



Hydro Tech Environmental, Corp.

Main Office
77 Arkay Drive, Suite G
Hauppauge, New York 11788
T (631) 462-5866 • F (631) 462-5877

NYC Office
15 Ocean Avenue, 2nd Floor
Brooklyn, New York 11225
T (718) 636-0800 • F (718) 636-0900

WWW.HYDROTECHENVIRONMENTAL.COM

June 6, 2013

New York City Office of Environmental Remediation
City Brownfield Cleanup Program
c/o Shaminder Chawla
100 Gold Street, 2nd Floor
New York, NY 10038

**Re: 13CVCP109K/13CVCP110K
490-504 Myrtle Avenue
Remedial Action Work Plan (RAWP) Stipulation List**

Dear Mr. Chawla:

Hydro Tech Environmental Corp. hereby submits to the New York City Office of Environmental Remediation (NYCOER) a Remedial Action Work Plan (RAWP) Stipulation List for the subject site on behalf of 490 Myrtle Residential Owner, LLC & 504 Myrtle Residential Owner, LLC. This Stipulation List serves as an addendum to the RAWP to stipulate additional content, requirements and procedures that will be followed during the site remediation. The contents of this list are added to the RAWP and will supersede the content in said document where there is a conflict in purpose or intent. The additional requirements/procedures include the following:

Stipulation List

1. The criterion attached in **Addendum 1** will be utilized if petroleum containing tank or vessel is identified during the remedial action or subsequent redevelopment excavation activities. All petroleum spills will be reported to the NYSDEC hotline as required by applicable laws and regulations. This contingency plan is designed for heating oil tanks and other small or moderately sized storage vessels. If larger tanks, such as gasoline storage tanks are identified, OER will be notified before this criterion is utilized.

2. Collection and analysis of end-point samples will be conducted to evaluate the performance of the remedy with respect to attainment of Track 1 SCOs. To evaluate attainment of Track 1 SCOs throughout the site, (8) base samples will be collected. Each sample will be analyzed for VOCs, SVOCs, TAL Metals, and pesticides as per their appropriate method numbers. A map indicating post-remedial End Point Sampling Locations is attached as **Addendum 2**.
3. An active Sub-Slab Depressurization System (SSDS) will be installed beneath areas of the building slab where ventilated sub-grade parking is not anticipated to be present. The system can be operated passively contingent upon post installation sampling and OER's discretion. Conceptual Design and technical specifications for the SSDS are also attached in **Addendum 3**.
4. In the event that dewatering is undertaken, it will be performed in full compliance with applicable laws, rules and regulations.
5. In the event that hazardous waste is identified during the remedial action or subsequent redevelopment excavation activities at this NYC VCP project, and removal and transportation of hazardous waste becomes necessary, the project may be subject to the New York State Department of Environmental Conservation's Special Assessment Tax (ECL 27-0923) and Hazardous Waste Regulatory Fees (ECL 72-00402). See DEC's website for more information:
<http://www.dec.ny.gov/chemical/9099.html>.
6. Any hotspot areas identified during waste characterization sampling will be disposed of in accordance with applicable laws and regulations as well as disposal facility requirements. Waste characterization sampling results will be provided to OER.
7. The following engineering plans signed and stamped by the RA of record for the project are attached as **Addendum 4**: final cover slab design, excavation diagram for footings/ development-related excavation, vapor barrier design (cross-section and plan showing horizontal extent).
8. A pre-approval letter from all disposal facilities will be provided to OER prior to any soil/fill material removal from the site. Documentation specified in the RAWP - Appendix 3 - Section 1.6 "Materials Disposal Off-

- Site" would be provided to OER. If a different disposal facility for the soil/fill material is selected, OER will be notified immediately.
9. Approval for the import of material for backfilling purposes must be received from OER prior to the commencement of such activities. Documentation illustrating that the requisitioned import material has been properly segregated, stockpiled, and tested (when needed) prior to its release from the generating site, and by extension prior to its arrival to the import site, will be required. Blended recycled concrete aggregate (bRCA) is not an acceptable material for import.
 10. A CD containing the final RAWP including this approved Stipulation List will be placed in the library that constitutes the primary public repository for project documents.
 11. Signage for the project will include a sturdy placard mounted in a publically accessible right of way to building and other permits signage will consist of the NYC VCP Information Sheet (attached **Addendum 5**) announcing the remedial action. The Information sheet will be laminated and permanently affixed to the placard.
 12. OER requires parties seeking City Brownfield Incentive Grants (BIG) grants to carry insurance. For a cleanup grant, both the excavator and the trucking firm(s) that handle removal of soil must carry or be covered under a commercial general liability (CGL) policy and a contractors pollution liability (CPL) policy, both of which must provide \$1 million per claim in coverage. Both policies must name the City of New York, the NYC Economic Development Corporation, and Brownfield Redevelopment Solutions as additional insured. A fact sheet regarding insurance is attached as **Addendum 6**.
 13. Vapor barrier as proposed in approved RAWP has been changed. Vapor barrier proposed for this site will consist of a 60-mil spray-on liquid boot plus 20-mil high performance Polyethylene-EVOH copolymer membrane and will be installed beneath the proposed slab and on the inside and top of existing foundation walls and the new foundations walls of the proposed building. The membrane will be protected on the inside of foundation walls with 1 inch rigid insulation boards and ½ inch impact resistant boards fixed with 1-1/2 inch metal studs. Conceptual Design and technical specifications for the liquid boot membrane are also provided in **Addendum 3**.

Mr. Chawla
June 6, 2013
Page 4

14. Revised project description for Site A (490 Myrtle Avenue) describes the project as a seven-story building with a full cellar. The cellar will be 10 feet below the first floor elevation and will consist of storage rooms and service rooms. The ground floor of the proposed building will contain a commercial space and the upper floor will contain a total of 93 residential units. A parking spaced associated with the Site A will be provided on the adjacent lot at 504 Myrtle Avenue. A revised RA stamped project description letter is provided in **Addendum 7**.

15. Signed and stamped RAWP certification page is attached in **Addendum 8**.

Very Truly Yours,
Hydro Tech Environmental Corp.



Paul I. Matli
Senior Project Manager

PM/aj
Enc.

cc: Hydro Tech File 120262 w/ Enc.
cc: J.Pati, jpati@dep.nyc.gov,
S. Chawla, ShaminderC@dep.nyc.gov

Addendum 1
Generic Procedures for Management of Underground Storage Tanks
Identified under the NYC VCP

Prior to Tank removal, the following procedures should be followed:

- Remove all fluid to its lowest draw-off point.
- Drain and flush piping into the tank.
- Vacuum out the “tank bottom” consisting of water product and sludge.
- Dig down to the top of the tank and expose the upper half.
- Remove the fill tube and disconnect the fill, gauge, product, vent lines and pumps. Cap and plug open ends of lines.
- Temporarily plug all tank openings, complete the excavation, remove the tank and place it in a secure location.
- Render the tank safe and check the tank atmosphere to ensure that petroleum vapors have been satisfactorily purged from the tank.
- Clean tank or remove to storage yard for cleaning.
- If the tank is to be moved, it must be transported by licensed waste transporter. Plug and cap all holes prior to transport leaving a 1/8 inch vent hole located at the top of the tank during transport.
- After cleaning, the tank must be made acceptable for disposal at a scrap yard, cleaning the tanks interior with a high pressure rinse and cutting the tank in several pieces.

During the tank and pipe line removal, the following field observations should be made and recorded:

- A description and photographic documentation of the tank and pipe line condition (pitting, holes, staining, leak points, evidence of repairs, etc.).
- Examination of the excavation floor and sidewalls for physical evidence of contamination (odor, staining, sheen, etc.).
- Periodic field screening (through bucket return) of the floor and sidewalls of the excavation, with a calibrated photoionization detector (PID).

Impacted Soil Excavation Methods

The excavation of the impacted soil will be performed following the removal of the existing tanks. Soil excavation will be performed in accordance with the procedures described under Section 5.5 of Draft DER-10 as follows:

- A description and photographic documentation of the excavation.
- Examination of the excavation floor and sidewalls for physical evidence of contamination (odor, staining, sheen, etc.).

- Periodic field screening (through bucket return) of the floor and sidewalls of the excavation, with calibrated photoionization detector (PID).

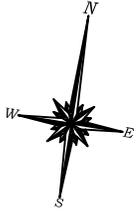
Final excavation depth, length, and width will be determined in the field, and will depend on the horizontal and vertical extent of contaminated soils as identified through physical examination (PID response, odor, staining, etc.). Collection of verification samples will be performed to evaluate the success of the removal action as specified in this document.

The following procedure will be used for the excavation of impacted soil (as necessary and appropriate):

- Wear appropriate health and safety equipment as outlined in the Health and Safety Plan.
- Prior to excavation, ensure that the area is clear of utility lines or other obstructions. Lay plastic sheeting on the ground next to the area to be excavated.
- Using a rubber-tired backhoe or track mounted excavator, remove overburden soils and stockpile, or dispose of, separate from the impacted soil.
- If additional UST's are discovered, the NYSDEC will be notified and the best course of action to remove the structure should be determined in the field. This may involve the continued trenching around the perimeter to minimize its disturbance.
- If physically contaminated soil is present (e.g., staining, odors, sheen, PID response, etc.) an attempt will be made to remove it, to the extent not limited by the site boundaries or the bedrock surface. If possible, physically impacted soil will be removed using the backhoe or excavator, segregated from clean soils and overburden, and staged on separated dedicated plastic sheeting or live loaded into trucks from the disposal facility. Removal of the impacted soils will continue until visibly clean material is encountered and monitoring instruments indicate that no contaminants are present.
- Excavated soils which are temporarily stockpiled on-site will be covered with tarp material while disposal options are determined. Tarp will be checked on a daily basis and replaced, repaired or adjusted as needed to provide full coverage. The sheeting will be shaped and secured in such a manner as to drain runoff and direct it toward the interior of the property.

Once the site representative and regulatory personnel are satisfied with the removal effort, verification of confirmatory samples will be collected from the excavation in accordance with DER-10.

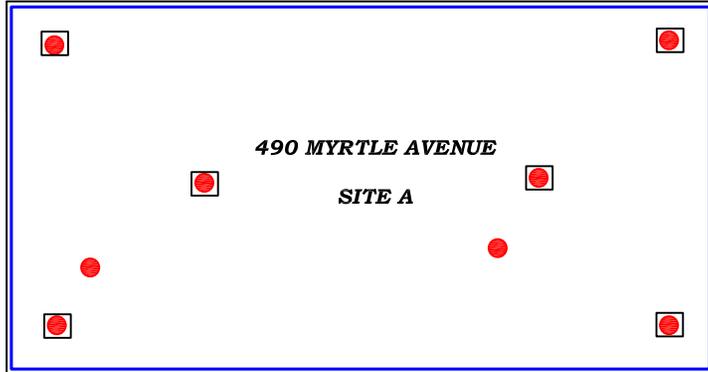
Addendum 2
End-point Sampling Plan



MYRTLE AVENUE

SIDEWALK

HALL STREET



LEGEND:

- END POINT SAMPLE LOCATION
- PITS OF ACTIVE SSDS



HYDRO TECH ENVIRONMENTAL CORP.

MAIN OFFICE: 77 ARKAY DRIVE, SUITE G
HAUPPAUGE, NEW YORK 11788
T (631)462-5866 F (631)462-5877
www.hydrotechenvironmental.com

NYC OFFICE: 15 OCEAN AVENUE, 2nd Floor
BROOKLYN, NEW YORK 11225
T (718)636-0800 F (718)636-0900

490 - 504 Myrtle Avenue
Brooklyn, NY
HTE Job# 120262

Drawn By: C.Q.
Reviewed By: M.R.
Approved By: M.S.
Date: 05/01/13
Scale: AS NOTED

TITLE:

END POINT SAMPLING MAP

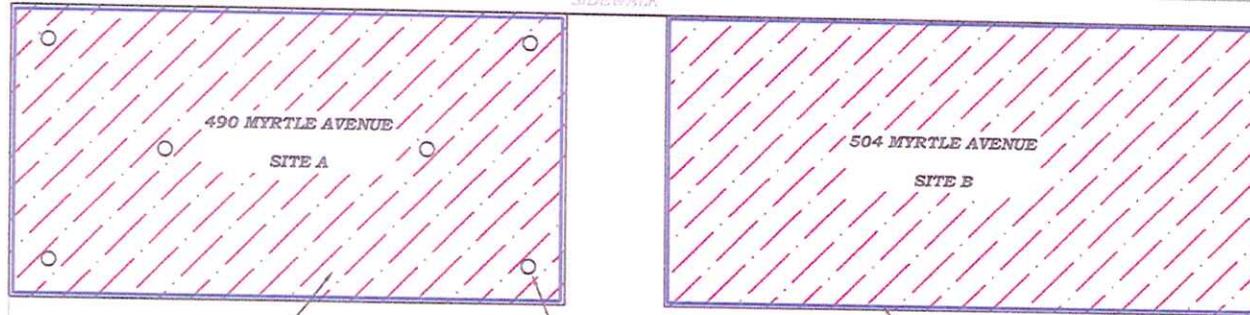
Addendum 3

Active Sub-Slab Depressurization System Design and Specifications

MYRTLE AVENUE

SIDEWALK

HALL STREET



GSE HDPE 60mil VAPOR BARRIER BENEATH THE BOTTOM OF THE CELLAR SLAB

PITS FOR ACTIVE SSDS

PREPRUFE 160R OR BITHUTENE 4000 BEHIND FOUNDATION WALLS

0' 20' 40' 60'
SCALE IN FEET (FT.)

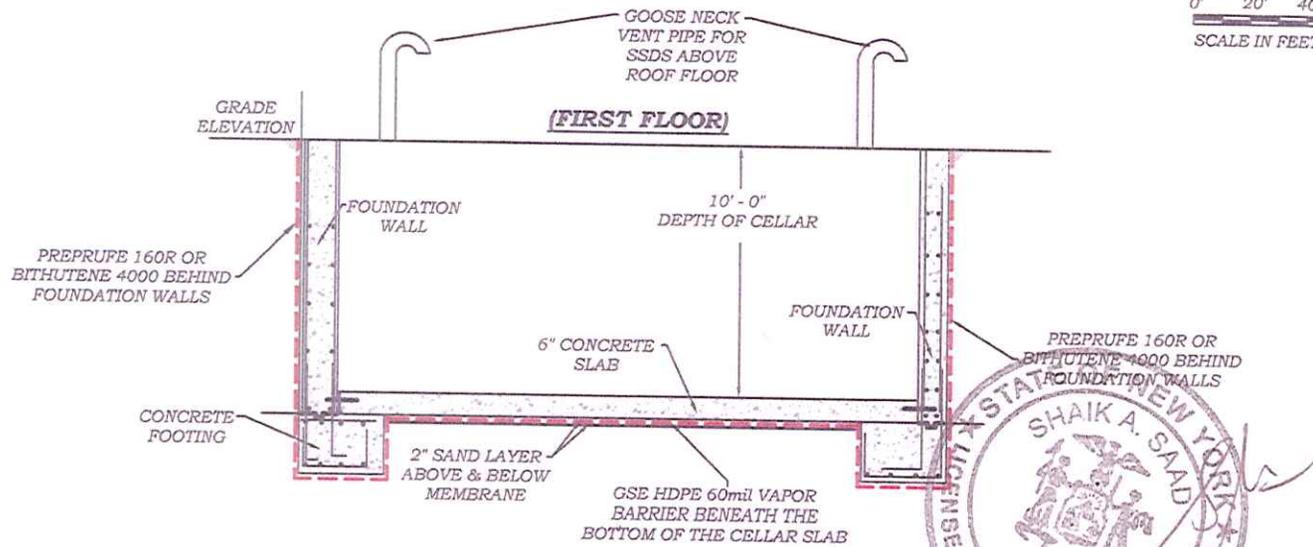


FIGURE 1. PLAN & ELEVATION



Hydro Tech ENVIRONMENTAL CORP.

MAIN OFFICE:

77 ARWAY DRIVE, SUITE G
HAUPPAUGE, NEW YORK 11788

T (631)462-5866 F (631)462-5877

www.hydrotechenvironmental.com

NYC OFFICE:

15 OCEAN AVENUE, 2nd Floor
BROOKLYN, NEW YORK 11225

T (718)636-0800 F (718)636-0900

490 & 504 Myrtle Avenue
Brooklyn, NY.
HTE Job# 120262

Drawn By: C.C.
Reviewed By: M.R.
Approved By: M.S.
Date: 01/15/13
Scale: AS NOTED

TITLE:

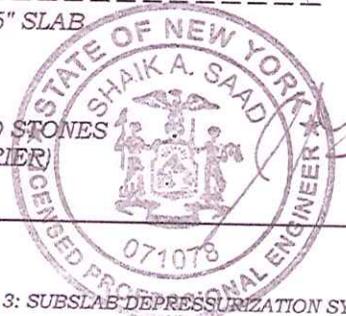
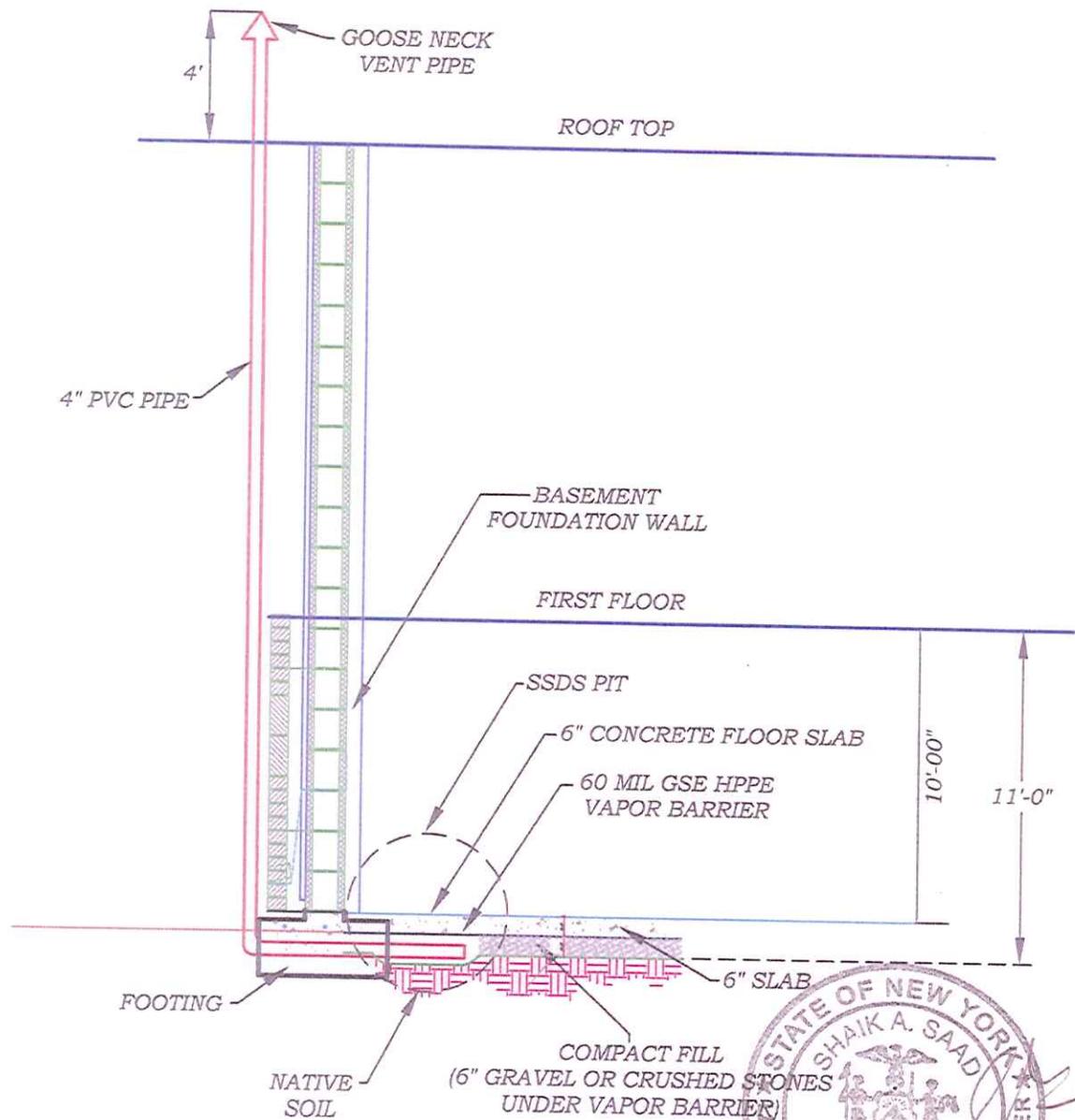


FIGURE 3: SUBSLAB DEPRESSURIZATION SYSTEM DETAIL



Hydro Tech Environmental Corp.
 MAIN OFFICE: 77 ARKAY DRIVE, SUITE G HAUPPAUGE, NEW YORK 11788
 NYC OFFICE: 15 OCEAN AVENUE, 2nd Floor BROOKLYN, NEW YORK 11225
 T (631)462-5888 F (631)462-5877 T (718)636-0800 F (718)636-0900
 www.hydrochemenvironmental.com

490 & 504 Myrtle Avenue
 Brooklyn, NY.
 HTE Job# 120262

Drawn By: C.G.
 Reviewed By: M.R.
 Approved By: M.S.
 Date: 01/15/13
 Scale: AS NOTED

TITLE:



INSTALLATION INSTRUCTION IN014 Rev G

DynaVac - XP/XR Series	DynaVac - GP Series
XP101 P/n 23008-1	GP201 P/n 23007-1
XP151 P/n 23010-1	GP301 P/n 23006-1
XP201 P/n 23011-1	GP401 P/n 23009-1
XR261 P/n 23019-1	GP501 P/n 23005-1

1.0 SYSTEM DESIGN CONSIDERATIONS

1.1 INTRODUCTION

The DynaVac GP/XP/XR Series Radon Fans are intended for use by trained, professional Radon mitigators. The purpose of this instruction is to provide additional guidance for the most effective use of a DynaVac Fan. This instruction should be considered as a supplement to EPA standard practices, state and local building codes and state regulations. In the event of a conflict, those codes, practices and regulations take precedence over this instruction.

1.2 ENVIRONMENTALS

The GP/XP/XR Series Fans are designed to perform year-round in all but the harshest climates without additional concern for temperature or weather. For installations in an area of severe cold weather, please contact RadonAway for assistance. When not in operation, the fan should be stored in an area where the temperature is never less than 32 degrees F. or more than 100 degrees F.

1.3 ACOUSTICS

The GP/XP/XR Series Fan, when installed properly, operates with little or no noticeable noise to the building occupants. The velocity of the outgoing air should be considered in the overall system design. In some cases the "rushing" sound of the outlet air may be disturbing. In these instances, the use of a RadonAway Exhaust Muffler is recommended.

1.4 GROUND WATER

In the event that a temporary high water table results in water at or above slab level, water may be drawn into the riser pipes thus blocking air flow to the GP/XP/XR Series Fan. The lack of cooling air may result in the fan cycling on and off as the internal temperature rises above the thermal cutoff and falls upon shutoff. Should this condition arise, it is recommended that the fan be turned off until the water recedes allowing for return to normal operation.

1.5 SLAB COVERAGE

The GP/XP/XR Series Fan can provide coverage up to 2000+ sq. ft. per slab penetration. This will primarily depend on the sub-slab material in any particular installation. In general, the tighter the material, the smaller the area covered per penetration. Appropriate selection of the GP/XP/XR Series Fan best suited for the sub-slab material can improve the slab coverage. The GP & XR Series have a wide range of models to choose from to cover a wide range of subslab material. The higher static suction fans are generally used for tighter subslab materials. The XR Series is specifically designed for high flow applications such as stone/gravel and drain tile. Additional suction points can be added as required. It is recommended that a small pit (5 to 10 gallons in size) be created below the slab at each suction hole.

1.6 CONDENSATION & DRAINAGE

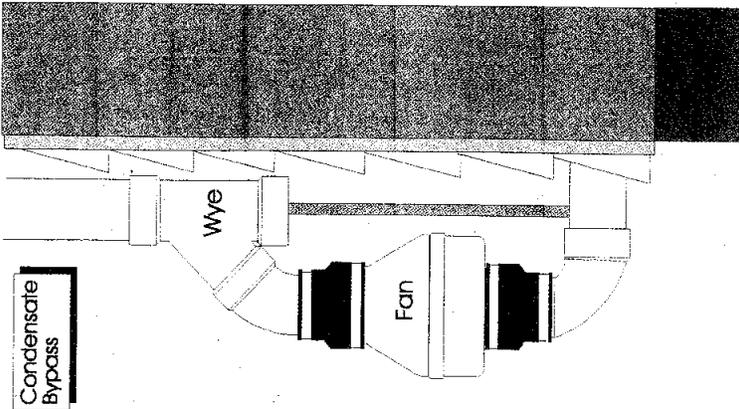
Condensation is formed in the piping of a mitigation system when the air in the piping is chilled below its dew point. This can occur at points where the system piping goes through unheated space such as an attic, garage or outside. The system design must provide a means for water to drain back to a slab hole to remove the condensation. The GP/XP/XR Series Fan MUST be mounted vertically plumb and level, with the outlet pointing up for proper drainage through the fan. Avoid mounting the fan in any orientation that will allow water to accumulate inside the fan housing. The GP/XP/XR Series Fans are NOT suitable for underground burial.

For GP/XP/XR Series Fan piping, the following table provides the minimum recommended pipe diameter and pitch under several system conditions.

Pipe Dia.	Minimum Rise per Foot of Run*		
	@25 CFM	@50 CFM	@100 CFM
4"	1/8"	1/4"	3/8"
3"	1/4"	3/8"	1 1/2"

*Typical GP/XP/XR Series Fan operational flow rate is 25 - 90 CFM. (For more precision, determine flow rate by using the chart in the addendum.)

Under some circumstances in an outdoor installation a condensate bypass should be installed in the outlet ducting as shown. This may be particularly true in cold climate installations which require long lengths of outlet ducting, or where the outlet ducting is likely to produce large amounts of condensation because of high soil moisture or outlet duct material. Schedule 20 piping and other thin-walled plastic ducting and Aluminum downspout will normally produce much more condensation than Schedule 40 piping.



The bypass is constructed with a 45 degree Wye fitting at the bottom of the outlet stack. The bottom of the Wye is capped and fitted with a tube that connects to the inlet piping or other drain. The condensation produced in the outlet stack is collected in the Wye fitting and drained through the bypass tube. The bypass tubing may be insulated to prevent freezing.

1.7 "SYSTEM ON" INDICATOR

A properly designed system should incorporate a "System On" Indicator for affirmation of system operation. A manometer, such as a U-Tube, or a vacuum alarm is recommended for this purpose.

1.8 ELECTRICAL WIRING

The GP/XP/XR Series Fans operate on standard 120V 60 Hz. AC. All wiring must be performed in accordance with the National Fire Protection Association's (NFPA) National Electrical Code, Standard #70th - current edition for all commercial and industrial work, and state and local building codes. All wiring must be performed by a qualified and licensed electrician. Outdoor installations require the use of a U.L. listed watertight conduit. Ensure that all exterior electrical boxes are outdoor rated and properly sealed to prevent water penetration into the box. A means, such as a weep hole, is recommended to drain the box.

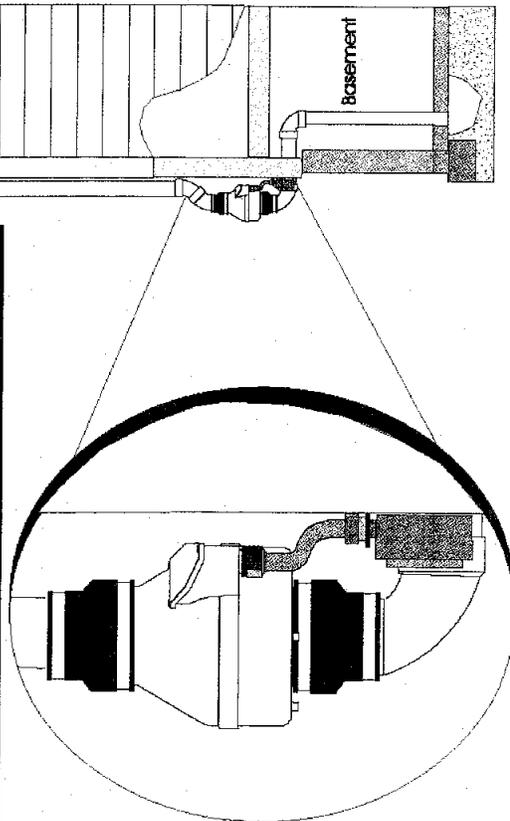
1.9 SPEED CONTROLS

The GP/XP/XR Series Fans are rated for use with electronic speed controls, however, they are generally not recommended.

2.0 INSTALLATION

The GP/XP/XR Series Fan can be mounted indoors or outdoors. (It is suggested that EPA recommendations be followed in choosing the fan location.) The GP/XP/XR Series Fan may be mounted directly on the system piping or fastened to a supporting structure by means of optional mounting bracket.

Typical GP/XP/XR Outdoor Installation



2.1 MOUNTING

Mount the GP/XP/XR Series Fan vertically with outlet up. Insure the unit is plumb and level. When mounting directly on the system piping assure that the fan does not contact any building surface to avoid vibration noise.

2.2 MOUNTING BRACKET (optional)

The GP/XP/XR Series fan may be optionally secured with the integral mounting bracket on the GP Series fan or with RadonAway P/N 25007-2 mounting bracket for an XP/XR Series fan. Foam or rubber grommets may also be used between the bracket and mounting surface for vibration isolation.

2.3 SYSTEM PIPING

Complete piping run, using flexible couplings as means of disconnect for servicing the unit and vibration isolation.

2.4 ELECTRICAL CONNECTION

Connect wiring with wire nuts provided, observing proper connections (See Section 1.8):

Fan Wire	Connection
Green	Ground
Black	AC Hot
White	AC Common

2.5 VENT MUFFLER (optional)

Install the muffler assembly in the selected location in the outlet ducting. Solvent weld all connections. The muffler is normally installed at the end of the vent pipe.

2.6 OPERATION CHECKS

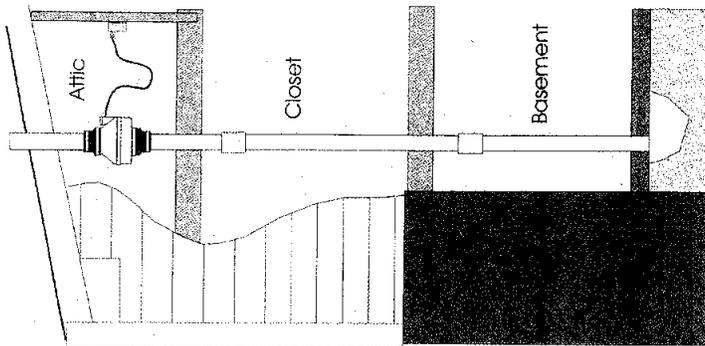
Verify all connections are tight and leak-free.

Insure the GP/XP/XR Series Fan and all ducting is secure and vibration-free.

Verify system vacuum pressure with manometer. Insure vacuum pressure is less than maximum recommended operating pressure
(Based on sea-level operation, at higher altitudes reduce by about 4% per 1000 Feet.)

(Further reduce Maximum Operating Pressure by 10% for High Temperature environments)
See Product Specifications. If this is exceeded, increase the number of suction points.

Verify Radon levels by testing to EPA protocol.



XP/XR SERIES PRODUCT SPECIFICATIONS

The following chart shows fan performance for the XP & XR Series Fan:

	Typical CFM Vs Static Suction "WC						
	0" .25"	.75"	1.0"	1.25"	1.5"	1.75"	2.0"
XP101	125	118	90	56	5	-	-
XP151	180	162	140	117	78	46	10
XP201	150	130	110	93	74	57	38
XR261	250	215	185	150	115	80	50

Maximum Recommended Operating Pressure*

XP101	0.9" W.C.	(Sea Level Operation)**
XP151	1.3" W.C.	(Sea Level Operation)**
XP201	1.7" W.C.	(Sea Level Operation)**
XR261	1.6" W.C.	(Sea Level Operation)**

*Reduce by 10% for High Temperature Operation
**Reduce by 4% per 1000 feet of altitude

Power Consumption @ 120 VAC

XP101	40 - 49 watts
XP151	45 - 60 watts
XP201	45 - 66 watts
XR261	65 - 105 watts

XP Series Inlet/Outlet: 4.5" OD (4.0" PVC Sched 40 size compatible)
XR Series Inlet/Outlet: 5.875" OD

Mounting: Mount on the duct pipe or with optional mounting bracket.

Recommended ducting: 3" or 4" Schedule 20/40 PVC Pipe

Storage temperature range: 32 - 100 degrees F.

Normal operating temperature range: -20 - 120 degrees F.

Maximum inlet air temperature: 80 degrees F.

Size: 9.5H" x 8.5" Dia. Weight: 6 lbs. (XR261 - 7 lbs)

Continuous Duty Thermally protected

Class B Insulation 3000 RPM

Residential Use Only Rated for Indoor or Outdoor use



GP SERIES PRODUCT SPECIFICATIONS

The following chart shows fan performance for the GPx01 Series Fan:

	Typical CFM Vs Static Suction "WC						
	1.0"	1.5"	2.0"	2.5"	3.0"	3.5"	4.0"
GP501	95	87	80	70	57	30	5
GP401	93	82	60	38	12	-	-
GP301	92	77	45	10	-	-	-
GP201	82	58	5	-	-	-	-

Maximum Recommended Operating Pressure*

GP501	3.8" W.C.	(Sea Level Operation)**
GP401	3.0" W.C.	(Sea Level Operation)**
GP301	2.4" W.C.	(Sea Level Operation)**
GP201	1.8" W.C.	(Sea Level Operation)**

*Reduce by 10% for High Temperature Operation
**Reduce by 4% per 1000 feet of altitude

Power Consumption @ 120 VAC

GP501	70 - 140 watts
GP401	60 - 110 watts
GP301	55 - 90 watts
GP201	40 - 60 watts

Inlet/Outlet: 3.5" OD (3.0" PVC Sched 40 size compatible)

Mounting: Fan may be mounted on the duct pipe or with integral flanges.

