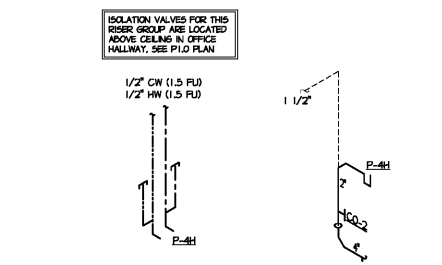
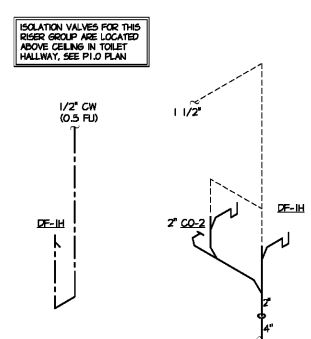


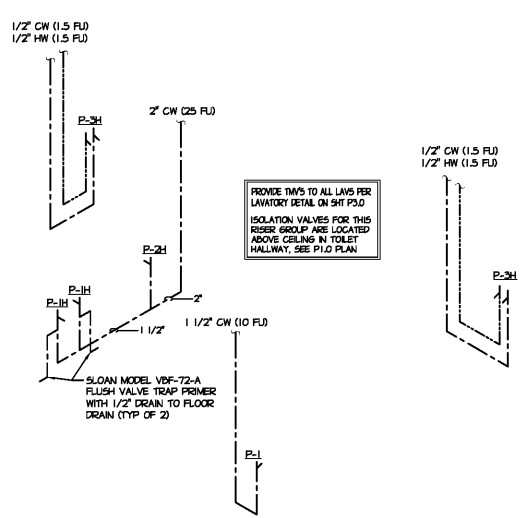
**1 JANITOR'S CLOSET DIAGRAM**  
P2.0 SCALE: NONE



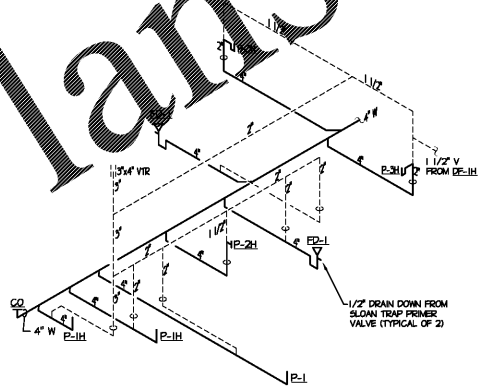
**2 LOCKER ROOM SINK DIAGRAM**  
P2.0 SCALE: NONE



**3 DF-1H DIAGRAM**  
P2.0 SCALE: NONE



**4 RESTROOM DIAGRAM - WATER SUPPLY**  
P2.0 SCALE: NONE



**5 RESTROOM DIAGRAM - WASTE AND VENT**  
P2.0 SCALE: NONE

**SPECIFICATIONS - PLUMBING**

**I. SCOPE**  
THE WORK COVERED BY THIS SPECIFICATION INCLUDES THE COMPLETE PLUMBING SYSTEM.  
THE WORK TO BE PERFORMED UNDER THE PLUMBING SPECIFICATIONS AND DRAWINGS CONSISTS OF FURNISHING ALL LABOR AND MATERIAL FOR THE COMPLETE INSTALLATION OF THESE SYSTEMS, INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING:  
A. UNDERGROUND AND ABOVE GROUND PIPING, FIXTURES, VALVES, ETC.  
B. HOT WATER HEATERS, ETC.  
C. PLUMBING SPECIALTIES  
D. PLUMBING EQUIPMENT

