Image:

Project Name:

ROBINSON PRESERVE OFFICE BUILDING

Bradenton, FL

Project Team:

95% CONSTRUCTION DOCUMENTS

ARCHITECT:
Houser Walker Architecture
1819 Peachtree Rd. NE, Ste 102
Atlanta, GA 30309
404.633.4264

CIVIL ENGINEER:
Stantec
6900 Professional Pkwy, Suite 100
Sarasota, FL 34240
941.720.3483

STRUCTURAL ENGINEER:
Stirling & Wilbur Engineering Group
7085 South Tamiami Trail
Sarasota, FL 34231
941.929.1552

MEP ENGINEER:
ATP Engineering South
5227 Office Park Blvd
Bradenton, FL 34203
941.751.6439

Project Information:

Occupancy Type:
Group B- Business

Construction Type:
Type VB- Sprinklered

Allowable Building Height and Area:
Area per Floor = 9,000sf
Height = 40'
Number of Stories = 2

Actual Building Height and Area:
Main Level = 5,067sf
Actual Height = 20'
Actual Stories = 1

Applicable Codes:
1. 2010 Florida Fire Prevention Code
(NFPA 1, FIRE CODE, FLORIDA 2010 EDITION; NFPA 101, LIFE SAFETY CODE, FLORIDA 2010 EDITION)
2. 2010 Florida Building Code- Building
3. 2010 Florida Building Code/Fuel Gas
4. 2010 Florida Building Code/Mechanical
5. 2010 Florida Building Code/Energy Conservation
6. 2008 National Electric Code
7. 2010 Florida Building Code/Plumbing
8. 2002-01 Building Accessibility Construction Administrative Code Ordinance
9. 2010 Florida Building Code/Accessibility

Revision Schedule:

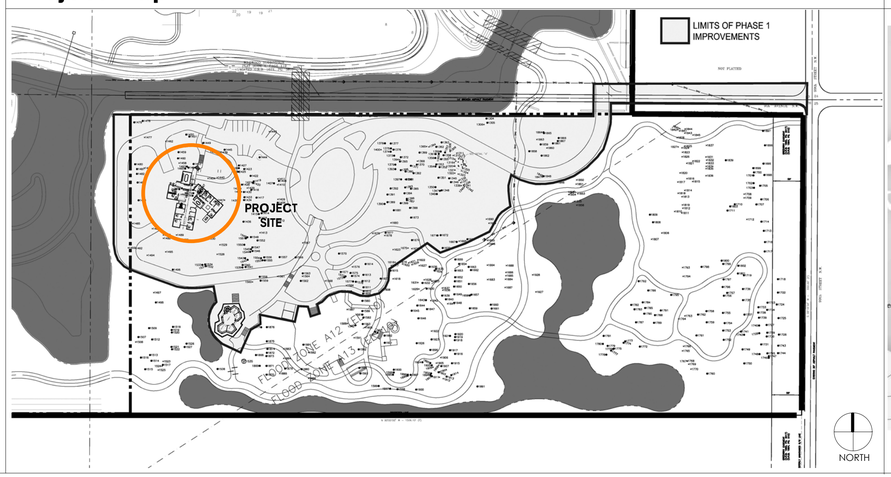
REV. #	DATE	DESCRIPTION

Drawing List:

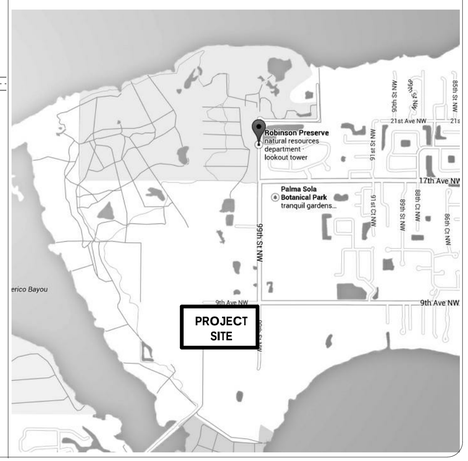
Key:
O = Current Issue
P = Previously Issued
= Not Issued (blank)
i = For information only

SHEET NUMBER	SHEET NAME	04/18/14 100% Design Development	05/23/2014 50% CONSTRUCTION DOCUMENTS	10/02/14 95% CONSTRUCTION DOCUMENTS	Current Revision
G	GENERAL				
G001	COVER SHEET	P	P	O	
G002	Drawing List, General Notes & Keynote List			O	
G101	LIFE SAFETY PLAN	P	P	O	
C	CIVIL				
L	LANDSCAPE				
A	ARCHITECTURAL				
A020	DOOR & WINDOW SCHEDULES	P	P	O	
A100	GROUND LEVEL PLAN	P	P	O	
A101	MAIN LEVEL PLAN	P	P	O	
A102	ROOF PLAN	P	P	O	
A200	BUILDING ELEVATIONS	P	P	O	
A201	BUILDING ELEVATIONS	P	P	O	
A210	BUILDING SECTIONS	P	P	O	
A211	BUILDING SECTIONS			O	
A220	WALL SECTIONS	P	P	O	
A221	WALL SECTIONS	P	P	O	
A300	ENLARGED BATHROOM PLANS	P	P	O	
A301	ENLARGED BREAKROOM			O	
A302	ENLARGED RECEPTION DESK			O	
A303	ENLARGED ENTRY VESTIBULE			O	
A400	GROUND LEVEL REFLECTED CEILING PLAN			O	
A401	MAIN LEVEL REFLECTED CEILING PLAN	P	P	O	
A500	DETAILS		P	O	
A501	DETAILS		P	O	
A502	DETAILS		P	O	
A503	DETAILS			O	
A701	INTERIOR ELEVATIONS			O	
AI	ARCHITECTURAL INTERIORS				
AI101	FINISH PLAN	P	P	O	
AR	ARCHITECTURAL REFERENCE				
AR020	DESIGN INTENTION DRAWINGS			O	
AR401	MAIN LEVEL COORDINATION RCP			O	
S	STRUCTURAL				
S1.1	Foundation Plan	P	P	O	
S2.1	Floor Framing Plan	P	P	O	
S2.2	Roof Framing Plan	P	P	O	
S3.1	SECTIONS		P	O	
S4.1	SECTIONS		P	O	
S4.2	SECTIONS			O	
S4.3	SECTIONS			O	
S5.1	GENERAL NOTES & TYPICAL DETAILS			O	
M	MECHANICAL				
M1.0	Mechanical Legend and General Notes	P	P	O	
M2.0	Mechanical Floor Plan	P	P	O	
M3.0	Mechanical Schedules	P	P	O	
M4.0	Mechanical Details	P	P	O	
M4.1	Mechanical Legend and General Notes	P	P	O	
E	ELECTRICAL				
E1.0	Electrical Symbols & Legends	P	P	O	
E2.0	Electrical Site Plan	P	P	O	
E3.0	Electrical Lighting Plan	P	P	O	
E4.0	Electrical Power and Systems Plan	P	P	O	
E5.0	Electrical One-Line Riser Diagram and Feeder Schedules	P	P	O	
E6.0	Electrical Details	P	P	O	
P	PLUMBING				
P1.1	Plumbing Legend and General Notes	P	P	O	
P2.0	Plumbing Floor Plan	P	P	O	
P3.0	Plumbing Schedules And Details	P	P	O	
FP	FIRE PROTECTION				
FP1.0	FIRE PROTECTION LEGEND AND GENERAL NOTES			O	
FP2.0	FIRE PROTECTION FLOOR PLAN			O	
FP2.1	FIRE PROTECTION FLOOR PLAN			O	
Q101	Main Level FFE Plan			i	

Project Map:



Location Map:



HOUSER WALKER ARCHITECTURE
1819 PEACHTREE ROAD, NE STE 102
ATLANTA, GA 30309
t. 404.633.4264
f. 404.870.7337
www.houserwalker.com

STIRLING & WILBUR ENGINEERING GROUP
7085 SOUTH TAMIAMI TRAIL, SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: cad@stirlingwilbur.com

SEAL

TO THE BEST OF THE ARCHITECTS OR ENGINEER'S KNOWLEDGE, SAID PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE CODES AND STANDARDS.

ATP ENGINEERING SOUTH, PL
BRADENTON, FLORIDA
ENGR. BUSINESS #8908
941-751-6485
www.atpengineeringsouth.com

ROBINSON PRESERVE EXPANSION OFFICE
MANATEE CO WA #18, IFAS #W1300220
MANATEE COUNTY, FLORIDA

REV. #	DATE	DESCRIPTION

DRAWING TITLE: COVER SHEET

DATE: 10/02/2014

DWG SCALE:

DRAWN BY:

CHECKED BY:

SHEET No.: G001

Keynote List:

03 00 00	CONCRETE
03 30 00	CAST-IN-PLACE CONCRETE
03 30 00.C	CAST-IN-PLACE CONCRETE
04 00 00	MASONRY
04 22 00.A16	
05 12 00.SS	STRUCTURAL SUPPORT MEMBER
05 70 00.CR	DECORATIVE METAL RAILINGS - CABLE RAIL
06 05 73	WOOD TREATMENT
06 10 00	ROUGH CARPENTRY
06 10 00.EWS	EXTERIOR WOOD SHEATHING
06 10 00.GS	GYPSUM WALL SHEATHING
06 10 00.SF	STRUCTURAL FRAMING
06 15 00.PD	PLYWOOD STRUCTURAL WOOD DECKING
06 15 00.WD	5/4" T&G WOOD DECKING
06 20 00	FINISH CARPENTRY
06 20 00.PTB	PAINTED BASE TRIM
06 20 00.PWS	PAINTED WOOD STOOLS AND SILLS
06 20 00.PWT	PAINTED WALL TRIM
06 20 00.SWT	STAINED WOOD TRIM
06 20 00.WDF	WOOD DOOR FRAME
06 41 00	ARCHITECTURAL WOOD CASEWORK
06 41 00.MA	MONITOR ARM
07 13 00.FF	FLEXIBLE FLASHING
07 21 00.AI	ACOUSTICAL INSULATION
07 21 19.CC	FOAMED INSULATION - CLOSED CELL
07 25 00.FF	FLEXIBLE FLASHING
07 25 00.VR	VAPOR RETARDER
07 41 13	METAL ROOF PANELS PACCLAD COPPER PENNY
07 41 13.MRP	METAL ROOF PANELS
07 41 13.RC	RIB AND RIDGE CLOSURES
07 41 13.SS	SLIP SHEET
07 41 13.U	UNDERLAYMENT
07 41 13.V	VALLEY CLOSURES
07 46 23	WOOD SIDING
07 46 23.TGB	T&G BOARD SIDING
07 46 46.FC	FIBER CEMENT SIDING
07 46 46.S1	FIBER CEMENT SIDING 1 HARDIEPLANK SELECT CEDARMILL
07 46 46.S2	FIBER CEMENT SIDING 2 HARDIEPLANK SELECT CEDARMILL
07 62 00.DC	SHEET METAL DRIP CAP
07 62 00.MFT	SHEET METAL FLASHING AND TRIM
07 62 00.TS	CONTINUOUS TERMITE SHIELD
07 71 00.C	MANUFACTURED COPING
07 71 23.D	DOWNSPOUT
07 71 23.G	GUTTER
07 90 05.BR	BACKER ROD
07 90 05.S	SEALANT
07 90 05.S1	GENERAL PURPOSE EXTERIOR SEALANT
08 11 13.MF	METAL FRAME
08 50 00.AL1	ALUM-CLAD WOOD WINDOWS
08 50 00.AL2	ALUM-CLAD WOOD WINDOWS
08 71 00.DH	DOOR HARDWARE
08 71 00.T	DOOR THRESHOLD
09 21 16.C1	GYPSUM WALLBOARD-CEILING
09 21 16.GA	GYPSUM BOARD ASSEMBLY
09 21 16.R2	F REVEAL MOLDING
09 21 16.R3	Z REVEAL MOLDING
09 30 00.WT2	BASE WALL TILE
09 30 00.WT3	ACCENT WALL TILE
09 51 00.ACT	ACOUSTICAL CEILING TILE
09 62 00	WOOD FLOORING
09 62 29.WD1	ENGINEERED WOOD FLOORING
09 68 13	TILE CARPETING
10 14 00.S	SIGNAGE
10 28 00.GB	GRAB BAR
10 28 00.M	MIRROR
10 28 00.PT	PAPER TOWEL DISPENSER
10 28 00.SD	SOAP DISPENSER
10 28 00.SNW	SANITARY WASTE RECEPTACLE
10 28 00.TP	TOILET PAPER DISPENSER
10 28 00.WR	WASTE RECEPTACLE
11 31 00	APPLIANCES
11 31 00.R	REFRIGERATOR
11 52 00.AV	AUDIO-VISUAL EQUIPMENT
11 52 13.PS	PROJECTION SCREEN
12 48 13.M	ENTRANCE FLOOR MAT
21 00 00.CS	CONCEALED SPRINKLER HEAD
21 00 00.FSS	FIRE-SUPPRESSION SYSTEM
21 00 00.SRS	SEMI-RECESSED SPRINKLER HEAD

Legend:

Room name — ROOM INDICATOR

A # OCC. — # OF ROOM OCCUPANTS

ROOM OCCUPANCY TYPE

12 / 6 — SLOPE INDICATOR

1 / A101 SIM — DETAIL INDICATOR

BUILDING SECTION INDICATOR

WALL SECTION INDICATOR

WALL SECTION INDICATOR

2 / A101 — INTERIOR ELEVATION INDICATOR

1 / A101 — EXTERIOR ELEVATION INDICATOR

1 / A101 SIM — CALLOUT INDICATOR

11 — WALL TYPE TAG INDICATOR

11 — WINDOW TYPE TAG INDICATOR

06 41 00.PL — KEYNOTE INDICATOR (SEE PROJECT MANUAL)

101 — DOOR TAG INDICATOR

ELEVATION INDICATOR

CENTER LINE

NORTH INDICATOR

DIMENSION LINE

0 — GRID LINE

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

1 | View Name
1/8" = 1'-0"
DRAWING TITLE

KP — SECURITY KEYPAD

SECURITY CAMERA

CR — CARD READER ACCESS

F.E.C — FIRE EXTINGUISHER CABINET TO BE RECESSED IN WALL, UNLESS OTHERWISE NOTED.

EXIT — EXIT SIGN

PANIC — PANIC HARDWARE

FIRE/HORN STROBE

M — MOTION DETECTOR

TO BE REMOVED (DEMO SHEETS)

EXISTING TO REMAIN

NEW

HIDDEN FEATURES LINE

CENTER LINE

2 HOUR RATED WALL LINE

1 HOUR RATED WALL

PATH OF EGRESS

EGRESS DOOR

BREAK LINE INDICATOR

General Notes:

Contract Documents

1. The Contractor shall maintain at the site for the Owner one copy of the Drawings, Specifications, Addenda, Change Orders and other Modifications, in good order and marked currently to indicate field changes and selections made during construction, and one copy of approved Shop Drawings, Product Data, Samples, and similar required submittals.
2. The Contractor shall perform work in accordance with the Contract Documents.
3. The drawings and specifications are complementary and are to be understood comprehensively. Organization and arrangement of the drawings and/ or specifications into divisions, sections and articles shall not control the Contractor in dividing the work among subcontractors or in establishing the extent of Work to be performed by any trade.
4. Because the Contract Documents are complementary, the Contractor shall, before starting each portion of the Work, carefully study and compare the various Contract Documents relative to that portion of the Work, shall take field measurements of any existing conditions related to that portion of the Work, and shall observe any condition at the site affecting it. These obligations are for the purpose of facilitating coordination and construction by the Contractor and are not for the purpose of discovering errors, omissions, or inconsistencies in the Contract Documents. However, the Contractor shall promptly report to the Architect any errors, inconsistencies or omissions discovered by or made known to the Contractor as request for information.
5. Drawings are not to be scaled for information.

Other General Requirements

1. The Contractor shall supervise and direct the work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for, and have control over, construction means, methods, techniques, sequences, and procedures and for coordinating all portions of the Work. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences, or procedures, the Contractor shall evaluate the jobsite safety thereof, and shall be fully responsible for the jobsite safety associated with such instructions. If the Contractor determines that such instructions may not be safe, the Contractor shall give timely written notice to the Owner and Architect and shall not proceed with that portion of the Work without further written instructions from the Architect.
2. The Contractor shall employ a competent superintendent and necessary assistants who shall be in attendance at the Project site during performance of the Work. The superintendent shall represent the Contractor and communications given the superintendent shall be binding as if given to the Contractor.
3. Demolition debris shall be removed from the site daily. Contractor shall clean jobsite daily, maintain a clean workplace and keep construction debris and dust away from adjacent building occupants.
4. Install blocking in all walls indicated to receive wall mounted devices and/ or cabinetry.
5. All wood blocking shall be fire retardant treated.
6. Provide double studs at all openings in walls.
7. Fur in all fire extinguisher cabinets so as to afford proper fit and to maintain the integrity of any rated walls in which they occur.
8. All vertical rated mechanical chase assemblies shall extend from floor finish to structure above.
10. All exposed electrical, fire protection, and mechanical devices shall be centered on or align with architectural features as shown on the Reflected Ceiling Plans.
11. Openings created in slabs, smoke partitions, or fire rated partitions by this work shall be repaired using techniques and materials to maintain the rating of the wall, including but not limited to, smoke dampers, fire dampers, firestopping, and fire safing, penetrations of masonry walls and concrete floors shall be stopped to minimum 2 hour rating.
12. Contractor is to coordinate with Owner provided materials & services, including: Security, A/V, TV, Tel/data cabeling, and whiteboards.
13. All dimensions are to face of finished surfaces, unless noted otherwise.

MATERIAL KEYNOTES

GENERAL NOTES

SHEET SPECIFIC NOTES

STIRLING & WILBUR
ENGINEERING GROUP
7085 SOUTH TAMIAMI TRAIL, SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: paul@stirlingwilbur.com

SEAL

TO THE BEST OF THE ARCHITECT'S OR ENGINEER'S KNOWLEDGE, SAID PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE CODES AND STANDARDS.

HOUSER WALKER ARCHITECTURE
1819 PEACHTREE ROAD, NE STE 102
ATLANTA, GA 30309
t. 404 . 633 . 4264
f. 404 . 870 . 7337
www.houserwalker.com

ATP ENGINEERING SOUTH, PL
BRADENTON, FLORIDA
ENGR. BUSINESS #8908
941-751-6485
www.atpengineeringsouth.com

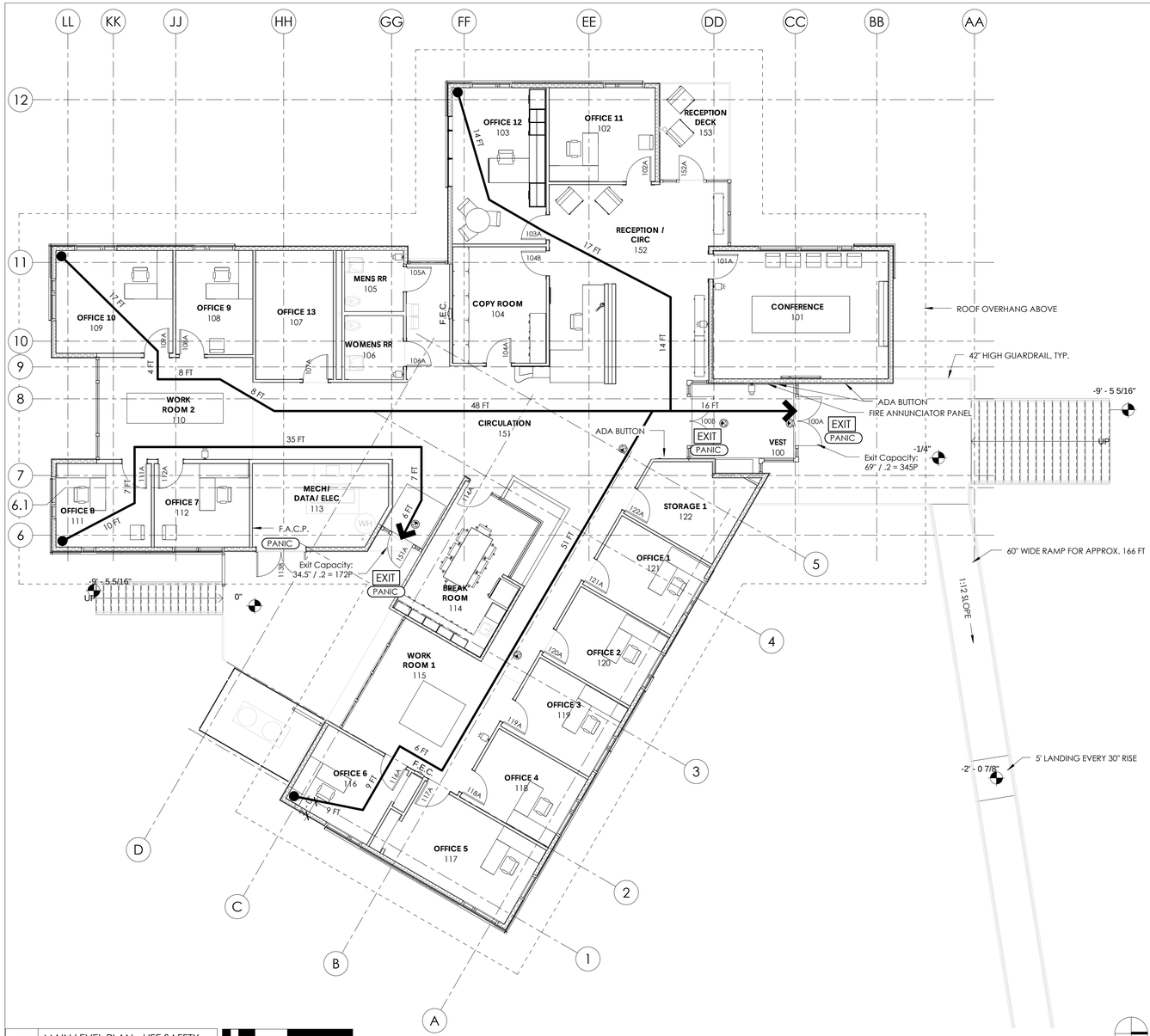
ROBINSON PRESERVE EXPANSION OFFICE
MANATEE CO WA #18, IFAS #W1300220
MANATEE COUNTY, FLORIDA

REV. #	DESCRIPTION	DATE

DRAWING TITLE
Drawing List, General Notes & Keynote List

DATE : 10/02/2014
DWG SCALE : 1" = 1'-0"
DRAWN BY: DE
CHECKED BY: Checker
SHEET No.:
G002

95% Construction Documents



01 MAIN LEVEL PLAN - LIFE SAFETY
1/8" = 1'-0"

2 4 8 16

Room Number	Room Name	Area	OL FACTOR	OL #	OL
MAIN LEVEL					
100	VEST	130 SF	BUSINESS	100 SF	2
101	CONFERENCE	338 SF	BUSINESS (15SF)	15 SF	23
102	OFFICE 11	149 SF	BUSINESS	100 SF	2
103	OFFICE 12	220 SF	BUSINESS	100 SF	3
104	COPY ROOM	164 SF	BUSINESS	100 SF	2
107	OFFICE 13	150 SF	BUSINESS	100 SF	2
108	OFFICE 9	120 SF	BUSINESS	100 SF	2
109	OFFICE 10	180 SF	BUSINESS	100 SF	2
110	WORK ROOM 2	233 SF	BUSINESS	100 SF	3
111	OFFICE 8	119 SF	BUSINESS	100 SF	2
112	OFFICE 7	119 SF	BUSINESS	100 SF	2
114	BREAK ROOM	206 SF	BUSINESS	100 SF	3
115	WORK ROOM 1	259 SF	BUSINESS	100 SF	3
116	OFFICE 6	119 SF	BUSINESS	100 SF	2
117	OFFICE 5	179 SF	BUSINESS	100 SF	2
118	OFFICE 4	121 SF	BUSINESS	100 SF	2
119	OFFICE 3	121 SF	BUSINESS	100 SF	2
120	OFFICE 2	121 SF	BUSINESS	100 SF	2
121	OFFICE 1	121 SF	BUSINESS	100 SF	2
151	CIRCULATION	944 SF	BUSINESS	100 SF	10
152	RECEPTION / CIRC	497 SF	BUSINESS	100 SF	5
153	RECEPTION DECK	102 SF	BUSINESS (15SF)	15 SF	7

TOTAL OCCUPANT LOAD **83**

1. GENERAL PROJECT INFORMATION

A. Project Information Summary

NAME OF PROJECT: Manatee Administration Building
PROPOSED USE: Administrative Offices
LOCATION: Robinson Preserve, Manatee County

B. Owner Information

OWNER: Manatee County Parks and Natural Resources Department
CONTACT PERSON:Charlie Hunsicker, 941-748-4501

C. Design Team Information

DISCIPLINE	NAME	CONTACT	PHONE NUMBER
MECHANICAL	ATP Engineering	John Camden	941.751.6485
ELECTRICAL	ATP Engineering	Matt Camden	941.751.6485
PLUMBING/FP	ATP Engineering		
CIVIL	Stantec	Michael Bell	941.907.6900
LANDSCAPE	Stantec	Scott Buttari	941.907.6900 x263
SRUCTURAL	Sterling & Wilbur	Steve Wilbur	941.929.1552
ARCHITECTURAL	Houser Walker	Greg Walker	404.633.4264

D. Applicable Codes **Abbreviation**

1. **2010 Florida Fire Prevention Code**
   NFPA 1, FIRE CODE, FLORIDA 2010 EDITION;
   NFPA 101, LIFE SAFETY CODE, FLORIDA 2010 EDITION **LSC**
2. **2010 Florida Building Code- Building** **FBC**
3. **2010 Florida Building Code/Fuel Gas**
4. **2010 Florida Building Code/Mechanical**
5. **2010 Florida Building Code/Energy Conservation**
6. **2008 National Electric Code**
7. **2010 Florida Building Code/Plumbing**
8. **2002-01 Building Construction Administrative Code Ordinance**
9. **2012 FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION** **FAC**

E. Occupancy/Construction Type

OCCUPANCY CLASSIFICATION: Space is **sprinklered**

Code	Size	Occupancy	Construction Type	Comments
FFPC	10,500 sf	Business	Type V (000)	Single Story
FBC-B	10,500 sf	Business	VB	Single Story

F. Height and Area Limitations

Allowable Area= 6,000 x 200% increase = **12,000sf** FBC table 503
Area Modification: Sprinker Increase: **200%** FBC 506.3
Allowable height= 40'+ 20' increase = **60'** FBC 504.2
Allowable Stories = 1 + 1 increase = **2** FBC 504.2

G. Occupancy Load Factors **LSC 7.3.1.2**

Business Use: 100 gross
Storage/Mechanical 300 gross

Floor Level Load	Occupancy	Floor Area/Occ	Net/Gross	Area	Occ
Lower	Storage	300	gross	270	1
Main	Business	100	gross	5000	50
	Storage/Mech	300	gross	433	2
Building Total					**53**

II. FIRE RESISTANCE REQUIREMENTS

A. Building Components

Structural Elements	TYPE VB RATING (hrs)	CODE REFERENCE
Structural Frame, including columns, girders, trusses	0	FBC Table 601
Bearing Walls:		
Exterior	0	FBC Table 601
Interior	0	
Nonbearing walls and partitions	0	FBC Table 602
Floor Construction	0	FBC Table 601
Roof Construction	0	FBC Table 601
Exterior Walls	0	FBC Table 601

Egress Capacity: (LSC 7.3.3)
Stairs: 0.3" / person
Level components and ramps: 0.22"/per
Maximum Travel Distance: (LSC 7.6.1)
Assembly: 150 ft
Business: 200 ft
Storage: NA
Maximum Dead End Limit: (LSC 7.6.1)
Assembly: 0 ft / 20 ft dead-end aisle
Business: 20 ft
Storage: NA
Maximum Common Path of Travel: (LSC 7.6.1)
Assembly: 20 ft
Business: 75 ft
Storage: NA

MATERIAL KEYNOTES

GENERAL NOTES

A. All changes in elevation shall not exceed 1/4". Changes in elevation exceeding 1/4", but not exceeding 1/2", shall be beveled 1:2.

SHEET SPECIFIC NOTES

STIRLING & WILBUR
ENGINEERING GROUP
7085 SOUTH TAMIAMI TRAIL, SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: cad@sterlingwilbur.com

SEAL

TO THE BEST OF THE ARCHITECTS OR ENGINEER'S KNOWLEDGE, SAID PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE CODES AND STANDARDS.

HOUSER WALKER ARCHITECTURE
1819 PEACHTREE ROAD, NE STE 102
ATLANTA, GA 30309
t. 404 . 633 . 4264
f. 404 . 870 . 7337
www.houserwalker.com

ATP ENGINEERING SOUTH, PL
BRADENTON, FLORIDA
ENGR. BUSINESS #8908
941-751-6485
www.atpengineeringsouth.com

ROBINSON PRESERVE EXPANSION OFFICE
MANATEE CO WA #18, IFAS #W1300220
MANATEE COUNTY, FLORIDA

DRAWING TITLE: LIFE SAFETY PLAN

DATE: 10/02/2014
DWG SCALE: 1/8" = 1'-0"
DRAWN BY: DE
CHECKED BY: DE
SHEET No.: G101

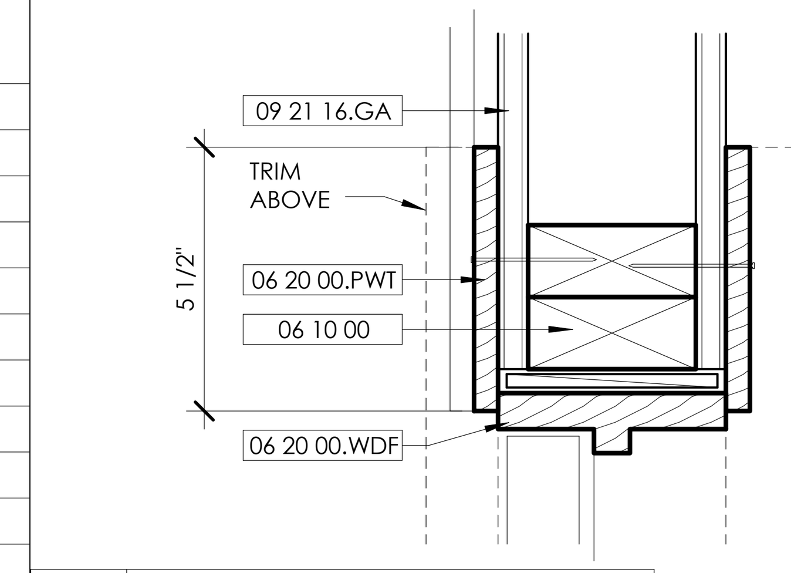
95% Construction Documents

REV. # DESCRIPTION DATE

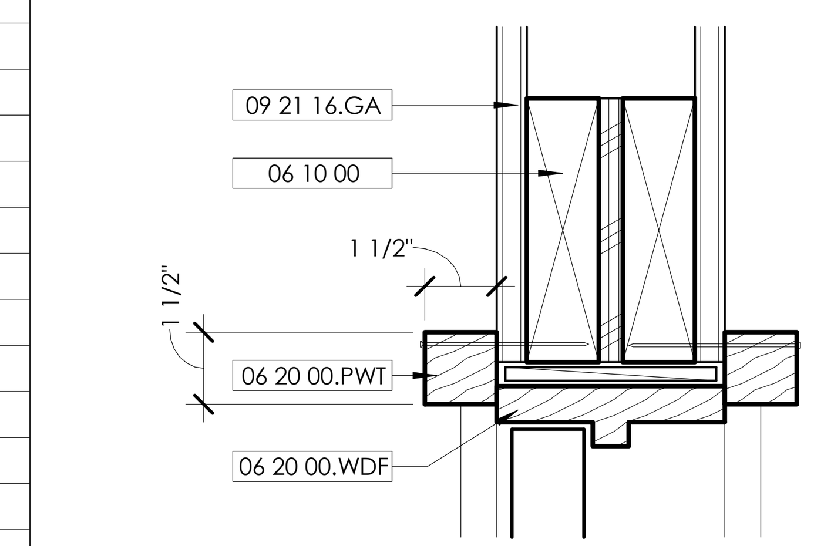
Door Schedule:

Door Number	Type	Door Width	Door Height	Door Material	Frame Material	Hardware Set	Access Control	Automatic Door Operator	Comments
100A	S2	6' - 0"	8' - 0"	GLASS	WD	Keyed		X	PANIC HARDWARE, ADA PUSH BUTTON CONTROL
100B	S2	6' - 0"	8' - 0"	GLASS	WD	Keyed		X	PANIC HARDWARE, ADA PUSH BUTTON CONTROL
101A	SR	3' - 0"	7' - 0"	WOOD VENEER	WD	Office			
102A	SR	3' - 0"	7' - 0"	WOOD VENEER	WD	Office			
103A	SR	3' - 0"	7' - 0"	WOOD VENEER	WD	Office			
104A	SR	3' - 0"	7' - 0"	WOOD VENEER	WD	Passage			
104B	SR	3' - 0"	7' - 0"	WOOD VENEER	WD	Passage			
105A	SR	3' - 0"	7' - 0"	WOOD VENEER	WD	Privacy			
106A	SR	3' - 0"	7' - 0"	WOOD VENEER	WD	Privacy			
107A	SR	3' - 0"	7' - 0"	WOOD VENEER	WD	Office			
108A	SR	3' - 0"	7' - 0"	WOOD VENEER	WD	Office			
109A	SR	3' - 0"	7' - 0"	WOOD VENEER	WD	Office			
111A	SR	3' - 0"	8' - 0"	WOOD VENEER	WD	Office			
112A	SR	3' - 0"	8' - 0"	WOOD VENEER	WD	Office			
113B	F2	6' - 0"	7' - 0"	WOOD VENEER	WD	Keyed			PANIC HARDWARE
114A	S3	3' - 0"	7' - 0"	GLASS	WD	Passage			6'-0" custom pull
116A	SR	3' - 0"	8' - 0"	WOOD VENEER	WD	Office			
117A	SR	3' - 0"	8' - 0"	WOOD VENEER	WD	Office			
118A	SR	3' - 0"	8' - 0"	WOOD VENEER	WD	Office			
119A	SR	3' - 0"	8' - 0"	WOOD VENEER	WD	Office			
120A	SR	3' - 0"	8' - 0"	WOOD VENEER	WD	Office			
121A	SR	3' - 0"	8' - 0"	WOOD VENEER	WD	Office			
122A	SR	3' - 0"	8' - 0"	WOOD VENEER	WD	Storage			
151A	S3	3' - 0"	8' - 0"	GLASS	WD	Keyed			PANIC HARDWARE
152A	S3	3' - 0"	8' - 0"	GLASS	WD	Keyed			
160A	F2	6' - 0"	7' - 0"	FIBERGLASS	FB	Keyed			

Typical Door Details:



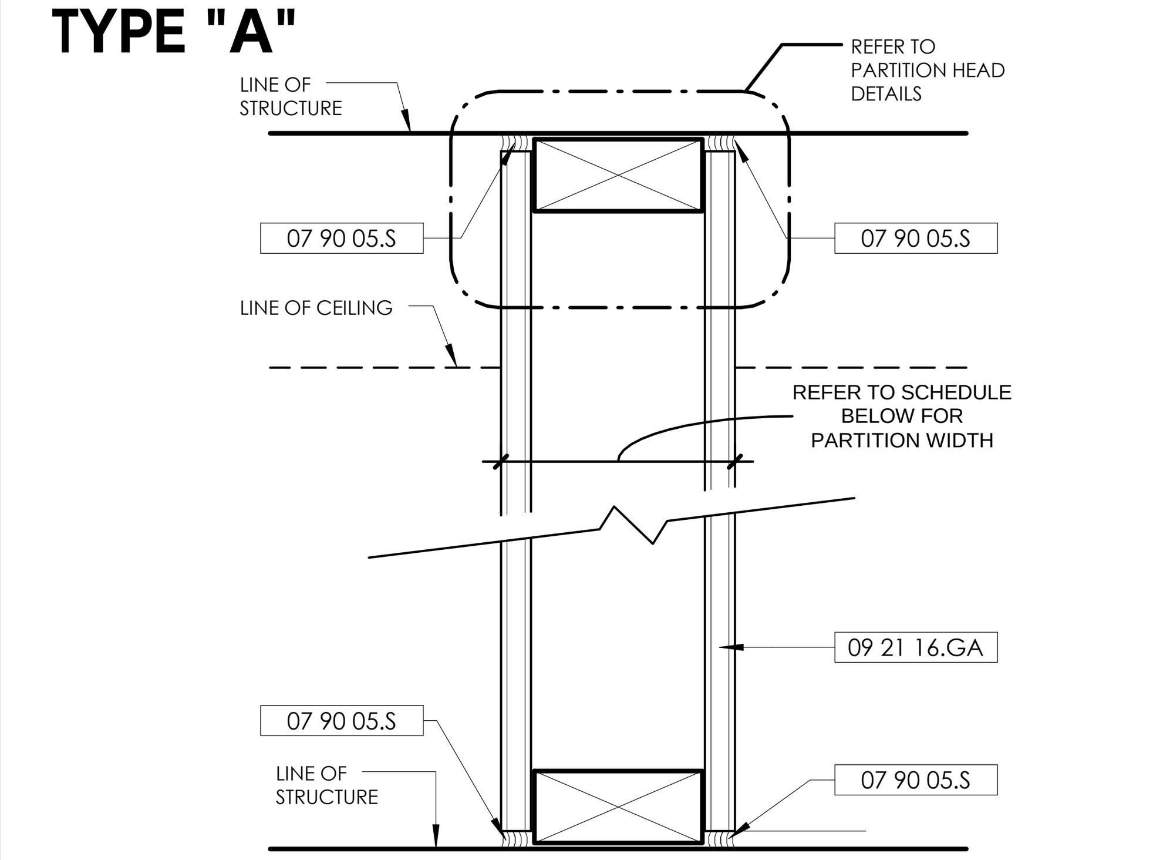
01 DOOR JAMB
3" = 1'-0"



02 DOOR HEAD
3" = 1'-0"

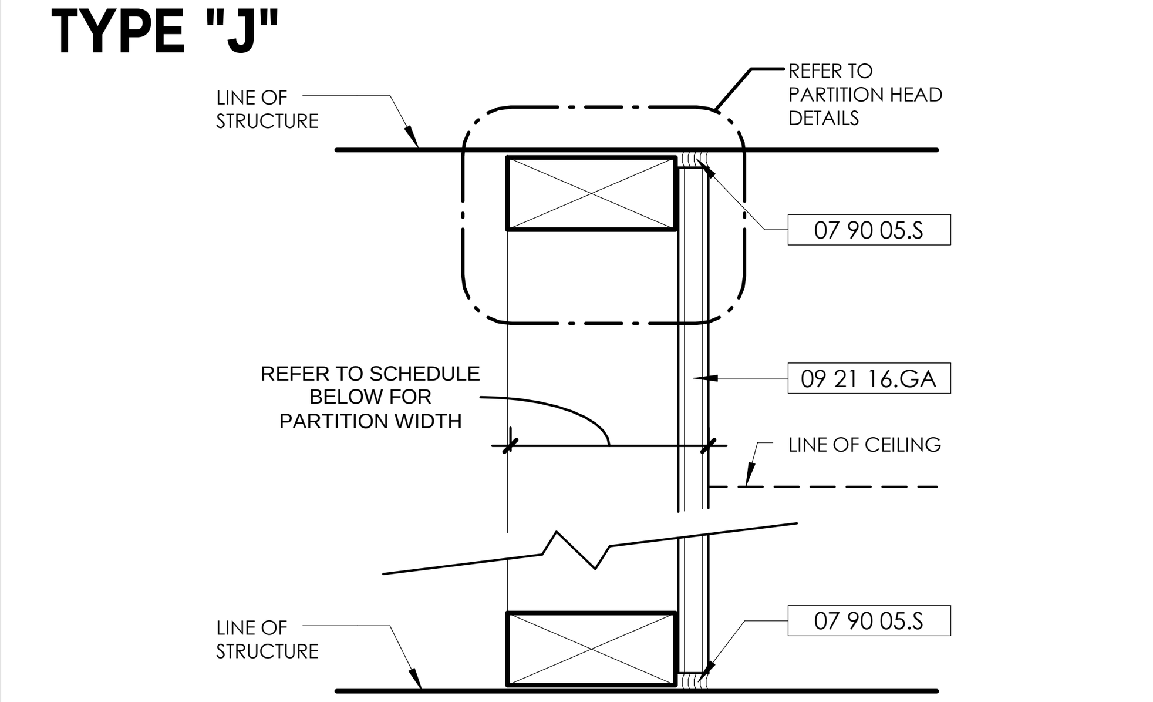
Partition Schedule:

TYPE "A"



FLOOR PLAN DESIGNATION NO SOUND ATTENUATION	FLOOR PLAN DESIGNATION WITH SOUND ATTENUATION	STUD SIZE	PART WIDTH	FIRE RATING	UL LISTING	STC: NO SOUND / WITH SOUND	REMARKS
A3	A3	3 1/2"	4 3/4"	NON-RATED	N/A	40 / 49 W/3" SAB	
A3	A3	3 1/2"	4 3/4"	ONE HOUR	U465	40 / 49 W/3" SAB	
A6	A6	5 1/2"	6 3/4"	NON-RATED	N/A	40 / 49 W/3" SAB	
A6	A6	5 1/2"	6 3/4"	ONE HOUR	U465	40 / 49 W/3" SAB	

TYPE "J"



FLOOR PLAN DESIGNATION NO SOUND ATTENUATION	FLOOR PLAN DESIGNATION WITH SOUND ATTENUATION	STUD SIZE	PART WIDTH	FIRE RATING	UL LISTING	SOUND TRANS CLASS	REMARKS
J3	N/A	3 1/2"	4 1/8"	NON-RATED	N/A	N/A	
J6	N/A	5 1/2"	6 1/8"	NON-RATED	N/A	N/A	

MATERIAL KEYNOTES

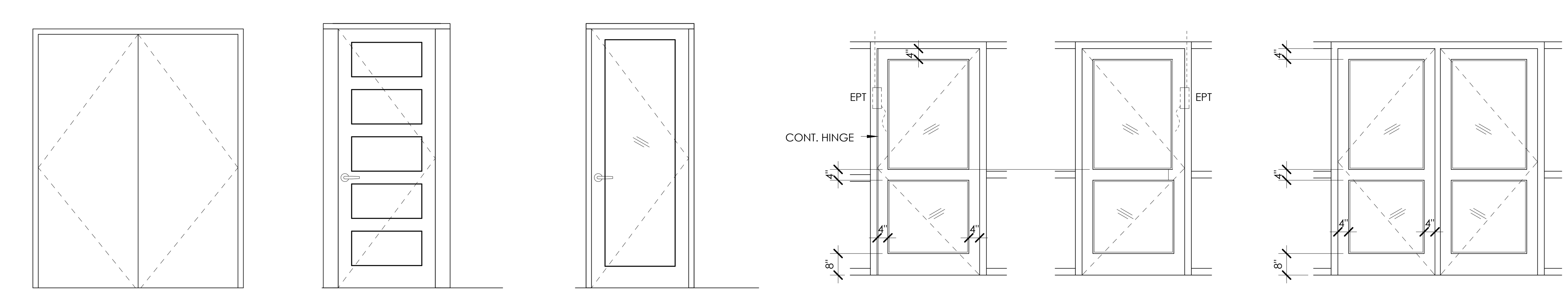
06 10 00	ROUGH CARPENTRY
06 20 00.PWT	PAINTED WALL TRIM
06 20 00.WDF	WOOD DOOR FRAME
07 90 05.S	SEALANT
09 21 16.GA	GYPSUM BOARD ASSEMBLY

GENERAL NOTES

A. Hardware shown on door types are for location purposes. See specifications for required hardware.
B. See door schedule for material of door types.
C. Door type indicated with 'R' is to be fire rated, per the Door Schedule.
D. See Finish Schedule in spec section 09 90 00 for finish of door frames.
E. All doors and windows are to have Florida Product Approval.

SHEET SPECIFIC NOTES

Door Types:



TYPE F2
DOUBLE FLUSH DOOR

TYPE SR
STILE AND RAIL DOOR

TYPE S3
EXTERIOR SINGLE STOREFRONT DOOR

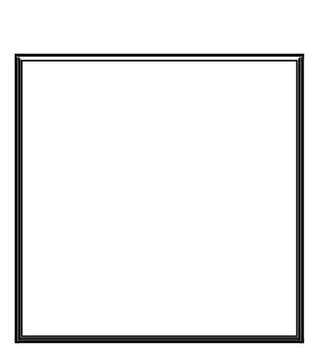
TYPE S1
EXTERIOR SINGLE DOOR

TYPE S2
EXTERIOR DOUBLE DOOR

Window Schedule:

Type Mark	Window Material	Height	Width	Finish	Glazing Type	Comments
W1	08 50 00.AL1	6' - 0"	1' - 9"			
W2	08 50 00.AL1	6' - 0"	3' - 5"			
W3		6' - 0"	5' - 0"			
W6	08 50 00.AL1	6' - 0"	1' - 9"			
W7		6' - 0"	3' - 5"			

Window Types:



SEAL

TO THE BEST OF THE ARCHITECT'S OR ENGINEER'S KNOWLEDGE, SAID PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE CODES AND STANDARDS.

STIRLING & WILBUR ENGINEERING GROUP
7085 SOUTH TAMIAMI TRAIL, SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: cad@stirlingwilbur.com

HOUSER WALKER ARCHITECTURE
1819 PEACHTREE ROAD, NE STE 102
Atlanta, GA 30309
t.404.633.7264
f.404.870.7337
www.houserwalker.com

ATP ENGINEERING SOUTH, PL
BRADENTON, FLORIDA
ENGR. BUSINESS #8908
941-751-6485
www.atpengineeringsouth.com

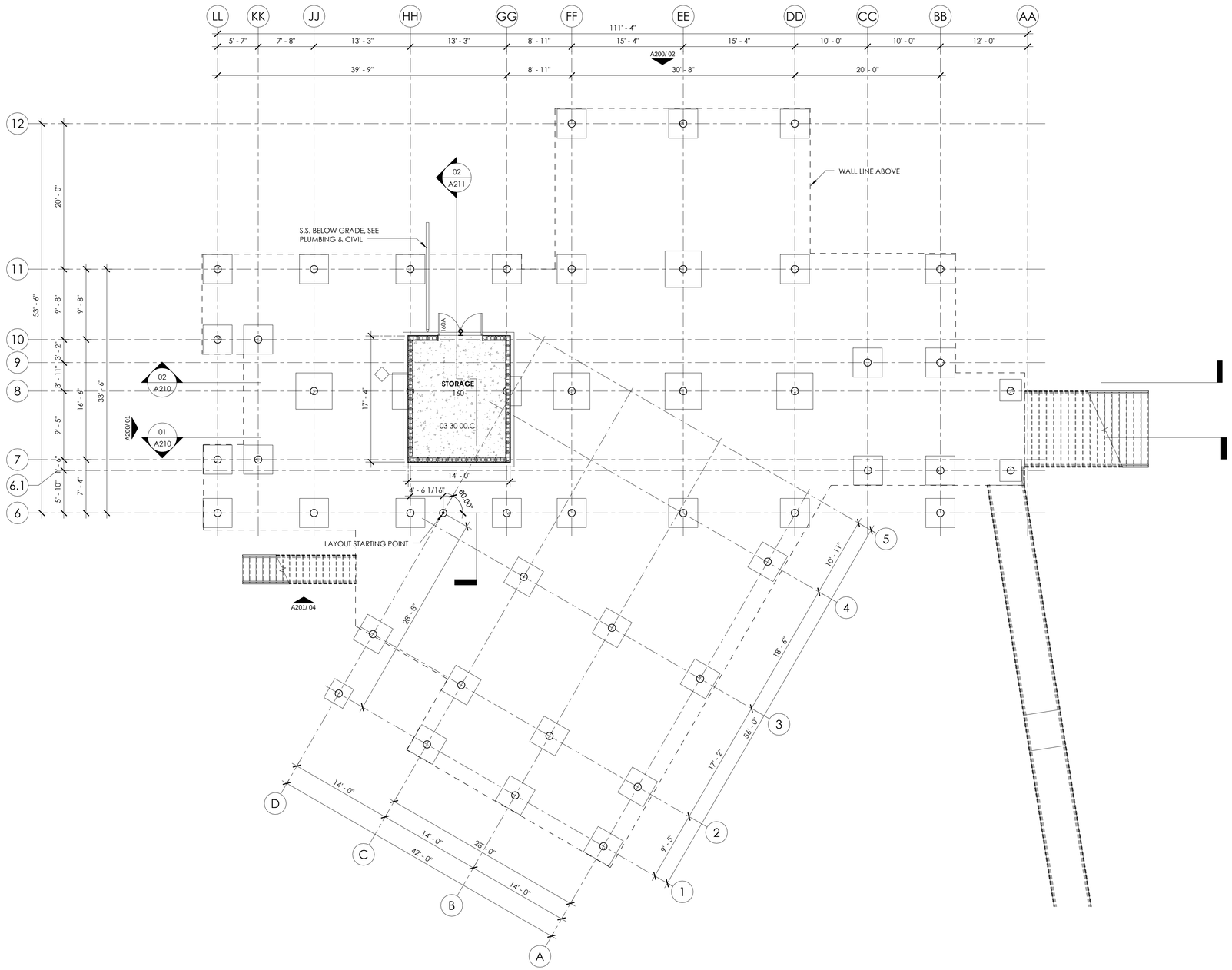
ROBINSON PRESERVE EXPANSION OFFICE
MANATEE CO WA #18, IFAS #W1300220
MANATEE COUNTY, FLORIDA

REV. #	DESCRIPTION	DATE

DRAWING TITLE: DOOR & WINDOW SCHEDULES

DATE: 10/02/2014
DWG SCALE: As indicated
DRAWN BY: DE
CHECKED BY: Checker
SHEET No.: A020

95% Construction Documents



01 GROUND LEVEL
1/8" = 1'-0"

2 4 8 16

NORTH

MATERIAL KEYNOTES

03 30 00.C CAST-IN-PLACE CONCRETE

GENERAL NOTES

SHEET SPECIFIC NOTES

HOUSER WALKER ARCHITECTURE
1819 PEACHTREE ROAD, NE STE 102
ATLANTA, GA 30309
t. 404 . 633 . 4264
f. 404 . 870 . 7337
www.houserwalker.com

STIRLING & WILBUR ENGINEERING GROUP
7085 SOUTH TAMIAMI TRAIL, SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: cad@stirlingwilbur.com

SEAL

TO THE BEST OF THE ARCHITECT'S OR ENGINEER'S KNOWLEDGE, SAID PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE CODES AND STANDARDS.

ROBINSON PRESERVE EXPANSION OFFICE
MANATEE CO WA #18, IFAS #W1300220
MANATEE COUNTY, FLORIDA

ATP ENGINEERING SOUTH, PL
BRADENTON, FLORIDA
ENGR. BUSINESS #8908
941-751-6485
www.atpengineeringsouth.com

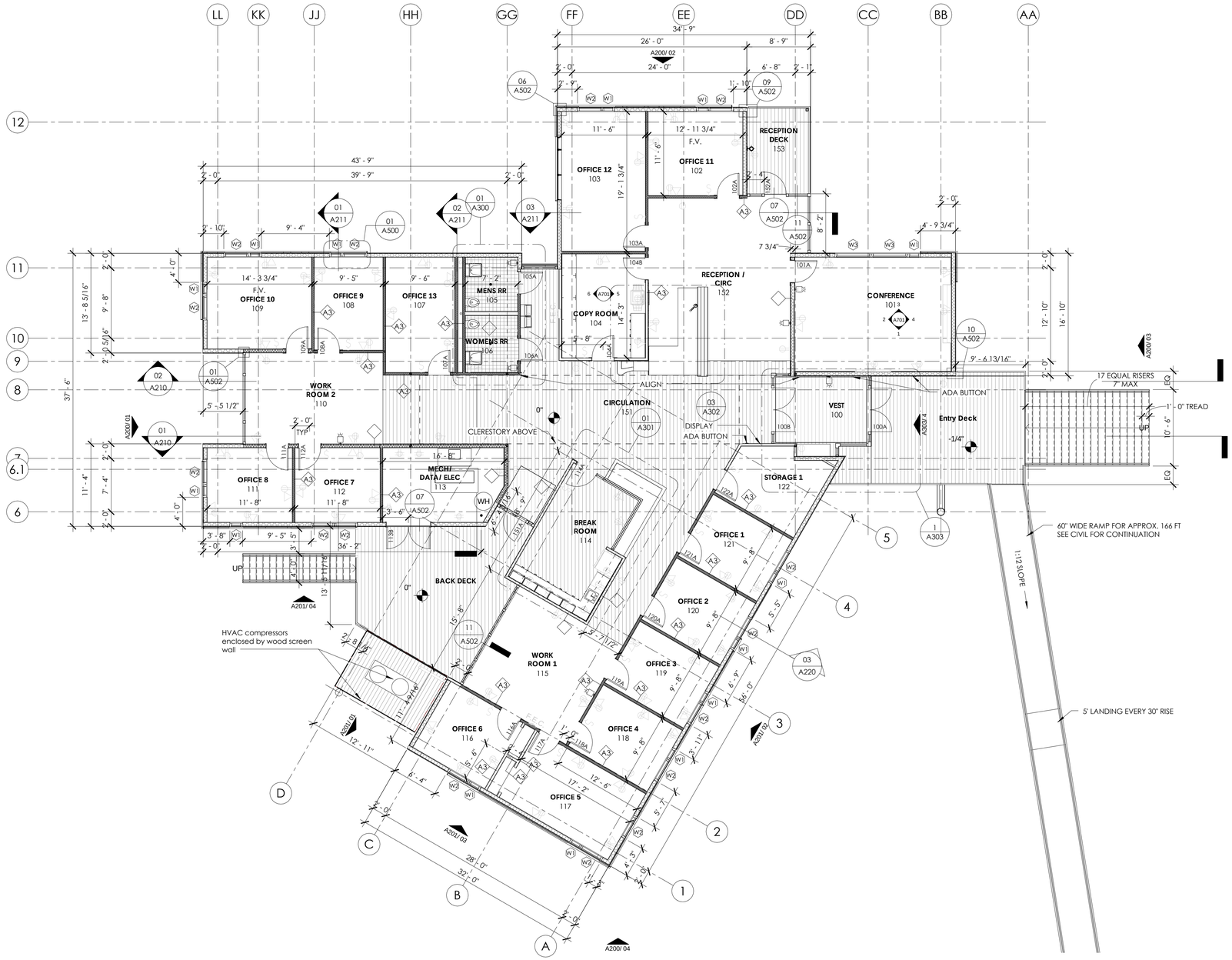
REV. #	DESCRIPTION	DATE

DRAWING TITLE: GROUND LEVEL PLAN

DATE : 10/02/2014
DWG SCALE: 1/8" = 1'-0"
DRAWN BY: DE
CHECKED BY: Checker
SHEET No.:

A100

95% Construction Documents



01 MAIN LEVEL PLAN
1/8" = 1'-0"

2 4 8 16

NORTH

MATERIAL KEYNOTES

GENERAL NOTES

SHEET SPECIFIC NOTES

STIRLING & WILBUR
ENGINEERING GROUP
7085 SOUTH TAMIAMI TRAIL, SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: caad@stirlingwilbur.com

SEAL

TO THE BEST OF THE ARCHITECTS OR ENGINEER'S KNOWLEDGE, SAID PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE CODES AND STANDARDS.

HOUSER WALKER ARCHITECTURE
1819 PEACHTREE ROAD, NE STE 102
ATLANTA, GA 30309
t. 404 . 633 . 4264
f. 404 . 870 . 7337
www.houserwalker.com

ATP ENGINEERING SOUTH, PL
BRADENTON, FLORIDA
ENGR. BUSINESS #8908
941-751-6485
www.atpengineeringsouth.com

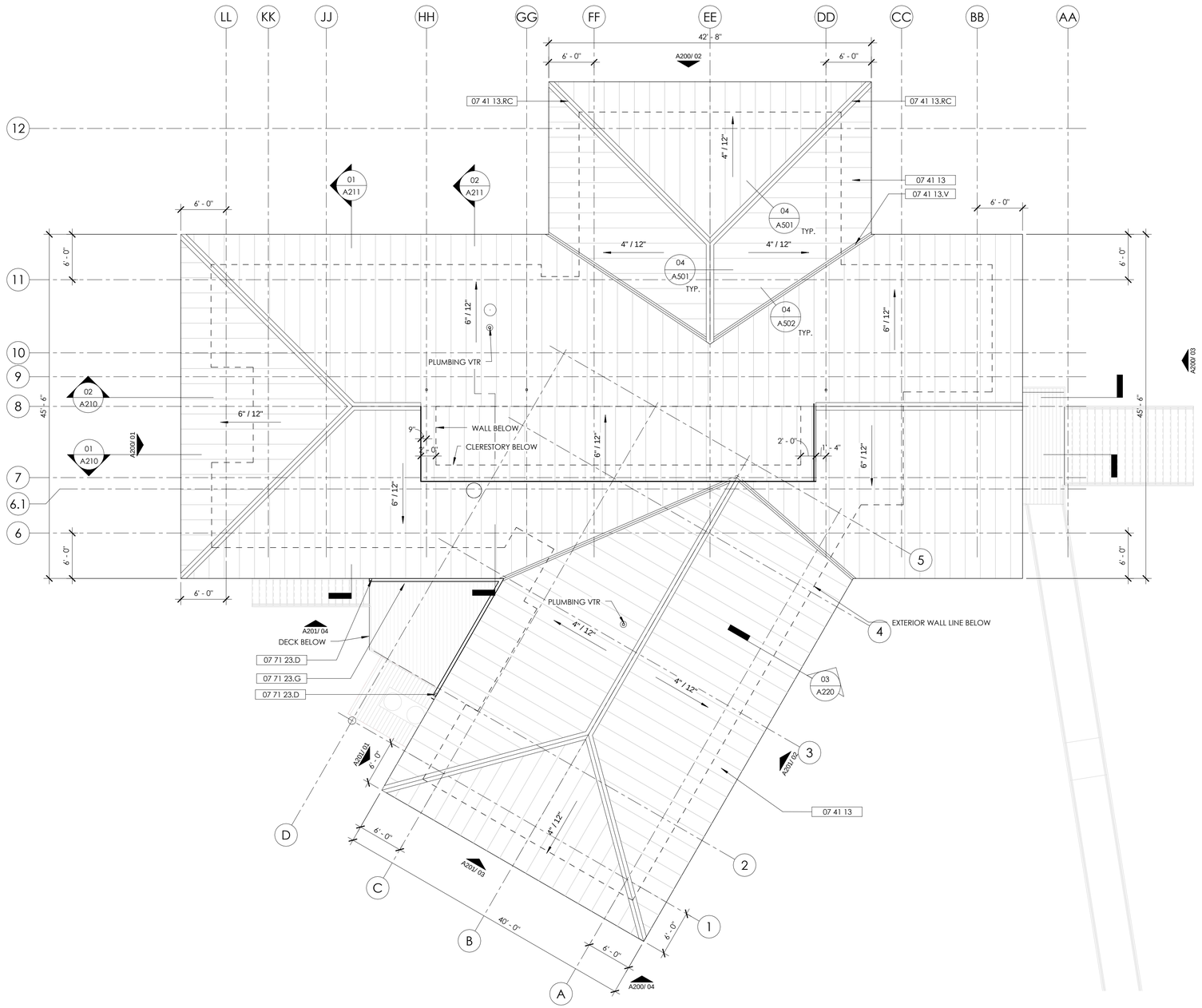
ROBINSON PRESERVE EXPANSION OFFICE
MANATEE CO WA #18, IFAS #W1300220
MANATEE COUNTY, FLORIDA

REV. #	DESCRIPTION	DATE

DRAWING TITLE: MAIN LEVEL PLAN

DATE: 10/02/2014
DWG SCALE: 1/8" = 1'-0"
DRAWN BY: DE
CHECKED BY: Checker
SHEET No.: A101

95% Construction Documents



01 ROOF PLAN
1/8" = 1'-0"

2 4 8 16

NORTH

MATERIAL KEYNOTES

07 41 13	METAL ROOF PANELS PACCLAD COPPER PENNY
07 41 13.RC	RIB AND RIDGE CLOSURES
07 41 13.V	VALLEY CLOSURES
07 71 23.D	DOWNSPOUT
07 71 23.G	GUTTER

GENERAL NOTES

SHEET SPECIFIC NOTES

HOUSER WALKER ARCHITECTURE
1819 PEACHTREE ROAD, NE STE 102
ATLANTA, GA 30309
t. 404 . 633 . 4264
f. 404 . 870 . 7337
www.houserwalker.com

STIRLING & WILBUR ENGINEERING GROUP
7085 SOUTH TAMIAMI TRAIL, SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: caxdg@stirlingwilbur.com

SEAL

TO THE BEST OF THE ARCHITECT'S OR ENGINEER'S KNOWLEDGE, SAID PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE CODES AND STANDARDS.