Weight: 12 lbs.

Size: 13H" x 12.5" x 12.5"

Recommended ducting: 3" or 4" Schedule 20/40 PVC Pipe

Storage temperature range: 32 - 100 degrees F.

Normal operating temperature range: -20 - 120 degrees F.

Maximum inlet air temperature: 80 degrees F.

Continuous Duty

Class B Insulation

3000 RPM

Thermally protected

Rated for Indoor or Outdoor Use



Addendum 4
Signed and Stamped Plans

GENERAL NOTES:

- 1. THE STRUCTURAL PLANS AND SPECIFICATIONS COMPLY WITH THE REQUIREMENTS OF THE NEW YORK CITY BUILDING CODE.
2. THE DESIGN, DETAILS, AND NOTES INCLUDED IN THE STRUCTURAL PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH SEISMIC DESIGN PER SECTION BC1614 OF THE NEW YORK CITY BUILDING CODE.
3. ALL WORK SHALL COMPLY WITH THE NEW YORK CITY BUILDING CODE AND ALL OTHER APPLICABLE CODES AND REGULATIONS OF AGENCIES HAVING JURISDICTION.
4. ALL REFERENCED STANDARD REFER TO THE EDITION IN FORCE AT THE TIME THAT THESE PLANS AND SPECIFICATIONS ARE ISSUED.
5. JOB SAFETY AND PROCEDURES FOR SAFE CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE G.C. AND SUBCONTRACTORS.
6. WORK EXPRESSLY SHOWN ON SPECIFIC PARTS OF THE DRAWING OR SPECIFICATIONS, BUT REASONABLY IMPLIED BY SIMILAR WORK SHOWN, SHALL BE REPEATED.
7. THE STRUCTURAL PLANS SHALL BE COORDINATED WITH THE SPECIFICATIONS, THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, SITE DRAWINGS.
8. THE G.C. AND SUBCONTRACTORS SHALL VERIFY THAT ALL MEMBERS AND MATERIALS CONFORM TO ACTUAL SITE CONDITIONS. THE G.C. SHALL REPORT DIFFERING SITE SITE CONDITIONS TO THE ARCHITECT AND ENGINEER FOR REVIEW.
9. THE G.C. AND SUBCONTRACTORS SHALL TAKE CARE TO PROTECT ALL EXISTING STRUCTURES AND UTILITIES FROM DAMAGE.
10. SPECIFIC NOTES AND DETAILS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. THE G.C. AND SUBCONTRACTORS SHALL REFER TO THE SPECIFICATIONS FOR INFORMATION NOT COVERED BY THESE GENERAL NOTES OR THE STRUCTURAL DRAWINGS. DRAWINGS SHALL TAKE PRECEDENCE OVER SPECIFICATIONS, IF THERE APPEARS TO BE A CONFLICT BETWEEN NOTES, DETAILS, OR SPECIFICATIONS, THE G.C. AND SUBCONTRACTORS SHALL APPLY THE MOST RIGID REQUIREMENTS TO THE WORK. THE G.C. AND SUBCONTRACTORS SHALL NOT DEVIATE FROM DRAWINGS WITHOUT WRITTEN APPROVAL FROM THE ENGINEER.
11. THE G.C. AND SUBCONTRACTORS SHALL PROVIDE TEMPORARY ERECTION BRACING AND/OR SHORING FOR ALL STRUCTURAL WORK AS REQUIRED FOR STABILITY OF THE STRUCTURE DURING ALL PHASES OF CONSTRUCTION.
12. THE G.C. AND SUBCONTRACTOR SHALL PERFORM ALL NECESSARY PRE-CONSTRUCTION INSPECTIONS/SURVEYS OF ADJACENT STRUCTURES, AS REQUIRED BY THE NYC BUILDING CODE AND AS NECESSARY TO FULLY UNDERSTAND THE EXISTING CONDITIONS AND STRUCTURAL SYSTEM.
13. THE G.C. SHALL PROVIDE SHOP DRAWINGS FOR REVIEW AND APPROVAL FOR ALL STRUCTURAL ELEMENTS. THE SHOP DRAWINGS SHALL BE PROVIDED IN A TIMELY FASHION TO ALLOW ADEQUATE TIME FOR REVIEW AND REVISIONS PRIOR TO FABRICATION.
14. CONTRACTOR IS TO ENGAGE AN INDEPENDENT, QUALIFIED CONTROLLED INSPECTOR PRIOR TO THE COMMENCEMENT OF ANY WORK.
15. THE G.C. AND SUBCONTRACTORS SHALL NOTIFY THE ENGINEER AND SPECIAL INSPECTION COMPANY AT LEAST 2 WEEKS PRIOR TO THE COMMENCEMENT OF ANY WORK.
16. THE G.C. SHALL HIRE A REGISTERED AND EXPERIENCED PROFESSIONAL ENGINEER TO DESIGN, SUPERVISE AND INSPECT ALL SHORING AND EXCAVATION REQUIRED FOR THIS PROJECT. THIS ENGINEER SHALL PREPARE AND SUBMIT A SEPARATE SET OF DRAWINGS TO THE BUILDING DEPARTMENT OUTLINING ALL ENGINEERED SHORING, EXCAVATION AND SPECIAL SITE CONSIDERATIONS, INCLUDING PROTECTION OF ADJACENT STRUCTURES AND PROPERTY.
17. CONTRACTOR SHALL BE RESPONSIBLE TO GENERATE A SET OF AS BUILT DOCUMENTS AFTER COMPLETION OF WORK. THIS AS-BUILT SET SHALL INCLUDE ALL COORDINATION, ADDITIONS AND REVISIONS MADE TO THE PLANS, DETAILS AND JOB SPECIFICATIONS, INCLUDING THE INTENTION OF THIS RECORD SET WILL BE AS NECESSARY FOR THE OWNER'S RECORDS, THE LOCAL MUNICIPALITIES' REQUEST AND THE ENGINEER'S RECORDS.
18. REFER TO THE PROJECT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

FOUNDATION NOTES AND REQUIREMENTS:

- 1. ELEVATIONS ARE REFERENCED TO FIRST FLOOR PLANK ELEVATION 53.92'+0"-0".
2. BASED ON THE GEOTECHNICAL ENGINEERING REPORT BY CARLIN-SIMPSON & ASSOCIATES DATED FEB 08, 2013, THE FOLLOWING CRITERIA WAS ALLOWED TO USE FOR FOUNDATION DESIGN: 3 TSF
3. ALL EXPOSED CONCRETE EDGES SHALL BE CHAMFERED.
4. WALL CONSTRUCTION JOINTS AND CRACK CONTROL JOINTS SHALL BE PROVIDED AS SHOWN ON DRAWING FO-101. ALLOW 3 DAYS BETWEEN ADJACENT CONCRETE POURS. ADDITIONAL CONSTRUCTION JOINTS MAY BE PROVIDED IF REQUESTED BY THE CONTRACTOR.
5. HORIZONTAL REINFORCING SHALL BE CONTINUOUS OR OVERLAPPED AS NEEDED ACROSS ALL CONSTRUCTION JOINTS.
6. BACKFILL MATERIAL SHALL BE CLEAN SAND OR GRAVEL CONTAINING NO MORE THAN 10% PASSING A NO. 200 SIEVE. BACKFILL SHALL BE COMPACTED TO A MINIMUM OF 95% (ASTM D1557) TO THE FINAL SUBGRADE IN LIFTS OF NO MORE THAN 8 INCH THICKNESS (LOOSE MEASURE) WITH A MECHANICAL COMPACTOR (MINIMUM OF THREE PASSES).
7. GENERAL CONTRACTOR/SUBCONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS, LICENSES AND NOTIFICATIONS PRIOR TO COMMENCING SITE WORK.
8. GENERAL CONTRACTOR/SUBCONTRACTOR SHALL REMOVE CONSTRUCTION MATERIAL AND DEBRIS FROM THE SITE DURING AND AT THE COMPLETION OF WORK.
9. A 6" LAYER OF 3/4" CRUSHED STONE AND CONTINUOUS VAPOR RETARDER IS REQUIRED FOR CONVENTIONAL SLAB ON GRADE.
10. BOTTOM OF FOOTING ELEVATION SHALL BE 4'-0" BELOW GRADE EXPOSED TO WEATHER AS PER REQUIREMENTS BY NYC FOR FROST PROTECTION, UNLESS FOOTING IS BEARING DIRECTLY ON ROCK.
11. CALL ENGINEER/ARCHITECT IF BOTTOM OF FOOTING SUPERIMPOSES EXISTING WALL.
12. GENERAL CONTRACTOR/SUBCONTRACTOR TO PROVIDE CORROSION PROTECTION FOR ALL STRUCTURES SUSCEPTIBLE TO CORROSION.
13. OWNER TO PERFORM MAINTENANCE PROGRAM TO PROTECT STRUCTURE AGAINST WATER DAMAGE AND CORROSION.
14. GENERAL CONTRACTOR/SUBCONTRACTOR TO COORDINATE WATERPROOFING WITH ARCHITECTURAL PLAN AT COLD JOINTS IF EXTERIOR GRADE IS HIGHER THAN JOINTS.
15. GENERAL CONTRACTOR/SUBCONTRACTOR TO UTILIZE STAY-FORMS OR EQUIVALENT, WHERE NEIGHBORING BUILDING IS IN CLOSE PROXIMITY TO PROPOSED BUILDING, SO NOT TO CREATE ANY PRESSURE ON NEIGHBORING FOUNDATION WALL.
16. FOUNDATION WALLS ARE NOT DESIGNED AS FREE STANDING WALLS. DO NOT PLACE ANY BACKFILL AGAINST WALLS UNLESS ADEQUATELY BRACED TO WITHSTAND EARTH PRESSURE AND CONSTRUCTION LOADS (I.E. FIRST FLOOR SLAB INSTALLED), U.N.O.
17. HEAVY EQUIPMENT SHALL NOT BE PERMITTED CLOSER THAN 8 FEET FROM ANY RETAINING WALL. THE G.C. AND SUBCONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATE SUPPORTS AND BRACING TO PROTECT WALLS AGAINST ADDITIONAL LOADS FROM HEAVY EQUIPMENT OPERATION.
18. DOWELS FROM FOOTINGS INTO PIERS, BUTTRESSES AND WALLS ABOVE SHALL BE THE SAME SIZE AND SPACING AS VERTICAL REINFORCEMENTS IN PIERS, BUTTRESSES AND WALLS, AND SHALL BE EXTENDED INTO FOOTINGS AND INTO PIERS, BUTTRESSES AND WALLS U.N.O.
19. DROP BOTTOM OF WALLS AND PIERS TO TOP OF FOOTINGS TO OBTAIN FULL EXTENT OF CONTACT, U.N.O.
20. THE "LIQUID BOOT" VAPOR BARRIER TO BE APPLIED TO FOUNDATION WALLS, MEMBRANE TO BE WRAPPED OVER TOP OF WALL. A CONTINUOUS "LIQUID BOOT" VAPOR BARRIER TO BE INSTALLED UNDER SLAB ON GRADE AND A SUB-SLAB DEPRESSURIZATION SYSTEM, TO BE INSTALLED BENEATH CELLAR SLAB. SEE ENVIRONMENTAL REPORT PROVIDED BY HYDRO TECH ENVIRONMENTAL CORP.

CONCRETE AND REINFORCING NOTES:

- 1. ALL CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH, F'c, OF 4000 PSI WITH 6% AIR-ENTRAINMENT AND A MAXIMUM SLUMP OF 4".
2. ALL CONCRETE SHALL BE REINFORCED AND ERECTED IN ACCORDANCE WITH THE NYC BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE AS ADOPTED BY ACI 318 AND LOCAL CODES.
3. ALL CONCRETE WORK SHALL CONFORM TO ACI 301 STANDARD SPECIFICATIONS FOR REINFORCED CONCRETE
4. ALL CONCRETE SHALL USE PORTLAND CEMENT TYPE II. CONCRETE SHALL BE PROPORTIONED, BATCHED, MIXED, FINISHED, CURED, ETC. AS PER ACI 301. SUBMIT MIX DESIGN AND COMPRESSION TEST RESULTS AS REQUIRED. CONCRETE SHALL CONFORM TO CONTROLLED INSPECTION REQUIREMENTS.
5. NO ADMIXTURES SHALL BE ALLOWED WITHOUT PRIOR REVIEW AND ACCEPTANCE BY THE ENGINEER.
6. ALL REINFORCING STEEL SHALL BE DEFORMED HIGH BOND BARS ROLLED FROM NEW BILLET OR INTERMEDIATE GRADE STEEL TO MEET LATEST ASTM SPECIFICATIONS A-615, GRADE 60.
7. ALL REINFORCEMENT SHALL BE TIED IN PLACE, AND SUPPORTED. IF REQUIRED, CONTRACTOR SHALL PROVIDE ADDITIONAL BARS OR STRUTS TO SUPPORT ALL REINFORCEMENTS.
8. SPLICES SHALL BE IN ACCORDANCE WITH ACI 318-95 AND SPLICE LENGTH TABLE SHOWN ON DRAWING FO-101, 36 TIMES BAR DIAMETER MINIMUM. WELDED WIRE FABRIC SHEETS SHALL BE SPLICED 8" MINIMUM.
9. ALL DETAILS OF REINFORCEMENT AND ACCESSORIES SHALL BE FABRICATED AND PROVIDED IN ACCORDANCE WITH THE MANUAL OF STANDARD PRACTICE FOR DETAILING.
10. WELDED WIRE FABRIC SHALL MEET REQUIREMENTS OF ASTM A-185.
11. SHOP DRAWINGS SHALL MEET REQUIREMENTS OF ASTM A-185. SHOP DRAWINGS ON ALL CONCRETE REINFORCING MUST BE SUBMITTED FOR REVIEW BEFORE CONSTRUCTION AND SHALL INCLUDE ALL NECESSARY REINFORCEMENT, WALL ELEVATIONS SHOWING REINFORCEMENTS, DOWELS, LOCATIONS OF CONTROL AND CONSTRUCTION JOINTS, AND ALL INSERTS OR OTHER OBJECTS AFFECTING PLACEMENT OF REINFORCEMENT IN WALLS, FOOTINGS, OR SLABS.
12. BEFORE POURING CONCRETE, MECHANICAL AND ELECTRICAL CONTRACTORS SHALL VERIFY LOCATION AND SIZE OF ALL OPENINGS, PADS, AND TRENCHES, FOR THEIR EQUIPMENT AS WELL AS ALL EMBEDDED ITEMS IN CONCRETE SUCH AS WELD PLATES, PIPE SLEEVES, ETC.
13. RIGID TEMPLATES SHALL BE USED TO INSTALL ANCHOR BOLTS.
14. PROVIDE CORNER REINFORCEMENT AT WALL INTERSECTIONS AS SHOWN IN TYPICAL CORNER REINFORCING DETAIL.
15. MINIMUM COVER SPACING, U.N.O.:
-CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3"
-CONCRETE EXPOSED TO EARTH/WEATHER: 2" (#6 BARS AND LARGER), 1 1/2" (#5 BARS AND SMALLER)
-CONCRETE NOT EXPOSED TO EARTH/WEATHER OR IN CONTACT WITH GROUND: 1 1/2" (#14 BARS AND LARGER), 3/4" (#11 BARS AND SMALLER)

STRUCTURAL STEEL NOTES:

- 1. ALL STRUCTURAL STEEL, EXCEPT RECTANGULAR AND SQUARE COLUMNS TO BE ASTM A572 GRADE 50 (FY=50KSI), RECTANGULAR AND SQUARE STEEL COLUMNS TO BE ASTM A500 GR.B. ALL STEEL TO BE FABRICATED, DETAILED, AND ERECTED IN ACCORDANCE WITH LATEST A.I.S.C. STANDARDS.
2. ALL NUTS, BOLTS AND WASHERS SHALL BE HIGH STRENGTH ASTM DESIGNATION A490N U.N.O., INSTALLED BY TURN-OF-NUT METHOD OR A CALIBRATED TORQUE WRENCH. ALL BOLTS TO BE 1" U.N.O.
3. ALL WELDS SHALL BE MADE BY WELDERS WHO HAVE BEEN PREVIOUSLY QUALIFIED BY TESTS AS PRESCRIBED IN THE A.W.S. STANDARD CODE FOR WELDING IN BUILDING CONSTRUCTION.
4. THE SHOP AND ERECTION DRAWINGS MUST SHOW ALL SHOP AND FIELD WELDS.
5. ALL WELDING ELECTRODES SHALL CONFORM TO E70XX SERIES A-233. ALL WELDING AND WELDING SYMBOLS ON DRAWINGS SHALL CONFORM TO A.W.S. STANDARD CODE FOR WELDING BUILDING CONSTRUCTION.
6. BOLT HOLES WILL NOT BE PERMITTED TO BEAM FLANGES U.N.O.
7. ALL STEEL OTHER THAN JOISTS AND STANDARD BRIDGING TO BE PROVIDED BY THE STEEL FABRICATOR.
8. SHOP DRAWINGS ON ALL STRUCTURAL STEEL MUST BE SUBMITTED FOR REVIEW.
9. FIELD CUTTING OR BURNING OF STRUCTURAL STEEL IS PROHIBITED WITHOUT EXPRESSED APPROVAL OF STRUCTURAL ENGINEER. ALL CUTS, HOLES, COPING, ETC SHALL BE MADE IN THE SHOP AND SHOWN IN THE SHOP DRAWINGS.
10. ALL BEAMS BEARING ON WALLS SHALL HAVE A WALL PLATE (SEE FLOOR PLANS, WALL PLATE SCHEDULE, AND TYPICAL DETAILS).
11. THE FLANGES OF STEEL TO RECEIVE SHEAR STUDS SHOULD NOT BE PAINTED OR PRIMED.
12. THE STEEL SHEAR CONNECTIONS ARE TO BE WELDED IN PLANE AND TO BE TESTED BY CERTIFIED MATERIAL TESTING COMPANY. A REPORT SHALL BE SUBMITTED TO THE ENGINEER.
13. ALL STEEL SURFACES SHALL RECEIVE 2 HOUR SPRAY ON FIREPROOFING, U.N.O.
14. ALL STEEL BEAMS SHALL BE TEMPORARILY SUPPORTED UNTIL THE FLOOR SYSTEM IS INSTALLED AND THE LOAD IS BALANCED ON EACH SIDE OR WELD PLATES ON PLANK ARE WELDED TO BEAMS. UNSUPPORTED BEAMS SUBJECT TO UNBALANCED LOADS CAN TWIST DURING INSTALLATION. TEMPORARY SUPPORTS ARE REQUIRED TO PREVENT TWISTING.
15. PROVIDE RUST INHIBITIVE PAINT FOR ALL STEEL BEAMS AND PERTAINING CONNECTIONS SUSCEPTIBLE TO CORROSION, ESPECIALLY BY A PARKING GARAGE.
16. THE OWNER SHALL PERFORM A MAINTENANCE PROGRAM TO PROTECT THE STRUCTURE AGAINST WATER PENETRATION AND CORROSION.
17. THE G.C. AND SUBCONTRACTOR SHALL BE RESPONSIBLE TO VERIFY AND COORDINATE DIMENSIONS, CLEARANCES, ETC. BETWEEN STRUCTURAL, ARCHITECTURAL, MECHANICAL, AND OTHER TRADES DRAWINGS.
18. ALL SHOP CONNECTIONS SHALL BE WELDED AND ALL FIELD CONNECTIONS SHALL BE BOLTED, U.N.O.
19. ALL STEEL SHALL BE CLEANED AS PER SSPC SP2 HAND TOOL CLEANING OR AS PER SSPC SP3 POWER TOOL CLEANING AND TO BE PAINTED WITH A PRIMER WHICH CONFORMS TO SSPC-PAINT 13. FINISH COAT SHALL BE COORDINATED WITH THE ARCHITECTURAL DRAWINGS.
20. SPLICE LOCATIONS SHALL BE SHOWN IN THE SHOP DRAWINGS AND NOT DEVIATE FROM STRUCTURAL PLANS WITHOUT APPROVAL FROM ENGINEER.
21. OVERSIZED OR SLOTTED HOLES SHALL NOT BE USED FOR CONNECTIONS WITHOUT APPROVAL FROM ENGINEER, U.N.O.
22. THE FRAMING OF STEEL MEMBERS AROUND THE ELEVATOR SHALL BE COORDINATED BY THE G.C. AND SUBCONTRACTOR WITH THE ARCHITECTURAL AND MECHANICAL DRAWINGS.
23. WHERE CONCENTRATED POINT LOADS EXIST ON STEEL MEMBERS, STIFFENER PLATES SHALL BE PROVIDED ON BOTH SIDES OF THE WEB WITH A MINIMUM THICKNESS OF THE GREATER THICKNESS OF FLANGES FOR CONNECTING MEMBERS, 1/2" MINIMUM.

MASONRY NOTES:

- 1. ALL MASONRY UNITS SHOWN ON STRUCTURAL DRAWINGS SHALL BE 2 CELL, NOMINAL 16" LONG, WIDTH SHOWN ON DRAWINGS, MINIMUM 1-1/2" FACE THICKNESS FOR C90 UNITS.
2. ALL MASONRY CONSTRUCTION SHALL CONFORM TO THE NEW YORK CITY BUILDING CODE AND THE LATEST EDITION OF THE "NATIONAL CONCRETE MASONRY ASSOCIATION" (NCMA) SPECIFICATION FOR THE DESIGN AND CONSTRUCTION OF LOAD BEARING CONCRETE MASONRY.
3. USE 1600 PSI BLOCK AND 4000 PSI GROUT WITH MORTAR TYPE "M". Fy=60KSI. G.C. SHALL COORDINATE A MASONRY CONSTRUCTION MEETING WITH THE ENGINEER, SUBCONTRACTOR AND TESTING COMPANY REPRESENTATIVE PRIOR TO MASONRY CONSTRUCTION.
4. DURING CONSTRUCTION THE FOLLOWING REPORTS SHALL BE SUBMITTED TO THE ENGINEER WITHIN 2 WEEKS FROM INSPECTION/TESTING: CONCRETE, MASONRY, GROUT, MORTAR, AND REINFORCEMENT INSPECTION. MASONRY COMPRESSION TESTS ARE REQUIRED EVERY 5000 SF OF WALL. GROUT AND MORTAR COMPRESSION TESTS ARE REQUIRED FOR EACH BATCH USED.
5. GROUT CELLS SOLID WHERE REINFORCEMENT IS PLACED AND A PENCIL VIBRATOR SHALL BE USED TO ELIMINATE AIR POCKETS. THE HEIGHT OF WALLS TO BE GROUTED SHALL BE AS FOLLOWS:
5.1. WHERE THE FOLLOWING CONDITIONS ARE MET, PLACE GROUT IN LIFTS NOT EXCEEDING 12'-8":
5.1.1. THE MASONRY HAS CURED FOR AT LEAST 4 HOURS.
5.1.2. THE GROUT SLUMP IS MAINTAINED BETWEEN 10 AND 11 INCHES.
5.1.3. THE TESTING AGENCY CAN VERIFY THAT THE GROUT HAS REACHED THE BOTTOM CELLS WITHOUT VOIDS.
5.1.4. NO INTERMEDIATE REINFORCED BOND BEAMS ARE PLACED BETWEEN THE TOP AND THE BOTTOM OF THE POUR HEIGHT.
5.2. WHEN THE CONDITIONS OF 4.1.1, 4.1.2, AND 4.1.3 ARE MET BUT THERE ARE INTERMEDIATE BOND BEAMS WITHIN THE GROUT POUR, LIMIT THE GROUT LIFT HEIGHT TO THE BOTTOM OF THE LOWEST BOND BEAM THAT IS MORE THAN 5 FEET ABOVE THE BOTTOM OF THE LIFT, BUT DO NOT EXCEED A GROUT LIFT HEIGHT OF 12'-8".
5.3. WHEN THE CONDITIONS OF 4.1.1, 4.1.2, AND 4.1.3 ARE NOT MET, PLACE GROUT IN LIFTS NOT EXCEEDING 5 FEET.
6. FULL TIME SPECIAL INSPECTION IS REQUIRED FOR MASONRY CONSTRUCTION IN ADDITION TO STANDARD CONSTRUCTION INSPECTION.
7. THE VERTICAL REINFORCEMENT SHALL BE INSTALLED AT THE CENTER OF THE BLOCK CORES AND THE CORES SHALL ALIGN THROUGHOUT THE VERTICAL HEIGHT OF THE WALL. MARK REINFORCEMENT LOCATIONS ON BLOCK.
8. WHERE BLOCK IS ADJACENT TO AN OPENING OR JOINT AND AT BLOCK INTERSECTIONS, GROUT (1) CELL SOLID WITH (2) # WALL REINFORCEMENT, SEE WALL SCHEDULE).
9. ALL NONBEARING MASONRY WALLS SHOULD HAVE A MINIMUM VERTICAL STEEL REINFORCEMENT OF #5 @ 48" O.C., U.N.O.
10. THE MINIMUM OVERLAP OF VERTICAL REINFORCEMENT FOR MASONRY WALLS SHALL BE 36x BAR#.
11. HAMMERING DOWN THE VERTICAL REINFORCEMENT IS NOT PERMITTED.
12. MASONRY BLOCKS SHALL BE CUT TO THE REQUIRED LENGTH BY A MOTOR DRIVEN SAW.
13. USE BOND BEAM BLOCKS FOR BOND BEAMS TO AVOID CUTTING OF REGULAR BLOCKS WHICH MAY NOT LEAVE ENOUGH SPACE FOR THE BOND BEAM REINFORCEMENT AND GROUT.
14. WHEN MASONRY WALLS REST ON STEEL BEAMS, SEE "TYPICAL MASONRY DOWELS TO BEAM CONNECTION DETAIL" ON S-201.
15. THE FLASHING MEMBRANE SHALL NOT EXTEND INTO THE FACE OF THE BLOCK AT ALL. A TERMINATION BAR SHALL BE USED TO CONNECT FLASHING TO MASONRY.
16. ALL MASONRY OPENINGS SHOWN ON THE STRUCTURAL PLANS ARE THE ROUGH OPENINGS. MASONRY OPENINGS SHALL NOT EXCEED WHAT IS SHOWN ON THE STRUCTURAL PLANS.
17. METAL EXPOSED TO WEATHER (I.E. BRICK TIES) SHALL BE GALVANIZED.
18. SEAL ALL EXTERIOR SURFACES THAT MAY BE EXPOSED TO FREEZING/THAWING OR WIND DRIVEN RAIN.
19. MORTAR BEDDING SHALL BE FULL MORTAR COVERAGE ON HORIZONTAL AND VERTICAL FACE SHELLS.
20. G.C. SHALL INFORM THE ENGINEER 48 HOURS PRIOR TO STARTING MASONRY AT EACH FLOOR SO THE PROPER CONNECTIONS CAN BE OBSERVED BEFORE CONTINUING VERTICALLY.
21. G.C./SUBCONTRACTOR TO PROVIDE 8" MASONRY WALL(MIN.) FOR BULKHEADS WITH #5 @ 32" O.C.(MIN.)
22. G.C./SUBCONTRACTOR TO PROVIDE ALL NECESSARY RUBBER CONTROL JOINTS, WEEP HOLES, COLUMN TIES, AND WELD ON TIES. SUBMIT SPECIFICATIONS FOR APPROVAL PRIOR TO CONSTRUCTION.
23. SEE ACI STANDARDS FOR WEATHER REQUIREMENTS, HOT AND COLD, WHEN APPLICABLE.
24. ADEQUATE HORIZONTAL BRACING SHALL BE PROVIDED FOR MASONRY WALLS DURING CONSTRUCTION.
25. PARAPET WALLS SHALL BE FULLY GROUTED WITH HORIZONTAL REINFORCEMENT (I.E. DUROWALL) @ 12" O.C. VERTICALLY AND SHALL EXTEND AROUND CORNERS AND LAPPED A MINIMUM OF 6 INCHES.

METAL DECK NOTES:

- 1. SEE THE DRAWINGS AND SPECIFICATIONS FOR METAL DECK SIZE AND TYPE.
2. ALL METAL DECK SHALL BE PLACED CONTINUOUS OVER A MINIMUM OF 2 SPANS. IF THERE IS ONLY 1 SPAN, THE AREA SHALL BE SHORED.
3. ALL METAL DECK SHALL BE CONNECTED TO STEEL SUPPORTS WITH 1/2" PUDDLE WELD AT EACH FLUTE. THE SIDE LAPS SHALL BE CONNECTED WITH 1 1/2" STITCH WELDS @ 24" O.C.
4. G.C. AND SUBCONTRACTOR SHALL NOT BURN THROUGH ANY METAL DECK.
5. POURSTOPS SHALL BE 16 GAGE AND PROVIDED AROUND ALL EDGES AND OPENINGS.
6. ADDITIONAL LOADS ON METAL DECK WITHOUT THE ENGINEER'S APPROVAL.
7. THE SIZES AND LOCATIONS OF ALL OPENINGS IN THE METAL DECK SHALL BE COORDINATED WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
8. SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW AND SHALL INCLUDING OPENING SIZES AND LOCATIONS.

SPECIAL INSPECTION REQUIREMENTS:

- 1. ALL MATERIALS, ASSEMBLIES, METHODS OF CONSTRUCTION AND SERVICE EQUIPMENT SHALL COMPLY WITH NEW YORK CITY BUILDING CODE REQUIREMENTS FOR ACCEPTANCE AND SPECIAL INSPECTION (27-131, 27-132 AND 27-135 AND 27-136).
2. REQUIREMENTS OF INSPECTION AND TESTING SHALL COMPLY WITH TABLE 1704.3, 1704.4, 1704.5.1 AND 1704.5.3 OF CHAPTER 17 OF THE NEW YORK CITY BUILDING CODE.
3. THE OWNER SHALL HIRE AN INDEPENDENT, QUALIFIED CONTROLLED INSPECTOR PRIOR TO THE COMMENCEMENT OF WORK. THE INSPECTOR MUST MEET THE REQUIREMENTS OUTLINED IN ARTICLE 115.
4. THE G.C. AND SUBCONTRACTORS SHALL NOTIFY THE ENGINEER AND INSPECTOR AT LEAST 2 WEEKS PRIOR TO THE COMMENCEMENT OF ANY WORK.
5. THE CONSTRUCTION DOCUMENTS TO BE FILED ARE AS FOLLOWS:
5.1. STRUCTURAL STEEL - WELDING - BC 1704.3.1
5.2. STRUCTURAL STEEL - ERECTION & BOLTING - BC 1704.3.2, BC 1704.3.3
5.3. CONCRETE - CAST IN PLACE - BC 1704.4
5.4. CONCRETE - TEST CYLINDERS (TR2) - BC 1905.6
5.5. CONCRETE - MIX DESIGN (TR3) - BC 1905.3
5.6. MASONRY - BC 1704.5
5.7. SOILS - SITE PREPARATION - BC 1704.7.1
5.8. SOILS - FILL PLACEMENT AND IN PLACE DENSITY - BC1704.7.2, BC 1704.7.3
5.9. SOILS - INVESTIGATIONS (BORINGS/TEST PITS) - TR4 - BC 1704.7.4
5.10. PIER FOUNDATION - BC 1704.9
5.11. SITE SAFETY

LOADING SCHEDULE

Table with 7 columns: LOCATION, RESIDENTIAL, MECH. ROOM, STAIRS, COMMERCIAL AREA, ROOF/OUTDOOR TERRACE, LOADING DOCK. Rows include LIVE LOAD, DECK/SLAB, FLOOR FINISH, CEILING, MECHANICAL, PARTITION, and TOTAL**.

* TRIBUTARY AREA REDUCTION WAS USED AS PER NYC BUILDING CODE SECTION 1607.9.

DESIGN CRITERIA:

SITE CLASS: D
STRUCTURAL OCCUPANCY CATEGORY: II
BASIC WIND SPEED: 100 MPH; WIND EXPOSURE: B
PRESSURE COEFFICIENT: 0.8+0.3, 2 SECOND GUST IMPORTANCE FACTOR: 1.0
SEISMIC DESIGN CATEGORY: C;
SEISMIC ACCELERATION (qa): 0.05 Z FACTOR: 0.15

SEISMIC NOTE:

THE STRUCTURE HAS BEEN DESIGNED FOR LATERAL LOADS IN ACCORDANCE TO THE BUILDING CODE OF NEW YORK CITY: TITLE 27, SUBCHAPTER 9, ARTICLE 5 - WIND LOADS AND EARTHQUAKE LOADS.

THIS DRAWING IS AN INSTRUMENT OF SERVICE AND SHALL REMAIN THE PROPERTY OF AUFGANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC. WHETHER THE PROJECT FOR WHICH IT IS MADE IS EXECUTED OR NOT; THIS DRAWING SHALL NOT BE USED BY THE OWNER OR OTHERS ON OTHER PROJECTS; FOR ADDITIONS TO THIS PROJECT OR FOR COMPLETION OF THIS PROJECT BY OTHERS EXCEPT BY AGREEMENT IN WRITING WITH AUFGANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC. SUBMISSION OR DISTRIBUTION TO MEET OFFICIAL REGULATORY REQUIREMENTS OR FOR OTHER PURPOSES IN CONNECTION WITH THE PROJECT IS NOT TO BE CONSTRUED AS PUBLICATION IN DEROGATION OF THE RIGHTS OF AUFGANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC. REPRODUCTION OR PUBLICATION BY ANY METHOD IN WHOLE OR IN PART IS PROHIBITED. TITLE TO THIS DRAWING BELONGS TO AUFGANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC, WITHOUT PREJUDICE.

Table with 2 columns: DATE, REVISIONS. Rows include 05/12/13 ISSUED FOR CONSTRUCTION, 03-06-13 ISSUED TO DOB FOR REVIEW AND COMMENT, 12-07-12 EXTENDED ALT 2 FILING, 11-14-12 SUPERCEDE FILING W/ DOB.

