

**Amelia Oakland, LLC
5821 Pinewood Road
Oakland, California 94611**

Ms. Dilan Roe
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

RECEIVED

By Alameda County Environmental Health 3:06 pm, Nov 21, 2017

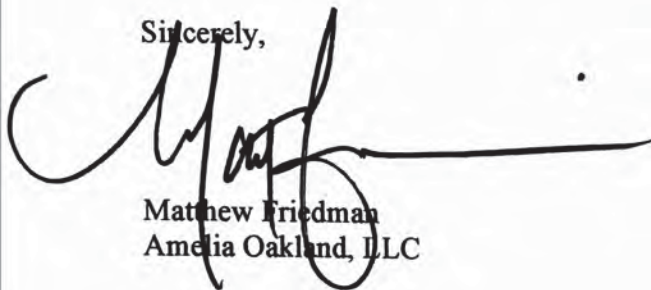
Re: 8410-30 Amelia Street – Acknowledgement Statement
Oakland, California
ACDEH Case No. RO00003240

Dear Ms. Roe:

Amelia Oakland, LLC, has retained the environmental consultant referenced on the attached report for the project referenced above. The attached report is being submitted on behalf of Amelia Oakland, LLC.

I have read and acknowledge the content, recommendations and/or conclusions contained in the attached document or report submitted on my behalf to ACDEH's FTP server and the State Water Resources Control Board's GeoTracker website.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matthew Friedman', with a long horizontal flourish extending to the right.

Matthew Friedman
Amelia Oakland, LLC



November 20, 2017

Ms. Karel Detterman
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: **Tenant Improvements and Mitigation Measures**
8410 – 8430 Amelia Street, Oakland, California
GeoTracker Global ID T1000000434
ACDEH Site Cleanup Program RO3240

Dear Ms. Detterman:

On behalf of Amelia Oakland LLC, PANGEA Environmental Services, Inc. (PANGEA) has provided the following tenant improvements and mitigation measures for each of the buildings at 8410 – 8430 Amelia Street in Oakland, California (Site). This information was requested by Alameda County Department of Environmental Health (ACDEH) in a letter dated August 31, 2017.

SITE DEVELOPMENT PHASES AND TENANT IMPROVEMENTS

The property owner, Amelia Oakland LLC, plans to improve all Site buildings (Buildings A, B, C, D and E) for future industrial uses. A figure showing the building locations and a table listing the tenant information are included in Attachment A. Development of the Site is expected to be completed in three main phases (Development Phases I, II, and III) moving from south to north across the Site as follows:

- **Development Phase I (8430 Amelia/Buildings C, D&E):** The first phase involves renovations and tenant improvements to Buildings C, D and E in the south part of the Site. Renovation and tenant improvements to Buildings C, D and E are almost complete and tenant occupancy is planned for the fourth quarter 2017. The City of Oakland Building Department has approved the tenant improvement drawing set for Phase I. Key pages of the approved tenant improvement drawing set for Phase I are included in Attachment F. A full drawing set (66 pages and 69MB) will be uploaded separately.
- **Development Phase II (8410A Amelia/Building B South):** The second phase involves renovations and tenant improvements to Building B South. Renovation and tenant improvements to Buildings B South are anticipated for the first quarter 2018. Key pages of the approved tenant improvement drawing set for Phase II are included in Attachment G. A full drawing set (51 pages and 51MB) will be uploaded separately. This drawing set is currently under permit review by the City of Oakland Planning Department.
- **Development Phase III (8410 Amelia/Buildings A and B North):** The third phase of development, planned for 2019, will involve future renovations to Buildings A and B North. These buildings are currently occupied by a tenant known as NIMBY. Phase III tenant improvement drawings have not yet been completed for Buildings A and B North.

PANGEA Environmental Services, Inc.

1710 Franklin Street, Suite 200, Oakland, CA 94612 Telephone 510.836.3700 Facsimile 510.836.3709 www.pangeaenv.com

MITIGATION MEASURES

This section describes implemented, tentative, and contingent measures for mitigation of potential vapor intrusion of volatile organic compounds into indoor air. Figure 1 presents a summary of these mitigation measures for the entire site.

Phase I (8430 Amelia/Bldgs D and E): Trench Plugs & Post-Slab Epoxy/Polyurethane Coating

Soil gas cut-off barriers/trench plugs were installed in three locations along the sewer lines entering Buildings D and E. Trench plugs consisted of concrete placed inside the utility trench and around the sewer line. The as-built drawings, design schematic, and photographs of the installed trench plugs are included in Attachment B.

An 83 mil-thickness epoxy/polyurethane coating was installed on top of the concrete slab inside Buildings D and E. The as-built drawing for Phase I is included in Attachment B. The epoxy/polyurethane coating was installed for tenant requirements for planned industrial operations. While this epoxy/polyurethane coating does help mitigate potential chemical vapor intrusion, this coating may not be fully comparable to a post-slab engineered chemical vapor barrier (e.g., RetroCoat™ manufactured Land Science Technologies). Vapor mitigation does not appear merited at this time due to the lack of subsurface VOCs in soil gas above screening levels, and the lack of TCE in groundwater above screening levels beneath Buildings D and E from recent groundwater sampling.

The epoxy/polyurethane coating installation on top of the concrete slabs inside Buildings D and E was conducted using the following procedures and materials:

- The concrete floor was first primed by bead blasting the concrete surface.
- A base coat of cementitious urethane slurry (Sikafloor® 22NA PurCem®) with a thickness of approximately 60 mil was applied to the concrete surface to provide resistance to moisture, abrasion, impact, and chemical attack.
- Two coats of polymer resin (Arizona Polymer Flooring - Epoxy 400) with a thickness of approximately 10 mil per coat was applied over the Sikafloor® 22NA PurCem to provide physical strength, flexibility and chemical resistance.
- A final coat of abrasion resistant polyurethane (Sikafloor® 315) with a thickness of approximately 3 mil was applied over the Epoxy 400 polymer resin to provide additional UV and chemical resistance.

The total thickness of the completed engineered chemical vapor barrier was approximately 83 mil. Product data sheets with specifications for the Sikafloor® and Arizona Polymer Flooring products are included in Attachment C.

Note that Building C has a wooden floor with an underlying crawl space, so no epoxy coating or engineered vapor barrier is planned for Building C.

Phase II (8410A Amelia/Building B South): Passive Sub-Slab Venting, Trench Plugs, Epoxy/Polyurethane Coating, and Contingent Vapor Barrier

Soil gas cut-off barriers/trench plugs were installed at two locations along the sewer line at the southwest corner of Building B South. These trench plugs were installed to minimize the potential for VOC vapor migration along utility trenches. Trench plugs consisted of concrete placed inside the utility trench and around the sewer line. The Phase II (8410A Amelia) as-built drawings, design schematic, and photographs of the installed trench plugs are included in Attachment D.

A passive sub-slab ventilation (SSV) system is being installed within the north-central portion of Building B South, proposed in the Interim Remedial Action Plan (IRAP) dated April 3, 2017. The subslab ventilation piping consists of horizontal perforated PVC vapor collection piping within a layer of permeable material. The collection piping in the central building area is manifolded together and will be connected to an existing 3-inch diameter metal riser conduit that routes vapors to a roof-mounted wind turbine fan. Planned vapor collection in the southern and southeast area of the building is scheduled for installation soon in conjunction with the planned sewer installation piping. The architectural drawing of the SSV layout with respect to sewer piping and the planned epoxy/polyurethane floor finish is included in Attachment D. The SSV system layout, details, and photographs are included in Attachment E. Further details of the SSV system installation will be documented in the forthcoming *IRAP Implementation Report*.

An 83 mil-thickness epoxy/polyurethane coating is planned for the top of the concrete slab inside Building B South. The epoxy/polyurethane coating is specified to meet tenant requirements for planned industrial operations. The drawing for the floor coating for Phase II (8410A Amelia) is included in Attachment D.

The IRAP proposed the installation of a post-slab, engineered chemical vapor barrier for most of Building B South due to the following factors: 1) PCE vapors in sub-slab gas under the north-central portion of Building B South, 2) potential vapor off-gassing from the TCE impact in site groundwater, and 3) tenant requirements for epoxy floor coating for most of the building flooring. During IRAP implementation, Pangea successfully identified and removed PCE source material beneath the former sink area of Building B South to help mitigate PCE vapor intrusion concerns. The PCE source removal effort will be documented in the forthcoming *IRAP Implementation Report*. As documented in the *Vapor Intrusion Assessment Report* dated October 4, 2017, the TCE concentrations in groundwater beneath Building B South are below the trigger levels for vapor mitigation (the TCE plume is apparently primarily located beneath Buildings B North and Building A). Based on this new information and the revised/delayed tenant plans, Amelia Oakland LLC now proposes to conduct post-IRAP sub-slab gas and/or indoor air sampling to facilitate selection of any contingent vapor mitigation measures for Building B South.

Phase III (8410 Amelia/Buildings A and B North): Future Measures

Vapor mitigation measures are merited for Building A due to TCE and vinyl chloride concentrations in sub-slab gas, as documented in the *Vapor Intrusion Assessment Report* dated October 4, 2017 and summarized on Figure 1. Vapor intrusion mitigation measures under consideration for Building A include installation of a passive or active sub-slab ventilation system, soil vapor extraction (SVE), and a post-slab engineered chemical vapor barrier. Pangea recommends consideration of an SVE test for Building A.

Tenant Improvements and Mitigation Measures
8410 – 8430 Amelia Street
Oakland, California
November 20, 2017

For Building B North, recent sub-slab gas and indoor air sampling data indicate VOC concentrations are below screening levels for vapor intrusion. Mitigation measures will be considered in the future after review of additional site data and agency discussion of potential TCE off-gassing from the TCE plume under Building B North. Contingent mitigation measures include expansion of the existing passive sub-slab ventilation system located in Building B South, and installation of a post-slab, engineered chemical vapor barrier.

If you have any questions or comments, please call me at (510) 435-8664 or email briddell@pangeaenv.com.

Sincerely,
PANGEA Environmental Services, Inc.

Bob Clark-Riddell, P.E.
Principal Engineer



ATTACHMENTS

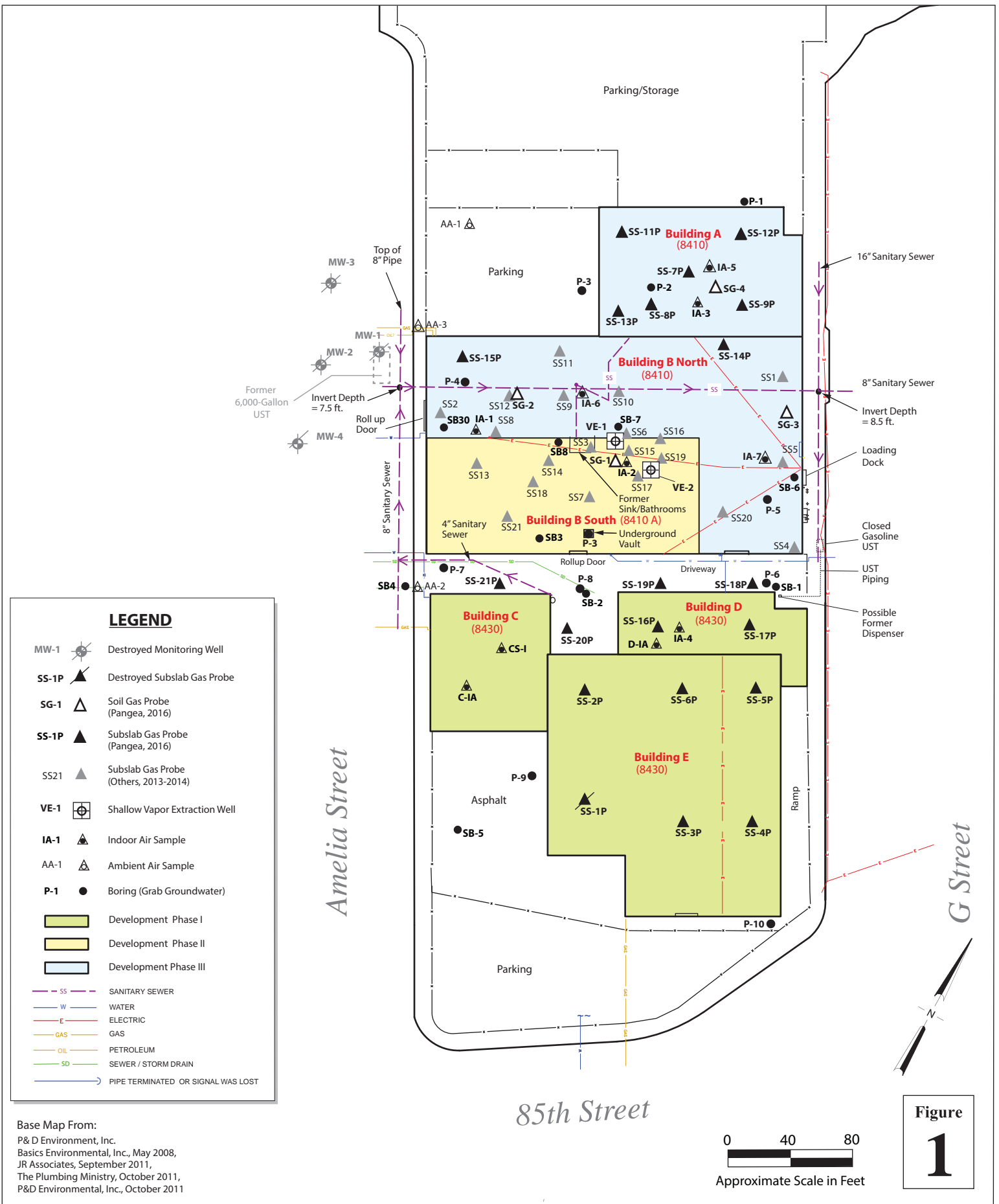
Figure 1 – Mitigation Measures Summary

- Attachment A - Building Tenant Information (Figure 1 and Table 1)
- Attachment B – Phase I (8430 Amelia) As-Built Drawing of Trench Plugs and Epoxy Floor Finish, Trench Design Detail, and Photos
- Attachment C – Epoxy/Polyurethane Floor Finish Product Specifications
- Attachment D – Phase II (8410A) Drawing of As-Built Trench Plugs and Planned Epoxy Floor Finish, Trench Design Detail, and Photos
- Attachment E – Phase II (8410A) Vapor Mitigation System Layout, Details and Photos
- Attachment F - Phase I Tenant Improvements Drawing Set (Select Pages)
- Attachment G - Phase II Tenant Improvement Drawing Set (Select Pages)



ATTACHMENT A

Building Tenant Information (Figure 1 and Table 1)



8410 Amelia Street
Oakland, California



PANGEA

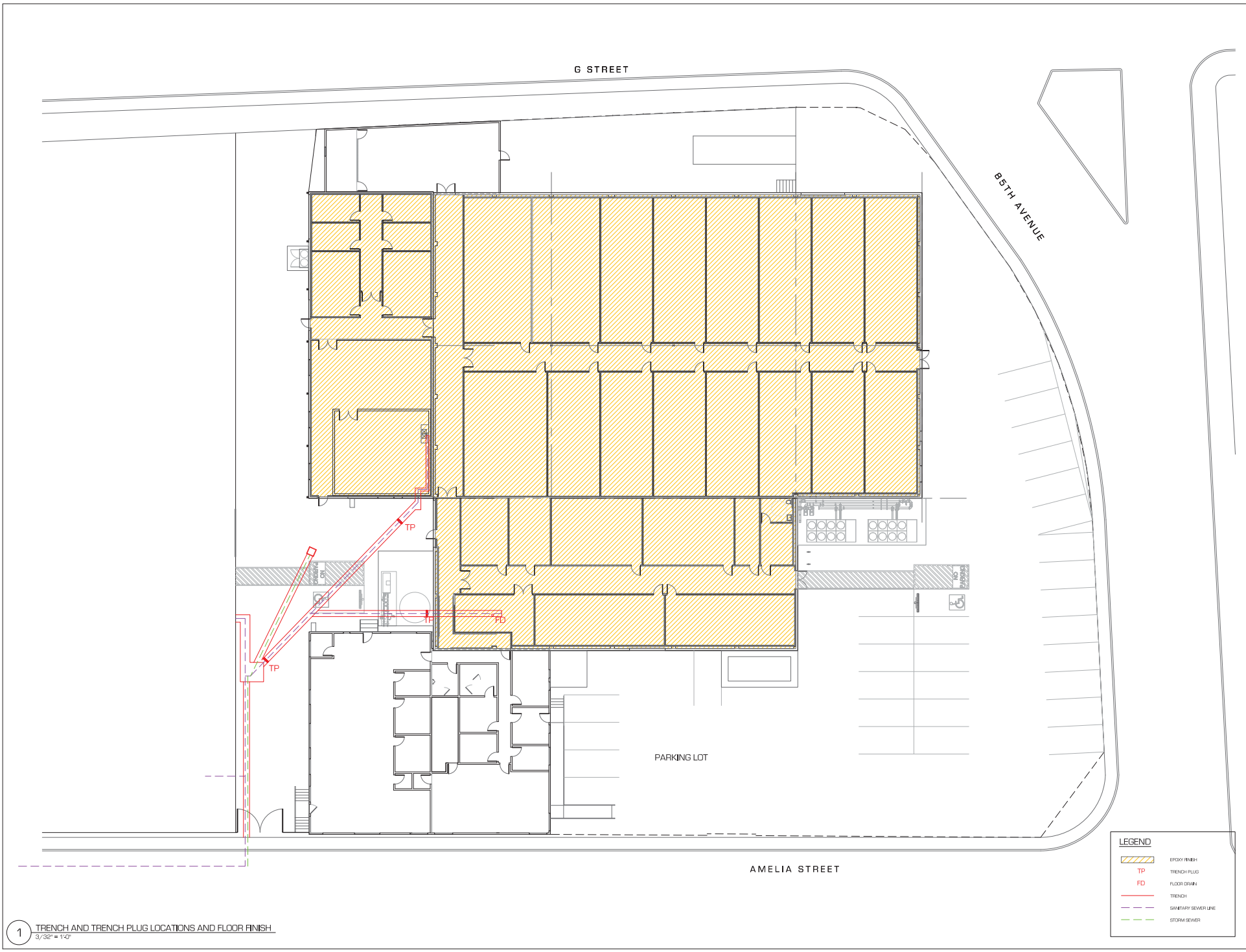
Site Map

Table 1 - Building Tenant Information
8410 - 8430 Amelia Street
Oakland , California

Criteria	Building A	Building B North	Building B South	Building C	Building D	Building E
APN	042-4301-001-005 (building); 41-4206-8 (yard); 42-4300-9 (yard); 42-4300-10 (yard)	042-4301-001-005	042-4301-001-005	042-4301-001-005	042-4301-001-005	042-4301-001-005
Address	8410 Amelia Street	8410 Amelia Street	8410A Amelia Street	8430 Amelia Street	8430 Amelia Street	8430 Amelia Street
Occupancy Status	Occupied	Occupied	Unoccupied. Occupancy scheduled for first quarter 2018.	Occupied	Occupied	Occupied
Tenant Name	NIMBY	NIMBY	Amelia Street Ventures	Amelia Street Ventures	Amelia Street Ventures	Amelia Street Ventures
Type of Business	Artist Studios	Artist Studios	Medical Cannabis	Medical Cannabis	Medical Cannabis	Medical Cannabis
Hours of Occupancy	M-S 7:00 AM-7:00 PM	M-S 7:00 AM-7:00 PM	M-S 7:00 AM-7:00 PM (proposed)	M-S 7:00 AM-7:00 PM	M-S 7:00 AM-7:00 PM	M-S 7:00 AM-7:00 PM
Tenant Improvements	Tenant improvements to be determined. Currently used as artist studios and a shared wood shop.	Tenant improvements to be determined. Currently used as artist studios and a shared machine shop.	Commercial Kitchen, Co-Packing and Cannabis Cultivation (proposed)	Admin Office (completed October 2017)	Cannabis Cultivation (completed October 2017)	Cannabis Extraction and Processing (completed October 2017)
Mitigation Measures: Existing/proposed	Mitigation measures under consideration include installation of a passive or active sub-slab venting system, soil vapor extraction system, and a post-slab engineered chemical vapor barrier.	Mitigation measures under consideration include expansion of the existing passive sub-slab venting system, or installation of an engineered post-slab chemical vapor barrier.	A passive sub-slab ventilation system is being installed per the approved IRAP dated April 3, 2017. An epoxy coating or post-slab engineered chemical vapor barrier may be installed within part or all of this building, contingent on post-IRAP soil gas and indoor air data.	Trench plugs installed along sewer lines outside of Buildings C/D/E. Building C is constructed with an underlying crawl space.	Trench plugs installed along sewer lines outside of Buildings C/D/E. An 83 mil epoxy/polyurethane coating was installed on all floor surfaces.	Trench plugs installed along sewer lines outside of Buildings C/D/E. An 83 mil epoxy/polyurethane coating was installed on all floor surfaces.

ATTACHMENT B

Phase I (8430 Amelia) As-Built Drawing of Trench Plugs and Epoxy
Floor Finish, Trench Design Detail, and Photos



1 TRENCH AND TRENCH PLUG LOCATIONS AND FLOOR FINISH
 3/32" = 1'-0"

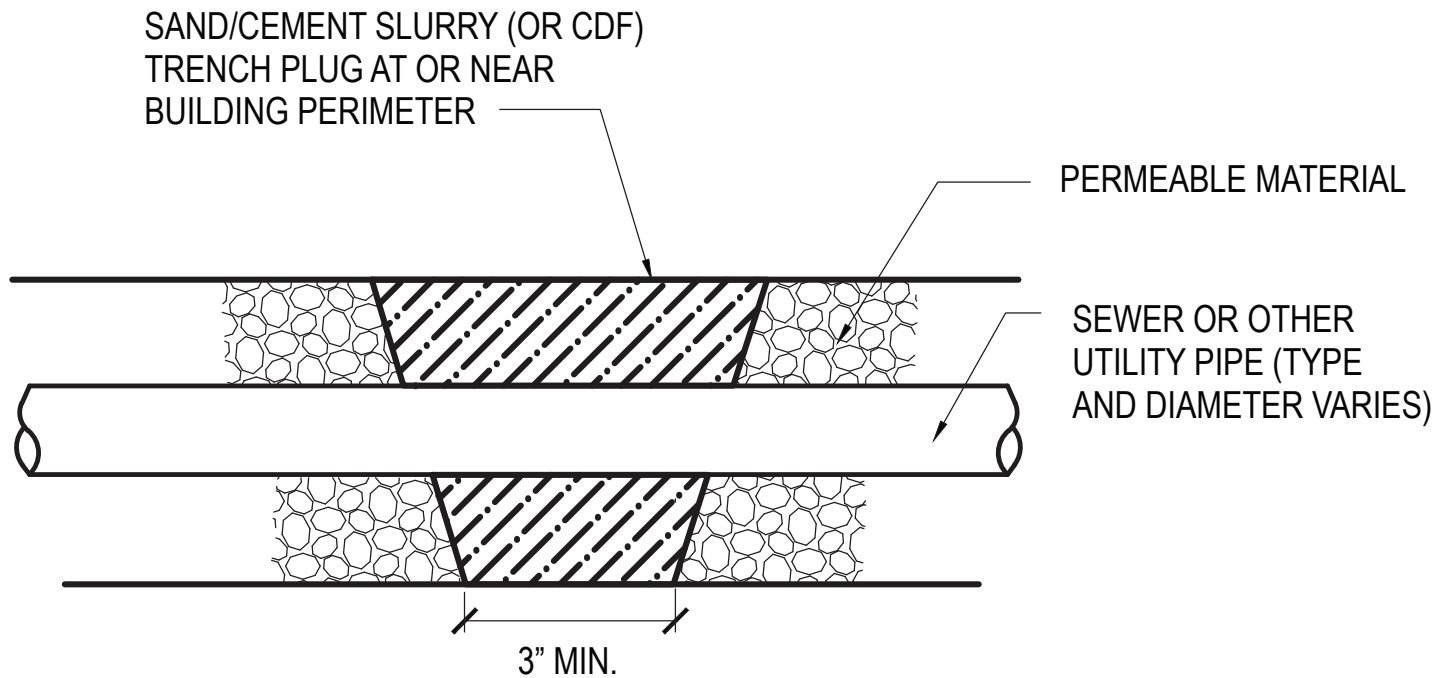
LEGEND

	SPRINKLER RUSH
	TRENCH PLUG
	FLOOR DRAIN
	TRENCH
	SANITARY SEWER LINE
	STORM SEWER

PROTONc
 3387 Mission Street
 San Francisco, CA 94110
 415.992.0889

PROJECT DATA:
AMELIA STREET VENTURES TENANT IMPROVEMENT
 8430 AMELIA STREET
 OAKLAND, CA 94621
 APN # 46-4301-1-5

DATE:	11/13/17
BY:	ENVIRONMENTAL
AC:	
SCALE:	3/32" = 1'-0"
PROJECT:	AMELIA STREET VENTURES TENANT IMPROVEMENT
SHEET:	A.203
TITLE:	TRENCH AND TRENCH PLUG LOCATIONS AND FLOOR FINISH



TYPICAL SOIL GAS CUT-OFF BARRIER/TRENCH PLUG IN UTILITY TRENCH

Not to Scale

Figure
1



Photo 1. Construction of trench plug in sewer utility trench.



