26 WEST STREET

BROOKLYN, NEW YORK 11222

Remedial Action Work Plan

NYC VCP Site Number: 15CVCPK044K

OER Site Number: 15EHAN098K

Prepared for:

The Rabsky Group

505 Flushing Avenue, Suite 1D

Brooklyn, New York 11205

Prepared by:

EBC

ENVIRONMENTAL BUSINESS CONSULTANTS

1808 Middle Country Road

Ridge, NY 11961

DECEMBER 2014

REMEDIAL ACTION WORK PLAN
TABLE OF CONTENTS

TABLES

FIGURES

ATTACHMENTS

LIST OF ACRONYMS

Acronym	Definition
AOC	Area of Concern
BOA	Brownfield Opportunity Area
CAMP	Community Air Monitoring Plan
COC	Certificate of Completion
CSOP	Contractors Site Operation Plan
ECs/ICs	Engineering and Institutional Controls
HASP	Health and Safety Plan
VCA	Voluntary Cleanup Agreement
NOC	Notice of Completion
NYC VCP	New York City Voluntary Cleanup Program
NYC DEP	New York City Department of Environmental Protection
NYC DOHMH	New York State Department of Health and Mental Hygiene
NYCRR	New York Codes Rules and Regulations
NYC OER	New York City Office of Environmental Remediation
NYS DEC	New York State Department of Environmental Conservation
NYS DOH	New York State Department of Health
NYS DOT	New York State Department of Transportation
OSHA	United States Occupational Health and Safety Administration
PE	Professional Engineer
PID	Photo Ionization Detector
QEP	Qualified Environmental Professional
QHHEA	Qualitative Human Health Exposure Assessment
RAOs	Remedial Action Objectives
RAR	Remedial Action Report
RAWP	Remedial Action Work Plan or Plan
RCA	Recycled Concrete Aggregate
RD	Remedial Design
RI	Remedial Investigation
RMZ	Residual Management Zone
SCOs	Soil Cleanup Objectives
SCG	Standards, Criteria and Guidance
SMP	Site Management Plan
SPDES	State Pollutant Discharge Elimination System
SVOC	Semi-Volatile Organic Compound
USGS	United States Geological Survey
UST	Underground Storage Tank
VOC	Volatile Organic Compound

CERTIFICATION

I, Ariel Czemerinski, am a Professional Engineer licensed in the State of New York. I have primary direct responsibility for implementation of the remedial action for the Redevelopment Site located at 26 West Street, Brooklyn, NY, Site number 15EHAN098K and NYC VCP number 15CVCP044K.

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.

_____

Name

_____

NYS PE License Number

_____

Signature

_____

Date

PE Stamp

EXECUTIVE SUMMARY

The Rabsky Group has applied to enroll in the New York City Voluntary Cleanup Program (NYC VCP) to investigate and remediate a 18,125-ft^2 Site located at 26 West Street in the Greenpoint section of Brooklyn, New York. A remedial investigation (RI) was performed to compile and evaluate data and information necessary to develop this Remedial Action Work Plan (RAWP). The remedial action described in this document provides for the protection of public health and the environment consistent with the intended property use, complies with applicable environmental standards, criteria and guidance and conforms with applicable laws and regulations.

Site Location and Current Usage

The Site is located at 26 West Street in the Greenpoint section of Brooklyn, New York, and is currently identified as Block 2571, Lot 1 on the New York City Tax Map. Figure 1 shows the Site location. Lot 1 is corner through lot located on the east side of West Street between Oak Street and Calyer Street. Lot 1 consists of 200 feet of street frontage on West Street, 100 feet of street frontage on Calyer Street and 75 feet of street frontage on Oak Street for a total of approximately 18,125 ft^2 (0.42 acres). The Site is bordered by 1 & 2 family homes to the east, Oak Street to the north, West Street to the west, and Calyer Street to the south. A map of the site boundary is shown on Figure 2.

Currently, the Site is improved with a vacant 1 story office building/warehouse and an asphalt paved parking lot. The office building was recently used by a commercial air conditioning company and as office building.

Summary of Proposed Redevelopment Plan

The proposed future use of the Site will consist of a new 6-story apartment building that will occupy the entire footprint of the lot. The first floor will consist of parking for 36 cars, a 960 ft^2 residential lobby, a compactor room, bicycle storage room, electrical meter room, water meter room, gas meter room. The second through sixth floors will consist of apartments.

The building will consist of a 24" thick mat slab, which will require excavation of the top 2 to 3 feet across the Site to construct. An estimated 2,000 cubic yards (3,000 tons) of soil will be removed for the 24 inch thick mat slab.

Layout of the redevelopment plans for first floor is presented in Figure 3. The current zoning designation is M1-2/R6A. The proposed use is consistent with existing zoning for the property.

The remedial action contemplated under this RAWP may be implemented independently of the proposed redevelopment plan.

Summary of Environmental Findings

1. The elevation of the Site is approximately 10 feet.
2. Depth to groundwater is approximately 9 feet below sidewalk grade.
3. Groundwater flow is generally west.
4. Depth to bedrock is at the Site is greater than 100 feet.
5. The stratigraphy of the Site consists of historic fill material to depths as great as 4 feet, underlain by native brown silty sand.
6. Soil/fill samples results were compared to NYSDEC Unrestricted Use Soil Cleanup Objectives and Restricted Residential Soil Cleanup Objectives as presented in 6NYCRR Part 375-6.8 and CP51. Soil/fill samples detected no VOCs, with the exception of methylene chloride (maximum [max] of 6.2 µg/kg), acetone (12 µg/kg), and naphthalene (140 µg/kg), all below Unrestricted Use SCOs. Six SVOCs, including benz(a)anthracene (max of 9,100 µg/kg), benzo(a)pyrene (max of 9,700 µg/kg), benzo(b)-fluoranthene (max of 12,000 µg/kg), benzo(k)fluoranthene (max of 4,300 µg/kg), chrysene (max of 9,100 µg/kg), and indeno(1,2,3-cd)pyrene (maximum of 4,500 µg/kg), were detected above Restricted Residential Use SCOs within four of the eight shallow soil samples. The pesticide 4,4'-DDD (56 µg/kg) was detected within one of the shallow soil samples exceeding Unrestricted Use SCOs but below Restricted Residential Use SCOs. PCB-1248 (270 µg/kg) exceeded Unrestricted Use SCOs in one shallow soil sample. Four metals including copper (max of 55.1 mg/kg), lead (max of 801 mg/kg), mercury (max of 1.08 mg/kg), and zinc (max of 272 mg/kg) exceeded Unrestricted Use SCOs within shallow soil samples. Of these metals, lead and mercury also exceeded Restricted

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

Residential Use SCOs. No VOCs, SVOCs, pesticides, PCBs or metals were detected above Unrestricted Use SCOs within any of the deeper soil samples. Overall, the soil results were consistent with data identified at sites with historic fill material in NYC.

7. Groundwater samples results were compared to New York State 6NYCRR Part 703.5 Class GA groundwater quality standards (GQS). Groundwater samples showed no PCBs or pesticides at detectable concentrations. No VOCs were detected above GQS, but the following VOCs were detected at trace amounts; acetone (max of 3.2 µg/L), naphthalene (0.32 µg/L), and trichloroethene (0.27 µg/L). Five SVOCs, including benz(a)anthracene (max of 0.06 µg/L), benzo(b)fluroanthene (max of 0.06 µg/L), benzo(k)fluroanthene (0.03 µg/L), chrysene (max of 0.06 µg/L), and indeno(1,2,3-cd)pyrene (0.02 µg/L) were detected above GQS in three of the four groundwater samples. Several metals were identified, but only iron, manganese and sodium exceeded their respective GQS in all four filtered groundwater samples. No pesticides or PCBs were detected in the groundwater samples.
8. Soil vapor results collected during the RI were compared to the compounds listed in Vapor Intrusion Matrices in the New York State Department of Health (NYSDOH) Final Guidance for Evaluating Soil Vapor Intrusion, dated October 2006. Total concentrations of petroleum-related VOCs (BTEX) ranged from 67 µg/m^3 to 235 µg/m^3. Highest concentrations were reported for ethanol (maximum of 591 µg/m^3). The chlorinated VOC, trichloroethylene (TCE) was detected in six of the seven soil gas samples ranging in concentration from 0.268 to 8.32 µg/m^3. Tetrachloroethylene was detected in all seven soil gas samples ranging in concentration from 2.44 to 10.2 µg/m^3. Carbon tetrachloride was detected in one of the seven soil gas samples at a concentration of 0.314 µg/m^3 and 1,1,1-trichloroethane (maximum of 6.6 µg/m^3) was detected within two of the seven soil gas samples. The concentrations of all chlorinated compounds were below the monitoring level ranges established within the NYSDOH Final Guidance on Soil Vapor Intrusion, with the exception of trichloroethene which was detected in one of the seven soil gas samples above the monitoring level range.

Summary of the Remedy

The proposed remedial action achieves protection of public health and the environment for the intended use of the property. The proposed remedial action achieves all of the remedial action objectives established for the project and addresses applicable standards, criterion, and guidance; is effective in both the short-term and long-term and reduces mobility, toxicity and volume of contaminants; is cost effective and implementable; and uses standards methods that are well established in the industry.

The proposed remedial action will consist of:

1. Preparation of a Community Protection Statement and performance of all required NYC VCP Citizen Participation activities according to an approved Citizen Participation Plan.
2. Performance of a Community Air Monitoring Program for particulates and volatile organic carbon compounds.
3. Establishment of Site-Specific (Track 4) Soil Cleanup Objectives (SCOs).
4. Site mobilization involving Site security setup, equipment mobilization, utility mark outs and marking & staking excavation areas.
5. Completion of a Waste Characterization Study prior to excavation activities. Waste characterization soil samples will be collected at a frequency dictated by disposal facility. A Waste Characterization Report documenting sample procedures, location, analytical results shall be submitted to NYCOER prior to start of remedial action.
6. Excavation and removal of soil/fill exceeding Track 4 Site-Specific SCOs. For development purposes, excavation of the top 2 to 3 feet would occur to construct the 24 inch thick mat slab. Approximately 3,000 tons of soil will be removed.
7. Screening of excavated soil/fill during intrusive work for indications of contamination by visual means, odor, and monitoring with a PID. Appropriate segregation of excavated media on-Site.
8. Management of excavated materials including temporarily stockpiling and segregating to prevent co-mingling of contaminated material and non-contaminated materials.
9. Removal of underground storage tanks (if encountered) and closure of petroleum spills (if evidence of a spill/leak is encountered during Site excavation) in compliance with applicable local, State and Federal laws and regulations.

10. Transportation and off-Site disposal of all soil/fill material at permitted facilities in accordance with applicable laws and regulations for handling, transport, and disposal, and this plan. Sampling and analysis of excavated media as required by disposal facilities. Appropriate segregation of excavated media on-Site.
11. Collection and analysis of end-point samples to determine the performance of the remedy with respect to attainment of SCOs.
12. Import of materials to be used for backfill and cover in compliance with this plan and in accordance with applicable laws and regulations.
13. Installation of a vapor barrier below the 24 inch thick mat slab. The vapor barrier to be installed below the 24 inch thick mat slab will consist of Raven Industries' VaporBlock 20 Plus, which is a seven layer co-extruded barrier made from state-of-the-art polyethylene and EVOH resins.
14. Construction and maintenance of an engineered composite cover consisting of the 24 inch thick concrete mat building slab to prevent human exposure to residual soil/fill remaining under the Site.
15. Implementation of storm-water pollution prevention measures in compliance with applicable laws and regulations.
16. Performance of all activities required for the remedial action, including permitting requirements and pretreatment requirements, in compliance with applicable laws and regulations.
17. Submission of a Remedial Action Report (RAR) that describes the remedial activities, certifies that the remedial requirements have been achieved, defines the Site boundaries, and describes all Engineering and Institutional Controls to be implemented at the Site, and lists any changes from this RAWP.
18. Submission of an approved Site Management Plan (SMP) in the RAR for long-term management of residual contamination, including plans for operation, maintenance, monitoring, inspection and certification of Engineering and Institutional Controls and reporting at a specified frequency.
19. The property will continue to be registered with an E-Designation by the NYC Buildings Department. Establishment of Engineering Controls and Institutional Controls in this RAWP and a requirement that management of these controls must be in compliance with

an approved SMP. Institutional Controls will include prohibition of the following: (1) vegetable gardening and farming; (2) use of groundwater without treatment rendering it safe for the intended use; (3) disturbance of residual contaminated material unless it is conducted in accordance with the SMP; and (4) higher level of land usage without OER-approval.

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
Ph: 631.504.6000
Fax: 631.928.2780

COMMUNITY PROTECTION STATEMENT

The Office of Environmental Remediation created the New York City Voluntary Cleanup Program (NYC VCP) to provide governmental oversight for the cleanup of contaminated property in NYC. This Remedial Action Work Plan ("cleanup plan") describes the findings of prior environmental studies that show the location of contamination at the Site, and describes the plans to clean up the Site to protect public health and the environment.

This cleanup plan provides a very high level of protection for neighboring communities and also includes many other elements that address common community concerns, such as community air monitoring, odor, dust and noise controls, hours of operation, good housekeeping and cleanliness, truck management and routing, and opportunities for community participation. The purpose of this Community Protection Statement is to explain these community protection measures in non-technical language to simplify community review.

Remedial Investigation and Cleanup Plan. Under the NYC VCP, a thorough cleanup study of this property (called a remedial investigation) has been performed to identify past property usage, to sample and test soils, groundwater and soil vapor, and identify contaminant sources present on the property. The cleanup plan has been designed to address all contaminant sources that have been identified during the study of this property.

Identification of Sensitive Land Uses. Prior to selecting a cleanup, the neighborhood was evaluated to identify sensitive land uses nearby, such as schools, day care facilities, hospitals and residential areas. The cleanup program was then tailored to address the special conditions of this community.

Qualitative Human Health Exposure Assessment. An important part of the cleanup planning for the Site is the performance of a study to find all of the ways that people might come in contact with contaminants at the Site now or in the future. This study is called a Qualitative Human Health Exposure Assessment (QHHEA). A QHHEA was performed for this project. This assessment has considered all known contamination at the Site and evaluated the potential for people to come in contact with this contamination. All identified public exposures will be addressed under this cleanup plan.

Construction Health and Safety Plan. This cleanup plan includes a Construction Health and Safety Plan (CHASP) that is designed to protect community residents and on-Site workers. The elements of this plan are in compliance with safety requirements of the United States Occupational Safety and Health Administration (OSHA). This plan includes many protective elements including those discussed below.

Site Safety Coordinator. This project has a designated Site Safety Coordinator to implement the CHASP. The Site Safety Coordinator maintains an emergency contact sheet and protocol for management of emergencies. The Site Safety Coordinator is Mr. Kevin Waters of Environmental Business Consultants. Mr. Waters can be reached at (631) 504-6000.

Worker Training. Workers participating in cleanup of contaminated material on this project are required to be trained in a 40-hour hazardous waste operators training course and to take annual refresher training. This pertains only to workers performing specific tasks including removing hazardous material and installing cleanup systems in contaminated areas.

Community Air Monitoring Plan. Community air monitoring will be performed during this cleanup project to ensure that the community is properly protected from contaminants, dust and odors. Air samples will be tested in accordance with a detailed plan called the Community Air Monitoring Plan (CAMP). Results will be regularly reported to the NYC OER. This cleanup plan also has a plan to address any unforeseen problems that might occur during the cleanup (called a 'Contingency Plan').

Odor, Dust and Noise Control. This cleanup plan includes actions for odor and dust control. These actions are designed to prevent off-Site odor and dust nuisances and includes steps to be taken if nuisances are detected. Generally, dust is managed by application of physical covers and by water sprays. Odors are controlled by limiting the area of open excavations, physical covers, spray foams and by a series of other actions (called operational measures). The project is also required to comply with NYC noise control standards. If you observe problems in these areas, please contact the on-Site Project Manager, Mr. Kevin Waters at (631) 504-6000 or NYC Office of Environmental Remediation Project Manager, Samantha Morris (212) 341-2082.

Quality Assurance. This cleanup plan requires that evidence be provided to illustrate that all cleanup work required under the plan has been completed properly. This evidence will be summarized in the final report, called the Remedial Action Report. This report will be submitted to the NYC Office of Environmental Remediation and will be thoroughly reviewed.

Storm-Water Management. To limit the potential for soil erosion and discharge, this cleanup plan has provisions for storm-water management. The main elements of the storm water management include physical barriers such as tarp covers and erosion fencing, and a program for frequent inspection.

Hours of Operation. The hours for operation of cleanup will comply with the NYC Department of Buildings construction code requirements or according to specific variances issued by that agency. For this cleanup project, the hours of operation are 7:00AM to 6:00PM Monday through Friday.

Signage. While the cleanup is in progress, a placard will be prominently posted at the main entrance of the property with a laminated project Fact Sheet that states that the project is in the NYC Voluntary Cleanup Program, provides project contact names and numbers, and locations of project documents can be viewed.

Complaint Management. The contractor performing this cleanup is required to address all complaints. If you have any complaints, you can call the facility Project Manager, Mr. Kevin Brussee (EBC) at (631) 504-6000, the NYC Office of Environmental Remediation Project Manager, Samantha Morris at (212) 341-2082, or call 311 and mention the Site is in the NYC Voluntary Cleanup Program.

Utility Mark-outs. To promote safety during excavation in this cleanup, the contractor is required to first identify all utilities and must perform all excavation and construction work in compliance with NYC Department of Buildings regulations.

Soil and Liquid Disposal. All soil and liquid material removed from the Site as part of the cleanup will be transported and disposed of in accordance with all applicable City, State and Federal regulations and required permits will be obtained.

Soil Chemical Testing and Screening. All excavations will be supervised by a trained and properly qualified environmental professional. In addition to extensive sampling and chemical testing of soils on the Site, excavated soil will be screened continuously using hand-held instruments, by sight, and by smell to ensure proper material handling and management, and community protection.

Stockpile Management. Soil stockpiles will be kept covered with tarps to prevent dust, odors and erosion. Stockpiles will be frequently inspected. Damaged tarp covers will be promptly replaced. Stockpiles will be protected with silt fences. Hay bales will be used, as needed to protect storm water catch basins and other discharge points.

Trucks and Covers. Loaded trucks leaving the Site will be covered in compliance with applicable laws and regulations to prevent dust and odor. Trucks will be properly recorded in logs and records and placarded in compliance with applicable City, State and Federal laws, including those of the New York State Department of Transportation. If loads contain wet material that can leak, truck liners will be used. All transport of materials will be performed by licensed truckers and in compliance with all laws and regulations.

Imported Material. All fill materials proposed to be brought onto the Site will comply with rules outlined in this cleanup plan and will be inspected and approved by a qualified worker located on-Site. Waste materials will not be brought onto the Site. Trucks entering the Site with imported clean materials will be covered in compliance with applicable laws and regulations.

Equipment Decontamination. All equipment used for cleanup work will be inspected and washed, if needed, before it leaves the Site. Trucks will be cleaned at a truck inspection station on the property before leaving the Site.

Housekeeping. Locations where trucks enter or leave the Site will be inspected every day and cleaned regularly to ensure that they are free of dirt and other materials from the Site.

Truck Routing. Truck routes have been selected to: (a) limit transport through residential areas and past sensitive nearby properties; (b) maximize use of city-mapped truck routes; (c) limit total distance to major highways; (d) promote safety in entry to highways; (e) promote overall safety

in trucking; and (f) minimize off-Site line-ups (queuing) of trucks entering the property. Operators of loaded trucks leaving the Site will be instructed not to stop or idle in the local neighborhood.

Final Report. The results of all cleanup work will be fully documented in a final report (called a Remedial Action Report) that will be available for you to review online at OER's website.

Long-Term Site Management. To provide long-term protection after the cleanup is complete, the property owner will be required to comply with an ongoing Site Management Plan that calls for continued inspection of protective controls, such as Site covers. The Site Management Plan is evaluated and approved by the NYC OER. Requirements that the property owner must comply with are established through a city environmental designation. A certification of continued protectiveness of the cleanup will be required from time to time to show that the approved cleanup is still effective.

REMEDIAL ACTION WORK PLAN

1.0 SITE BACKGROUND

The Rabsky Group has applied to enroll in the New York City Voluntary Cleanup Program (NYC VCP) to investigate and remediate a property located at 26 West Street in the Greenpoint section of Brooklyn, New York (the Site). A Remedial Investigation (RI) was performed to compile and evaluate data and information necessary to develop this Remedial Action Work Plan (RAWP) in a manner that will render the Site protective of public health and the environment consistent with the contemplated end use. This RAWP establishes remedial action objectives, provides remedial alternatives analysis that includes consideration of a permanent cleanup, and provides a description of the selected remedial action. The remedial action described in this document provides for the protection of public health and the environment, complies with applicable environmental standards, criteria and guidance and applicable laws and regulations.

1.1 Site Location and Current Usage

The Site is located at 26 West Street in the Greenpoint section of Brooklyn, New York, and is currently identified as Block 2571, Lot 1 on the New York City Tax Map. Figure 1 shows the Site location. Lot 1 is corner through lot located on the east side of West Street between Oak Street and Calyer Street. Lot 1 consists of 200 feet of street frontage on West Street, 100 feet of street frontage on Calyer Street and 75 feet of street frontage on Oak Street for a total of approximately 18,125 ft^2 (0.42 acres). The Site is bordered by 1 & 2 family homes to the east, Oak Street to the north, West Street to the west, and Calyer Street to the south. A map of the site boundary is shown on Figure 2.

Currently, the Site is improved with a vacant 1 story office building/warehouse and an asphalt paved parking lot. The office building was recently used by a commercial air conditioning company and as office building.

1.2 Proposed Redevelopment Plan

The proposed future use of the Site will consist of a new 6-story apartment building that will occupy the entire footprint of the lot. The first floor will consist of parking for 36 cars, a 960 ft^2

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
Ph: 631.504.6000
Fax: 631.928.2780

residential lobby, a compactor room, bicycle storage room, electrical meter room, water meter room, gas meter room. The second through sixth floors will consist of apartments.

The building will consist of a 24" thick mat slab, which will require excavation of the top 2 to 3 feet across the Site to construct. An estimated 2,000 cubic yards (3,000 tons) of soil will be removed for the 24 inch thick mat slab.

Layout of the redevelopment plans for first floor is presented in Figure 3. The current zoning designation is M1-2/R6A. The proposed use is consistent with existing zoning for the property. The remedial action contemplated under this RAWP may be implemented independently of the proposed redevelopment plan.

1.3 Description of Surrounding Property

The area immediately surrounding Site consists of industrial waterfront lots to the west, industrial properties to the north and south, and residential properties to the east. Figure 4 shows the surrounding land usage of the adjacent properties listed below as well as additional properties located up to 500 feet away from the Site. No hospitals, schools or daycare facilities are located within a 500 ft radius of the Site.

Surrounding Property Usage

Direction	Property Description
North – Opposite side of Oak Street	Block 2568, Lot 1 - 71 West Street A 131,650 ft^2 lot developed with three industrial/manufacturing buildings. The western most building is currently being renovated for commercial space.
South – Opposite side of Calyer Street	Block 2589 Lot 5 - 64 Calyer Street A 17,550 ft^2 lot developed with a two-story industrial/manufacturing building.
East – Adjacent Properties	Block 2571, Lot 36 - 71 Calyer Street A 2,500 ft^2 lot developed with a 1&2 family building with a small rear yard. Block 2571, Lot 10 - 66 Oak Street A 2,133 ft^2 lot developed with a multi-family walk-up with a small rear yard.
West – Opposite side of West Street	Block 2570, Lot 1 - 27 West Street A 213,00 ft^2 lot developed with a industrial/manufacturing building currently used as a lumber yard, and multiple other commercial uses. The majority of the lot is paved with asphalt and used for parking of rental vehicles.

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

1.4 Remedial Investigation

A remedial investigation was performed and the results are documented in a companion document called "*Remedial Investigation Report, 26 West Street, Brooklyn, NY*", dated November 2014 (RIR).

Summary of Past Uses of Site and Areas of Concern

A Phase I Environmental Site Assessment was performed by ENVIRON International Corporation in January of 2014. The past operations conducted the Site according to the Phase I Report are the following: The Site was utilized as a warehouse (1880s-1900s), for iron working (1900s-1910s), as a lumber yard (1930s-1960s), and vehicle repair, sale of auto supplies, vehicle rental, vehicle storage and a trade school (1970s-1980s).

The Phase I Report identified no recognized environmental conditions (RECs) in connection with the Site..

Areas of Concern (AOCs) identified for the Site include:

1. The presence of historic fill material to depths as great as 4 feet.

Summary of the Work Performed under the Remedial Investigation

EBC performed the following scope of work at the Site:

1. Conducted a Site inspection to identify AOCs and physical obstructions (i.e. structures, buildings, etc.);
2. Installed eight soil borings across the Site, and collected 16 soil samples for chemical analysis from the soil borings to evaluate soil quality;
3. Installed four groundwater monitoring wells throughout the Site and collected four groundwater samples for chemical analysis to evaluate groundwater quality; and
4. Installed seven soil vapor implants and collected seven soil vapor samples for chemical analysis.

Summary of Environmental Findings

1. The elevation of the Site is approximately 10 feet.
2. Depth to groundwater is approximately 9 feet below sidewalk grade.

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

3. Groundwater flow is generally west.
4. Depth to bedrock is at the Site is greater than 100 feet.
5. The stratigraphy of the Site consists of historic fill material to depths as great as 4 feet, underlain by native brown silty sand.
6. Soil/fill samples results were compared to NYSDEC Unrestricted Use Soil Cleanup Objectives and Restricted Residential Soil Cleanup Objectives as presented in 6NYCRR Part 375-6.8 and CP51. Soil/fill samples detected no VOCs, with the exception of methylene chloride (maximum [max] of 6.2 µg/kg), acetone (12 µg/kg), and naphthalene (140 µg/kg), all below Unrestricted Use SCOs. Six SVOCs, including benz(a)anthracene (max of 9,100 µg/kg), benzo(a)pyrene (max of 9,700 µg/kg), benzo(b)-fluoranthene (max of 12,000 µg/kg), benzo(k)fluoranthene (max of 4,300 µg/kg), chrysene (max of 9,100 µg/kg), and indeno(1,2,3-cd)pyrene (maximum of 4,500 µg/kg), were detected above Restricted Residential Use SCOs within four of the eight shallow soil samples. The pesticide 4,4'-DDD (56 µg/kg) was detected within one of the shallow soil samples exceeding Unrestricted Use SCOs but below Restricted Residential Use SCOs. PCB-1248 (270 µg/kg) exceeded Unrestricted Use SCOs in one shallow soil sample. Four metals including copper (max of 55.1 mg/kg), lead (max of 801 mg/kg), mercury (max of 1.08 mg/kg), and zinc (max of 272 mg/kg) exceeded Unrestricted Use SCOs within shallow soil samples. Of these metals, lead and mercury also exceeded Restricted Residential Use SCOs. No VOCs, SVOCs, pesticides, PCBs or metals were detected above Unrestricted Use SCOs within any of the deeper soil samples. Overall, the soil results were consistent with data identified at sites with historic fill material in NYC.
7. Groundwater samples results were compared to New York State 6NYCRR Part 703.5 Class GA groundwater quality standards (GQS). Groundwater samples showed no PCBs or pesticides at detectable concentrations. No VOCs were detected above GQS, but the following VOCs were detected at trace amounts; acetone (max of 3.2 µg/L), naphthalene (0.32 µg/L), and trichloroethene (0.27 µg/L). Five SVOCs, including benz(a)anthracene (max of 0.06 µg/L), benzo(b)fluroanthene (max of 0.06 µg/L), benzo(k)fluroanthene (0.03 µg/L), chrysene (max of 0.06 µg/L), and indeno(1,2,3-cd)pyrene (0.02 µg/L) were detected above GQS in three of the four groundwater samples. Several metals were

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

identified, but only iron, manganese and sodium exceeded their respective GQS in all four filtered groundwater samples. No pesticides or PCBs were detected in the groundwater samples.

8. Soil vapor results collected during the RI were compared to the compounds listed in Vapor Intrusion Matrices in the New York State Department of Health (NYSDOH) Final Guidance for Evaluating Soil Vapor Intrusion, dated October 2006. Total concentrations of petroleum-related VOCs (BTEX) ranged from 67 µg/m^3 to 235 µg/m^3. Highest concentrations were reported for ethanol (maximum of 591 µg/m^3). The chlorinated VOC, trichloroethylene (TCE) was detected in six of the seven soil gas samples ranging in concentration from 0.268 to 8.32 µg/m^3. Tetrachloroethylene was detected in all seven soil gas samples ranging in concentration from 2.44 to 10.2 µg/m^3. Carbon tetrachloride was detected in one of the seven soil gas samples at a concentration of 0.314 µg/m^3 and 1,1,1-trichloroethane (maximum of 6.6 µg/m^3) was detected within two of the seven soil gas samples. The concentrations of all chlorinated compounds were below the monitoring level ranges established within the NYSDOH Final Guidance on Soil Vapor Intrusion, with the exception of trichloroethene which was detected in one of the seven soil gas samples above the monitoring level range.

For more detailed results, consult the RIR. Based on an evaluation of the data and information from the RIR and this RAWP, disposal of significant amounts of hazardous waste is not suspected at this site.

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

2.0 REMEDIAL ACTION OBJECTIVES

Based on the results of the RI, the following Remedial Action Objectives (RAOs) have been identified for this Site:

Groundwater

- Prevent direct exposure to contaminated groundwater.
- Prevent exposure to contaminants volatilizing from contaminated groundwater.

Soil

- Prevent direct contact with contaminated soil.
- Prevent migration of contaminants that would result in groundwater contamination.

Soil Vapor

- Prevent exposure to contaminants in soil vapor.
- Prevent migration of soil vapor into dwelling and other occupied structures.

EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
1808 MIDDLE COUNTRY ROAD
RIDGE, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

3.0 REMEDIAL ALTERNATIVES ANALYSIS

The goal of the remedy selection process under is to select a remedy that is protective of human health and the environment taking into consideration the current, intended and reasonably anticipated future use of the property. The remedy selection process begins by establishing RAOs for media in which chemical constituents were found in exceedance of applicable standards, criteria and guidance values (SCGs). A remedy is then developed based on the following ten criteria:

- Protection of human health and the environment;
- Compliance with SCGs;
- Short-term effectiveness and impacts;
- Long-term effectiveness and permanence;
- Reduction of toxicity, mobility, or volume of contaminated material;
- Implementability;
- Cost effectiveness;
- Community Acceptance;
- Land use; and
- Sustainability.

The following is a detailed description of the alternative analysis and remedy selection to address impacted media at the Site. As required, a minimum of two remedial alternatives (including a Track 1 Unrestricted Use scenario) are evaluated, as follows:

Alternative 1 involves:

- Selection of NYSDEC 6NYCRR Part 375 Unrestricted Use (Track 1) Soil Cleanup Objectives (SCOs).
- Removal of all soil/fill exceeding Track 1 Unrestricted Use SCOs throughout the Site and confirmation that Track 1 Unrestricted Use SCOs have been achieved with post-excavation endpoint sampling. If soil/fill containing analytes at concentrations above Track 1 Unrestricted Use SCOs is still present at the base of the excavation after removal

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

of all soil required for construction of the building's foundation is complete, additional excavation will be performed to ensure complete removal of soil that does not meet Track 1 Unrestricted Use SCO;

- No Engineering or Institutional Controls are required for a Track 1 Unrestricted Use cleanup, but installation of a vapor barrier beneath the 24 inch thick mat slab as a part of development to prevent any potential future exposures from off-Site soil vapor;
- Placement of a final cover over the entire Site as part of new development.

Alternative 2 involves:

- Establishment of Site-Specific (Track 4) SCOs.
- Removal of all soil/fill exceeding Track 4 Site-Specific SCOs and confirmation that Track 4 Site-Specific SCOs have been achieved with post-excavation endpoint sampling. Excavation for construction of the new building's foundation would take place to a depth of approximately 3 feet below grade. If soil/fill containing analytes at concentrations above Track 4 Site-Specific SCOs is still present at the base of the excavation after removal of all soil required for construction of the new building's foundation, additional excavation will be performed to ensure complete removal of soil that does not meet Track 4 Site-Specific SCOs;
- Placement of a final cover over the entire Site to prevent exposure to remaining soil/fill;
- Installation of a soil vapor barrier system beneath the 24 inch thick mat slab to prevent any potential future exposures from off-Site soil vapor;
- Establishment of use restrictions including prohibitions on the use of groundwater from the Site; prohibitions of sensitive Site uses, such as farming or vegetable gardening, to prevent future exposure pathways; and prohibition of a higher level of land use without OER approval;
- Establishment of an approved Site Management Plan (SMP) to ensure long-term management of these Engineering and Institutional Controls including the performance of periodic inspections and certification that the controls are performing as they were intended; and

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

- Continued registration as an E-designated property to memorialize the remedial action and the Engineering and Institutional Controls required by the RAWP.

3.1 Threshold Criteria

Protection of Public Health and the Environment

This criterion is an evaluation of the remedy's ability to protect public health and the environment, and an assessment of how risks posed through each existing or potential pathway of exposure are eliminated, reduced or controlled through removal, treatment, and implementation of Engineering Controls or Institutional Controls. Protection of public health and the environment must be achieved for all approved remedial actions.

Alternative 1 would be protective of human health and the environment by removing contaminated soil/fill exceeding Track 1 Unrestricted Use SCOs and groundwater protection standards, thus eliminating potential for direct contact with contaminated soil/fill once construction is complete and eliminating the risk of contamination leaching into groundwater.

Alternative 2 would achieve comparable protections of human health and the environment by excavating the historic fill at the Site and by ensuring that remaining soil/fill on-Site meets Track 4 Site-Specific SCOs, as well as by placement of Institutional and Engineering Controls, including a composite cover system. The composite cover system would prevent direct contact with any remaining on-Site soil/fill. The vapor barrier would mitigate any vapor issues from entering the building. Implementing Institutional Controls including a Site Management Plan would ensure that the composite cover system remains intact and protective. Establishment of Track 4 Site-Specific SCOs would minimize the risk of contamination leaching into groundwater.

For both Alternatives, potential exposure to contaminated soils during construction would be minimized by implementing a Construction Health and Safety Plan (CHASP), an approved Soil/Materials Management Plan and Community Air Monitoring Plan (CAMP). Potential contact with contaminated groundwater would be prevented as its use is prohibited by city laws and regulations. Potential future migration of off-Site soil vapors into the new building would be

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

prevented by installing vapor barrier below the new building's 24 inch thick mat slab.

3.2. Balancing Criteria

Compliance with Standards, Criteria and Guidance (SCGs)

This evaluation criterion assesses the ability of the alternative to achieve applicable standards, criteria and guidance.

Alternative 1 would achieve compliance with the remedial goals, chemical-specific SCGs and RAOs for soil through removal of soil to achieve Track 1 Unrestricted Use SCOs and Groundwater Protection Standards. Compliance with SCGs for soil vapor would also be achieved by installing a vapor barrier system below 24 inch thick mat slab as part of development.

Alternative 2 would achieve compliance with the remedial goals, chemical-specific SCGs and RAOs for soil through removal of soil to meet Track 4 Site-Specific SCOs. Compliance with SCGs for soil vapor would also be achieved by installing a vapor barrier system below 24 inch thick mat slab. A Site Management Plan would ensure that these controls remained protective for the long term.

Health and safety measures contained in the CHASP and Community Air Monitoring Plan (CAMP) that comply with the applicable SCGs shall be implemented during Site redevelopment under this RAWP. For both Alternatives, focused attention on means and methods employed during the remedial action would ensure that handling and management of contaminated material would be in compliance with applicable SCGs. These measures will protect on-site workers and the surrounding community from exposure to Site-related contaminants.

Short-term effectiveness and impacts

This evaluation criterion assesses the effects of the alternative during the construction and implementation phase until remedial action objectives are met. Under this criterion, alternatives are evaluated with respect to their effects on public health and the environment during implementation of the remedial action, including protection of the community, environmental impacts, time until remedial response objectives are achieved, and protection of workers during

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

remedial actions.

Both alternatives 1 and 2 have similar short-term effectiveness during their respective implementations, as each requires excavation of historic fill material. Both alternatives would result in short-term dust generation impacts associated with excavation, handling, load out of materials, and truck traffic. Short term impacts could potentially be higher for Alternative 1 if excavation of greater amounts of historical fill material is encountered below the excavation depth of the proposed building. However, focused attention to means and methods during the remedial action during a Track 1 removal action, including community air monitoring and appropriate truck routing, would minimize or negate the overall impact of these activities.

An additional short-term adverse impact and risks to the community associated with both remedial alternatives is increased truck traffic. Approximately 120, 25-ton capacity truck trips would be necessary to transport fill and soil excavated during Site development. Truck traffic will be routed on the most direct course using major thoroughfares where possible and flaggers will be used to protect pedestrians at Site entrances and exits.

The effects of these potential adverse impacts to the community, workers and the environment will be minimized through implementation of corresponding control plans including a Construction Health and Safety Plan, a Community Air Monitoring Plan (CAMP) and a Soil/Materials Management Plan (SMMP), during all on-Site soil disturbance activities and would minimize the release of contaminants into the environment. Both alternatives provide short term effectiveness in protecting the surrounding community by decreasing the risk of contact with on-Site contaminants. Construction workers operating under appropriate management procedures and a Construction Health and Safety Plan (CHASP) would be protected from on-Site contaminants (personal protective equipment would be worn consistent with the documented risks within the respective work zones).

Long-term effectiveness and permanence

This evaluation criterion addresses the results of a remedial action in terms of its permanence and quantity/nature of waste or residual contamination remaining at the Site after response

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

objectives have been met, such as permanence of the remedial alternative, magnitude of remaining contamination, adequacy of controls including the adequacy and suitability of ECs/ICs that may be used to manage contaminant residuals that remain at the Site and assessment of containment systems and ICs that are designed to eliminate exposures to contaminants, and long-term reliability of Engineering Controls.

Alternative 1 would achieve long-term effectiveness and permanence related to on-Site contamination by permanently removing all impacted soil/fill and enabling unrestricted usage of the property.

Alternative 2 would provide long-term effectiveness by removing most on-Site contamination and attaining Track 4 Site-Specific SCOs; establishing Engineering Controls including a composite cover system across the Site; establishing Institutional Controls to ensure long-term management including use restrictions, a Site Management Plan and maintaining continued registration as an E-designation property to memorialize these controls for the long term. The SMP would ensure long-term effectiveness of all ECs and ICs by requiring periodic inspection and certification that these controls and restrictions continue to be in place and are functioning as they were intended assuring that protections designed into the remedy will provide a continued high level of protection in perpetuity.

Both alternatives would result in removal of soil contamination exceeding the SCOs providing the highest level, most effective and permanent remedy over the long-term with respect to a remedy for contaminated soil, which would eliminate any migration to groundwater. Potential sources of soil vapor and groundwater contamination would also be eliminated as part of the remedy.

Reduction of toxicity, mobility, or volume of contaminated material

This evaluation criterion assesses the remedial alternative's use of remedial technologies that permanently and significantly reduce toxicity, mobility, or volume of contaminants as their principal element. The following is the hierarchy of source removal and control measures that are to be used to remediate a Site, ranked from most preferable to least preferable: removal

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

and/or treatment, containment, elimination of exposure and treatment of source at the point of exposure. It is preferred to use treatment or removal to eliminate contaminants at a Site, reduce the total mass of toxic contaminants, cause irreversible reduction in contaminants mobility, or reduce of total volume of contaminated media.

Alternative 1 would permanently eliminate the toxicity, mobility, and volume of contaminants from on-Site soil by removing all soil in excess of Track 1 Unrestricted Use SCOs.

Alternative 2 would remove most of the historic fill at the Site thus would permanently eliminate the toxicity, mobility, and volume of contaminants, and any remaining on-Site soil beneath the new building would meet Track 4 Site-Specific SCOs. Alternative 1 would eliminate a greater total mass of contaminants on-Site.

Implementability

This evaluation criterion addresses the technical and administrative feasibility of implementing an alternative and the availability of various services and materials required during its implementation, including technical feasibility of construction and operation, reliability of the selected technology, ease of undertaking remedial action, monitoring considerations, administrative feasibility (e.g. obtaining permits for remedial activities), and availability of services and materials.

The proposed remedial action is both feasible and implementable. The techniques, materials and equipment to implement Alternatives 1 and 2 are readily available and have been proven effective in remediating the contaminants associated with the Site. They use standard materials and services that are well established technology. The reliability of each remedy is also high. There are no special difficulties associated with any of the activities proposed.

Cost effectiveness

This evaluation criterion addresses the cost of alternatives, including capital costs (such as construction costs, equipment costs, and disposal costs, engineering expenses) and site management costs (costs incurred after remedial construction is complete) necessary to ensure the continued effectiveness of a remedial action.

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

The costs associated with Alternative 1 would be significantly higher due to the cost of the installation of shoring, and excavation and off-Site disposal of additional historic fill. However, if additional soil/fill with analytes above Track 1 Unrestricted Use SCOs remains after excavation for the new building, long-term costs for Alternative 2 may be higher than Alternative 1 based on implementation of a Site Management Plan as part of Alternative 2.

The remedial plan creates an approach that combines the remedial action with the redevelopment of the Site, including the construction of the building foundation and subgrade structures. The remedial plan is also cost effective in that it will take into consideration the selection of the closest and most appropriate disposal facilities to reduce transportation and disposal costs during the excavation of historic fill and other soils during the redevelopment of the Site.

Community Acceptance

This evaluation criterion addresses community opinion and support for the remedial action. Observations here will be supplemented by public comment received on the RAWP.

Based on the overall goals of the remedial program and initial permitting associated with the proposed site development, no adverse community opinion is anticipated for either alternative. This RAWP will be subject to a public review under the NYC VCP and will provide the opportunity for detailed public input on the remedial alternatives and the selected remedy. This public comment will be considered by OER prior to approval of this plan. The Citizen Participation Plan for the project is provided in Attachment B.

Land use

This evaluation criterion addresses the proposed use of the property. This evaluation has considered reasonably anticipated future uses of the Site and takes into account: current use and historical and/or recent development patterns; applicable zoning laws and maps; NYS Department of State's Brownfield Opportunity Areas (BOA) pursuant to section 970-r of the general municipal law; applicable land use plans; proximity to real property currently used for residential use, and to commercial, industrial, agricultural, and/or recreational areas; environmental justice impacts, Federal or State land use designations; population growth patterns

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

and projections; accessibility to existing infrastructure; proximity of the site to important cultural resources and natural resources, potential vulnerability of groundwater to contamination that might emanate from the site, proximity to flood plains, geography and geology; and current Institutional Controls applicable to the Site.

The proposed redevelopment of the Site is compatible with its current zoning and is consistent with recent development patterns. Following remediation, the Site will meet either Track 1 Unrestricted Use or Track 4 Site-Specific SCOs, both of which are appropriate for its planned residential use. Improvements in the current environmental condition of the property achieved by both alternatives are also consistent with the City's goals for cleanup of contaminated land and bringing such properties into productive reuse. Both alternatives are equally protective of natural resources and cultural resources.

Sustainability of the Remedial Action

This criterion evaluates the overall sustainability of the remedial action alternatives and the degree to which sustainable means are employed to implement the remedial action including those that take into consideration NYC's sustainability goals defined in *PlaNYC: A Greener, Greater New York*. Sustainability goals may include: maximizing the recycling and reuse of non-virgin materials; reducing the consumption of virgin and non-renewable resources; minimizing energy consumption and greenhouse gas emissions; improving energy efficiency; and promotion of the use of native vegetation and enhancing biodiversity during landscaping associated with Site development.

The remedial plan would take into consideration the shortest trucking routes during off-Site disposal of historic fill and other soils, which would reduce greenhouse gas emissions and conserve energy used to fuel trucks. New York City Clean Soil Bank program may be utilized for reuse of native soils. To the extent practicable, energy efficient building materials, appliances, and equipment will be utilized to complete the development. While Alternative 2 would potentially result in lower energy usage based on reducing the volume of material transported off-Site, both remedial alternatives are comparable with respect to the opportunity to achieve sustainable remedial action. A complete list of green remedial activities considered as

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

part of the NYC VCP is included in the Sustainability Statement, included as Appendix C.

EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
1808 MIDDLE COUNTRY ROAD
RIDGE, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

4.0 REMEDIAL ACTION

4.1 Summary of Preferred Remedial Action

The preferred remedial action alternative is the Track 4 Alternative. The preferred remedial action alternative achieves protection of public health and the environment for the intended use of the property. The preferred remedial action alternative will achieve all of the remedial action objectives established for the project and addresses applicable SCGs. The preferred remedial action alternative is effective in both the short-term and long-term and reduces mobility, toxicity and volume of contaminants. The preferred remedial action alternative is cost effective and implementable and uses standards methods that are well established in the industry.

The proposed remedial action will consist of:

1. Preparation of a Community Protection Statement and performance of all required NYC VCP Citizen Participation activities according to an approved Citizen Participation Plan.
2. Performance of a Community Air Monitoring Program for particulates and volatile organic carbon compounds.
3. Establishment of Site-Specific (Track 4) Soil Cleanup Objectives (SCOs).
4. Site mobilization involving Site security setup, equipment mobilization, utility mark outs and marking & staking excavation areas.
5. Completion of a Waste Characterization Study prior to excavation activities. Waste characterization soil samples will be collected at a frequency dictated by disposal facility. A Waste Characterization Report documenting sample procedures, location, analytical results shall be submitted to NYCOER prior to start of remedial action.
6. Excavation and removal of soil/fill exceeding Track 4 Site-Specific SCOs. For development purposes, excavation of the top 2 to 3 feet would occur to construct the 24 inch thick mat slab. Approximately 3,000 tons of soil will be removed.
7. Screening of excavated soil/fill during intrusive work for indications of contamination by visual means, odor, and monitoring with a PID. Appropriate segregation of excavated media on-Site.
8. Management of excavated materials including temporarily stockpiling and segregating to prevent co-mingling of contaminated material and non-contaminated materials.

EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
1808 MIDDLE COUNTRY ROAD
RIDGE, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

9. Removal of underground storage tanks (if encountered) and closure of petroleum spills (if evidence of a spill/leak is encountered during Site excavation) in compliance with applicable local, State and Federal laws and regulations.
10. Transportation and off-Site disposal of all soil/fill material at permitted facilities in accordance with applicable laws and regulations for handling, transport, and disposal, and this plan. Sampling and analysis of excavated media as required by disposal facilities. Appropriate segregation of excavated media on-Site.
11. Collection and analysis of end-point samples to determine the performance of the remedy with respect to attainment of SCOs.
12. Import of materials to be used for backfill and cover in compliance with this plan and in accordance with applicable laws and regulations.
13. Installation of a vapor barrier below the 24 inch thick mat slab. The vapor barrier to be installed below the 24 inch thick mat slab will consist of Raven Industries' VaporBlock 20 Plus, which is a seven layer co-extruded barrier made from state-of-the-art polyethylene and EVOH resins.
14. Construction and maintenance of an engineered composite cover consisting of the 24 inch thick concrete mat building slab to prevent human exposure to residual soil/fill remaining under the Site.
15. Implementation of storm-water pollution prevention measures in compliance with applicable laws and regulations.
16. Performance of all activities required for the remedial action, including permitting requirements and pretreatment requirements, in compliance with applicable laws and regulations.
17. Submission of a Remedial Action Report (RAR) that describes the remedial activities, certifies that the remedial requirements have been achieved, defines the Site boundaries, and describes all Engineering and Institutional Controls to be implemented at the Site, and lists any changes from this RAWP.
18. Submission of an approved Site Management Plan (SMP) in the RAR for long-term management of residual contamination, including plans for operation, maintenance, monitoring, inspection and certification of Engineering and Institutional Controls and

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

reporting at a specified frequency.

19. The property will continue to be registered with an E-Designation by the NYC Buildings Department. Establishment of Engineering Controls and Institutional Controls in this RAWP and a requirement that management of these controls must be in compliance with an approved SMP. Institutional Controls will include prohibition of the following: (1) vegetable gardening and farming; (2) use of groundwater without treatment rendering it safe for the intended use; (3) disturbance of residual contaminated material unless it is conducted in accordance with the SMP; and (4) higher level of land usage without OER-approval.

4.2 Soil Cleanup Objectives and Soil/Fill Management

The SCOs for this Site are listed in the 6NYCRR Part 375, Table 6.8(b) Restricted Residential Use SCOs as amended by the following Site-Specific SCOs.

Contaminant	**Track 4 SCOs**
Total SVOCs	250 ppm
Lead	1,000 ppm
Mercury	2.5 ppm

Soil and materials management on-Site and off-Site, including excavation, handling and disposal, will be conducted in accordance with the Soil/Materials Management Plan in Attachment D. The location of planned excavations is shown in Figure 5.

No over-excavation beyond the development cut is anticipated. If any hot-spot areas are identified during development and remediation at the Site, they will be removed to the extent practical.

Discrete contaminant sources (such as hotspots) identified during the remedial action will be identified by GPR or survey. This information will be provided in the Remedial Action Report.

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

Estimated Soil/Fill Removal Quantities

The total quantity of soil/fill expected to be excavated and disposed off-Site is 3,000 tons. Disposal location(s) will be reported promptly to the OER Project Manager prior to the start of the remedial action.

End-Point Sampling

Removal actions under this plan will be performed in conjunction with remedial end-point sampling. Confirmation end-point sampling and testing will be performed following materials removal and completed proper to Site development activities. To evaluate attainment of Track 4 Site-Specific SCOs, eight confirmation end-point samples will be collected and analyzed for the trigger compounds and elements established on the Track 4 Site-Specific SCOs list from within the building footprint. The approximate collection location of the confirmation end-point soil samples is shown on Figure 6.

In addition, if hotspots are encountered, hotspot removal end-point sampling frequency will consist of the following:

1. For excavations less than 20 feet in total perimeter, at least one bottom sample and one sidewall sample biased in the direction of surface runoff.
2. For excavations 20 to 300 feet in perimeter:
    - For surface removals, one sample from the top of each sidewall for every 30 linear feet of sidewall and one sample from the excavation bottom for every 900 square feet of bottom area.
    - For subsurface removals, one sample from each sidewall for every 30 linear feet of sidewall and one sample from the excavation bottom for every 900 square feet of bottom area.
3. For sampling of volatile organics, bottom samples should be taken within 24 hours of excavation, and should be taken from the zero to six-inch interval at the excavation floor. Samples taken after 24 hours should be taken at six to twelve inches.
4. For contaminated soil removal, post remediation soil samples for laboratory analysis should be taken immediately after contaminated soil removal. If the excavation is

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

enlarged horizontally, additional soil samples will be taken pursuant to bullets 1-3 above.

Post-remediation sample locations and depth will be biased towards the areas and depths of highest contamination identified during previous sampling episodes unless field indicators such as field instrument measurements or visual contamination identified during the remedial action indicate that other locations and depths may be more heavily contaminated. In all cases, post-remediation samples should be biased toward locations and depths of the highest expected contamination.

New York State ELAP certified labs will be used for all end-point sample analyses. Labs for end-point sample analyses will be reported in the RAR. The RAR will provide a tabular and map summary of all end-point sample results and will include all data including non-detects and applicable standards and/or guidance values. End-point samples will be analyzed for trigger analytes (those for which SCO exceedence is identified) utilizing the following methodology:

Soil analytical methods will include:

- Volatile organic compounds by EPA Method 8260;
- Semi-volatile organic compounds by EPA Method 8270;
- Target Analyte List metals; and
- Pesticides/PCBs by EPA Method 8081/8082.

If either LNAPL and/or DNAPL are detected, appropriate samples will be collected for characterization and required regulatory reporting (i.e. spills hotline) will be performed.

Quality Assurance/Quality Control

The fundamental QA objective with respect to accuracy, precision, and sensitivity of analysis for laboratory analytical data is to achieve the QC acceptance of the analytical protocol. The accuracy, precision and completeness requirements will be addressed by the laboratory for all data generated.

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

One duplicate sample for every 20 samples collected will be submitted to the approved laboratory for analysis of the same parameters. One trip blank will be submitted to the laboratory with each shipment of soil samples.

Collected samples will be appropriately packaged, placed in coolers and shipped via overnight courier or delivered directly to the analytical laboratory by field personnel. Samples will be containerized in appropriate laboratory provided glassware and shipped in plastic coolers. Samples will be preserved through the use of ice or "cold-paks" to maintain a temperature of 4^{o}C.

Dedicated disposable sampling materials will be used for the collection endpoint samples, eliminating the need to prepare field equipment (rinsate) blanks. However, if non-disposable equipment is used, (stainless steel scoop, etc.) field rinsate blanks will be prepared at the rate of 1 for every eight samples collected. Decontamination of non-dedicated sampling equipment will consist of the following:

- Gently tap or scrape to remove adhered soil
- Rinse with tap water
- Wash with alconox® detergent solution and scrub
- Rinse with tap water
- Rinse with distilled or deionized water

Prepare field blanks by pouring distilled or deionized water over decontaminated equipment and collecting the water in laboratory provided containers. Trip blanks will be used whenever samples are transported to the laboratory for analysis of VOCs. Trip blanks will not be used for samples to be analyzed for metals, SVOCs or pesticides. One blind duplicate sample will be prepared and submitted for analysis every 20 samples.

Import and Reuse of Soils

Import of soils onto the property and reuse of soils already on-Site will be performed in conformance with the Soil/Materials Management Plan in Attachment D. The estimated quantity of soil to be imported into the Site for backfill and cover soil is 0 tons. The estimated quantity of

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

on-Site soil/fill expected to be reused/relocated on Site is 0 tons.

4.3 Engineering Controls

The excavation required for the proposed Site development will achieve Track 4 Site Specific SCOs. Engineering Controls are required in the remedial action to address residual contamination remaining at the site. The Site has two primary Engineering Control Systems: composite cover system and vapor barrier system.

Composite Cover System

Exposure to residual soil/fill will be prevented by an engineered, composite cover system to be built on the Site. This composite cover system is comprised of the 24 inch thick concrete mat slab.

The composite cover system would serve as a permanent engineering control for the Site. The system will be inspected and reported at specified intervals as required by this RAWP and the SMP. A Soil Management Plan will be included in the Site Management Plan and will outline the procedures to be followed in the event that the composite cover system and underlying residual soil/fill is disturbed after the remedial action is complete. Maintenance of this composite cover system will be described in the Site Management Plan in the RAR. Figure 5 shows the location of the composite cover system.

Vapor Barrier

Migration of potential soil vapor from off-Site in the future will be achieved with a combination of building slab and vapor barrier system. The vapor barrier will consist of Raven Industries' VaporBlock 20 Plus, which is a seven layer co-extruded barrier made from state-of-the-art polyethylene and EVOH resins. The vapor barrier will be installed prior to pouring the building's concrete slab. The vapor barrier will extend throughout the area occupied by the footprint of the new buildings in accordance with manufacturer specifications. The specifications for installation will be provided to the construction management company and the foundation contractor or installer of the liner. The specifications state that all vapor barrier seam, penetrations, and repairs

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

will be sealed either by the tape method or weld method, according to the manufacturer's recommendations and instructions.

