



AREA OF WORK

LOCATION MAP - BIG PINE KEY

DRAWING LIST
A-1.0 SITE PLAN
AD-2.0 DEMOLITION PLAN
A-2.0 FLOOR PLAN
A-3.0 DETAILS AND SCHEDULES
A-4.0 SPECIFICATIONS
A-4.1 SPECIFICATIONS
ID-2.0 INTERIOR DESIGN
ID-2.1 CABINETS ELEVATIONS
E-1.0 ELECTRIC NOTES
E-2.0 POWER AND LIGHTING
M-1.0 MECHANICAL NOTES
M-2.0 MECHANICAL PLAN
P-1.0 PLUMBING NOTES
P-2.0 PLUMBING PLAN
P-3.0 PLUMBING RISER
S-0.1 STRUCTURAL SPECIFICATIONS
S-0.2 STRUCTURAL SPECIFICATIONS
S-1.0 STRUCTURAL PLAN
Ex-1 EXISTING FIRST FLOOR PLAN
Ex-2 EXISTING FIRST FLOOR ELECTRIC

SCOPE OF WORK

WORK INCLUDES REMOVAL OF EXISTING FINISHES, STRUCTURAL SLAB, WINDOWS, AND DOORS. A NEW FLOODPROOF SLAB STRUCTURE WITH NEW FLOOR FINISHES AND FLOOR DRAINS, INSTALLATION OF NEW WINDOWS AND DOORS IN EXISTING EXTERIOR OPENINGS, NEW FURRING STRIPS AS NECESSARY, NEW PARTITION WALLS WITH DURROCK AND A KNOCKDOWN PLASTER FINISH. ALL WORK IS TO BE COMPLETED ON FIRST FLOOR ONLY.

WORK ALSO INCLUDES MAKING THE RESTROOMS ADA COMPLIANT, UTILIZING EXISTING WATER CLOSETS AND NEW ADA SINK FIXTURE, SOAP DISPENSER, TOILET PAPER HOLDER, AND HAND DRYER. THERE WILL ALSO BE NEW CABINETS WITH ART SINKS IN EACH CLASSROOM ALONG WITH A WATER FOUNTAIN.

ALL A/C UNITS ARE TO BE REUSED IN EXISTING LOCATIONS AND THEIR CONDENSERS ARE TO BE RAISED TO 9'-0" NGVD.

SITE -DATA

LAND USE : SC (SUBURBAN COMMERCIAL)

FLOOD ZONE: A E +8.0' NGVD

SITE AREA: 4 ACRES (174240 SF)

SETBACKS

FRONT YARD SETBACK =25'

SIDE YARD SETBACKS =10/15'

REAR YARD =10'

ALL SETBACKS REMAIN UNCHANGED

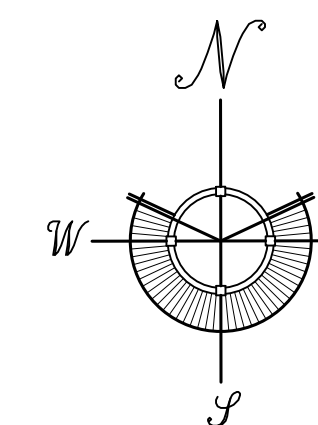
HEIGHT ALLOWED = 35'-0" MAX

NO CHANGE IN LOT COVERAGE OR IMPERVIOUS COVERAGE

LEGAL DESCRIPTION : 26 66 29 BIG PINE KEY PT N1/2 OF SW1/4 PARCEL 5-6-7 TROPIC ISLAND RANCHETTES & PT E1/2 OF NW1/4 OR864-183 OR879-2007 OR879-2009/10 OR952-1895E OR1348-1057/ 59Q/C OR1348-1060/62 OR1348-1063/65 OR1348-1066/68 RE 111420-000700 111420-000800 & 111700-000100 COMBINED FOR ASSMT PURPOSES 5-21-96



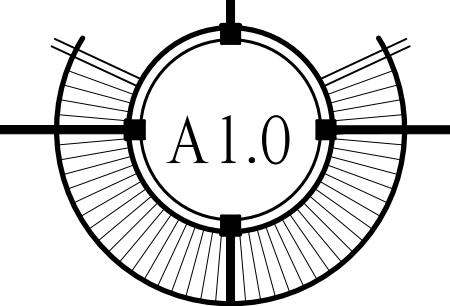
WORK IS LIMITED TO THE LOWER LEVEL OF THIS BUILDING

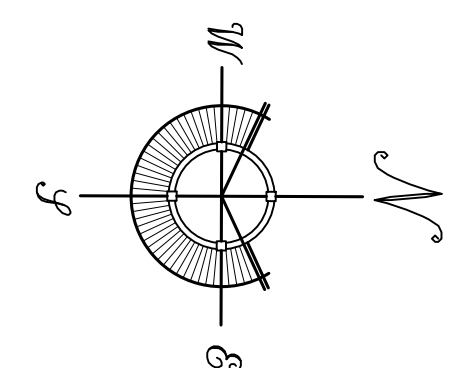
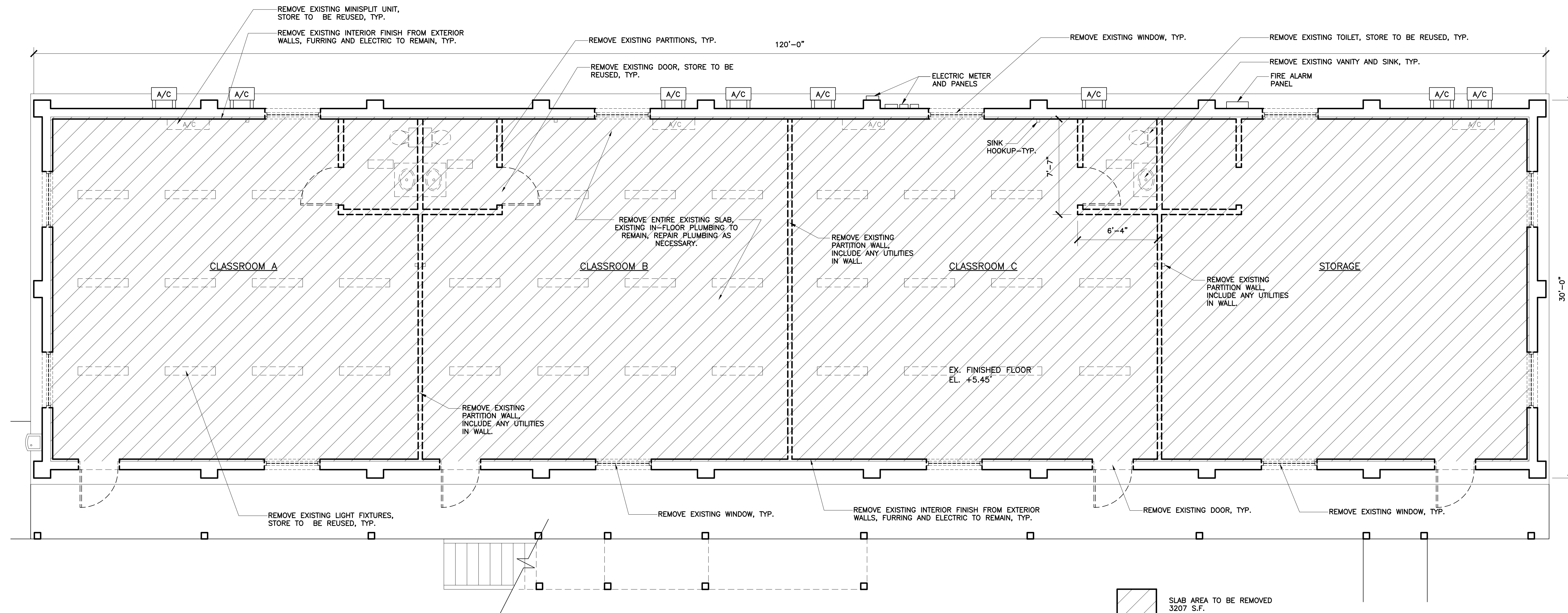
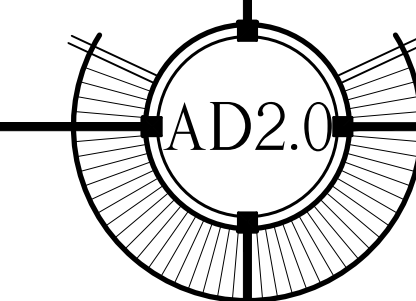


SITE PLAN

SITE PLAN BASED ON AERIAL INFORMATION FROM THE MONROE COUNTY PROPERTY APPRAISER

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





1  
AD2.0

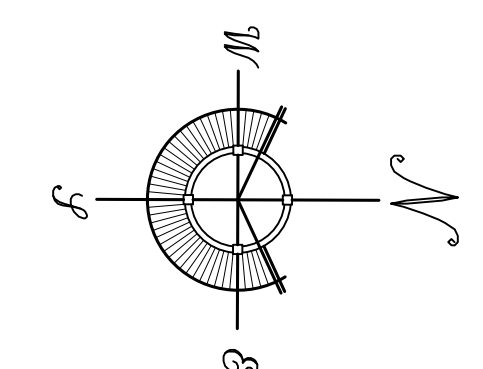
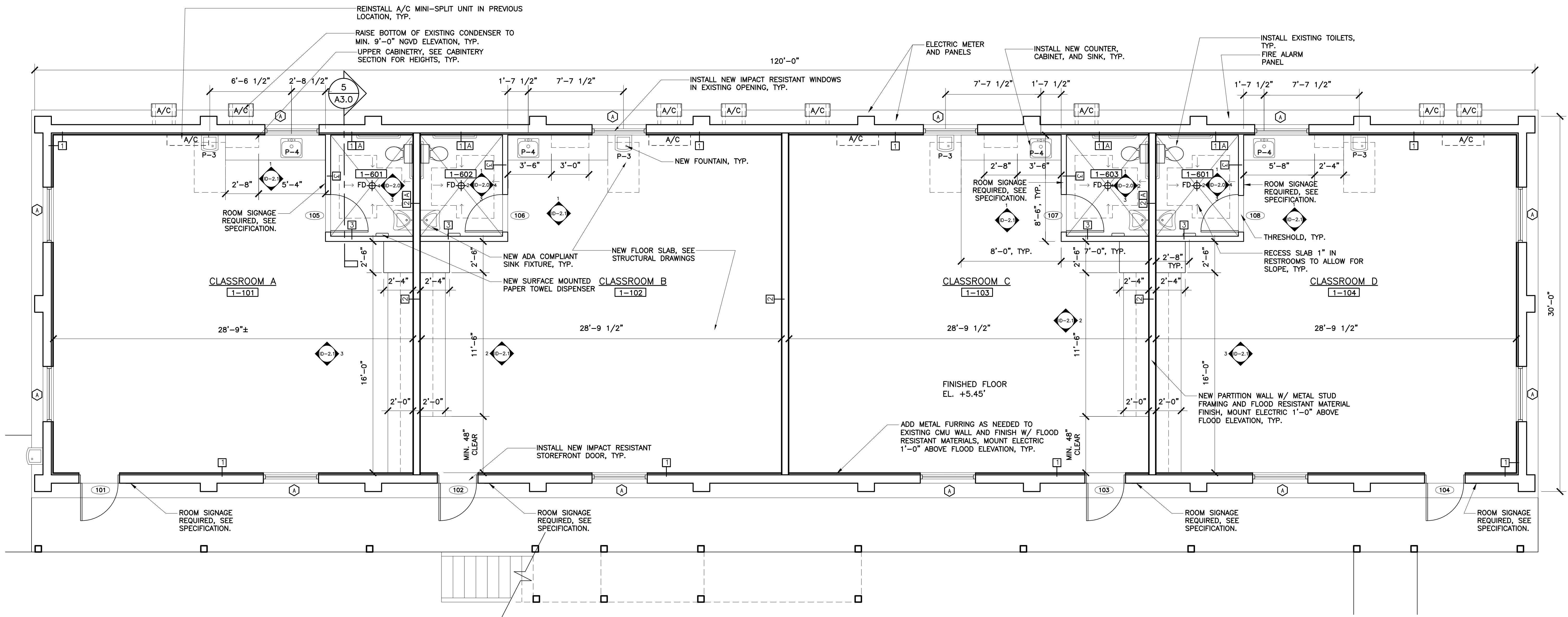
### DEMOLITION FIRST FLOOR PLAN

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

**DEMOLITION NOTES**  
1. CONTRACTOR TO REMOVE ALL ITEMS NOTED ABOVE AND ANY OTHER ITEMS NECESSARY TO COMPLETE THE NEW WORK.  
2. CONTRACTOR TO SHORE WALLS AND FLOOR SYSTEMS AS REQUIRED

GENERAL NOTES

1. ALL DIMENSIONS ARE TO FACE OF FINISH DURRECK UNLESS OTHERWISE NOTED.
2. REFER TO DRAWING A-3 FOR DOOR AND FRAME SCHEDULE.
3. GC TO PROVIDE AND INSTALL ROOM NAME AND NUMBER SIGNAGE AT EACH ROOM. REFER TO SPECIFICATION FOR EXACT REQUIREMENTS. MOUNT ALL SIGNS ON WALL 4" FROM LATCH SIDE EDGE OF DOOR FRAME AND 60" AFF TO THE CENTERLINE OF THE SIGN. CONFIRM ROOM NAME AND NUMBERS WITH OWNER.
4. ALL FURNITURE PROVIDED BY OWNER.
5. CLASSROOM CEILING HEIGHT TO BE 7'-8" AFF, 8" GWB FINISH ON UNDERSIDE OF EXISTING FLOOR TRUSSES.

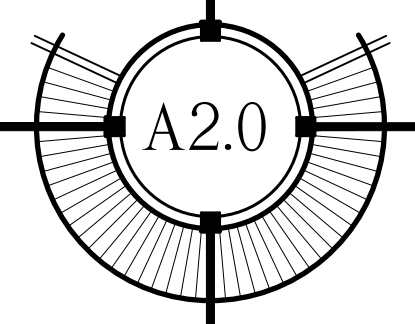


1 A2.0 PROPOSED FIRST FLOOR PLAN  
SCALE: 1/4"=1'-0"

WALL LEGEND

1	TYPICAL EXISTING EXTERIOR WALL. 8" CMU WITH BRICK VENEER ONE SIDE @ EXTERIOR WALLS; EXISTING 3/4" PT FURRING, 1 LAYER 3/4" RIGID POLY ISO INSULATION BD. AND 5/8" USG DUROCK, 2 COAT PLASTER KNOCKDOWN FINISH, PAINTED. MIN. STC RATING OF 50. REPLACE LOOSE FURRING W/ METAL FURRING AS NECESSARY.
2	TYPICAL INTERIOR WALL BETWEEN CLASSROOMS W/ 6" 20 GAUGE GALV. STEEL FRAMING @ 16" O.C. AND 5/8" USG DUROCK, 2 COAT PLASTER KNOCKDOWN FINISH - PAINTED, W/ R-19 FIBERGLASS BATT INSULATION
3	3 5/8" 20 GAUGE GALV. STL. FRAMING @ 16" O.C. AND 5/8" USG DUROCK, 2 COAT PLASTER KNOCKDOWN FINISH - PAINTED, MIN. STC RATING OF 49
A	PREPARE WALLS TO RECEIVE MARLITE STANDARD FRP. PEBBLE SURFACE TO 48" A.F.F., COLOR TBD

1. CONTRACTOR TO PROVIDE BLOCKING AND FIRE STOPS AS REQUIRED BY CODE. FIRE STOPS AND PENETRATIONS OF FIRE RATED WALLS AND CEILINGS SHALL BE PROTECTED WITH U.L. LISTED, HILTI OR EQUAL ASSEMBLIES SELECTED FOR THE SPECIFIC CHARACTERISTICS OF EACH PENETRATION. A SHOP DRAWING SUBMITTAL IS REQUIRED.

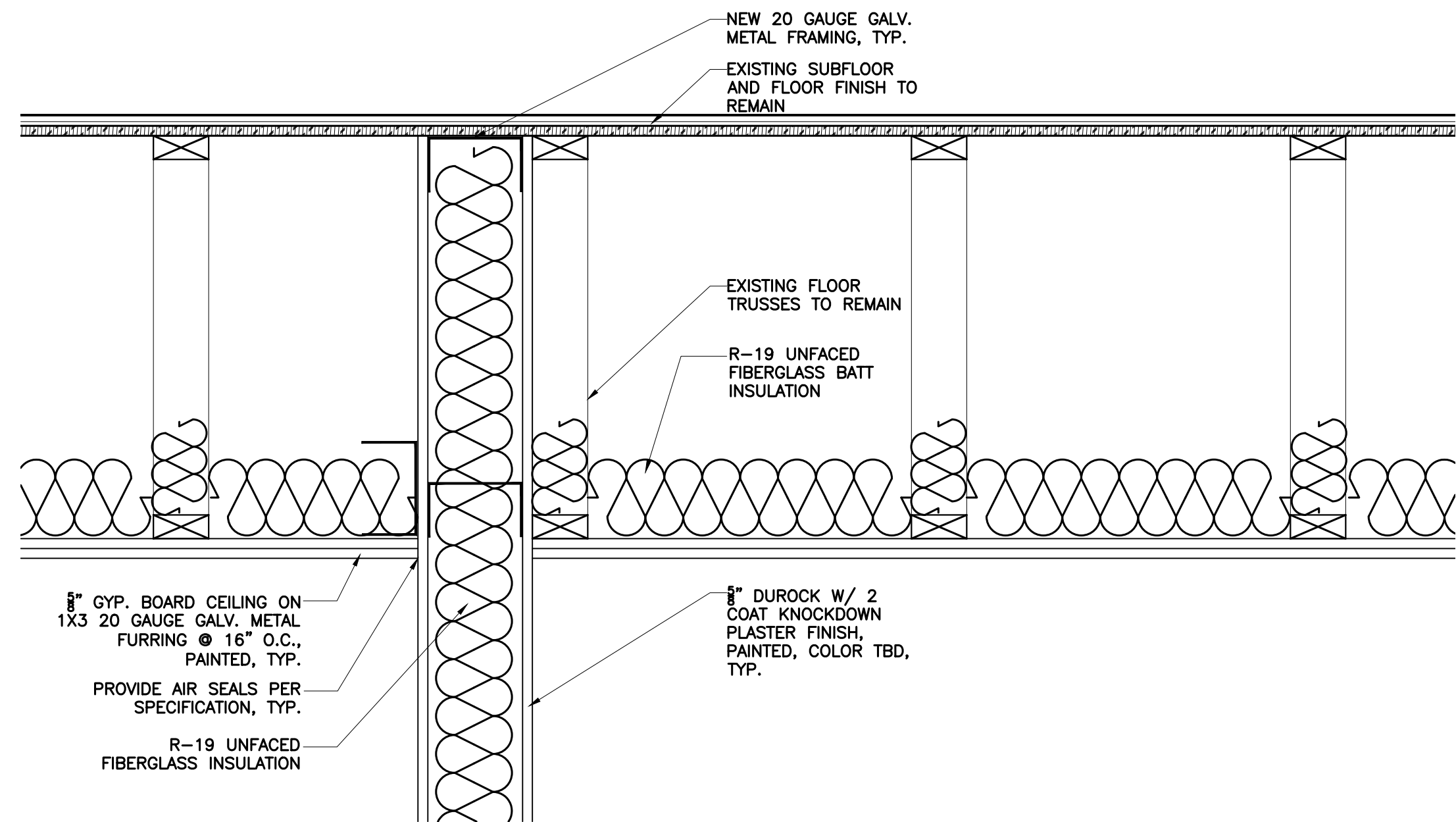


DOOR SCHEDULE				WIND LOAD REQUIREMENTS	P.S.F	APPROVAL NUMBER	MANUF. WIND LOAD RATING	GLASS TYPE	DESCRIPTION
NO.	SIZE (APPROX.)	MANUFACTURER	MATERIAL	(FIELD-4)	(CORNER-5)				
101	3'0"x7'0"	CGI STOREFRONT DOOR SYSTEM 3500 SERIES	ALUM.	+83.6/-90.9	+83.6/-108.8	NOA# 17-1114.01	+90/-120	TYPE- F GLASS	STOREFRONT EXTERIOR SWING DOOR, IMPACT RESISTANT PANIC HARDWARE REQUIRED PER SPECIFICATIONS, NO CONCEALED HARDWARE
102	3'0"x7'0"	CGI STOREFRONT DOOR SYSTEM 3500 SERIES	ALUM.	+83.6/-90.9	+83.6/-108.8	NOA# 17-1114.01	+90/-120	TYPE- F GLASS	STOREFRONT EXTERIOR SWING DOOR, IMPACT RESISTANT PANIC HARDWARE REQUIRED PER SPECIFICATIONS, NO CONCEALED HARDWARE
103	3'0"x7'0"	CGI STOREFRONT DOOR SYSTEM 3500 SERIES	ALUM.	+83.6/-90.9	+83.6/-108.8	NOA# 17-1114.01	+90/-120	TYPE- F GLASS	STOREFRONT EXTERIOR SWING DOOR, IMPACT RESISTANT PANIC HARDWARE REQUIRED PER SPECIFICATIONS, NO CONCEALED HARDWARE
104	3'0"x7'0"	CGI STOREFRONT DOOR SYSTEM 3500 SERIES	ALUM.	+83.6/-90.9	+83.6/-108.8	NOA# 17-1114.01	+90/-120	TYPE- F GLASS	STOREFRONT EXTERIOR SWING DOOR, IMPACT RESISTANT PANIC HARDWARE REQUIRED PER SPECIFICATIONS, NO CONCEALED HARDWARE
105	3'0"x7'0"	EXISTING DOOR TO BE REUSED							NEW ADA LEVER HARDWARE, NEW HINGES REVERSE SWING
106	3'0"x7'0"	EXISTING DOOR TO BE REUSED							NEW ADA LEVER HARDWARE, NEW HINGES REVERSE SWING
107	3'0"x7'0"	EXISTING DOOR TO BE REUSED							NEW ADA LEVER HARDWARE, NEW HINGES REVERSE SWING
108	3'0"x7'0"	EXISTING DOOR TO BE REUSED							NEW ADA LEVER HARDWARE, NEW HINGES REVERSE SWING

\*CONTRACTOR TO VERIFY ALL OPENING DIMENSIONS AND COORDINATE WITH MANUFACTURED PRODUCTS AVAILABLE.  
NOTE: ALL EXTERIOR OPENINGS SHALL BE PROVIDED WITH DOORS AND WINDOWS WHICH MEET ASCE/SEI 7-10, FLA. BUILDING CODE, 2017 EDITION.  
WIND PRESSURE ON COMPONENTS AND CLADDING  
ALL PRESSURES SHOWN ARE BASED UPON AS DESIGN, WITH A LOAD FACTOR OF 0.6.  
180 MPH, WIND LOAD AND IMPACT REQUIREMENTS, SEE SPECIFICATIONS.  
ALL CLASSROOM ENTRY DOORS SHALL HAVE INTEGRAL WEATHER STRIPPING AND BE HANDICAP COMPLIANT.  
COORDINATE DOOR INSTALLATION HARDWARE WITH EXISTING FLOOD PROOF PANELS TO PREVENT CONFLICT.  
CONFIRM THRESHOLD STYLE WITH OWNER PRIOR TO ORDERING EXTERIOR DOORS.  
DESIGN WIND LOAD REQUIREMENTS PROVIDED BY STRUCTURAL ENGINEER.

WINDOW SCHEDULE				WIND LOAD REQUIREMENTS	P.S.F	APPROVAL NUMBER	MANUF. WIND LOAD RATING	GLASS TYPE	DESCRIPTION
NO.	SIZE (APPROX.)	MANUFACTURER	MATERIAL	(FIELD)	(CORNER)				
1	4'6"x3'1"	CGI WINDOWS AND DOORS 238 SERIES		+87.7/-95.0	+87.7/-116.9	NOA# 17-0926.18	+110/-120	TYPE- 3A GLASS	FIXED PANEL WINDOW

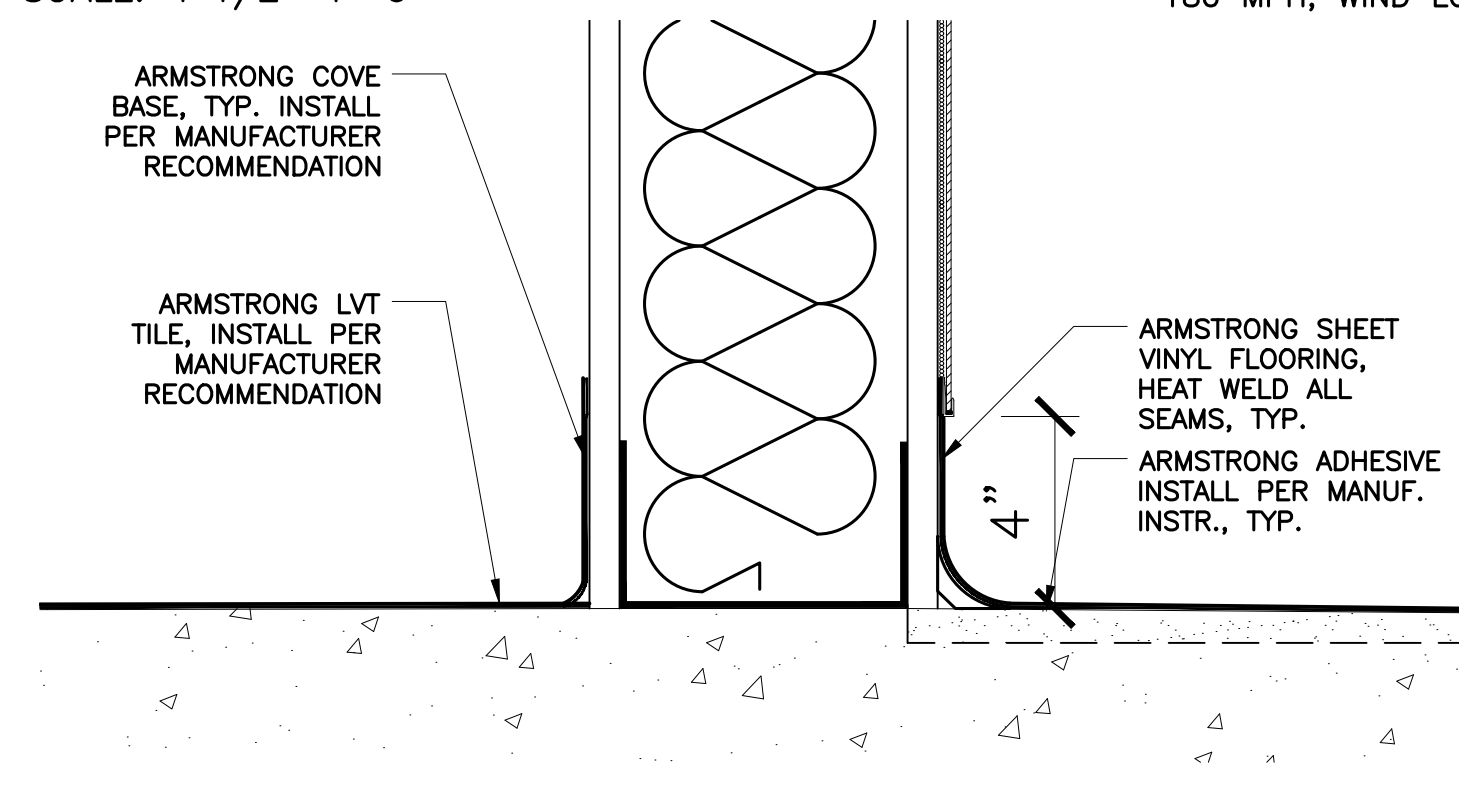
\*CONTRACTOR TO VERIFY ALL OPENING DIMENSIONS AND COORDINATE WITH MANUFACTURED PRODUCTS AVAILABLE.  
NOTE: ALL EXTERIOR OPENINGS SHALL BE PROVIDED WITH DOORS AND WINDOWS WHICH MEET ASCE/SEI 7-10, FLA. BUILDING CODE, 2017 EDITION.  
WIND PRESSURE ON COMPONENTS AND CLADDING  
ALL PRESSURES SHOWN ARE BASED UPON AS DESIGN, WITH A LOAD FACTOR OF 0.6.  
180 MPH, WIND LOAD AND IMPACT REQUIREMENTS, SEE SPECIFICATIONS.



