# CASTLE HILL ACADEMY

SW WOO) DBRANCH LN, LAKE CITY COLUMBIA COUNTY, FLORIDA

# DAY'CARE CENTER

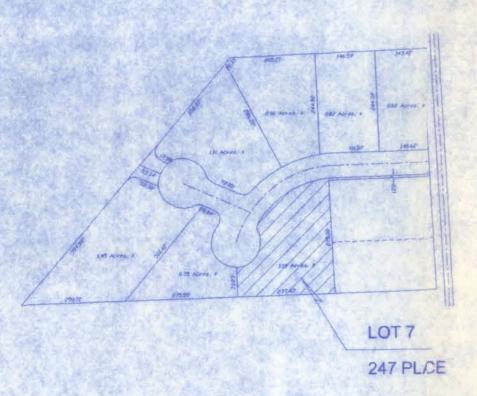
CASTLE HILL ACADEMY
DAY CARE CENTER
NEW CONSTRUCTION 1.15± ACRES PROJECT LOCATION: LAKE CITY, FLORIDA
PARCEL IDs: # 02918-107
ZONING: COMMERCIAL INTENSIVE (CI)

EXISTING USE: NONE
FUTURE LAND USE PLAN MAP CATEGORY: CI

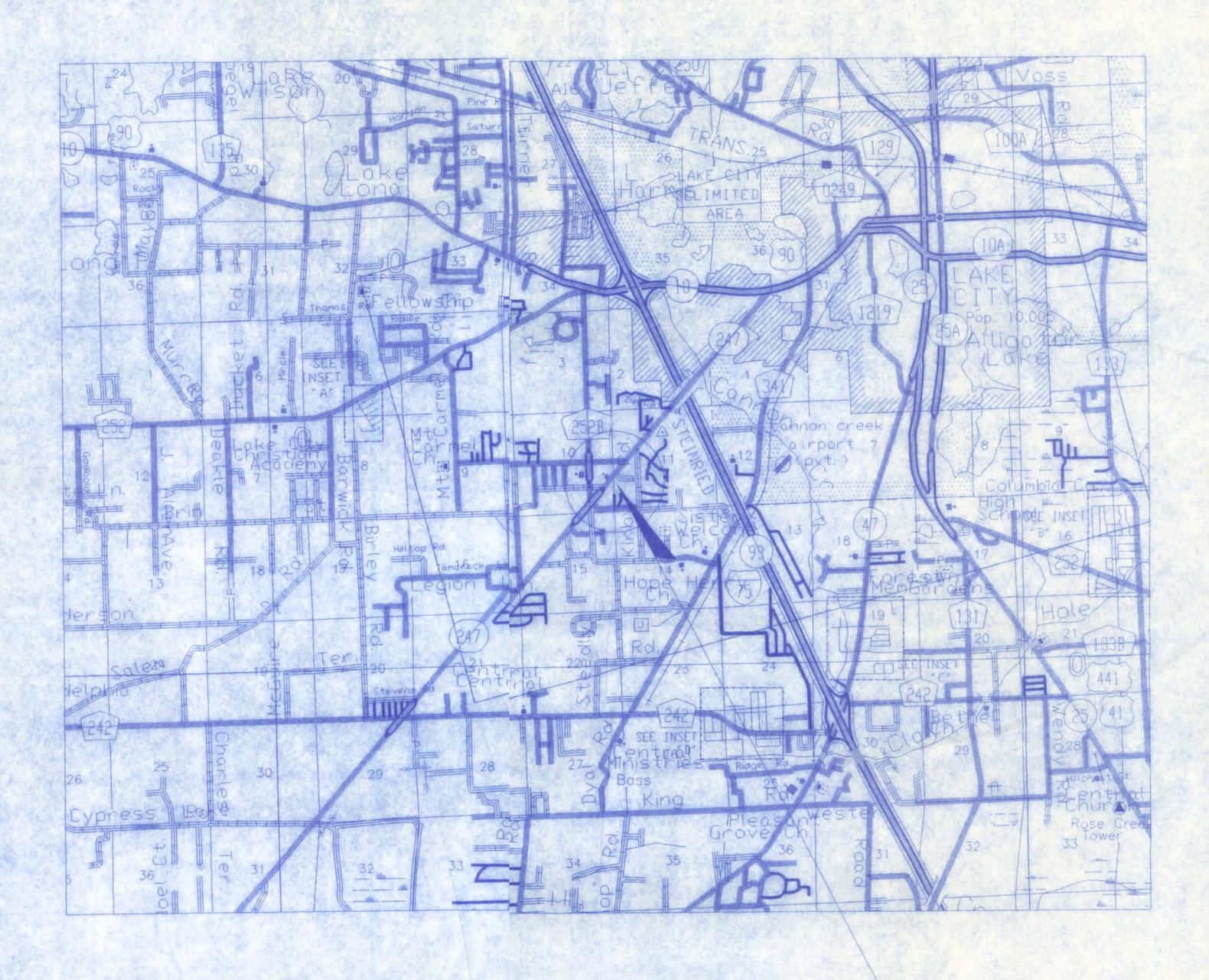
Development Information

# INDEX OF DRAWINGS

SHEET NO.	DESCRIPTION
SP-1 SP-2 SP-3 SP-4 SP-5	GENERAL NOTE SITE PLAN GRADING PLAN SITE DETAILS DRIVEWAY CONECTION
LS-1 LS-2 A-1 A-2 A-3 A-4 A-5 A-6 A-7 A-8 A-9 A-10 A-11	LIFE SAFTEY LAOUT ALARM LAYOUT GENERAL NOTE FLOOR PLAN ELEVATION (1 C 2) ELEVATION (2 C 2) FOUNDATION PAN ROOF PLAN SECTIONS FRAMING DETAS WALL SECTION ND DETAILS DOOR AND FINIH SCHEDULES SHEARWALL LAOUT
P-1 M-1 E-1 E-2 SAN-1	PLUMBING LAY/UT HVAC LAYOUT ELECTRICAL AN LIGHTING PLAN ELECTRICAL PAIEL DIAGRAMS SEPTIC PLAN



VICINITY MAP NOT TO SCALE



PROJECT LOCATION



# PLANS PREPARED FOR:

CASTLE HILL ACADEMY LOCAL CONTACT: THERESA BOYETTE 1925 SE CR 245 LAKE CITY, FLORIDA 32025 (386) 719-9922

# ENGINEER AND PLANNER:



128 SW NASSAU STREET LAKE CITY, FL. 32025 (386) 758-4209 CERTIFICATE OF AUTHORIZATION # 00008701

THE SCALE OF THESE PLANS MAY HAVE BEEN CHANGED DUE TO REPRODUCTION



P.E. NO: 56001

GENERAL PROJECT DATA

FOR IDENTIFICATION OF CONTRACTUAL AGREEMENTS, THIS SE OF DRAWINGS IS DATED AS SHOWN. ANY REVISIONS THEREAFTER WILL BE NOTED AND ATED ON THE AFFECTED DRAWINGS(S).

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

### DRAINAGE SYSTEMS

THE CONTRACTOR SHALL PERFORM ALL WORK PERTAINING TORAINAGE INCLUDING EXCAVATION OF WRA'S PRIOR TO THE COMMENCEMENT OF OTHER WORK INCLUDED IN THESE PLANS. THE DRAINAGE FACILITIES SHALL BE MAINTAINED BY THE CONTRACTOR DURING THE COURSE OF THIS CONTRACT. THE CONTRACTOR SHALL INCLUDE FUNDS IN THE DRAINAGE COSTSOF THE CONTRACT TO OPERATE AND MAINTAIN THE DRAINAGE SYSTEMS DURING THE WORK PROCES.

THE CONTRACTOR IS TO OBTAIN A COPY OF THAT SOILS REPOT FOR REVIEW PRIOR TO CONSTRUCTION; AND THE CONSTRUCTION IS TO CONFORM TO THE RECOMMENDATIONS IN THAT REPORT.

### AS-BUILTS

AS-BUILTS SHALL BE PROVIDED BY THE CONTRACTOR TO THE NGINEER TWO WEEKS PRIOR TO FINAL INSPECTION. ALL AS-BUILT DATA SHALL BE PROVIDED B'A FLORIDA LICENSED SURVEYOR, SIGNED, SEALED, AND DATED BY THE RESPONSIBL PARTY. SEE INDIVIDUAL SECTIONS (STORM, WATER SYSTEM, ETC.) FOR ADDITIONAL ASSUILT REQUIREMENTS.

### PERMITS AND PERMIT REQUIREMENTS

THE CONTRACTOR SHALL OBTAIN FROM THE OWNER COPIES & ALL REGULATORY AND LOCAL AGENCY PERMITS. THE CONTRACTOR SHALL BE EXPECTED TOREVIEW 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 CONTRACTOFSHALL PROVIDE FOR THE LAYOUT OF ALL OF THE WORK TO BE CONSTRUCTED. BENCHMARK INFORMATIN SHALL BE PROVIDED TO THE CONTRACTOR BY THE OWNER OR OWNER'S SURVEYOR. ANY ISCREPANCIES 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 OWNER/OERATOR, COUNTY, AND THE ENGINEER. TESTING REQUIREMENTS ARE TO BE IN ACCORDANCE WITH THE OWNER/OPERATOR'S SPECIFICATIONS AND REQUIREMENTS. ALL TEST RESULTS SHLL BE PROVIDED (PASSING AND FAILING) ON A REGULAR AND IMMEDIATE BASIS. CONTRACTORSHALL PROVIDE TESTING SERVICES THROUGH A FLORIDA LICENSES GEOTECHNICAL ENINEERING FIRM ACCEPTABLE TO THE OWNER AND ENGINEER. CONTRACTOR TO SUBMIT TESTING FIRM TO OWNER FOR APPROVAL PRIOR TO COMMENCING TESTING.

### SHOP DRAWINGS

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

### **EARTHWORK**

### EARTHWORK QUANTITIES

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

## EROSION CONTROL

EROSION AND SILTATION CONTROL MEASURES ARE TO BE PROIDED AND INSTALLED PRIOR TO COMMENCEMENT OF CONSTRUCTION. THESE MEASURES ARE O BE INSPECTED BY THE CONTRACTOR ON A REGULAR BASIS AND ARE TO BE MAINTAIND OR REPAIRED ON AN IMMEDIATE BASIS, AS REQUIRED. REFER TO WATER MANAGEMENT DISTRICT PERMIT FOR ADDITIONAL REQUIREMENTS FOR EROSION CONTROL AND SUFACE DRAINAGE.

### LIMITS OF DISTURBANCE

AT NO TIME SHALL THE CONTRACTOR DISTURB SURROUNDING PROPERTIES OR TRAVEL ON SURROUNDING PROPERTIES WITHOUT WRITTEN CONSENT FRM 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 COMPESATION SHALL BE PROVIDED.

THE CONTRACTOR SHALL NOTIFY THE OWNER AAND 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. NOTE: THE CONTRACTOR SHALL REFER TO THE LANDSSCAPE PLANS FOR TREE BARRICADING INFORMATION.

### SCREENING

WALLS AND FENCES SHALL BE LANDSCAPED ALLONG THE ENTIRE EXTERIOR SIDE SO THAT ONE-THIRD OR MORE OF THE VERRTICAL FACE OF THE FENCE OR WALL IS SCREENED BY PLANTINGS. THE APPLICANT SHALL BE REQUIRED TO DEMONSTRATE PROVISION FOR ACCESS AND MAINTENANCE OF LANDSCAPING AT THE TIME OF LANDSCAPE OR PLANTING PLANN APPROVAL.

### CLEARING AND GRUBBING

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

### MATERIAL STORAGE/DEBRIS REMOVAL

ALL MATERIALS EXCAVATED SHALL REMAIN THEE PROPERTY OF THE OWNER AND SHALL BE STOCKPILED AT ON-SITE LOCATIONS AS SPECIFIFIED BY THE OWNER. MATERIALS SHALL BE STOCKPILED SEPARATELY AS TO USABLE (NONOORGANIC) 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-ORGANIGO, GRANULAR MATERIAL WITH NOT MORE THAN 10% PASSING THE NO. 200 SIEVE.

### COMPACTION

FILL MATERIALS PLACED UNDER ROADWAYS SHHALL 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 WIJITH 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.

### PAVEMENT AND/OR ROAD AND I R/W WORK

### GENERAL DESIGN INTENT

ALL PAVING SURFACES IN INTERSECTIONS ANUD ADJACENT SECTIONS SHALL BE GRADED TO DRAIN POSITIVELY IN THE DIRECTION SHOWN I BY THE FLOW ARROWS ON THE PLANS AND TO PROVIDE A SMOOTHLY TRANSITIONED DRIVING SURFACEFOR VEHICLES WITH NO SHARP BREAKS IN GRADE, AND NO UNUSUALLY STEEP OR REVVERSE CROSS SLOPES. APPROACHES TO INTERSECTIONS AND ENTRANCE AND EXIT GRADES TO INTERSECTIONS WILL HAVE TO BE STAKED IN THE FIELD AT DIFFERENT GRADES 1THAN THE CENTERLINE GRADES SHOWN ON THE PLANS. IN THESE AREAS, IT MAY ALSO BECOMIVE ADVISABLE TO MAKE MINOR LOCAL FIELD ADJUSTMENTS IN THE CENTERLINE GRADES TO ACCOMPLISH THE PURPOSES OUTLINED. IN ADDITION, THE STANDARD CROWN WILL HAVE TO BE CHANGED IN ORDER TO DRAIN POSITIVELY IN THE AREA OF INTERSECTIONS. IT IS THE COONTRACTORS RESPONSIBILITY TO ACCOMPLISH THE ABOVE AND THE ENGINEER SHALL BE CONSUL'LTED SO THAT HE MAY MAKE ANY AND ALL REQUIRED INTERPRETATIONS OF THE PLANS.

### MATERIALS/CONSTRUCTION SPECIFICATIONS

MATERIALS AND CONSTRUCTION METHODS FOOR THE ROADWAY CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENNT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.

### PAVEMENT SECTION REQUIREMENTS

CONSTRUCTION OF DRIVES AND PARKING SHAALL BE 8" OF STABILIZED SUBBASE WITH A LIMEROCK BEARING RATIO OF (LBR) 40 COMPACTED TO THE MODIFIFIED PROCTOR MAXIMUM DRY DENSITY OF 98% PER AASHTO T-180, 6" OF LIMEROCK BASE COURSEE, (LBR) 100, COMPACTED TO THE MODIFIED PROCTOR MAXIMUM DRY DENSITY OF 98% PER AASHTO TT-180 AND 1 1/4" TYPE S-1 OF VIRGIN ASPHALTIC CONCRETE SURFACE COURSE WITH A MINIMUNIM STABILITY OF 1500 LBS. SUBGRADE PREPARATION AND PAVEMENT INSTALLATION SHALL CONFORM TOO FDOT STANDARDS AND SOILS REPORT RECOMMENDATIONS.

### SIDEWALKS

SIDEWALKS ARE TO BE CONSTRUCTED IN THE AREAS AS SHOWN ON THE CONSTRUCTION PLANS.

THE 5' SIDEWALK SHALL BE CONSTRUCTED OF 4" OF CONCRETE WITH A 28-DAY COMPRESSION

STRENGTH OF 2500 PSI. JOINTS SHALL BE EITHER TOOLED OR SAWCUT AT A DISTANCE OF 5'

LENGTHS, HANDICAPPED RAMPS SHALL BE PROVIDED AT ALL INTERSECTIONS AND BE IN ACCORDANCE WITH STATE REGULATIONS FOR HANDICAP ACCESSIBILITY.

### PAVEMENT MARKINGS/SIGNAGE

PAVEMENT MARKINGS AND SIGNAGE SHALL BE PROVIDED AS SHOWN ON THE CONSTRUCTION PLANS AND SHALL MEET THE REQUIREMENTS OF THE OWNER/OPERATOR. SIGNAGE SHALL BE IN CONFORMANCE WITH MUTCD (LATEST EDITION). A 48-HOUR PAVEMENT CURING TIME WILL BE PROVIDED PRIOR TO APPLICATION OF THE PAVEMENT MARKINGS. REFLECTIVE PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH FDOT INDEX NO. 17352.

### TRAFFIC CONTROL

A MINIMUM OF 2-WAY ONE LANE TRAFFIC SHALL BE MAINTAINED IN THE WORK SITE AREA. ALL CONSTRUCTION WARNING SIGNAGE SHALL BE IN PLACE PRIOR TO COMMENCEMENT OF CONSTRUCTION AND BE MAINTAINED THROUGHOUT CONSTRUCTION. ACCESS SHALL BE CONTINUOUSLY MAINTAINED FOR ALL PROPERTY OWNERS SURROUNDING THE WORK SITE AREA. LIGHTED WARNING DEVICES ARE TO BE OPERATIONAL PRIOR TO DUSK EACH NIGHT DURING CONSTRUCTION.

### CURBING

CURBING SHALL BE CONSTRUCTED WHERE NOTED ON THE CONSTRUCTION PLANS. CONCRETE FOR CURBS SHALL BE DEPARTMENT OF TRANSPORTATION CLASS "1" CONCRETE WITH A 28-DAY COMPRESSION STRENGTH OF 2500 PSI. ALL CURBS SHALL HAVE SAW CUT CONTRACTION JOINTS AND SHALL BE CONSTRUCTED AT INTERVALS NOT TO EXCEED 10'-0" ON CENTER. CONSTRUCTION OF CURBS SHALL BE IN CONFORMANCE WITH FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (1991) SECTION 520 AND DETAILS PROVIDED ON THE CONSTRUCTION PLANS.

### R/W RESTORATION

ALL AREAS WITHIN THE RIGHT-OF-WAY SHALL BE FINISH GRADED WITH A SMOOTH TRANSITION INTO EXISTING GROUND. ALL SWALES SHALL BE STABILIZED IMMEDIATELY AFTER FINAL GRADING. ALL DISTURBED AREAS SHALL BE RAKED CLEAN OF ALL LIMEROCK AND ROCKS AND SODDED AFTER FINAL GRADING IN ACCORDANCE WITH THE CONSTRUCTION PLANS PRIOR TO FINAL INSPECTION. ALL GRASSING (SEED OR SOD) SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL FINAL ACCEPTANCE BY THE OWNER/OPERATOR.

### SITE ACCESS

ALL ACCESS TO THE JOB-SITE FOR CONSTRUCTION AND RELATED ACTIVITIES SHALL BE BY EXISTING STREETS AND ROADS, OR BY THE CONSTRUCTION EASEMENT.

### CONSTRUCTION NOTES:

THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS AT THE JOB SITE TO INSURE THAT ALL NEW WORK WILL FIT IN THE MANNER INTENDED ON THE PLANS. SHOULD ANY CONDITIONS EXIST THAT ARE CONTRARY TO THOSE SHOWN ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF SUCH DIFFERENCES IMMEDIATELY AND PRIOR TO PROCEEDING WITH THE WORK.

THE CONTRACTOR SHALL MAINTAIN THE CONSTRUCTION SITE IN A SECURE MANNER.

ALL OPEN TRENCHES AND EXCAVATED AREAS SHALL BE PROTECTED FROM ACCESS BY THE GENERAL PUBLIC.

ALL EROSION CONTROL MEASURES SHALL BE IMPLEMENTED PRIOR TO CONSTRUCTION.

THE STORMWATER BASIN SHALL BE CONSTRUCTED IN ACCORDANCE WITH CHAPTER 40B-4 F.A.C.

THE RETENTION BASIN SHALL BE CONSTRUCTED INITIALLY TO SERVE AS A SEDIMENT TRAP DURING CONSTRUCTION.

ALL SLOPES OF THE STORMWATER BASIN AND OUTFALL DITCHES SHALL BE SEEDED & MULCHED. ALL SLOPES STEEPER THAN 3:1 SHALL BE STAPLED SOD.

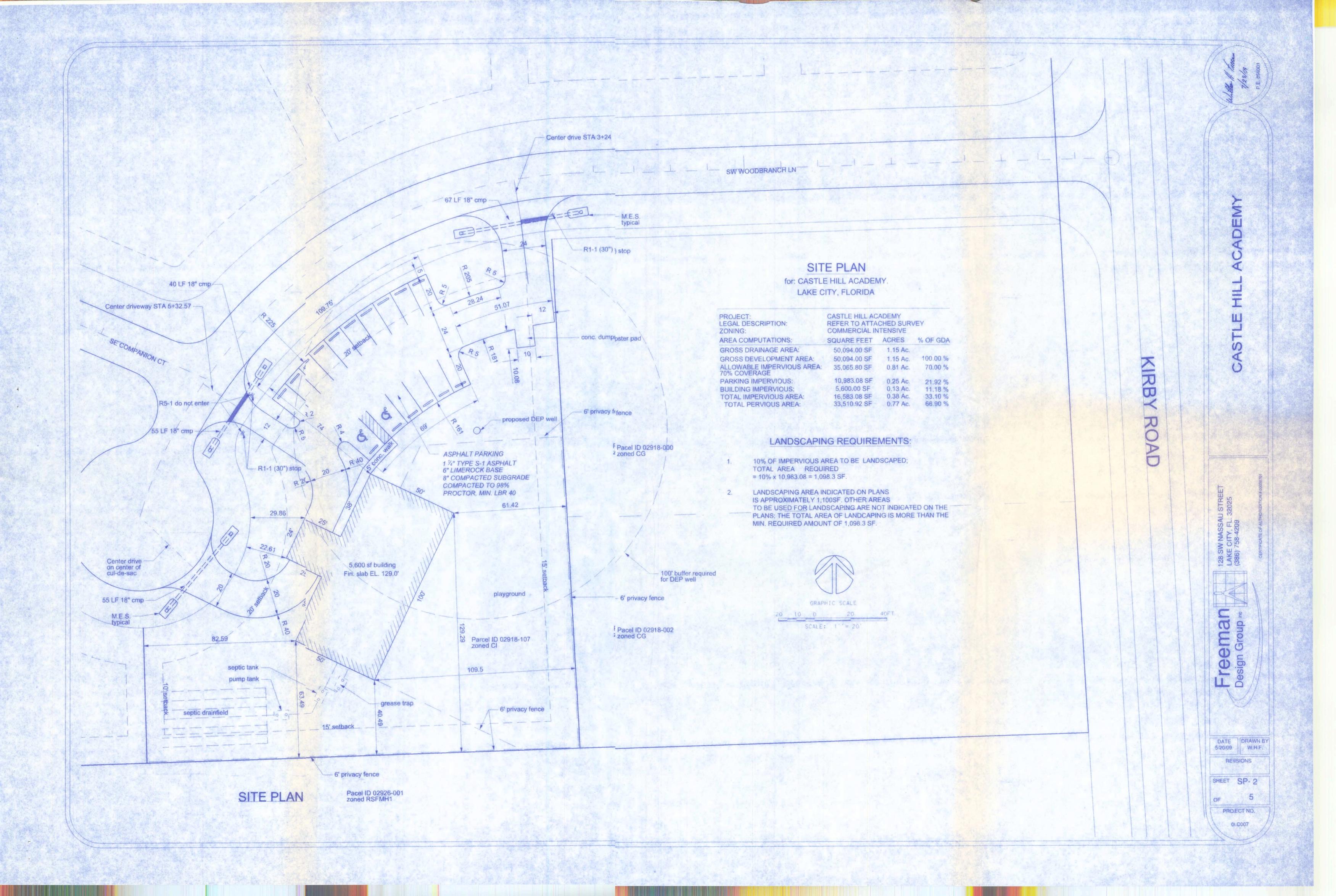
ALL DISTURBED AREAS NOT SODDED SHALL BE SEEDED WITH A MIXTURE OF LONG TERM VEGETATION AND QUICK GROWING SHORT TERM VEGETATION FOR THE FOLLOWING CONDITIONS. FOR THE MONTHS FROM SEPTEMBER THROUGH MARCH, THE MIX SHALL CONSIST OF 70 POUNDS PER ACRE OF LONG TERM SEED AND 20 POUNDS PER ACRE OF WINTER RYE. FOR THE MONTHS OF APRIL THROUGH AUGUST, THE MIX SHALL CONSIST OF 70 POUNDS PER ACRE OF LONG TERM SEED AND 20 POUNDS PER ACRE OF MILLET.