ATP ENGINEERING SOUTH, PL
BRADENTON, FLORIDA
ENGR. BUSINESS #8908
941-751-6485
www.atpengineeringsouth.com

ROBINSON PRESERVE EXPANSION OFFICE
MANATEE CO WA #18, IFAS #W1300220
MANATEE COUNTY, FLORIDA

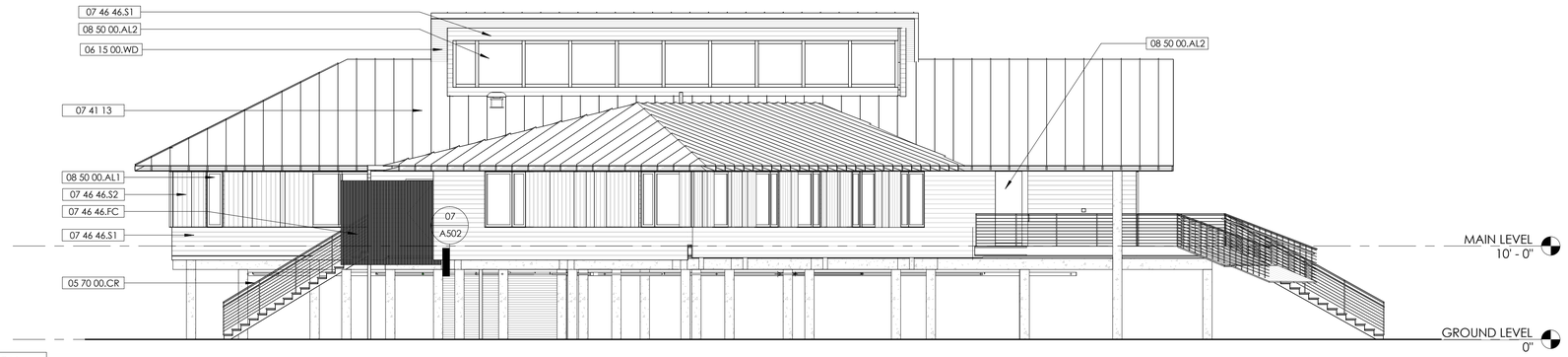
REV. #	DESCRIPTION	DATE

DRAWING TITLE: ROOF PLAN

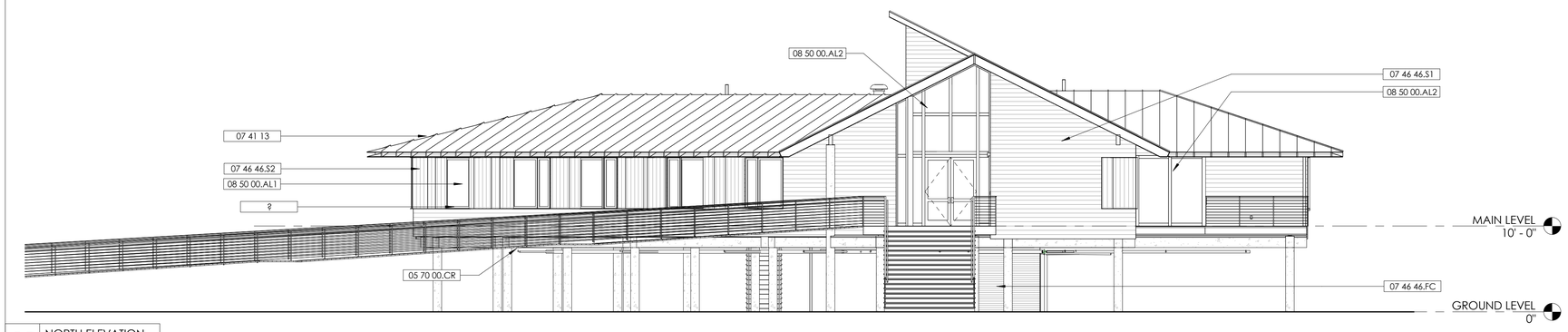
DATE : 10/02/2014
DWG SCALE: 1/8" = 1'-0"
DRAWN BY: Author
CHECKED BY: Checker
SHEET No.:

A102

95% Construction Documents

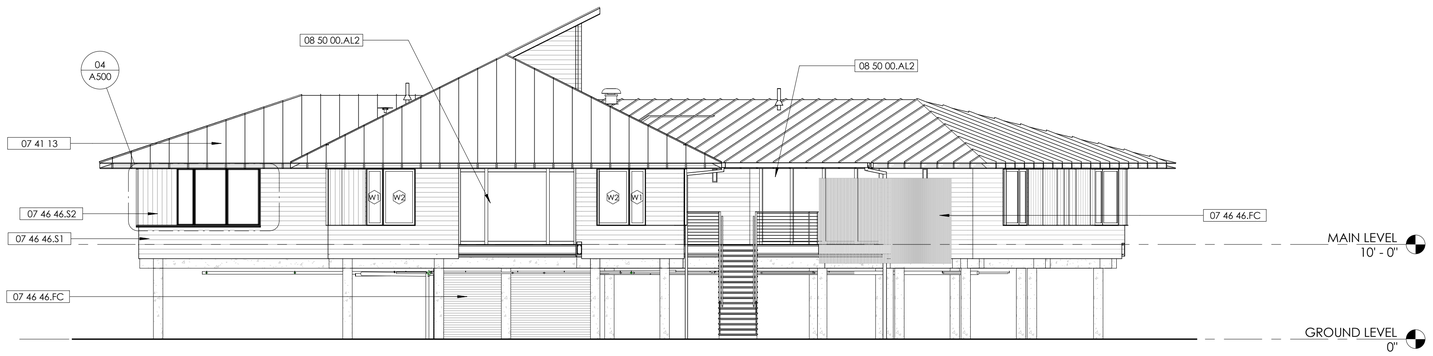


04 WEST ELEVATION
1/8" = 1'-0"



03 NORTH ELEVATION
1/8" = 1'-0"

02 EAST ELEVATION
1/8" = 1'-0"



01 SOUTH ELEVATION
1/8" = 1'-0"

MATERIAL KEYNOTES

05 70 00.CR	DECORATIVE METAL RAILINGS - CABLE RAIL
06 15 00.WD	5/4" T&G WOOD DECKING
07 41 13	METAL ROOF PANELS PACCLAD COPPER PENNY
07 46 46.FC	FIBER CEMENT SIDING
07 46 46.S1	FIBER CEMENT SIDING 1 HARDIEPLANK SELECT CEDARMILL
07 46 46.S2	FIBER CEMENT SIDING 2 HARDIEPLANK SELECT CEDARMILL
08 50 00.AL1	ALUM-CLAD WOOD WINDOWS
08 50 00.AL2	ALUM-CLAD WOOD WINDOWS

GENERAL NOTES

A. Unless noted otherwise, center all devices horizontally and vertically within siding pattern.

SHEET SPECIFIC NOTES

STIRLING & WILBUR
ENGINEERING GROUP
7085 SOUTH TAMIAMI TRAIL, SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: paul@stirlingandwilbur.com

HOUSER WALKER ARCHITECTURE
1819 PEACHTREE ROAD, NE STE 102
ATLANTA, GA 30309
t. 404 . 633 . 4264
f. 404 . 870 . 7337
www.houserwalker.com

ATP ENGINEERING SOUTH, PL
BRADENTON, FLORIDA
ENGR. BUSINESS #8908
941-751-6485
www.atpengineeringsouth.com

SEAL

TO THE BEST OF THE ARCHITECT'S OR ENGINEER'S KNOWLEDGE, SAID PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE CODES AND STANDARDS.

ROBINSON PRESERVE EXPANSION OFFICE
MANATEE CO WA #18, IFAS #W1300220
MANATEE COUNTY, FLORIDA

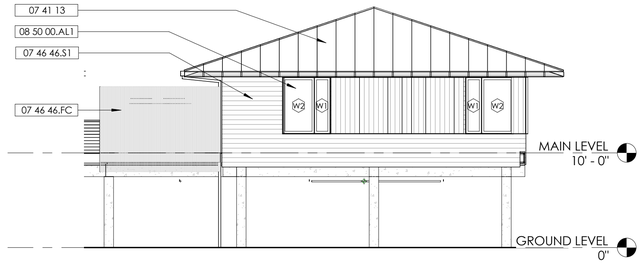
DRAWING TITLE: BUILDING ELEVATIONS

DATE: 10/02/2014
DWG SCALE: 1/8" = 1'-0"
DRAWN BY: Author
CHECKED BY: Checker
SHEET No.: A200

95% Construction Documents

REV. #	DESCRIPTION	DATE

04 WEST ELEVATION 3
1/8" = 1'-0"



03 WEST ELEVATION 2
1/8" = 1'-0"

02 NORTH ELEVATION 2
1/8" = 1'-0"

01 SOUTH ELEVATION 2
1/8" = 1'-0"

MATERIAL KEYNOTES

07 41 13	METAL ROOF PANELS PACCLAD COPPER PENNY
07 46 46.FC	FIBER CEMENT SIDING
07 46 46.S1	FIBER CEMENT SIDING 1 HARDIEPLANK SELECT CEDARMILL
07 46 46.S2	FIBER CEMENT SIDING 2 HARDIEPLANK SELECT CEDARMILL
08 50 00.AL1	ALUM-CLAD WOOD WINDOWS
08 50 00.AL2	ALUM-CLAD WOOD WINDOWS

GENERAL NOTES

SHEET SPECIFIC NOTES

STIRLING & WILBUR
ENGINEERING GROUP
7085 SOUTH TAMIAMI TRAIL, SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: paul@stirlingwilbur.com

SEAL

TO THE BEST OF THE ARCHITECTS OR ENGINEER'S KNOWLEDGE, SAID PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE CODES AND STANDARDS.

HOUSER WALKER ARCHITECTURE
1819 PEACHTREE ROAD, NE STE 102
ATLANTA, GA 30309
t. 404 . 633 . 4264
f. 404 . 870 . 7337
www.houserwalker.com

ATP ENGINEERING SOUTH, PL
BRADENTON, FLORIDA
ENGR. BUSINESS #8908
941-751-6485
www.atpengineeringsouth.com

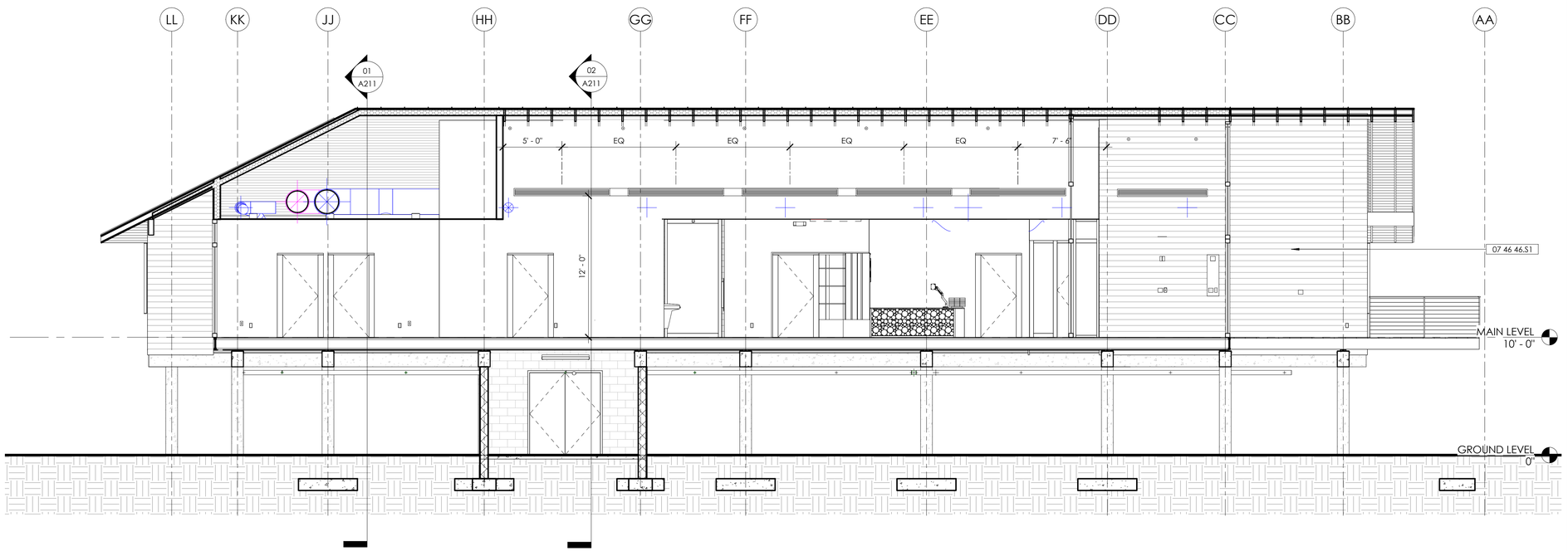
ROBINSON PRESERVE EXPANSION OFFICE
MANATEE CO WA #18, IFAS #W1300220
MANATEE COUNTY, FLORIDA

REV. #	DESCRIPTION	DATE

DRAWING TITLE:
BUILDING ELEVATIONS

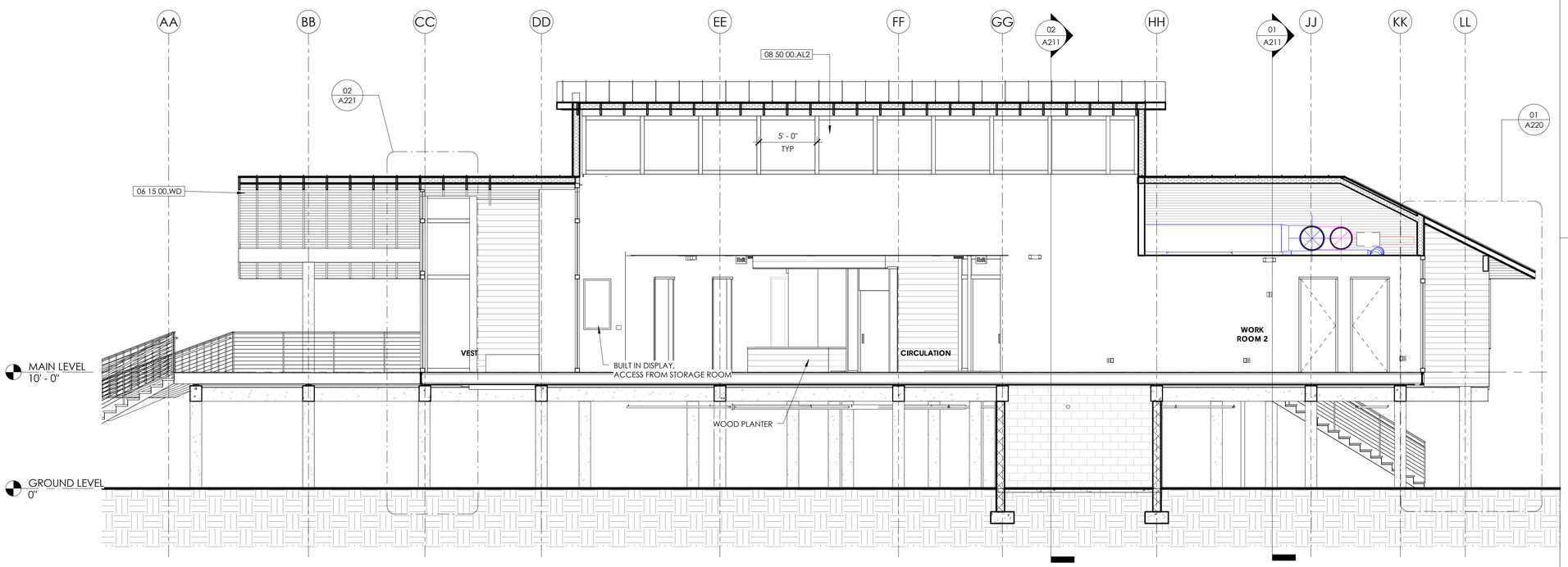
DATE : 10/02/2014
DWG. SCALE: 1/8" = 1'-0"
DRAWN BY: Author
CHECKED BY: Checker
SHEET No.:
A201

95% Construction Documents



02 BUILDING SECTION 6
3/16" = 1'-0"

1 2 4 8 12



01 BUILDING SECTION 1
3/16" = 1'-0"

1 2 4 8 12

MATERIAL KEYNOTES

06 15 00.WD	5/4" T&G WOOD DECKING
07 46 46.S1	FIBER CEMENT SIDING 1 HARDIEPLANK SELECT CEDARMILL
08 50 00.AL2	ALUM-CLAD WOOD WINDOWS

GENERAL NOTES

SHEET SPECIFIC NOTES

HOUSER WALKER ARCHITECTURE
1819 PEACHTREE ROAD, NE STE 102
ATLANTA, GA 30309
t. 404 . 633 . 4264
f. 404 . 870 . 7337
www.housewalker.com

STIRLING & WILBUR ENGINEERING GROUP
7085 SOUTH TAMIAMI TRAIL, SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: cad@stirlingwilbur.com

SEAL

TO THE BEST OF THE ARCHITECT'S OR ENGINEER'S KNOWLEDGE, SAID PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE CODES AND STANDARDS.

ROBINSON PRESERVE EXPANSION OFFICE
MANATEE CO WA #18, IFAS #W1300220
MANATEE COUNTY, FLORIDA

ATP ENGINEERING SOUTH, PL
BRADENTON, FLORIDA
ENGR. BUSINESS #8908
941-751-6485
www.atpengineeringsouth.com

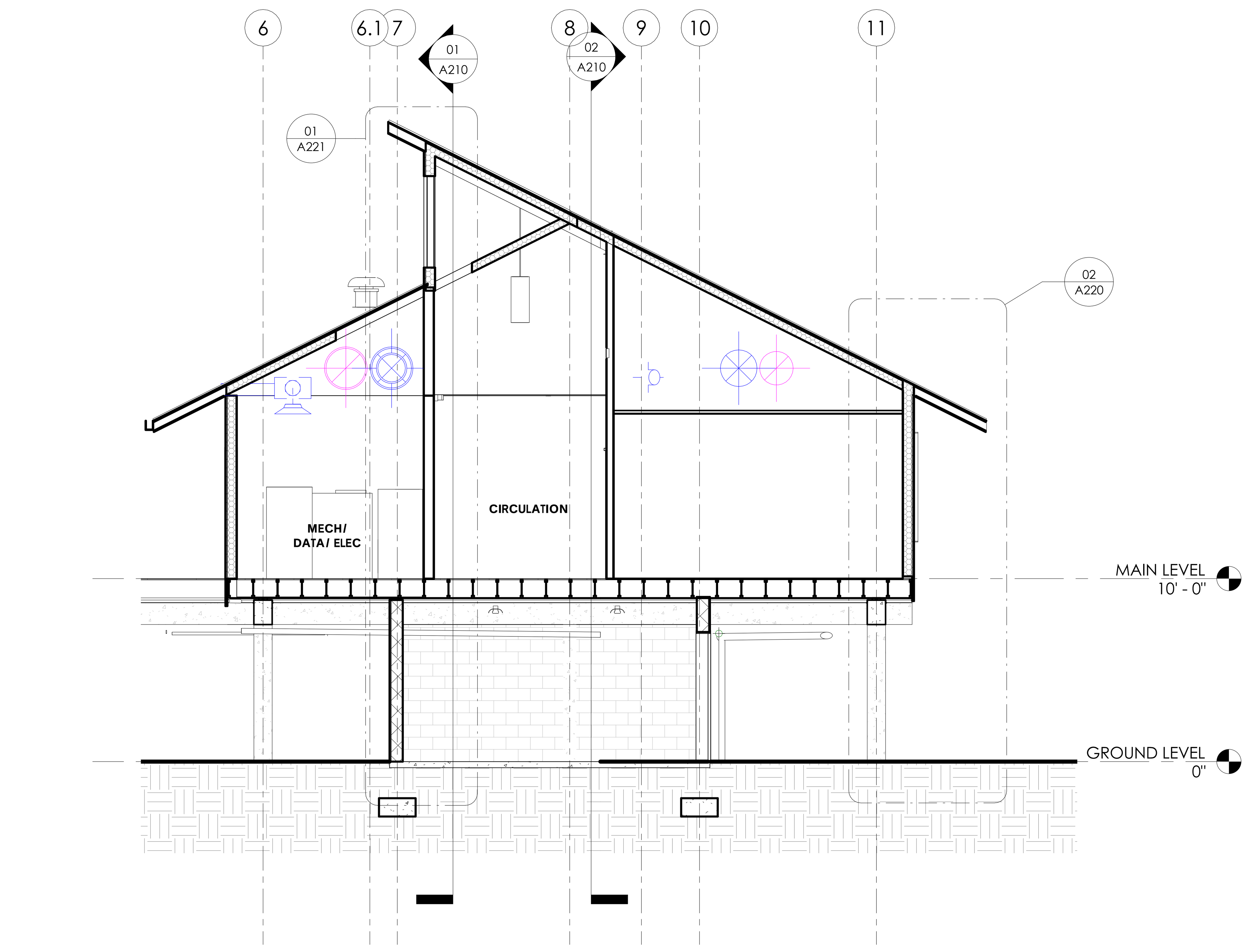
REV. #	DESCRIPTION	DATE

DRAWING TITLE: BUILDING SECTIONS

DATE : 10/02/2014
DWG. SCALE: 3/16" = 1'-0"
DRAWN. BY: Author
CHECKED. BY: Checker
SHEET No.:

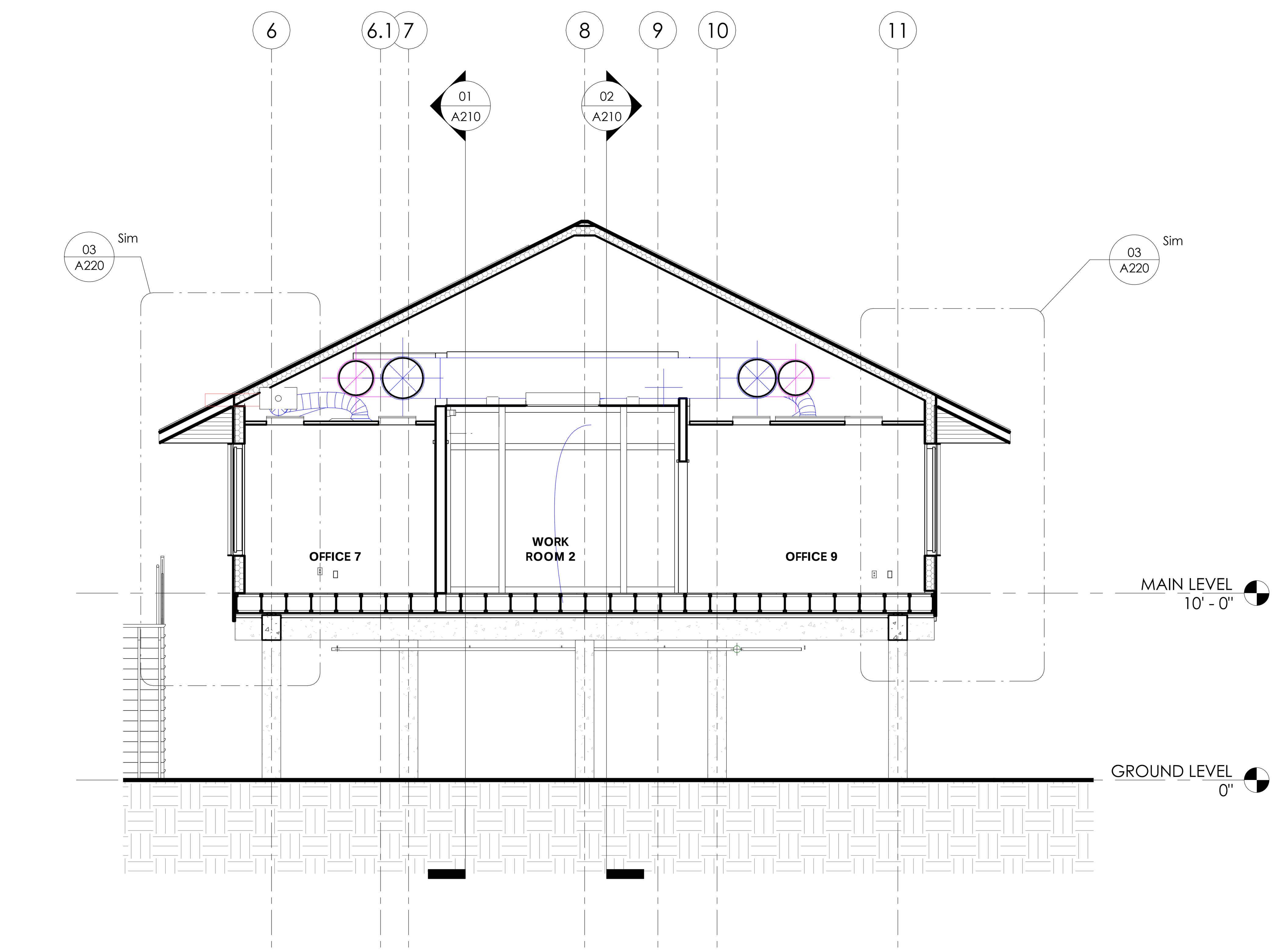
A210

95% Construction Documents



02 BUILDING SECTION 2
3/16" = 1'-0"
1 2 4 8 12

03 BUILDING SECTION 3
3/16" = 1'-0"
1 2 4 8 12



01 BUILDING SECTION 4
3/16" = 1'-0"
1 2 4 8 12

MATERIAL KEYNOTES

GENERAL NOTES

SHEET SPECIFIC NOTES

STIRLING & WILBUR
ENGINEERING GROUP
7085 SOUTH TAMIAMI TRAIL, SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: cad@stirlingwilbur.com
Copyright C 2012 Stirling & Wilbur Engineering Group

HOUSER
WALKER
ARCHITECTURE
1819 PEACHTREE ROAD, NE STE 102
Atlanta, GA 30309
t. 404.633.4264
f. 404.870.7337
www.houserwalker.com

ATP ENGINEERING SOUTH,
PL
BRADENTON, FLORIDA
ENGR. BUSINESS #8908
941-751-6485
www.atpengineeringsouth.com

SEAL

TO THE BEST OF THE ARCHITECT'S OR ENGINEER'S KNOWLEDGE, SAID PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE CODES AND STANDARDS.

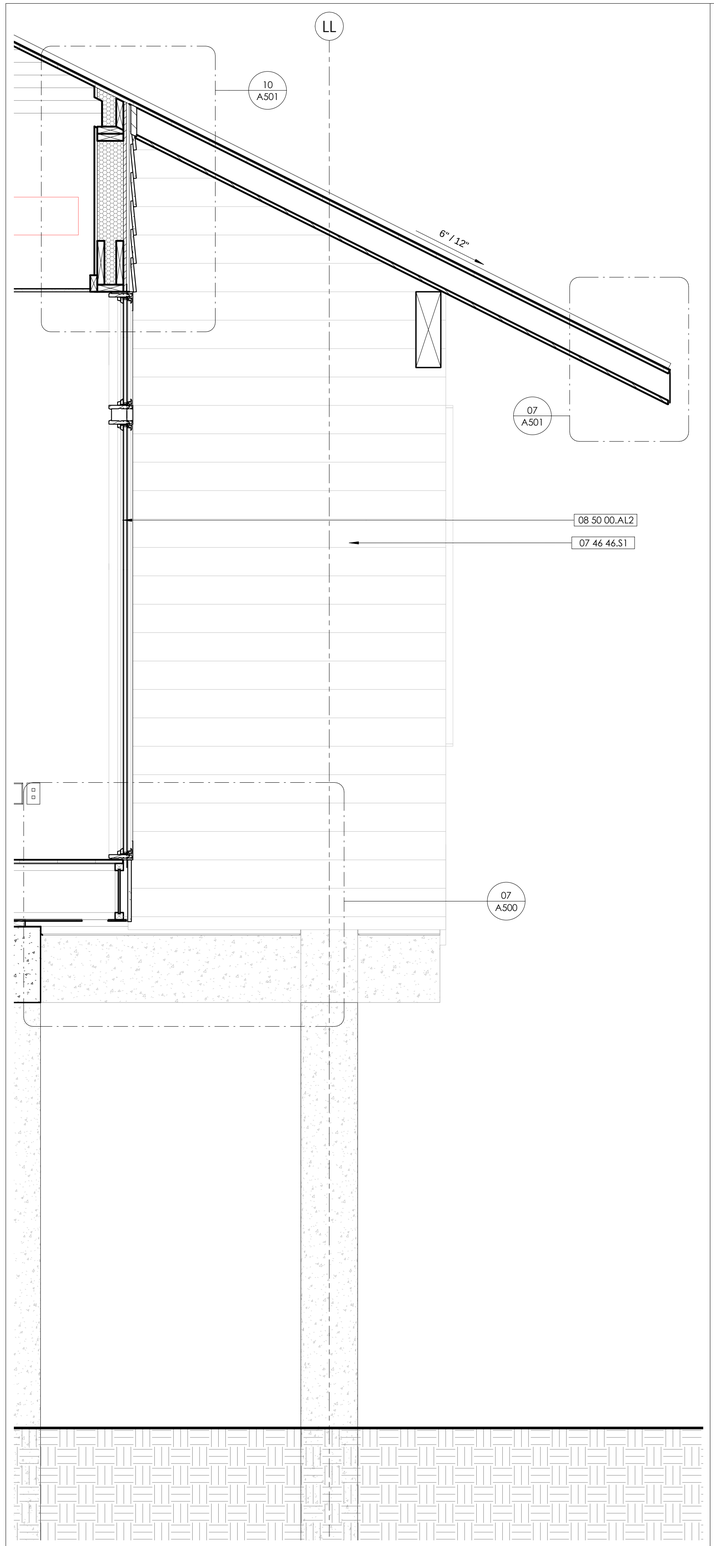
REV. #	DESCRIPTION	DATE

ROBINSON PRESERVE EXPANSION OFFICE
MANATEE CO WA #18, IFAS #W1300220
MANATEE COUNTY, FLORIDA

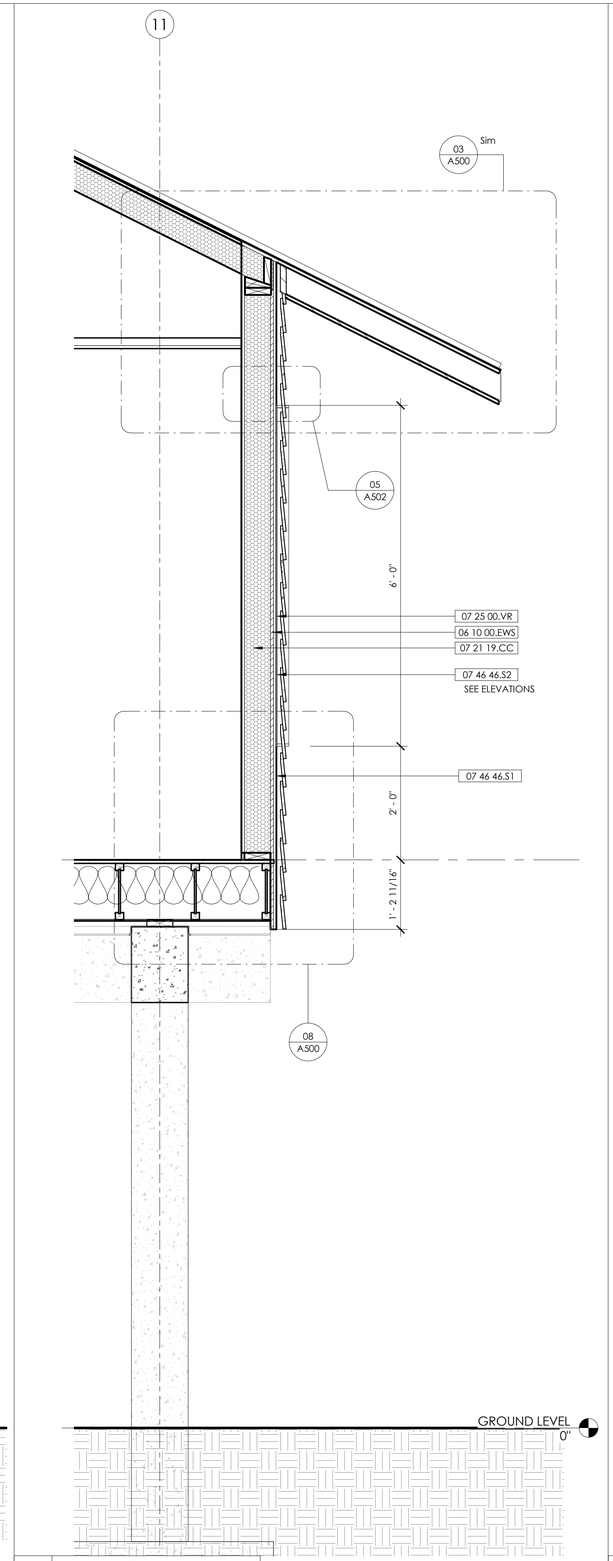
DRAWING TITLE:
BUILDING SECTIONS

DATE :	10/02/2014
DWG SCALE:	3/16" = 1'-0"
DRAWN BY:	Author
CHECKED BY:	Checker
SHEET No.:	A211

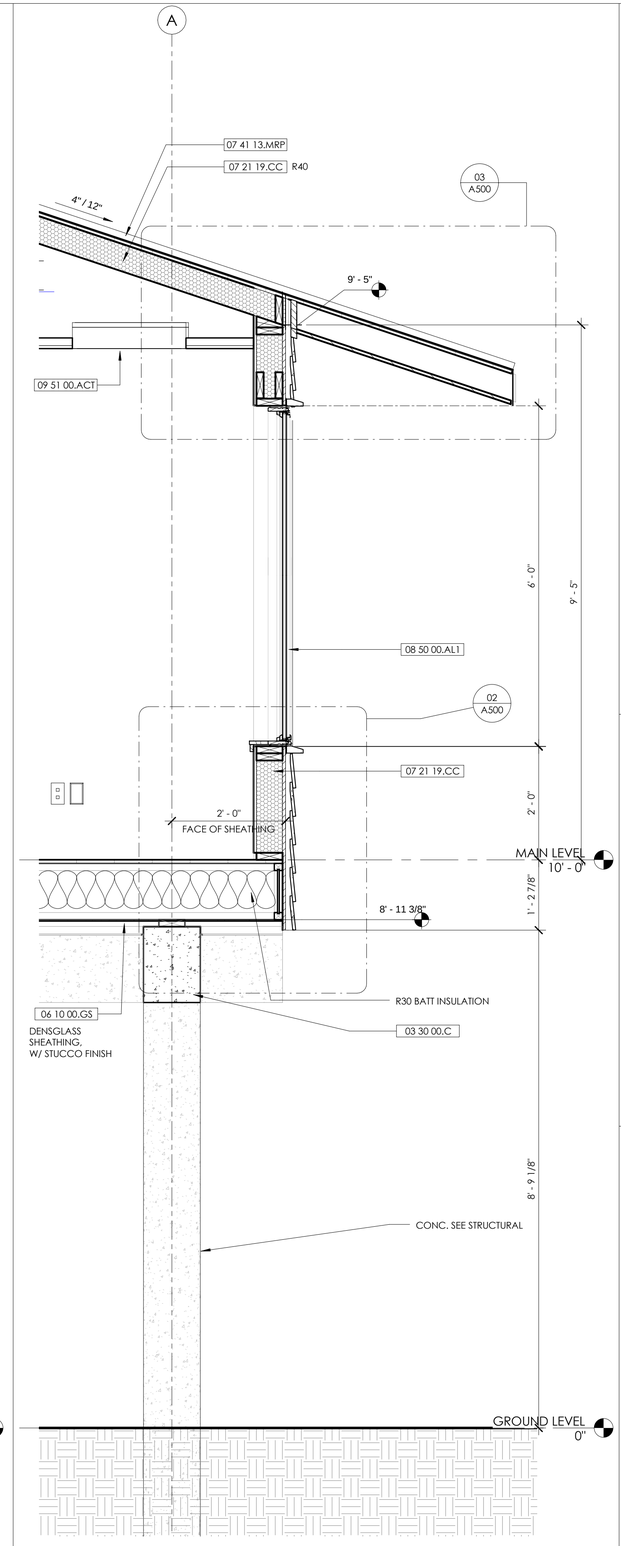
95% Construction Documents



01 WALL SECTION 1
3/4" = 1'-0"



02 WALL SECTION 2
3/4" = 1'-0"



03 TYP WALL SECTION
3/4" = 1'-0"

MATERIAL KEYNOTES

03 30 00.C	CAST-IN-PLACE CONCRETE
06 10 00.EWS	EXTERIOR WOOD SHEATHING
06 10 00.GS	GYPSUM WALL SHEATHING
07 21 19.CC	FOAMED INSULATION - CLOSED CELL
07 25 00.VR	VAPOR RETARDER
07 41 13.MRP	METAL ROOF PANELS
07 46 46.S1	FIBER CEMENT SIDING 1 HARDIEPLANK SELECT CEDARMILL
07 46 46.S2	FIBER CEMENT SIDING 2 HARDIEPLANK SELECT CEDARMILL
08 50 00.AL1	ALUM-CLAD WOOD WINDOWS
08 50 00.AL2	ALUM-CLAD WOOD WINDOWS
09 51 00.ACT	ACOUSTICAL CEILING TILE

GENERAL NOTES

SHEET SPECIFIC NOTES

STIRLING & WILBUR
ENGINEERING GROUP
7085 SOUTH TAMIAMI TRAIL, SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: paul@stirlingwilbur.com

SEAL

TO THE BEST OF THE ARCHITECTS OR ENGINEER'S KNOWLEDGE, SAID PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE CODES AND STANDARDS.

HOUSER WALKER ARCHITECTURE
1819 PEACHTREE ROAD, NE STE 102
ATLANTA, GA 30309
t. 404 . 633 . 4264
f. 404 . 870 . 7337
www.houserwalker.com

ATP ENGINEERING SOUTH, PL
BRADENTON, FLORIDA
ENGR. BUSINESS #8908
941-751-6485
www.atpengineeringsouth.com

ROBINSON PRESERVE EXPANSION OFFICE
MANATEE CO WA #18, IFAS #W1300220
MANATEE COUNTY, FLORIDA

DATE

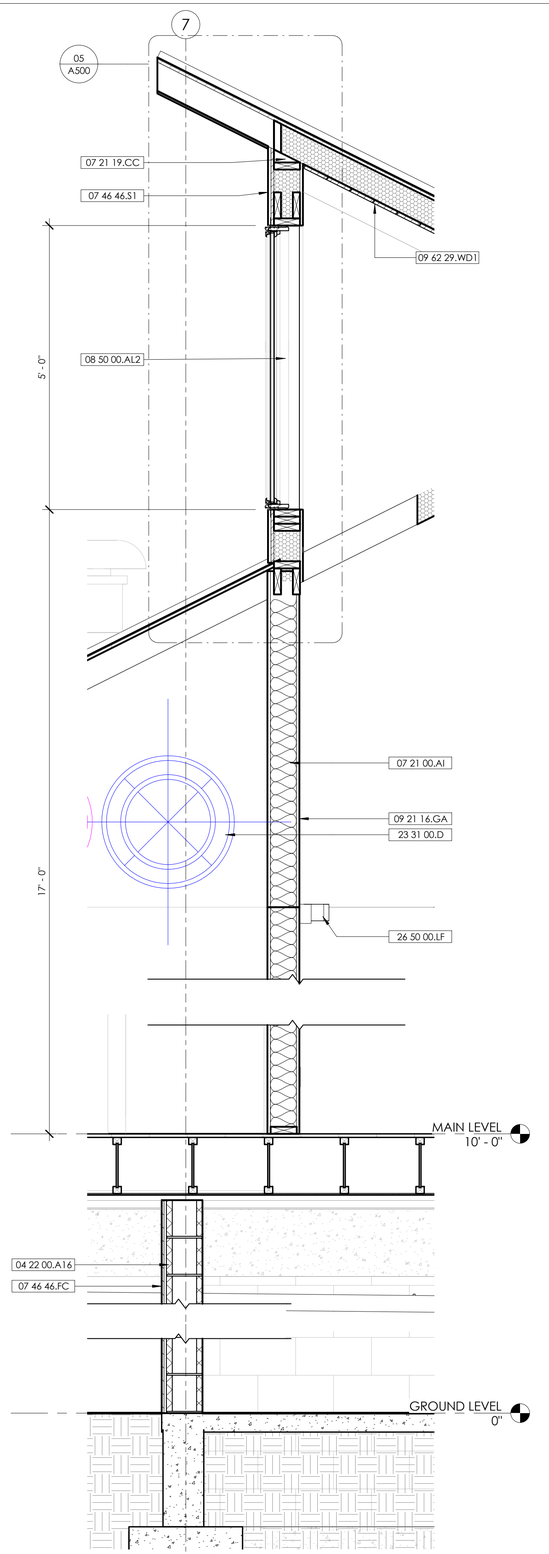
REV. # DESCRIPTION

DRAWING TITLE: WALL SECTIONS

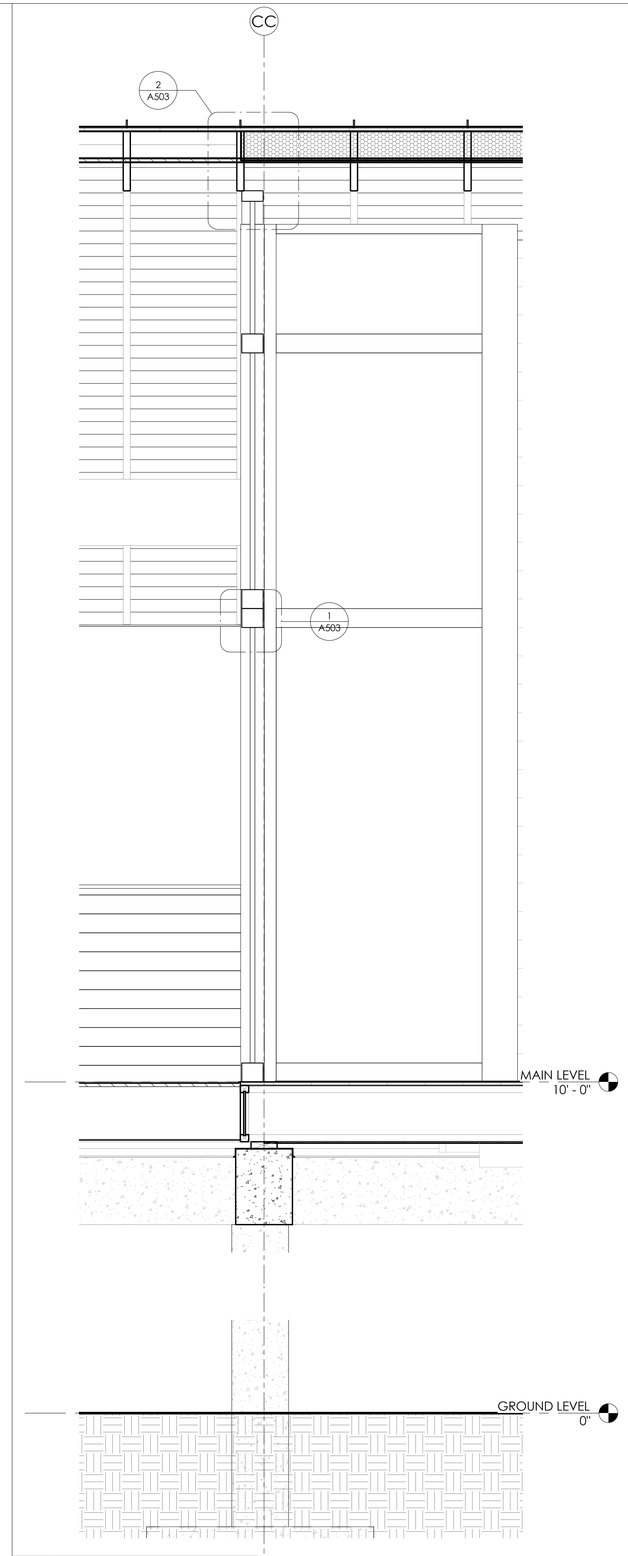
DATE : 10/02/2014
DWG SCALE: 3/4" = 1'-0"
DRAWN BY: Author
CHECKED BY: Checker
SHEET No.:

A220

95% Construction Documents



01 WALL SECTION @ CLERESTORY
3/4" = 1'-0"



02 WALL SECTION @ VESTIBULE
3/4" = 1'-0"

MATERIAL KEYNOTES

04 22 00.A16	
07 21 00.AI	ACOUSTICAL INSULATION
07 21 19.CC	FOAMED INSULATION - CLOSED CELL
07 46 46.FC	FIBER CEMENT SIDING
07 46 46.S1	FIBER CEMENT SIDING 1 HARDIEPLANK SELECT CEDARMILL
08 50 00.AL2	ALUM-CLAD WOOD WINDOWS
09 21 16.GA	GYPSUM BOARD ASSEMBLY
09 62 29.WD1	ENGINEERED WOOD FLOORING
23 31 00.D	HVAC DUCTWORK
26 50 00.LF	LIGHTING FIXTURES

GENERAL NOTES

SHEET SPECIFIC NOTES

STIRLING & WILBUR
ENGINEERING GROUP
7085 SOUTH TAMIAMI TRAIL, SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: paul@stirlingwilbur.com

HOUSER WALKER ARCHITECTURE
1819 PEACHTREE ROAD, NE STE 102
ATLANTA, GA 30309
t. 404 . 633 . 4264
f. 404 . 870 . 7337
www.houserwalker.com

ATP ENGINEERING SOUTH, PL
BRADENTON, FLORIDA
ENGR. BUSINESS #8908
941-751-6485
www.atpengineeringsouth.com

REV. #	DESCRIPTION	DATE

SEAL

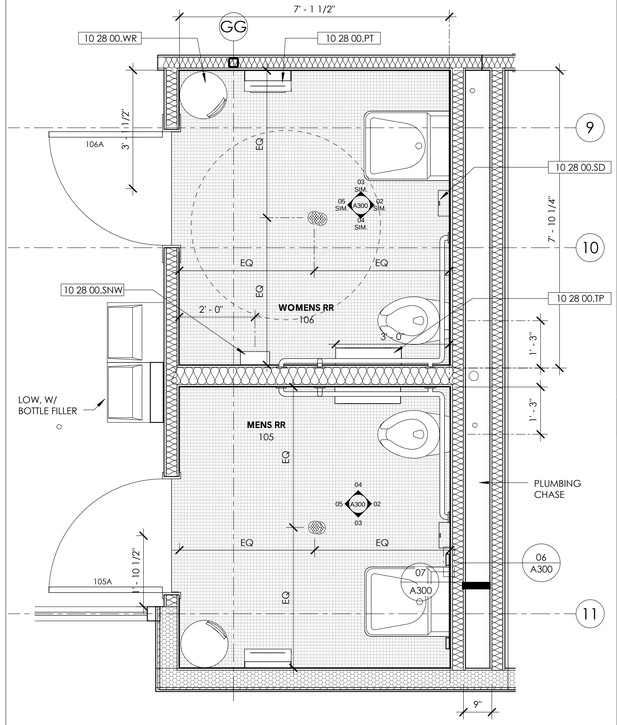
TO THE BEST OF THE ARCHITECT'S OR ENGINEER'S KNOWLEDGE, SAID PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE CODES AND STANDARDS.

ROBINSON PRESERVE EXPANSION OFFICE
MANATEE CO WA #18, IFAS #W1300220
MANATEE COUNTY, FLORIDA

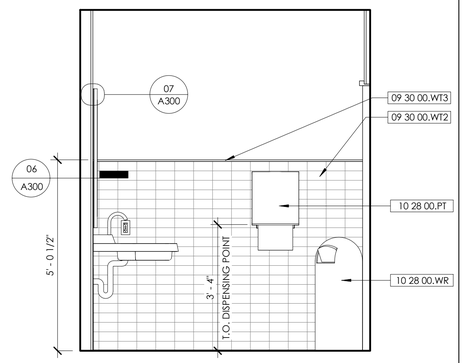
DRAWING TITLE:
WALL SECTIONS

DATE : 10/02/2014
DWG SCALE: 3/4" = 1'-0"
DRAWN BY: Author
CHECKED BY: Checker
SHEET No.:
A221

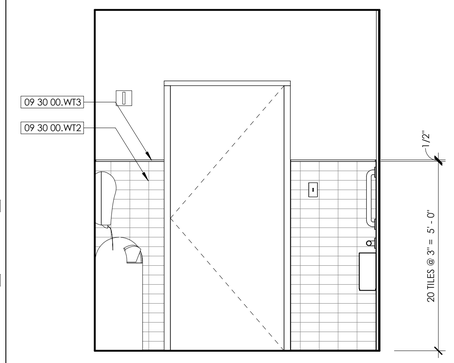
95% Construction Documents



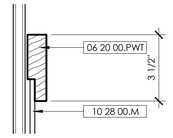
01 TOILET ROOM PLANS
1/2" = 1'-0"



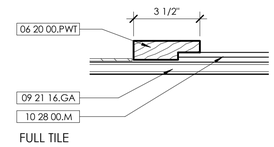
03 TOILET ROOM ELEVATION 1
1/2" = 1'-0"



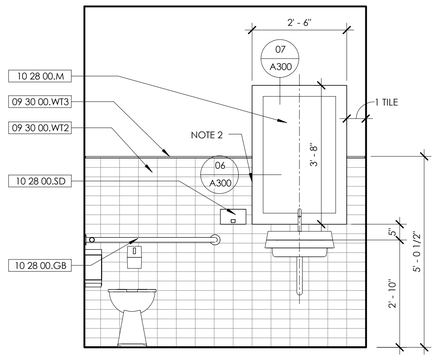
05 TOILET ROOM ELEVATION 2
1/2" = 1'-0"



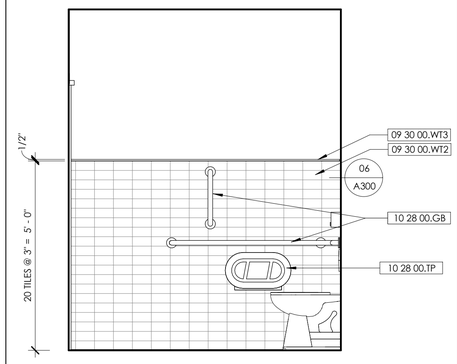
07 MIRROR HEAD DETAIL
3" = 1'-0"



06 MIRROR JAMB DETAIL
3" = 1'-0"



02 TOILET ROOM ELEVATION 3
1/2" = 1'-0"



04 TOILET ROOM ELEVATION 4
1/2" = 1'-0"

MATERIAL KEYNOTES

06 20 00.PWT	PAINTED WALL TRIM
09 21 16.GA	GYPSUM BOARD ASSEMBLY
09 30 00.WT2	BASE WALL TILE
09 30 00.WT3	ACCENT WALL TILE
10 28 00.GB	GRAB BAR
10 28 00.M	MIRROR
10 28 00.PT	PAPER TOWEL DISPENSER
10 28 00.SD	SOAP DISPENSER
10 28 00.SNW	SANITARY WASTE RECEPTACLE
10 28 00.TP	TOILET PAPER DISPENSER
10 28 00.WR	WASTE RECEPTACLE

GENERAL NOTES

SHEET SPECIFIC NOTES

1. All fixture heights to comply with 2010 ADA + Florida Accessibility Codes.
2. Tile to be installed around mirror trim, see details.

STIRLING & WILBUR
ENGINEERING GROUP
7085 SOUTH TAMIAMI TRAIL, SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: paul@stirlingwilbur.com

SEAL

TO THE BEST OF THE ARCHITECT'S OR ENGINEER'S KNOWLEDGE, SAID PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE CODES AND STANDARDS.

HOUSER WALKER ARCHITECTURE
1819 PEACHTREE ROAD, NE STE 102
ATLANTA, GA 30309
t. 404 . 633 . 4264
f. 404 . 870 . 7337
www.houserwalker.com

ATP ENGINEERING SOUTH, PL
BRADENTON, FLORIDA
ENGR. BUSINESS #8908
941-751-6485
www.atpengineeringsouth.com

ROBINSON PRESERVE EXPANSION OFFICE
MANATEE CO WA #18, IFAS #W1300220
MANATEE COUNTY, FLORIDA

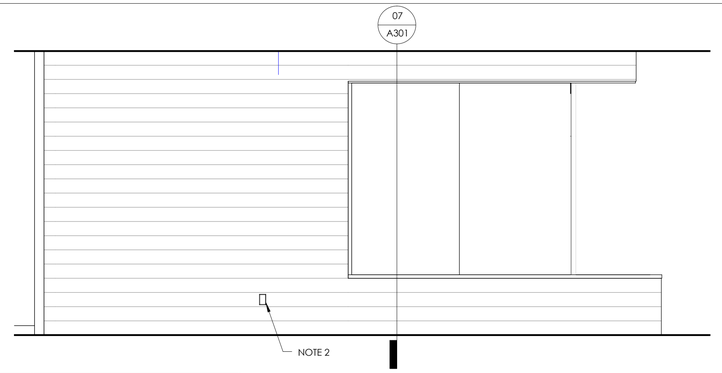
DRAWING TITLE:
ENLARGED BATHROOM PLANS

DATE : 10/02/2014
DWG. SCALE: As indicated
DRAWN BY: DE
CHECKED BY: Checker
SHEET No.:
A300

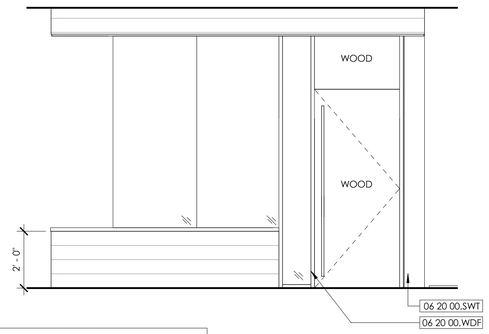
95% Construction Documents

REV. #	DESCRIPTION	DATE

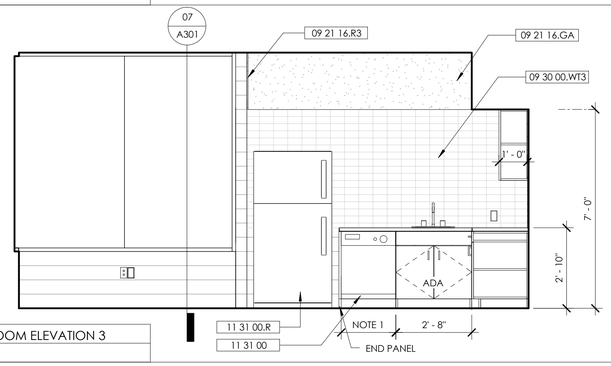
02 3D VIEW OF BREAKROOM



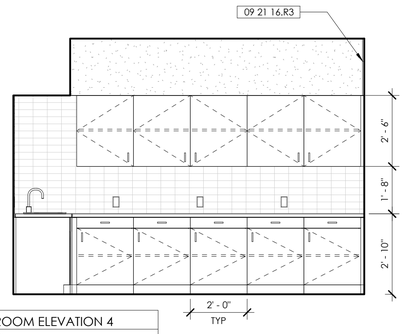
06 BREAKROOM ELEVATION 1
3/8" = 1'-0"



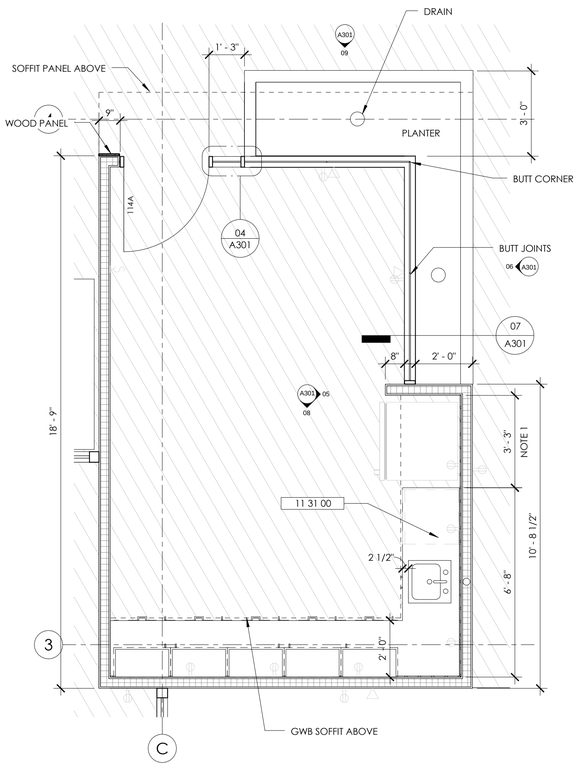
09 BREAKROOM ELEVATION 2
3/8" = 1'-0"



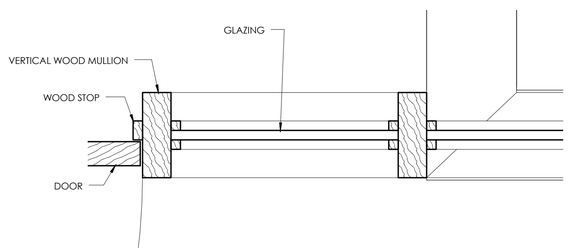
05 BREAKROOM ELEVATION 3
3/8" = 1'-0"



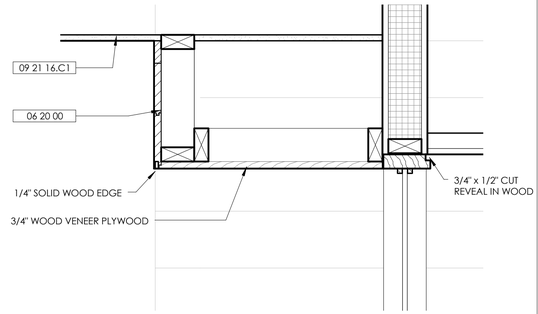
08 BREAKROOM ELEVATION 4
3/8" = 1'-0"

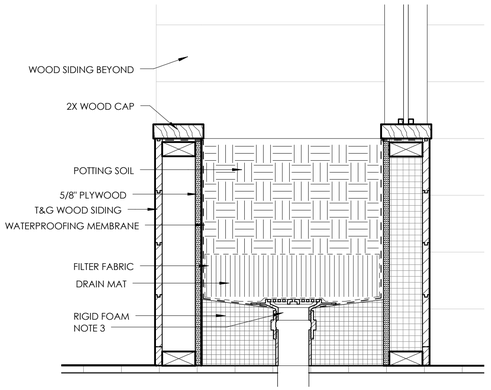


01 ENLARGED BREAK ROOM
3/8" = 1'-0"



04 WOOD JAMB DETAIL
3" = 1'-0"





07 PLANTER SECTION
1 1/2" = 1'-0"

MATERIAL KEYNOTES

06 20 00	FINISH CARPENTRY
06 20 00.SWT	STAINED WOOD TRIM
06 20 00.WDF	WOOD DOOR FRAME
09 21 16.C1	GYPSUM WALLBOARD-CEILING
09 21 16.GA	GYPSUM BOARD ASSEMBLY
09 21 16.R3	Z REVEAL MOLDING
09 30 00.WT3	ACCENT WALL TILE
11 31 00	APPLIANCES
11 31 00.R	REFRIGERATOR

GENERAL NOTES

SHEET SPECIFIC NOTES

1. Coordinate clear width dimensions with minimum requirements of appliance.
2. Locate outlet within center of wood siding plank.
3. Drainage to tie into building's drainage system. See Plumbing.

STIRLING & WILBUR
ENGINEERING GROUP
7085 SOUTH TAMIAMI TRAIL, SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: cad@stirlingwilbur.com

SEAL

TO THE BEST OF THE ARCHITECTS OR ENGINEER'S KNOWLEDGE, SAID PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE CODES AND STANDARDS.

