December 20, 2013

Ms. Karel Detterman
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

Subject: **Perjury Statement and Report Transmittal**
1620-1640 Park Street (Parcel B)
Alameda, California 94501
AEI Project No. 298931
ACEH RO#0000008

Dear Ms. Detterman:

I declare under penalty of perjury, that the information and/or recommendations contained in the attached report for the above-referenced site are true and correct to the best of my knowledge.

If you have any questions or need additional information, please do not hesitate to call me or Mr. Peter McIntyre at AEI Consultants, (925) 746-6004.

Sincerely,

John Buestad
President

JB/pm

Attachment: AEI Consultants, *Site Management Plan Addendum*

cc: Mr. Peter McIntyre, AEI Consultants, 2500 Camino Diablo, Walnut Creek, CA 94597

AEI Consultants
Environmental & Engineering Services
2500 Camino Diablo, Walnut Creek, CA 94597
Tel: 925.746.6000 Fax: 925.746.6099

December 20, 2013

Alameda County Environmental Health Department
Attn: Ms. Karel Detterman
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

Subject: **Site Management Plan Addendum**
1620-1640 Park Street – Parcel B
Alameda, California
AEI Project No. 298931
ACEHD Fuel Leak Case No. RO0000008

Dear Ms. Detterman:

AEI Consultants (AEI) prepared this *Site Management Plan Addendum* (SMPA) on behalf of Foley Street Investments, LLC (owner), for the commercial development at 1620-1640 Park Street, Alameda, California (Site). Environmental activities at the site are currently being overseen by the Alameda County Environmental Health Department (ACEHD). The purpose of this SMPA is to update the current *Site Management Plan – Commercial Development* dated November 21, 2013 with information regarding the proposed Cupolex system for the proposed building. This SMPA was requested by the ACEDH in electronic mail correspondence dated December 6, 2013 and December 13, 2013.

The following attachments are included per the ACEHD request:

1. General description of the Cupolex system including how the system works as a mitigation for vapor intrusion to indoor air (Attachment A);
2. Owner/Contractor site specific plan set for the Cupolex system as approved by the City of Alameda (Attachment B); and
3. Professional engineer (PE) certification regarding the Cupolex system for use as a venting system along with assurance that the PE will be onsite for the system installation and will perform verification testing following installation (Attachment C).

Construction activities commenced operation on December 9, 2013 and as-builts are not available at this time. Following the completion of the construction activities, an as-built plan for the Cupolex system can be provided to the ACEHD.

If there are any questions regarding this SMPA, please do not hesitate to contact AEI at 925-746-6000.

Sincerely,
AEI Consultants

REGISTERED GEOLOGIST
PETER J. MCINTYRE
Exp. 5/31/14
No. 7702
STATE OF CALIFORNIA

Peter McIntyre, PG
Executive Vice President

Jeremy Smith
Sr. Project Manager

Attachments:

Attachment A: Cupolex Description
Attachment B: Cupolex System Plans Approved by the City of Alameda
Attachment C: Cupolex Engineer Certification

Distribution:
John Buestad, Foley Street Investments
Karel Detterman, Alameda County Environmental Health Department (FTP Upload)
GeoTracker (Upload)

ATTACHMENT A

DESCRIPTION OF CUPOLEX® AERATED FLOOR SYSTEMS

Cupolex® is a modular concrete forming system used to construct aerated floors - concrete slabs with continuous under-slab void networks that can be used for radon or vapor intrusion control (Figure 1). Because the void space has very low resistance to air flow, vacuum levels and air exchange rates in the void space will be higher and more uniform than those that can be achieved in the sand or gravel layers that typically comprise traditional vapor intrusion mitigation systems (Folkes, 2012). Aerated floors are recognized by the California DTSC Vapor Intrusion Mitigation Advisory (VIMA) as a new vapor intrusion control technology and a variation of sub-slab depressurization (SSD) systems (DTSC, 2011). Cupolex® has also been approved for vapor intrusion mitigation by the New Jersey DEP (NJDEP 2013) and other states, as well as the U.S. Army Corp of Engineers for a new Child Development Center at Nellis Air Force Base (Wright Engineers, 2011). Over 500 million square feet of Cupolex® has been installed in Europe, North America, Australia, and Asia since 1990 (Kivi, 2013).

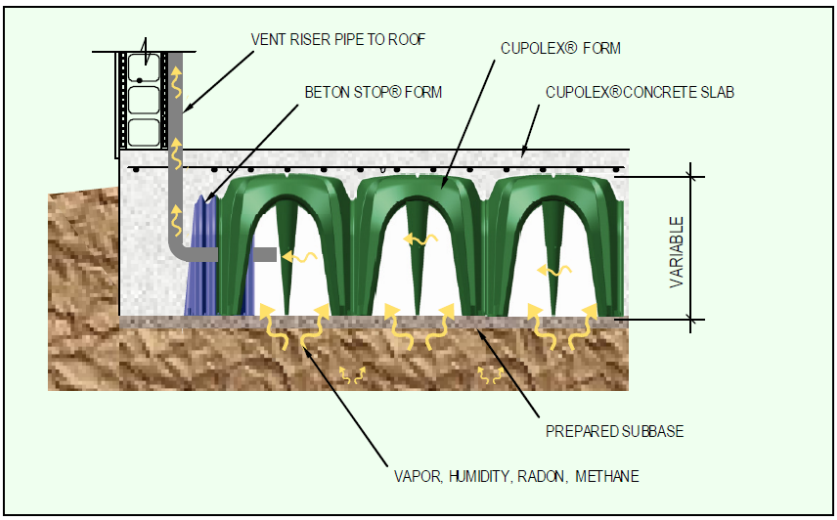


Figure 1. Cupolex® Aerated Floor System

Cupolex® plastic forms (100% recycled polypropylene) are placed on the subgrade prior to pouring of the concrete slab. Aerated floor systems are most applicable to new construction although aerated floors can also be placed over existing slabs if a higher finished floor elevation can be accommodated. The total thickness of the floor (including both the void space and concrete) can range from 6 inches to 3 feet, but is most commonly about 13 to 15 inches. The concrete geometry created by the forms (an orthogonal grid of arches) results in a very strong slab, in some cases requiring less concrete and other materials than standard slabs with the same load bearing

Figure 2. Placement of Cupolex® Forms

capacity (Kivi, 2013) .

Cupolex® aerated floors can be designed for SSV or SSD operation and operated in either active and passive venting modes, depending on the degree of venting or depressurization needed to control vapor intrusion. The combination of the interlocking plastic forms, concrete, and caulking of joints and utility penetrations (consistent with radon industry standards) provides a significant barrier to vapor migration through the floor.

Figure 3. Concrete being poured over Cupolex® forms at Nellis AFB

As with all SSV and SSD venting systems, vapor intrusion is then controlled by removal and dilution of sub-slab vapors and/or depressurization and reversal of air flow direction across the slab. Cupolex® aerated floors have been shown to work well in both passive and active venting modes, with substantial dilution of sub-slab vapor concentrations (passive systems) and strong, uniform negative pressures (active systems), using very small, sustainable fans (Folkes, 2012).

Key Elements of Aerated Floors

- Generally applicable to new structures, but can be designed for existing structures
- Low resistance of void space to air flow results in highly efficient SSV and SSD systems
- Small fans can vent or depressurize relatively large buildings
- Eliminate gravel and separate liner layers
- Low cost and “green” technology

References:

California DTSC, 2011. Vapor Intrusion Mitigation Advisory, Department of Toxic Substances Control, California Environmental Protection Agency, revised October 2011.

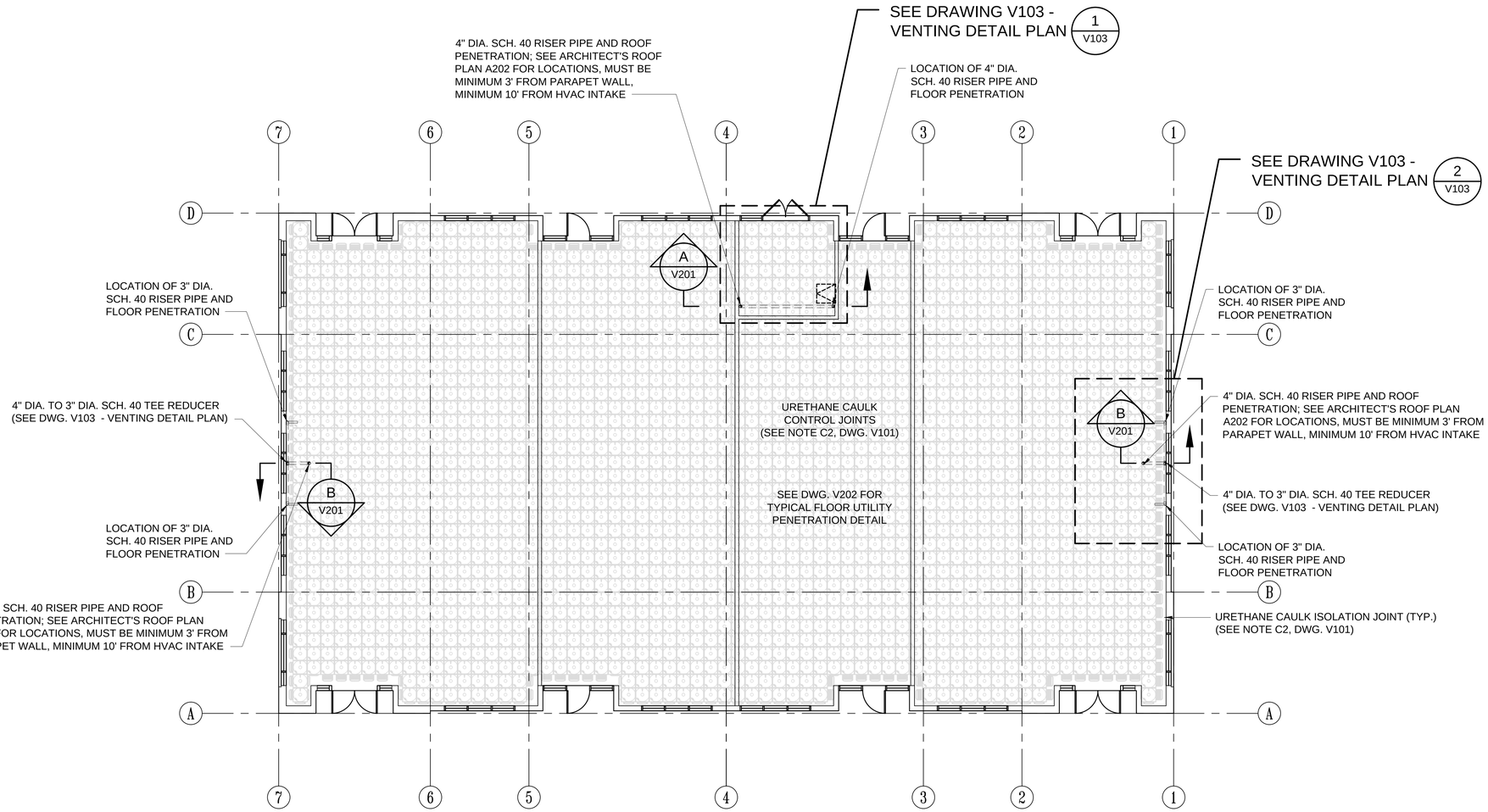
Folkes, D., 2012. Performance of Aerated Floor VI Mitigation Systems, presented at AEHS 22nd Annual International Conference on Soil, Water, Energy, & Air, San Diego, CA, March 20, 2012.

