

35 TECHNOLOGY DRIVE WARREN, NJ 07059 908.668.7777 FAX 908.754.5936 www.whitestoneassoc.com

SOIL VAPOR INTRUSION WORKPLAN

RIVER PLAZA SHOPPING CENTER
PROPOSED JAPANESE RESTAURANT
124-134 WILDEY STREET, SPACE NO. 7
SECTION 01, TAX SHEET 2, LOTS P-25 AND P-25B
TARRYTOWN, WESTCHESTER COUNTY, NEW YORK
NYSDEC SITE ID NO.: 360084

Submitted to:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION Division of Environmental Remediation, Region 3 21 South Putt Corners Road New Paltz, New York 12561-1620

and

NEW YORK STATE DEPARTMENT OF HEALTH Bureau of Environmental Exposure Investigation Flanigan Square 547 River Street Troy, New York 12180

Prepared for:

ACADIA TARRYTOWN, LLC 1311 Mamaroneck Avenue, Suite 260 White Plains, New York 10605

Prepared by:

WHITESTONE ASSOCIATES, INC. 35 Technology Drive Warren, New Jersey 07059

Christopher Seib

Director, Environmental Division

Keith T. D'Ambrosio, P.E. Principal, Environmental Services

Professional Engineer License No. 076095

Whitestone Project No.: EJ0810744.006

September 29, 2011

Other Office Locations:

■ STERLING, VA 703.464.5858 EVERGREEN, CO 303.670.6905



35 TECHNOLOGY DRIVE WARREN, NJ 07059 908.668.7777 FAX 908.754.5936 www.whitestoneassoc.com

September 29, 2011

via email and FedEx

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Protection, Region 3 21 South Putt Corners Road New Paltz, New York 12561-1620

Attention:

Ms. Janet Brown, Case Manager

and

NEW YORK STATE DEPARTMENT OF HEALTH

Bureau of Environmental Exposure Investigation Flanigan Square 547 River Street Troy, New York 12180

Attention:

Mr. Nate Walz, Project Manager

Regarding:

SOIL VAPOR INTRUSION WORKPLAN RIVER PLAZA SHOPPING CENTER PROPOSED JAPANESE RESTAURANT 124-134 WILDEY STREET, SPACE NO. 7

SECTION 01, TAX SHEET 2, LOTS P-25 AND P-25B TARRYTOWN, WESTCHESTER COUNTY, NEW YORK

NYSDEC SITE ID NO.: 360084

WHITESTONE PROJECT NO.: EJ0810744.006

Dear Ms. Brown and Mr. Walz:

Whitestone Associates, Inc. (Whitestone) is pleased to submit for your review the attached *Soil Vapor Intrusion Workplan* (SVIW) for the above-referenced site. This SVIW has been prepared to address the New York State Department of Environmental Conservation's (NYSDEC's) and New York State Department of Health's (NYSDOH's) comments pertaining to the Departments' review of the building permit application and plans for the proposed Japanese Restaurant at the site as required by the property's Environmental Easement. The NYSDEC's and NYSDOH's comments were provided to Whitestone in an August 23, 2011 letter correspondence. Specifically, the NYSDEC/NYSDOH had concerns associated with the restaurant's impact on SVI within the restaurant space.



NYSDEC/NYSDOH
Soil Vapor Intrusion Workplan
River Plaza Shopping Center
124-134 Wildey Street, Space No 7
Lots P-25 and P-25B
Tarrytown, New York
September 29, 2011
Page 2

Please contact us at (908) 668-7777 with any questions or comments regarding the enclosed report.

Sincerely,

WHITESTONE ASSOCIATES, INC.

Christopher Seib

Director, Environmental Division

Keith T. D'Ambrosio, P.E. Principal, Environmental Service

Professional Engineer License No. 076095

CS/amz Enclosures

L:\Job Folders\2008\0810744EJ\0810744.006\10744SoilVaporIntrusion-Tarrytown.wpd

Enclosure Copy:

Guy Saccento, Acadia Tarrytown, LLC Timothy Collier, Acadia Tarrytown, LLC Jing Zheng, Applicant Representative Donato R Penella, P.E., Tarrytown

SOIL VAPOR INTRUSION WORKPLAN

River Plaza Shopping Center Proposed Japanese Restaurant 124-134 Wildey Street, Space No. 7 Tarrytown, Westchester County, New York

TABLE OF CONTENTS

1.0	EXE	CUTIVE SUMMARY	1
2.0	INTR	ODUCTION	2
	2.1	Site Location/Description	2
		2.1.1 Location	2
		2.1.2 Existing Structures/Improvements and Current Site Use	2
		2.1.3 Proposed Site Use (Space No. 7)	2
		2.1.4 Proposed Exhaust/Air Intake (Space No. 7)	2
	2.2	Previous SVI Investigations	3
		2.2.1 Initial Sub-Slab, Soil Gas, and Indoor Air Quality Sampling	3
		2.2.2 Communication Testing	5
		2.2.3 SSDS Installation	5
		2.2.4 Post-Installation Communication Testing	6
		2.2.5 Post-Mitigation Indoor Air Quality Sampling	7
	2.3	Objective	7
3.0	SVI I	NVESTIGATIONS	8
	3.1	Permanent Monitoring Point Installation	8
	3.2	Communication Testing	8
	3.3	Indoor Air Sampling (if required)	8
	3.4	Reporting	9
	3.5	Schedule	9
4.0	SVI	CORRECTIVE ACTIONS	10
	4.1	Sub-Slab Depressurization System	10
	4.2	Sealing Penetrations	10
	4.3	Reporting	10
	4.4	Schedule	10

SOIL VAPOR INTRUSION WORKPLAN River Plaza Shopping Center Proposed Japanese Restaurant 124-134 Wildey Street, Space No. 7 Tarrytown, Westchester County, New York

TABLE OF CONTENTS

FIGURES

FIGURE 1	Site Plan
FIGURE 2	Proposed SSDS/Intake/Exhaust Location Plan
FIGURE 3	Proposed SSDS Design Plan

APPENDICES

APPENDIX 1 NYSDEC/NYSDOH August 23, 2011 Letter APPENDIX 2 Proposed Restaurant Plans

SECTION 1.0 Executive Summary

Whitestone Associates, Inc. (Whitestone) was retained by Acadia Tarrytown, LLC (Acadia) on behalf of Osaka Japanese Steak & Sushi Bar, Inc. to prepare this *Soil Vapor Intrusion Workplan* (SVIW) to outline supplemental soil vapor intrusion (SVI) investigations and corrective actions (if necessary) to be conducted in association with the Japanese Restaurant proposed at the River Plaza Shopping Center site located at 124-134 Wildey Street (Space No. 7) in Tarrytown, Westchester County, New York. This SVIW has been prepared to address the New York State Department of Environmental Conservation's (NYSDEC's) and New York State Department of Health's (NYSDOH's) comments pertaining to the Departments' review of the building permit application and plans for the proposed Japanese Restaurant at the site as required by the property's Environmental Easement. The NYSDEC's and NYSDOH's comments were provided to Whitestone in an August 23, 2011 letter correspondence. Specifically, the NYSDEC/NYSDOH had concerns associated with the restaurant's impact on SVI within the restaurant space. The investigative activities are outlined in Section 3.0 and a contingency plan for corrective actions is outlined in Section 4.0.

SECTION 2.0

Introduction

2.1 SITE LOCATION/DESCRIPTION

2.1.1 Location

The subject property is located at 124-134 Wildey Street in Tarrytown (Space No. 7), Westchester County, New York. The property is further identified as Section 01, Tax Sheet 2, Lots P-25 and P-25B, and comprises approximately 3.3 acres. Space No. 7 is located within the retail-strip structure at the northern portion of the site (Lot P-25). The site location and site layout are shown on Figures 1 and 2.

2.1.2 Existing Structures/Improvements and Current Site Use

The subject property currently consists of an approximately 24,000 square feet (footprint), single-story, retail building occupied by Walgreens, Dunkin' Donuts, and Chase Bank in the southeastern portion of the site and an approximately 9,000 square feet (footprint), retail-strip building occupied (from west to east) by Van Tassel Cleaners, vacant space (proposed Japanese Restaurant), a laundromat, a vacant space, and a dollar store in the northern portion of the site. The remaining portions of the site consist of asphalt-paved parking and driveway areas. The off-site parcel located immediately west of the retail-strip building currently is occupied by a McDonald's restaurant.

2.1.3 Proposed Site Use (Space No.7)

The proposed Japanese Restaurant will occupy the former Tappan Zee Dental Group space and comprise approximately 2,447 square feet. The restaurant will consist of a kitchen area in the northeastern portion of the space, bathrooms in the northwestern portion of the space, three hibachi grills in the western portion of the space, and dining areas and a sushi bar in the eastern portion of the space. The entrance/vestibule is located in the southern portion of the space.

The proposed restaurant improvements will require approximately 29 slab penetrations for sewer service. The penetrations include five floor drain locations. Water, gas, and electrical lines will run above the floor slab. The space will utilize the buildings existing forced hot air HVAC unit.

2.1.4 Proposed Exhaust/Air Intake (Space No. 7)

Based on an evaluation of the proposed plans for the restaurant, the following air handling units will be located within the proposed restaurant.

	Proposed Exha	ust Units			
Location	Number of Units	CFM	Total CFM		
Kitchen Hood	1	6,000	6,000		
Bathrooms	2	150	300		
Hibachi Grills	3	3,600	10,800		
EXHAUST TOTAL:	•		17,100		
	Proposed Make-U	p Air Intakes			
Kitchen Hood	1	6,000	6,000		
Bathrooms	0	0	0		
Hibachi Grills	3	3,240	9,720		
INTAKE TOTAL:			15,720		
TOTAL DIFFERENCE:	1,380 Exhaust				

Based on the proposed exhaust and make-up air units within the space, approximately 1,380 cubic feet per minute (cfm) of exhaust will be drawn from the building. The exhaust differential, however, will be reduced at times as the hibachi grill and bathroom exhausts are not constantly operating. In addition, additional make-up air is supplied by the opening of the front and rear doors of the space by patrons and staff.

Based on the location of the existing sub-slab depressurization system (SSDS) and the proposed make-up air intakes, three of the four air intakes are located greater than 20 feet from the SSDS exhaust. One of the intakes for one of the hibachi grills in located 10 feet from the existing SSDS.

2.2 PREVIOUS SVI INVESTIGATIONS

2.2.1 Initial Sub-Slab, Soil Gas, and Indoor Air Quality Sampling

In March 2008, Quest conducted sub-slab soil gas vapor and indoor air sampling and laboratory analyses. A total of three sub-slab soil vapor, one indoor air, and one ambient air samples were collected as part of these investigative activities. Analytical results documented elevated tetrachloroethene (PCE) and/or trichloroethene (TCE) levels in and/or below the drycleaners space to the west of the proposed restaurant.

One sub-slab soil gas sample was collected within Van Tassel Cleaners as well as in each of the four units located within the northern retail-strip structure (former Tappen Zee Dental Group, the laundromat, the former video store, and the dollar store) by Whitestone in order to investigate the potential for SVI. The SVI sampling activities were conducted on February 18, 2010 during the heating season which runs from

WHITESTONE ASSOCIATES, INC.