**II. GENERAL**  
THIS SPECIFICATION IS INCLUSIVE FOR EACH ITEM REQUIRING ALL LABOR, MATERIAL AND EQUIPMENT NECESSARY TO PROPERLY INSTALL, ADJUST AND PUT IN OPERATION, THE COMPLETE PLUMBING AND FIRE PROTECTION SYSTEM.  
THE CONTRACTOR IS RESPONSIBLE FOR THE PROPER LAYOUT AND CONSTRUCTION OF THE WORK INCLUDED IN THIS CONTRACT.  
THE DRAWINGS AND SPECIFICATIONS SHALL BE UNDERSTOOD TO COVER, ACCORDING TO THEIR INTENT AND MEANING, COMPLETE SYSTEMS AS DESCRIBED HEREIN.  
MINOR ITEMS, ACCESSORIES AND DEVICES REASONABLY INFERRABLE AS NECESSARY FOR THE COMPLETE AND PROPER OPERATION OF ANY SYSTEM SHALL BE PROVIDED BY THE CONTRACTOR FOR SUCH SYSTEMS WHETHER THEY ARE SPECIFICALLY CALLED FOR BY THE DRAWINGS AND/OR SPECIFICATIONS OR NOT.  
DRAWINGS ARE GENERALLY DIAGRAMMATIC. ROUTING OF PIPING ARE SHOWN, BUT DO NOT INTEND TO SHOW EVERY RISE, DROP, OFFSET, FITTING, NOR EVERY STRUCTURAL ELEMENT THAT MAY BE ENCOUNTERED DURING THE INSTALLATION OF THIS WORK. CONTRACTOR SHALL MAKE ANY REQUIRED CHANGES FROM THE GENERAL ROUTING SHOWN ON THESE DRAWINGS, SUCH AS OFFSETS, BENDS OR CHANGES IN ELEVATION DUE TO COORDINATION WITH THE WORK OF THE OTHER TRADES AND BUILDING CONSTRUCTION. ALL CHANGES SHALL BE MADE WITHOUT ADDITIONAL COST TO THE OWNER OR DELAY IN COMPLETION DATE OF THE PROJECT.  
IT IS INTENDED THAT EQUIPMENT SHALL BE LOCATED SYMMETRICALLY WITH THE ARCHITECTURAL ELEMENTS OF THE BUILDING, NOTWITHSTANDING THE FACT THAT LOCATIONS INDICATED BY THESE DRAWINGS MAY BE REQUESTED FOR CLARIFICATION OF PRESENTATION.  
CONTRACTOR SHALL BE RESPONSIBLE AND PAY FOR ALL COSTS OF CUTTING, PATCHING, REPAIRING AND REFINISHING EXISTING CONSTRUCTION REQUIRED TO ACCOMMODATE THE INSTALLATION OF THIS WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REFINISHING WORK SHALL BE PERFORMED BY THE REGULARLY EMPLOYED IN THAT TRADE AND SHALL BE FOR THE NEW CONSTRUCTION AS CLOSE AS POSSIBLE. CARE SHALL BE TAKEN SO AS NOT TO DAMAGE ANY EXISTING BUILDING CONSTRUCTION ELEMENTS THAT ARE TO REMAIN. ANY EXISTING ELEMENTS THAT ARE DAMAGED DURING INSTALLATION OF NEW WORK SHALL BE REPAIRED, REPLACED AND PAID BY THE INSTALLING CONTRACTOR TO THE SATISFACTION OF THE ARCHITECT AND OWNER.  
PERMIT TO THE ARCHITECTURAL DRAWINGS FOR EXISTING BUILDING CONSTRUCTION SHALL REMAIN AND, THEREFORE, SUBJECT TO PATCHING, REPAIRING, AND REFINISHING.  
CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING OWN CLEAN-UP DURING CONSTRUCTION. IF CONTRACTOR FAILS TO PROVIDE SUCH CLEAN-UP, THE ARCHITECT/ENGINEER WILL DETAIL ANOTHER CONTRACTOR TO PERFORM THE CLEAN-UP AT THE NEGLIGIBLE CONTRACTOR SHALL PAY THE ASSOCIATED BACK-CHARGE AS DEEMED APPROPRIATE BY THE ARCHITECT/ENGINEER.  
CONTRACTOR SHALL FURNISH MATERIALS AND USE INSTALLATION METHODS SUITABLE FOR THE ENVIRONMENTAL CONDITIONS OF THE AREA IN WHICH EQUIPMENT, FIXTURES AND DEVICES ARE INSTALLED.  
THE SPECIFICATIONS SHOWN FOR ALL FIXTURES AND CEILING MOUNTED SPRINKLER HEADS ARE DIAGRAMMATIC. EXACT LOCATION SHALL BE DETERMINED FROM THE PLANS, REFLECTED CEILING PLANS AND/OR ON THE JOB SITE BY THE ARCHITECT/ENGINEER REPRESENTATIVES.  
IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN CODE REQUIRED SPACING FOR ITEMS SUCH AS SPRINKLER HEADS.  
CONTRACTOR SHALL PROVIDE SLEEVES IN BEAMS, FLOORS, COLUMNS AND WALLS AS SHOWN ON THE DRAWINGS, AS REQUIRED BY JOB SITE CONDITIONS, AND/OR AS SPECIFIED, WHEN INSTALLING THEIR WORK. BEAMS AND COLUMNS WHICH ARE REQUIRED TO BE SLEEVED SHALL BE CUT AND REINFORCED AS REQUIRED BY FIELD CONDITIONS AND LOCATIONS AND SIZES SHALL BE CHECKED AND APPROVED BY ARCHITECT BEFORE CONTRACTOR CUTS ANY STRUCTURAL BUILDING MEMBER.  
CONTRACTOR SHALL REFER TO THE ARCHITECTURAL AND STRUCTURAL CONTRACT DRAWINGS BEFORE SUBMITTING THEIR BIDS TO FAMILIARIZE THEMSELVES WITH THE EXTENT OF THE GENERAL CONTRACTOR'S WORK, CEILING HEIGHTS AND CLEARANCE FOR INSTALLING THEIR WORK.  
SYSTEM INSTALLATION SHALL COMPLY WITH ALL APPLICABLE CODES.