A PAD OF RUBBLE RIP RAP SHALL BE PLACED AT THE BOTTOM OF ALL COLLECTION FLUMES, OUTFALL DITCHES AND COLLECTION PIPE OUTLETS.

EXISTING DRAINAGE STRUCTURES WITHIN THE CONSTRUCTION LIMITS SHALL BE REMOVED.

THE CONTRACTOR SHALL WASTE ALL EXCESS EARTH ON SITE AS DIRECTED BY THE ENGINEER

THE CONTRACTOR SHALL ADHERE TO THE EROSION CONTROL PLAN, SHEET SP-3, BEFORE COMMENCING ANY EARTHWORK ON THE SITE.



### **EROSION AND SEDIMENT CONTROL NOTES:**

EROSION AND SEDIMENTATION CONTROL MEASURES SHALL COMPLY WITH MINIMUM STANDARDS FROM APPLICABLE STORMWATER MANAGEMENT CRITERIA ADOPTED. SOME OF THESE STANDARDS ARE AS FOLLOWS:

- SEDIMENT BARRIERS/SCREENS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED OR INSTALLED AS A FIRST STEP IN ANY LAND DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE.
- 2. ALL SEDIMENT CONTROL MEASURES ARE TO BE ADJUSTED TO MEET FIELD CONDITIONS AT THE TIME OF CONSTRUCTION AND BE INSTALLED PRIOR TO ANY GRADING OF EXISTING SURFACE MATERIAL ON BALANCE OF SITE. PERIMETER SEDIMENT BARRIERS SHALL BE CONSTRUCTED TO PREVENT SEDIMENT AND TRASH FROM FLOWING OR FLOATING ONTO ADJACENT PROPERTIES.
- 3. PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS THAT MAY BE AT FINAL GRADE BUT WILL REMAIN UNDISTURBED FOR LONGER THAN 30 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE LEFT UNDISTURBED FOR MORE THAN ONE YEAR.
- 4. A PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DENUDED AREAS NOT OTHERWISE PERMANENTLY STABILIZED. PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL GROUND COVER IS ACHIEVED THAT, IN THE OPINION OF THE REVIEWER, IS UNIFORM, MATURE ENOUGH TO SURVIVE AND WILL INHIBIT EROSION.
- 5. RAINFALL SHALL BE MEASURED AND RECORDED. ONCE A WEEK OR AFTER RAINFALL AMOUNTS OF 0.5 INCHES OR A FDEP FORM REPORT SHALL BE FAXED TO THE APPROPRIATE FDEP OFFICE. SEDIMENT CONTROL STRUCTURES AND DEVICES WILL BE INSPECTED FOR INTEGRITY. ANY DAMAGED DEVISES SHALL BE CORRECTED IMMEDIATELY.
- ANY CONCENTRATED RUN-OFF SHALL NOT FLOW DOWN CUT SLOPES OR FILL SLOPES, UNLESS CONTAINED WITHIN ADEQUATE TEMPORARY CHANNELS OR SLOPE DRAIN STRUCTURES.
- 7. WHENEVER WATER SEEPS FROM A SLOPE FACE, ADEQUATE DRAINAGE OR OTHER PROTECTION SHALL BE PROVIDED.
- 8. SEDIMENT THAT ENTERS THE STORM SYSTEM SHALL BE FILTERED THROUGH THE USE OF FILTER SCREENS DURING CONSTRUCTION TO MINIMIZE SEVERE SEDIMENT DEPOSITS. PRIOR TO THE PLACEMENT OF FINAL STABILIZATION, SEDIMENT SHALL BE REMOVED FROM AFFECTED AREAS.
- 9. BEFORE TEMPORARY OR NEWLY CONSTRUCTED STORMWATER CONVEYANCE CHANNELS/SWALES ARE MADE OPERATIONAL, ADEQUATE OUTLET PROTECTION AND ANY REQUIRED TEMPORARY OR PERMANENT CHANNEL LINING SHALL BE INSTALLED IN BOTH THE CONVEYANCE CHANNEL/SWALE AND RECEIVING CHANNEL/DITCH.
- 10. PERIODIC INSPECTION AND MAINTENANCE OF ALL SEDIMENT CONTROL STRUCTURES AND DEVICES MUST BE PROVIDED TO ENSURE INTENDED PURPOSE IS ACCOMPLISHED. THE DEVELOPER, OWNER AND/OR CONTRACTOR SHALL BE CONTINUALLY RESPONSIBLE FOR ALL SEDIMENT LEAVING THE PROPERTY. SEDIMENT CONTROL MEASURES SHALL BE IN WORKING CONDITION AT THE END OF EACH WORKDAY.
- 11. WHERE CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED PUBLIC ROADS, PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY TRACKING ONTO THE PAVED SURFACE. ANY SEDIMENT DEPOSITED ONTO PAVED AREAS SHALL BE SWEPT/SHOVELED AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA AT THE END OF EACH DAY. THIS PROVISION SHALL APPLY TO INDIVIDUAL SUBDIVISION LOTS AS WELL AS TO LARGER LAND DISTURBING ACTIVITIES.
- 12. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER THE FINAL SITE STABILIZATION OR AFTER TEMPORARY MEASURES ARE NO LONGER NEEDED. IN THE OPINION OF THE REVIEWER, DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.
- 13. EROSION CONTROL DEVICES SHALL FOLLOW STANDARDS AND DETAILS IN INDEX NUMBERS 100 THROUGH 106 OF THE FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS. CONTROL DEVICES AND TECHNIQUES, AS PROVIDED IN THE FLORIDA STORMWATER, EROSION, AND SEDIMENTATION CONTROL MANUAL SHALL BE IMPLEMENTED TO COMPLY WITH CURRENT STATE REGULATIONS.
- 14. PROPERTIES AND WATERWAYS DOWNSTREAM FROM CONSTRUCTION SITES SHALL BE PROTECTED FROM SEDIMENT DEPOSITION AND EROSION.
- 15. NO CONSTRUCTION WILL OCCUR OUTSIDE THE LIMITS OF CONSTRUCTION.
- 16. THE SITE PLAN IS TO MATCH EXISTING GRADE AT PROPERTY LINES AND EXISTING ROAD WITHIN THE PROPERTY.
- 17. SEE SHEET SP-1 FOR CONSTRUCTION NOTES & DETAILS.

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SASTLE HILL ACADEMY

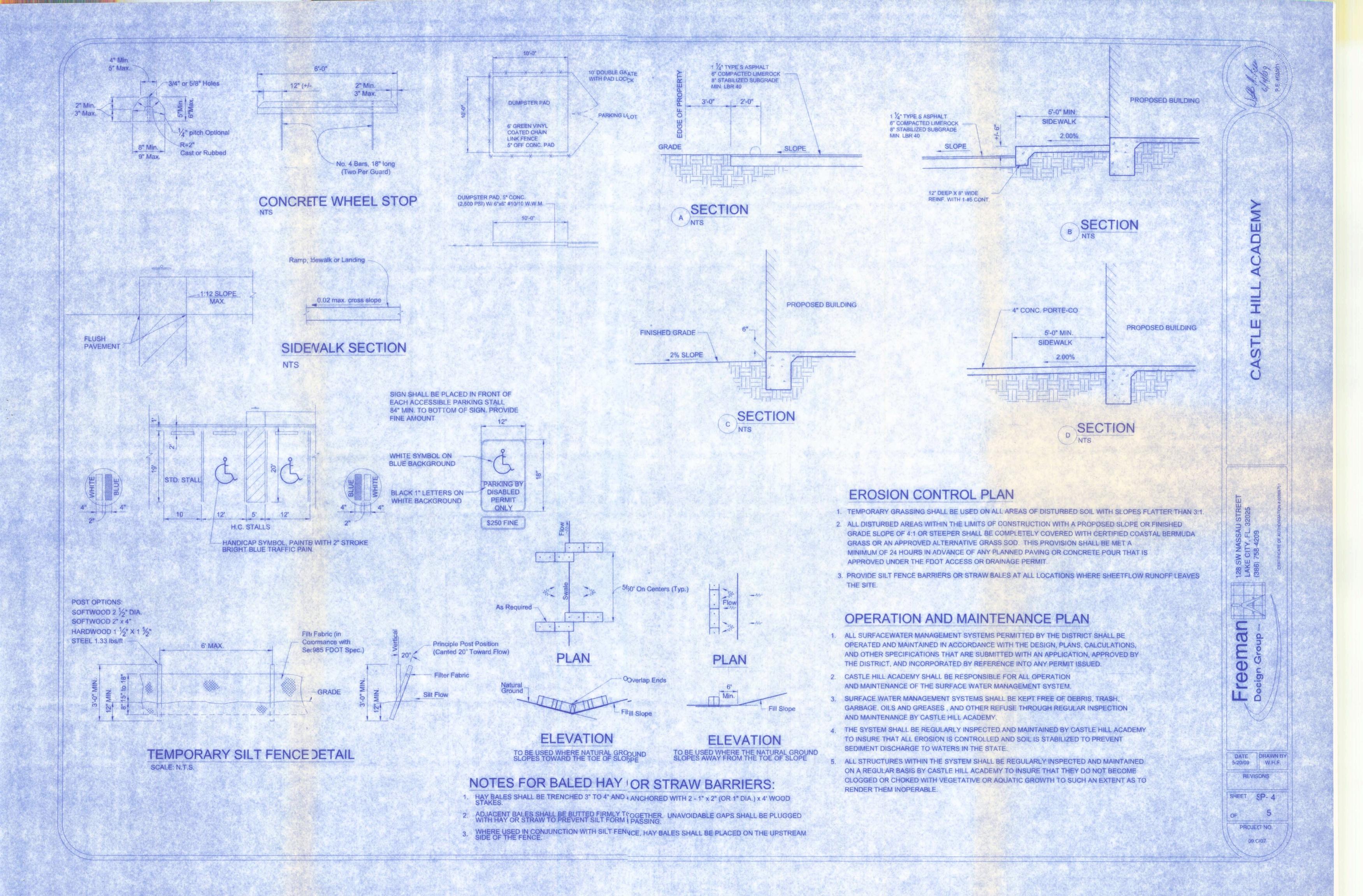
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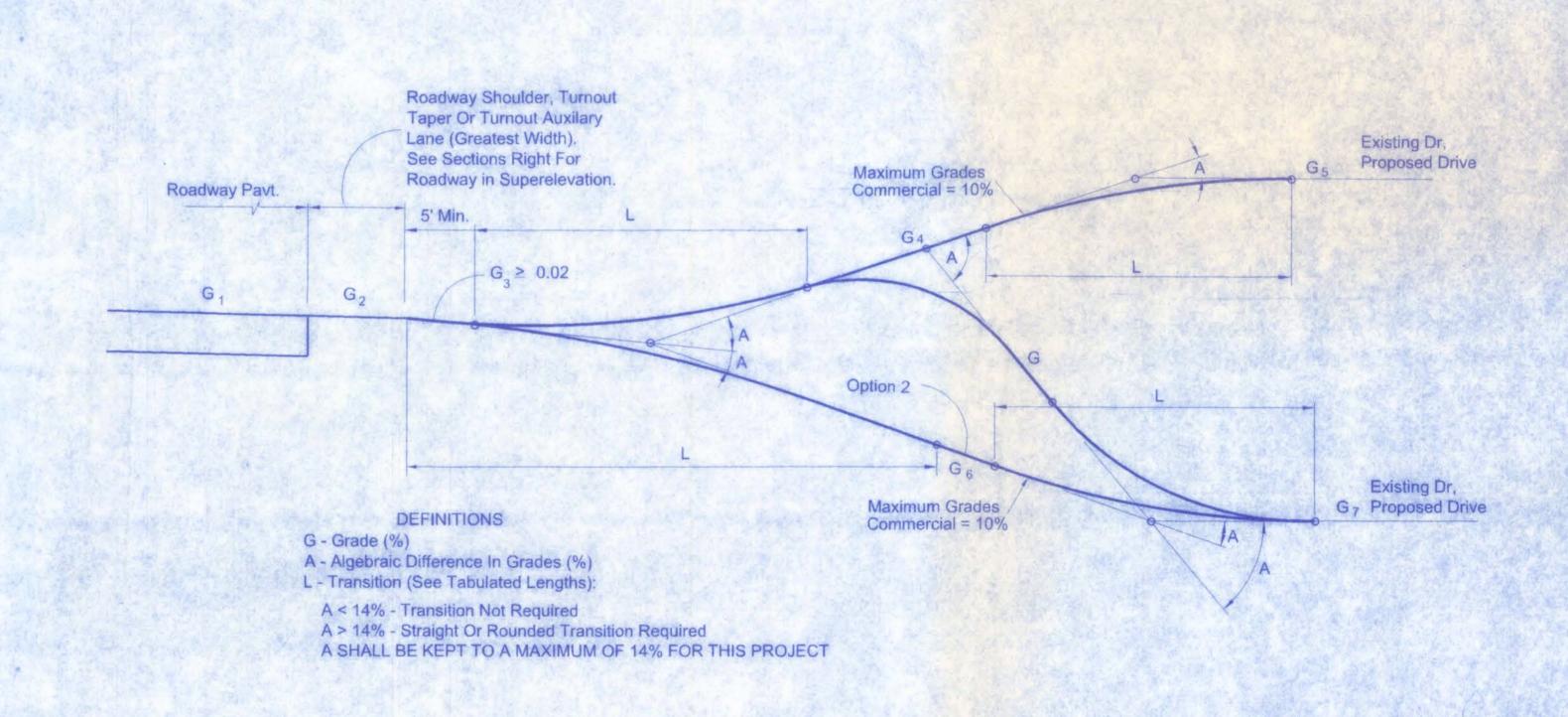
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DATE DRAWN BY W.H.F.

SHEET SP-3

PROJECT NO. 09.(007





ACADEMY

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Freeman Design Group inc

DATE DRAWN BY

5/20/09 W.H.F.

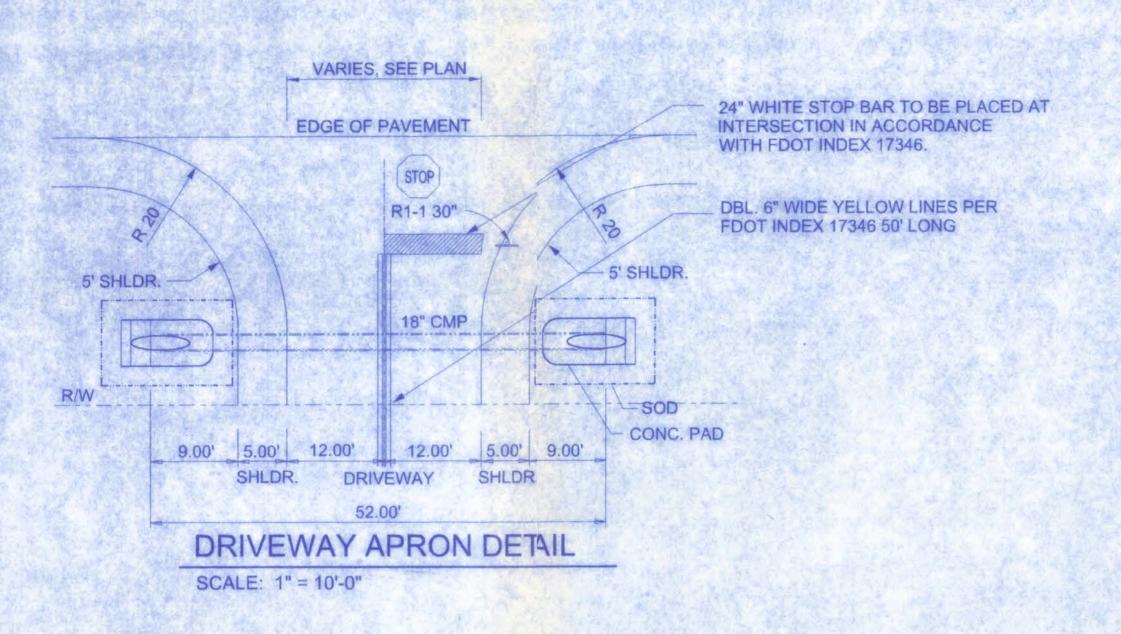
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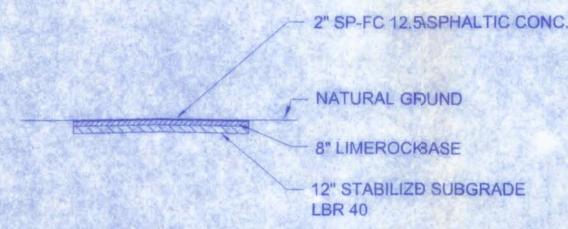
SHEET SP-5

PROJECT NO.

19.C007







TYPICAL PAVEMENT DESIGN PROFILE FROM THE ROAD TO R/W LNE

# SIGNING AND MARKING GENERAL NOTES

ALL FLORIDA ROUTE MARKERS MUST CONFORI TO STANDARD INDEX NO. 17355.

2. PAVEMENT MARKINGS SHOULD BE PLACED AS HOWN IN THE PLANS AND TRAFFIC DESIGN STANDARDS.

3. IT SHALL BE THE RESPONSIBILITY OF THE CONRACTOR TO VERIFY THE LENGTH OF COLUMN SUPPORTS IN THE FIELD PRIOR TO FABRICATION.

4. ALL ROUTE MARKERS AUXILIARIES SHALL MATH THE COLOR COMBINATION OF THE ROUTE MARKER WHICH THEY SUPPLEMENT.

5. REFER TO STANDARD INDEX NO. 17352 FOR RPI PLACEMENT DETAILS.

UNLESS OTHERWISE NOTED IN PLANS, ALL EXITING SIGNS OUTSIDE THE LIMITS OF CONSTRUCTION SHALL REMAIN.

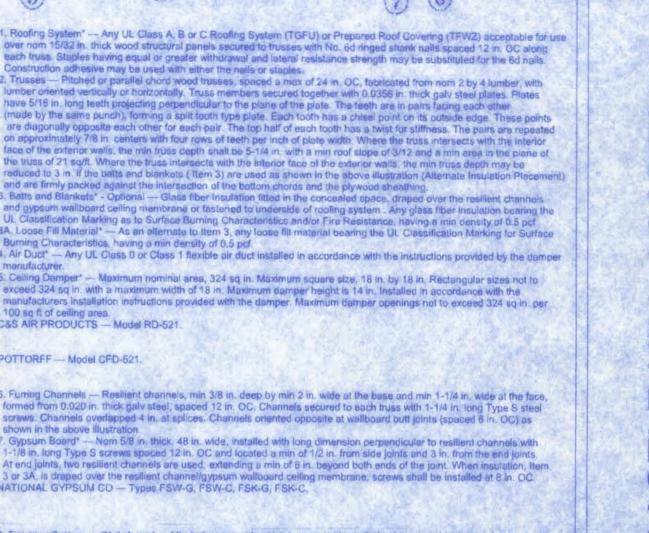
7. IT SHOULD BE NOTED THAT EXISTING SIGNAGEREFLECTS INVENTORY DATA COLLECTED DURING PLANS PREPARATION, AND IT IS POSSIBLE THAT ADDI'ONAL SIGNS MAY BE PRESENT AT THE TIME OF CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE CONTRACTO TO COORDINATE THE DISPOSITION OF SUCH SIGNS WITH

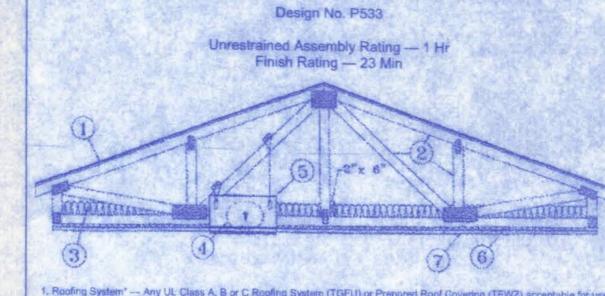
THE PROJECT ENGINEER. 8. ALL STRIPING/PAVEMENT MARKINGS SHALL BEVITH CERTIFIED LEAD-FREE THERMOPLASTIC MATERIALS ONLY.

9. SIGN ASSEMBLY LOCATIONS SHOWN ON THE PANS WHICH ARE IN CONFLICT WITH LIGHTING, UTILITIES, DRIVEWAYS, WHEELCHAIR RAMPS, ETC. MAY BE ADJUSTED LIGHTLY AS DIRECTED BY THE ENGINEER. ANY ADJUSTMENTS, AS

DIRECTED BY THE ENGINEER, SHALL BE IN ACORDANCE WITH THE UTILITY ACCOMMODATION MANUAL. 10. FOR SIGN DETAILS SEE THE MANUAL ON STANARD HIGHWAY SIGNS PUBLISHED BY THE U.S. DEPARTMENT OF TRANSPORATION FEDERAL HIGHWAY ADMINISTRATION, LATEST EDITION.

MITERED END SECTION DETAIL





 Roofing System\* — Any UL Class A, B or C Roofing System (TGFU) or Prepared Roof Covering (TFWZ) acceptable for use
over nom 15/32 in, thick wood structural panels secured to trusses with No. 6d ringed strank nails spaced 12 in, OC along
each truss. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Construction adhesive may be used with either the nails or staples.