The project's Professional Engineer licensed by the State of New York will have primary direct responsibility for overseeing the implementation of the vapor barrier. The extent of the proposed vapor barrier system is provided in Figure 7. Product specification sheets are provided in Attachment F.

The Remedial Action Report will include photographs (maximum of two photos per page) of the installation process, PE/RA certified letter (on company letterhead) from primary contractor responsible for installation oversight and field inspections, and a copy of the manufacturers certificate of warranty.

4.4 Institutional Controls

Institutional Controls (IC) have been incorporated in this remedial action to manage residual soil/fill and other media and render the Site protective of public health and the environment. Institutional Controls are listed below. Long-term employment of EC/ICs will be established in a site-specific Site Management Plan (SMP) that will be included in the RAR.

Institutional Controls for this remedial action are:

- The property will continue to be registered with an E-Designation at the NYC Buildings Department. This RAWP includes a description of all ECs and ICs and summarizes the requirements of the Site Management Plan which will note that the property owner and property owner's successors and assigns must comply with the approved SMP;
- Submittal of a Site Management Plan in the RAR for approval by OER that provides procedures for appropriate operation, maintenance, monitoring, inspection, reporting and certification of ECs. SMP will require that the property owner and property owner's successors and assigns will submit to OER a periodic written statement that certifies that: (1) controls employed at the Site are unchanged from the previous certification or that any changes to the controls were approved by OER; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

constitute a violation or failure to comply with the SMP. OER retains the right to enter the Site in order to evaluate the continued maintenance of any controls. This certification shall be submitted annually and will comply with RCNY §43-1407(l)(3);

- Vegetable gardens and farming on the Site are prohibited;
- Use of groundwater underlying the Site is prohibited without treatment rendering it safe for its intended use;
- All future activities on the Site that will disturb residual material must be conducted pursuant to the soil management provisions in an approved SMP; and
- The Site will be used for residential use and will not be used for a higher level of use without prior approval by OER.

4.5 Site Management Plan

Site Management is the last phase of remediation and begins with the approval of the Remedial Action Report and issuance of the Notice of Completion (NOC) for the Remedial Action. The Site Management Plan (SMP) describes appropriate methods and procedures to ensure implementation of all ECs and ICs that are required by this RAWP. The Site Management Plan is submitted as part of the RAR but will be written in a manner that allows its use as an independent document. Site Management continues until terminated in writing by OER. The property owner is responsible to ensure that all Site Management responsibilities defined in this RAWP and the Site Management Plan are implemented.

The SMP will provide a detailed description of the procedures required to manage residual soil/fill left in place following completion of the remedial action in accordance with the Voluntary Cleanup Agreement with OER. This includes a plan for: (1) implementation of EC's and ICs; (2) implementation of monitoring programs; (3) operation and maintenance of EC's; (4) inspection and certification of EC's; and (5) reporting.

Site management activities, reporting, and EC/IC certification will be scheduled on an periodic basis to be established in the SMP and will be subject to review and modification by OER. The Site Management Plan will be based on a calendar year and certification reports will be due for submission to OER by July 30 of the year following the reporting period.

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

4.6 Qualitative Human Health Exposure Assessment

Investigations reported in the Remedial Investigation Report (RIR) are sufficient to complete a Qualitative Human Health Exposure Assessment (QHHEA).

The objective of the qualitative exposure assessment is to identify potential receptors to the contaminants of concern (COC) that are present at, or migrating from, the Site. The identification of exposure pathways describes the route that the COC takes to travel from the source to the receptor. An identified pathway indicates that the potential for exposure exists; it does not imply that exposures actually occur.

Investigations reported in the Remedial Investigation Report (RIR) are sufficient to complete a Qualitative Human Health Exposure Assessment (QHHEA). As part of the VCP process, a QHHEA was performed to determine whether the Site poses an existing or future health hazard to the Site's exposed or potentially exposed population. The sampling data from the RI were evaluated to determine whether there is any health risk by characterizing the exposure setting, identifying exposure pathways, and evaluating contaminant fate and transport. This EA was prepared in accordance with Appendix 3B and Section 3.3 (b) 8 of the NYSDEC Draft DER-10 Technical Guidance for Site Investigation and Remediation.

Known and Potential Sources

Based on the results of the Remedial Investigation Report the contaminants of concern found are:

<u>Soil</u>

- Metals, including lead and mercury exceeding Restricted Residential Use SCOs;
- SVOCs (PAH compounds) including benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, and indeno(1,2,3-cd)pyrene exceeding Restricted Residential Use SCOs;
- Pesticide 4,4'-DDD was identified but did not exceed Restricted Residential Use SCOs;
- PCB-1248 was identified but did not exceed Restricted Residential Use SCOs.

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

Groundwater

- SVOCs, including benz(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene and indeno(1,2,3-cd)pyrene were exceeded Groundwater Quality Standards; and
- Several metals were identified but only iron, manganese and sodium exceeded Groundwater Quality Standards.

Soil Vapor

- The chlorinated VOC trichloroethylene was detected above NYS DOH mitigation thresholds;
- The chlorinated VOCs PCE, 1,1,1-trichloroethane, and carbon tetrachloride were detected at low concentrations; and
- Petroleum-related hydrocarbons including BTEX were detected at low concentrations.

Nature, Extent, Fate and Transport of Contaminants

SVOCs, metals, PCBs and pesticides are present in the historic fill materials to depths of 4 feet below grade. No SVOCs, metals. PCBs or pesticides were detected within any of the soil samples collected from the native soil layer below the historic fill material layer. No chlorinated compounds were detected above their respective standards in soil, but TCE was detected in one of the seven soil gas samples collected at the Site at a concentration above NYS DOH mitigation thresholds.

Potential Routes of Exposure

The five elements of an exposure pathway are: (1) a contaminant source; (2) contaminant release and transport mechanisms; (3) a point of exposure; (4) a route of exposure; and (5) a receptor population. An exposure pathways is considered complete when all five elements of an exposure pathway are documented. A potential exposure pathway exists when any one or more of the five elements comprising an exposure pathway cannot be documented. An exposure pathway may be eliminated from further evaluation when any one of the five elements comprising an exposure pathway has not existed in the past, does not exist in the present, and will never exist in the future. Three potential primary routes exist by which chemicals can enter the body:

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

- Ingestion of fill/soil;
- Inhalation of vapors and particulates; and
- Dermal contact with water, fill, soil, or building materials.

Existence of Human Health Exposure

Current Conditions: The Site is currently capped with the existing building's concrete slab, and asphalt paved parking lot, and access is limited by the chained and lock perimeter fence. The Site is served by public water supply and groundwater use for potable supply is prohibited, groundwater is not used at the Site and there is no potential for exposure. The potential for accumulation of soil vapor within the existing building exists.

Construction/Remediation Activities: Once redevelopment activities begin, construction workers will come into direct contact with surface and subsurface soils, as a result of on-Site construction and excavation activities. On-Site construction workers potentially could ingest, inhale, or have dermal contact with any exposed impacted soil, and fill. Similarly, off-Site receptors could be exposed to dust and vapors from on-Site activities. During remedial action, on-Site and off-Site exposures to contaminated dust from on-Site will be addressed through the implementation of the Soil/Materials Management Plan, storm water pollution prevention, dust controls, and through the implementation of the Community Air-Monitoring Program and a Construction Health and Safety Plan.

Proposed Future Conditions: Under future remediated conditions, all soils in excess of Track 4 Site-Specific SCOs will be removed. The Site will be fully capped, limiting potential direct exposure to soil and groundwater remaining in place, and a vapor barrier system will prevent any exposure to potential off-Site soil vapors in the future. The Site is served by a public water supply, and groundwater is not used at the Site for potable supply. There are no plausible off-site pathways for ingestion, inhalation, or dermal exposure to contaminants derived from the Site under future conditions.

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

Receptor Populations

On-Site Receptors - The Site is currently developed with a vacant one-story commercial building and accessory parking area. Access to Site is restricted by an 8 foot high, chained and locked, perimeter fence. During redevelopment of the Site, the on-Site potential receptors will include construction workers, site representatives, and visitors. Once the Site is redeveloped, the on-Site potential sensitive receptors will include adult and child building residents and visitors.

Off-Site Receptors - Potential off-Site receptors within a 0.25-mile radius of the Site include: adult and child residents, and commercial and construction workers, pedestrians, trespassers, and cyclists, based on the following:

1. Commercial Businesses (up to 0.25 mile) - existing and future
2. Residential Buildings (up to 0.25 mile) - existing and future
3. Building Construction/Renovation (up to 0.25 mile) - existing and future
4. pedestrians, Trespassers, Cyclists (up to 0.25 mile) - existing and future
5. Schools (up to 0.25 mile) - existing and future

Overall Human Health Exposure Assessment

There are potential complete exposure pathways for the current site condition. There is a potential complete, exposure pathway that requires mitigation during implementation of the remedy. Under current conditions, on-Site exposure pathways exist for site personnel and trespassers. During remedial construction, on-Site and off-Site exposures to contaminated dust from historic fill material will be addressed through dust controls, and through the implementation of the Community Air Monitoring Program, the Soil/Materials Management Plan, and a Construction Health and Safety Plan. There is no complete exposure pathway under future conditions after the Site is developed. After the remedial action is complete, there will be no remaining exposure pathways to on-Site soil/fill, as all soil above Track 4 Site Specific SCOs will have been removed and a vapor barrier system will have been installed as part of development. The vapor barrier system will prevent potential vapor intrusion. The composite cover system and use restrictions will prevent contact with residual soil or groundwater and continued protection after the remedial action will be achieved by the implementation of site management including periodic inspection and certification of the performance of remedial

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

controls. Potential post-construction use of groundwater is not considered an option because groundwater in this area of New York City is not used as a potable water source. There are no surface waters in close proximity to the Site that could be impacted or threatened. This assessment takes into consideration the reasonably anticipated use of the Site, which includes a residential structure, site-wide impervious surface cover cap, and a subsurface vapor barrier system for the building.

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
Ph: 631.504.6000
Fax: 631.928.2780

5.0 REMEDIAL ACTION MANAGEMENT

5.1 Project Organization and Oversight

Principal personnel who will participate in the remedial action include Kevin Brussee, Senior Project Manager-EBC and Kevin Waters, Field Operations Officer-EBC. The Professional Engineer (PE) and Qualified Environmental Professionals (QEP) for this project are Ariel Czemerinski P.E., AMC Engineering and Charles Sosik P.G. EBC.

5.2 Site Security

Site access will be controlled by a chain link or wooden construction fence, which will surround the property.

5.3 Work Hours

The hours for operation of remedial construction will be from 7:00AM to 6:00PM. These hours conform to the New York City Department of Buildings construction code requirements.

5.4 Construction Health and Safety Plan

The Health and Safety Plan is included in Appendix E. The Site Safety Coordinator will be Kevin Waters - EBC. Remedial work performed under this RAWP will be in full compliance with applicable health and safety laws and regulations, including Site and OSHA worker safety requirements and HAZWOPER requirements. Confined space entry, if any, will comply with OSHA requirements and industry standards and will address potential risks. The parties performing the remedial construction work will ensure that performance of work is in compliance with the HASP and applicable laws and regulations. The HASP pertains to remedial and invasive work performed at the Site until the issuance of the Notice of Completion.

All field personnel involved in remedial activities will participate in training required under 29 CFR 1910.120, including 40-hour hazardous waste operator training and annual 8-hour refresher training. Site Safety Officer will be responsible for maintaining workers training records.

Personnel entering any exclusion zone will be trained in the provisions of the HASP and be required to sign an HASP acknowledgment. Site-specific training will be provided to field

EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
1808 MIDDLE COUNTRY ROAD
RIDGE, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

personnel. Additional safety training may be added depending on the tasks performed. Emergency telephone numbers will be posted at the site location before any remedial work begins. A safety meeting will be conducted before each shift begins. Topics to be discussed include task hazards and protective measures (physical, chemical, environmental); emergency procedures; PPE levels and other relevant safety topics. Meetings will be documented in a log book or specific form.

An emergency contact sheet with names and phone numbers is included in the HASP. That document will define the specific project contacts for use in case of emergency.

5.5 Community Air Monitoring Plan

Real-time air monitoring for volatile organic compounds (VOCs) and particulate levels at the perimeter of the exclusion zone or work area will be performed. Continuous monitoring will be performed for all ground intrusive activities and during the handling of contaminated or potentially contaminated media. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pit excavation or trenching, and the installation of soil borings or monitoring wells.

Periodic monitoring for VOCs will be performed during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. Periodic monitoring during sample collection, for instance, will consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. Depending upon the proximity of potentially exposed individuals, continuous monitoring may be performed during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence. Exceedances of action levels observed during performance of the Community Air Monitoring Plan (CAMP) will be reported to the OER Project Manager and included in the Daily Report.

EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
1808 MIDDLE COUNTRY ROAD
RIDGE, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) will be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis during invasive work. Upwind concentrations will be measured at the start of each workday and periodically thereafter to establish background conditions. The monitoring work will be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment will be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment will be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

- If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities will be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities will resume with continued monitoring.
- If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities will be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities will resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.
- If the organic vapor level is above 25 ppm at the perimeter of the work area, activities will be shutdown.

All 15-minute readings must be recorded and be available for OER personnel to review. Instantaneous readings, if any, used for decision purposes will also be recorded.

Particulate Monitoring, Response Levels, and Actions

Particulate concentrations will be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

monitoring will be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment will be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m^3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques will be employed. Work will continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m^3 above the upwind level and provided that no visible dust is migrating from the work area.
- If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m^3 above the upwind level, work will be stopped and a re-evaluation of activities initiated. Work will resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m^3 of the upwind level and in preventing visible dust migration.

All readings will be recorded and be available for OER personnel to review.

5.6 Agency Approvals

All permits or government approvals required for remedial construction have been or will be obtained prior to the start of remedial construction. Approval of this RAWP by OER does not constitute satisfaction of these requirements and will not be a substitute for any required permit.

5.7 Site Preparation

Pre-Construction Meeting

OER will be invited to attend the pre-construction meeting at the Site with all parties involved in the remedial process prior to the start of remedial construction activities.

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

Mobilization

Mobilization will be conducted as necessary for each phase of work at the Site. Mobilization includes field personnel orientation, equipment mobilization (including securing all sampling equipment needed for the field investigation), marking/staking sampling locations and utility mark-outs. Each field team member will attend an orientation meeting to become familiar with the general operation of the Site, health and safety requirements, and field procedures.

Utility Marker Layouts, Easement Layouts

The presence of utilities and easements on the Site will be fully investigated prior to the performance of invasive work such as excavation or drilling under this plan by using, at a minimum, the One-Call System (811). Underground utilities may pose an electrocution, explosion, or other hazard during excavation or drilling activities. All invasive activities will be performed incompliance with applicable laws and regulations to assure safety. Utility companies and other responsible authorities will be contacted to locate and mark the locations, and a copy of the Mark out Ticket will be retained by the contractor prior to the start of drilling, excavation or other invasive subsurface operations. Overhead utilities may also be present within the anticipated work zones. Electrical hazards associated with drilling in the vicinity of overhead utilities will be prevented by maintaining a safe distance between overhead power lines and drill rig masts.

Proper safety and protective measures pertaining to utilities and easements, and compliance with all laws and regulations will be employed during invasive and other work contemplated under this RAWP. The integrity and safety of on-Site and off-Site structures will be maintained during all invasive, excavation or other remedial activity performed under the RAWP.

Dewatering

Groundwater is present at approximately 5 feet below grade and dewatering is not expected. In the event that dewatering of groundwater during construction will be necessary, the water will be water will be disposed into the New York City combined sanitary/storm sewer system. A permit to discharge will be obtained from the New York City Department of Environmental Protection (NYCDEP). As part of the permit to discharge, the location of discharge will be based on the

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

Site-Specific requirements of the DEP. The need for pretreatment will be determined by DEP's requirements for the discharge permit. If pretreatment is required by the DEP, it will be performed in accordance with the requirements of the DEP.

Equipment and Material Staging

Equipment and materials will be stored and staged in a manner that complies with applicable laws and regulations. Staging locations will be reported to OER prior to the start of the remedial action.

Stabilized Construction Entrance

Steps will be taken to ensure that trucks departing the Site will not track soil, fill or debris off-Site. Such actions may include use of cleaned asphalt or concrete roads or use of stone or other aggregate-based egress paths between the truck inspection station and the property exit. Measures will be taken to ensure that adjacent roadways will be kept clean of project related soils, fill and debris.

Truck Inspection Station

An outbound-truck inspection station will be set up close to the Site exit. Before exiting the NYC VCP Site, trucks will be required to stop at the truck inspection station and will be examined for evidence of contaminated soil on the undercarriage, body, and wheels. Soil and debris will be removed. Brooms, shovels and potable water will be utilized for the removal of soil from vehicles and equipment, as necessary.

Extreme Storm Preparedness and Response Contingency Plan

Damage from flooding or storm surge can include dislocation of soil and stockpiled materials, dislocation of site structures and construction materials and equipment, and dislocation of support of excavation structures. Damage from wind during an extreme storm event can create unsafe or unstable structures, damage safety structures and cause downed power lines creating dangerous site conditions and loss of power. In the event of emergency conditions caused by an extreme storm event, the enrollee will undertake the following steps for site preparedness prior to the event and response after the event.

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

Storm Preparedness

Preparations in advance of an extreme storm event will include the following: containerized hazardous materials and fuels will be removed from the property; lose materials will be secured to prevent dislocation and blowing by wind or water; heavy equipment such as excavators and generators will be removed from holes, trenches and depressions on the property to high ground or removed from the property; an inventory of the property with photographs will be performed to establish conditions for the site and equipment prior to the event; stockpile covers for soil and fill will be secured by adding weights such as sandbags for added security and worn or ripped stockpile covers will be replaced with competent covers; stockpiled hazardous wastes will be removed from the property; stormwater management systems will be inspected and fortified, including, as necessary: clean and reposition silt fences, haybales; clean storm sewer filters and traps; and secure and protect pumps and hosing.

Storm Response

At the conclusion of an extreme storm event, as soon as it is safe to access the property, a complete inspection of the property will be performed. A site inspection report will be submitted to OER at the completion of site inspection and after the site security is assessed. Site conditions will be compared to the inventory of site conditions and material performed prior to the storm event and significant differences will be noted. Damage from storm conditions that result in acute public safety threats, such as downed power lines or imminent collapse of buildings, structures or equipment will be reported to public safety authorities via appropriate means such as calling 911. Petroleum spills will be reported to NYS DEC within 2 hours of identification and consistent with State regulations. Emergency and spill conditions will also be reported to OER. Public safety structures, such as construction security fences will be repaired promptly to eliminate public safety threats. Debris will be collected and removed. Dewatering will be performed in compliance with existing laws and regulations and consistent with emergency notifications, if any, from proper authorities. Eroded areas of soil including unsafe slopes will be stabilized and fortified. Dislocated materials will by collected and appropriately managed. Support of excavation structure will be inspected and fortified as necessary. Impacted stockpiles will be contained and damaged stockpile covers will be replaced. Storm-water control systems

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

and structures will be inspected and maintained as necessary. If soil or fill materials are discharged off-Site to adjacent properties, property owners and OER will be notified and corrective measure plan designed to remove and clean dislocated material will be submitted to OER and implemented following approval by OER and granting of site access by the property owner. Impacted offsite areas may require characterization based on site conditions, at the discretion of OER. If on-Site petroleum spills are identified, a qualified environmental professional will determine the nature and extent of the spill and report to NYS DEC's spill hotline at DEC 800-457-7362. If the source of the spill is ongoing and can be identified, it should be stopped it this can be done safely. Potential hazards will be addressed immediately, consistent with guidance issued by NYS DEC.

Storm Response Reporting

A site inspection report will be submitted to OER at the completion of site inspection. An inspection report established by OER is available on OER's website (www.nyc.gov/oer) and will be used for this purpose. Site conditions will be compared to the inventory of site conditions and material performed prior to the storm event and significant differences will be noted. The site inspection report will be sent to the OER project manager and will include the site name, address, tax block and lot, site primary and alternate contact name and phone number. Damage and soil release assessment will include: whether the project had stockpiles; whether stockpiles were damaged; photographs of damage and notice of plan for repair; report of whether soil from the site was dislocated and whether any of the soil left the Site; estimates of the volume of soil that left the site, nature of impact, and photographs; description of erosion damage; description of equipment damage; description of damage to the remedial program or the construction program, such as damage to the support of excavation; presence of onsite or offsite exposure pathways caused by the storm; presence of petroleum or other spills and status of spill reporting to NYS DEC; description of corrective actions; schedule for corrective actions. This report should be completed and submitted to OER project manager with photographs within 24 hours of the time of safe entry to the property after the storm event.

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

5.8 Traffic Control

Drivers of trucks leaving the NYC VCP Site with soil/fill will be instructed to proceed without stopping in the vicinity of the site to prevent neighborhood impacts. The planned route is shown on Figure 11.

5.9 Demobilization

Demobilization will include:

- As necessary, restoration of temporary access areas and areas that may have been disturbed to accommodate support areas (e.g., staging areas, decontamination areas, storage areas, temporary water management areas, and access area);
- Removal of sediment from erosion control measures and truck wash and disposal of materials in accordance with applicable laws and regulations;
- Equipment decontamination, and;
- General refuse disposal.

Equipment will be decontaminated and demobilized at the completion of all field activities. Investigation equipment and large equipment (*e.g.*, soil excavators) will be washed at the truck inspection station as necessary. In addition, all investigation and remediation derived waste will be appropriately disposed.

5.10 Reporting and Record Keeping

Daily Reports

Daily reports providing a general summary of activities for each day of *active remedial work* will be emailed to the OER Project Manager by the end of the following day. Those reports will include:

- Project number and statement of the activities and an update of progress made and locations of work performed;
- Quantities of material imported and exported from the Site;
- Status of on-Site soil/fill stockpiles;
- A summary of all citizen complaints, with relevant details (basis of complaint; actions taken; etc.);

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

- A summary of CAMP excursions, if any;
- Photograph of notable Site conditions and activities.

The frequency of the reporting period may be revised in consultation with OER project manager based on planned project tasks. Daily email reports are not intended to be the primary mode of communication for notification to OER of emergencies (accidents, spills), requests for changes to the RAWP or other sensitive or time critical information. However, such information will be included in the daily reports. Emergency conditions and changes to the RAWP will be communicated directly to the OER project manager by personal communication. Daily reports will be included as an Appendix in the Remedial Action Report.

Record Keeping and Photo-Documentation

Job-site record keeping for all remedial work will be performed. These records will be maintained on-Site during the project and will be available for inspection by OER staff. Representative photographs will be taken of the Site prior to any remedial activities and during major remedial activities to illustrate remedial program elements and contaminant source areas. Photographs will be submitted at the completion of the project in the RAR in digital format (i.e. jpeg files).

5.11 Complaint Management

All complaints from citizens will be promptly reported to OER. Complaints will be addressed and outcomes will also be reported to OER in daily reports. Notices to OER will include the nature of the complaint, the party providing the complaint, and the actions taken to resolve any problems.

5.12 Deviations from the Remedial Action Work Plan

All changes to the RAWP will be reported to the OER Project Manager and will be documented in daily reports and reported in the Remedial Action Report. The process to be followed if there are any deviations from the RAWP will include a request for approval for the change from OER noting the following:

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

- Reasons for deviating from the approved RAWP;
- Effect of the deviations on overall remedy; and
- Determination that the remedial action with the deviation(s) is protective of public health and the environment.

EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
1808 MIDDLE COUNTRY ROAD
RIDGE, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

6.0 REMEDIAL ACTION REPORT

A Remedial Action Report (RAR) will be submitted to OER following implementation of the remedial action defined in this RAWP. The RAR will document that the remedial work required under this RAWP has been completed and has been performed in compliance with this plan. The RAR will include:

- Information required by this RAWP;
- As-built drawings for all constructed remedial elements, required certifications, manifests and other written and photographic documentation of remedial work performed under this remedy;
- Site Management Plan;
- Description of any changes in the remedial action from the elements provided in this RAWP and associated design documents;
- Tabular summary of all end point sampling results and all material characterization results, QA/QC results for end-point sampling, and other sampling and chemical analysis performed as part of the remedial action and DUSR;
- Test results or other evidence demonstrating that remedial systems are functioning properly;
- Account of the source area locations and characteristics of all contaminated material removed from the Site including a map showing source areas;
- Account of the disposal destination of all contaminated material removed from the Site. Documentation associated with disposal of all material will include transportation and disposal records, and letters approving receipt of the material.
- Account of the origin and required chemical quality testing for material imported onto the Site.
- Continue registration of the property with an E-Designation by the NYC Department of Buildings.
- Reports and supporting material will be submitted in digital form.

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

Remedial Action Report Certification

The following certification will appear in front of the Executive Summary of the Remedial Action Report. The certification will include the following statements:

I, _____, am currently a professional engineer licensed by the State of New York. I had primary direct responsibility for implementation of the remedial program for the project at 26 West Street,, Brooklyn, NY, NYC VCP Site number 15CVCP098K.

I certify that the OER-approved Remedial Action Work Plan dated month day year and Stipulations in a letter dated month day, year; if any were implemented and that all requirements in those documents have been substantively complied with. I certify that contaminated soil, fill, liquids or other material from the property were taken to facilities licensed to accept this material in full compliance with applicable laws and regulations.

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
Ph: 631.504.6000
Fax: 631.928.2780

7.0 SCHEDULE

The table below presents a schedule for the proposed remedial action and reporting. If the schedule for remediation and development activities changes, it will be updated and submitted to OER. Currently, a 2 month remediation period is anticipated.

Schedule Milestone	Weeks from Remedial Action Start	Duration (weeks)
OER Approval of RAWP	0	-
Fact Sheet 2 announcing start of remedy	0	-
Mobilization	1	1
Remedial Excavation	2	6
Demobilization	8	1
Submit Remedial Action Report	15	-

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
Ph: 631.504.6000
Fax: 631.928.2780

TABLES

TABLE 1
Soil Cleanup Objectives

Contaminant	CAS Number	Protection of Public Health				Protection of Ecological Resources	Protection of Ground-water
		Residential	Restricted-Residential	Commercial	Industrial		
METALS							
Arsenic	7440-38 -2	16[f]	16[f]	16[f]	16[f]	13[f]	16[f]
Barium	7440-39 -3	350[f]	400	400	10,000 [d]	433	820
Beryllium	7440-41 -7	14	72	590	2,700	10	47
Cadmium	7440-43 -9	2.5[f]	4.3	9.3	60	4	7.5
Chromium, hexavalent [h]	18540-29-9	22	110	400	800	1[e]	19
Chromium, trivalent[h]	16065-83-1	36	180	1,500	6,800	41	NS
Copper	7440-50 -8	270	270	270	10,000 [d]	50	1,720
Total Cyanide [h]		27	27	27	10,000 [d]	NS	40
Lead	7439-92 -1	400	400	1,000	3,900	63[f]	450
Manganese	7439-96 -5	2,000[f]	2,000[f]	10,000 [d]	10,000 [d]	1600[f]	2,000[f]
Total Mercury		0.81[j]	0.81[j]	2.8[j]	5.7[j]	0.18[f]	0.73
Nickel	7440-02 -0	140	310	310	10,000 [d]	30	130
Selenium	7782-49 -2	36	180	1,500	6,800	3.9[f]	4[f]
Silver	7440-22 -4	36	180	1,500	6,800	2	8.3
Zinc	7440-66 -6	2200	10,000 [d]	10,000 [d]	10,000 [d]	109[f]	2,480
PESTICIDES / PCBs							
2,4,5-TP Acid (Silvex)	93-72-1	58	100[a]	500[b]	1,000[c]	NS	3.8
4,4'-DDE	72-55-9	1.8	8.9	62	120	0.0033 [e]	17
4,4'-DDT	50-29-3	1.7	7.9	47	94	0.0033 [e]	136
4,4'-DDD	72-54-8	2.6	13	92	180	0.0033 [e]	14
Aldrin	309-00-2	0.019	0.097	0.68	1.4	0.14	0.19
alpha-BHC	319-84-6	0.097	0.48	3.4	6.8	0.04[g]	0.02
beta-BHC	319-85-7	0.072	0.36	3	14	0.6	0.09
Chlordane (alpha)	5103-71 -9	0.91	4.2	24	47	1.3	2.9
delta-BHC	319-86-8	100[a]	100[a]	500[b]	1,000[c]	0.04[g]	0.25
Dibenzofuran	132-64-9	14	59	350	1,000[c]	NS	210
Dieldrin	60-57-1	0.039	0.2	1.4	2.8	0.006	0.1
Endosulfan I	959-98-8	4.8[i]	24[i]	200[i]	920[i]	NS	102
Endosulfan II	33213-65-9	4.8[i]	24[i]	200[i]	920[i]	NS	102
Endosulfan sulfate	1031-07 -8	4.8[i]	24[i]	200[i]	920[i]	NS	1,000[c]
Endrin	72-20-8	2.2	11	89	410	0.014	0.06
Heptachlor	76-44-8	0.42	2.1	15	29	0.14	0.38
Lindane	58-89-9	0.28	1.3	9.2	23	6	0.1
Polychlorinated biphenyls	1336-36 -3	1	1	1	25	1	3.2
SEMI-VOLATILES							
Acenaphthene	83-32-9	100[a]	100[a]	500[b]	1,000[c]	20	98
Acenapthylene	208-96-8	100[a]	100[a]	500[b]	1,000[c]	NS	107
Anthracene	120-12-7	100[a]	100[a]	500[b]	1,000[c]	NS	1,000[c]
Benz(a)anthracene	56-55-3	1[f]	1[f]	5.6	11	NS	1[f]
Benzo(a)pyrene	50-32-8	1[f]	1[f]	1[f]	1.1	2.6	22
Benzo(b) fluoranthene	205-99-2	1[f]	1[f]	5.6	11	NS	1.7
Benzo(g,h,i) perylene	191-24-2	100[a]	100[a]	500[b]	1,000[c]	NS	1,000[c]
Benzo(k) fluoranthene	207-08-9	1	3.9	56	110	NS	1.7
Chrysene	218-01-9	1[f]	3.9	56	110	NS	1[f]
Dibenz(a,h) anthracene	53-70-3	0.33[e]	0.33[e]	0.56	1.1	NS	1,000[c]
Fluoranthene	206-44-0	100[a]	100[a]	500[b]	1,000[c]	NS	1,000[c]
Fluorene	86-73-7	100[a]	100[a]	500[b]	1,000[c]	30	386
Indeno(1,2,3-cd) pyrene	193-39-5	0.5[f]	0.5[f]	5.6	11	NS	8.2
m-Cresol	108-39-4	100[a]	100[a]	500[b]	1,000[c]	NS	0.33[e]
Naphthalene	91-20-3	100[a]	100[a]	500[b]	1,000[c]	NS	12
o-Cresol	95-48-7	100[a]	100[a]	500[b]	1,000[c]	NS	0.33[e]
p-Cresol	106-44-5	34	100[a]	500[b]	1,000[c]	NS	0.33[e]
Pentachlorophenol	87-86-5	2.4	6.7	6.7	55	0.8[e]	0.8[e]
Phenanthrene	85-01-8	100[a]	100[a]	500[b]	1,000[c]	NS	1,000[c]
Phenol	108-95-2	100[a]	100[a]	500[b]	1,000[c]	30	0.33[e]
Pyrene	129-00-0	100[a]	100[a]	500[b]	1,000[c]	NS	1,000[c]

TABLE 1
Soil Cleanup Objectives

Contaminant	CAS Number	Protection of Public Health				Protection of Ecological Resources	Protection of Ground-water
		Residential	Restricted-Residential	Commercial	Industrial		
VOLATILES							
1,1,1-Trichloroethane	71-55-6	100[a]	100[a]	500[b]	1,000[c]	NS	0.68
1,1-Dichloroethane	75-34-3	19	26	240	480	NS	0.27
1,1-Dichloroethene	75-35-4	100[a]	100[a]	500[b]	1,000[c]	NS	0.33
1,2-Dichlorobenzene	95-50-1	100[a]	100[a]	500[b]	1,000[c]	NS	1.1
1,2-Dichloroethane	107-06-2	2.3	3.1	30	60	10	0.02[f]
cis-1,2-Dichloroethene	156-59-2	59	100[a]	500[b]	1,000[c]	NS	0.25
trans-1,2-Dichloroethene	156-60-5	100[a]	100[a]	500[b]	1,000[c]	NS	0.19
1,3-Dichlorobenzene	541-73-1	17	49	280	560	NS	2.4
1,4-Dichlorobenzene	106-46-7	9.8	13	130	250	20	1.8
1,4-Dioxane	123-91-1	9.8	13	130	250	0.1[e]	0.1[e]
Acetone	67-64-1	100[a]	100[b]	500[b]	1,000[c]	2.2	0.05
Benzene	71-43-2	2.9	4.8	44	89	70	0.06
Butylbenzene	104-51-8	100[a]	100[a]	500[b]	1,000[c]	NS	12
Carbon tetrachloride	56-23-5	1.4	2.4	22	44	NS	0.76
Chlorobenzene	108-90-7	100[a]	100[a]	500[b]	1,000[c]	40	1.1
Chloroform	67-66-3	10	49	350	700	12	0.37
Ethylbenzene	100-41-4	30	41	390	780	NS	1
Hexachlorobenzene	118-74-1	0.33[e]	1.2	6	12	NS	3.2
Methyl ethyl ketone	78-93-3	100[a]	100[a]	500[b]	1,000[c]	100[a]	0.12
Methyl tert-butyl ether	1634-04 -4	62	100[a]	500[b]	1,000[c]	NS	0.93
Methylene chloride	75-09-2	51	100[a]	500[b]	1,000[c]	12	0.05
n-Propylbenzene	103-65-1	100[a]	100[a]	500[b]	1,000[c]	NS	3.9
sec-Butylbenzene	135-98-8	100[a]	100[a]	500[b]	1,000[c]	NS	11
tert-Butylbenzene	98-06-6	100[a]	100[a]	500[b]	1,000[c]	NS	5.9
Tetrachloroethene	127-18-4	5.5	19	150	300	2	1.3
Toluene	108-88-3	100[a]	100[a]	500[b]	1,000[c]	36	0.7
Trichloroethene	79-01-6	10	21	200	400	2	0.47
1,2,4-Trimethylbenzene	95-63-6	47	52	190	380	NS	3.6
1,3,5-Trimethylbenzene	108-67-8	47	52	190	380	NS	8.4
Vinyl chloride	75-01-4	0.21	0.9	13	27	NS	0.02
Xylene (mixed)	1330-20 -7	100[a]	100[a]	500[b]	1,000[c]	0.26	1.6

All soil cleanup objectives (SCOs) are in parts per million (ppm). NS=Not specified. See Technical Support Document (TSD). Footnotes

a The SCOs for residential, restricted-residential and ecological resources use were capped at a maximum value of 100 ppm. See TSD section 9.3.

b The SCOs for commercial use were capped at a maximum value of 500 ppm. See TSD section 9.3.

c The SCOs for industrial use and the protection of groundwater were capped at a maximum value of 1000 ppm. See TSD section 9.3.

d The SCOs for metals were capped at a maximum value of 10,000 ppm. See TSD section 9.3.

e For constituents where the calculated SCO was lower than the contract required quantitation limit (CRQL), the CRQL is used as the SCO value.

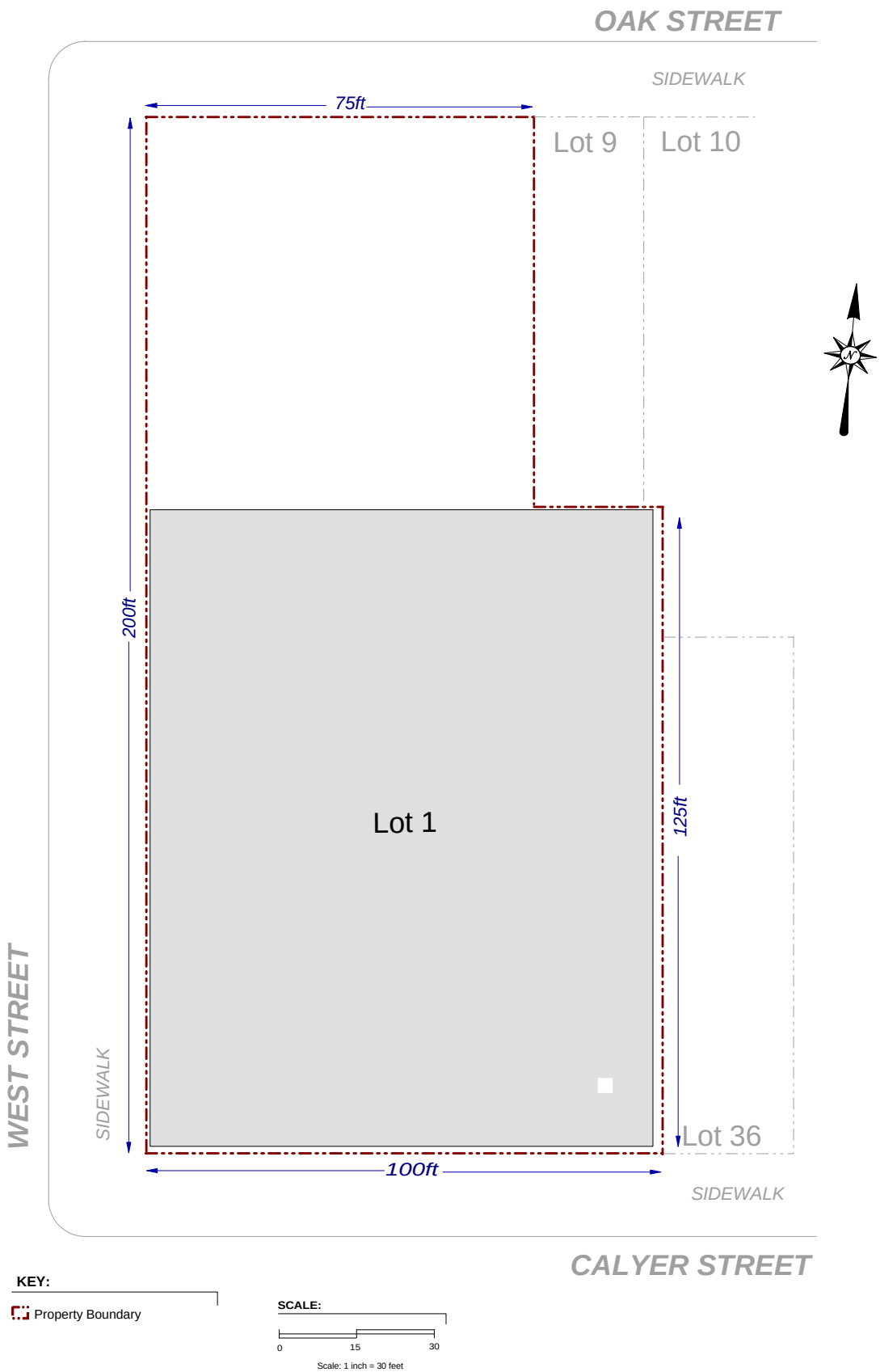
FIGURES

USGS Brooklyn Quadrangle 1995, Contour Interval = 10 feet

EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
Phone 631.504.6000
Fax 631. 924 .2870

REDEVELOPMENT SITE
26 WEST STREET, BROOKLYN, NY

FIGURE 1 SITE LOCATION MAP



EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
Phone 631.504.6000
Fax 631. 924 .2870

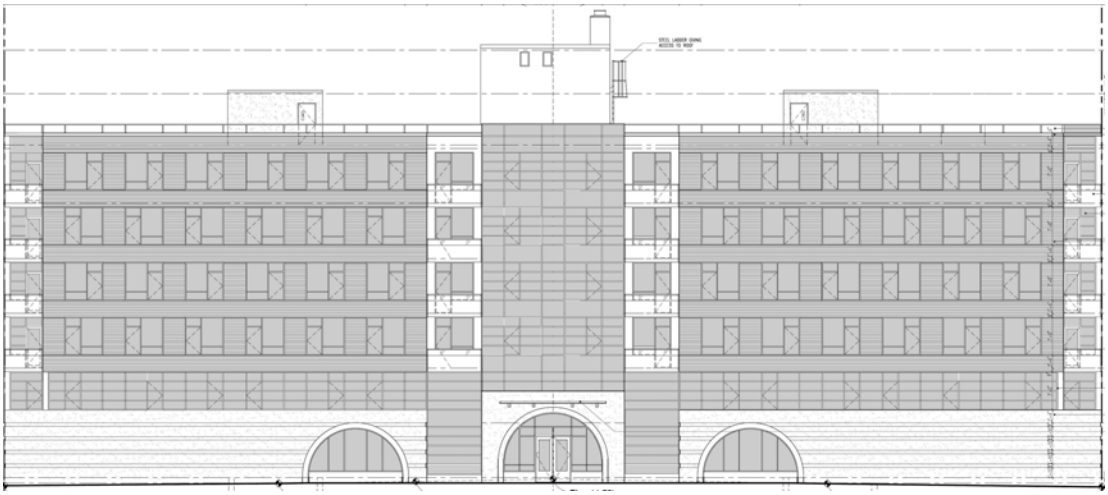
Figure No. 2

Site Name: Redevelopment Project

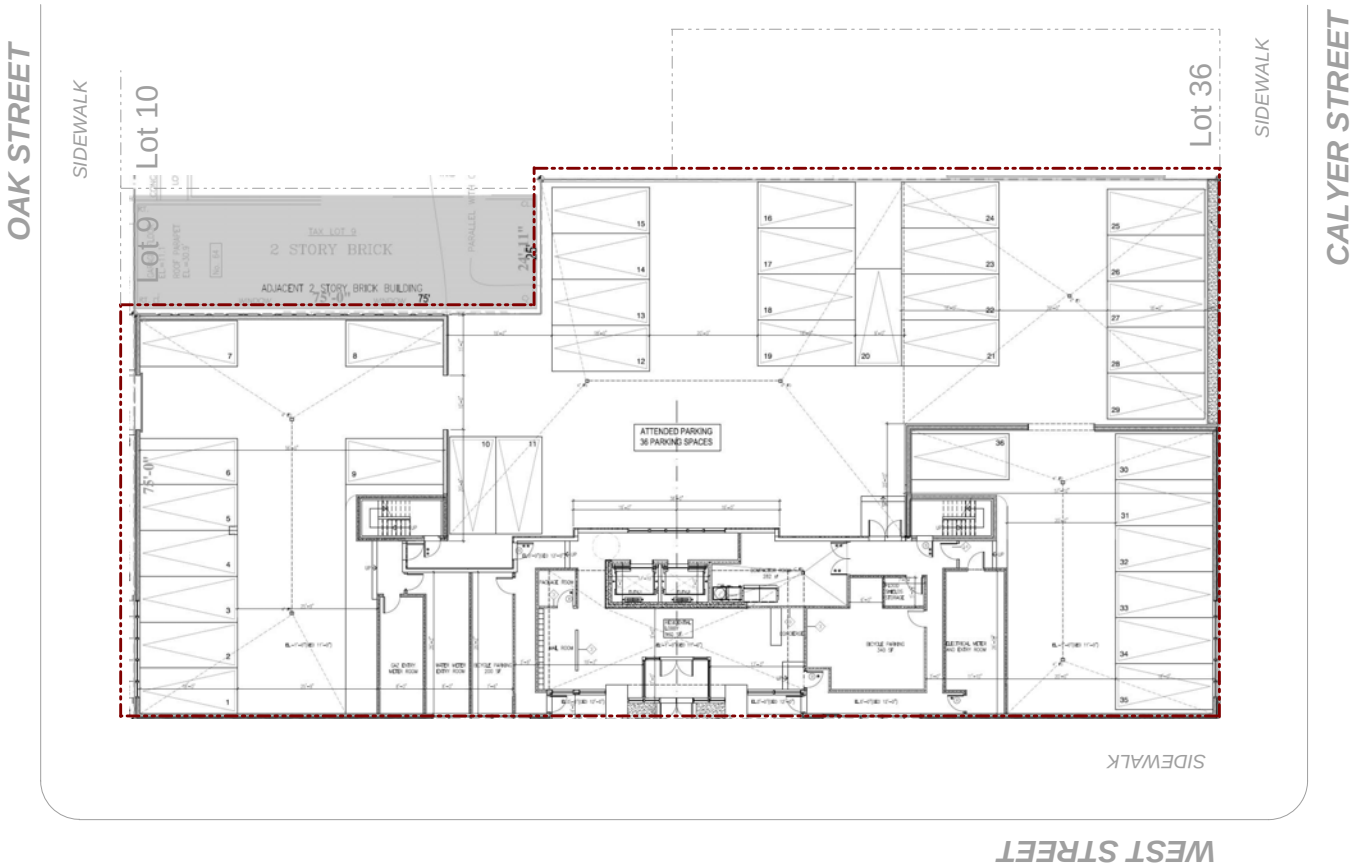
Site Address: 26 West Street, Brooklyn, NY

Drawing Title: Site Boundary Map

ELEVATION



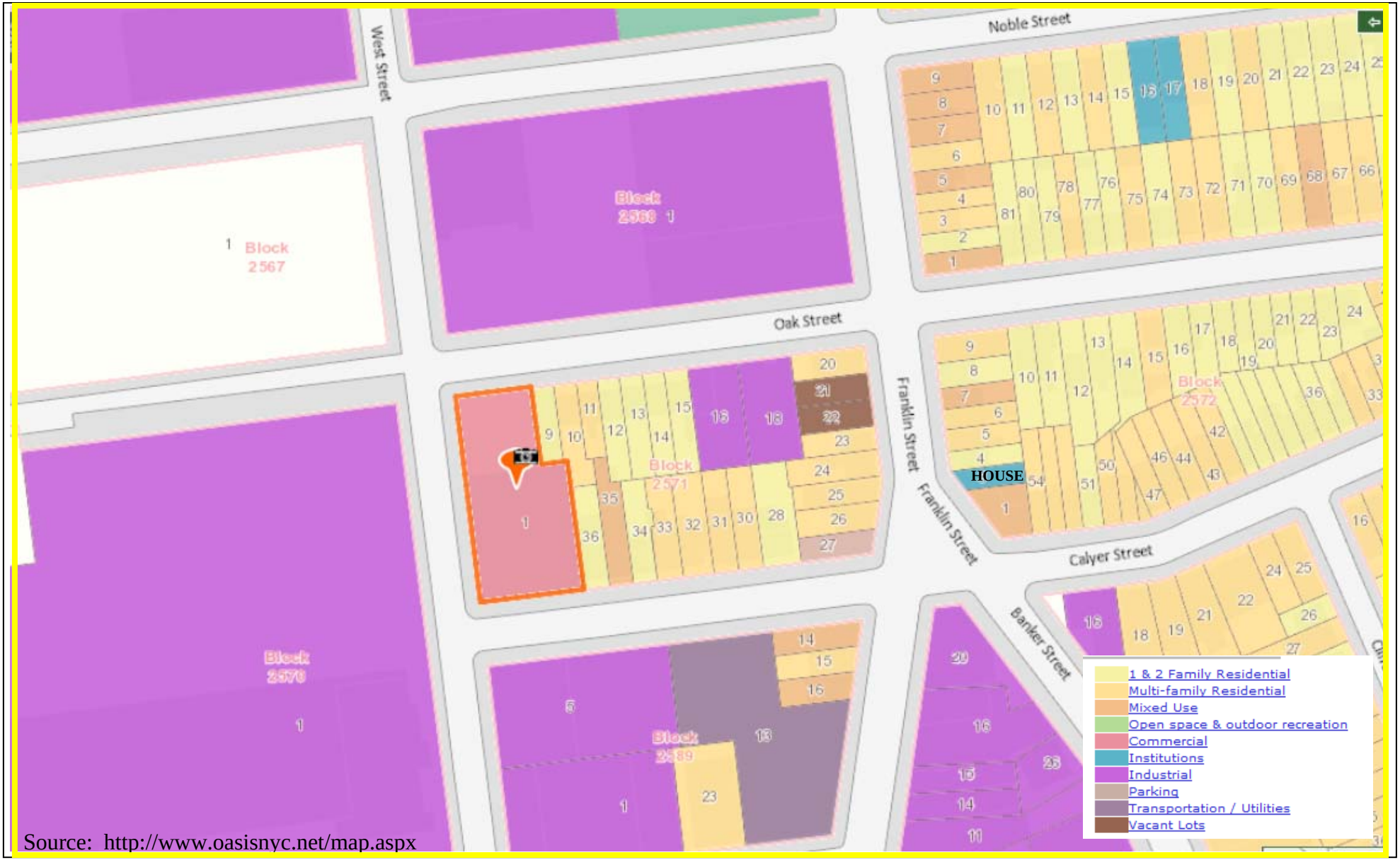
FIRST FLOOR PLAN



EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
Phone 631.504.6000
Fax 631. 924 .2870

Figure No. 3

Site Name:	Redevelopment Project
Site Address:	26 West Street, Brooklyn, NY
Drawing Title:	Redevelopment Plan



Source: http://www.oasisnyc.net/map.aspx

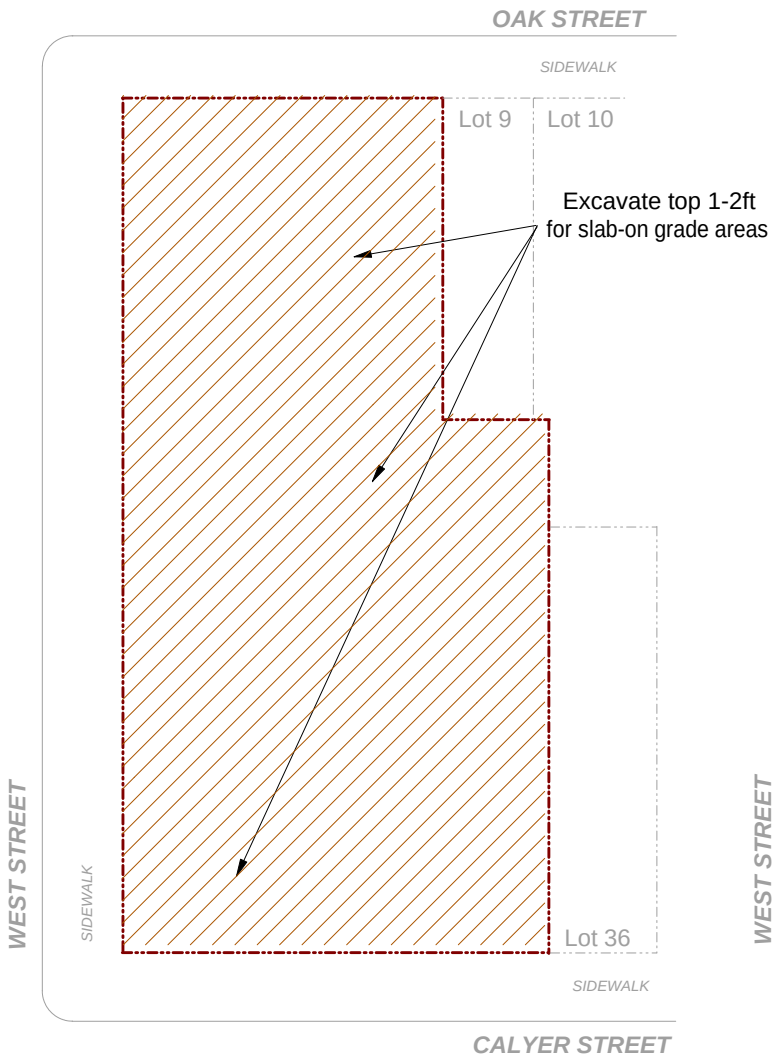
FIGURE 4
SURROUNDING LAND USE MAP

26 WEST STREET, BROOKLYN NY

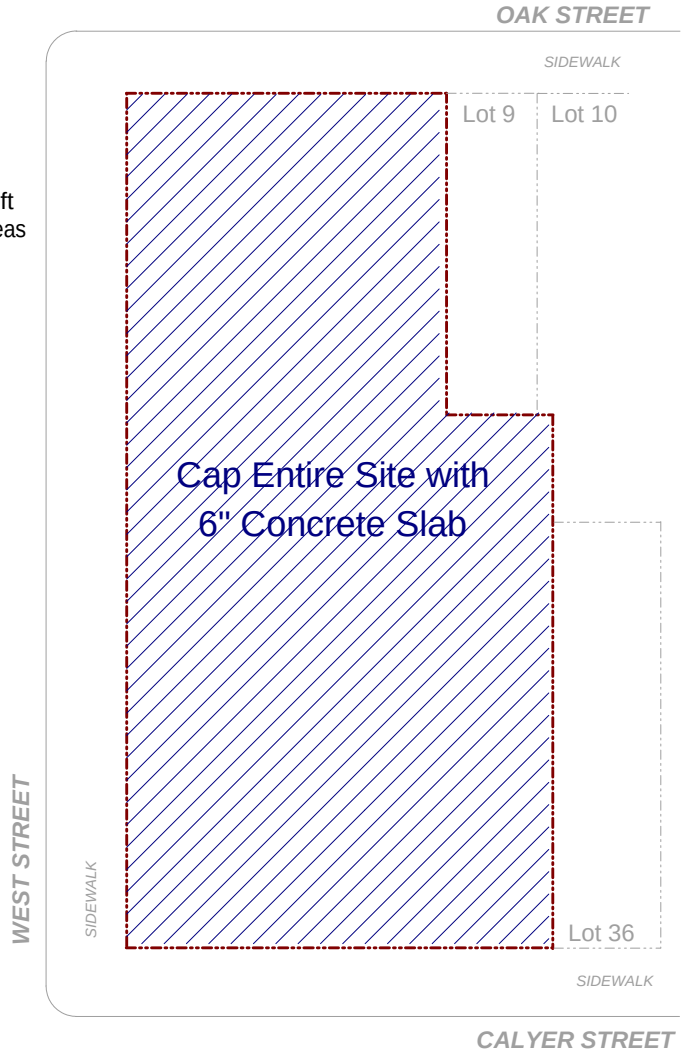
HAZARDOUS MATERIALS REMEDIAL INVESTIGATION REPORT

EBC
ENVIRONMENTAL BUSINESSS CONSULTANTS
1808 MIDDLE COUNTRY ROAD, RIDGE, NEW YORK 11961
PHONE: (631) 504-6000 FAX: (631) 924-2870