Photo 2. Trench plug in sewer trench south of Building B South.



Photo 3. Construction of trench plug in sewer utility trench.



Photo 4. Trench plug in sewer trench south of Building B South.

ATTACHMENT C

Epoxy/Polyurethane Floor Finish Product Specifications

Sikafloor® 22NA PurCem®

Medium Duty, Self-leveling Broadcast Cementitious Urethane Slurry

Description Sikafloor 22NA PurCem is a self-leveling, medium to heavy duty, solid colored, three component, cementitious urethane slurry designed to provide excellent resistance to abrasion, impact, and chemical attack. Sikafloor 22NA PurCem is broadcast with dried silica sand and sealed with Sikafloor-31NA PurCem to produce a solid color finish, or can be broadcasted with colored quartz aggregate and sealed with Sikafloor 510 clear polyaspartic topcoat for a decorative finish. The system is typically installed at 3/16 to 1/4 inch (4.5 to 6 mm) thickness.

Where to Use

- Sikafloor 22NA PurCem is primarily used to protect concrete substrates in aggressive environments.
- Typically used in food processing plants, wet & dry process areas, freezers & coolers, dairies, breweries, wineries, distilleries, laboratories, chemical process plants, pulp and paper plants, warehouses and storage areas and pharmaceutical facilities .

Advantages

- Can be applied on green concrete (typically 7 -10 days) after preparation (see surface prep section) and where substrate has tensile bond strength in excess of 218 psi (1.5 MPa).
- Can be applied to concrete substrates where <100% relative humidity is measured as per ASTM F2170.
- Resists a very wide range of organic and inorganic acids, alkalis, amines, salts and solvents. Consult Sika Technical Service for full details. Refer to the Sikafloor PurCem Chemical Resistance Chart.
- Similar coefficient of thermal expansion to concrete allowing movement with the substrate through normal thermal cycling. It will perform and retain its physical characteristics through a wide temperature range from -40°F (-40°C) up to 248°F (120°C).
- Bond strength in excess of the tensile strength of concrete, concrete will fail first.
- The broadcast finish provides a slip resistant surface.
- High abrasion qualities result from its aggregate structure.
- Can be applied over partially cured concrete substrates (<10% surface moisture), full 28 days cure time is not necessary.
- Minimal maintenance costs, superior life cycle cost advantage versus tile.
- Extra expansion joints are not necessary; maintain and extend existing expansion joints up through the Sikafloor PurCem Flooring System.
- Behaves plastically under impact / deforms but will not crack or debond.
- Achieves highest performance ratings according to ASTM G21 resistance to fungi and ASTM D3273 resistance to mold growth.
- Meets the requirements of USDA for use in food plants.
- Non-tainting, odorless.

TYPICAL DATA

RESULTS MAY DIFFER BASED UPON STATISTICAL VARIATIONS DEPENDING UPON MIXING METHODS AND EQUIPMENT, TEMPERATURE, APPLICATION METHODS, TEST METHODS, ACTUAL SITE CONDITIONS AND CURING CONDITIONS.

Packaging	Component A: 1 US gal (3.78 L) 8.53 lb (3.87 kg) Component B: 0.7 US gal (2.64 L) 7.33 lb (3.325 kg) Component C: 43.96 lbs (19.94 kg) in a bag (powder) Components A+B+C: 59.83 lb (27.14 kg)	
Colors	RAL 7012 Basalt Gray RAL 7038 Agate Gray RAL 7042 Traffic Grey A	RAL 3009 Oxide Red RAL 1001 Beige
Coverage	Approx. 37 ft ² (3.44 m ²) per unit at 160 mils (4 mm) Approx. 31 ft ² (2.87 m ²) per unit at 3/16" (4.75 mm) Approx. 25 ft ² (2.32 m ²) per unit at 1/4" (6 mm) (The above figures do not allow for surface porosity, profile or waste)	
Pot Life	Material Temperature	Time
	+50°F (10°C)	~ 25 - 30 minutes
	+68°F (20°C)	~ 15 - 20 minutes
	+86°F (30°C)	~ 5 - 10 minutes



PRIOR TO EACH USE OF ANY SIKA PRODUCT, THE USER MUST ALWAYS READ AND FOLLOW THE WARNINGS AND INSTRUCTIONS ON THE PRODUCT'S MOST CURRENT PRODUCT DATA SHEET, PRODUCT LABEL AND SAFETY DATA SHEET WHICH ARE AVAILABLE ONLINE AT [HTTP://USA.SIKA.COM/](http://usa.sika.com/) OR BY CALLING SIKA'S TECHNICAL SERVICE DEPARTMENT AT 800.933.7452 NOTHING CONTAINED IN ANY SIKA MATERIALS RELIEVES THE USER OF THE OBLIGATION TO READ AND FOLLOW THE WARNINGS AND INSTRUCTIONS FOR EACH SIKA PRODUCT AS SET FORTH IN THE CURRENT PRODUCT DATA SHEET, PRODUCT LABEL AND SAFETY DATA SHEET PRIOR TO PRODUCT USE.

Waiting / Recoat Times	Before applying Sikafloor-22NA PurCem when a scratch primer and sealer coat is used allow:			
	Ambient & Substrate Temperature	Minimum	Maximum	
	+50°F (10°C)	24 hours	7 days	
	+68°F (20°C)	6 hours	3 days	
	+86°F (30°C)	4 hours	2 days	
Cure Times	Ambient & Substrate Temperature	Foot traffic	Light traffic	Full cure
	+50°F (10°C)	~ 24 hours	~ 6 days	~ 10 days
	+68°F (20°C)	~ 12 hours	~ 4 days	~ 7 days
	+86°F (30°C)	~ 6 hours	~ 2 days	~ 5 days

Properties Tested at 73°F (23°C) and 50% R.H.:

Softening Point		266°F (130°C)
Density	ASTM C905	16.84 lb/US gal. (2.02 kg/L)
Service Temperature	- 40°F (- 40°C) min. / 212°F (100°C) max.	
Compressive Strength	ASTM579	
	24 hrs	3,191 psi (22 MPa)
	7 days	5,366 psi (37 MPa)
	28 days	5,802 psi (40 MPa)
Tensile Strength	ASTM C307	1,045 psi (6.5 MPa)
Flexural Strength	ASTM C580	2,314 psi (14.7 MPa)
Pull-off Strength	ASTM D4541	> 254 psi (1.75 MPa) (substrate failure)
Thermal Compatibility	ASTM C884	Pass
Hardness Shore D	ASTM D2240	80 - 85
Indentation	MIL -PRF -24613	~ 0%
Impact Resistance	ASTM D2794	5.02 ft - lb (6.81 joules) at 1/8" (3 mm) of thickness
Abrasion Resistance	ASTM D4060	CS-17/1,000 cycles/1,000 g -0.110 g H-22/1,000 cycles/1,000 g -2.26 g
Coefficient of Thermal Expansion	ASTM D696	0.89 x 10 ⁵ in/in/°F (1.6 x 10 ⁵ mm/mm/°C)
Water Absorption	ASTM C413	0.10%
Resistance to Fungi Growth	ASTM G21	Rated 0 (no growth)
Resistance to Mold Growth	ASTM D3273	Rated 10 (highest resistance)
VOC's Components A+B+C:	44 g/L	
A+B+C+Sikafloor 15NA Accelerator	44.2 g/l	
	Shelf Life	Components A+B: 1 year in original unopened packaging. Component C: 6 months in original unopened packaging. Store dry between 50°- 77°F (10°- 25°C). Protect from freezing.
Chemical Resistance	Please consult Sikafloor Technical Services.	

How to Use Surface Preparation

Concrete surfaces must be clean and sound. Remove all dust, dirt, existing paint films, efflorescence, exudates, laitance, forms oils, hydraulic or fuel oils, brake fluid, grease, fungus, mildew, biological residues or any other contaminants which may prohibit good bond. Prepare the surface by any appropriate mechanical means, in order to achieve a profile equivalent to ICRI-CSP 3-6. The compressive strength of the concrete substrate should be at least 3,625 psi (25 MPa) at 28 days and a minimum of 218 psi (1.5 MPa) in tensile at the time of application.

Repairs to cementitious substrates, filling of blowholes, levelling of irregularities, etc. should be carried out using an appropriate Sika profiling mortar. Contact Sika Technical Service for a recommendation.

Edge Terminations - all free edges of a Sikafloor PurCem floor, whether at the perimeter, along gutters or at drains require extra anchorage to distribute mechanical and thermal stresses. This is best achieved by forming or cutting grooves in the concrete. Grooves should have a depth and width of 2 times thickness of the Sikafloor PurCem floor. Refer to the edge details provided at <http://usa.sika.com>. If necessary, protect all free edges with mechanically attached metal strips. Do not featheredge, always turn into an anchor groove.

Expansion Joints - should be provided in the substrates at the intersection of dissimilar materials. Isolate areas subject to thermal stresses, vibration movements or around load-bearing columns and at vessel sealing rings. Refer to details provided at <http://usa.sika.com>.

Priming

Substrate priming is normally not required under typical circumstances. Compressive strength of the concrete substrate of at least 3,625 psi (25 MPa) and at least 218 psi (1.5 MPa) in tensile is required. However, due to variations in concrete quality, surface conditions, surface preparation and ambient conditions, test areas are recommended to determine whether priming is required to prevent the possibility of blisters, debonding, pinholes and other aesthetic variations.

Standard primer procedure is a 40 – 60 mils (1.0 - 1.5mm) scratch coat of Sikafloor-31NA/24NA PurCem and light broadcasting of dry quartz sand. This is the preferred method for concrete substrates. The application is done by steel trowel to the substrate, a continuous coating should be ensured.



PRIOR TO EACH USE OF ANY SIKA PRODUCT, THE USER MUST ALWAYS READ AND FOLLOW THE WARNINGS AND INSTRUCTIONS ON THE PRODUCT'S MOST CURRENT PRODUCT DATA SHEET, PRODUCT LABEL AND SAFETY DATA SHEET WHICH ARE AVAILABLE ONLINE AT [HTTP://USA.SIKA.COM/](http://usa.sika.com/) OR BY CALLING SIKA'S TECHNICAL SERVICE DEPARTMENT AT 800.933.7452 NOTHING CONTAINED IN ANY SIKA MATERIALS RELIEVES THE USER OF THE OBLIGATION TO READ AND FOLLOW THE WARNINGS AND INSTRUCTIONS FOR EACH SIKA PRODUCT AS SET FORTH IN THE CURRENT PRODUCT DATA SHEET, PRODUCT LABEL AND SAFETY DATA SHEET PRIOR TO PRODUCT USE.

Mixing

Mix Ratio Components A : B : C = Mix full units only

A "Kol" type mixer, incorporating a motor spun mixing pail and a shear angle mixing blade, or a forced action mixer is recommended. Mixing will be affected by temperature; condition materials for use to 60 - 70°F (15 - 21°C). Premix Components A and B separately, make sure all pigment is evenly distributed. Pour Components A and B into a clean mixing bucket, and mix for 30 seconds. Add Component C (powder) pouring slowly over a period of 20 seconds. **Note: Do not dump powder into resin!** Allow Component C to blend for a further 2-1/2 minutes after all powder is emptied into the resin to ensure complete mixing and that all powders are evenly distributed. During the mixing operations, scrape down the sides and bottom of the container with a flat or straight edge trowel at least once to ensure complete mixing (Components A+B+C).

Note: Improved flowability on cool substrates can be achieved by removing a maximum of 2.2 lb (1.0 kg) of Component C (powder) per unit.

Do not mix more material than can be applied within the working time limits (i.e. Pot Life) at the actual field temperature.

Application

Sikafloor-22NA PurCem: Scratch Coat - typically not required (see priming instructions)

Body Coat: Priming of concrete substrates is not usually required under typical circumstances. However, due to variations in concrete quality, surface conditions, surface preparation and ambient conditions, reference test areas are recommended to determine whether priming is required to prevent the possibility of blisters, debonding, pinholes and other aesthetic variations.

Mix and pour the Sikafloor-22NA PurCem materials on the floor. Spread to the desired thickness (160 mils - 1/4") using a screed gauge rake or trowel. Take care to spread newly mixed materials across the transition of previous applied mixes before the surface begins to set. Immediately spike roll the surface to release trapped air in the matrix. Sikafloor-22NA PurCem requires the wet surface to be broadcast to rejection with quartz or mineral aggregates. Aggregate must fall vertically to avoid surface defects / do not broadcast up to the transition line of new mixes, always broadcast 2 - 3 feet beyond the wet edge. Allow broadcast surface to cure sufficiently to be able to resist foot traffic without damaging the surface. Remove excess aggregate by sweeping or vacuuming until surface is free of all loose particles and dust. A topcoat of Sikafloor-31NA PurCem can be applied to lock in the aggregate. Allow a minimum 24 hour cure period at 68°F (20°C) before light traffic after the Sikafloor-31NA PurCem is applied.

Sikafloor-22NA PurCem Colored Quartz: Application method is the same as described above. Instead of a topcoat of Sikafloor-31NA PurCem, seal the surface using a clear polyaspartic; Sikafloor 510 (see product data sheets). Apply Sikafloor 510 top coat by squeegee and roller to provide a uniform coverage without ponding. When required, apply a second coat to achieve a specific texture. Allow a minimum 24 hour cure period at 68°F (20°C) before light traffic.

Please refer to the individual most current and respective Product Data Sheet for specific and detailed information.

Limitations

Notes on Limitations:

Prior to application, measure and confirm Substrate Moisture Content, Ambient Relative Humidity, Ambient and Surface Temperature and Dew Point. During installation, confirm and record above values at least once every 3 hours, or more frequently whenever conditions change (e.g. Ambient Temperature rise/fall, Relative Humidity increase/decrease, etc.).

Material Temperature: Precondition material for at least 24 hours between 65° to 75°F (18° to 24°C). **IMPORTANT:** Product must be protected from freezing. If frozen, discard.

Ambient Temperature: Minimum/Maximum 50°/85°F (10°/30°C)

Substrate Temperature: Minimum/Maximum 50°/85°F (10°/30°C). Substrate temperature must be at least 5°F (3°C) above measured Dew Point.

Mixing and Application must adhere to Material, Ambient and Substrate temperatures listed above or a decrease in product workability and slower cure rates will occur.

Reduced cure times may be achieved by use of Sikafloor-15NA Accelerator. Refer to Sikafloor-15NA product data sheet for complete mixing and use instructions.

Relative Ambient Humidity: Minimum ambient humidity 30%
Maximum ambient humidity 85% (during application and curing)

Dew Point: Beware of condensation!

The substrate must be at least 5°F (3°C) above the Dew Point to reduce the risk of condensation, which may lead to adhesion failure or "blushing" on the floor finish. Be aware that the substrate temperature may be lower than the ambient temperature. Calculate Dew Point from the substrate surface temperature, not the ambient temperature.

Mixing: Do not hand mix Sikafloor materials. Mechanically mix only.

Do not thin this product. Addition of thinners (e.g. water, solvent, etc.) will slow cure and reduce ultimate properties of this product. Thinners should never be added to the mix. Adding thinners will void any applicable Sika warranty.



PRIOR TO EACH USE OF ANY SIKA PRODUCT, THE USER MUST ALWAYS READ AND FOLLOW THE WARNINGS AND INSTRUCTIONS ON THE PRODUCT'S MOST CURRENT PRODUCT DATA SHEET, PRODUCT LABEL AND SAFETY DATA SHEET WHICH ARE AVAILABLE ONLINE AT [HTTP://USA.SIKA.COM/](http://USA.SIKA.COM/) OR BY CALLING SIKA'S TECHNICAL SERVICE DEPARTMENT AT 800.933.7452 NOTHING CONTAINED IN ANY SIKA MATERIALS RELIEVES THE USER OF THE OBLIGATION TO READ AND FOLLOW THE WARNINGS AND INSTRUCTIONS FOR EACH SIKA PRODUCT AS SET FORTH IN THE CURRENT PRODUCT DATA SHEET, PRODUCT LABEL AND SAFETY DATA SHEET PRIOR TO PRODUCT USE.

Application:

- Do not apply to polymer modified cement mortars (PCC) that may expand when sealed with an impervious resin.
- Do not apply to water-soaked, glistening-wet concrete substrates. (i.e standing water)
- Do not apply to un-reinforced sand cement screeds, asphaltic or bitumen substrate, glazed tile or non-porous brick, tile and magnesite, copper, aluminum, soft wood, or urethane composition, elastomeric membranes, fiber reinforced polyester (FRP) composites.
- Do not apply to cracked or unsound substrates.
- Do not apply while ambient and substrate temperatures are rising, as pinholes may occur.
- Freshly applied material should be protected from dampness, condensation and water for at least 24 hrs.
- Protect substrate during application from condensation from pipes or any overhead leaks.
- Do not apply to surfaces where moisture vapor can condense and freeze.
- Do not apply to vertical or overhead surfaces/ for vertical surfaces refer to Sikafloor-29NA PurCem.
- Do not featheredge.
- Applied material will follow undulations, depressions, lines, etc. of the underlying substrate. Visual appearance of the finished floor may vary, including, but not limited to, reflection of "waviness", slab transitions, etc.
- Color uniformity cannot be completely guaranteed from batch to batch (numbered). Take care when using Sikafloor PurCem products to draw from inventory in batch number sequence, do not mix batch numbers in a single floor area.
- Will discolor over time when exposed to sunlight (UV) and under certain artificial lighting conditions. Use of clear UV resistant top coat may not prevent discoloration of underlying coatings.
- Solid color UV resistant top coat available.
- Do not apply Sikafloor to concrete substrate containing aggregates susceptible to ASR (Alkali Silica Reaction) due to risk of natural alkali redistribution below the Sikafloor product after application. If concrete substrate has or is suspected to have ASR (Alkali Silica Reaction) present, do not proceed. Consult with design professional prior to use.
- Any aggregate used with Sikafloor systems must be non-reactive and oven-dried.
- This product is not designed for negative side waterproofing.
- For professional use only by experienced applicators.

PRIOR TO EACH USE OF ANY SIKA PRODUCT, THE USER MUST ALWAYS READ AND FOLLOW THE WARNINGS AND INSTRUCTIONS ON THE PRODUCT'S MOST CURRENT PRODUCT DATA SHEET, PRODUCT LABEL AND SAFETY DATA SHEET WHICH ARE AVAILABLE ONLINE AT [HTTP://USA.SIKA.COM/](http://usa.sika.com/) OR BY CALLING SIKA'S TECHNICAL SERVICE DEPARTMENT AT 800.933.7452 NOTHING CONTAINED IN ANY SIKA MATERIALS RELIEVES THE USER OF THE OBLIGATION TO READ AND FOLLOW THE WARNINGS AND INSTRUCTIONS FOR EACH SIKA PRODUCT AS SET FORTH IN THE CURRENT PRODUCT DATA SHEET, PRODUCT LABEL AND SAFETY DATA SHEET PRIOR TO PRODUCT USE.

KEEP CONTAINER TIGHTLY CLOSED. KEEP OUT OF REACH OF CHILDREN. NOT FOR INTERNAL CONSUMPTION. FOR INDUSTRIAL USE ONLY. FOR PROFESSIONAL USE ONLY.

All information provided by Sika Corporation ("Sika") concerning Sika products, including but not limited to, any recommendations and advice relating to the application and use of Sika products, is given in good faith based on Sika's current experience and knowledge of its products when properly stored, handled and applied under normal conditions in accordance with Sika's instructions. In practice, the differences in materials, substrates, storage and handling conditions, actual site conditions and other factors outside of Sika's control are such that Sika assumes no liability for the provision of such information, advice, recommendations or instructions related to its products, nor shall any legal relationship be created by or arise from the provision of such information, advice, recommendations or instructions related to its products. The user of the Sika product(s) must test the product(s) for suitability for the intended application and purpose before proceeding with the full application of the product(s). Sika reserves the right to change the properties of its products without notice. All sales of Sika product(s) are subject to its current terms and conditions of sale which are available at <http://usa.sika.com/> or by calling 800-933-7452.

Prior to each use of any Sika product, the user must always read and follow the warnings and instructions on the product's most current Product Data Sheet, product label and Safety Data Sheet which are available online at <http://usa.sika.com/> or by calling Sika's Technical Service Department at 800-933-7452. Nothing contained in any Sika materials relieves the user of the obligation to read and follow the warnings and instruction for each Sika product as set forth in the current Product Data Sheet, product label and Safety Data Sheet prior to product use.

Sika warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within shelf life. User determines suitability of product for intended use and assumes all risks. Buyer's sole remedy shall be limited to the purchase price or replacement of product exclusive of labor or cost of labor.

NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.

Visit our website at usa.sika.com

1-800-933-SIKA NATIONWIDE

Regional Information and Sales Centers. For the location of your nearest Sika sales office, contact your regional center.



Sika Corporation
201 Polito Avenue
Lyndhurst, NJ 07071
Phone: 800-933-7452
Fax: 201-933-6225





EPOXY 400

PRODUCT DESCRIPTION AND USE

Epoxy 400 is a low viscosity, 100% solids resin system used in a variety of flooring applications including high build coatings, aggregate-filled flooring and decorative epoxy pebble applications. This material cures blush-free and provides an outstanding balance of physical strength, flexibility and chemical resistance. Epoxy 400 has excellent clarity for use over color quartz aggregate and decorative architectural concrete. The pigmented material features high pigment loading for good substrate hide and color consistency when roller applied.

Epoxy 400 has considerably lower viscosity than most competitive products providing improved handling at cooler temperatures and exceptional troweling characteristics. The lower viscosity allows for the addition of fine silica fillers for easy application of “slurry” type floors. A fast cure hardener is available when cold weather cure down to 40°F or accelerated room temperature cure is required. A special hardener is available when adhesion to damp concrete is needed.

The versatility of Epoxy 400 makes it ideal as a primer, finish coat or aggregate binder in a wide variety of flooring applications including manufacturing facilities, warehouses, correctional facilities, loading docks and other areas requiring high performance flooring. Epoxy 400 UVR is fortified with a UV absorber package and designed for exterior use as a re-glaze material over decorative epoxy pebble systems. Epoxy 400 is not recommended for food processing areas, commercial kitchens, wineries or other areas that receive constant corrosive exposure. Epoxy 600 or 900 should be selected for these applications.

Chemical Composition

Modified Bisphenol A epoxy resin crosslinked with aliphatic and cycloaliphatic polyamines.

Colors

16 standard colors available, plus clear.

Limitations

- Must be applied to a clean, dry surface.
- Exterior pigmented applications will show chalking.
- Should be applied with aggregate fillers in flooring applications where impact or mechanical abuse is anticipated.

WARRANTY INFORMATION

Arizona Polymer Flooring guarantees that this product is free from manufacturing defects and complies with our published specifications. In the event that the buyer proves that the goods received do not conform to these specifications or were defectively manufactured, the buyer's remedies shall be limited to either the return of the goods and repayment of the purchase price or replacement of the defective material at the option of the seller. ARIZONA POLYMER FLOORING MAKES NO OTHER WARRANTY, EXPRESSED OR IMPLIED, AND ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED. Arizona Polymer Flooring shall not be liable for damages caused by application of its products over concrete with excessive moisture vapor transmission or alkalinity. Arizona Polymer Flooring shall not be liable for any injury incurred in a slip and fall accident. Manufacturer or seller shall not be liable for prospective profits or consequential damages resulting from the use of this product.