Trusses — Pitched or parallel chord wood trusses, spaced a max of 24 in. OC, fabricated from norn 2 by 4 lumber, with lumber oriented vertically or horizontally. Truss members secured together with 0.0356 in thick galv steel plates. Plates have 5/16 in, long teeth projecting perpendicular to the plane of the plate. The teeth are in pairs facing each other (made by the same punch), forming a split tooth type plate. Each tooth has a chisel point on its outside edge. These points are diagonally opposite each other for each pair. The top half of each tooth has a twist for stiffness. The pairs are repeated on approximately 7/8 in centers with four rows of teeth per inch of plate width. Where the truss intersects with the interior ace of the exterior walls, the min truss depth shall be 5-1/4 in, with a min roof slope of 3/12 and a min area in the plane of the truss of 21 sq/ft. Where the truss intersects with the interior face of the exterior walls, the min truss depth may be reduced to 3 in. If the batts and blankets ( Item 3) are used as shown in the above illustration (Alternate Insulation Placement and are firmly packed against the intersection of the bottom chords and the plywood sheathing. 3. Batts and Blankets\* - Optional — Glass fiber insulation fitted in the concealed space, draped over the resilient channels and gypsum wallboard ceiling memorane or fastened to underside of roofing system. Any glass fiber insulation bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance, having a min density of 0.5 pcf

uming Characteristics, having a min density of 0.5 pcf. 4. Air Duct\* — Any UL Class 0 or Class 1 flexible air duct installed in accordance with the instructions provided by the damper 5. Ceiling Damper\* — Maximum nominal area, 324 sq in. Maximum square size, 18 in. by 18 in. Rectangular sizes not to

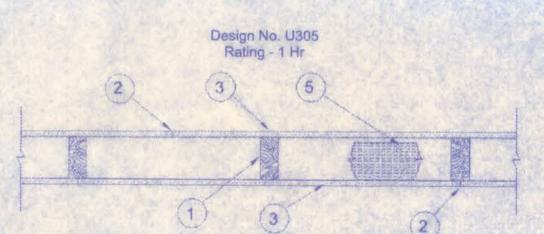
exceed 324 sq in. With a maximum width of 18 in. Maximum damper height is 14 in. Installed in accordance with the manufacturers installation instructions provided with the damper. Maximum damper openings not to exceed 324 sq in. per C&S AIR PRODUCTS - Model RD-521.

POTTORFF - Model CFD-521.

6. Furring Channels — Resilient channels, min 3/8 in. deep by min 2 in. wide at the base and min 1-1/4 in. wide at the face, formed from 0.020 in. thick galv steel, spaced 12 in. OC. Channels secured to each truss with 1-1/4 in. long Type S steel screws. Channels overlapped 4 in. at splices. Channels oriented opposite at wallboard butt joints (spaced 6 in. OC) as shown in the above illustration.

Gypsum Board\* - Nom 5/8 in, thick, 48 in, wide, installed with long dimension perpendicular to resilient channels with 1/8 in. long Type S screws spaced 12 in. OC and located a min of 1/2 in. from side joints and 3 in. from the end joints. At end joints, two resilient channels are used, extending a min of 6 in, beyond both ends of the joint. When insulation, Item 3 or 3A, is draped over the resilient channel/gypsum wallboard ceiling membrane, screws shall be installed at 8 in. OC. NATIONAL GYPSUM CO.— Types FSW-G, FSW-C, FSK-C.

8. Finishing System — (Not shown) — Vinyl, dry or premixed joint compound, applied in two coats to joints and screw-heads paper tape, 2 in. wide, embedded in first layer of compound over all joints. As an alternate, norm 3/32 in. thick veneer plaster may be applied to the entire surface of gypsum wallboard.



1. Wood Studs - Nom. 2 by 4 in, spaced 16" o.c. max, effectively firestopped. 2. Joints an Nail Heads - Exposed or covered with fiber tape and joint compound, except where required for specific edge configuration. For tapered, rounded edge gypsum board, joints covered with joint compound or fiber tape and joint compound. As an alternate, nom 3/32 in, thick gypsum may be applied

to the entire surface of classified veneer baseboard. Joints reinforced. Nailheads exposed or covered Gypsum Board - 5/8" thick paper or vinyl surfaced, with beveled, square, or tapered edges.

applied either horizontally or vertically. Gypsum panels nailed 7 in o.c. 8d cement coated nails 1-7/8 in long, 0.0915 in shank diam and 15/64 in diam heads. When used in widths other than 48 in, gypsum panels are to be installed horizontally. When Item 6, steel framing members is used, gypsum panels attached to furring channels with 1" long Type S bugle head steel screws spaced 12" o.c.

4. Steel Corner Fasteners - (Optional) - For use at wall corners. Channel shaped, 2" long by 1" high on the back side with two 1/8" wide cleats protruding into the 5/8" wide channel, fabricated from 24 gauge galv steel. Fasteners applied only to the end or cut edge of the gypsum board, no greater than 2" from corner of gypsum board, max spacing 16" o.c. Nalled to adjacent stud through tab using one No. 6d cement coated nail per fastener. Corners of wall board shall be nailed to top and bottom plate using No. 6d cement coated nails.

5. Batts and Blankets - (Optional - required when steel framing members used) Glass fiber or mineral wool insulation. Placed to completely or partially fill the stud cavities. When Steel Framing Used, glass fiber or mineral wool insulation shall be placed to completely fill the stud cavities and shall be secured to the studs 24" o.c. with staples nails or screws.

6. Steel Framing Members (Optional, Not Shown) - Furring channels and Steel Framing Members as described below: a. Furring Channels - Formed of No. 25 MSG galv steel spaced 24" o.o. perpendicular to stude. Channels secured to study as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6" and secured together with two self tapping #6 framing screws, min 7/16" long at the midpoint of the overlap, with one screw on each flange of the channel. Gypsum board attached to furning channels as described in Item #3.

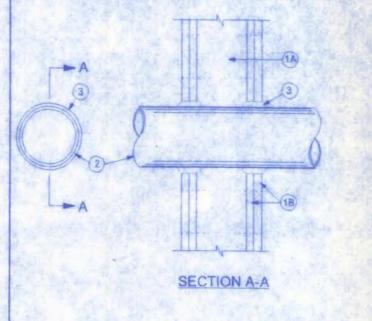
b. Steel Framing Members - Used to attach furring channels to studs. Clips spaced 48" o.c. RSIC-1 clips secured to studs with No. 8 x 2-1/2" coarse drywall screw through the center grammet. RSIC-V clips secured to study with No. 8 x 1-1/2" coarse drywell screw through the center hole, Furring hannels are friction fitted into clips.

Furring Channel - (Optional, Not Shown) - for use on one side of the wall - Resilient channels, 25 MSG galv. steel, spaced vertically 24" o.c., flange portion screw attached to one side of stude

with 1-1/4" long diamond shaped point, double lead Phillips head steel screws.

perimeter for sound control.

8. Caulking and Sealants - (not shown, optional) A bead of acoustical sealant applied around the partition



assembly shall be constructed of the materials and in the manner described in Section 709 FBC 2001 edition and shall include the following construction

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. 2x4 in. lumber and end plates and cross braces. Steel studs to be min. 3-5/8 in.

edges. The gypsum wall board 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. diameter of

concentrically or eccentrically within the firestop system. The annular space between pipe, conduit or tubing and periphery of opening shall be min. of 0 in (point contact) to max. 2 in. Pipe, conduit or tubing to be rigidly supported or both sides of wall assembly. The following types of sizes and metallic pipes, conduits or tubing may be used:

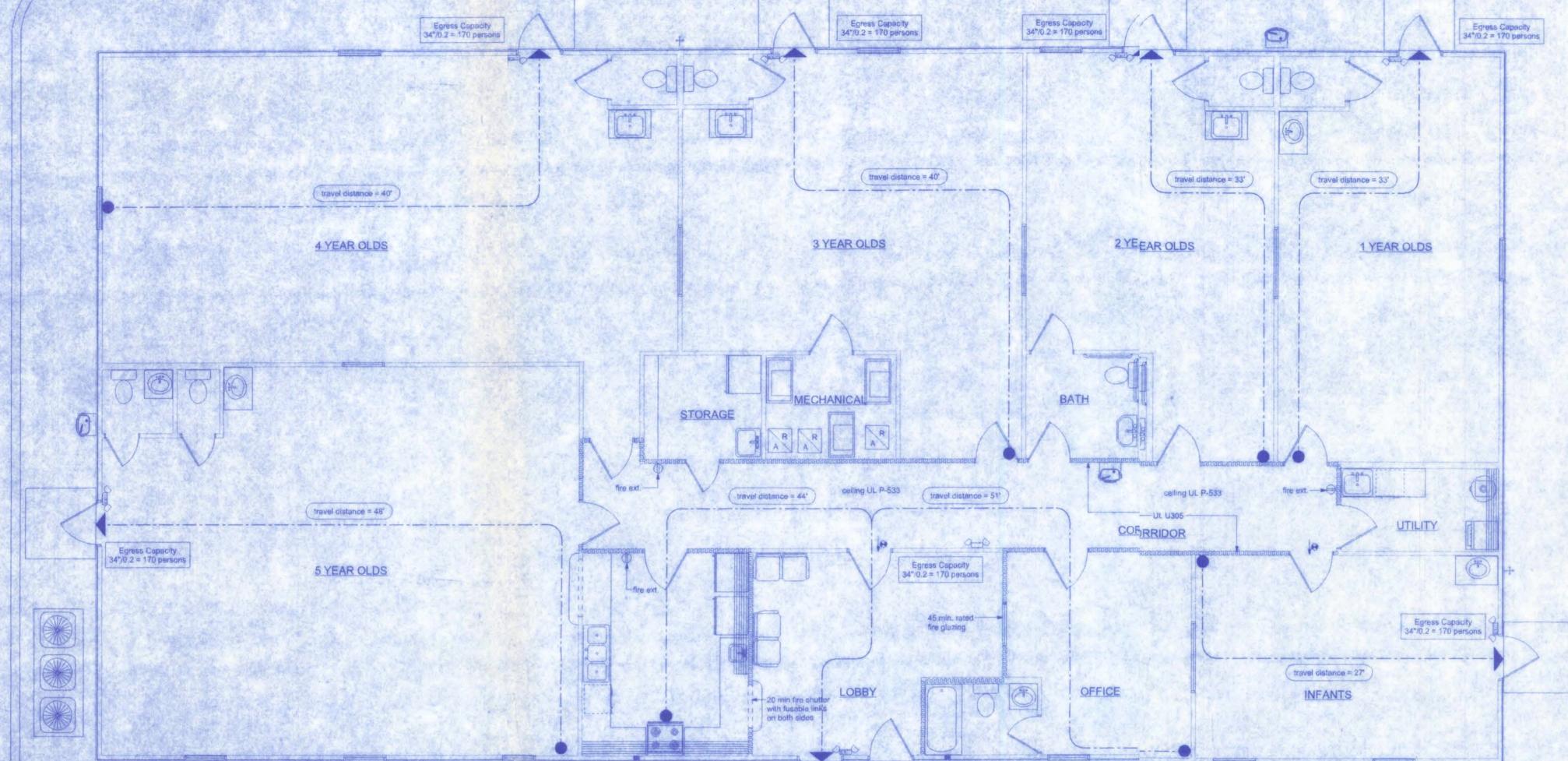
B Iron Pipe - Nom. 24 in. diam. (or smaller) service weight (or heavier) cast ron soil pipe, nom 12 in. diam. (or smaller) or Class 50 (or heavier) ductile

on piping may or may not be removed on both sides of floor or wall assembly. TITE FLEX CORP.

3. Nom. 1 in. diam (or smaller) steel flexible metal gas plping. Plastic covering may or may not be removed an both sides of floor or wall assembly.

3. Fill, Void or Cavity Material - Caulk or Sealant - Min 5/8. 1-1/4, 1-7/8 and -1/2 in thickness of caulk for 1,2,3 and 4 hr rated assemblies, respectively. applied within annulus, flush with both surfaces of wall. Min 1/4 in. diam bead of caulk applied to gypsum board/penetrant interface at point of contact location on both sides of wall. The hourly F rating of the firestop 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

Address of the Park of the Par		the second second second
Max. Pipe or Conduit Diam. in.	F Rating Hr.	T Rating Hr.
1	1 or 2	0+, 1 or 2
1	3 or 4	3 or 4
4	1 or 2	0
6	3 or 4	0
12	1 or 2	0



### MEANS OF EGRESS FBC CHAPTER 10 UNSPRINKLERED & UNPROTECTED OCCUPANCY CLASSIFICATION GROUP D - DAYCARE REQUIRED PROVIDED MAX. TRAVELDIST. 150 FT (TABLE 1016.1) MAX DEAD-END CORRIDOR 20 FT 10 FT TOTAL # OF EXITS TABLE 1019.1) EGRESS WIDTH PER PERSON 1.12 212 x 0.2 = 42.4" (LEVEL) (TABLE 1005.1) 44" AISLE WIDTH (FBC 1017.2) MIN CLEAR OPENING OF EXIT DOORS (FBC 1008.1.1)

### LIFE SAFETY NOTES

WAYS AND IN KITCHEN

AND SHALL BE ACCESSIBLE.

ALL EXIT AND EMERGENCY LIGHTING SHALL BE INSTALLED PER NEC 700-12, 2005 EDITION.

ACCESS TO EXITS SHALL BE MARKED BY APPROVED READILY VISIBLE SIGNS IN ALL CASES WHERE THE EXIT OR WAY TO REACH THE EXIT IS NOT READILY APPARENT TO THE OCCUPANTS. SIGN PLACEMENT SHALL BE SUCH THAT NO POINT IN THE EXIT ACCESS CORRIDOR IS MORE THAN 100 FT FROM THE NEAREST EXTERNALLY ILLUMINATED SIGN AND IS NOT IN EXCESS OF THE MARKED RATING FOR INTERNALLY ILLUMINATED SIGNS.

ALL FIRE EXTINGUISHERS SHALL BE TYPE 10ABC AND SHALL BE LOCATED SO THAT NO POINT IN THE DIRECTION OF TRAVEL FROM ANY POINT IS MORE THAN 75 FT TO THE FIRE EXTINGUISHER.

ALL RECEPTACLES SHALL BE 60" A.F.F. EXCEPT IN KITCHEN AND OFFICE SMOKE DETECTORS SHALL BE LOCATED EVERY 10" IN HALL

HEAT SENSORS SHALL BE LOCATED IN KITCHEN AND IN A/C CLOSETS. A TYPE 20ABC FIRE EXTINGUISHER SHALL BE LOCATED WITHIN 15 FEET OF RANGE IN KITCHEN

FIRE BELLS SHALL BE LOCATED ON OPPOSITE ENDS OF ALL ROOMS

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### Exception: Where none to the above means of notification is available, a plan for notification of the fire

## DETECTION:

OCCUPANT NOTIFICATION:

OF A FIRE OR OTHER EMERGENCY.

FIRE DEPARTMENT NOTIFICATION:

INITIATION:

BUILDING OFFICIAL:

1. an auxiliary alarm system, or

3. a proprietary system, or

4. a remote station connection.

2. a central station connection, or

A smoke detection system shall be installed in accordance with NFPA 72, with placement of detectors in each story in front of doors to the stairways and in front of corridors of all floors occupied by the day-care occupancy. Detectors shall also be installed in founges, recreation areas and sleeping rooms in the day-care

department, acceptable to the building official,

AUDIBLE AND VISIBLE ALARMS SHALL BE PROVIDED TO ALERT OCCUPANTS

INITIATION OF THE REQUIRED FIRE ALARM SYSTEM SHALL BE BY MANUAL

THE FIRE ALARM SYSTEM SHALL BE ARRANGED TO TRANSMIT THE ALARM

BY MEANS OF ONE OF THE FOLLOWING METHODS AS APPROVED BY THE

AUTOMATICALLY TO THE FIRE DEPARTMENT IN ACCORDANCE WITH NFPA 72

MEANS AND BY OPERATION OF ANY REQUIRED SMOKE DETECTORS.

ELECTRICAL	COUNT	SYMBOL	
emergency light with illuminated exit	7	O <sub>EXI</sub> O	
emergency lighting with battery backup	111	200	
exit		0	

eman n Group 9 DRAWN BY W.H.F. 6/3/09 APPROVED W.H.F. REVSIONS SHEET LS-1 2

> PROJECT NO. 05C007

System No. W-L-1001 Wall Assembly - The 1, 2, 3, or 4 hr fire-rated gypsum wallboard/stud wall. wide by 1-3/8 in. deep channels spaced max. 24" o.c. B. Gypsum Board - Nom. 1/2" or 5/8" thick, 4 ft. wide with square or tapered

2. Through Penetrant - One metallic pipe, conduit or tubing installed either

A. Steel Pipe - Nom. 24 in. diam (or smaller) Schedule 10 (or heavier) Steel Pipe.

C. Conduit - Nom. 6 In. diam (or smaller) steel conduit or nom. 4 in. diam. (or smaller) steel electrical metallic tubing.

 D. Copper Tubing - Nom. 6 in diam (or smaller) Type L (or heavier) copper pipe E. Copper Pipe - Nom, 6 in. diam (or smaller) Regular (or heavier) copper pipe.

Through Penetration Product - Flexible Metal Piping the following types of steel flexible metal gas piping may be used:

1. Nom 2 in: diam. (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly. OMEGA FLEX INC.

2. Nom. 1 in. diam (or smaller) steel flexible metal gas piping. Plastic covering

WARD MFG INC

assembly in which it is installed, as tabulated below:

	Max. Pipe or Conduit Diam, in.	F Rating Hr.	Rating Hr.
9	1	1 or 2	0+, 1 or 2
Š	1	3 or 4	3 or 4
	4	1 or 2	0
	6	3 or 4	0
	40	4 2	

Freeman

Design Group inc (386)758-4209

DATE DEAWN BY W.H.F.

6/3/09 APROVED W.H.F.

REVISIONS

SHEET LS2

PROJECTNO.
09.000

provide dedicated 20 and power supply for fire aftern each ceiling penetration n 0

FIRE ALARM PLAN
SCALE: 3/16" = 1'-0"

ELECTRICAL COUNT SYMBOL Damper Detector Fire Alarm Control Panel FACE Heat Detector Horn-Strobe 60cd 20 Amp dedicated ckt Pull Station Smoke Detector Strobe 60cd

FIRE DAMPERS SHALL COMPLY WITH THE REQUIREMENTS OF UL 555 AND SHALL BEAR THE LABEL OF AN APPROVED TESTING AGENCY. FIRE DAMPERS SHALL BE CLASSIFIED AND IDENTIFIED FOR USE IN EITHER:

1. STATIC SYSTEMS THAT AUTOMATICALLY SHUT DOWN IN THE EVENT OF FIRE.

2. DYNAMIC SYSTEMS THAT OPERATE IN THE EVENT OF FIRE.

NOTE:

FIRE DAMPERS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS IN THE FOLLOWING LOCATIONS:

1. DUCTS PENETRATING WALLS OR PARTITIONS HAVING A FIRE RESISTANCE RATING OF 1 HOUR OR MORE.

2. DUCTS PENETRATING SHAFT WALLS HAVING A FIRE RESISTANCE RATING OF 1 HOUR OR MORE.

### FIRE DEPARTMENT NOTIFICATION:

THE FIRE ALARM SYSTEM SHALL BE ARRANGED TO TRANSMIT THE ALARM AUTOMATICALLY TO THE FIRE DEPARTMENT IN ACCORDANCE WITH NFPA 72. BY MEANS OF ONE OF THE FOLLOWING METHODS AS APPROVED BY THE BUILDING OFFICIAL:

1. an auxiliary alarm system, or
2. a central station connection, or
3. a proprietary system, or
4. a remote station connection.

Where none fo the above means of notification is available, a plan for notification of the fire department, acceptable to the building official.

Exception:

shall be provided.

The HVAC contractor shall provide relay switches from each smoke damper to connect to the alarm system.

### MOUNTING HEIGHT:

key pad - 48" smoke detector - ceiling horn strobe - 81" pull station - 48" strobe - 81"

D2	DESIGN LOAD VALUES:	
	ROOF LIVE LOADS (top chord)	20 PSF
	ROOF LIVE LOADS (bottom chord)	20 PSF
	ROOF DEAD LOADS	10 PSF
	CORRIDOR LIVE LOADS	100 PSF
	CLASSROOM LIVE LOADS	60 PSF
	FLOOR DEAD LOADS	20 PSF
707	ASSUMED ALLOWABLE SOIL BEARING CAPACITY	1,500 PSF
		A PROPERTY OF

D3 THE STRUCTURAL PLANS AND WIND SPEED HAVE BEEN DESIGNED IN ACCORDANCE WITH SECTION 1609 OF THE FLORIDA BUDING CODE 2007 EDITION.

### GENERAL

- THE GENERAL CONTRACTOR SHALL REVIEW AND DETERMINE THAT DIMENSIONS ARE COORDINATED BETWEEN ARCHITECTURAL AND STRUCTURAL DRAWINGS PRIOR TO FABRICATION OR START OF CONSTRUCTION.
- THE GENERAL CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE, THE WORK PERSONS, AND OTHER PEOPLE DURING CONSTRUCTION. HE SHALL SUPERVISE AND DIRECT THE WORK AND BE RESPONSIBLE FOR ALL CONSTRUCTION & FOR ALL JOBSITE SAFETY.
- NO STRUCTURAL MEMBER SHALL BE CUT, NOTCHED, OR OTHERWIS REDUCED IN STRENGTH.
- THE GENERAL CONTRACTOR SHALL COORDINATE ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR ANCHORED, EMBEDDED AND SUPPORTED ITEMS WHICH AFFECT THE STRUCTRA DRAWINGS AND NOTIFY THE ARCHITECT/ENGINEER ON ANY DISCREPANCIES
- ANY SUBMITTALS RECEIVED BY A/E THAT HAVE NOT BEEN CHECKED BY THE GC AND HIS SUBCONTRACTOR SHALL BE RETURNED WITHOUT REVIEW.
- ALL SECTIONS AND DETAILS SHALL BE CONSTRUED TO BE TYPICAL OR SIMILAR UNLESS ANOTHER SECTION OR DETAIL
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS, ELEVATIONS, AND DIMENSIONS PRIOR TO COMMENCING CONSTRUCTION, INCLUDING FABRICATION. ALL DISCREPANCIES SHALL BE REPORTED TO THE A/E FOR RESOLUTION.

