# LAKE COUNTY

ADG Proj. # 842-10

EMERGENCY COMMUNICATIONS
AND OPERATIONS CENTER
425 W. Alfred Street
Tavares, FL 32778

BOARD OF COUNTY COMMISSIONERS
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District 2 - Sean Parks
District 3 - Jimmy Conner
District 4 - Leslie Campione, Vice Chairman
District 5 - Welton G. Cadwell
County Manager - Darren Gray

PERMIT CD SUBMITTAL

-FOR CENTRAL ENERGY PLANT INFORMATION SEE "CENTRAL ENERGY PLANT WIND LOAD RENOVATIONS"

## OWNER

Lake County Board of County Commissioners
Department of Facilities Management And Development
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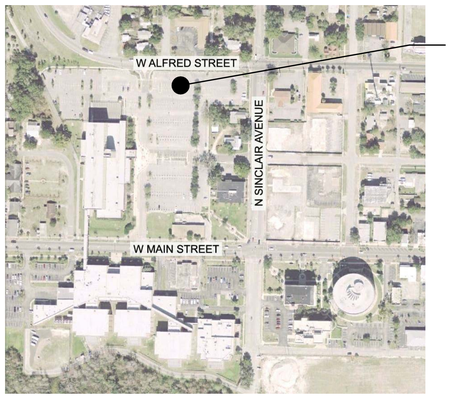
## LOCATION

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NOVEMBER 9, 2011

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LAKE COUNTY
FLORIDA
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**LAKE COUNTY BUILDING DIVISION**
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Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:

**FIRE SPRINKLER SYSTEM**
Plan Submittals And Permits Required Before Modification To And Or Installation Of:
Call 352-343-9653 If You Have Questions

**FIRE ALARM SYSTEM**
Plan Submittals And Permits Required Before Modification To And Or Installation Of:
Call 352-343-9653 If You Have Questions

**FIRE ALARM MONITORING**
Plan Submittals And Permits Required Before Modification To And Or Installation Of:
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**FIRE HYDRANTS**
Plan Submittals And Permits Required Before Modification To And Or Installation Of:
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**FUEL OR OIL TANKS**
Plan Submittals And Permits Required Before Modification To And Or Installation Of:
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**GENERATOR**
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**FIRE SUPPRESSION SYSTEM**
Plan Submittals And Permits Required Before Modification To And Or Installation Of:
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**FIRE MAINS**
Plan Submittals And Permits Required Before Modification To And Or Installation Of:
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# PROJECT CRITERIA - LAKE COUNTY EMERGENCY COMMUNICATIONS & OPERATIONS FACILITY

## WIND DESIGN CRITERIA

THE BUILDING IS DESIGNED IN ACCORDANCE WITH CHAPTER 16 OF THE FLORIDA BUILDING CODE, 2007 ED (w/2009 REVISIONS) AND THE AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE) STANDARD 7, MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES AS FOLLOWS:

**Design Wind Speed = 160 miles per hour (3 second gust)**
**Wind Importance Factor, *I* = 1.00**
**Exposure Category = C**
**Directionality Factor, *Kd* = 1.00**

**Internal Pressure Coefficient, *GCpi* = +/- 0.18"**

ALL COMPONENTS AND CLADDING ASSEMBLIES NECESSARY TO MAINTAIN A STRUCTURALLY ENCLOSED CONDITION AND PREVENT RAINWATER INTRUSION SHALL BE DESIGNED TO MEET THE WIND DESIGN CRITERIA.

## WINDBORNE DEBRIS IMPACT CRITERIA

THE BUILDING SHALL MEET THE HURRICANE WINDBORNE DEBRIS IMPACT CRITERIA SPECIFIED IN THE DEPARTMENT OF ENERGY'S (DOE) STANDARD, *Natural Phenomena Hazards Design and Evaluation Criteria*, DOE-STD-1020-2002 AS FOLLOWS:

**Missile size = 2x4 Lumber plank**
**Missile Weight = 15 pounds**
**Missile Speed = 50 mph striking end-on and normal to assembly surface**

## FBC 2007 (WITH 2009 REVISIONS) - NEW CONSTRUCTION

| | | |
|---|---|---|
| OCCUPANCY CLASSIFICATION | MIXED: BUSINESS / ASSEMBLY A-3 / STORAGE | |
| OCCUPANCY SEPARATION REQUIREMENT * (INCLUDES EXCEPTION FOR SPRINKLER - 302.3.2) | 1 HOUR * | 1 HOUR * |
| TYPE OF CONSTRUCTION | | TYPE II-B |
| PROTECTED | | NO |
| SPRINKLERED | | YES ■ NO ☐ |
| MAXIMUM ALLOWABLE HEIGHT = 45'-0" | ACTUAL HEIGHT = 42'-0" | |

| | | |
|---|---|---|
| TOTAL BUILDING AREA | FIRST FLOOR | 14025 SF |
| | SECOND FLOOR | 14470 SF |
| | Grand total | 28495 SF |

## AREA AND HEIGHT LIMITATIONS

PER SECTION 503 / FBC 2007

| | REQUIRED | | | PROVIDED | |
|---|---|---|---|---|---|
| | ASSEMBLY | BUSINESS | STORAGE | | |
| **NUMBER OF STORIES** | 2 | 4 | 3 | 2 (32'-8") | |
| **BUILDING AREA (TOTAL ASSEMBLY)** | 9,500 S.F./FLOOR | | | FIRST FLOOR | 4178 SF |
| | | | | SECOND FLOOR | 4317 SF |
| **BUILDING AREA (TOTAL BUSINESS)** | 23,000 S.F./FLOOR | | | FIRST FLOOR | 7638 SF |
| | | | | SECOND FLOOR | 8121 SF |
| **BUILDING AREA (TOTAL STORAGE)** | 17,500 S.F./FLOOR | | | FIRST FLOOR | 1444 SF |
| | | | | SECOND FLOOR | 1051 SF |

**TOTAL BUILDING AREA**
- PER 508.3.3.2: CALCULATED FOR EACH OCCUPANCY DIVIDED BY ALLOWABLE AREA (SUM MUST BE LESS THAN 1.0)

| 1ST FLOOR | | 2ND FLOOR | |
|---|---|---|---|
| ASSEMBLY RATIO | = .44 | ASSEMBLY RATIO | = .46 |
| BUSINESS RATIO | = .34 | BUSINESS RATIO | = .36 |
| STORAGE RATIO | = .09 | STORAGE RATIO | = .07 |
| TOTAL RATIO | = .87 | TOTAL RATIO | = .89 |

## OCCUPANT LOAD

PER TABLE 1004.1.1 / FBC 2007

| | | |
|---|---|---|
| **1ST FLOOR** | | |
| ASSEMBLY | 15 S.F. / PERSON | 4178 SF / 15 = 278 |
| BUSINESS | 100 S.F. / PERSON | 7638 SF / 100 = 77 |
| STORAGE | 300 S.F. / PERSON | 1444 SF / 300 = 5 |
| | **1ST FLOOR TOTAL** | **360** |
| **2ND FLOOR** | | |
| ASSEMBLY | 15 S.F. / PERSON | 4317 SF / 15 = 288 |
| BUSINESS | 100 S.F. / PERSON | 8121 SF / 100 = 82 |
| STORAGE | 300 S.F. / PERSON | 1051 SF / 300 = 4 |
| | **2ND FLOOR TOTAL** | **374** |
| **TOTAL OCCUPANT LOAD** | | **360 + 377 = 737** |

## EGRESS REQUIREMENTS

PER TABLE 1005.1 / FBC 2007

| | REQUIRED | PROVIDED |
|---|---|---|
| MAXIMUM TRAVEL DISTANCE TO AN EXIT (PER TABLE 1016.1 EXIT ACCESS TRAVEL DISTANCE AND MOST STRINGENT OCCUPANCY - ASSEMBLY / SPRINKLED) | 250 FEET | SEE LIFE SAFETY PLAN |
| MAXIMUM COMMEN PATH OF TRAVEL (PER MOST STRINGENT OCCUPANCY - ASSEMBLY / SPRINKLED) | 75 FEET | 3 |
| MINIMUM NUMBER OF EXITS (PER SECTION 1015.1 EXIT OR EXIT ACCESS DOORWAYS REQUIRED) | 3 (1) | 4 (1) |
| MINIMUM STAIRWAY WIDTH (.3 INCHES/OCCUPANT) ( 374 OCCUPANTS x .3 = 112.2" ) 9'-5" / 2 STAIRS | = 4'-9" MINIMUM | 5'-0" EACH STAIR |
| 1ST FLOOR MINIMUM CORRIDOR WIDTH (.2 INCHES/OCCUPANT) ( 360 OCCUPANTS x .2 = 72" ) | = 6'-0" MINIMUM | 6'-4" |
| 2ND FLOOR MINIMUM CORRIDOR WIDTH (.2 INCHES/OCCUPANT) ( 374 OCCUPANTS x .2 = 74.8" ) | = 6'-3" MINIMUM | 6'-4" |
| COMMON PATH OF TRAVEL (PER SECTION 1014.3 COMMON PATH OF EGRESS TRAVEL) | 100' (EXCEPTION 1) | --- |
| DEAD END CORRIDOR (PER SECTION 1017.3 DEAD ENDS: EXCEPTION 2) | 50 FEET | --- |

## FIRE PROTECTION REQUIREMENTS:

PER CHAPTERS 5,6,7 AND 10 / FBC 2007

| | REQUIRED | PROVIDED |
|---|---|---|
| FIRE WALLS - AREA SEPERATION - ASSEMBLY / BUISINESS (PER TABLE 508.3.3: REQUIRED SEPARATION OF OCCUPANCIES) | 1 HOUR | 1 HOUR |
| INTERIOR BEARING WALLS, COLUMNS, BEAMS, GIRDERS, TRUSSES, FLOOR CONSTRUCTION, EXTERIOR BEARING WALLS (PER TABLE 601: FIRE-RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS) | NON RATED | NON RATED |
| SMOKE PARTITIONS (PER SECTION 710.3) | NON RATED | NON RATED |
| CORRIDOR (PER TABLE 1017.1: CORRIDOR FIRE-RESISTANCE RATING) | 1 HOUR | 1 HOUR |
| VERTICAL EXIT ENCLOSURES (PER SECTION 1020.1) | 1 HOUR | 1 HOUR |
| VERTICAL SHAFT ENCLOSURES (PER SECTION 707) | NON RATED | NON RATED |

## PLUMBING

PER TABLE 403.1 / FBC 2007: PLUMBING

| | REQUIRED | | | | PROVIDED | | |
|---|---|---|---|---|---|---|---|
| | ASSEMBLY (566 OCCUPANTS) | BUSINESS (159 OCCUPANTS) | STORAGE (9 OCCUPANTS) | TOTAL REQUIRED | | | |
| FIXTURE PER PERSON | MEN / WOMEN | MEN & WOMEN | MEN & WOMEN | | MEN | WOMEN | UNISEX |
| WATER CLOSETS | 5 / 3 | 4 | 1 | 13 | 8 | 10 | 1 |
| LAVATORIES | 3 | 3 | 1 | 7 | 5 | 5 | 1 |
| UTILITY SINK, MOP SINK | 1 | --- | 1 | 2 | 2 | | |
| URINALS | NOT TO EXCEED 67% OF REQUIRED WATER CLOSETS | NOT TO EXCEED 50% OF REQUIRED WATER CLOSETS | NOT TO EXCEED 50% OF REQUIRED WATER CLOSETS | --- | 4 | | |
| DRINKING FOUNTAIN | 1 | 2 | 1 | 4 | 2 (DOUBLE FOUNTAINS) | | |

### VOIDS OR GAPS

A fire barrier wall shall extend from the foundation or floor below to the underside of the roof or floor deck above.

Any voids or gaps created by the meeting of the wall and floor below and the underside of the roof or floor deck above shall be filled with an approved material with a fire resistance rating at least equal to that of the fire wall.

LAKE COUNTY
FLORIDA
**Approved Plans - Commercial**
**LAKE COUNTY BUILDING DIVISION**
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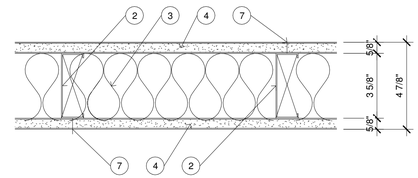
Plans reviewed for code compliance and shall be kept on site
Permit # 2011110212
Building: BLD31 12/29/11
Electric: ADM01 12/29/11
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:




1. FLOOR AND CEILING RUNNERS - (NOT SHOWN) - 3 5/8" CHANNEL SHAPED, FABRICATED FROM 25 GA. CORROSION-PROTECTED STEEL, WITH MIN. 1" LONG LEGS, ATTACHED TO FLOOR AND CEILING WITH FASTENERS 24" O.C. MAX. SEAL THE PARTITION PERIMETER WITH A 1/4" MIN. ROUND BEAD OF ACOUSTICAL SEALANT. SEAL AROUND ALL CUTOUTS.
2. STEEL STUDS - 3 5/8" CHANNEL SHAPED, FABRICATED FROM 25 GA. CORROSION-PROTECTED STEEL, MIN. 1 1/4" FLANGES AND 1/4" RETURN, SPACED 16" O.C., EXTEND TO DECK.
3. BATTS AND BLANKETS - FIBERGLASS BATTS, FRICTION FITTED BETWEEN STUDS AND RUNNERS. MIN. 3 1/2" NOMINAL THICKNESS.
4. GYPSUM WALLBOARD - 5/8" GYPSUM PANELS (TYPE "X") WITH BEVELED, SQUARE OR TAPERED EDGES, APPLIED VERTICALLY OR HORIZONTALLY. VERTICAL JOINTS CENTERED OVER STUDS AND STAGGERED ONE STUD CAVITY ON OPPOSITE SIDES OF STUDS. HORIZONTAL EDGE JOINTS AND HORIZONTAL BUTT JOINTS ON OPPOSITE SIDES OF STUDS STAGGERED A MIN. OF 12", EXTEND TO DECK.
5. FASTENERS - (NOT SHOWN) - TYPE S OR S-12 SELF-DRILLING, SELF-TAPPING STEEL SCREWS USED TO ATTACH PANELS TO STUDS (ITEM 2), 1" LONG, SPACED 8" O.C. WHEN PANELS ARE APPLIED HORIZONTALLY, OR 12" O.C. WHEN PANELS ARE APPLIED VERTICALLY.
6. NOT USED
7. JOINT TAPE AND COMPOUND - VINYL OR CASEIN, DRY OR PREMIXED JOINT COMPOUND APPLIED IN THREE COATS TO JOINTS AND SCREW HEADS OF OUTER LAYERS. PAPER TAPE, NOM 2" WIDE, EMBEDDED IN FIRST LAYER OF COMPOUND OVER ALL JOINTS OF OUTER PANELS.

UL DESIGN # U419
NON-BEARING WALL
ONE-HOUR RATING
STC RATING 48

1 1-Hour Rated Partition
3" = 1'-0"

STATE OF FLORIDA
KEVIN JOHN RATIGAN
10603
REGISTERED ARCHITECT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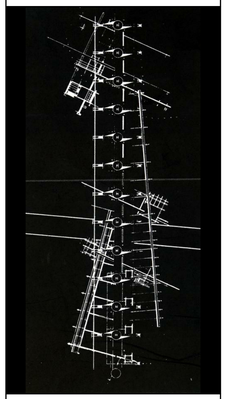

**Lake County Emergency Communications & Operations Center**

Tavares, Florida

**PERMIT CD SUBMITTAL**


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• revisions/addenda

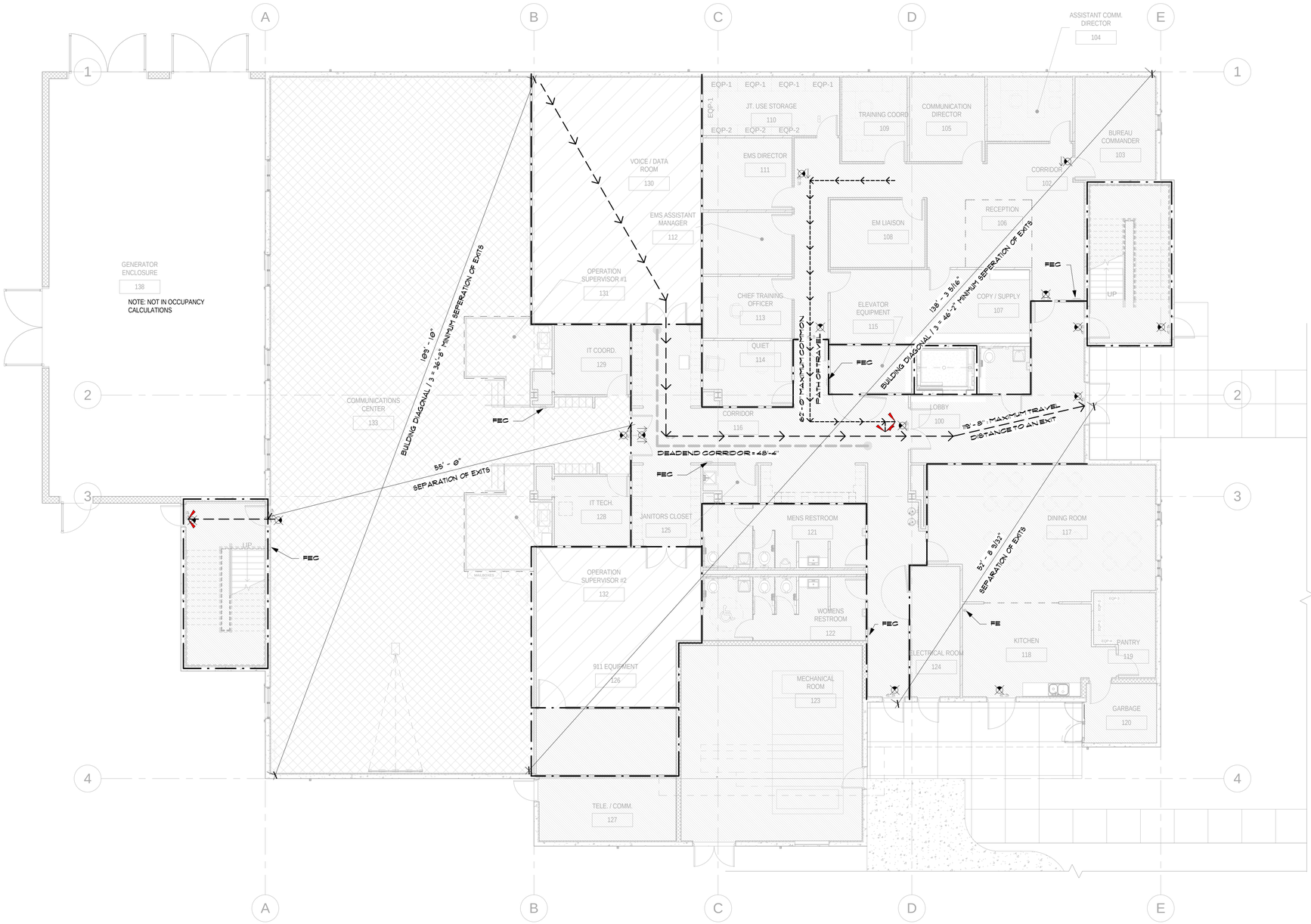
| Number | Description | Date Issued |
|---|---|---|
| 1 | ADDENDUM #1 | 12.16.11 |

• sheet title
PROJECT CRITERIA & UL DETAILS

• scale: 3" = 1'-0"
• drawn: DT, AH
• checked: SG, SB
• approved: KR, AIA
• date: 11/09/11

• project no. 842-10

• sheet no. G-0.01




1 01G First Floor - Life Safety Plan
1/8" = 1'-0"

N

## WALL AND SYMBOL LEGEND

- 1 HOUR FIRE RATED WALL
- MAXIMUM TRAVEL DISTANCE TO AN EXIT
- MAXIMUM COMMON PATH OF TRAVEL
- DEADEND CORRIDOR
- FIRE EXTINGUISHER CABINET (SEMI-RECESSED)
- FIRE EXTINGUISHER

## DEPARTMENT LEGEND

(FIRST FLOOR)

- Assembly
- Business
- Storage

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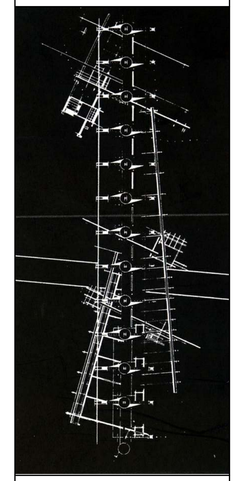

# Lake County Emergency Communications & Operations Center

Tavares, Florida

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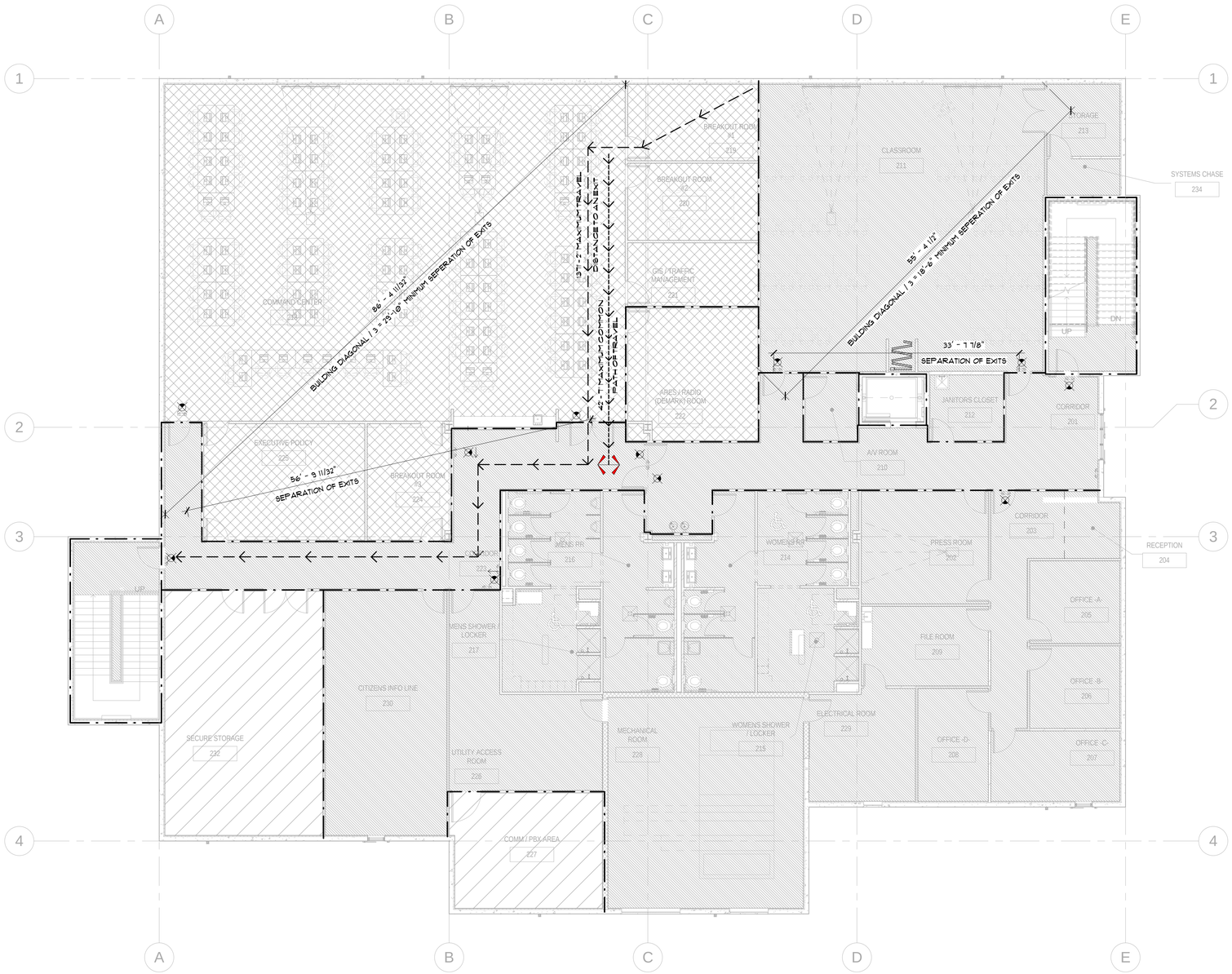
- revisions

- sheet title
  FIRST FLOOR - LIFE SAFETY PLAN
- scale: 1/8" = 1'-0"
- drawn: DT, AH
- checked: SG, SB
- approved: KR, AIA
- date: 11/09/11
- project no. 842-10
- sheet no. G-1.01




1 02G - Second Floor - Life Safety Plan

1/8" = 1'-0"

N

## WALL AND SYMBOL LEGEND

- 1 HOUR FIRE RATED WALL
- MAXIMUM TRAVEL DISTANCE TO AN EXIT
- MAXIMUM COMMON PATH OF TRAVEL
- DEADEND CORRIDOR
- FIRE EXTINGUISHER CABINET (SEMI-RECESSED)
- FIRE EXTINGUISHER

## DEPARTMENT LEGEND

(FIRST FLOOR)

- Assembly
- Business
- Storage

LAKE COUNTY
FLORIDA

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**LAKE COUNTY BUILDING DIVISION**
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Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:


Architects Design Group

Architects and Planners
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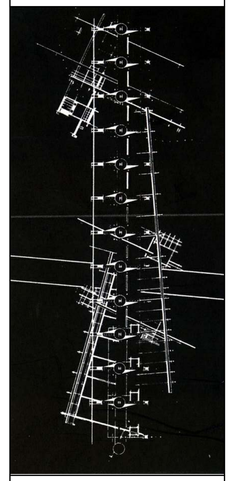

**Lake County Emergency Communications & Operations Center**

Tavares, Florida

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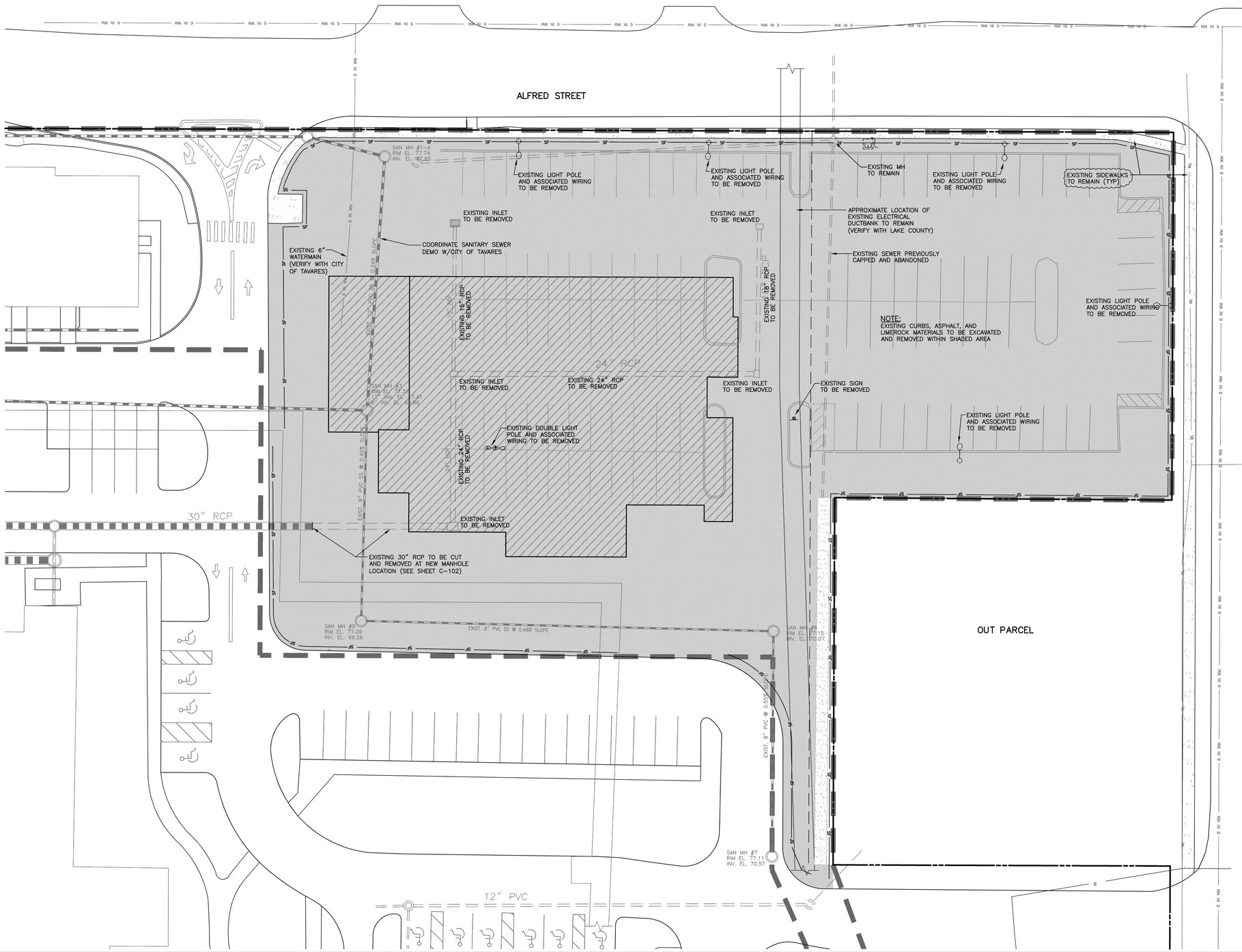
- revisions

- sheet title
  SECOND FLOOR - LIFE SAFETY PLAN
- scale: 1/8" = 1'-0"
- drawn: DT, AH
- checked: SG, SB
- approved: KR, AIA
- date: 11/09/11
- project no. 842-10
- sheet no. G-1.02




N

SCALE: 1"=20'

LAKE COUNTY
FLORIDA

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Fire: FIR08 12/29/11
Notes:

DEMOLITION NOTES:

1. UTILITIES CAN BE CAPPED AND ABANDONED IN-PLACE IF NOT CONFLICTING WITH NEW WORK. LINES ABANDONED SHALL BE CAPPED AND GROUT FILLED.
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CONFIRM THE TREES TO BE DEMOLISHED, TRANSPLANTED, SAVED AND PROTECTED.
3. IF AT ANY TIME DURING THE COURSE OF THE WORK UTILITY SERVICES TO OFF SITE AREAS IS INTERRUPTED, THE CONTRACTOR SHALL STOP WORK IMMEDIATELY AND MAKE THE NECESSARY REPAIRS. THE CONTRACTOR IS RESPONSIBLE FOR REPAIR AND REPLACEMENT OF ALL DAMAGED UTILITIES.
4. CALL SUNSHINE 1-800-432-4770 FOR UTILITY LOCATES PRIOR TO ANY WORK ON THE SITE.
5. DURING THE DEMOLITION PROCESS CONTRACTOR SHALL TAKE PRECAUTIONS NECESSARY TO ASSURE DIRT AND DEBRIS IS NOT DEPOSITED ON CITY STREETS, SIDEWALKS OR CITY STORM DRAINS.
6. PRIOR TO THE START OF CONSTRUCTION, THE OWNER HAS THE RIGHTS TO REMOVE ANY OF THE EXISTING PLANT MATERIAL FOR THEIR USE ELSEWHERE. ALL REMAINING PLANT MATERIAL SHALL BE DEMOLISHED AND REMOVED FROM THE SITE.

LEGEND

- PROPERTY LINE / LIMITS OF WORK
- REMOVE CONCRETE CURB, ASPHALT PAVING AND LIMEROCK
- PROPOSED BUILDING LOCATION
- SF — PROPOSED SILT FENCE


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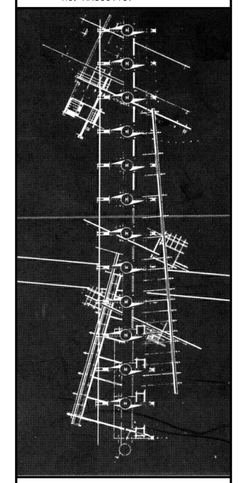

# Lake County Emergency Communications & Operations Center

Tavares, Florida

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revisions/addenda

| Number | Description | Date Issued |
|---|---|---|
| 1 | ADDENDUM #1 | 12.16.11 |
| 2 | ADDENDUM #2 | 12.22.11 |

- sheet title: DEMOLITION PLAN
- scale: 1" = 20'
- drawn: JRH
- checked: DWS
- approved: DWS
- date: 11/29/11
- project no. 842-10
- sheet no. C-101

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N

SCALE: 1"=20'

ALFRED STREET

SAN MH #1
RIM EL. 77.72
E. INV. EL. 67.55
W. INV. EL. 67.45

CORE EXISTING MH FOR 12" PVC SS @ INV EL 67.65

EXISTING SANITARY MANHOLE
RIM EL. 77.49
N. INV. 72.29
W. INV. 72.19
S. INV. PLUGGED

PROPERTY LINE

PROPOSED SSMH-103
RIM EL 77.72
E INV EL IN 67.57
S INV EL OUT 67.57

PROPOSED 37.89' OF 12" PVC SS AT 0.22% SLOPE

EXISTING SSMH TO REMAIN

60.00'
STANDOFF

APPROXIMATE LOCATION OF EXISTING ELECTRICAL DUCTBANK

EXISTING SIDEWALKS TO REMAIN (TYP)

NEW FDOT TYPE "C"
GRATE EL 77.25
E. INV. 71.31
S. INV. 71.31

103.96' OF 18" RCP @ 0.14% SLOPE

NEW FDOT TYPE "C"
GRATE EL 75.79
W. INV. 71.46
S. INV. 73.79

CONNECT TO EXISTING 6" WM WITH PROPOSED 6" GATE VALVE & TEE (VERIFY EXISTING WITH CITY OF TAVARES)

17' OF 12" HDPE @ 9.6% SLOPE

PROPOSED SIDEWALK TO TIE INTO EXISTING SIDEWALK AND TRANSITION AS REQUIRED.

6" C.O.

6" C.O.

PROPOSED 6" 90° BEND

EXISTING FIRE HYDRANT

57' OF 12" HDPE @ 1.0% SLOPE

50' OF 12" HDPE @ 1.1% SLOPE

CONNECT 6" PVC STORM TO DOWNSPOUT AT BUILDING (TYP)

YARD DRAIN #3
GRATE EL 77.94
INV EL 75.43

PROPOSED 83.04' OF 12" PVC SS AT 0.22% SLOPE

GENERATOR ENCLOSURE

PLACE 6" TOP SOIL AND GRADE TO DRAIN THEN SOD AREA WITH ARGENTINE BAHIA
(SEE LANDSCAPE PLAN)
(SEE GRADING PLAN SH C-103)

REMOVE EXISTING 6" WM CLEAR OF FOOTPRINT

EXISTING SS TO BE REMOVED

PROPOSED 124.48' OF 24" RCP @ 0.11% SLOPE

PROPOSED SSMH-102
RIM EL 77.92
N INV EL IN 67.38
S INV EL IN 68.55
W INV EL OUT 67.34

SAN MH #3
RIM EL. 77.31
12" INV. EL. 67.41
8" INV. EL. 68.86

EXISTING 12" PVC TO REMAIN

EXISTING SSMH TO BE REMOVED

EMERGENCY OPERATIONS & COMMUNICATIONS FACILITY
FFE 78.50

PUBLIC ENTRANCE

PROPOSED CONCRETE SIDEWALK (TYP) (SEE DET SH C-105)

PROPOSED CONCRETE SIDEWALK (TYP) (SEE DET SH C-105)

FIRE RISER CONNECTION

EXISTING SS TO BE REMOVED

NOTE:
SEE SHEETS C-104 AND C-105 FOR TYPICAL DETAILS

PROPOSED 6" 90° BEND

PROPOSED 4" 90° BEND

PROPOSED FIRE HYD ASSY W/(1)-6" TEE & (1)-6" G.V.

EXISTING MANHOLE TO REMAIN
TOP EL. 76.94
E. INV. IN 71.14
S. INV. IN 70.64
W. INV. OUT 71.91

NEW FDOT TYPE "D"
GRATE EL. 77.00
W. INV. 71.17
N. INV. 71.17
S. INV. 73.24

PROPOSED 66.18' OF 8" PVC SS AT 0.45% SLOPE

CONNECT 6" PVC STORM TO DOWNSPOUT AT BUILDING (TYP)

PROPOSED SS GRINDER STATION
RIM EL 78.00
W INV EL 73.25 (6" PVC)
E INV EL 73.25 (4" PVC)
(SEE EONE DETAILS ON SH C-105A)

STAFF ENTRANCE

14.48'

22' OF 12" HDPE @ 0.14% SLOPE

2" COND DRAIN

(2)-2" 45° BENDS

3" COND DRAIN

3"x4" WYE

4" SS

TWO WAY ECO

ECO

2"x6" WYE

164' OF 12" HDPE @ 0.14% SLOPE

YARD DRAIN #1
GRATE EL 76.26
INV EL 73.50

YARD DRAIN #2
GRATE EL 75.71
INV EL 73.27

NOTE:
CONTRACTOR TO VERIFY LOCATION OF CHILLED WATER LINES AND PROVIDE SEPARATION TO PROPOSED STORM PIPES AS REQUIRED.

APPROXIMATE LOCATION OF CHILLED WATER LINES

20,000 GAL WW TANK
(SEE SH C-105A)

30'

37.73'

4" FIRE RPZ BFP & METER

3" POTABLE RPZ BFP & METER

6" FIRE LINE

PROPOSED 6" THICK 3,000 PSI CONCRETE WITH 6x6/W1.4xW1.4 WWF

PROPOSED 4"X3" TEE

4" WM

CORE EXISTING MH FOR 8" PVC SS @ INV EL 69.16 (VERIFY 0.1' BELOW EAST INV IN)

PROPOSED 25.56' OF 8" PVC SS AT 0.45% SLOPE

PROPOSED SSMH-101
RIM EL 77.00
E INV EL IN 69.04
N INV EL OUT 68.94

PROPOSED 6" 45° BENDS

PROPOSED 6"X4" TEE W/4" GATE VALVE

PROPOSED 4"X4" TEE W/4" GATE VALVE

PROPOSED 6"X4" 90° BEND W/4" GATE VALVE

PROPOSED 6' TRANSITION TO END CURB

(1)-#5 REINF. W/3" CLR. AT PAVEMENT JOINT

PROPOSED 4"x3" 90° BEND W/4" GATE VALVE

JUDICIAL CENTER EXPANSION (BY OTHERS)

PROPOSED 8.5' TRANSITION TO F-CURB

OUT PARCEL

APPROXIMATE LOCATION OF EXISTING ELECTRICAL DUCTBANK

APPROXIMATE LOCATION OF EXISTING SIDEWALK TO REMAIN

EXISTING 8"X6" TEE W/6" GATE VALVE

EXISTING 8"X4" TEE W/4" GATE VALVE

EXISTING 8"X6" TEE W/6" GATE VALVE

PROPOSED 6" 90° BEND

PROPOSED 4" 90° BEND

PROPOSED 6" 90° BEND

PROPOSED 4" 90° BEND

EXISTING FIRE HYDRANT

SINCLAIR AVENUE

PROPERTY LINE

PROPOSED SIDEWALK CURB RAMP (SEE DET SH C-105A)

NOTE:
PROPOSED SIDEWALK TIE-INS 12:1 SLOPE MAX

PROPOSED WHITE THERMOPLASTIC CROSSWALK 24" WIDE @ 5'-0" O.C.

PROPOSED SIDEWALK CURB RAMP (SEE DET SH C-105A)

JUDICIAL CENTER EXPANSION (BY OTHERS)

12" PVC

ING JUDICIAL
'ACILITY

NG CENTRAL
RGY PLANT
E 77.80

NOTES:
1) FLOODPLAIN INFORMATION: PROJECT LIES WITHIN "ZONE X" (AREAS DETERMINED TO BE OUTSIDE THE 500YR FLOODPLAIN) AS PER THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP NUMBER 12069C0361D, PANEL 361 OF 725, EFFECTIVE JULY 3, 2002. FFE AT EOC EXCEEDS THE 500YR FLOOD ELEVATION +2 FEET.
2) BACKUP POTABLE WATER IS PROVIDED BY 2 INDEPENDENT WATER MAINS.

LEGEND

- PROPERTY LINE
- LIMITS OF WORK
- 6 IN WM — EXISTING 6IN WATERMAIN
- 8 IN WM — EXISTING 8IN WATERMAIN
- PROPOSED PIPE
- PROPOSED MANHOLE
- PROPOSED YARD DRAIN
- PROPOSED INLET
- SF — PROPOSED SILT FENCE

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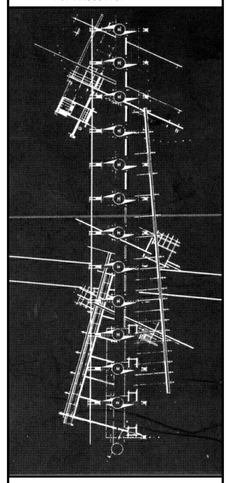

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Tavares, Florida

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| 1 | ADDENDUM #1 | 12.16.11 |
| 2 | ADDENDUM #2 | 12.22.11 |

• sheet title
SITE PLAN

• scale: 1" = 20'
• drawn: JRH
• checked: DWS
• approved: DWS
• date: 11/29/11
• project no. 842-10
• sheet no. C-102

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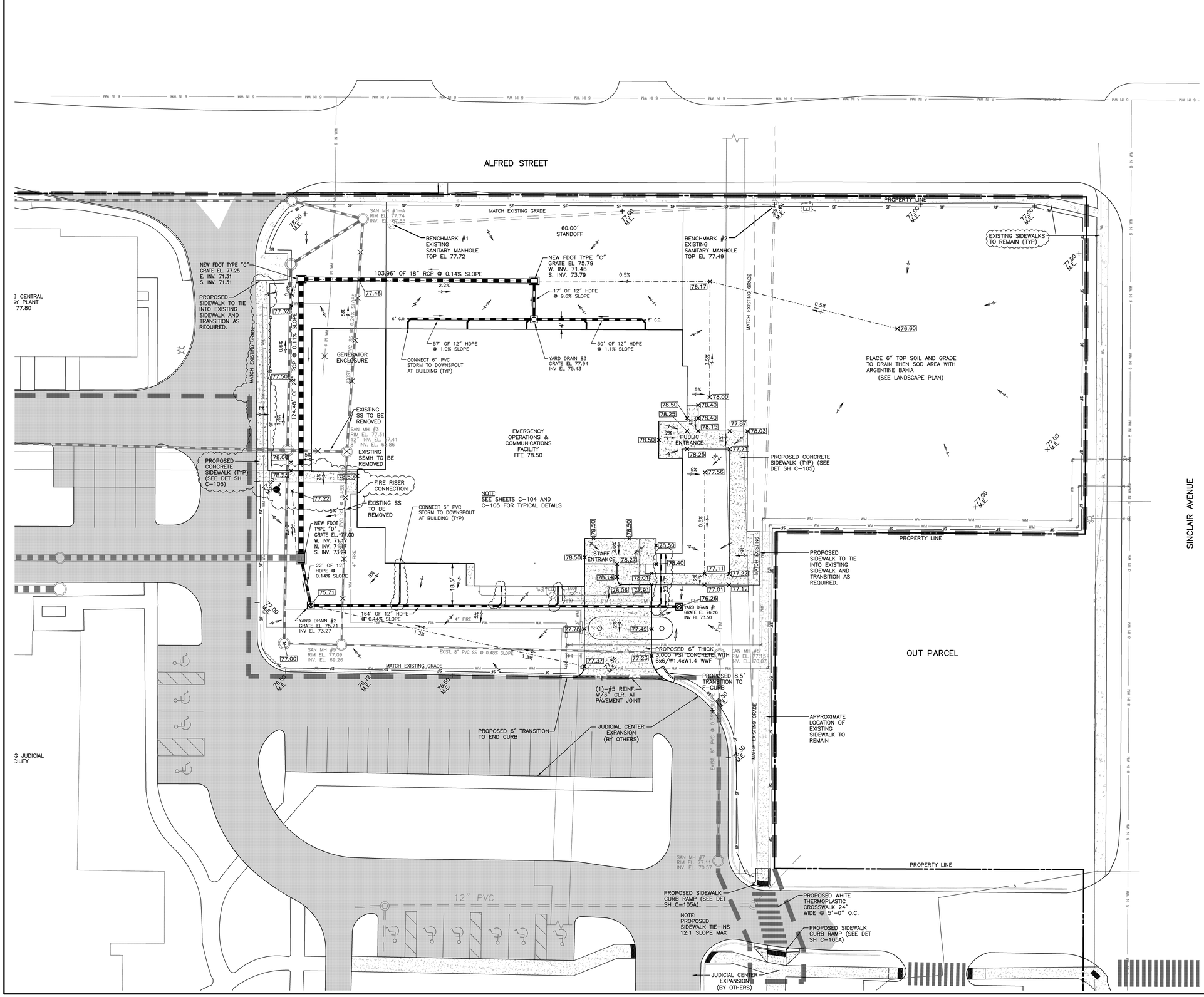


N

SCALE: 1"=20'

LAKE COUNTY
FLORIDA

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Notes:

LEGEND

- PROPERTY LINE
- LIMITS OF WORK
- EXISTING 6IN WATERMAIN
- EXISTING 8IN WATERMAIN
- PROPOSED PIPE
- PROPOSED MANHOLE
- PROPOSED YARD DRAIN
- PROPOSED INLET
- FINISHED GRADE FLOW DIRECTION
- FINISHED GRADE SPOT ELEVATION
- MATCH EXISTING SPOT ELEVATION
- FINISHED GRADE FLOW PATH
- PROPOSED SILT FENCE


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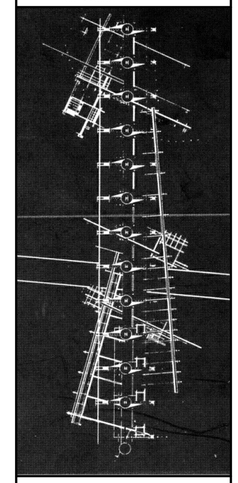

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| 1 | ADDENDUM #1 | 12.16.11 |
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• sheet title
GRADING PLAN

- scale: 1" = 20'
- drawn: JRH
- checked: DWS
- approved: DWS
- date: 11/29/11
- project no. 842-10
- sheet no. C-103

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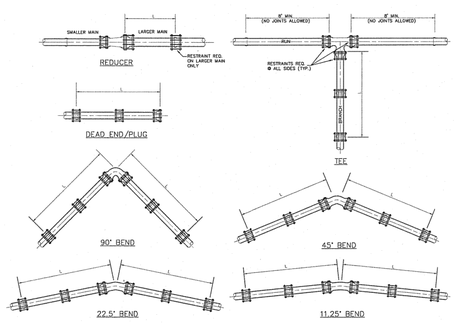


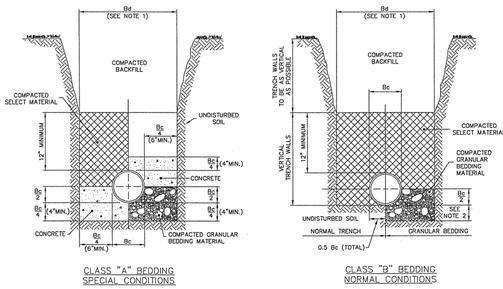

TABLE OF THRUST RESTRAINT LENGTHS

| PIPE SIZE (inches) | 90° BEND | | 45° BEND | | 22 1/2° BEND | | 11 1/4° BEND | | TEES | | DEAD END & PLUG | | REDUCER | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | P.V.C. (L) | DUCTILE IRON (L) | P.V.C. (L) | DUCTILE IRON (L) | P.V.C. (L) | DUCTILE IRON (L) | P.V.C. (L) | DUCTILE IRON (L) | P.V.C. (L) | DUCTILE IRON (L) | P.V.C. (L) | DUCTILE IRON (L) | PIPE SIZES | P.V.C. (L) | DUCTILE IRON (L) |
| 4 | 20' | 16' | 8' | 7' | 4' | 3' | 2' | 1' | 15' | 10' | 45' | 29' | 6"x4" | 33' | 21' |
| 6 | 28' | 22' | 12' | 9' | 6' | 4' | 3' | 2' | 33' | 21' | 63' | 40' | 8"x6" | 34' | 22' |
| 8 | 36' | 29' | 15' | 12' | 7' | 6' | 4' | 3' | 52' | 33' | 82' | 52' | 10"x8" | 33' | 21' |
| 10 | 43' | 34' | 18' | 14' | 9' | 7' | 4' | 3' | 68' | 43' | 98' | 63' | 12"x10" | 34' | 22' |
| 12 | 50' | 40' | 21' | 17' | 10' | 8' | 5' | 4' | 84' | 54' | 116' | 74' | 18"x12" | 63' | 40' |
| 16 | 63' | 51' | 26' | 21' | 13' | 10' | 6' | 5' | 116' | 74' | 148' | 94' | 18"x16" | 33' | 21' |
| 18 | 70' | 56' | 29' | 23' | 14' | 11' | 7' | 5' | 131' | 83' | 163' | 103' | 20"x18" | 33' | 21' |
| 20 | 75' | 61' | 31' | 25' | 15' | 12' | 7' | 5' | 145' | 92' | 178' | 113' | 20"x20" | 62' | 39' |
| 24 | 88' | 70' | 36' | 29' | 17' | 14' | 9' | 7' | 173' | 110' | 207' | 132' | | | |

THRUST RESTRAINT DESIGN NOTES

1. RESTRAINT JOINTS, FITTINGS, & VALVE REQUIREMENTS CALCULATED BY THE THRUST RESTRAINT DESIGN PROGRAM PROVIDED BY EBBA IRON SALES, INC.
2. DATA BASED ON MAX. PRESSURE OF 150 p.s.i. THE UNIFIED SOILS CLASSIFICATION SYSTEM (SOIL TYPE SP), THE PIPE BEDDED IN NATIVE SOIL w/ A MINIMUM OF 2.5' COMPACTED FIL OVER THE PIPE, AND USING A SAFETY FACTOR OF 1.5 FOR THE DATA.
3. ALL FITTINGS & VALVES SHALL HAVE RESTRAINED WITH "MEGA-LUG" RESTRAINTS, & ALL BELL & SPIGOT JOINTS TO BE RESTRAINED WITH A RESTRAINING HARNESS WITHIN THE REQUIRED LENGTH OF RESTRAINED PIPE (L).
4. THRUST BLOCKS SHALL BE USED ONLY AS SPECIFIED BY PROJECT ENGINEER.

## THRUST RESTRAINT DETAILS
NOT TO SCALE



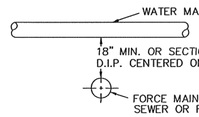

CLASS "A" BEDDING
SPECIAL CONDITIONS

CLASS "B" BEDDING
NORMAL CONDITIONS

NOTES: FOR BEDDING AND TRENCHING

1. DIMENSION Bc = PIPE O.D.
   DIMENSION Bd = TRENCH WIDTH AT TOP OF PIPE
   MAXIMUM Bd = Bc + 30"
   MINIMUM Bd = MAXIMUM DIMENSION OF BELL + 8" (UNSHEETED TRENCH)
2. DEPTH FOR REMOVAL FOR UNSUITABLE MATERIAL SHALL BE AS REQUIRED TO REACH SUITABLE FOUNDATION. FOR ROCK OR OTHER NON-CUSHIONING MATERIAL, DEPTH SHALL BE 6" BELOW BOTTOM OF UTILITY.
3. ALL BACKFILL AND SELECT MATERIAL UNDER ALL ROADWAYS, DRIVES (INCLUDING DIRT DRIVES), AND PARKING AREAS SHALL BE COMPACTED TO 98% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY. (AASHTO T-180). BACKFILL AND SELECT MATERIAL UNDER ALL OTHER AREAS SHALL BE COMPACTED AS FOLLOWS: FROM BOTTOM OF TRENCH TO 12" ABOVE TOP OF PIPE – 95% OF MODIFIED PROCTOR MAXIMUM DRY DENSITY (AASHTO T-180). FROM 12" ABOVE TOP OF PIPE TO TOP OF BACKFILL – 90% OF MODIFIED PROCTOR MAXIMUM DRY DENSITY (AASHTO T-180)

## TRENCHING AND BEDDING DETAILS

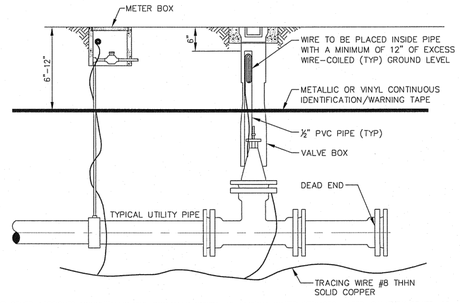



CROSSING SECTION

NOTES:

1. IF WATERMAIN IS LESS THAN 18" ABOVE SANITARY OR STORM SEWER, REUSE OR SEWERAGE FORCEMAIN PIPE AT A CROSSING, THEN CENTER ONE FULL LENGTH JOINT OF D.I.P. ON CROSSING POINT.
2. ALL PIPING CLEARANCES SHALL BE IN ACCORDANCE WITH CHAPTER 62-555.314, F.A.C.
3. DO NOT ENCASE PIPING IN CONCRETE UNLESS SPECIFICALLY AUTHORIZED.
4. ALL PIPING SHALL CLEAR OTHER CONSTRUCTION BY 6" MINIMUM.

## PIPING CLEARANCES
NOT TO SCALE




ALL PVC PIPE, OR OTHER APPROVED NONMETALLIC PIPE INSTALLED WITHIN THE FLORIDA WATER SERVICES WATER, SANITARY SEWER, OR REUSE WATER SYSTEMS, SHALL BE INSTALLED WITH #8 THHN SOLID COPPER TRACING WIRE.

THE TRACING WIRE MUST BE INSTALLED DIRECTLY BELOW THE PIPE AND BROUGHT TO THE SURFACE AT 500' MINIMUM INTERVALS. WIRE SHALL EXTEND A MINIMUM OF 12" ABOVE GRADE AT EACH INTERVAL AND BE COILED AND PLACED IN A VALVE BOX, METER BOX, MANHOLE, CLEANOUT OR OTHER APPLICABLE STRUCTURE.

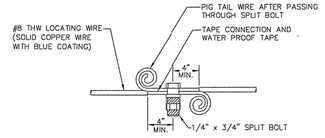
TRACING WIRE BETWEEN INTERVALS SHALL BE INSTALLED SO AS TO PROVIDE CONTINUOUS CURRENT WHEN LINE LOCATION EQUIPMENT IS CONNECTED TO THE TRACING WIRE BRANCHING FROM MAIN LINES SHALL BE LINKED BY A FLORIDA WATER SERVICE APPROVED CONNECTOR SUCH AS KING #2011 SAFETY SEALED CONNECTORS OR APPROVED EQUAL.

COLOR CODING:

PORTABLE WATER SYSTEM: BLUE
REUSE WATER SYSTEM: PURPLE
SANITARY SEWER FORCE AND LOW PRESSURE SEWER SYSTEMS: GREEN

1. FOR LOW PRESSURE SEWER, POTABLE WATER AND REUSE WATER SYSTEMS: WIRE SHALL BE INSTALLED BELOW ALL MAINS AND SERVICE LINES AND ATTACHED TO VALVES, HYDRANTS AND FITTINGS. WIRE INSTALLED WITH SERVICE LINES SHALL CONNECT TO THE WIRE INSTALLED BELOW THE MAIN AND EXTEND TO THE CURB STOP.
2. FIRE SPRINKLER LINES: WIRE SHALL CONNECT TO THE WIRE INSTALLED BELOW THE MAIN AND EXTEND TO THE RISER CONNECTION.
3. SANITARY SEWER FORCE MAINS: WIRE SHALL BE INSTALLED BELOW THE FORCE MAIN AND ATTACHED TO ALL VALVES AND FITTINGS AND BROUGHT TO THE SURFACE AND PLACED IN A METAL, FLORIDA WATER SERVICE APPROVED, VALVE BOX.
4. DEAD END MAINS: WIRE SHALL BE PLACED IN A PROPERLY IDENTIFIED METAL VALVE BOX AT THE END OF THE RUN.
5. WIRE SHALL NOT BE FASTENED OR COILED TO VALVE OPERATING NUT.

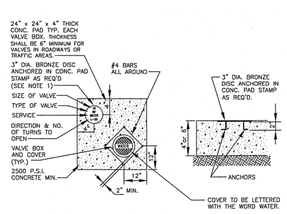
## UTILITY PIPE LOCATION MATERIALS




NOTES:

1. THE ENDS OF ALL LOCATING WIRES, WHETHER THEY ARE SPLICED, CONNECTED, OR TERMINATED, SHALL HAVE THE LAST THREE INCHES PIG TAILED AS DETAILED HEREON.
2. AFTER INSTALLATION OF THE LOCATING WIRE THE SYSTEM SHALL BE SUBJECTED TO TESTING, IN THE PRESENCE OF CITY UTILITY DIRECTOR OR HIS DESIGNEE PRIOR TO BACKFILL, IN ORDER TO THAT THE SYSTEM IS FUNCTIONAL.

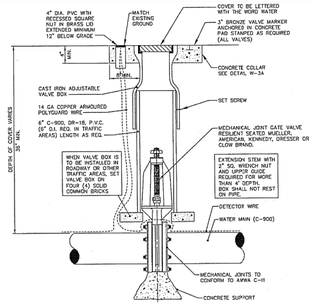
## LOCATING WIRE SPLICING
NOT TO SCALE



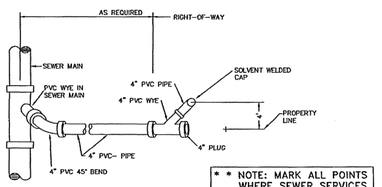

NOTE:

1. BRONZE IDENTIFICATION DISC SHALL BE REQUIRED FOR ALL VALVES.

## VALVE COLLAR DETAIL
NOT TO SCALE

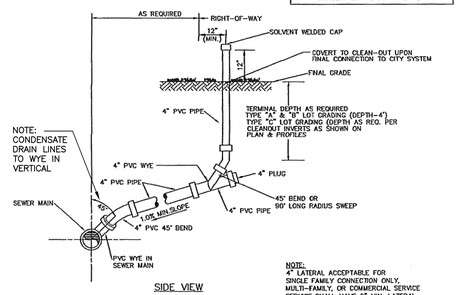



## GATE VALVE & BOX DETAIL
NOT TO SCALE




PLAN VIEW

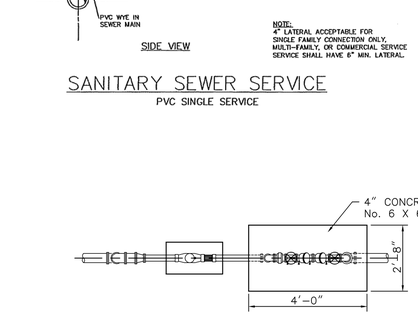
* * NOTE: MARK ALL POINTS WHERE SEWER SERVICES CROSS CURB WITH A "S" MARK IN CONCRETE.




SIDE VIEW

NOTE:
4" LATERAL ACCEPTABLE FOR SINGLE FAMILY CONNECTION ONLY. MULTI-FAMILY, OR COMMERCIAL SERVICE SERVICE SHALL HAVE 6" MIN. LATERAL.

## SANITARY SEWER SERVICE
PVC SINGLE SERVICE



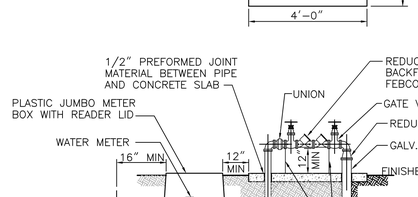

PAINTING

1. APPLY TWO COATS OF SHERMAN WILLIAMS OSHA SAFETY INDUSTRIAL YELLOW PAINT TO HYDRANT BARREL.
2. APPLY TWO COATS OF SHERWIN WILLIAMS OSHA SAFETY INDUSTRIAL ENAMEL PAINT TO THE BONNET AND NOZZLE CAPS. THE UTILITY DEPARTMENT INSPECTOR WILL DETERMINE THE COLOR TO PAINT THE HYDRANT BONNET AND NOZZLE CAPS BY FLOW TESTING HYDRANT.
   - BLUE 1500 GPM OR MORE (SHERWIN WILLIAMS #S940B6)
   - GREEN 1000 GPM TO 1499 GPM (SHERWIN WILLIAMS #B54614)
   - ORANGE 500 GPM TO 999 GPM (SHERWIN WILLIAMS #B54E39)
   - RED 499 GPM OR LESS (SHERWIN WILLIAMS #B54R38)
   - YELLOW HYDRANT BARREL (SHERWIN WILLIAMS #B54Y37)

SPECIFICATIONS

1. AWWA SPECIFICATIONS C-502
2. TWO 2-1/2" HOSE NOZZLE DISCHARGE
3. ONE 4-1/2" PUMPER NOZZLE DISCHARGE
4. ONE 1-1/2" OPERATING NUT, LEFT
5. HYDRANTS SHALL BE FLOW TESTED BY CONTRACTOR. COORDINATE WITH UTILITY DIRECTOR OR HIS DESIGNEE FOR TESTING PROCEDURES.
6. ALL HYDRANTS SHALL BE EQUIPPED WITH GRADE-LOK FITTINGS TO ALLOW FOR ELEVATION ADJUSTMENTS.
7. ALL HYDRANTS SHALL BE :
   a. MUELLER CENTURION 200
   b. AMERICAN DARLING 6" B-84-B
   c. CLOW MEDALLION

## FIRE HYDRANT WITH VALVE
NOT TO SCALE
(STANDARD FIRE HYDRANT ASSEMBLY)





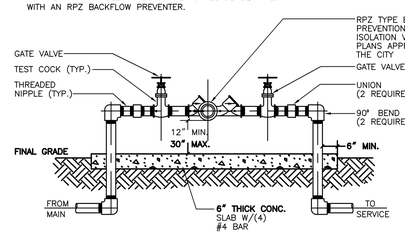


## WATER METER/BACKFLOW PREVENTER ASSEMBLY
NOT TO SCALE

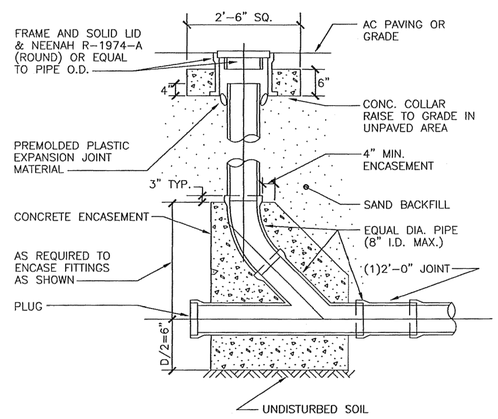
LAKE COUNTY
FLORIDA
**Approved Plans - Commercial**
**LAKE COUNTY BUILDING DIVISION**
Any errors or omission in these plans shall be made to conform with the applicable code requirements per Florida Building Code 105.4.1
Plans reviewed for code compliance and shall be kept on site
Permit # 2011110212
Building: BLD31 12/29/11
Electric: ADM01 12/29/11
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:

NOTES:

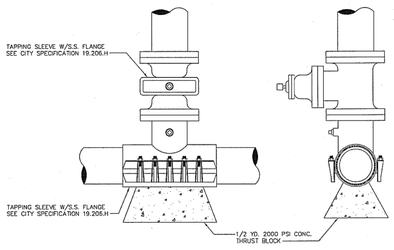
1. ALL PIPE AND FITTINGS SHALL BE THREADED SCHEDULE 40 GALVANIZED STEEL OR BRASS.
2. WHERE REUSE SERVICE IS AVAILABLE, ALL CONNECTIONS TO THE CITY POTABLE WATER SUPPLY SHALL BE EQUIPPED WITH AN RPZ BACKFLOW PREVENTER.




## REDUCED PRESSURE BACKFLOW PREVENTER
NOT TO SCALE




## GRAVITY CLEANOUT
NOT TO SCALE




## WET TAP SLEEVE & TAPPING VALVE
NOT TO SCALE


SPRINGSTEAD ENGINEERING, INC.
Consulting Engineers
Planners
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LB-0001723
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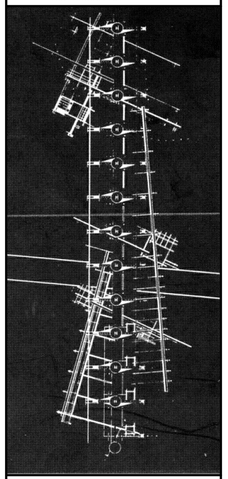

**Lake County Emergency Communications & Operations Center**
Tavares, Florida
**PERMIT CD SUBMITTAL**


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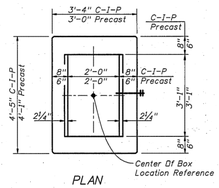
• revisions/addenda

| Number | Description | Date Issued |
|---|---|---|
| 1 | CITY OF TAVARES | 12.16.11 |

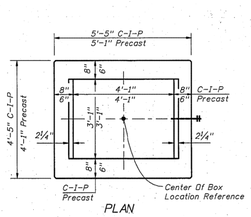
• sheet title
WATER AND SEWER DETAILS

- scale: AS SHOWN
- drawn: JRH
- checked: DWS
- approved: DWS
- date: 11/29/11
- project no. 842-10
- sheet no. C-104

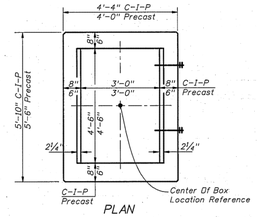
J:\Land Projects 2005\11100\19.000\dwg\SITEPLAN.dwg, W-S DET, 12/8/2011 5:14:13 PM, ***, JRH***




PLAN




PLAN

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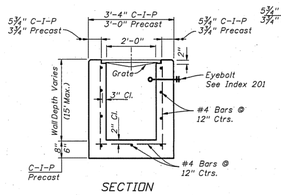
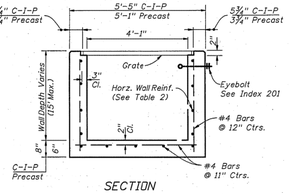



SECTION

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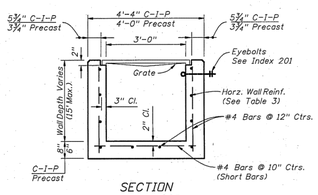



SECTION

### HORIZONTAL WALL REINFORCING SCHEDULES (TABLE 1)

| WALL DEPTH | SCHEDULE | AREA (in.²/ft.) | MAX. SPACING BARS | MAX. SPACING WWF |
|---|---|---|---|---|
| 0'-15' | A12 | 0.20 | 12" | 8" |
| | | | | |

TYPE C

Recommended Maximum Pipe Size:

2'-0" Wall - 18" Pipe
3'-1" Wall - 24" Pipe (18" where an 18" pipe enters a 2'-0" wall)

### HORIZONTAL WALL REINFORCING SCHEDULES (TABLE 2)

| WALL DEPTH | SCHEDULE | AREA (in.²/ft.) | MAX. SPACING BARS | MAX. SPACING WWF |
|---|---|---|---|---|
| 0'-6' | A12 | 0.20 | 12" | 8" |
| 6'-10' | A6 | 0.20 | 6" | 5" |
| 10'-13' | A4 | 0.20 | 4" | 3" |
| 10'-15' | B5.5 | 0.24 | 5½" | 5" |

TYPE D

Recommended Maximum Pipe Size:

3'-1" Wall - 24" Pipe
4'-1" Wall - 36" Pipe

### HORIZONTAL WALL REINFORCING SCHEDULES (TABLE 3)

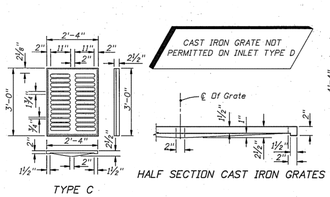
| WALL DEPTH | SCHEDULE | AREA (in.²/ft.) | MAX. SPACING BARS | MAX. SPACING WWF |
|---|---|---|---|---|
| 0'-5' | A12 | 0.20 | 12" | 8" |
| 0'-7.5' | A6 | 0.20 | 6" | 5" |
| 7.5'-10' | B5.5 | 0.24 | 5½" | 5" |
| 10'-15' | C6.5 | 0.37 | 6½" | 6" |

TYPE E

Recommended Maximum Pipe Size:

3'-0" Wall - 24" Pipe
4'-6" Wall - 36" Pipe






TYPE C
Approx. Weight 235 Lbs.

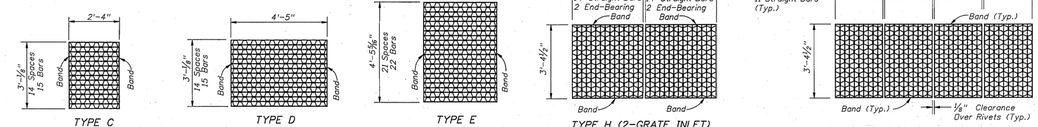
HALF SECTION CAST IRON GRATES

TYPE E
Approx. Weight 465 Lbs.

TYPE H (3-GRATE INLET)
Approx. Weight 725 Lbs.

TYPE H (4-GRATE INLET)
Approx. Weight 967 Lbs.

## CAST IRON GRATES




TYPE C

Straight Bars 2"x ¼"
Reticuline Bars 1¼" x ⅜"
Bands 2" x ¼"
Approx. Weight 104 Lbs.

TYPE D

Straight Bars 2" x ¼"
Reticuline Bars 1¼" x ⅜"
Bands 2" x ¼"
Approx. Weight 190 Lbs.

TYPE E

Straight Bars 2" x ¼"
Reticuline Bars 1¼" x ⅜"
Bands 2" x ¼"
Approx. Weight 215 Lbs.

TYPE H (2-GRATE INLET)

Straight End-Bearing Bars 2" x ⅜"
Straight Bearing Bars 2" x ¼"
Reticuline Bars 1¼" x ⅜"
Banding Bars 2" x ¼"
Approx. Total Weight 310 Lbs.

TYPE H (4-GRATE INLET)

Straight End-Bearing Bars 2" x ¼"
Reticuline Bars 1¼" x ⅜"
Banding Bars 2" x ⅜"
Approx. Total Weight 388 Lbs.

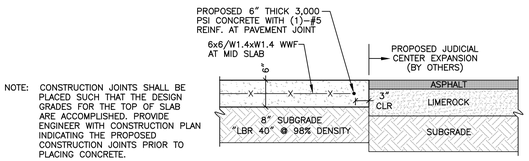
## STEEL GRATES

NOTE: Steel Grates Are Required On Inlets With Traversable Slots And On Inlets where Bicycle Traffic Is Anticipated.

## GENERAL NOTES

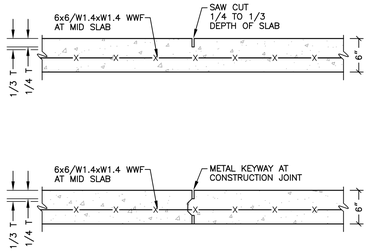
1. These inlets are suitable for bicycle traffic and are to be used in ditches, medians and other areas subject to infrequent traffic loadings but are not to be placed in areas subject to any heavy wheelloads. These inlets may be placed in areas subject to occasional pedestrian traffic such as landscaped areas and pavement areas where pedestrians can walk around the inlet.
2. Inlets subject to minimal debris should be constructed without slots. Where debris is a problem inlets should be constructed with slots. Slotted inlets located within roadway clear zones and areas subject to bicycles and/or pedestrians shall have traversable slots. The traversable slot modification is not adaptable to inlet Type H. Slots may be constructed at either or both ends as shown on plans.
3. Steel grates are to be used on all inlets where bicycle traffic is anticipated. Steel grates are to be used on all inlets with traversable slots. Either cast iron or steel grates may be used on inlets without slots where bicycle traffic is not anticipated. Either cast iron or steel grates may be used on all inlets with non-traversable slots. Subject to the selection described above, when Alternate G grate is specified in the plans, either the steel grate, hot dip galvanized after fabrication, or the cast iron grate may be used, unless the plans stipulate the particular type.
4. Recommended maximum pipe sizes shown are for concrete pipe. Size for other types of pipe must be checked for fit.
5. All exposed edges and corners shall be ¾" chamfer or tooled to ¼" radius.
6. Concrete inlet pavement to be used on inlets without slots and inlets with nontraversable slots only when called for in the plans; but required on all traversable slot inlets. Cost to be included in contract unit price for inlets. Quantities shown are for information only.
7. Traversable slots constructed in existing inlets shall be paid for as inlets partial. For conversion work and method of payment see 'TRAVERSABLE SLOT INLETS (PARTIAL) FOR EXISTING INLETS'.
8. Sodding to be used on all inlets not located in paved areas and paid for under contract unit price for Performance Turf, SY.
9. For supplementary details see Index No. 201.
10. All reinforcing is Grade 60 bars with 2" min. cover unless otherwise noted. Bars to be cut or bent for 1½" clearance around pipe opening. Provide one additional #4 bar above and at each side of pipe opening.



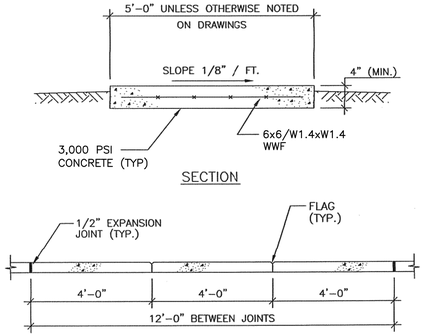



NOTE: CONSTRUCTION JOINTS SHALL BE PLACED SUCH THAT THE DESIGN GRADES FOR THE TOP OF SLAB ARE ACCOMPLISHED. PROVIDE ENGINEER WITH CONSTRUCTION PLAN INDICATING THE PROPOSED CONSTRUCTION JOINTS PRIOR TO PLACING CONCRETE.

PROPOSED DRIVEWAY
TYPICAL SECTION
N.T.S.



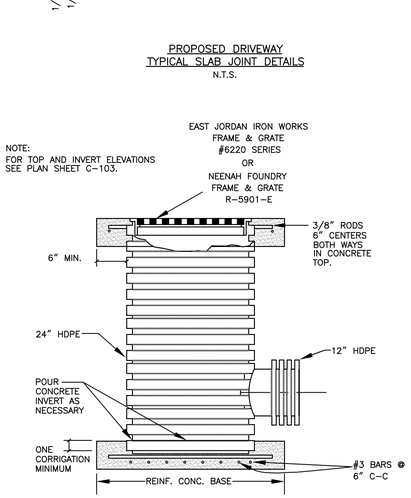

PROPOSED DRIVEWAY
TYPICAL SLAB JOINT DETAILS
N.T.S.




SECTION

PROFILE

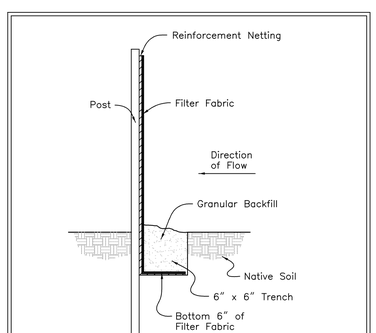
CONCRETE WALKWAY DETAIL
NOT TO SCALE



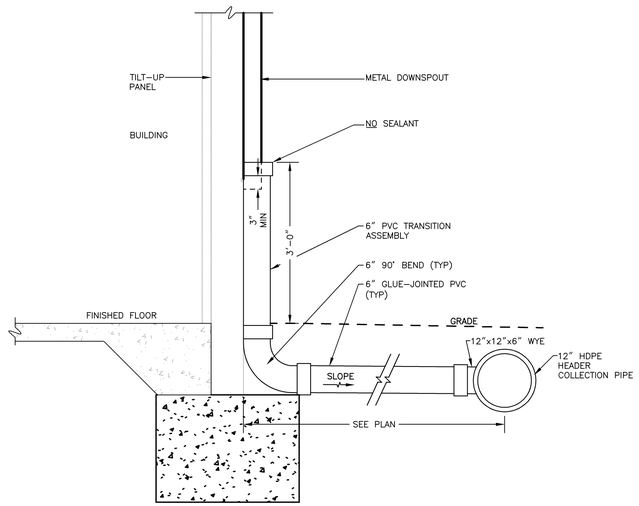

MANHOLE DETAIL




YARD DRAIN DETAIL
(LIGHT DUTY)
N.T.S.




SILT BARRIER DETAIL




DOWNSPOUT TRANSITION DETAIL
N.T.S.

LAKE COUNTY
FLORIDA
**Approved Plans - Commercial**
**LAKE COUNTY BUILDING DIVISION**
Any errors or omission in these plans shall be made to conform with the applicable code requirements per Florida Building Code 105.4.1
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Building: BLD31 12/29/11
Electric: ADM01 12/29/11
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:


SPRINGSTEAD ENGINEERING, INC.
Consulting Engineers
Planners
Surveyors
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LB-0001723
727 South 14th Street
Leesburg, Fl. 34748
(352) 787-1414



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Architects and Planners
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Corporate Registration
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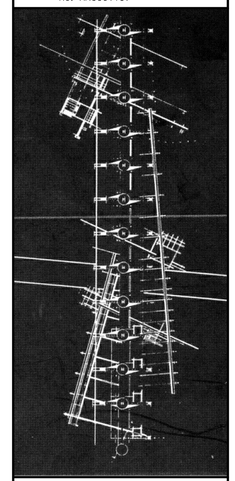

# Lake County Emergency Communications & Operations Center

Tavares,
Florida

**PERMIT CD SUBMITTAL**


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• revisions

| | |
|---|---|
| ADD SILT FENCE PER SJRWMD | 6/7/11 |
| REV TBLCK FOR REVISED GRANT SUBMITTAL | 6/20/11 |
| REV PER COUNTY REVIEW COMMENTS | 6/28/11 |
| ADG/FEMA COMMENTS | 7/21/11 |
| 100% CONST DOCS REV SUBMITTAL | 7/28/11 |
| ADD CONC SLAB DETS | 8/2/11 |
| REV PER PERMIT DOCS. | 11/8/11 |

• sheet title
SITE DETAILS

• scale: AS SHOWN
• drawn: JRH
• checked: DWS
• approved: DWS
• date: 11/09/11

• project no. 842-10

• sheet no. C-105


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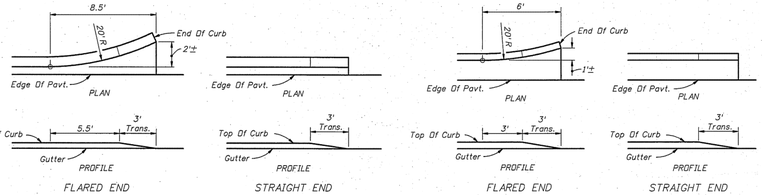
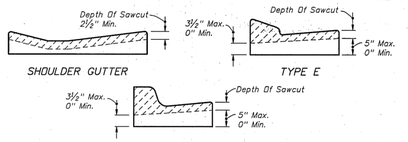



CURB TYPE A

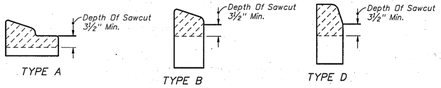
## CURB AND GUTTER ENDINGS

CURB AND GUTTER TYPES E & F

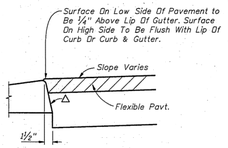



Sawcuts should be avoided within valley gutter and within curb and gutter endings.

CONTRACTION JOINT IN CURB AND GUTTER

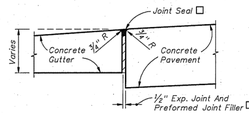



CONTRACTION JOINT IN CURB



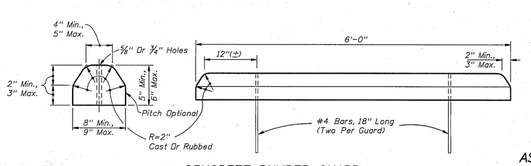

△ Applies to both high and low sides of pavement, low side shown. Applies to shoulder gutter only where adjoining traffic lanes.

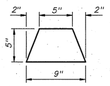
CURB AND GUTTER AND TYPE A CURB ADJACENT TO FLEXIBLE PAVEMENT




□ Applies to both high and low sides of pavement, low side shown.

EXPANSION JOINT BETWEEN GUTTER AND CONCRETE PAVEMENT

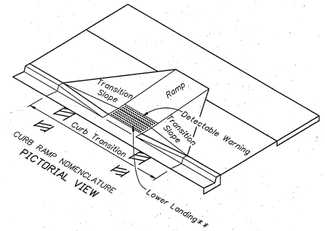


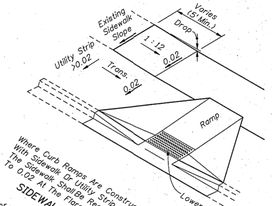

### GENERAL NOTES

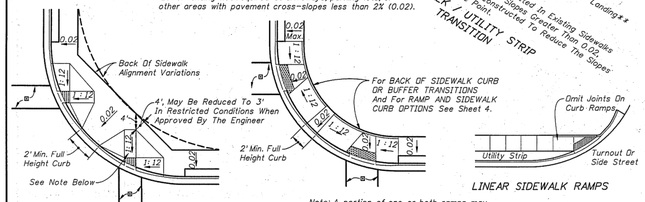
1. For curb, gutter and curb & gutter provide ⅛" – ¼" contraction joints at 10' centers (max.). Contraction joints adjacent to concrete pavement on tangents and flat curves are to match the pavement joints, with intermediate joints not to exceed 10' centers. Curb, gutter and curb & gutter expansion joints shall be located in accordance with Section 520 of the Standard Specifications.
2. Ends of Curbs Types B and D shall transition from full to zero heights in 3'.

| 2010 FDOT Design Standards | Last Revision 00 | Sheet No. 2 of 2 |
|---|---|---|
| CURB & CURB AND GUTTER | | Index No. 300 |




** Lower landing not required at driveways, parking lots, or other areas with pavement cross-slopes less than 2% (0.02).




Note: A portion of one or both ramps may extend outside the return.

Note:
When crosswalk markings are required, ramp runs must fall within crosswalk limits and where practical, be parallel with the projected crosswalk alignment. The bottom of the ramp beyond the curb line shall have a clear space 48" minimum within the markings of a marked crosswalk. If no crosswalk markings are present, the bottom of the ramp beyond the curb ramp shall have a clear space 48" minimum outside active traffic lanes.

⧈ Crosswalk widths and configuration vary: must conform to Index No. 17344 and 17346.

### GENERAL NOTES

1. Public sidewalk curb ramps shall be constructed in the public right of way at locations that will provide continuous unobstructed pedestrian circulation paths to pedestrian areas, elements and facilities in the public right of way and to accessible pedestrian routes on adjacent sites. Curbed facilities with sidewalks and those without sidewalks are to have curb ramps constructed at all street intersections and at turnouts that have curbed returns. Partial curb returns shall extend to the limit prescribed by Index No. 515 to accommodate curb ramps. Ramps constructed at locations without sidewalks shall have a landing constructed at the top of each ramp, see Sheet 5.
2. The location and orientation of curb ramps shall be as shown in the plans.
3. Curb ramp running slopes at unrestrained sites shall not be steeper than 1 : 12 and cross slope shall be 0.02 or flatter. Transition slopes shall not be steeper than 1 : 12.

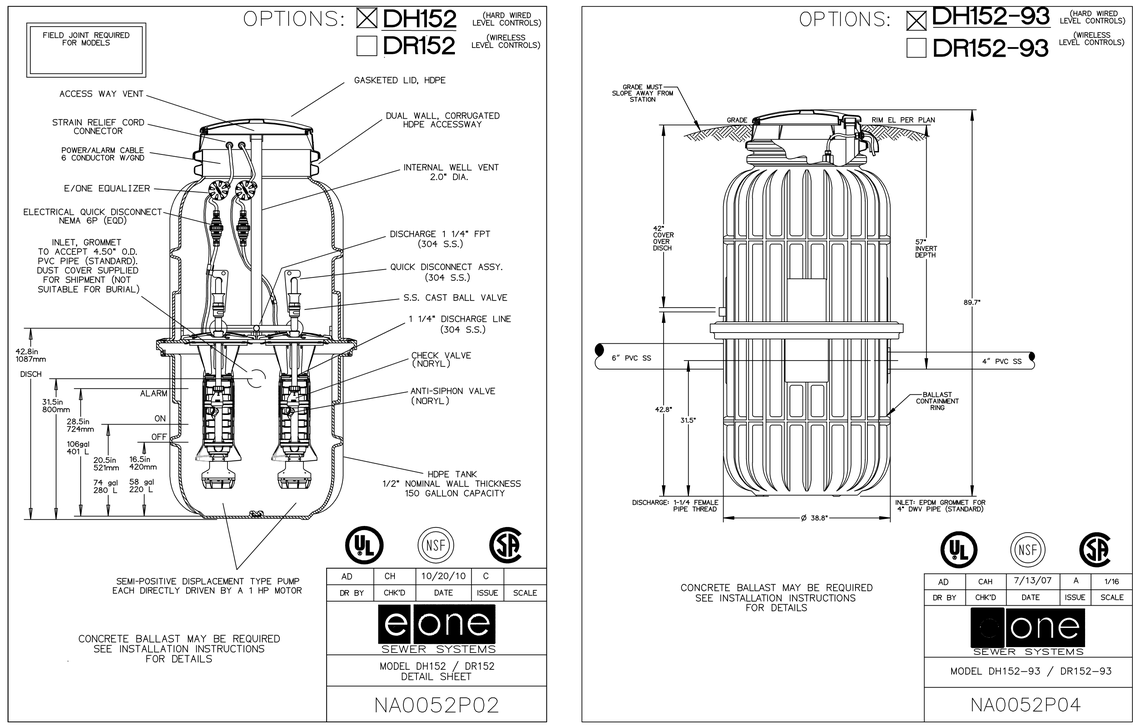
   When altering existing pedestrian facilities where existing site development precludes the accommodation of a ramp slope of 1 : 12, a running slope between 1 : 12 and 1 : 10 is permitted for a rise of 6" maximum and a running slope of between 1 : 10 and 1 : 8 is permitted for a rise of 3" maximum. Where compliance with the requirements for cross slope cannot be fully met, the minimum feasible cross slope shall be provided.

   Ramp running slope is not required to exceed 8' in length, except at sites where the plans specify a greater length.
4. If a curb ramp is located where pedestrians must walk across the ramp, then the walk shall have transition slopes to the ramp: the maximum slope of the transitions shall be 1 : 12. Ramps with curb returns may be used at locations where other improvements provide guidance away from that portion of curb perpendicular to the sidewalk: improvements for guidance are not required at curb ramps for linear pedestrian traffic.
5. Curb ramp detectable warning surfaces shall extend the full width of the ramp and 24" deep. Detectable warning surfaces shall be constructed in accordance with Specification 527. See Sheet 6 of 6 for detectable warning layouts. Transition slopes are not to have detectable warnings.
6. Where a curb ramp is constructed within existing curb, curb and gutter and/or sidewalk, the existing curb or curb and gutter shall be removed to the nearest joint beyond the curb transitions or to the extent that no remaining section of curb or curb and gutter is less than 5' long. The existing sidewalk shall be removed to the nearest joint beyond the transition slope or walk around or to the extent that no remaining section of sidewalk is less than 5' long. For details of Concrete Sidewalk See Index 310.
7. Alpha-numeric identifications are for reference (plans, permits, etc.).
8. Public sidewalk curb ramps are to be paid for as follows:
   Ramps, reconstructed sidewalks, walk around sidewalks, sidewalk landings and sidewalk curbs are to be paid for under the contract unit price for Sidewalk Concrete, (___" Thick), SY. Curb transitions and reconstructed curbs are to be paid for under the contract unit price for the parent curb, i.e., Curb Conc., (Type ___), LF or Curb and Gutter Conc., (Type ___), LF.

   When a separate pay item for the removal and disposal of existing curb, curb and gutter, and/or sidewalk is not provided in the plans, the cost of removal and disposal of these features shall be included in the contract unit price for new curb, curb and gutter and/or sidewalk respectively.
9. Acceptance Criteria for Detectable Warnings:
   (a) The ramp detectable warning surface shall be complete and uniform in color and texture
   (b) 90% of the individual truncated domes must comply with the design criteria
   (c) There may be no more than 4 non-complying domes in any one square foot of surface
   (d) No two adjacent domes may be non-compliant
   (e) Surface may not deviate more than 0.10" from a true plane
10. All sidewalk surfaces, ramp surfaces, and landings with a cross slope shown in this Index to be 0.02 shall be 0.02 maximum. All ramp surfaces and ramp transition slopes with a slope shown in this Index to be 1:12 shall be 1:12 maximum.

TYPICAL PLACEMENT OF PUBLIC SIDEWALK CURB RAMPS AT CURBED RETURNS

| 2010 FDOT Design Standards | Last Revision 07/01/07 | Sheet No. 1 of 6 |
|---|---|---|
| PUBLIC SIDEWALK CURB RAMPS | | Index No. 304 |




| AD | CH | 10/20/10 | C | |
|---|---|---|---|---|
| DR BY | CHK'D | DATE | ISSUE | SCALE |

eone SEWER SYSTEMS

MODEL DH152 / DR152 DETAIL SHEET

NA0052P02

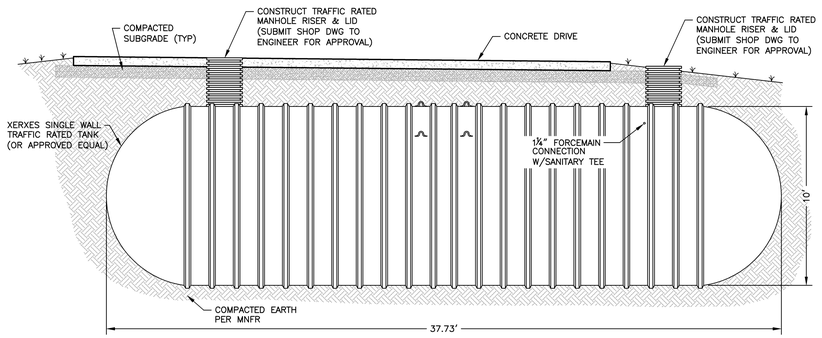



| AD | CAH | 7/13/07 | A | 1/16 |
|---|---|---|---|---|
| DR BY | CHK'D | DATE | ISSUE | SCALE |

eone SEWER SYSTEMS

MODEL DH152-93 / DR152-93

NA0052P04




20,000 GALLON
WASTEWATER HOLDING TANK DETAIL
SCALE: 1"=4'

LAKE COUNTY
FLORIDA
Approved Plans - Commercial
LAKE COUNTY BUILDING DIVISION
Any errors or omission in these plans shall be made to conform with the applicable code requirements per Florida Building Code 105.4.1
Plans reviewed for code compliance and shall be kept on site
Permit # 2011110212
Building: BLD31 12/29/11
Electric: ADM01 12/29/11
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:

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Consulting Engineers
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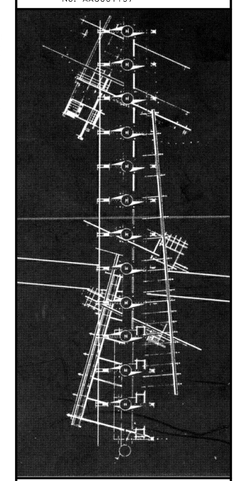

**Lake County Emergency Communications & Operations Center**

Tavares, Florida

**PERMIT CD SUBMITTAL**

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• revisions

| | |
|---|---|
| 100% CONST DOCS REV SUBMITTAL | 7/28/11 |
| REV PER NEW FLR PLAN/SS MODS. | 11/8/11 |

• sheet title
CURB DETAILS

• scale: AS SHOWN
• drawn: JRH
• checked: DWS
• approved: DWS
• date: 11/09/11
• project no. 842-10
• sheet no. C-105A

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## GENERAL PROJECT DATA NOTES:

FOR IDENTIFICATION OF CONTRACTUAL AGREEMENTS, THIS SET OF DRAWINGS IS DATED JULY, 2011. ANY REVISIONS THEREAFTER WILL BE NOTED AND DATED ON THE AFFECTED DRAWINGS(S).

ALL CONSTRUCTION PROJECTS 1 OR MORE ACRES IN SIZE THAT DISCHARGE TO OFFSITE AREAS ARE REQUIRED TO ABIDE BY THE PROVISIONS OF THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT, UNLESS OTHERWISE NOTED ON THE PLANS, THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING AND MAINTAINING THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) AND SUBMITTING NPDES "NOTICE OF INTENT" (N.O.I.) AND "NOTICE OF TERMINATION" (N.O.T.) NOTICES TO THE EPA OR LOCAL STATE AGENCY HAVING JURISDICTION OVER THE NPDES PROGRAM. THE CONTRACTOR SHALL KEEP ONSITE A COPY OF THE SWPPP, NOI, AND WATER MANAGEMENT DISTRICT PERMITS ISSUED TOGETHER WITH THE INSPECTION REPORTS AND CURRENT PLANS, INCLUDING ANY MODIFICATIONS REQUIRED.

THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THE PLANS HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY, IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO NOTIFY THE VARIOUS UTILITIES AND TO MAKE THE NECESSARY ARRANGEMENTS FOR ANY RELOCATIONS TO THESE UTILITIES WITH THE OWNER OF THE UTILITY. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN CROSSING AN UNDERGROUND UTILITY, WHETHER SHOWN ON THE PLANS OR LOCATED BY THE UTILITY COMPANY. ALL UTILITIES THAT INTERFERE WITH THE PROPOSED CONSTRUCTION SHALL BE RELOCATED BY THE RESPECTIVE UTILITY COMPANY AND THE CONTRACTOR SHALL COOPERATE WITH THEM DURING RELOCATION OPERATIONS. ANY DELAY OR INCONVENIENCE CAUSED TO THE CONTRACTOR BY THE RELOCATION OF VARIOUS UTILITIES SHALL BE INCIDENTAL TO THE CONTRACT, AND NO EXTRA COMPENSATION WILL BE ALLOWED.

### DRAINAGE SYSTEMS

THE DRAINAGE FACILITIES SHALL BE MAINTAINED BY THE CONTRACTOR DURING THE COURSE OF THIS CONTRACT. THE CONTRACTOR SHALL INCLUDE FUNDS TO OPERATE AND MAINTAIN THE DRAINAGE SYSTEMS DURING THE WORK PROCESS.

### UTILITIES

1) THE CONTRACTOR SHALL FIELD VERIFY ALL UTILITIES WITHIN THE PROJECT AREA PRIOR TO CONSTRUCTION.
2) COORDINATE WITH CONTRACTOR FOR JUDICIAL FACILITY IF CONSTRUCTION IS NOT COMPLETED AT THE TIME OF THIS CONTRACT.
3) CITY UTILITY CONTACTS:
   CITY OF TAVARES WATER DEPARTMENT – BURNEY VAUGHN (352) 742–6222
   CITY OF TAVARES WASTEWATER DEPARTMENT – GERALD BLAIR (352) 742–6301

### SOILS

A COPY OF A SOILS REPORT WAS PROVIDED FOR INFORMATIONAL PURPOSES DURING THE BID PROCESS.

### AS–BUILTS

AS–BUILTS SHALL BE PROVIDED BY THE CONTRACTOR TO THE ARCHITECT AS PART OF THE CONTRACT CLOSEOUT SUBMITTALS. AS–BUILT DATA SHALL BE PROVIDED BY A FLORIDA LICENSED SURVEYOR, SIGNED, SEALED, AND DATED BY THE RESPONSIBLE PARTY. SEE INDIVIDUAL SECTIONS (STORM, WATER SYSTEM, ETC.) FOR ADDITIONAL AS–BUILT REQUIREMENTS.

### PERMITS AND PERMIT REQUIREMENTS

THE CONTRACTOR SHALL OBTAIN FROM THE OWNER COPIES OF ALL REGULATORY AND LOCAL AGENCY PERMITS. THE CONTRACTOR SHALL BE EXPECTED TO REVIEW AND ABIDE BY ALL THE REQUIREMENTS AND LIMITATIONS SET FORTH IN THE PERMITS. A COPY OF THE PERMIT SHALL BE KEPT ON THE JOB AT ALL TIMES.

### LAYOUT AND CONTROL

UNLESS OTHERWISE NOTED ON THE PLANS, THE CONTRACTOR SHALL PROVIDE FOR THE LAYOUT OF ALL OF THE WORK TO BE CONSTRUCTED. BENCHMARK INFORMATION SHALL BE PROVIDED TO THE CONTRACTOR BY THE OWNER OR OWNER'S SURVEYOR. ANY DISCREPANCIES BETWEEN FIELD MEASUREMENTS AND CONSTRUCTION PLAN INFORMATION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.

### QUALITY CONTROL TESTING REQUIREMENTS

ALL TESTING RESULTS SHALL BE PROVIDED TO THE ARCHITECT WITHIN 3 DAYS AFTER COMPLETION OF TESTS. TESTING REQUIREMENTS ARE TO BE IN ACCORDANCE WITH THE SPECIFICATIONS AND REQUIREMENTS. ALL TEST RESULTS SHALL BE PROVIDED (PASSING AND FAILING) AS REQUIRED. CONTRACTOR SHALL PROVIDE TESTING SERVICES THROUGH AN INDEPENDENT TESTING LABORATORY ACCEPTABLE TO THE OWNER AND ARCHITECT. CONTRACTOR TO SUBMIT TESTING FIRM TO OWNER AND ARCHITECT FOR APPROVAL PRIOR TO COMMENCING TESTING.

### CONSTRUCTION SPECIFICATIONS

ALL CONSTRUCTION MATERIALS AND INSTALLATIONS SHALL MEET THE CITY OF TAVARES SPECIFICATIONS.

### SHOP DRAWINGS

SHOP DRAWINGS AND CERTIFICATIONS FOR ALL STORM DRAINAGE, WATER SYSTEM, SEWER SYSTEM, AND PAVING SYSTEM MATERIALS AND STRUCTURES ARE REQUIRED. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL PRIOR TO ORDERING THE MATERIALS REQUIRED FOR CONSTRUCTION.

## EARTHWORK

### EARTHWORK QUANTITIES

THE CONTRACTOR SHALL PERFORM HIS OWN INVESTIGATIONS AND CALCULATIONS AS NECESSARY TO ASSURE HIMSELF OF EARTHWORK QUANTITIES. THERE IS NO IMPLICATION THAT EARTHWORK BALANCES, AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY IMPORT FILL NEEDED, OR FOR REMOVAL AND DISPOSAL OF EXCESS MATERIALS.

### EROSION CONTROL

EROSION AND SILTATION CONTROL MEASURES ARE TO BE PROVIDED AND INSTALLED PRIOR TO COMMENCEMENT OF CONSTRUCTION. THESE MEASURES ARE TO BE INSPECTED BY THE CONTRACTOR ON A REGULAR BASIS AND ARE TO BE MAINTAINED OR REPAIRED ON AN IMMEDIATE BASIS, AS REQUIRED.

### WETLAND PROTECTION

THE LIMITS OF THE ON–SITE WETLANDS HAVE BEEN PROVIDED TO THE CONTRACTOR ON THE CONSTRUCTION PLANS OR ON PERMIT MATERIALS. THE WETLANDS ARE TO BE PROTECTED FROM DISTURBANCE AT ALL TIMES. CONTRACTOR SHALL PROVIDE EROSION, SILTATION, AND DIVERSION MEASURES PRIOR TO COMMENCEMENT OF CONSTRUCTION.

### LIMITS OF DISTURBANCE

AT NO TIME SHALL THE CONTRACTOR DISTURB SURROUNDING PROPERTIES OR TRAVEL ON SURROUNDING PROPERTIES WITHOUT WRITTEN CONSENT FROM THE PROPERTY OWNER. REPAIR OR RECONSTRUCTION OF DAMAGED AREAS ON SURROUNDING PROPERTIES SHALL BE PERFORMED BY THE CONTRACTOR ON AN IMMEDIATE BASIS. ALL COSTS FOR REPAIRS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND NO EXTRA COMPENSATION SHALL BE PROVIDED.

### TREE REMOVAL

THE CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER WHEN ALL WORK IS LAID OUT (SURVEY STAKED), SO THAT A DETERMINATION MAY BE MADE OF SPECIFIC TREES TO BE REMOVED. NO TREES SHOWN ON THE CONSTRUCTION PLANS AS BEING SAVED SHALL BE REMOVED WITHOUT PERMISSION FROM THE OWNER AND ENGINEER.

### CLEARING AND GRUBBING

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEARING AND GRUBBING FOR SITE CONSTRUCTION INCLUDING CLEARING FOR PAVING, UTILITIES, DRAINAGE FACILITIES AND BUILDING CONSTRUCTION. ALL AREAS TO BE CLEARED SHALL BE FIELD STAKED AND REVIEWED BY THE OWNER AND ENGINEER PRIOR TO ANY CONSTRUCTION.

### MATERIAL STORAGE/DEBRIS REMOVAL

ALL MATERIALS EXCAVATED SHALL REMAIN THE PROPERTY OF THE OWNER AND SHALL BE STOCKPILED AT ON–SITE LOCATIONS AS SPECIFIED BY THE OWNER. MATERIALS SHALL BE STOCKPILED SEPARATELY AS TO USABLE (NONORGANIC) FILL STOCKPILES AND ORGANIC (MUCK) STOCKPILES IF MUCK IS ENCOUNTERED. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL UNSUITABLE FILL MATERIALS FROM THE SITE. ALL CLAY ENCOUNTERED SHALL BE EXCAVATED OUT AND REPLACED WITH CLEAN GRANULAR FILL MATERIALS.

### FILL MATERIAL

ALL FILL MATERIALS SHALL CONTAIN NO MUCK, STUMPS, ROOTS, BRUSH, VEGETATIVE MATTER, RUBBISH OR OTHER MATERIAL THAT WILL NOT COMPACT INTO A SUITABLE AND ENDURING BACKFILL. FILL SHALL BE CLEAN, NON–ORGANIC, GRANULAR MATERIAL WITH NOT MORE THAN 10% PASSING THE NO. 200 SIEVE.

### COMPACTION

FILL MATERIALS PLACED UNDER ROADWAYS SHALL BE COMPACTED TO AT LEAST 98% OF THE MAXIMUM DENSITY AS SPECIFIED IN AASHTO T–180. ALL OTHER FILL AREAS ARE TO BE COMPACTED TO AT LEAST 95% MAXIMUM DENSITY AS SPECIFIED IN AASHTO T–180. FILL MATERIALS SHALL BE PLACED AND COMPACTED IN A MAXIMUM OF 12" LIFTS. THE CONTRACTOR SHALL PROVIDE THE ENGINEER AND OWNER WITH ALL (PASSING AND FAILING) TESTING RESULTS. RESULTS SHALL BE PROVIDED ON A TIMELY AND REGULAR BASIS PRIOR TO CONTRACTOR'S PAY REQUEST SUBMITTAL FOR THE AFFECTED WORK.

## POTABLE WATER/FIRE SYSTEMS NOTES:

### OWNER/OPERATOR:

THE ENTITY THAT WILL OWN, OPERATE AND MAINTAIN THE WATER SYSTEM SHOWN ON THESE PLANS IS THE CITY OF TAVARES. THE CONTRACTOR SHALL BE EXPECTED TO MEET ALL THE REQUIREMENTS OF THAT ENTITY.

### PIPE MATERIALS:

SHOP DRAWINGS SHALL BE SUBMITTED FOR ALL INFRASTRUCTURE TO BE CONSTRUCTED. WATER SYSTEM SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER AND OWNER FOR REVIEW PER THE OWNER'S POLICY FOR REVIEW OF SHOP DRAWINGS.

POLYVINYL CHLORIDE PLASTIC PIPE (PVC) 4" THROUGH 12" SHALL BE MANUFACTURED IN ACCORDANCE WITH ANSI/AWWA C900 (LATEST EDITION) AND SHALL HAVE A MINIMUM WORKING PRESSURE OF 150 PSI AND HAVE A DR (DIMENSION RATIO) OF 18. ALL PVC PIPE SHALL BEAR THE NSF LOGO FOR POTABLE WATER. JOINTS SHALL BE OF THE PUSH–ON TYPE AND COUPLINGS CONFORMING TO ASTM D3139, D818 PIPE. PIPE SMALLER THAN 4" SHALL BE SCH 80 PVC IN ACCORDANCE WITH ASTM D1785.

DUCTILE IRON PIPE (DIP) SHALL BE STANDARD PRESSURE CLASS 350 IN SIZES 4" THROUGH 12" AND CONFORM TO ANSI/AWWA C150/A21.50 (LATEST EDITION). ALL DUCTILE IRON PIPE SHALL HAVE A STANDARD THICKNESS OF CEMENT MORTAR LINING AS SPECIFIED IN ANSI/AWWA C104/A21.4 (LATEST EDITION). PIPE JOINTS SHALL BE OF THE PUSH–ON RUBBER GASKET TYPE CONFORMING TO ANSI/AWWA C111/A21.11 (LATEST EDITION).

PVC PIPE SMALLER THAN 4" SHALL BE SCHEDULE 80 IN ACCORDANCE WITH ASTM D2464.

FITTINGS FOR DUCTILE IRON PIPE AND PVC C–900 PIPE SHALL BE DUCTILE IRON AND SHALL CONFORM TO ANSI/AWWA C153/A21.10 (LATEST EDITION) AND SHALL BE CEMENT LINED IN CONFORMANCE WITH ANSI/AWWA C104/A21.4 (LATEST EDITION).

POLYETHYLENE WRAP USED FOR CORROSION PREVENTION ON DUCTILE IRON PIPE SHALL CONFORM TO THE REQUIREMENTS OF ANSI/ASTM D1248. THE MINIMUM NOMINAL THICKNESS SHALL BE 0.008 IN. (8 MILS). INSTALLATION OF POLY WRAP SHALL BE IN ACCORDANCE WITH AWWA C105.

### VALVES:

GATE VALVES SHALL BE RESILIENT SEAT AND SHALL CONFORM TO ANSI/AWWA C509.87 WITH HANDWHEEL OR WRENCH NUT, EXTENSION STEMS AND OTHER APPURTENANCES AS REQUIRED. MANUFACTURER'S CERTIFICATION OF THE VALVES COMPLIANCE WITH AWWA SPECIFICATION C509 AND TESTS LISTED THEREIN WILL BE REQUIRED. VALVES SHALL BE CLOW, DRESSER KENNEDY, AMERICAN.

### VALVE BOXES:

VALVE BOXES ON BURIED POTABLE WATER MAINS SHALL BE ADJUSTABLE, CAST IRON CONSTRUCTION, WITH MINIMUM INTERIOR DIAMETER OF 5" WITH COVERS CAST WITH THE INSCRIPTION IN LEGIBLE LETTERING ON TOP: "WATER". BOXES SHALL BE SUITABLE FOR THE APPLICABLE SURFACE LOADING AND VALVE SIZE, AND SHALL BE MANUFACTURED BY MUELLER COMPANY, MODEL 10364, OR APPROVED EQUAL. VALVE BOX PADS SHALL BE 18" X 18" X 4" THICK CONCRETE WITH #4 REINFORCING BARS. PAD TO BE SET AT FINISHED GRADE WITH RECESSED DETECTOR WIRE CONDUIT PORT PER DETAIL.

### PIPE INSTALLATION:

PIPE INSTALLATION OF PVC WATER MAIN SHALL BE IN CONFORMANCE WITH ASTM D2774 (LATEST EDITION). INSTALLATION OF DUCTILE IRON PIPE WATER MAIN SHALL BE IN CONFORMANCE WITH AWWA C600.87.

COMPACTED BACKFILL SHALL BE TO 98% MAXIMUM DENSITY AS DETERMINED BY AASHTO T–180 UNDER ALL PAVEMENTS WITH 12" MAXIMUM LIFT THICKNESS. OTHER COMPACTION OF BACKFILL SHALL BE TO 95% MAXIMUM DENSITY AS DETERMINED BY AASHTO T–180 WITH 12" MAXIMUM LIFT THICKNESS. SEE PIPE TRENCHING DETAILS.

MINIMUM COVER OVER ALL PIPE SHALL BE 36" FROM TOP OF PIPE TO FINISHED GRADE. SEE PLAN AND PROFILE SHEETS FOR REQUIRED DEPTH.

ALL WATER MAINS SHALL BE INSTALLED WITH PIPE RESTRAINTS OR THRUST BLOCKS, UNLESS SPECIFICALLY NOTED OR SHOWN OTHERWISE.

ALL PLUGS, CAPS, TEES, BENDS, FIRE HYDRANTS, VALVES, ETC. SHALL BE PROVIDED WITH PIPE RESTRAINTS OR THRUST BLOCKS. FOR RESTRAINT AND THRUST BLOCK CONSTRUCTION SPECIFICATIONS, REFER TO WATER SYSTEM DETAILS.

### PIPE IDENTIFICATION:

ALL WATER MAIN PIPE, INCLUDING FITTINGS, SHALL BE COLOR CODED OR MARKED USING BLUE AS PREDOMINANT COLOR TO DIFFERENTIATE DRINKING WATER FROM RECLAIMED OR OTHER WATER. UNDERGROUND PLASTIC PIPE SHALL BE SOLID–WALL BLUE PIPE, SHALL HAVE A CO–EXTRUDED BLUE EXTERNAL SKIN, OR SHALL BE WHITE OR BLACK PIPE WITH BLUE STRIPES INCORPORATED INTO, OR APPLIED TO, THE PIPE WALL; AND UNDERGROUND METAL OR CONCRETE PIPE SHALL HAVE BLUE STRIPES APPLIED TO THE PIPE WALL. PIPE STRIPED DURING MANUFACTURING OF THE PIPE SHALL HAVE CONTINUOUS STRIPES THAT RUN PARALLEL TO THE AXIS OF THE PIPE, THAT ARE LOCATED AT NO GREATER THAN 90–DEGREE INTERVALS AROUND THE PIPE, AND THAT WILL REMAIN INTACT DURING AND AFTER INSTALLATION OF THE PIPE. IF TAPE OR PAINT IS USED TO STRIPE PIPE DURING INSTALLATION OF THE PIPE, THE TAPE OR PAINT SHALL BE APPLIED IN A CONTINUOUS LINE THAT RUNS PARALLEL TO THE AXIS OF THE PIPE AND THAT IS LOCATED ALONG THE TOP OF THE PIPE; FOR PIPES WITH AN INTERNAL DIAMETER OF 24 INCHES OR GREATER, TAPE OR PAINT SHALL BE APPLIED IN CONTINUOUS LINES ALONG EACH SIDE OF THE PIPE AS WELL AS ALONG THE TOP OF THE PIPE. ABOVEGROUND PIPE AT DRINKING WATER TREATMENT PLANTS SHALL BE COLOR CODED AND LABELED IN ACCORDANCE WITH SUBSECTION 62–555.320(10), F.A.C., AND ALL OTHER ABOVEGROUND PIPE SHALL BE PAINTED BLUE OR SHALL BE COLOR CODED OR MARKED LIKE UNDERGROUND PIPE. A CONTINUOUS 14 GUAGE COPPER DETECTOR WIRE SHALL BE ATTACHED AS SHOWN ON THE WATER DETAIL SHEET.

### DISINFECTION AND TESTING:

ALL PIPE SHALL BE DISINFECTED IN ACCORDANCE WITH AWWA STANDARD C651.

ALLOWABLE LEAKAGE FOR PVC PRESSURE MAINS WILL BE IN ACCORDANCE WITH AWWA M23.

THE CONTRACTOR SHALL PROVIDE AT HIS OWN EXPENSE ALL NECESSARY TEST PUMPING EQUIPMENT, WATER, WATER METERS, PRESSURE GAUGES, AND OTHER EQUIPMENT, MATERIAL AND FACILITIES REQUIRED FOR ALL HYDROSTATIC AND LEAKAGE TESTING. CONTRACTOR SHALL CONTACT THE ENGINEER, OWNER/OPERATOR AND COUNTY IN WRITTEN FORM, FORTY–EIGHT (48) HOURS IN ADVANCE OF PROPOSED TESTING. THE CONTRACTOR SHALL PERFORM SATISFACTORY PRETESTING PRIOR TO NOTIFICATION.

THE WATER SYSTEM SHALL BE SOAK TESTED 24 HOURS @ 1.5 TIMES THE WORKING PRESSURE OR 150 PSI WHICHEVER IS GREATER, AND TESTED FOR LEAKAGE AT 150 PSI FOR TWO HOURS WITH ALLOWABLE LEAKAGE IN ACCORDANCE WITH ABOVE STANDARDS.

ALL TESTING SHALL BE PERFORMED WITH POTABLE WATER. AIR TESTING OF WATER MAINS WILL NOT BE ALLOWED.

CONTRACTOR SHALL PULL BACTERIOLOGICAL TEST SAMPLES FROM THE SAMPLE POINTS SPECIFIED BY THE ENGINEER.

### CONNECTIONS TO EXISTING WATER MAINS:

PRIOR TO THE CONNECTION TO ANY EXISTING MAIN, THE PROPOSED WATER MAIN SHALL BE DISINFECTED AND HAVE ENGINEER APPROVED PRESSURE TESTING.

### AS BUILT DRAWINGS:

THE CONTRACTOR SHALL PROVIDE VERTICAL AND HORIZONTAL "AS–BUILT" INFORMATION RELATIVE TO ALL CONSTRUCTED UTILITIES AND STRUCTURES. THREE SETS SHALL BE PROVIDED FOR REVIEW.

AS–BUILT INFORMATION FOR THE WATER SYSTEM SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING:

1. LOCATION OF ALL PUMPS, TANKS, RESEVOIRS, PRESSURE SYSTEMS, EQUIPMENT, VALVES, FITTINGS, HYDRANTS AND SERVICES. HORIZONTAL AND VERTICAL
2. LOCATION OF THE WATER MAIN TIED WITH COORDINATES.
3. CERTIFICATION AS TO THE SYSTEM MEETING THE MINIMUM COVER REQUIREMENTS.
4. HORIZONTAL AND VERTICAL DATA FOR ANY CONSTRUCTION WHICH DEVIATES FROM THE APPROVED ENGINEERING PLANS.
5. UTILITY LOCATES ON SYSTEMS INSTALLED UNDER THIS CONTRACT SHALL REMAIN THE RESPONSIBILITY OF THE CONTRACTOR/DEVELOPER UNTIL AS–BUILT DRAWINGS ARE REVIEWED AND APPROVED BY THE UTILITY.

## PIPE IDENTIFICATION FOR SANITARY/STORM SEWERS:

ALL WASTEWATER/STORMWATER PIPE, INCLUDING FITTINGS, SHALL BE COLOR CODED OR MARKED USING GREEN AS PREDOMINANT COLOR TO DIFFERENTIATE DRINKING WATER FROM RECLAIMED OR OTHER WATER. UNDERGROUND PLASTIC PIPE SHALL BE SOLID–WALL GREEN PIPE, SHALL HAVE A CO–EXTRUDED GREEN EXTERNAL SKIN, OR SHALL BE WHITE OR BLACK PIPE WITH GREEN STRIPES INCORPORATED INTO, OR APPLIED TO, THE PIPE WALL; AND UNDERGROUND METAL OR CONCRETE PIPE SHALL HAVE GREEN STRIPES APPLIED TO THE PIPE WALL. PIPE STRIPED DURING MANUFACTURING OF THE PIPE SHALL HAVE CONTINUOUS STRIPES THAT RUN PARALLEL TO THE AXIS OF THE PIPE, THAT ARE LOCATED AT NO GREATER THAN 90–DEGREE INTERVALS AROUND THE PIPE, AND THAT WILL REMAIN INTACT DURING AND AFTER INSTALLATION OF THE PIPE. IF TAPE OR PAINT IS USED TO STRIPE PIPE DURING INSTALLATION OF THE PIPE, THE TAPE OR PAINT SHALL BE APPLIED IN A CONTINUOUS LINE THAT RUNS PARALLEL TO THE AXIS OF THE PIPE AND THAT IS LOCATED ALONG THE TOP OF THE PIPE; FOR PIPES WITH AN INTERNAL DIAMETER OF 24 INCHES OR GREATER, TAPE OR PAINT SHALL BE APPLIED IN CONTINUOUS LINES ALONG EACH SIDE OF THE PIPE AS WELL AS ALONG THE TOP OF THE PIPE. ABOVEGROUND PIPE AT WASTEWATER TREATMENT PLANTS SHALL BE COLOR CODED AND LABELED AS SUGGESTED BY F.D.E.P. ALL OTHER WASTEWATER/STORMWATER PIPE ABOVEGROUND, SHALL BE PAINTED GREEN OR SHALL BE COLOR CODED OR MARKED LIKE UNDERGROUND PIPE. A CONTINUOUS 14 GUAGE COPPER DETECTOR WIRE SHALL BE ATTACHED AS SHOWN ON THE WATER DETAIL SHEET.

## STORM SEWER NOTES:

### OWNER/OPERATOR:

THE ENTITY THAT WILL OWN, OPERATE AND MAINTAIN THE SYSTEM SHOWN ON THESE PLANS IS LAKE COUNTY BOARD OF COUNTY COMMISSIONERS. THE CONTRACTOR SHALL BE EXPECTED TO MEET ALL THE REQUIREMENTS OF THAT ENTITY.

### MAINS AND MANHOLES:

1. ALL STORM SEWER MAINS SHALL BE CONSTRUCTED OF REINFORCED CONCRETE PIPE (RCP) MADE IN ACCORDANCE WITH ASTM C 507 STANDARDS AND MEETING FDOT REQUIREMENTS.
2. JOINTS SHALL BE TONGUE AND GROOVE WITH PREFORMED PLASTIC GASKET (RAM–NEK OR APPROVED EQUAL) MEETING FEDERAL SPECIFICATIONS SS–S–210 A, TYPE I, ROPE FORM AND AASHTO DESIGNATION M–198 75 I, TYPE B.
3. ALL MANHOLES AND INLET BOTTOMS SHALL BE PRECAST CONCRETE AND MEET FDOT SPECIFICATIONS FOR FOR THE DESIGNATED TYPE AND SIZE.
4. MANHOLE RING AND COVERS AND INLET GRATES AND TOPS SHALL BE TRAFFIC BEARING H–20.

### AS BUILT DRAWINGS:

THE CONTRACTOR SHALL PROVIDE VERTICAL AND HORIZONTAL "AS–BUILT" INFORMATION RELATIVE TO ALL CONSTRUCTED UTILITIES AND STRUCTURES. THREE SETS SHALL BE PROVIDED FOR REVIEW. ONCE APPROVED BY THE UTILITY, ONE REPRODUCIBLE SET SHALL BE PROVIDED.

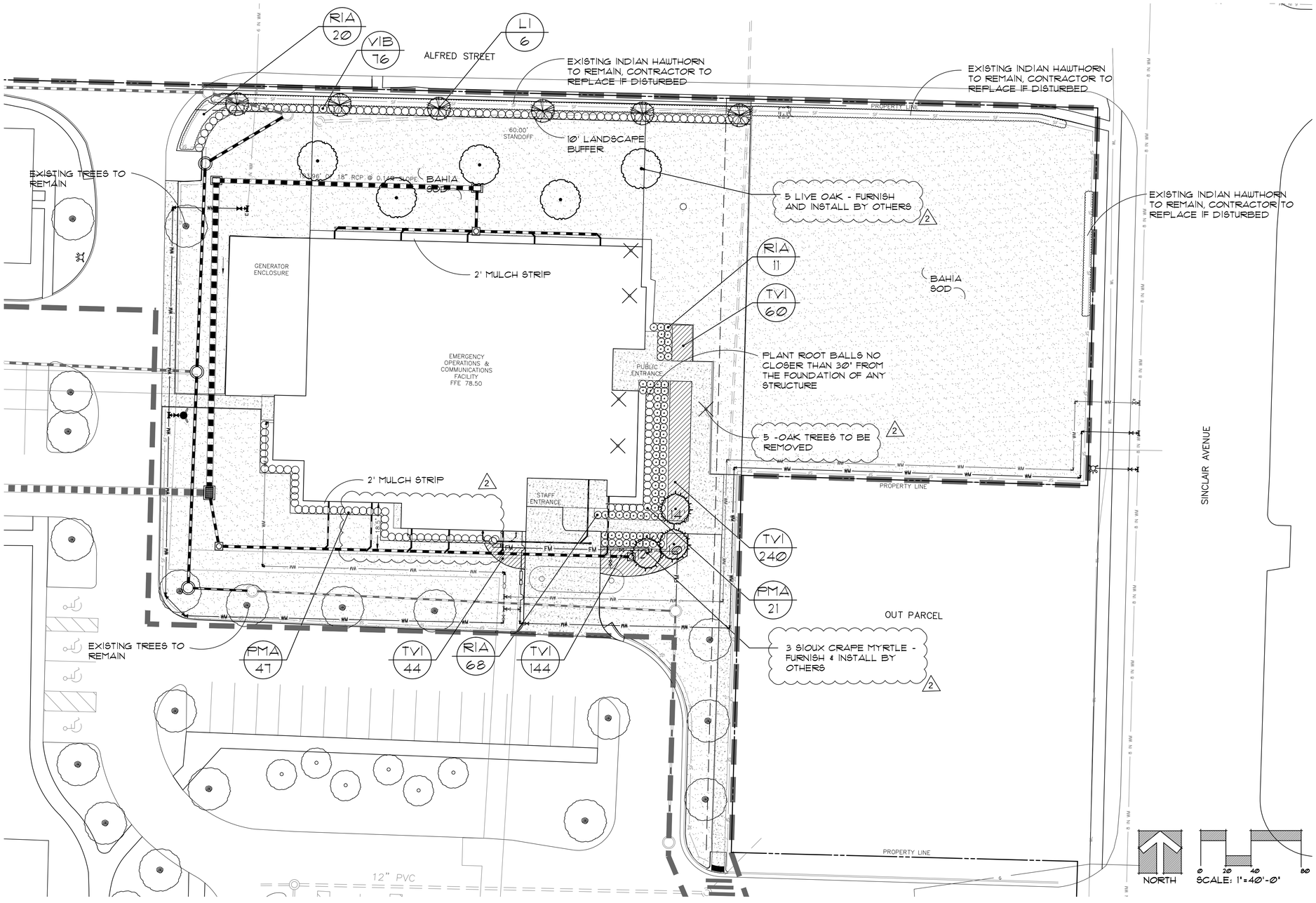
AS–BUILT INFORMATION FOR THE SYSTEM SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING:

1. LOCATION OF ALL INLETS, MANHOLES, PIPES, STRUCTURES, DITCHES, BERMS, AND WATER RETENTION AREAS. HORIZONTAL AND VERTICAL WITH INVERTS.
2. LOCATION OF THE MAIN TIED WITH COORDINATES.
3. CERTIFICATION AS TO THE SYSTEM MEETING THE MINIMUM COVER REQUIREMENTS.
4. HORIZONTAL AND VERTICAL DATA FOR ANY CONSTRUCTION WHICH DEVIATES FROM THE APPROVED ENGINEERING PLANS.
5. UTILITY LOCATES ON SYSTEMS INSTALLED UNDER THIS CONTRACT SHALL REMAIN THE RESPONSIBILITY OF THE CONTRACTOR UNTIL AS–BUILT DRAWINGS ARE REVIEWED AND APPROVED BY THE UTILITY.

## SEPARATION OF WATERMAINS, SANITARY SEWERS AND STORM SEWERS:

1. HORIZONTAL SEPARATION:
   - A) STORM SEWERS: WATER MAINS SHALL MAINTAIN MINIMUM OF A THREE (3) FOOT HORIZONTAL SEPARATION FROM STORM SEWER LINES. THIS DISTANCE IS MEASURED EDGE TO EDGE. IN CASES WHERE IT IS NOT PRACTICAL TO MAINTAIN A THREE (3) FOOT SEPARATION, THE WATER MAIN SHALL BE INSTALLED IN A SEPARATE TRENCH OR AN UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER AND AT AN ELEVATION SO THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST SIX (6) INCHES MIN ABOVE THE TOP OF THE SEWER, AND THE WATER AND SEWER JOINTS SHALL BE STAGGERED.
   - B) SANITARY SEWER FORCEMAINS: FORCE MAINS SHALL BE INSTALLED AT LEAST SIX (6) FEET AND PREFERABLY TEN (10) FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATER MAIN.
   - C) RECLAIMED WATER LINES: MAXIMUM OBTAINABLE SEPARATION OF RECLAIMED WATER FOR PUBLIC ACCESS IRRIGATION LINES AND DOMESTIC WATER LINES SHALL BE PRACTICED. A MINIMUM HORIZONTAL SEPARATION OF THREE (3) FEET OUTSIDE TO OUTSIDE SHALL BE MAINTAINED BETWEEN RECLAIMED WATER LINES AND POTABLE WATER MAINS. IF IT IS NOT POSSIBLE TO OBTAIN THE SEPARATION AS DESCRIBED THEN THE CONFLICT SHALL BE MITIGATED USING A METHOD APPROVED FOR GRAVITY SANITARY SEWERS.
   - D) SEWER/SEPTIC TANK ABSORPTION FIELDS: WATER MAINS SHALL BE LAID AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED SEWER/SEPTIC TANK ABSORPTION FIELD TRENCH. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE.
   - E) GRAVITY SANITARY SEWERS: GRAVITY SEWERS SHALL BE INSTALLED AT LEAST 6 FEET AND PREFERABLY 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATERMAIN. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE. IN CASES WHERE IT IS NOT PRACTICAL TO MAINTAIN A 6–FT. SEPARATION, THE WATERMAIN SHALL BE INSTALLED IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER AND AT AN ELEVATION SO THAT THE BOTTOM OF THE WATERMAIN IS AT LEAST 6 INCHES MIN ABOVE THE TOP OF THE SEWER, AND THE WATER AND SEWER JOINTS SHALL BE STAGGERED.
   - F) IF IT IS IMPOSSIBLE TO OBTAIN PROPER HORIZONTAL AND VERTICAL SEPARATION AS DESCRIBED, BOTH THE WATERMAIN AND SEWER MUST BE CONSTRUCTED OF SLIP–ON OR MECHANICAL JOINT PIPE COMPLYING WITH PUBLIC WATER SUPPLY DESIGN STANDARDS OF THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION AND BE PRESSURE TESTED TO 150 PSI TO ASSURE WATERTIGHTNESS BEFORE BACKFILLING.
2. VERTICAL SEPARATION:
   - A) WATERMAINS CROSSING SEWERS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 6 INCHES AND PREFERABLY 12 INCHES BETWEEN THE OUTSIDE OF THE WATERMAIN AND THE OUTSIDE OF THE SEWER. THIS SHALL BE THE CASE WHERE THE WATERMAIN IS ABOVE THE SEWER WITH PREFERENCE TO THE WATERMAIN LOCATED ABOVE THE SEWER. WHEN THE WATER MAIN MUST BE BELOW THE SEWER, A MINIMUM VERTICAL SEPARATION OF 12 INCHES BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF THE SEWER SHALL BE MAINTAINED. AT CROSSINGS ONE FULL LENGTH OF WATER PIPE SHALL BE LOCATED SO BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE. SPECIAL STRUCTURAL SUPPORT FOR THE WATER AND SEWER PIPES MAY BE REQUIRED.
   - B) SANITARY SEWER FORCEMAINS: THERE SHALL BE A 12 INCH VERTICAL SEPARATION AT CROSSINGS OF WATERMAINS AND SANITARY SEWER FORCEMAINS.
   - C) STORM SEWERS: A MINIMUM SIX (6) INCH VERTICAL SEPARATION SHALL BE MAINTAINED BETWEEN WATER MAINS AND STORM SEWERS. THIS DISTANCE IS MEASURED FROM THE OUTSIDE EDGE OF THE UPPER PIPE TO THE OUTSIDE EDGE OF THE LOWER PIPE. THE WATER LINE SHALL CROSS OVER THE SEWER LINE WHERE PRACTICAL. THE CROSSING SHALL BE ARRANGED SO THAT THE SEWER PIPE JOINTS AND THE WATER PIPE JOINTS ARE EQUIDISTANT FROM THE INTERSECTION POINT, WITH NO LESS THAN THREE (3) FEET BETWEEN ANY TWO (2) JOINTS. WHERE THE MINIMUM SIX (6) FEET SEPARATION CANNOT BE MAINTAINED, THE SEWER LINE SHALL BE SLEEVED OR ENCASED IN CONCRETE FOR TWENTY (20) FEET CENTERED ON THE POINT OF CROSSING.
   - D) RECLAIMED WATER LINES: A SIX (6) INCH VERTICAL SEPARATION SHALL BE MAINTAINED AT ALL CROSSINGS OF RECLAIMED WATER FOR PUBLIC ACCESS IRRIGATION.
   - E) GRAVITY SANITARY SEWERS: GRAVITY SEWERS CROSSING UNDER WATERMAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 6 INCHES AND PREFERABLY 12 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE. THE CROSSING SHALL BE ARRANGED SO THAT THE SEWER JOINTS AND WATER JOINTS WILL BE EQUIDISTANT FROM THE POINT OF CROSSING WITH NO LESS THAN 6 FEET BETWEEN ANY TWO JOINTS. WHERE THE MINIMUM 6–IN. SEPARATION CANNOT BE MAINTAINED, ONE OF THE FOLLOWING METHODS OF PROTECTION SHALL BE UTILIZED:
     1. THE SEWER SHALL BE ENCASED IN CONCRETE FOR 6 FEET CENTERED ON THE CROSSING (6–FT. LINEAR SEPARATION BETWEEN JOINTS);
     2. THE SEWER SHALL BE INSTALLED WITH D.I.P. FOR 6 FEET CENTERED ON THE CROSSING (6–FT. LINEAR SEPARATION BETWEEN JOINTS);
     3. THE SEWER SHALL BE DESIGNED AND CONSTRUCTED EQUAL TO WATER PIPE, AND SHALL BE PRESSURE TESTED AT 150 PSI TO ASSURE WATER TIGHTNESS PRIOR TO BACKFILLING; OR
     4. EITHER THE WATERMAIN OR THE SEWERLINE MAY BE ENCASED IN A WATERTIGHT CARRIER PIPE WHICH EXTENDS 6 FEET ON BOTH SIDES OF THE CROSSING, MEASURED PERPENDICULAR TO THE WATERMAIN. THE CARRIER PIPE SHALL BE OF MATERIALS APPROVED BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, FOR USE IN WATERMAIN CONSTRUCTION.

     ONE OF THESE METHODS SHALL ALSO BE UTILIZED WHEN THERE IS NO ALTERNATIVE TO SEWERS CROSSING OVER WATERMAINS. IN SUCH INSTANCES, ADEQUATE STRUCTURAL SUPPORT SHALL BE PROVIDED FOR THE SEWER TO MAINTAIN LINE AND GRADE.
   - F) WHEN THE WATER MAIN MUST BE BELOW THE SEWER, A MINIMUM VERTICAL SEPARATION OF 12 INCHES BETWEEN THE OUTSIDE EDGE OF THE WATER MAIN AND THE OUTSIDE EDGE OF THE SEWER SHALL BE MAINTAINED. IF THERE IS NO ALTERNATIVE TO PLACING SEWER PIPES OVER WATER MAINS, AND THE SEPARATION CANNOT BE MET, THE PIPES SHALL BE CENTERED A




LAKE COUNTY
FLORIDA
**Approved Plans - Commercial**
**LAKE COUNTY BUILDING DIVISION**
Any errors or omission in these plans shall be made to conform with the applicable code requirements per Florida Building Code 105.4.1
Plans reviewed for code compliance and shall be kept on site
Permit # 2011110212
Building: BLD31 12/29/11
Electric: ADM01 12/29/11
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:

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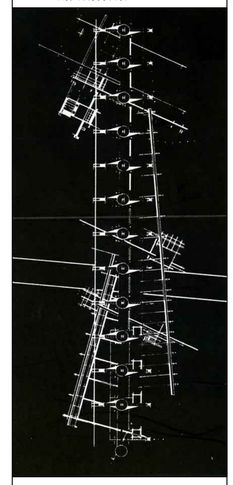

# Lake County Emergency Communications & Operations Center

Tavares, Florida

**City of Tavares Site Development Resubmittal**


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• revisions

2 12-20-11 ADDENDUM 2

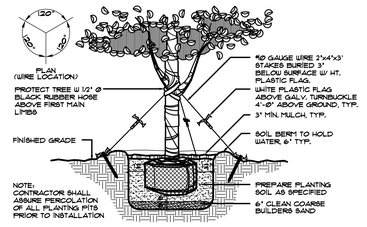
• sheet title

LANDSCAPE PLAN

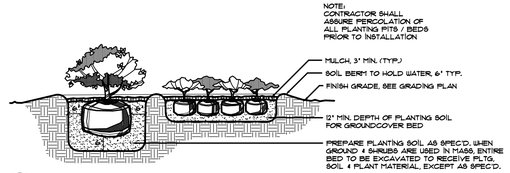
• scale: AS NOTED
• drawn: RP
• checked: FB
• approved: FB
• date: 11/29/11

• project no. 842

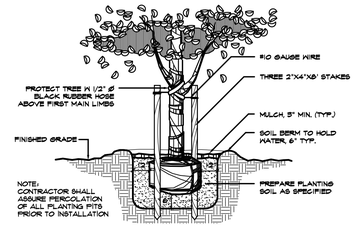
• sheet no. LA-1



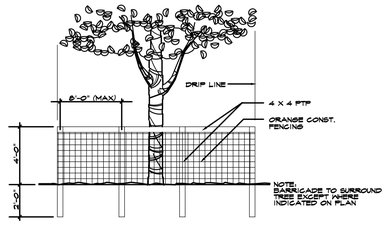

1 L.A-2 LARGE TREE DETAIL
N.T.S.




2 L.A-2 SHRUB AND GROUNDCOVER DETAIL
N.T.S.




3 L.A-2 SMALL TREE STAKING DETAIL
N.T.S.




4 L.A-2 EXISTING TREE BARRICADE
N.T.S.

2

| TREES & PALMS | | | | | | |
|---|---|---|---|---|---|---|
| KEY | QTY | BOTANICAL NAME | COMMON NAME | SIZE | SPACING | REMARKS |
| LI | 6 | Lagerstroemia indica 'Tuscarora' | Crape Mrytle | 7' Ht. Min. | A.S. | 2" Cal, Full Canopy, Multi-Stem |
| | | | | | | |
| SHRUBS & GROUND COVERS | | | | | | |
| KEY | QTY | BOTANICAL NAME | COMMON NAME | SIZE | SPACING | REMARKS |
| RIA | 99 | Raphiolepis indica 'Alba' | Indian Hawthorn | 12"-15" Ht. x 12"-15" Sprd. | 30" O.C. | 3 Gallon, Full |
| VIB | 76 | Viburnum suspensum | Sandankwa Viburnum | 24"-30" x 12"-15" | 36" O.C. | 3 Gallon, Full |
| PMA | 52 | Podocarpus macrophylla | Podocarpus | 5' Ht. x 18"-24" Sprd. | 24" O.C. | 7 Gallon, Full |
| TVI | 488 | Tulbaghia violaxea | Society Garlic | 10"-12" O.A. | 18" O.C. | 1 Gallon, Full |
| | | | | | | |
| SOD & MULCH | | | | | | |
| SOD | 46,590 S.F. | Argentine Bahia | | | | Contractor to verify quantity |
| MULCH | 32 C.Y. | Mini Pine Bark | | | | Contractor to verify quantity |

LANDSCAPE NOTES:

1. In the event of variation between the quantities shown on the plant list and the plans, the plans shall control. Sod quantity take-offs are the responsibility of the landscape contractor.
2. No plant material substitutions shall be permitted or will be accepted without the written consent of the Landscape Architect.
3. Fertilizer shall be applied to all planting areas at the rate of 1 1/2 lbs of actual nitrogen, 1 1/2 lbs. of actual phosphorus, and 1 1/2 lbs. of actual potash per 1000 square feet of planting area.
4. All plantings shall be backfilled with a mixture of 2/3 of the best of the on-site soil and 1/3 peat moss.
5. The landscape contractor is responsible for the immediate repair, at his/her own expense, to any on-site utilities damaged by these landscape construction operations.
6. It is the responsibility of the landscape contractor to prevent plants from falling or being blown over. The landscape contractor shall straighten, repair, and/or replace any plants damaged by a failure to properly stake or guy any trees on-site, at his/her own expense. The landscape contractor shall not be responsible for any trees blown over or damaged by winds in excess of 50 miles per hour.
7. Unless otherwise stated on these plans, the landscape contractor shall only be responsible for fine grading of the planting and sodding areas. Fine grading is described as the final .10 for of grade to be achieved.
8. The landscape contractor shall assure that this work does not interrupt existing or projected drainage patterns.
9. All sod must be placed with staggered joints, tightly butted, with no gaps or overlapping pieces. All sod shall be rolled.
10. All planting beds shall be top dressed with 3" of pine bark nugget mulch.
11. The landscape contractor shall remove his/her excess waste material from the project site on a daily basis.
12. Maintenance shall be the responsibility of the landscape contractor until such time as final acceptance of the project has been granted by the Landscape Architect. Maintenance shall include watering, mulching, weeding, pruning, replacement of dead and dying plants, cutting sod and any other operation necessary for the proper care of these plants.
13. All trees, shrubs, ground covers and sod shall be guaranteed for one year from date of substantial completion of this project. Replacement of material shall be guaranteed for an additional one year.
14. The landscape contractor shall not be responsible to honor any warranty for the loss of any trees, shrubs, ground covers, or sod caused by flooding, fire, freezing temperatures, winds over 50 miles per hour, lightning or any other natural disaster. The landscape contractor is also not responsible for any damage caused by vandalism or negligence on the part of the owner.
15. All plant material shall be Florida Number 1 or better in quality as described in Florida Grades and Standards for Nursery Plants, Florida Department of Agriculture.
16. The Landscape Architect shall have the right, at any time during these operations to reject any and all plant material and workmanship which in his/her opinion does not meet the requirements of these specifications.