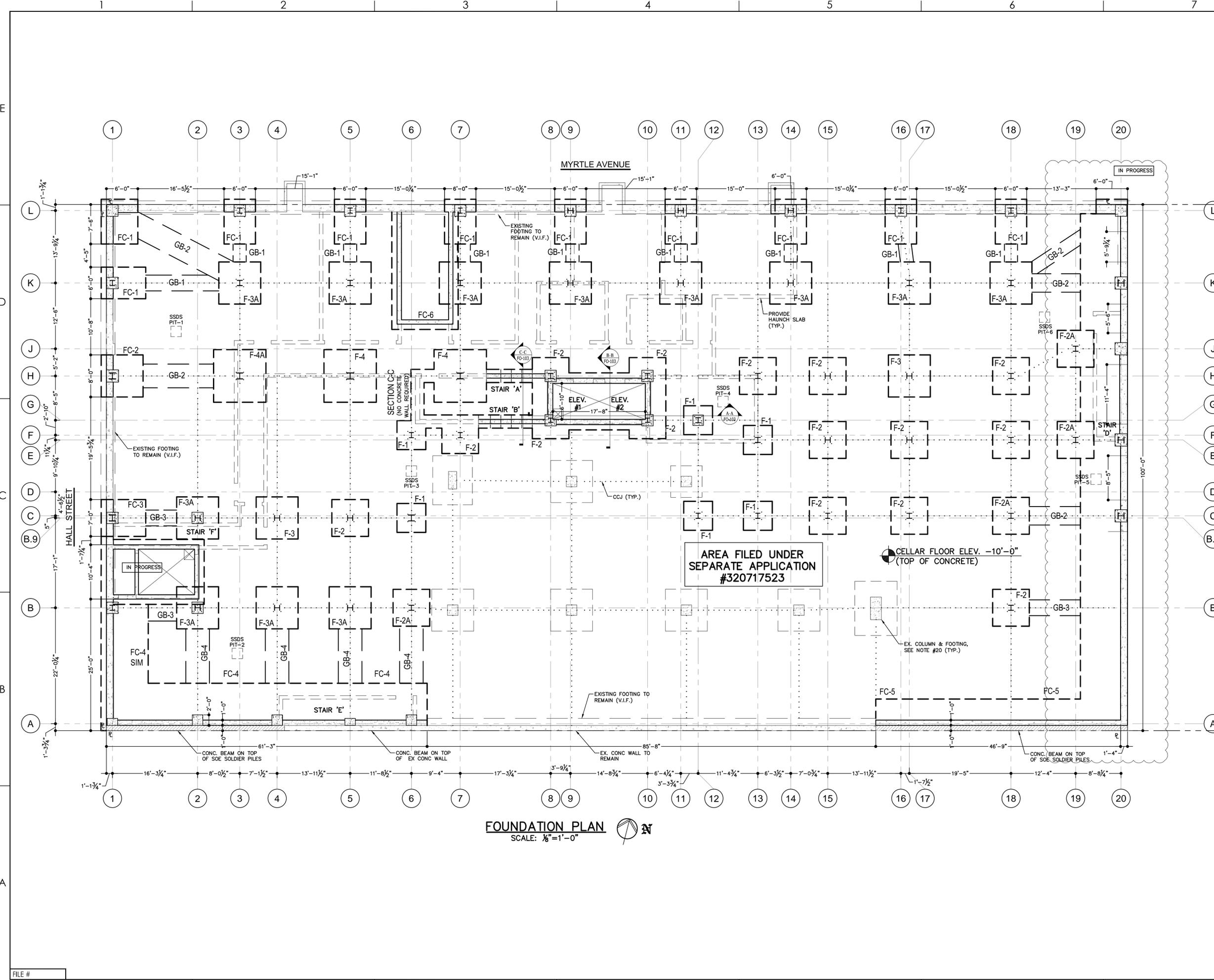
STRUCTURAL ENGINEER: BROOKER ENGINEERING, PLLC
76 LAFAYETTE AVENUE, SUFFERN, NEW YORK 10901
Phone: (845) 357-4411 Fax: (845) 357-1896

asap Aufgang + Subotovsky Architecture and Planning PLLC
49 North Airmont Road, Suffern, NY 10901 tel: 845.368.0004 fax: 800.772.8304 www.asaparchitecture.com

PROPOSED NEW DEVELOPMENT FOR: 490 MYRTLE AVENUE, 490 MYRTLE AVE, BROOKLYN, NEW YORK 11205

GENERAL NOTES AND LOADING SCHEDULE

Table with 2 columns: DATE, PROJECT NO, DRAWN BY, CHECKED BY, DRAWING NO, SCALE, SHEET NO, NYC DOB NUMBER. Includes a signature stamp for Brian Brooker, P.E.



LEGEND

- PROPERTY LINE
- FOOTING
- STEEL COLUMN
- GRADE BEAM
- WALL ABOVE
- CONCRETE PIER
- EX. COLUMN (SEE NOTE #20)
- NEW CONCRETE WALL
- CRACK CONTROL JOINT (CCJ)

- NOTES:**
1. THE CONCRETE SLABS SHALL BE 6" THICK.
 2. ELEVATION 0'-0" = ELEV. ±53.82' N.G.V.D.. COORDINATE HIGH POINT AND LOW POINT WITH ARCHITECTURAL DRAWINGS.
 3. SHEETING MAY BE NECESSARY IN ADDITION TO UNDERPINNING. THE G.C. AND SUBCONTRACTOR SHALL COORDINATE SHEETING IN THE FIELD TO MEET OSHA SAFETY STANDARDS AND REQUIREMENTS.
 4. THE G.C. AND SUBCONTRACTOR SHALL OBTAIN PERMISSION TO ENCRoACH THE NEIGHBORING PROPERTY FOR SHEETING AND SHORING WHERE APPLICABLE.
 5. THE G.C. AND SUBCONTRACTOR SHALL NOTIFY THE ARCHITECT AND ENGINEER OF THE SITE CONDITIONS VARY FROM ANY ASSUMPTIONS MADE FOR THE DESIGN OF THE FOUNDATION PLAN.
 6. THE BOTTOM OF FOOTING ELEVATIONS ARE APPROXIMATE AND SHALL BE DETERMINED BY THE GEOTECHNICAL ENGINEER DURING THE SUBGRADE INVESTIGATION. THE G.C. HAS THE OPTION TO SET THE BOTTOM OF FOOTING ELEVATION SUCH THAT THE TOP OF FOOTING ELEVATION WILL MATCH THE TOP OF SLAB ELEVATION ONLY IF THE GEOTECHNICAL ENGINEER VERIFIES THAT THE SUBGRADE IS ADEQUATE AT THAT ELEVATION.
 7. THE BOTTOM OF FOOTINGS SHALL MATCH THE BOTTOM OF ADJACENT EXISTING FOOTINGS, IF APPLICABLE.
 8. PROVIDE MIRADRAINS, FOOTING DRAINS, WATER STOPS, AND WATER PROOFING AS DIRECTED BY THE GEOTECHNICAL ENGINEER AND COORDINATE WITH THE MECHANICAL DRAWINGS FOR THE DRAINAGE COLLECTION SYSTEM.
 9. THE G.C. IS RESPONSIBLE FOR SHEETING/ SHORING AND UNDERPINNING.
 10. PROVIDE A HAUNCH SLAB ON GRADE (SEE DETAIL ON FO-101) FOR MISCELLANEOUS NONBEARING CMU WALLS SHOWN IN THE DRAWING, WHERE FOOTINGS WERE NOT PROVIDED.
 11. BASED ON THE GEOTECHNICAL ENGINEERING REPORT BY CARLIN-SIMPSON & ASSOCIATES, DATED FEB 08, 2013, THE FOLLOWING CRITERIA WAS ALLOWED TO USE FOR FOUNDATION DESIGN: 3 TSF
 12. EXTEND THE CONTINUOUS FOOTING REINFORCEMENT INTO ADJACENT CONTINUOUS FOOTINGS A MINIMUM OVERLAP OF 36 TIMES THE BAR DIAMETER. DO NOT EXTEND THE ISOLATED FOOTING REINFORCEMENT INTO ADJACENT FOOTINGS.
 13. FOOTINGS WITHIN CLOSE PROXIMITY OF EACH OTHER MAY BE COMBINED TO REDUCE FORMWORK.
 14. FOR THE TOP OF PIER ELEVATIONS, SEE THE COLUMN SCHEDULE ON S-201.
 15. CONTINUE HORIZONTAL WALL REINFORCEMENT THROUGH CONCRETE PIERS WHERE APPLICABLE.
 16. THIS DRAWING SHALL NOT BE USED FOR BID OR CONSTRUCTION.
 17. ALL EXISTING FOOTING SIZE TO BE VERIFIED IN FIELD. ADD'L FOOTING ADJUSTMENT TO BE DETERMINED DURING EXCAVATION.
 18. THE "LIQUID BOOT" VAPOR BARRIER TO BE APPLIED TO FOUNDATION WALLS. MEMBRANE TO BE WRAPPED OVER TOP OF WALL. A CONTINUOUS "LIQUID BOOT" VAPOR BARRIER TO BE INSTALLED UNDER SLAB ON GRADE AND A SUB-SLAB DEPRESSURIZATION SYSTEM, TO BE INSTALLED BENEATH CELLAR SLAB. SEE ENVIRONMENTAL REPORT PROVIDED BY HYDRO TECH ENVIRONMENTAL CORP.
 19. EXISTING COLUMN FOOTING TO BE EXPOSED BY G.C. CONTACT EOR ONCE EXPOSED W/ EXACT FOOTING SIZE AND LOCATION FOR REVIEW.

THIS DRAWING IS AN INSTRUMENT OF SERVICE AND SHALL REMAIN THE PROPERTY OF AUFGANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC, WHETHER THE PROJECT FOR WHICH IT IS MADE IS EXECUTED OR NOT. THIS DRAWING SHALL NOT BE USED BY THE OWNER OR OTHERS ON OTHER PROJECTS. FOR ADDITIONS TO THIS PROJECT OR FOR COMPLETION OF THIS PROJECT BY OTHERS EXCEPT BY AGREEMENT IN WRITING WITH AUFGANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC. SUBMISSION OR DISTRIBUTION TO MEET OFFICIAL REGULATORY REQUIREMENTS OR FOR OTHER PURPOSES IN CONNECTION WITH THE PROJECT IS NOT TO BE CONSTRUED AS PUBLICATION IN DEROGATION OF THE RIGHTS OF AUFGANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC. REPRODUCTION OR PUBLICATION BY ANY METHOD IN WHOLE OR IN PART IS PROHIBITED. TITLE TO THIS DRAWING BELONGS TO AUFGANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC, WITHOUT PREJUDICE.

DATE	REVISIONS
05/06/13	ISSUED FOR OWNER'S REVIEW
03-06-13	ISSUED TO DOB FOR REVIEW AND COMMENT
12-07-12	EXTENDED ALT 2 FILING
11-14-12	SUPERCEDE FILING W/ DOB

STRUCTURAL ENGINEER:

BROOKER ENGINEERING, PLLC
 76 LAFAYETTE AVENUE, SUFFERN, NEW YORK 10901
 Phone: (845) 357-4411 Fax: (845) 357-1896

Aufgang + Subotovsky
 Architecture and Planning
 PLLC
 49 North Airmont Road, Suffern, NY 10901 tel: 845.368.0004 fax: 800.772.8304
 www.asaparchitecture.com

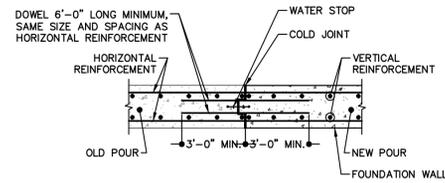
PROPOSED NEW DEVELOPMENT FOR:
490 MYRTLE AVENUE
 490 MYRTLE AVE, BROOKLYN, NEW YORK 11205

FOUNDATION PLAN	
DATE:	11-14-12
PROJECT NO:	12172
DRAWN BY:	SP
CHECKED BY:	DJ
DRAWING NO:	FO-001.00
SCALE:	AS NOTED SHEET NO: 1 OF 5
NYC DOB NUMBER:	

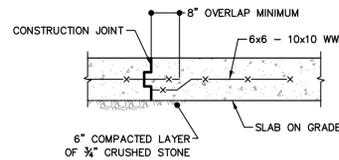
FOUNDATION PLAN
 SCALE: 1/8"=1'-0"



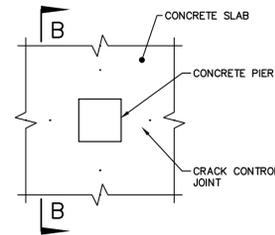
BRIAN BROOKER P.E.
 N.Y.S. Lic. No. 60229



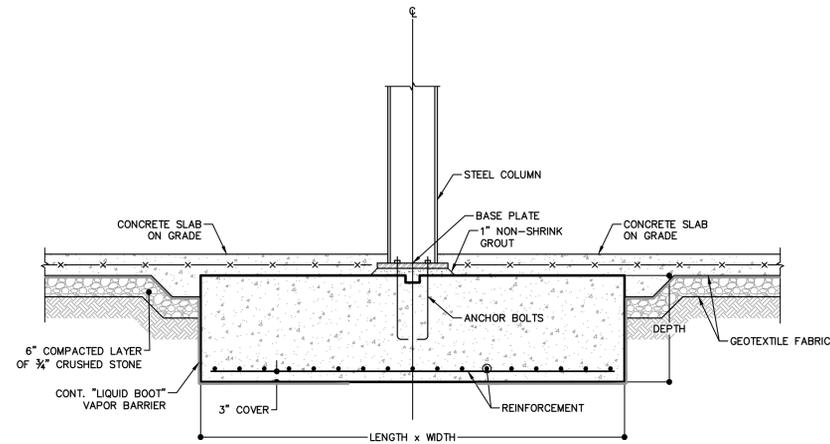
WALL CONSTRUCTION JOINT DETAIL
N.T.S.



SLAB ON GRADE CONSTRUCTION JOINT DETAIL
N.T.S.



CRACK CONTROL JOINT DETAIL
N.T.S.

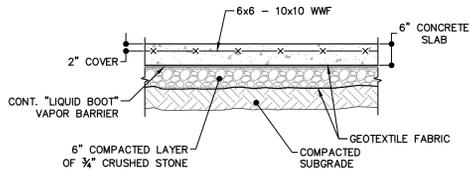


SPREAD FOOTING DETAIL @ INTERIOR COLUMNS
N.T.S.

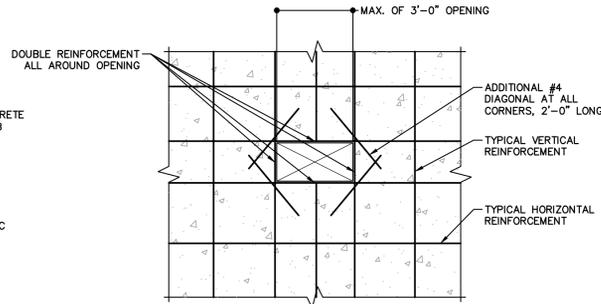
NOTE: SEE COLUMN SCHEDULE ON S-201 FOR COLUMN, BASE PLATE, PIER, AND ANCHOR BOLTS.

SPREAD FOOTING SCHEDULE

	LENGTH x WIDTH	DEPTH	REINFORCEMENT
F-1	5'-6" x 5'-6"	1'-2"	(7) #5 BAR EACH WAY
F-2	7'-0" x 7'-0"	1'-6"	(8) #6 BAR EACH WAY
F-2A	7'-0" x 7'-0"	2'-6"	(8) #6 BAR EACH WAY
F-3	8'-0" x 8'-0"	1'-8"	(11) #6 BAR EACH WAY
F-3A	8'-0" x 8'-0"	2'-6"	(11) #6 BAR EACH WAY
F-4	10'-0" x 10'-0"	2'-2"	(15) #6 BAR EACH WAY
F-4A	10'-0" x 10'-0"	2'-6"	(15) #6 BAR EACH WAY

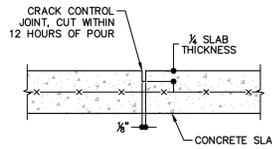


6" CONCRETE SLAB ON GRADE
N.T.S.

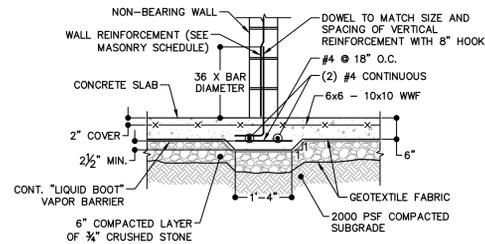


TYPICAL OPENING IN CONCRETE WALL DETAIL
N.T.S.

NOTE: SAW CUT CRACK CONTROL JOINT AT EACH COLUMN LINE TO EACH OTHER COLUMN LINE OR 20' O.C. MINIMUM.

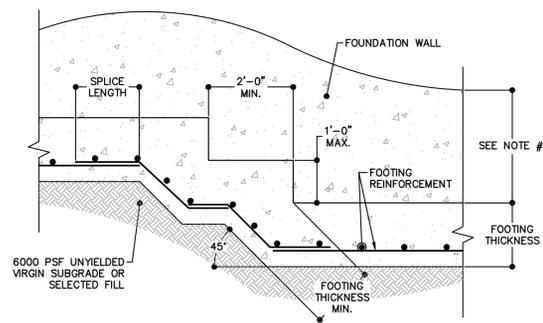


SECTION B-B
N.T.S.



HAUNCH SLAB UNDER NON-BEARING WALL
N.T.S.

NOTE: PROVIDE HAUNCH SLAB AT LOCATION WHERE FOOTING IS NOT SHOWN IN THE FOUNDATION PLAN, WHERE A NON-BEARING WALL IS PROPOSED.

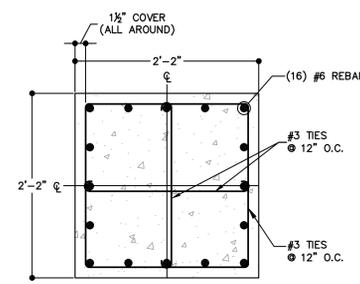


TYPICAL STEP FOOTING DETAIL
N.T.S.

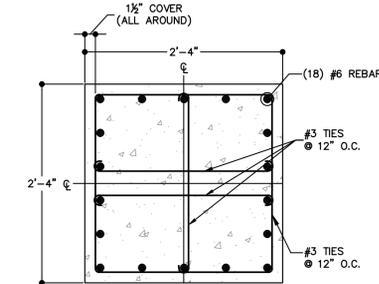
NOTES:
1. THE LOCATION OF THE STEPS ARE TO BE CONFIRMED IN THE FIELD BASED ON THE MINIMUM 4'-0" OF FROST PROTECTION AND UNDISTURBED SUBGRADE BENEATH.
2. SEE THE GEOTECHNICAL REPORT FOR REQUIREMENTS OF SELECTED FILL.

SPLICE LENGTH IN TENSION

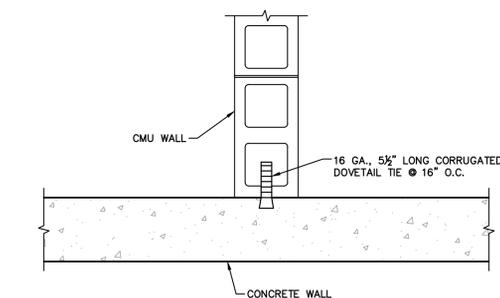
BAR SIZE	MIN. SPLICE
#3	1'-3"
#4	1'-7"
#5	2'-0"
#6	2'-5"
#7	3'-6"
#8	4'-0"
#9	4'-6"
#10	5'-0"



P-1 CONCRETE PIER
N.T.S.

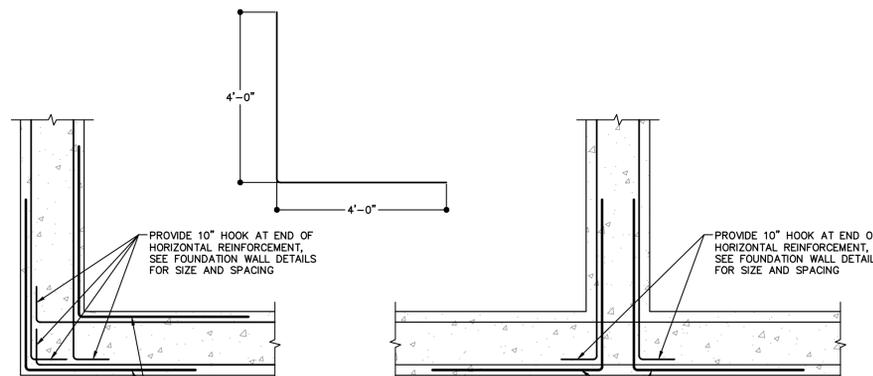


P-2 CONCRETE PIER
N.T.S.



TYPICAL CONCRETE TO CMU CONNECTION DETAIL
N.T.S.

NOTES:
1. THE CMU AND CONCRETE WALL REINFORCEMENT IS NOT SHOWN FOR CLARITY.
2. THE CORRUGATED DOVETAIL TIE SHALL BE PROVIDED WHEREVER A CMU WALL IS ADJACENT (PARALLEL OR PERPENDICULAR) TO A CONCRETE WALL.



TYPICAL CORNER REINFORCING DETAIL
N.T.S.

THIS DRAWING IS AN INSTRUMENT OF SERVICE AND SHALL REMAIN THE PROPERTY OF AUFANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC. WHETHER THE PROJECT FOR WHICH IT IS MADE IS EXECUTED OR NOT. THIS DRAWING SHALL NOT BE USED BY THE OWNER OR OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT OR FOR COMPLETION OF THIS PROJECT BY OTHERS EXCEPT BY AGREEMENT IN WRITING WITH AUFANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC. SUBMISSION OR DISTRIBUTION TO MEET OFFICIAL REGULATORY REQUIREMENTS OR FOR OTHER PURPOSES IN CONNECTION WITH THE PROJECT IS NOT TO BE CONSTRUED AS PUBLICATION IN DEROGATION OF THE RIGHTS OF AUFANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC. REPRODUCTION OR PUBLICATION BY ANY METHOD IN WHOLE OR IN PART IS PROHIBITED. TITLE TO THIS DRAWING BELONGS TO AUFANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC, WITHOUT PREJUDICE.

DATE	REVISIONS
05/06/13	ISSUED FOR OWNER'S REVIEW
04-03-13	ISSUED TO OER FOR REVIEW
03-06-13	ISSUED TO DOB FOR REVIEW AND COMMENT
12-07-12	EXTENDED ALT 2 FILING
11-14-12	SUPERCEDE FILING W/ DOB

STRUCTURAL ENGINEER:
BROOKER ENGINEERING, PLLC
76 LAFAYETTE AVENUE, SUFFERN, NEW YORK 10901
Phone: (845) 357-4411 Fax: (845) 357-1896

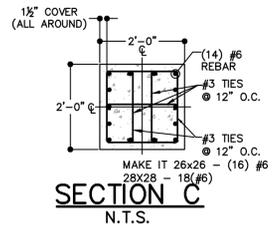
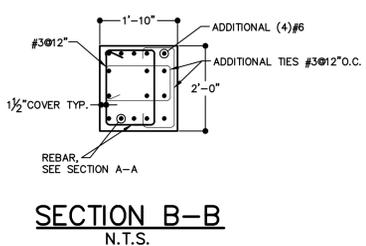
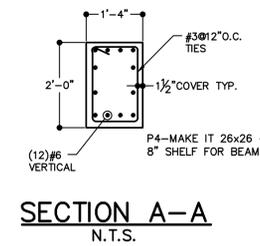
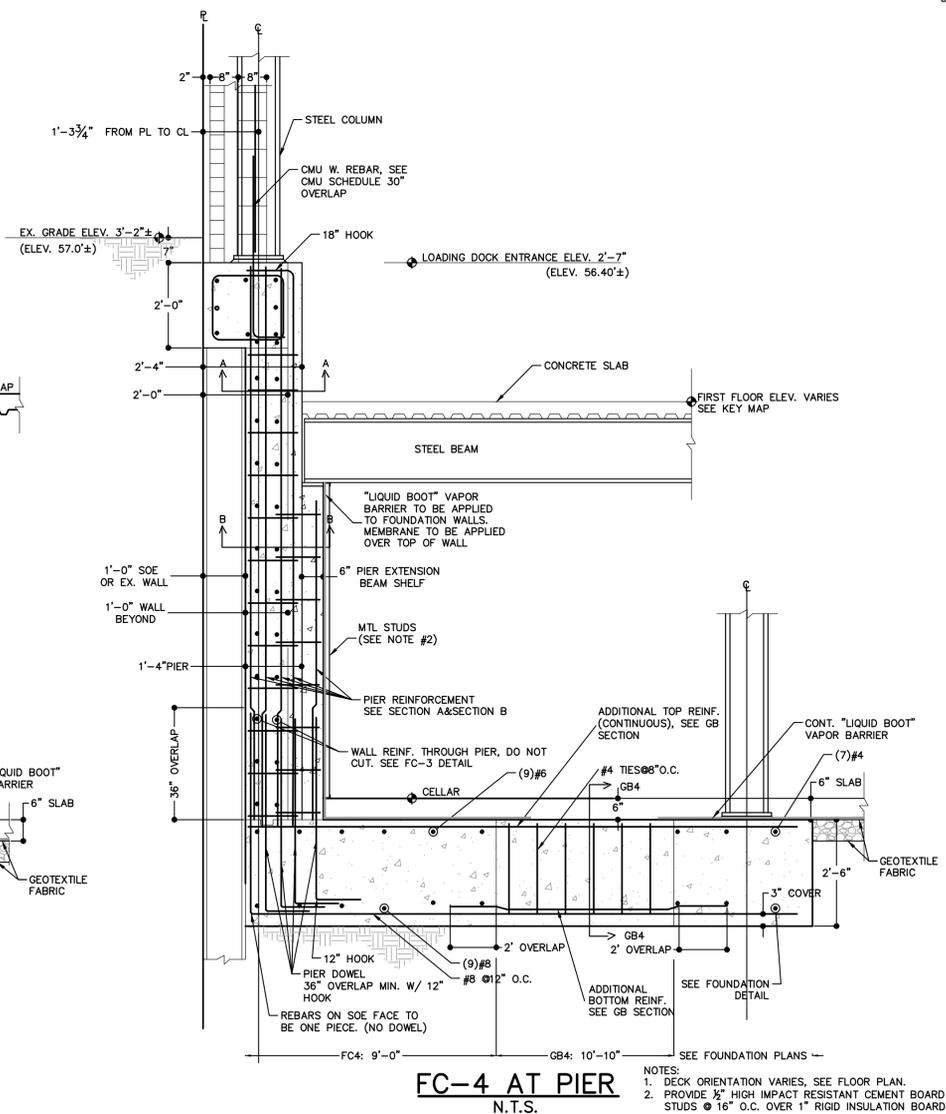
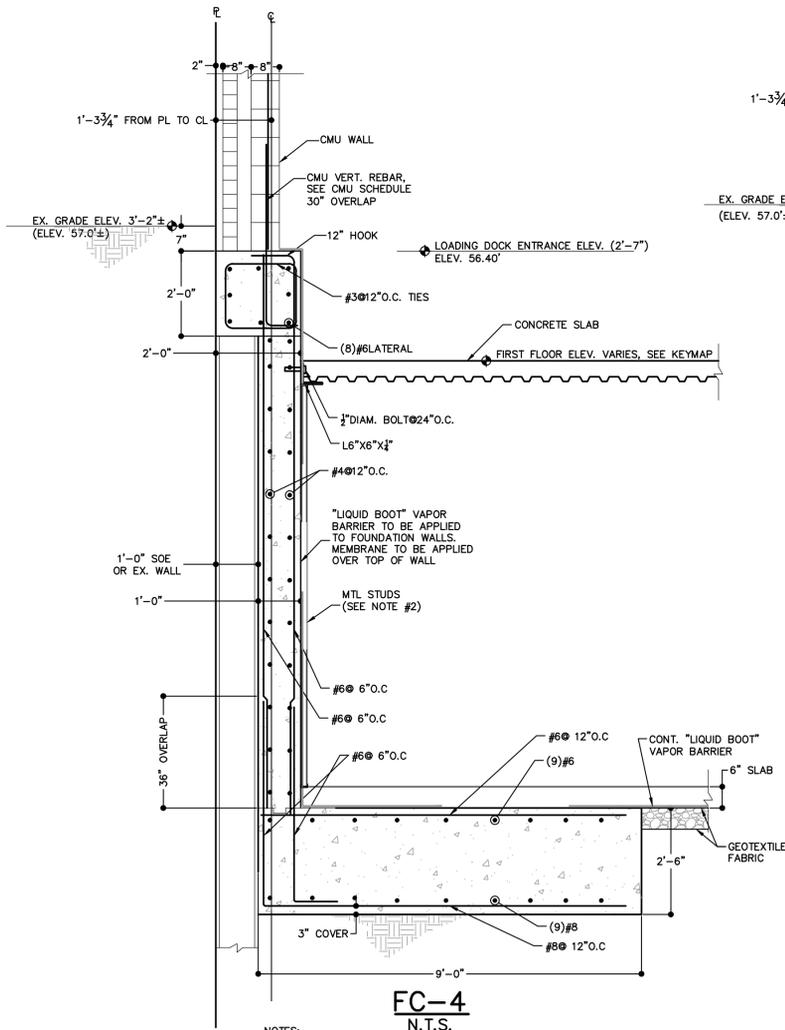
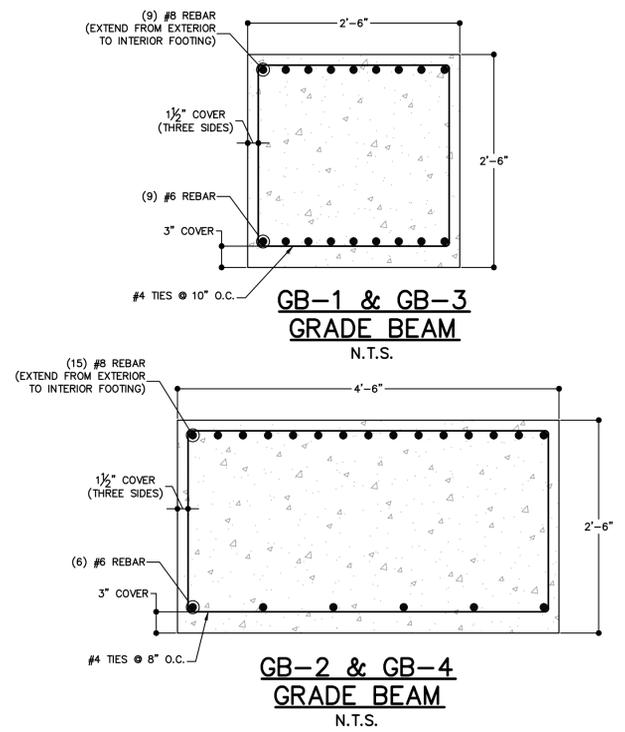
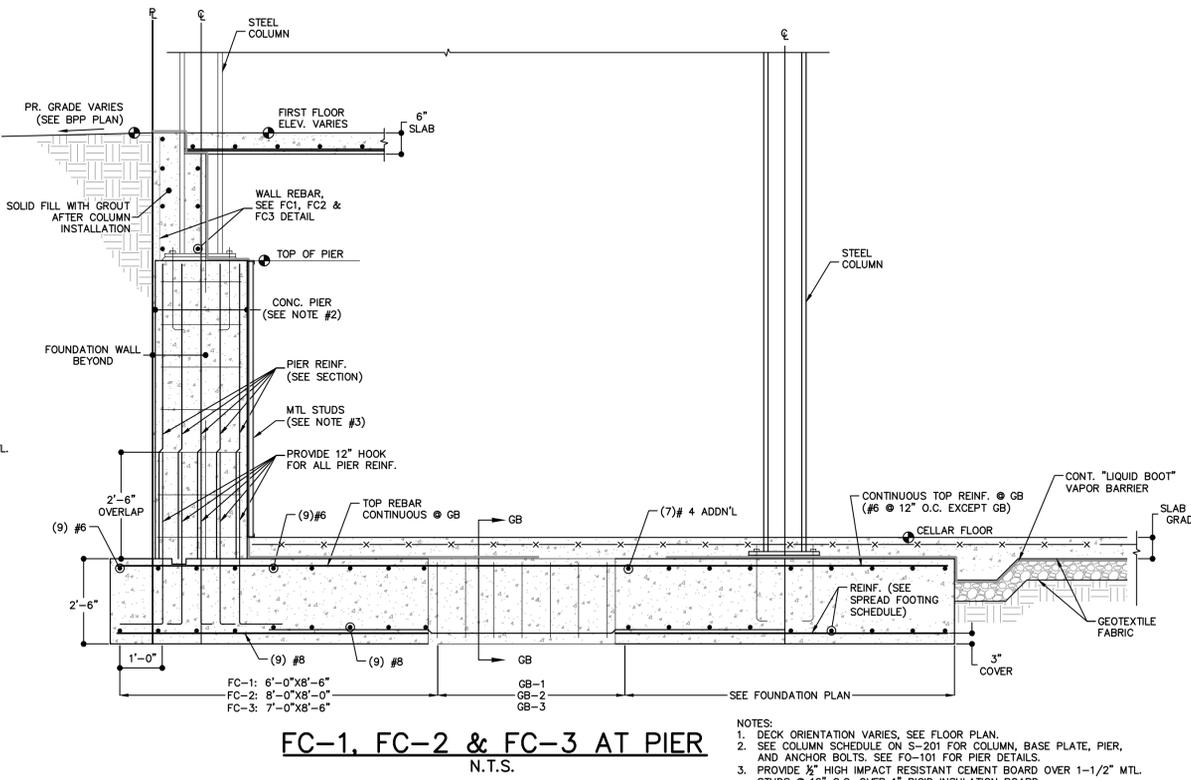
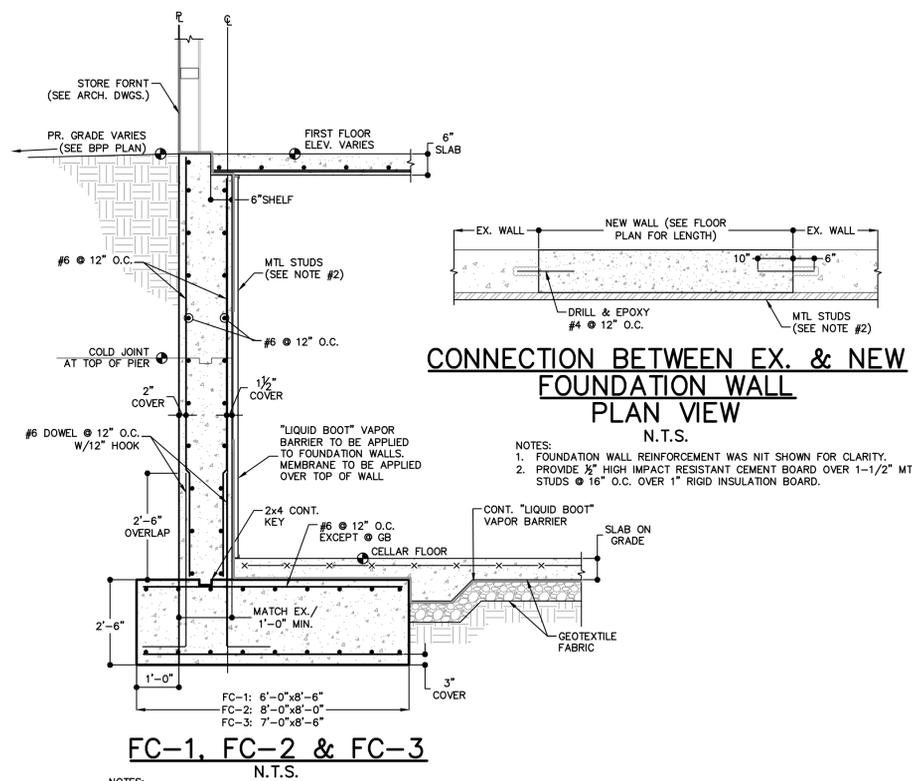
asap Aufgang + Subotovsky
Architecture and Planning
PLLC
49 North Airmont Road, Suffern, NY 10901 tel: 845.368.0004 fax: 800.772.8304
www.asaparchitecture.com

PROPOSED NEW DEVELOPMENT FOR:
490 MYRTLE AVENUE
490 MYRTLE AVE, BROOKLYN, NEW YORK 11205

FOUNDATION DETAILS

DATE:	11-14-12
PROJECT NO:	12172
DRAWN BY:	SP
CHECKED BY:	DJ
DRAWING NO:	FO-101.00

BRIAN BROOKER P.E.
N.Y.S. Lic. No. 60229
SCALE: AS NOTED SHEET NO: 2 of 5
NYC DOB NUMBER:



THIS DRAWING IS AN INSTRUMENT OF SERVICE AND SHALL REMAIN THE PROPERTY OF AUFANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC, WHETHER THE PROJECT FOR WHICH IT IS MADE IS EXECUTED OR NOT. THIS DRAWING SHALL NOT BE USED BY THE OWNER OR OTHERS ON OTHER PROJECTS. FOR ADDITIONS TO THIS PROJECT OR FOR COMPLETION OF THIS PROJECT BY OTHERS EXCEPT BY AGREEMENT IN WRITING WITH AUFANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC. SUBMISSION OR DISTRIBUTION TO MEET OFFICIAL REGULATORY REQUIREMENTS OR FOR OTHER PURPOSES IN CONNECTION WITH THE PROJECT IS NOT TO BE CONSTRUED AS PUBLICATION IN DEROGATION OF THE RIGHTS OF AUFANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC. REPRODUCTION OR PUBLICATION BY ANY METHOD IN WHOLE OR IN PART IS PROHIBITED. TITLE TO THIS DRAWING BELONGS TO AUFANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC, WITHOUT PREJUDICE.