### **FOUNDATIONS**

- A GEOTECHNICAL REPORT FOR THIS PROJECT WAS NOT PROVIDED Y THE OWNER. THESE PLANS ARE BASED UPON AN ASSUMED ALLOWABLE BEARINGAPACITY OF 1,500 PSF. AT THE OWNER'S REQUEST, THE CONTRACTOR SHALENGAGE A QUALIFIED AND CERTIFIED GEOTECHNICAL ENGINEER TO DETERMIN THE ALLOWABLE SOIL BEARING CAPACITY, A COPY OF THE REPORT SHALL BE PROVIED TO THE A/E. IF THE DETERMINED ALLOWABLE BEARING CAPACITY IS LESS THAN THASSUMED VALUE. MODIFICATIONS TO THE FOUNDATIONS MAY BE REQUIRED.
- F2 THE GEOTECHNICAL ENGINEER SHALL MAKE A FIELD INVESTIGATION O DETERMINE IF ANY SOIL CONDITIONS ARE PRESENT THAT MAY ADVERSELY AFFET THE PROJECT. THE CONTRACTOR SHALL REMOVE ALL SUCH MATERIAL AD REPLACE IT WITH APPROVED FILL.
- SUBGRADE UNDER FOOTINGS AND SLABS SHALL BE COMPACTED TOT LEAST 98% OF THE MODIFIED PROCTOR MAXMIMUM DRY DENSITY (ASTM D'57). SUBMIT DENSITY TESTS TO THE A/E.

### SLABS ON GRADE

- PROVIDE 6 MIL POLYETHYLENE SHEETING UNDER ALL SLABS ON GRDE.
- PROVIDE CONTROL JOINTS (1/4" WIDE BY 3/8" DEEP) [MAY OR MAY NT BE INDICATED ON PLANI, FILL JOINTS WITH POURED RUBBER. IF JOINTARE SAWCUT. SAWCUTTING MUST BE DONE THE SAME DAY THE CONCRETE IS PLAED.
- PROVIDE 1/2" EXPANSION JOINTS AT ALL LOCATIONS WHERE SLABS ABUT STRUCTURES (WALLS, COLUMNS, ETC.)

### CONCRETE AND REINFORCING

- C1 AT THE OWNER'S REQUEST, THE GENERAL CONTRACTOR SHALL ENGAGE A CERTIFIED TESTING AGENCY TO PERFORM INDUSTRY STANDARD TESTING INCLUDING SLUMP TESTS AND CYLINDER BREAKS TO ENSURE CONFORMANCE WITH PLANS. SUBMIT REPORTS TO A/E.
- C2 CONCRETE WORK & MIX DESIGN SHALL CONFORM TO ACI 301 (LATEST EDITION) "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS". MIXING SHALL BE IN ACCORDANCE WITH ASTM C94

2,500 PSI

2,500 PSI

- C3 MINIMUM 28-DAY COMPRESSIVE STRENGTH FOOTINGS AND TIE BEAMS COLUMNS AND SLABS
- C4 SPLICES OF REINFORCING (EXCEPT AS SHOWN ON PLANS) #4 BARS #5 BARS ---- 27 INCHES WELDED WIRE MESH.
- C5 AT ALL CORNERS OF TIE BEAMS AND WALL FOOTINGS, PROVIDE CORNER BARS (30 INCH MINIMUM LEGS) TO MATCH HORIZONTAL BARS.
- C6 REINFORCING BARS SHALL CONFORM TO ASTM A615-96a GRADE 60. WELDED WIRE MESH SHALL CONFORM TO ASTM A-185. LAP WELDED WIRE MESH ON MESH + 2" WHERE SPLICED.
- C7 MINIMUM COVER FOR REINFORCING SHALL BE AS FOLLOWS UNLESS OTHEWISE NOTED.

LOCATION	MIN. COVER
BOTTOM OF FOOTINGS	3"
SIDES OF FOOTINGS	3"
COLUMNS	1 1/2"
TIE BEAMS	1 1/2"
SLABS	AS NOTED

### PRE-FABRICATED WOOD TRUSSES

- WT1 GENERAL CONTRACTOR SHALL ENGAGE A CERTIFIED TESTING AGENCY TO PERFORM INDUSTRY STANDARD INSPECTIONS TO ENSURE CONFORMANCE WITH PLANS . SUBMIT REPORTS TO A/E.
- WOOD TRUSSES SHALL BE DESIGNED, SIGNED & SEALED BY A QUALIFIED PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF FLORIDA. TRUSSES SHALL BE FABRICATED IN CONFORMANCE WITH THE THE "QUALITY CONTROL MANUAL" BY THE TRUSS PLATE INSTITUTE (TPI).
- WT3 HANDLING, ERECTION AND BRACING OF WOOD TRUSSES SHALL BE IN ACCORDANCE WITH "HANDLING AND ERECTING WOOD TRUSSES" (HET80) AND "BRACING WOOD TRUSSES: COMMENTARY AND RECOMMENDATIONS" (BWT-76) BY THE TRUSS PLATE INSTITUTE (TPI).
- PERMANENT BRACING SHALL BE INDICATED IN THE TRUSS LAYOUT DRAWINGS AND SHALL BE SUPPLIED AND INSTALLED BY THE FRAMING CONTRACTOR.
- TRUSSES SHALL BE DESIGNED FOR THE FOLLOWING LOADS: DEAD LOAD LIVE LOAD (top chord) 20 PSF LIVE LOAD (bottom chord) 20 PSF 110 MPH
- PRE-FABRICATED WOOD TRUSSES SHALL BE FABRICATED FROM SOUTHERN PINE (SPIB) KILN DRIED #2 GRADE OR BETTER FOR CHORD AND #3 GRADE OR BETTER FOR WEBS.
- TRUSS BEARING SHALL BE 4" NOMINAL UNLESS NOTED OTHERWISE. BEARING LOCATIONS MUST BE MARKED ON TRUSS BY FABRICATOR TO INSURE PROPER INSTALLATION.
- SHOP DRAWINGS SHALL BE SUBMITTED WHICH INDICATE DESIGN LOADS, DURATION FACTOR TRUSS LAYOUT, TRUSS CONFIGURATION AND TRUSS TO TRUSS CONNECTION. SHOP DRAWINGS SHALL SHOW PIECE MARKS, MEMBER SIZE AND GRADE AND CONNECTION DETAILS.
- NO WANE KNOTS, SKIPS OR OTHER DEFECTS SHALL OCCUR IN THE PLATE CONTACT AREA OR SCARFED AREA OF WEB MEMBERS. PLATES SHALL BE CENTERED WITH ONE REQUIRED EACH SIDE OR TRUSS.
- DESIGN OF METAL CONNECTED WOOD ROOF TRUSSES TO COMPLY WITH STANDARD BLDG. CODE NFPA'S "NATIONAL DESIGN SPECIFICATIONS FOR STRESS GRADED LMUBER AND ITS FASTENINGS", AND THE TRUSS PLATE INSTITUTE'S "DESIGN SPECIFICATIONS FOR LIGHT METAL PLATE CONNECTED WOOD TRUSSES"
- WOOD BLOCKING AT TRUSS BEARING SHALL BE LAP SPLICED 4'-0" MIN. AND NAILED WITH (20) 10d NAILS AT SPLICE, 10d NAILS @ 16" O.C. ELSEWHERE.

- MASONRY CONSTRUCTION SHALL CONFORM TO ACI STANDARD BUILDING CODE REQUIREMENTS FOR CONCRETE MASONRY STRUCTURES (ACI 530-05/ASCE 5-05) AND SPECIFICATIONS FOR MASONRY STRUCTURES (ACI 530.1-05/ASCE 6-05)
- CONCRETE BLOCKS SHALL CONFORM TO ASTM C-90 (fm = 1500 PSI) (1900 PSI ON THE NET AREA)
- MORTAR SHALL COMPLY WITH ASTM C270 TYPE M OR S (COMPRESSIVE STRENGTH = 2500 PSI AND 1800 PSI) RESPECTIVELY. SITE TESTED MORTAR CUBES SHALL ACHIEVE A MINIMUM OF 80% OF THE DESIGN COMPRESSIVE
- BLOCK SHALL NOT BE MOISTENED BEFORE GROUTING.
- ALL MASONRY CROSS WEBS SHALL BE FULLY BEDDED IN MORTAR AROUND CELLS TO BE GROUTED.
- THE MINIMUM CONTINUOUS UNOBSTRUCTED CELL AREA IN CELL TO RECEIVE GROUT MUST BE NOT LESS THAN 2" x 3". MORTAR FINS MUST BE REMOVED AS BLOCK PLACEMENT PROCEEDS, MORTAR DROPPINGS MUST BE KEPT OUT OF CELLS WHICH ARE TO BE GROUTED.
- REINFORCE WALLS WITH LADDER TYPE (ASTM A-82, #9 GAGE WIRE) REINFORCEMENT EQUAL TO DURO-WALL IN BED JOINTS @ 16" O.C. MEASURED VERTICALLY, PLACE PER MFR. INSTR. LAP ALL HORIZONTAL JOINT REINFORCING 8" MIN.
- CORES OR BLOCK MASONRY SHALL BE FILLED WITH GROUT AT CORNERS, EACH SIDE OF OPENINGS, AND @ 48" O.C. WITH MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS. GROUT SLUMP SHALL BE 8" TO 11" FOR MASONRY FILLED CELLS.
- GROUT FOR FILLED CELLS SHALL BE POURED OR PUMPED IN LIFTS NOT TO EXCEED EIGHT (8) FEET IN HEIGHT, AND SHALL BE CONSOLIDATED AT TIME OF POURING BY RODDING OR VIBRATING.
- M10 PROVIDE KNOCK-OUT CMU AT BASE OF EACH FILLED CELL TO ALLOW VISUAL VERIFICATION OF COMPLETE GROUT PENETRATION (FOR LIFTS OF 5'-0" OR LESS, A KNOCK OUT AT BASE OF LIFT WILL NOT BE REQUIRED).
- VERTICAL REINFORCING MUST HAVE A MIMUM CLEARANCE OF 1/2 " TO INSIDE FACE. VERTICAL REINFORCEMENT IN WALLS SHALL BE SECURED AND LATERALLY SUPPORTED AGAINST DISPLACEMENT AT INTERVALS NOT EXCEEDING 6 FT.
- M12 GROUT PLACEMENT STOPPED FOR (1) HOUR OR MORE SHALL BE STOPPED (1 1/2 ") BELOW THE TOP OF THE MASONRY UNIT TO PROVIDE A KEY FOR SUBSEQUENT GROUTING.
- M13 SEE FOUNDATION PLANS FOR ALL VERT, REINFORCING, TYP, VERTICAL REINFORCING SIZE & SPACING SHALL BE ABOVE AND BELOW ALL WALL OPENINGS.
- M14 TEMPORARY BRACING AND SHORING OF WALLS TO PROVIDE STABILITY DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE CONTRACTOR.
- MASONRY CONSTRUCTION MATERIALS AND INSPECTIONS SHALL CONFORM TO ALL REQUIREMENTS OF "SPECIFICATIONS FOR MASONRY STRUCTURES (ACI-ASCE 530.1)" EXCEPT AS MODIFIED BY THE REQUIREMENTS OF THESE DOCUMENTS.
- PROVIDE FILLED PRECAST U-LINTELS W/ (1) #5 CONT. AT ALL OPENINGS WHERE CONCRETE BEAMS ARE NOT SHOWN OR NOTED, MINIMUM UNFILLED LINTEL CAPACITY = 400 Ib/LF FOR SPAN INIDICATED. SEE PLANS FOR LINTEL REQUIREMENTS AT DOOR OPENINGS.
- STOPPING AND RESUMING WORK: RACK BACK 1/2- UNIT LENGTH IN EACH COURSE. DO NOT TOOTH. CLEAN EXPOSED SURFACES OF SET MASONRY WET UNITS LIGHTLY (IF REQ'D.) AND REMOVE LOOSE MASONRY UNITS AND MORTAR PRIOR TO LAYING FRESH MASONRY
- M18 REINFORCE MASONRY OPENINGS GREATER THAN 1'-0" WIDE WITH HORIZ, JT. REINF. PLACED IN (2) HORIZ, JTS, APPROXIMATELY 8" APART, IMMEDIATELY ABOVE THE LINTEL AND IMMEDIATELY BELOW THE SILL. EXTEND REINFORCING A MINIMUM OF 2'-0" BEYOND JAMBS OF THE OPENING EXCEPT AT CONTROL JOINTS. SEE PLAN FOR ADDITIONAL REQUIREMENTS.
- M19 DO NOT APPLY UNIFORM LOADS TO MASONRY WALLS FOR (3) DAYS
- M20 DO NOT APPLY CONCENTRATED LOADS TO MASONRY WALLS FOR (7) DAYS.
- M21 EXTEND ALL VERTICAL REINFORCEMENT TO WITHIN 2" OF TOP OF TIE BEAMS UNLESS THERWISE NOTED.

ALL WIND LOADS ARE IN ACCORDANCE WITH SECTION 1609, FLORIDA BUILDING CODE, 2007 EDITION, AND IN ACCORDANCE WITH ASCE-7

BASIC WIND SPEED		110 MPH			
IMPORTANCE FACTOR	IMPORTANCE FACTOR				
BUILDING CATEGORY	2				
EXPOSURE	В				
INTERNAL PRESSURE COEFFICIENT					
	WALLS	+21.8/-29.1 PSF			
CLADDING PRESSURE	ROOF	+12.5/-29.1 PSF			
	OVERHANGS	-71.6 PSF			
TYPE OF STRUCTURE	TYPE OF STRUCTURE				

EXTERIOR WINDOWS AND GLASS DOORS SHALL BE TESTED BY AN APPROVED INDEPENDENT TESTING LABORATORY, AND BEAR AN AAMA OR WDMA OR OTHER APPROVED LABEL IDENTIFYING THE MANUFACTURER, PERFORMANCE CHARACTERISTICS AND APPROVED PRODUCT EVALUATION ENTITY TO INDICATE COMPLIANCE WITH THE REQUIREMENTS OF THE FOLLOWING SPECIFICATION:

### ANSI/AAMA/NWWDA 101/IS2 2/97

THE CONSTRUCTION SHALL BE TESTED IN ACCORDANCE WITH ASTM E 330, STANDARD TEST METHODS FOR STRUCTURAL PERFORMANCE OF EXTERIOR WINDOWS, CURTAIN WALLS, AND DOORS BY UNIFORM STATIC AIR PRESSURE.

PULL DING CHOUD GOOLIDANION	and up a
BUILDING GROUP OCCUPANCY	GROUP D
TABLE 503 TYPE OF CONSTRUCTION	TYPE V-B
TABLE 503 AREA/HEIGHT LIMITATIONS	9.5 KSF/1 STORY
OCCUPANCY	
OAD CAPACITY:	4,229 SF/ 20 =
DAY-CARE: 20 SF/PERSON NET	212 PERSONS

MEANS OF EGRESS FBC CHAPTER 10				
OCCUPANCY CLASSIFICATION	UNSPRINKLERED & UNPROTECTED			
GROUP D - DAYCARE	REQUIRED	PROVIDED		
MAX. TRAVEL DIST. (TABLE 1016.1)	150 FT	51 FT		
MAX. DEAD-END CORRIDOR (FBC 1017.3)	20 FT	10 FT		
TOTAL # OF EXITS (TABLE 1019.1)	2			
EGRESS WIDTH PER PERSON (LEVEL) (TABLE 1005.1)	0.2 212 x 0.2 = 42.4"	1.12		
MINIMUM CORRIDOR AISLE WIDTH (FBC 1017.2)	44"	59"		
MIN. CLEAR OPENING OF EXIT DOORS (FBC 1008.1.1)	32"	34"		

212 OCCUPANT	S = 106 ME	EN & 106	WOMEN		
OCCUPANCY	WA <sup>-</sup>	TER SETS	LAVS	DRINKING FOUNTAIN	SERVICE
E/D	M 1 per 50 = 3	F 1 per 50 = 3	M F 1 per 50 = 5	1 per 100 = 3	1 service sink
PROVIDED		4	8	3	



DRAWN BY W.H.F. DATE APPROVED W.H.F. REVISIONS PROJECT NO.

HILL ACADEMY

CASTLE

128 SW NASSAU STREET
LAKE CITY, FL. 32025
(386)758-4209

Freeman

Design Group inc (386)758-4209

DATE N.H.F.
6/3/09 APPROVED N.H.F.

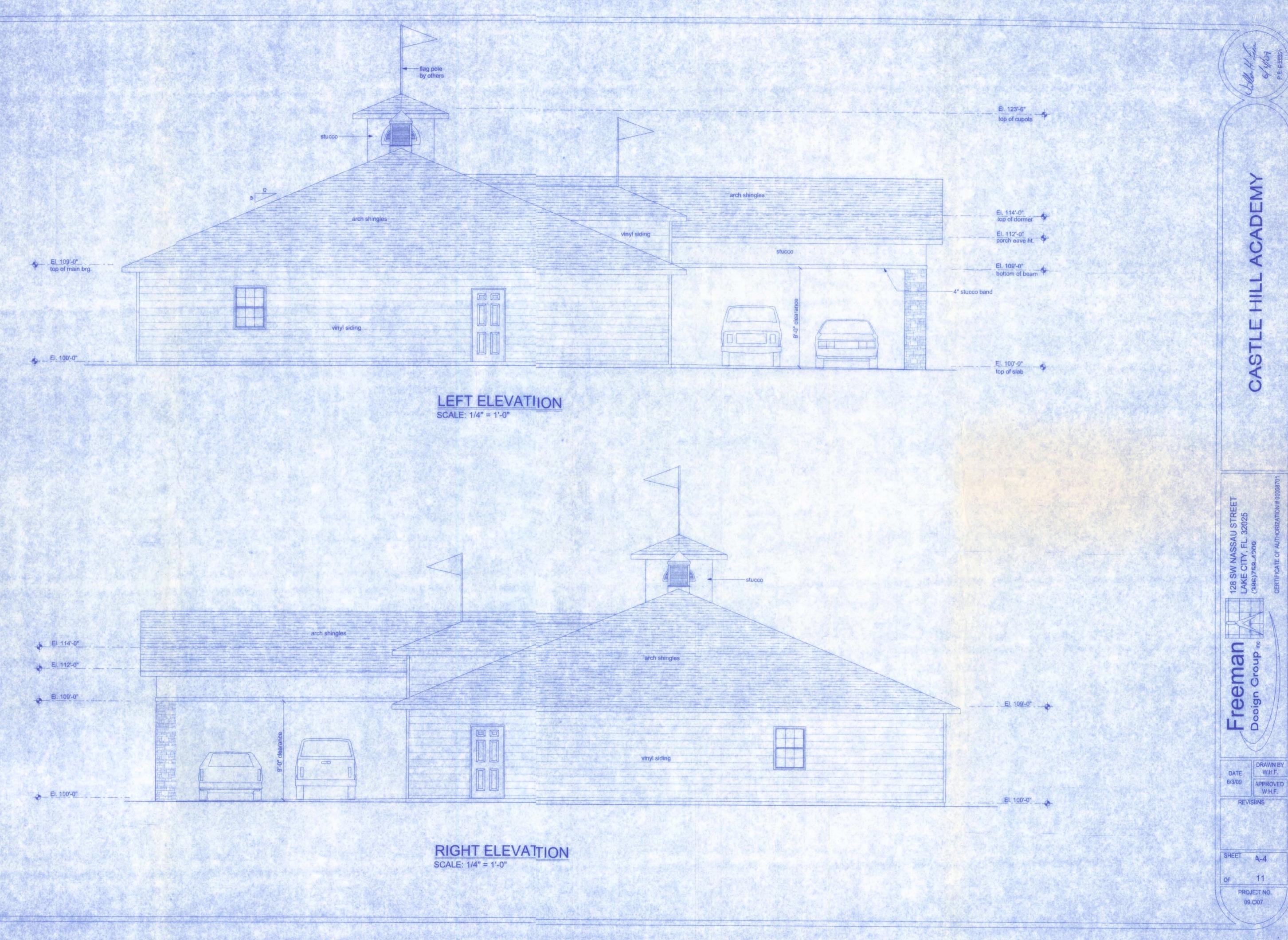
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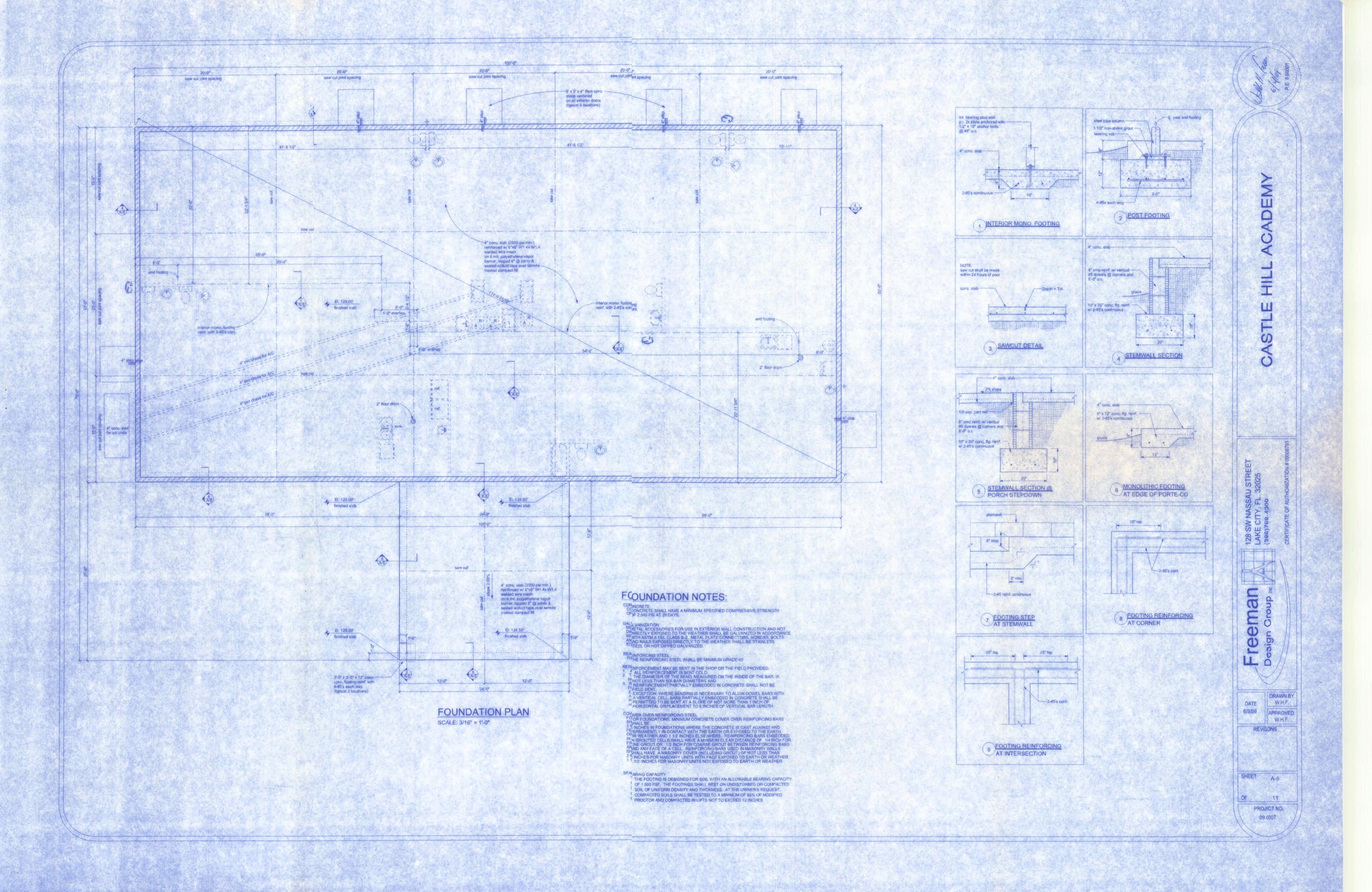
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OF 11

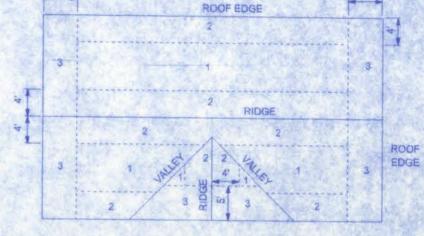
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09.C007









### ROOF SHEATHING NAILING ZONES (GABLE ROOF)

DECK REQUIREMENTS: ASPHALT SHINGLES SHALL BE FASTENED TO SOLIDLY SHEATHED DECKS.