LAKE COUNTY
FLORIDA
Approved Plans - Commercial
LAKE COUNTY BUILDING DIVISION
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Notes:

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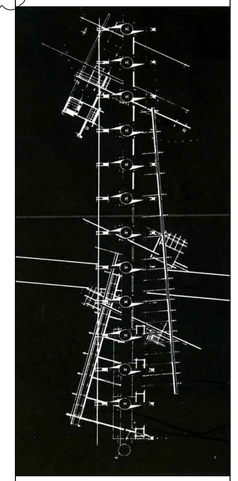

# Lake County Emergency Communications & Operations Center

Tavares, Florida

**City of Tavares Site Development Resubmittal**

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- revisions
- 2 12-20-11 ADDENDUM 2

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- project no. 842
- sheet no. LA-2

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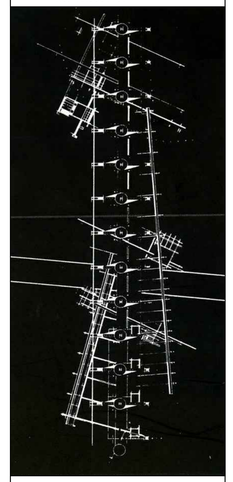

# Lake County Emergency Communications & Operations Center

Tavares, Florida

**City of Tavares Site Development Resubmittal**


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LAKE COUNTY FLORIDA

**Approved Plans - Commercial**

**LAKE COUNTY BUILDING DIVISION**

Any errors or omission in these plans shall be made to conform with the applicable code requirements per Florida Building Code 105.4.1

Plans reviewed for code compliance and shall be kept on site

Permit # 2011110212

Building: BLD31 12/29/11
Electric: ADM01 12/29/11
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:

- revisions

2 12-20-11 ADDENDUM 2

- sheet title

## IRRIGATION PLAN

- scale: AS NOTED
- drawn: RP
- checked: FB
- approved: FB
- date: 11/29/11
- project no. 842
- sheet no. IR-1


LANDSCAPE ARCHITECTS

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tel 407 422 4845
fax 407 422 0699

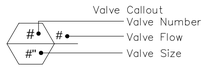
IRRIGATION_SCHEDULE

| SYMBOL | MANUFACTURER/MODEL | QTY | ARC | PSI | GPM | RADIUS |
|---|---|---|---|---|---|---|
| | Rain Bird 1806–PRS 15 Strip Series | 10 | EST | 30 | 0.61 | 4'x15' |
| | Rain Bird 1806–PRS 15 Strip Series | 13 | SST | 30 | 1.21 | 4'x30' |
| | Rain Bird 1812–PRS 15 Strip Series | 4 | EST | 30 | 0.61 | 4'x15' |
| | Rain Bird 1812–PRS 10 Series MPR | 26 | 180 | 30 | 0.79 | 10' |
| | Rain Bird 1812–PRS 10 Series MPR | 2 | 90 | 30 | 0.39 | 10' |
| | Rain Bird 1812–PRS 12 Series MPR | 4 | 90 | 30 | 0.65 | 12' |
| | Rain Bird 1812–PRS 15 Series MPR | 10 | 180 | 30 | 1.85 | 15' |
| | Rain Bird 1812–PRS 15 Series MPR | 10 | 90 | 30 | 0.92 | 15' |
| | Rain Bird 1804–PRS 5 Series Stream | 4 | 180 | 30 | 0.50 | 1'x10' |
| | Rain Bird 1806–PRS with Maxijet ARCGHFG09H | 2 | 90 | 30 | 0.25 | 5' |
| | Rain Bird 1806–PRS with Maxijet ARCRHFR09H | 14 | 90 | 30 | 0.50 | 5' |
| | Rain Bird 1402 Bubbler | 7 | 90 | 30 | 0.50 | 5' |

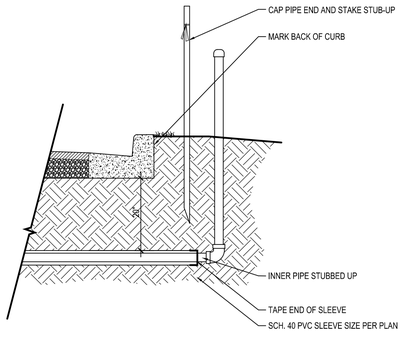
2

| SYMBOL | MANUFACTURER/MODEL/DESCRIPTION | QTY |
|---|---|---|
| | Rain Bird PGA Remote Control Valve | 5 |
| BF | Wilkins 975 1" RPA Backflow Preventer | 1 |
| C | Rain Bird ESP–7M 7 Station Controller | 1 |
| | Rain Bird RSD–BEx Rain Sensor | 1 |
| M | Water Meter 3/4" to produce 20gpm @ 55psi To be provided by others. Located at edge of walk. | 1 |
| | Irrigation Lateral Line: PVC Class 160 SDR 21 | 1,400 l.f. |
| | Irrigation Mainline: PVC 1–1/2" Class 200 | 280 l.f. |
| | Pipe Sleeve: PVC Schedule 40 Extend sleeves 18 inches beyond edges of paving or construction. | |

IRRIGATION CONTRACTOR RESPONSIBLE FOR THEIR OWN TAKE OFF




PROVIDE MEASUREMENTS FROM 2 REFERENCE POINTS TO STUB UP ON THE AS-BUILD DRAWING




## SLEEVING ROUGH-IN DETAIL

SCALE: NTS

# UNDERGROUND IRRIGATION SPECIFICATIONS

1.0 GENERAL

1.1 SUMMARY: Includes but not limited to:
- A. Furnishing and installing sprinkler system as described in Contract Documents complete with accessories necessary for proper functioning.

1.2 SYSTEM DESCRIPTION:
- A. Design Requirements:
  1. Layout of Irrigation Heads:
     - a. Location of heads shown on Drawings is approximate. Actual placement may vary slightly as is required to achieve full, even coverage without spraying onto buildings, sidewalks, fences, etc.
     - b. During layout, consult with Landscape Architect to verify proper placement and make recommendations, where revisions are advisable.

1.3 QUALITY ASSURANCE:
- A. Regulatory Requirements:
  1. Work and materials shall be in accordance with latest rules and regulations, and other applicable state or local laws. Nothing in Contract Documents is to be construed to permit work not conforming to these codes.
- B. Pre-Installation Conference:
  1. Meet with Owner and Landscape Architect to discuss and clarify all aspects of job requirements prior to commencing work of this Section.
- C. System Adjustments:
  1. Minor adjustments in system will be permitted to avoid existing fixed obstructions.
  2. Mainline, laterals, and valves are shown for clarity purposes only. All irrigation equipment to be with landscape area. Mainline, laterals and valves to be installed as far away from existing and new specimen trees as possible.
- D. 1. Documentation and submittal of actual water supply performance prior to commencing installation.

1.4 SUBMITTALS:
- A. Record Drawings:
  1. Prepare an accurate as-built drawing as installation proceeds to be submitted prior to final inspection. Drawing shall include:
     - a. Detail and dimension changes made during construction.
     - b. Significant details and dimensions not shown in original Bidding Documents.
  2. Maintain, at job site, one copy of Contract Documents (as defined in General Conditions) and relevant shop drawings.
  3. Clearly mark each document "PROJECT RECORD COPY" and maintain in good condition for use of the Landscape Architect and Owner.
  4. As-built drawing shall be clearly drawn on reproducible mylar.
  5. Submit product literature for all sprinklers, valves, pipe, wire, wire connectors and controller.
  6. Final payment for system will not be authorized until accurate and complete submittals are delivered to the Landscape Architect.
- B. Instruction Manual:
  1. Provide instruction manual which lists complete instructions for system operation and maintenance.

1.5 PRODUCT STORAGE:
- A. During construction and storage, protect materials from damage and prolonged exposure to sunlight.

1.6 WARRANTY:
- A. Standard one (1) year warranty stipulated in General Conditions shall include:
  1. Completed system including parts and labor.
  2. Filling and repairing depressions and replacing plantings due to settlement of irrigation trenches for one (1) year following final acceptance.
  3. System adjustment to supply proper coverage to areas to receive water.

1.7 MAINTENANCE:
- A. Extra Materials:
  1. In addition to installed system, furnish Owner with the following items at close-out:
     - a. Two sprinkler head bodies of each size and type.
     - b. Two nozzles for each size and type.
     - c. Two adjusting keys for each sprinkler head cover type.

2.0 PRODUCTS:

2.1 PIPE, PIPE FITTINGS, AND CONNECTIONS:
- A. Pipe shall be continuously and permanently marked with Manufacturer's name, size, schedule, type, and working pressure.
- B. Pipe:
  1. Pressure Lines: as indicated on plans.
  2. Lateral Lines: as indicated on plans.
  3. Risers: sch. 80 PVC, gray
- C. Fittings:
  1. Spears Schedule 40 PVC.
- D. Sleeving:
  1. Schedule 40 PVC.

2.2 SPRINKLER HEADS:
- A. Conform to requirements shown on Drawings as to type, radius of throw, pressure, and discharge.

2.3 AUTOMATIC SPRINKLER SYSTEM:
- A. Control valves shall be of size and type indicated on Drawings.
- B. Control wire shall be Regency UL listed, color coded copper conductor direct burial size 14. Tape control wire to bottom of main line every ten (10') feet. Where control wire leaves main it shall be enclosed in Class 200 PVC conduit. Use 3M-DBY waterproof wire connectors at splices and locate all splices within valve boxes. Use white or gray color for common wire and other colors for all other wire.
- C. Add one extra control wire from panel to valves for use if a wire fails and mark it in the control box as an extra wire. This wire shall be of a different color than the others.

2.4 VALVES:
- A. Electric Valves:
  1. Make and model shown on Drawings.
- B. Gate valves:
  1. Bronze construction, angle type, 150 pound class, threaded connections, with cross-type operating handle designed to receive operating key.
- C. Automatic Controller:
  1. Make and model shown on Drawings.
- D. Backflow Preventor:
  1. Make and model shown on Drawings.

2.5 VALVE ACCESSORIES:
- A. Valve Boxes:
  1. Ametek or Brooks rectangular heavy duty valve box with locking lid or Landscape Architect approved equal.
  2. Do not install more than one (1) valve in a single box.
  3. Valve boxes shall be large enough for easy removal or maintenance of valves.

3.0 EXECUTION:

3.1 PREPARATION:
- A. Protection:
  1. Work of others damaged by this Section during course of its work shall be replaced or repaired by original installer at this Section's expense.

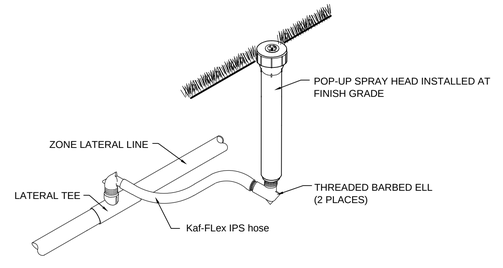
3.2 INSTALLATION:
- A. Trenching and Backfilling:
  1. Over-excavate trenches by two (2") inches and bring back to indicated depth by filling with fine, rock-free soil or sand.
  2. Cover pipe both top and sides with two (2") inches of material specified in paragraph above. In no case shall there be less than two (2") inches of rock-free soil or sand surrounding pipe.
  3. Do not cover pressure main, sprinkler pipe, or fittings until the Landscape Architect has inspected and approved system.
- B. Installation of Plastic Pipe:
  1. Install plastic pipe in a manner to provide for expansion and contraction as recommended by Manufacturer.
  2. Unless otherwise indicated on Drawings, install main lines with a minimum cover of eighteen (18") inches based on finish grade. Install lateral lines with a minimum cover of twelve (12") inches based on finish grade.
  3. Install pipe and wires under driveways or parking areas in specified sleeves a minimum of eighteen (18") inches below finish grade or as shown on Drawings.
  4. Locate no sprinkler head closer than twelve (12") inches from building foundation. Heads immediately adjacent to mowing strips, walks or curbs shall be one (1") inch below top of mowing strip, walk or curb and have a minimum of one (1") inch clearance between head and mowing strip, walk or curb.
  5. Drawings show arrangement of piping. Should local conditions necessitate rearrangement, obtain approval of Landscape Architect prior to proceeding with work.
  6. Cut plastic pipe square. Remove burrs at cut ends prior to installation so unobstructed flow will result.
  7. Make solvent weld joints in the following manner:
     - a. Clean mating pipe and fitting with clean, dry cloth and apply one (1) coat of P-70 primer to each.
     - b. Apply uniform coat of 711 solvent to outside of pipe.
     - c. Apply solvent to fitting in similar manner.
     - d. Reapply a light coat of solvent to pipe and quickly insert into fitting.
     - e. Give pipe or fitting a quarter turn to insure even distribution of solvent and make sure pipe is inserted to full depth of fitting socket.
     - f. Hold in position for fifteen (15) seconds minimum or long enough to secure joint.
     - g. Wipe off solvent appearing on outer shoulder of fitting.
     - h. Do not use an excessive amount of solvent thereby causing an obstruction to form on the inside of pipe.
     - i. Allow joints to set at least 24 hours before applying pressure to PVC pipe.
  8. Tape threaded connection with teflon tape.
  9. Install concrete thrust blocks wherever change of direction occurs a PVC main pressure lines unless otherwise detailed on Drawings.
- C. Control Valves and Controller:
  1. Install controller, control wires, and valves in accordance with Manufacturer's recommendations and according to applicable electrical code.
  2. Install valves in plastic boxes with reinforced heavy duty plastic covers. Locate valve box tops at finish grade.
  3. Install remote control valves in valve boxes positioned over valve so all parts of valve can be reached for service. Set cover of valve box even with finish grade.
  4. Install all valve boxes over nine (9") inches of gravel for drainage.
- D. Sprinkler Heads:
  1. Prior to the installation of sprinkler heads, open control valves and use full head of water to flush out system.
  2. Set sprinkler heads perpendicular to finish grade.
  3. Set lawn sprinkler heads adjacent to existing walks, curbs, and other paved areas to grade.

3.3 FIELD QUALITY CONTROL:
- A. Flushing and Testing:
  1. Test pressure lines at a minimum sustained pressure of 100 psi for four (2) hours. Notify Landscape Architect 24 hours prior to test. Do not backfill lines until approved by Landscape Architect.

3.4 ADJUSTMENT AND CLEANING:
- A. Adjust heads to proper grade when turf is sufficiently established to allow walking on it without appreciable harm. Such lowering or raising of of heads shall be part of the original contract with no additional charge to the Owner.
- B. Adjust sprinkler heads for proper distribution and trim to ensure spray does not fall on building.
- C. Adjust watering time of valves to provide proper amounts of water to all plants.

3.5 DEMONSTRATION:
- A. After system is installed and approved, instruct Owners Representative in complete operation and maintenance.

END OF SECTION




## SPRAY HEAD INSTALLATION DETAIL

SCALE: NTS

LAKE COUNTY
FLORIDA
**Approved Plans - Commercial**
**LAKE COUNTY BUILDING DIVISION**
Any errors or omission in these plans shall be made to conform with the applicable code requirements per Florida Building Code 105.4.1
Plans reviewed for code compliance and shall be kept on site
Permit # 20111102l2
Building: BLD31 12/29/11
Electric: ADM01 12/29/11
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes: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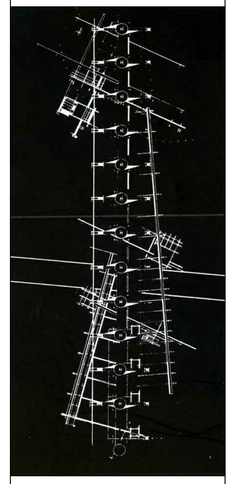

# Lake County Emergency Communications & Operations Center

Tavares, Florida

**City of Tavares Site Development Resubmittal**


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° revisions
2 12-20-11 ADDENDUM 2

° sheet title
IRRIGATION PLAN

° scale: AS NOTED
° drawn: RP
° checked: FB
° approved: FB
° date: 11/29/11

° project no. 842

° sheet no. IR-2

## STRUCTURAL NOTES:

### A. GENERAL

1. ALL NEW WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE MINIMUM REQUIREMENTS OF THE FLORIDA BUILDING CODE, 2007 EDITION WITH 2009 REVISIONS AND ANY MORE STRICT STANDARDS AS REQUIRED BY LAKE COUNTY, FLORIDA.
2. VERIFY ALL EXISTING CONDITIONS, DIMENSIONS, AMD ELEVATIONS PRIOR TO BEGINNING WORK. ANY DEVIATIONS FOUND SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING.
3. THE CONTRACTOR IS RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION AND SHALL PERFORM HIS WORK IN A SAFE MANNER.
4. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL TEMPORARY SHORING OR BRACING, AS REQUIRED, DURING CONSTRUCTION.

### B. FOUNDATIONS

1. PERFORM FOUNDATION WORK AS INDICATED ON THE PLANS.
2. THE FOUNDATIONS HAVE BEEN DESIGNED FOR AN ALLOWABLE SOIL BEARING PRESSURE OF 4,000 PSF, IN ACCORDANCE WITH THE SOIL REPORT PREPARED BY "NODARSE & ASSOC; REPORT #01-11-0122-101A; DATED MARCH 29, 2011". THE CONTRACTOR SHALL PROVIDE SUITABLE MEANS FOR COMPACTING THE SOILS SO AS TO ACHIEVE THE ASSUMED ALLOWABLE SOIL BEARING CAPACITY USED IN THE DESIGN. ALL SOILS BENEATH SLABS AND FOUNDATIONS SHALL BE COMPACTED AND SHALL BE TESTED BY AN INDEPENDENT GEOTECHNIC TESTING LABORATORY PRIOR TO PLACING ANY CONCRETE AS FOLLOWS: CONTINUOUS FOOTING = ONE TEST EVERY 100 LINEAL FEET; INDIVIDUAL COLUMN FOOTINGS = ONE TEST FOR EACH FOOTING, AND EVERY 50 YARDS OF EACH CLASS OF CONCRETE.
3. THE CONTRACTOR IS REPONSIBLE FOR ANY DEWATERING AT THE SITE DURING CONSTRUCTION.

### C. CONCRETE

1. ALL CONCRETE WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE, 2007 EDITION, (W/2009 REV'S), AND THE REQUIREMENTS OF ACI 301-05 BY THE "AMERICAN CONCRETE INSTITUTE FOR CAST-IN-PLACE, REINFORCED CONCRETE AND REINFORCING, AND ACI 318-05 "BUILDING CODE REQUIREMENTS FOR CONCRETE STRUCTURES".
2. CEMENT SHALL BE PORTLAND CEMENT, TYPE I.
3. REINFORCING SHALL BE ASTM A-615, GRADE 60 (DEFORMED) AND FREE OF RUST, MILL, SCALE AND OIL.
4. ALL CONCRETE SHALL REACH A 28-DAY DESIGN COMPRESSIVE STRENGTH OF 3000 PSI, EXCEPT CONCRETE BEAMS (4000 PSI)
   SLUMPS SHALL BE AS FOLLOWS: CONCRETE FOR MASONRY GROUT 8" TO 11"
   ALL OTHER CONCRETE 4" +/- 1"
   SLUMPS SHALL BE MEASURED AT THE DISCHARGE END OF THE HOSE, IF A PUMP IS USED.
5. ALL CONCRETE SLABS AT SIDEWALKS, STAIR TREADS, AND LANDINGS SHALL HAVE A NON-SLIP, BROOM FINISH.
6. PROVIDE CONCRETE COVER OVER ALL REINFORCING AS FOLLOWS:
   FOOTINGS (SIDES AND BOT) 3"
   FORMED, EXPOSED TO EARTH 2"
   FORMED, EXPOSED TO WEATHER, 1 1/2"
   FORMED, NOT EXPOSED TO EARTH OR WEATHER 3/4"
7. ALL REINFORCING IN SLABS-ON-GRADE SHALL BE 6x6/W1.4xW1.4 WELDED WIRE FABRIC, TYP UNO ASTM A-85
8. REINFORCING BARS IN CONCRETE SHALL BE LAPPED A MIN OF 36 BAR DIA, TYP (EXCEPT 48 BAR DIA AT VERTICAL MASONRY WALL REINFORCING). 3/4" CHAMFER AT ALL EXPOSED CONCRETE EDGES (BINS).
9. THE CONTRACTOR SHALL PREPARE SHOP DRAWINGS SHOWING ALL REINFORCING PLACEMENT AND CONCRETE DESIGN MIXES TO BE AVAILABLE FOR THE A/E TO REVIEW FOR CONFORMANCE TO PROJECT REQUIREMENTS PRIOR TO PLACING ANY CONCRETE. ALL CONCRETE SHALL BE FROM A SINGLE SOURCE SUPPLIER.

### D. TILT-UP PANELS

1. ALL CONCRETE TILT-UP PANEL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE, ACI 551R-(LATEST) "TILT-UP CONCRETE STRUCTURES" AND ACI 318-05 "BUILDING CODE REQUIREMENTS FOR CONCRETE STRUCTURES." (ACI = AMERICAN CONCRETE INSTITUTE)
2. CEMENT SHALL BE PORTLAND CEMENT, TYPE I.
3. REINFORCING SHALL BE ASTM A-615, GRADE 60 (DEFORMED) AND FREE OF RUST, MILL, SCALE AND OIL.
4. ALL CONCRETE TILT-UP PANELS SHALL REACH A 28-DAY DESIGN COMPRESSIVE STRENGTH OF 4000 PSI. SLUMPS SHALL BE 4" +/- 1". SLUMPS SHALL BE MEASURED AT THE DISCHARGE END OF THE HOSE, IF A PUMP IS USED.
5. PROVIDE CONCRETE COVER OVER ALL REINFORCING. REINFORCING EXPOSED TO EARTH OR WEATHER:
   No. 6 TO No. 18 BARS, 2"
   No. 5 BAR AND SMALLER, 1 1/2"
6. REINFORCING BARS IN CONCRETE TILT-UP PANELS SHALL BE LAPPED A MINIMUM OF 36 BAR DIAMETERS.
7. TILT-WALL PANELS SHALL BE BUILT AND REINFORCED AS INDICATED IN THE DRAWINGS. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR ALL OPENINGS DIMENSIONS AND REVEALS, ETC., TYPICAL.
8. GENERAL CONTRACTOR SHALL PROVIDE TILT-WALL SHOP DRAWINGS FOR REINFORCING, LAYOUT, AND EMBED PLACEMENT. SUBMIT THE SHOP DRAWINGS TO THE ARCH/ENG FOR REVIEW. SUBMIT SIGNED AND SEALED LIFTING AND TEMPORARY BRACING DRAWINGS FOR TILT-WALLS.
9. TILT-WALLS SHALL NOT BE LIFTED UNTIL THE CONCRETE HAS REACHED AT LEAST 75% OF ITS DESIGN STRENGTH.

### E. STRUCTURAL STEEL

1. ALL STRUCTURAL STEEL SHALL BE FABRICATED AND ERECTED IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF AISC, 9TH EDITION (ASD).
2. ALL STEEL SHALL BE ASTM A-36, Fy = 36,000 PSI; WF SHAPES SHALL BE ASTM A-572 (Fy = 50 KSI) ALL STEEL TUBE SHAPES SHALL BE ASTM A500, GRADE B (Fy = 46 KSI)
3. ALL BOLTS FOR STEEL CONNECTIONS SHALL BE 3/4" DIAMETER, A-325N, BEARING TYPE CONNECTIONS. BOLTS SHALL BE TIGHTENED TO A "SNUG-TIGHT" CONDITION, TYPICAL.
4. NO STEEL MEMBERS SHALL BE CUT, NOTCHED, OR OTHERWISE ALTERED IN THE FIELD IN ORDER TO FACILITATE A CONNECTION.
5. ALL STEEL SHALL RECEIVE ONE COAT OF SHOP PRIMER, RED OXIDE, AND SHALL BE TOUCHED UP IN THE FIELD AFTER WELDING.
6. ALL WELDING SHALL BE IN ACCORDANCE WITH A.W.S. ALL WELDING SHALL BE PERFORMED WITH E70XX ELECTRODES, UNO
7. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS SHOWING FABRICATION AND ERECTION DRAWINGS FOR ALL STRUCTURAL STEEL TO THE ENGINEER-OF-RECORD FOR REVIEW OF CONFORMANCE WITH PROJECT REQUIREMENTS.
8. ALL STEEL STAIRS AND HANDRAILS - O.C. SHALL SUBMIT SHOP DRAWINGS. MINIMUM STRINGER SIZE = C12x20.7 FOR LONG RUNS OR MC12x10.6 FOR SWITCH-BACK RUNS, TYP. SEE ARCHITECTURAL DRAWINGS FOR STAIR AND HANDRAIL DIMENSIONS AND REQUIREMENTS, TYP.

### F. STEEL JOISTS

1. EXTENT OF NEW STEEL JOISTS IS SHOWN ON THE PLANS.
2. ALL MATERIALS, FABRICATION, AND ERECTION AND HANDLING OF JOISTS SHALL BE IN STRICT ACCORDANCE WITH SJI, "STEEL JOIST INSTITUTE", MANUAL FOR STEEL JOIST AND JOIST GIRDER CONSTRUCTION.
3. PROVIDE AND INSTALL ALL JOIST BRIDGING; SIZES AND QUANTITY IN ACCORDANCE WITH SJI.
4. ALL K-SERIES JOISTS SHALL HAVE A BEARING SEAT DEPTH OF 2 1/2", AND THE TOP CHORD SHALL EXTEND TO WITHIN 1/2" OF STEEL EDGE ANGLE (EDGE OF SUPPORTED SLAB) U.N.O.
5. ALL K-SERIES JOISTS SHALL BE INSTALLED TO STRUCTURAL STEEL FRAMING MEMBERS OR STEEL BEARING PLATES WITH A MINIMUM BEARING LENGTH OF 3 1/2", AND SHALL BE FASTENED BY WELDING, WITH A 1/8" E70XX ELECTRODE WITH 2" (MIN) OF WELD EACH SIDE FOR A TOTAL OF 4" OF WELD, TYP.

### G. STEEL DECK

1. PROVIDE STEEL FLOOR FORM DECK AND ROOF DECK AS INDICATED ON THE DRAWINGS. ALL STEEL DECK SHALL BE FABRICATED, HANDLED, AND ERECTED IN ACCORDANCE WITH SDI (STEEL DECK INSTITUTE).
2. FORM DECK AND ROOF DECK SHALL HAVE THE MINIMUM SECTION PROPERTIES OF VULCRAFT DECK AS INDICATED.
3. DECK SUPPLIER TO PROVIDE ALL DECK ACCESSORIES AS REQUIRED FOR FULL AND PROPER INSTALLATION.

### H. LIGHT GAGE METAL FRAMING

1. ALL LIGHT GAGE METAL FRAMING WORK SHALL BE IN ACCORDANCE WITH AISI, LATEST EDITION.
2. LIGHT GAGE FRAMING MEMBERS SHALL BE COLD FORMED WITH Fy = 50,000 PSI, MINIMUM (U.N.O.)
3. LIGHT GAGE FRAMING SHAPES SHALL BE: (TYP UNO)
   CSJ FOR STUDS (1 5/8" RETURNS)
   CR FOR RUNNERS OR TRACKS (6" x 16GA TOP & 6" x 16GA BOTTOM)
4. METAL STUD FRAMING INSTALLER SHALL PROVIDE ALL ACCESSORIES, INCLUDING CLIPS WHERE REQUIRED FOR THE ASSEMBLIES INDICATED.
5. ALL LIGHT GAUGE METAL WALL STUDS SHALL HAVE THE FOLLOWING MINIMUM SECTION PROPERTIES: (TYP UNO)
   6", 18 GAGE A=0.442 in^2 Sx=0.753 in^3 Ix=2.229 in^4
   PROVIDE A STUD AT 1'-4" O.C. AND TWO STUDS UNDER EACH GIRDER TRUSS BEARING POINT (U.N.O.)
   PROVIDE A 6"x16GA TRACK AT THE TOP & A 6"x16GA TRACK AT THE BOTTOM OF ALL WALLS. FASTEN STUD TO TRACK WITH (2) #12 TEK SCREWS EACH SIDE OF STUD TOP AND BOTTOM. DOUBLE ALL STUDS AT ENDS OF WALLS, CORNERS, INTERSECTIONS AND EACH SIDE OF OPENINGS. CONNECT MULTI MEMBER STUDS WITH (2) #12 TEK SCREWS AT 12" O.C. OR 1" FILLET WELD AT 12" O.C.
6. ALL LIGHT GAGE FRAMING CONNECTIONS SHALL BE MADE WITH A MINIMUM OF (4) #12 SELF-TAPPING SCREWS, U.N.O.
7. METAL STUD WALL BASE TRACKS SHALL BE SECURED TO CONCRETE WITH 1/4" DIA x 2 1/2" TAPCON ANCHORS (WITH WASHERS) AT A SPACING OF 8" O.C., STAGGER ANCHORS ALONG TRACK. PROVIDE (2) ANCHORS AT ALL JAMB LOCATIONS.
8. PROVIDE LIGHT GAGE METAL BLOCKING AT MID HEIGHT OF WALL. SEE MANUFACTURES SPECIFICATIONS FOR MORE INFORMATION.

### J. MASONRY

1. ALL MASONRY WORK SHALL CONFORM TO THE REQUIREMENTS OF ACI 530-05 "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES".
2. ALL MASONRY SHALL BE NORMAL WEIGHT, ASTM C-90, TYPE II, NON-MOISTURE CONTROLLED UNITS AND SHALL HAVE AN ASSUMED STRENGTH OF MASONRY ASSEMBLAGE, f'm = 1500 PSI (1900 PSI ON THE NET AREA).
3. ALL MASONRY SHALL BE NOMINAL SIZE UNITS 8"x8"x16" (7 5/8"x7 5/8"x15 5/8") PROVIDE HALF-SIZE, KNOCK-OUT, OR U-BLOCKS WHERE SPECIFIED.
4. ALL MASONRY SHALL BE LAID IN RUNNING BOND WITH 3/8" STRUCK JOINTS. MORTAR FOR MASONRY SHALL BE TYPE S THROUGH-OUT. (TYPE M FOR BELOW GRADE PLACEMENT)
5. DO NOT WET MASONRY PRIOR TO APPLYING MORTAR.
6. PROVIDE PRECAST 8"x8" LINTELS OVER ALL MASONRY OPENINGS. PRECAST LINTELS SHALL BE REINFORCED WITH (1)#5 CONT AND SHALL BE FILLED SOLID WITH GROUT. LINTELS SHALL BEAR A MINIMUM OF 8" EACH END. KNOCK OUT B/LINTEL AT BEARING TO ADMIT VERTICAL REINFORCING.
7. PROVIDE STANDARD DURO-WALL LADDER TYPE, 3/16" SIDE AND CROSS RODS, GALVANIZED HORIZONTAL JOINT REINFORCING PLACED AT 16" OC, TYP.

### K. DESIGN LOADS

| | LIVE LOAD | DEAD LOAD |
|---|---|---|
| ROOF (FLAT) | 20 PSF | 25 PSF (10 PSF STRUCTURE + 5 PSF ROOFING + 10 PSF CIVIL, MECHANICAL, ELECTRICAL, PLUMBING) |
| ROOF (SLOPED) | 16 PSF | |
| SECOND FLOOR | | 115 PSF (5" COMP SLAB/DECK + STRUCTURE+ C/M/E/P) |
| OFFICE | 100 PSF | |
| MECHANICAL | 125 PSF | |
| STAIRS, CORRIDORS, ELEVATOR LOBBIES | 100 PSF | |
| NON-BEARING MASONRY WALLS (10 ft) | | 600 PLF |
| SLAB-ON-GRADE | 250 PSF | 75 PSF |

### L. WIND LOADS

WIND LOADS: THE STRUCTURE HAS BEEN DESIGNED FOR WIND LOADS IN ACCORDANCE WITH CHAPTER 16 OF THE FLORIDA BUILDING CODE, 2007 ED (w/2009 REVISIONS) AS FOLLOWS:
BASIC WIND SPEED (3-SECOND GUST) = 160 MPH
EQUIVALENT SUSTAINED VELOCITY = 140 MPH
WIND IMPORTANCE FACTOR = 1.00
WIND EXPOSURE CATEGORY = C
INTERNAL PRESSURE COEFFICIENT = +/- 0.18 (ASCE 7-05; TABLE 6-7)
DIRECTIONALITY FACTOR, Kd = 1.00
BUILDING HEIGHT = 30'
BUILDING TYPE = ENCLOSED
HEIGHT AND EXPOSURE ADJUSTMENT COEFFICIENT = 1.40
ROOF SLOPE = ALMOST FLAT

MAXIMUM DESIGN WIND PRESSURES

- MAIN WIND FORCE RESISTING SYSTEM (MWFRS)
  * EDGE ZONE = 12'-0"
  - WALLS EDGE ZONE = 52.4 PSF
    INTERIOR ZONE = 46.8 PSF
  - WINDWARD ROOFS
    EDGE ZONE = -59.5 PSF
    INTERIOR ZONE = -48.9 PSF
  - LEEWARD ROOFS
    EDGE ZONE = -44.0 PSF
    INTERIOR ZONE = -41.6 PSF
- COMPONENTS AND CLADDING
  NET ROOF UPLIFT = - 54.5 PSF

PRESSURES FOR OPENINGS

| AREA OF OPENING | INTERIOR ZONE (4) | EDGE ZONE (5) |
|---|---|---|
| UP TO 10 SQ. FT. | +53.9 PSF/-58.8 PSF | +53.9 PSF/-67.6 PSF |
| >10 UP TO 20 SQ. FT. | +49.5 PSF/-53.0 PSF | +49.5 PSF/-62.4 PSF |
| >20 UP TO 50 SQ. FT. | +45.5 PSF/-49.7 PSF | +45.5 PSF/-57.6 PSF |
| >50 UP TO 100 SQ.FT. | +41.6 PSF/-46.4 PSF | +41.6PSF/ -52.7 PSF |

CONNECTORS FOR DOOR/WINDOW BUCKS (2x4 MIN)

3/16" DIA x 2" (EMBEDMENT) TAPCONS AT 6" O.C.-
STAGGER CONNECTORS THROUGHOUT LENGTH OF MEMBERS

WIND BOURNE DEBRIS IMPACT REQUIREMENTS

THE PROJECT SITE LIES WITHIN THE WIND BOURNE HURRICANE DEBRIS REGION - ALL OPENINGS SHALL BE PROTECTED WITH IMPACT RESISTANT SHUTTERS OR GLAZING/FRAME MATERIAL - SEE ARCHITECTURAL DRAWINGS FOR GLAZING PROTECTION REQUIREMENTS.

THE BUILDING SHALL MEET THE HURRICANE WIND BOURNE DEBRIS IMPACT CRITERIA SPECIFIED IN THE DEPARTMENT OF ENERGY'S (DOE) STANDARD, Natural Phenomina Hazards Design and Evaluation Criteria, DOE-STS-1020-2002, AS FOLLOWS:

"RESIST PENETRATION OF A 2X4 LUMBER PLANK WEIGHING 15 POUNDS, PROPELLED AT 50 MPH STRIKING END-ON AND NORMAL TO THE ASSEMBLY SURFACE"

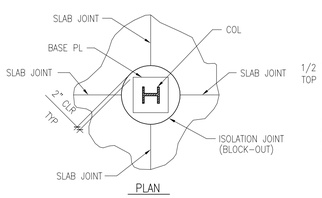
THRESHOLD INSPECTION

IN ACCORDANCE WITH THE ACCEPTED GRANT CRITERIA, THE PROJECT WILL REQUIRE THRESHOLD INSPECTION PER FLORIDA STATUTES - REFER TO THRESHOLD INSPECTION PLAN (SEPARATE DOCUMENT) PREPARED BY THE STRUCTURAL ENGINEER OF RECORD.

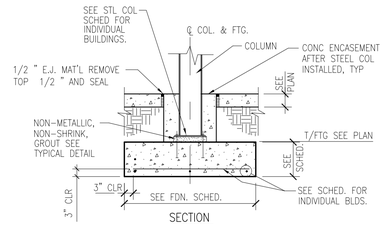
## FOUNDATION SCHEDULE

| FTG MARK | SIZE L x W x D | LOCATION | REINFORCING | REMARKS |
|---|---|---|---|---|
| WF1 | CONT x 3'-4" x 1'-4" | TOP BARS | N/A | |
| | | BOT BARS | (4)#5 CONT AND #4 AT 18" O.C. SW | |
| WF2 | CONT x 2'-4" x 1'-4" | TOP BARS | N/A | |
| | | BOT BARS | (3)#5 CONT AND #4 AT 24" O.C. SW | |
| WF3 | CONT x 5'-0" x 1'-4" | TOP BARS | (5)#5 CONT AND #5 AT 18" O.C. SW | FOOTING AT CMU SCREN WALL SEE PLAN AND SECTION |
| | | BOT BARS | (5)#5 CONT AND #5 AT 18" O.C. SW | |
| F1 | 7'-0" x 7'-0" x 1'-6" | TOP BARS | (8) #6 EW | |
| | | BOT BARS | (8) #6 EW | |
| F2 | 12'-6" x 10'-6" x 1'-6" | TOP BARS | #5 AT 12" O.C. E.W. | ELEVATOR PIT MAT SEE DETAIL FOR SUMP PIT INFO |
| | | BOT BARS | #5 AT 12" O.C. E.W. | |
| | | | | |
| TDS1 | CONT x 1'-4" x 1'-4" | TOP BARS | (1)#5 CONT | |
| | | BOT BARS | (2)#5 CONT | |

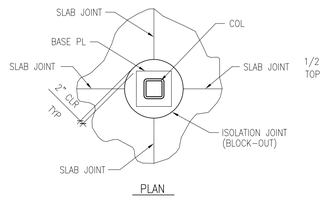
NOTES: EW = EACH WAY, LW = LONG WAY, SW = SHORT WAY



PLAN



SECTION



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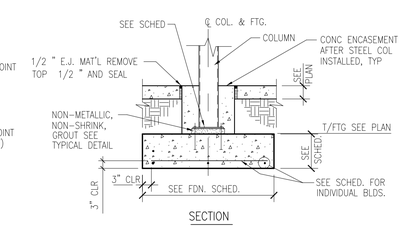
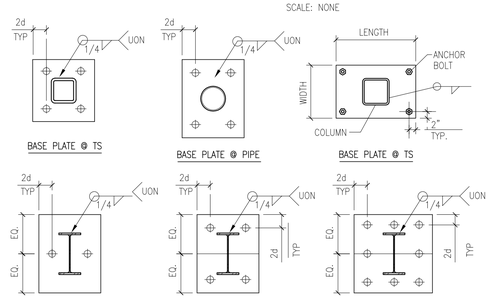


SECTION

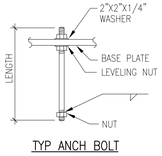
## TYPICAL COLUMN BASE DETAILS

SCALE: NONE




## BASE PLATE DETAILS

SCALE: NONE

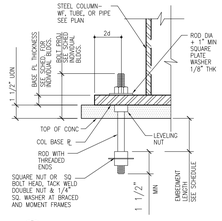


TYP ANCH BOLT

## STEEL COLUMN AND BASE PLATE SCHEDULE

| COL MARK | SIZE | BASE PLATE LENGTH | BASE PLATE WIDTH | BASE PLATE THICKNESS | ANCHOR BOLTS QUANTITY | ANCHOR BOLTS DIAMETER | ANCHOR BOLTS LENGTH | ANCHOR BOLTS PROJECTION | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| C1 | W12x79 | 18" | 18" | 1" | (4) | 7/8" | 16" | 5 1/2" | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

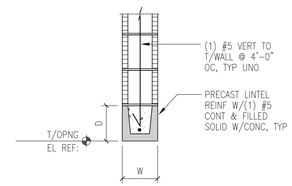
NOTES: 1. SEE SHEET S3.01 FOR TYPICAL BASE PLATE DETAIL, NON-SHRINK GROUT REQUIREMENTS, EDGE DISTANCES, WELD REQUIREMENTS, AND OTHER BASE INFORMATION.
2. SEE PLAN FOR TOP OF FOOTING ELEVATIONS.
3. BASE PLATES SHALL BE GROUTED AS SOON AS STRUCTURE IS IN FINAL ALIGNMENT AND PRIOR TO INSTALLING METAL DECK, ROOFING, EQUIPMENT, etc.
4. PROJECTION IS ABOVE TOP OF FOOTING, TYPICAL.



ANCHOR BOLT DETAIL
SCALE: NONE

## STRUCTURAL ABBREVIATIONS

| | | | |
|---|---|---|---|
| ABV | ABOVE | L2, L3, ETC. | LEVEL 2, 3, ETC, |
| ABV | ADDITIONAL | L | ANGLE |
| ADD'L | AGGREGATE | LB | LEDGER BEAM |
| AGGR | AMERICAN IRON AND | LLH | LONG LEG HORIZONTAL |
| A.I.S.I. | STEEL INSTITUTE | LLV | LONG LEG VERTICAL |
| ALT | ALTERNATE | LNTL | LINTEL |
| ANCH | ANCHOR | LO | LOW |
| APPROX | APPROXIMATELY | LSL | LONG SLOTTED HOLES |
| ARCH | ARCHITECTURAL | LT. WT. | LIGHTWEIGHT |
| A.W.S. | AMERICAN WELDING SOCIETY | LVL | LAMINATED VENEER LUMBER (1.9E) |
| | | LW | LONG WAY |
| L | ANGLE | M | |
| @ | AT | M | MECHANICAL |
| & | AND | MAX | MAXIMUM |
| B | | MBM | METAL BUILDING MFR |
| BB | BOND BEAM | MC | MOMENT CONNECTION |
| BM | BEAM | MCJ | MASONRY CONTROL JT |
| BLDG | BUILDING | MECH | MECHANICAL |
| BLW | BELOW | MEZZ | MEZZANINE |
| BOT | BOTTOM | MFR | MANUFACTURER |
| B.O. | BOTTOM OF | MIN. | MINIMUM |
| BP | BASE PLATE | MISC | MISCELLANEOUS |
| BRDG | BRIDGING | MS | METAL STUD |
| BRG | BEARING | MO | MASONRY OPENING |
| BRK | BRICK | N | |
| BS | BOTH SIDES | NF | NEAR FACE |
| BTJ | BOLTED TIE JOIST | N.I.C. | NOT IN CONTRACT |
| C | | No. OR # | NUMBER |
| C | CEILING | NS | NEAR SIDE |
| CANT | CANTILEVER | N.S.G. | NON-SHRINK GROUT |
| CC | CONCRETE COL | N.T.S. | NOT TO SCALE |
| CHAN | CHANNEL | N. WT. | NORMAL WEIGHT |
| CIP | CAST IN PLACE | O | |
| CJ | CONTROL JOINT | O.C. | ON CENTER |
| CL | CENTER LINE | OPG or OPN'G | OPENING |
| COL | COLUMN | OPP | OPPOSITE |
| COMPR | COMPRESSION | P | |
| CONC | CONCRETE | P | PLUMBING |
| CONN | CONNECTION | PAF | POWDER ACTUATED FASTENER |
| CONSTR | CONSTRUCTION | PC | PRECAST |
| CONT | CONTINUOUS | PERP | PERPENDICULAR |
| CORR | CORRUGATED | PL | PLATE |
| CTR'D | CENTERED | PROP | PROPERTY |
| D | | PROP'Y L. | PROPERTY LINE |
| DET | DETAIL | PSF | POUNDS PER SQ. FOOT |
| DIA OR ø | DIAMETER | PSI | POUNDS PER SQ. INCH |
| DT | DOUBLE TEE | PSL | PARALLEL STRAND LUMBER (2.0E) |
| DWG | DRAWING | R | |
| DWL | DOWEL | R | RISER |
| E | | RAD | RADIUS |
| E | ELECTRICAL | REF | REFERENCE |
| EA | EACH | REINF | REINFORCEMENT |
| EE | EACH END | REQD | REQUIRED |
| EF | EACH FACE | REV | REVISION |
| EL | ELEVATION | RF | ROOF |
| EMBED | EMBEDMENT | RTN | RETURN |
| ENGR | ENGINEER | RW | RETAINING WALL |
| EOP | EDGE OF PIT | ø | ROUND |
| EQ | EQUAL | S | |
| EQ SP | EQUAL SPACE(S) (ING) | SCHD | SCHEDULE |
| EQUIV | EQUIVALENT | SE | SLAB EDGE |
| ES | EACH SIDE | SECT | SECTION |
| EW | EACH WAY | SEIJ | SEALED EDGE ISOLATION JOINT |
| EXIST | EXISTING | SEJ | SEALED EDGE JOINT |
| EXP | EXPANSION | SHRW | SHEAR WALL |
| EXP JT | EXPANSION JOINT | SHT | SHEET |
| EXTERIOR | EXTERIOR | SIM | SIMILAR |
| F | | SJ | SAWCUT JOINT |
| F/ | FACE OF | SJI | STEEL JOIST INSTITUTE |
| FAB | FABRICATE | SL | SLOPE |
| F.D. | FLOOR DRAIN | SOG | SLAB-ON-GRADE |
| FDN | FOUNDATION | SPA | SPACE(S) |
| FF | FAR FACE | SPECS | SPECIFICATIONS |
| FIN | FINISH | SQ | SQUARE |
| FL | FLOOR | ST | STEEL |
| FP | FIRE PROTECTION | STD | STANDARD |
| FS | FAR SIDE | STIRRUP | STIRRUP |
| FT | FOOT | STR | STRENGTH |
| FTG | FOOTING | STRUCT | STRUCTURAL |
| FUT | FUTURE | SW | SHORT WAY |
| G | | T | |
| GALV | GALVANIZE | T | TOP |
| GEN | GENERAL | TB | TIE BEAM |
| GR | GRADE | T&B | TOP & BOTTOM |
| GRTG | GRATING | TC | TIE COLUMN |
| H | | TOS(TSE) | TURN DOWN SLAB |
| HGR | HANGER | THD | THREAD |
| HI | HIGH | THK | THICK |
| HK | HOOK | THKN | THICKEN SLAB |
| HORZ | HORIZONTAL | T.O. or T/ | TOP OF |
| HPT | HORIZONTAL POINT | TOP | TOP OF PLATE |
| HR | HANDRAIL | TOP'G | TOPPING |
| HS | HEADED STUD | TOS | TOP OF STEEL |
| HSA | HEADED STUD ANCHOR | TS | THICKENED SLAB |
| I | | TSE | THICKENED SLAB EDGE |
| IF | INSIDE FACE | TYP | TYPICAL |
| IN | INCH | U | |
| IT | INVERTED TEE | UN | UNLESS NOTED |
| J | | UNO | UNLESS NOTED OTHERWISE |
| JST | JOIST | UON | UNLESS OTHERWISE NOTED |
| JT | JOINT | V | |
| K | | VERT | VERTICAL |
| KIP | KIP | W | |
| KB | KNEE BRACE | W/ | WITH |
| KO | KNOCK OUT | WF | WALL FOOTING (OR WIDE FLANGE) |
| KSF | KIPS PER SQ FOOT | WP | WORK POINT |
| KSI | KIPS PER SQ INCH | WWF | WELDED WIRE FABRIC |
| | | Y | |
| | | YP | YIELD POINT |




NOTES: 1. PRECAST LINTELS SHALL BEAR A MINIMUM OF 8" EACH END, TYP. UNO.
2. BREAK OUT BOTTOM OF LINTEL AT BEARING TO ADMIT VERTICAL REINFORCING.
3. MAX OPENING WIDTH = 10'-0", TYP.

COORDIANTE LOCATIONS WITH MECHANICAL DRAWINGS, TYP.

1 S0.01 TYPICAL PRECAST LINTEL DETAIL AT MECHANICAL DUCT OPENINGS N.T.S.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Winter Park, Florida 32789
(407) 647-1706
Corporate Registration No. AAC001197


LAKE COUNTY FLORIDA

**Approved Plans - Commercial**
**LAKE COUNTY BUILDING DIVISION**
Any errors or omission in these plans shall be made to conform with the applicable code requirements per Florida Building Code 105.4.1
Plans reviewed for code compliance and shall be kept on site
Permit # 2011110212
Building: BLD31 12/29/11
Electric: ADM01 12/29/11
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:


bec
BISHOP ENGINEERING COMPANY
Consulting Structural Engineering
219 Laurel Park
Winter Park, Florida 32792
Phone 407-622-2477 Fax 407-622-2479
Certificate of Authorization # 8175
E.O.R. Bradford T. Bishop, P.E. #51299


Lake County Emergency Communications & Operations Center

Tavares, Florida

PERMIT CD SUBMITTAL


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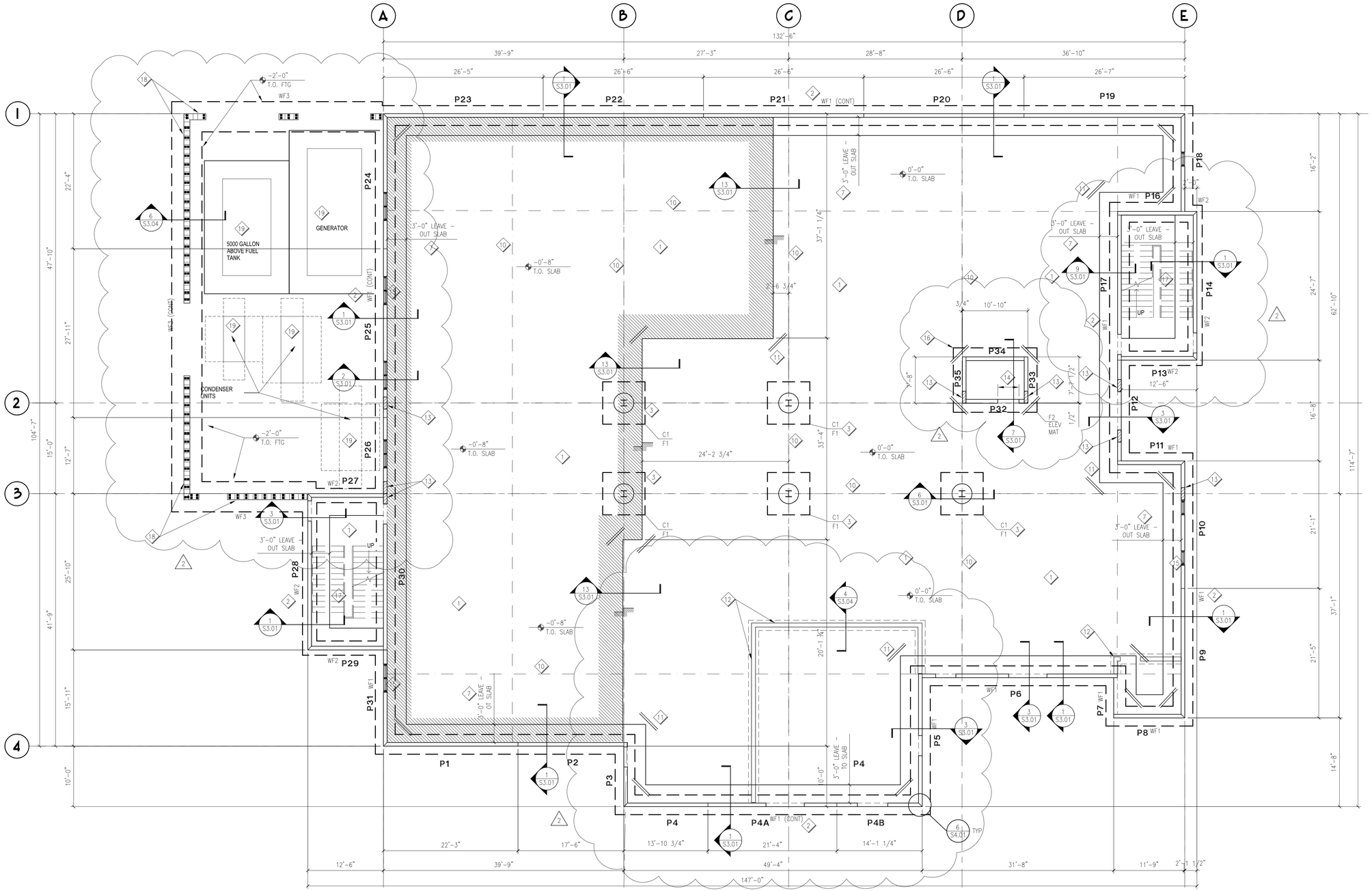
- revisions
- sheet title: Structural General Notes
- scale: AS NOTED
- drawn: BTB
- checked: BTB
- approved: BTB
- date: 11-09-11
- project no. 842-10
- sheet S-0.01




## FOUNDATION PLAN KEYNOTES

1. 4" CONCRETE SLAB-ON-GRADE, REINFORCED WITH 6x6/W1.4xW1.4 WWF OVER 6 MIL VAPOR BARRIER OVER COMPACTED SUBGRADE.
   T.O. SLAB ELEV = 0'-0",
   (ASSUMED) SEE CIVIL DRAWINGS FOR ACTUAL ELEVATIONS.
2. T.O. WALL FOOTING ELEV = -2'-0" TYP UNO. SEE PLAN
3. T.O. STEEL COL FOOTING ELEV = -1'-6", TYP UNO.
4. CONCRETE TILT-UP PANELS ARE 7 1/4" (6 1/2" STRUCTURAL THICKNESS WITH 3/4" REVEAL ALLOWANCE). ARE 7 1/4" THICK - NO REVEALS. SEE SEE SHT S4.01 FOR PANEL TYPES AND REINF.
   SEE ARCHITECTURAL FOR ALL REVEAL LOCATIONS, SIZES, AND DIMENSIONS, TYP.
5. ALL FOOTINGS ARE CENTERED BENEATH BEARING WALLS AND COLUMNS, TYP UNO
6. SEE SHEETS S4.01/2 FOR TILT-UP PANEL REINF, EMBEDDED ITEMS AND JOINT DETAILS, TYP
7. SEE DETAILS FOR SLAB LEAVE-OUT DIMENSIONS AND SEE SECTIONS FOR ADDITIONAL LEAVE-OUT SLAB REINFORCING, TYP.
8. SEE SHT S0.01 FOR GENERAL STRUCTURAL NOTES.
9. COORDINATE DIMENSIONS OF ALL OPENINGS WITH ARCHITECTURAL DRAWINGS, TYP.
10. INDICATES CONSTRUCTION OR CONTROL JOINT, SEE TYP DETAIL ON SHT S3.01.
11. (2)#4 x 4'-0" CENTERED IN SLAB AT ALL SLAB RE-ENTRANT CORNERS AND WHERE SHOWN ON THE PLAN, TYP.
12. NON-LOAD BEARING 8" MASONRY PARTITION WALLS; SEE SECTION, TYP. SEE ARCHITECTURAL FOR DIM's, TYP.
13. COLUMN REINFORCING IN TILT PANELS; REF: S4.01 & S4.02, TYP.
14. VERIFY ROUGH OPENING IN TILT WALL PANEL FOR ELEV DOOR WITH ELEVATOR MFR, TYP.
15. INDICATES GLAZING OPENING IN CONCRETE TILT WALL PANEL - SEE ARCH'L DRAWINGS FOR ALL OPENING DIMENSIONS, TYP.
16. ELEVATOR PIT: 7 1/4" THICK C.I.P. CONCRETE WALLS - SEE SECTIONS - VERFIY PIT DIMENSIONS WITH ELEVATOR MFR PRIOR TO FORMING AND POURING WALLS, TYP.
    T.O. ELEVATOR PIT MAT ELEVATION = -4'-0", TYP.
17. STEEL STAIRS, LANDINGS, AND HANDRAILS - SEE NOTES E.8 AND E.9 ON S0.01 AND SEE ARCH'L DRAWINGS FOR ALL STAIR DIMENSIONS, TYP.
18. SCREEN WALL 12" MASONRY REINFORCED WITH (2) #5 VERT BARS SPACED AT 16" O.C. - GROUT ALL CELLS SOLID; INSTALL No. 9 GAGE HORIZONTAL JOINT REINFORCING AT 16" O.C. (EVERY OTHER MORTAR JOINT), TYP.
    T.O. WALL ELEV = 12'-0", TYP. REF: ARCH'L, TYP.
19. CONCRETE PADS FOR GENERATOR, FUEL TANK, AND CONDENSORS:
    8" THICK REINF'D WITH #5 AT 12" O.C. EACH WAY, CENTERED IN SLABS; WITH PERIMETER THICKEND EDGES 12" WIDE x 16" DEEP REINF'D WITH (2) #5 CONT, TYP. (COORD DIMENSIONS WITH ARCH'L, MECH'L)

N

A S1.01 FOUNDATION AND SLAB PLAN
SCALE: 1/8" = 1'-0"
0 4' 8' 16'
1/8"=1'-0"

THE STRUCTURE HAS BEEN DESIGNED FOR LIVE AND DEAD LOADS IN ACCORDANCE WITH THE FLORIDA BUILDING CODE, 2007 EDITION, (W/2009 REV'S) INCLUDING LOADS FOR A 3-SECOND WIND VELOCITY OF 160 MPH: I = 1.0 EXPOSURE C.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Architects and Planners
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Corporate Registration No. AAC001197


LAKE COUNTY
FLORIDA
**Approved Plans - Commercial**
**LAKE COUNTY BUILDING DIVISION**
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Certificate of Authorization # 8175
E.O.R. Bradford T. Bishop, P.E. #51299


# Lake County Emergency Communications & Operations Center

Tavares, Florida

PERMIT CD SUBMITTAL


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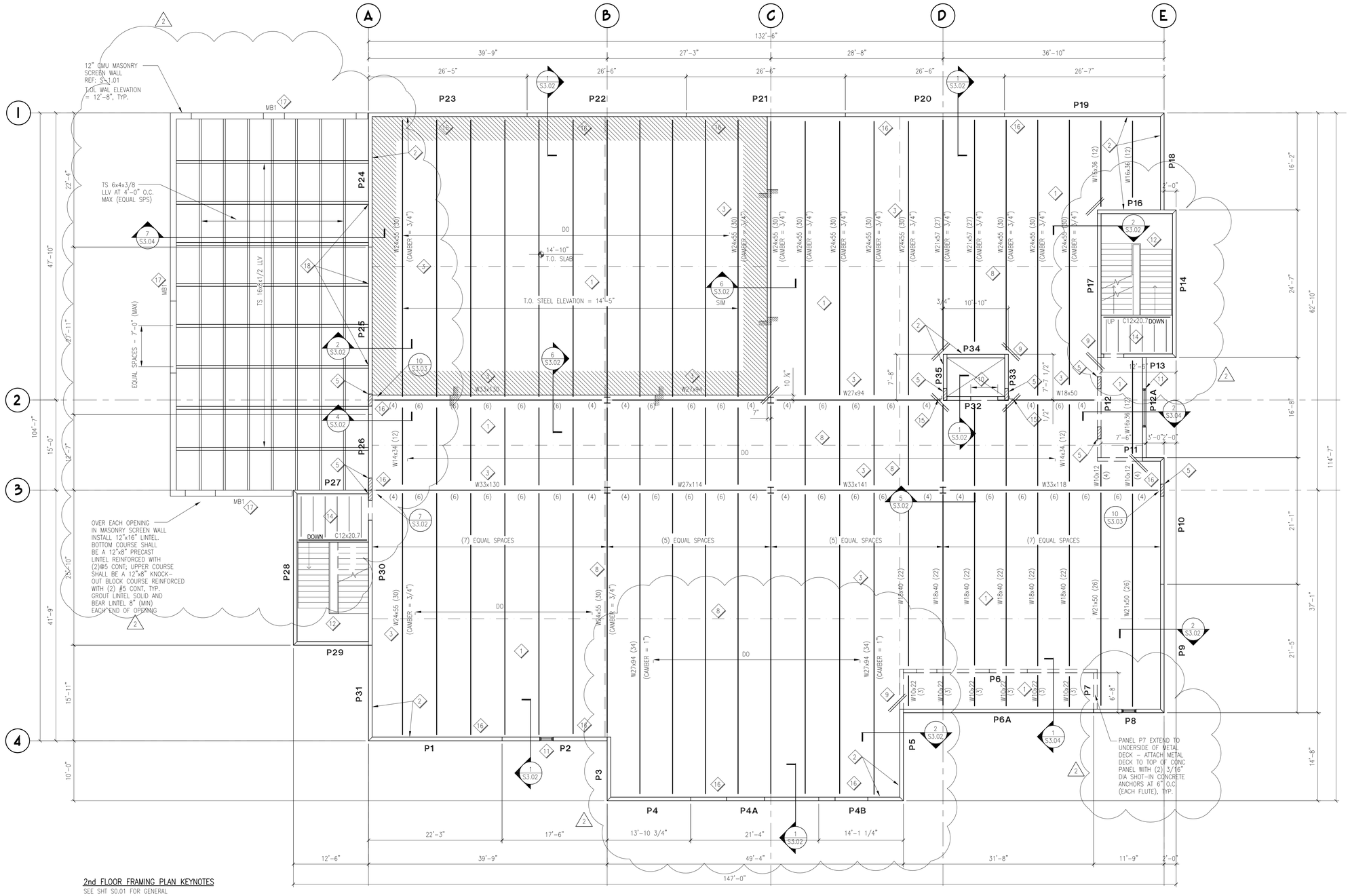
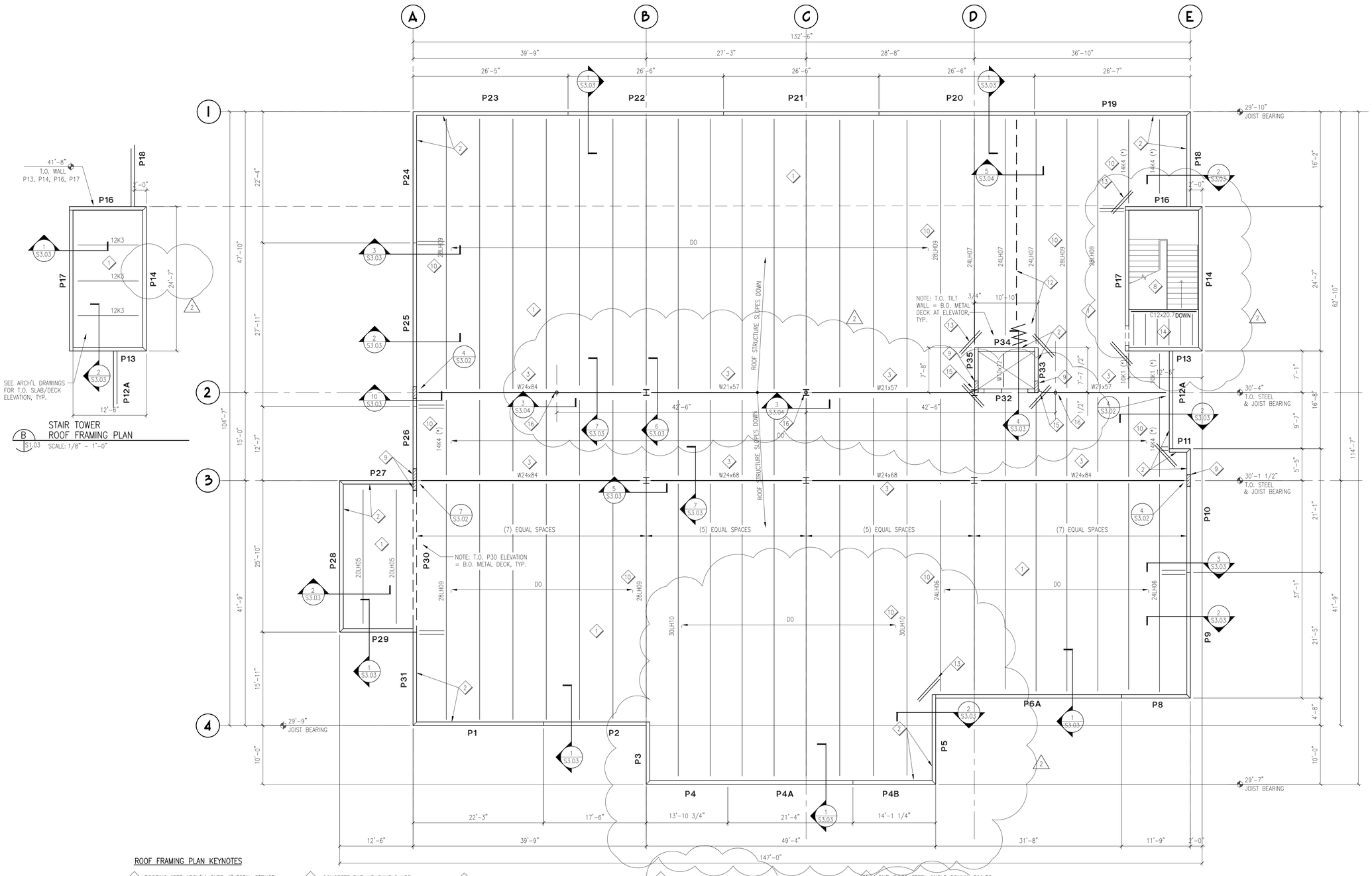
- revisions
  2 ADDENDUM #2 12-22-11
- sheet title: **Foundation and Slab Plan**
- scale: AS NOTED
- drawn: BTB
- checked: BTB
- approved: BTB
- date: 11-09-11
- project no. **842-10**
- sheet **S-1.01**


A
B
C
D
E
1
2
3
4
132'-6"
39'-9"
27'-3"
28'-8"
36'-10"
26'-5"
26'-6"
26'-6"
26'-6"
26'-7"
P23
P22
P21
P20
P19
P18
P17
P16
P14
P13
P12
P12A
P11
P10
P9
P8
P7
P6
P6A
P5
P4
P4A
P4B
P3
P2
P1
P24
P25
P26
P27
P28
P29
P30
P31
P32
P33
P34
P35
12" CMU MASONRY SCREEN WALL REF: S-1.01 TOL WAL ELEVATION = 12'-8", TYP.
TS 6x4x3/8 LLV AT 4'-0" O.C. MAX (EQUAL SPS)
TS 16x8x1/2 LLV
EQUAL SPACES = 7'-0" (MAX)
OVER EACH OPENING IN MASONRY SCREEN WALL INSTALL 12"x16" LINTEL. BOTTOM COURSE SHALL BE A 12"x8" PRECAST LINTEL REINFORCED WITH (2)#5 CONT; UPPER COURSE SHALL BE A 12"x8" KNOCK-OUT BLOCK COURSE REINFORCED WITH (2) #5 CONT, TYP. GROUT LINTEL SOLID AND BEAR LINTEL 8" (MIN) EACH END OF OPENING
MB1
DOWN C12x20.7
UP C12x20.7 DOWN
DO
14'-10" T.O. SLAB
T.O. STEEL ELEVATION = 14'-5"
(7) EQUAL SPACES
(5) EQUAL SPACES
(5) EQUAL SPACES
(7) EQUAL SPACES
PANEL P7 EXTEND TO UNDERSIDE OF METAL DECK – ATTACH METAL DECK TO TOP OF CONC PANEL WITH (2) 3/16" DIA SHOT-IN CONCRETE ANCHORS AT 6" O.C (EACH FLUTE), TYP.
W24x55 (30) (CAMBER = 3/4")
W27x94 (34) (CAMBER = 1")
W33x130
W27x114
W33x141
W33x118
W18x50
W14x34 (12)
W16x36 (12)
W10x12 (4)
W10x22 (3)
W18x40 (22)
W21x50 (26)
W21x57 (27)
W16x26 (12)
W18x36 (12)
W24x55 (30)
W27x94
W24x84
W21x44
W21x57 (27)
W21x50 (26)
W18x40 (22)
W10x22 (3)
W10x12 (4)
W14x34 (12)
W16x36 (12)
W18x50
W33x118
W33x130
W27x114
W33x141
W24x55 (30)
W27x94 (34




## ROOF FRAMING PLAN KEYNOTES

1. ROOFING (SEE ARCH'L) OVER 4" TOTAL STRUCT LT WT CONCRETE (115 PCF) SLAB REINFORCED WITH 6x6/W2.9xW2.9 WWF OVER 1 1/2", 20 GAGE GALV FORM DECK (VULCRAFT 1.5C20 OR ENGINEER APPORVED EQUAL) SUPPORTED BY STEEL JOISTS (SEE PLAN). INSTALL METAL DECK WITH 5/8" DIA PUDDLE WELDS AT 6" O.C. (EACH FLUTE) TO ALL SUPPORTS; WELD ALL SIDE EDGES AT 6" O.C., TYP. INSTALL (3) #12 TEKS STITCH SCREWS AT ALL SIDELAPS, TYP.
2. CONT EDGE ANGLE TO SUPPORT METAL DECK; SEE SECTIONS, TYPICAL.
3. STEEL BEAMS / STEEL JOISTS
   **TOP OF STEEL BEAM ELEVATION = SEE PLAN, TYP**
   **JOIST BEARING ELEVATION = SEE PLAN, TYP**
4. CONCRETE TILT-UP PANELS ARE 7 1/4" (6 1/2" STRUCTURAL THICKNESS WITH 3/4" REVEAL ALLOWANCE). ARE 7 1/4" THICK – NO REVEALS. SEE SEE SHT S4.01 FOR PANEL TYPES AND REINF.
   **SEE ARCHITECTURAL FOR ALL REVEAL LOCATIONS, SIZES, AND DIMENSIONS, TYP.**
   **T.O. PARAPET (TILT WALL) ELEVATION = 32'-8", TYP. UNO**
   **SEE ARCH'L FOR 2x8 PLATE (INSTALLED WITH 3/4" DIA x 6" ANCH'S AT 24" O.C.)**
5. SEE SHT S0.01 FOR GENERAL STRUCTURAL NOTES.
6. SEE SHEETS S4.01/2 FOR TILT-UP PANEL REINF, EMBEDDED ITEMS AND JOINT DETAILS, TYP
7. COORDINATE DIMENSIONS OF ALL OPENINGS WITH ARCHITECTURAL DRAWINGS, TYP.
8. STEEL STAIRS, LANDINGS, AND HANDRAILS – SEE NOTES E.8 AND E.9 ON S0.01 AND SEE ARCH'L DRAWINGS FOR ALL STAIR DIMENSIONS, TYP.
9. COLUMN REINFORCING IN TILT PANEL – SEE S4.01, TYP.
10. STEEL JOISTS AND JOIST BRIDGING (NOT SHOWN) SHALL BE DESIGNED AND INSTALLED IN STRICT ACCORDANCE WITH THE STEEL JOIST INSTITUTE (S.J.I.) SPECIFICATIONS, TYP.
    (*) – INDICATES PROVIDE 5" DEEP JOIST SEATS ON ALL "K" SERIES JOISTS, TYP.
11. NOTE NOT USED
12. MOVABLE PARTITION; SEE SECTION. ADD L5x5x3/8 BTEN JOISTS AT 24" O.C. AT STACK AREA, TYP.
    ** JOIST MFR: ADD 1.0 K AT EACH JOIST AT STACK AREA
    ADD 0.2 KLF TO EACH JOIST L.L.
13. (2) #4 x 4'-0" BARS AT 3" O.C., TYP IN SLAB AT RE-ENTRANT CORNERS, TYP.
14. TYPICAL STAIR LANDING FRAMING: 3" CONCRETE SLAB REINF'D w/6x6/W1.4xW1.4 WWF OVER 1", 22 GAGE FORM DECK (5/8" PUDDLE WELDS AT 6" O.C. ALL SUPPORTS AND EDGES) SUPPORTED BY L5x5x3/8" SPACED AT 24" O.C., TYP.
    PERIMETER OF LANDING TO HAVE CONT LEDGER L3x3x1/4 INSTALLED TO CONCRETE WALLS Ww/3/4" DIA x 4" EXPANSION ANCHORS AT 24" O.C., TYP.
15. ONE-SIDED STEEL ANGLE CONNX, SIM TO 10/S3.03; USE L6x6x3/4" (SINGLE) SHEAR WEDLED TO EMBED PLATE, TYP.
16. 20' HIGH x 6" DIA X-STRONG STEEL PIPE GALV G-90 (UNO); WELD TO TOP OF STEEL PRIOR TO POURING CONCRETE ON ROOF DECK (INSTALLATION AFTER POURING CONCRETET WILL NOT BE ALLOWED). SEE SECTION ON SHEET S3.04 OCCURS (3) PLACES, TYP.

N

A S1.03 ROOF FRAMING PLAN SCALE: 1/8" = 1'-0"

0 4' 8' 16'
1/8"=1'-0"

THE STRUCTURE HAS BEEN DESIGNED FOR LIVE AND DEAD LOADS IN ACCORDANCE WITH THE FLORIDA BUILDING CODE, 2007 EDITION, (W/2009 REV'S) INCLUDING LOADS FOR A 3-SECOND WIND VELOCITY OF 160 MPH: I = 1.0 EXPOSURE C.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Corporate Registration
No. AAC001197


LAKE COUNTY
FLORIDA

**Approved Plans - Commercial**
**LAKE COUNTY BUILDING DIVISION**
Any errors or omission in these plans shall be made to conform with the applicable code requirements per Florida Building Code 105.4.1
Plans reviewed for code compliance and shall be kept on site
Permit # 2011110212
Building: BLD31 12/29/11
Electric: ADM01 12/29/11
Mechanical: BLD31 12/1/111
Plumbing: BLD31 12/2/111
Fire: FIR08 12/29/11
Notes:


bec
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219 Laurel Park
Winter Park, Florida 32792
Phone 407-622-2477 Fax 407-622-2479
Certificate of Authorization # 8175
E.O.R. Bradford T. Bishop, P.E. #51299


# Lake County Emergency Communications & Operations Center

Tavares, Florida

PERMIT CD SUBMITTAL


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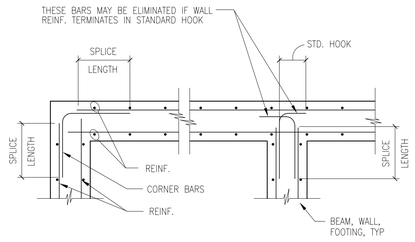
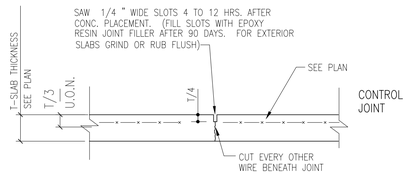
- revisions
  2 ADDENDUM #2 12-22-11
- sheet title **Roof Framnig Plan**
- scale: AS NOTED
- drawn: BTB
- checked: BTB
- approved: BTB
- date: 11-09-11
- project no. **842-10**
- sheet **S-1.03**



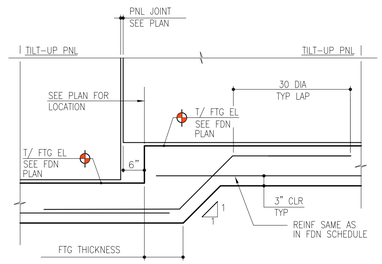

NOTE: CORNER BAR SIZE, SPACING AND LOCATION SAME AS HORIZ. WALL REINF. LAP SPLICES PER ACI 318 FOR SPLICE LENGTH. FOR BEAMS, WALLS, FOOTINGS

10 / S3.01 TYPICAL CORNER BARS N.T.S.



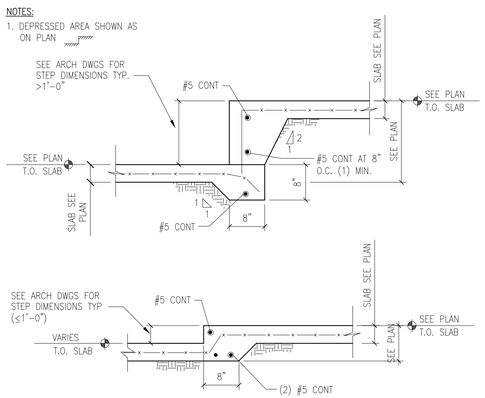

TYPICAL CONSTRUCTION JOINT
TYPICAL CONTROL JOINT

11 / S3.01 N.T.S.

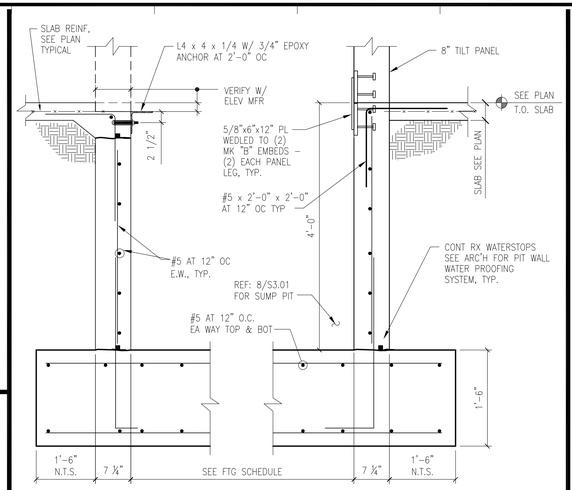



STEP FOOTINGS WHERE REQUIRED ON THE PLAN OR WHERE NECESSARY TO AVOID INTERFERENCE WITH WORK OF OTHER TRADES, ie. PLUMBING; G.C. COORDINATE, TYP.

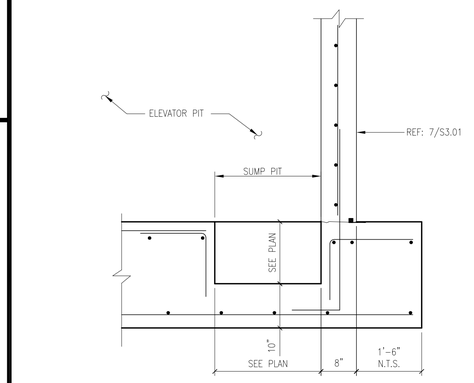
12 / S3.01 TYPICAL STEPPED FOOTING DETAIL N.T.S.



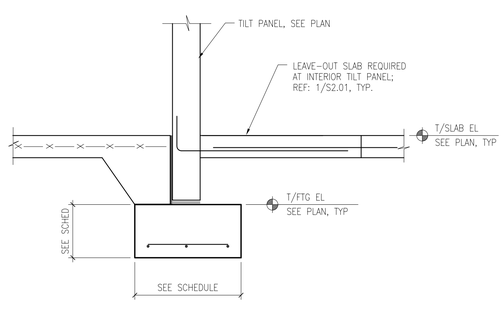

13 / S3.01 SECTION AT SLAB DEPRESSION/TRANSITION SCALE: 3/4" = 1'-0"



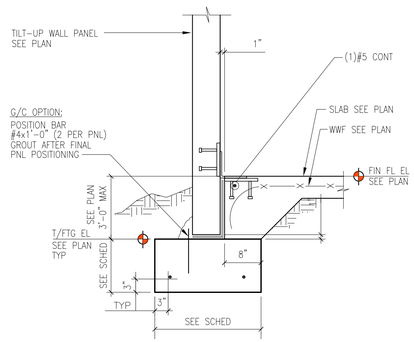

7 / S3.01 SECTION AT ELEV PIT SCALE: 3/4" = 1'-0"




8 / S3.01 SECTION AT SUMP PIT SCALE: 3/4" = 1'-0"

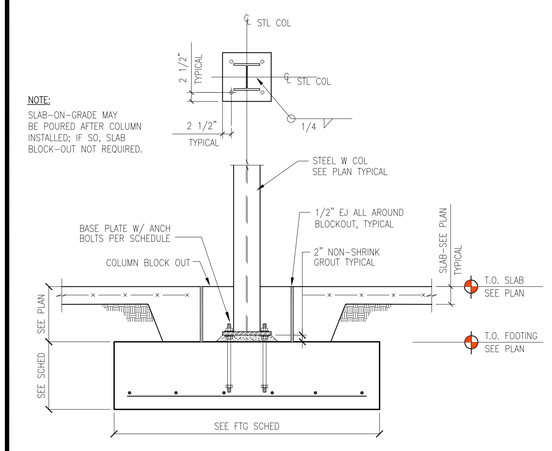



9 / S3.01 SECTION SCALE: 3/4" = 1'-0"

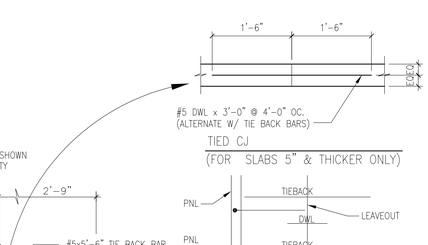



OPTION TO LEAVEOUT DETAIL

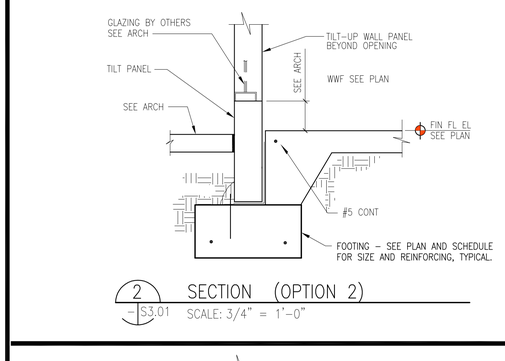
5 / S3.01 SECTION (OPTION 2) SCALE: 3/4" = 1'-0"



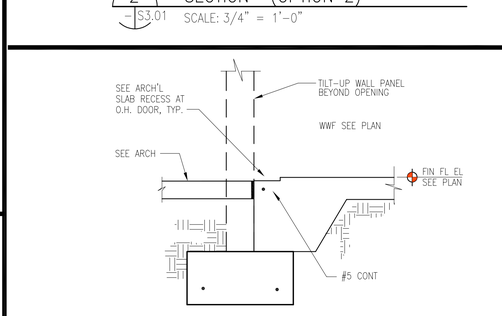

6 / S3.01 SECTION SCALE: 3/4" = 1'-0"



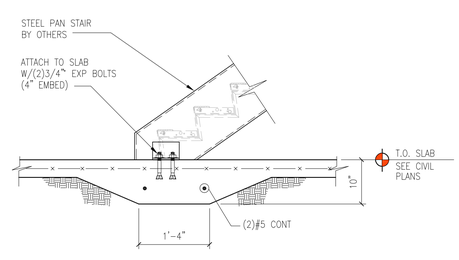

1 / S3.01 SECTION (OPTION 1) SCALE: 3/4" = 1'-0"




2 / S3.01 SECTION (OPTION 2) SCALE: 3/4" = 1'-0"




3 / S3.01 SECTION SCALE: 3/4" = 1'-0"




4 / S3.01 TYP SLAB AT STAIR BASE SCALE: 3/4" = 1'-0"

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LAKE COUNTY FLORIDA
Approved Plans - Commercial
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Lake County Emergency Communications & Operations Center

Tavares, Florida

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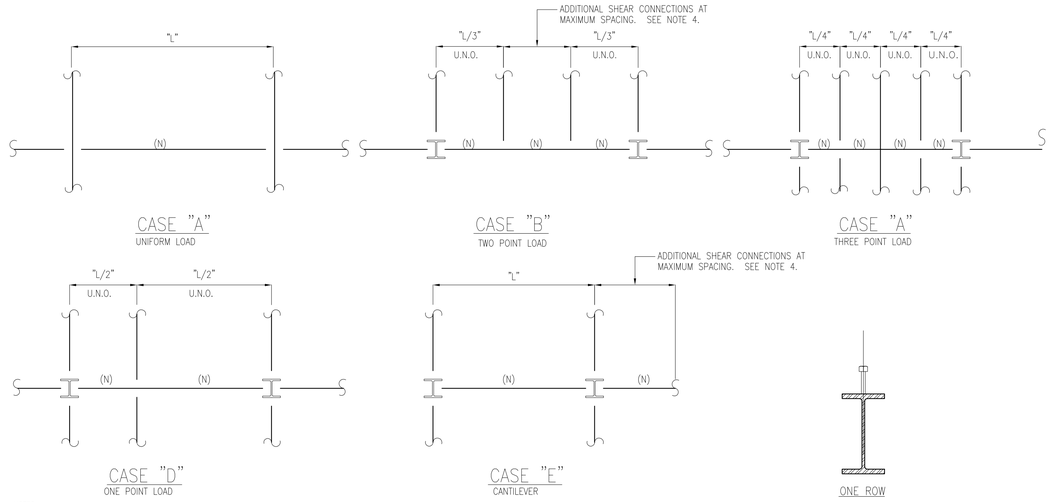
- revisions
- sheet title: Structural and Sections Details
- scale: AS NOTED
- drawn: BTB
- checked: BTB
- approved: BTB
- date: 11-09-11
- project no. 842-10
- sheet S-3.01



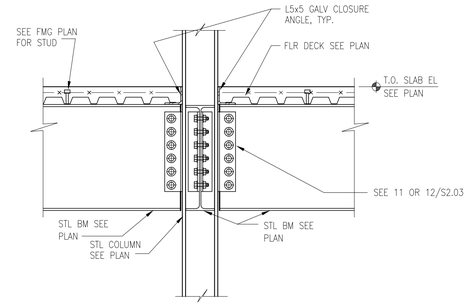

NOTES:

1. (N) = SPECIFIED NUMBER OF SHEAR CONNECTORS. REFER TO PLAN OR COMPOSITE BEAM SCHEDULE.
2. UNLESS NOTED OTHERWISE ON PLAN OR IN THE COMPOSITE BEAM SCHEDULE. SHEAR SCHEDULE CONNECTORS SHALL BE DISTRIBUTED ALONG THE LENGTH OF THE BEAM AS SHOWN ON DETAILS ABOVE.
3. REFER TO GENERAL NOTES FOR SHEAR CONNECTOR DIAMETER AND LENGTH.
4. MAXIMUM SPACING OF SHEAR CONNECTORS SHALL BE AS FOLLOWS:
   A. BEAMS PERPENDICULAR TO DECK SPAN: 24 INCHES.
   B. BEAMS PARALLEL TO DECK SPAN: 32 INCHES.
5. WHERE STEEL DECK CORRUGATIONS DO NOT ALLOW FOR AN EVEN SPACING OF SHEAR CONNECTORS WITH ONE STUD IN EACH FLUTE, ADDITIONAL STUDS IN A SECOND ROW (THIRD ROW WHERE, REQUIRED) SHALL BE PLACED SUCH THAT THE HIGHEST DENSITY OF SHEAR CONNECTORS OCCURS NEAR THE BEAM SUPPORT.
6. WHERE THE SPECIFIED NUMBER OF SHEAR CONNECTORS IS LESS THAN THE BEAM SPAN LENGTH DIVIDED BY THE MAXIMUM SPACING (SEE NOTE 4). ADDITIONAL SHEAR CONNECTORS SHALL BE PROVIDED SUCH THAT THE MAXIMUM SPACING IS NOT EXCEEDED AT ANY LOCATION IN THE SPAN.
7. SUBMIT SHOP DRAWINGS SHOWING PLACEMENT OF SHEAR CONNECTORS FOR ENGINEERS APPROVAL.

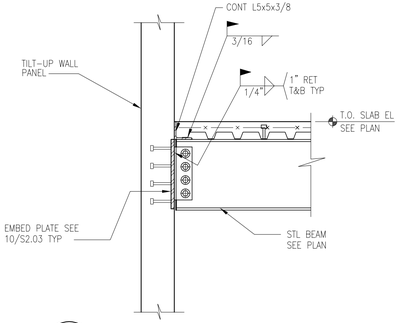
NOTES:

1. SHEAR CONNECTORS IN ONE ROW SHALL BE PLACED DIRECTLY OVER THE BEAM WEB.
2. PLACE STUDS IN A SINGLE ROW WHERE SPACING REQUIREMENTS PERMIT. STUDS SHALL BE PLACED IN TWO ROWS OR THREE ROWS ONLY WHERE REQUIRED IN ORDER TO PLACE THE TOTAL NUMBER OF STUDS. SEE TYPICAL DETAIL. SHEAR CONNECTOR PLACEMENT DIAGRAMS.
3. PROVIDE MINIMUM 1" SPACING FROM EDGE OF FLANGE TO CENTERLINE OF STUD.
4. SUBMIT SHOP DRAWINGS SHOWING PLACEMENT OF SHEAR CONNECTORS FOR ENGINEERS APPROVAL.
5. SEE GENERAL NOTES AND PLANS FOR STUD LENGTHS.

8 – S3.02 SHEAR CONNECTOR PLACEMENT DIAGRAMS COMPOSITE METAL DECK
SCALE: NO SCALE




5 – S3.02 SECTION
SCALE: 3/4" = 1'-0"




1 – S3.02 SECTION
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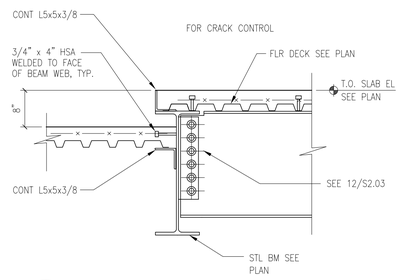
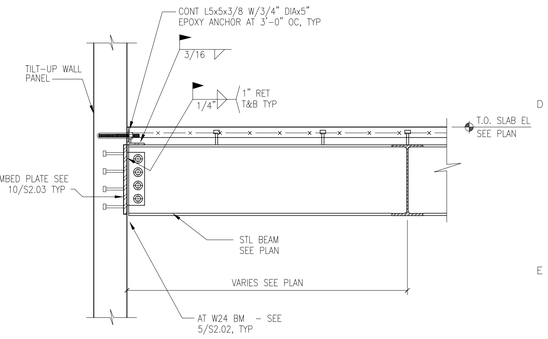


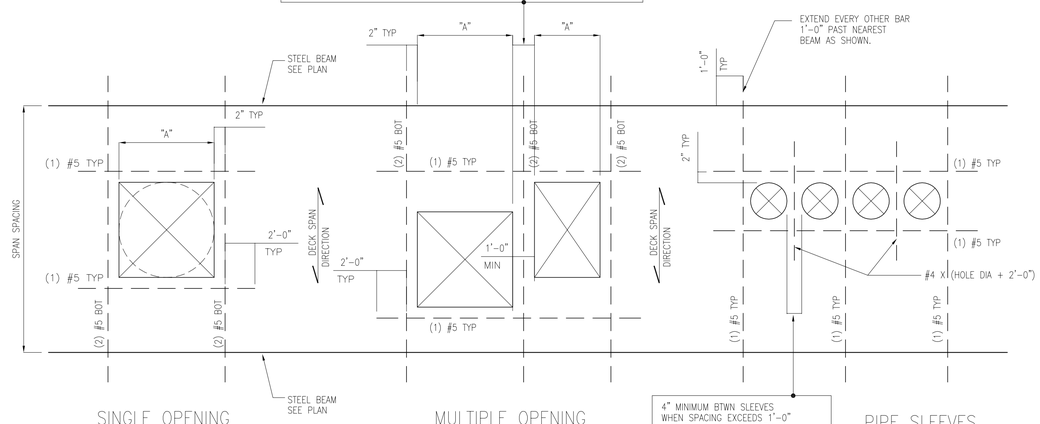

6 – S3.02 SECTION
SCALE: 3/4" = 1'-0"




2 – S3.02 SECTION
SCALE: 3/4" = 1'-0"

"A" = OPENING DIMENSION IN THE DIRECTION PERPENDICULAR TO DECK SPAN. USE THIS DETAIL FOR "A" , 4'-0"

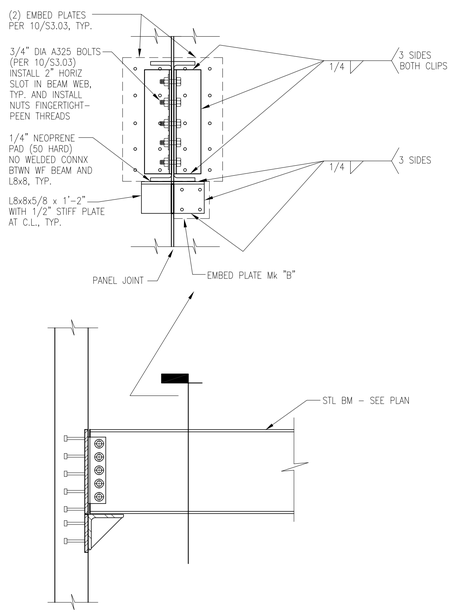
NOTE: WHEN SPACING BETWEEN MULTIPLE OPENINGS IS < 2'-0" REINFORCEMENT SHOULD BE PLACED AS SHOWN IN SINGLE OPENING CONDITION.



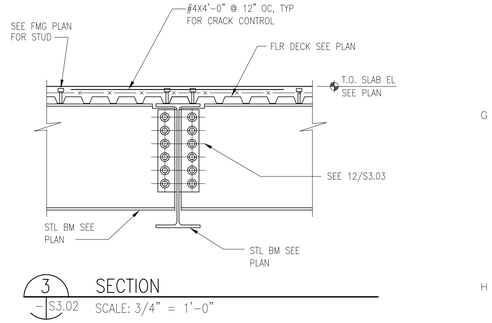

NOTES:

1. COORDINATE OPENING SIZE AND LOCATION WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
2. MAXIMUM DIMENSION "A" SHALL BE 4'-0". REFER TO PLAN OR DETAIL ON DRAWINGS FOR FRAMING OF OPENINGS GREATER THAN 4'-0".
3. WWF SLAB REINFORCEMENT SHALL BE CUT AROUND SLAB OPENING. WWF SHALL EXTEND TO WITHIN 2" OF OPENING ON ALL SIDES.
4. OPENINGS 10" AND SMALLER DO NOT REQUIRE ADDITIONAL REINFORCEMENT.
5. FIELD CUT OPENINGS IN DECK AFTER CONCRETE SLAB HAS BEEN POURED AND HAS ATTAINED MINIMUM 75% OF ITS SPECIFIED 28 DAY COMPRESSIVE STRENGTH.
6. REINFORCEMENT PERPENDICULAR TO DECK SPAN SHALL BE PLACED ON TOP OF DECK FLUTES.
7. REINFORCEMENT PARALLEL TO DECK SPAN SHALL BE PLACED IN THE LOWER FLUTE AND SHALL BE CHAIRED TO PROVIDE 3/4" COVER.
8. THIS DETAIL SHOWS TYPICAL CONDITIONS. VERIFY REINFORCING STEEL PLACEMENT WITH ENGINEER FOR SPECIAL CASES.
9. PROVIDE REINFORCEMENT AS SHOWN FOR SQUARE, RECTANGULAR OR ROUND OPENINGS.

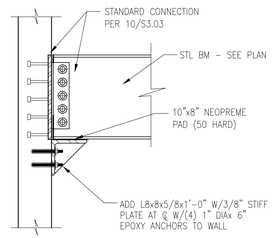
9 – S3.02 FLOOR OPENINGS IN COMPOSITE METAL DECK SLAB
SCALE: NO SCALE




7 – S3.02 BEAM CONNX AT PANEL JOINT
SCALE: 3/4" = 1'-0"




3 – S3.02 SECTION
SCALE: 3/4" = 1'-0"




4 – S3.02 SECTION
SCALE: 3/4" = 1'-0"

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Corporate Registration No. AAC001197

LAKE COUNTY
FLORIDA
**Approved Plans - Commercial**
**LAKE COUNTY BUILDING DIVISION**
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Permit # 2011110212
Building: BLD31 12/29/11
Electric: ADM01 12/29/11
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Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:

BEC
BISHOP ENGINEERING COMPANY
Consulting Structural Engineering
219 Laurel Park
Winter Park, Florida 32792
Phone 407-622-2477 Fax 407-622-2479
Certificate of Authorization # 8175
E.O.R. Bradford T. Bishop, P.E. #51299

Lake County Emergency Communications & Operations Center

Tavares, Florida

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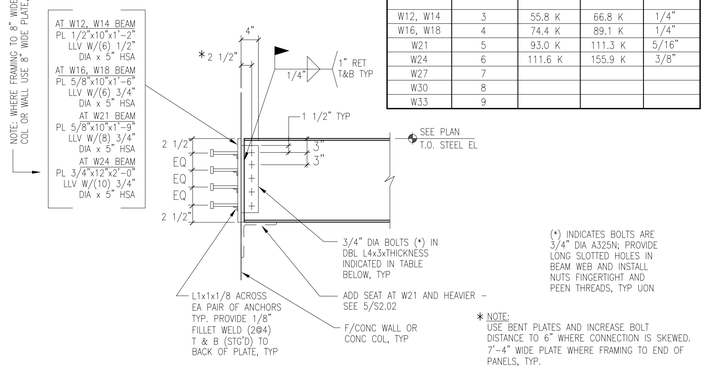
- revisions
- sheet title: Structural and Sections Details
- scale: AS NOTED
- drawn: BTB
- checked: BTB
- approved: BTB
- date: 11-09-11
- project no. 842-10
- sheet S-3.02

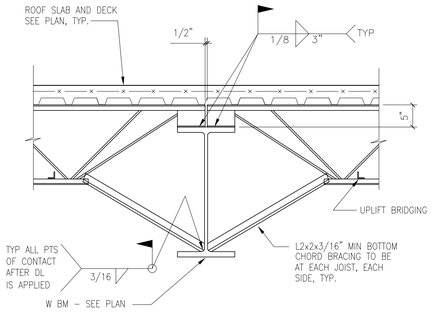
| BOLT SCHEDULE | | | | |
|---|---|---|---|---|
| BEAM SIZE | # ROWS/ OF BOLTS | BOLT CAP | WELD CAP | ANGLE THICK. |
| W12, W14 | 3 | 55.8 K | 66.8 K | 1/4" |
| W16, W18 | 4 | 74.4 K | 89.1 K | 1/4" |
| W21 | 5 | 93.0 K | 111.3 K | 5/16" |
| W24 | 6 | 111.6 K | 155.9 K | 3/8" |
| W27 | 7 | | | |
| W30 | 8 | | | |
| W33 | 9 | | | |



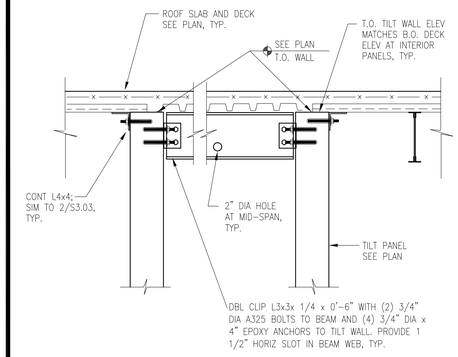

(*) INDICATES BOLTS ARE 3/4" DIA A325N; PROVIDE LONG SLOTTED HOLES IN BEAM WEB AND INSTALL NUTS FINGERTIGHT AND PEEN THREADS, TYP UON

* NOTE: USE BENT PLATES AND INCREASE BOLT DISTANCE TO 6" WHERE CONNECTION IS SKEWED. 7'-4" WIDE PLATE WHERE FRAMING TO END OF PANELS, TYP.

10 – S3.03 TYP STEEL BEAM TO CONCRETE WALL DETAIL
SCALE: 3/4" = 1'-0"




7 – S3.03 SECTION
SCALE: 3/4" = 1'-0"




4 – S3.03 SECTION
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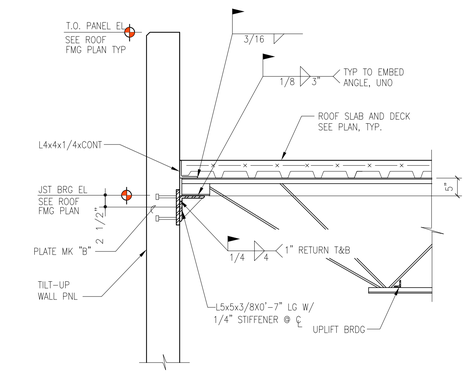
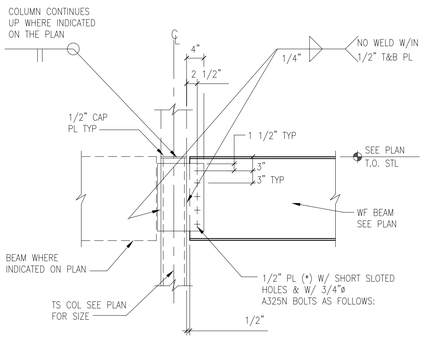


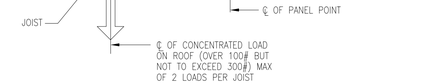

1 – S3.03 SECTION
SCALE: 3/4" = 1'-0"




| BOLT SCHEDULE | | |
|---|---|---|
| WF SIZE | # ROWS/ BOLTS | CAP |
| W8, W10 | 2 | 12.0 K |
| W12, W14, C15 | 3 | 19.8 K |
| W16, W18 | 4 | 26.5 K |
| W21 | 5 | 33.1 K |
| W24 | 6 | |
| W27 | 7 | |
| W30 | 8 | |
| W33 | 9 | |

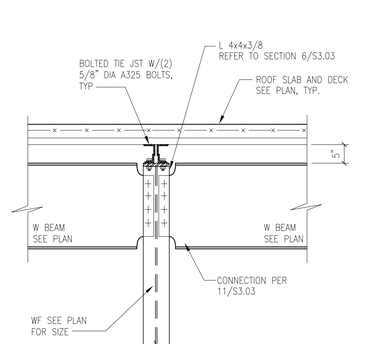
WELDED SHEAR PLATE TO FACE OF TUBE COLUMN OR FACE OF WEB OR FLANGE AT WF COLUMN, TYP.

11 – S3.03 TYP STEEL BEAM TO STEEL COLUMN DETAIL
SCALE: 3/4" = 1'-0"

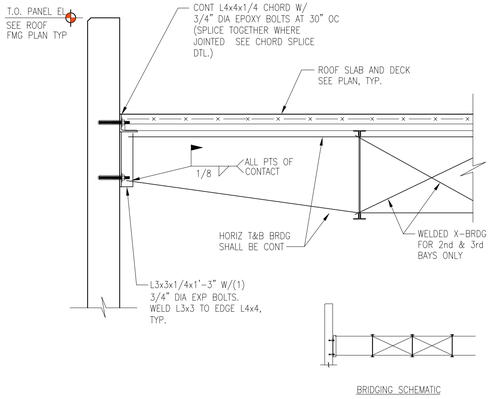



NOTE: ANGLE STIFFENER NOT REQUIRED IF LOAD IS WITHIN 6" OF PANEL POINT.

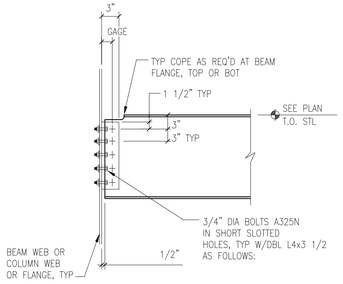
8 – S3.03 DETAIL AT JOIST POINT LOADS
SCALE: 3/4" = 1'-0"




5 – S3.03 SECTION
SCALE: 3/4" = 1'-0"



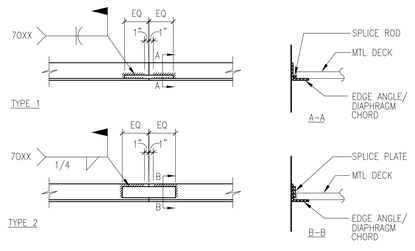

2 – S3.03 SECTION
SCALE: 3/4" = 1'-0"



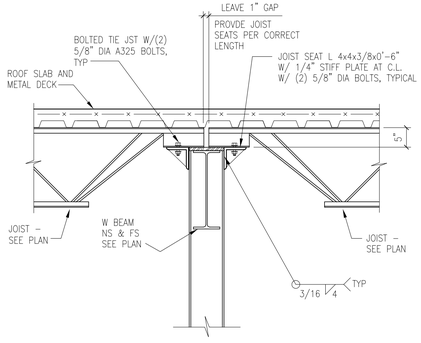

| BOLT SCHEDULE | | |
|---|---|---|
| WF SIZE | # ROWS/ BOLTS (CAP) | ANGLE THICKNESS |
| W8, C8, C10, W10 | 2 (26.5 K) | 1/4" |
| W12, C12, W14 | 3 (39.8 K) | 1/4" |
| W16, W18 | 4 (53 K) | 1/4" |
| W21 | 5 (66.5 K) | 5/16" |
| W24 | 6 (79.8 K) | 5/16" |
| W27 | 7 (93.1 K) | 3/8" |
| W30 | 8 (106.4 K) | 3/8" |
| W33 | 9 (119.7 K) | 7/16" |
| W36 | 10 (133 K) | 1/2" |

12 – S3.03 TYPICAL STEEL FRAMED BEAM CONNX DETAIL
SCALE: 3/4" = 1'-0"

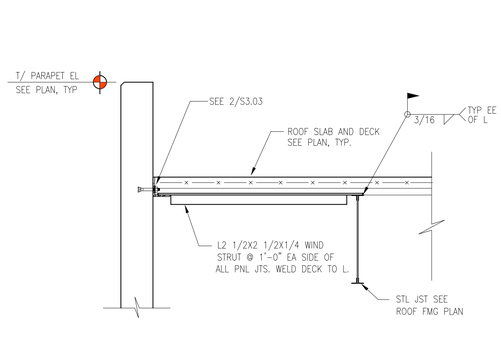
| EDGE ANGLE/DIAPHRAGM CHORD SPLICES | | | | |
|---|---|---|---|---|
| ANGLE | TYPE 1 ROD DIM. | CAP (KIPS) | TYPE 2 PLATE DIM | CAP (KIPS) |
| L3X3X1/4 | 3/4"X8" | 9.5 | 1/2X2-1/2X0'-9" | 22.0 |
| L4X4X1/4 | 3/4"X11" | 9.5 | 1/2X3-1/2X1'-0" | 31.0 |
| L5X3X1/4 LLV | 3/4"X11" | 9.5 | 1/2X4-1/2X0'-10" | 31.0 |
| L5X3X1/4 LLH | 3/4"X11" | 9.5 | 3/4X2-1/2X1'-2" | 31.0 |




9 – S3.03 CHORD SPLICE DETAIL
SCALE: 3/4" = 1'-0"




6 – S3.03 SECTION
SCALE: 3/4" = 1'-0"




3 – S3.03 TYP DECK STRUT AT PANEL JOINT
SCALE: 3/4" = 1'-0"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LAKE COUNTY FLORIDA

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Building: BLD31 12/29/11
Electric: ADM01 12/29/11
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Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:


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Lake County Emergency Communications & Operations Center

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- sheet title: Structural and Sections Details
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- drawn: BTB
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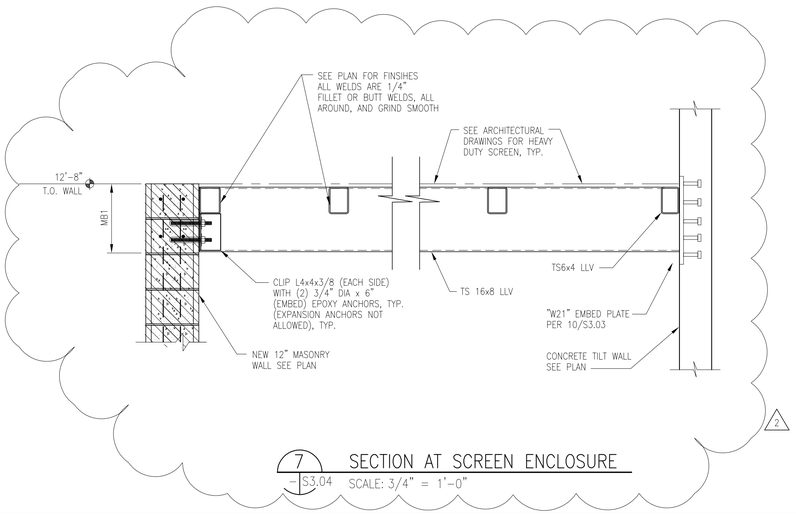
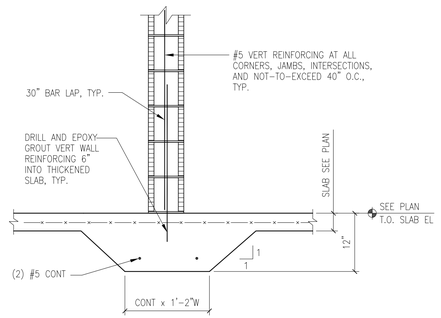
- approved: BTB
- date: 11-09-11
- project no. 842-10
- sheet S-3.03




7 – S3.04 SECTION AT SCREEN ENCLOSURE
SCALE: 3/4" = 1'-0"




4 – S3.04 TYP INT CMU WALL SECTION
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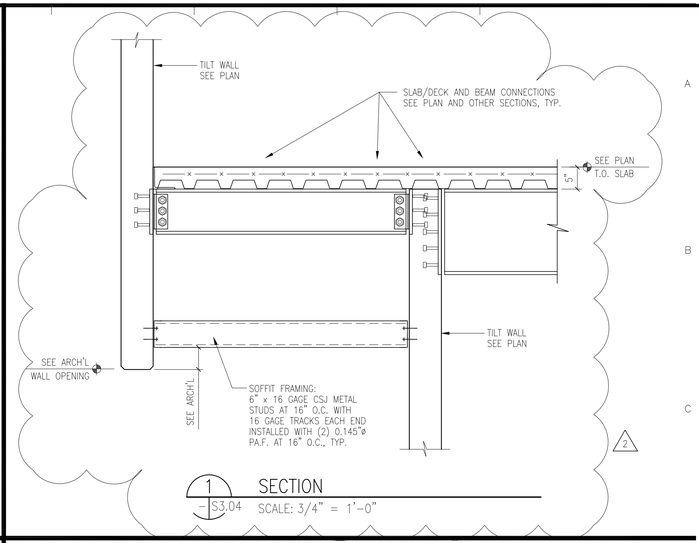
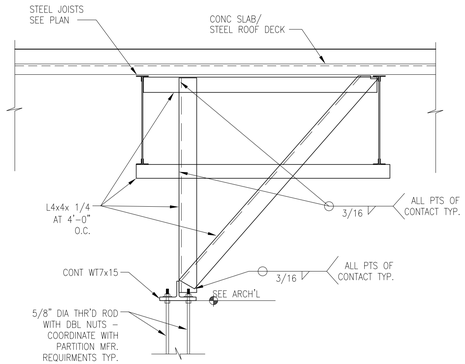
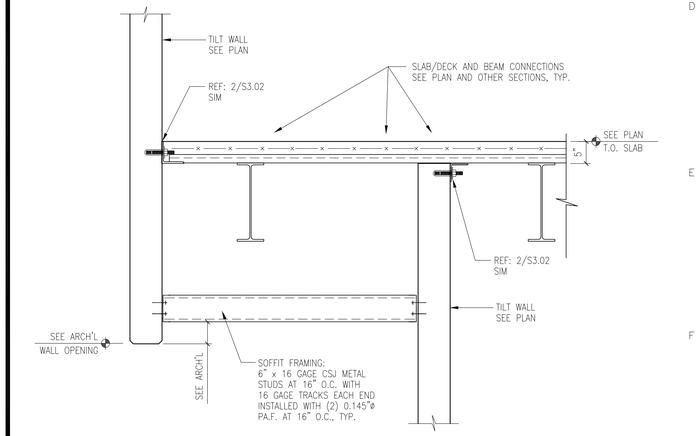



1 – S3.04 SECTION
SCALE: 3/4" = 1'-0"




5 – S3.04 SECTION AT FOLDING PARTITION
SCALE: 3/4" = 1'-0"




2 – S3.04 SECTION
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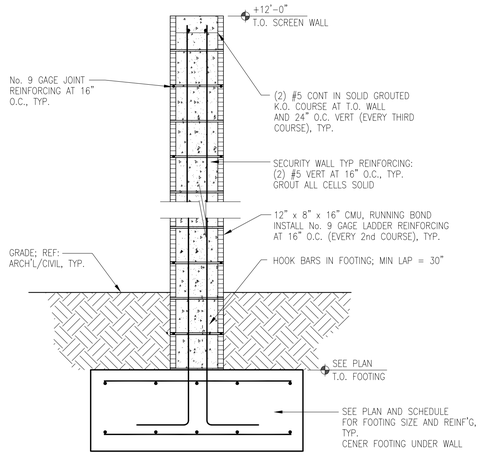
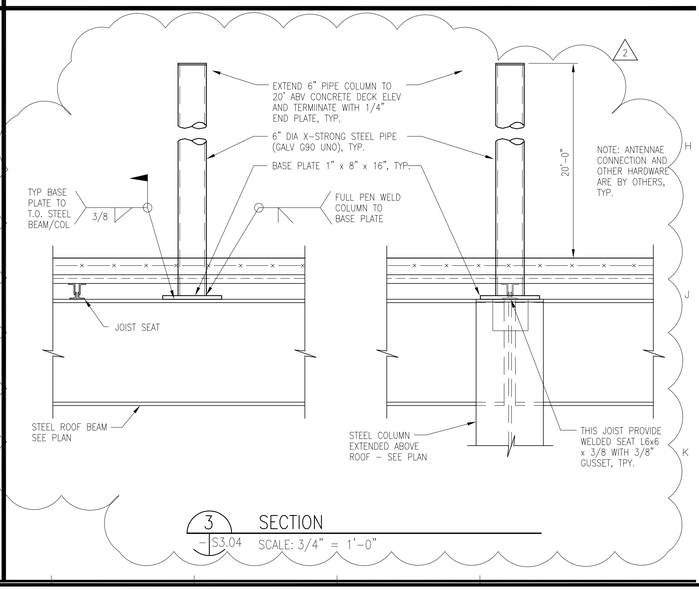



6 – S3.04 SECTION AT SCREEN WALL
SCALE: 3/4" = 1'-0"




3 – S3.04 SECTION
SCALE: 3/4" = 1'-0"

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  2 ADDENDUM #2 12-22-11
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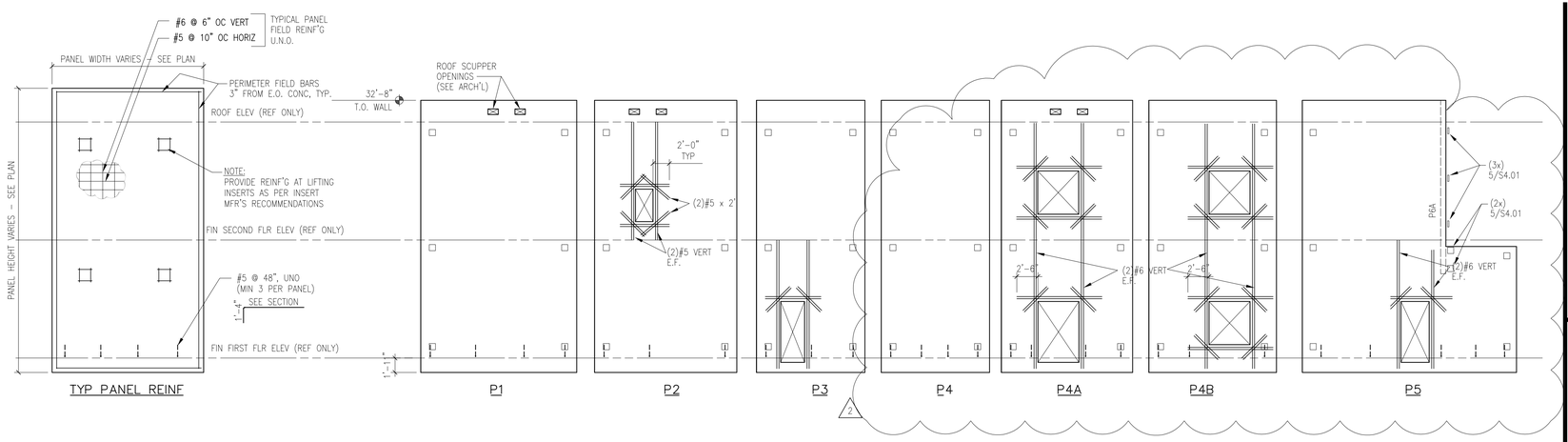
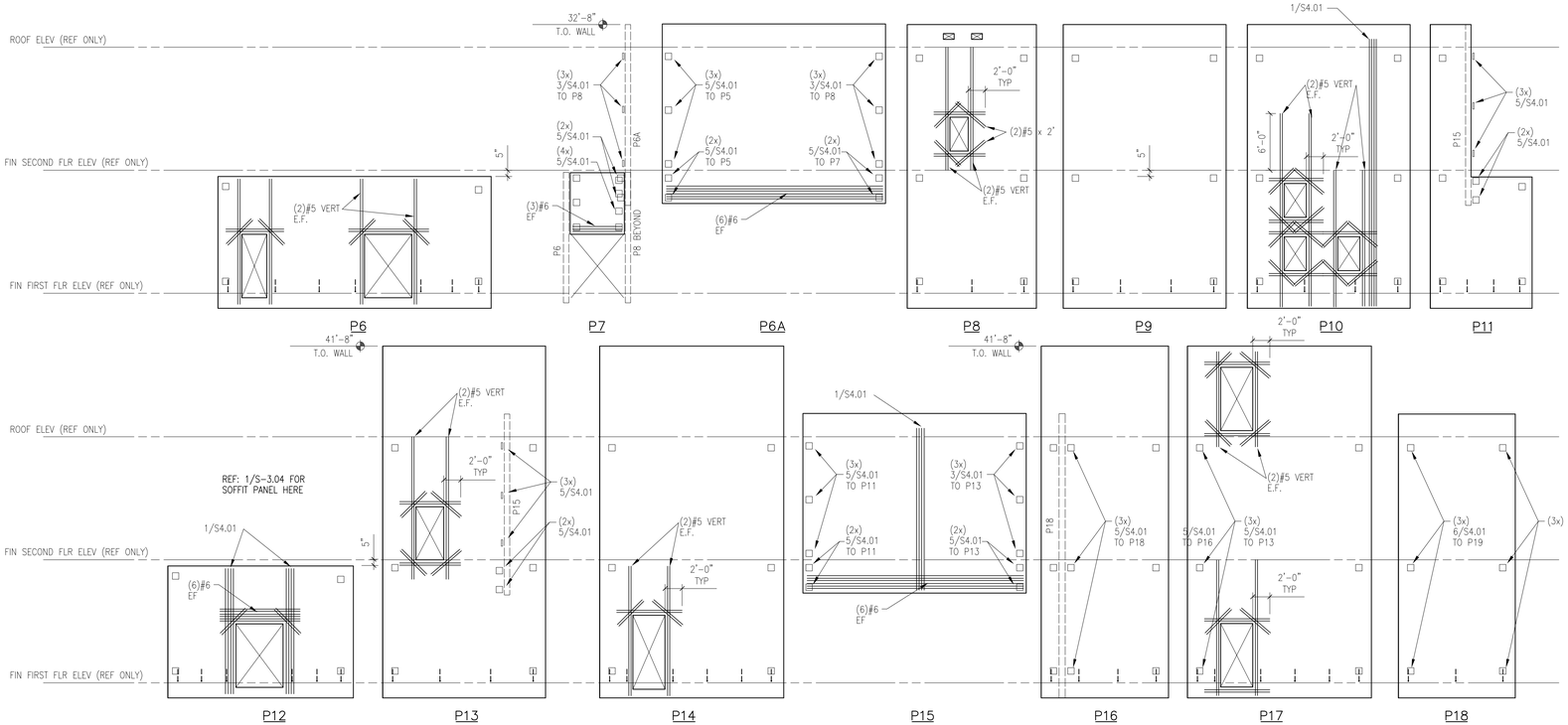
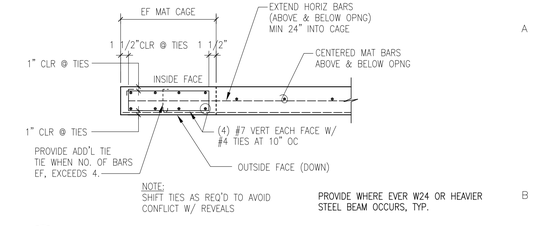
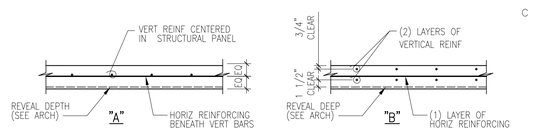
- scale: AS NOTED
- drawn: BTB
- checked: BTB
- approved: BTB
- date: 11-09-11
- project no. 842-10
- sheet S-3.04




1 -S4.01 TYPICAL REINF AT GIRDER/BEAM
SCALE: 3/4" = 1'-0"




2 -S4.01 TYPICAL REINF PLACEMENT
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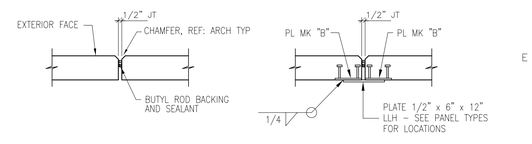


3 -S4.01 TYPICAL IN-LINE BUTT JOINT
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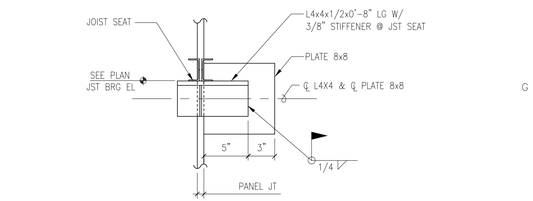
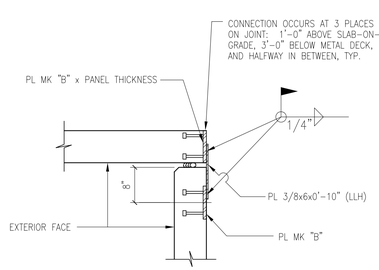
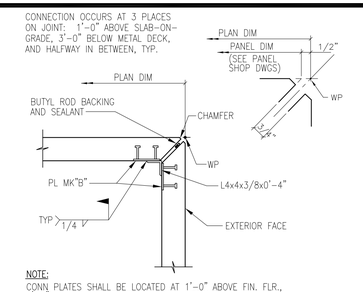


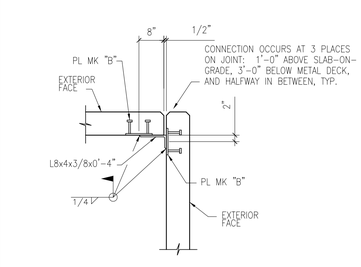

8 -S4.01 TYPICAL JOIST AT PANEL JOINT
SCALE: 3/4" = 1'-0"



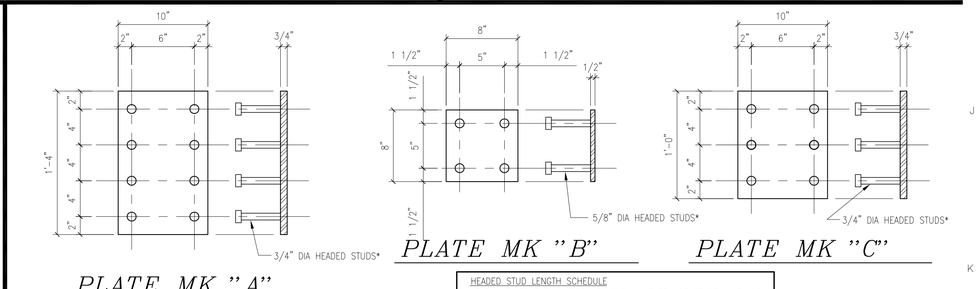

7 -S4.01 TYPICAL INT CORNER BUTT JOINT
SCALE: 3/4" = 1'-0"




6 -S4.01 TYPICAL MITER JOINT
SCALE: 3/4" = 1'-0"




5 -S4.01 TYPICAL EXT CORNER BUTT JOINT
SCALE: 3/4" = 1'-0"




NOTE : SEE ARCH'L JAMB DETAILS FOR EMBEDDED JAMB CHANNEL AT OVERHEAD DOORS.