EXCAVATION PLAN



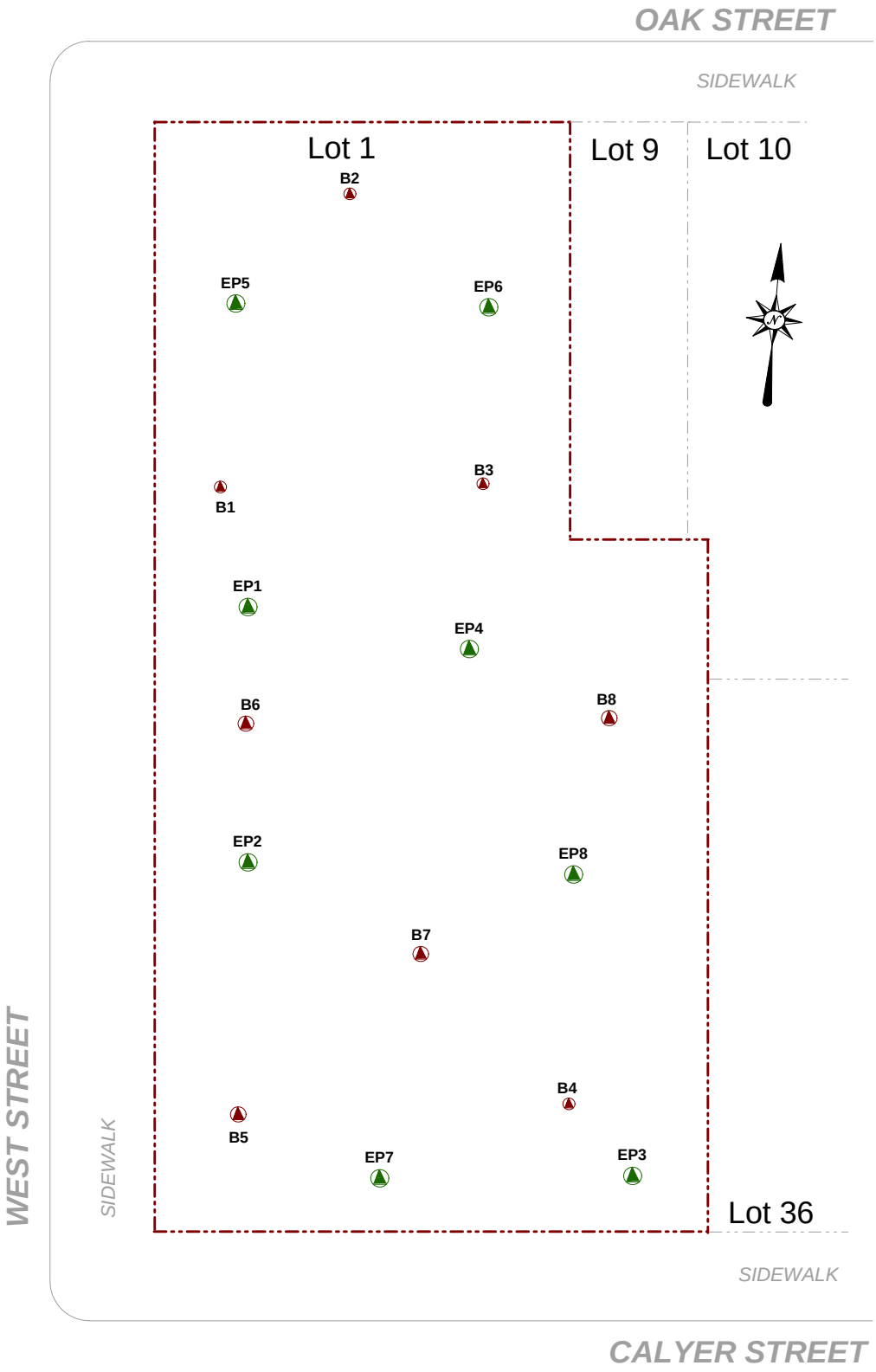
CAPPING PLAN



EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
Phone 631.504.6000
Fax 631. 924 .2870

Figure No. 5

Site Name: REDEVELOPMENT PROJECT
Site Address: 26 WEST STREET, BROOKLYN, NY
Drawing Title: EXCAVATION AND CAPPING PLAN



EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
Phone 631.504.6000
Fax 631. 924 .2870

Figure No. 6

Site Name: Redevelopment Project

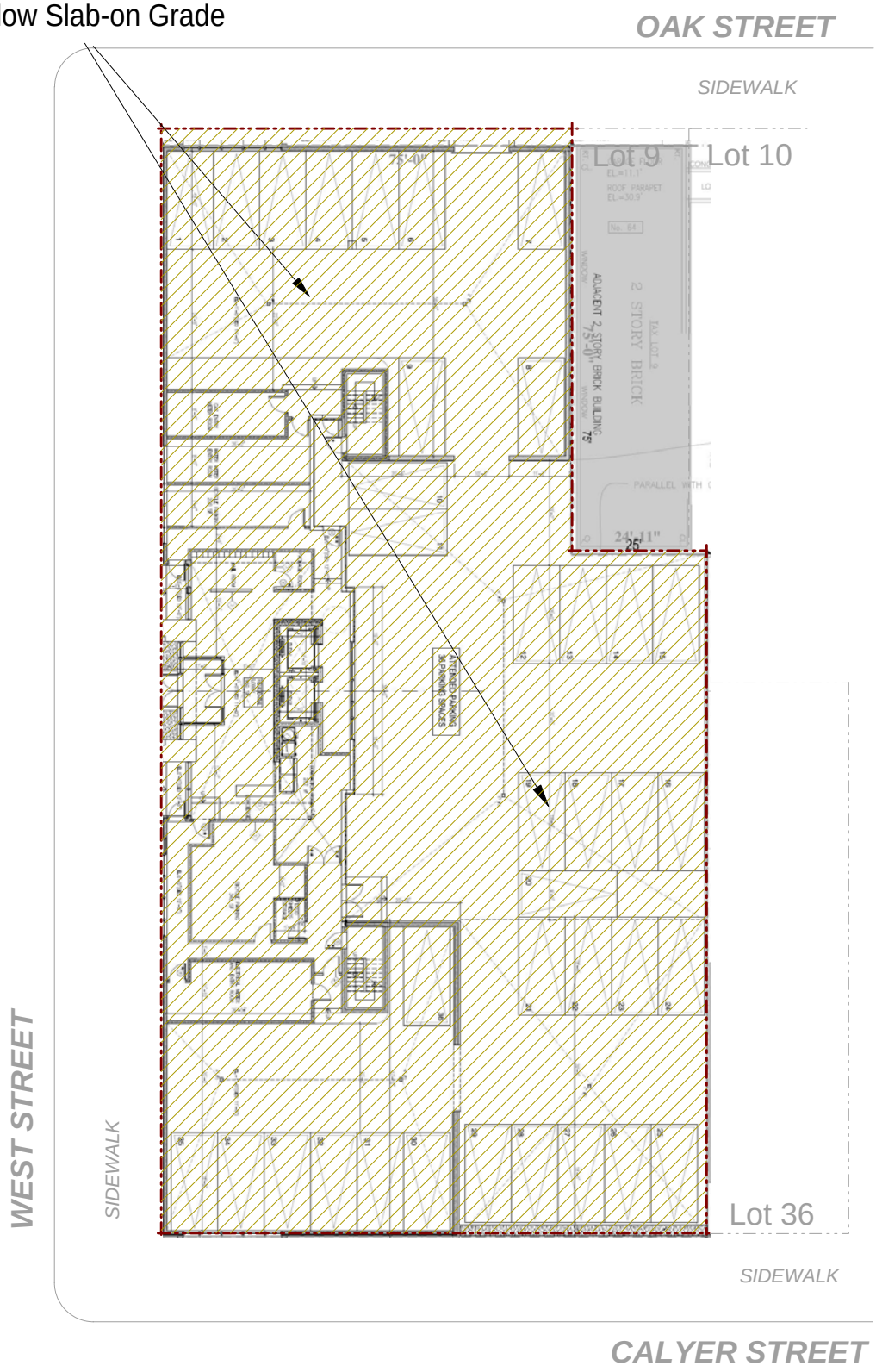
Site Address: 26 West Street, Brooklyn, NY

Drawing Title: Endpoint Sampling Plan

FIRST FLOOR PLAN

Raven Industries VBP 20 Plus

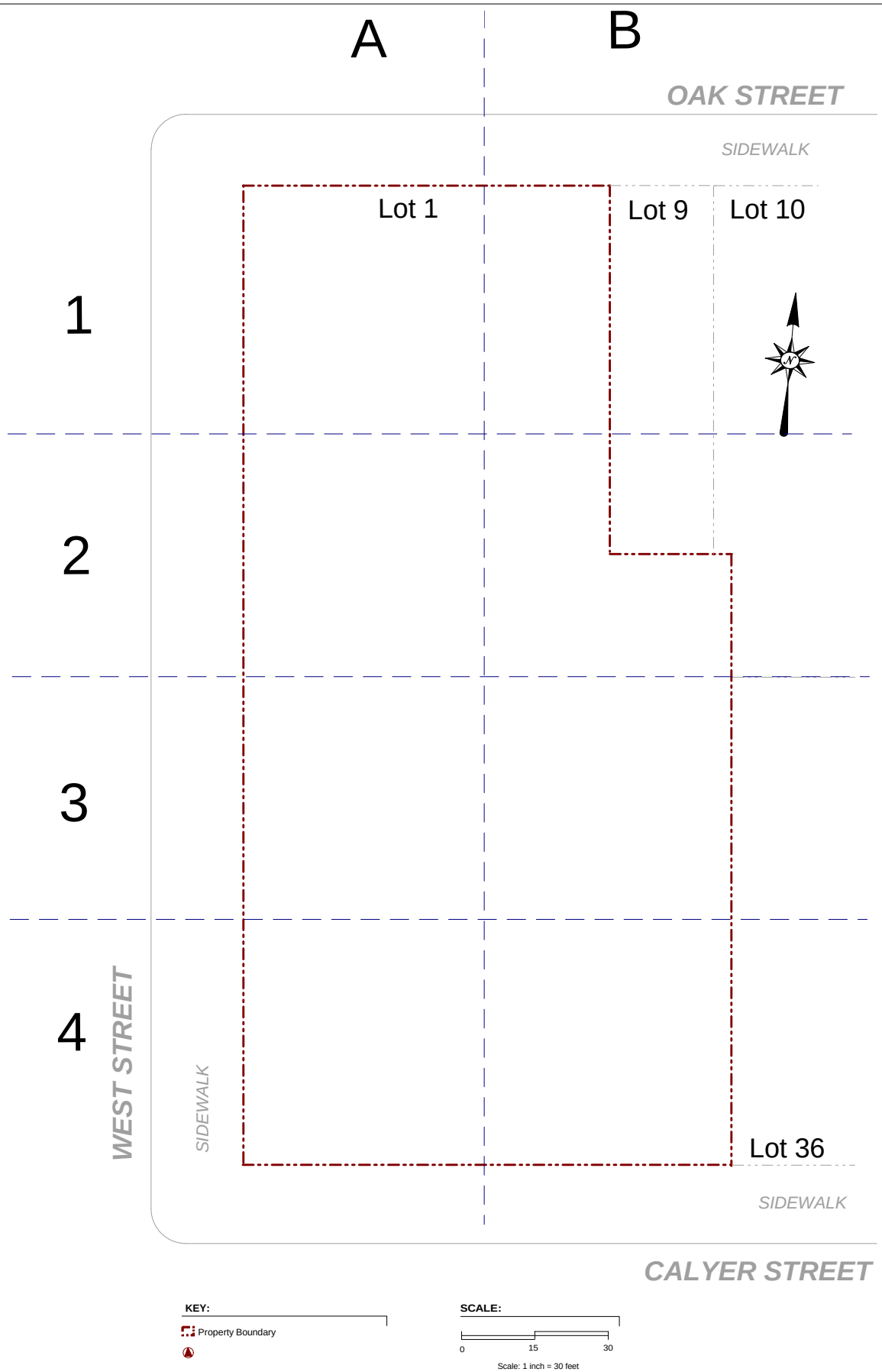
Vapor Barrier Below Slab-on Grade



EBC
Environmental Business Consultants
Phone 631.504.6000
Fax 631. 924 .2870

Figure No. **7**

Site Name:	Redevelopment Project
Site Address:	26 West Street, Brooklyn, NY
Drawing Title:	Vapor Barrier Plan



EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
Phone 631.504.6000
Fax 631. 924 .2870

Figure No. 8

Site Name: Redevelopment Project

Site Address: 26 West Street, Brooklyn, NY

Drawing Title: Alpha-Numeric Grid Map

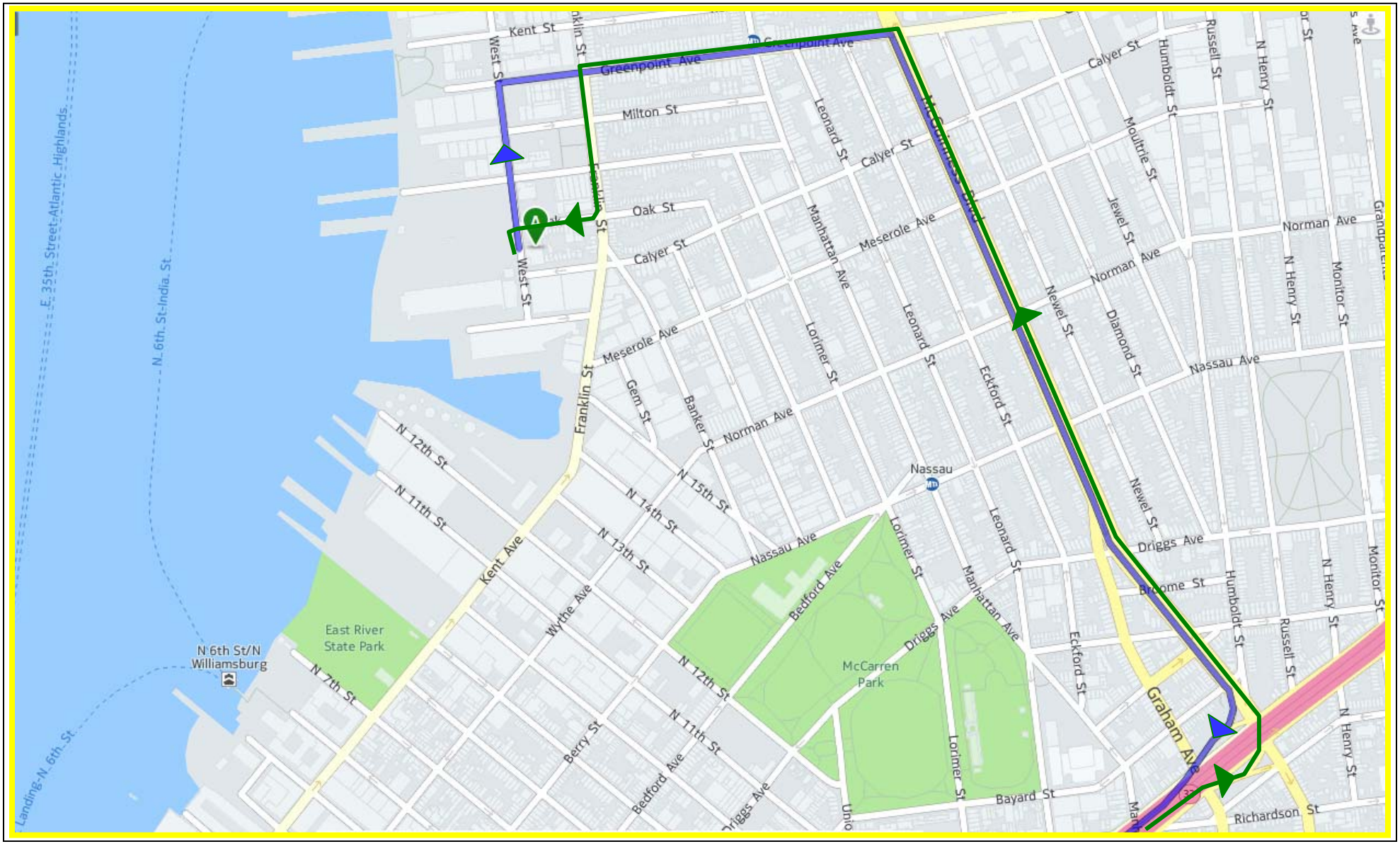


FIGURE 9 – TRUCK ROUTE MAP

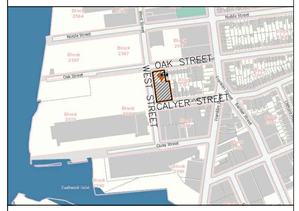
26 WEST STREET, BROOKLYN, NY
REMEDIAL ACTION WORK PLAN

EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
1808 Middle Country Road, Ridge, New York 11961
Phone: (631) 504-6000 Fax: (631) 924-2870

ATTACHMENT A
PROPOSED DEVELOPMENT PLANS

26 WEST STREET, BROOKLYN, NY
RESIDENTIAL BUILDING

KEY PLAN



BLOCK 2571 LOT 1

issue	rev	date	description
1		2014/11/25	ISSUED TO D.O.B.

ISSUES/REVISIONS

MEP ENGINEER:

STRUCTURAL ENGINEER:

CLIENT

KARL FISCHER ARCHITECT
OAQ RAIC AIA
530 BROADWAY, 9th FLOOR, NEW YORK, NY 10012
TEL: (212) 219-9733 FAX: (212) 219-8980
1420 NOTRE-DAME WEST, MONTREAL, QC H3C 1K9
TEL: (514) 933-4137 FAX: (514) 933-0409
WEB SITE: WWW.KFARCHITECT.COM
E-MAIL:KARL@KFARCHITECT.COM

SEAL

REGISTERED ARCHITECT
KARL FISCHER
021282
STATE OF NEW YORK

project title

BLOCK 2571 LOT 1
26 WEST STREET, BROOKLYN, 11222

drawing title

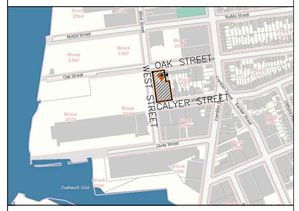
COVER SHEET

dob no

scale	project no. 14-45
date	sheet no. OF
drawn	drawing no. T-001
checked	

DRAWING NUMBER	DRAWING TITLE
ARCHITECTURAL	
General	
T-001	Cover Sheet
T-002	Drawings List
G-001	General Notes
G-002	General Notes
G-003	General Notes
G-004	ADA Notes and Diagrams
G-005	ADA Notes and Diagrams
G-006	ADA Notes and Diagrams
G-007	ADA Notes and Diagrams
Zoning	
Z-001	Zoning Analysis
Z-002	Zoning Area calculations
Z-003	Zoning Area calculations
Z-004	Zoning Area calculations
Z-005	Zoning Area calculations
Z-006	Zoning Deduction calculation 1st floor
Z-007	Zoning Deduction calculation 2nd floor
Z-008	Zoning Deduction calculation 3rd floor
Z-009	Zoning Deduction calculation 4th floor
Z-010	Zoning Deduction calculation 5th floor
Z-011	Zoning Deduction calculation 6th floor
Z-012	Zoning Deduction calculation roof
Z-013	Zoning Deduction calculation EMR
Z-014	Light and Air Diagrams
Z-015	Light and Air Diagrams
Z-016	Light and Air Diagrams
Z-020	FEMA flood plan
Floor Plans	
A-010	Site survey plan
A-011	Site plan
A-100.**00**	Cellar Floor Plan
A-101.00	First Floor Plan
A-102.00	Second Floor Plan
A-103.00	Third Floor Plan
A-104.00	Fourth Floor Plan
A-105.00	Fifth Floor Plan
A-106.00	Sixth Floor Plan
A-107.00	Roof Plan
A-108.00	E.M.R. Plan
A-109.00	Roof E.M.R. Plan
Elevations And Sections	
A-200.00	Elevation West Street
A-201.00	Elevation Calyer Street
A-202.00	Elevation Oak Street
A-203.00	Rear Elevations
A-204.00	Rear Elevations
Schedules And Details	
A-500.00	Wall Types

KEY PLAN



BLOCK 2571 LOT 1

issue	rev	date	description
1		2014/11/25	ISSUED TO D.O.B.

ISSUES/REVISIONS

MEP ENGINEER:

STRUCTURAL ENGINEER:

CLIENT

KARL FISCHER ARCHITECT
OAQ RAIC AIA
530 BROADWAY, 9th FLOOR, NEW YORK, NY 10012
TEL: (212) 219-9733 FAX: (212) 219-8980
1420 NOTRE-DAME WEST, MONTREAL, QC H3C 1K9
TEL: (514) 933-4137 FAX: (514) 933-0409
WEB SITE: WWW.KFARCHITECT.COM
E-MAIL:KARL@KFARCHITECT.COM

SEAL

REGISTERED ARCHITECT KARL FISCHER 021282 STATE OF NEW YORK

project title

BLOCK 2571 LOT 1
26 WEST STREET, BROOKLYN, 11222

drawing title

DRAWINGS LIST

dob no

scale	project no. 14-45
date	sheet no. OF
drawn	drawing no. T-002
checked	

GENERAL NOTES:

1. THE PROPOSED WORK ON THESE DRAWINGS SHALL COMPLY WITH NEW YORK CITY BUILDING CODE REQUIREMENTS, INCLUDING LOCAL LAW #17/95 (EARTHQUAKE CODE).
2. THE GENERAL CONTRACTOR SHALL OBTAIN CONSTRUCTION PERMIT AND PAY ALL REQUIRED FEES TO THE D.O.B. BASED ON THE PROPOSED WORK OF THIS DRAWING FROM NEW YORK CITY BUILDING DEPARTMENT PRIOR TO START OF WORK.
3. ALL ELECTRICAL WORK BEING PERFORMED SHALL BE BY A LICENSED ELECTRICIAN IN ACCORDANCE WITH NEW YORK CITY ELECTRICAL CODE, AND SHALL BE REQUIRED TO OBTAIN ALL REQUIRED SIGN-OFFS AND CERTIFICATE OF COMPLETIONS FROM THE B.E.C.
4. ALL PLUMBING WORK SHALL BE PERFORMED BY A LICENSED PLUMBER IN ACCORDANCE WITH THE NEW YORK CITY BUILDING CODE AND INSPECTION REQUIREMENTS. HE SHALL BE RESPONSIBLE TO OBTAIN ALL REQUIRED PLUMBING SIGN-OFFS AND INSPECTIONS FROM THE DEPARTMENT OF BUILDING'S PLUMBING DIVISION.
5. THE GENERAL CONTRACTOR SHALL CHECK AND VERIFY ALL CONDITIONS AND DIMENSIONS ON THE SITE PRIOR TO START OF WORK. HE SHALL NOTIFY THE ARCHITECT/ENGINEER OF RECORD OF ANY DISCREPANCIES AND/OR CHANGE OF LAYOUT BETWEEN THE FIELD CONDITIONS AND THESE DRAWINGS IMMEDIATELY. FAILURE TO DO SO WILL INDICATE THE GENERAL CONTRACTOR'S ACCEPTANCE OF THESE DRAWINGS AND WILLINGNESS TO TAKE FULL RESPONSIBILITY FOR SAID WORK BEING PERFORMED.
6. THE ARCHITECT/ENGINEER OF RECORD HAS NOT BEEN RETAINED TO SUPERVISE THE CONSTRUCTION.
7. THE GENERAL CONTRACTOR SHALL RETAIN THE SERVICES OF A LICENSED ARCHITECT/ENGINEER FOR ALL REQUIRED SPECIAL INSPECTIONS.
8. THE GENERAL CONTRACTOR SHALL OBTAIN SIGN-OFF FROM THE DEPARTMENT OF BUILDINGS AFTER COMPLETION OF WORK.
9. THE CONTRACTOR SHALL VISIT THE SITE AND SHALL BE KNOWLEDGEABLE OF CONDITIONS THEREON. HE SHALL INVESTIGATE, VERIFY AND BE RESPONSIBLE FOR ALL CONDITIONS OF THE PROJECT AND SHALL NOTIFY THE OWNER OF ANY CONDITIONS REQUIRING MODIFICATIONS BEFORE PROCEEDING WITH THE WORK.
10. REFER TO STRUCTURAL, MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS FOR ADDITIONAL GENERAL NOTES, ABBREVIATIONS AND SYMBOLS. ALL NOTES ARE TO BE REVISED AND APPLIED TO RELATED BUILDING COMPONENTS.
11. NOTES APPEAR ON VARIOUS SHEETS FOR DIFFERENT SYSTEMS AND MATERIALS. SHEETS TO BE REVIEWED AND NOTES ON ANY ONE SHEET TO BE APPLIED ON RELATED DRAWINGS AND DETAILS.
12. DETAILS NOT SHOWN ARE SIMILAR IN CHARACTER TO THOSE DETAILED. WHERE SPECIFIED DIMENSIONS, DETAILS OR DESIGN INTENT CANNOT BE DETERMINED, CONSULT THE ARCHITECT BEFORE PROCEEDING WITH THE WORK.
13. ALL ELEVATOR OPENINGS SHALL BE CERTIFIED BY THE ELEVATOR SUBCONTRACTOR PRIOR TO FORMING. REQUIRED MODIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR APPROVAL PRIOR TO FORMING.
14. REFER TO CERTIFIED MECHANICAL AND ELECTRICAL CONTRACTOR'S DRAWINGS AND MANUFACTURER'S TEMPLATE DRAWINGS FOR ALL MECHANICAL AND ELECTRICAL EQUIPMENT SUPPORTS, BOLT SETTING TEMPLATES, ISOLATIONS, SPRING ISOLATION, ETC, NOT SHOWN ON THE DRAWINGS.
15. CONTRACTOR TO COORDINATE ALL EQUIPMENT BASE AND HOUSEKEEPING PADS WITH MECHANICAL, PLUMBING AND ELECTRICAL CONTRACTORS. EQUIPMENT BASES AND HOUSEKEEPING PADS TO BE A MINIMUM OF 4" HIGH UNLESS OTHERWISE NOTED.
16. CONCRETE PADS AND MOUNTINGS IN MECHANICAL SPACES SHALL BE COORDINATED WITH ELECTRICAL AND PLUMBING CONTRACTORS.
17. CONTRACTOR TO COORDINATE ALL MECHANICAL AND ELECTRICAL FLOOR AND WALL SLEEVES AND ALL MECHANICAL SHAFTS WITH MECHANICAL, PLUMBING, FIRE-PROTECTION, ELECTRICAL, STRUCTURAL AND ARCHITECTURAL DRAWINGS.
18. PROVIDE ACCESS PANELS AS APPLICABLE AND AS REQUIRED FOR MECHANICAL EQUIPMENT. ALL ACCESS PANELS SHALL BE CONCEALED, AND LOCATIONS SHALL BE REVIEWED WITH THE ARCHITECT PRIOR TO PROCEEDING.
19. PORTABLE FIRE EXTINGUISHERS LOCATED ON THE DRAWINGS SHALL RECEIVE APPROVAL OF FIRE DEPARTMENT PRIOR TO INSTALLATION. (N/A)
20. ALL SPRINKLER HEADS IN ACOUSTICAL TILE SHALL BE INSTALLED CENTERED IN THE ACOUSTICAL TILE.
21. ALL EXTERIOR HANDRAILS AND EXTERIOR EXPOSED METAL SHALL BE GALVANIZED AND PAINTED UNLESS NOTED OTHERWISE.
22. ALL EXTERIOR DOORS SHALL PREVENT AIR LEAKAGE/INFILTRATION AROUND THEIR PERIMETER WHEN IN A CLOSED POSITION.
23. ALL EXTERIOR JOINTS AROUND WINDOW AND DOOR FRAMES, BETWEEN WALLS AND FOUNDATIONS, BETWEEN WALLS AND ROOFS, AND BETWEEN WALLS AND PANELS AT PENETRATION OF UTILITIES THROUGH THE ENVELOPE SHALL BE SEALED, CAULKED OR WEATHER STRIPPED TO PREVENT AIR LEAKAGE/INFILTRATION.
24. ALL EXTERIOR SOFFITS SHALL BE CONSTRUCTED WITH RIGID GALVANIZED METAL FRAME MEMBERS AND SHALL RESIST UPLIFTING WIND LOADS OF 1.5 TIMES THE WIND PRESSURE DIAGRAM.
25. ALL EXTERIOR SOFFITS SHALL BE INSTALLED TO PROVIDE A 'U' VALUE OF 0.09, SHALL HAVE A VAPOR BARRIER AND SHALL BE PROPERLY SEALED AGAINST AIR INFILTRATION.
26. ALL DISSIMILAR METALS SHALL BE EFFECTIVELY ISOLATED FROM EACH OTHER TO AVOID MOLECULAR BREAKDOWN.
27. FUTURE TENANT DEVELOPMENT TO BE COVERED UNDER SEPARATE PERMITS.
28. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL CONDITIONS AND MATERIALS WITHIN THE PROPOSED CONSTRUCTION AREA. THE CONTRACTOR SHALL DESIGN AND INSTALL ADEQUATE SHORING AND BRACING FOR ALL STRUCTURAL AND REMOVAL TASKS. THE CONTRACTOR SHALL HAVE SOLE RESPONSIBILITY FOR ANY DAMAGE OR INJURIES CAUSED BY OR DURING THE EXECUTION OF WORK.
29. THE CONTRACTOR SHALL REPLACE AND REPAIR MISSING OR BROKEN SIDEWALK, CURB, OR ROADWAY DAMAGED DURING CONSTRUCTION AS DIRECTED BY THE NYC DEPARTMENT OF BUILDINGS, NYC DEPARTMENT OF TRANSPORTATION, OR OTHER AGENCIES.

DIMENSIONING:

1. ALL WALLS ARE ORTHOGONAL TO THE PROPERTY LINES UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL BE KNOWLEDGEABLE OF WHICH PROPERTY LINE DETERMINES THE ORIENTATION OF EACH WALL, AND SHALL NOTIFY THE ARCHITECT OF ANY CONDITIONS REQUIRING CLARIFICATION BEFORE PROCEEDING WITH THE WORK.
2. PARTITIONS ARE DIMENSIONED TO THE FURNISHED FACE OF THE WALL UNLESS OTHERWISE NOTED.
3. ALL DIMENSIONS SHALL HAVE PREFERENCE OVER SCALE.
4. ALL DIMENSIONS SHALL BE VERIFIED IN THE FIELD BEFORE PROCEEDING WITH THE WORK. THE ARCHITECT SHALL BE NOTIFIED OF ANY CORRECTIONS.
5. DOOR OPENINGS ARE GENERALLY DIMENSIONED TO CENTERLINE OF OPENING. DOOR OPENINGS THAT ARE NOT DIMENSIONALLY LOCATED ARE TO BE CENTERED BETWEEN WALLS OR POSITIONED WITH ONE JAMB AGAINST AND ADJACENT WALL OR COLUMN AS SHOWN ON THE PLANS AND/OR DETERMINED FROM THE DETAILS.
6. WHEN UNDIMENSIONED PARTITIONS APPEAR IN CONJUNCTION WITH DOOR OPENINGS, THE DOOR WIDTH AND DOOR FRAME DETAILS DETERMINE THE LOCATION OF THE ADJACENT WALLS AND FRAMES.

PARTITION NOTES:

1. DEFLECTION FOR ALL PARTITIONS SHALL NOT EXCEED 1/240TH OF THE SPAN MAXIMUM FOR TYPICAL GYPSUM PARTITIONS, OR 1/360 FOR WOOD-CLAD PARTITIONS, OR STONE-CLAD PARTITION SYSTEMS.
2. WATER RESISTANT DRYWALL (FOR THE FULL HEIGHT OF THE PARTITION CONSTRUCTION) SHALL BE USED IN TOILETS, SHOWERS, SERVICE ROOMS, ETC. USE STANDARD GYPSUM BOARD FOR CEILING CONSTRUCTION.
3. PENETRATIONS: COORDINATE WITH MECHANICAL CONTRACTOR FOR OPENINGS REQUIRED FOR RETURN AIR IN FULL HEIGHT PARTITIONS.
4. PROVIDE LATERAL BRACING TO STRUCTURE ABOVE FINISHED CEILINGS FOR PARTITIONS EXCEEDING UNSUPPORTED HEIGHTS INDICATED ON DRAWINGS.
5. PROVIDE HORIZONTAL CONTROL JOINTS AT 12'-0' O.C. IN THE VERTICAL DIRECTION UNLESS NOTED OTHERWISE.
6. PROVIDE CONTROL JOINTS IN GYPSUM WALLBOARD CONSTRUCTION SUCH THAT PARTITION OR FURRING RUNS DO NOT EXCEED 30', AND CEILING DIMENSIONS DO NOT EXCEED 50' IN EITHER DIRECTION WITH PERIMETER RELIEF OR 30' WITHOUT PERIMETER RELIEF.
7. PROVIDE VERTICAL CONTROL JOINTS WITH SEALANT IN MASONRY WALLS AS SHOWN IN DRAWINGS WITH MAXIMUM SPACING OF 25'-0'.
8. COMPLETELY SEAL WITH ACOUSTICAL SEALANT HEADS, BASES, AND ENDS, PLUS ALL PENETRATIONS (INCLUDING BUT NOT LIMITED TO MECHANICAL, ELECTRICAL, AND PLUMBING WORK).
9. PROVIDE SOUND BLANKETS AS INDICATED.

SEISMIC/EARTHQUAKE CODE NOTES (BC 1614):

1. EARTHQUAKE LOADS - EVERY BUILDING, STRUCTURE AND PORTION THEREOF SHALL, AT A MINIMUM BE DESIGNED AND CONSTRUCTED TO RESIST THE EFFECTS OF SEISMIC GROUND MOTIONS.
2. NEW CONCRETE BLOCK WALLS TO HAVE STANDARD LADDER TYPE HORIZONTAL REINFORCEMENT AT 16 INCHES ON CENTER VERTICALLY.
3. PROVIDE BOND BEAM WITH TWO #6 REBARS AT TOP OF EACH FLOOR.
4. NEW CONSTRUCTION HAS BEEN DESIGNED IN COMPLIANCE WITH SEISMIC CODE LOCAL LAW 10/95 RULES AND REGULATIONS.
5. THESE PLANS COMPLY WITH THE SEISMIC CODE REQUIREMENTS OF LOCAL LAW17/95 RULES AND REGULATIONS.

WIND LOADS NOTES (BC-1609):

1. WIND LOADS - THE STRUCTURAL FRAME AND EXTERIOR COMPONENTS OF ALL BUILDINGS, SIGNS, TANKS AND OTHER EXPOSED CONSTRUCTION SHALL BE DESIGNED TO RESIST THE PRESSURES DUE TO WIND. WIND SHALL BE ASSUMED TO ACT FROM ANY DIRECTION. FOR CONTINUOUS FRAMING, THE EFFECTS OF PARTIAL LOADING CONDITIONS SHALL BE CONSIDERED.

BUILDING CLASSIFICATION STATEMENT (BC-106.4):

THE OCCUPANCY GROUPS ARE R2 AND M, WITH R2 BEING THE DOMINANT OCCUPANCY. THE CONSTRUCTION CLASS IS TYPE IB, NON-COMBUSTIBLE CONSTRUCTION. FULLY SPRINKLERED. STRUCTURAL OCCUPANCY CATEGORY IS II PER TABLE 1604.5. THE BUILDING IS INSIDE THE FIRE DISTRICT. THE HEIGHT OF THE BUILDING IS 80'-0" THE HIGHEST LEVEL OF FIRE DEPARTMENT IS ACCESS 80'-0"; THE GROUND LEVEL IS THE LOWEST LEVEL OF FIRE DEPARTMENT ACCESS. THE MULTIPLE DWELLING CLASSIFICATION IS "HEREAFTER ERECTED CLASS A" APARTMENTS.

OCCUPANCY RESISTANCE RATINGS:

1. CONSTRUCTION: TYPE IB, NON-COMBUSTIBLE CONSTRUCTION - FULLY SPRINKLERED.
2. UNLESS NOTED OTHERWISE ALL COLUMNS, BEAMS AND OTHER STRUCTURAL MEMBERS SHALL HAVE SPRAYED ON FIREPROOFING INSTALLED AT THE REQUIRED THICKNESS AND DENSITY TO ACHIEVE THE THE HOURLY RATINGS AS SET FORTH HEREAFTER. ALL SPRAYED-ON FIREPROOFING SHALL COMPLY WITH SECTION (BC 720): TABLE 720.1, INSPECTION REQUIREMENTS OF THE BUILDING CODE OF NEW YORK CITY.
3. ALL RATED PARTITIONS SHALL RUN PAST STRUCTURAL BEAMS, TO THE UNDERSIDE OF STRUCTURAL SLAB. WHERE THE PARTITIONS TERMINATE TO THE UNDERSIDE OF STRUCTURAL BEAMS, THE STRUCTURAL BEAMS SHALL HAVE ADDITIONAL SPRAYED-ON FIREPROOFING TO ACHIEVE AN AREA SEPARATION RATING EQUAL TO THAT OF THE PARTITION RATING, IF REQUIRED.
4. SPACE BETWEEN SLAB AND EXTERIOR WALL AND ALL OPENINGS IN THE FLOOR SLABS INCLUDING SPACES BETWEEN DUCTS, CONDUIT, PIPING, ETC., (EXCEPT WHEN COMPLETELY ENCLOSED BY FIRE RATED CONSTRUCTION), SHALL BE SAFED-OFF (FILLED) WITH APPROVED SAFING MATERIAL TO MAINTAIN FIRE RATING CONTINUITY OF THE FLOOR CONSTRUCTION. ALL JOINTS OF ANY ELEMENT OF CONSTRUCTION SHALL BE TIGHT AND PREVENT THE PASSAGE OF SMOKE OR FLAME.
5. WHERE MASONRY WALLS AT INTERIOR LOT LINES ARE BROKEN TO ACCOMMODATE STRUCTURE THEREBY REDUCING THE FIRE RATING OF THE WALL AT THE STRUCTURE, THEN THE STRUCTURE SHALL BE FIREPROOFED AT THE REQUIRED WALL RATING.
6. ALL FIRE RESISTIVE (LABELED) FIRE DOORS SHALL HAVE THE APPROPRIATE LABELS AFFIXED TO BOTH DOOR AND FRAME.
7. A FINISH OR FIRE RATING INDICATION ON A WALL SHALL MEAN THE ENTIRE LENGTH OF WALL IS TO BE FINISHED OR FIRE RATED AS INDICATED.
8. ALL PIPING, DUCTS, ETC., THAT PENETRATE FLOOR SLABS SHALL BE INSTALLED IN A MANNER THAT WILL PRESERVE THE FIRE RESISTIVE AND STRUCTURAL INTEGRITY OF THE BUILDING.
9. WHERE INTERIOR FINISH MATERIALS ARE SPACED (FURRED) FROM THEIR SUPPORTING MEMBERS, THE CONCEALED SPACES CREATED SHALL BE FIRE STOPPED AS REQUIRED BY CODE.
10. ALL RATINGS ARE TO COMPLY WITH THE FIRE RESISTANCE RATED CONSTRUCTION CHAPTER 7 OF THE 2008 BUILDING CODE OF THE CITY OF NEW YORK.
11. LINTEL OVER OPENINGS WIDER THAN 4 FEET IN MASONRY WALLS SHALL BE FIRE PROTECTED AS REQUIRED BY SECTION BC 714.2.
12. WHERE PIPES, WIRES, CONDUITS, DUCTS, ETC. PIERCE FIRE PROTECTION OF INDIVIDUALLY ENCASED STRUCTURAL MEMBERS, SUCH PENETRATION SHALL NOT EXCEED 2% OF ANY ONE FACE OF SUCH PROTECTION, AND SHALL BE CLOSED OFF WITH CLOSE FITTING METAL ESCUTCHEONS OR PLATES AND CONCEALED SPACE SHALL BE FIRE STOPPED AT EACH STORY (BC714.3).
13. FIRE BARRIER WALLS SHALL COMPLY WITH PROVISIONS OF BC 706 AND SHALL EXTEND FROM THE TOP OF THE FLOOR/ CEILING ASSEMBLY BELOW TO THE UNDERSIDE OF THE FLOOR ABOVE. THESE WALLS SHALL BE CONTINUOUS THROUGH CONCEALED SPACES IN THE FLOOR AND ROOF CONSTRUCTION. HOLLOW VERTICAL SPACES WITHIN THE FIRE BARRIER WALL SHALL BE FIRESTOPPED AT EVERY FLOOR.
14. FLOOR AND ROOF ASSEMBLIES REQUIRED TO HAVE A FIRE-RESISTANCE RATING SHALL COMPLY WITH SECTION BC 711 OF THE 2008 NYC BUILDING CODE.
15. THROUGH PENETRATIONS AND MEMBRANE PENETRATIONS OF FIRE RATED CONSTRUCTION SHALL COMPLY WITH THE REGULATIONS SET FORTH IN SECTION BC 712, IN ADDITION, DUCTS AND TRANSFER OPENINGS SHALL COMPLY WITH THE REGULATIONS SET FORTH IN SECTION BC 716 AND THE NEW YORK CITY MECHANICAL CODE. SHAFT ENCLOSURES SHALL COMPLY WITH THE REGULATIONS SET FORTH IN BC 707.
16. OPENINGS IN FIRE RATED CONSTRUCTION TO COMPLY WITH SECTION BC 715.
17. CONCEALED SPACES WITHIN PARTITIONS, WALLS, FLOORS, STAIR, FURRING, PIPE SPACES, COLUMN ENCLOSURES, ETC., SHALL BE FIRE STOPPED IN COMPLIANCE WITH REGULATIONS SET FORTH IN SECTION BC 717.

OCCUPANCY: RESIDENTIAL (R2) & MERCANTILE (M)

18. ALLOWABLE HEIGHT AND BUILDING AREAS LIMITATIONS TABLE 503 OF 2008 NYC BUILDING CODE.

TABLE 503
ALLOWABLE HEIGHT AND BUILDING AREAS[a]
Height limitations shown as stories and feet above grade plane.
Area limitations as determined by the definition of "Area, building," per floor.

		TYPE OF CONSTRUCTION								
		TYPE I		TYPE II		TYPE III		TYPE IV	TYPE V	
		A	B	A	B	A	B	HT	A	B
GROUP	Hgt (feet) / Hgt(S)	UL	160[e]	65	55	65	55	65	50	40
A-1	S	UL	UL	6	3	6	3	6	3	2
	A	UL	UL	17,500	10,500	14,700	5,600	15,000	8,400	5,500
A-2	S	UL	UL	6	3	6	3	6	3	2
	A	UL	UL	17,500	9,500	14,000	5,600	15,000	8,400	5,500
A-3	S	UL	UL	6	3	6	3	6	3	2
	A	UL	UL	17,500	9,500	14,000	5,600	15,000	8,400	5,500
A-4	S	UL	UL	6	3	6	3	6	3	2
	A	UL	UL	17,500	9,500	14,000	5,600	15,000	8,400	5,500
A-5	S	UL	UL	UL	UL	UL	UL	6	UL	UL
	A	UL	UL	UL	UL	UL	UL	UL	UL	UL
B	S	UL	UL	6	3	6	3	6	3	2
	A	UL	UL	37,500	10,500	28,500	5,600	36,000	8,400	5,500
E	S	UL	UL	4	3	4	3	6	3	2
	A	UL	UL	26,000	10,500	23,500	5,600	25,500	8,400	5,500
F-1	S	UL	6	5	3	5	2	5	3	2
	A	UL	UL	12,500	7,500	7,500	3,000	10,000	3,000	1,000
F-2	S	UL	UL	6	3	6	3	6	3	2
	A	UL	UL	37,500	10,500	28,500	5,600	30,000	8,400	5,500
H-1	S	1	1	1	1	1	1	1	1	NP
	A	21,000	16,500	11,000	7,500	9,500	7,000	10,500	7,500	NP
H-2[d]	S	UL	3	2	1	2	1	2	1	1
	A	21,000	16,500	11,000	7,500	9,500	7,000	10,500	7,500	3,000
H-3[d]	S	UL	6	4	2	4	2	4	2	1
	A	UL	60,000	26,500	14,000	17,500	13,000	25,000	10,000	5,000
H-4	S	UL	7	5	3	5	3	5	3	2
	A	UL	UL	37,500	17,500	28,500	17,500	36,000	18,000	6,500
H-5	S	3	3	3	3	3	3	3	3	2
	A	UL	UL	37,500	23,000	28,500	19,000	36,000	18,000	9,000
I-1	S	UL	UL	6	NP	4	3	4	NP	NP
	A	UL	UL	19,000	NP	16,500	5,600	18,000	NP	NP
I-2	S	UL	6	4	4	4	3	5	3	NP
	A	UL	UL	7,000	3,500	5,000	1,200	6,500	2,000	NP
I-3	S	UL	4	4	3	4	2	4	3	NP
	A	UL	UL	7,000	3,500	5,000	1,200	6,500	2,000	NP
I-4	S	UL	UL	3	3	3	3	3	2	2
	A	UL	UL	26,500	9,500	23,500	5,600	25,500	8,400	5,500
M	S	UL	UL	6	3	6	3	6	3	2
	A	UL	UL	21,500	7,500	18,500	5,600	14,000	8,400	5,500
R-1	S	UL	UL	6	NP	6	NP	6	NP	NP
	A	UL	UL	UL	NP	24,000	NP	20,500	NP	NP
R-2	S	UL	UL	6	NP	6	3	6	NP	NP
	A	UL	UL	UL	NP	24,000	5,600	20,500	NP	NP
R-3	S	UL	UL	6	3	6	3	6	3	3
	A	UL	UL	17,500	10,500	14,700	5,600	30,000	8,400	5,500
S-1	S	UL	6	5	3	4	3	4	3	2
	A	UL	48,000	12,000	7,500	7,500	7,500	7,500	5,000	1,000
S-2[b,c]	S	UL	UL	6	3	6	4	6	3	2
	A	UL	UL	15,000	10,000	10,000	8,500	10,000	8,400	5,500
U[c]	S	UL	5	4	2	3	2	4	2	1
	A	UL	35,000	19,000	8,500	14,000	8,500	18,000	9,000	5,500

For SI: 1 foot = 304.8 mm, 1 square foot = $0.0929 m^2$.
UL = Unlimited, NP = Not permitted.
Not permitted in Fire District
Not permitted in Fire District without sprinklers
a. See the following sections for general exceptions to Table 503:
1. Section 504.2, Allowable height increase due to automatic sprinkler system installation.
2. Section 506.2, Allowable area increase due to frontage.
3. Section 506.3, Allowable area increase due to automatic sprinkler system installation.
4. Section 507, Unlimited area building.
b. For open parking structures, see Section 406.3.
c. For private garages, see Section 406.1.
d. See Section 415.5 for limitations.
e. Except for Occupancy Groups F-1, H-1 through H-5, I-2, I-3, S-1 and U, buildings equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1 shall be unlimited in height.

20. REQUIRED SEPARATION OF OCCUPANCIES (HOURS)TABLE 508.3.3 OF 2008 NYC BUILDING CODE.

TABLE 508.3.3
REQUIRED SEPARATION OF OCCUPANCIES (HOURS)[a]

USE	A-1	A-2	A-3	A-4	A-5	B[b]	E	F-1	F-2	H-1	H-2	H-3	H-4	H-5	I-1	I-2	I-3	I-4	M[b]	R-1	R-2	R-3	S-1	S-2	U
A-1	—	2	2	2	2	2	2	3	2	NP	4	3	2	4	2	2	2	2	2	2	2	2	3	2	1
A-2[e]	—	—	2	2	2	2	2	3	2	NP	4	3	2	4	2	2	2	2	2	2	2	2	3	2	1
A-3	—	—	—	2	2	2	2	3	2	NP	4	3	2	4	2	2	2	2	2	2	2	2	3	2	1
A-4	—	—	—	—	2	2	2	3	2	NP	4	3	2	4	2	2	2	2	2	2	2	2	3	2	1
A-5	—	—	—	—	—	2	2	3	2	NP	4	3	2	4	2	2	2	2	2	2	2	2	3	2	1
B[b]	—	—	—	—	—	—	2	3	2	NP	2	1	1	1	2	2	2	2	2	2	2	2	3	2	1
E	—	—	—	—	—	—	—	3	2	NP	4	3	2	3	2	2	2	2	2	2	2	2	3	2	1
F-1	—	—	—	—	—	—	—	—	3	NP	2	1	1	1	3	3	3	3	3	3	3	3	3	3	3
F-2	—	—	—	—	—	—	—	—	—	NP	2	1	1	1	2	2	2	2	2	2	2	2	3	2	1
H-1	—	—	—	—	—	—	—	—	—	—	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
H-2	—	—	—	—	—	—	—	—	—	—	—	1	2	2	4	4	4	4	2	4	4	4	2	2	1
H-3	—	—	—	—	—	—	—	—	—	—	—	—	1	1	4	3	3	3	1	3	3	3	1	1	1
H-4	—	—	—	—	—	—	—	—	—	—	—	—	—	1	4	4	4	4	1	4	4	4	1	1	1
H-5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4	4	4	3	1	4	4	4	1	1	3
I-1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	2	2	2	2	2	2	4	3	2
I-2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	2	2	2	2	2	3	2	1
I-3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	2	2	2	2	3	2	1
I-4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	2	2	2	3	2	1
M[b]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	2	2	3	2	1
R-1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	2	3	2	1
R-2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	3	2	1
R-3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	2[d]	1[d]
S-1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	3
S-2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
U	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

For SI: 1 square foot = $0.0929 m^2$.
NP = Not Permitted.
a. See Section 508.3.3.4 for reductions permitted.
b. Occupancy separation need not be provided for storage areas serving Group B or M if any of the following conditions apply:
1. The storage area is less than 10 percent of the floor area of the story and less than 3000 square feet ($278.7 m^2$).
2. The storage area is provided with an automatic fire-extinguishing system and is less than 3,000 square feet ($278.7 m^2$); or
3. The storage area is less than 1,000 square feet ($92.9 m^2$).
c. Reserved.
d. For private garages and carports, see Section 406.1.4.
e. Commercial kitchens need not be separated from the restaurant seating areas that they serve, provided:
1. The cooking equipment is vented directly to the outdoors; and
2. A draft curtain of noncombustible materials, at least 24 inches (610 mm) down from the ceiling, is provided to separate the cooking facilities from the restaurant seating areas; and
3. Sprinkler heads constructed in accordance with the provisions of this code are provided in the kitchen side of the curtain, within 24 inches (610 mm) of the curtain opening, and any other openings including doors between the kitchen and the seating areas, and spaced not more than 48 inches (1210 mm) on center for each opening that is more than 60 inches (1524 mm) wide.

PARTITION TYPES FIRE RATING AS SPECIFIED ON SHEET A-500

21. FIRE-RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS (HOURS) TABLE 601 OF 2008 NYC BUILDING CODE.

TABLE 601
FIRE-RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS (hours)

BUILDING ELEMENT	TYPE I A	TYPE I B	TYPE II A[d]	TYPE II B	TYPE III A[d]	TYPE III B	TYPE IV HT	TYPE V[i] A[d]	TYPE V[i] B
Structural frame[a] Including columns, girders, trusses	3[b]	2[b]	1	0	1	0	HT	1	0
Bearing walls Exterior[f, g]	3	2	1	0	2	2	2	1	0
Interior	3[b]	2[b]	1	0	1	0	1/HT	1	0
Nonbearing walls and partitions Exterior	See Table 602								
Nonbearing walls and partitions Interior[e]	0	0	0	0	0	0	See Section 602.4.6	0	0
Floor construction[h] Including supporting beams and joists	2	2	1	0	1	0	HT	1	0
Roof construction Including supporting beams and joists	1 1/2[c]	1[c]	1[c]	0[c]	1[c]	0	HT	1[c]	0

For SI: 1 foot = 304.8 mm.
a. The structural frame shall be considered to be the columns and the girders, beams, trusses and spandrels having direct connections to the columns and bracing members designed to carry gravity loads. The members of floor or roof panels which have no connection to the columns shall be considered secondary members and not a part of the structural frame.
b. Roof supports: Fire-resistance ratings of structural frame and bearing walls are permitted to be reduced by 1 hour where supporting a roof only.
c. 1. Except in Factory-Industrial (F-1), Hazardous (H), Mercantile (M) and Moderate-Hazard Storage (S-1) occupancies, fire protection of structural members shall not be required, including protection of roof framing and decking where every part of the roof construction is 20 feet or more above any floor immediately below. Fire-retardant-treated wood members shall be allowed to be used for such unprotected members.
2. Except in Factory-Industrial (F) occupancies subject to regulation under Sections 264(1) and 264(2) of the *New York State Labor Law*, and in Group I-1, R-1, and Group R-2 occupancies, in all occupancies heavy timber shall be allowed where a 1-hour or less fire-resistance rating is required.
3. Except in Factory-Industrial (F) occupancies subject to regulation under Sections 264(1) and 264(2) of the *New York State Labor Law*, and in Group I-1, R-1, and Group R-2 occupancies, in Type I and II construction, fire-retardant-treated wood shall be allowed in buildings including girders and trusses as part of the roof construction when the building is:
i. Type II construction of any height; or
ii. Type I construction two stories or less; or when over two stories, the vertical distance from the upper floor to the roof is 20 feet or more.
d. An approved automatic sprinkler system in accordance with Section 903.3.1.1 shall be allowed to be substituted for 1-hour fire-resistance-rated construction, provided such system is not otherwise required by other provisions of the code or used for an allowable area increase in accordance with Section 506.3 or an allowable height increase in accordance with Section 504.2. The 1-hour substitution for the fire resistance of exterior walls shall not be permitted.
e. Not less than the fire-resistance rating required by other sections of this code.
f. Not less than the fire-resistance rating based on fire separation distance (see Table 602).
g. See footnote (d) of Table 602.
h. See Section 711.3 for additional requirements.
i. Type V construction is not permitted inside fire districts except as provided for in Section D105.1 of Appendix D.

PARTITION TYPES FIRE RATING AS SPECIFIED ON SHEET A-500

20. FIRE-RESISTANCE RATING REQUIREMENTS FOR EXTERIOR WALLS BASE ON FIRE SEPARATION DISTANCE TABLE 602 OF 2008 NYC BUILDING CODE.

TABLE 602
FIRE-RESISTANCE RATING REQUIREMENTS FOR EXTERIOR WALLS BASED ON FIRE SEPARATION DISTANCE[a, d, e]

FIRE SEPARATION DISTANCE (feet)	TYPE OF CONSTRUCTION	OCCUPANCY GROUP H	OCCUPANCY GROUP F-1, M, S-1	OCCUPANCY GROUP A, B, E, F-2, I, R[b], S-2, U
< 5[c]	All	3	2	1
≥ 5 to < 10	IA Others	3 2	2 1	1 1
≥ 10 to < 30	IA, IB IIB, VB Others	2 1 1	1 0 1	1 0 1
≥ 30	All	0	0	0

For SI: 1 foot = 304.8 mm.
a. Load-bearing exterior walls shall also comply with the fire-resistance rating requirements of Table 601.
b. Group R-3 and Group U when used as accessory to Group R-3, shall not be required to have a fire-resistance rating where the fire separation distance is 3 feet or more.
c. See Section 705.1.1 for party walls.
d. Inside the fire district, exterior load-bearing walls of Type II buildings shall have a fire-resistance rating not less than prescribed below:
< 5 — 2 hours
> (or equal) 5 and <10 — 2 hours
> (or equal) 10 < 30 — 1 hour
> (or equal) 30 — As per table 602.
e. Inside the fire district, exterior nonload-bearing walls of Type II buildings shall have a fire-resistance rating not less than prescribed below:
< 5 — As per Table 602
> (or equal) 5 and <10 — As per Table 602
> (or equal) 10 < 30 — 1 hour
> (or equal) 30 — As per Table 602.

FIRE RATINGS, FOR EXTERIOR WALLS REQUIRED TO HAVE FIRE RATINGS AS PER THE ABOVE TABLE, ARE SPECIFIED ON WALL SECTIONS, A300 SERIES.