November 15th through March 31st. Concurrently, one indoor air sample was collected from within each of the five units which occupy the structure.

Soil gas vapor samples were also collected to assess the potential for SVI into the adjacent McDonald's restaurant. Specifically, one soil gas vapor sample was collected immediately northwest and one soil gas vapor sample was collected immediately southwest of the drycleaners unit to assess the potential for SVI into the McDonald's restaurant. Whitestone attempted to collect one additional soil gas vapor sample in the parking lot area to the southeast of the drycleaners unit to assess the potential for SVI into the Walgreens building, however, due to the presence of trapped water beneath the asphalt pavement in this area, this sample could not be properly collected. One ambient air quality sample was also collected from outside the northern retail building to establish background conditions.

The sub-slab, soil gas, indoor air, and ambient air samples were collected over the same 8-hour duration utilizing Summa canisters and submitted to Alpha Analytical Laboratories, a NYSDOH-certified laboratory, for volatile organic compounds (VOC) analyses by USEPA Method TO-15. The samples were collected utilizing the methodologies outlined in NYSDOH's *Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (October 2006).

The analytical results identified select VOC exceedances of NYSDOH's Soil Vapor/Indoor Air Matrices. PCE was detected at concentrations in the sub-slab and indoor air samples from the drycleaners unit warranting mitigation per NYSDOH's Soil Vapor/Indoor Air Matrix 2. PCE was not identified at concentrations warranting further monitoring or mitigation per NYSDOH's Soil Vapor/Indoor Air Matrix 2 in the sub-slab or indoor air samples from the four adjoining units. Based on NYSDOH guidance and the detection of PCE in sub-slab and indoor air samples in the drycleaning unit and at lower levels in the adjacent former Tappen Zee Dental Group and laundromat units, reasonable and practical actions to identify the source(s) of the PCE and reduce exposure was necessary. Accordingly, a SSDS was proposed to be installed to mitigate indoor air impacts to these units.

TCE was detected at concentrations in the sub-slab and indoor air samples from the drycleaners unit warranting additional monitoring per to NYSDOH's Soil Vapor/Indoor Air Matrix 1. TCE was not identified at concentrations warranting further monitoring or mitigation per NYSDOH's Soil Vapor/Indoor Air Matrix 1 in the sub-slab or indoor air samples from the four adjoining units. PCE and TCE as well as methylene chloride were not detected at concentrations exceeding NYSDOH Air Guidance Values in the indoor air samples.

Additional VOCs including acetone, chloroform, isopropanol, and ethanol were detected in select sub-slab and/or indoor air samples at slightly elevated levels. The most elevated levels of acetone, ethanol, and isopropanol detected in indoor air were documented in the former Tappen Zee Dental Group. The presence of these compounds is attributable to the disinfectants and sterilizers including rubbing alcohol utilized within the dental facility. Products containing isopropanol also were identified in the video store and

products containing ethanol were identified in the drycleaners and dentist. Chloroform was detected at a slightly elevated concentration in indoor air in the laundromat. The presence of chloroform may be attributable to clothing dyes present in the laundromat on a daily basis. The remainder of the VOCs detected exceeding laboratory reported detection limits appear to be contributable to background conditions, products stored in the individual units, or off-gasing building materials. With the exception of PCE and TCE, the VOCs detected at the site are not compounds of concern.

2.2.2 Communication Testing

Following Whitestone's review of the results of the sub-slab and indoor air sampling activities, communication testing was performed to confirm that vapors will be drawn from underneath the entire floor slab of the drycleaners unit as this unit documented PCE and TCE concentrations requiring mitigation and monitoring. Communication testing in the two adjoining units (former Tappen Zee Dental Group and the laundromat) also was conducted to ensure the protection of air quality in these units. The communication testing consisted of drilling three holes through the dry cleaner's flooring and concrete slab. These borings were terminated in the sub-base material immediately beneath the floor slab. One boring location was installed in the location of the future SSDS unit and the two other borings were installed in the two locations within the unit that were furthest from the SSDS location to ensure that a vacuum can be created across the entire floor slab of the unit. The former locations utilized to collected the sub-slab air samples in the two adjoining units were re-established in an effort to confirm that vapors would also be drawn from underneath these units. Hand-held, digital micromanometers with the ability to measure inches of water column (wc) of pressure to the ten thousandth of an inch of a wc (with an accuracy of one percent) were placed in the holes away from the proposed SSDS unit location to evaluate/measure pressure differentials while a vacuum was applied at the proposed SSDS location test hole.

The micromanometers were utilized to confirm that a preferred pressure differential of 0.0025 inches we to 0.0035 inches we can be achieved across the floor slab in the drycleaners unit as well as the two adjoining units (former Tappen Zee Dental Group and the laundromat). A portable device capable of establishing comparable vacuum pressure to a SSDS was utilized to complete the communication testing. The device utilized for the testing was capable of extracting approximately 90 cfm of air. A meter was utilized to confirm the cfm of air being removed to create the required vacuum pressure across the floor slabs. Based on the results of the communication testing, a pressure differential of 0.0026 inches we was detected at the furthest sampling point (former Tappen Zee Dental Group). Pressure differentials in the drycleaners unit ranged for 0.0029 to 0.0041 inch we. The holes in the floor slab were sealed following the communication test.

2.2.3 SSDS Installation

In accordance with Whitestone's April 7, 2010 Sub-Slab Depressurization System Design Plan and Westchester County Department of Health (WCDOH) Permit No. 52-7276, a SSDS was constructed at the site on July 28, 2010. The SSDS consists of a four-inch diameter PVC pipe installed in the sub-base

WHITESTONE ASSOCIATES, INC.

Page 5

immediately below the dry cleaning unit's floor slab which extends vertically upward through the roof and connects to a motorized fan and exhaust stack. In accordance with Permit No. 52-7276 and Whitestone's design, the SSDS initially utilized a Radonaway Model RP-145 fan.

Following the installation of the SSDS, a series of diagnostic and communication tests were performed in order to evaluate the effectiveness of the system and confirm the system's ability to create the necessary differential pressure beneath the building floor slab. Communication test results recorded utilizing the Radonaway Model RP-145 fan (as described below) did not achieve consistent or adequate levels of differential pressure beneath the building floor slab as required by NYSDEC and NYSDOH.

Accordingly, Whitestone tested the Radonaway Model HS-5000 fan on the SSDS. The Radonaway Model HS-5000 fan is capable of creating a greater vacuum pressure in poor sub-base materials and over larger areas with a decreased exhaust volume of approximately 53 cfm. Communication test results recorded during the test utilizing the Radonaway Model HS-5000 fan (as described below) achieved sufficient, consistent levels of differential pressure across the building floor slab. Based on the results of the communication tests, Whitestone replaced the Model RP-145 fan with the Model HS-5000 fan.

2.2.4 Post-Installation Communication Testing

Following Whitestone's installation of the SSDS, communication testing was performed to confirm that vapors will be drawn from underneath the entire floor slab of the drycleaners unit as this unit documented PCE and TCE concentrations requiring mitigation and monitoring. Communication testing in the two adjoining units (former Tappen Zee Dental Group and the laundromat) also was conducted to ensure the protection of air quality in these units. The communication testing consisted of drilling three holes through the drycleaner's flooring and concrete slab. Two of the borings were installed in the two locations within the unit that were furthest from the SSDS location to ensure that a vacuum can be created across the entire floor slab of the unit. The former locations utilized to collect the sub-slab air samples in the two adjoining units were re-established in an effort to confirm that vapors would also be drawn from underneath these units. Hand-held, digital micromanometers with the ability to measure inches of wc of pressure to the ten thousandth of an inch of a wc (with an accuracy of one percent) were placed in the holes to evaluate/measure pressure differentials while the SSDS was operating.

The micromanometers were utilized to confirm that a preferred pressure differential of 0.0025 inches we to 0.0035 inches we was achieved across the floor slab in the drycleaners unit as well as the two adjoining units. The SSDS with the Radonaway RP-145 fan was utilized to complete the communication testing performed in July 2010. Based on the results of this communication test, it was determined that the Radonaway RP-145 could not establish the required pressure differential. The insufficient results were suspected to be associated with the dense sub-base material located underneath the building floor slab.

The SSDS equipment the Radonaway HS-5000 fan was utilized to complete the final communication testing in August 2010. Based on the results of the communication testing, a pressure differential of 0.0321 inches we was detected at the furthest sampling point (laundromat). Pressure differentials in the drycleaners unit ranged for 0.0038 to 0.0244 inches we. The holes in the floor slab were sealed following each communication test.

2.2.5 Post-Mitigation Indoor Air Quality Sampling

Following the installation of the SSDS within the drycleaners space, one indoor air sample was collected within the former Tappan Zee Dental Group. Concurrently, one ambient air sample was collected from outside of the structure to establish background conditions. The post-mitigation air sampling activities were conducted on January 18, 2011 during the heating season which runs from November 15th through March 31st. The indoor air and ambient air samples were collected to assess the effectiveness of the SSDS.

The indoor air and ambient air samples were collected over the same 8-hour duration utilizing Summa canisters and submitted to Alpha Analytical Laboratories for VOC analyses by USEPA Method TO-15. The samples were collected utilizing the methodologies outlined in NYSDOH's *Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (October 2006).

The analytical results identified one VOC exceedance of NYSDOH's Soil Vapor/Indoor Air Matrices. PCE was detected at a concentration in the indoor air sample (IAS-1) collected from the former Tappan Zee Dental Group unit warranting monitoring per NYSDOH's Soil Vapor/Indoor Air Matrix 2. TCE was not identified at a concentration warranting further monitoring or mitigation per NYSDOH's Soil Vapor/Indoor Air Matrix 2 in the indoor air sample from the unit.

2.3 OBJECTIVE

In response to NYSDEC's and NYSDOH's August 23, 2011 comments, supplemental SVI investigations and corrective actions (as necessary) will be conducted at the site as presented in Section 3.0 and Section 4.0 of this report, respectively. The objective of these activities is to evaluate and mitigate potential SVI impacts to the proposed Japanese Restaurant following construction.

SECTION 3.0 SVI Investigations

This section of the SVIW has been prepared to address NYSDEC's and NYSDOH's comments pertaining to the requirements for additional SVI investigation at the site.

3.1 PERMANENT MONITORING POINT INSTALLATION

Prior to the proposed construction activities, Whitestone will install three permanent pressure differential/soil vapor monitoring points within the floor slab of the proposed restaurant space in accordance with NYSDOH regulations. The permanent points will be maintained during and subsequent to the proposed construction activities. The proposed monitoring points are shown on Figure 1.

3.2 COMMUNICATION TESTING

Communication testing will be performed to confirm that vapors will be drawn from underneath the entire floor slab of Space No. 7 by the existing SSDS. The communication tests will be completed prior to the proposed construction activities and following construction. The post-construction test will be conducted with the restaurant's exhaust/intake fans operational, however, prior to the opening of the restaurant. The proposed communication testing will utilize the permanent monitoring points discussed above. Hand-held, digital micro-manometers with the ability to measure inches of wc of pressure to the ten thousandth of an inch of a wc with an accuracy of one percent will be placed in the permanent points to evaluate/measure pressure differentials. The digital micro-manometers will be utilized to confirm that a preferred pressure differential of 0.0025 inches wc to 0.0035 inches wc can be achieved across the floor slab. The results of the communication testing will be reviewed with NYSDEC/NYSDOH to determine if the indoor air sampling outlined below is necessary.