HOUSER WALKER ARCHITECTURE
1819 PEACHTREE ROAD, NE STE 102
ATLANTA, GA 30309
t. 404 . 633 . 4264
f. 404 . 870 . 7337
www.houserwalker.com

ATP ENGINEERING SOUTH, PL
BRADENTON, FLORIDA
ENGR. BUSINESS #8908
941-751-6485
www.atpengineeringsouth.com

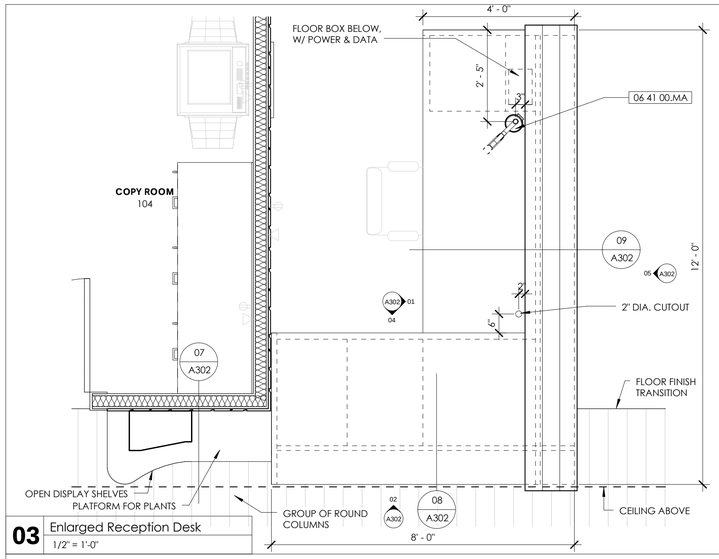
ROBINSON PRESERVE EXPANSION OFFICE
MANATEE CO WA #18, IFAS #W1300220
MANATEE COUNTY, FLORIDA

REV. #	DESCRIPTION	DATE

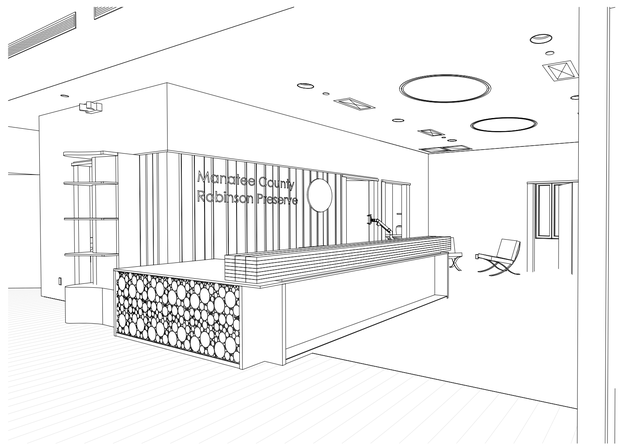
DRAWING TITLE:
ENLARGED BREAKROOM

DATE: 10/02/2014
DWG SCALE: As indicated
DRAWN BY: DE
CHECKED BY: Checker
SHEET No.:
A301

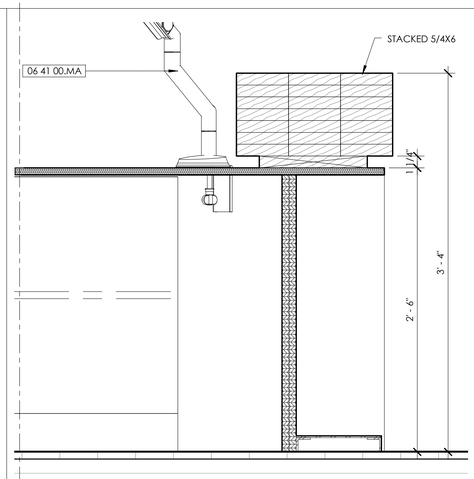
95% Construction Documents



03 Enlarged Reception Desk
1/2" = 1'-0"



06 3D VIEW OF RECEPTION



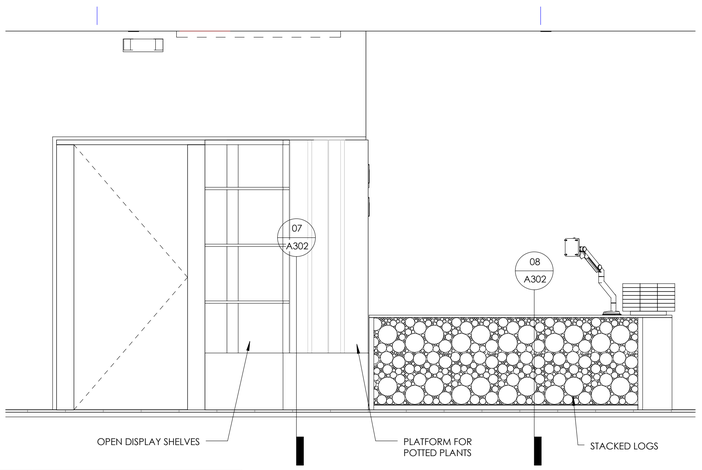
09 DESK SECTION 1
1 1/2" = 1'-0"

MATERIAL KEYNOTES

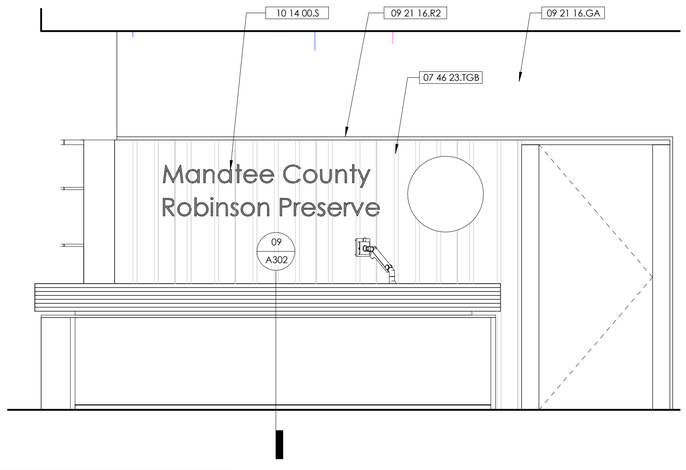
06 41 00.MA	MONITOR ARM
07 46 23.TGB	T&G BOARD SIDING
09 21 16.GA	GYPSUM BOARD ASSEMBLY
09 21 16.R2	F REVEAL MOLDING
10 14 00.S	SIGNAGE

GENERAL NOTES

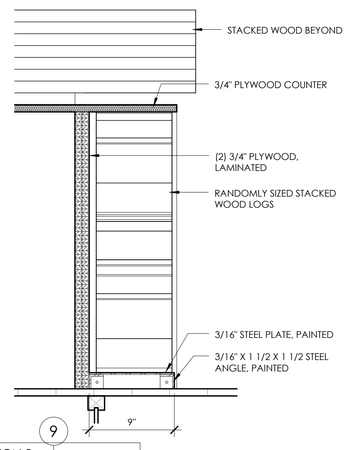
SHEET SPECIFIC NOTES



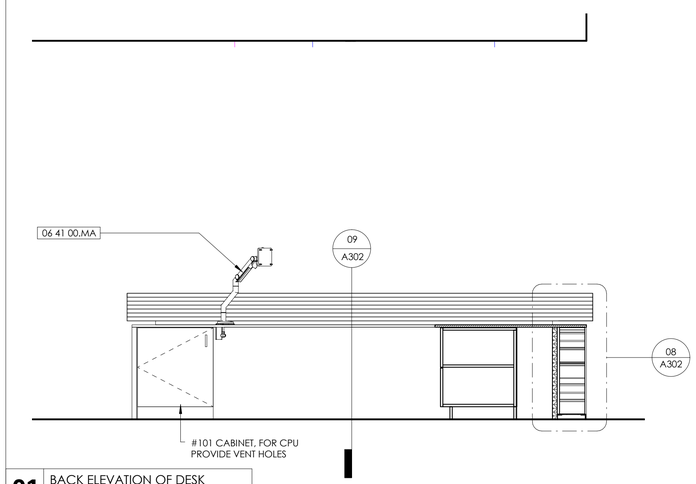
02 SIDE ELEVATION OF DESK
1/2" = 1'-0"



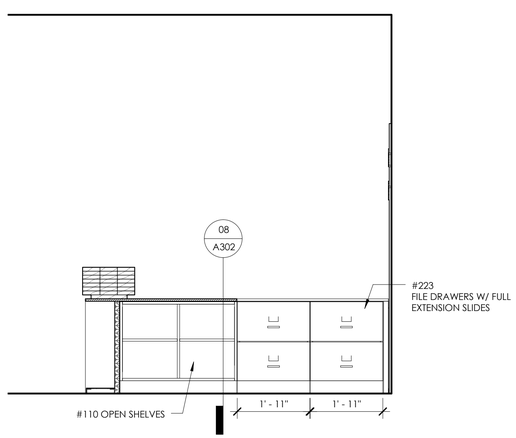
05 FRONT ELEVATION OF DESK
1/2" = 1'-0"



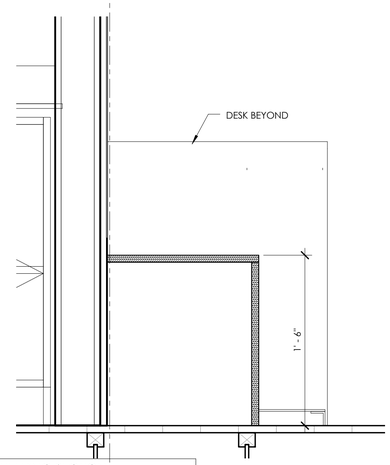
08 DESK SECTION 2
1 1/2" = 1'-0"



01 BACK ELEVATION OF DESK
1/2" = 1'-0"



04 BACK SIDE ELEVATION OF DESK
1/2" = 1'-0"



07 SHELVING SECTION
1 1/2" = 1'-0"

STIRLING & WILBUR
ENGINEERING GROUP
7085 SOUTH TAMIAMI TRAIL, SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: paul@stirlingwilbur.com

HOUSER WALKER ARCHITECTURE
1819 PEACHTREE ROAD, NE STE 102
ATLANTA, GA 30309
t. 404 . 633 . 4264
f. 404 . 870 . 7337
www.houserwalker.com

ATP ENGINEERING SOUTH, PL
BRADENTON, FLORIDA
ENGR. BUSINESS #8908
941-751-6485
www.atpengineeringsouth.com

SEAL

TO THE BEST OF THE ARCHITECT'S OR ENGINEER'S KNOWLEDGE, SAID PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE CODES AND STANDARDS.

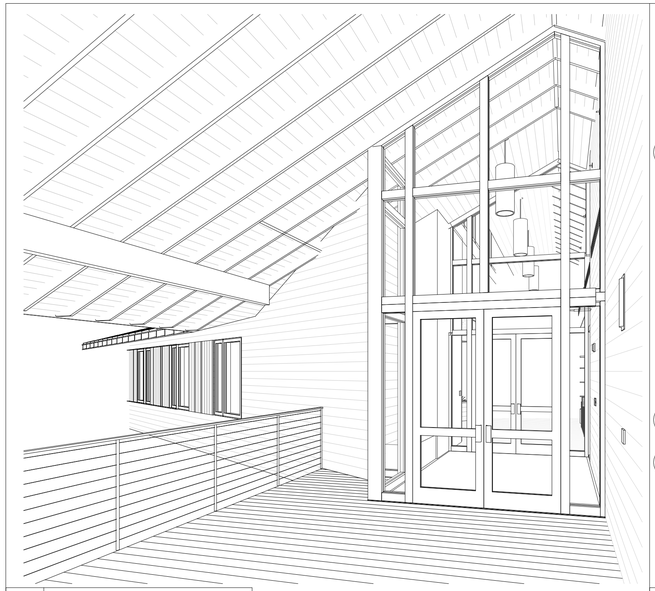
ROBINSON PRESERVE EXPANSION OFFICE
MANATEE CO WA #18, IFAS #W1300220
MANATEE COUNTY, FLORIDA

DRAWING TITLE:
ENLARGED RECEPTION DESK

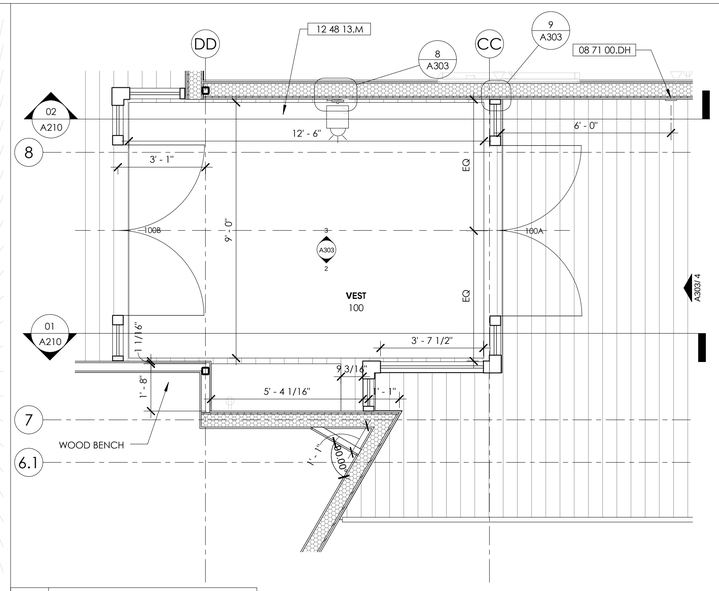
DATE:	10/02/2014
DWG SCALE:	As indicated
DRAWN BY:	Author
CHECKED BY:	Checker
SHEET No.:	A302

REV. #	DESCRIPTION	DATE

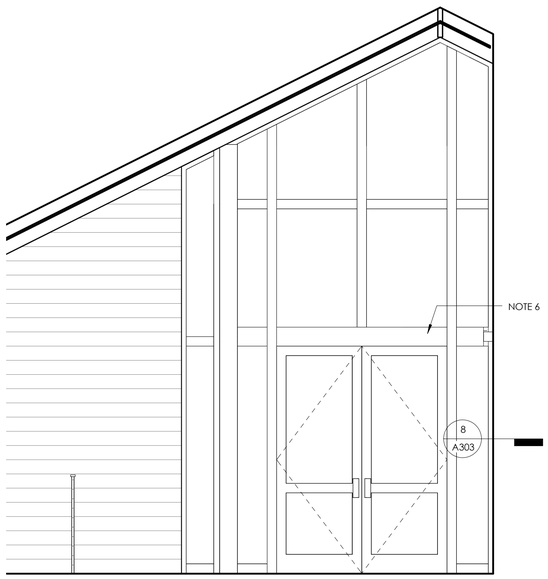
95% Construction Documents



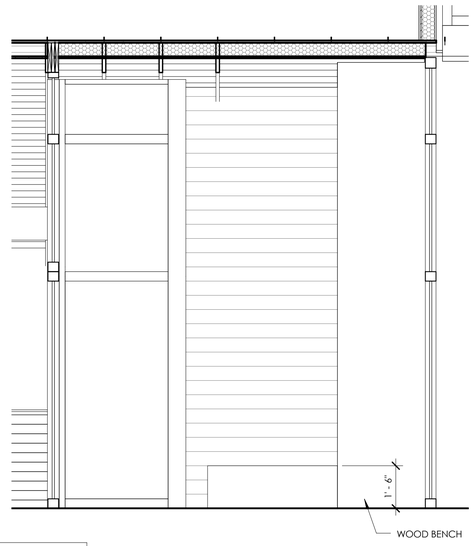
5 3D View of Entry



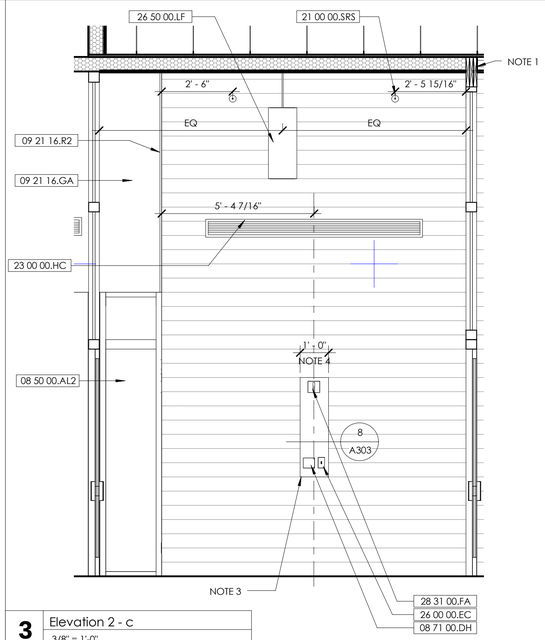
1 Enlarged Vestibule Plan
3/8" = 1'-0"



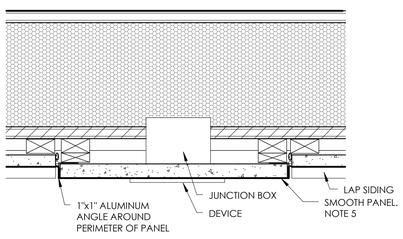
4 2 - a
3/8" = 1'-0"



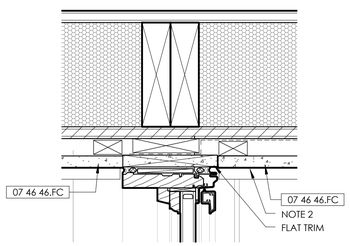
2 Elevation 9 - a
3/8" = 1'-0"



3 Elevation 2 - c
3/8" = 1'-0"



8 DETAIL @ DEVICES @ SIDING
3" = 1'-0"



9 SIDING @ ENTRY WINDOW WALL
3" = 1'-0"

MATERIAL KEYNOTES

07 46 46.FC	FIBER CEMENT SIDING
08 50 00.AL2	ALUM-CLAD WOOD WINDOWS
08 71 00.DH	DOOR HARDWARE
09 21 16.GA	GYPSUM BOARD ASSEMBLY
09 21 16.R2	F REVEAL MOLDING
12 48 13.M	ENTRANCE FLOOR MAT
21 00 00.SRS	SEMI-RECESSED SPRINKLER HEAD
23 00 00.HC	HVAC COMPONENT
26 00 00.EC	ELECTRICAL COMPONENT
26 50 00.LF	LIGHTING FIXTURES
28 31 00.FA	FIRE ALARM COMPONENT

GENERAL NOTES

SHEET SPECIFIC NOTES

1. Provide additional 2x12 framing to match window mullion width.
2. It is the intent for the siding to appear to be continuing from exterior to interior, behind the window mullion.
3. Align top and bottom of flat panel with lap siding joints.
4. Coordinate width with final dimensions of devices.
5. Paint color of smooth inset panel T.B.D. by Architect.
6. Conduit to ADA door controllers to be concealed within steel support, above door. It is intended that the ADA door controller box is concealed by the window mullions.

STIRLING & WILBUR
ENGINEERING GROUP
7085 SOUTH TAMIAMI TRAIL, SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: cad@stirlingwilbur.com

SEAL

TO THE BEST OF THE ARCHITECT'S OR ENGINEER'S KNOWLEDGE, SAID PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE CODES AND STANDARDS.

HOUSER WALKER ARCHITECTURE
1819 PEACHTREE ROAD, NE STE 102
ATLANTA, GA 30309
t. 404 . 633 . 4264
f. 404 . 870 . 7337
www.houserwalker.com

ATP ENGINEERING SOUTH, PL
BRADENTON, FLORIDA
ENGR. BUSINESS #8908
941-751-6485
www.atpengineeringsouth.com

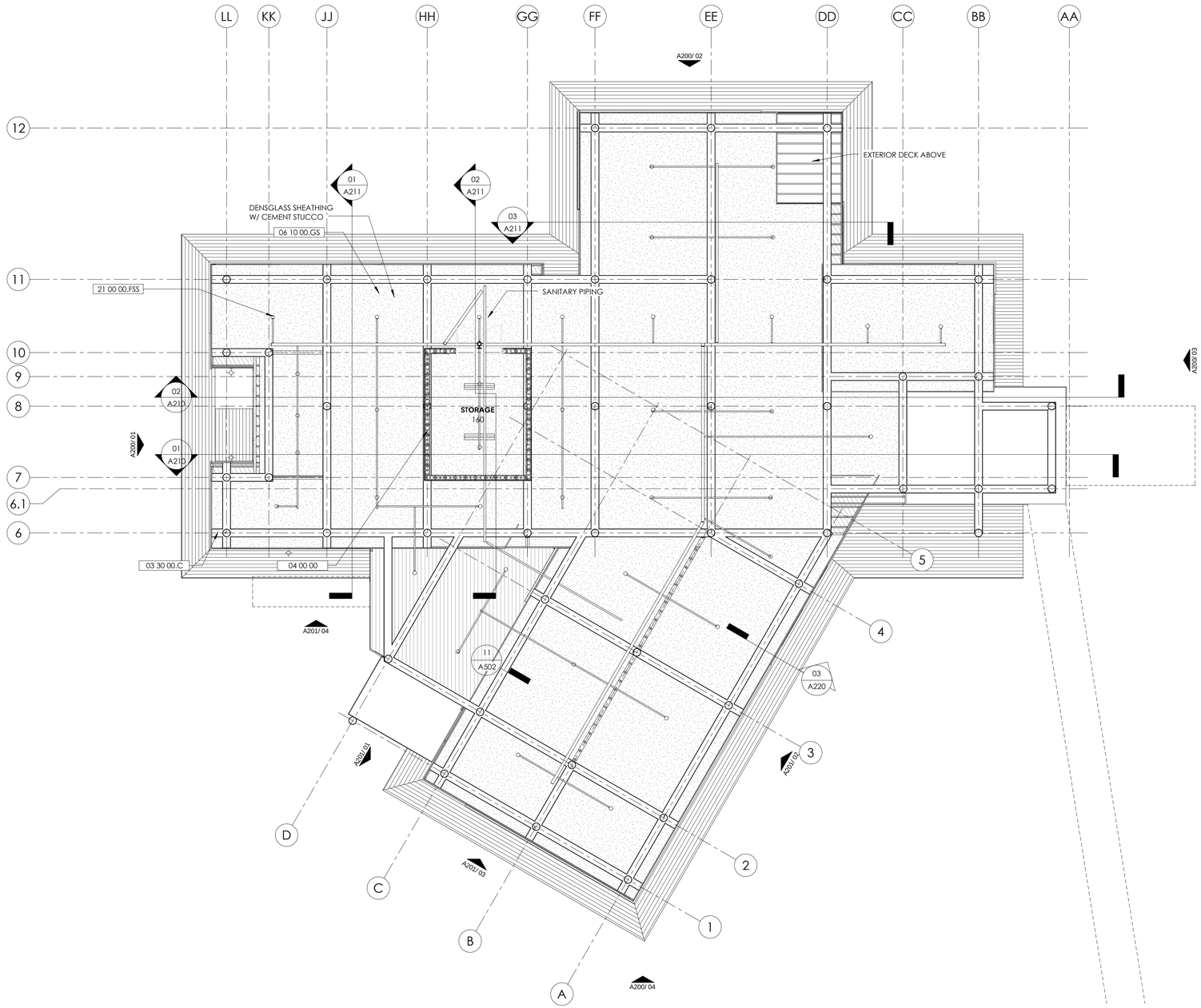
ROBINSON PRESERVE EXPANSION OFFICE
MANATEE CO WA #18, IFAS #W1300220
MANATEE COUNTY, FLORIDA

DRAWING TITLE:
ENLARGED ENTRY VESTIBULE

DATE: 10/02/2014
DWG SCALE: As indicated
DRAWN BY: Author
CHECKED BY: Checker
SHEET No.:
A303

95% Construction Documents

REV. #	DESCRIPTION	DATE



01 GROUND LEVEL
1/8" = 1'-0"

2 4 8 16

MATERIAL KEYNOTES

03 30 00.C	CAST-IN-PLACE CONCRETE
04 00 00	MASONRY
06 10 00.GS	GYPSUM WALL SHEATHING
21 00 00.FSS	FIRE-SUPPRESSION SYSTEM

GENERAL NOTES

A. Final locations of the fire protection sprinkler heads shall comply with applicable codes and specifications. Illustrated layout is schematic and may not reflect all the sprinkler heads or piping which may be required per code.

SHEET SPECIFIC NOTES

STIRLING & WILBUR
ENGINEERING GROUP
7085 SOUTH TAMIAMI TRAIL, SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: cad@stirlingwilbur.com

HOUSER WALKER ARCHITECTURE
1819 PEACHTREE ROAD, NE STE 102
ATLANTA, GA 30309
t. 404 . 633 . 4264
f. 404 . 870 . 7337
www.houserwalker.com

ATP ENGINEERING SOUTH, PL
BRADENTON, FLORIDA
ENGR. BUSINESS #8908
941-751-6485
www.atpengineeringsouth.com

SEAL

TO THE BEST OF THE ARCHITECT'S OR ENGINEER'S KNOWLEDGE, SAID PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE CODES AND STANDARDS.

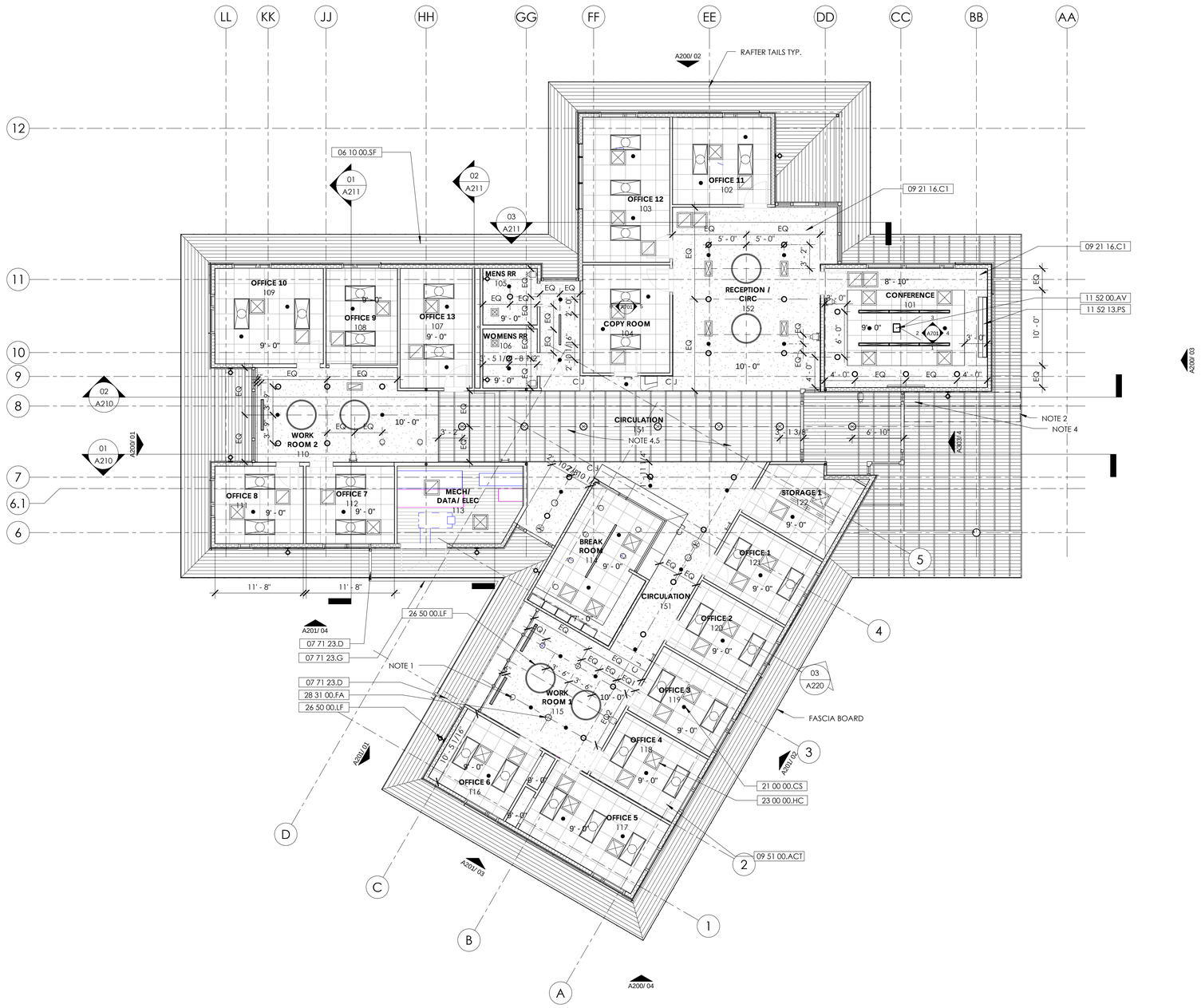
ROBINSON PRESERVE EXPANSION OFFICE
MANATEE CO WA #18, IFAS #W1300220
MANATEE COUNTY, FLORIDA

DRAWING TITLE:
GROUND LEVEL
REFLECTED CEILING
PLAN

DATE: 10/02/2014
DWG SCALE: 1/8" = 1'-0"
DRAWN BY: Author
CHECKED BY: Checker
SHEET No.:
A400

REV. # DESCRIPTION DATE

95% Construction Documents



01 MAIN LEVEL
1/8" = 1'-0"

2 4 8 16

NORTH

MATERIAL KEYNOTES

06 10 00.SF	STRUCTURAL FRAMING
07 71 23.D	DOWNSPOUT
07 71 23.G	GUTTER
09 21 16.C1	GYPSUM WALLBOARD-CEILING
09 51 00.ACT	ACOUSTICAL CEILING TILE
11 52 00.AV	AUDIO-VISUAL EQUIPMENT
11 52 13.PS	PROJECTION SCREEN
21 00 00.CS	CONCEALED SPRINKLER HEAD
23 00 00.HC	HVAC COMPONENT
26 50 00.LF	LIGHTING FIXTURES
28 31 00.FA	FIRE ALARM COMPONENT

GENERAL NOTES

A. Any devices, panels, etc, not indicated on this RCP shall not be located without prior approval by Architect.
B. All devices in ceiling are to be installed with care to organize elements: consistent alignment, centered in tiles, etc. Ask Architect if precise location is not explicit in drawings.drawings.
C. The fire protection sprinkler heads have been located in order to align with the architectural intent. Final locations shall comply with applicable codes and specifications. Quantity of sprinkler heads may need to be increased in order to achieve layout indicated.

SHEET SPECIFIC NOTES

1. Align fixtures and devices along centerline of window mullion.
2. Space soffit decking boards at ridge with 1" air gap, similar to soffit detail. Provide insect screen behind decking.
3. Clerestory above.
4. Area to be protected by sidewall type sprinkler heads.
5. No ducts or pipes are to be routed or visible within the areas open to roof deck/structure. Conduit is to be minimized & locations must be well organized with structure & all locations to be approved by Architect prior to installation.

HOUSER WALKER ARCHITECTURE
1819 PEACHTREE ROAD, NE STE 102
ATLANTA, GA 30309
t. 404 . 633 . 4264
f. 404 . 870 . 7337
www.houserwalker.com

STIRLING & WILBUR ENGINEERING GROUP
7085 SOUTH TAMIAMI TRAIL, SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: cad@stirlingwilbur.com

SEAL

TO THE BEST OF THE ARCHITECTS OR ENGINEER'S KNOWLEDGE, SAID PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE CODES AND STANDARDS.

ATP ENGINEERING SOUTH, PL
BRADENTON, FLORIDA
ENGR. BUSINESS #8908
941-751-6485
www.atpengineeringsouth.com

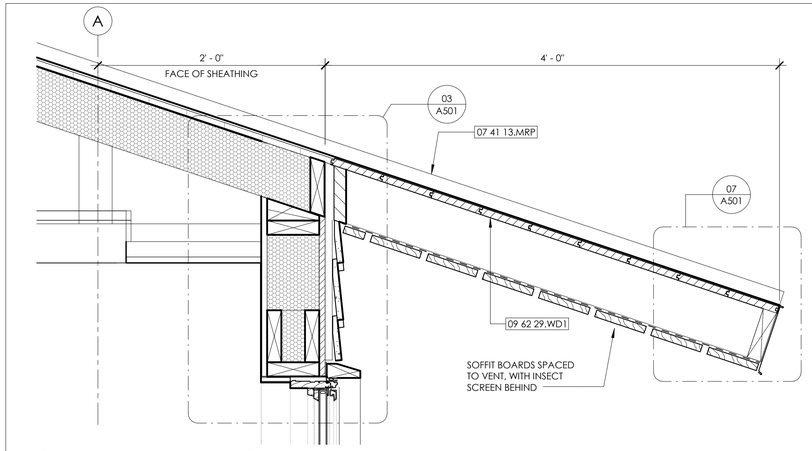
ROBINSON PRESERVE EXPANSION OFFICE
MANATEE CO WA #18, IFAS #W1300220
MANATEE COUNTY, FLORIDA

REV. #	DESCRIPTION	DATE

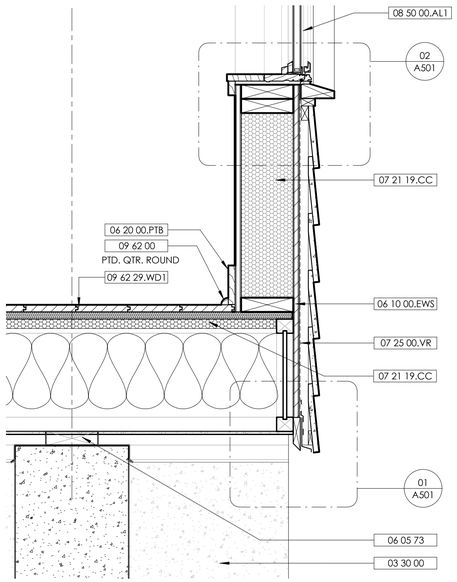
DRAWING TITLE:
MAIN LEVEL REFLECTED CEILING PLAN

DATE: 10/02/2014
DWG SCALE: 1/8" = 1'-0"
DRAWN BY: DE
CHECKED BY: Checker
SHEET No.:
A401

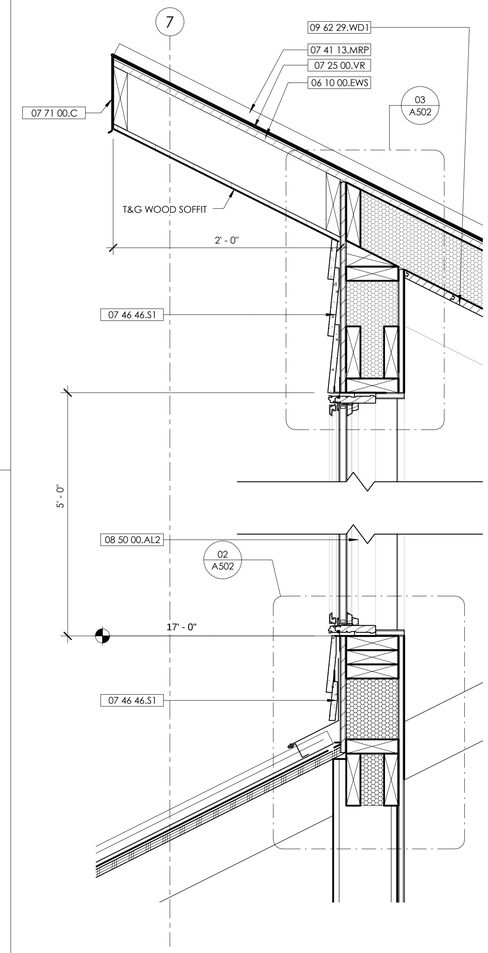
95% Construction Documents



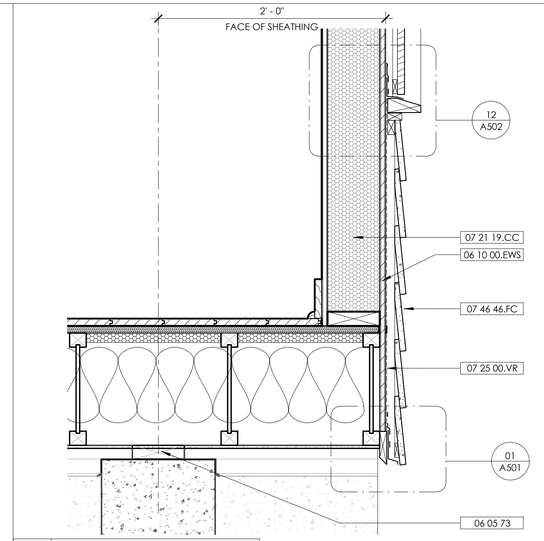
03 TYPICAL ROOF DETAIL 1
1 1/2" = 1'-0"



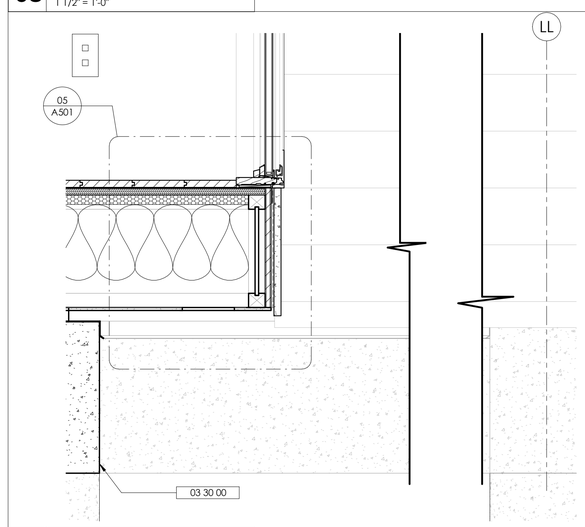
02 TYP WALL DETAIL 1
1 1/2" = 1'-0"



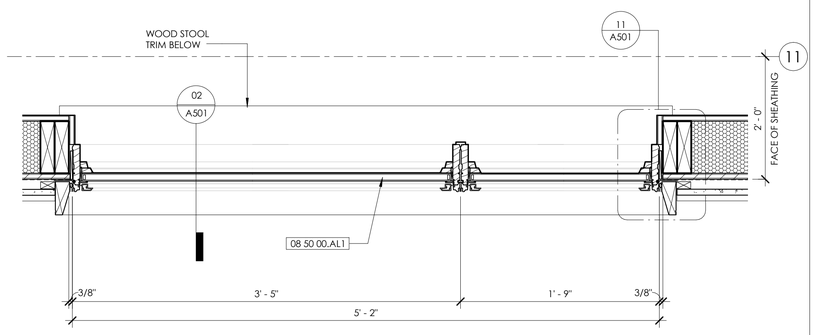
05 WALL SECTION @ CLERESTORY
1 1/2" = 1'-0"



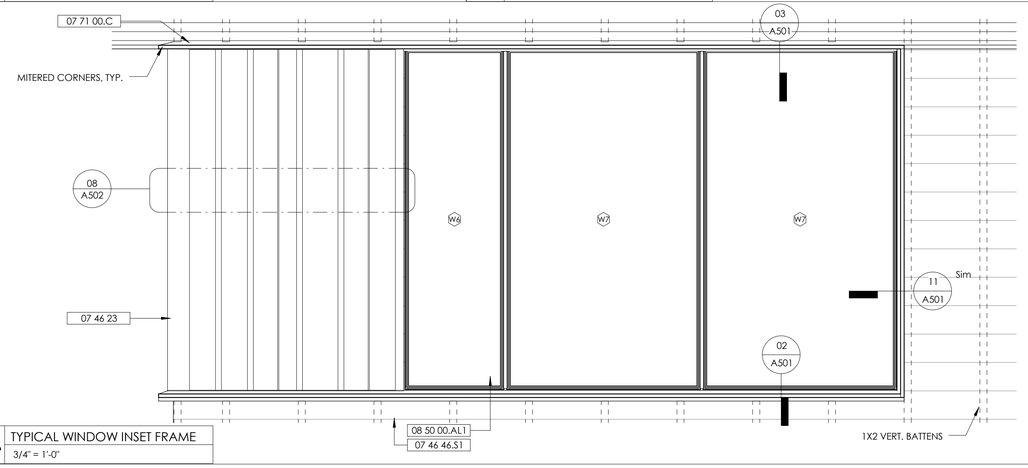
08 TYP WALL DETAIL 2
1 1/2" = 1'-0"



07 TYP WALL DETAIL 3
1 1/2" = 1'-0"



01 PLAN DETAIL AT WINDOW
1 1/2" = 1'-0"



04 TYPICAL WINDOW INSET FRAME
3/4" = 1'-0"

MATERIAL KEYNOTES

03 30 00	CAST-IN-PLACE CONCRETE
06 05 73	WOOD TREATMENT
06 10 00.EWS	EXTERIOR WOOD SHEATHING
06 20 00.PTB	PAINTED BASE TRIM
07 21 19.CC	FOAMED INSULATION - CLOSED CELL
07 25 00.VR	VAPOR RETARDER
07 41 13.MRP	METAL ROOF PANELS
07 46 23	WOOD SIDING
07 46 46.FC	FIBER CEMENT SIDING
07 46 46.S1	FIBER CEMENT SIDING 1 HARDIEPLANK SELECT CEDARMILL
07 71 00.C	MANUFACTURED COPING
08 50 00.AL1	ALUM-CLAD WOOD WINDOWS
08 50 00.AL2	ALUM-CLAD WOOD WINDOWS
09 62 00	WOOD FLOORING
09 62 29.WD1	ENGINEERED WOOD FLOORING

GENERAL NOTES

SHEET SPECIFIC NOTES

1. Coordinate location and size of steel supports with window wall manufacturer.

STIRLING & WILBUR
ENGINEERING GROUP
7085 SOUTH TAMIAMI TRAIL, SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: cad@stirlingwilbur.com

SEAL

TO THE BEST OF THE ARCHITECT'S OR ENGINEER'S KNOWLEDGE, SAID PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE CODES AND STANDARDS.

HOUSER WALKER ARCHITECTURE
1819 PEACHTREE ROAD, NE STE 102
ATLANTA, GA 30309
t. 404 . 633 . 4264
f. 404 . 870 . 7337
www.houserwalker.com

ATP ENGINEERING SOUTH, PL
BRADENTON, FLORIDA
ENGR. BUSINESS #8908
941-751-6485
www.atpengineeringsouth.com

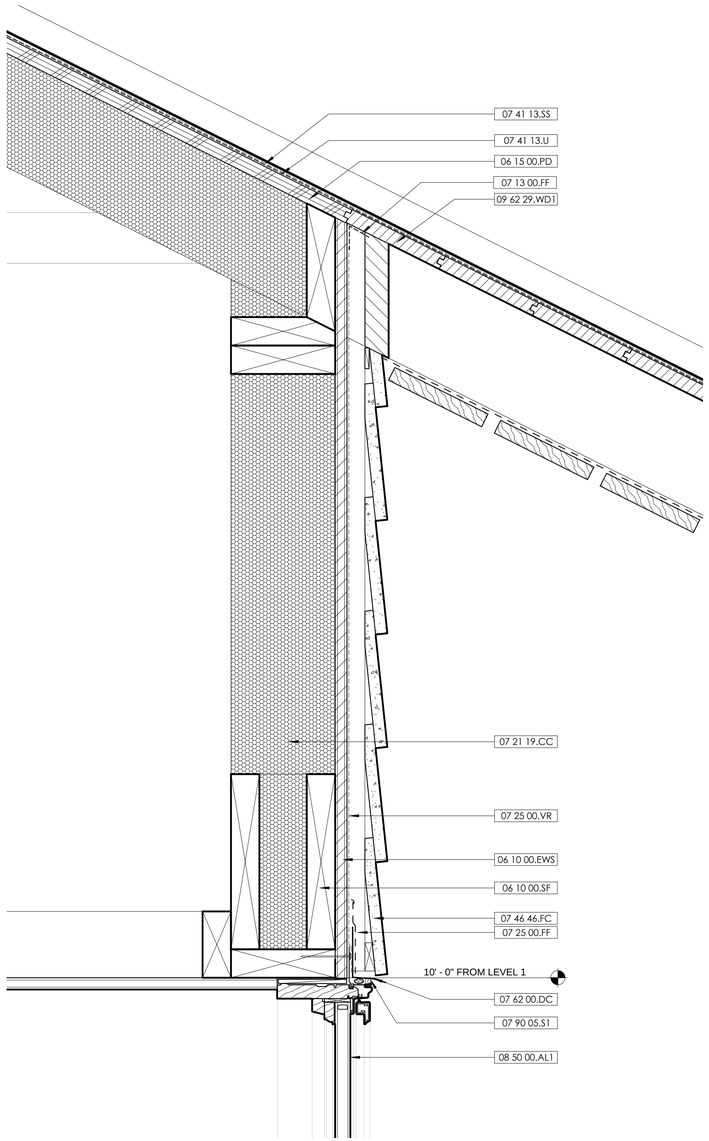
ROBINSON PRESERVE EXPANSION OFFICE
MANATEE CO WA #18, IFAS #W1300220
MANATEE COUNTY, FLORIDA

DRAWING TITLE: DETAILS

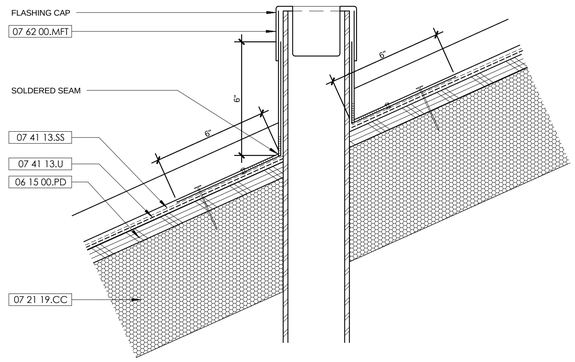
DATE :	10/02/2014
DWG. SCALE:	As indicated
DRAWN BY:	DE
CHECKED BY:	Checker
SHEET No.:	A500

95% Construction Documents

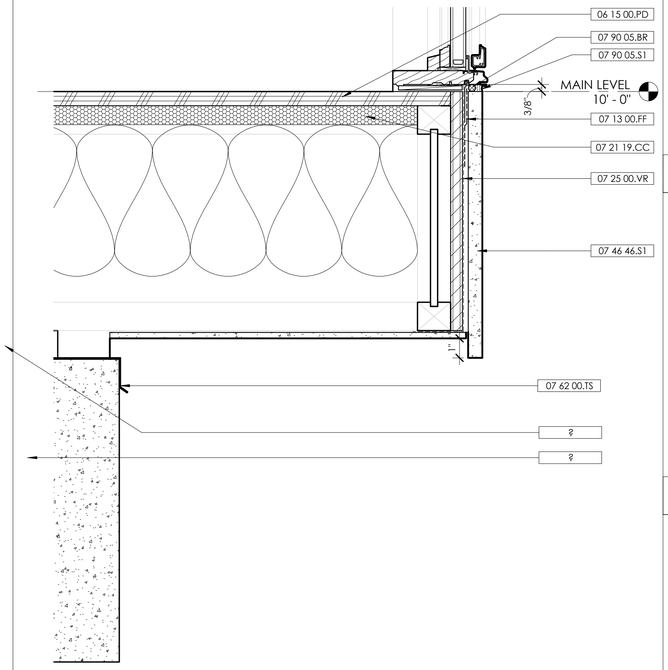
REV. #	DESCRIPTION	DATE



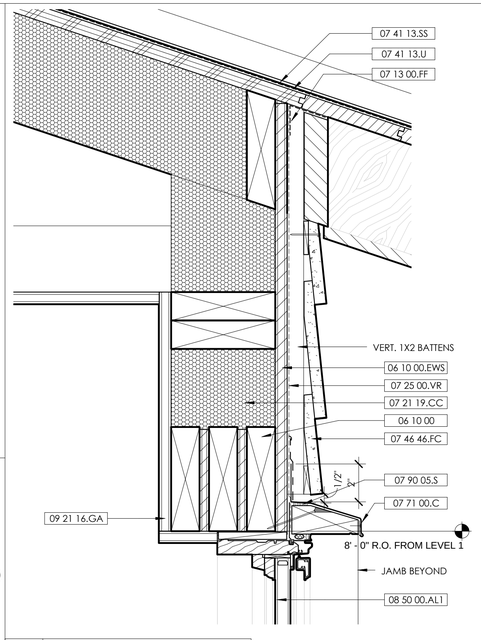
10 WINDOW HEAD AT WINDOW WALL
3" = 1'-0"



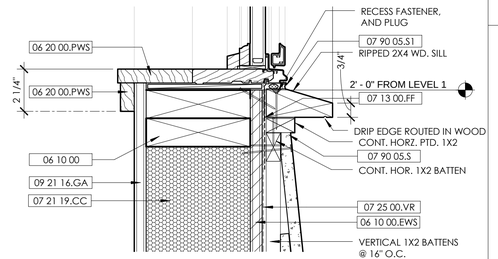
06 PLUMBING VENT FLASHING
3" = 1'-0"



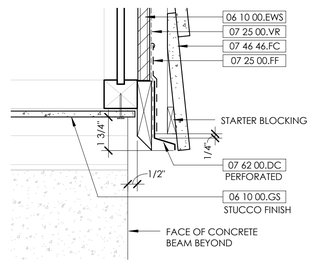
05 DETAIL AT WINDOW WALL
3" = 1'-0"



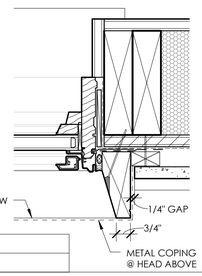
03 WINDOW HEAD
3" = 1'-0"



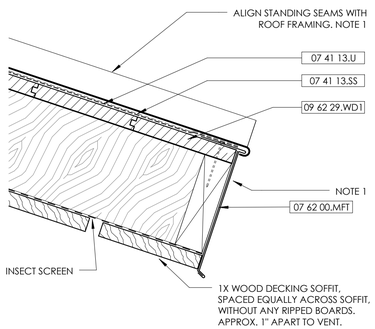
02 WINDOW SILL
3" = 1'-0"



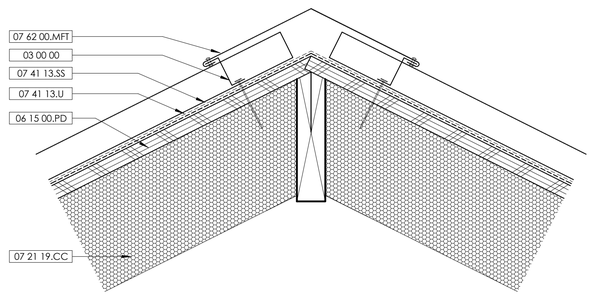
01 WALL BASE CONDITION
3" = 1'-0"



11 WINDOW JAMB
3" = 1'-0"



07 ROOF EDGE
3" = 1'-0"



04 ROOF RIDGE DETAIL
3" = 1'-0"

MATERIAL KEYNOTES

03 00 00	CONCRETE
03 30 00	CAST-IN-PLACE CONCRETE
06 05 73	WOOD TREATMENT
06 10 00	ROUGH CARPENTRY
06 10 00.EWS	EXTERIOR WOOD SHEATHING
06 10 00.GS	GYPSUM WALL SHEATHING
06 10 00.SF	STRUCTURAL FRAMING
06 15 00.PD	PLYWOOD STRUCTURAL WOOD DECKING
06 20 00.PWS	PAINTED WOOD STOOLS AND SILLS
07 13 00.FF	FLEXIBLE FLASHING
07 21 19.CC	FOAMED INSULATION - CLOSED CELL
07 25 00.FF	FLEXIBLE FLASHING
07 25 00.VR	VAPOR RETARDER
07 41 13.SS	SLIP SHEET
07 41 13.U	UNDERLAYMENT
07 46 46.FC	FIBER CEMENT SIDING
07 46 46.S1	FIBER CEMENT SIDING 1 HARDIEPLANK SELECT CEDARMILL
07 62 00.DC	SHEET METAL DRIP CAP
07 62 00.MFT	SHEET METAL FLASHING AND TRIM
07 62 00.TS	CONTINUOUS TERMITE SHIELD
07 71 00.C	MANUFACTURED COPING
07 90 05.BR	BACKER ROD
07 90 05.S	SEALANT
07 90 05.S1	GENERAL PURPOSE EXTERIOR SEALANT
08 50 00.AL1	ALUM-CLAD WOOD WINDOWS
09 21 16.GA	GYPSUM BOARD ASSEMBLY
09 62 29.WD1	ENGINEERED WOOD FLOORING

GENERAL NOTES

SHEET SPECIFIC NOTES

1. Coordinate size and location of roof fasteners with framing. Fasteners exposed through the decking will not be acceptable.

STIRLING & WILBUR
ENGINEERING GROUP
7085 SOUTH TAMIAMI TRAIL, SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: cad@stirlingwilbur.com

SEAL

TO THE BEST OF THE ARCHITECT'S OR ENGINEER'S KNOWLEDGE, SAID PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE CODES AND STANDARDS.

HOUSER WALKER ARCHITECTURE
1819 PEACHTREE ROAD, NE STE 102
ATLANTA, GA 30309
t. 404 . 633 . 4264
f. 404 . 870 . 7337
www.houserwalker.com

ATP ENGINEERING SOUTH, PL
BRADENTON, FLORIDA
ENGR. BUSINESS #8908
941-751-6485
www.atpengineeringsouth.com

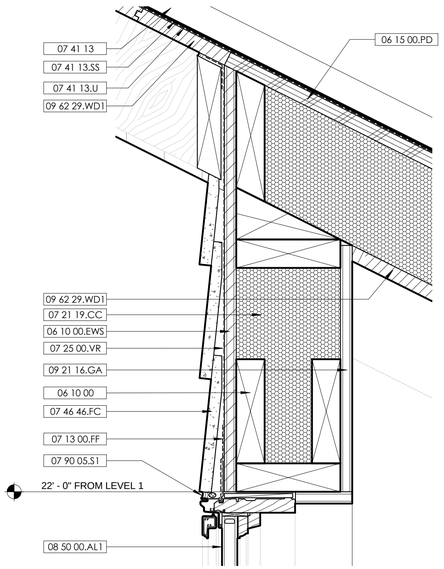
ROBINSON PRESERVE EXPANSION OFFICE
MANATEE CO WA #18, IFAS #W1300220
MANATEE COUNTY, FLORIDA

REV. #	DESCRIPTION	DATE

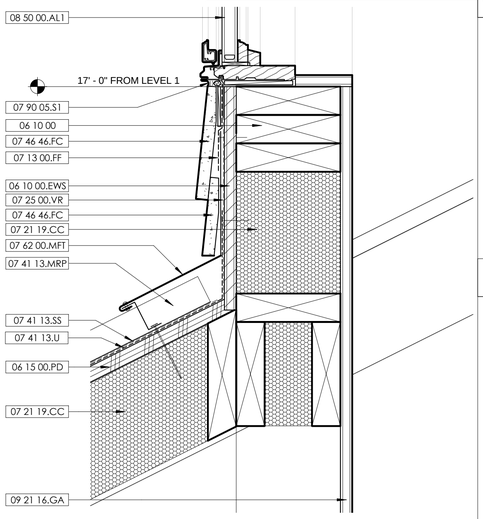
DRAWING TITLE: DETAILS

DATE : 10/02/2014
DWG SCALE: 3" = 1'-0"
DRAWN BY: Author
CHECKED BY: Checker
SHEET No.:

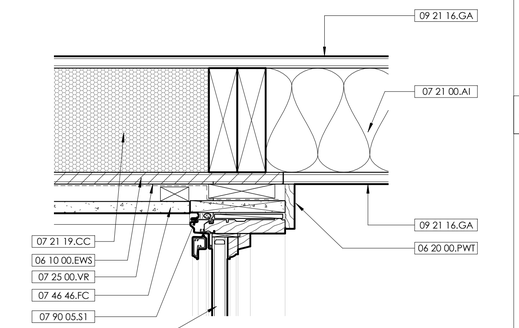
A501



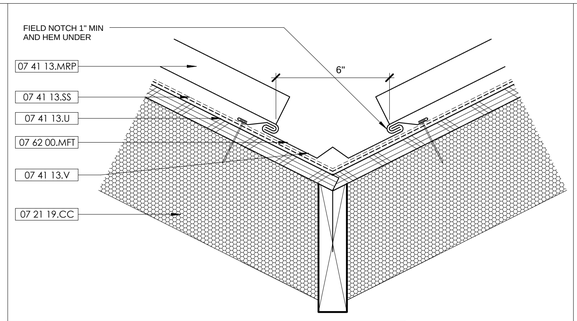
03 CLERESTORY WINDOW HEAD
3" = 1'-0"



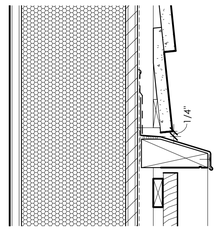
02 CLERESTORY WINDOW SILL
3" = 1'-0"



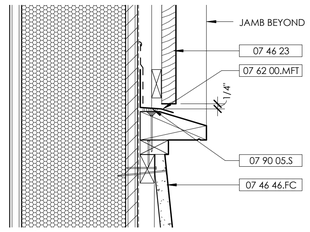
01 WINDOW @ EXT./INT. WALL
3" = 1'-0"



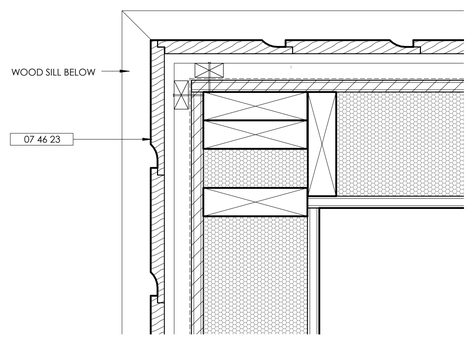
04 CROSS SECTION SHOWING OPEN METAL VALLEY
3" = 1'-0"



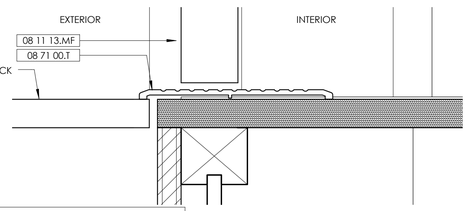
05 HEAD DETAIL @ WOOD SIDING INSET
3" = 1'-0"



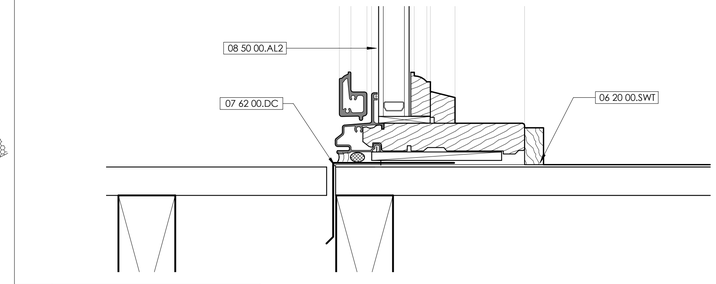
12 SILL DETAIL @ WOOD SIDING INSET
3" = 1'-0"



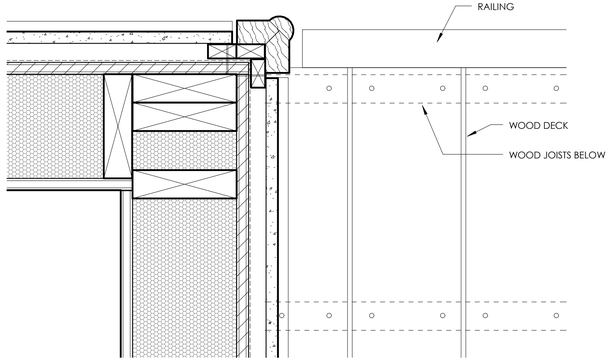
06 CORNER @ WOOD SIDING
3" = 1'-0"



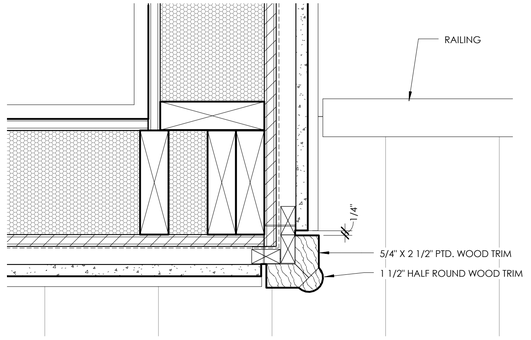
07 TYPICAL EXTERIOR THRESHOLD
6" = 1'-0"



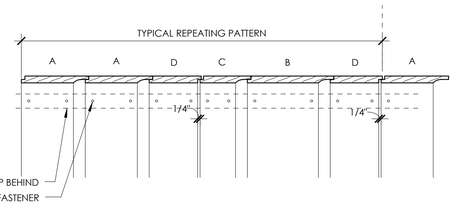
11 THRESHOLD @ WINDOW WALL
6" = 1'-0"



09 Detail 19
3" = 1'-0"



10 TYPICAL SIDING CORNER TRIM
3" = 1'-0"



08 WOOD PATTERN
1 1/2" = 1'-0"

MATERIAL KEYNOTES

06 10 00	ROUGH CARPENTRY
06 10 00.EWS	EXTERIOR WOOD SHEATHING
06 15 00.PD	PLYWOOD STRUCTURAL WOOD DECKING
06 20 00.PWT	PAINTED WALL TRIM
06 20 00.SWT	STAINED WOOD TRIM
07 13 00.FF	FLEXIBLE FLASHING
07 21 00.AI	ACOUSTICAL INSULATION
07 21 19.CC	FOAMED INSULATION - CLOSED CELL
07 25 00.VR	VAPOR RETARDER
07 41 13	METAL ROOF PANELS PACCLAD COPPER PENNY
07 41 13.MRP	METAL ROOF PANELS
07 41 13.SS	SLIP SHEET
07 41 13.U	UNDERLAYMENT
07 41 13.V	VALLEY CLOSURES
07 46 23	WOOD SIDING
07 46 46.FC	FIBER CEMENT SIDING
07 62 00.DC	SHEET METAL DRIP CAP
07 62 00.MFT	SHEET METAL FLASHING AND TRIM
07 90 05.S	SEALANT
07 90 05.S1	GENERAL PURPOSE EXTERIOR SEALANT
08 11 13.MF	METAL FRAME
08 50 00.AL1	ALUM-CLAD WOOD WINDOWS
08 50 00.AL2	ALUM-CLAD WOOD WINDOWS
08 71 00.T	DOOR THRESHOLD
09 21 16.GA	GYPSUM BOARD ASSEMBLY
09 62 29.WD1	ENGINEERED WOOD FLOORING

GENERAL NOTES

SHEET SPECIFIC NOTES

STIRLING & WILBUR
ENGINEERING GROUP
7085 SOUTH TAMIAMI TRAIL, SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: cad@stirlingwilbur.com

SEAL

TO THE BEST OF THE ARCHITECT'S OR ENGINEER'S KNOWLEDGE, SAID PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE CODES AND STANDARDS.

HOUSER WALKER ARCHITECTURE
1819 PEACHTREE ROAD, NE STE 102
ATLANTA, GA 30309
t. 404 . 633 . 4264
f. 404 . 870 . 7337
www.houserwalker.com

ATP ENGINEERING SOUTH, PL
BRADENTON, FLORIDA
ENGR. BUSINESS #8908
941-751-6485
www.atpengineeringsouth.com

ROBINSON PRESERVE EXPANSION OFFICE
MANATEE CO WA #18, IFAS #W1300220
MANATEE COUNTY, FLORIDA

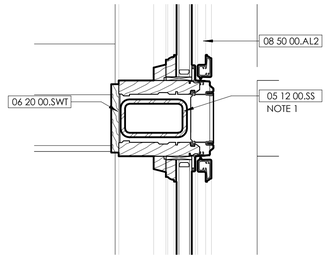
REV. #	DESCRIPTION	DATE

DRAWING TITLE: DETAILS

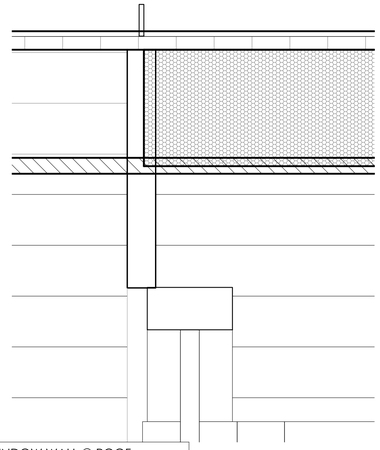
DATE :	10/02/2014
DWG SCALE:	As indicated
DRAWN BY:	Author
CHECKED BY:	Checker

SHEET No.: A502

95% Construction Documents



1 TYP WINDOW WALL GANG MULLION
3" = 1'-0"



2 WINDOW WALL @ ROOF
3" = 1'-0"

MATERIAL KEYNOTES

GENERAL NOTES

SHEET SPECIFIC NOTES

STIRLING & WILBUR
ENGINEERING GROUP
7085 SOUTH TAMIAMI TRAIL, SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: saxd@stirlingwilbur.com

SEAL

TO THE BEST OF THE ARCHITECT'S OR ENGINEER'S KNOWLEDGE, SAID PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE CODES AND STANDARDS.