KEY PLAN

BLOCK 2571 LOT 1

issue	rev	date	description
1		2014/11/25	ISSUED TO D.O.B.
1		2014-02---	ISSUE TO THE DOB

ISSUES/REVISIONS

MEP ENGINEER:

STRUCTURAL ENGINEER:

CLIENT

KARL FISCHER ARCHITECT
OAQ RAIC AIA

530 BROADWAY, 9th FLOOR, NEW YORK, NY 10012
TEL: (212) 219-9733 FAX: (212) 219-8980

1420 NOTRE-DAME WEST, MONTREAL, QC H3C 1K9
TEL: (514) 933-4137 FAX: (514) 933-0409
WEB SITE: WWW.KFARCHITECT.COM
E-MAIL:KARL@KFARCHITECT.COM

SEAL
REGISTERED ARCHITECT
KARL FISCHER
021282
STATE OF NEW YORK

project title
BLOCK 2571 LOT 1
26 WEST STREET, BROOKLYN, 11222

drawing title
GENERAL NOTES

dob no

scale	NTS	project no.	14-45
date		sheet no.	---OF
drawn		drawing no.	G-001.00
checked			

EGRESS NOTES:

1. MEANS OF EGRESS ARE TO COMPLY WITH ALL APPLICABLE REQUIREMENTS OF BC 1003. THE MEANS OF EGRESS SHALL HAVE A MINIMUM CLEAR HEIGHT OF 7"-6" , EXCEPT OTHERWISE LISTED IN BC 1003.2. PROJECTION OBJECTS SHALL COMPLY WITH THE REQUIREMENTS OF BC 1003.3.1 THROUGH BC 1003.3.4.

2. DOORS, GATES, AND TURNSTILES ARE TO COMPLY WITH ALL APPLICABLE REQUIREMENTS OF BC 1008.

3. INTERIOR STAIRS ARE TO COMPLY WITH ALL APPLICABLE REQUIREMENTS OF BC 1009 INCLUDING THE FOLLOWING;

3.1. THE CLEAR HEADROOM IS TO BE 7'-0" MINIMUM, EXCEPT FOR GROUP R-2 AND R-3 MINIMUM HEADROOM IS TO BE 6'-8" (BC 1009.2).
3.2. LANDINGS AND PLATFORMS PROVIDED AT THE HEAD AND FOOT OF EACH FLIGHT OF STAIRS ARE TO HAVE A MINIMUM WIDTH, PERPENDICULAR TO THE DIRECTIONS OF TRAVEL, OF AT LEAST THE WIDTH OF THE STAIR. IN AN INTERMEDIATE LANDING IN STRAIGHT-RUN STAIRS, THE DISTANCE BETWEEN RISERS OF THE UPPER AND LOWER FLIGHTS NEED NOT BE MORE THAN 48". (BC 1009.4)
3.3. THE MAXIMUM VERTICAL RISE OF A SINGLE FLIGHT OF STAIRS BETWEEN FLOORS IS NOT TO EXCEED 12' IN ALL OCCUPANCY GROUPS, EXCEPT GROUP A AND I OCCUPANCIES THE VERTICAL RISE IS NOT TO EXCEED 8'. (BC 1009.6).
3.4. FOR GROUP R2 AND R3, THE SUM OF TWO RISERS PLUS ONE TREAD EXCLUSIVE OF NOSING SHALL BE NOT LESS THAN 24" NOR MORE THAN 25 1/2" (BC 1009.3).
3.5. HANDRAILS SHALL BE PROVIDED ON EACH SIDE, EXCEPT THAT AN ENCLOSED EXIT STAIRS LESS THAN 44" WIDE THAT DO NOT SERVE AS AN ACCESSIBLE MEANS OF EGRESS (BC 1009.11). HANDRAIL HEIGHT MEASURED ABOVE STAIR TREAD NOSINGS, OR FINISH SURFACE OF RAMP SLOPE, SHALL BE UNIFORM, NOT LESS THAN 34" AND NOT MORE THAN 38" (BC 1009.11.1). INTERMEDIATE HANDRAILS ARE REQUIRED SO THAT ALL PORTIONS OF THE STAIRWAY WIDTH REQUIRED FOR EGRESS CAPACITY ARE WITHIN 30" OF A HANDRAIL (BC 1009.11.2). HANDRAIL SHALL PROVIDE 1-1/2" CLEAR SPACE BETWEEN A HANDRAIL AND A WALL, OR OTHER SURFACE (BC 1009.11.6).

4. THE MEANS OF EGRESS ILLUMINATION LEVEL SHALL NOT BE LESS THAN 2 FOOT-CANDELS AT THE FLOOR LEVEL IN EXITS, AT EXIT DISCHARGES, AND IN PUBLIC CORRIDORS, AND SHALL NOT BE LESS THAN 1 FOOT-CANDLE AT THE FLOOR LEVEL IN EXIT ACCESS COMPONENTS OTHER THAN PUBLIC CORRIDORS. (BC 1006.2).

5. AS PER BC 1006.3 IN EVENT OF POWER SUPPLY FAILURE, AN EMERGENCY ELECTRICAL SYSTEM SHALL AUTOMATICALLY ILLUMINATE EXIT ACCESS CORRIDORS, EXIT PASSAGEWAYS, AND EXIT STAIRWAYS IN BUILDINGS REQUIRED TO HAVE TWO OR MORE MEANS OF EGRESS. THE INSTALLATION OF THE EMERGENCY POWER SYSTEM SHALL BE IN ACCORDANCE WITH SECTION BC 2702.

6. EXITS SHALL BE MARKED BY APPROVED EXIT SIGN READILY VISIBLE FROM ANY DIRECTION OF EGRESS TRAVEL; ACCESS TO EXITS SHALL BE MARKED BY EXITS SIGNS IN CASES WHERE THE PATH OF EGRESS IS NOT IMMEDIATELY VISIBLE TO THE OCCUPANTS. EXIT SIGNS TO BE PROVIDED AS REQUIRED AND AS SPECIFIED IN BC 1011.

7. PROVIDE FLOOR NUMBERING SIGNS AS PER SECTION BC 1019.1.7

8. ELEVATOR IDENTIFICATION AND EMERGENCY SIGNS SHALL BE PROVIDED IN ACCORDANCE WITH SECTION BC 3002.3.

9. ACCESSIBLE SPACES SHALL BE PROVIDED WITH NOT LESS THAN ONE ACCESSIBLE MEANS OF EGRESS; ACCESSIBLE MEANS OF EGRESS SHALL COMPLY WITH THE REQUIREMENTS OF SECTION BC 1007.

10. PENETRATIONS INTO AND OPENINGS THROUGH AN EXIT ENCLOSURE AND PROHIBITED EXCEPT FOR REQUIRED EXIT DOORS, EQUIPMENT, AND DUCTWORK NECESSARY FOR INDEPENDENT PRESSURIZATION, SPRINKLER PIPING, STANDPIPES,ELECTRICAL RACEWAY FOR FIRE DEPT. COMMUNICATION AND THE EXIT ENCLOSURE AS PER SECTION BC 1019.1.2.

11. ALL EXITS SHALL BE KEPT READILY ACCESSIBLE AND UNOBSTRUCTED AT ALL TIMES.

12. MAXIMUM TRAVEL DISTANCE SHALL COMPLY WITH BC 1016: TABLE 1015.1.

TABLE 1015.1
EXIT ACCESS TRAVEL DISTANCE[a]

OCCUPANCY	WITHOUT SPRINKLER SYSTEM (feet)	WITH SPRINKLER SYSTEM (feet)
A	See Section 1024.7	
E, F-1, I-1, M, R, S-1	150	200[b]
B	200	300[c]
F-2, S-2, U	200	250[b]
H-1	Not Permitted	75[c]
H-2	Not Permitted	100[c]
H-3	Not Permitted	150[c]
H-4	Not Permitted	175[c]
H-5	Not Permitted	200[c]
I-2, I-3, I-4	150	200[c]

For SI: 1 foot = 304.8 mm.
a. See the following sections for modifications to exit access travel distance requirements:
Section 402: For the distance limitation in malls.
Section 404: For the distance limitation through an atrium space.
Section 1018.2: For buildings with one exit.
Chapter 31: For the limitation in temporary structures.
b. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2. See Section 903 for occupancies where sprinkler systems according to Section 903.3.1.2 are permitted.
c. Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

13. MINIMUM NUMBER OF EXITS REQUIRED SHALL COMPLY WITH BC 1018: TABLE 1018.1

14. OCCUPANCY LOAD SHALL COMPLY WITH BC 1004: TABLE 1004.1.2.
-RESIDENTIAL = 200 SQ. FT. GROSS WITHIN DWELLING UNIT

UNIT A = 860 SF /200 SF = 4 OCCUPANTS x 5 = 20
UNIT B = 575 SF /200 SF = 3 OCCUPANTS x 4 = 12
UNIT C = 575 SF /200 SF = 3 OCCUPANTS x 4 = 12
UNIT D = 539 SF /200 SF = 3 OCCUPANTS x 4 = 12
UNIT E = 688 SF /200 SF = 4 OCCUPANTS x 4= 16
UNIT F = 575 SF /200 SF = 3 OCCUPANTS x 4= 12
UNIT G =575 SF /200 SF = 3 OCCUPANTS x 4= 12
UNIT H = 575 SF /200 SF = 3 OCCUPANTS x 1= 3
UNIT H(3-5) = 673 SF/200 = 3 OCCUPANTS x 3= 9
UNIT J = 575 SF /200 SF = 3 OCCUPANTS x 1= 3
UNIT K = 575 SF /200 SF = 3 OCCUPANTS x 1= 3
UNIT M = 911 SF /200 SF = 5 OCCUPANTS x 1= 5
UNIT N+J (FLOORS 3-6)= 634 SF /200 SF = 3 OCCUPANTS x 5= 15
6TH FLOOR: UNIT B = 722 SF /200 SF = 4 OCCUPANTS x 1= 4
UNIT C = 755 SF /200 SF = 4 OCCUPANTS x 1= 4
UNIT D = 556 SF /200 SF = 3 OCCUPANTS x 1= 3

RESIDENTIAL TOTAL = 145 OCCUPANTS

-MERCANTILE= GROSS FLOOR AREA PER OCCUPANT:

1st floor: 8,278 SF (net) / 30 SF (mercantile) = 276 OCCUPANTS
cellar: 7,462 SF (net) / 30 SF (mercantile) = 249 OCCUPANTS

MERCANTILE TOTAL = 525 OCCUPANTS

15. EGRESS WIDTH PER OCCUPANT SHALL NOT BE LESS THAN THE TOTAL OCCUPANT LOAD SERVED BY THE MEANS OF EGRESS MULTIPLIED BY FACTORS IN BC 1005.1: TABLE 1005.1.

TABLE 1005.1
EGRESS WIDTH PER OCCUPANT SERVED

OCCUPANCY	STAIRWAYS (inches per occupant)	OTHER COMPONENTS (inches per occupant)
Occupancies other than those listed below	0.3	0.2
Hazardous: H-1, H-2, H-3 and H-4	0.7	0.4

RESIDENTIAL = (0.3) X 73 OCCUPANTS = 21.9" MINIMUM WIDTH OF EGRESS (STAIRWAYS)
36" MINIMUM PROVIDED COMPLYING WITH BC 1009
(0.2) X 145 OCCUPANTS = 29" MINIMUM WIDTH OF EGRESS (OTHER COMPONENTS)
36" MIN PROVIDED IN EXIT PASSAGEWAYS (BC 1020)
32" MIN PROVIDED AT DOORS (BC 1008.1.1.1)
MERCANTILE = (0.3) X 138 OCCUPANTS = 41.4" MINIMUM WIDTH OF EGRESS (STAIRWAYS)
44" MINIMUM PROVIDED COMPLYING WITH BC 1009
(0.2) X 138 OCCUPANTS = 27.6" MINIMUM WIDTH OF EGRESS (OTHER COMPONENTS)
44" MIN PROVIDED IN EXIT PASSAGEWAYS (BC 1020)
32" MIN PROVIDED AT DOORS (BC 1008.1.1.1)

FINISHES AND DETAILS:

1. INTERIOR FINISHES SHALL LIMIT THE ALLOWABLE FLAME SPREAD AND SMOKE DEVELOPMENT BASE ON LOCATION AND OCCUPANCY CLASSIFICATION (BC 801.1).

2. INTERIOR WALL AND CEILING FINISHES SHALL BE CLASSIFIED IN ACCORDANCE WITH ASTM E84 AND SHALL BE USED IN ACCORDANCE WITH BC 803, TABLE 803.5.

3. SMOKE DEVELOPED INDEX SHALL COMPLY WITH BC 803.1.1.

4. ATTACHMENTS AND ADHESIVES FOR INTERIOR FINISH TO HAVE THE SAME FLAME-SPREAD, AND SMOKE DEVELOPED RATING OF THE INTERIOR FINISHES.

5. NO MATERIAL SHALL BE USED IN ANY INTERIOR LOCATION WHICH WILL PRODUCE PRODUCTS MORE TOXIC THAN THOSE GIVEN OFF BY WOOD OR PAPER WHEN DECOMPOSING OR BURNING AS PER BC 803.2.2.

6. COMBUSTIBLE FLOORING MAY BE USED WHEN IN ACCORDANCE WITH BC 804.

7. ALL GLASS PANELS, USED IN WINDOWS, IN DOORS, AS INTERIOR PARTITIONS, ETC., SHALL BE IN COMPLY WITH CHAPTER 24 OF THE 2008 NYC BUILDING CODE.

8. EXCEPT FOR MISCELLANEOUS TRIMS, MOLDINGS, ETC., ALL WOOD USED SHALL BE FIRE-RETARDANT, I.E. COUNTER TOPS, CABINETS, DOORS, ETC.

SMOKE DETECTING DEVICES:

1. SMOKE DETECTING DEVICES SHALL CONFORM TO SECTION 907 OF THE NEW YORK CITY BUILDING CODE AND THE HOUSEHOLD FIRE-WARNING EQUIPMENT PROVISIONS OF NFPA 72.

2. SMOKE ALARMS SHALL BE INSTALLED AND MAINTAINED IN ALL THE FOLLOWING LOCATIONS: ON THE CEILING OR WALL OUTSIDE OF EACH ROOM USED FOR SLEEPING PURPOSES WITHIN 15 FEET OF THE DOOR TO SUCH ROOM; IN EACH ROOM USED FOR SLEEPING PURPOSES; OR IN EACH STORY OF A DWELLING UNIT.

3. REQUIRED SMOKE DETECTING DEVICES SHALL RECEIVE THEIR PRIMARY POWER FROM A DEDICATED BRANCH CIRCUIT OR THE UNSWITCHED PORTION OF A BRANCH CIRCUIT ALSO USED FOR POWER AND LIGHTING AND SHALL BE EQUIPPED WITH A BATTERY BACKUP.

4. SMOKE ALARMS SHALL BE PROVIDED WITH THE CAPABILITY TO SUPPORT VISIBLE ALARM NOTIFICATION APPLIANCES IN ACCORDANCE WITH ICC/ANSI A117.1

5. ALL SMOKE DETECTING DEVICES SHALL BE ACCEPTED PURSUANT TO THE RULES AND REGULATIONS PROMULGATED BY THE COMMISSIONER, APPROVED BY THE BOARD OF STANDARDS AND APPEALS LISTED BY A NATIONALLY RECOGNIZED INDEPENDENT LABORATORY.

6. THE MAINTENANCE AND TESTING SCHEDULES AND PROCEDURES FOR FIRE ALARM AND FIRE DETECTION SYSTEMS SHALL BE IN ACCORDANCE WITH BC 17 AND THE NEW YORK CITY FIRE CODE.

CARBON MONOXIDE DETECTING DEVICES:

1. CARBON MONOXIDE DETECTING DEVICES SHALL CONFORM TO BC 908 OF THE 2008 NEW YORK CITY BUILDING CODE.

2. CARBON MONOXIDE DETECTING DEVICES SHALL BE INSTALLED AND MAINTAINED IN ALL THE FOLLOWING LOCATIONS: ON THE CEILING OR WALL OUTSIDE OF EACH ROOM USED FOR SLEEPING PURPOSES WITHIN 15 FEET OF THE DOOR TO SUCH ROOM; IN EACH ROOM USED FOR SLEEPING PURPOSES; OR IN EACH STORY OF A DWELLING UNIT.

3. REQUIRED CARBON MONOXIDE DETECTING DEVICES SHALL RECEIVE THEIR PRIMARY POWER FROM A DEDICATED BRANCH CIRCUIT OR THE UNSWITCHED PORTION OF A BRANCH CIRCUIT ALSO USED FOR POWER AND LIGHTING AND SHALL BE EQUIPPED WITH A BATTERY BACKUP.

4. CARBON MONOXIDE DETECTING DEVICES SHALL BE PROVIDED WITH THE CAPABILITY TO SUPPORT VISIBLE ALARM NOTIFICATION APPLIANCES IN ACCORDANCE WITH ICC/ANSI A117.1

5. ALL CARBON MONOXIDE DETECTING DEVICES SHALL BE ACCEPTED PURSUANT TO THE RULES AND REGULATIONS PROMULGATED BY THE COMMISSIONER, APPROVED BY THE BOARD OF STANDARDS AND APPEALS LISTED BY A NATIONALLY RECOGNIZED INDEPENDENT LABORATORY.

6. THE INSPECTION, MAINTENANCE AND TESTING SCHEDULES AND PROCEDURES FOR FIRE ALARM AND FIRE DETECTION SYSTEMS SHALL BE IN ACCORDANCE WITH BC 17 AND THE 2008 NEW YORK CITY FIRE CODE.

ACCESSIBILITY:

1. BUILDINGS AND FACILITIES SHALL BE DESIGNED AND CONSTRUCTED TO BE ACCESSIBLE IN ACCORDANCE WITH BC CHAPTER 11, BC APPENDICES E,N & P, AND ICC A117.1 (ACCESSIBLE AND USABLE BUILDING FACILITIES).

2. AN ACCESSIBLE ROUTE SHALL BE PROVIDED TO EACH PORTION OF THE BUILDING, TO ACCESSIBLE BUILDING ENTRANCES CONNECTING ACCESSIBLE PEDESTRIAN WALKWAYS AND THE PUBLIC WAY, AND OTHER WISE COMPLY WITH CHAPTER 4, ACCESSIBLE ROUTES, OF THE ICC A117.7.

3. ALL UNITS SERVED BY AN ELEVATOR IN OCCUPANCY R-2 SHALL BE TYPE B UNITS WITH THE THE ADDITIONAL REQUIREMENTS OF TYPE B UNITS IN R-2 OCCUPANCY PER BC 1107.2. ALL TYPE B UNITS TOILET AND BATHING FACILITIES IN GROUP R-2 MUST COMPLY WITH APPENDIX P OR TYPE A TOILET AND BATHING FACILITIES (BC 1107.2.2). DWELLING UNITS SHALL BE EQUIPPED WITH DOOR WIDTHS AND CLEAR FLOOR SPACES FOR POSSIBLE OCCUPANTS WITH PHYSICAL DISABILITIES. TYPE B UNITS FOR R-2 OCCUPANCY SHALL INCLUDE ADAPTABLE FEATURES AND ABIDE BY REQUIREMENTS SET FORTH FOR ALL APPLICABLE SPACES IN SECTION BC 1107.

4. DOOR CLOSERS SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 90 DEGREES, THE TIME REQUIRED TO MOVE THE DOOR SHALL BE 5 SECONDS MINIMUM.

5. OPERABLE PARTS SHALL PLACED WITHIN ONE OR MORE OF THE REACH RANGES SPECIFIED IN SECTION 308 OF THE ICC A117.1 AND BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST AS PER BC 309 OF THE ICC A117.1.

6. BLOCKING FOR THE FUTURE INSTALLATION OF GRAB BARS TO BE PROVIDED IN ALL ACCESSIBLE BATHROOMS AS DESCRIBED IN SECTION 604 OF ICC A117.7.

7. INTERIOR ACCESS, FLOOR SURFACES, ADAPTABLE KITCHENS, ADAPTABLE KITCHENETTES AND ADAPTABLE BATHROOMS SHALL BE PER ICC A117.1

8. ACCESSIBLE MEANS OF EGRESS TO BE PROVIDED AS PER BC 1007.1

ENERGY EFFICIENCY NOTES:

1. BUILDING SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE.

PLUMBING SYSTEM NOTES:

1. THE NEW YORK CITY PLUMBING CODE SHALL GOVERN THE ERECTION, INSTALLATION, ALTERATION, REPAIRS, RELOCATION, REPLACEMENT, ADDITION TO, USE OR MAINTENANCE OF PLUMBING EQUIPMENT AND SYSTEMS. PLUMBING SYSTEMS AND EQUIPMENT SHALL BE CONSTRUCTED, INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE NEW YORK CITY PLUMBING CODE.

2. ALL MATERIALS AND EQUIPMENT INSTALLED SHALL BE OF MANUFACTURER AND MODEL APPROVED FOR USE IN NEW YORK CITY, COMPLETE WITH M.E.A. APPROVAL NUMBERS.

3. ALL GAS-FIRED EQUIPMENT AND ACCESSORY EQUIPMENT OR DEVICES TO BE AGA OR MEA APPROVED.

4. PLUMBING CONTRACTOR TO EXAMINE PROPOSED LAYOUT WITH REGARD TO EXISTING FIELD CONDITIONS, AND SHALL NOTIFY THE ARCHITECT OF ANY DISCREPANCIES BETWEEN ASSUMED FIELD CONDITIONS AND THOSE ENCOUNTERED DURING CONSTRUCTION. PLUMBING CONTRACTOR SHALL INFORM ARCHITECT OF ANY REVISIONS TO PLAN WHICH SHALL BE NECESSARY, BASED ON CONDITIONS UNCOVERED IN THE FIELD, IN ORDER TO INSTALL ALL FIXTURES, EQUIPMENT AND PIPING IN STRICT ACCORDANCE WITH REQUIREMENTS OF THE NEW YORK CITY BUILDING CODE AND/OR AS PER DESIGNS SHOWN IN THE CONTRACT DOCUMENTS.

5. PLUMBING CONTRACTOR SHALL ARRANGE AND OBTAIN INSPECTIONS AND REQUIRED SIGN-OFFS.

MECHANICAL SYSTEM NOTES:

1. MECHANICAL APPLIANCES, EQUIPMENT AND SYSTEMS SHALL BE CONSTRUCTED, INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE NEW YORK CITY MECHANICAL CODE AND THE NEW YORK CITY FUEL GAS CODE. MASONRY CHIMNEYS, FIREPLACES AND BARBECUES SHALL COMPLY WITH THE NEW YORK CITY MECHANICAL CODE AND CHAPTER 21 OF THE 2008 NEW YORK CITY BUILDING CODE.

2. ALL BATHROOM AND TOILET ROOMS TO HAVE MECHANICAL VENTILATION PROVIDING MINIMUM 50 CFM EXHAUST.

3. ALL KITCHENETTES TO BE PROVIDED WITH MECHANICAL VENTILATION PROVIDING MIN 125 CFM EXHAUST KITCHEN DUCT.

4. DUCT RISERS TO BE FIRE PROTECTED WITH TWO (2) LAYERS TYPE 'X' GYPSUM BOARD ON ALL SIDES, ATTACHED WITH CONSTRUCTION ADHESIVE AND 18GA SIRE TIES @ 4'-0" O.C. (NO SCREWS TO BE USED).

5. WHERE DUCTS PASS THROUGH FLOOR, FLOOR OPENINGS TO BE CUT TIGHT TO DUCT, AND REMAINING GAP BETWEEN DUCT AND FLOOR CONSTRUCTION TO BE FILLED WITH MINERAL WOOL.

6. EACH BATHROOM AND KITCHEN TO BE EQUIPPED WITH ITS OWN INDEPENDENT EXHAUST BLOWER WITH BACKDRAFT DAMPER.

7. EACH BATHROOM AND KITCHEN OUTLET TO BE EQUIPPED WITH A BSA APPROVED FIRE DAMPER.

8. MINIMUM 12'X12' OUTDOOR AIR INTAKE (F.A.I.) with BSA APPROVED FIRE DAMPER TO BE PROVIDED FOR BOILER ROOM.

SPRINKLERS:

1. PER BC 28.2-903.2.7 GROUP R. AN AUTOMATIC SPRINKLER SYSTEM SHALL BE INSTALLED IN GROUP R FIRE AREAS AND THOUGHOUT BUILDINGS WITH A MAIN USE OR DOMINENT OCCUPANCY OF GROUP R.

NOISE CONTROL IN MULTIPLE DWELLING BUILDINGS:

1. NOISE CONTROL IN MULTIPLE DWELLING BUILDINGS TO MEET N.Y.C. BUILDING CODE SECTION BC 1207; ALL SOUND ATTENUATION LOCATIONS AND DETAILS ARE TO BE INDICATED ON THE PLANS AND PARTITION SCHEDULES.

CONTRACTOR SUBMITTALS:
1. CONTRACTOR SHALL PROVIDE THE FOLLOWING FORMS TO THE APPLICANT FOR SUBMITTAL TO THE DEPARTMENT OF BUILDING:
A. CONCRETE MASONRY FORMS 10H AND 10J
B. QUALITY OF STEEL AFFIDAVIT FORM 2055

CONTROLLED INSPECTIONS:

THE FOLLOWING ITEMS OF WORK SHALL BE SUBJECT TO CONTROLLED INSPECTION, MADE AND WITNESSED BY OR UNDER THE DIRECT SUPERVISION OF AN ARCHITECT/ENGINEER, RETAINED BY THE OWNER AND ACCEPTABLE TO THE ARCHITECT OF RECORD. TEST REPORTS AND CERTIFICATE OF INSPECTION SHALL BE FILED WITH THE DEPARTMENT OF BUILDING.

SPECIAL INSPECTIONS :

CONCRETE CAST IN PLACE		BC 1704.4
MASONRY		BC 1704.5
SOILS - SITE PREPARATION		BC 1704.7.1
SOILS - FILL PLACEMENT AND IN-PLACE DENSITY		BC 1704.7.2 BC1704.7.3
PILE FOUNDATIONS & DRILLED PIER INSTALLATION	TR 5	BC 1704.8
MECHANICAL SYSTEMS		BC 1704.15
HEATING SYSTEMS		BC 1704.23
FIRESTOP, DRAFTSTOP, AND FIREBLOCK SYSTEMS		BC 1704.25
CONCRETE TEST CYLINDERS	TR2	BC 1905.6
CONCRETE DESIGN MIX	TR3	BC 1905.3
EXCAVATION - SHEETING SHORING AND BRACING		BC 1704.19, BC3304.4.1
ENERGY CODE COMPLIANCE INSPECTIONS	TR8	BC 109.3.5
FIRE RESISTENCE RATED CONSTRUCTION		BC 109.3.4

SPECIAL INSPECTIONS (TR-8):

INSULATION PLACEMENT AND R VALUES	IA2, IIA2
FENESTRATION THERMAL VALUES AND RATINGS	IA3, IIA3
FENESTRATION RATINGS FOR AIR LEAKAGE	IA4, IIA4
FENESTRATION AREAS	IA5, IIA5
AIR SEALING AND INSULATION - VISUAL	IA6, IIA6
DAMPERS INTEGRAL TO BUILDING ENVELOPE	IB2, IIB2
HVAC AND SERVICE WATER HEATING EQUIPMENT	IB3, IIB3
HVAC AND SERVICE WATER HEATING SYSTEM CONTROLS	IB4, IIB4
DUCT PLENUM AND PIPING INSULATION AND SEALING	IB5, IIB5
ELECTRICAL METERING	IC1, IIC1
LIGHTING IN DWELLING UNITS	IC2, IIC2
INTERIOR LIGHTING POWER	IIC3
LIGHTING CONTROL	IIC5
EXIT SIGNS	IIC6
ELECTRICAL MOTORS	IIC8

APPLICATIONS TO BE FILED SEPARATELY:

1. SPRINKLER ALARM
2. BUILDERS PAVEMENT PLAN
3. ELEVATOR

HOUSING MAINTENANCE CODE NOTES

1. DUTIES OF THE OWNER SHALL BE AS PER SECTION D26-10.01 OF H.M.C.

2. DUTIES OF TENANTS SHALL BE AS PER SECTIONS D26-10.03 & 10.05 OF H.M.C.

3. THE OWNER OF THE MULTIPLE DWELLINGS SHALL KEEP THE PREMISES IN GOOD REPAIR.

4. OWNER'S RIGHT OF ACCESS SHALL BE AS PER SECTION D26-10.07 OF H.M.C.

5. INTERIOR OF DWELLING UNIT SHALL BE CLEANED AS PER SECTION D26-11.05 OF H.M.C.

6. THE OWNER SHALL KEEP THE ROOF, YARDS, COURTS & OTHER OPEN SPACES CLEAN & FREE FROM DIRT, FILTH, GARBAGE OR OTHER OFFENSIVE MATERIALS.

7. PAINTING OF PUBLIC PARTS & WITHIN DWELLINGS TO COMPLY WITH SECTION D26-12.01 OF H.M.C.

8. PAINTING OF WINDOW FRAMES TO COMPLY WITH SECTION D26-12.03 OF H.M.C.

9. PREMISES TO BE MAINTAINED & KEPT FREE OF RODENT & INSECT INFESTATION AS PER SECTIONS D26-13.03 & D26-13.05 OF H.M.C.

10. RECEPTACLES FOR COLLECTION OF WASTE MATTER TO BE PROVIDED AS PER SECTION D26-14.03 & D26-14.05 OF H.M.C.

11. SANITARY FACILITIES IN MULTIPLE DWELLINGS & LIGHT & VENTILATION FOR TOILET COMPARTMENTS SHALL BE AS PER SECTIONS D26-31.01, D26-31.03, D26-31.05, D26-31.07, & D26-31.11 OF H.M.C.

12. PROVIDE & MAINTAIN A SUPPLY OF PURE & WHOLESOME WATER SUFFICIENT IN QUANTITY & AT SUFFICIENT PRESSURE TO KEEP ALL PLUMBING FIXTURES ADEQUATELY SUPPLIED FOR THEIR SANITARY MAINTENANCE AS PER SECTIONS D26-15.01 & D26-15.03 OF H.M.C.

13. MAINTAIN & KEEP IN GOOD REPAIR THE PLUMBING & DRAINAGE SYSTEM INCLUDING WATER CLOSETS, TOILETS, SINKS & OTHER FIXTURES AS PER D26-16.01 OF H.M.C.

14. DRAINAGE OF ROOFS, COURTS & YARDS SHALL COMPLY WITH D26-16.03 OF H.M.C.

15. HEAT & HOT WATER REQUIREMENTS AS PER ARTICLE 17 OF H.M.C. CENTRAL HEATING SYSTEM AS PER BUILDING CODES; MINIMUM TEMPERATURES TO BE MAINTAINED AS PER SECT. D26-17.03. CENTRAL HEATING SYSTEM TO BE INSPECTED YEARLY BY QUALIFIED PERSON IN ACCORDANCE WITH SECTION D26-17.05 OF H.M.C. SUPPLY OF HOT WATER AS PER SECTION D26-17.07 OF H.M.C.

16. YEARLY INSPECTIONS OF CENTRAL HEATING PLANT BY QUALIFIED PERSON TO BE MADE AS PER SECTION D26-17.05 OF H.M.C.

17. PROVIDE ELECTRIC LIGHTING EQUIPMENT IN ALL DWELLINGS AS PER SECTIONS D26-19.01 OF H.M.C. AND C26-605AC, C26-1203AC, & SECTION 26 TO 35 OF MDL.

18. PROVIDE & MAINTAIN ELECTRIC LIGHTING FIXTURES IN EVERY PUBLIC HALL, STAIR OR FIRE STAIR, ENTRANCE WAY, COURT, OR YARD IN ACCORDANCE WITH SECTIONS D26-19.03, D26-19.05, & D26-19.07 OF H.M.C.

19. PROPER ELECTRIC LIGHTS TO BE PROVIDED NEAR ENTRANCE WAYS, YARDS & COURTS AS PER SECTION D26-19.07 OF H.M.C., ON SEPARATE CIRCUIT OR CONNECTED TO HOUSE LINE SERVICING PUBLIC HALLS, AND IN ACCORDANCE WITH REQUIREMENTS & APPROVAL OF THE DEPARTMENT OF WATER SUPPLY, GAS & ELECTRICITY.

20. BOARD OF STANDARDS & APPEALS APPROVED TYPE PEEPHOLES APPROXIMATELY 5 FEET ABOVE FINISHED FLOOR TO BE PROVIDED IN ENTRANCE DOORS OF DWELLING UNITS AS PER SECTION D26-20.01 OF H.M.C. & DEPARTMENT RULES & REGULATIONS.

21. ENTRANCE DOORS SHALL BE PROVIDED WITH HEAVY DUTY LATCH SET & A HEAVY DUTY DEAD BOLT OPERABLE WITH A KEY FROM THE OUTSIDE & A THUMB-TURN FROM THE INSIDE; EQUIP DOORS WITH A CHAIN DOOR GUARD SO AS TO PERMIT PARTIAL OPENING AS PER SECTION D26-20.05 OF H.M.C.

22. KEY LOCK IN THE ENTRANCE DOOR TO EACH DWELLING UNIT WITH AT LEAST ONE KEY TO BE PROVIDED BY OWNER AS PER D26-20.05 OF H.M.C.

23. PROPERLY MOUNTED & SECURED POLISHED METAL VIEWING MIRRORS TO BE PROVIDED WITHIN SELF-SERVICE ELEVATORS AS PER SECTION D26-20.03 OF H.M.C. & DEPARTMENT RULES & REGULATIONS.

24. APPROVED TYPE MAIL RECEPTACLES & DIRECTORY OF PERSONS LIVING IN DWELLING TO BE PROVIDED AS PER SECTION D26-21.01 OF H.M.C. & REGULATIONS OF POST OFFICE DEPARTMENT.

25. PROPER FLOOR SIGNS TO BE PROVIDED IN PUBLIC HALL NEAR STAIRS & ELEVATORS & WITHIN STAIR ENCLOSURE AS PER SECTION D26-21.03 OF H.M.C. & DEPARTMENT RULES & REGULATIONS.

26. PROPER STREET NUMBERS PLAINLY VISIBLE FROM THE SIDEWALK IN FRONT OF THE DWELLING TO BE POSTED ON THE DWELLING AS PER SECTION D26-21.05 OF H.M.C. AND RULES & REGULATIONS OF BOROUGH PRESIDENT.

27. A RESIDENT MANAGER RESPONSIBLE FOR OPERATION & MAINTENANCE OF ROOMING UNITS TO BE PROVIDED AS PER SECTION D26-21.09 OF H.M.C.

28. PROPER JANITORIAL SERVICES TO BE PROVIDED AS PER SECTION D26-22.03 OF H.M.C.

29. ALL COMBUSTIBLE MATERIALS WITHIN ONE FOOT OF COOKING APPARATUS TO BE PROPERLY FIRE RETARDED & MINIMUM 2-FOOT CLEARANCE MAINTAINED ABOVE EXPOSED COOKING SURFACE. COMBUSTIBLE MATERIAL BETWEEN 2 FEET & 3 FEET ABOVE EXPOSED COOKING SURFACE TO BE FIRE RETARDED. SECTION D26-32.05 OF H.M.C. & DEPARTMENT RULES & REGULATIONS.

30. MINIMUM ROOM SIZE SHALL BE AS PER D26-33.01 AND MAXIMUM OCCUPANCY SHALL BE AS PER D26-33.03 OF H.M.C.

31. NATURAL LIGHT AND VENTILATION SHALL BE PROVIDED AS PER D26-30.14 AND 30.03 OF HMC.

32. KITCHENS AND KITCHENETTES SHALL BE PROVIDED WITH PROPER FACILITIES, EQUIPMENT, LIGHTING, VENTILATION AND FIRE PROTECTION AS PER D26- 32.01, 32.03, AND 32.05 OF H.M.C.

33. NO KITCHEN SHALL BE OCCUPIED FOR SLEEPING PURPOSES. SECTION D26-33.05 OF H.M.C.

34. MAXIMUM TWO BOARDERS, ROOMERS OR LODGERS PERMITTED TO EACH FAMILY EXCEPT THAT MAXIMUM ONE BOARDER, ROOMER OR LODGER PERMITTED IF LOCATED IN ZONING TO ONE & TWO FAMILY DWELLINGS.

35. OCCUPANCY OF CELLARS AND BASEMENTS SHALL BE AS PER D26-34.01, 34.03, AND 34.05 OF H.M.C.

36. REGISTRATION STATEMENT TO BE FILED AS PER SECTION D26-41.01 & D26-41.03 OF H.M.C.

37. REGISTRATION IDENTIFICATION, SIGN CONTACT (OWNER AND MANAGEMENT), AND DWELLING SERIAL NUMBER TO BE POSTED AS PER SECTION D26-41.15 OF H.M.C.

38. IDENTIFICATION OF MANAGING AGENT OR OWNER TO BE INDICATED ON TENANT'S RENT RECEIPT AS PER SECTION D26-41.17 OF H.M.C.

NOTE:
HOUSING MAINTENANCE CODE NOTES APPLY TO THE OWNER AFTER OCCUPANCY AND ARE NOT SUBJECT TO COMPLIANCE BY CM DURING CONSTRUCTION.

KEY PLAN

BLOCK 2571 LOT 1

issue	rev	date	description
1		2014/11/25	ISSUED TO D.O.B.
1		2014-02---	ISSUE TO THE DOB

ISSUES/REVISIONS

MEP ENGINEER:

STRUCTURAL ENGINEER:

CLIENT

KARL FISCHER ARCHITECT
OAQ RAIC AIA
530 BROADWAY, 9th FLOOR, NEW YORK, NY 10012
TEL: (212) 219-9733 FAX: (212) 219-8980
1420 NOTRE-DAME WEST, MONTREAL, QC H3C 1K9
TEL: (514) 933-4137 FAX: (514) 933-0409
WEB SITE: WWW.KFARCHITECT.COM
E-MAIL:KARL@KFARCHITECT.COM

SEAL
REGISTERED ARCHITECT KARL FISCHER 021282 STATE OF NEW YORK

project title
BLOCK 2571 LOT 1
26 WEST STREET, BROOKLYN, 11222

drawing title
GENERAL NOTES

dob no

scale	NTS	project no.	14-45
date		sheet no.	---OF
drawn		drawing no.	G-002.00
checked			

MULTIPLE DWELLING LAW NOTES:

1. LIGHTING AND VENTILATION OF ROOMS SHALL BE AS PER SECTION 31 OF MDL.
2. SIZE OF ROOMS AS PER SECTION 31 OF MDL.
3. ALCOVES SHALL BE AS PER SECTION 32 OF MDL
4. COOKING SPACES SHALL BE AS PER SECTION 33 OF MDL.
5. ROOMS IN BASEMENTS AND CELLARS SHALL BE AS PER SECTION 34 OF MDL.
6. BUILDING ENTRANCE DOORS AND LIGHTS SHALL BE AS PER SECTION 35 OF MDL.
7. WINDOWS AND SKYLIGHTS FOR PUBLIC HALLS AND STAIRS SHALL BE AS PER SECTION 36 OF MDL.
8. ARTIFICIAL HALL LIGHTING SHALL BE AS PER SECTION 37 OF MDL.
9. ENTRANCE HALLS TO BE AS PER SECTION 50 OF MDL.
10. BUILDING ENTRANCE DOORS, LOCKS AND INTERCOM SYSTEM SHALL BE SECTION 50-A OF MDL.
11. ALL SHAFTS, ELEVATORS AND DUMBWAITERS SHALL BE AS PER SECTION 51 OF MDL.
12. APARTMENT PEEPHOLES SHALL BE AS PER SECTION 51-A OF MDL.
13. MIRRORS IN SELF-SERVICE ELEVATORS SHALL BE AS PER SECTION 51-B OF MDL.
14. STAIRS SHALL BE AS PER SECTION 52 OF MDL.
15. FIRE ESCAPES SHALL BE AS PER SECTION 53 OF MDL.
16. WAINSCOTING SHALL BE AS PER SECTION 55 OF MDL.
17. ENTRANCE BOLTS AND MAIL BOXES SHALL BE AS PER SECTION 57 OF MDL.
18. ALL INCOMBUSTIBLE MATERIALS SHALL BE AS PER SECTION 58 OF MDL.
19. PARAPETS AND GUARD RAILINGS SHALL BE AS PER SECTION 62 OF MDL.
20. BELOW GRADE FLOORS SHALL COMPLY AS PER SECTION 63 OF MDL.
21. LIGHTING, GAS METERS, GAS AND OIL APPLIANCES, SHALL BE AS PER SECTION 64 OF MDL.
22. BOILER ROOMS SHALL BE AS PER SECTION 65 OF MDL.
23. WATER SUPPLY SHALL BE AS PER SECTION 75 OF MDL
24. WATER CLOSET AND BATH ACCOMMODATIONS SHALL BE AS PER SECTION 76 OF MDL.
25. PLUMBING AND DRAINAGE SHALL BE AS PER SECTION 77 OF MDL.
26. REPAIRS SHALL BE MADE AS PER SECTION 78 OF MDL.
27. HEAT SHALL BE PROVIDED AS PER SECTION 79 OF MDL.
28. CLEANLINESS SHALL BE AS PER SECTION 80 OF MDL.
29. RECEPTACLES FOR WASTE MATTER SHALL BE AS PER SECTION 81 OF MDL.
30. PRIVACY SHALL BE AS PER SECTION 82 OF MDL.
31. JANITORIAL SERVICES SHALL BE AS PER SECTION 83 OF MDL.
32. CONSTRUCTION STANDARDS FOR THE CONTROL OF NOISE SHALL BE AS PER SECTION 84 OF MDL.

ARTICLE NO. 4:

33. FIRE PROOF CONSTRUCTION AS PER SECT. 101 OF MDL.
34. FIRE PROOF STAIRS AS PER SECT. 102 OF MDL.
35. EGRESS FROM APARTMENTS AS PER SECT. 103 OF MDL.
36. STAIR BULKHEAD AS PER SECT. 104 OF MDL.
37. SEPARATION AND VENTILATION OF FIRE PROOF STAIRS AS PER SECT. 105 OF MDL.
38. CELLAR AND BASEMENT FIRE STAIRS AS PER SECT. 106 OF MDL.
39. PUBLIC HALL AS PER SECT. 107 OF MDL.
40. PARTITIONS AS PER SECT. 108 OF MDL.
41. INTERIOR WATER CLOSETS AND BATHROOMS AS PER SECT. 115 OF MDL.

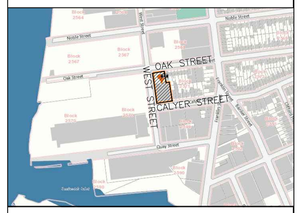
NEW YORK CITY DEPARTMENT OF HEALTH AND MENTAL HYGIENE
WINDOW GUARD REGULATIONS OF THE CITY OF NY 6-30-91: CHAPTER 12
§12-10: SPECIFICATIONS FOR WINDOW GUARD DOUBLE HUNG WINDOWS.

A. GUARDS SHALL BE CONSTRUCTED OF RIGID METAL, FREE OF SHARP PROJECTIONS, EDGES, OR ROUGH SURFACES.
B. GUARDS SHALL BE CONSTRUCTED AS TO REJECT THE PASSAGE OF A SOLID FIVE(5) INCH SPHERE AT EVERY SPACE AND INTERVAL.
C. GUARDS SHALL BEAR A ONE HUNDRED AND FIFTY POUND (150 LB.) LOAD AT CENTER SPAN WHEN EXTENDED TO MAXIMUM WIDTH. A TEST WITH THE GUARD ATTACHED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION MUST BE PERFORMED, AND THE RESULTS, INCLUDING INFORMATION AS TO TEMPORARY OR PERMANENT DISTORTION, CERTIFIED BY A PROFESSIONAL ENGINEER, OR INDEPENDENT TESTING LABORATORY.
D. 1. ON GUARDS UTILIZING NON-TELESCOPING BARS, THERE SHALL BE A PERMANENT SPOT WELD ON AT LEAST TWO OF THE HORIZONTAL BARS SO AS TO PROVIDE A MINIMUM OF TWO (2) INCHES OVERLAP WHEN THE GUARD IS FULLY EXTENDED.
2. ON TELESCOPING BARS, WHEN THE GUARD IS EXTENDED TO THE MAXIMUM ALLOWABLE WIDTH, THERE SHALL BE A MINIMUM OVERLAP OF FIVE (5) INCHES OR 1/3 OF THE LENGTH OF THE BAR, WHICH EVER IS GREATER.
3. A PERMANENT LABEL SHALL BE AFFIXED ON AT LEAST ONE HORIZONTAL BAR, ON EACH FACING SURFACE. SAID LABEL SHALL READ: **WARNING! EXTENSION OF THIS GUARD BEYOND ___ INCHES IS DANGEROUS AND ILLEGAL.** *INSERT THE NUMBER OF INCHES APPROPRIATE TO THE PARTICULAR MODEL IN THE SPACE.
4. ON TELESCOPING GUARDS, THERE SHALL BE AN ADDITIONAL STILE OR OTHER APPROVED SUPPORT(S), AT THE TELESCOPIC OPENING OF THE OUTER TUBING OF THE BARS, THAT SHALL PREVENT ANY SPREADING OF THE BARS.
E. GUARDS SHALL BE A MINIMUM OF FIFTEEN (15) INCHES HIGH MEASURED ALONG THE VERTICAL STILES.
F. THE CHANNEL STILES SHALL EACH HAVE AT LEAST TWO (2) HOLES FOR PERMANENT WINDOW MOUNTING. IF GUARDS ARE MORE THAN FIFTEEN INCHES (15")IN HEIGHT, ADDITIONAL MOUNTING HOLES ARE REQUIRED TO PROVIDE A MAXIMUM INTERVAL OF EIGHTEEN INCHES (18") BETWEEN MOUNTING HOLES.
G. STOPS.
1. RIGID METAL "L" SHAPED STOPS, TO BE A MINIMUM OF ONE HALF THE WIDTH OF THE WINDOW TRACK AND EACH LEG OF WHICH SHALL MEASURE AT LEAST TWO INCHES, SHALL BE INSTALLED SECURELY WITH TWO (2) SCREWS IN THE UPPER TRACKS OF EACH SIDE OF THE BOTTOM WINDOW TO PREVENT THE LOWER WINDOW FROM BEING RAISED MORE THAN 4 ½ INCHES ABOVE THE LOWEST SECTION OF THE TOP HORIZONTAL BAR OF THE WINDOW GUARD.
2. WHERE "L" SHAPED STOPS CANNOT BE PLACED IN THE WINDOW TRACK WITHOUT INTERFERING WITH THE NORMAL OPERATION OF THE WINDOW, A RIGID METAL STRIP MAY BE SECURELY FASTENED ACROSS THE TRACK OF THE BOTTOM WINDOW TO PREVENT THE LOWER WINDOW FROM BEING RAISED MORE THAN 4 ½ INCHES ABOVE THE LOWEST SECTION OF THE TOP HORIZONTAL BAR OF THE WINDOW GUARD. STRIPS SHALL BE MOUNTED ON EACH OF THE WINDOWS AND SHALL BE SECURED BY TWO (2) SCREWS ON EACH SIDE OF THE WINDOW TRACK.
3. IN SITUATIONS WHERE THE STOPS DESCRIBED IN (1) AND (2) ABOVE CANNOT BE USED, SUCH AS IN BALLAST WINDOWS, RIGID METAL "L" SHAPED STOPS MAYBE SECURELY FASTENED TO THE FRAME OF THE WINDOW TO PREVENT THE LOWER WINDOW FROM BEING RAISED MORE THAN 4 ½ INCHES ABOVE THE LOWEST SECTION OF THE TOP HORIZONTAL BAR OF THE WINDOW GUARD. A STOP SHALL BE SECURELY MOUNTED ONE EACH SIDE OF THE EXTERIOR LOWER WINDOW FRAME AND SHALL BE SECURED BY TWO (2)SCREWS IN EACH STOP.
4. IN SPECIAL SITUATIONS WHERE THE STOPS DESCRIBED IN (1), (2), AND (3)ABOVE CANNOT BE USED, AN APPLICATION MAY BE MADE TO THE WINDOW GUARD POLICY AND ACCEPTANCE BOARD FOR APPROVAL OF AN ALTERNATIVE STOPPING DEVICE.
5. STOPS ARE NOT REQUIRED WHERE APPROVED WINDOW GUARDS ARE INSTALLED THAT ARE OF SUFFICIENT HEIGHT TO PREVENT AN OPENING OF MORE THAN 4 ½ INCHES ABOVE THE LOWEST SECTION OF THE TOP HORIZONTAL BAR OF THE WINDOW GUARD WHEN THE LOWER WINDOW IS RAISED TO IT'S MAXIMUM OPEN POSITION.
H. SCREWS. SCREWS USED TO MOUNT WINDOW GUARDS AND STOPPING DEVICES SHALL BE ONE WAY SHEET METAL SCREWS OR TAMPER RESISTANT SCREWS. TAMPER RESISTANT SCREWS ARE DEFINED AS SCREWS REQUIRING SPECIAL TOOLS FOR THEIR INSTALLATION AND/OR REMOVAL, WHICH TOOLS ARE NOT READILY AVAILABLE IN RETAIL HARDWARE STORES. ALL TAMPER RESISTANT SCREWS MUST BE COUNTER-SUNK FLUSH WITH THE STILE OR STOPPING DEVICE. APPROPRIATE SCREWS SHALL BE:
1. MINIMUM SIZE #10 AND LONG ENOUGH TO PENETRATE ONE (1) INCH INTO A WOODEN WINDOW FRAME, OR
2. OF AN ADEQUATE TYPE, SIZE, AND LENGTH TO BE SECURELY FASTENED TO A METAL WINDOW FRAME. MANUFACTURER SHALL SUPPLY ALL REQUIRED SCREWS WITH GUARDS.
1. THE COATING OF GUARDS SHALL BE UNLEADED. THE STATEMENT FROM THE PAINT MANUFACTURER ATTESTING TO THIS FACT MUST ACCOMPANY APPLICATIONS FOR WINDOW GUARD APPROVAL.
2. CODED MANUFACTURER'S IDENTIFICATION SYMBOL (GUARD MODEL), HEALTH DEPARTMENT APPROVAL NUMBER, AND FABRICATION DATE SYMBOLS (MONTH AND YEAR) SHALL BE IMPRINTED INDELIBLY (DIE STAMPED), ON ONE OF THE END STILES, SO LOCATED AS TO BE READILY VISIBLE WHEN VIEWED FROM WITHIN THE ROOM WHERE THE GUARD HAS BEEN INSTALLED.
3. EACH GUARD SOLD BY A MANUFACTURER SHALL BE SOLD WITH A SELF-CONTAINED ENVELOPE OR PLASTIC BAG CONTAINING:
1. APPROVED INSTALLATION INSTRUCTIONS,
2. "L" SHAPED OR OTHER APPROVED STOPS, AND
3. SPECIFIED SCREWS FOR INSTALLATION OF GUARD AND STOPS. IF WOOD SCREWS ARE SUPPLIED BY THE MANUFACTURER, A WARNING LABEL SHOULD BE INCLUDED STATING THAT FOR METAL INSTALLATIONS, APPROPRIATE TYPE, SIZE, AND LENGTH SCREWS MUST BE SUBSTITUTED. THE WARNING SHALL BE IMPRINTED ON THE PACKAGING CONTAINER.
L. INSTRUCTIONS FOR SAFE INSTALLATION SHOULD BE PROVIDED WITH EACH GUARD BY MANUFACTURER.
1. INSTRUCTIONS SHALL SPECIFY MAXIMUM WINDOW WIDTH FOR WHICH THE GUARD IS INTENDED, AND SHALL CONTAIN THE FOLLOWING PROMINENTLY PRINTED WARNING: **WARNING: USE OF THIS GUARD BEYOND SPECIFIED MAXIMUM WIDTH IS DANGEROUS AND ILLEGAL.**
2. INSTRUCTIONS SHALL PROMINENTLY WARN THAT GUARDS AND STOPS MUST BE INSTALLED ONLY IN SOUND (NON-ROTTING) WINDOW TRACKS.
INSTRUCTIONS SHALL PROMINENTLY SPECIFY: **WINDOW GUARDS MAY NOT BE INSTALLED IN WINDOWS PROVIDING ACCESS TO FIRE ESCAPES.**
3. INSTRUCTIONS SHALL SPECIFY THAT GUARDS BE INSTALLED SO THAT THE BOTTOM HORIZONTAL MEMBERS ARE MOUNTED A MAXIMUM OF 4 ½ INCHES ABOVE THE WINDOWSILL.
INSTRUCTIONS SHALL SPECIFY THE USE OF SUPPLIED "L" SHAPED STOPS TO BE INSTALLED WITH SCREWS PROVIDED, OR ALTERNATIVE APPROVED STOPPING DEVICES ALSO PROVIDED WITH PRESCRIBED SCREWS, TO LIMIT THE OPENING ABOVE THE LOWEST SECTION OF THE TOP HORIZONTAL BAR TO 4 ½ INCHES WHEN THE BOTTOM SASH IS RAISED.

§12-11: SPECIFICATIONS FOR WINDOW GUARDS FOR OTHER THAN DOUBLE HUNG WINDOWS.