3.3 INDOOR AIR SAMPLING (IF REQUIRED)

Prior to the indoor air sampling activities (if required), a product inventory inspection will be conducted to identify any potential sources of PCE, TCE, and/or other contaminants within the proposed restaurant space as well as the adjoining tenant spaces located in the retail-strip building. During the product inventory inspection, a NYSDOH *Indoor Air Quality Questionnaire and Building Inventory* form will be completed for each of the units of the retail-strip building. Potential sources of PCE, TCE, and/or other contaminants will be identified, documented, and removed (if feasible) prior to the sampling activities.

If required, one indoor air sample will be collected from within the proposed restaurant space in order to investigate the potential for SVI. One ambient air quality sample will also be collected from outside the retail-strip building to establish background conditions.

The indoor and ambient air samples will be collected over an 8-hour duration utilizing Summa canisters and submitted to a NYSDOH-certified laboratory for VOC analyses by EPA Method TO-15. Whitestone will ensure that the NYSDOH-certified laboratory properly meets the detection limits for each of the VOCs analyzed. The samples will be collected utilizing the methodologies outlined in NYSDOH's *Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (October 2006). The negative inches of mercury contained within the Summa canisters will be recorded prior to and following sample collection. The analytical results from this sampling event will be compared with the criteria outlined in NYSDOH's *Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (October 2006). The proposed sampling activities will be conducted during the heating season which runs from November 15th through March 31st.

3.4 REPORTING

Upon completion of the proposed activities outlined in Section 3.0 of this report, a SVI Investigation Report and Supplemental SVI Investigation/Corrective Action Workplan (if necessary) will be submitted to NYSDEC and NYSDOH for review. The workplans will include recommendations for supplemental SVI investigations and/or corrective actions that may be necessary to address site conditions.

3.5 SCHEDULE

The following proposed tasks will be completed under the supervision of a Professional Engineer pursuant to the site's *Health and Safety Plan* and *Quality Assurance Project Plan*. The HASP also outlines the Community Air Monitoring that will be conducted during the short term invasive activities (penetrating the floor slab) associated with the permanent monitoring point installation.

TASK	ESTIMATED SCHEDULE*
Permanent Monitoring Point Installation	One Week
Communication Testing	One Week
Product Inventory Inspection	TBD
SVI Sampling	TBD
Submission of SVI Investigation Report and Supplemental SVI Investigation/Corrective Action Workplan (if necessary)	TBD
* Startup and schedule are from NYSDEC's and NYSDOH's approval of thi TBD To be determined, if necessary	s SVIW.

SECTION 4.0

SVI Corrective Actions

4.1 SUB-SLAB DEPRESSURIZATION SYSTEM INSTALLATION

Piping associated with a SSDS will be installed in the proposed restaurant space as shown on Figure 3. The SSDS piping will be installed in the event an active SSDS is required to create the required pressure differential beneath the restaurant space and/or mitigate SVI concerns. The SSDS initially will not be equipped with a fan or monitoring system. These components will be installed if an active SSDS is required. Also, if necessary, the fan on the existing SSDS may be modified.

The SSDS will be constructed by placing a four-inch diameter PVC pipe in the sub-base immediately below the building's floor slab. The pipe will extend vertically (upward) through the unit and vent to the exterior atmosphere above the roof. A fan (Radonaway Model HS-5000 or equivalent), if ultimately necessary, capable of mechanically venting air from beneath the slab will be placed in line with the vent pipe above the roof. A sealable sampling port will be installed at the base of the unit for future sampling purposes. An inline magnahelic dial vacuum gauge and alarm system (Radonaway Checkpoint II or equivalent) will be installed on the SSDS unit, if necessary. The fan and gauge/alarm will each have their own dedicated electrical circuits. A plan depicting the proposed SSDS system design is attached as Figure 3. The proposed SSDS is located greater than 15 feet from any air intakes.

4.2 SEALING PENETRATIONS

All existing penetrations/breaches in the existing floor slab will be sealed utilizing the appropriate sealant (concrete, caulk, etc.) for the surface. In addition, all penetrations associated with the proposed restaurant will be sealed/repaired as appropriate.

4.3 REPORTING

The final design of an active SSDS (if necessary) will be reported to NYSDEC/NYSDOH in a SVI Corrective Action Workplan.

4.5 SCHEDULE

The proposed tasks will be completed under the supervision of a Professional Engineer pursuant to the project's *Health and Safety Plan*. The HASP also outlines the Community Air Monitoring that will be conducted during the short term invasive activities (penetrating the floor slab) associated with the SSDS installation.

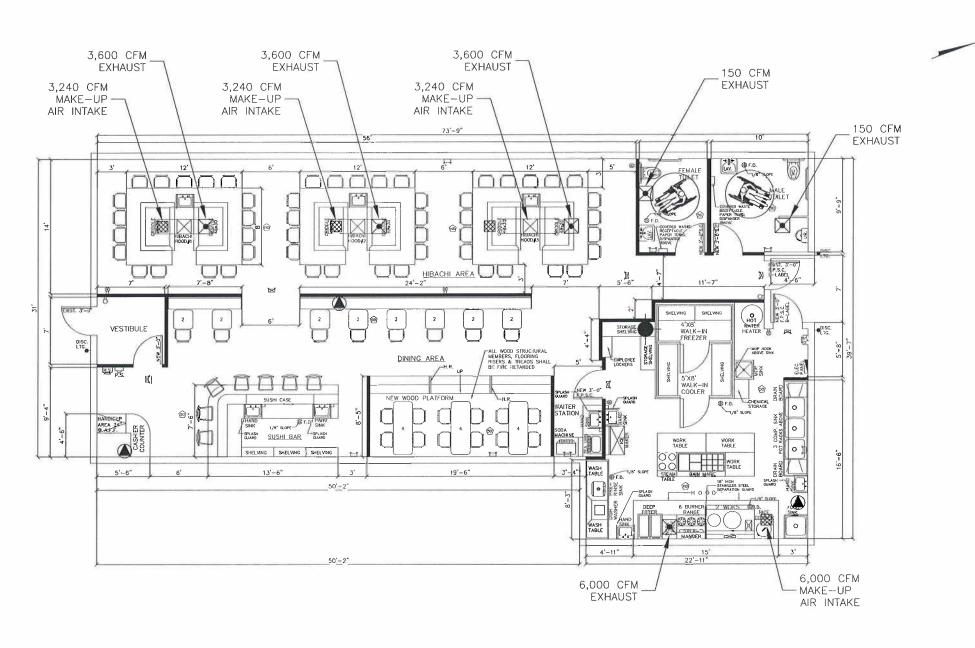
WHITESTONE ASSOCIATES, INC.

Page 10

Task	Estimated Schedule
Installation of SSDS	During Construction
Submission of SVI Corrective Action Workplan	TBD
TBD To be determined, if necessary	

FIGURE 1 Site Plan







PLAN

SITE

LEGEND/NOTES

CUBIC FEET PER MINUTE

SUB-SLAB DEPRESSURIZATION SYSTEM

PROPOSED SSDS LOCATION (APPROX.)

MAKE-UP AIR INTAKE LOCATION (APPROX.)

DIFFERENTIAL/SOIL VAPOR MONITORING

EXHAUST LOCATION (APPROX.)

PERMANENT PRESSURE

POINT (APPROX.)

REFERENCE THIS PLAN IS BASED UPON AN UNDATED FLOOR PLAN PROVIDED BY

CFM

SSDS

 \boxtimes

OTHERS.

1 inch = 10 ft.

35 TECHNOLOGY DRIVE ARREN, NEW JERSEY 07059 668.7777 • 908.754.5936 FAX WHITESTONE WARREN, I 908.668.777

SSOCIATES, INC.

PROJECT:

ACADIA TARRYTOWN, LLC

CLIENT:

RIVER PLAZA SHOPPING CENTER 124 TO 134 WILDEY STREET, SPACE NO. 7 TARRYTOWN, WESTCHESTER COUNTY, NEW YORK

EJ0810744.006 PROJECT #:

RP BY:

PROJ. MGR.: CS

SCALE: 9/27/11

DATE:

FIGURE 2 Proposed SSDS/Intake/Exhaust Plan

FIGURE 3 Proposed SSDS Design Plan

4" VENT CAP



SYSTEM ALARM/GAUGE **DETAIL** SCALE: N.T.S.

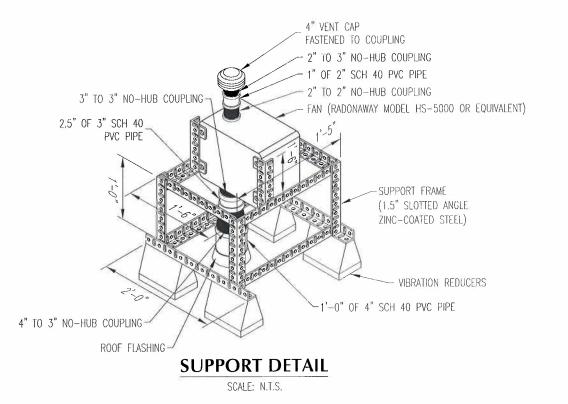


PLACARD DETAIL

SCALE: N.T.S.

- SSDS PIPE AT LEAST 10 FEET AWAY FROM ANY OPENING OR INTAKE THAT IS LESS THAN 24 INCHES BELOW THE SSDS'S EXHAUST POINT.
- PVC CONNECTIONS IN THE INTERIOR ARE GLUED.
- SSDS DESIGN MAY VARY BASED ON FIELD CONDITIONS AND RESULTS OF PLANNED INVESTIGATIONS.

SSDS - SUB-SLAB DEPRESSURIZATION SYSTEM





PLAN

DESIGN

SSDS

PROPOSED

SSOCIATES, INC. 35 TECHNOLOGY DRIVE WARREN, NEW JERSEY 07059 908.668.7777 • 908.754.5936 FAX WHITESTONE

DATE: MGR.: CS PROJ.

FIGURE:

AS SHOWN

RP BY:

EJ0810744.006

PROJECT #:

RIVER PLAZA SHOPPING CENTER 124 TO 134 WILDEY STREET, SPACE NO. 7 TARRYTOWN, WESTCHESTER COUNTY, NEW YORK

ACADIA TARRYTOWN, LLC

CLIENT:

PROJECT:

APPENDIX 1 NYSDEC/NYSDOH August 23, 2011 Letter

New York State Department of Environmental Conservation

Division of Environmental Remediation, Region 3

21 South Putt Corners Road, New Paltz, New York 12561-1696

Phone: (845) 256-3000 • Fax: (845) 255-3414

Website: www.dec.ny.gov

Transmitted Via: Email

August 23, 2011

Mr. Donato R. Pennella, PE Assistant Village Engineer Tarrytown-On-Hudson One Depot Plaza Tarrytown, NY 10591-3199

Re: River Plaza Shopping Center, NYSDEC Site No.: 360084 Building Permit for 134 Wildey Street, Tarrytown, NY Osaka Japanese Steak & Sushi Bar, Inc.