HOUSER WALKER ARCHITECTURE
1819 PEACHTREE ROAD, NE STE 102
ATLANTA, GA 30309
t. 404 . 633 . 4264
f. 404 . 870 . 7337
www.houserwalker.com

ATP ENGINEERING SOUTH, PL
BRADENTON, FLORIDA
ENGR. BUSINESS #8908
941-751-6485
www.atpengineeringsouth.com

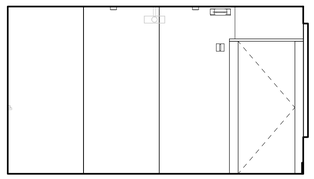
ROBINSON PRESERVE EXPANSION OFFICE
MANATEE CO WA #18, IFAS #W1300220
MANATEE COUNTY, FLORIDA

REV. #	DESCRIPTION	DATE

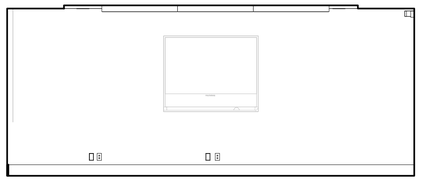
DRAWING TITLE: DETAILS

DATE : 10/02/2014
DWG SCALE: 3" = 1'-0"
DRAWN BY: Author
CHECKED BY: Checker
SHEET No.:
A503

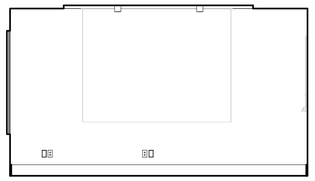
95% Construction Documents



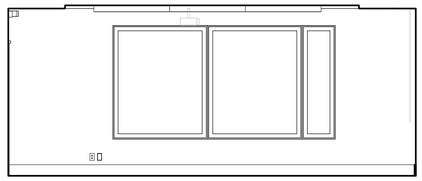
2 CONFERENCE RM 1
1/4" = 1'-0"



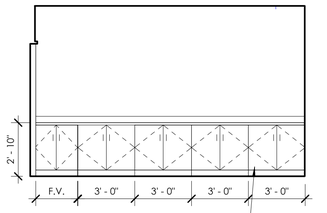
1 CONFERENCE RM 2
1/4" = 1'-0"



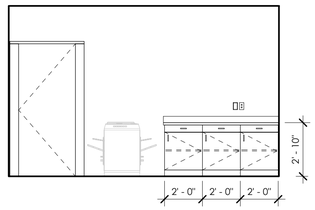
4 CONFERENCE RM 3
1/4" = 1'-0"



3 CONFERENCE RM 4
1/4" = 1'-0"



6 COPY ROOM 1
1/4" = 1'-0"



5 COPY ROOM 2
1/4" = 1'-0"

MATERIAL KEYNOTES

06 41 00 ARCHITECTURAL WOOD CASEWORK

GENERAL NOTES

A. Any locations requiring control joints in gypsum wall board shall be approved by Architect, prior to installation.

SHEET SPECIFIC NOTES

STIRLING & WILBUR
ENGINEERING GROUP
7085 SOUTH TAMIAMI TRAIL, SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: paul@stirlingwilbur.com

HOUSER WALKER ARCHITECTURE
1819 PEACHTREE ROAD, NE STE 102
ATLANTA, GA 30309
t. 404 . 633 . 4264
f. 404 . 870 . 7337
www.houserwalker.com

ATP ENGINEERING SOUTH, PL
BRADENTON, FLORIDA
ENGR. BUSINESS #8908
941-751-6485
www.atpengineeringsouth.com

SEAL

TO THE BEST OF THE ARCHITECT'S OR ENGINEER'S KNOWLEDGE, SAID PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE CODES AND STANDARDS.

ROBINSON PRESERVE EXPANSION OFFICE
MANATEE CO WA #18, IFAS #W1300220
MANATEE COUNTY, FLORIDA

REV. #	DESCRIPTION	DATE

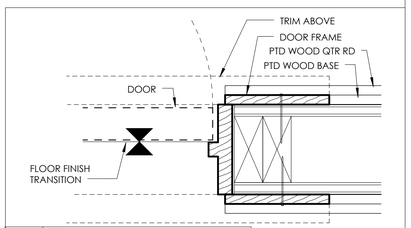
DRAWING TITLE: INTERIOR ELEVATIONS

DATE : 10/02/2014
DWG SCALE: 1/4" = 1'-0"
DRAWN BY: Author
CHECKED BY: Checker
SHEET No.:

A701

95% Construction Documents

01 MAIN LEVEL - FLOOR FINISH PLAN
1/8" = 1'-0"
2 4 8 16



02 TYPICAL TRANSITION @ DOOR
3" = 1'-0"

MATERIAL KEYNOTES

06 15 00.WD	5/4" T&G WOOD DECKING
09 68 13	TILE CARPETING

GENERAL NOTES

A. Refer to individual specification sections for finishes.

SHEET SPECIFIC NOTES

STIRLING & WILBUR ENGINEERING GROUP
7085 SOUTH TAMIAMI TRAIL, SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: cad@stirlingwilbur.com

HOUSER WALKER ARCHITECTURE
1819 PEACHTREE ROAD, NE STE 102
ATLANTA, GA 30309
t. 404. 633. 4264
f. 404. 870. 7337
www.houserwalker.com

ATP ENGINEERING SOUTH, PL
BRADENTON, FLORIDA
ENGR. BUSINESS #8908
941-751-6485
www.atpengineeringsouth.com

SEAL

TO THE BEST OF THE ARCHITECTS OR ENGINEER'S KNOWLEDGE, SAID PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE CODES AND STANDARDS.

ROBINSON PRESERVE EXPANSION OFFICE
MANATEE CO WA #18, IFAS #W1300220
MANATEE COUNTY, FLORIDA

REV. #	DESCRIPTION	DATE

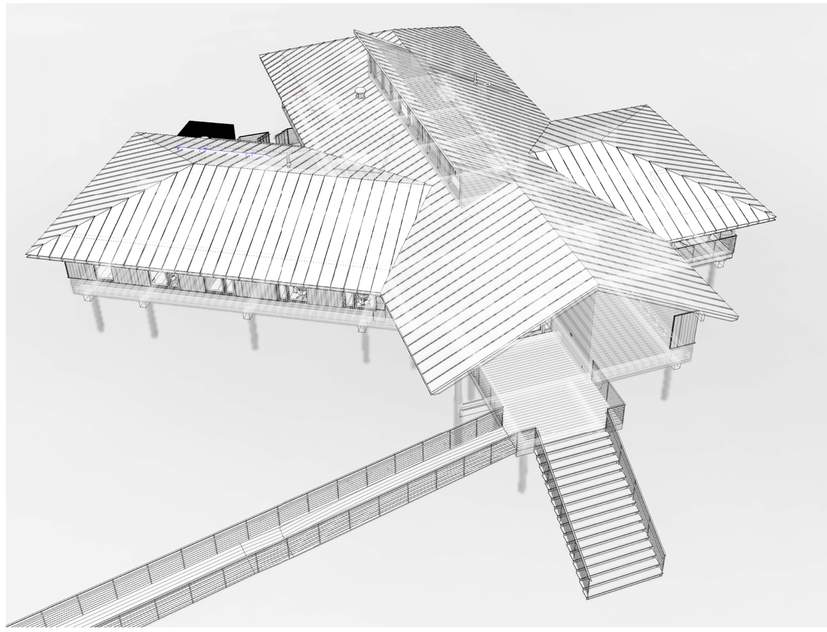
DRAWING TITLE: FINISH PLAN

DATE: 10/02/2014
DWG SCALE: As indicated
DRAWN BY: DE
CHECKED BY: Checker
SHEET No.:

AI101

95% Construction Documents

2 Entry Exterior View 4 Copy 1



3 Birds Eye Copy 1

1 LOBBY 1

4 LOBBY 2

MATERIAL KEYNOTES

GENERAL NOTES

A. These drawings are intended for Reference purposes only. If deemed necessary by the Contractor and/or Architect, other 3D views may be made available for coordination purposes.

B. The 3D views are NOT intended to provideany additional information to the publishedContract Documents. The Contractor understands that the 3-dimensional information was created of the 2-dimensional ConstructionDocuments and not created to accurately reflect construction assemblies.

C. The Contractor shall understand that the 3D images include information that may contradict the published contract documentsand that the information contained in the 3D images in no way adds, reduces, or in any way alters the requirements contained within the published Contract Documents.

SHEET SPECIFIC NOTES

STIRLING & WILBUR
ENGINEERING GROUP
7085 SOUTH TAMIAMI TRAIL, SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: cad@stirlingwilbur.com

SEAL

TO THE BEST OF THE ARCHITECTS OR ENGINEER'S KNOWLEDGE, SAID PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE CODES AND STANDARDS.

HOUSER WALKER ARCHITECTURE
1819 PEACHTREE ROAD, NE STE 102
ATLANTA, GA 30309
t. 404 . 633 . 4264
f. 404 . 870 . 7337
www.houserwalker.com

ATP ENGINEERING SOUTH, PL
BRADENTON, FLORIDA
ENGR. BUSINESS #8908
941-751-6485
www.atpengineeringsouth.com

ROBINSON PRESERVE EXPANSION OFFICE
MANATEE CO WA #18, IFAS #W1300220
MANATEE COUNTY, FLORIDA

DRAWING TITLE:
DESIGN INTENTION DRAWINGS

REV. #	DESCRIPTION	DATE

DATE : 10/02/2014
DWG SCALE:
DRAWN BY: Author
CHECKED BY: Checker
SHEET No.:
AR020
95% Construction Documents

01 COORDINATION RCP
1/8" = 1'-0"

2 4 8 16

NORTH

MATERIAL KEYNOTES

21 00 00.CS	CONCEALED SPRINKLER HEAD
23 00 00.HC	HVAC COMPONENT
23 31 00.D	HVAC DUCTWORK

GENERAL NOTES

SHEET SPECIFIC NOTES

STIRLING & WILBUR
ENGINEERING GROUP
7085 SOUTH TAMIAMI TRAIL, SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: paul@stirlingwilbur.com

SEAL

TO THE BEST OF THE ARCHITECT'S OR ENGINEER'S KNOWLEDGE, SAID PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE CODES AND STANDARDS.

HOUSER WALKER ARCHITECTURE
1819 PEACHTREE ROAD, NE STE 102
ATLANTA, GA 30309
t. 404 . 633 . 4264
f. 404 . 870 . 7337
www.houserwalker.com

ATP ENGINEERING SOUTH, PL
BRADENTON, FLORIDA
ENGR. BUSINESS #8908
941-751-6485
www.atpengineeringsouth.com

ROBINSON PRESERVE EXPANSION OFFICE
MANATEE CO WA #18, IFAS #W1300220
MANATEE COUNTY, FLORIDA

2 4 8 16

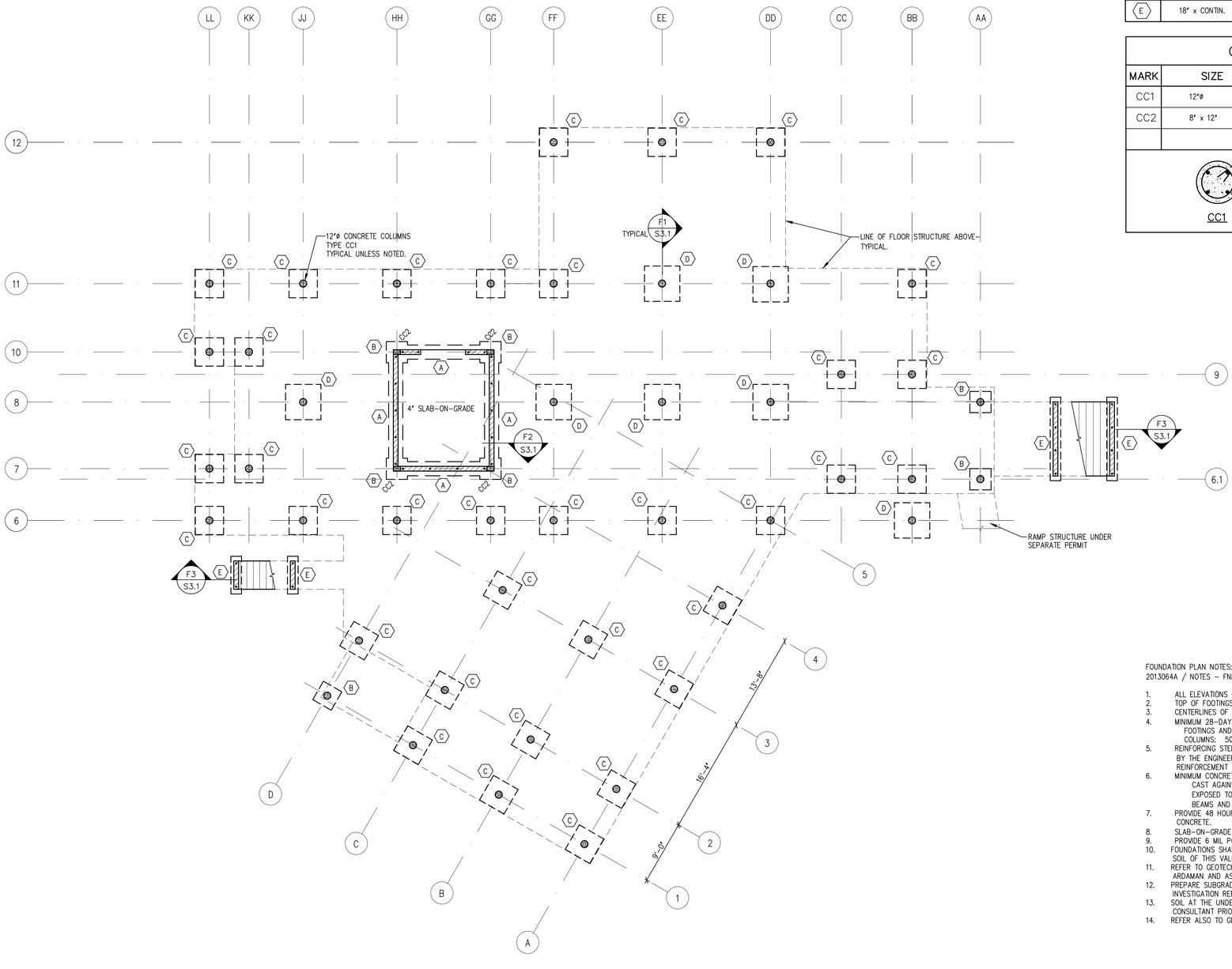
DRAWING TITLE:
MAIN LEVEL
COORDINATION RCP

DATE :	10/02/2014
DWG. SCALE :	1/8" = 1'-0"
DRAWN. B.Y. :	Author
CHECKED. B.Y. :	Checker
SHEET No.:	AR401

95% Construction Documents

REV. #	DESCRIPTION	DATE

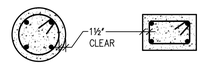
PRELIMINARY
NOT FOR CONSTRUCTION



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

FOUNDATION SCHEDULE				
MARK	SIZE	DEPTH	REINF.	REMARKS
A	24" x CONTIN.	12"	3#5 B. CONTINUOUS #5 @ 18" B., TRANSVERSE	
B	3'-0" x 3'-0"	12"	4#5 BEW	
C	4'-0" x 4'-0"	12"	5#5 BEW	
D	5'-0" x 5'-0"	12"	6#5 BEW	
E	18" x CONTIN.	12"	2#5 B. CONTINUOUS	

CONCRETE COLUMN SCHEDULE			
MARK	SIZE	REINF.	REMARKS
CC1	12"ø	4#6 VERTICALS #3○TIES @ 10" O/C	
CC2	8" x 12"	4#5 VERTICALS #3□TIES @ 8" O/C	



CC1 CC2

FOUNDATION PLAN NOTES:
2013064A / NOTES – FNDN

1. ALL ELEVATIONS ON THE STRUCTURAL DRAWINGS ARE REFERENCED TO NAVD.
2. TOP OF FOOTINGS ARE AT ELEVATION +2'-0" NAVD, UNLESS NOTED.
3. CENTERLINES OF COLUMNS, WALLS AND FOOTINGS ARE COINCIDENT UNLESS NOTED.
4. MINIMUM 28-DAY CONCRETE COMPRESSIVE STRENGTH (F'c):
   FOOTINGS AND SLAB-ON-GRADE: 3000 PSI
   COLUMNS: 5000 PSI
5. REINFORCING STEEL: GRADE 60 KSI. SUBMIT SHOP DRAWINGS FOR ALL REINFORCEMENT FOR REVIEW BY THE ENGINEER. STAGGER SPLICES (24" MIN LAP FOR #5 BARS) OF CONTINUOUS FOOTING REINFORCEMENT AND PROVIDE 24"x 24" CORNER BARS.
6. MINIMUM CONCRETE COVER TO REINFORCING STEEL:
   CAST AGAINST EARTH: 3"
   EXPOSED TO EARTH OR WEATHER: 1-1/2"
   BEAMS AND COLUMNS: 1-1/2" TO STIRRUPS AND TIES.
7. PROVIDE 48 HOURS MINIMUM NOTICE TO THE ENGINEER PRIOR TO ANY POUR OF STRUCTURAL CONCRETE.
8. SLAB-ON-GRADE TO BE 4" THICK, REINFORCED WITH 1 LAYER OF 6x6 10/10 WELDED WIRE FABRIC.
9. PROVIDE 6 MIL POLYETHYLENE VAPOR BARRIER UNDER SLAB-ON-GRADE WITH 6" TAPED LAPS.
10. FOUNDATIONS SHALL BE FOUNDED ON SOIL CAPABLE OF SUSTAINING 2000 POUNDS PER SQUARE FOOT. SOIL OF THIS VALUE IS ASSUMED TO BE FOUND AT THE ELEVATIONS SHOWN.
11. REFER TO GEOTECHNICAL INVESTIGATION REPORT NO. 13-7414, DATED 03-27-14, PREPARED BY ARDAMAN AND ASSOCIATES, INC.
12. PREPARE SUBGRADE SOIL IN ACCORDANCE WITH PROCEDURE INCLUDED IN THE GEOTECHNICAL INVESTIGATION REPORT NOTED ABOVE.
13. SOIL AT THE UNDERSIDE OF FOOTINGS SHALL BE INSPECTED AND APPROVED BY THE GEOTECHNICAL CONSULTANT PRIOR TO THE POURING OF FOOTINGS.
14. REFER ALSO TO GENERAL NOTES AND TYPICAL DETAILS ON DRAWINGS S5.1 AND S5.2.

STIRLING & WILBUR
ENGINEERING GROUP

7085 SOUTH TAMIAMI TRAIL, SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: cad@stirlingwilbur.com

EB6482

PROJECT NAME

ROBINSON PRESERVE EXPANSION
OFFICE BUILDING
MANATEE COUNTY, FLORIDA

ISSUED FOR

95% CONSTRUCTION DOCUMENTS 10-02-14

PROJECT NUMBER

W2013-064A

SIGN/SEAL

STEPHEN WILBUR, PE 42119

REVISIONS

NO.	ITEM	DATE
1		

DRAWN BY RTR
CHECKED BY SW
DATE 10-02-14
PLOT SCALE 1/8"=1'-0"
THIS DRAWING IS NOT TO BE SCALED.

SHEET TITLE

FOUNDATION PLAN

SHEET NUMBER

S1.1

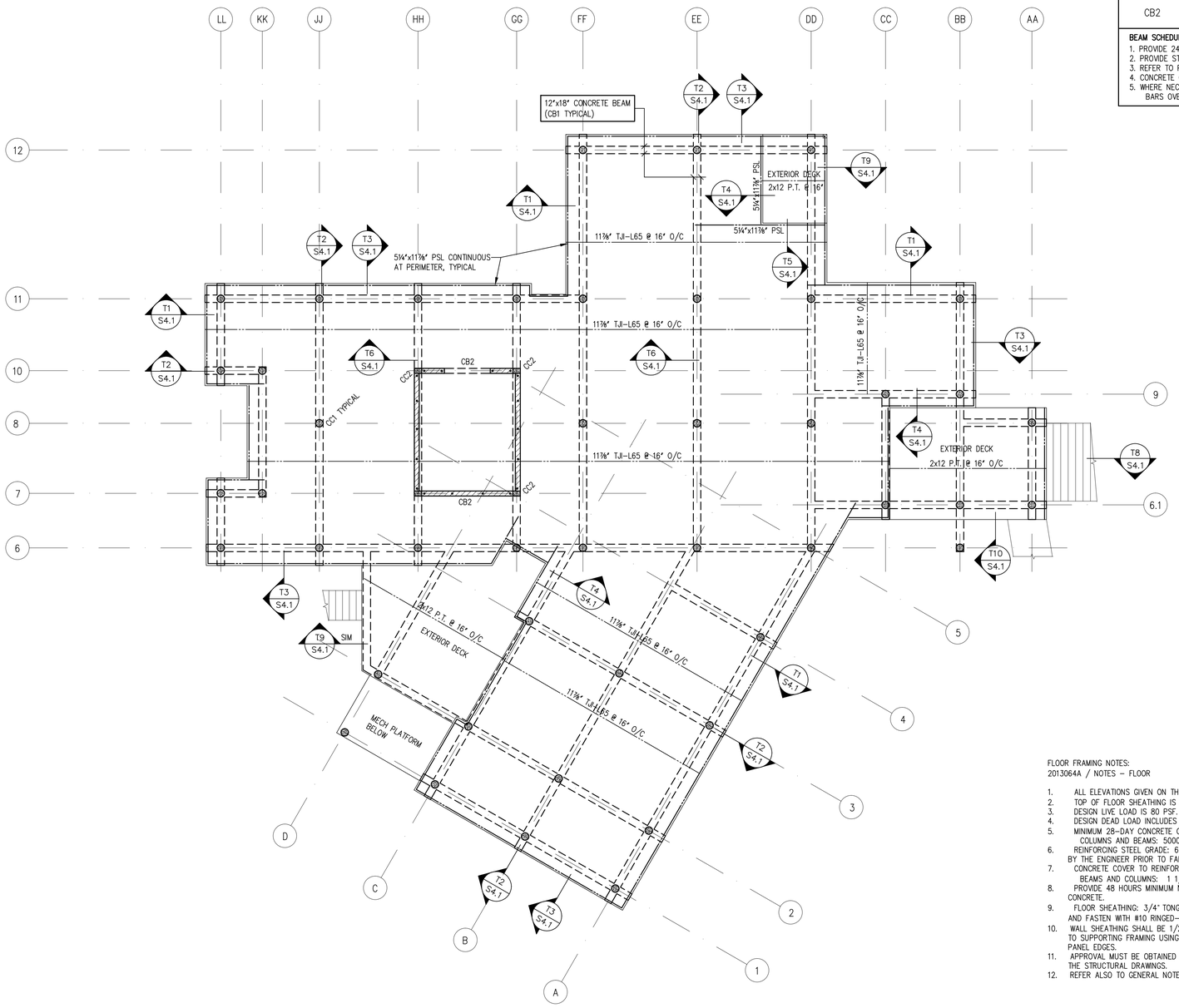
\std\D18

X:\2013\2013-064\S11.dwg 10/2/2014 12:45:43 PM, 0.12512

PRELIMINARY
NOT FOR CONSTRUCTION

CONCRETE BEAM SCHEDULE		
MARK	SIZE	REINFORCEMENT
CB1	12"x18"	2#7 T&B CONTINUOUS #3 □ STIRRUPS @ 8" O/C
CB2	8"x18"	2#5 T&B CONTINUOUS #3 □ STIRRUPS @ 24" O/C

BEAM SCHEDULE NOTES:
1. PROVIDE 24"x24" L BARS FOR EACH CONTINUOUS HORIZONTAL BAR AT CORNERS.
2. PROVIDE STANDARD HOOK AT DISCONTINUOUS ENDS OF HORIZONTAL BARS.
3. REFER TO PLAN NOTES FOR CONCRETE STRENGTH AND REBAR GRADE.
4. CONCRETE COVER TO REINFORCING STEEL: 1½" TO STIRRUPS.
5. WHERE NECESSARY, LAP CONTINUOUS TOP BARS AT MIDSPAN AND CONTINUOUS BOTTOM BARS OVER SUPPORTS. MINIMUM LAP LENGTH= 30x BAR DIAMETER.



FLOOR FRAMING PLAN
⅛"=1'-0"

FLOOR FRAMING NOTES:
2013064A / NOTES – FLOOR

1. ALL ELEVATIONS GIVEN ON THE STRUCTURAL DRAWINGS ARE REFERENCED TO NAVD.
2. TOP OF FLOOR SHEATHING IS AT DATUM ELEVATION 0'-0" (13'-4" NAVD).
3. DESIGN LIVE LOAD IS 80 PSF.
4. DESIGN DEAD LOAD INCLUDES 20 PSF ALLOWANCE FOR PARTITIONS AND FLOOR FINISH.
5. MINIMUM 28-DAY CONCRETE COMPRESSIVE STRENGTH (F'C):
   COLUMNS AND BEAMS: 5000 PSI.
6. REINFORCING STEEL GRADE: 60 KSI. SUBMIT SHOP DRAWINGS FOR ALL REINFORCEMENT FOR REVIEW BY THE ENGINEER PRIOR TO FABRICATION OR PLACEMENT.
7. CONCRETE COVER TO REINFORCING STEEL:
   BEAMS AND COLUMNS: 1 1/2" TO STIRRUPS AND TIES.
8. PROVIDE 48 HOURS MINIMUM NOTICE TO ENGINEER FOR REVIEW PRIOR TO ANY POUR OF STRUCTURAL CONCRETE.
9. FLOOR SHEATHING: 3/4" TONGUE AND GROOVE APA STURDI-FLOOR PLYWOOD SHEATHING PANELS. GLUE AND FASTEN WITH #10 RINGED-SHANK NAILS AT 8" ON CENTER IN FIELD / 4" ON CENTER AT PANEL EDGES.
10. WALL SHEATHING SHALL BE 1/2" THICK APA SPAN-RATED PLYWOOD SHEATHING. FASTEN SHEATHING TO SUPPORTING FRAMING USING 8D NAILS AT 4" O.C. AT PANEL EDGES AND 8" O.C. IN FIELD. BLOCK ALL PANEL EDGES.
11. APPROVAL MUST BE OBTAINED FROM ENGINEER FOR ALL OPENINGS OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS.
12. REFER ALSO TO GENERAL NOTES AND TYPICAL DETAILS ON DRAWINGS S5.1 AND S5.2.

\std\D18

X:\2013\2013-064A\S2.1.dwg 10/2/2014 12:53:43 PM, 0.12512

STIRLING & WILBUR
ENGINEERING GROUP

7085 SOUTH TAMIAMI TRAIL, SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: cad@stirlingwilbur.com

EB6482

PROJECT NAME

ROBINSON PRESERVE EXPANSION
OFFICE BUILDING
MANATEE COUNTY, FLORIDA

ISSUED FOR

95% CONSTRUCTION DOCUMENTS 10-02-14

PROJECT NUMBER

W2013-064A

SIGN/SEAL

STEPHEN WILBUR, PE 42119

REVISIONS

NO.	ITEM	DATE
1		

DRAWN BY RTR
CHECKED BY SW
DATE 10-02-14
PLOT SCALE ⅛"=1'-0"
THIS DRAWING IS NOT TO BE SCALED.

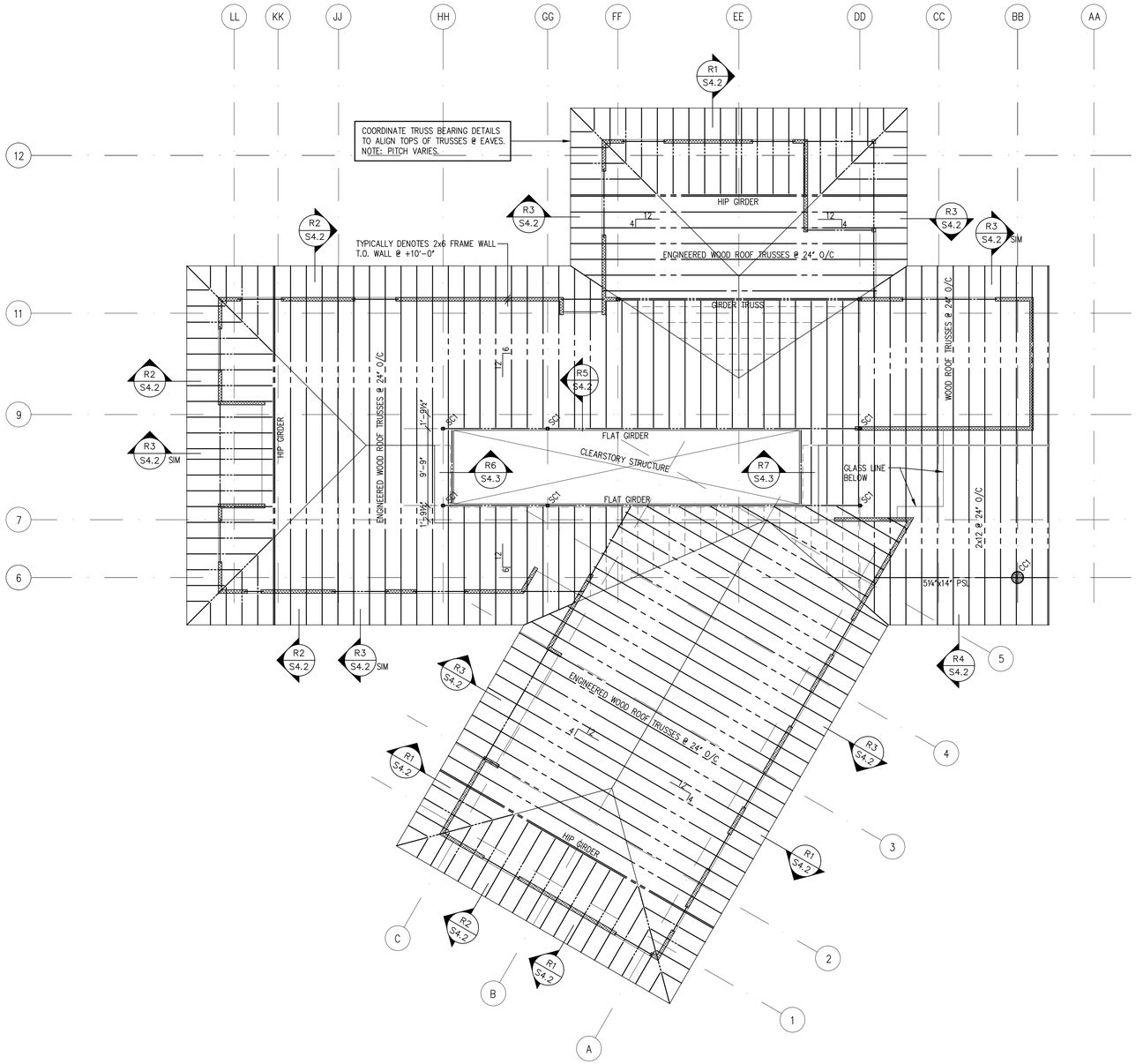
SHEET TITLE

FLOOR FRAMING PLAN

SHEET NUMBER

S2.1

PRELIMINARY
NOT FOR CONSTRUCTION



ROOF FRAMING NOTES:
2013064A / NOTES – ROOF

1. ALL ELEVATIONS ON THE STRUCTURAL DRAWINGS ARE REFERENCED TO NAVD.
2. ROOF TRUSS BEARING IS AT ELEVATION +10'-0" ABOVE OFFICE FLOOR LEVEL, EXCEPT AS NOTED.
3. ROOF SLOPE VARIES: SEE PLAN AND SECTIONS.
4. DESIGN LOADS FOR THE ROOF STRUCTURE ARE LIVE LOAD OF 30 PSF AND DEAD LOAD OF 25 PSF. ROOF LL = 20 PSF; ATTIC LL = 10 PSF
   SEE PLAN FOR ADDITIONAL LOADS. DESIGN FOR WIND UPLIFT IN ACCORDANCE WITH THE 2010 FLORIDA BUILDING CODE USING V = 150 MPH, EXPOSURE D, BUILDING HT = 30', AND ENCLOSED STRUCTURE. NET UPLIFT LOADS SHALL BE CALCULATED USING A MAXIMUM OF 10 PSF RESISTING DEAD LOAD.
5. THE STRUCTURE HAS BEEN DESIGNED BASED ON THE TRUSS LAYOUT AND FRAMING CONFIGURATION SHOWN ON PLAN. ANY DEVIATIONS MUST BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD AND SHALL BE CLEARLY MARKED ON THE SHOP DRAWINGS.
6. ROOF SHEATHING SHALL BE 5/8" THICK APA SPAN-RATED PLYWOOD SHEATHING. FASTEN SHEATHING TO SUPPORTING FRAMING USING 10D NAILS SPACED AT 4" O.C. AT ALL SUPPORTS AND PANEL EDGES.
7. WALL SHEATHING: 5/8" THICK APA SPAN-RATED PLYWOOD SHEATHING. FASTEN WITH 10D NAILS AT 4" O/C THROUGHOUT. BLOCK ALL PANEL JOINTS.
8. APPROVAL MUST BE OBTAINED FROM THE ENGINEER OF RECORD FOR ALL OPENINGS OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS.
9. MINIMUM 28-DAY CONCRETE COMPRESSIVE STRENGTH (F'C):
   TIEBEAMS AND COLUMNS: 5000 PSI
10. REINFORCING STEEL GRADE: 60 KSI. SUBMIT SHOP DRAWINGS FOR ALL REINFORCEMENT FOR REVIEW BY THE ENGINEER PRIOR TO FABRICATION OR PLACEMENT.
11. MINIMUM CONCRETE COVER TO REINFORCING STEEL:
    BEAMS AND COLUMNS: 1-1/2" TO STIRRUPS AND TIES.
12. NOTIFY ENGINEER A MINIMUM OF 48 HOURS IN ADVANCE OF ANY POUR OF STRUCTURAL CONCRETE.
13. REFER ALSO TO GENERAL NOTES AND TYPICAL DETAILS ON DRAWINGS S5.1 AND S5.2.

ROOF FRAMING PLAN
1/8"=1'-0"

STIRLING & WILBUR
ENGINEERING GROUP

7085 SOUTH TAMIAMI TRAIL, SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: cad@stirlingwilbur.com

EB6482

PROJECT NAME

ROBINSON PRESERVE EXPANSION
OFFICE BUILDING
MANATEE COUNTY, FLORIDA

ISSUED FOR

95% CONSTRUCTION DOCUMENTS	10-02-14

PROJECT NUMBER

W2013-064A

SIGN/SEAL

STEPHEN WILBUR, PE 42119

REVISIONS

NO.	ITEM	DATE
1		

DRAWN BY	RTR
CHECKED BY	SW
DATE	10-02-14
PLOT SCALE	1/8"=1'-0"

THIS DRAWING IS NOT TO BE SCALED.

SHEET TITLE

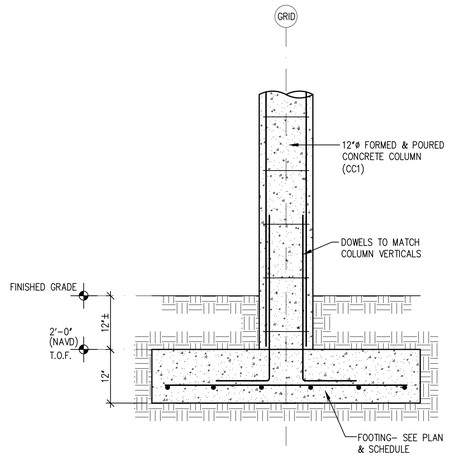
ROOF FRAMING PLAN

SHEET NUMBER

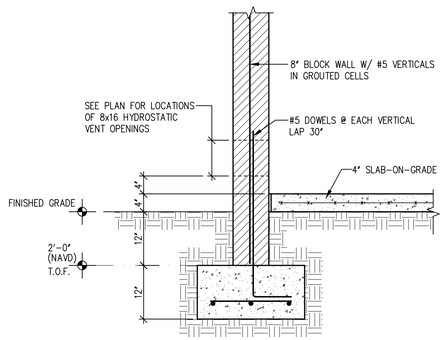
S2.2

\std\D18

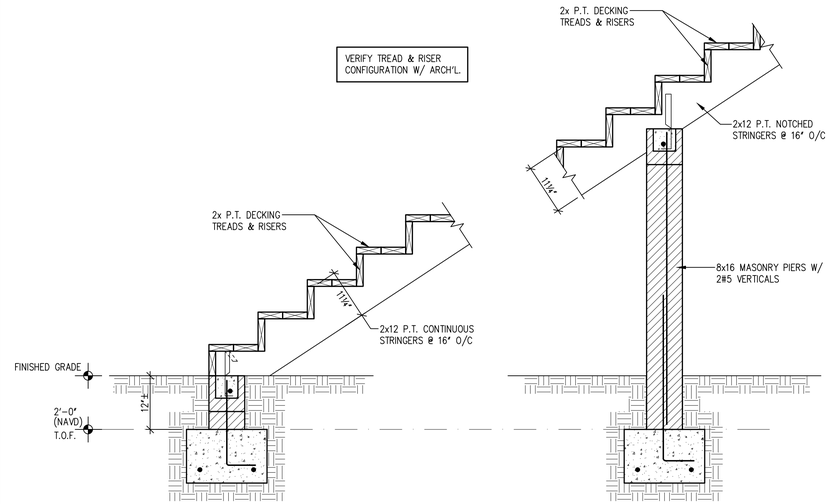
X:\2013\2013-064A\S2.2.dwg 10/2/2014 12:59:44 PM, 0.12512



F1 S3.1 ¾"=1'-0"



F2 S3.1 ¾"=1'-0"



F3 S3.1 ¾"=1'-0"

\std\D34

X:\2013\2013-064A\S3.1.dwg 10/2/2014 1:17:59 PM -0.7512

PRELIMINARY
NOT FOR CONSTRUCTION

STIRLING & WILBUR
ENGINEERING GROUP

7085 SOUTH TAMIAMI TRAIL, SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: cad@stirlingwilbur.com

EB6482

PROJECT NAME

ROBINSON PRESERVE EXPANSION
OFFICE BUILDING
MANATEE COUNTY, FLORIDA

ISSUED FOR

95% CONSTRUCTION DOCUMENTS 10-02-14

PROJECT NUMBER

W2013-064A

SIGN/SEAL

STEPHEN WILBUR, PE 42119

REVISIONS

NO.	ITEM	DATE
1		

DRAWN BY RTR

CHECKED BY SW

DATE 10-02-14

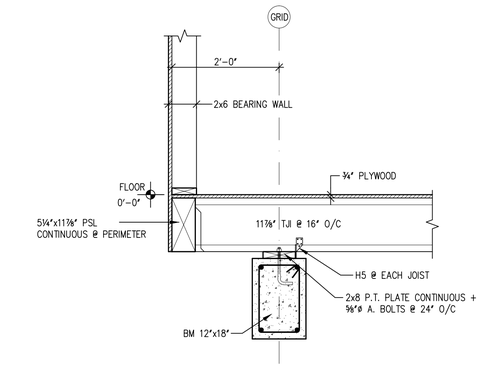
PLOT SCALE ¾"=1'-0"
THIS DRAWING IS NOT TO BE SCALED.

SHEET TITLE

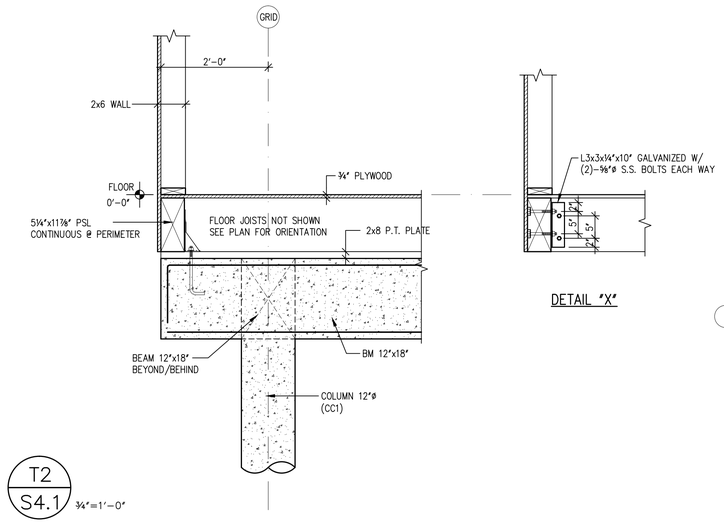
SECTIONS

SHEET NUMBER

S3.1

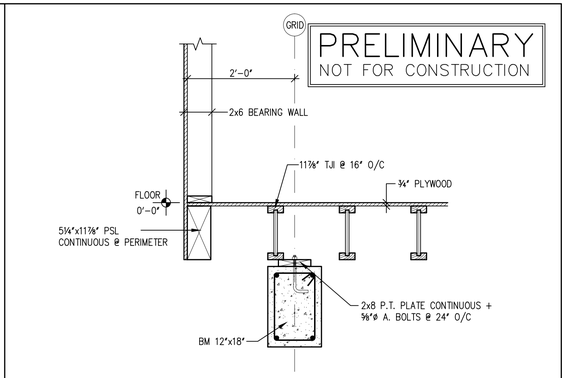


T1 / S4.1 ¾"=1'-0"

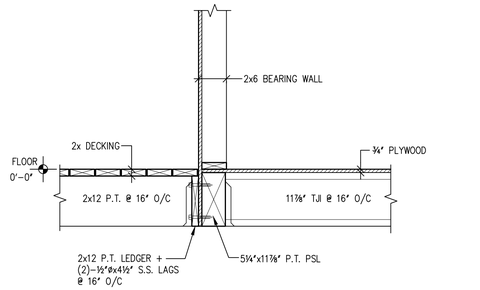


T2 / S4.1 ¾"=1'-0"

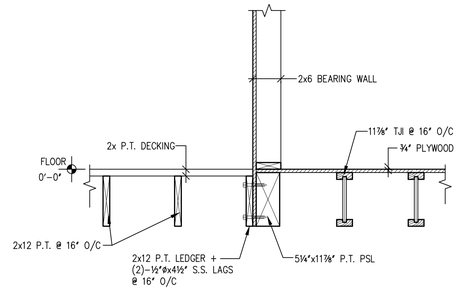
PLAN @ CORNERS



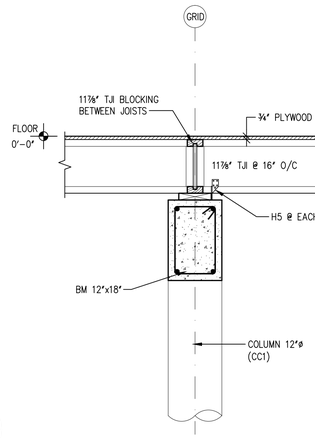
T3 / S4.1 ¾"=1'-0"



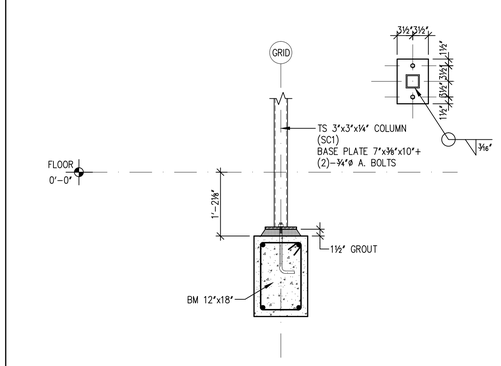
T4 / S4.1 ¾"=1'-0"



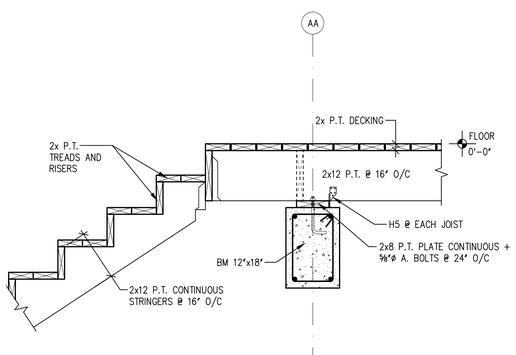
T5 / S4.1 ¾"=1'-0"



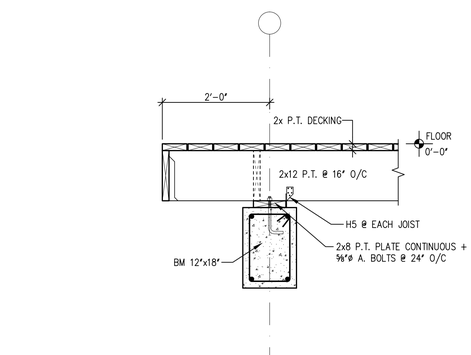
T6 / S4.1 ¾"=1'-0"



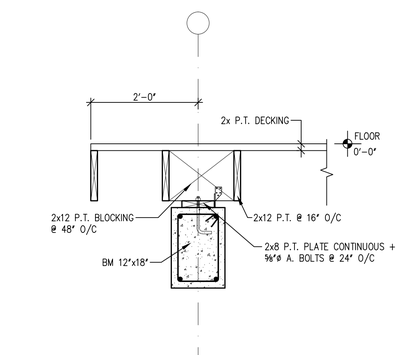
T7 / S4.1 ¾"=1'-0"



T8 / S4.1 ¾"=1'-0"



T9 / S4.1 ¾"=1'-0"



T10 / S4.1

STIRLING & WILBUR
ENGINEERING GROUP

7085 SOUTH TAMIAMI TRAIL, SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: cad@stirlingwilbur.com

EB6482

PROJECT NAME

ROBINSON PRESERVE EXPANSION
OFFICE BUILDING
MANATEE COUNTY, FLORIDA

ISSUED FOR

95% CONSTRUCTION DOCUMENTS	10-02-14

PROJECT NUMBER

W2013-064A

SIGN/SEAL

STEPHEN WILBUR, PE 42119

REVISIONS

NO.	ITEM	DATE
1		

DRAWN BY RTR

CHECKED BY SW

DATE 10-02-14

PLOT SCALE ¾"=1'-0"

THIS DRAWING IS NOT TO BE SCALED.

SHEET TITLE

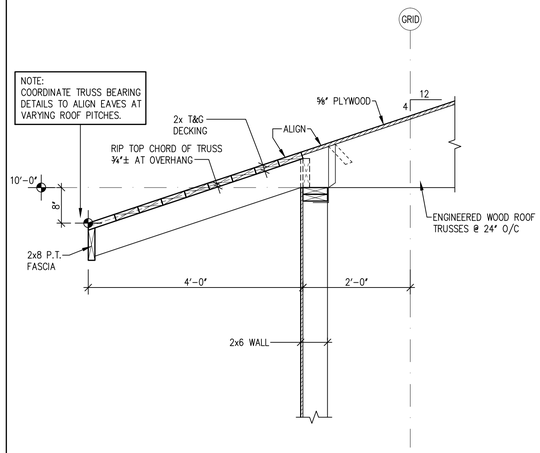
SECTIONS

SHEET NUMBER

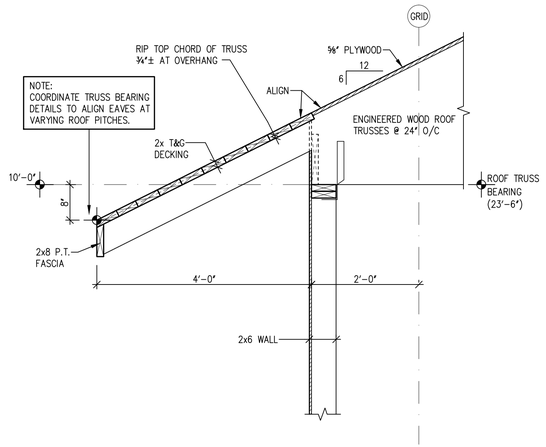
S4.1

X:\2013\2013-064A\S4.1.dwg 10/2/2014 12:12:12 PM, 0.7512

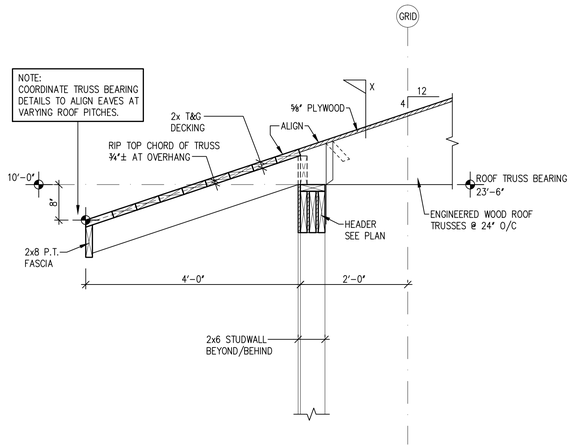
\std\0.34



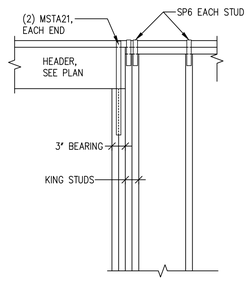
R1 / S4.2 3/4"=1'-0"



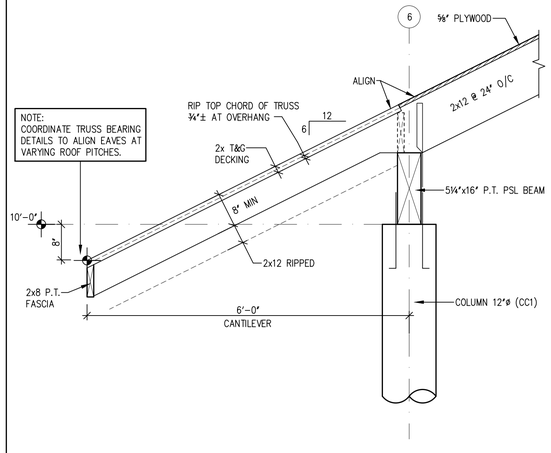
R2 / S4.2 3/4"=1'-0"



R3 / S4.2 3/4"=1'-0"



'X': HEADER BEARING DETAIL



R4 / S4.2 3/4"=1'-0"

\std\D34

X:\2013\2013-064A\S4.2.dwg 10/2/2014 12:15:56 PM -0.7512

PRELIMINARY
NOT FOR CONSTRUCTION

STIRLING & WILBUR
ENGINEERING GROUP

7085 SOUTH TAMIAMI TRAIL, SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: cad@stirlingwilbur.com

EB6482

PROJECT NAME

ROBINSON PRESERVE EXPANSION
OFFICE BUILDING
MANATEE COUNTY, FLORIDA

ISSUED FOR

95% CONSTRUCTION DOCUMENTS	10-02-14

PROJECT NUMBER

W2013-064A

SIGN/SEAL

STEPHEN WILBUR, PE 42119

REVISIONS

NO.	ITEM	DATE
1		

DRAWN BY RTR

CHECKED BY SW

DATE 10-02-14

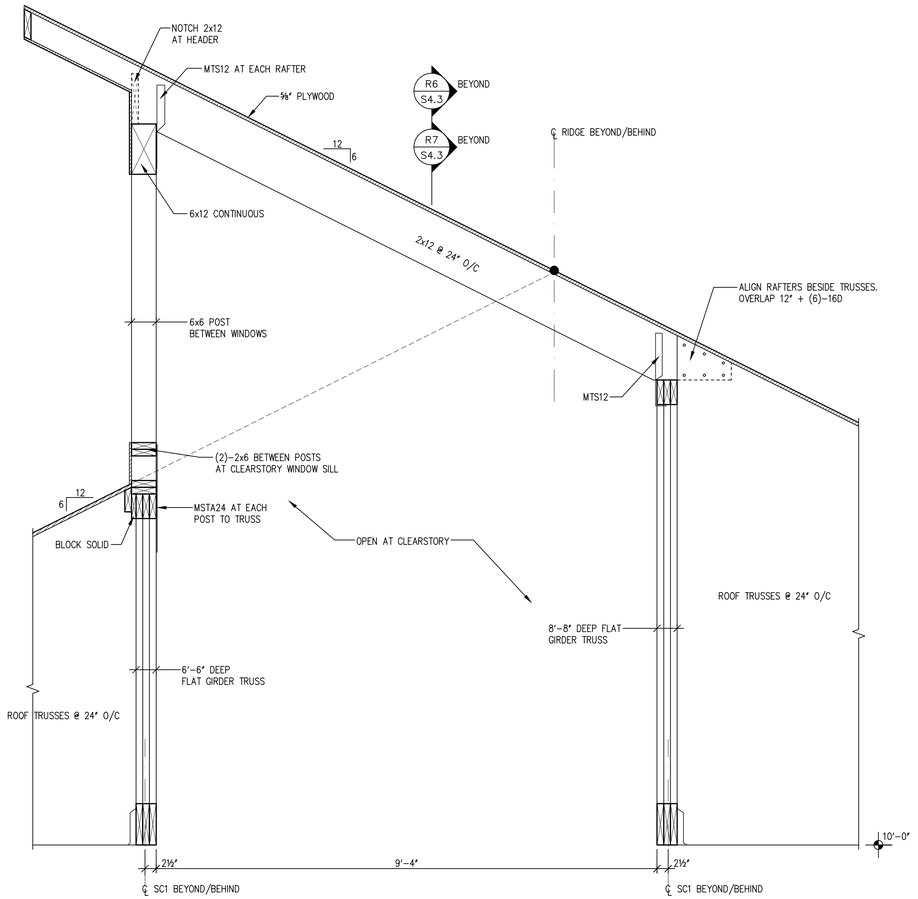
PLOT SCALE 3/4"=1'-0"
THIS DRAWING IS NOT TO BE SCALED.

SHEET TITLE

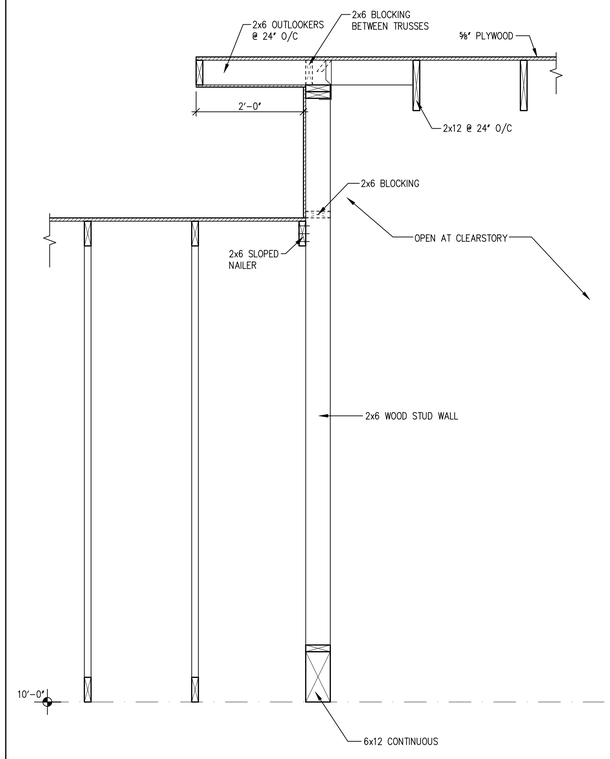
SECTIONS

SHEET NUMBER

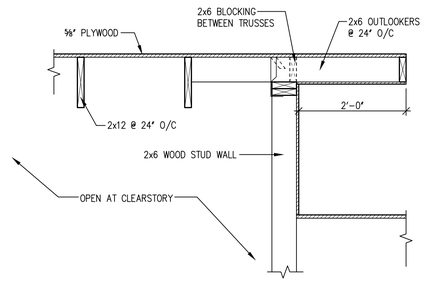
S4.2



R5 / S4.3 ¾"=1'-0"



R6 / S4.3 ¾"=1'-0"



R7 / S4.3 ¾"=1'-0"

PRELIMINARY
NOT FOR CONSTRUCTION

STIRLING & WILBUR
ENGINEERING GROUP

7085 SOUTH TAMIAMI TRAIL, SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: cad@stirlingwilbur.com

EB6482

PROJECT NAME

ROBINSON PRESERVE EXPANSION
OFFICE BUILDING
MANATEE COUNTY, FLORIDA

ISSUED FOR

95% CONSTRUCTION DOCUMENTS	10-02-14

PROJECT NUMBER

W2013-064A

SIGN/SEAL

STEPHEN WILBUR, PE 42119

REVISIONS

NO.	ITEM	DATE
1		

DRAWN BY	RTR
CHECKED BY	SW
DATE	10-02-14
PLOT SCALE	¾"=1'-0"

THIS DRAWING IS NOT TO BE SCALED.

SHEET TITLE

SECTIONS

SHEET NUMBER

S4.3

GENERAL NOTES:
2013064A / GNOTES – GENERAL

DESIGN:

1. THE STRUCTURE DESCRIBED ON THE STRUCTURAL DRAWINGS HAS BEEN DESIGNED TO COMPLY WITH THE REQUIREMENTS OF THE 2010 FLORIDA BUILDING CODE.
2. DESIGN LOADS:
   LIVE LOADS: SEE PLAN NOTES.
   DEAD LOADS: SEE PLAN NOTES
   WIND LOAD: PER ASCE STANDARD 7–10:
   BUILDING CATEGORY: 2
   V = 150 MPH (ULTIMATE 3 SECOND GUST)
   MEAN ROOF HT = 30'
   EXPOSURE: D
   ENCLOSED STRUCTURE: INTERNAL PRESSURE COEFFICIENT = +/– 0.18
   COMPONENTS AND CLADDING DESIGN PRESSURE / SUCTION (PSF): SEE PLAN.
3. DELEGATED ENGINEERING REQUIREMENTS: THE FOLLOWING ITEMS SHALL BE DESIGNED BY THE MAUFACTURER'S SPECIALTY ENGINEER WHO SHALL BE A PROFESSIONAL ENGINEER, LICENSED IN THE STATE OF FLORIDA. PROVIDE SHOP DRAWINGS, AND CALCULATIONS WHERE INDICATED, SIGNED AND SEALED BY THE SPECIALTY ENGINEER, FOR APPROVAL BY THE ARCHITECT AND ENGINEER–OF–RECORD:
   PRE–ENGINEERED WOOD ROOF TRUSSES

GENERAL:

1. ALL DIMENSIONS, OTHER THAN PURELY STRUCTURAL DIMENSIONS, SHOWN ON THE STRUCTURAL DRAWINGS MUST BE CHECKED AGAINST THE ARCHITECTURAL DRAWINGS. REPORT ANY DISCREPANCIES TO THE ARCHITECT AND ENGINEER OF RECORD, PRIOR TO PROCEEDING WITH THE WORK.
2. DO NOT SCALE THE DRAWINGS.
3. OPENINGS, TRENCHES, PITS, BASES AND MECHANICAL EQUIPMENT, WHERE SHOWN, ARE APPROXIMATE AS TO SIZE AND LOCATION. REFER TO ARCHITECTURAL, MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS FOR EXACT LOCATIONS AND SIZES, AND FOR ANY OTHER FORMED, ANCHORED, SUPPORTED OR EMBEDDED ITEMS WHICH AFFECT THE STRUCTURE.
4. NO PROVISION HAS BEEN MADE IN THE STRUCTURAL DESIGN FOR TEMPORARY CONDITIONS OCCURRING DURING CONSTRUCTION, UNLESS SPECIFICALLY NOTED ON THE STRUCTURAL DRAWINGS. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY SHORING AND BRACING REQUIRED TO RESIST STRESSES OR INSTABILITY OCCURRING FROM ANY CAUSE DURING CONSTRUCTION. THE CONTRACTOR SHALL ASSUME COMPLETE RESPONSIBILITY FOR SUCH MEASURES.
5. REFER ALSO TO NOTES UNDER PLANS AND TO SCHEDULES ON STRUCTURAL DRAWINGS.
6. ALL CODES AND STANDARDS REFERRED TO ARE LATEST EDITIONS INCLUDING LATEST REVISIONS AND ADDENDA.

SUBMITTALS:

1. SUBMIT SHOP DRAWINGS AS DIRECTED WITHIN THE CONTRACT DOCUMENTS FOR REVIEW BY THE ARCHITECT AND ENGINEER OF RECORD. REVIEW BY THE ENGINEER SHALL NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY OF SEEING THAT THE WORK IS COMPLETE, ACCURATE, AND IN CONFORMANCE WITH THE STRUCTURAL CONTRACT DOCUMENTS. THE CONTRACTOR SHALL REVIEW, APPROVE, SIGN AND DATE THE SHOP DRAWINGS PRIOR TO SUBMITTAL TO THE ENGINEER FOR REVIEW.