A. APPLICATIONS FOR APPROVAL OF WINDOW GUARDS FOR USE IN OTHER THAN DOUBLE HUNG WINDOWS SHALL SPECIFY THE WINDOW TYPE(S) FOR WHICH THE GUARD SUBMITTED IS INTENDED. MOUNTING MATERIALS AND INSTRUCTIONS FOR INSTALLATION FOR EACH SPECIFIC TYPE OF WINDOW MUST BE INCLUDED WITH THE APPLICATION AND MUST BE PROVIDED TO THE CONSUMER WITH THE GUARDS.
B. GUARDS SHALL BE CONSTRUCTED SO AS TO REJECT THE PASSAGE OF A SOLID FIVE (5) INCH SPHERE ARE EVERY SPACE AND INTERVAL.
C. GUARDS INTENDED FOR ENCASEMENTS, SLIDERS, AND OTHER TYPES OR COMBINATIONS WINDOWS IN WHICH THE HEIGHT OF THE OPENINGS ARE NOT SUBJECT TO LIMITATION, MUST BE OF SUCH SIZE AS TO FILL THE ENTIRE APERTURE, AND MUST REJECT PASSAGE OF A SOLID FIVE (5) INCH SPHERE AT EVERY SPACE AND INTERVAL.
1. WHEN APPROVED LIMITING DEVICES ARE UTILIZED IN LIEU OF WINDOW GUARDS, THE SIZE OF ANY UNGUARDED OPENING MAY NOT EXCEED 4 ½ INCHES SO AS TO REJECT PASSAGE OF A SOLID FIVE (5) INCH SPHERE AT EVERY SPACE AND INTERVAL.
2. ON GUARDS UTILIZING NON-TELESCOPING BARS, THERE SHALL BE A PERMANENT SPOT WELD ON AT LEAST TWO (2) OF THE HORIZONTAL BARS SO AS TO PROVIDE A MINIMUM OF TWO (2) INCHES OVERLAP WHEN FULLY EXTENDED.
3. ON TELESCOPING BARS, WHEN THE GUARD IS EXTENDED TO THE MAXIMUM ALLOWABLE WIDTH, THERE SHALL BE A MINIMUM OVERLAP OF FIVE (5) INCHES OR 1/3 OF THE LENGTH OF THE BAR, WHICHEVER IS GREATER.
4. A PERMANENT LABEL SHALL BE AFFIXED ON AT LEAST ONE HORIZONTAL BAR ONE EACH FACING SURFACE. SAID LABEL SHALL READ: **WARNING! EXTENSION OF THIS GUARD BEYOND ___ INCHES IS DANGEROUS AND ILLEGAL.** *INSERT THE NUMBER OF INCHES APPROPRIATE TO THE PARTICULAR MODEL IN THIS SPACE.
5. ON TELESCOPING GUARDS, THERE SHALL BE AN ADDITIONAL STILE OR OTHER APPROVED SUPPORT(S), AT THE TELESCOPING OPENING OF THE OUTER TUBING OF THE BARS, THAT SHALL PREVENT THE SPREADING OF THE BARS.
D. GUARDS SHALL BEAR A ONE HUNDRED AND FIFTY POUND (150LB.) LOAD AT IT'S CENTER SPAN WHEN EXTENDED TO IT'S MAXIMUM WIDTH. A TEST WITH GUARDS ATTACHED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION MUST BE PERFORMED AND RESULTS CERTIFIED BY A PROFESSIONAL ENGINEER OR INDEPENDENT TESTING LABORATORY. THE INFORMATION SHALL INCLUDE ANY FINDING OF A PERMANENT OR TEMPORARY DISTORTION.
E. EACH CHANNEL STILE SHALL HAVE AT LEAST TWO (2) MOUNTING HOLES. IF GUARD IS MORE THAN 15 INCHES HIGH, ADDITIONAL MOUNTING HOLES ARE REQUIRED TO PROVIDE A MAXIMUM OF 18 INCHES BETWEEN MOUNTING HOLES.
F. COATING OF GUARDS SHALL BE UNLEADED. STATEMENT FROM THE PAINT MANUFACTURER ATTESTING TO THIS FACT SHALL ACCOMPANY THE APPLICATION FOR WINDOW GUARD APPROVAL.
G. CODED MANUFACTURER'S IDENTIFICATION SYMBOL (GUARD MODEL), HEALTH DEPARTMENT APPROVAL NUMBER, AND FABRICATION DATE SYMBOLS (MONTH AND YEAR),SHALL BE IMPRINTED ON ONE OF THE END STILES SO LOCATED AS TO BE READILY VISIBLE WHEN VIEWED FROM WITHIN THE ROOM WHERE THE GUARD HAS BEEN INSTALLED.
H. SLIDING WINDOWS AND VERTICAL PIVOTING WINDOWS MAY USE STOPPING DEVICES IN LIEU OF WINDOW GUARDS AS FOLLOWS:
1. SLIDING WINDOWS. A SOLID METAL BLOCK, MEASURING AT LEAST ONE HALF THE DEPTH OF THE WINDOW TRACK AND ONE HALF THE WIDTH, SHALL BE SECURELY FASTENED BY TWO (2) SCREWS IN THE BOTTOM WINDOW TRACK, AND A SOLID METAL BLOCK OR AN "L" SHAPED METAL STOP SHALL BE SECURELY FASTENED BY TWO (2) SCREWS IN THE UPPER WINDOW TRACK, TO PREVENT THE WINDOW FROM OPENING MORE THAN 4 ½ INCHES.
2. VERTICAL PIVOTING WINDOWS. METAL STOPPING DEVICES SHALL BE SECURELY FASTENED TO THE UPPER AND LOWER WINDOW FRAMES BY TWO (2) SCREWS SO AS TO PREVENT THE WINDOW FROM PIVOTING OPEN MORE THAN 4 ½ INCHES. THE HEIGHT OF THE STOPPING DEVICES SHALL EXTEND NO LESS THAN ONE INCH, NO LESS THAN TWO INCHES BEYOND THE WINDOW FRAME AS NEEDED TO STOP THE WINDOW.
I. FOR TYPES OF NON-DOUBLE HUNG WINDOWS, OTHER THAN THOSE DESCRIBED IN SUBDIVISION (H) AND IN SPECIAL SITUATIONS WHERE THE STOPS DESCRIBED IN SUBDIVISIONS (H) (1) AND (H) (2) CANNOT BE USED, APPLICATION MAY BE MADE TO THE WINDOW GUARD POLICY AND ACCEPTANCE BOARD FOR APPROVAL OF AN ALTERNATE STOPPING DEVICE.
J. SCREWS USED TO MOUNT WINDOW GUARDS AND STOPPING DEVICES SHALL BE ONEWAY METAL, SCREWS OR TAMPER RESISTANT SCREWS. TAMPER RESISTANT SCREWS ARE DEFINED AS SCREWS REQUIRING SPECIAL TOOLS FOR INSTALLATION AND/OR REMOVAL,WHICH TOOLS ARE NOT READILY AVAILABLE IN RETAIL HARDWARE STORES. ALL TAMPER RESISTANT SCREWS SHALL BE COUNTER-SUNK FLUSH WITH THE STILE OR STOPPING DEVICE.
1. APPROPRIATE SCREWS SHALL BE A MINIMUM SIZE #10 AND SHALL BE LONG ENOUGH TO PENETRATE ONE INCH INTO A WOODEN FRAME, OR
2. SHALL BE OF ADEQUATE TYPE, SIZE, AND LENGTH TO BE SECURELY FASTENED TO A METAL WINDOW FRAME. MANUFACTURERS SHALL SUPPLY ALL REQUIRED SCREWS.
K. EACH GUARD SOLD SHALL BE SOLD WITH A SELF-CONTAINED ENVELOPE OR PLASTIC BAG CONTAINING:
1. APPROVED INSTALLATION INSTRUCTIONS,
2. APPROVED STOOPING DEVICES, AND
3. SPECIFIED SCREWS NEEDED FOR INSTALLATION OF THE WINDOW GUARD AND/OR STOPPING DEVICES. IF WOOD SCREWS ARE SUPPLIED BY A MANUFACTURER, A WARNING LABEL OR MESSAGE IMPRINTED ON THE PACKAGING SHALL WARN THAT FOR METAL INSTALLATIONS, APPROPRIATE TYPE, SIZE, AND LENGTH SCREWS MUST BE SUBSTITUTED. THIS WARNING SHALL BE IMPRINTED ON THE PACKAGING CONTAINER.
L. INSTRUCTIONS FOR SAFE INSTALLATION OF WINDOW GUARDS SHALL BE PROVIDED BY THE MANUFACTURER FOR EACH SPECIFIC TYPE OF WINDOW FOR WHICH THEY ARE INTENDED.
1. INSTRUCTIONS SHALL SPECIFY THAT WINDOW GUARDS MAY NOT BE INSTALLED ON WINDOWS PROVIDING ACCESS TO FIRE ESCAPES.
2. INSTRUCTIONS SHALL SPECIFY MAXIMUM WINDOW WIDTH AND HEIGHT FOR WHICH GUARD IS INTENDED, AND SHALL CONTAIN THE FOLLOWING PROMINENTLY PRINTED WORDING: **WARNING! USE OF THIS GUARD BEYOND SPECIFIED MAXIMUM WIDTH IS DANGEROUS AND ILLEGAL!**
3. INSTRUCTIONS SHALL PROMINENTLY WARN THAT GUARDS MUST BE INSTALLED ONLY IN SOUND (NON-ROTTING) MOUNTINGS OR TRACKS.

KEY PLAN



BLOCK 2571 LOT 1

issue	rev	date	description
1		2014/11/25	ISSUED TO D.O.B.
		2014-05--	ISSUE TO THE DOB

ISSUES/REVISIONS

MEP ENGINEER:

STRUCTURAL ENGINEER:

CLIENT

KARL FISCHER ARCHITECT
OAQ RAIC AIA
530 BROADWAY, 9th FLOOR, NEW YORK, NY 10012
TEL: (212) 219-9733 FAX: (212) 219-8980
1420 NOTRE-DAME WEST, MONTREAL, QC H3C 1K9
TEL: (514) 933-4137 FAX: (514) 933-0409
WEB SITE: WWW.KFARCHITECT.COM
E-MAIL:KARL@KFARCHITECT.COM

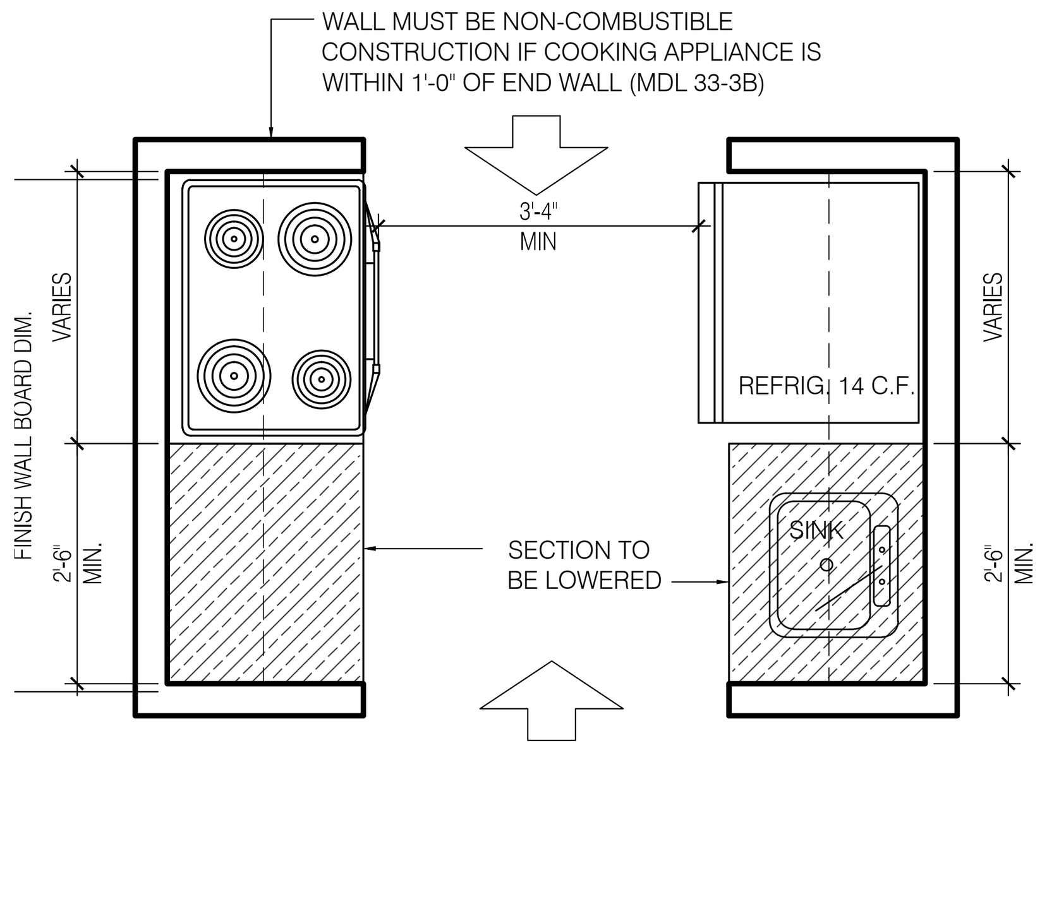
SEAL
REGISTERED ARCHITECT
KARL FISCHER
021282
STATE OF NEW YORK

project title
BLOCK 2571 LOT 1
26 WEST STREET, BROOKLYN, 11222

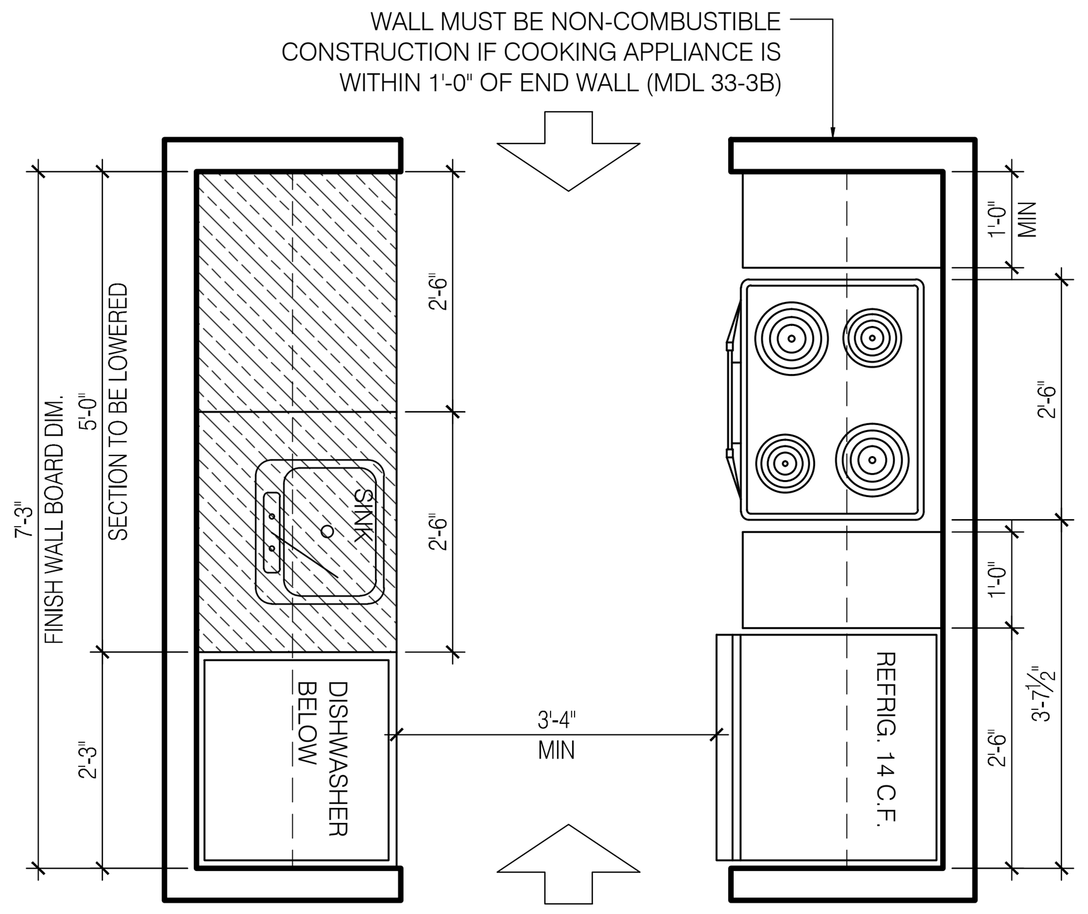
drawing title
GENERAL NOTES

dob no

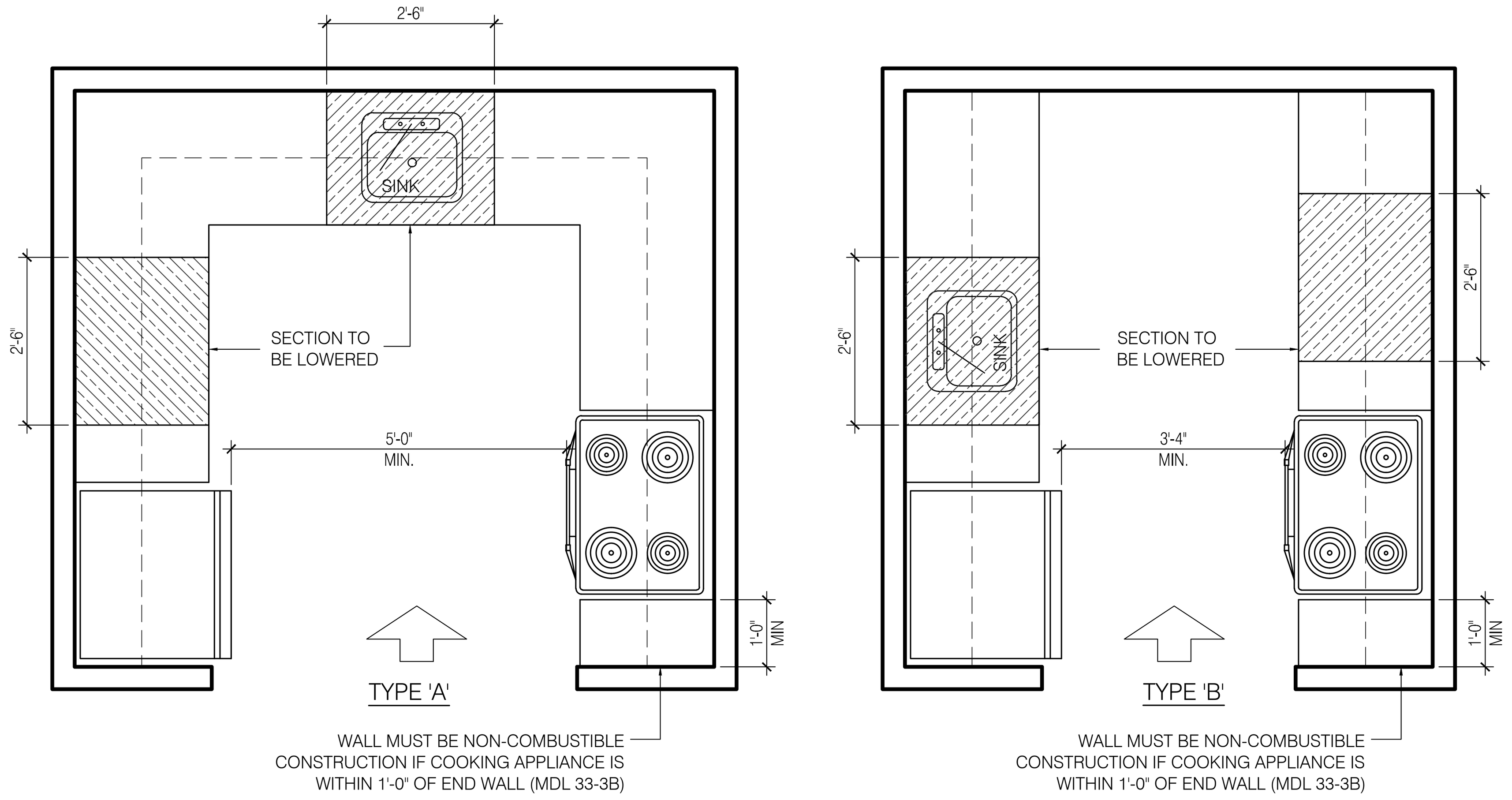
scale NTS	project no. 14-45
date	sheet no. ---OF
drawn	drawing no. G-003.00
checked	



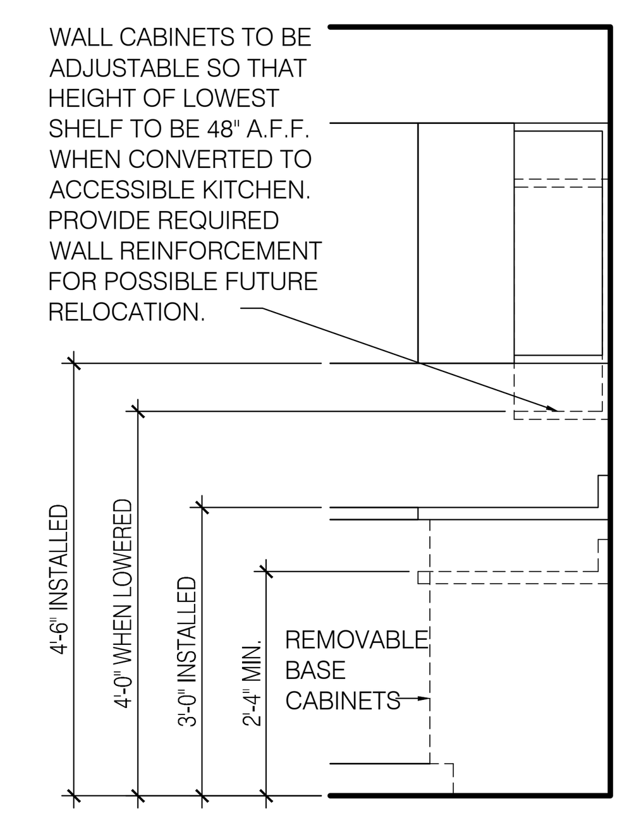
MIN. PERMISSIBLE KITCHEN SIZE



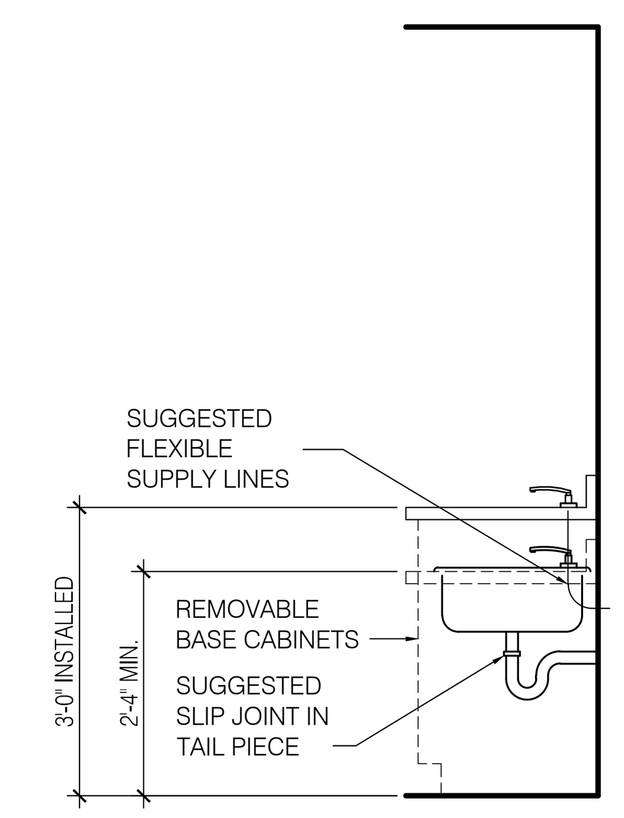
PASS-THROUGH KITCHEN CLEARANCE



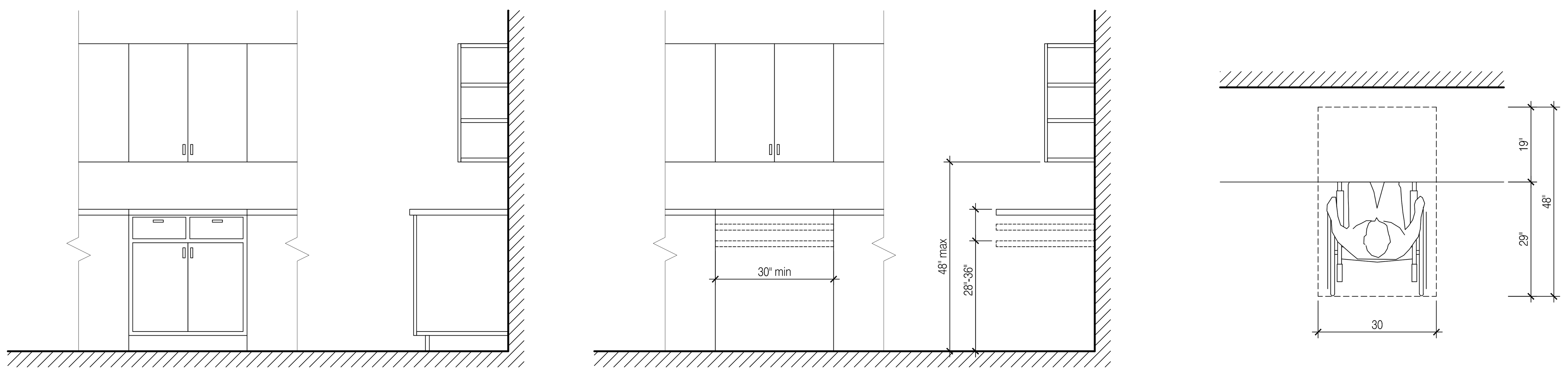
"U" SHAPED KITCHEN CLEARANCE



ADAPTABLE KITCHEN LOWERABLE WORK SURFACE
LOWERABLE WALL CABINETS



ADAPTABLE KITCHEN
LOWERABLE SINK COUNTER

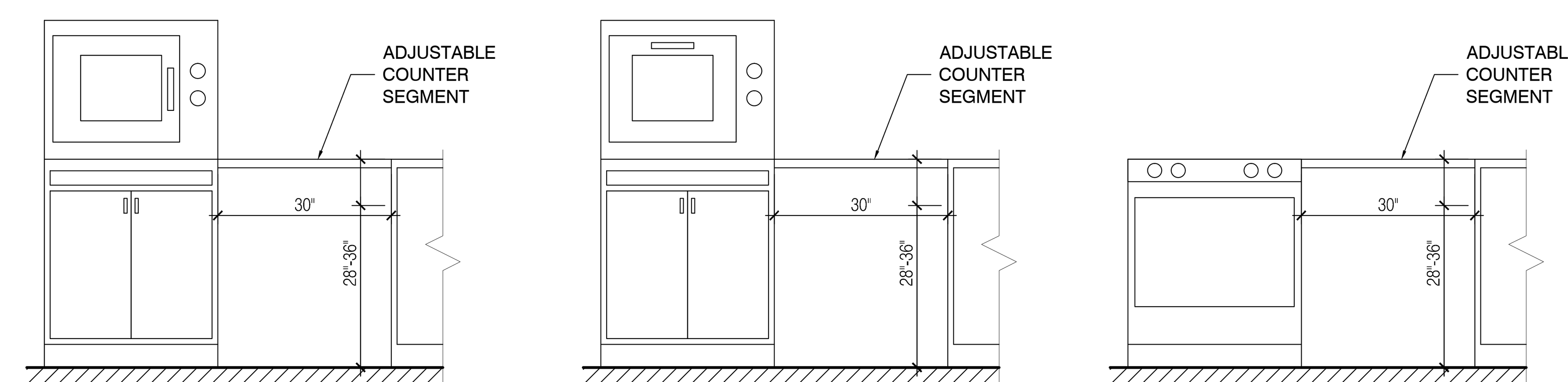


(A) BEFORE REMOVAL OF CABINETS AND BASE

(B) CABINETS AND BASE REMOVED AND HEIGHT ALTERNATIVES

(C) CLEAR FLOOR SPACE UNDER WORK SURFACE

COUNTER WORK SERVICE

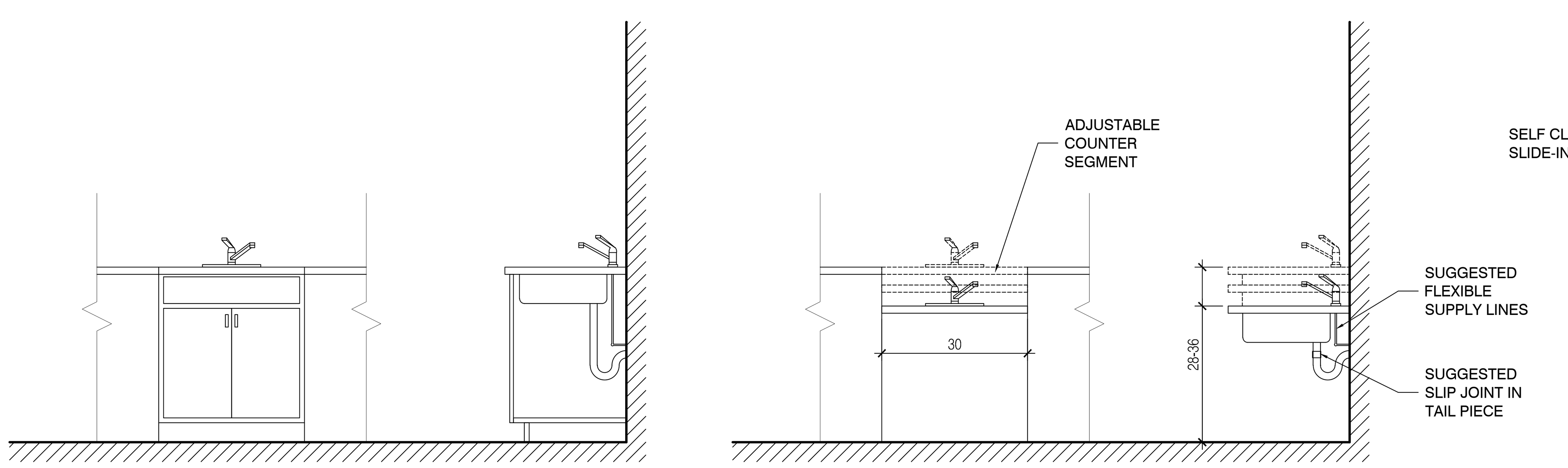


(A) SIDE HINGED DOOR

(B) BOTTOM HINGED DOOR

(C) RANGE OVEN

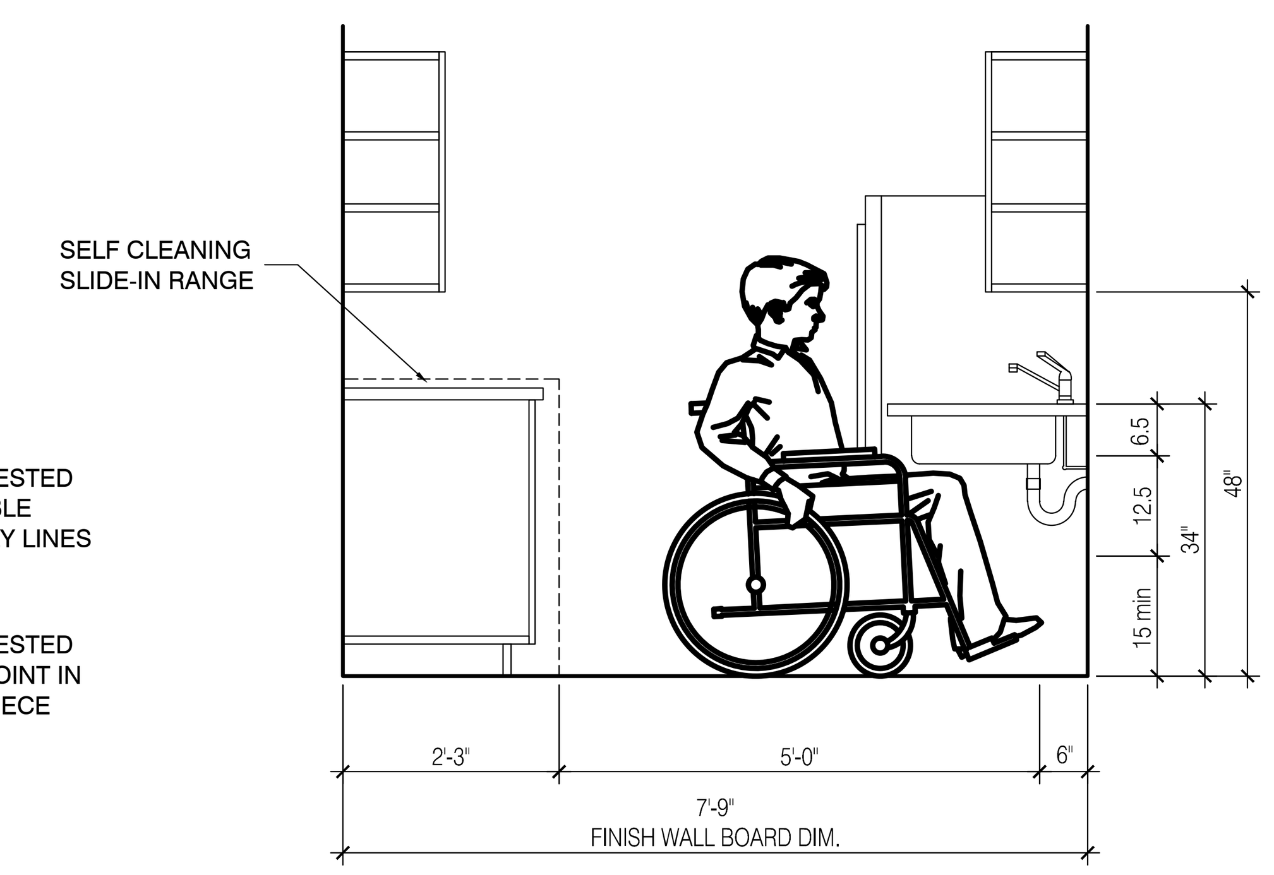
OVENS WITHOUT SELF CLEANING FEATURE



(A) BEFORE REMOVAL OF CABINETS AND BASE

(B) CABINETS AND BASE REMOVED AND HEIGHT ALTERNATIVES

KITCHEN SINK



KITCHEN CLEARANCE DIMENSIONS

ADAPTABLE KITCHENS (CAPABLE OF POSSIBLE FUTURE CONVERSION TO ACCESSIBLE KITCHENS)

GENERAL NOTES:

1. ONE LOWERABLE WORK SURFACE, 30" WIDE, IS REQUIRED, WITH REMOVABLE BASE CABINETS. HEIGHT TO BE ADJUSTABLE BETWEEN 28" AND 36" AFF TO COUNTERTOP.
2. ONE LOWERABLE SINK SURFACE, 30" WIDE, IS REQUIRED, WITH REMOVABLE BASE CABINETS. HEIGHT TO BE ADJUSTABLE BETWEEN 28" AND 36" AFF TO COUNTERTOP.
3. OVENS ARE ASSUMED TO BE SELF-CLEANING TYPE. IF OTHERWISE, PROVIDE A MINIMUM 30" ADJUSTABLE COUNTER SPACE WITH REMOVABLE BASE CABINETS NEXT TO OVEN.
4. A MINIMUM 36" TURNAROUND SPACE UNDER THE COUNTER WITH REMOVABLE BASE CABINETS SHALL BE PROVIDED IN DEEP CLOSED ENDED GALLEY KITCHENS AND OTHER U-SHAPED KITCHENS WHERE THE CLEARANCE BETWEEN CABINETS IS LESS THAN 5'-0". THE MINIMUM CLEARANCE BETWEEN CABINETS SHALL BE 40".
5. 48" A.F.F. WHEN CONVERTED TO ACCESSIBLE KITCHEN. PROVIDE REQUIRED WALL REINFORCEMENT FOR POSSIBLE FUTURE RELOCATION.

GENERAL NOTES:

ACCESSIBLE ROUTE:
A CONTINUOUS UNOBSTRUCTED PATH CONNECTING ALL ACCESSIBLE SPACES AND ROOMS IN A BUILDING THAT CAN BE NEGOTIATED BY ALL CATEGORIES OF PEOPLE HAVING PHYSICAL DISABILITIES.

PORTIONS OF ACCESSIBLE ROUTES WITH SLOPES OF MORE THAN 1:20 ARE RAMPS AND SHALL COMPLY WITH REQUIREMENTS FOR RAMPS.

AN INTERIOR ACCESSIBLE ROUTE SHALL BE PROVIDED FROM THE ENTRANCE OF THE BUILDING TO ALL DWELLING UNITS IN THE BUILDING. ALL DWELLING UNITS ARE TO BE ADAPTABLE.

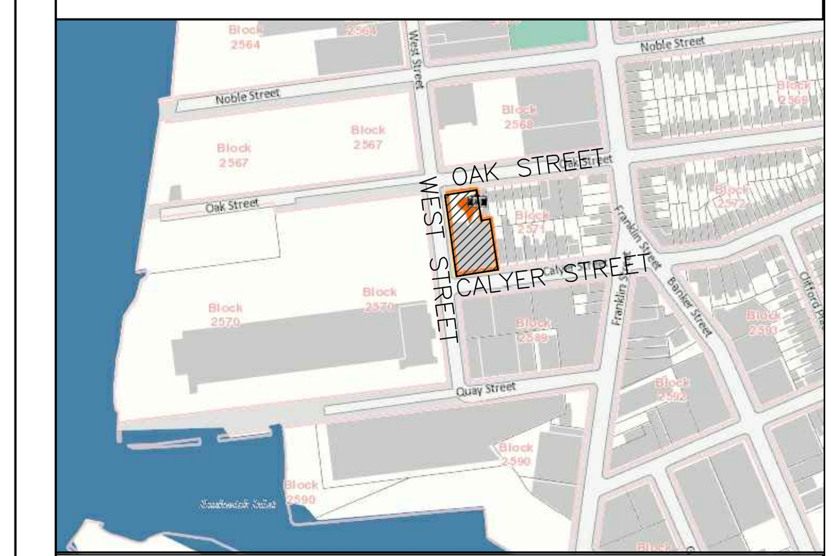
ADAPTABLE DWELLING UNITS:
DWELLING UNITS WHICH ARE CONSTRUCTED ON AN ACCESSIBLE ROUTE AND EQUIPPED AS SET FORTH IN REFERENCE STANDARD RS 4-6 OF THE NYC BUILDING CODE SO THAT THEY CAN BE CONVERTED TO BE USED, WITH A MINIMUM OF STRUCTURAL CHANGE, BY ALL CATEGORIES OF PERSONS HAVING PHYSICAL DISABILITIES.

ALL DOORS TO BE PROVIDED WITH HANDICAP COMPLIANT HARDWARE AND SADDLES AS PER SEC.4.13, ANSI A117.1. ADAPTABLE DWELLING UNITS SHALL BE EQUIPPED WITH DOOR WIDTHS AND CLEAR FLOOR SPACES FOR POSSIBLE OCCUPANTS WITH PHYSICAL DISABILITIES. ADAPTABLE SPACES WITHIN DWELLING UNITS SHALL INCLUDE KITCHENS AND BATHROOMS AND THEIR RESPECTIVE DOORWAYS.

THE INFORMATION SHOWN ON THIS DRAWING IS FOR GUIDANCE PURPOSES ONLY AND OUTLINE THE MOST COMMON ACCESSIBILITY CRITERIA APPLICABLE TO THIS JOB. THEY DO NOT CONSTITUTE A COMPREHENSIVE DESCRIPTION OF ALL POSSIBLE CRITERIA WHICH ARE GIVEN IN RS 4-6 OF THE NYC BLDG. CODE AND ANSI A1117.1 - 1986 AS MODIFIED BY RS 4-6.

THE GENERAL CONTRACTOR MUST DO ALL WORK IN ACCORDANCE WITH THESE REGULATIONS.

KEY PLAN



BLOCK 2571 LOT 1

issue	rev	date	description
1		2014/11/25	ISSUED TO D.O.B.
1		2014-02---	ISSUE TO THE DOB

ISSUES/REVISIONS

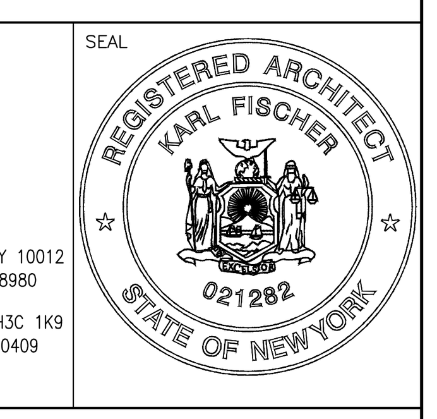
MEP ENGINEER:

STRUCTURAL ENGINEER:

CLIENT

KARL FISCHER ARCHITECT
OAQ RAIC AIA
530 BROADWAY, 9th FLOOR, NEW YORK, NY 10012
TEL: (212) 219-9733 FAX: (212) 219-8980
1420 NOTRE-DAME WEST, MONTREAL, QC H3C 1K9
TEL: (514) 933-4137 FAX: (514) 933-0409
WEB SITE: WWW.KFARCHITECT.COM
E-MAIL:KARL@KFARCHITECT.COM

SEAL

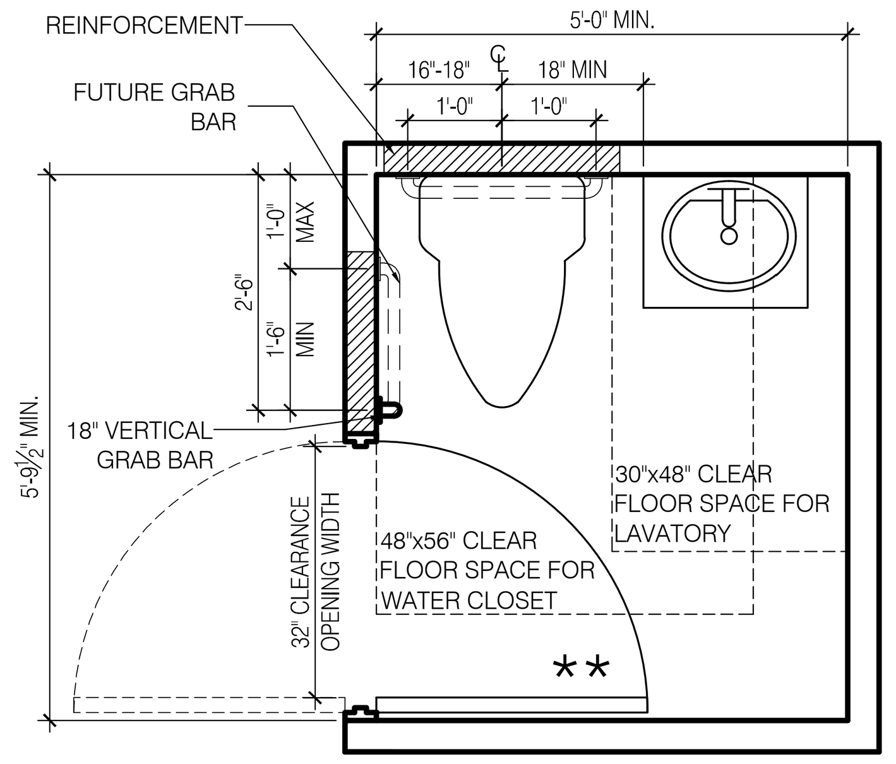


project title
BLOCK 2571 LOT 1
26 WEST STREET, BROOKLYN, 11222

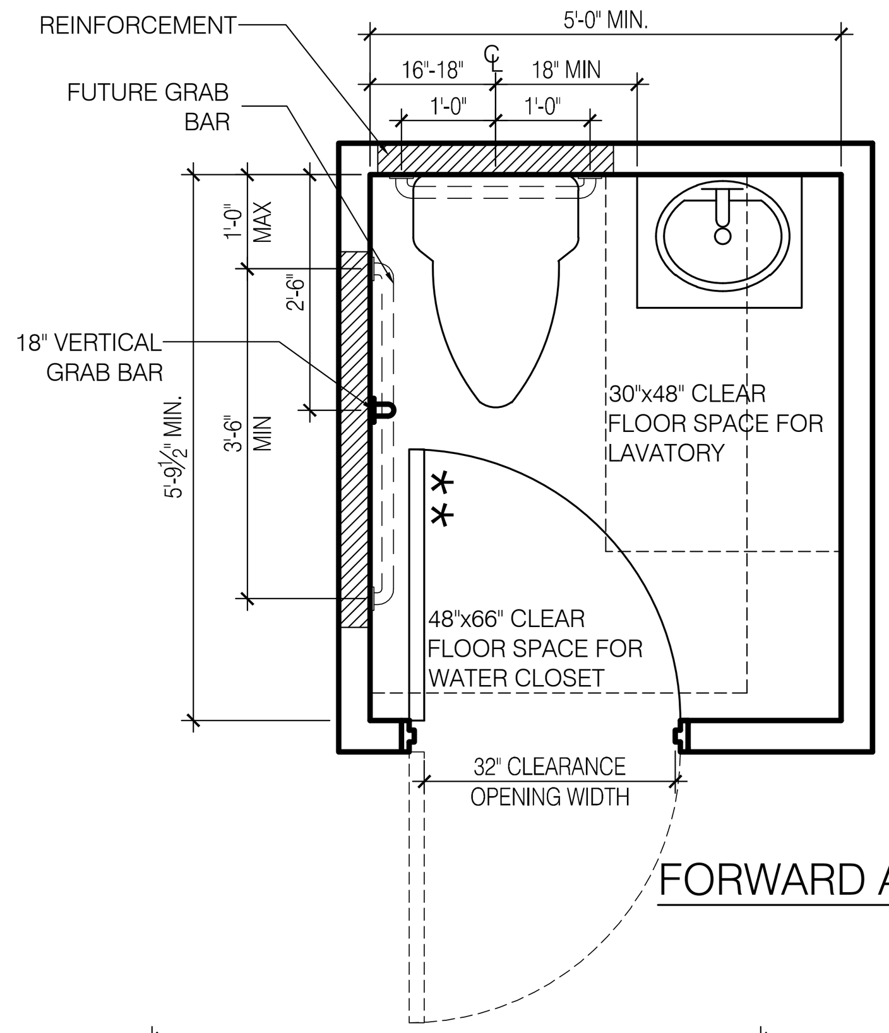
drawing title
ADA NOTES & DETAILS

dob no

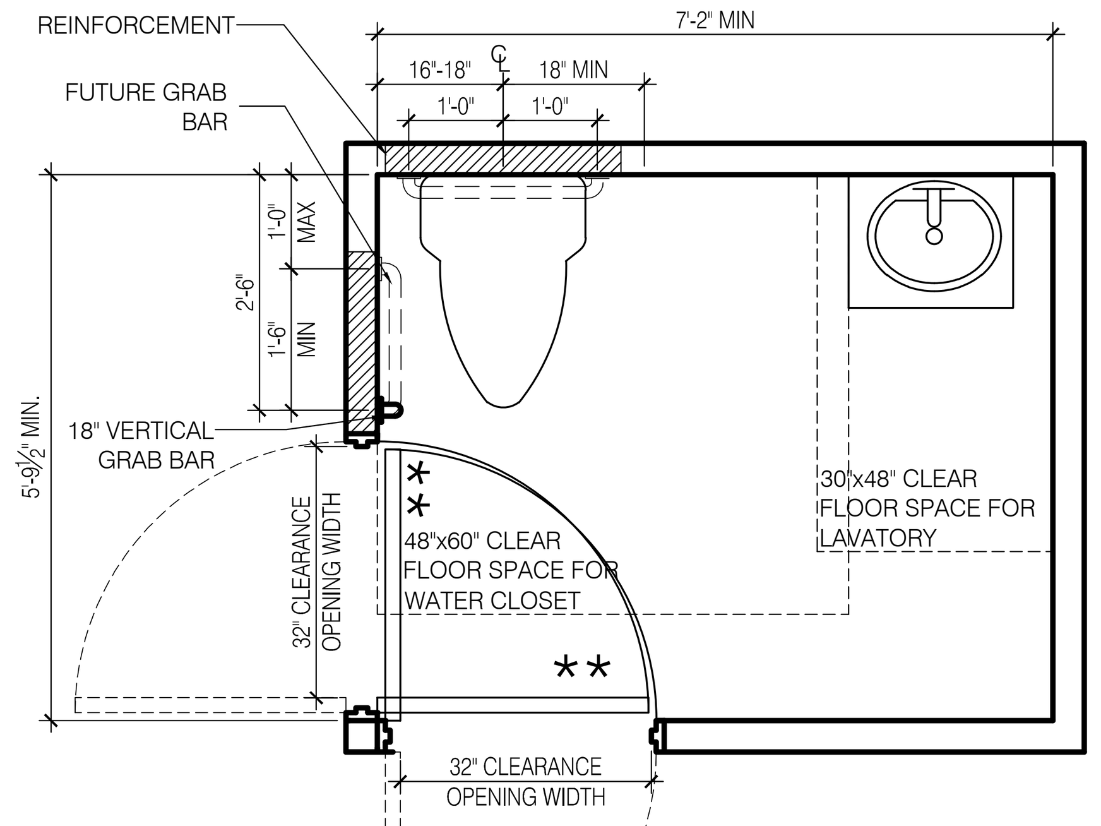
scale	NTS	project no.	14-45
date		sheet no.	---OF
drawn		drawing no.	
checked			G-004.00



