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JOB PROGRESS:
 ITEM: DATE:

REVISIONS:
 TAG: DATE:

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ALEXANDRIA
 AN APARTMENT COMMUNITY
 FOR
Bobo Family Group
 HUNTSVILLE, ALABAMA

JOB NUMBER:
DRAWN BY:
CHECKED BY:

RADON MITIGATION DETAILS TYP. ALL BLDGS.
SHEET NO.

A0.8

1. BELOW SLAB PREPARATION

GRAVEL METHOD
 USUALLY USED IN AREAS WHERE GRAVEL IS READILY AVAILABLE AND ECONOMICAL OR IF GRAVEL IS REQUIRED BY LOCAL BUILDING CODE AS AN UNDERSLAB STABILIZATION METHOD. A FOUR (4") INCH LAYER OF CLEAN GRAVEL IN 1/2" TO 3/4" SIZE SHALL BE LAID DOWN PRIOR TO INSTALLATION OF ANY VAPOR BARRIER (SHEETING).

ATTENTION TO DETAILS

- PROVIDE SLEEVES TO INTERCONNECT DIFFERENT ZONES OF THE 'BELOW SLAB AREA' THAT MIGHT BE SEPARATED BY A CONTINUOUS 'THICKENED SLAB' BEAM. AT LEAST (2) - 4" DIAMETER PIPES TO BE INSTALLED AT OPPOSITE ENDS OF THE GRADE BEAM. INSTALL ONE PIPE EVERY TEN (10') IF GRADE BEAM IS LONG. PROTECT ENDS OF PIPE TO PREVENT CONCRETE FROM FILLING PIPE WHILE POURING GRADE BEAM.
- WHEN SLEEVES AND RISERS ARE IN PLACE INSTALL A MINIMUM OF 4" OF CLEAN COARSE GRAVEL. THE ENDS OF SLEEVES AND RISER PIPES THAT WILL BE EMBEDDED IN GRANULAR FILL ARE TO BE WRAPPED WITH HARDWARE CLOTH MESH.
- THE VERTICAL RISER THAT WILL EXTEND THROUGH THE SLAB SHOULD BE ATTACHED TO 3 OR 4 INCH PVC TEE FITTING AND ADDITIONAL PIPING SHALL EXTEND TO 10 FEET EACH WAY FROM IT AND BE EMBEDDED IN GRAVEL. THE HORIZONTAL PIPING IS TO BE PERFORATED AND CORRUGATED TO ALLOW FOR A GREATER COLLECTION AREA THAN JUST THE END OF THE PIPE. PERFORATED PIPE IS TO BE WRAPPED WITH FILTER CLOTH TO PREVENT BEING PLUGGED UP DURING CONCRETE POUR.
- (ALTERNATIVE TO WHAT IS SHOWN) - PERFORATED PIPE IS TO BE LOCATED IN A TRENCH AROUND THE FOUNDATION PERIMETER JUST INSIDE THE FOUNDATION FOOTING. MAKE SURE PIPE IS COVERED BY AT LEAST ONE INCH OF FILL TO PREVENT CONCRETE FROM BLOCKING PERFORATIONS. IT IS RECOMMENDED THAT PERFORATED PIPE BE COVERED WITH A GEOTEXTILE CLOTH TO PREVENT FINE PARTICLES FROM CLOGGING HOLES.
- IT IS RECOMMENDED THAT AT LEAST A MINIMUM OF 3 OR 4 INCH DIAMETER PERFORATED PIPE BE LAID IN THE SUB-GRADE WITH THE TOP OF THE PIPE LOCATED AT LEAST ONE INCH BELOW THE CONCRETE SURFACE FOR SLAB AREAS LESS THAN 2000 SQ.FT.