Kivi, A., 2013. Evaluation of structural dome formwork systems in concrete pavement applications, thesis, University of Waterloo, Canada.

NJDEP, 2013. Vapor Intrusion Guidance, New Jersey Department of Environmental Protection, October 2005, revised 2012, 2013.

Wright Engineers, 2011. Project description, Child Development Center, Nellis Air Force Base, Nevada.

ATTACHMENT B



VENTING LAYOUT PLAN

SCALE: 1/8" = 1'-0"
(FULL SIZE 36"x24")

SEE STRUCTURAL DRAWINGS FOR CUPOLEX SLAB PLAN AND DETAILS BY OTHERS.

NOTE:

1. SEE ARCHITECT'S ROOF PLAN DWG. A202 FOR LOCATION OF ROOF PENETRATIONS.
2. ROUTE PIPE TO MINIMIZE LENGTH OF PIPE RUNS AND NUMBER OF FITTINGS.

Vapor Intrusion Solutions
7009 S. Potomac Street, Suite 300
Centennial, Colorado 80112
P. 303-790-1340 F. 303-790-1347

CUPOLEX®

Alameda Station
Building B
1620-1640 Park Street
Alameda, CA 94501

NUMBER	DATE	DESCRIPTION
1	04/12/13	ISSUE FOR REVIEW
2	04/15/13	BID SET
3	07/03/13	ISSUED FOR PERMIT

DATE: JULY 03, 2013
DESIGN BY: DF/JL
PROJECT MGR: DF
PROJECT NO: DEV001

Venting Layout Plan

V102

(6) 4" DIA. SCHEDULE 40 PVC PIPE TO CONNECT VOID SPACE ON EITHER SIDE OF THE CUT AT APPROXIMATELY 8'-0" o.c. PROVIDE AT LEAST (1) PIPE FOR CUTS OVER 4'-0" LONG. IN ADDITION, ADD PIPES IN ANY LOCATIONS ALONG THE CUT AS NECESSARY TO PREVENT INSOLATING THE VOID SPACE UNDER ANY PORTION OF THE FLOOR FROM THE VOID SPACE UNDER OTHER PORTIONS OF THE FLOOR

(7) #4 AT 12" o.c., TOP AND BOTTOM EACH WAY

(8) REPLACE WELDED WIRE FABRIC LISTED ON PLANS

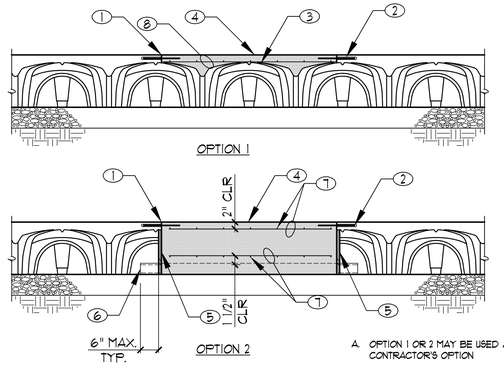
(1) ROUGHEN SURFACE TO 1/4" AMPLITUDE, TYP.

(2) #4 x 8" (MIN.) HORIZONTAL EPOXY ANCHORED DOUELS CENTERED IN THICKNESS OF EXISTING SLAB. SPACE DOUELS AT 2'-0" o.c. MAX. EMBED DOUELS 4 1/2" INTO CONCRETE. USE SIMPSON SET-XP OR HILTI HIT-RE 500-SD EPOXY

(3) REPLACE CUPOLEX/BENTON STOP. IF SLAB CUT DOES NOT OCCUR AT CUPOLEX JOINT, FORM EDGES w/ PLYWOOD AND INSTALL CUPOLEX (OR PORTIONS OF CUPOLEX) TO FILL VOID.

(4) CONCRETE TO MEET REQUIREMENTS OF G.S.N.

(5) FORM SIDES w/ PLYWOOD



A. OPTION 1 OR 2 MAY BE USED AT CONTRACTOR'S OPTION

B. SEE VENTING PLANS FOR ADDITIONAL REQUIREMENTS

103 CUPOLEX SLAB REPAIR

103-130458 NO SCALE

(4) COMPACTED GRANULAR BASE

(5) CUPOLEX H26 (10")

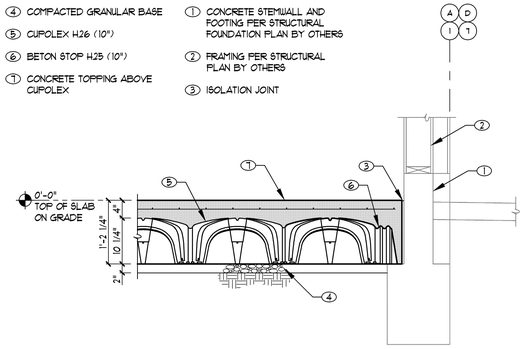
(6) BETON STOP H25 (10")

(7) CONCRETE TOPPING ABOVE CUPOLEX

(1) CONCRETE STEMWALL AND FOOTING PER STRUCTURAL FOUNDATION PLAN BY OTHERS

(2) FRAMING PER STRUCTURAL PLAN BY OTHERS

(3) ISOLATION JOINT



101 TYPICAL EDGE OF SLAB

101-130458 NO SCALE

(1) JOINTS TO BE EQUALLY SPACED AT SPACING NOT TO EXCEED 8'-0" o.c.

(2) PLACE (2) #3 x 48" BARS AT MID-HEIGHT OF SLAB ADJACENT TO ALL DISCONTINUOUS JOINT LOCATIONS. CENTER ON JOINT

(3) WHERE CONTROL JOINT SECTIONS ARE RECTANGULAR, WIDTH "W" SHALL NOT EXCEED 1.5 TIMES LENGTH "L"

(4) DEPTH EQUAL TO 1/4" SLAB THICKNESS

(5) SAW-CUT JOINT. SAW CUT SHALL BE MADE w/ EARLY ENTRY SAW SOON ENOUGH TO PREVENT SHRINKAGE CRACKING, BUT NOT SO SOON AS TO CAUSE SPALLING

TYPICAL CONTROL JOINT LAYOUT

A SAW-CUT CONTROL JOINT

A. TOOLED JOINT OF EQUIVALENT DEPTH MAY BE USED IN LIEU OF SAW-CUT JOINT

102 TYPICAL CONTROL JOINTS IN SLAB ON GRADE

103-120811 NO SCALE

S503-130458-D

JOHN MALICK & ASSOCIATES

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Revisions	Date
Design Review Modifications	07/31/12
City Council Changes	10/16/12
Design Development Set	03/01/13
Building Permit Submittal	04/08/13
Bid Set	04/15/13

Alameda Station
Building B

1620-1640 Park Street
Alameda, CA 94501

Drawing Title

Cupolex Details

Scale AS NOTED

Drawn By CAD

Job Number 130458

Drawing Number

S503

CUPOLEX LAYOUT PLAN NOTES

A. THIS DRAWING IS FOR CUPOLEX LAYOUT ONLY. SEE STRUCTURAL DRAWINGS BY OTHERS FOR STRUCTURAL REQUIREMENTS AND ADDITIONAL REINFORCING REQUIREMENTS NOT SHOWN.