Dear Mr. Pennella:

The New York State Departments of Environmental Conservation and Health (NYSDEC/NYSDOH) have reviewed the building permit application and associated plans for interior alterations for a restaurant at the above-referenced location. Based on the information provided and review of the design plans, a work plan will need to be prepared and submitted to the NYSDEC/NYSDOH to evaluate what influence the proposed Japanese Restaurant will have on soil vapor intrusion into this tenant space. The following should be considered while developing the work plan:

- 1. The flow rate (cubic feet per minute, CFM) the kitchen exhaust and hibachi tables exhaust systems will be operating at;
- 2. The distance the make-up air intake for the restaurant ventilation system will be from the discharge point from the adjacent sub-slab depressurization system (SSDS);
- 3. Placement of permanent pressure differential/soil vapor monitoring points within the dining area and kitchen of the Japanese Restaurant that will not interfere with the operation and occupancy of the restaurant;
- 4. Sealing of all floor slab/sub-surface penetrations from installation of utilities (i.e., plumbing, electrical, etc.);
- 5. Sampling of the current pressure differential prior to remodeling and sampling of the pressure differential post-remodeling while exhaust fans are in operation but prior to the restaurant opening;
- 6. A contingency plan should be developed to upgrade the current SSDS if the exhaust fan flow and/or stack effect overcomes the influence of the SSDS. During remodeling, it is suggested that an additional suction point be installed in the Japanese Restaurant, in a discreet location that won't interfere with the operation/occupancy of the restaurant; and
- 7. Indoor air sampling maybe warranted based on pressure differential testing following remodeling to ensure that soil vapor intrusion is not occurring.



The requested work plan should be submitted to:

Janet Brown NYSDEC 21 South Putt Corners Road New Paltz, NY 12561 jebrown@gw.dec.state.ny.us Nathan Walz NYSDOH Flanigan Square 547 River Street Troy, NY 12180 nmw02@health.state.ny.us

Feel free to email me at the above address or call me at 845-256-3826 with any questions.

Sincerely,

Janet E. Brown, P.E.

Project Manager

ec: L. Zheng, Applicant's Representative

G. Saccento, Acadia Realty

C. Seib, Whitestone Associates

E. Moore, NYSDEC

N. Walz, NYSDOH

APPENDIX 2 Proposed Restaurant Plans

PROPOSED JAPANESE RESTAURANT

124-134 WILDEY STREET, SPACE#7 TARRYTOWN, NEW YORK

NOTES:

- 1. THIS STRUCTURE SHALL BE CLASSIFIED A-2 PER THE BUILDING CODE OF NYS.
- 2. THE CONSTRUCTION CLASSIFICATION SHALL BE 11A PER THE BUILDING CODE OF NYS.
- 3. THIS STRUCTURE COMPLIES WITH TABLE 601 OF THE BUILDING CODE OF NYS.
- 4. THE SPACE COMPLIES WITH TABLE 503 PER ALLOWABLE HEIGHT AND BUILDING AREAS AS SHOWN IN THE BUILDING CODE OF NYS.
- 5. SHAFT ENCLOSURES SHALL COMPLY WITH SECTION 707 OF THE BUILDING CODE OF NYS.
- 6. FIRE PARTITIONS SHALL COMPLY WITH SECTION 708 OF THE BUILDING CODE OF NYS.
- 7. PENETRATION OF THE FIRE RATED ASSEMBLIES SHALL COMPLY WITH SECTION 711 OF THE BUILDING CODE OF NYS.
- 8. FIRE BLOCKING AND DRAFT STOPPING SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 716 OF THE BUILDING CODE OF
- 9. FIRE RATINGS SHALL COMPLY WITH TABLE 719.1(3) OF THE BUILDINGCODE OF NYS.
- 10. INTERIOR WALL AND CEILING FINISHES SHALL COMPLY WITH SECTION 803 OF THE BUILDING CODE OF NYS.
- 11. THE INTERIOR FLOOR FINISH SHALL COMPLY WITH ARTICLE 804 OF THE BUILDING CODE OF NYS.
- 12. SPRINKLER SYSTEMS WHERE REQUIRED SHALL COMPLY SHALL COMPLY WITH ARTICLE 903.2.1.2 OF THE BUILDING CODE OF NYS.
- 13. THE AUTOMATIC FIRE EXTINGUISHING SYSTEM SHALL COMPLY WITH (F) SECTION 904 OF THE BUILDING CODE OF NYS.
- 14. OCCUPANCY SHALL BE DETERMINED PER TABLE 1003.2.2.2 OF THE BUILDING OF NYS.
- 15. EXIT SIGNS SHALL COMPLY WITH SECTION 1003.2.10
- 16. DOOR ARRANGEMENT SHALL BE PER ARTICLE 1003.0.1.7 OF THE BUILDING CODE OF NYS.
- 17. LOCKS AND LATCHES SHALL BE OPERABLE PER ARTICLE 1003.3.1.8
 OF THE BUILDING CODE OF NYS.
- 18. EXIT TRAVEL DISTANCE SHALL COMPLY WITH TABLE 1004.2.4 OF THE BUILDING CODE OF NYS.
- 19. AISLES FOR EGRESS SHALL COMPLY WITH ARTICLE 1004.3.1 OF THE BUILDING CODE OF NYS.

20. ALL EGRES SHALL COMPLY WITH SECTION 1004. OF THE BUILDING

- CODE OF NYS.

 21. ALL EXITS SHALL COMPLY WITH SECTION 1005 OF THE BUILDING
- CODE OF NYS.

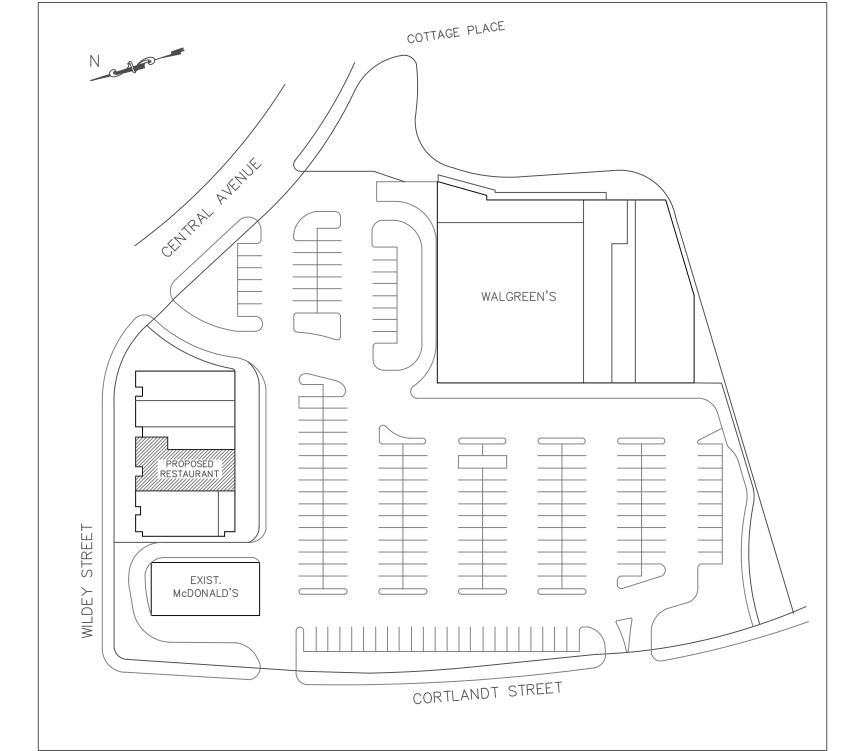
 22. EXITS SHALL ALSO COMPLY WITH ASSMBLY REQUIREMENTS LISTED IN SECTION 1008 OF THE BUILDING CODE OF NYS.
- 23. ALL WORK SHALL COMPLY WITH LOCAL HEALH DEPARTMENT CODE.

INSETTINGS: REQUIRE 48 HOURS NOTICE

FINISHES, ROUGH PLUMBING ELECTRICAL & FIRE MARSHAL

REQUIREMENTS BOARD OF HEALTH & VILLAGE FINAL INSPECTIONS

FINISH SCHEDULE											
SPACE	FLOOR	WALL	CEILING	REMARK							
DINING AREA	QUARRY TILE OR CARPET	WALL PAPER /PAINT	G.B. CEILING	COVED BASE							
KITCHEN	QUARRY TILE	STAINLESS STEEL	MINERAL TILE (SMOOTH & WASHABLE)	COVED BASE							
TOILET	CERAMIC TILE	CERAMIC TILE OR PAINT	2' x 2' MINERAL TILE (SMOOTH & WASHABLE)	COVE BASE 6" CEREMIC TILE							
COUNTER	COUNTER SURFACES — PLASTIC LAMINATE PAINT UNDER COUNTER SHELVES WITH HI —GLOSS PAINT										



PLOT PLAN

PLUMBING REQUIREMENTS

- ALL PLUMBING SHALL COMPLY WITH THE LOCAL PLUMBING
 HEALTH DEPARTMENT REQUITE.
- 2. INSULATE ALL HOT & COLD WATER LINEWS ABOVE GRADE WITH 3/4"
- FIBERGLASS PIPE INSULATION WITH VAPOR BARRIER.
- 3. VERIFY ALL FINAL CONNECTIONS TO KITCHEN EQUIPMENT WITH KITCHEN SUPPLIER. VERIFY ROUGH—IN REQUIREMENTS WITH SAME.
- 4. MATERIALS SHALL BE AS FOLLOWS:

 A: WATER PIPING TO BE TYPE 'K' COPPER BELOW GRADE, TYPE 'L'

 COPPER ABOVE GRADE.
- B. WASTE PIPING TO BE CAST IRON, OR COPPER PIPE.
- C: VENTS TO BE CAST IRON, GALVANIZED STEEL, OR COPPER PIPE.

 D: GAS PIPING TO BE SCHEDULE 40, BLACK STEEL PIPE. PROVIDE

 AUTOMATIC GAS SHUT-OFF VALVE IN COOKING EQUIPMENT SUPPLY

 MAIN AS REQUIRED FOR COOKING EQUIPMENT FIRE RPOTECTION

 SYSTEM. VERIFY & COORDINATE WITH KITCHEN EQUIPMENT SUPPLIER.
- 5. ALL INDIRECT WASTES EXCEEDING 24" IN LENGTH SHALL BE TRAPPED.
 6. PROVIDE CLEANOUTS REQUIRED, & AT THE BASE OF ALL STACKS.
- 7. ALL MATERIALS USED WITHIN RETURN AIR PLENUMS SHALL BE APPROVED FOR SUCH USE.
- 8. PROVDIE FIXTURE STOPS AT ALL PLUMBING FIXTURES.
- 9. PROVIDE ALL FITTING & ACCESSORIES AS REQUIRED FOR A COMPLETE INSTALLATION.
- HOT WATER SUPPLIED TO LAVATORY FIXTURES SHALL NOT EXCEED 120F HANDICAP PLUMBING FIXTURES SHALL BE INSTALLED IN ACCORDANCE WITH THE ADA REQUIREMENTS & LOCAL STATE BARRIER FREE REQUIREMENTS.
- COORDINATE ALL WORK IN FIELD WITH ARCHITECTURAL, MECHANICAL, & ELECTRICAL TRADES.
- VERIFY ALL EXISTING JOB CONDITIONS & AS REQUIRED FOR A COMPLETE INSTALLATION.