4 -S4.01 EMBED PLATES
SCALE: 3/4" = 1'-0"

HEADED STUD LENGTH SCHEDULE
AT 5 1/2" TO 6 1/4" THICK PANELS - LENGTH OF STUDS = 3 1/2"
AT 6 1/2" TO 7 1/4" THICK PANELS - LENGTH OF STUDS = 4 1/2"
AT 7 1/2" AND THICKER PANELS - LENGTH OF STUDS = 5 1/2"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- revisions
  2 ADDENDUM #2 12-22-11
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- scale: AS NOTED
- drawn: BTB
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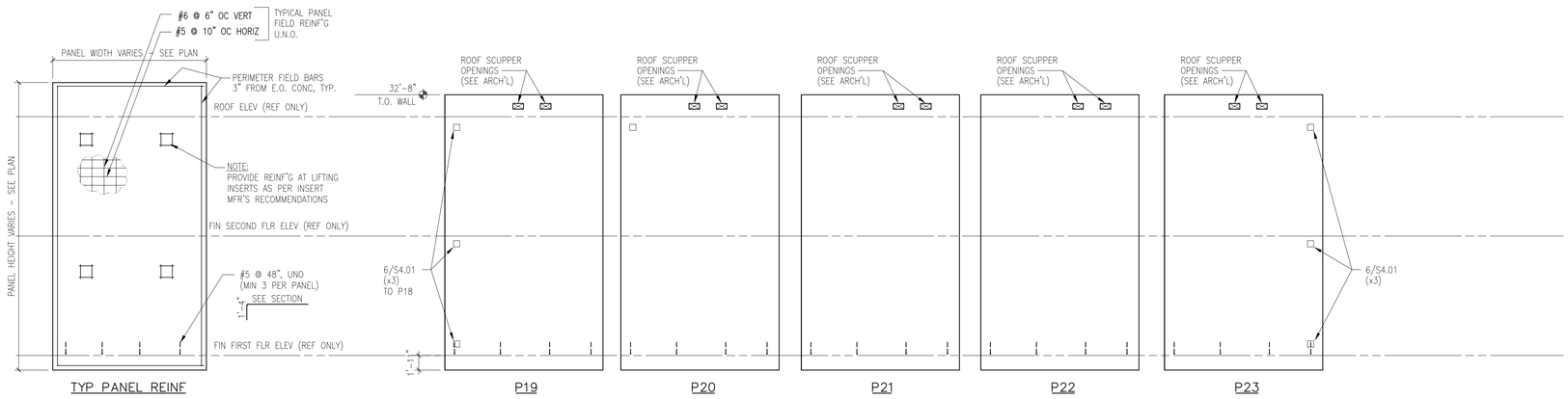
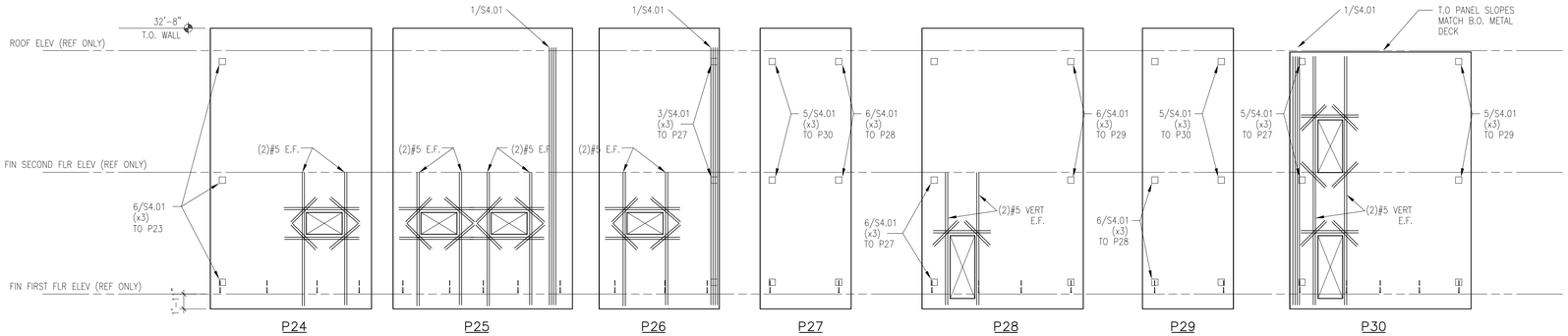
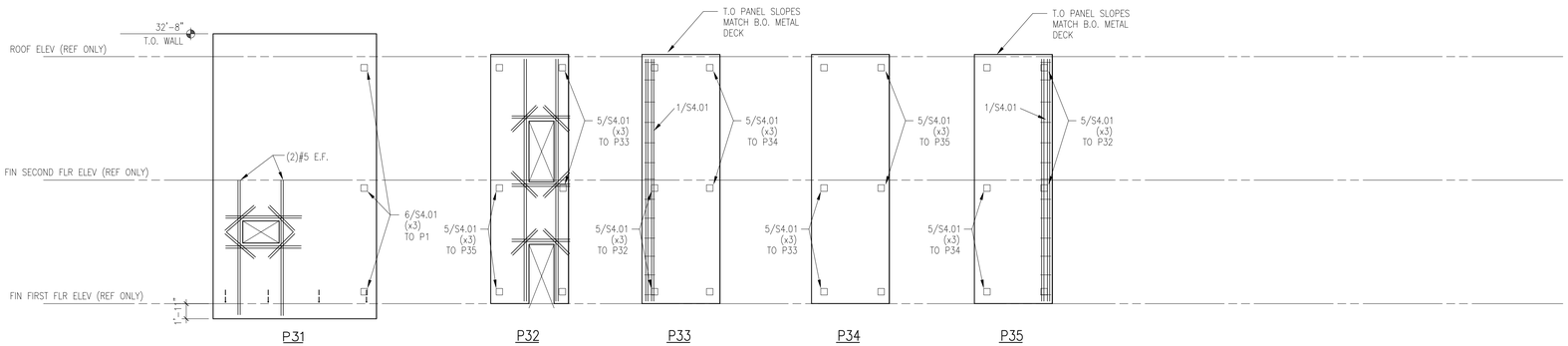
- project no. 842-10
- sheet S-4.01




**NOTE: REF: SHT S-4.01 FOR TILT PANEL REINFORCING, CONNECTIONS, AND TYPICAL EMBED DETAILS, TYP.


Architects Design Group

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Corporate Registration No. AAC001197


LAKE COUNTY
FLORIDA

**Approved Plans - Commercial**
**LAKE COUNTY BUILDING DIVISION**
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Permit # 2011110212
Building: BLD31 12/29/11
Electric: ADM01 12/29/11
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:


bec
BISHOP ENGINEERING COMPANY
Consulting Structural Engineering
319 Laurel Park
Winter Park, Florida 32792
Phone 407-622-2477 Fax 407-622-2479
Certificate of Authorization # 8175
E.O.R. Bradford T. Bishop, P.E. #51299


Lake County Emergency Communications & Operations Center

Tavares, Florida

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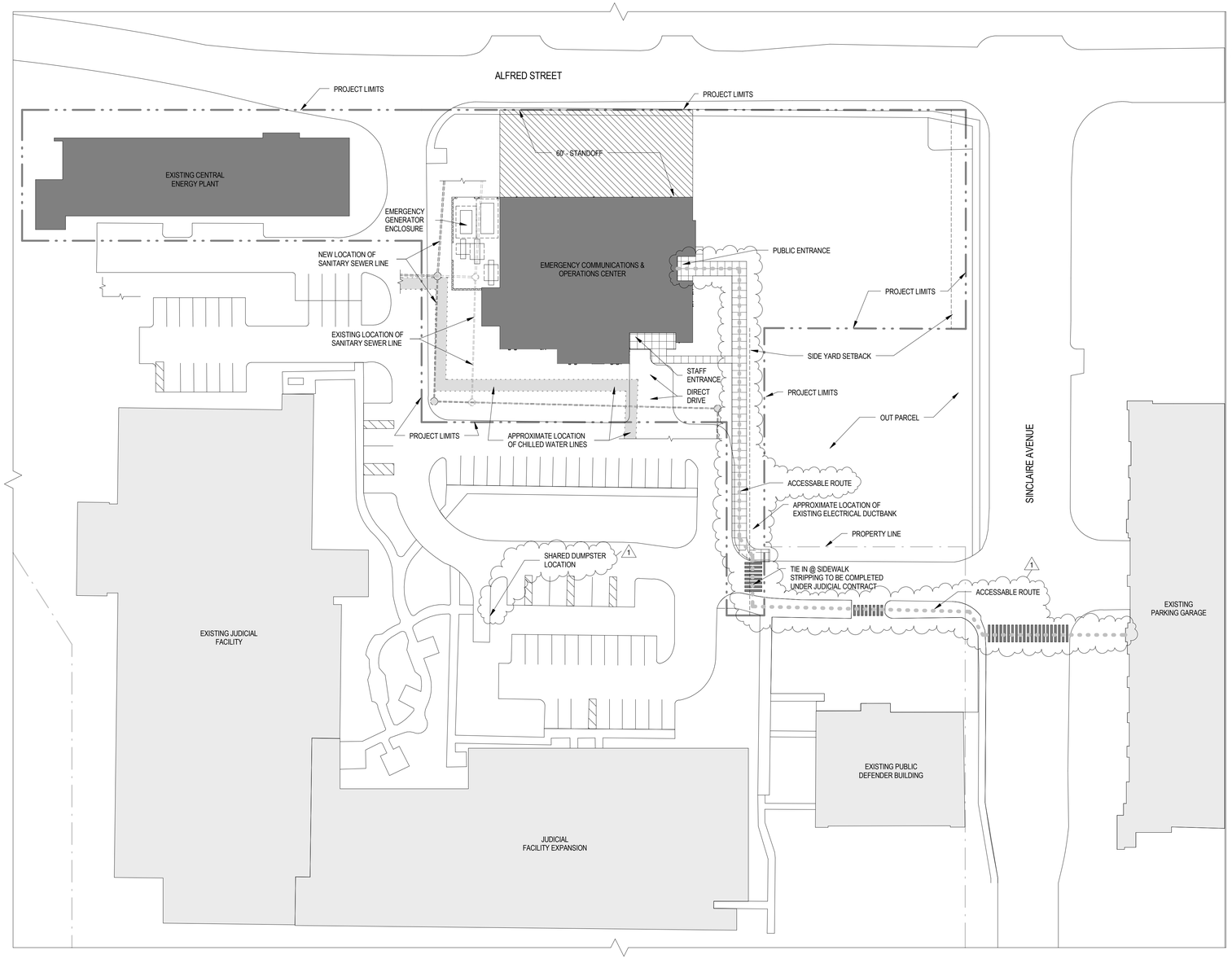
- revisions
- sheet title: Tilt Wall Panel Reinforcing
- scale: AS NOTED
- drawn: BTB
- checked: BTB
- approved: BTB
- date: 11-09-11
- project no. 842-10
- sheet S-4.02




1 ARCHITECTURAL SITE PLAN
1" = 40'-0"

N

0' 20' 40' 100'

# SITE DEVELOPMENT DATA

BUILDING DATA
SQUARE FOOTAGE CALCULATION

| | |
|---|---|
| FIRST FLOOR | 14025 SF |
| SECOND FLOOR | 14470 SF |
| Grand total | 28495 SF |

# GENERAL NOTES

1. ARCHITECTURAL SITE PLAN FOR REFERENCE ONLY
2. SEE CIVIL SHEET C-1.02 FOR LOCATION OF UTILITIES

# LEGEND

STANDOFF DISTANCE

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Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:

STATE OF FLORIDA
KEVIN JOHN RATIGAN
10603
REGISTERED ARCHITECT

Architects Design Group

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Kevin Ratigan, A.I.A.
Ian A. Reeves, A.I.A.
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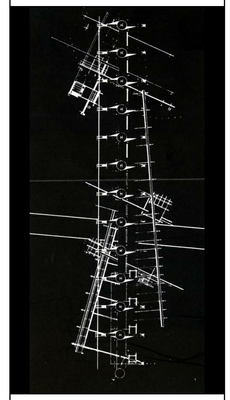
Winter Park, Florida 32789
(407) 647-1706

Corporate Registration
No. AAC26002047



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• revisions/addenda

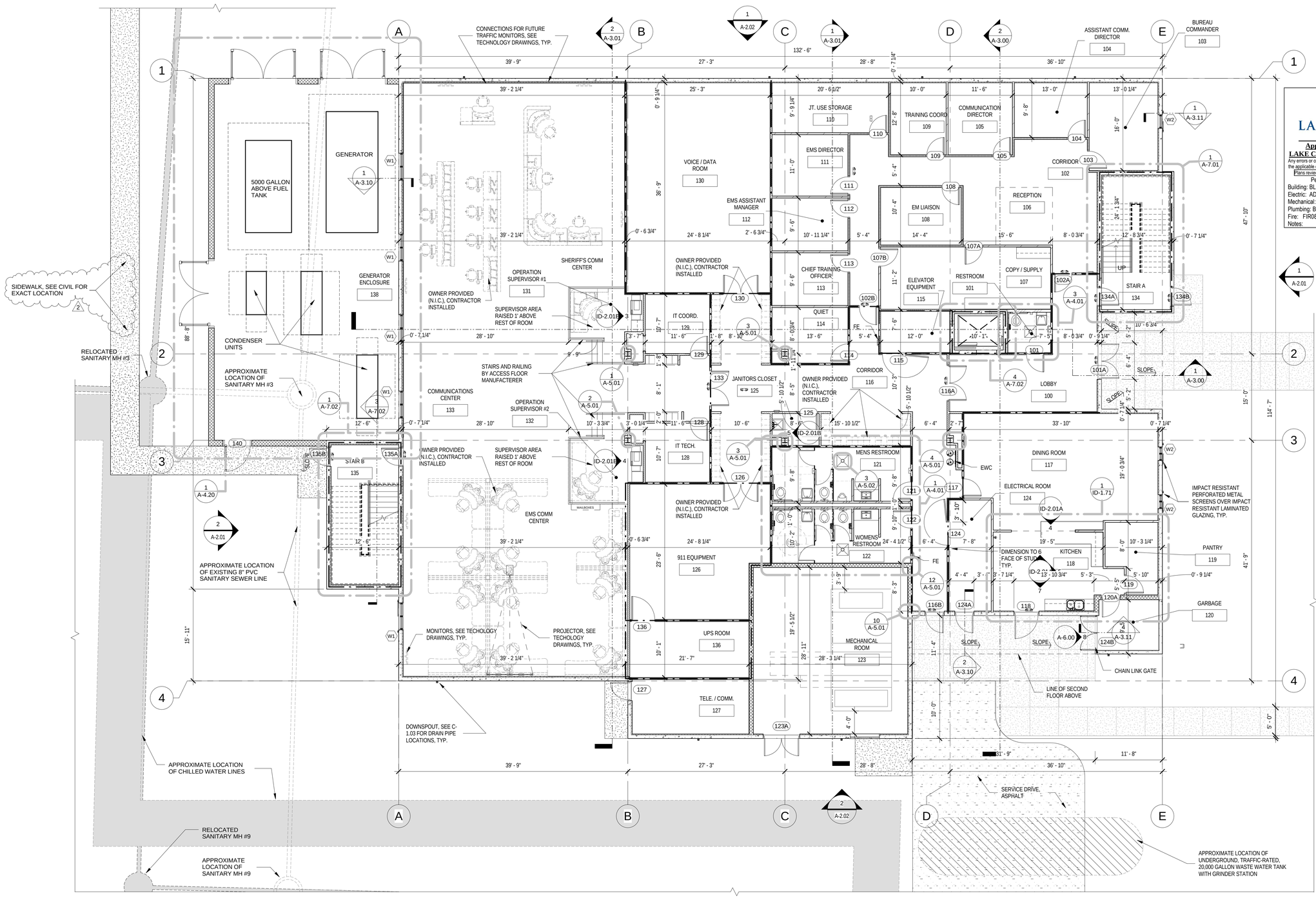
| Number | Description | Date Issued |
|---|---|---|
| 1 | ADDENDUM #1 | 12.16.11 |

• sheet title
SITE PLAN

• scale: 1" = 40'-0"
• drawn: DT, AH
• checked: SG, SB
• approved: KR, AIA
• date: 11/09/11

• project no. 842-10

• sheet no. A-0.01




# 1 FIRST FLOOR PLAN

1/8" = 1'-0"

N

## GENERAL NOTES:

1) ALL DIMENSIONS ARE TO FACE OF METAL STUDS, FACE OF CONCRETE WALL OR CMU OR ℄ OF COLUMN GRID, U.N.O.
2) DO NOT SCALE DRAWINGS
3) FOR WALL TYPES REFER TO REFLECTED CEILING PLANS A-1.51
4) FOR FIRE RATED WALLS, SEE LIFE SAFETY PLANS G-1.01 AND G-1.02

LAKE COUNTY
FLORIDA

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Any errors or omission in these plans shall be made to conform with the applicable code requirements per Florida Building Code 105.4.1
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Permit # 20111102l2
Building: BLD31 12/29/11
Electric: ADM01 12/29/11
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:


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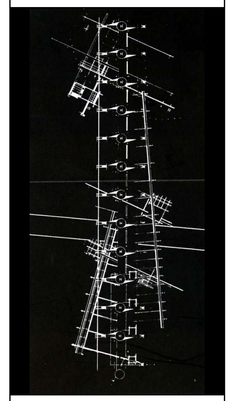

# Lake County Emergency Communications & Operations Center

Tavares, Florida

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• revisions/addenda

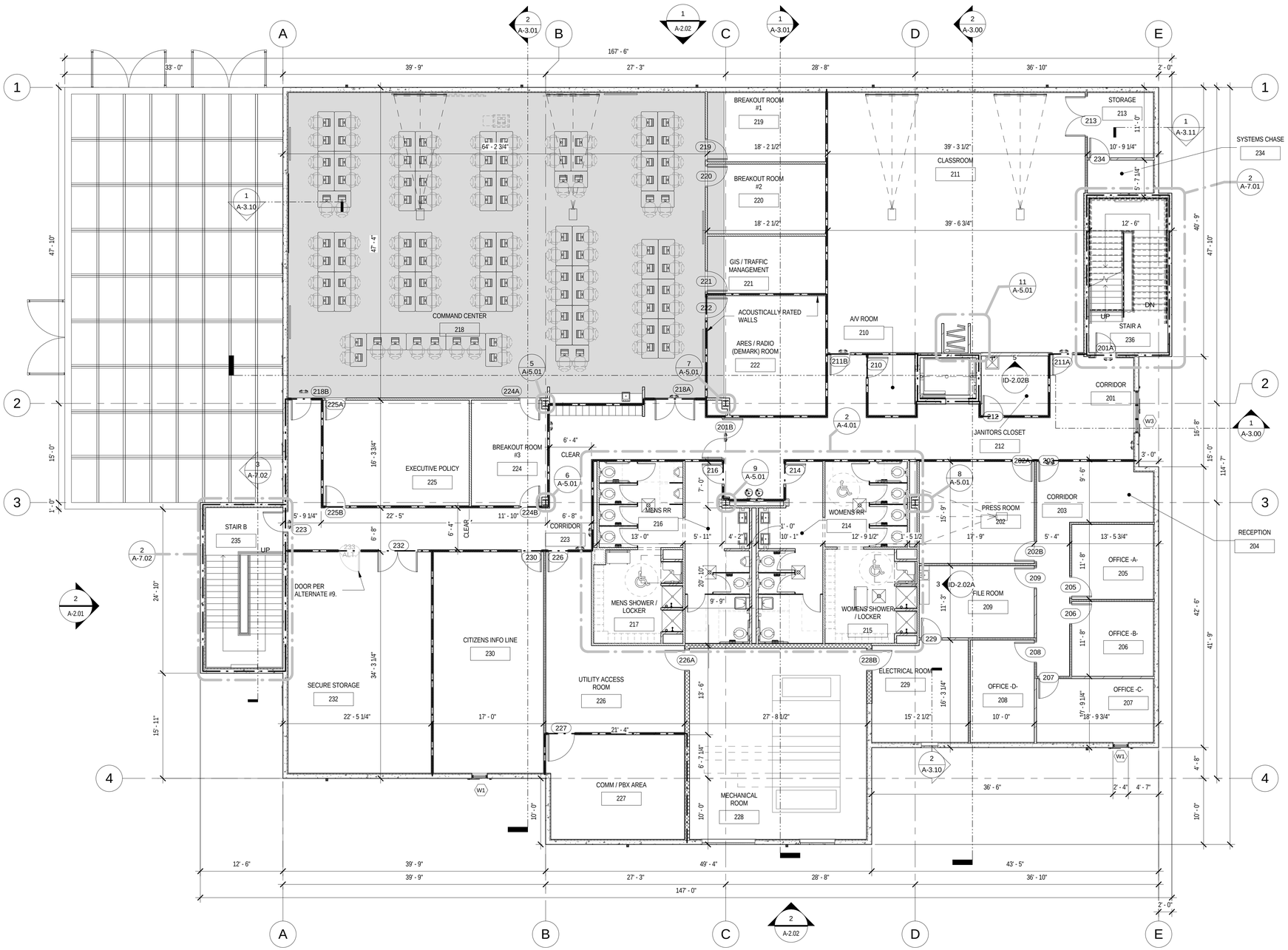
| Number | Description | Date Issued |
|---|---|---|
| 2 | ADDENDUM #2 | 12.22.11 |

• sheet title
FIRST FLOOR PLAN

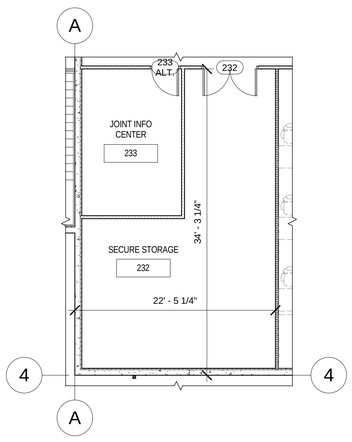
• scale: 1/8" = 1'-0"
• drawn: DT, AH
• checked: SG, SB
• approved: KR, AIA
• date: 11/09/11

• project no. 842-10

• sheet no. A-1.01




1 SECOND FLOOR PLAN
1/8" = 1'-0"




2 ALTERNATE #9: J.I.C.
1/8" = 1'-0"

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FLORIDA
**Approved Plans - Commercial**
**LAKE COUNTY BUILDING DIVISION**
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Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:

GENERAL NOTES:
1) ALL DIMENSIONS ARE TO FACE OF METAL STUDS, FACE OF CONCRETE WALL OR CMU OR ℄ OF COLUMN GRID, U.N.O.
2) DO NOT SCALE DRAWINGS
3) FOR WALL TYPES REFER TO REFLECTED CEILING PLANS A-1.51
4) FOR FIRE RATED WALLS, SEE LIFE SAFETY PLANS G-1.01 AND G-1.02


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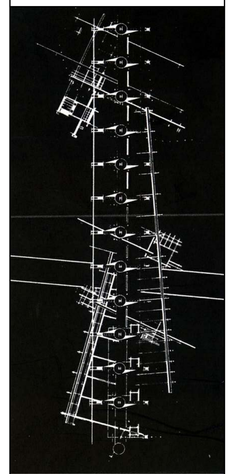
Corporate Registration No. AAC26002047

**Lake County Emergency Communications & Operations Center**

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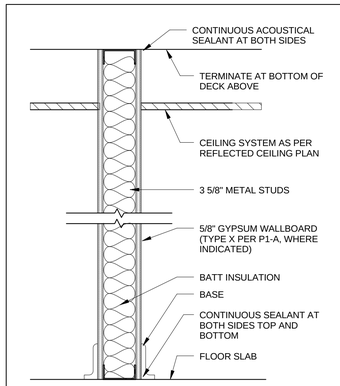
- revisions

- sheet title
SECOND FLOOR PLAN

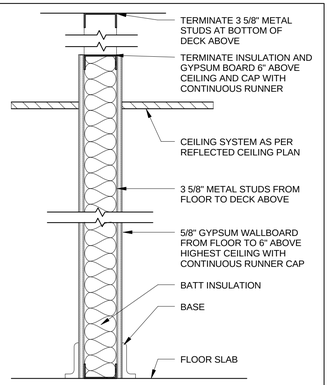
- scale: 1/8" = 1'-0"
- drawn: DT, AH
- checked: SG, SB
- approved: KR, AIA
- date: 11/09/11
- project no. 842-10
- sheet no. A-1.02




WALL TYPE P1 & P1-A

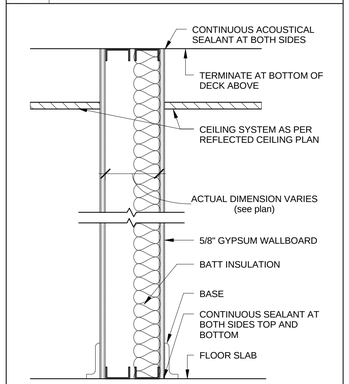
P1 AIR TIGHT WALL

P1-A FIRE RATED



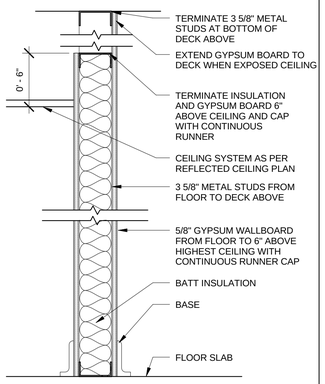

WALL TYPE P2

METAL STUD WALL



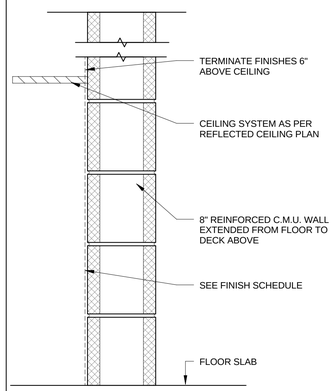

WALL TYPE P3

METAL STUD WALL



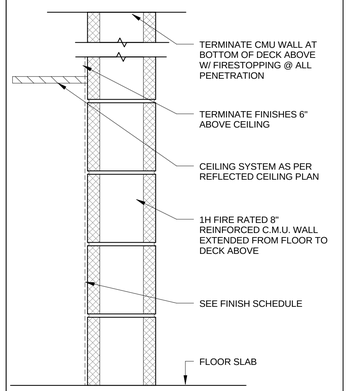

WALL TYPE P2-A

METAL STUD WALL




WALL TYPE P4

CMU WALL



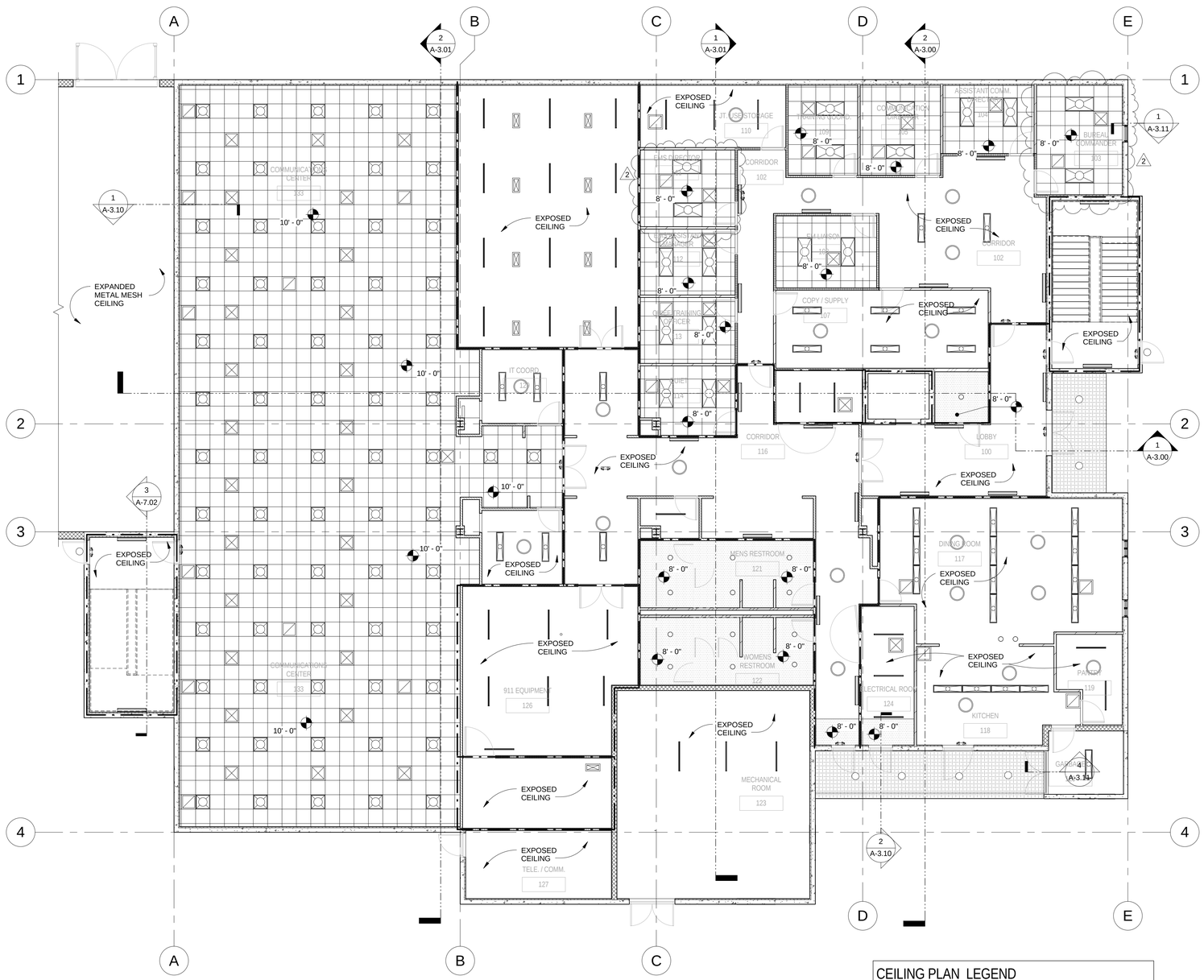

WALL TYPE P4-A

1H FIRE RATED CMU WALL

## WALL TYPES

GENERAL NOTE: FOR FIRE RATED WALLS, SEE LIFE SAFETY PLANS G-1.01 AND G-1.02

1 1/2" = 1'-0"




## 1 FIRST FLOOR REFLECTED CEILING PLAN

1/8" = 1'-0"

LAKE COUNTY FLORIDA

**Approved Plans - Commercial**

**LAKE COUNTY BUILDING DIVISION**

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Permit # 2011110212

Building: BLD31 12/29/11
Electric: ADM01 12/29/11
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:

## CEILING PLAN LEGEND

| | |
|---|---|
| CEILING HEIGHT | |
| 2 x 2 LED | |
| 2 x 4 TROFFER | |
| PENDANT FLUORESCENT | |
| STRIP FLUORESCENT LIGHT | |
| RECESSED LIGHT FIXTURE | |
| WALL MOUNTED LIGHT | |
| 1h FIRE RATED WALL | |
| EXIT LIGHT | |
| TILT UP CONCRETE | 2x2 ACOUSTICAL CEILING GRID |
| GYPSUM WALL BOARD | HARDIBOARD |


Architects Design Group

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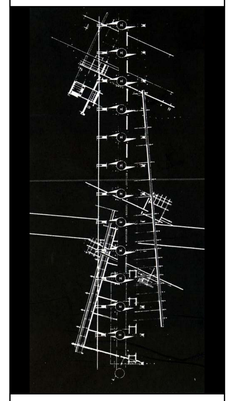
Corporate Registration No. AAC26002047

# Lake County Emergency Communications & Operations Center

Tavares, Florida

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• revisions/addenda

| Number | Description | Date Issued |
|---|---|---|
| 2 | ADDENDUM #2 | 12.22.11 |

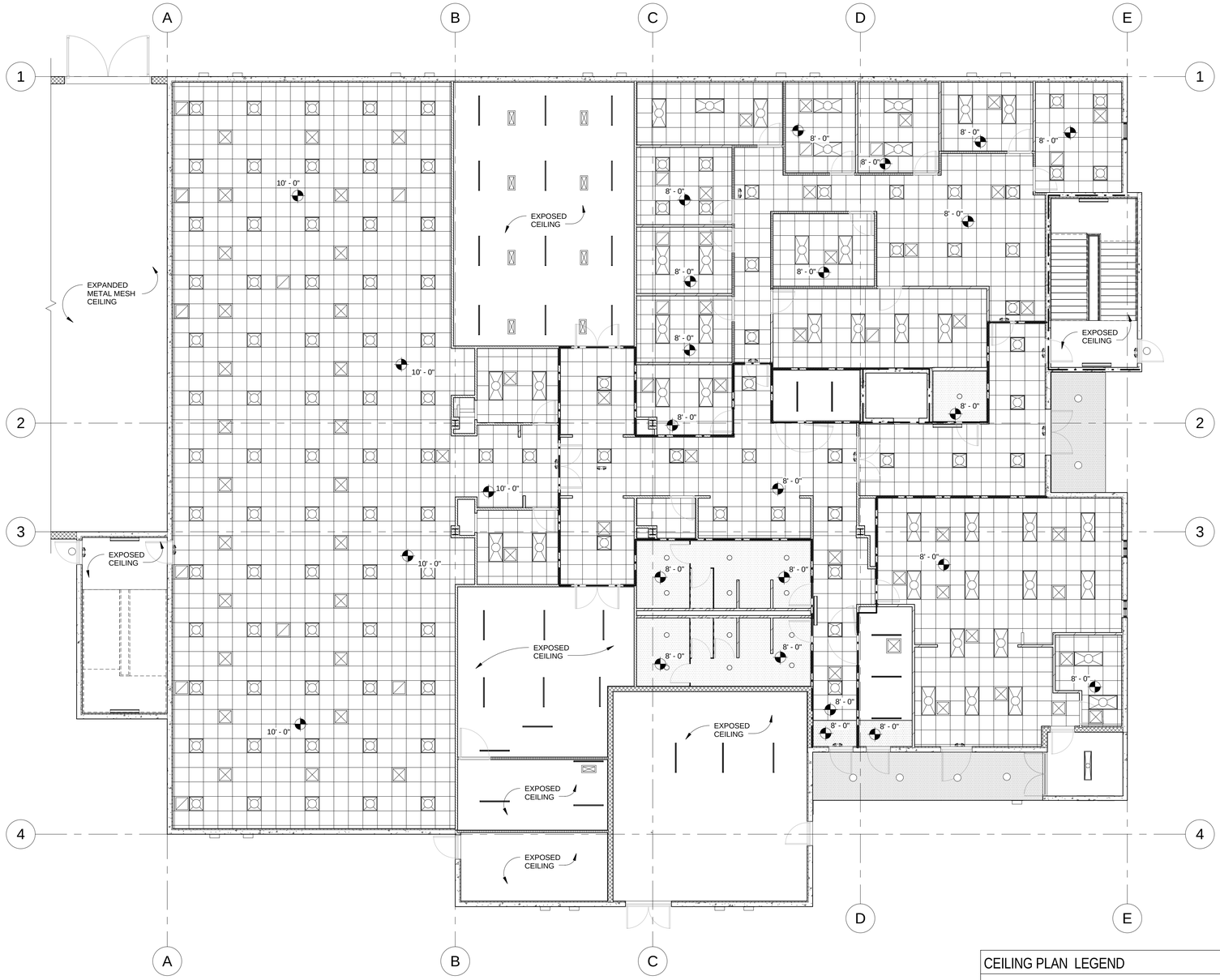
• sheet title

## 1ST FLOOR REFLECTED CEILING PLAN

• scale: As indicated
• drawn: DT, AH
• checked: SG, SB
• approved: KR, AIA
• date: 11/09/11

• project no. 842-10

• sheet no. A-1.51




# 1 ALTERNATE 4 FIRST FLOOR REFLECTED CEILING PLAN

1/8" = 1'-0"

NOTE:
1) FOR WALL TYPES REFER TO REFLECTED CEILING PLANS A-1.51

LAKE COUNTY FLORIDA
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**LAKE COUNTY BUILDING DIVISION**
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Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:

| CEILING PLAN LEGEND | |
|---|---|
| CEILING HEIGHT | |
| 2 x 2 LED | |
| 2 x 4 TROFFER | |
| PENDANT FLUORESCENT | |
| STRIP FLUORESCENT LIGHT | |
| RECESSED LIGHT FIXTURE | |
| WALL MOUNTED LIGHT | |
| 1h FIRE RATED WALL | |
| EXIT LIGHT | |
| TILT UP CONCRETE | 2x2 ACOUSTICAL CEILING GRID |
| GYPSUM WALL BOARD | HARDIBOARD |


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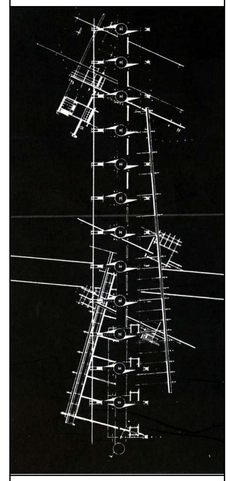

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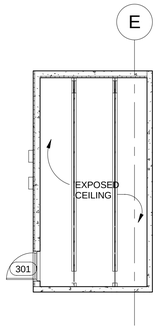
- revisions

- sheet title
  FIRST FLOOR RCP - ALT.4

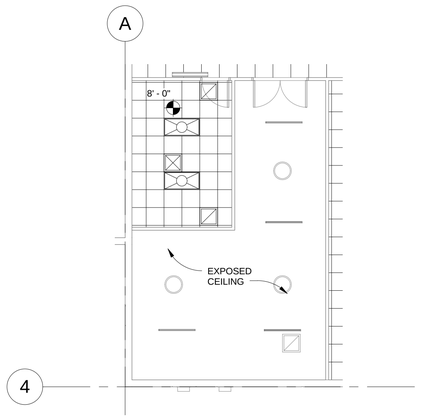
- scale: 1/8" = 1'-0"
- drawn: DT, AH
- checked: SG, SB
- approved: KR, AIA
- date: 11/09/11

- project no. 842-10

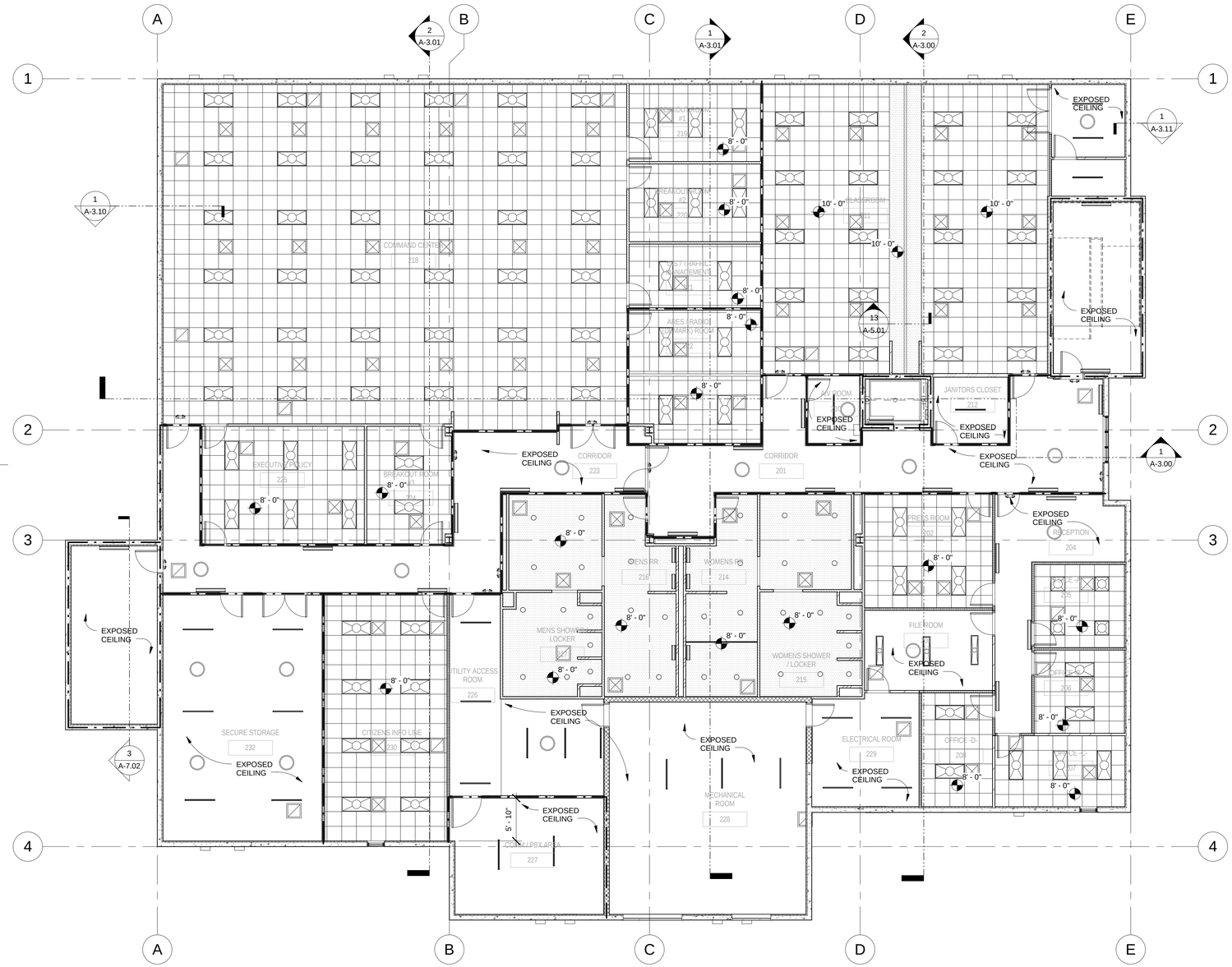
- sheet no. A-1.51A




## 3 ROOF ACCESS STAIR RCP
1/8" = 1'-0"




## 2 ALTERNATE #9: J.I.C.
1/8" = 1'-0"




## 1 SECOND FLOOR REFLECTED CEILING PLAN
1/8" = 1'-0"

NOTE:
1) FOR WALL TYPES REFER TO REFLECTED CEILING PLANS A-1.51

LAKE COUNTY
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Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:

| CEILING PLAN LEGEND | |
|---|---|
| CEILING HEIGHT | |
| 2 x 2 LED | |
| 2 x 4 TROFFER | |
| PENDANT FLUORESCENT | |
| STRIP FLUORESCENT LIGHT | |
| RECESSED LIGHT FIXTURE | |
| WALL MOUNTED LIGHT | |
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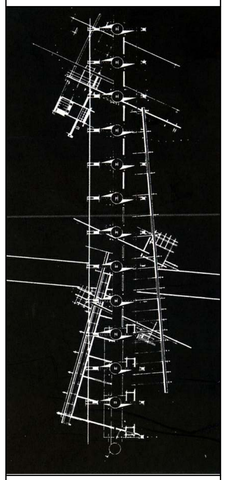

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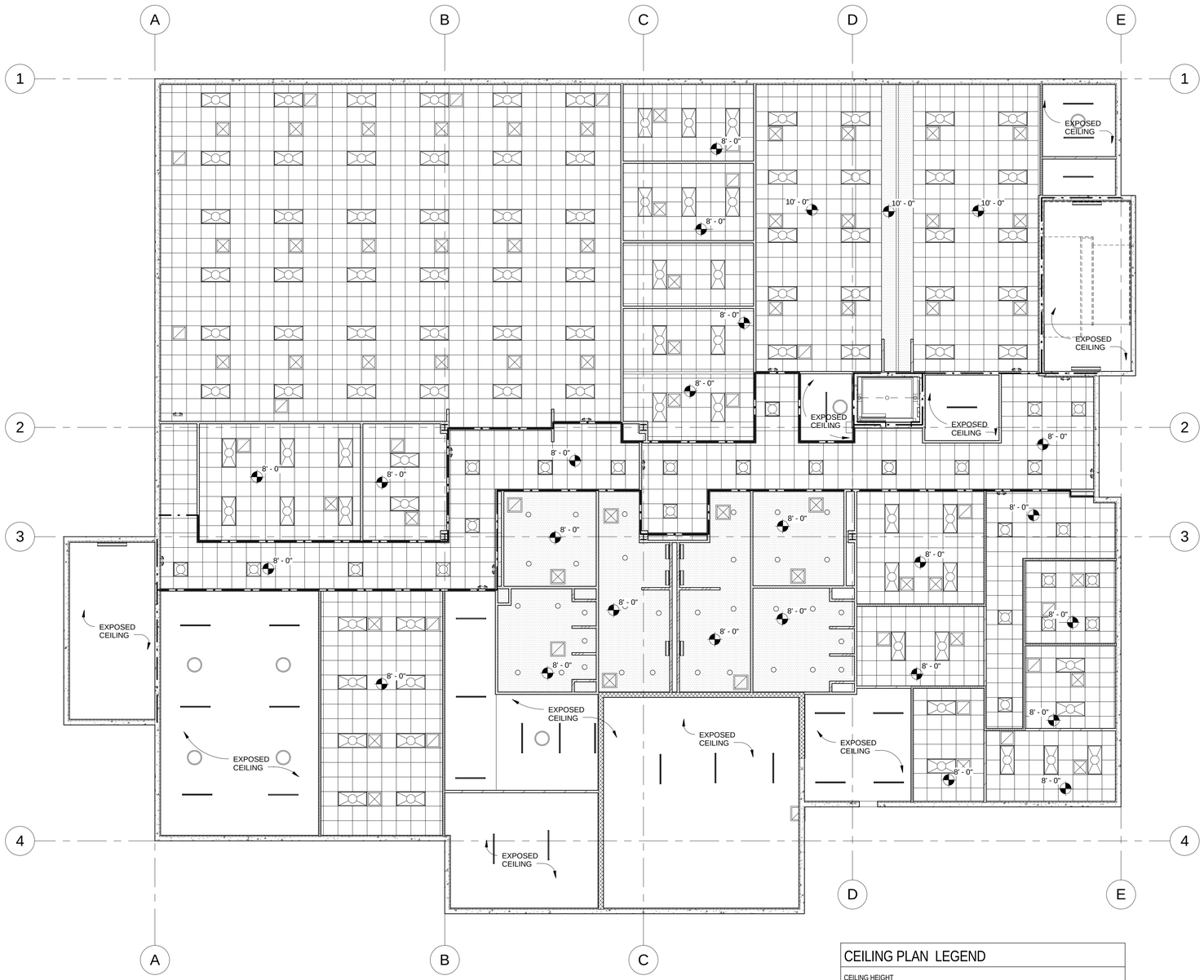
- revisions

- sheet title
  2ND FLOOR REFLECTED CEILING PLAN
- scale: 1/8" = 1'-0"
- drawn: DT, AH
- checked: SG, SB
- approved: KR, AIA
- date: 11/09/11
- project no. 842-10
- sheet no. A-1.52




# ALTERNATE 4 SECOND FLOOR REFLECTED CEILING PLAN

1 — 1/8" = 1'-0"

NOTE:
1) FOR WALL TYPES REFER TO REFLECTED CEILING PLANS A-1.51

LAKE COUNTY
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Permit # 2011110212
Building: BLD31 12/29/11
Electric: ADM01 12/29/11
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:

## CEILING PLAN LEGEND

| | |
|---|---|
| CEILING HEIGHT | |
| 2 x 2 LED | |
| 2 x 4 TROFFER | |
| PENDANT FLUORESCENT | |
| STRIP FLUORESCENT LIGHT | |
| RECESSED LIGHT FIXTURE | |
| WALL MOUNTED LIGHT | |
| 1h FIRE RATED WALL | |
| EXIT LIGHT | |
| TILT UP CONCRETE | 2x2 ACOUSTICAL CEILING GRID |
| GYPSUM WALL BOARD | HARDIBOARD |


Architects Design Group

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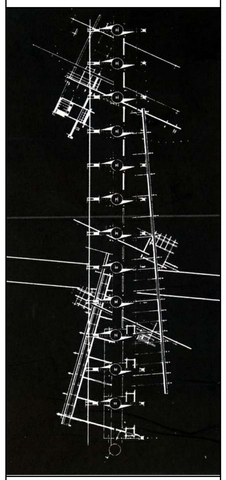
(407) 647-1706
Corporate Registration No. AAC26002047

**Lake County Emergency Communications & Operations Center**

Tavares, Florida

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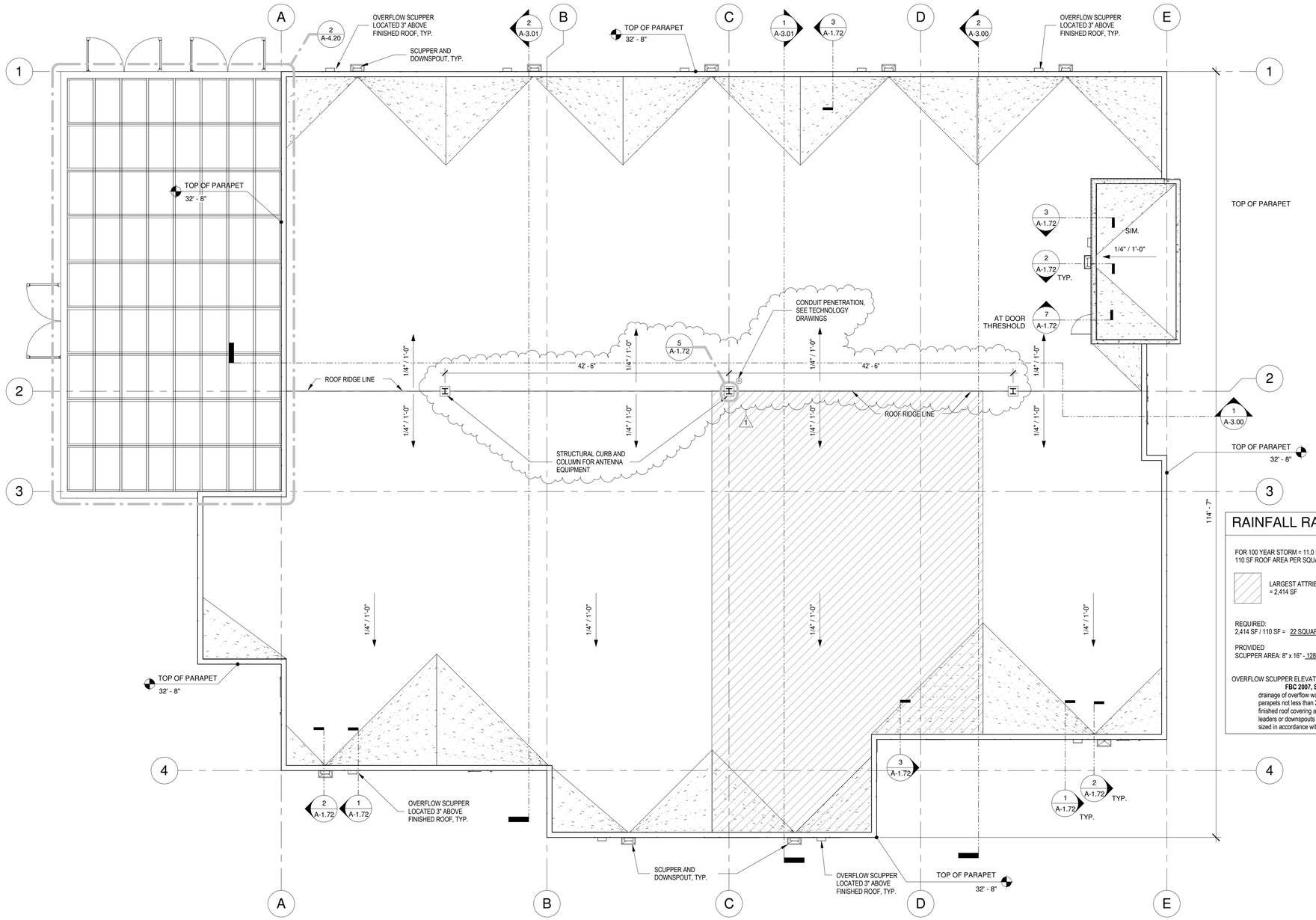
- revisions

- sheet title: 2ND FLOOR RCP - ALT.4
- scale: 1/8" = 1'-0"
- drawn: DT, AH
- checked: SG, SB
- approved: KR, AIA
- date: 11/09/11
- project no. 842-10
- sheet no. A-1.52A




1 ROOF PLAN

1/8" = 1'-0"

## RAINFALL RATE & SCUPPER DESIGN

FOR 100 YEAR STORM = 11.0 INCHES PER HOUR
110 SF ROOF AREA PER SQUARE INCH OF DOWNSPOUT AREA

LARGEST ATTRIBUTABLE DOWNSPOUT AREA
= 2,414 SF

REQUIRED:
2,414 SF / 110 SF = 22 SQUARE INCHES OF DOWNSPOUT AREA

PROVIDED
SCUPPER AREA: 8" x 16" - 128 SQUARE INCHES OF SCUPPER AREA

OVERFLOW SCUPPER ELEVATION LOCATION PER:
**FBC 2007, SECTION 1503.4.3 Overflow scuppers.** When other means of drainage of overflow water is not provided, overflow scuppers shall be placed in walls or parapets not less than 2 inches (51 mm) nor more than 4 inches (102 mm) above the finished roof covering and shall be located as close as practical to required vertical leaders or downspouts or wall and parapet scuppers. An overflow scupper shall be sized in accordance with the *Florida Building Code, Plumbing*.

LAKE COUNTY
FLORIDA
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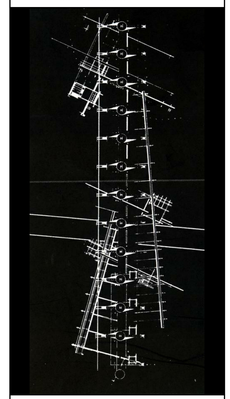

# Lake County Emergency Communications & Operations Center

Tavares, Florida

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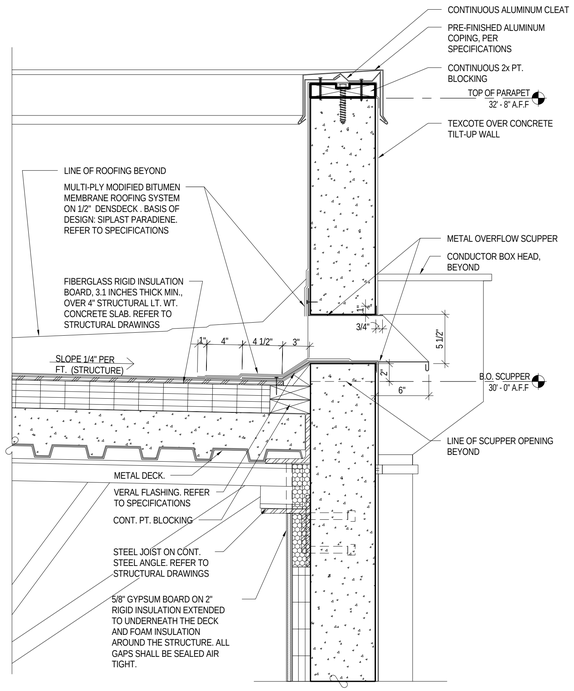
revisions/addenda

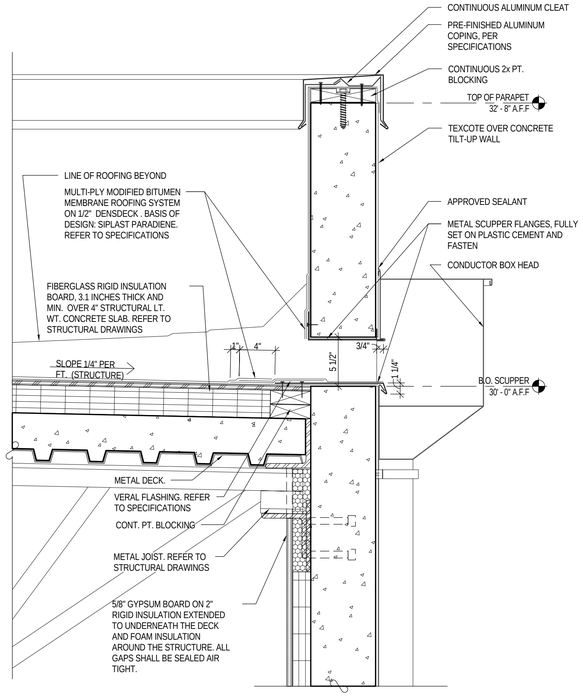
| Number | Description | Date Issued |
|---|---|---|
| 1 | ADDENDUM #1 | 12.16.11 |

sheet title
ROOF PLAN

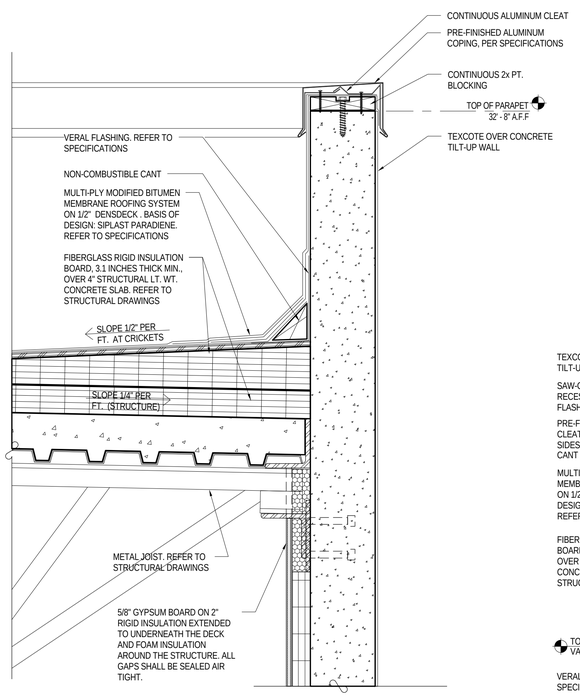
- scale: 1/8" = 1'-0"
- drawn: DT, AH
- checked: SG, SB
- approved: KR, AIA
- date: 11/09/11
- project no. 842-10
- sheet no. A-1.71



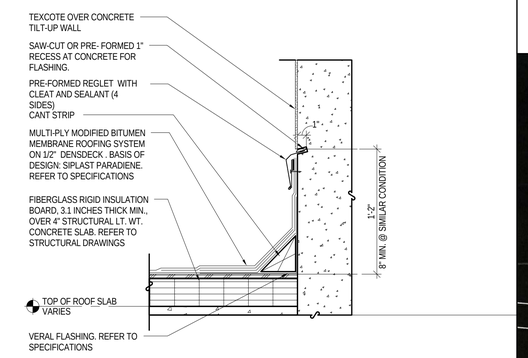

1 ROOF- OVERFLOW SCUPPER
1 1/2" = 1'-0"




2 ROOF- SCUPPER/CONDUCTOR HEAD
1 1/2" = 1'-0"

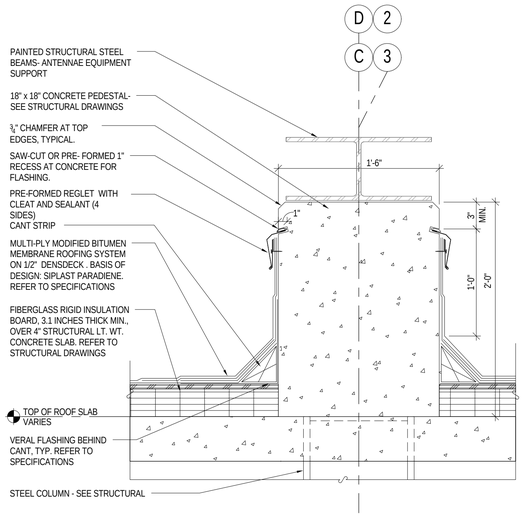



3 ROOF- PARAPET COPING
1 1/2" = 1'-0"

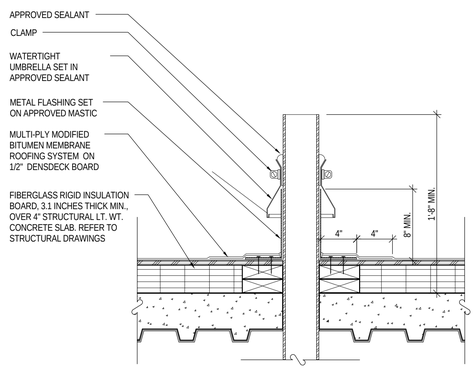



4 ROOF- WALL FLASHING
1 1/2" = 1'-0"

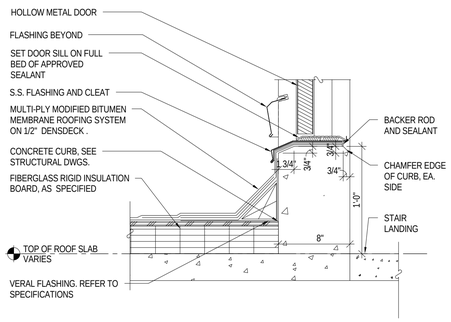
NOTE: DETAIL OCCURS AT INTERSECTION OF GRID LINES C & D WITH 2 & 3.




5 ROOF- CONCRETE PEDESTAL
1 1/2" = 1'-0"




6 ROOF- PIPE PENETRATION
1 1/2" = 1'-0"




7 ROOF- CURB DETAIL
1 1/2" = 1'-0"

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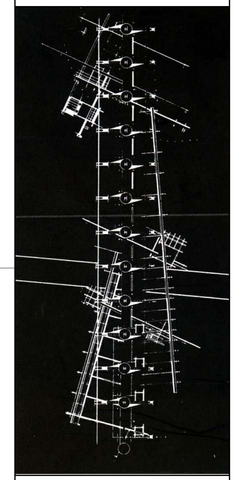

**Lake County Emergency Communications & Operations Center**

Tavares, Florida

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- revisions

- sheet title
ROOF DETAILS

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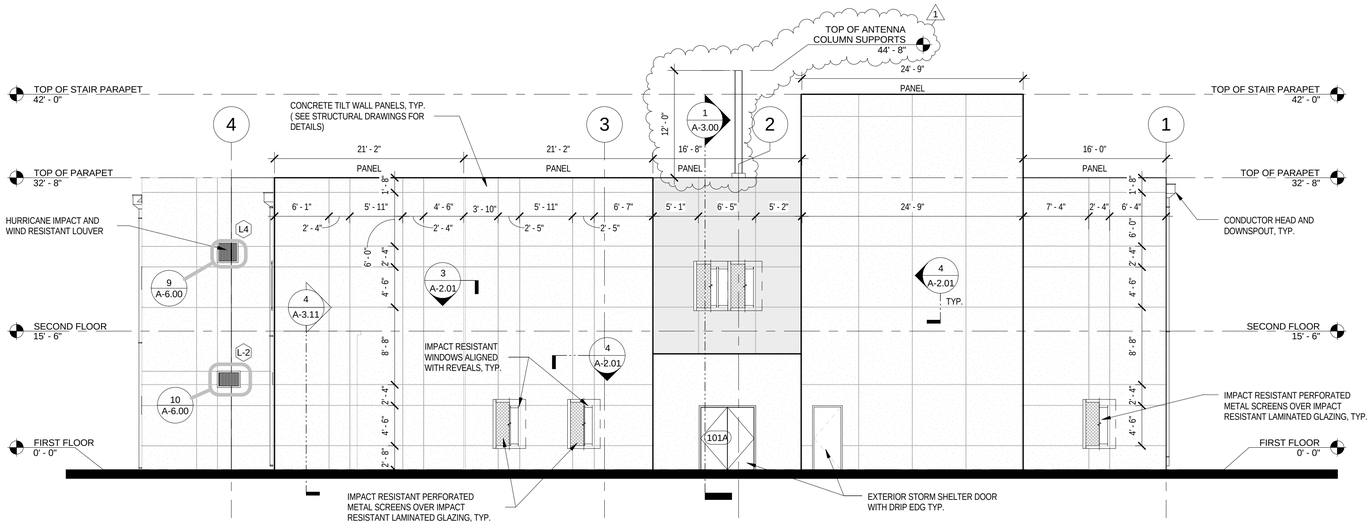
- date: 11/09/11

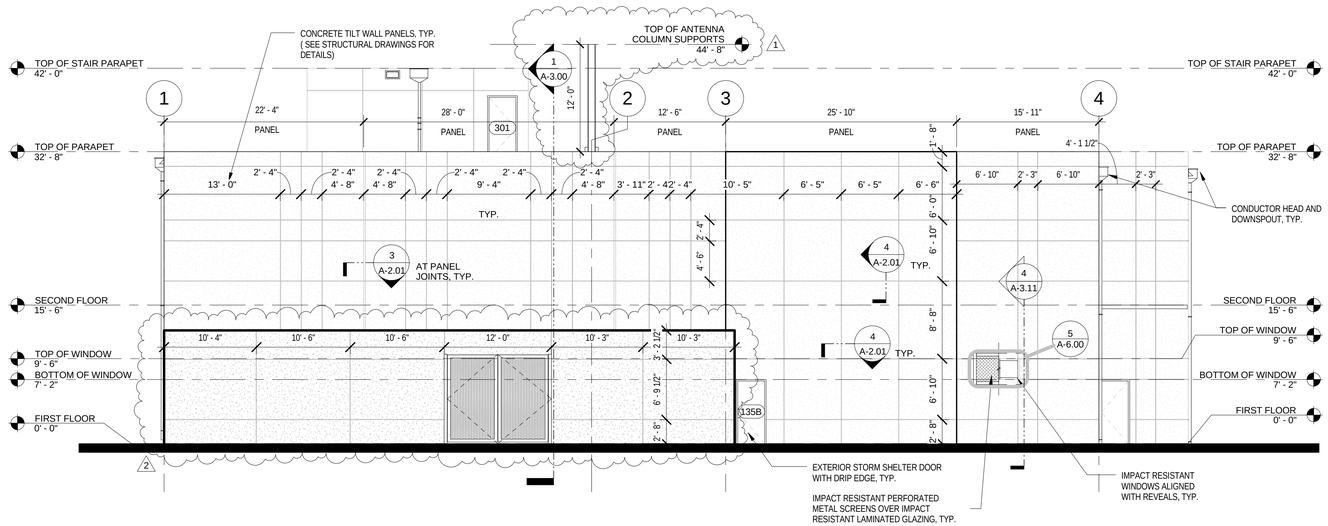
- project no. 842-10

- sheet no. A-1.72



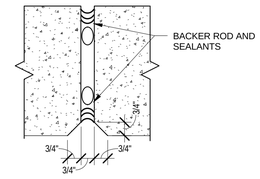

# 1 EAST ELEVATION

1/8" = 1'-0"



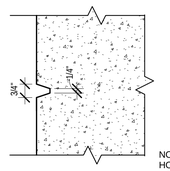

# 2 WEST ELEVATION

1/8" = 1'-0"




# 3 PANEL JOINT

3" = 1'-0"




NOTE: TYPICAL, AT HORIZONTAL AND VERTICAL, EXCEPT AT PANEL JOINTS

# 4 BUILDING REVEAL

3" = 1'-0"

## GENERAL NOTES

1. GLAZING SYSTEMS, LOUVERS AND EXTERIOR DOORS MUST AT A MINIMUM MEET THE DOE-STD-1020-2002 IMPACT CRITERIA OF A 15 LB. 2X4 FIRED AT 50 MPH

   -APPROVED COMBINATION SYSTEM BASIS OF DESIGN:
   GLAZING = LEVEL D CERTIFIED (9 LB. 2X4 FIRED AT 34 MPH)
   HURRICANE SHUTTERS = LEVEL E CERTIFIED (9 LB. 2X4 FIRED AT 55 MPH)
   -APPROVED STAND-ALONE GLAZING ALTERNATE:
   GLAZING = CERTIFIED TO MEET DOE-STD-1020-2002 CRITERIA (15 LB. 2X4 FIRED AT 50 MPH)

2. GLAZING SYSTEMS, LOUVERS AND EXTERIOR DOORS MUST MEET 160 MPH WIND SPEED (3-SECOND GUST)

LAKE COUNTY
FLORIDA
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Plumbing: BLD31 12/27/11
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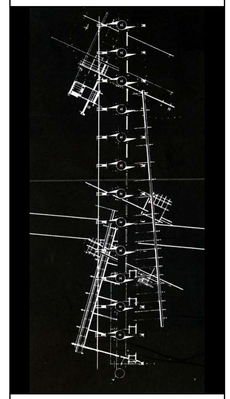

**Lake County Emergency Communications & Operations Center**

Tavares, Florida

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• revisions/addenda

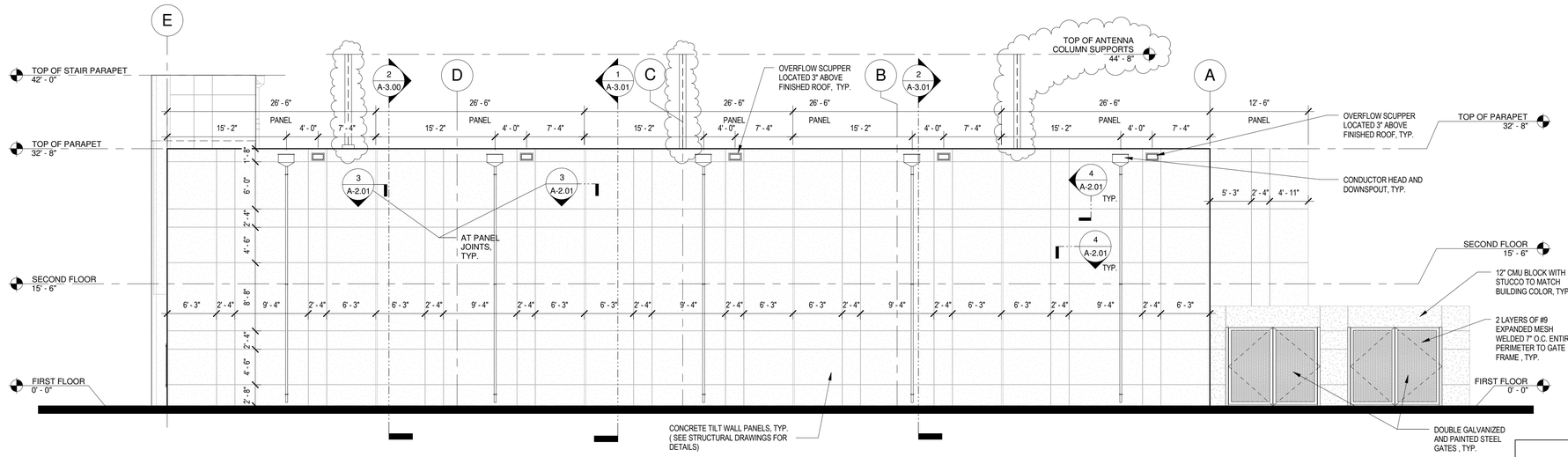
| Number | Description | Date Issued |
|---|---|---|
| 1 | ADDENDUM #1 | 12.16.11 |
| 2 | ADDENDUM #2 | 12.22.11 |

• sheet title
BUILDING ELEVATIONS

• scale: As indicated
• drawn: DT, AH
• checked: SG, SB
• approved: KR, AIA
• date: 11/09/11

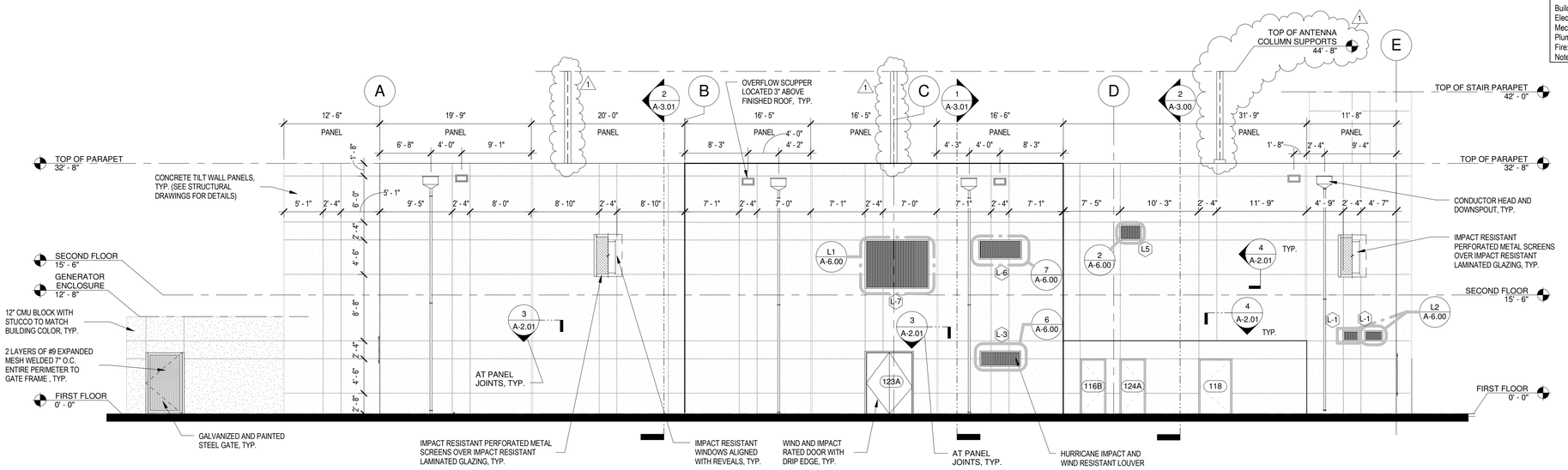
• project no. 842-10

• sheet no. A-2.01




# 1 NORTH ELEVATION

1/8" = 1'-0"




# 2 SOUTH ELEVATION

1/8" = 1'-0"

## GENERAL NOTES

1. GLAZING SYSTEMS, LOUVERS AND EXTERIOR DOORS MUST AT A MINIMUM MEET THE DOE-STD-1020-2002 IMPACT CRITERIA OF A 15 LB. 2X4 FIRED AT 50 MPH

   -APPROVED COMBINATION SYSTEM BASIS OF DESIGN:
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   -APPROVED STAND-ALONE GLAZING ALTERNATE:
   GLAZING = CERTIFIED TO MEET DOE-STD-1020-2002 CRITERIA (15 LB. 2X4 FIRED AT 50 MPH)

2. GLAZING SYSTEMS, LOUVERS AND EXTERIOR DOORS MUST MEET 160 MPH WIND SPEED (3-SECOND GUST)

LAKE COUNTY
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Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:

STATE OF FLORIDA
KEVIN JOHN RATIGAN
10603
REGISTERED ARCHITECT


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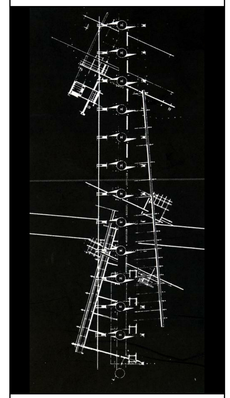

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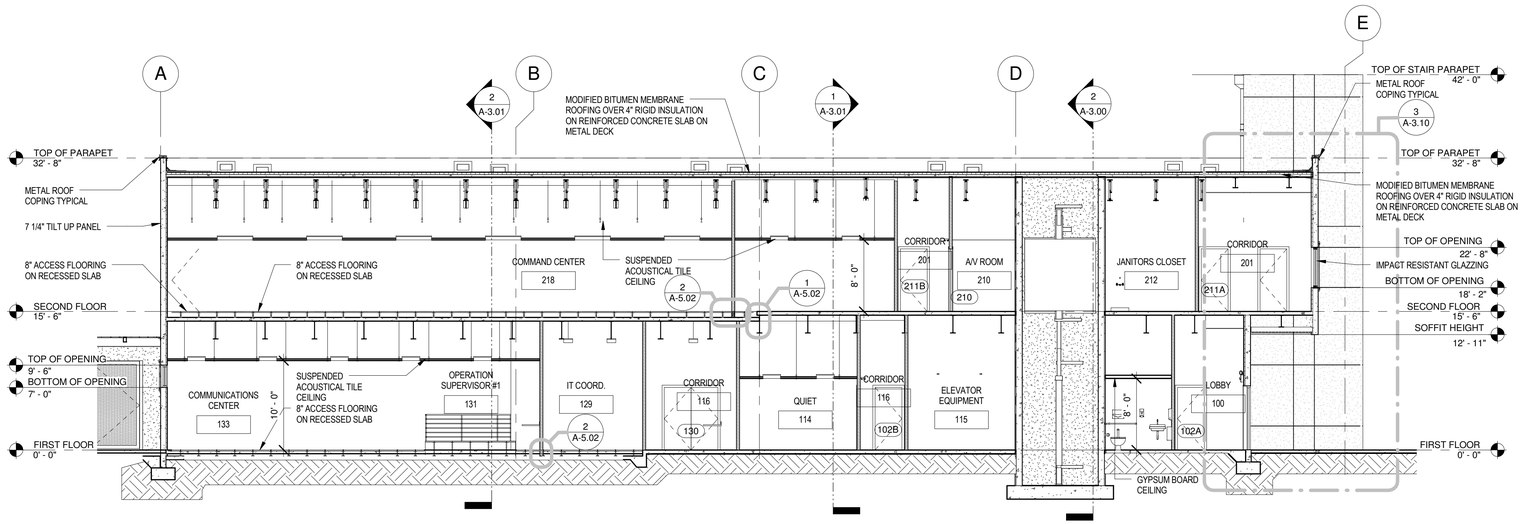
| 1 | ADDENDUM #1 | 12.16.11 |

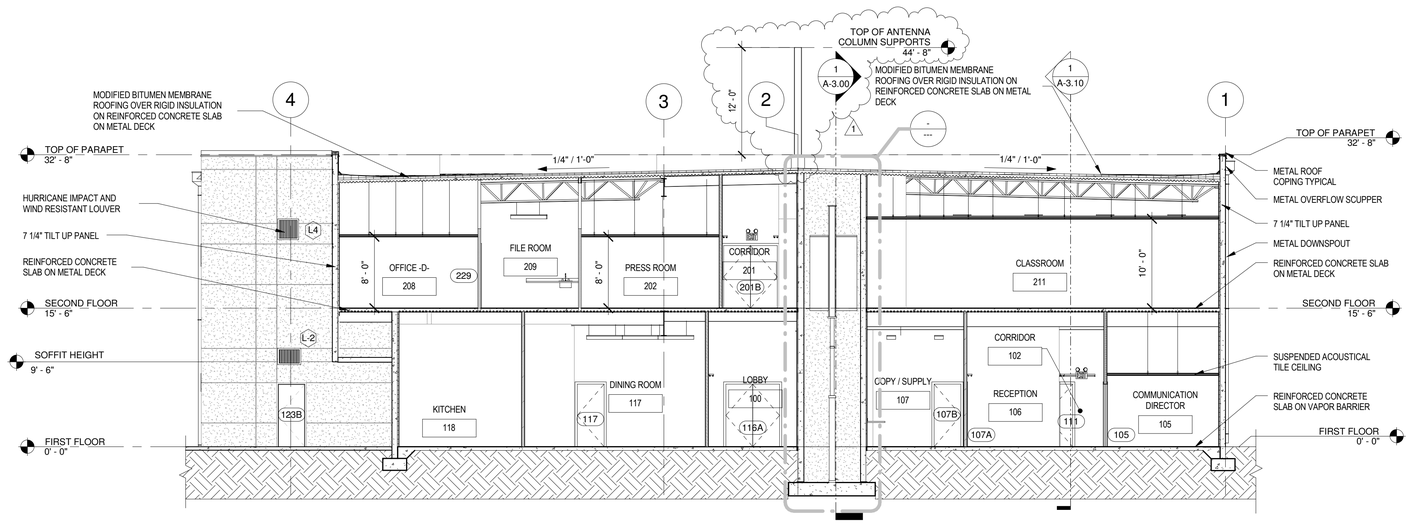
sheet title
**BUILDING ELEVATIONS**

| | |
|---|---|
| scale: | As indicated |
| drawn: | DT, AH |
| checked: | SG, SB |
| approved: | KR, AIA |
| date: | 11/09/11 |
| project no. | 842-10 |
| sheet no. | A-2.02 |




## 1 BUILDING SECTION

1/8" = 1'-0"




## 2 BUILDING SECTION

1/8" = 1'-0"

LAKE COUNTY
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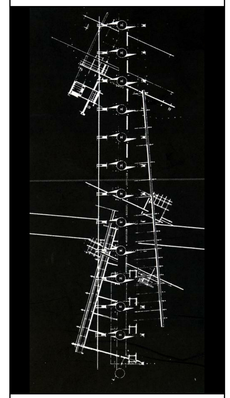

# Lake County Emergency Communications & Operations Center

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| 1 | ADDENDUM #1 | 12.16.11 |

• sheet title
## BUILDING SECTIONS

- scale: 1/8" = 1'-0"
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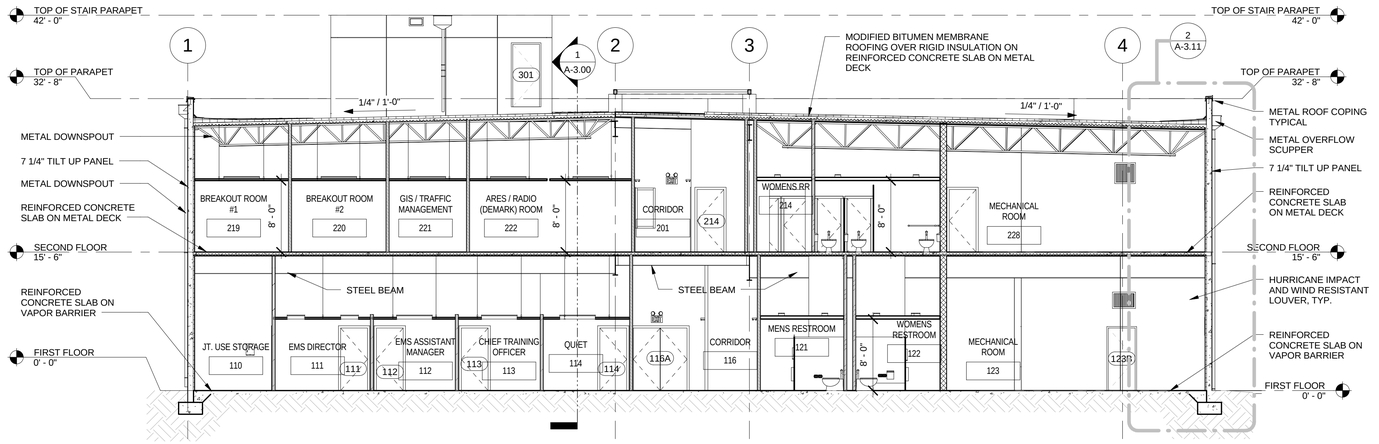
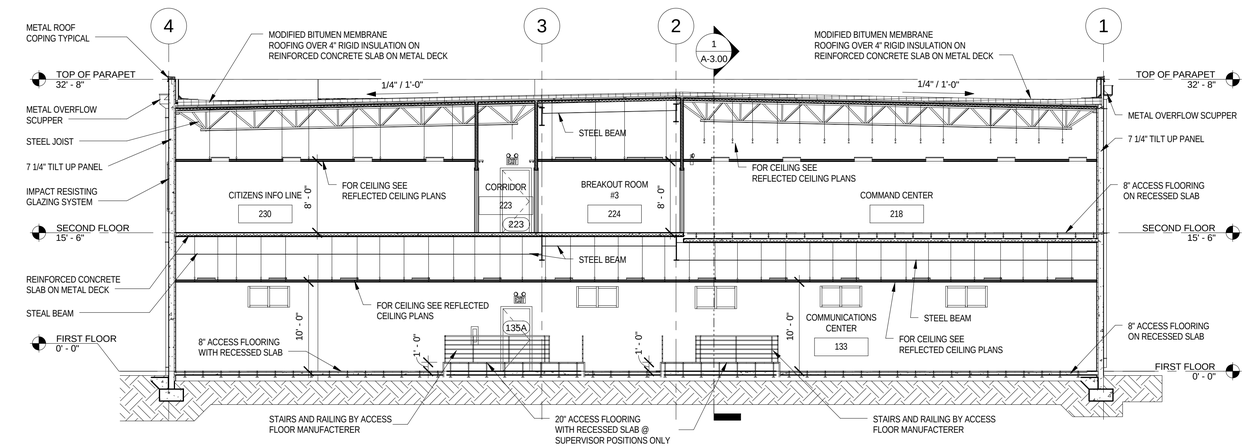
• project no. 842-10

• sheet no. A-3.00




# 1 BUILDING SECTION

1/8" = 1'-0"




# 2 BUILDING SECTION

1/8" = 1'-0"

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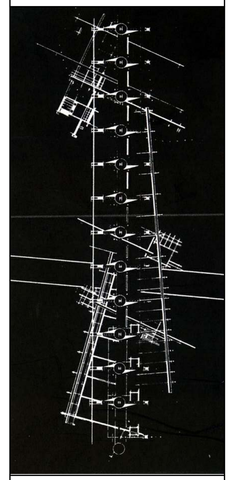

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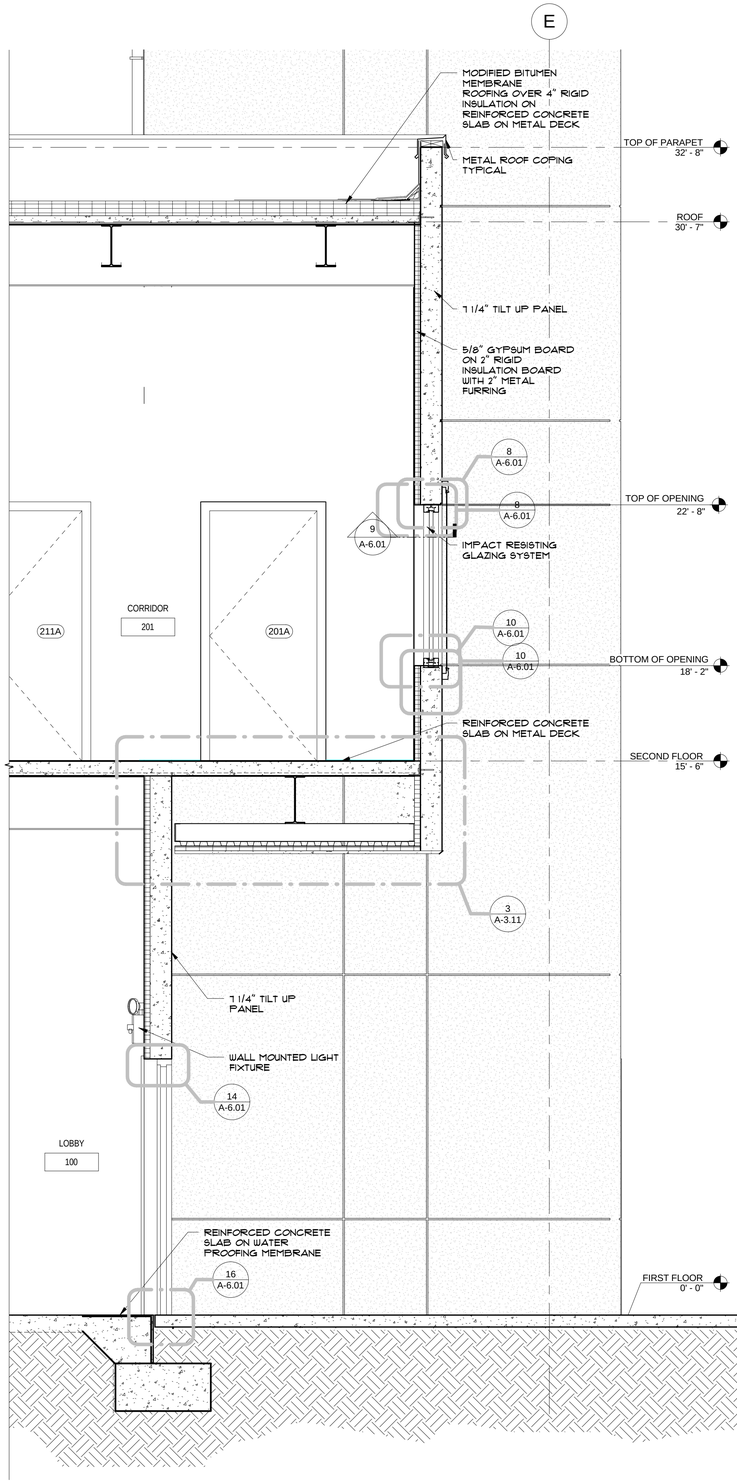
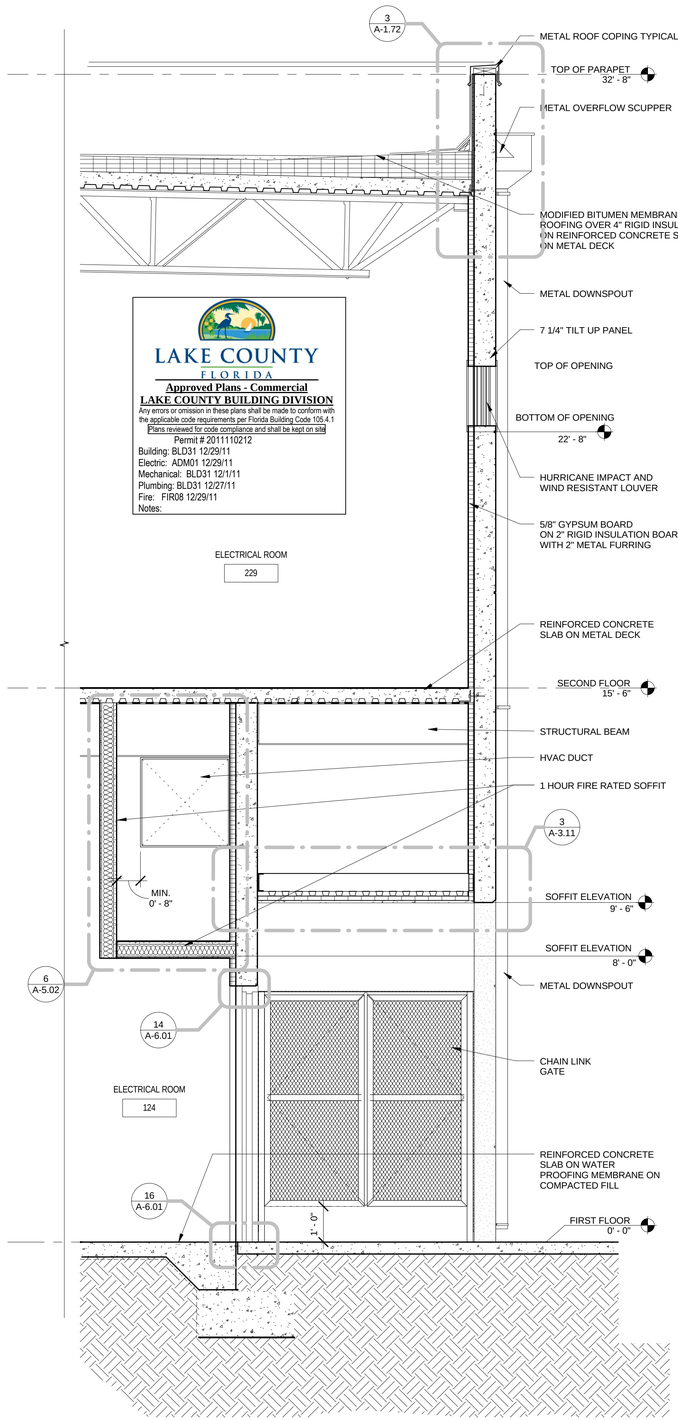
- sheet no. A-3.01




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




LAKE COUNTY
FLORIDA
**Approved Plans - Commercial**
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Permit # 2011110212
Building: BLD31 12/29/11
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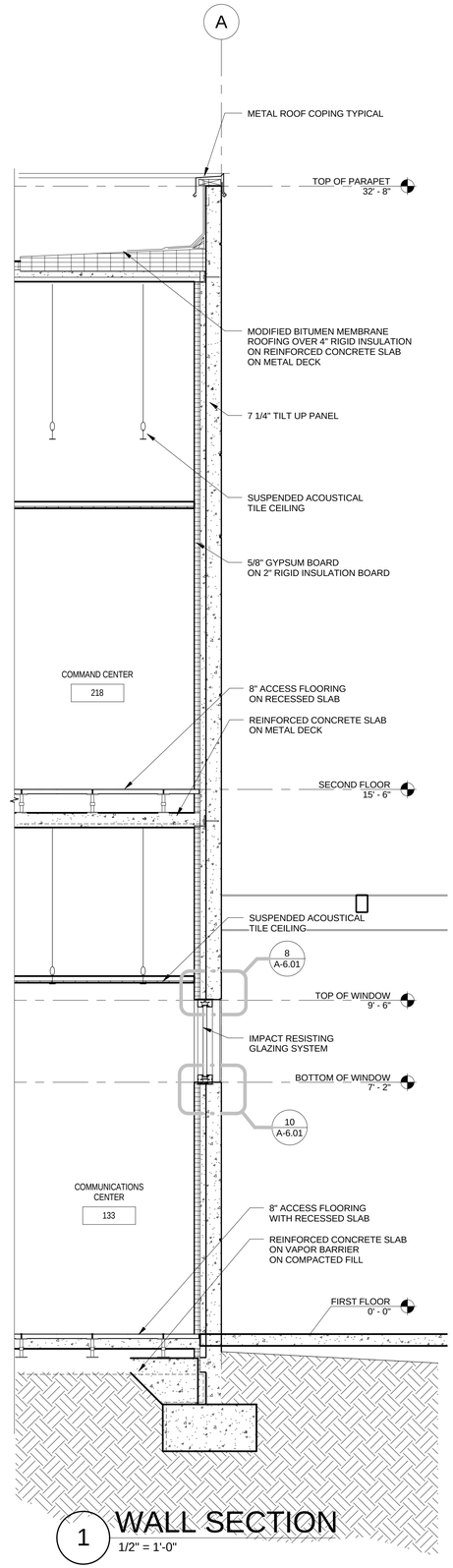
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:

2 WALL SECTION
1/2" = 1'-0"




1 WALL SECTION
1/2" = 1'-0"

Architects Design Group
Architects and Planners
I.S.K. Reeves V, F.A.I.A.
Kevin Ratigan, A.I.A.
Ian A. Reeves, A.I.A.
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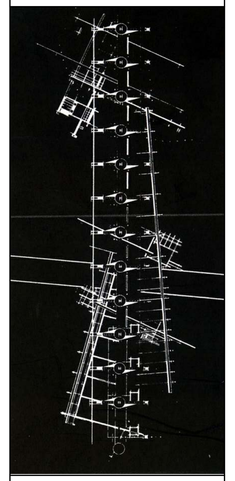
(407) 647-1706
Corporate Registration No. AAC26002047



# Lake County Emergency Communications & Operations Center

Tavares, Florida

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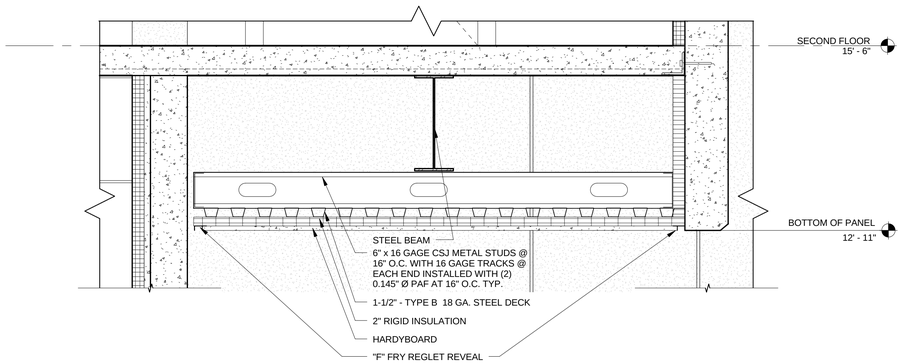
- revisions

- sheet title
  WALL SECTIONS

- scale: 1/2" = 1'-0"
- drawn: DT, AH
- checked: SG, SB
- approved: KR, AIA
- date: 11/09/11

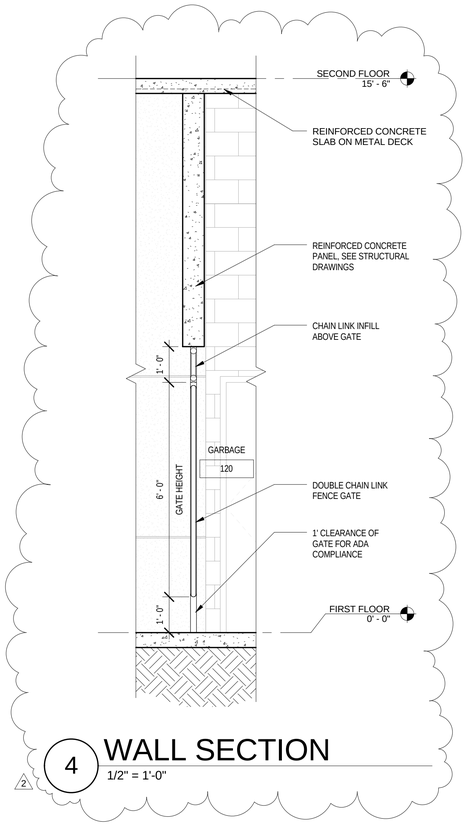
- project no. 842-10

- sheet no. A-3.10



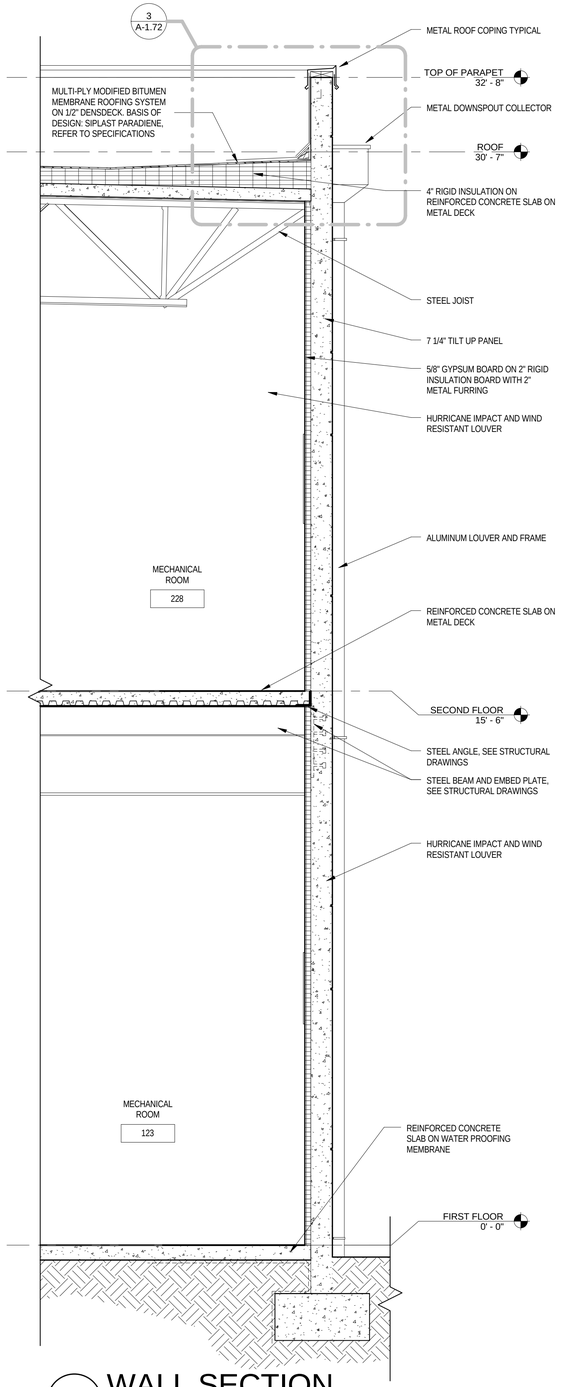

## 3 EXTERIOR SOFFIT DETAIL

1" = 1'-0"



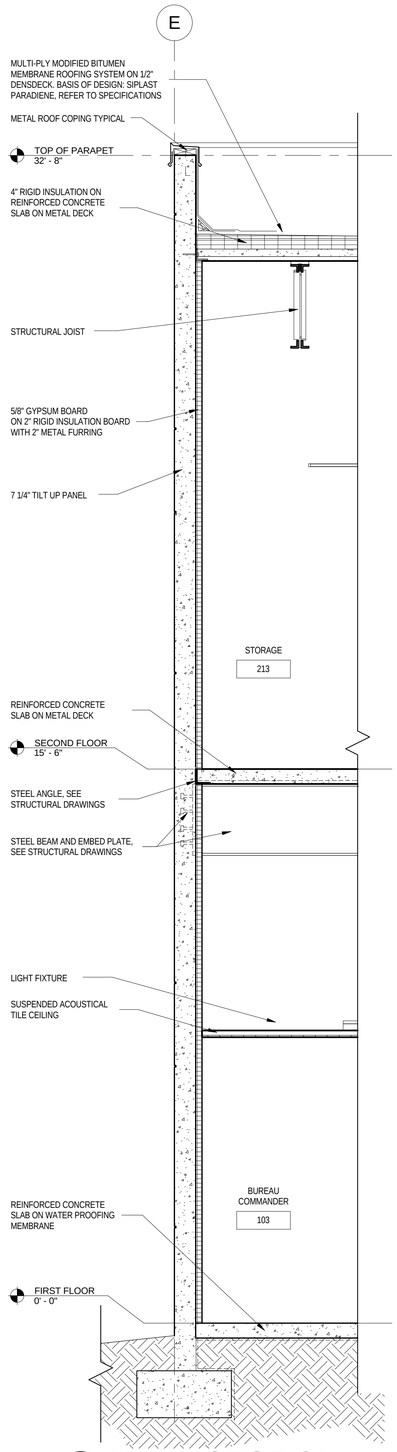

## 4 WALL SECTION

1/2" = 1'-0"




## 2 WALL SECTION

1/2" = 1'-0"




## 1 WALL SECTION

1/2" = 1'-0"

LAKE COUNTY
FLORIDA

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Permit # 20111110212
Building: BLD31 12/29/11
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Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
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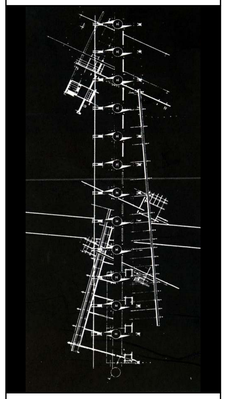
Winter Park, Florida 32789
(407) 647-1706
Corporate Registration No. AAC26002047

# Lake County Emergency Communications & Operations Center

Tavares, Florida

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| Number | Description | Date Issued |
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| 2 | ADDENDUM #2 | 12.22.11 |

• sheet title
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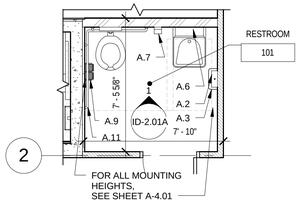
• date: 11/09/11

• project no. 842-10

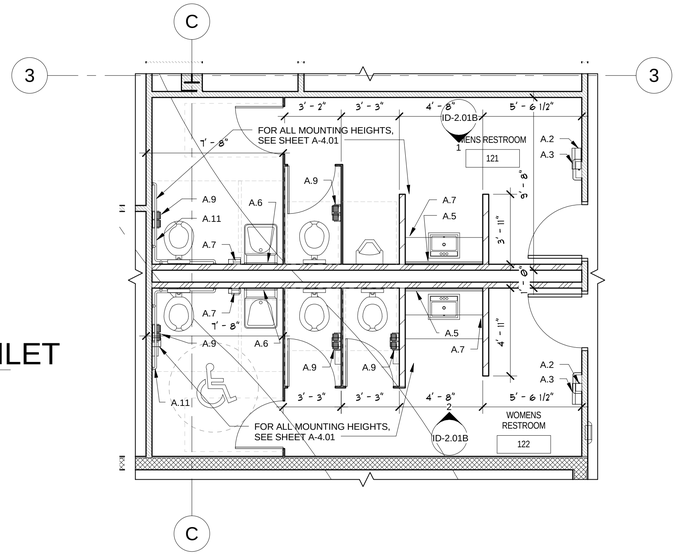
• sheet no. A-3.11




2

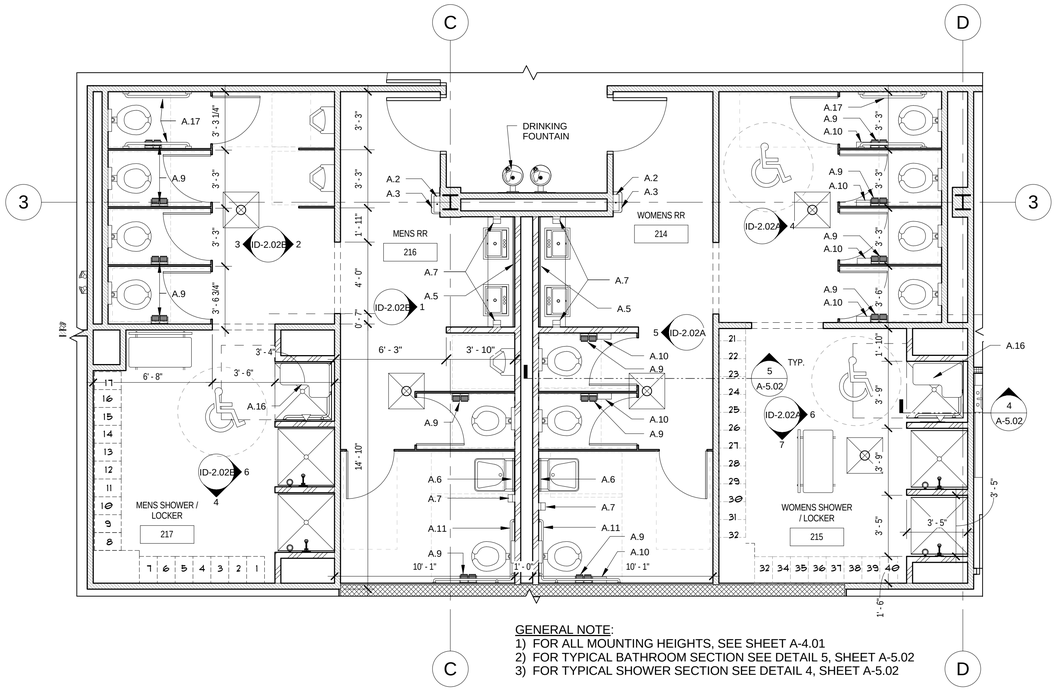
# RESTROOM 101
# 01.2 ENLARGED TOILET

3 1/4" = 1'-0"




# MEN'S RESTROOM-121 &
# WOMEN'S RESTROOM - 122
# 01.2 ROOMS 121 AND 122

1 1/4" = 1'-0"



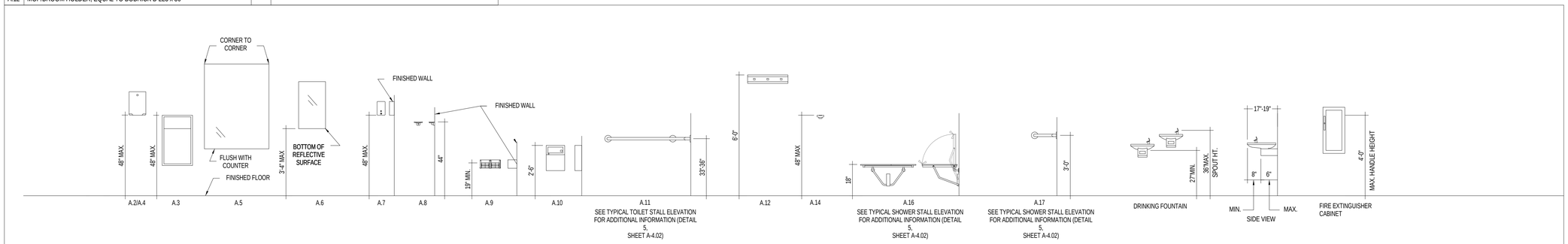

GENERAL NOTE:
1) FOR ALL MOUNTING HEIGHTS, SEE SHEET A-4.01
2) FOR TYPICAL BATHROOM SECTION SEE DETAIL 5, SHEET A-5.02
3) FOR TYPICAL SHOWER SECTION SEE DETAIL 4, SHEET A-5.02

# MEN'S RESTROOM - 216 & WOMEN'S RESTROOM - 214
# SHOWERS

2 1/4" = 1'-0"

## TOILET ACCESSORIES SCHEDULE

| | | | |
|---|---|---|---|
| A.2 | PAPER TOWEL DISPENSER, SURFACE MOUNTED, BRADLEY MODEL 250-15 (C-FOLD/ MULTI-FOLD TOWELS) | A.13 | SHOWER CURTAIN ROD, EQUAL TO B-6107 W/ PLASTIC SHOWER CURTAIN, TYPICAL EACH SHOWER |
| A.3 | WASTE RECEPTACLE, SURFACE MOUNTED, BRADLEY MODEL 357 | A.14 | DOUBLE ROBE HOOK, EQUAL TO B-672 |
| A.5 | FRAMELESS MIRROR, BRADLEY MODELS 747 & 7471 (SEE INTERIOR DRAWINGS FOR WIDTH AND HEIGHT) | A.15 | LOCKER ROOM BENCH-LAQUERED HARDWOOD BENCH 12"W X 1 X30"L, W/ TWO STANDARD GRAY PEDESTALS, BY BALLY BLOCK COMPANY, WWW. MABLEBLOCK.COM, SEE ENLARGED PLAN FOR LOCATION |
| A.6 | FRAMELESS MIRROR, BRADLEY MODELS 747 & 7471 (SEE INTERIOR DRAWINGS FOR WIDTH AND HEIGHT) | | |
| A.7 | SOAP DISPENSER, BRADLEY MODEL 650 | A.16 | FOLDING ADA SHOWER SEAT REVERSABLE, SOLID PHENOLIC - ADA"T EQUAL TO BOBRICK B-5181 |
| A.8 | SURFACE MOUNTED SOAP DISH, BOBRICK B-680 | | |
| A.9 | TOILET TISSUE DISPENSER, BRADLEY MODEL 522 | A.17 | ADA SHOWER BAR, EQUAL TO BOBRICK B6861 16" X 30" 'L' SHAPE |
| A.10 | SANITARY NAPKIN DISPOSAL, BRADLEY MODEL 4722-15 - SURFACE MOUNTED | | |
| A.11 | TOILET GRAB BAR, BRADLY MODEL 817- STAINLESS STEEL | | |
| A.12 | MOP/BROOM HOLDER, EQUAL TO BOBRICK B-223 x 36" | | |




4

# BATHROOM ACCESORIES

3/8" = 1'-0"

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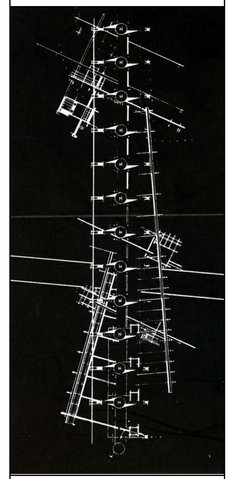
Corporate Registration No. AAC26002047



**Lake County Emergency Communications & Operations Center**

Tavares, Florida

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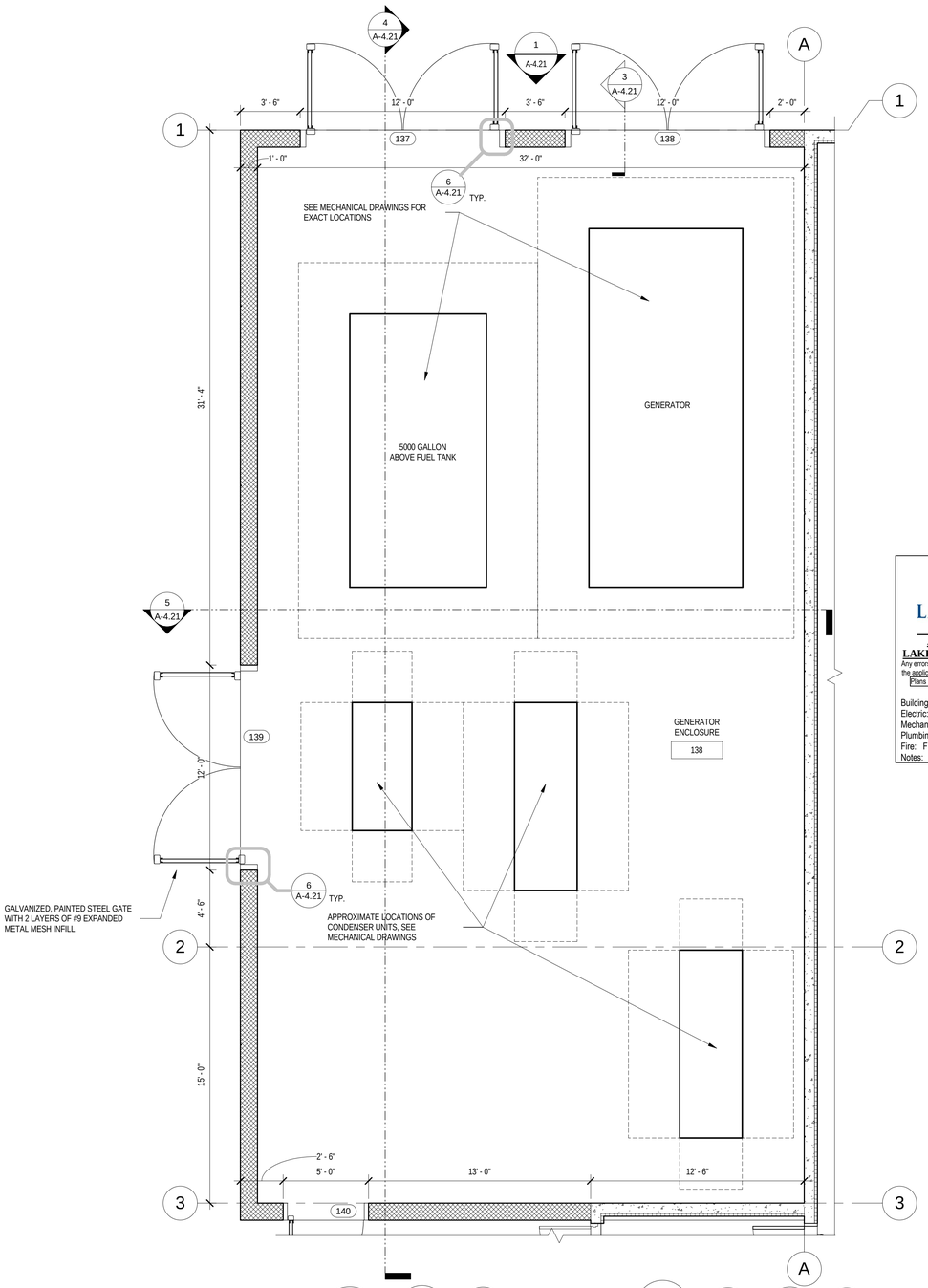
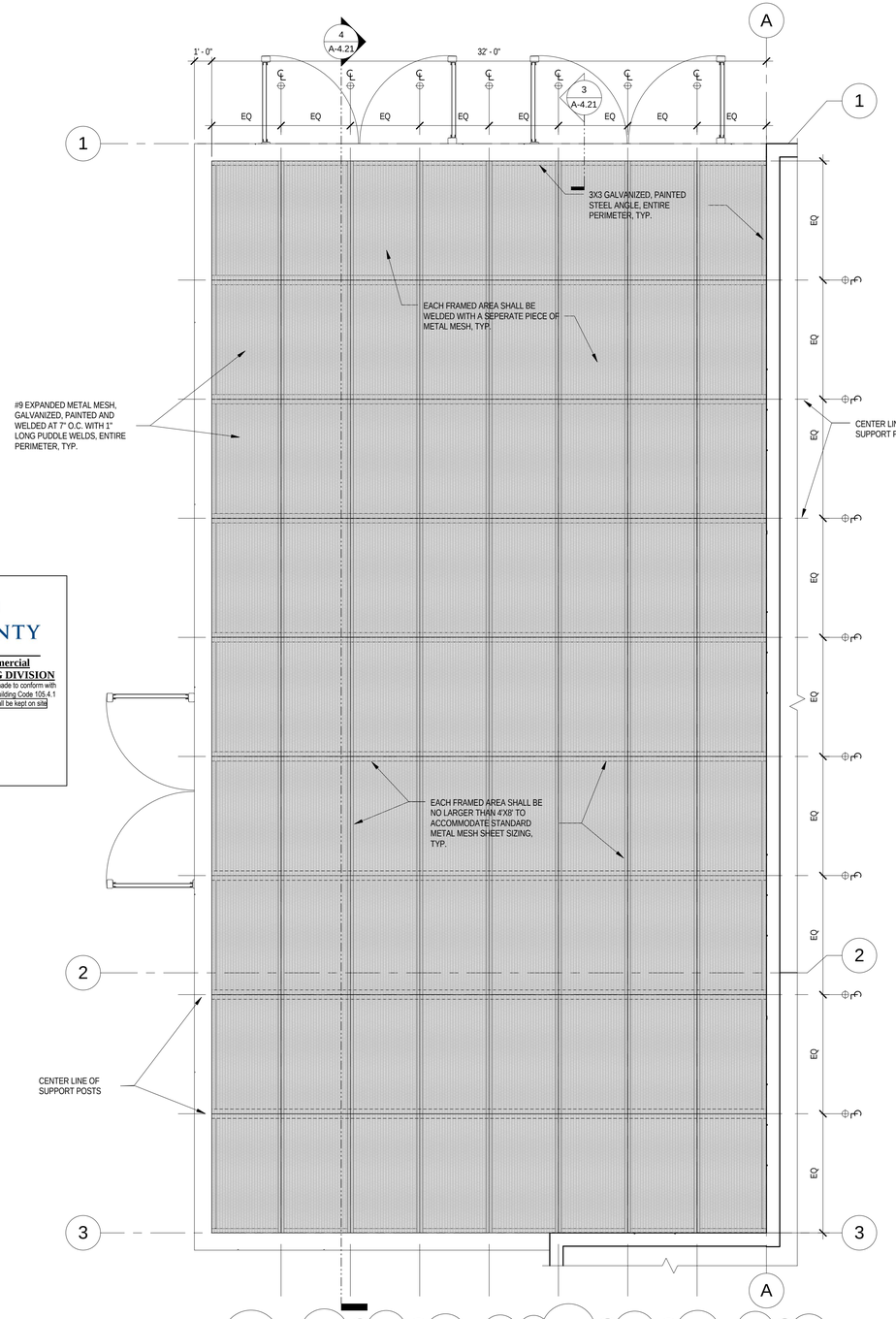
- revisions

- sheet title: ENLARGED PLANS
- scale: As indicated
- drawn: DT, AH
- checked: SG, SB
- approved: KR, AIA
- date: 11/09/11
- project no. 842-10
- sheet no. A-4.01




1 GENERATOR ENCLOSURE FLOOR PLAN
1/4" = 1'-0"




2 GENERATOR ENCLOSURE ROOF PLAN
1/4" = 1'-0"

LAKE COUNTY
FLORIDA

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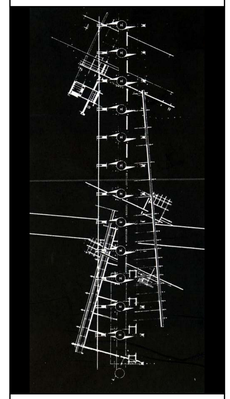

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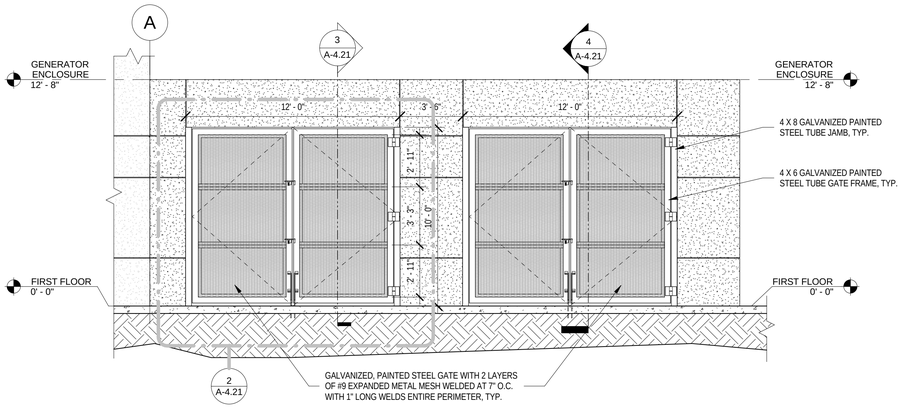
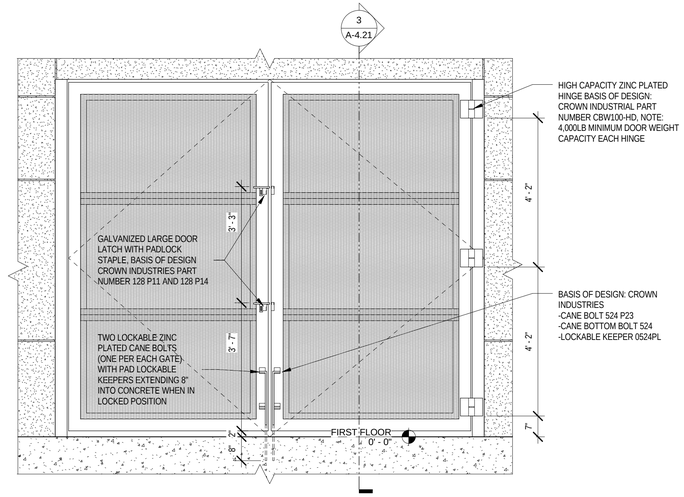
| 2 | ADDENDUM #2 | 12.22.11 |

- sheet title
GENERATOR ENCLOSURE - PLANS
- scale: 1/4" = 1'-0"
- drawn: DT, AH
- checked: SG, SB
- approved: KR, AIA
- date: 11/09/11
- project no. 842-10
- sheet no. A-4.20



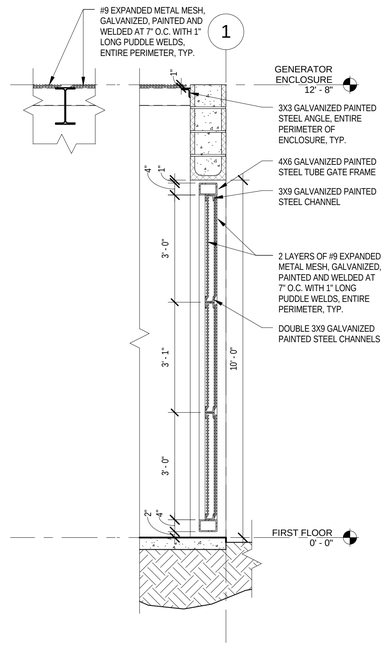

## 1 GEN ENCL NORTH ELEVATION

1/4" = 1'-0"



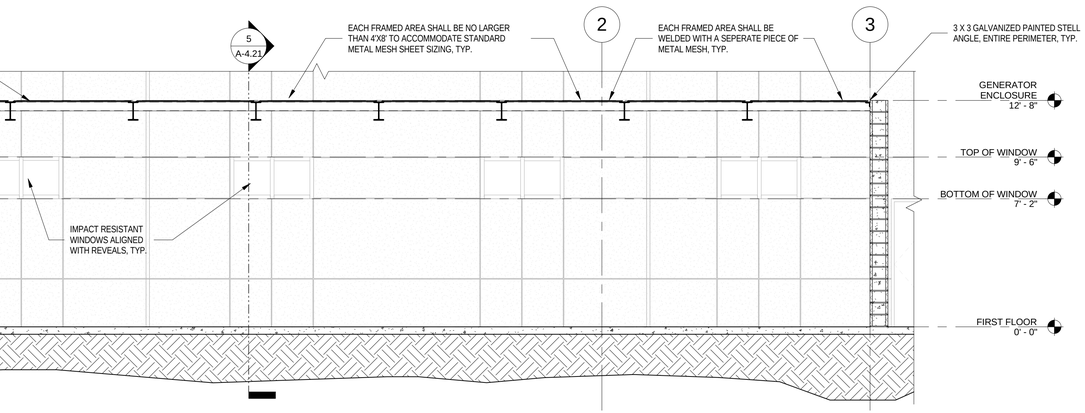

## 2 GATE HARDWARE

1/2" = 1'-0"




## 3 WALL SECTION AT GATE

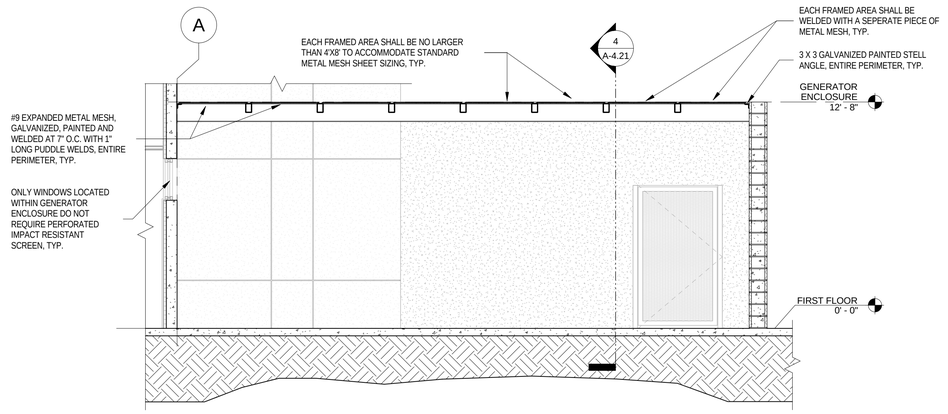
1/2" = 1'-0"




## 4 GEN ENCL NORTH-SOUTH

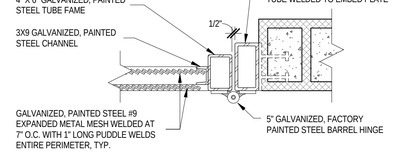
1/4" = 1'-0"

NOTE: FOUR WINDOWS LOCATED WITHIN GENERATOR ENCLOSURE DO NOT REQUIRE PERFORATED IMPACT RESISTANT SCREEN.



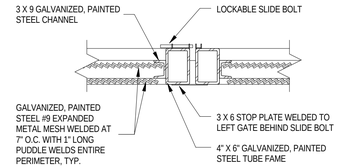

## 5 GEN ENCL EAST-WEST

1/4" = 1'-0"




## 6 GATE - JAMB

1" = 1'-0"




## 7 GEN ENCL - LATCH PLAN

1" = 1'-0"

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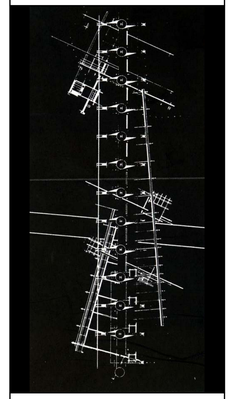

**Lake County Emergency Communications & Operations Center**

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GENERATOR ENCLOSURE DETAILS

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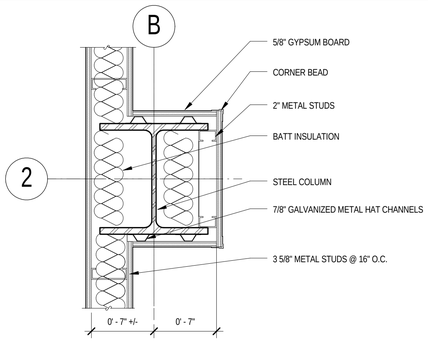
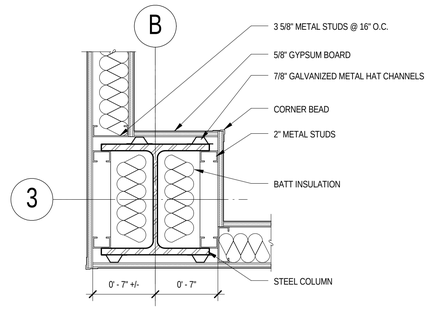
- date: 11/09/11

• project no. 842-10

• sheet no. A-4.21 2




1 1ST FLOOR - COLUMN B-2
1 1/2" = 1'-0"

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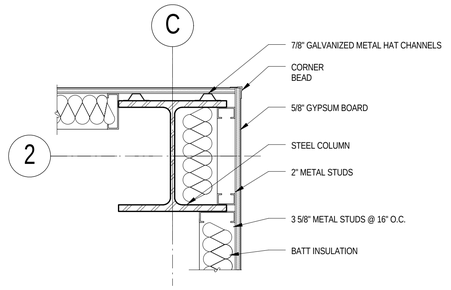


3 1ST FLOOR - COLUMN C-2
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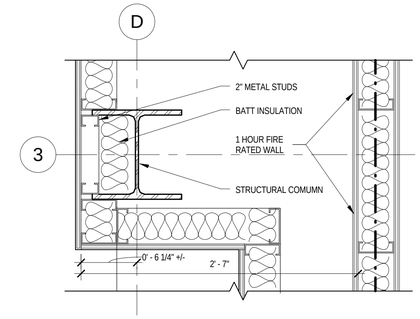


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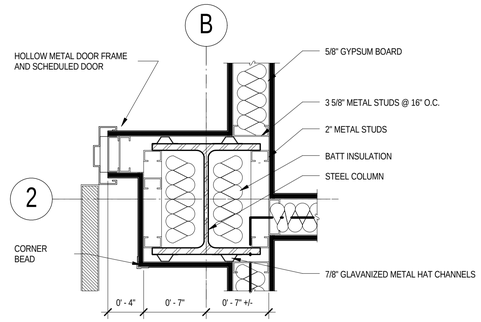


5 2ND FLOOR - COLUMN B-2
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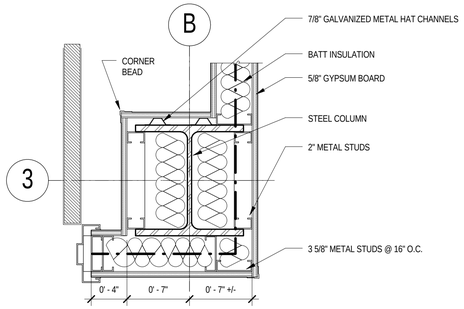
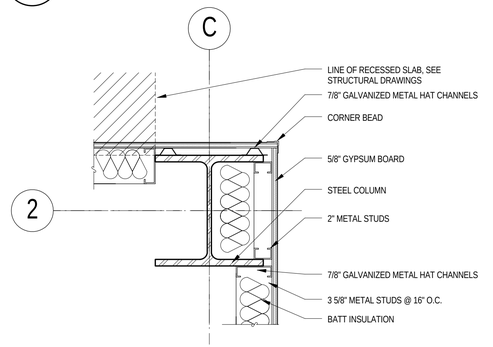
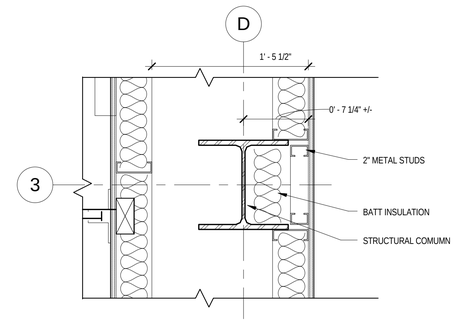



6 2ND FLOOR - COLUMN B-3
1 1/2" = 1'-0"




7 2ND FLOOR - COLUMN C-2
1 1/2" = 1'-0"




8 2ND FLOOR - COLUMN D-3
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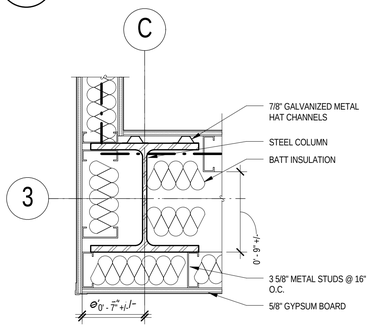
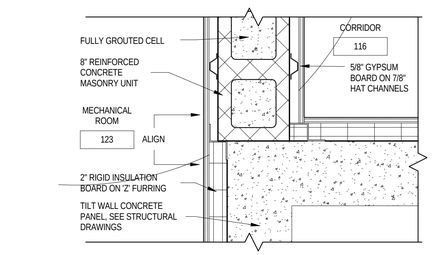
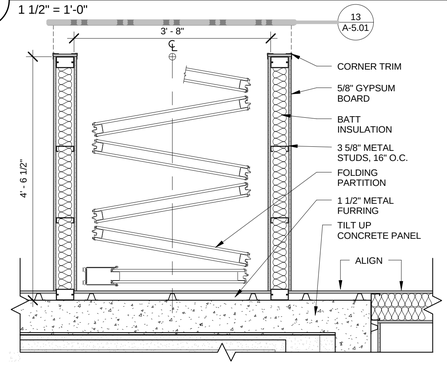


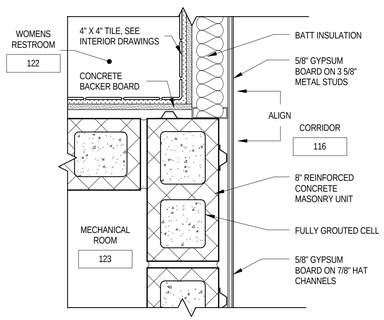

9 2ND FLOOR - COLUMN C-3
1 1/2" = 1'-0"



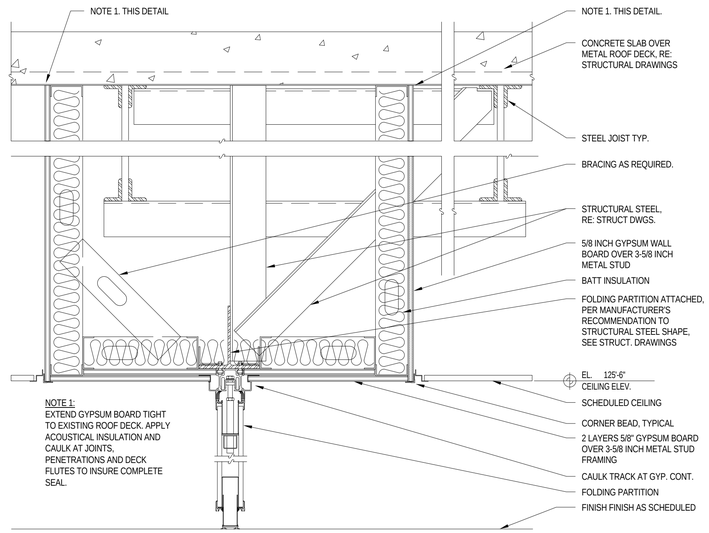

10 1ST FLOOR - ROOM 123
1 1/2" = 1'-0"




11 FOLDING PARTITION DETAIL
3/4" = 1'-0"




12 PLAN DETAIL - ROOM 123 & 122
1 1/2" = 1'-0"




13 DETAIL- FOLDING PARTITION HEAD
1 1/2" = 1'-0"

Architects Design Group

Architects and Planners
I.S.K. Reeves V, F.A.I.A.
Kevin Ratigan, A.I.A.
Ian A. Reeves, A.I.A.
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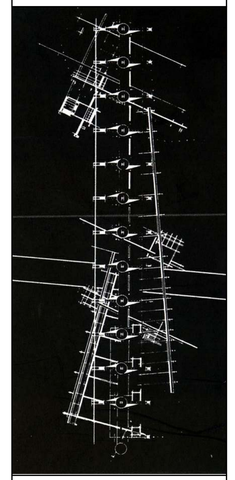
Winter Park, Florida 32789
(407) 647-1706
Corporate Registration
No. AAC26002047



LAKE COUNTY
FLORIDA
**Approved Plans - Commercial**
**LAKE COUNTY BUILDING DIVISION**
Any errors or omission in these plans shall be made to conform with the applicable code requirements per Florida Building Code 105.4.1
Plans reviewed for code compliance and shall be kept on site
Permit # 20111110212
Building: BLD31 12/29/11
Electric: ADM01 12/29/11
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:

# Lake County Emergency Communications & Operations Center

Tavares, Florida

**PERMIT CD SUBMITTAL**

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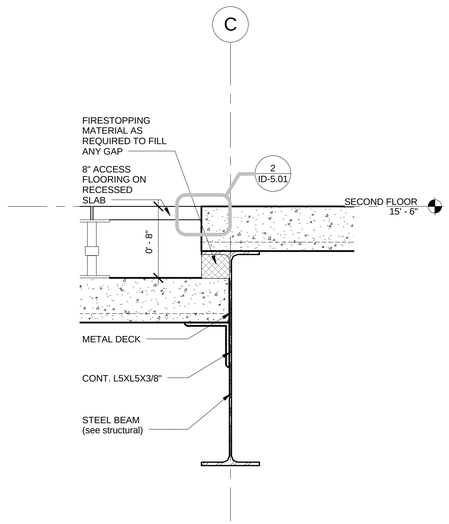
- revisions

- sheet title
  DETAILS

- scale: As indicated
- drawn: DT, AH
- checked: SG, SB
- approved: KR, AIA
- date: 11/09/11

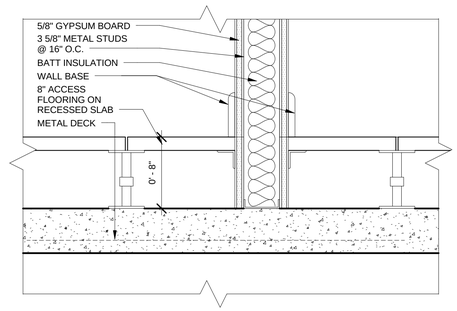
- project no. 842-10

- sheet no. A-5.01



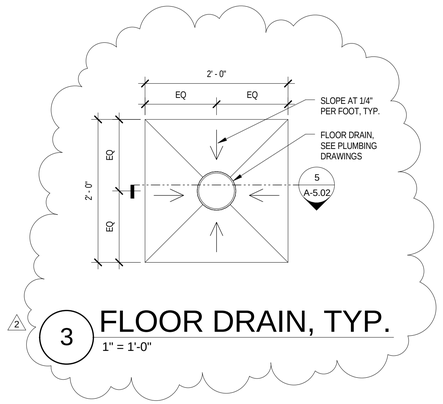

## 1 RECESSED SLAB CONNECTION (typ.)

1 1/2" = 1'-0"



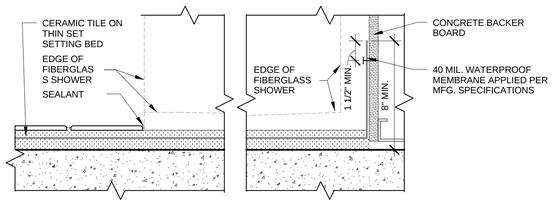

## 2 WALL RECESSED SLAB INTERSECTION (typ.)

1 1/2" = 1'-0"



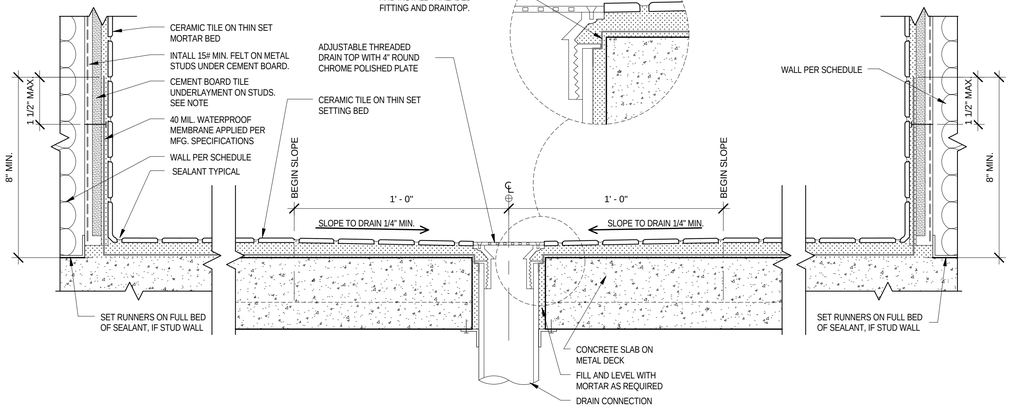

## 3 FLOOR DRAIN, TYP.

1" = 1'-0"



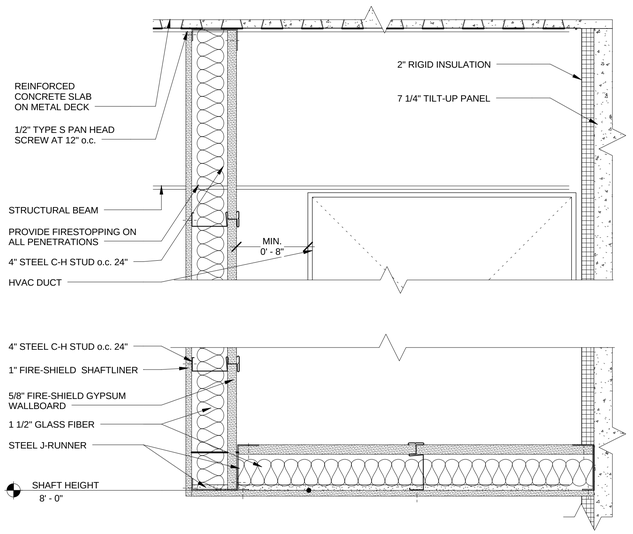

## 4 SECTION AT SHOWER, TYP.

3" = 1'-0"




## 5 SECTION AT BATHROOM, TYP.

3" = 1'-0"




## 6 1H FIRE-RATED SOFFIT

1 1/2" = 1'-0" UL Des U415 System A

LAKE COUNTY
FLORIDA
**Approved Plans - Commercial**
**LAKE COUNTY BUILDING DIVISION**
Any errors or omission in these plans shall be made to conform with the applicable code requirements per Florida Building Code 105.4.1
Plans reviewed for code compliance and shall be kept on site
Permit # 2011110212
Building: BLD31 12/29/11
Electric: ADM01 12/29/11
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:

GENERAL INSTALLATION NOTES:

1. INSTALL FIBER-REINFORCED CEMENT BOARD IN SHOWER AND DRYING AREA.
2. INSTALL WALL AND FLOOR TILES WITH DRY-SET MORTAR
3. GROUT ALL WALL AND FLOOR TILE WITH DRY-SET PORTLAND CEMENT GROUT, SAME COLOR.
4. CAULK ALL CORNERS AND EDGES WITH SILICONE CAULK. COLOR TO MATCH GROUT COLOR.
5. SHOWERS ARE 3'-5" WIDE BY 3'-5" DEEP. SEE MANUFACTERER'S INFORMATION.