HIGH PERFORMANCE CONCRETE COATING SYSTEM

TECHNICAL DATA

Physical Properties

Mixing Ratio, by Volume.....	2-1
Solids Content, %	100
V.O.C.	none
Viscosity, cps (Clear Material, 77 degrees).....	650
Pot Life, Regular Cure (77 degrees, 1 quart mass).....	35 minutes
Pot Life, Fast Cure (77 degrees)	18 minutes

Pot Life is reduced by increasing mass and/or temperature.

Cure Times (77 degrees)

Regular Cure

Dry to Touch.....	6 hours
Light Traffic.....	16 hours
Full Cure.....	7 days

Fast Cure

Dry to Touch.....	3 hours
Light Traffic.....	7 hours
Full Cure.....	5 days

Cure Times (50 degrees)

Fast Cure

Dry to Touch.....	18 hours
Light Traffic.....	30 hours
Full Cure.....	14 days

Cure times are influenced by both the ambient air temperature and the temperature of the concrete.

Performance Properties

Tensile Strength, psi (ASTM D-638).....	6,230
Ultimate Elongation, % (ASTM D-638).....	11
Compressive Yield Strength, psi (ASTM D-695).....	9,850
Ultimate Compressive Strength, psi (ASTM D-695).....	19,501
Ultimate Flexural Strength, psi (ASTM D-790).....	9,680
Hardness, Shore D (ASTM D-2240).....	78
Bond Strength to Concrete (ASTM D-4541).....	concrete fails before loss of bond

CHEMICAL AND STAIN RESISTANCE (ASTM D-1308 24 HOUR IMMERSION)

Vegetable Oil	no effect
Mustard.....	no effect
Urine	no effect
Gasoline.....	no effect
Motor Oil	no effect
Transmission Fluid.....	no effect
Brake Fluid.....	slight softening, film recovers
Mineral Spirits	no effect
10% Sulphuric Acid	no effect
10% Hydrochloric Acid	no effect
10% Acetic Acid.....	no effect
Xylene.....	slight softening, film recovers
MEK.....	film destroyed

GENERAL INFORMATION

Moisture Vapor Emissions Precautions

All interior concrete floors not poured over an effective moisture vapor retarder are subject to possible moisture vapor transmission that may lead to blistering and failure of the coating system. It is the coating applicator's responsibility to conduct calcium chloride and relative humidity probe testing to determine if excessive levels of vapor emissions are present before applying any coatings. APF can supply moisture remediation products. Consult our technical service department. Arizona Polymer Flooring and its sales agents will not be responsible for coating failures due to undetected moisture vapor emissions.

Surface Preparation

Concrete must be cured 30 days and be clean, dry, and structurally sound. If using damp surface hardener, surface may be damp but with no visible water. Surface must be shot blasted, diamond ground or acid etched to achieve an ICRI profile of CSP3 or greater. A properly prepared surface will have the texture of 80-100 grit sandpaper. If the surface is diamond ground, use 20-30 grit diamonds and vacuum the floor twice to remove concrete dust. Excessive dust in the pores of the concrete can compromise adhesion. **If acid etched, machine scrubbing is required.** Adhere strictly to guidelines listed in the Arizona Polymer Flooring Surface Preparation Manual. Previously coated surfaces must be mechanically cleaned and abraded with 80-100 mesh sandpaper prior to application.

Mixing Instructions

If using regular cure material, pot life is 35 minutes at 77 degrees. Pot life of fast cure material is 15 minutes. Work times are shortened by higher temperatures. Pouring material on floor immediately after mixing will extend work time. Combining ratio is 2 parts A to 1 part B. If using pigmented material, stir Part A well, bringing settled pigments up from bottom of container before adding Part B. **Proportion the amounts carefully and mix for 2 full minutes using a low speed drill, scraping the bottom and sides of the mixing vessel.**

Application Recommendations

Epoxy 400 may be applied by roller, trowel or squeegee. For use in aggregate filled flooring, see Arizona Polymer Flooring Application Manual. When applied as an unfilled system, Epoxy 400 may be thinned with up to 15% Acetone, MEK or Glycol Ether EP. Product must be thinned 10-15% when using as a reglaze material for epoxy pebble system. If using thinned product, keep application rate above 200 sq. ft. per gallon. The addition of solvent may slow the cure somewhat. **If using in aggregate filled flooring, do not add solvent.**

Handling Precautions

Do not breathe vapors. Use appropriate respirator with green band cartridge to protect against methyl amine vapors. Avoid contact with skin; wear protective gloves. Read Material Safety Data Sheet before using.

Slip and Fall Precautions

OSHA and the American Disabilities Act (ADA) have now set enforceable standards for slip-resistance on pedestrian surfaces. The current coefficient of friction required by ADA is .6 on level surfaces and .8 on ramps. Arizona Polymer Flooring recommends the use of angular slip-resistant aggregate in all coatings or flooring systems that may be exposed to wet, oily or greasy conditions. It is the contractor and end users' responsibility to provide a flooring system that meets current safety standards. Arizona Polymer Flooring or its sales agents will not be responsible for injury incurred in a slip and fall accident.

Sikafloor® 315

Abrasion Resistant Aliphatic Polyurethane Low - VOC

Description	Sikafloor 315 is a high solids, low VOC abrasion resistant, aliphatic polyurethane coating. It can be applied as a three part clear, or four part pigmented coating. Wear additive is included for increased abrasion resistance.
Where to Use	Sikafloor 315 provides excellent adhesion and wear resistant properties to epoxy primed concrete substrates. It displays excellent UV resistance and chemical resistance. Sikafloor 315 includes wear aggregate which includes abrasion resistance and is typically used in light to heavy traffic areas.
Advantages	<ul style="list-style-type: none"> ■ Superior abrasion resistance ■ High impact resistance ■ Excellent UV resistance

TYPICAL DATA

RESULTS MAY DIFFER BASED UPON STATISTICAL VARIATIONS DEPENDING UPON MIXING METHODS AND EQUIPMENT, TEMPERATURE, APPLICATION METHODS, TEST METHODS, ACTUAL SITE CONDITIONS AND CURING CONDITIONS.

Packaging	Component A: 0.34 US gal. (1.3L) Catalyst Component B: 2.00 US gal. (7.6 L) Isocyanate Components A+B: 2.34 US gal. (8.9 L) Component C: Wear Aggregate: 0.5 US gal. (1.9 L) (7 lb/can 3.17 kg/can)			
Color	Clear or pigmented with Sikafloor Polyurethane Color Additive; 1 quart (0.95 L) size per 2.34 US gallon mix.			
Coverage	Coverage of materials on a primed or prepared substrate will vary depending on the porosity or density, profile and texture of the substrate. Sikafloor 315 is applied at 3 - 3.5 wet mils. The dry film thickness is 2.7 - 3.1 mils. The theoretical coverages are: Pigmented Sikafloor 315 with Wear Additive: 3.09 gallon mix = 1,400 ft ² (458 ft ² /gal) at 3.5 wet mils Unpigmented Sikafloor 315 with Wear Additive: 2.84 gallon mix = 1,300 ft ² (458 ft ² /gal) at 3.5 wet mils (The above figures do not allow for surface profile or wastage)			
Pot Life	Material Temperature	Time		
	+50°F (10°C)	~ 50 minutes		
	+68°F (20°C)	~ 25 minutes		
	+86°F (30°C)	~ 15 minutes		
	*Do not apply after indicated Pot Life is exceeded. End of Pot Life is not visible.			
Waiting / Recoat Times	Before applying second coat of Sikafloor 315 allow:			
	Ambient & Substrate Temperature	Minimum	Maximum	
	+50°F (10°C)	24 hours	3 days	
	+68°F (20°C)	8 hours	2 days	
	+86°F (30°C)	6 hours	1 day	
Cure Times	Ambient & Substrate Temperature	Foot traffic	Light traffic	Full cure
	+50°F (10°C)	~ 24 hours	~ 6 days	~ 10 days
	+68°F (20°C)	~ 12 hours	~ 4 days	~ 7 days
	+86°F (30°C)	~ 6 hours	~ 2 days	~ 5 days
Properties Tested at 73°F (23°C) and 50 % R.H:				
Tensile Strength		ASTM D2370	2,882 psi.	
Pull-off Strength - Primed Concrete		ASTM D4541	> 400 psi (2.76 MPa) (100% concrete failure)	
Elongation			2.29	
Abrasion Resistance (CS-17 Wheel, 1000 gm load, 1000 cycles)		ASTM D4060	0.01 - 0.02 grams	
Coefficient Of Friction		ASTM 2047	0.6 - 0.7	
VOC Content		ASTM D2369 With Wear Aggregate	≤ 100 g/L	
		ASTM D2369 With Sikafloor Urethane Color Add Only	≤ 50 g/L	
Hardness		ASTM D 3363 Pencil	2H to 3H	
Slip Resistance		Equivalent to ASTM D2047	Passes	
Chemical Resistance		Please consult Sikafloor Technical Services.		
Shelf Life		2 years in unopened container, Store dry between 40° - 90°F (4° - 32°C)		



PRIOR TO EACH USE OF ANY SIKA PRODUCT, THE USER MUST ALWAYS READ AND FOLLOW THE WARNINGS AND INSTRUCTIONS ON THE PRODUCT'S MOST CURRENT PRODUCT DATA SHEET, PRODUCT LABEL AND SAFETY DATA SHEET WHICH ARE AVAILABLE ONLINE AT [HTTP://USA.SIKA.COM/](http://USA.SIKA.COM/) OR BY CALLING SIKA'S TECHNICAL SERVICE DEPARTMENT AT 800.933.7452 NOTHING CONTAINED IN ANY SIKA MATERIALS RELIEVES THE USER OF THE OBLIGATION TO READ AND FOLLOW THE WARNINGS AND INSTRUCTIONS FOR EACH SIKA PRODUCT AS SET FORTH IN THE CURRENT PRODUCT DATA SHEET, PRODUCT LABEL AND SAFETY DATA SHEET PRIOR TO PRODUCT USE.

**How to Use
Surface
Preparation**

Surface must be clean, sound and dry. Remove dust, laitance, grease, curing compounds, bond inhibiting impregnations, waxes and any other contaminants. All projections, rough spots, etc. should be dressed off to achieve a level surface prior to the application. **Concrete** - Should be cleaned and prepared to achieve a laitance-free and contaminant-free, open textured surface by shot blasting or equivalent mechanical means (CSP-3 to CSP-4 as per ICRI guidelines). Sweep and vacuum any remaining dirt and dust with a wet/dry vacuum. Removing residual dust will help ensure a tenacious bond between the primer and substrate. Whenever "shot-blasting" is utilized, be careful to leave concrete with a uniform texture. "Over-blasting" will result in reduced coverage rates of the primer and/or subsequent topcoats. The "shotblast" pattern may show through the last coat, known as "tracking". The compressive strength of the concrete substrate should be at least 3,500 psi (24 MPa) at 28 days and at least 215 psi (1.5 MPa) in tension at the time of application. For other substrates, please contact Sikafloor Technical Services.

Priming

Priming for concrete substrate is required. Prime with either **Sikafloor 160, Sikafloor 161 or Sikafloor 1610**. Allow the primer to cure (varies with temperature and humidity) until tack free before applying subsequent coats. Ensure that the primer is pore-free, pinhole-free and provides uniform and complete coverage over the entire substrate.

Please refer to the individual most current and respective Product Data Sheet for specific and detailed information.

Mixing

Mix Ratio: Mix full units only

Clear Resin:

Empty the entire contents of the Component B (Isocyanate) into a clean bucket/container large enough to accommodate the mix size quantity. Using a Jiffy Blade and drill, add the the Component A (Catalyst) to the Component B (Isocyanate) under agitation. Mix at low speed for 1 minute (300 - 450 rpm). Next, slowly add the wear additive aggregate to the material under agitation, mix for 2 minutes. Be careful not to introduce any air bubbles while mixing. Make sure the contents are completely mixed to avoid any weak or partially cured spots in the coating. During the mixing operation, scrape down the sides and bottom of the container with a flat or straight edge trowel at least once to ensure complete mixing.

Field Pigmented:

Premix each component separately. If color is desired, the appropriate Sikafloor Urethane Color Additive is added to Component B (Isocyanate) at a rate of 1 quart per 2.34 mixed gallons (i.e. Components A+B). Mix Component B (Isocyanate) and Sikafloor Polyurethane Color Additive for 2 minutes or until a uniform color is achieved with a low speed drill (300 - 450 rpm) and Exomixer or Jiffy type paddle suited to the volume. Empty Component A (Catalyst) in the correct mix ratio to Component B (Isocyanate) and mix for additional 2 minutes. Be careful not to introduce any air bubbles while mixing. Make sure the contents are completely mixed to avoid any weak or partially cured spots in the coating. During the mixing operation, scrape down the sides and bottom of the container with a flat or straight edge trowel at least once to ensure complete mixing.

Do not mix more material than can be applied within the working time limits (i.e. Pot Life) at the actual field temperature

Application

Application of Sikafloor 315 using a Roller:

Sikafloor 315 is applied with an 18 inch (454 mm) wide short nap roller, 3/8-inch (10 mm), solvent-resistant roller cover at a thickness of 3 – 3.5 mils (0.075 mm).

The floor area to be coated should be divided into sections that can be done completely in one application sequence. Sections should be divided at expansion joints or doorways when possible. The end of a section should be taped off to form a straight clean edge for an adjacent section. Pour the material in a roller tray and saturate the roller, remove the excess material by lightly rolling it in the tray. Apply 3 pairs of 8 - 10 foot long paths on to the floor. Spread the material with roller passes perpendicular to the originally applied paths. This material may be aggressively rolled to even out the application. It is extremely important to apply the coating at a rate of 3 - 3.5 mils to achieve proper appearance, texture, and color stability. If material is applied too heavy, the coating may blister, if too thin, the coating will appear very flat in sheen. It is also very important to remix the material often with the roller in the tray to keep the aggregate from settling. Cross roll the entire area with straight uninterrupted passes across the entire width of the floor. This will reduce roller marks. If appearance is still not uniform after a few of these passes, repeat this procedure.



PRIOR TO EACH USE OF ANY SIKA PRODUCT, THE USER MUST ALWAYS READ AND FOLLOW THE WARNINGS AND INSTRUCTIONS ON THE PRODUCT'S MOST CURRENT PRODUCT DATA SHEET, PRODUCT LABEL AND SAFETY DATA SHEET WHICH ARE AVAILABLE ONLINE AT [HTTP://USA.SIKA.COM/](http://USA.SIKA.COM/) OR BY CALLING SIKA'S TECHNICAL SERVICE DEPARTMENT AT 800.933.7452 NOTHING CONTAINED IN ANY SIKA MATERIALS RELIEVES THE USER OF THE OBLIGATION TO READ AND FOLLOW THE WARNINGS AND INSTRUCTIONS FOR EACH SIKA PRODUCT AS SET FORTH IN THE CURRENT PRODUCT DATA SHEET, PRODUCT LABEL AND SAFETY DATA SHEET PRIOR TO PRODUCT USE.



Application of Sikafloor 315 using a Flat Squeegee:

Pour a thin ribbon, approximately 6”- 8” wide of Sikafloor 315 onto the floor surface. Using a flat squeegee spread the material at the manufacturers recommended rate. Avoid leaving puddles of the Sikafloor 315 on the floor surface. Using a 3/8” nap roller, back roll the material in the opposite direction that it was squeegee applied. Continue to back roll the material to achieve even coverage across the floor. The Sikafloor 315 can be rolled aggressively to remove any color shading. It is extremely important to apply this material at a rate of 3 – 3.5 mils (WFT). To finish, the Sikafloor 315 should be cross rolled; uninterrupted across the entire width of the floor. This will help reduce roller marks. It is important to remix the remaining material in the bucket before a fresh ribbon of material is poured onto the floor. This will ensure that the Wear Additive is evenly dispersed in the Sikafloor 315.

Limitations

Notes on Limitations:

Prior to application, measure and confirm Substrate Moisture Content, Ambient Relative Humidity, Ambient and Surface Temperature and Dew Point. During installation, confirm and record above values at least once every 3 hours, or more frequently whenever conditions change (e.g. Ambient Temperature rise/fall, Relative Humidity increase/decrease, etc.).

Substrate Moisture Content: Moisture content of concrete substrate must be ≤ 4% by mass (pbw – part by weight) as measured with a Tramex® CME/CMExpert type concrete moisture meter on mechanically prepared surface according to this product data sheet (preparation to CSP-3 to CSP-4 as per ICRI guidelines). Do not apply to concrete substrate with moisture levels > 4% mass (pbw – part by weight) as measured with Tramex® CME/CMExpert type concrete moisture meter. If moisture content of concrete substrate is > 4% by mass (pbw – part by weight) as measured with Tramex® CME/CMExpert type concrete moisture meter, use Sikafloor 1610 or Sikafloor 22NA PurCem.

When relative humidity tests for concrete substrate are conducted per ASTM F2170 for project specific requirements, values must be ≤ 85%. If values are > 85% according to ASTM F2170 use Sikafloor 1610 or Sikafloor 22NA PurCem.

ASTM F2170 testing is not a substitute for measuring substrate moisture content with a Tramex® CME/CMExpert type concrete moisture meter as described above.

Material Temperature: Precondition material for at least 24 hours between 65° to 75°F (18° to 24°C)

Ambient Temperature: Minimum/Maximum 50°/85°F (10°/30°C)

Substrate Temperature: Minimum/Maximum 50°/85°F (10°/30°C). Substrate temperature must be at least 5°F (3°C) above measured Dew Point.

Mixing and Application must adhere to Material, Ambient and Substrate temperatures listed above or a decrease in product workability and slower cure rates will occur.

Relative Ambient Humidity: Minimum ambient humidity 30%
Maximum ambient humidity 75% (during application and curing)

Dew Point: Beware of condensation!

The substrate must be at least 5°F (3°C) above the Dew Point to reduce the risk of condensation, which may lead to adhesion failure or “blushing” on the floor finish. Be aware that the substrate temperature may be lower than the ambient temperature.

Mixing: Do not hand mix Sikafloor materials. Mechanically mix only.

Do not thin this product. Addition of thinners (e.g. water, solvent, etc.) will slow cure and reduce ultimate properties of this product. Use of thinners will void any applicable Sika warranty.

Application: Apply the coating to the prepared substrate which should be pore-free and pinhole-free. If necessary, apply an additional coat of a suitable material to ensure the substrate is pore-free and pinhole-free and provides uniform and complete coverage over the entire substrate.

- Do not apply while ambient and substrate temperatures are rising, as pinholes may occur. Ensure there is no vapor drive at the time of application. Refer to ASTM D4263, may be used for a visual indication of vapor drive.
- Will discolor over time when exposed to sunlight (UV) and under certain artificial lighting conditions. Use of clear UV resistant top coat may not prevent discoloration of underlying coatings.
- Do not apply Sikafloor to concrete substrate containing aggregates susceptible to ASR (Alkali Silica Reaction) due to risk of natural alkali redistribution below the Sikafloor product after application. If concrete substrate has or is suspected to have ASR (Alkali Silica Reaction) present, do not proceed. Consult with design professional prior to use.
- Any aggregate used with Sikafloor systems must be non-reactive and oven-dried.
- This product is not designed for negative side waterproofing.
- Use of unvented heaters and certain heat sources may result in defects (e.g. blushing, whitening, debonding, etc.).
- Beware of air flow and changes in air flow. Introduction of dust, debris, and particles, etc. may result in surface imperfections and other defects.
- For professional use only by experienced applicators.

PRIOR TO EACH USE OF ANY SIKA PRODUCT, THE USER MUST ALWAYS READ AND FOLLOW THE WARNINGS AND INSTRUCTIONS ON THE PRODUCT'S MOST CURRENT PRODUCT DATA SHEET, PRODUCT LABEL AND SAFETY DATA SHEET WHICH ARE AVAILABLE ONLINE AT [HTTP://USA.SIKA.COM/](http://USA.SIKA.COM/) OR BY CALLING SIKA'S TECHNICAL SERVICE DEPARTMENT AT 800.933.7452 NOTHING CONTAINED IN ANY SIKA MATERIALS RELIEVES THE USER OF THE OBLIGATION TO READ AND FOLLOW THE WARNINGS AND INSTRUCTIONS FOR EACH SIKA PRODUCT AS SET FORTH IN THE CURRENT PRODUCT DATA SHEET, PRODUCT LABEL AND SAFETY DATA SHEET PRIOR TO PRODUCT USE.

Industrial Flooring

The Sika logo consists of the word "Sika" in a bold, yellow, sans-serif font, positioned inside a red triangle that points downwards.

PRIOR TO EACH USE OF ANY SIKA PRODUCT, THE USER MUST ALWAYS READ AND FOLLOW THE WARNINGS AND INSTRUCTIONS ON THE PRODUCT'S MOST CURRENT PRODUCT DATA SHEET, PRODUCT LABEL AND SAFETY DATA SHEET WHICH ARE AVAILABLE ONLINE AT [HTTP://USA.SIKA.COM/](http://USA.SIKA.COM/) OR BY CALLING SIKA'S TECHNICAL SERVICE DEPARTMENT AT 800.933.7452 NOTHING CONTAINED IN ANY SIKA MATERIALS RELIEVES THE USER OF THE OBLIGATION TO READ AND FOLLOW THE WARNINGS AND INSTRUCTIONS FOR EACH SIKA PRODUCT AS SET FORTH IN THE CURRENT PRODUCT DATA SHEET, PRODUCT LABEL AND SAFETY DATA SHEET PRIOR TO PRODUCT USE.

KEEP CONTAINER TIGHTLY CLOSED • KEEP OUT OF REACH OF CHILDREN • NOT FOR INTERNAL CONSUMPTION • FOR INDUSTRIAL USE ONLY

All information provided by Sika Corporation ("Sika") concerning Sika products, including but not limited to, any recommendations and advice relating to the application and use of Sika products, is given in good faith based on Sika's current experience and knowledge of its products when properly stored, handled and applied under normal conditions in accordance with Sika's instructions. In practice, the differences in materials, substrates, storage and handling conditions, actual site conditions and other factors outside of Sika's control are such that Sika assumes no liability for the provision of such information, advice, recommendations or instructions related to its products, nor shall any legal relationship be created by or arise from the provision of such information, advice, recommendations or instructions related to its products. The user of the Sika product(s) must test the product(s) for suitability for the intended application and purpose before proceeding with the full application of the product(s). Sika reserves the right to change the properties of its products without notice. All sales of Sika product(s) are subject to its current terms and conditions of sale which are available at www.sikausa.com or by calling 800-933-7452.

Prior to each use of any Sika product, the user must always read and follow the warnings and instructions on the product's most current Product Data Sheet, product label and Material Safety Data Sheet which are available online at www.sikausa.com or by calling Sika's Technical Service Department at 800-933-7452. Nothing contained in any Sika materials relieves the user of the obligation to read and follow the warnings and instruction for each Sika product as set forth in the current Product Data Sheet, product label and Material Safety Data Sheet prior to product use.

Sika warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within shelf life. User determines suitability of product for intended use and assumes all risks. Buyer's sole remedy shall be limited to the purchase price or replacement of product exclusive of labor or cost of labor. **NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKASHALLNOT BELIEABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKASHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.**

Visit our website at www.sikausa.com

1-800-933-SIKA NATIONWIDE

Regional Information and Sales Centers. For the location of your nearest Sika sales office, contact your regional center.