ASPHALT SHINGLES SHALL BE USED ONLY ON ROOF SLOPES OF 2:12 OR GREATER FOR ROOF SLOPES FROM 2:12 TO 4:12, DOUBLE UNDERLAYMENT IS REQUIRED.

UNDERLAYMENT: UNLESS OTHERWISE NOTED, UNDERLAYMENT SHALL CONFORM WITH ASTM D 226, TYPE 1, OR ASTM D 4869, TYPE 1.

SELF-ADHERING POLYMER MODIFIED BITUMEN SHEET: SELF ADHERING POLYMER MODIFIED BITUMEN SHALL COMPLY WITH ASTM D 1970.

ASPHALT SHINGLES SHALL HAVE SELF SEAL STRIPS OR BE INTERLOCKING, AND COMPLY WITH ASTM D 225 OR ASTM D 3462.

FASTENERS:
FASTENERS FOR ASPHALT SHINGLES SHALL BE GALVANIZED, STAINLESS STEEL,
ALUMINUM OR COPPER ROOFING NAILS, MINIMUM 12 GAUGE SHANK WITH A MINIMUM
3/8 INCH DIAMETER HEAD, OF A LENGTH TO PENETRATE THROUGH THE ROOFING
MATERIAL AND A MINIMUM 3/4" INTO THE ROOF SHEATHING. WHERE ROOF SHEATHING
IS LESS THAN 3/4" THICK, THE NAILS SHALL PENETRATE THROUGH THE SHEATHING.

ASPHALT SHINGLES SHALL BE SECURED TO THE ROOF WITH NOT LESS THAN FOUR FASTENERS PER STRIP SHINGLE OR TWO FASTENERS PER INDIVIDUAL SHINGLE. WHERE ROOFS LOCATED IN BASIC WIND SPEED OF 110 MPH OR GREATER, SPECIAL METHODS OF FASTENING ARE REQUIRED. UNLESS OTHERWISE NOTED, ATTACHMENT OF ASPHALT SHINGLES SHALL CONFORM WITH ASTM D 3161 OR M-DC PA 107-95.

UNDERLAYMENT APPLICATION: FOR ROOF SLOPES FORM 2:12 TO 4:12, UNDERLAYMENT SHALL BE A MINIMUM OF TWO LAYERS APPLIED AS FOLLOWS:

1. STARTING AT THE EAVE, A 19 INCH STRIP OF UNDERLAYMENT SHALL BE APPLIED PARALLEL WITH THE EAVE AND FASTENED SUFFICIENTLY TO STAY IN PLACE

APPLIED OVERLAPPING SUCCESSIVE SHEETS 19 INCHES AND FASTENED SUFFICIENTLY TO STAY IN PLACE

FOR ROOF SLOPED 4:12 AND GREATER, UNDERLAYMENT SHALL BE A MINIMUM OF ONE LAYER OF UNDERLAYMENT FELT APPLIED AS FOLLOWS:

STARTING AT THE EAVE, UNDERLAYMENT SHALL BE APPLIED SHINGLE FASHION PARALLEL TO THE EAVE, LAPPED 2 INCHES, AND FASTENED SUFFICIENTLY TO STAY

BASE AND CAP FLASHINGS:
BASE AND CAP FLASHING SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S
INSTALLATION INSTRUCTIONS. BASE FLASHING SHALL BE OF EITHER CORROSION RESISTANT
METAL OF MINIMUM NOMINAL THICKNESS 0.019 INCH OR MINERAL SURFACE ROLL ROOFING
WEIGHING A MINIMUM OF 77 LBS PER 100 SQUARE FEET. CAP FLASHING SHALL BE
CORROSION RESISTANT METAL OF MINIMUM NOMINAL THICKNESS OF 0.019 INCH.

VALLEY LININGS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS BEFORE APPLYING ASPHALT SHINGLES. VALLEY LININGS OF THE FOLLOWING TYPES SHALL BE PERMITTED. 1. FOR OPEN VALLEYS LINED WITH METAL, THE VALLEY LINING SHALL BE AT LEAST 16 INCHES WIDE AND OF ANY OF THE CORROSION RESISTANT METALS IN TABLE 1507.3.9.2.
2. FOR OPEN VALLEYS, VALLEY LINING OF TWO PLIES OF MINERAL SURFACE ROLL ROOFING SHALL BE PERMITTED. THE BOTTOM LAYER SHALL BE 18 INCHES AND THE TOP LAYER

A MINIMUM OF 36 INCHES WIDE. 3. FOR CLOSED VALLEYS VALLEY LINING SHALL BE ONE OF THE FOLLOWING:

1. BOTH TYPES 1 AND 2 ABOVE, COMBINED.

2. ONE PLY OF SMOOTH ROLL ROOFING AT LEAST 36 INCHES WIDE AND COMPLYING WITH 3. SPECIALTY UNDERLAYMENT AT LEAST 36 INCHES WIDE AND COMPLYING WITH ASTM D 1970.

MATERIAL	MINIMUM THICKNESS (in)	GAGE	WEIGHT (LB)
COPPER		T. S. W. S.	1
ALUMINUM	0.024	ELANT THE	
STAINLESS STEEL		28	
GALVANIZED STEEL	0.0179	26 (zinc coated G90)	
ZINC ALLOY LEAD PAINTED TERNE	0.027		2 1/2



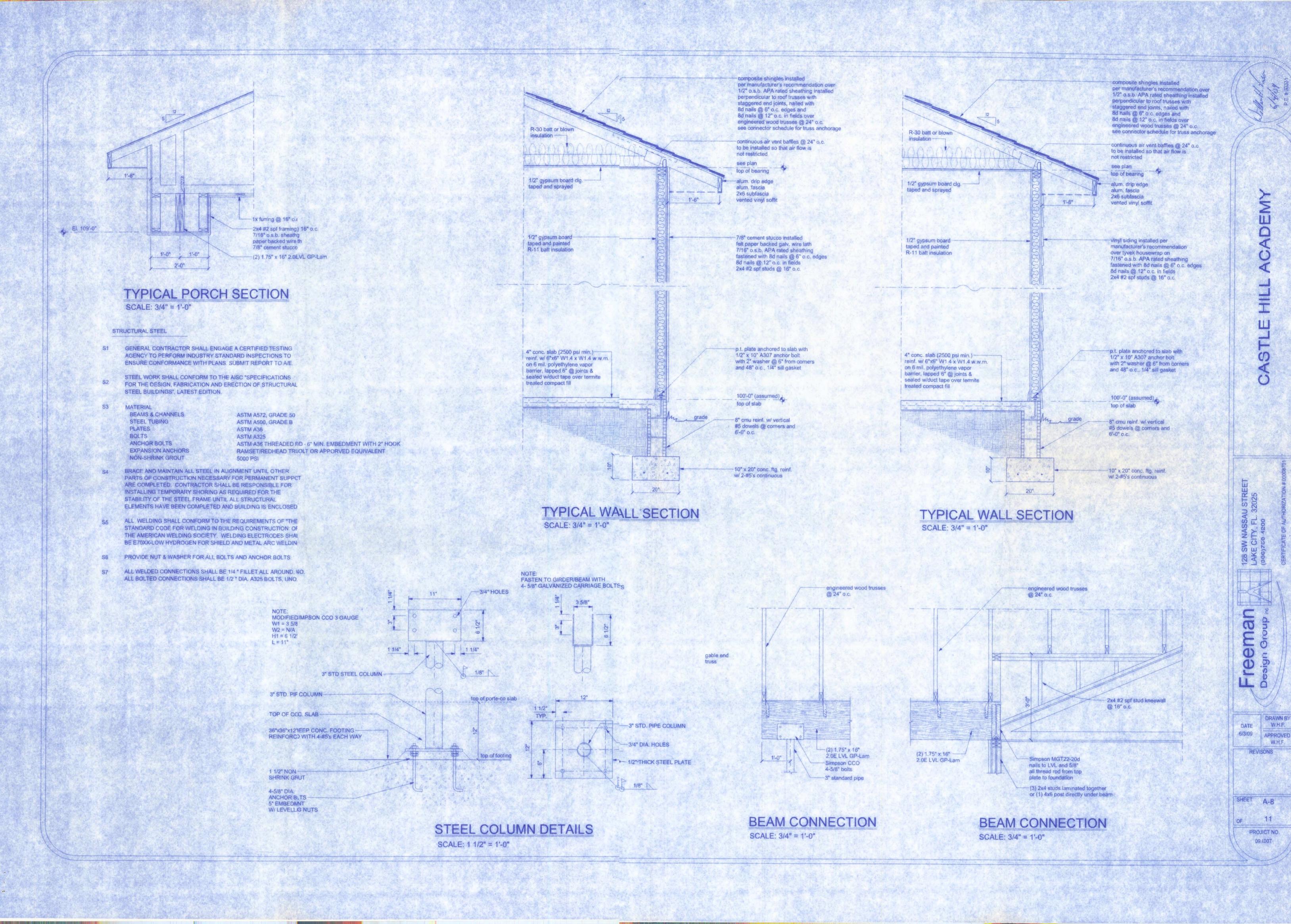


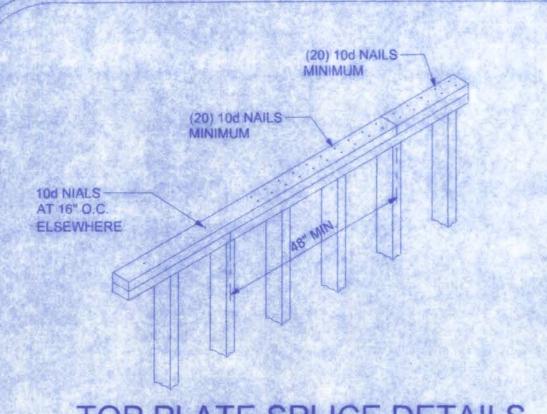
DRAWN BY W.H.F. DATE 6/3/09 APPROVED W.H.F.

REVISONS

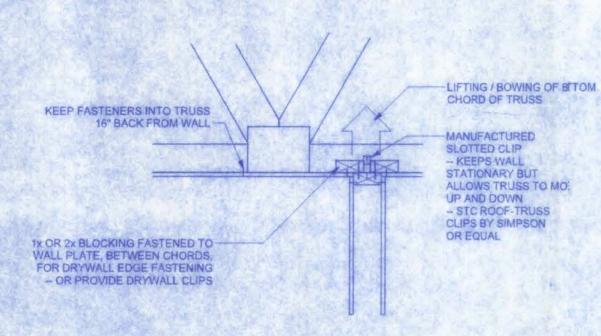
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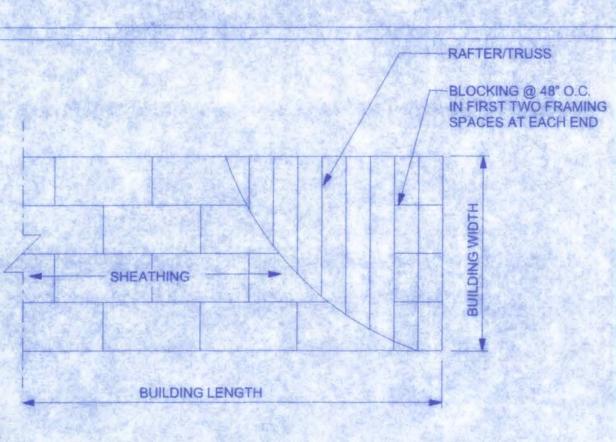




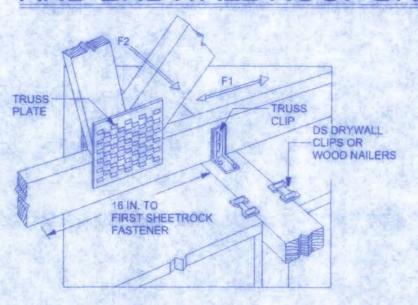
# TOP PLATE SPLICE DETAILS SCALE: 1/2" = 1'-0"

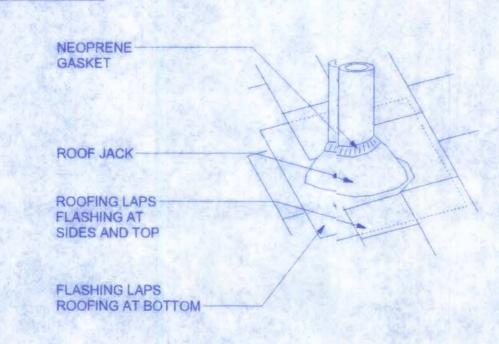


PENETRATIONS

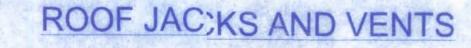


# ROOF SHEATHING LAYOUT AND ENDWALL ROOF BRACING





# NON-BEARING INT. WAL ATTACHMENT TO TRUSSES



ALLOWABLE CDEFLECTION OF STRUCTURAL MEMBERS

STRUCCTURAL MEMBER

rafters having sl slopes greater than 2/12 with no finished ceilining attached to rafters

exterior walls wiwith plaster or stucco finish

exterior walls - \ wind loads with brittle finishes

exterior walls - v. wind loads with flexible finishes

interior walls anind partitions

floors and plaststered ceilings

all other structulural members

ALLOWABLE

DEFLECTION

L/180

H/180

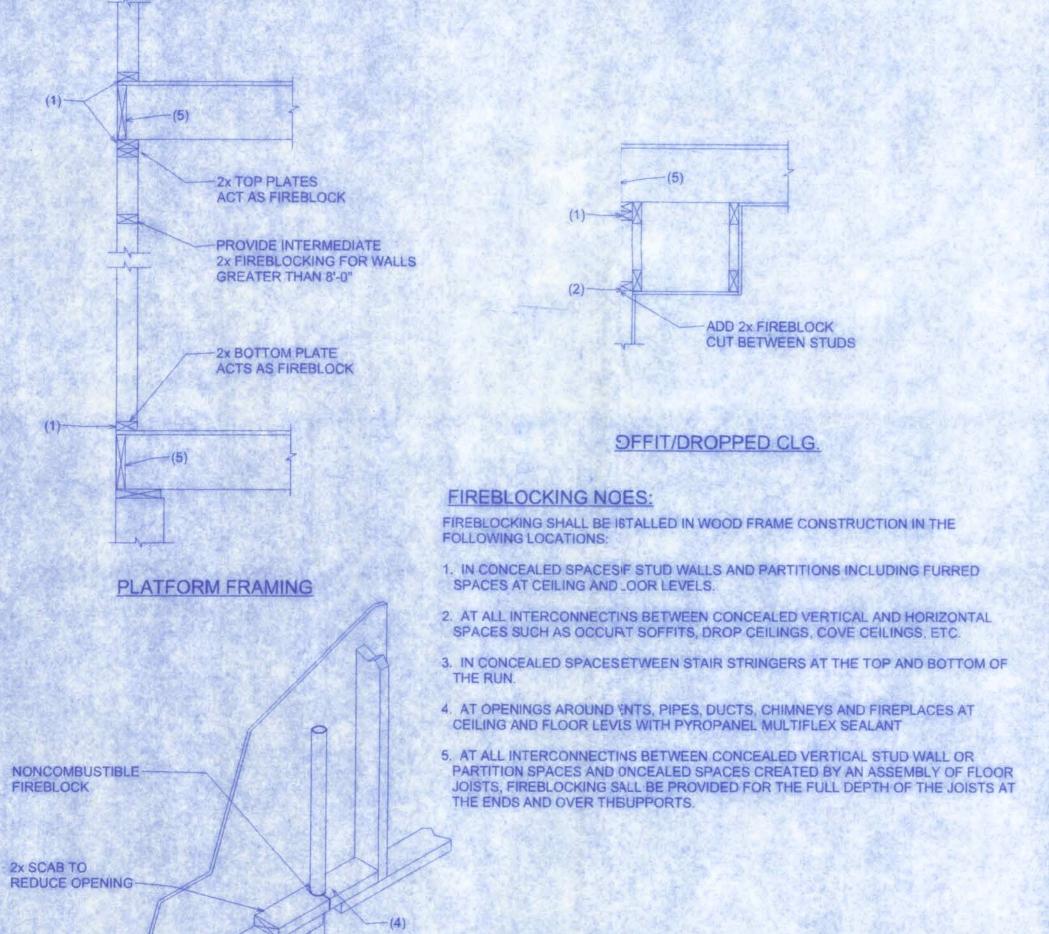
L/360

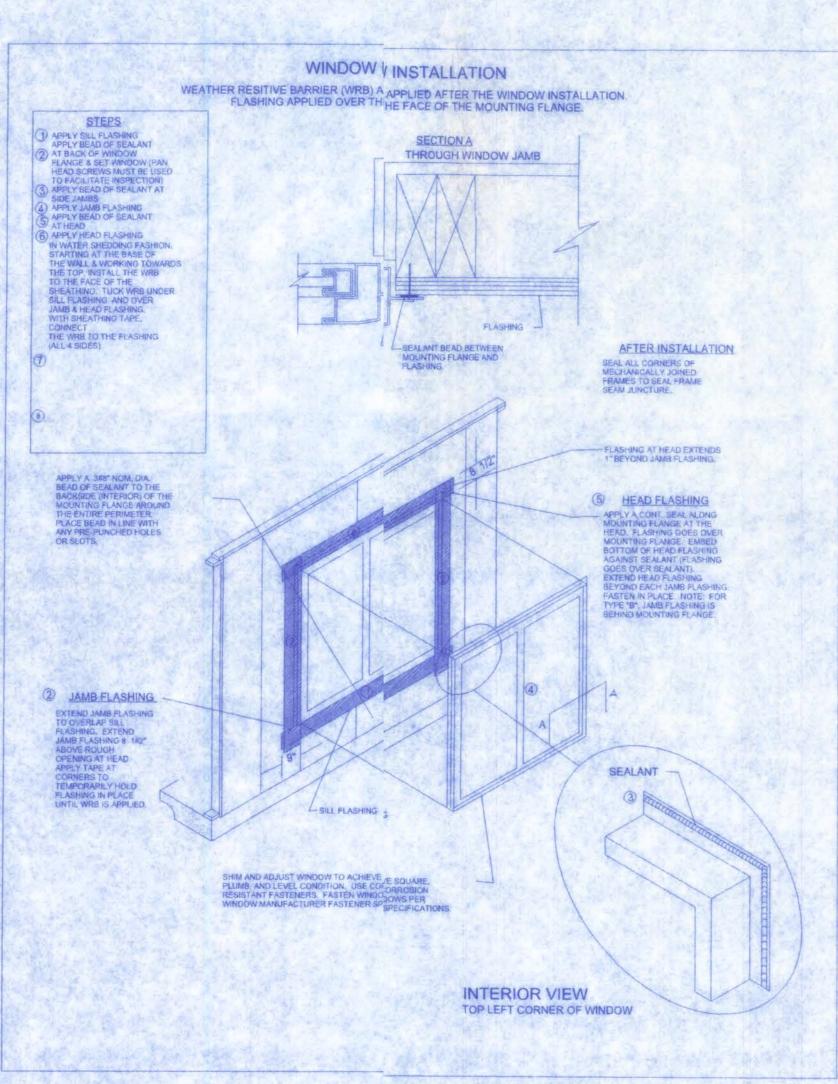
L/240

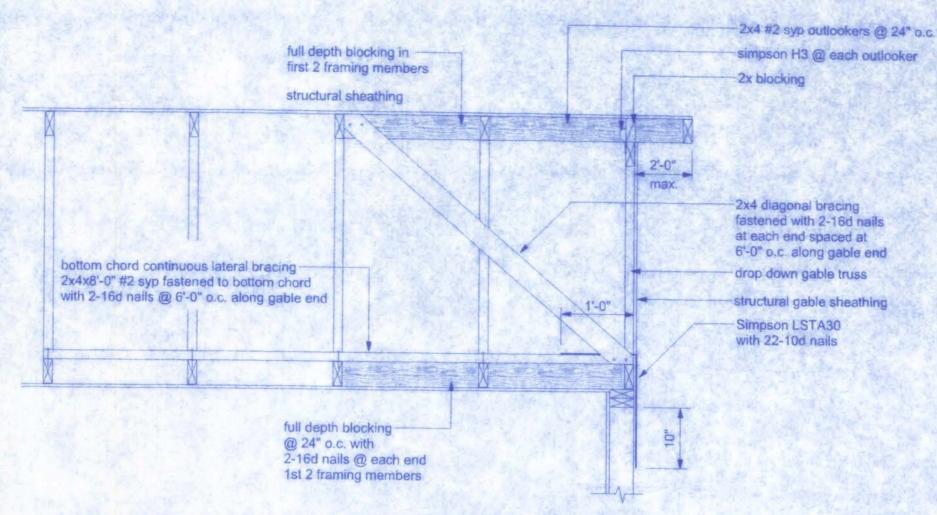
H/360

L/240

L/120



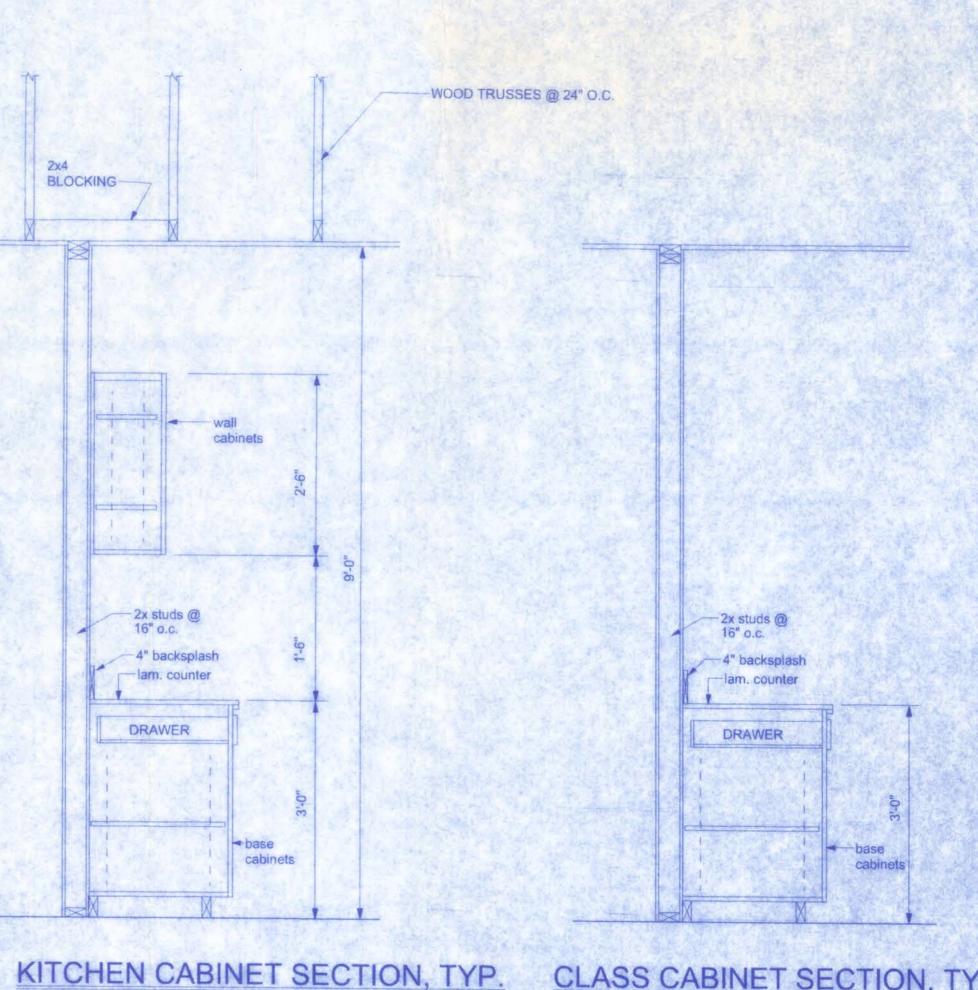




# END WALL BRACING FOR CEILING DIAPHRAGM

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

NOTE: ALL WOOD TO BE NUMBER 2 GRADE SOUTHERN YELLOW PINE



CRAWN BY W.H.F. DATE APPROVED W.H.F. REVISIONS SHEET PROJECTNO. CLASS CABINET SECTION, TYP. SCALE: 3/4" = 1'-0"