Architects Design Group

Architects and Planners
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Kevin Ratigan, A.I.A.
Ian A. Reeves, A.I.A.
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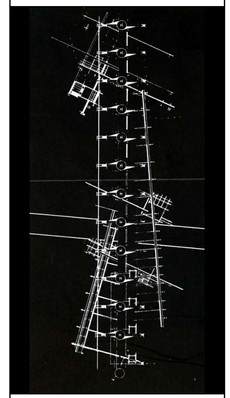
Winter Park, Florida 32789
(407) 647-1706
Corporate Registration No. AAC26002047



**Lake County Emergency Communications & Operations Center**

Tavares, Florida

**PERMIT CD SUBMITTAL**

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• revisions/addenda

| Number | Description | Date Issued |
|---|---|---|
| 2 | ADDENDUM #2 | 12.22.11 |

• sheet title
DETAILS

• scale: As indicated
• drawn: DT, AH
• checked: SG, SB
• approved: KR, AIA
• date: 11/09/11

• project no. 842-10

• sheet no. A-5.02

## DOOR SCHEDULE

| DOOR NO. | TYPE | MATERIAL | WIDTH | HEIGHT | GLASS-TYPE | FRAME MATERIAL | HEAD | JAMB | THRESHOLD | LABEL | CLOSERS | CARD READER ALTERNATE | CONDUIT FOR FUTURE CARD READER | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 101 | D1 | SC | 3' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | C | Yes | | | |
| 101A | DBL D5 | AL | 6' - 0" | 7' - 0" | C1 | AL | 1/A-6.02 | 2/A-6.02 | 3/A-6.02 | | | | | |
| 102A | D2 | SC | 3' - 0" | 7' - 0" | E | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | C | Yes | Yes | | PREWIRE DOOR WITH CONDUIT AND RACEWAY |
| 102B | D2 | SC | 3' - 0" | 7' - 0" | E | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | C | Yes | Yes | | PREWIRE DOOR WITH CONDUIT AND RACEWAY |
| 103 | D1 | SC | 3' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | | | | | |
| 104 | D1 | SC | 3' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | | | | | |
| 105 | D1 | SC | 3' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | | | | | |
| 107A | D1 | SC | 3' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | | | | | |
| 107B | D2 | SC | 3' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | | | | | |
| 108 | D1 | SC | 3' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | | | | | |
| 109 | D1 | SC | 3' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | | | | | |
| 110 | D1 | SC | 3' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | | Yes | | | |
| 111 | D1 | SC | 3' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | | | | | |
| 112 | D1 | SC | 3' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | | | | | |
| 113 | D1 | SC | 3' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | | | | | |
| 114 | D1 | SC | 3' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | C | Yes | | | |
| 115 | D1 | SC | 4' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | C | Yes | | | 180 SWING |
| 116A | DBL D3 | SC | 6' - 0" | 7' - 0" | A2 | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | | Yes | Yes | | PREWIRE DOOR WITH CONDUIT AND RACEWAY |
| 116B | D2 | HM | 3' - 0" | 7' - 0" | | HM | 14/A-6.01 | 15/A-6.01 | 16/A-6.01 | | Yes | Yes | | FEMA 361, PREWIRE DOOR WITH CONDUIT AND RACEWAY |
| 117 | D2 | SC | 3' - 0" | 7' - 0" | E | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | C | Yes | | | |
| 118 | D1 | HM | 3' - 0" | 7' - 0" | | HM | 14/A-6.01 | 15/A-6.01 | 16/A-6.01 | | Yes | | | FEMA 361 |
| 119 | D1 | SC | 3' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | | | | | |
| 120A | D1 | HM | 3' - 0" | 7' - 0" | | HM | 3/A-6.01 | 4/A-6.01 | 16/A-6.01 | | Yes | | | FEMA 361 |
| 121 | D1 | SC | 3' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | C | Yes | | | |
| 122 | D1 | SC | 3' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | C | Yes | | | |
| 123A | DBL D1 | HM | 6' - 0" | 8' - 0" | | HM | 14/A-6.01 | 15/A-6.01 | 16/A-6.01 | | | | | FEMA 361 |
| 124 | D1 | SC | 4' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | C | Yes | | | 180 SWING, PANIC HARDWARE |
| 124A | D1 | HM | 3' - 0" | 7' - 0" | | HM | 14/A-6.01 | 15/A-6.01 | 16/A-6.01 | | Yes | | | FEMA 361, PANIC HARDWARE |
| 124B | DBL D4 | | 6' - 0" | 7' - 0" | | | | | | | | | | CHAIN LINK GATE |
| 125 | D1 | SC | 3' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | | Yes | | | |
| 126 | DBL D1 | SC | 6' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | C | Yes | | | |
| 127 | D1 | HM | 3' - 0" | 7' - 0" | | | 14/A-6.01 | 15/A-6.01 | 16/A-6.01 | | | | | FEMA 361 |
| 128 | D1 | SC | 3' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | | | | | |
| 129 | D1 | SC | 3' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | | | | | |
| 130 | DBL D1 | SC | 6' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | C | Yes | | | |
| 133 | DBL D3 | SC | 6' - 0" | 7' - 0" | E | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | C | Yes | Yes | | PREWIRE DOOR WITH CONDUIT AND RACEWAY |
| 134A | D2 | SC | 3' - 0" | 7' - 0" | E | HM | 14/A-6.01 | 15/A-6.01 | 16/A-6.01 | C | Yes | | Yes | PREWIRE DOOR WITH CONDUIT AND RACEWAY |
| 134B | D1 | HM | 3' - 0" | 7' - 0" | | HM | 14/A-6.01 | 15/A-6.01 | 16/A-6.01 | C | Yes | | Yes | FEMA 361- NO HARDWARE ON EXTERIOR SIDE OF DOOR, PREWIRE DOOR WITH CONDUIT AND RACEWAY |
| 135A | D2 | SC | 3' - 0" | 7' - 0" | E | HM | 14/A-6.01 | 15/A-6.01 | 16/A-6.01 | C | Yes | | Yes | PREWIRE DOOR WITH CONDUIT AND RACEWAY |
| 135B | D1 | HM | 3' - 0" | 7' - 0" | | HM | 14/A-6.01 | 15/A-6.01 | 16/A-6.01 | C | Yes | | Yes | FEMA 361- NO HARDWARE ON EXTERIOR SIDE OF DOOR, PREWIRE DOOR WITH CONDUIT AND RACEWAY |
| 136 | D1 | SC | 4' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | | | | | |
| 137 | | | 12' - 0" | 10' - 0" | | | | | | | | | | FOR DETAILS SEE SHEET A-4.21 |
| 138 | | | 12' - 0" | 10' - 0" | | | | | | | | | | FOR DETAILS SEE SHEET A-4.21 |
| 139 | | | 12' - 0" | 10' - 0" | | | | | | | | | | FOR DETAILS SEE SHEET A-4.21 |
| 140 | | | 5' - 0" | 8' - 0" | | | | | | | | | | FOR DETAILS SEE SHEET A-4.21 |
| 201A | D2 | SC | 3' - 0" | 7' - 0" | E | HM | 14/A-6.01 | 15/A-6.01 | 16/A-6.01 | C | Yes | | | |
| 201B | DBL D3 | SC | 6' - 0" | 7' - 0" | A2 | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | | Yes | Yes | | PREWIRE DOOR WITH CONDUIT AND RACEWAY. DOUBLE EGRESS DOOR |
| 202A | D1 | SC | 3' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | C | Yes | | | |
| 202B | D2 | SC | 3' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | | | | | |
| 203 | D2 | SC | 3' - 0" | 7' - 0" | E | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | C | Yes | Yes | | PREWIRE DOOR WITH CONDUIT AND RACEWAY |
| 205 | D1 | SC | 3' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | | | | | |
| 206 | D1 | SC | 3' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | | | | | |
| 207 | D1 | SC | 3' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | | | | | |
| 208 | D1 | SC | 3' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | | | | | |
| 209 | D1 | SC | 3' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | | | | | |
| 210 | D1 | SC | 3' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | C | Yes | | | |
| 211A | D2 | SC | 3' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | C | Yes | | | |
| 211B | D2 | SC | 3' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | C | Yes | | | |
| 212 | D1 | SC | 3' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | C | Yes | | | |
| 213 | DBL D1 | SC | 6' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | | | | | |
| 214 | D1 | SC | 3' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | C | Yes | | | |
| 216 | D1 | SC | 3' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | C | Yes | | | |
| 218A | DBL D2 | SC | 6' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | C | Yes | | | |
| 218B | D2 | SC | 3' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | C | Yes | | | |
| 219 | D1 | SC | 3' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | | | | | |
| 220 | D1 | SC | 3' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | | | | | |
| 221 | D1 | SC | 3' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | | | | | |
| 222 | D1 | SC | 3' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | C | Yes | | | |
| 223 | D2 | SC | 3' - 0" | 7' - 0" | E | HM | 14/A-6.01 | 15/A-6.01 | 16/A-6.01 | C | Yes | | Yes | PREWIRE DOOR WITH CONDUIT AND RACEWAY |
| 224A | D1 | SC | 3' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | | | | | |
| 224B | D1 | SC | 3' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | C | Yes | | | |
| 225A | D1 | SC | 3' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | | | | | |
| 225B | D1 | SC | 3' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | C | Yes | | | |
| 226 | D1 | SC | 3' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | C | Yes | | | |
| 226A | D1 | SC | 3' - 0" | 7' - 0" | | HM | 5/A-6.01 | 6/A-6.01 | 13/A-6.01 | | Yes | | | |
| 227 | D1 | SC | 4' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | | | | | |
| 228B | D1 | SC | 3' - 0" | 7' - 0" | | HM | 5/A-6.01 | 6/A-6.01 | 13/A-6.01 | | | | | |
| 229 | D1 | SC | 3' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | | Yes | | | |
| 230 | D1 | SC | 3' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | C | Yes | | | |
| 232 | DBL D1 | SC | 6' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | C | Yes | | | |
| 233 ALT. | D1 | SC | 3' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | C | Yes | | | ALTERNATE |
| 234 | D1 | SC | 3' - 0" | 7' - 0" | | HM | 11/A-6.01 | 12/A-6.01 | 13/A-6.01 | | Yes | | | |
| 301 | D1 | SC | 3' - 0" | 7' - 0" | | HM | 14/A-6.01 | 15/A-6.01 | 16/A-6.01 | | Yes | | | FEMA 361- ROOF ACCESS |

## GENERAL NOTES

1. REFER TO FINISH SCHEDULE FOR ALL FINISH MATERIAL AND FINISH LOCATIONS.

2. ALL SURFACES EXPOSED TO VIEW ARE TO BE PAINTED PER SPEC

## DOOR MATERIAL ABBREVIATIONS AND NOTES

AL = ALUMINUM
DBL = DOUBLE DOORS
HM = HOLLOW METAL DOOR
X = INDICATES LABEL, CLOSER OR ELECT. LOCK IS INCLUDED
N/A = NOT APPLICABLE
STL = STEEL
SC = SOLID CORE WOOD DOOR
CR = ACCESS CONTROL CARD READER
GL = TEMPERED GLASS

## GLAZING MATERIAL TYPES

A2 = SAFETY GLASS-TEMPERED
C1 = LAMINATED TINTED SOLAR, LOW E GLASS
E = FIRE RATED GLAZING

## DOOR SCHEDULE NOTES

1. ALL DOORS TO BE 1 3/4" UNLESS NOTED OTHERWISE

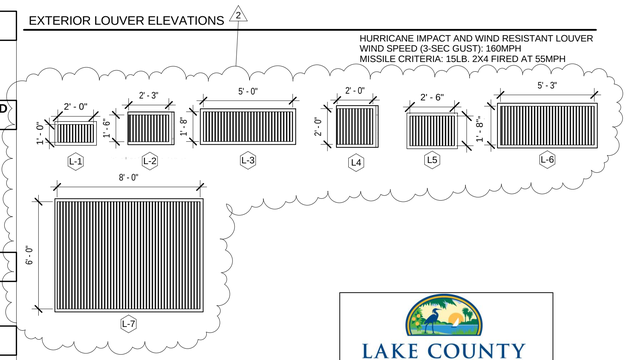
2. FIELD VERIFY ALL DIMENSIONS

3. DOOR AND FRAME FIRE RATING IS AS FOLLOWS:
3/4" HOUR C LABEL

4. REFER TO SPECIFICATIONS SECTION 08800 FOR GLAZING TYPES AND MATERIALS.

5. ALL DOORS IN MASONRY TO HAVE 4" HEAD TO MATCH BLOCK COURSING FIELD VERIFY ALL DIMENSIONS

## EXTERIOR LOUVER ELEVATIONS




LAKE COUNTY
FLORIDA
**Approved Plans - Commercial**
**LAKE COUNTY BUILDING DIVISION**
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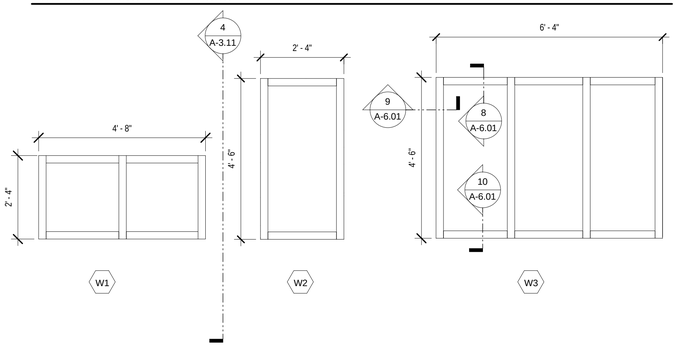
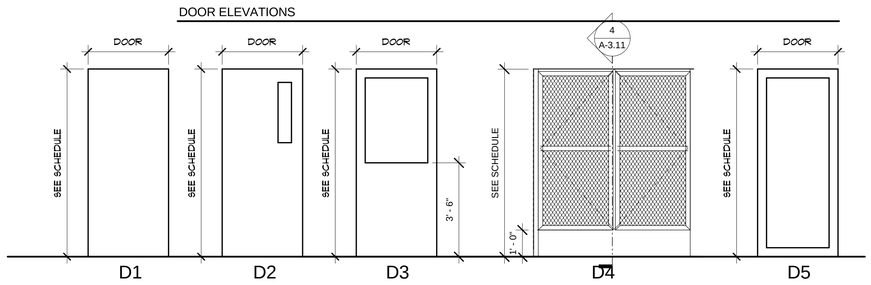
Permit # 2011110212
Building: BLD31 12/29/11
Electric: ADM01 12/29/11
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:

## EXTERIOR WINDOW ELEVATIONS




## DOOR ELEVATIONS




## GENERAL NOTES

1. GLAZING SYSTEMS, LOUVERS AND EXTERIOR DOORS MUST AT A MINIMUM MEET THE DOE-STD-1020-2002 IMPACT CRITERIA OF A 15 LB. 2X4 FIRED AT 50 MPH

-APPROVED COMBINATION SYSTEM BASIS OF DESIGN:
GLAZING = LEVEL D CERTIFIED (9 LB. 2X4 FIRED AT 34 MPH)
HURRICANE SHUTTERS = LEVEL E CERTIFIED (9 LB. 2X4 FIRED AT 55 MPH)
-APPROVED STAND-ALONE GLAZING ALTERNATE:
GLAZING = CERTIFIED TO MEET DOE-STD-1020-2002 CRITERIA (15 LB. 2X4 FIRED AT 50 MPH)

2. GLAZING SYSTEMS, LOUVERS AND EXTERIOR DOORS MUST MEET 160 MPH WIND SPEED (3-SECOND GUST)


Architects Design Group

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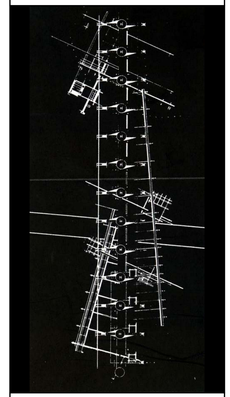
Corporate Registration No. AAC26002047

# Lake County Emergency Communications & Operations Center

Tavares, Florida

**PERMIT CD SUBMITTAL**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• revisions/addenda

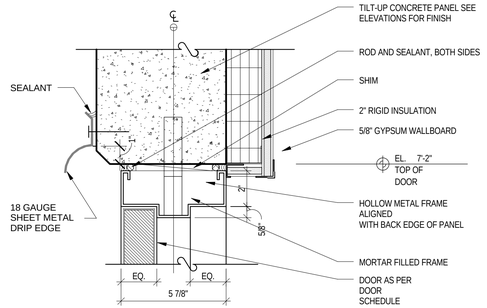
| Number | Description | Date Issued |
|---|---|---|
| 2 | ADDENDUM #2 | 12.22.11 |

• sheet title
DOOR SCHEDULE

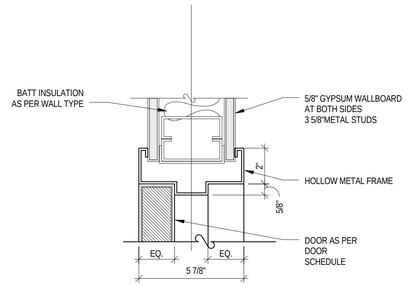
• scale: As indicated
• drawn: DT, AH
• checked: SG, SB
• approved: KR, AIA
• date: 11/09/11

• project no. 842-10

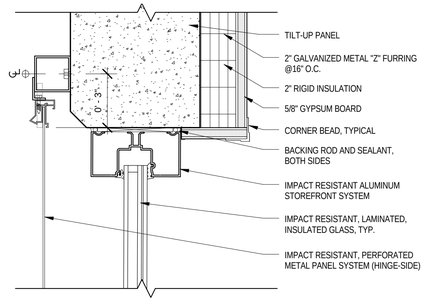
• sheet no. A-6.00



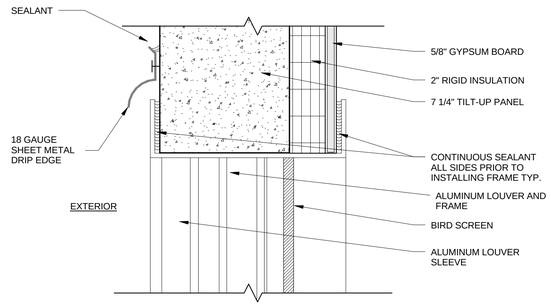

## 14 HM DOOR HEAD
3" = 1'-0"

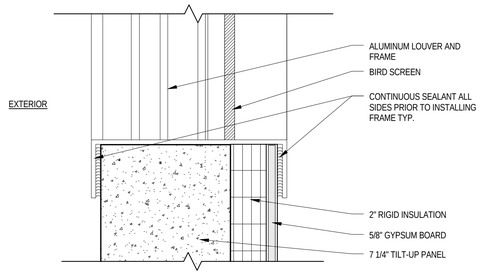



## 11 HM INT. FRAME DOOR HEAD
3" = 1'-0"

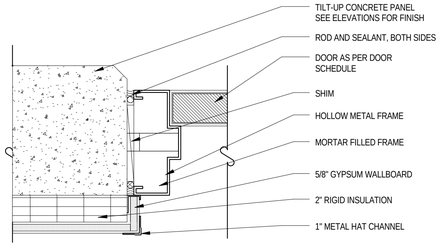



## 8 WINDOW HEAD
3" = 1'-0"

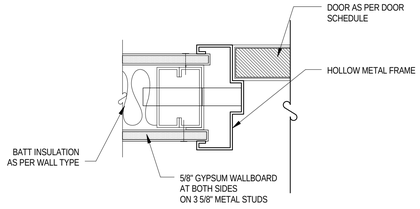


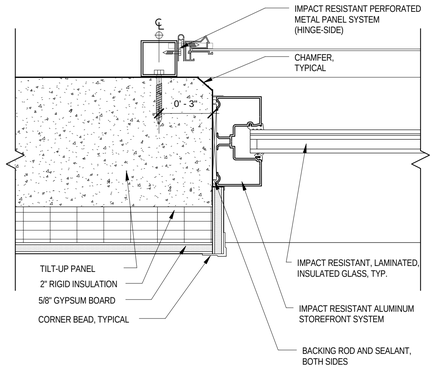

## 2 LOUVER - Head and Sill
3" = 1'-0"



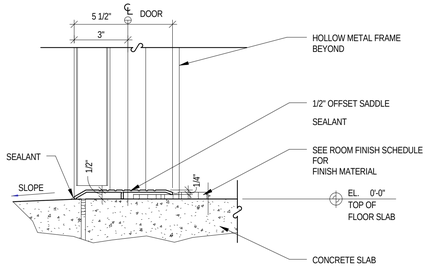

## 15 HM DOOR JAMB
3" = 1'-0"



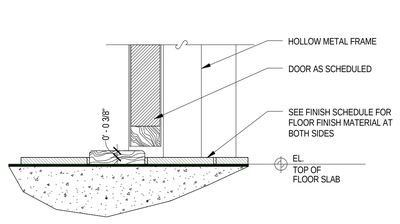

## 12 HM INT. FRAME DOOR JAMB
3" = 1'-0"



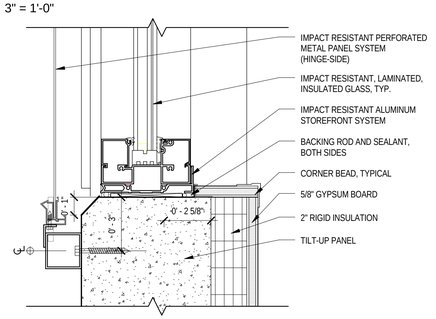

## 9 WINDOW JAMB
3" = 1'-0"



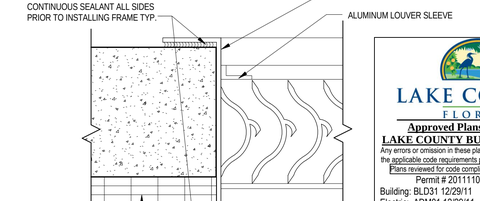

## 16 HM DOOR SILL
3" = 1'-0"



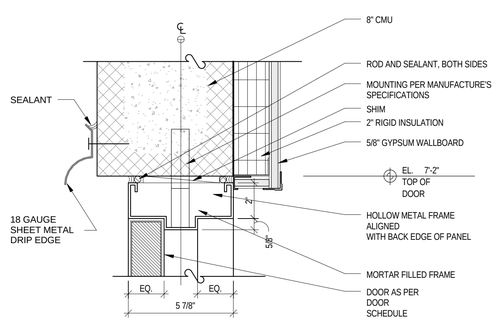

## 13 HM INT. FRAME DOOR SILL
3" = 1'-0"



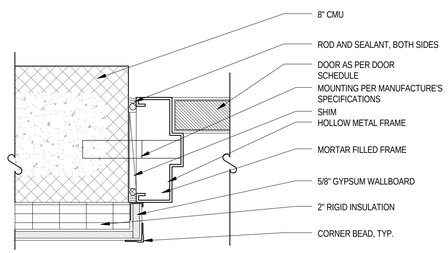

## 10 WINDOW SILL
3" = 1'-0"



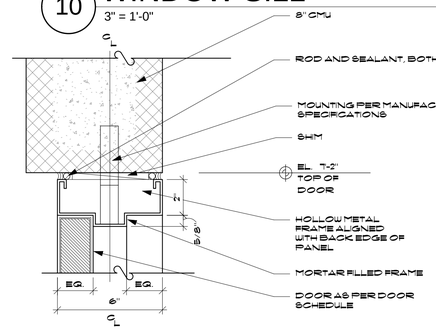

## 1 LOUVER - JAMB
3" = 1'-0"



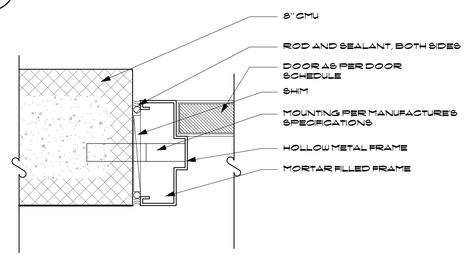

## 3 HM DOOR HEAD MASON.
3" = 1'-0"




## 4 HM DOOR JAMB MASON.
3" = 1'-0"




## 5 HM DOOR NO INSUL HEAD MASON.
3" = 1'-0"




## 6 HM DOOR NO INSUL JAMB MASON.
3" = 1'-0"

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Ian A. Reeves, A.I.A.
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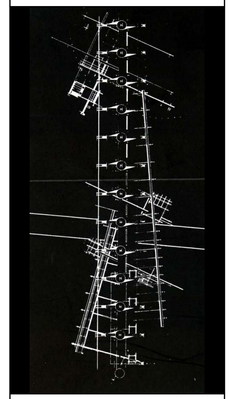
Winter Park, Florida 32789
(407) 647-1706
Corporate Registration No. AAC26002047



**Lake County Emergency Communications & Operations Center**

Tavares, Florida

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• revisions/addenda

| Number | Description | Date Issued |
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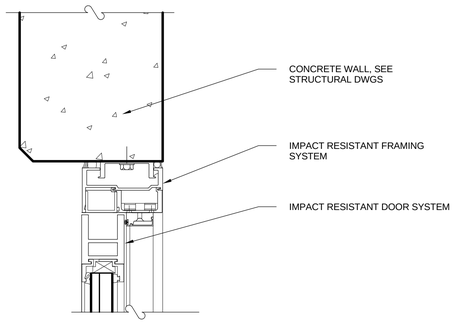
• sheet title
WINDOWS & DOORS DETAILS

- scale: As indicated
- drawn: DT, AH
- checked: SG, SB
- approved: KR, AIA
- date: 11/09/11

• project no. 842-10

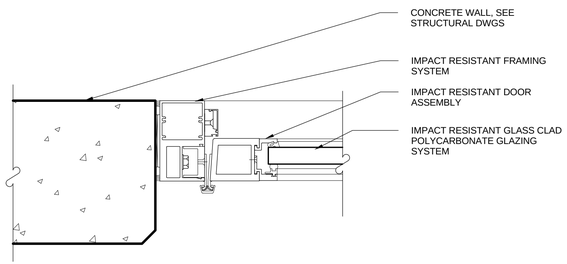
• sheet no. A-6.01




## 1 STOREFRONT DOOR HEAD DETAIL

3" = 1'-0"

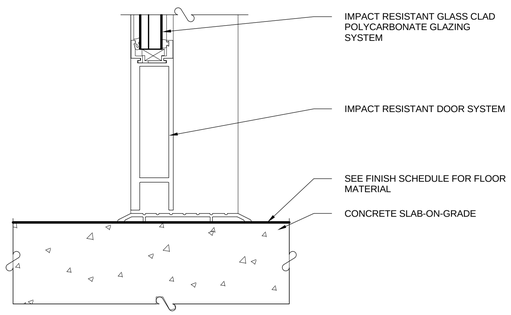
ENHANCED IMPACT RATED STOREFRONT TESTED TO MINIMUM OF 15LB. 2X4 PROPELLED AT 50MPH (73.3 FT/SEC)




## 2 STOREFRONT DOOR JAMB DETAIL

3" = 1'-0"

ENHANCED IMPACT RATED STOREFRONT TESTED TO MINIMUM OF 15LB. 2X4 PROPELLED AT 50MPH (73.3 FT/SEC)




## 3 STOREFRONT DOOR SILL DETAIL

3" = 1'-0"

ENHANCED IMPACT RATED STOREFRONT TESTED TO MINIMUM OF 15LB. 2X4 PROPELLED AT 50MPH (73.3 FT/SEC)

LAKE COUNTY
FLORIDA
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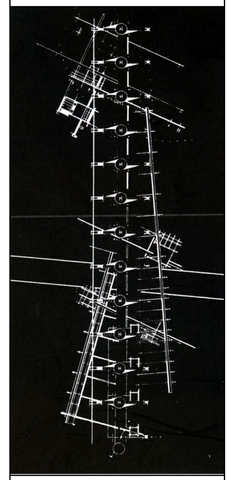

# Lake County Emergency Communications & Operations Center

Tavares,
Florida

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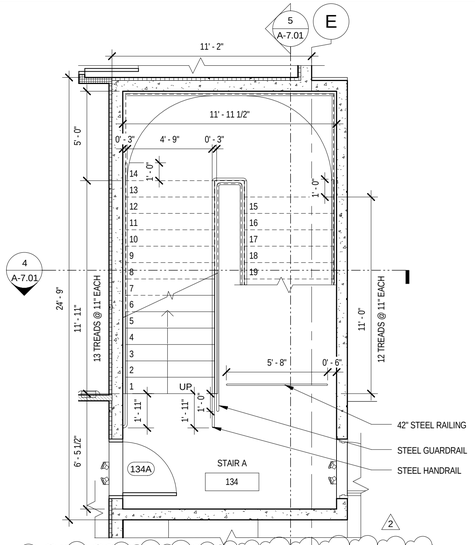
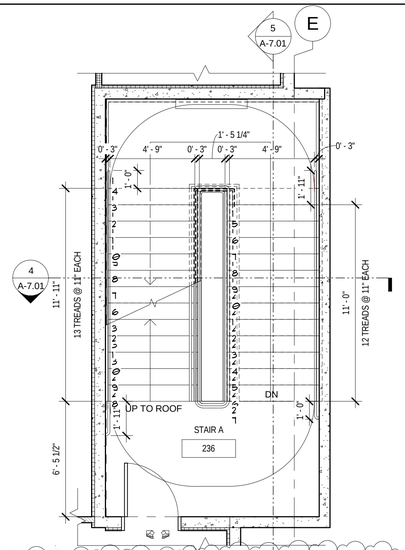
- revisions

- sheet title
  WINDOW & DOORS DETAILS
- scale: 3" = 1'-0"
- drawn: DT, AH
- checked: SG, SB
- approved: KR, AIA
- date: 11/09/11
- project no. 842-10
- sheet no. A-6.02



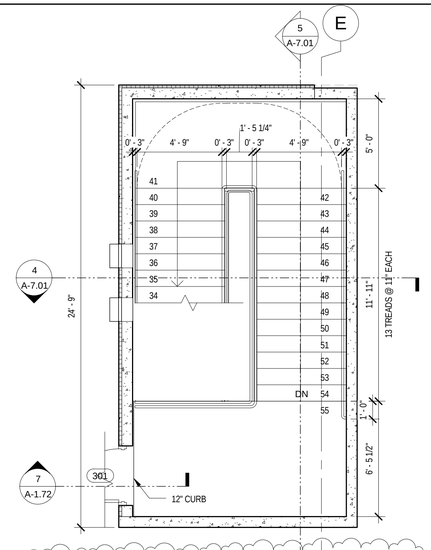

# 1 STAIR A - 1st. FLOOR PLAN

1/4" = 1'-0"



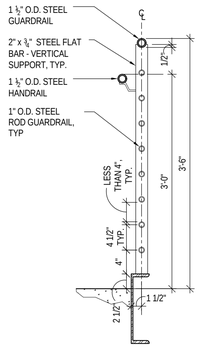

# 2 STAIR A - 2 nd. FLOOR PLAN

1/4" = 1'-0"




# 3 STAIR A - ROOF ACCESS

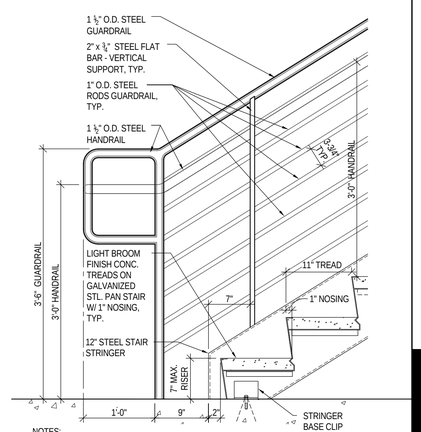
1/4" = 1'-0"




# 8 STAIR RAILING DTL.

1" = 1'-0"

TYPICAL

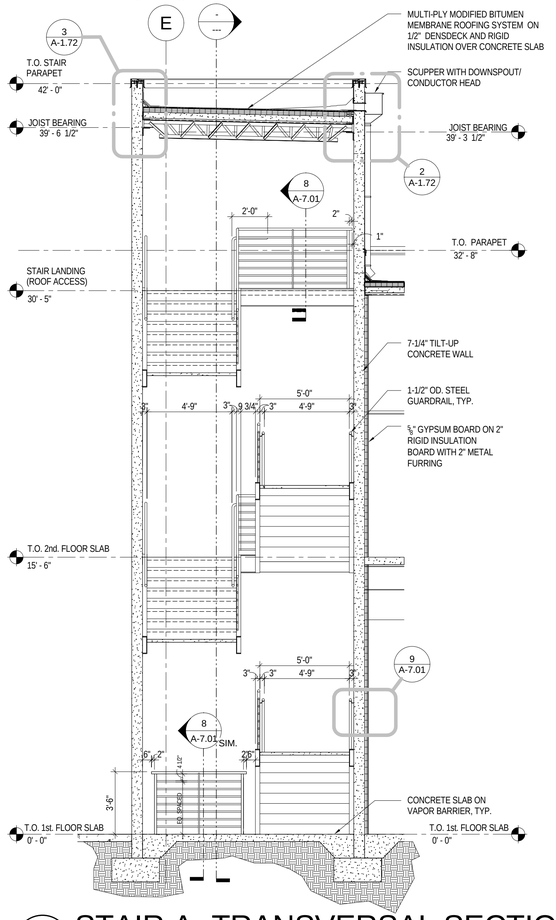



NOTES:
1. ALL STEEL PRIMED AND PAINTED PER SPECIFICATIONS.

2. SIGNED AND SEALED STAIRS DESIGN AND CALCULATIONS MUST BE PROVIDED BY STAIRS MANUFACTURER. SEE SPECIFICATIONS.

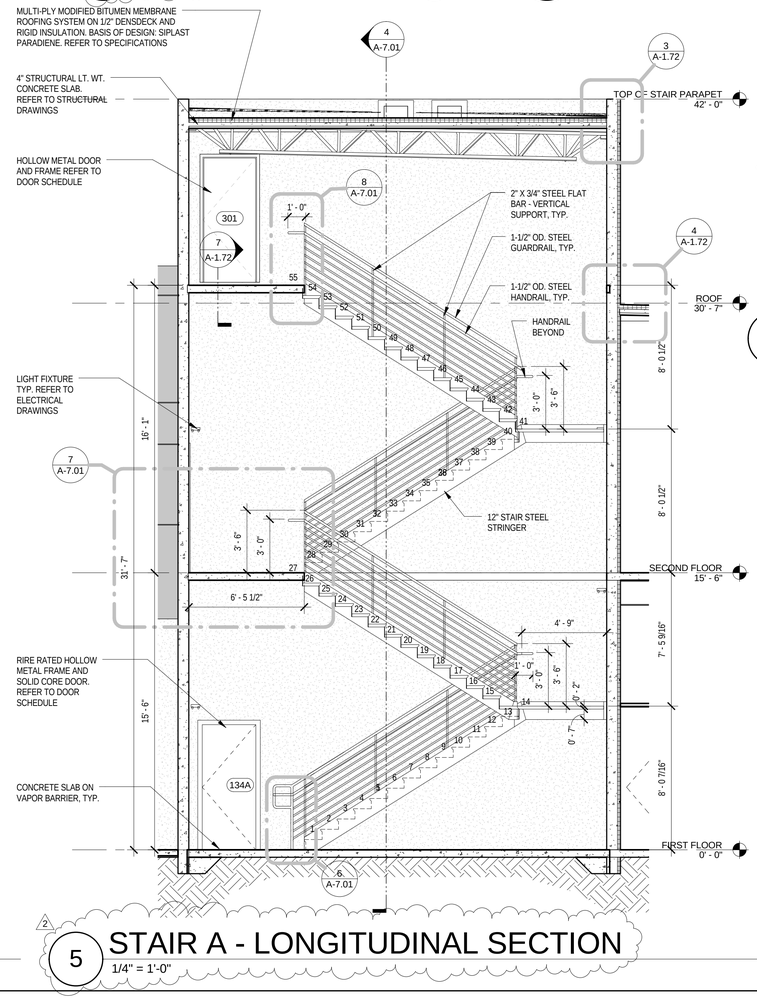
# 6 STAIR- HANDRAIL DTL.

1" = 1'-0"



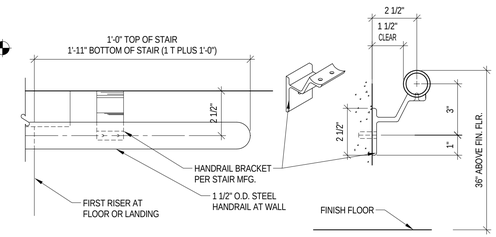

# 4 STAIR A- TRANSVERSAL SECTION

1/4" = 1'-0"




# 5 STAIR A - LONGITUDINAL SECTION

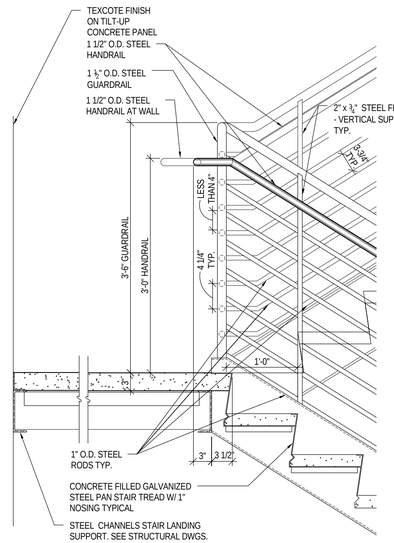
1/4" = 1'-0"




# 9 WALL HANDRAIL ATTACHMENT

3" = 1'-0"

TYPICAL




# 7 STAIR- LANDING DTL.

1" = 1'-0"

LAKE COUNTY
FLORIDA

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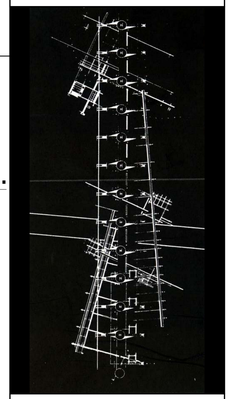
Corporate Registration No. AAC26002047

**Lake County Emergency Communications & Operations Center**

Tavares, Florida

**PERMIT CD SUBMITTAL**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| Number | Description | Date Issued |
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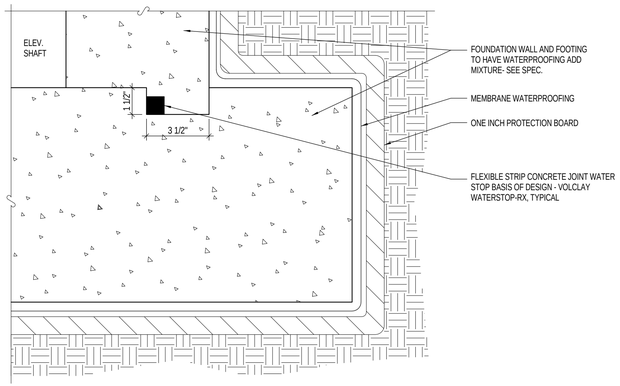
| 2 | ADDENDUM #2 | 12.22.11 |

• sheet title
STAIR A- PLANS, SECT. & DTLS.

• scale: As indicated
• drawn: DT, AH
• checked: SG, SB
• approved: KR, AIA
• date: 11/09/11

• project no. 842-10

• sheet no. A-7.01




## 6 ELEVATOR- PIT DETAIL
3" = 1'-0"

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Building: BLD31 12/29/11
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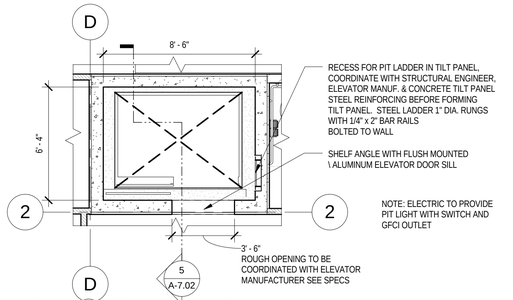
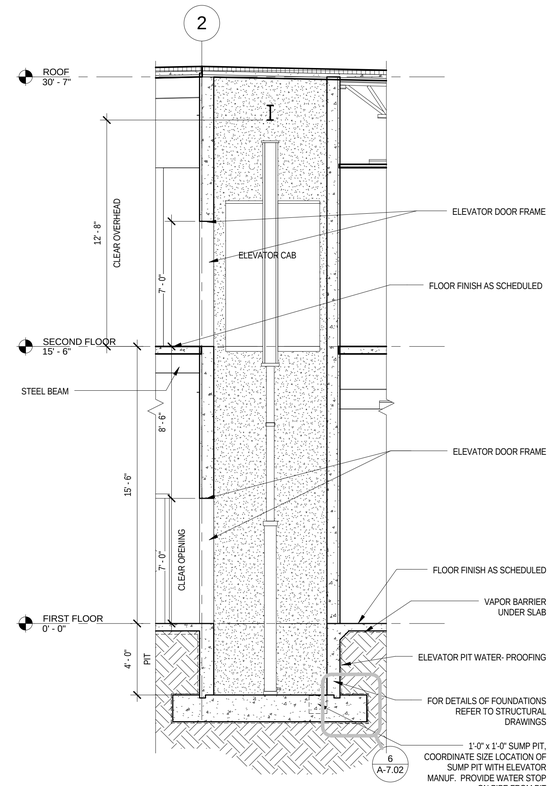
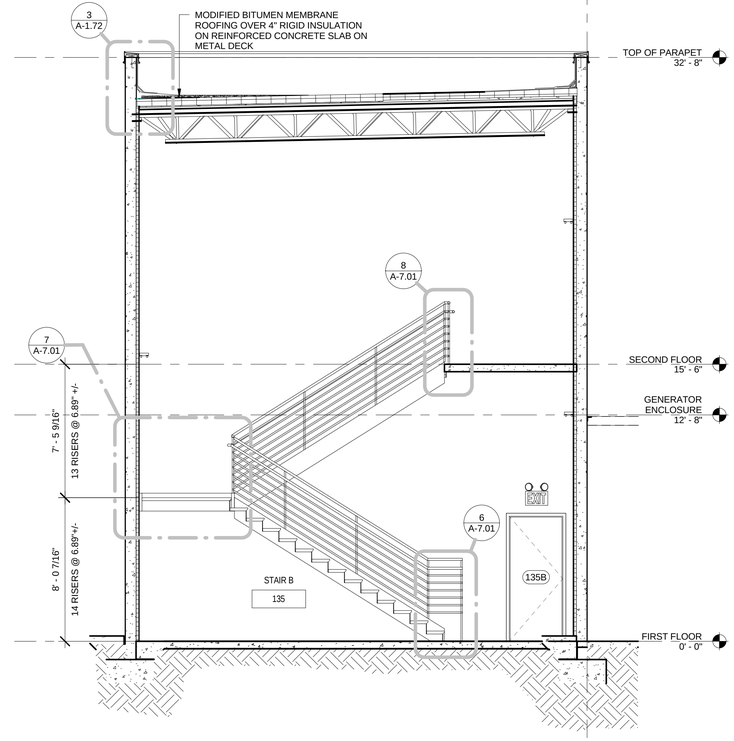
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:



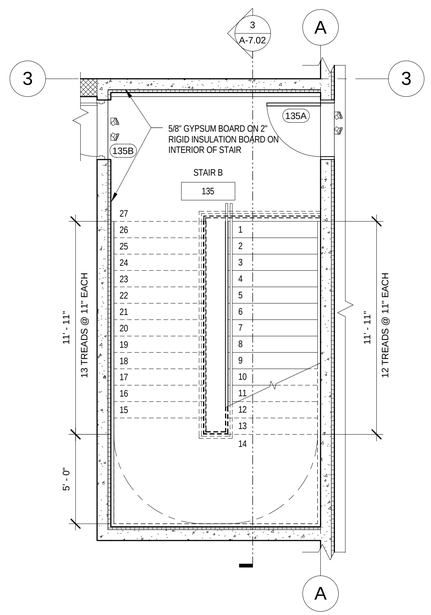

## 4 ELEVATOR PLAN (SECOND FLOOR - SIMILAR)
1/4" = 1'-0"



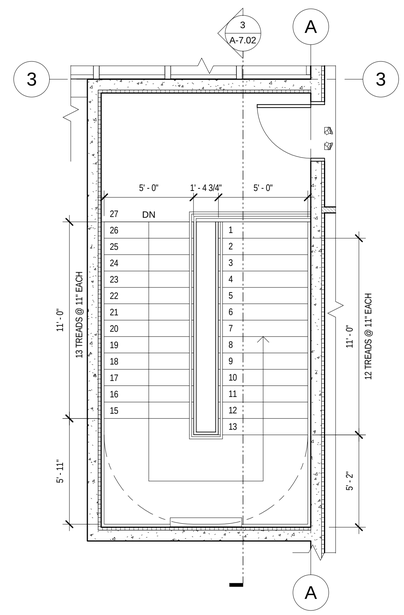

## 5 ELEVATOR SECTION
1/4" = 1'-0"




## 3 STAIR B SECTION
1/4" = 1'-0"




## 1 01.2 STAIR B - 1ST FLOOR PLAN
1/4" = 1'-0"




## 2 02.2 STAIR B - 2ND FLOOR
1/4" = 1'-0"

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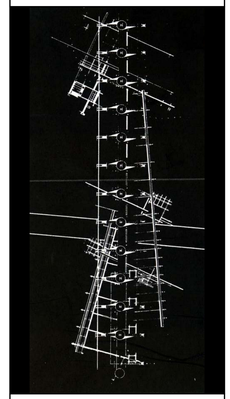

**Lake County Emergency Communications & Operations Center**

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• revisions/addenda

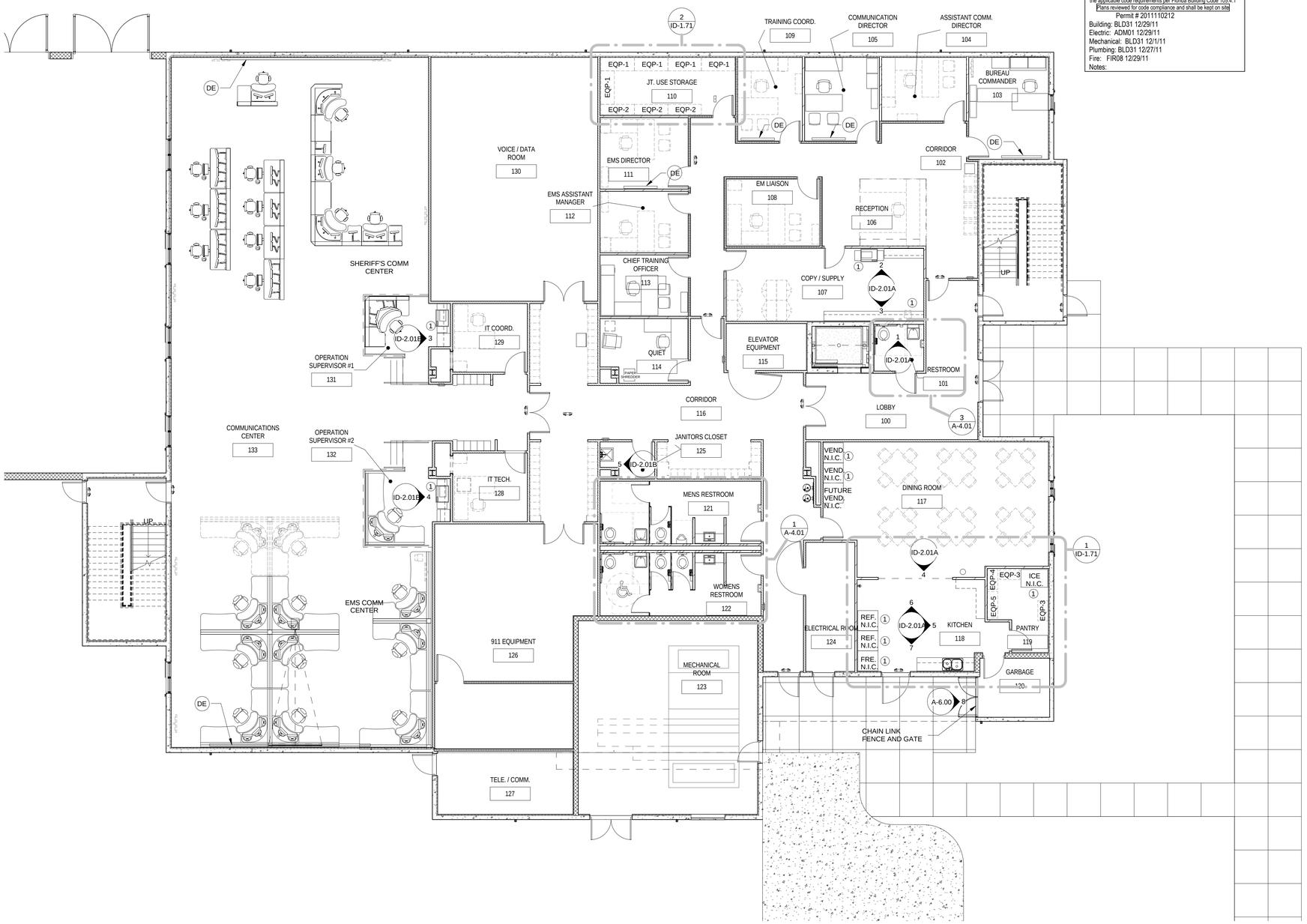
| Number | Description | Date Issued |
|---|---|---|
| 2 | ADDENDUM #2 | 12.22.11 |

• sheet title
STAIR B- PLANS & SECTIONS

• scale: As indicated
• drawn: DT, AH
• checked: SG, SB
• approved: KR, AIA
• date: 11/09/11

• project no. 842-10

• sheet no. A-7.02




5 01.1 Furniture Plan

1/8" = 1'-0"

LAKE COUNTY
FLORIDA

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Building: BLD31 12/29/11
Electric: ADM01 12/29/11
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:

## GENERAL NOTES

1. FURNITURE SHOWN AS DASHED LINES INDICATE SUGGESTED NEW FURNITURE ITEM LAYOUT AT THE TIME OF OCCUPANCY.
2. FURNITURE SHOWN AS SOLID LINES INDICATE SUGGESTED REUSED FURNITURE LAYOUT AT THE TIME OF OCCUPANCY. FURNITURE PROVIDED BY OWNER.
3. SEE SHEET ID-6.01 AND ID-6.02 FOR BASE BID FLOOR FINISH LOCATIONS. SEE SHEETS ID-6.01A & ID-6.02A FOR ADD ALTERNATES FLOOR FINISH LOCATIONS.
4. FIELD VERIFY CLEARANCES FOR FURNITURE AND EQUIPMENT PROVIDED BY OWNER.

## KEY NOTES

1. OWNER PROVIDED EQUIPMENT. NOT IN CONTRACT.

## INTERIOR WALLCOVERING LEGEND

XX = WALLCOVERING DESIGNATION

DE = DRY ERASE WALLCOVERING

ACCESSORY NOTES:

60" ROLL- SIZE AND HEIGHT AS INDICATED IN SCHEDULE BELOW.

PROVIDE 1/4" THICK BY 1 1/2" WIDE, ALUMINUM J-TRIM TO FRAME ALL DRY ERASE WALLS.

PROVIDE 1" THICK, CONTINUOUS CLEAR SATIN ANODIZED ALUMINUM RAIL AT ALL DRY ERASE WALLS.

PROVIDE CLEAR SATIN ALUMINUM MARKER TRAYS AT ALL DRY ERASE WALLS.

FIRST FLOOR WALLCOVERING SCHEDULE

| ROOM | ITEM(S) | QUANTITY | WIDTH | HEIGHT | BOTTOM AT X' AFF, TOP AT X' AFF |
|---|---|---|---|---|---|
| 103 | DE | 1 | 6'-0" | 4'-0" | BOTTOM AT 3' AFF, TOP AT 7' AFF |
| 105 | DE | 1 | 5'-0" | 4'-0" | BOTTOM AT 3' AFF, TOP AT 7' AFF |
| 109 | DE | 1 | 5'-0" | 4'-0" | BOTTOM AT 3' AFF, TOP AT 7' AFF |
| 111 | DE | 1 | 5'-0" | 4'-0" | BOTTOM AT 3' AFF, TOP AT 7' AFF |
| 133 NORTH | DE | 1 | 24'-0" | 7'-0" | BOTTOM AT 3' AFF, TOP AT 10' AFF |
| 133 SOUTH | DE | 1 | 24'-0" | 7'-0" | BOTTOM AT 3' AFF, TOP AT 10' AFF |

GENERAL WALLCOVERING NOTES:

1. SEE SHEET ID-6.01 FOR MANUFACTURER AND FINISH INFORMATION. REFER TO SPECIFICATION SECTIONS 9720 FOR ADDITIONAL INFORMATION.
2. REFER TO MANUFACTURER FOR DETAILS AND INSTALLATION INSTRUCTIONS.
3. COORDINATE ALL ELECTRICAL DEVICES, SUCH AS ELECTRICAL RECEPTACLES, FIRE STROBES, AND THERMOMETERS, TO AVOID CONFLICT WITH WALLCOVERING, WHERE POSSIBLE.
4. FIELD VERIFY ALL DIMENSIONS PRIOR TO FABRICATION.
5. WHERE WALLCOVERING DOES NOT EXTEND CORNER TO CORNER, CENTER ON WALL, AS INDICATED ON PLANS.
6. THICKNESS OF WALLCOVERING ON PLAN IS DRAWN FOR REFERENCE ONLY. REFER TO SPECIFICATIONS FOR ACTUAL THICKNESS OF MATERIAL.
7. COORDINATE BOTTOM MOUNTING HEIGHT WITH FURNITURE AND PARTITION PANELS.
8. COORDINATE TELEVISION MOUNTING HEIGHT TO AVOID CONFLICT WITH WALLCOVERING.


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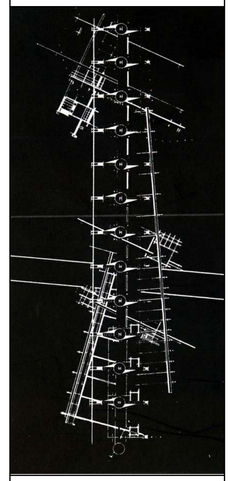

# Lake County Emergency Communications & Operations Center

Tavares, Florida

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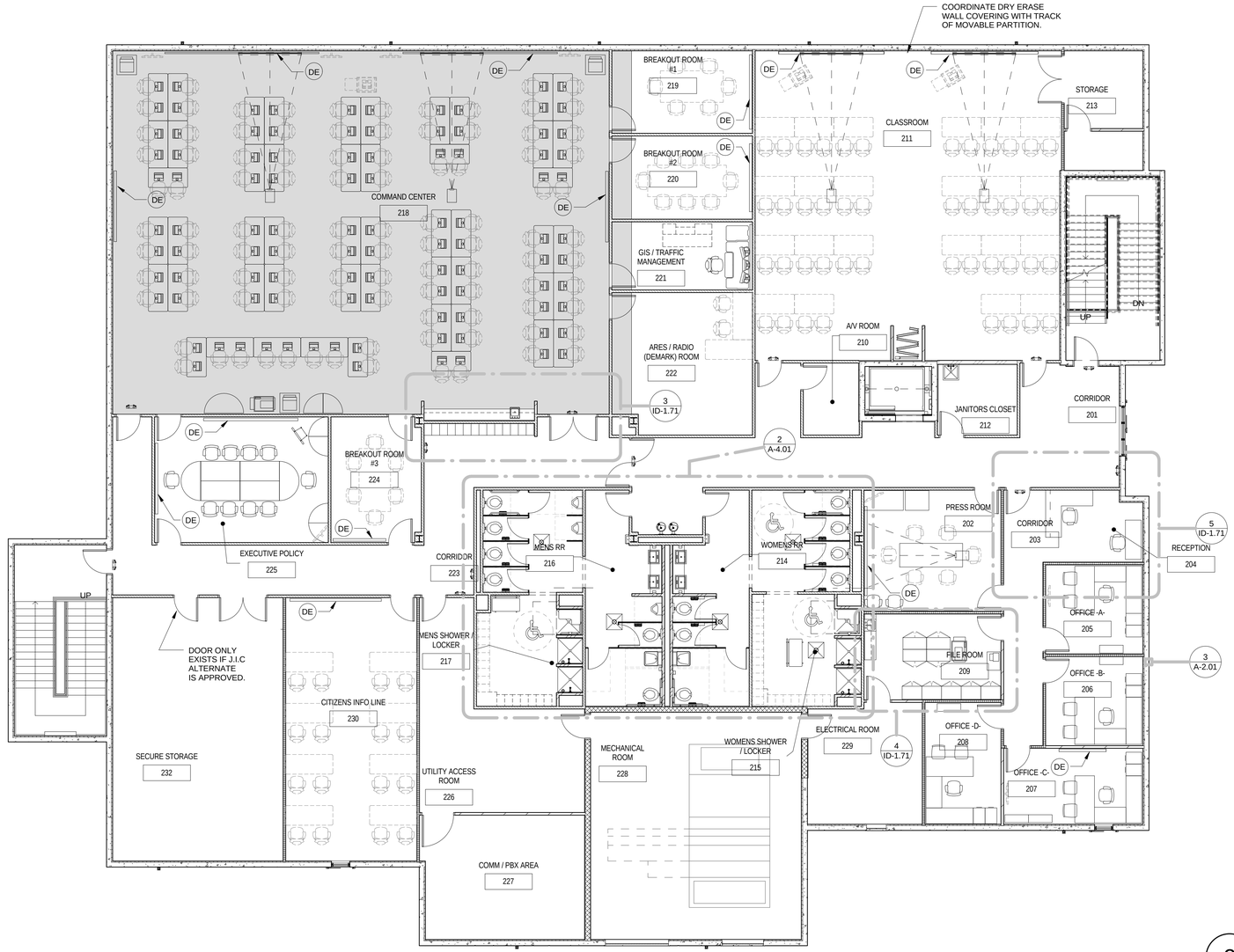
- revisions

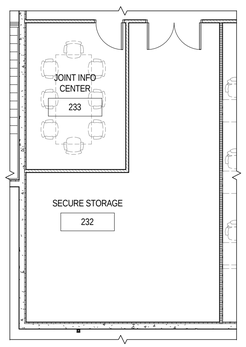
- sheet title
FIRST FLOOR FURNITURE PLAN
- scale: 1/8" = 1'-0"
- drawn: DT, AH
- checked: SG, SB
- approved: KR, AIA
- date: 11/09/11

- project no. 842-10

- sheet no. ID-1.01




1 02.1 Furniture Plan
1/8" = 1'-0"




2 ALTERNATE: J.I.C.
1/8" = 1'-0"

N

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FLORIDA
**Approved Plans - Commercial**
**LAKE COUNTY BUILDING DIVISION**
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Building: BLD31 12/29/11
Electric: ADM01 12/29/11
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:

## GENERAL NOTES

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2. FURNITURE SHOWN AS SOLID LINES INDICATE SUGGESTED REUSED FURNITURE LAYOUT AT THE TIME OF OCCUPANCY. FURNITURE PROVIDED BY OWNER.
3. SEE SHEET ID-6.01 AND ID-6.02 FOR LOCATIONS FOR FLOORING AND BASE FINISH ADD ALTERNATES.
4. FIELD VERIFY CLEARANCES FOR FURNITURE AND EQUIPMENT PROVIDED BY OWNER.

## KEY NOTES

(1.) OWNER PROVIDED EQUIPMENT. NOT IN CONTRACT.

## INTERIOR WALLCOVERING LEGEND

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ACCESSORY NOTES:

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60" ROLL- SIZE AND HEIGHT AS INDICATED IN SCHEDULE BELOW.

PROVIDE 1/4" THICK BY 1 1/2" WIDE, ALUMINUM J-TRIM TO FRAME ALL DRY ERASE WALLS.

PROVIDE 1" THICK, CONTINUOUS CLEAR SATIN ANODIZED ALUMINUM RAIL WITH TAC-WALL INSERT AT ALL DRY ERASE WALLS. TAC-WALL INSERT TO BE "82 QUARRY".

PROVIDE CLEAR SATIN ALUMINUM MARKER TRAYS AT ALL DRY ERASE WALLS.

SECOND FLOOR WALLCOVERING SCHEDULE

| ROOM | ITEM(S) | QUANTITY | WIDTH | HEIGHT | |
|---|---|---|---|---|---|
| 202 | DE | 1 | 11'-4" | 4'-0" | BOTTOM AT 3' AFF, TOP AT 7' AFF |
| 211 NORTH | DE | 2 | 13'-4" | 7'-0" | BOTTOM AT 3' AFF, TOP AT 10' AFF |
| 218 NORTH | DE | 2 | 19'-0" | 7'-0" | BOTTOM AT 3' AFF, TOP AT 10' AFF |
| 218 WEST | DE | 1 | 9'-0" | 4'-0" | BOTTOM AT 3' AFF, TOP AT 7' AFF |
| 218 EAST | DE | 1 | 9'-0" | 4'-0" | BOTTOM AT 3' AFF, TOP AT 7' AFF |
| 219 | DE | 1 | 9'-5" | 4'-0" | BOTTOM AT 3' AFF, TOP AT 7' AFF |
| 220 | DE | 1 | 8'-7" | 4'-0" | BOTTOM AT 3' AFF, TOP AT 7' AFF |
| 224 | DE | 1 | 6'-8" | 4'-0" | BOTTOM AT 3' AFF, TOP AT 7' AFF |
| 225 NORTH | DE | 1 | 12'-0" | 4'-0" | BOTTOM AT 3' AFF, TOP AT 7' AFF |
| 225 WEST | DE | 1 | 9'-0" | 4'-0" | BOTTOM AT 3' AFF, TOP AT 7' AFF |
| 230 | DE | 1 | 11'-7" | 4'-0" | BOTTOM AT 3' AFF, TOP AT 7' AFF |
| 207 | DE | 1 | 6'-0" | 4'-0" | BOTTOM AT 3' AFF, TOP AT 7' AFF |

GENERAL WALLCOVERING NOTES:

1. SEE SHEET ID-6.01 FOR MANUFACTURER AND FINISH INFORMATION. REFER TO SPECIFICATION SECTIONS 9720 FOR ADDITIONAL INFORMATION.
2. REFER TO MANUFACTURER FOR DETAILS AND INSTALLATION INSTRUCTIONS.
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7. CORDINATE BOTTOM MOUNTING HEIGHT WITH FURNITURE AND PARTITION PANELS.
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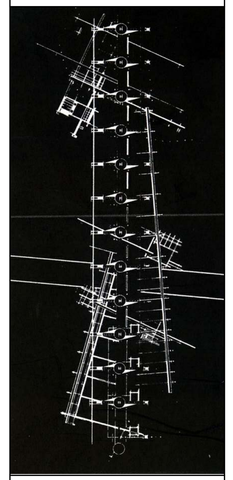
(407) 647-1706

Corporate Registration No. AAC26002047

**Lake County Emergency Communications & Operations Center**

Tavares, Florida

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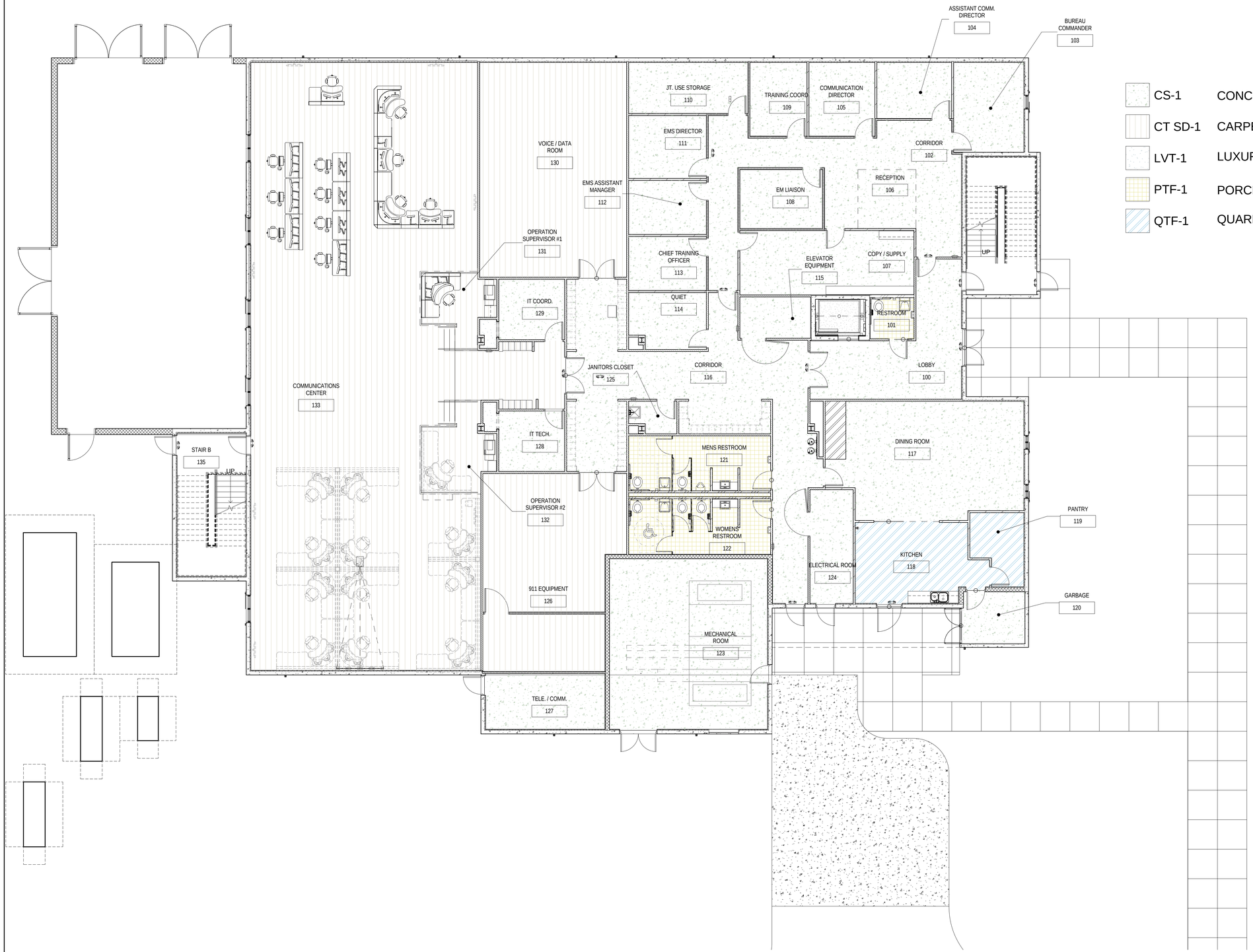
- revisions

- sheet title: SECOND FLOOR FURNITURE PLAN 1/8" = 1'-0"
- drawn: DT, AH
- checked: SG, SB
- approved: KR, AIA
- date: 11/09/11
- project no. 842-10
- sheet no. ID-1.02




| | | |
|---|---|---|
| CS-1 | CONCRETE, SEALED |
| CT SD-1 | CARPET TILE, STATIC DISSIPATIVE |
| LVT-1 | LUXURY VINYL TILE |
| PTF-1 | PORCELAIN TILE FLOOR |
| QTF-1 | QUARRY TILE FLOOR |

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FLORIDA
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Permit # 2011110212
Building: BLD31 12/29/11
Electric: ADM01 12/29/11
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:

1 01.1 FINISH PLAN
1/8" = 1'-0"


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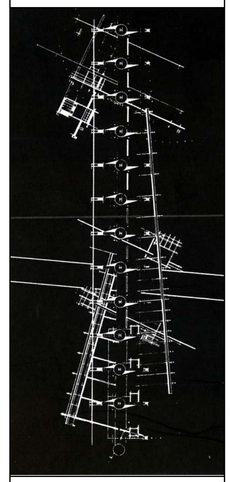

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- sheet title
  FIRST FLOOR-FINISH PLAN

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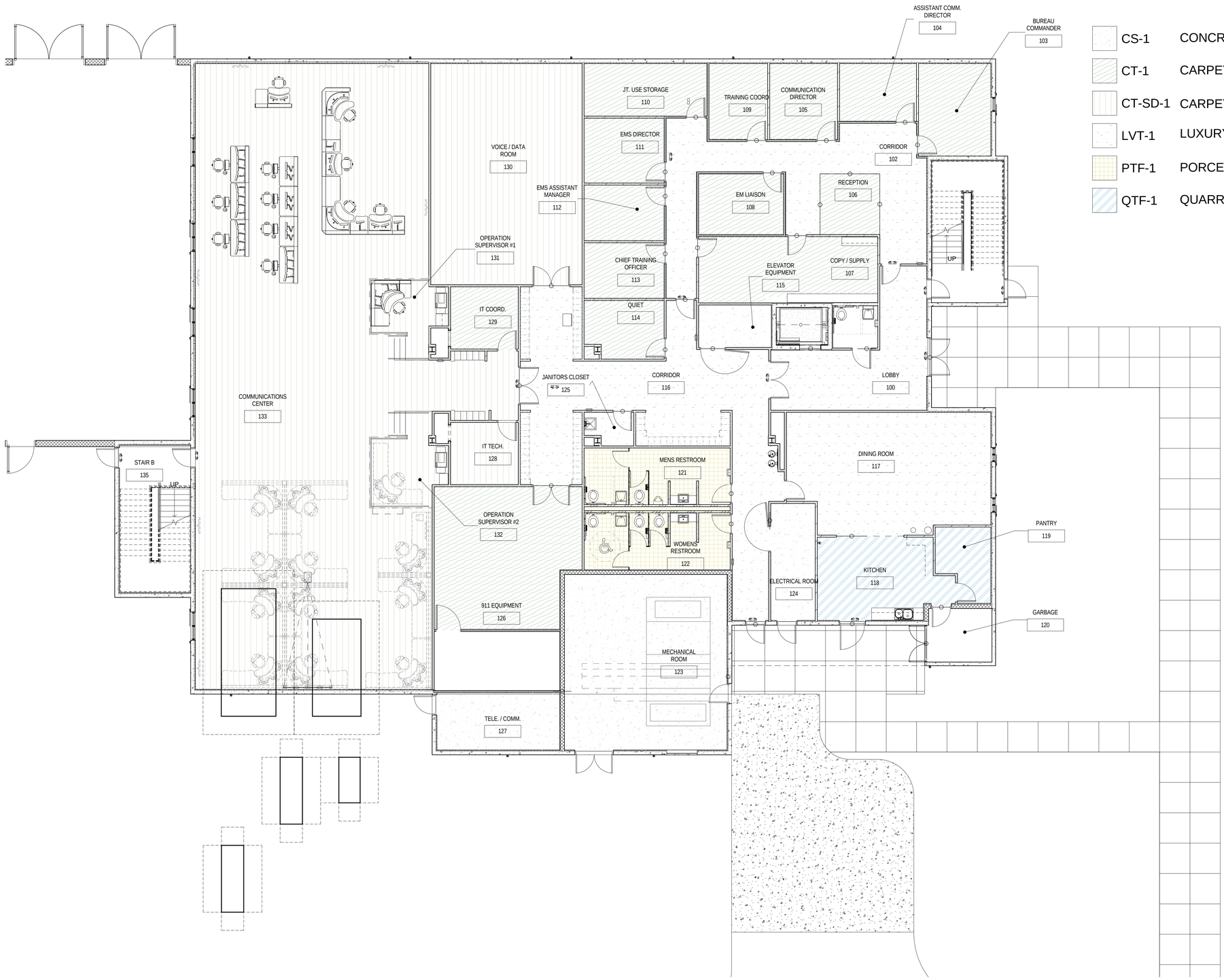
- checked: SG, SB
- approved: KR, AIA
- date: 11/09/11

- project no. 842-10

- sheet no. ID-1.51




| | | |
|---|---|---|
| CS-1 | CONCRETE, SEALED |
| CT-1 | CARPET TILE |
| CT-SD-1 | CARPET TILE, STATIC DISSIPATIVE |
| LVT-1 | LUXURY VINYL TILE |
| PTF-1 | PORCELAIN TILE FLOOR |
| QTF-1 | QUARRY TILE FLOOR |

1 01.1 FINISH PLAN - ALTERNATE #1 & #2
1/8" = 1'-0"

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Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:

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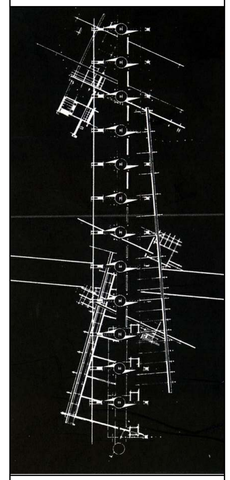

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- revisions

- sheet title
  FIRST FLOOR FINISH PLAN - ALT. 1 &2
- scale: 1/8" = 1'-0"
- drawn: DT, AH
- checked: SG, SB
- approved: KR, AIA
- date: 11/09/11
- project no. 842-10
- sheet no. ID-1.51A

| | | |
|---|---|---|
| CS-1 | CONCRETE, SEALED |
| CT SD-1 | CARPET TILE, STATIC DISSIPATIVE |
| CT-1 | LUXURY VINYL TILE |
| LVT-1 | PORCELAIN TILE FLOOR |
| PTF-1 | QUARRY TILE FLOOR |

1 02.1 FINISH PLAN
1/8" = 1'-0"

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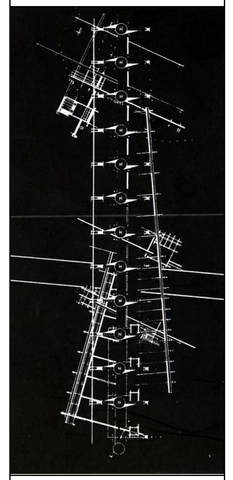

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- scale: 1/8" = 1'-0"
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- approved: KR, AIA
- date: 11/09/11
- project no. 842-10
- sheet no. ID-1.52

| | | |
|---|---|---|
| CS-1 | CONCRETE, SEALED |
| CT-1 | CARPET TILE |
| CT-SD-1 | CARPET TILE, STATIC DISSIPATIVE |
| LVT-1 | LUXURY VINYL TILE |
| PTF-1 | PORCELAIN TILE FLOOR |

1 02.1 FINISH PLAN- ALTERNATE #1 & #2

1/8" = 1'-0"

LAKE COUNTY
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**LAKE COUNTY BUILDING DIVISION**
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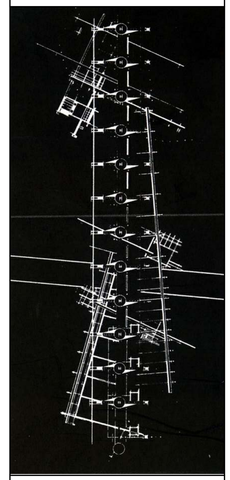

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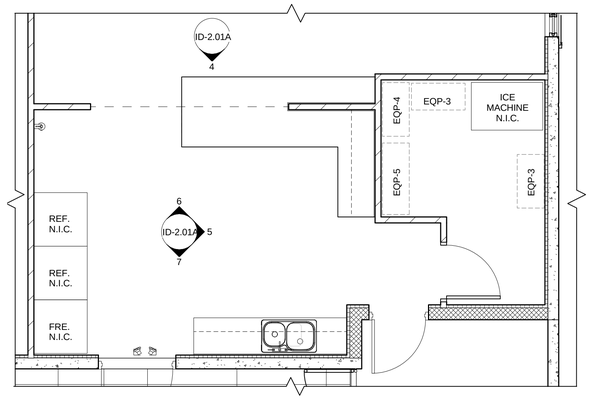
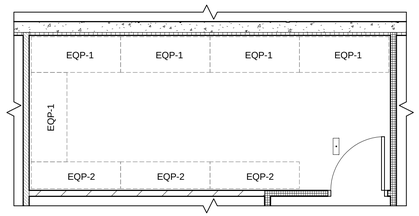
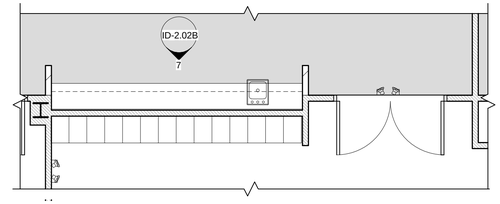
- scale: 1/8" = 1'-0"
- drawn: DT, AH
- checked: SG, SB
- approved: KR, AIA
- date: 11/09/11
- project no. 842-10
- sheet no. ID-1.52A



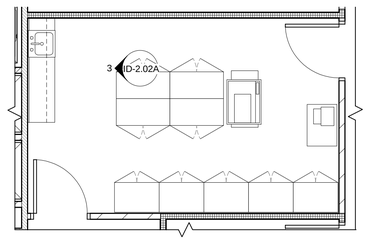

## 1 RM. 118 KITCHEN
1/4" = 1'-0"



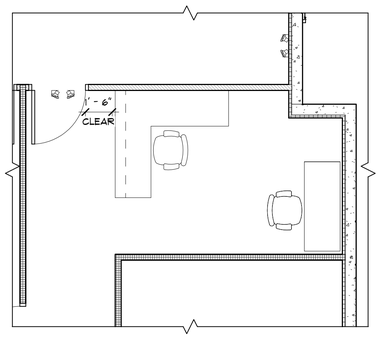

## 2 RM. 110 JT. USE STOR.
1/4" = 1'-0"




## 3 ELARGED PLAN - RM. 218 COMMAND CENTER
1/4" = 1'-0"




## 4 ENLARGED PLAN - RM. 209 FILE ROOM
1/4" = 1'-0"




## 5 ENLARGED PLAN - RM. 204 RECEPTION
1/4" = 1'-0"

LAKE COUNTY
FLORIDA
**Approved Plans - Commercial**
**LAKE COUNTY BUILDING DIVISION**
Any errors or omission in these plans shall be made to conform with the applicable code requirements per Florida Building Code 105.4.1
Plans reviewed for code compliance and shall be kept on site
Permit # 201111O212
Building: BLD31 12/29/11
Electric: ADM01 12/29/11
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:

N

Architects Design Group
Architects and Planners
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Kevin Ratigan, A.I.A.
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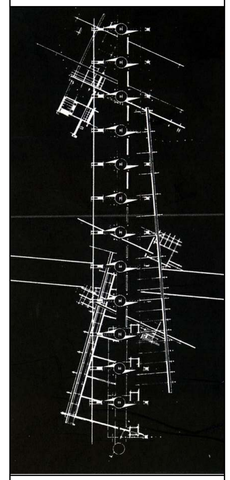
333 N. Knowles Ave.
Winter Park, Florida 32789
(407) 647-1706
Corporate Registration No. AAC26002047



**Lake County Emergency Communications & Operations Center**

Tavares, Florida

**PERMIT CD SUBMITTAL**

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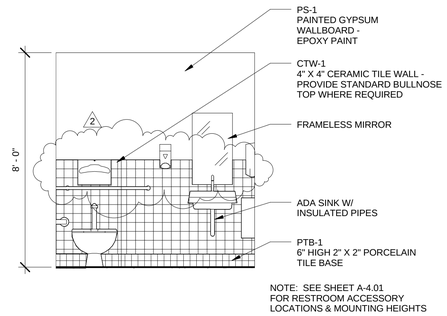
- revisions

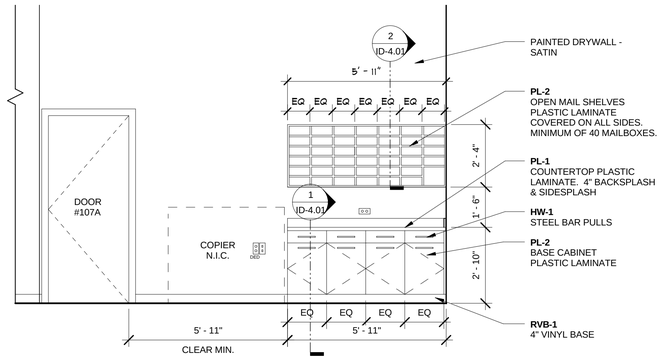
- sheet title
ENLARGED FLOOR PLANS

- scale: 1/4" = 1'-0"
- drawn: DT, AH
- checked: SG, SB
- approved: KR, AIA
- date: 11/09/11
- project no. 842-10
- sheet no. ID-1.71



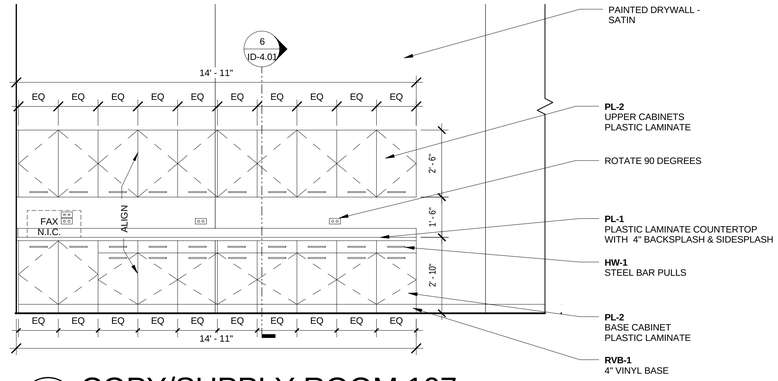

## 1 RESTROOM 101

3/8" = 1'-0"



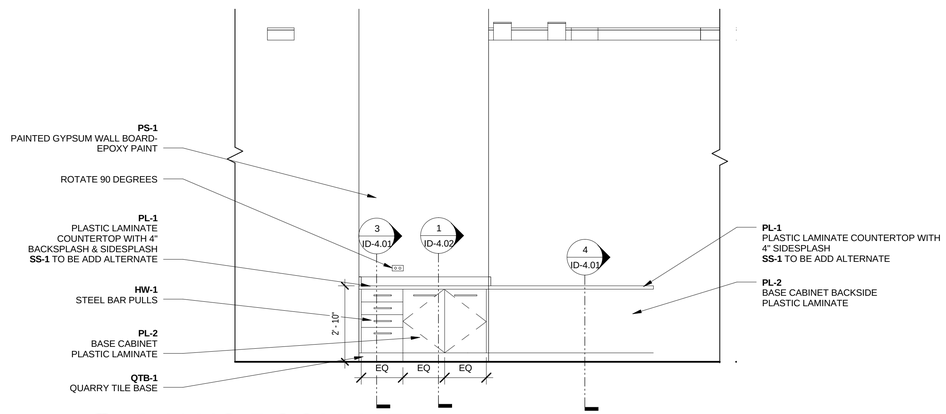

## 2 COPY/SUPPLY ROOM 107

3/8" = 1'-0"



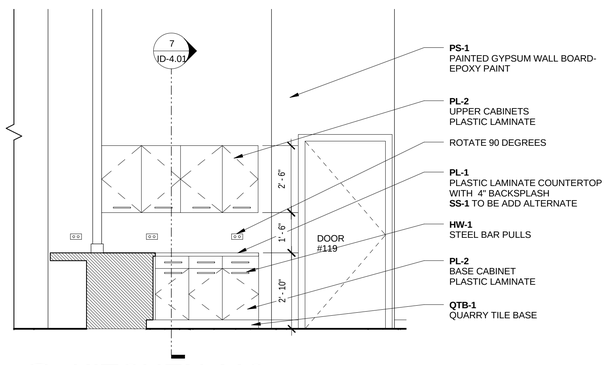

## 3 COPY/SUPPLY ROOM 107

3/8" = 1'-0"



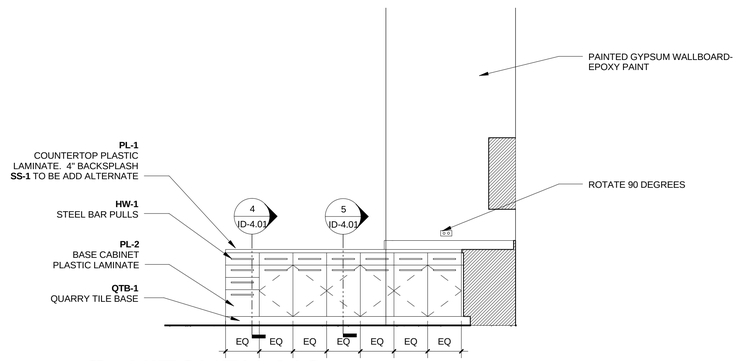

## 4 DINING ROOM 117

3/8" = 1'-0"



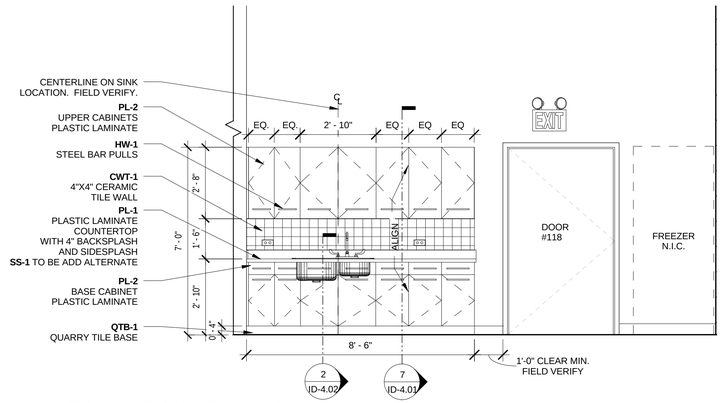

## 5 KITCHEN 118

3/8" = 1'-0"




## 6 KITCHEN 118

3/8" = 1'-0"




## 7 KITCHEN 118

3/8" = 1'-0"

LAKE COUNTY
FLORIDA
**Approved Plans - Commercial**
**LAKE COUNTY BUILDING DIVISION**
Any errors or omission in these plans shall be made to conform with the applicable code requirements per Florida Building Code 105.4.1
Plans reviewed for code compliance and shall be kept on site
Permit # 2011110212
Building: BLD31 12/29/11
Electric: ADM01 12/29/11
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:

**GENERAL NOTES:**

1. REFER TO SHEET ID-6.01 FOR GENERAL MILLWORK NOTES.
2. REFER TO SHEET ID-6.01 FOR INTERIOR FINISH LEGEND, ADD ALTERNATES, HARDWARE SCHEDULE, AND EQUIPMENT SCHEDULE.
3. REFER TO SHEET ID-6.02 FOR A ROOM BY ROOM FINISH SCHEDULE FOR FIRST AND SECOND FLOOR.
4. ALL DIMENSIONS SHOWN ARE TAKEN FROM THE FACE OF THE FINISHED FLOOR.

**LEGEND:**

FINISH TAG = FINISH DESIGNATION TAG

= MILLWORK SECTION TAG

Architects Design Group

Architects and Planners
I.S.K. Reeves V, F.A.I.A.
Kevin Ratigan, A.I.A.
Ian A. Reeves, A.I.A.
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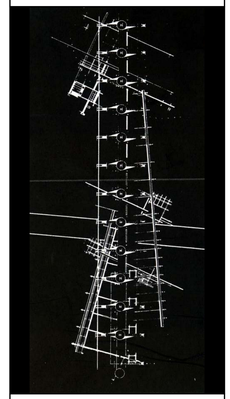
Winter Park, Florida 32789
(407) 647-1706
Corporate Registration
No. AAC26002047



# Lake County Emergency Communications & Operations Center

Tavares, Florida

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• revisions/addenda

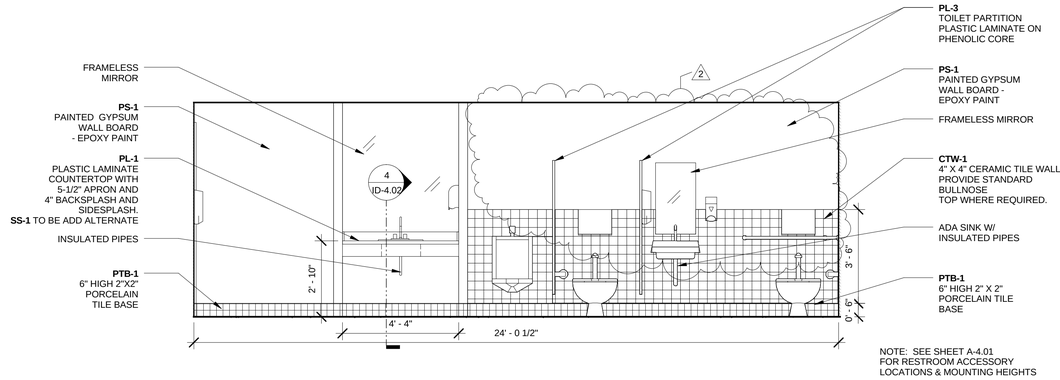
| Number | Description | Date Issued |
|---|---|---|
| 2 | ADDENDUM #2 | 12.22.11 |

• sheet title
INTERIOR ELEVATIONS

• scale: As indicated
• drawn: DT, AH
• checked: SG, SB
• approved: KR, AIA
• date: 11/09/11

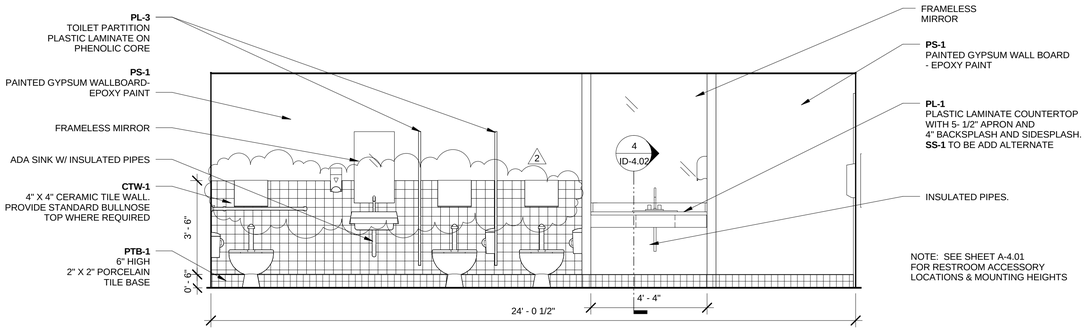
• project no. 842-10

• sheet no. ID-2.01A



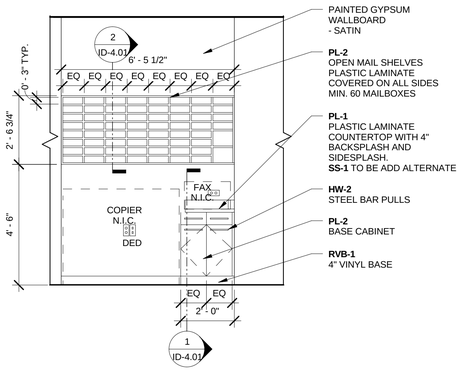

# 1 MENS RESTROOM 121

3/8" = 1'-0"



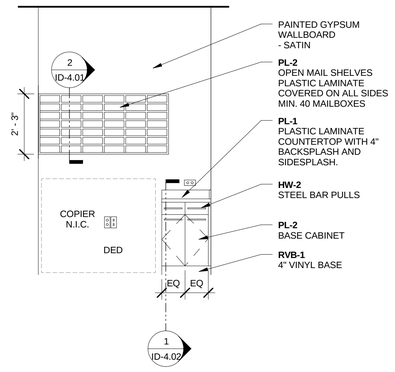

# 2 WOMENS RESTROOM 122

3/8" = 1'-0"



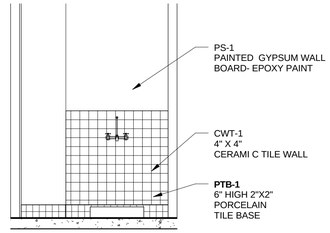

# 3 OPERATION SUPERVISOR #1 131

3/8" = 1'-0"




# 4 OPERATION SUPERVISOR #1 132

3/8" = 1'-0"




# 5 RM. 125 JANITOR'S CLOSET

3/8" = 1'-0"

LAKE COUNTY
FLORIDA
**Approved Plans - Commercial**
**LAKE COUNTY BUILDING DIVISION**
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Permit # 2011110212
Building: BLD31 12/29/11
Electric: ADM01 12/29/11
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:

GENERAL NOTES:

1. REFER TO SHEET ID-6.01 FOR GENERAL MILLWORK NOTES.
2. REFER TO SHEET ID-6.01 FOR INTERIOR FINISH LEGEND, ADD ALTERNATES, HARDWARE SCHEDULE, AND EQUIPMENT SCHEDULE.
3. REFER TO SHEET ID-6.02 FOR A ROOM BY ROOM FINISH SCHEDULE FOR FIRST AND SECOND FLOOR.
4. ALL DIMENSIONS SHOWN ARE TAKEN FROM THE FACE OF THE FINISHED FLOOR.

LEGEND:

FINISH TAG = FINISH DESIGNATION TAG

= MILLWORK SECTION TAG

Architects Design Group

Architects and Planners
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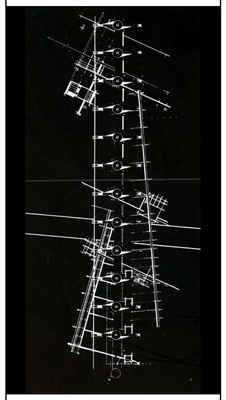
Kevin Ratigan, A.I.A.
Ian A. Reeves, A.I.A.
333 N. Knowles Ave.
Winter Park, Florida 32789
(407) 647-1706

Corporate Registration No. AAC26002047



**Lake County Emergency Communications & Operations Center**

Tavares, Florida

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• revisions/addenda

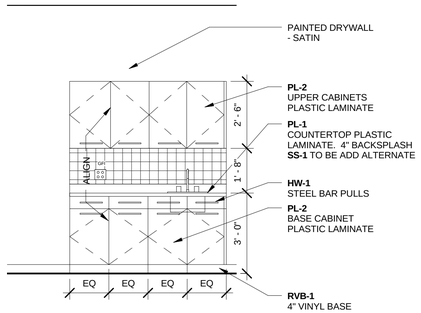
| Number | Description | Date Issued |
|---|---|---|
| 2 | ADDENDUM #2 | 12.22.11 |

• sheet title
INTERIOR ELEVATIONS

• scale: As indicated
• drawn: DT, AH
• checked: SG, SB
• approved: KR, AIA
• date: 11/09/11

• project no. 842-10

• sheet no. ID-2.01B

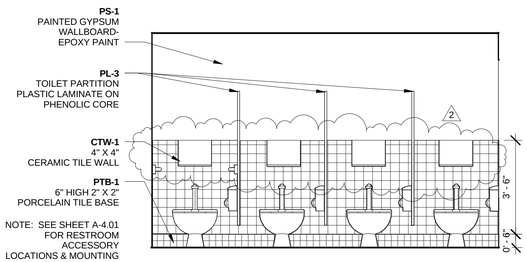



## 1 NOT USED

## 2 NOT USED

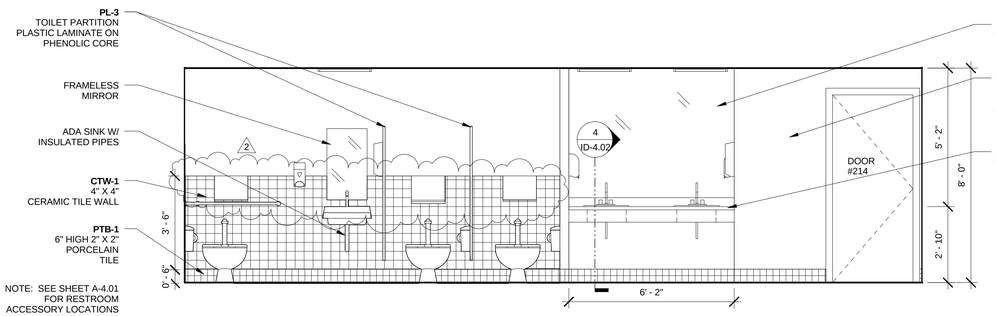
## 3 RM. 209 FILE ROOM

3/8" = 1'-0"



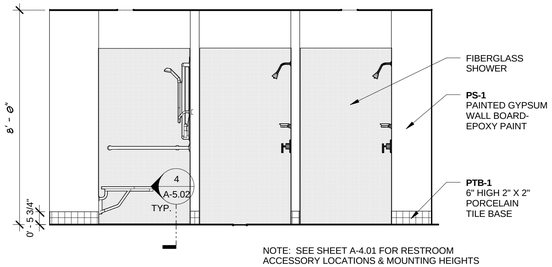

## 4 RM. 214 WOMENS RESTROOM

3/8" = 1'-0"



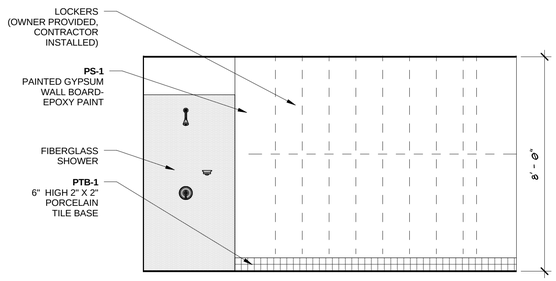

## 5 RM. 214 WOMENS RESTROOM

3/8" = 1'-0"




## 6 RM. 215 WOMENS SHOWER/ LOCKER ROOM

3/8" = 1'-0"




## 7 RM. 215 WOMENS SHOWER/ LOCKER ROOM

3/8" = 1'-0"

| GENERAL NOTES: |
|---|
| 1. REFER TO SHEET ID-6.01 FOR GENERAL MILLWORK NOTES. |
| 2. REFER TO SHEET ID-6.01 FOR INTERIOR FINISH LEGEND, ADD ALTERNATES, HARDWARE SCHEDULE, AND EQUIPMENT SCHEDULE. |
| 3. REFER TO SHEET ID-6.02 FOR A ROOM BY ROOM FINISH SCHEDULE FOR FIRST AND SECOND FLOOR. |
| 4. ALL DIMENSIONS SHOWN ARE TAKEN FROM THE FACE OF THE FINISHED FLOOR. |
| LEGEND: |
| FINISH TAG = FINISH DESIGNATION TAG |
| = MILLWORK SECTION TAG |

LAKE COUNTY
FLORIDA
**Approved Plans - Commercial**
**LAKE COUNTY BUILDING DIVISION**
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Permit # 2011110212
Building: BLD31 12/29/11
Electric: ADM01 12/29/11
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:

Architects Design Group
Architects and Planners
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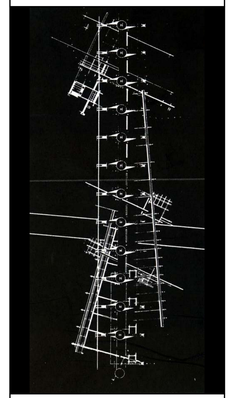
333 N. Knowles Ave.
Winter Park, Florida 32789
(407) 647-1706
Corporate Registration
No. AAC26002047



**Lake County Emergency Communications & Operations Center**

Tavares, Florida

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• revisions/addenda

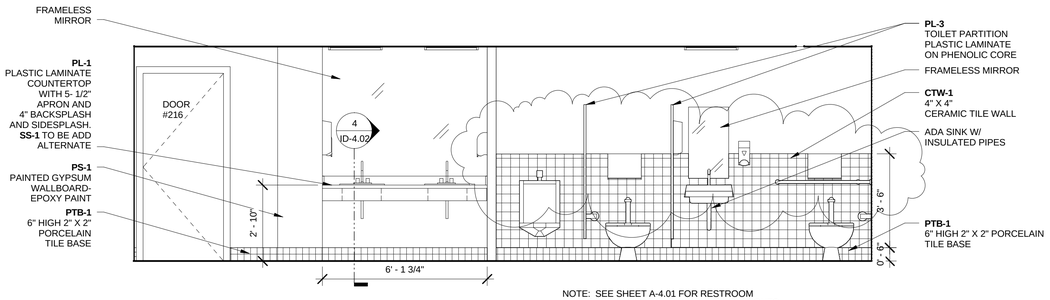
| Number | Description | Date Issued |
|---|---|---|
| 2 | ADDENDUM #2 | 12.22.11 |

• sheet title
INTERIOR ELEVATIONS

• scale: 3/8" = 1'-0"
• drawn: DT, AH
• checked: SG, SB
• approved: KR, AIA
• date: 11/09/11

• project no. 842-10

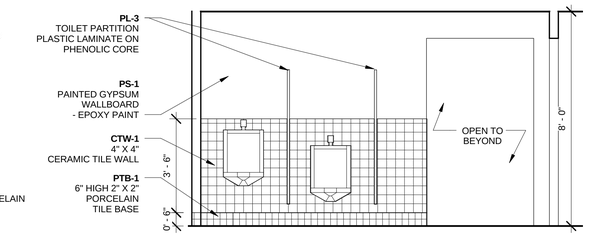
• sheet no. ID-2.02A




NOTE: SEE SHEET A-4.01 FOR RESTROOM ACCESSORY LOCATIONS & MOUNTING HEIGHTS

## 1 RM. 216 MENS RESTROOM

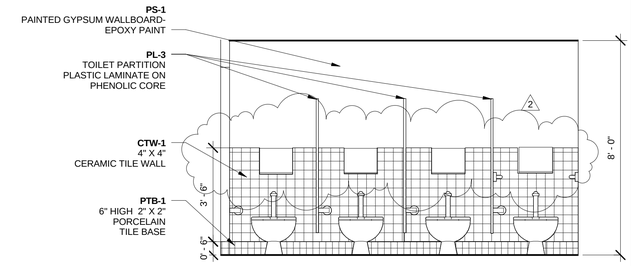
3/8" = 1'-0"




NOTE: SEE SHEET A-4.01 FOR RESTROOM ACCESSORY LOCATIONS & MOUNTING HEIGHTS

## 2 RM. 216 MENS RESTROOM

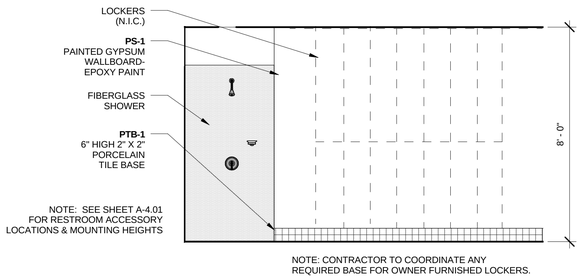
3/8" = 1'-0"




NOTE: SEE SHEET A-4.01 FOR RESTROOM ACCESSORY LOCATIONS & MOUNTING HEIGHTS

## 3 RM. 216 MENS RESTROOM

3/8" = 1'-0"

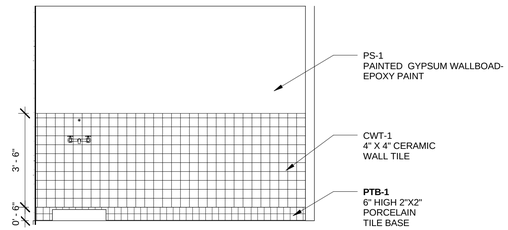



NOTE: SEE SHEET A-4.01 FOR RESTROOM ACCESSORY LOCATIONS & MOUNTING HEIGHTS

NOTE: CONTRACTOR TO COORDINATE ANY REQUIRED BASE FOR OWNER FURNISHED LOCKERS.

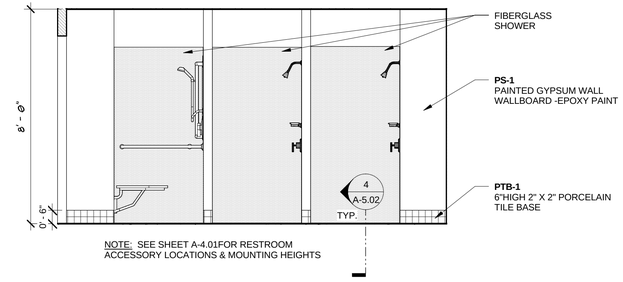
## 4 RM. 217 MENS SHOWER/LOCKER ROOM

3/8" = 1'-0"




## 5 RM 212 JANITOR'S CLOSET

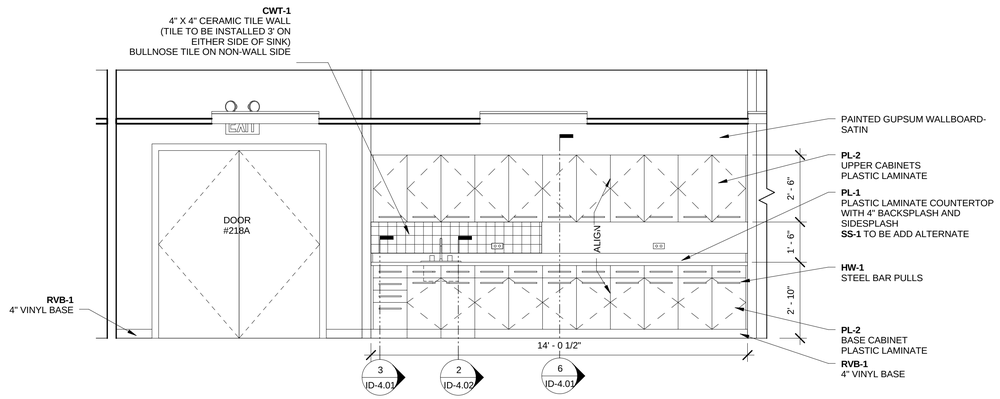
3/8" = 1'-0"




NOTE: SEE SHEET A-4.01FOR RESTROOM ACCESSORY LOCATIONS & MOUNTING HEIGHTS

## 6 RM. 217 MENS SHOWER/LOCKER ROOM

3/8" = 1'-0"




## 7 RM. 218 COMMAND CENTER

3/8" = 1'-0"

LAKE COUNTY FLORIDA

**Approved Plans - Commercial**

**LAKE COUNTY BUILDING DIVISION**

Any errors or omission in these plans shall be made to conform with the applicable code requirements per Florida Building Code 105.4.1

Plans reviewed for code compliance and shall be kept on site

Permit # 2011110212

Building: BLD31 12/29/11
Electric: ADM01 12/29/11
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:

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4. ALL DIMENSIONS SHOWN ARE TAKEN FROM THE FACE OF THE FINISHED FLOOR.

LEGEND:

FINISH TAG = FINISH DESIGNATION TAG

= MILLWORK SECTION TAG

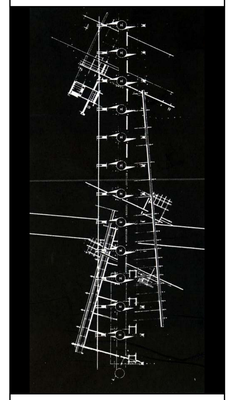
Architects Design Group

Architects and Planners

I.S.K. Reeves V, F.A.I.A.
Kevin Ratigan, A.I.A.
Ian A. Reeves, A.I.A.

333 N. Knowles Ave.
Winter Park, Florida 32789
(407) 647-1706

Corporate Registration No. AAC26002047



**Lake County Emergency Communications & Operations Center**

Tavares, Florida

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• revisions/addenda

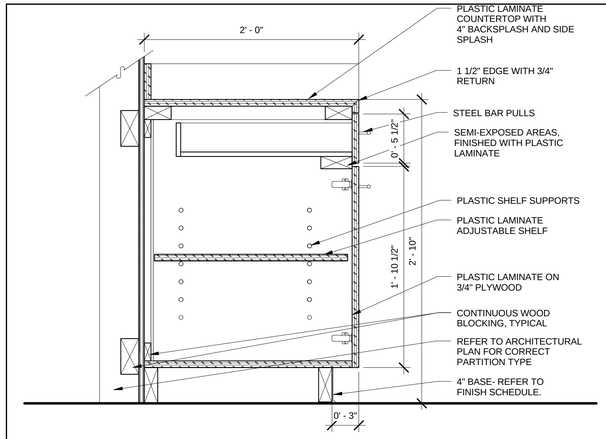
| Number | Description | Date Issued |
|---|---|---|
| 2 | ADDENDUM #2 | 12.22.11 |

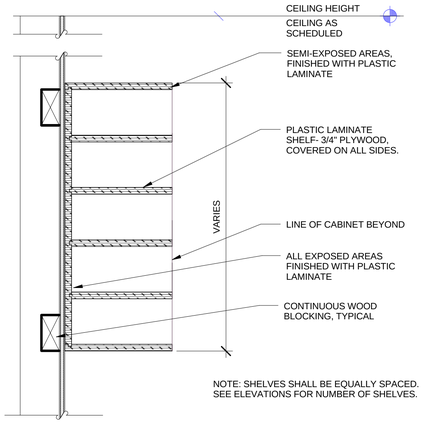
• sheet title
INTERIOR ELEVATIONS

• scale: 3/8" = 1'-0"
• drawn: DT, AH
• checked: SG, SB
• approved: KR, AIA
• date: 11/09/11

• project no. 842-10

• sheet no. ID-2.02B




NOTE: SHELVES SHALL BE EQUALLY SPACED. SEE ELEVATIONS FOR NUMBER OF SHELVES.

LAKE COUNTY
FLORIDA

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**LAKE COUNTY BUILDING DIVISION**
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Plumbing: BLD31 12/27/11
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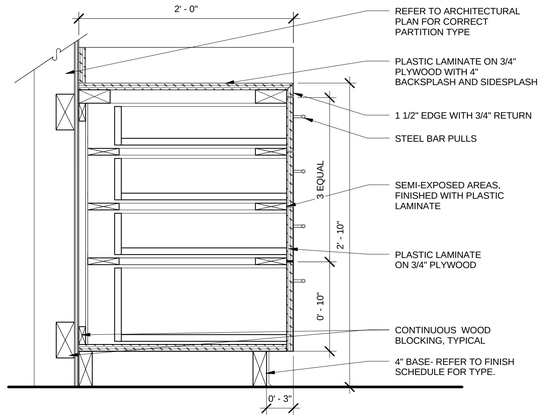
Notes:




Architects Design Group

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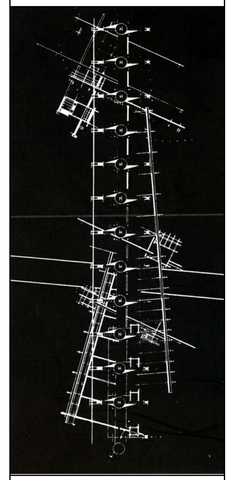
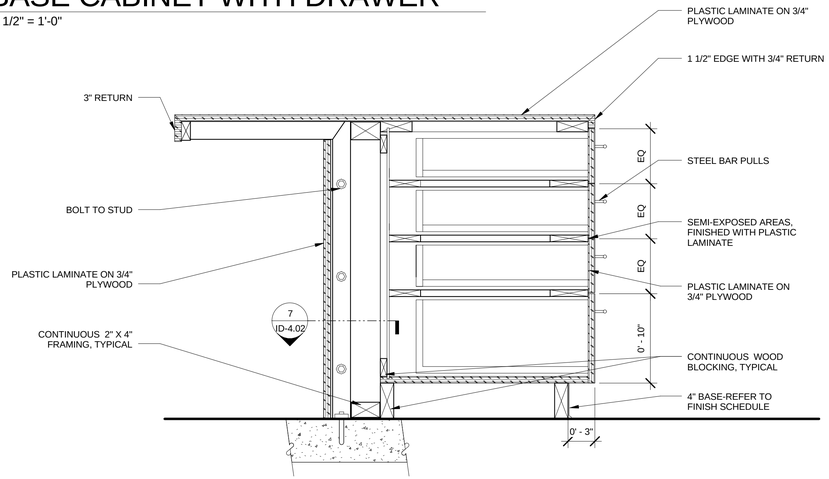
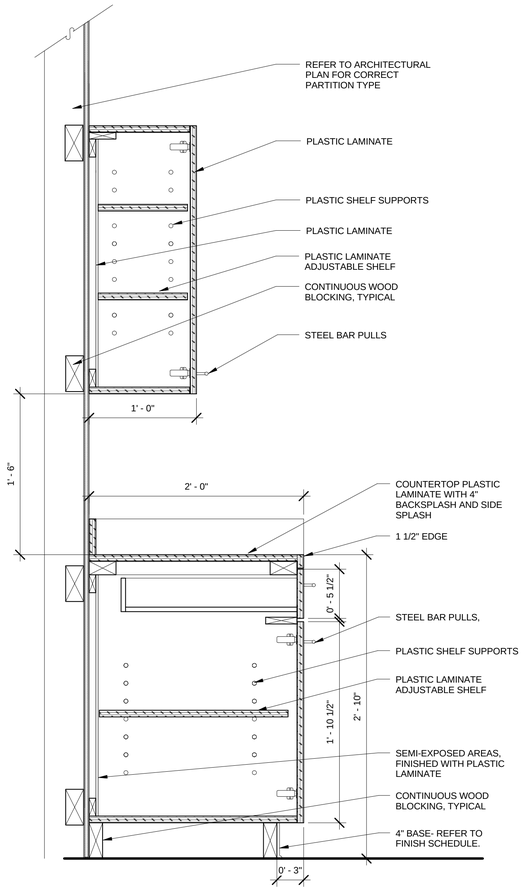


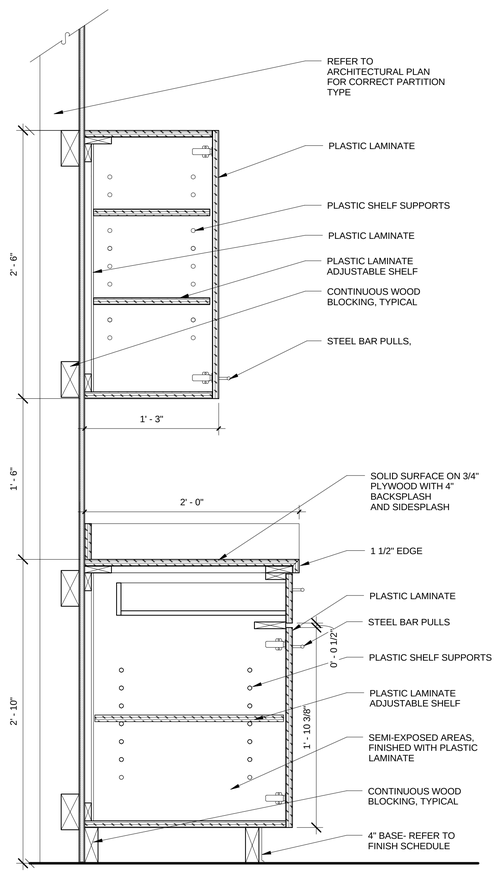
## 1 BASE CABINET WITH DRAWER
1 1/2" = 1'-0"



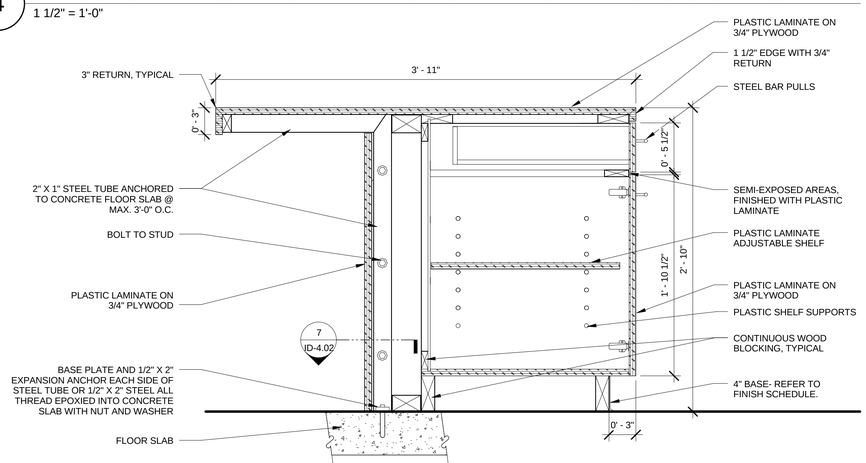

## 2 UPPER CABINET W/ OPEN SHELVING
1 1/2" = 1'-0"




## 3 BASE CABINET W/ DRAWERS
1 1/2" = 1'-0"




## 4 BASE CABINET W/ DRAWERS AND DINING COUNTER
1 1/2" = 1'-0"




## 5 BASE CABINET W/ DRAWERS & DOOR AND DINING COUNTER
1 1/2" = 1'-0"

## 6 BASE CABINETS W/ 12" UPPER CABINETS
1 1/2" = 1'-0"

## 7 BASE CABINET W/ 15" UPPER CABINET
1 1/2" = 1'-0"

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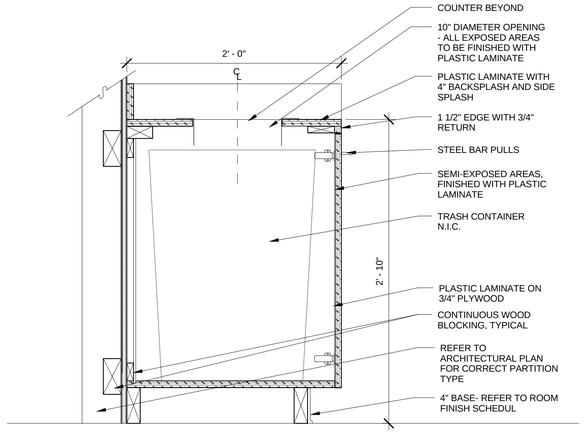
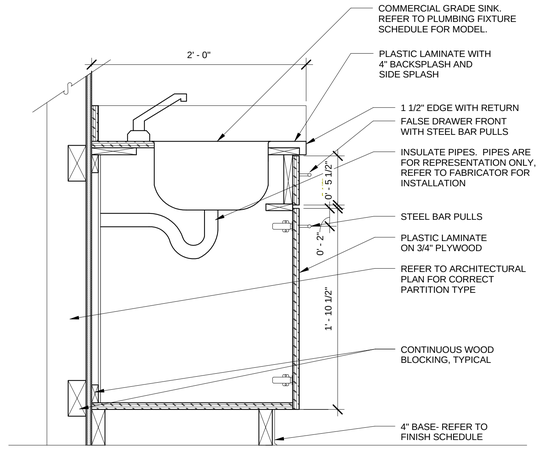
- revisions

- sheet title
INTERIOR MILLWORK DETAILS
- scale: 1 1/2" = 1'-0"
- drawn: DT, AH
- checked: SG, SB
- approved: KR, AIA
- date: 11/09/11
- project no. 842-10
- sheet no. ID-4.01



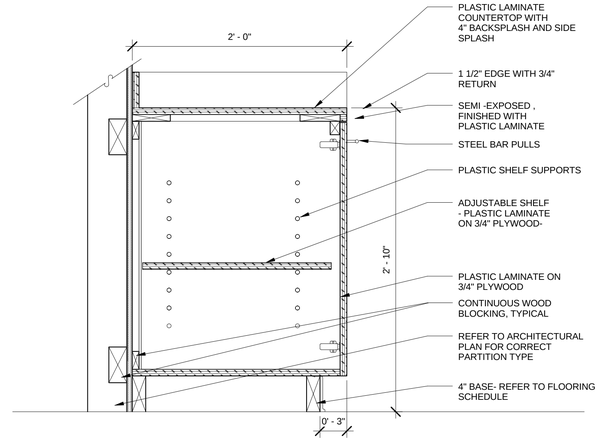

## 1 BASE CABINET W/ TRASH CONTAINER

1 1/2" = 1'-0"




## 2 BASE CABINET WITH SINK

1 1/2" = 1'-0"



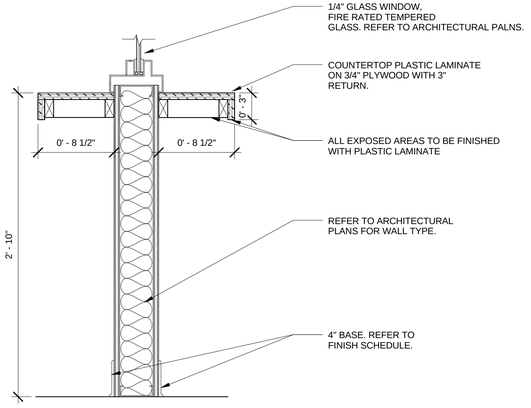

## 3 BASE CABINET W/ NO DRAWERS

1 1/2" = 1'-0"



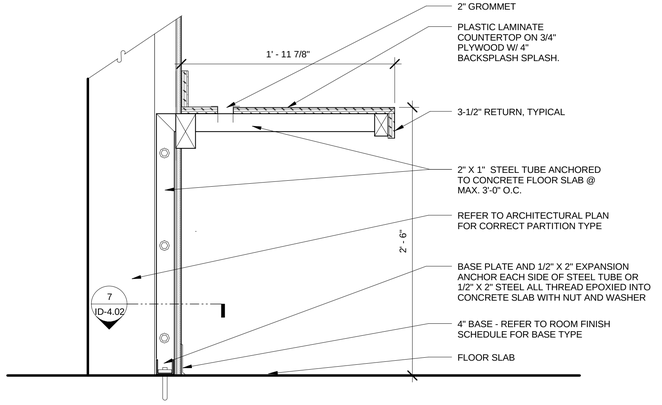

## 4 SINK W/ STEEL TUBE DETAIL

1 1/2" = 1'-0"



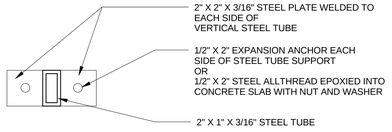

## 5 TRANSACTION COUNTER

1 1/2" = 1'-0"




## 6 MILLWORK COUNTER W/ STEEL TUBE DETAIL

1 1/2" = 1'-0"




## 7 DETAIL - STEEL TUBE WELDED PLATE

3" = 1'-0"

LAKE COUNTY
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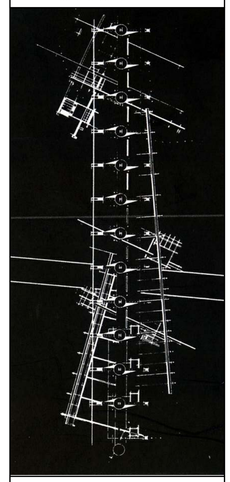

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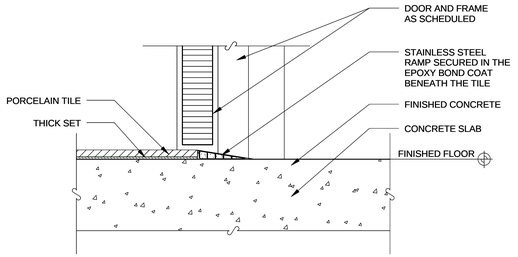
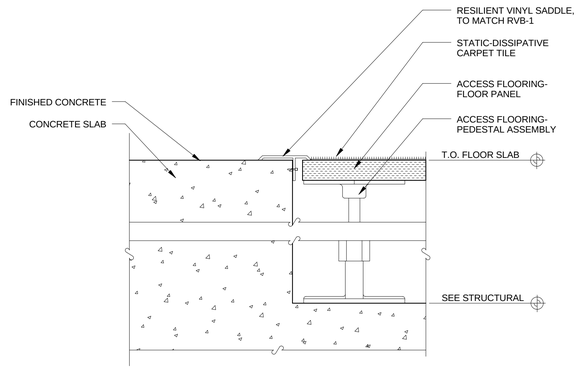
- revisions

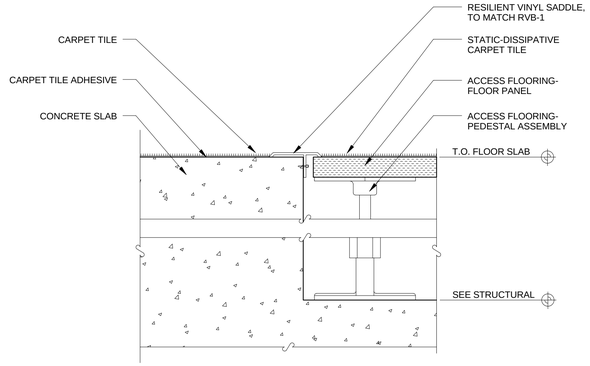
- sheet title: INTERIOR MILLWORK DETAILS
- scale: As indicated
- drawn: DT, AH
- checked: SG, SB
- approved: KR, AIA
- date: 11/09/11
- project no. 842-10
- sheet no. ID-4.02



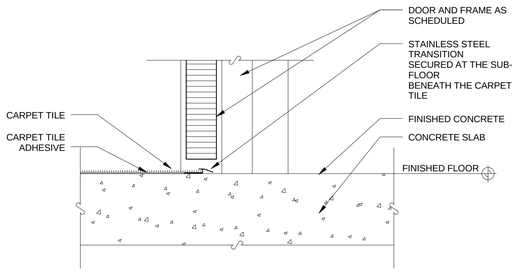

## 1 TILE/CONCRETE
3" = 1'-0"



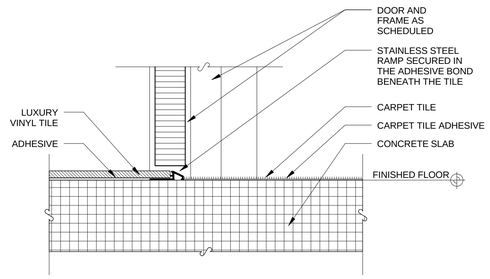

## 2 CONCRETE TO STATIC DISSIPATIVE CARPET TILE ON ACCESS FLOORING
3" = 1'-0"



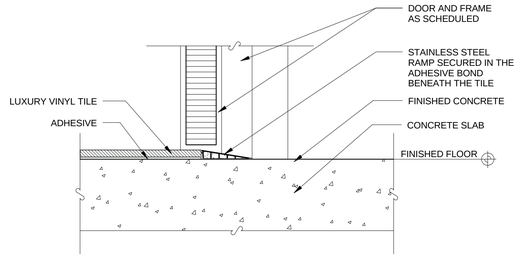

## 3 ADD ALTERNATE CARPET TILE TO STATIC DISSIPATIVE CARPET TILE ON ACCESS FLOORING
3" = 1'-0"



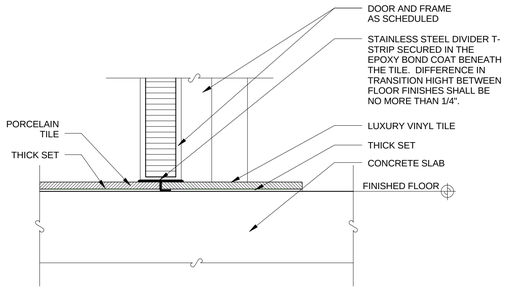

## 4 ADD ALTERNATE CARPET TILE/CONCRETE
3" = 1'-0"




## 5 ADD ALTERNATE LUXURY VINYL TILE TO CARPET TILE
3" = 1'-0"




## 6 ADD ALTERNATE LUXURY VINYL TILE/ CONCRETE
3" = 1'-0"




## 7 ADD ALTERNATE TILE TO LUXURY VINYL TILE
3" = 1'-0"

FLOOR FINISH TRANSITION GENERAL NOTES:

1. ALL INTERIOR FLOOR FINISH TRANSITIONS SHALL MEET THE MINIMUM RECOMMENDED ADA REQUIREMENTS.
2. INSTALL ALL TRANSITION, DIVIDER, REDUCER, AND RAMP PIECES PER MANUFACTURER'S RECOMMENDED INSTALLATION PROCEDURES.
3. REFER TO INTERIOR DESIGN SHEETS ID-6.01 - ID-6.02 FOR INTERIOR FINISH LEGEND AND FINISH SCHEDULE PER FLOOR.
4. ALL FLOORING FINISH TRANSITIONS SHALL BE CENTERED UNDER THE CENTERLINE OF THE DOOR, U.N.O. SEE INTERIOR DESIGN SHEETS ID-1.51 - ID-1.52 FOR LOCATIONS OF FLOOR FINISH TRANSITIONS.
5. DOOR AND FRAME SHOWN FOR REFERENCE ONLY - SEE ARCHITECTURAL DRAWINGS FOR DOOR AND FRAME SCHEDULE.

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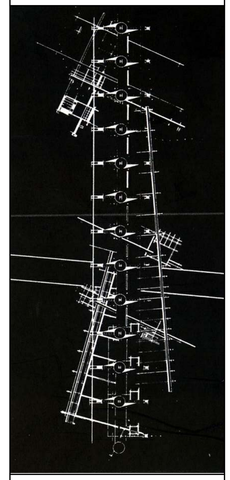

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- sheet title: FLOOR TRANSITION DETAILS
- scale: 3" = 1'-0"
- drawn: DT, AH
- checked: SG, SB
- approved: KR, AIA
- date: 11/09/11
- project no. 842-10
- sheet no. ID-5.01

# GENERAL FINISH NOTES

1. REFER TO INTERIOR FINISH SCHEDULES ON SHEETS ID-6.02 FOR A ROOM BY ROOM SCHEDULE.
2. REFER TO ENLARGED PLANS ON SHEETS ID1.71 FOR EXTENTS OF WALL TILE LOCATIONS.
3. SEE REFLECTED CEILING PLAN FOR CEILING MATERIAL AND FINISHES.
4. INTERIOR COLORS WILL CONSIST OF ONE MAIN FIELD COLOR AND UP TO THREE DIFFERENT ACCENT COLORS. PROVIDE ONE MAIN FIELD COLOR AND ONE ACCENT WALL PER ROOM AS INDICATED ON ACCENT WALL LOCATION PLANS.
5. REFER TO ARCHITECTURAL DRAWINGS FOR CORRECT GLAZING TYPES, SYSTEMS, AND DETAILS.
6. ALL INTERIOR FINISH MATERIALS TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDED INSTALLATION PROCEDURES.
7. ALL INTERIOR WALL AND CEILING FINISHES SHALL COMPLY WITH TABLE 803.5 OF 2007 F.B.C.
8. ALL INTERIOR FLOOR FINISHES SHALL COMPLY WITH SECTIONS 804.2 THROUGH 804.4.1 OF 2007 F.B.C.

# INTERIOR FINISH ABBREVIATIONS

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ACT | = ACOUSTICAL CEILING TILE | EXT-T | = EXTERIOR, TILE | PS | = PAINT, SPECIAL- EPOXY | TW | = TACKABLE WALLCOVERING |
| AF | = ACCESS FLOORING | F | = FACTORY FINISH | PTB | = PORCELAIN TILE, BASE | VCT | = VINYL COMPOSITION TILE |
| AP | = ACRYLIC PANEL | FWC | = FABRIC WALL COVERING | PTF | = PORCELAIN TILE, FLOOR | WD | = WOOD DOOR |
| CB | = CEMENT BOARD | GL | = GLASS | PTW | = PORCELAIN TILE, WALL | WP | = WALL PANEL |
| CONC | = CONCRETE | GLT | = GLASS TILE | QTZ | = QUARTZ | | |
| CGP | = CONCRETE, GROUND & POLISHED | GRT | = GROUT | QTF | = QUARRY TILE FLOOR | | |
| CS | = CONCRETE, SEALED | GWB | = GYPSUM WALL BOARD | QTB | = QUARRY TILE BASE | | |
| CSS | = CONCRETE, STAINED & SEALED | LVT | = LUXURY VINYL TILE | RP | = RESIN PANEL | | |
| CT | = CARPET TILE | ML | = METAL LOCKERS | RLT | = RESILIENT TILE, FLOOR | | |
| CT-SD | = CARPET TILE - STATIC DISSIPATIVE | MP | = MOVEABLE PARTITION | RTF | = RUBBER TILE, FLOOR | | |
| CTF | = CERAMIC TILE, FLOOR | MR | = MOISTURE RESISTIVE | RVB | = RESILIENT VINYL BASE | | |
| CTB | = CERAMIC TILE, BASE | MTL | = METAL | RVT | = RESILIENT VINYL THRESHOLD | | |
| CTW | = CERAMIC TILE, WALL | N/A | = NOT APPLICABLE | SD | = STATIC DISSIPATIVE | | |
| DE | = DRY ERASE WALLCOVERING | P | = PAINT | SG | = SEMI-GLOSS | | |
| ESF | = EPOXY SHOP FLOOR | PE | = PAINT, EXTERIOR | STN | = SATIN | | |
| EQF | = EPOXY QUARTZ FLOOR | PG | = PAINT, GENERAL | STS | = STAINLESS STEEL | | |
| EQB | = EPOXY QUARTZ BASE | PL | = PLASTIC LAMINATE | SS | = SOLID SURFACE | | |
| EXP | = EXPOSED | PP | = POLISHED PLASTER | TP | = TOILET PARTITION | | |

NOTE: ALL ABBREVIATIONS ARE NOT SPECIFIC TO THIS JOB.

# ID-4.01-4.10 MILLWORK DETAILS GENERAL NOTES:

1. FIELD VERIFY ALL DIMENSIONS FOR CLEARANCES.
2. PROVIDE WOOD BLOCKING BETWEEN STUDS AT ALL LOCATIONS SCHEDULED TO RECEIVE MILLWORK, AS REQUIRED AT GYPSUM BOARD PARTITONS.
3. REFER TO ARCHITECTURAL PLAN FOR CORRECT PARTITION TYPES.
4. PROVIDE SEALANT JOINT WHERE MILLWORK MEETS PORCELAIN TILE BASE.
5. ALL SEMI-EXPOSED AREAS AT UPPER, BASE CABINETS, AND ADJUSTABLE SHELVING TO RECEIVE PLASTIC LAMINATE.
6. PROVIDE A 3/4" FILLER WHERE UPPER CABINET MEETS FINISHED CEILING.
7. ALL COUNTERS THAT MEET ADJACENT WALLS SHALL BE CLEATED AT EACH END.
8. PROVIDE FILLER PANELS TO FINISH OUT CABINETS TO WALL.
9. PROVIDE FILLER PANELS AND/OR TRIM WHERE EQUIPMENT OR TRANSACTION HARDWARE IS LOCATED WITHIN CABINET.
10. PROVIDE 1-1/2" THICK FINISHED END PANEL, AT FREE STANDING END OF ACCESSIBLE SINKS AND KNEESPACES.
11. PROVIDE END SPLASH WHEN COUNTERTOP IS ADJACENT TO WALL AT SIDES.
12. PROVIDE 2" DIAMETER WIRE ACCESS HOLE IN GROMMETS AT COUNTERTOPS WHERE INDICATED ON INTERIOR MILLWORK ELEVATIONS.