Sika Corporation
201 Polito Avenue
Lyndhurst, NJ 07071
Phone: 800-933-7452
Fax: 201-933-6225

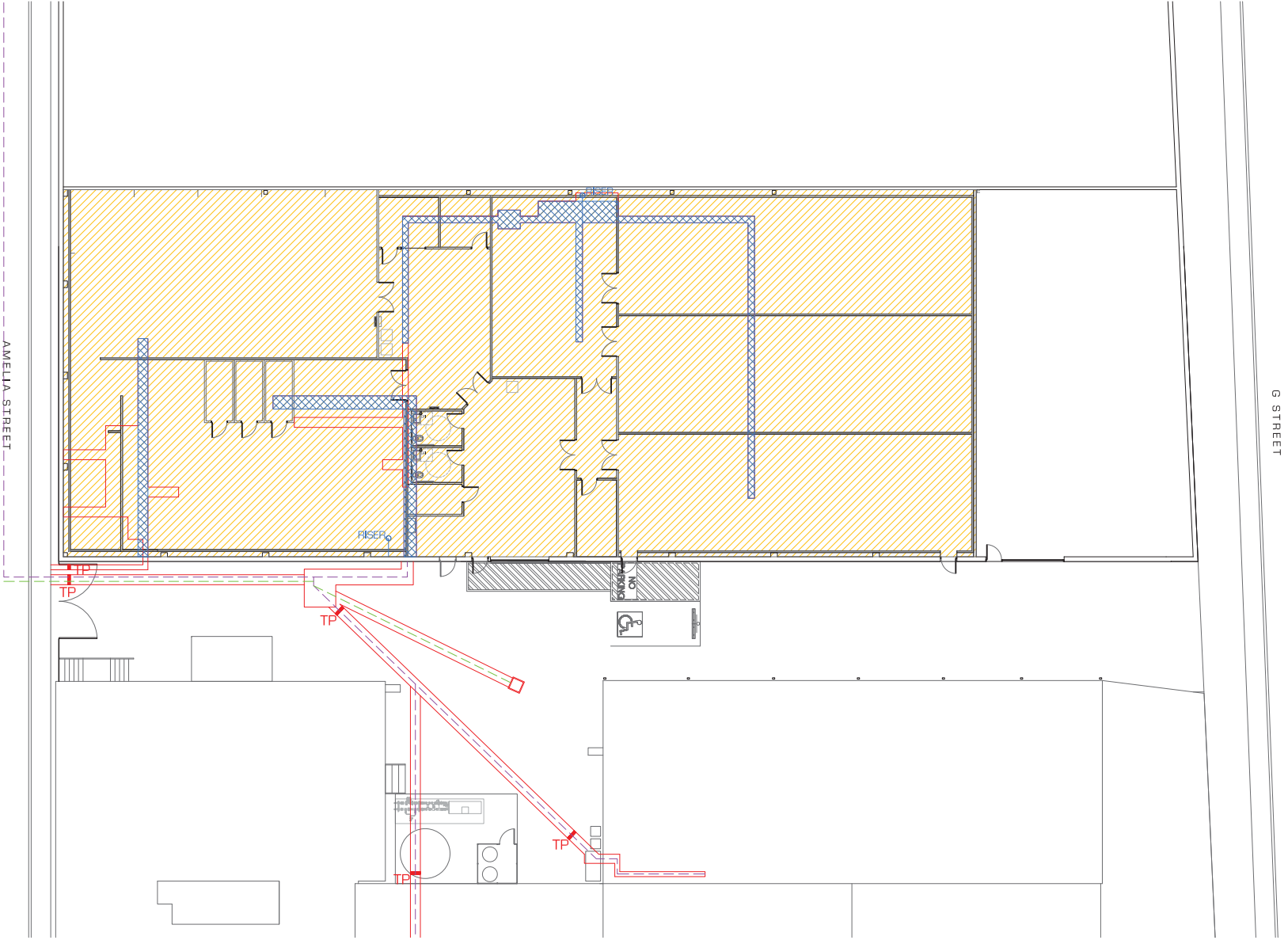
Sika Canada Inc.
601 Delmar Avenue
Pointe Claire
Quebec H9R 4A9
Phone: 514-697-2610
Fax: 514-694-2792

Sika Mexicana S.A. de C.V.
Carretera Libre Celaya Km. 8.5
Fracc. Industrial Balvanera
Corregidora, Queretaro
C.P. 76920
Phone: 52 442 2385800
Fax: 52 442 2250537



ATTACHMENT D

Phase II (8410A) Drawing of As-Built Trench Plugs and Planned Epoxy Floor Finish, Trench Design Detail, and Photos



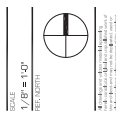
1 PHASE 2 TRENCH AND TRENCH PLUG LOCATIONS AND FLOOR FINISH
 1/8" = 1'-0"

LEGEND	
	EPoxy RISER
	TRENCH PLUG
	TRENCH
	SANITARY SEWER LINE
	STORM SEWER
	DOUBLE VENTILATION AND RISERS

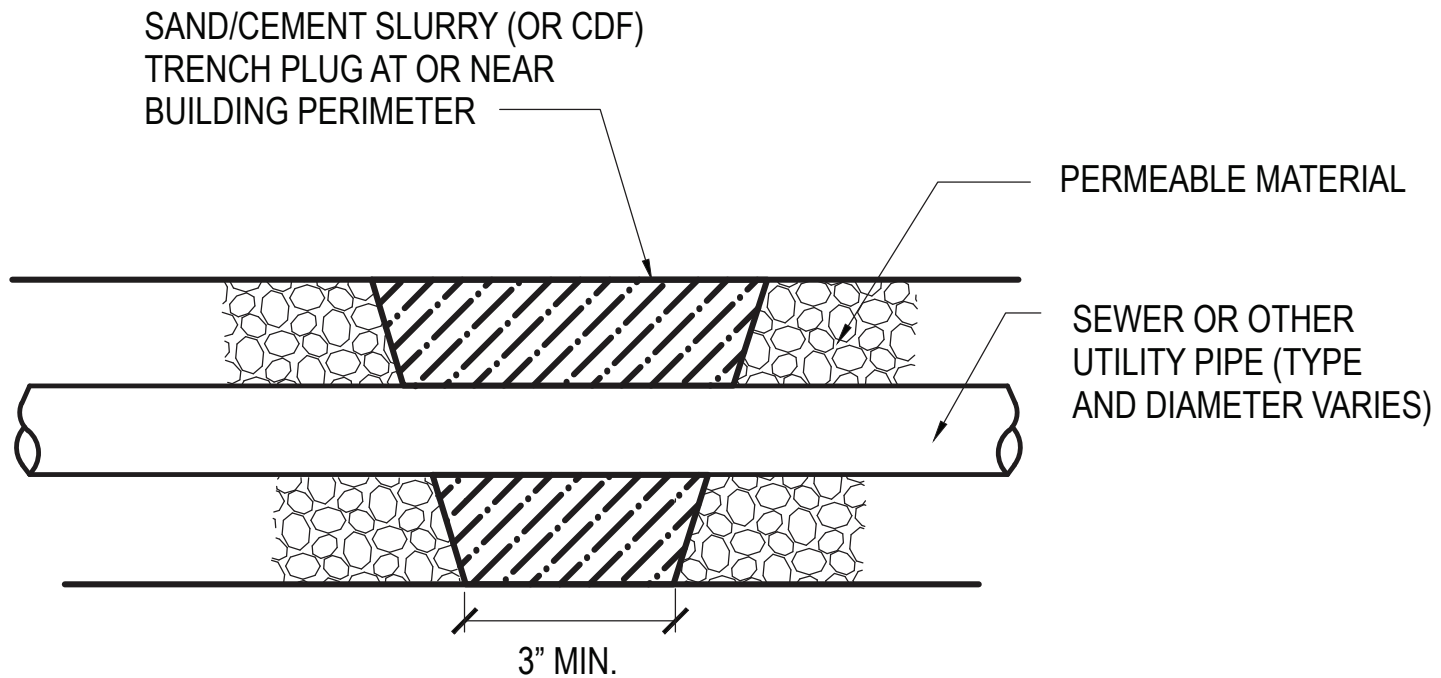
PROTON
 3387 Mission Street
 San Francisco, CA 94110
 415.992.0889

PROJECT DATA
8410 AMELIA
 8410 AMELIA STREET
 OAKLAND, CA 94621
 APN # 46-4301-1-5

DATE	DESCRIPTION
11.15.17	ENVIRONMENTAL



A.202
 SHEET DESIGN FOR
 TRENCH PLUG
 LOCATIONS
 2025 FLOOR FINISH



TYPICAL SOIL GAS CUT-OFF BARRIER/TRENCH PLUG IN UTILITY TRENCH

Not to Scale

Figure
1



Photo 1. Construction of trench plug in sewer utility trench.



Photo 2. Trench plug in sewer trench south of Building B South.



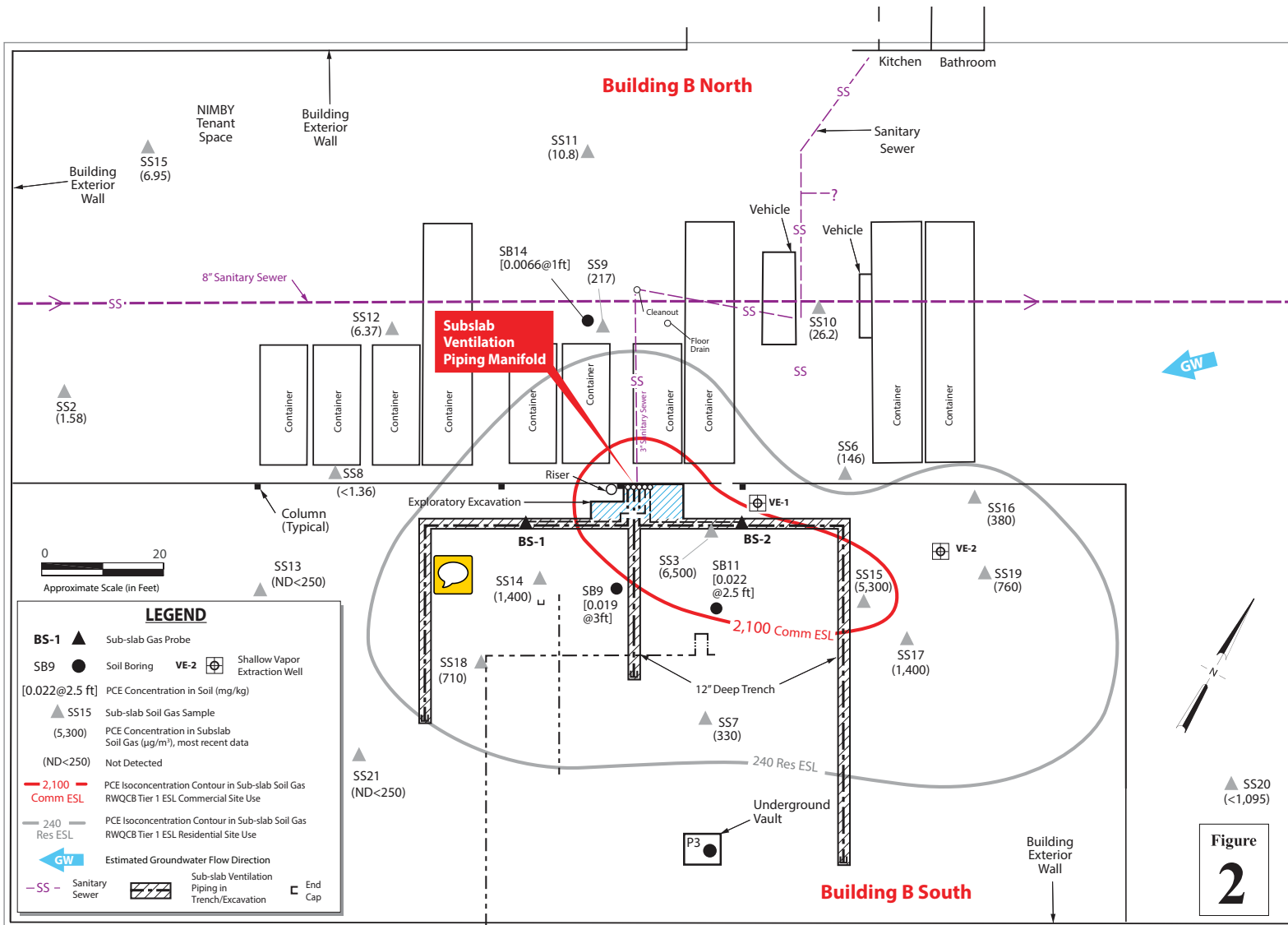
Photo 3. Construction of trench plug in sewer utility trench.



Photo 4. Trench plug in sewer trench south of Building B South.

ATTACHMENT E

Phase II (8410A) Vapor Mitigation System Layout, Details and Photos

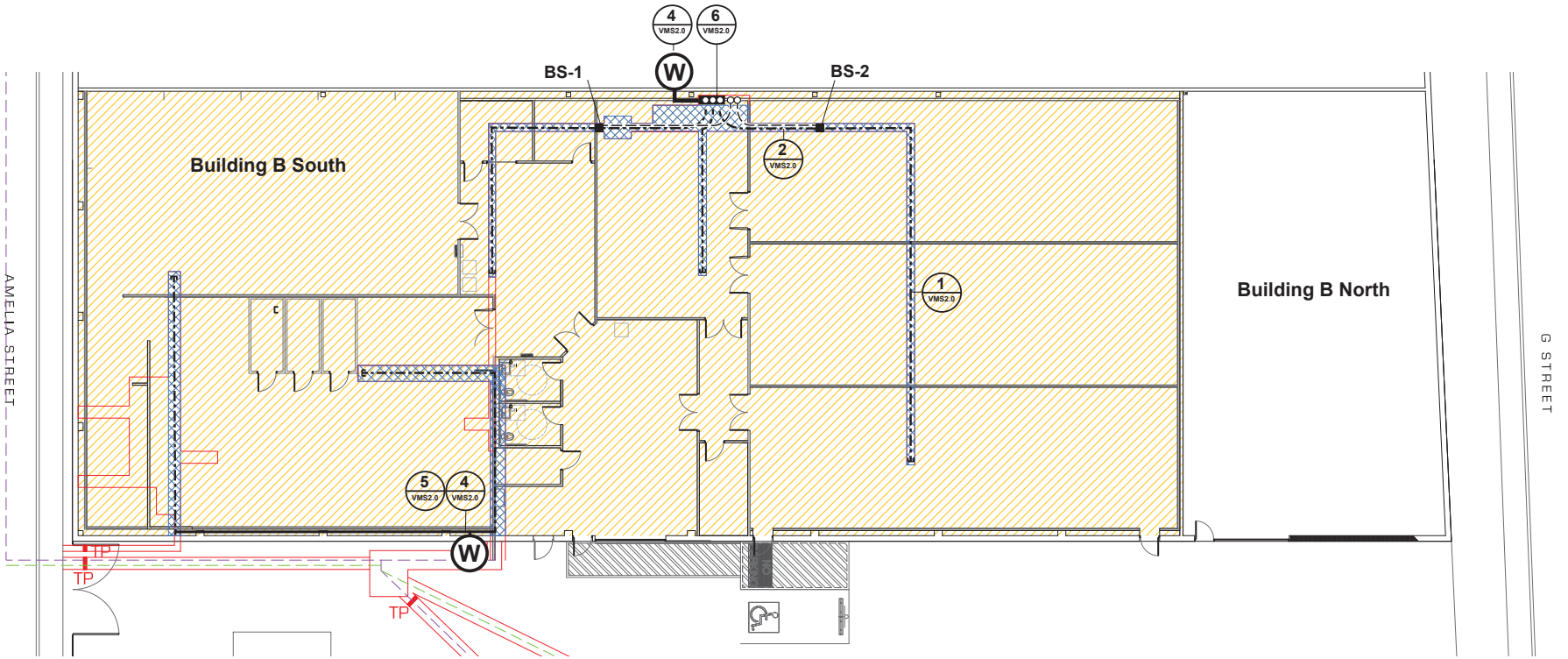


8410 Amelia Street
Oakland, California



Sub-slab Ventilation at Source Area in Building B

Building B North



SYMBOLS LEGEND

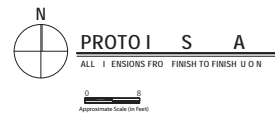
- 3" DIAMETER PERFORATED CORRUGATED HDPE DRAIN PIPE BELOW SLAB (SEE DETAILS ON SHEET VMS2.01A)
- 3" DIAMETER SOLID SCH. 40 PVC PIPE BELOW SLAB
- ⊔ 3" DIAMETER HDPE PIPE END CAP
- BS-1 ■ - - - SUB-SLAB GAS PROBE AND 1/4" DIAMETER TEFLON TUBING WITH 3/4" PVC SOLID PIPE CASING

- (W) CIP, DIP OR METAL RISER PIPE TO ROOF (SEE DETAILS ON SHEET VMS2.0)
- (1) SEE DETAIL 1, SHEET VMS2.0

- EPOXY FINISH
- TRENCH PLUG
- TRENCH BOUNDARY
- SANITARY SEWER LINE
- STORM SEWER
- TRENCH FOR SUB-SLAB VENTILATION AND PIPING

GENERAL NOTES

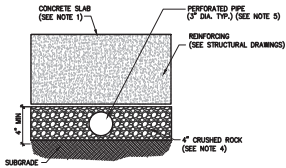
1. SYMBOLS NOT TO SCALE.



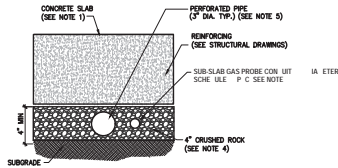
Vapor Mitigation Plan
VMS1.0

8410A Amelia Street
Oakland, California

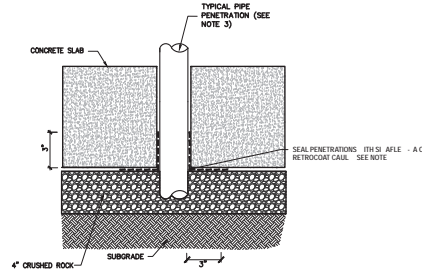




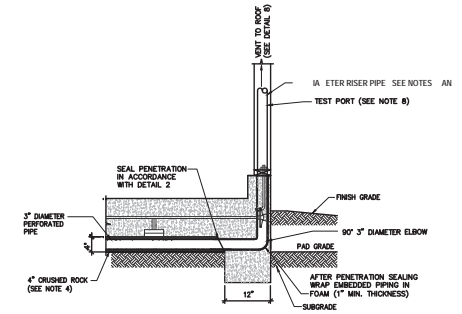
1 TYPICAL VAPOR MITIGATION SYSTEM CROSS-SECTION
NOT TO SCALE



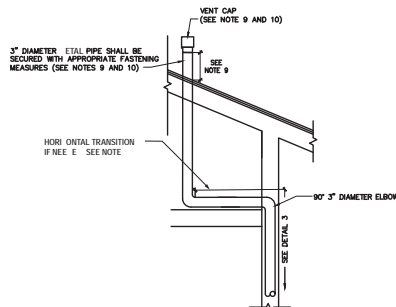
2 TYPICAL VAPOR MITIGATION SYSTEM CROSS-SECTION WITH SUB-SLAB PROBE
NOT TO SCALE



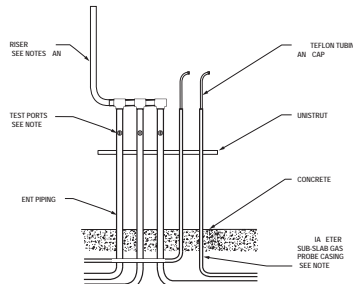
3 TYPICAL SEALING OF ALL PENETRATIONS THROUGH CONCRETE SLAB
NOT TO SCALE



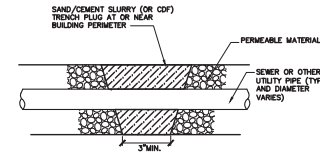
4 HORIZONTAL-TO-VERTICAL RISER TRANSITION AT EXTERIOR WALL
NOT TO SCALE



5 RISER TRANSITION TO VENT AT ROOF
NOT TO SCALE



6 ANIFOL FOR VENT PIPING AND SUB-SLAB GAS PIPING
NOT TO SCALE



7 TYPICAL SOIL GAS CUT-OFF BARRIER IN UTILITY TRENCH
NOT TO SCALE

NOTES

- ALL LOCATIONS AND DIMENSIONS OF BUILDING SLABS, FOOTINGS, SHEAR WALLS, AND GRADE BEAMS TO BE CONFIRMED WITH STRUCTURAL DETAILS.
- PENETRATIONS SHALL BE SEALED WITH SI AFLE - A PRE I U HIGH PERFOR ANCE OISTURE -CURE ONE-CO NONENT POLYURETHANE-BASE ELASTO ERIC SEALANT OR RETROCOAT CAUL ACCOR ING TO LAN SCIENCE TECHNOLOGIES MANUFACTURER'S SPECIFICATIONS AND QA/QC REQUIREMENTS BY A MANUFACTURER APPROVED APPLICATOR.
- SLAB PENETRATIONS SHALL NOT BE IN CONTACT WITH AN ADJACENT PENETRATION THAT WOULD PREVENT PROPER SEALING OF THE PENETRATION CIRCUMFERENCE. SLAB PENETRATIONS SHALL BE PREPARED AND STURBED PRIOR TO APPLYING SEALANT.
- CRUSHED ROCK LAYER SHALL BE 1/4\"/>

Vapor Mitigation System Details VMS2.0

8410A Amelia Street
Oakland, California





Photo 1 - SSV Piping at Manifold before Backfilling



Photo 2 - SSV Piping before Backfilling



Photo 3 - SSV Piping and Sub-slab Probe with Protective Outer Casing



Photo 4 - Sub-slab Probe (Tip and Teflon Tubing) with 3/4" PVC Casing



Photo 5 - SSV Piping with Partial Backfill



Photo 6 - Trench Backfill Completion



Photo 7-Manifold Stub Ups



Photo 8 – Manifold with Partial Backfilling

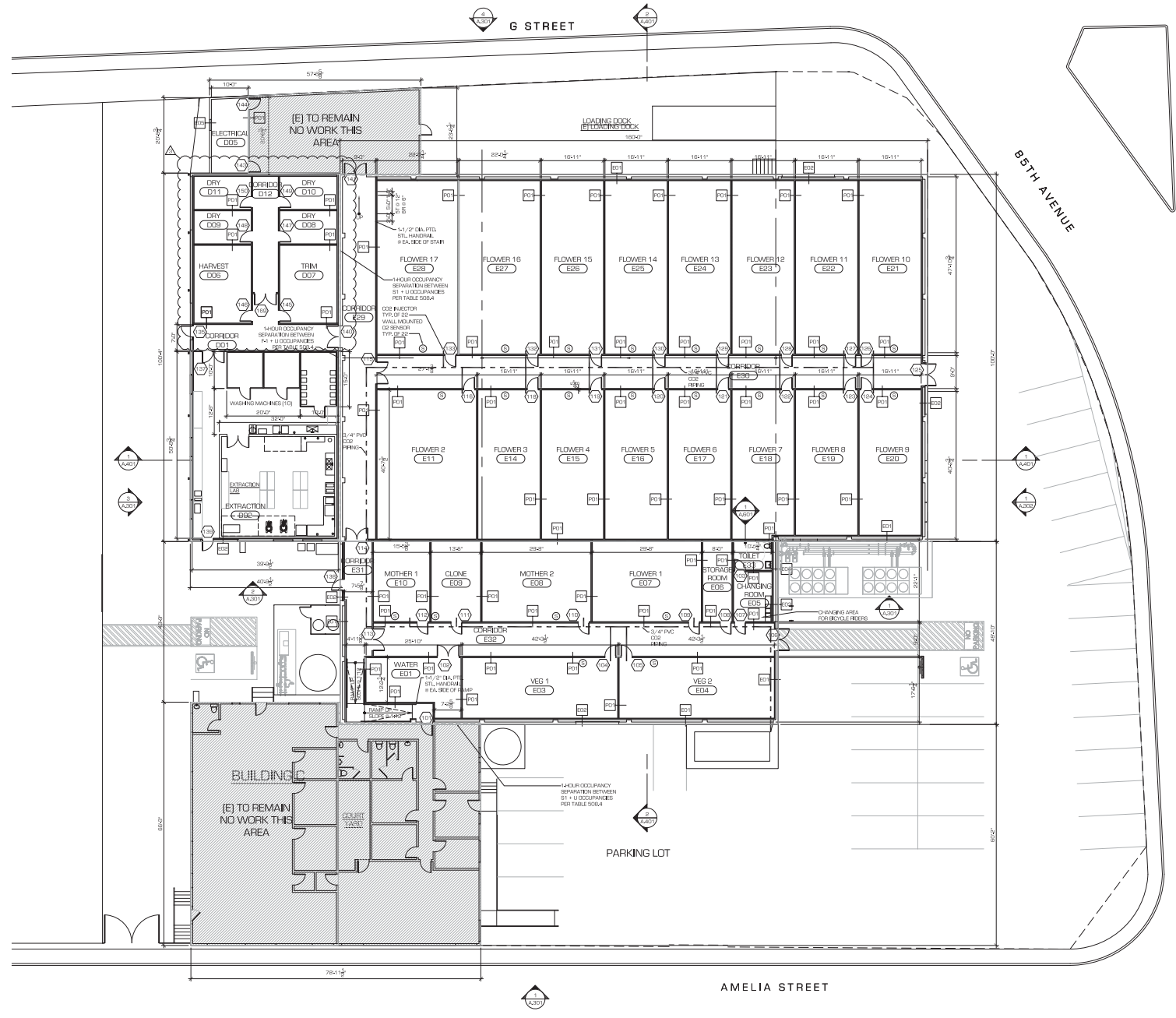
ATTACHMENT F

Phase I Tenant Improvements Drawing Set (Select Pages)