B. PLACE 2" OF COMPACTED GRAVEL DIRECTLY BELOW CUPOLEX FORMS.

C. ALL CUPOLEX SHALL BE 10" UNLESS NOTED OTHERWISE.

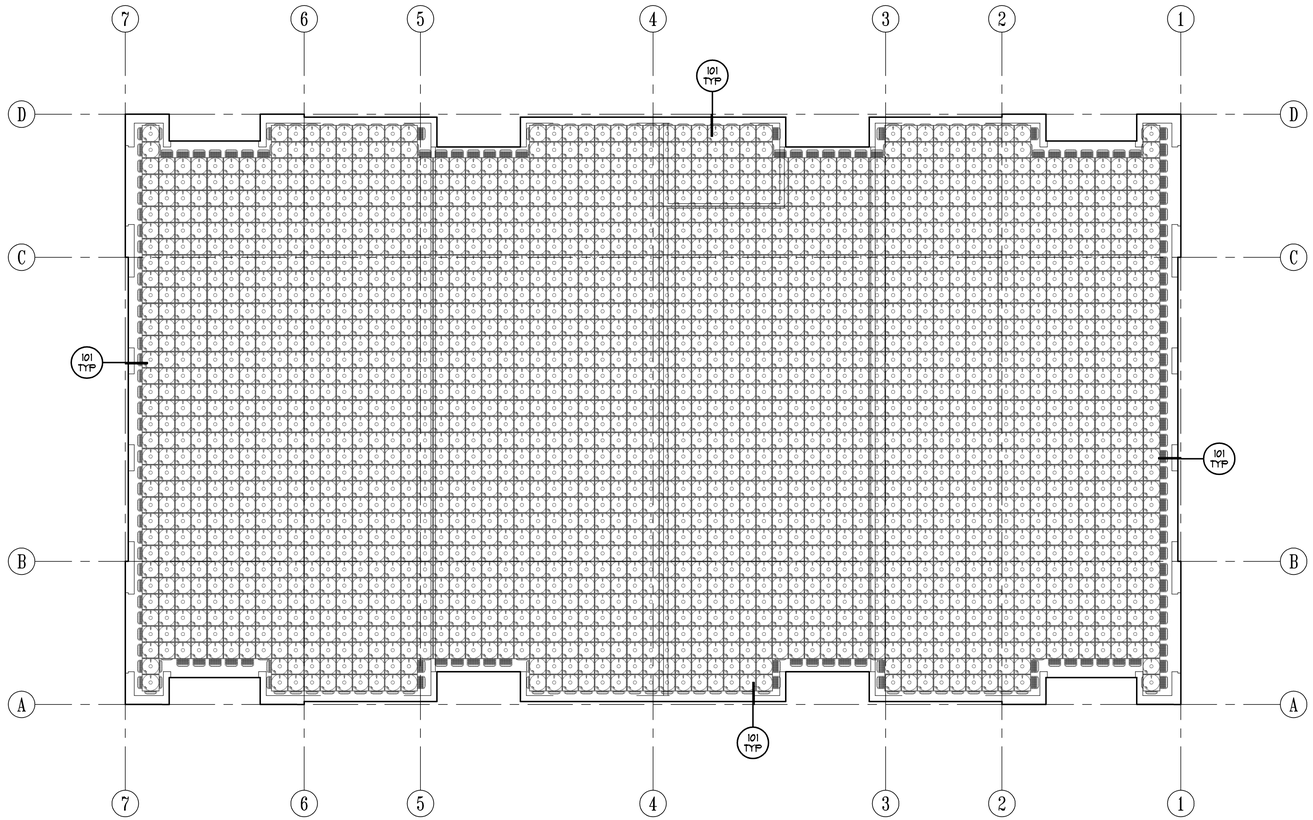
D. MINIMUM CONCRETE THICKNESS ABOVE CUPOLEX IS 4". REINFORCE WITH 6x6 W2.9xW2.9 WWF PLACED DIRECTLY ON TOP OF CUPOLEX FORM. PROVIDE CONTROL JOINTS PER DETAIL 102.

E. VERIFY DIMENSIONS SHOWN WITH FOUNDATION PLAN BY OTHERS

F. MINIMUM SUBGRADE MODULUS OF 150 pci REQUIRES VERIFICATION BY THE GEOTECHNICAL ENGINEER.

G. THESE DRAWINGS DO NOT CONSTITUTE DESIGNS FOR CONTROL OF RADON, METHANE, MOISTURE, OR ANY OTHER TYPE OF VAPORS. ENGINEER DOES NOT WARRANT OR REPRESENT THAT INSTALLATION OF A CUPOLEX(R) FLOOR AND RISER PIPE ALONE AS SHOWN ON THE DRAWINGS WILL BE SUFFICIENT TO CONTROL ANY VAPOR OR MOISTURE PROBLEMS THAT MAY EXIST. A QUALIFIED RADON MITIGATION OR ENVIRONMENTAL PROFESSIONAL SHOULD 1) DETERMINE THE NEED FOR, 2) DESIGN, 3) INSTALL, AND 4) CONFIRM THE ADEQUATE PERFORMANCE OF ANY VAPOR INTRUSION OR MOISTURE CONTROL SYSTEM, INCLUDING BUT NOT LIMITED TO THE addition OF AN ELECTRIC (E.G., RADON) FAN, ADDITIONAL SEALING OF THE FLOOR, AND OTHER ACTIONS THAT MAY BE REQUIRED OR RECOMMENDED BY APPLICABLE FEDERAL, STATE OR LOCAL REGULATIONS OR GUIDANCE AND GOOD INDUSTRY PRACTICES.

H. REPAIR CUTS IN SLAB PER DETAIL 103.



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

CUPOLEX LAYOUT PLAN

JOHN MALICK & ASSOCIATES

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Alameda Station
Building B

1620-1640 Park Street
Alameda, CA 94501

Drawing Title

Cupolex Layout Plan

Scale: AS NOTED

Drawn By: CAD

Job Number: 130458

Drawing Number

S502

S502-130458-CS

GENERAL STRUCTURAL NOTES

A. GENERAL

1. THESE DRAWINGS HAVE BEEN PREPARED USING STANDARDS OF PROFESSIONAL CARE AND COMPLETENESS NORMALLY EXERCISED UNDER SIMILAR CIRCUMSTANCES BY REPUTABLE STRUCTURAL ENGINEERS IN THIS OR SIMILAR LOCALITIES. THEY ASSUME THAT THE WORK DEPICTED WILL BE PERFORMED BY AN EXPERIENCED CONTRACTOR AND/OR WORKMEN WHO HAVE A WORKING KNOWLEDGE OF THE APPLICABLE CODE STANDARDS AND REQUIREMENTS AND OF INDUSTRY ACCEPTED STANDARD GOOD PRACTICE. AS NOT EVERY CONDITION OR ELEMENT IS (OR CAN BE) EXPLICITLY SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL USE INDUSTRY ACCEPTED STANDARD GOOD PRACTICE FOR MISCELLANEOUS WORK NOT EXPLICITLY SHOWN.

2. THESE DRAWINGS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, LAGGING, SHORING, BRACING, FORM-WORK, ETC. AS REQUIRED FOR THE PROTECTION OF LIFE AND PROPERTY DURING CONSTRUCTION. CONSTRUCTION MATERIALS SHALL BE UNIFORMLY SPREAD OUT SUCH THAT DESIGN LIVE LOAD PER SQUARE FOOT AS NOTED HEREIN IS NOT EXCEEDED.

3. DESIGN OF ITEMS NOT PART OF THE PRIMARY STRUCTURAL SYSTEM (SUCH AS STAIRS, RAILINGS, NON-STRUCTURAL WALLS) AND PREFABRICATED STRUCTURAL ITEMS (SUCH AS FLOOR, ROOF TRUSSES) SHALL BE PROVIDED BY OTHERS UNLESS SPECIFICALLY NOTED ON THESE DRAWINGS. REFER TO SUBMITTALS SECTION FOR ITEMS THAT MUST BE SUBMITTED FOR REVIEW AND FOR SUBMITTAL REQUIREMENTS.

4. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, CONDITIONS AND ELEVATIONS WITH ARCH'L. DRAWINGS AND RESOLVE ANY DISCREPANCIES WITH THE ARCHITECT PRIOR TO START OF CONSTRUCTION. CONTRACTOR SHALL ESTABLISH AND VERIFY ALL OPENINGS AND INSERTS FOR ARCH'L., MECH., PLUMBING AND ELECTRICAL WITH APPROPRIATE TRADES, DRAWINGS AND SUBCONTRACTORS PRIOR TO CONSTRUCTION.

5. TYPICAL DETAILS AND NOTES SHALL APPLY, THOUGH NOT NECESSARILY INDICATED AT A SPECIFIC LOCATION ON PLANS. WHERE NO DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT. DETAILS MAY SHOW ONLY ONE SIDE OF CONNECTION OR MAY OMIT INFORMATION FOR CLARITY.

6. NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS.

7. STANDARDS AND CODE REFERENCES NOTED IN THESE CONSTRUCTION DOCUMENTS REFER TO THE EDITIONS ADOPTED BY THE BUILDING CODE SPECIFIED IN THE BASIS FOR DESIGN. REFERENCES NOT SPECIFICALLY ADOPTED BY SAID BUILDING CODE REFER TO THE LATEST EDITION.

8. ALL INSPECTIONS REQUIRED BY THE BUILDING CODES, JURISDICTION, OR THESE PLANS SHALL BE PROVIDED BY AN INDEPENDENT INSPECTION COMPANY OR THE BUILDING DEPARTMENT. SITE VISITS BY THE ENGINEER DO NOT CONSTITUTE AN INSPECTION.

B. BASIS FOR SLAB DESIGN

1. BUILDING CODE: 2010 CALIFORNIA BUILDING CODE

2. FLOOR LOADS: LIVE LOAD
   100 PSF (RETAIL)

C. CUPOLEX SLAB

1. CUPOLEX SLAB DESIGNED PER RECOMENDATIONS BY JENSEN-VAN LIENDEN ASSOCIATES, INC., REPORT NO. X164AA, DATED NOVEMBER 22, 2011. SITE PREPARATION, GRADING, TESTS, INSPECTIONS, OR FIELD OBSERVATIONS RECOMMENDED BY THE CODE SHALL BE COMPLETED PRIOR TO CONSTRUCTION OF FOUNDATIONS.