# INTERIOR FINISH LEGEND

| SPEC | MATERIAL | MFR | STYLE | COLOR | COMMENTS |
|---|---|---|---|---|---|
| **03360** | **Sealed Concrete** | | | | |
| CS-1 | | | | Clear Coat | See Specifications |
| **06402** | **Plastic Laminate** | | | | |
| PL-1 | Laminate | Wilsonart | Matte Finish | Mystique Moonlight 4757-60 | Vanity/Countertops |
| PL-2 | Laminate | Wilsonart | Matte Finish | Dove Grey D92-60 | Cabinets - Base and Upper |
| PL-3 | Laminate | Wilsonart | Matte Finish | Dove Grey D92-60 | Restroom Partitions |
| PL-4 | Laminate | Wilsonart | Matte Finish | 10745-60 Fronthill Pear | Add Alternate for Elevator Walls |
| **06402** | **Solid Surface** | | | | |
| SS-1 | Solid Surface | DuPont Corian | Eclipse | | Add Alternate for Vanity/Countertops See Alternate #6 and Keynote #6 |
| **08211** | **Flush Wood Doors** | | | | |
| WD-1 | Interior Wood Doors | Refer to Specs | | | |
| **09300** | **Tile** | | | | |
| PTF-1 | Porcelain Tile, Floor | American Olean | Unglazed Colorbody | 0A52 Buff Granite | 2 x 2 mosaic, installed straight set, 1/8" Grout Joint |
| PTB-1 | Porcelain Tile, Base | American Olean | Unglazed Colorbody | 0A52 Buff Granite Base MT6 | 2 x 2 mosaic, Built up cove base 6" H |
| CTW-1 | Ceramic Tile, Wall | American Olean | Bright & White Series | 0092 Matte Biscuit | 4-1/4 x 4-1/4, installed straight set, 1/16" grout joint |
| QTF-1 | Quarry Tile, Floor | American Olean | Quarry Regular | Q54 Smoked Gray | 6x6 installed strait set, 3/8" grout joint |
| QTB-1 | Quarry Tile, Base | American Olean | Quarry Regular Cove Base | Q3565 Smoked Gray | 6", cove base, 5" high |
| GRT-1 | Grout, Porcelain Tile Floor | Laticrete | SpectraLock Epoxy | 45 Raven | Use for all Floor Tile with PTF-1 |
| GRT-2 | Grout, Ceramic Tile Wall | Laticrete | SpectraLock Epoxy | 03 Silk | Use for all Wall Tile with CTW-1 |
| GRT-3 | Grout, Ceramic Tile Floor | Laticrete | SpectraLock Epoxy | 35 Mocha | Use for all Floor Tile with QTB-1 and QTF-1 |
| **09653** | **Resilient Wall Base** | | | | |
| RVB-1 | Resilient Vinyl Base | Mercer | Recess Wall Base | 502 Brown | 4" high |
| **09680** | **Carpet Tile** | | | | |
| CT-1 | Carpet Tile | Tandus C&A | Crayon 01957 Powerbond | Precious Metal 48010 | 24" x 24" tile. Add Alternate . |
| CT-SD | Carpet Tile, Static Dissipative | StaticWorks | Natural Solids | Montpellier Slate | 24" x 24" |
| **09720** | **Dry Erase Wallcovering** | | | | |
| DE-1 | Dry Erase Wallcovering | Walltalkers | Erase-Rite | White Sand (03) | 60" Roll |
| **09721** | **Acrylic Plastic Wall Panel** | | | | |
| AP-1 | Acrylic Plastic Wall Panel | Construction Specialties | C/S Acrovyn | #162 Charcoal | |
| **09912** | **Painting and Special Coatings** | | | | |
| P-1 | Interior Paint | Sherwin Williams | Satin, U.N.O. | Divine White SW6105 | Interior/Office Color/Ceiling Color |
| P-2 | Interior Paint | Colorwheel | Satin, U.N.O. | Old Washer | Common Wall Area Color |
| P-3 | Interior Paint | Colorwheel | Semi-gloss, U.N.O. | Eclipse CL3257N-4/L33 | Trim/ Interior Metal Doors |
| P-5 | Exterior Paint | TBD | See Architectural Spec | TBD | TBD |
| PS-1 | Epoxy Paint, Special | Sherwin Williams | | Divine White SW6105 | Restrooms Color |
| **09651** | **Vinyl Composition Tile** | | | | |
| LVT-1 | Luxury Vinyl Tile | Burke Flooring | Luxury Vinyl Solid, Concrete & Slate | LVT12-702 Concrete Red Giant | Common Area Flooring, 18" x 18". Add Alternate . |
| LVT-2 | Luxury Vinyl Tile | Burke Flooring | Endura Flecksibles - Standard Profile | 4013SCT-18 Spruce Blue | Kitchen/ Dining Area, 18"x 18". Add Alternate |
| LVT-3 | Luxury Vinyl Tile | Burke Flooring | Endura Flecksibles - Standard Profile | 50255sct-18 - Sockeye Salmon | Kitchen/ Dining Area, 18"x 18". Add Alternate |
| LVT-4 | Luxury Vinyl Tile | Burke Flooring | Endura Flecksibles - Standard Profile | 027 -Agate Gray | Kitchen/ Dining Area, 18"x 18". Add Alternate |

# HARDWARE SCHEDULE

| NO. | PRODUCT | MFR | MODEL | DESCRIPTION | COMMENTS |
|---|---|---|---|---|---|
| HW-1 | Steel Bar Pull | House of Knobs | HOK 32557 | 9.84" Overall Length, 1/2" Diameter, 1-3/8" Projection length, Brushed Nickle Finish | |
| HW-2 | Steel Bar Pull | House of Knobs | HOK 34695 | 7.30" Overall Length, 1/2" Diameter, 1-3/8" Projection length, Brushed Nickle Finish | |
| HW-3 | Two-Way Communicator | C.R. Laurence, Co. | AUTTU3 | 240V AC Standard counter top two-way electronic communicator, satin anodized finish, 6"W x 2-1/2"D x 2-1/2"H | |
| HW-4 | Grommet | Hafele | 429.94.658 | Metal Grommet, Round, for 2-1/2" holes, Brushed Nickel | |

# EQUIPMENT SCHEDULE

| NO. | PRODUCT | LOCATIONS | QTY | MFR | MODEL | DESCRIPTION |
|---|---|---|---|---|---|---|
| EQP-1 | Shelving | Storage 110 | 5 | Global | 60" W x 24"D x 74" H | Nexelon Wire Shelving, starter kit including 4 posts, leveling feet, 4 shelves, and snap-on sleeves to secure shelves to posts. |
| EQP-2 | Shelving | Storage 110 | 3 | Global | 60" W x 18"D x 74" H | Nexelon Wire Shelving, starter kit including 4 posts, leveling feet, 4 shelves, and snap-on sleeves to secure shelves to posts. |
| EQP-3 | Shelving | Storage 119 | 3 | Global | 36" W x 18"D x 74" H | Nexelon Wire Shelving, starter kit including 4 posts, leveling feet, 4 shelves, and snap-on sleeves to secure shelves to posts. |
| EQP-4 | Shelving | Storage 119 | 1 | Global | 48" W x 18"D x 74" H | Nexelon Wire Shelving, starter kit including 4 posts, leveling feet, 4 shelves, and snap-on sleeves to secure shelves to posts. |

# BID ALTERNATES

A. **Alternate # 1**: Provide bid alternate pricing for "Powerbond" carpet tile in lieu of sealed concrete. Refer to floor finish alternate sheets ID1.51A & ID1.52A.

B. **Alternate # 2**: Provide bid alternate pricing for LVT flooring in lieu of sealed concrete. Refer to floor finish alternate sheets ID1.51A & ID1.52A.

C. **Alternate # 3**: Provide bid alternate pricing for painting exposed ceiling in lieu of non painted exposed ceiling. See reflected ceiling plan A-1.51 and A-1.52 for locations and specifications section 09900 for painting requirements.

D. **Alternate # 4**: Provide bid alternate pricing for acoustical ceiling tile, lighting and associated MEP items in lieu of non painted exposed ceiling. See reflected ceiling plan A-1.51 A, A-1.52 A and construction drawings and specifications for locations and specified items.

E. **Alternate # 5**: Provide bid alternate pricing for elevator interior finishes as noted in the specifications section 14240-2.2.G in lieu of no interior cab finishes.

F. **Alternate # 6**: Provide bid alternate pricing for solid surface in lieu of plastic laminate for counter tops in the following rooms: 107, 117, 118, 121, 122, 131, 132, 201, 204, 209, 214, 216 and 218.

G. **Alternate # 7**: Provide bid alternate pricing for resilient wall base in lieu of no base in the following rooms: 120, 123, 127, 134, 135, 228.

H. **Alternate # 8**: Provide proxy card access system for doors noted on the door schedule, Technology drawings and Division 17 specifications.

J. **Alternate # 9**: Provide bid alternate pricing for Joint Info Center, Room # 233 and associated finishes, doors, ceilings, lighting and power and all associated items shown in the Contract Documents.

2

K. **Alternate # 10**: Delete Storm Shutters at exterior window openings, and upgrade window system glazing to GE Polymers-Insulgard glazing system. See Division 8 specifications.

L. **Alternate # 11**: Provide acoustic wall panels at locations shown on the Construction Drawings. See specification Section 09841.

M. **Alternate # 12**: Provide projection screens for rooms noted in the technology drawings and Division 17 specifications.

O. **Alternate # 13**: Provide painting for Mechanical and Electrical rooms in lieu of no painting finish.

P. **Alternate # 14**: Provide permanent secondary impact resistant screening system to meet Impact requirements (Armor Screen).

Q. **Alternate # 15:** Provide card readers and infrastructure for doors noted in the Specifications Section 08710 and sheet A-6.00.

LAKE COUNTY
FLORIDA
**Approved Plans - Commercial**
**LAKE COUNTY BUILDING DIVISION**
Any errors or omission in these plans shall be made to conform with the applicable code requirements per Florida Building Code 105.4.1
Plans reviewed for code compliance and shall be kept on site
Permit # 2011110212
Building: BLD31 12/29/11
Electric: ADM01 12/29/11
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:


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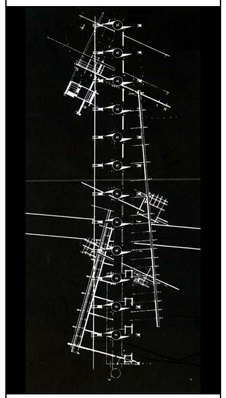

**Lake County Emergency Communications & Operations Center**

Tavares, Florida

**PERMIT CD SUBMITTAL**


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• revisions/addenda

| Number | Description | Date Issued |
|---|---|---|
| 2 | ADDENDUM #2 | 12.22.11 |

• sheet title
INTERIOR FINISH LEGEND

• scale:
• drawn: DT, AH
• checked: SG, SB
• approved: KR, AIA
• date: 11/09/11

• project no. 842-10

• sheet no. ID-6.01

# 1ST FLOOR ROOM FINISH SCHEDULE- BASE BID

| ROOM NO. | ROOM NAME | FLOOR | BASE | WALLS | | | | | | | | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | North | | East | | South | | West | | |
| | | MAT | MAT | MAT | FN | MAT | FN | MAT | FN | MAT | FN | |
| 100 | LOBBY | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 101 | RESTROOM | PTB | PTB | CB | CWT | MR-GWB | PS | MR-GWB | PS | MR-GWB | PS | CB to be behind wall tile typical. MR-GWB for remainder of wall(s). |
| 102 | CORRIDOR | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 103 | BUREAU COMMANDER | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 104 | ASSISTANT COMM. DIRECTOR | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 105 | COMMUNICATION DIRECTOR | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 106 | RECEPTION | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 107 | COPY / SUPPLY | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 108 | EM LIAISON | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 109 | TRAINING COORD. | CS | RVB | GWB | P | GWB | P | GWB | PP | GWB | P | |
| 110 | JT. USE STORAGE | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 111 | EMS DIRECTOR | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 112 | EMS ASSITANT MANAGER | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 113 | CHIEF TRAINING OFFICER | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 114 | QUIET | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 115 | ELEVATOR EQUIPMENT | CS | NONE | GWB | P | GWB | P | GWB | P | GWB | P | |
| 116 | CORRIDOR | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 117 | DINING ROOM | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | Use QTF-1 and QTB-1 under vending machine area along west wall. See ID-1.51. |
| 118 | KITCHEN | QTF | QTB | GWB | PS | GWB | PS | GWB | PS | GWB | PS | Add alternate - Use LVT 2-4 to create a floor pattern in kitchen and dining room. |
| 119 | PANTRY | QTF | QTB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 120 | GARBAGE | CS | NONE | CONC | P | CONC | P | CONC | P | CONC | P | |
| 121 | MENS RESTROOM | PTF | PTB | MR-GWB | PS | MR-GWB | PS | CB | PS | MR-GWB | PS | |
| 122 | WOMENS RESTROOM | PTF | PTB | CB | CTW | MR-GWB | PS | MR-GWB | PS | MR-GWB | PS | |
| 123 | MECHANICAL ROOM | CS | NONE | CONC | NONE | CONC | NONE | CONC | NONE | CONC | NONE | |
| 124 | ELECTRICAL ROOM | CS | NONE | CONC | NONE | CONC | NONE | CONC | NONE | CONC | NONE | |
| 125 | JANITORS CLOSET | CS | PTB | MR-GWB | PS | MR-GWB | PS | MR-GWB | PS | CB | CWT | CB to be behind wall tile. MR-GWB for remainder of wall(s). |
| 126 | 911 EQUIPMENT | CT-SD | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 127 | TELE. / COMM. | CS | NONE | EXPOSED | P | EXPOSED | P | EXPOSED | P | EXPOSED | P | |
| 128 | IT TECH. | CT-SD | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 129 | IT CORD. | CT-SD | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 130 | VOICE / DATA ROOM | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 131 | OPERATION SUPERVISOR #1 | CT-SD | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 132 | OPERATION SUPERVISOR #2 | CT-SD | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 133 | COMM. CENTER | CT-SD | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 134 | STAIRS | CS | NONE | EXPOSED | P | ESPOSED | P | EXPOSED | P | EXPOSED | P | |
| 135 | STAIRS | CS | NONE | EXPOSED | P | EXPOSED | P | EXPOSED | P | EXPOSED | P | |

# 2ND FLOOR ROOM FINISH SCHEDULE - BASE BID

| ROOM NO. | ROOM NAME | FLOOR | BASE | WALLS | | | | | | | | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | North | | East | | South | | West | | |
| | | MAT | MAT | MAT | FN | MAT | FN | MAT | FN | MAT | FN | |
| 201 | CORRIDOR | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 202 | PRESS ROOM | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 203 | CORRIDOR | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 204 | RECEPTION | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 205 | OFFICE -A- | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 206 | OFFICE -B- | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 207 | OFFICE -C- | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 208 | OFFICE -D- | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 209 | FILE ROOM | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 210 | A/V ROOM | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 211 | CLASSROOM | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 212 | JANITORS CLOSET | CS | PTB | CB | CWT | MR-GWB | PS | MR-GWB | PS | MR-GWB | PS | CB to be behind wall tile typical. MR-GWB for remainder of wall(s). |
| 213 | STORAGE | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 214 | WOMENS RR | PTF | PTB | GWB | PS | CB | CTW-1 | GWB | PS | CB | CTW-1 | CB to be behind wall tile typical. MR-GWB for remainder of wall(s). |
| 215 | WOMENS SHOWER / LOCKER | PTF | PTB | GWB | PS | CB | PS | GWB | PS | GWB | PS | Showers to be molded fiberglass |
| 216 | MENS RR | PTF | PTB | GWB | PS | CB | CTW-1 | GWB | PS | CB | CTW-1 | CB to be behind wall tile typical. MR-GWB for remainder of wall(s). |
| 217 | MENS SHOWER / LOCKER | PTF | PTB | GWB | PS | GWB | PS | GWB | PS | CB | PS | Showers to be molded fiberglass |
| 218 | COMMAND CENTER | CT-SD | RVB | GWB | P | GWB | P | GWB | P-1 | GWB | P | |
| 219 | BREAKOUT ROOM #1 | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 220 | BREAKOUT ROOM #2 | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 221 | GIS / TRAFFIC MANAGEMENT | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 222 | ARES / RADIO (DEMARK)ROOM | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 223 | CORRIDOR | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 224 | BREAKOUT ROOM #3 | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 225 | EXECUTIVE POLICY | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 226 | UTILITY ACCESS ROOM | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 227 | COMM / PBX | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 228 | MECHANICAL ROOM | CS | RVB | EXPOSED | NONE | EXPOSED | NONE | EXPOSED | NONE | EXPOSED | NONE | |
| 229 | ELECTRICAL ROOM | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 230 | CITIZENS INFO LINE | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 232 | SECURE STORAGE | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 233 | JOINT INFO CENTER | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 234 | SYSTEMS CHASE | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| | ELEVATOR | NONE | NONE | NONE | NONE | NONE | NONE | NONE | NONE | NONE | NONE | |
| | STAIRS | CS | NONE | CONC | PE | CONC | PE | CONC | PE | CONC | PE | |

# GENERAL NOTES

REFER TO INTERIOR FINISH LEGEND ON SHEET ID-6.01 FOR SPECIFIC FINISH MATERIAL SELECTIONS, COLORS, MANUFACTURERS, SIZES, ETC. REFER TO ARCHITECTURAL INTERIORS INC. FOR ANY ADDITIONAL CLARIFICATION.

# FINISH SCHEDULE KEY NOTES

A. Alternate # 1: Provide bid alternate pricing for "Powerbond" carpet tile in lieu of sealed concrete. Refer to floor finish alternate sheets ID1.51A & ID1.52A.

B. Alternate # 2: Provide bid alternate pricing for LVT flooring in lieu of sealed concrete. Refer to floor finish alternate sheets ID1.51A & ID 1.52A

C. Alternate # 3: Provide bid alternate pricing for painting exposed ceiling in lieu of non painted exposed ceiling. See reflected ceiling plan A-1.51 and A-1.52 for locations and specifications section 09900 for painting requirements.

D. Alternate # 4: Provide bid alternate pricing for acoustical ceiling tile, lighting and associated MEP items in lieu of non painted exposed ceiling. See reflected ceiling planA-1.51 A, A-1.52 A and construction drawings and specifications for locations and specified items.

E. Alternate # 5: Provide bid alternate pricing for elevator interior finishes as noted in the specifications section 14240-2.2.G in lieu of no interior cab finishes.

F. Alternate # 6: Provide bid alternate pricing for solid surface in lieu of plastic laminate for counter tops in the following rooms: 107, 117, 118, 121, 122, 131, 132, 201, 204, 209, 214, 216 and 218.

G. Alternate # 7: Provide bid alternate pricing for resilient wall base in lieu of no base in the following rooms: 120, 123, 127, 134, 135, 228.

H. Alternate # 8: Provide proxy card access system for doors noted on the door schedule, Technology drawings and Division 17 specifications.

I. Alternate # 9: Provide bid alternate pricing for Joint Info Center, Room # 233 and associated finishes, doors, ceilings, lighting and power and all associated items shown in the Contract Documents.

J. Alternate # 10: Delete Storm Shutters at exterior window openings, and upgrade window system glazing to GE Polymers-Insulgard glazing system See Construction Document Plans, dated August 1, 2011, and Division 8 specifications.

K. Alternate # 11: Provide acoustic wall panels at locations shown on the Construction Drawings, dated August 1, 2011 and Section 09841 specifications.

L. Alternate # 12: Provide projection screens for rooms noted in the technology drawings and Division 17 specifications.

M. Alternate # 13: Provide painting for Mechanical and Electrical rooms in lieu of no painting finish.

N. Alternate # 14: Provide permanent secondary impact resistant screening system to meet Impact requirements (Armor Screen).

LAKE COUNTY
FLORIDA
**Approved Plans - Commercial**
**LAKE COUNTY BUILDING DIVISION**
Any errors or omission in these plans shall be made to conform with the applicable code requirements per Florida Building Code 105.4.1
Plans reviewed for code compliance and shall be kept on site
Permit # 20111110212
Building: BLD31 12/29/11
Electric: ADM01 12/29/11
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:


Architects Design Group

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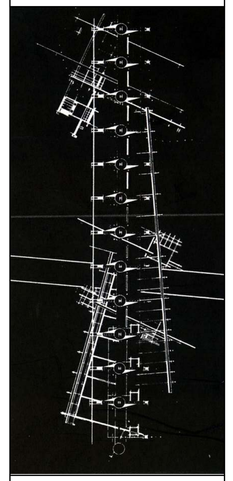

**Lake County Emergency Communications & Operations Center**

Tavares, Florida

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- revisions

- sheet title
ROOM FINISH SCHEDULE

- scale:
- drawn: DT, AH
- checked: SG, SB
- approved: KR, AIA
- date: 11/09/11

- project no. 842-10

- sheet no. ID-6.02

# 1ST FLOOR ROOM FINISH SCHEDULE- BASE BID

| ROOM NO. | ROOM NAME | FLOOR | BASE | WALLS North | | East | | South | | West | | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MAT | MAT | MAT | FN | MAT | FN | MAT | FN | MAT | FN | |
| 100 | LOBBY | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 101 | RESTROOM | PTB | PTB | CB | CWT | MR-GWB | PS | MR-GWB | PS | MR-GWB | PS | CB to be behind wall tile typical. MR-GWB for remainder of wall(s). |
| 102 | CORRIDOR | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 103 | BUREAU COMMANDER | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 104 | ASSISTANT COMM. DIRECTOR | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 105 | COMMUNICATION DIRECTOR | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 106 | RECEPTION | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 107 | COPY / SUPPLY | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 108 | EM LIAISON | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 109 | TRAINING COORD. | CS | RVB | GWB | P | GWB | P | GWB | PP | GWB | P | |
| 110 | JT. USE STORAGE | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 111 | EMS DIRECTOR | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 112 | EMS ASSITANT MANAGER | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 113 | CHIEF TRAINING OFFICER | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 114 | QUIET | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 115 | ELEVATOR EQUIPMENT | CS | NONE | GWB | P | GWB | P | GWB | P | GWB | P | |
| 116 | CORRIDOR | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 117 | DINING ROOM | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | Use QTF-1 and QTB-1 under vending machine area along west wall. See ID-1.51. |
| 118 | KITCHEN | QTF | QTB | GWB | PS | GWB | PS | GWB | PS | GWB | PS | Add alternate - Use LVT 2-4 to create a floor pattern in kitchen and dining room. |
| 119 | PANTRY | QTF | QTB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 120 | GARBAGE | CS | NONE | CONC | P | CONC | P | CONC | P | CONC | P | |
| 121 | MENS RESTROOM | PTF | PTB | MR-GWB | PS | MR-GWB | PS | CB | PS | MR-GWB | PS | |
| 122 | WOMENS RESTROOM | PTF | PTB | CB | CTW | MR-GWB | PS | MR-GWB | PS | MR-GWB | PS | |
| 123 | MECHANICAL ROOM | CS | NONE | CONC | NONE | CONC | NONE | CONC | NONE | CONC | NONE | |
| 124 | ELECTRICAL ROOM | CS | NONE | CONC | NONE | CONC | NONE | CONC | NONE | CONC | NONE | |
| 125 | JANITORS CLOSET | CS | PTB | MR-GWB | PS | MR-GWB | PS | MR-GWB | PS | CB | CWT | CB to be behind wall tile. MR-GWB for remainder of wall(s). |
| 126 | 911 EQUIPMENT | CT-SD | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 127 | TELE. / COMM. | CS | NONE | EXPOSED | P | EXPOSED | P | EXPOSED | P | EXPOSED | P | |
| 128 | IT TECH. | CT-SD | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 129 | IT CORD. | CT-SD | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 130 | VOICE / DATA ROOM | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 131 | OPERATION SUPERVISOR #1 | CT-SD | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 132 | OPERATION SUPERVISOR #2 | CT-SD | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 133 | COMM. CENTER | CT-SD | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 134 | STAIRS | CS | NONE | EXPOSED | P | ESPOSED | P | EXPOSED | P | EXPOSED | P | |
| 135 | STAIRS | CS | NONE | EXPOSED | P | EXPOSED | P | EXPOSED | P | EXPOSED | P | |

# 2ND FLOOR ROOM FINISH SCHEDULE - BASE BID

| ROOM NO. | ROOM NAME | FLOOR | BASE | WALLS North | | East | | South | | West | | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MAT | MAT | MAT | FN | MAT | FN | MAT | FN | MAT | FN | |
| 201 | CORRIDOR | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 202 | PRESS ROOM | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 203 | CORRIDOR | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 204 | RECEPTION | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 205 | OFFICE -A- | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 206 | OFFICE -B- | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 207 | OFFICE -C- | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 208 | OFFICE -D- | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 209 | FILE ROOM | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 210 | A/V ROOM | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 211 | CLASSROOM | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 212 | JANITORS CLOSET | CS | PTB | CB | CWT | MR-GWB | PS | MR-GWB | PS | MR-GWB | PS | CB to be behind wall tile typical. MR-GWB for remainder of wall(s). |
| 213 | STORAGE | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 214 | WOMENS RR | PTF | PTB | GWB | PS | CB | CTW-1 | GWB | PS | CB | CTW-1 | CB to be behind wall tile typical. MR-GWB for remainder of wall(s). |
| 215 | WOMENS SHOWER / LOCKER | PTF | PTB | GWB | PS | CB | PS | GWB | PS | GWB | PS | Showers to be molded fiberglass |
| 216 | MENS RR | PTF | PTB | GWB | PS | CB | CTW-1 | GWB | PS | CB | CTW-1 | CB to be behind wall tile typical. MR-GWB for remainder of wall(s). |
| 217 | MENS SHOWER / LOCKER | PTF | PTB | GWB | PS | GWB | PS | GWB | PS | CB | PS | Showers to be molded fiberglass |
| 218 | COMMAND CENTER | CT-SD | RVB | GWB | P | GWB | P | GWB | P-1 | GWB | P | |
| 219 | BREAKOUT ROOM #1 | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 220 | BREAKOUT ROOM #2 | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 221 | GIS / TRAFFIC MANAGEMENT | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 222 | ARES / RADIO (DEMARK)ROOM | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 223 | CORRIDOR | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 224 | BREAKOUT ROOM #3 | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 225 | EXECUTIVE POLICY | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 226 | UTILITY ACCESS ROOM | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 227 | COMM / PBX | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 228 | MECHANICAL ROOM | CS | RVB | EXPOSED | NONE | EXPOSED | NONE | EXPOSED | NONE | EXPOSED | NONE | |
| 229 | ELECTRICAL ROOM | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 230 | CITIZENS INFO LINE | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 232 | SECURE STORAGE | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 233 | JOINT INFO CENTER | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| 234 | SYSTEMS CHASE | CS | RVB | GWB | P | GWB | P | GWB | P | GWB | P | |
| | ELEVATOR | NONE | NONE | NONE | NONE | NONE | NONE | NONE | NONE | NONE | NONE | |
| | STAIRS | CS | NONE | CONC | PE | CONC | PE | CONC | PE | CONC | PE | |

# GENERAL NOTES

REFER TO INTERIOR FINISH LEGEND ON SHEET ID-6.01 FOR SPECIFIC FINISH MATERIAL SELECTIONS, COLORS, MANUFACTURERS, SIZES, ETC. REFER TO ARCHITECTURAL INTERIORS INC. FOR ANY ADDITIONAL CLARIFICATION.

FOR FLAME SPREAD RATING FOR ACOUSTICAL CEILING SYSTEMS, REFER TO SPECIFICATION SECTION 09510.
FOR FLAME SPREAD RATING FOR DRY WALL, REFER TO SPECIFICATION SECTION 09250.
FOR FLAME SPREAD RATING FOR CARPET, REFER TO SPECIFICATION SECTION 09680.
FOR FLAME SPREAD RATING FOR CERAMIC TILE, REFER TO SPECIFICATION SECTION 09310.
FOR FLAME SPREAD RATING FOR PAINTING & SPECIAL COATING, REFER TO SPECIFICATION SECTION 09900.
FOR FLAME SPREAD RATING FOR RESILIENT FLOORING, REFER TO SPECIFICATION SECTION 09650.

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# FINISH SCHEDULE KEY NOTES

A. **Alternate # 1**: Provide bid alternate pricing for "Powerbond" carpet tile in lieu of sealed concrete. Refer to floor finish alternate sheets ID1.51A & ID1.52A.

B. **Alternate # 2**: Provide bid alternate pricing for LVT flooring in lieu of sealed concrete. Refer to floor finish alternate sheets ID1.51A & ID1.52A.

C. **Alternate # 3**: Provide bid alternate pricing for painting exposed ceiling in lieu of non painted exposed ceiling. See reflected ceiling plan A-1.51 and A-1.52 for locations and specifications section 09900 for painting requirements.

D. **Alternate # 4**: Provide bid alternate pricing for acoustical ceiling tile, lighting and associated MEP items in lieu of non painted exposed ceiling. See reflected ceiling plan A-1.51 A, A-1.52 A and construction drawings and specifications for locations and specified items.

E. **Alternate # 5**: Provide bid alternate pricing for elevator interior finishes as noted in the specifications section 14240-2.2.G in lieu of no interior cab finishes.

F. **Alternate # 6**: Provide bid alternate pricing for solid surface in lieu of plastic laminate for counter tops in the following rooms: 107, 117, 118, 121, 122, 131, 132, 201, 204, 209, 214, 216 and 218.

G. **Alternate # 7**: Provide bid alternate pricing for resilient wall base in lieu of no base in the following rooms: 120, 123, 127, 134, 135, 228.

H. **Alternate # 8**: Provide proxy card access system for doors noted on the door schedule, Technology drawings and Division 17 specifications.

J. **Alternate # 9**: Provide bid alternate pricing for Joint Info Center, Room # 233 and associated finishes, doors, ceilings, lighting and power and all associated items shown in the Contract Documents.

K. **Alternate # 10**: Delete Storm Shutters at exterior window openings, and upgrade window system glazing to GE Polymers-Insulgard glazing system. See Division 8 specifications.

L. **Alternate # 11**: Provide acoustic wall panels at locations shown on the Construction Drawings. See specification Section 09841.

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M. **Alternate # 12**: Provide projection screens for rooms noted in the technology drawings and Division 17 specifications.

O. **Alternate # 13**: Provide painting for Mechanical and Electrical rooms in lieu of no painting finish.

P. **Alternate # 14**: Provide permanent secondary impact resistant screening system to meet Impact requirements (Armor Screen).

Q. **Alternate # 15:** Provide card readers and infrastructure for doors noted in the Specifications Section 08710 and sheet A-6.00.

LAKE COUNTY
FLORIDA
**Approved Plans - Commercial**
**LAKE COUNTY BUILDING DIVISION**
Any errors or omission in these plans shall be made to conform with the applicable code requirements per Florida Building Code 105.4.1
Plans reviewed for code compliance and shall be kept on site
Permit # 2011110212
Building: BLD31 12/29/11
Electric: ADM01 12/29/11
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:


Architects Design Group

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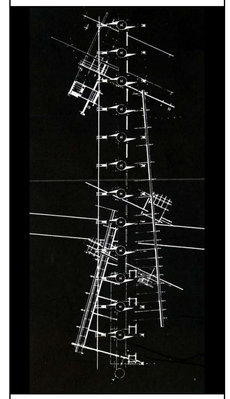

**Lake County Emergency Communications & Operations Center**

Tavares, Florida

**PERMIT CD SUBMITTAL**


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revisions/addenda

| Number | Description | Date Issued |
|---|---|---|
| 2 | ADDENDUM #2 | 12.22.11 |

sheet title
ROOM FINISH SCHEDULE

scale:
drawn: DT, AH
checked: SG, SB
approved: KR, AIA
date: 11/09/11

project no. 842-10

sheet no. ID-6.02

# MECHANICAL SYMBOL LEGEND

## AIR DISTRIBUTION

- SUPPLY AIR CEILING DIFFUSER (FOUR WAY THROW UNLESS FLOW ARROWS INDICATE OTHERWISE)
- RETURN OR TRANSFER AIR REGISTER
- EXHAUST AIR GRILLE
- LINEAR SLOT DIFFUSER (RETURN OR SUPPLY)
- ROUND DIFFUSER
- CEILING RADIATION DAMPER
- AIR DISTRIBUTION DEVICE (REFER TO SCHEDULE FOR LETTER DESIGNATION) / AIR QUANTITY (CFM) — A / 100
- SIDEWALL REGISTER (W/ VOLUME DAMPER)
- SIDEWALL GRILLE — 24"x12"

| DOUBLE LINE | | SINGLE LINE |
|---|---|---|
| | GRAPHICAL REPRESENTATION FROM DOUBLE LINED DUCTWORK TO SINGLE LINE DUCTWORK | |
| A x B | MIN. INSIDE DUCT SIZE–SQUARE OR RECT. (A = HORIZONTAL, B = VERTICAL) | A x B |
| A"ø | MIN. INSIDE DUCT SIZE–ROUND (A = DIAMETER) | A"ø |
| A x B | MIN. INSIDE DUCT SIZE–FLAT OVAL (A = HORIZONTAL, B = VERTICAL) | A x B |
| R | DUCT RISE | R |
| D | DUCT DROP | D |
| | DIRECTION OF AIRFLOW | |
| | DOUBLE WALL WITH INTERIOR INSULATION | |
| | CONCENTRIC DUCT REDUCER | |
| | ECCENTRIC DUCT REDUCER | |
| | SPIN–IN FITTING W/ DAMPER (SIDE TAPPING) | |
| | SPIN–IN FITTING W/OUT DAMPER (SIDE TAPPING) | |
| | SPIN–IN FITTING W/DAMPER (TOP TAPPING) | |
| | 90° ELBOW WITH TURNING VANES | |
| | 45° ELBOW WITH TURNING VANES | |
| | RADIUS 90° ELBOW | |
| | RADIUS 45° ELBOW | |
| | SUPPLY AIR DUCT UP | |
| | SUPPLY AIR DUCT DOWN | |
| | RETURN OR TRANSFER AIR DUCT UP | |
| | RETURN OR TRANSFER AIR DUCT DOWN | |
| | EXHAUST AIR DUCT UP | |
| | EXHAUST AIR DUCT DOWN | |
| | RIGID ROUND DUCT UP | |
| | RIGID ROUND DUCT DOWN | |
| | FLEXIBLE DUCTWORK | |
| | EXISTING DUCTWORK | |
| | EXISTING DUCTWORK TO BE REMOVED | |
| AP or CO | ACCESS PANEL/CLEAN OUT | AP or CO |

| DOUBLE LINE | | SINGLE LINE |
|---|---|---|
| | MANUAL VOLUME DAMPER | |
| FD | FIRE DAMPER | FD |
| FS | FIRE/SMOKE DAMPER | FS |
| S | SMOKE DAMPER | S |
| BDD | BACKDRAFT DAMPER | BDD |
| S | SMOKE DETECTOR | S |
| | HEAT DETECTOR | |
| M | MOTORIZED DAMPER | M |
| SP | STATIC PRESSURE SENSOR | SP |
| CO2 | CARBON DIOXIDE SENSOR | CO2 |
| B | BAROMETRIC DAMPER | B |
| DPS | DIFFERENTIAL PRESSURE SAFETY SHUT DOWN RELAY | DPS |
| H | DUCT MOUNTED HUMIDISTAT | H |
| T | DUCT MOUNTED TEMPERATURE SENSOR | T |
| AF | AIRFLOW PROOF SWITCH | AF |

- T — WALL MOUNTED THERMOSTAT or TEMPERATURE SENSOR W/CONTROL WIRING
- R — WALL MOUNTED OVERRIDE SWITCH
- H — WALL MOUNTED HUMIDISTAT
- M — WALL MOUNTED MOTION SENSOR
- CO2 — WALL MOUNTED CARBON DIOXIDE SENSOR
- EF–x — CEILING CABINET EXHAUST FAN
- EF–x — ROOFTOP EXHAUST FAN – FLOOR PLAN VIEW
- EF–x — ROOFTOP EXHAUST FAN – ROOF PLAN VIEW
- EF–x — INLINE CENTRIFUGAL EXHAUST OR SUPPLY FAN
- VAV–x — VARIABLE AIR VOLUME UNIT (COOLING ONLY)
- VAV–x — VARIABLE AIR VOLUME UNIT WITH ELECTRIC HEAT
- SEPU–x — SERIES FAN–POWERED VAV TERMINAL UNIT WITH ELECTRIC HEAT
- PEPU–x — PARALLEL FAN–POWERED VAV TERMINAL UNIT WITH ELECTRIC HEAT
- L–x — EXTERIOR WALL LOUVER
- CP — CONTROL PANEL
- MS — MOTOR STARTER
- VFD — VARIABLE FREQUENCY DRIVE
- UC — DOOR UNDERCUT (MINIMUM 1")
- LD — DOOR LOUVER
- A / M4.01 — SECTION LETTER OR NUMBER / SECTION SHEET NUMBER
- 1 — DRAWING HEX NOTE
- POINT OF REMOVAL FOR EXISTING EQUIPMENT
- POINT OF CONNECTION BETWEEN EXISTING AND NEW
- REVISION DELTA AND NUMBER

## MECHANICAL PIPING

- CD — CONDENSATE DRAIN
- R — REFRIGERANT PIPING
- CHS — CHILLED WATER SUPPLY
- CHR — CHILLED WATER RETURN
- HWS — HOT WATER SUPPLY
- HWR — HOT WATER RETURN
- CWS — CONDENSER WATER SUPPLY
- CWR — CONDENSER WATER RETURN
- BALL VALVE
- BUTTERFLY VALVE
- CHECK VALVE
- GATE VALVE
- GLOBE VALVE
- PLUG VALVE
- BALANCING VALVE
- TWO–WAY CONTROL VALVE, MODULATING ACTUATOR
- TWO–WAY CONTROL VALVE, TWO POSITION ACTUATOR
- THREE–WAY CONTROL VALVE, MODULATING ACTUATOR
- THREE–WAY CONTROL VALVE, TWO POSITION ACTUATOR
- PRESSURE REDUCING VALVE
- RELIEF VALVE
- ANGLE VALVE
- PIPE STRAINER
- AV — PIPE STRAINER W/ BLOW OFF
- AV — AUTOMATIC AIR VENT
- MAV — MANUAL AIR VENT
- FS — FLOW SWITCH
- DPS — DIFFERENTIAL PRESSURE SWITCH
- AQUASTAT
- AIR SEPARATOR
- ORIFICE FLOW METER
- BM — B.A.S. FLOW METER/MONITOR
- VENTURI FLOW METER
- PIPE EXPANSION JOINT
- PIPE FLEXIBLE CONNECTION
- PIPE ANCHOR
- PIPE SUPPORT
- PIPE CAP
- PIPE EXPANSION LOOP
- PRESSURE GAGE W/COCK IN PIPE
- T — HYDRONIC TEMPERATURE SENSOR
- THERMOMETER IN PIPE
- P — PUMP (ARROW INDICATES FLOW)
- UNION
- CONDENSATE DRYWELL
- PIPING TURNED DOWN (PLAN VIEW)
- PIPING TURNED UP (PLAN VIEW)
- PIPING TEE (TAP OFF OF TOP)
- PIPING TEE (TAP OFF OF BOTTOM)
- PIPING ELL
- PIPING TEE
- PIPING CLEANOUT

# MECHANICAL GENERAL NOTES

1. ALL MECHANICAL WORK SHALL BE GOVERNED AND INSTALLED IN COMPLIANCE WITH THE LATEST EDITION AND APPLICABLE PROVISIONS OF THE FOLLOWING CODES AND STANDARDS:
   A. FLORIDA BUILDING CODE – 2007 WITH THE 2009 SUPPLEMENTS.
   B. FLORIDA MECHANICAL CODE – 2007 WITH THE 2009 SUPPLEMENTS.
   C. FLORIDA PLUMBING CODE – 2007 WITH THE 2009 SUPPLEMENTS.
   D. FLORIDA ENERGY EFFICIENCY CODE – 2007 WITH THE 2009 SUPPLEMENTS.
   E. FLORIDA FIRE PREVENTION CODE – 2007 WITH THE 2009 SUPPLEMENTS.
   F. FLORIDA FUEL GAS CODE – 2007 WITH THE 2009 SUPPLEMENTS.
   G. FLORIDA EXISTING BUILDING CODE – 2007 WITH THE 2009 SUPPLEMENTS.
   H. NATIONAL ELECTRICAL CODE (NEC) – 2008
   I. NFPA 90A – INSTALLATION OF AIR CONDITIONING & VENTILATING SYSTEMS
   J. NFPA 101 – LIFE SAFETY CODE
   K. ASHRAE STANDARDS (INCLUDING 15, 55, 62.1, 90.1 & 129)
   L. ANSI
   M. SMACNA DUCTWORK STANDARDS
   N. AMERICANS WITH DISABILITIES ACT (ADA)
   O. ALL OTHER APPLICABLE FEDERAL, COUNTY AND CITY CODES REQUIRED BY LOCAL JURISDICTIONS.

2. SUPPLY AND RETURN AIR DUCTWORK:
   A. ALL ROUND AND OVAL EXPOSED AND CONCEALED SUPPLY AIR DUCTWORK UPSTREAM OF PFPU'S AND VAV'S SHALL BE MEDIUM VELOCITY, INTERNALLY LINED, DOUBLE WALL, GALVANIZED SPIRAL METAL DUCT. THE INNER METAL LINER SHALL BE PERFORATED FOR ACOUSTICAL VALUE. THIS DUCTWORK SHALL BE RATED FOR A MINIMUM 6" STATIC PRESSURE AND INSTALLED PER SMACNA. "ACOUSTI–K27" DUCT AS MANUFACTURED BY UNITED MCGILL. THE INSULATION BETWEEN THE INTERIOR AND EXTERIOR GALVANIZED METAL WALLS SHALL HAVE A MINIMUM R–8.0 INSULATION VALUE. PROVIDE WITH PAINT GRIP FINISH WHERE EXPOSED. ALL JOINTS AND SEAMS SHALL BE SEALED WITH HIGH PRESSURE DUCT SEALANT.
   B. ALL RECTANGULAR EXPOSED AND CONCEALED RETURN AIR DUCTWORK, SHALL BE MEDIUM VELOCITY, DOUBLE WALL GALVANIZED METAL DUCT, WITH INNER METAL LINE PERFORATED FOR ACOUSTICAL VALUE. THIS DUCTWORK SHALL BE RATED FOR A MINIMUM OF 2" STATIC PRESSURE AND INSTALLED PER SMACNA. INSULATION SHALL HAVE MINIMUM R–8.0 VALUE, WITH AN ANTI–MICROBIAL 'EPA' APPROVED COATING MEETING UL 181. SEAL ALL DUCTWORK JOINTS AND SEAMS WITH MEDIUM VELOCITY DUCT SEALANT.
   C. ALL RECTANGULAR EXPOSED AND CONCEALED SUPPLY AIR DUCTWORK DOWNSTREAM OF PFPU'S AND VAV'S AND ALL OTHER CONSTANT VOLUME AIR HANDLING UNITS SHALL BE LOW VELOCITY, DOUBLE WALL GALVANIZED METAL DUCT, WITH INNER METAL LINE PERFORATED FOR ACOUSTICAL VALUE. THIS DUCTWORK SHALL BE RATED FOR A MINIMUM OF 2" STATIC PRESSURE AND INSTALLED PER SMACNA. INSULATION SHALL HAVE MINIMUM R–8 VALUE, WITH AN ANTI–MICROBIAL 'EPA' APPROVED COATING MEETING UL 181. SEAL ALL DUCTWORK JOINTS AND SEAMS WITH MEDIUM VELOCITY DUCT SEALANT.
   D. TRANSFER AIR DUCTWORK SHALL BE INTERNALLY LINED WITH 2" THICK INSULATION MEETING UL 181 W/ ANTI–MICROBIAL 'EPA' APPROVED COATING IN ACCORDANCE WITH SMACNA STANDARDS.

3. UNLESS OTHERWISE NOTED ALL EXHAUST DUCTWORK SHALL BE UN–INSULATED RIGID GALVANIZED SHEET–METAL DUCT. SEAL ALL JOINTS AND SEAMS WITH MEDIUM PRESSURE DUCT SEALANT.

4. OUTSIDE AIR DUCTWORK SHALL BE GALVANIZED SHEET METAL, EXTERNALLY INSULATED WITH 2" THICK, 0.75 LB. DENSITY DUCT WRAP. SEAL ALL DUCTWORK JOINTS AND SEAMS WITH MEDIUM VELOCITY DUCT SEALANT AND SEAL ALL INSULATION JOINTS AND SEAMS WITH FAB AND MASTIC, FOIL TAPE IS NOT ACCEPTABLE.

5. ALL DUCTWORK SHALL BE FABRICATED, CONSTRUCTED, SUPPORTED AND INSULATED IN STRICT COMPLIANCE WITH SMACNA STANDARDS AND THE FLORIDA ENERGY EFFICIENCY CODE.

6. PROVIDE A "N.E.B.B." OR "A.A.B.C." CERTIFIED TEST AND BALANCE CONTRACTOR TO PROVIDE A COMPLETE T&B REPORT FOR ALL HYDRONIC AND AIR DISTRIBUTION SYSTEMS AND ALL MECHANICAL EQUIPMENT. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

7. CHECK/VERIFY CLEARANCES BEFORE ORDERING MATERIALS DUE TO LIMITED SPACE AVAILABILITY. IF THE INDICATED DUCTWORK SIZES ARE UNABLE TO FIT IN THE SPACE, PROVIDE EQUIVALENT DUCT SIZES WITH ALL REQUIRED OFFSETS, TRANSITIONS, ETC., AT NO ADDITIONAL COST TO OWNER.

8. CONTRACTOR SHALL FULLY COORDINATE LOCATION OF CEILING ACCESS PANELS AND LOCATIONS FOR ALL MECHANICAL EQUIPMENT, FIRE DAMPERS, SMOKE DAMPERS, DUCT ACCESS DOORS, ETC., REQUIRING SERVICE ACCESS AND/OR INSPECTION ABOVE ALL CEILINGS AND IN ALL CHASES OR PARTITIONS WITH THE GENERAL CONTRACTOR.

9. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, LICENSES, DOCUMENTS AND SERVICES RELATED TO INSTALLATION OF THE WORK.

10. ALL WORK SHALL BE LOCATED TO AVOID CONFLICTS WITH OTHER TRADES. PROVIDE ADEQUATE CLEARANCE FOR ARCHITECTURAL DESIGN, PROPER OPERATION AND SERVICE OF ALL MECHANICAL EQUIPMENT.

11. DRAWINGS ARE GENERALLY DIAGRAMMATIC AND DO NOT NECESSARILY SHOW EVERY FITTING AND DETAIL. INSTALL DUCTWORK, EQUIPMENT AND CONTROLS IN A NEAT, WORKMANLIKE MANNER AND IN ACCORDANCE WITH GOOD PRACTICE FOR A COMPLETE, WORKABLE INSTALLATION. AVOID CONFLICTS WITH OTHER TRADE'S WORK. MAKE ADEQUATE PROVISIONS FOR PREVENTING NOISE AND VIBRATION.

12. MATERIALS AND WORKMANSHIP SHALL BE GUARANTEED AGAINST DEFECTS FOR ONE YEAR. PROVIDE A FIVE YEAR WARRANTY ON ALL COMPRESSORS.

13. COORDINATE VOLTAGE AND PHASE OF EACH PIECE OF EQUIPMENT WITH ELECTRICAL CONTRACTOR BEFORE ORDERING. CLEARLY IDENTIFY AND FLAG ANY DISCREPANCIES ON SUBMITTALS.

14. CONTRACTOR SHALL PROVIDE A COMPLETE SET OF AS–BUILT DRAWINGS CLEARLY INDICATING LOCATION OF DUCTWORK AND EQUIPMENT, INCLUDING DIMENSIONS, ARRANGEMENT, RATING AND CAPACITIES OF ALL MECHANICAL EQUIPMENT.

15. ALL DUCT BENDS FROM THE VERTICAL TO THE HORIZONTAL AND ANGLED TURNS OF DUCTWORK SHALL HAVE TURNING VANES INSTALLED.

16. EXTRACTORS OR SPIN–IN FITTINGS WITH VOLUME DAMPERS SHALL BE INSTALLED IN ALL BRANCH DUCTWORK LEADING FROM MAIN TRUNK LINES. PROVIDE DAMPER ACTUATORS OR ACCESS PANELS FOR VOLUME DAMPERS ABOVE CONCEALED CEILINGS.

17. DUCT SIZES SHOWN ARE MINIMUM INSIDE DIMENSIONS.

18. OFFSETS IN DUCTS, INCLUDING DIVIDED DUCTS, AND TRANSITIONS AROUND OBSTRUCTIONS SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.

19. CONTRACTOR SHALL INCLUDE IN THE BID THE NECESSARY PROGRAMMING, WIRING AND PROCEDURES FOR THE GRAPHICS AND COMMUNICATIONS AND ALL WORK AND MATERIALS REQUIRED TO INTERFACE ALL MECHANICAL EQUIPMENT FOR A COMPLETE AND FULLY OPERATIONAL TEMPERATURE AND BUILDING AUTOMATED CONTROL SYSTEM WHICH SHALL BE FURNISHED AND INSTALLED UNDER DIVISION 15 – MECHANICAL OF THESE CONTRACT DOCUMENTS. PROVIDE A COMPLETE CONTROL SYSTEM WIRING SCHEMATIC, POINT TO POINT DIAGRAM AND SEQUENCE OF OPERATIONS. ALL WIRING SHALL BE PLENUM RATED. ALL CONTROL VOLTAGE WIRING IN EXPOSED AREAS SHALL BE IN CONDUIT. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

20. INSTALL ALL SPACE THERMOSTATS, HUMIDISTAT AND TEMPERATURE SENSORS AT 48" A.F.F.

21. COORDINATE DIFFUSER AND REGISTER LOCATIONS WITH SPRINKLER HEAD AND LIGHTING LAYOUT AND LOCATE PER ARCHITECTURAL REFLECTED CEILING PLANS.

22. REVIEW DRAWINGS AND PROVIDE ALL WORK FOR A COMPLETE AND OPERABLE SYSTEM, INCLUDING ALL INCIDENTALS REQUIRED BY CODE AGENCIES AND LOCAL GOVERNING BODIES. ANY DISCREPANCY NOT BROUGHT TO THE ATTENTION OF THE ARCHITECT IN WRITING PRIOR TO THE BID SHALL BE CONSIDERED CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE ARCHITECT AND AS THE ARCHITECT DIRECTS.

23. LOCATE AND ARRANGE EQUIPMENT INTO THE AVAILABLE SPACE IN A MANNER TO ALLOW FOR ALL WORKING PARTS TO BE ACCESSIBLE FOR MAINTENANCE AND SERVICE.

24. ALL CHILLED AND HOT WATER PIPING ABOVE GRADE SHALL BE GRADE B, SCHEDULE 40, ASTM A53 TYPE E. ALL CHILLED WATER PIPING BELOW GRADE SHALL BE PRE–INSULATED GRADE B, SCHEDULE 40, ASTM A53 TYPE E WITH 1–1/2" THICK FOAM INSULATION AND PVC SCHEDULE 40 OUTER JACKET. COPPER PIPING IS ACCEPTABLE FOR PIPE SIZES 2" INCHES AND SMALLER.

25. FURNISH TO THE OWNER, FOUR COPIES OF OPERATING INSTRUCTIONS, MANUFACTURER'S PARTS DATA AND SERVICE INSTRUCTIONS.

26. ALL DUCTWORK, PIPING AND MECHANICAL EQUIPMENT ABOVE CEILING SHALL BE INSTALLED AS HIGH AS POSSIBLE.

27. PROVIDE THE NECESSARY REQUIRED NUMBER OF SUBMITTALS FOR ALL MECHANICAL EQUIPMENT, DUCTWORK, AIR DISTRIBUTION AND MATERIALS REQUIRED PER THESE PLANS AND SPECIFICATIONS.

28. PROVIDE AND INSTALL INSULATED HINGED ACCESS PANELS FOR ALL FIRE DAMPERS. ACCESS PANELS SHALL BE 'RUSKIN' MODEL ADCW AND ADHW TYPE.

29. PROVIDE U.L. LISTED FIRE DAMPERS IN ALL PENETRATIONS OF FIRE RATED ASSEMBLIES. INSTALL ALL FIRE DAMPERS IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS AND THE U.L. LISTING REQUIREMENTS.

30. FIRE DAMPERS – 1–1/2 HOUR RATED:
   A. A. UL LABELED FIRE DAMPERS SHALL BE CLASSIFIED "FOR USE IN DYNAMIC SYSTEMS".
   B. FURNISH AND INSTALL, AT LOCATIONS SHOWN ON PLANS (SEE ARCHITECTURAL PLANS FOR LOCATION OF FIRE RATED PARTITIONS) OR AS REQUIRED BY GOVERNING CODES, FIRE DAMPERS CONSTRUCTED AND TESTED IN ACCORDANCE WITH UL SAFETY STANDARD 555.
   C. UL LABELED FIRE DAMPERS SHALL BE CLASSIFIED "FOR USE IN DYNAMIC SYSTEMS".
   D. EACH FIRE DAMPER SHALL HAVE A 1–1/2 HOUR FIRE PROTECTION RATING (SUITABLE FOR INSTALLATION IN 3 HOUR RATED ASSEMBLIES AND LESS), 165° MIN. FUSIBLE LINK AND SHALL INCLUDE THE UL LABEL.
   E. FIRE DAMPERS SHALL BE EQUIPPED FOR VERTICAL OR HORIZONTAL INSTALLATION AS REQUIRED BY THE LOCATION INDICATED. DAMPERS SHALL BE GRAVITY OPERATED FOR VERTICAL INSTALLATIONS, BY CLOSURE SPRINGS AND LATCHES FOR HORIZONTAL INSTALLATIONS.
   F. DAMPERS IN RETURN AIR OPENINGS OR BEHIND GRILLES OR REGISTERS SHALL BE 'TYPE A'. DAMPERS IN LOW PRESSURE DUCTWORK SHALL BE 'TYPE B'. DAMPERS IN MEDIUM OR HIGH PRESSURE SHALL BE 'TYPE C'.
   G. ACCEPTABLE MANUFACTURERS ARE:
   - RUSKIN – MODEL IBD 20, 40, 60, 230, 430, 630, OR APPROVED EQUAL.

   H. FIRE DAMPERS SHALL BE INSTALLED UTILIZING STEEL SLEEVES, ANGLES, OTHER MATERIALS, AND PRACTICES REQUIRED TO PROVIDE AN INSTALLATION EQUIVALENT TO THAT UTILIZED BY THE MANUFACTURER WHEN DAMPERS WERE TESTED AT UL. INSTALLATION SHALL BE IN ACCORDANCE WITH THE DAMPER MANUFACTURER'S INSTRUCTIONS.
   I. ADEQUATELY PROVIDE DAMPER LOCATION ACCESS AFTER DAMPER INSTALLATION.
   J. PROVIDE DUCT ACCESS DOOR THAT WILL ALLOW RESETTING OF DAMPER AND REPLACEMENT OF THE LINK. ACCESS SHALL BE 12"x12" MINIMUM, EXCEPT FOR SMALLER DUCTS, WHERE ACCESS SHALL AS LARGE AS PRACTICAL.

31. ALL PIPING AND DUCTWORK SHALL BE NONCOMBUSTIBLE MATERIAL.

32. ALL EQUIPMENT AND MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS. MANUFACTURER'S SERVICE CLEARANCE FOR ALL EQUIPMENT SHALL BE MAINTAINED.

33. ALL CHILLED WATER PIPING ABOVE GRADE SHALL BE INSULATED WITH MINIMUM 2" THICK FOAMGLASS INSULATION. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS, THICKNESS AND JACKET TYPES.

34. EXHAUST FAN OUTLETS AND PLUMBING VENTS SHALL BE INSTALLED A MINIMUM OF 10'–0" FROM FRESH AIR INTAKES OF THE MECHANICAL EQUIPMENT. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH THE PLUMBING CONTRACTOR. PROVIDE ANY VENT OR DUCT OFFSETS AT NO ADDITIONAL COSTS TO THE OWNER. ALL NOT WATER PIPING ABOVE GRADE SHALL BE INSULATED WITH FIBERGLASS INSULATION. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS, THICKNESS AND JACKET TYPES.

35. ALL EQUIPMENT, DUCTWORK, ETC., SHALL BE SUPPORTED FROM STRUCTURAL MEMBERS AS REQUIRED TO PROVIDE A VIBRATION–FREE INSTALLATION.

36. COORDINATE ALL WALL, AND SLAB PENETRATIONS WITH GENERAL CONTRACTOR AND AS REQUIRED PER STRUCTURAL AND ARCHITECTURAL PLANS AND SPECIFICATIONS.

37. PROVIDE A DEEP SEAL TRAP AT CONDENSATE DRAIN TO AIR CONDITIONING UNITS. RUN CONDENSATE DRAIN FROM DRAIN PAN CONNECTION TO NEAREST FLOOR DRAIN. CONDENSATE DRAIN PIPING SHALL BE FULL SIZE OF UNIT CONNECTION. CONDENSATE PIPING INSTALLED INSIDE OF BUILDING SHALL BE TYPE 'L' COPPER AND INSULATED PER SPECIFICATIONS.

38. STARTERS AND VFD'S REQUIRED FOR THE MECHANICAL EQUIPMENT SHALL BE FURNISHED BY DIVISION 15 – MECHANICAL AND INSTALLED BY DIVISION 16 – ELECTRICAL. STARTERS SHALL BE COMBINATION DISCONNECT HAND–OFF AUTO TYPE WITH CONTROL TRANSFORMER AND AUXILIARY CONTACTS.

39. DISCONNECT SWITCHES REQUIRED FOR THE MECHANICAL EQUIPMENT SHALL BE PROVIDED BY DIVISION 16 – ELECTRICAL UNLESS NOTED OTHERWISE.

40. CONTRACTOR SHALL INCLUDE IN THE BID THE TRANSPORT AND DISPOSAL OR RECYCLING OF ALL WASTE MATERIALS GENERATED BY THIS PROJECT IN ACCORDANCE WITH ALL RULES, REGULATIONS AND GUIDELINES APPLICABLE.

41. ALL DUCT AND PIPE PENETRATIONS THROUGH FIRE RATED ASSEMBLIES SHALL BE PROPERLY PROTECTED WITH A UL RATED FIRE–STOPPING SYSTEM.

42. COORDINATE ALL DUCT MOUNTED SMOKE DETECTORS AND FIRE SMOKE DAMPERS WITH DIVISION–16 FIRE ALARM AND ELECTRICAL CONTRACTORS.

43. ALL LOUVERS SHOWN ON THE MECHANICAL PLANS SHALL BE FURNISHED AND INSTALLED BY THE GENERAL CONTRACTOR, IN ACCORDANCE WITH THE ARCHITECTURAL SPECIFICATIONS. COORDINATE SIZE AND MINIMUM FREE AREA REQUIREMENTS AS SCHEDULED ON THE MECHANICAL PLANS. PROVIDE A MINIMUM 24" DEEP PLENUM FOR DUCTWORK CONNECTION.

44. CONTRACTOR SHALL PROVIDE A MINIMUM OF 7'–0" CLEARANCE FROM BOTTOM OF MECHANICAL EQUIPMENT/DUCTWORK TO FINISHED FLOOR IN ALL MECHANICAL ROOMS.

45. THE AUTOMATIC TEMPERATURE CONTROL SYSTEM SHALL BE FULLY COMPATIBLE AND SEAMLESSLY INTERFACE WITH OWNERS EXISTING CAMPUS WIDE HONEYWELL EBI BUILDING MANAGEMENT CONTROL SYSTEM.

LAKE COUNTY FLORIDA

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**LAKE COUNTY BUILDING DIVISION**
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Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:

# MECHANICAL SHEET INDEX


| Sheet Number | Sheet Title |
|---|---|
| M–0.01 | SYMBOL LEGEND AND GENERAL NOTES – MECHANICAL |
| M–1.01 | SITE PLAN – MECHANICAL |
| M–2.01 | FIRST FLOOR PLAN – MECHANICAL |
| M–2.01A | ALTERNATE #4 FIRST FLOOR PLAN – MECHANICAL |
| M–2.02 | SECOND FLOOR PLAN – MECHANICAL |
| M–2.02A | ALTERNATE #4 SECOND FLOOR PLAN – MECHANICAL |
| M–2.03 | ENLARGED MECHANICAL ROOMS – MECHANICAL |
| M–3.01 | FIRST FLOOR PIPING PLAN – MECHANICAL |
| M–3.02 | SECOND FLOOR PIPING PLAN – MECHANICAL |
| M–4.01 | SECTIONS – MECHANICAL |
| M–4.02 | SECTIONS – MECHANICAL |
| M–5.01 | SCHEDULES – MECHANICAL |
| M–5.02 | SCHEDULES – MECHANICAL |
| M–5.03 | SCHEDULES – MECHANICAL |
| M–6.01 | DETAILS – MECHANICAL |
| M–6.02 | DETAILS – MECHANICAL |
| M–6.03 | DETAILS – MECHANICAL |
| M–6.04 | DETAILS – MECHANICAL |
| M–7.01 | CONTROLS SCHEMATIC – MECHANICAL |
| M–7.02 | CONTROLS MATRIX – MECHANICAL |



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KLG Project No. 2011005


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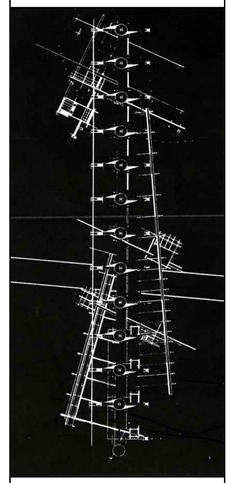

# Lake County Emergency Communications & Operations Center

Tavares, Florida

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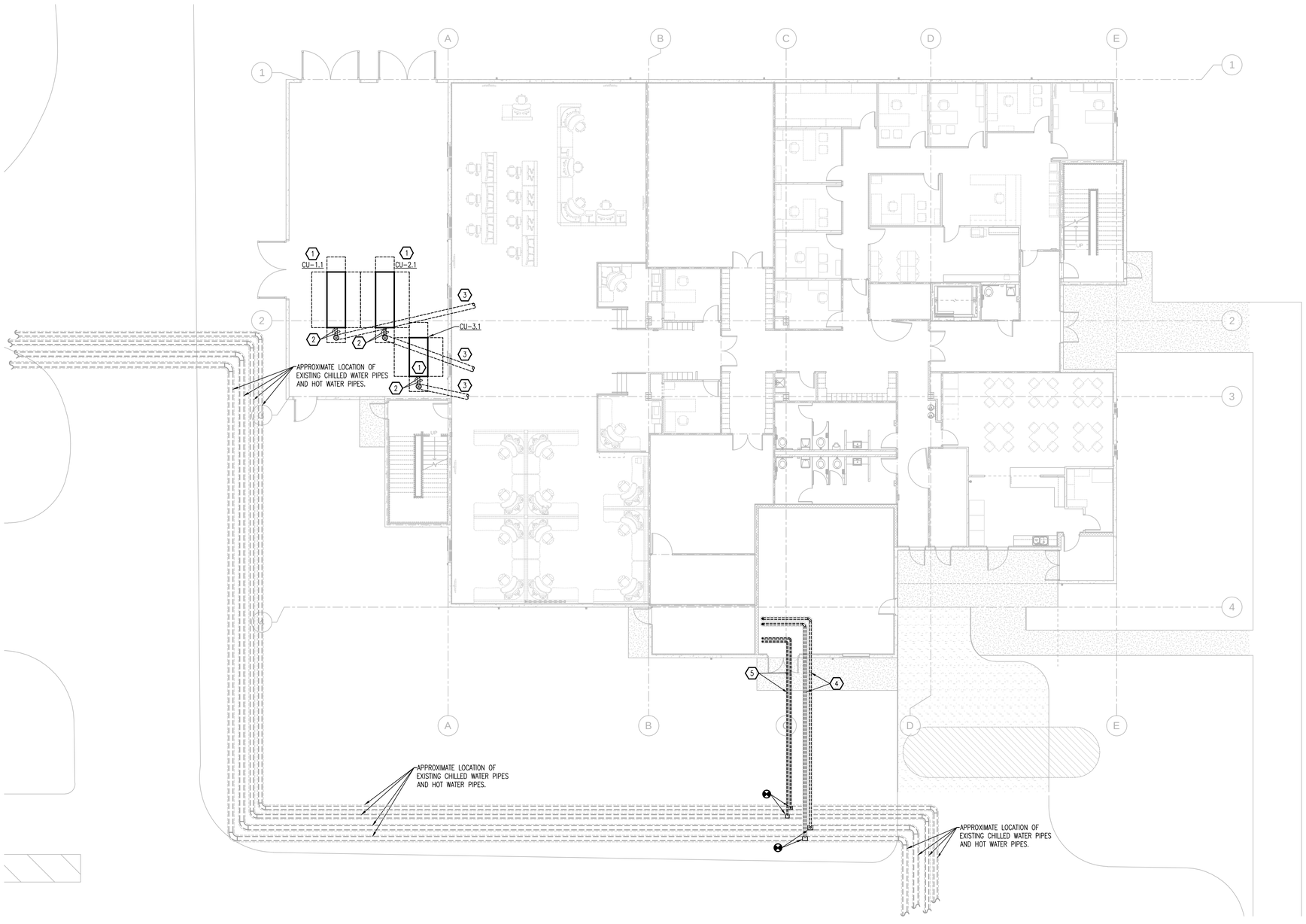
- revisions

- sheet title: SYMBOL LEGEND AND GENERAL NOTES – MECHANICAL
- scale: AS SHOWN
- drawn: VVL
- checked: WGE
- approved: RWF
- date: 11/09/11
- project no. 842
- sheet M–0.01




N

1 / M-1.01 **SITE PLAN - MECHANICAL**

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

GENERAL NOTES:

1. REFER TO SHEET "M0.01" FOR GENERAL NOTES AND SYMBOL LEGEND.
2. REFER TO SPECIFICATIONS.

HEX NOTES:

1. MOUNT CONDENSING UNIT ON CONCRETE SLAB PER CONDENSING UNIT SUPPORT DETAIL ON SHEET M-6.02. CONTRACTOR SHALL MAINTAIN MINIMUM CLEARANCES AS REQUIRED BY EQUIPMENT MANUFACTURERS AND N.E.C..
2. REFRIGERANT PIPING TO CONDENSING UNIT SHALL BE INSULATED PER SPECIFICATIONS AND PAINTED WITH WHITE ELASTOMERIC UV PROTECTION PAINT.
3. PROVIDE TWO SETS OF 6" DIAMETER SCH. 40 P.V.C. PIPE CHASE FOR EACH LIEBERT A/C SYSTEM. SIZE REFRIGERANT LINES PER MANUFACTURERS RECOMMENDATIONS. FOR EACH CHASE, INSTALL ONE SET OF REFRIGERANT PIPES FOR EACH CIRCUIT.
4. NEW 4" UNDERGROUND CHILLED WATER SUPPLY AND RETURN LINES. CHILLED WATER PIPING SHALL BE PRE-INSULATED PIPING, STEEL, SCH. 40 WELDED. CONTRACTOR SHALL TIE NEW UNDERGROUND CHILLED WATER SUPPLY AND RETURN LINES INTO EXISTING MAIN CHILLED WATER SUPPLY AND RETURN LINES. ALL TRENCHING AND BACK FILLING SHALL BE IN COMPLIANCE WITH PIPE MANUFACTURER'S RECOMMENDATIONS.
5. NEW 2-1/2" UNDERGROUND HOT WATER SUPPLY AND RETURN LINES. HOT WATER PIPING SHALL BE PRE-INSULATED PIPING, STEEL, SCH. 40, WELDED. CONTRACTOR SHALL TIE NEW UNDERGROUND HOT WATER SUPPLY AND RETURN LINES INTO EXISTING MAIN HOT WATER SUPPLY AND RETURN LINES. ALL TRENCHING AND BACK FILLING SHALL BE IN COMPLIANCE WITH PIPE MANUFACTURER'S RECOMMENDATIONS.

LAKE COUNTY
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Notes:


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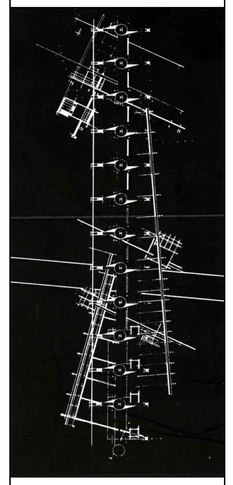

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- revisions

- sheet title

**SITE PLAN - MECHANICAL**

- scale: 3/32" = 1'-0"
- drawn: VVL
- checked: WGE
- approved: RWG
- date: 11/09/11
- project no. 842
- sheet M-1.01


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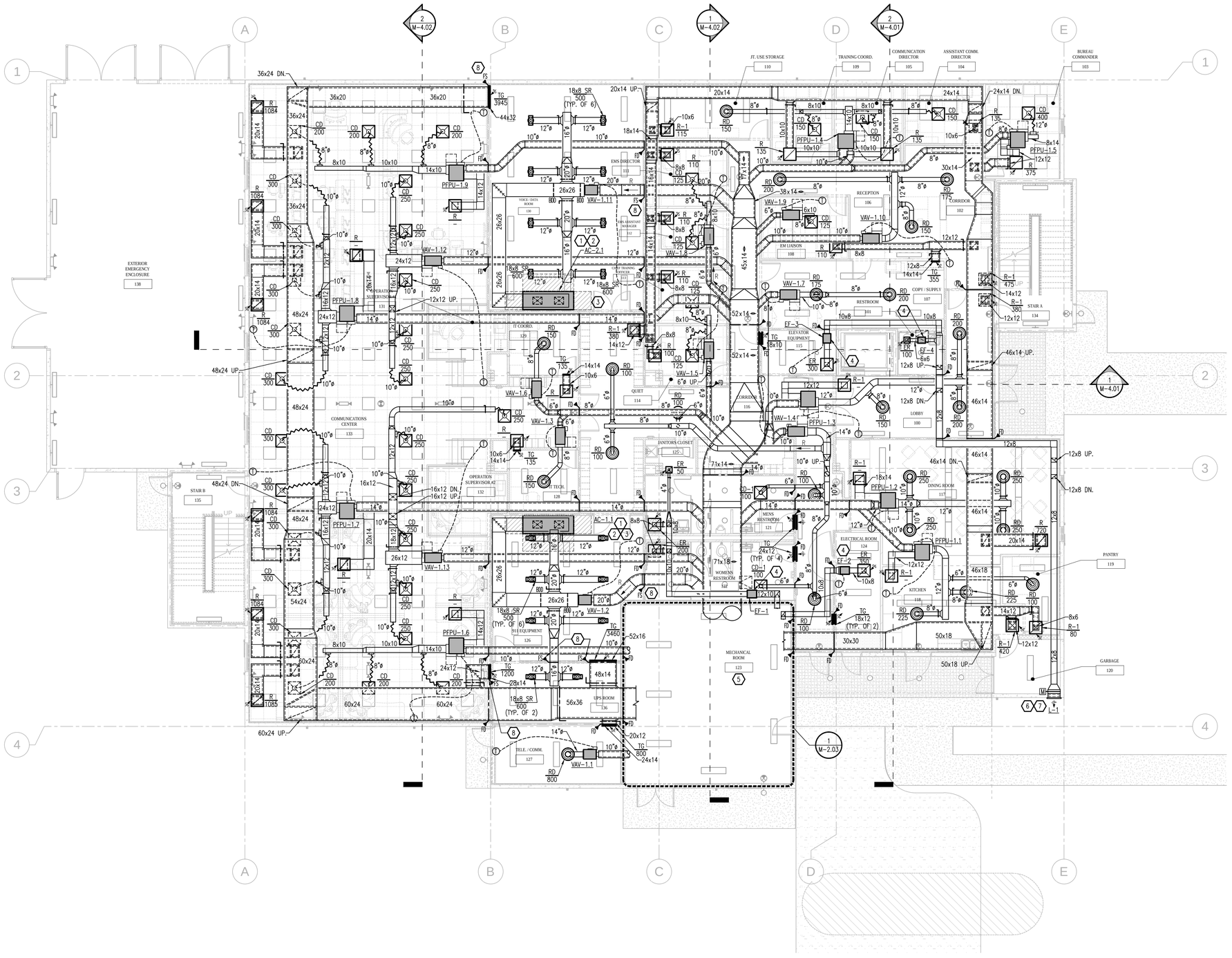


## 1 FIRST FLOOR PLAN - MECHANICAL
M-2.01 SCALE: 1/8" = 1'-0"

**GENERAL NOTES:**

1. REFER TO SHEET "M0.01" FOR GENERAL NOTES AND SYMBOL LEGEND.
2. REFER TO SPECIFICATIONS.
3. ROUTE MAIN RETURN AIR DUCTWORK TIGHT TO BOTTOM OF JOIST STRUCTURE (TYP.).
4. COORDINATE CLEARANCES FOR DUCTWORK PASSING OVER DUCTWORK WITH STRUCTURE AND CEILING HEIGHTS (TYP.).
5. COORDINATE ALL WALL PENETRATIONS WITH STRUCTURAL DRAWINGS PRIOR TO START OF ANY WORK (TYP.).
6. INSTALL ALL VAV'S AND PFPU'S AT LOCATION AND ELEVATION TO PERMIT MAXIMUM ACCESS AND CLEARANCE SPACE FOR SERVICE. COORDINATE LOCATION WITH ALL TRADES PRIOR TO INSTALLATION.
7. CONTRACTOR SHALL NOT RUN ANY DUCTWORK WITHIN VAV'S AND PFPU'S ACCESS PANEL CLEARANCE AREA. COORDINATE WITH ALL TRADES.
8. ALL COMBINATION FIRE/SMOKE DAMPERS SHALL BE CONNECTED TO THE ADDRESSABLE FIRE ALARM SYSTEM.
9. MECHANICAL CONTRACTOR SHALL COORDINATE EXACT DIMENSIONS AND LOCATION OF ALL STRUCTURAL OPENINGS WITH CONTRACTOR.
10. ALL DUCT MOUNTED MANUAL VOLUME BALANCING DAMPERS SHALL BE IDENTIFIED WITH BRIGHT COLORED MINIMUM 12" LONG STREAMER AND A MINIMUM 3" WIDE PAINTED BAND AROUND ENTIRE DUCT AT LOCATION OF DAMPER. TYPICAL FOR ALL DAMPERS ABOVE CEILINGS ONLY.

**HEX NOTES:**

1. INSTALL VERTICAL LIEBERT AIR CONDITIONING UNIT MOUNTED ON GALVANIZED STEEL PLATFORM. REFER TO SCHEDULES FOR CAPACITIES ON SHEET M-5.02 AND DETAILS ON SHEET M-6.02 FOR INSTALLATION.
2. PROVIDE GALVANIZED STEEL AUXILIARY DRAIN PAN AT FLOOR UNDER UNIT WITH FLOAT SWITCH FOR SHUT DOWN OF AIR HANDLER UNIT. SEE DETAIL ON SHEET M-6.02 FOR INSTALLATION.
3. REFER TO SHEET M-3.01 FOR REFRIGERANT PIPING LOCATION AND CONDENSATE DRAIN. REFER TO PLUMBING DRAWINGS FOR HUB LOCATION AND CONDENSATE PIPING.
4. INSTALL INLINE EXHAUST FAN ABOVE CEILING. PROVIDE ACCESS DOOR WHERE NEEDED. REFER TO SCHEDULE FOR CAPACITIES ON SHEET M-5.02 AND DETAILS ON SHEET M-6.01 FOR INSTALLATION.
5. REFER TO ENLARGED MECHANICAL ROOM PLAN ON SHEET M-2.03 FOR ROUTING OF DUCTWORK AND PIPING IN MECHANICAL ROOM.
6. PROVIDE EXHAUST LOUVER WITH WATERTIGHT PENETRATION AT EXTERIOR WALL. REFER TO SCHEDULE SHEET M-5.01 AND DETAILS ON SHEET M-6.01 FOR INSTALLATION.
7. EXHAUST DUCTWORK CLEARANCE SHALL BE MINIMUM OF 10'-0" AWAY FROM ANY AIR INTAKE (TYP.).
8. COORDINATE COMBINATION FIRE/SMOKE DAMPER OPERATION AND CONTROL WITH FIRE ALARM AND FIRE PROTECTION SYSTEM CONTRACTORS. FIRE/SMOKE DAMPERS SHALL CLOSE UPON FM-200 ACTIVATION AND SHALL RE-OPEN PER CONTROL OF THE FM200 CONTROL SYSTEM PANEL. LIEBERT A/C UNIT SHALL SHUTDOWN UPON FM-200 ACTIVATION AND RE-START PER CONTROL OF THE FM-200 CONTROL SYSTEM PANEL.

LAKE COUNTY FLORIDA
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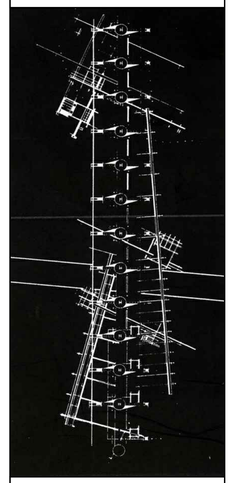

# Lake County Emergency Communications & Operations Center

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- revisions

- sheet title
  **FIRST FLOOR PLAN - MECHANICAL**

- scale: 1/8" = 1'-0"
- drawn: VVL
- checked: WGE
- approved: RWG
- date: 11/09/11
- project no. 842
- sheet M-2.01


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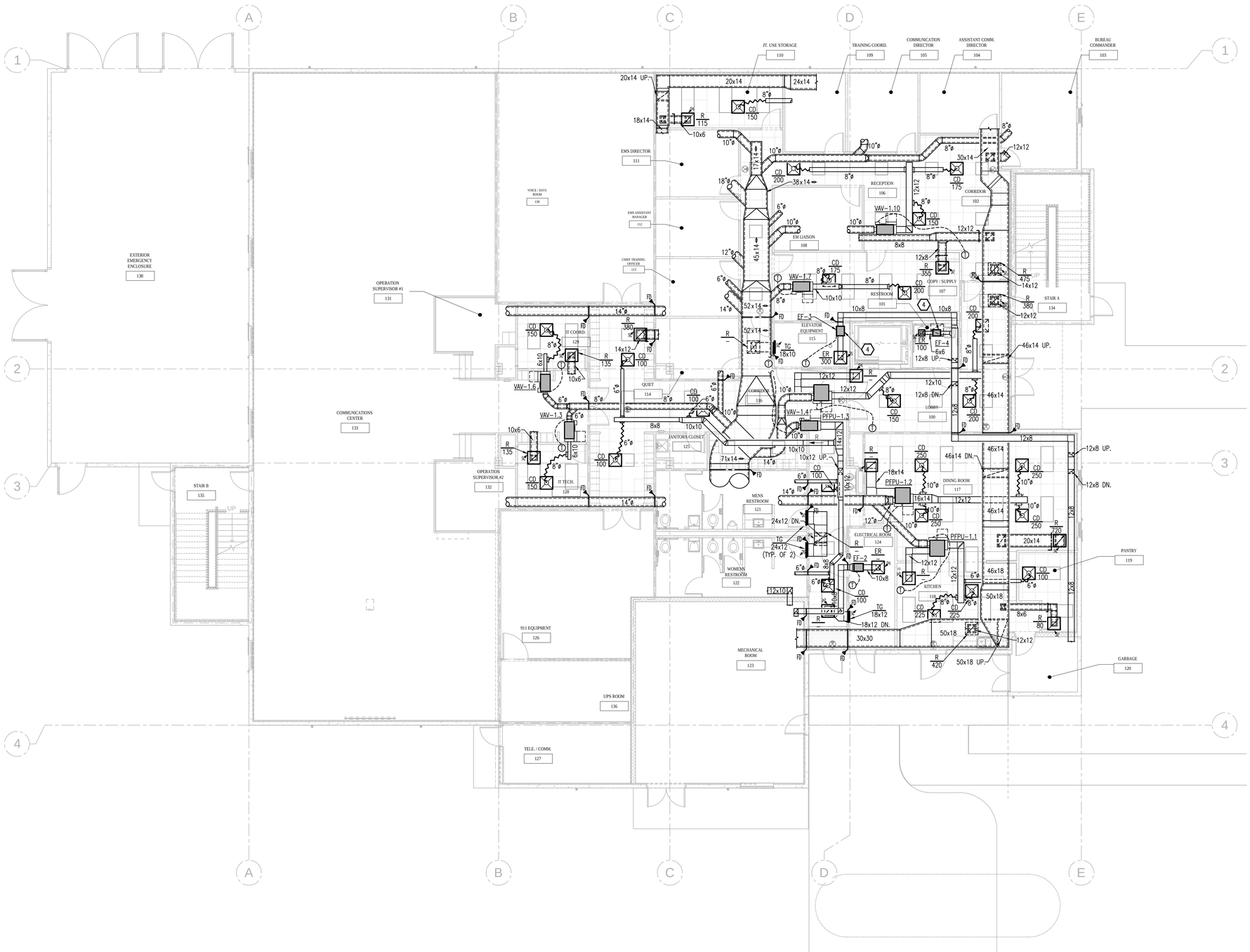


N

1 M-2.01A

## ALTERNATE #4 - FIRST FLOOR PLAN - MECHANICAL

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

GENERAL NOTES:

1. REFER TO SHEET "M0.01" FOR GENERAL NOTES AND SYMBOL LEGEND.
2. REFER TO SPECIFICATIONS.
3. ROUTE MAIN RETURN AIR DUCTWORK TIGHT TO BOTTOM OF JOIST STRUCTURE (TYP.).
4. COORDINATE CLEARANCES FOR DUCTWORK PASSING OVER DUCTWORK WITH STRUCTURE AND CEILING HEIGHTS (TYP.).
5. COORDINATE ALL WALL PENETRATIONS WITH STRUCTURAL DRAWINGS PRIOR TO START OF ANY WORK (TYP.).
6. INSTALL ALL VAV'S AND PFPU'S AT LOCATION AND ELEVATION TO PERMIT MAXIMUM ACCESS AND CLEARANCE SPACE FOR SERVICE. COORDINATE LOCATION WITH ALL TRADES PRIOR TO INSTALLATION.
7. CONTRACTOR SHALL NOT RUN ANY DUCTWORK WITHIN VAV'S AND PFPU'S ACCESS PANEL CLEARANCE AREA. COORDINATE WITH ALL TRADES.
8. ALL COMBINATION FIRE/SMOKE DAMPERS SHALL BE CONNECTED TO THE ADDRESSABLE FIRE ALARM SYSTEM.
9. ALL DUCT MOUNTED MANUAL VOLUME BALANCING DAMPERS SHALL BE IDENTIFIED WITH BRIGHT COLORED MINIMUM 12" LONG STREAMER AND A MINIMUM 3" WIDE PAINTED BAND AROUND ENTIRE DUCT AT LOCATION OF DAMPER. TYPICAL FOR ALL DAMPERS ABOVE CEILINGS ONLY.

LAKE COUNTY
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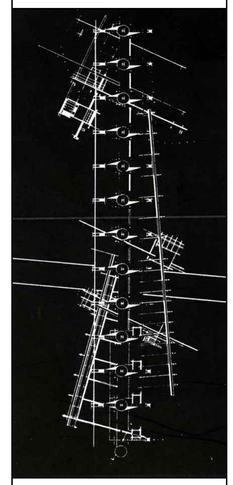

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- sheet title
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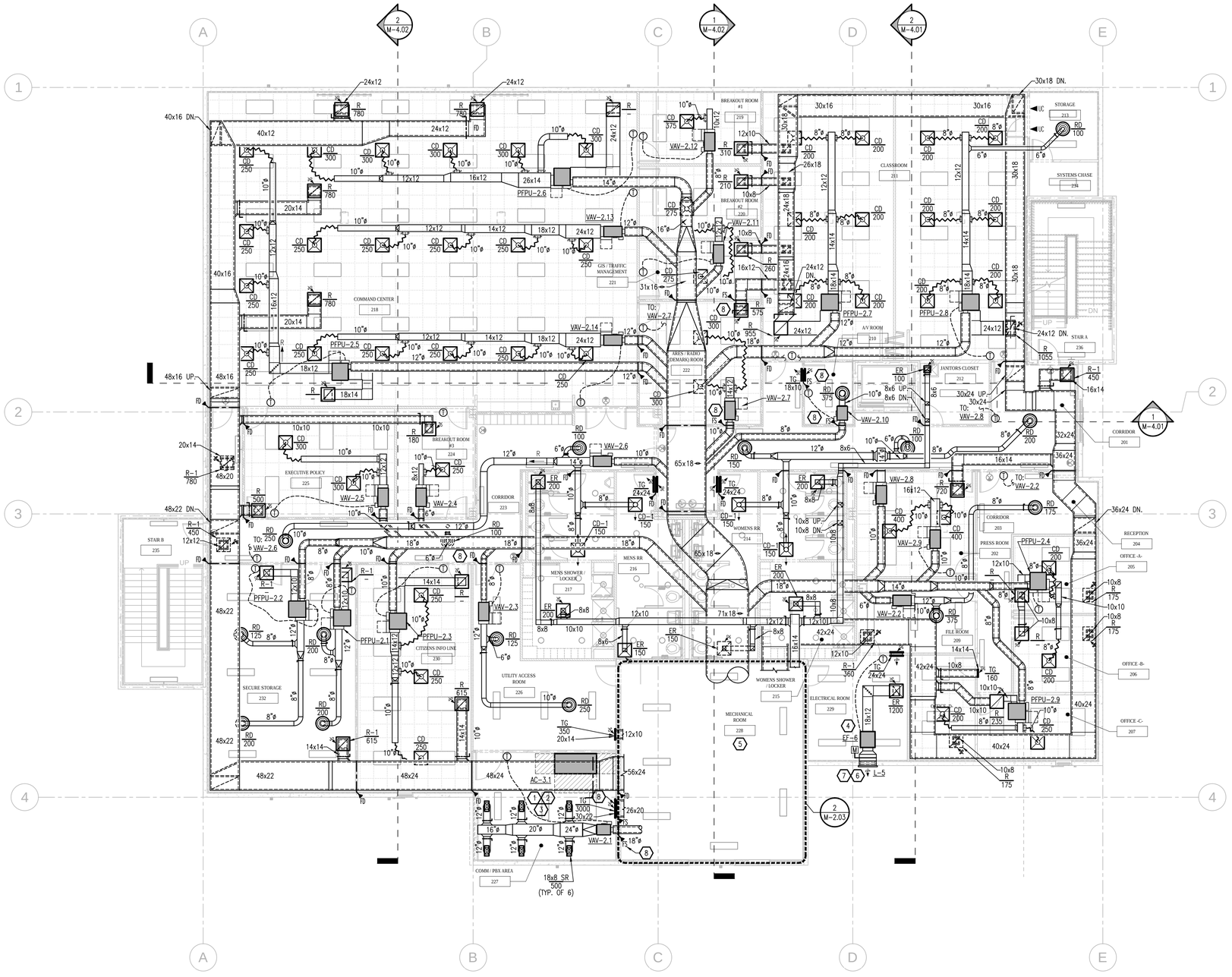
- scale: 1/8" = 1'-0"
- drawn: VVL
- checked: WGE
- approved: RWF
- date: 11/09/11
- project no. 842
- sheet M-2.01A




## SECOND FLOOR PLAN - MECHANICAL

N

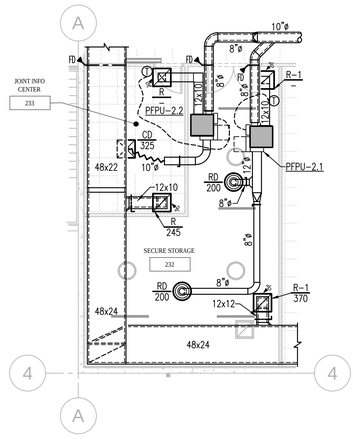
1 / M-2.02 SCALE: 1/8" = 1'-0"

GENERAL NOTES:

1. REFER TO SHEET "M0.01" FOR GENERAL NOTES AND SYMBOL LEGEND.
2. REFER TO SPECIFICATIONS.
3. ROUTE MAIN RETURN AIR DUCTWORK TIGHT TO BOTTOM OF JOIST STRUCTURE (TYP.).
4. COORDINATE CLEARANCES FOR DUCTWORK PASSING OVER DUCTWORK WITH STRUCTURE AND CEILING HEIGHTS (TYP.).
5. COORDINATE ALL WALL PENETRATIONS WITH STRUCTURAL DRAWINGS PRIOR TO START OF ANY WORK (TYP.).
6. INSTALL ALL VAV'S AND PFPU'S AT LOCATION AND ELEVATION TO PERMIT MAXIMUM ACCESS AND CLEARANCE SPACE FOR SERVICE. COORDINATE LOCATION WITH ALL TRADES PRIOR TO INSTALLATION.
7. CONTRACTOR SHALL NOT RUN ANY DUCTWORK WITHIN VAV'S AND PFPU'S ACCESS PANEL CLEARANCE AREA. COORDINATE WITH ALL TRADES.
8. ALL COMBINATION FIRE/SMOKE DAMPERS SHALL BE CONNECTED TO THE ADDRESSABLE FIRE ALARM SYSTEM.
9. MECHANICAL CONTRACTOR SHALL COORDINATE EXACT DIMENSIONS AND LOCATION OF ALL STRUCTURAL OPENINGS WITH CONTRACTOR.
10. ALL DUCT MOUNTED MANUAL VOLUME BALANCING DAMPERS SHALL BE IDENTIFIED WITH BRIGHT COLORED MINIMUM 12" LONG STREAMER AND A MINIMUM 3" WIDE PAINTED BAND AROUND ENTIRE DUCT AT LOCATION OF DAMPER. TYPICAL FOR ALL DAMPERS ABOVE CEILINGS ONLY.

KEY NOTES:

1. INSTALL VERTICAL LIEBERT AIR CONDITIONING UNIT MOUNTED ON GALVANIZED STEEL PLATFORM. REFER TO SCHEDULES FOR CAPACITIES ON SHEET M-5.02 AND DETAILS ON SHEET M-6.02 FOR INSTALLATION.
2. PROVIDE GALVANIZED STEEL AUXILIARY DRAIN PAN AT FLOOR UNDER UNIT WITH FLOAT SWITCH FOR SHUT DOWN OF AIR HANDLER UNIT. SEE DETAIL ON SHEET M-6.02 FOR INSTALLATION.
3. REFER TO SHEET M-3.01 FOR REFRIGERANT PIPING LOCATION AND CONDENSATE DRAIN. REFER TO PLUMBING DRAWINGS FOR HUB LOCATION AND CONDENSATE PIPING.
4. INSTALL INLINE EXHAUST FAN ABOVE CEILING. PROVIDE ACCESS DOOR WHERE NEEDED. REFER TO SCHEDULE FOR CAPACITIES ON SHEET M-5.02 AND DETAILS ON SHEET M-6.01 FOR INSTALLATION.
5. REFER TO ENLARGED MECHANICAL ROOM PLAN ON SHEET M-2.03 FOR ROUTING OF DUCTWORK AND PIPING IN MECHANICAL ROOM.
6. PROVIDE EXHAUST LOUVER WITH WATERTIGHT PENETRATION AT EXTERIOR WALL. REFER TO SCHEDULE SHEET M-5.01 AND DETAILS ON SHEET M-6.01 FOR INSTALLATION.
7. EXHAUST DUCTWORK CLEARANCE SHALL BE MINIMUM OF 10'-0" AWAY FROM ANY AIR INTAKE (TYP.).
8. COORDINATE COMBINATION FIRE/SMOKE DAMPER OPERATION AND CONTROL WITH FIRE ALARM AND FIRE PROTECTION SYSTEM CONTRACTORS. FIRE/SMOKE DAMPERS SHALL CLOSE UPON FM-200 ACTIVATION AND SHALL RE-OPEN PER CONTROL OF THE FM200 CONTROL SYSTEM PANEL. LIEBERT A/C UNIT SHALL SHUTDOWN UPON FM-200 ACTIVATION AND RE-START PER CONTROL OF THE FM-200 CONTROL SYSTEM PANEL.




## ALTERNATE #9
## ROOM #233 - MECHANICAL

2 / M-2.02 SCALE: 1/8" = 1'-0"

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**LAKE COUNTY BUILDING DIVISION**
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Building: BLD31 12/29/11
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Mechanical: BLD31 12/1/11
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Notes:


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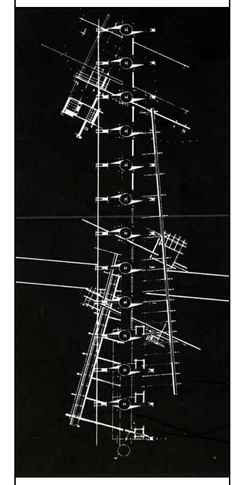

# Lake County Emergency Communications & Operations Center

Tavares, Florida

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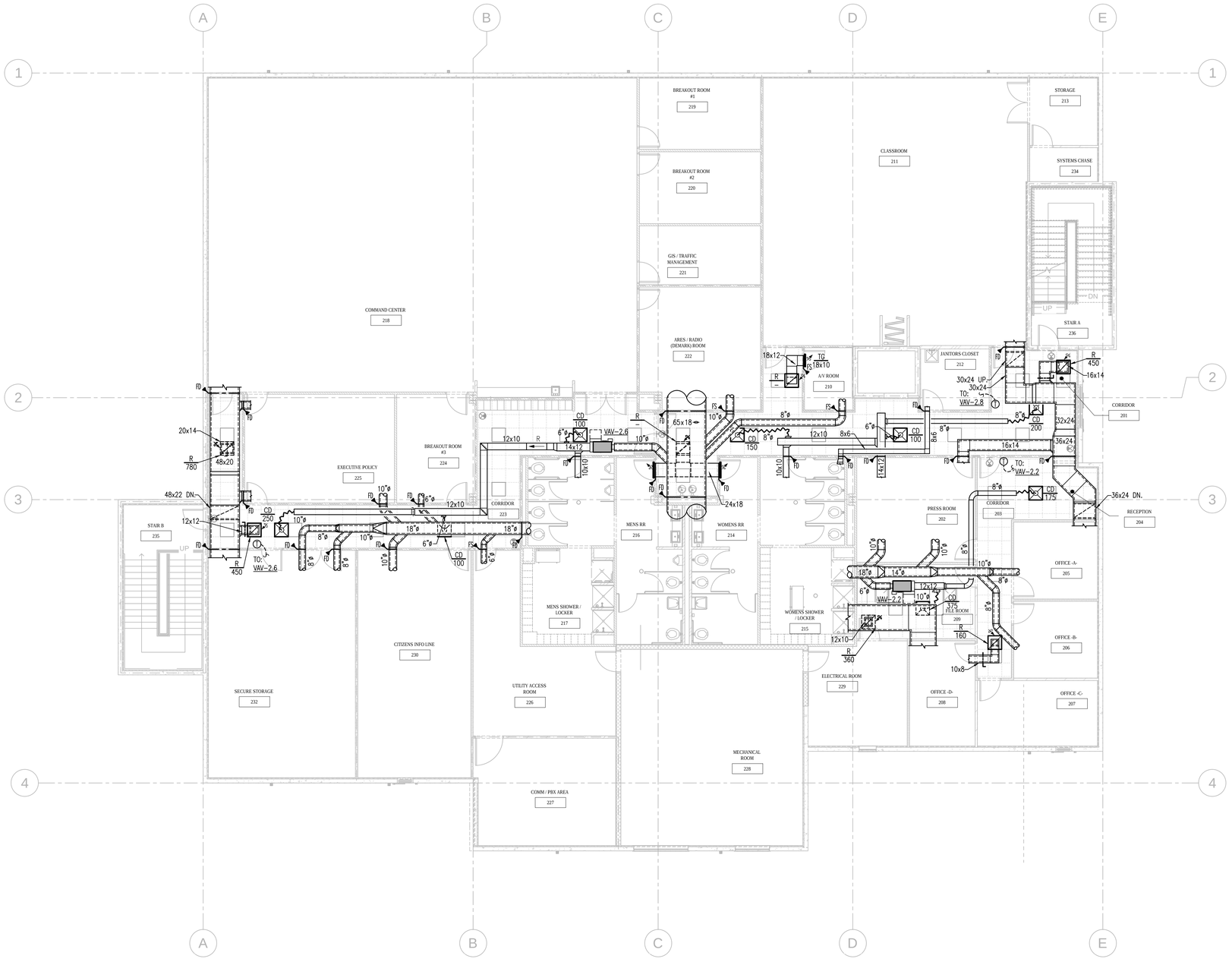
- revisions
- sheet title: SECOND FLOOR PLAN - MECHANICAL
- scale: 1/8" = 1'-0"
- drawn: VVL
- checked: WGE
- approved: RWF
- date: 11/09/11
- project no. 842
- sheet M-2.02

GENERAL NOTES:

1. REFER TO SHEET "M0.01" FOR GENERAL NOTES AND SYMBOL LEGEND.
2. REFER TO SPECIFICATIONS.
3. ROUTE MAIN RETURN AIR DUCTWORK TIGHT TO BOTTOM OF JOIST STRUCTURE (TYP.).
4. COORDINATE CLEARANCES FOR DUCTWORK PASSING OVER DUCTWORK WITH STRUCTURE AND CEILING HEIGHTS (TYP.).
5. COORDINATE ALL WALL PENETRATIONS WITH STRUCTURAL DRAWINGS PRIOR TO START OF ANY WORK (TYP.).
6. INSTALL ALL VAV'S AND PFPU'S AT LOCATION AND ELEVATION TO PERMIT MAXIMUM ACCESS AND CLEARANCE SPACE FOR SERVICE.
7. CONTRACTOR SHALL NOT RUN ANY DUCTWORK WITHIN VAV'S AND PFPU'S ACCESS PANEL CLEARANCE AREA. COORDINATE WITH ALL TRADES.
8. ALL FIRE/SMOKE DAMPERS SHALL BE CONNECTED TO THE ADDRESSABLE FIRE ALARM SYSTEM.





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Ian A. Reeves, Assoc. A.I.A.

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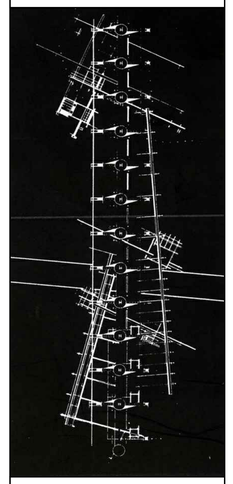
(407) 647-1706

Corporate Registration
No. AAC001197

# Lake County Emergency Communications & Operations Center

Tavares,
Florida

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**Approved Plans - Commercial**
**LAKE COUNTY BUILDING DIVISION**
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Electric: ADM01 12/29/11
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:


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- revisions

- sheet title
  **ALTERNATE #4 SECOND FLOOR PLAN - MECHANICAL**
- scale: 1/8" = 1'-0"
- drawn: VVL
- checked: WGE
- approved: RWF
- date: 11/09/11
- project no. 842
- sheet M-2.02A

N

1
M-2.02A

## ALTERNATE #4 - SECOND FLOOR PLAN - MECHANICAL

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


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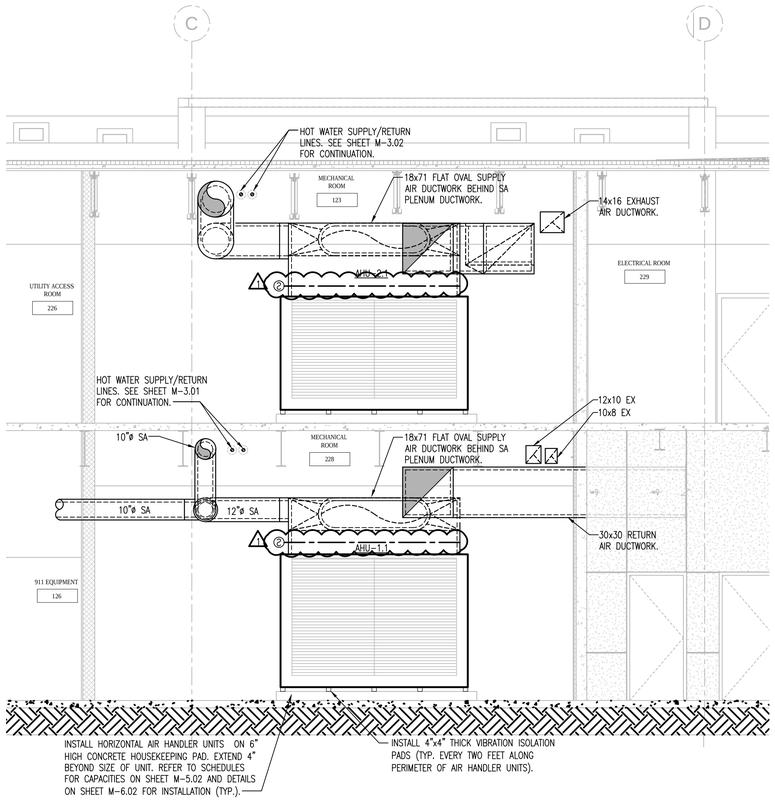
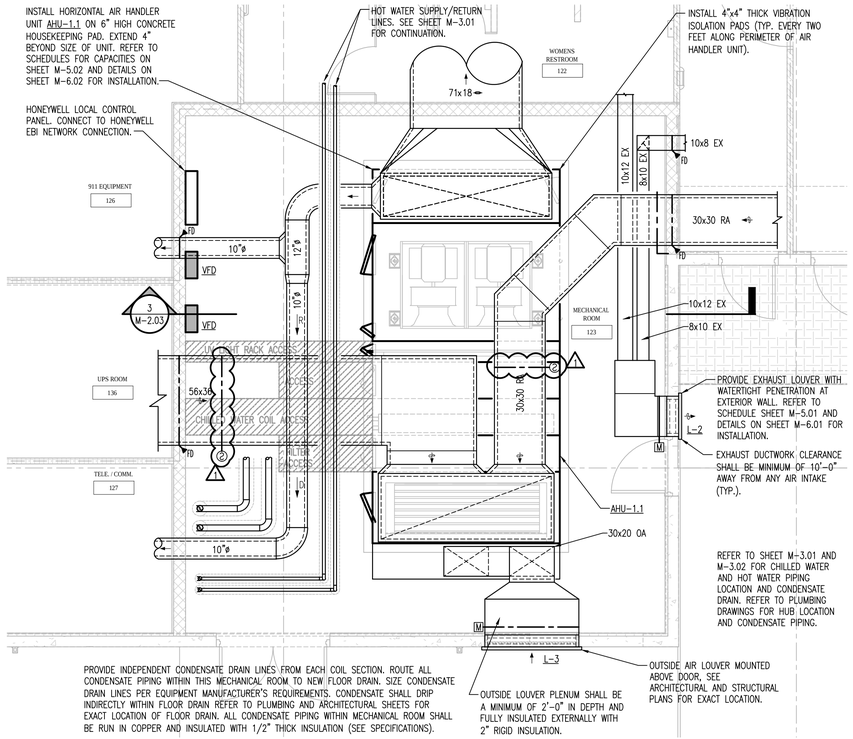
Danny Y. Lundstrom, PE (Registration No. 0033857)
Certificate of Authorization No. 29635

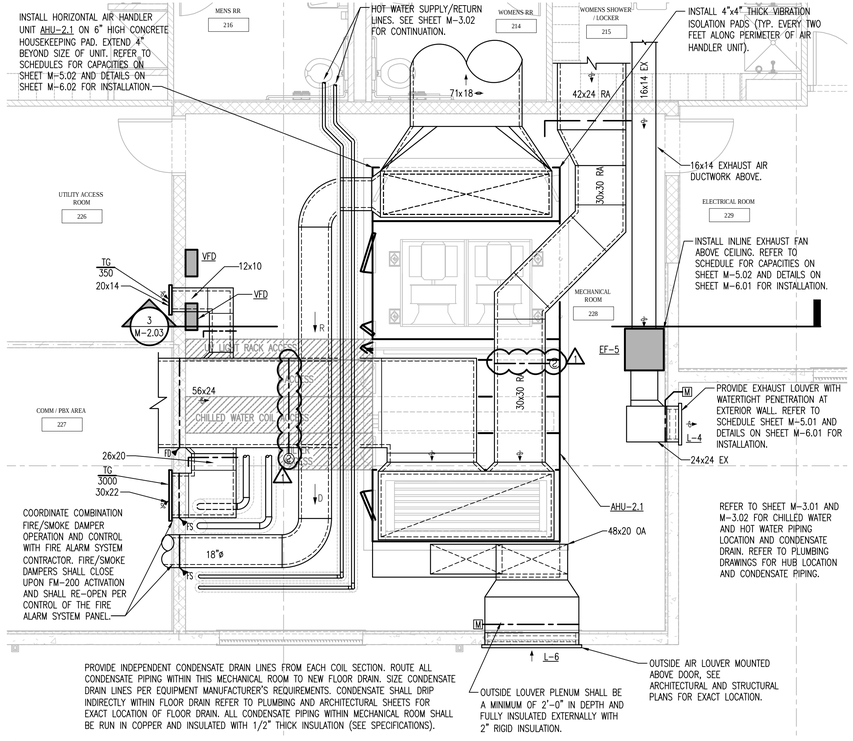

KLG Project No. 2011005




## 3 MECHANICAL ROOM SECTION
M-2.03 SCALE: 1/4" = 1'-0"




## 1 FIRST FLOOR PLAN - ENLARGED MECHANICAL ROOM
M-2.03 SCALE: 1/4" = 1'-0"




## 2 SECOND FLOOR PLAN - ENLARGED MECHANICAL ROOM
M-2.03 SCALE: 1/4" = 1'-0"

GENERAL NOTES:

1. REFER TO SHEET "M0.01" FOR GENERAL NOTES AND SYMBOL LEGEND.
2. REFER TO SPECIFICATIONS.
3. ROUTE MAIN RETURN AIR DUCTWORK AND EXHAUST DUCTWORK TIGHT TO BOTTOM OF JOIST STRUCTURE (TYP.).
4. COORDINATE CLEARANCES FOR DUCTWORK PASSING OVER DUCTWORK WITH STRUCTURE AND CEILING HEIGHTS (TYP.).
5. COORDINATE ALL WALL PENETRATIONS WITH STRUCTURAL DRAWINGS PRIOR TO START OF ANY WORK (TYP.).
6. ALL COMBINATION FIRE/SMOKE DAMPERS SHALL BE CONNECTED TO THE ADDRESSABLE FIRE ALARM SYSTEM.
7. MECHANICAL CONTRACTOR SHALL COORDINATE EXACT DIMENSIONS AND LOCATION OF ALL STRUCTURAL OPENINGS WITH WALL CONTRACTOR.
8. CONTRACTOR SHALL VERIFY THAT THE LOCATION OF THE OUTSIDE AIR INTAKE IS A MINIMUM OF 10'-0" AWAY FROM ANY DISCHARGE OF PLUMBING VENTS AND LOUVERS. CONTRACTOR SHALL MAKE MODIFICATIONS AS REQUIRED TO MEET CODE REQUIREMENTS.
9. CONTRACTOR SHALL ROUTE ALL CHILLED WATER SUPPLY AND RETURN LINES SUCH THAT THEY DO NOT BLOCK ANY ACCESS DOORS. REFER TO EQUIPMENT MANUFACTURE FOR EXACT LOCATION OF ALL ACCESS DOORS.
10. REFER TO CONTROL DRAWINGS AND SPECIFICATIONS FOR TYPE AND LOCATION OF ALL DUCT MOUNTED SENSORS.
11. SEE MANUFACTURERS CHILLED WATER COIL PIPING DETAIL FOR SIZING AND VALVING ARRANGEMENT (TYP.).
12. ALL NEW CHILLED WATER PIPING SHALL BE INSULATED. INSULATE ALL PIPING, FITTINGS, AND VALVING ABOVE GRADE. WITHIN ALL MECHANICAL ROOMS PROVIDE PVC JACKETING AND SHIELDING AT ALL SUPPORTS. SEE SPECIFICATIONS.

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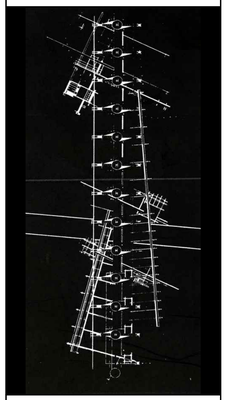

# Lake County Emergency Communications & Operations Center

Tavares, Florida

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- revisions/addenda

| Number | Description | Date Issued |
|---|---|---|
| 1 | ADDENDUM #2 | 12.23.11 |

LAKE COUNTY FLORIDA
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Certificate of Authorization No. 26635
KLG Project No. 2011005
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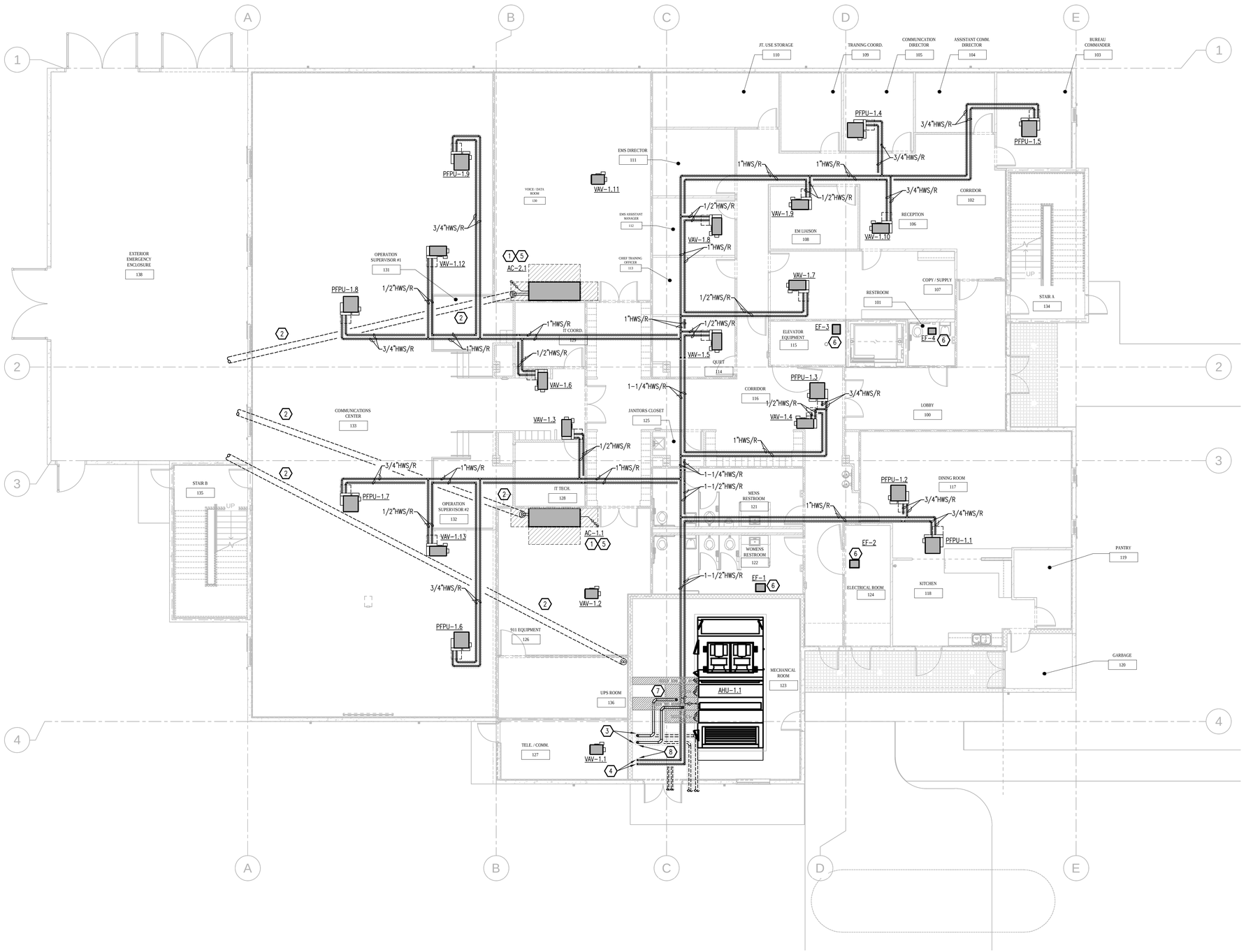
- sheet title: ENLARGED MECHANICAL ROOMS - MECHANICAL
- scale: 1/4" = 1'-0"
- drawn: VVL
- checked: WGE
- approved: RWG
- date: 11/09/11
- project no. 842
- sheet M-2.03




## FIRST FLOOR PIPING PLAN - MECHANICAL

N

1 / M-3.01

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

GENERAL NOTES:

1. REFER TO SHEET "M0.01" FOR GENERAL NOTES AND SYMBOL LEGEND.
2. REFER TO SPECIFICATIONS.
3. CONTRACTOR SHALL ROUTE ALL CHILLED WATER SUPPLY AND RETURN LINES SUCH THAT THEY DO NOT BLOCK ANY ACCESS DOORS. REFER TO EQUIPMENT MANUFACTURE FOR EXACT LOCATION OF ALL ACCESS DOORS.
4. SEE MANUFACTURERS CHILLED WATER COIL PIPING DETAIL FOR SIZING AND VALVING ARRANGEMENT (TYP.).
5. ALL NEW CHILLED WATER PIPING SHALL BE INSULATED. INSULATE ALL PIPING, FITTINGS, AND VALVING ABOVE GRADE. WITHIN ALL MECHANICAL ROOMS PROVIDE PVC JACKETING AND SHIELDING AT ALL SUPPORTS. SEE SPECIFICATIONS.
6. PROVIDE GALVANIZED PIPING SUPPORTS FOR ALL PIPING (TYP.) SEE SPECIFICATIONS.

HEX NOTES:

1. INSTALL VERTICAL AIR HANDLER UNIT AC-1.1 AND AC-2.1 MOUNTED ON GALVANIZED STEEL PLATFORM. REFER TO SCHEDULES FOR CAPACITIES ON SHEET M-5.02 AND DETAILS ON SHEET M-6.02 FOR INSTALLATION.
2. PROVIDE TWO SETS OF 6" DIAMETER SCH. 40 P.V.C. PIPE CHASE FOR EACH LIEBERT A/C SYSTEM. SIZE REFRIGERANT LINES PER MANUFACTURERS RECOMMENDATIONS. FOR EACH CHASE, INSTALL ONE SET OF REFRIGERANT PIPES FOR EACH CIRCUIT.
3. 4" CHILLED WATER SUPPLY AND RETURN PIPING RISE IN THIS LOCATION.
4. 2-1/2" HOT WATER SUPPLY AND RETURN PIPING RISE IN THIS LOCATION. CONTRACTOR SHALL INSTALL HOT WATER SUPPLY AND RETURN LINES AS HIGH AS POSSIBLE ABOVE CEILING.
5. PROVIDE GALVANIZED STEEL AUXILIARY DRAIN PAN AT FLOOR UNDER UNIT WITH FLOAT SWITCH FOR SHUT DOWN OF LIEBERT AIR HANDLER UNIT. SEE DETAIL ON SHEET M-6.02 FOR INSTALLATION.
6. INSTALL INLINE EXHAUST FAN ABOVE CEILING. PROVIDE ACCESS DOOR WHERE NEEDED. REFER TO SCHEDULE FOR CAPACITIES ON SHEET M-5.02 AND DETAILS ON SHEET M-6.01 FOR INSTALLATION.
7. PROVIDE INDEPENDENT CONDENSATE DRAIN LINES FROM EACH COIL SECTION. ROUTE ALL CONDENSATE PIPING WITHIN THIS MECHANICAL ROOM TO NEW FLOOR DRAIN. SIZE CONDENSATE DRAIN LINES PER EQUIPMENT MANUFACTURER'S REQUIREMENTS. CONDENSATE SHALL DRIP INDIRECTLY WITHIN FLOOR DRAIN REFER TO PLUMBING AND ARCHITECTURAL SHEETS FOR EXACT LOCATION OF FLOOR DRAIN. ALL CONDENSATE PIPING WITHIN MECHANICAL ROOM SHALL BE RUN IN COPPER AND INSULATED (SEE SPECIFICATIONS).
8. INSTALL "ONICON" BTU FLOW METER. INTERFACE WITH HONEYWELL EBI CONTROL SYSTEM. CONTRACTOR SHALL INSTALL BUTTERFLY SHUT-OFF VALVES AT FLOOR LEVEL UPSTREAM OF BTU FLOW METER.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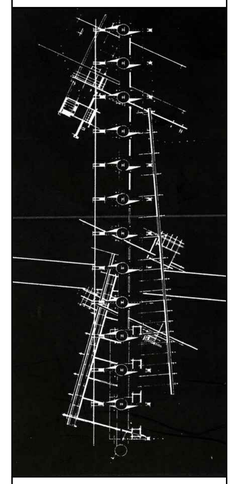

# Lake County Emergency Communications & Operations Center

Tavares,
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LAKE COUNTY
FLORIDA

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**LAKE COUNTY BUILDING DIVISION**
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Mechanical: BLD31 12/1/111
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:

- revisions

- sheet title
  **FIRST FLOOR PIPING PLAN - MECHANICAL**

- scale: 1/8" = 1'-0"
- drawn: VVL
- checked: WGE
- approved: RWG
- date: 11/09/11
- project no. 842
- sheet M-3.01


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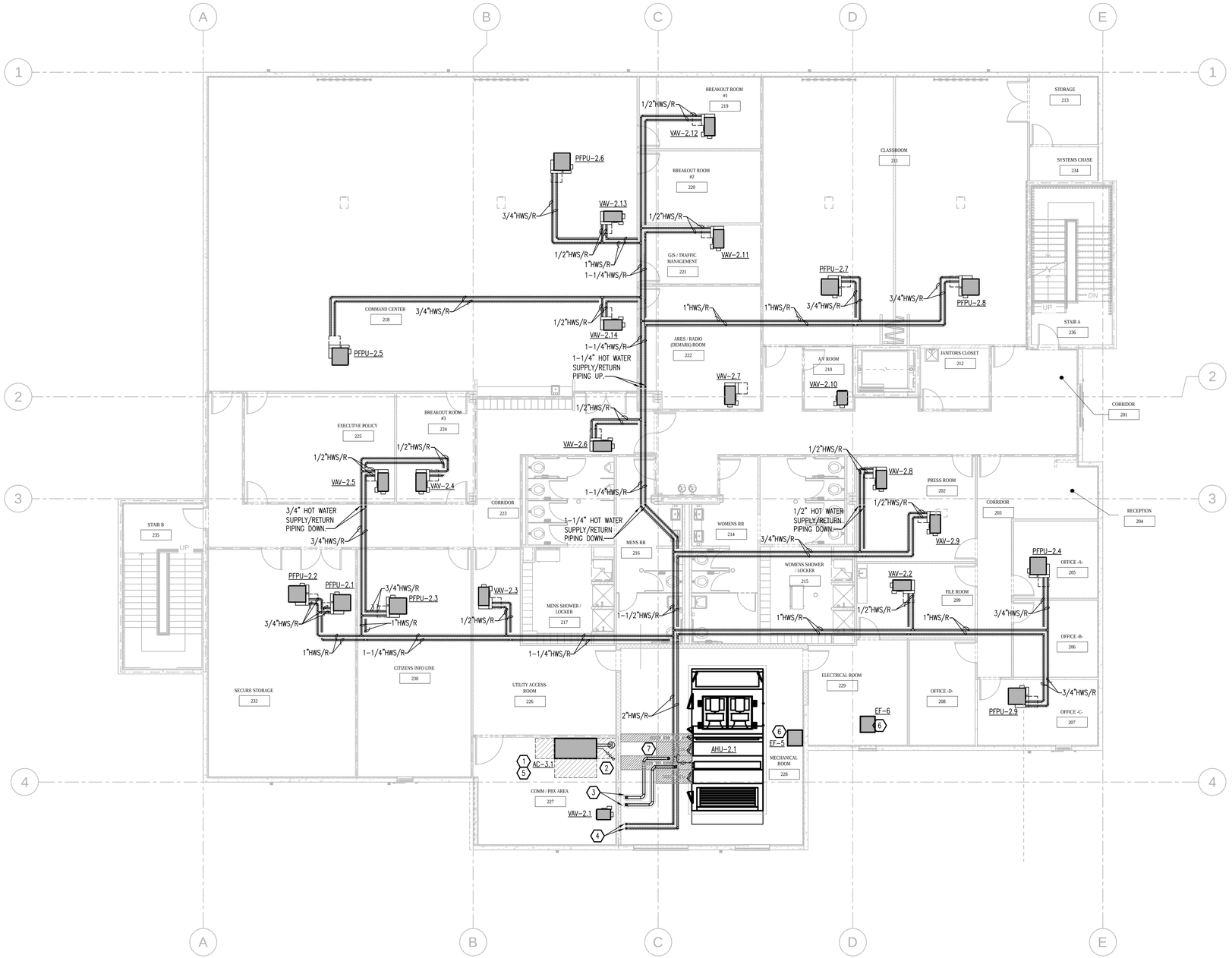


## SECOND FLOOR PIPING PLAN - MECHANICAL

N

1 / M-3.02

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

GENERAL NOTES:

1. REFER TO SHEET "M0.01" FOR GENERAL NOTES AND SYMBOL LEGEND.
2. REFER TO SPECIFICATIONS.
3. CONTRACTOR SHALL ROUTE ALL CHILLED WATER SUPPLY AND RETURN LINES SUCH THAT THEY DO NOT BLOCK ANY ACCESS DOORS. REFER TO EQUIPMENT MANUFACTURE FOR EXACT LOCATION OF ALL ACCESS DOORS.
4. SEE MANUFACTURERS CHILLED WATER COIL PIPING DETAIL FOR SIZING AND VALVING ARRANGEMENT (TYP.).
5. ALL NEW CHILLED WATER PIPING SHALL BE INSULATED. INSULATE ALL PIPING, FITTINGS, AND VALVING ABOVE GRADE. WITHIN ALL MECHANICAL ROOMS PROVIDE PVC JACKETING AND SHIELDING AT ALL SUPPORTS. SEE SPECIFICATIONS.
6. PROVIDE GALVANIZED PIPING SUPPORTS FOR ALL PIPING (TYP.) SEE SPECIFICATIONS.

HEX NOTES:

1. INSTALL VERTICAL AIR HANDLER UNIT AC-3.1 MOUNTED ON GALVANIZED STEEL PLATFORM. REFER TO SCHEDULES FOR CAPACITIES ON SHEET M-5.02 AND DETAILS ON SHEET M-6.02 FOR INSTALLATION.
2. PROVIDE TWO SETS OF 6" DIAMETER SCH. 40 P.V.C. PIPE CHASE FOR EACH LIEBERT A/C SYSTEM. SIZE REFRIGERANT LINES PER MANUFACTURERS RECOMMENDATIONS. FOR EACH CHASE, INSTALL ONE SET OF REFRIGERANT PIPES FOR EACH CIRCUIT.
3. 3" CHILLED WATER SUPPLY AND RETURN PIPING RISE IN THIS LOCATION.
4. 2-1/2" HOT WATER SUPPLY AND RETURN PIPING RISE IN THIS LOCATION. CONTRACTOR SHALL INSTALL HOT WATER SUPPLY AND RETURN LINES AS HIGH AS POSSIBLE ABOVE CEILING.
5. PROVIDE GALVANIZED STEEL AUXILIARY DRAIN PAN AT FLOOR UNDER UNIT WITH FLOAT SWITCH FOR SHUT DOWN OF LIEBERT AIR HANDLER UNIT. SEE DETAIL ON SHEET M-6.02 FOR INSTALLATION.
6. INSTALL INLINE EXHAUST FAN ABOVE CEILING. PROVIDE ACCESS DOOR WHERE NEEDED. REFER TO SCHEDULE FOR CAPACITIES ON SHEET M-5.02 AND DETAILS ON SHEET M-6.01 FOR INSTALLATION.
7. PROVIDE INDEPENDENT CONDENSATE DRAIN LINES FROM EACH COIL SECTION. ROUTE ALL CONDENSATE PIPING WITHIN THIS MECHANICAL ROOM TO NEW FLOOR DRAIN. SIZE CONDENSATE DRAIN LINES PER EQUIPMENT MANUFACTURER'S REQUIREMENTS. CONDENSATE SHALL DRIP INDIRECTLY WITHIN FLOOR DRAIN REFER TO PLUMBING AND ARCHITECTURAL SHEETS FOR EXACT LOCATION OF FLOOR DRAIN. ALL CONDENSATE PIPING WITHIN MECHANICAL ROOM SHALL BE RUN IN COPPER AND INSULATED (SEE SPECIFICATIONS).