FOUNDATIONS:

1. DO NOT EXCEED A RISE OF 7 IN A RUN OF 10 IN THE LINE OF SLOPE BETWEEN ADJACENT EXCAVATIONS. MAXIMUM FOOTING STEP DEPTH SHALL BE 2'–0".
2. FOUNDATION ELEVATIONS ARE BASED ON INFORMATION AVAILABLE AT THE TIME OF THE DESIGN. ACTUAL JOBSITE CONDITIONS WHICH VARY FROM ASSUMED CONDITIONS MUST BE REPORTED TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK.
3. KEEP EXCAVATIONS CONTINUALLY DRY BEFORE POURING CONCRETE. EXCAVATE MATERIAL SOFTENED BY WATER AND THICKEN FOOTING TO SUIT.
4. BACKFILLING AND COMPACTION:
   A. SLABS ON GRADE AND STRUCTURAL FRAMING PROVIDING LATERAL SUPPORT TO WALLS WHICH RETAIN EARTH SHALL BE IN PLACE PRIOR TO BACKFILLING. PROVIDE LATERAL SUPPORT TO TOP OF WALLS WHERE TOP SLAB/FRAMING CANNOT BE PLACED UNTIL WALL IS BUILT.
   B. WHERE BACKFILLING IS REQUIRED ON BOTH SIDES OF A FOUNDATION WALL, THE GRADE DIFFERENCE SHALL NOT EXCEED 1'–0".
   C. BACKFILL SLABS–ON–GRADE, FOOTING EXCAVATIONS AND TRENCHES ONLY WITH APPROVED MATERIAL. FOLLOW BACKFILLING RECOMMENDATIONS OF THE GEOTECHNICAL CONSULTANT. IN THE ABSENCE OF SUCH INFORMATION, AND UNLESS NOTED OTHERWISE, BACKFILL IN 8" (MAX) HIGH LIFTS, COMPACTED TO A MINIMUM OF 98% STANDARD PROCTOR DRY DENSITY.
   D. PROVIDE A 6 MIL POLYETHYLENE VAPOR BARRIER UNDER ALL SLABS–ON–GRADE, UNLESS NOTED OTHERWISE. PROVIDE 6" TAPED LAPS, MINIMUM.

CONCRETE NOTES:
2013064A / GNOTES – CONCRETE

GENERAL:

1. ALL CONCRETE MATERIALS, BATCHING AND WORKMANSHIP SHALL CONFORM TO THE FOLLOWING:
   2010 FLORIDA BUILDING CODE
   ACI 301: SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS.
   ACI 318: BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE.
   ASTM C94: READYMIX CONCRETE.
2. FORMWORK, SHORING AND RESHORING:
   A. DESIGN:
   THE STRUCTURAL ADEQUACY OF THE DESIGN AND CONSTRUCTION OF ALL FORMWORK, SHORING AND RE–SHORING IS THE RESPONSIBILITY OF THE CONTRACTOR. THE DESIGN OF ALL FORMWORK, SHORING AND RE–SHORING FOR ALL ELEVATED FRAMED CONCRETE SHALL BE CARRIED OUT BY A FLORIDA REGISTERED PROFESSIONAL ENGINEER, RETAINED BY THE CONTRACTOR. REVIEW BY THE ENGINEER OF RECORD OF ANY DRAWINGS OR CONSTRUCTION OF FORMWORK, SHORING OR RE–SHORING IS FOR GENERAL LAYOUT AND EFFECTS ON THE COMPLETED BUILDING STRUCTURE ONLY.
   B. REMOVAL OF FORMWORK:
   DO NOT REMOVE FORMWORK FOR CONCRETE SUPPORTING ITS OWN WEIGHT AT ANY TIME PRIOR TO CONCRETE REACHING A PROVEN COMPRESSIVE STRENGTH OF 75% OF THE SPECIFIED 28 DAY STRENGTH. RESHORING INSTALLATION TO PROCEED IMMEDIATELY FOLLOWING THE REMOVAL OF SHORING. PROPOSED SCHEDULE FOR REMOVAL OF SHORING/RESHORING TO BE SUBMITTED TO THE ENGINEER FOR REVIEW.

MATERIALS:

1. CONCRETE: MINIMUM COMPRESSIVE STRENGTH(S) FOR CONCRETE SHALL BE AS NOTED ON THE STRUCTURAL PLANS. SLUMP: 4" +/– 1". IN ALL CONCRETE PROVIDE A WATER REDUCING ADMIXTURE CONFORMING TO ASTM C260; ALL OTHER ADMIXTURES SHALL CONFORM TO ASTM C494 AND SHALL BE USED IN STRICT ACCORDANCE WITH THE MANUFACTURERS' DIRECTIONS.
2. SUBMIT MIX DESIGN(S) FOR REVIEW BY THE ENGINEER OF RECORD A MINIMUM OF 7 DAYS PRIOR TO INITIAL CONCRETE POUR.
3. REINFORCING STEEL: DEFORMED BARS, CONFORMING TO ASTM A615, WITH A MINIMUM YIELD STRENGTH OF 60 KSI.
4. WELDED WIRE FABRIC: "WELDED STEEL WIRE FABRIC" CONFORMING TO ASTM A185.

EXECUTION:

1. REINFORCING STEEL SHALL BE DETAILED, FABRICATED, PLACED AND SUPPORTED TO CONFORM WITH THE ACI DETAILING MANUAL: ACI SP–66.
2. MINIMUM REINFORCING STEEL LAP SPLICE LENGTH, UNLESS NOTED OTHERWISE, IS 36 x BAR DIA.
3. POUR STRUCTURAL CONCRETE WITHIN THE FOLLOWING TOLERANCES:
   VARIATION FROM PLUMB: 1/4" IN 10'–0"
   VARIATION FROM LEVEL IN TOPS OF SLABS, SOFFITS OF SLABS, BEAM SOFFITS: 1/8" IN 10'–0"
   VARIATION FROM CONSPICUOUS LINES AT LINTELS, SILLS, PARAPETS, GROOVES, ETC.: 1/4" IN ANY BAY
   VARIATION OF BUILDING LINES, COLUMN CENTERLINES, WALLS OR PARTITIONS FROM PLAN LOCATION:
   1/4" IN BAY OF 20' MAX; 1/2" IN BAY OF 40' MAX
   VARIATION IN SIZE OF WALL OR FLOOR OPENINGS: +1/2", – 0"
   VARIATION IN CROSS–SECTION DIMENSIONS:
   BEAMS AND COLUMNS: +1/2", – 1/4"
   SLABS AND WALLS: +1/4", – 0"
   VARIATION FOOTINGS AND PILECAPS:
   PLAN DIMENSIONS: +2", – 1/2"
   THICKNESS: – 0"
   VARIATION IN STAIRS: RISE: +/– 1/8"; TREAD: +/– 1/4"
4. MINIMUM CONCRETE COVER TO REINFORCING STEEL, UNLESS NOTED ON DRAWINGS:
   CAST AGAINST EARTH: 3"
   EXPOSED TO EARTH OR WEATHER: 1–1/2"
   INTERIOR: SLABS AND WALLS: 1"
   BEAMS AND COLUMNS: 1–1/2"
5. CONSTRUCTION JOINTS: THE LOCATION OF ALL CONSTRUCTION JOINTS, UNLESS SHOWN ON THE DRAWINGS, IN CONCRETE WALLS, SLABS AND BEAMS SHALL BE APPROVED BY THE ENGINEER, PRIOR TO CONSTRUCTION. JOINTS IN SLABS SHALL BE PERPENDICULAR TO THE SPAN, AT MID–SPAN, WITH VERTICAL BULKHEADS. UNLESS NOTED OTHERWISE CONCRETE WALL REINFORCEMENT IS BASED ON VERTICAL CONSTRUCTION JOINT SPACING OF 30'–0", MAX. BEAMS SHALL BE CONSTRUCTED WITH NO HORIZONTAL CONSTRUCTION JOINTS.
6. INSERTS, SLEEVES, CONDUITS, FASTENERS, ETC, WHERE REQUIRED BY THE DOCUMENTS, SHALL BE INSTALLED SO AS NOT TO IMPAIR THE INTEGRITY OF THE STRUCTURE, AND IN A MANNER WHICH WILL NOT REQUIRE THE BENDING, CUTTING OR DISPLACEMENT OF THE REINFORCEMENT. PLACE CONDUIT IN SLABS ABOVE THE BOTTOM REINFORCEMENT, BELOW THE TOP REINFORCEMENT, OF DIAMETER LESS THAN 1/3 x THE SLAB THICKNESS, SPACED AT LEAST 3 DIAMETERS C/C. MINIMUM COVER SHALL BE 1".
7. FOR READYMIX CONCRETE THE MAXIMUM TIME PERMITTED BETWEEN BATCHING AND DEPOSITING IN THE FORMWORK IS 90 MINUTES. CONCRETE NOT PLACED WITHIN THIS TIME LIMIT SHALL BE REJECTED.
8. THE ADDITION OF MIX WATER AT THE SITE TO INCREASE THE CONCRETE SLUMP SHALL NOT BE ALLOWED AND SHALL BE CAUSE FOR REJECTION OF THAT BATCH OF CONCRETE.
9. THE CONTRACTOR SHALL ARRANGE FOR CONCRETE TESTING BY AN INDEPENDENT TESTING LAB IN ACCORDANCE WITH FLORIDA BUILDING CODE / ACI 318 REQUIREMENTS.
10. OPENINGS OR FASTENERS REQUIRED AFTER CONCRETE PLACEMENT SHALL BE INSTALLED ONLY WITH THE APPROVAL OF THE ENGINEER.
11. FINISHES: REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS. CONFORM TO ACI 302.
12. REPAIR / DEFECTIVE WORK: CUT OUT AND PATCH HONEY–COMBED AREAS IN AN APPROVED MANNER. FILL ALL HOLES FROM FORM–TIES AND SEPARATORS.

MASONRY NOTES:
2013064A / GNOTES –MASONRY

GENERAL:

1. THESE NOTES PROVIDE MINIMUM STRUCTURAL REQUIREMENTS. REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR REQUIREMENTS OTHER THAN STRUCTURAL.
2. MASONRY CONSTRUCTION SHALL CONFORM TO THE FOLLOWING:
   2010 FLORIDA STANDARD BUILDING CODE
   BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES – ACI 530
   SPECIFICATIONS FOR MASONRY STRUCTURES – ACI 530.1

MATERIALS:

1. CONCRETE BLOCK: MODULAR UNITS, NORMAL WEIGHT (UNLESS NOTED OTHERWISE), CONFORMING TO ASTM C90, WITH A MINIMUM UNIT COMPRESSIVE STRENGTH OF 1900 PSI, BASED ON THE NET UNIT AREA.
2. MORTAR: TYPE 'M' OR 'S', CONFORMING TO ASTM C270.
3. MASONRY GROUT FOR FILLED CELLS: CONFORM TO ASTM C476. MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS SHALL BE 3000 PSI. SLUMP: 7" +/– 1". ALTERNATELY, FILLED CELLS MAY BE PLACED WITH 3000 PSI CONCRETE WITH A SLUMP OF 7" +/– 1".
4. HORIZONTAL JOINT REINFORCEMENT: GALVANIZED, LADDER–TYPE, WITH 9 GAGE SIDE AND CROSS RODS. PROVIDE PRE–FABRICATED CORNER AND TEE SECTIONS AT ALL INTERSECTIONS.

EXECUTION:

1. NET AREA COMPRESSIVE STRENGTH OF MASONRY CONSTRUCTION (F'M) SHALL BE 1500 PSI, MIN.
2. PROVIDE HORIZONTAL JOINT REINFORCEMENT, UNLESS NOTED OTHERWISE, AT 16" O/C VERTICALLY. PROVIDE ADDITIONAL REINFORCEMENT ABOVE AND BELOW ALL OPENINGS, EXTENDING 2'–0" BEYOND EACH SIDE OF OPENING. PROVIDE STANDARD DOVETAIL ANCHORS TO SECURE MASONRY TO ABUTTING CONCRETE COLUMNS.
3. PROVIDE MINIMUM BEARING OF 8" ON MASONRY FOR BEAMS, LINTELS OR BASEPLATES. BEARING SHALL BE ON HOLLOW BLOCKS GROUTED SOLID AND REINFORCED AS SHOWN ON PLANS.
4. UNLESS NOTED OTHERWISE, PROVIDE A CONTINUOUS 'KNOCK–OUT' COURSE, FILLED SOLID WITH 3000 PSI CONCRETE, AT THE TOP OF ALL LOAD BEARING MASONRY WALLS.
5. IN HOLLOW MASONRY EXTERIOR WALLS PROVIDE REINFORCED VERTICAL FILLED CELLS WHERE SHOWN ON PLAN. AS A MINIMUM REQUIREMENT, PROVIDE 1 #5 VERTICAL BAR AT ALL CORNERS, JAMBS OF OPENINGS AND AS SHOWN ON PLAN. REGARDLESS OF INFORMATION SHOWN ON PLAN, VERTICAL REINFORCEMENT SPACING AT EXTERIOR WALLS SHALL NOT EXCEED 6'–0" ON CENTER. FILLED CELLS SHALL BE GROUTED SOLID IN MAXIMUM LIFTS OF 12'–0" HEIGHT. PROVIDE CLEANOUT / INSPECTION HOLES AT THE BOTTOM OF ALL FILLED CELLS. MORTAR JOINTS SHALL BE FULLY BEDDED AT ALL FILLED CELLS.
6. AT SILLS OF WINDOW OPENINGS IN LOAD–BEARING MASONRY WALLS, PROVIDE 8"x 8"KNOCKOUT COURSE, POURED SOLID AND REINFORCED WITH 1 #5 HORIZONTAL BAR, TYPICAL UNLESS NOTED OTHERWISE ON PLAN OR DETAILS.
7. PROVIDE VERTICAL CONTROL JOINTS IN MASONRY AS SHOWN ON THE ARCHITECTURAL DRAWINGS.

STRUCTURAL STEEL NOTES:
2013064A / GNOTES – STEEL

GENERAL:

1. DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO AISC "SPECIFICATION FOR THE DESIGN FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS" AND THE AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES".
2. COMPLY WITH THE 2010 FLORIDA BUILDING CODE.
3. SUBMIT SHOP AND ERECTION DRAWINGS FOR REVIEW BY THE ENGINEER OF RECORD FOR ALL STRUCTURAL STEEL COMPONENTS INDICATING THAT THE INTENT OF THE STRUCTURAL DESIGN HAS BEEN UNDERSTOOD AND ACCOMPLISHED. SHOP DRAWINGS SHALL INDICATE AT LEAST THE FOLLOWING INFORMATION: MATERIALS, MEMBER SIZES SPACING AND LOCATIONS, TYPES AND DETAILS OF ALL CONNECTIONS, SPLICES, OPENINGS, REACTIONS, AND CLEANING AND PAINTING REQUIREMENTS. UNLESS DETAILED ON THE STRUCTURAL DRAWINGS, ALL CONNECTIONS SHALL BE DESIGNED AND DETAILED BY THE FABRICATOR.

MATERIALS:

1. ALL STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING:
   PLATES AND ROLLED SECTIONS: ASTM A36 (MIN YIELD STRENGTH = 36 KSI)
   HOLLOW STRUCTURAL TUBE SECTIONS: ASTM A500, GRADE B (MIN YIELD STRENGTH = 46 KSI)
   STEEL PIPE SECTIONS: ASTM A53, GRADE B (MIN YIELD STRENGTH = 35 KSI)
2. ALL BOLTS, NUTS AND WASHERS FOR CONNECTIONS, UNLESS OTHERWISE SPECIFIED, SHALL CONFORM TO ASTM A325.
3. ALL ANCHOR BOLTS FOR BASE AND BEARING PLATES SHALL CONFORM TO ASTM A307.
4. WELDING AND WELDER QUALIFICATIONS SHALL CONFORM TO THE STRUCTURAL WELDING CODE OF THE AMERICAN WELDING SOCIETY (AWS D1.1).

EXECUTION:

1. FABRICATION AND ASSEMBLY AND ERECTION SHALL COMPLY WITH AISC SPECIFICATIONS REFERENCED ABOVE. SHOP–ASSEMBLE WORK TO THE GREATEST EXTENT POSSIBLE.
2. WELDING SHALL CONFORM TO AWS D1.1.
3. CLEAN AND SHOP–PRIME ALL STRUCTURAL STEEL SURFACES AFTER FABRICATION. CLEAN AND PREPARE SURFACE TO SSPC–SP2 REQUIREMENT FOR STANDARD RED–OXIDE PRIMER APPLICATION. HOT–DIP GALVANIZING, WHERE REQUIRED, SHALL CONFORM TO ASTM A–123 REQUIREMENTS, WITH SURFACE PREPARATION TO SSPC–SP5.
4. NO HOLES, OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS, SHALL BE PERMITTED WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER OF RECORD.
5. ALL NECESSARY TEMPORARY SHORING AND BRACING SHALL BE PROVIDED BY THE CONTRACTOR. BRACING SHOWN ON THE STRUCTURAL DRAWINGS IS FOR THE COMPLETED STRUCTURE ONLY.
6. AFTER ERECTION, CLEAN AND PREPARE ALL FIELD WELDS, SCRATCHES AND ABRASIONS, AND TOUCH UP WITH SPECIFIED PRIMER PRIOR TO FINISH PAINT.

WOOD FRAMING NOTES
2013064A / GNOTES – WOOD

PRELIMINARY
NOT FOR CONSTRUCTION

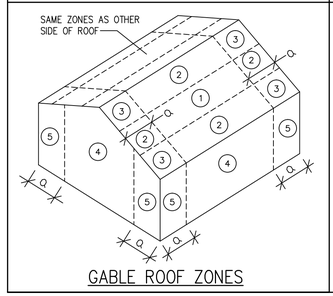
1. CONNECTIONS, MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE 2010 FLORIDA BUILDING CODE, CHAPTER 23: WOOD CONSTRUCTION, AND TO THE TIMBER CONSTRUCTION MANUAL BY THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION.
2. NOTIFY ENGINEER OF RECORD AND ARCHITECT IF EXISTING CONDITIONS DEVIATE FROM THE DETAILS SHOWN ON THE DRAWINGS.
3. WOOD FRAMING MATERIALS:
   CONVENTIONAL FRAMING LUMBER: #2 SO. PINE, OR BETTER, UNLESS NOTED.
   TJI / PRO FLOOR JOISTS: BY TRUSJOIST INC, OR APPROVED ALTERNATE.
   LVL AND PSL ENGINEERED LUMBER PRODUCTS: 'MICRO.LAM' AND 'PARALLAM' SECTIONS BY TRUSJOIST, INC, OR APPROVED ALTERNATE.
   MINIMUM ALLOWABLE STRESS REQUIREMENTS: FB = 2900 PSI; FV = 285 PSI; E = 2.0M.
   ALTERNATE ENGINEERED LUMBER PRODUCTS MAY BE ACCEPTABLE: SUBMIT DETAILS AND MANUFACTURER'S PRODUCT DATA TO THE ENGINEER OF RECORD FOR REVIEW AND ACCEPTANCE.
   PLYWOOD SHEATHING:
   MATERIAL: APA SPAN RATED SHEATHING; EXPOSURE 1; THICKNESS AS NOTED ON DRAWINGS
   NAILING: AS NOTED ON DRAWINGS.
4. ALL CONNECTORS, FASTENERS AND ANCHORS SPECIFIED ON THE DRAWINGS ARE PRODUCTS OF SIMPSON –STRONGTIE, UNLESS NOTED. EQUIVALENT ALTERNATE PRODUCTS ARE ACCEPTABLE SUBJECT TO REVIEW AND APPROVAL BY THE ENGINEER.
5. WHERE CONNECTIONS HAVE NOT BEEN DETAILED ON PLAN, PROVIDE ALL FRAMING ANCHORS AND CONNECTORS AS REQUIRED TO TRANSFER THE DESIGN LOADS AS SHOWN. UNLESS NOTED OTHERWISE THE CONNECTIONS SHALL BE DETAILED TO DEVELOP THE FULL CAPACITY OF THE CONNECTED MEMBERS.
6. PRESERVATIVE TREATED WOOD: ALL EXPOSED EXTERIOR WOOD, ALL WOOD IN CONTACT WITH MASONRY OR CONCRETE, AND WHERE NOTED (P.T.) ON PLANS, SHALL BE PRESERVATIVE TREATED IN ACCORDANCE WITH AWPA STANDARD U1. PROVIDE PRESERVATIVE AT RETENTION LEVELS APPROPRIATE FOR THE PRESERVATIVE PRODUCT USED, PER AWPA USE CATEGORIES AS FOLLOWS:
   USE CATEGORY UC3B: EXPOSED, ABOVE GROUND.
   USE CATEGORY UC4A: EXPOSED, IN CONTACT WITH GROUND, CONCRETE, AND FRESH WATER.
   TREAT FIELD CUTS AND HOLES WITH PRESERVATIVE SEALER.
   ALL HARDWARE AND FASTENERS IN CONTACT WITH TREATED LUMBER SHALL BE CORROSION RESISTANT:
   HOT–DIP GALVANIZED FOR PROTECTED EXPOSURE
   STAINLESS STEEL FOR POTENTIALLY WET EXPOSURE
7. FASTEN BUILT–UP WOOD JOIST, BEAM AND STUD SECTIONS TOGETHER WITH MINIMUM OF 2 ROWS OF 12D NAILS, PER PLY, AT 12"ON CENTER UNLESS NOTED OTHERWISE ON PLANS OR DETAILS.

PRE–FABRICATED WOOD TRUSS NOTES
2013064A / GNOTES –WOOD TRUSSES

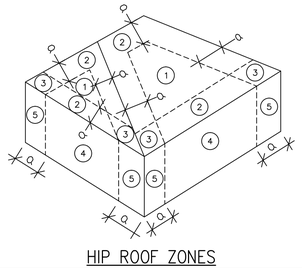
1. TRUSSES, BRACING, BRIDGING AND TRUSS–TO–TRUSS CONNECTORS SHALL BE DESIGNED BY THE TRUSS MANUFACTURER TO SAFELY SUPPORT THE DESIGN LOADS GIVEN ON PLANS AND IN GENERAL NOTES, ABOVE.
   TOTAL DEAD LOAD + LIVE LOAD = 55 PSF, MINIMUM, FOR ROOF TRUSSES:
   TOP CHORD: DL = 20 PSF; LL = 20 PSF
   BOTTOM CHORD: DL = 5 PSF; LL = 10 PSF
   WIND LOAD SHALL BE CALCULATED IN ACCORDANCE WITH THE 2010 FBC / ASCE 7–10. (REFER TO GENERAL NOTES ON THIS SHEET FOR WIND LOAD DESIGN CRITERIA) TOTAL DEAD LOAD SHALL NOT EXCEED 10 PSF FOR CALCULATION OF NET WND UPLIFT FORCES AND REACTIONS.
   LIVE LOAD DEFLECTION SHALL NOT EXCEED SPAN / 360.
2. THE STRUCTURE HAS BEEN DESIGNED BASED ON THE TRUSS LAYOUT SHOWN ON THE STRUCTURAL DRAWINGS. ANY DEVIATIONS FROM THAT LAYOUT SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER–OF–RECORD FOR REVIEW AND SHALL BE CLEARLY FLAGGED ON THE SHOP DRAWINGS.
3. SUBMIT SHOP DRAWINGS FOR REVIEW BY THE ENGINEER OF RECORD PRIOR TO FABRICATION OR ERECTION OF WOOD TRUSSES. AS A MINIMUM, SHOP DRAWINGS SHALL INDICATE REQUIREMENTS FOR BEARING, LATERAL BRACING AND ANCHORAGE. INDICATE SIZE, SPECIES AND STRESS GRADE OF LUMBER; AND, LOCATION, SIZE AND TYPE OF CONNECTORS. SHOW SPAN, PITCH, CONFIGURATION AND SPACING OF EACH TRUSS TYPE. SHOP DRAWINGS SHALL BEAR THE SIGNATURE AND SEAL OF THE FLORIDA–REGISTERED PROFESSIONAL ENGINEER RESPONSIBLE FOR THE DESIGN OF THE TRUSSES.
4. BRACE TRUSS CHORD AND WEB MEMBERS IN ACCORDANCE WITH THE TRUSS SHOP DRAWINGS. NOTE THAT ADDITIONAL BRACING IS REQUIRED AT TRUSS BOTTOM CHORDS WHERE A RIGID CEILING DIAPHRAGM IS NOT ATTACHED DIRECTLY TO THE TRUSSES.
5. DO NOT CUT, NOTCH OR DRILL TRUSS MEMBERS WITHOUT WRITTEN APPROVAL OF THE TRUSS DESIGN ENGINEER.
6. REMOVE AND REPLACE DAMAGED TRUSSES. REPAIR DAMAGED TRUSSES ONLY WITH THE WRITTEN APPROVAL AND DIRECTION OF THE TRUSS DESIGN ENGINEER. SUBMIT COPIES OF SUCH APPROVAL TO THE ENGINEER–OF–RECORD FOR REVIEW BEFORE PROCEEDING.
7. CONNECT ROOF TRUSSES TO SUPPORTING FRAMING WITH APPROVED HURRICANE ANCHORS IN ACCORDANCE WITH THE FOLLOWING:
   TRUSS TO TRUSS CONNECTORS SHALL BE DESIGNED BY THE TRUSS MANUFACTURER.
   EACH TRUSS SHALL BE ANCHORED TO SUPPORTING STRUCTURAL FRAMING IN ACCORDANCE WITH THE TRUSS ANCHORAGE SCHEDULE AND /OR DETAILS PROVIDED ON THE STRUCTURAL DRAWINGS. THE ANCHOR DESIGN IS BASED UPON THE TRUSS LAYOUT SHOWN ON THE STRUCTURAL DRAWINGS. NOTIFY THE ENGINEER OF RECORD OF ANY DISCREPANCIES.

COMPONENT & CLADDING WIND LOADS (PSF)					
ZONE / AREA	1	2	3	4	5
10	+23.2 –36.8	+23.2 –64.1	+23.2 –94.8	+40.2 –43.6	+40.2 –53.9
20	+21.5 –35.1	+21.5 –59.0	+21.5 –88.0	+38.5 –41.9	+38.5 –50.5
50	+18.1 –33.4	+18.1 –52.2	+18.1 –81.2	+36.8 –40.2	+36.8 –45.4
100	+16.4 –33.4	+16.4 –47.1	+16.4 –74.3	+33.4 –36.8	+33.4 –41.9

NOTES:
1. WIND LOADS PER ASCE 7–10 & 2010 FLORIDA BUILDING CODE.
   V=150 MPH– 3 SECOND GUST, ULTIMATE
   O.=3'–0"
   EXPOSURE 'D'
   CATEGORY II BUILDING
   HT= 30'–0"
   ENCLOSED STRUCTURE/GCpi = ±0.18
2. POSITIVE LOADS (PRESSURE) ACT TOWARDS BUILDING SURFACE.
   NEGATIVE LOADS (SUCTION) ACT AWAY FROM BUILDING SURFACE.
3. ZONES (WALL + ROOF) ARE PER ASCE 7–10; FIG 30.4–1 & 30.4–2A



GABLE ROOF ZONES



HIP ROOF ZONES

STIRLING & WILBUR
ENGINEERING GROUP

7085 SOUTH TAMIAMI TRAIL, SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: cad@stirlingwilbur.com

EB6482

PROJECT NAME

ROBINSON PRESERVE EXPANSION
OFFICE BUILDING
MANATEE COUNTY, FLORIDA

ISSUED FOR

95% CONSTRUCTION DOCUMENTS 10-02-14

PROJECT NUMBER

W2013-064A

SIGN/SEAL

STEPHEN WILBUR, PE 42119

REVISIONS

NO.	ITEM	DATE
1		

DRAWN BY RTR

CHECKED BY SW

DATE 10-02-14

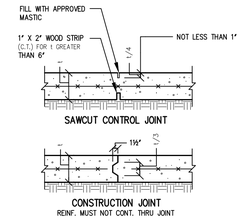
PLOT SCALE 3/4"=1'–0"
THIS DRAWING IS NOT TO BE SCALED.

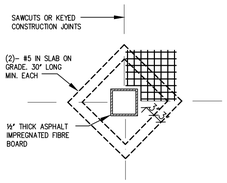
SHEET TITLE

GENERAL NOTES

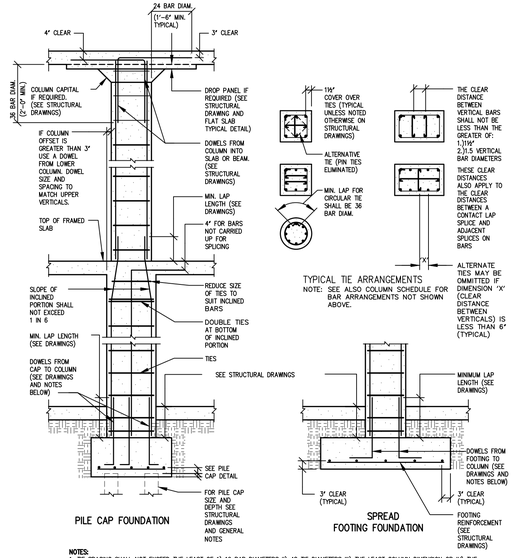
SHEET NUMBER

S5.1





SLAB ON GRADE DETAILS

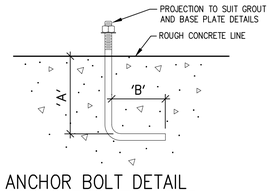


NOTES:
1. TIE SPACING SHALL NOT EXCEED THE LEAST OF I) 16 BAR DIAMETERS II) 48 TIE DIAMETERS III) THE LEAST COLUMN DIMENSION OR IV) THE SPACING GIVEN ON THE COLUMN SCHEDULE.
2. TIES SHALL BE SO ARRANGED THAT EVERY CORNER AND ALTERNATE LONGITUDINAL BAR SHALL HAVE LATERAL SUPPORT PROVIDED BY THE CORNER OF A TIE HAVING AN INCLINED ANGLE OF NOT MORE THAN 135 DEGREES. NO BAR SHALL BE MORE THAN 6" FROM SUCH A LATERALLY SUPPORTED BAR.
3. IF CIRCULAR TIES ARE USED THE LAP SHALL BE A MINIMUM OF 36 TIE DIAMETERS.
4. TIES SHALL BE LOCATED VERTICALLY NOT MORE THAN HALF A TIE SPACING ABOVE THE FLOOR OR FOOTING, AND SHALL BE SPACED TO NOT MORE THAN HALF A TIE SPACING BELOW THE LOWEST HORIZONTAL REINFORCEMENT IN THE SLAB OR DROP PANEL ABOVE, EXCEPT THAT WHERE BEAMS OR BRACKETS PROVIDE ENCLOSURE ON ALL SIDES OF THE COLUMN, THE TIES MAY BE TERMINATED NOT MORE THAN 3 INCHES BELOW THE LOWEST REINFORCEMENT IN SUCH BEAMS OR BRACKETS.
5. TIES MAY BE MADE OF INTERMEDIATE GRADE STEEL.
6. PLAIN BARS SHALL ONLY BE USED WITH PERMISSION FROM THE ENGINEER AND ACCORDING TO HIS INSTRUCTIONS.
7. LAPPED SPLICES MAY BE REPLACED BY WELDING OR MECHANICAL DEVICES WITH APPROVAL FROM THE ENGINEER.
8. DOWELS FROM FOOTINGS OR CAPS TO COLUMNS TO PROTECT EQUALLY ABOVE AND BELOW THE CONSTRUCTION JOINT UNLESS OTHERWISE SHOWN ON THE DRAWINGS. NUMBER AND SIZE OF DOWELS TO MATCH COLUMN VERTICALS UNLESS OTHERWISE NOTED ON DRAWINGS.
9. REINFORCING TO BE DETAILED, BENT, PLACED AND SUPPORTED IN ACCORDANCE WITH THE MANUAL FOR DETAILING REINFORCED CONCRETE STRUCTURES ACI – 315 (LATEST EDITION).

TYPICAL DETAIL OF CONCRETE COLUMN

STANDARD ABBREVIATIONS

A. BOLT (A.B.)	ANCHOR BOLT	GA.	GAUGE
ADJ.	ADJUSTABLE	GALV.	GALVANIZED
ARCH.	ARCHITECTURAL	GB	GRADE BEAM
AFB	ASPHALT IMPREGNATED FIBRE BOARD		
		H. (HOR.)	HORIZONTAL
B. (BOTT.)	BOTTOM	HEF	HORIZONTAL EACH FACE
BEW	BOTTOM EACH WAY	HIF	HORIZONTAL INSIDE FACE
BLL	BOTTOM LOWER LAYER	HOF	HORIZONTAL OUTSIDE FACE
BML	BOTTOM MIDDLE LAYER		
BUL	BOTTOM UPPER LAYER	INT.	INTERIOR
BLDG.	BUILDING	INV.	INVERT
BM	BEAM		
B. R. (B.P.)	BASE PLATE		
		JT.	JOINT
C/C	CENTER TO CENTER	JST.	JOIST
℄	CENTERLINE		
CANT.	CANTILEVER		
COL.	COLUMN		
CONC.	CONCRETE		
CONST.	CONSTRUCTION	K	KIPS
CONT.	CONTINUOUS		
C.J.	CONTROL JOINT		
CONST. JT.	CONSTRUCTION JOINT		
C.A.	COLUMN ABOVE	L	ANGLE
		LB. (#)	POUNDS
DIAG.	DIAGONAL	L.L.	LIVE LOAD
# (DIA.)	DIAMETER	LG.	LONG
D. FIR	DOUGLAS FIR	LLV	LONG LEG VERTICAL
DIM	DIMENSION	LLH	LONG LEG HORIZONTAL
DJ	DOUBLE JOIST	LONG.	LONGITUDINAL
D.L.	DEAD LOAD		
do	DITTO	MAX.	MAXIMUM
DWG.	DRAWING	MECH.	MECHANICAL
DWL.	DOWEL	MEZZ.	MEZZANINE
DT	DOUBLE TEE	MIN.	MINIMUM
		MISC.	MISCELLANEOUS
EA.	EACH	MOM.	MOMENT
EE	EACH END	M.C.	MOMENT CONNECTION
EF	EACH FACE	M.S.L.	MEAN SEA LEVEL
EJ	EXPANSION JOINT		
EW	EACH WAY	N–S	NORTH–SOUTH
EWB	EACH WAY BOTTOM	N.T.S.	NOT TO SCALE
EWT	EACH WAY TOP	NO. (#)	NUMBER
ELEV.	ELEVATION		
ELECT.	ELECTRICAL		
E–W	EAST–WEST	OWSJ	OPEN WEB STEEL JOIST
EQ.	EQUAL	O/C	ON CENTER
EXIST.	EXISTING		
EXT.	EXTERIOR		
		PL	PLATE
FF	FAR FACE	PC	PRECAST
FDN.	FOUNDATION	PROJ.	PROJECTION
FIN.	FINISHED	PSI	POUNDS PER SQUARE INCH
FL	FLOOR	PSF	POUNDS PER SQUARE FOOT
FTG.	FOOTING	PLF	POUNDS PER LINEAL FOOT
FMC	FULL MOMENT CONNECTION	P.T.	PRESSURE TREATED
		REF.	REFERENCE
		REINF.	REINFORCING
		REQ'D	REQUIRED
		REV.	REVISION/REVISED
		SPEC.	SPECIFICATIONS
		SST.	STAINLESS STEEL
		ST.	STEEL
		STD.	STANDARD
		SQ.	SQUARE
		SDL	SUPERIMPOSED DEAD LOAD
		STRUCT.	STRUCTURAL
		S.P.F.	SPRUCE/PINE/FIR
		TSE	THICKENED SLAB EDGE
		T	TOP
		TLL	TOP LOWER LAYER
		TML	TOP MIDDLE LAYER
		TUL	TOP UPPER LAYER
		TEMP.	TEMPERATURE
		TYP.	TYPICAL
		TRANS.	TRANSVERSE
		TSF.	TONS PER SQUARE FOOT
		TJ	TIE JOIST
		T.O.D.	TOP OF DECK
		T.O.S.	TOP OF SLAB (TOP OF STEEL)
		U/S	UNDERSIDE
		U.N.O	UNLESS NOTED OTHERWISE
		V. (VERT.)	VERTICAL
		VEF	VERTICAL EACH FACE
		VIF	VERTICAL INSIDE FACE
		VOF	VERTICAL OUTSIDE FACE
		WD.	WOOD
		WP.	WALL PLATE
		W	WIDE FLANGE BEAM
		W.W.F.	WELDED WIRE FABRIC
		W.W.M.	WELDED WIRE MESH



ANCHOR BOLT DETAIL

DESIGN NOTES

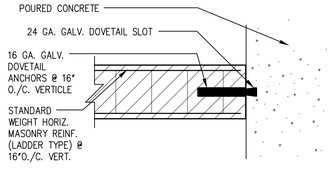
1. SHEAR VALUES ARE BASED ON 3200 LBS PER INCH OF DIAMETER.
2. TENSION CAPACITIES ARE BASED ON AN ALLOWABLE BOND STRESS OF 120√D (OR 375 LBS PER INCH OF LENGTH ON THE EMBEDDED LENGTH LESS THE SLEEVE LENGTH EXCEPT FOR ½" AND ⅝" BOLTS WHICH ARE BASED ON AN ALLOWABLE BOND STRESS OF 160 PSI.
3. IF SPACE RESTRICTS LENGTH 'A' TO LESS THAN THE RECOMMENDED VALUE TABULATED, REDUCE THE TENSION CAPACITY BY THE REDUCTION IN BOND AREA TIMES THE BOND STRESS NOTED ABOVE.

DESIGN TABLE

BOLT ø (INCH)	'A' (INCH)	'B' (INCH)	TENSION CAPACITY (LBS)	SHEAR CAPACITY (LBS)
½	8	4	3,000	1,600
⅝	10	4	4,375	2,000
¾	12	6	5,250	2,400
⅞	16	6	6,750	2,800
1	20	6	8,250	3,200
1⅛	24	8	9,750	3,600
1¼	28	8	11,250	4,000
1⅜	32	8	12,750	4,400
1½	36	8	14,250	4,800

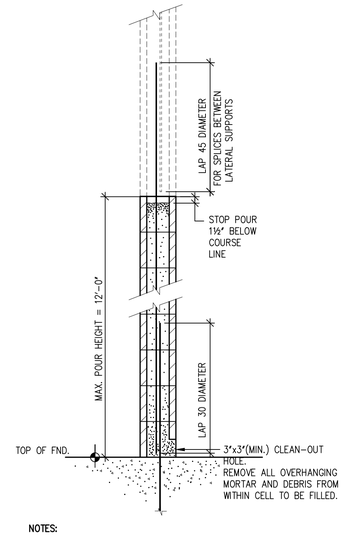
CONSTRUCTION NOTES

1. BOLTS AND NUTS SHALL BE MANUFACTURED FROM MILD STEEL.
2. NUTS SHALL BE AMERICAN STANDARD HEAVY, SEMIFINISHED HEXAGON TAPPED, U.N.C. THREAD SERIES CLASS 2B. FOR INSTALLATION WHERE VIBRATION IS PRESENT, USE TWO NUTS.
3. COUPLING NUTS SHALL CONFORM IN CROSS SECTION TO AMERICAN STANDARD REGULAR NUTS WITH U.N.C. THREAD SERIES CLASS 2B.
4. ANCHOR BOLTS SHALL BE SET ACCURATLY AND HELD IN PLACE BY TEMPLATE.
5. SLEEVES SHALL BE USED WHERE SPECIFIED ON CONSTRUCTION DRAWINGS. CENTER SLEEVES AROUND BOLTS. PLASTIC ANCHOR BOLT SLEEVES AS MANUFACTURED BY WILSON ANCHOR SLEEVE, INC. OR EQUAL MAY BE USED IN LIEU OF CONDUCTOR PIPE, BUT WHERE REQUIRED, TOP OF SLEEVE SHALL BE CUT OFF TO MAINTAIN EMBEDMENT LENGTH 'B'.



PLAN VIEW

STANDARD DETAIL OF MASONRY ANCHORAGE TO POURED CONCRETE



NOTES:

1. SEE PLANS, SECTIONS AND NOTES FOR LOCATION(S) OF FILLED CELLS AND FOR REINFORCING.
2. CONCRETE FOR FILLED CELLS:
   STRENGTH = 3000 PSI MIN. @ 28 DAYS
   MAX. AGGREGATE SIZE = ⅜"
   SLUMP = 7"±1"
   SUBMIT MIX DESIGN FOR REVIEW BY THE ENGINEER.
   DO NOT USE THE SAME MIX DESIGN AS FOR OTHER CAST–IN–PLACE CONCRETE.
3. NOTIFY ENGINEER FOR REVIEW PRIOR TO SEALING 'CLEAN–OUT' HOLES.
4. ALLOW MORTAR TO SET, 24 HOURS MINIMUM, PRIOR TO COMMENCING GROUTING.

MASONRY CLEAN–OUT DETAIL

STIRLING & WILBUR
ENGINEERING GROUP
7085 SOUTH TAMIAMI TRAIL, SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: cad@stirlingwilbur.com

EB6482

PRELIMINARY
NOT FOR CONSTRUCTION

PROJECT NAME

ROBINSON PRESERVE EXPANSION
OFFICE BUILDING
MANATEE COUNTY, FLORIDA

ISSUED FOR

95% CONSTRUCTION DOCUMENTS 10-02-14

PROJECT NUMBER

W2013-064A

SIGN/SEAL

STEPHEN WILBUR, PE 42119

REVISIONS

NO.	ITEM	DATE
1		

DRAWN BY RTR
CHECKED BY SW
DATE 10-02-14
PLOT SCALE ¾"=1'–0"
THIS DRAWING IS NOT TO BE SCALED.

SHEET TITLE

TYPICAL DETAILS

SHEET NUMBER

S5.2

LEGENDS, GENERAL NOTES AND ABBREVIATIONS

ABBREVIATIONS

AC	AIR CONDITIONING
AD	ACCESS DOOR
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
AI	ANALOG INPUT
AO	ANALOG OUTPUT
AP	ACCESS PANEL
BFF	BELOW FINISHED FLOOR
BHP	BRAKE HORSE POWER
BOT	BOTTOM
CC	COOLING COIL
CD	CONDENSATE DRAIN
CFM	CUBIC FEET PER MINUTE
CH	CHILLER
CHWR	CHILLED WATER RETURN
CHWS	CHILLED WATER SUPPLY
CLG	CEILING
CO	CLEANOUT
CT	COOLING TOWER
CU	CONDENSING UNIT
CW	COLD WATER
CWR	CONDENSER WATER RETURN
CWS	CONDENSER WATER SUPPLY
DB	DRY BULB
DCC	DIRECT DIGITAL CONTROL
DG	DOOR GRILLE
DI	DIGITAL INPUT
DO	DIGITAL OUTPUT
DP	DEW POINT
DX	DIRECT EXPANSION
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EC	ELECTRICAL CONTRACTOR
ECC	ENERGY CONTROL CENTER
EER	ENERGY EFFICIENCY RATIO
EF	EXHAUST FAN
ET	EXPANSION TANK
EL	ELEVATION
EQUIP	EQUIPMENT
EWC	ELECTRIC WATER COOLER
EWT	ENTERING WATER TEMPERATURE
EXIST	EXISTING
FDPR	FIRE DAMPER
FCU	FAN COIL UNIT
FD	FLOOR DRAIN
FL	FLOOR
FPI	FINS PER INCH
FPF	FINS PER FOOT
FPM	FEET PER MINUTE
G	GUARD
GC	GENERAL CONTRACTOR
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
H	HUMIDITY
HB	HOSE BIBB
HC	HEATING COIL
HE	HEAT EXCHANGER
HP	HORSE POWER
HW	HOT WATER
HWR	HOT WATER RETURN
HWS	HOT WATER SUPPLY
KW	KILOWATT
LAT	LEAVING AIR TEMPERATURE
LWT	LEAVING WATER TEMPERATURE
MC	MECHANICAL CONTRACTOR
MD	MOTORIZED DAMPER
MAX	MAXIMUM
MIN	MINIMUM
NC	NORMALLY CLOSED
NO	NORMALLY OPENED
OA	OUTSIDE AIR
OS&Y	OUTSIDE SCREW & YOKE
PC	PLUMBING CONTRACTOR
PD	PRESSURE DROP
PRESS	PRESSURE
RA	RETURN AIR
RD	ROOF DRAIN
RL	RAIN LEADER
RTU	ROOF TOP UNIT
S	SANITARY
SDPR	SMOKE DAMPER
SA	SUPPLY AIR
SP	STATIC PRESSURE
TCC	TEMPERATURE CONTROL CONTRACTOR
T	TEMPERATURE
TYP	TYPICAL
UC	UNDERCUT
UG	UNDERGROUND
UON	UNLESS OTHERWISE NOTED
UV	UNIT VENTILATOR
V	VENT
VAC	VACUUM
VAV	VARIABLE AIR VOLUME
VD	VOLUME DAMPER
VFD	VARIABLE FREQUENCY DRIVE
VSD	VARIABLE SPEED DRIVE
VTR	VENT THRU ROOF
W	WASTE
WB	WET BULB
WCO	WALL CLEANOUT

NOTE:

THESE ARE STANDARD SYMBOLS AND MAY NOT ALL APPEAR ON THE PROJECT DRAWINGS; HOWEVER WHEREVER THE SYMBOL APPEARS ON THE PROJECT DRAWINGS, THE ITEM SHALL BE PROVIDED AND INSTALLED.

DUCTWORK

- UP / DN — SUPPLY DUCT (UP & DOWN)
- UP / DN — EXHAUST DUCT (UP & DOWN)
- UP / DN — RETURN AIR DUCT (UP & DOWN)
- CEILING DIFFUSERS
- SIDE WALL REGISTER OR GRILLE
- RETURN OR EXHAUST CEILING GRILLE
- EXHAUST OR RETURN WALL MTD GRILLE
- 10x8 — NEW DUCT – WIDTH X DEPTH
- (SINGLE LINE)
- EXISTING DUCT TO REMAIN
- (SINGLE LINE)
- EXISTING DUCT TO BE REMOVED
- (SINGLE LINE)
- FLEXIBLE DUCTWORK (INSULATED)
- (SINGLE LINE)
- SPIN–IN FITTING
- (SINGLE LINE)
- DUCT SIZE TRANSITION (CONCENTRIC)
- (SINGLE LINE)
- DUCT SIZE TRANSITION (ECCENTRIC)
- (SINGLE LINE)
- DUCT TRANSITION (RECTANGULAR TO ROUND)
- (SINGLE LINE)
- ACOUSTICALLY LINED DUCT
- R — INCLINED RISE, IN DIRECTION OF AIR FLOW
- D — INCLINED DROP, IN DIRECTION OF AIR FLOW
- FLEXIBLE CONNECTION
- LOUVER
- MANUAL VOLUME DAMPER
- FIRE DAMPER
- SMOKE DAMPER
- FIRE / SMOKE DAMPER
- DS — SMOKE DETECTOR
- DUCT HEATER
- VANED ELBOW (PROVIDE ALL SQUARE OR RECTANGULAR ELBOWS WITH VANES EVEN IF SYMBOL IS MISSING)
- VANED ELBOW (SHORT RADIUS)
- STANDARD RADIUS ELBOW
- VANE TURN ELBOW & AIR SPLIT TYPE DUCT TAKE–OFF
- T — THERMOSTAT / TEMPERATURE SENSOR
- H — HUMIDISTAT / HUMIDITY SENSOR
- UC — UNDERCUT (1" U.O.N.)
- DG — DOOR GRILLE (18"X12" U.O.N.)
- A / 100 / 6"ø — AIR DEVICE TYPE, AIR FLOW CFM, NECK SIZE
- 4–WAY AIR FLOW
- 3–WAY AIR FLOW
- 2–WAY AIR FLOW
- 1–WAY AIR FLOW

PIPING

- CWS — CONDENSER WATER SUPPLY
- CWR — CONDENSER WATER RETURN
- CHWS — CHILLED WATER SUPPLY
- CHWR — CHILLED WATER RETURN
- CD — CONDENSATE LINE
- RL — REFRIGERANT LIQUID
- RS — REFRIGERANT SUCTION
- RHG — REFRIGERANT HOT GAS
- HWS — HOT WATER SUPPLY
- HWR — HOT WATER RETURN
- DOMESTIC WATER
- GATE VALVE
- GLOBE VALVE
- CHECK VALVE
- BALL VALVE
- PLUG VALVE
- PRESSURE REDUCING VALVE
- 2–WAY CONTROL VALVE
- 3–WAY MODULATING CONTROL VALVE
- SAFETY OR PRESSURE RELIEF VALVE
- MANUAL AIR VENT
- BUTTERFLY VALVE
- HOSE BIBB
- ANGLE GLOBE VALVE
- MOTOR OPERATED GATE VALVE
- MOTOR OPERATED GLOBE VALVE
- TEST PLUG (PRESSURE / TEMPERATURE)
- OUTSIDE SCREW & YOKE (O S & Y)
- DIRECTION OF FLOW
- ANCHOR
- REDUCER OR INCREASER
- ECCENTRIC REDUCER
- TOP CONNECTION, 45 OR 90 DEG.
- BOTTOM CONNECTION, 45 OR 90 DEG.
- SIDE CONNECTION
- CAPPED OUTLET
- RISE OR DROP IN PIPE
- UNION
- STRAINER
- THERMOMETER
- PRESSURE GAGE
- WATER FLOW MEASURING DEVICE
- EXISTING PIPE TO BE REMOVED

DRAWING SYMBOLS

- 2 / FP5 — DETAIL NUMBER; DRAWING NUMBER WHERE DRAWN
- A / FP5 — SECTION LETTER; DRAWING NUMBER WHERE DRAWN
- P.O.C — POINT OF INTERFACE BETWEEN NEW & EXISTING P.O.C.
- P.O.D — POINT OF DEMOLITION P.O.D.
- POINT OF INTERFACE BETWEEN CONTRACTORS

GENERAL NOTES

1. HVAC WORK CONSISTS OF PROVIDING AND INSTALLING AIR CONDITIONING SYSTEMS FOR A COMPLETE OPERATING SYSTEM AND AS INDICATED ON THE DRAWINGS. ALL WORK SHALL COMPLY WITH APPLICABLE CODES IN SPECIFICATIONS. IT IS THE INTENTION OF THE CONTRACT DRAWINGS AND SPECIFICATIONS TO CALL FOR COMPLETE, FINISHED WORK, TESTED, AND READY FOR OPERATION.
2. TEST AND BALANCE SHALL BE PROVIDED BY A COMPANY SPECIALIZING IN THE TESTING AND BALANCING OF HVAC SYSTEMS AS SUBCONTRACTOR TO THE HVAC CONTRACTOR, OR GENERAL CONTRACTOR. THE TEST AND BALANCE CONTRACTOR SHALL BE A MEMBER OF EITHER AABC OR NEBB.
3. DUCT DIMENSIONS SHOWN ON THE DRAWINGS ARE CLEAR INSIDE AIR PASSAGE DIMENSIONS.
4. PROVIDE SPIN–IN FITTINGS AT ALL FLEXIBLE DUCT RUNOUTS TO DIFFUSERS WITH AIR EXTRACTOR AND DAMPER.
5. MAXIMUM LENGTH OF FLEXIBLE DUCT SHALL BE 6'–0".
6. ALL PIPING SUBJECT TO THERMAL EXPANSION AND/OR CONTRACTION THAT PENETRATES A SMOKE, FIRE, OR FIRE/SMOKE WALL, PARTITION, OR FLOOR SLAB SHALL BE SUITABLY SLEEVED AND FIRE SAFED.
7. METAL DUCTS WHICH PENETRATE 1 HOUR RATED FIRE WALLS AND ARE LESS THAN 100 SQUARE INCHES SHALL EXTEND A MINIMUM OF 5 FEET ON BOTH SIDES OF THE WALL WITHOUT AN OPENING (TO PRECLUDE THE REQUIREMENT OF A FIRE DAMPER). DUCTWORK SHALL IN NO CASE BE LIGHTER (TO PRECLUDE THE REQUIREMENT OF A FIRE DAMPER). DUCTWORK SHALL IN NO CASE BE LIGHTER THAN 24 GAUGE STEEL.
8. PROVIDE IDENTIFICATION OF THE LOCATION OF ALL FIRE AND BALANCING DAMPERS. IDENTIFICATION TAGS SHALL BE AFFIXED TO THE WALLS OR CEILINGS AND SHALL BE VISIBLE FROM THE OCCUPIED SPACE.
9. ALL PIPING SHALL BE SUPPORTED WITH COMMERCIAL MANUFACTURED CLAMPS. PROVIDE ISOLATION SLEEVES TO PREVENT CONTACT OF DISSIMILAR METALS.
10. INSTALL ALL EQUIPMENT IN STRICT ACCORDANCE WITH THE MANUFACTURERS' INSTRUCTIONS AND RECOMMENDATIONS.
11. CONTRACTOR TO PROVIDE ALL SUPPLEMENTARY STEEL REQUIRED TO SUSPEND MECHANICAL EQUIPMENT AND MATERIALS.
12. PENETRATIONS THROUGH FIRE RATED ASSEMBLIES, PENETRATIONS FOR PIPES, CONDUITS, OR OTHER PURPOSES THROUGH ASSEMBLIES (FLOORS, ROOF, WALLS, PARTITIONS, ETC.) WITH A REQUIRED FIRE RESISTANCE RATING FIRE STOP MATERIAL. FIRE STOP SEALANTS SHALL BE UL LISTED. APPLY FIRE STOP AS RECOMMENDED BY THE MANUFACTURER AND IN ACCORDANCE WITH ITS LISTING TO MEET OR EXCEED THE FIRE RATING OF THE ASSEMBLY IN WHICH IT IS INSTALLED.
13. ALL INSULATION SHALL BE FIRE RATED IN ACCORDANCE WITH ASHRAE 90A 50/25 SMOKE DEVELOPMENT AND FLAME SPREAD REQUIREMENTS. INSULATION "R" VALUES SHALL COMPLY WITH THE FLORIDA ENERGY CODE. MINIMUM R6.0.
14. MOUNT ALL SPACE THERMOSTATS AND/OR SENSORS 4 FEET ABOVE THE FLOOR, UNLESS OTHERWISE NOTED.
15. INSTALL DUCT MOUNTED SMOKE DETECTORS (FURNISHED BY DIVISION 16) IN SUPPLY AIR DUCTWORK CONNECTED TO THE A/C UNIT. WIRE DUCT MOUNTED SMOKE DETECTORS SUCH THAT ACTIVATION WILL DE–ENERGIZE AIR HANDLING UNIT FAN. LOCATE DUCT MOUNTED SMOKE DETECTORS THE REQUIRED DISTANCE DOWNSTREAM FROM BENDS OR INLETS AS RECOMMENDED BY THE MANUFACTURER.
16. AIR HANDLING UNITS SHALL BE SHUT DOWN BY THE FIRE ALARM SYSTEM. WIRE THROUGH FIRE ALARM RELAY CONTACT (PROVIDED BY THE FIRE ALARM CONTRACTOR) TO SHUT DOWN AIR HANDLING UNITS UPON FIRE ALARM ACTIVATION. COORDINATE WITH FIRE ALARM CONTRACTOR ACCORDINGLY.
17. SEE ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF ALL AIR DEVICES LOCATED IN THE CEILING.
18. SEE ELECTRICAL DRAWINGS FOR ELECTRICAL CHARACTERISTICS OF MECHANICAL EQUIPMENT.
19. UNLESS OTHERWISE NOTED, INSTALL ALL DUCTWORK AS HIGH AS POSSIBLE, TIGHT TO THE BOTTOM OF THE STRUCTURE. COORDINATE ELEVATION AND LOCATION WITH RAIN LEADERS, WATER PIPING, PLUMBING VENTS, AND MAJOR ELECTRICAL CONDUITS OR CABLE TRAY.
20. PROVIDE MOTORIZED DAMPERS IN ALL OUTSIDE AIR DUCTS.
21. PROVIDE DRAIN P–TRAPS IN THE CONDENSATE LINES AT ALL AIR HANDLING UNITS.
22. ROUTE FULL SIZE (MIN. 1") COPPER DRAIN PIPE FROM EACH AHU DRAIN PAN TO RESPECTIVE FLOOR DRAIN. INSULATE WITH 3/4" ARMSTRONG "ARMAFLEX" INSULATION.
23. THE WORK INDICATED ON THESE DRAWINGS IS GENERALLY DIAGRAMMATIC AND IS INTENDED TO CONVEY THE SCOPE OF WORK AND INDICATE THE GENERAL ARRANGEMENT OF DUCTWORK AND EQUIPMENT, ETC.
24. ALL WORK IS TO BE FREE OF DEFECTS IN WORKMANSHIP AND MATERIALS FOR A PERIOD OF THREE (3) YEARS FROM DATE OF FINAL ACCEPTANCE. ALL DEFECTS WHICH DEVELOP OR ARE DISCOVERED WITHIN THIS PERIOD SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST TO THE OWNER.
25. UPON COMPLETION OF THE WORK UNDER THIS CONTRACT, THE CONTRACTOR SHALL REMOVE ALL TOOLS, APPLIANCES, SURPLUS MATERIALS, AND SCRAP. ALL IDENTIFIED EXISTING EQUIPMENT TO BE REMOVED SHALL BE TURNED OVER TO THE OWNER.
26. WHEN CONFLICTS OCCUR IN SPECIFICATIONS OR IN THE DRAWINGS, OR BETWEEN EITHER, THE ITEMS OF GREATER QUANTITY OR HIGHER COST SHALL BE PROVIDED.
27. THE CONTRACTOR SHALL COORDINATE WORK WITH OTHER TRADES IN ORDER TO AVOID CONFLICTS.
28. PROVIDE BALANCING DAMPER IN EACH BRANCH CONNECTION.
29. ALL DUCTWORK INSTALLED ON THIS PROJECT SHALL BE OF SHEET METAL CONSTRUCTION. DUCTWORK SHALL BE FABRICATED AND CONSTRUCTED IN ACCORDANCE WITH SMACNA REQUIREMENTS.
30. ALL FACILITY ATTACHED EQUIPMENT AND APPURTENANCES INCLUDED IN THE SCOPE OF THIS PROJECT ARE REQUIRED TO BE SECURED TO THE UNDERLYING BUILDING STRUCTURE. THE FASTENING SYSTEMS SHALL BE DESIGNED TO WITHSTAND A 160 MPH WIND LOAD.
31. CONTRACTOR SHALL PROVIDE TO LOCAL AHJ OR PERMITTING AGENCY A COPY OF ALL MAJOR EQUIPMENT CUTS SHEETS AT TIME OF APPLICATION.
32. WHERE ACCESS TO VAV BOXES AND DAMPERS IS REQURIED, THE CONTRACTOR SHALL PROVIDE AND INSTALL ACCESS PANELS. ACCESS PANELS SHALL BE AS SELCTED BY THE ARCHITECT.

95% SET

(NOT FOR CONSTRUCTION)
10/02/2014

STIRLING & WILBUR
ENGINEERING GROUP
7085 SOUTH TAMIAMI TRAIL, SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: cad@stirlingwilbur.com

SEAL

TO THE BEST OF THE ARCHITECTS OR ENGINEER'S KNOWLEDGE, SAID PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE CODES AND STANDARDS.