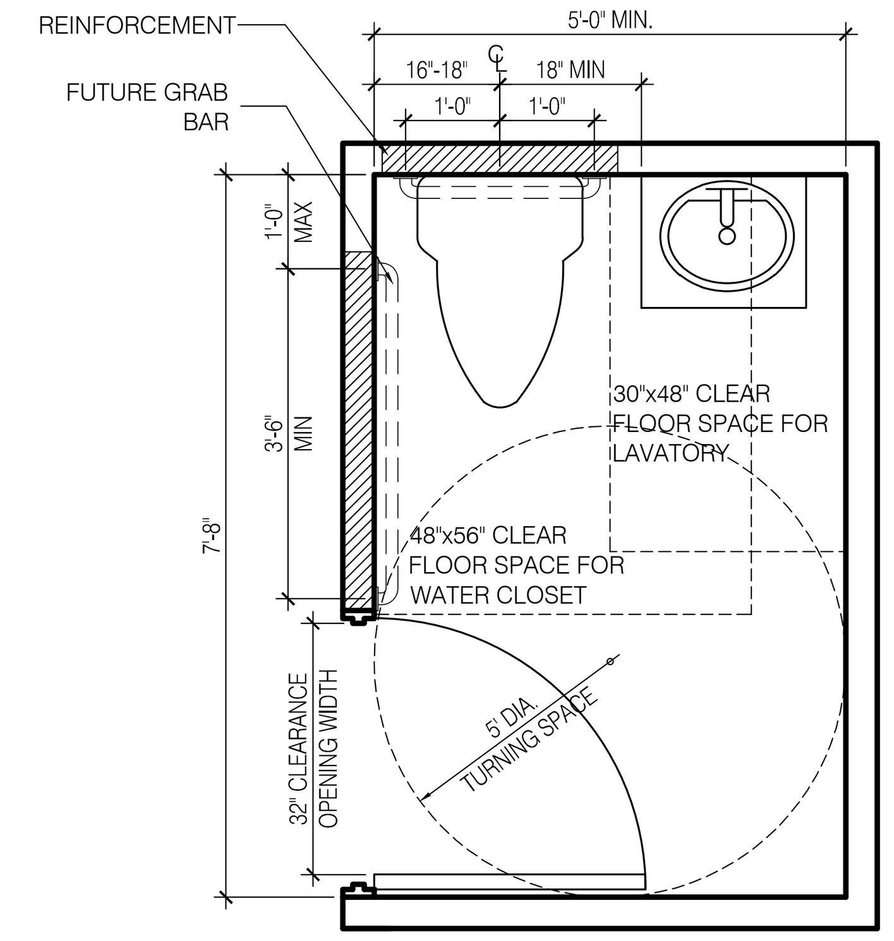
PARALLEL APPROACH



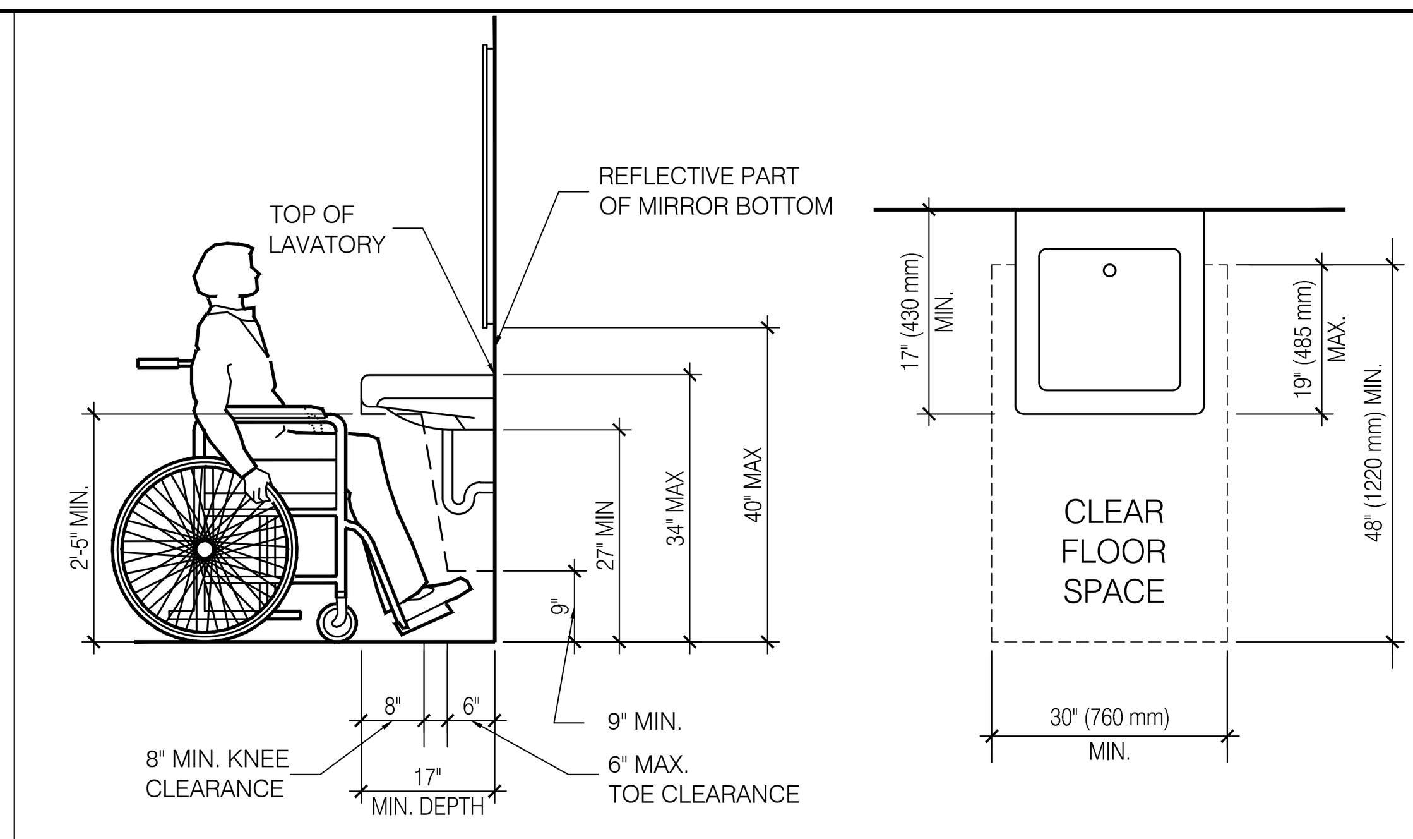
FORWARD APPROACH



PARALLEL & FORWARD APPROACH

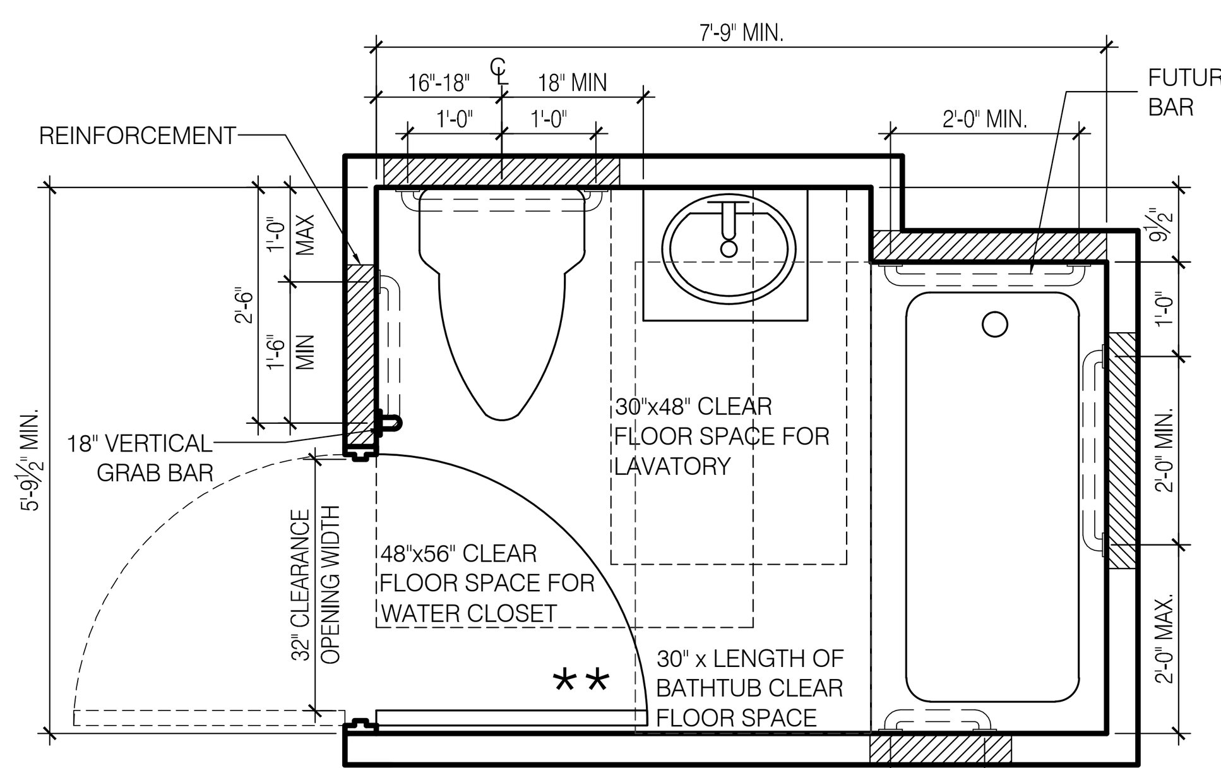


POWDER ROOM

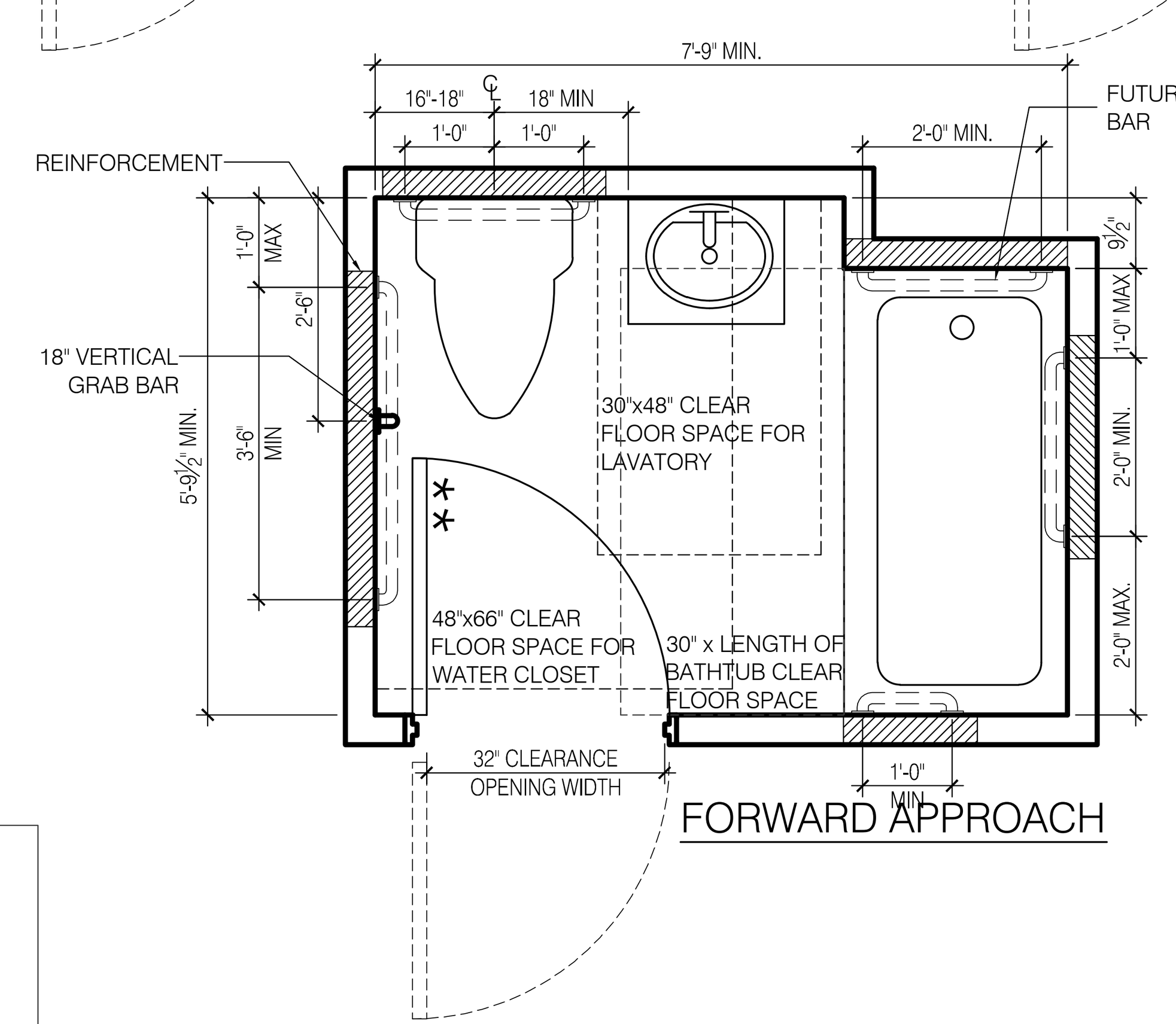


ACCESSIBLE LAVATORY

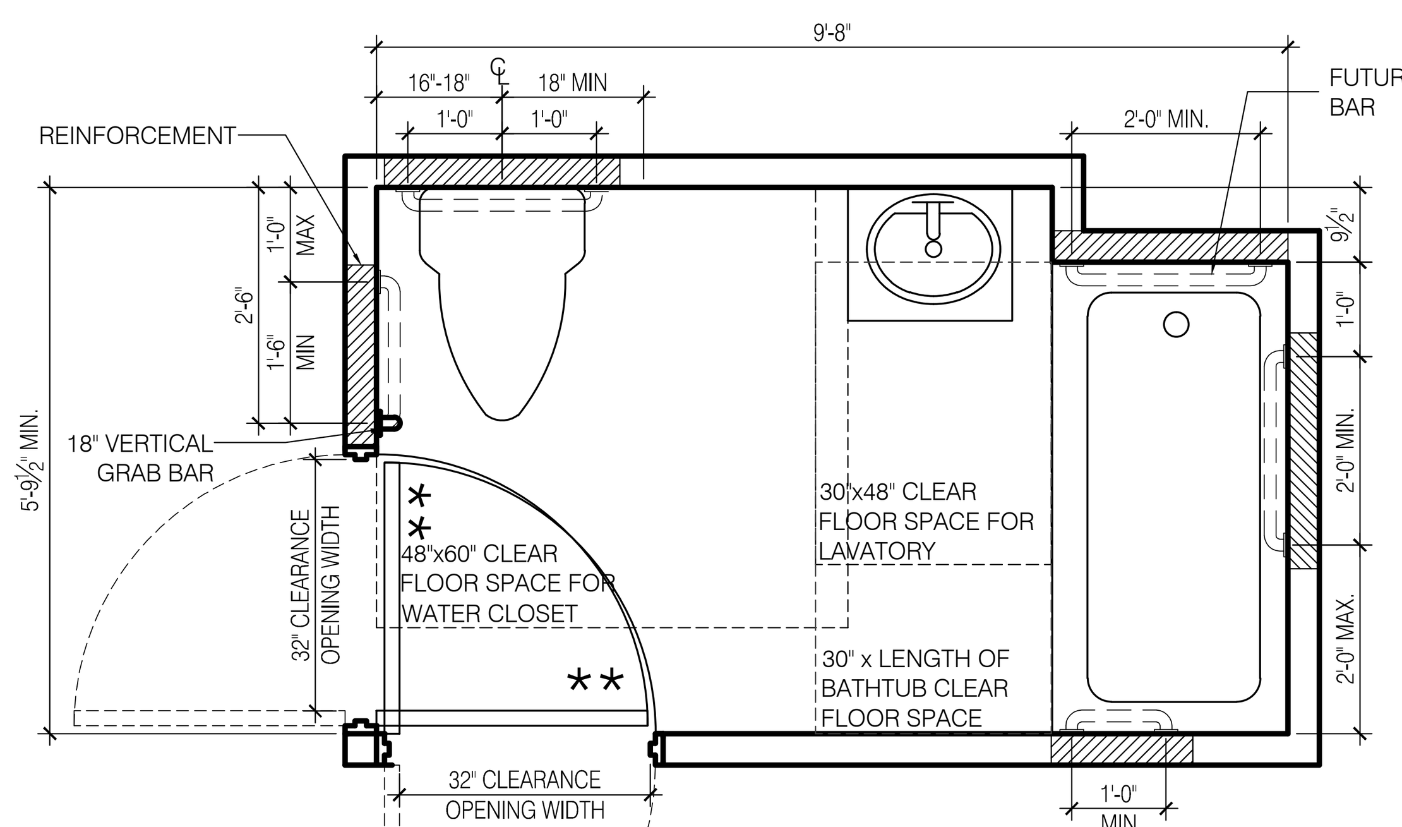
NOTE:GRAB BAR IN ACCESSIBLE TOILET FACILITY
ALL REINFORCEMENT & GRAB BARS ARE REQUIRED FOR ACCESSIBLE TOILET FACILITY



PARALLEL APPROACH

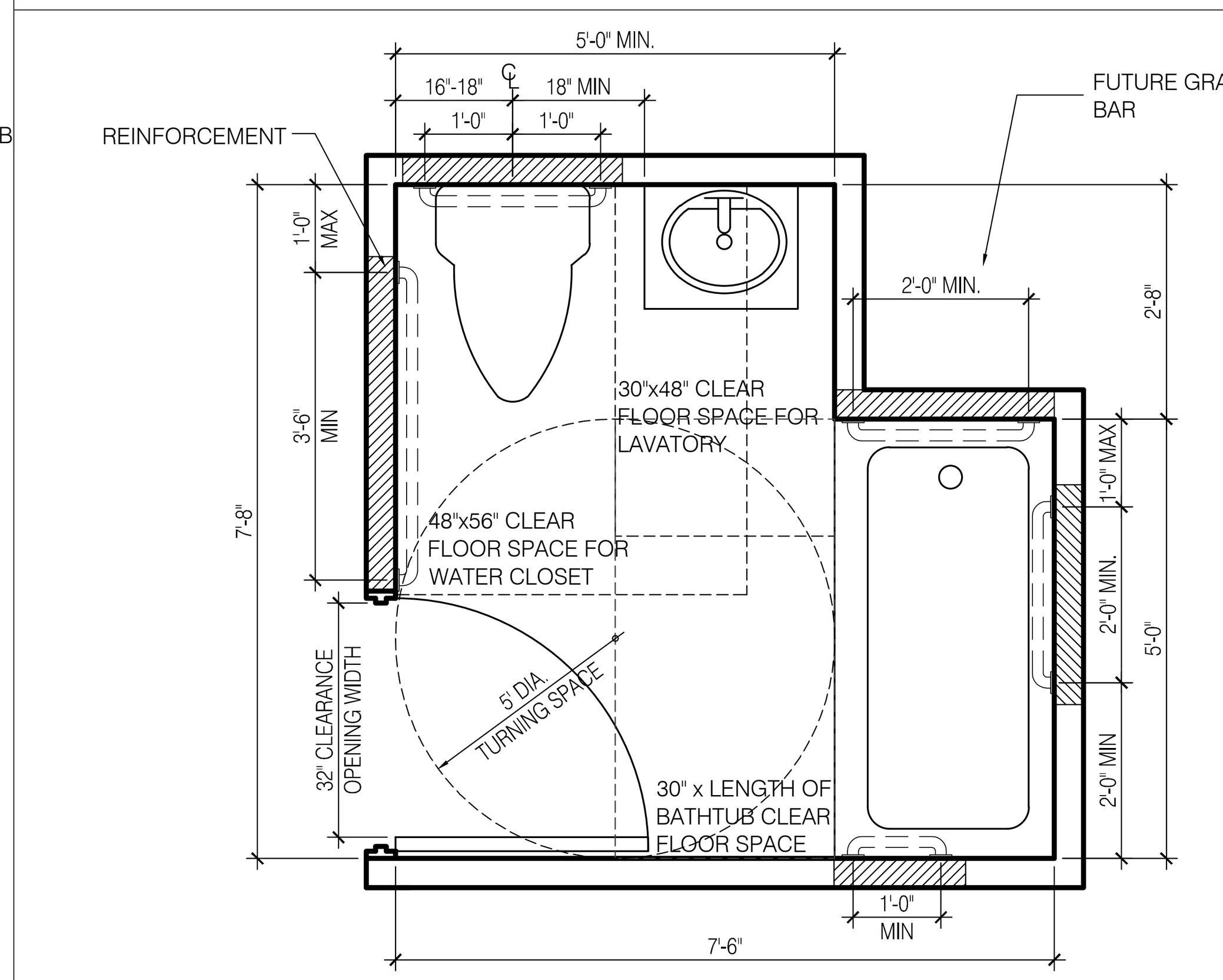


FORWARD APPROACH

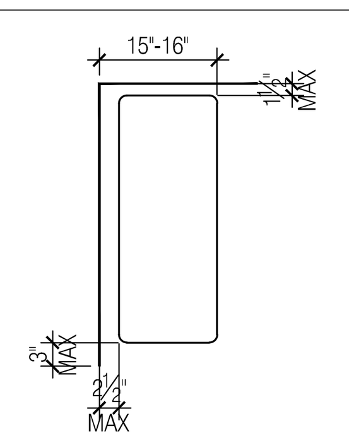


PARALLEL & FORWARD APPROACH

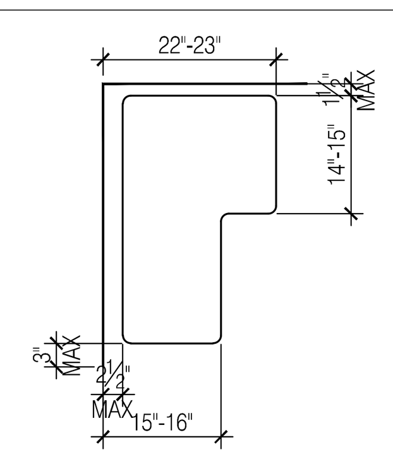
APPENDIX 'P' BATHROOM



TYPE 'A' BATHROOM

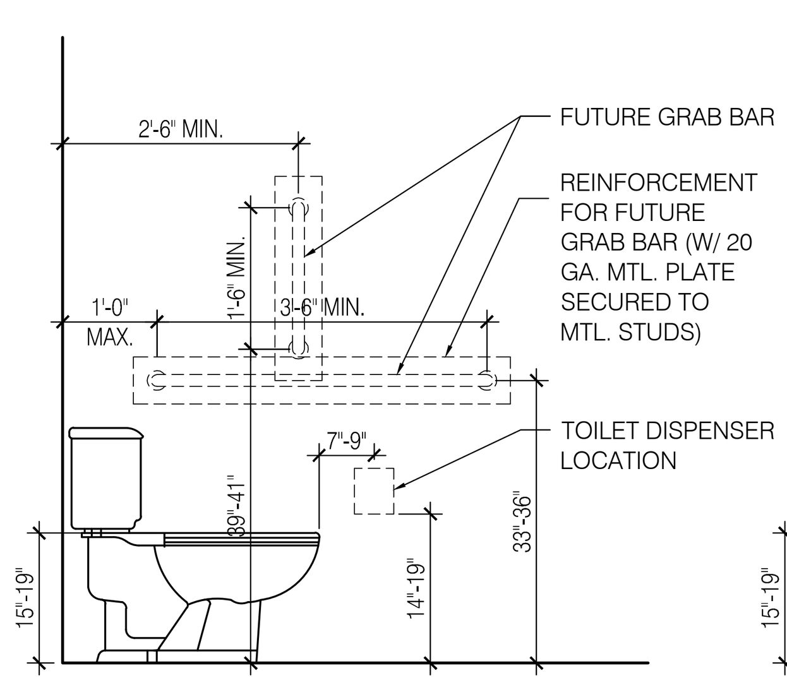


RECTANGULAR SHOWER COMPARTMENT SEAT

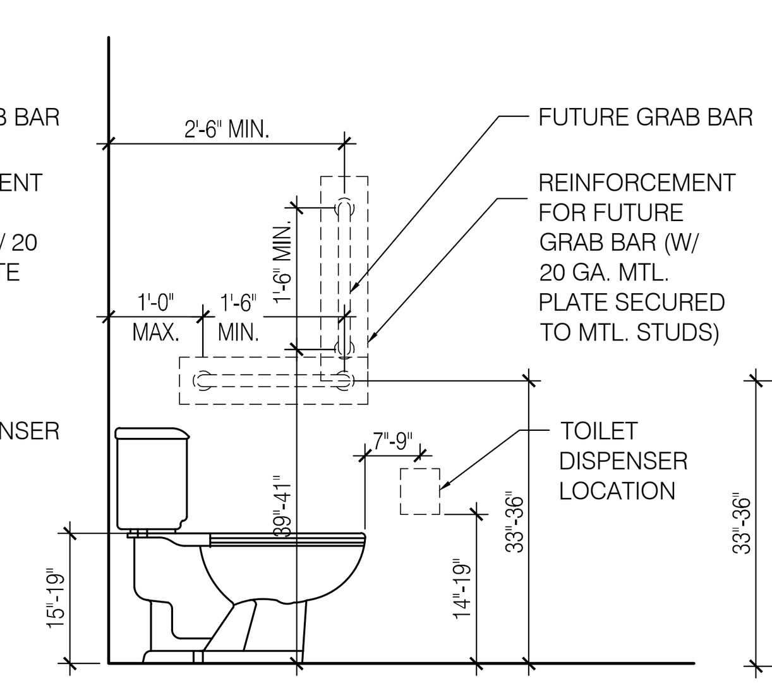


L-SHAPE SHOWER COMPARTMENT SEAT

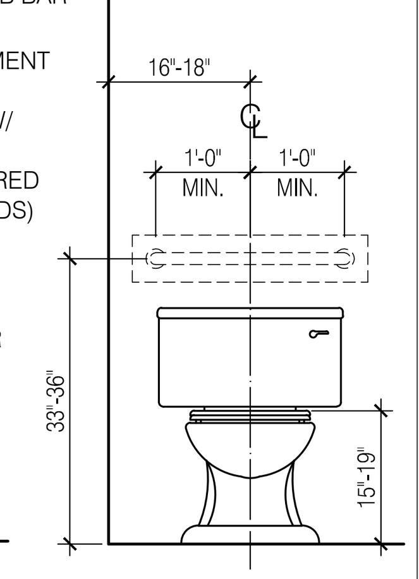
**NOTE:DOOR SWING - APPENDIX 'P' TOILET & BATHING FACILITY
THE DOOR & FRAME ARE PROVIDED WITH MORTISED HINGE & LATCH BLANKS TO PERMIT FUTURE REVERSAL OF THE DOOR ON THE SAME FRAMES USING COMMON HAND TOOLS AND WITHOUT FURTHER ALTERATIONS TO THE DOOR & FRAMES. SUCH FUTURE SWING OF THE DOOR SHALL NOT OBSTRUCT THE MANEUVERING CLEARANCES REQUIRED AT THE DOOR OR DOORWAY.



SIDE WALL - TYPE 'A'

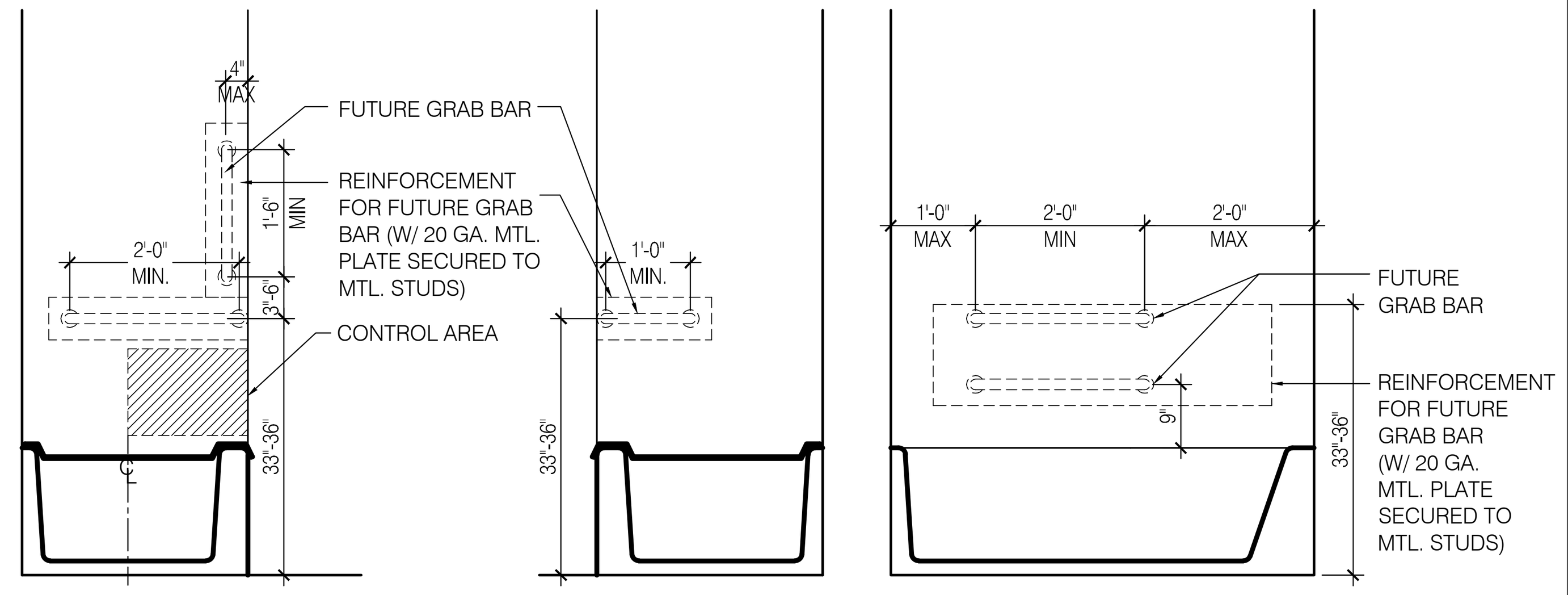


SIDE WALL - TYPE 'B'
(EXCEPTION FOR SIDE WALL THAT CANNOT ACCOMMODATE A 42" GRAB BAR)



REAR WALL

WATER CLOSET

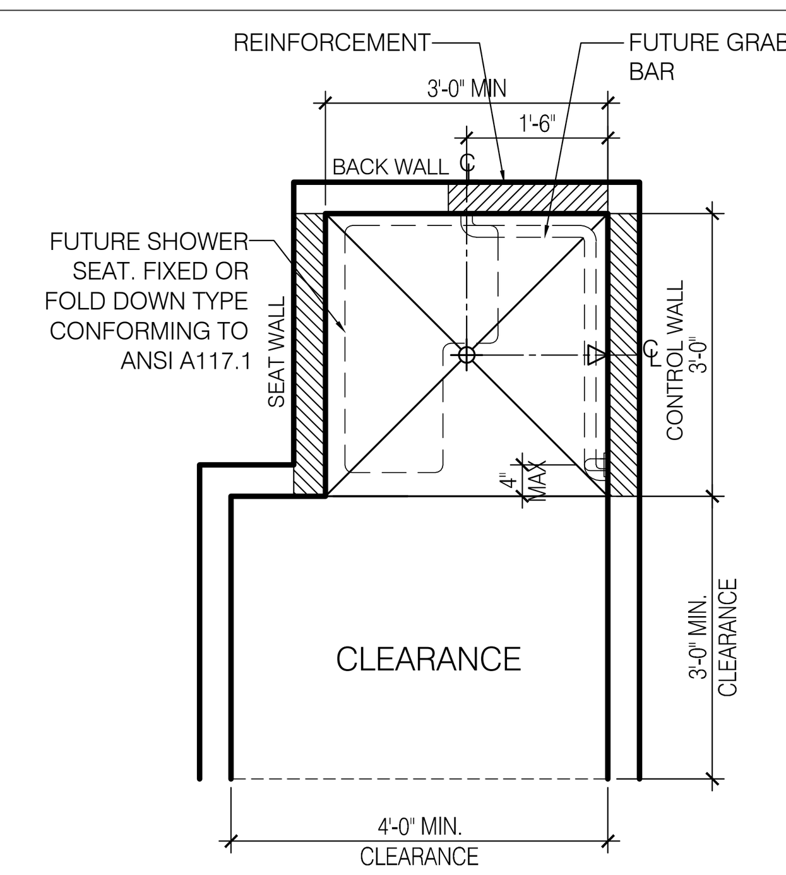


CONTROL END WALL

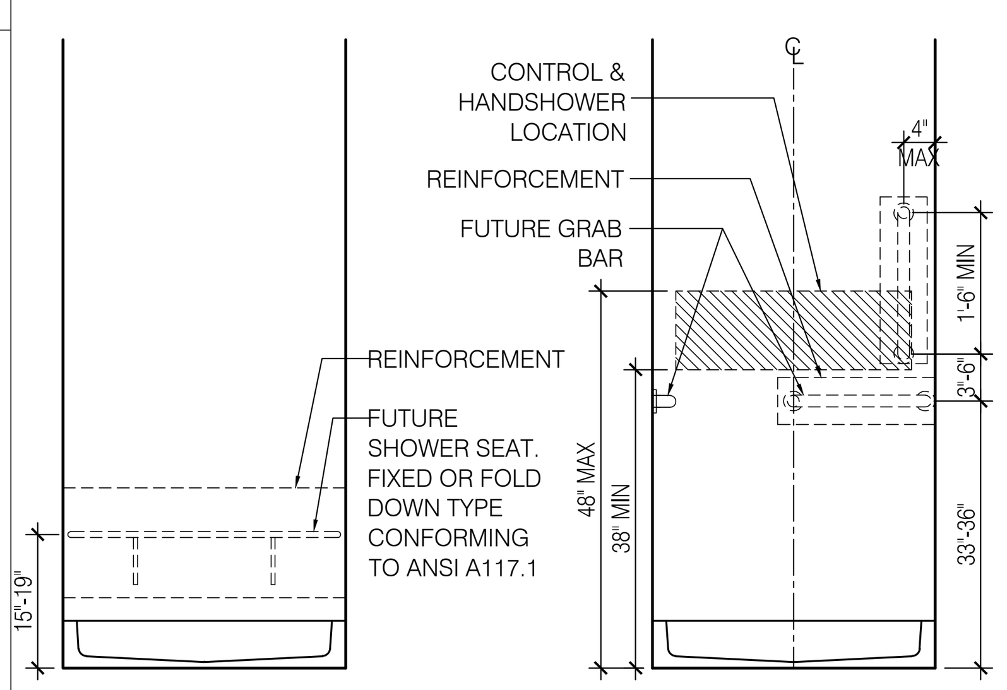
END WALL

BACK WALL

BATHTUB



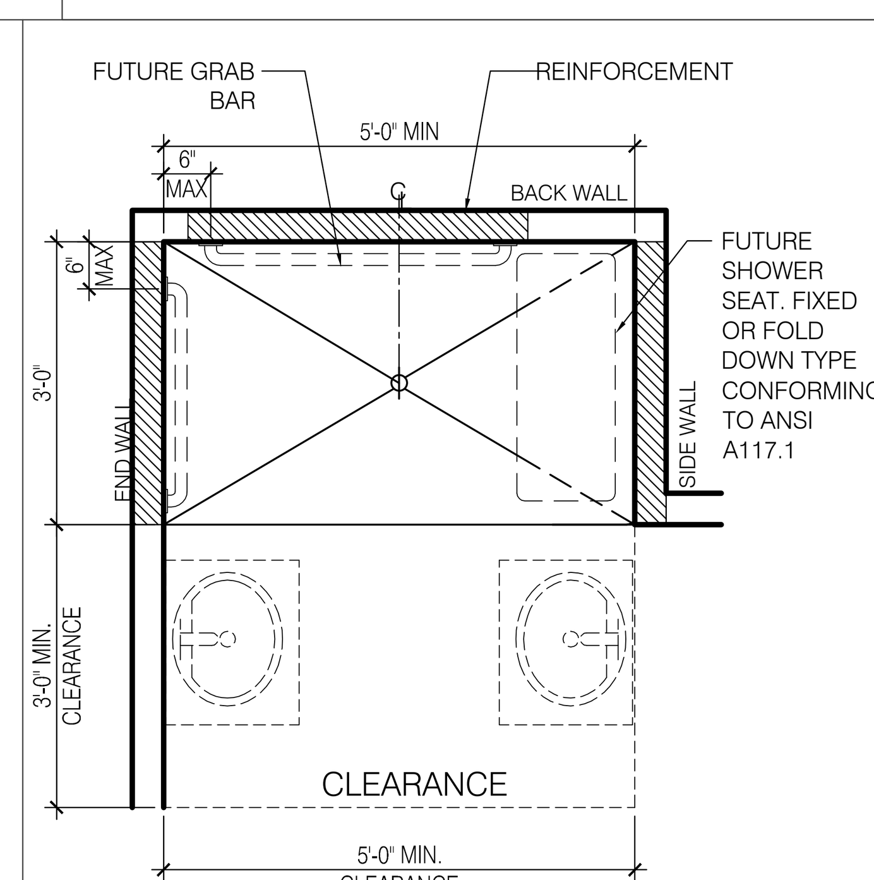
PLAN



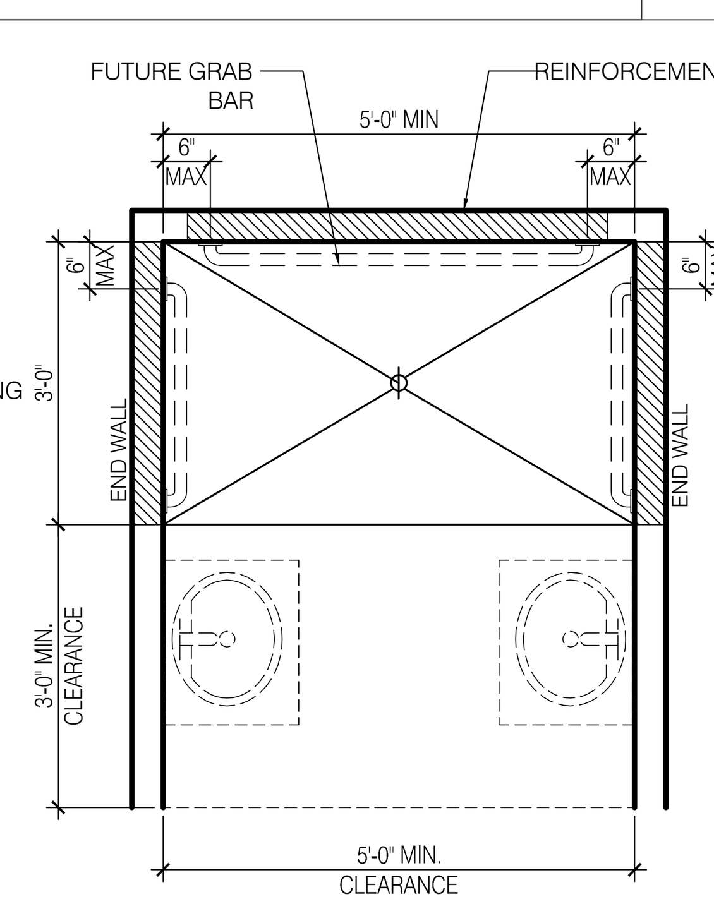
SEAT WALL

CONTROL WALL

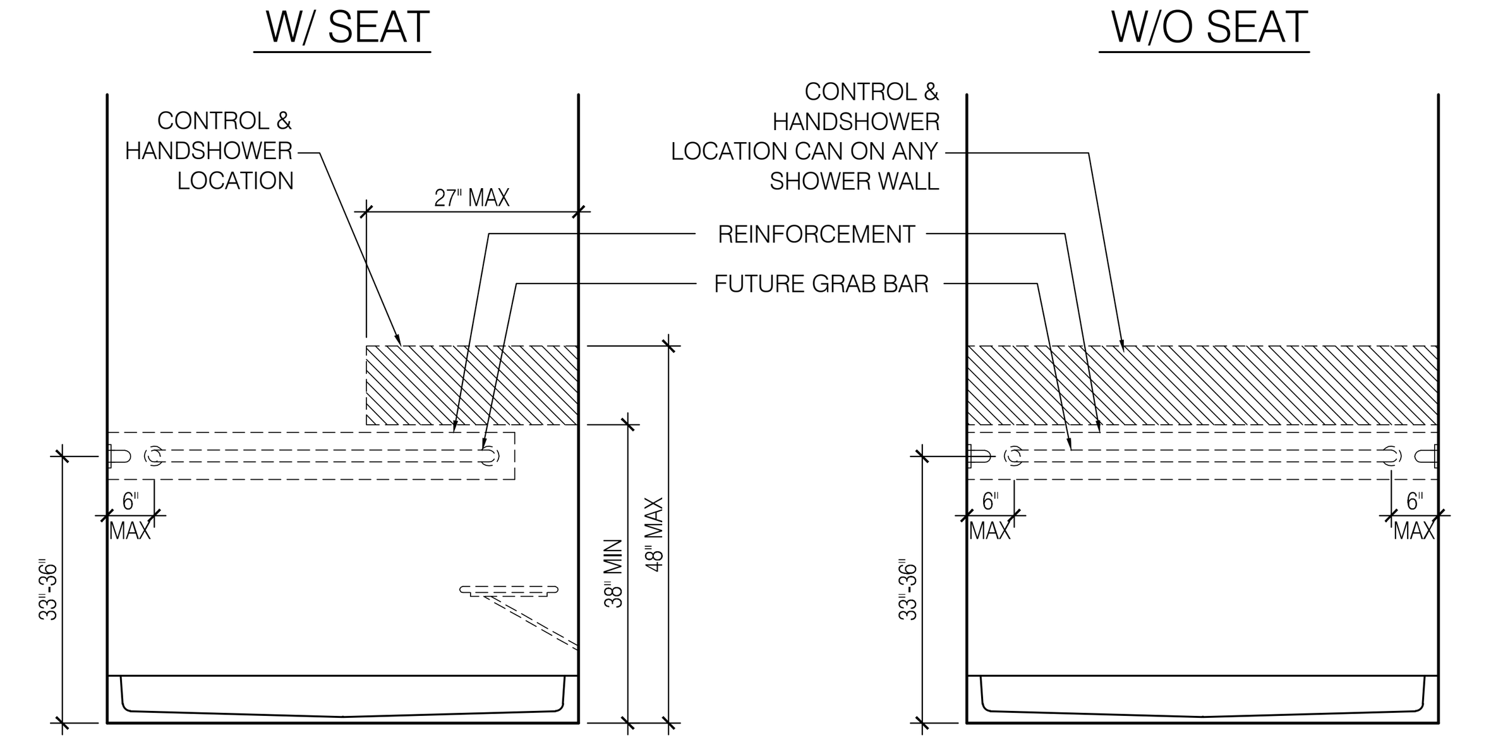
TRANSFER-TYPE SHOWER STALL



W/ SEAT



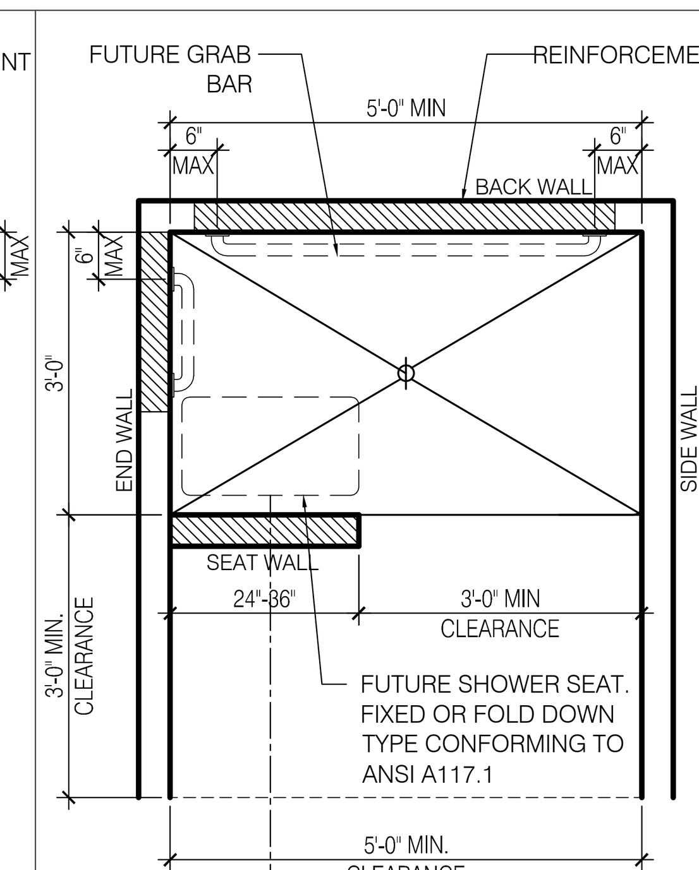
W/O SEAT



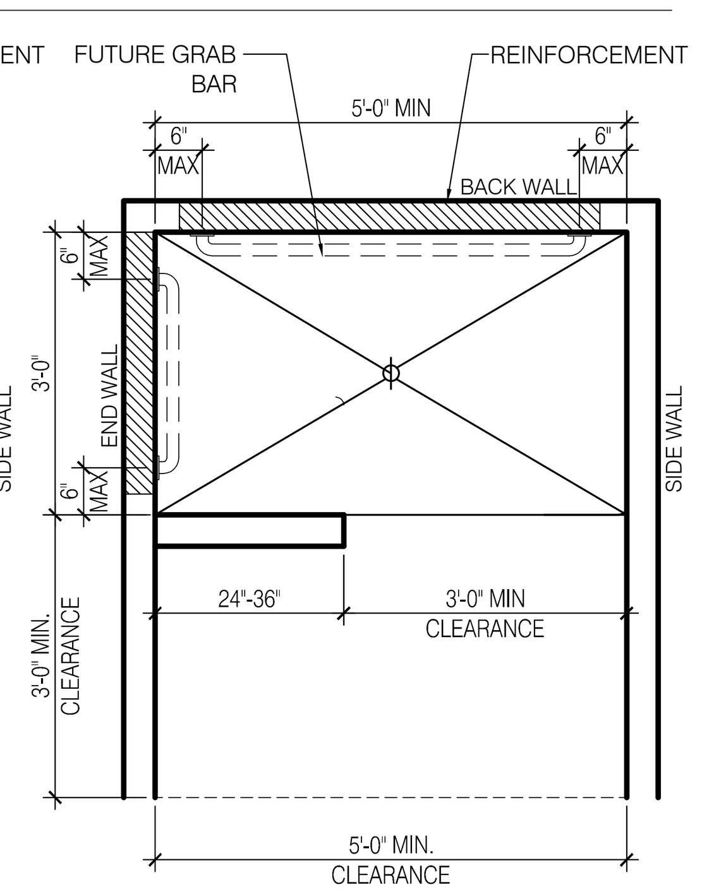
BACK WALL W/ SEAT

BACK WALL W/O SEAT

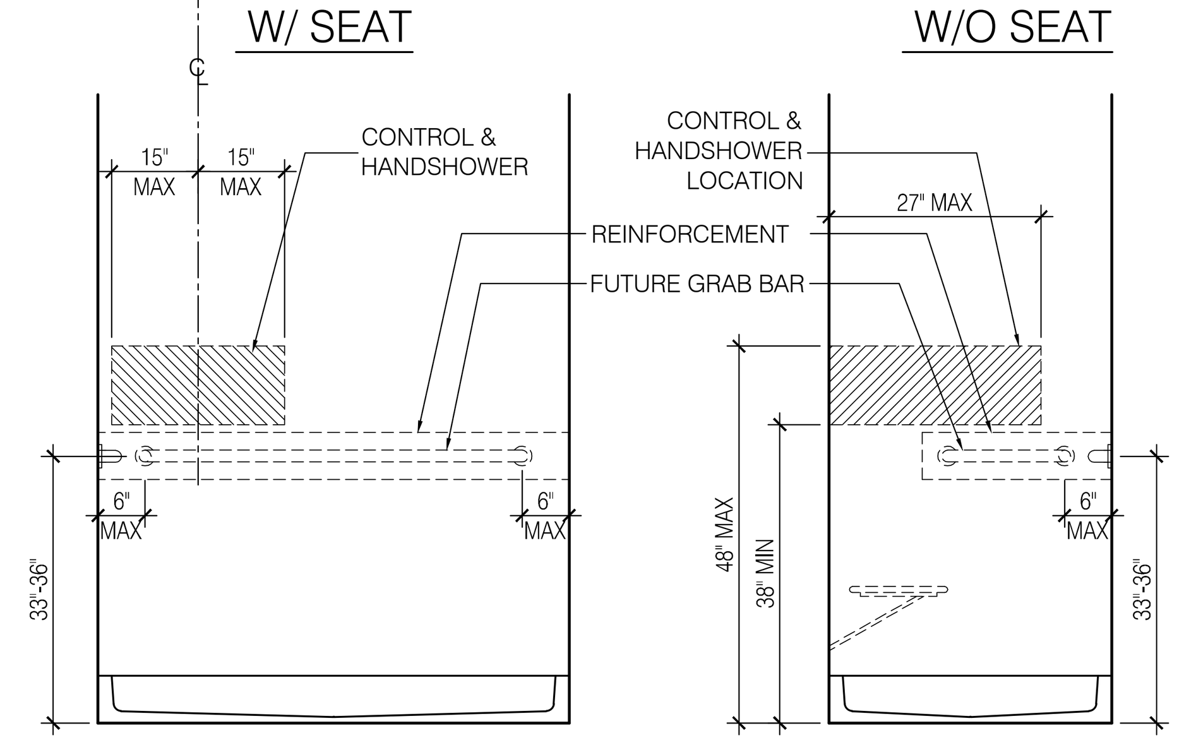
STANDARD ROLL IN TYPE SHOWER COMPARTMENT



W/ SEAT



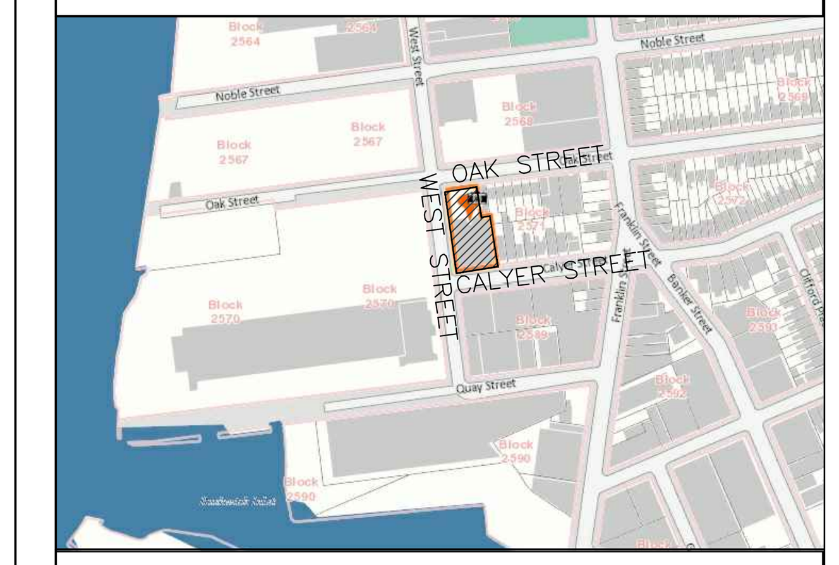
W/O SEAT



BACK WALL W/ SEAT

END WALL W/ SEAT

KEY PLAN



BLOCK 2571 LOT 1

issue	rev	date	description
1		2014/11/25	ISSUED TO D.O.B.
1		2014-02---	ISSUE TO THE DOB

ISSUES/REVISIONS

MEP ENGINEER:

STRUCTURAL ENGINEER:

CLIENT

KARL FISCHER ARCHITECT
OAQ RAIC AIA
530 BROADWAY, 9th FLOOR, NEW YORK, NY 10012
TEL: (212) 219-9733 FAX: (212) 219-8980
1420 NOTRE-DAME WEST, MONTREAL, QC H3C 1K9
TEL: (514) 933-4137 FAX: (514) 933-0409
WEB SITE: WWW.KFARCHITECT.COM
E-MAIL:KARL@KFARCHITECT.COM

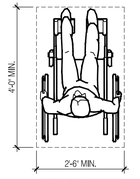
SEAL
REGISTERED ARCHITECT KARL FISCHER 021282 STATE OF NEW YORK

project title
BLOCK 2571 LOT 1
26 WEST STREET, BROOKLYN, 11222

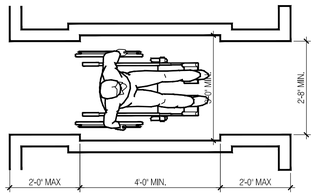
drawing title
ADA NOTES & DETAILS

dob no

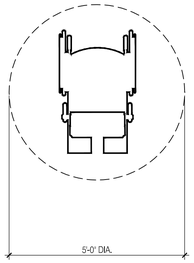
scale	NTS	project no.	14-45
date		sheet no.	---OF
drawn		drawing no.	G-005.00
checked			



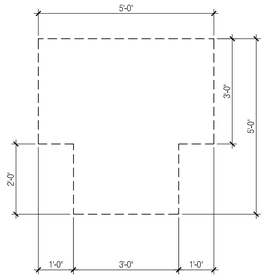
SIZE OF CLEAR FLOOR SPACE



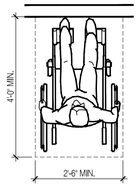
CLEAR WIDTH OF AN ACCESSIBLE ROUTE



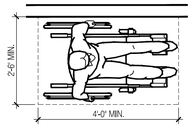
CIRCULAR



T-SHAPE

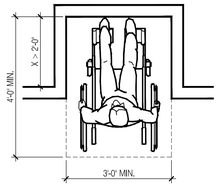


FORWARD

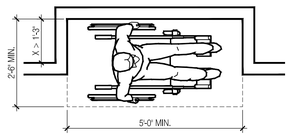


PARALLEL

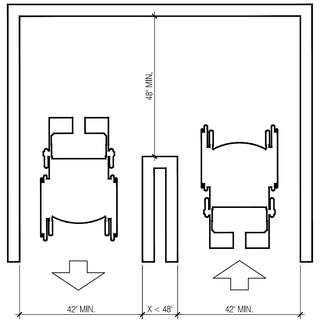
POSITION OF CLEAR FLOOR SPACE



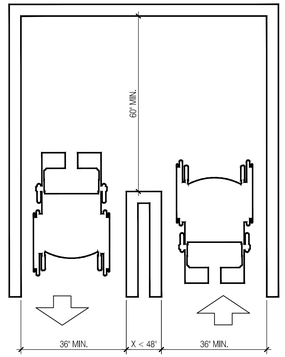
FORWARD APPROACH



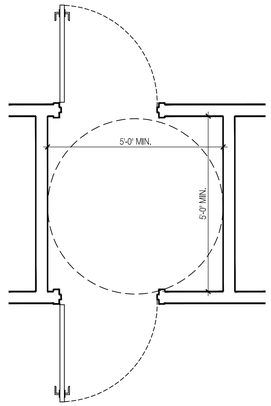
PARALLEL APPROACH

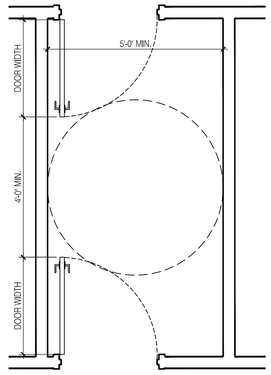


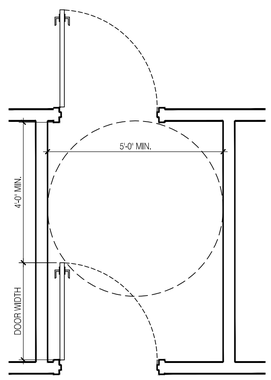
180 DEGREE TURN



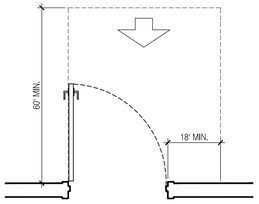
180 DEGREE TURN (EXCEPTION)



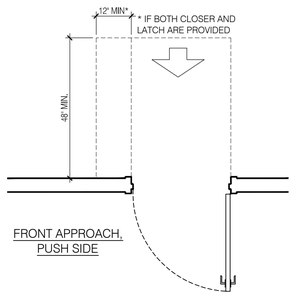




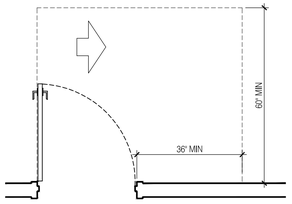
2 DOORS IN A SERIES



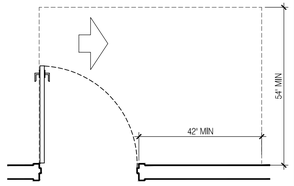
FRONT APPROACH, PULL SIDE



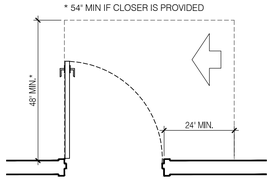
FRONT APPROACH, PUSH SIDE



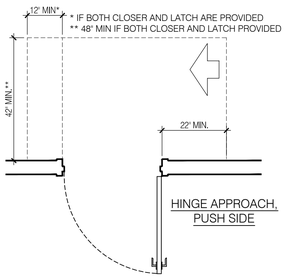
HINGE APPROACH, PULL SIDE



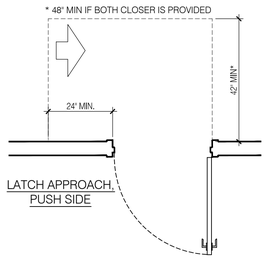
HINGE APPROACH, PULL SIDE



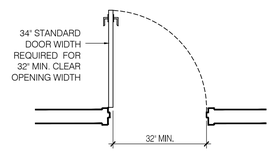
LATCH APPROACH, PULL SIDE



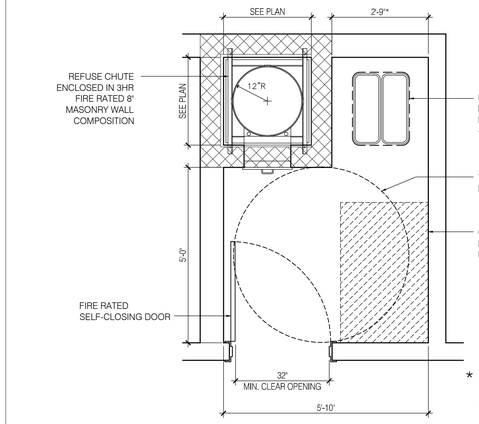
HINGE APPROACH, PUSH SIDE



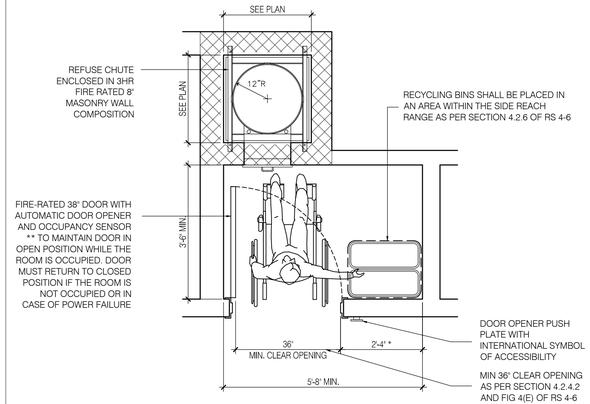
LATCH APPROACH, PUSH SIDE



CLEAR OPENING WIDTH SWINGING DOOR



REFUSE DISPOSAL ROOM PLAN



** THE OCCUPANCY SENSOR MAY BE:
1. WEIGHT-SENSITIVE FLOOR MAT
2. INFRARED SENSOR
3. OTHER EQUIVALENT TECHNOLOGY

* VARIABLE DIMENSION. MUST BE OF SUFFICIENT SIZE TO ACCOMMODATE 2 DIFFERENT RECYCLING BINS AND BE WITHIN THE SIDE REACH RANGE

ALTERNATE REFUSE DISPOSAL ROOM PLAN

NYC DEPARTMENT OF BUILDINGS MEMO DATED JULY 3, 2007

ACCESSIBLE COMMON-USE REFUSE DISPOSAL/STORAGE ROOM

COMMON-USE REFUSE DISPOSAL/STORAGE ROOM THAT ARE REQUIRED TO BE ACCESSIBLE PURSUANT TO ADMINISTRATIVE CODE SECTION 27-292.5(c), SECTION 27-292.10 AND TABLE 4 OF REFERENCE STANDARD RS 4-6 SHALL COMPLY WITH SECTION 4.2 THROUGH 4.32 OF RS 4-6 INCLUDING, BUT NOT LIMITED TO, WHEELCHAIR TURNING SPACE, CLEAR FLOOR OR GROUND SPACE FOR WHEELCHAIRS, AND MANEUVERING CLEARANCES AT THE DOOR (SEE ATTACHED FIGURE 1). AN ALTERNATIVE TO THE STANDARD DESIGN FOR SUCH REFUSE DISPOSAL/STORAGE ROOM HAS BEEN REVIEWED AND FOUND COMPLIANT WITH RS 4-6 (SEE ATTACHED FIGURE 2) PROVIDED IT MEET ALL THE FOLLOWING:

1. THE REFUSE DISPOSAL/STORAGE ROOM SHALL BE DESIGNED SO THAT THE WHEELCHAIR USER CAN ENTER THE ROOM HEAD ON, AND BACK OUT WITHOUT TURNING OR CHANGING DIRECTION.

2. THE REFUSE DISPOSAL/STORAGE ROOM SHALL BE PROVIDED WITH MANEUVERING CLEARANCE INCLUDING A MINIMUM OF 36" CLEAR WIDTH AT THE DOORWAY FOR A FORWARD APPROACH AS PER SECTION 4.2.4.2 AND FIG. 4(e) OF RS 4-6. SUCH CLEAR WIDTH AT THE DOOR SHALL BE MEASURED BETWEEN THE FACE OF THE DOOR AND STOP, WITH THE DOOR OPEN 90 DEGREES. THIS WILL TYPICALLY REQUIRE A 38" WIDE DOOR.

3. THE DOOR OF THE REFUSE DISPOSAL/STORAGE ROOM SHALL COMPLY WITH SECTION 4.13.6 (AMUVERING CLEARANCES AT DOORS) OF RS 4-6 EXCEPT SUCH CLEARANCE IS NOT REQUIRED INSIDE THE REFUSE DISPOSAL/STORAGE ROOM. THRESHOLDS AT THE DOORWAY SHALL COMPLY WITH SECTION 4.13.8 OF RS 4-6.