**III. VISIT TO SITE**  
ATTENTION IS DIRECTED TO THE NECESSITY FOR CONTRACTOR TO VISIT THE SITE AND EXAMINE ALL CONDITIONS AFFECTING THE PROPER EXECUTION OF THIS CONTRACT. SUBMISSION OF PROPOSALS SHALL BE CONSIDERED EVIDENCE THAT THE CONTRACTOR HAS VISITED AND EXAMINED THE SITE.  
NO EXTRA PAYMENT WILL BE ALLOWED THE CONTRACTOR FOR EXTRA WORK CAUSED BY FAILURE TO VISIT, EXAMINE AND CLARIFY.

**IV. LAWS, ORDINANCES AND REGULATIONS**  
ALL SYSTEMS SHALL CONFORM IN FULL AND/OR PART SHALL CONFORM TO ALL PERTINENT LAWS, ORDINANCES AND REGULATIONS OF ALL BODIES HAVING JURISDICTION AT ALL GOVERNING LEVELS, NOTWITHSTANDING ANYTHING IN THESE DRAWINGS OR SPECIFICATIONS.  
TO THE CONTRARY, IN CASE OF CONFLICT BETWEEN GOVERNING LEVELS, THE MORE STRINGENT LAWS SHALL APPLY.  
THE CONTRACTOR SHALL PAY ALL FEES AND OBTAIN AND PAY FOR ALL PERMITS AND INSPECTIONS REQUIRED BY ANY AUTHORITY HAVING JURISDICTION IN CONNECTION WITH HIS WORK.  
WHERE APPLICABLE, ALL NEW MATERIAL SHALL BEAR THE UNDERWRITER'S SEAL OF APPROVAL, AS WELL AS THOSE SEALS OF ALL MUNICIPALITIES HAVING JURISDICTION, CERTIFICATES TO THIS EFFECT TO BE FURNISHED TO ARCHITECT UPON REQUEST.

**V. WORKMANSHIP**  
ALL WORK TO BE PERFORMED SHALL BE DONE BY QUALIFIED MECHANICS. ALL MECHANICS IN THE EMPLOY OF THIS CONTRACTOR ON THIS PROJECT SHALL BE SKILLED IN THE PHASES OF THE WORK TO WHICH THEY ARE USED.  
ALL WORK MUST BE DONE IN WORKMANLIKE MANNER TO THE COMPLETE SATISFACTION OF THE ARCHITECT. ALL MATERIAL SHALL BE NEW OF THE QUALITY SPECIFIED, FREE FROM DEFECTS AND IN FIRST-CLASS CONDITION. ALL VERTICAL PIPE SHALL BE PLUMB.  
VI. MATERIALS AND EQUIPMENT  
ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND SHALL CONFORM TO THE GRADE, QUALITY AND STANDARD SPECIFIED HEREIN. ALL EQUIPMENT OFFERED UNDER THESE SPECIFICATIONS SHALL BE LIMITED TO PRODUCTS REGULARLY PRODUCED AND RECOMMENDED FOR SERVICE, IN ACCORDANCE WITH ENGINEERING DATA, RATINGS OR OTHER COMPREHENSIVE LITERATURE MADE AVAILABLE TO THE PUBLIC AND IN EFFECT AT THE TIME OF OPENING OF BIDS.  
EQUIPMENT SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS FOR THE TYPE AND CAPACITY OF EACH PIECE OF EQUIPMENT USED.  
UNLESS INDICATED OTHERWISE, THE ARCHITECT/ENGINEER MAKES NO REPRESENTATION AS TO WHETHER OR NOT ANY HAZARDOUS OR CONTAMINATED MATERIALS (INCLUDING BUT NOT LIMITED TO ASBESTOS, PCB'S, CONTAMINATED SOILS, ETC.) ARE PRESENT WITHIN THE EXISTING BUILDING OR ON THE SITE. WORK SHOWN ON THE DRAWINGS AND/OR INDICATED IN THE SPECIFICATIONS SHALL NOT BE CONSIDERED TO CALL FOR CONTACT WITH ANY OF THESE MATERIALS. IF THESE MATERIALS ARE ENCOUNTERED OR SUSPECTED THE CONTRACTOR SHALL NOT DISTURB THEM AND SHALL CONTACT THE ARCHITECT/ENGINEER IMMEDIATELY.  
SYSTEM INSTALLATION SHALL COMPLY WITH ALL APPLICABLE CODES.