MATERIALS

PROPOSED CUSTOMER OCCUPANCY LOAD:

PROPOSED EMPLOYEE OCCUPANCY LOAD:

PROJECT DATA

MECHANICAL CODE:

ELECTRICAL CODE:

CONSTRUCTION CODE:

PLUMBING CODE:

FIRE PROTECTION:

OCCUPANT LOAD:

DINING AREA:

INDUSTRIE / KITCHEN:

ACTUAL OCCUPANCY LOAD:

FIRE CODE: GAS CODE:

OCCUPANCY CLASSIFICATION:

CONSTRUCTION CLASSIFICATION:

CONDUIT SHALL BE RIGID GALVANIZED STEEL, RIGID ALUMINUM, OR E.M.T. FLEXIBLE CONDUIT SHALL BE TYPE AC AND MAY BE USED FOR BRANCH CIRCUIT WIRING.

A-2 RESTAURANT

MECHANICAL CODE OF NY STATE

PLUMBING CODE OF NY STATE

FIRE CODE OF NY STATE

GAS CODE OF NY STATE

FULLY SPRINKLERED

2446.92 S.F.

LOAD FACTOR

2007 NATIONAL ELECTRICAL CODE

BUILDING CODE OF NY STATE (2010)

1 PERSON / 15 S.F. 1748.81 SQ. FT.

508.60 SQ. FT.

OCCUPANCY LOAD

116

86

94

WIRE AND CABLE SHALL BE COPPER WITH 600V TYPE "THWN" INSULATION. WIRE SMALLER THAN #12 AWG SHALL NOT BE USED. 150 DEGREES CENTIGRADE TYPE "AF" WIRING IS REQUIRED FOR INCANDESCENT FIXTURE WIRING.

OUTLET BOXES SHALL BE PRESSED STEEL IN DRY LOCATIONS AND CAST ALLOY WITH THREADED HUBS IN WET AND DAMP LOCATIONS. WIRING DEVICES SHALL BE SPECIFICATION GRADE WITH COLOR OF DEVICES AND PLATES CHOSEN BY THE OWNER.

LIGHTING FIXTURES AND LAMPS SHALL BE FURNISHED, INSTALLED AND WIRED COMPLETE BY THE ELECTRICAL CONTRACTOR. ALL LAMPS USED SHALL COMPLY WITH THE 1992 ENERGY POLICY ACT INDICATING THE STANDARDS FOR ENERGY SAVING LAMPS AND MINIMUM LAMP LUMENS PER WATT.

PANELBOARDS SHALL BE AS INDICATED ON THE DRAWING, AS MANUFACTURED BY ITE, SQUARE D OR WESTINGHOUSE. PROVIDE BOLT—ON CIRCUIT BRAEKERS AND A TYPEWRITTEN PANEL DIRECTORY.

DESIGN

ALL ELECTRICAL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE N.E.C., ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES, AND THE LANDLORD'S DESIGN CRITERIA.

EXIT AND EMERGENCY LIGHTING SHALL CONFORM WITH LOCAL CODES.
ALL ELECTRICAL MATERIALS SHALL BE NEW, MEET N.E.C. STANDARDS
AND SHALL BEAR THE U.L. LABEL.
ELECTRICAL WORK SHALL BE CONCEALED IN FINISHED AREAS WITH

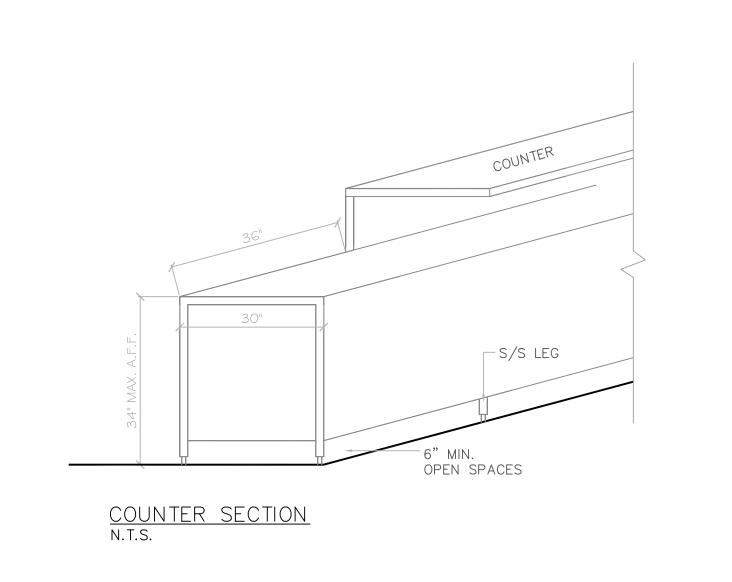
DEVICES AND EQUIPMENT MOUNTED FLUSH WHERE POSSIBLE.
ALL WIRING SHALL BE INSTALLED IN CONDUIT. NO CONDUITS SHALL
BE RUN IN DUCT WORK.
WIRING DEVICES SHALL BE INSTALLED IN OUTLET BOXES. BOXES

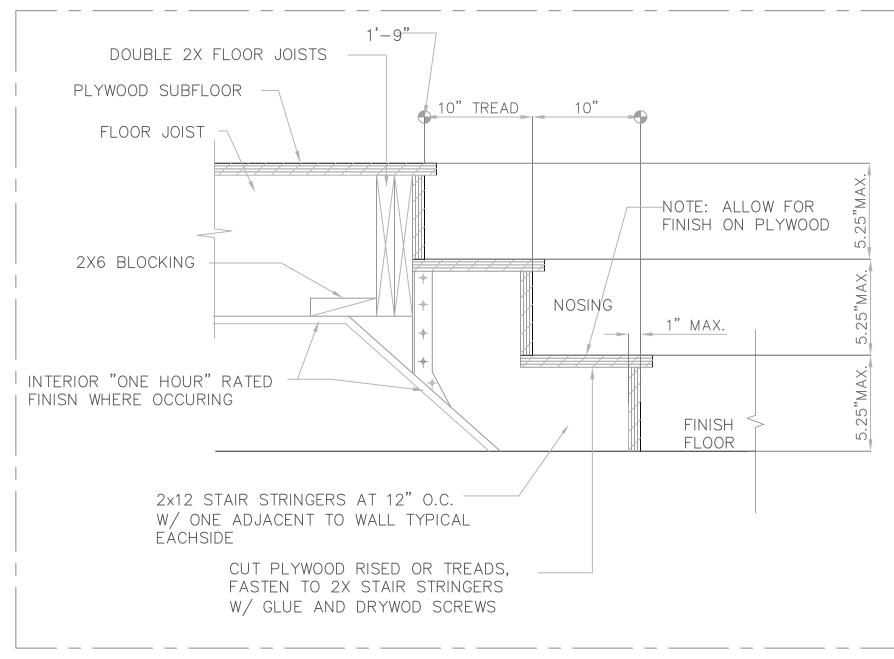
WIRING DEVICES SHALL BE INSTALLED IN OUTLET BOXES. BOXE SHALL BE 4" SQUARE MINIMUM WITH DEVICE COVERS TO SUIT. FIXTURES SHALL BE SUPPORTED FROM BUILDING STRUCTURE. INSTALL PULL WIRE IN ALL EMPTY CONDUIT SYSTEMS.

ELECTRICAL NOTES & REQUIREMENTS

- 1. ALL WIRING TO COMPLY WITH I.E.C., N.E.C., 2007
- 2. MINIMUM CIRCUIT TO BE 20 AMP. BREAKER, (2) #12 IN 3/4 CONDUIT (=GND.) UNLESS SHOWN OTHERWISE.
- 3. WIRE SIZES BASED ON THE COPPER, A.W.G.
- 4. PROVIDE DISCONNECTING MEANS AT ALL MOTOR LOADS.
- 5. VERIFY ALL REQUIREMENTS FOR KITCHEN EQUIPMENT WITH EQUIPMENT SUPPLIER.
- 6. MAKE ALL FINAL CONNECTIONS.
- 7. MOUNT ALL ELECTRICAL DEVICES AND SWITCHES AS REQUIRED BY THE ADA AND THE LOCAL STATE BARRIER FREE RULES.
- 8. FUSE ALL MOTORS AND MOTOR ASSEMBLIES IN A ACCORDANCE WITH THE N.E.C. 2007 AND MANUFACTURER'S RECOMMENDATIONS.
- 9. BALANCE THE LOADS EVENLY BETWEEN THE PHASES OF THE SYSTEM MINIMUM UNBALANCE OF 3%.
- 10. MAINTAIN A MAXIMUM VOLTAGE DROP OF 5 % THROUGHOUT THE ENTIRE SYSTEM.
- 11. COORDINATE ALL WORK WITH ARCHITECTURAL, MECHANICAL, AND PLUMBING TRADES IN FIELD.
- 12. VERIFY ALL EXISTING JOB CONDITIONS AND ACCOMMODATE AS REQUIRED FOR A COMPLETE INSTALLATION.
- 13. ELECTRICAL PANEL SHALL BE ENCLOSED INTO THE WALL.
- 14. AEAS OTHER THAN STORAGE, CORRIDORS, STOREROOMS, RESTROOMS OR PUBLIC LOBBIES THAT CONTAIN MORE THAN ONE LIGHT FIXTURE SHALL HAVE EITHER A SWITCH THAT ALLOW THE LIGHTING LOAD TO BE REDUCED BY LEAST 50% OR OCCUPANT SENSING DEVICES PER IECC 505.2.2.1