6 TYP. WALL SECTION @ CEILING

A-3.0

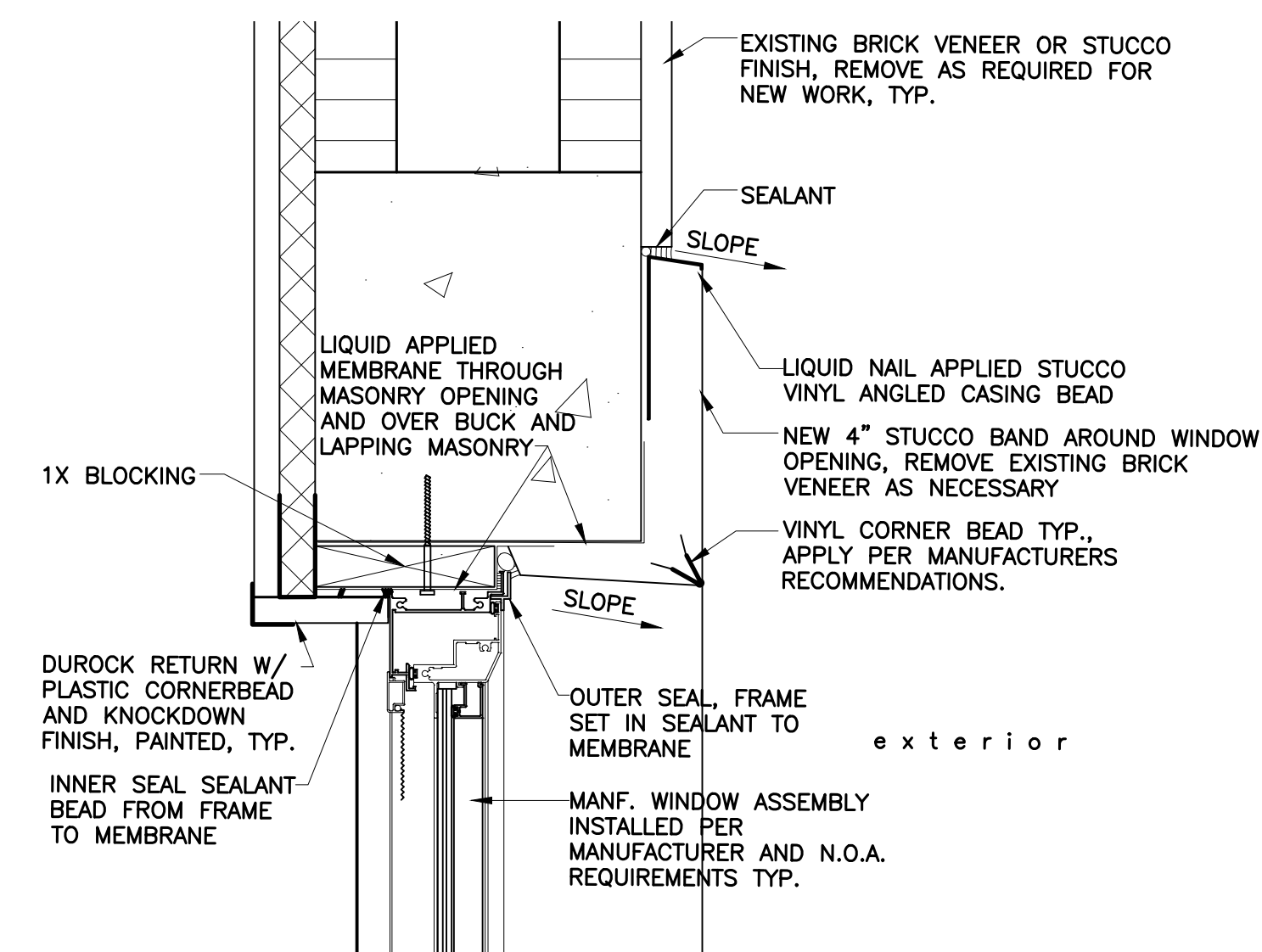
SCALE: 1 1/2"=1'-0"



7 SHEET VINYL TO FRP DETAIL

A-3.0

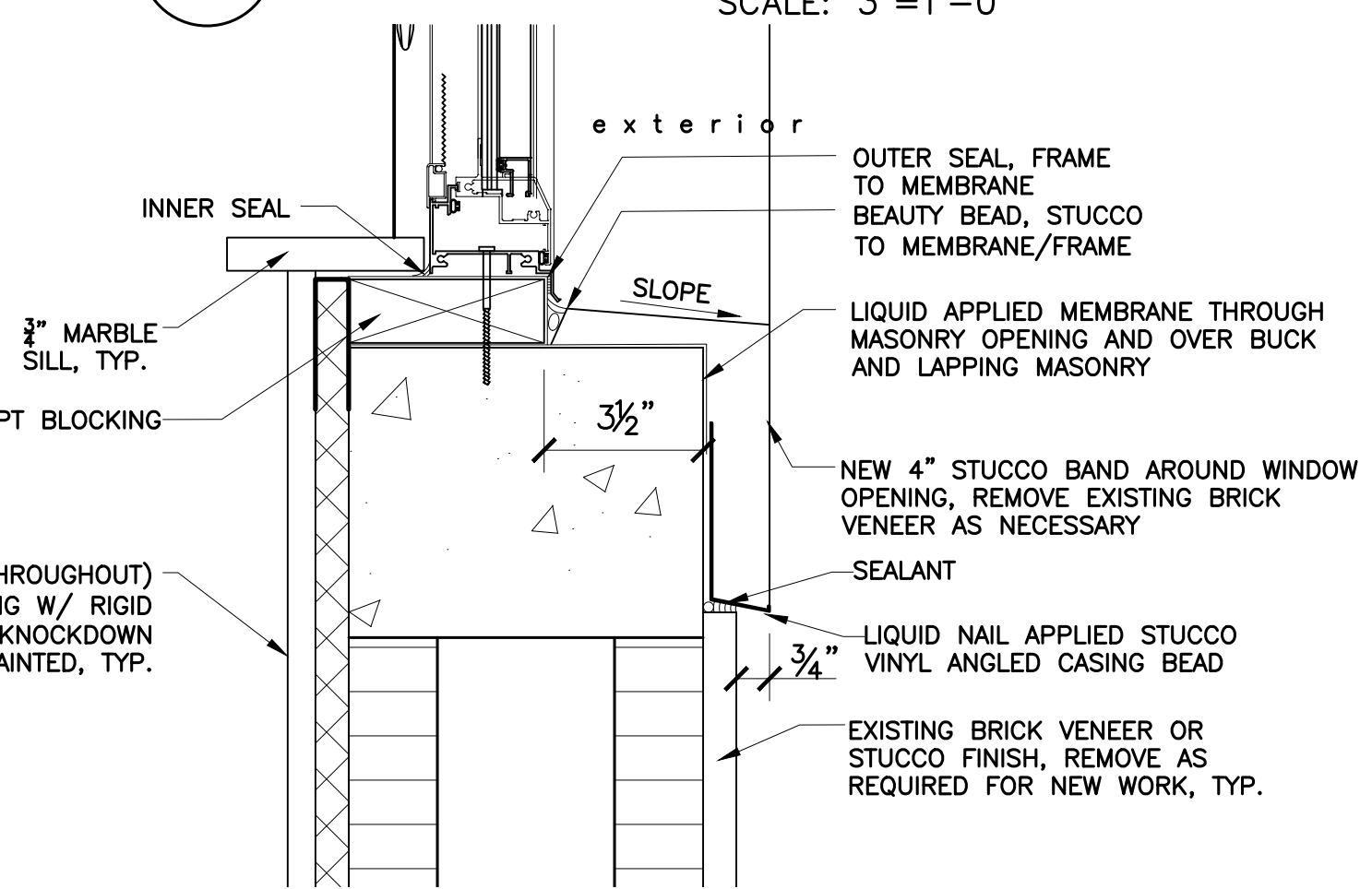
SCALE: 3"=1'-0"



3 WINDOW HEAD DETAIL

A-3.0

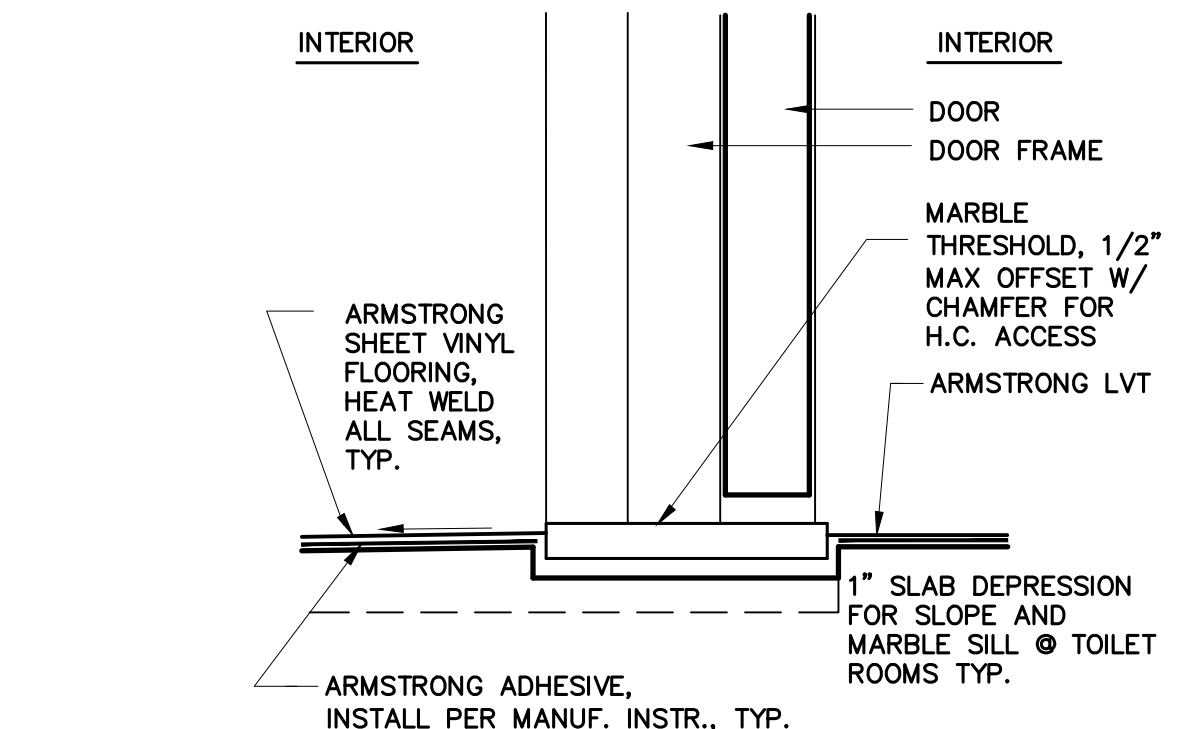
SCALE: 3"=1'-0"



2 WINDOW SILL DETAIL

A-3.0

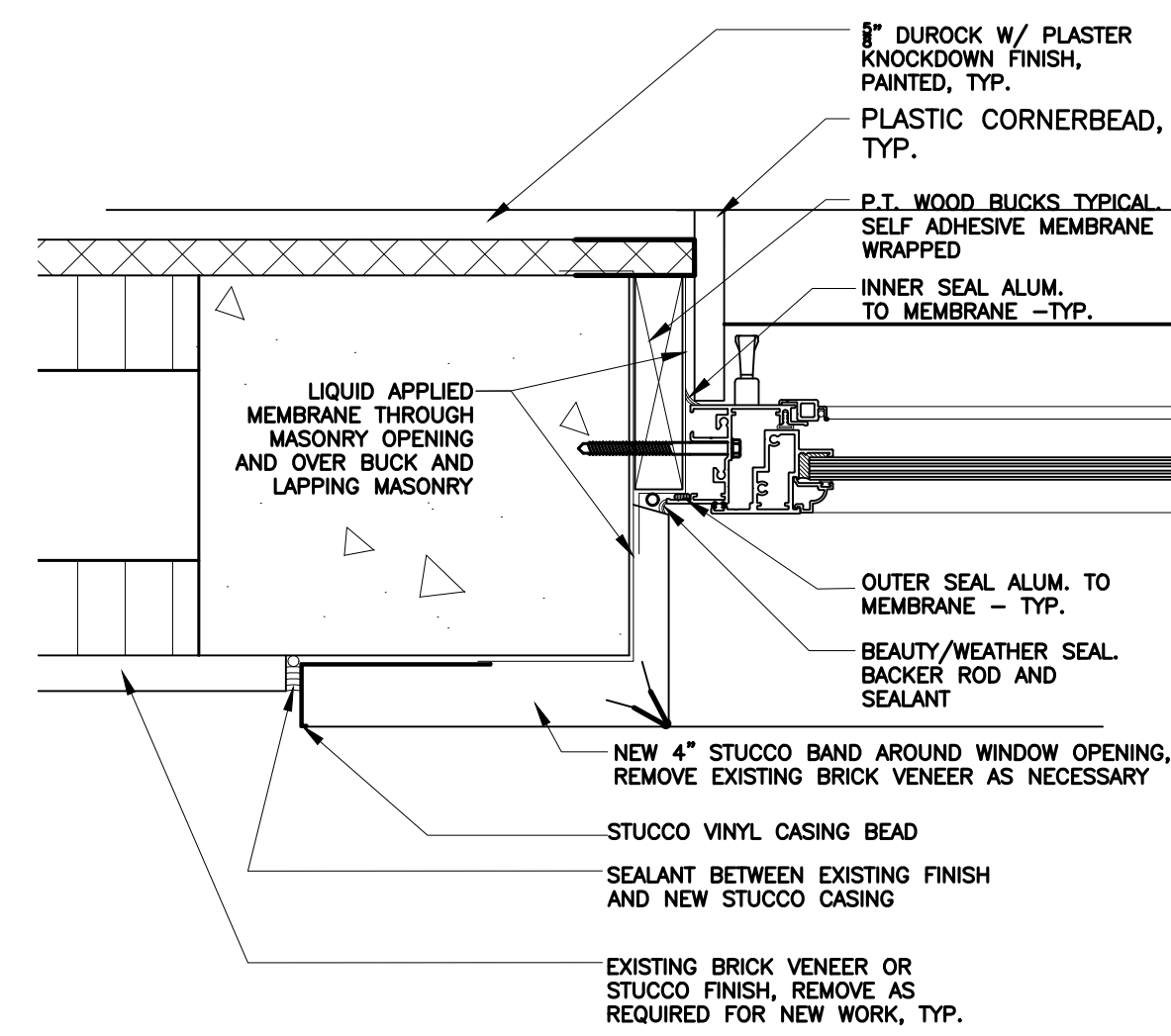
SCALE: 3"=1'-0"



4 BATHROOM DOOR THRESHOLD

A-3.0

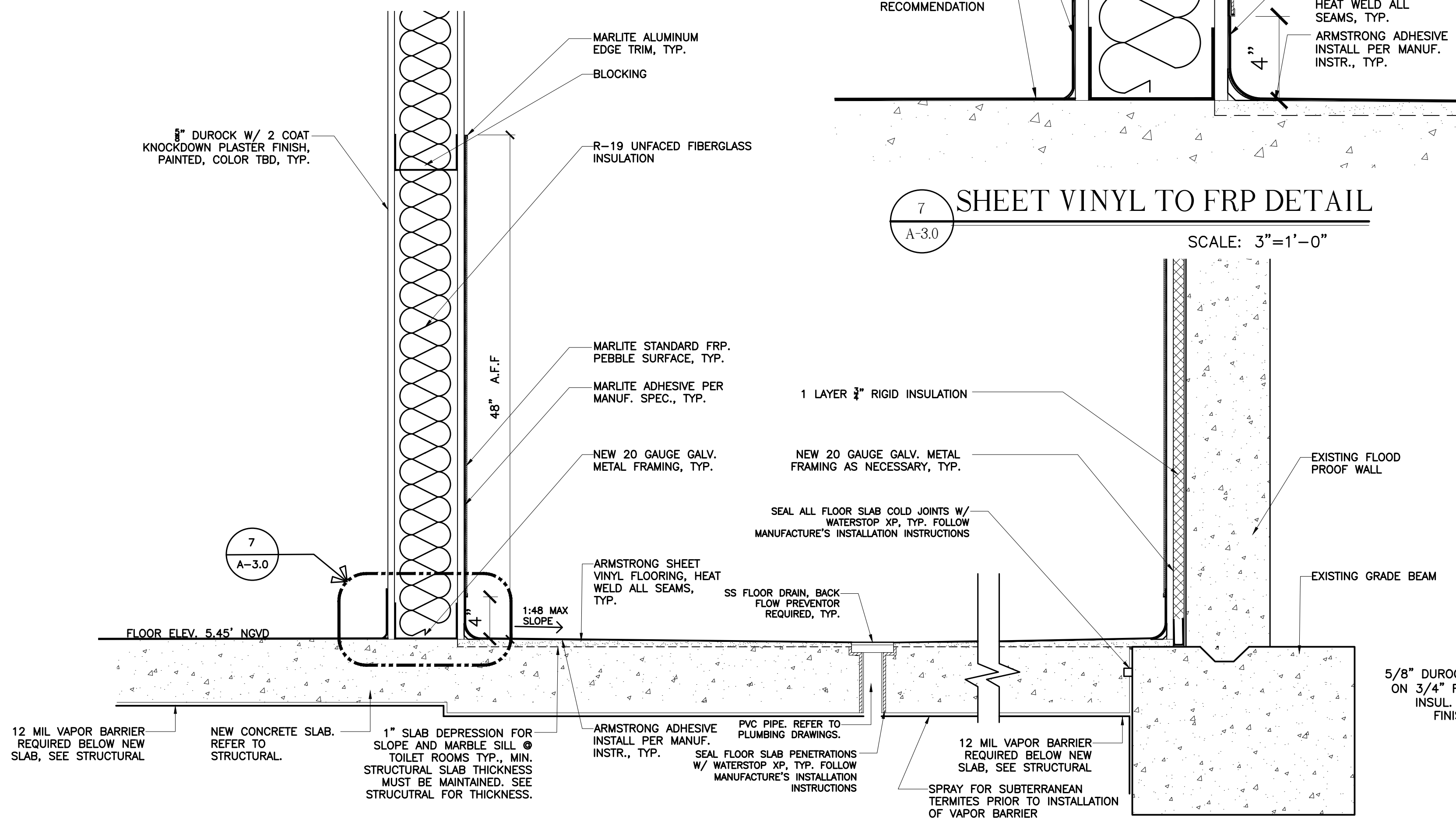
SCALE: 3"=1'-0"



1 WINDOW JAMB DETAIL

A-3.0

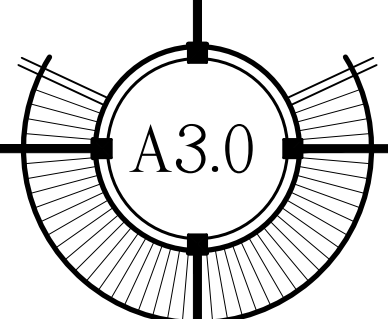
SCALE: 3"=1'-0"



5 TYP. BATHROOM WALL SECTION AND FLOOR DRAIN

A-3.0

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





PROVIDE PAINT AS SHOWN WITH ALL MATERIALS BY BENJAMIN MOORE OR EQUAL. COLORS AND FINISH SHALL BE SELECTED BY OWNER:

EXTERIOR WOOD:

PRIMER: .....SPOT PRIME KNOTS & SURROUNDING AREA W/BIN SCHULAC  
(1 COAT ) FRESH START 100% ACRYLIC SUPERIOR PRIMER #046, VOC = 44 G/L  
FINISH:.....MOORGARD 100% ACRYLIC LOW LUSTRE HOUSE PAINT # N103, VOC = 50 G/L  
(2 COATS )

EXTERIOR FIBER CEMENTITIOUS SIDING AND TRIM:

PRIMER:.....PRE-PRIMED  
FINISH:.....MOOREGARD 100% ACRYLIC LOW LUSTRE HOUSE PAINT #N103 OR MOORLIFE  
100% ACRYLIC FLAT HOUSE PAINT #N105 VOC = 50 G/L  
(2 COATS )

EXTERIOR STUCCO OR MASONRY: ( TO BE PAINTED)

PRIMER:.....SUPER SPEC MASONRY INTERIOR/EXTERIOR 100% ACRYLIC MASONRY SEALER  
#N066 VOC = 81 G/L . USE MOORE'S HIGH BUILD ACRYLIC MASONRY PRIMER  
#W068 VOC= 97 G/L FOR VERY POROUS CONDITIONS.  
FINISH:.....( 2 COATS ) REGAL SELECT FLAT FINISH #N400 OR REGAL SELECT SOFT GLOSS FINISH  
#N402 VOC = 50 G/L.

EXTERIOR WATERPROOF PAINT ON EXTERIOR STUCCO:

PRIMER:.....CORONADO TEXCRETE WB ACRYLIC DIRECT TO MASONRY WATER PROOFER  
#3194-1, SMOOTH FINISH VOC = 100 G/L. (1 COAT)  
FINISH:.....CORONADO TEXCRETE WB ACRYLIC DIRECT TO MASONRY WATER PROOFER  
#3192-1 OR 3194-1 VOC = 100 G/L. ( 2 COATS )

INTERIOR WOOD:

PRIMER:.....FRESH START 100% ACRYLIC SUPERIOR PRIMER #046 VOC = 44 G/L.  
(1 COAT )  
FINISH:.....REGAL SELECT SEMI- GLOSS FINISH #551 VOC = 38 G/L  
(2 COATS )

PORCH AND STAIR TREADS: (WOOD)

PRIMER:.....ALKYD URETHANE REINFORCED  
PORCH FLOOR ENAMEL (THIN FIRST COAT ON BARE WOOD)  
ADD SKIDTEX TO PRIME COAT  
FINISH:.....ALKYD URETHANE REINFORCED PORCH FLOOR ENAMEL

GALVANIZED METAL AND ALUMINUM (NON FERROUS METAL)

CLEAN SURFACES WITH SUPER SPEC HP OIL AND GREASE EMULSIFIER (P83) TO REMOVE CONTAMINANTS  
PRIMER:.....ONE COAT SUPER SPEC HP D.T.M. ACRYLIC SEMI-GLOSS #WP29 VOC = 45 G/L  
FINISH:.....ONE COAT SUPER SPEC HP D.T.M. ACRYLIC SEMI-GLOSS #WP29 VOC = 45 G/L

GYP SUM BOARD:

PRIMER:.....FRESH START 100 % ACRYLIC SUPERIOR PRIMER #046 VOC = 44 G/L.  
(1 COAT)  
FINISH:.....2 COATS REGAL SELECT MATTE FINISH #548 OR FLAT #547, VOC = 12G/L  
CEILINGS.....WATERBORNE CEILING PAINT #508, VOC = 50 G/L  
(2 COATS )

STRUCTURAL STEEL AND IRON: ( FERROUS METAL)

PRIMER AND FINISH...2 COATS SUPER SPEC HP D.T.M.  
ACRYLIC SEMI-GLOSS #WP29, VOC = 45 G/L

NATURAL-FINISH WOODWORK:

PRIMER .....BENWOOD STAYS CLEAR ACRYLIC POLYURETHANE  
HIGH GLOSS # 422, VOC = 270 G/L ( 1 COAT )  
FINISH..... BENWOOD STAYS CLEAR ACRYLIC POLYURETHANE  
HIGH GLOSS # 422, VOC = 270 G/L ( 2 COATS )  
OR BENWOOD INTERIOR WOOD FINISHES  
WATERBORNE STAIN #205, VOC = 231 G/L ( 1 COAT )

PROTECTIVE COATING: USE AS A CLEAR PROTECTIVE COATING OVER PAINTED SURFACES.

SUPER SPEC HP WATERBORNE URETHANE,  
GLOSS ENAMEL #P73, VOC =221 G/L OR  
SEMI-GLOSS #P77, VOC = 247 G/L.

09940 - EXISTING WOOD PREPARATION: CONTRACTOR TO REMOVE AND REPLACE ALL ROTTED OR DAMAGED WOOD WITH LIGHT GAUGE METAL FRAMING. SPLICE IN NEW BOARDS AS INCONSPICUOUSLY AS POSSIBLE AND STAGGER JOINTS AS REQUIRED. SCRAPE ALL LOOSE PAINT OF EXISTING WOOD SURFACES, SAND SMOOTH PRIOR TO PRIME COAT PAINT (SEE PAINT SPECIFICATION). AFTER PRIME COAT, CAULK ALL SEAMS, JOINTS AND HOLES AS REQUIRED PRIOR TO FINISH COATS (SEE SEALANT SPECIFICATIONS).

DIVISION 10 - SPECIALTIES

10522 - FIRE EXTINGUISHERS: PROVIDE FIRE EXTINGUISHER AND CABINET OR WALL MOUNTING BRACKET, AS MANUFACTURED BY LARSEN'S MANUFACTURING CO. OR EQUAL, FOR EACH LOCATION AND MOUNTING CONDITION INDICATED ON THE DRAWINGS.

- A. CABINET TO BE SEMI-RECESSED, FABRICATED IN ONE PIECE W/ONE PIECE COMBINATION TRIM AND PERIMETER DOOR FRAME OVERLAPPING SURROUNDING WALL SURFACE. SHOP DRAWING SUBMITTALS ARE REQUIRED FOR APPROVAL, PRIOR TO ANY FABRICATION OR DELIVERY OF MATERIALS.
- B. EXTINGUISHER TO BE MULTIPURPOSE DRY CHEMICAL TYPE.  
UL RATED 4-A, 60-BC, 10-LB, NOMINAL CAPACITY, IN ENAMELED STEEL CONTAINER.
- C. TO COMPLY WITH ADA WALL PROJECTION GUIDELINES, THE CABINET MUST BE MOUNTED WITH ITS BOTTOM (LEADING EDGE) AT OR BELOW 27" FROM THE FINISHED FLOOR.

10810 - TOILET ACCESSORIES: (FOR H.C. COMMERCIAL TOILET). PROVIDE TOILET ACCESSORIES BY PER SPECIFICATION OR APPROVED EQUAL. CONTRACTOR TO PROVIDE COMPLETE SYSTEMS INCLUDING ALL ACCESSORIES AND ATTACHMENTS AND ALL BLOCKING AS REQUIRED. ALLOWANCE IS FOR PURCHASE ONLY, LABOR TO INSTALL IS PART OF BASE BID.

DIVISION 11 - EQUIPMENT

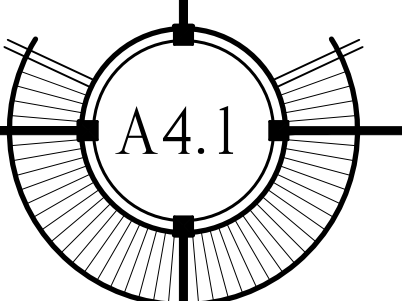
11400 - CONTRACTOR TO COORDINATE WITH OWNER AND OR EQUIPMENT SUPPLIER PRIOR TO BIDDING TO DETERMINE IN WRITING WHAT WILL BE SUPPLIED BY OWNER, EQUIPMENT SUPPLIER, OR CONTRACTOR, AND TO DETERMINE WHAT WILL BE COORDINATED OR INSTALLED BY CONTRACTOR.