HOUSER WALKER ARCHITECTURE
1473 Spring St. NW
Atlanta, GA 30309
t. 404. 633. 4264
f. 404. 870. 7337
www.houserwalker.com

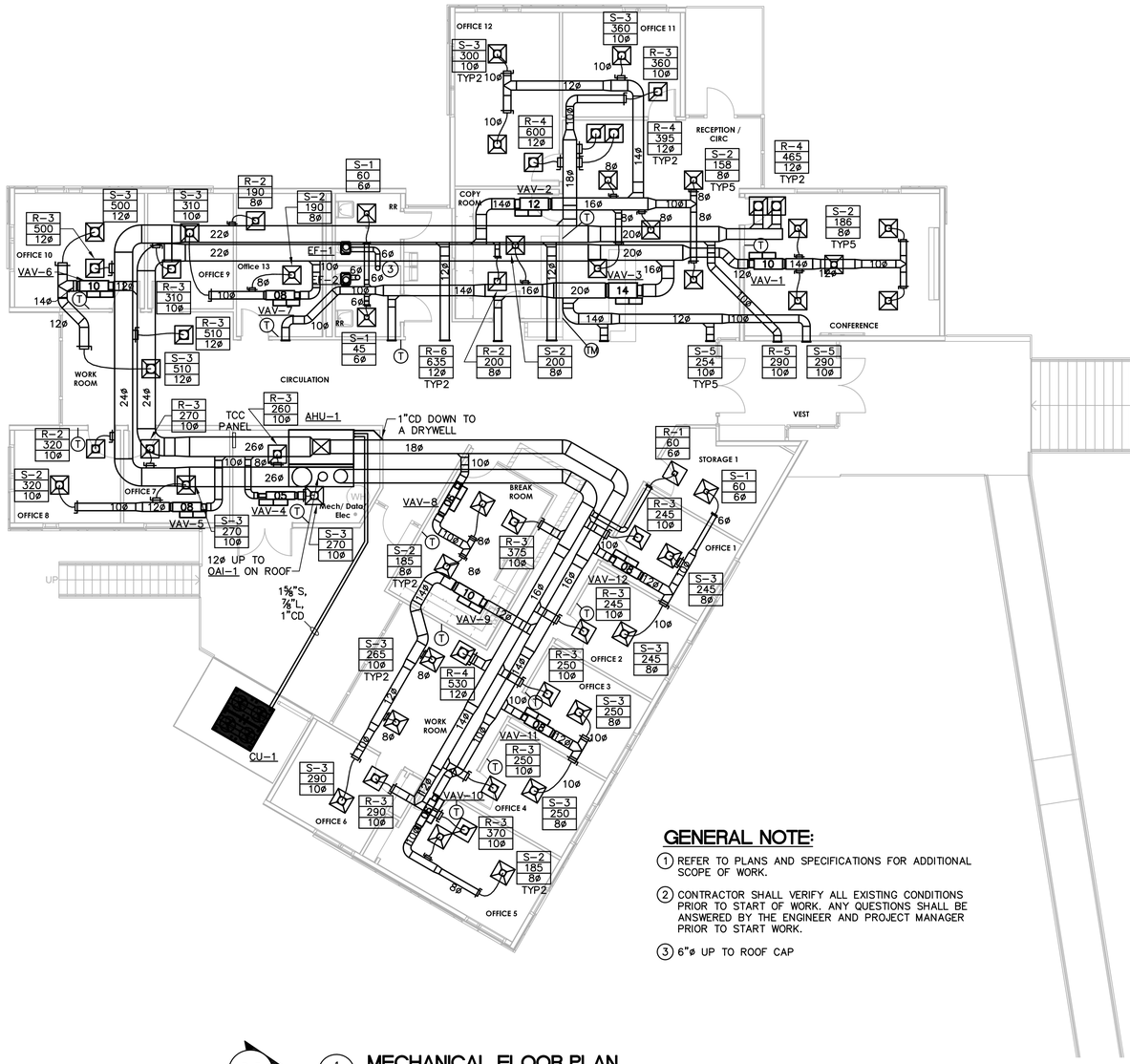
ATP ENGINEERING SOUTH, PL
BRADENTON, FLORIDA
ENGR. BUSINESS #8908
941-751-6485
www.atpengineeringsouth.com

ROBINSON PRESERVE EXPANSION OFFICE TREE HOUSE
MANATEE CO WA #18, IFAS #W1300220
MANATEE COUNTY, FLORIDA

DRAWING TITLE: MECHANICAL LEGEND AND GENERAL NOTES

DATE :	10/02/2014
DWG SCALE:	NOT TO SCALE
DRAWN BY:	DC
CHECKED BY:	JDC
SHEET No.:	M1.0

REV.#	DESCRIPTION	DATE



GENERAL NOTE:

1. REFER TO PLANS AND SPECIFICATIONS FOR ADDITIONAL SCOPE OF WORK.
2. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO START OF WORK. ANY QUESTIONS SHALL BE ANSWERED BY THE ENGINEER AND PROJECT MANAGER PRIOR TO START WORK.
3. 6"ø UP TO ROOF CAP

N

1 / M2.0 **MECHANICAL FLOOR PLAN**

1/8"=1'-0"

95% SET

(NOT FOR CONSTRUCTION)
10/02/2014

STIRLING & WILBUR
ENGINEERING GROUP
7085 SOUTH TAMIAMI TRAIL. SARASOTA, FL 34231
PHONE: (941) 929-1552 FAX (941) 929-1553
email: csad@stirlingwilbur.com

SEAL

TO THE BEST OF THE ARCHITECT'S OR ENGINEER'S KNOWLEDGE, SAID PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE CODES AND STANDARDS.

HOUSER WALKER ARCHITECTURE
1473 Spring St. NW
Atlanta, GA 30309
t. 404. 633. 4264
f. 404. 870. 7337
www.houserwalker.com

ATP ENGINEERING SOUTH, PL
BRADENTON, FLORIDA
ENGR. BUSINESS #8908
941-751-6485
www.atpengineeringsouth.com

ROBINSON PRESERVE EXPANSION OFFICE TREE HOUSE
MANATEE CO WA #18, IFAS #W1300220
MANATEE COUNTY, FLORIDA

REV #	DESCRIPTION	DATE

DRAWING TITLE: **MECHANICAL FLOOR PLAN**

DATE :	10/02/2014
DWG SCALE:	1/8" = 1'-0"
DRAWN BY:	DC
CHECKED BY:	JDC
SHEET No.:	M2.0

VENTILATOR SCHEDULE

Tag No.	Location	Area Served	Roof Opening (Inches)	Maximum Throat Velocity (FPM)	Pressure Drop (IN W.C.)	CFM	Manufacturer	Model No.	Remarks
OAI-1	ROOF	BLDG OA	12X12	829	.115	680	GREENHECK	GRSI-12	1-3

NOTES:
1. TWELVE INCH GPI-G12 PRE-FABRICATED CURB, 22X22 OUTSIDE BY UNIT MANUFACTURER.
2. ALUMINUM INSECT AND BIRD SCREEN, 4 TIE DOWNS, HINGED CURB CAP BY UNIT MANUFACTURER.
3. 24 VDC MOTORIZED OA. DAMPER BY UNIT MANUFACTURER PROVIDE FLA APPROVAL WITH UNIT. OAI COLOR AS SELECTED BY ARCHITECT.

SPLIT SYSTEM A/C SCHEDULE

CONDENSING UNIT	---	CU-1
CAPACITY	TONS	20
NO. OF COMPRESSORS	---	2
COMPRESSOR RLA/LRA	AMPS	30.1/225
NO. OF CONDENSER FANS	---	2
CONDENSER FAN MOTOR	FLA	3.0
ELECTRICAL	V/PH/HZ	240/3/60
MCA/MOCP	AMPS	41.2/50
E.E.R.	---	11.3
WEIGHT	LBS.	945
MANUFACTURER	---	YORK
MODEL NO.	---	YC240C00A2
AIR HANDLING UNIT	---	AHU-1
COOLING CAPACITY	BTUH	236,922
SENSIBLE CAPACITY	BTUH	174,639
SUPPLY AIR	CFM	9520
OUTSIDE AIR	CFM	680
ENTERING AIR (DB/WB)	°F/°F	75.2/64.1
LEAVING AIR (DB/WB)	°F/°F	58/55
FAN MOTOR	HP	10
STATIC PRESS. (EXTERNAL/TOTAL)	---	1.40/2.49
ELECTRICAL	V/PH/HZ	240/3/60
MCA/MOCP	AMPS	29.5/40
ELECTRIC HEAT	KW	0
FILTER TYPE	---	2" MERV 8 TA
WEIGHT	LBS.	1811
MANUFACTURER	---	USA COIL & AIR
MODEL NO.	---	AVL-095-ICDO

NOTES:
1. UNIT SUPPLIED HORIZONTAL "L" WITH VIBRATION ISOLATORS, MOTORIZED 24 V OA DAMPER OPEN WHEN UNIT IS ON, MFR CONTROL PACKAGE, REVIEW PIPING CONNECTIONS W/ MFR., SMOKE DETECTOR SHUT DOWN ON SUPPLY, CONDENSATE OVERFLOW SWITCH SHUT DOWN, AND DRAIN PAN. CONDENSER TIE DOWN AND VIBRATION ISOLATION, LINE SET, AND FILTER. R410A REFRIGERANT, VARIABLE SPEED DRIVE WITH MIN. FLOW RATE FOR UNIT.
2. DISCONNECT BY DIV 16, CONVENIENCE OUTLET BY DIV 16 NEXT TO CONDENSER. RN ENTERPRISES TIE DOWNS AND STRUCTURAL SUPPORT BY MC. REFER TO PLANS FOR CONTROLS, PROVIDE 3 SETS OF FILTERS, ONE CONST. ONE START UP , ONE FINAL BALANCE
3. 1⅝"S, ⅞"L, 1"CD

HVAC LOAD CALCULATIONS SUMMARY

	ZONE 1
SIZING METHOD	CARRIER E20II
AREA (SQ. FEET)	4975.5
TOTAL COOLING REQUIRED W/ OUTSIDE AIR (MBH)	242.5
OUTDOOR DRY BULB USED	93
OUTDOOR WET BULB USED	79
RELATIVE HUMIDITY %	57
INDOOR DRY BULB	74
TOTAL HEATING REQUIRED W/ OUTSIDE AIR (MBH)	79.3
TOTAL SENSIBLE GAIN (MBH)	183.9
TOTAL LATENT GAIN (MBH)	58.6
LB. / LB. SPECIFIC HUMIDITY ACROSS COIL	.00413

Reference: 503.2, 2010 FLORIDA BUILDING CODE – ENERGY

FAN SCHEDULE

ITEM NO.	---	EF-1	EF-2
SERVICE	---	RESTROOM	RESTROOM
AIR QUANTITY	CFM	75	75
EXT. STATIC PRESSURE	IN. WTR.	.375	.375
FAN TYPE	---	CEILING CABINET	CEILING CABINET
DRIVE	---	VS	VS
SONES	---	1.0	1.0
MOTOR	HP	100W	100W
FAN SPEED	RPM	767	767
ELECTRICAL	V/PH./HZ.	120/1/60	120/1/60
CONTROLS	---	MOTION	MOTION
LOCATION	---	CEILING	CEILING
MANUFACTURER	---	GREENHECK	GREENHECK
MODEL NO.	---	SP-B110	SP-B110

NOTES:
1. PROVIDE AND INSTALL UNIT WITH GRILLE, BACK DRAFT DAMPER, DISCONNECT, AND CEILING MOTION SENSOR, TIMER, ALUMINUM FAN BLADE, AND EAVE GRILLE OUTLET. PROVIDE WIND DATA ON EAVE GRILLE FOR SUBMITTAL TO AHJ.

GRILLE, REGISTER AND DIFFUSER SCHEDULE

TAG NO.	PATTERN	NECK SIZE	MODULE SIZE	FRAME STYLE	MATERIAL	FINISH	CFM RANGE	ACCESSORIES	MANUFACTURER	MODEL NO.	REMARKS
S-1	4 WAY	6ø	24X24	SURF	ALUM	WHITE	0-110	OBD	METALAIRE	7600-1-DF	1,2
S-2	4 WAY	8ø	24X24	SURF	ALUM	WHITE	105-240	OBD	METALAIRE	7600-1-DF	1,2
S-3	4 WAY	10ø	24X24	SURF	ALUM	WHITE	165-420	OBD	METALAIRE	7600-1-DF	1,2
S-4	4 WAY	12ø	24X24	SURF	ALUM	WHITE	235-630	OBD	METALAIRE	7600-1-DF	1,2
S-5	DBL DEFLECT	12X8	14X10	SURF	ALUM	WHITE	150-500	OBD	METALAIRE	V4004-1	1,3
S-6	DBL DEFLECT	16X8	18X10	SURF	ALUM	WHITE	200-700	OBD	METALAIRE	V4004-1	1,3
---	---	---	---	---	---	---	---	---	---	---	---
R-1	PERF	6ø	24X24	SURF	ALUM	WHITE	0-110	OBD	GREENHECK	7500R-1 AF	1,2
R-2	PERF	8ø	24X24	SURF	ALUM	WHITE	105-245	OBD	GREENHECK	7500R-1 AF	1,2
R-3	PERF	10ø	24X24	SURF	ALUM	WHITE	165-430	OBD	GREENHECK	7500R-1 AF	1,2
R-4	PERF	12ø	24X24	SURF	ALUM	WHITE	235-700	OBD	GREENHECK	7500R-1 AF	1,2
R-5	30°	12X8	14X10	SURF	ALUM	WHITE	150-500	OBD	GREENHECK	RH-1	1,3
R-6	30°	12X12	14X14	SURF	ALUM	WHITE	200-750	OBD	GREENHECK	RH-1	1,3
---	---	---	---	---	---	---	---	---	---	---	---
T-1	30°	12X8	14X10	SURF	ALUM	WHITE	150-500	OBD	GREENHECK	RH-1	1,4
T-2	30°	12X12	14X14	SURF	ALUM	WHITE	200-750	OBD	GREENHECK	RH-1	1,4

NOTES:
1. COLORS AS SELECTED BY ARCHITECT. VERIFY ALL CEILING TYPES PRIOR TO ORDER. PAINT ALL GRILLE/ DIFFUSER PLENUMS COLOR AS SELECTED BY ARCHITECT.
2. ROUND NECK DIFFUSERS AND RETURN AIR GRILLES.
3. PROVIDE RECTANGULAR BOX TO ROUND TRANSITION WITH UNIT. REFER TO PLANS FOR ROUND DUCT SIZE.
4. PROVIDE DUCT TRANSITION TO TRANSFER AIR GRILLES. LINE DUCT BETWEEN GRILLES.

VARIABLE AIR VOLUME BOX SCHEDULE

ITEM NO.	---	VAV-1	VAV-2	VAV-3	VAV-4	VAV-5	VAV-6	VAV-7
BOX CAPACITY	CFM	930	1750	1865	260	590	1010	500
CONTROL CFM VOLUME	MIN./MAX.	300/1600	450/2300	665/3100	150/350	300/1000	375/1600	320/1000
MAX. STATIC PRESS. DROP	IN. WTR.	.15	.15	.12	.15	.15	.12	.15
ELECTRIC HEATER SIZE	(KW)/STEPS	4/2	4/2	9/3	2/1	4/2	5/2	4/1
ELECTRICAL	V/PH/HZ	240/1/60	240/1/60	240/1/60	240/1/60	240/1/60	240/1/60	240/1/60
MANUFACTURER	---	ENVIROTEC	ENVIROTEC	ENVIROTEC	ENVIROTEC	ENVIROTEC	ENVIROTEC	ENVIROTEC
MODEL NO.	---	SDR-EH 010	SDR-EH 012	SDR-EH 014	SDR-EH 05	SDR-EH 08	SDR-EH 010	SDR-EH 08

NOTES:
1. VAV BOX MANUFACTURER TO FACTORY MOUNT CONTROLLER WHICH IS TO BE FURNISHED BY THE CONTROLS CONTRACTOR.
2. ALL ELECTRICAL HEAT SHALL BE 240-1 PHASE.
3. FACTORY MOUNTED DISCONNECT SWITCH WITH INTEGRAL FUSING FOR THE ELECTRIC HEATER AND CONTROLS. CONTROL POINT TIED TO ALC CONTROLS.

VARIABLE AIR VOLUME BOX SCHEDULE

ITEM NO.	---	VAV-8	VAV-9	VAV-10	VAV-11	VAV-12
BOX CAPACITY	CFM	375	820	370	500	550
CONTROL CFM VOLUME	MIN./MAX.	150/550	300/1600	225/550	225/1000	320/1000
MAX. STATIC PRESS. DROP	IN. WTR.	.25	.12	.15	.1	.15
ELECTRIC HEATER SIZE	(KW)/STEPS	2/1	4/2	3/1	3/1	4/1
ELECTRICAL	V/PH/HZ	240/1/60	240/1/60	240/1/60	240/1/60	240/1/60
MANUFACTURER	---	ENVIROTEC	ENVIROTEC	ENVIROTEC	ENVIROTEC	ENVIROTEC
MODEL NO.	---	SDR-EH 06	SDR-EH 010	SDR-EH 06	SDR-EH 08	SDR-EH 08

NOTES:
1. VAV BOX MANUFACTURER TO FACTORY MOUNT CONTROLLER WHICH IS TO BE FURNISHED BY THE CONTROLS CONTRACTOR.
2. ALL ELECTRICAL HEAT SHALL BE 240-1 PHASE.
3. FACTORY MOUNTED DISCONNECT SWITCH WITH INTEGRAL FUSING FOR THE ELECTRIC HEATER AND CONTROLS. CONTROL POINT TIED TO ALC CONTROLS.

OUTDOOR AIR LOAD CALCULATIONS

(FMC TABLE 403.3 & ASHRAE 62 2010)

338 S.F. CONFERENCE X 50/1000 X 5 + .06 CFM /SF = 104.78 CFM
1851 S.F. OFFICE X 5/1000 X 5 + .06 CFM/SF = 157.335 CFM
1344 S.F. CIRCULATION, VESTIBULE, STORAGE, MECH/DATA X .06 CFM/SF = 80.64 CFM
659 S.F. COPY, WORKROOM 5X 4/1000 + .06 CFM/SF =52.72 CFM
205 S.F. BREAKROOM 5X 50/1000 + .12 CFM/SF = 75.85 CFM
464 S.F. RECEPTION 5X 30/1000 + .06 CFM/SF = 97.44 CFM
RESTROOM 70 CFM WC EXHAUST
RESTROOM 70 X 2 WC = 140 CFM
RESTROOM 150 CFM WC EXHAUST INSTALLED
SPACE OA REQUIRED = 568.7 CFM TOTAL
SPACE OA INSTALLED = 680 CFM TOTAL
(Voz = Vbz/1.0)

95% SET
(NOT FOR CONSTRUCTION)
10/02/2014

STIRLING & WILBUR
ENGINEERING GROUP
7085 SOUTH TAMIAMI TRAIL. SARASOTA, FL 34231
PHONE (941) 929-1562 FAX (941) 929-1563
email: cad@stirlingwilbur.com

SEAL

TO THE BEST OF THE ARCHITECT'S OR ENGINEER'S KNOWLEDGE, SAID PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE CODES AND STANDARDS.

HOUSER WALKER ARCHITECTURE
1473 Spring St. NW
Atlanta, GA 30309
t. 404. 633. 4264
f. 404. 870. 7337
www.houserwalker.com

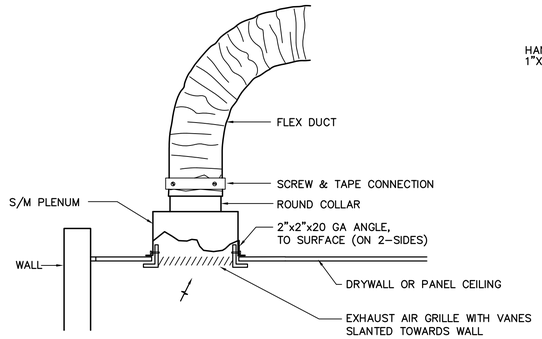
ATP ENGINEERING SOUTH, PL
BRADENTON, FLORIDA
ENGR. BUSINESS #8908
941-751-6485
www.atpengineeringsouth.com

DATE | DESCRIPTION | REV.#

ROBINSON PRESERVE EXPANSION OFFICE TREE HOUSE
MANATEE CO WA #18, IFAS #W1300220
MANATEE COUNTY, FLORIDA

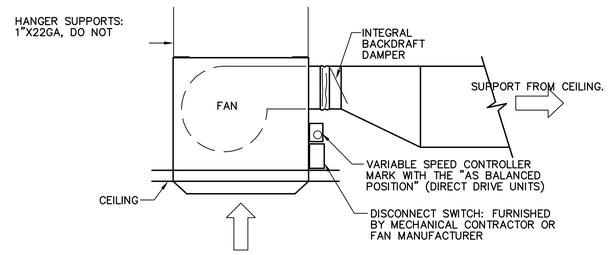
DRAWING TITLE: MECHANICAL SCHEDULES

DATE : 10/02/2014
DWG SCALE: 1/8" = 1'-0"
DRAWN BY: DC
CHECKED BY: JDC
SHEET No.:
M3.0



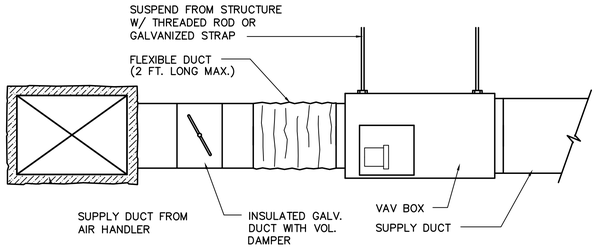
1 M4.0 FLEX-DUCTED EXHAUST GRILLE

NOT TO SCALE



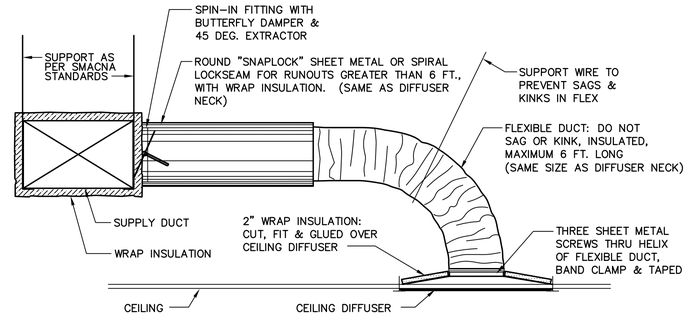
6 M4.0 CEILING FAN DETAIL

NOT TO SCALE



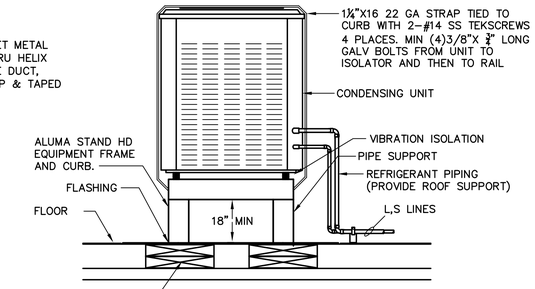
2 M4.0 VAV BOX DETAIL

NOT TO SCALE



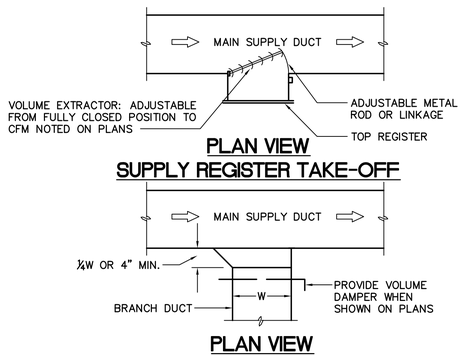
5 M4.0 CEILING DIFFUSER RUNOUT DETAIL

NOT TO SCALE VERIFY CEILING TYPE PRIOR TO ORDER.



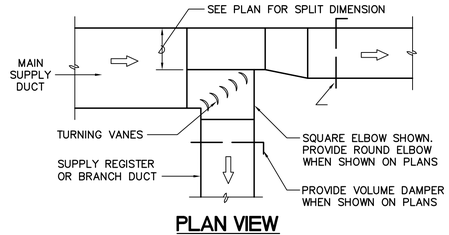
8 M4.0 CONDENSING UNIT ON ROOF DETAIL

NOT TO SCALE
FOR CU MIN. HT PER FBC IS 30".



PLAN VIEW
SUPPLY REGISTER TAKE-OFF

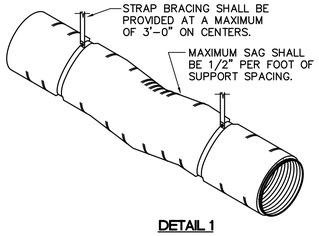
PLAN VIEW
BRANCH DUCT TAKE-OFF



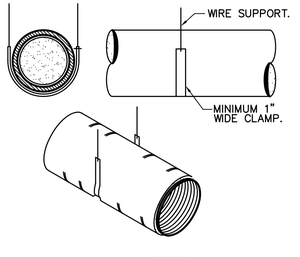
PLAN VIEW
AIR SPLIT TYPE DUCT TAKE-OFF

3 M4.0 SUPPLY DUCT TAKE-OFFS

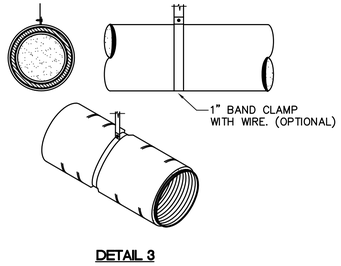
NOT TO SCALE



DETAIL 1



DETAIL 2



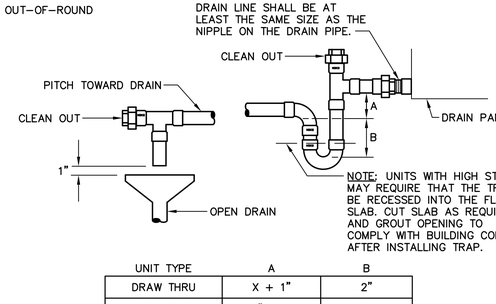
DETAIL 3

NOTES:

1. METALLIC FLEXIBLE DUCTWORK SHALL BE ATTACHED USING A MINIMUM OF THREE (3) #8 SHEET METAL SCREWS EQUALLY SPACED AROUND THE DUCTWORK CIRCUMFERENCE. DUCTWORK LARGER THAN 12" SHALL HAVE A MINIMUM OF FIVE (5) #8 SHEET METAL SCREWS. SCREWS SHALL BE LOCATED AT LEAST 1/2" FROM THE DUCTWORK END.
2. NONMETALLIC FLEXIBLE DUCTWORK SHALL BE SECURED TO THE SLEEVE OR COLLAR USING A DRAW BAND. IF THE DUCTWORK COLLAR EXCEEDS 12", THE DRAW BAND MUST BE POSITIONED BEHIND A BEAD ON THE METAL COLLAR.
3. INSULATION AND VAPOR BARRIERS PRESENT ON FACTORY-FABRICATED DUCTWORK SHALL BE FITTED OVER THE CORE CONNECTION AND SHALL BE SUPPLEMENTALLY SECURED WITH A DRAW BAND.
4. FLEXIBLE DUCTWORK SEALING SHALL BE A CLASS "B" SEAL FOR LOW PRESSURE DUCTWORK.
5. SUPPORT SYSTEM SHALL NOT DAMAGE OR CAUSE OUT-OF-ROUND SHAPE.

4 M4.0 INSULATION FLEXIBLE DUCTWORK DETAIL

NOT TO SCALE



UNIT TYPE	A	B
DRAW THRU	X + 1"	2"
BLOW THRU	1" MIN.	2.0 X

WHERE X = STATIC PRESSURE IN PAN

7 M4.0 AIR HANDLING UNIT CONDENSATE TRAP DETAIL

NOT TO SCALE

95% SET

(NOT FOR CONSTRUCTION)
10/02/2014

HOUSER WALKER ARCHITECTURE
1473 Spring St. NW
Atlanta, GA 30309
t. 404.633.4264
f. 404.870.7337
www.houserwalker.com

STIRLING & WILBUR ENGINEERING GROUP
7085 SOUTH TAMIAMI TRAIL SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: csd@stirlingwilbur.com

SEAL

TO THE BEST OF THE ARCHITECTS OR ENGINEER'S KNOWLEDGE, SAID PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE CODES AND STANDARDS.

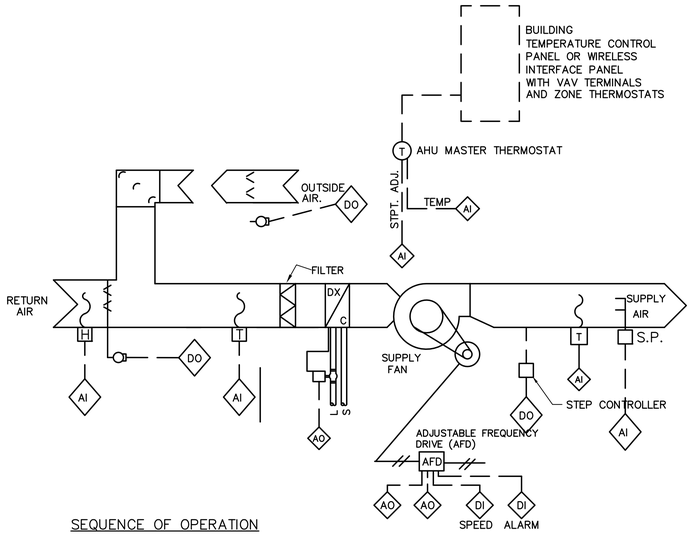
ATP ENGINEERING SOUTH, PL
BRADENTON, FLORIDA
ENGR. BUSINESS #8908
941-751-6485
www.atpengineeringsouth.com

ROBINSON PRESERVE EXPANSION OFFICE TREE HOUSE
MANATEE CO WA #18, IFAS #W1300220
MANATEE COUNTY, FLORIDA

DRAWING TITLE: MECHANICAL DETAILS

DATE	DESCRIPTION	REV.#

DATE :	10/02/2014
DWG SCALE:	1/8" = 1'-0"
DRAWN BY:	DC
CHECKED BY:	JDC
SHEET No.:	M4.0



SEQUENCE OF OPERATION

FOR EACH SYSTEM, THE REFRIG. EXPANSION VALVE SHALL BE MODULATED TO MAINTAIN THE COOLING ROOM TEMPERATURE SETPOINT. PROVIDE A SPACE TEMPERATURE INPUT TO THE TCC PANEL. MAINTAIN THE SPACE COOLING COOLING TEMPERATURE SETPOINT (75°F ± .5°F – SOFTWARE ADJUSTABLE).

HUMIDITY OVERRIDE SEQUENCE SHALL BE INITIATED WHEN RETURN AIR HUMIDITY EXCEEDS 60% ADJUST, FOR THIS SEQUENCE, THE LAT SHALL BE RESET TO 60° F (ADJUSTABLE). THE REFRIG VALVE SHALL OPEN AND THE ELECTRIC HEAT SHALL BE STAGED TO MAINTAIN THE ROOM SET POINT AND THE FRONT END CONTROL SHALL DISPLAY "HUMIDITY OVERRIDE" FOR EACH APPLICABLE UNIT. WHEN RETURN AIR HUMIDITY REACHES SETPOINT OF 55% RETURN TO NORMAL OPERATION.

THE UNIT'S FAN SHALL OPERATE AS PER THE USER PROGRAMMABLE MASTER THERMOSTAT SCHEDULE. THE OUTSIDE AIR DAMPER SHALL BE CLOSED WHEN THE BUILDING IS NOT SCHEDULED FOR OCCUPANCY PER THE PROGRAMMABLE THERMOSTAT. THE RETURN AIR DAMPER SHALL CLOSE WHEN THE UNIT IS OFF.

THE UNIT'S VVT BYPASS DAMPER SHALL OPERATE ALL TIMES THE FAN IS ON. THE DISCHARGE STATIC SENSOR SHALL OPERATE THE BYPASS DAMPER. MIN 20% AIRFLOW SETPOINT FOR ALL ZONES, BYPASS MAXIMUM 80%.

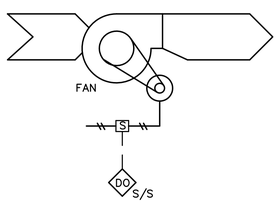
STATIC PRESSURE CONTROL:

THE CONTROL SHALL CONTINUOUSLY RESET THE STATIC PRESSURE SETPOINT TO SATISFY THE CRITICAL ZONE. THE CRITICAL ZONE IS THE VAV TERMINAL UNIT THAT IS 100% OPEN. THE STATIC PRESSURE IS CONTINUOUSLY ADJUSTED UP AND DOWN TO SATISFY THE CRITICAL ZONE.

AFTER THE FAN STARTS, THE AFD/VFD SHALL START IN AN UNLOADED (CLOSED) CONDITION AND MODULATE OPEN TO MAINTAIN THE STATIC PRESSURE SETPOINT. IF THE VFD STOPS SHALL SUCH THAT ON A LOSS OF POWER OR A CONTROL SIGNAL, THE MOTOR WILL STOP. THE STATIC PRESSURE HIGH LIMIT (SPHL) SHALL MODULATE VFD WHEN THE STATIC PRESSURE EXCEEDS 1.6" W.G. (ADJ) ONCE THE STATIC PRESSURE DECREASES BELOW THE SPHL SETPOINT, THE VFD CONTROL SHALL BE INDEXED BACK TO THE NORMAL CONTROL STRATEGY. MINIMUM SET POINT MUST BE 40% –50% ADJUSTABLE TO PREVENT COIL PROBLEMS.

1 / M4.1 **TYPICAL VAV AIR HANDLING UNIT DETAIL**

NOT TO SCALE



SEQUENCE OF OPERATION

SEE FAN SCHEDULE FOR SEQUENCE OF OPERATION.

FANS CONTROLLED BY THE DDC SYSTEM SHALL OPERATE AS PER THE FAN SCHEDULE.

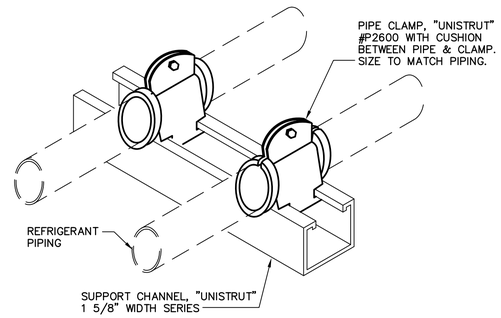
OTHER FANS SHALL BE CONTROLLED BY THERMOSTATS, WALL MOUNTED SWITCHES, EQUIPMENT INTERLOCKS, ETC. AS INDICATED ON THE FAN SCHEDULE.

3 / M4.1 **TYPICAL EXHAUST FAN**

NOT TO SCALE

MASTER SITE TCC SYSTEM

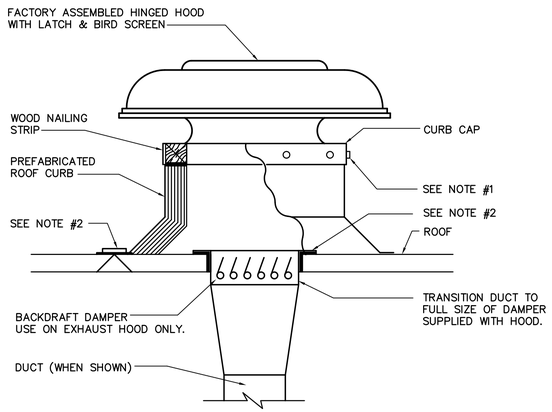
PROVIDE A COMPLETE TIE INTO THE MASTER ALC SYSTEM FROM EACH TCC PANEL. PROVIDE AND INSTALL A COMPLETE LINK THROUGH THE MASTER SYSTEM FROM THE TCC PANEL IN THE ELECTRICAL ROOM TO THE BUILDING FIBER IN THE BUILDING. THE EXH. FANS AND VAV BOXES LINK BACK TO THE TCC PANELS.



1. ALL REFRIGERANT PIPING SHALL BE HARD COPPER, TYPE "L" WITH LONG RADIUS ELBOWS.
2. TRAPS SHALL BE SINGLE PIECE, WROUGHT COPPER.
3. INSULATE SUCTION LINE WITH ½" ARMAFLEX INSULATION FULL LENGTH. DO NOT SPLIT DURING INSULATION BUTT JOINTS WITH ARMAFLEX SEALANT, AND APPLY ARMAFLEX PRESERVATIVE ON ALL LINES.
4. ROUTING OF ALL REFRIGERANT PIPING SHALL BE PLUMB AND SHALL RUN TRUE WITH THE BUILDING LINES. HORIZONTAL RUNS OF SUCTION LINES OVER 25' SHALL BE PITCHED "ONE–HALF" BUBBLE TOWARD THE COMPRESSOR, FOR OIL RETURN.
5. SUPPORT OF ALL PIPING AT COMPRESSORS, CONDENSERS, AND AIR HANDLING UNITS SHALL BE AS SHOWN ABOVE. SUPPORT OF PIPING IN BETWEEN THE UNITS SHALL BE WITH STRAP MATERIAL, USING ARMAFLEX INSULATION AS SADDLES. NO METAL–TO–METAL CONTACT.
6. BRAZE REFRIGERANT PIPING WITH FLOW OF DRY NITROGEN DURING BRAZING.
7. SOLDER SHALL BE 15% SILVER "SIL–FOS" OR EQUAL.
8. CHANGE FILTER–DRIER CORES AFTER 30 DAYS OF OPERATION.
9. PROVIDE LOW VOL SEALANT IN ACCORDANCE WITH LEED REQUIREMENTS.
10. COORDINATE HG, DISCH, S, AND L LINE LENGTHS FOR INDIVIDUAL UNITS WITH MFG.

2 / M4.1 **REFRIGERANT PIPING DETAIL**

NOT TO SCALE



NOTES:

1. SECURE HOOD TO WOOD NAILING STRIP WITH 3/8" CADMIUM PLATED LAG BOLTS NOT OVER 12" ON CENTER.
2. SECURE ROOF CURB, DUCTWORK AND DAMPER TO ROOF WITH EXPANSION BOLTS (CONCRETE ROOF) OR RUST RESISTANT BOLTS (METAL DECK & BAR JOIST ROOF).
3. SIZE OF DUCT THROUGH ROOF SHALL NOT BE LARGER THAN CURB SUPPLIED WITH HOOD.

4 / M4.1 **LOW-SILHOUETTE INTAKE HOOD**

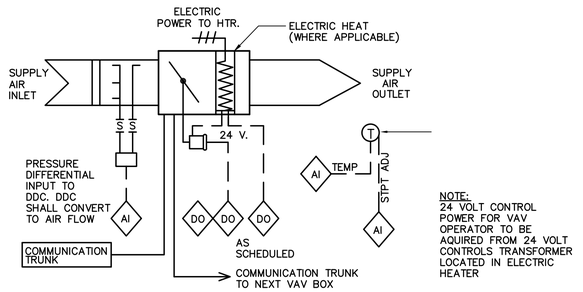
NOT TO SCALE

95% SET

(NOT FOR CONSTRUCTION)
10/02/2014

CONTROL POINT ABBREVIATION LEGEND

DI	DIGITAL INPUT
DO	DIGITAL OUTPUT
AI	ANALOG INPUT
AO	ANALOG OUTPUT
S/S	START/STOP
VFD	VARIABLE FREQUENCY DRIVE
S	REFRIGERATION SUCTION LINE
L	REFRIGERATION LIQUID LINE
T	TEMPERATURE
H	HUMIDITY
C	CO_2
SP	STATIC PRESSURE
FS	FLOW SWITCH
LAT	LEAVING AIR TEMPERATURE
S	STARTER
T W	WIRELESS THERMOSTAT



SEQUENCE OF OPERATIONS

THE VAV TERMINALS SHALL BE CONTROLLED DIRECTLY FROM THE DDC. CONNECT TO THE TERMINAL MANUFACTURER'S AIR FLOW PORTS TO SENSE PRESSURE DIFFERENTIAL. CALIBRATE PRESSURE DIFFERENTIAL TO VOLUMETRIC AIR FLOW. AIR FLOW SENSORS SHALL HAVE A RANGE OF 0.00 TO 0.75 INCH W.G. AND OFFER A RESOLUTION OF 0.02 INCHES OF WATER AND AN ACCURACY OF + 0.05 INCHES OF W.G. OR BETTER. PROVIDE TRI–STATE MOTOR.

IN THE COOLING MODE, THE VAV TERMINAL DAMPER SHALL MODULATE TO MAINTAIN ROOM SETPOINT TEMPERATURE, 75 DEGREES F ± 1 DEGREE F (ADJUSTABLE). IN THE HEATING MODE, THE VAV BOX WILL HAVE OBTAINED MINIMUM POSITION AND THEN THE ELECTRIC HEAT SHALL BE STAGED TO MAINTAIN MINIMUM SPACE SETPOINT TEMPERATURE 70 DEGREES F±1°F (ADJUSTABLE). PROVIDE A MINIMUM DEAD BAND BETWEEN THE HEATING AND COOLING MODE OF 4 DEGREES F WHERE NO CONTROL ACTION OCCURS. THE SOFTWARE ROUTINE SHALL PROVIDE PRESSURE INDEPENDENT CONTROL WITH SOFTWARE ADJUSTABLE MINIMUM AND MAXIMUM AIR FLOW SETPOINTS AS SCHEDULED FOR THE VAV TERMINAL UNITS SCHEDULE.

POINTS TO BE MONITORED AND CONTROLLED AT THE "FRONT END" ARE AS FOLLOWS:
- SPACE TEMPERATURE (F)
- AIRFLOW (CFM)
- ELECTRIC HEAT OUTPUTS
- DAMPER OUTPUT
- HEATING SETPOINT
- COOLING SETPOINT

WHEN THE SYSTEM IS IN THE "UNOCCUPIED" MODE AND THE HUMIDITY OVERIDE SEQUENCE, THE ELECTRIC REHEAT SHALL NOT ENERGIZE UNTIL THE SPACE TEMPERATURE DROPS TO 10 DEGS. BELOW THE THERMOSTAT SETPOINT.

5 / M4.1 **VARIABLE AIR VOLUME DETAIL**

NOT TO SCALE

STIRLING & WILBUR
ENGINEERING GROUP
7085 SOUTH TAMIAMI TRAIL. SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: cad4@stirlingwilbur.com

SEAL

TO THE BEST OF THE ARCHITECT'S OR ENGINEER'S KNOWLEDGE, SAID PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE CODES AND STANDARDS.

HOUSER WALKER ARCHITECTURE
1473 Spring St. NW
Atlanta, GA 30309
t. 404. 633. 4264
f. 404. 870. 7337
www.houserwalker.com

ATP ENGINEERING SOUTH, PL
BRADENTON, FLORIDA
ENGR. BUSINESS #8908
941-751-6485
www.atpengineeringsouth.com

ROBINSON PRESERVE EXPANSION OFFICE TREE HOUSE
MANATEE CO WA #18, IFAS #W1300220
MANATEE COUNTY, FLORIDA

DRAWING TITLE:
MECHANICAL DETAILS

DATE :	10/02/2014
DWG SCALE:	1/8" = 1'-0"
DRAWN BY:	DC
CHECKED BY:	JDC
SHEET No.:	M4.1

REV #	DESCRIPTION	DATE

ELECTRICAL SYMBOLS AND ABBREVIATIONS

NOTE:

THESE ARE STANDARD SYMBOLS AND MAY NOT ALL APPEAR ON THE PROJECT DRAWINGS; HOWEVER WHEREVER THE SYMBOL APPEARS ON THE PROJECT DRAWINGS, THE ITEM SHALL BE PROVIDED AND INSTALLED.

EQUIPMENT

SYMBOL	DESCRIPTION
	DISTRIBUTION PANELBOARD AND CABINET – RECESSED MOUNT
	DISTRIBUTION PANELBOARD AND CABINET – SURFACE MOUNT
	BRANCH PANELBOARD AND CABINET – RECESSED MOUNT
	BRANCH PANELBOARD AND CABINET – SURFACE MOUNT
A	DENOTES PANEL/PANELBOARD DESIGNATION
X Y	MOTOR "X" INDICATES HORSEPOWER "Y" INDICATES PHASE
	DISCONNECT SWITCH – FUSED "X"= RATING, "Y" = FUSE SIZE
	DISCONNECT SWITCH – NON–FUSED
	DISCONNECT SWITCH – CIRCUIT BREAKER
T XX	DRY TYPE TRANSFORMER – "XX" INDICATES KVA
M	METER SOCKET
M	CURRENT TRANSFORMER METER SOCKET
SPD	SURGE PROTECTION DEVICE
G	GENERATOR
N E ATS/MTS L	TRANSFER SWITCH ATS = AUTOMATIC TRANSFER SWITCH MTS = MANUAL TRANSFER SWITCH N = NORMAL POWER E = EMERGENCY POWER L = LOAD
	WIREWAY
	GROUND CONNECTION
	MOLDED CASE CIRCUIT BREAKER
	FUSE

RACEWAY SYSTEM

SYMBOL	DESCRIPTION
	CONCEALED CONDUIT
	4" CONDUIT SLEEVE WITH BUSHINGS THRU WALL ABOVE CEILING
XX	LETTER DESIGNATION REFERS TO SYSTEM (SEE ABBREVIATIONS)
A–XX F50	PHASE CONDUCTORS GROUND SWITCH LEG NEUTRAL QUANTITY OF CONDUCTORS OR CABLES IN CONDUIT "F50" DENOTES THE FEEDER SIZE "A–XX" DENOTES PANEL AND CIRCUIT #
	CONDUIT TURNED UP
	CONDUIT TURNED DOWN
	JUNCTION OR PULL BOX
	CABLE TRAY
	U/G CONDUIT TURNED UP
	U/G CONDUIT TURNED DOWN

LIGHTING

SYMBOL	DESCRIPTION
X–2–C	X = FIXTURE TYPE, 2 = CIRCUIT NUMBER, C = SWITCH LEG F – FLUORESCENT K – INCANDESCENT H – H.I.D.
	FLUORESCENT STRIP TYPE FIXTURE
	FLUORESCENT TYPE FIXTURE
	FLUORESCENT TYPE FIXTURE WITH EMERGENCY BATTERY BALLAST
	CEILING MOUNT LIGHT FIXTURE
	CEILING MOUNT RECESSED LIGHT FIXTURE (ROUND OR SQUARE, SEE SCHEDULE
	INTERIOR WALL MOUNT FIXTURE
	EXTERIOR WALL MOUNT FIXTURE
	LIGHT POLE WITH ONE FIXTURE (FIXTURE LOCATION AND SPACING AS SHOWN)
	2 HEAD POLE LIGHT. LOCATION AND SPACING AS SHOWN.
	3 HEAD POLE LIGHT. LOCATION AND SPACING AS SHOWN.
	EXIT LIGHT –CEILING MOUNTED ARROWS DENOTE EGRESS PATH
	EXIT LIGHT – WALL MOUNTED ARROWS DENOTE EGRESS PATH
	EMERGENCY WALL MOUNT W/ BATTERY UNIT
	EXIT / EMERGENCY WALL MOUNT W/ BATTERY UNIT ARROWS DENOTE EGRESS PATH
	EMERGENCY WALL MOUNT REMOTE HEAD

DEVICES

SYMBOL	DESCRIPTION
x	DUPLEX RECEPTACLE – NORMAL CIRCUIT "X" INDICATES AS FOLLOWS: NONE = 20 AMP, 125VAC GFI = 20 AMP, 125VAC, GROUND FAULT INTERRUPTER TYPE HM = 20 AMP, 125VAC, HORIZONTAL MOUNT TYPE IG = 20 AMP, 125VAC, ISOLATED GROUND TYPE S = 20 AMP, 125VAC, TVSS PROTECTION TYPE WP = 20 AMP, 125VAC, WEATHERPROOF TYPE
	DOUBLE DUPLEX RECEPTACLE
	DUPLEX RECEPTACLE – ABOVE COUNTER. 44" AFF
	DOUBLE DUPLEX RECEPTACLE – ABOVE COUNTER. 44" AFF
	SINGLE RECEPTACLE – SEE DRAWINGS AND SPECIFICATIONS.
	DUPLEX RECEPTACLE – CEILING MOUNT
	SINGLE RECEPTACLE – FLOOR, SEE DRAWINGS AND SPECIFICATIONS.
	DUPLEX RECEPTACLE – FLOOR, SEE DRAWINGS AND SPECIFICATIONS.
HEIGHT C	CLOCK RECEPTACLE – 120VAC
S	TOGGLE SWITCH – SINGLE POLE
S2	TOGGLE SWITCH – DOUBLE POLE
S3	TOGGLE SWITCH – 3–WAY
S4	TOGGLE SWITCH – 4–WAY
Sa	TOGGLE SWITCH – a– INDICATES TYPE T: TIMER, K: KEY OPERATED
SD	SWITCH – DIMMER
SF	SWITCH – FAN SPEED CONTROL
W $	WALL MOUNTED OCCUPANCY SENSOR
CSx	CEILING MOUNTED OCCUPANCY SENSOR x = TYPE, SEE PLANS
JB	JUNCTION BOX
T	HVAC THERMOSTAT
H	HVAC HUMIDISTAT
PP	FURNITURE POWER POLE
CP	FURNITURE CABLE MANAGEMENT POLE.
	MUSHROOM HEAD RED PUSH BUTTON

FIRE ALARM SYSTEM

SYMBOL	DESCRIPTION
	HORN / STROBE ○= CEILING MOUNT □= WALL MOUNT
	HORN ○= CEILING MOUNT □= WALL MOUNT
S	SPEAKER/STROBE ○= CEILING MOUNT □= WALL MOUNT
	STROBE ○= CEILING MOUNT □= WALL MOUNT
F F	BELL ○= CEILING MOUNT □= WALL MOUNT
	SMOKE DETECTOR
	HEAT DETECTOR
	PULL STATION
	ELEVATOR WARNING LIGHT
F	FIREFIGHTER PHONE JACK
	TAMPER SWITCH
	FLOW SWITCH
F.A.A.P.	REMOTE ANNUNCIATOR
FACP	FIRE ALARM CONTROL PANEL
	DOOR RELEASE DEVICE – FIRE ALARM ACTIVATED
S	SPEAKER – FIRE ALARM
D x	AUTOMATIC DUCT DETECTOR ("X" DENOTES AS FOLLOWS:) NONE = PHOTO ELECTRIC TYPE S= SUPPLY R= RETURN
R	EQUIPMENT SHUT DOWN RELAY
RI x	REMOTE DUCT DETECTOR INDICATOR LIGHT X= AIR HANDLER / ROOF TOP UNIT
FSS	FIRE SUPPRESSION SYSTEM

DOOR SECURITY SYSTEM

SYMBOL	DESCRIPTION
D	DOOR CONTACT ROUGH–IN
C	PROXIMITY CARD READER ROUGH–IN
EL	ELECTRO–MAGNETIC DOOR LOCK
	DURESS / PANIC BUTTON

COMMUNICATION SYSTEMS

SYMBOL	DESCRIPTION
	WALL MOUNTED VOICE OUTLET
	WALL MOUNTED DATA OUTLET
	WALL MOUNTED COMBINATION VOICE / DATA OUTLET
	FLOOR MOUNTED VOICE OUTLET.
F	FLOOR MOUNTED DATA OUTLET.
	FLOOR MOUNTED COMBINATION VOICE / DATA OUTLET.
TTC	TELEPHONE CABINET
CC	COMMUNICATIONS CABINET

DRAWING SYMBOLS

2 / E X – DETAIL NUMBER / DRAWING NUMBER WHERE DRAWN

A / E X – SECTION LETTER / DRAWING NUMBER WHERE DRAWN

1 REFER TO LIKE NUMBER NOTES.

1 REFER TO LIKE NUMBER NOTES.

TELEVISION SYSTEM

SYMBOL	DESCRIPTION
TV	TELEVISION ROUGH–IN

ABBREVIATIONS

A	AMPERE
AC	AIR CONDITIONING OR ALTERNATING CURRENT
ACC	ACCESS
AF	AMPERE FRAME
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHJ	AUTHORITY HAVING JURISDICTION
AHU	AIR HANDLER UNIT
AM	AMMETER
ARCH	ARCHITECT
AT	AMPERE TRIP
ATC	AUTOMATIC TEMPERATURE CONTROL
ATS	AUTOMATIC TRANSFER SWITCH
AWG	AMERICAN WIRE GAUGE
C	CONDUIT
CAT	CATEGORY
CB	CIRCUIT BREAKER
CH	CHILLER
CKT	CIRCUIT
CL	CENTER LINE
CLF	CURRENT–LIMITING FUSE
CM	CEILING MOUNTED
CNTL	CONTROL
CU	COPPER
DWG(S)	DRAWING(S)
EC	ELECTRICAL CONTRACTOR
EF	EXHAUST FAN
EM	EMERGENCY
EMS	ENERGY MANAGEMENT SYSTEM
EMT	ELECTRICAL METALLIC TUBING
EPO	EMERGENCY POWER OFF
EWC	ELECTRIC WATER COOLER
EWH	ELECTRIC WATER HEATER
EX	EXISTING TO REMAIN
FA	FIRE ALARM
FACP	FIRE ALARM CONTROL PANEL
FACC	FIRE ALARM COMMAND CENTER
FATC	FIRE ALARM TERMINAL CABINET
FLR	FLOOR
FMC	FURNISHED BY MECHANICAL CONTRACTOR
FO	FIBER OPTIC
FOTC	FIBER OPTIC TERMINAL CABINET
FSS	FIRE SUPPRESSION SYSTEM
FWE	FURNISHED WITH EQUIPMENT
GFI	GROUND FAULT INTERRUPTER
GND,G	GROUND
GRS	GALVANIZED RIGID STEEL CONDUIT
HOA	HAND–OFF–AUTO
HACR	HEATING/AIR CONDITIONING–RATED
HID	HIGH INTENSITY DISCHARGE
HPF	HIGH POWER FACTOR
HPS	HIGH PRESSURE SODIUM
HZ	HERTZ
HP	HORSEPOWER
IG	ISOLATED GROUND
IMC	INTERMEDIATE METALLIC CONDUIT
JB	JUNCTION BOX
KAIC	KILO AMPERE INTERRUPTING CAPACITY
KCMIL	THOUSAND CIRCULAR MILS
KVA	KILOVOLT AMPERE
KW	KILOWATT
LC	LIGHTING CONTACTOR
MC	MECHANICAL CONTRACTOR
MCC	MOTOR CONTROL CENTER
M–G	MOTOR GENERATOR
MDP	MAIN DISTRIBUTION PANEL
MH	METAL HALIDE
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NF	NON–FUSED
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NIC	NOT IN CONTRACT
NL	NIGHT LIGHT
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OCPD	OVER CURRENT PROTECTIVE DEVICE
PNL	PANEL
ø	PHASE
PB	PUSHBUTTON
PE	PHOTOELECTRIC CONTROLLER
PC	PLUMBING CONTRACTOR
PVC	POLYVINYL CHLORIDE CONDUIT
RTU	ROOF TOP UNIT
SCH	SCHEDULE
SEC	SECURITY
SPD	SURGE PROTECTION DEVICE
SW	SWITCH
SWGR	SWITCHGEAR
TEL,T	TELEPHONE
TBB	TELEPHONE BACKBOARD
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
TC	TIME CLOCK
XFMR	TRANSFORMER
TYP	TYPICAL
UG	UNDERGROUND
UL,U.L.	UNDERWRITERS LABORATORIES
UPS	UNINTERRUPTIBLE POWER SUPPLY
U.O.N.	UNLESS OTHERWISE NOTED
VT	VAPORTIGHT
VAV	VARIABLE AIR VOLUME
VFD	VARIABLE FREQUENCY DRIVE
VSD	VARIABLE SPEED DRIVE
V	VOLT
W	WATT
WP	WEATHER PROOF

GENERAL NOTES (APPLY TO ALL DRAWINGS):

1. THE WORK INDICATED ON THESE DRAWINGS IS DIAGRAMMATIC AND IS INTENDED TO CONVEY THE SCOPE OF WORK AND INDICATE THE GENERAL ARRANGEMENT OF EQUIPMENT AND DEVICES FOR A COMPLETE SYSTEM IN EVERY RESPECT AND DETAIL, TESTED AND LEFT READY IN PERFECT OPERATING CONDITION FOR THE OWNER'S USE. MATERIALS AND EQUIPMENT SHALL BE LISTED BY UNDERWRITERS' LABORATORIES AND SHALL BE INSTALLED IN ACCORDANCE WITH SUCH LISTINGS. INSTALLATIONS SHALL BE MADE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. WORK SHALL MEET THE REQUIREMENTS OF THE SPECIFICATIONS AND CONFORM TO THE NEC (NFPA 70 & 72) AND ALL APPLICABLE CODES, AND BE COMPLETED BY A QUALIFIED, EXPERIENCED, LICENSED ELECTRICAL CONTRACTOR.
2. THE ENGINEER HAS MADE AN EFFORT TO COORDINATE WORK WITH OTHER TRADES AND IDENTIFY ANY AND ALL CONFLICTS. THE CONTRACTOR IS RESPONSIBLE TO COORDINATE FIELD WORK BETWEEN TRADES AND TO IDENTIFY FIELD CONDITIONS PRIOR TO INSTALLATION AND REPORT ANY CONFLICTS TO THE ENGINEER.
3. FOR BIDDING PURPOSES, WHEN A CONFLICT OCCURS BETWEEN THE SPECIFICATIONS AND DRAWINGS, THE ITEMS OF GREATER QUANTITY AND/OR COST SHALL BE PROVIDED. ANY SUCH CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR RESOLUTION.
4. CONTRACTOR SHALL VERIFY THE LOCATION AND ELECTRICAL REQUIREMENTS OF ALL EQUIPMENT FURNISHED BY OTHER TRADES PRIOR TO INSTALLATION. COORDINATE ROUGH–IN INSTALLATION WITH EQUIPMENT DETAILS.
5. ALL OPENINGS IN FIRE AND SMOKE PARTITIONS SHALL BE SEALED AS REQUIRED BY THE NEC/ FLORIDA BUILDING CODE. PROVIDE UL LISTED COMPOUND TO MATCH PARTITION RATING.
6. DO NOT SCALE DRAWINGS. VERIFY FIELD CONDITIONS PRIOR TO AND DURING CONSTRUCTION FOR EXACT DEVICE / EQUIPMENT LOCATION.
7. CONTRACTOR SHALL PROVIDE TO LOCAL AHJ OR PERMITTING AGENCY A COPY OF ALL MAJOR EQUIPMENT CUT SHEETS AT TIME OF APPLICATION IF REQUESTED.

95% SET

(NOT FOR CONSTRUCTION)
10/02/2014

STIRLING & WILBUR
ENGINEERING GROUP
7085 SOUTH TAMIAMI TRAIL SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: cad@stirlingwilbur.com

SEAL

TO THE BEST OF THE ARCHITECTS OR ENGINEER'S KNOWLEDGE, SAID PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE CODES AND STANDARDS.

HOUSER WALKER ARCHITECTURE
1473 Spring St. NW
Atlanta, GA 30309
t. 404. 633. 4264
f. 404. 870. 7337
www.houserwalker.com

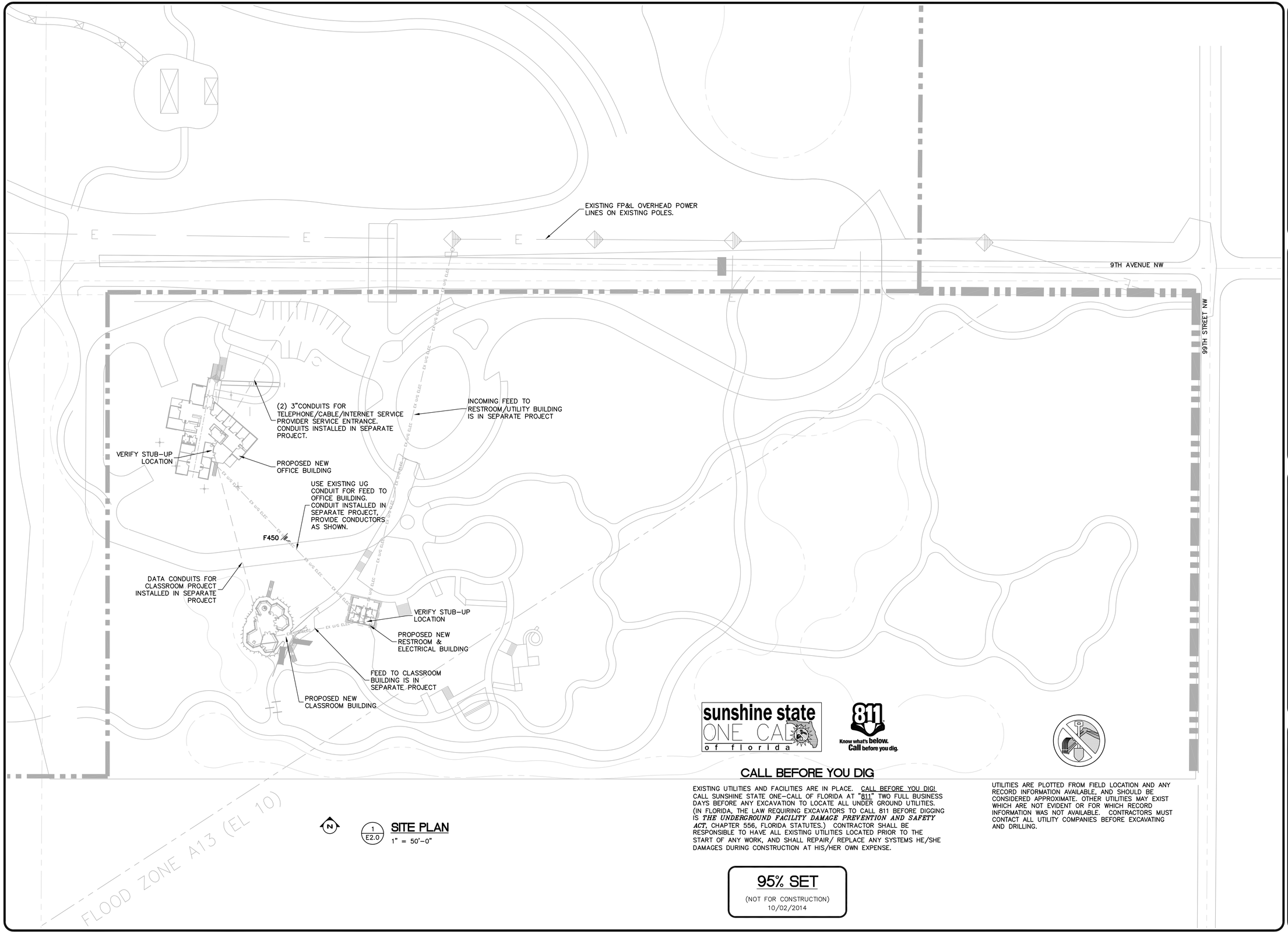
ATP ENGINEERING SOUTH, PL
BRADENTON, FLORIDA
ENGR. BUSINESS #8908
941-751-6485
www.atpengineeringsouth.com

ROBINSON PRESERVE EXPANSION OFFICE TREE HOUSE
MANATEE CO WA #18, IFAS #W1300220
MANATEE COUNTY, FLORIDA

DRAWING TITLE:
ELECTRICAL SYMBOLS, LEGENDS AND GENERAL NOTES

DATE :	10/02/2014
DWG SCALE:	NOT TO SCALE
DRAWN BY:	CMD
CHECKED BY:	JDC
SHEET No.:	E1.0

REV #	DESCRIPTION	DATE



1 E2.0 **SITE PLAN**
1" = 50'-0"

sunshine state ONE CALL of florida

811 Know what's below. Call before you dig.

CALL BEFORE YOU DIG

EXISTING UTILITIES AND FACILITIES ARE IN PLACE. CALL BEFORE YOU DIG! CALL SUNSHINE STATE ONE-CALL OF FLORIDA AT "811" TWO FULL BUSINESS DAYS BEFORE ANY EXCAVATION TO LOCATE ALL UNDER GROUND UTILITIES. (IN FLORIDA, THE LAW REQUIRING EXCAVATORS TO CALL 811 BEFORE DIGGING IS *THE UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT*, CHAPTER 556, FLORIDA STATUTES.) CONTRACTOR SHALL BE RESPONSIBLE TO HAVE ALL EXISTING UTILITIES LOCATED PRIOR TO THE START OF ANY WORK, AND SHALL REPAIR/ REPLACE ANY SYSTEMS HE/SHE DAMAGES DURING CONSTRUCTION AT HIS/HER OWN EXPENSE.