NO. 1	PROJ. NO. 14-00000000
NO. 2	PROJ. NAME A.201
NO. 3	PROJ. DATE 10/2018
NO. 4	PROJ. DESCRIPTION PLANNED RENOVATION
NO. 5	PROJ. LOCATION 8430 AMELIA STREET
NO. 6	PROJ. CLIENT AMELIA STREET VENTURES
NO. 7	PROJ. ARCHITECT PROTON
NO. 8	PROJ. ENGINEER PROTON
NO. 9	PROJ. CONTRACTOR
NO. 10	PROJ. PERMIT NO.
NO. 11	PROJ. PERMIT DATE
NO. 12	PROJ. PERMIT EXPIRES

SCALE	3/32" = 1'-0"
PROJ. NO.	14-00000000
PROJ. NAME	A.201
PROJ. DATE	10/2018
PROJ. DESCRIPTION	PLANNED RENOVATION
PROJ. LOCATION	8430 AMELIA STREET
PROJ. CLIENT	AMELIA STREET VENTURES
PROJ. ARCHITECT	PROTON
PROJ. ENGINEER	PROTON
PROJ. CONTRACTOR	
PROJ. PERMIT NO.	
PROJ. PERMIT DATE	
PROJ. PERMIT EXPIRES	

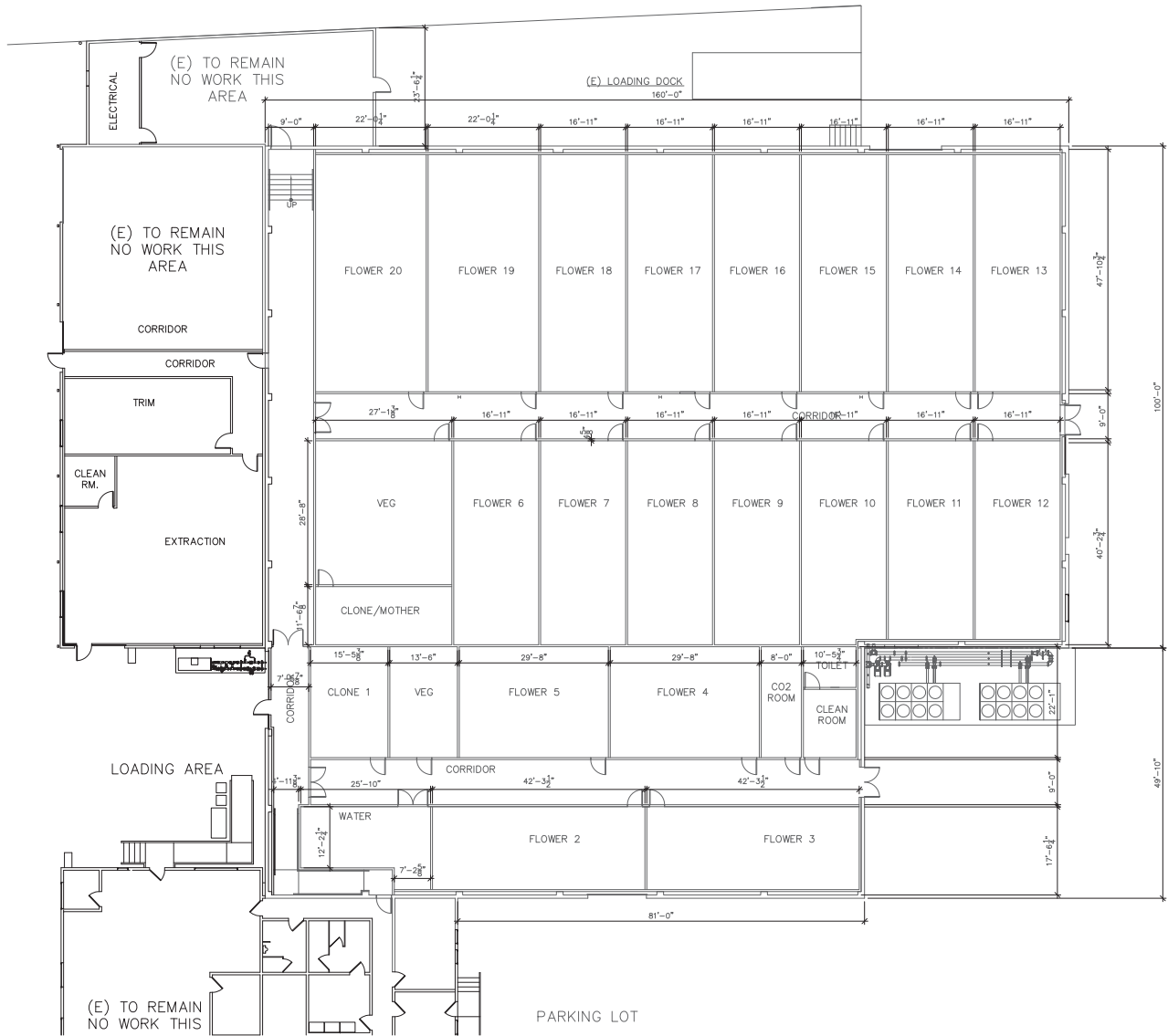
SHEET NO.	A.201
SHEET DESCRIPTION	PROPOSED GROUND FLOOR PLAN
DATE	10/2018
SCALE	3/32" = 1'-0"
PROJ. NO.	14-00000000
PROJ. NAME	A.201
PROJ. DATE	10/2018
PROJ. DESCRIPTION	PLANNED RENOVATION
PROJ. LOCATION	8430 AMELIA STREET
PROJ. CLIENT	AMELIA STREET VENTURES
PROJ. ARCHITECT	PROTON
PROJ. ENGINEER	PROTON
PROJ. CONTRACTOR	
PROJ. PERMIT NO.	
PROJ. PERMIT DATE	
PROJ. PERMIT EXPIRES	



WALL LEGEND

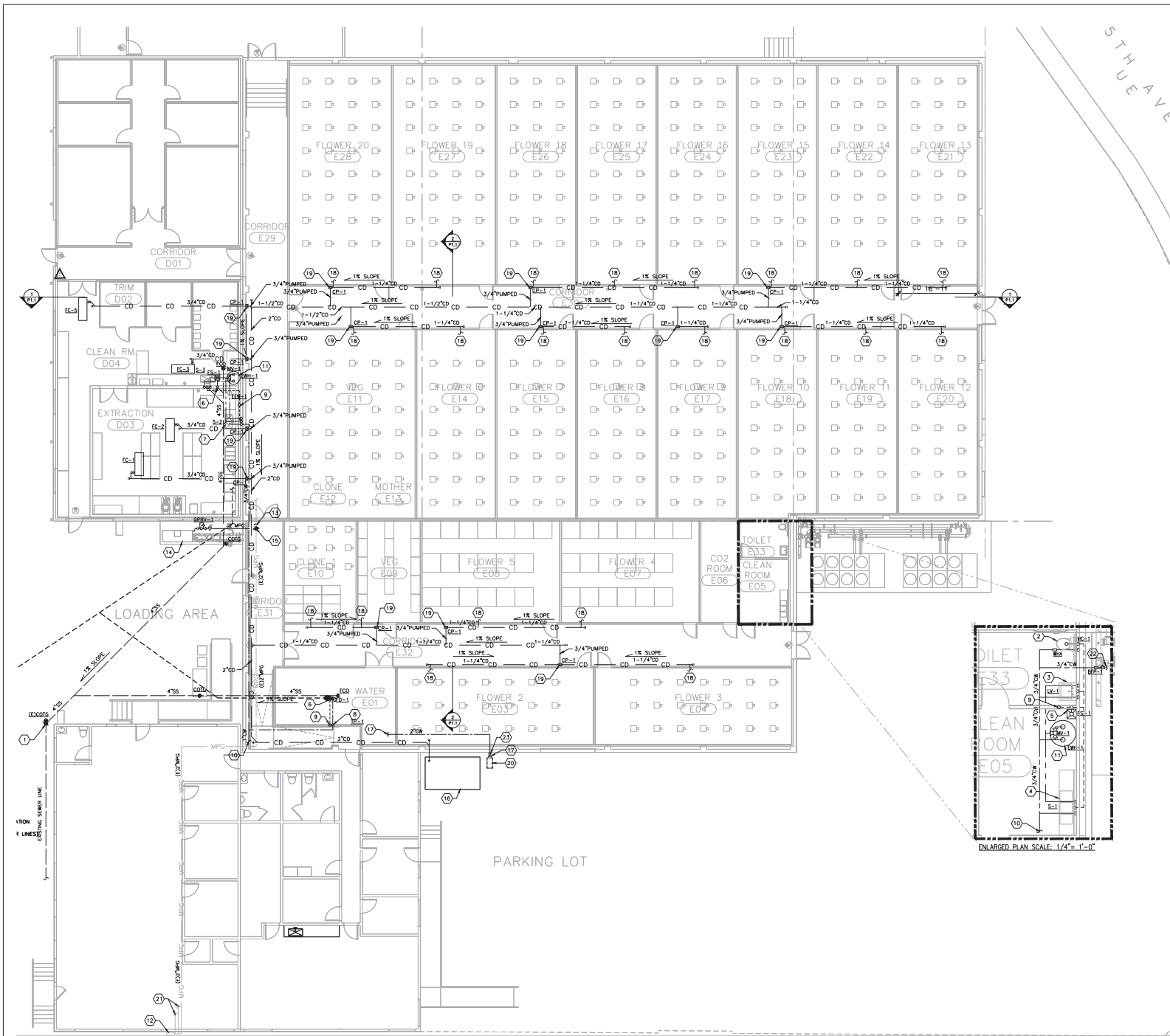
	(N) WALL/PARTITION
	(E) WALL/PARTITION

1 GROUND FLOOR PLAN
 3/32" = 1'-0"



FLOOR PLAN
SCALE: 3/32" = 1'-0"

REVISION	
NO.	DATE
STRUCTURAL ENGINEERS:	
VTA CONSULTING ENGINEERS	
1755 J. HUNTINGTON DRIVE, SUITE 202	
OAKLAND, CALIFORNIA 94612	
TEL: (510) 575-5221 FAX: (510) 575-5262	
RESTRICTIVE NOTICE: ALL DESIGN, TESTING, AND CONSTRUCTION SPECIFICATIONS, DRAWINGS, AND REPORTS ARE THE EXCLUSIVE PROPERTY OF VTA CONSULTING ENGINEERS. NO PART OF THIS DOCUMENT IS TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF VTA CONSULTING ENGINEERS. THIS DRAWING IS PROTECTED BY COPYRIGHT.	
	
ARCHITECT:	AMELIA STREET VENTURES TENANT IMPROVEMENT 8430 AMELIA STREET OAKLAND, CALIFORNIA 94621 APN # 42-4301-15
SHEET TITLE:	FLOOR PLAN AMELIA STREET VENTURES TENANT IMPROVEMENT 8430 AMELIA STREET OAKLAND, CALIFORNIA 94621 APN # 42-4301-15
DRAWN:	A.S.
CHECKED:	V.J.
DATE:	03/13/17
SCALE:	AS SHOWN
JOB NO.	1703-028
FILE NAME:	
DRAWING:	
S-1	



GENERAL NOTES

1. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION PRIOR TO START OF CONSTRUCTION.
2. REMOVE EXISTING PLUMBING EQUIPMENTS, FIXTURES AND PIPES IF THEY ARE NOT REUSED. CAP PIPE AND PATCH THE WALL, FLOOR, CEILING AND ROOF.
3. REMOVE EXISTING PLUMBING EQUIPMENTS, FIXTURES AND PIPES IF THEY ARE NOT REUSED. CAP PIPE AND PATCH THE WALL, FLOOR, CEILING AND ROOF.
4. ALL OF CONDENSATE DRAIN PIPE IS 1/2" SLOPE.
5. ALL OF CONDENSATE DRAIN PIPE IS COPPER TYPE M.
6. PROVIDE GAS REGULATOR FOR ALL EXISTING GAS APPLIANCE/EQUIPMENT IF THEY ARE TO BE RE-USED. FIELD VERIFY LOCATIONS AND SIZE OF REGULATOR.

SHEET NOTES

- 1) P.O.C. VERIFY THE LOCATION & INVERT OF EXISTING SEWER.
- 2) 1/2" CW, 4" SS, 2" V TO WATER CLOSET. EXTEND AND CONNECT 4" SS, 2" V TO THE NEAREST EXISTING 4" SS, 2" V.
- 3) 1/2" CW, 2" SS, 1-1/2" V TO LAVATORY. EXTEND AND CONNECT 2" SS TO THE NEAREST EXISTING 2" SS.
- 4) 1/2" CW/HW, 2" SS, 1-1/2" V TO SINK(S-1). EXTEND AND CONNECT 2" SS TO THE NEAREST EXISTING 2" SS.
- 5) 2" SS, 1-1/2" V TO FLOOR SINK. EXTEND AND CONNECT 2" SS TO THE NEAREST EXISTING 2" SS.
- 6) 2" SS, 1-1/2" V TO FLOOR DRAIN/FLOOR SINK.
- 7) 1/2" CW/HW, 2" SS, 2" V TO SINK(S-2/S-3).
- 8) 1/2" CW DOWN TO ACCESSIBLE TRAP PRIMER(TP-1).
- 9) 2" VTR.
- 10) EXTEND AND CONNECT 1" CW TO EXISTING 1" CW. VERIFY THE LOCATION OF EXISTING 1" CW.
- 11) 3/4" CW/HW TO ELECTRIC WATER HEATER IN CEILING SPACE. TERMINATE 3/4" T&P DRAIN TO FLOOR SINK WITH 2" AIR CAP. PROVIDE STAINLESS STEEL DRAIN FAN WITH 1" DRAIN PIPE. TERMINATE 1" DRAIN TO FLOOR SINK WITH 2" AIR CAP.
- 12) REPLACE EXISTING GAS METER WITH NEW. THE CAPACITY OF NEW GAS METER IS 2,300MBH (2PSI). COORDINATE WITH PG&E FOR INSTALLATION.
- 13) DEMOLISH (E)2" G & CAP AS SHOWN.
- 14) BOILER PROVIDED BY DELTA T SOLUTIONS. SEE DELTA T SOLUTIONS DRAWINGS FOR LOCATION & DETAILS.
- 15) P.O.C. (N)2" MFG CONNECT TO (E)2" MFG.
- 16) 2,000 GALLON WATER TANK ON GROUND. NORWESCO 2035 GALLON ELLIPTICAL LEG TANK WITH 3" FITTING AND LADDER TO ACCESS. INSTALL WITH OVERFLOW SYSTEM BEFORE USE.
- 17) 2" CW CAP FOR FUTURE CONNECTION.
- 18) REFER TO DRAWINGS BY DELTA T SOLUTIONS FOR CONTINUATION.
- 19) CONDENSATE PUMP WITH 1 GALLON RESERVOIR ON PLATFORM. PROVIDE CHECK VALVE ON DISCHARGE LINE. PLATFORM PROVIDED BY GC.
- 20) FUTURE WATER PUMP TO BE PROVIDED BY OWNER.
- 21) (E)1" G TO REMAIN.
- 22) 3/4" CW CAP FOR FUTURE CONNECTION TO CHILLER.
- 23) 2" CW UP NEXT TO WALL TO CEILING LEVEL.

PROTOING
 3367 Mission Street
 San Francisco, CA
 94110
 415.392.6899

AGES ENGINEERING
 5001 Bay Street
 Emeryville, CA
 94608
 415.771.0000

AMELIA STREET VENTURES TENANT IMPROVEMENT
 8430 AMELIA STREET
 OAKLAND, CA 94621
 APN # 42-4301-1-5

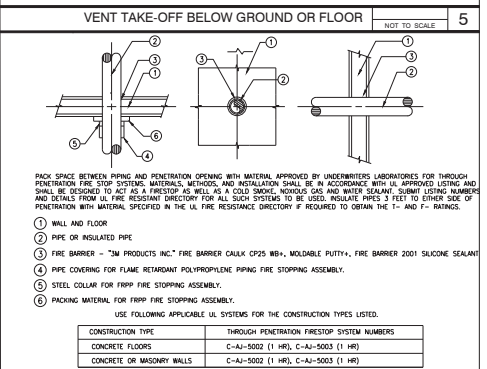
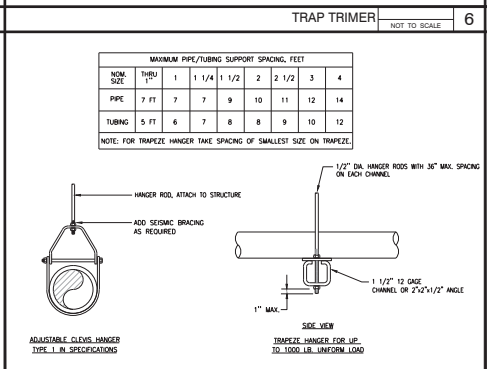
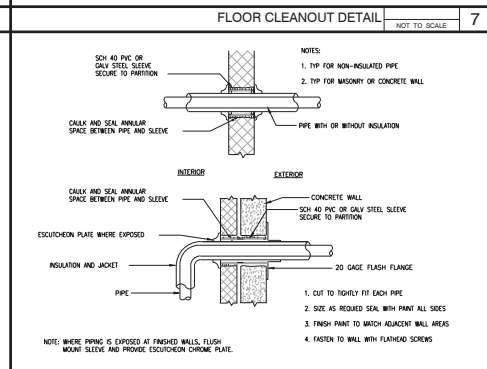
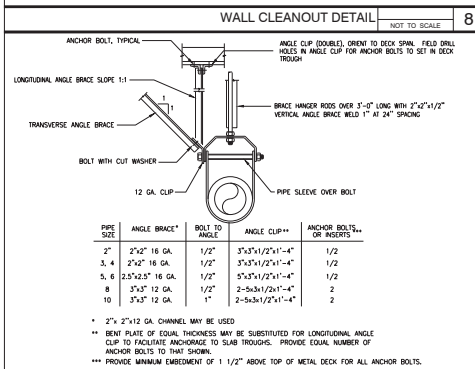
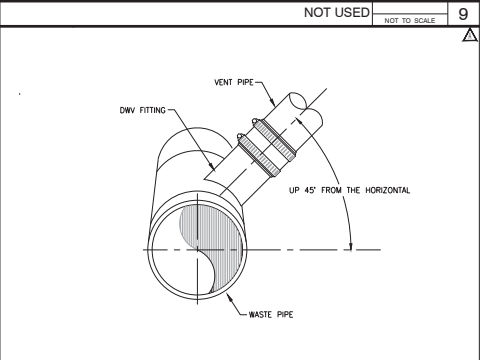
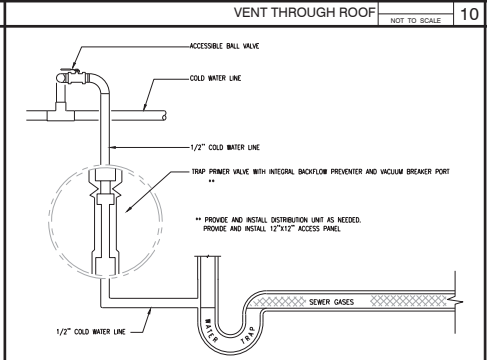
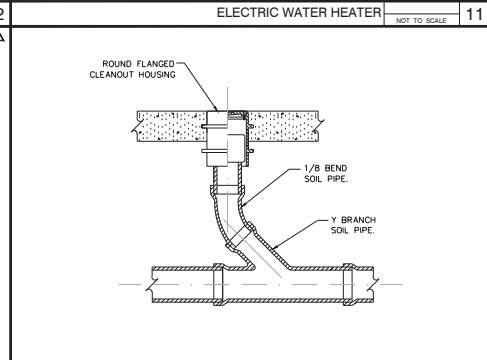
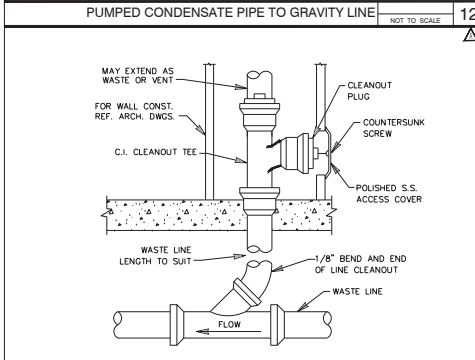
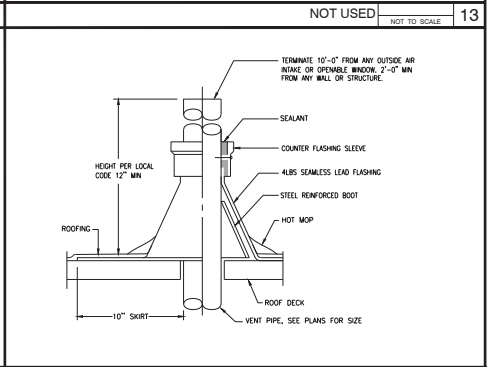
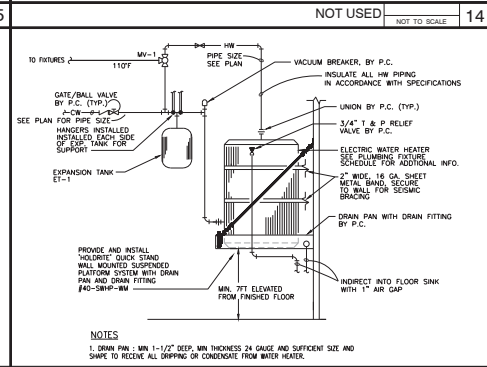
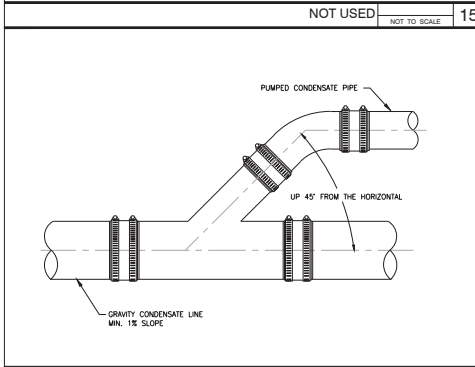
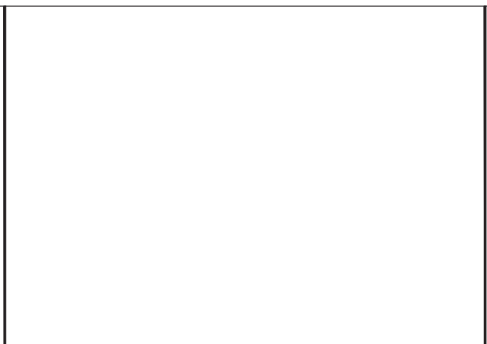
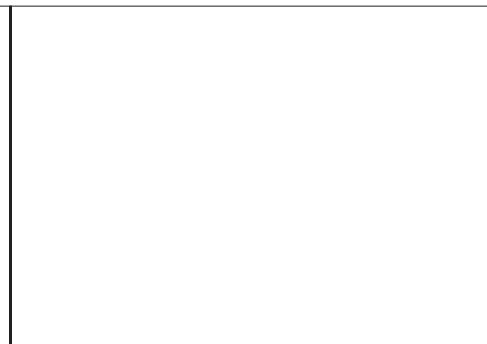
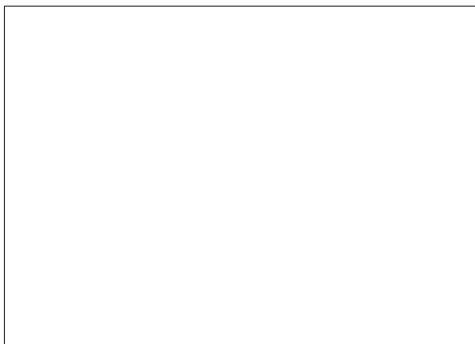
PROJECT DATA