2. ALLOWABLE DEAD PLUS LIVE LOAD SOIL PRESSURE = 1600 PSF

3. TRENCHES AND EXCAVATIONS UNDER OR ADJACENT TO FOUNDATIONS SHALL BE PROPERLY BACKFILLED AND CUPOLEX SLAB COMPACTED.

D. CONCRETE

1. ALL CONCRETE CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH ACI 318 AND ACI 301, EXCEPT AS MODIFIED BY THE CONSTRUCTION DOCUMENTS.

2. MIN. 28 DAY COMPRESSIVE STRENGTH, f'c, SHALL BE 3500 PSI FOR ALL CONCRETE OVER COMPLEX FORMS (DESIGN BASED ON 2500 PSI).

3. CONCRETE MIXES SHALL BE DESIGNED BY A CERTIFIED LABORATORY, STAMPED BY AN APPROPRIATELY LICENSED SPECIALTY ENGINEER, AND APPROVED BY THE ENGINEER OF RECORD. MIX DESIGNS SHALL INCLUDE THE PROJECT NAME AND INDICATE THEIR USE WITHIN THE STRUCTURE. MIX DESIGNS SHALL BE PROPORTIONED TO MINIMIZE SHRINKAGE AND HAVE PROVEN SHRINKAGE CHARACTERISTICS OF 0.05% OR LESS BASED ON TESTING PER ASTM C157.

4. IF USED, EARLY STRENGTH CONCRETE SHALL BE PROPORTIONED TO DEVELOP THE 28 DAY COMPRESSIVE STRENGTH AT THE AGE REQUIRED BY THE CONTRACTOR. CONTRACTOR SHALL SUBMIT TEST DATA FOR REVIEW BY THE STRUCTURAL ENGINEER TO SUBSTANTIATE THE CONCRETE STRENGTH AT THE REQUIRED AGE.

5. ALL CONCRETE SHALL BE NORMAL WEIGHT OF 145 POUNDS PER CUBIC FOOT USING HARD ROCK AGGREGATES CONFORMING TO ASTM C33 U.N.O. LARGEST NOMINAL AGGREGATE SIZE SHALL BE 3/4" OR GREATER AND SHALL MEET REQUIREMENTS OF SPECIFICATIONS.

6. MAX. SLUMP SHALL BE PER SPECIFICATIONS. MIX WATER SHALL BE CLEAN AND POTABLE.

7. PORTLAND CEMENT SHALL CONFORM TO ASTM C150, TYPE V. CEMENT SHALL BE TYPE V WITH POZZOLAN WHERE CONCRETE IS IN CONTACT WITH SOIL CONTAINING VERY SEVERE SULFATE EXPOSURE.

8. WATER SOLUBLE CHLORIDE ION CONCENTRATIONS IN CONCRETE SHALL BE LIMITED PER ACI 318, SECTION 4.4.

9. TIME BETWEEN CONCRETE BATCHING AND PLACEMENT SHALL BE IN ACCORDANCE WITH ASTM C94.

10. CONCRETE MIXING, PLACEMENT AND QUALITY SHALL BE PER IBC SECTION 1905. MECHANICALLY VIBRATE ALL CONCRETE WHEN PLACED. SLABS ON GRADE NEED BE VIBRATED ONLY AROUND AND UNDER FLOOR DUCTS OR SIMILAR ELEMENTS. REMOVE ALL DEBRIS FROM FORMS BEFORE PLACING CONCRETE. CONCRETE SHALL NOT BE DROPPED THROUGH REINFORCING STEEL SO AS TO CAUSE SEGREGATION OF AGGREGATES. UNCONFINED FALL OF CONCRETE SHALL NOT EXCEED 5 FEET.

11. PROTECT CONCRETE FROM DAMAGE OR REDUCED STRENGTH DUE TO COLD OR HOT WEATHER IN ACCORDANCE WITH ACI 305 AND 306. CONTRACTOR SHALL TAKE SPECIAL CURING PRECAUTIONS TO MINIMIZE SHRINKAGE CRACKING OF CONCRETE SLABS.

12. ALL ITEMS TO BE CAST IN CONCRETE SUCH AS REINFORCEMENT, DOWELS, BOLTS, ANCHORS, SLEEVES, ETC., SHALL BE SECURELY POSITIONED IN THE FORMS.

13. CONSTRUCTION JOINT SURFACES SHALL BE CLEANED AND LAITANCE REMOVED. HORIZONTAL JOINT SURFACES SHALL BE ROUGHENED TO 1/4" AMPLITUDE. THOROUGHLY WET ALL JOINT SURFACES AND REMOVE STANDING WATER IMMEDIATELY PRIOR TO NEW CONCRETE PLACEMENT.

14. CONCRETE SHALL BE CURED IN ACCORDANCE WITH ACI 318, SECTIONS 5.11.1 OR 5.11.2, WHICHEVER IS APPLICABLE, UNLESS ALTERNATE METHODS HAVE BEEN APPROVED BY THE ARCHITECT AND ENGINEER. WHERE CURING COMPOUNDS HAVE BEEN APPROVED FOR SLAB CURING, CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING COMPATIBILITY OF COMPOUNDS WITH ANTICIPATED FLOOR FINISH (e.g., RESILIENT TILE) PRIOR TO CURING COMPOUND APPLICATION.

E. REINFORCING STEEL

1. REINFORCING STEEL SHALL BE DETAILED AND PLACED IN ACCORDANCE WITH ACI 318 AND CRSI'S MANUAL OF STANDARD PRACTICE.

2. REINFORCING STEEL SHALL CONFORM TO ASTM A615 OR ASTM A706 (A706 REQUIRED FOR ALL REINFORCING TO BE WELDED) AND SHALL BE GRADE 60 (f_y = 60 KSI) DEFORMED BARS U.N.O.

3. WELDED WIRE FABRIC SHALL CONFORM TO THE REQUIREMENTS OF ASTM A185. LAPS IN WELDED WIRE FABRIC SHALL BE MADE SUCH THAT THE OVERLAP, MEASURED BETWEEN OUTERMOST CROSS WIRE OF EACH FABRIC SHEET, IS NOT LESS THAN THE SPACING OF CROSS WIRES PLUS 2 INCHES.

4. RECTANGULAR PLATE DOWELS AND SMOOTH ROUND DOWELS USED AT CONTROL AND CONSTRUCTION JOINTS IN SLABS ON GRADE SHALL CONFORM TO ASTM A36. REFER TO TYPICAL CONTROL JOINTS IN SLAB ON GRADE DETAIL FOR SIZE, PLACEMENT, SPACING, ETC. RECTANGULAR PLATE DOWELS SHALL BE BY FNA CONSTRUCTION TECHNOLOGIES (800-542-0214) OR OTHER MFR. APPROVED BY ENGINEER. INSTALL ALL PLATE DOWEL BASKET ASSEMBLIES PER MFR.'S RECOMMENDATIONS.

5. ALL DIMENSIONS SHOWING THE LOCATION OF REINFORCING STEEL NOT NOTED AS "CLEAR" OR "CLR." ARE TO CENTER OF STEEL. CLEAR COVER FOR NON-PRESTRESSED CONCRETE REINFORCING SHALL BE AS NOTED BELOW U.N.O. ON PLANS OR DETAILS. CLEAR COVER FOR PRESTRESSED CONCRETE AND FOR PRECAST CONCRETE MANUFACTURED UNDER PLANT CONTROL CONDITIONS SHALL BE PER ACI 318, SECTIONS 7.7.2 AND 7.7.3, RESPECTIVELY.

EXPOSURE CONDITION:	COVER:
CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3"
EXPOSED TO EARTH OR WEATHER (INCLUDES SLABS ON GRADE)	
NO. 5 AND SMALLER	1 1/2"
NO. 6 AND LARGER	2"
NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND	
STRUCTURAL SLABS, WALLS, JOISTS	
NO. 11 AND SMALLER	3/4"
NO. 14 AND LARGER	1 1/2"
BEAMS, COLUMNS (PRIMARY REINFORCEMENT, TIES, STIRRUPS, SPIRALS)	1 1/2"

6. LAP SPLICES OF REINFORCING STEEL SHALL CONFORM TO TYPICAL REBAR LAP SCHEDULE U.N.O. NO TACK WELDING OF REINFORCING BARS ALLOWED. LATEST ACI CODE AND DETAILING MANUAL APPLY. AT WALLS AND FOOTINGS, PROVIDE BENT CORNER BARS TO MATCH AND LAP WITH HORIZ. BARS AT ALL CORNERS AND INTERSECTIONS U.N.O. VERT. WALL BARS SHALL BE SPLICED AT OR NEAR FLOOR LINES. SPLICE TOP BARS AT CENTER LINE OF SPAN AND BOTTOM BARS AT THE SUPPORT IN SPANDRELS, BEAMS, GRADE BEAMS, ETC., U.N.O. ON PLANS OR DETAILS.

7. MECHANICAL SPLICE COUPLERS SHALL HAVE CURRENT ICC APPROVAL AND SHALL BE CAPABLE OF DEVELOPING 125% OF THE SPLICED BAR'S YIELD STRENGTH.

8. ALL REINFORCING SHALL BE BENT COLD. BARS SHALL NOT BE UN-BENT AND RE-BENT. FIELD BENDING OF REBAR SHALL NOT BE ALLOWED UNLESS SPECIFICALLY NOTED.