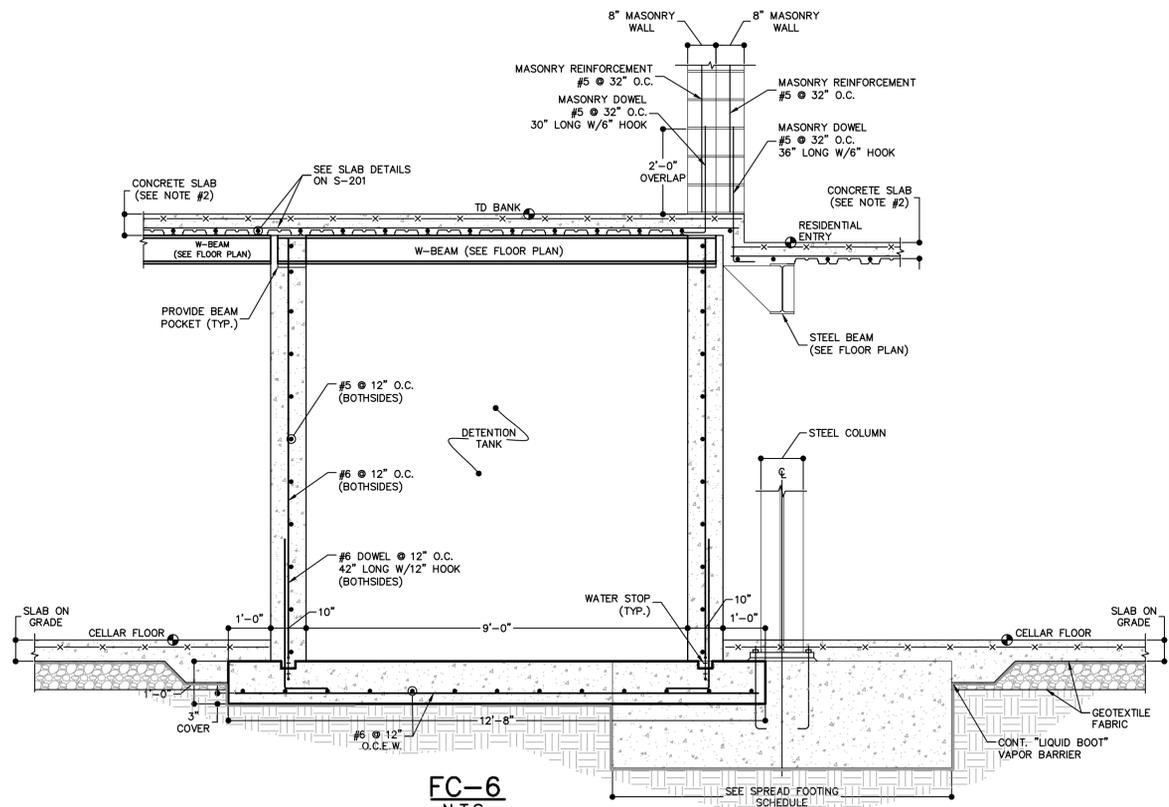
DATE	REVISIONS
05/06/13	ISSUED FOR OWNER'S REVIEW
04-03-13	ISSUED TO OER FOR REVIEW
03-06-13	ISSUED TO DOB FOR REVIEW AND COMMENT
12-07-12	EXTENDED ALT 2 FILING
11-14-12	SUPERCEDE FILING W/ DOB

STRUCTURAL ENGINEER:
BROOKER ENGINEERING, PLLC
76 LAFAYETTE AVENUE, SUFFERN, NEW YORK 10901
Phone: (845) 357-4411 Fax: (845) 357-1896

asap Aufgang + Subotovsky
Architecture and Planning
PLLC
49 North Airmont Road, Suffern, NY 10901 tel: 845.368.0004 fax: 800.772.8304
www.asaparchitecture.com

PROPOSED NEW DEVELOPMENT FOR:
490 MYRTLE AVENUE
490 MYRTLE AVE, BROOKLYN, NEW YORK 11205

FOUNDATION DETAILS	
DATE:	11-14-12
PROJECT NO:	12172
DRAWN BY:	SP
CHECKED BY:	DJ
DRAWING NO:	FO-102.00
BRIAN BROOKER P.E. N.Y.S. Lic. No. 60229	SCALE: AS NOTED SHEET NO: 3 of 5 NYC DOB NUMBER:



FC-6
N.T.S.

NOTES:
1. SEE FLOOR PLAN FOR STEEL BEAM LOCATION AND SIZE.
2. SEE DRAWING S-201 FOR DECK AND SLAB DETAILS.

LIQUID BOOT® Brownfield Membrane/Liner Specifications
Section 2 | Version 4.3

These specifications may have changed. Please contact visit <http://remediation.cetco.com> for the most recent version.

PART 1 - GENERAL

- 1.01 DESCRIPTION**-General and Supplementary Conditions and Division 1-General Requirements applies to this section. Provide gas vapor barrier as indicated, specified and required.
- A.** Work in this section - principal items include:
1. Gas vapor barrier providing protection from the following gases: Methane, other Hydrocarbon vapors in concentrations up to 20,000ppm, Hydrogen Sulfide, Radon
2. Gas vapor barrier under single family homes.
- B.** Related work **NOT** in this section: excavation and backfilling, purge coat on masonry to receive gas vapor barrier membrane, mortar beds or concrete toppings over gas vapor barrier membranes, latex waterproofing, damp-proofing, flashing and sheet metal, joint sealers, soil sterilant, gas collection systems, gas monitoring, and drainage.
- 1.02 QUALITY ASSURANCE**-Gas vapor barrier contractor/applicator shall be trained and approved by gas vapor barrier manufacturer, CETCO. A pre-installation conference shall be held prior to application of gas vapor barrier to assure proper substrate and installation conditions, to include contractor, applicator, architect/engineer and special inspector.
- 1.03 SUBMITTALS**
- A.** Project Data - Submit manufacturer's qualifications, product data and installation instructions for specific application.
B. Samples - Submit representative samples of the following for approval:
1. Gas vapor barrier membrane material
2. Protection board and/or protection mat
3. Prefabricated drainage mat
4. Geotextiles
- 1.04 DELIVERY, STORAGE AND HANDLING**
Deliver materials to site in original unbroken packages bearing manufacturers label showing brand, weight, volume, and batch number. Store materials at site in strict compliance with manufacturer's instructions. Do not allow materials to freeze in containers.
- 1.05 JOB CONDITIONS**
- A.** Protect all adjacent areas not to receive gas vapor barrier. Where necessary, apply masking to prevent staining of surfaces to remain exposed wherever membrane abuts to other finish surfaces.
B. Perform work only when existing and forecasted weather conditions are within manufacturer's recommendations for material and product used.
C. Minimum clearance of required for application of product: 90° spray wand- 2 feet | Conventional spray wand- 4 feet.
D. Ambient temperature shall be within manufacturer's specifications. If winter conditions apply, we recommend the use space of heaters and necessary cover (i.e. visque) to bring the ambient temperature to at least +45°F until the protection course and structural slab rebar or a mudslab protection course has been placed.
E. All plumbing, electrical, mechanical and structural items to be under or passing through the gas vapor barrier shall be positively secured in their proper positions and appropriately protected prior to membrane application.
F. Gas vapor barrier shall be installed before placement of reinforcing steel. When not possible, all exposed reinforcing steel shall be masked by General Contractor prior to membrane application.
G. Expansion joints must be filled with a conventional waterproof expansion joint material.
H. Surface preparation shall be per manufacturer's specification.
- 1.06 PRODUCT WARRANTY**
Upon delivery and acceptance by the Owner of material specified by this Section, the materials manufacturer will provide a written one year standard material indicating the material conforms to its product specifications and is free of material defects. Factors affecting the results obtained from using this product including weather, equipment utilized, construction, workmanship and other variables are all beyond the manufacturer's control.

LIQUID BOOT® GVB, version 4.3

1

© 2012 CETCO

PART 2 - PRODUCTS

2.01 QUALIFICATIONS

The gas vapor barrier manufacturer must have produced at least 22 million square feet (2 million square meters) of gas vapor barrier, with at least 22 million square feet (2,000,000 square meters) installed.

2.02 MATERIALS

- A.** Fluid applied gas vapor barrier system - LIQUID BOOT® a single-course, high-build, polymer modified asphaltic emulsion. Water borne and spray applied at ambient temperatures. A minimum thickness of 80 dry mils, unless specified otherwise as some cities and engineers may require a thicker membrane. Non-toxic and odorless. LIQUID BOOT® Trowel Grade has similar properties with greater viscosity and is trowel applied. Manufactured by CETCO, (800) 527-9948.
- B.** LIQUID BOOT® gas vapor barrier physical properties:

GAS VAPOR MEMBRANE	TEST METHOD	VALUE
Acid Exposure (10% H ₂ SO ₄ for 90 days)	ASTM D543	Less than 1% weight change
Benzene Diffusion	Tested at 43,000 ppm	2.90 x 10 ⁻¹¹ m ² /day
Chemical Resistance: VOCs, BTEXs (tested at 20,000 ppm)	ASTM D543	Less than 1% weight change
Chromate Exposure (10% Chromium+6 salt for 31 days)	ASTM E96	Less than 1% weight change
Diesel (1000 mg/l), Ethylbenzene (1000 mg/l), Naphthalene (5000 mg/l) and Acetone (500 mg/l) Exposure for 7 days	ASTM D543	Less than 1% weight change, Less than 1% tensile strength change
Radon Permeability	Tested by US Dept of Energy	Zero permeability to Radon (222Rn)
Bonded Seam Strength Tests	ASTM D6362	Passed*
Micro Organism Resistance (Soil Burial)- average weight change,	ASTM D4988-98	Passed*
Methane Permeability	ASTM 1434-02	Passed*
Oil Resistance Test- average weight change, average tensile strength change, average tensile stress change, average elongation change, bonded seams, methane permeability	ASTM D543-97	Passed*
Heat Aging- average tensile strength change, average tensile stress change, average elongation change, bonded seams	ASTM D4968-98	Passed*
Dead Load Seam Strength	City of Los Angeles	Passed*
Environmental Stress-Cracking	ASTM D1683-78	Passed*
PCE Diffusion Coefficient	Tested at 6,000 mg/m ³	2.74 x 10 ⁻¹⁴ ml ² /sec
TCE Diffusion Coefficient	Tested at 20,000 mg/m ³	8.04 x 10 ⁻¹⁴ ml ² /sec
Soil Burial	ASTM E154-88	Passed
Water Vapor Transmission	ASTM E96	0.069 perms
POTABLE WATER	TEST METHOD	VALUE
Toxicity Test	22 CCR 66696	Passed, CCR Bioassay—Flathead Minnow
Potable Water Containment	ANSI/NSF 61	NSF Certified for tanks >300,000 gal**
Hydrostatic Head Resistance	ASTM D751	Tested to 138 feet or 60 p.s.i.
GENERAL INFORMATION	TEST METHOD	VALUE
Freeze-Thaw Resistance (100 Cycles)	ASTM A742	Meets criteria. No spalling or disbondment
Accelerated Weathering & Ultraviolet Exposure	ASTM D622	No adverse effect after 500 hours
Elongation	ASTM D412	1,323% - Ø reinforcement, 90% recovery
Tensile Strength	ASTM D412	58 p.s.i. without reinforcement
Tensile Bond Strength to Concrete	ASTM D413	2,707 lbs/ft ² uplift force

*per City of Los Angeles approval for 100-mil LIQUID BOOT® gas vapor barrier.
**per NSF approval for 80-mil Liquid Boot® potable water containment membrane

C. LIQUID BOOT® Agency Approvals:

- City of Los Angeles Research Report # 24860-Approved for "LIQUID BOOT® Membrane for Below-Grade Waterproofing and Gas Barrier"
- United States Navy-Approved for "LIQUID BOOT® for Use World Wide to Waterproof Earth-Covered Steel Ammunition Storage"
- NSF International-NSF 61 approved for "Potable Water Tank Liner"
- Canadian Construction Materials Board-Approved for "Waterproofing and Damp Proofing"
- County of Los Angeles Department of public works-Approved for "LIQUID BOOT® Application as a Methane Gas Barrier"

LIQUID BOOT® GVB, version 4.3

2

© 2012 CETCO

- D. LIQUID BOOT® 500**
Contact CETCO before specifying or bidding LIQUID BOOT® 500 to insure LIQUID BOOT® 500 is appropriate for the project. LIQUID BOOT® 500 may be used in lieu of LIQUID BOOT® (described in section 2.01 B. above) where the membrane is exposed to methane and may be suited for low-level VOC applications. The Agency Approvals in section 2.01 C above do not apply to LIQUID BOOT® 500. The physical properties for LIQUID BOOT® 500 are as follows:

Note: LIQUID BOOT® 500 may tend to sag on vertical surfaces at higher ambient temperatures. When this condition occurs, use LIQUID BOOT® at these locations.

GAS VAPOR MEMBRANE	TEST METHOD	VALUE
Elongation	ASTM D412	542%
Bond Seam Strength Tests	ASTM D6362	Passed
Methane Permeability	ASTM D1434	None detected
Water Vapor Permeability	ASTM E96	0.22 perms

- LIQUID BOOT® 500 Agency Approval - City of Los Angeles Research Report-RR 25549-Approved for "LIQUID BOOT® 500 Spray-Applied Membrane for Below-Grade Waterproofing and Gas Barrier"

- E. Protection**
On vertical surfaces, use UltraShield™ P-100 or other protections as approved by the manufacturer, project architect or engineer. On horizontal surfaces, use UltraShield™ G-1000 or other protections as approved by the manufacturer, project architect or engineer.

Due diverse jobsite conditions, all protection materials must be approved by the membrane manufacturer, including the use of the LIQUID BOOT® UltraShield products.

- F. Prefabricated Drain Mat**
1. On vertical surfaces, use UltraDrain™ 6200
2. On horizontal surfaces, use UltraDrain™ 9000

- G. Adhesive system for UltraShield™ and UltraDrain™.** Use UltraGrip™.

- H. Gas vapor vent piping- GeoVent™ system**

- I. Base Geotextile**
BaseFabric™ T-40 non-woven geotextile, unless otherwise specified and approved by membrane manufacturer. The heat-rolled side shall be used as the application surface. Some projects may require a heavier geotextile (BaseFabric™ T-60).

- J. Cold Joints, Cracks, Form Tie Holes:** Covered with Hardcast CRT 1602 Tape 3" wide.

PART 3 - EXECUTION

- 3.01 EXAMINATION**
All surfaces to receive gas vapor barrier shall be inspected and approved by the applicator at least one day prior to commencing work.

- 3.02 SURFACE PREPARATION:** Provide 24 inch minimum clearance out from surfaces to receive the gas vapor barrier. The application surface shall be prepared and provided to the applicator in accordance with manufacturer's specifications listed below:

- A. Concrete/Shotcrete/Masonry**
Concrete surfaces shall be light broom finish or smoother, free of any dirt, debris, loose material, release agents or curing compounds. Fill all voids more than 1/4 inch deep and 1/4 inch wide. Masonry joints, cold joints, and form joints shall be struck smooth. All penetrations shall be prepared in accordance with manufacturer's specifications. Provide a 3/4 inch minimum cant of LIQUID BOOT® or other suitable material as approved by manufacturer, at all horizontal to vertical transitions and other inside corners of 120° or less. Allow to cure overnight before the application of LIQUID BOOT®. All cracks or cold joints greater than 1/16 inch must be completely grouted with non-shrink grout as approved by engineer. Install Hardcast reinforcing tape over all cold joints, cracks and form tie holes (after holes and cracks are grouted).

- B. Dirt & Gravel**
The sub-grade shall be moisture conditioned and compacted to a minimum relative compaction of 90 percent or as specified by civil/geotechnical engineer. The finished surface shall be smooth, uniform, and free of debris and standing water. Remove all stones or dirt clods greater than 1/4 inch. (NOTE: Aggregate sub-bases shall be rolled flat, free from any protruding sharp edges). Penetrations shall be prepared in accordance with manufacturer's specifications. All form stakes that penetrate the membrane shall be of robar which shall be bent over and left in the slab. Trenches shall be cut over size to accommodate gas vapor barrier membrane and protection course with perpendicular to sloped sides and maximum obtainable compaction. Adjoining grade shall be finish graded and compacted. Excavated walls shall be vertical or sloped back, free of roots and protruding rocks. Specific sub-grade preparation shall be designed by a qualified civil or geotechnical engineer. If organic materials with potential for growth (i.e. seeds or grasses) exist within the sub-base, spray apply soil sterilant at the sterilant manufacturer's recommended rate.

LIQUID BOOT® GVB, version 4.3

3

© 2012 CETCO

- 3.03 INSTALLATION**

3.03.10 INSTALLATION ON CONCRETE/SHOTCRETE/MASONRY (Follow the procedures below carefully)

- A.** Refer to section 3.03.30, "Sealing Around Penetrations", for procedures to seal around penetrations.
- B.** Provide a 3/4" minimum cant of LIQUID BOOT®, or other suitable material as approved by manufacturer, at all horizontal to vertical transitions and other inside corners of 120° or less. Allow to cure overnight before the application of LIQUID BOOT®.
- C.** Delineate a test area on site with a minimum dimension of 10 feet by 10 feet (3m by 3m). Apply LIQUID BOOT® to a thickness of 60 mils and let it cure for 24 hours. Observe for blisters. If minor or no blistering occurs, proceed to the next step. (See note regarding blisters). If significant blistering does occur, apply a thin (10 mil) tack coat of LIQUID BOOT® "A" side without catalyst to the entire concrete surface and allow curing before proceeding. (See also information regarding blister repair).
- D.** Spray-apply LIQUID BOOT® to a 60 mil minimum dry thickness. Increase thickness to 100 dry mils if shotcrete is to be applied directly to membrane. If a second coat is required, remove any standing water from the membrane before proceeding with the second application.
- E.** Do not penetrate membrane. Keep membrane free of dirt and debris and traffic until a protective cover is in place. It is the responsibility of the General Contractor to insure that the membrane and the protection system are not penetrated.
- F.** After membrane has cured and checked for proper thickness and flaws, install protection material pursuant to manufacturer's instructions. **NOTE: All testing or inspection to be performed prior to placing protection course.**

NON-HORIZONTAL SURFACES: Spray on non-horizontal surfaces should begin at the bottom and work towards the top. This method allows the product to adhere to the surface before tilting catalyst runoff.

NOTE: Due to the nature of concrete as a substrate, it is normal for some blistering to occur. This is caused by either concrete's tendency to off-gas or water that is temporarily trapped between the concrete and the membrane. With time and the applied pressure of backfill or over-slab, blisters will absorb into the concrete without detriment to the membrane. A small number of blister heads should be sampled and checked for proper membrane thickness. If the samples have the minimum required membrane thickness, then the remaining blisters should not be punctured or cut. If the samples have less than the minimum required membrane thickness, then the area can either be re-sprayed to obtain the proper thickness, or the blisters can be cut out and the area re-sprayed or patched with LIQUID BOOT® Trowel Grade.

3.03.20 INSTALLATION ON DIRT SURFACES AND MUDSLABS

- A.** Roll out BaseFabric™ geotextile on sub-grade with the heat-rolled side facing up. Overlap seams a minimum of 6 inches. Lay geotextile tight at all inside corners. Apply a thin 10 mil tack coat of LIQUID BOOT® "A" side without catalyst within the seam overlap. Line trenches with geotextile extending at least six inches (6") onto adjoining sub-grade if slab and footings are to be sprayed separately.
- B.** Minimize the use of nails to secure the geotextile to the dirt subgrade. Remove all nails before spraying membrane, if possible. Nails that cannot be removed from the dirt subgrade are to be patched with geotextile or Hardcast reinforcing tape overlapping the nail head by a minimum of two inches (2"). Apply a thin tack coat of LIQUID BOOT® under the geotextile patch, when patching with geotextile.
- C.** Refer to section 3.03.30, "Sealing Around Penetrations", for procedures to seal around penetrations.
- D.** Spray-apply LIQUID BOOT® onto geotextile to a 60 mil minimum dry thickness. Increase thickness to 100 dry mils if shotcrete is to be applied directly to membrane. If a second coat is required, remove any standing water from the membrane before proceeding with the second application.
- E.** Do not penetrate membrane. Keep membrane free of dirt, debris and traffic until a protective cover is in place. It is the responsibility of the General Contractor to insure that the membrane and the protection system are not penetrated.
- F.** After membrane has cured and checked for proper thickness and flaws, install protection material pursuant to manufacturer's instructions. **NOTE: All testing or inspection to be performed prior to placing protection course.**

3.03.30 SEALING AROUND PENETRATIONS

3.03.31 OPTION 1

- A.** Clean all penetrations. All metal penetrations shall be sanded clean with emery cloth.
- B.** For applications requiring BaseFabric™ geotextile, roll out geotextile on sub-grade with the heat-rolled side facing up, overlapping seams a minimum of six inches (6"). Cut the geotextile around penetrations so that it lays flat on the sub-grade. Lay geotextile tight at all inside corners. Apply a thin (10 mil) tack coat of LIQUID BOOT® "A" side without catalyst within the seam overlap.

LIQUID BOOT® GVB, version 4.3

4

© 2012 CETCO

- C.** At the base of penetration install a minimum 3/4 inch thick membrane cant of LIQUID BOOT®, or other suitable material as approved by manufacturer. Extend the membrane at a 60 mil thickness three inches (3") around the base of penetration and up the penetration a minimum of three inches (3"). **Allow to cure overnight before the application of LIQUID BOOT® membrane. (See manufacturer's standard detail.)**

- D.** Spray apply LIQUID BOOT® to a 60 mils minimum dry thickness around the penetration, completely encapsulating the collar assembly and to a height of one and one half inches (1 1/2") minimum above the membrane as described in 3.03.31 C above. Spray-apply LIQUID BOOT® to surrounding areas as specified for the particular application. (SEE MANUFACTURER'S STANDARD DETAIL)

- E.** Allow LIQUID BOOT® to cure completely before proceeding to step "F".

- F.** Wrap penetration with polypropylene cable tie at a point two inches (2") above the base of the penetration. Tighten the cable tie firmly so as to squeeze, but not cut, the cured membrane collar.

3.03.32 OPTION 2 (For Gas Vapor Membrane Only)

- A.** Clean all penetrations. All metal penetrations shall be sanded clean with emery cloth.
- B.** For applications requiring BaseFabric™ geotextile, roll out geotextile on sub-grade with the heat-rolled side facing up, overlapping seams a minimum of six inches (6"). Cut the geotextile around penetrations so that it lays flat on the sub-grade. Lay geotextile tight at all inside corners. Apply a thin (10 mil) tack coat of LIQUID BOOT® "A" side without catalyst within the seam overlap.

- C.** Spray-apply LIQUID BOOT® to surrounding areas as specified for the particular application to a 60 mil minimum dry thickness. At the base of penetration install a minimum 3/4 inch thick membrane cant of LIQUID BOOT®, or other suitable material as approved by manufacturer. Extend the membrane at 60 mil thickness up the penetration a minimum of three inches (3"). Allow curing overnight before proceeding to D (SEE MANUFACTURER'S STANDARD DETAIL)

- D.** Spray apply LIQUID BOOT® the membrane at a 60 mil thickness three inches (3") around the base of penetration and up the penetration, completely encapsulating the collar assembly, to a height of one and one half inches (1 1/2") minimum above the membrane as described in 3.03.32 C above. (SEE MANUFACTURER'S STANDARD DETAIL)

- E.** Allow LIQUID BOOT® to cure completely before proceeding to step "F".

- F.** Wrap penetration with polypropylene cable tie at a point two inches (2") above the base of the penetration. Tighten the cable tie firmly so as to squeeze, but not cut, the cured membrane collar.

3.04 FIELD QUALITY CONTROL- Field Quality Control is a very important part of all LIQUID BOOT® applications. Applicators should check their own work for coverage, thickness, and all around good workmanship before calling for inspections.

The membrane must be cured at least overnight before inspecting for dry-thickness, holes, shadow shrinkage, and any other membrane damage. If water testing is to be performed, allow the membrane to cure at least 72 hours prior to the water test. When thickness or integrity is in question the membrane should be tested in the proper manner as described below. However, over-sampling defeats the intent of inspections. Inspectors should always use visual and tactile measurement to guide them. Areas suspected of being too thin to the touch should be measured with the gauges to determine the exact thickness. With practice and by comparing tactile measurements with those of the gauges, fingers become very accurate tools.

3.04.10 ON CONCRETE/SHOTCRETE/MASONRY & OTHER HARD SURFACES

- A.** Membrane may be checked for proper thickness with a blunt-nose depth gauge, taking one reading every 500 square feet. Record the readings. Mark the test area for repair, if necessary.
- B.** If necessary, test areas are to be patched over with LIQUID BOOT® to a 60 mils minimum dry thickness, extending a minimum of one inch (1") beyond the test perimeter.

3.04.20 ON DIRT AND OTHER SOFT SUBSTRATES

- A.** Samples may be cut from the membrane and geotextile sandwich to a maximum area of 2 square inches. Measure the thickness with a mil-reading caliper, per 500 sq. feet. Deduct the plain geotextile thickness to determine the thickness of LIQUID BOOT® membrane. Mark the test area for repair.
- B.** Voids left by sampling are to be patched with geotextile overlapping the void by a minimum of two inches (2"). Apply a thin tack coat of LIQUID BOOT® under the geotextile patch. Then spray or trowel-apply LIQUID BOOT® to a 60 mils minimum dry thickness, extending at least three inches (3") beyond geotextile patch.

- 3.04.30 SMOKE TESTING FOR HOLES (Optional) - Holes or other breaches in the membrane can be detected by conducting a smoke test. This involves pumping smoke under the membrane for a specified period of time, under a specified pressure, which varies from project to project. Contact CETCO for information about this test at 800-527-9948.**

LIQUID BOOT® GVB, version 4.3

5

© 2012 CETCO

THIS DRAWING IS AN INSTRUMENT OF SERVICE AND SHALL REMAIN THE PROPERTY OF AUFGANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC, WHETHER THE PROJECT FOR WHICH IT IS MADE IS EXECUTED OR NOT. THIS DRAWING SHALL NOT BE USED BY THE OWNER OR OTHERS ON OTHER PROJECTS. FOR ADDITIONS TO THIS PROJECT OR FOR COMPLETION OF THIS PROJECT BY OTHERS EXCEPT BY AGREEMENT IN WRITING WITH AUFGANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC, SUBMISSION OR DISTRIBUTION TO MEET OFFICIAL REGULATORY REQUIREMENTS OR FOR OTHER PURPOSES IN CONNECTION WITH THE PROJECT IS NOT TO BE CONSTRUED AS PUBLICATION IN DEROGATION OF THE RIGHTS OF AUFGANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC. REPRODUCTION OR PUBLICATION BY ANY METHOD IN WHOLE OR IN PART IS PROHIBITED. TITLE TO THIS DRAWING BELONGS TO AUFGANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC, WITHOUT PREJUDICE.

05/06/13	ISSUED FOR OWNER'S REVIEW
04-03-13	ISSUED TO OER FOR REVIEW
03-06-13	ISSUED TO DOB FOR REVIEW AND COMMENT
12-07-12	EXTENDED ALT 2 FILING
11-14-12	SUPERCEDE FILING W/ DOB
DATE	REVISIONS

STRUCTURAL ENGINEER:
BROOKER ENGINEERING, PLLC
76 LAFAYETTE AVENUE, SUFFERN, NEW YORK 10901
Phone: (845) 357-4411 Fax: (845) 357-1896

asap Aufgang + Subotovsky
Architecture and Planning
PLLC
49 North Airmont Road, Suffern, NY 10901 tel: 845.368.0004 fax: 800.772.8304
www.asaparchitecture.com

PROPOSED NEW DEVELOPMENT FOR:
490 MYRTLE AVENUE
490 MYRTLE AVE, BROOKLYN, NEW YORK 11205

FOUNDATION DETAILS

DATE:	11-14-12
PROJECT NO:	12172
DRAWN BY:	SP
CHECKED BY:	DJ
DRAWING NO:	FO-104.00
SCALE:	AS NOTED
SHEET NO:	5 of 5
NYC DOB NUMBER:	

BRIAN BROOKER P.E.
N.Y.S. Lic. No. 60229

FILE #

1

2

3

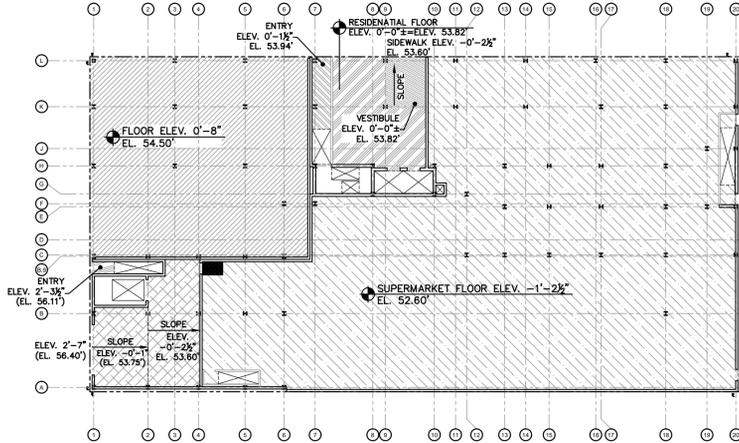
4

5

6

7

8



LEGEND

	PROPERTY LINE
	MASONRY WALL
	BRICK/FACADE
	STEEL COLUMN
	STEEL BEAM
	MOMENT CONNECTION
	CONCRETE OVER CORRUGATED METAL DECK
	EDGE OF FLOOR (EOF)
	OPENING
	WALL PLATE (FOR SIZE AND DETAIL SEE DWG. S-201)
	STEEL LINTEL (SEE DWG. S-202 FOR DETAIL)
	EX. COLUMN (SEE NOTE #12)
	NEW CONCRETE PIER
	T.O.S. (SEE NOTE #2)
	CORRUGATED METAL DECK W/ INSULATION
	EX. CONCRETE WALL
	NEW CONCRETE WALL

- NOTES:**
- FIRST FLOOR FRAMING PLAN IS THE ARCHITECTURAL CELLAR FLOOR PLAN.
 - THE FIRST FLOOR (TOP OF CONCRETE) ELEV. 53.82' = ELEV. 0'-0". ALL T.O.S. ELEVATIONS ARE REFERENCED FROM FIRST FLOOR ELEVATION.
 - TOP OF STEEL BEAM ELEVATION TO BE 6" BELOW TOP OF CONCRETE, U.N.O. SEE S-200 DRAWINGS FOR DETAIL.
* DENOTES STEEL SHALL BE HEADER OF THE DOOR/WINDOW. SEE ARCH. DWGS. FOR DOOR/WINDOW HEIGHT.
** DENOTES TOP OF STEEL ELEV. -1'-8 1/2"
*** DENOTES TOP OF STEEL ELEV. 0'-2"
 - FOR COLUMN SCHEDULE SEE S-200 DRAWINGS.
 - FOR MASONRY WALL SCHEDULE SEE S-300 DRAWINGS.
 - PROVIDE MASONRY DOWELS WELDED TO THE TOP FLANGE OF THE STEEL BEAMS, WHERE THE STEEL BEAMS ARE DIRECTLY SUPPORTING THE MASONRY WALLS, SEE D-1 ON S-202. SEE DETAIL D-2 FOR ALL COLUMNS ADJACENT TO MASONRY WALLS.
 - G.C. TO COORDINATE THE CONSTRUCTION SEQUENCE OF THE MASONRY WALL BY THE ELEVATOR ENTRANCE W/ ELEVATOR MANUFACTURER. G.C. SHOULD VERIFY SIZE & LOCATION OF ELEVATOR DOOR OPENINGS W/ ELEVATOR MANUFACTURER PRIOR TO INSTALLATION.
 - FOR MISC. STEEL, I.E.: BRICK SUPPORT, REFER TO ARCHITECTURAL DRAWINGS FOR DETAIL.
 - THE G.C. AND SUBCONTRACTOR SHALL COORDINATE THE T.O.S. ELEVATIONS WITH THE ARCHITECTURAL AND MECHANICAL DRAWINGS.
 - G.C. AND SUBCONTRACTOR TO VERIFY ALL MECHANICAL & PLUMBING OPENINGS, SIZE & LOCATION W/ MECHANICAL ENGINEER AND THE ARCHITECT.
 - G.C. TO ARRANGE SUPERSTRUCTURE OVERVIEW MEETING PRIOR TO ERECTION OF ANY STEEL MEMBERS. MASONRY WALLS AND CORRUGATED METAL DECK, THE MEETING SHALL BE ATTENDED BY TESTING COMPANY REPRESENTATIVE, MASON AND STEEL INSTALLER.
 - THE SUPERMARKET FLOOR WAS DESIGNED FOR 100 PSF LIVE LOAD, SUPERMARKET HEAVY LOAD (MORE THAN 100 PSF) SHOULD BE COORDINATED. STEEL SIZES MAY CHANGE/ADDITIONAL STEEL MAY BE REQUIRED AS PER LOAD REQUIREMENTS.
 - EXISTING COLUMNS TO BE EXPOSED BY G.C. CONTACT EOR ONCE EXPOSED W/ EXACT COLUMN SIZE AND LOCATION FOR REVIEW.
 - STEEL BEAMS ABOVE DETENTION TANK TO BE GALVANIZED.