DEMY

7/27/09 REVISIONS

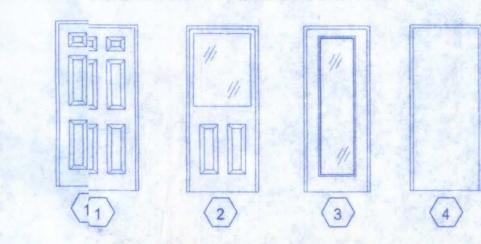
4 1/2" Thru 24'0" 5 1/4"

TO GO			C	DOOR SCHEE	DULE								47
NO.	LCOCATION	DOOR SIZE	TYPE	MATERIAL	JAMB MATERIAL	JAMB SIZE	LOCKS	DOOR CLOSER	PULL PLATE	PUSH	KICK PLATE	DOOR	FIRE
Α	FRONT <sub>T EXIT</sub>	3/0 X 6/8 X 1 3/4	3	STOREFRONT	METAL	4 1/2	ENTRY LOCK PANIC HARDWARE	X				X	
В	CORRIGIOR INTERIOR	3/0 × 6/8 × 1 3/4	4	BIRCH	METAL	4 3/4	PRIVACY	Х				X	20 MIN.
С	MECHAANICAL ROOM	3/0 × 6/8 × 1 3/8	1	MASONITE	WOOD	4 1/2	keyed exterior lever exit hardwa					×	
D	CLASS EXTERIOR	3/0 × 6/8 × 1 3/4	1	METAL	WOOD	4 1/2	keyed exterior lever exit hardwa	single			X	X	
Е	CORRIGIDOR/LOBBY	3/0 X 6/8 X 1 3/4	2	BIRCH	WOOD	4 3/4	PASSAGE					X	
F	CLASSISROOM BATH	2/8 X 6/8 X 1 3/8	1	MASONITE	WOOD	4 1/2	PRIVACY				577	X	
G	FRONT T ENTRY	3/0 X 6/8 X 1 3/4	3	STOREFRONT	METAL	4 3/4	ENTRY LOCK PANIC H/W	×				X	
Н	5 Y/O BBATH	2/4 X 6/8 X 1 3/8	1	MASONITE	WOOD	4 1/2	PRIVACY					X	
-1	OFFICE <sub>E</sub> BATH	2/6 X 6/8 X 1 3/8	1	MASONITE	WOOD	4 1/2	PRIVACY				A Vice	X	
J	H.C. CCORRIDOR BATH	3/0 X 6/8 X 1 3/4	1	BIRCH	METAL	4 3/4	PRIVACY	X				X	20 MIN.
K	H.C. BAATH	3/0 X 6/8 X 1 3/8	1	MASONITE	WOOD	4 1/2	PRIVACY					X	
	Control of the last of the las			1000	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		keyed exterior		13 13 1	CFT C			1

### NOTE:

L STORAGE

BATHROOM DOGORS SHALL BE DESIGNED TO ALLOW OPENING OF LOCKED DOOR FROM OUTSIDE BY OPENING DEEVICE READILY ACCESSIBLE BY STAFF.



18 gage steel holollow metal frame knockdown asse, embly for 1 3/4" wood doolor with a 4 3/4" throat with a primed finnish for painting. verify color with owner r.

JAMB [DETAIL

SCALE: 11 1/2" = 1'-0"

1 hour 2x4 wall --

2x4 wall-

2 1/4" split jamb with fingerjoints

1 3/8" 6 panel door with a primed finish

for painting, verify color with owner

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

OVERHEAD) DOOR COMPANY (OR EQUAL)
DIMENSION A AAND B
C187 AND F2655 SLATS

THE 4 HOUR FFIRE WALL WITHOUT PRIOR VERIFICATION OF

THE ROUGH OPPENING SIZE FROM THE DOOR MANUFACTURER.

CONTRACTOR ? TO VERIFY THE PROPER ROUGH OPENING WIDTH PRIOR TO ORDDERING THE COIL DOOR. DO NOT CONSTRUCT

MAX. WALL	C187 SLAT		F265 SLAT	
OPENING HEIGHT	A	B*	A	B*
THRU 9'3"	14 1/2"	19"	19 1/2"	21"
THRU 10'0"	14 1/2"	19 1/4"	21 1/2"	23 1/4"
THRU 11'0"	14 1/2""	19 3/8""	21 1/2"	23 3/8"
THRU 12'0"	14 1/2"	19 1/2"	21 1/2"	23 1/2"

\*ADD 2" TO "B" C DIMENSION WHEN ELECTRICALLY OPERATED.

DIMENSION W / EXPANSION GAAP
EXPANSION GRAP

SERIES 631 FIRE DOOR

MAX. WALL	3"
OPENING HEIGGHT*	W
THRU 6'0"	3/4"
THRU 8'0"	1"
THRU 10'0"	1 1/4"
THRU 12'0"	1 1/2""

\*HEADPLATE HHEIGHT + "W" + 1/4" = EXPANSION GAP REQUIRED FORR BETWEEN JAMB FIREDOOR ABOVE HEADPLATE.

KITCHEN DESCRIPTION QTY.

GERBER #21-718, 17" HIGH ELONGATED BOWL, WHITE. KOHER STAINLESS STEEL 3-WELL SINK #K-3248-1 GERBER #22-554 24"x20" LAV. W/ PEDESTAL, WHITE. KOHER FORTE® KITCHEN FAUCET W/SIDESPRAY IN GERBER 44-051 SERIES LAVATORY FAUCETS W/ ESCTCHEON AND LEVER HANDLE #K-10413. WRIST BLADE HANDLES. KOHER STAINLESS STEEL SINK #K-3349-1. 1 1/2" X 36" GRAB BAR ON WALL BEHIND TOILET. KOHER REVIVAL SINK FAUCET #K-16112-4A

INTERIOR FINISH SCHEDULE

BASE

STRIP VINYL 3 1/4" WOOD, P/G TEXTURED/PAINED

FLOORING

CONCRETE

STRIP VINYL

STRIP VINYL

STRIP VINYL

STRIP VINYL

STRIP VINYL

CONCRETE

ALL WALLS SHALL RECEIVE ONE PRIMER COAT AND 2 FINISH COATS OF LATEXAINT.

WALLS

3 1/4" WOOD, P/G TEXTURED/PAINTED TEXTURED/PAINTED

3 1/4" WOOD, P/G | TEXTURED/PAINTED | TEXTURED/PAINTED

3 1/4" WOOD, P/G TEXTURED/PAINTED TEXTURED/PAINTED

3 1/4" WOOD, P/G TEXTURED/PAINED TEXTURED/PAINTED

3 1/4" WOOD, P/G | TEXTURED/PAINED | TEXTURED/PAINTED

3 1/4" WOOD, P/G | TEXTURED/PAINED | TEXTURED/PAINTED

3 1/4" WOOD, P/G TEXTURED/PAINTED TEXTURED/PAINTED

3 1/4" WOOD, P/G | TEXTURED/PAINED | TEXTURED/PAINTED

FIXTURE SCHEDILE

ROOM RESTROOM/SINK
DESCRIPTION
UNIVERSAL RUNDLE 20" x 17" SELF RIMMING SINK, WHITE
1 Y/O AND INFANT ROOM

**ELEVATION** 

SERIES 631 FIRE DOOR

KOHLER 33491-1 SELF RIMMING STAINLESS STEEL SINK ALL OTHER ROOMS

H.C. ACCESSIBLE RESTROOM

DESCRIPTION

1 1/2" X 42" GRAB BAR ON WALL LEFT SIDE OF TOILET

KOHLER K15171-F SINGLE LEVER FAUCET GERBER #21-302 ROUND BOWL, WHITE

ROOM

OFFICE

KITCHEN

HALLWAY

PORCH

MECH. ROOM

UTILITY ROOM

H.C. RESTROOM

CLASSROOMS

ROOM RESTROOMS

COLORS BY OWNER.

SINCE HANDLE STORAGE ROOM DESCRIPTION THEMOPLASTIC LAUNDRY TUB KOHER K-11935-U TWO HANDLE FAUCET

	UTILITY ROOM	
QTY.	DESCRIPTION	
1	KOHER STAINLESS STEEL SINK #K-3349-1.	
1	KOHER REVIVAL SINK FAUCET #K-16112-4A SINCE HANDLE	

WATER COOER - OASIS MODEL PRAMEE WATER COOLER (CORRIDOR)

CLG. HEIGHT

9'-0"

9'-0"

9'-0"

9'-0"

9'-0"

9'-0"

9'-0"

9'-0"

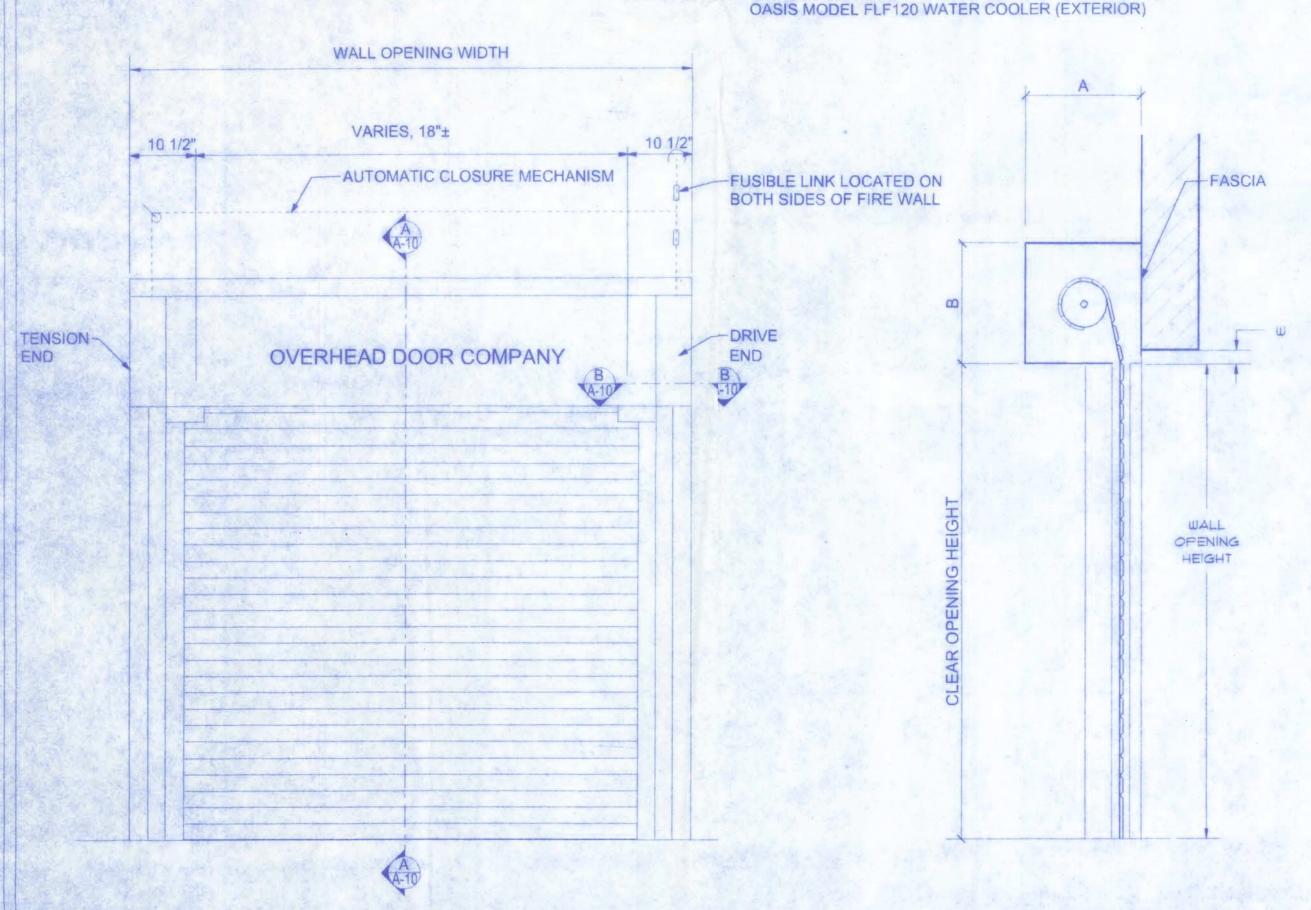
9'-0"

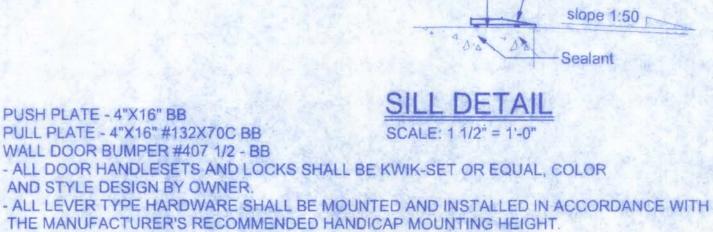
10'-4"

CEILING

TEXTURED/PAINTED

VINYL SOFFIT





-1/2" bevelled sill

GENERAL NOTES - DOORS

METAL 4 3/4 single lever exit

PUSH PLATE - 4"X16" BB

PULL PLATE - 4"X16" #132X70C BB

AND STYLE DESIGN BY OWNER.

WALL DOOR BUMPER #407 1/2 - BB

1. ALL INTERIOR DOORS SHALL BE 6 PANEL MASONITE 6/8 x 1 3/8" PREHUNG UNLESS NOTED OTHERWISE.

2. ALL EXTERIOR DOORS SHALL BE 6 PANEL METAL, PREHUNG 6/8 X 1 3/4" - WOOD JAMBS WEATHERSTRIPPING, AND THRESHOLD FACTORY INSTALLED UNLESS NOTED OTHERWIS

3. IF REQUIRED, UNDERCUT DOORS FOR RETURN AIR. COORDINATE WITH MECHANICAL SUB-CONTRACTOR 4. CONFIRM DEPTHS OF ALL WOOD FLAT JAMBS. COORDINATE WITH CORRESPONDING WALL

Door sill set -

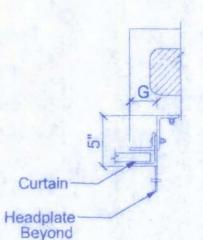
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SECTIONS, PARTITION TYPES, AND WALL MODIFICATION DETAILS. 5. PAINT ALL EXTERIOR SURFACES OF EXTERIOR METAL DOORS AND THE SOLID WOOD

DOOR FRAME. COLOR SELECTION BY OWNER.

6. PAINT ALL INTERIOR SURFACES OF EXTERNAL METAL DOORS AND THE SOLID WOOD DOOR FRAME. COLOR SELECTION BY OWNER.

PAINT ALL INTERIOR WOOD FLAT JAMBS. COLOR SELECTION BY OWNER. 8. PAINT ALL INTERIOR DOORS. COLOR SELECTION BY OWNER.



SERIES 631 FIRE DOOR

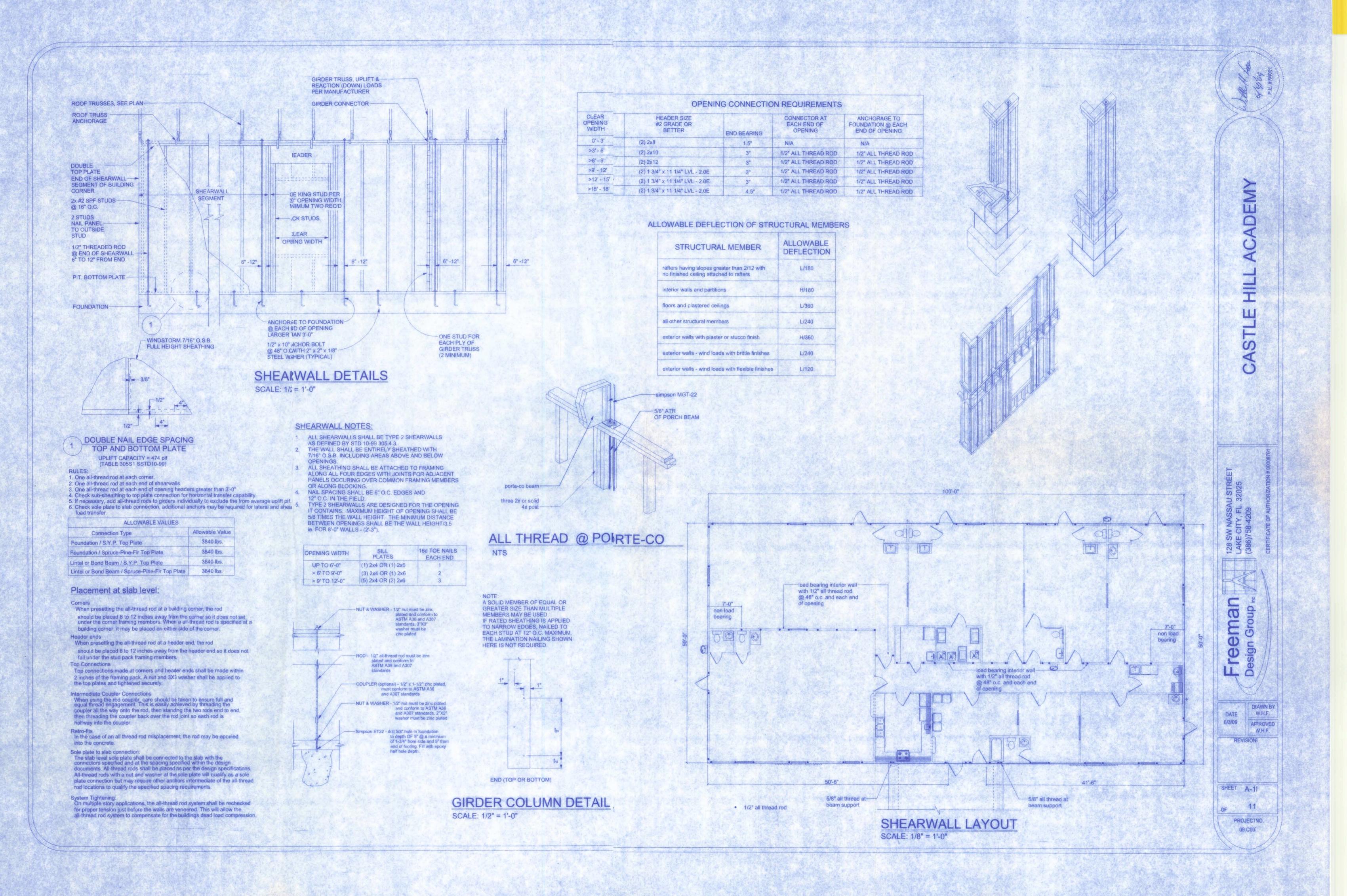
DIMENSION W **EXPANSION GAP** MAX. WALL **OPENING HEIGHT\*** 3/4" THRU 6'0" THRU 8'0" 1 1/4" THRU 10'0" 1 1/2"" THRU 12'0"

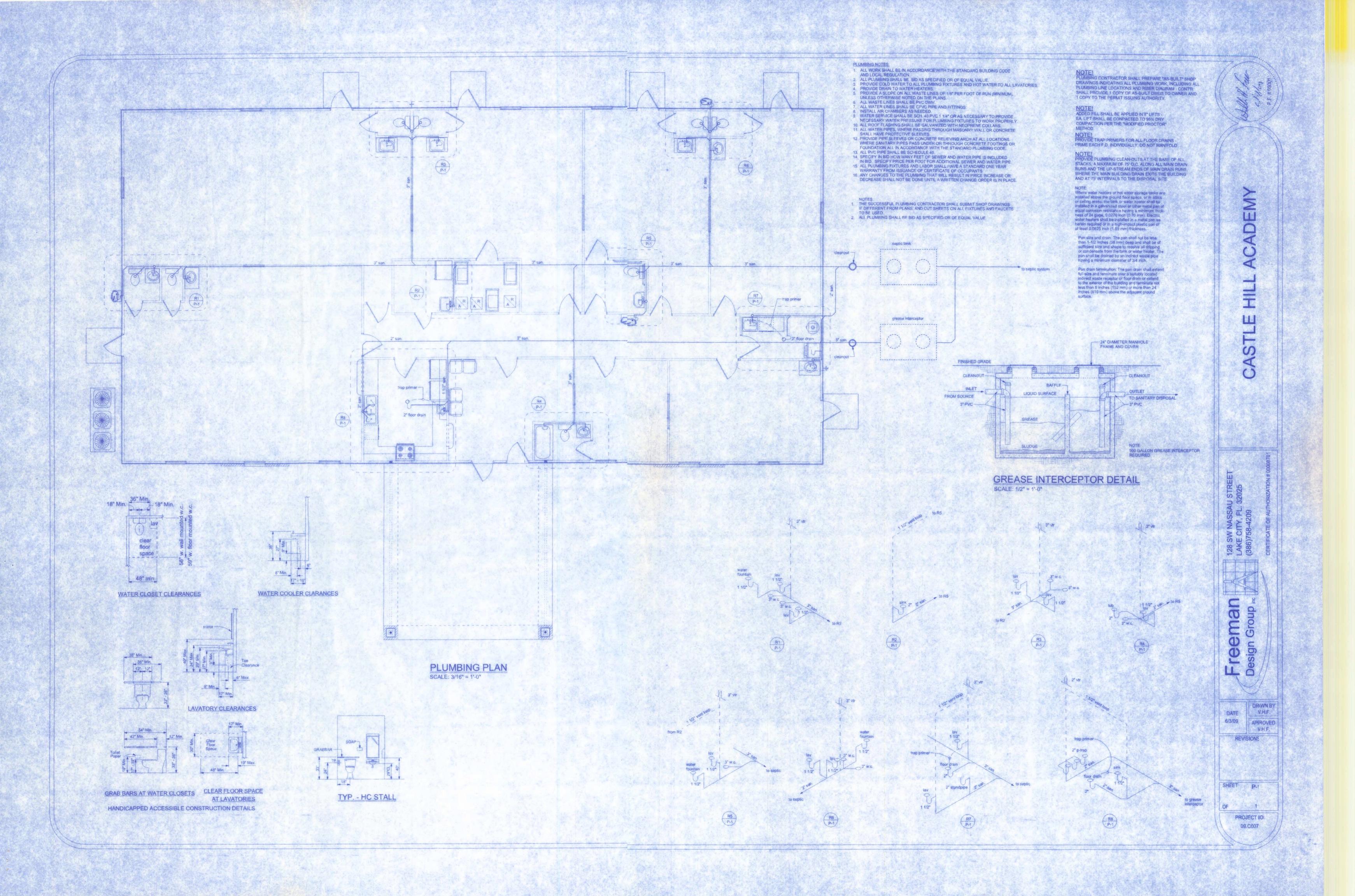
\*HEADPLATE HEIGHT + "W" + 1/4" = EXPANSION GAP REQUIRED FOR BETWEEN JAMB FIREDOOR ABOVE HEADPLATE.