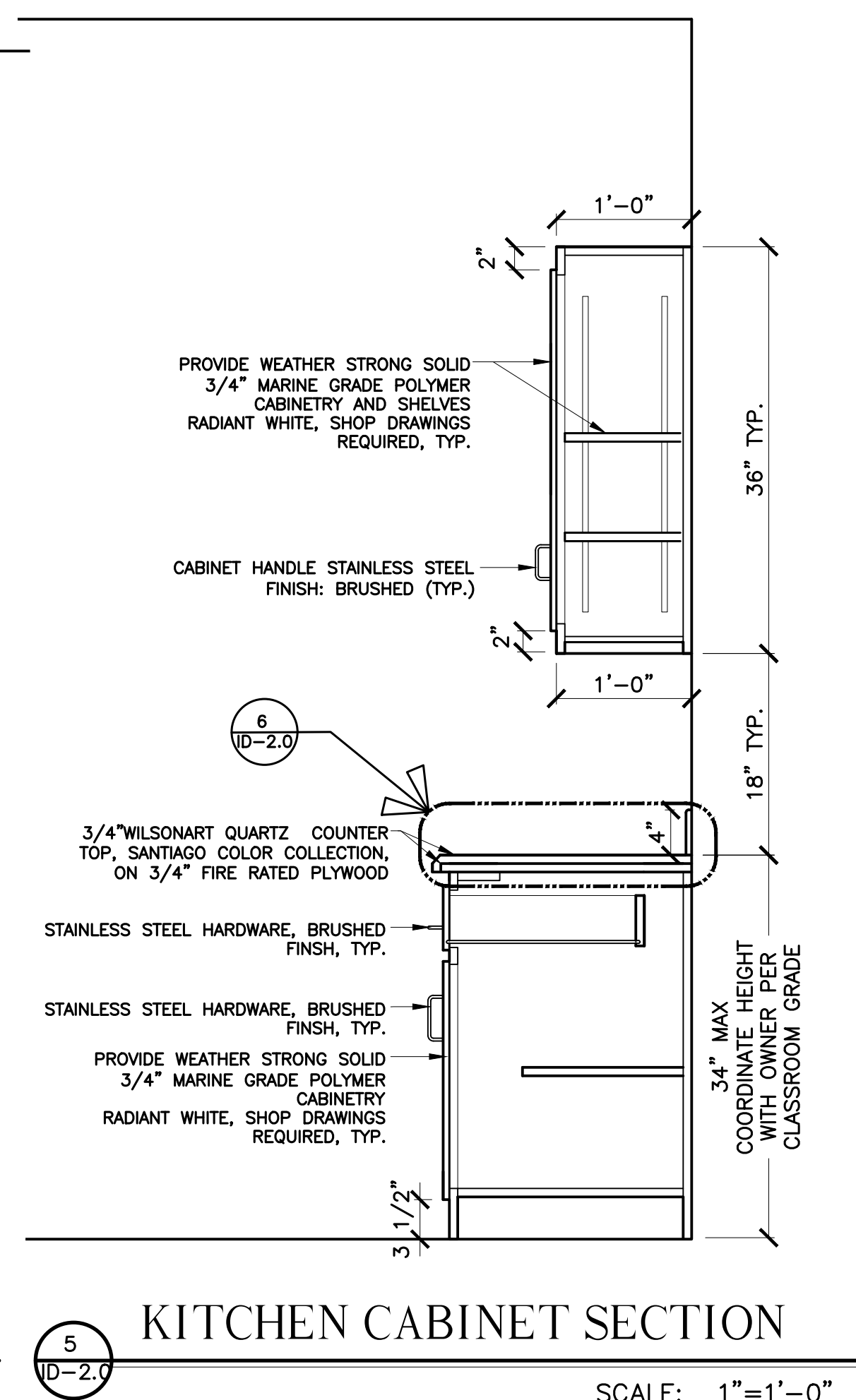
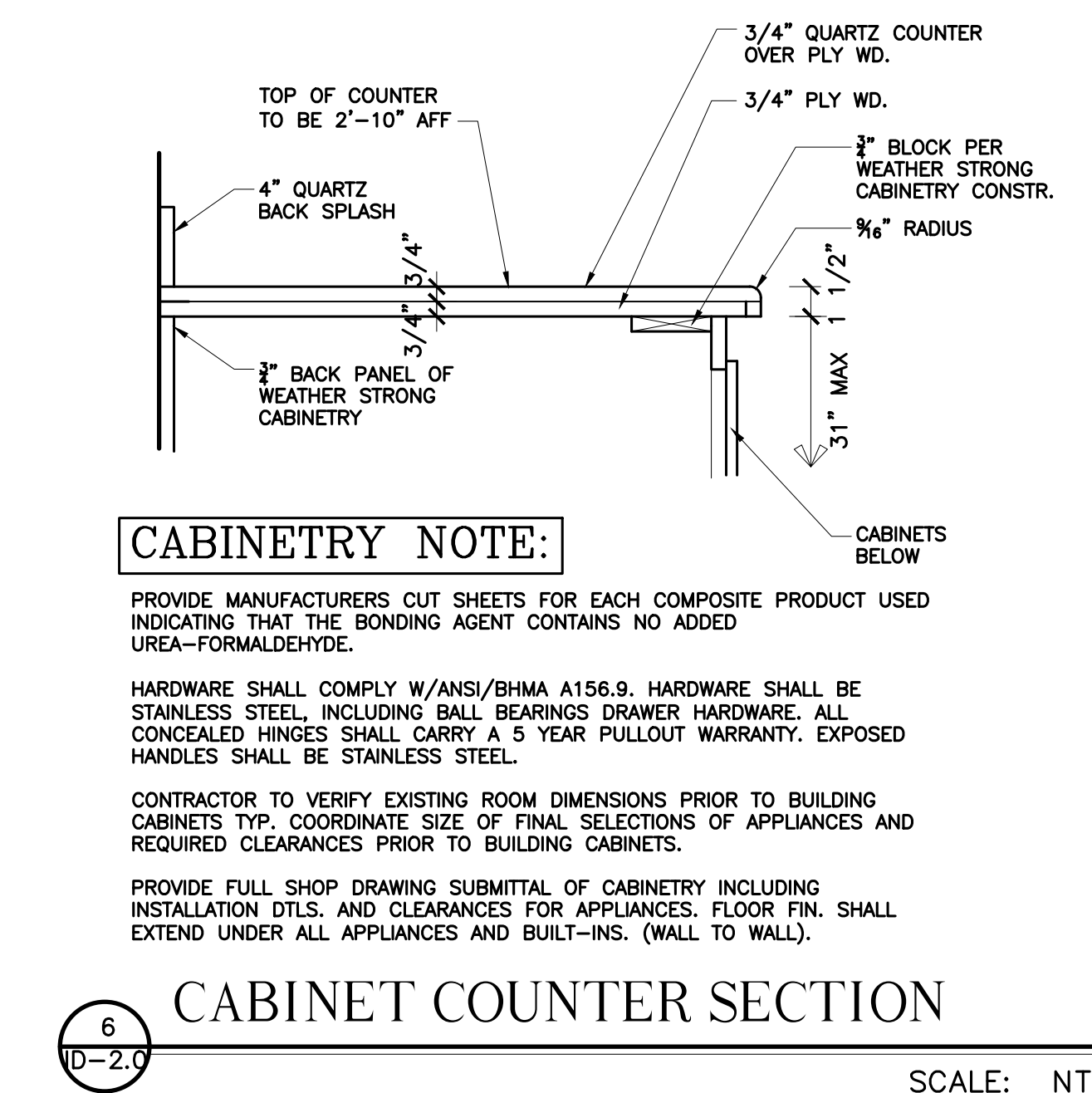
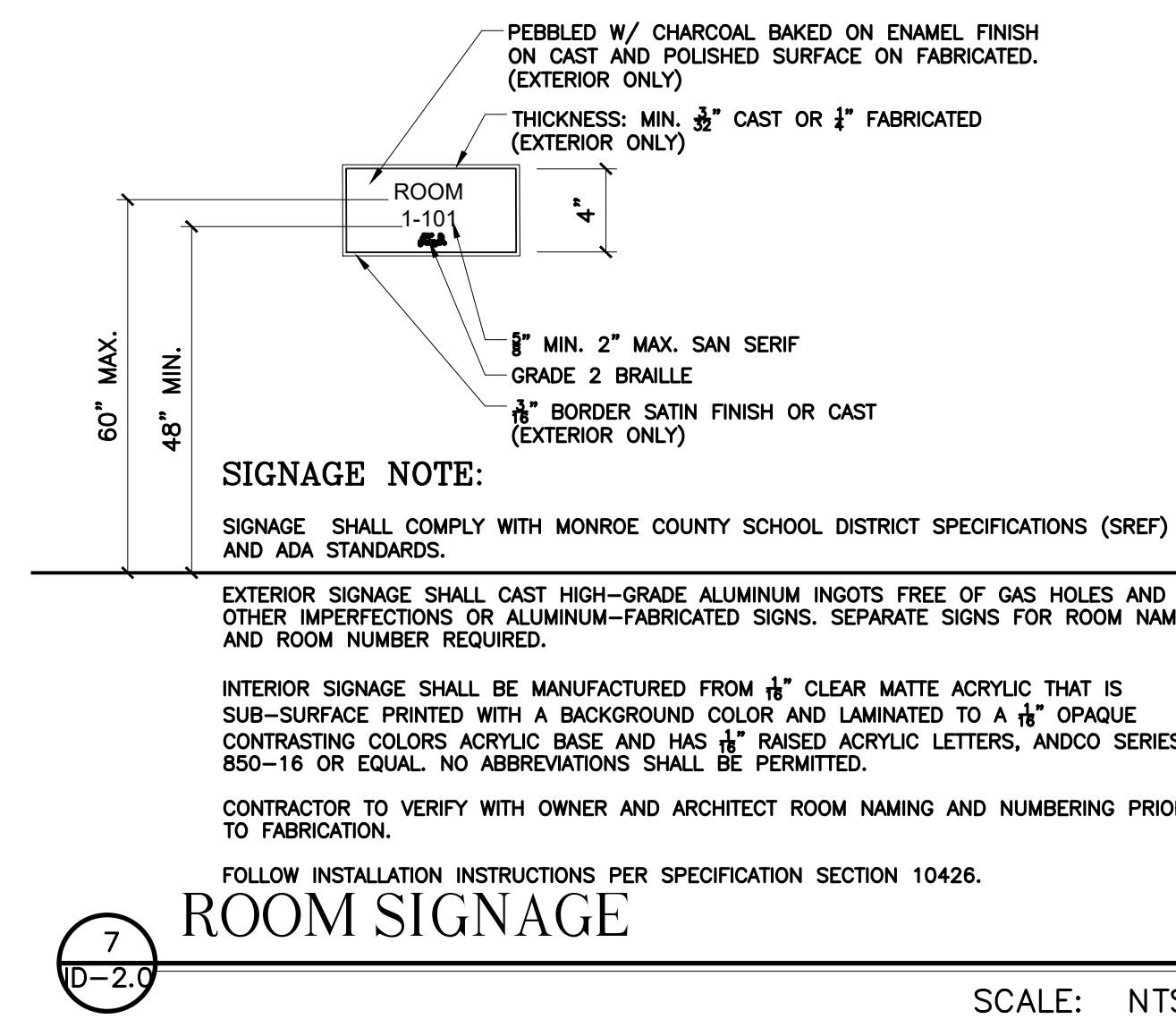
11455 - KITCHEN & BATH CABINETS SHALL BE CUSTOM BUILT CABINETS AS SHOWN OUT OF 3/4" MARINE GRADE POLYMER BY WEATHER STRONG BRAND OR EQUAL.

DIVISION 12, 13 & 14 - NOT USED

DIVISION 15 - MECHANICAL (SEE MECHANICAL DRAWINGS)

DIVISION 16 - ELECTRICAL (SEE ELECTRICAL DRAWINGS)

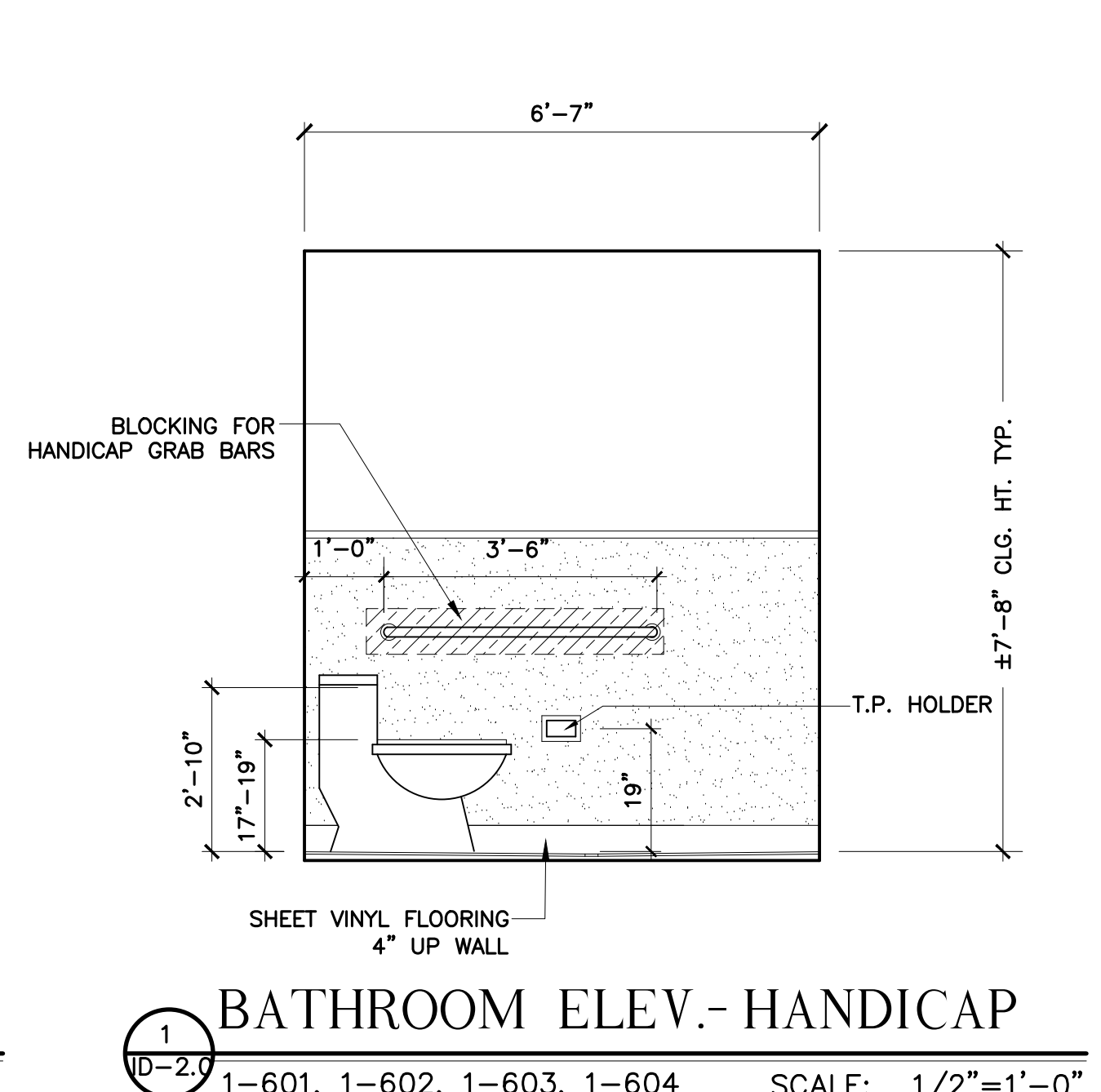
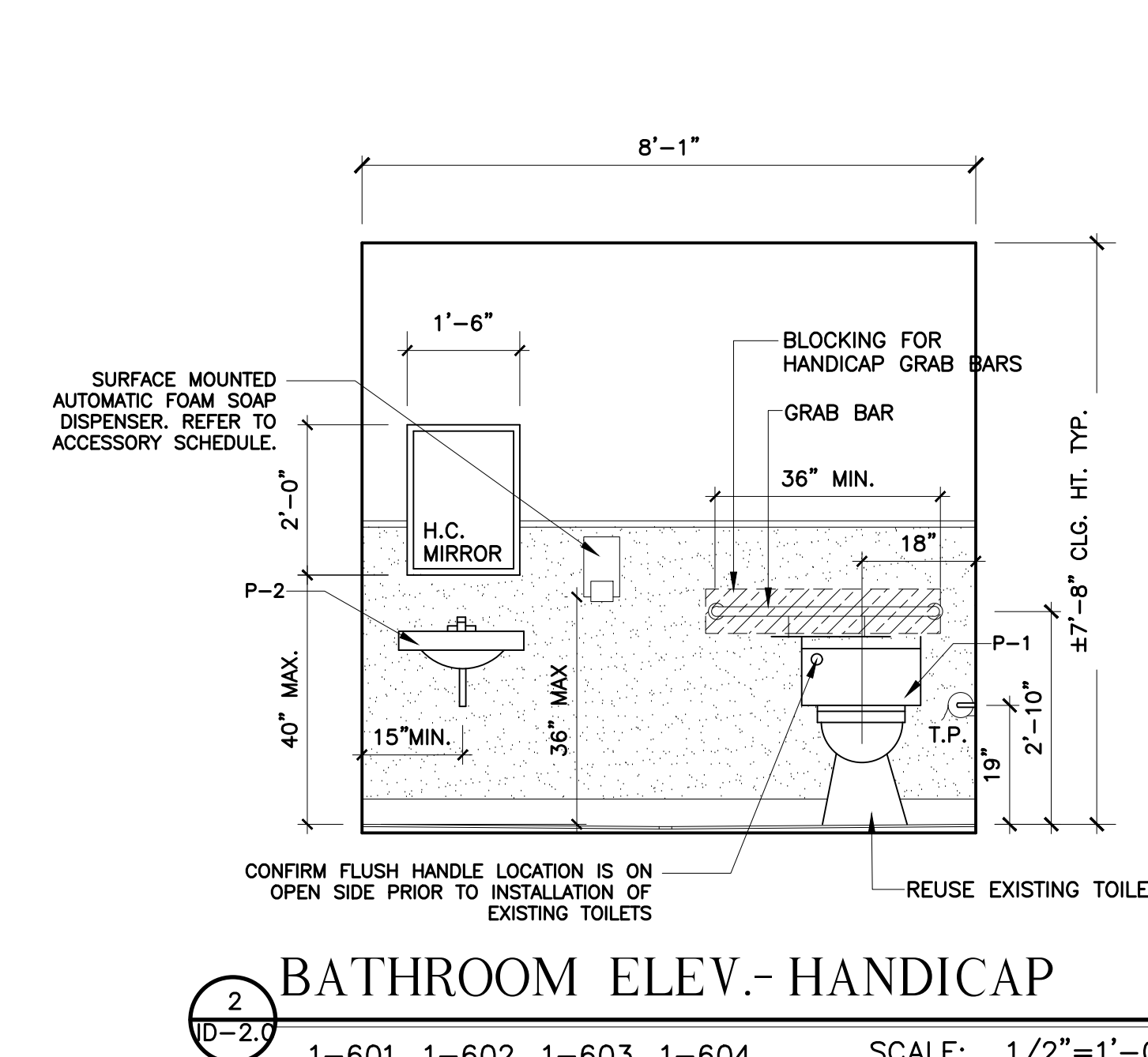
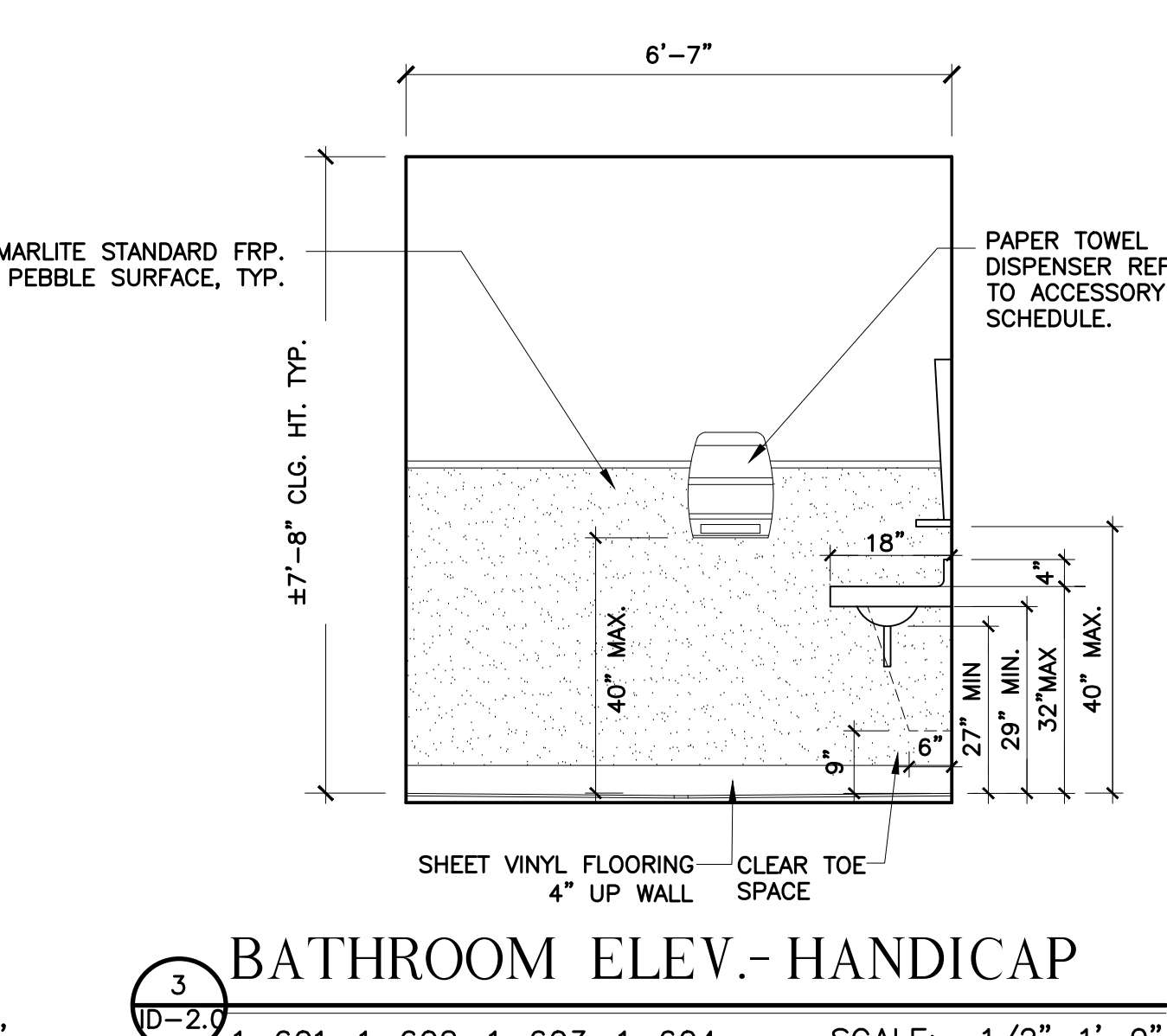
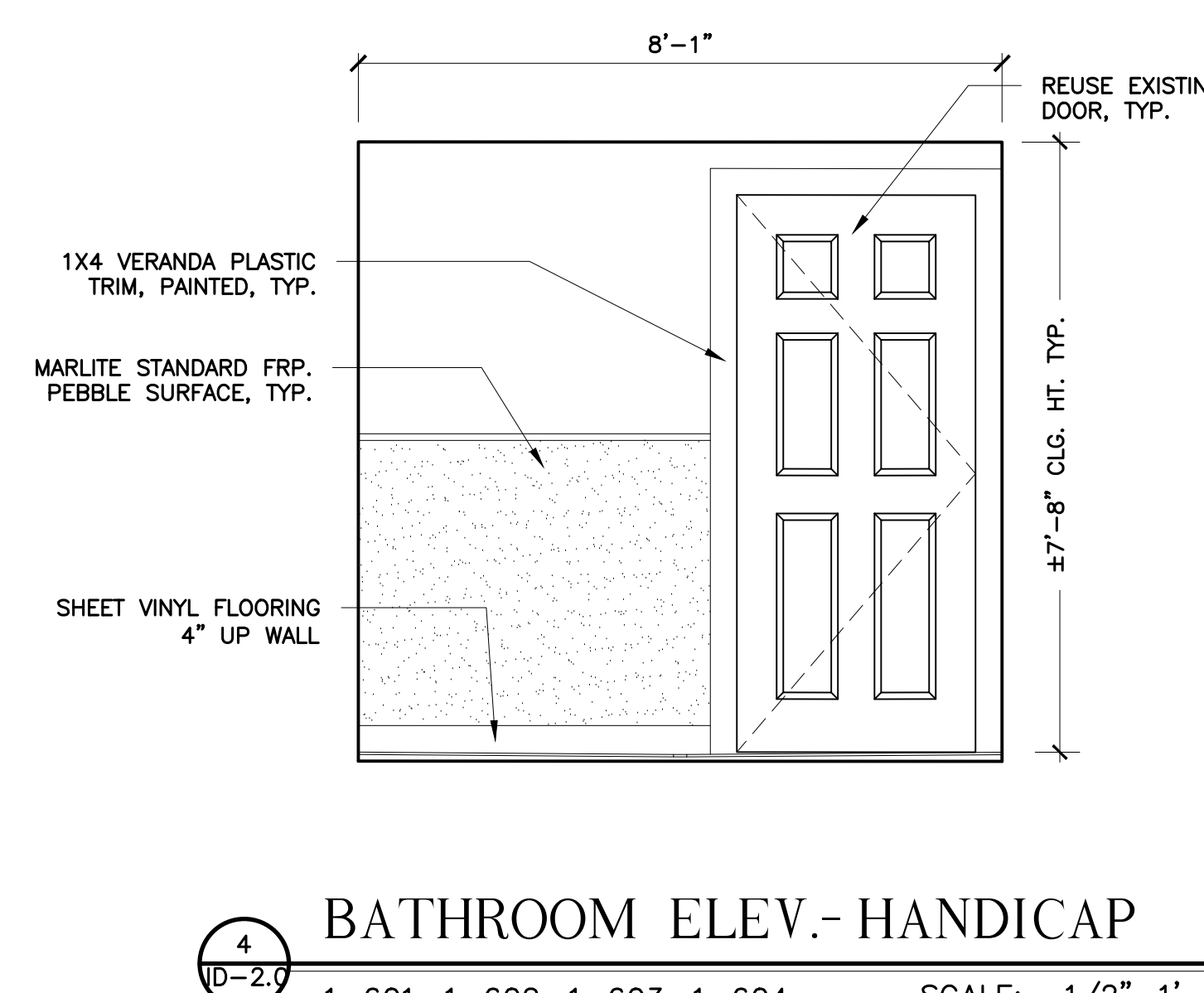




**ACCESSORY SCHEDULE**

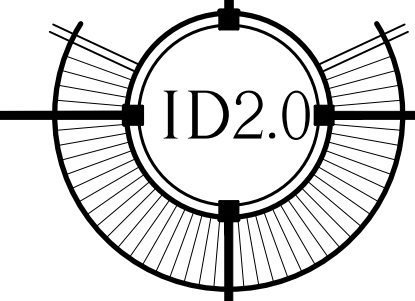
NO.	DESCRIPTION	BASIS OF DESIGN	SIZE	MATERIAL	FINISH
01	ADA COMPLIANT SURFACE-MOUNTED TOILET TISSUE DISPENSER	BOBRICK B-6857	HOLDS ONE ROLL: 5 1/2"DIA. UNIT 7 1/4" W, 2" H	STAINLESS STEEL	SATIN
02	ADA COMPLIANT GRAB BARS	BRADLEY: MODEL 812	STAINLESS STEEL 1-1/2" DIA. WITH CONCEALED MOUNTING	STAINLESS STEEL	SAFETY GRIP
03	FIXED ANGLE TILT MIRROR	AMERICAN SPECIALTIES 0535-2436	18W X 24H FOR COMPLIANCE WITH ADA ACCESSIBILITY GUIDELINES, BOTTOM OF REFLECTING SURFACE SHOULD BE INSTALLED 40"	STAINLESS STEEL	BRUSHED
04	SURFACE MOUNTED PAPER TOWEL DISPENSER	BRADLEY MODEL 2494 SENSOR ACTIVATED	12 1/4"W X 15 1/4"H X 9 1/2"D	PLASTIC	TRANSLUCENT
05	SURFACE MOUNTED SOAP DISPENSER	BOBRICK B-818615	CAPACITY: 40-FL OZ	STAINLESS STEEL	BRUSHED

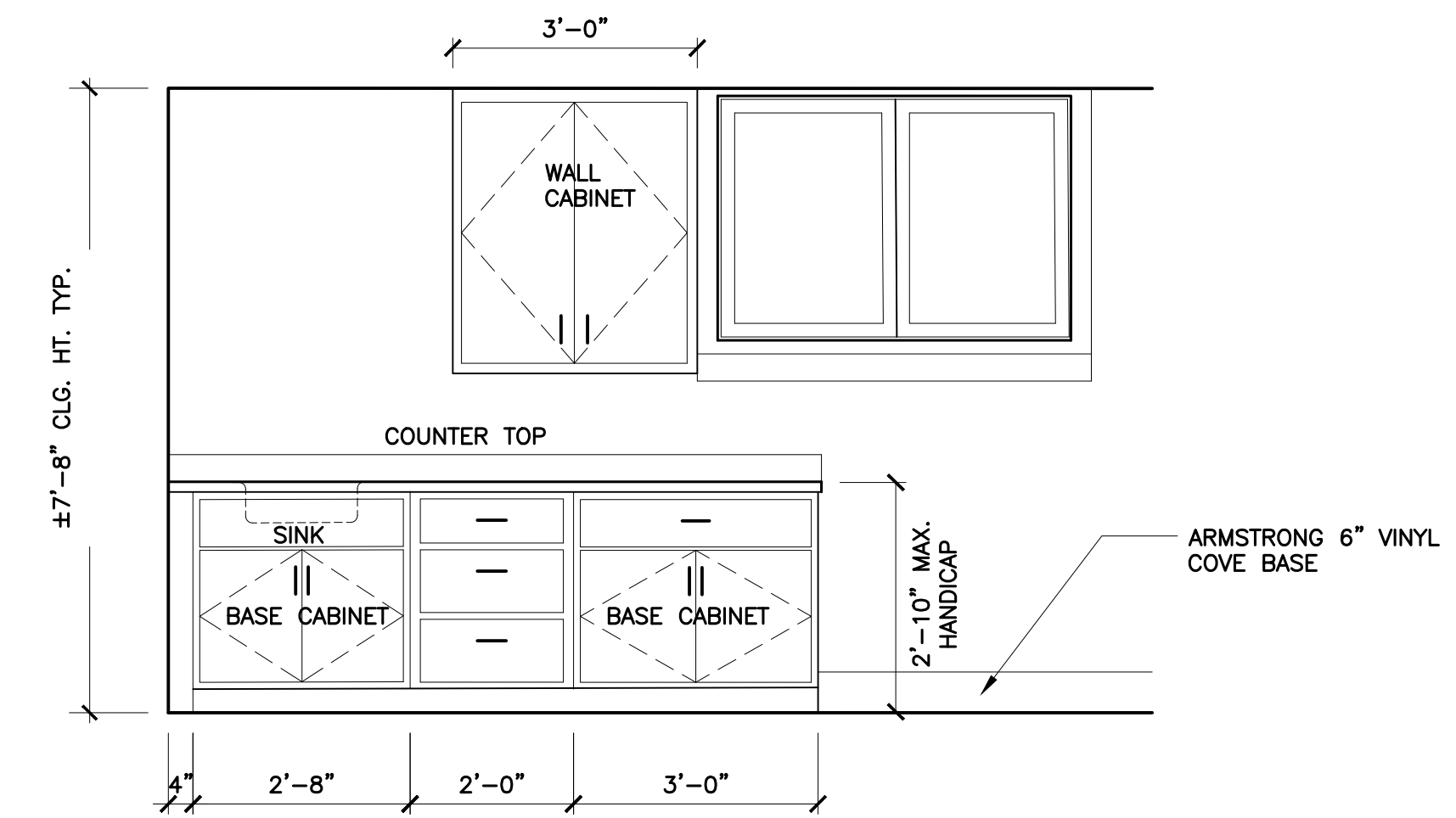
ACCESSORY NOTE: CONTRACTOR TO PROVIDE LISTED BASIS OF DESIGN OR PROVIDE EQUAL IN PERFORMANCE AND FINISH.