THIS DRAWING IS AN INSTRUMENT OF SERVICE AND SHALL REMAIN THE PROPERTY OF AUFGANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC, WHETHER THE PROJECT FOR WHICH IT IS MADE IS EXECUTED OR NOT. THIS DRAWING SHALL NOT BE USED BY THE OWNER OR OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT OR FOR COMPLETION OF THIS PROJECT BY OTHERS EXCEPT BY AGREEMENT IN WRITING WITH AUFGANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC. SUBMISSION OR DISTRIBUTION TO MEET OFFICIAL REGULATORY REQUIREMENTS OR FOR OTHER PURPOSES IN CONNECTION WITH THE PROJECT IS NOT TO BE CONSTRUED AS PUBLICATION IN DEROGATION OF THE RIGHTS OF AUFGANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC. REPRODUCTION OR PUBLICATION BY ANY METHOD IN WHOLE OR IN PART IS PROHIBITED. TITLE TO THIS DRAWING BELONGS TO AUFGANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC, WITHOUT PREJUDICE.

05/12/13	ISSUED FOR CONSTRUCTION
03-06-13	ISSUED TO DOB FOR REVIEW AND COMMENT
12-07-12	EXTENDED ALT 2 FILING
11-14-12	SUPERCEDE FILING W/ DOB
DATE	REVISIONS

STRUCTURAL ENGINEER:
BROOKER ENGINEERING, PLLC
76 LAFAYETTE AVENUE, SUFFERN, NEW YORK 10901
Phone: (845) 357-4411 Fax: (845) 357-1896

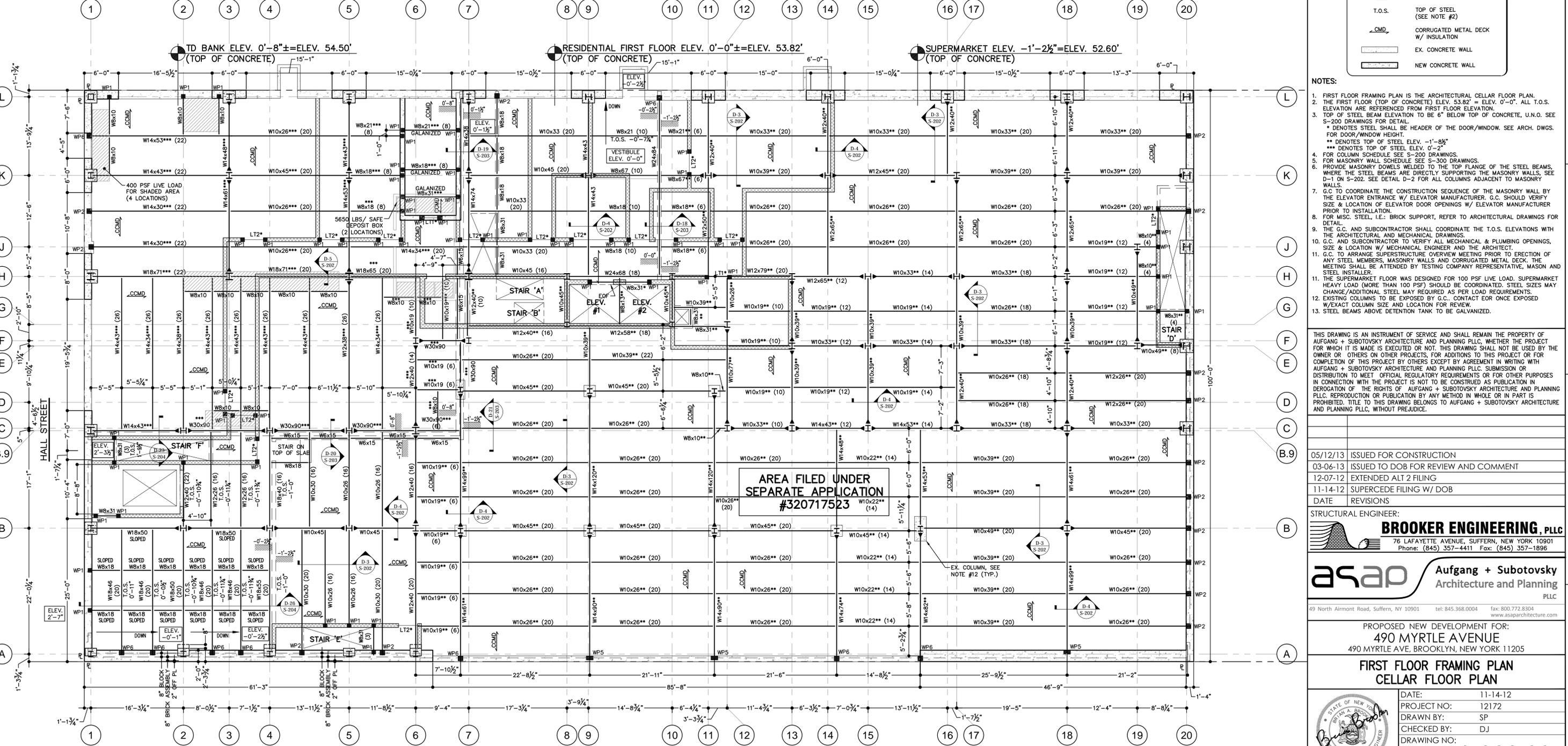
asap Aufgang + Subotovsky
Architecture and Planning
PLLC
49 North Airmont Road, Suffern, NY 10901 tel: 845.368.0004 fax: 800.772.8304
www.asaparchitecture.com

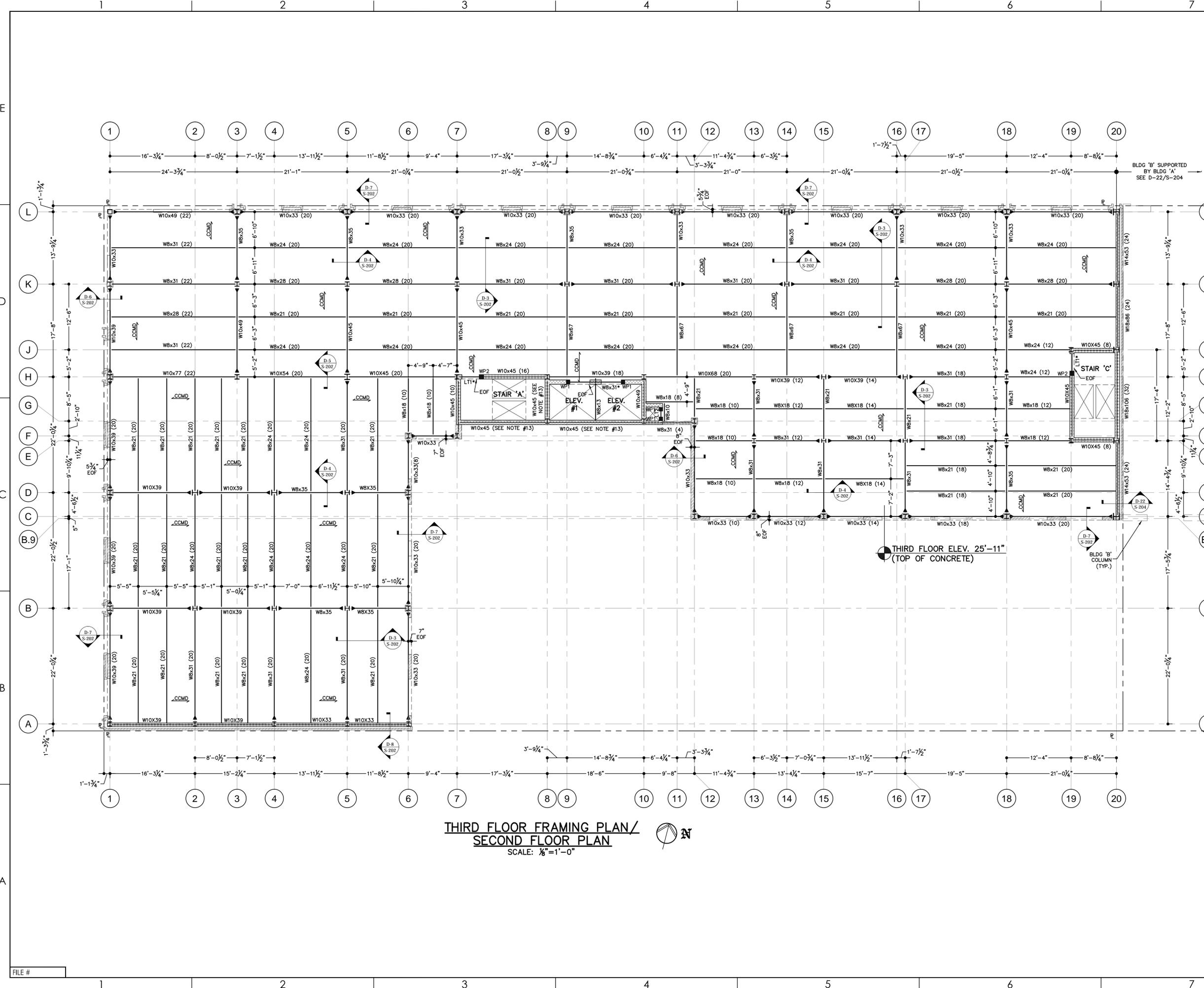
PROPOSED NEW DEVELOPMENT FOR:
490 MYRTLE AVENUE
490 MYRTLE AVE, BROOKLYN, NEW YORK 11205

**FIRST FLOOR FRAMING PLAN
CELLAR FLOOR PLAN**

DATE:	11-14-12
PROJECT NO:	12172
DRAWN BY:	SP
CHECKED BY:	DJ
DRAWING NO:	S-002.00

BRIAN BROOKER P.E.
N.Y.S. Lic. No. 60229
SCALE: AS NOTED SHEET NO: 2 OF 12
NYC DOB NUMBER:





LEGEND

- PROPERTY LINE
- MASONRY WALL
- BRICK/FACADE
- STUD WALL
- STEEL COLUMN
- STEEL BEAM
- (10) NUMBER OF STUDS ON BEAM
- MOMENT CONNECTION
- CONCRETE OVER CORRUGATED METAL DECK
- EDGE OF FLOOR (EOF)
- OPENING
- WALL PLATE (FOR SIZE AND DETAIL SEE DWG. S-201)
- STEEL LINTEL (SEE DWG. S-202 FOR DETAIL)

- NOTES:**
- THIRD FLOOR FRAMING PLAN IS THE ARCHITECTURAL SECOND FLOOR PLAN.
 - TOP OF STEEL BEAM ELEVATION TO BE 4" BELOW TOP OF CONCRETE, U.N.O. SEE S-200 DRAWINGS FOR DETAIL.
 - * DENOTES STEEL SHALL BE HEADER OF THE DOOR/WINDOW. SEE ARCH. DWGS. FOR DOOR/WINDOW HEIGHT.
 - FOR COLUMN SCHEDULE SEE S-200 DRAWINGS.
 - FOR MASONRY WALL SCHEDULE SEE S-300 DRAWINGS.
 - PROVIDE MASONRY DOWELS WELDED TO THE TOP FLANGE OF THE STEEL BEAMS, WHERE THE STEEL BEAMS ARE DIRECTLY SUPPORTING THE MASONRY WALLS, SEE D-1 ON S-202. SEE DETAIL D-2 FOR ALL COLUMNS ADJACENT TO MASONRY WALLS.
 - TO COORDINATE THE CONSTRUCTION SEQUENCE OF THE MASONRY WALL BY ELEVATOR ENTRANCE W/ ELEVATOR MANUFACTURER, G.C. SHOULD VERIFY SIZE & LOCATION OF ELEVATOR DOOR OPENINGS W/ ELEVATOR MANUFACTURER PRIOR TO INSTALLATION.
 - FOR MISC. STEEL, I.E.: BRICK SUPPORT, REFER TO ARCHITECTURAL DRAWINGS FOR DETAIL.
 - THE G.C. AND SUBCONTRACTOR SHALL COORDINATE THE T.O.S. ELEVATIONS WITH THE ARCHITECTURAL AND MECHANICAL DRAWINGS.
 - G.C. AND SUBCONTRACTOR TO VERIFY ALL MECHANICAL & PLUMBING OPENINGS, SIZE & LOCATION W/ MECHANICAL ENGINEER AND THE ARCHITECT.
 - G.C. TO ARRANGE SUPERSTRUCTURE OVERVIEW MEETING PRIOR TO ERECTION OF ANY STEEL MEMBERS, MASONRY WALLS AND CORRUGATED METAL DECK. THE MEETING SHALL BE ATTENDED BY TESTING COMPANY REPRESENTATIVE, MASON AND STEEL INSTALLER.
 - ARCH. AND MECH. COORDINATION PENDING. STEEL SIZES MAY CHANGE BASED ON COORDINATION.
 - SEE ARCH. DWGS FOR STUD WALL DIMENSIONS.
 - STEEL MAY BE OMITTED IF STAIR IS BEARING ON MASONRY WALLS.

THIS DRAWING IS AN INSTRUMENT OF SERVICE AND SHALL REMAIN THE PROPERTY OF AUFANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC, WHETHER THE PROJECT FOR WHICH IT IS MADE IS EXECUTED OR NOT. THIS DRAWING SHALL NOT BE USED BY THE OWNER OR OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT OR FOR COMPLETION OF THIS PROJECT BY OTHERS EXCEPT BY AGREEMENT IN WRITING WITH AUFANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC. SUBMISSION OR DISTRIBUTION TO MEET OFFICIAL REGULATORY REQUIREMENTS OR FOR OTHER PURPOSES IN CONNECTION WITH THE PROJECT IS NOT TO BE CONSTRUED AS PUBLICATION OR DEROGATION OF THE RIGHTS OF AUFANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC. REPRODUCTION OR PUBLICATION BY ANY METHOD IN WHOLE OR IN PART IS PROHIBITED. TITLE TO THIS DRAWING BELONGS TO AUFANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC, WITHOUT PREJUDICE.

05/12/13	ISSUED FOR CONSTRUCTION
05/12/13	ISSUED FOR CONSTRUCTION
03-06-13	ISSUED TO DOB FOR REVIEW AND COMMENT
DATE	REVISIONS

STRUCTURAL ENGINEER:
BROOKER ENGINEERING, PLLC
 76 LAFAYETTE AVENUE, SUFFERN, NEW YORK 10901
 Phone: (845) 357-4411 Fax: (845) 357-1896

asap Aufgang + Subotovsky
 Architecture and Planning
 PLLC
 49 North Airmont Road, Suffern, NY 10901 tel: 845.368.0004 fax: 800.772.8304
 www.asaparchitecture.com

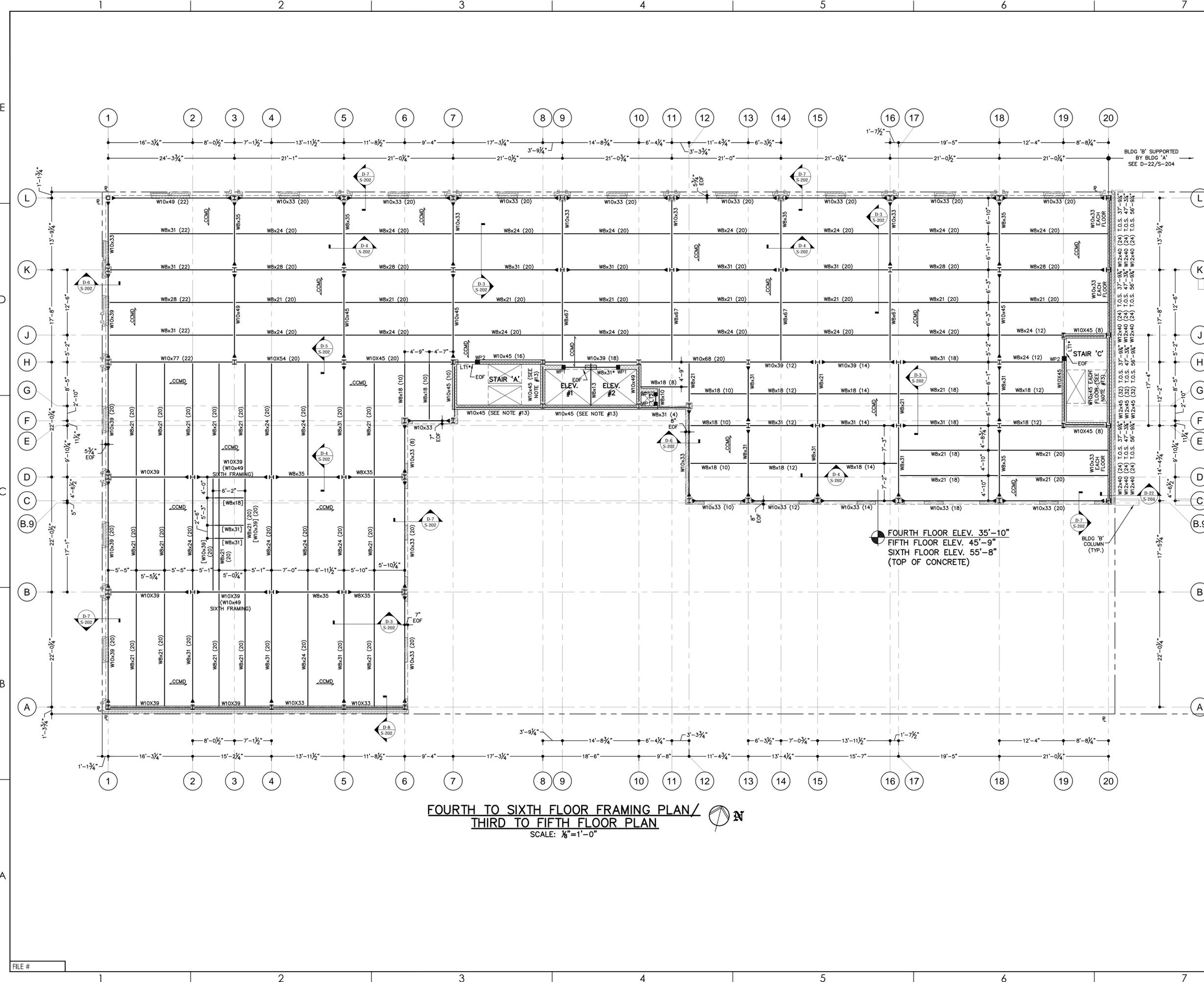
PROPOSED NEW DEVELOPMENT FOR:
 490 MYRTLE AVENUE
 490 MYRTLE AVE, BROOKLYN, NEW YORK 11205

**THIRD FLOOR FRAMING PLAN
 SECOND FLOOR PLAN**

DATE:	11-14-12
PROJECT NO:	12172
DRAWN BY:	SP
CHECKED BY:	DJ
DRAWING NO:	S-004.00

SCALE: AS NOTED SHEET NO: 4 OF 12
 NYC DOB NUMBER:

**THIRD FLOOR FRAMING PLAN/
 SECOND FLOOR PLAN**
 SCALE: 1/8"=1'-0"



LEGEND

- PROPERTY LINE
- MASONRY WALL
- BRICK/FACADE
- STUD WALL
- STEEL COLUMN
- STEEL BEAM
- (10) NUMBER OF STUDS ON BEAM
- MOMENT CONNECTION
- CONCRETE OVER CORRUGATED METAL DECK
- EDGE OF FLOOR (EOF)
- OPENING
- WALL PLATE (FOR SIZE AND DETAIL SEE DWG. S-201)
- STEEL LINTEL (SEE DWG. S-202 FOR DETAIL)

- NOTES:**
- FOURTH, FIFTH & SIXTH FLOOR FRAMING PLAN IS THE ARCHITECTURAL THIRD, FOURTH AND FIFTH FLOOR PLAN.
 - TOP OF STEEL BEAM ELEVATION TO BE 4" BELOW TOP OF CONCRETE, U.N.O. SEE S-200 DRAWINGS FOR DETAIL.
 - * DENOTES STEEL SHALL BE HEADER OF THE DOOR/WINDOW. SEE ARCH. DWGS. FOR DOOR/WINDOW HEIGHT.
 - [] DENOTES BEAMS ON SIXTH FLOOR FRAMING ONLY.
 - FOR COLUMN SCHEDULE SEE S-200 DRAWINGS.
 - FOR MASONRY WALL SCHEDULE SEE S-300 DRAWINGS.
 - PROVIDE MASONRY DOWELS WELDED TO THE TOP FLANGE OF THE STEEL BEAMS, WHERE THE STEEL BEAMS ARE DIRECTLY SUPPORTING THE MASONRY WALLS, SEE D-1 ON S-202. SEE DETAIL D-2 FOR ALL COLUMNS ADJACENT TO MASONRY WALLS.
 - G.C. TO COORDINATE THE CONSTRUCTION SEQUENCE OF THE MASONRY WALL BY THE ELEVATOR ENTRANCE W/ ELEVATOR DOOR OPENINGS W/ ELEVATOR MANUFACTURER PRIOR TO INSTALLATION.
 - FOR MISC. STEEL, I.E.: BRICK SUPPORT, REFER TO ARCHITECTURAL DRAWINGS FOR DETAIL.
 - THE G.C. AND SUBCONTRACTOR SHALL COORDINATE THE T.O.S. ELEVATIONS WITH THE ARCHITECTURAL AND MECHANICAL DRAWINGS.
 - G.C. AND SUBCONTRACTOR TO VERIFY ALL MECHANICAL & PLUMBING OPENINGS, SIZE & LOCATION W/ MECHANICAL ENGINEER AND THE ARCHITECT.
 - G.C. TO ARRANGE SUPERSTRUCTURE OVERVIEW MEETING PRIOR TO ERECTION OF ANY STEEL MEMBERS, MASONRY WALLS AND CORRUGATED METAL DECK. THE MEETING SHALL BE ATTENDED BY TESTING COMPANY REPRESENTATIVE, MASON AND STEEL INSTALLER.
 - G.C. AND SUBCONTRACTOR TO VERIFY ALL MECHANICAL & PLUMBING OPENINGS, SIZE & LOCATION W/ MECHANICAL ENGINEER AND THE ARCHITECT.
 - SEE ARCH. DWGS FOR STUD WALL DIMENSIONS.
 - STEEL MAY BE OMITTED IF STAIR IS BEARING ON MASONRY WALLS.

THIS DRAWING IS AN INSTRUMENT OF SERVICE AND SHALL REMAIN THE PROPERTY OF AUFGANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC, WHETHER THE PROJECT FOR WHICH IT IS MADE IS EXECUTED OR NOT. THIS DRAWING SHALL NOT BE USED BY THE OWNER OR OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT OR FOR COMPLETION OF THIS PROJECT BY OTHERS EXCEPT BY AGREEMENT IN WRITING WITH AUFGANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC. SUBMISSION OR DISTRIBUTION TO MEET OFFICIAL REGULATORY REQUIREMENTS OR FOR OTHER PURPOSES IN CONNECTION WITH THE PROJECT IS NOT TO BE CONSTRUED AS PUBLICATION IN DEROGATION OF THE RIGHTS OF AUFGANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC. REPRODUCTION OR PUBLICATION BY ANY METHOD IN WHOLE OR IN PART IS PROHIBITED. TITLE TO THIS DRAWING BELONGS TO AUFGANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC, WITHOUT PREJUDICE.

05/12/13 ISSUED FOR CONSTRUCTION
 03-06-13 ISSUED TO DOB FOR REVIEW AND COMMENT

DATE REVISIONS
 STRUCTURAL ENGINEER:
BROOKER ENGINEERING, PLLC
 76 LAFAYETTE AVENUE, SUFFERN, NEW YORK 10901
 Phone: (845) 357-4411 Fax: (845) 357-1896

asap Aufgang + Subotovsky
 Architecture and Planning
 PLLC
 49 North Airmont Road, Suffern, NY 10901 tel: 845.368.0004 fax: 800.772.8304
 www.asaparchitecture.com

PROPOSED NEW DEVELOPMENT FOR:
 490 MYRTLE AVENUE
 490 MYRTLE AVE, BROOKLYN, NEW YORK 11205

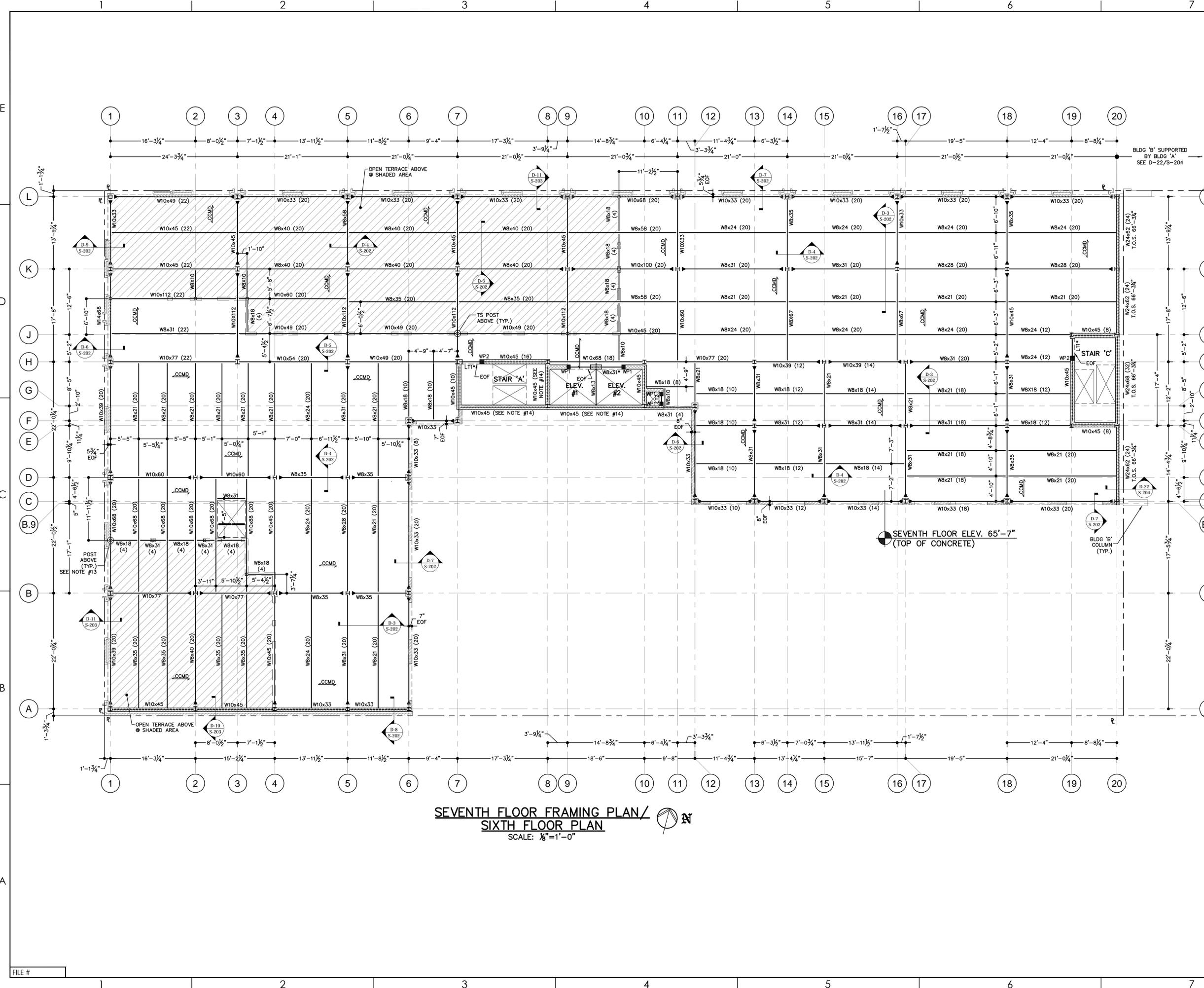
**FOURTH TO SIXTH FLOOR FRAMING PLAN
 THIRD TO FIFTH FLOOR PLAN**

DATE: 11-14-12
 PROJECT NO: 12172
 DRAWN BY: SP
 CHECKED BY: DJ
 DRAWING NO:
S-005.00

SCALE: AS NOTED SHEET NO: 5 OF 12
 NYC DOB NUMBER:

**FOURTH TO SIXTH FLOOR FRAMING PLAN/
 THIRD TO FIFTH FLOOR PLAN**
 SCALE: 1/8"=1'-0"





LEGEND

- PROPERTY LINE
- MASONRY WALL
- BRICK/FACADE
- STUD WALL
- STEEL COLUMN
- STEEL BEAM
- (10) NUMBER OF STUDS ON BEAM
- MOMENT CONNECTION
- CONCRETE OVER CORRUGATED METAL DECK
- EDGE OF FLOOR (EOF)
- OPENING
- WALL PLATE (FOR SIZE AND DETAIL SEE DWG. S-201)
- STEEL LINTEL (SEE DWG. S-202 FOR DETAIL)

- NOTES:**
- SEVENTH FLOOR FRAMING PLAN IS THE ARCHITECTURAL SIXTH FLOOR PLAN.
 - TOP OF STEEL BEAM ELEVATION TO BE 4" BELOW TOP OF CONCRETE, U.N.O. SEE S-200 DRAWINGS FOR DETAIL.
 - * DENOTES STEEL SHALL BE HEADER OF THE DOOR/WINDOW. SEE ARCH. DWGS. FOR DOOR/WINDOW HEIGHT.
 - FOR COLUMN SCHEDULE SEE S-200 DRAWINGS.
 - FOR MASONRY WALL SCHEDULE SEE S-300 DRAWINGS.
 - PROVIDE MASONRY DOWELS WELDED TO THE TOP FLANGE OF THE STEEL BEAMS, WHERE THE STEEL BEAMS ARE DIRECTLY SUPPORTING THE MASONRY WALLS, SEE D-1 ON S-202. SEE DETAIL D-2 FOR ALL COLUMNS ADJACENT TO MASONRY WALLS.
 - G.C. TO COORDINATE THE CONSTRUCTION SEQUENCE OF THE MASONRY WALL BY THE ELEVATOR ENTRANCE W/ ELEVATOR MANUFACTURER, G.C. SHOULD VERIFY SIZE & LOCATION OF ELEVATOR DOOR OPENINGS W/ ELEVATOR MANUFACTURER PRIOR TO INSTALLATION.
 - FOR MISC. STEEL, I.E.: BRICK SUPPORT, REFER TO ARCHITECTURAL DRAWINGS FOR DETAIL.
 - THE G.C. AND SUBCONTRACTOR SHALL COORDINATE THE T.O.S. ELEVATIONS WITH THE ARCHITECTURAL AND MECHANICAL DRAWINGS.
 - G.C. AND SUBCONTRACTOR TO VERIFY ALL MECHANICAL & PLUMBING OPENINGS, SIZE & LOCATION W/ MECHANICAL ENGINEER AND THE ARCHITECT.
 - G.C. TO ARRANGE SUPERSTRUCTURE OVERVIEW MEETING PRIOR TO ERECTION OF ANY STEEL MEMBERS, MASONRY WALLS AND CORRUGATED METAL DECK. THE MEETING SHALL BE ATTENDED BY TESTING COMPANY REPRESENTATIVE, MASON AND STEEL INSTALLER.
 - ARCH. AND MECH. COORDINATION PENDING. STEEL SIZES MAY CHANGE BASED ON COORDINATION.
 - SEE ARCH. DWGS FOR STUD WALL DIMENSIONS.
 - SEE DRAWING S-202 FOR BASE PLATE DETAILS.
 - STEEL MAY BE OMITTED IF STAIR IS BEARING ON MASONRY WALLS.