NIO OTY				1400551				ELE	CTRIC	CAL	AL		SAS	WA	TER	WAS	STE	
10. QTY.	QTY.	DESCRIPTION	MANUFACTURE	MODEL	AGA	N.S.F.	VOLT	PHS.	HP.	KW	FLA.	SIZE	BTUH	C.W.	H.W.	DIR.	IND.	REMARK
1	2	RICE COOKER	RINAI	RER-55A	AGA	N.S.F.	_	_	_	_	_	3/4"	35,000	_	_	_	_	
2	2	CHINESE STOVES	GRANDVIEW	RSR-600	AGA	N.S.F.	_	_	_	_	_	3/4"	500,000	_	_	_	_	
3	2	DEEP FRYER	PITCO	#14	AGA	N.S.F.	_	_	_	_	_	3/4"	110,000	_	_	_	_	
4	1	BAIN MARIE	BEVERAGE-AIR	BM-60	_	N.S.F.	115	1	_	0.4	8.5	_	_	_	_	_	2"	
5	1	3 COMP. SINKS	ADVANCE	79-43-72-24RL	_	N.S.F.	_	_	_	_	_	_	_	1/2"	1/2"	_	3"	
6	9	HAND SINK	ADVANCE	7-PS-60	_	N.S.F.	_	_	_	_	_	_	_	1/2"	1/2"	2"	_	
7	1	DISH WASHER	MOYER DIEBEL	MH-60	_	N.S.F.	208	3			_	_	_	1/2"	1/2"	_	3"	
8	1	SOILED DISHTABLE	AVANTI	3,0 CUT	_	N.S.F.	_	_	_	_		_	_	_	_	_	_	
9	1	SLOP SINK	GRANDVIEW	DS-12-72	_	N.S.F.	208	1	_	4.5	_	_	_		1/2"	_	3"	
10	1	TEA URN	GRANDVIEW	DS-12-72	_	N.S.F.	115	1	_	4.5	_	_	_	_	_	_	2"	
11	3	WORK TABLE	GRANDVIEW	48"x30"	_	N.S.F.	_	_	_	_	_	_	_	_	_	_	_	
12	1	FOOD SINK	EAGLE	F-24	_	N.S.F.	_	_	_	_	_	_	_	1/2"	1/2"	_	3"	
13	1	SUSHI CASE	HOSHIZAKI	HNC-150AA-R	_	N.S.F.	115	1	_	1.0	_	_	_	_	_	_	_	
14	1	STEAM TABLE	GRANDVIEW	ST030	AGA	N.S.F.	_	_	_	_	_	3/4"	25,000	_	_	_	_	
15	1	BURNER RANGE	SOUTHBEND	6 BURNERS	AGA	N.S.F.	_	_	_	_	_	3/4"	120,000	_	_	_	_	
16	1	WALK-IN COOLER	AMERIKOOLER,INC.	5'-0"x8'-0"	_	N.S.F.	115	1	_	2.5	18	_	_	_	_	_	_	
17	1	WALK-IN FREEZER	AMERIKOOLER,INC.	4'-0"x8'-0"	_	N.S.F.	115	1	_	2.5	18	_	_	_	_	_	_	
18	1	HOT WATER HEATER	A.O. SMITH	BT-85	_	N.S.F.	_	_	_	_	_	1"	242,000	3/4"	3/4"	_	_	
19	1	ICE MAKER	TRUE	MT-49	_	N.S.F.	208	3	_	1.5	_	_	_	1/2"	_	_	3"	
20	1	GREASE REMOVAL	BIG DIPPER	W-500-IS	_	N.S.F.	120	_	_	0.52	_	_	_	_	_	4"	_	
21	1	COOLER	BEVERAGE-AIR	UCR60	_	N.S.F.	115	1	_	1.2	_	_	_	_	_	_	_	
22	6	HIBACHI GRIDDLE	WOLF RANGE	TYG-48	AGA	N.S.F.	_	_	_	_	_	3/4"	30,000	_	_	_		
23	1	ICE CREAM BOX	ICE-O-MATIC	600 LBS	_	N.S.F.	115	1	_	1.0	_	_	_	_	_	_		



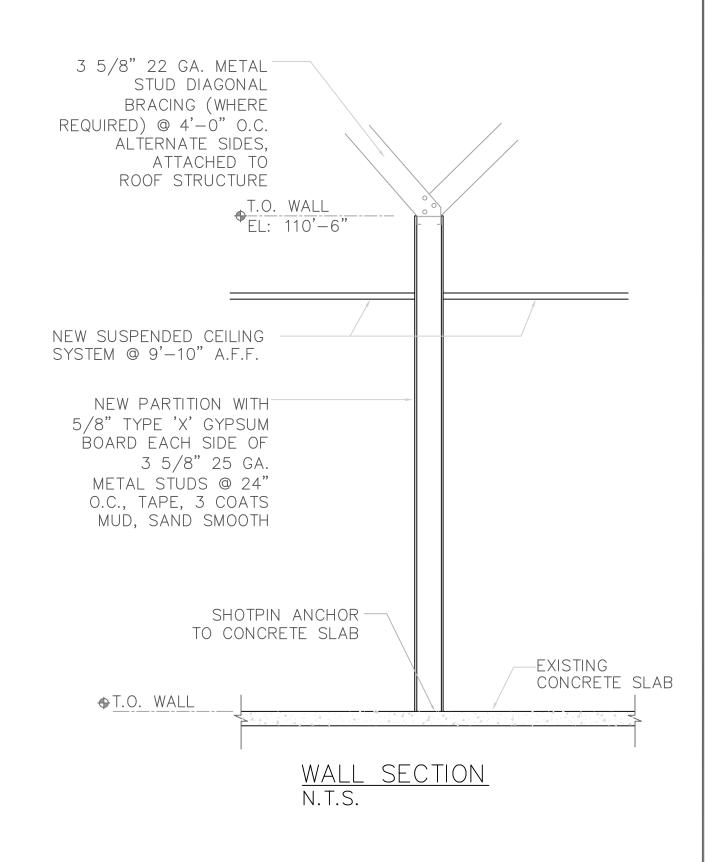


3/4" PLYWOOD W. LAMINATED
FINISH

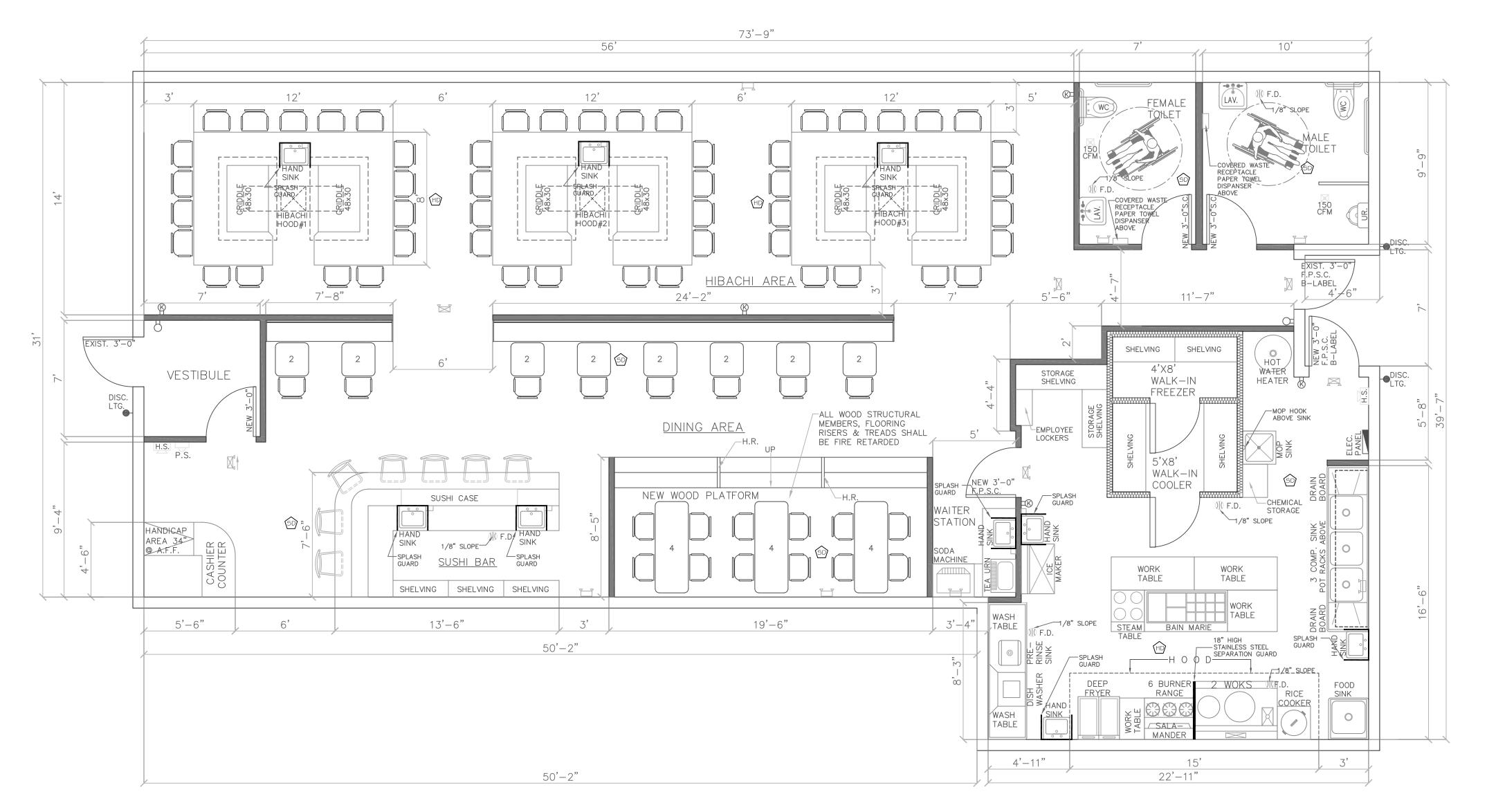
HIBACHI GRIDDLE

STAINLESS STEEL
TABLE
FLOOR

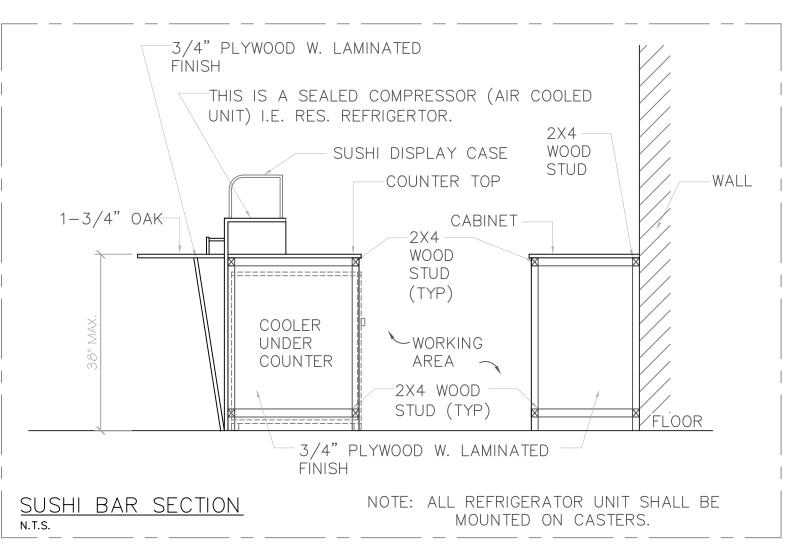
HIBACHI TABLE DETAIL
N.T.S.



PLATFORM STAIRS SECTION N.T.S.