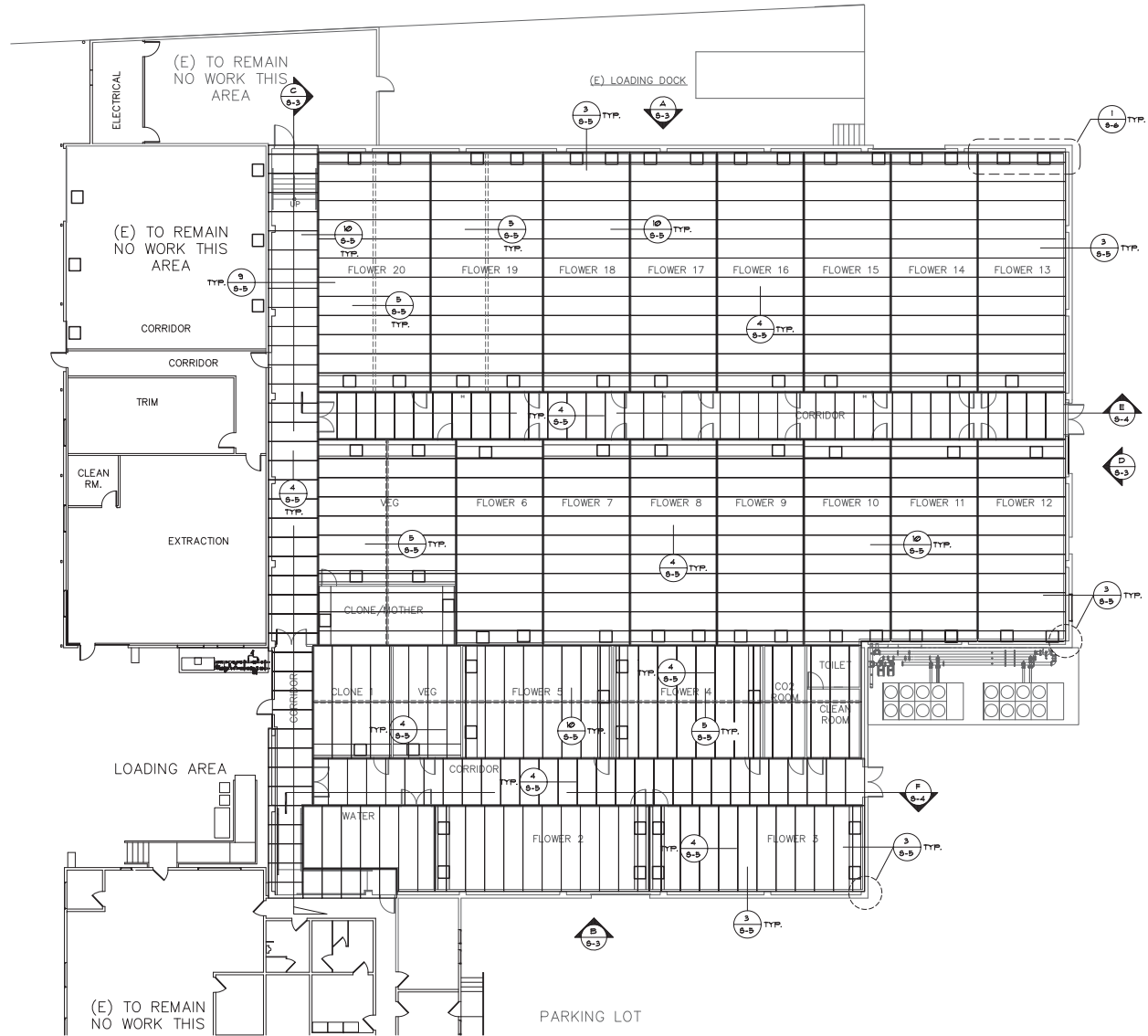
DATE	02/25/2020
SCALE	AS SHOWN
PROJECT	AMELIA STREET VENTURES TENANT IMPROVEMENT
CLIENT	AMELIA STREET VENTURES
DESIGNER	AGES ENGINEERING
CHECKER	HANNA PETERSON
DATE	02/25/2020

SCALE
 AS SHOWN
 NORTH

SHEET
 P1.0
 PLUMBING FLOOR PLAN

APPROVED
 HANNA PETERSON
 PROJECT MANAGER



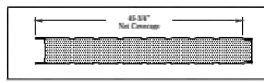


CEILING PLAN
SCALE: 3/32" = 1'-0"

- GENERAL NOTES:**
- ALL PANELS MANUFACTURED AT 48" X WIDE FIELD MODIFIED WIDTH AS REQUIRED FIELD VERIFIED ALL DIMENSIONS
 - 4 3/4" EPS WALL PANELS (DPS/CANNA PANELS) WALL PANELS FINISH - 26 GA WHITE EPISOCCO USCA APPROVED, INTERIOR 4 EXTERIOR
 - 12" EPS CEILING PANELS (THREADED ROD AT MID-SPAN FOR ROOFS SHOWN ON CEILING PLAN) CEILING PANELS FINISH - 26 GA WHITE EPISOCCO USCA APPROVED, INTERIOR 4 EXTERIOR
 - CONCRETE (FOG) - 6" MIN. (3000 PSI MIN.)
 - SEISMIC:
 - 5c6+13872g, 5c+2.080g, 5d+1.055g, 5i+0.855g
 - LOADS:
 - DEAD LOAD (8" PANEL) - 3 PSF
 - DEAD LOAD (12" PANEL) - 3.5 PSF
 - ROOF LIVE LOAD (LL) - 10 PSF
 - ROOF MOUNTED MECH UNITS - MAX. OPT. WT. - 275 LBS.
 - ACCESSORIES:
 - 5 - 6'-0" X 1'-0" DOUBLE SWING DOOR
 - 25 - 3'-0" X 1'-0" SWING DOOR

SLIP LOCK PANEL

SL-504

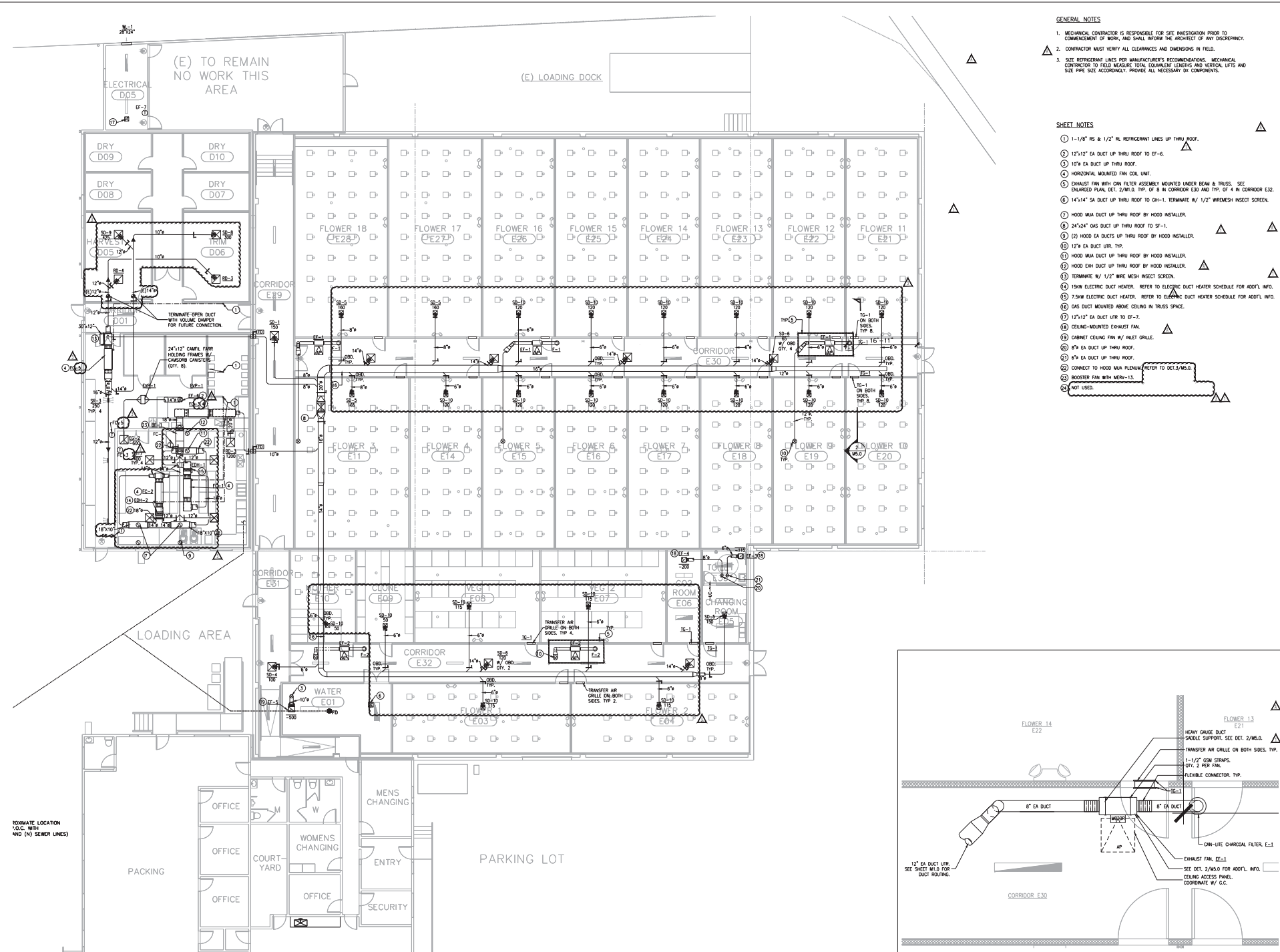


DESCRIPTION	RECOMMENDED USES
A versatile, modular, slip lock panel with a tongue and groove joining system not formed along the edge.	Interior/Exterior, Cold rooms, Clean rooms, Corrosive Areas, Retail, Farming, Potable Buildings.
SPECIFICATIONS	RECOMMENDED USES
Width: 48.0"	Adhesives: Polyurethane, C/Clean.
Thickness: 2"-12"	Flammability: Preparation of ISO Series Panels.
Length: To Order.	ISO 14644 Class 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.
US 1: 30 days 0-50 mph (up to 100 mph) with 1/2" thick and 1/2" gap between panels over a properly finished and sealed substrate.	ISO 14644 Class 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.
US 2: 30 days 0-50 mph (up to 100 mph) with 1/2" thick and 1/2" gap between panels over a properly finished and sealed substrate.	ISO 14644 Class 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.
US 3: 30 days 0-50 mph (up to 100 mph) with 1/2" thick and 1/2" gap between panels over a properly finished and sealed substrate.	ISO 14644 Class 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.
US 4: 30 days 0-50 mph (up to 100 mph) with 1/2" thick and 1/2" gap between panels over a properly finished and sealed substrate.	ISO 14644 Class 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.
US 5: 30 days 0-50 mph (up to 100 mph) with 1/2" thick and 1/2" gap between panels over a properly finished and sealed substrate.	ISO 14644 Class 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.
US 6: 30 days 0-50 mph (up to 100 mph) with 1/2" thick and 1/2" gap between panels over a properly finished and sealed substrate.	ISO 14644 Class 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.
US 7: 30 days 0-50 mph (up to 100 mph) with 1/2" thick and 1/2" gap between panels over a properly finished and sealed substrate.	ISO 14644 Class 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.
US 8: 30 days 0-50 mph (up to 100 mph) with 1/2" thick and 1/2" gap between panels over a properly finished and sealed substrate.	ISO 14644 Class 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.
US 9: 30 days 0-50 mph (up to 100 mph) with 1/2" thick and 1/2" gap between panels over a properly finished and sealed substrate.	ISO 14644 Class 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.
US 10: 30 days 0-50 mph (up to 100 mph) with 1/2" thick and 1/2" gap between panels over a properly finished and sealed substrate.	ISO 14644 Class 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.

Diversified Panel Systems uses only the highest quality materials and offers customers a variety of panel colors, sizes, cores and profiles from which to choose.

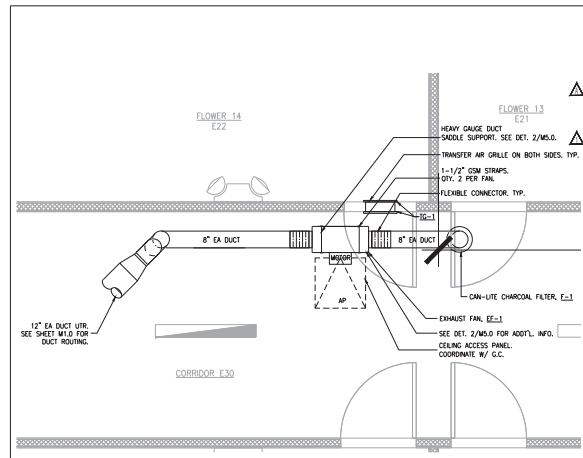
DIVERSIFIED PANEL SYSTEMS, INC.
2375 Sulltown Blvd., Concord CA 94520
(925) 308-1000 Fax: (925) 308-4000
www.dpscorp.com

STRUCTURAL ENGINEERS:	REVISION
	NO. DATE
VTA CONSULTING ENGINEERS 1755 LINDENHURST DRIVE, SUITE 202 OAKLAND, CALIFORNIA 94612 TEL: (510) 575-5231 FAX: (510) 575-5262	PROFESSIONAL SEAL
	REGISTERED PROFESSIONAL ENGINEER STRUCTURAL STATE OF CALIFORNIA NO. 50838 EXPIRES 12/31/2015
ARCHITECT:	CEILING PLAN
	AMELIA STREET VENTURES TENANT IMPROVEMENT 3830 AMELIA STREET OAKLAND, CALIFORNIA 94621 APP # 42-080-0-5
DRAWN BY:	AS
	CHECKED VS.
FILE NAME:	DATE 03/13/17
	SCALE AS SHOWN
DRAWING	JOB NO 1703-028
	S-2



- GENERAL NOTES**
- MECHANICAL CONTRACTOR IS RESPONSIBLE FOR SITE INVESTIGATION PRIOR TO COMMENCEMENT OF WORK, AND SHALL INFORM THE ARCHITECT OF ANY DISCREPANCY.
 - CONTRACTOR MUST VERIFY ALL CLEARANCES AND DIMENSIONS IN FIELD.
 - SIZE REFRIGERANT LINES PER MANUFACTURER'S RECOMMENDATIONS. MECHANICAL CONTRACTOR TO FIELD MEASURE TOTAL EQUIVALENT LENGTHS AND VERTICAL LIFTS AND SIZE PIPE SIZE ACCORDINGLY. PROVIDE ALL NECESSARY COMPONENTS.

- SHEET NOTES**
- 1-1/2" RS & 1/2" RL REFRIGERANT LINES UP THRU ROOF.
 - 12"x12" EA DUCT UP THRU ROOF TO EF-6.
 - 10" EA DUCT UP THRU ROOF.
 - HORIZONTAL MOUNTED FAN COOL UNIT.
 - EXHAUST FAN WITH CAN FILTER ASSEMBLY MOUNTED UNDER BEAM & TRUSS. SEE DETAILED PLAN DET. 2/NO.10. TYP. OF 8" IN CORRIDOR E30 AND TYP. OF 4" IN CORRIDOR E32.
 - 14"x14" SA DUCT UP THRU ROOF TO GH-1. TERMINATE W/ 1/2" WIREMESH INSECT SCREEN.
 - HOOD MIA DUCT UP THRU ROOF BY HOOD INSTALLER.
 - 24"x24" OAS DUCT UP THRU ROOF TO SF-1.
 - (2) HOOD EA DUCTS UP THRU ROOF BY HOOD INSTALLER.
 - 12" EA DUCT UTR. TYP.
 - HOOD MIA DUCT UP THRU ROOF BY HOOD INSTALLER.
 - HOOD EXH DUCT UP THRU ROOF BY HOOD INSTALLER.
 - TERMINATE W/ 1/2" WIRE MESH INSECT SCREEN.
 - 15W ELECTRIC DUCT HEATER. REFER TO ELECTRIC DUCT HEATER SCHEDULE FOR ADD'L INFO.
 - 15W ELECTRIC DUCT HEATER. REFER TO ELECTRIC DUCT HEATER SCHEDULE FOR ADD'L INFO.
 - OAS DUCT MOUNTED ABOVE CEILING IN TRUSS SPACE.
 - 12"x12" EA DUCT UTR TO EF-7.
 - CEILING-MOUNTED EXHAUST FAN.
 - CABINET CEILING FAN W/ INLET GRILLE.
 - 8" EA DUCT UP THRU ROOF.
 - 8" EA DUCT UP THRU ROOF.
 - CONNECT TO HOOD MIA FLENUM (REFER TO DET.3/NO.10).
 - BOOSTER FAN WITH MERV-13.
 - NOT USED.



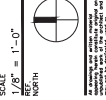
PROTOING
 3567 Mission Street
 San Francisco, CA
 94110
 415.392.6899

AGES
 ENGINEERING
 5000 SHAW BLVD
 SUITE 200
 OAKLAND, CA 94612
 510.436.2000
 FAX 510.436.2001
 www.ageseng.com

AMELIA STREET VENTURES TENANT IMPROVEMENT
 8430 AMELIA STREET
 OAKLAND, CA 94621
 APN # 42-4301-1-5

PROJECT DATA

NO. DATE	DESIGN NO. / PROJECT NO.
1	MECHANICAL FLOOR PLAN
2	EXHAUST SYSTEM (TYPICAL)
3	MECHANICAL FLOOR PLAN
4	MECHANICAL FLOOR PLAN
5	MECHANICAL FLOOR PLAN
6	MECHANICAL FLOOR PLAN
7	MECHANICAL FLOOR PLAN
8	MECHANICAL FLOOR PLAN
9	MECHANICAL FLOOR PLAN
10	MECHANICAL FLOOR PLAN
11	MECHANICAL FLOOR PLAN
12	MECHANICAL FLOOR PLAN
13	MECHANICAL FLOOR PLAN
14	MECHANICAL FLOOR PLAN
15	MECHANICAL FLOOR PLAN
16	MECHANICAL FLOOR PLAN
17	MECHANICAL FLOOR PLAN
18	MECHANICAL FLOOR PLAN
19	MECHANICAL FLOOR PLAN
20	MECHANICAL FLOOR PLAN
21	MECHANICAL FLOOR PLAN
22	MECHANICAL FLOOR PLAN
23	MECHANICAL FLOOR PLAN
24	MECHANICAL FLOOR PLAN
25	MECHANICAL FLOOR PLAN
26	MECHANICAL FLOOR PLAN
27	MECHANICAL FLOOR PLAN
28	MECHANICAL FLOOR PLAN
29	MECHANICAL FLOOR PLAN
30	MECHANICAL FLOOR PLAN



1 MECHANICAL FLOOR PLAN

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

2 EXHAUST SYSTEM (TYPICAL)

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

M1.0
 MECHANICAL FLOOR PLAN

DATE	DESCRIPTION
10/20/23	ISSUE FOR PERMITS
08/22/23	ISSUE FOR PERMITS
08/22/23	ISSUE FOR PERMITS
08/22/23	ISSUE FOR PERMITS
08/22/23	ISSUE FOR PERMITS
08/22/23	ISSUE FOR PERMITS
08/22/23	ISSUE FOR PERMITS
08/22/23	ISSUE FOR PERMITS
08/22/23	ISSUE FOR PERMITS
08/22/23	ISSUE FOR PERMITS

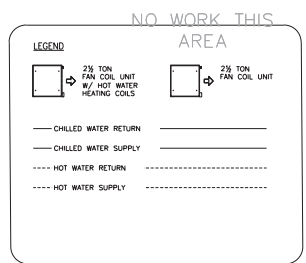
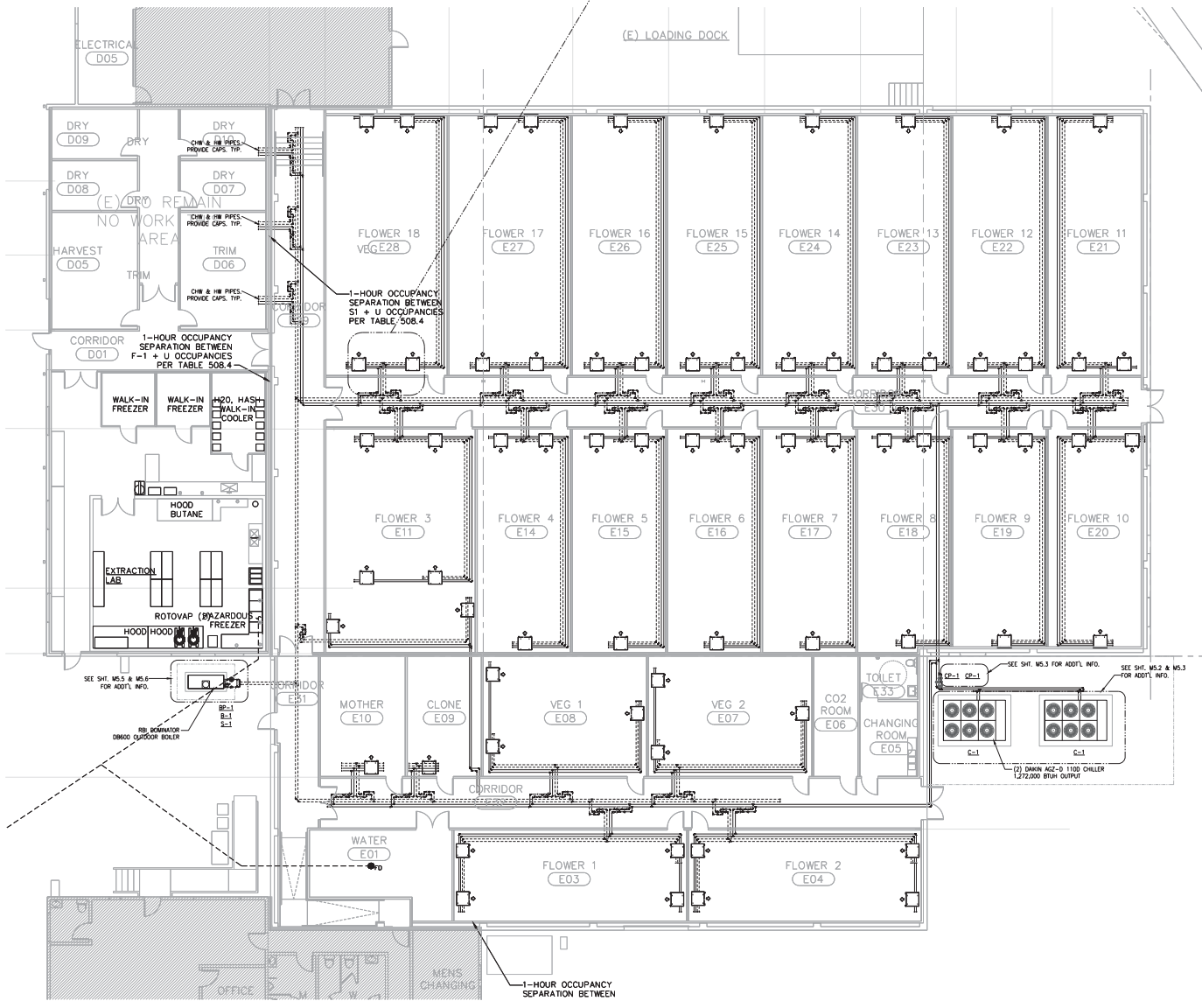
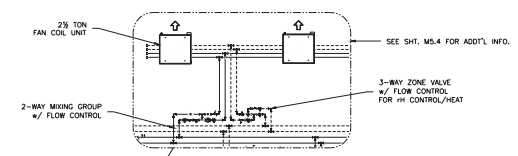