THIS DRAWING IS AN INSTRUMENT OF SERVICE AND SHALL REMAIN THE PROPERTY OF AUFGANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC, WHETHER THE PROJECT FOR WHICH IT IS MADE IS EXECUTED OR NOT. THIS DRAWING SHALL NOT BE USED BY THE OWNER OR OTHER PROJECTS. FOR ADDITIONS TO THIS PROJECT OR FOR COMPLETION OF THIS PROJECT BY OTHERS EXCEPT BY AGREEMENT IN WRITING WITH AUFGANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC, SUBMISSION OR DISTRIBUTION TO MEET OFFICIAL REGULATORY REQUIREMENTS OR FOR OTHER PURPOSES IN CONNECTION WITH THE PROJECT IS NOT TO BE CONSIDERED AS PUBLICATION IN DEROGATION OF THE RIGHTS OF AUFGANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC. REPRODUCTION OR PUBLICATION BY ANY METHOD IN WHOLE OR IN PART IS PROHIBITED. TITLE TO THIS DRAWING BELONGS TO AUFGANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC, WITHOUT PREJUDICE.

05/12/13	ISSUED FOR CONSTRUCTION
03-06-13	ISSUED TO DOB FOR REVIEW AND COMMENT
DATE	REVISIONS

STRUCTURAL ENGINEER:
BROOKER ENGINEERING, PLLC
 76 LAFAYETTE AVENUE, SUFFERN, NEW YORK 10901
 Phone: (845) 357-4411 Fax: (845) 357-1896

asap Aufgang + Subotovsky
 Architecture and Planning
 PLLC
 49 North Airmont Road, Suffern, NY 10901 tel: 845.368.0004 fax: 800.772.8304
 www.asaparchitecture.com

PROPOSED NEW DEVELOPMENT FOR:
490 MYRTLE AVENUE
 490 MYRTLE AVE, BROOKLYN, NEW YORK 11205

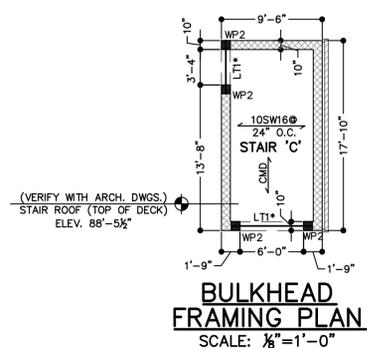
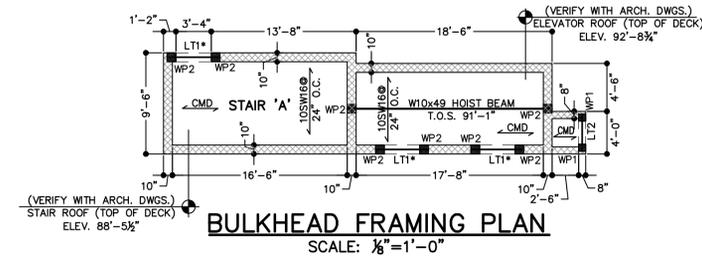
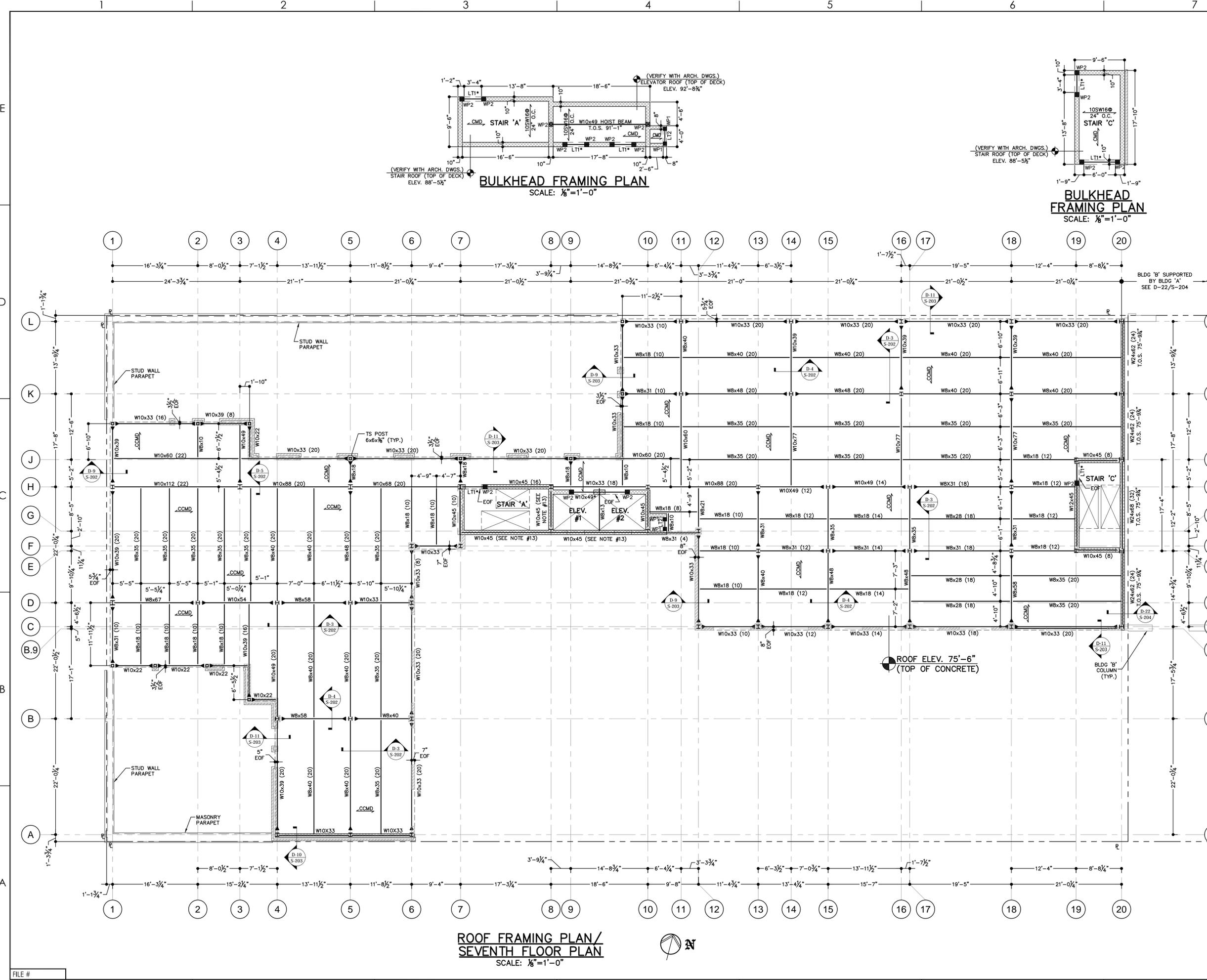
**SEVENTH FLOOR FRAMING PLAN
 SIXTH FLOOR PLAN**

DATE:	11-14-12
PROJECT NO:	12172
DRAWN BY:	SP
CHECKED BY:	DJ
DRAWING NO:	S-006.00

BRIAN BROOKER P.E.
 N.Y.S. Lic. No. 60229
 SCALE: AS NOTED SHEET NO: 6 OF 12
 NYC DOB NUMBER:

**SEVENTH FLOOR FRAMING PLAN/
 SIXTH FLOOR PLAN**
 SCALE: 1/8"=1'-0"

FILE #



LEGEND	
	PROPERTY LINE
	MASONRY WALL
	BRICK/FACADE
	STUD WALL
	STEEL COLUMN
	STEEL BEAM
	NUMBER OF STUDS ON BEAM
	MOMENT CONNECTION
	CONCRETE OVER CORRUGATED METAL DECK
	CORRUGATED METAL DECK W/ INSULATION
	EDGE OF FLOOR (EOF)
	OPENING
	WALL PLATE (FOR SIZE AND DETAIL SEE DWG. S-201)
	STEEL LINTEL (SEE DWG. S-202 FOR DETAIL)
	JOIST SIZE AND DIRECTION
	T.O.S.

- NOTES:**
- ROOF FRAMING PLAN IS THE ARCHITECTURAL SEVENTH FLOOR PLAN.
 - TOP OF STEEL BEAM ELEVATION TO BE 4" BELOW TOP OF CONCRETE, U.N.O. SEE S-200 DRAWINGS FOR DETAIL.
 - * DENOTES STEEL SHALL BE HEADER OF THE DOOR/WINDOW. SEE ARCH. DWGS. FOR DOOR/WINDOW HEIGHT.
 - FOR COLUMN SCHEDULE SEE S-200 DRAWINGS.
 - FOR MASONRY WALL SCHEDULE SEE S-300 DRAWINGS.
 - PROVIDE MASONRY DOWELS WELDED TO THE TOP FLANGE OF THE STEEL BEAMS, WHERE THE STEEL BEAMS ARE DIRECTLY SUPPORTING THE MASONRY WALLS, SEE D-1 ON S-202. SEE DETAIL D-2 FOR ALL COLUMNS ADJACENT TO MASONRY WALLS.
 - G.C. TO COORDINATE THE CONSTRUCTION SEQUENCE OF THE MASONRY WALL BY THE ELEVATOR ENTRANCE W/ ELEVATOR MANUFACTURER. G.C. SHOULD VERIFY SIZE & LOCATION OF ELEVATOR DOOR OPENINGS W/ ELEVATOR MANUFACTURER PRIOR TO INSTALLATION.
 - FOR MISC. STEEL, I.E., BRICK SUPPORT, REFER TO ARCHITECTURAL DRAWINGS FOR DETAIL.
 - THE G.C. AND SUBCONTRACTOR SHALL COORDINATE THE T.O.S. ELEVATIONS WITH THE ARCHITECTURAL AND MECHANICAL DRAWINGS.
 - G.C. AND SUBCONTRACTOR TO VERIFY ALL MECHANICAL & PLUMBING OPENINGS, SIZE & LOCATION W/ MECHANICAL ENGINEER AND THE ARCHITECT.
 - G.C. TO ARRANGE SUPERSTRUCTURE OVERVIEW MEETING PRIOR TO ERECTION OF ANY STEEL MEMBERS, MASONRY WALLS AND CORRUGATED METAL DECK. THE MEETING SHALL BE ATTENDED BY TESTING COMPANY REPRESENTATIVE, MASON AND STEEL INSTALLER.
 - ARCH. AND MECH. COORDINATION IS PENDING. STEEL SIZES MAY CHANGE/ADDITIONAL STEEL MAY BE REQUIRED AS PER REQUIREMENTS I.E. HVAC UNIT LOCATION, DUCT OPENINGS, PLANTER SIZE AND LOCATION, FLOOR TO ROOF SHAFT, ETC.
 - SEE ARCH. DWGS FOR STUD WALL DIMENSIONS.
 - STEEL MAY BE OMITTED IF STAIR IS BEARING ON MASONRY WALLS.

THIS DRAWING IS AN INSTRUMENT OF SERVICE AND SHALL REMAIN THE PROPERTY OF AUFANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC, WHETHER THE PROJECT FOR WHICH IT IS MADE IS EXECUTED OR NOT. THIS DRAWING SHALL NOT BE USED BY THE OWNER OR OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT OR FOR COMPLETION OF THIS PROJECT BY OTHERS EXCEPT BY AGREEMENT IN WRITING WITH AUFANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC. SUBMISSION OR DISTRIBUTION TO MEET OFFICIAL REGULATORY REQUIREMENTS OR FOR OTHER PURPOSES IN CONNECTION WITH THE PROJECT IS NOT TO BE CONSTRUED AS PUBLICATION IN DEROGATION OF THE RIGHTS OF AUFANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC. REPRODUCTION OR PUBLICATION BY ANY METHOD IN WHOLE OR IN PART IS PROHIBITED. TITLE TO THIS DRAWING BELONGS TO AUFANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC, WITHOUT PREJUDICE.

05/12/13	ISSUED FOR CONSTRUCTION
03-05-13	ISSUED FOR DOB TO REVIEW
DATE	REVISIONS
STRUCTURAL ENGINEER:	
BROOKER ENGINEERING, PLLC	
76 LAFAYETTE AVENUE, SUFFERN, NEW YORK 10901 Phone: (845) 357-4411 Fax: (845) 357-1896	

asap Aufgang + Subotovsky
Architecture and Planning
PLLC

49 North Airmont Road, Suffern, NY 10901 tel: 845.368.0004 fax: 800.772.8304
www.asaparchitecture.com

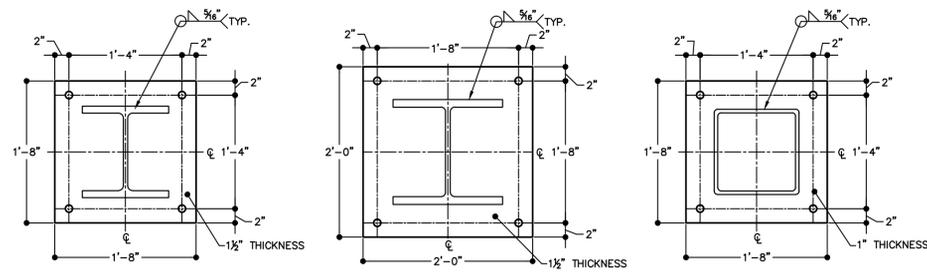
PROPOSED NEW DEVELOPMENT FOR:
490 MYRTLE AVENUE
490 MYRTLE AVE, BROOKLYN, NEW YORK 11205

ROOF FRAMING PLAN SEVENTH FLOOR PLAN	
DATE:	11-14-12
PROJECT NO.:	12172
DRAWN BY:	SP
CHECKED BY:	DJ
DRAWING NO.:	S-007.00
BRIAN BROOKER P.E. N.Y.S. Lic. No. 60229	SCALE: AS NOTED SHEET NO: 7 OF 12 NYC DOB NUMBER:

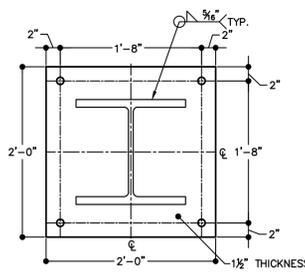
FILE #

**ROOF FRAMING PLAN/
SEVENTH FLOOR PLAN**
SCALE: 1/8"=1'-0"

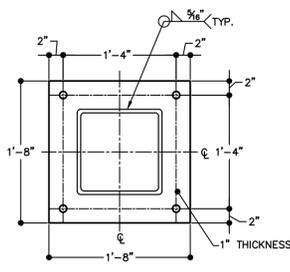




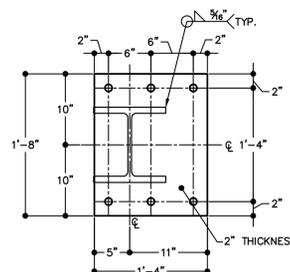
BP-1



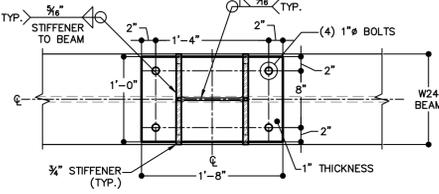
BP-2



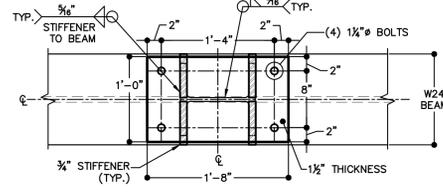
BP-3



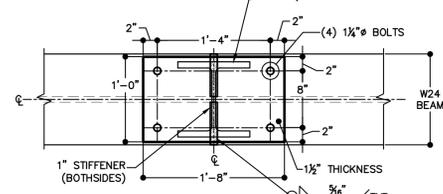
BP-4



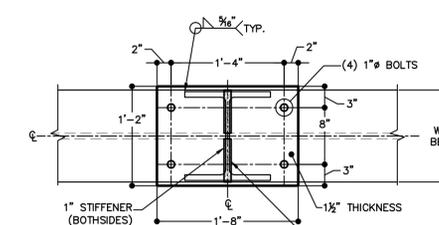
BP-5
© GRIDLINE D-6



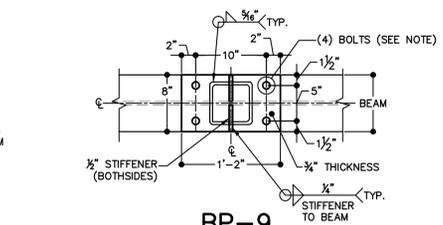
BP-6
© GRIDLINE D-1



BP-7
© GRIDLINE D-5 & K-16



BP-8
© GRIDLINE D-2 & D-4

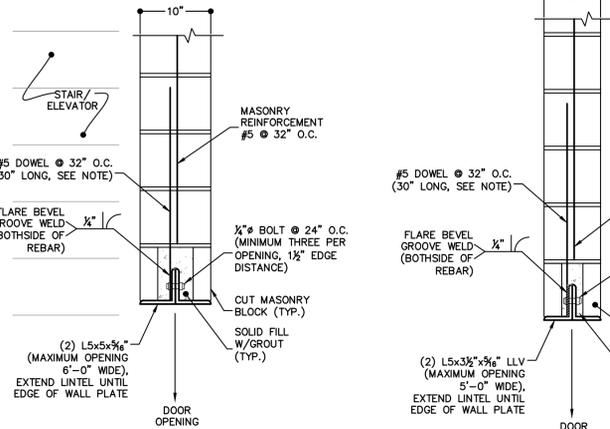


BP-9
© TS POST (SETBACK FLOOR)

NOTE:
1. PROVIDE 3/4" DIA BOLT BETWEEN GRIDLINE B TO D & 1 TO 4 ON SEVENTH FLOOR FRAMING PLAN. PROVIDE 1" DIA BOLT BETWEEN GRIDLINE J TO L & 1 TO 10 ON SEVENTH FLOOR FRAMING PLAN.

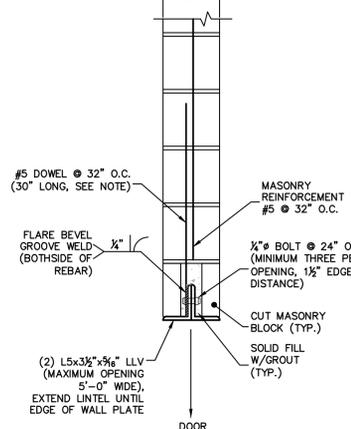
BASE PLATES
N.T.S.

NOTES:
1. BASE PLATE SHALL BE 50 KSI.
2. ANCHOR BOLT SHALL BE SET WHILE PIER/FOOTING IS POURED.



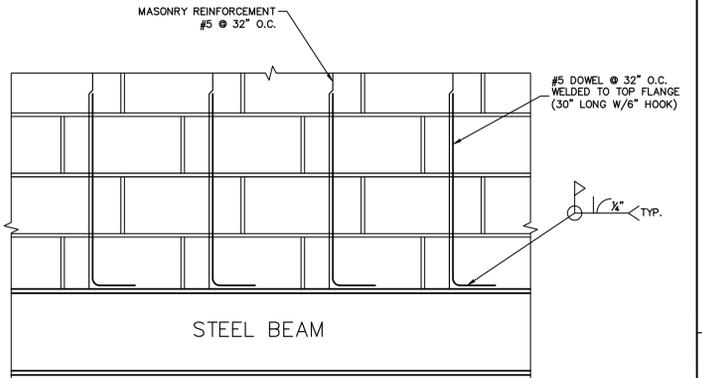
LINTEL LT-1
N.T.S.

NOTE:
DOWEL SHALL BE PLACED @ 32" O.C. (THREE REINFORCEMENT MINIMUM PER OPENING - CORNERS AND MIDDLE).

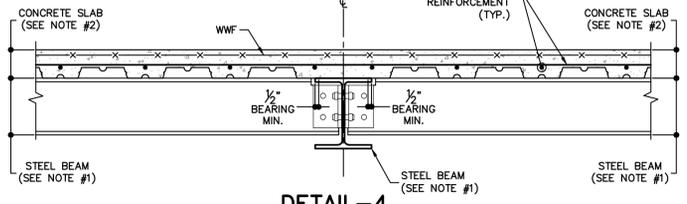


LINTEL LT-2
N.T.S.

NOTE:
DOWEL SHALL BE PLACED @ 32" O.C. (THREE REINFORCEMENT MINIMUM PER OPENING - CORNERS AND MIDDLE).

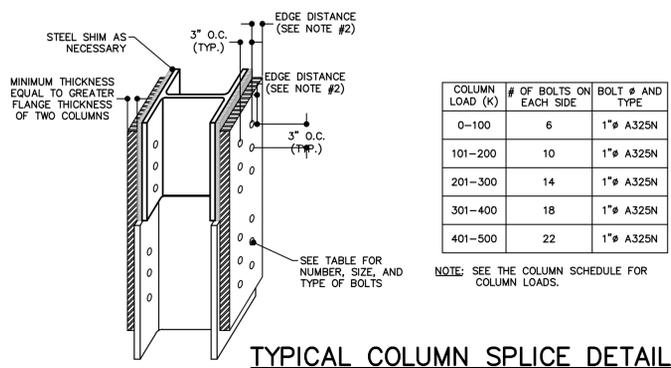


DETAIL-1
TYPICAL MASONRY DOWELS TO BEAM CONNECTION DETAIL
N.T.S.



DETAIL-4
N.T.S.

NOTES:
1. SEE FLOOR PLAN FOR STEEL BEAM LOCATION AND SIZE.
2. SEE DRAWING S-201 FOR DECK AND SLAB DETAILS.

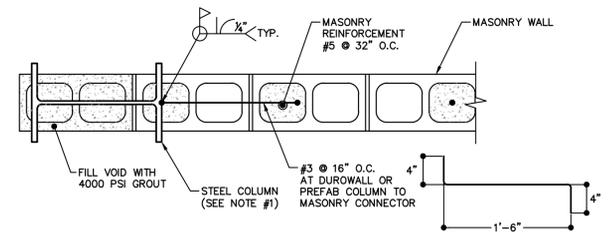


TYPICAL COLUMN SPLICE DETAIL
N.T.S.

NOTES:
1. SPLICE CONNECTIONS ARE SUBJECT TO CHANGE DURING SHOP DRAWING REVIEW.
2. EDGE DISTANCE SHALL BE 1.75 x BOLT #, 1/2" MINIMUM.
3. THE COLUMN SPLICE SHALL NOT OCCUR IN THE MIDDLE THIRD OF THE FLOOR TO FLOOR HEIGHT.

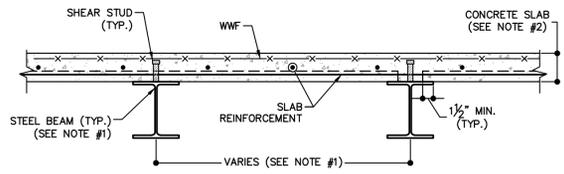
COLUMN LOAD (K)	# OF BOLTS ON EACH SIDE	BOLT # AND TYPE
0-100	6	1" A325N
101-200	10	1" A325N
201-300	14	1" A325N
301-400	18	1" A325N
401-500	22	1" A325N

NOTE: SEE THE COLUMN SCHEDULE FOR COLUMN LOADS.



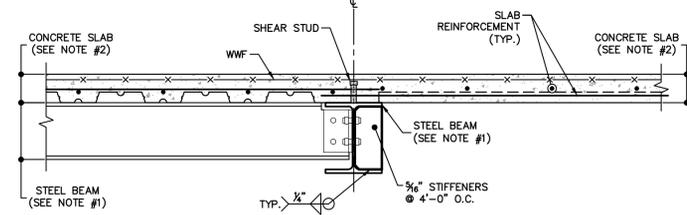
DETAIL-2 (PLAN VIEW)
TYPICAL WALL TO COLUMN CONNECTION
N.T.S.

NOTE:
1. COLUMN ORIENTATION MAY VARY.



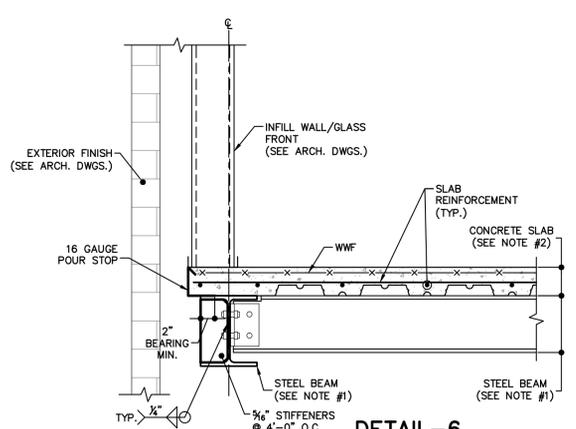
DETAIL-3
N.T.S.

NOTES:
1. SEE FLOOR PLAN FOR STEEL BEAM LOCATION AND SIZE.
2. SEE DRAWING S-201 FOR DECK AND SLAB DETAILS.



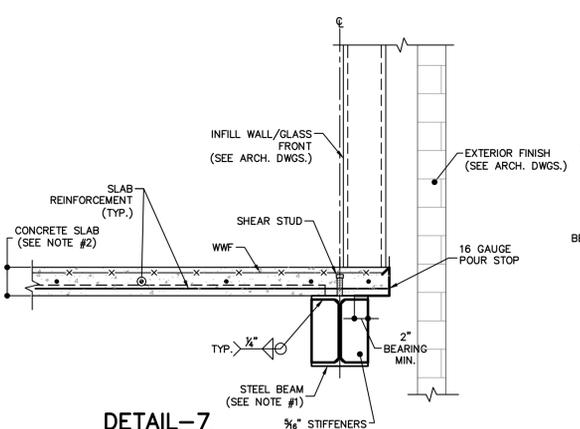
DETAIL-5
N.T.S.

NOTES:
1. SEE FLOOR PLAN FOR STEEL BEAM LOCATION AND SIZE.
2. SEE DRAWING S-201 FOR DECK AND SLAB DETAILS.



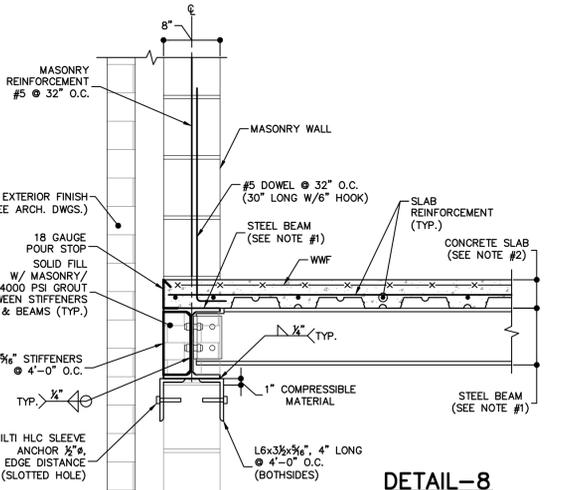
DETAIL-6
N.T.S.

NOTES:
1. SEE FLOOR PLAN FOR STEEL BEAM LOCATION AND SIZE.
2. SEE DRAWING S-201 FOR DECK AND SLAB DETAILS.
3. BRICK AND CONNECTION IS NOT SHOWN. SEE ARCHITECTURAL PLAN IF APPLICABLE.



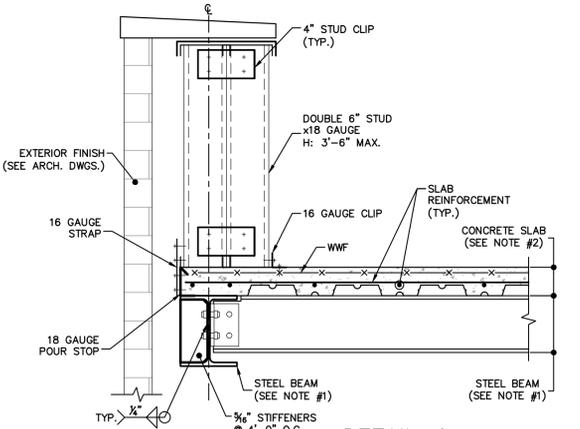
DETAIL-7
N.T.S.

NOTES:
1. SEE FLOOR PLAN FOR STEEL BEAM LOCATION AND SIZE.
2. SEE DRAWING S-201 FOR DECK AND SLAB DETAILS.
3. BRICK AND CONNECTION IS NOT SHOWN. SEE ARCHITECTURAL PLAN IF APPLICABLE.



DETAIL-8
N.T.S.

NOTES:
1. SEE FLOOR PLAN FOR STEEL BEAM LOCATION AND SIZE.
2. SEE DRAWING S-201 FOR DECK AND SLAB DETAILS.
3. BRICK AND CONNECTION IS NOT SHOWN. SEE ARCHITECTURAL PLAN IF APPLICABLE.



DETAIL-9
N.T.S.

NOTES:
1. SEE FLOOR PLAN FOR STEEL BEAM LOCATION AND SIZE.
2. SEE DRAWING S-201 FOR DECK AND SLAB DETAILS.
3. BRICK AND CONNECTION IS NOT SHOWN. SEE ARCHITECTURAL PLAN IF APPLICABLE.

THIS DRAWING IS AN INSTRUMENT OF SERVICE AND SHALL REMAIN THE PROPERTY OF AUFANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC, WHETHER THE PROJECT FOR WHICH IT IS MADE IS EXECUTED OR NOT. THIS DRAWING SHALL NOT BE USED BY THE OWNER OR OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT OR FOR COMPLETION OF THIS PROJECT BY OTHERS EXCEPT BY AGREEMENT IN WRITING WITH AUFANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC. SUBMISSION OR DISTRIBUTION TO MEET OFFICIAL REGULATORY REQUIREMENTS OR FOR OTHER PURPOSES IN CONNECTION WITH THE PROJECT IS NOT TO BE CONSTRUED AS PUBLICATION IN DEROGATION OF THE RIGHTS OF AUFANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC. REPRODUCTION OR PUBLICATION BY ANY METHOD IN WHOLE OR IN PART IS PROHIBITED. TITLE TO THIS DRAWING BELONGS TO AUFANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC, WITHOUT PREJUDICE.