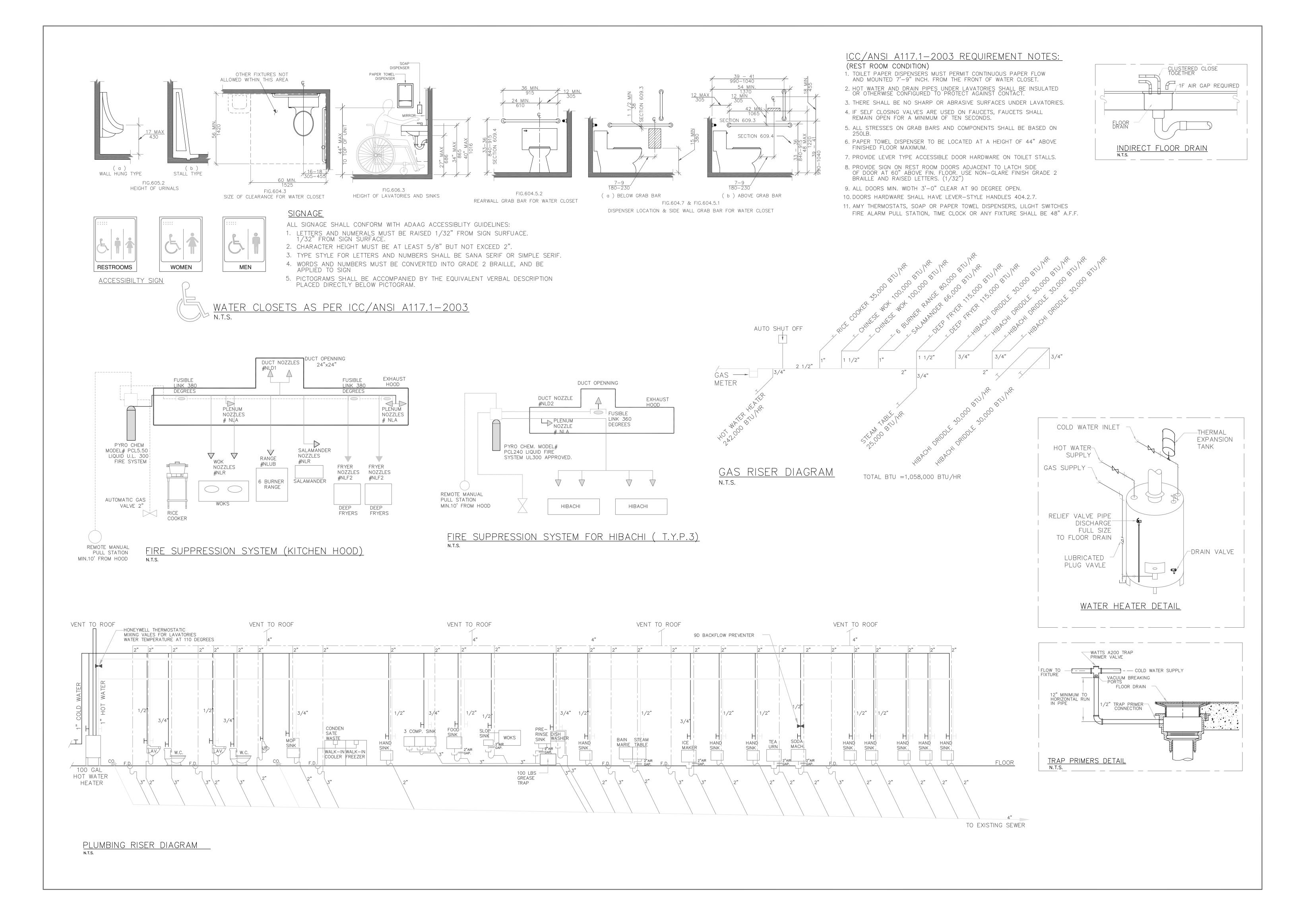


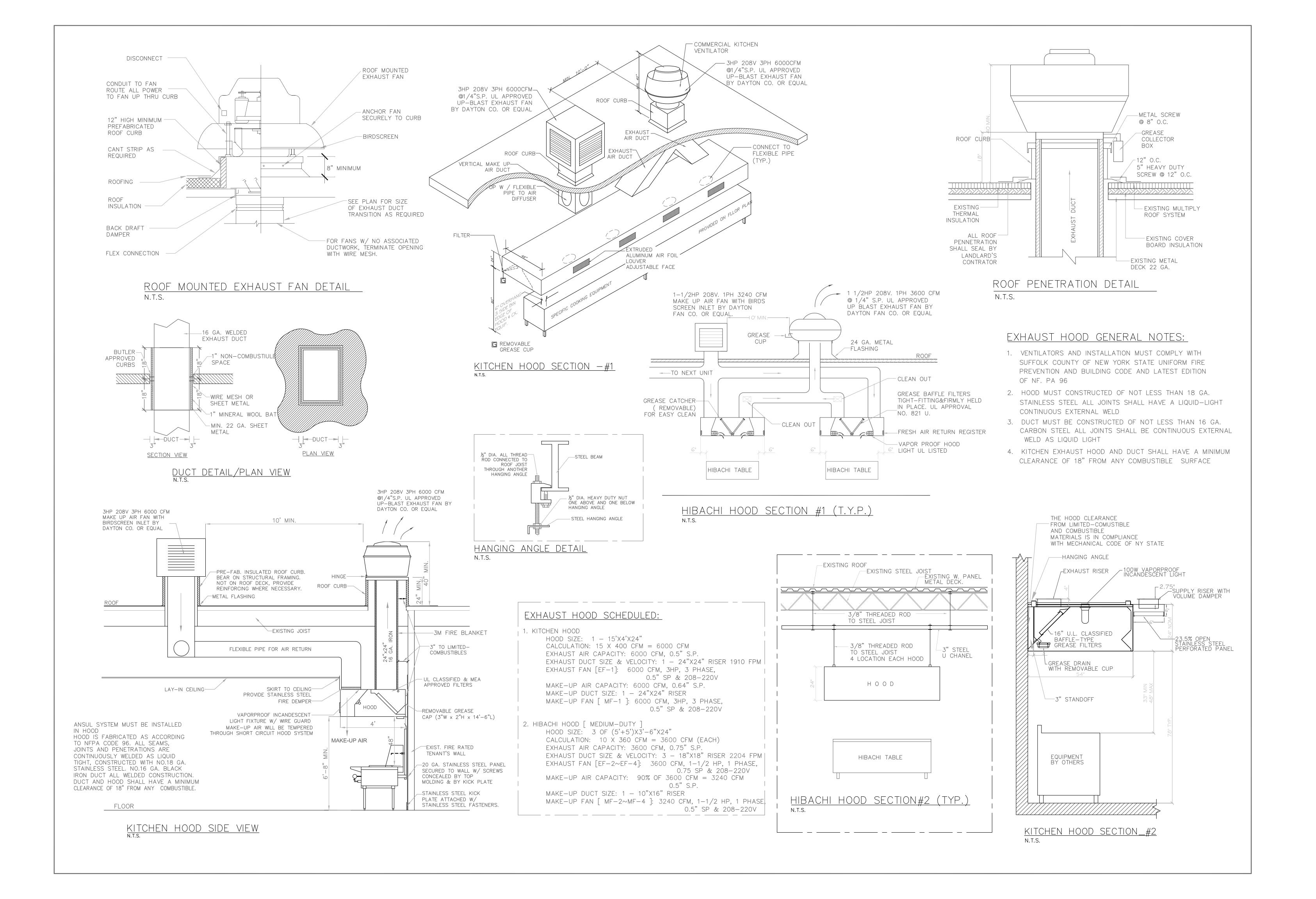


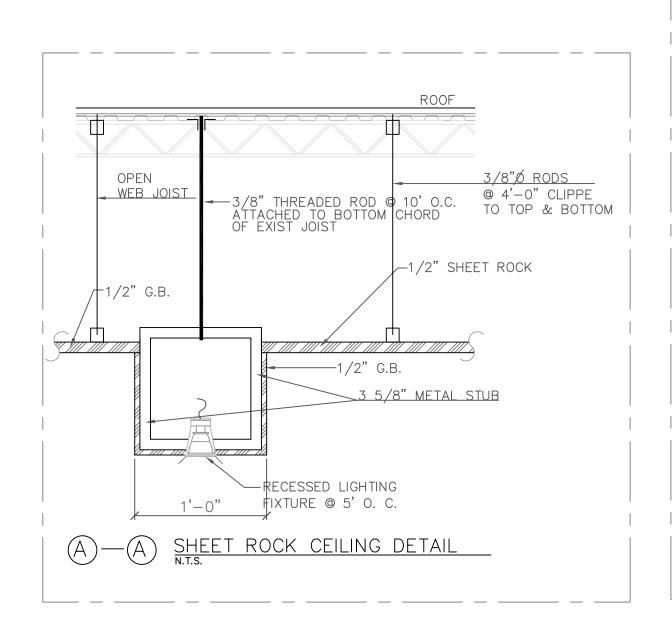


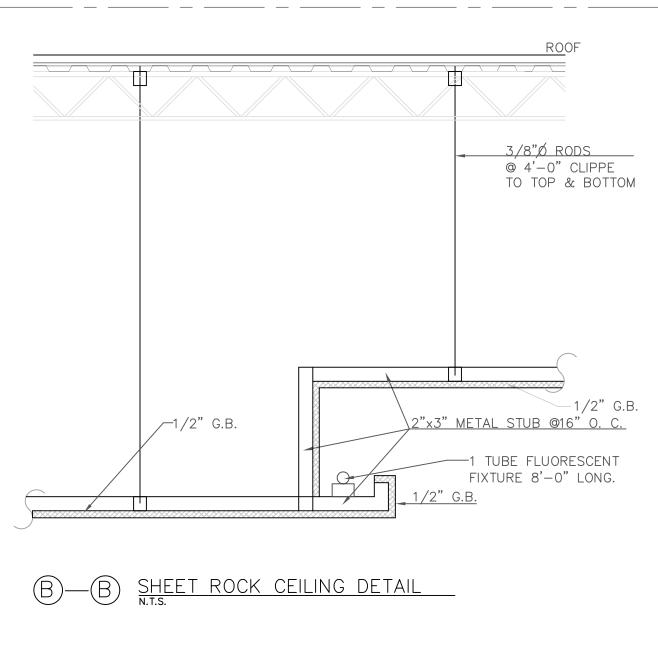
FLOOR PLAN
SCALE: 1/4"=1'-0"

NOTE: ALL HAND SINK MUST INSTALL WITH SOAP AND PAPER TOWEL DISPENSER.