LAKE COUNTY FLORIDA

**Approved Plans - Commercial**

**LAKE COUNTY BUILDING DIVISION**

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Mechanical: BLD31 12/1/11
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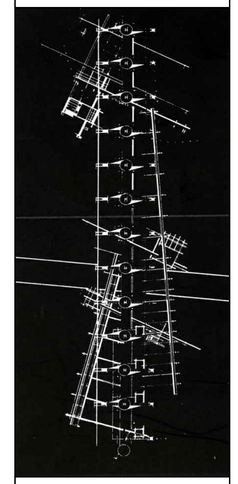

# Lake County Emergency Communications & Operations Center

Tavares, Florida

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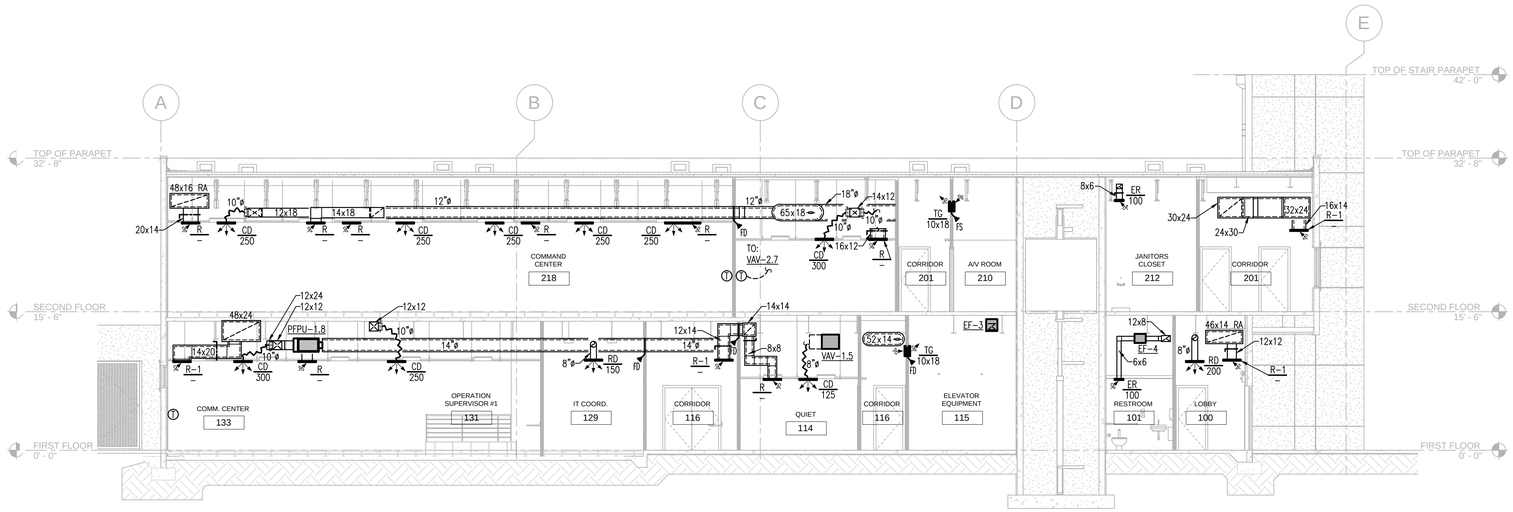
- revisions

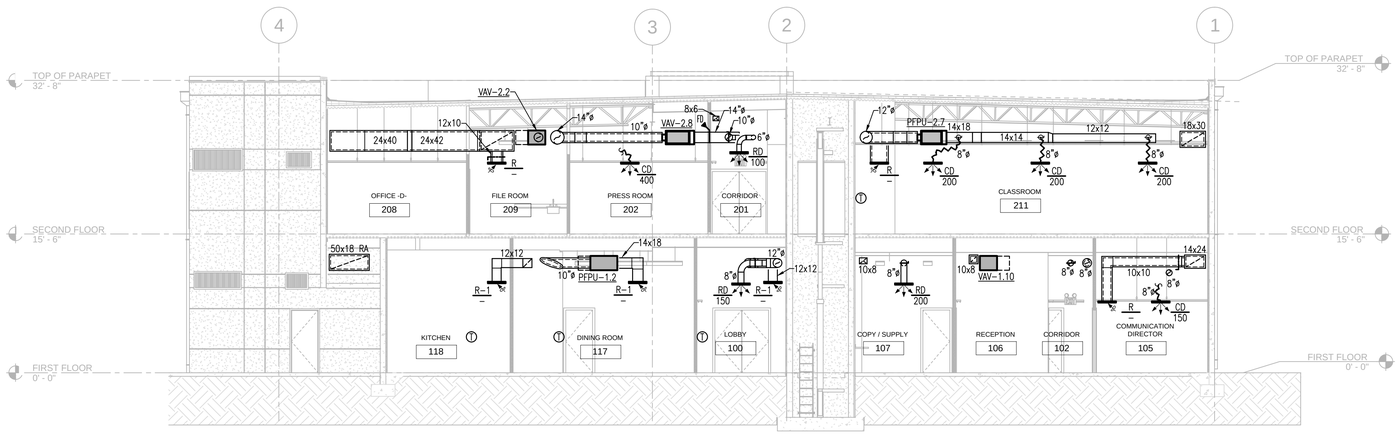
- sheet title: SECOND FLOOR PIPING PLAN - MECHANICAL
- scale: 1/8" = 1'-0"
- drawn: VVL
- checked: WGE
- approved: RWF
- date: 11/09/11
- project no. 842
- sheet M-3.02




## 1 SECTION - MECHANICAL

M-4.01 SCALE: 1/8" = 1'-0"

(NOTE: HOT WATER PIPING NOT SHOWN BUT SHALL BE INSTALLED AS HIGH AS POSSIBLE)




## 2 SECTION - MECHANICAL

M-4.01 SCALE: 1/8" = 1'-0"

(NOTE: HOT WATER PIPING NOT SHOWN BUT SHALL BE INSTALLED AS HIGH AS POSSIBLE)

LAKE COUNTY
FLORIDA

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Permit # 2011110212
Building: BLD31 12/29/11
Electric: ADM01 12/29/11
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:


KLG, LLC
11486 Corporate Blvd.
Suite 120
Orlando, FL 32817
t: 407.830.6622 f: 407.830.6836
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ATLANTA
GREENVILLE
LOS ANGELES
NEW ORLEANS
ORLANDO

Ronald W. Fessler, PE (Registration No. 0018606)
Danny Y. Lundstrom, PE (Registration No. 0033857)
Certificate of Authorization No. 26635


KLG Project No. 2011005


Architects Design Group, Inc.
Architects and Planners
ISK. Reeves V, F.A.I.A.
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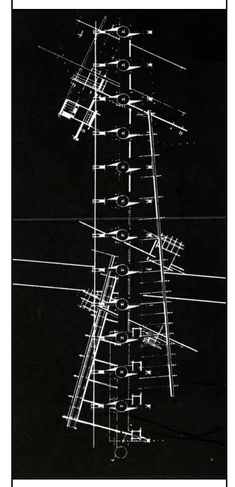
333 N. Knowles Ave.
Winter Park, Florida 32789
(407) 647-1706
Corporate Registration No. AAC001197

# Lake County Emergency Communications & Operations Center

Tavares, Florida

**PERMIT CD SUBMITTAL**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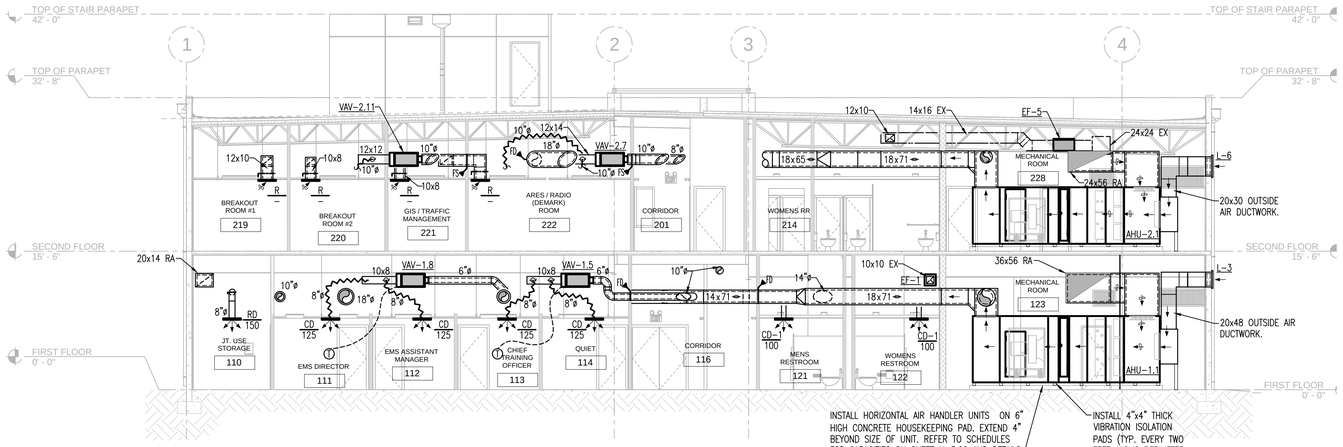
- revisions

- sheet title

**SECTIONS - MECHANICAL**

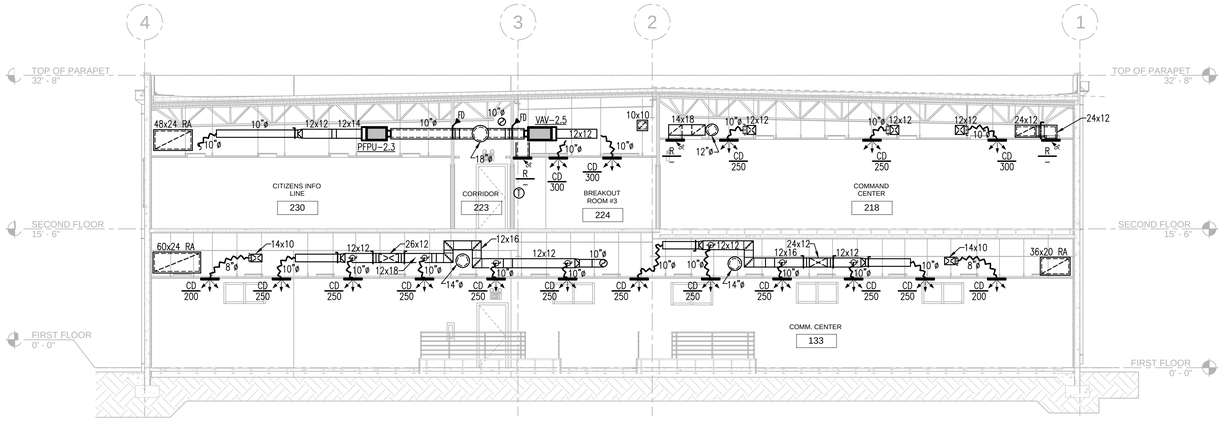
- scale: 1/8" = 1'-0"
- drawn: VVL
- checked: WGE
- approved: RWF
- date: 11/09/11
- project no. 842
- sheet M-4.01




## 1 M-4.02 SECTION - MECHANICAL

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

(NOTE: HOT WATER PIPING NOT SHOWN BUT SHALL BE INSTALLED AS HIGH AS POSSIBLE)




## 2 M-4.02 SECTION - MECHANICAL

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

(NOTE: HOT WATER PIPING NOT SHOWN BUT SHALL BE INSTALLED AS HIGH AS POSSIBLE)

LAKE COUNTY
FLORIDA

**Approved Plans - Commercial**

**LAKE COUNTY BUILDING DIVISION**

Any errors or omission in these plans shall be made to conform with the applicable code requirements per Florida Building Code 105.4.1

Plans reviewed for code compliance and shall be kept on site

Permit # 2011110212

Building: BLD31 12/29/11
Electric: ADM01 12/29/11
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
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Notes:


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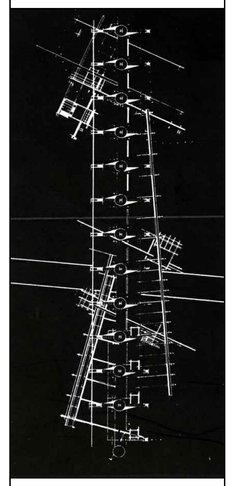

# Lake County Emergency Communications & Operations Center

Tavares, Florida

**PERMIT CD SUBMITTAL**


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- revisions

- sheet title

**SECTIONS - MECHANICAL**

- scale: 1/8" = 1'-0"
- drawn: VVL
- checked: WGE
- approved: RWF
- date: 11/09/11
- project no. 842
- sheet M-4.02

# PARALLEL FAN POWERED HOT WATER COIL V.A.V. TERMINAL UNITS SCHEDULE

| SYMBOL | LOCATION SERVED | AIR VALVE DATA | | | | TOTAL HEATING CFM | FAN DATA (HEATING MODE ONLY) | | | | | MAX. N.C. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MAX. COOLING CFM | MIN. COOLING CFM | MAX. P.D. (IN H20) | HEATING MODE CFM | | CFM | EXT. S.P. (IN H20) | H.P. | VOLT. | PH. | |
| PFPU-1.1 | KITCHEN 118/PANTRY 119 | 550 | 105 | 0.1 | 105 | 225 | 120 | 0.38 | 0.12 | 277 | 1 | 30 |
| PFPU-1.2 | DINING RM. 117 | 1,000 | 165 | 0.1 | 165 | 500 | 335 | 0.38 | 0.33 | 277 | 1 | 30 |
| PFPU-1.3 | LOBBY 100 | 550 | 105 | 0.1 | 105 | 225 | 120 | 0.38 | 0.12 | 277 | 1 | 30 |
| PFPU-1.4 | COMM. DIRECTOR 104,105,109,110 | 600 | 105 | 0.1 | 105 | 300 | 195 | 0.38 | 0.12 | 277 | 1 | 30 |
| PFPU-1.5 | BUREAU COMM. 103 | 400 | 60 | 0.1 | 60 | 200 | 140 | 0.38 | 0.12 | 277 | 1 | 30 |
| PFPU-1.6 | COMM. CENTER SOUTH 133 | 600 | 105 | 0.1 | 105 | 300 | 195 | 0.38 | 0.12 | 277 | 1 | 30 |
| PFPU-1.7 | COMM. CENTER SOUTHWEST 133 | 1,500 | 240 | 0.1 | 240 | 750 | 510 | 0.38 | 0.33 | 277 | 1 | 30 |
| PFPU-1.8 | COMM. CENTER NORTHWEST 133 | 1,500 | 240 | 0.1 | 240 | 750 | 510 | 0.38 | 0.33 | 277 | 1 | 30 |
| PFPU-1.9 | COMM. CENTER NORTH 133 | 600 | 105 | 0.1 | 105 | 300 | 195 | 0.38 | 0.12 | 277 | 1 | 30 |
| | | | | | | | | | | | | |
| PFPU-2.1 | SECURE STORAGE 232 | 400 | 60 | 0.1 | 60 | 200 | 140 | 0.38 | 0.12 | 277 | 1 | 30 |
| PFPU-2.2 | JOINT INFO. CENTER 233 | 375 | 60 | 0.1 | 60 | 188 | 128 | 0.38 | 0.33 | 277 | 1 | 30 |
| PFPU-2.3 | CITIZENS INFO. LINE 230 | 750 | 105 | 0.1 | 105 | 375 | 270 | 0.38 | 0.12 | 277 | 1 | 30 |
| PFPU-2.4 | OFFICES 205, 206 | 400 | 60 | 0.1 | 60 | 200 | 140 | 0.38 | 0.12 | 277 | 1 | 30 |
| PFPU-2.5 | COMMAND CENTER WEST 218 | 1,000 | 165 | 0.1 | 165 | 500 | 335 | 0.38 | 0.33 | 277 | 1 | 30 |
| PFPU-2.6 | COMMAND CENTER NORTH 218 | 1,500 | 240 | 0.1 | 240 | 750 | 510 | 0.38 | 0.33 | 277 | 1 | 30 |
| PFPU-2.7 | CLASSROOM WEST 211 | 1,200 | 165 | 0.1 | 165 | 600 | 435 | 0.38 | 0.33 | 277 | 1 | 30 |
| PFPU-2.8 | CLASSROOM EAST 211 | 1,300 | 165 | 0.1 | 165 | 650 | 435 | 0.38 | 0.33 | 277 | 1 | 30 |
| PFPU-2.9 | OFFICES 207, 208 | 450 | 60 | 0.1 | 60 | 225 | 165 | 0.38 | 0.12 | 277 | 1 | 30 |

| SYMBOL | HOT WATER COIL DATA | | | | | | | | | PHYSICAL DATA | | | MANUFACTURER | MODEL NUMBER | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AIR SIDE | | | | WATER SIDE | | | | | INLET SIZE | OUTLET SIZE | WEIGHT (LBS.) (MAX) | | | |
| | CFM | E.A.T. (DEG. F) | L.A.T. (DEG. F) | DELTA P (IN. W.G.) (MAX) | BTUH | GPM | E.W.T. (DEG. F) | L.W.T. (DEG. F) | DELTA P (FT. W.G.) (MAX) | | | | | | |
| PFPU-1.1 | 225 | 63 | 90 | 0.10 | 7,000 | 0.75 | 180 | 160 | 2.0 | 8 | 20x14 | 98 | TRANE | VPWF0802SQ | ALL |
| PFPU-1.2 | 500 | 63 | 90 | 0.10 | 15,000 | 1.50 | 180 | 160 | 2.0 | 10 | 20x14 | 98 | TRANE | VPWF1003SQ | ALL |
| PFPU-1.3 | 225 | 63 | 90 | 0.10 | 7,000 | 0.75 | 180 | 160 | 2.0 | 8 | 20x14 | 98 | TRANE | VPWF0802SQ | ALL |
| PFPU-1.4 | 300 | 63 | 90 | 0.10 | 9,000 | 1.00 | 180 | 160 | 2.0 | 8 | 20x14 | 98 | TRANE | VPWF0802SQ | ALL |
| PFPU-1.5 | 200 | 63 | 90 | 0.10 | 6,000 | 0.60 | 180 | 160 | 2.0 | 6 | 20x14 | 98 | TRANE | VPWF0602SQ | ALL |
| PFPU-1.6 | 300 | 63 | 90 | 0.10 | 9,000 | 1.00 | 180 | 160 | 2.0 | 8 | 20x14 | 98 | TRANE | VPWF0802SQ | ALL |
| PFPU-1.7 | 750 | 63 | 90 | 0.10 | 22,000 | 2.20 | 180 | 160 | 2.0 | 12 | 20x16 | 116 | TRANE | VPWF1204SQ | ALL |
| PFPU-1.8 | 750 | 63 | 90 | 0.10 | 22,000 | 2.20 | 180 | 160 | 2.0 | 12 | 20x16 | 116 | TRANE | VPWF1204SQ | ALL |
| PFPU-1.9 | 300 | 63 | 90 | 0.10 | 9,000 | 1.00 | 180 | 160 | 2.0 | 8 | 20x14 | 98 | TRANE | VPWF0802SQ | ALL |
| | | | | | | | | | | | | | | | |
| PFPU-2.1 | 200 | 63 | 90 | 0.10 | 6,000 | 0.60 | 180 | 160 | 2.0 | 6 | 20x14 | 98 | TRANE | VPWF0602SQ | ALL |
| PFPU-2.2 | 188 | 63 | 90 | 0.10 | 5,500 | 0.60 | 180 | 160 | 2.0 | 6 | 20x14 | 98 | TRANE | VPWF0602SQ | ALL |
| PFPU-2.3 | 375 | 63 | 90 | 0.10 | 11,000 | 1.10 | 180 | 160 | 2.0 | 8 | 20x14 | 98 | TRANE | VPWF0802SQ | ALL |
| PFPU-2.4 | 200 | 63 | 90 | 0.10 | 7,000 | 0.75 | 180 | 160 | 2.0 | 6 | 20x14 | 98 | TRANE | VPWF0602SQ | ALL |
| PFPU-2.5 | 500 | 63 | 90 | 0.10 | 6,000 | 0.60 | 180 | 160 | 2.0 | 10 | 20x14 | 98 | TRANE | VPWF1003SQ | ALL |
| PFPU-2.6 | 750 | 63 | 90 | 0.10 | 22,000 | 2.20 | 180 | 160 | 2.0 | 12 | 20x16 | 116 | TRANE | VPWF1204SQ | ALL |
| PFPU-2.7 | 600 | 63 | 90 | 0.10 | 18,000 | 1.80 | 180 | 160 | 2.0 | 10 | 20x14 | 98 | TRANE | VPWF1003SQ | ALL |
| PFPU-2.8 | 650 | 63 | 90 | 0.10 | 19,000 | 2.00 | 180 | 160 | 2.0 | 10 | 20x14 | 98 | TRANE | VPWF1003SQ | ALL |
| PFPU-2.9 | 225 | 63 | 90 | 0.10 | 7,000 | 0.75 | 180 | 160 | 2.0 | 6 | 20x14 | 98 | TRANE | VPWF0602SQ | ALL |

REMARKS:

1. PROVIDE FACTORY MOUNTED DIGITAL ELECTRONIC CONTROLLER AND REMOTE WALL MOUNTED SENSOR WITH ADJUSTABLE SET-POINTS FOR VAV COOLING AND HEATING WITH DUAL MINIMUM FLOWS. SEE SPECIFICATIONS FOR CONTROL SYSTEM REQUIREMENTS AND COORDINATE WITH CONTROL SUBCONTRACTOR AS REQUIRED.
2. PROVIDE 24 VOLT CONTROL POWER TRANSFORMER.
3. PROVIDE 22 GAGE GALVANIZED STEEL UNIT CASING.
4. PROVIDE "PSC" FAN MOTOR WITH SCR SPEED CONTROLLER.
5. PROVIDE 2-ROW HOT WATER HEATING COIL.
6. PROVIDE HANGER BRACKETS.
7. PROVIDE FLANGED OUTLET DUCT CONNECTION.
8. PROVIDE UNIT WITH MOUNTED DISCONNECT SWITCH.
9. PROVIDE 1" THICK FOIL-FACED INSULATION.

# WALL MOUNTED LOUVER SCHEDULE

| SYMBOL | SERVING | SIZE | CFM | MAX. VELOCITY (FPM) | MAX. P.D. (IN. W.G.) | MATERIAL | FREE AREA (%) | BLADE ANGLE (DEG.) | BLADE SPACING | FRAME DEPTH | MANUFACTURER | MODEL NUMBER | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L-1 | 101, 115 | 24x12 | 400 | 503 | 0.034 | ALUMINUM | 39.8 | 37 | 4" | 6" | GREENHECK | ESD-635D | ALL |
| L-2 | 121 - 125 | 27x18 | 800 | 534 | 0.038 | ALUMINUM | 44.4 | 37 | 4" | 6" | GREENHECK | ESD-635D | ALL |
| L-3 | 123 | 60x20 | 1,450 | 416 | 0.26 | ALUMINUM | 43.3 | 37 | 4" | 6" | GREENHECK | ESD-635D | ALL |
| L-4 | 228 | 24"x24" | 1,200 | 657 | 0.057 | ALUMINUM | 45.7 | 37 | 4" | 6" | GREENHECK | ESD-635D | ALL |
| L-5 | 229 | 30"x20" | 1,200 | 680 | 0.062 | ALUMINUM | 42.3 | 37 | 4" | 6" | GREENHECK | ESD-635D | ALL |
| L-6 | 228 | 63"x26" | 2,400 | 444 | 0.029 | ALUMINUM | 47.5 | 37 | 4" | 6" | GREENHECK | ESD-635D | ALL |

REMARKS:

1. RUSKIN CD-40 AUTOMATIC DAMPER WITH A SINGLE 120 VOLT DAMPER ACTUATOR. ACTUATOR SHALL BE A "VALVCON" SERIES SV600 TWO POSITION ACTUATOR (RUSKING MODEL NO. SVW600S115V AC.)
2. THE LOUVER AND AUTOMATIC DAMPER SHALL BE A SINGLE UNIT. MULTIPLE SECTIONS FIT TOGETHER TO COMPRISE A LOUVER AND DAMPER IS NOT ACCEPTABLE.
3. FINISH SHALL BE "KYNAR 500" FLUROPOLYMER COATING. COLOR SELECTED BY ARCHITECT.
4. FLANGED FRAME.
5. VERTICAL SECURITY BARS 3" ON CENTER.
6. #6 GUAGE U.S. CUSTOMS APPROVED SECURITY SCREEN MESH.
7. PROVIDE COLOR APPROVED BY ARCHITECT.
8. PROVIDE BUG SCREEN.

# V.A.V. TERMINAL UNITS WITH HOT WATER COIL SCHEDULE

| SYMBOL | LOCATION SERVED | AIR DATA | | ELECTRICAL DATA | | HOT WATER COIL DATA | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MAX. CFM | MIN. CFM | VOLT | PH | AIR SIDE | | | | WATER SIDE | | | | |
| | | | | | | CFM | E.A.T. (DEG. F) | L.A.T. (DEG. F) | DELTA P (IN. W.G.) | BTUH | GPM | E.W.T. (DEG. F) | L.W.T. (DEG. F) | DELTA P (FT. W.G.) |
| VAV-1.1 | TELE/COMM 127 | 800 | 0 | 277 | 1 | N/A | N/A | N/A | N/A | 0 | 0 | N/A | N/A | N/A |
| VAV-1.2 | 911 EQUIPMENT 126 | 4,200 | 0 | 277 | 1 | N/A | N/A | N/A | N/A | 0 | 0 | N/A | N/A | N/A |
| VAV-1.3 | IT TECH 128 | 150 | 25 | 277 | 1 | 60 | 51 | 89 | 0.25 | 2,500 | 0.25 | 180 | 160 | 2.0 |
| VAV-1.4 | MENS/WOMENS RR., CORR. 116 | 700 | 105 | 277 | 1 | 165 | 51 | 89 | 0.25 | 5,000 | 0.50 | 180 | 160 | 2.0 |
| VAV-1.5 | CHIEF TRNG. OFF. 113/QUIET 114 | 250 | 40 | 277 | 1 | 60 | 51 | 89 | 0.25 | 2,500 | 0.25 | 180 | 160 | 2.0 |
| VAV-1.6 | IT CORD 129 | 150 | 25 | 277 | 1 | 60 | 51 | 89 | 0.25 | 2,500 | 0.25 | 180 | 160 | 2.0 |
| VAV-1.7 | COP/SUPPLY 107 | 375 | 60 | 277 | 1 | 60 | 51 | 89 | 0.25 | 2,500 | 0.25 | 180 | 160 | 2.0 |
| VAV-1.8 | EMS DIRECTOR 111/ASST. MGR. 112 | 250 | 40 | 277 | 1 | 60 | 51 | 89 | 0.25 | 2,500 | 0.25 | 180 | 160 | 2.0 |
| VAV-1.9 | EM LIAISON 108 | 125 | 25 | 277 | 1 | 60 | 51 | 89 | 0.25 | 2,500 | 0.25 | 180 | 160 | 2.0 |
| VAV-1.10 | RECEPTION 106/CORR. 102 | 525 | 105 | 277 | 1 | 165 | 51 | 89 | 0.25 | 7,500 | 0.75 | 180 | 160 | 2.0 |
| VAV-1.11 | VOICE/DATA RM. 130 | 4,200 | 0 | 277 | 1 | N/A | N/A | N/A | N/A | 0 | 0 | N/A | N/A | N/A |
| VAV-1.12 | COMM. CENTER 133 | 1,250 | 165 | 277 | 1 | 350 | 51 | 89 | 0.25 | 15,000 | 1.50 | 180 | 160 | 2.0 |
| VAV-1.13 | COMM. CENTER 133 | 1,250 | 165 | 277 | 1 | 350 | 51 | 89 | 0.25 | 15,000 | 1.50 | 180 | 160 | 2.0 |
| | | | | | | | | | | | | | | |
| VAV-2.1 | COMM./PBX BOX 227 | 3,200 | 0 | 277 | 1 | N/A | N/A | N/A | N/A | 0 | 0 | N/A | N/A | N/A |
| VAV-2.2 | FILE RM. 209/CORR. 203 | 375 | 60 | 277 | 1 | 60 | 51 | 89 | 0.25 | 2,500 | 0.25 | 180 | 160 | 2.0 |
| VAV-2.3 | UTILITY ACCESS RM. 226 | 375 | 60 | 277 | 1 | 60 | 51 | 89 | 0.25 | 2,500 | 0.25 | 180 | 160 | 2.0 |
| VAV-2.4 | BREAKOUT RM #3 224 | 250 | 40 | 277 | 1 | 60 | 51 | 89 | 0.25 | 2,500 | 0.25 | 180 | 160 | 2.0 |
| VAV-2.5 | EXECUTIVE POLICY RM. 225 | 600 | 105 | 277 | 1 | 165 | 51 | 89 | 0.25 | 7,500 | 0.75 | 180 | 160 | 2.0 |
| VAV-2.6 | MENS RR./CORR. 223 | 750 | 105 | 277 | 1 | 165 | 51 | 89 | 0.25 | 7,500 | 0.75 | 180 | 160 | 2.0 |
| VAV-2.7 | ARES/RADIO RM. 222 | 600 | 0 | 277 | 1 | N/A | N/A | N/A | N/A | 0 | 0 | N/A | N/A | N/A |
| VAV-2.8 | WOMENS RR./CORR. 201 | 750 | 105 | 277 | 1 | 165 | 51 | 89 | 0.25 | 7,500 | 0.75 | 180 | 160 | 2.0 |
| VAV-2.9 | PRESS RM. 202 | 800 | 105 | 277 | 1 | 165 | 51 | 89 | 0.25 | 7,500 | 0.75 | 180 | 160 | 2.0 |
| VAV-2.10 | A/V RM. 210 | 375 | 0 | 277 | 1 | N/A | N/A | N/A | N/A | 0 | 0 | N/A | N/A | N/A |
| VAV-2.11 | BREAKOUT RM. #2 220/TRAFFICE 221 | 550 | 105 | 277 | 1 | 165 | 51 | 89 | 0.25 | 7,500 | 0.75 | 180 | 160 | 2.0 |
| VAV-2.12 | BREAKOUT RM. #1 219 | 375 | 40 | 277 | 1 | 60 | 51 | 89 | 0.25 | 2,500 | 0.25 | 180 | 160 | 2.0 |
| VAV-2.13 | COMMAND CENTER 218 | 1,250 | 165 | 277 | 1 | 350 | 51 | 89 | 0.25 | 15,000 | 1.50 | 180 | 160 | 2.0 |
| VAV-2.14 | COMMAND CENTER 218 | 1,250 | 165 | 277 | 1 | 350 | 51 | 89 | 0.25 | 15,000 | 1.50 | 180 | 160 | 2.0 |

| SYMBOL | MAX. N.C. | INLET SIZE (IN. DIA.) | OUTLET SIZE (IN. DIA.) | MANUFACTURER | MODEL NO. | REMARKS |
|---|---|---|---|---|---|---|
| VAV-1.1 | 30 | 8 | 11x10 | TRANE | VCC-08 | ALL |
| VAV-1.2 | 30 | 24x16 | 28x19 | TRANE | VCC-24x16 | ALL |
| VAV-1.3 | 30 | 4 | 10x8 | TRANE | VCWF-04 | ALL |
| VAV-1.4 | 30 | 8 | 11x10 | TRANE | VCWF-08 | ALL |
| VAV-1.5 | 30 | 5 | 10x8 | TRANE | VCWF-05 | ALL |
| VAV-1.6 | 30 | 4 | 10x8 | TRANE | VCWF-04 | ALL |
| VAV-1.7 | 30 | 6 | 10x8 | TRANE | VCWF-06 | ALL |
| VAV-1.8 | 30 | 5 | 10x8 | TRANE | VCWF-05 | ALL |
| VAV-1.9 | 30 | 4 | 10x8 | TRANE | VCWF-04 | ALL |
| VAV-1.10 | 30 | 8 | 11x10 | TRANE | VCWF-08 | ALL |
| VAV-1.11 | 30 | 24x16 | 28x19 | TRANE | VCC-24x16 | ALL |
| VAV-1.12 | 30 | 10 | 14x12 | TRANE | VCWF-10 | ALL |
| VAV-1.13 | 30 | 10 | 14x12 | TRANE | VCWF-10 | ALL |
| | | | | | | |
| VAV-2.1 | 30 | 16 | 23x18 | TRANE | VCWF-16 | ALL |
| VAV-2.2 | 30 | 6 | 10x8 | TRANE | VCWF-06 | ALL |
| VAV-2.3 | 30 | 6 | 10x8 | TRANE | VCWF-06 | ALL |
| VAV-2.4 | 30 | 5 | 10x8 | TRANE | VCWF-05 | ALL |
| VAV-2.5 | 30 | 8 | 11x10 | TRANE | VCWF-08 | ALL |
| VAV-2.6 | 30 | 8 | 11x10 | TRANE | VCWF-08 | ALL |
| VAV-2.7 | 30 | 8 | 11x10 | TRANE | VCWF-08 | ALL |
| VAV-2.8 | 30 | 8 | 11x10 | TRANE | VCWF-08 | ALL |
| VAV-2.9 | 30 | 8 | 11x10 | TRANE | VCWF-08 | ALL |
| VAV-2.10 | 30 | 6 | 10x8 | TRANE | VCWF-06 | ALL |
| VAV-2.11 | 30 | 8 | 11x10 | TRANE | VCWF-08 | ALL |
| VAV-2.12 | 30 | 6 | 10x8 | TRANE | VCWF-06 | ALL |
| VAV-2.13 | 30 | 10 | 14x12 | TRANE | VCWF-10 | ALL |
| VAV-2.14 | 30 | 10 | 14x12 | TRANE | VCWF-10 | ALL |

REMARKS:

1. PROVIDE FACTORY MOUNTED DIGITAL ELECTRONIC CONTROLLER AND REMOTE WALL MOUNTED SENSOR WITH ADJUSTABLE SET-POINTS FOR VAV COOLING AND HEATING WITH DUAL MINIMUM FLOWS. SEE SPECIFICATIONS FOR CONTROL SYSTEM REQUIREMENTS AND COORDINATE WITH CONTROL SUBCONTRACTOR AS REQUIRED.
2. PROVIDE 277 TO 24 VOLT CONTROL POWER TRANSFORMER.
3. PROVIDE SINGLE POINT POWER CONNECTION.
4. PROVIDE 22 GAGE GALVANIZED STEEL UNIT CASING.
5. PROVIDE 1" THICK FOIL-FACED INSULATION.
6. PROVIDE 1-ROW HOT WATER HEATING COIL FOR VCWF-08 UNITS AND SMALLER.
7. PROVIDE 2-ROW HOT WATER HEATING COIL FOR VCWF-10 UNITS AND LARGER. NO HOT WATER COIL IS REQUIRED FOR VCCF UNITS.

LAKE COUNTY
FLORIDA
**Approved Plans - Commercial**
**LAKE COUNTY BUILDING DIVISION**
Any errors or omission in these plans shall be made to conform with the applicable code requirements per Florida Building Code 105.4.1
Plans reviewed for code compliance and shall be kept on site
Permit # 2011110212
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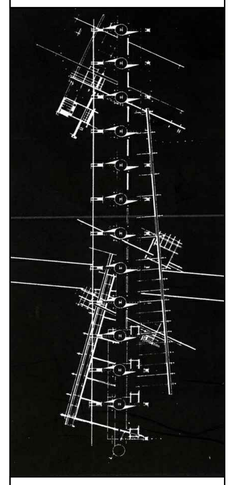
(407) 647-1706
Corporate Registration No. AAC001197

**Lake County Emergency Communications & Operations Center**

Tavares, Florida

**PERMIT CD SUBMITTAL**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- revisions

- sheet title

**SCHEDULES - MECHANICAL**

- scale: AS SHOWN
- drawn: VVL
- checked: WGE
- approved: RWF
- date: 11/09/11
- project no. 842
- sheet M-5.01

# DX A/C COMPUTER ROOM UNIT SCHEDULE

| SYMBOL | ROOMS/SPACES SERVED | SUPPLY AIR CFM | OUTSIDE AIR CFM | E.S.P. (IN. W.G.) | COOLING DATA | | | | | HEATING DATA | | | | | INDOOR FAN DATA | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | TOTAL BTU/HR | SENSIBLE BTU/HR | ENT. AIR TEMP. DB | ENT. AIR TEMP. WB | MIN. E.E.R. | KW | CAP. BTU/HR | STEPS | VOLT. | PH. | QTY. | DRIVE | HP (EA.) | VOLT. | PH. |
| AC-1.1 | 911 EQUIP. 126 | 8,000 | N/A | 0.75 | 171,500 | 150,900 | 72.0 | 60.0 | 11.0 | 25.0 | 85,325 | 3 | 480 | 3 | 1 | BELT | 5.0 | 480 | 3 |
| AC-2.1 | VOICE/DATA RM. 130 | 8,000 | N/A | 0.75 | 171,500 | 150,900 | 72.0 | 60.0 | 11.0 | 25.0 | 85,325 | 3 | 480 | 3 | 1 | BELT | 5.0 | 480 | 3 |
| AC-3.1 | COMM/ PBX 227 | 5,500 | N/A | 0.75 | 121,400 | 104,400 | 72.0 | 60.0 | 11.0 | 15.0 | 51,195 | 3 | 480 | 3 | 1 | BELT | 5.0 | 480 | 3 |

| SYMBOL | HUMIDIFIER DATA | | COMPRESSOR DATA | | | UNIT ELECTRICAL DATA | | | | PHYSICAL CHARACTERISTICS | | MANUFACTURER | MODEL NUMBER | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | CAP. LB/HR | KW | NO. | RLA (EA.) | LRA (EA.) | MCA | MOCP | VOLT. | PH. | DIMENSIONS LxWxH (IN.) | WEIGHT LBS. | | | |
| AC-1.1 | 22.0 | 9.6 | 2 | – | – | 69.0 | 70.0 | 480 | 3 | 98"x35"x76" | 2,300 | LIEBERT | D5053 | 1 THRU 17,19,20,21 |
| AC-2.1 | 22.0 | 9.6 | 2 | – | – | 69.0 | 70.0 | 480 | 3 | 98"x35"x76" | 2,300 | LIEBERT | D5053 | 1 THRU 17,19,20,21 |
| AC-3.1 | 11.0 | 6.4 | 2 | – | – | 44.7 | 45.0 | 480 | 3 | 73"x35"x76" | 1,950 | LIEBERT | D5053 | ALL |

REMARKS:

1. PROVIDE VARIABLE COOLING CAPACITY CONTROL.
2. PROVIDE SINGLE POINT POWER CONNECTION.
3. PROVIDE UP-FLOW CONFIGURATION. SEE FLOOR PLANS FOR CONFIGURATION.
4. PROVIDE FILTER SECTION WITH MERV-11 FILTERS AMD MERV-8 PRE-FILTERS.
5. PROVIDE ADJUSTABLE 12" HIGH STEEL FLOOR STAND.
6. PROVIDE DUAL REFRIGERATION CIRCUITS.
7. PROVIDE LOW, HIGH, AND LOSS OF CHARGE PRESSURE SAFETY CONTROL SWITCHES.
8. PROVIDE A SMOKE DETECTOR IN SUPPLY AND RETURN AIR PER SFA #E-4500-6.
9. PROVIDE NON-LOCKING DISCONNECT SWITCH.
10. PROVIDE ADVANCED MICROPROCESSOR CONTROL SYSTEM WITH BMS INTERFACE. TRANSLATE FOR COMPATIBILITY TO EXISTING CENTRAL ENERGY PLANT HONEYWELL EBI CONTROL SYSTEM.
11. PROVIDE WATER DETECTION MONITORING (LIQUID TECH).
12. PROVIDE INFRARED HUMIDIFIER WITH AUTO-FLUSH.
13. PROVIDE DIGITAL SCROLL COMPRESSORS.
14. PROVIDE CRANKCASE HEATER ON EACH COMPRESSOR.
15. PROVIDE TEMPERATURE SENSOR AND HUMIDITY SENSOR.
16. PROVIDE 5 YEAR COMPRESSOR AND PARTS WARRANTY.
17. PROVIDE WITH OPTIONAL HIGH CAPACITY EVAPORATOR FAN MOTOR.
18. PROVIDE WITH OPTIONAL DISCHARGE PLENUM AND GRILLES.
19. PROVIDE WITH OPEN DRIP-PROOF PREMIUM EFFICIENCY MOTORS.
20. PROVIDE THREE PHASE PROTECTION MONITOR.
21. PROVIDE R-407C REFRIGERANT.

EXTERNAL STATIC PRESSURE DOES NOT INCLUDE FILTER LOSSES.

# AIR COOLED CONDENSER SCHEDULE

| SYMBOL | SERVING | CAPACITY | | OUTDOOR FAN DATA | | | | UNIT ELECTRICAL DATA | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | BTU/HR. | COND. DEG. F. | NO. | H.P. (EA.) | VOLTAGE | PHASE | #CONN. | MCA | MOCP | VOLT. | PHASE |
| CU-1.1 | AC-1.1 | 308,000 | 100 | 3 | 0.75 | 480 | 3 | ONE | 5.7 | 15.0 | 480 | 3 |
| CU-2.1 | AC-2.1 | 308,000 | 100 | 3 | 0.75 | 480 | 3 | ONE | 5.7 | 15.0 | 480 | 3 |
| CU-3.1 | AC-3.1 | 205,000 | 100 | 2 | 0.75 | 480 | 3 | ONE | 3.8 | 15.0 | 480 | 3 |

| SYMBOL | PHYSICAL CHARACTERISTERICS | | MANUFACTURER | MODEL NUMBER | REMARKS |
|---|---|---|---|---|---|
| | DIMENSIONS LxWxH (IN.) | WEIGHT LBS. | | | |
| CU-1.1 | 132"x44"x44" | 670 | LIEBERT | CDF-308 | ALL |
| CU-2.1 | 132"x44"x44" | 670 | LIEBERT | CDF-308 | ALL |
| CU-3.1 | 92"x44"x48" | 425 | LIEBERT | CDF-205 | ALL |

REMARKS:

1. PROVIDE REFRIGERANT SHUT-OFF TYPE SERVICE VALVES.
2. PROVIDE SWEAT TYPE REFRIGERANT PIPE CONNECTIONS.
3. PROVIDE DUAL REFRIGERANT CIRCUITS.
4. PROVIDE LOW AMBIENT VFD CONTROL.
5. PROVIDE WITH FAN CYCLE HEAD PRESSURE CONTROL.

# AIR DISTRIBUTION SCHEDULE

| SYMBOL | DESCRIPTION | MODULE SIZE | MATERIAL | FINISH | NECK SIZE | DAMPER | BORDER FRAME TYPE | PATTERN | MAX. PRESS. DROP | MAX. N.C. | MANUF. | MODEL NUMBER | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CD | SQUARE SUPPLY AIR CEILING DIFFUSER WITH THREE CONE, ONE PIECE CONSTRUCTION, NO CORNER JOINTS, REMOVABLE INNER CONES AND ROUND NECK DUCT CONNECTION. DAMPER SHALL BE OPERABLE FROM FACE OF DIFFUSER. | 24 X 24 | ALUMINUM | WHITE | SAME AS DUCT SIZE ON PLANS | NO | LAY-IN PANEL | SEE PLANS | 0.10 | 30 | TITUS | TMS-AA | |
| CD-1 | SQUARE SUPPLY AIR CEILING DIFFUSER WITH THREE CONE, ONE PIECE CONSTRUCTION, NO CORNER JOINTS, REMOVABLE INNER CONES AND ROUND NECK DUCT CONNECTION. DAMPER SHALL BE OPERABLE FROM FACE OF DIFFUSER. | 24 X 24 | ALUMINUM | WHITE | SAME AS DUCT SIZE ON PLANS | NO | SURFACE MOUNT | SEE PLANS | 0.10 | 30 | TITUS | TMS-AA | |
| SR | ADJUSTABLE CURVED BLADE SQUARE AND RECTANGULAR SUPPLY AIR CEILING DIFFUSER WITH INDIVIDUALLY ADJUSTABLE BLADES. DAMPER SHALL BE OPERABLE FROM FACE OF DIFFUSER. | 18 X 8 | ALUMINUM | WHITE | SAME AS DUCT SIZE ON PLANS | YES | SURFACE MOUNT | SEE PLANS | 0.10 | 30 | TITUS | 132RS | |
| RD | ROUND ADJUSTABLE THREE CONE SUPPLY AIR DIFFUSER WITH REMOVABLE INNER CONES. DAMPER SHALL BE OPERABLE FROM FACE OF DIFFUSER. | VARIES | ALUMINUM | WHITE | SAME AS DUCT SIZE ON PLANS | YES | SURFACE MOUNT | | 0.10 | 30 | TITUS | TMRA-AA | |
| R | RETURN, INTAKE OR TRANSFER AIR GRILLE WITH 30 DEGREE FIXED DEFLECTION BLADES ON 1/2" CENTERS. BLADES ARE PARALLEL TO LONG DIMENSION. CORNERS SHALL BE WELDED. DAMPER SHALL BE OPERABLE FROM FACE OF GRILLE. | VARIES | STEEL | WHITE | SAME AS DUCT SIZE ON PLANS | NO | LAY-IN PANEL | N/A | 0.10 | 30 | TITUS | 25RL | |
| R-1 | RETURN, INTAKE OR TRANSFER AIR GRILLE WITH 30 DEGREE FIXED DEFLECTION BLADES ON 1/2" CENTERS BLADES ARE PARALLEL TO LONG DIMENSION. CORNERS SHALL BE WELDED. DAMPER SHALL BE OPERABLE FROM FACE OF GRILLE. | VARIES | STEEL | WHITE | SAME AS DUCT SIZE ON PLANS | YES | SURFACE MOUNT | N/A | 0.10 | 30 | TITUS | 25RL | |
| TG | RETURN, INTAKE OR TRANSFER AIR GRILLE WITH 30 DEGREE FIXED DEFLECTION BLADES ON 1/2" CENTERS BLADES ARE PARALLEL TO LONG DIMENSION. CORNERS SHALL BE WELDED. DAMPER SHALL BE OPERABLE FROM FACE OF GRILLE. | VARIES | STEEL | WHITE | SAME AS DUCT SIZE ON PLANS | YES | SURFACE MOUNT | N/A | 0.10 | 30 | TITUS | 25RL | |
| ER | 1/2" X 1/2" X 1/2" EGGCRATE TYPE EXHAUST AIR GRILLE. CORNERS SHALL BE WELDED. FRAME CONTAINS COUNTERSUNK SCREW HOLES. DAMPER SHALL BE OPERABLE FROM FACE OF GRILLE. | VARIES | ALUMINUM | WHITE | SAME AS DUCT SIZE ON PLANS | YES | LAY-IN PANEL | N/A | 0.10 | 30 | TITUS | 50F | |

REMARKS:

1. PROVIDE FILTER BACK STYLE TYPE GRILLE WITH 1" THICK FILTER.

# CHILLED WATER AIR HANDLING UNITS SCHEDULE

| SYMBOL | LOCATION SERVED | FAN DATA | | | | | | MOTOR DATA | | | | HOT WATER COIL DATA (NOT REQUIRED) | | | | | PHYSICAL CHARACTERISITICS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MAX. CFM | O/A CFM | E.S.P. (IN. W.G.) | FAN TYPE | FAN SIZE | FAN RPM | H.P. (EACH) | RPM | VOLT | PH. | EWT (DEG. F) | LWT (DEG. F) | GPM | CAPACITY BTUH | MAX. DELTA P (FT. H20) | DIMENSIONS L x W x H (IN.) | WEIGHT MAX. (LBS.) |
| *AHU-1.1 | FIRST FLOOR | 19,000 | 1,450 | 2.5 | PLUG-AF | 30.0 | 1,335 | *25.0 | 1,200 | 460 | 3 | – | – | – | – | – | 251"x126"x89 | 12,000 |
| *AHU-2.1 | SECOND FLOOR | 17,800 | 2,400 | 2.5 | PLUG-AF | 30.0 | 1,329 | *25.0 | 1,200 | 460 | 3 | – | – | – | – | – | 251"x126"x76" | 11,300 |

| SYMBOL | CHILLED WATER COIL DATA | | | | | | | | | | MANUFACTURER | MODEL NO. | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | COOLING DATA | | | | | | | CHILLED WATER DATA | | | | | |
| | TOTAL MBH | SENSIBLE MBH | E.A.T. DEG. F DB | E.A.T. DEG. F WB | L.A.T. DEG. F DB | L.A.T. DEG. F WB | FACE VEL. MAX (FPM) | NO. OF ROWS | EWT (DEG F) | LWT (DEG F) | MAX DELTA P (FT. H20) | GPM | | | |
| *AHU-1.1 | 734.0 | 564.0 | 78.4 | 64.5 | 51.4 | 51.2 | 500.0 | **6 | 43.0 | 55.0 | 2.5 | 122.0 | TRANE | PCC-57 | ALL |
| *AHU-2.1 | 687.0 | 528.0 | 78.4 | 64.5 | 51.4 | 51.2 | 500.0 | **6 | 43.0 | 55.0 | 2.8 | 114.0 | TRANE | PCC-50 | ALL |

REMARKS:

1. PROVIDE MIXING BOX SECTION WITH TRANE-TRAQ DAMPER.
2. PROVIDE DOUBLE WALL CONSTRUCTION WITH 2" THICK INSULATION 1.5LB DENSITY.
3. PROVIDE FILTER SECTION WITH 12" THICK 95% EFFICIENT, MERV-15 FILTERS AND 2" THICK PLEATED MEDIA MERV-8 PRE-FILTERS.
4. PROVIDE STAINLESS STEEL SLOPED DRAIN PAN AND COIL CASING.
5. PROVIDE SAME SIDE HINGED ACCESS DOORS. REMOVABLE PANELS ARE NOT ACCEPTABLE.
6. PROVIDE HORIZONTAL CONFIGURED TYPE UNIT. SEE PLANS FOR COMPLETE REQUIREMENTS.
7. PROVIDE TWO DIRECT DRIVE INDEPENDENT PLUG FANS, AND TWO MOTORS.
8. PROVIDE TWO VARIABLE FREQUENCY DRIVES FOR EACH AHU FAN MOTOR (REMOTE MOUNTED).
9. PROVIDE EXTENDED GREASE LINES FOR FAN BEARINGS.
10. PROVIDE TRANE-TRAQ AIRFLOW MONITORING SYSTEM FOR OUTSIDE AIR SECTION.
11. PROVIDE DUAL COMPLETELY INDEPENDENT HORIZONTAL SPLIT FACE CHILLED WATER COILS.
12. PROVIDE COMPLETELY INDEPENDENT FAN SECTION WITH INTERNAL SPRING ISOLATION.
13. PROVIDE UV LIGHTS WITH EXTERNAL DISCONNECT SWITCH. ACCESS PANEL AND SAFETY DOOR INTERLOCK. LIGHTS SHALL BE SEPARATE 120 VOLT CIRCUIT.
14. PROVIDE A SMOKE DETECTOR IN SUPPLY AND RETURN. 1

* PROVIDE 2 INDEPENDENT FANS PER AHU. EACH FAN TO BE RATED FOR 100% SUPPLY AIR CAPACITY FOR REDUNDANCY BUT OPERATE SYNCHRONOUSLY DURING NORMAL OPERATION FOR OPTIMUM EFFICIENCY.

** PROVIDE 2 COMPLETELY INDEPENDENT COILS EACH RATED FOR A MINIMUM 65% CAPACITY OF TOTAL MBH.

# MAXIMUM ALLOWABLE OVERALL AIR HANDLER UNIT ACOUSTICAL DATA

| | FREQUENCY (HERTZ) | | | | | | | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 | |
| DISCHARGE | 81 | 83 | 85 | 69 | 76 | 81 | 74 | 72 | |
| INLET + CASING | 87 | 83 | 86 | 65 | 74 | 79 | 76 | 72 | |
| CASING | 82 | 81 | 75 | 69 | 75 | 62 | 54 | 56 | |
| DUCTED INLET | 78 | 72 | 84 | 54 | 63 | 69 | 60 | 52 | |

# FAN SCHEDULE

| SYMBOL | LOCATION | SERVICE | TYPE | FAN DATA | | | | | MOTOR DATA | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | CFM | ESP (IN. W.G.) | FAN RPM | MAX. SONES | DRIVE | HP (WATTS) | RPM | VOLT | PH | HZ. |
| EF-1 | RESTROOMS | EXHAUST | INLINE CABINET | 450 | 0.50 | 1,541 | 8.0 | DIRECT | 1/8 | 1,541 | 120 | 1 | 60 |
| EF-2 | ELECTRIC RM. | EXHAUST | INLINE CABINET | 350 | 0.38 | 1,419 | 6.3 | DIRECT | 1/4 | 1,419 | 120 | 1 | 60 |
| EF-3 | ELEV. EQUIP. RM. | EXHAUST | INLINE CABINET | 300 | 0.38 | 1,476 | 6.8 | DIRECT | 1/12 | 1,476 | 120 | 1 | 60 |
| EF-4 | RESTROOMS | EXHAUST | INLINE CABINET | 100 | 0.38 | 1,515 | 4.5 | DIRECT | 1/30 | 1,515 | 120 | 1 | 60 |
| EF-5 | RESTROOM/LOCKERS | EXHAUST | INLINE CABINET | 1,200 | 0.68 | 931 | 6.9 | DIRECT | 1/2 | 931 | 120 | 1 | 60 |
| EF-6 | ELEC. RM. 229 | EXHAUST | INLINE CABINET | 1,200 | 0.68 | 931 | 6.9 | DIRECT | 1/2 | 931 | 120 | 1 | 60 |

| SYMBOL | PHYSICAL CHARACTERISTICS | | CONTROLLED BY | MANUFACTURER | MODEL NUMBER | REMARKS | |
|---|---|---|---|---|---|---|---|
| | DIMENSIONS LxWxH (in.) | WEIGHT (LBS.) | ROOF OPENING LxW (in.) | | | | |
| EF-1 | 18x15x15 | 48 | N/A | BMS | GREENHECK | SQ-90-D | 1,2,3,4,6,7,8 |
| EF-2 | 18x15x15 | 67 | N/A | LINE VOLT T'STAT | GREENHECK | SQ-90-VG | 1,2,3,4,5,6,7,8 |
| EF-3 | 18x15x15 | 48 | N/A | LINE VOLT T'STAT | GREENHECK | SQ-85-D | 1,2,3,4,5,6,7,8 |
| EF-4 | 15x12x12 | 32 | N/A | BMS | GREENHECK | SQ-75-D | 1,2,3,4,6,7,8 |
| EF-5 | 28x26x26 | 171 | N/A | BMS | GREENHECK | SQ-160-B | 1,2,3,4,6,7,8 |
| EF-6 | 28x26x26 | 171 | N/A | LINE VOLT T'STAT | GREENHECK | SQ-160-B | 1,2,3,4,6,7,8 |

REMARKS:

1. PROVIDE "NEMA-1" DISCONNECT SWITCH MOUNTED TO UNIT.
2. PROVIDE BACKDRAFT DAMPER.
3. PROVIDE HANGING MOUNTING BRACKETS.
4. PROVIDE SPRING TYPE VIBRATION ISOLATORS.
5. PROVIDE LINE VOLTAGE THERMOSTAT.
6. PROVIDE BOLTED ACCESS PANELS.
7. PROVIDE INLET AND DISCHARGE DUCT MOUNTING COLLARS.
8. PROVIDE SPEED CONTROLLER.

LAKE COUNTY
FLORIDA
**Approved Plans - Commercial**
**LAKE COUNTY BUILDING DIVISION**
Any errors or omission in these plans shall be made to conform with the applicable code requirements per Florida Building Code 105.4.1
Plans reviewed for code compliance and shall be kept on site
Permit # 2011110212
Building: BLD31 12/29/11
Electric: ADM01 12/29/11
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:


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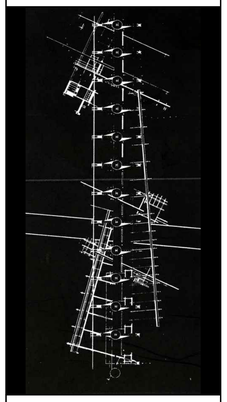

**Lake County Emergency Communications & Operations Center**

Tavares, Florida

**PERMIT CD SUBMITTAL**


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- revisions/addenda

| Number | Description | Date Issued |
|---|---|---|
| 1 | ADDENDUM #2 | 12.23.11 |

- sheet title

**SCHEDULES - MECHANICAL**

- scale: AS SHOWN
- drawn: VVL
- checked: WGE
- approved: RWF
- date: 11/09/11
- project no. 842
- sheet M-5.02

# BUILDING AIRFLOW PRESSURIZATION SCHEDULE

| POSITIVE AIRFLOW PRESSURE (CFM) | | NEGATIVE AIRFLOW PRESSURE (CFM) | |
|---|---|---|---|
| AHU-1 & AHU-2 OUTSIDE AIR | KITCHEN HOOD MAKE-UP AIR | GENERAL/TOILET BUILDING EXHAUST AIR | KITCHEN HOOD EXHAUST AIR |
| + 3,850 CFM | + 0 CFM | - 1,750 CFM | - 1,850 CFM |
| + 3,850 POSITIVE TOTAL AIRFLOW PRESSURE | | - 3,600 NEGATIVE TOTAL AIRFLOW PRESSURE | |
| + 250 POSITIVE BUILDING AIRFLOW PRESSURE | | | |

NOTE: BUILDING BAROMETRIC RELIEF DAMPERS SHALL BE SET AT 0.005 IN. W.G. TO PROPERLY RELIEVE EXCESS POSITIVE PRESSURE.

# OUTSIDE AIR CALCULATION SCHEDULE

| SPACE | AREA (SQFT.) | BREATHING ZONE | PEOPLE PER 1000 SQFT. | PEOPLE | CFM/PERSON | CFM/SQFT. | REQUIRED CFM | PROVIDED CFM | DIVERSITY (%) | DIFFERENCE +/- | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 100 LOBBY | 400 | 211 | 10 | 3 | 11 | 0.06 | 46 | 150 | 0 | + | 104 |
| 101 RESTROOM | 59 | - | - | - | - | - | - | - | - | +/- | - |
| 102 CORR. & 106 RECP. | 698 | 345 | 5 | 1 | 5 | 0.06 | 46 | 55 | 0 | + | 9 |
| 103 BUREAU COMMANDER | 208 | 108 | 5 | 2 | 5 | 0.06 | 12 | 25 | 0 | + | 13 |
| 104 ASS. COMM. DIRECTOR | 136 | 58 | 5 | 1 | 5 | 0.06 | 9 | 15 | 0 | + | 6 |
| 105 COMM. DIRECTOR | 155 | 71 | 5 | 1 | 5 | 0.06 | 10 | 15 | 0 | + | 5 |
| 107 COPY/SUPPLY | 336 | 188 | - | - | - | 0.12 | 23 | 25 | 0 | + | 2 |
| 108 EM. LIAISON | 148 | 66 | 5 | 1 | 5 | 0.06 | 9 | 15 | 0 | + | 6 |
| 109 TRAINING COORD. | 135 | 57 | 5 | 1 | 5 | 0.06 | 9 | 15 | 0 | + | 6 |
| 110 JT. USE STORAGE | 198 | 93 | - | - | - | 0.12 | 12 | 30 | 0 | + | 18 |
| 111 EMS DIRECTOR | 149 | 67 | 5 | 1 | 5 | 0.06 | 10 | 15 | 0 | + | 5 |
| 112 EMS ASS. MANAGER | 129 | 53 | 5 | 1 | 5 | 0.06 | 9 | 15 | 0 | + | 6 |
| 113 CHIEF TRAINING OFF. | 129 | 53 | 5 | 1 | 5 | 0.06 | 9 | 15 | 0 | + | 6 |
| 114 QUIET | 135 | 57 | 5 | 2 | 5 | 0.06 | 14 | 25 | 0 | + | 11 |
| 115 ELEV. EQUIP. RM. | 93 | - | - | - | - | 0.06 | 6 | 0 | 0 | - | 6 |
| 116 CORRIDOR | 1,012 | - | - | - | - | 0.06 | 61 | 120 | 0 | + | 59 |
| 117 DINING RM. | 692 | 475 | 70 | 24 | 7.5 | 0.18 | 266 | 280 | 0 | + | 14 |
| 118 KITCHEN | 303 | 168 | 20 | 4 | 7.5 | - | 30 | 30 | 0 | +/- | 0 |
| 119 PANTRY | 117 | 38 | - | - | - | 0.12 | 5 | 15 | 0 | + | 10 |
| 120 GARBAGE | 103 | - | - | - | - | - | - | - | 0 | +/- | - |
| 121 MENS RESTROOM | 248 | - | - | - | - | - | - | - | 0 | +/- | - |
| 122 WOMENS RESTROOM | 256 | - | - | - | - | - | - | - | 0 | +/- | - |
| 123 MECH. ROOM | 775 | - | - | - | - | 0.12 | 93 | 0 | 0 | - | 93 |
| 124 ELEC. ROOM | 155 | - | - | - | - | 0.06 | 10 | 0 | 0 | - | 10 |
| 125 JANITORS CLOSET | 50 | - | - | - | - | - | - | - | 0 | +/- | - |
| 126 911 EQUIPMENT | 550 | - | - | - | - | 0.06 | 33 | 45 | 0 | + | 12 |
| 127 TELE./COMM. | 196 | - | - | - | - | 0.06 | 12 | 10 | 0 | - | 2 |
| 128 IT TECH. | 122 | 49 | 5 | 1 | 5 | 0.06 | 8 | 15 | 0 | + | 7 |
| 129 IT COORD. | 122 | 49 | 5 | 1 | 5 | 0.06 | 8 | 15 | 0 | + | 7 |
| 130 VOICE/DATA ROOM | 944 | - | - | - | - | 0.06 | 57 | 60 | 0 | + | 3 |
| 131 -133 COMM. CENTER | 4,359 | 3,739 | 5 | 24 | 5 | 0.06 | 345 | 445 | 0 | + | 100 |
| 136 UPS ROOM | 205 | - | - | - | - | 0.06 | 13 | 0 | 0 | - | 13 |
| AHU-1 TOTAL | | | | | | | 1,165 | 1,450 | 0 | + | 285 |
| RESTROOM EXHAUST | | | | | | | 1,000 | 1,000 | 0 | +/- | 0 |
| 201 CORRIDOR | 680 | - | - | - | - | 0.06 | 41 | 0 | 0 | - | 41 |
| 202 PRESS ROOM | 283 | 164 | 50 | 8 | 5 | 0.06 | 50 | 90 | 0 | + | 40 |
| 203 CORR. & 204 RECEP. | 299 | 109 | 5 | 1 | 5 | 0.06 | 12 | 15 | 0 | + | 3 |
| 205 OFFICE A | 156 | 72 | 5 | 2 | 5 | 0.06 | 10 | 20 | 0 | + | 10 |
| 206 OFFICE B | 156 | 72 | 5 | 2 | 5 | 0.06 | 10 | 20 | 0 | + | 10 |
| 207 OFFICE C | 195 | 94 | 5 | 1 | 5 | 0.06 | 11 | 15 | 0 | + | 4 |
| 208 OFFICE D | 163 | 73 | 5 | 1 | 5 | 0.06 | 10 | 15 | 0 | + | 5 |
| 209 FILE ROOM | 202 | 101 | - | - | - | 0.12 | 13 | 15 | 0 | + | 5 |
| 210 A/V ROOM | 72 | - | - | - | - | 0.06 | 5 | 0 | 0 | - | 5 |
| 211 CLASSROOM | 1,591 | 1,286 | 65 | 44 | 7.5 | 0.06 | 408 | 490 | 0 | + | 82 |
| 212 JANITORS CLOSET | 101 | - | - | - | - | - | - | - | - | +/- | - |
| 213 STORAGE | 178 | 48 | - | - | - | 0.12 | 6 | 0 | 0 | - | 6 |
| 214 & 215 RR./LOCKER | 651 | - | - | - | - | - | - | - | - | +/- | - |
| 216 & 217 RR./LOCKER | 651 | - | - | - | - | - | - | - | - | +/- | - |
| 218 COMMAND CENTER | 3,136 | 2,645 | 5 | 102 | 5 | 0.06 | 669 | 1,045 | 0 | + | 376 |
| 219 BREAKOUT RM. #1 | 209 | 106 | 50 | 6 | 5 | 0.06 | 37 | 70 | 0 | + | 33 |
| 220 BREAKOUT RM. #2 | 199 | 99 | 50 | 8 | 5 | 0.06 | 46 | 90 | 0 | + | 44 |
| 221 GIS/TRAFFIC MANAG. | 164 | 71 | 5 | 1 | 5 | 0.06 | 10 | 15 | 0 | + | 5 |
| 222 ARES/RADIO ROOM | 337 | 206 | 5 | 2 | 5 | 0.06 | 23 | 25 | 0 | + | 2 |
| 223 CORRIDOR | 582 | - | - | - | - | 0.06 | 35 | 0 | 0 | - | 35 |
| 224 BREAKOUT ROOM #3 | 194 | 96 | 50 | 6 | 5 | 0.06 | 36 | 70 | 0 | + | 34 |
| 225 EXECUTIVE POLICY | 366 | 227 | 50 | 10 | 5 | 0.06 | 64 | 110 | 0 | + | 46 |
| 226 & 227 UTILITY/COMM. | 708 | - | - | - | - | 0.06 | 43 | 35 | 0 | - | 8 |
| 228 MECH. ROOM | 775 | - | - | - | - | 0.12 | 93 | 0 | 0 | - | 93 |
| 229 ELECTRICAL ROOM | 243 | - | - | - | - | 0.06 | 15 | 0 | 0 | - | 15 |
| 230 CITIZENS INFO LINE | 586 | 396 | 5 | 16 | 5 | 0.06 | 104 | 135 | 0 | + | 31 |
| 232 SECURE STORAGE | 576 | 363 | - | - | - | 0.12 | 44 | 35 | 0 | - | 9 |
| 233 JOINT INFO CENTER | 200 | 102 | 50 | 8 | 5 | 0.06 | 47 | 90 | 0 | + | 43 |
| 234 SYSTEMS CHASE | 60 | - | - | - | - | - | - | - | 0 | +/- | - |
| AHU-2 TOTAL | | | | | | | 1,842 | 2,400 | 0 | + | 558 |
| RESTROOM EXHAUST | | | | | | | 2,400 | 2,400 | 0 | +/- | 0 |

NOTES:
1.) OUTSIDE AIR BASED UPON ASHRAE 62.1-2007.

LAKE COUNTY
FLORIDA
**Approved Plans - Commercial**
**LAKE COUNTY BUILDING DIVISION**
Any errors or omission in these plans shall be made to conform with the applicable code requirements per Florida Building Code 105.4.1
Plans reviewed for code compliance and shall be kept on site
Permit # 2011110212
Building: BLD31 12/29/11
Electric: ADM01 12/29/11
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:


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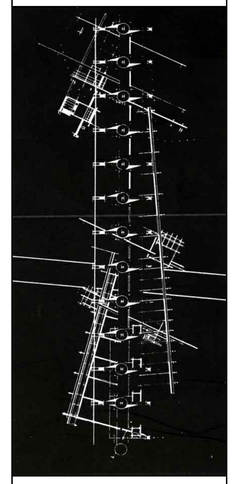

## Lake County Emergency Communications & Operations Center

Tavares, Florida

**PERMIT CD SUBMITTAL**


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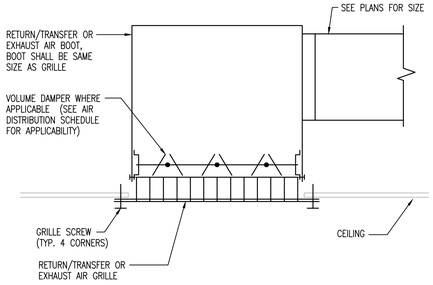
- revisions
- sheet title

**SCHEDULES - MECHANICAL**

- scale: AS SHOWN
- drawn: VVL
- checked: WGE
- approved: RWF
- date: 11/09/11
- project no. 842
- sheet M-5.03




NOTE:
CONTRACTOR SHALL CONFIRM SCHEDULED GRILLE IS COMPATIBLE WITH ARCHITECTURAL CEILING TYPE. SEE ARCHITECTURAL REFLECTED CEILING PLAN FOR TYPES.

## DUCT CONNECTION TO RETURN, TRANSFER OR EXHAUST AIR GRILLE

SCALE: NONE

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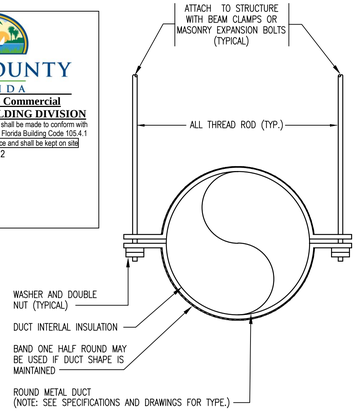
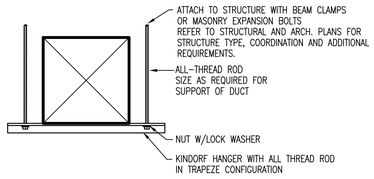



## ROUND DUCTWORK (FLAT OVAL SIMILAR) HANGING DETAIL

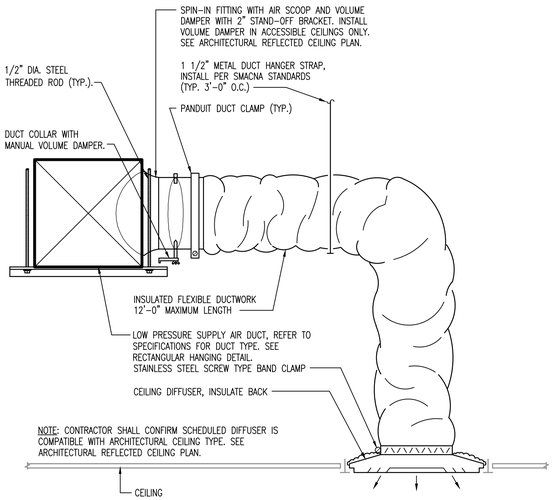



## RECTANGULAR DUCTWORK

NOTES:
1. DO NOT USE POWDER POWERED FASTENING SYSTEMS TO ATTACH SUPPORTS TO STRUCTURE.
2. ALL CHANNEL SECTIONS SHALL BE HOT DIPPED GALVANIZED.
3. SUPPORT SYSTEM MUST NOT DAMAGE DUCT, INSULATION, OR CAUSE DUCT SHAPE DEFORMATION.
4. HANGER SIZES SHALL BE IN ACCORDANCE WITH SMACNA, LATEST EDITION.

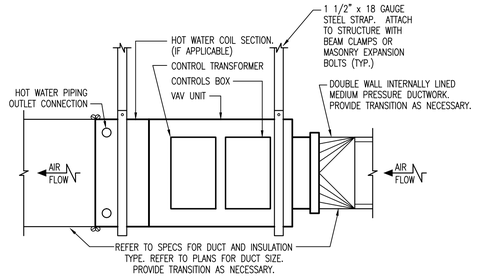
## DUCTWORK SUPPORT DETAIL

SCALE: NONE



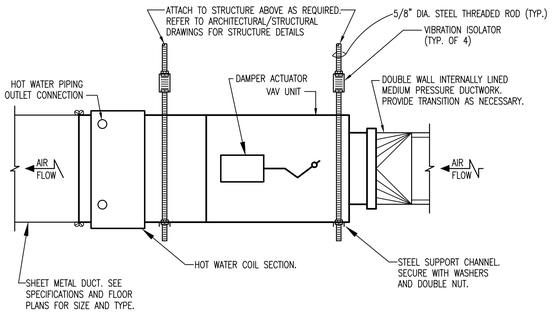

## CEILING DIFFUSER DETAIL

SCALE: NONE



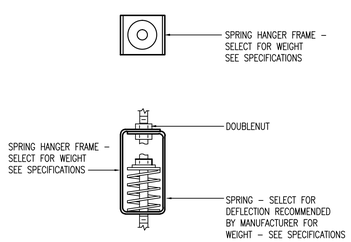

## VARIABLE AIR VOLUME TERMINAL UNIT WITH HOT WATER HEAT DETAIL

SCALE: NONE



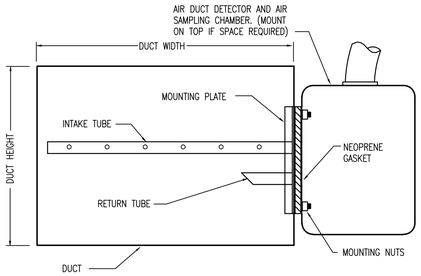

## FAN POWERED VARIABLE AIR VOLUME TERMINAL UNIT WITH HOT WATER HEAT DETAIL

SCALE: NONE




## SPRING ISOLATED HANGER FOR SUSPENDED MECHANICAL EQUIPMENT

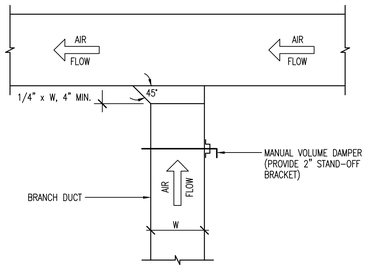
SCALE: NONE




NOTES:
1. SMOKE DETECTOR FURNISHED AND WIRED BY ELECTRICAL CONTRACTOR, AND MOUNTED BY MECHANICAL CONTRACTOR. UNLESS NOTED OTHERWISE
2. INSTALL IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS.
3. PROVIDE ACCESS DOOR AT SAMPLING TUBES.
4. INSTALL SMOKE DETECTOR IN SUPPLY AND RETURN DUCT OF EACH AHU.

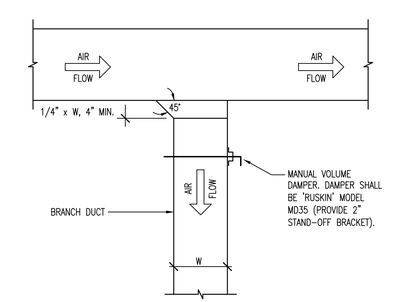
## SMOKE DETECTOR MOUNTING DETAIL

SCALE: NONE



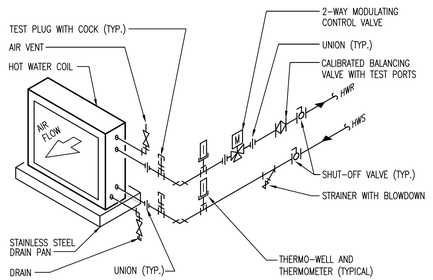

## EXHAUST / RETURN BRANCH DUCT DETAIL

SCALE: NONE




## SUPPLY BRANCH DUCT TAKE-OFF DETAIL

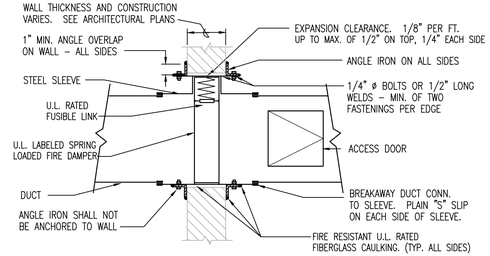
SCALE: NONE




NOTE:
1. INSULATE HOT WATER PIPING PER SPECIFICATIONS.
2. ALL COILS SHALL BE PIPED IN COUNTER FLOW CONFIGURATION AND AS RECOMMENDED PER MANUFACTURER.

## TWO-WAY MODULATING HOT WATER COIL PIPING DETAIL

SCALE: NONE



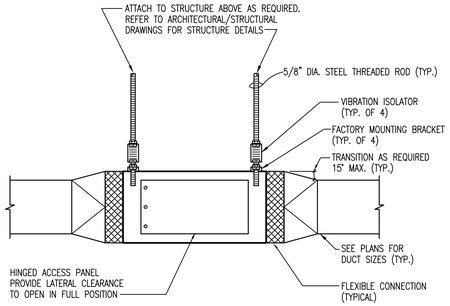

| WALL SLEEVE | |
|---|---|
| DUCT DIMENSION (IN DIA. OR EITHER RECT. DIM) | MINIMUM GAUGE |
| 0 - 12" | 26 |
| 13 - 30" | 24 |
| 31 - 54" | 22 |
| 55 - 84" | 20 |
| 85" - UP | 18 |

| ANGLE IRON & FASTENER DIMENSIONS | | |
|---|---|---|
| LENGTH | MIN. ANGLE SIZE | FASTENER LOCATION |
| 0 - 48" | 1-1/2" x 1-1/2" x 1/8" | 8" ON CENTER |
| 49 - 96" | 2" x 2" x 1/8" | 6" ON CENTER |
| OVER 96" | 2-1/2" x 2-1/2" x 3/16" | 6" ON CENTER |

NOTES:
1. FIRE DAMPER INSTALLATION SHALL BE IN COMPLIANCE WITH MANUFACTURER'S REQUIREMENTS AND NFPA 90A AND SMACNA MANUAL "FIRE DAMPER HEAT & STOP GUIDE FOR AIR HANDLING SYSTEMS" LATEST EDITION.

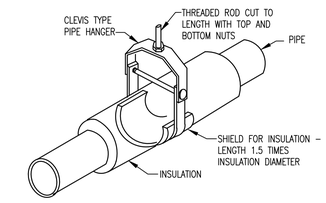
## FIRE DAMPER DETAIL

SCALE: NONE



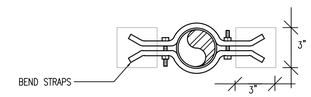

## INLINE CENTRIFUGAL FAN DETAIL

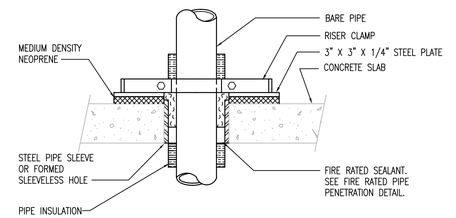
SCALE: NONE




## CLEVIS TYPE PIPE HANGER DETAIL

SCALE: NONE




## TYPICAL RISER SUPPORT DETAIL

SCALE: NONE


KLG, LLC
11486 Corporate Blvd.
Suite 120
Orlando, FL 32817
t: 407.830.6622 f: 407.830.6836
www.klgllc.com
Ronald W. Fessler, PE (Registration No. 0018606)
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Certificate of Authorization No. 26635
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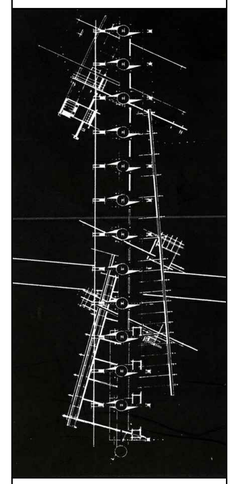

**Lake County Emergency Communications & Operations Center**

Tavares, Florida

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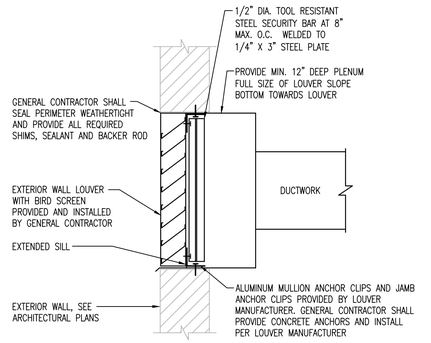
**DETAILS - MECHANICAL**

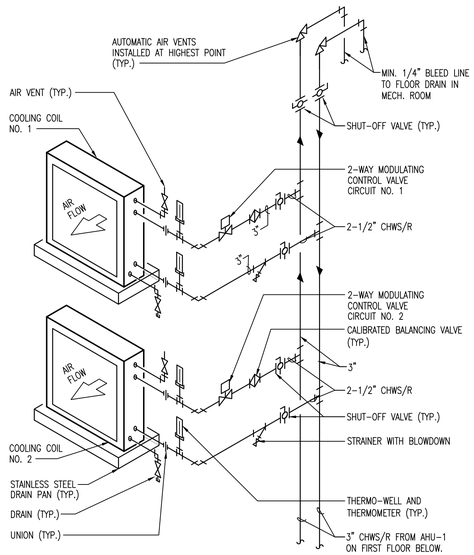
- scale: AS SHOWN
- drawn: VVL
- checked: WGE
- approved: RWF
- date: 11/09/11
- project no. 842
- sheet M-6.01




NOTES:
1. THE INSTALLATION SHALL CONFORM TO ALL APPLICABLE CODES AND STANDARDS.
2. COORDINATE EXACT MOUNTING HEIGHT AND LOCATION WITH ARCHITECTURAL AND STRUCTURAL DRAWINGS.
3. THE GENERAL CONTRACTOR INSTALL THE LOUVER PER THE MANUFACTURER'S RECOMMENDATIONS AND INSTRUCTIONS.

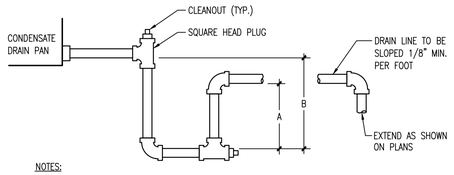
## TYPICAL WALL LOUVER DETAIL

SCALE: NONE




## TYPICAL AHU CHILLED WATER COIL PIPING INSTALLATION DETAIL

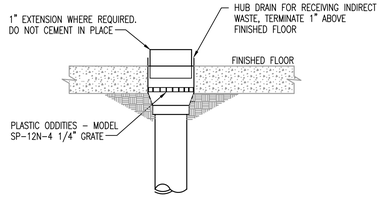
SCALE: NONE




NOTES:
1. FILL TRAP MANUALLY ON INITIAL START-UP.
2. TRAP EACH COMPONENT DRAIN CONNECTION.
3. PIPE SIZE SHALL NOT BE LESS THAN DRAIN PAN CONNECTION SIZE.
4. A = NEG. S.P. B = (2 X NEG. S.P.)
5. INSULATE CONDENSATE PIPING PER SPECS.

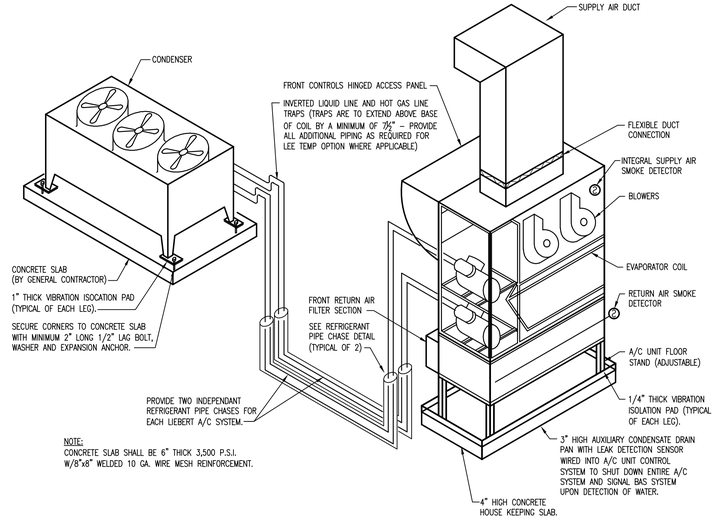
## CONDENSATE DRAIN TRAP PIPING DETAIL

SCALE: NONE




## HUB DRAIN DETAIL

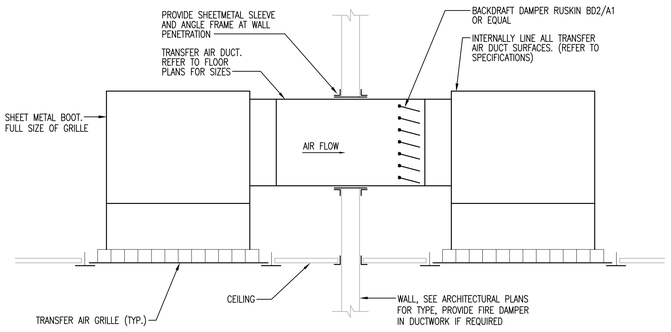
SCALE: NONE




NOTE:
CONCRETE SLAB SHALL BE 6" THICK 3,500 P.S.I. W/6"x6" WELDED 10 GA. WIRE MESH REINFORCEMENT.

## LIEBERT A/C UNIT SYSTEM INSTALLATION DETAIL

SCALE: NONE




NOTE:
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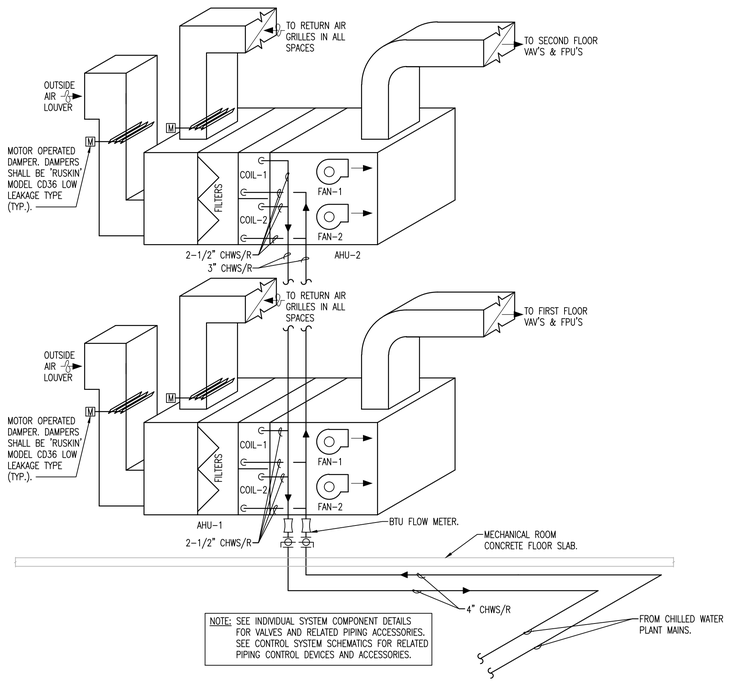
## TRANSFER AIR DUCT DETAIL

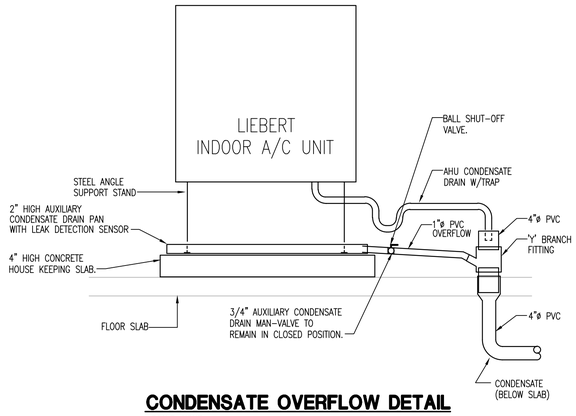
SCALE: NONE




NOTE: SEE INDIVIDUAL SYSTEM COMPONENT DETAILS FOR VALVES AND RELATED PIPING ACCESSORIES. SEE CONTROL SYSTEM SCHEMATICS FOR RELATED PIPING CONTROL DEVICES AND ACCESSORIES.

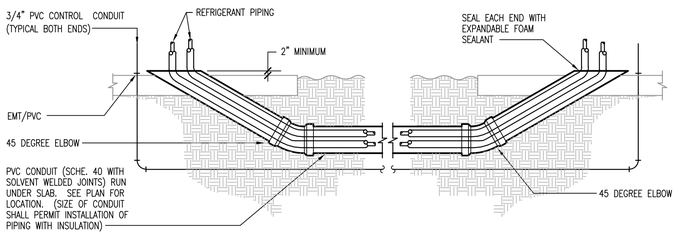
## CHILLED WATER SYSTEM PIPING SCHEMATIC

SCALE: NONE




## CONDENSATE OVERFLOW DETAIL

SCALE: NONE




NOTES:
1. CONDUITS WHICH MUST PASS BELOW STRUCTURAL FOUNDATIONS SHALL HAVE MINIMUM 6" FINE GRAVEL AROUND PERIMETER 2'-0" TO EITHER SIDE OF STRUCTURE - FIRMLY TAMPED.
2. ALL BACKFILLING SHALL BE FIRMLY TAMPED, PRIOR TO LANDSCAPE WORK. EXCAVATION AND ACKFILL SHALL BE IN ACCORDANCE WITH DIVISION 15 SPECIFICATIONS.

## UNDERGROUND REFRIGERANT PIPING DETAIL

SCALE: NONE (TYPICAL OF EACH REFRIGERANT PIPE CIRCUIT.)

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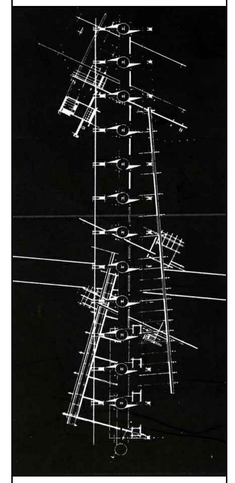

# Lake County Emergency Communications & Operations Center

Tavares, Florida

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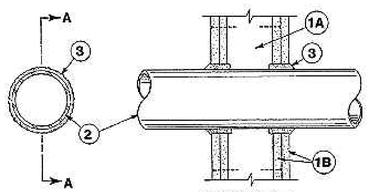
DETAILS - MECHANICAL

- scale: AS SHOWN
- drawn: VVL
- checked: WGE
- approved: RWF
- date: 11/09/11
- project no. 842
- sheet M-6.02

## System No. W-L-1001
(Formerly System No. 147)
F Ratings—1, 2, 3 and 4 Hr (See Items 2 and 3)
T Ratings—0, 1, 2, 3, and 4 Hr (See Item 3)
L Rating At Ambient—less than 1 CFM/sq ft
L Rating At 400 F—less than 1 CFM/sq ft



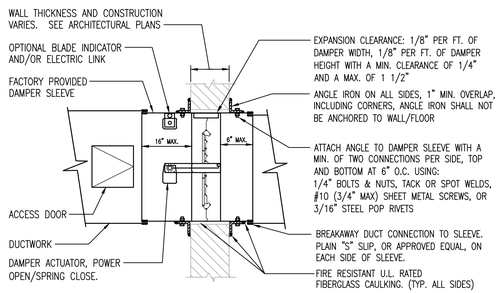

SECTION A-A

1. **Wall Assembly**—The 1, 2, 3 or 4 hr 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 Designs in the UL Fire Resistance Directory and shall include the following construction features:
   A. **Studs**—Wall framing may consist of either wood studs (max 2 h fire rated assemblies) or steel channel studs. Wood studs to consist of nom 2 by 4 in. lumber spaced 16 in. OC with nom 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. **Wallboard, Gypsum***—Nom 1/2 or 5/8 in. thick, 4 ft. 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**—Nom 12 in. diam (or smaller) Schedule 10 (or heavier) steel pipe, nom 12 in. diam (or smaller) service weight (or heavier) cast iron soil pipe, nom 12 in. diam (or smaller) Class 50 (or heavier) ductile iron pressure pipe, nom 6 in. diam (or smaller) steel conduit, nom 4 in. diam (or smaller) steel electrical metallic tubing, nom 6 in. diam (or smaller) Type L or (or heavier) copper tubing or nom 1 in. diam (or smaller) flexible steel conduit. **When copper pipe is used, max F Rating of firestop system (Item 3) is 2 h. Steel pipes or conduits larger than nom 4 in. diam may only be used in walls constructed using steel channel studs. A max of one pipe or conduit is permitted in the firestop system. Pipe or conduit to be installed near center of stud cavity width and to be rigidly supported on both sides of wall assembly.**
3. **Fill, Void or Cavity Material*—Caulk**—Caulk fill material installed to completely fill annular space between pipe or conduit and gypsum wallboard and with 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:

### System No. W-L-1001 – *Continued*

| Max Pipe or Conduit Diam, In | Annular Space, In | F Rating, Hr | T Rating, Hr |
|---|---|---|---|
| 1 | 0 to 3/16 | 1 or 2 | 0+, 1 or 2 |
| 1 | 1/4 to 1/2 | 3 or 4 | 3 or 4 |
| 4 | 0 to 1/4 | 1 or 2 | 0 |
| 4 | 0 to 1-1/2# | 1 or 2 | 0 |
| 6 | 1/4 to 1/2 | 3 or 4 | 0 |
| 12 | 3/16 to 3/8 | 1 or 2 | 0 |

+When copper pipe is used, T Rating is 0 h.
#0 to 1-1/2 in. annular space applies only when Type CP-25 WB+ caulk is used and only when the min thickness of the gypsum wallboard is 5/8 in. for 1 hr rated walls and 1-1/4 in. for 2 hr rated walls.
**Minnesota Mining & Mfg. Co.**—CP 25WB+.
*Bearing the UL Classification Marking




| WALL SLEEVE (BREAKAWAY CONNECTION) | |
|---|---|
| DUCT DIMENSION (IN DIA. OR EITHER RECT. DIM) | MINIMUM GAUGE |
| 0 – 12" | 26 |
| 13 – 30" | 24 |
| 31 – 54" | 22 |
| 55 – 84" | 20 |
| 85" – UP | 18 |

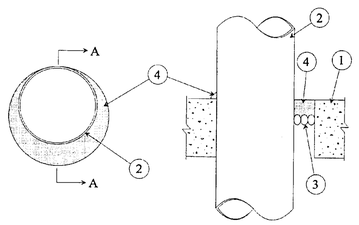
| ANGLE IRON & FASTENER DIMENSIONS | | |
|---|---|---|
| LENGTH | MIN. ANGLE SIZE | FASTENER LOCATION |
| 0 – 48" | 1-1/2" x 1-1/2" x 1/8" | 8" ON CENTER |
| 49 – 96" | 2" x 2" x 1/8" | 6" ON CENTER |
| OVER 96" | 2-1/2" x 2-1/2" x 3/16" | 6" ON CENTER |

| WALL THICKNESS & SLEEVE LENGTH | |
|---|---|
| WALL THICKNESS | SLEEVE LENGTH |
| 4" – 6" | 16" |
| 7" – 10" | 21" |
| 11" – 13" | 24" |

NOTES:
COMPLETE FIRE DAMPER INSTALLATION SHALL BE IN COMPLIANCE WITH MANUFACTURER'S REQUIREMENTS, NFPA 90A, UL 555, AND SMACNA MANUAL "FIRE DAMPER HEAT & STOP GUIDE FOR AIR HANDLING SYSTEMS" LATEST EDITION.

## COMBINATION FIRE/SMOKE DAMPER DETAIL
SCALE: NONE

## System No. C-AJ-1044
(Formerly System No. 319)
F Ratings—2, 3, and 4 Hr (See Items 2A and 4)
T Rating—0 Hr
L Rating At Ambient—2 CFM/sq ft
L Rating At 400 F—less than 1 CFM/sq ft

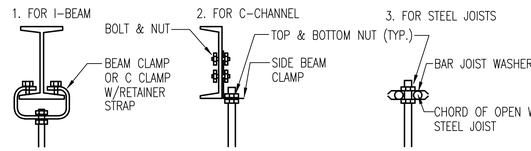



SECTION A-A

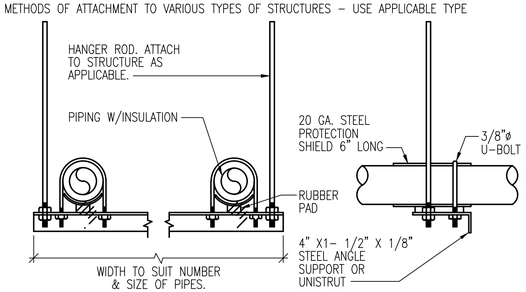
1. **Floor or Wall Assembly**—Lightweight or normal weight (100-150 pcf) concrete. Except as noted in table under Item 4, min thickness of solid concrete floor or wall assembly is 4-1/2 in. Floor may also be constructed of any min 6 in. thick UL Classified hollow core **Precast Concrete Units***. When floor is constructed of hollow core precast concrete units, packing material (Item 3) and caulk fill material (Item 4) to be installed symmetrically on both sides of floor, flush with floor surface. Wall assembly may also be constructed of any UL Classified **Concrete Blocks***. Max diam of opening is in solid lightweight or normal weight concrete. Floor is 32 in. Max diam of opening in floor constructed of hollow-core precast concrete units is 7 in.
   See **Concrete Blocks** (CAZT) and **Precast Concrete Units** (CFTV) categories in the Fire Resistance Directory for names of manufacturers.
1A. **Steel Sleeve**—(Optional, not shown)—Max 15 in. ID (or smaller) Schedule 10 (or heavier) steel sleeve cast or grouted into floor or wall assembly. Sleeve may extend a max of 2 in. above top of floor or beyond either surface of wall. Max 16 in. ID (or smaller) min 0.028 wall thickness (or heavier) galvanized steel sleeve cast or grouted into floor or wall assembly. Sleeve may extend a max of 1/2 in. beyond either surface of floor or wall.
2. **Through Penetrants**—One metallic pipe, conduit or tubing to be installed either concentrically or eccentrically within the firestop system. Max annular space between pipe, conduit or tubing and edge of through opening or sleeve is dependent on the parameters shown in Item 4, Min annular space between pipe or conduit and edge of through opening is zero in. (point contact). Pipe conduit or tubing to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:
   A. **Steel Pipe**—Nom 30 in. diam (or smaller) Schedule 10 (or heavier) steel pipe.
   B. **Iron Pipe**—Nom 30 in. diam (or smaller) cast or ductile iron pipe.
   C. **Conduit**—Nom 6 in. diam (or smaller) rigid steel conduit.
   D. **Conduit**—Nom 4 in. diam (or smaller) steel electrical metallic tubing.
   E. **Copper Tubing**—Nom 6 in. diam (or smaller) Type L (or heavier) copper tube.
   F. **Copper Pipe**—Nom 6 in. diam (or smaller) Regular (or heavier) copper pipe.
3. **Packing Material**—Polyethylene backer rod or nom 1 in. thickness of tightly-packed mineral wool batt or glass fiber insulation firmly packed into opening as a permanent form. Packing material to be recessed from top surface of floor or from both surfaces of wall as required to accommodate the required thickness of caulk fill material (Item 4).
4. **Fill, Void or Cavity Material*—Caulk**—Applied to fill the annular space flush with top surface of floor. In wall assemblies, required caulk thickness to be installed symmetrically on both sides of wall, flush with wall surface. At point contact location between penetrant and sleeve or between penetrant and concrete, a min 1/4 in. diam bead of caulk shall be applied at top surface of floor and at both surfaces of wall. The hourly F Ratings and the min required caulk thicknesses are dependent upon a number of parameters, as shown in the following table:

| Min Floor Or Wall Thkns, In | Nom Pipe Tube Or Conduit Diam, In | Max Annular Space, In | Min Caulk Thkns, In | F Rating, Hr |
|---|---|---|---|---|
| 2-1/2 | 1/2-12 | 1-3/8 | 1/2 | 2 |
| 2-1/2 | 1/2-12 | 3-1/4 | 1 | 2 |
| 4-1/2 | 1/2-6 | 1-3/8 | 1/4(a) | 2 |
| 4-1/2 | 1/2-12 | 1-1/4 | 1/2 | 3 |
| 4-1/2 | 1/2-20 | 2 | 1 | 3 |
| 4-1/2 | 1/2-20 | 2 | 1 | 3 |
| 4-1/2 | 1/2-12 | 3-1/4 | 1 | 3 |
| 4-1/2 | 22-30 | 2 | 2 | 3 |
| 5-1/2 | 1/2-6 | 1-3/8 | 1(b) | 4 |

(a)Min 2 in thickness of mineral wool batt insulation required in annular space.
(b)Min 1 in. thickness of mineral wool batt insulation required in annular space on both sides of floor or wall assembly. Min 1 in. thickness of caulk to be installed flush with each surface of floor or wall assembly.
**Minnesota Mining & Manufacturing Co.**—CP 25WB+.
*Bearing the UL Classification Marking

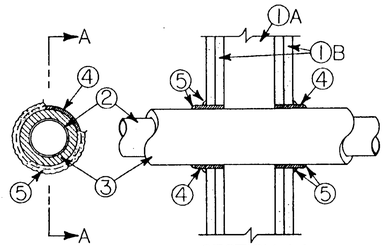



METHODS OF ATTACHMENT TO VARIOUS TYPES OF STRUCTURES – USE APPLICABLE TYPE




## PIPING SUPPORT DETAIL
SCALE: NONE

## System No. W-L-5009
(Formerly System No. 566)
F Rating—2 Hr
T Rating—1/2 Hr
L Rating At Ambient—less than 1 CFM/sq ft
L Rating At 400 F—less than 1 CFM/sq ft



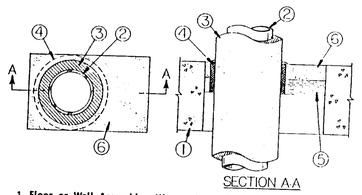

SECTION A-A

1. **Wall Assembly**—The 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 and 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 to consist of nom 2 by 4 in. lumber spaced 16 in. OC. Steel studs to be min 3-5/8 in. wide and spaced max 24 in. OC.
   B. **Wallboard, Gypsum***—Two layers of nom 5/8 in. thick gypsum wallboard, as specified in the individual Wall and Partition Design. Diam of opening cut in gypsum wallboard layers on each side of wall assembly (concentric with pipe, Item 2) to be 1/2 to 3/4 in. larger than outside diam of pipe insulation (Item 3) such that, when installed, a 1/4 to 3/8 in. annular space will be present between the pipe insulation and the gypsum wallboard around the entire circumference of the opening. Max diam of opening is 4 in.
2. **Copper Pipe**—Nom 2 in. diam (or smaller) Type L (or heavier) copper pipe. A max of one pipe is permitted in the firestop system. Pipe to be installed near center of stud cavity width and is to be rigidly supported on both sides of wall assembly.
3. **Pipe Insulation—Plastic#**—Nom 5/8 in. thick acrylonitrile butadiene/polyvinyl chloride (AB/PVC) flexible foam supplied in the form of tubes

THROUGH-PENETRATION FIRESTOP SYSTEMS (XHEZ)—*Continued*

with skin. Pipe insulation to be sized to outside diam of copper pipe.
**See Plastics (QMFZ2) category in the Recognized Component Directory for names of manufacturers. Any Recognized Component pipe insulation material meeting the above specifications and having a UL94 Flammability Classification of 94-5VA may be used.**
4. **Fill, Void or Cavity Materials*—Wrap Strip**—Nom 1/4 in. thick intumescent elastomeric material faced on one side with aluminum foil, supplied in 2 in. wide strips. Nom 2 in wide strip tightly wrapped around pipe insulation (foil side out) with seam butted. Wrap strip layer securely bound with steel wire or aluminum foil tape and slid into annular space approx 1-1/4 in. such that approx 3/4 in. of the wrap strip width protrudes from the wall surface. Wrap strip installed symmetrically on both sides of wall.
**Minnesota Mining & Mfg. Co.**—FS-195+
5. **Fill, Void or Cavity Materials*—Caulk**—Min 1/4 in. diam continuous bead applied to leading edge of wrap strip layer (Item 4) prior to insertion of wrap strip layer into annular space. **After insertion of wrap strip layer in annular space, a nom 1/4 in. diam continuous bead is to be applied to the wrap strip/wall interface and to the exposed edge of the wrap strip layer approx 3/4 in. from the wall surface.**
**Minnesota Mining & Mfg. Co.—CP 25WB+.**
**#Bearing the UL Recognized Component Marking.**
*Bearing the UL Classification Marking

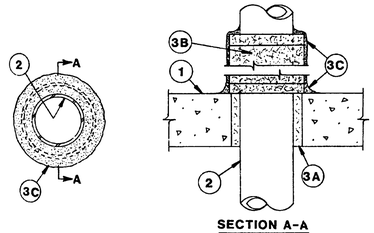
## System No. C-AJ-5017
(Formerly System No. 395)
F Rating—3 Hr
T Ratings—1/2 and 1 Hr (See Item 3)
L Rating At Ambient—less than 1 CFM/sq ft
L Rating At 400 F—less than 1 CFM/sq ft




SECTION A-A

1. **Floor or Wall Assembly**—Min 4-1/2 in. thick lightweight or normal weight (100-150 pcf) concrete. Wall may also be constructed of any UL Classified **Concrete Blocks*** Max area of square, rectangular or circular opening is 45 sq in. with max dimension of 9 in.
   See **Concrete Blocks** (CAZT) category in the Fire Resistance Directory for names of manufacturers.
2. **Pipe**—Nom 3 in. diam (or smaller) Type L (or heavier) copper pipe or nom 2-1/2 in. diam (or smaller) Schedule 10 (or heavier) steel pipe. One or more insulated pipes may be installed with a min clearance of 1/2 in. maintained between insulated pipes and with a min clearance of 1/4 in. maintained between insulated pipe and sides of through opening. Pipes to be rigidly supported on both sides of floor or wall assembly.
3. **Pipe Insulation—Plastics#**—Nom 3/4 in. thick acrylonitrile butadiene/polyvinyl chloride (AB/PVC) flexible foam furnished in the form of tubing with skin. **When nom 2-1/2 or 3 in. diam insulated steel or copper pipe is used, T Rating is 1/2 hr. When max 2 in. diam insulated steel or copper pipe is used, T rating is 1 hr.**
   **See Plastics# (QMFZ2) category in the Recognized Component Directory for names of manufacturers. Any Recognized Component tube insulation material meeting the above specifications and having a UL94 Flammability Classification of 94-5VA may be used.**
4. **Fill, Void or Cavity Materials*—Wrap Strip**—Nom 1/4 in. thick intumescent elastomeric material faced on one side with aluminum foil, supplied in 2 in. wide strips. One nom 2 in. wide strip tightly-wrapped around pipe insulation (Item 3) with the foil side exposed and slid into through opening such that the top edge is flush with top surface of floor. When a single insulated pipe is installed in a circular through opening and when the max annular space between the insulated pipe and the sides of the through opening is 3/8 in., the wrap strip layer may be secured in place with pressure-sensitive tape. In all other situations, the wrap strip layer shall be secured in place with min No. 18 gauge galv steel tie wire. In wall assemblies, the wrap strip layer is to be installed on the insulated pipe in the same manner used for floor assemblies but shall be installed symmetrically on both sides of the wall.
   **Minnesota Mining & Mfg. Co.**—Type FS-195+
5. **Packing Material**—Min 1 in. thick mineral wool batt insulation firmly packed into opening with its top surface recessed min 1 in. from top surface of the floor. In wall assemblies, packing material to be firmly packed into opening on both sides of wall and recessed min 1 in. from wall surface. When a single insulated pipe (with wrap strip layer) is installed in a circular through opening and when the max annular space between the wrap strip layer and the sides of the through opening is 1/8 in., no forming material is required.
6. **Fill, Void or Cavity Materials*—Caulk**—Applied to fill through opening to a min depth of 1 in. In floor assemblies, fill material to be installed flush with top surface of floor. In wall assemblies, fill material to be installed flush with wall surface on both sides of wall.
   **Minnesota Mining & Mfg. Co.**—CP 25WB+
*Bearing the UL Classification Marking

## System No. C-AJ-1053
(Formerly System No. 338)
F Rating—3 Hr
T Ratings—1/2 and 1 Hr (See Item 2)



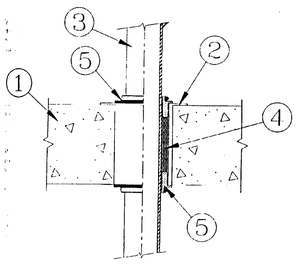

SECTION A-A

1. **Floor or Wall Assembly**—Min 4-1/2 in. thick reinforced lightweight or normal weight (100-150 pcf) concrete. Wall may also be constructed of any UL Classified **Concrete Blocks***. Max diam of opening is 5-5/8 in.
   See **Concrete Blocks*** (CAZT) category in the Fire Resistance Directory for names of manufacturers.
2. **Metallic Pipe**—The following types of sizes of metallic pipes, conduit or tubing may be used:
   A. Nom 4 in. diam (or smaller) Schedule 10 (or heavier) steel pipe.
   B. Nom 4 in. diam (or smaller) galv steel rigid conduit.
   C. Nom 4 in. diam (or smaller) steel electrical metallic tubing (EMT).
   D. Nom 3 in. diam (or smaller) Type L (or heavier) copper tubing.
   One pipe, conduit or tubing to be installed within the opening and rigidly supported on both sides of floor or wall assembly. The T rating of the system is dependent upon the size of pipe, conduit, or tubing and annular space within the opening as shown below:

| Type and Max Diam of Penetrating Item | Min and Max Annular Space, In. | T Rating, Hr |
|---|---|---|
| 4 in. diam steel pipe | 3/8, 1-1/8 | 1 |
| 4 in. diam steel conduit | 3/8, 1-1/8 | 1 |
| 4 in. diam EMT | 3/8, 1-1/8 | 1 |
| 3 in. diam copper tubing | 3/8, 2-1/2 | 1/2 |

3. **Firestop System**—The firestop system shall consist of the following:
   A. **Fill, Void or Cavity Material*—Bulk Fiber**—Bulk ceramic fiber firmly packed within the opening to fill the annular space between the pipe, conduit or tubing and the periphery of the opening. Min thickness of bulk ceramic fiber shall be 4-1/2 in.
   **Thermal Ceramics**—FireMaster Bulk
   B. **Fill, Void or Cavity Material*—Ceramic Blanket**—Nom 1 in. thick ceramic fiber blanket wrapped tightly around the circumference of the pipe, conduit, or tubing with nom 3 in. overlap along its vertical seam and secured in place with 3/4 in. wide fiberglass filament tape and No. 18 AWG steel tie wire spaced 6 in. OC. The ceramic blanket shall extend a min of 12 in. from the top surface of the floor or from both sides of wall assembly.
   **Thermal Ceramics**—FireMaster Blanket
   C. **Fill, Void or Cavity Material*—Mastic Coating**—Mastic coating spray or trowel applied to the bulk ceramic fiber and ceramic fiber blanket to a min thickness of 1/4 in. Additional mastic coating shall be applied to the concrete a min 1 in. beyond the periphery of the opening. In wall assemblies, the mastic coating shall be applied symmetrically.
   **Thermal Ceramics**—FireMaster Mastic 35-01 and 45-01
*Bearing the UL Classification Marking

## System No. C-AJ-1106
F Ratings—1, 3 and 4 Hr (See Item 3)
T Ratings—0, 1 and 2 Hr (See Item 3)




THROUGH-PENETRATION FIRESTOP SYSTEMS (XHEZ)—*Continued*

or vented), the device orientation (floor or wall) and the thickness of the floor or wall assembly, as shown in the following table:

| Orientation (a) | Pipe Type (b) | Max Pipe Diam, In. | Piping System (c) | Min Floor or Wall Thkns, In. | F Rating, Hr | T Rating, Hr |
|---|---|---|---|---|---|---|
| W, F | CU | 3/4 | C | 8 | 3 | 2 |
| F | CU | 6 | C, V | 2-1/2 | 1 | 0 |
| F | CU | 6 | C, V | 4-1/2 | 3 | 0 |
| W | CU | 6 | C, V | 8 | 3 | 0 |
| F | CI, STL | 5 | C, V | 2-1/2 | 1 | 0 |
| F | CI, STL | 5 | C, V | 4-1/2 | 3 | 0 |
| F | CI, STL | 4 | C, V | 8 | 3 | 1 |
| W | CI, STL | 4 | C, V | 8 | 4 | 1 |

(a) W = wall, F = floor.
(b) CU = Copper tube or pipe.
CI = Cast iron pipe.
STL = Steel pipe or conduit.
(c) C = Closed (supply or process pipes), V = Vented, (drain, waste, vent piping systems).
4. **Firestop Device*—Packing Material**—Ceramic fiber packing material firmly packed into annulus between pipe, tube or conduit and coupling. Packing material to be installed throughout entire height of coupling except for the recess depth required to accommodate the elastomeric plugs (Item 5).
   **ProSet Systems, Inc.**—Part No. F10450
5. **Firestop Device*—Plug**—Elastomeric plug sized to fit coupling and pipe, conduit or tube. Plug seated in coupling on both sides of floor or wall assembly. Plugs sized to accommodate nom 4 or 5 in. diam pipe or conduit or nom 6 in. diam tube to be additionally secured with stainless steel band clamp supplied with plug.
   **ProSet Systems, Inc.**—Part Nos. 20034 through 40300-P, P20012 through P40300, LP60400, LP60400-T, LP60500 or LP60600-T
*Bearing the UL Classification Marking

THROUGH-PENETRATION FIRESTOP SYSTEMS (XHEZ)—*Continued*

1. **Floor or Wall Assembly**—Min 2-1/2 in. thick reinforced lightweight or normal weight (100-150 pcf) concrete floor or min 8 in. thick lightweight or normal weight (100-150 pcf) concrete wall. When corrugated or fluted **steel deck** is used as a form for the concrete floor, the concrete thickness shall be measured from the top plane of the steel deck to the top surface of the floor. Floor may also be constructed of any min 7-1/2 in. thick UL Classified hollow core **Precast Concrete Units***. Wall may also be constructed of any UL Classified **Concrete Blocks***.
   **See Precast Concrete Units** (CFTV) and **Concrete Blocks** (CAZT) categories in the Fire Resistance Directory for names of manufacturers.
2. **Firestop Device*—Cored Hole Coupling**—Nom 8 in. high flanged PVC sleeve sized to accommodate nom 2, 3, 4 or 6 in. diam pipe and sized to tightly-fit into nom 3, 4, 5 or 7 in. diam core-drilled hole, respectively. Device installed in accordance with accompanying installation instructions.
   **ProSet Systems, Inc.**—Part Nos. P25558 through P65558
2A. **Firestop Device*—Coupling**—(Not Shown)—As an alternate to the cored hole coupling (Item 2), a cast in place PVC coupling sized to accommodate nom 2, 3, 4 or 6 in. diam pipe with height equal to overall thickness of concrete floor may be used. Device installed in accordance with the accompanying installation instructions.
   **ProSet Systems, Inc.**—Part Nos. P25458 through P65458
2B. **Firestop Device*—Coupling Extension**—(Not Shown) —When thickness of concrete floor is less than 4-1/2 in., a nom 4 in. or 6 in. high PVC coupling extension shall be cemented into top of coupling (Item 2 or 2A).
   **Proset Systems, Inc.**—Part Nos. P25404 through P65404
3. **Through Penetrants**—One metallic pipe or conduit to be centered within the firestop system. Pipe or conduit to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of metallic pipes or conduits may be used:
   A. **Steel Pipe**—Nom 5 in. diam (or smaller ) Schedule 40 (or heavier) steel pipe. A nom annular space of 5/16 to 1-1/16 in. is required between the pipe and the coupling.
   B. **Iron Pipe**—Nom 5 in. diam (or smaller) cast or ductile iron pipe (Service Weight or Extra Heavy). A nom annular space of 3/8 to 1-1/4 in. is required between the pipe and the coupling.
   C. **Conduit**—Nom 5 in. diam (or smaller) rigid steel conduit. A nom annular space of 5/16 to 1-1/16 in. is required between the conduit and the coupling.
   D. **Copper Tubing**—Nom 3 in. diam (or smaller) Type L (or heavier) copper tubing. A nom annular space of 3/8 to 15/16 in. is required between the tube and the coupling.
   E. **Copper Pipe**—Nom 6 in. diam (or smaller) Regular (or heavier) copper pipe. A nom annular space of 1/4 to 1-1/4 in. is required between the pipe and the coupling.
The hourly F and T Ratings of the firestop device are dependent upon the size and type of the penetrating item, the type of piping system (closed

LAKE COUNTY
FLORIDA
**Approved Plans - Commercial**
**LAKE COUNTY BUILDING DIVISION**
Any errors or omission in these plans shall be made to conform with the applicable code requirements per Florida Building Code 105.4.1
Plans reviewed for code compliance and shall be kept on site
Permit # 20111110212
Building: BLD31 12/29/11
Electric: ADM01 12/29/11
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes: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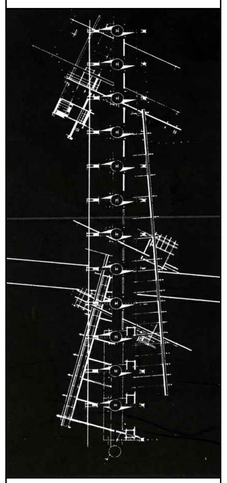

**Lake County Emergency Communications & Operations Center**

Tavares, Florida

**PERMIT CD SUBMITTAL**


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- revisions
- sheet title: DETAILS - MECHANICAL
- scale: AS SHOWN
- drawn: VVL
- checked: WGE
- approved: RWF
- date: 11/09/11
- project no. 842
- sheet M-6.03

# RUSKIN®

3900 Dr. Greaves Rd. • Kansas City, MO 64030 • (816) 761-7476 • FAX (816) 765-8955

## INSTALLATION INSTRUCTIONS
## 1½ HOUR UL CLASSIFIED
## CURTAIN TYPE (D)IBD20, (D)IBD40, and (D)IBD60 FIRE DAMPERS WITH INTEGRAL SLEEVES

### APPLICATION

The (D)IBD20, (D)IBD40, and (D)IBD60 fire dampers include sleeves that are an integral part of the damper frame and are approved installation without the need for a supplemental, field-installed sleeve. Select the damper with sufficient length to permit attachment, with perimeter mounting angles, to ductwork to each side of wall or floor opening.

**MODELS IBD20, IBD40, and IBD60 MAXIMUM SIZE**

Single Section
Vertical Installation – 48"w x 30"h or 33"w x 72"h (1219 x 762 or 838 x 1829).
Horizontal Installation – 33"w x 38"h or 30"w x 45½"h (838 x 965 or 762 x 1156).
Multiple Section Assembly
Vertical Installation – 84"w x 72"h (2134 x 1829).
Horizontal Installation – 84"w x 84"h (2134 x 2134).

**MODELS (D)IBD20, (D)IBD40, and (D)IBD60 MAXIMUM SIZE**

Single Section
Vertical or Horizontal Installation – 33"w x 36"h (838 x 914).
Multiple Section Assembly
Vertical Installation – 84"w x 72"h (2134 x 1829).
Horizontal Installation – 84"w x 84"h (2134 x 2134).

### INSTALLATION SUPPLEMENTS

Refer to the appropriate Ruskin installation operation instructions supplements for special requirements:
- S-and-Drivemate No. 14880
- Ductmate
- Sealing of Dampers in Fire Rated Walls or Floors

**These instructions comply with Underwriters Laboratories Safety Standard 555. UL File No. R5531.**

SEE DETAILS ON UL CLASSIFICATION MARKING ON ENCLOSED PRODUCT

**California State Fire Marshal Listing No. 3225-245:005** (Vert. only)

Note:
Dimensions shown in parentheses ( ) indicate millimeters.

IHBD20-594/Replaces II-IBD20-394

*ALL STATED SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE OR OBLIGATION.* ©Ruskin Manufacturing 1994

**1. Expansion Clearance**

Expansion clearance is required for all fire damper/sleeve assemblies. The opening in the wall or floor must be a minimum of ⅛" per foot (3 per 305) larger than the overall damper/sleeve assembly size for galvanized steel dampers and a minimum 9/16" per foot (5 per 305) for stainless steel dampers. The maximum opening size is 2" (51) larger than the minimum clearance dimensions above. Example: Opening for a 36" x 24" damper/sleeve assembly can be 36⅛" x 24⅛" minimum up to 38⅛" x 26⅛" maximum. All openings must be at least ¼" (6) larger than the damper/sleeve assembly.

**2. Fasteners and Multiple Section Assembly**

Use No. 10 (M5) bolts or screws, 3/16" (5) rivets, tack welds or spot welds as depicted in figures 2 and 4 and spaced as follows when joining individual dampers to make multiple section damper assemblies or when fastening damper to the sleeve:

| | |
|---|---|
| Vertical Mount (In wall) | |
| All dampers | 6" (152) spacing |
| Horizontal Mount (In floor) | |
| All dampers | 6" (152) spacing |

Multiple section horizontal mount dampers require a 14 gage thick steel mullion plate sandwiched between the damper frames with ½" (13) long welds staggered intermittently and spaced on maximum 6" (152) centers. The mullion plate must be the same material as the dampers. The mullion length must be equal to the damper width of two or more adjoining damper sections. Mullions are not required for assemblies consisting of two dampers attached end-to-end or three dampers attached side-to-side as depicted in figure 5.

**3. Damper Sleeve**

Damper sleeve must be minimum 26 gage (.6) up to a maximum 10 gage (3.5) steel. Sleeve thickness must be equal to or thicker than the duct connected to it. Sleeve gage requirements are listed in the SMACNA Fire, Smoke and Radiation Damper Installation Guide For HVAC Systems and in NFPA90A. If a break-away style duct/sleeve connection is not used, sleeve must be 16 gage (1.6) minimum for dampers up to 36" wide or 24" height and 14 gage (2) minimum when damper exceeds 36" wide or 24" high. Sleeve must be fastened to damper as described in (note 2). Sleeve must not extend more than 6" (152) out of the wall or floor. Exception – Dampers equipped with factory installed access door may extend 16" (406) out of the wall or floor on the access door side. Sleeves must terminate on both sides of the wall or floor within the dimension shown in figures 1 and 3.

**4. Damper Orientation**

Damper must be installed with the blades within the wall or floor when they are in the closed position. Use "Air Flow" and "Mount With Arrow Up" labels on Dynamic DIBD and DIBDX models for proper damper orientation. For Static IBD models use only "Mount With Arrow Up" label on damper for proper damper orientation.

**5. Mounting Angles**

**Ruskin Picture Frame Mounting Angles** can be used as shown in the supplemental installation instructions in lieu of the following conventional mounting angles.

Galvanized dampers 50" x 60" or 60" x 50" (1270 x 1524 or 1524 x 1270) or smaller require minimum of 1½" x 1½" x 16 gage (38 x 38 x 1.6) conventional mounting angles fastened to the damper sleeve with No. 10 (M5) bolts or screws, 3/16" (5) rivets, tack welds or spot welds as depicted in figures 1 and 3, spaced a maximum of 6" (152) on center.

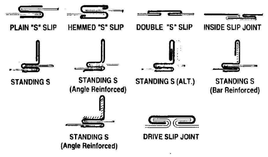
Larger dampers require minimum 1½" x 1½" x 14 gage (38 x 38 x 2) conventional mounting angles fastened to damper sleeve with No. 10 (M5) bolts or screws, 3/16" (5) rivets, tack welds or spot welds as depicted in figures 1 and 3 and spaced as follows:

| | |
|---|---|
| Galvanized steel dampers | 12" (305) spacing |
| Stainless steel dampers | 6" (152) spacing |

Mounting angles must overlap the wall or floor a minimum of 1" (25). Do not fasten angles together at corners of the damper/sleeve assembly.

**6. Duct/Sleeve Connections**
**Break-away Duct/Sleeve Connections**

Rectangular ducts must use one or more of the connections depicted below:




A maximum of two #10 sheet metal screws on each side and the bottom, located in the center of the slip pocket and penetrating both sides of the slip pocket may be used. Connections using these slip joints on the top and bottom with flat drive slips up to 20" (508) long on the sides may also be used.

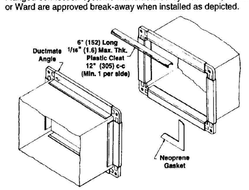
**Round and Oval Break-away Connections**

Round and flat oval break-away connections must use either a 4" (102) wide drawband or #10 sheet metal screws spaced equally around the circumference of the duct as follows:
- Duct diameters 22" (559) and smaller – Maximum 3 screws.
- Duct diameters over 22" (559) and including 36" (914) – Maximum 5 screws.
- Duct diameters over 36" (914) and up to and including 191" (4851) total perimeter – Maximum 8 screws. For flat oval ducts, the diameter is considered the largest (major) dimension of the duct.

**Note:** When optional sealing of these joints is desired, the following sealants may be applied in accordance with the sealant manufacturer's instructions:
Hardcast, Inc. – Iron Grip 601
Precision – PA2084T

**Flanged Break-away Style Duct Sleeve Connections.**

Flanged connection systems manufactured by Ductmate, Nexus or Ward are approved break-away when installed as depicted.

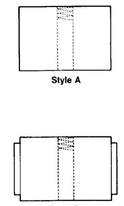



TDC (by Lockformer) and TDF (by Engle) flanged connections are approved break-away connections when installed as described in the TDC or TDF addendum to the SMACNA Duct Construction Standards except the corners may not be bolted. The standard 6" (152) metal clip may be used with spacing as depicted in the addendum.

**Non-Break-away Duct/Sleeve Connections**

If other duct sleeve connections are used, the sleeve shall be a minimum of 16 gage (1.6) for dampers up to 36" (914) wide x 24" (610) high and 14 gage (2.0) for dampers exceeding 36" (914) wide x 24" (610) high.

FIGURE 1

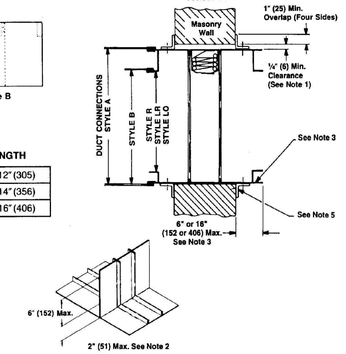



**SLEEVE LENGTH**

| | |
|---|---|
| (D)-IBD230 | 12" (305) |
| (D)-IBD430 | 14" (356) |
| (D)-IBD630 | 16" (406) |

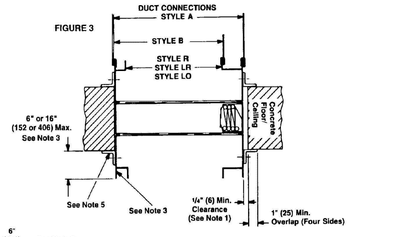
**VERTICAL INSTALLATION**

FIGURE 2




**HORIZONTAL INSTALLATION**

FIGURE 3



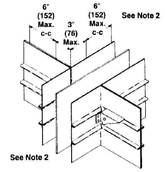
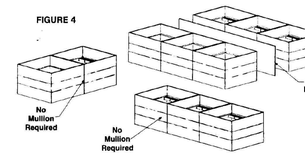




FIGURE 4




## FIRESTOPPING GENERAL NOTES

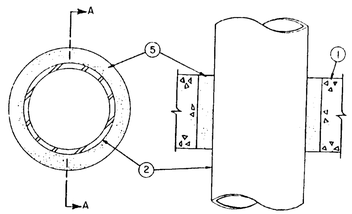
1) ALL PENETRATIONS OF FIRE RATED WALLS OR FLOORS SHALL BE FIRE STOPPED TO MAINTAIN THE FIRE RATING PER AN APPROVED U.L. DETAIL FOR THE SPECIFIC APPLICATION. ALL DETAILS TO BE USED MUST BE APPROVED BY THE ARCHITECT/ENGINEER AND ORANGE COUNTY BLDG. DEPARTMENT PRIOR TO ROUGH-IN AND INSTALLATION.

2) IF THE APPLICATIONS OCCUR WHICH ARE NOT SHOWN ON THESE DWGS. THE CONTRACTOR SHALL SUBMIT A U.L. DETAIL FOR THE APPLICATION FOR REVIEW AND APPROVAL PRIOR TO ROUGH-IN AND INSTALLATION.

3) THE CONTRACTOR SHALL TAKE CARE TO ASSURE APPROVED FIRE STOPPING DETAILS ARE USED ONLY FOR THE SPECIFIC PENETRATION APPLICATION.

4) ALL FLOOR PENETRATIONS WHICH ARE NOT LOCATED WITHIN A NON-COMBUSTIBLE WALL SHALL BE MADE WITH A THROUGH-PENETRATION FIRESTOP SYSTEM WITH A T RATING EQUAL TO THE FLOOR F RATING.

**System No. C-AJ-1008**
(Formerly System No. 111)
F Rating—3 Hr
T Rating—0, 1/2, 1-1/2 and 3 Hr (See Item 5)




SECTION A A

1. **Floor or Wall Assembly**—Min 4-1/2 in. thick reinforced lightweight or normal weight (100-150 pcf) concrete. Wall may also be constructed of any UL Classified **Concrete Blocks***. Max diam of opening is 8 in. See **Concrete Blocks** (CAZT) category in the Fire Resistance Directory for names of manufacturers.
2. **Metallic Pipe**—Max 6 in. diam (or smaller) rigid galv steel conduit, Schedule 10 (or heavier) steel pipe or max 4 in. diam (or smaller) steel EMT conduit centered in the opening. Pipe to be rigidly supported on both sides of floor or wall assembly. The T Rating of the system is dependent on the size of the conduit and through opening as shown in the table below (See Item 5).
3. **Forms**—(Not Shown, Optional)—Used as a form to prevent leakage of fill material during installation. Forms to be a rigid sheet material, cut to fit the contour of the penetrating item. Forms friction fitted into the opening or located on underside of floor on both sides of wall to prevent the leakage of fill material. The forms to be removed after the fill material has cured.
4. **Packing Material**—(Not Shown, Optional)—Mineral wool batt insulation firmly packed between the forms and penetrating items to prevent the leakage of fill material. The packing material may be removed after the fill material has cured.
5. **Fill, Void or Cavity Material*—Sealant**—Fill material applied within annulus, flush with top surface of floor or with both surfaces of wall. The T Rating of the system is dependent upon the size of the opening, size of the penetrating item, nom annular space within opening and thickness of the fill material as shown in the table below:

| Max Opening Size, In | Max Diam Penetration Item, In | Nom Annular Space, In | Min Fill Material Thk, In | T Rating, Hr |
|---|---|---|---|---|
| 3 | 1-1/2 | 9/16 | 4-1/2 | 1-1/2 |
| 5 | 3 | 3/4 | 4-1/2 | 1/2 |
| 5 | 1/2 | 2 | 3-1/2 | 3 |
| 8 | 6 | 11/16 | 3-1/2 | 0 |
| 8 | 6 | 11/16 | 4-1/2 | 1/2 |

**International Protective Coatings Corp.**—Types FS500, FS501, FS503, FS505, FS529, FST601, FST603, FST605, RFS500, RFS501, RFS505, RFST601 and RFST605

*Bearing the UL Classification Marking

LAKE COUNTY
FLORIDA
**Approved Plans - Commercial**
**LAKE COUNTY BUILDING DIVISION**
Any errors or omission in these plans shall be made to conform with the applicable code requirements per Florida Building Code 105.4.1
Plans reviewed for code compliance and shall be kept on site
Permit # 20111102l2
Building: BLD31 12/29/11
Electric: ADM01 12/29/11
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:

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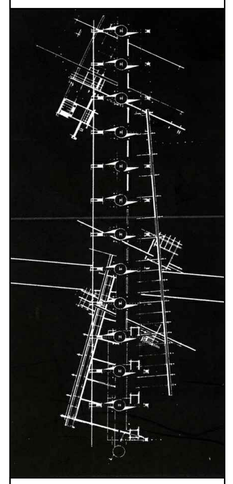

# Lake County Emergency Communications & Operations Center

Tavares, Florida

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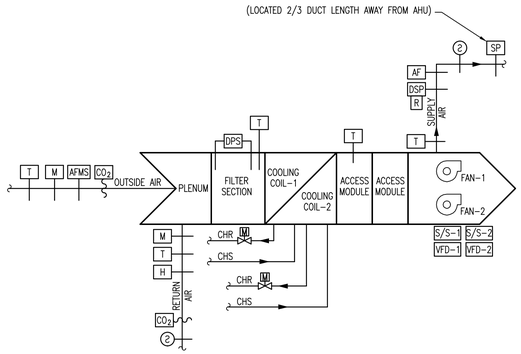
- sheet title

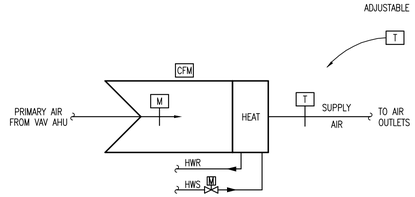
**DETAILS - MECHANICAL**

- scale: AS SHOWN
- drawn: VVL
- checked: WGE
- approved: RWF
- date: 11/09/11
- project no. 842
- sheet M-6.04



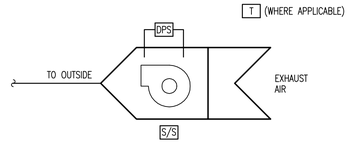

## VARIABLE AIR VOLUME AIR HANDLING UNIT

SCALE: NONE (TYPICAL OF AHU-1 AND AHU-2)



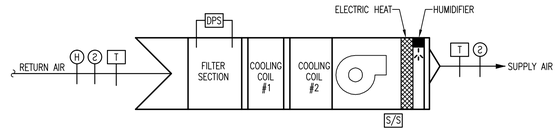

## VARIABLE AIR VOLUME TERMINAL UNIT

SCALE: NONE (TYPICAL OF ALL)



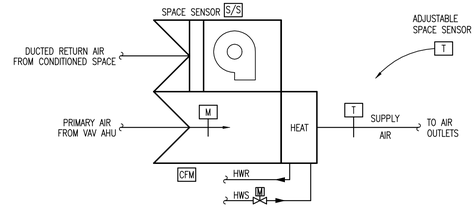

## EXHAUST FAN CONTROL SCHEMATIC

SCALE: NONE



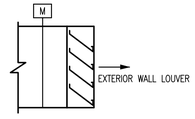

## LIEBERT A/C COMPUTER ROOM UNIT CONTROL SCHEMATIC

SCALE: NONE




## PARALLEL FAN POWERED VARIABLE AIR VOLUME TERMINAL UNIT

SCALE: NONE (TYPICAL OF ALL)




## INTAKE OR EXHAUST EXTERIOR LOUVER

SCALE: NONE (TYPICAL OF ALL)

## CONTROL DIAGRAM SYMBOL LEGEND

| | | | |
|---|---|---|---|
| H | HUMIDITY SENSOR, WALL MOUNTED | FM | FLOW METER |
| T | THERMOSTAT OR TEMPERATURE SENSOR, WALL MOUNTED | C | CONTACTOR COIL |
| T | TEMPERATURE SENSOR, FOR DUCT | M | MOTOR |
| T | TEMPERATURE SENSOR, FOR PIPE | | NORMALLY OPEN CONTACTS |
| H | HUMIDITY SENSOR, FOR DUCT | | NORMALLY CLOSED CONTACTS |
| M | MOTOR OPERATED DAMPER | 2 | DUCT MOUNTED SMOKE DETECTOR |
| DSP R | OVER PRESSURE SAFETY SHUT DOWN RELAY | S | MOTOR RATED SWITCH |
| | | | AIR FLOW MONITOR |
| SP | SUPPLY FAN STATIC PRESSURE | AF | AIRFLOW PROOF SWITCH |
| DPS | DIFFERNTIAL PRESSURE SWITCH | $CO_2$ | CARBON DIOXIDE SENSOR |
| SPS | SPACE PRESSURE SENSOR | | 3-WAY CONTROL VALVE |
| S/S | START/STOP | AFS | AIRFLOW FLOW STATION |
| J | JUNCTION BOX | CS | CURRENT SWITCH |
| DSPS | DUCT STATIC PRESSURE SWITCH | | |

LAKE COUNTY
FLORIDA
**Approved Plans - Commercial**
**LAKE COUNTY BUILDING DIVISION**
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Plans reviewed for code compliance and shall be kept on site
Permit # 2011110212
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Electric: ADM01 12/29/11
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:


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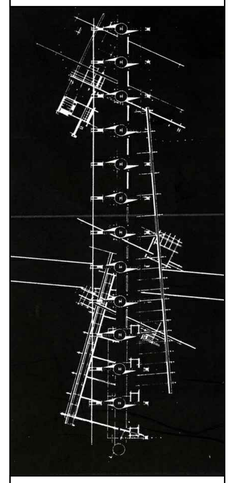

# Lake County Emergency Communications & Operations Center

Tavares, Florida

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- sheet title

**CONTROLS SCHEMATICS - MECHANICAL**

- scale: AS SHOWN
- drawn: VVL
- checked: WGE
- approved: RWF
- date: 11/09/11
- project no. 842
- sheet M-7.01

# DATA & CONTROL SUMMARY MATRIX

| SYSTEM POINT DESCRIPTION | UNIT NO. AHU- | ANALOG Input: GRAPHIC | TEMPERATURE | PRESSURE | RH | CFM | CFM | SETPOINT | CO 2 - PPM | PERCENT RLA | ANALOG Output: DDC (4-20 ma, 0-10 vdc. | SET POINT ADJ. | BINARY Input: VFD FAULT DETECTION | STATUS ON/OFF | FILTER STATUS | STATUS OPEN/CLOSED | STATUS | NO. OF STARTS | TIMED OVERRIDE | BINARY Output: OFF/ON | OPEN/CLOSE | LOCK OUT | ENABLE/DISABLE | LEAD/LAG | SYSTEM FEATURES Alarms: HIGH ANALOG | LOW ANALOG | HIGH BINARY | LOW BINARY | PROOF | SENSOR FAIL | FLOW FAIL | COMM. FAIL | DIAGNOSTICS | Programs: TIME SCHEDULING | CUSTOM TREND LOG | OPTIMAL START/STOP | RESET | EVENT PROGRAM | DDC | ALARM INSTRUCT | MANT. MK. ORD. | RUN TIME | DSP. MESSAGE | SET BACK/SET UP | NIGHT PURGE | TENANT BILLING | CHILLER SEQUENCING | TOTALLING | TIMED OVERRIDE | DEMAND LIMITING | PUMP SEQUENCING |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HUMIDITY | 1,2 | | | X | | | | | | | | X | | | | | | | | | | | | | X | X | | | X | | | | | | X | | X | | X | | | | X | | | | | | |
| SUPPLY FAN (EACH) | 1,2 | X | | | | | X | | | | | | | X | | | | | | X | | | | | | | | X | | X | | | X | X | | | | | | | | | | | | | | |
| $CO_2$ | 1,2 | | | | | | | | X | | | X | | | | | | | | | | | | | X | X | | | X | | | | | | X | | X | | X | | | | | | | | | | |
| FAN MODULATION (EACH FAN) | 1,2 | | | | | | X | | | X | X | X | X | | | | | | | | | | | | X | X | | | | | | | X | | | X | | X | | | | | | | | | | |
| CHW COIL (EACH) | 1,2 | X | X | | | | | | | | | X | | | | | | | | | | | | | X | X | | | X | | | | | | X | | X | | X | | | | | | | | | | |
| SPACE | 1,2 | | X | | | | | | | | | X | | | | | | | | | | | | | X | X | | | X | | | | | X | X | | X | | | | | | X | | | | | | |
| O/A DAMPER | 1,2 | X | | | | | | | | | X | X | | | | X | | | | | | | | | | | | | | | | | X | X | | | | | | | | | | | | | | |
| OUTSIDE AIR | 1,2 | | X | | | | X | | | | | X | | | | | | | | | | | | | X | X | | | X | | | | | | X | | X | | X | | | | | | | | | | |
| RETURN AIR | 1,2 | | X | | X | | | | | X | X | | | | | | | | | | | | | | X | | | | X | | | | | | X | | | | | | | | | | | | | | |
| DISCHARGE AIR | 1,2 | | X | | | | | | | | | X | | | | | | | | | | | | | X | X | | | X | | | | | | X | | X | | X | | | | | | | | | | |
| R/A DAMPER | 1,2 | X | | | | | | | | | X | X | | | | X | | | | | | | | | | | | | | | | | | X | | | | | | | | | | | | | | |
| FILTER | 1,2 | | | X | | | | | | | | X | | | X | | | | | | | | | | X | X | | | X | | | | | | X | | X | | | | | | | | | | | | |
| BLDG. PRESSURE | 1,2 | | | X | | | | | | | X | X | | | | | | | | | | | | | X | X | | | X | | | | | | | | | | X | | X | | | | | | | | |
| VAV TERMINAL UNITS | UNIT NO. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | ALL | X | X | | | | X | X | | | X | X | | | | | | | | | | | | | X | X | | | | | | X | | | | | | X | X | | X | | | | | | | | X |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FAN TERMINAL UNITS | UNIT NO. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | ALL | X | X | | | | X | X | | | X | X | | | X | | | | | X | | X | | | | | | | | | | | X | X | | X | | X | | | | | | | | | |
| EXHAUST FANS | UNIT NO. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | ALL | X | | | | | | | | | | | | X | | | | | X | | | X | | | | | | | X | | | | X | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SUPPLY FANS | UNIT NO. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | KSF-1,2 | X | | | | | | | | | | | | X | | | | | X | | | X | | | | | | | X | | | | X | | | | | | | | | | | | | | |
| LIEBERT A/C UNITS | UNIT NO. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| HUMIDITY | ALL | | | X | | | | | | | | X | | | | | | | | | | | | | X | X | | | X | | | | | | X | | X | | X | | | | X | | | | | | |
| SUPPLY FAN | ALL | X | | | | X | | | | | | | | X | | | | | X | | | X | | | | | | X | | X | | | X | X | | | | | | | | | | | | | | |
| SPACE | ALL | | X | | | | | | | | | X | | | | | | | | | | | | | X | X | | | X | | | | | | X | | X | | X | | | | X | | | | | | |
| RETURN AIR | ALL | | X | | | | | | | | | X | | | | | | | | | | | | | X | | | | X | | | | | | X | | | | X | | | | | | | | | | |
| DISCHARGE AIR | ALL | | X | | | | | | | | | | | | | | | | | | | | | | X | | | | X | | | | | | X | | | | X | | | | | | | | | | |
| FILTER | ALL | | | X | | | | | | | | X | | | | X | | | | | | | | | X | X | | | X | | | | | | X | | X | | | | | | | | | | | | |
| COMPRESSOR(S) | ALL | X | | | | | | | | | | | | | | | | | | X | | X | X | X | X | X | | | X | | X | X | X | | X | | X | X | X | X | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |


Architects Design Group, Inc.

Architects and Planners
I.S.K. Reeves V, F.A.I.A.
Kevin Ratigan, A.I.A.
Ian A. Reeves, Assoc. A.I.A.

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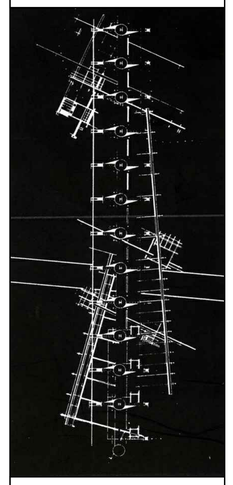
Winter Park, Florida 32789
(407) 647-1706

Corporate Registration
No. AAC001197

## Lake County Emergency Communications & Operations Center

Tavares, Florida

**PERMIT CD SUBMITTAL**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- revisions

- sheet title

**CONTROLS MATRIX - MECHANICAL**

- scale: AS SHOWN
- drawn: VVL
- checked: WGE
- approved: RWF
- date: 11/09/11
- project no. 842
- sheet M-7.02

LAKE COUNTY
FLORIDA
**Approved Plans - Commercial**
**LAKE COUNTY BUILDING DIVISION**
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Plans reviewed for code compliance and shall be kept on site
Permit # 2011110212
Building: BLD31 12/29/11
Electric: ADM01 12/29/11
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:


KLG, LLC
11486 Corporate Blvd.
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Orlando, FL 32817
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Ronald W. Fessler, PE (Registration No. 0018606)
Danny Y. Lundstrom, PE (Registration No. 0033857)
Certificate of Authorization No. 26635

ATLANTA
GREENVILLE
LOS ANGELES
NEW ORLEANS
ORLANDO


KLG Project No. 2011005

## PANEL - H2A

VOLTS L-N : 277
VOLTS PH. : 480
PHASE : 3
MOUNTING : SURFACE
MFR : SIEMENS
TYPE : P3

MAIN OPTIONS REQUIRED
S.E. RATED : N/A
GFI PROT. : N/A
SHUNT TRIP : N/A

MCB : N/A AMPS
MLO : 400 AMPS

ENCLOSURE DATA
NEMA : 1
SECTIONS : 1
WIDTH/SECT. : 24
DEPTH : 7

AIC RATING (FULLY RATED): 35 KA (MINIMUM, SEE SPECIFICATIONS)

| NOTES | DESCRIPTION | LOAD CONN | AMPS | AMPS | AMPS | C.B. AMPS | C.B. POLES | CKT. NUM. | CKT. NUM. | C.B. POLES | C.B. AMPS | AMPS | AMPS | AMPS | LOAD CONN | DESCRIPTION | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AHU-2.1 | 34 | 34 | | | 60 | 3 | 1 | 2 | 3 | 45 | 33 | | | 33 | AC-3.1 | 1 |
| | ==== | 34 | | 34 | | === | === | 3 | 4 | === | === | | 33 | | 33 | ==== | 1 |
| | ==== | 34 | | | 34 | === | === | 5 | 6 | === | === | | | 33 | 33 | ==== | 1 |
| | AHU-2.1 | 34 | 34 | | | 60 | 3 | 7 | 8 | 1 | | 0 | | | | SHUNT TRIP COIL | 1 |
| | ==== | 34 | | 34 | | === | === | 9 | 10 | 1 | 20 | | 10 | | 10 | PFPU-2.4, 2.7, 2.8 | |
| | ==== | 34 | | | 34 | === | === | 11 | 12 | 1 | 20 | | | 7 | 7 | PFPU-2.1, 2.2, 2.3 | |
| | EWH-1C | 22 | 22 | | | 30 | 1 | 13 | 14 | 1 | 20 | 6 | | | 6 | PFPU-2.5, 2.6 | |
| | EWH-1D | 22 | | 22 | | 30 | 1 | 15 | 16 | 1 | 20 | | 4 | | 4 | VAV'S | |
| | EWH-1E | 22 | | | 22 | 30 | 1 | 17 | 18 | 1 | 20 | | | 6 | 6 | VAV'S | |
| | EWH-2B | 22 | 22 | | | 30 | 1 | 19 | 20 | 1 | 20 | 3 | | | 3 | VAV'S | |
| | EWH-3C | 11 | | 11 | | 20 | 1 | 21 | 22 | 1 | 20 | | 10 | | 2875 | LIGHTS | |
| | EWH-3D | 11 | | | 11 | 20 | 1 | 23 | 24 | 1 | 20 | | | 11 | 3000 | LIGHTS | |
| | EWH-4A | 29 | 29 | | | 40 | 1 | 25 | 26 | 1 | 20 | 10 | | | 2900 | LIGHTS | |
| | EWH-4A | 29 | | 29 | | 40 | 1 | 27 | 28 | 1 | 20 | | 11 | | 3000 | LIGHTS | |
| | EWH-4B | 29 | | | 29 | 40 | 1 | 29 | 30 | 1 | 20 | | | 0 | | SPARE | |
| | EWH-4B | 29 | 29 | | | 40 | 1 | 31 | 32 | 1 | 20 | 0 | | | | SPARE | |
| | SPARE | | | 0 | | 20 | 1 | 33 | 34 | 1 | 20 | | 0 | | | SPARE | |
| | SPARE | | | | 0 | 20 | 1 | 35 | 36 | 1 | 20 | | | 0 | | SPARE | |
| | PANEL L2A | 45 | 35 | | | 150 | 3 | 37 | 38 | 1 | 20 | 0 | | | | SPARE | |
| | ==== | 45 | | 35 | | === | === | 39 | 40 | 1 | 20 | | 0 | | | SPARE | |
| | ==== | 45 | | | 35 | === | === | 41 | 42 | 1 | 20 | | | 0 | | SPARE | |

SUBFEED C.B. OR FEED-THROUGH LUGS AS INDICATED, NOT APPLICABLE IF BLANK

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 0 | | | 3 | | | 3 | | 0 | | | | | | |
| | | | | 0 | | === | === | | === | | | 0 | | | | | |
| | | | | | 0 | === | === | | === | | | | 0 | | | | |

| | AMPS | KVA |
|---|---|---|
| 258 : AMPS PHASE A | ACTUAL CONN. LOAD : | 248 206 |
| 233 : AMPS PHASE B | NEC DEMAND : | 238 197 |
| 222 : AMPS PHASE C | | |

PANEL NOTES:
1) PROVIDE THIS BREAKER WITH 120V SHUNT TRIP COIL.