4. THE DOOR OF THE REFUSE DISPOSAL/STORAGE ROOM SHALL BE A FULL POWERED AUTOMATIC DOOR COMPLYING WITH SECTION 4.13.12 OF RS 4-6 AND ANSI/BHMA A156.10-1985. CONTROLS FOR THE AUTOMATIC DOOR SHALL BE PROVIDED WITHIN THE REACH RANGE PERMITTED IN SECTION 4.2.5 OR 4.2.6 AND SHALL BE LOCATED ALONGSIDE THE DOOR AT THE LATCH SIDE. ROOM IDENTIFICATION AND SYMBOL OF ACCESSIBILITY SHALL BE PROVIDED NEAR THE CONTROL AND SHALL COMPLY WITH SECTION 4.28 OF RS 4-6.

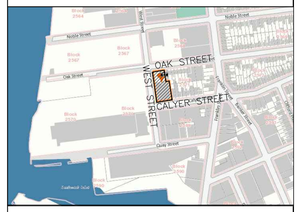
5. AN OCCUPANCY SENSOR SHALL BE PROVIDED IN THE REFUSE DISPOSAL/STORAGE ROOM TO DETECT THE PRESENCE AND THE ABSENCE OF OCCUPANTS. UPON THE DETECTION OF AN OCCUPANT IN THE ROOM, THE DOOR SHALL BE MAINTAINED IN THE OPEN POSITION DURING THE ENTIRE PERIOD OF OCCUPANCY OF THE ROOM. UPON THE ABSENCE OF AN OCCUPANT IN THE ROOM, THE DOOR SHALL AUTOMATICALLY RETURN TO THE CLOSED POSITION.

6. THE AUTOMATIC DOOR OF THE REFUSE DISPOSAL/STORAGE ROOM SHALL RETURN TO THE CLOSED POSITION IN THE CASE OF POWER FAILURE, UPON THE ACTIVATION OF THE FIR ALARM SYSTEMS (IF A FIRE ALARM SYSTEM IS PROVIDED IN THE BUILDING), OR UPON THE ACTIVATION OF SMOKE DETECTORS.

7. THE REFUSE DISPOSAL/STORAGE ROOM SHALL BE PROVIDED WITH A FIRE-RATED DOOR THAT REMAINS CLOSED DURING PERIODS OF NON USE. THE PLACEMENT OF THE STORAGE BINS AND/OR SHELVES AND THE LOCATION OF THE REFUSE CHUTE ACCESS OPENING SHALL COMPLY WITH THE REACH RANGES OF SECTION 4.2.5 OR 4.2.6 OF RS 4-6.

8. ALL CONTROLS AND OPERATING MECHANISMS SHALL COMPLY WITH SECTION 4.25 OF RS 4-6.

KEY PLAN



BLOCK 2571 LOT 1

issue	rev	date	description
1	1	2014/11/25	ISSUED TO D.O.B.
		2014-02--	ISSUE TO THE DOB

ISSUES/REVISIONS

MEP ENGINEER:

STRUCTURAL ENGINEER:

CLIENT

KARL FISCHER ARCHITECT
ONG RAIC AIA
530 BROADWAY, 9th FLOOR, NEW YORK, NY 10012
TEL: (212) 219-9733 FAX: (212) 219-8980
1420 NOTRE-DAME WEST, MONTREAL, QC H3C 1K9
TEL: (514) 933-4137 FAX: (514) 933-0409
WEB SITE: WWW.KFARCHITECT.COM
E-MAIL:KARL@KFARCHITECT.COM

SEAL

project title

BLOCK 2571 LOT 1
26 WEST STREET, BROOKLYN, 11222

drawing title

ADA NOTES & DETAILS

dob no

scale: NTS	project no.: 14-45
date:	sheet no.: ***OF
drawn:	drawing no.: G-006.00
checked:	

ICC/ANSI A117.1- 2003 & ASME/ANSI 17.1-2000 NOTES:

407 ELEVATORS

407.1 GENERAL. ELEVATORS SHALL COMPLY WITH SECTION 407 AND ASME A17.1 LISTED IN SECTION 105.2.5. ELEVATORS SHALL BE PASSENGER ELEVATORS AS CLASSIFIED BY ASME A17.1. ELEVATOR OPERATION SHALL BE AUTOMATIC.

407.2.1 CALL CONTROLS. CALL BUTTONS SHALL BE RAISED OR FLUSH. OBJECTS BENEATH HALL CALL BUTTONS SHALL PROTRUDE 1 INCH MAXIMUM. CALL BUTTONS AND KEYPADS SHALL BE LOCATED 15-48" ABOVE THE GROUND MEASURED TO THE CENTER LINE OF THE HIGHEST OPERABLE POINT. CALL BUTTONS SHALL BE .75" INCH MINIMUM IN THE SMALLEST DIMENSION. A CLEAR FLOOR SPACE OF 30" X 48" MINIMUM SHALL BE PROVIDED AT ALL CALL CONTROLS. THE CALL BUTTON THAT DESIGNATES THE UP DIRECTION SHALL BE LOCATED ABOVE THE CALL BUTTON THAT DESIGNATES THE DOWN DIRECTION. CALL BUTTONS SHALL HAVE VISIBLE SIGNALS TO INDICATE WHEN EACH CALL IS REGISTERED AND WHEN EACH CALL IS ANSWERED.

407.2.2 HALL SIGNALS. A VISUAL AND AUDIBLE SIGNAL SHALL BE PROVIDED AT EACH HOISTWAY ENTRANCE TO INDICATE WHICH CAR IS ANSWERING A CALL AND THE CARS' DIRECTION OF TRAVEL. WHERE IN-CAR SIGNALS ARE PROVIDED THEY SHALL BE VISIBLE FROM THE FLOOR AREA ADJACENT TO THE HALL CALL BUTTONS. VISIBLE SIGNAL FIXTURES SHALL BE CENTERED AT 72" MINIMUM ABOVE THE FLOOR. THE VISUAL SIGNAL ELEMENTS SHALL BE 2.5 INCHES MINIMUM MEASURED ALONG THE VERTICAL CENTERLINE OF THE ELEMENT. SIGNALS SHALL BE VISIBLE FROM THE FLOOR AREA ADJACENT TO THE HALL CALL BUTTON. AUDIBLE SIGNALS SHALL SOUND ONCE FOR THE UP DIRECTION AND TWICE FOR THE DOWN DIRECTION AT MAXIMUM FREQUENCY OF 1500 HZ, OR SHALL HAVE VERBAL ANNUCIATORS THAT STATE THE WORD "UP" OR "DOWN" BETWEEN A FREQUENCY OF 300 AND 3,000 HZ. THE AUDIBLE SIGNAL OR VERBAL ANNUCIATOR SHALL BE 10 DBA MINIMUM ABOVE AMBIENT BUT SHALL NOT EXCEED 80 DBA, MEASURED AT THE HALL CALL BUTTON.

407.2.3 HOISTWAY SIGNS. FLOOR DESIGNATIONS SHALL BE PROVIDED IN TACTILE CHARACTERS LOCATED ON BOTH JAMBS OF THE ELEVATOR HOISTWAY ENTRANCES. TACTILE CHARACTERS SHALL BE 2" MINIMUM IN HEIGHT. A TACTILE STAR SHALL BE PROVIDED ON BOTH JAMBS AT THE MAIN ENTRY LEVEL.

407.3.2 ELEVATOR DOORS SHALL BE HORIZONTAL SLIDING TYPE. CAR GATES SHALL BE PROHIBITED. ELEVATOR HOISTWAY AND CAR DOORS SHALL OPEN AND CLOSE AUTOMATICALLY.

407.3.3 REOPENING DEVICE. ELEVATOR DOORS SHALL BE PROVIDED WITH A REOPENING DEVICE COMPLYING WITH SECTION 703.3 OF ANSI A117.1 THAT SHALL STOP AND REOPEN A CAR DOOR AND HOISTWAY DOOR AUTOMATICALLY IF THE DOOR BECOMES OBSTRUCTED BY AN OBJECT OR PERSON. THE REOPENING DEVICE SHALL REMAIN EFFECTIVE FOR 20 SECONDS MINIMUM.

407.3.4 DOOR AND SIGNAL TIMING. THE MINIMUM ACCEPTABLE TIME FROM THE NOTIFICATION THAT A CAR IS ANSWERING A CALL UNTIL THE DOORS OF THAT CAR START TO CLOSE SHALL BE CALCULATED FROM THE FOLLOWING EQUATION:

T = D/(1.5 FT/S) OR T = D/ (455MM/S) = 5 SECONDS MINIMUM.

WHERE T = THE TOTAL TIME IN SECONDS AND D = THE DISTANCE (IN FEET OR MILLIMETERS) FROM THE POINT IN THE LOBBY OR CORRIDOR 60 INCHES DIRECTLY IN FRONT OF THE FARTHEST CALL BUTTON CONTROLLING THAT CAR TO THE CENTERLINE OF THE DOOR.

407.3.5 DOOR DELAY. ELEVATOR DOORS SHALL REMAIN FULLY OPEN IN RESPONSE TO A CAR CALL FOR 3 SECONDS MINIMUM.

407.4.1 CAR DIMENSIONS. INSIDE OF CAR DIMENSIONS SHALL COMPLY WITH TABLE 407.4.1 AS MODIFIED BY BC 3002.4 STATING THE MINIMUM INSIDE DIMENSIONS OF ELEVATOR CARS SHALL ACCOMMODATE A 24' BY 76' HOSPITAL STRETCHER.

407.4.2 FLOOR SURFACES IN ELEVATORS SHALL BE STABLE, FIRM, AND SLIP RESISTANT AND SHALL COMPLY WITH SECTION 302 OF ICC/ANSI A117.1.

407.4.5 ILLUMINATION. THE LEVEL OF ILLUMINATION AT THE CAR CONTROLS, PLATFORM, CAR THRESHOLD AND CAR LANDING SILL SHALL BE A 5 FOOT-CANDLES (54 LUX) MINIMUM.

407.4.6 ELEVATOR CAR CONTROLS. CONTROLS SHALL BE LOCATED 15-48" ABOVE THE GROUND MEASURED TO THE CENTER LINE OF THE HIGHEST OPERABLE POINT. EXCEPTION WHERE THE ELEVATOR SERVES MORE THAN 16 OPENINGS AND A PARALLEL APPROACH TO THE CONTROLS IS PROVIDED, IN WHICH CASE BUTTONS WITH FLOOR DESIGNATIONS SHALL BE PERMITTED TO BE 54 INCHES MAXIMUM ABOVE THE FLOOR.

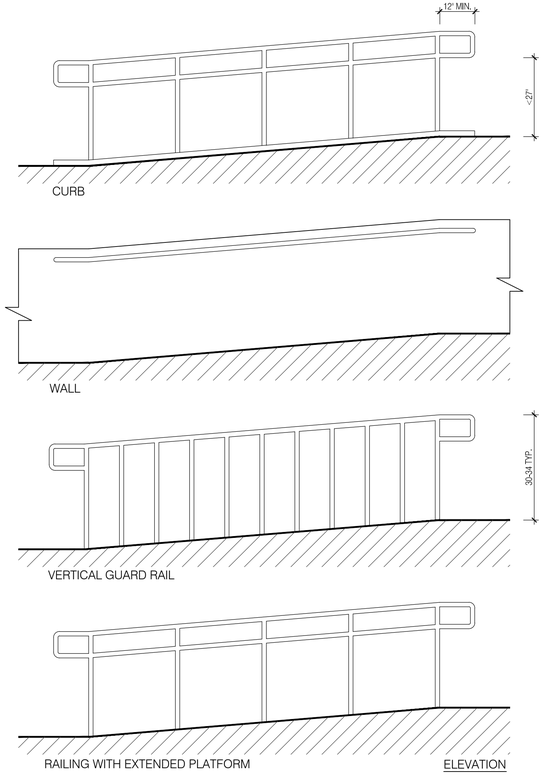
407.4.6.2 CAR CONTROL BUTTONS WITH FLOOR DESIGNATIONS SHALL BE RAISED OR FLUSH, AND 3/4 INCH MINIMUM IN THEIR SMALLEST DIMENSION. BUTTONS SHALL BE ARRANGED IN ASCENDING ORDER. WHEN TWO OR MORE COLUMNS OF BUTTONS ARE PROVIDED THEY SHALL BE READ FROM LEFT TO RIGHT.

407.4.6.4 EMERGENCY CONTROLS. EMERGENCY CONTROL BUTTONS SHALL HAVE THEIR CENTERLINES 35 INCHES MINIMUM ABOVE THE FLOOR. EMERGENCY CONTROLS, INCLUDING THE EMERGENCY ALARM SHALL BE GROUPED AT THE BOTTOM OF THE PANEL.

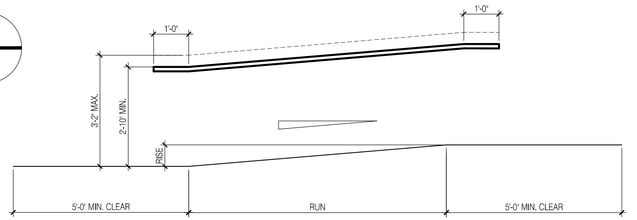
407.4.7 DESIGNATIONS AND INDICATORS OF CAR CONTROLS. CONTROL BUTTONS SHALL BE IDENTIFIED BY TACTILE CHARACTERS COMPLYING WITH SECTION 703.3. TACTILE CHARACTER AND BRAILLE DESIGNATIONS SHALL BE PLACED IMMEDIATELY TO THE LEFT OF THE CONTROL BUTTON TO WHICH THE DESIGNATIONS APPLY. BUTTONS WITH FLOOR DESTINATIONS SHALL BE PROVIDED WITH VISIBLE INDICATORS TO SHOW THAT A CALL HAS BEEN REGISTERED. THE VISIBLE INDICATION SHALL EXTINGUISH WHEN THE CAR ARRIVES AT THE DESIGNATED FLOOR.

407.4.9 CAR POSITION INDICATORS. AUDIBLE AND VISIBLE CAR POSITION INDICATORS SHALL BE PROVIDED IN ELEVATOR CARS. VISIBLE INDICATORS SHALL BE LOCATED ABOVE THE CAR CONTROL PANELS OR ABOVE THE DOOR; CHARACTERS SHALL BE 1/2 INCH HIGH MINIMUM IN HEIGHT. AS THE CAR PASSES A FLOOR AND WHEN A CAR STOPS AT A FLOOR SERVED BY THE ELEVATOR, THE CORRESPONDING CHARACTER SHALL ILLUMINATE. AUDIBLE INDICATORS SHALL SIGNAL AS AN AUTOMATIC VERBAL ANNUNCIATOR THE ANNOUNCES THE FLOOR AT WHICH THE CAR IS ABOUT TO STOP; THE VERBAL ANNOUNCEMENT INDICATING THE FLOOR SHALL BE COMPLETED PRIOR TO THE INITIATION OF THE DOOR OPENING. THE VERBAL ANNUCIATOR SHALL BE 10 DBA MINIMUM ABOVE AMBIENT BUT SHALL NOT EXCEED 60 DBA, MEASURED AT THE ANNUNCIATOR.

407.4.10 EMERGENCY COMMUNICATIONS. EMERGENCY TWO WAY COMMUNICATION SYSTEMS BETWEEN THE ELEVATOR CAR AND A POINT OUTSIDE THE HOISTWAY SHALL COMPLY WITH SECTION 407.4.10 AND ASME/ANSI A17.1 LISTED IN SECTION 105.2.5. THE MIDPOINT OF THE HIGHEST OPERABLE PART OF A TWO WAY COMMUNICATION SYSTEM SHALL NOT EXCEED 48 INCHES; TACTILE CHARACTERS AND SYMBOLS SHALL BE PROVIDED ADJACENT TO THE DEVICE IN COMPLIANCE WITH SECTIONS 703.3 AND 407.4.7.1.3 OF ICC/ANSI A117.1-2003.

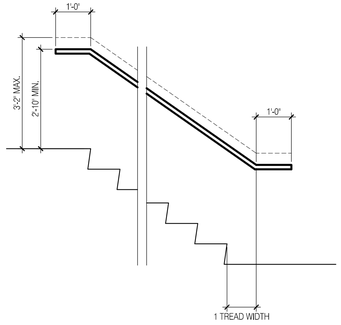


EXAMPLES OF EDGE PROTECTION & HANDRAIL EXTENSIONS

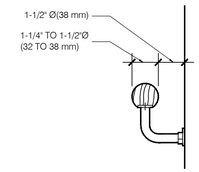


SLOPE	MAXIMUM RISE	MAXIMUM RUN
1:12 TO 1:15	30 INCHES	30 FEET
1:16 TO 1:19	30 INCHES	40 FEET
1:20	30 INCHES	50 FEET

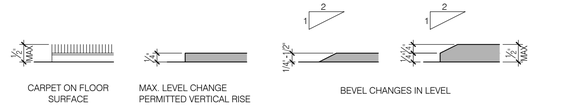
RAMP REQUIREMENTS



HANDRAIL REQUIREMENTS FOR STAIRS

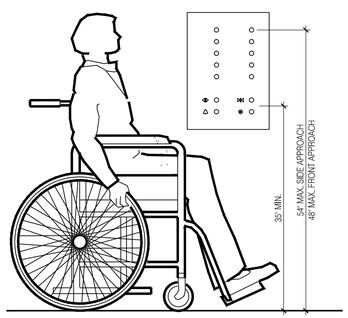


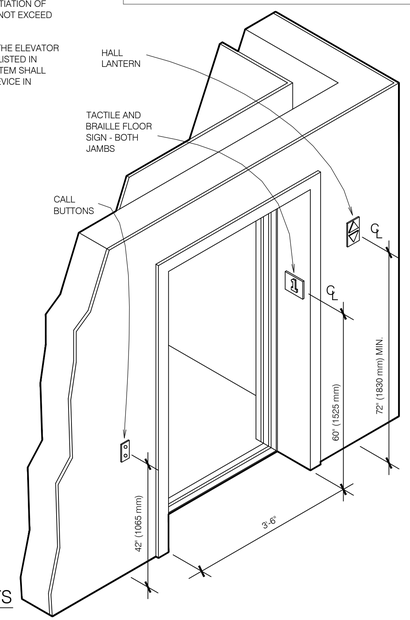
HANDRAIL REQUIREMENTS
(WALL MOUNTED)



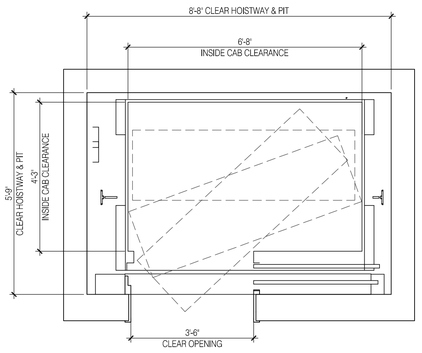
CARPET ON FLOOR SURFACE — MAX. LEVEL CHANGE PERMITTED VERTICAL RISE — BEVEL CHANGES IN LEVEL

HEIGHT CHANGES AND FLOOR SADDLES





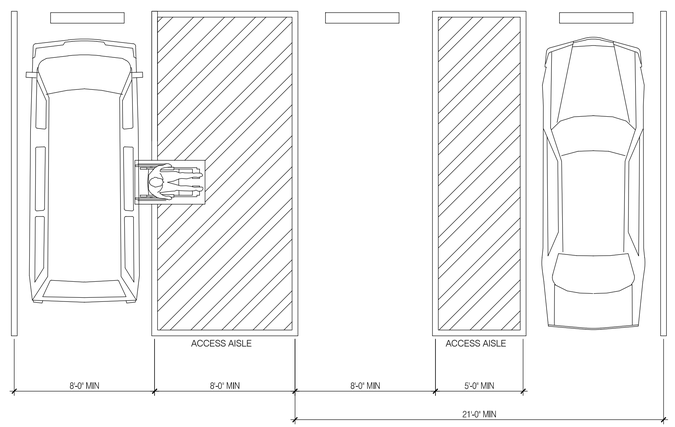
ELEVATOR REQUIREMENTS



STANDARD 2500 LBS. CAPACITY CAR

-76" X 24" STRETCHER SHOWN DOTTED;OK TO MANUEVER (BC 3002)

-ELEVATOR HOISTWAY AND HOISTWAY DOOR ASSEMBLY TO HAVE A 2 HOUR FIRE RATING (BC 3001, BC 3002)



NOTE:
1. PROVIDE AT LEAST (1) 96" WIDE ACCESS AISLE FOR LESS THAN 30 PARKING SPACES.
2. PROVIDE AT LEAST (2) 96" WIDE ACCESS AISLES FOR 30 OR MORE PARKING SPACES.

DIMENSIONS OF PARKING SPACES

KEY PLAN

BLOCK 2571 LOT 1

issue	rev	date	description
1	1	2014/11/25	ISSUED TO D.O.B.
		2014-02--	ISSUE TO THE DOB

ISSUES/REVISIONS

MEP ENGINEER:

STRUCTURAL ENGINEER:

CLIENT

KARL FISCHER ARCHITECT
OAQ RAIC AIA
530 BROADWAY, 9th FLOOR, NEW YORK, NY 10012
TEL: (212) 219-9733 FAX: (212) 219-8980
1420 NOTRE-DAME WEST, MONTREAL, QC H3C 1K9
TEL: (514) 933-4137 FAX: (514) 933-0409
WEB SITE: WWW.KFARCHITECT.COM
E-MAIL:KARL@KFARCHITECT.COM

SEAL

project title

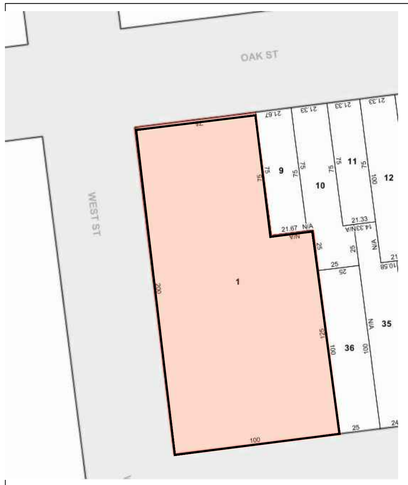
BLOCK 2571 LOT 1
26 WEST STREET, BROOKLYN, 11222

drawing title

ADA NOTES & DETAILS

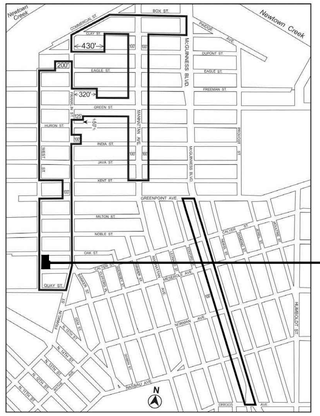
dob no

scale: NTS	project no.: 14-45
date:	sheet no.: ---OF
drawn:	drawing no.: G-007.00
checked:	



1 DIGITAL TAX MAP
Z-001 SCALE: –

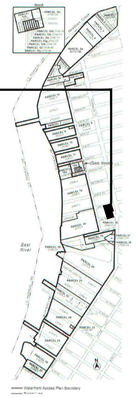
Map 1 - (12/10/12)



Portion of Community District 1, Brooklyn

2 INCLUSIONARY HOUSING MAP
Z-001 SCALE:

(f) Greenpoint-Williamsburg Waterfront Access Plan Maps
BK-1a: Parcel Designation (62-931f.1)



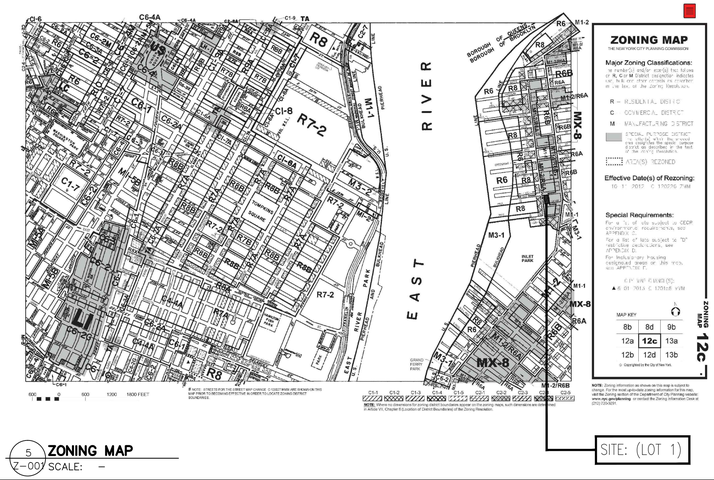
SITE: (LOT 1)

3 BK-1a: PARCEL DESIGNATION
Z-001 SCALE:

SITE: (LOT 1)

4 FEMA FLOOD MAP
Z-001 SCALE: –

6 E-DESIGNATION MAP
Z-001 SCALE: –



5 ZONING MAP
Z-001 SCALE: –

ZONING ANALYSIS

ADDRESS:	26 WEST STREET, BROOKLYN NY 11222
Block:	2571
Lot(s):	1
Zoning District(s):	M1-2 R6A (MX-8)
Zoning Map:	12C
Total Lot Area	18125
Community Board:	1 BROOKLYN
Inclusionary Housing	YES
Flood Zone	ZONE AE
Environmental Designation	E-138, HAZMAT

Applicable ZR Section	Item	Required/Permitted	Proposed	Compliance
Use Regulations				
22-00	General Provisions. Uses Permitted	UG 1-9	UG 2	Complies
Bulk Regulations - RESIDENTIAL BUILDING				
23-011	Quality Housing Program	Any Building in R6A shall comply with requirements of chapter 8, quality housing program	Quality housing program requirements are provided as required in R6A residential Districts.See requirements below	Complies
23-02	Applicability of Residential District Bulk Regulations			
23-03 /26/41	Street Tree Planting	Street Tree Planting shall be provided in accordance with Section 26-41 (Street Tree Planting) 1 tree/25ft:	Street Tree Planting provided in accordance with Section 26-41: 1tree/25ft	
23-04/26/42	Planting Strips	Planting Strips shall be provided in accordance with Section 26-42:	Planting Strips provided in accordance with Section 26-42:	
26-41				
23-10	Open Space and Floor Area Regulations			
23-145	For Quality Housing Buildings	Maximum Lot Coverage for Corner Lot: 80%	Lot Coverage: 70.9% (Oak street) and 45.80% (Calyer street)	complies
23-952	**Inclusionalry Housing**	**Maximum Base Floor area Ratio:2.70** **Maximum permitted zoning floor area: 48937.5 sf**	**Floor Area Ratio proposed: 2.71** **Floor Area proposed: 49038.15 sf**	
23-22	Maximum Number of Dwelling Units	Permitted Zoning Floor Area/680 = 48937.5/680 = 72 units	72	Complies
23-40	Yard Regulations			
23-46	Minimum Required Side Yards	Side Yard = 0'-0" or 8'-0"	No side yard provided	complies
23-541	Rear Yard within one hundred feet of corners	no rear yard shall be required		complies
23-60	Height and Setback Regulations			
23-633 (a)	Street Wall Location and Height and Setback	in R6A, the street wall shall be located no closer to the street line than the closest street wall of an existing building to such street line located on the same block, and within 150 ft. of such development. however the street wall need not to be located further from the street line more than 15 ft.	The building wall is located on the street line.Building is not aligned on Calyer St. However, the provisions of this section only apply to one street frontage on a corner lot. Building aligns on West St., so this is acceptable. Please see the site plan A-010	complies
23-633 (d)	Min. & Max Base Height and Max Building Height	Min. Base Height = 40'-0" Max Base Height = 60'-0" Maximum Building Height = 70'-0"	Base Height = 60'-0" Building Height = 70'-0"	complies
64-00	Special Regulations Applying in Flood Hazard Areas		see Z-020 FEMA	
64-131	Measurement of height	All measurements of the building should be done from #flood-resistant construction elevation#.	Building height measured from D.F.E (designed flood elevation) Apendix G, Section 6.2	complies
62-10/ 12-10	Waterfront area	Property is not on a waterfront lot.	N/A	
62-9311.1	Waterfront access plan BK-1	Property is not in waterfront areat. (see	N/A	
Accessory Off-Street Parking and Loading Regulations				
25-20	Required Accessory Off-Street Parking Spaces For Residence			complies
25-23	Accessory parking	50% of number of dwelling units_ 72x 0.50= 36	36	
25-621(c)	Location of parking spaces	(c)Accessory off-street parkingoff-street parking spaces shall be located only within or to the side or rear of #buildings# containing #residences#. No parking spaces of shall be permitted between the #street line# and the #street wall# of such #buildings#.	Parking location complies.	complies
25-80	Bicycle Parking			
25-811	Enclosed Bicycle Parking Spaces	1 bicycle parking for each 2 dwelling units is required(15sf per parking) Max required spaces= 72 x 0.5 =36 spaces (36x15sf=540sf)	36 spaces (540 sf)	Complies
25-83	Restrictions on Operations, Size and Location of Bicycle Parking spaces	All enclosed bicycle parking spaces shall be provided on the same zoning lot as the building. All enclosed bicycle parking's spaces shall be surrounded on all sides by solid enclosure, except where a parking garage is open at the sides, and covered by a roof for weather protection. Each bicycle space shall adjoin a rack or similar system for securing the bicycle. 15 s.f. of area shall be provided for each bicycle space. Max Required area =36 x 15 = 540 s.f. A plaque shall be placed at the exterior of the entry to the bicycle parking area with lettering at least 3/4 in. in height stating "Bicycle Parking".	All Bicycle Parking spaces are enclosed with the signage as required. See 1st Floor Plan (A-101)	Complies
Quality Housing requirements				
28-12/26-41	Street Tree planting	1 tree/25' street frontage, 3" min caliper ; 375ft frontage/25=15 200ft frontage West street = 8trees 75ft frontage Oak street= 3 trees 100ft frontage Calyer street= 4 trees	8 provided 3 provided 4 provided	complies complies complies complies
28-21	Size of dwelling units	400 sf min		complies
28-22	Windows	all residential windows to be double-glazed	provided	complies
28-23	Refuse storage and disposal	2.9 cuft/ unit 2.9 x 45 units = 130.5 sf		
28-24	Laundry Facilities	1 w.m./ 20 d.u. + 1 dryer/40 d.u. = 40 UNITS/20 = 2 req.W.m. 1 req. Dr	W+D provided in dwelling units	complies
28-25	Daylight in Corridor: excl. 50% FA	exterior window 20 sf min., visible from 50 % of corridor or vertical core		
28-31	Req'd recreation space	3.3% of residential FA 49038.15 sf x 3.3 % = 1620 sf	1618 sf provided	complies
28-32	Standards for rec. space			complies
28-33	Planting Areas	area between street and proposed building	provided	complies

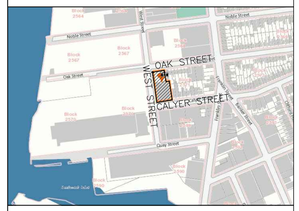
26 WEST STREET , BROOKLYN 112222, AREA CHART - 2014-07-21

Floor	Residential Gross Floor Area	Deductions							TOTAL DEDUCTION BUILDING "A"	Residential Net for FAR Building "A"
		Recreation Room	Open to below	Daylight in Corridor 50%	Bicycle Storage	Refuse room	Mechanical	Parking		
1st	**10,139.00**				540.00		1,083.80	**6,236.30**	**7,860.10**	2,278.90
2	**10,129.00**		849.70	501.05	53.00	12.00	157.50		**1,573.25**	8,555.75
3	**10,280.70**	495.00		501.05	53.00	12.00	160.60		**1,221.65**	9,059.05
4	**10,280.70**			501.05	53.00	12.00	167.60		**733.65**	9,547.05
5	**10,280.70**			501.05	53.00	12.00	167.60		**733.65**	9,547.05
6	**10,280.70**			501.05	53.00	12.00	167.60		**733.65**	9,547.05
ROOF	**531.80**		132.60						**132.60**	399.20
Total Gross Area Above Grade	**61,922.60**	**495.00**	**982.30**	**2,505.25**	**805.00**	**60.00**	**1,904.70**	**6,236.30**	**12,988.55**	**48,934.05**

AREA OF ZONING LOT 1	18,125.00
ZR 23-952 MAXIMUM PERMITTED RESIDENTIAL FAR IN (MX) R6A	2.70
MAXIMUM PERMITTED RESIDENTIAL FLOOR AREA	48,937.50

PROPOSED TOTAL GROSS FLOOR AREA ABOVE GRADE	**61922.60**
PROPOSED TOTAL ZONING FLOOR AREA	**48934.05**
PROPOSED TOTAL FAR :	**2.70**
UNDERBUILT BY:	-3.45

KEY PLAN



BLOCK 2571 LOT 1

issue	rev	date	description
1		2014/11/25	ISSUED TO D.O.B.

ISSUES/REVISIONS

MEP ENGINEER:

STRUCTURAL ENGINEER:

CLIENT

KARL FISCHER ARCHITECT
OAQ RAIC AIA
530 BROADWAY, 9th FLOOR, NEW YORK, NY 10012
TEL: (212) 219-9733 FAX: (212) 219-8980
1420 NOTRE-DAME WEST, MONTREAL, QC H3C 1K9
TEL: (514) 933-4137 FAX: (514) 933-0409
WEB SITE: WWW.KFARCHITECT.COM
E-MAIL:KARL@KFARCHITECT.COM

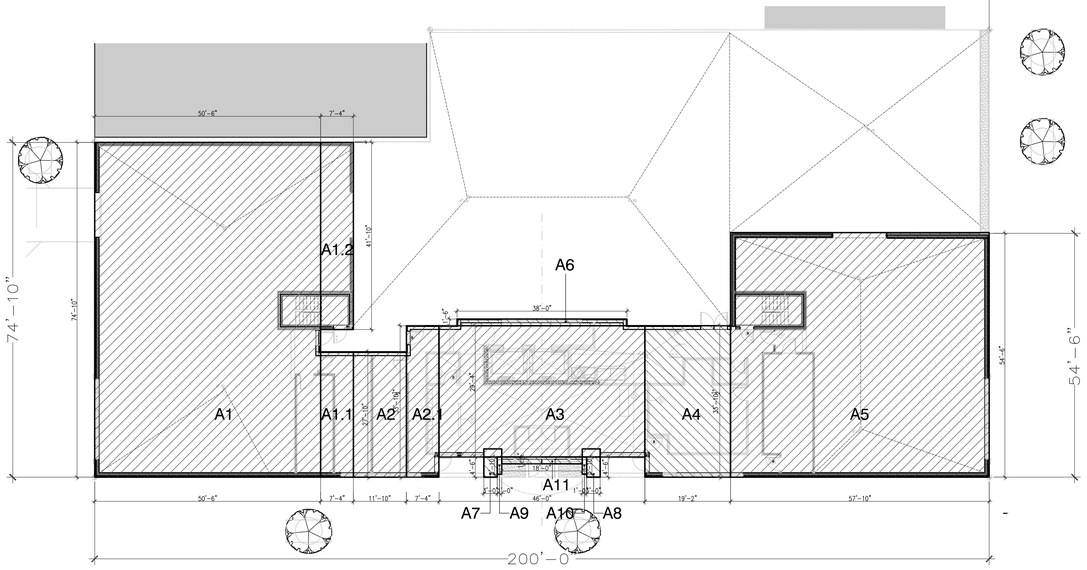
SEAL
REGISTERED ARCHITECT KARL FISCHER 021282 STATE OF NEW YORK

project title
BLOCK 2571 LOT 1
26 WEST STREET, BROOKLYN, 11222

drawing title
SITE PLAN AND ZONING

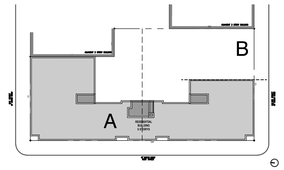
dob no

scale 1/16"=1'-0"	project no. 14-45
date 2014-04-02	sheet no. OF
drawn	drawing no. Z-001
checked	

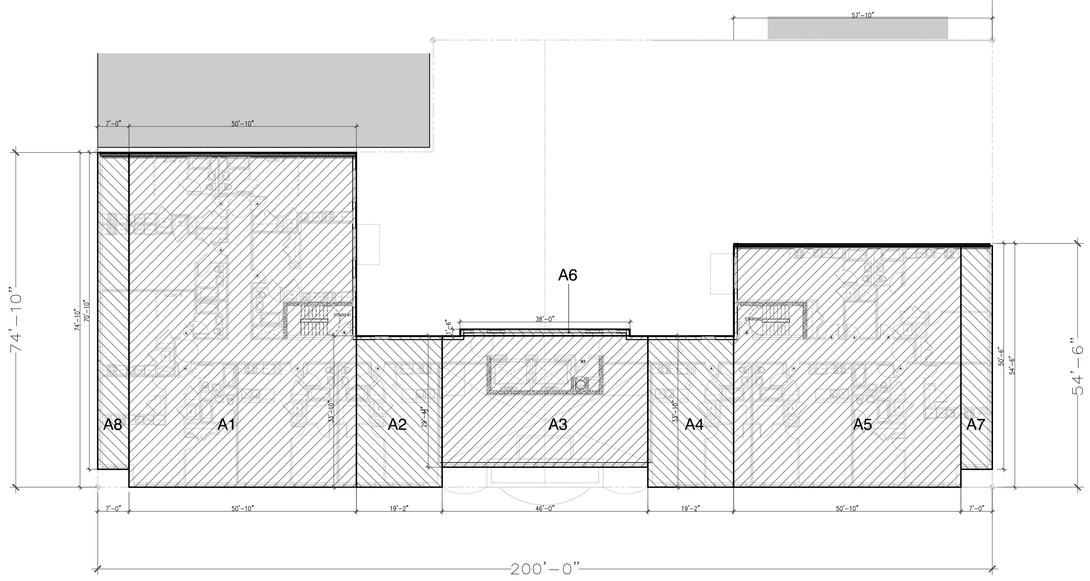


1 Z-002 **FIRST FLOOR GROSS AREA DIAGRAM**
SCALE: 1/16"=1'-0"

RESIDENTIAL BUILDING			
	GROSS AREA CALCULATION		
TAG	LENGTH	WIDTH	AREA
A1	50'-6"	74'-10"	3779.1 SQ. FT.
A1.1	7'-4"	27'-10"	204.1 SQ. FT.
A1.2	7'-4"	41'-10"	306.8 SQ. FT.
A2	11'-10"	27'-10"	329.4 SQ. FT.
A2.1	7'-4"	33'-10"	248.1 SQ. FT.
A3	46'-0"	29'-4"	1349.3 SQ. FT.
A4	19'-2"	34'-0"	651.7 SQ. FT.
A5	57'-10"	54'-6"	3151.9 SQ. FT.
A6	38'-0"	1'-6"	57.0 SQ. FT.
A7	3'-0"	4'-6"	13.5 SQ. FT.
A8	3'-0"	4'-6"	13.5 SQ. FT.
A9	1'-0"	3'-10"	3.8 SQ. FT.
A10	1'-0"	3'-10"	3.8 SQ. FT.
A11	18'-0"	1'-6"	27.0 SQ. FT.
TOTAL			10139.0 SQ. FT.



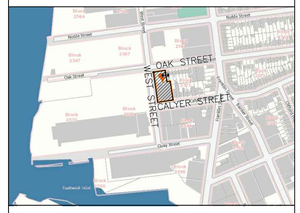
2 Z-011 **KEY PLAN**
SCALE: 1/64"=1'-0"



RESIDENTIAL BUILDING			
	GROSS AREA CALCULATION		
TAG	LENGTH	WIDTH	AREA
A1	50'-10"	74'-10"	3804.0 SQ. FT.
A2	19'-2"	33'-10"	648.5 SQ. FT.
A3	46'-0"	29'-4 1/2"	1351.3 SQ. FT.
A4	19'-2"	33'-10"	648.5 SQ. FT.
A5	50'-10"	54'-6"	2770.4 SQ. FT.
A6	38'-0"	1'-6"	57.0 SQ. FT.
A7	7'-0"	50'-6"	353.5 SQ. FT.
A8	7'-0"	70'-10"	495.8 SQ. FT.
TOTAL			10129.0 SQ. FT.

2 Z-002 **SECOND FLOOR GROSS AREA DIAGRAM**
SCALE: 1/16"=1'-0"

KEY PLAN



BLOCK 2571 LOT 1

issue	rev	date	description
1		2014/11/25	ISSUED TO D.O.B.

ISSUES/REVISIONS

MEP ENGINEER:

STRUCTURAL ENGINEER:

CLIENT

KARL FISCHER ARCHITECT
OAQ RAIC AIA
530 BROADWAY, 9th FLOOR, NEW YORK, NY 10012
TEL: (212) 219-9733 FAX: (212) 219-8980
1420 NOTRE-DAME WEST, MONTREAL, QC H3C 1K9
TEL: (514) 933-4137 FAX: (514) 933-0409
WEB SITE: WWW.KFARCHITECT.COM
E-MAIL:KARL@KFARCHITECT.COM

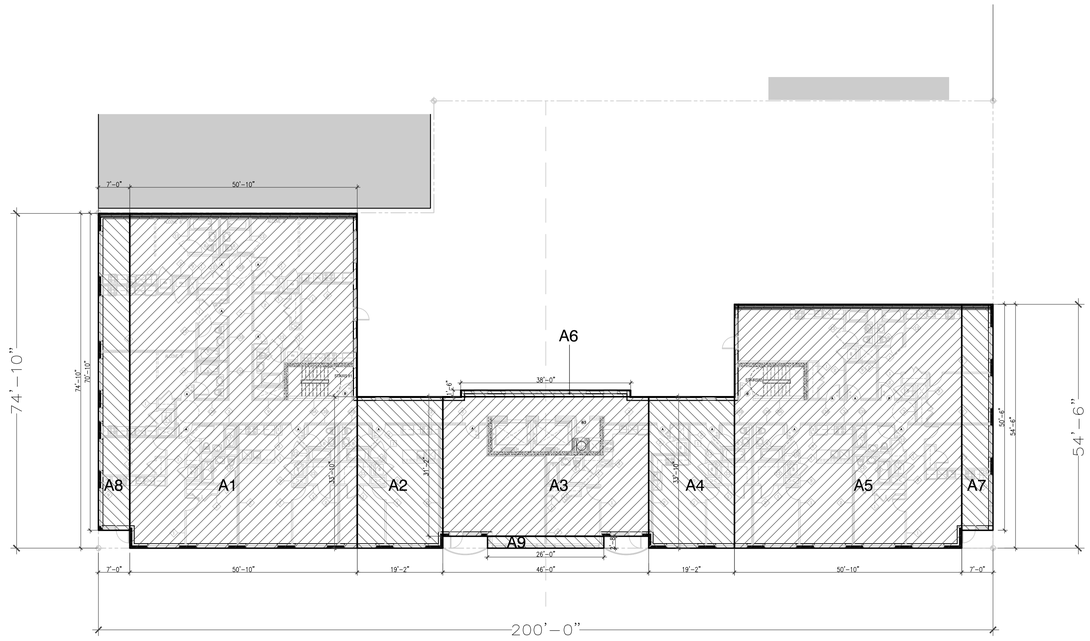
SEAL
REGISTERED ARCHITECT KARL FISCHER 021282 STATE OF NEW YORK

project title
NEW MIXED USE PROJECT
BLOCK 2571 LOT 1
26 WEST STREET, BROOKLYN, 11222

drawing title
ZONING AREA CALCULATIONS

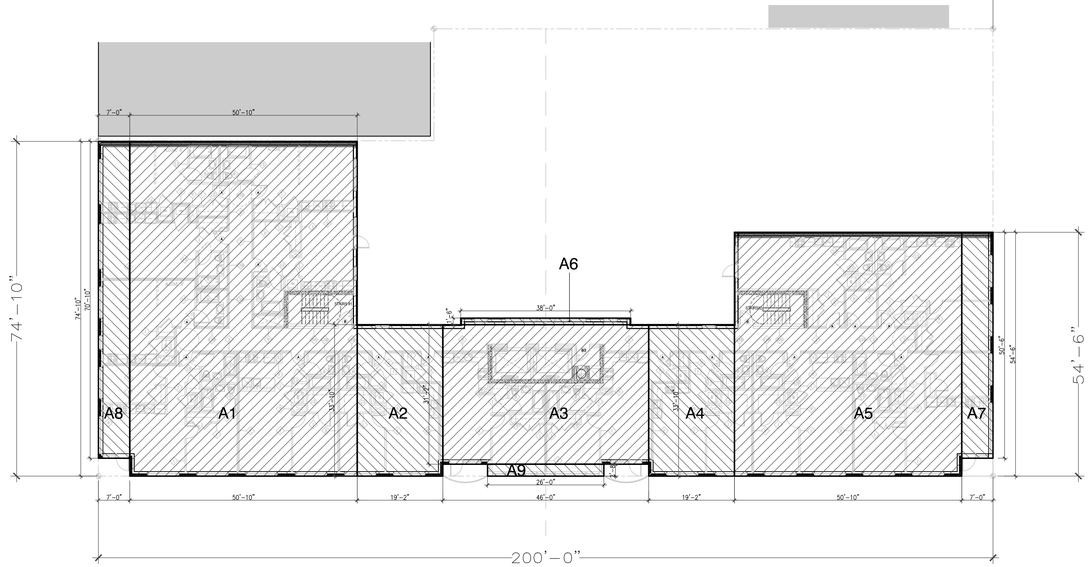
dob no

scale 1/16"=1'-0"	project no. 14-45
date 2014-07-09	sheet no. OF
drawn SW	drawing no. Z-002
checked	



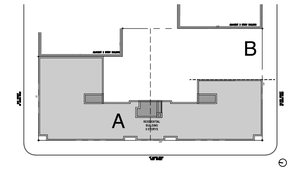
RESIDENTIAL BUILDING			
	GROSS AREA CALCULATION		
TAG	LENGTH	WIDTH	AREA
A1	50'-10"	74'-10"	3804.0 SQ. FT.
A2	19'-2"	33'-10"	648.5 SQ. FT.
A3	46'-0"	31'-2"	1433.7 SQ. FT.
A4	19'-2"	33'-10"	648.5 SQ. FT.
A5	50'-10"	54'-6"	2770.4 SQ. FT.
A6	38'-0"	1'-6"	57.0 SQ. FT.
A7	7'-0"	50'-6"	353.5 SQ. FT.
A8	7'-0"	70'-10"	495.8 SQ. FT.
A9	26'-0"	2'-8"	69.3 SQ. FT.
TOTAL			10280.7 SQ. FT.

1 Z-003 **3RD FLOOR GROSS AREA DIAGRAM**
SCALE: 1/16"=1'-0"



RESIDENTIAL BUILDING			
	GROSS AREA CALCULATION		
TAG	LENGTH	WIDTH	AREA
A1	50'-10"	74'-10"	3804.0 SQ. FT.
A2	19'-2"	33'-10"	648.5 SQ. FT.
A3	46'-0"	31'-2"	1433.7 SQ. FT.
A4	19'-2"	33'-10"	648.5 SQ. FT.
A5	50'-10"	54'-6"	2770.4 SQ. FT.
A6	38'-0"	1'-6"	57.0 SQ. FT.
A7	7'-0"	50'-6"	353.5 SQ. FT.
A8	7'-0"	70'-10"	495.8 SQ. FT.
A9	26'-0"	2'-8"	69.3 SQ. FT.
TOTAL			10280.7 SQ. FT.

2 Z-003 **4TH FLOOR GROSS AREA DIAGRAM**
SCALE: 1/16"=1'-0"



2 Z-011 **KEY PLAN**
SCALE: 1/64"=1'-0"

KEY PLAN

BLOCK 2571 LOT 1

issue	rev	date	description
1		2014/11/25	ISSUED TO D.O.B.

ISSUES/REVISIONS

MEP ENGINEER:

STRUCTURAL ENGINEER:

CLIENT

KARL FISCHER ARCHITECT
OAQ RAIC AIA
530 BROADWAY, 9th FLOOR, NEW YORK, NY 10012
TEL: (212) 219-9733 FAX: (212) 219-8980
1420 NOTRE-DAME WEST, MONTREAL, QC H3C 1K9
TEL: (514) 933-4137 FAX: (514) 933-0409
WEB SITE: WWW.KFARCHITECT.COM
E-MAIL:KARL@KFARCHITECT.COM

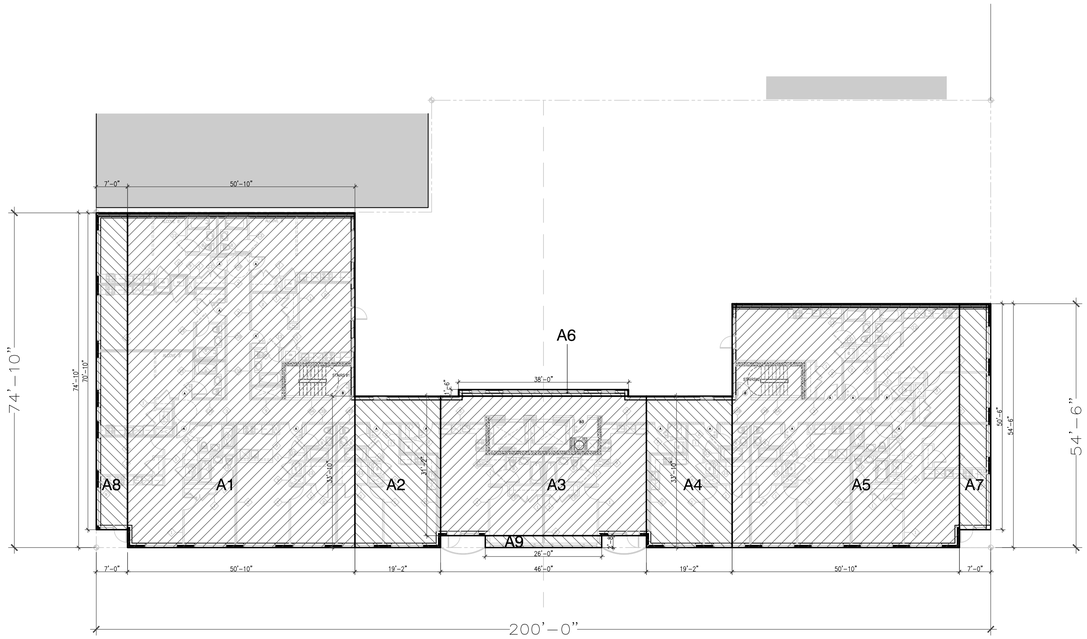
SEAL
REGISTERED ARCHITECT
KARL FISCHER
021282
STATE OF NEW YORK

project title
NEW MIXED USE PROJECT
BLOCK 2571 LOT 1
26 WEST STREET, BROOKLYN, 11222

drawing title
ZONING AREA CALCULATIONS

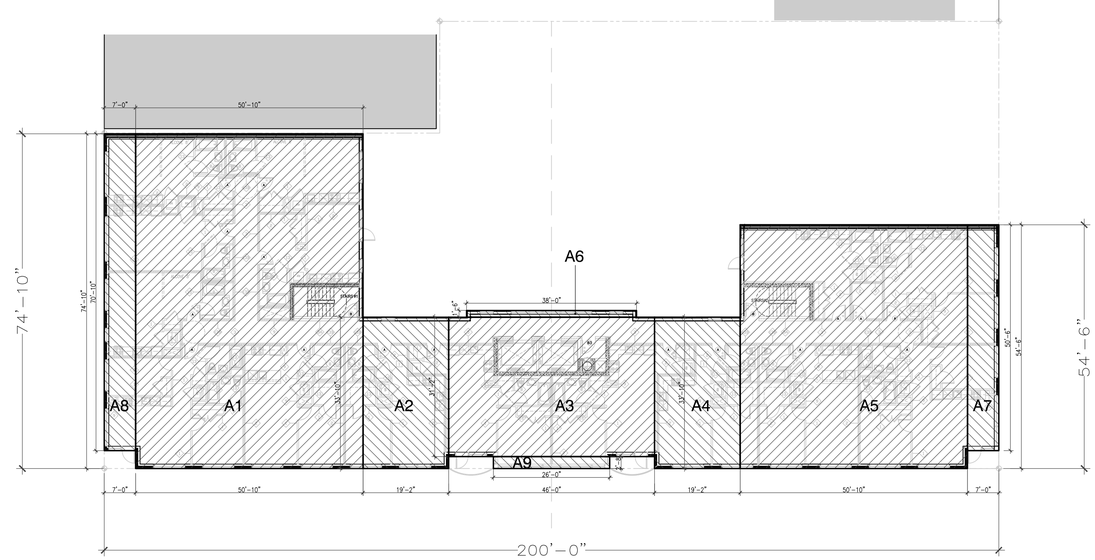
dob no

scale 1/16"=1'-0"	project no. 14-45
date 2014-07-09	sheet no. OF
drawn SW	drawing no. Z-003
checked	



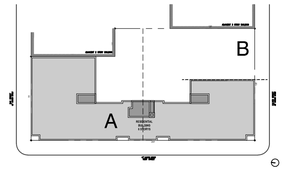
RESIDENTIAL BUILDING			
	GROSS AREA CALCULATION		
TAG	LENGTH	WIDTH	AREA
A1	50'-10"	74'-10"	3804.0 SQ. FT.
A2	19'-2"	33'-10"	648.5 SQ. FT.
A3	46'-0"	31'-2"	1433.7 SQ. FT.
A4	19'-2"	33'-10"	648.5 SQ. FT.
A5	50'-10"	54'-6"	2770.4 SQ. FT.
A6	38'-0"	1'-6"	57.0 SQ. FT.
A7	7'-0"	50'-6"	353.5 SQ. FT.
A8	7'-0"	70'-10"	495.8 SQ. FT.
A9	26'-0"	2'-8"	69.3 SQ. FT.
TOTAL			10280.7 SQ. FT.

1 / Z-004 **5TH FLOOR GROSS AREA DIAGRAM**
SCALE: 1/16"=1'-0"



RESIDENTIAL BUILDING			
	GROSS AREA CALCULATION		
TAG	LENGTH	WIDTH	AREA
A1	50'-10"	74'-10"	3804.0 SQ. FT.
A2	19'-2"	33'-10"	648.5 SQ. FT.
A3	46'-0"	31'-2"	1433.7 SQ. FT.
A4	19'-2"	33'-10"	648.5 SQ. FT.
A5	50'-10"	54'-6"	2770.4 SQ. FT.
A6	38'-0"	1'-6"	57.0 SQ. FT.
A7	7'-0"	50'-6"	353.5 SQ. FT.
A8	7'-0"	70'-10"	495.8 SQ. FT.
A9	26'-0"	2'-8"	69.3 SQ. FT.
TOTAL			10280.7 SQ. FT.

2 / Z-004 **6TH FLOOR GROSS AREA DIAGRAM**
SCALE: 1/16"=1'-0"



2 / Z-011 **KEY PLAN**
SCALE: 1/64"=1'-0"

KEY PLAN

BLOCK 2571 LOT 1

issue	rev	date	description
1		2014/11/25	ISSUED TO D.O.B.