- PLASTIC SHEETING**
- REGARDLESS OF SUB-GRADE COLLECTION METHOD USED, YOU WILL HAVE A STUB OF PIPE STICKING OUT OF THE SLAB TO WHICH THE VENT PIPE SYSTEM WILL BE ATTACHED LATER.
- PROTRUDING ENDS OF VENT PIPE IS TO BE COVERED WITH PLASTIC TO PREVENT ANY CONCRETE FROM ENTERING DURING POUR. PROTRUDING PIPE SHALL ALSO BE CLEARLY LABELED SO IT IS NOT TAKEN FOR A SANITARY DRAIN LINE LATER. SOME PEOPLE USE AN ENTIRELY DIFFERENT COLOR OR THE VENT PIPE TO PREVENT THIS MISTAKE. VERTICAL RISER PIPE IS TO BE SUPPORTED BY BEING TIED TO A VERTICAL POST DRIVEN IN THE GROUND THAT CAN BE REMOVED OR CUT OFF LATER. IF THIS METHOD IS USED BE SURE TO SEAL ANY PENETRATION IN THE SLAB TO PREVENT ANY SOIL GASES FROM ENTERING THE BUILDING.
- COVER THE GAS PERMEABLE LAYER WITH 6 MIL SHEETING INSTALLED TO OVERLAP BY 12" MIN. AT JOINTS. IT IS NECESSARY TO SEAL THE JOINT BETWEEN OVERLAPPING SHEETS OR PLASTIC. PLASTIC SHEETING SHOULD COVER THE ENTIRE FLOOR AREA.
 - MAKE SURE PLASTIC SHEETING FITS TIGHTLY AROUND ANY PIPE OR OTHER PENETRATIONS.
 - REPAIR ANY AREAS OF PLASTIC SHEETING THAT GET DAMAGED DURING CONSTRUCTION.

SLAB ABUTTING RETAINING WALLS

IN SOME CIRCUMSTANCES THERE MAY BE VERTICAL RETAINING WALLS ADJACENT TO THE SLAB. THESE WALLS ARE ALSO EXPOSED TO THE SOIL AND MUST BE TREATED AS POSSIBLE POINTS OF RADON ENTRY INTO THE BUILDING. ANY JOINTS OR PENETRATIONS THROUGH THESE RETAINING WALLS SHOULD BE CAREFULLY SEALED. ANY GAPS SHOULD BE CAULKED WITH AN ELASTOMERIC SEALANT SUCH AS POLYURETHANE CAULK.