9. WELDING OF REINFORCING BARS, METAL INSERTS, AND CONNECTIONS SHALL BE MADE ONLY AT LOCATIONS SHOWN ON PLANS OR DETAILS. SEE WELDING SECTION OF G.S.N. FOR ADDITIONAL REQUIREMENTS.

10. REINFORCING BAR SPACINGS SHOWN ON PLANS ARE MAX. ON CENTER DIMENSIONS. DOWEL ALL VERT. REINFORCING TO FOUNDATION. SECURELY TIE ALL BARS IN LOCATION BEFORE PLACING CONCRETE. MIN. CLEAR SPACING BETWEEN PARALLEL REINFORCEMENT SHALL BE THE LARGER OF 1-1/2 TIMES NOMINAL BAR DIA. OR 1-1/3 TIMES MAX. AGGREGATE SIZE OR 1-1/2". CLEAR SPACING LIMITATION APPLIES ALSO TO CLEAR DISTANCE BETWEEN A CONTACT LAP SPLICE AND ADJACENT SPLICES OR BARS.

F. SUBMITTALS

1. PREFABRICATED COMPONENTS, SPECIALTY ITEMS, OR DESIGN-BUILD ELEMENTS NOTED ON THE STRUCTURAL DRAWINGS, BUT WHICH REQUIRE THE MFR. OR SUPPLIER TO PROVIDE THE DESIGN, MAY BE SUBMITTED TO THE ARCHITECT AND/OR ENGINEER FOR REVIEW AS A DEFERRED SUBMITTAL. DEFERRED SUBMITTALS REQ'D. BY THE STRUCTURAL ENGINEER OF RECORD SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING:

   CONCRETE MIX DESIGNS

2. DEFERRED SUBMITTALS SHALL INCLUDE CALCULATIONS AND DRAWINGS PREPARED AND STAMPED BY AN APPROPRIATELY LICENSED ENGINEER (SPECIALTY ENGINEER) SHOWING LOCATION AND MAGNITUDE OF LOADS, CONFIGURATION AND SIZE OF MEMBERS, AND COMPATIBILITY OF SUBMITTAL ITEM WITH THE PRIMARY STRUCTURAL SYSTEM.

3. THE PURPOSE OF THE STRUCTURAL ENGINEER'S REVIEW OF DEFERRED SUBMITTALS SHALL BE LIMITED TO DETERMINING THAT THE DRAWINGS AND CALCULATIONS HAVE BEEN PROPERLY SEALED, THAT THE LOAD CRITERIA IS IN GENERAL CONFORMANCE WITH THE CONTRACT DOCUMENTS AND WITH THE REFERENCED BUILDING CODE, THAT CONNECTIONS TO THE PRIMARY STRUCTURE ARE COMPATIBLE WITH THE PRIMARY DESIGN, AND THAT THE PRIMARY STRUCTURE IS CAPABLE OF SUPPORTING THE IMPOSED LOADS.

4. THE STRUCTURAL ENGINEER WILL RELY UPON THE SPECIALTY ENGINEER'S SEAL AS CERTIFICATION THAT THE ITEMS DESIGNED BY THE SPECIALTY ENGINEER COMPLY WITH THE CRITERIA SET FORTH IN THE CONTRACT DOCUMENTS AND APPLICABLE CODES AND STANDARDS. THE STRUCTURAL ENGINEER SHALL NOT BE RESPONSIBLE FOR THE ADEQUACY OF DESIGNS PROVIDED BY OTHERS.

5. FOR ALL SUBMITTALS, ANY CORRECTIONS NOTED WILL BE MARKED ON ONE (1) COPY SET ONLY AND RETURNED. ADDITIONAL COPIES OF ANY SUBMITTAL WILL BE RETURNED UNMARKED. CONTRACTOR SHALL BE RESPONSIBLE FOR REPRODUCING ENGINEER'S CORRECTIONS ON ADDITIONAL COPIES REQ'D. ONE COPY SET MAY BE RETAINED FOR THE ENGINEER'S RECORDS. ALLOW FIVE (5) TO TEN (10) WORKING DAYS FOR THE ENGINEER'S REVIEW.

6. REFER TO APPLICABLE G.S.N. SECTIONS FOR FURTHER REQUIREMENTS SPECIFIC TO INDIVIDUAL SUBMITTALS.

STANDARD ABBREVIATIONS

A.B.	ANCHOR BOLT
ACI	AMERICAN CONCRETE INSTITUTE
A.C.S.	ALL COMMON SURFACES
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
AISI	AMERICAN IRON AND STEEL INSTITUTE
ALT.	ALTERNATE
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
A.R.	ANCHOR ROD
ARCH'L.	ARCHITECTURAL
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AWS	AMERICAN WELDING SOCIETY
B.F.	BOUNDARY FASTENERS
B.F.F.	BELOW FINISH FLOOR
BOT.	BOTTOM
BRG.	BEARING
C.J.	CONTROL JOINT
C.J.P.	COMPLETE JOINT PENETRATION
℄	CENTER LINE
CLR.	CLEAR DIMENSION TO FACE OF REBAR
COL.	COLUMN
CONT.	CONTINUOUS
CRSI	CONCRETE REINFORCING STEEL INSTITUTE
DIA.	DIAMETER
DIAG.	DIAGONAL
DWG.	DRAWING
E.F.	EACH FACE
EL.	ELEVATION
ELECT.	ELECTRICAL
E.O.R.	ENGINEER OF RECORD
EQ.	EQUAL
E.W.	EACH WAY
F.F.	FINISH FLOOR
FLR.	FLOOR
FT.	FOOT
FTG.	FOOTING
GA.	GAUGE
GLB	GLULAM BEAM
G.S.N.	GENERAL STRUCTURAL NOTES
G.T.	GIRDER TRUSS
HORIZ.	HORIZONTAL
HSS	HOLLOW STRUCTURAL SECTION
IBC	INTERNATIONAL BUILDING CODE
ICC	INTERNATIONAL CODE COUNCIL
I.D.	INSIDE DIAMETER
INFO.	INFORMATION
JT.	JOINT
K	KIP (1000 LBS)
K.O.	KNOCKOUT
KSI	KIPS PER SQUARE INCH
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LSL	LAMINATED STRAND LUMBER
LVL	LAMINATED VENEER LUMBER
MFR.	MANUFACTURER
MAX.	MAXIMUM
MECH.	MECHANICAL
MIN.	MINIMUM
MISC.	MISCELLANEOUS
N.T.S.	NOT TO SCALE
o.c.	ON CENTER
O.D.	OUTSIDE DIAMETER
OPP.	OPPOSITE
PL.	PLATE
PLF	POUNDS PER LINEAR FOOT
PLYWD.	PLYWOOD
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSL	PARALLEL STRAND LUMBER
RCSC	RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS
REQ'D.	REQUIRED
SIM.	SIMILAR
SLRS	SEISMIC LOAD RESISTING SYSTEM
SPEC.	SPECIFICATION
STD.	STANDARD
SW	SHEAR WALL
T & B	TOP AND BOTTOM
T & G	TONGUE AND GROOVE
THRU	THROUGH
T.O.	TOP OF
T.O.D.	TOP OF DECK
T.O.F.	TOP OF FOOTING
T.O.L.	TOP OF LEDGER
T.O.S.	TOP OF STEEL
T.O.W.	TOP OF WALL
TYP.	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
VERT.	VERTICAL
w/	WITH
w/o	WITHOUT
WT.	WEIGHT

SHEET INDEX

- INDICATES PREVIOUSLY / CURRENTLY ISSUED SHEETS

PLANCHECK SUBMITTAL

JOHN MALICK & ASSOCIATES

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Revisions	Date
Design Review Modifications	07/31/12
City Council Changes	10/16/12
Design Development Set	03/01/13
Building Permit Submittal	04/08/13
Bid Set	04/15/13

Alameda Station
Building B

1620-1640 Park Street
Alameda, CA 94501

Drawing Title

General Structural Notes

Scale	AS NOTED
Drawn By	CAD
Job Number	130458

Drawing Number

S501

A. GENERAL

1. THE WORK DEPICTED ON THESE DRAWINGS SHALL BE PERFORMED BY AN EXPERIENCED CONTRACTOR WHO HAS A WORKING KNOWLEDGE OF APPLICABLE CODE STANDARDS AND INDUSTRY ACCEPTED STANDARD GOOD PRACTICE. NOT EVERY CONDITION OR ELEMENT IS OR CAN BE EXPLICITLY SHOWN ON THESE DRAWINGS, THEREFORE THE CONTRACTOR SHALL USE INDUSTRY ACCEPTED STANDARD GOOD PRACTICE FOR MISCELLANEOUS WORK NOT EXPLICITLY SHOWN.
2. ALL WORK SHALL BE IN COMPLIANCE WITH FEDERAL, STATE, AND LOCAL BUILDING, FIRE, AND ELECTRICAL CODES.
3. THE CONTRACTOR SHALL CONFER WITH AND SEEK THE APPROVAL OF THE ARCHITECT FOR THE FINAL LOCATIONS OF VENTING SYSTEM COMPONENTS.
4. ALL INSPECTIONS REQUIRED BY BUILDING CODES AND/OR THESE DRAWINGS SHALL BE PROVIDED BY AN INDEPENDENT INSPECTION COMPANY OR THE BUILDING DEPARTMENT AS APPLICABLE.