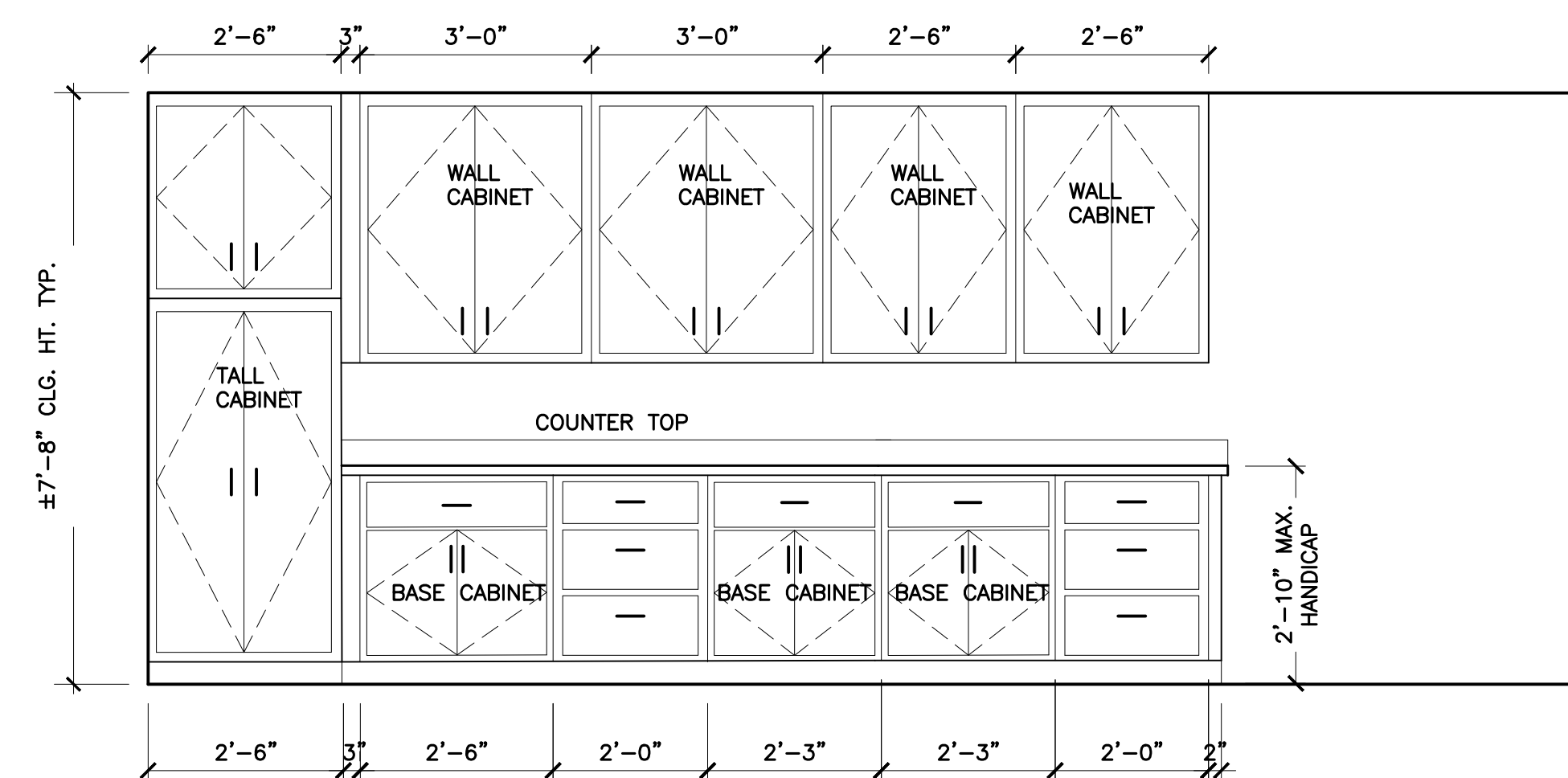
**FINISH SCHEDULE**

ROOM NAME	FLOOR	BASE	WALLS	CEILING	REMARKS
	18X18 LVF TILE (COLOR TBD) SLIP RESISTANT SHEET VINYL	VINYL COVE BASE SLIP RESISTANT SHEET VINYL	BOBRICK PLASTER FINISH PAINTED FRP PEBBLE SURFACE 4'-0" AFF	5/8" TYP X GYP.BD.-PAINT	
1-101 CLASSROOM A					
1-102 CLASSROOM B					
1-103 CLASSROOM C					
1-104 CLASSROOM D					
1-601 RESTROOM					SEE WALL SECTION FOR FRP ATTACHMENT
1-602 RESTROOM					SEE WALL SECTION FOR FRP ATTACHMENT
1-603 RESTROOM					SEE WALL SECTION FOR FRP ATTACHMENT
1-604 RESTROOM					SEE WALL SECTION FOR FRP ATTACHMENT

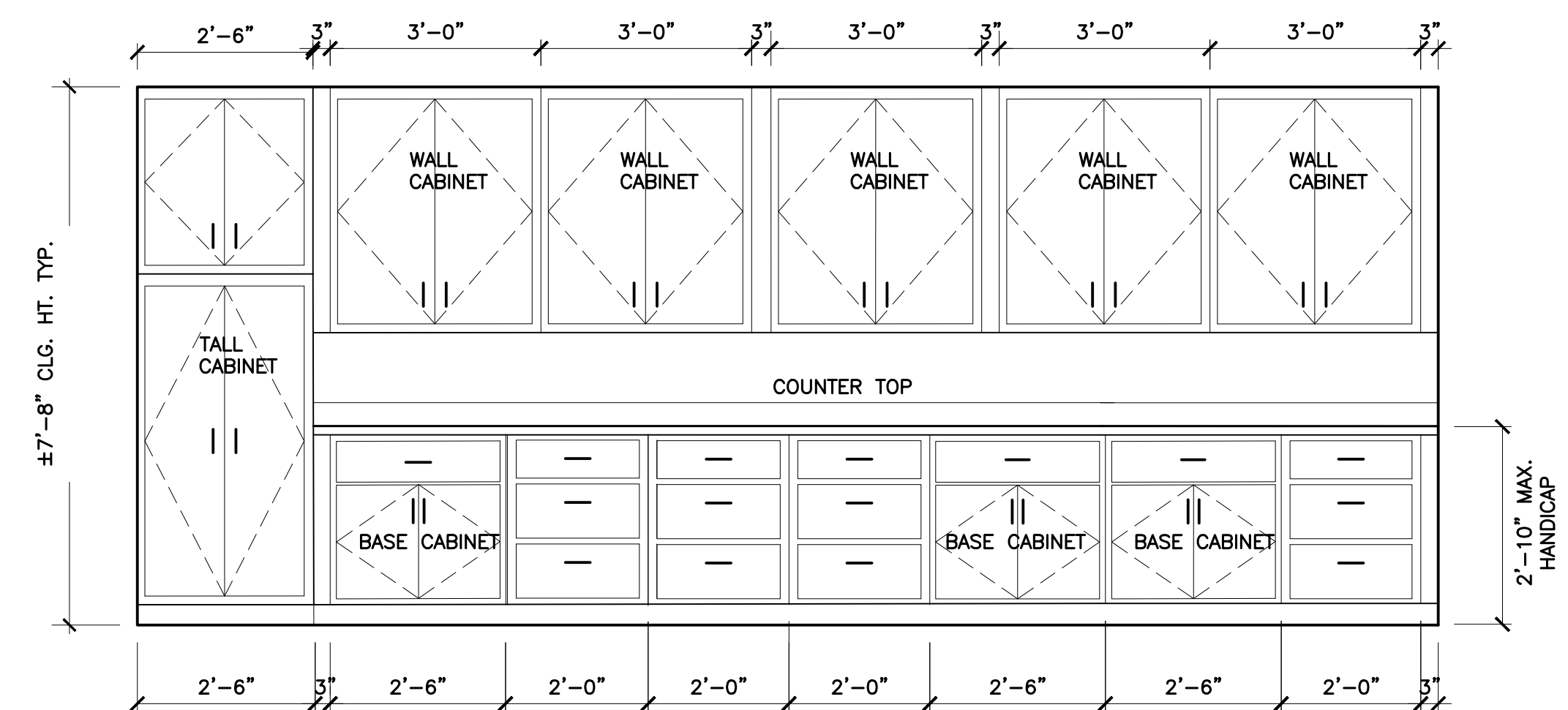




1  
ID2.1 CLASS ROOM CABINETRY CONFIG. 1, TYP.  
SCALE: 1/2"=1'-0"



2  
ID2.1 CLASS ROOM CABINETRY CONFIG. 2, TYP.  
SCALE: 1/2"=1'-0"



3  
ID2.1 CLASS ROOM CABINETRY CONFIG. 3, TYP.  
SCALE: 1/2"=1'-0"



**GENERAL ELECTRICAL NOTES**

- ALL WORK SHALL BE IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE, FLORIDA BUILDING CODE AND OTHER APPLICABLE CODES AND STANDARDS.
- o) THE DRAWINGS ARE DIAGRAMMATIC AND DO NOT SHOW ALL OFFSETS, BENDS AND BOXES REQUIRED TO MAKE A COMPLETE NEAT INSTALLATION IN ACCORDANCE WITH N.E.C. WHEN CONFLICTS ARISE IN LOCATIONS WIRING DEVICES, ELECTRICAL EQUIPMENT, b) DISCONNECTS, PANEL BOARDS, ETC. DUE TO FIELD CONDITION OR IMPROPER FIELD COORDINATION CONTRACTOR SHALL BRING IT TO THE A/E'S ATTENTION AND AT NO EXTRA COST RELOCATE, AND OR EXTEND WITHIN A REASONABLE DISTANCE SUCH ITEM WHICH IS IN CONFLICT. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING LOCATION OF ALL COMPONENTS PRIOR TO ROUGH IN WITH ALL TRADES NO EXTRAS WILL BE ALLOWED FOR FAILURE TO DO SO.
- THE CONTRACTOR IS RESPONSIBLE FOR EVALUATING FIELD CONDITIONS BY VISITING THE SITE PRIOR TO COMMENCING / BIDDING WORK.
- THE CONTRACTOR SHALL SATISFACTORILY REPAIR / REPLACE EQUIPMENT OR PART OF STRUCTURE DAMAGED AS A RESULT OF HIS WORK. SURFACES AND FINISHED AREAS SHALL BE RESTORED TO MATCH ADJACENT AREAS.
- APPROVAL SHALL BE OBTAINED FROM A STRUCTURAL ENGINEER PRIOR TO CUTTING OR DRILLING ANY STRUCTURAL SUPPORT MEMBER.
- ALL DEVICE BOXES SHALL BE INSTALLED FLUSH AND CONDUITS RUN CONCEALED IN FINISHED AREAS EXCEPT AS SPECIFICALLY SHOWN/NOTED OTHERWISE.
- ALL ELECTRICAL EQUIPMENT SHALL BE REMOVED FROM STRUCTURE TO BE REMOVED.
- ACCESSIBLE RACEWAYS, WIRES, BOXES, SWITCHES AND OTHER ELECTRICAL ITEMS ASSOCIATED WITH THIS WORK SHALL BE REMOVED IF NOT REQUIRED FOR NEW EQUIPMENT TO CONTINUE IN SERVICE.
- WIRE SHALL BE REMOVED BACK TO SOURCE FROM INACCESSIBLE RACEWAYS NOT REUSED. INSTALL BLANK PLATES ON FLUSH OUTLETS NOT REUSED. PLATE COLOR SHALL MATCH ADJACENT SURFACE AS NEAR AS POSSIBLE IN FINISHED AREAS.
- MODIFY AND REROUTE EXISTING WIRING AS REQUIRED TO ACCOMPLISH INDICATED WORK AND CONTINUE SERVICE TO LOADS BEYOND AREA IN WHICH WORK IS DONE. CONTRACTOR SHALL RE-USE EXISTING SPARE BRANCH CIRCUIT BREAKER AND/OR EXISTING BRANCH CIRCUITS PRESENTLY SERVING ELECTRICAL DEVICES BEING REMOVED IN AREAS BEING REMODELED. ACTUAL CIRCUIT NUMBERS MAY VARY FROM ACTUAL FIELD CONDITIONS BUT ARE SHOWN TO FACILITATE CIRCUITING LAYOUT
- INSTALL POWER AND CONTROL WIRING AND REQUIRED CONTROL COMPONENTS FOR AIR CONDITIONING SYSTEM AS SHOWN/NOTED ON THESE DRAWINGS AND PER OTHER APPLICABLE DRAWINGS / INSTRUCTIONS. SEE AIR CONDITIONING DRAWING.
- ALL MATERIAL REMOVED SHALL BE DISPOSED OF AS DIRECTED BY OWNER.
- ALL WIRING INDICATED AS EXISTING IS BASED ON ORIGINAL CONTRACT DRAWINGS AND IS TO BE VERIFIED BY CONTRACTOR AT JOB SITE.
- MINIMUM WIRE SIZE SHALL BE # 12 THHN / THWN UNLESS OTHERWISE NOTED ON PLANS. CONDUCTORS #6 AND LARGER SHALL BE THW.
- ALL CONDUCTORS SHALL BE COPPER RUN IN METALLIC CONDUIT.
- ALL CONDUCTORS SHALL BE RUN IN CONDUIT (METALLIC TYPE). IF PVC SCHEDULE 40 IS USED FOR UNDERGROUND FEEDERS ONLY, AN EQUIPMENT GROUND CONDUCTOR SIZED IN ACCORDANCE WITH N.E.C. 250-122 MUST BE INSTALLED AND CONDUIT SIZE INCREASED AS REQUIRED.
- ALL MATERIALS SHALL BE U.L. APPROVED.
- NEW TYPED PANEL TALLY SHALL BE FURNISHED AFTER JOB IS COMPLETED.
- ALL BRANCH CIRCUITS SHALL BE PROPERLY PHASE BALANCED.
- CONTRACTOR TO REMOVE AND/OR REPLACE CIRCUIT BREAKERS IN EXISTING PANEL TO OBTAIN AMOUNT REQUIRED AS A MINIMUM PER PANEL SCHEDULE. ALL EXISTING EXCESS BREAKERS, IF ANY, TO REMAIN AS SPARE.
- ALL NON POWER RELATED WIRING IN CEILING AIR CONDITIONING PLENUM RUNNING WITHOUT CONDUIT SHALL BE TEFLON COATED CLASSIFIED FOR USE IN PLENUMS.
- PROVIDE TRAPEZE HANGER AS ASSEMBLY FOR PLENUM COMMUNICATION CABLE WITH 3/8" DIAMETER. THREADED ROD AND CHANNEL ASSEMBLY TO SUPPORT CABLE BUNDLES EVERY 4 FT. O.C. (MAXIMUM CABLES SHALL NOT LIE ON TOP OF CEILING TILE OR LUMINARIES).
- SEE ARCHITECTURAL DRAWING FOR INFORMATION CONCERNING EXISTING CONDITIONS AND COUNTER DETAILS.
- ALL BRANCH CIRCUITS TO HAVE A GREEN EQUIPMENT GROUNDING CONDUCTOR SIZED AS PER N.E.C. 250.122.
- ALL DEVICES IN EXISTING WALLS NOT AFFECTED BY NEW CONSTRUCTION SHALL REMAIN ACTIVE.
- ALL EMPTY CONDUITS TO BE PROVIDED WITH NYLON PULL STRINGS.
- FUSES SHALL BE DUAL ELEMENT, TIME DELAY TYPE UNLESS OTHERWISE NOTED.
- A/C EQUIPMENT WIRING, BREAKER AND FUSE SIZES ARE BASED ON A/C EQUIPMENT SPECIFIED ON CONTRACT DRAWING. CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL WIRING, BREAKER AND FUSES SIZES IN ACCORDANCE WITH A/C EQUIPMENT NAMEPLATE REQUIREMENTS IF DIFFERENT FROM THAT SPECIFIED ON DRAWINGS, AS WELL AS ANY FEEDER CHANGES BEING AFFECTED BY THIS CHANGE CONTRACTOR SHALL MAKE ABOVE MENTIONED CHANGES AT NO EXTRA COST.
- CONTRACTOR SHALL COORDINATE ALL HIS WORK WITH OTHER TRADES IN ORDER TO FURNISH AND INSTALL ALL CONTROL WIRING AND RACEWAYS. ALL POWER CONTROL CIRCUIT WIRING AND RACEWAY AS SHOWN ON THE AIR CONDITIONING DRAWING OR SPECIFICATIONS. IF AIR CONDITIONING DRAWING REFER TO MANUFACTURER ALL REQUIREMENT AND INCLUDE ALL RELATED WORK IN HAS CONTACT.
- ALL LUMINARIES SHALL BE PROPERLY SUPPORTED IN ACCORDANCE WITH THE CEILING 30. SYSTEM MANUFACTURER RECOMMENDATIONS AND LOCAL CODE REQUIREMENTS.
- RISERS ARE DIAGRAMMATIC ONLY. THEY DO NOT SHOW EVERY BEND REQUIRED FOR THE INSTALLATION.
- THIS DRAWING IS A GUIDE FOR THE ELECTRICAL INSTALLATION. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE TO PROVIDE A FUNCTIONING SYSTEM.
- ALL CABLES SHALL BE RUN WITH OUT SPLICES EXCEPT IF OTHERWISE INDICATED.
- ALL PULL AND JUNCTION BOXES SHALL BE ACCESSIBLE AT ALL TIMES.
- EXACT POINT AND METHODS OF CONNECTION SHALL BE DETERMINED IN FIELD.
- ALL WORK SHALL BE DONE IN A NEAT AND WORKMANLIKE MANNER.
- ALL LOADS IN EXISTING PANEL BOARDS ARE ESTIMATED.
- ALL RACEWAY ROUTED, INSULATED CONDUCTORS SYSTEM SHALL BE COLOR CODED AS 38. FOLLOWS:

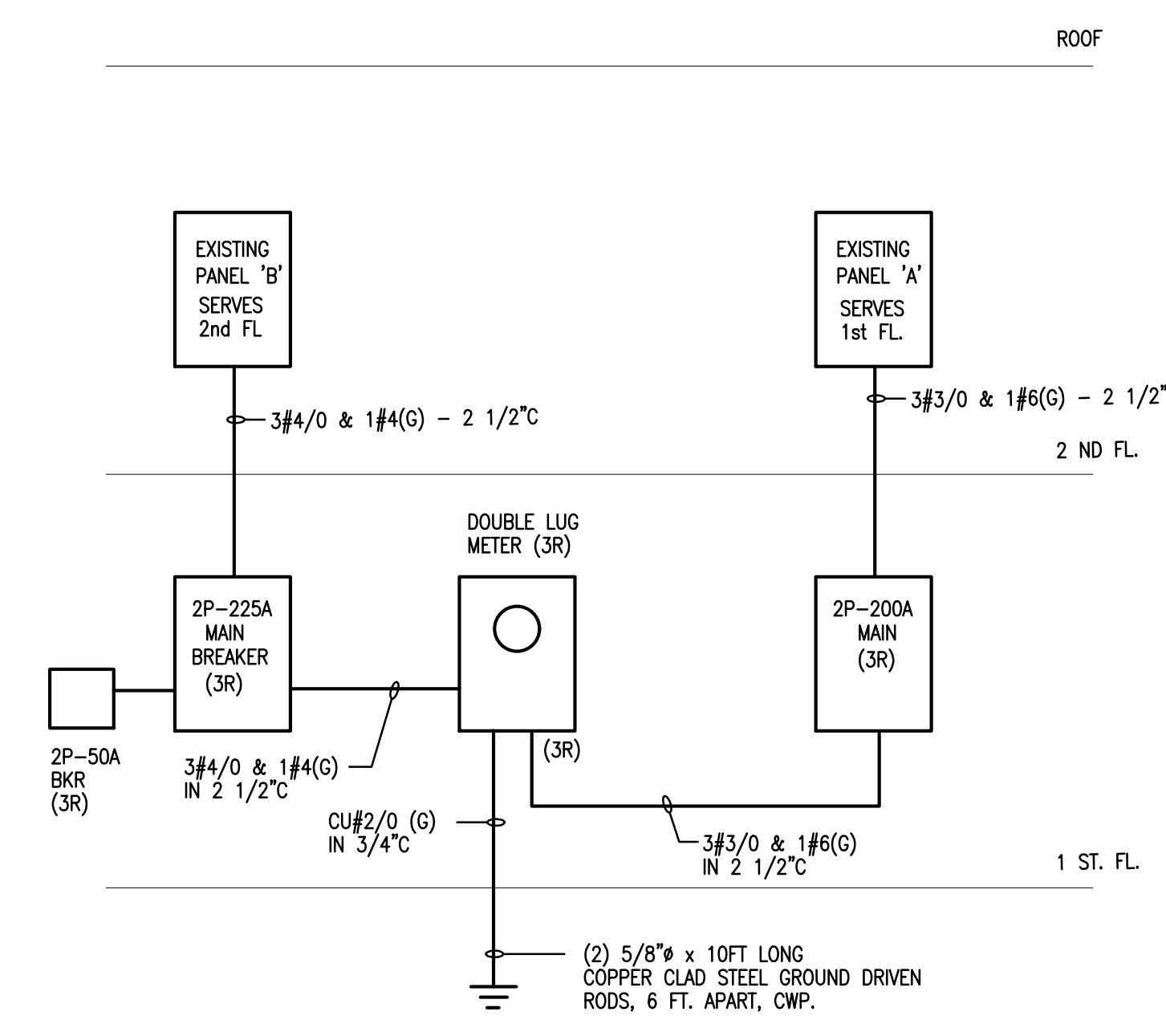
120/208 V SYSTEM  
 PHASE 'A' BLACK  
 PHASE 'B' RED  
 PHASE 'C' BLUE  
 NEUTRAL WHITE  
 GROUND GREEN  
 277/480 V SYSTEM  
 PHASE 'A' BROWN  
 PHASE 'B' PURPLE  
 PHASE 'C' YELLOW  
 NEUTRAL GRAY  
 GROUND GREEN

Innovative Engineering  
 Group Inc. CA#6717  
 2500 NW 79th Ave., #240  
 Doral, FL 33122  
 305-468-1783  
 Sudhir K. Gupta, P.E.  
 Fla. Reg. No. 29189

TYPE: EXISTING		PANEL : A (EXISTING)										VOLTS: 120/240V, 1Ø, 3W	
MTG	EXISTING											BUS	225 A
MAIN	MLO	(CU BUS / GND BUS)										LOAD	SEE LOAD CALCULATION
LOAD	COND	WIRE	TRIP	POLE	DESCRIPTION	CKT No	CKT No	DESCRIPTION	POLE	TRIP	WIRE	COND	LOAD
4,104	1/2"	12	20	2	EXIST. A/C SYSTEM 3	1	2	SMOKE DETECTOR	1	20	12	1/2"	100
-	-	-	-	-	(*)	3	4	LIGHTING	1	20	12	1/2"	1,100
4,104	1/2"	12	20	2	EXIST. A/C SYSTEM 2	5	6	LIGHTING	1	20	12	1/2"	1,100
-	-	-	-	-	(*)	7	8	LIGHTING	1	20	12	1/2"	1,100
4,104	1/2"	12	20	2	EXIST. A/C SYSTEM 1	9	10	LIGHTING	1	20	12	1/2"	1,100
-	-	-	-	-	(*)	11	12	DRINKING FOUNTAIN	1	20	12	1/2"	1,500
4,104	1/2"	12	20	2	EXIST. A/C SYSTEM 4	13	14	DRINKING FOUNTAIN	1	20	12	1/2"	1,500
-	-	-	-	-	(*)	15	16	PROJECTOR	1	20	12	1/2"	1,200
1,350	1/2"	12	20	1	RECEPTACLES	17	18	PROJECTOR	1	20	12	1/2"	1,200
1,350	1/2"	12	20	1	RECEPTACLES	19	20	PROJECTOR	1	20	12	1/2"	1,200
1,350	1/2"	12	20	1	RECEPTACLES	21	22	PROJECTOR	1	20	12	1/2"	1,200
1,350	1/2"	12	20	1	RECEPTACLES	23	24	SPARE	1	20	-	-	1,200
1,350	1/2"	12	20	1	RECEPTACLES	25	26	FIRE ALARM	1	20	12	1/2"	200
1,350	1/2"	12	20	1	RECEPTACLES	27	28	RECEPTACLES	1	20	12	1/2"	1,350
-	-	-	-	-	SPARE	29	30	RECEPTACLES	1	20	12	1/2"	1,350

(\*) PROVIDE HACR TYPE BREAKER  
 INDOOR UNIT IS FED THRU OUTDOOR UNIT

LOAD CALCULATION  
 TOTAL LOAD = 40,916 VA / 240 V = 170.5 AMPS



**ELECTRICAL RISER DIAGRAM**  
 N.T.S.  
 NOTE:  
 1. MOUNT ALL EQUIPMENT ABOVE FLOOD ELEVATION (MIN. 9'-0" NGVD ELEVATION)  
 2. RE-USE DISCONNECTS IF IN GOOD WORKING ORDER.

WILLIAM P. HORN  
 ARCHITECT, P.A.

915 EATON ST.  
 KEY WEST,  
 FLORIDA  
 33040

TEL (305) 296-8302  
 FAX (305) 296-1033

LICENSE NO.  
 AA 0003040

BIG PINE ACADEMY  
 BIG PINE, FLORIDA

SEAL

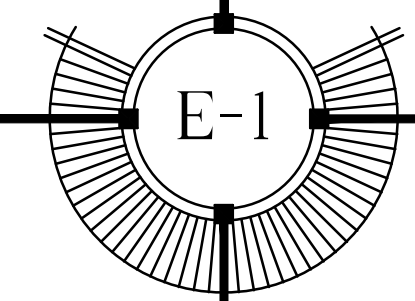
THESE DRAWINGS MAY  
 NOT BE REPRODUCED  
 WITHOUT WRITTEN  
 AUTHORIZATION BY  
 WILLIAM P. HORN

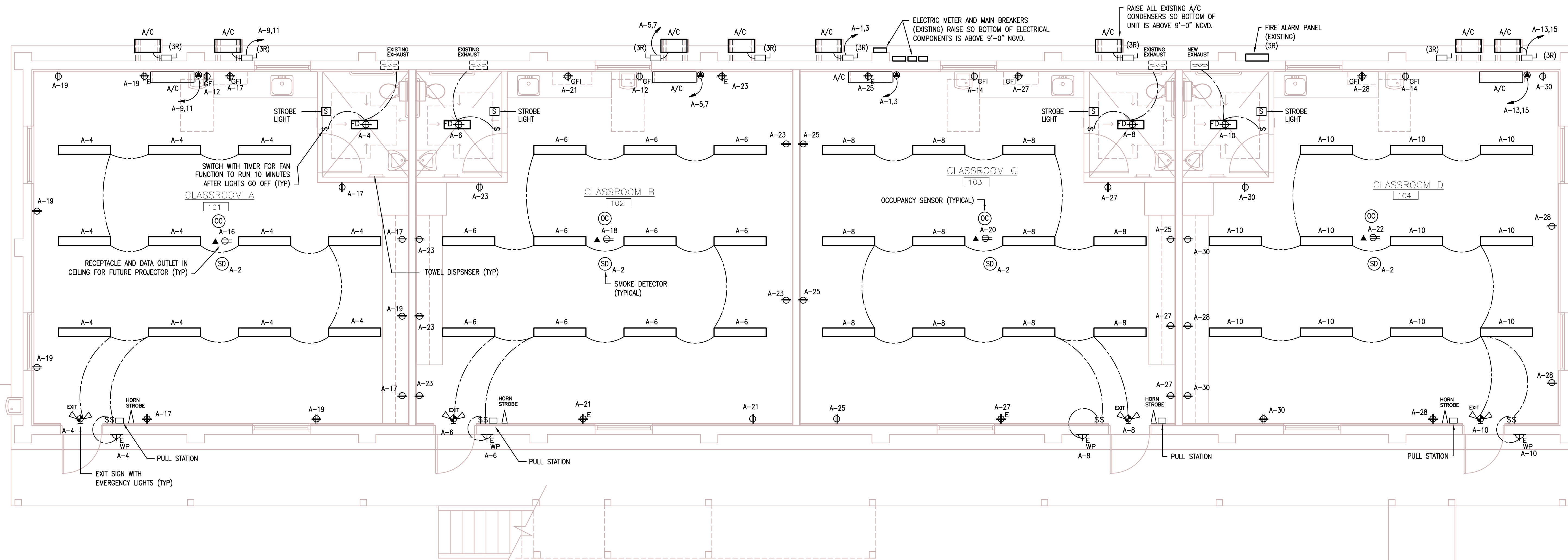
DATE  
 02-08-19

REVISIONS

DRAWN BY  
 E.M.A

PROJECT  
 NUMBER  
 1822





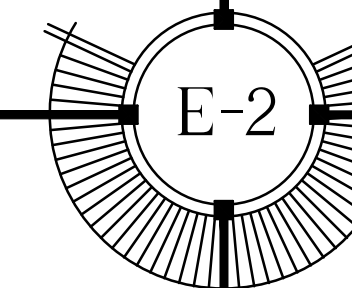
### FIRST FLOOR ELECTRICAL PLAN

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

### ELECTRICAL NOTES

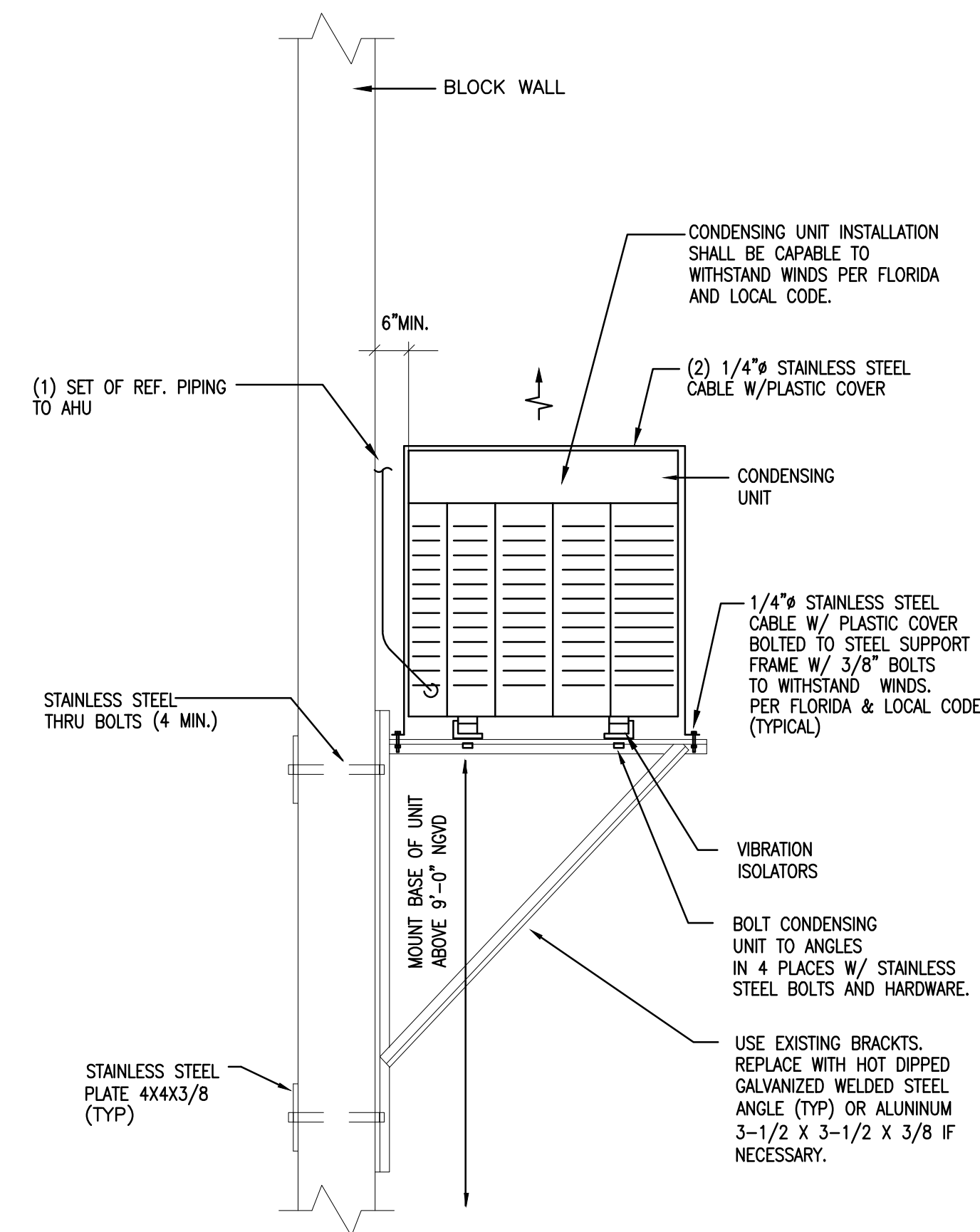
1. ALL OUTLETS ARE TO BE A MIN. 48" A.F.F.
2. ACTUAL LOCATION OF ALL WORK TO BE SITE VERIFIED AND COORDINATE WITH OWNER.
3. ALL ROOMS TO HAVE OCCUPANCY SENSORS WITH MANUAL OVERRIDE SWITCHING.
4. FIELD VERIFY ALL EXISTING CONDITIONS.
5. ALL FIRE ALARM DEVICES SHALL BE COMPATIBLE WITH EXISTING FIRE ALARM PANEL. CONTRACTOR MAY USE EXISTING COMPONENTS IF IN GOOD OPERATING CONDITION. FIRE ALARM CONTRACTOR TO SUBMIT SIGNED AND SEALED PLANS FOR PERMIT.
6. EXISTING LIGHT FIXTURES IN CLASSROOMS A, B AND C TO BE REUSED.
7. 'E' DENOTED EXISTING TO REMAIN.