05/12/13	ISSUED FOR CONSTRUCTION
03-06-13	ISSUED TO DOB FOR REVIEW AND COMMENT
12-07-12	EXTENDED ALT 2 FILING
11-14-12	SUPERCEDE FILING W/ DOB
DATE	REVISIONS

STRUCTURAL ENGINEER:
BROOKER ENGINEERING, PLLC
76 LAFAYETTE AVENUE, SUFFERN, NEW YORK 10901
Phone: (845) 357-4411 Fax: (845) 357-1896

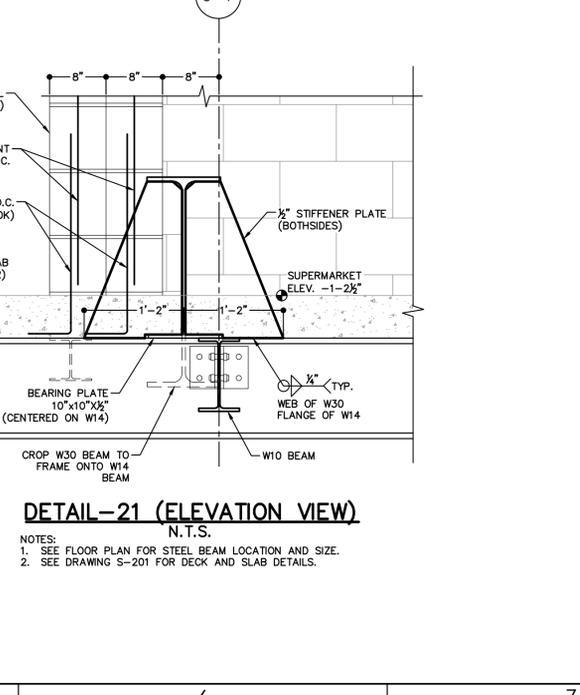
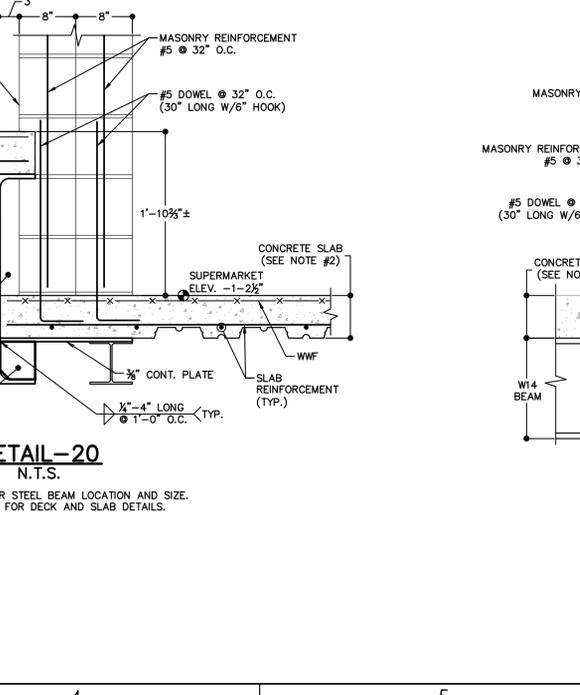
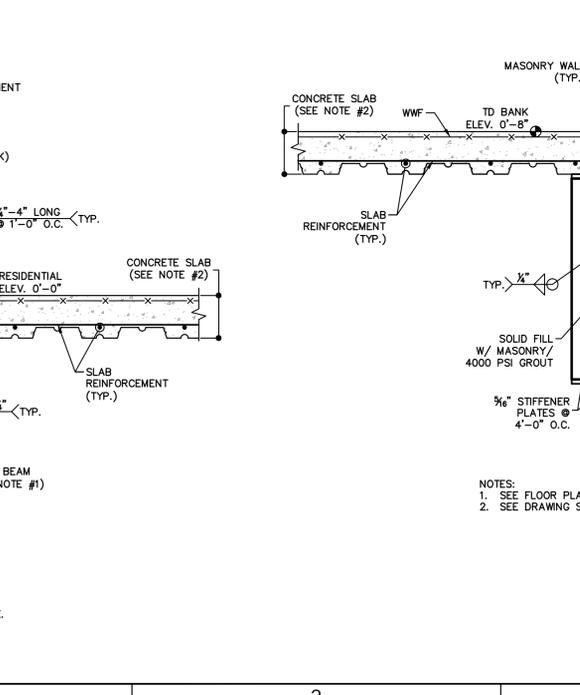
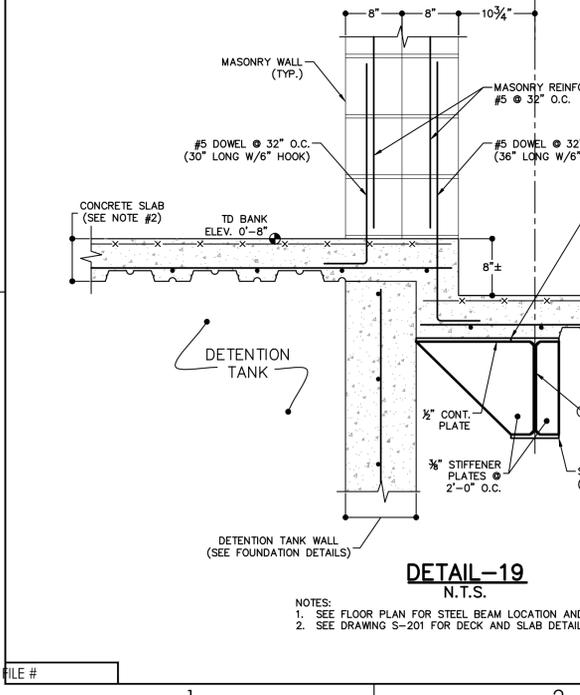
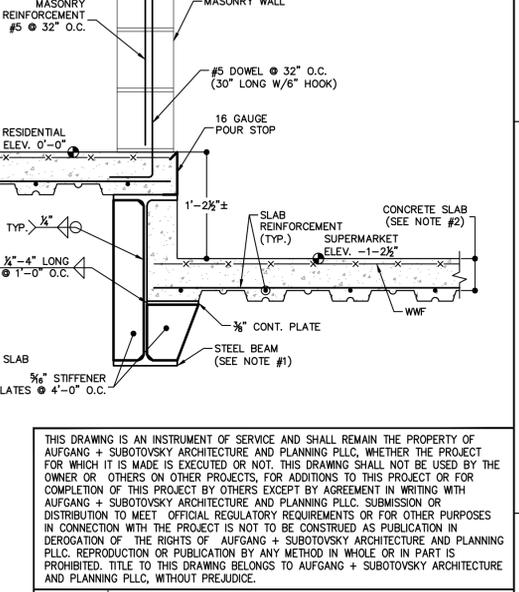
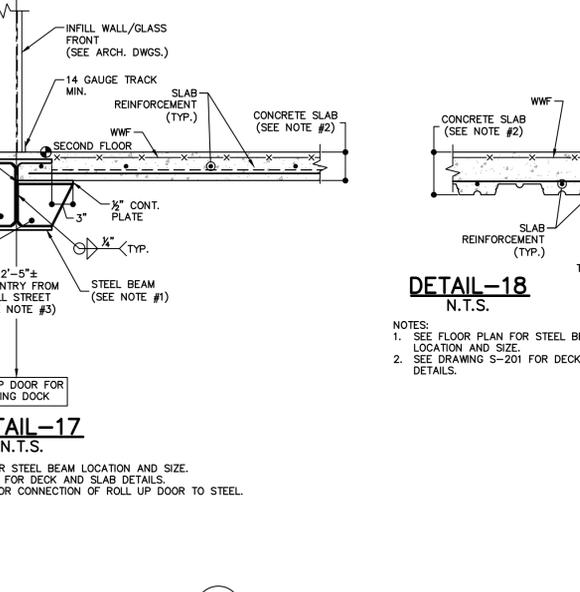
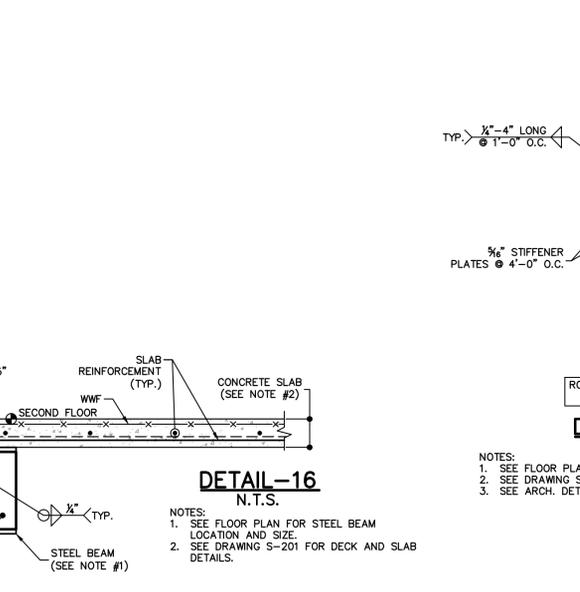
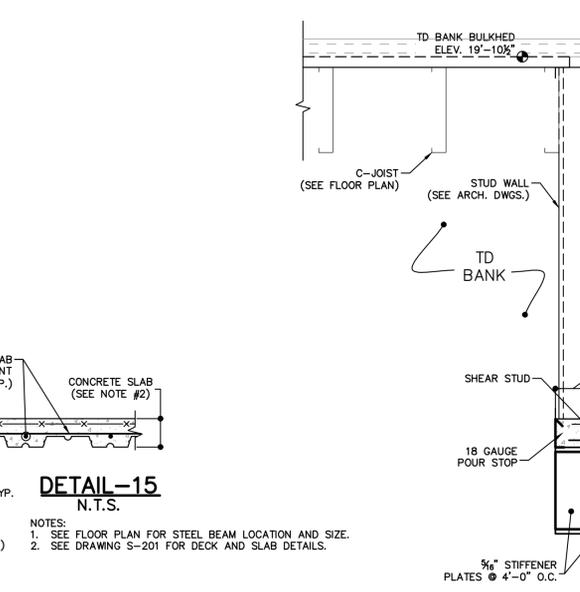
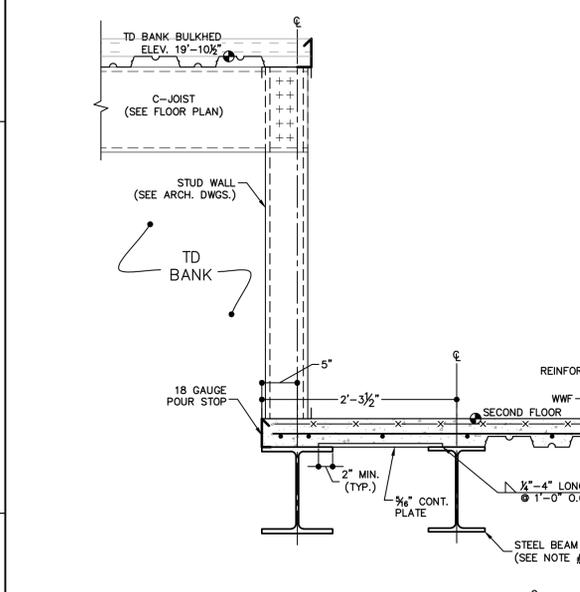
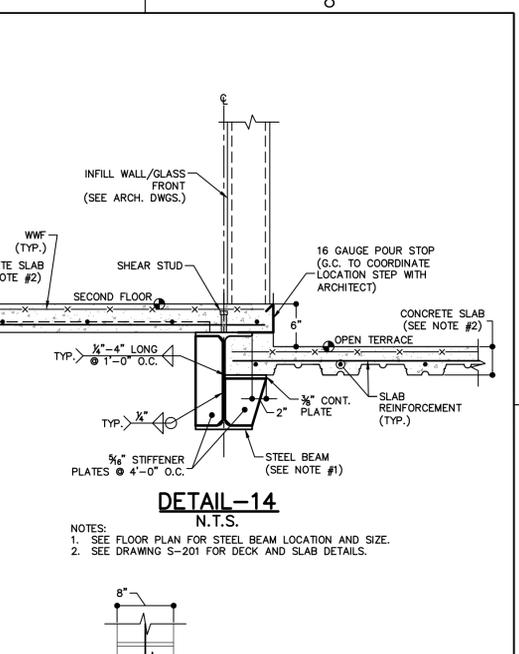
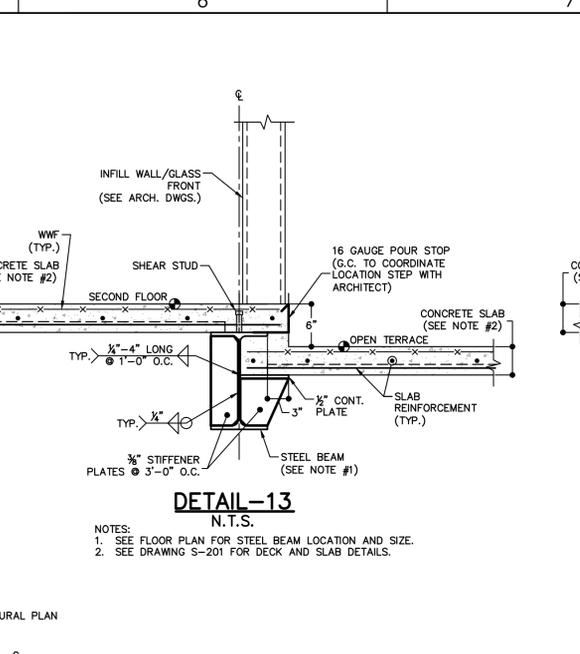
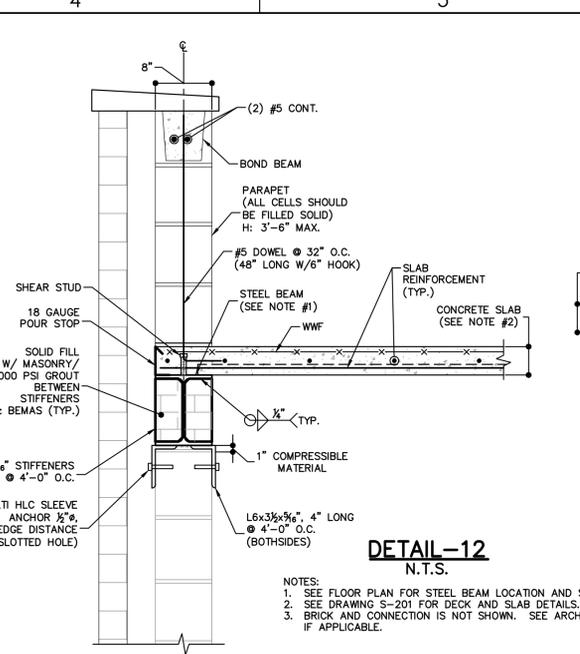
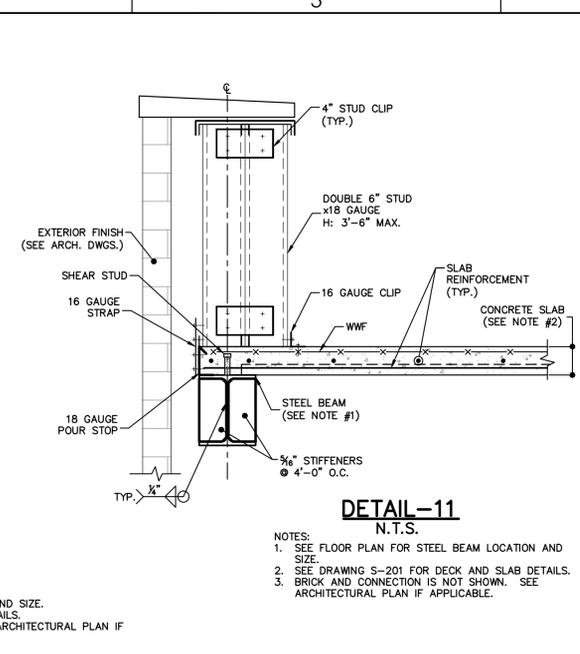
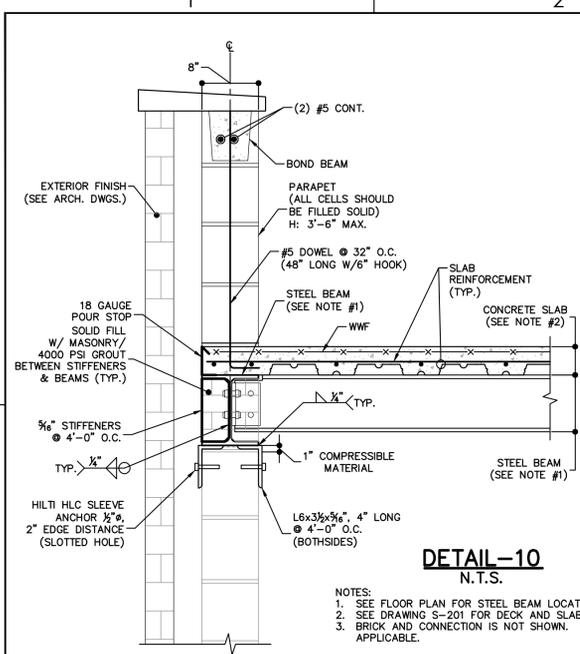
asap Aufgang + Subotovsky
Architecture and Planning
PLLC
49 North Airmont Road, Suffern, NY 10901 tel: 845.368.0004 fax: 800.772.8304
www.asaparchitecture.com

PROPOSED NEW DEVELOPMENT FOR:
490 MYRTLE AVENUE
490 MYRTLE AVE, BROOKLYN, NEW YORK 11205

STEEL DETAILS

DATE:	11-14-12
PROJECT NO:	12172
DRAWN BY:	SP
CHECKED BY:	DJ
DRAWING NO:	S-202.00
SCALE:	AS NOTED SHEET NO: 9 OF 12
NYC DOB NUMBER:	

BRIAN BROOKER P.E.
N.Y.S. Lic. No. 60229



THIS DRAWING IS AN INSTRUMENT OF SERVICE AND SHALL REMAIN THE PROPERTY OF AUFANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC, WHETHER THE PROJECT FOR WHICH IT IS MADE IS EXECUTED OR NOT. THIS DRAWING SHALL NOT BE USED BY THE OWNER OR OTHERS ON OTHER PROJECTS. FOR ADDITIONS TO THIS PROJECT OR FOR COMPLETION OF THIS PROJECT BY OTHERS EXCEPT BY AGREEMENT IN WRITING WITH AUFANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC, SUBMISSION OR DISTRIBUTION TO MEET OFFICIAL REGULATORY REQUIREMENTS OR FOR OTHER PURPOSES IN CONNECTION WITH THE PROJECT IS NOT TO BE CONSTRUED AS PUBLICATION IN DEROGATION OF THE RIGHTS OF AUFANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC. REPRODUCTION OR PUBLICATION BY ANY METHOD IN WHOLE OR IN PART IS PROHIBITED. TITLE TO THIS DRAWING BELONGS TO AUFANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC, WITHOUT PREJUDICE.

05/12/13	ISSUED FOR CONSTRUCTION
03-06-13	ISSUED TO DOB FOR REVIEW AND COMMENT
12-07-12	EXTENDED ALT 2 FILING
11-14-12	SUPERCEDDE FILING W/ DOB
DATE	REVISIONS

STRUCTURAL ENGINEER:
BROOKER ENGINEERING, PLLC
 76 LAFAYETTE AVENUE, SUFFERN, NEW YORK 10901
 Phone: (845) 357-4411 Fax: (845) 357-1896

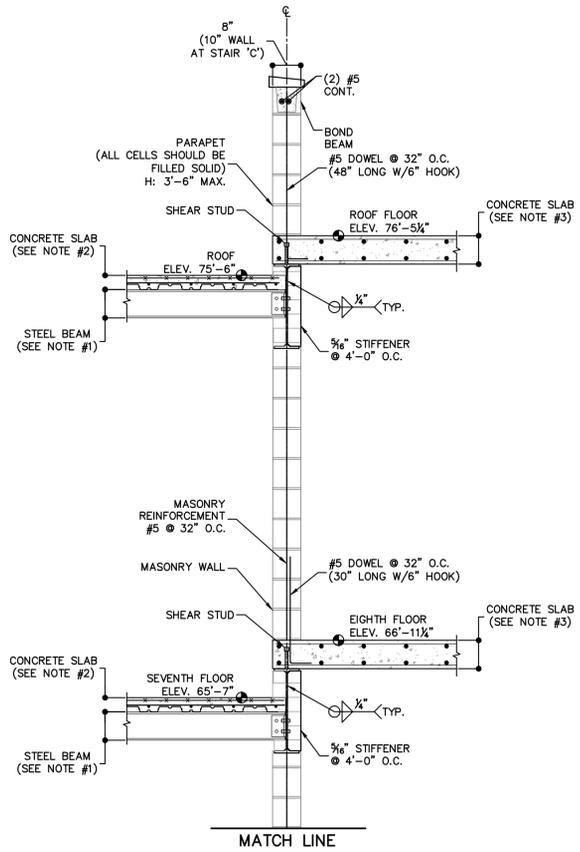
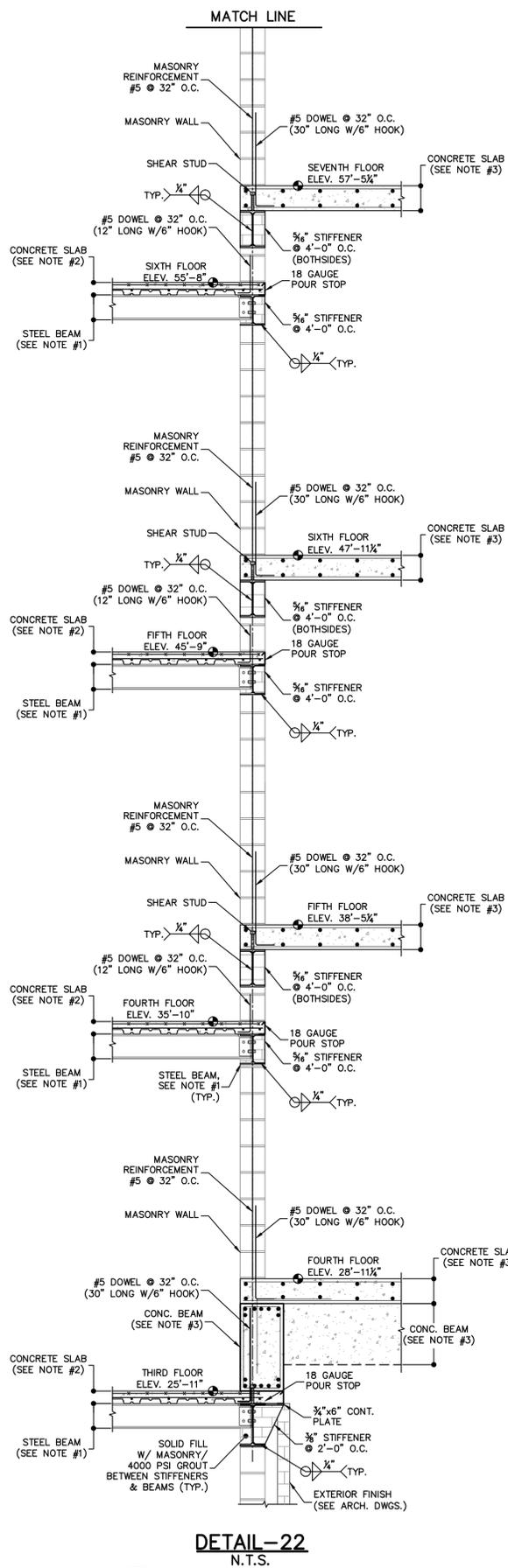
asap Aufgang + Subotovsky
 Architecture and Planning
 PLLC
 49 North Airmont Road, Suffern, NY 10901 tel: 845.368.0004 fax: 800.772.8304
 www.asaparchitecture.com

PROPOSED NEW DEVELOPMENT FOR:
490 MYRTLE AVENUE
 490 MYRTLE AVE, BROOKLYN, NEW YORK 11205

STEEL DETAILS

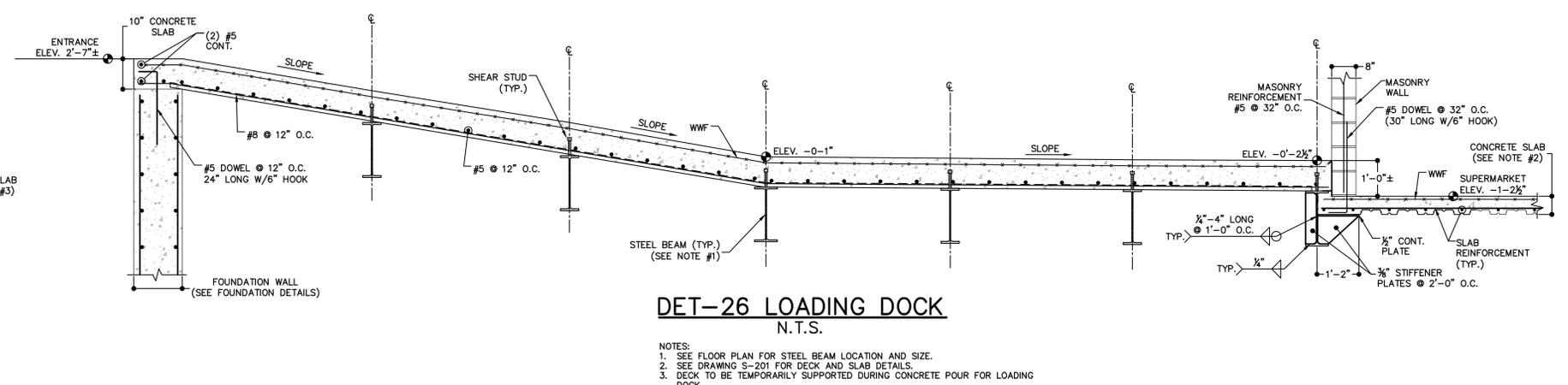
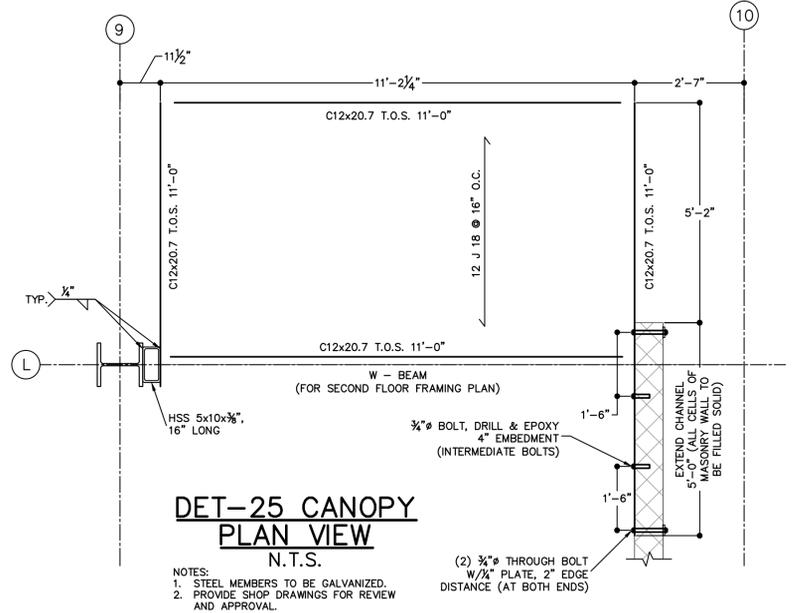
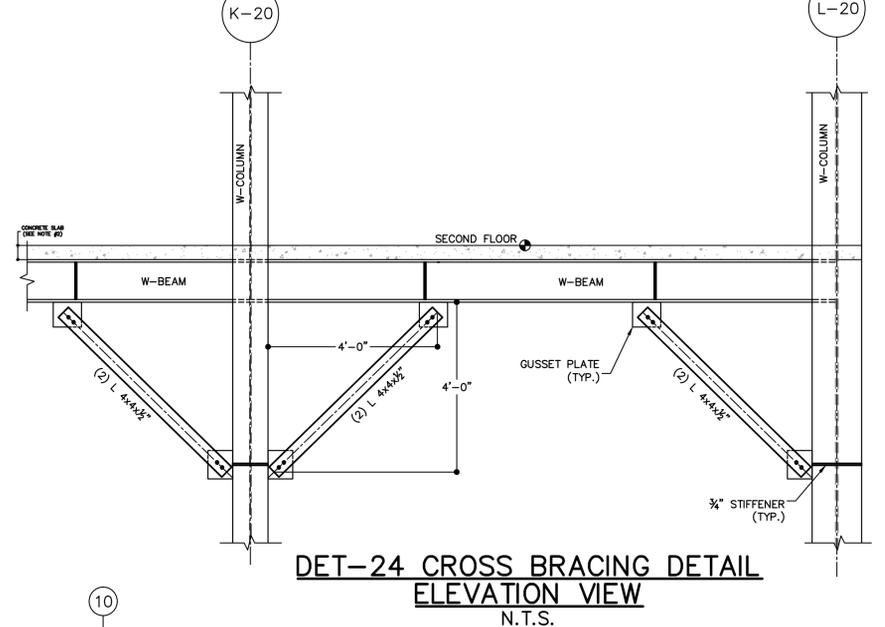
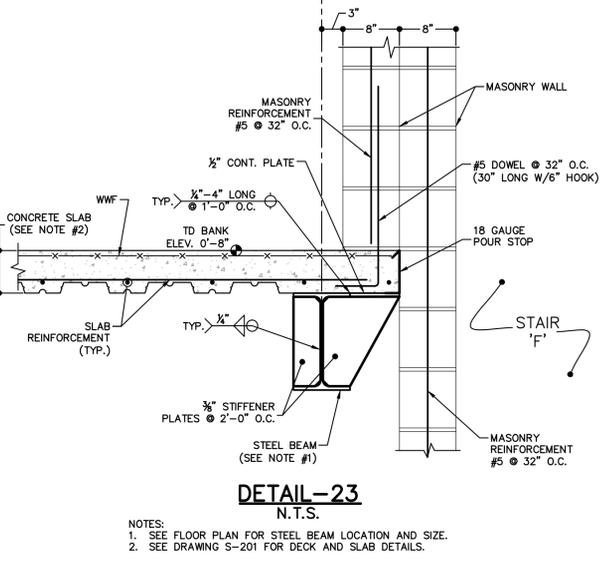
DATE:	11-14-12
PROJECT NO:	12172
DRAWN BY:	SP
CHECKED BY:	DJ
DRAWING NO:	S-203.00
SCALE:	AS NOTED SHEET NO: 10 OF 12
NYC DOB NUMBER:	

BRIAN BROOKER P.E.
 N.Y.S. Lic. No. 60229



CONSTRUCTION PROCEDURE FOR MASONRY WALL AT EAST PROPERTY LINE:

- BUILDING 'A' CONSTRUCTION WILL START PRIOR TO BUILDING 'B' CONSTRUCTION. THE WALL SEPARATING BUILDING 'A' & 'B' I.E. WALL ALONG GRIDLINE 20 FROM C TO L SHOULD BE CLOSED TEMPORARILY.
- MASONRY WALL ABOVE THIRD FLOOR OF BUILDING 'A' SHALL BE PROVIDED DURING CONSTRUCTION OF BUILDING 'B'.



THIS DRAWING IS AN INSTRUMENT OF SERVICE AND SHALL REMAIN THE PROPERTY OF AUFANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC, WHETHER THE PROJECT FOR WHICH IT IS MADE IS EXECUTED OR NOT. THIS DRAWING SHALL NOT BE USED BY THE OWNER OR OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT OR FOR COMPLETION OF THIS PROJECT BY OTHERS EXCEPT BY AGREEMENT IN WRITING WITH AUFANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC. SUBMISSION OR DISTRIBUTION TO MEET OFFICIAL REGULATORY REQUIREMENTS OR FOR OTHER PURPOSES IN CONNECTION WITH THE PROJECT IS NOT TO BE CONSTRUED AS PUBLICATION IN DEROGATION OF THE RIGHTS OF AUFANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC. REPRODUCTION OR PUBLICATION BY ANY METHOD IN WHOLE OR IN PART IS PROHIBITED. TITLE TO THIS DRAWING BELONGS TO AUFANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC, WITHOUT PREJUDICE.

05/12/13	ISSUED FOR CONSTRUCTION
03-06-13	ISSUED TO DOB FOR REVIEW AND COMMENT
12-07-12	EXTENDED ALT 2 FILING
11-14-12	SUPERCEDE FILING W/ DOB
DATE	REVISIONS

STRUCTURAL ENGINEER:
BROOKER ENGINEERING, PLLC
76 LAFAYETTE AVENUE, SUFFERN, NEW YORK 10901
Phone: (845) 357-4411 Fax: (845) 357-1896

asap Aufgang + Subotovsky
Architecture and Planning
PLLC
49 North Airmont Road, Suffern, NY 10901 tel: 845.368.0004 fax: 800.772.8304
www.asaparchitecture.com

PROPOSED NEW DEVELOPMENT FOR:
490 MYRTLE AVENUE
490 MYRTLE AVE, BROOKLYN, NEW YORK 11205

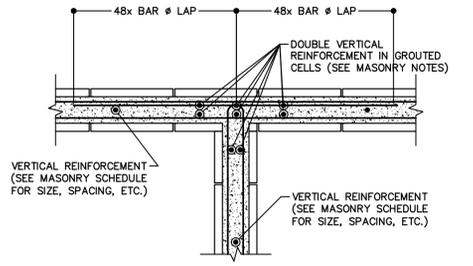
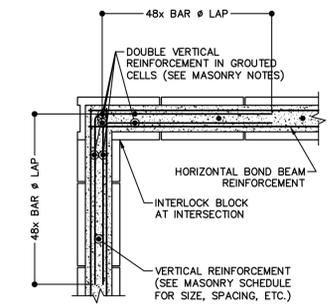
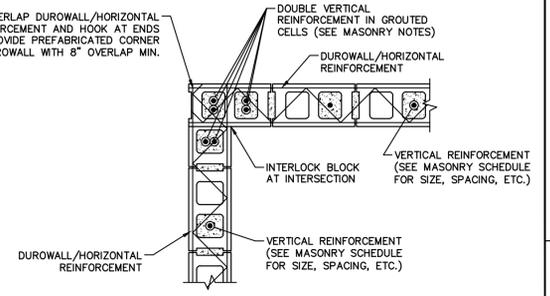
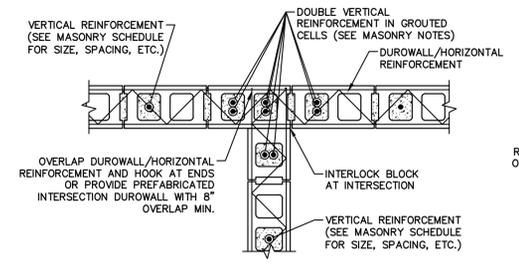
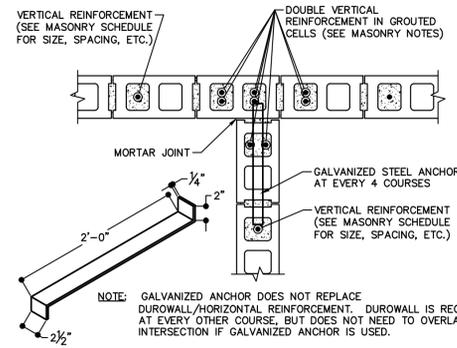
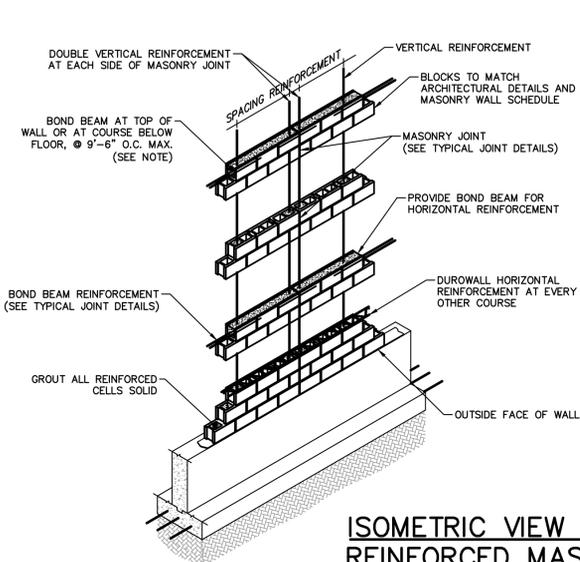
STEEL DETAILS	
DATE:	11-14-12
PROJECT NO:	12172
DRAWN BY:	SP
CHECKED BY:	DJ
DRAWING NO:	S-204.00
SCALE:	AS NOTED
SHEET NO:	11 OF 12
NYC DOB NUMBER:	



BRIAN BROOKER P.E.
N.Y.S. Lic. No. 60229

MASONRY WALL SCHEDULE

Fm		STAIR AND ELEVATOR	SW SOUTH & EAST WALL - SHEAR WALLS	WALL W1
4000 PSI BLOCK AND 4000 PSI GROUT	CELLAR TO ROOF/BULKHEAD	10" HOLLOW BLOCK V: #5 @ 32" O.C. (AT PARAPET ALL CELLS SHOULD BE FILLED SOLID)	10" HOLLOW BLOCK V: #5 @ 32" O.C. (AT PARAPET ALL CELLS SHOULD BE FILLED SOLID)	8" HOLLOW BLOCK V: #5 @ 32" O.C. (COMPACTOR CHUTE, CELLAR & FIRST FLOOR WALLS)



THIS DRAWING IS AN INSTRUMENT OF SERVICE AND SHALL REMAIN THE PROPERTY OF AUFGANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC, WHETHER THE PROJECT FOR WHICH IT IS MADE IS EXECUTED OR NOT. THIS DRAWING SHALL NOT BE USED BY THE OWNER OR OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT OR FOR COMPLETION OF THIS PROJECT BY OTHERS EXCEPT BY AGREEMENT IN WRITING WITH AUFGANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC. SUBMISSION OR DISTRIBUTION TO MEET OFFICIAL REGULATORY REQUIREMENTS OR FOR OTHER PURPOSES IN CONNECTION WITH THE PROJECT IS NOT TO BE CONSTRUED AS PUBLICATION IN DEROGATION OF THE RIGHTS OF AUFGANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC. REPRODUCTION OR PUBLICATION BY ANY METHOD IN WHOLE OR IN PART IS PROHIBITED. TITLE TO THIS DRAWING BELONGS TO AUFGANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC, WITHOUT PREJUDICE.