B. CUPOLEX VENTING NOTES

1. THE CUPOLEX VENTING SYSTEM CONSISTS OF: RISER PIPES THAT PENETRATE THE CUPOLEX FLOOR SLAB AT THE LOCATIONS SHOWN ON SHEETS V102 AND V103, RISE VERTICALLY AND RUN HORIZONTALLY INSIDE THE BUILDING TO THE ROOF PENETRATION POINTS, AND TERMINATE ABOVE THE ROOF. THE INTENT OF THE SYSTEM IS TO ALLOW PASSIVE AIR EXCHANGE IN THE VOID SPACE BELOW THE CUPOLEX SLAB. THE NEED FOR A FAN TO PROVIDE ACTIVE VENTING, IF ANY, WILL BE DETERMINED BY OTHERS.
2. WHEN FOOTINGS OR GRADE BEAMS OR OTHER BUILDING STRUCTURES ISOLATE ANY SECTION OF THE CUPOLEX FLOOR SLAB VOID SPACE, HORIZONTAL AIR TRANSFER PIPES SHALL BE PLACED THROUGH THESE STRUCTURES TO CONNECT THE VOID SPACES ON EITHER SIDE OF THE STRUCTURES, AS SHOWN ON SHEET V202.
3. RISER PIPES AND AIR TRANSFER PIPES SHALL BE SCHEDULE 40 PVC WITH CLASS A FIRE RATING AND FLAME/SMOKE INDEX OF AT MOST 25/50 BY METHOD ASTM E84. OTHER PIPE MATERIALS, E.G., CAST IRON, SHALL BE USED INSTEAD OF SCHEDULE 40 PVC WHEN REQUIRED BY BUILDING OR FIRE CODES.
4. ALL PVC PIPING CONNECTIONS SHALL BE SOLVENT CEMENTED AND PERMANENTLY SEALED USING A PRIMER MEETING ASTM F656 AND SOLVENT MEETING ASTM D2564. JOINTS SHALL BE MADE WHILE SOLVENT IS WET AND SHALL BE IN ACCORDANCE WITH ASTM 2855 AND ASTM F402.
5. AT THE TIME OF INSTALLATION, THE RISER PIPE STUBS AT THE CUPOLEX FLOOR PENETRATION POINT MUST BE MARKED WHERE STUBBED ABOVE THE FLOOR “SOIL VAPOR VENT PIPE” TO ENSURE PROPER IDENTIFICATION OF THE PIPE STUBS AFTER THE FLOOR SLAB HAS BEEN POURED.
6. ALL PIPING SHALL BE INSTALLED IN COMPLIANCE WITH BUILDING AND FIRE CODES. ALL VERTICAL PIPE RUNS SHALL BE SUPPORTED AT LEAST EVERY 10 FEET AND AT EVERY PENETRATION THROUGH SLABS, CEILINGS OR ROOF DECKS. HORIZONTAL PIPE RUNS SHALL BE SLOPED A MINIMUM OF 1/8” PER FOOT RUN TO ENSURE THAT ANY RAIN THAT ENTERS THE TOP OF THE PIPE AND ANY CONDENSATION THAT FORMS IN THE PIPE WILL DRAIN TOWARD THE FLOOR PENETRATION. HORIZONTAL RUNS SHALL BE SUPPORTED AT LEAST EVERY 4 FEET WITH CODE APPROVED HANGERS. ALL HORIZONTAL RUNS SHALL BE SUPPORTED WITHIN 2 FEET OF EACH FITTING.
7. EACH VERTICAL AND HORIZONTAL PIPE RUN SHALL BE CLEARLY AND PERMANENTLY LABELED AT LEAST EVERY 5 FEET “POTENTIALLY HAZARDOUS VOLATILE COMPOUNDS - DO NOT BLOCK OR DAMAGE PIPE” IN 2 INCH LETTERING, INCLUDING LABELS ON THE TERMINATION OF EACH VENT PIPE, EACH HORIZONTAL RUN ABOVE THE CEILING, EACH VERTICAL RUN ON EACH FLOOR OF THE BUILDING, AND AT EACH PIPE ACCESS PANEL, IF ANY. OWNER CONTACT INFORMATION SHALL BE INCLUDED ON THE LABELS.
8. RISER PIPES SHALL BE INSULATED WHERE CONDENSATION ON THE PIPE’S EXTERIOR MAY DRIP ONTO AND DAMAGE CEILINGS AND FLOORS, ETC., AND WHERE WATER VAPOR, FROM THE SOIL, MAY CONDENSE INSIDE THE PIPE, AND THEN FREEZE PARTIALLY OR FULLY BLOCKING THE SOIL-GAS EXHAUST.
9. RISER PIPE TERMINATION POINTS ON THE ROOF SHALL BE AT LEAST 3 FEET FROM ADJACENT WALLS INCLUDING PARAPET WALLS AND AT LEAST 10 FEET AWAY FROM HVAC AIR INTAKES, DOORS, WINDOWS, OR OTHER OPENINGS INTO THE OCCUPIED SPACE OF THE BUILDING OR ADJACENT BUILDINGS.
10. THE TOP OF THE RISER PIPES SHALL BE AT LEAST 18" ABOVE THE ROOF AND ANY IMMEDIATELY ADJACENT BUILDING ROOF AND AT LEAST 6 INCHES ABOVE THE TOP OF ANY ADJACENT PARAPET WALLS.
11. A VARMINT GUARD SHALL BE INSTALLED ON THE TOP OF RISER PIPES AS SPECIFIED ON SHEET V201.
12. PROVIDE 120 V AC 20 AMP ELECTRIC SERVICE TO WITHIN 5 FEET OF THE ROOF TOP LOCATION OF THE MECHANICAL ROOM RISER PIPE, WITH A DEDICATED CIRCUIT BREAKER AS A CONTINGENCY IN THE EVENT A FAN IS REQUIRED AT A LATER DATE.

C. FLOOR SLAB PENETRATIONS

1. THE INTENT OF THIS WORK IS TO ENSURE THAT THE VOID SPACE BELOW THE CUPOLEX FLOOR SLAB IS SEALED AT ALL LOCATIONS, TO MINIMIZE THE LEAKAGE OF AIR BETWEEN THE VOID SPACE AND THE INDOOR AIR SPACE OF THE BUILDING.
2. ALL EXPANSION JOINTS, CONTROL JOINTS, CONSTRUCTION JOINTS, AND OPEN CRACKS IN THE CUPOLEX FLOOR SLAB SHALL BE SEALED USING URETHANE CAULK ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
3. THE ANNULUS OF ALL UTILITIES, PIPES, AND OTHER CONDUITS THAT PENETRATE THE CUPOLEX FLOOR SLAB SHALL BE SEALED WITH A URETHANE GROUT ACCORDING TO MANUFACTURER'S RECOMMENDATIONS AND IN A MANNER MEETING APPLICABLE FIRE CODES.
4. ALL OPENINGS IN THE CUPOLEX FLOOR SLAB, SUCH AS OPENINGS CREATED BY PLUMBING BOX OUTS FOR TUBS OR SHOWERS, SHALL BE SEALED USING EXPANDING FOAM SEALANTS OR URETHANE CAULK.
5. URETHANE CAULK OR SEALANT SHALL COMPLY WITH FEDERAL SPECIFICATION TT-S-00230C (E.G. PECORA CORPORATION'S DYNATROL 1-XL, OR TREMCO'S VULKEM 116) AND FIRE CODES AS APPLICABLE.
6. ALL THE ABOVE SEALANT APPLICATIONS WILL BE MADE AT THE FINISHED CONCRETE FLOOR SURFACE.

Vapor Intrusion Solutions
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CUPOLEX®

Alameda Station
Building B
1620-1640 Park Street
Alameda, CA 94501

NUMBER	DATE	DESCRIPTION
1	04/12/13	ISSUE FOR REVIEW
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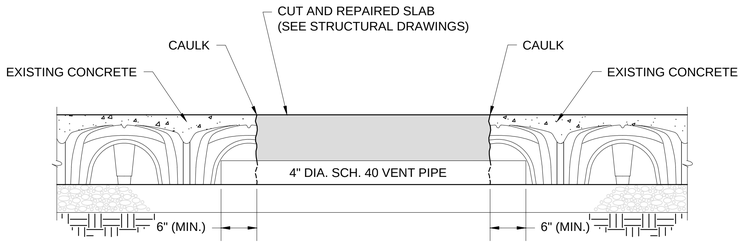
DATE: JULY 03, 2013
DESIGN BY: DF/JL
PROJECT MGR: DF
PROJECT NO: DEV001

Cupolex Venting System Notes

V101

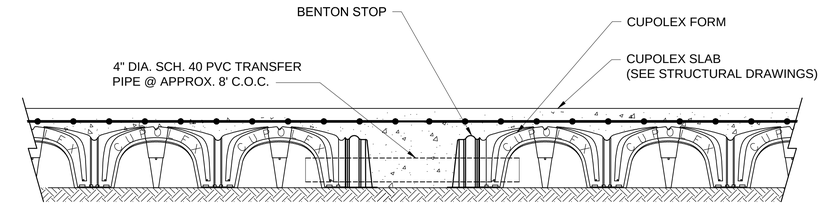


NOTE:
4" SCH. 40 PIPE CONNECTING VOIDS EITHER SIDE OF SAW CUT @ APPROX.
8 FT. ON CENTER (SEE SCHEMATIC PLAN BELOW). SEE NOTE B2, DWG. V101.