Innovative Engineering  
Group Inc. CA#6717  
2500 NW 79th Ave., #240  
Doral, FL 33122  
305-468-1783  
Sudhir K. Gupta, P.E.  
Fla. Reg. No. 29189

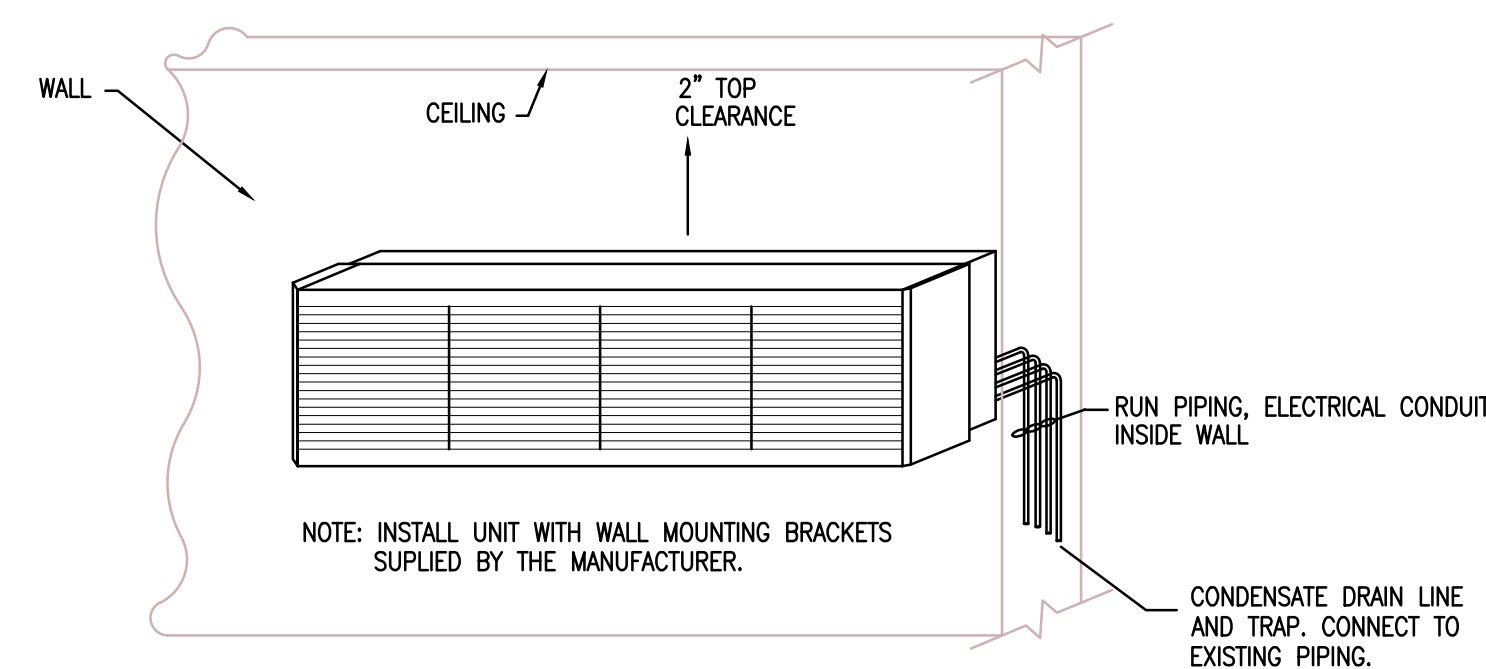


HVAC GENERAL NOTES

1. THE WORK IS TO BE DONE UNDER THIS HEADING INCLUDES THE FURNISHING OF ALL LABOR, MATERIALS, EQUIPMENT, PERMITS, FEES, INSPECTIONS, TESTS, INSURANCE, ETC. REQUIRED FOR THE COMPLETION OF THE HVAC SYSTEM SHOWN ON DRAWINGS AND/OR LISTED BELOW.
2. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE FLORIDA BUILDING CODE AND ALL LOCAL ORDINANCES.
3. CONTRACTORS SHALL VERIFY SPACE CONDITIONS AND DIMENSIONS AND SHALL COORDINATE WORK WITH ALL OTHER TRADES AT THE JOB SITE PRIOR TO INSTALLATION OF EQUIPMENT.
4. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGRESS OF CONSTRUCTION AND IN STRICT COMPLIANCE WITH ALL APPLICABLE CODES AND STANDARDS.
5. ALL REFRIGERANT PIPING SHALL BE TYPE "L" COPPER, TOGETHER WITH WROUGHT COPPER, SOLDER FITTINGS. JOINTS SHALL BE MADE WITH SILVER SOLDER OR "SILFOSS."
6. PIPE INSULATION: CONDENSATE PIPING AND REFRIGERANT SUCTION PIPING SHALL BE INSULATED WITH 3/4" FIRE RATED FLEXIBLE FOAM INSULATION, FINISHED, WHERE EXPOSED WITH 2 COATS OF ACRYLIC LAQUER IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
7. FLAME AND SMOKE RATING: ALL INSULATION PRODUCTS USED INSIDE THE BUILDING SHALL HAVE A MAXIMUM FLAME SPREAD RATING OF 25 AND A MAXIMUM SMOKE GENERATION OF 50 IN ACCORDANCE WITH TESTS OUTLINED IN ASTM E84.
8. VERIFY ALL VOLTAGES WITH ELECTRICAL CONTRACTOR BEFORE ORDERING ANY EQUIPMENT.
9. SUBMIT SHOP DRAWINGS OF ALL EQUIPMENT FOR APPROVAL PRIOR TO ORDERING.
10. ALL EQUIPMENT AND MATERIALS SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR. COMPRESSOR SHALL CARRY MINIMUM 5 YEAR FACTORY WARRANTY.
11. VIBRATION ISOLATION: ALL EQUIPMENT AS PER MANUFACTURER'S RECOMMENDATION OR AS SCHEDULED ON DRAWINGS.
12. FAN SHALL BE AS SCHEDULED ON THE DRAWINGS OR APPROVED EQUAL.
13. ALL OUTSIDE EQUIPMENT SHALL BE SECURED TO WITHSTAND WINDS PER FLORIDA AND LOCAL CODE.
14. MOUNT THERMOSTAT ON WALL WHERE SHOWN ON PLANS OR AT PREVIOUS LOCATIONS PER HANDICAP CODE REQUIREMENTS. PROVIDE KEY LOCK PLASTIC GUARD.
15. TESTING:
  - A. PRESSURE TEST ALL REFRIGERANT HIGH SIDE PIPING TO 275 PSIG. HOLD FOR 24 HOURS. LOW SIDE TO BE TESTED AT 150 PSIG. HOLD FOR 24 HOURS. AFTER TESTING EVACUATE SYSTEM TO 28 INCHES OF MERCURY GAUGE PRESSURE WITH VACUUM PUMP. HOLD FOR 24 HOURS WITH PUMP OFF. BREAK VACUUM WITH OPERATING REFRIGERANT.
16. ALL EQUIPMENT SHALL BE INSTALLED MAINTAINING RECOMMENDED CLEARANCES FOR AIR FLOW AND SERVICE. COORDINATE LOCATION WITH STRUCTURAL FRAMING.
17. CONTRACTOR SHALL VISIT THE JOBSITE PRIOR TO BID AND BECOME FAMILIAR WITH THE EXISTING CONDITIONS. ANY CLARIFICATION REQUIRED SHALL BE BROUGHT TO THE ARCHITECT ATTENTION. NO EXTRAS SHALL BE ALLOWED FOR FAILURE TO DO SO.
18. EXISTING EQUIPMENT NOT INDICATED TO BE REUSED SHALL BE REMOVED AND DISPOSED OF PER ARCHITECT'S INSTRUCTIONS.
19. TOILET EXHAUST FAN, EF-1: THRU WALL 'BROAN' MODEL 512M, 70 CFM, 115V-1-60, 0.5AMP. 3.5 SONES. INTERLOCK WITH TOILET LIGHT SWITCH.
20. MINISPLIT A/C SYSTEM FOR CLASSROOM D: THE SYSTEM CAPACITY SHALL MATCH OTHER CLASSROOMS (2 TONS) FIELD VERIFY. IF LESS, REPLACE THE INDOOR AND OUTDOOR UNITS TO MATCH CLASSROOMS A THRU C.
21. CONTRACTOR MAY RE-USE EXISTING REFRIGERANT AND CONDENSATE DRAIN PIPING IF IN GOOD CONDITION. PROVIDE NEW INSULATION.



CONDENSING UNIT  
MOUNTING DETAIL  
N.T.S.

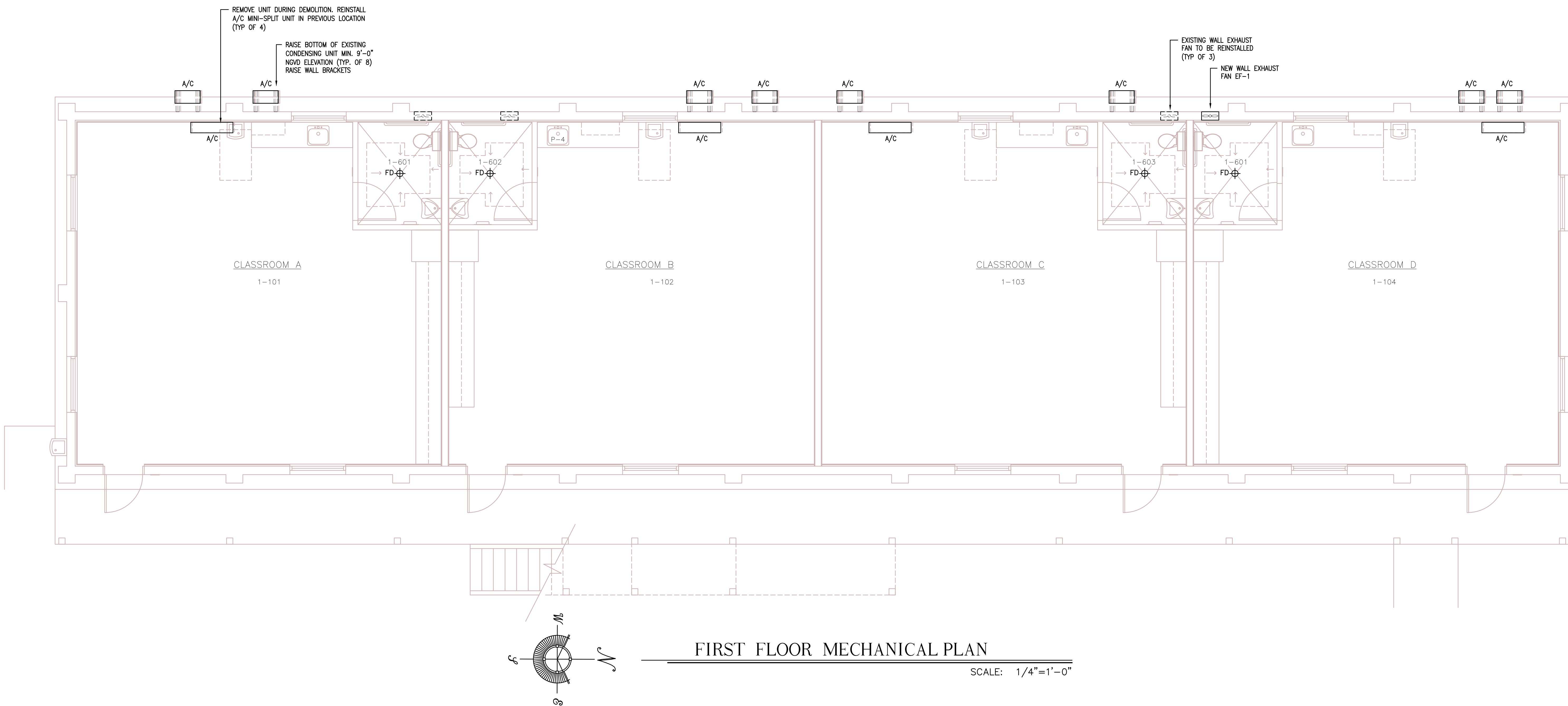
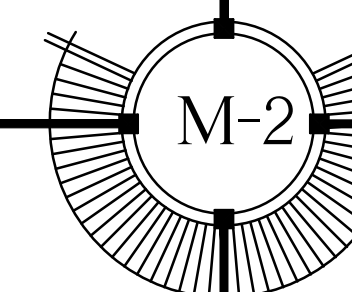


WALL MOUNTED DUCTLESS SPLIT AHU DETAIL  
N.T.S.

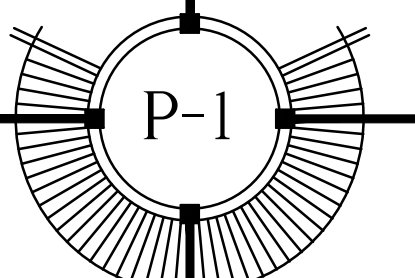
NOTE:  
REMOVE EXISTING DUCTLESS SPLIT UNITS DURING DEMOLITION AND STORE. REINSTALL EXISTING UNITS IN SAME LOCATION WHEN ROOMS ARE READY.

Innovative Engineering  
Group Inc. CA#6717  
2500 NW 79th Ave., #240  
Doral, FL 33122  
305-468-1783  
Sudhir K. Gupta, P.E.  
Fla. Reg. No. 29189

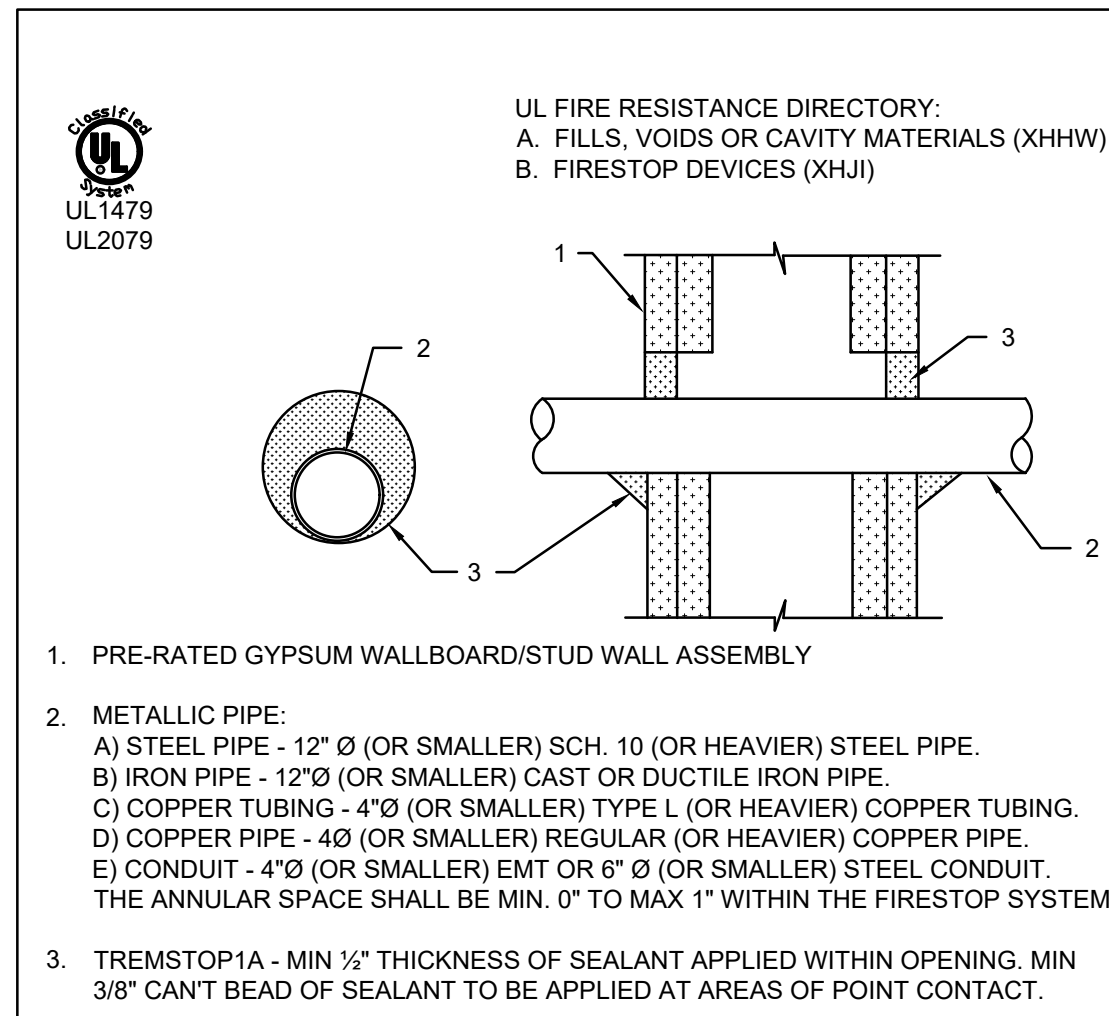
Innovative Engineering  
Group Inc. CA#6717  
2500 NW 79th Ave., #240  
Doral, FL 33122  
305-468-1783  
Sudhir K. Gupta, P.E.  
Fla. Reg. No. 29189



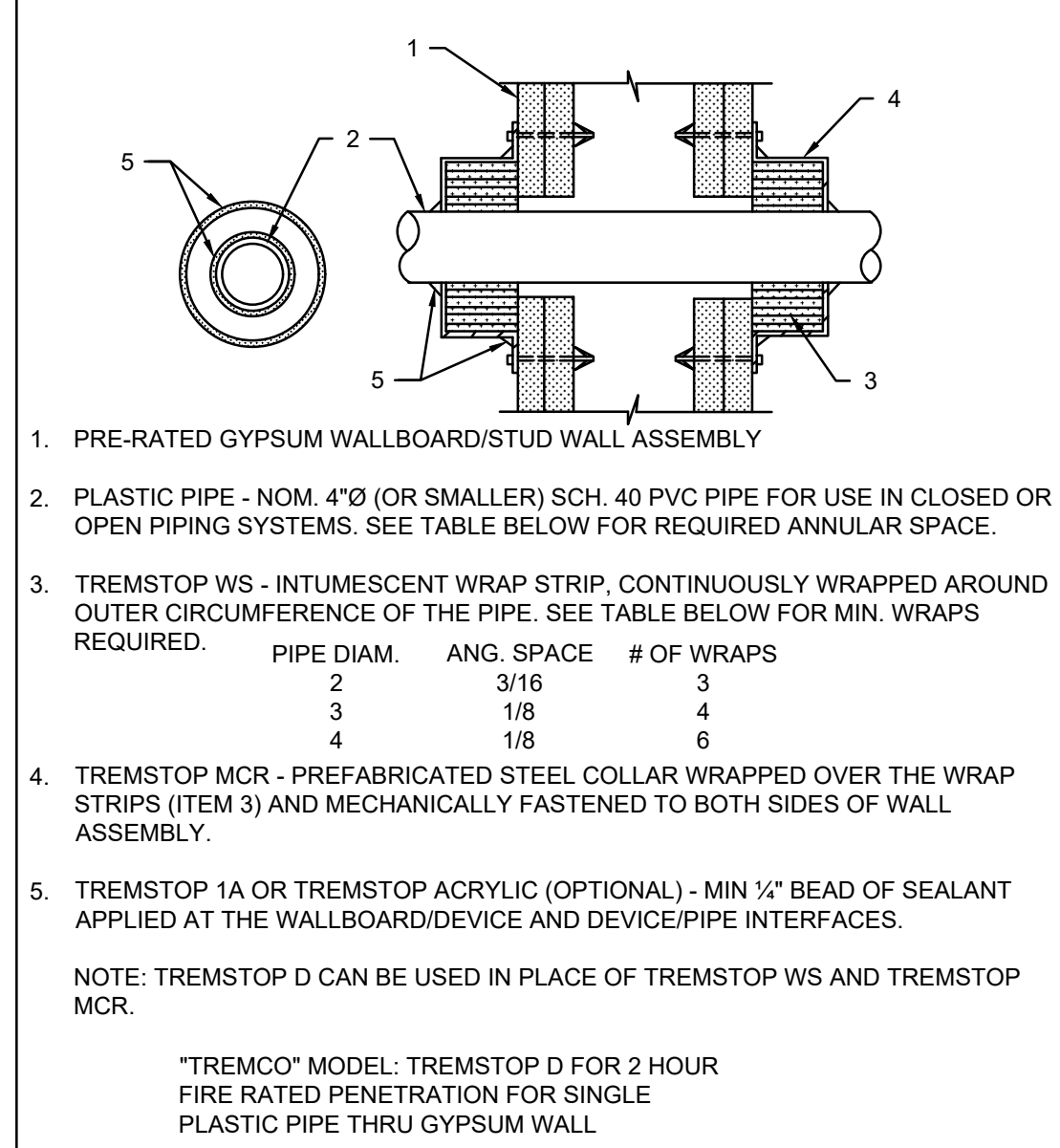
Innovative Engineering  
Group Inc. CA#6717  
2500 NW 79th Ave., #240  
Doral, FL 33122  
305-488-1783  
Sudhir K. Gupta, P.E.  
Fla. Reg. No. 29189



PLUMBING LEGEND	
SYMBOL	DESCRIPTION
—	SANITARY WASTE LINE (SAN)
- - - - -	SANITARY VENT LINE (V)
—○—	FLOOR CLEAN OUT
—○—	WALL CLEAN OUT
—○—	"P" TRAP
—○—	CLEAN OUT ON GROUND
—○—	ABOVE
—○—	BELOW
—○—	CEILING
FL	FLOOR
FCO	FLOOR CLEAN OUT
F.U.	FIXTURE UNIT
(UG)	UNDERGROUND
V.T.R.	VENT THRU ROOF
VB	VACUUM BREAKER
TP	TRAP PRIMER
—○—	CONNECTION (NEW TO EXISTING)



"TREMCO" MODEL: TREMSTOP IA FOR 1 OR 2 HOUR FIRE RATED PENETRATION FOR SINGLE METALLIC PIPE THRU GYPSUM WALL



"TREMCO" MODEL: TREMSTOP D FOR 2 HOUR FIRE RATED PENETRATION FOR SINGLE PLASTIC PIPE THRU GYPSUM WALL

**FIRE STOPPING DETAIL**  
N.T.S.

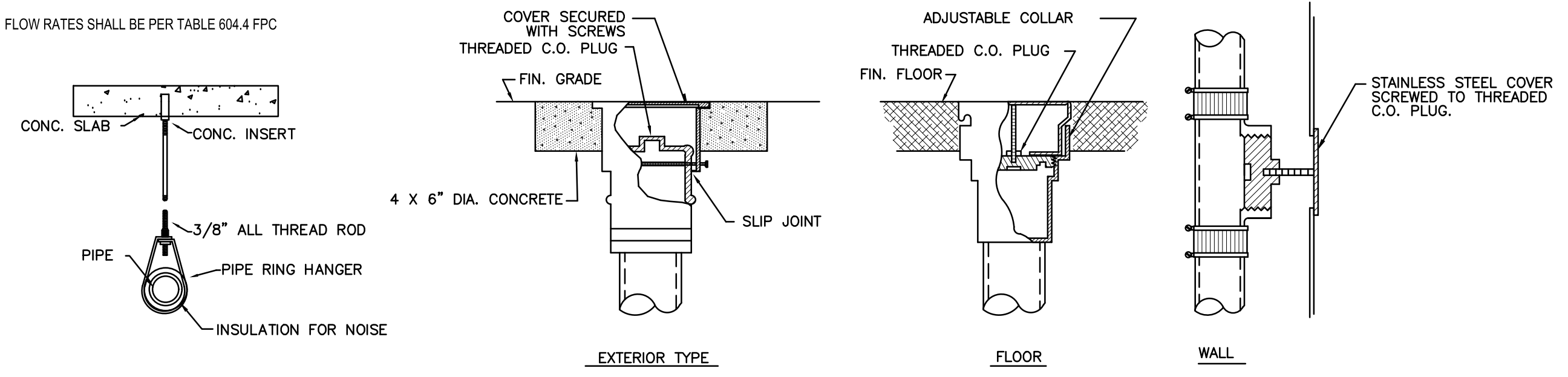
PLUMBING FIXTURE CONNECTION SCHEDULE						
SYMBOL	DESCRIPTION	DRAIN	COLD WATER	HOT WATER	MANUFACTURER/MODEL	TRIM
P-1H	WATER CLOSET (ADA FLOOR MOUNTED) CLASSROOM D	3"	1/2"	--	AMERICAN STANDARD "CADET 3" #270FA101020, WHITE VITREOUS CHINA ELONGATED BDWL, RIGHT HEIGHT, LOW CONSUMPTION, 1.28 GPF. RIM HEIGHT 16-1/2".	SUPPLY: BRASS-CRAFT POLISHED CHROME PLATED CAST BRASS ANGLE SUPPLY WITH RIGID SUPPLY RISER, LOOSE KEY STOP AND ESCUTCHEON.
P-2H	LAVATORY (HANDICAP)	1 1/4"	1/2"	--	AMERICAN STANDARD LUCERN#0356.421 WHITE VITREOUS CHINA WALL HUNG LAVATORY WITH CENTER FAUCET HOLE, FRONT INTEGRAL OVERFLOW AND CONCEALED ARM SUPPORT. CARRIER: MIFAB MC-41 SERIES.	FAUCET: AMERICAN STANDARD #7385.053 RELIANT 3 SINGLE CONTROL CENTERSET METAL LEVER HANDLE. GRID DRAIN LESS POP-UP HOLE. 0.5 GPM PRESSURE COMPENSATING VANDAL RESISTANT SPRAY. DRAIN: MCGUIRE #155A POLISHED CHROME PLATED CAST BRASS OPEN GRID STRAINER AND TAILPIECE, MCGUIRE #8872 POLISHED CHROME PLATED CAST BRASS P-TRAP WITH CLEANOUT PLUG AND ESCUTCHEON. SUPPLY: BRASS-CRAFT POLISHED CHROME PLATED CAST BRASS ANGLE SUPPLY WITH RIGID SUPPLY RISER, LOOSE KEY STOP AND ESCUTCHEON. PIPE INSULATION: TRUEBRO #101W & #105W, WHITE HANDICAP LAVATORY. P-TRAP AND SUPPLY INSULATION.
P-3	SINK (SINGLE COMP.)	2"	1/2"	--	AMERICAN STANDARD #24SB.252211/791566-0750A COUNTERTOP MOUNTED SINK	FAUCET: AMERICAN STANDARD # 4332.310.F15 PEKOE SINGLE HANDLE FAUCET. DRAIN: ELKAY #LK-35 BASKET STRAINER, CHROME PLATED CAST BRASS WITH TAILPIECE. MCGUIRE #8912 POLISHED CHROME PLATED CAST BRASS P-TRAP WITH CLEANOUT PLUG AND ESCUTCHEON. SUPPLY: BRASS-CRAFT POLISHED CHROME PLATED CAST BRASS ANGLE SUPPLY WITH RIGID SUPPLY RISER, LOOSE KEY STOP AND ESCUTCHEON.
P-4	ELECTRIC WATER COOLER	1 1/2"	1/2"	1/2"	ELKAY WALL MOUNTED WATER COOLER- MODEL EZ4-BARRIER FREE ACCESS (ADULT & CHILD) NSF/ANSI 61 COMPLAINT.	CONTRACTOR SHALL INSTALL AND PROVIDE ALL REQUIRED TRIMS, ACCESSORIES AND CONNECTIONS AS PER MANUFACTURER'S RECOMMENDATIONS TO MAKE FIXTURE OPERATIONAL AND FREE FROM DEFECTS. DRAIN: MCGUIRE #8872 POLISHED CHROME PLATED CAST BRASS P-TRAP WITH CLEANOUT PLUG AND ESCUTCHEON. SUPPLY: BRASS-CRAFT POLISHED CHROME PLATED CAST BRASS ANGLE SUPPLY WITH RIGID SUPPLY RISER, LOOSE KEY STOP AND ESCUTCHEON.
FD-1	FLOOR DRAIN	3"	--	--	MIFAB MODEL F1100-S6-1-6-7-SS, CAST IRON FLOOR DRAIN WITH ANCHOR FLANGE, WEEPHOLES, 6" SQUARE SATIN FINISHED STAINLESS STEEL STRAINER, VANDAL PROOF AND 1/2" TRAP SEAL.	