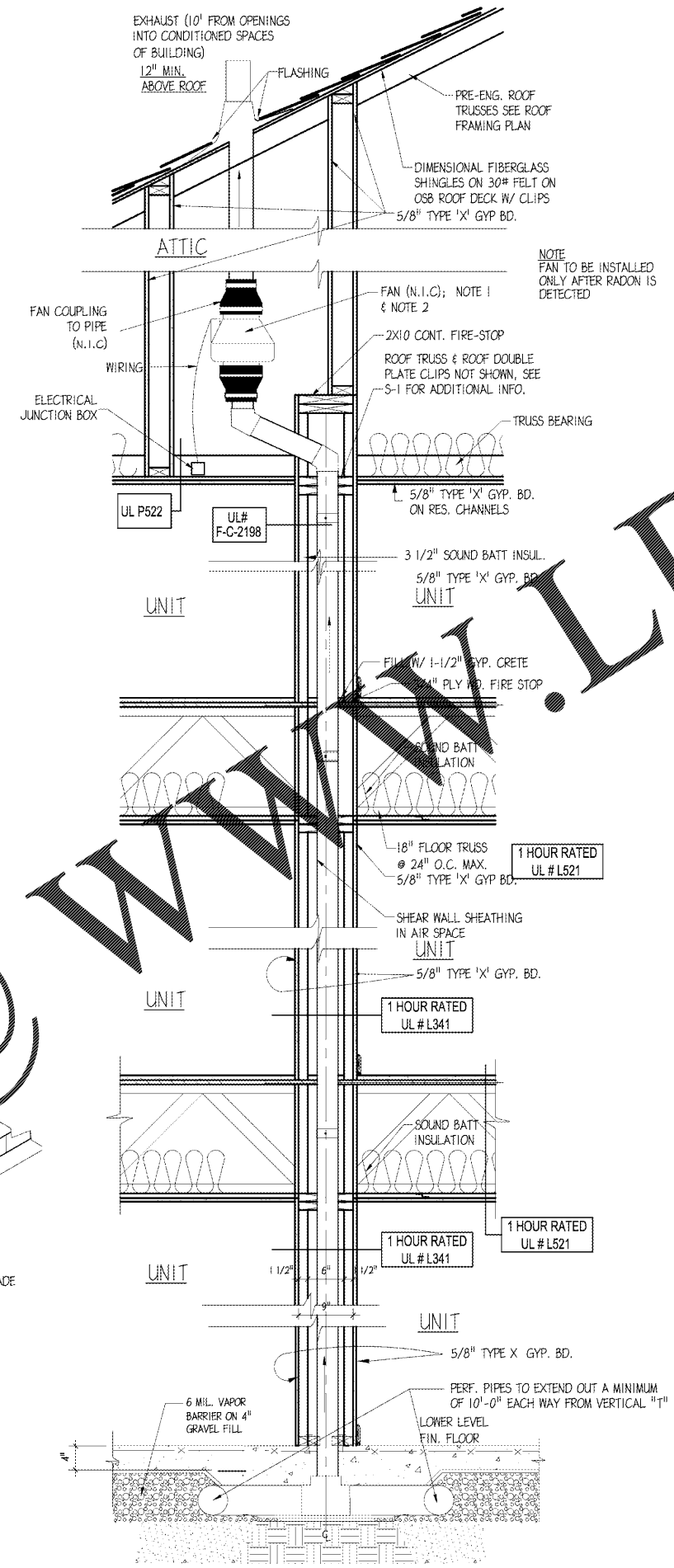
PRECAUTIONS WHEN POURING SLAB

ANY CONTROL JOINTS IN SLAB WILL NEED TO BE SEALED WITH POLYURETHANE CAULK TO REDUCE RADON ENTRY.
 DO NOT ALLOW CONCRETE SUB-CONTRACTOR TO DELIBERATELY PUNCTURE HOLES IN THE PLASTIC SHEETING PRIOR TO POURING THE SLAB. SOME WILL DO THIS TO ALLOW EXCESS WATER TO DRAIN FROM WET CONCRETE. IT IS RECOMMENDED THAT A (LOW SLUMP CONCRETE) MIX BE USED THAT HAS A LOW WATER-TO-CEMENT RATIO.

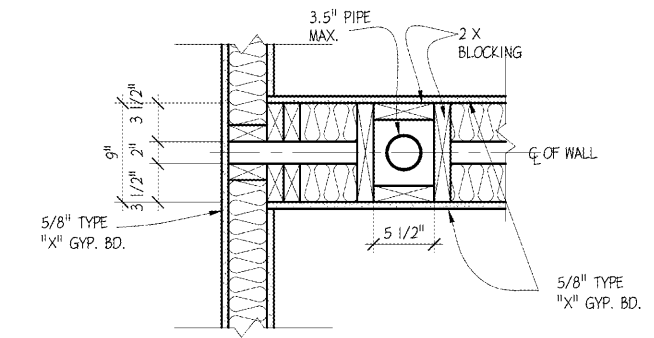
ADDITIONAL COMPONENTS REQUIRED FOR ACTIVATION OF PASSIVE SUB-SLAB DEPRESSURIZATION RADON CONTROL SYSTEM.

NOTES:

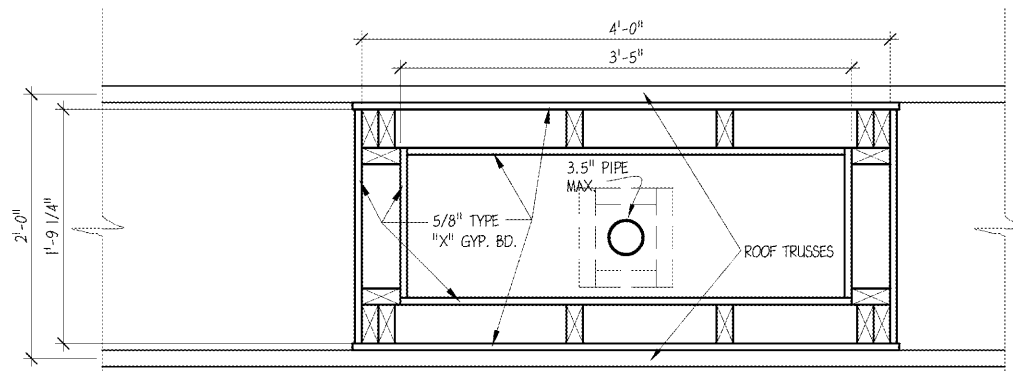
- INSTALL THE VENT FAN(N.I.C.) IN THE VERTICAL RUN OF THE VENT PIPE. THE SIZE AND AIR MOVEMENT CAPACITY OF THE VENT FAN(N.I.C.) SHALL BE SUFFICIENT TO CREATE AND MAINTAIN A PRESSURE FIELD BENEATH THE SLAB OR CRAWLSPACE MEMBRANE THAT IS LOWER THAN THE PRESSURE ABOVE THE SLAB OR MEMBRANE.
- ALL POSITIVELY PRESSURED PORTIONS OF THE VENT PIPE AND FAN(N.I.C.) SHALL BE LOCATED OUTSIDE THE HABITABLE SPACE OF THE BUILDING.
- PROVIDE A VISIBLE OR AUDIBLE WARNING SYSTEM TO ALERT THE BUILDING OCCUPANT IF THERE IS A LOSS OF PRESSURE OR AIR FLOW IN THE VENT PIPE.