VENTING REQUIREMENTS FOR CUPOLEX CONCRETE SLAB REPAIRS - SECTION

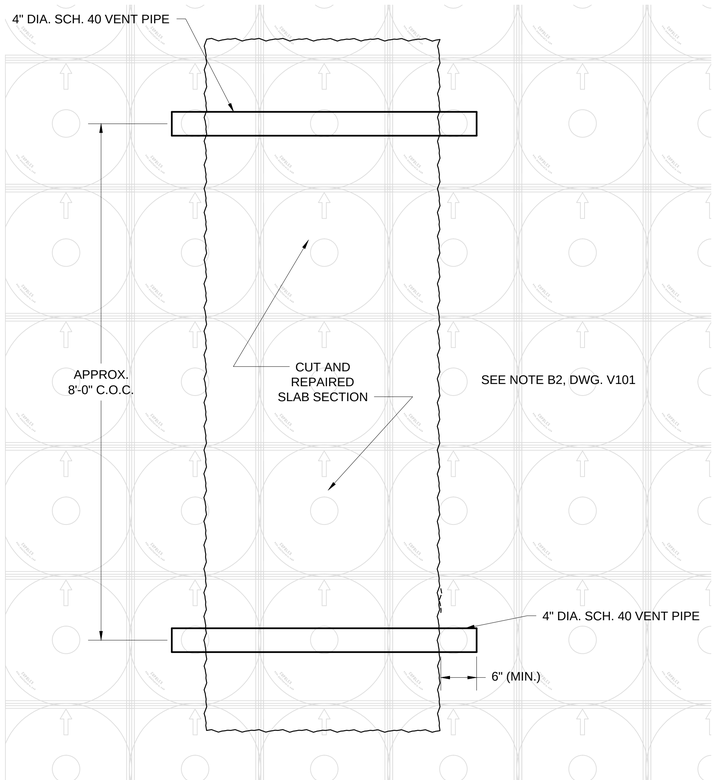
SCALE: 1" = 1'-0" (FULL SIZE 36"x24")

SEE STRUCTURAL DRAWINGS, CUPOLEX DETAILS, FOR SLAB REPAIR REQUIREMENTS.



TYPICAL VENT TRANSFER PIPE AT GRADE BEAMS OR FOOTINGS

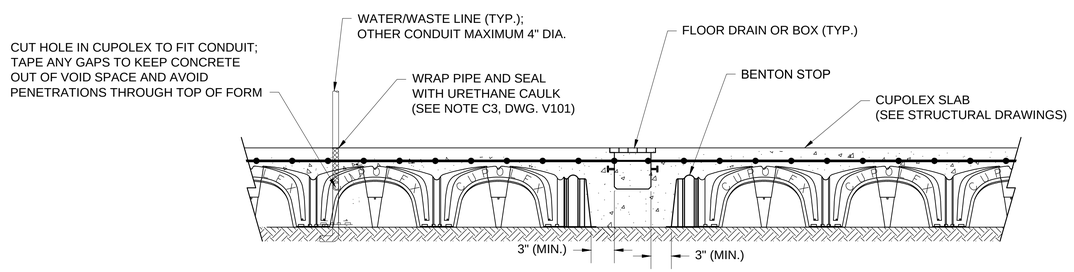
SCALE: NTS



VENTING REQUIREMENTS FOR CUPOLEX CONCRETE SLAB REPAIRS - SCHEMATIC PLAN

SCALE: 1" = 1'-0" (FULL SIZE 36"x24")

SEE STRUCTURAL DRAWINGS, CUPOLEX DETAILS, FOR SLAB REPAIR REQUIREMENTS.



TYPICAL UTILITY PENETRATION

SCALE: NTS

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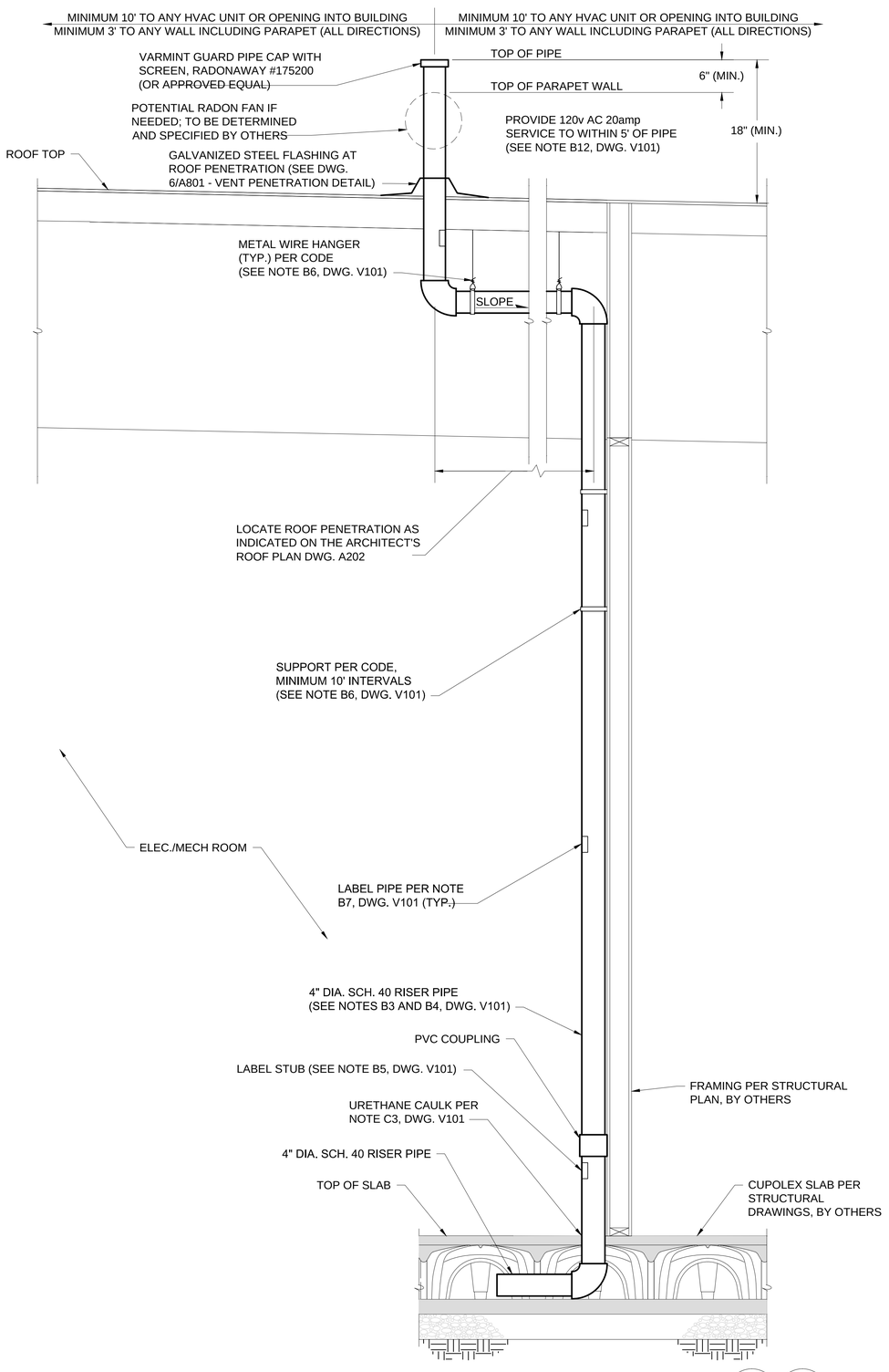
DESIGN BY: DF/JL
PROJECT MGR: DF
PROJECT NO: DEV001

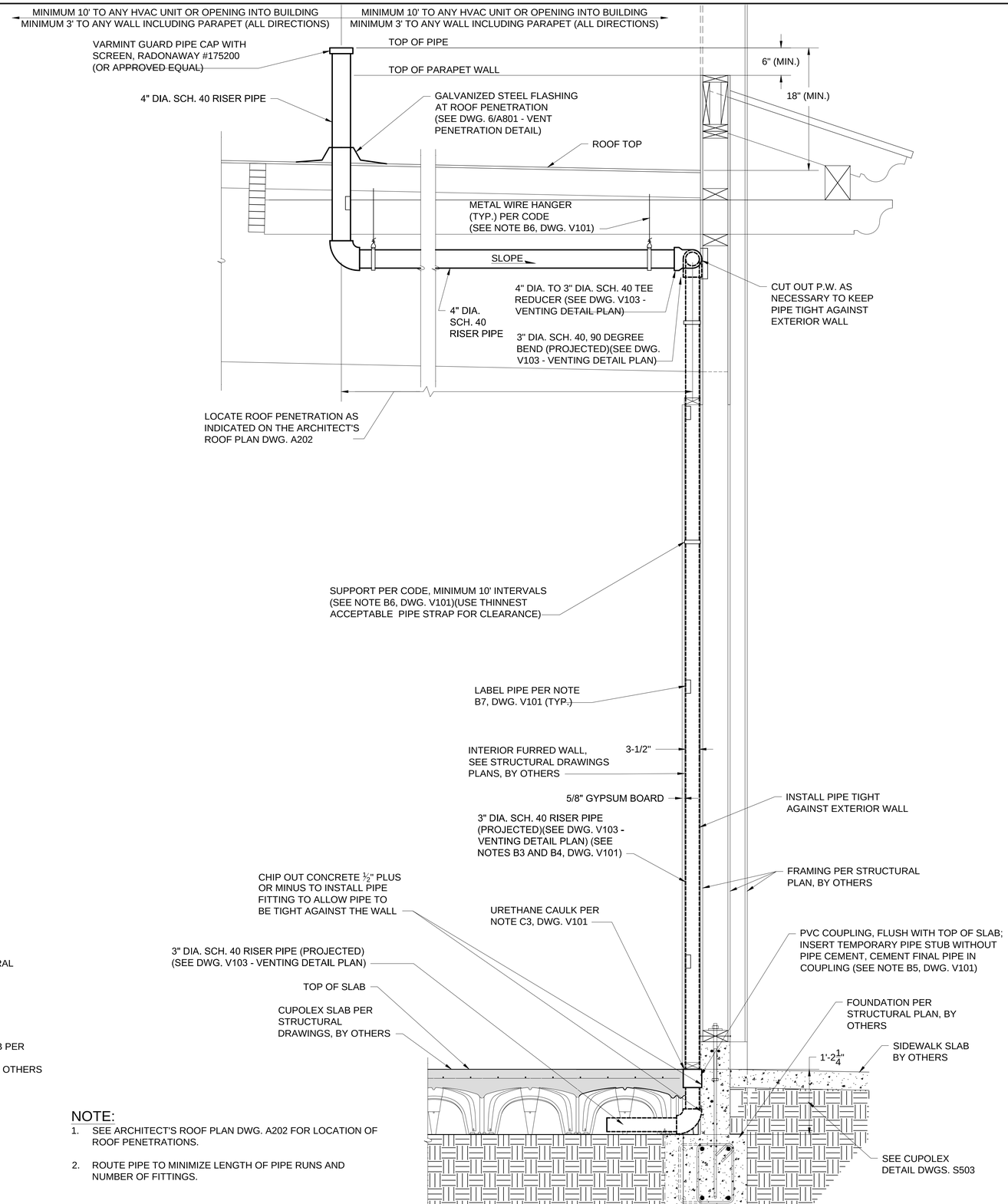
Venting Details
Sheet 2 of 2

V202



MECHANICAL ROOM RISER PIPE AND PENETRATION DETAIL (A / V102, A / V103)