## PANEL - L2A

VOLTS L-N : 120
VOLTS PH. : 208
PHASE : 3
MOUNTING : SURFACE
MFR : SIEMENS
TYPE : P1

MAIN OPTIONS REQUIRED
S.E. RATED : N/A
GFI PROT. : N/A
SHUNT TRIP : N/A

MCB : 150 AMPS
MLO : N/A AMPS

ENCLOSURE DATA
NEMA : 1
SECTIONS : 2
WIDTH/SECT. : 20
DEPTH : 5.75

AIC RATING (FULLY RATED): 10 KA (MINIMUM, SEE SPECIFICATIONS)

| NOTES | DESCRIPTION | LOAD CONN | AMPS | AMPS | AMPS | C.B. AMPS | C.B. POLES | CKT. NUM. | CKT. NUM. | C.B. POLES | C.B. AMPS | AMPS | AMPS | AMPS | LOAD CONN | DESCRIPTION | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | RECEPTACLES | 5 | 8 | | | 20 | 1 | 1 | 2 | 1 | 20 | 6 | | | 4 | RECEPTACLES | |
| | RECEPTACLES | 5 | | 8 | | 20 | 1 | 3 | 4 | 1 | 20 | | 3 | | 2 | RECEPTACLES | |
| | RECEPTACLES | 5 | | | 8 | 20 | 1 | 5 | 6 | 1 | 20 | | | 6 | 4 | RECEPTACLES | |
| | RECEPTACLES | 5 | 8 | | | 20 | 1 | 7 | 8 | 1 | 20 | 6 | | | 4 | RECEPTACLES | |
| | RECEPTACLES | 5 | | 8 | | 20 | 1 | 9 | 10 | 1 | 20 | | 6 | | 4 | RECEPTACLES | |
| | RECEPTACLES | 5 | | | 8 | 20 | 1 | 11 | 12 | 1 | 20 | | | 6 | 4 | RECEPTACLES | |
| | RECEPTACLES | 3 | 5 | | | 20 | 1 | 13 | 14 | 1 | 20 | 11 | | | 7 | RECEPTACLES | |
| | RECEPTACLES | 4 | | 6 | | 20 | 1 | 15 | 16 | 1 | 20 | | 6 | | 4 | RECEPTACLES | |
| | RECEPTACLES | 4 | | | 6 | 20 | 1 | 17 | 18 | 1 | 20 | | | 3 | 2 | RECEPTACLES | |
| | PROJECTOR | 3 | 3 | | | 20 | 1 | 19 | 20 | 1 | 20 | 5 | | | 3 | RECEPTACLES | |
| | RECEPTACLES | 5 | | 8 | | 20 | 1 | 21 | 22 | 1 | 20 | | 6 | | 4 | RECEPTACLES | |
| | RECEPTACLES | 1 | | | 2 | 20 | 1 | 23 | 24 | 1 | 20 | | | 6 | 4 | RECEPTACLES | |
| | RECEPTACLES | 1 | 2 | | | 20 | 1 | 25 | 26 | 1 | 20 | 6 | | | 4 | RECEPTACLES | |
| | EWC | 5 | | 5 | | 20 | 1 | 27 | 28 | 1 | 20 | | 5 | | 3 | RECEPTACLES | |
| | RECEPTACLES | 4 | | | 6 | 20 | 1 | 29 | 30 | 1 | 20 | | | 3 | 2 | RECEPTACLES | |
| | RECEPTACLES | 4 | 6 | | | 20 | 1 | 31 | 32 | 1 | 20 | 5 | | | 3 | RECEPTACLES | |
| | RECEPTACLES | 3 | | 5 | | 20 | 1 | 33 | 34 | 1 | 20 | | 6 | | 4 | RECEPTACLES | |
| | SHUNT TRIP CKT. | 1 | | | 1 | 20 | 1 | 35 | 36 | 1 | 20 | | | 6 | 4 | RECEPTACLES | |
| | RECEPTACLES | 4 | 6 | | | 20 | 1 | 37 | 38 | 1 | 20 | 6 | | | 4 | RECEPTACLES | |
| | SPARE | | | 0 | | 20 | 1 | 39 | 40 | 1 | 20 | | 0 | | | SPARE | |
| | SPARE | | | | 0 | 20 | 1 | 41 | 42 | 1 | 20 | | | 0 | | SPARE | |
| | AHU-2.1 UV LIGHTS | 3 | 3 | | | 20 | 1 | 43 | 44 | 1 | 20 | 10 | | | 10 | EF-5 | |
| | DAMPERS | 3 | | 3 | | 20 | 1 | 45 | 46 | 1 | 20 | | 10 | | 10 | EF-6 | |
| | FIRE/SMOKE DAMPERS | 2 | | | 2 | 20 | 1 | 47 | 48 | 1 | 20 | | | 2 | 2 | FLUSH VALVE XFMR | |
| 1 | FATC | 5 | 5 | | | 20 | 1 | 49 | 50 | 1 | 20 | 7 | | | 7 | COPIER | |
| | TELEVISIONS | 5 | | 5 | | 20 | 1 | 51 | 52 | 1 | 20 | | 4 | | 4 | TELEVISIONS | |
| | TELEVISIONS | 6 | | | 6 | 20 | 1 | 53 | 54 | 1 | 20 | | | 4 | 4 | TELEVISIONS | |
| | TELEVISIONS | 5 | 5 | | | 20 | 1 | 55 | 56 | 1 | 20 | 3 | | | 2 | RECEPTACLES | |
| | PROJECTOR | 6 | | 6 | | 20 | 1 | 57 | 58 | 1 | 20 | | 3 | | 2 | RECEPTACLES | |
| | RECEPTACLES | 3 | | | 5 | 20 | 1 | 59 | 60 | 1 | 20 | | | 4 | 4 | TELEVISIONS | |
| | TELEVISIONS | 3 | 5 | | | 20 | 1 | 61 | 62 | 1 | 20 | 4 | | | 4 | TELEVISIONS | |
| | RECEPTACLES | 1 | | 2 | | 20 | 1 | 63 | 64 | 1 | 20 | | 0 | | | SPARE | |
| | TELEVISIONS | 3 | | | 5 | 20 | 1 | 65 | 66 | 1 | 20 | | | 0 | | SPARE | |
| | TELEVISIONS | 3 | 5 | | | 20 | 1 | 67 | 68 | 1 | 20 | 0 | | | | SPARE | |
| | SPARE | | | 0 | | 20 | 1 | 69 | 70 | 1 | 20 | | 0 | | | SPARE | |
| | SPARE | | | | 0 | 20 | 1 | 71 | 72 | 1 | 20 | | | 0 | | SPARE | |
| | SPARE | | 0 | | | 20 | 1 | 73 | 74 | 1 | 20 | 0 | | | | SPARE | |
| | SPARE | | | 0 | | 20 | 1 | 75 | 76 | 1 | 20 | | 0 | | | SPARE | |
| | SPARE | | | | 0 | 20 | 1 | 77 | 78 | 1 | 20 | | | 0 | | SPARE | |
| | SPARE | | 0 | | | 20 | 1 | 79 | 80 | 3 | 30 | 0 | | | | SURGE PROT. DEVICE | |
| | SPARE | | | 0 | | 20 | 1 | 81 | 82 | === | === | | 0 | | | ==== | |
| | SPARE | | | | 0 | 20 | 1 | 83 | 84 | === | === | | | 0 | | ==== | |

SUBFEED C.B. OR FEED-THROUGH LUGS AS INDICATED, NOT APPLICABLE IF BLANK

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 0 | | | 3 | | | 3 | | 0 | | | | | | |
| | | | | 0 | | === | | | === | | | 0 | | | | | |
| | | | | | 0 | === | | | === | | | | 0 | | | | |

| | AMPS | KVA |
|---|---|---|
| 126 : AMPS PHASE A | ACTUAL CONN. LOAD : | 105 38 |
| 102 : AMPS PHASE B | NEC DEMAND : | 81 29 |
| 87 : AMPS PHASE C | | |

PANEL NOTES:
1) PROVIDE CIRCUIT BREAKER WITH "RED" LOCKING HANDLE PER NFPA 72.

## PANEL - DPU1

VOLTS L-N : 120
VOLTS PH. : 208
PHASE : 3
MOUNTING : SURFACE
MFR : SIEMENS
TYPE : P5

MAIN OPTIONS REQUIRED
S.E. RATED : N/A
GFI PROT. : N/A
SHUNT TRIP : N/A

MCB : 1000 AMPS
MLO : N/A AMPS

ENCLOSURE DATA
NEMA : 1
SECTIONS : 1
WIDTH/SECT. : 38
DEPTH : 13

**NOTE 1**

AIC RATING (FULLY RATED): 22 KA (MINIMUM, SEE SPECIFICATIONS)

| NOTES | DESCRIPTION | LOAD CONN | AMPS | AMPS | AMPS | C.B. AMPS | C.B. POLES | CKT. NUM. | CKT. NUM. | C.B. POLES | C.B. AMPS | AMPS | AMPS | AMPS | LOAD CONN | DESCRIPTION | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PANEL 1AU | 219 | 219 | | | 300 | 3 | 1 | 2 | 3 | 250 | 191 | | | 192 | PANEL 2AU | |
| | ==== | 219 | | 219 | | === | === | 3 | 4 | === | === | | 191 | | 192 | ==== | |
| | ==== | 219 | | | 219 | === | === | 5 | 6 | === | === | | | 191 | 192 | ==== | |
| | PANEL 1BU | 109 | 109 | | | 200 | 3 | 7 | 8 | 3 | 100 | 30 | | | 30 | PANEL 2BU | |
| | ==== | 109 | | 109 | | === | === | 9 | 10 | === | === | | 30 | | 30 | ==== | |
| | ==== | 109 | | | 109 | === | === | 11 | 12 | === | === | | | 30 | 30 | ==== | |
| | PANEL 1CU | 63 | 63 | | | 100 | 3 | 13 | 14 | 3 | 150 | 86 | | | 86 | PANEL 1EU | |
| | ==== | 63 | | 63 | | === | === | 15 | 16 | === | === | | 86 | | 86 | ==== | |
| | ==== | 63 | | | 63 | === | === | 17 | 18 | === | === | | | 86 | 86 | ==== | |
| | PANEL 1DU | 167 | 167 | | | 300 | 3 | 19 | 20 | 3 | | 0 | | | | SPACE | |
| | ==== | 167 | | 167 | | === | === | 21 | 22 | === | === | | 0 | | | ==== | |
| | ==== | 167 | | | 167 | === | === | 23 | 24 | === | === | | | 0 | | ==== | |
| | SPACE | | 0 | | | | 3 | 25 | 26 | 3 | | 0 | | | | SPACE | |
| | ==== | | | 0 | | === | === | 27 | 28 | === | === | | 0 | | | ==== | |
| | ==== | | | | 0 | === | === | 29 | 30 | === | === | | | 0 | | ==== | |
| | SPACE | | 0 | | | | 3 | 31 | 32 | 3 | 30 | 0 | | | | SURGE PROT. DEVICE | |
| | ==== | | | 0 | | === | === | 33 | 34 | === | === | | 0 | | | ==== | |
| | ==== | | | | 0 | === | === | 35 | 36 | === | === | | | 0 | | ==== | |
| | | | 0 | | | | | | | | | 0 | | | | | |
| | | | | 0 | | | | | | | | | 0 | | | | |
| | | | | | 0 | | | | | | | | | 0 | | | |
| | | | 0 | | | | | | | | | 0 | | | | | |
| | | | | 0 | | | | | | | | | 0 | | | | |
| | | | | | 0 | | | | | | | | | 0 | | | |
| | | | 0 | | | | | | | | | 0 | | | | | |
| | | | | 0 | | | | | | | | | 0 | | | | |
| | | | | | 0 | | | | | | | | | 0 | | | |
| | | | 0 | | | | | | | | | 0 | | | | | |
| | | | | 0 | | | | | | | | | 0 | | | | |
| | | | | | 0 | | | | | | | | | 0 | | | |

SUBFEED C.B. OR FEED-THROUGH LUGS AS INDICATED, NOT APPLICABLE IF BLANK

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 0 | | | 3 | | | 3 | | 0 | | | | | | |
| | | | | 0 | | === | | | === | | | 0 | | | | | |
| | | | | | 0 | === | | | === | | | | 0 | | | | |

| | AMPS | KVA |
|---|---|---|
| 865 : AMPS PHASE A | ACTUAL CONN. LOAD : | 867 312 |
| 865 : AMPS PHASE B | NEC DEMAND : | 829 298 |
| 865 : AMPS PHASE C | | |

PANEL NOTES:
1) PROVIDE 100% RATED MAIN CIRCUIT BREAKER.

## PANEL DPU1 DEMAND CALCULATIONS (PER NEC 220.44)

PROJECT: 201105

| | | | |
|---|---|---|---|
| TOTAL RECEPTACLE CONNECTED LOAD | = | 36.9 | KVA |
| FIRST 10KVA @ 100% | = | 10.0 | KVA |
| REMAINDER OVER 10KVA @ 50% | = | 13.5 | KVA |
| TOTAL RECEPTACLE DEMAND LOAD | = | 23.5 | KVA |
| DIFFERENCE IN RECEPTACLE CONNECTED VS DEMAND LOAD | = | 13.4 | KVA |
| PANEL DPU1 TOTAL CONNECTED LOAD | = | 311.6 | KVA |
| MINUS 13.4KVA RECEPTACLE LOAD DIFFERENCE | = | 298.2 | KVA |
| (TOTAL DEMAND LOAD FOR PANEL DPU1) | | | |

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Electric: ADM01 12/29/11
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Notes:


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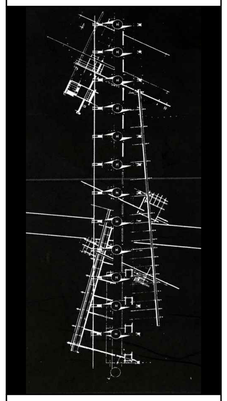

# Lake County Emergency Communications & Operations Center

Tavares, Florida

**PERMIT CD SUBMITTAL**


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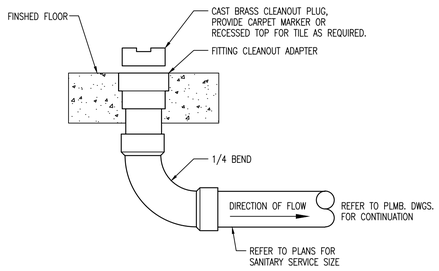
- revisions/addenda

| Number | Description | Date Issued |
|---|---|---|
| 1 | ADDENDUM #1 | 12.16.11 |
| 2 | ADDENDUM #2 | 12.22.11 |

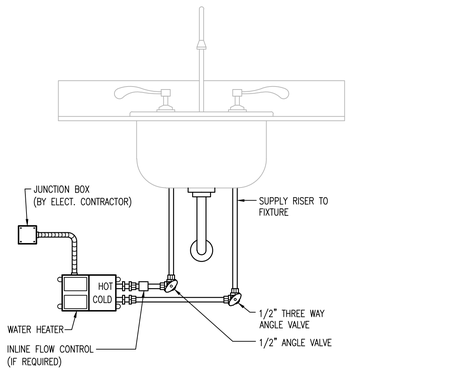
- sheet title
**ELECTRICAL SCHEDULES**

- scale: AS SHOWN
- drawn: MJR
- checked: GPM
- approved: DYL
- date: 11/09/11
- project no. 842
- sheet E-5.04



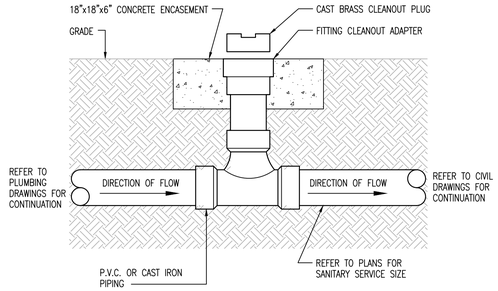

## FLOOR CLEANOUT DETAIL

NO SCALE



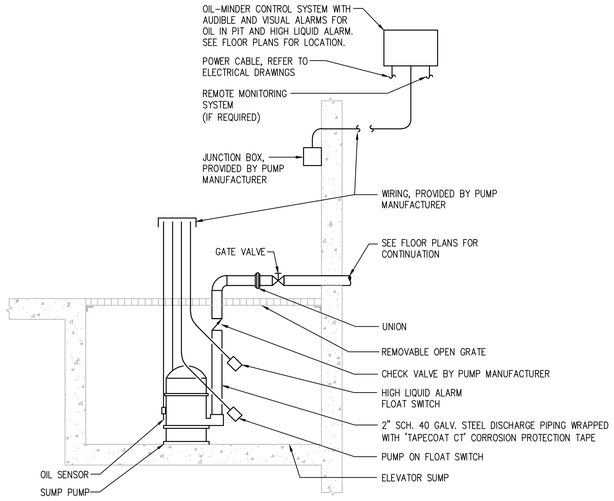

## INSTANTANEOUS WATER HEATER DETAIL

NO SCALE




## EXTERIOR TWO-WAY CLEANOUT TO GRADE DETAIL

SCALE: NONE




NOTES:

1. REFER TO SPECIFICATIONS.
2. REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS.

## SUMP PUMP AND OIL MINDER SYSTEM DETAIL

SCALE: NONE

# PLUMBING GENERAL NOTES

1. ALL PLUMBING WORK SHALL BE GOVERNED AND INSTALLED IN COMPLIANCE WITH THE LATEST EDITION AND APPLICABLE PROVISIONS OF THE FOLLOWING CODES AND STANDARDS:
   A. FLORIDA BUILDING CODE – 2007 WITH THE 2009 SUPPLEMENTS
   B. FLORIDA EXISTING BUILDING CODE – 2007 WITH THE 2009 SUPPLEMENTS
   C. FLORIDA MECHANICAL CODE – 2007 WITH THE 2009 SUPPLEMENTS
   D. FLORIDA PLUMBING CODE – 2007 WITH THE 2009 SUPPLEMENTS
   E. FLORIDA FUEL GAS CODE – 2007 WITH THE 2009 SUPPLEMENTS
   F. FLORIDA ENERGY EFFICIENCY CODE – 2007 WITH THE 2009 SUPPLEMENTS
   G. FLORIDA FIRE PREVENTION CODE – 2007 WITH THE 2009 SUPPLEMENTS
   H. NATIONAL ELECTRICAL CODE (NEC) – 2008
   I. NFPA – LATEST EDITION
   J. ASPE STANDARDS
   K. ANSI
   L. AMERICANS WITH DISABILITIES ACT (ADA)
   M. ALL OTHER APPLICABLE FEDERAL, COUNTY AND CITY CODES REQUIRED BY LOCAL JURISDICTIONS
2. PRIOR TO SUBMITTING BID, CONTRACTOR SHALL VERIFY EXACT LOCATIONS OF UTILITIES IN FIELD AND ALL EXISTING BUILDING CONDITIONS.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL NECESSARY FITTINGS AS REQUIRED BY ALL APPLICABLE CODES AND GOVERNING AUTHORITIES.
4. CONTRACTOR SHALL PROVIDE ALL WORK CUSTOMARILY INCLUDED IF NOT SPECIFICALLY CALLED FOR ON THE PLANS. ALL WORK SHALL BE IN ACCORDANCE WITH BUILDING PLANS AND SPECIFICATIONS.
5. PIPE ROUTING IS SCHEMATIC AND IS NOT INTENDED TO INDICATE EXACT ROUTING. THE PIPING SHALL BE INSTALLED WITH NO CHANGES IN PIPE SIZE. CONTRACTOR SHALL PROVIDE ANY ADDITIONAL OFFSETS OR FITTINGS REQUIRED FOR PROPER INSTALLATION AND CLEARANCES.
6. CONTRACTOR SHALL VERIFY AND CORRECT AS REQUIRED TO MEET ALL CODES AND REGULATIONS ANY POSSIBLE DISCREPANCIES BETWEEN TYPE AND SIZE OF CONNECTION SPECIFIED IN PLUMBING FIXTURE SCHEDULE AND FIXTURES ACTUALLY INSTALLED ON THE SITE.
7. CONTRACTOR SHALL VERIFY INSTALLATIONS AND OBSTRUCTIONS OF ALL TRADES AND SHALL COORDINATE ALL PLUMBING WORK WITH OTHER TRADES AND ROUTE PIPING TO AVOID INTERFERENCES.
8. PROVIDE ACCESS PANELS TO ALL VALVES WITHIN CHASES OR ABOVE NON-ACCESSIBLE CEILINGS. REFER TO ARCHITECTURAL DRAWINGS FOR CEILING TYPES.
9. REFER TO ARCHITECTURAL DRAWINGS FOR PLUMBING FIXTURE EXACT LOCATIONS, MOUNTING HEIGHTS AND DIMENSIONS.
10. CONTRACTOR SHALL VERIFY INVERT ELEVATIONS OF EXISTING SANITARY PIPING TO WHICH NEW SEWER DRAINS ARE TO BE CONNECTED BEFORE INSTALLATION OF NEW SEWER LINE.
11. ALL ADA COMPLIANT (HANDICAP) FIXTURES SHALL BE MOUNTED IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA).
12. CONTRACTOR SHALL FURNISH AND INSTALL DIELECTRIC UNIONS AT CONNECTIONS OF DISSIMILAR METALS.
13. PIPING SHALL NOT BE ROUTED THROUGH OR ABOVE ELECTRICAL ROOMS.
14. ALL PIPING SHALL BE FIRMLY ANCHORED AND SUPPORTED TO PREVENT SWAY AND VIBRATION THE ENTIRE LENGTH.
15. INSTALL WATER HAMMER SHOCK ARRESTORS AT EACH BATTERY OF FIXTURES AND AS INDICATED ON RISER DIAGRAMS/ISOMETRICS. ARRESTORS SHALL BE FACTORY-FABRICATED. INSTALL ARRESTORS AND SIZE PER PLUMBING AND DRAINAGE INSTITUTE STANDARD P.D.I. WH-201. PROVIDE ACCESS PANELS FOR SERVICE AND MAINTENANCE.
16. ROUTE ALL PIPING CONCEALED ABOVE CEILINGS, WITHIN WALLS, IN MECHANICAL ROOMS, OR IN CHASES EXCEPT AS SPECIFICALLY NOTED.
17. DRAIN, WASTE, AND VENT PIPING LOCATED IN FIRE RATED WALL ASSEMBLIES AND RETURN AIR PLENUMS SHALL BE SERVICE WEIGHT CAST IRON WITH NO HUB FITTINGS.
18. ALL FLOOR DRAINS AND FLOOR SINKS SHALL HAVE TRAP PRIMER CONNECTIONS AND SHALL BE SUPPLIED FROM AUTOMATIC TRAP PRIMERS CONNECTED TO THE WATER SUPPLY OR THE NEAREST SINK. RUN 1/2" PIPING FROM TRAP PRIMERS TO FLOOR DRAIN/SINK TRAP PRIMER CONNECTION. SEE DETAIL.
19. PROVIDE CLEANOUTS IN ACCORDANCE WITH APPLICABLE BUILDING CODES, NO MORE THAN 100 FT. APART, AT CHANGES IN DIRECTION GREATER THAN 45 DEGREES, AT BASE OF DOWNSPOUTS AND AT BASE OF SOIL AND WASTE STACKS.
20. ALL VENTS THROUGH ROOF SHALL BE A MIN. OF 10'-0" FROM ANY MECHANICAL EQUIPMENT OUTSIDE AIR INTAKES. OFFSET VENT STACKS AS NECESSARY TO ACCOMMODATE THIS REQUIREMENT.
21. DISCONNECT SWITCHES REQUIRED FOR THE PLUMBING EQUIPMENT SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR UNLESS NOTED OTHERWISE.
22. THE CONTRACTOR SHALL INCLUDE IN THE BID THE TRANSPORT AND DISPOSAL OR RECYCLING OF ALL WASTE MATERIALS GENERATED BY THIS PROJECT IN ACCORDANCE WITH ALL RULES, REGULATIONS AND GUIDELINES APPLICABLE.
23. ALL PIPING PENETRATIONS THROUGH FIRE RATED ASSEMBLIES SHALL BE PROPERLY PROTECTED WITH A UL RATED FIRESTOPPING SYSTEM. REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
24. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, LICENSES, DOCUMENTS AND SERVICES RELATED TO INSTALLATION OF THE WORK.
25. ALL WORK SHALL BE LOCATED TO AVOID CONFLICTS WITH OTHER TRADES. PROVIDE ADEQUATE CLEARANCE FOR ARCHITECTURAL DESIGN, PROPER OPERATION AND SERVICE OF ALL PLUMBING EQUIPMENT, VALVES, CLEANOUTS, ETC.

# PLUMBING SYMBOL LEGEND

| SYMBOL | DESCRIPTION | ABBREVIATION |
|---|---|---|
| SAN | SOIL, WASTE or SANITARY DRAIN | S, W or SAN |
| GW | GREASE WASTE | GW |
| ST | STORM DRAIN | ST |
| OST | OVERFLOW STORM DRAIN | OST |
| V | VENT | V |
| CD | CONDENSATE DRAIN | CD |
| | COLD WATER | CW |
| | HOT WATER SUPPLY ( 110° or 140° ) | HW |
| | HOT WATER RECIRCULATING ( 110° or 140° ) | HWR |
| G(0.5) | GAS (WORKING PRESSURE) | G |
| A(0.5) | COMPRESSED AIR (WORKING PRESSURE) | A |
| | GATE VALVE | GV |
| | GLOBE VALVE | GLV |
| | BALL VALVE | BV |
| | BUTTERFLY VALVE | BFV |
| | CHECK VALVE | CV |
| | SHUT-OFF VALVE IN VALVE BOX | |
| | HOSE BIBB | HB |
| | UNION | |
| | STRAINER | |
| | PIPE ANCHOR | PA |
| | CONCENTRIC REDUCER | |
| | ECCENTRIC REDUCER | |
| | WATER HAMMER ARRESTOR | WHA |
| | TRAP PRIMER | TP |
| | TEE | |
| | ELL | |
| | RISER DOWN | |
| | RISER UP | |
| | P-TRAP | |
| | CAP ON END OF PIPE | |
| | PIPE CONTINUATION | |
| | PIPE FLOW – IN DIRECTION OF ARROW | |
| | ROOF DRAIN OR OVERFLOW ROOF DRAIN | RD or ORD |
| FCO | FLOOR CLEANOUT | FCO |
| WCO or CO | WALL CLEANOUT or CLEANOUT PLUG | WCO or CO |
| COTG or ECO | CLEANOUT TO GRADE or EXTERIOR CLEANOUT | COTG or ECO |
| | FLOOR DRAIN | FD |
| | FLOOR SINK | FS |
| | PLUMBING HEX NOTE | |
| | POINT OF CONNECTION BETWEEN NEW AND EXISTING | POC |
| | POINT OF REMOVAL | POR |

# PLUMBING ABBREVIATIONS

| DESCRIPTION | ABBREVIATION |
|---|---|
| ABOVE FINISHED FLOOR | AFF |
| AMERICAN DISABILITIES ACT | ADA |
| ACCESS PANEL | AP |
| BARRIER FREE | BF |
| BELOW FLOOR | B/F |
| BELOW SLAB | B/S |
| UNDERGROUND | U/G |
| VACUUM BREAKER | VB |
| VENT THROUGH ROOF | VTR |

# PLUMBING SHEET INDEX



| Sheet Number | Sheet Title |
|---|---|
| P-0.01 | COVER SHEET |
| P-0.02 | SCHEDULES |
| P-2.01 | FIRST FLOOR PLAN – SANITARY WASTE & VENT |
| P-2.02 | SECOND FLOOR PLAN – SANITARY WASTE & VENT |
| P-3.01 | FIRST FLOOR PLAN – DOMESTIC WATER |
| P-3.02 | SECOND FLOOR PLAN – DOMESTIC WATER |
| P-4.01 | ENLARGED FLOOR PLANS |
| P-5.01 | RISER DIAGRAMS |



LAKE COUNTY
FLORIDA
**Approved Plans - Commercial**
**LAKE COUNTY BUILDING DIVISION**
Any errors or omission in these plans shall be made to conform with the applicable code requirements per Florida Building Code 105.4.1
Plans reviewed for code compliance and shall be kept on site
Permit # 2011110212
Building: BLD31 12/29/11
Electric: ADM01 12/29/11
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:


ATLANTA
GREENVILLE
LOS ANGELES
NEW ORLEANS
ORLANDO

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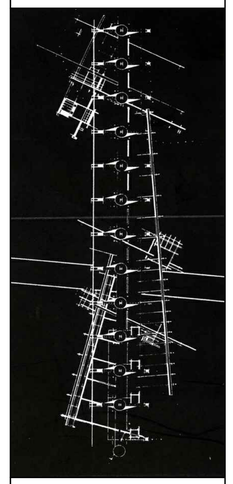

**Lake County Emergency Communications & Operations Center**

Tavares, Florida

**PERMIT CD SUBMITTAL**


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- revisions
- sheet title: COVER SHEET PLUMBING
- scale: AS SHOWN
- drawn: TDC
- checked: WGE
- approved: RWF
- date: 11/09/11
- project no. 842
- sheet P-0.01

# ELEVATOR SUMP PUMP SYSTEM SPECIFICATION

THE CONTRACTOR SHALL FURNISH AND INSTALL A STANCOR MODEL SE-50-1-RP2 COMPLETE PUMP AND OIL-MINDER CONTROL AND ALARM SYSTEM FOR EACH ELEVATOR PIT, AS SHOWN ON THE DRAWINGS. THE SYSTEM SHALL BE CAPABLE OF PUMPING WATER AND WATER WITH ANY OTHER FLUID AUTOMATICALLY FROM THE ELEVATOR PIT AT THE CAPACITY SCHEDULED. THE OIL-MINDER SYSTEM SHALL BE CAPABLE OF SENSING OIL FLOATING ON THE TOP OF THE WATER, EMULSIFIED IN SOLUTION OR SOLID OIL AND PUMP THE FLUID AUTOMATICALLY INTO THE SEWER OR STORM DRAIN AS SHOWN ON THE DRAWINGS. THE PUMP AND OIL SENSOR TECHNOLOGY CONTROL SYSTEM MUST COMPLY WITH ALL APPLICABLE BUILDING CODES, ALL STATE AND LOCAL STATUTES, LAWS AND REGULATIONS PER THE AUTHORITY HAVING JURISDICTION AND ASME A 17.1 SECTION 2.2.2.5 (2007) STANDARD. THE SYSTEM SHALL FUNCTION AUTOMATICALLY TO REMOVE WATER AND WATER WITH ANY OTHER SUBSTANCE FROM THE PIT AUTOMATICALLY WITHOUT ANY HUMAN INTERVENTION. THE CONTROL SYSTEM SHALL PROVIDE A LOCAL AUDIBLE ALARM WITH SILENCE SWITCH AND INDIVIDUAL DRY CONTACTS FOR WARNING OF CONDITIONS A & B, (C, D & E OPTIONAL) WITH PANEL MOUNTED AUDIBLE ALARM WITH LED INDICATOR LIGHTS FOR POWER, OIL DETECTED AND HIGH WATER LEVEL, A) THE PRESENCE OF OIL IN THE SUMP WHEN THE PUMP IS SIGNALED TO RUN, B) HIGH LIQUID LEVEL IN THE SUMP, C) HIGH AMPERAGE OR A LOCKED ROTOR MOTOR CONDITION, D) LOSS OF ELECTRICAL POWER TO THE PANEL, E) PUMP ACTIVATION/PUMP RUN. AN ALARM THAT SOUNDS ONLY IN THE EVENT OF A HIGH LIQUID LEVEL CONDITION AND/OR OIL DETECTED IN THE PIT SHALL NOT BE CONSIDERED EQUAL AND WILL NOT BE ACCEPTED. THE OIL MONITORING CONTROL SYSTEM SHALL HAVE A MINIMUM OF 15 YEARS OF PROVEN RELIABILITY. IF A BMS IS PROVIDED, PROVIDE INDIVIDUAL DRY CONTACTS AND WIRE TO THE BMS FOR REMOTE MONITORING OF OIL DETECTED AND HIGH WATER ALARM WITH OPTIONAL HIGH AMPERAGE/MOTOR OVERLOAD ALERT, PUMP RUN AND/OR LOSS OF POWER.

THE SUMP PUMP SHALL BE A MODEL SE-50, HEAVY DUTY SUBMERSIBLE TYPE, CAPABLE OF PUMPING WATER, WATER/OIL AND OIL AT A MINIMUM CAPACITY OF 50 GPM @ 20' TDH, (3000 GPH AS PER ASME A 17.1 SECTION 2.2.2.5 (2007). THE PUMP SHALL BE CONSTRUCTED AND TESTED TO MEET UL 778 STANDARDS AND SHALL INCLUDE THERMAL OVERLOAD PROTECTION. THE MOTOR SHALL BE AIR FILLED AND RATED AT ½ H.P., 115 VOLT, 1 PHASE, 60 HERTZ. OIL FILLED MOTORS ARE NOT CONSIDERED EQUAL. THE PUMP SHALL BE CAPABLE OF OPERATING WITH THE WATER LEVEL COVERING ONLY 50% OF THE MOTOR CASING AND SHALL OPERATE AUTOMATICALLY EITHER CONTINUOUSLY OR INTERMITTENTLY, AS REQUIRED BY THE ON-OFF FLOAT SWITCH CONTROL. THE PUMP SHALL HAVE A SIZE 2" MINIMUM DISCHARGE CONNECTION. THE MOTOR HOUSING AND FASTENING BOLTS SHALL BE CONSTRUCTED OF 304 STAINLESS STEEL AND THE MECHANICAL SEALS SHALL BE HOUSED IN A SEPARATE OIL-FILLED COMPARTMENT. THE PUMP SHALL HAVE A SEMI-OPEN NON-CLOGGING VORTEX IMPELLER, AND SHALL BE DESIGNED FOR FLOOR MOUNTING COMPLETE WITH SUPPORT LEGS.

THE SOLID STATE OIL MINDER CONTROL SYSTEM SHALL BE CONSTRUCTED AND TESTED TO MEET UL508 STANDARDS AND SHALL BE HOUSED IN A GASKETED NEMA 4X ELECTRICAL ENCLOSURE WITH A WIRING TERMINAL STRIP FOR FIELD WIRING TO THE J-BOX IN THE HOISTWAY. THE CONTROL PANEL SHALL INCLUDE A FIELD ADJUSTABLE SWITCH WITH VARIABLE OIL SENSITIVITY SETTINGS, FOR INDICATING OIL PRESENT, HAVING AN ADJUSTABLE RANGE OF 1 TO 10, FACTORY SET AT #5 OIL SENSITIVITY AND SHALL BE CAPABLE OF SENSING AND ALARMING EMULSIFIED OIL OR SOLID OIL. THE PANEL SHALL ALSO INCLUDE A SEPARATE OVER-CURRENT RELAY AND FIELD ADJUSTABLE MOTOR OVERLOAD HAVING A RANGE OF 5 TO 15 AMPS, FACTORY SET AT 8 AMPS FOR THIS PUMP APPLICATION. THE CONTROL PANEL SHALL HAVE A COMBINATION MANUAL RESET/PUSH TO TEST SWITCH FOR MOTOR OVERLOAD WITH BOTH AUTOMATIC, MANUAL RESET AND CONTROL DIAGNOSTICS. THE CONTROL SYSTEM MUST BE FACTORY SET FOR AUTOMATIC OVERLOAD RESTART. THE FACTORY INSTALLED OIL SENSOR PROBE DETECTION SYSTEM MUST BE HERMETICALLY SEALED, HEAVY DUTY, STAINLESS STEEL WITH LOW AMPERAGE SELF-CLEANING TECHNOLOGY. THE FACTORY MOUNTED AND ADJUSTED OIL SENSOR-LEVEL PROBE SHALL BE SET NO HIGHER THAN 4" FROM THE BOTTOM OF THE PIT. THE FACTORY MOUNTED MAIN FLOAT SWITCH WILL AUTOMATICALLY START THE PUMP ON A LEVEL INCREASE IN THE SUMP PIT FLUID LEVEL. WHEN THE WATER OR FLUID LEVEL DROPS BELOW THE OIL SENSOR PROBE TIP THE PUMP WILL AUTOMATICALLY TURN OFF.

THE CONTROL PANEL SHALL PROVIDE A ONE (1) SECOND TIME DELAY AFTER THE LIQUID LEVEL DROPS BELOW THE OIL SENSOR PROBE TIP, LEAVING ABOUT TWO INCHES OF WATER IN THE PIT. AT THIS POINT, THE OIL SENSOR PROBE VOLTAGE WILL DROP FROM 5VDC TO 15 MILLIVOLTS DC. THE OIL SENSOR PROBE VOLTAGE SHALL NOT EXCEED 15 MILLIVOLTS DC UNTIL IT COMES IN CONTACT WITH WATER OR ANY OTHER FLUID, AT WHICH POINT THE OIL SENSOR RETURNS TO 5VDC. THE LOW 15 MILLIVOLT DC INPUT SHALL REDUCE THE POTENTIAL FIELD AND SUBSEQUENT METAL ION EXCHANGE, PREVENTING BUILD UP OF FOREIGN MATTER ON THE PROBE SURFACE. OIL SENSING SYSTEMS USING FLOATS, STANDARD STAINLESS STEEL PROBES OR OPTICAL LENS, SUBJECT TO DIRT CONTAMINATION, HIGH MAINTENANCE AND FALSE ALARMS ARE NOT CONSIDERED EQUAL. IF THE MAIN FLOAT SWITCH IS CLOSED AND THE OIL SENSOR MEASURES A HIGHER RESISTANCE THAN ITS SET POINT, THE PUMP IS TO BE AUTOMATICALLY STARTED AND THE OIL LED, AUDIBLE ALARM AND REMOTE ALARM RELAY ARE TO BE ENERGIZED. THE CONDITION OF OIL PRESENT WILL ALERT THE BUILDING MAINTENANCE PERSONNEL THE PUMP IS PUMPING AN OIL SOLUTION TO THE DISCHARGE SO MAINTENANCE CAN INVESTIGATE AND RESOLVE THE PROBLEM. THE PUMP CONTROL FLOAT AND OIL SENSING PROBE ARE TO BE FACTORY MOUNTED AND POSITIONED ON THE PUMP AND FACTORY TESTED AS A COMPLETE SYSTEM. PIPE DISCHARGE FIELD MOUNTED PUMP FLOATS AND FIELD MOUNTED OIL SENSORS ARE NOT CONSIDERED EQUAL. THE CONTROL PANEL SHALL HAVE A HIGH DECIBEL WARNING HORN WITH ILLUMINATED RED LIGHT COMPLETE WITH ALARM SILENCING SWITCH AND SEPARATE DRY CONTACTS FOR EACH OF THE ALARM EVENTS SPECIFIED.

THE OIL-MINDER CONTROL SYSTEM SHALL BE PROVIDED WITH OPTION RP (REMEDIATION PROVISION) THAT CONSISTS OF A DEADMAN SPRING RETURN OIL-MINDER BY-PASS SWITCH MOUNTED ON THE CONTROL PANEL. THIS DEADMAN SWITCH WILL ALLOW THE CONTROL PANEL TO BE MANUALLY OVERRIDDEN ALLOWING THE SUMP PUMP TO START, TESTING THE OPERATION OF THE PUMP SYSTEM. IF THE DRAWINGS SO INDICATE, THE SPRING LOADED BYPASS SWITCH WILL ALLOW THE PUMP TO MANUALLY RUN AND PUMP ANY FLUID OUT OF THE PIT INCLUDING OIL INTO A OIL REMEDIATION CONTAINER. SEE THE DRAWINGS FOR PIPING DETAILS AND NORMAL OPERATING MANUAL VALVE POSITIONS. IF SO INDICATED, THE OIL DIVERTER VALVE IS TO BE INSTALLED WITH A HOSE BIBB IN AN EASILY ACCESSIBLE AREA, FOR THE USE OF A PORTABLE 55 GALLON STEEL DRUM OIL STORAGE CONTAINER.

THE CONTROL SYSTEM SHALL INCLUDE DUAL FLOAT SWITCHES FOR AUTOMATIC PUMP ACTIVATION AND HIGH WATER ALARM, WITH THE HIGH WATER ALARM FLOAT SWITCH ALSO ACTING AS A REDUNDANT PUMP RUN (ON) FLOAT IN THE EVENT OF THE PRIMARY PUMP RUN FLOAT BEING INCAPACITATED. PROVIDE A CLEARLY MARKED TERMINAL BOARD WITH THE REMOTE MONITORING ALARM CONTACTS FOR CONNECTION TO THE BMS. PROVIDE A SOLID STATE PUSH/HOLD TO TEST BUTTON TO PERFORM ALL PUMP, ALARM, LED LIGHTS, REMOTE CONTACTS AND CONTROL DIAGNOSTIC TESTS.

PROVIDE A FACTORY PREWIRED NEMA 6 P WATER TIGHT JUNCTION BOX WITH A DIN RAIL MOUNTED WIRING TERMINAL STRIP. PROVIDE FACTORY INSTALLED WIRING OF PUMP, OIL PROBE AND FLOATS INTO THE NEMA 6 P JUNCTION BOX. ALL CABLES BETWEEN THE PUMP AND JUNCTION BOX SHALL BE A MAXIMUM OF 6' LONG PER NEC 2008. THE CABLE SHALL BE HEAVY USAGE, WATER TIGHT AND OIL RESISTANT. THE FLOATS AND OIL SENSING PROBE SHALL BE FACTORY MOUNTED ON THE PUMP HOUSING. ALL CABLE ENTRIES INTO THE J-BOX FROM THE PUMP PIT SHALL HAVE NEMA 6 P WATER TIGHT CORD GRIPS.

THE CONTROL PANEL, PUMP, ON/OFF FLOAT, HIGH WATER ALARM FLOAT, WIRING, J-BOX AND OIL SENSOR PROBE SHALL BE FACTORY ASSEMBLED AS A COMPLETE ASSEMBLY, READY TO USE SYSTEM AND SHALL BE TESTED, APPROVED AND LABELED, FOR THE INTENDED PURPOSE AS A SYSTEM, AND CERTIFIED BY A NATIONALLY RECOGNIZED INDEPENDENT TESTING LABORATORY SUCH AS ENTELA. ALL OF THE EQUIPMENT COMPONENTS MUST BE MANUFACTURED, ASSEMBLED AND TESTED BY THE SAME COMPANY.

INDIVIDUAL COMPONENTS MANUFACTURED BY DIFFERENT COMPANIES THAT ARE ASSEMBLED TO CONFORM TO THIS SPECIFICATION ARE NOT CONSIDERED EQUAL AND WILL NOT BE ACCEPTABLE.

ACCEPTABLE MANUFACTURERS:
STANCOR PUMP COMPANY OR PRIOR APPROVED EQUAL, PROVIDED ALL OF THE SPECIFICATIONS ARE MET.

END OF SECTION

# PLUMBING EQUIPMENT SCHEDULE

| SYMBOL | DESCRIPTION | MANUFACTURER | MODEL NUMBER | SPECIFICATION |
|---|---|---|---|---|
| EWH-1A,B,C,D,E | INSTANTANEOUS TANKLESS WATER HEATER | EEMAX | EX60T-ML | 6.0 KW 277V IRON FREE NICKEL CHROME REPLACEABLE CARTRIDGE ELEMENT, 41°F TEMP. RISE AT 1.0 GPM, MULTIPLE LAVATORY (SEE PLANS), UNIT ACTIVATES AT 0.3 GPM, THERMOSTATIC, DIGITAL MICROPROCESSING TEMPERATURE CONTROL SET AT 105°F, ABS-UL 94V0 RATED COVER, REPLACEABLE INLET FILTER, 1/2" COMPRESSION FITTINGS. |
| EWH-2A,B | INSTANTANEOUS TANKLESS WATER HEATER | EEMAX | EX60T-FS | 6.0 KW 277V IRON FREE NICKEL CHROME REPLACEABLE CARTRIDGE ELEMENT, 41°F TEMP. RISE AT 1.0 GPM, UNIT ACTIVATES AT 0.3 GPM, THERMOSTATIC, DIGITAL MICROPROCESSING TEMPERATURE CONTROL SET AT 105°F, ABS-UL 94V0 RATED COVER, REPLACEABLE INLET FILTER, 1/2" COMPRESSION FITTINGS. |
| EWH-3A,B,C,D | INSTANTANEOUS TANKLESS WATER HEATER | EEMAX | EX3277T-FS | 3.0 KW 277V IRON FREE NICKEL CHROME REPLACEABLE CARTRIDGE ELEMENT, 41°F TEMP. RISE AT 0.5 GPM, UNIT ACTIVATES AT 0.3 GPM, THERMOSTATIC, DIGITAL MICROPROCESSING TEMPERATURE CONTROL SET AT 105°F, ABS-UL 94V0 RATED COVER, REPLACEABLE INLET FILTER, 1/2" COMPRESSION FITTINGS. |
| EWH-4A,B | INSTANTANEOUS TANKLESS WATER HEATER | EEMAX | EX160TC-ML | TWO 8.0 KW 277V IRON FREE NICKEL CHROME REPLACEABLE CARTRIDGE ELEMENTS (REQUIRES TWO INDEPENDENT ELECTRICAL CIRCUITS), 55°F TEMP. RISE AT 2.0 GPM, MULTIPLE FIXTURE CAPABLE, UNIT ACTIVATES AT 0.5 GPM, THERMOSTATIC CONTROL, TEMPERATURE CONTROL SET AT 105°F, UL LISTED, REPLACEABLE INLET FILTER, 3/4" NPT FITTINGS. |
| WHA | WATER HAMMER ARRESTOR | ZURN | Z1700 | TYPE 304 STAINLESS STEEL CONSTRUCTION, ACCURATELY MACHINED PIPE THREADS TO ASSURE TIGHT CONNECTION, 3/4" MALE I.P.S. INLET (100 AND 200 UNIT SIZES), 1" MALE I.P.S. INLET (300 THRU 600 UNIT SIZES). WATER HAMMER ARRESTORS SHALL BE INSTALLED AND CERTIFIED TO THE FOLLOWING SPECIFICATIONS: PDI-WH201, ANSI A112.26.1, ASSE 1010. TYPE "A"=11 F.U. MAX., TYPE "B"=32 F.U. MAX., TYPE "C"=60 F.U. MAX., TYPE "D"=113 F.U. MAX., TYPE "E"=154 F.U. MAX. PROVIDE ACCESS PANELS FOR SERVICE AND MAINTENANCE. |
| FCO | FLOOR CLEANOUT | ZURN | ZN1400-K | ADJUSTABLE CLEANOUT, DURA-COATED CAST IRON BODY, ANCHOR FLANGE, GAS AND WATERTIGHT ABS TAPERED THREAD PLUG, AND ROUND SCORIATED SECURED POLISHED NICKEL BRONZE TOP. PROVIDE CARPET MARKER OR RECESSED TOP FOR TILE AS REQUIRED. |
| ECO | EXTERIOR CLEANOUT | ZURN | ZB1400-K | ADJUSTABLE CLEANOUT, DURA-COATED CAST IRON BODY, ANCHOR FLANGE, GAS AND WATERTIGHT ABS TAPERED THREAD PLUG, AND ROUND SCORIATED SECURED POLISHED BRONZE TOP. WHEN INSTALLED ON GRADE, PROVIDE A 18"X18" CONCRETE BASE. |
| WCO | WALL CLEANOUT | ZURN | Z1446 | CLEANOUT TEE, DURA-COATED CAST IRON BODY, GAS AND WATERTIGHT ABS TAPERED THREAD PLUG, AND ROUND, SMOOTH STAINLESS STEEL WALL ACCESS COVER WITH SECURING SCREW. |
| TPV-A | ELECTRONIC TRAP PRIMER VALVE | PRECISION PLUMBING PRODUCTS | MPB-500-115V | PRESET TO OPEN FOR 10 SECONDS EVERY 24 HOURS, 12"x12"x4" BOX WITH ACCESS DOOR, INTEGRAL INLET SHUT-OFF VALVE, TEST SWITCH, UL LISTED TIMER SOLENOID VALVE, CIRCUIT BREAKER, 1/2" INLET WITH SCREEN, ONE TO FOUR OUTLET DISTRIBUTION UNIT. |
| TPV-B | AUTOMATIC TRAP PRIMER VALVE | ZURN | P6000-TPO | PROVIDED ON FLUSH VALVE TUBE, 1-1/2" FLUSH TUBE WITH TRAP PRIMER COLLAR, SPUD COUPLING, FLANGE FOR TOP SPUD CONNECTION, 3/8"X12" SUPPLY TUBE AND FITTINGS, VACUUM BREAKER, VACUUM BREAKER TUBE NUT AND WALL ESCUTCHEON. |
| FD-A | FLOOR DRAIN | ZURN | ZN415B-P | DURA-COATED CAST IRON BODY WITH BOTTOM OUTLET, COMBINATION INVERTIBLE MEMBRANE CLAMP AND ADJUSTABLE COLLAR WITH SEEPAGE SLOTS AND "TYPE B" POLISHED NICKEL BRONZE STRAINER AND 1/2" TRAP PRIMER CONNECTION. PROVIDE DEEP SEAL TRAP. FLOOR DRAINS LOCATED IN SHOWERS DO NOT REQUIRE A TRAP PRIMER CONNECTION. |
| FD-B | FLOOR DRAIN WITH RAISED FLANGE | ZURN | ZN415I-V | DURA-COATED CAST IRON BODY WITH BOTTOM OUTLET, COMBINATION INVERTIBLE MEMBRANE CLAMP AND ADJUSTABLE COLLAR WITH SEEPAGE SLOTS, "TYPE I" POLISHED NICKEL BRONZE STRAINER WITH RAISED FLANGE AND BACKWATER VALVE. PROVIDE DEEP SEAL TRAP. |
| WH-1 | CONCEALED FREEZELESS WALL HYDRANT | WOODFORD MFG. | MODEL B65 | ASSE 1019-B AND ASSE 1011 APPROVED, ANTI-SIPHON VACUUM BREAKER, AUTOMATIC DRAINING, HARDENED STAINLESS STEEL OPERATING STEM, ONE PIECE VALVE PLUNGER CONTROLS BOTH FLOW AND DRAIN FUNCTIONS, 3/4" INLET AND 3/4" MALE HOSE THREAD, LOOSE TEE KEY, STANDARD CHROME FINISH, STEEL BOX WITH HINGED COVER, CYLINDER LOCK AND "WATER" STAMPED ON COVER. |

# PLUMBING FIXTURE SCHEDULE

| SYMBOL | DESCRIPTION | MANUFACTURER | MODEL NUMBER | SPECIFICATION | FIXTURE CONNECTIONS | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | CW | HW | WASTE | VENT |
| WC-1 | WATER CLOSET | AMERICAN STANDARD | AFWALL FLOWISE 3351.128 | WALL MOUNTED, 1.28 GPF, WHITE VITREOUS CHINA, 1-1/2" TOP SPUD, EVERCLEAN SURFACE, SIPHON JET, ELONGATED BOWL, PROVIDE CARRIER EQUAL TO ZURN Z1203. | 1" | – | 4" | 2" |
| WC-2 | WATER CLOSET (ADA COMPLIANT) | AMERICAN STANDARD | AFWALL FLOWISE 3351.128 | WALL MOUNTED, MOUNT TOP OF SEAT AT 17"-19" A.F.F., 1.28 GPF, WHITE VITREOUS CHINA, 1-1/2" TOP SPUD, EVERCLEAN SURFACE, SIPHON JET, ELONGATED BOWL, PROVIDE CARRIER EQUAL TO ZURN Z1203. | 1" | – | 4" | 2" |
| | FLUSHOMETER VALVE (WC-1 & WC-2) | SLOAN | ROYAL OPTIMA 111-1.28 ES-S TMO | EXPOSED, 120V HARDWIRED, SENSOR OPERATED, 1.28 GPF, NON HOLD OPEN TRUE MECHANICAL OVERRIDE FLUSH BUTTON, DIAPHRAGM TYPE, CHROME PLATED, THREE SECOND FLUSH DELAY, 1" SCREWDRIVER BACK-CHECK ANGLE STOP, ADJUSTABLE TAILPIECE, VACUUM BREAKER, PROVIDE QUANTITY OF MODEL EL-154 120VAC/24 VAC 50VA TRANSFORMERS (SERVES UP TO 10 FLUSH VALVES) AS INDICATED ON PLANS. | | | | |
| | TOILET SEAT (WC-1 & WC-2) | CHURCH SEATS | 9500C | OPEN FRONT, LESS COVER, WHITE, EXTRA HEAVY WEIGHT, INJECTION MOLDED SOLID PLASTIC, ELONGATED, LARGE MODELD-IN BUMPERS, CONCEALED CHECK STAINLESS STEEL HINGES. | | | | |
| L-1 | LAVATORY | AMERICAN STANDARD | ROSELYN 0498.001 | SINGLE BOWL, COUNTERTOP MOUNTED, SELF-RIMMING, SQUARE, 21"X18", FAUCET LEDGE, WHITE VITREOUS CHINA, SINGLE CENTER HOLE, FRONT OVERFLOW. PROVIDE GRID DRAIN, P-TRAP AND STOPS. | 1/2" | 1/2" | 1 1/2" | 1 1/2" |
| L-2 | LAVATORY (ADA COMPLIANT) | AMERICAN STANDARD | LUCERNE 0356.421 | SINGLE BOWL, WALL HUNG, 21"X18", CONCEALED ARM SUPPORT, FAUCET LEDGE, WHITE VITREOUS CHINA, SINGLE CENTER HOLE, FRONT OVERFLOW, SELF DRAINING DECK WITH SIDE AND BACK SPLASH SHIELDS. PROVIDE ZURN Z-1222-D CARRIER, GRID DRAIN, P-TRAP AND STOPS. | 1/2" | 1/2" | 1 1/2" | 1 1/2" |
| | FAUCET (L-1 & L-2) (ADA COMPLIANT) | HYDROTEK | H-5000EM | SINGLE-HOLE DECK MOUNT, 120V HARDWIRED, SENSOR OPERATED, CHROME PLATED FINISH, SLOW-CLOSING SOLENOID VALVE, 0.5 GPM VANDAL RESISTANT AERATOR, ONE SECOND SHUT-OFF DELAY, EXTERNAL MANUAL TEMPERATURE CONTROL LEVER WITH ON/OFF. SENSOR, CONTROL MODULE PCB AND SOLENOID VALVE HOUSED IN THE VANDAL RESISTANT FAUCET BODY. PROVIDE HBL-04 THERMOSTATIC MIXING VALVE WITH CHECKS AND HC-010 MULTI-UNIT VOLTAGE ADAPTER (SERVES UP TO 10 FAUCETS), INCLUDES 3/8"BRAIDED STAINLESS STEEL SUPPLY LINES WITH INLINE FILTERS AND INTEGRAL CHECKS. | | | | |
| UR-1 | URINAL | AMERICAN STANDARD | WASHBROOK 6590.005 | WALL HUNG, 0.5 GPF, 3/4" TOP SPUD, SIPHON JET, ELONGATED FLUSHING RIM 14" FROM WALL, WASHOUT FLUSH ACTION, EXTENDED SIDES, WHITE VITREOUS CHINA, 2" THREADED INSIDE OUTLET. PROVIDE ZURN Z-1221 CARRIER. | 3/4" | – | 2" | 1 1/2" |
| UR-2 | URINAL (ADA COMPLIANT) | AMERICAN STANDARD | WASHBROOK 6590.005 | WALL HUNG, 0.5 GPF, MOUNT TOP OF RIM 15-1/4" A.F.F., 3/4" TOP SPUD, SIPHON JET, ELONGATED FLUSHING RIM 14" FROM WALL, WASHOUT FLUSH ACTION, EXTENDED SIDES, WHITE VITREOUS CHINA, 2" THREADED INSIDE OUTLET. PROVIDE ZURN Z-1221 CARRIER. | 3/4" | – | 2" | 1 1/2" |
| | FLUSHOMETER VALVE (UR-1 & UR-2) | SLOAN | ROYAL OPTIMA 186-0.5 ES-S TMO | EXPOSED, 120V HARDWIRED, SENSOR OPERATED, 0.5 GPF, NON HOLD OPEN TRUE MECHANICAL OVERRIDE FLUSH BUTTON, DIAPHRAGM TYPE, CHROME PLATED, THREE SECOND FLUSH DELAY, 3/4" SCREWDRIVER BACK-CHECK ANGLE STOP, ADJUSTABLE TAILPIECE, VACUUM BREAKER, PROVIDE QUANTITY OF MODEL EL-154 120VAC/24 VAC 50VA TRANSFORMERS (SERVES UP TO 10 FLUSH VALVES) AS INDICATED ON PLANS. | | | | |
| SH-1 | SHOWER | ZURN | Z7301-SS-MT-S9 | SINGLE HANDLE PRESSURE BALANCING MIXING SHOWER UNIT, CERAMIC CONTROL CARTRIDGE WITH STAINLESS STEEL BALANCING PISTON, 1.5 GPM SHOWER HEAD, ARM AND FLANGE, POLISHED NIICKEL CHROME PLATED FINISH, SERVICE STOPS, CHECK STOPS, ADJUSTABLE LIMIT STOP. | 1/2" | 1/2" | 2" | 1 1/2" |
| SH-2 | SHOWER (ADA COMPLIANT) | ZURN | Z7300-SS-MT-HW-H9 | ADA COMPLIANT SINGLE HANDLE PRESSURE BALANCING MIXING SHOWER UNIT, CERAMIC CONTROL CARTRIDGE WITH STAINLESS STEEL BALANCING PISTON, 1.5 GPM HAND/WALL SHOWER HEAD AND UNIT, 60" FLEXIBLE METAL HOSE, 24" MOUNTING BAR, SUPPLY ELBOW AND FLANGE, POLISHED NIICKEL CHROME PLATED FINISH, SERVICE STOPS, CHECK STOPS, ADJUSTABLE LIMIT STOP. | 1/2" | 1/2" | 2" | 1 1/2" |
| S-1 | SINK (ADA COMPLIANT) | ELKAY | LUSTERTONE LRAD1517 LK406HA08T6 | SELF RIMMING, 15"x17-1/2"x6" DEEP, SINGLE BOWL, TWO HOLES ON 4" CENTERS, SATIN FINISH STAINLESS STEEL, RECESSED BOWL AND FAUCET DECKS, ROUNDED CORNERS, FULLY UNDERCOATED, 3-1/2" CENTER DRAIN, GOOSENECK SWING SPOUT CHROME FINISH TOP MOUNT FAUCET WITH QUARTER TURN 6" WRIST BLADE HANDLES, PROVIDE P-TRAP, STOPS, SUPPLIES AND BASKET STRAINER. | 1/2" | 1/2" | 1 1/2" | 1 1/2" |
| KS-1 | KITCHEN SINK | ELKAY | LUSTERTONE LR2521R LK406HA08T6 | SELF RIMMING, 25"x21"x6" DEEP, SINGLE BOWL, TWO HOLES ON 4" CENTERS, OFF-CENTERED REAR DRAIN, SATIN FINISH STAINLESS STEEL, RECESSED BOWL AND FAUCET DECKS, ROUNDED CORNERS, FULLY UNDERCOATED, 3-1/2" CENTER DRAIN, GOOSENECK SWING SPOUT CHROME FINISH TOP MOUNT FAUCET WITH QUARTER TURN 6" WRIST BLADE HANDLES, PROVIDE P-TRAP, STOPS, SUPPLIES AND BASKET STRAINER. | 1/2" | 1/2" | 1 1/2" | 1 1/2" |
| EWC-1 | ELECTRIC WATER COOLER (ADA COMPLIANT) | ELKAY | SWIRLFLO LRPBM28K | HI-LO BARRIER FREE, SATIN FINISH STAINLESS STEEL, 100% LEAD FREE WATERWAYS, WATERSENTRY FILTER SYSTEM, ANTI-MICROBIAL SAFETY BUBBLER, FRONT PUSH BUTTON, VANDAL RESISTANT, FRONT LOUVERED GRILL, 8.6 GPH 50°F DRINKING WATER AT 70°F AMBIENT, RECESSED CHILLER (ADJUSTABLE THERMOSTAT, R-134A,115V/60 HZ/370W/4.0 F.L.A.) AND MF200 MOUNTING SYSTEM. PROVIDE STOP AND P-TRAP. INSULATE WASTE PIPING WITH 1/2" FLEXIBLE ELASTOMERIC INSULATION | 1/2" | – | 1 1/2" | 1 1/2" |
| MS-1 | MOP SINK | FIAT | MSB-2424 | 24"X24"X12" MOLDED STONE, 10" HIGH WALLS, FLOOR MOUNTED MOP SERVICE BASIN WITH WALL MOUNTED CHROME PLATED FAUCET WITH 3/4" HOSE THREAD SPOUT, INTEGRAL STOPS, WALL BRACKET, PAIL HOOK AND VACUUM BREAKER, COMBINATION DOME STRAINER AND LINT BASKET, 30" HOSE AND BRACKET, MOP BRACKET, STAINLESS STEEL FLAT STRAINER AND STAINLESS STEEL WALL GUARD. PROVIDE 830-AA FAUCET, 832-AA HOSE AND BRACKET, 889-CC MOP BRACKET, MSG-2424 WALL GUARD. | 1/2" | 1/2" | 3" | 2" |

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FLORIDA
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**LAKE COUNTY BUILDING DIVISION**
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Electric: ADM01 12/29/11
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:


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Danny Y. Lundstrom, PE (Registration No. 0033857)
Certificate of Authorization No. 26635


KLG Project No. 2011005


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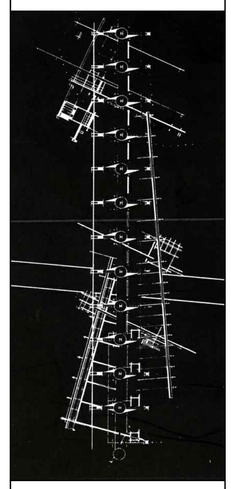

**Lake County Emergency Communications & Operations Center**

Tavares, Florida

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- revisions
- sheet title
  SCHEDULES
  PLUMBING
- scale: AS SHOWN
- drawn: TDC
- checked: WGE
- approved: RWF
- date: 11/09/11
- project no. 842
- sheet P-0.02

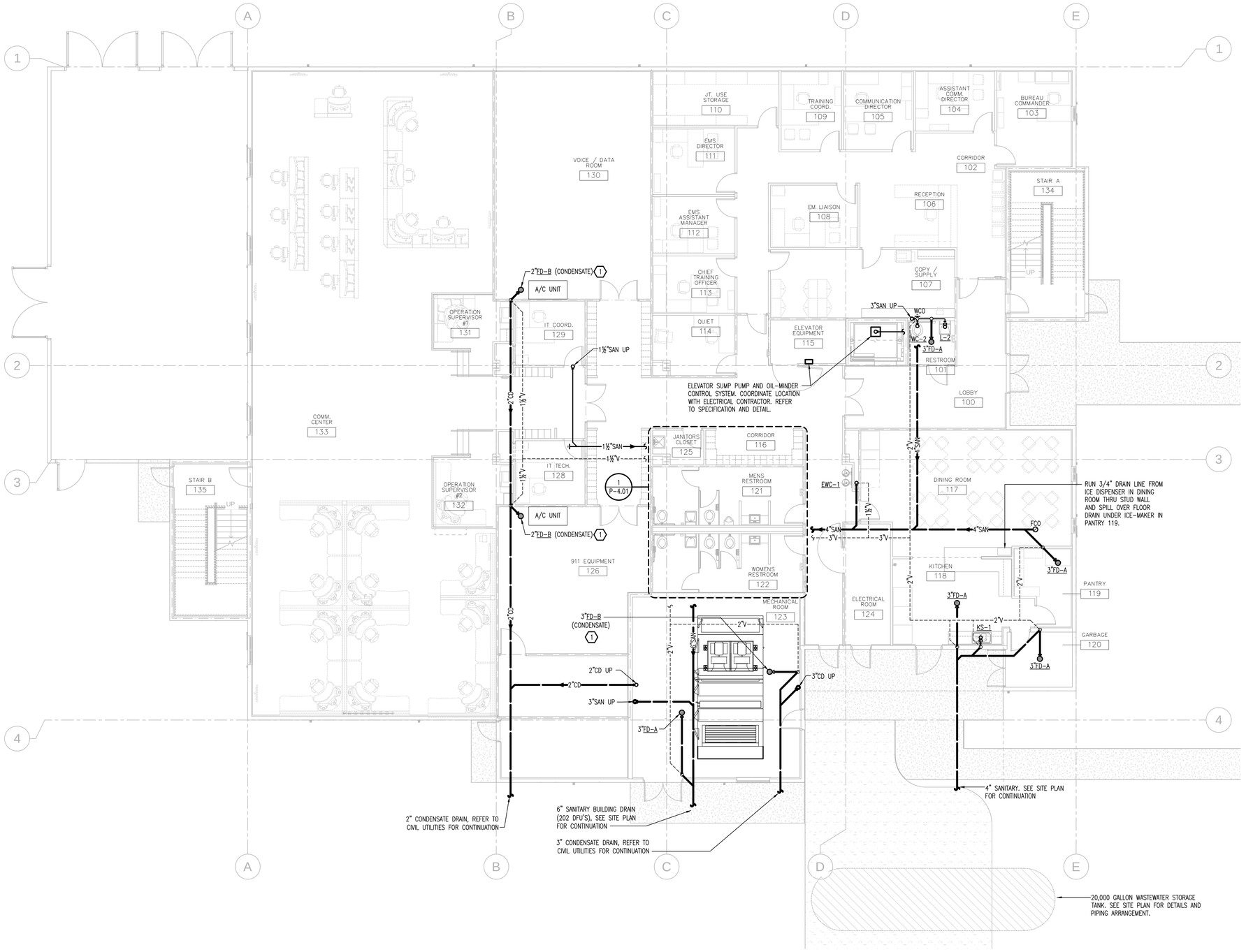
GENERAL NOTES:

1) REFER TO SHEET P-0.01 FOR GENERAL NOTES AND SYMBOL LEGEND.

2) REFER TO SPECIFICATIONS.

HEX NOTES:

(1) PLUMBING CONTRACTOR SHALL COORDINATE FLOOR DRAIN LOCATION WITH GENERAL CONTRACTOR AND MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.




N

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P-2.01

## FIRST FLOOR PLAN - SANITARY WASTE & VENT PIPING

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


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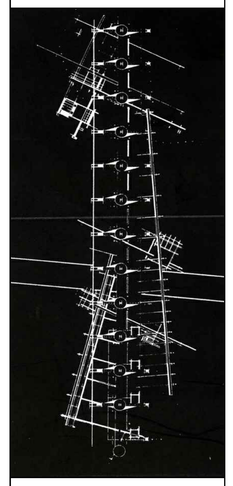
Corporate Registration
No. AAC001197

# Lake County Emergency Communications & Operations Center

Tavares, Florida

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  **FIRST FLOOR PLAN-PLUMBING SANITARY WASTE & VENT**
- scale: 1/8" = 1'-0"
- drawn: TDC
- checked: WGE
- approved: RWF
- date: 11/09/11
- project no. 842
- sheet P-2.01

LAKE COUNTY
FLORIDA
**Approved Plans - Commercial**
**LAKE COUNTY BUILDING DIVISION**
Any errors or omission in these plans shall be made to conform with the applicable code requirements per Florida Building Code 105.4.1
Plans reviewed for code compliance and shall be kept on site
Permit # 2011110212
Building: BLD31 12/29/11
Electric: ADM01 12/29/11
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
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Danny Y. Lundstrom, PE (Registration No. 0033857)
Certificate of Authorization No. 26635

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ORLANDO

KLG Project No. 2011005

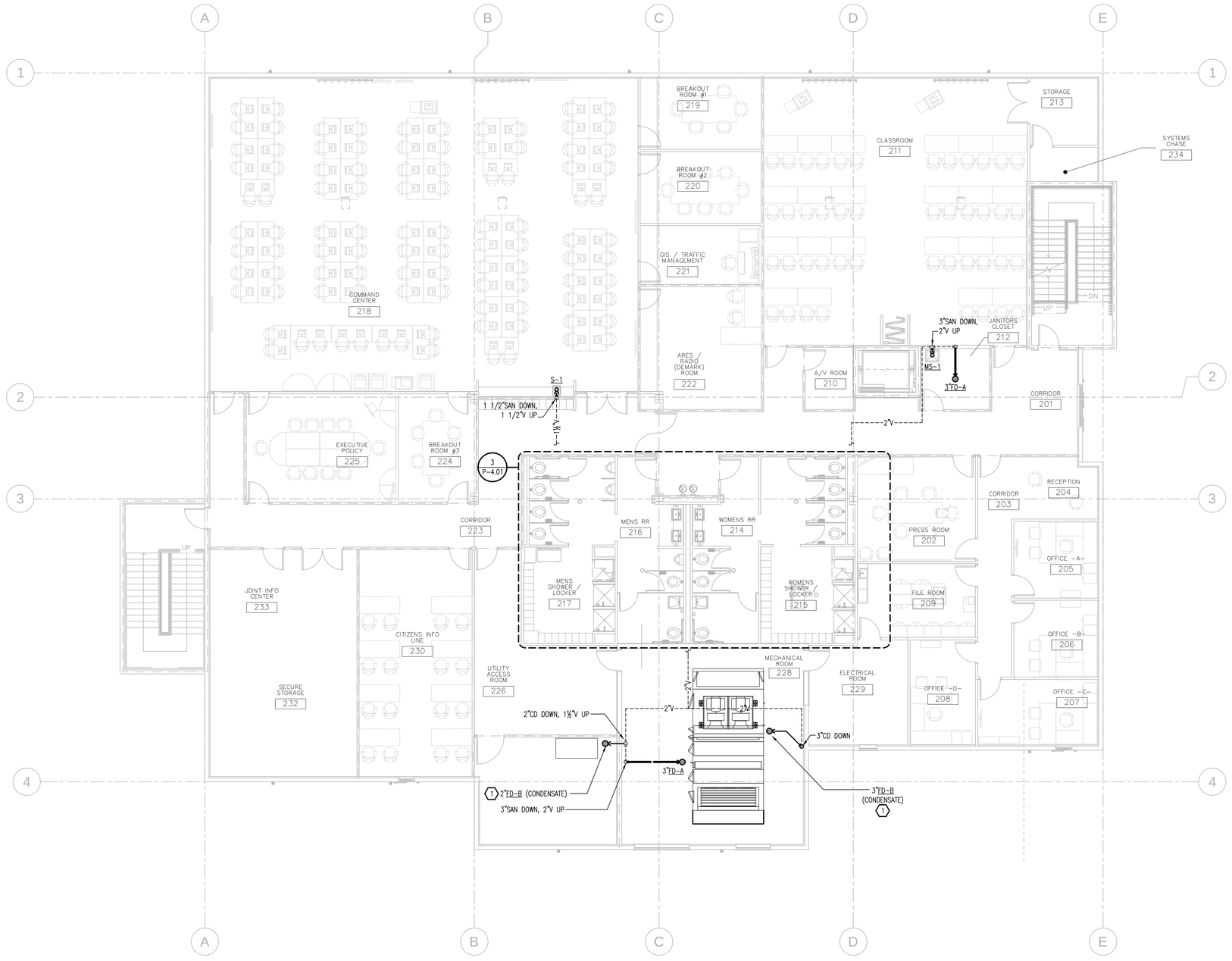
GENERAL NOTES:

1) REFER TO SHEET P-0.01 FOR GENERAL NOTES AND SYMBOL LEGEND.

2) REFER TO SPECIFICATIONS.

HEX NOTES:

(1) PLUMBING CONTRACTOR SHALL COORDINATE FLOOR DRAIN LOCATION WITH GENERAL CONTRACTOR AND MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.

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1 P-2.02

## SECOND FLOOR PLAN - SANITARY WASTE & VENT PIPING

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


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Architects and Planners

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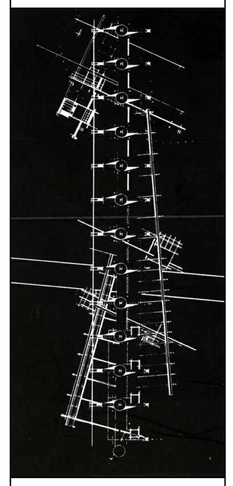
Corporate Registration No. AAC0001197

# Lake County Emergency Communications & Operations Center

Tavares, Florida

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  **SECOND FLOOR PLAN-PLUMBING SANITARY WASTE & VENT**
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- approved: RWF
- date: 11/09/11
- project no. 842
- sheet P-2.02

LAKE COUNTY
FLORIDA

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**LAKE COUNTY BUILDING DIVISION**

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Mechanical: BLD31 12/1/11
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Certificate of Authorization No. 26635

KLG Project No. 2011005

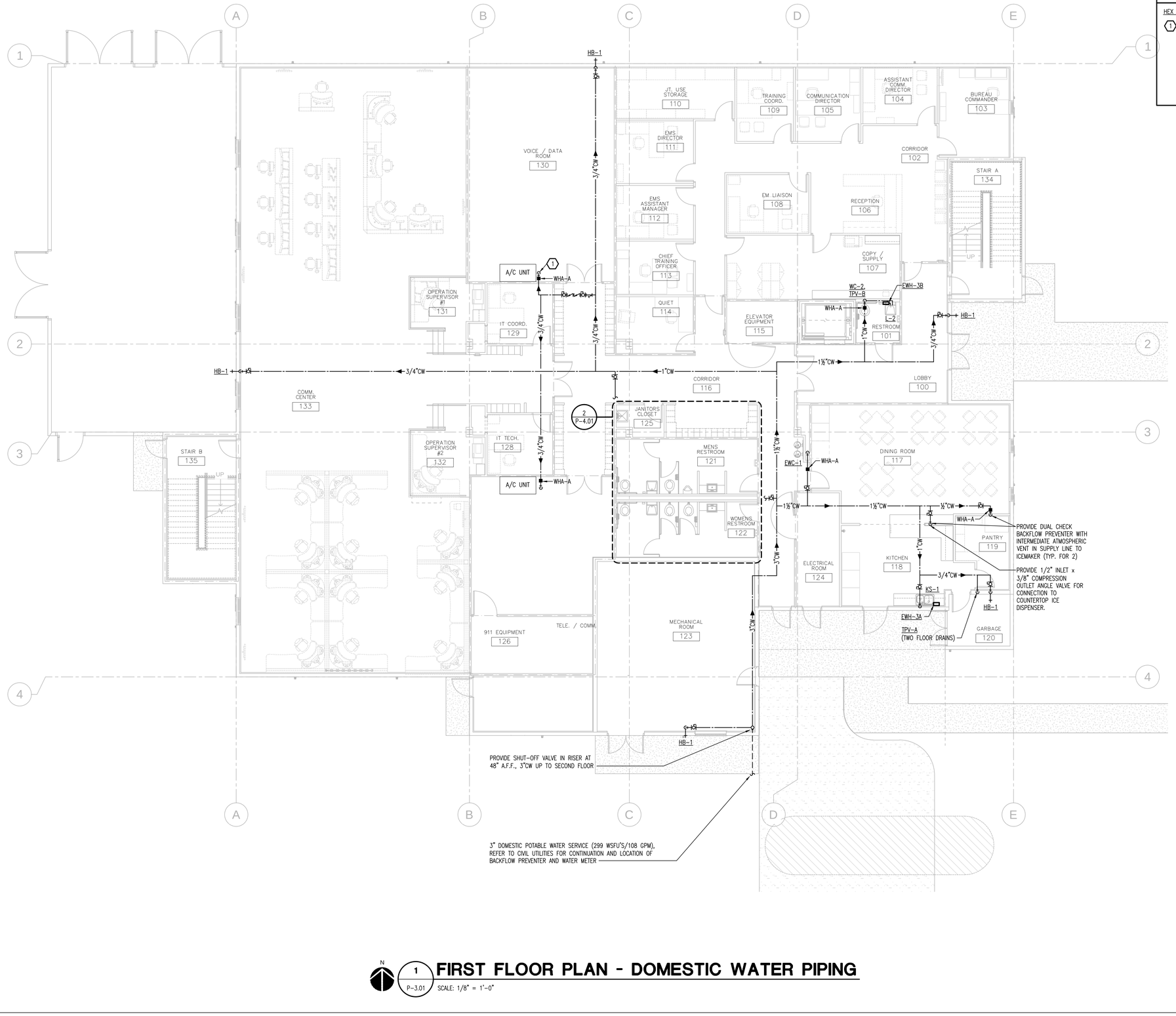
GENERAL NOTES:

1) REFER TO SHEET P-0.01 FOR GENERAL NOTES AND SYMBOL LEGEND.

2) REFER TO SPECIFICATIONS.

HEX NOTES:

(1) 3/4" HUMIDIFIER MAKE-UP WATER TO A/C UNIT. PROVIDE REDUCED PRESSURE BACKFLOW PREVENTER WITH FULL PORT QUARTER TURN BALL VALVES, STRAINER AND AIR GAP FITTING EQUAL TO WILKINS 975XL-S-AG. ROUTE AIR GAP DISCHARGE TO FLOOR DRAIN. FIELD COORDINATE EXACT LOCATION OF EQUIPMENT CONNECTION. REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.

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1 P-3.01

## FIRST FLOOR PLAN - DOMESTIC WATER PIPING

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

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Electric: ADM01 12/29/11
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:


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Architects and Planners
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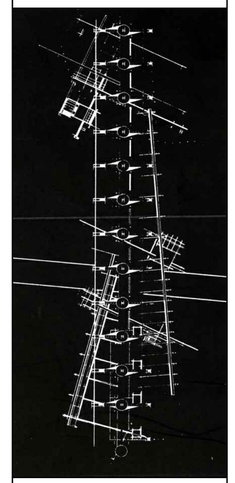

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- sheet title: FIRST FLOOR PLANS-PLUMBING DOMESTIC WATER
- scale: 1/8" = 1'-0"
- drawn: TDC
- checked: WGE
- approved: RWF
- date: 11/09/11
- project no. 842
- sheet P-3.01


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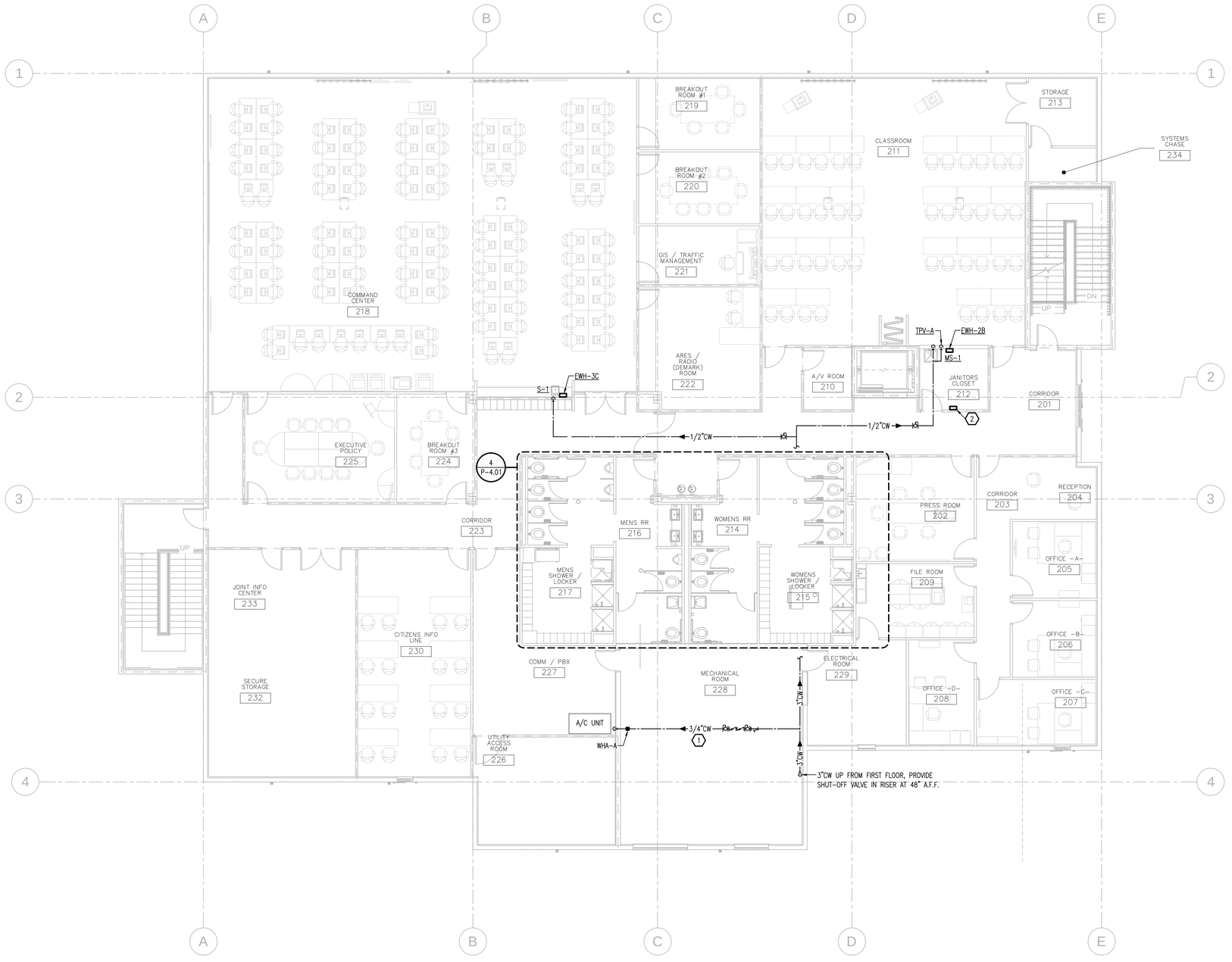
ORLANDO




N

1 P-3.02

## SECOND FLOOR PLAN - DOMESTIC WATER PIPING

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

GENERAL NOTES:

1) REFER TO SHEET P-0.01 FOR GENERAL NOTES AND SYMBOL LEGEND.
2) REFER TO SPECIFICATIONS.

HEX NOTES:

1. 3/4" HUMIDIFIER MAKE-UP WATER TO A/C UNIT. PROVIDE REDUCED PRESSURE BACKFLOW PREVENTER WITH FULL PORT QUARTER TURN BALL VALVES, STRAINER AND AIR GAP FITTING EQUAL TO WILKINS 975XL-S-AG. ROUTE AIR GAP DISCHARGE TO FLOOR DRAIN. FIELD COORDINATE EXACT LOCATION OF EQUIPMENT CONNECTION. REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
2. PROVIDE TWO FLUSH VALVE TRANSFORMERS (120V/24V-50VA, ONE TRANSFORMER SERVES UP TO 10 FLUSH VALVES) TO BE INSTALLED AND WIRED BY THE ELECTRICAL CONTRACTOR. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.

LAKE COUNTY
FLORIDA
**Approved Plans - Commercial**
**LAKE COUNTY BUILDING DIVISION**
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Plans reviewed for code compliance and shall be kept on site
Permit # 2011110212
Building: BLD31 12/29/11
Electric: ADM01 12/29/11
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:


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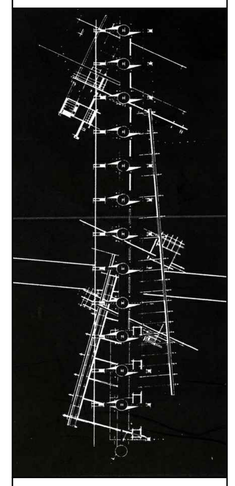

# Lake County Emergency Communications & Operations Center

Tavares, Florida

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- revisions

- sheet title: SECOND FLOOR PLAN-PLUMBING DOMESTIC WATER
- scale: 1/8" = 1'-0"
- drawn: TDC
- checked: WGE
- approved: RWF
- date: 11/09/11
- project no. 842
- sheet P-3.02


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Certificate of Authorization No. 26635
KLG Project No. 2011005

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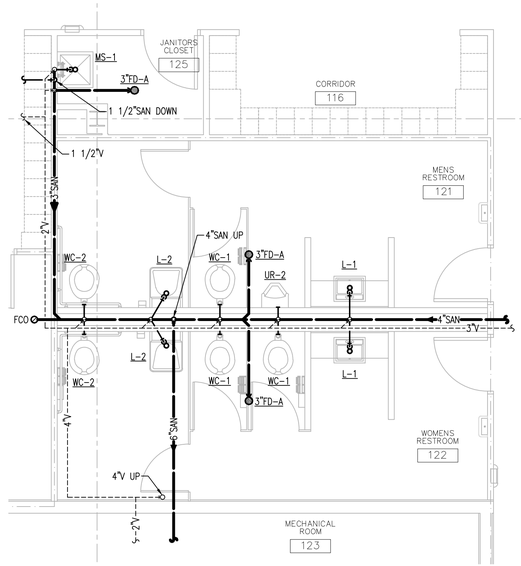
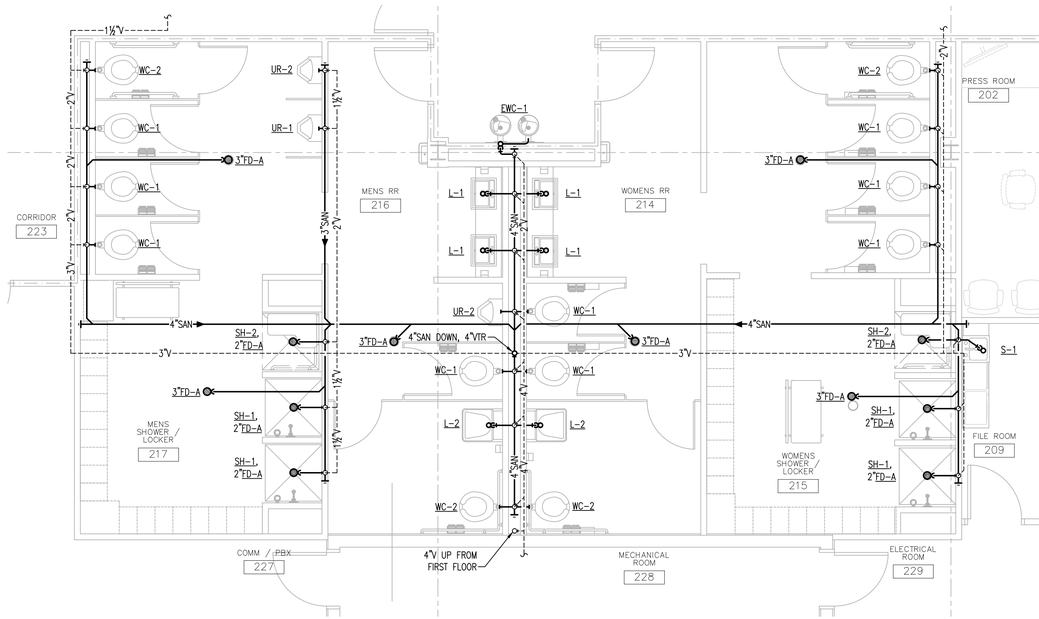


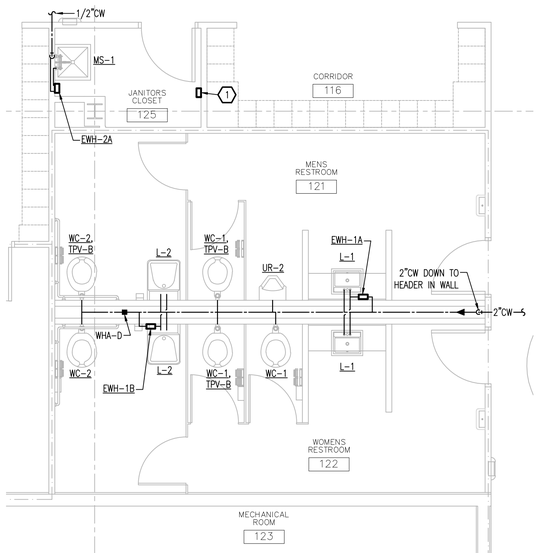

## ENLARGED FIRST FLOOR PLAN SANITARY WASTE & VENT PIPING

N 1 P-4.01 SCALE: 1/4" = 1'-0"



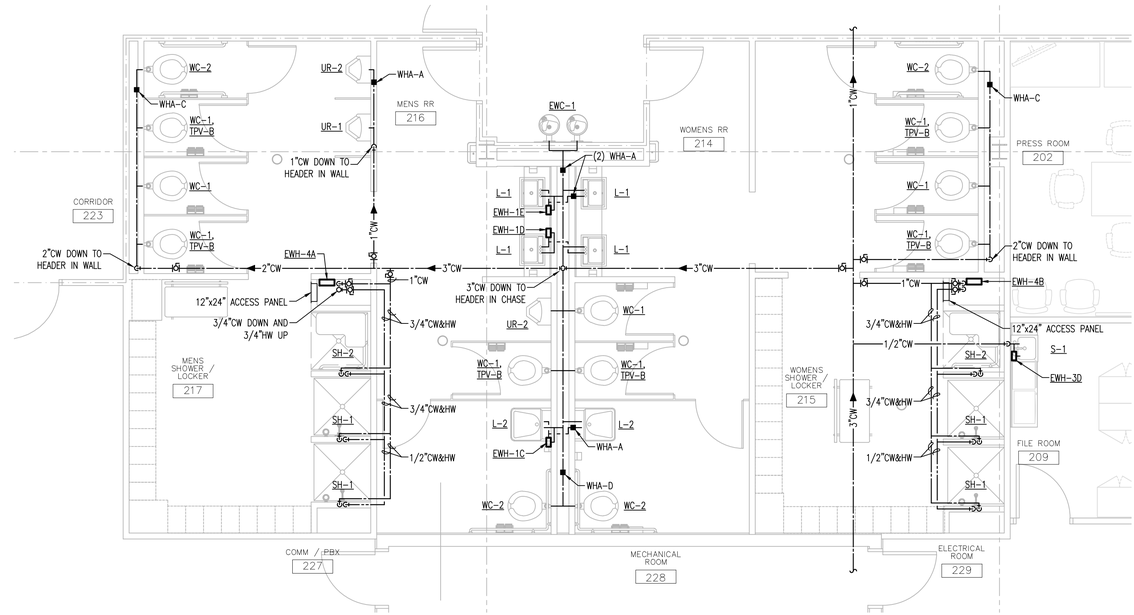

## ENLARGED SECOND FLOOR PLAN SANITARY WASTE & VENT PIPING

N 3 P-4.01 SCALE: 1/4" = 1'-0"




## ENLARGED FIRST FLOOR PLAN DOMESTIC WATER PIPING

N 2 P-4.01 SCALE: 1/4" = 1'-0"




## ENLARGED SECOND FLOOR PLAN DOMESTIC WATER PIPING

N 4 P-4.01 SCALE: 1/4" = 1'-0"

**GENERAL NOTES:**

1) REFER TO SHEET P-0.01 FOR GENERAL NOTES AND SYMBOL LEGEND.
2) REFER TO SPECIFICATIONS.
2) PROVIDE A 12"x12" ACCESS PANEL FOR ALL VALVES ABOVE INACCESSIBLE CEILINGS.

**HEX NOTES:**

1. PROVIDE ONE FLUSH VALVE TRANSFORMER (120V/24V-50VA, ONE TRANSFORMER SERVES UP TO 10 FLUSH VALVES) TO BE INSTALLED AND WIRED BY THE ELECTRICAL CONTRACTOR. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.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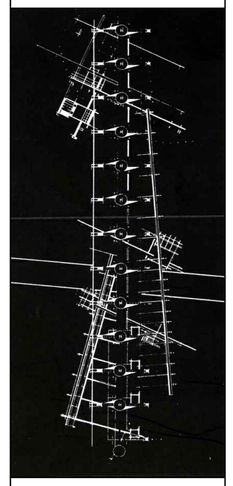

# Lake County Emergency Communications & Operations Center

Tavares, Florida

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- revisions

- sheet title
  ENLARGED FLOOR PLANS PLUMBING

- scale: 1/4" = 1'-0"
- drawn: TDC
- checked: WGE
- approved: RWF
- date: 11/09/11
- project no. 842
- sheet P-4.01

LAKE COUNTY
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**LAKE COUNTY BUILDING DIVISION**
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Permit # 20111102l2
Building: BLD31 12/29/11
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Mechanical: BLD31 12/1/11
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Notes:


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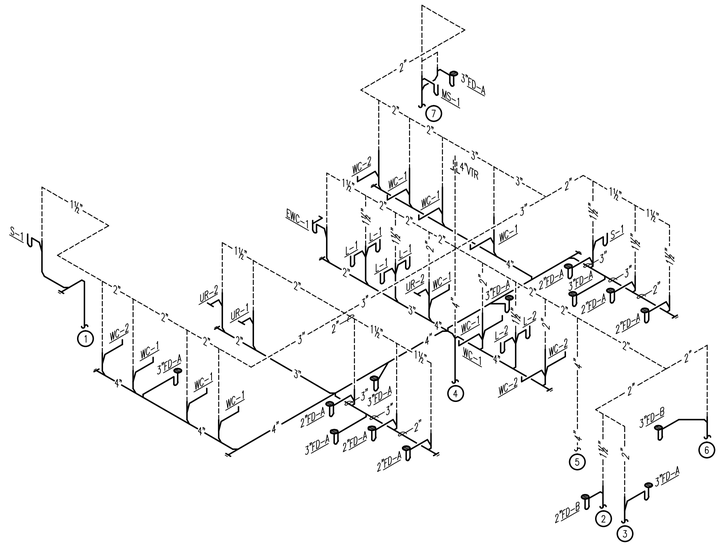
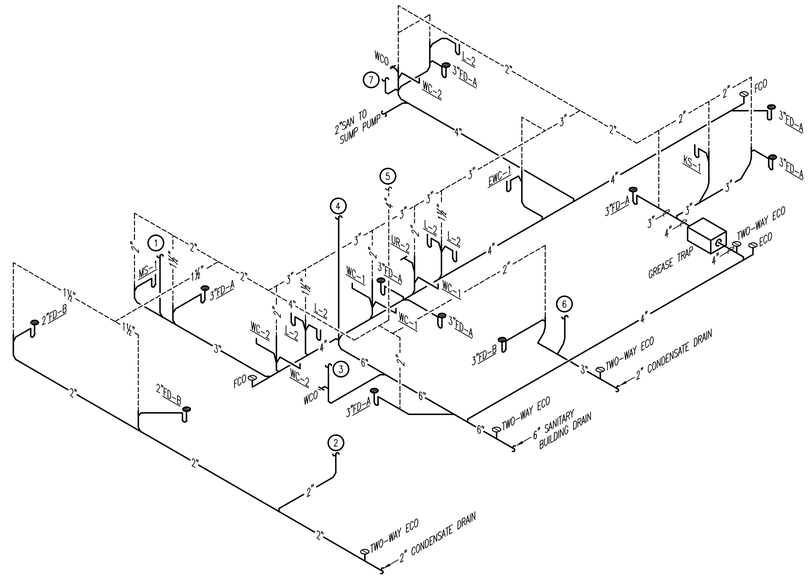
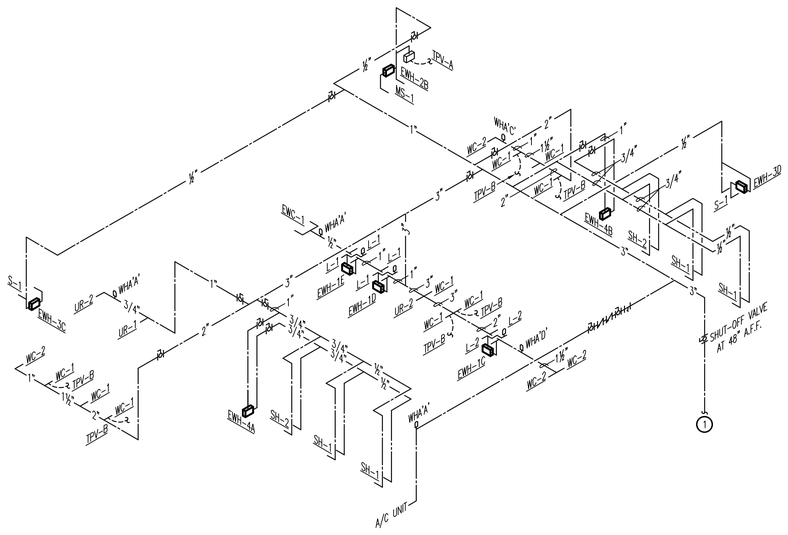


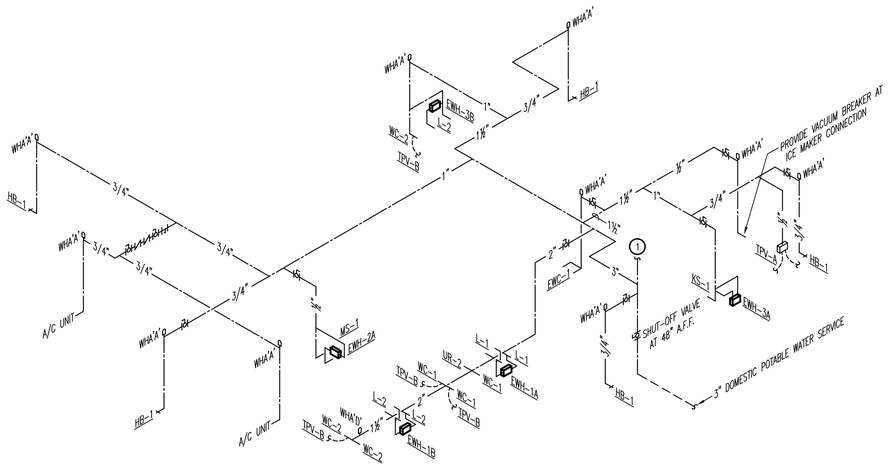

## SANITARY RISER DIAGRAM - SECOND FLOOR
NO SCALE




## SANITARY RISER DIAGRAM - FIRST FLOOR
NO SCALE




## WATER RISER DIAGRAM - SECOND FLOOR
NO SCALE




## WATER RISER DIAGRAM - FIRST FLOOR
NO SCALE

LAKE COUNTY
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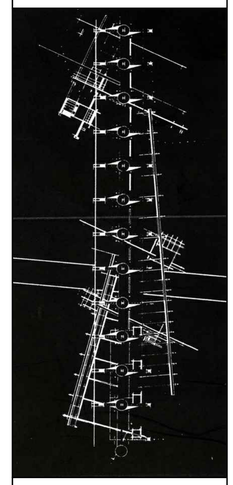

# Lake County Emergency Communications & Operations Center

Tavares,
Florida

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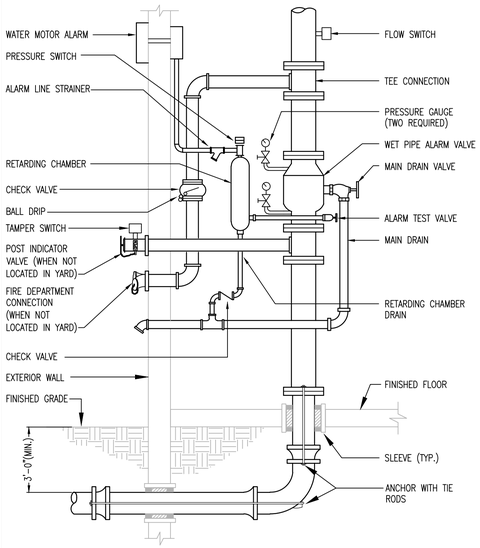
- revisions

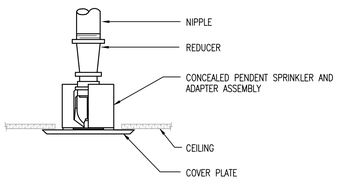
- sheet title
  RISER DIAGRAMS
  PLUMBING

- scale: AS SHOWN
- drawn: TDC
- checked: WGE
- approved: RWF
- date: 11/09/11
- project no. 842
- sheet P-5.01



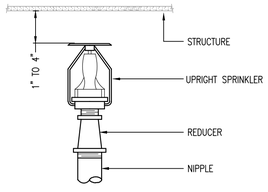

## FIRE RISER DETAIL

NOT TO SCALE



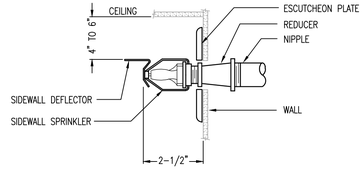

## CONCEALED PENDENT SPRINKLER DETAIL

NOT TO SCALE




## UPRIGHT SPRINKLER DETAIL

NOT TO SCALE




## SIDEWALL SPRINKLER DETAIL

NOT TO SCALE

# FIRE PROTECTION GENERAL NOTES

1. PRIOR TO SUBMITTING A BID, THE FIRE PROTECTION SYSTEM CONTRACTOR SHALL VISIT THE JOB SITE AND VERIFY EXACT LOCATIONS OF UTILITIES IN FIELD, ALL EXISTING BUILDING CONDITIONS AND THAT NO WORK WILL BE REQUIRED OUTSIDE OF THE AREAS OF WORK SHOWN ON THE DRAWINGS.
2. THE FIRE PROTECTION SYSTEM CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND VERIFYING A CURRENT WATER FLOW TEST AND PRESSURE DATA, THE DESIGN OF SHOP DRAWINGS AND, IF REQUIRED, PERFORMING HYDRAULIC CALCULATIONS. CONTRACTOR SHALL PROVIDE ALL WORK CUSTOMARILY INCLUDED IF NOT SPECIFICALLY CALLED FOR ON THE PLANS. PROVIDE ALL NECESSARY INFORMATION REGARDING THE EXISTING FIRE PROTECTION SYSTEM ON THE PLANS TO MAKE ALL CONDITIONS CLEAR. THE INSTALLATION AND DESIGN SHALL COMPLY WITH NFPA 13, LATEST EDITION, 2007 FLORIDA FIRE PREVENTION CODE, 2007 FLORIDA BUILDING CODE CHAPTER NINE – FIRE PROTECTION SYSTEMS, FLORIDA ADMINISTRATIVE CODE CHAPTER 61G15-32 AND ALL OTHER CITY, COUNTY AND STATE REGULATIONS.
3. THE FIRE PROTECTION SYSTEM CONTRACTOR SHALL SUBMIT THE SHOP DRAWINGS (WHICH SHALL INDICATE DESIGN CRITERIA USED TO ESTABLISH DESIGN DENSITIES I.E. OCCUPANCY USE, OCCUPANCY CLASSIFICATION, TYPE OF COMMODITY, COMMODITY CLASSIFICATION, STORAGE CONFIGURATION, MAXIMUM AVAILABLE HEIGHT FOR STORAGE, AND APPROPRIATE CODE REFERENCES), MANUFACTURER'S SPECIFICATIONS AND HYDRAULIC CALCULATIONS, IF REQUIRED, TO THE LOCAL AUTHORITY HAVING JURISDICTION FOR REVIEW, APPROVAL AND PERMITTING PRIOR TO INSTALLATION OR MODIFICATION OF THE AUTOMATIC SPRINKLER SYSTEM. ALL DRAWINGS AND CALCULATIONS SHALL BE SIGNED AND SEALED BY THE FIRE PROTECTION SYSTEM CONTRACTOR'S REGISTERED FIRE PROTECTION ENGINEER. THE ARCHITECT SHALL RECEIVE TWO COPIES OF THE SHOP DRAWINGS, MANUFACTURER'S SPECIFICATIONS AND REQUIRED HYDRAULIC CALCULATIONS FOR THEIR RECORDS.
4. THE FIRE PROTECTION SYSTEM CONTRACTOR SHALL VERIFY INSTALLATIONS AND OBSTRUCTIONS OF ALL TRADES AND SHALL COORDINATE ALL FIRE PROTECTION WORK WITH OTHER TRADES, NEW AND EXISTING, AND ROUTE PIPING TO AVOID INTERFERENCES.
5. THE FIRE PROTECTION SYSTEM CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FEES, PERMITS AND INSPECTIONS REQUIRED TO PERFORM THE WORK DESCRIBED IN THE CONTRACT DOCUMENTS AND SHOP DRAWINGS.
6. THE FIRE PROTECTION SYSTEM CONTRACTOR, PER NFPA 13, LATEST EDITION, SHALL PERFORM ALL REQUIRED ACCEPTANCE TESTS, COMPLETE THE CONTRACTOR'S MATERIAL AND TEST CERTIFICATES, AND FORWARD THE CERTIFICATES TO THE AUTHORITY HAVING JURISDICTION PRIOR TO ASKING FOR APPROVAL OF THE INSTALLATION.
7. THE FIRE PROTECTION SYSTEM CONTRACTOR, AFTER EXAMINATION OF ALL EXISTING CONDITIONS, PLANS AND SPECIFICATIONS, SHALL INCLUDE ALL COSTS NECESSARY FOR ALTERATION, MODIFICATIONS, AND/OR ADDITIONS TO THE FIRE SPRINKLER SYSTEM NECESSARY TO MAKE THE COMPLETE AND FINISHED INSTALLATION IN ALL ASPECTS. IT IS THE INTENT THAT ALL COSTS FOR THE WORK REQUIRED BE IN THE BID OF THIS TRADE.
8. ALL MATERIAL (SPRINKLER HEADS, PIPING, FITTINGS, ETC.) SHALL BE IN CONFORMANCE WITH NFPA 13, LATEST EDITION, AND ALL OTHER APPLICABLE CODES.
9. ALL SHUTDOWNS OF THE EXISTING FIRE SPRINKLER SYSTEM TO PERFORM THE WORK UNDER THIS CONTRACT SHALL BE COORDINATED WITH THE BUILDING OWNER/ENGINEERING DEPARTMENT TO MINIMIZE OR AVOID INCONVENIENCE TO THE BUILDING TENANTS.
10. THE SPRINKLER HEADS SHOWN ON THE DRAWING ARE FOR REFERENCE ONLY. MORE HEADS MAY BE NECESSARY FOR THE DESIGN TO COMPLY WITH ALL CODES AND STANDARDS. ALL SPRINKLER HEADS SHALL BE CENTERED IN THE ACOUSTICAL TILE. PROVIDE ARMOVERS OR SWING JOINTS AS REQUIRED.
11. THE METHODS OF HANGING PIPE, HEADERS AND BRANCHES SHALL BE APPROVED BY NFPA 13, LATEST EDITION. ALL PIPING SHALL BE FIRMLY ANCHORED AND SUPPORTED TO PREVENT SWAY AND VIBRATION THE ENTIRE LENGTH. PROVIDE DETAIL AND INDICATE TYPE OF HANGER TO BE INSTALLED FOR THE FIRE PROTECTION SYSTEM PIPING.
12. PROVIDE FIRE RATED SLEEVES AND UL LISTED FIRESTOPPING AT ALL PENETRATIONS OF SMOKE/FIRE WALLS, CEILINGS, ROOFS, ETC. FLASH AND COUNTER FLASH ROOF PENETRATIONS.
13. INDICATE CENTER TO CENTER DIMENSIONS, PIPE CUT LENGTHS AND NOMINAL PIPE DIAMETERS ON ALL PIPING.
14. REFER TO AND COORDINATE WITH THE ARCHITECTURAL REFLECTED CEILING PLANS FOR CEILING TYPES, HEIGHTS AND OTHER CEILING MOUNTED DEVICES. THE OWNER AND THE ARCHITECT RESERVE THE RIGHT TO MODIFY HEAD LOCATIONS TO CREATE AN AESTHETIC DESIGN.
15. ROUTE ALL PIPING CONCEALED ABOVE CEILINGS, WITHIN WALLS, IN MECHANICAL ROOMS, OR IN CHASES EXCEPT AS SPECIFICALLY NOTED.
16. COORDINATE LOCATION OF ANY NEW OR RELOCATED SIAMESE CONNECTIONS WITH ARCHITECT, SITE LAYOUT, AND FIRE DEPARTMENT. PROVIDE REMOTE SIAMESE CONNECTIONS AS REQUIRED FOR FIRE DEPARTMENT ACCESS FROM DRIVE.
17. LOCATION OF NEW OR RELOCATED INSPECTORS TEST STATIONS, ISOLATION VALVES AND DRAIN DOWN VALVES SHALL BE COORDINATED AS TO MINIMIZE PLACEMENT OF THESE DEVICES INSIDE TENANT SPACES. PROVIDE DRAIN DOWN VALVES FOR ANY AND ALL TRAPPED SECTION OF PIPING PER NFPA 13, LATEST EDITION. WHERE VALVES ARE REQUIRED IN TENANT SPACES, LOCATE IN A SERVICE OR STORAGE AREA. EACH SPRINKLER ZONE IS TO HAVE DRAIN DOWN VALVES CONFIGURED SO AS TO ALLOW ATTACHMENT OF A DRAIN HOSE. ALL DISCHARGE SHALL BE ARRANGED TO MINIMIZE DAMAGE TO THE BUILDING. ALL DRAIN PIPING SHALL BE GALVANIZED. PROVIDE ACCESS PANELS TO ANY VALVES ABOVE NON-ACCESSIBLE CEILING AND IN CHASES. ALL DRAIN DOWN VALVES AND INSPECTOR'S TEST STATION VALVES SHALL BE CHAINED AND PADLOCKED.
18. ALL ISOLATION VALVES SHALL BE SUPERVISED. PROVIDE TAMPER SWITCHES ON ALL CONTROL VALVES. COORDINATE WITH FIRE ALARM CONTRACTOR.
19. SPRINKLER HEADS MOUNTED LESS THAN 7 FEET ABOVE FINISHED FLOOR SHALL BE PROTECTED WITH A WIRE CAGE TYPE GUARD.
20. SPRINKLER CONTRACTOR SHALL INSTALL AND ACTIVATE THE ENTIRE SPRINKLER SYSTEM PRIOR TO THE ISSUANCE OF THE CERTIFICATE OF OCCUPANCY.
21. ALL FIRE PROTECTION SYSTEMS SHALL BE TESTED AS REQUIRED PER NFPA 13, LATEST EDITION AND LOCAL AUTHORITY HAVING JURISDICTION BEFORE ANY SYSTEMS ARE CONCEALED.
22. CONTRACTOR SHALL CONDUCT HYDROSTATIC TESTS IN COMPLIANCE WITH NFPA 13, LATEST EDITION (TWO HOUR AT 200 PSI OR 100 PSI OVER NORMAL SYSTEM PRESSURE MINIMUM). PIPING SUBJECT TO FREEZING DURING TEST PERIOD SHALL BE TESTED WITH COMPRESSED AIR.
23. CERTIFICATES OF APPROVAL OF INSTALLATION SHALL BE OBTAINED FROM THE AUTHORITY HAVING JURISDICTION AND FORWARDED TO THE OWNER.
24. THE FINAL INSPECTION AND APPROVAL OF THE FIRE PROTECTION SYSTEM SHALL BE BY THE LOCAL FIRE MARSHAL.
25. AFTER TESTS ARE CONDUCTED AND ANY REPAIRS COMPLETED, COMPLETELY FLUSH THE PIPING SYSTEMS WITH WATER UNTIL DISCHARGE SHOWS NO DISCOLORATION.

# FLORIDA ADMINISTRATIVE CODE CHAPTER 61G15-32 GENERAL NOTES

### 61G15-32.003 COMMON REQUIREMENTS TO ALL FIRE PROTECTION ENGINEERING DOCUMENTS.

(1) THE SCOPE OF WORK IS A NEW WET PIPE SPRINKLER SYSTEM DESIGNED, FABRICATED AND INSTALLED PER NFPA 13, LATEST EDITION. FIRE PROTECTION PIPING, FITTINGS AND SPRINKLERS SHALL BE UL LISTED AND FM APPROVED. PIPING 2" AND SMALLER SHALL BE STANDARD WEIGHT BLACK STEEL SCH. 40, ASTM A53 WITH THREADED FITTINGS, CLASS 125, ASME B16.4. PIPING 2 1/2" AND LARGER SHALL BE STANDARD WEIGHT BLACK STEEL LIGHTWALL SCH. 10, ASTM A135 WITH GROOVED FITTINGS AND COUPLINGS, ASME B16.1. OUTLETS ON MAINS SHALL BE WELDED THREAD-OLETS OR GROOVE-OLETS. HANGERS SHALL BE CADIUM PLATED, ADJUSTABLE AND SIZED AND SPACED IN ACCORDANCE WITH NFPA 13, LATEST EDITION. HANGER RODS SHALL BE ZINC ELECTROPLATED STEEL.

FINAL CONNECTION TO SPRINKLERS UTILIZING A UL LISTED, FM APPROVED, TYPE 304 STAINLESS STEEL, FULLY WELDED (NON-MECHANICAL FITTINGS), BRAIDED, LEAK-TESTED WITH A MINIMUM INTERNAL CORRUGATED HOSE DIAMETER OF ONE INCH, ONE PIECE MULTI-PORT CEILING BRACKET WITH REMOVABLE ATTACHMENT HUB, SELF-SECURING INTEGRATED SNAP-ON CLIP-ENDS FOR ATTACHMENT TO CEILING GRID WITHOUT A SCREW FASTENER EQUAL TO FLEXHEAD INDUSTRIES SERIES 2000 SHALL BE ACCEPTABLE.

OTHER FITTING TYPES, IF ACCEPTED BY THE AHJ: GROOVED-END, CAST MALLEABLE IRON, ASTM A47 OR CAST DUCTILE IRON ASTM A536.

(2) ACCEPTANCE TESTING SHALL BE PROVIDED IN ACCORDANCE WITH NFPA 13, LATEST EDITION.

(3) THE OCCUPANCY CLASSIFICATIONS ARE AS FOLLOWS:

LIGHT HAZARD: (ALL ROOMS SHALL BE RATED LIGHT HAZARD UNLESS NOTED OTHERWISE)
DENSITY = 0.10 GPM/FT²
HOSE STREAM DEMAND (COMBINED TOTAL INSIDE AND OUTSIDE) = 100 GPM AT 30 MINS.
SPRINKLER HEAD PROTECTION AREA MAX. = 225 FT²
SPRINKLER HEAD MAXIMUM SPACING DISTANCE MAX. = 15 FT.

ORDINARY HAZARD (GROUP 1): (WHERE DESIGNATED ON DRAWINGS AND REQUIRED PER NFPA 13, LATEST EDITION)
DENSITY = 0.15 GPM/FT²
HOSE STREAM DEMAND (COMBINED TOTAL INSIDE AND OUTSIDE) = 250 GPM AT 60-90 MINS.
SPRINKLER HEAD PROTECTION AREA = 130 FT²
SPRINKLER HEAD MAXIMUM SPACING DISTANCE = 15 FT.

(4) THE FIRE PROTECTION CONTRACTOR SHALL PREPARE THE FIRE PROTECTION SYSTEM LAYOUT DOCUMENTS AND HYDRAULIC CALCULATIONS WHICH SHALL BE DESIGNED AND PREPARED IN ACCORDANCE WITH NFPA 13, LATEST EDITION, 2007 FLORIDA FIRE PREVENTION CODE AND 2007 FLORIDA BUILDING CODE, CHAPTER NINE FIRE PROTECTION SYSTEMS AND SHALL STRICTLY ADHERE TO ALL OTHER APPLICABLE CITY, COUNTY AND STATE REGULATIONS. THE FIRE PROTECTION SYSTEM LAYOUT DOCUMENTS AND HYDRAULIC CALCULATIONS SHALL BE SIGNED AND SEALED BY THE CONTRACTOR'S REGISTERED FIRE PROTECTION ENGINEER.

(5) STRUCTURAL SUPPORT AND STRUCTURAL OPENINGS REQUIRED BY THE FIRE PROTECTION SYSTEM HAVE BEEN COORDINATED WITH THE STRUCTURAL ENGINEER.

(6) ANY DEVIATIONS SHOWN ON THE FIRE PROTECTION SYSTEM LAYOUT DOCUMENTS SHALL BE SHOWN ON REVISED FIRE PROTECTION SYSTEM ENGINEERING DOCUMENTS.

(7) THE REQUIREMENTS FOR ACTIVATION OF CONTROL SYSTEMS, SEQUENCE, OPERATING PARAMETERS, INTERLOCKS, SAFETY RELATED DEVICES, INDICATORS AND ALARMS ARE SHOWN ON THE FIRE PROTECTION SYSTEM ENGINEERING DOCUMENTS AND ARE REFERENCED ON THE FIRE PROTECTION SYSTEM LAYOUT DOCUMENTS. THE FIRE PROTECTION SYSTEM CONTRACTOR SHALL COORDINATE ALL ASSOCIATED APPURTENANCES WITH THE FIRE ALARM CONTRACTOR.

(8) THE FIRE PROTECTION SYSTEM CONTRACTOR WILL PREPARE THE FIRE PROTECTION SYSTEM LAYOUT DOCUMENTS AND WILL ASSIST THE AUTHORITY HAVING JURISDICTION IN UNDERSTANDING THE OWNER'S INTENDED USE AND PROPOSED PROTECTION OF THE BUILDING OR FACILITY AND TO PROVIDE SUFFICIENT DIRECTION REGARDING THE LAYOUT OF THE SYSTEM(S).

### 61G15-32.004 DESIGN OF WATER BASED FIRE PROTECTION SYSTEMS.

(2A) THE POINT OF SERVICE FOR THE FIRE PROTECTION WATER SUPPLY IS AN 6 INCH WATER MAIN LOCATED ON SITE 50 FEET FROM THE RISER. A 4 INCH TAP AT THE MAIN WILL FEED THE 4 INCH FIRE LINE TO THE BACKFLOW DEVICE.

(2B) THE FIRE PROTECTION SPRINKLER SYSTEM SHALL BE DESIGNED AND PREPARED IN ACCORDANCE WITH NFPA 13, LATEST EDITION, 2007 FLORIDA FIRE PREVENTION CODE AND 2007 FLORIDA BUILDING CODE, CHAPTER NINE. THE DOCUMENTS SHALL STRICTLY ADHERE TO ALL OTHER APPLICABLE CITY, COUNTY AND STATE REGULATIONS.

(2C) OCCUPANCY CLASSIFICATIONS: REFER TO 61G15-32.003 (3).

(2D) THE DESIGN APPROACH, SYSTEM TYPE, DENSITIES, DEVICE TEMPERATURE RATING, AND SPACING FOR EACH SEPARATE HAZARD OCCUPANCY IS INDICATED IN THESE DOCUMENTS.

(2E) REFER TO THE FIRE PROTECTION SYSTEM LAYOUT DOCUMENTS WHICH INCLUDE THE CHARACTERISTICS OF WATER SUPPLY TO BE USED, SUCH AS MAIN SIZE AND LOCATION, WHETHER IT IS DEAD-END OR CIRCULATING; AND IF DEAD-END, THE DISTANCE TO THE NEAREST CIRCULATING MAIN, AS WELL AS ITS MINIMUM DURATION AND RELIABILITY FOR THE MOST HYDRAULICALLY DEMANDING DESIGN AREA.

(2F) REFER TO THE FIRE PROTECTION SYSTEM LAYOUT DOCUMENTS FOR FLOW TEST DATA, INCLUDING DATE AND TIME OF TEST, WHO CONDUCTED TEST OR SUPPLIED INFORMATION, TEST ELEVATION, STATIC GAUGE PRESSURE AT NO FLOW, FLOW RATE WITH RESIDUAL GAUGE PRESSURE, HYDRANT BUTT COEFFICIENT, AND LOCATION OF TEST IN RELATION TO THE HYDRAULIC POINT OF SERVICE. IF THE FIRE PROTECTION SYSTEMS CONTRACTOR SUBMITS THEIR SIGNED AND SEALED DOCUMENTS TO THE AHJ 60 DAYS LATER THAN THE DATE LISTED ON THE HYDRANT FLOW TEST THE FIRE PROTECTION SYSTEMS CONTRACTOR SHALL HAVE A NEW FLOW TEST PERFORMED. THE NEW HYDRANT FLOW TEST DATA SHALL BE USED AND INDICATED ON THE FIRE PROTECTION SYSTEM LAYOUT DOCUMENTS. THE FIRE PROTECTION SYSTEM LAYOUT DOCUMENTS SHALL INCLUDE A SITE PLAN INDICATING THE WATER MAIN, FIRE MAIN, AND HYDRANT LOCATIONS. THE HYDRANTS SHALL BE IDENTIFIED AS THE RESIDUAL HYDRANT AND THE FLOW HYDRANT FROM WHICH THE TESTS WERE PERFORMED.

(2G) THE RISER INCLUDES A WATER FLOW SWITCH AND AN OS&Y SUPERVISED GATE VALVE WITH A TAMPER SWITCH. REFER TO THE FIRE ALARM SYSTEM ENGINEERING DOCUMENTS WHICH INCLUDE ALL VALVING AND ALARM REQUIREMENTS TO MINIMIZE POTENTIAL FOR IMPAIRMENTS AND UNRECOGNIZED FLOW OF WATER.

(2H) THE LOCAL UTILITY PURVEYOR AND FIRE MARSHAL CONTINUOUSLY MONITOR THE WATER SUPPLY FOR CONTAMINANTS WHICH MAY CAUSE MICROBIAL INDUCED CORROSION (MIC). WHEN CONDITIONS ARE FOUND THAT MAY RESULT IN MIC CONTAMINATION OF THE FIRE PROTECTION PIPING, THE OWNER'S REPRESENTATIVE, ARCHITECT AND / OR ENGINEER OF RECORD SHALL BE NOTIFIED SO CORRECTIVE MEASURES MAY BE TAKEN.

(2I) THE BACKFLOW PREVENTION DEVICE IS A 4 INCH DOUBLE DETECTOR CHECK VALVE WITH A MAXIMUM ALLOWABLE PRESSURE DROP OF 13 PSIG.

(2J) ALL YARD AND INTERIOR FIRE PROTECTION COMPONENTS SHALL BE UL LISTED AND FM APPROVED.

(3) ANY DEVIATIONS WHICH ORIGINATE FROM THE CONTRACTOR'S SUBMITTALS SHALL BE SHOWN ON REVISED FIRE PROTECTION SYSTEM ENGINEERING DOCUMENTS.

(4) THE FIRE PROTECTION SYSTEM CONTRACTOR SHALL PREPARE THE FIRE PROTECTION SYSTEM LAYOUT DOCUMENTS AND SUBMIT THEM TO THE AUTHORITY HAVING JURISDICTION, ARCHITECT AND ENGINEER OF RECORD FOR APPROVAL PRIOR TO COMMENCING WORK.

# FIRE PROTECTION SYMBOL LEGEND

| SYMBOL | DESCRIPTION | ABBREVIATION |
|---|---|---|
| ⊗ | FIRE PROTECTION RISER OR STANDPIPE | |
| F | FIRE MAIN AND DIRECTION OF FLOW | |
| | RELOCATED SPRINKLER HEAD | |
| | FIRE DEPARTMENT CONNECTION | FDC |
| | ROOF MANIFOLD | |
| | FIRE HYDRANT | |
| | THRUST BLOCK | TB |
| PIV TS | POST INDICATOR VALVE WITH TAMPER SWITCH | PIV |
| | DOUBLE CHECK DETECTOR BACKFLOW PREVENTER | |
| | INSPECTOR'S TEST | |
| | FIRE PUMP | |
| FACP | FIRE ALARM CONTROL PANEL | FACP |
| FHC | FIRE HOSE CABINET | FHC |
| | OUTSIDE SCREW & YOKE GATE VALVE | OS&Y |
| | BUTTERFLY VALVE | BFV |
| | ALARM CHECK VALVE | |
| | CHECK VALVE | |
| | CONTROL VALVE WITH TAMPER SWITCH | |
| | FLOW SWITCH | FS |
| | DRY PIPE VALVE | |
| | DELUGE VALVE | |
| | PREACTION VALVE | |
| | TEE | |
| | ELL | |
| | RISER DOWN | |
| | RISER UP | |
| | BRANCH TOP CONNECTION | |
| | BRANCH BOTTOM CONNECTION | |
| | CAP ON END OF PIPE | |
| | PIPE CONTINUATION | |
| 1 | FIRE PROTECTION HEX NOTE | |
| | POINT OF CONNECTION BETWEEN NEW AND EXISTING | |
| | POINT OF REMOVAL | |

# FIRE PROTECTION SHEET INDEX


| Sheet Number | Sheet Title |
|---|---|
| F-0.01 | COVER SHEET |
| F-2.01 | FIRST FLOOR PLAN |
| F-2.01A | ALTERNATE 4 – FIRST FLOOR PLAN |
| F-2.02 | SECOND FLOOR PLAN |
| F-2.02A | ALTERNATE 4 – SECOND FLOOR PLAN |


# QUICK RESPONSE SPRINKLER HEAD SCHEDULE

| SYMBOL | STYLE | MANUFACTURER | MODEL NO. | FINISH | ESCUTCHEON PLATE | ORIFICE | TEMP. | K-FACTOR | MINIMUM OPERATING PRESSURE | MAXIMUM OPERATING PRESSURE | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ○ | UPRIGHT | VIKING | VK300 | BRASS | NONE | 1/2" | 155° | 5.6 | 7 PSI | 175 PSI | ALL |
| ● | CONCEALED | VIKING | VK462 | CUSTOM | CUSTOM | 1/2" | 155° | 5.6 | 7 PSI | 175 PSI | ALL |
| ▽ | HORIZONTAL SIDEWALL | VIKING | VK304 | CUSTOM | CUSTOM | 1/2" | 155° | 5.6 | 7 PSI | 175 PSI | ALL |
| | | | | | | | | | | | |

REMARKS:
1. SPRINKLERS SHALL BE UL LISTED AND FM APPROVED.
2. NEW SPRINKLERS SHALL HAVE CUSTOM COLORS – COORDINATE WITH ARCHITECT.

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**LAKE COUNTY BUILDING DIVISION**
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Electric: ADM01 12/29/11
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:


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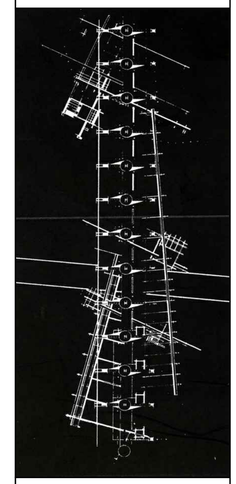

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- revisions

- sheet title
  COVER SHEET
  FIRE PROTECTION

- scale: AS SHOWN
- drawn: TDC
- checked: WGE
- approved: RWF
- date: 11/09/11
- project no. 842
- sheet F-0.01


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ORLANDO
KLG Project No. 2011005

N

1 / F-2.01 **FIRST FLOOR PLAN - FIRE PROTECTION**

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

GENERAL NOTES:

1) REFER TO SHEET F-0.01 FOR GENERAL NOTES AND SYMBOL LEGEND.
2) REFER TO SPECIFICATIONS.

HEX NOTES:

1. PROVIDE UPRIGHT SPRINKLERS UNDER 48" WIDE DUCTWORK IN EXPOSED AREAS WITHOUT CEILINGS PER NFPA 13. REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION AND FIELD COORDINATE AS REQUIRED.
2. FM-200 FIRE SUPPRESSION SYSTEM REQUIRED FOR THIS SPACE. WET PIPE SPRINKLER PIPING SHALL NOT BE RUN IN THIS SPACE OR ABOVE THE CEILING OF THIS SPACE. COORDINATE SHUT DOWN OF HVAC EQUIPMENT, CYLINDER LOCATION, FIRE/SMOKE DAMPER RELAYS, AND ALL OTHER DEVICES REQUIRED FOR A COMPLETE SYSTEM WITH THE OWNER, GENERAL CONTRACTOR, MECHANICAL CONTRACTOR AND ELECTRICAL CONTRACTOR.
3. PROVIDE A SPRINKLER ZONE ISOLATION VALVE FOR THE FIRST FLOOR WITH A TAMPER AND FLOW SWITCH.
4. PROVIDE A TAMPER AND FLOW SWITCH ON THE BACKFLOW PREVENTER. REFER TO THE CIVIL PLANS FOR LOCATION.

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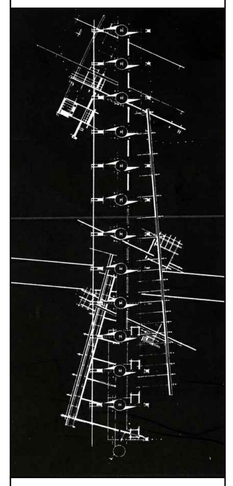

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- sheet title: FIRST FLOOR PLAN FIRE PROTECTION

- scale: 1/8" = 1'-0"
- drawn: TDC
- checked: WGE
- approved: RWF
- date: 11/09/11
- project no. 842
- sheet F-2.01

GENERAL NOTES:

1) REFER TO SHEET F-0.01 FOR GENERAL NOTES AND SYMBOL LEGEND.

2) REFER TO SPECIFICATIONS.

N

1 F-2.01A

## ALTERNATE #4 - FIRST FLOOR PLAN - FIRE PROTECTION

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

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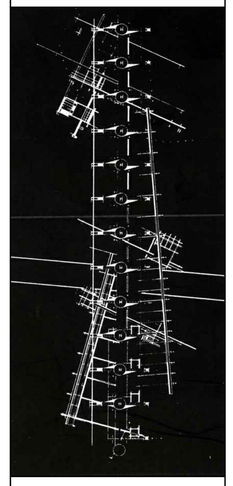

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- drawn: TDC
- checked: WGE
- approved: RWF
- date: 11/09/11
- project no. 842
- sheet F-2.01A

GENERAL NOTES:

1) REFER TO SHEET F-0.01 FOR GENERAL NOTES AND SYMBOL LEGEND.

2) REFER TO SPECIFICATIONS.

HEX NOTES:

1. PROVIDE UPRIGHT SPRINKLERS UNDER DUCTWORK 48" WIDE IN EXPOSED AREAS WITHOUT CEILINGS PER NFPA 13. REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION AND FIELD COORDINATE AS REQUIRED.

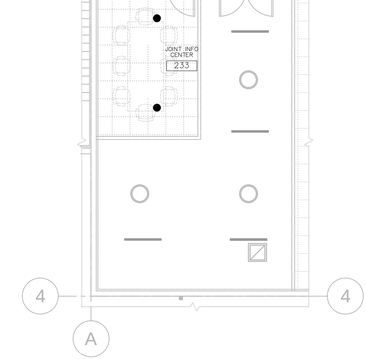
2. FM-200 FIRE SUPPRESSION SYSTEM REQUIRED FOR THIS SPACE. WET PIPE SPRINKLER PIPING SHALL NOT BE RUN IN THIS SPACE OR ABOVE THE CEILING OF THIS SPACE. COORDINATE SHUT DOWN OF HVAC EQUIPMENT, CYLINDER LOCATION, FIRE/SMOKE DAMPER RELAYS, AND ALL OTHER DEVICES REQUIRED FOR A COMPLETE SYSTEM WITH THE OWNER, GENERAL CONTRACTOR, MECHANICAL CONTRACTOR AND ELECTRICAL CONTRACTOR.

3. PROVIDE A SPRINKLER ZONE ISOLATION VALVE FOR THE FIRST FLOOR WITH A TAMPER AND FLOW SWITCH.

N

1 / F-2.02 **SECOND FLOOR PLAN - FIRE PROTECTION**

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




2 / E-4.02 **ALTERNATE #9 ROOM #233 - LIGHTING**

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

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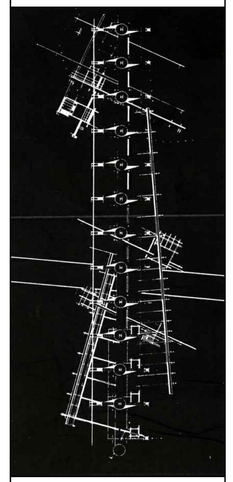

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- checked: WGE
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- project no. 842
- sheet F-2.02

GENERAL NOTES:

1) REFER TO SHEET F-0.01 FOR GENERAL NOTES AND SYMBOL LEGEND.

2) REFER TO SPECIFICATIONS.