NOTE:  
1. ALL PLUMBING FIXTURES SHALL COMPLY WITH CHAPTER 4 OF FLORIDA PLUMBING CODE. FLOW RATES SHALL BE PER TABLE 604.4 FPC

- GENERAL NOTES:**
- ALL WORK TO BE DONE IN ACCORDANCE WITH THE 2017 FLORIDA BUILDING CODE, STATE AND LOCAL ORDINANCES.
  - DRAINAGE SYSTEM DESIGN IS BASED ON 1/8" PER FOOT MINIMUM FALL FOR PIPES 3" OR LARGER AND 1/4" PER FOOT MINIMUM FALL FOR PIPES 2" OR SMALLER, ANY DEVIATIONS SHALL BE APPROVED BY ARCHITECT/ENGINEER.
  - PROVIDE CLEAN OUTS EVERY 75 FT. AND AT BASE OF EVERY WASTESTACK. ALL CLOSE-OUTS TO BE FLUSH MOUNTED.
  - MATERIALS SHALL BE ALL NEW AND AS FOLLOWS:
    - DRAINAGE WASTE AND VENT PIPING ABOVE AND BELOW GROUND PVC DRAINAGE WASTE AND PIPING (DW) CONFORMING TO ASTM D-2665, INSTALL PLASTIC (PVC) SCH40 SOLID WALL PIPES ONLY WHEN IT IS APPROVED BY LOCAL AUTHORITIES AND NOT TO BE USED IN AIR RETURN PLENUM.
    - CONDENSATE DRAIN PIPING: COPPER TYPE "M" ASTM B-88 INSIDE THE BUILDING AND PVC SCHEDULE 40 ABOVE ROOF AND UNDERGROUND. PROVIDE 3/4" ARMAFLEX PIPE INSULATION TO ALL CONDENSATE DRAIN PIPING.
    - FLOOR CLEAN OUTS: JOSAM SERIES 56020 OR EQUAL.
    - WALL CLEAN OUTS: JOSAM SERIES 58750 WITH ACCESS COVER OR EQUAL.
  - PERFORM THE FOLLOWING TEST:
    - DRAINAGE SYSTEM: BEFORE INSTALLATION OF ANY DRAINS, THE END OF THE SYSTEM SHALL BE CAPPED & ALL LINES FILLED WITH WATER TO HIGHEST POINT & ALLOWED TO STAND UNTIL INSPECTION IS MADE AND WATER LEVELS REMAIN CONSTANT.
    - CORRECT ALL DEFECTS DISCLOSED BY ABOVE TESTS.
    - COMPLETE SYSTEM FIXTURE & EQUIPMENT SHALL BE GIVEN AN IN SERVICE TEST AFTER COMPLETION OF THE INSTALLATION.
  - PLUMBING CONTRACTOR SHALL FURNISH A WRITTEN GUARANTEE THAT ALL PLUMBING WORK SHALL BE FREE FROM DEFECTS OF MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE, AND THAT HE WILL, AT HIS EXPENSE, REPAIR AND REPLACE ALL WORK WHICH BECOMES DEFECTIVE DURING GUARANTEE PERIOD.
  - CONTRACTOR SHALL FIELD VERIFY EXACT LOCATION OF EXISTING UTILITIES AND POINTS OF CONNECTION BEFORE COMMENCING ANY WORK.
  - PLUMBING CONTRACTOR SHALL PAY ALL FEES, INSPECTION AND CONNECTION CHARGES REQUIRED.
  - SUBMIT SHOP DRAWINGS TO ENGINEER FOR APPROVAL OF ALL EQUIPMENT, MATERIALS AND LAYOUTS PRIOR TO INSTALLATION.
  - OFFSET PIPING AS REQUIRED TO CLEAR BUILDING STRUCTURE, DUCTWORK, ETC. AS SHOWN ON DRAWINGS AND AS REQUIRED BY FIELD CONDITIONS.
  - PLUMBING CONTRACTOR SHALL FURNISH AND INSTALL A/C CONDENSATE DRAIN AND TRAP. SEE A/C PLANS FOR LOCATION OF UNITS AND DRAINS.
  - PLUMBING CONTRACTOR SHALL VERIFY ALL SPACE CONDITIONS AND DIMENSIONS AT JOB SITE PRIOR TO FABRICATION AND INSTALLATION OF MATERIALS AND EQUIPMENT.
  - COORDINATE WORK WITH OTHER TRADES.
  - FURNISH AND INSTALL FIXTURES AS SPECIFIED IN SCHEDULE ON THIS SHEET
  - PROVIDE SHUTOFF VALVE FOR EACH FIXTURE, JUST BEFORE CONNECTING TO FIXTURE.
  - ALL EQUIPMENT SHALL BE INSTALLED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS
  - WATER PIPING (CW): COPPER TYPE "L" ASTM B-88 ABOVE GROUND AND COPPER TYPE "K" ASTM B-88 UNDERGROUND. CPVC CTS MAYBE USED FOR WATER PIPING WHERE APPROVED BY CODE AND ACCEPTABLE TO OWNER.

HANGER SPACING		
PIPING MATERIAL	MAXIMUM HORIZONTAL SPACING	MAXIMUM VERTICAL SPACING
COPPER PIPE	12'	10'
COPPER TUBING 1 1/4" AND LESS	6'	10'
COPPER TUBING 1 1/2" AND OVER	10'	10'
PVC PIPE	4'	10' (B)

A - SPACING SHALL BE 10' IF 10' LENGTHS ARE INSTALLED  
B - MID STORY GUIDE FOR 2" AND LARGER



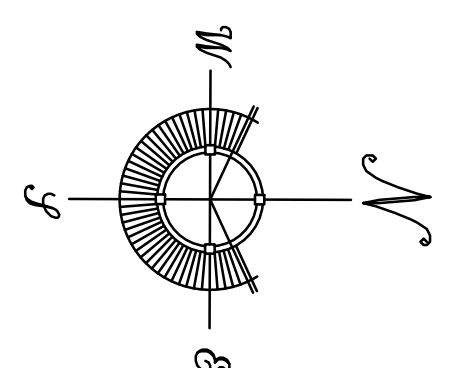
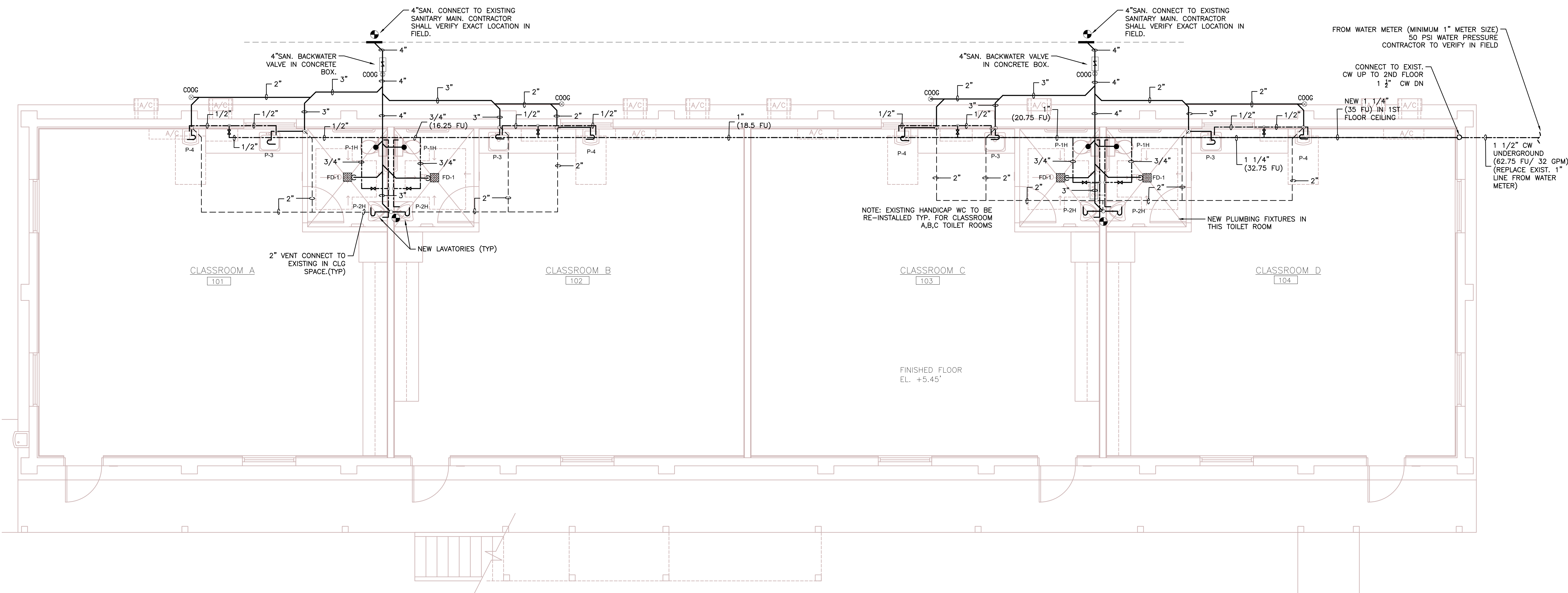
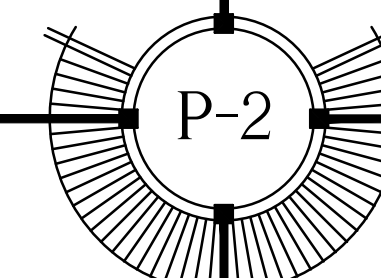
**PIPE HANGER DETAIL**  
N.T.S.

**TYPICAL CLEANOUT DETAIL**  
N.T.S.

**PLUMBING FIXTURE SCHEDULE, NOTES & LEGENDS**

SCALE: NTS

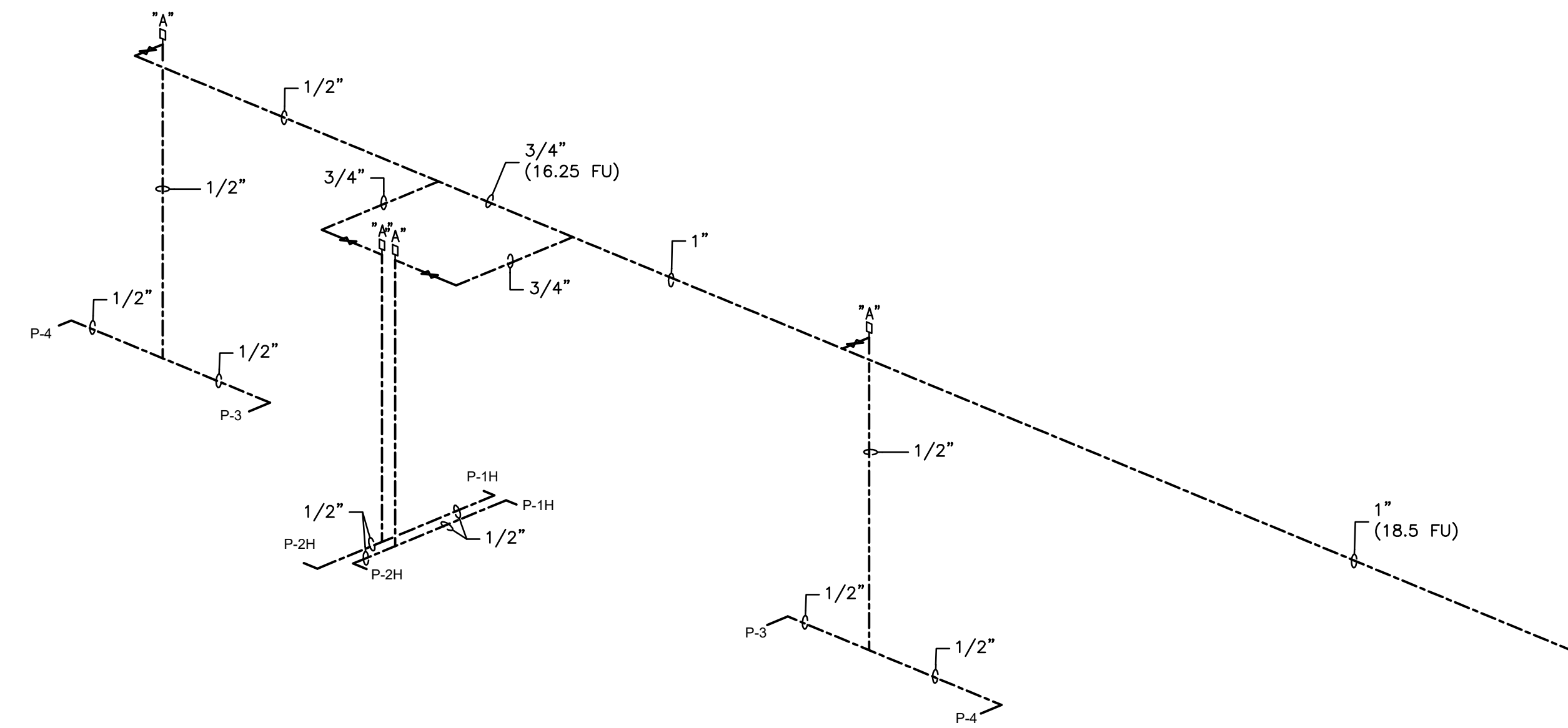
Innovative Engineering  
Group Inc. CA#6717  
2500 NW 79th Ave., #240  
Doral, FL 33122  
305-488-1783  
Sudhir K. Gupta, P.E.  
Fla. Reg. No. 29189



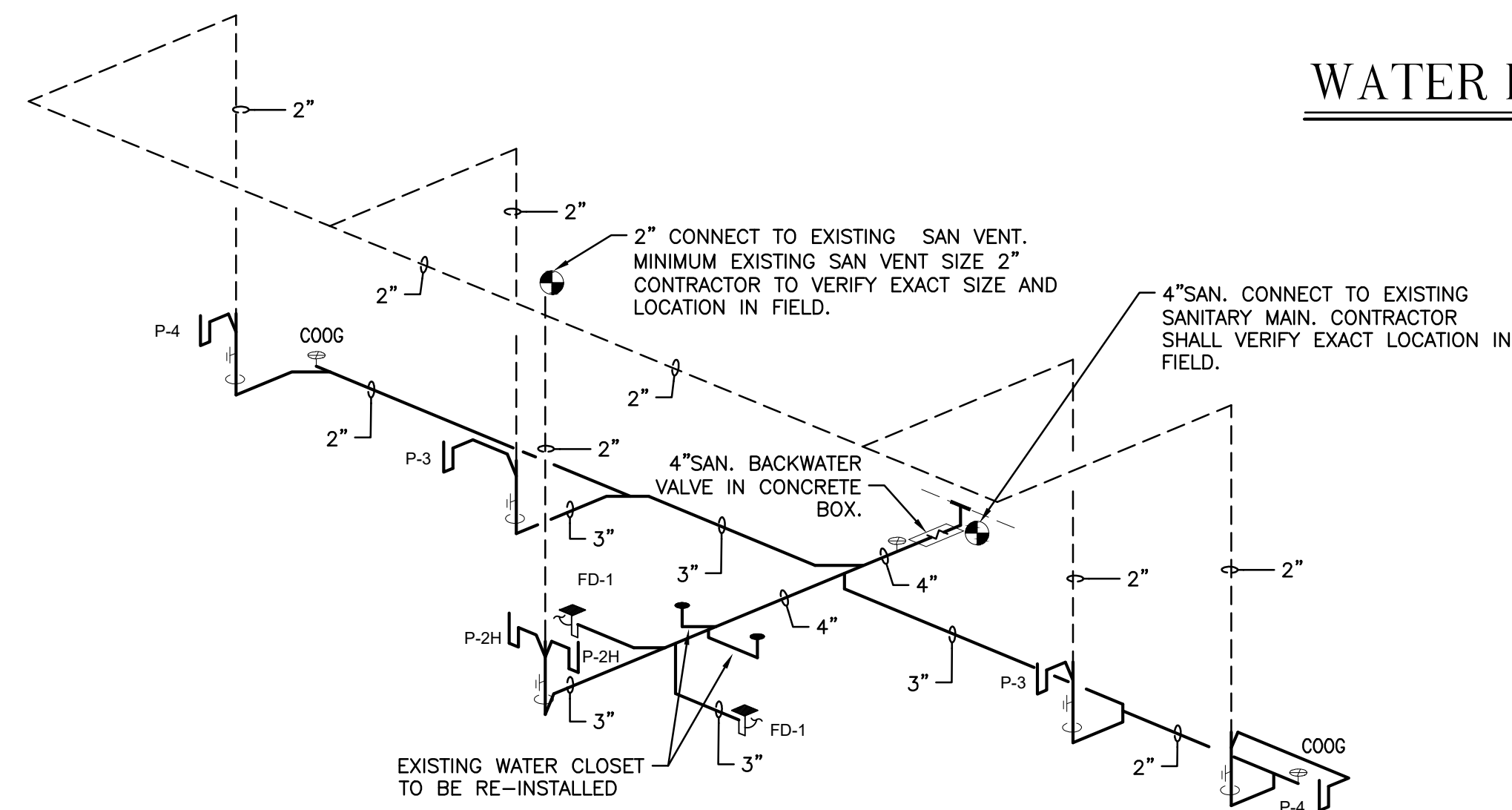
### FIRST FLOOR PLUMBING PLAN

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

- NOTES:
1. ALL SANITARY PIPING IS INDICATED AS NEW. CONTRACTOR MAY RE-USE EXISTING PIPING IN GOOD CONDITION AND SAME SIZE AS INDICATED.
  2. FLOOD PROOFING OF PLUMBING PIPES: ALL WALL AND SLAB PENETRATIONS OF PLUMBING PIPING BELOW 9 FEET NGVD SHALL BE SEALED WATER TIGHT.
  3. CAP-OFF EXISTING COLD WATER PIPING IN 2ND FLOOR CURRENTLY SERVING 1ST FLOOR FROM ABOVE.

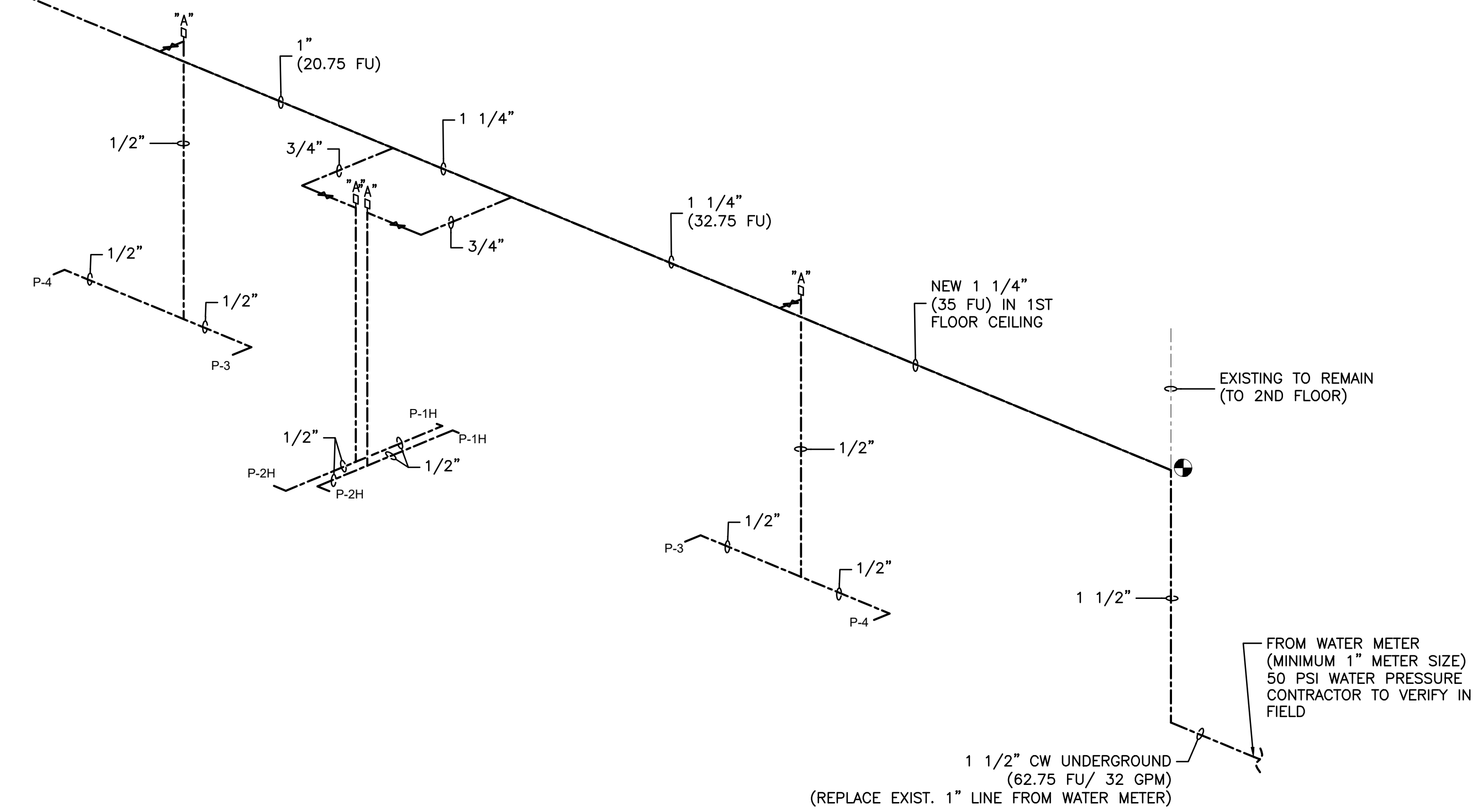


**WATER ISOMETRIC**  
SCALE: NTS

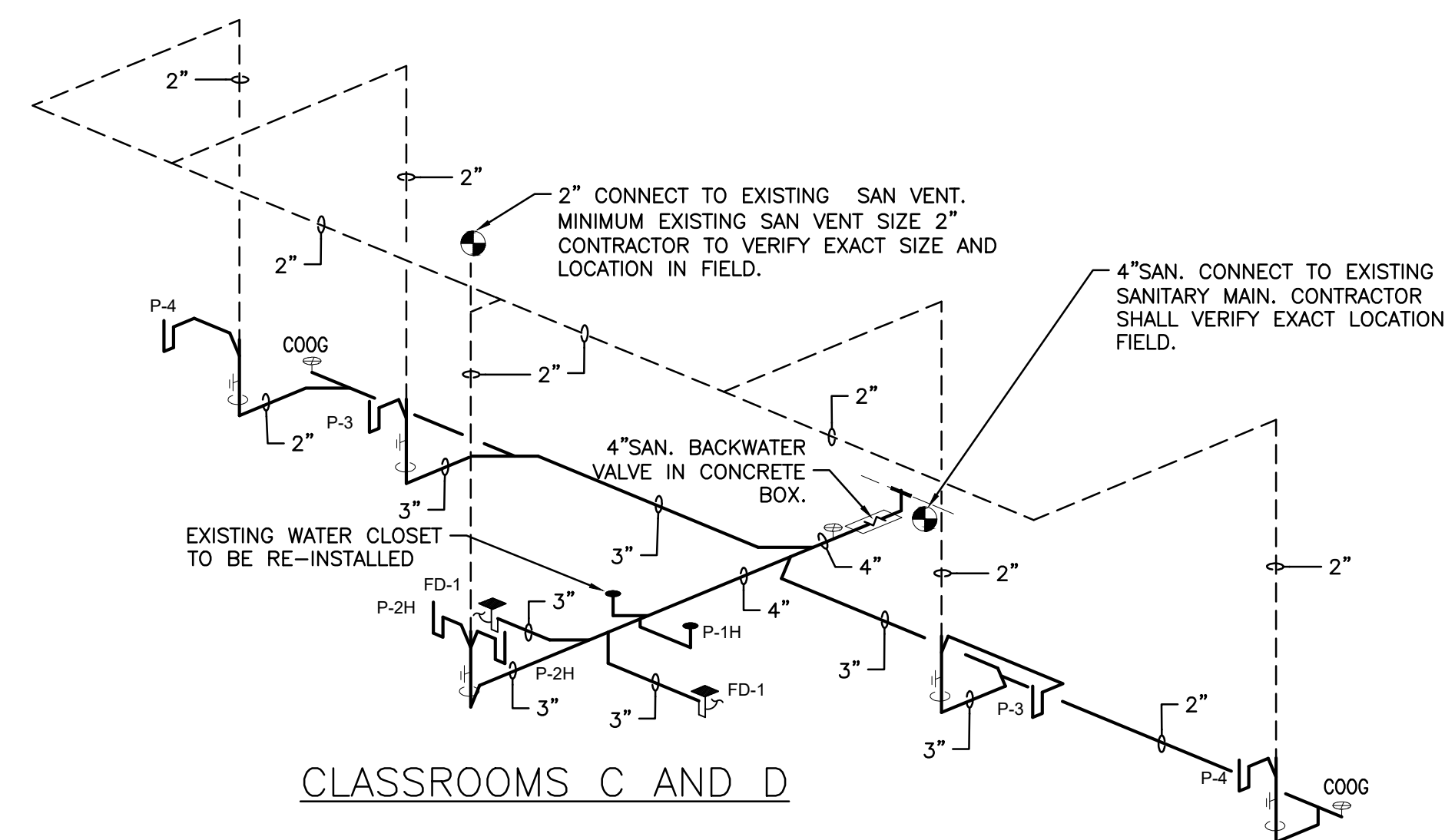


**CLASSROOMS A AND B**

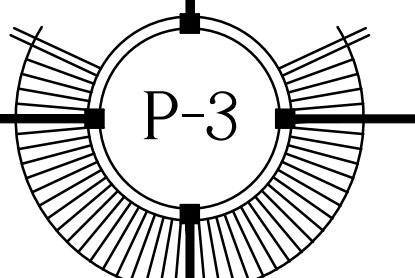
**SANITARY ISOMETRIC**  
SCALE: NTS



**CLASSROOMS C AND D**



Innovative Engineering  
Group Inc. CA#6717  
2500 NW 79th Ave., #240  
Doral, FL 33122  
305-468-1783  
Sudhir K. Gupta, P.E.  
Fla. Reg. No. 29189



THIS DRAWING IS NOT FOR CONSTRUCTION. IT HAS BEEN ISSUED FOR GOVERNMENTAL REVIEW AND/OR PRELIMINARY PRICING ONLY.

WILLIAM P. HORN  
ARCHITECT , P.A.

915 EATON ST.  
KEY WEST,  
FLORIDA  
33040

TEL (305) 296-8302  
FAX (305) 296-1033

LICENSE NO.  
AA 0003040

**McCarthy and Associates, Inc.**  
A DIVISION OF PENNON ASSOCIATES, INC.  
2555 Nursery Road, Suite 10  
Clearwater, Florida 34617  
(727) 534-9774  
Florida Co. 7819  
Florida P.C. # 7754  
Pennon Project No. WPHRM1801

**BIG PINE ACADEMY**  
BIG PINE, FLORIDA

SEAL

THESE DRAWINGS MAY NOT BE REPRODUCED WITHOUT WRITTEN AUTHORIZATION BY WILLIAM P. HORN

DATE  
03-22-2019

REVISIONS

DRAWN BY  
E.M.A

PROJECT NUMBER  
1822  
STRUCTURAL SPECIFICATIONS

NOT FOR CONSTRUCTION - NOT FOR FINAL PRICING - SUBJECT TO CHANGE

- A) PORTLAND CEMENT - ASTM C 150, TYPE I
- B) AGGREGATES - NORMAL WEIGHT CONCRETE, COARSE AND FINE, ASTM C33. STRUCTURAL LIGHT WEIGHT ASTM C330.
- C) AIR-ENTRAINING - ASTM C260
- D) WATER REDUCING - ASTM C494, TYPE A
- E) WATER - FRESH, CLEAN AND POTABLE
- F) NO ACCELERATORS, RETARDERS OR ADMIXTURES CONTAINING CHLORIDES WILL BE PERMITTED
- G) FLY-ASH - ASTM C618, CLASS F, 20% MAXIMUM OF CEMENTITIOUS MATERIAL BY WEIGHT. DO NOT USE FOR EXPOSED SLABS OR ARCHITECTURAL CONCRETE.
- H) SUPER PLASTICIZER - ASTM C494, TYPE F OR G, WHERE AUTHORIZED BY THE ENGINEER.
- I) GROUND GRANULATED BLAST-FURNACE SLAG CEMENT - ASTM C989, 50% MAXIMUM BY WEIGHT.
- J) MAXIMUM AGGREGATE SIZE - FOOTINGS = #57, OTHERS #67

- 4. REINFORCING MATERIALS
  - A) DEFORMED BARS - ASTM A615, GRADE 60
  - B) SMOOTH DOWELS - ASTM A615, PLAIN BARS, MINIMUM YIELD STRENGTH OF 60,000 PSI.
  - C) CORROSION RESISTANT UNCOATED STEEL (MMFX-2) - ASTM A615, GRADE 75 AND ASTM A1035 LOW-CARBON (8% MINIMUM) CHROMIUM BY MMFX OR EQUAL.
  - D) WELDED WIRE FABRIC - ASTM A1064, PLAIN WIRE FABRIC IN FLAT SHEETS ONLY.
  - E) ACCESSORIES TO CONFORM TO ACI 315.
  - F) WHERE CONCRETE SURFACES ARE EXPOSED, MAKE THOSE PORTIONS OF ALL ACCESSORIES IN CONTACT WITH THE CONCRETE SURFACE OR WITHIN 1/2 INCH THEREOF, OF PLASTIC OR STAINLESS STEEL.

- 5. PROVIDE THE FOLLOWING MINIMUM CONCRETE STRENGTHS AT 28 DAYS:
  - A) FOOTINGS, SLAB-ON-GRADE-----4000 PSI
- 6. CONCRETE MUST BE BATCHED, MIXED AND TRANSPORTED IN ACCORDANCE WITH THE SPECIFICATIONS FOR READY-MIXED CONCRETE ASTM C94.
- 7. REQUIRED SLUMP = 4 PLUS OR MINUS ONE INCH.

- 8. CONCRETE MUST BE PLACED WITHIN 90 MINUTES OF BATCH TIME. WHEN AIR TEMPERATURE IS BETWEEN 85 AND 90 DEGREES F, REDUCE MIXING AND DELIVERY TIME TO 75 MINUTES. WHEN AIR TEMPERATURE IS HIGHER THAN 90 DEGREES F, REDUCE MIXING AND DELIVERY TIME TO 60 MINUTES.
- 9. DO NOT ADD WATER AT THE JOB SITE WITHOUT APPROVAL OF THE PROJECT SUPERINTENDENT. DO NOT EXCEED THE SLUMP LIMITATION. USE ONLY COLD WATER FROM THE TRUCK TANK. ANY ADDED WATER MUST BE INDICATED ON THE DELIVERY TICKET PLUS THE NAME OF THE PERSON AUTHORIZING. TEST CYLINDERS SHALL BE TAKEN AFTER THE ADDITION OF WATER.