SCALE: 1" = 1'-0"
(FULL SIZE 36"x24")



EXTERIOR WALL RISER PIPE AND PENETRATION DETAIL (B / V102, B / V103)

SCALE: 1" = 1'-0"
(FULL SIZE 36"x24")

NOTE:

1. SEE ARCHITECT'S ROOF PLAN DWG. A202 FOR LOCATION OF ROOF PENETRATIONS.
2. ROUTE PIPE TO MINIMIZE LENGTH OF PIPE RUNS AND NUMBER OF FITTINGS.

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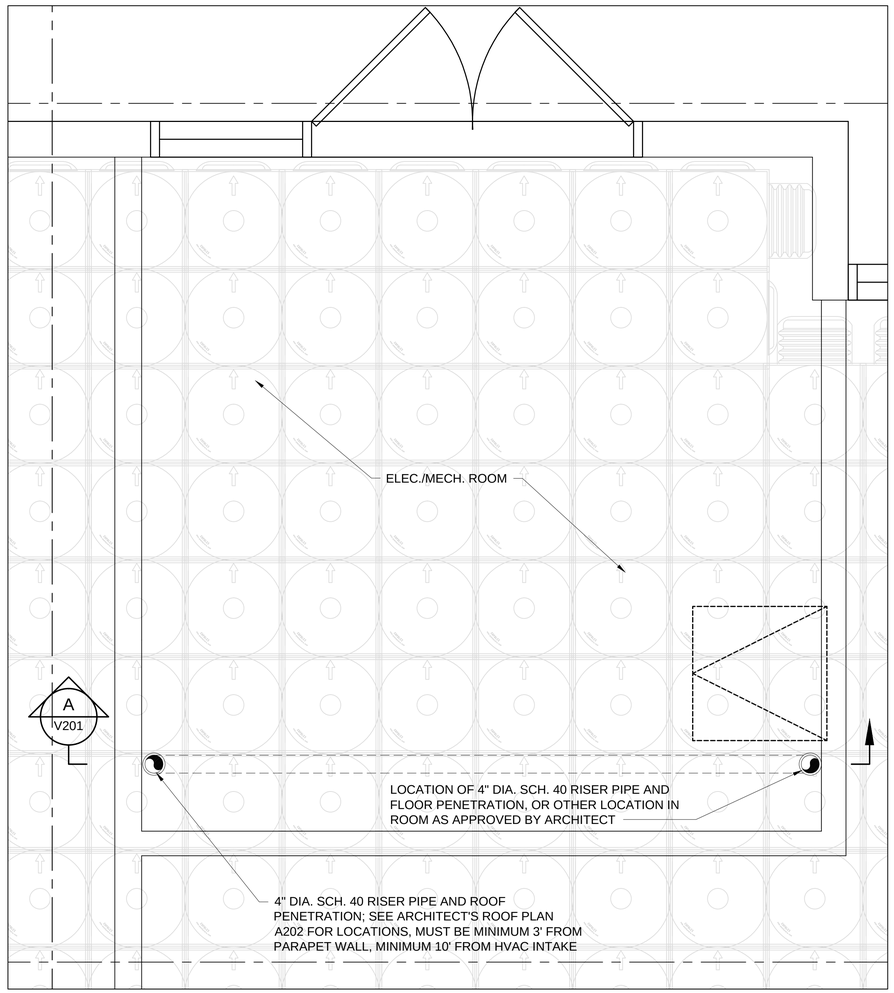
Venting Details
Sheet 1 of 2

V201

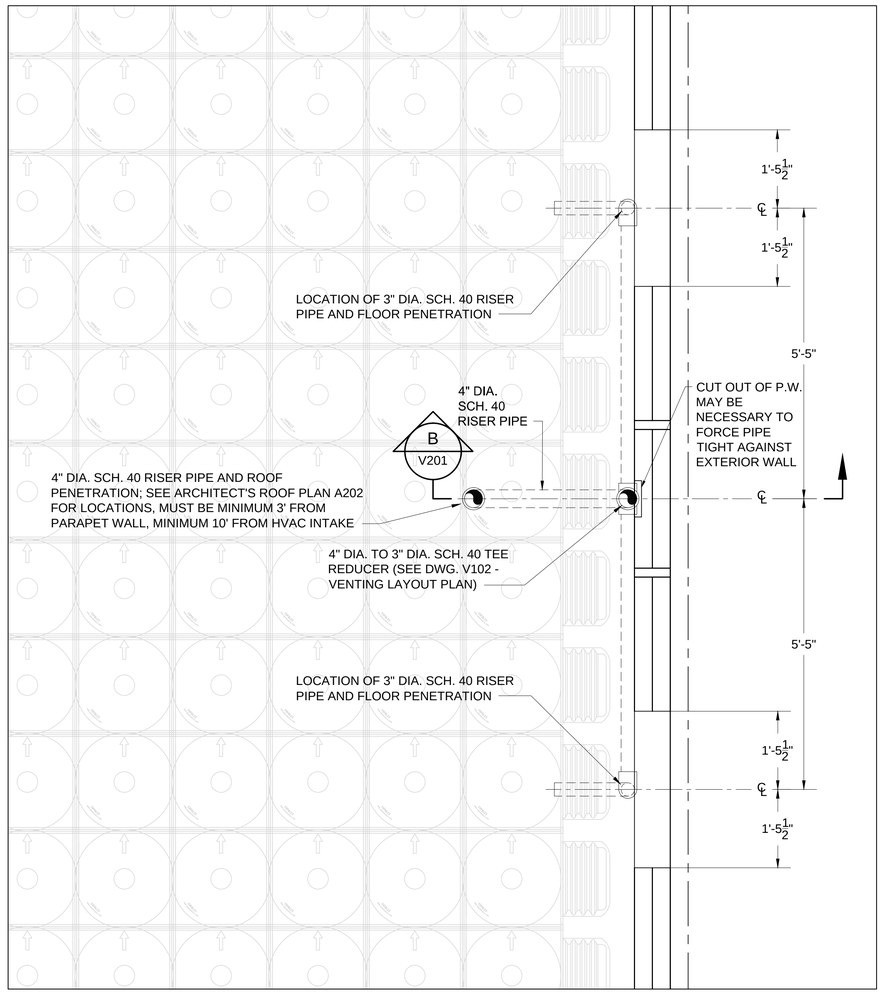


CUPOLEX DETAIL PLAN

SCALE: 3/4" = 1'-0" (FULL SIZE 36"x24")

ELECTRICAL/MECHANICAL ROOM LAYOUT AND FRAMING PER STRUCTURAL PLAN BY OTHERS.

1 / V102



CUPOLEX DETAIL PLAN

SCALE: 3/4" = 1'-0" (FULL SIZE 36"x24")

ELECTRICAL/MECHANICAL ROOM LAYOUT AND FRAMING PER STRUCTURAL PLAN BY OTHERS.

2 / V102

NOTE:

1. SEE ARCHITECT'S ROOF PLAN DWG. A202 FOR LOCATION OF ROOF PENETRATIONS.
2. ROUTE PIPE TO MINIMIZE LENGTH OF PIPE RUNS AND NUMBER OF FITTINGS.

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Venting Detail Plan

V103

ATTACHMENT C

Geosyntec consultants

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Oakland, California 94607
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13 December 2013

Karel Detterman
County of Alameda
1221 Oak Street
Oakland, CA 94612

Subject: Cupolex Venting System Certification
Alameda Station Building B
1620-1640 Park Street
Alameda, CA 94501

Dear Ms. Detterman:

The purpose of this letter is to certify that the Cupolex Venting System (System) proposed for Building B of the planned Alameda Station development at 1620-1640 Park Street in Alameda, California (Site) was designed to provide vapor mitigation beneath the subject building. The design has been reviewed and approved by a California Registered Professional Engineer, who will also observe Cupolex form placement and perform on-Site testing after concrete slab placement to verify that the System was installed and is operating as designed.

Please contact the undersigned at (510) 285-2738 or (303) 539-8814 with any questions or concerns.

Sincerely,

Jacquelyn Lanzon, P.E. (CA)
Project Engineer

David Folkes, P.E. (CO)
Principal

Copies to: Dilan Roe, County of Alameda
Tom Graf, GrafCon
Ken Carvalho, Buestad Construction, Inc.