Dimension G C187, C275 ar		Drive End
Max. Wall Opening Width	G	Type of Operation Push-Up
Thru 8'0"	2 3/4"	Elect., Chain, Crank
Thru 12'0"	3 1/4"	
Thru 14'0"	3 1/2"	Dimension H
Thru 16'0"	3 1/2"	Tension End
Thru 20'0"	4 1/4"	C187, C275 and
Thru 24'0"	5 1/4"	Max. Wall

4" 7 1/2" F265 Slats Max. Wall Opening Width Thru 14'0" Thru 20'0"

A-10 11 PROJECT NO. 09.C007





FIRE DAMPERS SHALL COMPLY WITH THE REQUIREMENTS OF UL 555 AND SHALL BEAR THE LABEL OF AN APPROVED TESTING AGENCY. FIRE DAMPERS SHALL BE CLASSIFIED AND IDENTIFIED FOR USE IN EITHER:

1. STATIC SYSTEMS THAT AUTOMATICALLY SHUT DOWN IN THE EVENT OF FIRE. 2. DYNAMIC SYSTEMS THAT OPERATE IN THE EVENT OF FIRE. FIRE DAMPERS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS IN THE FOLLOWING LOCATIONS:

1. DUCTS PENETRATING WALLS OR PARTITIONS HAVING A FIRE RESISTANCE RATING OF 1 HOUR OR MORE. 2. DUCTS PENETRATING SHAFT WALLS HAVING A FIRE RESISTANCE RATING OF HVAC NOTES SUB-CONTRACTORS PROVIDING HVAC INSTALLATION SHALL BE SUJECT TO THE PROVISIONS OF NOTES 1 THRU 6. GENERAL NOTES. HVAC SUB-CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIAL, TOOLS AND EQUIPMENT TO INSTALL A COMPLETE HVAC HVAC SYSTEM SHALL BE AS DETAILED IN THE PLANS (IF INCLUDED)
 OR SHALL BE AS DIRECTED BY THE OWNER IN CONSULTATION WITH THE
 HVAC SUB-CONTRACTOR. HVAC SUB-CONTRACTOR SHALL FURNISH SHOP DRAWINGS FOR DUCTWORK, CONDENSING UNIT & AIR HANDLER, EXHAUST FANS AND AIR DEVICES. 5. IT IS THE HVAC SUB-CONTRACTOR'S RESPONSIBILITY TO COMPLY WITH NFPA-90A AND ALL APPLICABLE CODES. FLEXIBLE DUCT SHALL BE FULLY ANNEALED, CORRUGATED ALUMINUM W/1 3/4 LB. DENSITY FIRBERGLASS INSULATION AND SHALL BE U.L. LISTED. SHEET METAL DUCT SHALL BE LINED W/1" MATFACED DUCT LINER & WRAPPED W/1 3/4 L. FOILFACED FIBERGLASS INSULATION. ALL FIBERGLASS DUCT SHALL BE FOILFACED, R4.3/R6.0 DUCTBOARD. ALL EXHAUST AND OUTSIDE AIR DUCT SHALL BE GALVANIZED SHEET METAL CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH ASHREA AND SMACNA STANDARDS. 8. ALL AIR DEVICES SHALL BE OF ALUMINUM CONSTRUCTION FOR WALL AND CEILING APPLICATIONS AND STEEL CONSTRUCTION IN FLOOR APPLICATIONS ACCEPTABLE MANUFACTURERS SHALL BE TITUS, METALAIRE, NAILORHART, HART & COOLIE OR AS DIRECTED BY THE 9. IF REQUIRED BY THE OWNER, THE HIVAC SUB-CONTRACTOR SHALL SUPPLY A TEST AND BALANCE REPORT IN ACCORDANCE WITH AIR BALANCE COUNCIL STANDARDS, SIGNED AND SEALED BY A REGISTERED

HVAC SUB-CONTRACTOR SHALL SUPPLY ALL CONTRACTORS, RELAYS AND THERMOSTATS. THE ELECTRICAL SUB-CONTRACTOR SHALL PROVIDE ALL SWITCHES, DISCONNECTS & CONTROL WIRING. THERMOSTATS SHALL BE APPROVED BY THE EQUIPMENT MANUFACTURER.
 ALL DUCT SIZES INDICATED IN THE PLANS (IF INCLUDED) ARE NET INSIDE DIMENSION.
 ALL EQUIPMENT SHALL BE FULLY WARRANTED FOR 1 YEAR AND THE COMPRESSOR(S) SHALL BE WARRANTED 5 YEARS FROM DATE OF FINAL ACCEPTANCE, BY THE OWNER.
 ALL WORK IN THIS TRADE SHALL BE COORDINATED WITH ALL OTHER TRADES SO AS TO AVOID CONFLICTS OR HINDRANCE TO COMPLETION OF THE JOB
 CONDENSATE DRAIN PIPING SHALL BE INSULATED WITH 1.2" THICK ARMAFLEC INSULATION.

ARMAFLEC INSULATION:

15. FILTERS SHALL BE DISPOSABLE TYPE AND HAVE INITIAL SHARE WEIGHT ARRESTANCE OF 10% AND A CLEAN PRESSURE DROP OF 0.15 PROVIDE 2 SETS, ONE DURING CONSTRUCTION AND ONE FOR USE AT FINAL ACCEPTANCE.

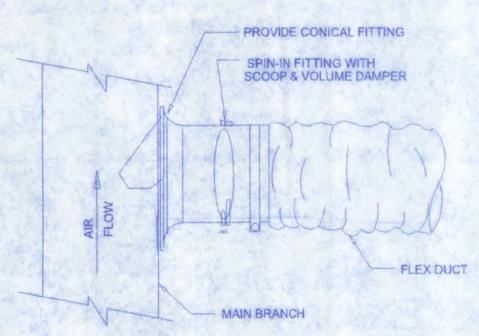
16. HVAC SUB-CONTRACTOR SHALL PROVIDE & INSTALL ALL NECESSARY OFFSETS, TRANSITIONS & BENDS REQUIRED TO PROVIDE A COMPLETE SYSTEM AT NO ADDITIONAL GOST TO THE OWNER.

17. IT IS THE RESPONSIBILITY OF THE HVAC SUB-CONTRACTOR TO COORDINATE LOCATION OF CEILING DIFFUSERS, GRILLES AND REGISTERS IN THE FIELD WITH THE ELECTRICIAN, LIGHTS AND ARCHITECTURAL ELEMENTS.

18. COORDINATE W/ THE ELECTRICIAN, TO ASSURE SUITABLE SIZES OF BREAKER, SWITCHES AND WIRING.

NOTE:
CONDENSATE LINES AND ROOF DOWN SPOUTS SHALL DISCHARGE
AT LEAST ONE FOOT AWAY FROM THE STRUCTURE SIDEWALL. IN
CASES WHERE THE ROOF EAVE IS LESS THAN 6 INCHES. GUTTERS
MUST BE INSTALLED AND DIRECT WATER A MINIMUM OF 1 FOOT
FROM THE STRUCTURE.

CONDENSATE WASTE AND DRAIN LINE SIZE SHALL
BE NOT LESS THAN 3/4" INTERNAL DIAMETER AND
SHALL NOT DECREASE IN SIZE FROM THE DRAIN PAN
CONNECTION TO THE PLACE OF CONDENSATE DISPOSAL



FIRE DAMPERS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS IN THE FOLLOWING LOCATIONS:

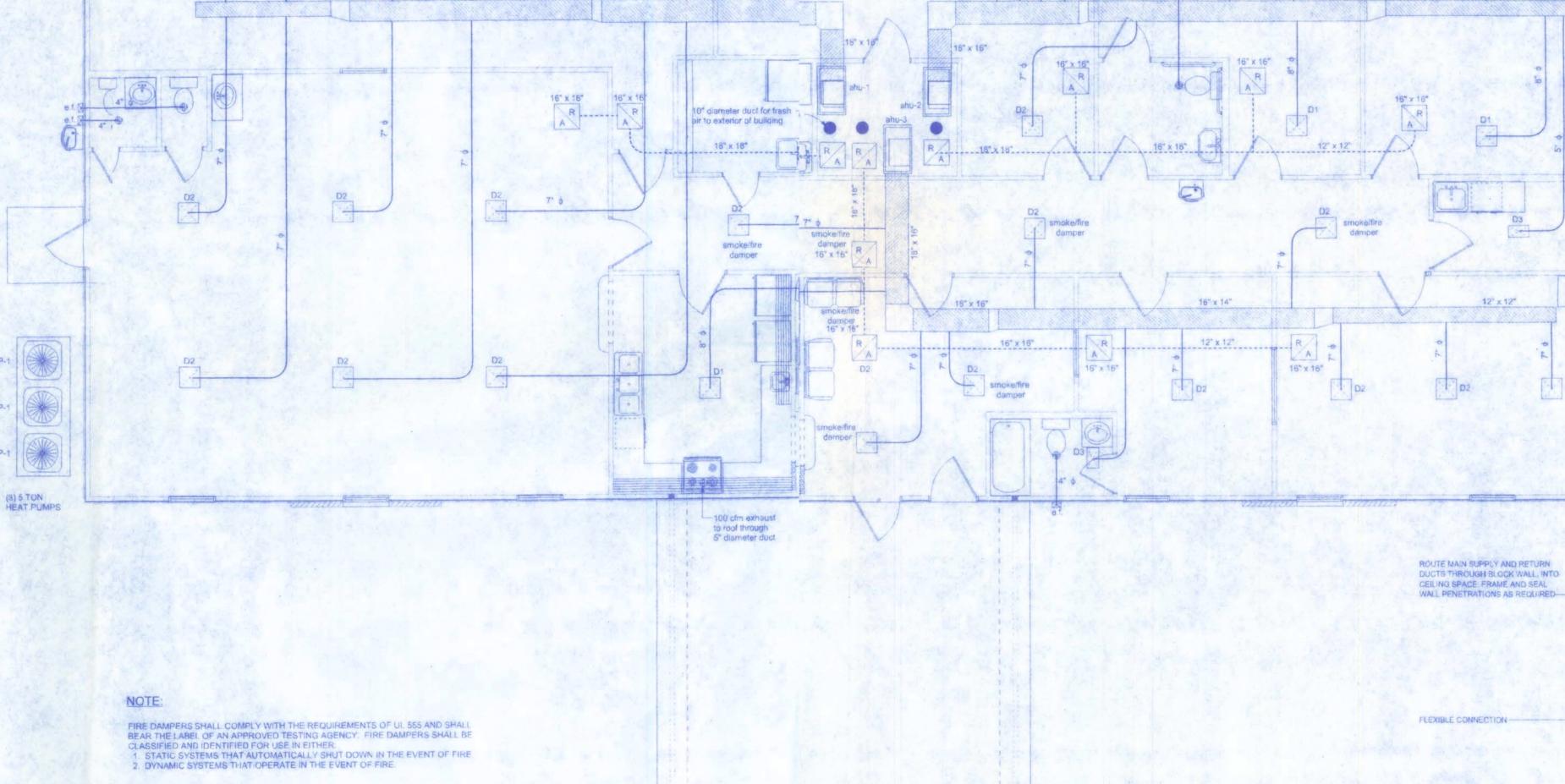
1. DUCTS PENETRATING WALLS OR PARTITIONS HAVING A FIRE RESISTANCE

2. DUCTS PENETRATING SHAFT WALLS HAVING A FIRE RESISTANCE RATING OF

RATING OF 1 HOUR OR MORE

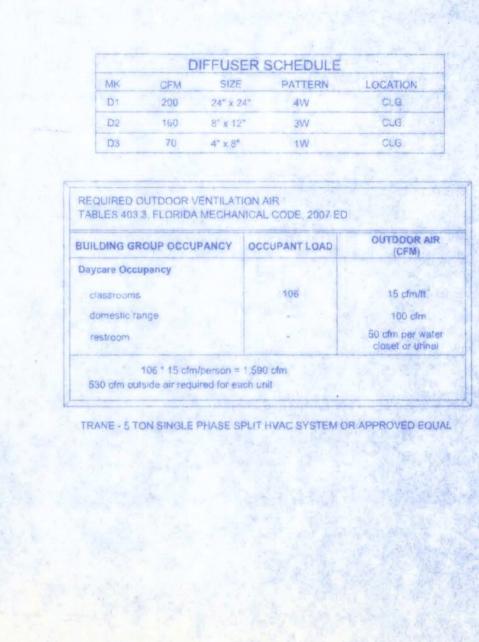
1 HOUR OR MORE

SPIN-IN COLLAR FITTING DETAIL



•

H'IVAC LAYOUT



-MAINTAIN 4" CLEARANCE

A.H.U. MOUNTING DETAIL

MAINTAIN SERVICE CLEARENCE-

IN FRONT OF UNIT

FLEXIBLE CONNECTION -

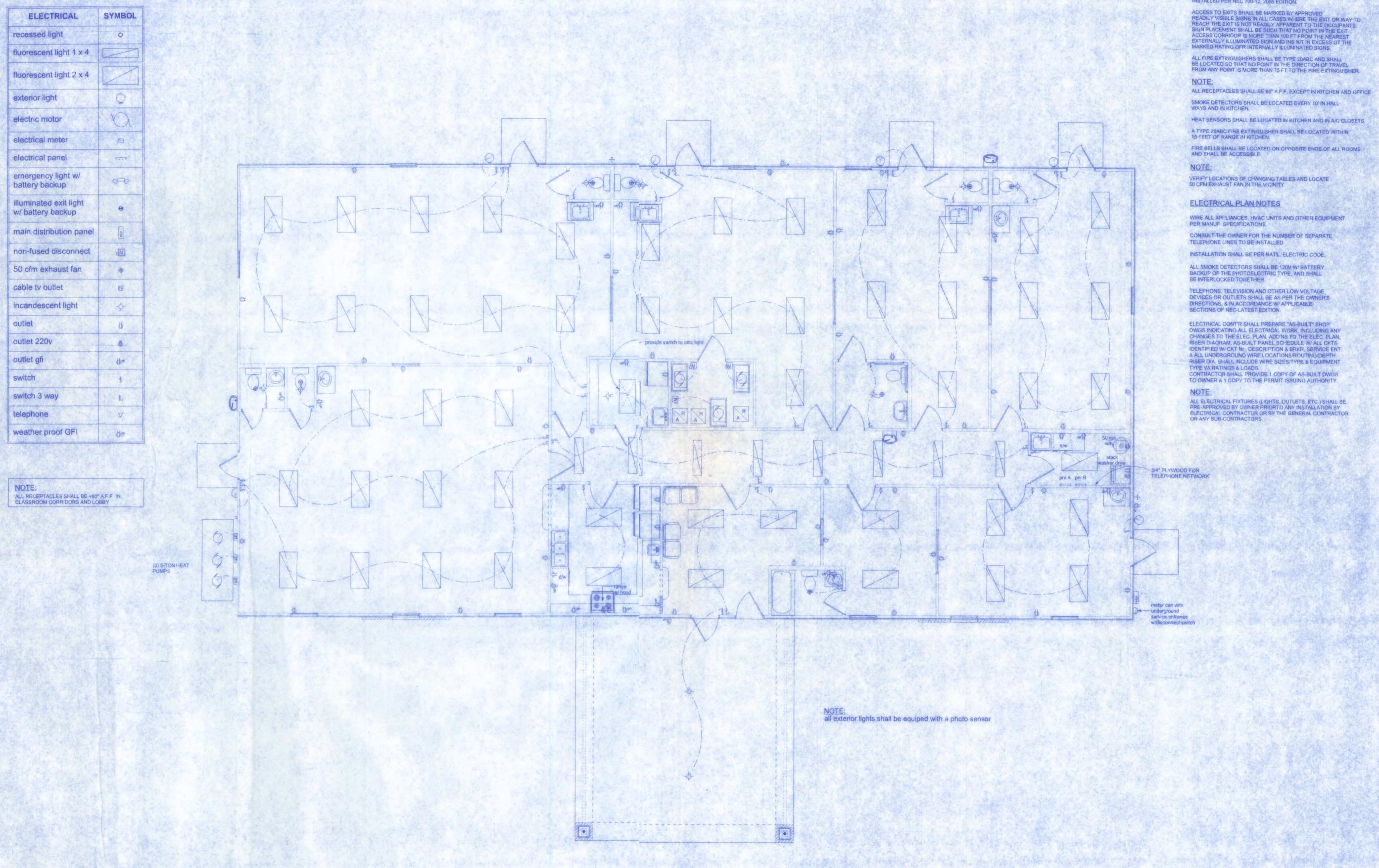
NOMINAL 24" HIGH FLOOR STAND— 1-1/2"x1-1/2"x1/8" ANGLE WELDED CONSTRUCTION SIZE TO

NOMINAL 3" HIGH DRAIN PAN -WITH FLOAT SWITCH SOLDER

ALL SEAMS WATERTIGHT

VIBRATION PADS

CLEAR RIA DUCT.



ELECTRICAL PLAN
SQCALE: 3/16" = 1'-0"

LIFE SAFETY NOTES

ALL EXIT AND EMERGENCY LIGHTING SHALL BE INSTALLED PER NEC 700-12, 2005 EDITION.

HEAT SENSORS SHALL BE LOCATED IN KITCHEN AND IN A/C CLOSETS.

Freeman
Design Group

ADEMY

DRAWN BY W.H.F. APPROVED W.H.F.