SCALE: 1/8" = 1'-0"
 NORTH

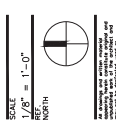
SHEET M1.1
 MECHANICAL FLOOR PLAN - OVERALL PIPING LAYOUT

GENERAL NOTES

1. ALL CHILLED WATER PIPING TO BE INSULATED. ALL MAIN RUNS OF HOT WATER PIPING TO BE INSULATED.

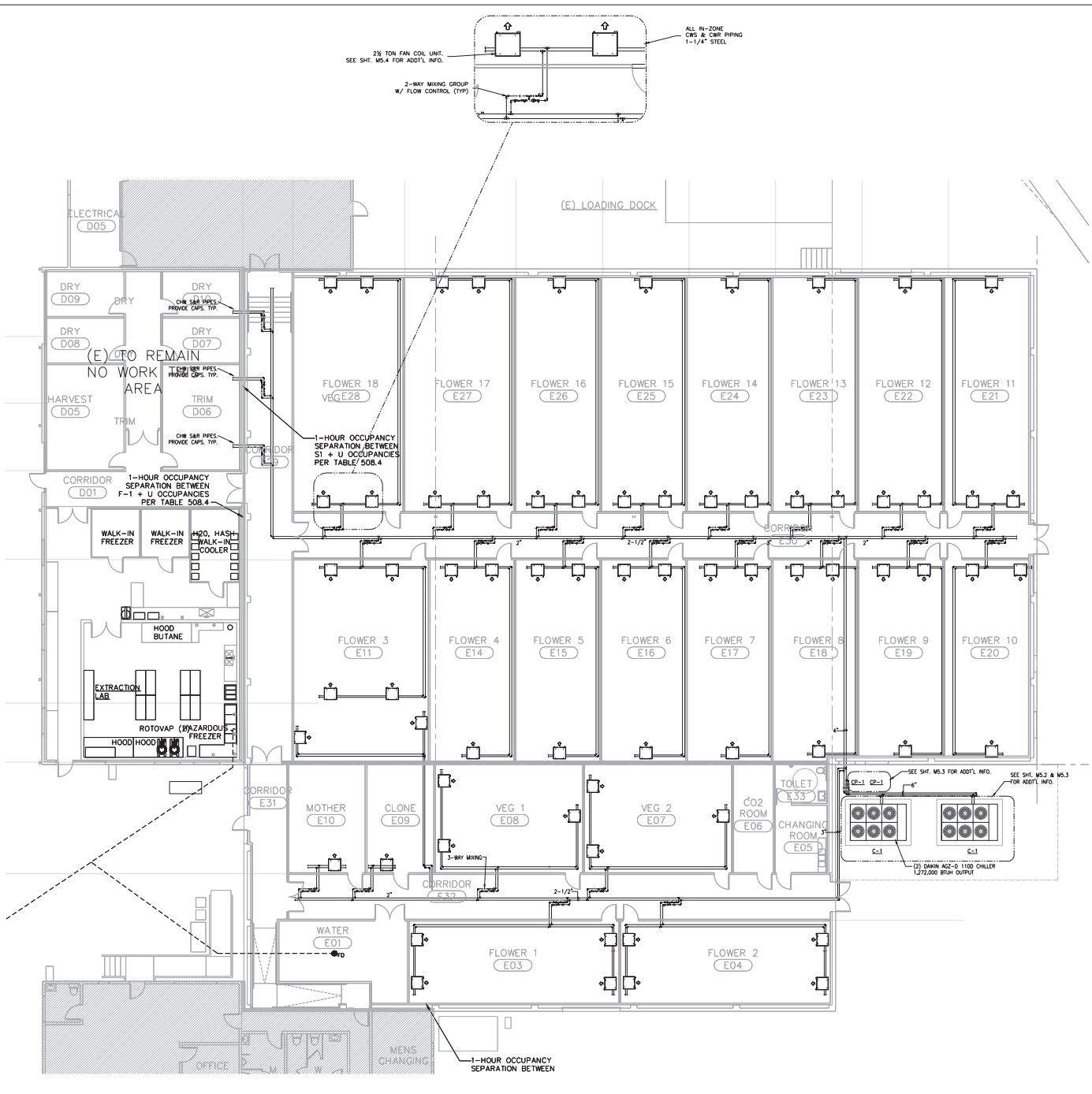


DATE	DESCRIPTION
10/20/23	ISSUE FOR PERMIT
10/20/23	ISSUE FOR PERMIT
10/20/23	ISSUE FOR PERMIT
10/20/23	ISSUE FOR PERMIT
10/20/23	ISSUE FOR PERMIT
10/20/23	ISSUE FOR PERMIT
10/20/23	ISSUE FOR PERMIT
10/20/23	ISSUE FOR PERMIT
10/20/23	ISSUE FOR PERMIT



GENERAL NOTES

1. ALL CHILLED WATER PIPING TO BE INSULATED. ALL MAIN RUNS OF HOT WATER PIPING TO BE INSULATED.



NO WORK THIS AREA

LEGEND

- 2 1/2 TON FAN COIL UNIT W/ HOT WATER HEATING COILS
- 2 1/2 TON FAN COIL UNIT
- CHILLED WATER RETURN
- CHILLED WATER SUPPLY
- HOT WATER RETURN
- HOT WATER SUPPLY

DATE	02/25/2016
REVISION	
NO. DATE	
1	02/25/2016
2	03/02/2016
3	03/02/2016
4	03/02/2016
5	03/02/2016
6	03/02/2016
7	03/02/2016
8	03/02/2016
9	03/02/2016
10	03/02/2016
11	03/02/2016
12	03/02/2016
13	03/02/2016
14	03/02/2016
15	03/02/2016
16	03/02/2016
17	03/02/2016
18	03/02/2016
19	03/02/2016
20	03/02/2016
21	03/02/2016
22	03/02/2016
23	03/02/2016
24	03/02/2016
25	03/02/2016
26	03/02/2016
27	03/02/2016
28	03/02/2016
29	03/02/2016
30	03/02/2016
31	03/02/2016
32	03/02/2016
33	03/02/2016
34	03/02/2016
35	03/02/2016
36	03/02/2016
37	03/02/2016
38	03/02/2016
39	03/02/2016
40	03/02/2016
41	03/02/2016
42	03/02/2016
43	03/02/2016
44	03/02/2016
45	03/02/2016
46	03/02/2016
47	03/02/2016
48	03/02/2016
49	03/02/2016
50	03/02/2016

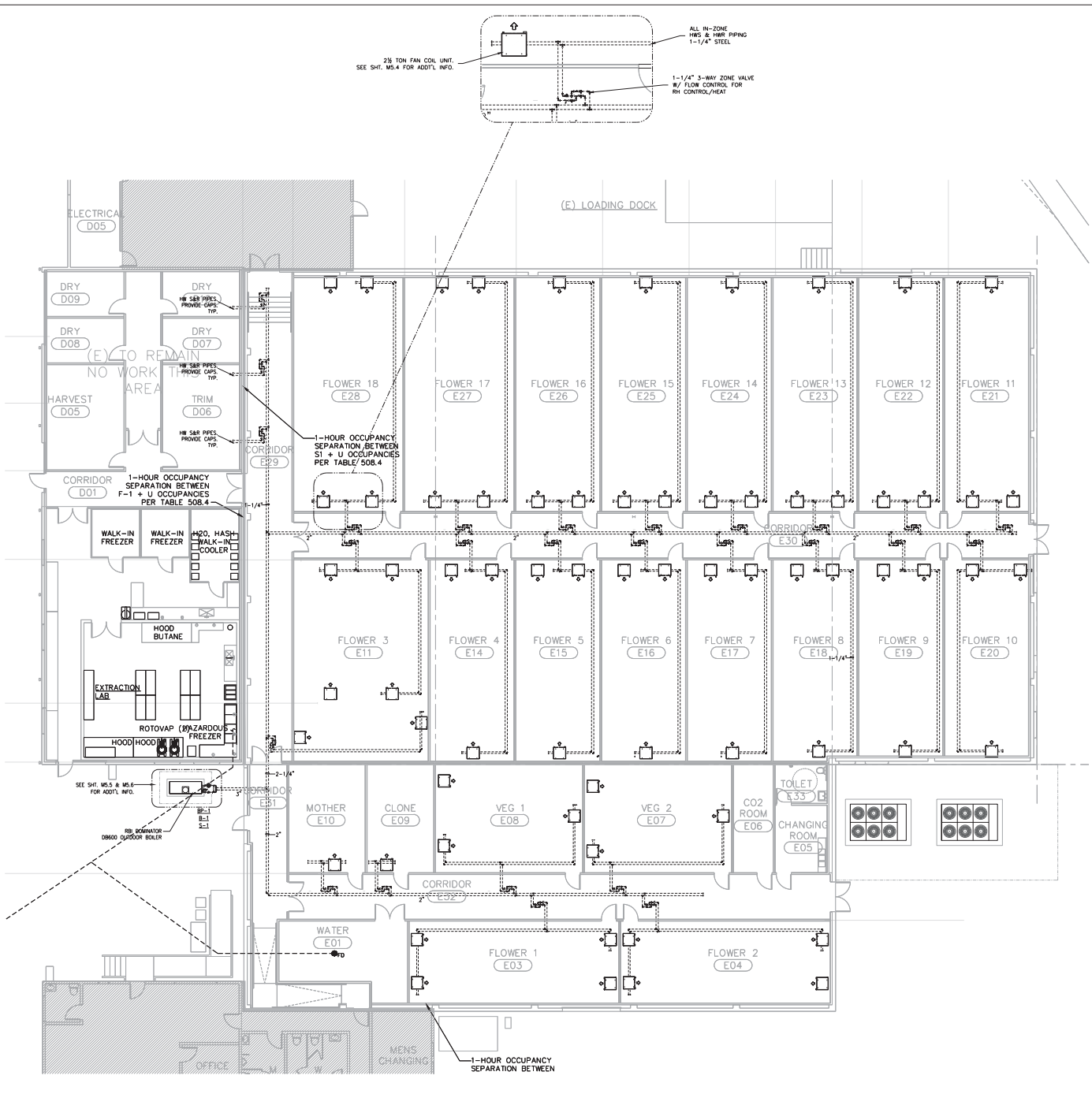


SCALE: 1/8" = 1'-0"
 NORTH

SHEET M1.3
 MECHANICAL FLOOR PLAN - HOT WATER PIPING LAYOUT

GENERAL NOTES

1. ALL CHILLED WATER PIPING TO BE INSULATED. ALL MAIN RUNS OF HOT WATER PIPING TO BE INSULATED.



ATTACHMENT G

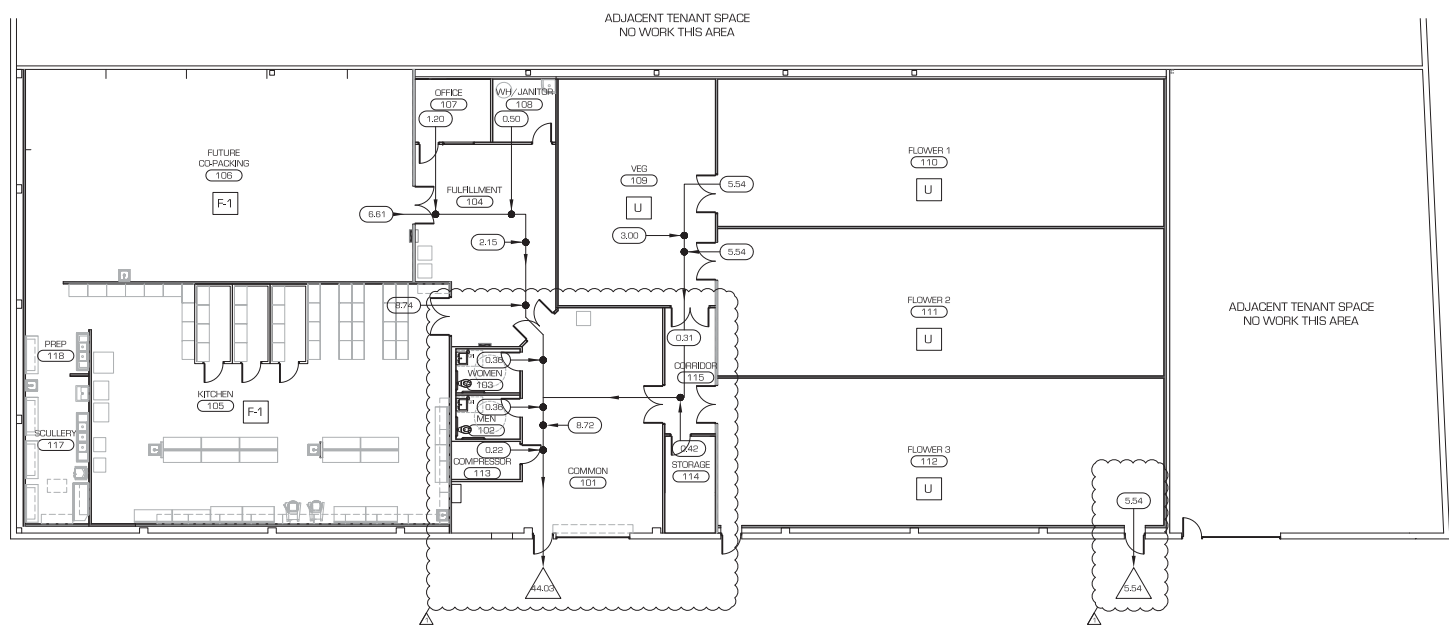
Phase II Tenant Improvement Drawing Set (Select Pages)

NO. 001	DATE 05/11/17	BY/AC
NO. 002	DATE 05/11/17	BY/AC
NO. 003	DATE 05/11/17	BY/AC
NO. 004	DATE 05/11/17	BY/AC
NO. 005	DATE 05/11/17	BY/AC
NO. 006	DATE 05/11/17	BY/AC
NO. 007	DATE 05/11/17	BY/AC
NO. 008	DATE 05/11/17	BY/AC
NO. 009	DATE 05/11/17	BY/AC
NO. 010	DATE 05/11/17	BY/AC
NO. 011	DATE 05/11/17	BY/AC
NO. 012	DATE 05/11/17	BY/AC
NO. 013	DATE 05/11/17	BY/AC
NO. 014	DATE 05/11/17	BY/AC
NO. 015	DATE 05/11/17	BY/AC
NO. 016	DATE 05/11/17	BY/AC
NO. 017	DATE 05/11/17	BY/AC
NO. 018	DATE 05/11/17	BY/AC
NO. 019	DATE 05/11/17	BY/AC
NO. 020	DATE 05/11/17	BY/AC



ROOM NO.	ROOM NAME	USE	OCC. TYPE	OCC. LOAD FACTOR	OCC. RFL. AREA (SQ. FT.)	DESIGN OCCUPANCY	NO. OF SEATED SEATS	NO. OF PROVIDED SEATS	
101	COMMON	FACTORY	F-1	100	87,138	8,728			
102	DRINK	ACCESSORY	U	200	20,728	0,364			
103	WOMEN	ACCESSORY	U	200	20,728	0,364			
104	FULFILLMENT	FACTORY	F-1	300	643	2,175			
105	PACKING	FACTORY	F-1	200	17,627	8,728			
106	PACKING	FACTORY	F-1	200	1583	6,811			
107	DRINK	FACTORY	F-1	100	323	1,350			
108	JANITOR	ACCESSORY	U	200	100	0,500			
109	MFG	AGRICULTURAL	U	300	300	3,000			
110	FLOWER 1	AGRICULTURAL	U	300	1851	3,54			
111	FLOWER 2	AGRICULTURAL	U	300	1881	3,54			
112	FLOWER 3	AGRICULTURAL	U	300	1881	3,54			
113	COMPRESSOR	AGRICULTURAL	U	300	65,29	6,32			
114	STORAGE	AGRICULTURAL	U	300	12,333	0,48			
115	COMPRESSOR	ACCESSORY	U	300	181	0,31			
116	FREEZER	AGRICULTURAL	U	300	108	0,38			
TOTAL OCCUPANT LOAD						11,652	4827		

2 OCCUPANT LOAD FACTOR
 N.T.S.



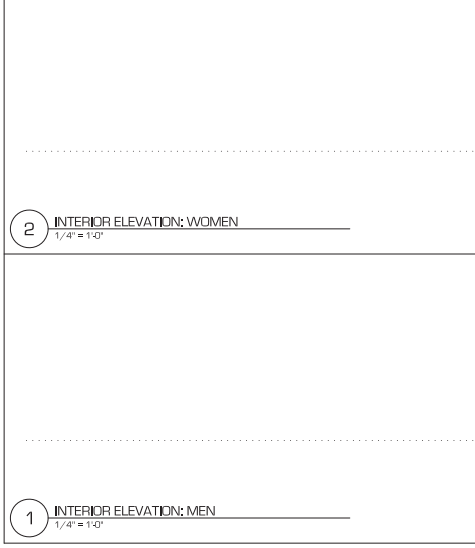
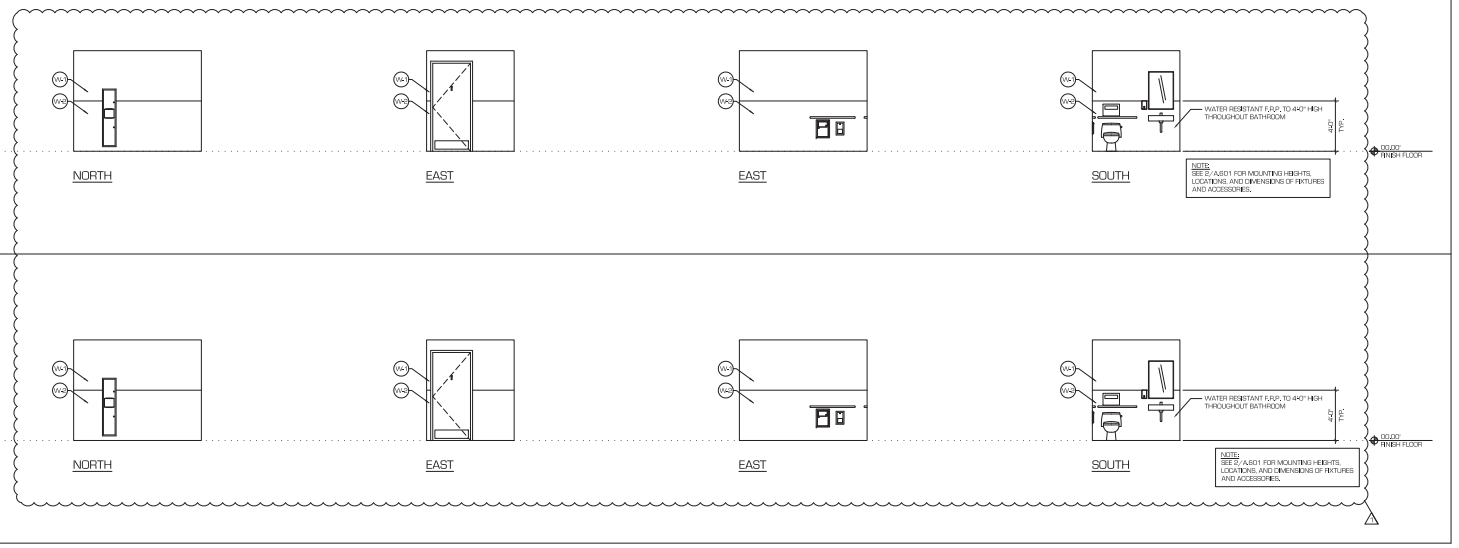
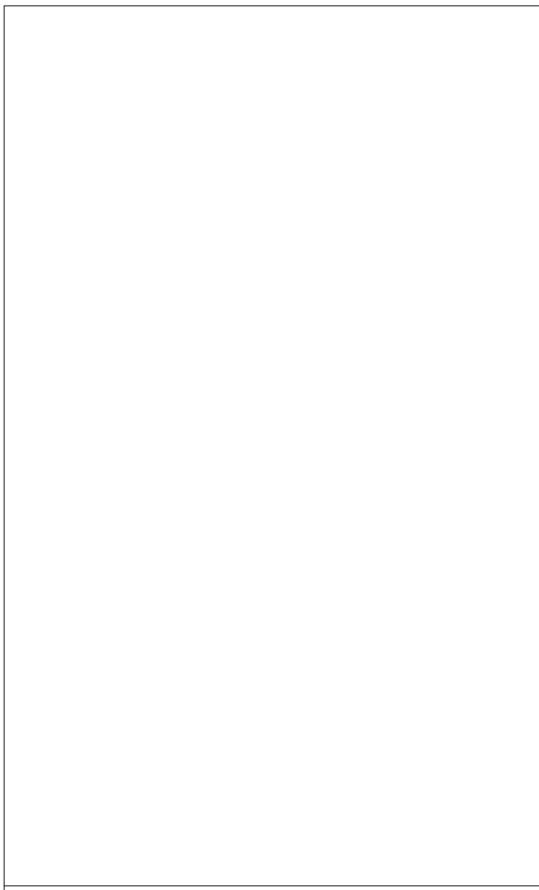
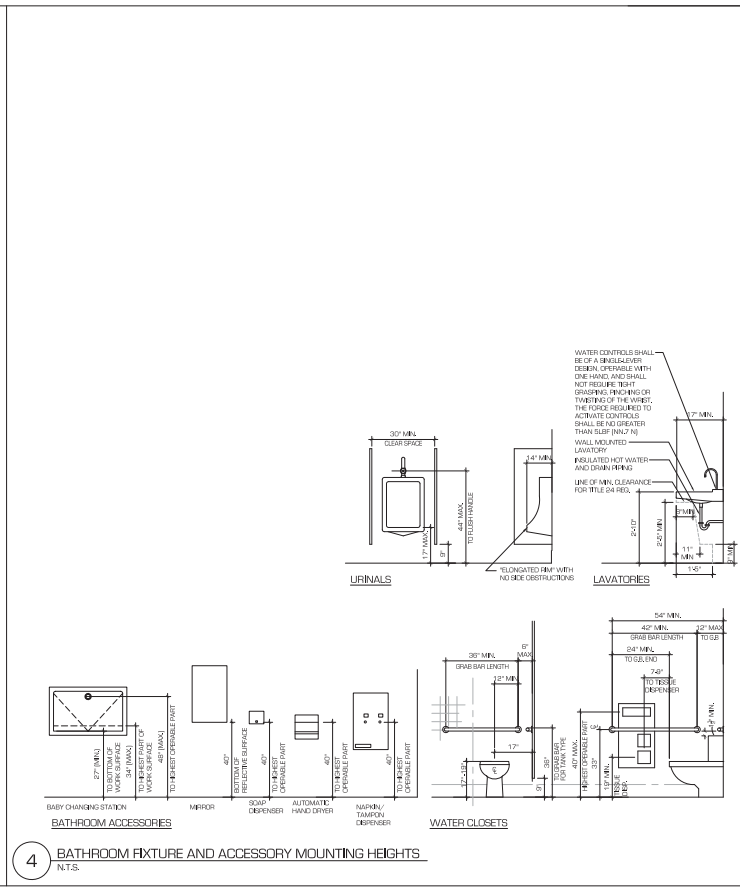
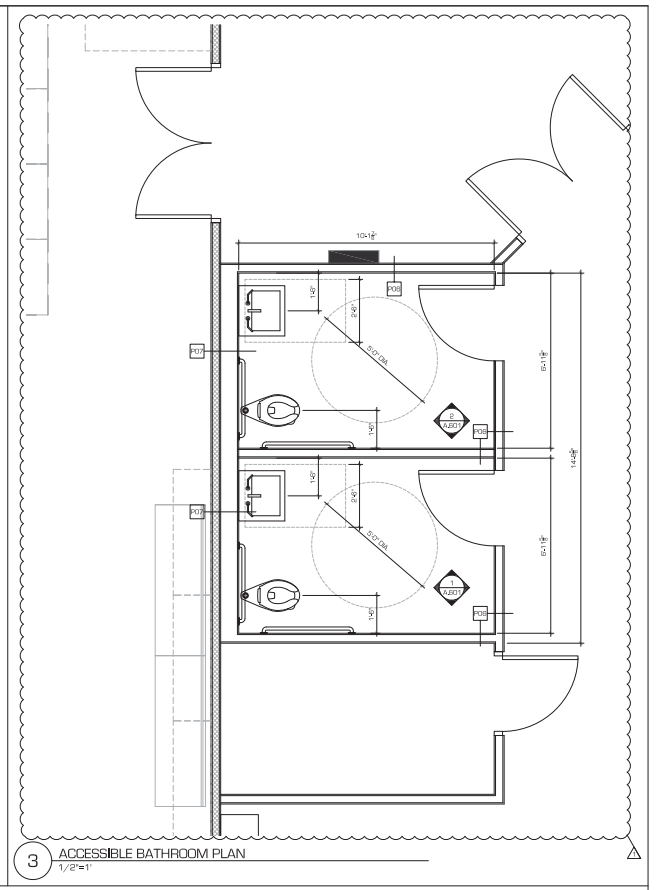
1 OCCUPANCY AND EXITING PLAN
 1/8" = 1'-0"