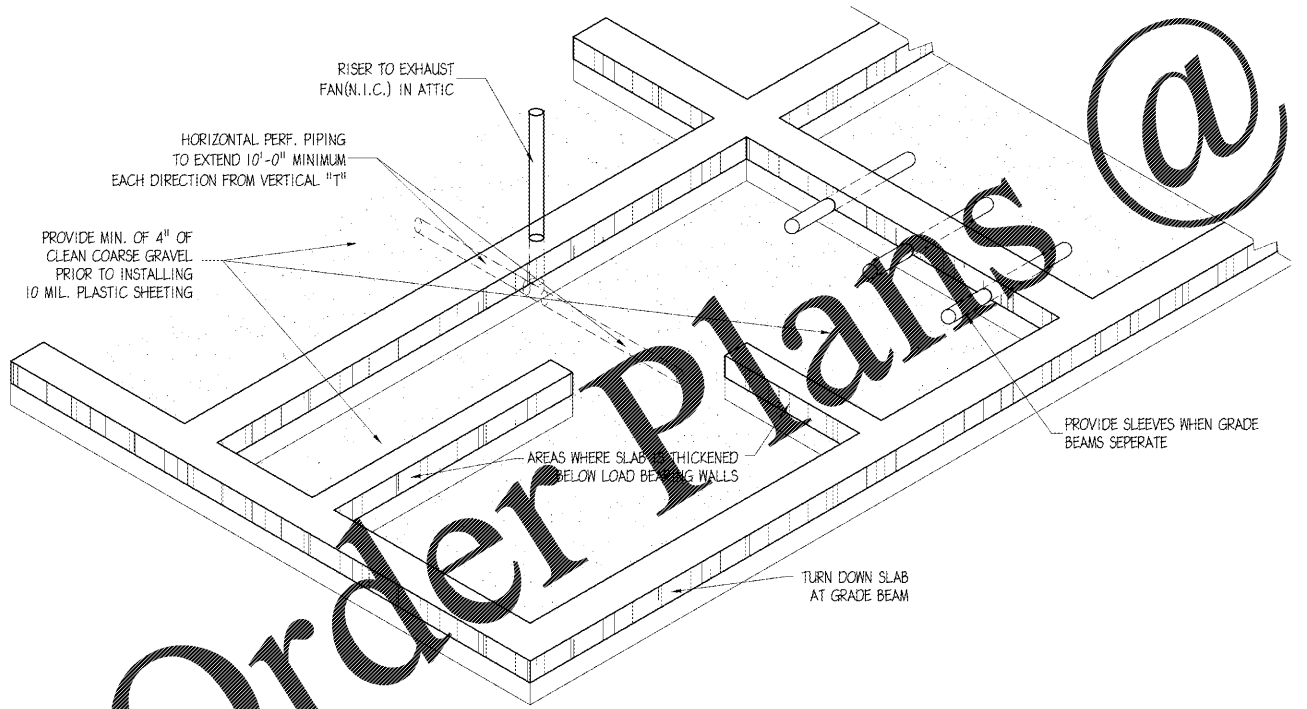
1 WALL SECTION
 SCALE: 1"=1'-0" OCCURS @ 3 STORY



2 EXHAUST TUBE ENCLOSURE
 SCALE: 1/2"=1'-0" THRU 2" CHASE WALL - 4" CHASE WALL SIMILAR



3 EXHAUST TUBE ENCLOSURE
 SCALE: 1/2"=1'-0" THRU ATTIC SPACE



4 SLAB ON GRADE CONSTRUCTION
 SCALE: N.T.S.

Order Plans @

RADON PROTECTION PLAN