DRAWING INDEX:	
601	STRUCTURAL SPECIFICATIONS
602	STRUCTURAL SPECIFICATIONS
4	WIND PRESSURES
610	PLAN AND DETAILS

- POTABLE.
- 14. UNLESS OTHERWISE DIRECTED, CORE DRILLING, ROTARY DRILLING, PERCUSSION DRILLING, AUGER DRILLING, DRIVEN CASING OR OTHER ACCEPTABLE MEANS CAN BE USED. THE MINI-PILE CAN BE INSTALLED IN THE DRILL HOLE AFTER DRILLING OR IT CAN BE ADVANCED BY THE DRILL.
- 15. GROUTING EQUIPMENT SHALL PRODUCE A GROUT FREE OF LUMPS AND UNDISPERSED CEMENT. THE PUMP SHALL BE EQUIPPED WITH A PRESSURE GAUGE TO MONITOR GROUT PRESSURES. THE PRESSURE GAUGE SHALL BE CAPABLE OF MEASURING PRESSURES OF AT LEAST 150 PSI OR TWICE THE ACTUAL GROUT PRESSURES USED BY THE CONTRACTOR, WHICH EVER IS GREATER. THE GROUTING EQUIPMENT SHALL BE SIZED TO ENABLE THE GROUT TO BE PUMPED IN ONE CONTINUOUS OPERATION. THE MIXER SHOULD BE CAPABLE OF CONTINUOUSLY AGITATING THE GROUT.
- 16. THE ENTIRE MINI-PILE SHALL BE FILLED WITH GROUT. GROUT SHALL BE INJECTED FROM THE LOWEST POINT OF THE DRILL HOLE. THE GROUT MAY BE PUMPED THROUGH GROUT TUBES, CASING, HOLLOW STEM AUGERS OR DRILL RODS. THE QUANTITY OF THE GROUT AND THE GROUT PRESSURES SHALL BE RECORDED. THE GROUT PRESSURES AND GROUT SHALL BE CONTROLLED TO PREVENT EXCESSIVE HEAVE IN COHESIVE SOILS OR FRACTURING OF ROCK FORMATIONS.
- 17. AFTER GROUTING, THE MINI-PILE SHALL NOT BE LOADED FOR A MINIMUM OF THREE (3) DAYS.
- 18. A MINIMUM OF ONE TEST PILE SHALL BE LOADED TO 1.25 TIMES THE DESIGN LOAD. THE LOAD TEST SHALL BE EVALUATED BY THE CONTRACTOR AND TESTING LABORATORY TO ASSUME COMPLIANCE WITH JOB PERFORMANCE REQUIREMENTS.
- 19. LOAD TESTING TO BE COMPLETED AS DETAILED IN THE GEOTECHNICAL REPORT DATED MARCH 3, 2019. LOAD TESTING TO BE PER ASTM D3689 "STAIG AXIAL TENSION LOAD" SECTION 8.1.2. QUICK TEST, OR AS DEFINED BY THE GEOTECHNICAL ENGINEER.
- 20. THE LOAD SHALL BE APPLIED WITH A CALIBRATED HYDRAULIC JACK. A LEVELING PLATE SHALL BE ATTACHED TO THE SURFACE OF THE TEST PILE AND THE JACK SHALL BE SET IN POSITION WITH THE LOAD CENTERED ON THE PILE.
- 21. TEST PILE(S) CAN BE A PRODUCTION PILE APPROVED BY THE GEOTECHNICAL ENGINEER.
- 22. CONTRACTOR GUARANTEES THAT SHOULD THE TEST PILE FAIL TO GIVE ACCEPTABLE RESULTS, HE WILL MODIFY HIS DESIGN AND INSTALL AND TEST ANOTHER PILE AT HIS EXPENSE.

**CAST IN PLACE CONCRETE**

- 1. ALL CAST-IN-PLACE CONCRETE WORK INCLUDES REINFORCING STEEL AND RELATED WORK SHOWN INCLUDING FORMWORK, SETTING ANCHOR BOLTS, PLATES, FRAMES, DOWELS FOR MASONRY OR OTHER ITEMS EMBEDDED IN CONCRETE.
- 2. APPLICABLE STANDARDS

ACI NUMBER	TITLE
117	STANDARD SPECIFICATIONS FOR TOLERANCES FOR CONCRETE CONSTRUCTION
226	GROUND GRANULATED BLAST-FURNACE SLAG STANDARD SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS
301	GUIDE FOR CONCRETE FLOOR AND SLAB CONSTRUCTION
302	GUIDE FOR MEASURING MIXING, TRANSPORTING AND PLACING CONCRETE
304	PLACING CONCRETE BY PUMPING METHODS.
304.2R	HOT WEATHER CONCRETING
305R	COLD WEATHER CONCRETING
306R	STANDARD PRACTICE FOR CURING CONCRETE
308	GUIDE FOR CONSOLIDATION OF CONCRETE
309R	MANUAL OF STANDARD PRACTICE FOR DETAILING CONCRETE STRUCTURES
315	BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE
318	RECOMMENDED PRACTICE FOR CONCRETE FORMWORK
347	RECOMMENDED PRACTICE FOR CONCRETE FORMWORK
CRSI NUMBER	TITLE
63	RECOMMENDED PRACTICE FOR PLACING REINFORCING BARS

- 3. CONCRETE MATERIALS

DIRECTED BY THE CIVIL ENGINEER.

**MICRO PILES**

- 1. USING THE PROJECT SOILS REPORT FOR REFERENCE, THE CONTRACTOR SHALL SELECT THE MINI-PILE TYPE AND THE INSTALLATION METHOD, AND DETERMINE THE LENGTH AND DIAMETER.
- 2. SERVICE LOAD CAPACITIES:  
DOWNWARD = 44 TONS  
UPLIFT = 24 TONS  
LATERAL = 8 TONS
- 3. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING MINI-PILES THAT WILL DEVELOP THE LOADS INDICATED ON THE CONTRACT DRAWINGS. IN ACCORDANCE WITH THE TESTING PARAGRAPH OF THIS SPECIFICATION.
- 4. CONTRACTORS PROPOSAL FOR WORK SHALL EXPLAIN IN DETAIL THE MATERIALS, METHODS, AND DESIGN ASSUMPTIONS HE WILL EMPLOY.
- 5. CONTRACTOR PERFORMING THE WORK DESCRIBED IN THIS SPECIFICATION SHALL HAVE INSTALLED MINI-PILES FOR MINIMUM OF FIVE (5) YEARS.
- 6. AN ACCEPTABLE PRE-QUALIFIED SPECIALTY CONTRACTOR CAPABLE OF DOING THIS WORK IS GKN HAYWARD BAKER, INC., TAMPA, FLORIDA, (813) 884\_3441.
- 7. A QUALIFIED TESTING LABORATORY SHALL BE RETAINED TO:
  - A) REVIEW CONTRACTOR'S QUALIFICATIONS.
  - B) REVIEW CONTRACTOR'S PROPOSAL.
  - C) MONITOR TEST PILE PROCEDURE.
  - D) MONITOR INSTALLATION OF ALL PILES.
- 8. TESTING LABORATORY SHALL APPROVE OR REJECT THE CONTRACTOR'S QUALIFICATIONS AND STAFF WITHIN FIFTEEN (15) WORKING DAYS AFTER RECEIPT OF THE SUBMISSION. WORK SHALL NOT BE STARTED ON ANY PILING NOR MATERIALS ORDERED UNTIL APPROVAL OF THE CONTRACTOR'S QUALIFICATIONS ARE GIVEN.
- 9. TESTING LABORATORY SHALL SUBMIT:
  - A) AS-BUILT DRAWINGS SHOWING THE LOCATION OF THE MINI-PILES AND PILE LENGTH.
  - B) DETAILED DRILLING RECORDS INCLUDING DEPTH TO ROCK AND DETAILS OF ROCK QUALITY.
  - C) GROUTING RECORDS INDICATING THE CEMENT TYPE, AND QUANTITY INJECTED.
  - D) MINI-PILE TEST RESULTS AND GRAPHS.

- 10. CONTRACTOR SHALL PREPARE AND SUBMIT FOR REVIEW WORKING AND DESIGN SUBMISSION DESCRIBING THE MINI-PILE SYSTEM OR SYSTEMS INTENDED FOR USE, INCLUDING:
  - A) A DRAWING SHOWING THE LOCATION AND ORIENTATION OF EACH MINI-PILE.
  - B) A MINI-PILE SCHEDULE GIVING:
    - 1) MINI-PILE NUMBER
    - 2) MINI-PILE DESIGN LOAD
    - 3) TYPE AND SIZE OF MINI-PILE

- 11. IF REQUIRED, THE CONTRACTOR SHALL SUBMIT CALIBRATION DATA FOR EACH TEST JACK. PRESSURE GAUGE AND MASTER PRESSURE GAUGE TO BE USED. THE CALIBRATION TESTS SHALL HAVE BEEN PERFORMED BY AN INDEPENDENT TESTING LABORATORY AND TEST SHALL HAVE BEEN PERFORMED WITHIN SIXTY (60) CALENDAR DAYS OF THE DATE SUBMITTED.
- 12. CONTRACTOR SHALL USE A NEAT CEMENT GROUT OR A SAND\_CEMENT GROUT. IT SHALL NOT CONTAIN LUMPS OR OTHER INDICATIONS OF HYDRATION.
- 13. GROUT SHALL BE 4000 PSI AT 28 DAYS WITH:
  - A) CEMENT - TYPE I, II, OR III CONFORMING TO AASHTO M85. IN SOME APPLICATIONS WHERE VOIDS EXIST, SAND MAY BE ADDED TO THE GROUT.
  - B) ADMIXTURES - ADMIXTURES WHICH CONTROL BLEEDING, IMPROVE FLOWABILITY, REDUCE WATER CONTENT AND RETARD SET MAY BE USED IN THE GROUT. ADMIXTURES, IF THEY ARE USED, SHALL BE COMPATIBLE WITH STEEL PILE COMPONENTS AND MIXED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
  - C) SAND - CLEAN
  - D) WATER - WATER FOR MIXING GROUT SHALL BE

- 3. THE DELEGATED ENGINEER MUST BE PROVIDED WITH A COPY OF THESE DRAWINGS AND SPECIFICATIONS.
- 4. IT IS THE DELEGATED ENGINEER'S RESPONSIBILITY TO REVIEW THE ENGINEER OF RECORD'S WRITTEN ENGINEERING REQUIREMENTS AND AUTHORIZATION FOR THE DELEGATED ENGINEERING DOCUMENT TO DETERMINE THE APPROPRIATE SCOPE OF ENGINEERING.
- 5. THE DELEGATED ENGINEERING DOCUMENT SHALL COMPLY WITH THE WRITTEN ENGINEERING REQUIREMENTS RECEIVED FROM THE ENGINEER OF RECORD. THEY SHALL INCLUDE THE PROJECT IDENTIFICATION AND THE CRITERIA USED AS A BASIS FOR ITS PREPARATION. IF A DELEGATED ENGINEER DETERMINES THERE ARE DETAILS, FEATURES OR UNANTICIPATED PROJECT LIMITS WHICH CONFLICT WITH THE WRITTEN ENGINEERING REQUIREMENTS PROVIDED BY THE ENGINEER OF RECORD, THE DELEGATED ENGINEER SHALL TIMELY CONTACT THE ENGINEER OF RECORD FOR RESOLUTION OF CONFLICTS.
- 6. THE DELEGATED ENGINEER SHALL FORWARD THE DELEGATED ENGINEERING DOCUMENT TO THE ENGINEER OF RECORD FOR REVIEW. ALL FINAL DELEGATED ENGINEERING DOCUMENTS REQUIRE THE IMPRESSED SEAL AND SIGNATURE OF THE DELEGATED ENGINEER AND INCLUDE:
  - A) DRAWINGS INTRODUCING ENGINEERING INPUT SUCH AS DEFINING THE CONFIGURATION OR STRUCTURAL CAPACITY OF STRUCTURAL COMPONENTS AND/OR THEIR ASSEMBLY INTO STRUCTURAL SYSTEMS.
  - B) CALCULATIONS.

**EXISTING BUILDINGS**

INFORMATION ON THE EXISTING BUILDING, SHOWN ON THESE PLANS, IS OBTAINED FROM EXISTING BUILDING PLANS BY THOMAS/GRAY & ASSOCIATES INC., DATED SEPTEMBER 18, 1992. EXISTING INFORMATION DOES NOT NECESSARILY REFLECT AS-BUILT CONDITIONS. THE CONTRACTOR SHALL VERIFY ALL INFORMATION SHOWN ON THESE PLANS AND NOTIFY THE ENGINEER OF ANY VARIATION.

**SITE WORK**

- 1. A SUBSURFACE INVESTIGATION HAS BEEN COMPLETED AT THE PROJECT SITE BY WINGERTER LABORATORIES INC. SOIL BORING LOGS AND SITE PREPARATION PROCEDURES ARE INCLUDED IN THE PROJECT SOILS REPORT, DATED JANUARY 18, 2019, WHICH IS AN INTEGRAL PART OF THESE CONTRACT DOCUMENTS. AN ADDENDUM TO THE GEOTECHNICAL REPORT DATED MARCH 5, 2019 INCLUDES PROVISIONS FOR LOAD TEST REQUIREMENTS.
- 2. SITE WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE PROJECT SOILS REPORT.
- 3. CONTRACTOR SHALL REVIEW THE SOILS REPORT AND VERIFY THAT TEST BORINGS HAVE BEEN DONE UNDER ALL BUILDING(S) PRIOR TO BEGINNING EARTHWORK.
- 4. INFORMATION FROM GEOTECHNICAL REPORT:
  - MICRO PILE CAPACITY
  - A.SHAFT DIAMETER 6.0 INCHES (ROUND)
  - B.TOTAL PILE LENGTH 12 FEET
  - C.TYPE OF MICRO PILE: POST GROUTED
  - D.COMPRESSIVE CAPACITY: 44 KIPS (22 TONS)
  - E.TENSION CAPACITY: 24 KIPS (12 TONS)
  - F.LATERAL CAPACITY: 8 KIPS (4 TONS)
- 5. A QUALIFIED TESTING LABORATORY SHALL BE RETAINED TO PERFORM THE FOLLOWING MINIMUM TESTS. REFER TO SOILS REPORT FOR ANY ADDITIONAL TESTING.
  - A) ONE DENSITY TEST FOR EACH 2,000 SQUARE FEET OF COMPACTED SUBGRADE AND COMPACTED FILL.
  - B) ONE DENSITY TEST AT EACH COLUMN FOOTING.
  - C) ONE DENSITY TEST PER 50 FEET OF WALL FOOTING.
- 6. ONE COPY OF ALL TEST REPORTS SHALL BE SENT DIRECTLY TO OWNER, ARCHITECT, STRUCTURAL ENGINEER, AND GENERAL CONTRACTOR.
- 7. FOUNDATION WALLS THAT RETAIN EARTH SHALL BE BRACED AGAINST BACKFILLING PRESSURES UNTIL FLOOR SLABS AT TOP AND BOTTOM ARE IN PLACE.
- 8. THE SIDES OF FOOTINGS MAY BE EARTH FORMED IF THE EXCAVATION CAN BE KEPT VERTICAL, CLEAN, AND STABLE, OTHERWISE, PLYWOOD FORMS MUST BE USED.
- 9. EXERCISE CARE WHEN COMPACTING NEAR ADJACENT STRUCTURES. FOLLOW THE RECOMMENDATIONS IN THE SOILS REPORT AND DOCUMENT EXISTING CONDITIONS WITH PHOTOGRAPHS PRIOR TO STARTING WORK.
- 10. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL LOCATE ALL EXISTING UNDERGROUND UTILITY LINES, TANKS, ETC. WITHIN THE CONSTRUCTION AREA AND RELOCATE THEM AS

**STRUCTURAL SPECIFICATIONS**

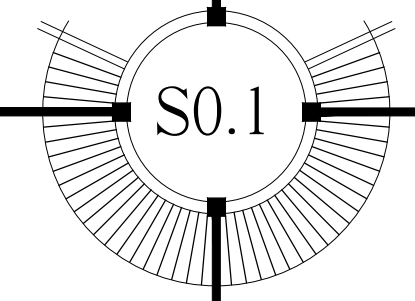
**MISCELLANEOUS**

- 1. THESE ABBREVIATED DRAWING SPECIFICATIONS ARE WRITTEN TO MATCH THE BOOK SPECIFICATIONS. IF THERE ARE ANY ITEMS THAT DO NOT CORRESPOND EXACTLY AS WRITTEN, THE MORE STRINGENT WILL TAKE PRECEDENCE.
- 2. THE STRUCTURAL SYSTEM IS UNSTABLE UNTIL ALL CONNECTIONS HAVE BEEN MADE AND ALL CONCRETE HAS REACHED ITS MINIMUM DESIGN STRENGTH, AS SHOWN IN THE STRUCTURAL DOCUMENTS.
- 3. CONTRACTOR IS RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION TO ENSURE THE SAFETY OF THE BUILDING UNTIL STRUCTURAL SYSTEM IS COMPLETED. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF WHATEVER TEMPORARY BRACING, SHORING, GUYS OR TIE\_DOWNS THAT MAY BE NECESSARY. SUCH MATERIAL SHALL BE REMOVED AND SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER COMPLETION OF THE PROJECT.
- 4. CONTRACTOR TO SUPPORT, BRACE AND SECURE EXISTING STRUCTURE AS REQUIRED. CONTRACTOR IS SOLELY RESPONSIBLE FOR THE SAFETY OF THE BUILDING DURING CONSTRUCTION.
- 5. APPLICABLE BUILDING CODE: 6TH EDITION (2017) FLORIDA BUILDING CODE.
- 6. GRAVITY DESIGN LOADS:
 

AREA	SUPERIMPOSED LIVE LOAD	TOTAL DEAD LOAD
FIRST FLOOR	40 PSF	20 PSF
- 7. WIND DESIGN CRITERIA:
  - ULTIMATE WIND SPEED: VULT = 182 MPH (3 SECOND GUST)
  - EQUIVALENT NOMINAL BASIC WIND SPEED VASD = 141 MPH (3 SECOND GUST)
  - RISK CATEGORY = II
  - EXPOSURE CATEGORY = D
  - ENCLOSED BUILDING INTERNAL PRESSURE COEFFICIENT, GCPI= +/-0.18
  - WIND BORNE DEBRIS REGION
- 8. ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE REFERENCED BUILDING CODE.
- 9. COORDINATE ALL DIMENSIONS AND ELEVATIONS WITH THE ARCHITECTURAL DRAWINGS. DO NOT SCALE DRAWINGS.
- 10. CONTACT ENGINEER WITH ANY QUESTIONS OR DISCREPANCIES FOUND ON DRAWINGS.
- 11. SECTIONS AND DETAILS ARE REFERENCED IN TYPICAL LOCATIONS BUT ALSO APPLY TO ALL OTHER SIMILAR CONDITIONS.
- 12. CONTRACTOR TO VERIFY ALL EXISTING DIMENSIONS, ELEVATIONS, AND CONDITIONS PRIOR TO BEGINNING CONSTRUCTION.
- 13. SUBMIT SHOP DRAWINGS AS REQUIRED HEREIN. ALLOW FOR TWO WEEKS REVIEW TIME AFTER RECEIPT OF SUBMITTALS BY THIS FIRM. ALL SUBMITTALS SHALL BE CHECKED AND SIGNED BY THE GENERAL CONTRACTOR AND SIGNED/SEALED BY THE DELEGATED ENGINEER, WHERE SPECIFIED HEREIN.
- 14. CONTRACTOR SHALL NOT BE RELIEVED FROM RESPONSIBILITY FOR ERRORS OR OMISSIONS IN SHOP DRAWINGS OR MIX DESIGNS BY THE ENGINEER'S REVIEW THEREOF.
- 15. ANY CHANGES TO THE STRUCTURE SHALL HAVE BEEN REVIEWED AND APPROVED IN WRITING BY THE ENGINEER PRIOR TO COMMENCING WORK ON ITEMS AFFECTED.
- 16. CONTRACTOR SHALL NOTIFY THIS OFFICE WHEN THE STRUCTURAL SYSTEM IS SUBSTANTIALLY COMPLETED, AND BEFORE SHEATHING, CEILINGS, OR ROOFING IS INSTALLED.

**DELEGATED ENGINEER**

- 1. WHERE NOTED HEREIN, A LICENSED PROFESSIONAL (DELEGATED) ENGINEER SHALL BE RETAINED TO DESIGN THE PRODUCT OR ASSEMBLY.
- 2. THE DELEGATED ENGINEER SHALL BE EXPERIENCED IN THE DESIGN OF THE REFERENCED PRODUCT OR ASSEMBLY.





THIS DRAWING IS NOT FOR CONSTRUCTION. IT HAS BEEN ISSUED FOR GOVERNMENTAL REVIEW AND/OR PRELIMINARY PRICING ONLY.

WILLIAM P. HORN  
ARCHITECT, P.A.

915 EATON ST.  
KEY WEST,  
FLORIDA  
33040

TEL (305) 296-8302  
FAX (305) 296-1033

LICENSE NO.  
AA 0003040

**McCarthy and Associates, Inc.**  
A DIVISION OF PENNON ASSOCIATES, INC.  
2555 Nursery Road, Suite 1010  
Clearwater, FL 34617-3080  
(727) 536-9777  
Florida Co. 7819  
Professional Seal  
Florida P.E. # 7754  
Permit Project No. WPHRN18001

BIG PINE ACADEMY  
BIG PINE, FLORIDA

SEAL

THESE DRAWINGS MAY NOT BE REPRODUCED WITHOUT WRITTEN AUTHORIZATION BY WILLIAM P. HORN

DATE

03-22-2019

REVISIONS

DRAWN BY

E.M.A

PROJECT NUMBER

1822  
STRUCTURAL SPECIFICATIONS & WIND PRESSURES

NOT FOR CONSTRUCTION - NOT FOR FINAL PRICING - SUBJECT TO CHANGE

10. LAP SPLICE REINFORCING PER CONCRETE LAP SCHEDULE MINIMUM UNLESS OTHERWISE SHOWN OR NOTED.
11. PROVIDE CORNER BARS AT ALL WALL FOOTING, WALL AND BEAM CORNERS. SIZE AND NUMBER TO MATCH HORIZONTAL BARS.
12. PROVIDE FOUNDATION DOWELS TO MATCH SIZE AND NUMBER OF VERTICAL BARS. EMBED DOWELS TO:
  - A) 3" ABOVE BOTTOM OF FOOTINGS
13. REINFORCEMENT SHALL BE FASTENED AND SECURED TOGETHER TO PREVENT DISPLACEMENT BY CONSTRUCTION LOADS OR THE PLACING OF CONCRETE.
14. REINFORCING BAR COVER
  - A) FOOTINGS 2" (TOP), 3" (SIDES AND BOTTOM)
  - B) SLABS 1-1/2" (EXTERIOR)
15. WHERE BAR LENGTHS ARE GIVEN ON THE DRAWINGS, LENGTH OF HOOK, IF REQUIRED, IS NOT INCLUDED.
16. SELECT PROPORTIONS IN ACCORDANCE WITH ACI 301 TO PROVIDE CONCRETE CAPABLE OF BEING PLACED WITHOUT EXCESSIVE SEGREGATION AND WITH ACCEPTABLE FINISHING PROPERTIES, DURABILITY, SURFACE HARDENERS, APPEARANCE, AND STRENGTH REQUIREMENTS REQUIRED BY THESE SPECIFICATIONS.
17. CHAIR WELDED WIRE FABRIC REINFORCING AT 3'-0" ON CENTER MAXIMUM IN EACH DIRECTION.
18. MAXIMUM WATER TO CEMENT RATIO WHEN NO BACK-UP DATA IS AVAILABLE:
  - A) 4000 PSI, 28-DAY COMPRESSIVE STRENGTH; W/C RATIO, 0.44 MAXIMUM (NON-AIR-ENTRAINED), 0.36 MAXIMUM (AIR-ENTRAINED).
19. DATA TO BE SUBMITTED:
  - A) INTENDED USAGE AND LOCATION FOR EACH TYPE
  - B) MIX DESIGN FOR EACH TYPE
  - C) CEMENT CONTENT IN POUNDS-PER-CUBIC YARD
  - D) COARSE AND FINE AGGREGATE IN POUNDS/CUBIC YARD
  - E) WATER CEMENT RATIO BY WEIGHT
  - F) CEMENT TYPE AND MANUFACTURER
  - G) SLUMP RANGE
  - H) AIR CONTENT
  - I) ADMIXTURE TYPE AND MANUFACTURER
  - J) PERCENT ADMIXTURE BY WEIGHT
  - K) STRENGTH TEST DATA REQUIRED TO ESTABLISH MIX DESIGN.
  - L) COMPLETE DETAIL AND PLACING SHOP DRAWINGS FOR ALL REINFORCING STEEL INCLUDING ACCESSORIES THAT HAVE BEEN REVIEWED AND STAMPED BY THE GENERAL CONTRACTOR. INCLUDE ALL REQUIRED DIMENSIONS AND ELEVATIONS (I.E. TOP OF CONCRETE)
20. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE CONSTRUCTION OF FORMWORK, SHORING AND RE-SHORING IN ACCORDANCE WITH ACI 347.
  - A) FORM AND SHORING DESIGN BY A P.E. REGISTERED IN THE STATE OF FLORIDA.
21. SUBMIT FORM WORK AND SHORING DRAWINGS TO LOCAL BUILDING DEPARTMENT WHEN REQUIRED BY FLORIDA THRESHOLD LAW.
22. CONSTRUCTION JOINTS NOT SHOWN ON THE DRAWINGS MUST BE MADE AND LOCATED TO LEAST IMPAIR THE STRENGTH OF THE STRUCTURE.
  - A) NO HORIZONTAL CONSTRUCTION JOINTS WILL BE PERMITTED IN BEAMS, GIRDERS AND SLABS.
  - B) LOCATION OF ANY CONSTRUCTION JOINT NOT SHOWN IS SUBJECT TO REVIEW AND ACCEPTANCE BY ENGINEER.
23. INTERNAL VIBRATION, PROPERLY APPLIED IS THE REQUIRED METHOD OF CONSOLIDATING PLASTIC CONCRETE.
24. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL OPENINGS, SLEEVES, AND SLAB RECESSES AS REQUIRED BY OTHER TRADES BEFORE CONCRETE IS PLACED. NO SLEEVE, OPENINGS, OR INSERT MAY BE PLACED IN BEAMS, JOISTS, OR COLUMN UNLESS APPROVED BY THE ENGINEER.
25. CONTRACTOR SHALL VERIFY EMBEDDED ITEMS INCLUDING, BUT NOT LIMITED TO, ANCHOR BOLTS, BOLT CLUSTERS, WELD PLATES, ETC., BEFORE PLACING CONCRETE. NOTIFY ENGINEER OF ANY CONFLICTS WITH REBAR.
26. SEE ARCHITECTURAL DRAWINGS FOR REQUIRED CONCRETE FINISHES.

27. SLOPE WALKWAYS AND BALCONIES TO DRAIN AWAY FROM THE BUILDING.
  28. TESTING
    - A) A QUALIFIED TESTING LAB SHALL BE RETAINED TO PERFORM QUALITY CONTROL WORK AND ON-SITE TESTING.
    - B) SLUMP TEST - ASTM 143
    - C) MOLD AND CURE TEST CYLINDERS (ASTM C-31) AND TEST CYLINDERS FOR STRENGTH (ASTM C39). TAKE ONE TEST - THREE CYLINDERS FOR EACH DAYS POUR OF 100 CUBIC YARDS, OR FRACTION THEREOF. TEST ONE CYLINDER AT 7 DAYS, TWO AT 28 DAYS. TEST CYLINDER SAMPLES SHALL BE TAKEN AT THE POINT OF DISCHARGE WHEN USING A PUMP.
    - D) ONE COPY OF ALL TEST REPORTS SHALL BE SENT DIRECTLY TO THE OWNER, ENGINEER, ARCHITECT AND GENERAL CONTRACTOR.
  29. CONTRACTOR SHALL PROVIDE FLATNESS AND LEVELNESS IN CONCRETE SLABS PER ACI 302.1R, FIG. 10.7 MINIMUM REQUIRED "F" NUMBERS FOR TYPE OF SLAB USE. REFER TO ACI 117 FOR FLOOR TOLERANCES.
  30. REPAIR ANY CRACKS OR DEFECTIVE AREAS THAT WILL RESTORE THE AFFECTED SURFACE OR AREAS TO THEIR FULL DESIGN STRENGTH AND APPEARANCE. CONTACT THE STRUCTURAL ENGINEER FOR ADVICE AND EVALUATION.
  31. ACCEPTANCE OF THE STRUCTURE WILL BE MADE IN CONFORMANCE WITH ACI 301.
  32. ALL CAST-IN-PLACE CONCRETE MUST BE MAINTAINED WITH MINIMAL MOISTURE LOSS AT A RELATIVELY CONSTANT TEMPERATURE FOR A MINIMUM OF 7 DAYS FOLLOWING THE PLACING OF THE CONCRETE BY THE USE OF A WATER SPRAY, WATER SATURATED FABRIC, MOISTURE RETAINING MEMBRANE OR LIQUID CURING COMPOUND.
  33. CURE SLABS-ON-GRADE FOR THE FIRST 72 HOURS BY THE USE OF:
    - A) FOG SPRAYING
    - B) PONDING
    - C) SPRINKLING
    - D) CONTINUOUSLY WET ABSORPTIVE MATS OR FABRIC
    - E) CONTINUE CURING BY USE OF MOISTURE RETAINING COVER UNTIL CONCRETE HAS OBTAINED ITS SPECIFIED 28 DAY COMPRESSIVE STRENGTH.
    - F) OR LIQUID CURING COMPOUND AFTER FINISHING PROCESS IS COMPLETED.
    - G) CONCRETE WET CURE TIME TO BE 7 DAYS MINIMUM AT 50 DEGREES MINIMUM TEMPERATURE.
  34. SUBMIT MATERIALS AND METHOD OF CURING FOR REVIEW.
  35. DO NOT USE MOISTURE RETAINING CURING COMPOUNDS FOR CURING SURFACES TO RECEIVE CARPET, FLEXIBLE FLOORING, CERAMIC TILED FLOORS OR OTHER SPECIFIED FLOOR SYSTEMS, UNLESS IT HAS BEEN DEMONSTRATED THAT SUCH COMPOUNDS WILL NOT PREVENT BOND.
  36. DO NOT PERMIT CONCRETE NOT FULLY CURED TO BE EXPOSED TO EXCESSIVE TEMPERATURE CHANGES OR HIGH WINDS.
  37. POUR ALL GROUND SLABS ON 10 MIL MINIMUM VAPOR RETARDER IN COMPLIANCE WITH ASTM E1745, LAPPED 6" MINIMUM AND FULLY TAPED.
  38. EQUIPMENT MADE OF ALUMINUM OR ALUMINUM ALLOYS, SHALL NOT BE USED FOR PUMP LINES, TREMIES, OR CHUTES OTHER THAN SHORT CHUTES SUCH AS THOSE USED TO CONVEY CONCRETE FROM A TRUCK MIXER.
  39. THE CODE PROHIBITS THE USE OF ALUMINUM (CONDUIT, PIPES, ETC.) IN STRUCTURAL CONCRETE UNLESS IT IS EFFECTIVELY COATED OR COVERED.
- DRILL-IN BOLTS, SCREWS AND DOWELS

1. ADHESIVE DOWELING RODS/BOLTS SHALL BE CARBON STEEL THREADED ROD CONFORMING TO ISO 898 5.8 WITH A MINIMUM TENSILE STRENGTH OF 72.5 KSI (500MPA) AND A MINIMUM YIELD OF 58 KSI (400MPA). THREADED RODS WITH NUTS AND WASHERS INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
2. ANCHORING ADHESIVE SHALL BE A TWO-COMPONENT SYSTEM SUPPLIED IN MANUFACTURER'S STANDARD SIDE-BY-SIDE FOIL PACKAGE AND DISPENSED THROUGH A STATIC-MIXING NOZZLE SUPPLIED BY THE MANUFACTURER. ADHESIVE SHALL BE TESTED AND APPROVED TO MEET THE MINIMUM REQUIREMENTS OF ACI 355.4 FOR CRACKED AND UNCRACKED CONCRETE RECOGNITION. PROVIDE HILTI HY 200 SAFE SET (ESR

3187) OR RE 500 V3 (ESR 3814) ANCHORS BY HILTI OR EQUAL (E.G. SIMPSON SET-XP, ATC ULTRABOND 365CC) UNLESS SPECIFIED OTHERWISE IN THE STRUCTURAL DOCUMENT.