**VII. COORDINATION WITH OTHER TRADES**  
THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING HIS WORK WITH THAT WORK OF THE OTHER TRADES. CONTRACTOR IS COMPLETELY RESPONSIBLE IF FAILURE ON HIS PART TO COORDINATE EFFORTS RESULTS IN EXTRA WORK HAVING TO BE DONE TO COMPLETE A TASK, AS SUCH HIS FAILURE SHALL NOT BE THE BASIS FOR ANY EXTRA CHARGE AGAINST THE OWNER.  
CONTRACTOR SHALL CHECK DRAWINGS OF OTHER TRADES TO VERIFY THAT SPACES IN WHICH THEIR WORK WILL BE INSTALLED IS CLEAR OF OBSTRUCTIONS. WORK SHALL BE INSTALLED TO MAINTAIN MAXIMUM HEADROOM AND SPACE CONDITION AT ALL POINTS IN THE BUILDING, WHERE HEADROOM OR SPACE CONDITIONS APPEAR INADEQUATE, CONTRACTOR SHALL NOTIFY ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE INSTALLATION OF THEIR WORK.

**VII. COORDINATION WITH OTHER TRADES (CONTINUED)**  
CONTRACTOR SHALL FURNISH OTHER TRADES ADVANCE INFORMATION AND/OR SHOP DRAWINGS ON LOCATIONS AND SIZES OF PIPING, EQUIPMENT, FRAMES, BOXES, SLEEVES AND OPENINGS, ETC., NEEDED FOR THEIR WORK TO PERMIT OTHER TRADES AFFECTED TO INSTALL THEIR WORK PROPERLY AND WITHOUT DELAY.  
WHERE THERE IS EVIDENCE THAT WORK OF ONE TRADE WILL INTERFERE WITH WORK OF OTHER TRADES, ALL TRADES SHALL MEET ON JOB SITE TO WORK OUT SPACE CONDITIONS, AND MAKE SATISFACTORY ADJUSTMENTS TO INSTALLATION OF THE NEW WORK. CONTRACTOR SHALL VERIFY EXACT LOCATION OF ALL PLUMBING AND FIRE PROTECTION DEVICES AND EQUIPMENT PRIOR TO PROCEEDING WITH THEIR CONDITIONS, SHOP DRAWINGS AND WORK OF OTHER TRADES. EACH CONTRACTOR SHALL BE RESPONSIBLE AT THEIR OWN EXPENSE, FOR THE REMOVAL AND REINSTALLATION OF ANY PART OF THEIR WORK IF SAME WAS INSTALLED WITHOUT CONSULTING WITH OTHER TRADES BEFORE INSTALLING THEIR WORK.