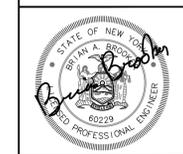
DATE	REVISIONS
05/12/13	ISSUED FOR CONSTRUCTION
03-06-13	ISSUED TO DOB FOR REVIEW AND COMMENT
12-07-12	EXTENDED ALT 2 FILING
11-14-12	SUPERCEDE FILING W/ DOB

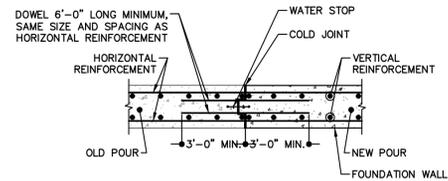
STRUCTURAL ENGINEER:
BROOKER ENGINEERING, PLLC
 76 LAFAYETTE AVENUE, SUFFERN, NEW YORK 10901
 Phone: (845) 357-4411 Fax: (845) 357-1896

asap **Aufgang + Subotovsky**
 Architecture and Planning PLLC
 49 North Airmont Road, Suffern, NY 10901 tel: 845.368.0004 fax: 800.772.8304
 www.asaparchitecture.com

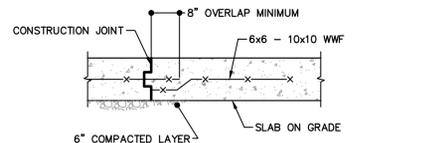
PROPOSED NEW DEVELOPMENT FOR:
490 MYRTLE AVENUE
 490 MYRTLE AVE, BROOKLYN, NEW YORK 11205

MASONRY DETAILS	
DATE:	11-14-12
PROJECT NO:	12172
DRAWN BY:	SP
CHECKED BY:	DJ
DRAWING NO:	S-301.00
BRIAN BROOKER P.E. N.Y.S. Lic. No. 60229	SCALE: AS NOTED SHEET NO: 12 OF 12 NYC DOB NUMBER:

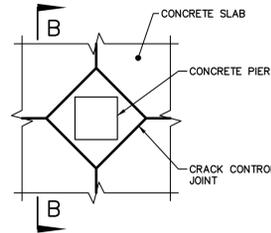




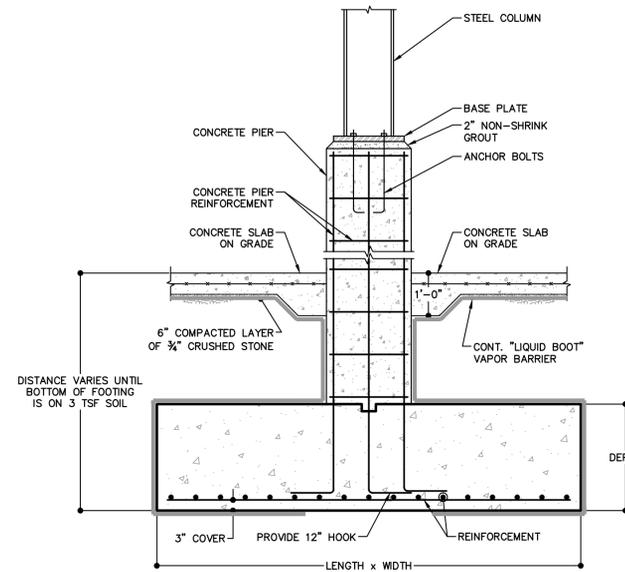
WALL CONSTRUCTION JOINT DETAIL
N.T.S.



SLAB ON GRADE CONSTRUCTION JOINT DETAIL
N.T.S.



CRACK CONTROL JOINT DETAIL
N.T.S.

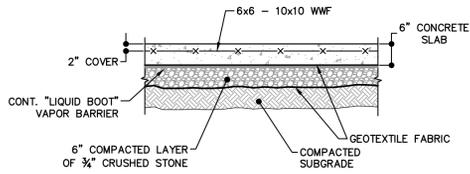


SPREAD FOOTING DETAIL
N.T.S.

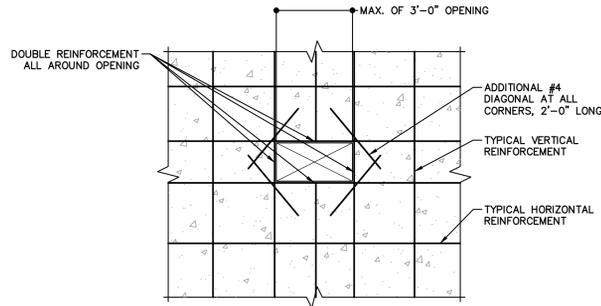
NOTE: SEE COLUMN SCHEDULE ON S-201 FOR COLUMN, BASE PLATE, PIER, AND ANCHOR BOLTS.

SPREAD FOOTING SCHEDULE

	LENGTH x WIDTH	DEPTH	REINFORCEMENT
F-1	5'-6" x 5'-6"	1'-2"	(7) #5 BAR EACH WAY
F-2	7'-0" x 7'-0"	1'-6"	(8) #6 BAR EACH WAY
F-2A	7'-0" x 7'-0"	2'-0"	(10) #6 BAR EACH WAY
F-3	8'-0" x 8'-0"	2'-0"	(11) #6 BAR EACH WAY
F-4	9'-0" x 9'-0"	2'-0"	(14) #6 BAR EACH WAY

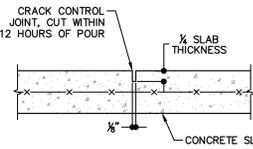


6" CONCRETE SLAB ON GRADE
N.T.S.

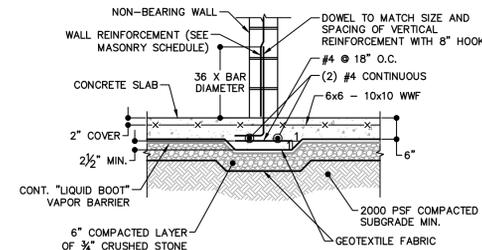


TYPICAL OPENING IN CONCRETE WALL DETAIL
N.T.S.

NOTE: SAW CUT CRACK CONTROL JOINT AT EACH COLUMN LINE TO EACH OTHER COLUMN LINE OR 20' O.C. MINIMUM.

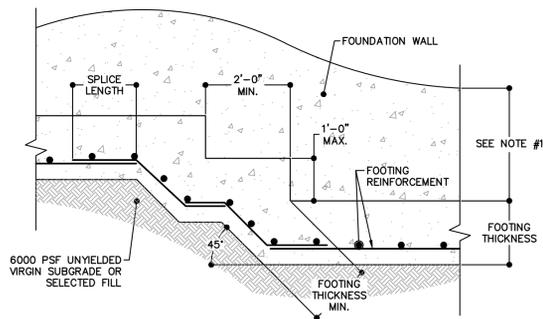


SECTION B-B
N.T.S.



HAUNCH SLAB UNDER NON-BEARING WALL
N.T.S.

NOTE: PROVIDE HAUNCH SLAB AT LOCATION WHERE FOOTING IS NOT SHOWN IN THE FOUNDATION PLAN, WHERE A NON-BEARING WALL IS PROPOSED.

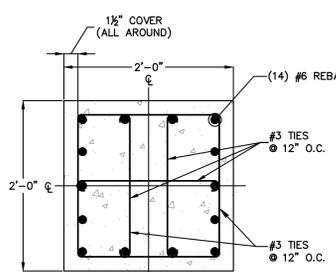


TYPICAL STEP FOOTING DETAIL
N.T.S.

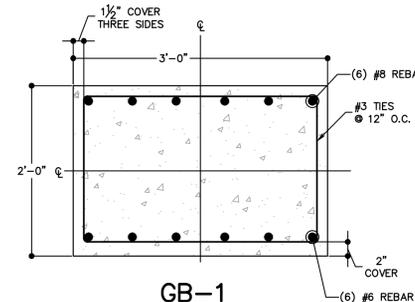
NOTES:
1. THE LOCATION OF THE STEPS ARE TO BE CONFIRMED IN THE FIELD BASED ON THE MINIMUM 4'-0" OF FROST PROTECTION AND UNDISTURBED SUBGRADE BENEATH.
2. SEE THE GEOTECHNICAL REPORT FOR REQUIREMENTS OF SELECTED FILL.

SPLICE LENGTH IN TENSION

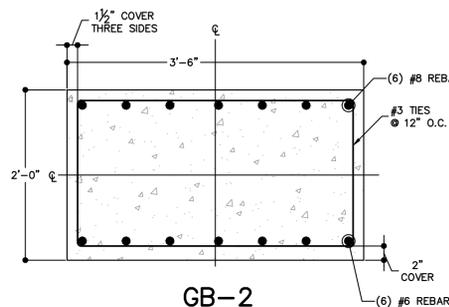
BAR SIZE	MIN. SPLICE
#3	1'-3"
#4	1'-7"
#5	2'-0"
#6	2'-5"
#7	3'-6"
#8	4'-0"
#9	4'-6"
#10	5'-0"



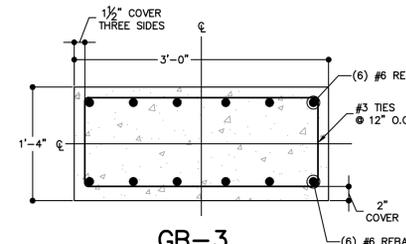
P-1 CONCRETE PIER
N.T.S.



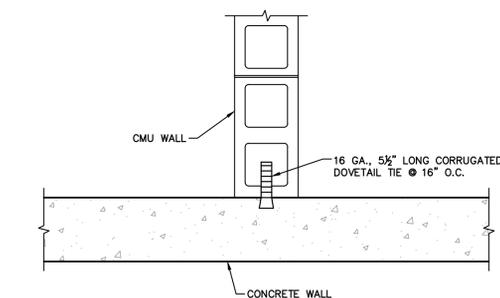
GB-1 GRADE BEAM
N.T.S.



GB-2 GRADE BEAM
N.T.S.

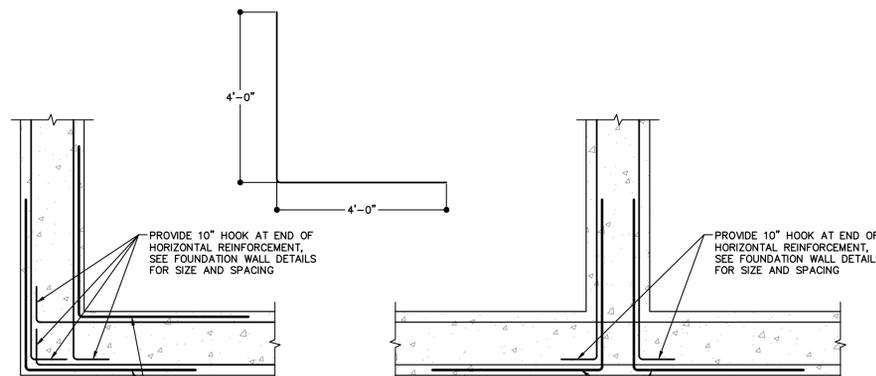


GB-3 GRADE BEAM
N.T.S.



TYPICAL CONCRETE TO CMU CONNECTION DETAIL
N.T.S.

NOTES:
1. THE CMU AND CONCRETE WALL REINFORCEMENT IS NOT SHOWN FOR CLARITY.
2. THE CORRUGATED DOVETAIL TIE SHALL BE PROVIDED WHEREVER A CMU WALL IS ADJACENT (PARALLEL OR PERPENDICULAR) TO A CONCRETE WALL.



TYPICAL CORNER REINFORCING DETAIL
N.T.S.

THIS DRAWING IS AN INSTRUMENT OF SERVICE AND SHALL REMAIN THE PROPERTY OF AUFANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC. WHETHER THE PROJECT FOR WHICH IT IS MADE IS EXECUTED OR NOT. THIS DRAWING SHALL NOT BE USED BY THE OWNER OR OTHERS ON OTHER PROJECTS. FOR ADDITIONS TO THIS PROJECT OR FOR COMPLETION OF THIS PROJECT BY OTHERS EXCEPT BY AGREEMENT IN WRITING WITH AUFANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC. SUBMISSION OF THIS DRAWING IN CONNECTION WITH THE PROJECT IS NOT TO BE CONSTRUED AS PUBLICATION IN DEROGATION OF THE RIGHTS OF AUFANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC. REPRODUCTION OR PUBLICATION BY ANY METHOD IN WHOLE OR IN PART IS PROHIBITED. TITLE TO THIS DRAWING BELONGS TO AUFANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC, WITHOUT PREJUDICE.

DATE	REVISIONS
03-06-13	ISSUED TO DOB FOR REVIEW AND COMMENT
12-07-12	EXTENDED ALT 2 FILING
11-14-12	SUPERCEDE FILING W/ DOB

STRUCTURAL ENGINEER:
BROOKER ENGINEERING, PLLC
76 LAFAYETTE AVENUE, SUFFERN, NEW YORK 10901
Phone: (845) 357-4411 Fax: (845) 357-1896

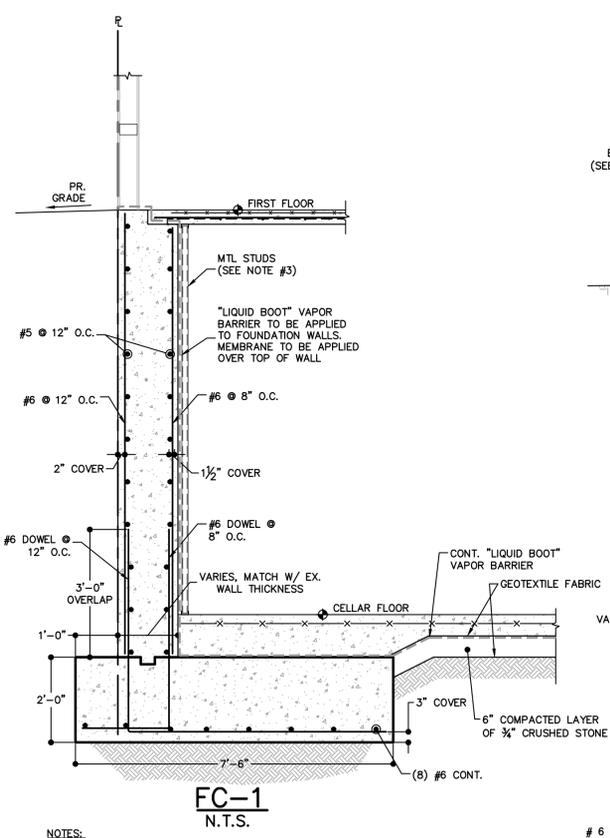
asap Aufgang + Subotovsky
Architecture and Planning
PLLC

49 North Airmont Road, Suffern, NY 10901 tel: 845.368.0004 fax: 800.772.8304
www.asaparchitecture.com

PROPOSED NEW DEVELOPMENT FOR:
490 MYRTLE AVENUE
490 MYRTLE AVE, BROOKLYN, NEW YORK 11205

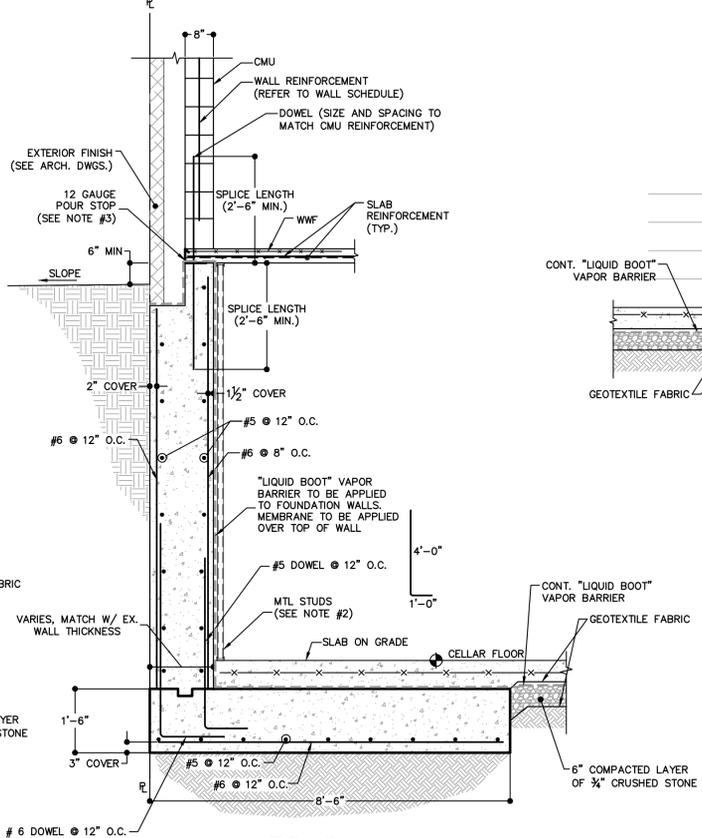
FOUNDATION DETAILS

DATE:	11-14-12
PROJECT NO:	12172
DRAWN BY:	SP
CHECKED BY:	DJ
DRAWING NO:	FO-101.00
BRIAN BROOKER P.E. N.Y.S. Lic. No. 60229	SCALE: AS NOTED SHEET NO: 2 of 4 NYC DOB NUMBER:



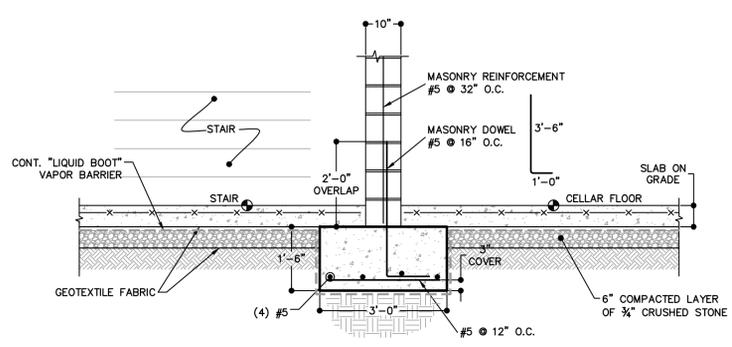
FC-1
N.T.S.

NOTES:
 1. IT MAY BE NECESSARY TO EXTEND FOUNDATION WALL BELOW CELLAR SLAB ELEVATION IF ADEQUATE SUBGRADE MATERIAL IS NOT ENCOUNTERED IMMEDIATELY BENEATH BOTTOM OF FOOTING.
 2. PIER REINFORCEMENT IS NOT SHOWN FOR CLARITY.
 3. PROVIDE 1/2" HIGH IMPACT RESISTANT CEMENT BOARD OVER 1-1/2" MTL STUDS @ 16" O.C. OVER 1" RIGID INSULATION BOARD.



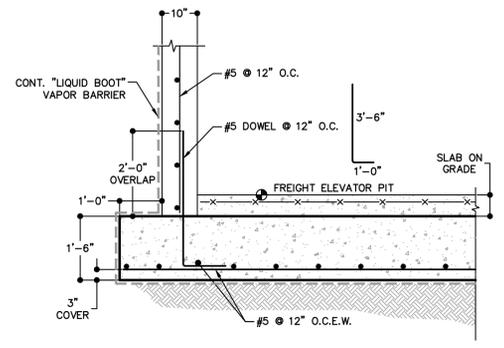
FC-2
N.T.S.

NOTES:
 1. IT MAY BE NECESSARY TO EXTEND FOUNDATION WALL BELOW CELLAR SLAB ELEVATION IF ADEQUATE SUBGRADE MATERIAL IS NOT ENCOUNTERED IMMEDIATELY BENEATH BOTTOM OF FOOTING.
 2. PROVIDE 1/2" HIGH IMPACT RESISTANT CEMENT BOARD OVER 1-1/2" MTL STUDS @ 16" O.C. OVER 1" RIGID INSULATION BOARD.



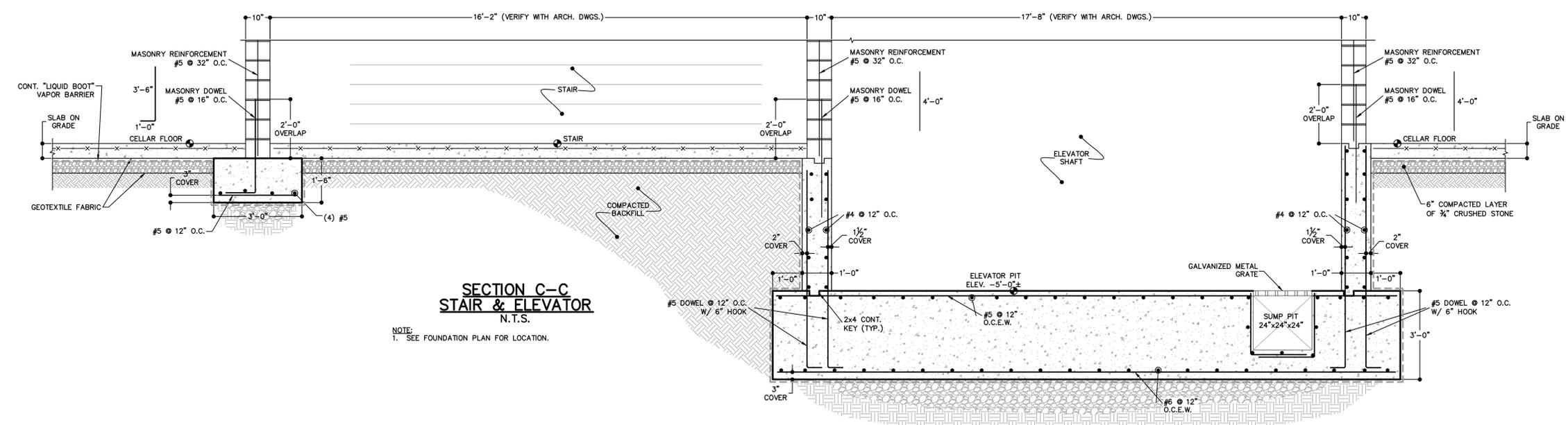
FC-3
N.T.S.

NOTE:
 1. IT MAY BE NECESSARY TO EXTEND FOUNDATION WALL BELOW CELLAR SLAB ELEVATION IF ADEQUATE SUBGRADE MATERIAL IS NOT ENCOUNTERED IMMEDIATELY BENEATH BOTTOM OF FOOTING.



FC-4
N.T.S.

NOTE:
 1. IT MAY BE NECESSARY TO EXTEND FOUNDATION WALL BELOW CELLAR SLAB ELEVATION IF ADEQUATE SUBGRADE MATERIAL IS NOT ENCOUNTERED IMMEDIATELY BENEATH BOTTOM OF FOOTING.



SECTION C-C
STAIR & ELEVATOR
N.T.S.

NOTE:
 1. SEE FOUNDATION PLAN FOR LOCATION.

THIS DRAWING IS AN INSTRUMENT OF SERVICE AND SHALL REMAIN THE PROPERTY OF AUFANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC. WHETHER THE PROJECT FOR WHICH IT IS MADE IS EXECUTED OR NOT. THIS DRAWING SHALL NOT BE USED BY THE OWNER OR OTHERS ON OTHER PROJECTS, FOR ADDITIONS TO THIS PROJECT OR FOR COMPLETION OF THIS PROJECT BY OTHERS EXCEPT BY AGREEMENT IN WRITING WITH AUFANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC. SUBMISSION OR DISTRIBUTION TO MEET OFFICIAL REGULATORY REQUIREMENTS OR FOR OTHER PURPOSES IN CONNECTION WITH THE PROJECT IS NOT TO BE CONSTRUED AS PUBLICATION IN DEROGATION OF THE RIGHTS OF AUFANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC. REPRODUCTION OR PUBLICATION BY ANY METHOD IN WHOLE OR IN PART IS PROHIBITED. TITLE TO THIS DRAWING BELONGS TO AUFANG + SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC, WITHOUT PREJUDICE.

DATE	REVISIONS
03-06-13	ISSUED TO DOB FOR REVIEW AND COMMENT
12-07-12	EXTENDED ALT 2 FILING
11-14-12	SUPERCEDE FILING W/ DOB

STRUCTURAL ENGINEER:
BROOKER ENGINEERING, PLLC
 76 LAFAYETTE AVENUE, SUFFERN, NEW YORK 10901
 Phone: (845) 357-4411 Fax: (845) 357-1896

asap Aufgang + Subotovsky
 Architecture and Planning
 PLLC
 49 North Airmont Road, Suffern, NY 10901 tel: 845.368.0004 fax: 800.772.8304
 www.asaparchitecture.com

PROPOSED NEW DEVELOPMENT FOR:
490 MYRTLE AVENUE
 490 MYRTLE AVE, BROOKLYN, NEW YORK 11205

FOUNDATION DETAILS

DATE:	11-14-12
PROJECT NO:	12172
DRAWN BY:	SP
CHECKED BY:	DJ
DRAWING NO:	FO-102.00

BRIAN BROOKER P.E.
 N.Y.S. Lic. No. 60229
 SCALE: AS NOTED SHEET NO: 3 of 4
 NYC DOB NUMBER:

Addendum 5
Signage



NYC Brownfield Cleanup Program

This property is enrolled in the New York City Brownfield Cleanup Program for environmental remediation. This is a voluntary program administered by the NYC Office of Environmental Remediation.

For more information, log on to:
www.nyc.gov/oer



If you have questions or would like more information, please contact:

Jennifer Pati at (212) 341-2034
or email us at brownfields@cityhall.nyc.gov

490 - 504 Myrtle Avenue Site
Site #: 13CVCP109M

Addendum 6
Fact Sheet - BIG Program Insurance Requirements

FACT SHEET – BIG PROGRAM INSURANCE REQUIREMENTS

Investigation Grants – for a developer or site owner to be eligible for a BIG investigation grant, its environmental consultant(s) must be:

- a Qualified Vendor in the BIG Program; and
- maintain Professional Liability (PL) insurance of \$1M per claim and annual aggregate.

Cleanup Grants – for a developer or site owner to be eligible for a BIG cleanup grant:

- Its general contractor or excavation/foundation contractor hired to perform remedial work must maintain:
 - a. Commercial General Liability(CGL) insurance of at least \$1M per occurrence and \$2M in the general aggregate; and
 - b. Contractors Pollution Liability (CPL) insurance of at least \$1M per occurrence.

Both policies must list the city, EDC and BRS as additional insureds, include completed operations coverage and be primary and non-contributory to any other insurance the additional insureds may have.

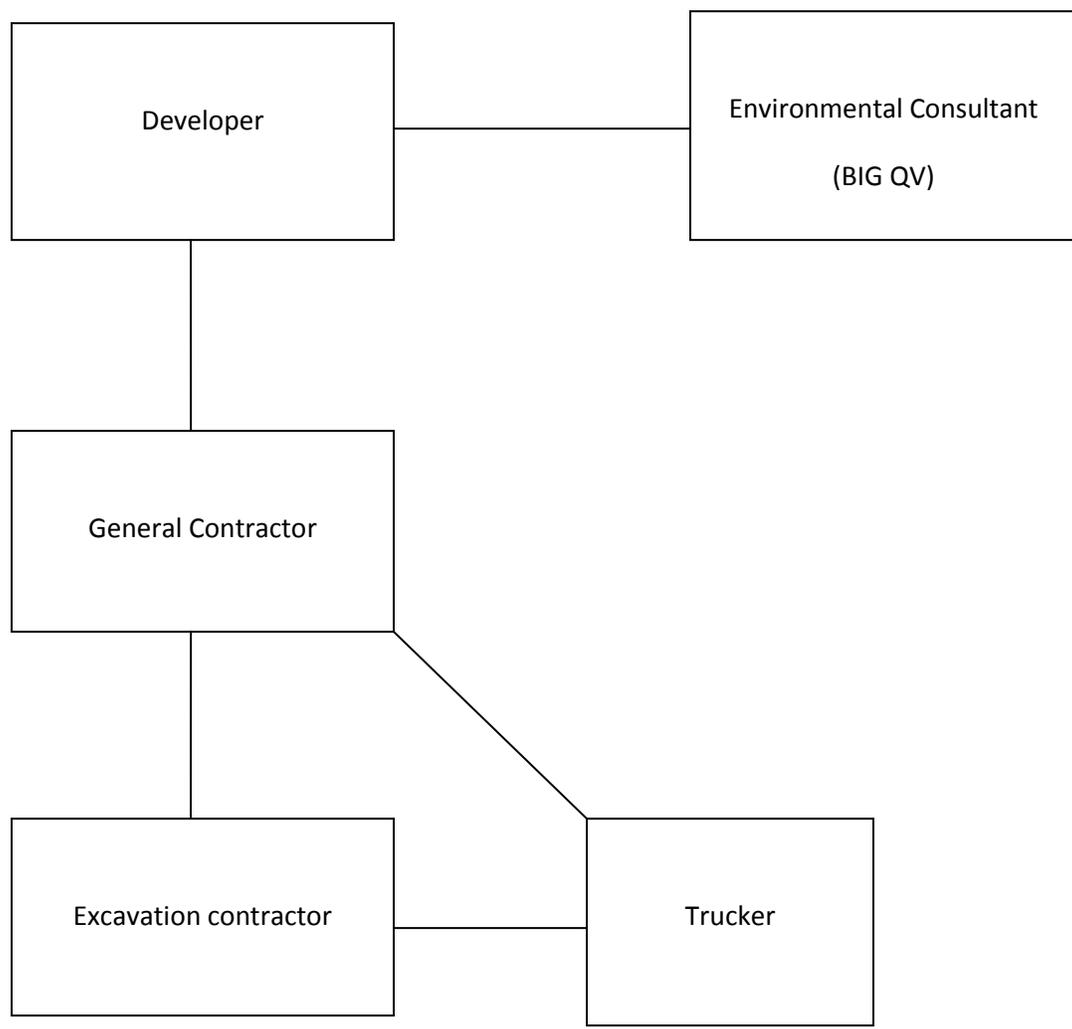
- Its subcontractors who are hired by the general contractor etc. to perform remedial work at a site, including soil brokers and truckers, must also maintain CGL and CPL policies in the amount and with the terms set forth above; and
- Its environmental consultant(s) hired to oversee the cleanup must be:
 - a. a BIG Qualified Vendor; and
 - b. maintain Professional Liability (PL) insurance of \$1M per claim and annual aggregate.

If, in the alternative, the developer hires its environmental consultant to perform the cleanup, the environmental consultant must maintain CGL and CPL insurance in the amount and with the terms set forth above.

A schematic presenting the contractual relationships described above appears on page 2. Parties who must be named as Additional Insureds on Cleanup Grant insurance policies (CGL and CPL) are presented on page 3.

Example of Contractual Relationships for Cleanup Work

The Office of Environmental Remediation’s Voluntary Cleanup Plan program requires applicants to identify the parties who are engaged in active remediation of their sites including: the General Contractor hired to remediate and/or the excavation contractor hired to excavate soil from the site and the trucking firm(s) that remove soil from the site for disposal at approved facilit(ies).



The chart above shows contractual relationships that typically exist for projects that are enrolled in the Voluntary Cleanup Program.

BIG Program Additional Insureds

The full names and addresses of the additional insureds required under the Required CGL and Required CPL Policies are as follows:

“City and its officials and employees”
New York City Mayor’s Office of Environmental Remediation
253 Broadway, 14th Floor
New York, NY 10007

“NYC EDC and its officials and employees”
New York City Economic Development Corporation
110 William Street
New York, NY 10038

“BIG Grant Administrator and its officials and employees”
Brownfield Redevelopment Solutions, Inc.
739 Stokes Road, Units A & B
Medford, NJ 08055

Addendum 7

Revised RA Stamped Project Description letter for Site A

June 3, 2013

Re: 490 Myrtle Avenue, Brooklyn, New York
Project Description

To Whom It May Concern:

We are the Architect for the proposed project listed above.

490 Myrtle Avenue is a 93,820 sq. ft. mixed-use building with 93 apartments and ground floor commercial space. It is seven (7) stories tall. There will be a full Cellar at this site containing service rooms and storage spaces set at elevation 43.82 ft. which is 10 ft. below the 1st Floor elevation of 53.82 ft.

Two elevator pits with a depth of 5 ft. will be required for the building. Cellar slab construction will consist of the following: 6" concrete slab over 6" of gravel fill for a total excavation depth of 11'-0" below the 1st Floor slab.

Parking will be provided for the building located on the adjacent lot at 504 Myrtle Avenue.

Very truly yours



AUFGANG SUBOTOVSKY ARCHITECTURE AND PLANNING PLLC
Ariel Aufgang, AIA, Principal

AA:cet

Addendum 8
Signed and Stamped RAWP Certification Page

CERTIFICATION

I, Shaik A. Saad, am a Professional Engineer licensed in the State of New York. I have primary direct responsibility for implementation of the remedial action for the 490 Myrtle Avenue Site and 504 Myrtle Avenue Site (OER E-Designation # 11EH-N012K and VCP Site No. 13CVCP109K and 13CVCP110K).

I, Mark E. Robbins am a Qualified Environmental Professional as defined in §43-140. I have primary direct responsibility for implementation of the remedial action for the 490 Myrtle Avenue Site and 504 Myrtle Avenue Site (OER E-Designation # 11EH-N012K and VCP Site No. 13CVCP109K and 13CVCP110K).

I certify that this Remedial Action Work Plan (RAWP) has a plan for handling, transport and disposal of soil, fill, fluids and other materials removed from the property in accordance with applicable City, State and Federal laws and regulations. Importation of all soil, fill and other material from off-Site will be in accordance with all applicable City, State and Federal laws and requirements. This RAWP has provisions to control nuisances during the remediation and all invasive work, including dust and odor suppression.

Shaik A. Saad

Name

071078

NYS PE License Number

Signature

Date

Mark E. Robbins

QEP Name

QEP Signature

Date