N

1
F-2.02A

## ALTERNATE #4 - SECOND FLOOR PLAN - FIRE PROTECTION

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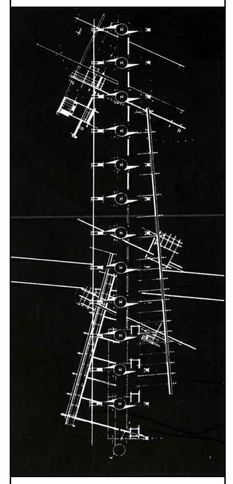

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Notes:

- revisions

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# TECHNOLOGY SYSTEMS SYMBOL LEGEND

## BASIC MATERIALS

| SYMBOL | DESCRIPTION |
|---|---|
| J | JUNCTION BOX |
| J | FLOOR MOUNTED JUNCTION BOX |
| J | PEDESTAL MOUNTED JUNCTION BOX |
| | INGROUND PULL BOX |
| | EXISTING CONDUIT ABOVE HARD CEILING BETWEEN CEILING BOXES |
| | CONDUIT CONCEALED ABOVE CEILING OR IN WALL |
| | CONDUIT CONCEALED IN SLAB, UNDERGROUND OR UNDER FLOOR |
| | CONDUIT EXPOSED |
| | CONDUIT TURNING UP |
| | CONDUIT TURNING DOWN |
| | CONDUIT STUB |
| | CONDUIT CONTINUED |
| | FLEXIBLE CONDUIT |
| | GROUND OR GROUND ROD AS NOTED |
| | SLEEVE TURNING UP |
| | SLEEVE TURNING DOWN |
| | EXISTING TO BE REMOVED |
| | EXISTING TO REMAIN |
| * | EXISTING AFFECTED BY THIS PROJECT |
| | FUTURE |
| | CABLE TRAY FOR ABOVE THE CEILING |
| | CABLE TRAY FOR UNDER THE FLOOR |
| | PENETRATION CONDUIT SLEEVE WITH BUSHINGS. |

## BROADBAND TELEVISION SYSTEM

| SYMBOL | DESCRIPTION |
|---|---|
| | 2 PORT TAP |
| | 4 PORT TAP |
| | 6 PORT TAP |
| 2.5 | 8 PORT TAP |
| | TERMINATION TAP |
| | 2 WAY SPLITTER |
| | 3 WAY SPLITTER |
| | 4 WAY SPLITTER |
| T | AMPLIFIER |
| | DIRECTIONAL COUPLER |

## AUDIO/VIDEO SYSTEM

| SYMBOL | DESCRIPTION |
|---|---|
| X Y | OVERHEAD PROJECTOR WITH SCREEN, SCREEN SIZE SHOWN ON PLANS |
| XX | FLAT PANEL DISPLAY - XX DENOTES THE SCREEN SIZE |
| X | OVERHEAD PROJECTOR - CEILING MOUNTED<br>X - DENOTES TYPE |
| | CEILING MOUNTED DOCUMENT CAMERA |
| AV | AUDIO/VIDEO CAMERA |
| X Y | PULLDOWN PROJECTION SCREEN, SIZE SPECIFIED ON PLANS |
| X Y | MOTORIZED PROJECTION SCREEN, SIZE SPECIFIED ON PLANS |
| | OVERHEAD PROJECTION SCREEN MOTOR |
| Sx | WALL SWITCH FOR MOTORIZED SCREEN<br>X = A, B, C... INTERFACE TYPE. |
| AV X | AUDIO VISUAL OUTLET - WALL MOUNTED WITH ADJACENT DEDICATED DUPLEX RECEPTACLE BY DIVISION 16 |
| TV | TELEVISION OUTLET - WALL MOUNTED AT 7'-0" ABOVE FINISHED FLOOR. ADJACENT DUPLEX RECEPTACLE BY ELECTRICAL INSTALLER |
| FS | FLAT SCREEN INFRASTRUCTURE - UNLESS OTHERWISE SPECIFIED, MOUNTED AT 5'-6" ABOVE FINISHED FLOOR. |
| ALT | ASSISTED LISTENING TRANSMITTER |
| TS | TOUCH SCREEN AUDIO/VIDEO CONTROL |
| TS | WALL MOUNTED TOUCH SCREEN AUDIO/VIDEO CONTROL |
| SX Y | CEILING MOUNTED SPEAKER<br>x DENOTES TYPE<br>y DENOTES ZONE |
| SX Y | WALL MOUNTED SPEAKER<br>x DENOTES TYPE<br>y DENOTES ZONE<br>NO ZONE DENOTES LOCAL AUDIO/VIDEO SYSTEM |
| S | SPEAKER - DEMOLITION PLAN |
| VC | VOLUME CONTROL. PROVIDE 3/4" CONDUIT STUB-UP ABOVE CEILING AND SINGLE STANDARD ELECTRICAL BOX AT 52" ABOVE FINISHED FLOOR |
| MX Y | CEILING MOUNTED MICROPHONE OUTLET<br>x DENOTES TYPE<br>y DENOTES ZONE |
| MX Y | WALL MOUNTED MICROPHONE<br>x DENOTES TYPE<br>y DENOTES ZONE<br>NO ZONE DENOTES LOCAL AUDIO/VIDEO SYSTEM |
| MX Y | SURFACE MOUNTED MICROPHONE<br>x DENOTES TYPE<br>y DENOTES ZONE<br>NO ZONE DENOTES LOCAL AUDIO/VIDEO SYSTEM |
| M | MICROPHONE - DEMOLITION PLAN |
| SD | SATELLITE DISH |
| PODIUM | SEE PODIUM DETAILS |

NOTES:

1. ALL RACEWAYS AND BOXES SHOWN ARE IN CONTRACT BY THE ELECTRICAL INSTALLER.
2. AUDIO/VIDEO DEVICES AND EQUIPMENT BY THE AUDIO/VIDEO INSTALLER.

## INTERCOM & PAGING SYSTEM

| | |
|---|---|
| AP | ADMINISTRATIVE PHONE |
| HS | HANDSET |
| CS | CALL STATION |
| SX Y | CEILING MOUNTED SPEAKER<br>x DENOTES TYPE<br>y DENOTES ZONE |
| SX Y | WALL MOUNTED SPEAKER<br>x DENOTES TYPE<br>y DENOTES ZONE<br>NO ZONE DENOTES LOCAL AUDIO/VIDEO SYSTEM |

## VOICE & DATA SYSTEM

| SYMBOL | DESCRIPTION |
|---|---|
| C X N N N N | MOUNTING 2" ABOVE COUNTER OR BACK SPLASH<br>X = MOUNTING (F)LUSH, (S)URFACE, (M)ODULAR FURNITURE ADAPTER (P)OLE, (R)ACEWAY, (D)OUBLE GANG FLUSH, (PD) PEDESTAL<br>N = # OF VOICE JACKS, RJ11<br>N = # OF DATA JACKS, RJ45<br>N = # OF COAX CONNECTORS "F" TYPE CONNECTOR<br>N = # OF FIBER OPTIC CONNECTORS. SC, ST, LC<br>COMMUNICATIONS "INFORMATION OUTLET" MOUNTED AT RECEPTACLE HEIGHT UNLESS OTHERWISE NOTED. MODULE AND FACEPLATE DESCRIPTIONS ON DETAIL SHEETS |
| W F1 | WALL TELEPHONE OUTLET FOR HOUSE PHONE. MOUNTED AT 52" ABOVE FINISHED FLOOR TO TOP. |
| W P1 | WALL TELEPHONE OUTLET FOR PAY PHONE. MOUNTED AT 48" ABOVE FINISHED FLOOR. |
| P ADA | WALL TELEPHONE OUTLET FOR PAY PHONE. ADA COMPLIANT 42" ABOVE FINISHED FLOOR. |
| WAP XON | WIRELESS ACCESS POINT OUTLET. ACTUAL QUANTITY AND LOCATIONS OF WIRELESS ACCESS POINTS BASED ON SIGNAL SURVEY BY WLAN VENDOR.<br>X = MOUNTING (F)LUSH, (S)URFACE, (C)EILING.<br>N = # OF DATA JACKS. MAXIMUM CABLE LENGTH 262 FT |
| S1 ELV | WALL TELEPHONE OUTLET FOR TELEPHONE IN ELEVATOR MACHINE ROOM. (S)URFACE MOUNTED AT 52" ABOVE FINISHED FLOOR. |
| XNNN | COMBINED VOICE/DATA, AUDIO/VIDEO AND POWER OUTLETS IN FLOOR BOX. POWER RECEPTACLE IS SHOWN FOR REFERENCE ONLY. CONDUIT, BOX AND POWER RECEPTACLE PROVIDED BY **DIVISION 16**.<br>X = A, B, C... FLOOR BOX TYPE. N'S ARE DESCRIBED ABOVE. |
| TB XNNN | TABLE TOP POP-UP WITH VOICE/DATA, AUDIO/VIDEO AND POWER INTERFACE.<br>X = A, B, C... FLOOR BOX TYPE. N'S ARE DESCRIBED ABOVE. |
| P XNNN | POKE THRU WITH COMBINED VOICE/DATA, AUDIO/VIDEO AND POWER.<br>X = A, B, C... FLOOR BOX TYPE. N'S ARE DESCRIBED ABOVE. |
| | 3/4" PLYWOOD BACKBOARD. BY DIVISION 16 |
| | IDF - 2 POST RACK |
| | IDF - 4 POST RACK |
| | TELECOMM PANEL |
| TEF: | TELECOMMUNICATIONS ENTRANCE FACILITY |
| TR: | TELECOMMUNICATIONS ROOM |
| TER: | TELECOMMUNICATIONS EQUIPMENT ROOM |

NOTES:

1. INSTALLER TO REMOVE ALL EXISTING LOW VOLTAGE CABLES NOT TO BE REUSED. E.G. ALL EXISTING UTP 4 PAIR CABLES. NO ABANDONED CABLES SHALL BE LEFT IN THE BUILDING.
2. ALL CABLE TRAY, CONDUITS AND BOXES SHOWN ARE IN CONTRACT BY THE ELECTRICAL INSTALLER. J-HOOKS AND LADDER RACKS BY SCS INSTALLER.
3. STRUCTURED CABLING SYSTDIVISION CABLING INSTALLER.

## CLOCK SYSTEM

| | |
|---|---|
| C | WALL MOUNTED WIRELESS DIGITAL CLOCK MOUNTED 7'-0" A.F.F. DESIGN SELECTION: PYRAMID TIME SYSTEMS. |

## SECURITY SYSTEM

| SYMBOL | DESCRIPTION |
|---|---|
| FIX | FIXED CCTV CAMERA |
| PTZ | PAN/TILT/ZOOM CCTV CAMERA |
| C # | CAMERA NUMBER DESIGNATION |
| | SECURITY PANEL |
| DPS | DOOR POSITION SWITCH |
| BMS | BALANCED MAGNETIC SWITCH |
| CR | CARD READER |
| KP | KEYPAD |
| CK | COMBINED CARD READER/KEYPAD |
| HS | HIRSH SCRAMBLE KEYPAD |
| IK | INTRUSION ALARM KEYPAD |
| BR | BIOMETRIC READER |
| SA | LOCAL HORN STROBE ALARM |
| EL | ELECTRIC LATCH |
| EM | ELECTRIC MORTISE/TRIM LOCK |
| ES | ELECTRIC STRIKE |
| ML | MAGNETIC LOCK |
| SL | SHEAR LOCK |
| DE | DELAYED EGRESS |
| DL | DETENTION LOCK |
| DI | DOOR INTERLOCK |
| | REMOTE DOOR RELEASE BUTTON |
| | REX OR ADA DOOR OPEN BUTTON |
| AS | ASSISTANCE STATION |
| IS | INTERCOM SUBSTATION |
| SP | SPEAKER PHONE |
| D | DURESS BUTTON MOUNTED UNDERSIDE OF COUNTER |
| D | DURESS BUTTON WALL MOUNTED |
| MON | CCTV MONITOR |
| P | PHOTO ELECTRIC BEAM |
| MI | INTERCOM MASTER STATION |
| M | DIRECTIONAL MOTION DETECTOR |
| | 360° MOTION DETECTOR |
| G | GLASS BREAK SENSOR |
| R | REQUEST TO EXIT MOTION SENSOR |
| X | ASSOCIATED DOOR DETAIL REFERENCE |
| PC | PERSONAL COMPUTER WORKSTATION |

NOTES:

1. INSTALLER TO REMOVE ALL EXISTING SECURITY CABLES AND EQUIPMENT NOT TO BE REUSED. ALL EXISTING EQUIPMENT WILL BE RETURNED TO THE OWNER.
2. ALL RACEWAYS AND BOXES SHOWN ARE IN CONTRACT BY THE ELECTRICAL INSTALLER.
3. SECURITY DEVICES AND EQUIPMENT BY **DIVISION 17** SECURITY INSTALLER.

NOTE: SOME SYMBOLS SHOWN ON THIS LEGEND MAY NOT PERTAIN TO THIS PROJECT.

# GENERAL NOTES

## GENERAL SYSTEM NOTES

1. PRODUCTS SHALL BE OF MATERIALS THAT ARE SUITABLE FOR THE ENVIRONMENT IN WHICH THEY ARE TO BE INSTALLED.
2. WORKING CLEARANCES AROUND ELECTRICAL EQUIPMENT SHALL BE MAINTAINED IN COMPLIANCE WITH THE NATIONAL ELECTRICAL CODE ARTICLE 110, COORDINATE EQUIPMENT INSTALLATION TO MAINTAIN REQUIRED CLEARANCES.
3. IF AN OUTLET BOX IS REQUIRED TO BE LOCATED IN AN ASSEMBLY OR PARTITION RATED AS "FIRE/SMOKE" OR "SMOKE" OR IDENTIFIED AS EITHER "FIRE/SMOKE" OR "SMOKE", THEN ALL OF THE FOLLOWING CONDITIONS SHALL BE MET:
   A. THE OUTLET BOX SHALL BE METALLIC.
   B. THE OUTLET BOX OPENINGS SHALL OCCUR ONLY ON ONE SIDE OF THE FRAMING SPACE.
   C. THE OUTLET BOX OPENINGS SHALL NOT EXCEED 16 SQUARE INCHES.
   D. ALL CLEARANCES BETWEEN THE OUTLET BOX AND THE WALL BOARD MATERIAL SHALL BE COMPLETELY SEALED WITH APPROVED MATERIALS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS FOR THE PROJECT.
   E. PROVIDE A SUPPLEMENTAL BARRIER AROUND OUTLETS LARGER THAN 16 INCHES SO THAT THE ORIGINAL RATING OF THE PENETRATION IS MAINTAINED.
   F. THE TOTAL AGGREGATE SURFACE AREA OF THE OUTLET BOX SHALL NOT EXCEED 100 SQUARE INCHES PER 100 SQUARE FEET.
   G. THE OUTLET BOX SHALL BE SEPARATED FROM OPENINGS ON THE OPPOSITE SIDE OF THE RATED PARTITION BY A MINIMUM HORIZONTAL DISTANCE OF 24 INCHES.
   H. THE OUTLET BOX SHALL BE SECURELY FASTENED TO A PARTITION FRAMING MEMBER BY MEANS OF AN APPROVED ATTACHMENT METHOD.
   I. OPENINGS CUT INTO THE WALL BOARD MATERIAL SHALL NOT EXCEED 1/8 INCH BETWEEN THE EDGES OF THE OUTLET BOX AND THE EDGES OF THE OPENING.
4. LOCATIONS OF EQUIPMENT SHOWN ON THE DRAWINGS ARE APPROXIMATE, COORDINATE EXACT EQUIPMENT LOCATION AND CONNECTION REQUIREMENTS WITH THE APPROPRIATE TRADE PRIOR TO INSTALLATION.
5. FOR EXACT LOCATION OF CEILING MOUNTED EQUIPMENT REFER TO THE ARCHITECTURAL REFLECTED CEILING PLAN. LOCATIONS OF EQUIPMENT NOT INCLUDED ON THE REFLECTED CEILING PLAN SHALL BE COORDINATED WITH THOSE ITEMS SHOWN. COORDINATION OF CEILING MOUNTED EQUIPMENT SHALL BE PRIOR TO ANY ROUGH-IN. NOTIFY ENGINEER OF ANY DISCREPANCY.
6. PROVIDE FINAL CONNECTIONS TO OWNER PROVIDED EQUIPMENT WHERE INDICATED ON THE PLAN DRAWINGS.
7. PRIOR TO ROUGH-IN AND INSTALLATION OF ANY FLOOR MOUNTED DEVICE, VERIFY LOCATION WITH THE OWNER AND ARCHITECT.
8. VERIFY AND COORDINATE THE LOCATION OF REQUIRED **DIVISION 17** OUTLETS WITH OTHER TRADE DRAWINGS AND OWNER PROVIDED EQUIPMENT.
9. EACH TELEVISION OUTLET LOCATION SHOWN, SHALL HAVE A DOUBLE GANG OUTLET BOX WITH A SINGLE GANG PLASTER RING AND (1) 1" CONDUIT STUBBED UP TO AN ACCESSIBLE LOCATION ABOVE THE FINISHED CEILING OR TO AN ACCESSIBLE CABLE TRAY WHERE PROVIDED.
10. THE DESIGNATION "N.I.C." SHALL DENOTE ITEMS, WHICH ARE "NOT IN CONTRACT".
11. THE DESIGNATION "U.S.C." SHALL DENOTE ITEMS, WHICH ARE "UNDER SEPARATE CONTRACT".
12. THE DESIGNATION "F.B.O." SHALL DENOTE ITEMS, WHICH ARE "FURNISHED BY OTHERS".
13. THE DESIGNATION "O.F.E." SHALL DENOTE ITEMS, WHICH ARE "OWNER FURNISHED EQUIPMENT".
14. THE DESIGNATION "D.H.C." SHALL DENOTE "DOOR HARDWARE INSTALLER".
15. THE DESIGNATION "O.F.C.I." SHALL DENOTE ITEMS WHICH ARE FURNISHED BY THE OWNER AND INSTALLED BY THE CONTRACTOR.
16. ALL RACEWAY SYSTEMS SHOWN TO SUPPORT THE INSTALLATION OF THE DIVISION 17 EQUIPMENT SHALL BE PROVIDED BY THE ELECTRICAL INSTALLER. PROVIDE COORDINATION FOR THE INSTALLATION OF THIS BE PROVIDED BY THE ELECTRICAL INSTALLER.
17. THE SYMBOL LEGENDS SHOWN ON THIS SHEET ARE ALL INCLUSIVE. SYMBOLS INCLUDED IN THE LEGENDS MAY OR MAY NOT BE USED IN THESE PROJECT DRAWINGS.
18. EACH VOICE/DATA OUTLET LOCATION SHOWN, SHALL HAVE A DOUBLE GANG OUTLET BOX WITH A SINGLE GANG PLASTER RING AND (1) 1" CONDUIT STUBBED UP TO AN ACCESSIBLE LOCATION ABOVE THE FINISHED CEILING, TO AN ACCESSIBLE CABLE TRAY WHERE PROVIDED OR HOMERUN IN SLAB TO NEAREST COMMUNICATIONS ROOM. WORK BY ELECTRICAL INSTALLER PER SPECS SECTION 17110.
19. EACH FLOOR MOUNTED VOICE/DATA OUTLET SHALL HAVE A SINGLE GANG SPACE WITHIN THE FLOOR BOX AND (1) 1" CONDUIT CONCEALED IN SLAB STUBBED UP TO AN ACCESSIBLE LOCATION ABOVE THE FINISHED CEILING OR TO AN ACCESSIBLE CABLE TRAY WHERE PROVIDED. WORK BY ELECTRICAL INSTALLER PER SPECS SECTION 17110 AND 17130.
20. ALL BONDING AND GROUNDING ELEMENTS UTILIZED FOR STRUCTURED CABLING SYSTEM SHALL BE IN COMPLIANCE WITH SPECIFICATION SECTION 17450.
21. PROVIDE ALL SLEEVES AS REQUIRED FOR ALL LOW VOLTAGE CABLE PATHWAYS. RESTORE THE FIRE RATING OF THE SURFACE.
22. ALL CABLES SHALL BE SUITABLE TO THE ENVIRONMENT TO WHERE THEY WILL BE INSTALLED.
23. ALL INDOOR CONDUITS NO LARGER THAN 1" SHOWN ON THE GROUND FLOOR SHALL BE INSTALLED EMBEDDED IN THE SLAB. CONDUITS SHALL BE KEPT DRY AND CLEAN PRIOR TO PULLING CABLES.
24. ANYTHING NOT DESIGNATED AS ROUGH-IN AND SUPPORT RESPONSIBILITY ON THESE DRAWINGS IS IN THE SYSTEM INSTALLER SCOPE OF WORK.
25. SEE DETAIL SHEETS FOR DEVICE MOUNTING REQUIREMENTS AND ADDITIONAL INFORMATION.
26. IN ELECTRICAL AND MECHANICAL ROOMS, CONDUIT FOR LOW VOLTAGE OUTLETS SHALL BE EXTENDED TO ACCESSIBLE CEILING OUTSIDE OF THE ROOM.

## SECURITY SYSTEM NOTES

1. ALL DOUBLE DOORS ARE TO RECEIVE (1) DOOR POSITION SWITCH ON EACH DOOR LEAF AND SHALL REPORT AS ONE ALARM POINT.
2. ALL 120V POWER WIRING SHALL BE INSTALLED IN A SEPARATE CONDUIT.
3. FIBER CCTV LOCATION WHICH EXCEEDS 3000 FEET SHALL BE EQUIPPED WITH 2 FIBER CONNECTIONS 1 VIDEO, 1 DATA
4. ALL POWER CIRCUITS, 120VAC AND 24VAC, SHALL INCLUDE AN EQUIPMENT GROUNDING CONDUCTOR WHICH IS EQUAL IN SIZE TO THE PHASE AND NEUTRAL CONDUCTORS.
5. ALL CONDUIT ABOVE GRADE SHALL BE METALLIC. ALL CONDUIT BELOW GRADE SHALL BE PVC UNLESS OTHERWISE NOTED ON DRAWINGS.
6. ALL CARD READERS AND KEYPADS DEDICATED FOR ELEVATOR FLOOR SELECTION CONTROL ARE SHOWN INSIDE THE ELEVATOR CAB ON THE LOWEST LEVEL FLOOR PLAN TO WHICH THE ELEVATOR TRAVELS.
7. ALL CONDUIT, WIRING, AND ASSOCIATED BACK BOXES SHALL BE FULLY CONCEALED WITHIN WALLS, FLOORS, AND CEILINGS.
8. INSTALLATION OF CATEGORY 6 UTP CABLE SHALL BE IN ACCORDANCE WITH EIA/TIA GUIDELINES. CABLE INSTALLATION AND TERMINATIONS THAT DO NOT COMPLY SHALL BE REPLACED BY THE INSTALLER.
   A. THE MAXIMUM PULLING TENSION SHALL NOT EXCEED 25 POUNDS TO AVOID STRETCHING THE CONDUCTORS.
   B. THE MINIMUM BENDING RADIUS OF THE CABLE SHALL NOT BE LESS THAN 4X THE OUTSIDE DIAMETER OF THE CABLE.
   C. THE CABLE SHALL BE INSTALLED WITHOUT KINKS OR TWISTS AND THE APPLICATION OF CABLE TIES SHALL NOT DEFORM THE CABLE BUNDLE.
   D. STRIP BACK ONLY AS MUCH CABLE JACKET AS IS REQUIRED TO TERMINATE THE CABLE. CABLE PAIRS SHALL NOT BE UNTWISTED MORE THAN 1/2 INCH.
9. INSTALLATION OF FIBER OPTIC CABLES SHALL BE IN ACCORDANCE WITH EIA/TIA GUIDELINES. CABLE INSTALLATION AND TERMINATIONS THAT DO NOT COMPLY SHALL BE REPLACED BY THE INSTALLER.
   A. THE BEND RADIUS FOR INTRABUILDING 2 AND 4-FIBER HORIZONTAL OPTICAL FIBER CABLE SHALL NOT BE LESS THAN 1 INCH UNDER NO-LOAD CONDITIONS. WHEN UNDER A MAXIMUM TENSILE LOAD OF 50 LBF, THE BEND RADIUS SHALL NOT BE LESS THAN 2 INCHES.
   B. THE BEND RADIUS FOR INTRABUILDING OPTICAL FIBER BACKBONE SHALL NOT BE LESS THAN THAT RECOMMENDED BY THE MANUFACTURER IF NO RECOMMENDATION IS KNOWN, THEN THE APPLIED BEND RADIUS SHALL NOT BE LESS THAN 10 TIMES THE CABLE OUTSIDE DIAMETER UNDER NO-LOAD CONDITIONS AND NOT LESS THAN 15 TIMES THE CABLE OUTSIDE DIAMETER WHEN THE CABLE IS UNDER TENSILE LOAD
   C. THE BEND RADIUS FOR INTER BUILDING (OSP) OPTICAL FIBER BACKBONE SHALL NOT BE LESS THAN THAT RECOMMENDED BY THE MANUFACTURER IF NO RECOMMENDATION IS KNOWN, THEN THE APPLIED BEND RADIUS SHALL NOT BE LESS THAN 10 TIMES THE CABLE OUTSIDE DIAMETER NO-LOAD CONDITIONS AND NOT LESS THAN 20 TIMES THE CABLE OUTSIDE DIAMETER WHEN THE CABLE IS UNDER A TENSILE LOAD UP TO THE RATING OF THE CABLE, USUALLY 600 LBF.
10. COORDINATE LOCATION OF ALL FIRE RATED PENETRATIONS PRIOR TO PROCEEDING WITH INSTALLATION. ALL PENETRATIONS THROUGH FIRE RATED BARRIERS SHALL BE COMPLETELY SEALED WITH APPROPRIATE FIRE STOP MATERIAL IN ACCORDANCE WITH NFPA AND FIRE AUTHORITY HAVING JURISDICTION.
11. ALL DELAYED EGRESS LOCKS AND MAGNETIC LOCKS, SHALL RECEIVE A FIRE ALARM RELAY TO RELEASE THE DOOR UPON ALARM AS REQUIRED BY CODE.

## TECHNOLOGY DRAWING INDEX


| Sheet | DESCRIPTION | ISSUED |
|---|---|---|
| T-0.01 | GENERAL TECHNOLOGY INFORMATION | Yes |
| T-0.02 | SITE PLAN - TECHNOLOGY | Yes |
| T-1.01 | FIRST FLOOR PLAN - VOICE/DATA | Yes |
| T-1.02 | SECOND FLOOR - VOICE/DATA | Yes |
| T-2.01 | FIRST FLOOR - SEC AND AV INFRA. | Yes |
| T-2.02 | SECOND FLOOR - SEC AND AV INFRA. | Yes |
| T-3.01 | ROOF PLAN - TECHNOLOGY | Yes |
| T-4.01 | ENLARGED/RISER PLAN - TECHNOLOGY | Yes |
| T-7.11 | VOICE/DATA - DETAILS | Yes |
| T-7.12 | VOICE/DATA - DETAILS | Yes |
| T-7.13 | VOICE/DATA - DETAILS | Yes |
| T-7.14 | VOICE/DATA - DETAILS | Yes |
| T-7.15 | VOICE/DATA - DETAILS | Yes |
| T-7.16 | VOICE/DATA - DETAILS | Yes |
| T-7.17 | VOICE/DATA - DETAILS | Yes |
| T-7.21 | AUDIO/VIDEO - DETAILS | Yes |
| T-7.31 | SECURITY - DETAILS | Yes |
| T-7.32 | SECURITY - DETAILS | Yes |


LAKE COUNTY
FLORIDA
**Approved Plans - Commercial**
**LAKE COUNTY BUILDING DIVISION**
Any errors or omission in these plans shall be made to conform with the applicable code requirements per Florida Building Code 105.4.1
Plans reviewed for code compliance and shall be kept on site
Permit # 2011110212
Building: BLD31 12/29/11
Electric: ADM01 12/29/11
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:


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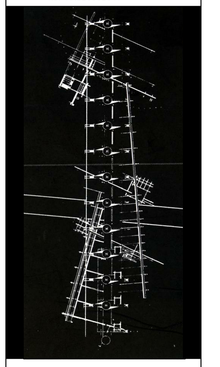

# Lake County Emergency Communications & Operations Center

Tavares, Florida

**PERMIT CD SUBMITTAL**


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• revisions / addenda

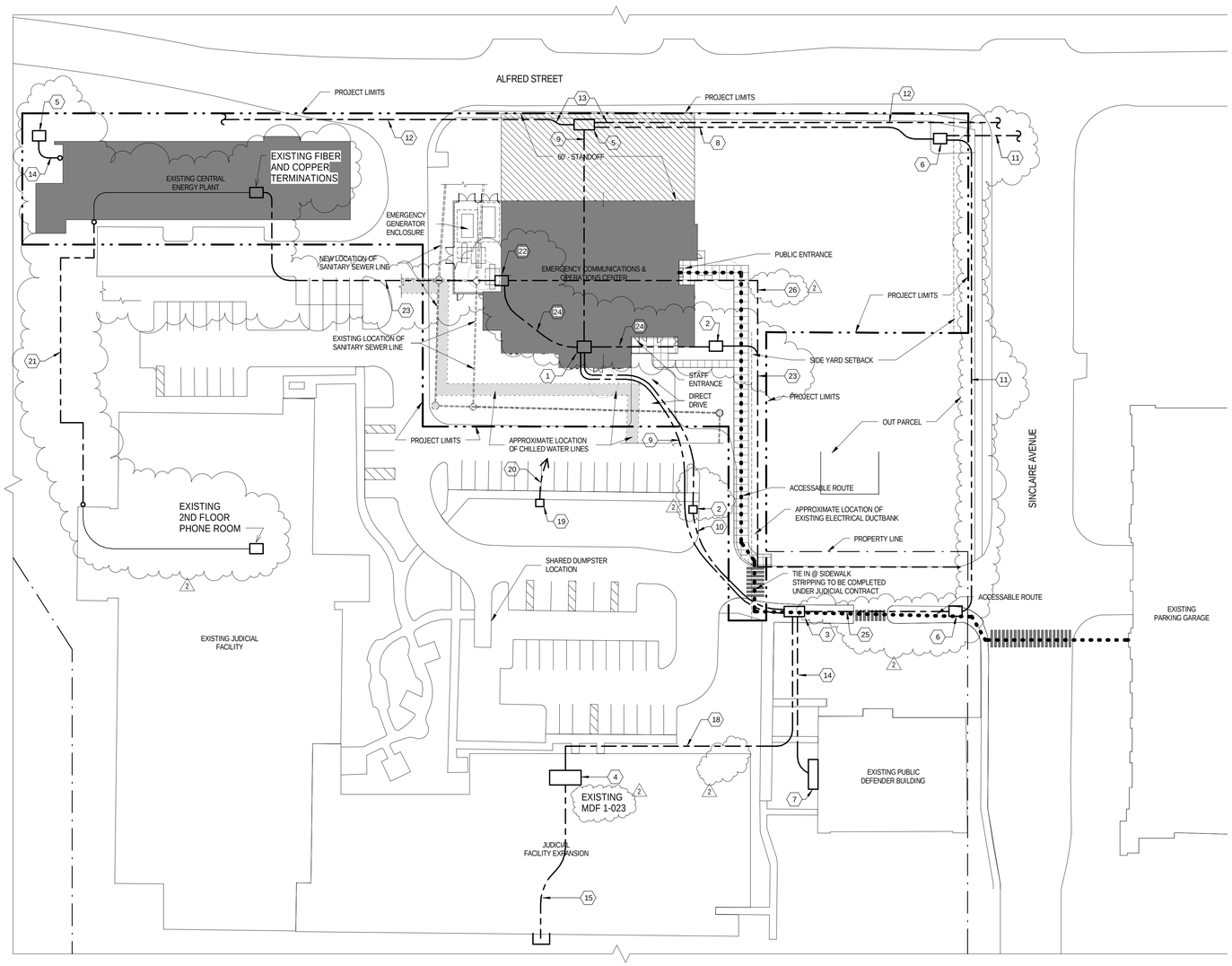
| Number | Description | Date Issued |
|---|---|---|
| 2 | ADDENDUM #2 | 12/22/11 |

• sheet title
GENERAL TECHNOLOGY INFORMATION

• scale: 12" = 1'-0"
• drawn: DT, AH
• checked: SG, SB
• approved: KR, AIA
• date: 11/09/11

• project no. Project Number

• sheet no. T-0.01




1 SITE PLAN - TECHNOLOGY
1" = 40'-0"

0' 20' 40' 100'

GENERAL NOTES:

1. ALL CABLING FOR VOICE AND DATA SHALL CONFORM TO THE LAKE COUNTY BCC IT REQUIREMENTS AS IDENTIFIED IN SPECIFICATION SECTION 17020.
2. NOT ALL WORK SHOWN IS INCLUDED IN THIS CONTRACT. WORK REQUIRED BY THE JUDICIAL EXPANSION PROJECT AND EXISTING DUCT BANK SYSTEMS ARE INCLUDED TO IDENTIFY CAMPUS WIDE CONNECTIVITY AND IS NOTED ACCORDINGLY.
3. ALL FIBER CABLING SHALL BE CORNING CERTIFIED WITH PROOF OF CERTIFICATION PROVIDED TO THE OWNER.
4. ALL EQUIPMENT AND MATERIALS REQUIRED FOR CABLE TERMINATION SHALL BE PROVIDED BY THE CONTRACTOR.

PLAN NOTES:

1. LOCATION OF THE TELECOMMUNICATIONS SERVICE ENTRANCE ROOM #127, STUB SITE CONDUIT AT WALL 4 INCHES ABOVE FINISHED FLOOR.
2. PROVIDE A 13" X 24" GRADE MOUNTED PULLBOX WITH HEAVY DUTY BOLT DOWN COVER. DESIGN SELECTION: QUAZITE PD1324B18 WITH PG1324HA00. ADD ALTERNATE, PROVIDE 24" X 36" NEMA 4X STAINLESS STEEL MEDIA BOX WITH CONCRETE BASE AND KINDORF SUPPORT STRUCTURE.
3. EXISTING COMMUNICATION VAULT PROVIDED WITH THE JUDICIAL FACILITY EXPANSION, CONDUITS SHOWN SHALL TIE INTO THE EXISTING VAULT.
4. AT THE EXISTING MDF LOCATED IN ROOM #1-023 PROVIDE TERMINATION OF (1) 96 STRAND SM FIBER OPTIC CABLE AND (1) 200 PAIR COPPER CABLE. THE COPPER CABLE TERMINATION SHALL INCLUDE LIGHTNING PROTECTION FOR ALL COPPER PAIRS. COORDINATE ALL WORK ASSOCIATED TO THESE TERMINATIONS WITH THE OWNER.
5. CONCRETE COMMUNICATIONS VAULT PROVIDED UNDER THE JUDICIAL FACILITY EXPANSION PROJECT. COORDINATE INSTALLATION WITH OWNER.
6. EXISTING COMMUNICATIONS VAULT, CONDUITS SHOWN SHALL TIE INTO THE EXISTING VAULT.
7. EXISTING WALL MOUNTED COMMUNICATIONS ENCLOSURE.
8. TWO FOUR INCH CONDUITS PROVIDED UNDER THE JUDICIAL FACILITY EXPANSION PROJECT.
9. PROVIDE THREE FOUR INCH CONDUITS, EACH WITH (3) 1 ¼ INCH INNER DUCTS. IN ONE OF THE CONDUITS PROVIDE (1) 96 STRAND SM FIBER OPTIC CABLE AND (1) 200 PAIR COPPER CABLE. THE FIBER AND COPPER CABLES SHALL BE TERMINATED IN ROOM #127 OF THE EOC AND 1-023 OF THE JUDICIAL EXPANSION AND SHALL INCLUDE ALL TERMINATION EQUIPMENT.
10. PROVIDE ONE FOUR INCH CONDUIT WITH (3) 1-1/4" INNERDUCTS.
11. EXISTING LAKE COUNTY COMMUNICATION CONDUIT TO REMAIN.
12. EXISTING CENTURY LINK UNDERGROUND SERVICE LINE.
13. INTENDED LOCATION FOR CENTURY LINK TIE-IN FOR PRIMARY TELECOMMUNICATIONS SERVICE INTO THE EOC.
14. ONE FOUR INCH CONDUIT PROVIDED UNDER THE JUDICIAL FACILITY EXPANSION PROJECT.
15. THREE EXISTING FOUR INCH CONDUITS INSTALLED UNDER THE JUDICIAL FACILITY EXPANSION, TO BE USED FOR REDUNDANT TELECOMMUNICATIONS SERVICE INTO THE EOC.
16. NOT USED.
17. NOT USED.
18. (FOUR) FOUR INCH CONDUITS INSTALLED UNDER THE JUDICIAL FACILITY EXPANSION IN ONE CONDUIT THIS CONTRACTOR SHALL PROVIDE (1) 96 STRAND SM FIBER AND (1) 200 PAIR COPPER.
19. VOICE/DATA RACEWAY FOR MOBILE COMMAND CENTER CONNECTION, PROVIDE 24 INCH X 36 INCH NEMA 4X STAINLESS STEEL BOX WITH CONCRETE BASE AND KINDORF SUPPORT.
20. PROVIDE (1) 4 INCH CONDUIT TO SERVICE ENTRANCE ROOM #127 STUB CONDUIT UP AT WALL 4 INCHES ABOVE FINISHED FLOOR.
21. CONDUIT, 25 PAIR COPPER AND 12 STRAND SM FIBER PROVIDED UNDER THE JUDICIAL FACILITY EXPANSION PROJECT.
22. EXISTING PULLBOX, FIELD VERIFY LOCATION. RE-LOCATE AND INSTALL IF WITHIN THE FOOTPRINT OF THE NEW CONSTRUCTION.
23. EXISTING UNDERGROUND CONDUIT WITH (1) 25 PAIR COPPER AND (1) 24 STRAND FIBER. INTERCEPT CABLES AND PROVIDE WEATHER PROOF SPLICE TO EXTEND CABLES FOR TERMINATION IN SERVICE ENTRANCE ROOM #127.
24. PROVIDE (1) 2-1/2 INCH CONDUIT WITH (1) 25 PAIR COPPER AND (1) 24 STRAND SM FIBER. TERMINATE CABLES AT SERVICE ENTRANCE ROOM #127. PROVIDE COPPER PROTECTION FOR 25 PAIR COPPER CABLE.
25. TWO FOUR INCH CONDUITS ARE TO BE INSTALLED UNDER THE JUDICIAL EXPANSION PROJECT TO CONNECT THE COMMUNICATION MANHOLES AS SHOWN.
26. EXISTING SECTION OF CONDUIT AND CABLE TO BE REMOVED.

LAKE COUNTY FLORIDA
**Approved Plans - Commercial**
**LAKE COUNTY BUILDING DIVISION**
Any errors or omission in these plans shall be made to conform with the applicable code requirements per Florida Building Code 105.4.1
Plans reviewed for code compliance and shall be kept on site
Permit # 2011110212
Building: BLD31 12/29/11
Electric: ADM01 12/29/11
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes: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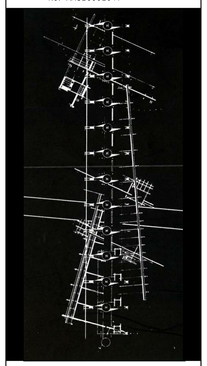

# Lake County Emergency Communications & Operations Center

Tavares, Florida

**PERMIT CD SUBMITTAL**


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revisions / addenda

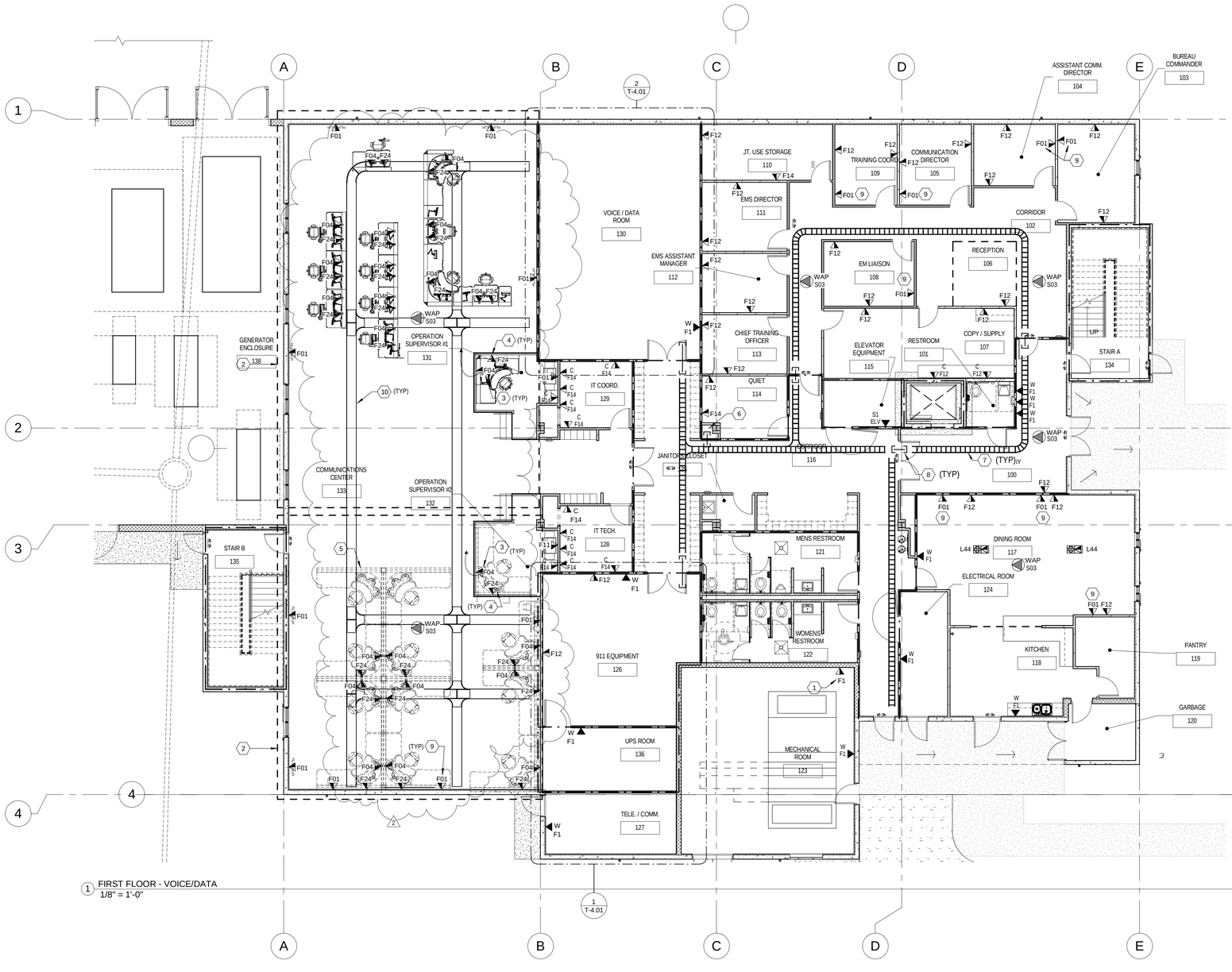
| Number | Description | Date Issued |
|---|---|---|
| 2 | ADDENDUM #2 | 12/22/11 |

sheet title
SITE PLAN - TECHNOLOGY

| | |
|---|---|
| scale: | 1" = 40'-0" |
| drawn: | DT, AH |
| checked: | SG, SB |
| approved: | KR, AIA |
| date: | 11/09/11 |

project no. Project Number

sheet no. T-0.02




GENERAL NOTES:

1. ALL HORIZONTAL DATA CABLING SHALL BE TERMINATED ON RACK MOUNTED PATCH PANELS LOCATED IN VOICE/DATA ROOM #130, UNLESS NOTED OTHERWISE.
2. ALL HORIZONTAL VOICE CABLING SHALL BE TERMINATED ON WALL MOUNTED 66 BLOCKS IN COMM/PBX #227, 12 CABLES PER BLOCK UNLESS NOTED OTHERWISE.

PLAN NOTES:

1. PROVIDE NETWORK CONNECTION FOR BMS PANEL, COORDINATE LOCATION AND CONNECTION REQUIREMENTS WITH MECHANICAL CONTRACTOR.
2. ALL CABLING FOR THE OUTLETS SHOW IN THIS AREA SHALL BE ROUTED UNDER THE RAISED FLOOR. TYPICAL FOR WORKSTATIONS IN THIS AREA
3. HORIZONTAL CABLE FROM F04 OUTLET SHALL BE TERMINATED ON RACK MOUNTED PATCH PANELS LOCATED IN THE VOICE/DATA ROOM #130
4. HORIZONTAL CABLE FROM F24 OUTLET SHALL BE TERMINATED AS FOLLOWS: (1) VOICE CABLE ON 66 BLOCK AT COMM/PBX #227. (1) VOICE CABLE ON 66 BLOCKS AT 911 EQUIPMENT ROOM #126 AND (4) DATA CABLES IN RACK MOUNTED PATCH PANELS LOCATED IN 911 EQUIPMENT # 126
5. AT FUTURE COMM CENTER POSITIONS PROVIDE 10 CABLES WITH 6' SERVICE LOOP UN-TERMINATED AND MARKED FOR FUTURE USE.
6. VERTICAL CHASE RESERVED FOR VERTICAL VOICE AND DATA CABLE INSTALLATION.
7. PROVIDE TWELVE INCH BY FOUR INCH BASKET STYLE ABOVE CEILING CABLE TRAY SECURELY MOUNTED TO STRUCTURE.
8. PROVIDE WALL PENETRATION, SEE DETAILS. FOR QUANTITY AND INSTALLATION REQUIREMENTS. WALL RATING SHALL BE MAINTAINED.
9. PROVIDE NETWORK CONNECTION AT FLAT SCREEN LOCATION, SEE DETAILS 1 & 2 ON SHEET T7.21, TYPICAL WITHIN ROOMS AS NOTED.
10. PROVIDE EIGHTEEN INCH BY FOUR INCH BASKET STYLE UNDER FLOOR CABLE TRAY SECURELY MOUNTED TO STRUCTURE.

LAKE COUNTY FLORIDA
**Approved Plans - Commercial**
**LAKE COUNTY BUILDING DIVISION**
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Plans reviewed for code compliance and shall be kept on site
Permit # 2011110212
Building: BLD31 12/29/11
Electric: ADM01 12/29/11
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:


Architects Design Group

Architects and Planners

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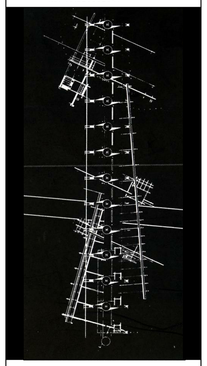

# Lake County Emergency Communications & Operations Center

Tavares, Florida

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• revisions / addenda

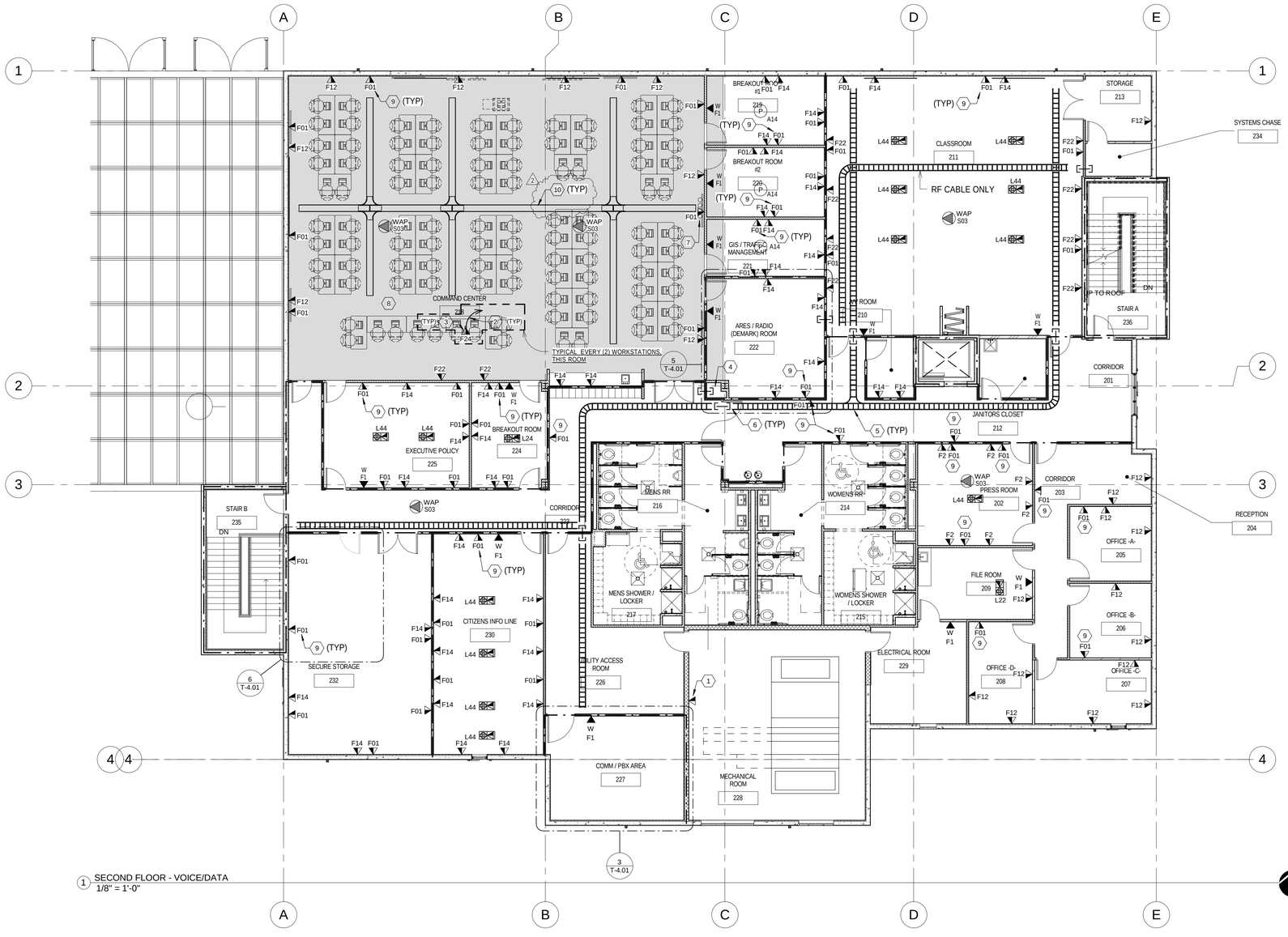
| Number | Description | Date Issued |
|---|---|---|
| 2 | ADDENDUM #2 | 12/22/11 |

• sheet title
FIRST FLOOR PLAN - VOICE/DATA

• scale: 1/8" = 1'-0"
• drawn: DT, AH
• checked: SG, SB
• approved: KR, AIA
• date: 11/09/11

* project no. Project Number

• sheet no. T-1.01




1 SECOND FLOOR - VOICE/DATA
1/8" = 1'-0"

GENERAL NOTES:

1. ALL HORIZONTAL DATA CABLING SHALL BE TERMINATED ON RACK MOUNTED PATCH PANELS LOCATED IN COMM/PBX #227, UNLESS NOTED OTHERWISE.
2. ALL HORIZONTAL VOICE CABLING SHALL BE TERMINATED ON WALL MOUNTED 66 BLOCKS IN COMM/PBX #227, UNLESS NOTED OTHERWISE.

PLAN NOTES:

1. PROVIDE NETWORK CONNECTION FOR BMS PANEL, COORDINATE LOCATION AND CONNECTION REQUIREMENTS WITH MECHANICAL CONTRACTOR.
2. ALL CABLING FOR THE OUTLETS SHOW IN THE SHADED AREA SHALL BE ROUTED UNDER THE RAISED FLOOR.
3. EACH F24 SHOWN SHALL SERVE THE WORK STATIONS WITH (1) VOICE AND (2) DATA CABLES.
4. VERTICAL CHASE RESERVED FOR VERTICAL VOICE AND DATA CABLE INSTALLATION.
5. PROVIDE TWELVE INCH BY FOUR INCH ABOVE CEILING BASKET STYLE CABLE TRAY SECURELY MOUNTED TO STRUCTURE.
6. PROVIDE WALL PENETRATION, SEE DETAILS. FOR QUANTITY AND INSTALLATION REQUIREMENTS. WALL RATING SHALL BE MAINTAINED.
7. PROVIDE (4) 4" CONDUIT SLEEVES DOWN TO VOICE/DATA ROOM #130.
8. ALL HORIZONTAL VOICE/DATA CABLING FOR COMMAND CENTER #218 SHALL BE ROUTED AND TERMINATED IN VOICE/DATA #130 ON 66 BLOCKS OR PATCH PANELS RESPECTIVELY.
9. PROVIDE NETWORK CONNECTION AT FLAT SCREEN LOCATION, SEE DETAILS 1 & 2 ON SHEET T7.21, TYPICAL WITHIN ROOMS AS NOTED.
10. PROVIDE TWELVE INCH BY FOUR INCH UNDER FLOOR BASKET STYLE CABLE TRAY SECURELY MOUNTED TO STRUCTURE.

LAKE COUNTY
FLORIDA

**Approved Plans - Commercial**
**LAKE COUNTY BUILDING DIVISION**
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Fire: FIR08 12/29/11
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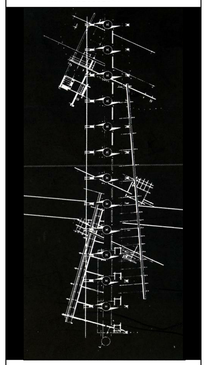

# Lake County Emergency Communications & Operations Center

Tavares, Florida

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• revisions / addenda

| Number | Description | Date Issued |
|---|---|---|
| 2 | ADDENDUM #2 | 12/22/11 |

• sheet title
SECOND FLOOR - VOICE/DATA

• scale: 1/8" = 1'-0"
• drawn: DT, AH
• checked: SG, SB
• approved: KR, AIA
• date: 11 / 09 / 11

* project no. Project Number

• sheet no. T-1.02

1 FIRST FLOOR - SECURITY AND AV INFRASTRUCTURE
1/8" = 1'-0"

**PLAN NOTES:**

1. PROVIDE CEILING MOUNTED IP FIXED DOME CAMERA.
2. PROVIDE WALL MOUNTED FIXED IP CAMERA, BRACKET MOUNTED.
3. PROVIDE WALL MOUNTED FIXED IP CAMERA WITH MOUNTING BRACKET AND WEATHER PROOF HOUSING.
4. CAMERA PROVIDED BY OWNER INSTALLED AND INTEGRATED BY CONTRACTOR.
5. FUTURE WALL MOUNTED CAMERA LOCATION. PROVIDE ROUGH-IN ONLY.
6. FUTURE ACCESS CONTROL EQUIPMENT. PROVIDE ROUGH-IN ONLY.
7. PROVIDE INTERCOM STATION WITH SPECIFIC CONNECTION CAPABILITY TO OPERATION SUPERVISOR 1 & 2 ADD RECEPTION 204.
8. PROVIDE REMOTE DOOR RELEASE BUTTON TO CONTROL EXTERIOR LOBBY DOOR.
9. PROVIDE INTERCOM MASTER STATION CONNECTED TO DOOR SUBSTATION AT EXTERIOR LOBBY DOOR.
10. AT THE FLAT SCREEN LOCATION, PROVIDE DOUBLE GANG JUNCTION BOX WITH BLANK PLATE AND (1) 1-1.4 INCH CONDUIT TO ACCESSIBLE CEILING LOCATION, AT RAISED FLOOR LOCATION PROVIDE (1) 1-1/4 INCH CONDUIT TO AN ACCESSIBLE LOCATION BELOW THE FLOOR, SEE DETAILS 1 & 2 ON SHEET T7.21.
11. PROVIDE BATTERY POWERED DIGITAL CLOCK WITH WIRELESS GPS SYNCHRONIZATION.
12. KEYPAD CONTROL SHALL BE PROVIDED UNDER BASE BID. AS ADD ALTERNATE PROVIDE PROXIMITY CARD READER.
13. PROVIDE SECURITY VIDEO MONITOR VIA COMPUTER SOFTWARE. FOR VIEW OF ALL CAMERAS.
14. COORDINATE FINAL PROJECTOR LOCATION WITH THE ARCHITECTURAL REFLECTED CEILING PLAN FOR THE LARGEST PROJECTED IMAGE.

LAKE COUNTY
FLORIDA
**Approved Plans - Commercial**
**LAKE COUNTY BUILDING DIVISION**
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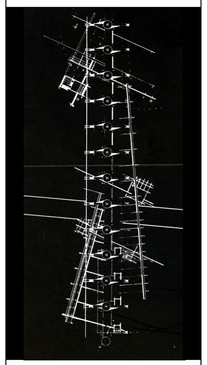

# Lake County Emergency Communications & Operations Center

Tavares, Florida

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• revisions / addenda

| Number | Description | Date Issued |
|---|---|---|
| 2 | ADDENDUM #2 | 12/22/11 |

• sheet title
FIRST FLOOR - SEC AND AV INFRA.

• scale: 1/8" = 1'-0"
• drawn: DT, AH
• checked: SG, SB
• approved: KR, AIA
• date: 11 / 09 / 11

• project no. Project Number

• sheet no. T-2.01

1 SECOND FLOOR - SECURITY AND AV INFRASTRUCTURE
1/8" = 1'-0"

**PLAN NOTES:**

1. FUTURE ACCESS CONTROL EQUIPMENT. PROVIDE ROUGH-IN ONLY.
2. PROVIDE REMOTE DOOR RELEASE BUTTON TO CONTROL EXTERIOR LOBBY DOOR.
3. PROVIDE INTERCOM MASTER STATION CONNECTED TO EXTERIOR DOOR STATION AT EXTERIOR LOBBY DOOR.
4. AT THE FLAT SCREEN DISPLAY, PROVIDE RECESSED DOUBLE GANG JUNCTION BOX WITH BLANK COVER PLATE AND (1) 1-1/4 INCH CONDUIT TO AN ACCESSIBLE LOCATION ABOVE THE CEILING. SEE DETAILS 1 & 2 ON SHEET T7.21.
5. AT THE FLAT SCREEN DISPLAY, PROVIDE RECESSED DOUBLE GANG JUNCTION BOX WITH BLANK COVER PLATE AND (1) 1-1/4 INCH CONDUIT TO AN ACCESSIBLE LOCATION ABOVE THE CEILING. AT RAISED FLOOR LOCATIONS PROVIDE (1) 1-1/4 INCH CONDUIT BE LOW THE FLOOR. SEE DETAILS 1 & 2 ON SHEET T7.21.
6. PROVIDE (2) RECESSED DOUBLE GANG JUNCTION BOXES EACH WITH BLANK COVER PLATE AND (2) 1-1/4 INCH CONDUITS, ONE TO AN ACCESSIBLE LOCATION ABOVE THE CEILING AND THE OTHER BELOW THE RAISED FLOOR. BOXES SHALL BE LOCATED IN THE CABINET FOR THE INSTALLATION OF AUDIO/VIDEO CABLING PROVIDED BY THE OWNER.
7. KEYPAD CONTROL SHALL BE PROVIDED UNDER BASE BID. AS ADD ALTERNATE PROVIDE PROXIMITY CARD READER.
8. PROVIDE BATTERY POWERED DIGITAL CLOCK WITH WIRELESS GPS SYNCHRONIZATION.
9. AT AV INPUT PLATE LOCATION, PROVIDE DOUBLE GANG JUNCTION BOX WITH (2) 1 INCH CONDUITS TO AN ACCESSIBLE CEILING LOCATION. MOUNT AT 18" A.F.F.
10. COORDINATE FINAL PROJECTOR LOCATION WITH ARCHITECTURAL REFLECTED CEILING PLAN FOR THE LARGEST PROJECTED IMAGE.
11. LOCATION FOR COAX CABLE TERMINATIONS.


Wayne Edward Allred, P.E.
Florida License #45800

Seal

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Architects Design Group, Inc.

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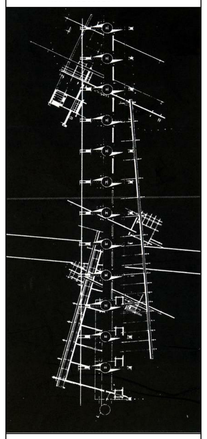

# Lake County Emergency Communications & Operations Center

Lake County,
Florida

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- revisions

- sheet title

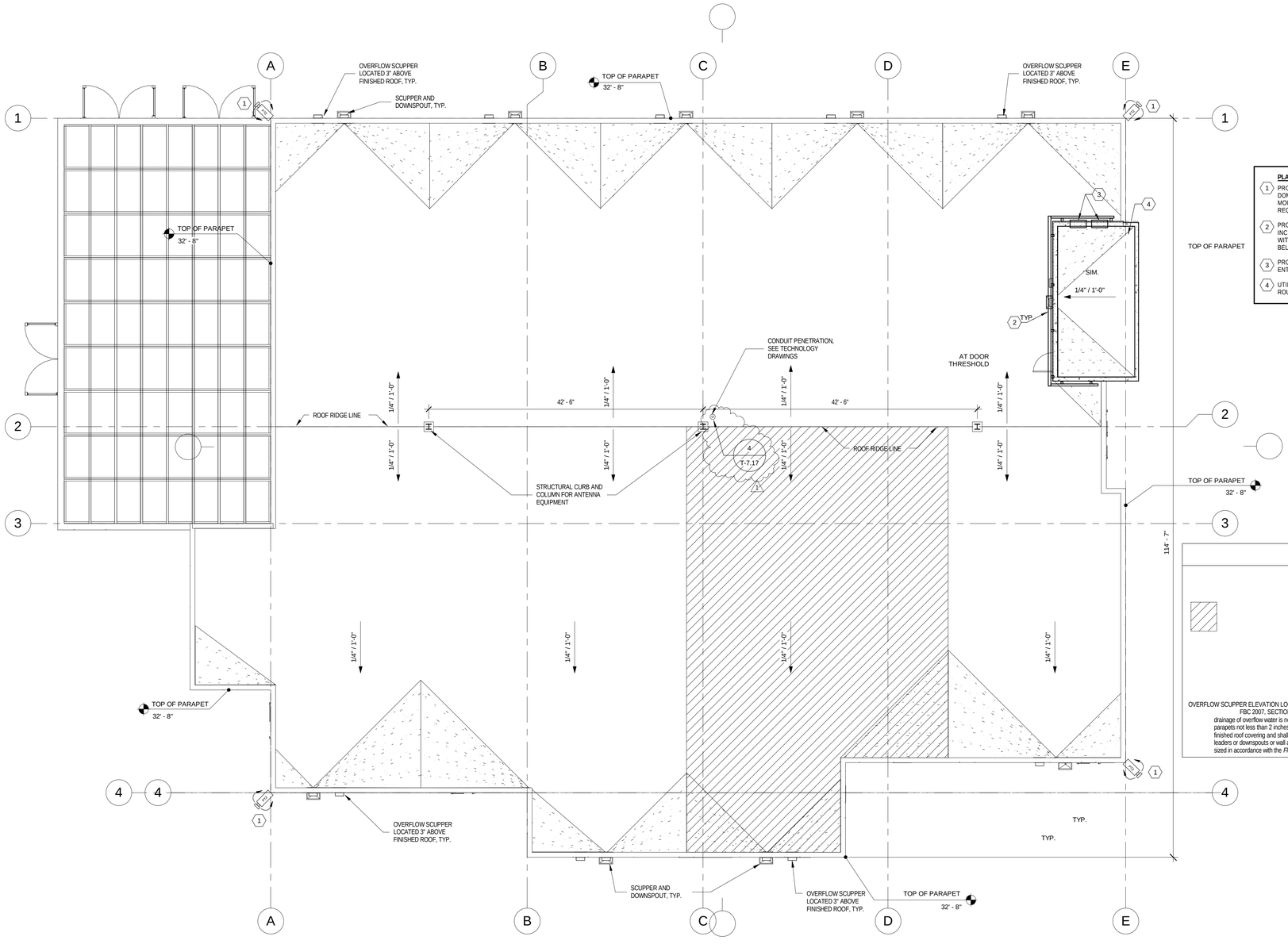
SECOND FLOOR - SEC AND AV INFRA.

- scale: 1/8" = 1'-0"
- drawn: MBR
- checked: JTA
- approved: TLM
- date: 11/09/11

* project no. Project Number

- sheet no. T-2.02

11/9/2011 2:07:30 PM




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

**PLAN NOTES:**

1. PROVIDE ROUGH-IN ONLY FOR PARAPET MOUNTED PTZ IP DOME CAMERA WITH EXTERIOR ENCLOSURE AND MOUNTING BRACKET. SEE DETAILS FOR ROUGH-IN REQUIREMENTS.
2. PROVIDE IMBEDDED I-BEAM ANTENNA MOUNTING RAIL, 12 INCHES BELOW THE TOP OF THE STAIR TOWER ROOF WITH 12 INCH STAINLESS STEEL LADDER RACK 6 INCHES BELOW RAIL.
3. PROVIDE WEATHER PROOF 8 PORT MODULAR EARTHEN ENTRANCE PANEL, 8PEEP-M.
4. UTILIZE CABLING CHASE WITHIN STAIRWELL FOR ROUTING ANTENNA CABLING TO RADIO ROOM.

OVERFLOW SCUPPER ELEVATION LOCATION PER:
FBC 2007, SECTION 1503.4.3 Overflow scuppers. When other means of drainage of overflow water is not provided, overflow scuppers shall be placed in walls or parapets not less than 2 inches (51 mm) nor more than 4 inches (102 mm) above the finished roof covering and shall be located as close as practical to required vertical leaders or downspouts or wall and parapet scuppers. An overflow scupper shall be sized in accordance with the *Florida Building Code, Plumbing*.

LAKE COUNTY
FLORIDA
**Approved Plans - Commercial**
**LAKE COUNTY BUILDING DIVISION**
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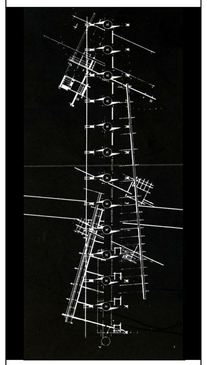

# Lake County Emergency Communications & Operations Center

Tavares, Florida

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• revisions / addenda

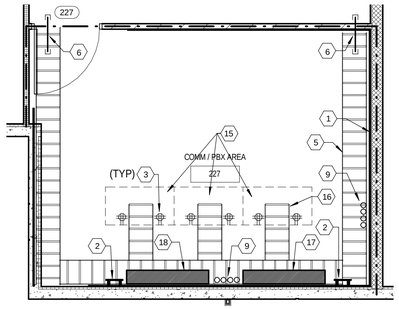
| Number | Description | Date Issued |
|---|---|---|
| 1 | ADDENDUM #1 | 12/16/11 |

• sheet title
ROOF PLAN - TECHNOLOGY

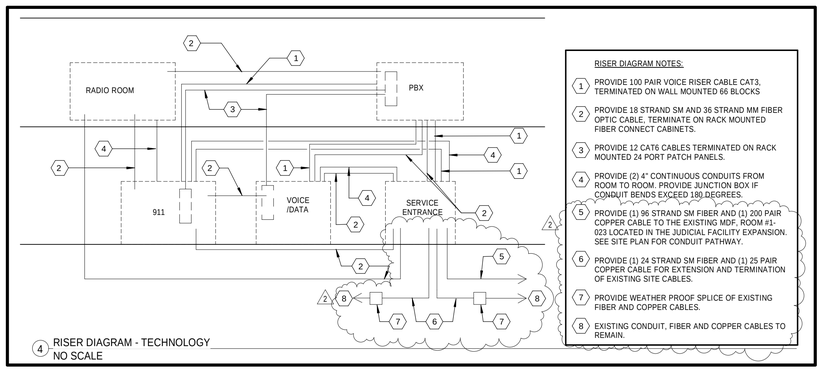
• scale: 1/8" = 1'-0"
• drawn: DT, AH
• checked: SG, SB
• approved: KR, AIA
• date: 11/09/11

* project no. Project Number

• sheet no. T-3.01



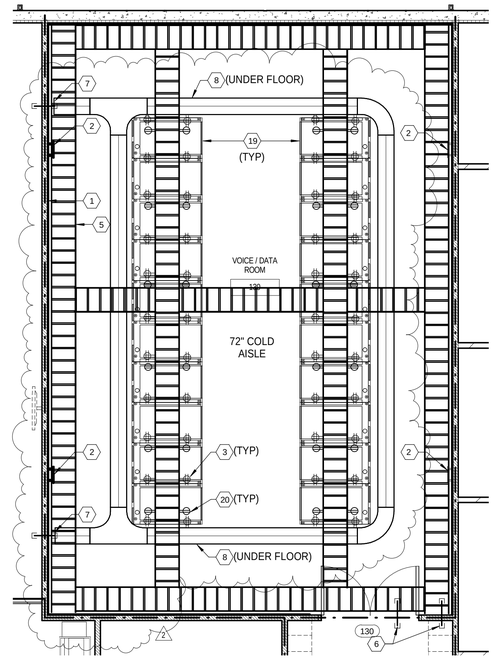

3 SECOND FLOOR - COMM/PBX 227
1/4" = 1'-0"



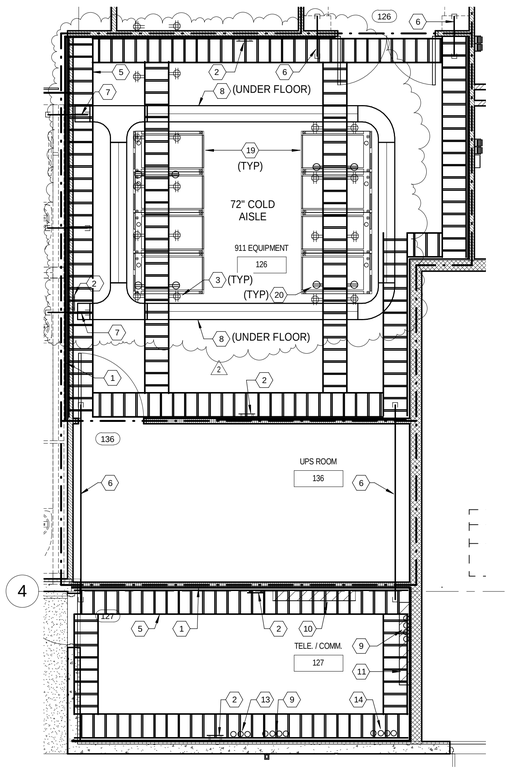

4 RISER DIAGRAM - TECHNOLOGY
NO SCALE

RISER DIAGRAM NOTES:

1. PROVIDE 100 PAIR VOICE RISER CABLE CAT3, TERMINATED ON WALL MOUNTED 66 BLOCKS
2. PROVIDE 18 STRAND SM AND 36 STRAND MM FIBER OPTIC CABLE, TERMINATE ON RACK MOUNTED FIBER CONNECT CABINETS.
3. PROVIDE 12 CAT6 CABLES TERMINATED ON RACK MOUNTED 24 PORT PATCH PANELS.
4. PROVIDE (2) 4" CONTINUOUS CONDUITS FROM ROOM TO ROOM. PROVIDE JUNCTION BOX IF CONDUIT BENDS EXCEED 180 DEGREES.
5. PROVIDE (1) 96 STRAND SM FIBER AND (1) 200 PAIR COPPER CABLE TO THE EXISTING MDF, ROOM #1-023 LOCATED IN THE JUDICIAL FACILITY EXPANSION. SEE SITE PLAN FOR CONDUIT PATHWAY.
6. PROVIDE (1) 24 STRAND SM FIBER AND (1) 25 PAIR COPPER CABLE FOR EXTENSION AND TERMINATION OF EXISTING SITE CABLES.
7. PROVIDE WEATHER PROOF SPLICE OF EXISTING FIBER AND COPPER CABLES.
8. EXISTING CONDUIT, FIBER AND COPPER CABLES TO REMAIN.



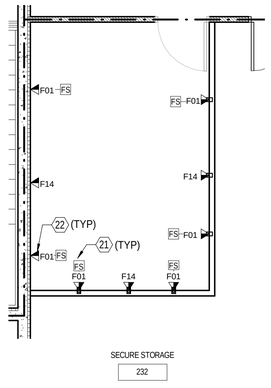

2 ENLARGED PLAN - VOICE/DATA ROOM 130
1/4" = 1'-0"



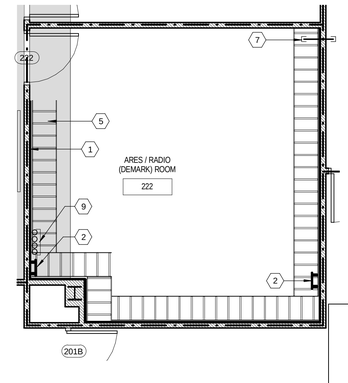

1 ENLARGED PLAN - 911 EQUIPMENT ROOM 126 AND TELE/COMM 127
1/4" = 1'-0"

ENLARGED PLAN NOTES:

1. PROVIDE 3/4 INCH FIRE RETARDANT PLYWOOD, MOUNT FOUR INCHES A.F.F. UP TO EIGHT FEET.
2. PROVIDE GROUND BUS, SEE DETAILS FOR REQUIREMENTS
3. RACK MOUNTED ELECTRICAL QUAD RECEPTACLE, 2 CIRCUIT, 120V TWIST LOCK. COORDINATE INSTALLATION WITH ELECTRICAL CONTRACTOR
4. PROVIDE NINETEEN INCH TWO POST EQUIPMENT RACKS, SEVEN FOOT IN HEIGHT WITH TEN INCH WIRE MANAGERS BETWEEN AND SIX INCH WIRE MANAGERS IN THE ENDS.
5. PROVIDE EIGHTEEN INCH WALL MOUNTED LADDER RACK NINETY-SIX INCHES A.F.F.
6. PROVIDE WALL PENETRATIONS TO THE ADJACENT CEILING SPACE WITH RUNWAY RADIUS DROP ON THE COMMUNICATION ROOM SIDE, SEE DETAILS FOR INSTALLATION REQUIREMENTS AND QUANTITY.
7. PROVIDE WALL PENETRATION BELOW THE RAISED FLOOR, SEE DETAILS FOR INSTALLATION REQUIREMENTS AND QUANTITY
8. PROVIDE TWELVE BY FOUR INCH BASKET TRAY UNDER THE RAISED FLOOR FOR HORIZONTAL CABLE DISTRIBUTION.
9. PROVIDE (4) FOUR INCH VERTICAL CONDUIT SLEEVES, INSTALLATION SHALL MAINTAIN FLOOR RATING.
10. INTENDED LOCATION FOR THE SERVICE PROVIDER DEMARK.
11. INTENDED LOCATION FOR LAKE COUNTY DEMARK
12. PROVIDE TWELVE INCH LADDER RACK WALL MOUNTED AT SEVENTY TWO INCHES A.F.F.
13. (3) FOUR INCH SITE CONDUITS FROM THE NORTH, STUB CONDUITS FOUR INCHES A.F.F. AND BOND TO THE GROUND BUS, SEE SITE PLAN FOR ROUTING.
14. (4) FOUR INCH SITE CONDUITS FROM THE SOUTH, STUB CONDUITS FOUR INCHES A.F.F. AND BOND TO THE GROUND BUS, SEE SITE PLAN FOR ROUTING.
15. INTENDED LOCATION FOR THE OWNER PROVIDED TELEPHONE SWITCH CABINETS.
16. PROVIDE TWENTY FOUR INCH LADDER RACK AND CONNECT TO TELEPHONE CABINETS, COORDINATE INSTALLATION WITH OWNER.
17. PROVIDE WALL MOUNTED 66 BLOCKS FOR TERMINATION OF HORIZONTAL AND BACKBONE CABLING, QUANTITY REQUIRED TO TERMINATE ALL VOICE CABLING REPRESENTED ON THESE DRAWINGS.
18. PROVIDE WALL MOUNTED 66 BLOCK FOR TERMINATION OF TELEPHONE SWITCH TAILS FOR CROSS-CONNECT DISTRIBUTION.
19. OWNER PROVIDED COMMUNICATIONS CABINET. 30"W X 52"D X 84"H.
20. RACK MOUNTED ELECTRICAL RECEPTACLE, SINGLE CIRCUIT, 20A, 208V, 3P TWIST LOCK, COORDINATE WITH ELECTRICAL CONTRACTOR
21. AT THE FLAT SCREEN DISPLAY, PROVIDE RECESSED DOUBLE GANG JUNCTION BOX WITH BLANK COVER PLATE AND (1) 1-1/4 INCH CONDUIT TO AN ACCESSIBLE LOCATION ABOVE THE CEILING. SEE DETAILS 1 & 2 ON SHEET T7.21.
22. PROVIDE NETWORK CONNECTION AT FLAT SCREEN LOCATION, SEE DETAILS 1 & 2 ON SHEET T7.21, TYPICAL WITHIN ROOMS AS NOTED.




6 ADD ALTERNATE JOINT INFO CENTER
1/4" = 1'-0"




5 ENLARGED PLAN - ARES/RADIO (DEMARK) ROOM
1/4" = 1'-0"

LAKE COUNTY
FLORIDA
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Ian A. Reeves, A.I.A.

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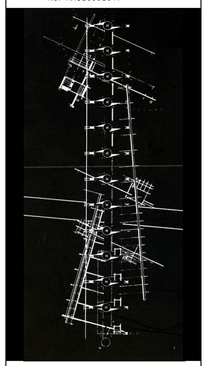
Winter Park, Florida 32789
(407) 647-1706

Corporate Registration No. AAC26002047

# Lake County Emergency Communications & Operations Center

Tavares, Florida

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• revisions / addenda

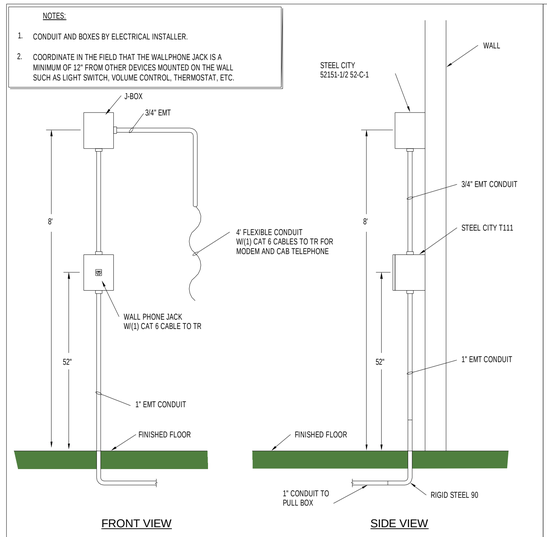
| Number | Description | Date Issued |
|---|---|---|
| 2 | ADDENDUM #2 | 12/22/11 |

• sheet title
ENLARGED/RISER PLAN - TECHNOLOGY

• scale: As indicated
• drawn: DT, AH
• checked: SG, SB
• approved: KR, AIA
• date: 11/09/11

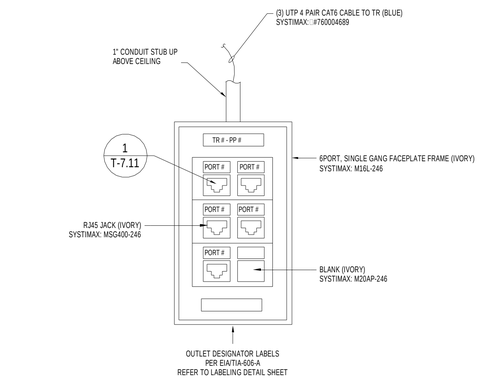
* project no. Project Number

• sheet no. T-4.01




## SURFACE MOUNTED OUTLET — 5

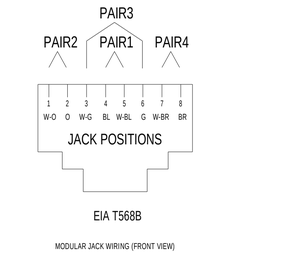
No Scale FOR ELEVATOR MACHINE ROOM - BY SCS INSTALLER-DIV. 17




F12

## WALL MOUNTED OUTLET - VOICE/DATA — 3

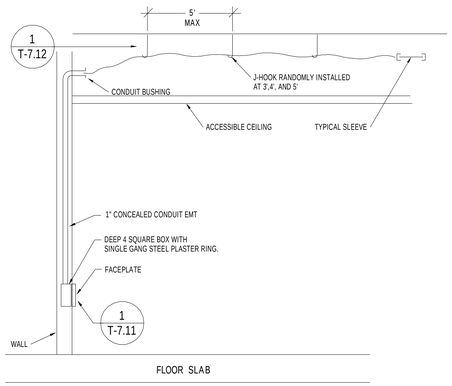
No Scale




MODULAR JACK WIRING (FRONT VIEW)

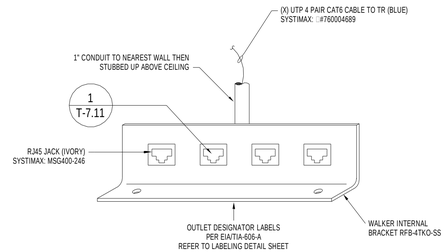
## MODULAR JACK WIRING DETAIL — 1

No Scale BY SCS INSTALLER-DIV. 17




## TYPICAL FLUSH OUTLET MOUNTING — 6

No Scale CONDUIT OVERHEAD

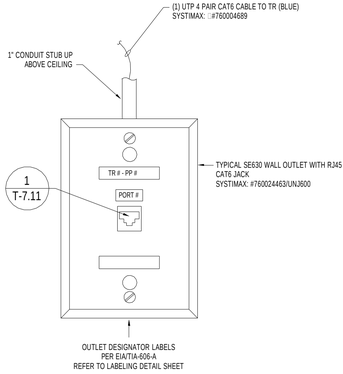



XN

| FOR THE OTHER OUTLET TYPES PROVIDE AS FOLLOWS | |
|---|---|
| OUTLET TYPE | # OF RJ45 CAT6 JACKS FOR VOICE/DATA |
| L3 / L21 | 3 |
| L4 / L22 | 4 |

## OUTLET IN FLOOR BOX - VOICE/DATA — 4

No Scale




W
F1

NOTE: COORDINATE IN THE FIELD THAT THE WALLPHONE JACK IS A MINIMUM OF 12" FROM OTHER DEVICES MOUNTED IN THE WALL SUCH AS LIGHT SWITCH, VOLUME CONTROL, THERMOSTAT, ETC.

## WALL PHONE OUTLET — 2

No Scale BY SCS INSTALLER-DIV. 17

Wayne Edward Allred, P.E.
Florida License #45800

Seal

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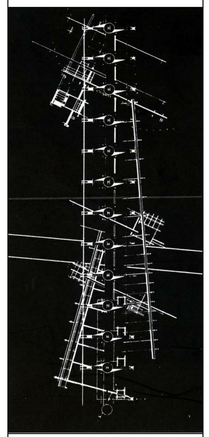

# Lake County Emergency Communications & Operations Center

Lake County, Florida

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- revisions

- sheet title

## VOICE/DATA - DETAILS

- scale: 12" = 1'-0"
- drawn: MBR
- checked: JTA
- approved: TLM
- date: 11/09/11
- project no. Project Number
- sheet no. T-7.11

LAKE COUNTY FLORIDA
**Approved Plans - Commercial**
**LAKE COUNTY BUILDING DIVISION**
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Permit # 2011110212
Building: BLD31 12/29/11
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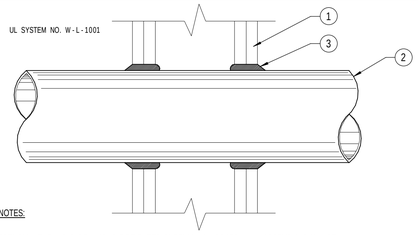
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:

11/9/2011 2:07:35 PM




DETAIL NOTES:

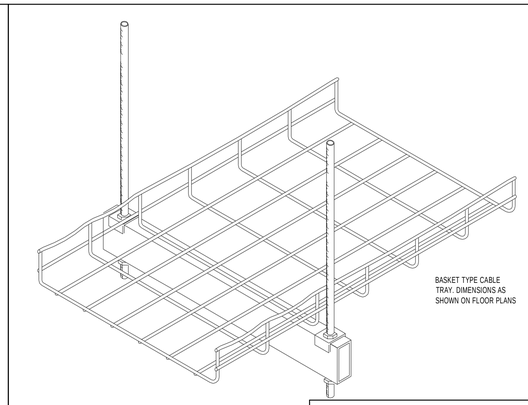
1. WALL ASSEMBLY - THE 1, 2, 3, OR 4 HOUR FIRE RATED GYPSUM WALLBOARD WALL ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER DESCRIBED IN THE INDIVIDUAL U300 OR U400 SERIES WALL OR PARTITION DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY.

2. CONDUIT - NOM 4" DIAMETER OR SMALLER STEEL ELECTRICAL METALLIC TUBING. A MAXIMUM OF ONE CONDUIT IS PERMITTED IN THE FIRE STOP SYSTEM. CONDUIT TO BE INSTALLED NEAR CENTER OF STUD CAVITY WIDTH AND TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL ASSEMBLY.

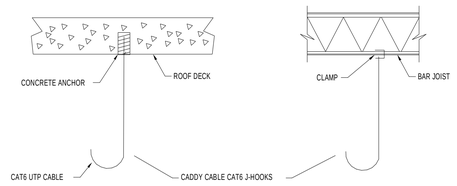
3. FILL VOID OR CAVITY MATERIAL - CAULK FILL MATERIAL BEARING THE UL CLASSIFICATION MARKING INSTALLED TO COMPLETELY FILL ANNULAR SPACE BETWEEN PIPE OR CONDUIT AND GYPSUM WALLBOARD AND WITH A MIN. 1/4" DIAMETER BEAD OF CAULK APPLIED TO PERIMETER OF CONDUIT AT ITS EGRESS FROM THE WALL. CAULK INSTALLED SYMMETRICALLY ON BOTH SIDES OF WALL ASSEMBLY. THE HOURLY F RATING OF THE FIRE STOP 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 FIRE STOP SYSTEM IS DEPENDENT UPON THE TYPE OR SIZE OF THE CONDUIT AND THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED, AS TABULATED BELOW:

| MAXIMUM CONDUIT DIAMETER IN INCHES | ANNULAR SPACE IN INCHES | FIRE RATING IN HOURS | T RATING IN HOURS |
|---|---|---|---|
| 1 | 0 TO 3/16 | 1 OR 2 | 0, 1 OR 2 |
| 1 | 1/4 TO 1/2 | 3 OR 4 | 3 OR 4 |
| 4 | 0 TO 1-1/2 | 1 OR 2 | 0 |
| 6 | 1/4 TO 1/2 | 3 OR 4 | 0 |
| 12 | 3/16 TO 3/8 | 1 OR 2 | 0 |

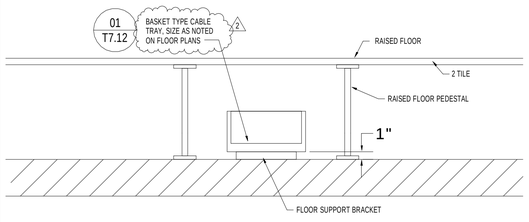
## CONDUIT PENETRATION OF FIRE WALL 5
No Scale



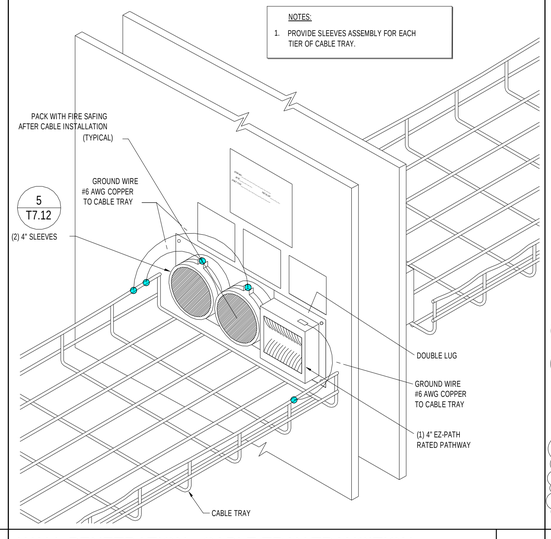

## CABLE TRAY 3
No Scale BY ELECTRICAL INSTALLER



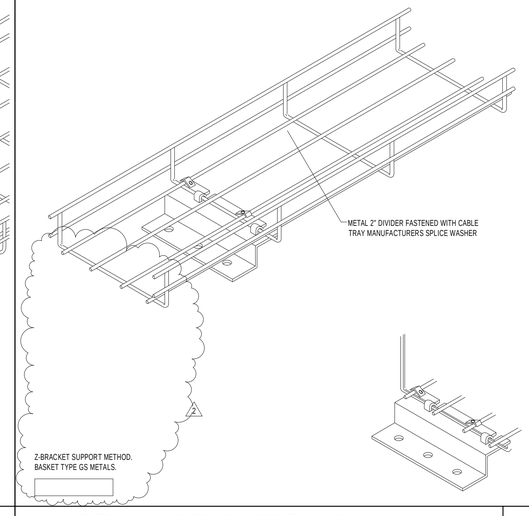

## CABLE HANGER 1
No Scale




## CABLE TRAY UNDER RAISED FLOOR 6
No Scale




## WALL PENETRATION - CABLE TRAY TRANSITION 4
No Scale CABLE TRAY FIRE RESISTANCE PATHWAY - BY ELECTRICAL. INSTALLER




## CABLE TRAY - UNDER RAISED FLOOR 2
No Scale BY ELECTRICAL INSTALLER

1 VOICE/DATA DETAIL 2
12" = 1'-0"

LAKE COUNTY FLORIDA
**Approved Plans - Commercial**
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Notes:

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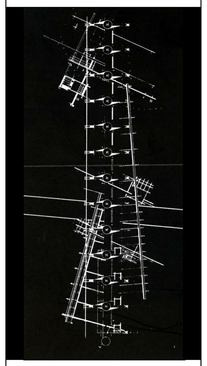

**Lake County Emergency Communications & Operations Center**

Tavares, Florida

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• revisions / addenda

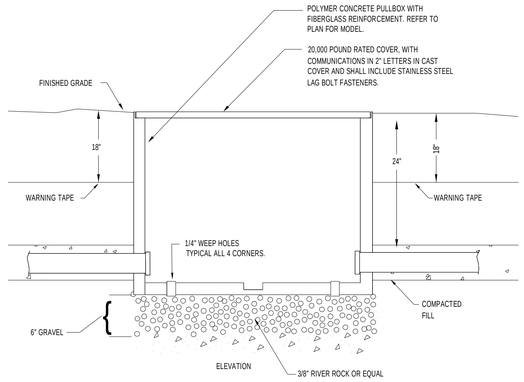
| Number | Description | Date Issued |
|---|---|---|
| 2 | ADDENDUM #2 | 12/22/11 |

• sheet title
VOICE/DATA - DETAILS

• scale: 12" = 1'-0"
• drawn: DT, AH
• checked: SG, SB
• approved: KR, AIA
• date: 11 / 09 / 11

* project no. Project Number

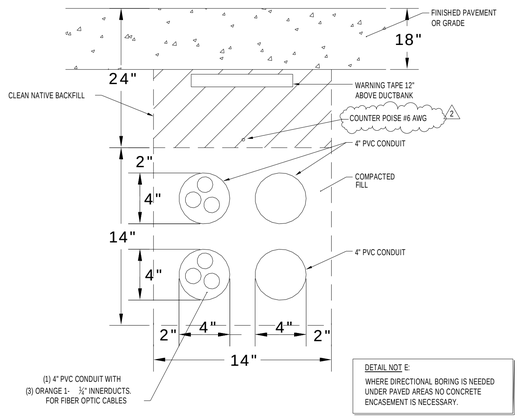
• sheet no. T-7.12




## COMMUNICATIONS PULL BOX

No Scale BY ELECTRICAL INSTALLER-DIV. 16

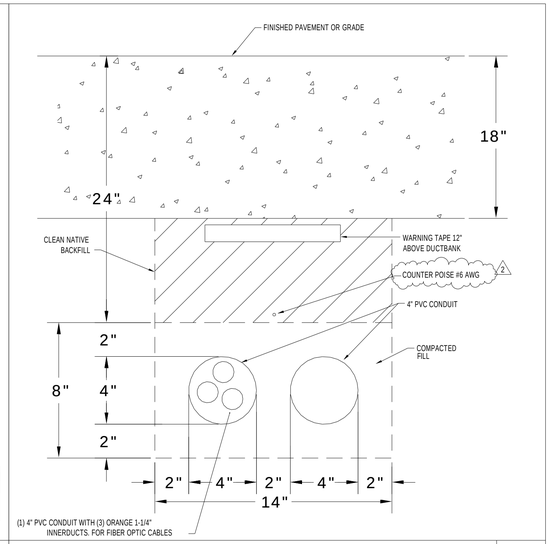
5




## 4W4" TELECOMMUNICATIONS DUCTBANK

No Scale BY ELECTRICAL INSTALLER-DIV. 16

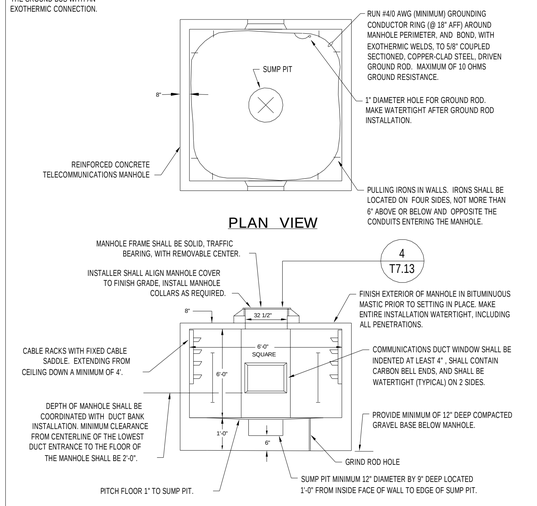
3




## 2W4" TELECOMM DUCTBANK

No Scale BY ELECTRICAL INSTALLER-DIV. 16

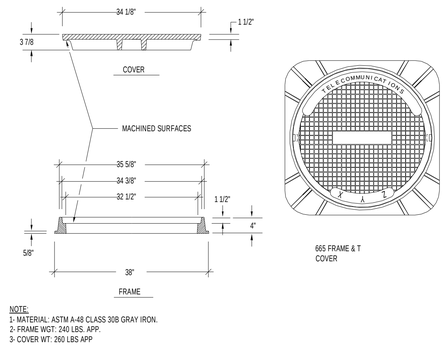
1




## 6' X 6' SQUARE MANHOLE DETAIL

No Scale

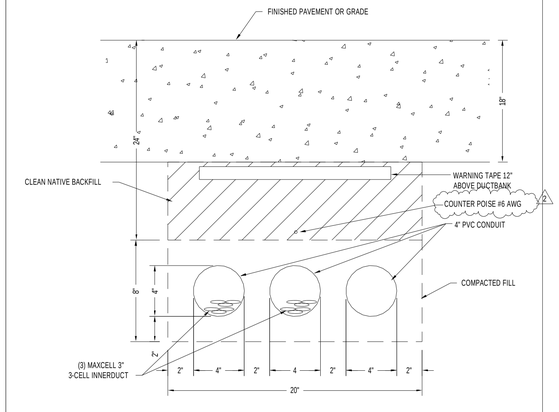
6




## MANHOLE COVER & COLLAR DETAIL

No Scale

4




## 3W4" TELECOMMUNICATIONS DUCTBANK

No Scale BY ELECTRICAL INSTALLER-DIV. 16

2

(1) VOICE/DATA DETAIL 3
12" = 1'-0"

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FLORIDA
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Notes:

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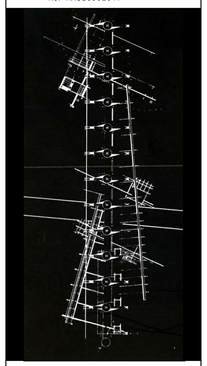

# Lake County Emergency Communications & Operations Center

Tavares, Florida

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| Number | Description | Date Issued |
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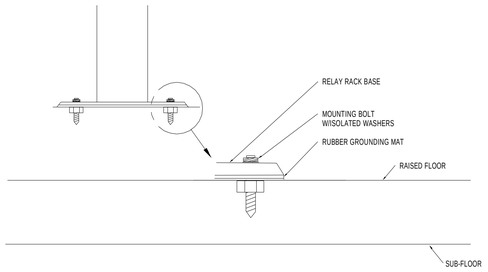
| 2 | ADDENDUM #2 | 12/22/11 |

• sheet title
VOICE/DATA - DETAILS

• scale: 12" = 1'-0"
• drawn: DT, AH
• checked: SG, SB
• approved: KR, AIA
• date: 11 / 09 / 11

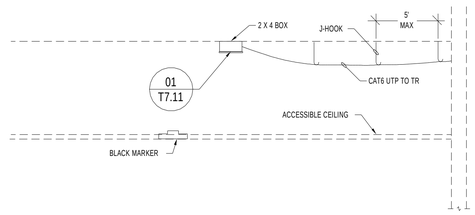
* project no. Project Number

• sheet no. T-7.13




## FLOOR RACK MOUNTING ON RAISED FLOOR 5

No Scale BY SCS INSTALLER-DIV. 17

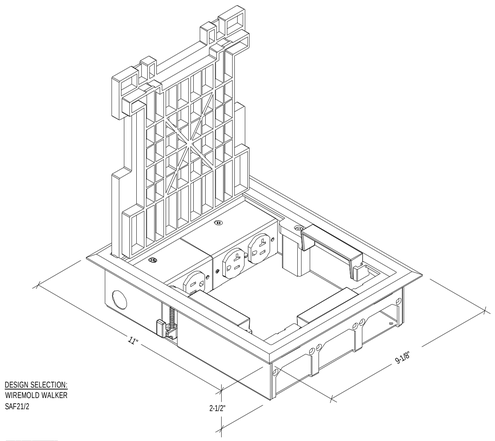



WAP
S01

NOTE:
WIRELESS ACCESS POINT AND ANTENNA NOT IN CONTRACT.

## OUTLET MOUNTING FOR WIRELESS ACCESS POINT 3

No Scale

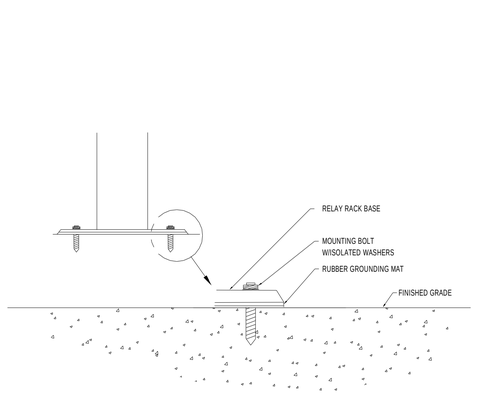



DESIGN SELECTION:
WIREMOLD WALKER
SAF21/2

RL4

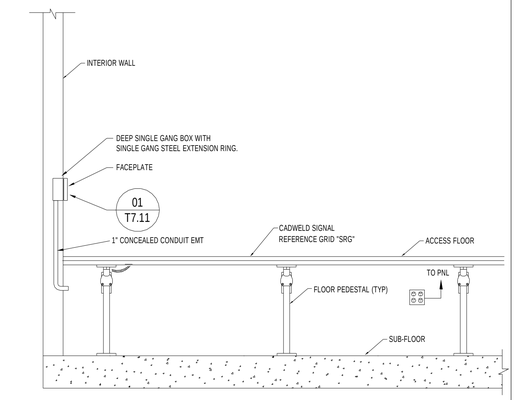
## FLOOR BOX IN RAISED FLOOR 1

No Scale



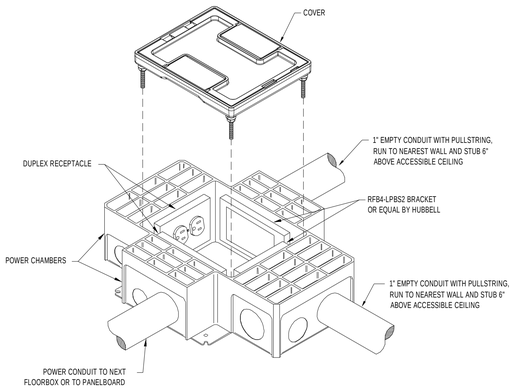

## FLOOR RACK MOUNTING ON SLAB 6

No Scale BY SCS INSTALLER-DIV. 17




## FLUSH OUTLET MOUNTING ON FIXED WALL 4

No Scale TO RAISED FLOOR




DESIGN SELECTION:

WIREMOLD WALKER RFB4

WIREMOLD WALKER RFB4-C1-1FOR SLAB ON GRADE

WIREMOLD WALKER RFB4-SSFOR SLAB ABOVE GRADE

LN

## FLOOR BOX DETAIL 2

No Scale

① VOICE/DATA DETAIL 4
12" = 1'-0"


Wayne Edward Allred, P.E.
Florida License #45800

Seal

TLC ENGINEERING FOR ARCHITECTURE
255 South Orange Avenue
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Phone: 407-841-9050
Fax: 407-540-0234
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Architects and Planners

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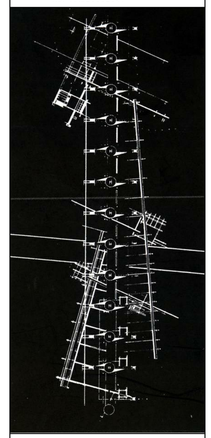

# Lake County Emergency Communications & Operations Center

Lake County,
Florida

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* project no. Project Number

- sheet no. T-7.14

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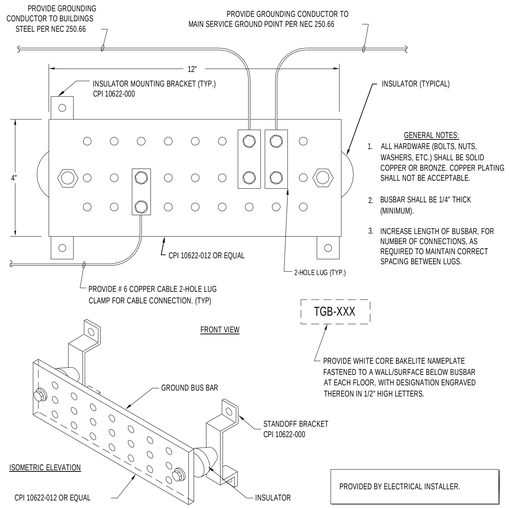
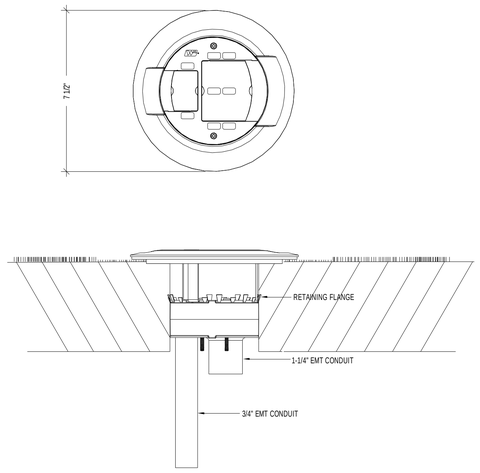
11/9/2011 2:07:37 PM




## GROUND BUS BAR (TYPICAL FOR ALL SHOWN)
No Scale

3



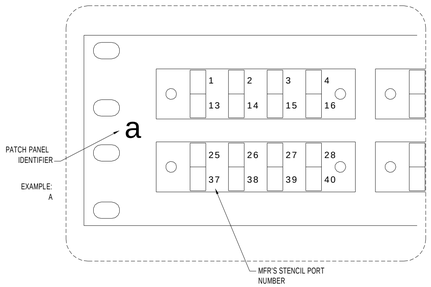

P XN

NOTE: REQUIRED A 4" CORED HOLE (AMERICAN MADE CORE BIT HAVING AND OUTSIDE DIAMETER OF 4-1/16").

DESIGN SELECTION: WIREMOLD EVOLUTION 6AT SERIES

## POKE-THRU - TYPE "A"
No Scale

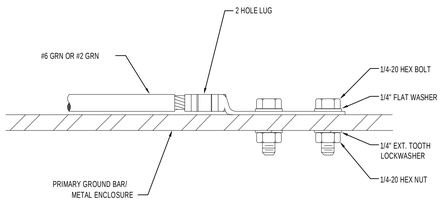
5




ALL LABELING SHALL BE MACHINE GENERATED, AND INSTALLED UNDER FACTORY PLASTIC COVER.

## TYPICAL FIBER OPTIC PATCH PANEL LABELING
No Scale

1




#6 OR #2 GRN TO GROUND BAR OF FLAT SURFACE.

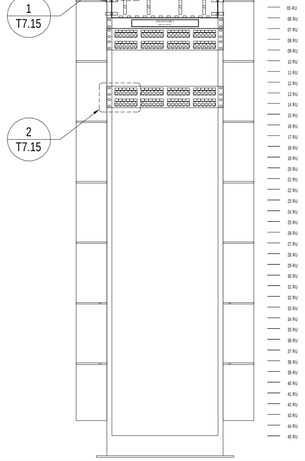
#6 IS USED PRIMARILY AS CABINET TO BUS LINK.

INSTALLATION NOTES:

A. SELECT BOLT LENGTH TO PROVIDE A MINIMUM OF TWO EXPOSED THREADS.
B. BURNISH MOUNTING SURFACE TO REMOVE PAINT IN THE AREA OF LUG CONTACT.
C. APPLY ANTI-OXIDANT COMPOUND TO MATING SURFACE OF LUG AND WIPE CLEAN EXCESS COMPOUND.
D. USE SOLID COPPER WIRE AND MECHANICAL 2-HOLE LUG FOR ALL EXTERIOR GROUNDING.

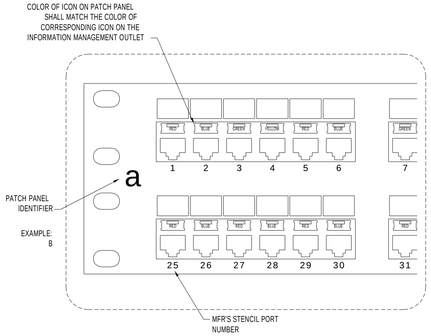
## GROUND BAR 2-HOLE LUG TERMINATION
No Scale

4




## RACK LABELING ELEMENTS
No Scale

6




ALL LABELING SHALL BE MACHINE GENERATED, AND INSTALLED UNDER FACTORY PLASTIC COVER.

## TYPICAL COPPER PATCH PANEL LABELING
No Scale

2

1 VOICE/DATA DETAIL 5
12" = 1'-0"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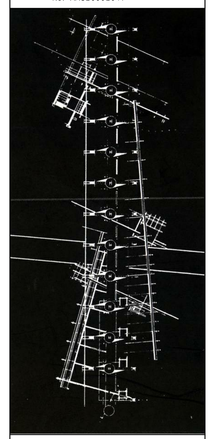

# Lake County Emergency Communications & Operations Center

Lake County, Florida

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- revisions

- sheet title: VOICE/DATA - DETAILS

- scale: 12" = 1'-0"
- drawn: MBR
- checked: JTA
- approved: TLM
- date: 11/09/11

- project no. Project Number

- sheet no. T-7.15

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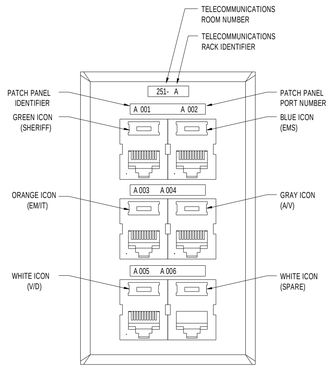
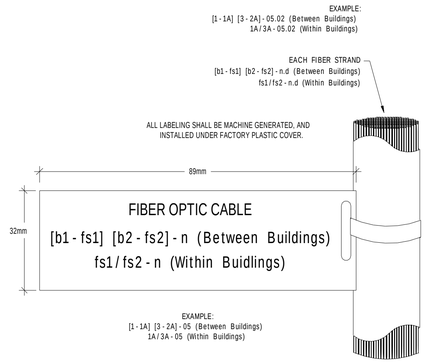
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:

11/9/2011 2:07:39 PM




ALL LABELING SHALL BE MACHINE GENERATED, AND INSTALLED UNDER FACTORY PLASTIC COVER.

## TYPICAL WORK AREA OUTLET LABEL DETAIL
No Scale — 5




LAMINATED ID TAG WITH 4.8mm HIGH BLACK LETTERS ON WHITE BACKGROUND. (IBICO/GBC LUGGAGE TAG WITH LOOP) SECURE TAG WITH HOOK AND LOOP MATERIAL.

## TYPICAL FIBER OPTIC CABLE TAG DETAIL
No Scale — 3

PROVIDE CLASS 3 ADMINISTRATION LABELING PER EIA/TIA-606-A STANDARD MAY 2002 REVISION AND ADDENDUM 1 OF NOVEMBER 2008.

TS = Telecomm space 1.E. Comm Room
fs = the TS identifier
f = numeric character(s) identifying the floor of the building occupied by the TS
s = alpha character(s) uniquely identifying the TS on floor f, or the building area in which the space is located

HORIZONTAL CABLING ELEMENTS
a = one or two alpha characters uniquely identifying a single patch panel, a group of patch panels with sequentially numbered ports, an IDC connector (punch-down block), or a group of IDC connectors, serving as part of the horizontal cross-connect
n = two to four numeric characters designating the port on a patch panel, or the section of an IDC connector on which a four-pair horizontal cable is terminated in the TS

WITHIN BUILDING BACKBONE CABLING ELEMENTS
fs1 = TS identifier for the space containing the termination of one end of the backbone cable
fs2 = TS identifier for the space containing the termination of the other end of the backbone cable
n = one or two alpha-numeric characters identifying a single cable with one end terminated in the TS designated fs1 and the other end terminated in the TS designated fs2.

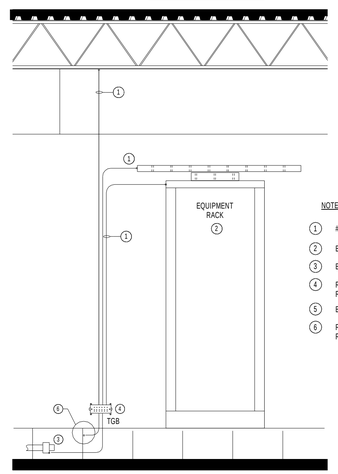
BETWEEN BUILDING BACKBONE CABLING ELEMENTS
fs1/fs2-n = a building backbone cable identifier
d = two to four numeric characters identifying a single copper pair or a single optical fiber

b1fs1 = building identifier and TS identifier for the TS in which one end of the backbone cable is terminated
b2fs2 = building identifier and TS identifier for the TS in which the other end of the backbone cable is terminated
n = one or two alpha-numeric characters identifying a single cable with one end terminated in the TS designated b1fs1 and the other end terminated in the TS designated b2fs2

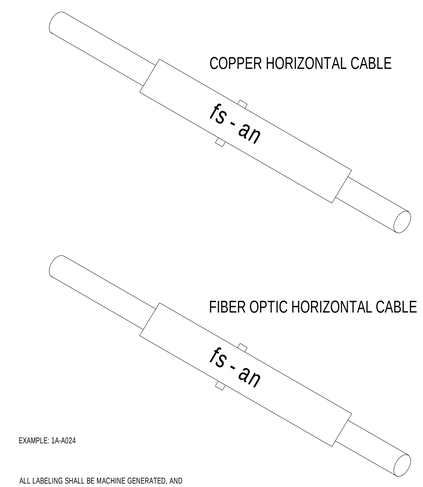
[b1-fs1]/[b2-fs2]-n = campus backbone cable identifier
d = two to four numeric characters identifying a single copper pair or a single optical fiber

NOTE: THIS SHEET PROVIDES EXAMPLES OF SOME ELEMENTS. LABELING SHALL BE PROVIDED TO ALL ELEMENTS PER CLASS 3 ADMINISTRATION.

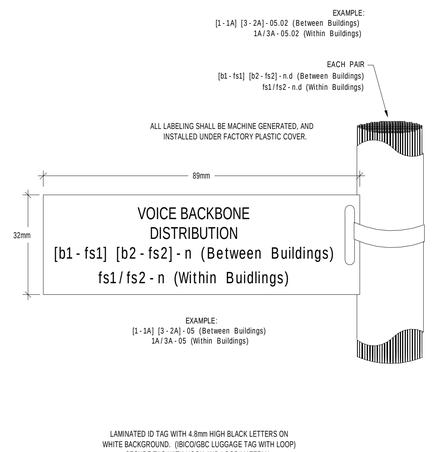
## LABELING GENERAL NOTES
No Scale — 1




## GROUNDING DETAIL (WITH RAISED FLOOR)
No Scale — 6




## TYPICAL HORIZONTAL CABLE I.D. LABEL DETAIL
No Scale — 4




LAMINATED ID TAG WITH 4.8mm HIGH BLACK LETTERS ON WHITE BACKGROUND. (IBICO/GBC LUGGAGE TAG WITH LOOP) SECURE TAG WITH HOOK AND LOOP MATERIAL.

## TYPICAL COPPER CABLE I.D. LABEL DETAIL
No Scale — 2

1 VOICE/DATA DETAIL 6
12" = 1'-0"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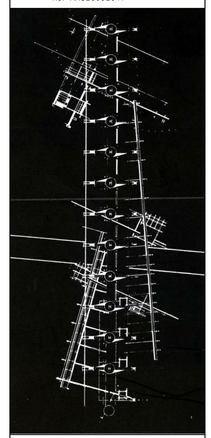

**Lake County Emergency Communications & Operations Center**

Lake County, Florida

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**LAKE COUNTY BUILDING DIVISION**
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Electric: ADM01 12/29/11
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:

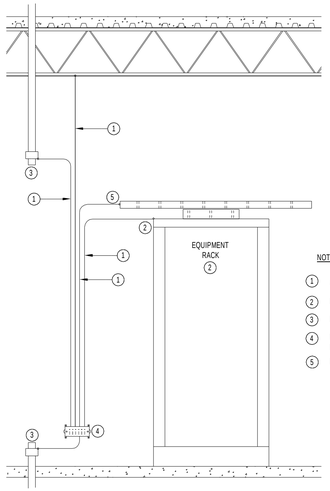
- revisions

- sheet title

VOICE/DATA - DETAILS

- scale: 12" = 1'-0"
- drawn: MBR
- checked: JTA
- approved: TLM
- date: 11/09/11
- project no. Project Number
- sheet no. T-7.16

11/9/2011 2:07:40 PM



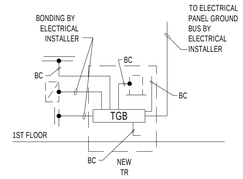

NOTES:

1. #6 AWG COPPER GROUNDING CONDUCTOR.
2. BOND RACKS TO BUSBAR.
3. BOND METAL CONDUIT TO BUSBAR.
4. REFER TO DETAIL 2 OF THIS SHEET AND RISER DIAGRAM FOR TGB CONNECTIVITY.
5. BOND CABLE TRAY & RUNWAY TO BUSBAR.

## GROUNDING DETAIL - TYPICAL TELECOM ROOM 3

No Scale (WITHOUT RAISED FLOOR)

| TBB LENGTH LINEAR M (FT) | TBB SIZE AWG |
|---|---|
| LESS THAN 4 (13) | 6 |
| 4-6 (14-20) | 4 |
| 6-8 (21-26) | 3 |
| 8-10 (27-33) | 2 |
| 10-13 (34-41) | 1 |
| 13-16 (42-52) | 1/0 |
| 16-20 (53-66) | 2/0 |
| GREATER THAN 20 (66) | 3/0 |

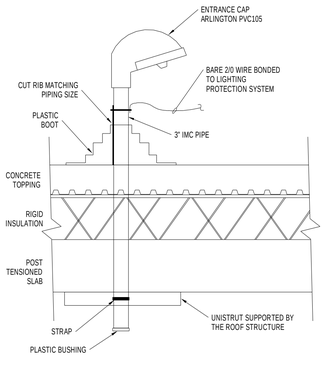



## GROUNDING AND BONDING DIAGRAM 1

No Scale

### ABBREVIATION SCHEDULE

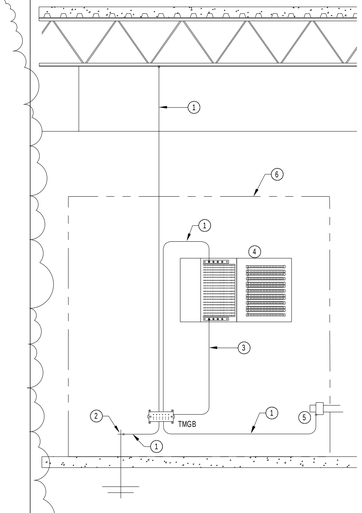
| | |
|---|---|
| BCT | BONDING CONDUCTOR FOR TELECOMMUNICATIONS. |
| TR | TELECOMMUNICATIONS ROOM. |
| TEF | TELECOMMUNICATIONS ENTRANCE FACILITY. |
| TER | TELECOMMUNICATIONS EQUIPMENT ROOM. |
| TBB | TELECOMMUNICATIONS BONDING BACKBONE. |
| BC | BONDING CONDUCTOR. SHALL BE #6 AWG. UNLESS OTHERWISE NOTED BY COMMUNICATIONS CABLING INSTALLER. |
| TGB | TELECOMMUNICATIONS GROUNDING BUSBAR. |
| TMGB | TELECOMMUNICATIONS MAIN GROUNDING BUSBAR. |
| | RACK CONNECTION. |
| | ELECTRICAL PANELBOARD SERVING EQUIPMENT IN THIS COMM ROOM. |
| • | CABLE BOND CONNECTIONS MADE W/U.L. LISTED BONDING CONNECTION FASTENERS. |
| | CABLE TRAY CONNECTION |
| | METAL FRAME OF BUILDING CONNECTION. |
| | CONDUIT/SLEEVES. |




SECTIONAL VIEW

## GOOSENECK ROOF PENETRATIONS 4

No Scale




NOTES:

1. #6 AWG COPPER GROUNDING CONDUCTOR.
2. SUPPLEMENTAL GROUNDING ELECTRODE (NEC 800-11c).
3. #6 AWG COPPER GROUNDING CONDUCTOR & 5' COIL FOR CONNECTION TO OVERCURRENT PROTECTIVE DEVICE.
4. PROTECTION FIELD.
5. BOND METAL CONDUIT TO BUSBAR.
6. PLYWOOD BACKBOARD.

## ENTRANCE FACILITY GROUNDING DETAIL 2

No Scale

1 VOICE/DATA DETAIL 7
12" = 1'-0"

LAKE COUNTY FLORIDA

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Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:


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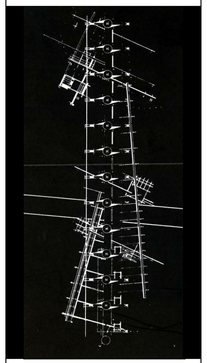

**Lake County Emergency Communications & Operations Center**

Tavares, Florida

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• revisions / addenda

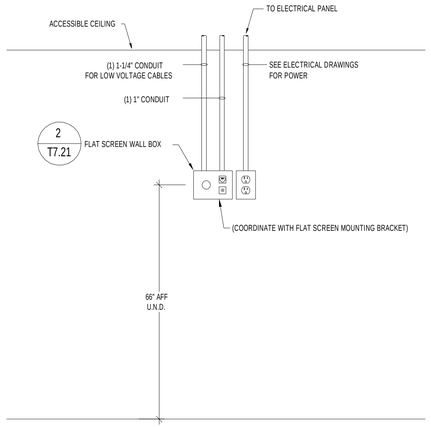
| Number | Description | Date Issued |
|---|---|---|
| 1 | ADDENDUM #1 | 12/16/11 |

• sheet title
VOICE/DATA - DETAILS

• scale: 12" = 1'-0"
• drawn: DT, AH
• checked: SG, SB
• approved: KR, AIA
• date: 11/09/11

* project no. Project Number

• sheet no. T-7.17



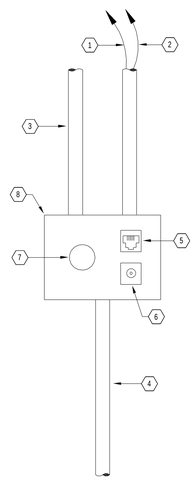

## FLAT SCREEN INFRASTRUCTURE DETAIL

No Scale

1

DETAIL NOTES:

1. PROVIDE (1) RG6 COAX CABLE TO AV ROOM #210. TERMINATE CABLE AT BOX WITH "F" CONNECTOR AND AT ROOM #210 TERMINATE WITH "F" CONNECTOR AND PROVIDE 6'-0" SERVICE LOOP.
2. PROVIDE (1) CAT6 CABLE TERMINATED AT OUTLET WITH RJ45 CONNECTOR AND AT THE AREA NETWORK CLOSET ON RACK MOUNTED PATCH PANEL.
3. PROVIDE (1) 1-1/4" CONDUIT TO AN ACCESSIBLE LOCATION ABOVE THE CEILING.
4. IN RAISED FLOOR AREAS PROVIDE (1) 1-1/4" CONDUIT TO AN ACCESSIBLE LOCATION BELOW THE FLOOR.
5. PROVIDE RJ45 JACK INSTALLED IN FACE PLATE.
6. PROVIDE "F" INSTALLED INSTALLED IN FACE PLATE.
7. PROVIDE 1-1/4" OPENING IN FACEPLATE FOR FUTURE AV CABLES.
8. PROVIDE DOUBLE GANG BACK BOX, TRIM RING AND COVER PLATE.




## FLAT SCREEN WALL BOX

No Scale

2

1 AUDIO/VIDEO DETAILS 1
12" = 1'-0"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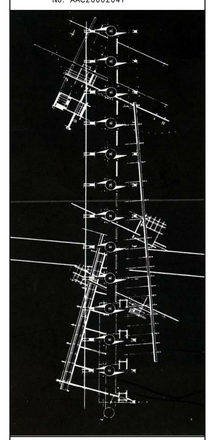

# Lake County Emergency Communications & Operations Center

Lake County, Florida

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- revisions

- sheet title

AUDIO/VIDEO - DETAILS

- scale: 12" = 1'-0"
- drawn: MBR
- checked: JTA
- approved: TLM
- date: 11/09/11

* project no. Project Number

- sheet no. T-7.21

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FLORIDA
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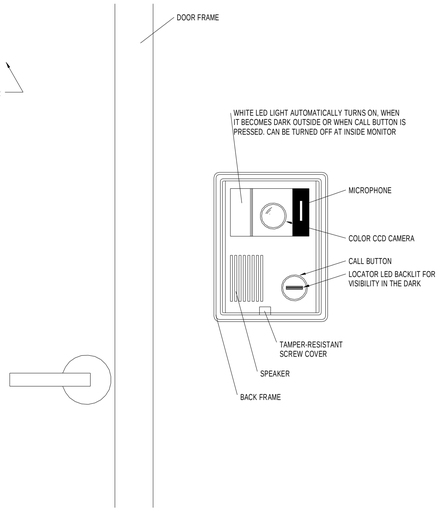
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:

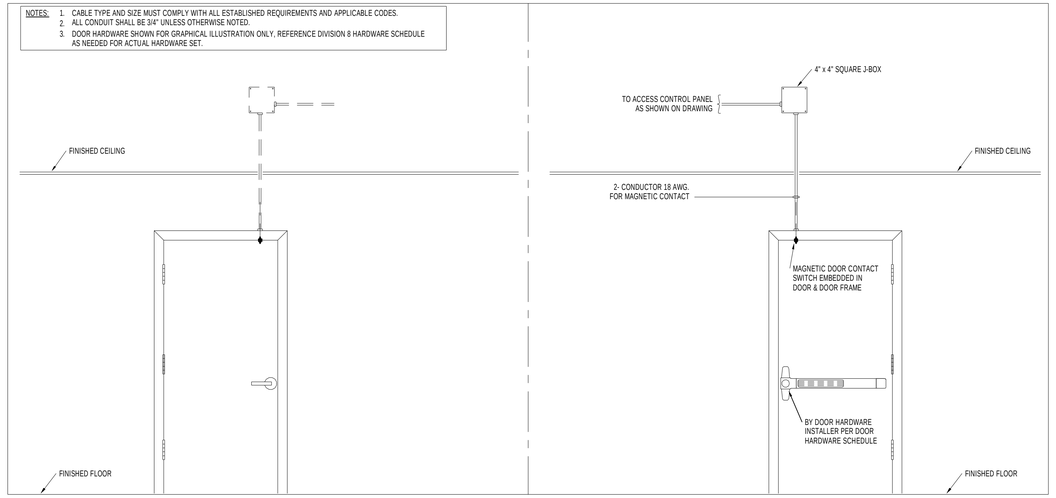
11/9/2011 2:07:41 PM




## INTERCOM W/ CCTV CAMERA

No Scale

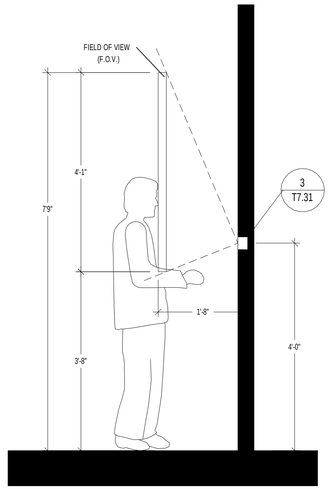
3




## SECURITY SINGLE DOOR - MAGNETIC DOOR POSITION SWITCH (DPS)

No Scale

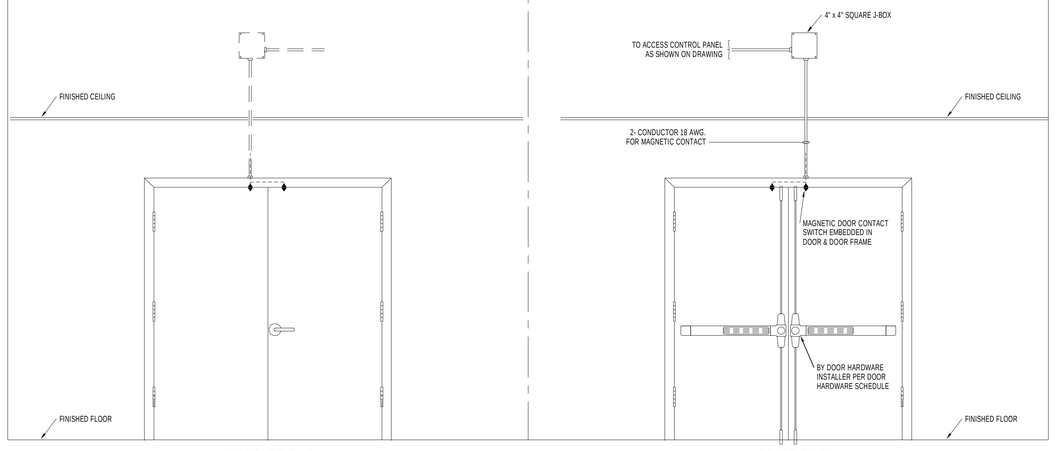
1




## INTERCOM W/ CCTV CAMERA - MOUNTING, F.O.V.

No Scale

4




## SECURITY DOUBLE DOOR - MAGNETIC DOOR POSITION SWITCH (DPS)

No Scale

2

1 SECURITY DETAILS 1
12" = 1'-0"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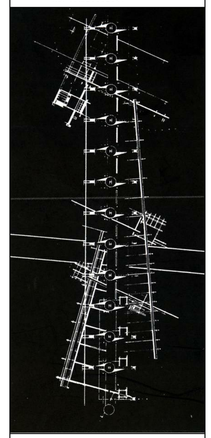
(407) 647-1706
Corporate Registration No. AAC26002047

# Lake County Emergency Communications & Operations Center

Lake County, Florida

**PERMIT CD SUBMITTAL**

The architect hereby expressly reserves his common law copyright and other property rights in these drawings. These drawings shall not be reproduced without written permission and consent of the architect, nor are they to be assigned to any party without first obtaining written permission and consent.

- revisions

LAKE COUNTY FLORIDA
**Approved Plans - Commercial**
**LAKE COUNTY BUILDING DIVISION**
Any errors or omission in these plans shall be made to conform with the applicable code requirements per Florida Building Code 105.4.1
Plans reviewed for code compliance and shall be kept on site
Permit # 2011110212
Building: BLD31 12/29/11
Electric: ADM01 12/29/11
Mechanical: BLD31 12/1/11
Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:

- sheet title

SECURITY - DETAILS

- scale: 12" = 1'-0"
- drawn: MBR
- checked: JTA
- approved: TLM
- date: 11/09/11

* project no. Project Number

- sheet no. T-7.31

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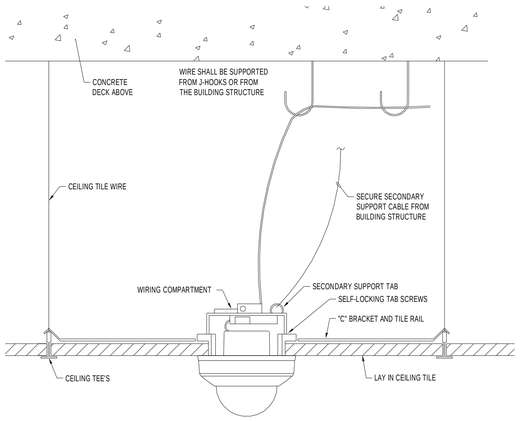
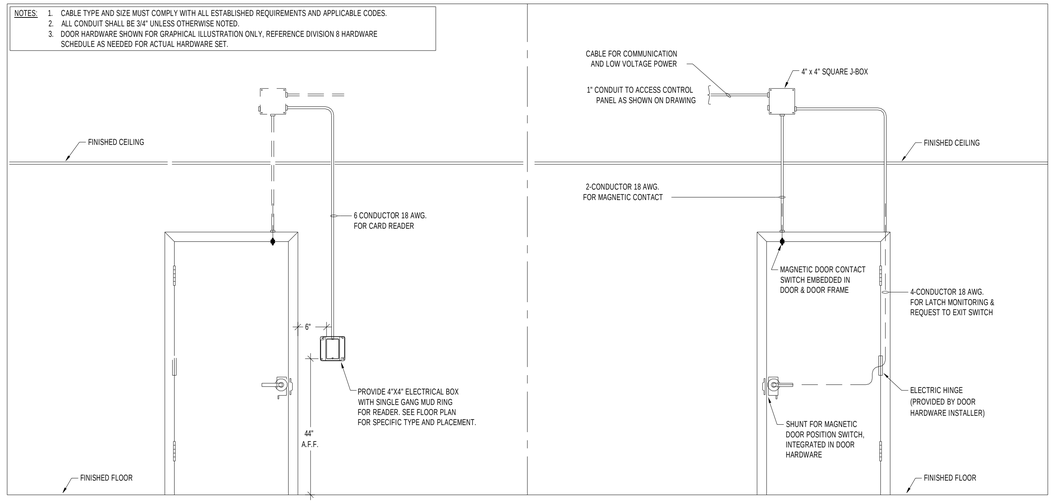



INTERIOR FIXED CAMERA RECESSED MOUNTED
No Scale

3

NOTES:
1. CABLE TYPE AND SIZE MUST COMPLY WITH ALL ESTABLISHED REQUIREMENTS AND APPLICABLE CODES.
2. ALL CONDUIT SHALL BE 3/4" UNLESS OTHERWISE NOTED.
3. DOOR HARDWARE SHOWN FOR GRAPHICAL ILLUSTRATION ONLY, REFERENCE DIVISION 8 HARDWARE SCHEDULE AS NEEDED FOR ACTUAL HARDWARE SET.




SECURITY SINGLE DOOR - ELECTRIC MORTISE LOCK WITH CARD READER OR KEY PAD
No Scale

1

NOTES:
1. CABLE TYPE AND SIZE MUST COMPLY WITH ALL ESTABLISHED REQUIREMENTS AND APPLICABLE CODES.
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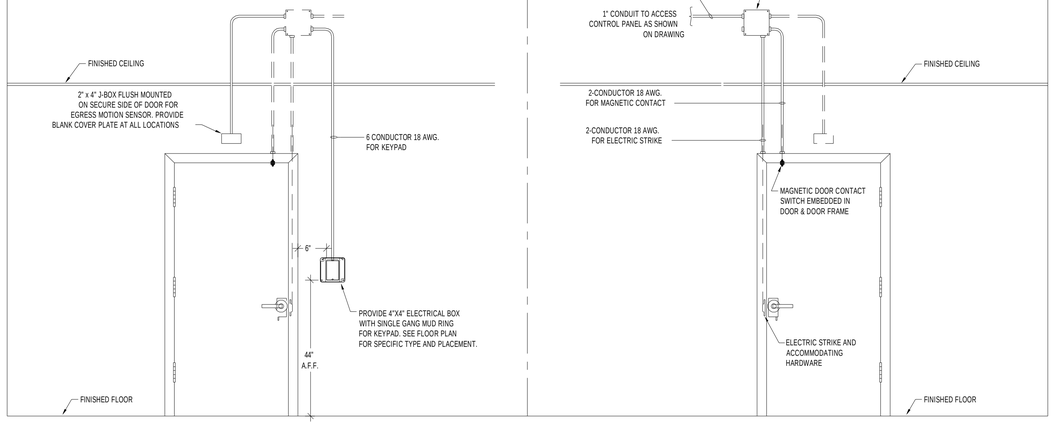
3. DOOR HARDWARE SHOWN FOR GRAPHICAL ILLUSTRATION ONLY, REFERENCE DIVISION 8 HARDWARE SCHEDULE AS NEEDED FOR ACTUAL HARDWARE SET.




SECURITY SINGLE DOOR - ELECTRIC STRIKE WITH CARD READER AND DPS
No Scale

2

1 SECURITY DETAILS 2
12" = 1'-0"


Wayne Edward Allred, P.E.
Florida License #45800

Seal

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EB #0000015 TLC NO: 110814

Architects Design Group, Inc.

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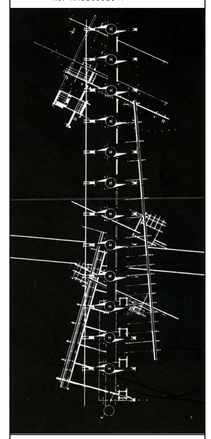
Corporate Registration No. AAC26002047

# Lake County Emergency Communications & Operations Center

Lake County, Florida

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- sheet title

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- sheet no. T-7.32

LAKE COUNTY FLORIDA
**Approved Plans - Commercial**
**LAKE COUNTY BUILDING DIVISION**
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Plumbing: BLD31 12/27/11
Fire: FIR08 12/29/11
Notes:

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