REVISIONS

PROJECT NO. 0).C007

# PANEL BOARD SCHEDULE

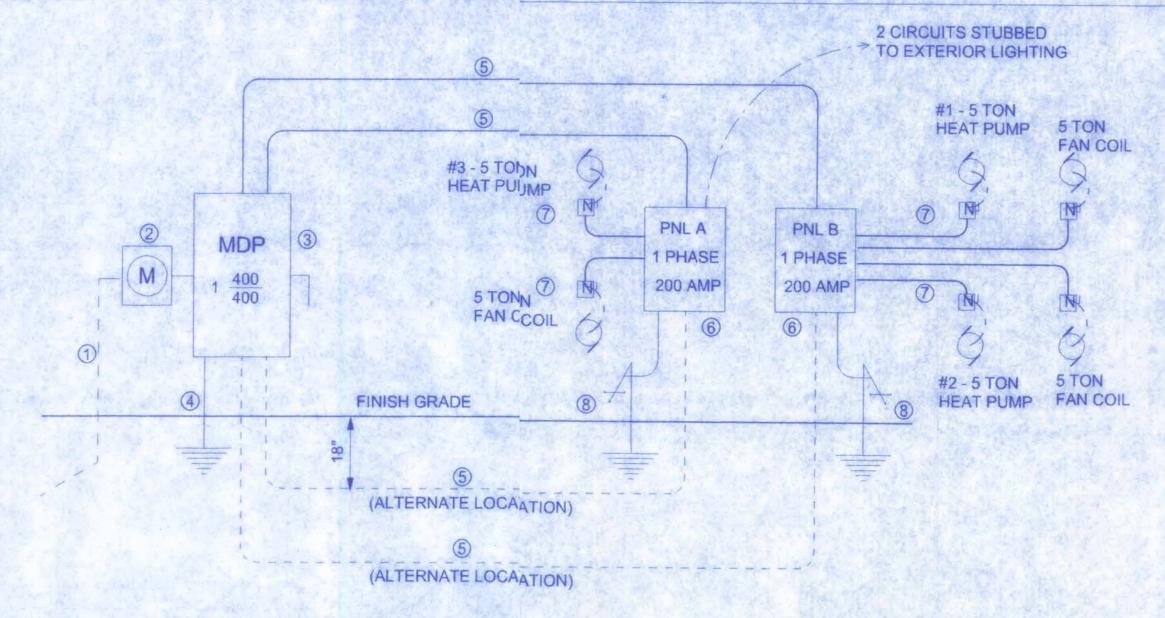
PANEL	PNLA	SERVICE SERVICE	LOCATION	UTILITY	THE ADDRESS OF THE	1
TYPE	SQ.D. 'NQOD'	_ MAIN LUGS	ONLY	MAII	N BREAIR X	AMPS20
VOLTS	120/240	_ PHASE _	1	WIRE	3 NGLE POLES	40
A.I.C. RATING 10,000 KVA		FEEDE	R SIZE	3 - 3/0 THW	The start of	Ny State 6
		FEEL	TOP	X	BOTTI	
MOUN	NTING / SURFACE	FI	LUSH	x		
CABIN	NET/STANDARD X				7-14	

	WIRE	GND.	COND.	APPLICATION	LOAD	CIR:	BRK.		BRK.	CIR.	LOAD APPLICATION	COND.	GND.	WIRE
	8	10	3/4"	HEAT PUMP		1	40/2		60/2	2	AIR HANDLER	1"	6	4
				#3		3				4	Man and a second	AIR HANDLER		
	12	12	1/2"	LIGHTING		5	20/1		30/2	6	WATER	3/4"	12	10
	12	12	1/2"	RECEPT.		7	20/1			8	HEATER			
	12	12	1/2"	RECEPT.		9	20/1		20/1	10	RECEPT.	1/2"	12	1:
	12	12	1/2"	RECEPT.		11	20/1		20/1	12	RECEPT.	1/2"	12	1.
	12	12	1/2"	BATHROOM		13	20/1		20/1	14	MISCELL.	1/2"	12	1
	6	8	3/4"	RANGE		15	50/2		20/1	16	SM. APPLIANCE	1/2"	12	1.
				KANGE	To V	17			20/1	18	SM. APPLIANCE	1/2"	12	1
	12	12	1/2"	LIGHTING		19	20/1		20/1	20	LIGHTING	1/2"	12	1
	12	12	1/2"	EXT. LIGHTING		21	20/1		20/1	22	EXT. LIGHTING	1/2"	12	1
	12	12	1/2"	1/2" HP PUMP		23	20/2		20/2	24	1/2" HP PUMP	1/2"	12	1.
		r de				25				26				
	12	12	1/2"	1" HP WELL PUMP		27	20/2			28				
				SPACE							SPACE	No.		
					(42)			S.						10,
200														
		148					25.8			3			TAIL	
										+		7		
4				SPACE	16	39			112	40	SPACE		3.7	

# PANEL BOARD SCHEDULE

PANEL	PNL B	LOCATION	UTILIT	YES SELECTION OF THE SEL
TYPE	SQ.D. 'NQOD'	MAIN LUGS ONLY	M	AIN BREAKE X AMPS 200
VOLTS	120/240	PHASE 1	WIRE	3 SINLE POLES 40
A.I.C.	RATING 10,000 KVA	FEEDER SIZE _	3 - 3/0 THW	
		FEED/TOP	X	ВОТТОМ
MOU	NTING / SURFACE	FLUSH	X	
CABI	NET/STANDARD X			
TOTA	AL KW LOAD 31.1			

WIRE	GND.	COND.	APPLICATION	LOAD	CIR.	BRK.	BRK.	CIR.	LOAD	APPLICATION	COND.	GND.	WIRE
8	10	3/4"	HEAT PUMP		1	40/2	30/2	2	40/2	HEAT PUMP 3/	3/4"	10	8
			#1		3			4		#2			
4	6	1"	AIR HANDLER		5	60/2	60/2	6	60/2	AIR HANDLER	1"	6	4
			AIRTIANDLER		7			8		AIR HANDLER		-	
12	12	1/2"	EM. LIGHTING		9	20/1		10	30/2	DRYER	3/4"	12	10
12	12	1/2"	EXT. LIGHTING		11	20/1		12					
12	12	1/2"	LIGHTING		13	20/1	201	14	20/1	LAUNDRY	7 3 1 5 7 3 1 5	12	12
12	12	1/2"	LIGHTING		15	20/1		16	20/1	LIGHTING		12	12
					17			18		SPACE			
	1												
			SPACE	Care I	39			40		SPACE	15/11	Our -	Vil.



- 1 Service/Feeder Entrance Conductors: 2 1/2" rigid conduit, minin 18" deep, w. continuous ground bonding conductor, Service/ Entrance Conductors shall not be spliced except that bolted connections at the Meter, Disconnection Devices and Panel shall be allowed.
- Meter Enclosure, weatherproof, U.L. Listed.
- 3 Main Disconnect Switch: fused or Main Breaker, weatherprocof. U.L. Listed.
- (4) Service entrance ground: 5/8" diameter iron/steel rod x 8'-0" long and/or concrete encased foundation steel rebar x 20'-0" " long. Grounding conductor shall be bonded to each piece of if Service/Entrance Equipment, and shall be sized per Item #5 below.
- (5) 200 Ampere Feeder: 3-3/0-THW-Cu, 1-#2-Cu-GND, 2 1/2" Conduit
- 6 House Panel (PNL), U.L. Listed, sized per schedule.
- (7) Equipment Disconnect Switch: non-fused, in weather proof enclosure, size according to Panel Schedule loads.
- 8) Provide Ground Bond Wire to metal piping, size in accordangce with the Service Ground Conductor.

### NOTE:

The minimum AIC rating for panel boards, breakers and disconnect switches shall be 10,000 AIC.

# GENERAL LIGHTING LOAD (CONTINUOUS)

DAY CARE FACILITY		
TOTAL BUILDING AREA	(SF)	5000
2.0 VA PER SQUA	RE FOOT	10000
SUBTOTAL		10000
DEMAND FACTOR	125 %	12500 kw

### **OUTSIDE LIGHTING (CONTINUOUS)** 3,000 VA X 125% =

# RECEPTACLE LOADING (NON-CONT.)

Number of Receptacles	60
180 VA per receptacle	10,800
FIRST 10,000 VA X 100% =	10,000
REMAINING 800 X 50% =	400
	40 400

WATER	HEATER	
4,500	VA per water heater	4500 kw
1	Number of water heaters	

### RANGELOAD

MITOL LOND	
8,000 VA per range	8000 kw
1 Number of ranges	

### WELL PUMP 1 hp submersible pump

		1,000
pumps =	1	1900
TOTAL		1900 kw
SEWAGE PUMP		
1/2 hp submersible pump		1,500
pumps =	2	3000
TOTAL		3000 kw
HEATING LOADS		
5 ton heat pump		5,000
hast summer	0	45000

# IC MOTOR LOADS

heat pump load

I = total load/240 =

TOTAL

A/C MOTOR LOADS		
ton air handler		6,050
ir handlers =	3	18150
OTAL		18150 kw

### CALCULATING LARGEST MOTOR LOAD

25 %	1512.5 kw
	12500
	3750
	10,400
	4500
	15000
CTA TOTAL	18150
	8000
S	3000
	1900
	1512.5
	78712.5 kw
	25 % S

327.9688 AMPS

USE 400 AMP 1 PHASE POWER 120/240

### **WIRING NOTES:**

- WIRING, DISTRIBUTION EQUIPMENT AND DEVICES
- A. CONDUCTORS: Copper, in accordance with ASTM Standards, size reference AWG. Conductors No. 10 and smaller size solid, No. 8 and Larger, Stranded. Insulation of conductor thermoplastic, type THHN (min. size No. 12) any wire installed outside, underground, in slabs or exposed to moisture shall have THWN insulation.
- B. RACEWAYS: RIGID STEEL CONDUIT, full weight pipe galvanized, threaded, and minimum 1/2 inch except as noted or required for wiring. ELECTRICAL METALLIC TUBING (EMT), thin wall pipe, galvanized, threadless, compression fittings, and minim 1/2" size except as noted or required for wiring. FLEXIBLE STEEL CONDUIT: continuous single strip, galvanized, and minimum 1/2" size except as noted or required for wiring. PVC CONDUIT, heavy duty type, size as indicated. Separate raceways shall be used for each voltage system.
- C: DISCONNECT SWITCHES: General Duty, horsepower rated for motor loads 250 volt rating, fused or non-fused as noted; number of poles as indicated. Enclosure NEMA 1 for indoor use and NEMA 3R for weatherproof applications. Switch to be Square "D" or equal.
- D: CIRCUIT BREAKERS: molded case, thermal-magnetic, quick make, quick break, bolt-on type with manually operated insulated trip-free handle. Multi-pole types with internal common trip bar. Terminals suitable for copper or aluminum conductors. Interrupting capacity minimum 10,000 RMS symmetrical amperes circuit circuit breakers to be Square "D", Siemens or equal, type as required. E: PANEL BOARDS: Voltage, phasing, and ampere ratings as indicated, circuit breaker type as indicated, buss bars of hard drawn copper, minimum 98% conductivity, galvanized steel back box, door and trim. All corners lapped and welded, hardware chrome plated with flush lock and catch. Hinges semi-concealed, 5 knuckles steel with nonferrous pins. 180 degree openings. Minimum gutter space 5-3/4" sides, top and bottom. Increase size where required by code. Directory holder complete with clear plastic transparent cover indicating typewritten list of feeder cables, conduit sizes, circuit number, outlets of equipment supplied, and their location. Circuit breaker type panel boards to be Square "D" type NQOD or I-Line, or equal. A plastic label shall be located on
- exterior of panel board identifying the system voltage, phase, and current rating. F: WIRING DEVICES: All devices their product of the same manufacturer. Wall switches and receptacles to be 20 amp, 125 volt, unless noted otherwise. Color to be selected by Architect. G: DEVICE PLATES: provide for all outlets where devices are installed. Provide engraved marking for special outlets (where noted). Provide blank plates for empty or future outlet boxes. DEVICE AND DEVICE PLATE COLORS TO BE VERIFIED WITH ARCHITECT AND OWNER.

### GROUNDING SYSTEM:

a. EQUIPMENT: Ground non-current carrying metal parts of panel board, raceways and all lighting fixtures. All conduit shall have equipment grounding conductors.

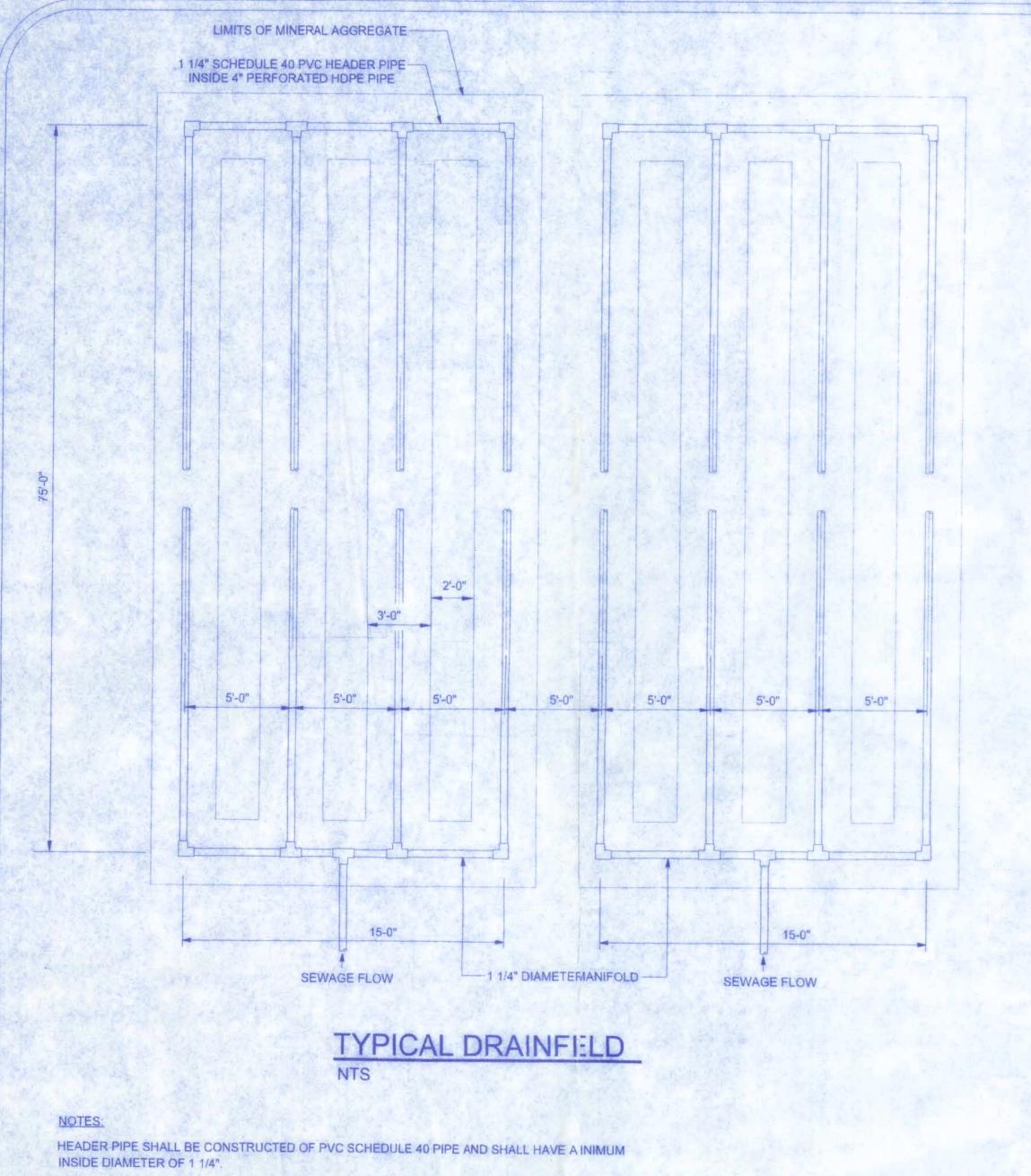
### INSTALLATION:

- A. Secure all supports to building structure as specified under raceways. Support horizontal runs of metallic conduit not more than 10 feet apart. Run exposed raceways parallel with or at right angles
- B. Pass raceways over water, steam or other piping when pull boxes are not required. no raceway within 3 inches of steam or hot water pipes, or appliances. expect crossing where the raceway shall be at least 2 inches from pipe cover.
- C. Cut conduit ends square, ream smooth. Paint male threads of field threaded conduit with Graphite based pip compound. Draw up tight with conduit couplings.
- D. Leave wire sufficiently long to permit making final connections. In raceway over 50 feet in which wiring is not installed, furnish pull wire.
- E. Verify locations of outlets and switches.
- F. Support panel, junction and pull boxes independently to building structure with no weight bearing on conduits. G. Connect conduit to motor conduit terminal bases with flexible conduit; minimum 18 inches in
- length and 50% slack. Do not terminate in or fasten raceways to motor foundation H. This contractor shall provide a temporary electrical distribution system as required; 120/208 volt, 1 phase, 100 amp, for new construction. All temporary work shall be installed in a neat and
- I. Contractor to remove and salvage all abandoned electrical equipment.
- J. This contractor shall warrant all labor and materials for one year from date of final written acceptance.

DEMY Ш

W.H.F. 6/3/09 APROVED W.H.F. REVISIONS

PROJECTVO. 09.C001



MINERAL AGGREGATE SHALL CONFORM WITH ASTM C33-86 OR LIGHTWEIGHT AGGREG/E CONFORMING TO ASTM C330-87 MEETING FDOT SPECIFICATIONS UNDER SECTION 901 "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION"

# THE DRAINFIELD SHALL BE PROTECTED FROM INFILTRATION OF EARTH BACKFILL BY A BARRIER OF POLYESTER FILLAMENT. THE BARRIER SHALL BE PLACED ON TOP OF THE DRAINFIELD ONLY FILTER FABRIC 1 1/4" SCH. 40 PVC PERFORATED PIPE INSIDE 4" PERFORATED HDPE PIPE FINISHED GRADE 2'-0" 3'-0" EXCAVATE EXISTING MATERIAL AND BACKFILL WITH CLEAN SANDY SOIL IF SOIL IS UNSUITABLE WET SEASON WATER TABLE **EMPERVIOUS LAYER** DRAINFELD SECTION

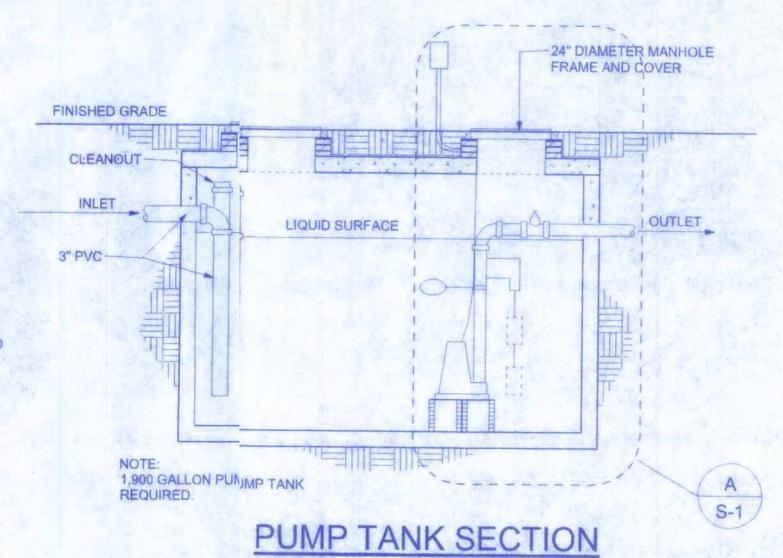
# GREASE INNTERCEPTOR CALCULATIONS (M) x (GM) x (LF) = Effective & capacity in gallons (M) = Meals prepared per da<sub>lay</sub> (GM)= Gallons of waste wateter per meal (5 gallons) LF = Loading Factor (Use 1.0 00 with dishwasher 0.75 without) 180 x 5 x 1.00 = 900 gallons s Use 900 gallon grease interceceptor

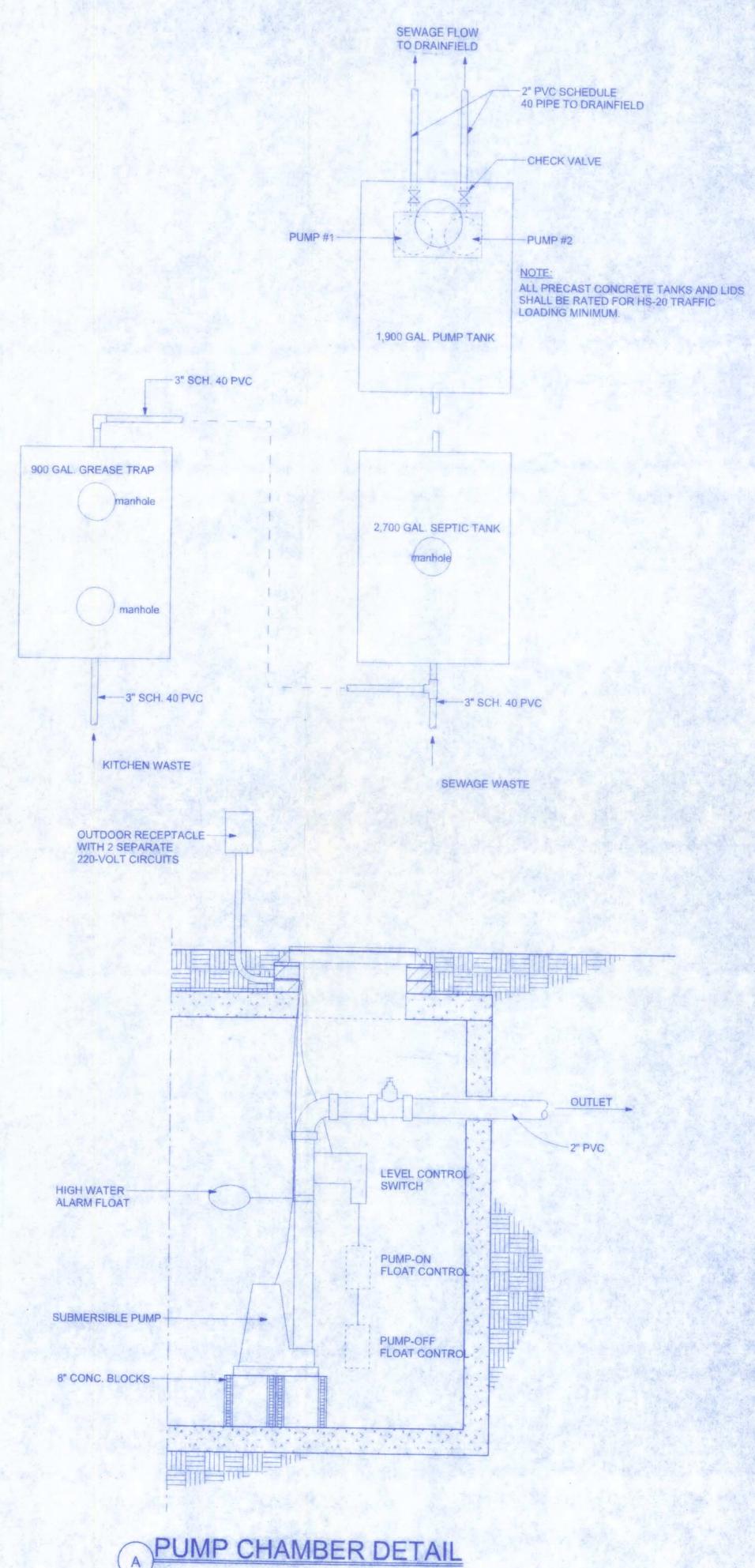
SEI:WAGE CALCULA	TIONS	
96 children with cafeteria @ 1·14 gpd = 1,344 gpd 6 full time employees @ 15 gr <sub>3</sub> pd = 90 gpd total estimated sewage = 1,43,34 gpd		
ESTIMATED TOTAL SEWAGEE	1,434	GPD
FACTOR OF SAFETY	0.8	
DRAINFIELD AREA REQ'D.	1,792.5	SQ. FT.
LINEAR FEET OF LATERAL	597.5	LF
NUMBER OF LATERALS	8	EACH
LATERAL LENGTH	75	LF
SEPTIC TANK CAPACITY	2,700	GAL.
DOSING TANK CAPACITY	1,900	GAL.

CAPACITIES TO	31 GPM
HEADS TO	23 FT
SOLIDS HANDLING CAP.	1/2 "
MOTOR	1/3 HP SHADED POLE 1550 RPM
ELECTRICAL	115V, 8.5 AMPS SINGLE PHASE, 60 Hz
MIN. SUMP DIAMETER	12"

# SYSTEM REQUIREMEENTS PER PUMP (2 REQ'D.)

LINIOFE	N FUIVIF (Z F	TEQU.
Daily waste flow	1,793	apd
Septic Tank size	2,700	
Pumping Tank size	1,900	
Effluent loading rate		ga/ft^2/day
Absorbtion area	1,121	
Total length of laterals	300	
Lateral diameter	1 1/4	
Lateral configuration	4 x 75	ft lines
Supply line length		
Supply line diameter	50	
Manifold placement	2	inch
Hole size	end	
Hole Spacing	5/32	inch
Number of Holes		ft
	52	
Pressure Head		ft
Total Head	10.02	ft
Pump Requirements	26.0 gpm	10.02 ft of head
Storage Volume in laterirals	19.2	gal
Storage Volume in suppopy line	8.1	gal
Total Storage Volume	27.3	gal
Dosing Volume	146	gal
Dosing Depth	1.10	ft
Check Valve needed?	ves	THE RESERVE





DRAWN BY

V.H.F.

DATE V.H.F.
7/27/09 APIROVED

REVISIONS

PROJECT NO. 09.C007