**VIII. SHOP DRAWINGS**  
THE CONTRACTOR IS REQUIRED TO SUBMIT FIVE (5) SETS OF SHOP DRAWINGS FOR MATERIAL ITEMS SPECIFICALLY DESIGNATED IN THIS SPECIFICATION AND/OR CALLED OUT FOR ON THE DRAWINGS. CONTRACTOR REPRESENTS THAT ANY MATERIAL ITEMS PURCHASED BEFORE APPROVAL OF SHOP DRAWINGS ARE PURCHASED AT CONTRACTOR'S OWN RISK. ANY MAY BE SUBJECT TO REJECTION BY THE ARCHITECT/ENGINEER. SHOP DRAWINGS ARE TO BE SUBMITTED TO THE GENERAL CONTRACTOR OR HIS REPRESENTATIVE.  
PRODUCT SUBMITTALS SHALL BE PREPARED IN AN ORGANIZED, LEGIBLE FORMAT WITH COVER SHEET INDICATING PROJECT, LOCATION, DATE, CONTRACTOR(S) AND ENGINEER. MINIMAL BLANK SPACES OF MINIMUM 5 INCH BY 5 INCH SIZE FOR APPROVAL STAMPS FROM GENERAL CONTRACTOR, ARCHITECT AND ENGINEER.  
ALL PRODUCTS SPECIFIED HEREIN OR ON THE DRAWINGS SHALL BE SUBMITTED WITH THE SAME PRODUCT TAG THAT IS USED IN THE CONSTRUCTION DOCUMENTS. WHEN A PRODUCT TAG IS NOT USED, THE SUBMITTAL SHALL REFERENCE THE PARAGRAPH OF THIS SPECIFICATION FOR WHICH THE PRODUCT IS BEING SUBMITTED.  
REPRODUCTION OF THE CONTRACT DOCUMENTS FOR SUBMITTAL PURPOSES IS NOT ACCEPTABLE.  
ALL SUBMITTALS WHICH ARE NOT SUBMITTED IN ACCORDANCE WITH THESE REQUIREMENTS WILL BE REJECTED WITHOUT ANY ALLOWANCES MADE FOR DELAYS THAT MAY BE INCURRED.  
X. PIPING INSULATION  
PIPING INSULATION ON CONDENSATE DRAIN PIPING, DOMESTIC HOT WATER AND COLD WATER PIPING TO BE RIGID MOLDED FIBERGLASS WITH "C" VALUE OF .24 AT 75 DEGREES F. WITH VAPOR BARRIER JACKET WHITE KRAFT PAPER WITH FIBER YARN ON ALUMINIZED FILM. INSULATION THICKNESS TO BE 1/2 INCH.  
ALL INSULATION TO HAVE MAXIMUM 25/50 FLAME SPREAD/SMOKE DEVELOPED. SAME COMPONENT RATINGS FOR ACCESSORIES (ADHESIVES, MASTIC AND CEMENTS FOR FITTINGS).  
ALL INSULATION JACKETS INSTALLED WITHIN WALK-IN COOLERS FOR CONDENSATE DRAIN MUST BE NSF APPROVED.  
XI. PLUMBING PIPING  
DOMESTIC WATER PIPING: ASTM B88 HARD DRAWN, TYPE-1, COPPER WITH SOLDER JOINT WROUGHT COPPER FITTINGS OPTION TO USE CLASS 52 DUCTILE IRON FOR UNDERGROUND WATER SUPPLY MAIN.  
SANITARY AND SANITARY VENT PIPING: ASTM A74 SERVICE WEIGHT CAST IRON WITH HUB AND SPIGOT COMPRESSION JOINING OPTION FOR NON-HUB MECHANICAL CLAMP JOINT SHALL BE AVAILABLE FOR ABOVE GROUND APPLICATIONS.  
DIELECTRIC UNIONS OR COUPLINGS SHALL BE USED WHERE JOINING PIPING OF DISSIMILAR METALS.  
VALVES:  
BALL VALVES (BV) UP TO 2 INCHES: 600 PSI WOG, BRONZE BODY, STAINLESS STEEL BALL, TEFLOON SEATS AND STUFFING BOX RING, LEVER HANDLE AND SOLDER ENDS.  
CHECK VALVES (CV) UP TO 2 INCHES: BRONZE HORIZONTAL SWING DISC, SOLDER ENDS.  
GATE VALVES (GV): 200 PSI WOG WITH SINGLE WEDGE AND RISING STEMS.  
DOMESTIC WATER PIPING DISINFECTION: CHLORINATION OF PIPING SYSTEM IN ORDER TO COMPLY WITH THE STATES SAFE DRINKING WATER STANDARDS.  
PIPING TESTING: PNEUMATIC AND HYDROSTATIC TESTING REQUIRED FOR THE ABOVE REFERENCED SYSTEMS.  
XII. PLUMBING SPECIALTIES  
WATER HAMMER ARRESTORS: FIT WATER SUPPLY TO EACH FIXTURE OR GROUP OF FIXTURES WITH AIR CHAMBER AIR CHAMBERS SAME SIZE AS SUPPLY LINE OR 3/4 INCH MINIMUM IS INCHES LONG.  
XIII. PLUMBING FIXTURES  
SEE SCHEDULE ON DRAWINGS.  
PROVIDE LOOSE KEY STOPS AND P-TRAPS FOR EACH FIXTURE. P-TRAPS WILL BE REQUIRED TO BE INSTALLED PARALLEL WITH WALL IN ORDER TO ACCOMMODATE OFF-SET TAILPIECES ON HANDICAP LAVATORIES.  
INSULATE TRAPS AND FIXTURE STOPS IN ACCORDANCE WITH ADA REQUIREMENTS.  
XIV. PLUMBING EQUIPMENT  
SEE SCHEDULE ON DRAWINGS  
XV. FIRE STOPPING  
CONTRACTOR SHALL FIRE STOP ALL PENETRATIONS THRU FIRE RATED WALLS, PARTITIONS, ROOFS AND/OR FLOORS SO THAT THE INTEGRITY OF THE FIRE RATING IS NOT COMPROMISED BY THE CONTRACTOR'S INSTALLATION OF ANY PIPE. FIRE STOPPING METHODS AND MATERIALS SHALL CONFORM TO LOCAL CODE AUTHORITY REQUIREMENTS. AS A MINIMUM, CONTRACTOR SHALL GROUT PIPES IN PENETRATION RATED PARTITION/FLOOR CONSTRUCTION WITH NON-SHINK, GROUT SO THAT ALL OPEN SPACES ARE FILLED IN SOLIDITY. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR THE LOCATION OF ALL FIRE RATED CEILING, PARTITIONS AND WALLS.  
XVI. GUARANTEE  
THIS CONTRACTOR SHALL UNCONDITIONALLY GUARANTEE IN WRITING ALL MATERIAL, EQUIPMENT AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM DATE OF ACCEPTANCE BY OWNER. THE CONTRACTOR SHALL PROVIDE FREE SERVICE FOR ALL EQUIPMENT INVOLVED IN HIS CONTRACT DURING THIS GUARANTEE PERIOD.  
THE GUARANTEE SHALL INCLUDE RESTORATION TO ITS ORIGINAL CONDITION OF ALL ADJACENT WORK THAT MUST BE DISTURBED IN FULFILLING THIS GUARANTEE.  
ALL SUCH REPAIRS AND/OR REPLACEMENTS SHALL BE MADE WITHOUT DELAY AND AT THE CONVENIENCE OF THE DEVELOPER AND TENANT.  
XVII. SUBSTITUTIONS  
APPROVALS OF SUBSTITUTIONS FOR "APPROVED EQUAL" MUST BE MADE IN WRITING AND SUBSTITUTIONS MUST BE APPROVED BEFORE INSTALLATION. INSTALLATION WITHOUT PRIOR APPROVAL MAY RESULT IN CONTRACTOR REMOVING SUBSTITUTION AND REPLACING IT WITH SPECIFIED ITEM AT HIS EXPENSE.  
APPROVAL MAY BE GIVEN BY ENGINEER ONLY.