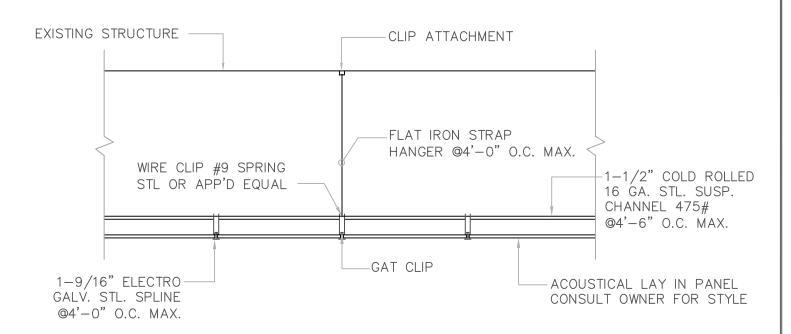




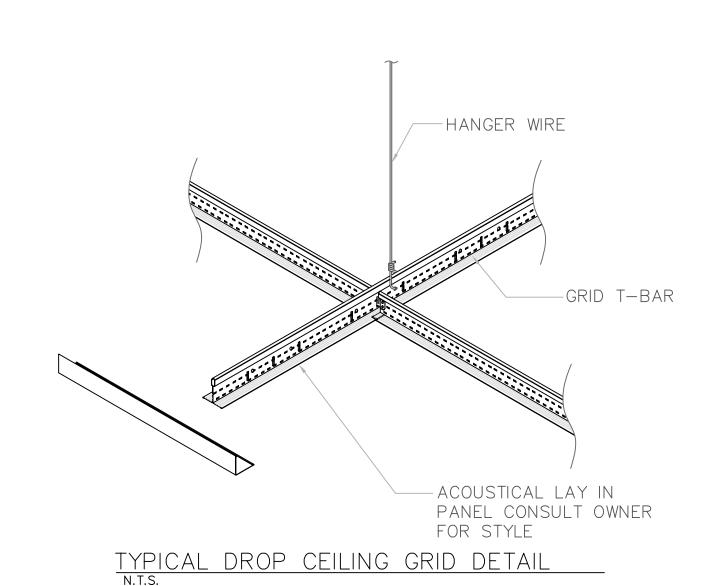


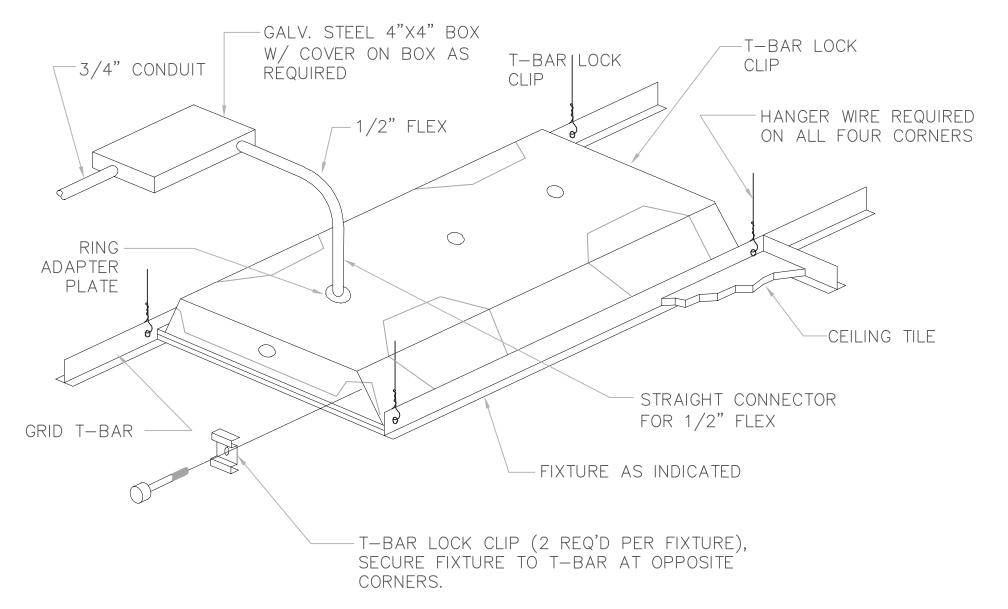


ELECTRICAL SPECIFICATIONS: WORK INCLUDED THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL WORK, LABOR, MATERIALS AND EQUIPMENT AS REQUIRED FOR A COMPLETE AND OPERATING ELECTRICAL INSTALLATION AS INDICATED ON THE THE ELECTRICAL CONTRACTOR SHALL ALSO FURNISH AND/OR PERFORM THE FOLLOWING: SECURE AND PAY FOR ALL REQUIRED PERMITS AND INSPECTIONS VISIT JOB SITE AND VERIFY ALL EXISTING CONDITIONS PRIOR TO BID SUBMITTAL GUARANTEE ALL WORK FOR A ONE YEAR PERIOD FROM THE DATE OF FINAL ACCEPTANCE CONTACT ELECTRIC UTILITY COMPANY AND/OR LANDLORD AND MAKE ALL ARRANGEMENTS FOR ELECTRICAL SERVICE CONTACT TELEPHONE COMPANY AND MAKE ALL NECESSARY ARRANGEMENTS FOR TELEPHONE SERVICE PROVIDE A COMPLETE GROUNDING SYSTEM PER N.E.C. TEST ALL CIRCUITS FOR SHORTS AND GROUNDS BALANCE LOADS ON ALL PANELS PROVIDE TEMPORARY ELECTRICAL SERVICES FURNISH AND INSTALL EVERYTHING NECESSARY FOR A COMPLETE ELECTRICAL OPERATING SYSTEM WHETHER CALLED FOR OR NOT ON THE PLANS



NEW SUSPENSION CEILING SYSTEM





TYPICAL FLUORESCENT LIGHTING FIXTURE MOUNTING (RECESSED)
N.T.S.

ELECTRICAL SPECIFICATIONS:

WORK INCLUDED

THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL WORK, LABOR, MATERIALS AND EQUIPMENT AS REQUIRED FOR A COMPLETE AND OPERATING ELECTRICAL INSTALLATION AS INDICATED ON THE DRAWINGS

THE ELECTRICAL CONTRACTOR SHALL ALSO FURNISH AND/OR PERFORM THE FOLLOWING:

SECURE AND PAY FOR ALL REQUIRED PERMITS AND INSPECTIONS VISIT JOB SITE AND VERIFY ALL EXISTING CONDITIONS PRIOR TO

GUARANTEE ALL WORK FOR A ONE YEAR PERIOD FROM THE DATE

OF FINAL ACCEPTANCE

CONTACT ELECTRIC UTILITY COMPANY AND/OR LANDLORD AND MAKE

ALL ARRANGEMENTS FOR ELECTRICAL SERVICE
CONTACT TELEPHONE COMPANY AND MAKE ALL NECESSARY

ARRANGEMENTS FOR TELEPHONE SERVICE PROVIDE A COMPLETE GROUNDING SYSTEM PER N.E.C.

TEST ALL CIRCUITS FOR SHORTS AND GROUNDS

BALANCE LOADS ON ALL PANELS
PROVIDE TEMPORARY ELECTRICAL SERVICES

FURNISH AND INSTALL EVERYTHING NECESSARY FOR A COMPLETE

ELECTRICAL OPERATING SYSTEM WHETHER CALLED FOR OR NOT ON THE PLANS

EX	(IST. PANEL A	VOLTAG	E <u>11</u>	<u>0/24</u> 0	V	AMP	S ₋	200		MOUNT	ING	RECESS	ED OTHER	
CKT	LOCATION	LTG	REC	HTG	MISC	C/B	Ø	C/B	MISC	HTG	REC	LTG	LOCATION	CKT
1	EF-1 3 HP				.83	30 /	Α	20				0.55	DINING AREA LIGHTING	2
3					.83		В	20				0.55	DINING AREA LIGHTING	4
5	+				.83	3 P	С	20				0.55	DINING AREA LIGHTING	6
7	MF-1 3 HP				.67	30 /	Α	20				0.55	DINING AREA LIGHTING	8
9					.67		В	20				0.55	DINING AREA LIGHTING	10
11	+				.67	/ 3P	С	20				0.55	DINING AREA LIGHTING	12
13	DISH WASHER RECPT.				1.5	40 /	Α	20				.45	SUSHI BAR LIGHTING	14
15					1.5		В	20				.40	TOILET LIGHTING	16
17	+				1.5	/ 3P	С	20				.40	TOILET LIGHTING	18
19	ICE MAKER RECPT.				.75	20 /	Α	20				1.12	KITCHEN LIGHTING	20
21					.75	/2P	В	20				.45	KITCHEN EXH. HOOD LIGHT.	22
23	TEAURN RECEPT				1.5	40 /	С	20				.45	FREEZER & COOLER LIG.	24
25					1.5		Α	20				2.4	SIGN LIGHTING	26
27					1.5	/ 3P	В	20				2.4	SIGN LIGHTING	28
29	COOLER EVAP				1.0	20	С	20				2.4	SIGN LIGHTING	30
31	COOLER COND				.75	20/	Α	20					SPARE	32
33	+				.75	/ 2P	В	20						34
35	FREEZER EVAP				1.0	20	С	20						36
37	FREEZER COND				.75	20 /	Α	20						38
39	+				.75	/ 2P	В	20						40
41	SPARE													42
	TOTAL KW				20.0							13.77	TOTAL KW	

EX	IST. PANEL B	VOL	.TAGE <u>11</u>	<u>0/24</u> 0	V	AMP	S _	200		MOUNT	ING _	RECESS	ED OTHER	
CKT	LOCATION	LT	G REC	HTG	MISC	C/B	Ø	C/B	MISC	HTG	REC	LTG	LOCATION	CKT
1	EF-2 1-1	/2 HP			.83	30 /	Α	20				.45	HIBACHI HOOD LIGHTING	2
3	V				.83	2P	В	20				.45	HIBACHI HOOD LIGHTING	4
5	MF-2 1-	1/2 HP			.67	30/	С	20				.45	HIBACHI HOOD LIGHTING	6
7	+				.67	2 P	Α	20			1.0		GENERAL RECEPT.	8
9	EF-3 1-1	/2 HP			.83	30/	В	20			1.0		GENERAL RECEPT.	10
11	•				.83	/2P	С	20			1.0		GENERAL RECEPT.	12
13	MF-3 1-	1/2 HP			.67	30/	Α	20			1.0		KITCHEN RECEPT.	14
15					.67	/2P	В	20			1.0		SUSHI BAR RECEPT.	16
17	EF-4 1-1	/2 HP			.83	30/	С	20			1.2		LOWBOY RECEPT.	18
19	V				.83	/2P	Α	20	.40				BAIN MARIE RECEPT.	20
21	MF-4 1-	1/2 HP			.67	30	В	20						22
23					.67	/2P	С	20						24
25	SPARE						Α	20						26
27							В	20						28
29							С	20						30
31							Α	20						32
33							В	20						34
35							С	20						36
37							Α	20						38
39							В	20						40
41													SPARE	42
	TOTAL KW				12.0				.40		6.20	1.35	TOTAL KW	

REMARKS:

- A. REMOVABLE GREASE CATCHER (4.1.2.2.6.)
- B. UL LISTED VAPOR TIGHT WITH WIRE SAFETY GUARD.
- C. BAFFLE FILTER SET 45 DEGREE. UL LISTED. (821U)
- D. 14" X 22" UL LISTED FIRE DAMPER.
- E. DUCTS CONSTRUCTED OF NO. 16 MSG STEEL WITH ALL SEAMS JOISTS, AND PENETRATIONS WELDED AS LIQUID—TIGHT AS PER NFPA CODE 96.
- F. HOOD CONSTRUCTED OF NO. 18 MSG STAINLESS STEEL TYPE 304 WITH FRESH AIR RETURN.
 ALL CONNECTION AND SEAMS WERE WELDED AS LIQUID—TIGHT TO MEET NFPA CODE 96 STANDARD.
 NSF LISTED NO. 1499.
- G. EXISTING WALL WITH 5/8" "X" TYPE SHEET ROCK WITH 26 GA. STAINLESS STEEL SURFACES, 2HR FIRE RATED.
- H. FIRE SUPPRESSION NEEDS.
- I. ROOF CURB.
- J. ALL KITCHEN EQUIPMENT SHALL BE MOUNTED ON
- | STAINLESS STEEL LEGS@A MINIMUM OF 6" AFF.
- K. ALL UTILITY LINES MUST BE INSTALLED 6" AFF AND 1" AWAY FROM WINDOWS.