UTILITIES ARE PLOTTED FROM FIELD LOCATION AND ANY RECORD INFORMATION AVAILABLE, AND SHOULD BE CONSIDERED APPROXIMATE. OTHER UTILITIES MAY EXIST WHICH ARE NOT EVIDENT OR FOR WHICH RECORD INFORMATION WAS NOT AVAILABLE. CONTRACTORS MUST CONTACT ALL UTILITY COMPANIES BEFORE EXCAVATING AND DRILLING.

95% SET
(NOT FOR CONSTRUCTION)
10/02/2014

STIRLING & WILBUR
ENGINEERING GROUP
7085 SOUTH TAMIAMI TRAIL, SARASOTA, FL 34231
PHONE: (941) 929-1562 FAX: (941) 929-1553
email: cad@stirlingwilbur.com

SEAL

TO THE BEST OF THE ARCHITECTS OR ENGINEER'S KNOWLEDGE, SAID PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE CODES AND STANDARDS.

HOUSER WALKER ARCHITECTURE
1473 Spring St. NW
Atlanta, GA 30309
t. 404. 633. 4264
f. 404. 870. 7337
www.houserwalker.com

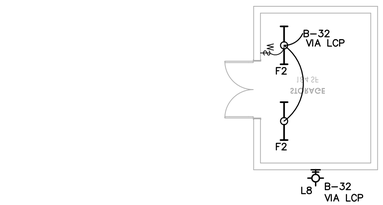
ATP ENGINEERING SOUTH, PL
BRADENTON, FLORIDA
ENGR. BUSINESS #8908
941-751-6485
www.atpengineeringsouth.com

ROBINSON PRESERVE EXPANSION OFFICE TREE HOUSE
MANATEE CO WA #18, IFAS #W1300220
MANATEE COUNTY, FLORIDA

REV #	DESCRIPTION	DATE

DRAWING TITLE:
ELECTRICAL OFFICE BUILDING SITE PLAN

DATE :	10/02/2014
DWG SCALE:	1/4" = 1'-0"
DRAWN BY:	CMD
CHECKED BY:	JDC
SHEET No.:	E2.0

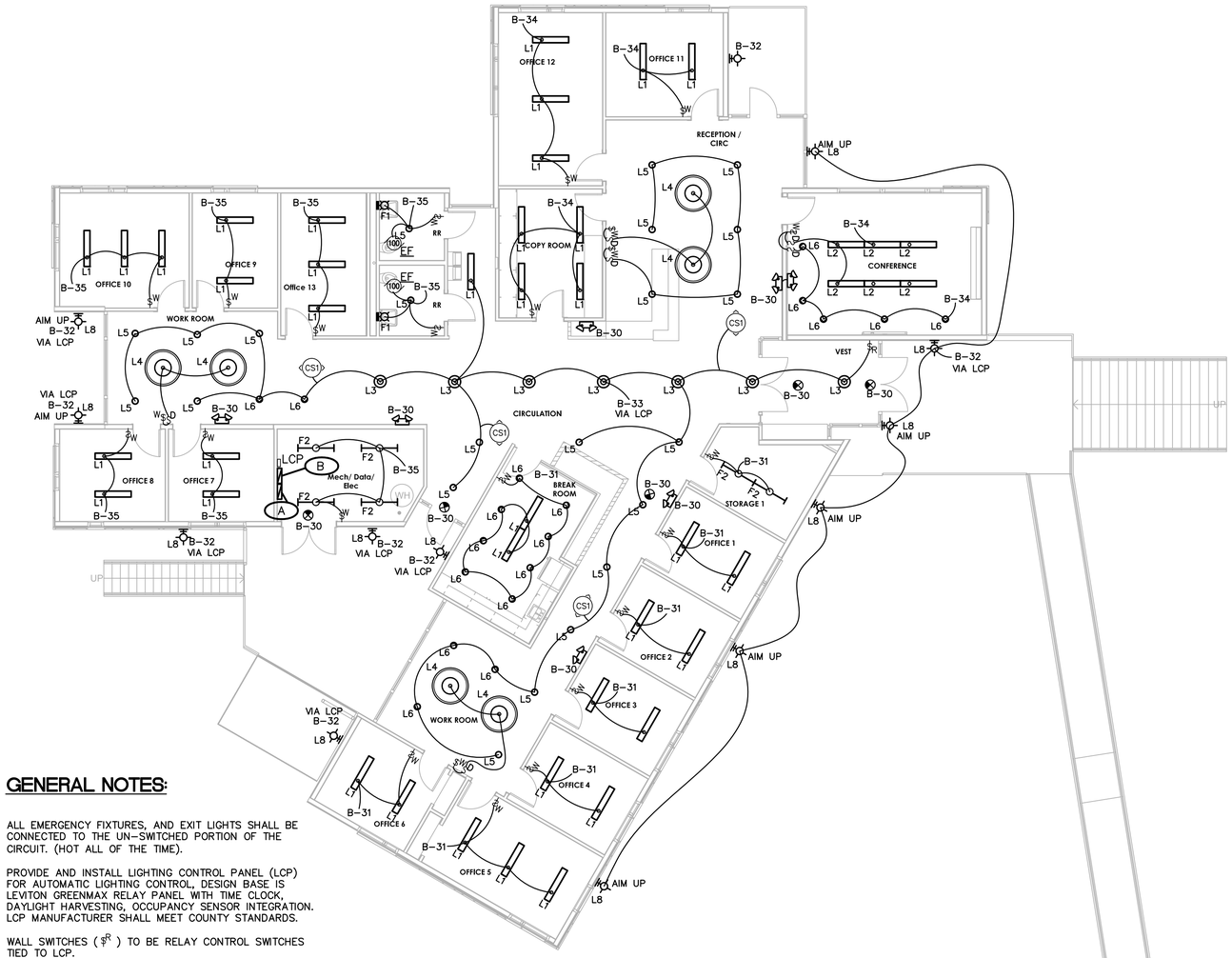


N

1 / E2.0

GRADE LEVEL LIGHTING PLAN

1/8" = 1'-0"



N

2 / E2.0

1ST FLOOR LIGHTING PLAN

1/8" = 1'-0"

3 / E2.0

CEILING OCC. SENSOR

NOT TO SCALE

GENERAL NOTES:

ALL EMERGENCY FIXTURES, AND EXIT LIGHTS SHALL BE CONNECTED TO THE UN-SWITCHED PORTION OF THE CIRCUIT. (HOT ALL OF THE TIME).

PROVIDE AND INSTALL LIGHTING CONTROL PANEL (LCP) FOR AUTOMATIC LIGHTING CONTROL, DESIGN BASE IS LEVITON GREENMAX RELAY PANEL WITH TIME CLOCK, DAYLIGHT HARVESTING, OCCUPANCY SENSOR INTEGRATION. LCP MANUFACTURER SHALL MEET COUNTY STANDARDS.

WALL SWITCHES ($_{3R}$) TO BE RELAY CONTROL SWITCHES TIED TO LCP.

WALL SWITCHES ($_{3W}$) TO BE LEVITON OCCUPANCY SENSORS OSS10-INW, SINGLE-POLE, 180 DEGREE, 1200 SQ. FT. COVERAGE, PASSIVE INFRARED WALL SWITCH OCCUPANCY SENSOR, COMMERCIAL GRADE - WHITE, OR APPROVED EQUAL.

CEILING MOUNT ((CS1)) TO BE LEVITON OCCUPANCY SENSORS OSC10-M. MULTI-TECHNOLOGY, 360 DEGREE, 1000 SQ. FT.COVERAGE, SELF-ADJUSTING, CEILING MOUNT OCCUPANCY SENSOR, COMMERCIAL GRADE - WHITE OR APPROVED EQUAL. POWER PACKS SHALL MATCH SENSOR MANUFACTURER. SENSORS SHALL BE COMPATIBLE WITH LCP.

DIMMER SWITCHES TO BE 2000W, SLIDE TYPE WITH MANUAL ON/OFF, WHITE, AND SHALL BE COMPATIBLE WITH FIXTURES SUPPLIED. DIMMER SWITCHES SHALL BE COMPATIBLE WITH FIXTURES.

PROVIDE VOLTAGE DROP CALCULATIONS FOR EXTERIOR LIGHTING CIRCUITS.

FIXTURES "L5" MOUNT UNDER ROOF EVES.

95% SET

(NOT FOR CONSTRUCTION)
10/02/2014

STIRLING & WILBUR
ENGINEERING GROUP
7085 SOUTH TAMIAMI TRAIL, SARASOTA, FL 34231
PHONE: (941) 929-1562 FAX (941) 929-1563
email: csd@stirlingwilbur.com

SEAL

TO THE BEST OF THE ARCHITECT'S OR ENGINEER'S KNOWLEDGE, SAID PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE CODES AND STANDARDS.

HOUSER WALKER ARCHITECTURE
1473 Spring St., NW
Atlanta, GA 30309
t. 404. 633. 4264
f. 404. 870. 7337
www.houserwalker.com

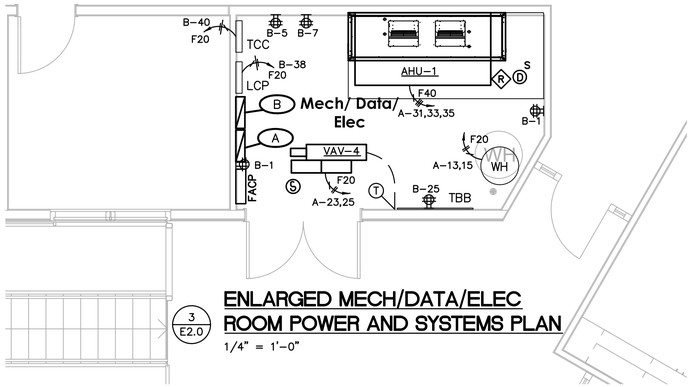
ATP ENGINEERING SOUTH, PL
BRADENTON, FLORIDA
ENGR. BUSINESS #8908
941-751-6485
www.atpengineeringsouth.com

ROBINSON PRESERVE EXPANSION OFFICE TREE HOUSE
MANATEE CO WA #18, IFAS #W1300220
MANATEE COUNTY, FLORIDA

REV.#	DESCRIPTION	DATE

DRAWING TITLE: ELECTRICAL OFFICE LIGHTING PLAN

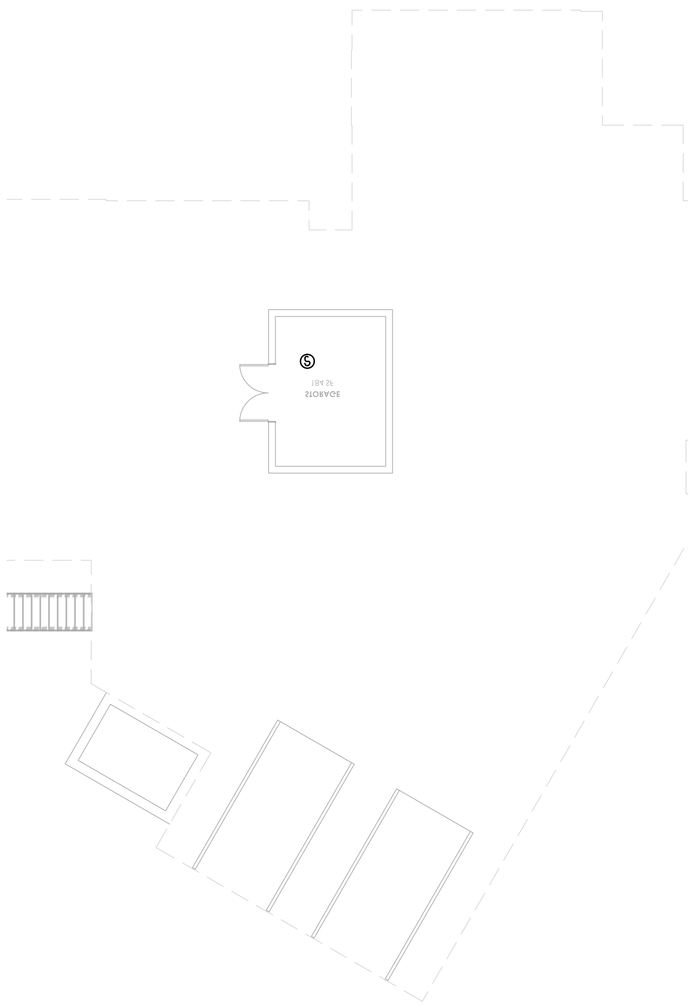
DATE :	10/02/2014
DWG SCALE:	1/8" = 1'-0"
DRAWN BY:	CMD
CHECKED BY:	JDC
SHEET No.:	E3.0



ENLARGED MECH/DATA/ELEC ROOM POWER AND SYSTEMS PLAN

3 / E2.0

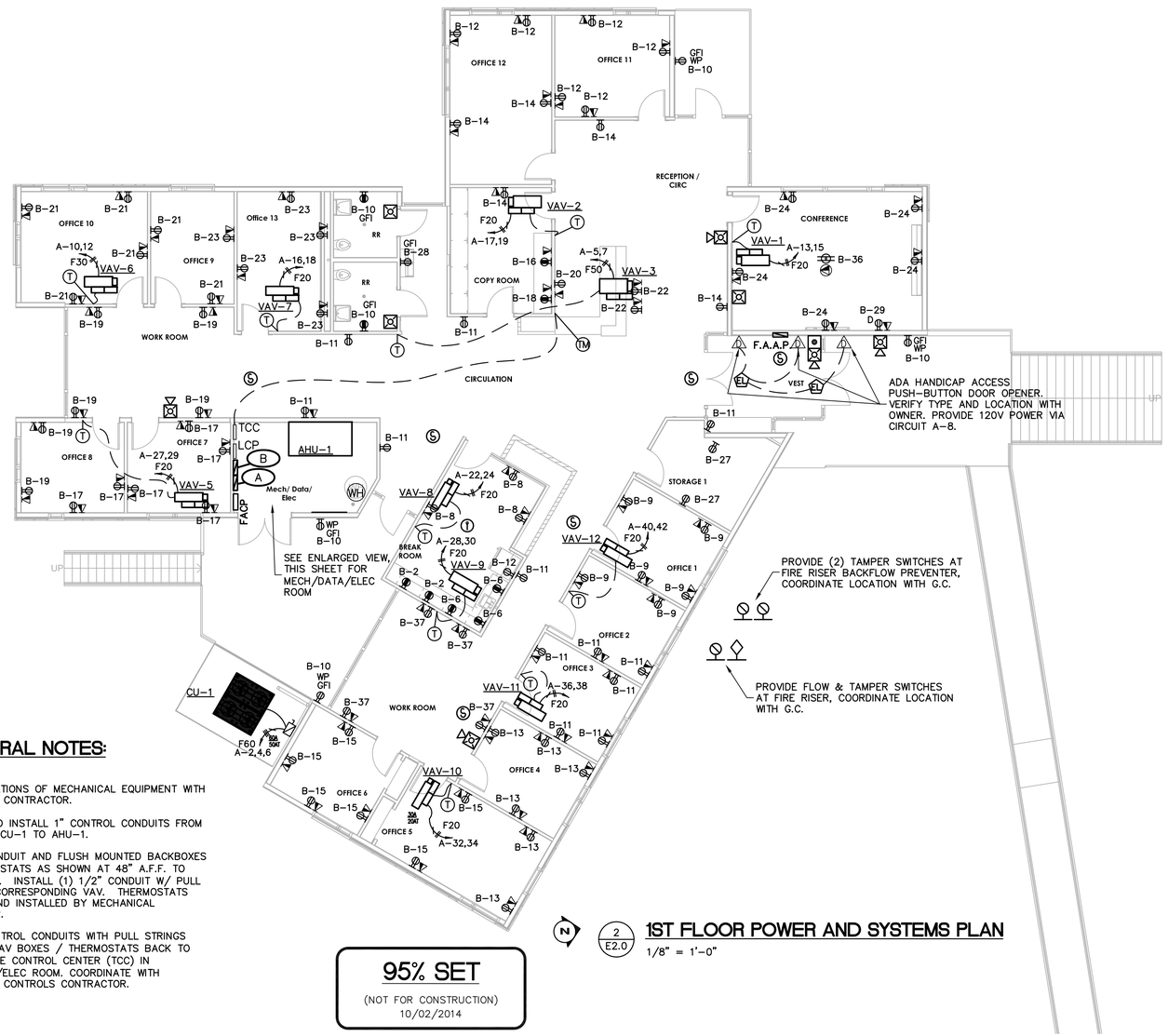
1/4" = 1'-0"



1 / E2.0

GRADE LEVEL POWER AND SYSTEMS PLAN

1/8" = 1'-0"



GENERAL NOTES:

VERIFY LOCATIONS OF MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR.

PROVIDE AND INSTALL 1" CONTROL CONDUITS FROM CONDENSER CU-1 TO AHU-1.

FURNISH CONDUIT AND FLUSH MOUNTED BACKBOXES FOR THERMOSTATS AS SHOWN AT 48" A.F.F. TO TOP OF BOX. INSTALL (1) 1/2" CONDUIT W/ PULL STRING TO CORRESPONDING VAV. THERMOSTATS PROVIDED AND INSTALLED BY MECHANICAL CONTRACTOR.

INSTALL CONTROL CONDUITS WITH PULL STRINGS FROM ALL VAV BOXES / THERMOSTATS BACK TO TEMPERATURE CONTROL CENTER (TCC) IN MECH/DATA/ELEC ROOM. COORDINATE WITH MECHANICAL CONTROLS CONTRACTOR.

95% SET

(NOT FOR CONSTRUCTION)
10/02/2014

2 / E2.0

1ST FLOOR POWER AND SYSTEMS PLAN

1/8" = 1'-0"

STIRLING & WILBUR
ENGINEERING GROUP
7085 SOUTH TAMIAMI TRAIL. SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: csd@stirlingwilbur.com

SEAL

TO THE BEST OF THE ARCHITECT'S OR ENGINEER'S KNOWLEDGE, SAID PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE CODES AND STANDARDS.

HOUSER WALKER ARCHITECTURE
1473 Spring St. NW
Atlanta, GA 30309
t. 404. 633. 4264
f. 404. 870. 7337
www.houserwalker.com

ATP ENGINEERING SOUTH, PL
BRADENTON, FLORIDA
ENGR. BUSINESS #8908
941-751-6485
www.atpengineeringsouth.com

ROBINSON PRESERVE EXPANSION OFFICE TREE HOUSE
MANATEE CO WA #18, IFAS #W1300220
MANATEE COUNTY, FLORIDA

DRAWING TITLE:
ELECTRICAL OFFICE
POWER AND SYSTEMS PLAN

DATE :	10/02/2014
DWG SCALE:	1/8" = 1'-0"
DRAWN BY:	CMD
CHECKED BY:	JDC
SHEET No.:	E4.0

REV.#	DESCRIPTION	DATE

FEEDER AND BRANCH CIRCUIT SCHEDULE

FEEDER/BRANCH CIRCUIT DESIGNATION	COPPER CONDUCTOR THHN,THWN,&THWN-2		CONDUIT SIZE AND QUANTITY [QUANTITY IS 1, UNLESS NOTED IN ( )]					
	PHASE & NEUTRAL	EQUIPMENT GROUND	1P, 1N, 1G, 2P, 1G	2P, 1N, 1G, 3P, 1G	3P, 1N, 1G	3P, 2N, 1G	3P, 3N, 1G	3P, 1N, 2G
F20	12	12	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
F30	10	10	3/4"	3/4"	3/4"	1"	1"	1"
F40-50	8	10	3/4"	1"	1"	1 1/4"	1 1/4"	1 1/4"
F60	6	10	1"	1 1/4"	1 1/4"	1 1/4"	1 1/4"	1 1/4"
F70-F80	4	8	1"	1 1/4"	1 1/4"	1 1/2"	1 1/2"	1 1/2"
F90-F100	3	8	1 1/4"	1 1/4"	1 1/2"	1 1/2"	2"	1 1/2"
F110	2	6	1 1/4"	1 1/2"	1 1/2"	2"	2"	2"
F125	1	6	1 1/2"	2"	2"	2"	2 1/2"	2"
F150	1/0	6	1 1/2"	2"	2"	2 1/2"	2 1/2"	2 1/2"
F175	2/0	6	2"	2"	2 1/2"	2 1/2"	3"	2 1/2"
F200	3/0	6	2"	2 1/2"	2 1/2"	3"	3"	3"
F225	4/0	4	2"	2 1/2"	3"	3"	3"	3"
F250	250	4	2 1/2"	3"	3"	3 1/2"	3 1/2"	3-1/2"
F300	350	4	3"	3"	3 1/2"	3 1/2"	4"	3 1/2"
F350	2/0	3	(2) 2"	(2) 2 1/2"	(2) 2 1/2"	(2) 2 1/2"	(2) 3"	(2) 2 1/2"
F400	3/0	3	(2) 2"	(2) 2 1/2"	(2) 2 1/2"	(2) 3"	(2) 3"	(2) 2 1/2"
F450	4/0	2	(2) 2"	(2) 2 1/2"	(2) 2 1/2"	(2) 3"	(2) 3"	(2) 3"
F500	250	2	(2) 2 1/2"	(2) 3"	(2) 3"	(2) 3"	(2) 3 1/2"	(2) 3 1/2"
F600	350	1	(2) 2 1/2"	(2) 3"	(2) 3"	(2) 3"	(2) 3 1/2"	(2) 3"
F800	300	1/0	(3) 2 1/2"	(3) 3"	(3) 3"	(3) 3 1/2"	(3) 3 1/2"	(3) 3 1/2"
F900	350	2/0	(3) 3"	(3) 3"	(3) 3 1/2"	(3) 3 1/2"	(3) 4"	(3) 3 1/2"
F1000	400	2/0	(3) 3"	(3) 3"	(3) 3 1/2"	(3) 3 1/2"	(3) 4"	(3) 4"
F1200	350	3/0	(4) 3"	(4) 3"	(4) 3 1/2"	(4) 3 1/2"	(4) 4"	(4) 4"

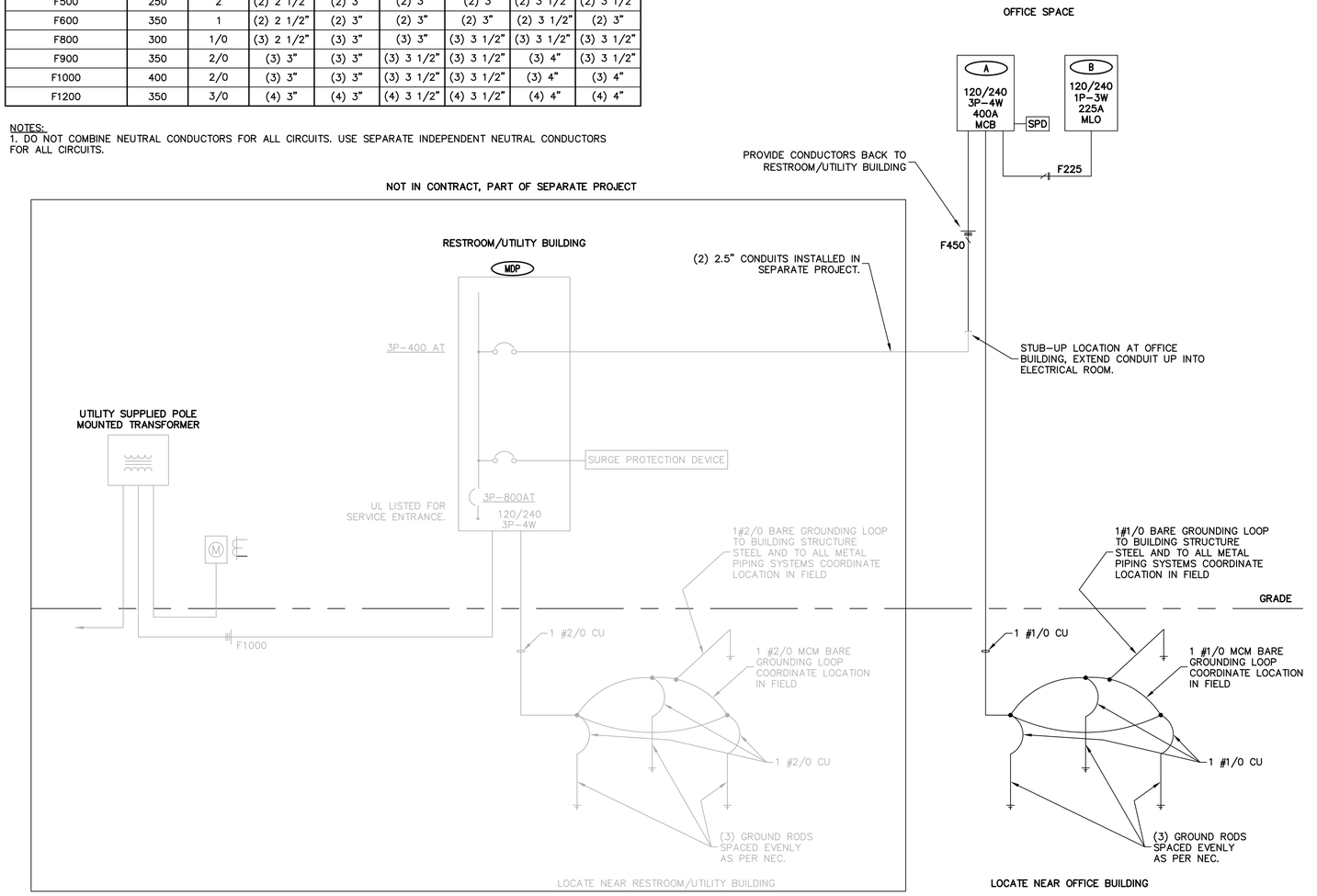
NOTES:
1. DO NOT COMBINE NEUTRAL CONDUCTORS FOR ALL CIRCUITS. USE SEPARATE INDEPENDENT NEUTRAL CONDUCTORS FOR ALL CIRCUITS.

VOLTAGE DROP FOR 1ϕ, 20A BRANCH CIRCUITS

FEEDER SIZE TO USE	DISTANCE ALLOWED	
	120V	208V
F20	0 - 45 FEET	0 - 79 FEET
F30	45 - 72 FEET	79 - 126 FEET
F40-50	72 - 115 FEET	126 - 201 FEET
F60	115 - 183 FEET	201 - 318 FEET
F70-80	183 - 292 FEET	318 - 506 FEET
F90-100	292 - 367 FEET	506 - 637 FEET
F110	367 - 464 FEET	637 - 804 FEET
F125	464 - 584 FEET	804 - 1013 FEET
F150	584 - 738 FEET	1013 - 1279 FEET

NOTES:

1. 20 A BRANCH CIRCUITS SHALL BE SIZED FOR VOLTAGE DROP. WIRE SIZES ARE NOT INDICATED ON THE DRAWINGS TO COMPENSATE FOR VOLTAGE DROP FOR THESE CIRCUITS. CONTRACTOR SHALL UTILIZE WIRE SIZE SHOWN ABOVE FOR DISTANCES LISTED ABOVE.
2. VOLTAGE DROP WIRE SIZES WILL BE STRICTLY ENFORCED. CONTRACTOR SHALL SUBMIT A LIST OF CIRCUITS THAT WILL EXCEED THE DISTANCES ALLOWED AND INDICATE WIRE SIZE TO BE USED PRIOR TO ANY WIRE BEING INSTALLED.



1 / E5.0 ONE-LINE RISER DIAGRAM
NTS

POWER DISTRIBUTION PANELBOARD SCHEDULE	DESIGNATION: A LOCATION: VOLTAGE: 240/120 PHASE: 3 PHASE, 4 WIRE W/ HIGH LEG	MAINS: 400 A MCB BUS SIZE: 400 AMP PANEL MOUNTING: SURFACE ALL BREAKERS: AWAITING UTILITY INFORMATION FOR KAIC / SHORT CIRCUIT CALC'S

CKT NO.	LOAD DESCRIPTION	LOAD CODE	CONN. KVA	BREAKER AMPS	BREAKER POLE	CONNECTED LOAD A	CONNECTED LOAD B	CONNECTED LOAD C	BREAKER AMPS	BREAKER POLE	CONN. KVA	LOAD CODE	LOAD DESCRIPTION	CKT NO.
1	Panel "B"	P	9.22	225	2	14.92			50	3	5.70	M	CU-1	2
3	"	P	9.23				14.93				5.70	M	"	4
5	VAV-3	M	4.50	50	2			10.20			5.70	M	"	6
7	"	M	4.50			4.50			20	1			Spare	8
9	Water Heater	M	1.50	20	2		4.00		30	2	2.50	M	VAV-6	10
11	"	M	1.50					4.00			2.50	M	"	12
13	VAV-1	M	2.00	20	2	2.00			20	1			Spare	14
15	"	M	2.00				4.00		20	2	2.00	M	VAV-7	16
17	VAV-2	M	2.00	20	2			4.00			2.00	M	"	18
19	"	M	2.00			2.00			20	1			Spare	20
21	<<BLANK>>						1.00		20	2	1.00	M	VAV-8	22
23	VAV-4	M	1.00	20	2			2.00			1.00	M	"	24
25	"	M	1.00			1.00			20	1			Spare	26
27	VAV-5	M	2.00	20	2		4.00		20	2	2.00	M	VAV-9	28
29	"	M	2.00					4.00			2.00	M	"	30
31	AHU-1	M	4.08	40	3	5.58			20	2	1.50	M	VAV-10	32
33	"	M	4.08				5.58				1.50	M	"	34
35	"	M	4.08					5.58	20	2	1.50	M	VAV-11	36
37	SPD			30	3	1.50					1.50	M	"	38
39	"						2.00		20	2	2.00	M	VAV-12	40
41	"							2.00			2.00	M	"	42
						31.50	35.51	31.78	KVA					
	TOTAL CONNECTED AMPS:		295.93 AMPS			262.50	295.93	264.83	AMPS					
	TOTAL CONNECTED LOAD:		98.79 KVA											
	TOTAL DEMAND AMPS:		241.18 AMPS											
	TOTAL DEMAND LOAD:		78.71 KVA											

LOAD CODES:
L= LIGHTING
R= RECEPTACLES
M= MECHANICAL
C= COMPUTER
K= KITCHEN
P= PANELBOARD

PANELBOARD SCHEDULE	DESIGNATION: B LOCATION: Mech/Data Room VOLTAGE: 240/120 PHASE: 1 PHASE, 3 WIRE	MAINS: 225 A BUS SIZE: 225A PANEL MOUNTING: FLUSH ALL BREAKERS: AWAITING UTILITY INFORMATION FOR KAIC / SHORT CIRCUIT CALC'S

CKT NO.	LOAD DESCRIPTION	LOAD CODE	CONN. KVA	BREAKER AMPS	BREAKER POLE	CONN. LOAD A	CONN. LOAD B	BREAKER AMPS	BREAKER POLE	CONN. KVA	LOAD CODE	LOAD DESCRIPTION	CKT NO.
1	Mechanical RM Recpts	R	0.54	20	1	1.08		20	1	0.54	R	Break Room Receptps	2
3	DATA Quad Recept	R	1.00	20	1		1.54	20	1	0.54	R	Break Room Receptps	4
5	DATA Quad Recept	R	1.00	20	1	1.54		20	1	0.54	R	Break Room Receptps	6
7	Convenience Receptps	R	1.08	20	1		2.28	20	1	1.20	K	Refrigerator	8
9	Office 1 & 2 Receptps	R	1.08	20	1	2.16		20	1	1.08	R	RR & Exterior Receptps	10
11	Office 2 & 3 Receptps	R	1.08	20	1		2.16	20	1	1.08	R	Office 11 & 12 Receptps	12
13	Office 4 & 5 Receptps	R	1.08	20	1	1.98		20	1	0.90	R	Office 12 & Copy Rcpts	14
15	Office 5 & 6 Receptps	R	1.08	20	1		1.58	20	1	0.50	R	Copy Countertop Recept	16
17	Office 7 & 8 Receptps	R	1.08	20	1	1.58		20	1	0.50	R	Copy Countertop Recept	18
19	Off. 8 & Work Room Receptps	R	1.08	20	1		1.58	20	1	0.50	R	Reception Desk	20
21	Office 9 & 11 Receptps	R	1.08	20	1	1.44		20	1	0.36	R	Reception Desk	22
23	Office 9 & 13 Receptps	R	0.90	20	1		1.80	20	1	0.90	R	Conference Receptps	24
25	Telephone Backboard	R	0.50	20	1	1.00		20	1	0.50	R	Conference Receptps	26
27	Storage Receptps	R	0.54	20	1		1.04	20	1	0.50	R	Water Cooler	28
29	Smart Board - Conf. Rm	R	0.37	20	1	1.17		20	1	0.80	L	Emergency and Exit Lights	30
31	Lighting - West Wing	L	1.02	20	1		1.72	20	1	0.70	L	Exterior Lighting	32
33	Common Area Lighting	L	1.40	20	1	2.20		20	1	0.80	L	Lighting - North End	34
35	Lighting - South End	L	1.26	20	1		1.62	20	1	0.36	R	Conference RM Floor Box	36
37	Workroom Receptps	R	0.90	20	1	1.40		20	1	0.50	P	Lighting Control Panel LCP	38
39	Spare			20	1		0.50	20	1	0.50	P	Temp. Control Center (TCC)	40
41	Spare			20	1	0.00		20	1			Spare	42
						15.55	15.82	KVA					
	TOTAL CONNECTED AMPS:		131.83 AMPS			129.54	131.83	AMPS					
	TOTAL CONNECTED LOAD:		31.37 KVA										
	TOTAL DEMAND AMPS:		76.93 AMPS										
	TOTAL DEMAND LOAD:		18.45 KVA										

LOAD CODES:
L= LIGHTING
R= RECEPTACLES
M= MECHANICAL
C= COMPUTER
K= KITCHEN
P= PANELBOARD

95% SET
(NOT FOR CONSTRUCTION)
10/02/2014

STIRLING & WILBUR ENGINEERING GROUP
7085 SOUTH TAMIAMI TRAIL. SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: cad@stirlingwilbur.com

SEAL

TO THE BEST OF THE ARCHITECT'S OR ENGINEER'S KNOWLEDGE, SAID PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE CODES AND STANDARDS.

HOUSER WALKER ARCHITECTURE
1473 Spring St. NW
Atlanta, GA 30309
t. 404. 633. 4264
f. 404. 870. 7337
www.houserwalker.com

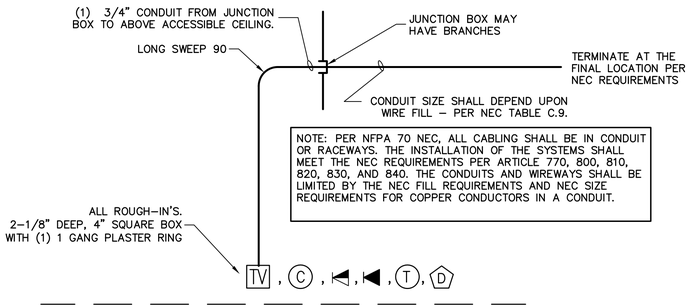
ATP ENGINEERING SOUTH, PL
BRADENTON, FLORIDA
ENGR. BUSINESS #6908
941-751-6485
www.atpengineeringsouth.com

ROBINSON PRESERVE EXPANSION OFFICE TREE HOUSE
MANATEE CO WA #18, IFAS #W1300220
MANATEE COUNTY, FLORIDA

DATE
REV.# DESCRIPTION

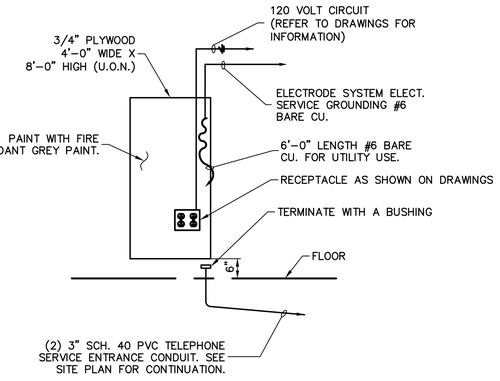
DRAWING TITLE:
ELECTRICAL OFFICE ONE-LINE RISER DIAGRAM

DATE : 10/02/2014
DWG SCALE: NOT TO SCALE
DRAWN BY: CMD
CHECKED BY: JDC
SHEET No.:
E5.0



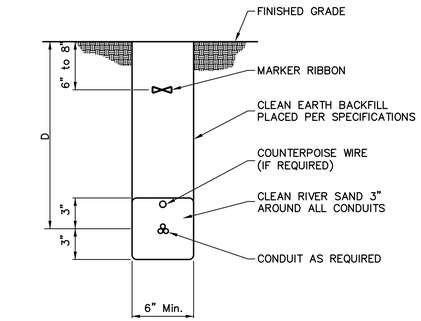
2 / E6.0 LOW VOLTAGE ROUGH-IN

NOT TO SCALE



1 / E6.0 TELEPHONE EQUIPMENT BACKBOARD DETAIL

NOT TO SCALE



BURIAL DEPTH	
SERVICE	"D"
CCTV cable	1'–6"
Telephone	2'–0"
Power under 600V	3'–0"
Medium voltage power	3'–0"

NOTE:

USE BURIAL DEPTHS SHOWN ON TABLE UNLESS NOTED OTHERWISE IN SPECIFICATIONS OR ON DRAWINGS. BURIAL DEPTHS FOR UTILITY COMPANY CABLES SHALL BE AS DIRECTED BY THE UTILITY COMPANY.

4 / E6.0 CONDUIT BURIAL DETAIL

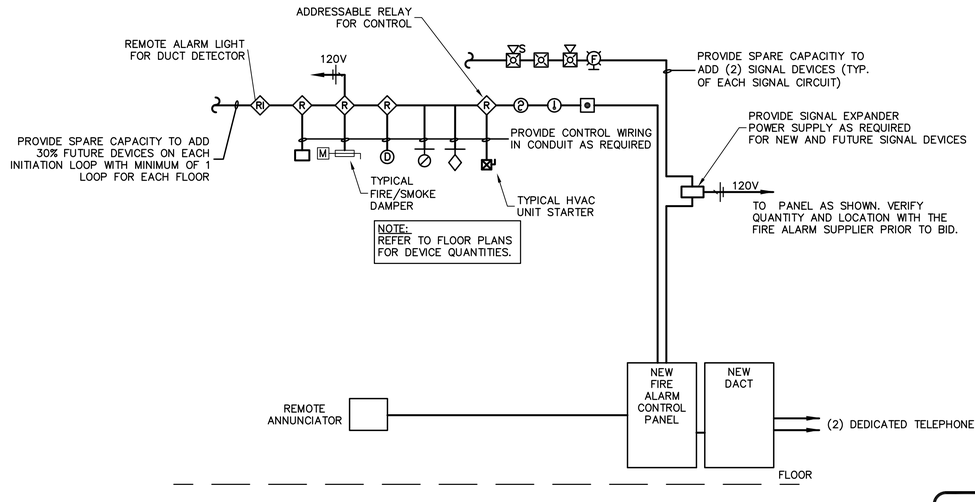
NOT TO SCALE

LIGHT FIXTURE SCHEDULE

TYPE	DESCRIPTION	VOLT	LAMP NUMBER AND TYPE	MOUNT	LENS	SERIES	ACCEPTABLE MANUFACTURERS	REMARKS
L1	NOMINAL 4"X4"X48" LINEAR DIRECT LED FIXTURE. DIE-FORMED STEEL HOUSING, TEXTURED MATTE WHITE FINISH, OPAL FROSTED ACRYLIC LENS. DIMMING – 0-10V. PROVIDE WITH INTEGRAL DAYLIGHT HARVESTING MODULE.	120	2800 LUMEN, 49W, 3000K LED	CABLE	OPAL FORST ACRYLIC	P40	PRUDENTIAL	DIMMING DRIVER
L2	NOMINAL 4"X4"X48" LINEAR DIRECT LED FIXTURE. DIE-FORMED STEEL HOUSING, TEXTURED MATTE WHITE FINISH, OPAL FROSTED ACRYLIC LENS. DIMMING – 0-10V. PROVIDE WITH INTEGRAL DAYLIGHT HARVESTING MODULE.	120	2000 LUMEN, 49W, 3000K LED	CABLE	OPAL FORST ACRYLIC	P40	PRUDENTIAL	DIMMING DRIVER
L3	PENDANT FIXTURE, DIE-CAST ALUMINUM HOUSING WITH ADJUSTABLE CABLE MOUNT. SATIN ALUMINUM FINISH, VERIFY SHADE COLOR, GLASS LENS. DIMMING – 0-10V.	120	3000 LUMENS, 3000K LED	CABLE	GLASS	FCP660	FC LIGHTING	DIMMING DRIVER
L4	NOMINALLY 4' DIA RECESSED LED DOWNLIGHT. STANDARD OUTPUT, 10000 LUMENS, 3000K. DIMMING – 0-10V.	120	NOM. 10000 LUMENS LED 140W	CEILING RECESSED	FROSTED ACRYLIC	FSDL	FOCAL POINT	DIMMING DRIVER
L5	NOMINAL 6" APERTURE OPEN LED DOWN LIGHT WITH LOW IRIDESCENT ALZAK ALUMINUM REFLECTOR. DIMMING – 0-10V. UL LISTED DAMP	120	15W, 1100 LUMEN LED MODULE, 3000K	CEILING RECESSED	N/A	LF6LEDG4	PRESCOLITE	DIMMING DRIVER
L6	NOMINAL 6" APERTURE OPEN LED WALLWASH LIGHT WITH LOW IRIDESCENT ALZAK ALUMINUM REFLECTOR. DIMMING – 0-10V. UL LISTED DAMP	120	15W, 1100 LUMEN LED MODULE, 3000K	CEILING RECESSED	N/A	LF6LEDG4	PRESCOLITE	DIMMING DRIVER
L7	NOMINAL 6" APERTURE OPEN LED DOWN LIGHT WITH LOW IRIDESCENT ALZAK ALUMINUM REFLECTOR. DIMMING – 0-10V. UL LISTED DAMP	120	39W, 3000 LUMEN LED MODULE, 3000K	CEILING RECESSED	N/A	LF6LEDG4	PRESCOLITE	DIMMING DRIVER
L8	LED WALL MOUNTED EXTERIOR FIXTURE. DIE-CAST ALUMINUM HOUSING, FULL CUTOFF, 50W, CARBON BRONZE FINISH.	120	3000 LUMEN LED MODULE, 3500K	WALL	N/A	XTOR5A	LUMARK	ELECTRONIC BALLAST
F1	WALL BRACKET, NOMINAL 2' LONG X 8" DEEP. EXTRUDED ALUMINUM HOUSING W/ HIGH IMPACT INJECTION MOLDED END CAPS. HOUSING AND END CAPS TO HAVE BRUSHED ALUMINUM FINISH.	120	(2)17W T8	WALL	PATTERN NO. 12, 0.125" NOMINAL PRISMATIC ACRYLIC	BAU	METALUX	ELECTRONIC BALLAST
F2	4' FLUORESCENT INDUSTRIAL STRIP. DIE FORMED STEEL CHANNELS WITH HIGH GLOSS BAKED ENAMEL FINISH, AND SOLID TOP REFLECTOR AND WIRE GUARDS.	120	(2)32W T8	CEILING SURFACE	N/A	C	LITHONIA	ELECTRONIC BALLAST SUPPLY WIRE GUARDS
	EMERGENCY BATTERY PACK WITH ALUMINUM HOUSING, SEALED NICKEL-CALCIUM BATTERY AND TEST SWITCH FRONT MOUNTED HEADS. UL LISTED FOR DAMP LOCATIONS.	120	LED	WALL	N/A	AEL2	SURE-LITES	UL LISTED FIVE YEAR WARRANTEE.
	LED EDGELIT EXIT LIGHT, SINGLE OR DOUBLE FACE AS INDICATED ON DRAWINGS. UNIVERSAL SURFACE MOUNTING CANOPY, END, BACK OR TOP MOUNT, DIRECTIONAL ARROW PANEL, STROKE STENCIL FACE RED LETTERS "EXIT". BATTERY BACKUP W/ NICKEL-CADMIUM BATTERY. PUSH TO TEST FEATURE.	120	LED	SURFACE/ CEILING		ELX	SURE-LITES	WHITE TRIM

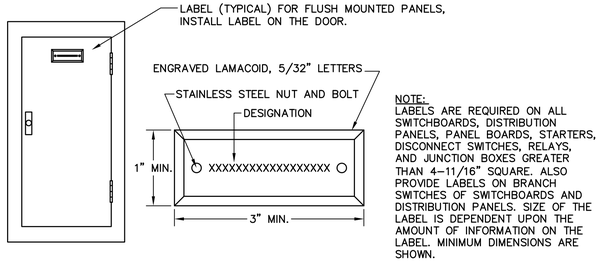
NOTES:

1. ALL LIGHT FIXTURES TO BE SUPPLIED WITH LAMPS. LAMPS SHALL BE GE, PHILLIPS, OR OSRAM/SLYVANIA, NO EXCEPTIONS.
2. FLUORESCENT LAMP COLOR SHALL B3000 DEGREES K.
3. MANUFACTURERS SHOWN ARE BASIS OF DESIGN AND "OR EQUAL" FIXTURES MAY BE PROVIDED. "OR EQUAL" FIXTURES SHALL BE PRE-APPROVED DURING BIDDING.



3 / E6.0 ADDRESSABLE FIRE ALARM SYSTEM SCHEMATIC

NOT TO SCALE



STANDARD COLORS:
1. NORMAL POWER– BLACK BACKGROUND, WHITE LETTERS
2. EMERGENCY POWER– RED BACKGROUND, WHITE LETTERING
3. IN ADDITION TO THE FUNCTION LABELS, PROVIDE LABELS IDENTIFYING ALL "MAIN SERVICE LABEL DISCONNECTS"– RED BACKGROUND, WHITE LETTERING

5 / E6.0 EQUIPMENT LABELING DETAIL

NOT TO SCALE

95% SET
(NOT FOR CONSTRUCTION)
10/02/2014

STIRLING & WILBUR ENGINEERING GROUP
7085 SOUTH TAMIAMI TRAIL, SARASOTA, FL 34231
PHONE (941) 929-1562 FAX (941) 929-1553
email: cad@stirlingwilbur.com

SEAL

TO THE BEST OF THE ARCHITECT'S OR ENGINEER'S KNOWLEDGE, SAID PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE CODES AND STANDARDS.

HOUSER WALKER ARCHITECTURE
1473 Spring St. NW
Atlanta, GA 30309
t. 404. 633. 4264
f. 404. 870. 7337
www.houserwalker.com

ATP ENGINEERING SOUTH, PL
BRADENTON, FLORIDA
ENGR. BUSINESS #8908
941-751-6485
www.atpengineeringsouth.com

ROBINSON PRESERVE EXPANSION OFFICE TREE HOUSE
MANATEE CO WA #18, IFAS #W1300220
MANATEE COUNTY, FLORIDA

REV.#	DESCRIPTION	DATE

DRAWING TITLE: ELECTRICAL DETAILS

DATE : 10/02/2014
DWG SCALE: NOT TO SCALE
DRAWN BY: CMD
CHECKED BY: JDC
SHEET No.:
E6.0

ABBREVIATIONS, LEGENDS AND GENERAL NOTES

ABBREVIATIONS

AC	AIR CONDITIONING
AD	ACCESS DOOR
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
AI	ANALOG INPUT
AO	ANALOG OUTPUT
AP	ACCESS PANEL
BFF	BELOW FINISHED FLOOR
BHP	BRAKE HORSE POWER
BTUH	BRITISH THERMAL UNIT PER HOUR
BOT	BOTTOM
CC	COOLING COIL
CFM	CUBIC FEET PER MINUTE
CH	CHILLER
CHWS	CHILLED WATER RETURN
CHWR	CHILLED WATER SUPPLY
CLG	CEILING
CO	CLEANOUT
CT	COOLING TOWER
CU	CONDENSING UNIT
CW	COLD WATER
CWR	CONDENSER WATER RETURN
CWS	CONDENSER WATER SUPPLY
DB	DRY BULB
DCC	DIRECT DIGITAL CONTROL
DG	DOOR GRILLE
DI	DIGITAL INPUT
DN	DIGITAL OUTPUT
DO	DOWN
DP	DEW POINT
DX	DIRECT EXPANSION
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
ECC	ENERGY CONTROL CENTER
EER	ENERGY EFFICIENCY RATIO
EF	EXHAUST FAN
ET	EXPANSION TANK
EL	ELEVATION
EQUIP	EQUIPMENT
EWC	ELECTRIC WATER COOLER
EWT	ENTERING WATER TEMPERATURE
EXIST	EXISTING
F DPR	FIRE DAMPER
FCU	FAN COIL UNIT
FD	FLOOR DRAIN
FL	FLOOR
FIPI	FINS PER INCH
FPF	FINS PER FOOT
FPM	FEET PER MINUTE
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
H	HUMIDITY
HB	HOSE BIBB
HC	HEATING COIL
HE	HEAT EXCHANGER
HP	HORSE POWER
HW	HOT WATER
HWR	HOT WATER RETURN
HWS	HOT WATER SUPPLY
KW	KILOWATT
LAT	LEAVING AIR TEMPERATURE
LWT	LEAVING WATER TEMPERATURE
MD	MOTORIZED DAMPER
MAX	MAXIMUM
MIN	MINIMUM
NC	NORMALLY CLOSED
NO	NORMALLY OPENED
OA	OUTSIDE AIR
OS&Y	OUTSIDE SCREW & YOKE
PD	PRESSURE DROP
PRESS	PRESSURE
RA	RETURN AIR
RD	ROOF DRAIN
RL	RAIN LEADER
RTU	ROOF TOP UNIT
S	SANITARY
SEER	SEASONAL ENGINEERING EFFICIENCY RATIO
SD	SMOKE DAMPER
SA	SUPPLY AIR
SP	STATIC PRESSURE
T	TEMPERATURE
TYP	TYPICAL
UC	UNDERCUT
UG	UNDERGROUND
UON	UNLESS OTHERWISE NOTED
UV	UNIT VENTILATOR
V	VENT
VAC	VACUUM
VAV	VARIABLE AIR VOLUME
VD	VOLUME DAMPER
VFD	VARIABLE FREQUENCY DRIVE
VSD	VARIABLE SPEED DRIVE
VTR	VENT THRU ROOF
W	WASTE
WB	WET BULB
WCO	WALL CLEANOUT

SYMBOLS

- VALVE – SEE SPECIFICATIONS FOR TYPE, GATE VALVE WHEN NOT SPECIFIED.
- GATE VALVE
- GLOBE VALVE
- PRESSURE REDUCING VALVE
- OS&Y VALVE
- CHECK VALVE
- BACK WATER VALVE
- BACK FLOW PREVENTER
- UNION
- BUTTERFLY VALVE
- BALL VALVE
- GAS COCK
- STRAINER
- EXPANSION JOINT
- GRADE CLEANOUT IN–LINE
- CONCENTRIC REDUCER
- ECENTRIC REDUCER
- PIPE ANCHOR
- FLOW DIRECTION
- PRESSURE GAUGE
- HAMMER ARRESTOR (PDI SIZE INDICATED)
- TEMPERATURE GAUGE
- SAFETY OR PRESSURE RELIEF VALVE
- ANGLE GLOBE VALVE
- MANUAL AIR VENT
- CLEANOUT EXPOSED
- FLOOR CLEANOUT
- GRADE CLEANOUT END–LINE
- CAPPED OUTLET
- VALVE IN RISER
- GATE VALVE W/ ADAPTER TO 3/4" HOSE THREAD
- P–TRAP
- HOSE BIBB W/ VACUUM BREAKER
- WALL HYDRANT W/ VACUUM BREAKER
- FLOOR DRAIN
- ROOF DRAIN

PIPING AND CONNECTIONS

- NEW SOIL OR WASTE PIPING
- EXISTING PIPING TO REMAIN
- EXISTING PIPING TO BE REMOVED
- VENT PIPING
- COLD WATER PIPING
- HOT WATER PIPING
- HOT WATER RETURN PIPING
- CRP — CHEMICAL RESISTANT PIPING
- FP — FIRE PROTECTION PIPING
- G — GAS PIPING
- O — OXYGEN PIPING
- A — AIR PIPING
- N — NITROGEN PIPING
- V — VACUUM PIPING
- NO — NITROUS OXIDE PIPING
- IN–LINE UP CONNECTION
- END–LINE UP
- IN–LINE DOWN/UP CONNECTION
- END–LINE DOWN CONNECTION
- BOTTOM CONNECTION, 45 OR 90 DEG.
- TOP CONNECTION, 45 OR 90 DEG.
- CROSSING BOTTOM CONNECTION
- SIDE CONNECTION
- Y–1/8 BEND

DRAWING SYMBOLS

- 2 / FP5 — DETAIL NUMBER / DRAWING NUMBER WHERE DRAWN
- A / FP5 — SECTION LETTER / DRAWING NUMBER WHERE DRAWN
- P.O.C — POINT OF INTERFACE BETWEEN NEW & EXISTING P.O.C.
- P.O.D — POINT OF DEMOLITION P.O.D.
- POINT OF INTERFACE BETWEEN CONTRACTORS

NOTE:

THESE ARE STANDARD SYMBOLS AND MAY NOT ALL APPEAR ON THE PROJECT DRAWINGS; HOWEVER WHEREVER THE SYMBOL APPEARS ON THE PROJECT DRAWINGS, THE ITEM SHALL BE PROVIDED AND INSTALLED.

GENERAL NOTES

1. CONTRACTOR SHALL PROVIDE COMPLETE PLUMBING SYSTEMS AS DETAILED ON THESE DRAWINGS. WORK CONSISTS OF FURNISHING ALL MATERIALS, EQUIPMENT, AND SERVICES REQUIRED FOR COMPLETE SYSTEMS. INCLUDE ANY INCIDENTAL APPARATUS, APPLIANCES, MATERIAL LABOR AND SERVICES NECESSARY TO MAKE NEW WORK COMPLETE IN ALL RESPECTS AND FULLY READY FOR OPERATION.
2. ALL PLUMBING WORK SHALL BE DESIGNED, INSTALLED, TESTED, AND CLEANED IN ACCORDANCE WITH FLORIDA PLUMBING CODE REQUIREMENTS.
3. VERIFY THE EXACT LOCATION OF EXISTING SANITARY WASTE, DOMESTIC COLD WATER PIPING MAINS FROM THE ACTUAL JOB SITE AND CIVIL PLANS. ALL NEW LINES ARE TO BE ROUTED TO AND/OR FROM VERIFIED LOCATIONS. TAPS, WHEN NOT PROVIDED BY PREVIOUS INSTALLER, ARE TO BE PROVIDED BY THIS INSTALLER.
4. MAKE SUCH OFFSETS AND DEVIATIONS FROM WORK SHOWN ON THE DRAWINGS, AS MAY BE NECESSARY TO FIT THE ACTUAL SPACE CONDITIONS.
5. WHERE VALVES OCCUR ABOVE DRYWALL OR PLASTER OR ARE CONCEALED BEHIND WALLS, THIS CONTRACTOR SHALL FURNISH AND INSTALL ACCESS PANELS. PANELS SHALL BE AS SELECTED BY THE ARCHITECT.
6. THE INSTALLER SHALL VISIT THE JOB SITE AND INSPECT ALL EXISTING CONDITIONS AFFECTING THE WORK. SUBMISSION OF HIS PROPOSAL SHALL BE CONSTRUED AS INDICATING SUCH KNOWLEDGE. NO ADDITIONAL PAYMENT WILL BE MADE ON CLAIMS THAT ARISE FROM THE CONTRACTOR'S FAILURE TO COMPLY WITH THIS REQUIREMENT.
7. THE PLANS AND DIAGRAMS OF PLUMBING PIPING ARE SCHEMATIC ONLY AND SHOULD NOT BE SCALED. INSTALLER SHALL COORDINATE AT SITE WITH ALL PLUMBING, HVAC, FIRE PROTECTION, AND ELECTRICAL WORK SO AS NOT TO CONFLICT IN LOCATION WITH OTHER WORK UNDER THIS CONTRACT OR THAT MAY BE EXISTING.
8. PROVIDE AND MAINTAIN TEMPORARY CONNECTIONS TO KEEP EXISTING UTILITIES IN SERVICE. ANY SHUT DOWNS ARE TO BE APPROVED BY OWNER'S REPRESENTATIVE.
9. EXACT LOCATION NUMBER AND TYPE OF PLUMBING FIXTURES SHALL BE DETERMINED FROM ARCHITECTURAL DRAWINGS. VERIFY SUCH LOCATIONS BEFORE PROCEEDING ROUGH–IN.
10. INSTALLER SHALL NOT CUT ANY STRUCTURAL MEMBERS WITHOUT FIRST SECURING WRITTEN APPROVAL FROM THE ARCHITECT.
11. PROVIDE DIELECTRIC UNIONS AT ALL CONNECTIONS BETWEEN DISSIMILAR PIPING METALS.
12. FIELD VERIFY ALL EXISTING PIPE SIZES PRIOR TO INSTALLATION.
13. NO VENT THRU ROOF SHALL TERMINATE CLOSER THAN 10 FT. TO ANY OUTSIDE AIR INTAKE.
14. ALL SANITARY AND WATER PIPING UNDERGROUND SHALL BE A MINIMUM OF 18" BELOW GRADE OR FINISHED FLOOR UNLESS NOTED OTHERWISE. PIPE HANGERS ARE REQUIRED UNDER THE FACILITY.
15. PROVIDE ALL SINKS AND LAVATORIES WITH SLIP JOINT TRAP FITTINGS FOR CLEANOUT.
16. PROVIDE ALL REFRIGERATORS WITH A 3/8" COLD WATER SUPPLY FOR AN ICE MAKER. TERMINATE SUPPLY BEHIND REFRIGERATOR AT APPROXIMATELY 12" AFF WITH A CHROME PLATED STOP. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF REFRIGERATORS.
17. ALL WORK IS TO BE FREE OF DEFECTS IN WORKMANSHIP AND MATERIALS FOR A PERIOD OF THREE (3) YEARS FROM DATE OF FINAL ACCEPTANCE. ALL DEFECTS WHICH DEVELOP OR ARE DISCOVERED WITHIN THIS PERIOD SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST TO THE OWNER.
18. UPON COMPLETION OF THE WORK UNDER THIS CONTRACT, THE CONTRACTOR SHALL REMOVE ALL TOOLS, APPLIANCES, SURPLUS MATERIALS, AND SCRAP.
19. WHEN CONFLICTS OCCUR IN SPECIFICATIONS OR IN THE DRAWINGS, OR BETWEEN EITHER, THE ITEMS OF GREATER QUANTITY OR HIGHER COST SHALL BE PROVIDED.
20. THE CONTRACTOR SHALL COORDINATE WORK WITH OTHER TRADES IN ORDER TO AVOID CONFLICTS.
21. CONTRACTOR SHALL PROVIDE TO LOCAL AHJ OR PERMITTING AGENCY A COPY OF ALL MAJOR EQUIPMENT CUTS SHEETS AT TIME OF APPLICATION.

95% SET

(NOT FOR CONSTRUCTION)
10/02/2014

STIRLING & WILBUR
ENGINEERING GROUP
7085 SOUTH TAMIAMI TRAIL, SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: cad@stirlingwilbur.com

SEAL

TO THE BEST OF THE ARCHITECT'S OR ENGINEER'S KNOWLEDGE, SAID PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE CODES AND STANDARDS.