3. DRILL-IN REBAR DOWELS SHALL BE SET USING A TWO-PART ADHESIVE AS DESCRIBED ABOVE.
4. MASONRY SCREWS SHALL BE 1/4" DIAMETER WITH 1-5/8" MINIMUM EMBEDMENT INSTALLED IN DRILLED HOLES USING AN APPROPRIATE BIT DIAMETER.
5. SCREWS SHALL HAVE A BODY MADE OF CARBON STEEL AND SHALL BE HEAT TREATED AND SHALL HAVE 8MM ZINC COATING IN ACORDANCE WITH EN ISO 4042. PROVIDE HUS EZ (ESR 3027) SCREWS BY HILTI OR EQUAL.
6. HEAVY-DUTY CONCRETE AND MASONRY SCREWS SHALL BE TESTED AND APPROVED TO MEET THE MINIMUM REQUIREMENTS OF ACI 355.2. HILTI KWICK HUS EZ (ESR-3027 FOR CONCRETE, ESR-3056 FOR GROUT FILLED MASONRY). HEAVY DUTY SCREWS BY HILTI OR EQUAL.
7. THE CONTRACTOR SHALL ARRANGE FOR AN ANCHOR MANUFACTURER'S REPRESENTATIVE TO PROVIDE ONSITE INSTALLATION TRAINING FOR ALL OF THE ANCHORING PRODUCTS SPECIFIED. MCCARTHY AND ASSOCIATES TO RECEIVE DOCUMENTED CONFIRMATION THAT ALL OF THE CONTRACTOR'S PERSONNEL WHO ARE TO INSTALL ANCHORS ARE TRAINED PRIOR TO THE COMMENCEMENT OF INSTALLATION.

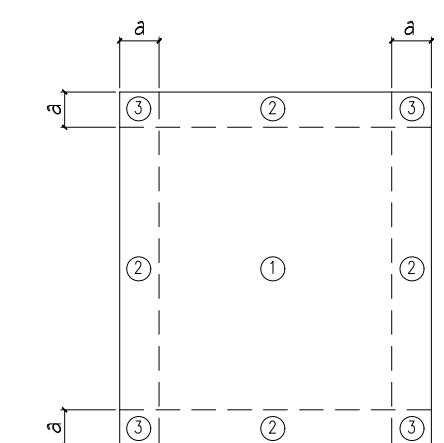
ULTIMATE GROSS WIND LOADS MAIN ROOF ROOFING MATERIALS			
COMPONENTS AND CLADDING	ROOF ZONE		
	1	2	3
PRESSURE (psf)	39.0	39.0	39.0
SUCTION (psf)	-95.8	-102.8	-142.0

ULTIMATE GROSS WIND LOADS MAIN ROOF JOISTS			
COMPONENTS AND CLADDING	ROOF ZONE		
	1	2	3
PRESSURE (psf)	30.9	30.9	30.9
SUCTION (psf)	-81.7	-102.9	-102.9

ULTIMATE WIND PRESSURES ( PSF ) EXTERIOR DOORS, WINDOWS, WALLS				
EFFECTIVE AREA (ft <sup>2</sup> )	ZONE 4		ZONE 5	
	PRESSURE	SUCTION	PRESSURE	SUCTION
1 TO 20	81.1	-95.0	81.1	-116.9
21 TO 50	83.6	-90.9	83.6	-108.8
51 TO 100	78.8	-86.1	78.8	-99.1
101 TO 150	74.1	-82.0	74.1	-90.9
151 TO 250	72.3	-79.6	72.3	-86.9
251 TO 500	69.8	-77.1	69.8	-81.2
501 + ABOVE	65.8	-73.1	65.8	-73.1

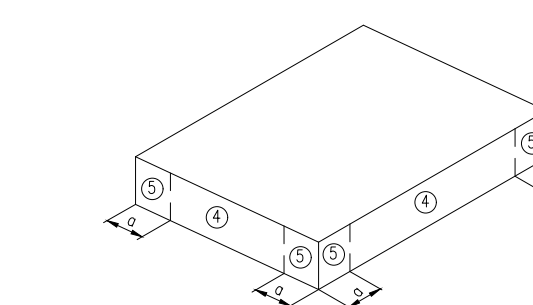
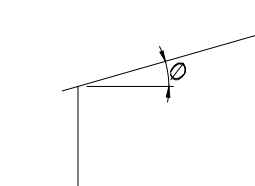
COMPONENT AND CLADDING LOADING DIAGRAMS

1.  $s = 3'-0"$
2. THIS BUILDING IS DESIGNED AS AN ENCLOSED STRUCTURE. ALL EXTERIOR COMPONENTS (DOORS, WINDOWS, ETC.) MUST BE DESIGNED TO WITHSTAND THE WIND LOADINGS SPECIFIED FOR THE DESIGN OF COMPONENTS AND CLADDING IN THE TABLES IN ADDITION ALL AREAS OF EXTERIOR GLAZING MUST BE CERTIFIED FOR MISSILE IMPACT OR PROTECTED BY WIND-BORNE DEBRIS BY A SCREEN BARRIER.



FLAT ROOF

BUILDING HEIGHT = 25ft. ASSUMED



DOORS, WINDOWS AND WALLS

THIS DRAWING IS NOT FOR CONSTRUCTION. IT HAS BEEN ISSUED FOR GOVERNMENTAL REVIEW AND/OR PRELIMINARY PRICING ONLY.

WILLIAM P. HORN  
ARCHITECT, P.A.

915 EATON ST.  
KEY WEST,  
FLORIDA  
33040

TEL. (305) 296-8302  
FAX (305) 296-1033

LICENSE NO.  
AA 0003040

**McCarthy and Associates, Inc.**  
A DIVISION OF PERDINI ASSOCIATES, INC.  
2555 Nursery Road, Suite 1010  
Clearwater, FL 34614-3080  
(727) 536-9774  
Florida Co. # 8119  
Professional Seal No. 7756  
Permit Project No. WPHRM18001

BIG PINE ACADEMY  
BIG PINE, FLORIDA

SEAL

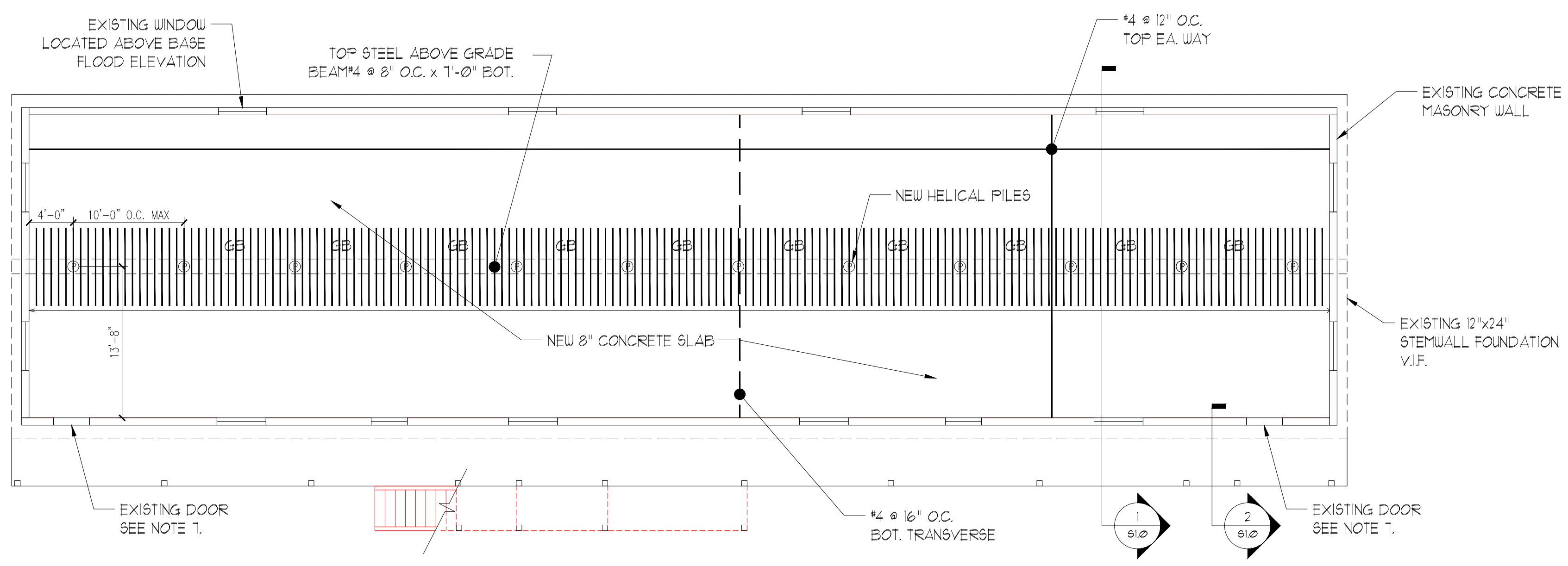
THESE DRAWINGS MAY NOT BE REPRODUCED WITHOUT WRITTEN AUTHORIZATION BY WILLIAM P. HORN

DATE  
03-22-2019

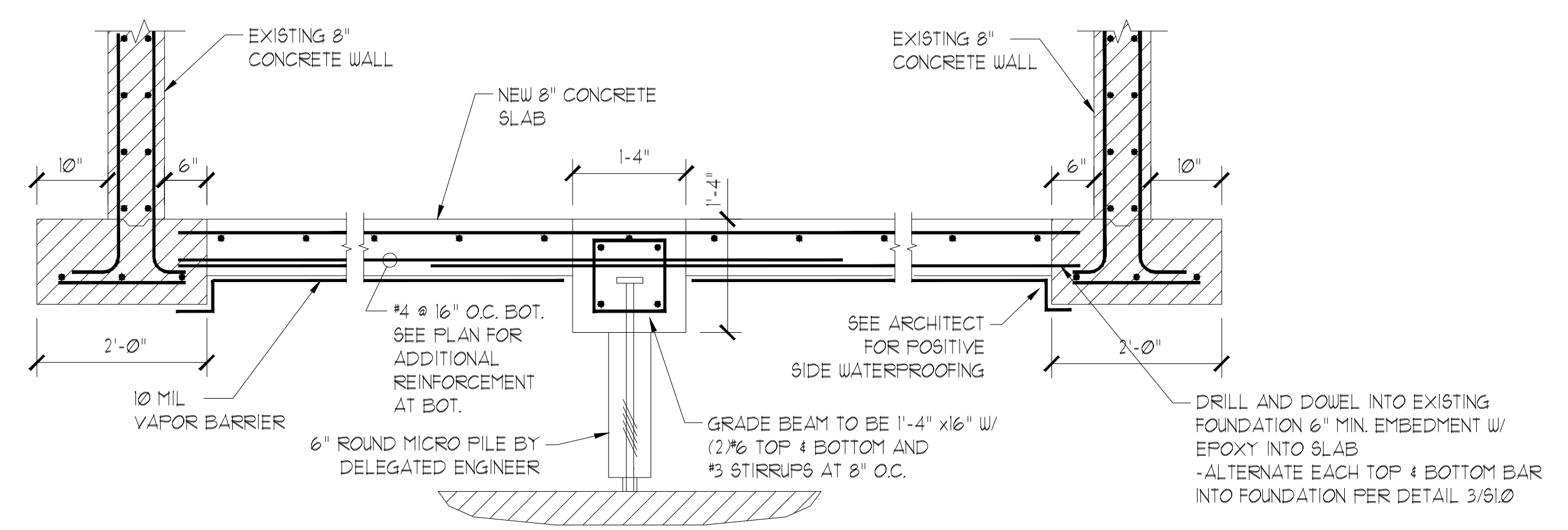
REVISIONS

DRAWN BY  
E.M.A

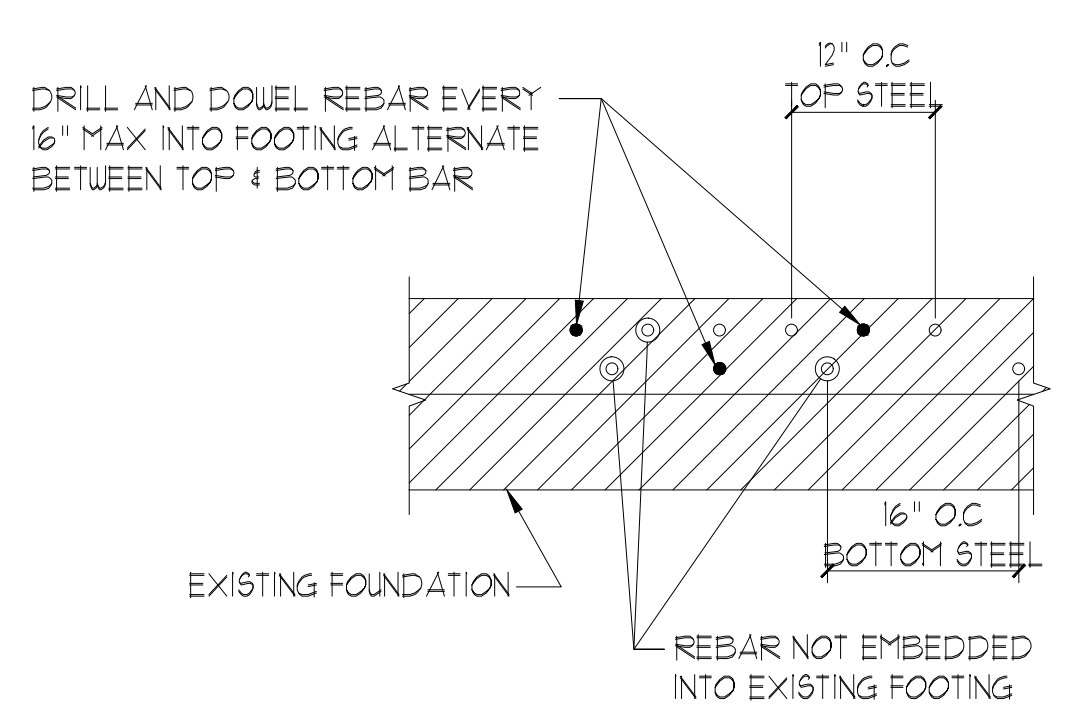
PROJECT NUMBER  
1822  
PLAN & DETAILS



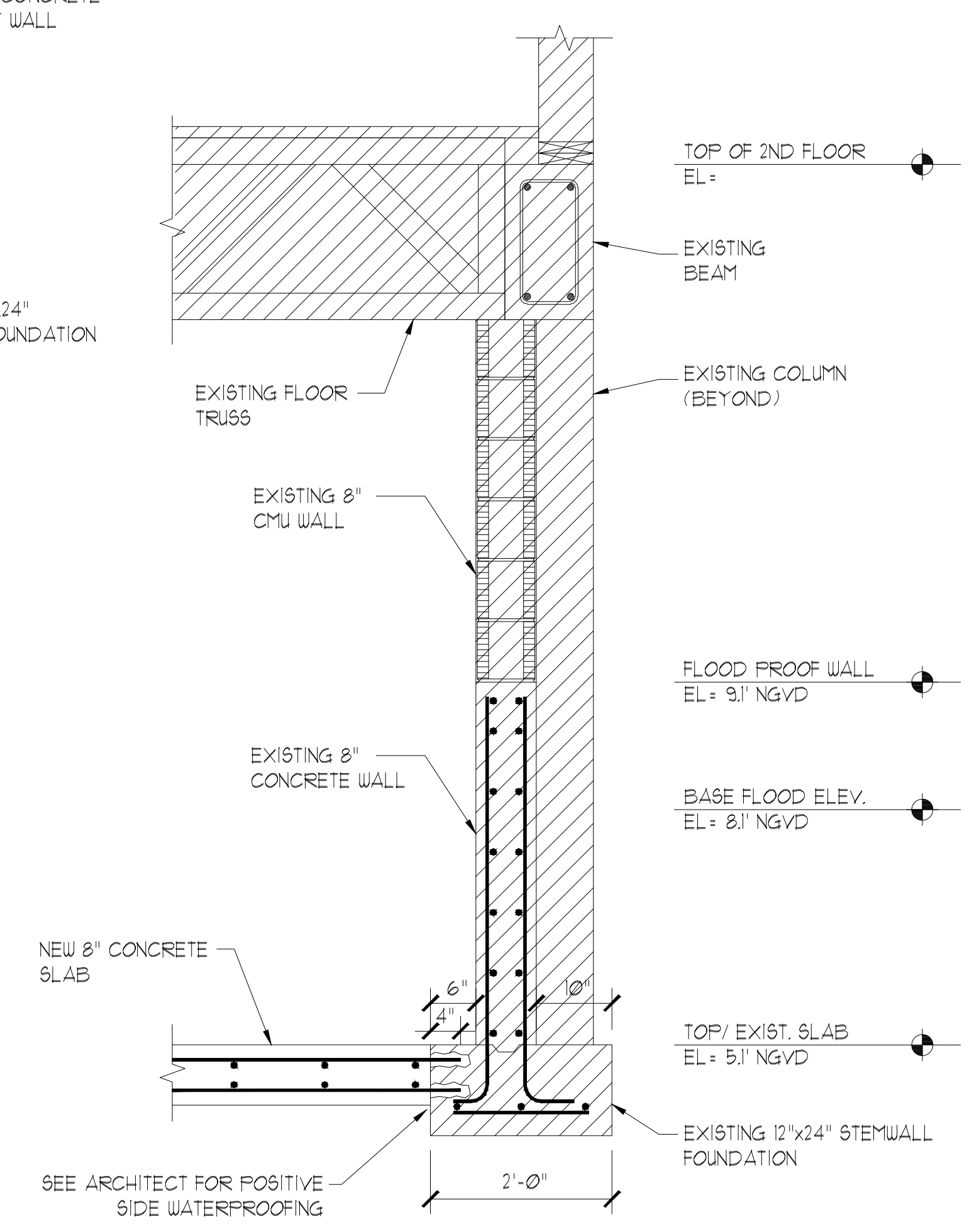
**FLOOR REPLACEMENT PLAN**  
SCALE: 1/8" = 1'-0"



**FLOOR REPLACEMENT SECTION**  
SCALE: 3/4" = 1'-0"



**REINFORCEMENT EMBEDMENT DETAIL**  
SCALE: 3/4" = 1'-0"

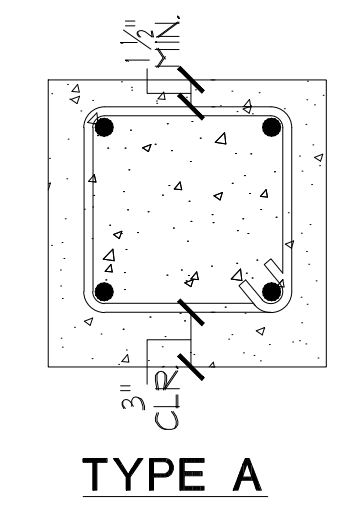


**WALL SECTION**  
SCALE: 3/4" = 1'-0"

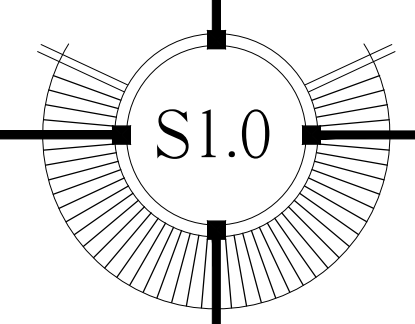
- FOUNDATION NOTES**
- TOP OF INTERIOR SLAB ELEVATION TO BE + 5.1 NAVD.
  - ① MICRO PILES TO BE DESIGNED BY DELEGATED ENGINEER TO MEET THE SPECIFICATIONS AS OUTLINED IN THE WINGERTER LABORATORIES, INC REPORT
    - a. SHAFT DIAMETER 6" ROUND
    - b. TOTAL MIN. LENGTH 12'-0"
    - c. POST GROUTED W/ 3000 PSI CONCRETE
    - d. COM PRESSURE CAPACITY - 44 KIPS (22 TONS)
    - e. TENSION CAPACITY - 24 KIPS (12 TONS)
    - f. LATERAL CAPACITY - 8 KIPS (4 TONS)
  - DOVEL REINFORCEMENT FOR GRADE BEAM INTO EXISTING FOUNDATION AS SHOWN.
  - INSTALL 10 MIL. VAPOR BARRIER BELOW NEW SLAB UNO.
  - SEE ARCHITECT FOR DIMENSIONS AND ALL FLOOR ELEVATIONS.
  - STRUCTURAL SLAB TO BE 8", 4000 PSI CONCRETE W/ REINFORCEMENT AS SHOWN.
  - EXISTING EXTERIOR DOORS AND FLOOD PANELS TO REMAIN. AT OWNERS OPTION, FLOOD GATES ARE TO BE REMOVED & REPLACED OR PROOF WATER TESTED TO VERIFY THE FUNCTIONALITY OF THE EXISTING.

**GRADE BEAM SCHEDULE**

MARK	SIZE	REINFORCING		STIRRUPS	REMARKS
		TOP	BOT.		
GB	16"x16"	(2) # 5	(2) # 5	# 3 @ 12" O.C.	TYPE A



NOT FOR CONSTRUCTION - NOT FOR FINAL PRICING - SUBJECT TO CHANGE



DATE

11-09-18 SD  
01-20-19 DD  
02-21-19 PRELIM. REVIEW  
03-25-19 PRICING REVIEW  
04-17-19 PERMIT SUBMIT

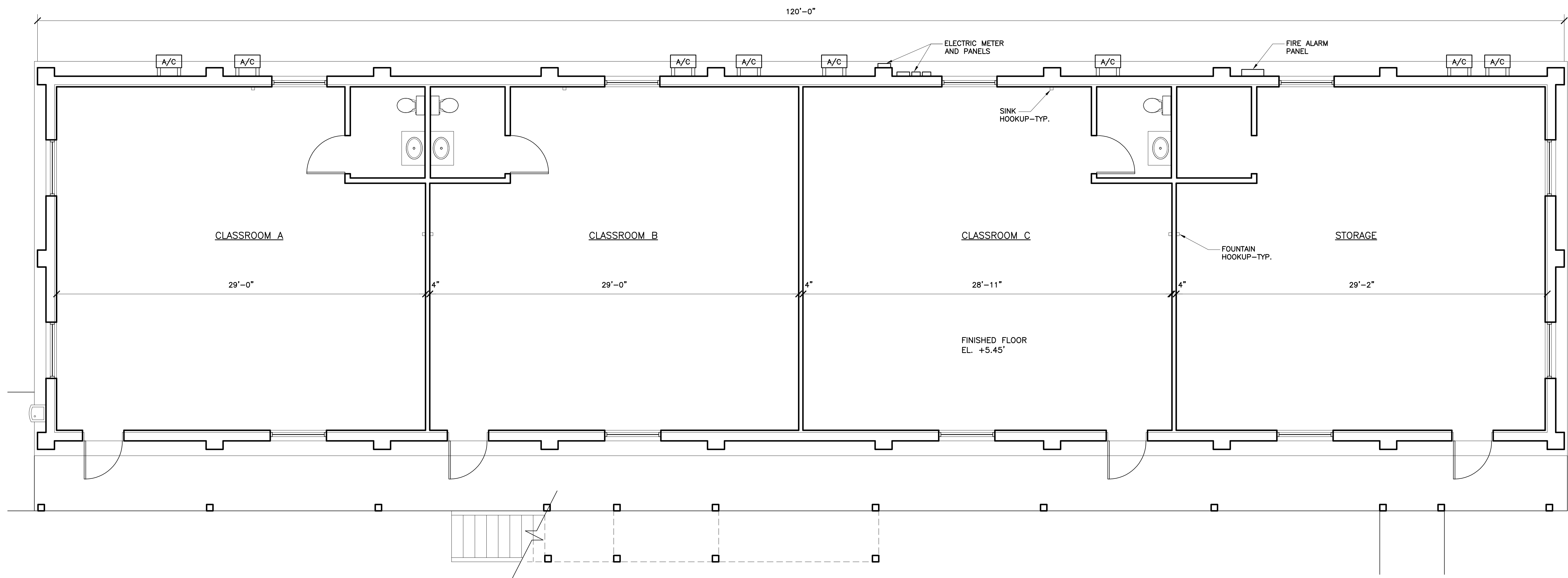
REVISIONS

DRAWN BY

E.M.A

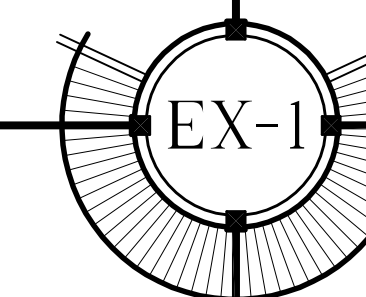
PROJECT  
NUMBER

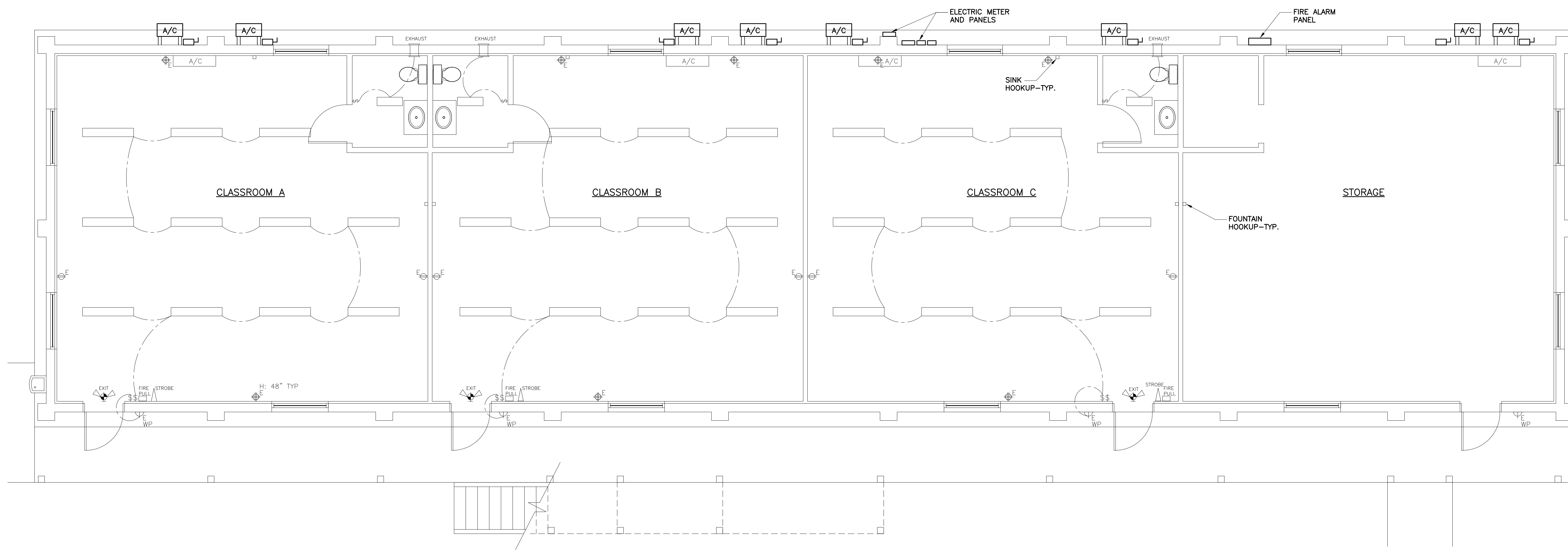
1822



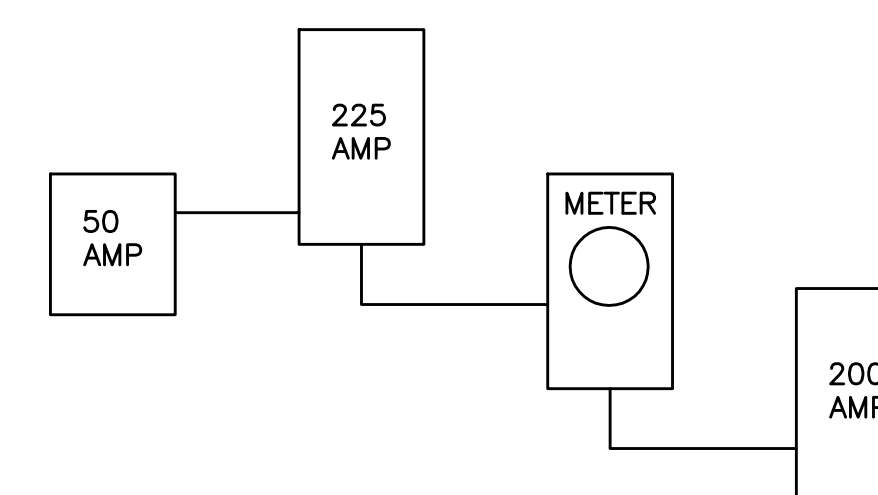
1  
EX-1  
EXISTING FIRST FLOOR PLAN

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





1 EX-2 EXISTING ELECTRIC FLOOR PLAN  
SCALE: 1/4"=1'-0"



2 EX-2 EXISTING RISER DIAGRAM  
N.T.S.