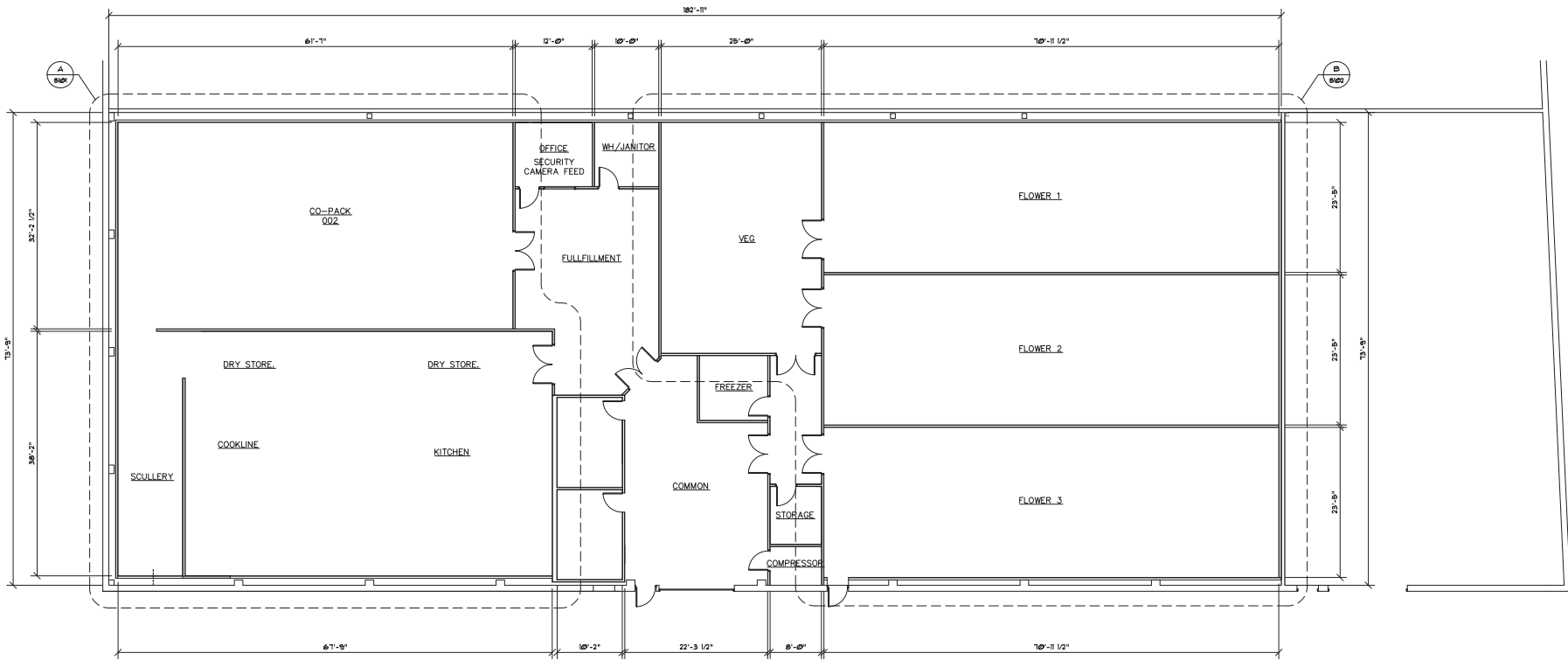
DESIGNER	PROTONc
ARCHITECT	PROTONc
DATE	02/15/17
PROJECT	HEALTH COMMUNITY RESPONSE
CLIENT	HEALTH COMMUNITY RESPONSE
DATE	02/15/17
PROJECT	HEALTH COMMUNITY RESPONSE
CLIENT	HEALTH COMMUNITY RESPONSE



SCALE	1/4" = 1'-0"
DATE	02/15/17
PROJECT	HEALTH COMMUNITY RESPONSE
CLIENT	HEALTH COMMUNITY RESPONSE

SHEET	A.601
DESCRIPTION	ACCESSIBLE BATHROOM DETAILS





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

NO.	REVISION	DATE

STRUCTURAL ENGINEERS:
VTA CONSULTING ENGINEERS
1755 LIL WASHINGTON DRIVE, SUITE 202
OAKLAND, CALIFORNIA 94612
TEL: (415) 575-5221 FAX: (415) 575-5262

RESTRICTIVE NOTICE:
ALL DESIGN, TESTING, MANAGEMENT, PLANS, SPECIFICATIONS, DRAWINGS AND RELATED INFORMATION ARE THE EXCLUSIVE PROPERTY OF VTA CONSULTING ENGINEERS. NO PART OF THIS DOCUMENT IS TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF VTA CONSULTING ENGINEERS. THIS DRAWING IS PROTECTED BY COPYRIGHT LAW.

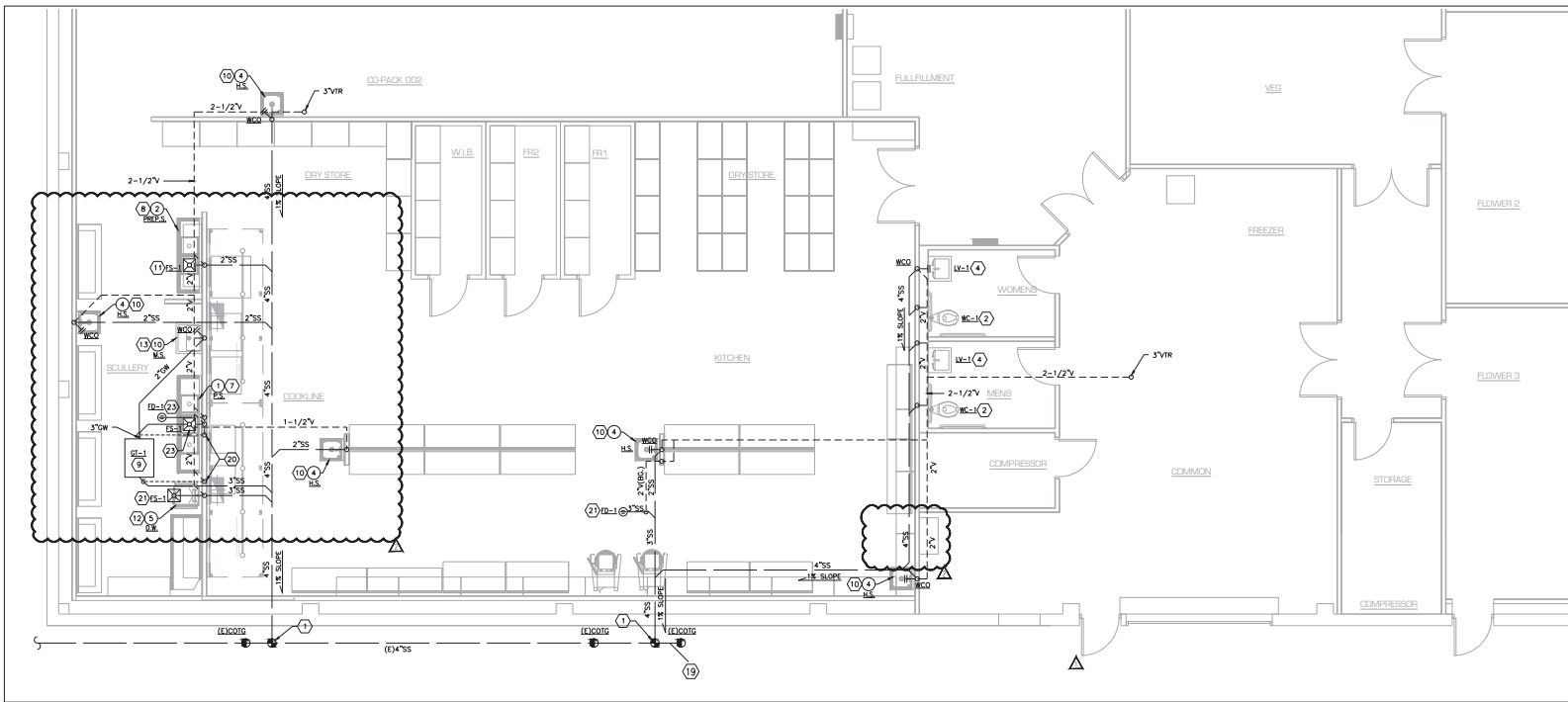


ARCHITECT:

SHEET TITLE: SITE PLAN
OWNER: **DEEP OAK**
8410 AMELIA STREET
OAKLAND, CALIFORNIA 94621

DRAWN	AS
CHECKED	V1
DATE	06/21/2017
SCALE	AS SHOWN
JOB NO	1706-061
FILE NAME:	
DRAWING	

S100

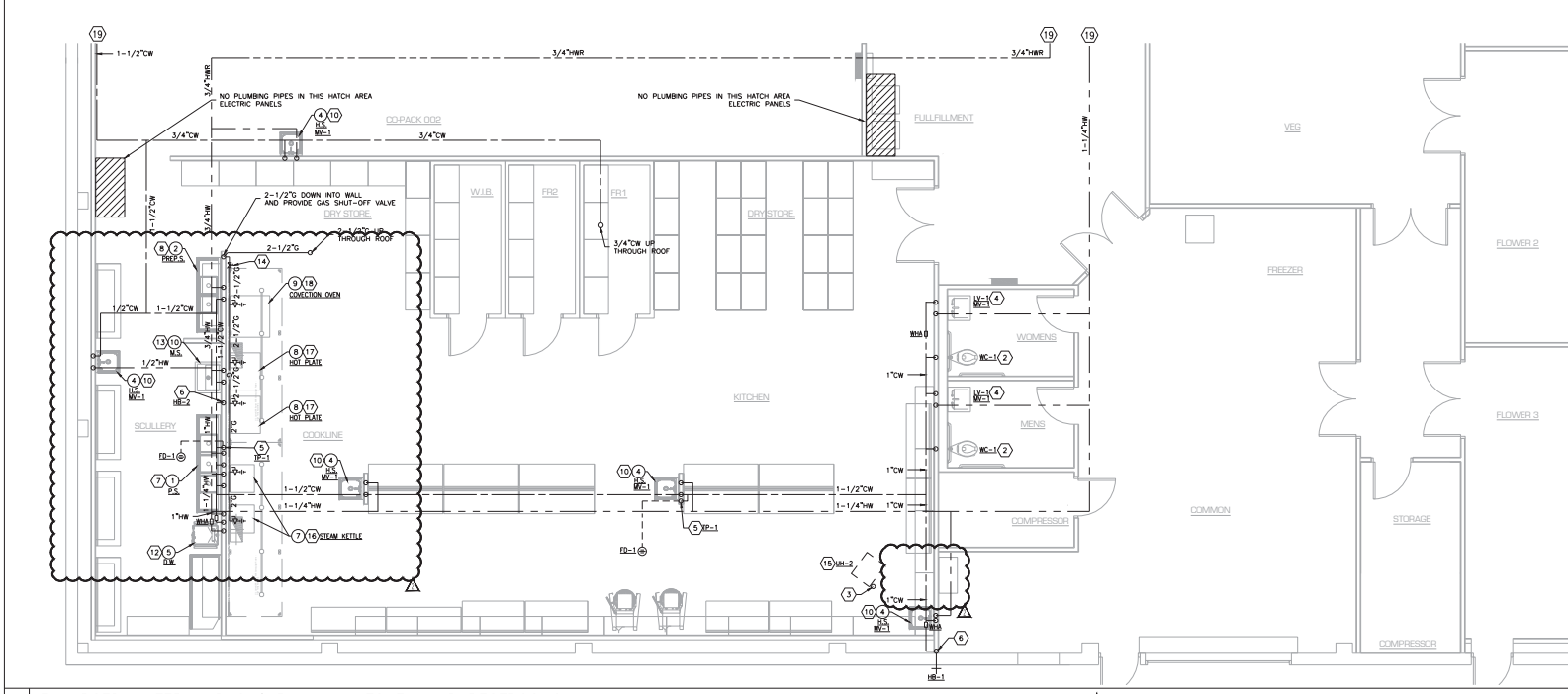


GENERAL NOTES

1. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION PRIOR TO START OF CONSTRUCTION.
2. REMOVE EXISTING PLUMBING EQUIPMENTS, FIXTURES AND PIPES IF THEY ARE NOT REUSED, CAP PIPE AND PATCH THE WALL, FLOOR, CEILING AND ROOF.
3. ALL OF CONDENSATE DRAIN PIPE IS 1/2\"/>

2 ENLARGED SEWER AND VENT PLAN – KITCHEN AND RESTROOMS

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



SHEET NOTES

- 1) P.O.C. VERIFY THE LOCATION & INVERT OF EXISTING SEWER.
- 2) 1/2" CW, 4" SS, 2" V TO WATER CLOSET.
- 3) 1" G DN FROM ROOF TO UNIT HEATER WITH SOV.
- 4) 1/2" CW, 2" SS, 1-1/2" V TO LAVATORY.
- 5) 1/2" CW DOWN TO ACCESSIBLE TRAP PRIMER (TP-1).
- 6) 3/4" CW TO HOSE BIBB.
- 7) 1/2" CW & HW TO POT SINK. DRAIN INDIRECTLY TO FLOOR SINK WITH 2" AIR GAP.
- 8) 1/2" CW & HW TO PREPARATION SINK. DRAIN INDIRECTLY TO FLOOR SINK WITH 2" AIR GAP.
- 9) GREASE TRAP UNDER GROUND.
- 10) 1/2" CW & HW, 2" SS, 1-1/2" V TO HAND SINK.
- 11) 2" SS, 1-1/2" V TO FLOOR SINK/DRAIN.
- 12) 3/4" CW & 1" HW TO DISH WASHER. DRAIN TO FLOOR SINK WITH 2" AIR GAP.
- 13) 3/4" CW & HW, 2" GW TO MOP SINK.
- 14) AUTOMATIC GAS SHUT-OFF VALVE (PROVIDED BY HOOD FIRE EXTINGUISHING CONTRACTOR) INTERLOCKED WITH HOOD FIRE EXTINGUISHING SYSTEM IN ACCORDANCE WITH NFPA 96.
- 15) UNIT HEATER BELOW ROOF. REFER TO MECHANICAL DRAWINGS FOR DETAILS.
- 16) STEAM KETTLE. PROVIDE 1" GAS PIPE WITH GAS SHUT-OFF VALVE. 1/2" CW & HW TO STEAM KETTLE.
- 17) HOT COOKTOP PLATE. PROVIDE 1-1/2" GAS PIPE WITH GAS SHUT-OFF VALVE.
- 18) DOUBLE CONVECTION OVEN. PROVIDE 1-1/4" GAS PIPE WITH GAS SHUT-OFF VALVE.
- 19) SEE #1/P1.0 FOR CONTINUATION.
- 20) 2" V TO GREASE TRAP.
- 21) 3" SS, 2" V TO FLOOR SINK/DRAIN.
- 22) UNIT HEATER BELOW ROOF. REFER TO MECHANICAL DRAWINGS FOR DETAILS.
- 23) 3" GW, 2" V TO FLOOR SINK/DRAIN.

1 ENLARGED WATER AND GAS PLAN – KITCHEN AND RESTROOMS

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

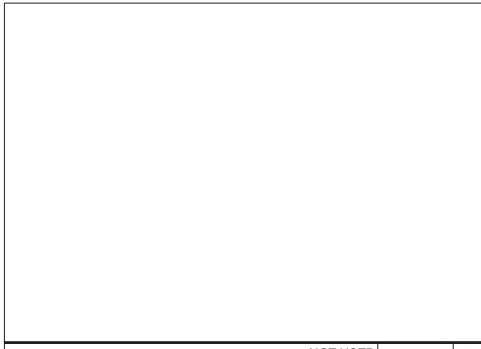
PROTODING
 3387 Mission Street
 San Francisco, CA 94110
 415.596.6889

AGES ENGINEERING
 5001 Lake Street
 Oakland, CA 94612
 510.436.2200
 www.ageseng.com

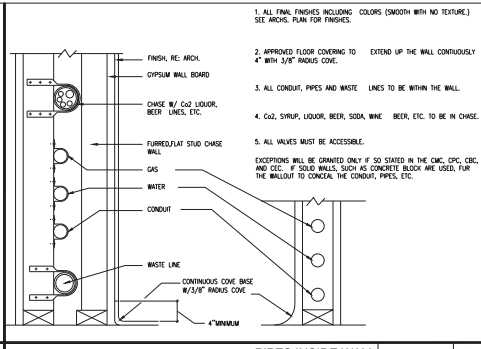
DEEP OAK
 8410 AMELIA STREET
 OAKLAND, CA 94621
 APN # 42-4301-1-5

PROFESSIONAL SEAL
 CIVIL ENGINEER
 No. M28498
 Exp. 08/31/2024
 J. Taylor Berman

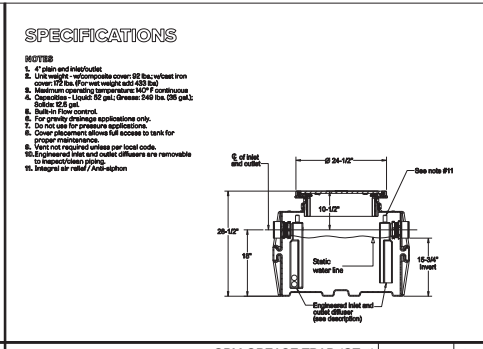
P2.0
 SHEET NO.
 ENLARGED PLUMBING PLAN



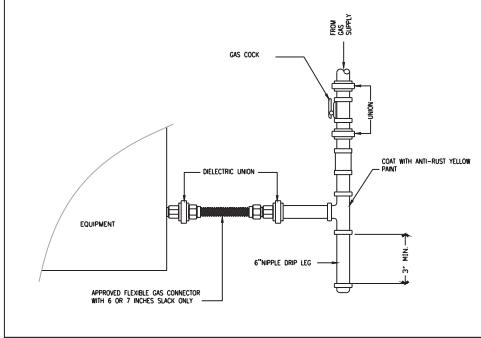
NOT USED NOT TO SCALE 15



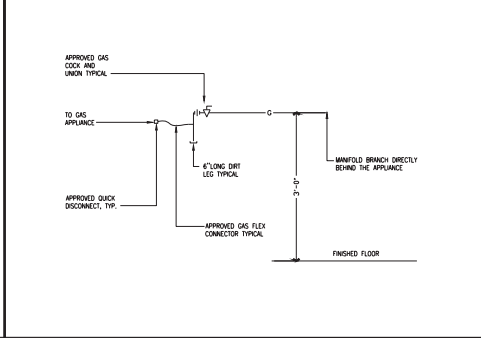
15GPM GREASE TRAP (GT-2) NOT TO SCALE 14



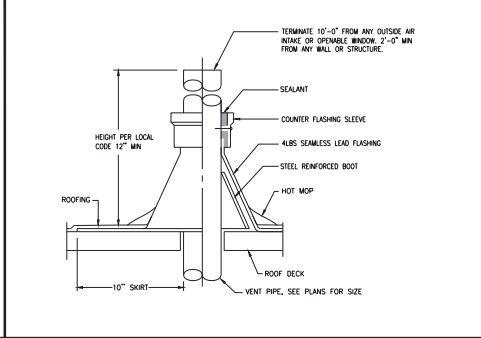
50GPM GREASE TRAP (GT-1) NOT TO SCALE 13



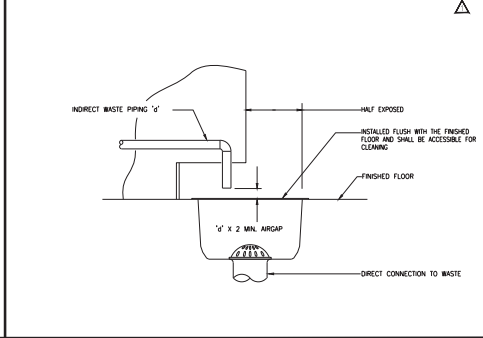
GAS PIPE TO EQUIPMENT NOT TO SCALE 12



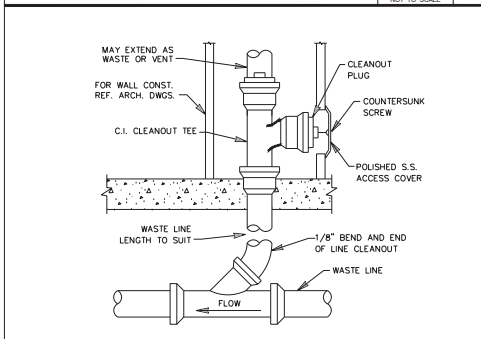
COOKING GAS MANIFOLD NOT TO SCALE 11



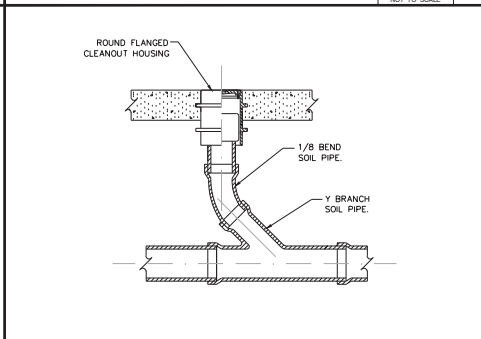
VENT THROUGH ROOF NOT TO SCALE 10



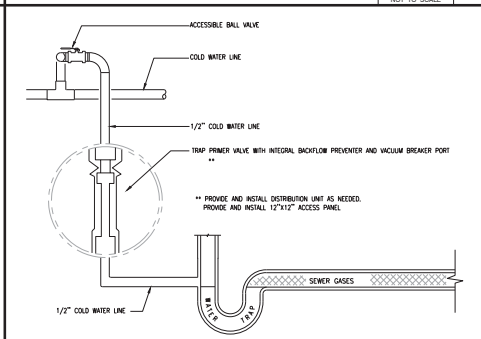
FLOOR SINK DETAIL NOT TO SCALE 9



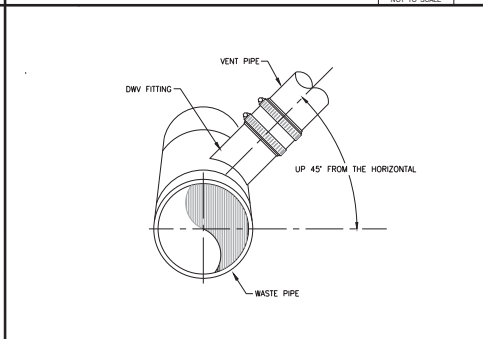
WALL CLEANOUT DETAIL NOT TO SCALE 8



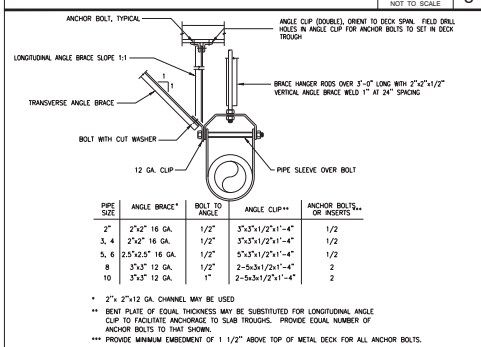
FLOOR CLEANOUT DETAIL NOT TO SCALE 7



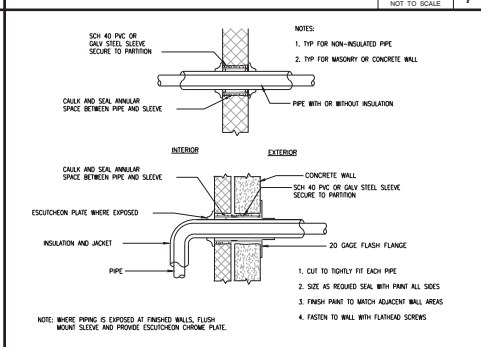
TRAP TRIMER NOT TO SCALE 6



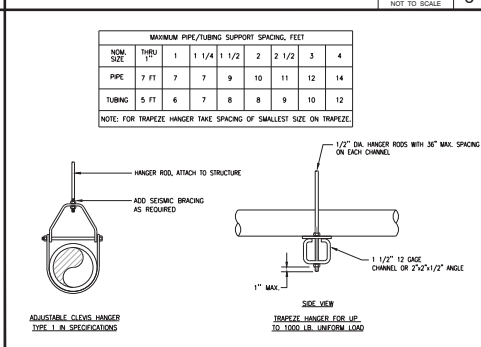
VENT TAKE-OFF BELOW GROUND OR FLOOR NOT TO SCALE 5



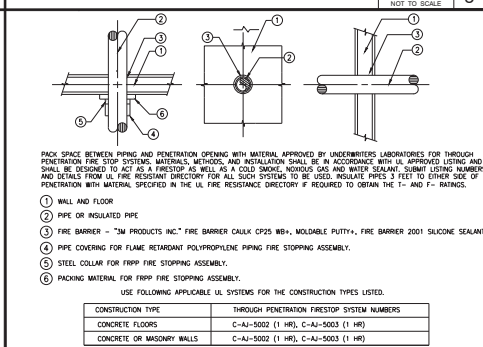
SEISMIC SUPPORT FOR PIPES NOT TO SCALE 4



PENETRATION FOR FIRE RATED WALLS AND FLOOR NOT TO SCALE 3



PIPING SUPPORT NOT TO SCALE 2



PIPE PENETRATION THROUGH WALLS NOT TO SCALE 1