HOUSER WALKER ARCHITECTURE
1473 Spring St. NW
Atlanta, GA 30309
t. 404. 633. 4264
f. 404. 870. 7337
www.houserwalker.com

ATP ENGINEERING SOUTH, PL
BRADENTON, FLORIDA
ENGR. BUSINESS #8908
941-751-6485
www.atpengineeringsouth.com

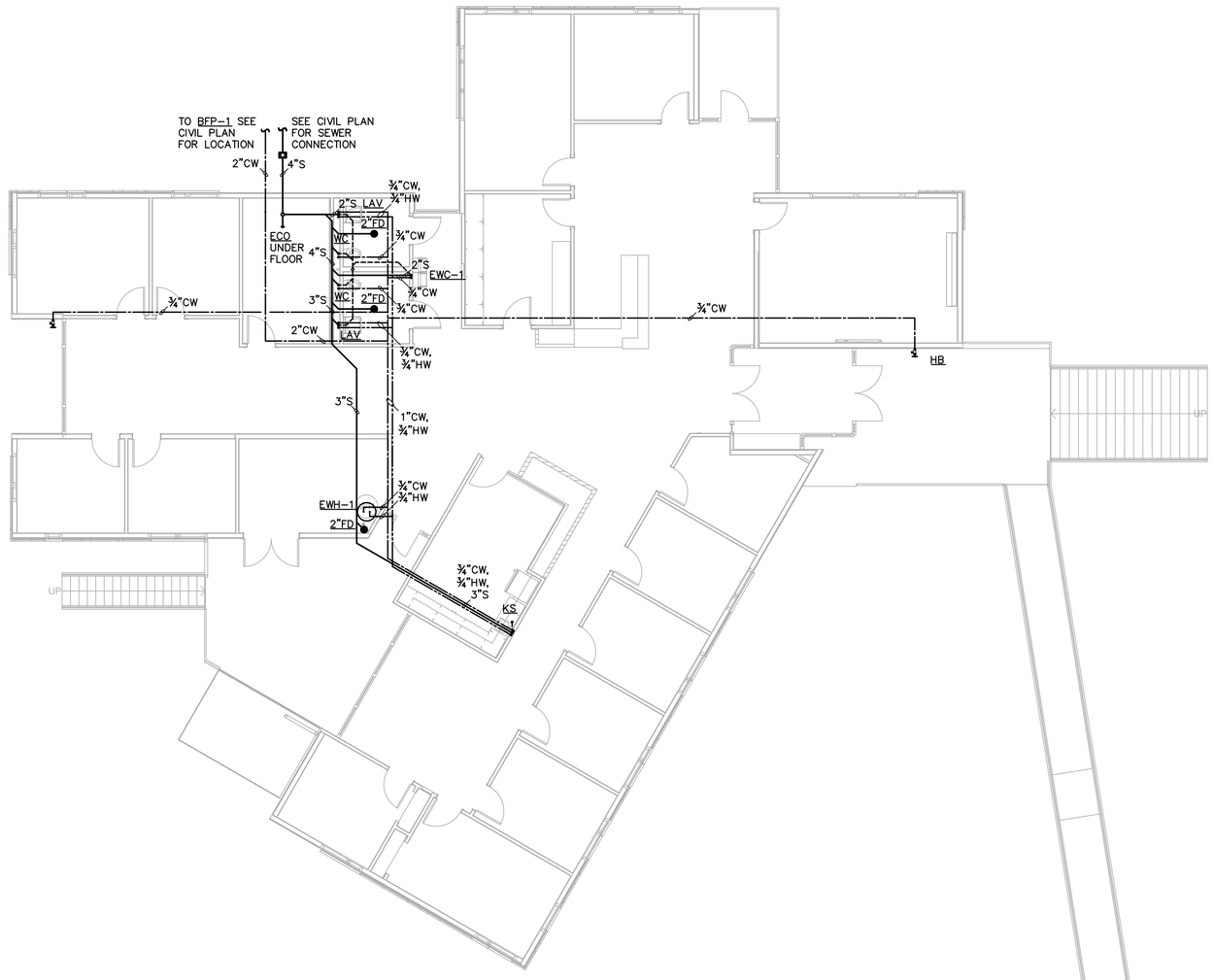
DATE

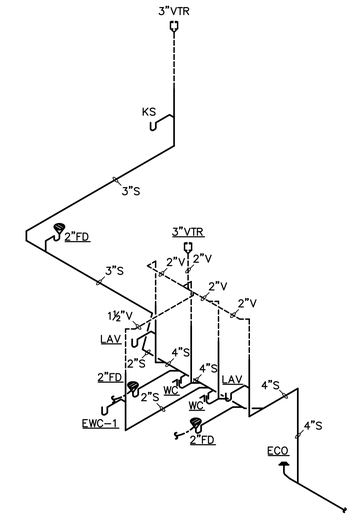
REV.# DESCRIPTION

ROBINSON PRESERVE EXPANSION OFFICE TREE HOUSE
MANATEE CO WA #18, IFAS #W1300220
MANATEE COUNTY, FLORIDA

DRAWING TITLE:
PLUMBING LEGEND AND GENERAL NOTES

DATE : 10/02/2014
DWG SCALE: NOT TO SCALE
DRAWN BY: DC
CHECKED BY: JDC
SHEET No.:
P1.0





N

1 P2.0 **PLUMBING FLOOR PLAN**
1/8"=1'-0"

2 P2.0 **SANITARY ISOMETRIC PIPING DETAIL**
1/4"=1'-0"

95% SET
(NOT FOR CONSTRUCTION)
10/02/2014

STIRLING & WILBUR
ENGINEERING GROUP
7085 SOUTH TAMIAMI TRAIL, SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: csd@stirlingwilbur.com

SEAL

TO THE BEST OF THE ARCHITECT'S OR ENGINEER'S KNOWLEDGE, SAID PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE CODES AND STANDARDS.

HOUSER WALKER ARCHITECTURE
1473 Spring St. NW
Atlanta, GA 30309
t. 404. 633. 4264
f. 404. 870. 7337
www.houserwalker.com

ATP ENGINEERING SOUTH, PL
BRADENTON, FLORIDA
ENGR. BUSINESS #6908
941-751-6485
www.atpengineeringsouth.com

REV.#	DESCRIPTION	DATE

ROBINSON PRESERVE EXPANSION OFFICE TREE HOUSE
MANATEE CO WA #18, IFAS #W1300220
MANATEE COUNTY, FLORIDA

DRAWING TITLE:
PLUMBING FLOOR PLAN

DATE :	10/02/2014
DWG SCALE:	1/8" = 1'-0"
DRAWN BY:	DC
CHECKED BY:	JDC
SHEET No.:	P2.0

PLUMBING FIXTURE SCHEDULE

MARK	DESCRIPTION	COMPONENTS PROVIDED BY P.C.	FIXTURE		FIXTURE RUNOUT SIZE					REMARKS
			BASIC FIXTURE	TRIM AND ACCESSORIES	DRAIN WASTE	VENT	C.W.	H.W.	OTHER	
WC	VITREOUS CHINA FL. MTD. WATER CLOSET,WHITE 26"X 16 ⅜", ELONGATED BOWL, WALL MT TYPE, ADA	COMPLETE UNIT WITH ALL TRIM & ACCESSORIES	AMERICAN STANDARD 'AFWALL' MODEL #3351.001	SEAT: AMER STD. SOLID PLASTIC, ELONGATED WHITE OPEN FRONT SEAT W/CHECK HINGE, FLUSHOMETER 6047.161 WITH VAC BRKR, ANGLE STOP, AND ESCUTCHEONS, WAX RING, CHAIR CARRIER .	3"	2"	1"	---	---	1.6 GALLON PER FLUSH, CAULK AT WALL CONTACT WITH WHITE SILICONE SEALANT. COMPLIES WITH ADA REQ. WITH SEAT WHEN MOUNTED AT CORRECT HEIGHT ON CARRIER.
LAV	VITREOUS CHINA WALL HUNG LAVATORY, WHITE, 20 ½"X18", 4" CENTER SETS	COMPLETE UNIT WITH ALL TRIM & ACCESSORIES	AMERICAN STANDARD 'LUCERNE' MODEL # 0355.012	FAUCET: T&S BRASS MODEL # B–0890, 4" CTR. TWO WING ADA HANDLES, ROSE SPRAY OUTLET, GRID STRAINER DRN. ASSEMBLY 1.5 GPM FLOW RATE TRAP COVER: PROFLO #PF202WH SUPPORT: CONCEALED FL. MTD. SUPPORT WATTS TCA–411 CW & HW SHUTOFF VALVES @ WALL.	1¼"	1½"	½"	½"	---	CAULK AT WALL CONTACT WITH WHITE SILICONE SEALANT. SEE ARCHITECTURAL PLANS FOR MOUNTING HEIGHT TO COMPLY WITH ADA REQUIREMENTS. PROVIDE INSULATION ON DRN. AND WATER PIPING.
KS	STAINLESS STEEL SINGLE COMPARTMENT SINK, SELF–RIMMING, 15"X15"XD5 7/8" BASIN DEPTH WITH 1 HOLE– 4 " CENTER SET.	COMPLETE UNIT WITH ALL TRIM & ACCESSORIES	DAYTON D1515 ABOVE COUNTER SINK WITH ADA FAUCET, VERIFY HOLE NUMBERS PRIOR TO ORDER	P–TRAP LK–LK406GN04L2 TWO HANDLE ADA GOOSENECK FAUCET OR EQUAL LK–D5018A STRAINER, DRAIN, TAILPIECE CW & HW SHUTOFF VALVES @ WALL.	2"	1 1/2"	½"	½"	---	COORDINATE ABOVE COUNTER SINK, FAUCET HOLE, MOUNTING W/ARCHITECT AND G.C. PRIOR TO PURCHASE. CAULK WITH CLEAR SEALANT UNDER UNIT.
ECO	EXTERIOR CLEANOUT	COMPLETE UNIT WITH ALL TRIM & ACCESSORIES	WATTS MODEL# CO–260 SERIES	ACCESSORIES: VANDAL PROOF SCREWS, COUNTER SUNK BRASS PLUG.	---	---	---	---	---	VERIFY SIZE REQUIRED AT POINT OF APPLICATION. SET IN CONCRETE PAD PER DRAWINGS.
FCO	INTERIOR CLEANOUT	COMPLETE UNIT WITH ALL TRIM	WATTS MODEL# CO–200–R/RC/T/U	ACCESSORIES: ADJUSTABLE TOP, CARPET OR TILE RETAINER, VERIFY FLOORING PRIOR TO ORDER FOR SUFFIX ON MODEL# FROM EACH MFR.	---	---	---	---	---	VERIFY SIZE REQUIRED AT POINT OF APPLICATION.
WCO	WALL CLEANOUT	COMPLETE UNIT WITH ALL TRIM & ACCESSORIES	ZURN MODEL# 1446–4–Z–VP WATTS MODEL# CO–460–RD	ACCESSORIES: FLUSH OVER WALL FRAME, NICKEL BRONZE WALL ACCESS COVER, COUNTERSUNK BRASS PLUG.	---	---	---	---	---	VERIFY SIZE REQUIRED AT POINT OF APPLICATION.
EWC–1	PACKAGED WATER COOLER BARRIER–FREE, BOTTLE FILLER WALL HUNG	COMPLETE UNIT WITH ALL TRIM & ACCESSORIES	ELKAY MODEL#LZS8WS	COLOR: COLOR AS SELECTED BY ARCHITECT ACCESSORIES: STAINLESS STEEL BASIN, STAINLESS STEEL BUBBLER, WATER FILLER WITH AUTO SHUT OFF WITH CW SHUTOFF VALVE @ WALL.	2"	1½"	½"	---	---	COORDINATE WITH EC FOR POWER REQUIREMENTS. PROVIDE WITH R–134A REFRIGERANT, PROVIDE WITH 5 YEAR WARRANTY FOR COMPRESSOR. 120 VOLT, 1PHASE, 370 W, ADA COMPLIANT
WH–1	WALL HYDRANT VACUUM BREAKER, ¾" MALE HOSE CONNECTION.	COMPLETE UNIT WITH ALL TRIM & ACCESSORIES	WOODFORD B75 WITH TEE KEY UP ¾" INLET, POLISHED BRASS WALL COVER, RECESSED IN WALL	COLOR: ROUGH BRONZE.	---	---	¾"	---	---	COORDINATE WITH GC FOR ROUGH IN.
FD	FLOOR DRAIN	COMPLETE UNIT WITH ALL TRIM & ACCESSORIES	ZURN MODEL# Z–415 ROUND TOP, WATTS FD–100 COORDINATE COVER WITH ARCHITECT.	ZURN #Z–1022, WATTS A–200 TRAP PRIMER TO L–1, REFER TO PLANS FOR LOCATIONS	2"	---	---	---	½"	COORDINATE INSTALLATION WITH G.C. PRIOR TO CONCRETE FLOOR PLACEMENT.
TP–1	TRAP PRIMER	COMPLETE UNIT WITH ALL TRIM & ACCESSORIES	ZURN MODEL# Z–1021P	PROVIDE ON LAVATORY TRAP LINE, PROVIDE ESCUTCHEON	---	---	½"	---	---	COORDINATE INSTALLATION WITH G.C. PRIOR TO WALL PLACEMENT.
WHA	WATER HAMMER ARRESTER	COMPLETE UNIT WITH ALL TRIM & ACCESSORIES	J.R. SMITH "HYDROTROL" MODEL# 5005–5020. WATTS SG SERIES ZURN "SHOKSTOP" MODEL# Z–1700.	SEE P.D.I SIZES. P.D.I SIZE / PIPE SIZE / FIXTURE UNIT / ZURN / WATTS / J.R. SMITH: A ¾" 1–11 100 SG–050 5005; B 1" 12–32 200 SG–075 5010; C 1" 33–60 300 SG–100 5020						SIZES TO MATCH MAINS. INSTALL PER MANUFATURER'S RECOMMENDATIONS. SEE WATER DISTRIBUTION DIAGRAM FOR LOCATION.

SCHEDULES NOTES:
1. ALL FIXTURES SHALL BE SUPPLIED WITH MCGUIRE SUPPLY KITS WITH BRASS STEMS, AND CHROME PLATED BRASS STOPS. PROVIDE AND INSTALL BRAIDED FLEXIBLE CONNECTION LINES, AND ESCUTCHEONS.
2. ALL ADA FIXTURES (LAVS) SHALL HAVE PROVIDED PLUMBEREX PTRAP COVERS AND VALVE SUPPLY COVERS.
3. VERIFY ALL OWNER SUPPLIED FIXTURES AND DEVICES PRIOR TO BID FOR ROUGH IN.

ELECTRIC WATER HEATER SCHEDULE

(DWH)

TAG NO.	LOCATION	STORAGE CAPACITY GALLONS	RECOVERY GPH	TEMP. RISE °F	KW	ELECTRICAL CHARACTERISTICS			MANUFACTURER	MODEL NO.	WEIGHT	REMARKS
						VOLTS	PH	HZ				
EWH–1	MECH	30	20	60	3	240	1	60	RHEEM	ELD030	235# SHIP	1

NOTES:
1. T & P RELIEF VALVE, COMMERCIAL WATER HEATER, UPPER AND LOWER NON SIMULTANEOUS ELEMENTS. PROVIDE AND INSTALL(5) GALLON EXPANSION TANK ABOVE WATER HEATER AND DRAIN PAN UNDER UNIT.

BACKFLOW PREVENTER SCHEDULE

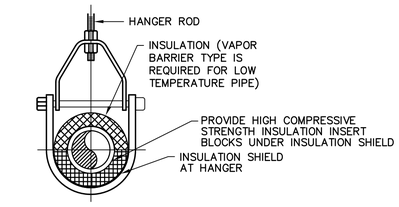
ITEM NO.		BFP–1
TOTAL CAPACITY	GPM	40
PRESSURE DROP	PSI	12
QTR. TURN BALL SHUT OFFS		X
BRONZE STRAINER		X
STAINLESS STEEL CHECK VALVE		X
NON RISING STEM GATE VALVE SHUTOFF		----
INTEGRAL BODY UNIONS		----
OPERATING WEIGHT	LBS.	16
FLANGED ADAPTOR ENDS		-----
LOCATION	---	EXTERIOR.
MANUFACTURER	---	WATTS
MODEL NO.	---	909M2QT –1 1/2"

NOTES:
1. DRAIN FUNNEL AND FULL SIZE LINE TO SITE.
2. PRESSURE GAUGE ON INCOMING AND LEAVING WITH PETCOCK SHUTOFF

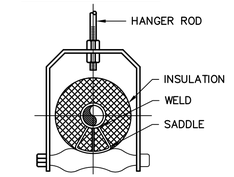
4 / P3.0 FLOOR DRAIN INSTALLATION DETAIL
NOT TO SCALE

3 / P3.0 EXTERIOR CLEANOUT DETAIL
NOT TO SCALE

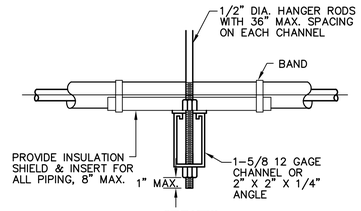
25.4 CWFU = 38 GPM FOR THE BUILDING
27 DFU FOR THE BUILDING



ADJUSTABLE CLEVIS HANGER TYPE 1 IN SPECIFICATIONS



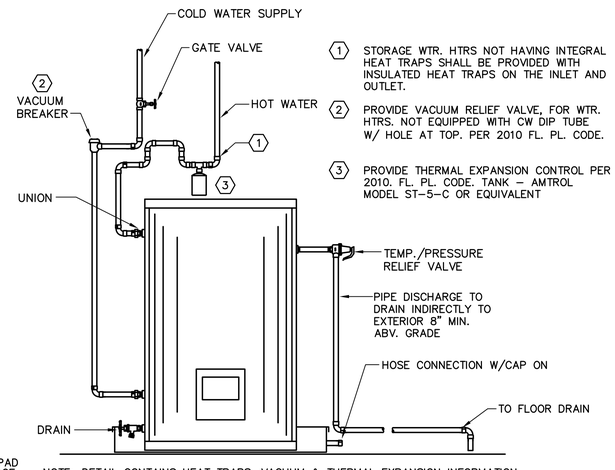
ADJUSTABLE ROLLER HANGER TYPE 43 IN SPECIFICATIONS



SIDE VIEW
TRAPEZE HANGER FOR UP TO 1000 LB. UNIFORM LOAD

MAXIMUM PIPE SUPPORT SPACING, FEET																
NOM. SIZE	THRU 3/4"	1	1¼	1½	2	2½	3	4	5	6	8	10	12	14	16	18	20	24
PIPE	7 FT	7	7	9	10	11	12	14	16	17	19	22	23	25	27	28	30	32
NOTE: FOR TRAPEZE HANGER TAKE SPACING OF SMALLEST SIZE ON TRAPEZE.																		

1 / P3.0 TYPICAL PIPE HANGERS
NOT TO SCALE



1. STORAGE WTR. HTRS NOT HAVING INTEGRAL HEAT TRAPS SHALL BE PROVIDED WITH INSULATED HEAT TRAPS ON THE INLET AND OUTLET.
2. PROVIDE VACUUM RELIEF VALVE, FOR WTR. HTRS. NOT EQUIPPED WITH CW DIP TUBE W/ HOLE AT TOP. PER 2010 FL. PL. CODE.
3. PROVIDE THERMAL EXPANSION CONTROL PER 2010. FL. PL. CODE. TANK – AMTROL MODEL ST–5–C OR EQUIVALENT

NOTE: DETAIL CONTAINS HEAT TRAPS, VACUUM & THERMAL EXPANSION INFORMATION

2 / P3.0 ELECTRIC WATER HEATER PIPING DETAIL
NOT TO SCALE

REFER TO CIVIL PLANS FOR BACKFLOW DETAIL

95% SET
(NOT FOR CONSTRUCTION)
10/02/2014

HOUSER WALKER ARCHITECTURE
1473 Spring St. NW
Atlanta, GA 30309
t. 404. 633. 4264
f. 404. 870. 7337
www.houserwalker.com

STIRLING & WILBUR ENGINEERING GROUP
7085 SOUTH TAMIAMI TRAIL SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: cad@stirlingwilbur.com

SEAL

TO THE BEST OF THE ARCHITECTS OR ENGINEER'S KNOWLEDGE, SAID PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE CODES AND STANDARDS.

ROBINSON PRESERVE EXPANSION OFFICE TREE HOUSE
MANATEE CO WA #18, IFAS #W1300220
MANATEE COUNTY, FLORIDA

ATP ENGINEERING SOUTH, PL
BRADENTON, FLORIDA
ENGR. BUSINESS #8908
941-751-6485
www.atpengineeringsouth.com

REV.#	DESCRIPTION	DATE

DRAWING TITLE: PLUMBING DETAILS

DATE : 10/02/2014
DWG SCALE: 1/8" = 1'–0"
DRAWN BY: DC
CHECKED BY: JDC
SHEET No.: P3.0

ABBREVIATIONS, LEGENDS AND GENERAL NOTES

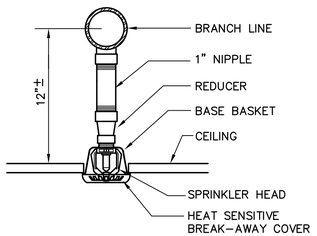
ABBREVIATIONS

AD	ACCESS DOOR
AFF	ABOVE FINISHED FLOOR
AP	ACCESS PANEL
BFF	BELOW FINISHED FLOOR
BOT	BOTTOM CEILING
CLG	CLEANOUT
CO	COLD WATER
CW	DUCTILE IRON PIPE
DIP	ELEVATION
EL	EQUIPMENT
EQUIP	EXISTING
EXIST	FIRE SERVICE
F	FLOOR DRAIN
FD	FIRE DEPARTMENT
FDC	CONNECTIONS
FDV	FIRE DEPARTMENT VALVE
FH	FIRE HYDRANT
FL	FLOOR
FSP	FIRE STANDPIPE RISER
HB	HOSE BIBB
OS&Y	OUTSIDE SCREW & YOKE
SPK	SPRINKLER
TYP	TYPICAL
UG	UNDERGROUND
UON	UNLESS OTHERWISE NOTED
W/TS	WITH TAMPER SWITCH

FIRE PROTECTION SYSTEM SERVES

TOTAL AREA – XXXX S.F.
CLASSIFICATION – LIGHT HAZARD
WET PIPE SYSTEM
DENSITY – .XX GPM
COVERAGE PER SPRINKLER 225 SF MAX
NO. OF SPRINKLER HEADS CALCULATED – XX
SPRINKLER "K" FACTOR – 5.5
HMD MINIMUM RESIDUAL PRESSURE – 7.0 PSI
HOSE STREAM ALLOWANCE – XXX GPM
SCHEDULE 40 STEEL PIPE –
SCREWED AND GROOVED CONNECTIONS

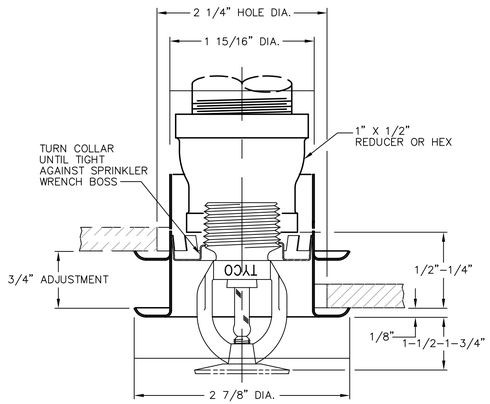
FIRE HAZARD – LIGHT
TEST STATIC PRESSURE – XX PSI
TEST FLOW – XXXX GPM
RESIDUAL PRESSURE – XX PSI
DEMAND FLOW – XXX GPM + XXX HOSE STREAM = XXX GPM
REQUIRED PRESSURE – XX PSI
AVAILABLE PRESSURE – XX PSI



1 / FP1.0 **RECESSED PENDENT SPRINKLER HEAD**
NOT TO SCALE

FIRE PROTECTION

SPRINKLER HEAD – UPRIGHT
SPRINKLER HEAD – PENDENT
SPRINKLER HEAD – SPECIAL
SPRINKLER HEAD – SIDEWALL
VALVE IN RISER
FIRE DEPARTMENT CONNECTION
DIRECTION OF PIPE PITCH (DOWN)
DIRECTION OF FLOW
ANCHOR
REDUCER OR INCREASER
ECCENTRIC REDUCER
TOP CONNECTION, 45 OR 90 DEG.
BOTTOM CONNECTION, 45 OR 90 DEG.
SIDE CONNECTION
CAPPED OUTLET
RISE OR DROP IN PIPE
UNION
ORIFICE UNION
STRAINER
PRESSURE GAGE
EXISTING PIPE TO BE REMOVED
GATE VALVE
GLOBE VALVE
CHECK VALVE
BALL VALVE
BUTTERFLY VALVE
GATE VALVE W/ ADAPTER TO 3/4" HOSE THREAD
ANGLE GLOBE VALVE
OUTSIDE SCREW & YOKE (O S & Y)



RECESSED

2 / FP1.0 **SPRINKLER HEAD PENETRATION DETAIL**
NOT TO SCALE

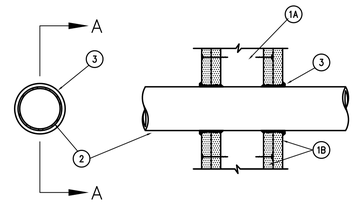
TYCO TY–FRL 165 DEGREE F SPRINKLER, QUICK RESPONSE, 1/2 INCH, K=5.6
VERIFY PRIOR TO PURCHASE AND INSTALLATION, CENTRAL RECESSED UNITS.
CHROME PLATED SPRINKLER, AND ESCUTCHEON MATCHING EXISTING.
USE BRASS SPRINKLER AND BRASS ESCUTCHEON ON MRI AREAS.

NOTE:
THESE ARE STANDARD SYMBOLS AND MAY NOT ALL APPEAR ON THE PROJECT DRAWINGS; HOWEVER WHEREVER THE SYMBOL APPEARS ON THE PROJECT DRAWINGS, THE ITEM SHALL BE PROVIDED AND INSTALLED.

DRAWING SYMBOLS

2 / FP5 — DETAIL NUMBER / DRAWING NUMBER WHERE DRAWN
A / FP5 — SECTION LETTER / DRAWING NUMBER WHERE DRAWN
P.O.C — POINT OF INTERFACE BETWEEN NEW & EXISTING P.O.C.
P.O.D — POINT OF DEMOLITION P.O.D.
POINT OF INTERFACE BETWEEN CONTRACTORS

SYSTEM NO. WL1001
(Formerly System No. 147)
F Ratings– 1, 2, 3 and 4Hr. (See item 2 and 3)
T Ratings– 0, 1, 2, 3, and 4 Hr. (See item 3)



SECTION A–A

1. WALL ASSEMBLY – THE 1,2,3 OR 4 HOUR FIRE–RATED GYPSUM WALLBOARD/STUD WALL ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER DESCRIBED IN THE INDIVIDUAL U300 OR U400 SERIES WALL OR PARTITION DESIGN IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES:
   A. STUDS – WALL FRAMING MAY CONSIST OF EITHER WOOD STUDS OR STEEL CHANNEL STUDS. WOOD STUDS CONSIST OF NOMINAL 2 BY 4 IN. LUMBER SPACED 16 INCHES OC WITH NOMINAL 2 BY 4 IN. LUMBER END PLATES AND CROSS BRACES. STEEL STUDS TO BE MIN. 3–5/8 IN. WIDE BY 1–3/8 IN. DEEP CHANNELS SPACED MAX. 24 IN. OC.
   B. WALL BOARD GYPSUM* – 1/2 IN. OR 5/8 IN. THICK 4 FOOT WIDE WITH SQUARE OR TAPERED EDGES. THE GYPSUM WALLBOARD TYPE, THICKNESS, NUMBER OF LAYERS, FASTENER TYPE AND SHEET ORIENTATION SHALL BE AS SPECIFIED IN THE INDIVIDUAL U300 OR U400 SERIES DESIGN IN THE UL FIRE RESISTANCE DIRECTORY. MAX. DIAM OF OPENING IS 13–1/2 IN.
2. PIPE OR CONDUIT – NOMINAL 12 IN. DIAM. (OR SMALLER) SCHEDULE 10 (OR HEAVIER STEEL CONDUIT, NOM. 4 IN. DIAM (OR SMALLER) STEEL ELECTRICAL CONDUIT MECHANICAL OR TYPE L OR (HEAVIER) COPPER TUBING OR MON. 1 IN. DIAM (OR SMALLER) FLEXIBLE STEEL CONDUIT.
3. FILL, VOID OR CAVITY MATERIAL* – CAULK – CAULK FILL MATERIAL INSTALLED TO COMPLETELY FILL ANNULAR SPACE BETWEEN PIPE OR CONDUIT AND GYPSUM WALLBOARD AND W/ A MIN. 1/4 IN. DIAM BEAD OF CAULK APPLIED TO PERIMETER OF PIPE OR CONDUIT AT ITS EGRESS FROM THE WALL. CAULK INSTALLED SYMMETRICALLY ON BOTH SIDES OF WALL ASSEMBLY. THE HOURLY F RATING OF THE FIRESTOP SYSTEM IS DEPENDENT UPON THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED, AS SHOWN IN THE FOLLOWING TABLE. THE HOURLY T RATING OF THE FIRESTOP SYSTEM IS DEPENDENT UPON THE TYPE OR SIZE OF THE PIPE OR CONDUIT AND THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED, AS TABULATED BELOW:

MAX. PIPE OR CONDUIT DIAM. in.	ANNULAR SPACE	F RATING	T RATING
1 in.	0 to 3/16 in.	1 or 2	0+, 1 or 2
1 in.	1/4 to 1/2	3 or 4	3 or 4
4 in.	0 to 1 1/2	1 or 2	0
6 in.	1/4 to 1/2	3 or 4	0
12 in.	3/16 to 3/8	1 or 2	0

+WHEN COPPER PIPE IS USED, T RATING IS O H.

MINNESOTA MINING & MANUFACTURING CO. – TYPES CP–25 S/L, CP–25 N/S, CP–25 WB, CP–25 WB+

*BEARING THE UL CLASSIFICATION MARKING

3 / FP1.0 **UL PENETRATION DETAILS**
NOT TO SCALE

95% SET
(NOT FOR CONSTRUCTION)
10/02/2014

GENERAL NOTES

1. FIRE PROTECTION WORK SHALL BE DESIGNED, INSTALLED, AND TESTED IN ACCORDANCE WITH NFPA 13 NFPA 14 AND 25 LATEST EDITION OR AS ADOPTED BY THE AUTHORITY HAVING JURISDICTION.
2. INCLUDE ANY INCIDENTAL APPARATUS, APPLIANCES, MATERIAL LABOR AND SERVICES NECESSARY TO MAKE NEW WORK COMPLETE IN ALL RESPECTS AND FULLY READY FOR OPERATION.
3. MAKE SUCH OFFSETS AND DEVIATIONS FROM WORK SHOWN ON THE DRAWINGS, AS MAY BE NECESSARY TO FIT THE ACTUAL SPACE CONDITIONS.
4. THE INSTALLER SHALL VISIT THE JOB SITE, INSPECT ALL EXISTING CONDITIONS AFFECTING THE WORK. SUBMISSION OF HIS PROPOSAL SHALL BE CONSTRUED AS INDICATING SUCH KNOWLEDGE. NO ADDITIONAL PAYMENT WILL BE MADE ON CLAIMS THAT ARISE FROM THE CONTRACTOR'S FAILURE TO COMPLY WITH THIS REQUIREMENT.
5. INSTALLER SHALL COORDINATE AT SITE WITH ALL PLUMBING, HVAC, FIRE PROTECTION, AND ELECTRICAL WORK SO AS NOT TO CONFLICT IN LOCATION WITH OTHER WORK UNDER THIS CONTRACT OR THAT MAY BE EXISTING. CONTRACTOR SHALL ADJUST PIPE ROUTING AS NECESSARY TO AVOID CONFLICTS WITH EXISTING DUCTWORK, EQUIPMENT, LIGHTING, ETC.
6. INSTALLER SHALL NOT CUT ANY STRUCTURAL MEMBERS WITHOUT FIRST SECURING WRITTEN APPROVAL FROM THE ARCHITECT.
7. IN GEOGRAPHICAL LOCATIONS SUBJECT TO TEMPERATURES BELOW 40°F, PROVIDE PROTECTION FOR ALL EXPOSED FIRE PROTECTION PIPING IN ACCORDANCE WITH NFPA 13, AND NFPA 14.
8. ALL FIRE DEPARTMENT CONNECTIONS SHALL HAVE AN AUTOMATIC BALL DRIP.
9. PROVIDE TAMPER SWITCHES ON ALL VALVES THAT CAN SHUT OFF FLOW IN MAINS OR BRANCHES. CHAINS AND LOCKS IN LIEU OF TAMPER SWITCHES MAY BE USED AT OUTDOOR BACKFLOW PREVENTERS ONLY IF APPROVED BY THE AUTHORITY HAVING JURISDICTION.
10. PIPE SIZED, GENERAL ROUTING, AND CONFIGURATION IN SYSTEMS REQUIRED TO BE HYDRAULICALLY CALCULATED SHALL BE INSTALLED PER THIS ENGINEER'S CONSTRUCTION DOCUMENTS. ANY DEVIATION SUBMITTED BY THE CONTRACTOR SHALL BE RE–DESIGNED BY THIS ENGINEER WITH RELATED RE–DESIGN FEES BORN BY THE CONTRACTOR.
11. CONTRACTOR SHALL ARRANGE FOR, OBTAIN AND BEAR THE COST OF NECESSARY PERMITS, BONDS, AND FEES.
12. ALL MATERIALS SHALL BE U.L. LISTED AND BEAR THE U.L. LABEL.
13. CONDITIONS SHOWN AS EXISTING (LOCATIONS, MATERIALS, ELEVATIONS, SIZED, ETC.) ARE BASED ON AVAILABLE EXISTING DATA AND SHOULD BE INTERPRETED TO BE APPROXIMATE. CONTRACTOR SHALL VERIFY CONDITIONS IN THE FIELD. EXISTING CONDITIONS FOUND TO DEVIATE FROM THOSE SHOWN SHALL BE REPORTED TO THE ENGINEER.
14. PENETRATIONS THROUGH FIRE RATED ASSEMBLIES. PENETRATIONS FOR PIPES, CONDUITS, OR OTHER PURPOSES THROUGH ASSEMBLIES (FLOORS, ROOF, WALLS, PARTITIONS, ETC.) WITH A REQUIRED FIRE STOP MATERIAL FIRE STOP MATERIAL SHALL BE U.L. LISTED AND INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS TO MEET OR EXCEED THE FIRE RATING OF THE PENETRATED ASSEMBLY.
15. BEFORE SHUTTING OFF ANY SECTION OF THE FIRE PROTECTION SYSTEM TO MAKE ADJUSTMENTS OR ADDITIONAL CONNECTIONS, COORDINATE WITH THE OWNER AND NOTIFY THE AUTHORITY HAVING JURISDICTION. PLAN THE WORK CAREFULLY AND ASSEMBLE ALL MATERIALS TO ENABLE COMPLETION IN THE SHORTEST POSSIBLE TIME. WORK SHALL BE USED TO COMPLETION WITHOUT INTERRUPTION, AND PROTECTION SHALL BE RESTORED AS PROMPTLY AS POSSIBLE.
16. WHERE ELECTRICAL PANELS EXIST, PROVIDE DEFLECTORS ON ELECTRICAL EQUIPMENT TO PREVENT WETTING PANELS. SPRINKLER PIPING SHALL NOT BE INSTALLED DIRECTLY ABOVE ELECTRIC PANELS.
17. PROVIDE FLUSHING CONNECTION AT END OF SPRINKLER SYSTEM WHERE LAY–IN CEILING OCCURS. ALL SPRINKLER PIPING THAT REQUIRES CHANGE IN ELEVATION DUE TO COORDINATION ROUTING OF PIPING SHALL HAVE FLUSH CONNECTION AT ALL LOWER ELEVATION. THE SPRINKLER SYSTEM SHALL BE INSTALLED WITH COMPLETE DRAINABLE SYSTEM.
18. VERIFY THE EXACT LOCATION OF EXISTING FIRE PROTECTION PIPING, FROM THE ACTUAL JOB SITE. ALL NEW LINES ARE TO BE ROUTED TO AND/OR FROM VERIFIED LOCATIONS. TAPS, WHEN NOT PROVIDED BY PREVIOUS INSTALLER SHALL BE PROVIDED BY THIS INSTALLER.
19. PROVIDE AND MAINTAIN TEMPORARY CONNECTIONS TO KEEP EXISTING FIRE PROTECTION SYSTEM IN SERVICE. ANY SHUT DOWNS ARE TO BE APPROVED BY OWNER'S REPRESENTATIVE.
20. NEW SPRINKLER HEADS IN RENOVATION AREA AND NEW ADDITION SHALL MATCH EXISTING TYPE SPRINKLER HEADS.
21. THE ENGINEER HAS MADE AN EXTENSIVE EFFORT TO IDENTIFY ABOVE CEILING CONFLICTS. THE CONTRACTOR IS RESPONSIBLE TO ALSO CHECKING FIELD CONDITIONS PRIOR TO BIDDING AND REPORT ANY PROBLEMS/CONFLICTS TO THE ENGINEER WITHIN 2 DAYS OF DISCOVERY. ANY CHANGES RESULTING FROM CONDITIONS ARISING IN THE FIELD WHICH WERE NOT BROUGHT TO THE ENGINEER'S ATTENTION ARE TO BE MADE BY THIS CONTRACTOR WITH NO ADDITIONAL COST TO THE OWNER.
22. ALL WORK IS TO BE FREE OF DEFECTS IN WORKMANSHIP AND MATERIALS FOR A PERIOD OF ONE(1) YEAR FROM DATE OF FINAL ACCEPTANCE. ALL DEFECTS WHICH DEVELOP OR ARE DISCOVERED WITHIN THIS PERIOD SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST TO THE OWNER.
23. UPON COMPLETION OF THE WORK UNDER THIS CONTRACT, THE CONTRACTOR SHALL REMOVE ALL TOOLS, APPLIANCES, SURPLUS MATERIALS, AND SCRAP. ALL IDENTIFIED EXISTING EQUIPMENT TO BE REMOVED SHALL BE TURNED OVER TO THE OWNER.
24. WHEN CONFLICTS OCCUR IN SPECIFICATIONS OR IN THE DRAWINGS, OR BETWEEN EITHER, THE ITEMS OF GREATER QUANTITY OR HIGHER COST SHALL BE PROVIDED.
25. THE CONTRACTOR SHALL COORDINATE WORK WITH OTHER TRADES IN ORDER TO AVOID CONFLICTS.
26. MECHANICAL ROOM NOTE – SPRINKLER HEADS IN THE MECHANICAL ROOMS MUST BE COORDINATED WITH THE EQUIPMENT AND DUCTWORK. THE SPRINKLER CONTRACTOR SHALL COORDINATE HIS SHOP DRAWINGS WITH THOSE OF THE HVAC CONTRACTOR AND PROVIDE HEADS BETWEEN EQUIPMENT AND UNDER DUCTWORK AS REQUIRED. ADDITIONAL SPRINKLERS SHALL BE PROVIDED UNDER ALL DUCTS AND OBSTRUCTIONS GREATER THAN 4 FEET IN WIDTH AS REQUIRED BY NFPA 13, 8.10.7.3.2 (2007).
27. CONTRACTOR SHALL PROVIDE TO LOCAL AHJ OR PERMITTING AGENCY A COPY OF ALL MAJOR EQUIPMENT CUTS SHEETS AT TIME OF APPLICATION.

STIRLING & WILBUR
ENGINEERING GROUP
7085 SOUTH TAMIAMI TRAIL SARASOTA, FL 34231
PHONE (941) 929-1562 FAX (941) 929-1563
email: cad@stirlingwilbur.com

SEAL

TO THE BEST OF THE ARCHITECT'S OR ENGINEER'S KNOWLEDGE, SAID PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE CODES AND STANDARDS.

HOUSER WALKER ARCHITECTURE
1473 Spring St. NW
Atlanta, GA 30309
t. 404. 633. 4264
f. 404. 870. 7337
www.houserwalker.com

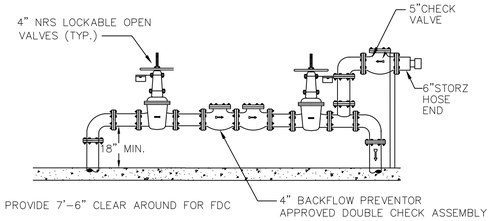
ATP ENGINEERING SOUTH, PL
BRADENTON, FLORIDA
ENGR. BUSINESS #8908
941-751-6485
www.atpengineeringsouth.com

ROBINSON PRESERVE EXPANSION OFFICE TREE HOUSE
MANATEE CO WA #18, IFAS #W1300220
MANATEE COUNTY, FLORIDA

DRAWING TITLE:
FIRE PROTECTION LEGEND AND GENERAL NOTES

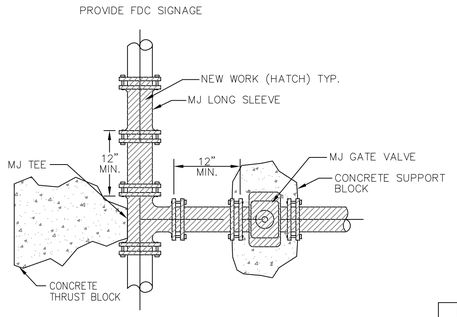
DATE : 10/02/2014
DWG SCALE: NOT TO SCALE
DRAWN BY: DC
CHECKED BY: JDC
SHEET No.:
FP1.0

REV#	DESCRIPTION	DATE



2 FP2.0 BACK FLOW PREVENTOR DETAIL FIRE SYSTEM

NOT TO SCALE



NOTES:

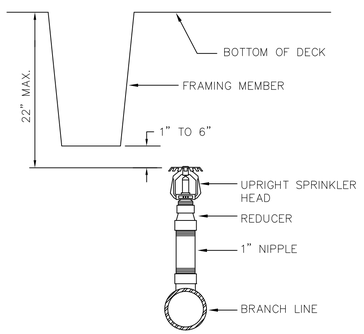
1. CONNECTION TO MAIN SHALL BE MADE AFTER ARCHITECT & FIRE MARSHAL AHJ, AND COUNTY WATER COMPANY. HAVE APPROVED ALL NEW WATER MAIN CONSTRUCTION. CONTRACTOR IS TO NOTIFY THE ARCHITECT 72 HRS PRIOR TO CUTTING IN TEE.
2. SEE COUNTY SPECIFICATIONS FOR FITTINGS, GATE VALVES, AND PIPE COUPLINGS. ANY SUBSTITUTIONS SHALL BE APPROVED BY THE ARCHITECT AND AHJ, AND COUNTY WATER COMPANY PRIOR TO CONSTRUCTION.
3. WRAP TEE AND VALVE WITH PLASTIC THEN POUR SUPPORT BLOCK AND THRUST BLOCK.

3 FP2.0 MAIN CONNECTION DETAIL

NOT TO SCALE

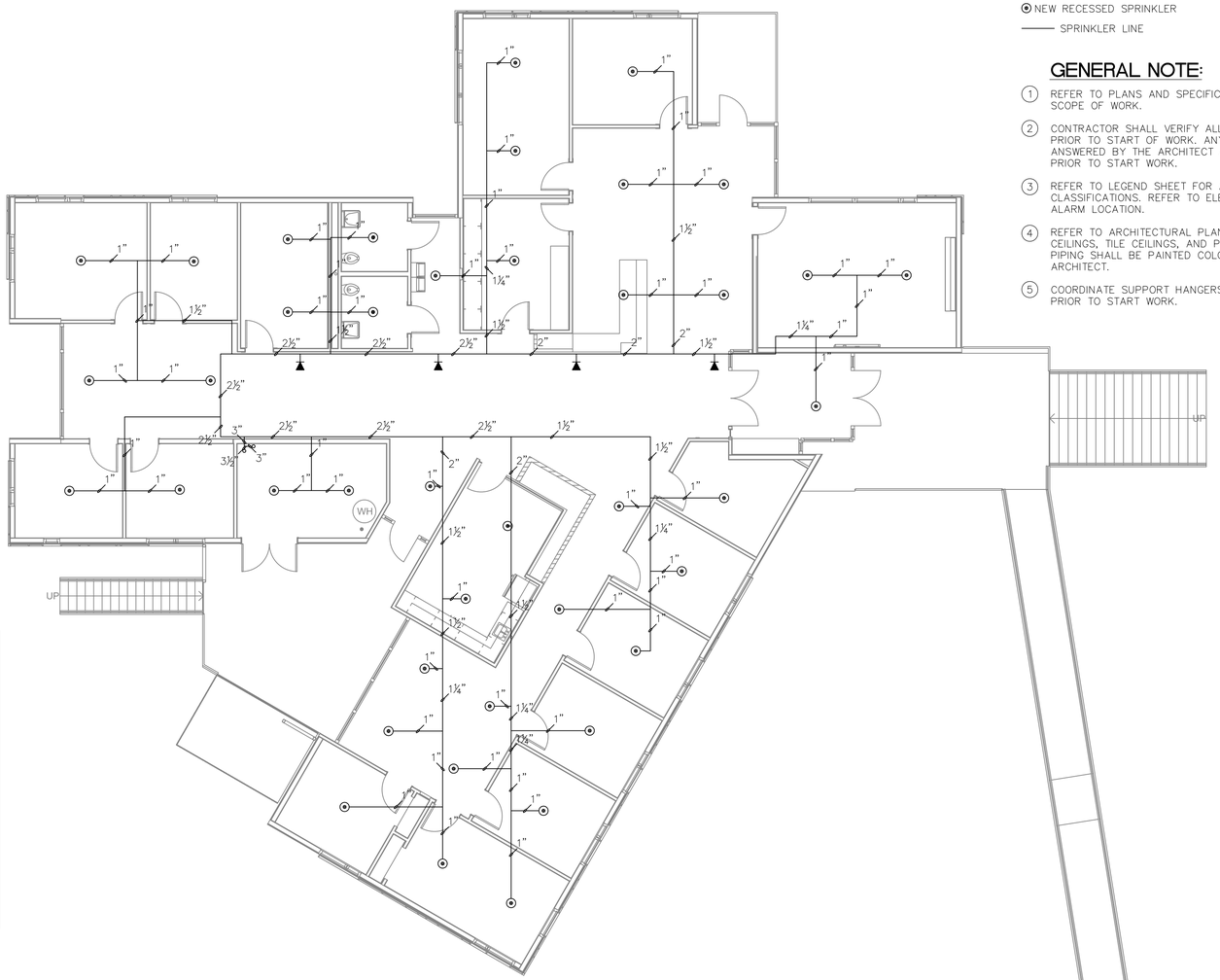
HANGER DISTANCE		
PIPE	SPAN DISTANCE	ROD DIA SIZE
1"	7'-0"	3/8"
1 1/4"	7'-0"	3/8"
1 1/2"	9'-0"	3/8"
2"	10'-0"	3/8"
2 1/2"	10'-0"	1/2"
3"	12'-0"	1/2"
4"	14'-0"	5/8"
6"	15'-0"	3/4"

NOTES: REF. NFPA 9.2.3.2.2 FOR STARTER SPRINKLERS AND 9.2.3.4 FOR UNSUPPORTED LENGTHS, PROVIDE RISER CLAMPS AT EXTERIOR WALL INSTALLATIONS AND SLEEVE WALL PENETRATIONS



4 FP2.0 UPRIGHT SPRINKLER HEAD DETAIL

NOT TO SCALE



SPRINKLER HEAD – SIDEWALL
NEW UPRIGHT SPRINKLER
NEW RECESSED SPRINKLER
SPRINKLER LINE

GENERAL NOTE:

1. REFER TO PLANS AND SPECIFICATIONS FOR ADDITIONAL SCOPE OF WORK.
2. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO START OF WORK. ANY QUESTIONS SHALL BE ANSWERED BY THE ARCHITECT AND PROJECT MANAGER PRIOR TO START WORK.
3. REFER TO LEGEND SHEET FOR AREA HAZARD CLASSIFICATIONS. REFER TO ELECTRICAL PLAN FOR FIRE ALARM LOCATION.
4. REFER TO ARCHITECTURAL PLANS FOR AREAS OF EXPOSED CEILINGS, TILE CEILINGS, AND PLASTER CEILINGS. EXPOSED PIPING SHALL BE PAINTED COLOR AS SELECTED BY THE ARCHITECT.
5. COORDINATE SUPPORT HANGERS WITH FRAMING LAYOUT PRIOR TO START WORK.

N

1 FP2.0 FIRE PROTECTION FLOOR PLAN

1/8"=1'-0"

95% SET

(NOT FOR CONSTRUCTION)
10/02/2014

STIRLING & WILBUR ENGINEERING GROUP
7085 SOUTH TAMIAMI TRAIL. SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: cad@stirlingwilbur.com

SEAL

TO THE BEST OF THE ARCHITECT'S OR ENGINEER'S KNOWLEDGE, SAID PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE CODES AND STANDARDS.

HOUSER WALKER ARCHITECTURE
1473 Spring St. NW
Atlanta, GA 30309
t. 404. 633. 4264
f. 404. 870. 7337
www.houserwalker.com

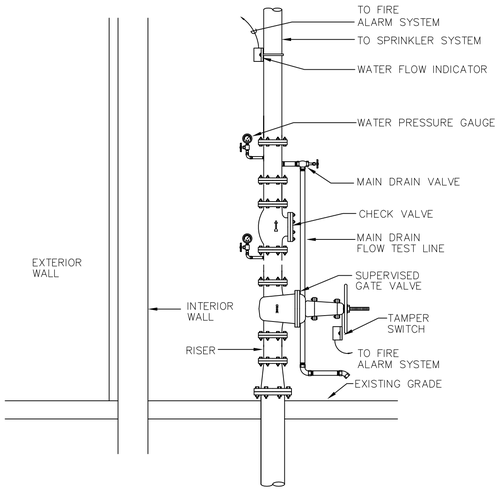
ATP ENGINEERING SOUTH, PL
BRADENTON, FLORIDA
ENGR. BUSINESS #8908
941-751-6485
www.atpengineeringsouth.com

ROBINSON PRESERVE EXPANSION OFFICE TREE HOUSE
MANATEE CO WA #18, IFAS #W1300220
MANATEE COUNTY, FLORIDA

DRAWING TITLE: FIRE PROTECTION FLOOR PLAN

DATE :	10/02/2014
DWG SCALE:	1/8" = 1'-0"
DRAWN BY:	DC
CHECKED BY:	JDC
SHEET No.:	FP2.0

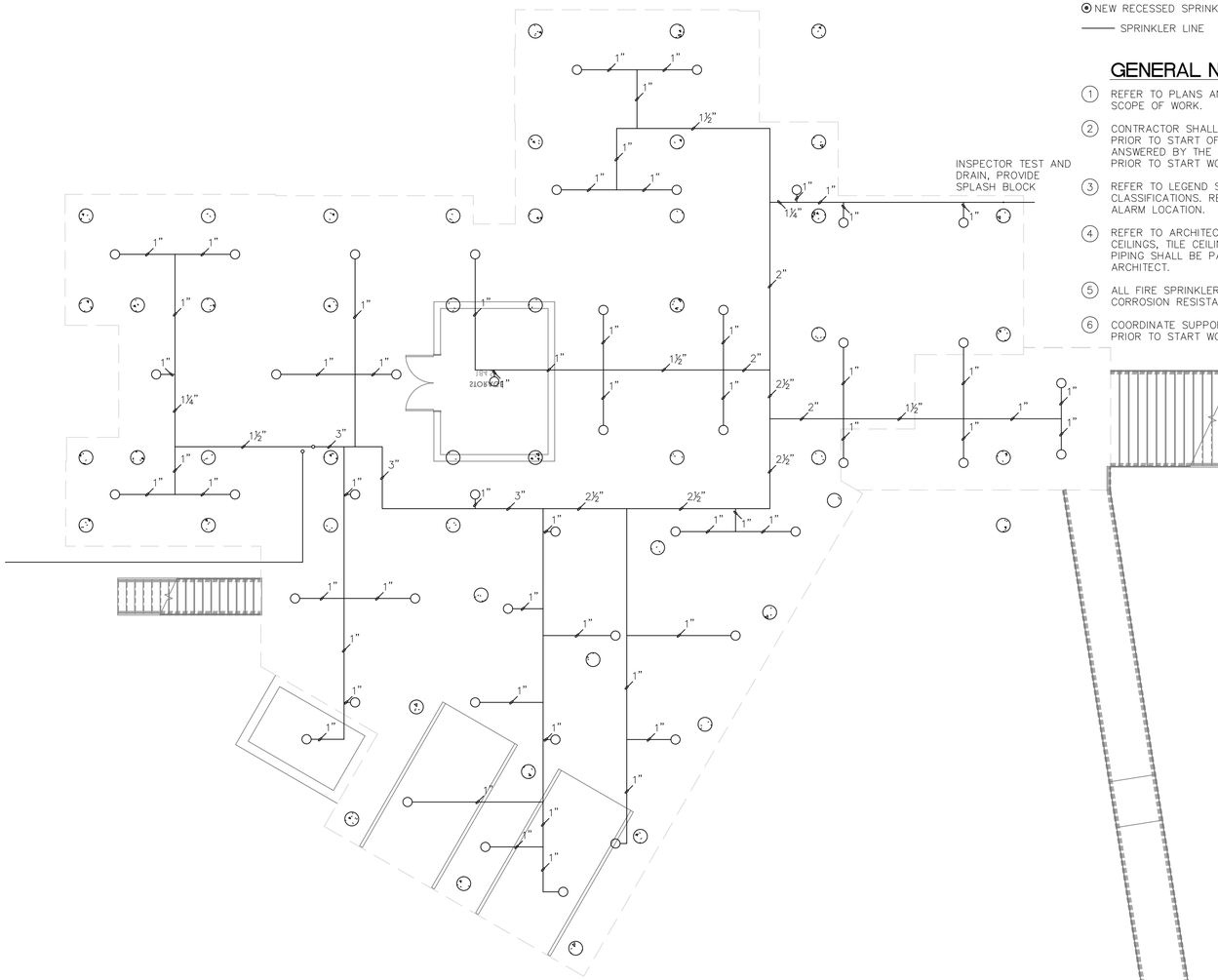
REV.#	DESCRIPTION	DATE



PROVIDE MIN CLEARANCE AROUND RISER. PLACE PIPE BOLLARDS IN FRONT OF RISER. PLACE SIGN FOR CLEARANCE/ NO PARKING .

2 / FP2.1 **SYSTEM RISER WITHOUT A TEE DETAIL**

NOT TO SCALE



- NEW UPRIGHT SPRINKLER
- NEW RECESSED SPRINKLER
- SPRINKLER LINE

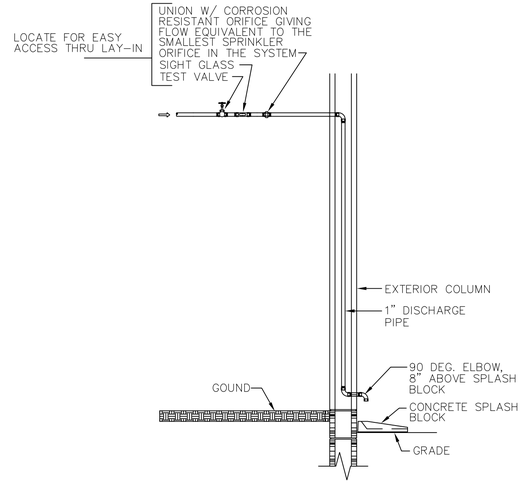
GENERAL NOTE:

1. REFER TO PLANS AND SPECIFICATIONS FOR ADDITIONAL SCOPE OF WORK.
2. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO START OF WORK. ANY QUESTIONS SHALL BE ANSWERED BY THE ARCHITECT AND PROJECT MANAGER PRIOR TO START WORK.
3. REFER TO LEGEND SHEET FOR AREA HAZARD CLASSIFICATIONS. REFER TO ELECTRICAL PLAN FOR FIRE ALARM LOCATION.
4. REFER TO ARCHITECTURAL PLANS FOR AREAS OF EXPOSED CEILINGS, TILE CEILINGS, AND PLASTER CEILINGS. EXPOSED PIPING SHALL BE PAINTED COLOR AS SELECTED BY THE ARCHITECT.
5. ALL FIRE SPRINKLERS UNDER THE FLOOR SHALL BE CORROSION RESISTANT.
6. COORDINATE SUPPORT HANGERS WITH FRAMING LAYOUT PRIOR TO START WORK.

N

1 / FP2.1 **FIRE PROTECTION FLOOR PLAN**

1/8"=1'-0"



3 / FP2.1 **INSPECTORS TEST AND DRAIN DETAIL**

NOT TO SCALE

95% SET

(NOT FOR CONSTRUCTION)
10/02/2014

STIRLING & WILBUR
ENGINEERING GROUP
7085 SOUTH TAMIAMI TRAIL. SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: cad@stirlingwilbur.com

HOUSER WALKER ARCHITECTURE
1473 Spring St. NW
Atlanta, GA 30309
t. 404. 633. 4264
f. 404. 870. 7337
www.houserwalker.com

ATP ENGINEERING SOUTH, PL
BRADENTON, FLORIDA
ENGR. BUSINESS #8908
941-751-6485
www.atpengineeringsouth.com

SEAL

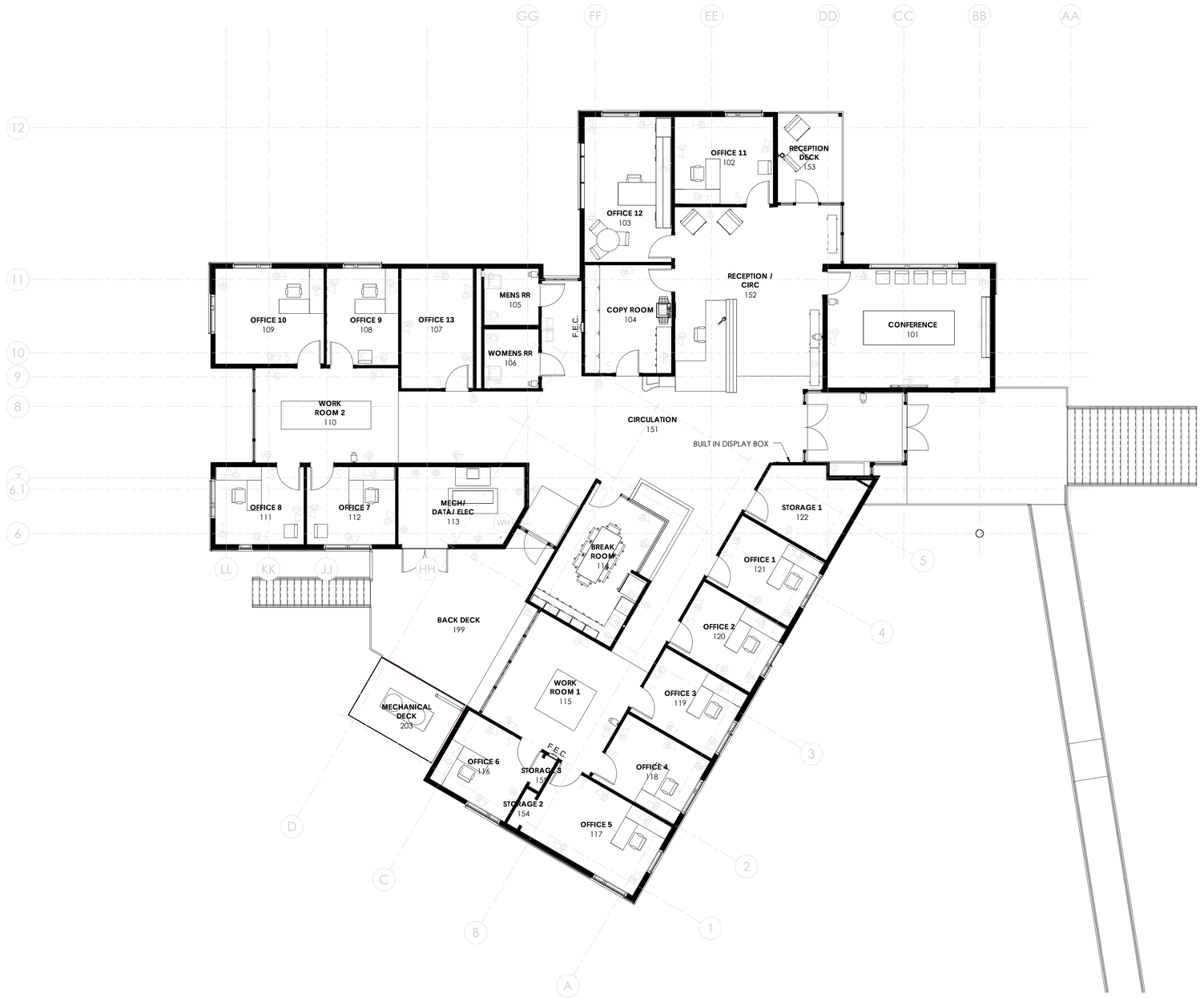
TO THE BEST OF THE ARCHITECT'S OR ENGINEER'S KNOWLEDGE, SAID PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE CODES AND STANDARDS.

ROBINSON PRESERVE EXPANSION OFFICE TREE HOUSE
MANATEE CO WA #18, IFAS #W1300220
MANATEE COUNTY, FLORIDA

REV.#	DESCRIPTION	DATE

DRAWING TITLE: FIRE PROTECTION FLOOR PLAN

DATE :	10/02/2014
DWG SCALE:	1/8" = 1'-0"
DRAWN BY:	DC
CHECKED BY:	JDC
SHEET No.:	FP2.1



01 FFE PLAN
1/8" = 1'-0"

2 4 8 16

MATERIAL KEYNOTES

GENERAL NOTES

SHEET SPECIFIC NOTES

HOUSER WALKER ARCHITECTURE
1819 PEACHTREE ROAD, NE STE 102
ATLANTA, GA 30309
t. 404 . 633 . 4264
f. 404 . 870 . 7337
www.houserwalker.com

STIRLING & WILBUR ENGINEERING GROUP
7085 SOUTH TAMIAMI TRAIL, SARASOTA, FL 34231
PHONE (941) 929-1552 FAX (941) 929-1553
email: cad@stirlingwilbur.com

SEAL

TO THE BEST OF THE ARCHITECT'S OR ENGINEER'S KNOWLEDGE, SAID PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE CODES AND STANDARDS.

ATP ENGINEERING SOUTH, PL
BRADENTON, FLORIDA
ENGR. BUSINESS #8908
941-751-6485
www.atpengineeringsouth.com

ROBINSON PRESERVE EXPANSION OFFICE
MANATEE CO WA #18, IFAS #W1300220
MANATEE COUNTY, FLORIDA

REV. #	DESCRIPTION	DATE

DRAWING TITLE: Main Level FFE Plan

DATE: 09/05/2014
DWG SCALE: 1/8" = 1'-0"
DRAWN BY: Author
CHECKED BY: Checker
SHEET No.: Q101

935 Construction Documents