**ANTHONY CASSATA**  
ARCHITECT  
2803 BUCKFIELD  
SUITE 1140  
KIRK BRIDGES RD. 6052  
(312) 711-6245  
FAX (312) 711-6123

**dd's DISCOUNTS**

**OWNER:**  
**ROSS STORES**  
5130 HACIENDA DRIVE  
DUBLIN, CA 94568

**PROJECT:**  
**dd's DISCOUNTS STORE #5352 (GREENVILLE, SC)**  
**WHITE HORSE PLAZA**  
6119 WHITE HORSE ROAD  
GREENVILLE, SC 29611

BASED ON DD'S 22K TURNKEY - EXISTING PROTOTYPE DATED MARCH, 2018

<b>DRAWING TITLE:</b>	SPECIFICATIONS & DIAGRAMS
<b>REV. NO.   DATE   DESCRIPTION:</b>	02/02/18 FOR ROSS REVIEW 03/02/18 FOR ROSS MARK-UPS

**3/12/18**  
APPROVED FOR CONSTRUCTION  
ANTHONY CASSATA  
ARCHITECT  
EXPIRES: 6/30/2018

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**SCALE:** AS NOTED  
**DRAWN BY:** **CHECKED BY:**  
**SHEET NUMBER**  
**P2.0**

Order Plans @ WWW