ISSUES/REVISIONS

MEP ENGINEER:

STRUCTURAL ENGINEER:

CLIENT

KARL FISCHER ARCHITECT
OAQ RAIC AIA
530 BROADWAY, 9th FLOOR, NEW YORK, NY 10012
TEL: (212) 219-9733 FAX: (212) 219-8980
1420 NOTRE-DAME WEST, MONTREAL, QC H3C 1K9
TEL: (514) 933-4137 FAX: (514) 933-0409
WEB SITE: WWW.KFARCHITECT.COM
E-MAIL:KARL@KFARCHITECT.COM

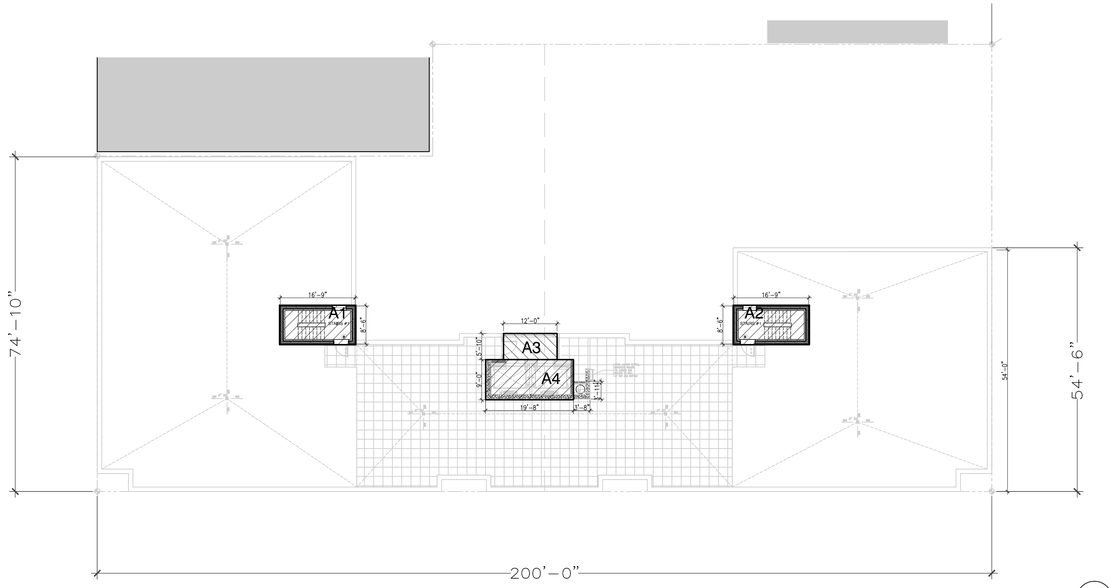
SEAL
REGISTERED ARCHITECT
KARL FISCHER
021282
STATE OF NEW YORK

project title
NEW MIXED USE PROJECT
BLOCK 2571 LOT 1
26 WEST STREET, BROOKLYN, 11222

drawing title
ZONING AREA CALCULATIONS

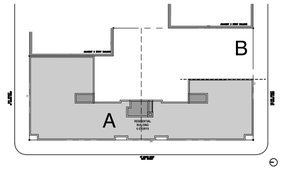
dob no

scale 1/16"=1'-0"	project no. 14-45
date 2014-07-09	sheet no. OF
drawn SW	drawing no. Z-004
checked	

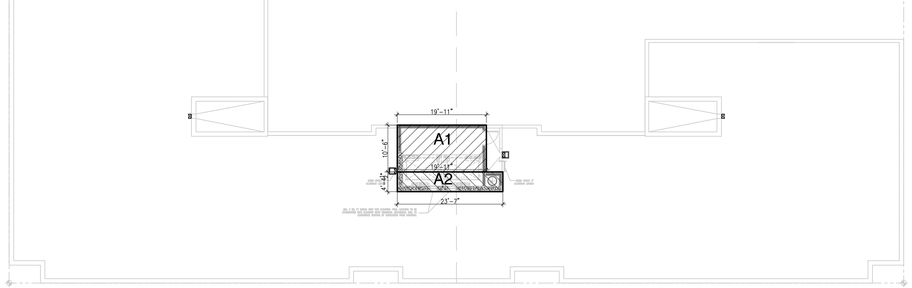


RESIDENTIAL BUILDING			
	GROSS AREA CALCULATION		
TAG	LENGTH	WIDTH	AREA
A1	16'-9"	8'-6"	142.4 SQ. FT.
A2	16'-9"	8'-6"	142.4 SQ. FT.
A3	12'-0"	5'-10"	70.0 SQ. FT.
A4	19'-8"	9'-0"	177.0 SQ. FT.
TOTAL			531.8 SQ. FT.

1 / Z-005 **ROOF GROSS AREA DIAGRAM**
SCALE: 1/16"=1'-0"



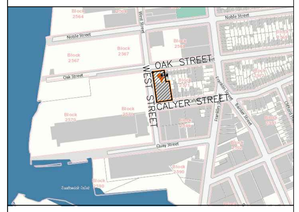
2 / Z-011 **KEY PLAN**
SCALE: 1/64"=1'-0"



RESIDENTIAL BUILDING			
	GROSS AREA CALCULATION		
TAG	LENGTH	WIDTH	AREA
A1	19'-11"	10'-6"	209.1 SQ. FT.
A2	23'-7"	4'-4 1/2"	103.2 SQ. FT.
TOTAL			312.3 SQ. FT.

2 / Z-005 **ROOF / E.M.R. GROSS AREA DIAGRAM**
SCALE: 1/16"=1'-0"

KEY PLAN



BLOCK 2571 LOT 1

issue	rev	date	description
1		2014/11/25	ISSUED TO D.O.B.

ISSUES/REVISIONS

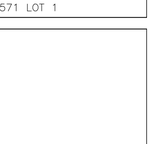
MEP ENGINEER:

STRUCTURAL ENGINEER:

CLIENT:

KARL FISCHER ARCHITECT
OAQ RAIC AIA
530 BROADWAY, 9th FLOOR, NEW YORK, NY 10012
TEL: (212) 219-9733 FAX: (212) 219-8980
1420 NOTRE-DAME WEST, MONTREAL, QC H3C 1K9
TEL: (514) 933-4137 FAX: (514) 933-0409
WEB SITE: WWW.KFARCHITECT.COM
E-MAIL:KARL@KFARCHITECT.COM

SEAL

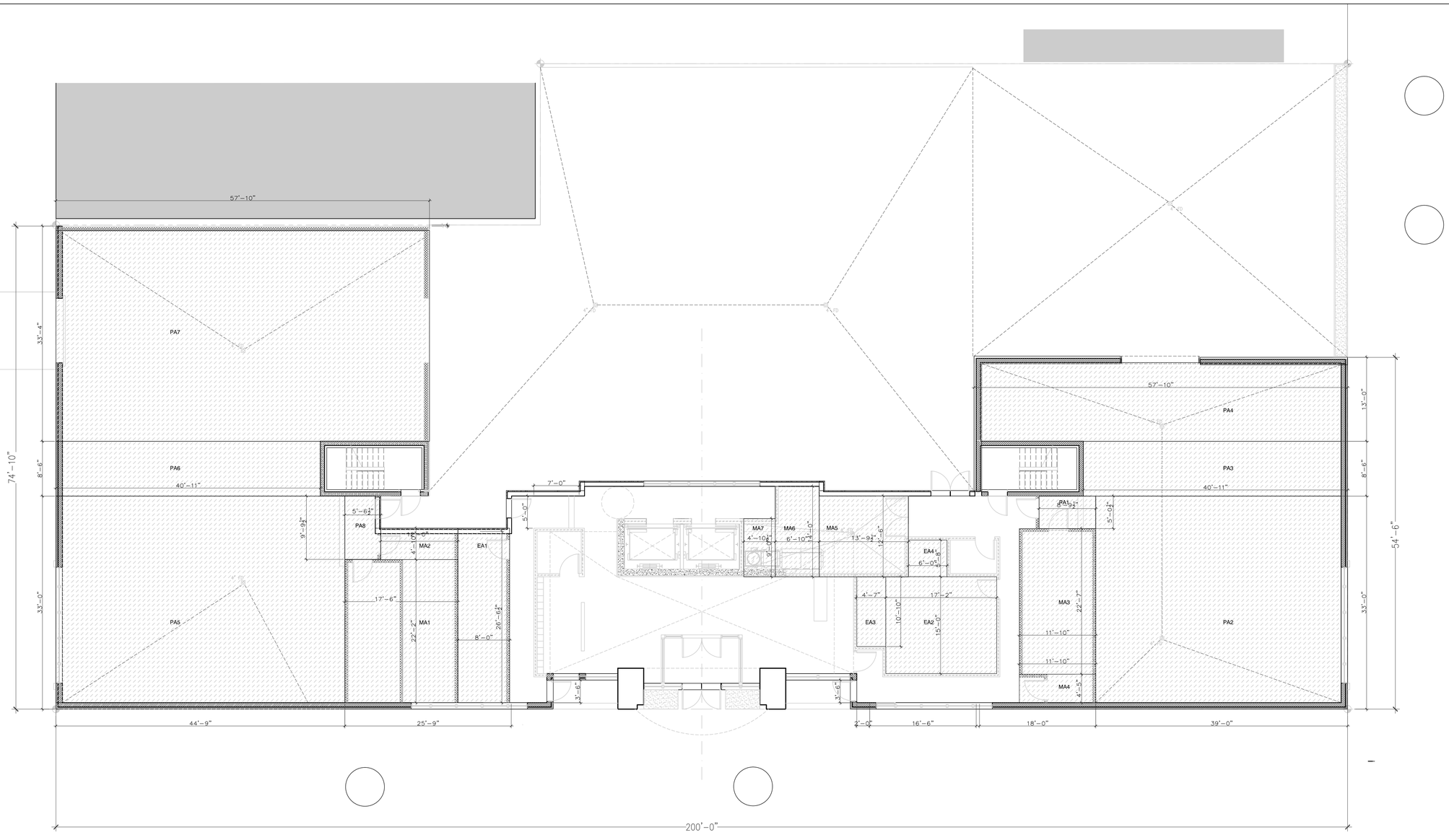


project title
NEW MIXED USE PROJECT
BLOCK 2571 LOT 1
26 WEST STREET, BROOKLYN, 11222

drawing title
ZONING AREA CALCULATIONS

dob no

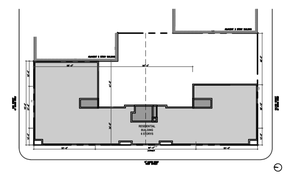
scale 1/16"=1'-0"	project no. 14-45
date 2014-07-09	sheet no. OF
drawn SW	drawing no. Z-005
checked	



	ACCESSORY OFF-STREET PARKING				
TAG	LENGTH	WIDTH	AREA	QUANTITY	TOTAL AREA
PA1	5'-0"	8'-9"	43.8 SQ. FT.	1	43.8 SQ. FT.
PA2	39'-0"	33'-0"	1287.0 SQ. FT.	1	1287.0 SQ. FT.
PA3	40'-11"	8'-6"	347.8 SQ. FT.	1	347.8 SQ. FT.
PA4	13'-0"	57'-10"	751.8 SQ. FT.	1	751.8 SQ. FT.
PA5	44'-9"	33'-0"	1476.8 SQ. FT.	1	1476.8 SQ. FT.
PA6	40'-11"	8'-6"	347.8 SQ. FT.	1	347.8 SQ. FT.
PA7	33'-4"	57'-10"	1927.8 SQ. FT.	1	1927.8 SQ. FT.
PA8	5'-6"	9'-9"	53.6 SQ. FT.	1	53.6 SQ. FT.
TOTAL					6236.3 SQ. FT.

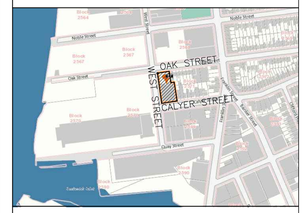
	MECHANICAL DEDUCTIONS				
TAG	LENGTH	WIDTH	AREA	QUANTITY	TOTAL AREA
MA1	22'-2"	17'-10"	395.3 SQ. FT.	1	395.3 SQ. FT.
MA2	12'-0"	4'-10"	58.0 SQ. FT.	1	58.0 SQ. FT.
MA3	22'-7"	11'-10"	267.2 SQ. FT.	1	267.2 SQ. FT.
MA4	11'-10"	4'-6"	52.3 SQ. FT.	1	52.3 SQ. FT.
MA5	13'-9"	12'-6"	171.9 SQ. FT.	1	171.9 SQ. FT.
MA6	6'-10"	14'-0"	95.7 SQ. FT.	1	95.7 SQ. FT.
MA7	4'-10"	9'-0"	43.5 SQ. FT.	1	43.5 SQ. FT.
TOTAL					1083.8 SQ. FT.

	QUALITY HOUSING DEDUCTIONS : BICYCLE PARKING		
TAG	LENGTH	WIDTH	AREA
EA1	26'-6"	7'-6"	198.8 SQ. FT.
EA2	17'-2"	15'-0"	257.5 SQ. FT.
EA3	4'-7"	10'-10"	49.7 SQ. FT.
EA4	6'-0"	5'-8"	34.0 SQ. FT.
TOTAL			539.9 SQ. FT.



2 KEY PLAN
Z-006 SCALE: 1/64"=1'-0"

KEY PLAN



BLOCK 2571 LOT 1

issue	rev	date	description
1		2014/11/25	ISSUED TO D.O.B.

ISSUES/REVISIONS

MEP ENGINEER:

STRUCTURAL ENGINEER:

CLIENT:

KARL FISCHER ARCHITECT
OAQ RAIC AIA
530 BROADWAY, 9th FLOOR, NEW YORK, NY 10012
TEL: (212) 219-9733 FAX: (212) 219-8980
1420 NOTRE-DAME WEST, MONTREAL, QC H3C 1K9
TEL: (514) 933-4137 FAX: (514) 933-0409
WEB SITE: WWW.KFARCHITECT.COM
E-MAIL:KARL@KFARCHITECT.COM

SEAL

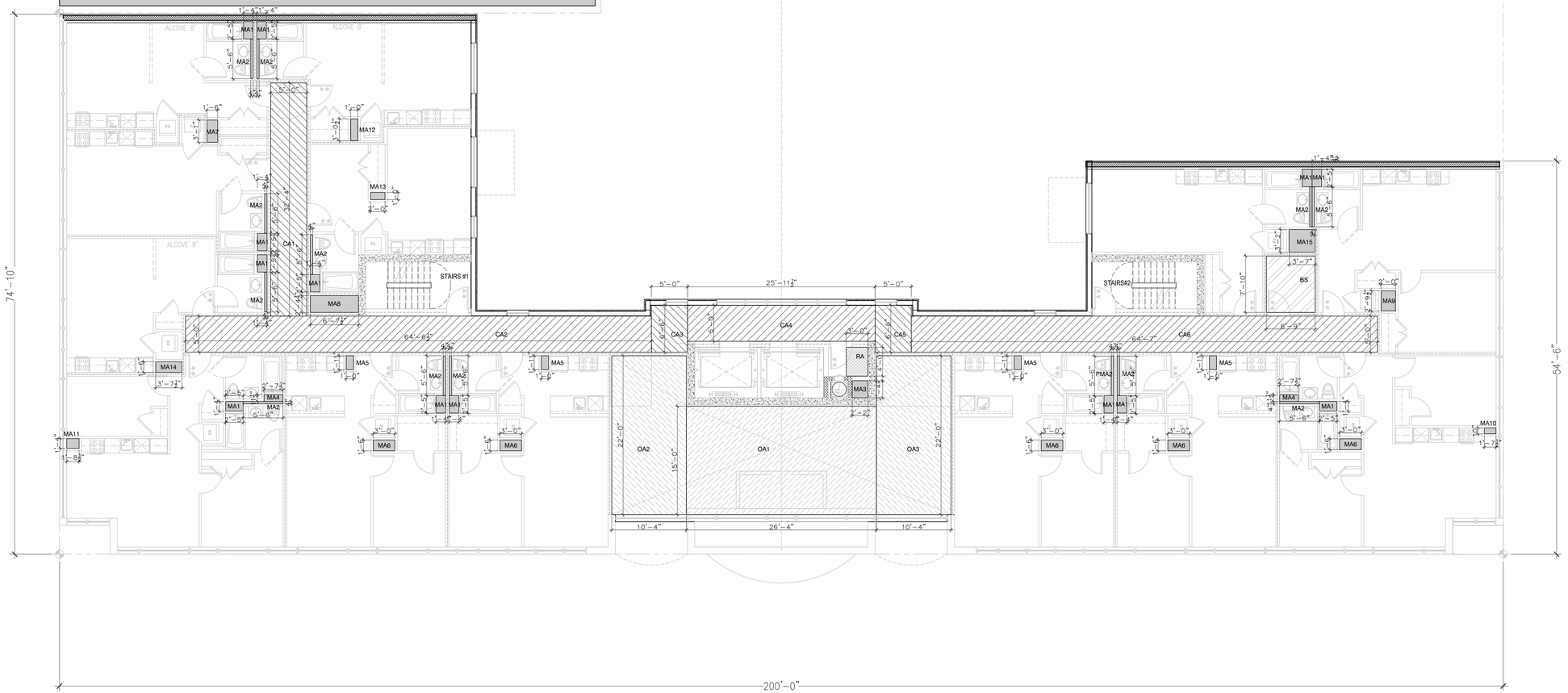
REGISTERED ARCHITECT KARL FISCHER 021282 STATE OF NEW YORK

project title
NEW MIXED USE PROJECT
BLOCK 2571 LOT 1
26 WEST STREET, BROOKLYN, 11222

drawing title
ZONING DEDUCTION CALCULATIONS
1ST FLOOR

dob no

scale 1/8"=1'-0"	project no. 14-45
date 2014-07-09	sheet no. OF
drawn SW	drawing no. Z-006
checked	



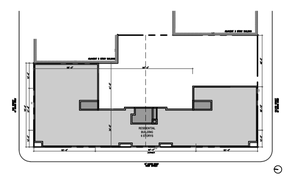
	QUALITY HOUSING DEDUCTIONS : FLOOR OPENING		
TAG	LENGTH	WIDTH	AREA
OA1	26'-4"	15'-0"	395.0 SQ. FT.
OA2	10'-4"	22'-0"	227.3 SQ. FT.
OA3	10'-4"	22'-0"	227.3 SQ. FT.
TOTAL			849.7 SQ. FT.

	QUALITY HOUSING DEDUCTIONS : CORRIDOR		
TAG	LENGTH	WIDTH	AREA
CA1	5'-0"	32'-4"	161.7 SQ. FT.
CA2	64'-6 1/2"	5'-0"	322.7 SQ. FT.
CA3	5'-0"	6'-6"	32.5 SQ. FT.
CA4	25'-11 1/2"	5'-0"	129.8 SQ. FT.
CA5	5'-0"	6'-6"	32.5 SQ. FT.
CA6	64'-7"	5'-0"	322.9 SQ. FT.
TOTAL			1002.1 SQ. FT.
50% DAYLIGHT IN CORRIDOR			501.0 SQ. FT.

	MECHANICAL DEDUCTIONS				
TAG	LENGTH	WIDTH	AREA	QUANTITY	TOTAL AREA
MA1	2'-5"	1'-4"	3.2 SQ. FT.	13	41.9 SQ. FT.
MA2	5'-6"	0'-4"	1.8 SQ. FT.	13	23.8 SQ. FT.
MA3	2'-4 1/2"	2'-2"	5.1 SQ. FT.	1	5.1 SQ. FT.
MA4	2'-7 1/2"	0'-11 1/2"	2.5 SQ. FT.	2	5.0 SQ. FT.
MA5	1'-0"	1'-11"	1.9 SQ. FT.	4	7.7 SQ. FT.
MA6	3'-0"	1'-6"	4.5 SQ. FT.	5	22.5 SQ. FT.
MA7	1'-6"	3'-1"	4.6 SQ. FT.	1	4.6 SQ. FT.
MA8	6'-7 1/2"	2'-4 1/2"	15.7 SQ. FT.	1	15.7 SQ. FT.
MA9	2'-0"	2'-9 1/2"	5.6 SQ. FT.	1	5.6 SQ. FT.
MA10	1'-7 1/2"	0'-10"	1.4 SQ. FT.	1	1.4 SQ. FT.
MA11	1'-8 1/2"	1'-4"	2.3 SQ. FT.	1	2.3 SQ. FT.
MA12	1'-0"	3'-0 1/2"	3.0 SQ. FT.	1	3.0 SQ. FT.
MA13	2'-0"	1'-0"	2.0 SQ. FT.	1	2.0 SQ. FT.
MA14	3'-7 1/2"	1'-6"	5.4 SQ. FT.	1	5.4 SQ. FT.
MA15	3'-7"	3'-2"	11.3 SQ. FT.	1	11.3 SQ. FT.
TOTAL					157.5 SQ. FT.

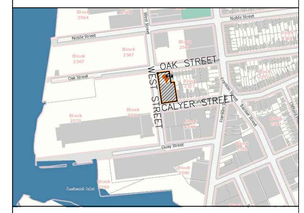
	QUALITY HOUSING DEDUCTIONS: REFUSE ROOM		
TAG	LENGTH	WIDTH	AREA
RA	3'-0"	4'-0"	12.0 SQ. FT.
TOTAL			12.0 SQ. FT.

	QUALITY HOUSING DEDUCTIONS: BICYCLE STORAGE		
TAG	LENGTH	WIDTH	AREA
BS	6'-9"	7'-10"	52.9 SQ. FT.
TOTAL			52.9 SQ. FT.



2 KEY PLAN
Z-007 SCALE: 1/64"=1'-0"

KEY PLAN



BLOCK 2571 LOT 1

issue	rev	date	description
1		2014/11/25	ISSUED TO D.O.B.

ISSUES/REVISIONS

MEP ENGINEER:

STRUCTURAL ENGINEER:

CLIENT

KARL FISCHER ARCHITECT
OAQ RAIC AIA
530 BROADWAY, 9th FLOOR, NEW YORK, NY 10012
TEL: (212) 219-9733 FAX: (212) 219-8980
1420 NOTRE-DAME WEST, MONTREAL, QC H3C 1K9
TEL: (514) 933-4137 FAX: (514) 933-0409
WEB SITE: WWW.KFARCHITECT.COM
E-MAIL:KARL@KFARCHITECT.COM

SEAL

REGISTERED ARCHITECT KARL FISCHER 021262 STATE OF NEW YORK

project title

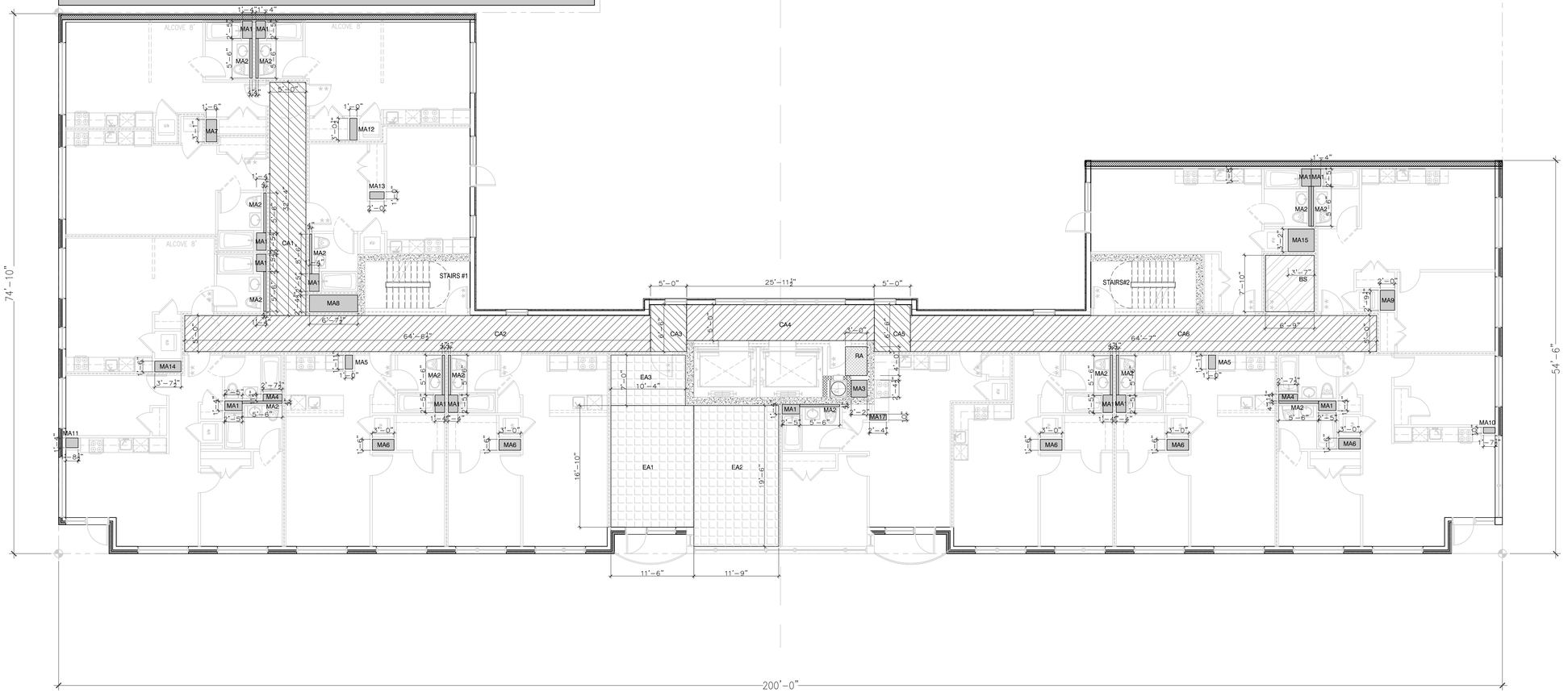
NEW MIXED USE PROJECT
BLOCK 2571 LOT 1
26 WEST STREET, BROOKLYN, 11222

drawing title

ZONING DEDUCTION CALCULATIONS
2ND FLOOR

dob no

scale 1/8"=1'-0"	project no. 14-45
date 2014-07-09	sheet no. OF
drawn SW	drawing no. Z-007
checked	



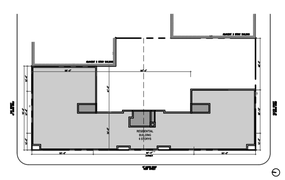
	QUALITY HOUSING DEDUCTIONS : RECREATION ROOM		
TAG	LENGTH	WIDTH	AREA
EA1	11'-6"	16'-10"	193.6 SQ. FT.
EA2	11'-9"	19'-6"	229.1 SQ. FT.
EA3	10'-4"	7'-0"	72.3 SQ. FT.
TOTAL			495.0 SQ. FT.

	QUALITY HOUSING DEDUCTIONS : CORRIDOR		
TAG	LENGTH	WIDTH	AREA
CA1	5'-0"	32'-4"	161.7 SQ. FT.
CA2	64'-6 1/2"	5'-0"	322.7 SQ. FT.
CA3	5'-0"	6'-6"	32.5 SQ. FT.
CA4	25'-11 1/2"	5'-0"	129.8 SQ. FT.
CA5	5'-0"	6'-6"	32.5 SQ. FT.
CA6	64'-7"	5'-0"	322.9 SQ. FT.
TOTAL			1002.1 SQ. FT.
50% DAYLIGHT IN CORRIDOR			501.0 SQ. FT.

	MECHANICAL DEDUCTIONS				
TAG	LENGTH	WIDTH	AREA	QUANTITY	TOTAL AREA
MA1	2'-5"	1'-4"	3.2 SQ. FT.	14	45.1 SQ. FT.
MA2	5'-6"	0'-4"	1.8 SQ. FT.	14	25.7 SQ. FT.
MA3	2'-4 1/2"	2'-2"	5.1 SQ. FT.	1	5.1 SQ. FT.
MA4	2'-7 1/2"	0'-11 1/2"	2.5 SQ. FT.	2	5.0 SQ. FT.
MA5	1'-6"	1'-11"	1.9 SQ. FT.	2	3.8 SQ. FT.
MA6	3'-0"	1'-6"	4.5 SQ. FT.	5	22.5 SQ. FT.
MA7	1'-6"	3'-1"	4.6 SQ. FT.	1	4.6 SQ. FT.
MA8	6'-7 1/2"	2'-4 1/2"	15.7 SQ. FT.	1	15.7 SQ. FT.
MA9	2'-0"	2'-9 1/2"	5.6 SQ. FT.	1	5.6 SQ. FT.
MA10	1'-7 1/2"	0'-10"	1.4 SQ. FT.	1	1.4 SQ. FT.
MA11	1'-8 1/2"	1'-4"	2.3 SQ. FT.	1	2.3 SQ. FT.
MA12	1'-0"	3'-0 1/2"	3.0 SQ. FT.	1	3.0 SQ. FT.
MA13	2'-0"	1'-0"	2.0 SQ. FT.	1	2.0 SQ. FT.
MA14	3'-7 1/2"	1'-6"	5.4 SQ. FT.	1	5.4 SQ. FT.
MA15	3'-7"	3'-2"	11.3 SQ. FT.	1	11.3 SQ. FT.
MA17	2'-4"	0'-10"	1.9 SQ. FT.	1	1.9 SQ. FT.
TOTAL					160.6 SQ. FT.

	QUALITY HOUSING DEDUCTIONS: REFUSE ROOM		
TAG	LENGTH	WIDTH	AREA
RA	3'-0"	4'-0"	12.0 SQ. FT.
TOTAL			12.0 SQ. FT.

	QUALITY HOUSING DEDUCTIONS: BICYCLE STORAGE		
TAG	LENGTH	WIDTH	AREA
BS	6'-9"	7'-10"	52.9 SQ. FT.
TOTAL			52.9 SQ. FT.



2 KEY PLAN
Z-008 SCALE: 1/64"=1'-0"

KEY PLAN

BLOCK 2571 LOT 1

issue	rev	date	description
1		2014/11/25	ISSUED TO D.O.B.

ISSUES/REVISIONS

MEP ENGINEER:

STRUCTURAL ENGINEER:

CLIENT

KARL FISCHER ARCHITECT
ONQ RAIC AIA
530 BROADWAY, 9th FLOOR, NEW YORK, NY 10012
TEL: (212) 219-9733 FAX: (212) 219-8980
1420 NOTRE-DAME WEST, MONTREAL, QC H3C 1K9
TEL: (514) 933-4137 FAX: (514) 933-0409
WEB SITE: WWW.KFARCHITECT.COM
E-MAIL:KARL@KFARCHITECT.COM

SEAL

REGISTERED ARCHITECT KARL FISCHER 021282 STATE OF NEW YORK

project title

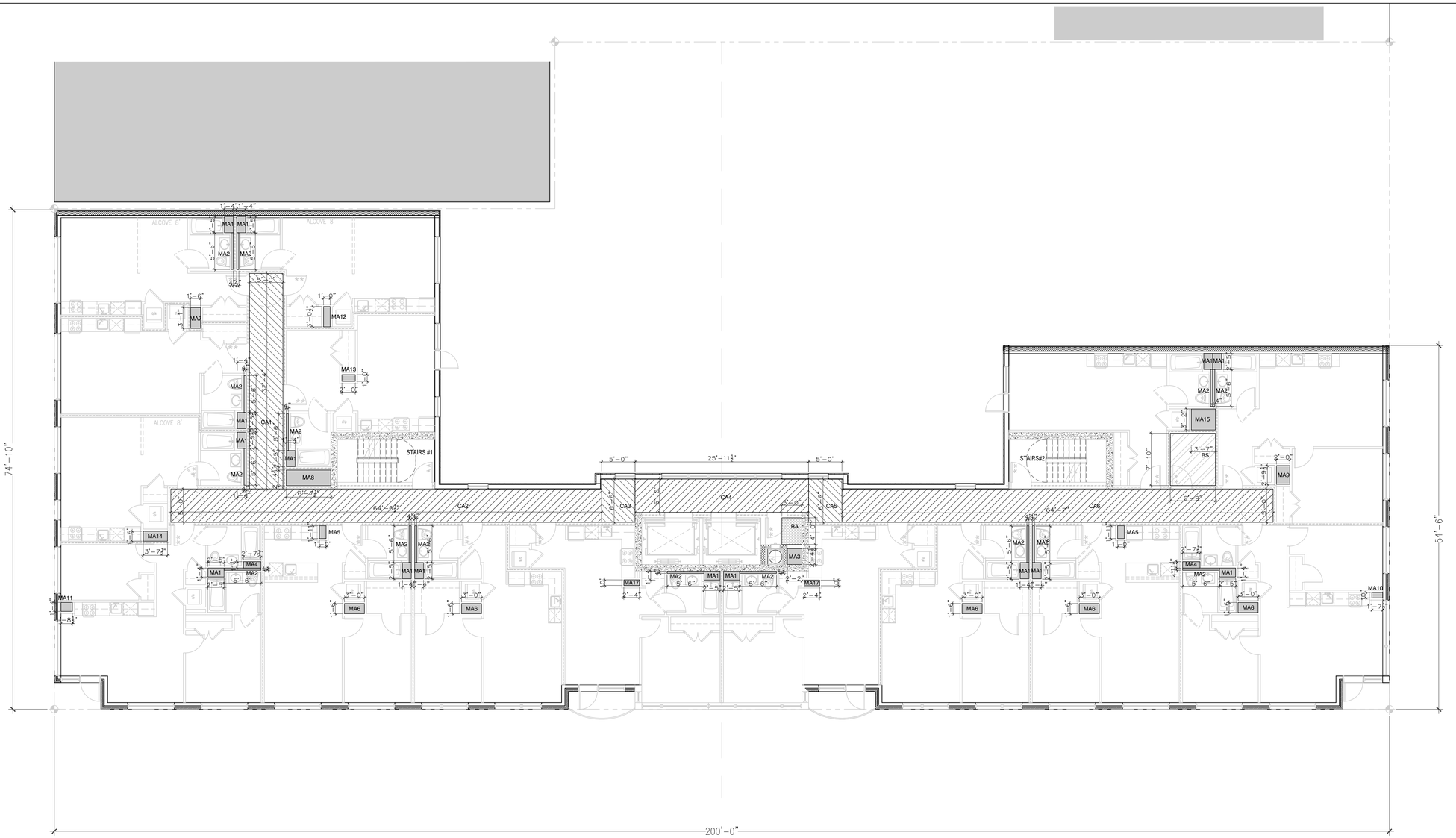
NEW MIXED USE PROJECT
BLOCK 2571 LOT 1
26 WEST STREET, BROOKLYN, 11222

drawing title

ZONING DEDUCTION CALCULATIONS
3RD FLOOR

dob no

scale 1/8"=1'-0"	project no. 14-45
date 2014-07-09	sheet no. OF
drawn SW	drawing no. Z-008
checked	

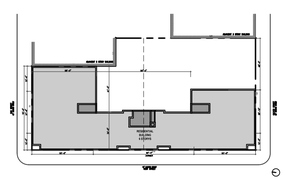


	QUALITY HOUSING DEDUCTIONS : CORRIDOR		
TAG	LENGTH	WIDTH	AREA
CA1	5'-0"	32'-4"	161.7 SQ. FT.
CA2	64'-6 1/2"	5'-0"	322.7 SQ. FT.
CA3	5'-0"	6'-6"	32.5 SQ. FT.
CA4	25'-11 1/2"	5'-0"	129.8 SQ. FT.
CA5	5'-0"	6'-6"	32.5 SQ. FT.
CA6	64'-7"	5'-0"	322.9 SQ. FT.
TOTAL			1002.1 SQ. FT.
50% DAYLIGHT IN CORRIDOR			501.0 SQ. FT.

	MECHANICAL DEDUCTIONS				
TAG	LENGTH	WIDTH	AREA	QUANTITY	TOTAL AREA
MA1	2'-0"	1'-4"	3.2 SQ. FT.	15	48.3 SQ. FT.
MA2	5'-6"	0'-8"	1.8 SQ. FT.	15	27.5 SQ. FT.
MA3	2'-4 1/2"	2'-2"	5.1 SQ. FT.	1	5.1 SQ. FT.
MA4	2'-7 1/2"	0'-11 1/2"	2.5 SQ. FT.	2	5.0 SQ. FT.
MA5	1'-0"	1'-11"	1.9 SQ. FT.	2	3.8 SQ. FT.
MA6	3'-0"	1'-6"	4.5 SQ. FT.	5	22.5 SQ. FT.
MA7	1'-6"	3'-1"	4.6 SQ. FT.	1	4.6 SQ. FT.
MA8	6'-7 1/2"	2'-4 1/2"	15.7 SQ. FT.	1	15.7 SQ. FT.
MA9	2'-0"	2'-9 1/2"	5.6 SQ. FT.	1	5.6 SQ. FT.
MA10	1'-7 1/2"	0'-10"	1.4 SQ. FT.	1	1.4 SQ. FT.
MA11	1'-8 1/2"	1'-4"	2.3 SQ. FT.	1	2.3 SQ. FT.
MA12	1'-0"	3'-0 1/2"	3.0 SQ. FT.	1	3.0 SQ. FT.
MA13	2'-0"	1'-0"	2.0 SQ. FT.	1	2.0 SQ. FT.
MA14	3'-7 1/2"	1'-6"	5.4 SQ. FT.	1	5.4 SQ. FT.
MA15	3'-7"	3'-2"	11.3 SQ. FT.	1	11.3 SQ. FT.
MA17	2'-4"	0'-10"	1.9 SQ. FT.	2	3.9 SQ. FT.
TOTAL					167.6 SQ. FT.

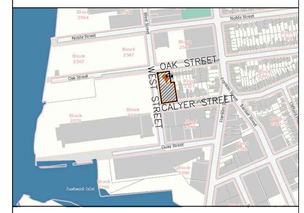
	QUALITY HOUSING DEDUCTIONS: REFUSE ROOM		
TAG	LENGTH	WIDTH	AREA
RA	3'-0"	4'-0"	12.0 SQ. FT.
TOTAL			12.0 SQ. FT.

	QUALITY HOUSING DEDUCTIONS: BICYCLE STORAGE		
TAG	LENGTH	WIDTH	AREA
BS	6'-9"	7'-10"	52.9 SQ. FT.
TOTAL			52.9 SQ. FT.



2 Z-009 **KEY PLAN** SCALE: 1/64"=1'-0"

KEY PLAN



BLOCK 2571 LOT 1

issue	rev	date	description
1		2014/11/25	ISSUED TO D.O.B.

ISSUES/REVISIONS

MEP ENGINEER:

STRUCTURAL ENGINEER:

CLIENT

KARL FISCHER ARCHITECT
OAQ RAIC AIA
530 BROADWAY, 9th FLOOR, NEW YORK, NY 10012
TEL: (212) 219-9733 FAX: (212) 219-8980
1420 NOTRE-DAME WEST, MONTREAL, QC H3C 1K9
TEL: (514) 933-4137 FAX: (514) 933-0409
WEB SITE: WWW.KFARCHITECT.COM
E-MAIL:KARL@KFARCHITECT.COM

SEAL

REGISTERED ARCHITECT KARL FISCHER 021282 STATE OF NEW YORK

project title

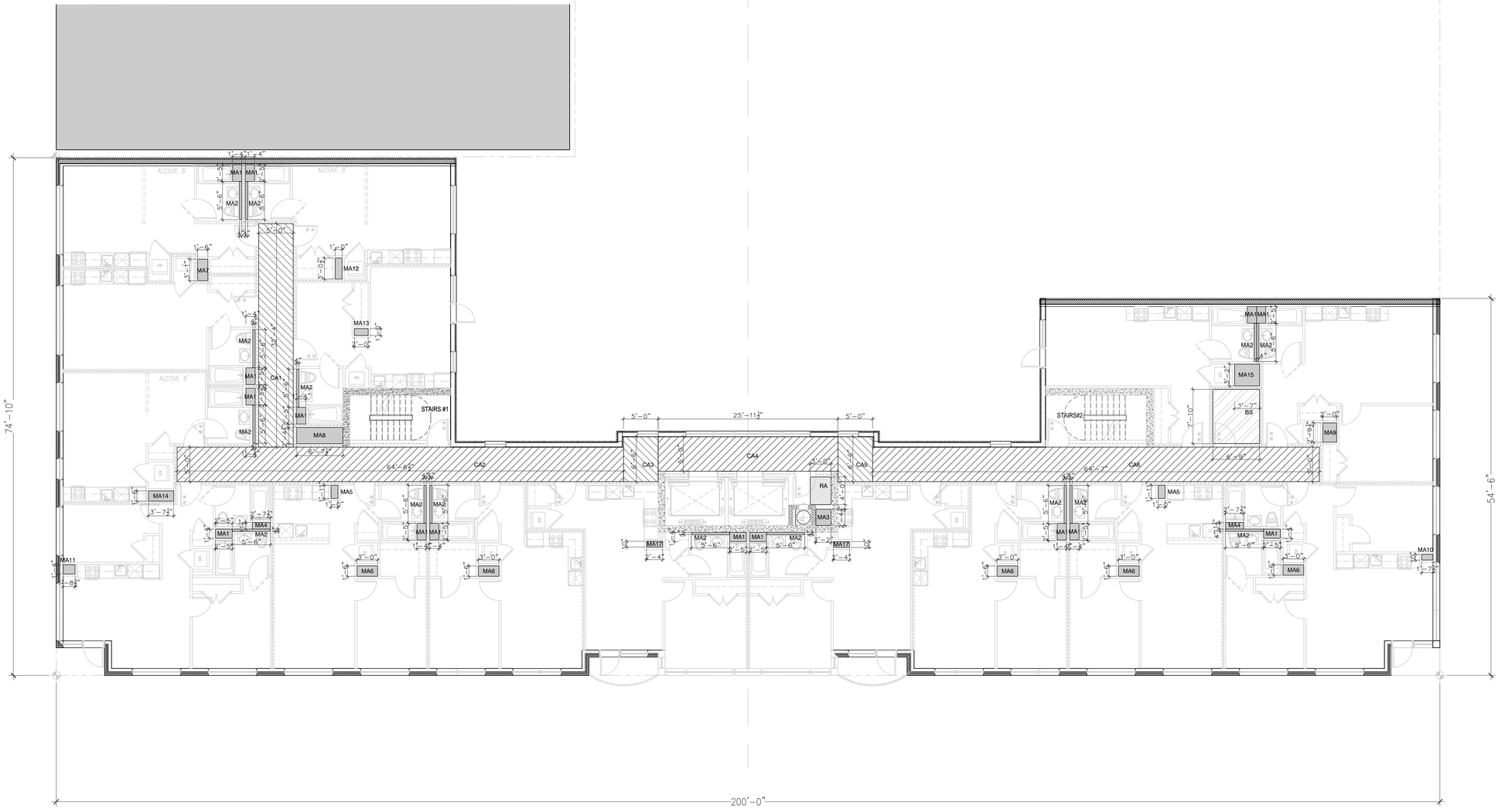
NEW MIXED USE PROJECT
BLOCK 2571 LOT 1
26 WEST STREET, BROOKLYN, 11222

drawing title

ZONING DEDUCTION CALCULATIONS
4TH FLOOR

dob no

scale 1/8"=1'-0"	project no. 14-45
date 2014-07-09	sheet no. OF
drawn SW	drawing no. Z-009
checked	

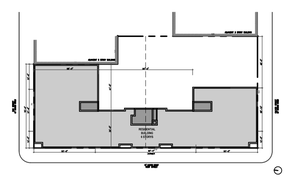


	QUALITY HOUSING DEDUCTIONS : CORRIDOR		
TAG	LENGTH	WIDTH	AREA
CA1	5'-0"	32'-4"	161.7 SQ. FT.
CA2	64'-6 1/2"	5'-0"	322.7 SQ. FT.
CA3	5'-0"	6'-6"	32.5 SQ. FT.
CA4	25'-11 1/2"	5'-0"	129.8 SQ. FT.
CA5	5'-0"	6'-6"	32.5 SQ. FT.
CA6	64'-7"	5'-0"	322.9 SQ. FT.
TOTAL			1002.1 SQ. FT.
50% DAYLIGHT IN CORRIDOR			501.0 SQ. FT.

	MECHANICAL DEDUCTIONS				
TAG	LENGTH	WIDTH	AREA	QUANTITY	TOTAL AREA
MA1	2'-5"	1'-4"	3.2 SQ. FT.	15	48.3 SQ. FT.
MA2	5'-6"	0'-4"	1.8 SQ. FT.	15	27.5 SQ. FT.
MA3	2'-4 1/2"	2'-2"	5.1 SQ. FT.	1	5.1 SQ. FT.
MA4	2'-7 1/2"	0'-11 1/2"	2.5 SQ. FT.	2	5.0 SQ. FT.
MA5	1'-0"	1'-11"	1.9 SQ. FT.	2	3.8 SQ. FT.
MA6	3'-0"	1'-6"	4.5 SQ. FT.	5	22.5 SQ. FT.
MA7	1'-6"	3'-1"	4.6 SQ. FT.	1	4.6 SQ. FT.
MA8	6'-7 1/2"	2'-4 1/2"	15.7 SQ. FT.	1	15.7 SQ. FT.
MA9	2'-0"	2'-9 1/2"	5.6 SQ. FT.	1	5.6 SQ. FT.
MA10	1'-7 1/2"	0'-10"	1.4 SQ. FT.	1	1.4 SQ. FT.
MA11	1'-8 1/2"	1'-4"	2.3 SQ. FT.	1	2.3 SQ. FT.
MA12	1'-0"	3'-0 1/2"	3.0 SQ. FT.	1	3.0 SQ. FT.
MA13	2'-0"	1'-0"	2.0 SQ. FT.	1	2.0 SQ. FT.
MA14	3'-7 1/2"	1'-6"	5.4 SQ. FT.	1	5.4 SQ. FT.
MA15	3'-7"	3'-2"	11.3 SQ. FT.	1	11.3 SQ. FT.
MA17	2'-4"	0'-10"	1.9 SQ. FT.	2	3.9 SQ. FT.
TOTAL					167.6 SQ. FT.

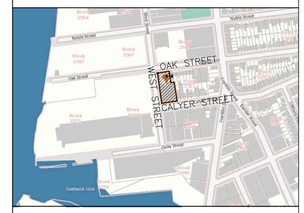
	QUALITY HOUSING DEDUCTIONS: REFUSE ROOM		
TAG	LENGTH	WIDTH	AREA
RA	3'-0"	4'-0"	12.0 SQ. FT.
TOTAL			12.0 SQ. FT.

	QUALITY HOUSING DEDUCTIONS: BICYCLE STORAGE		
TAG	LENGTH	WIDTH	AREA
BS	6'-9"	7'-10"	52.9 SQ. FT.
TOTAL			52.9 SQ. FT.



2 Z-010 **KEY PLAN** SCALE: 1/64"=1'-0"

KEY PLAN



BLOCK 2571 LOT 1

issue	rev	date	description
1		2014/11/25	ISSUED TO D.O.B.

ISSUES/REVISIONS

MEP ENGINEER:

STRUCTURAL ENGINEER:

CLIENT

KARL FISCHER ARCHITECT
OAQ RAIC AIA
530 BROADWAY, 9th FLOOR, NEW YORK, NY 10012
TEL: (212) 219-9733 FAX: (212) 219-8880
1420 NOTRE-DAME WEST, MONTREAL, QC H3C 1K9
TEL: (514) 933-4137 FAX: (514) 933-0409
WEB SITE: WWW.KFARCHITECT.COM
E-MAIL:KARL@KFARCHITECT.COM

SEAL

REGISTERED ARCHITECT KARL FISCHER 021262 STATE OF NEW YORK

project title

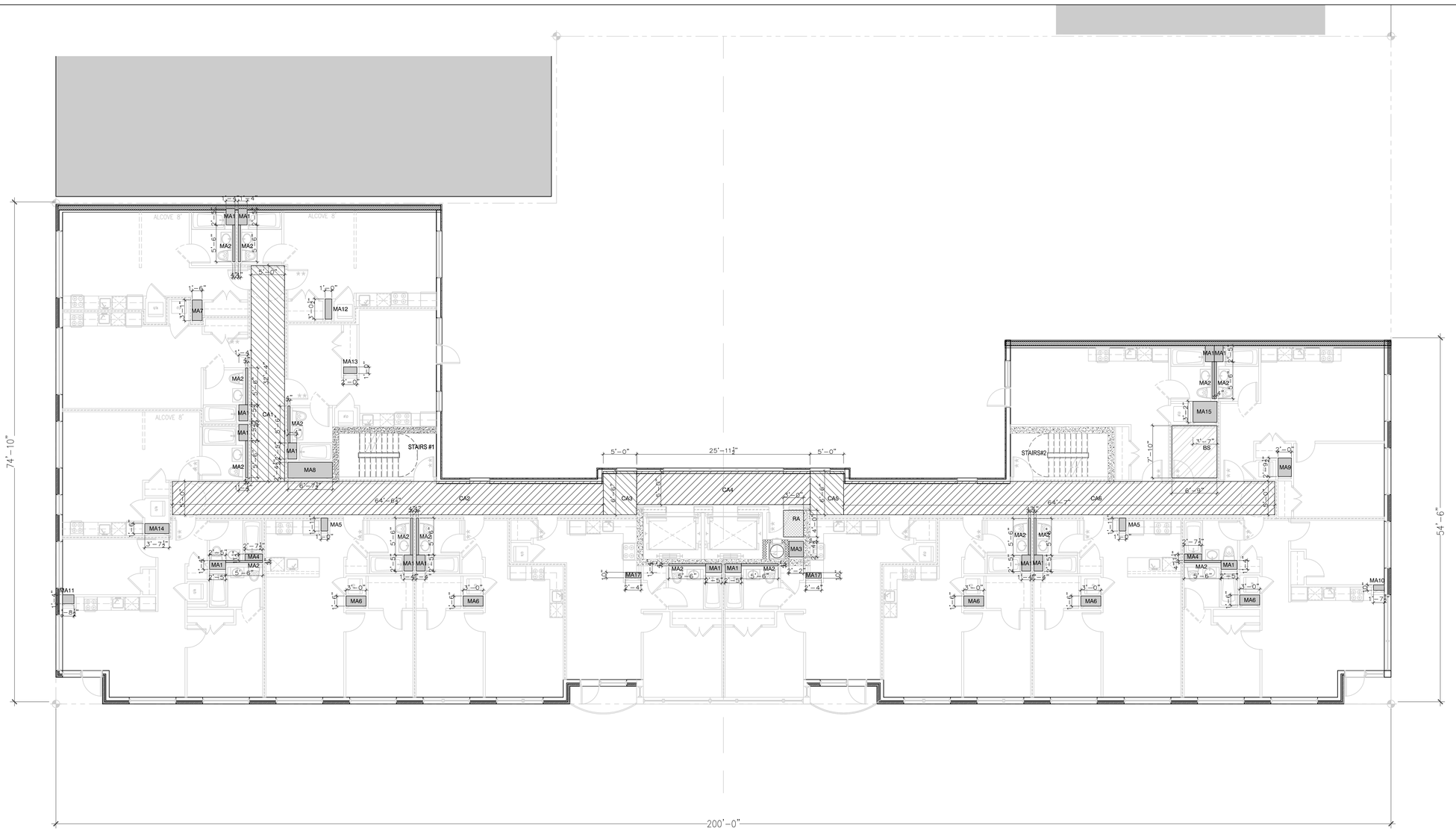
NEW MIXED USE PROJECT
BLOCK 2571 LOT 1
26 WEST STREET, BROOKLYN, 11222

drawing title

ZONING DEDUCTION CALCULATIONS
5TH FLOOR

dob no

scale 1/8"=1'-0"	project no. 14-45
date 2014-07-09	sheet no. OF
drawn SW	drawing no. Z-010
checked	

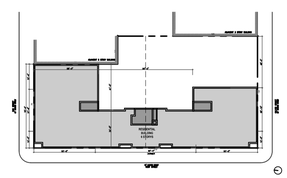


	QUALITY HOUSING DEDUCTIONS : CORRIDOR		
TAG	LENGTH	WIDTH	AREA
CA1	5'-0"	32'-4"	161.7 SQ. FT.
CA2	64'-6 1/2"	5'-0"	322.7 SQ. FT.
CA3	5'-0"	6'-6"	32.5 SQ. FT.
CA4	25'-11 1/2"	5'-0"	129.8 SQ. FT.
CA5	5'-0"	6'-6"	32.5 SQ. FT.
CA6	64'-7"	5'-0"	322.9 SQ. FT.
TOTAL			1002.1 SQ. FT.
50% DAYLIGHT IN CORRIDOR			501.0 SQ. FT.

	MECHANICAL DEDUCTIONS				
TAG	LENGTH	WIDTH	AREA	QUANTITY	TOTAL AREA
MA1	2'-5"	1'-4"	3.2 SQ. FT.	15	48.3 SQ. FT.
MA2	5'-6"	0'-4"	1.8 SQ. FT.	15	27.5 SQ. FT.
MA3	2'-4 1/2"	2'-2"	5.1 SQ. FT.	1	5.1 SQ. FT.
MA4	2'-7 1/2"	0'-11 1/2"	2.5 SQ. FT.	2	5.0 SQ. FT.
MA5	1'-0"	1'-11"	1.9 SQ. FT.	2	3.8 SQ. FT.
MA6	3'-0"	1'-6"	4.5 SQ. FT.	5	22.5 SQ. FT.
MA7	1'-6"	3'-1"	4.6 SQ. FT.	1	4.6 SQ. FT.
MA8	6'-7 1/2"	2'-4 1/2"	15.7 SQ. FT.	1	15.7 SQ. FT.
MA9	2'-0"	2'-9 1/2"	5.6 SQ. FT.	1	5.6 SQ. FT.
MA10	1'-7 1/2"	0'-10"	1.4 SQ. FT.	1	1.4 SQ. FT.
MA11	1'-8 1/2"	1'-4"	2.3 SQ. FT.	1	2.3 SQ. FT.
MA12	1'-0"	3'-0 1/2"	3.0 SQ. FT.	1	3.0 SQ. FT.
MA13	2'-0"	1'-0"	2.0 SQ. FT.	1	2.0 SQ. FT.
MA14	3'-7 1/2"	1'-6"	5.4 SQ. FT.	1	5.4 SQ. FT.
MA15	3'-7"	3'-2"	11.3 SQ. FT.	1	11.3 SQ. FT.
MA17	2'-4"	0'-10"	1.9 SQ. FT.	2	3.9 SQ. FT.
TOTAL					167.6 SQ. FT.

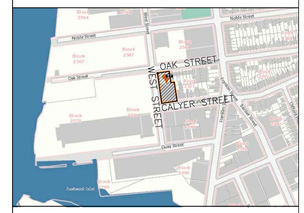
	QUALITY HOUSING DEDUCTIONS: REFUSE ROOM		
TAG	LENGTH	WIDTH	AREA
RA	3'-0"	4'-0"	12.0 SQ. FT.
TOTAL			12.0 SQ. FT.

	QUALITY HOUSING DEDUCTIONS: BICYCLE STORAGE		
TAG	LENGTH	WIDTH	AREA
BS	6'-9"	7'-10"	52.9 SQ. FT.
TOTAL			52.9 SQ. FT.



2 KEY PLAN
Z-011 SCALE: 1/64"=1'-0"

KEY PLAN



BLOCK 2571 LOT 1

issue	rev	date	description
1		2014/11/25	ISSUED TO D.O.B.

ISSUES/REVISIONS

MEP ENGINEER:

STRUCTURAL ENGINEER:

CLIENT

KARL FISCHER ARCHITECT
OAQ RAIC AIA
530 BROADWAY, 9th FLOOR, NEW YORK, NY 10012
TEL: (212) 219-9733 FAX: (212) 219-8980
1420 NOTRE-DAME WEST, MONTREAL, QC H3C 1K9
TEL: (514) 933-4137 FAX: (514) 933-0409
WEB SITE: WWW.KFARCHITECT.COM
E-MAIL:KARL@KFARCHITECT.COM

SEAL

project title

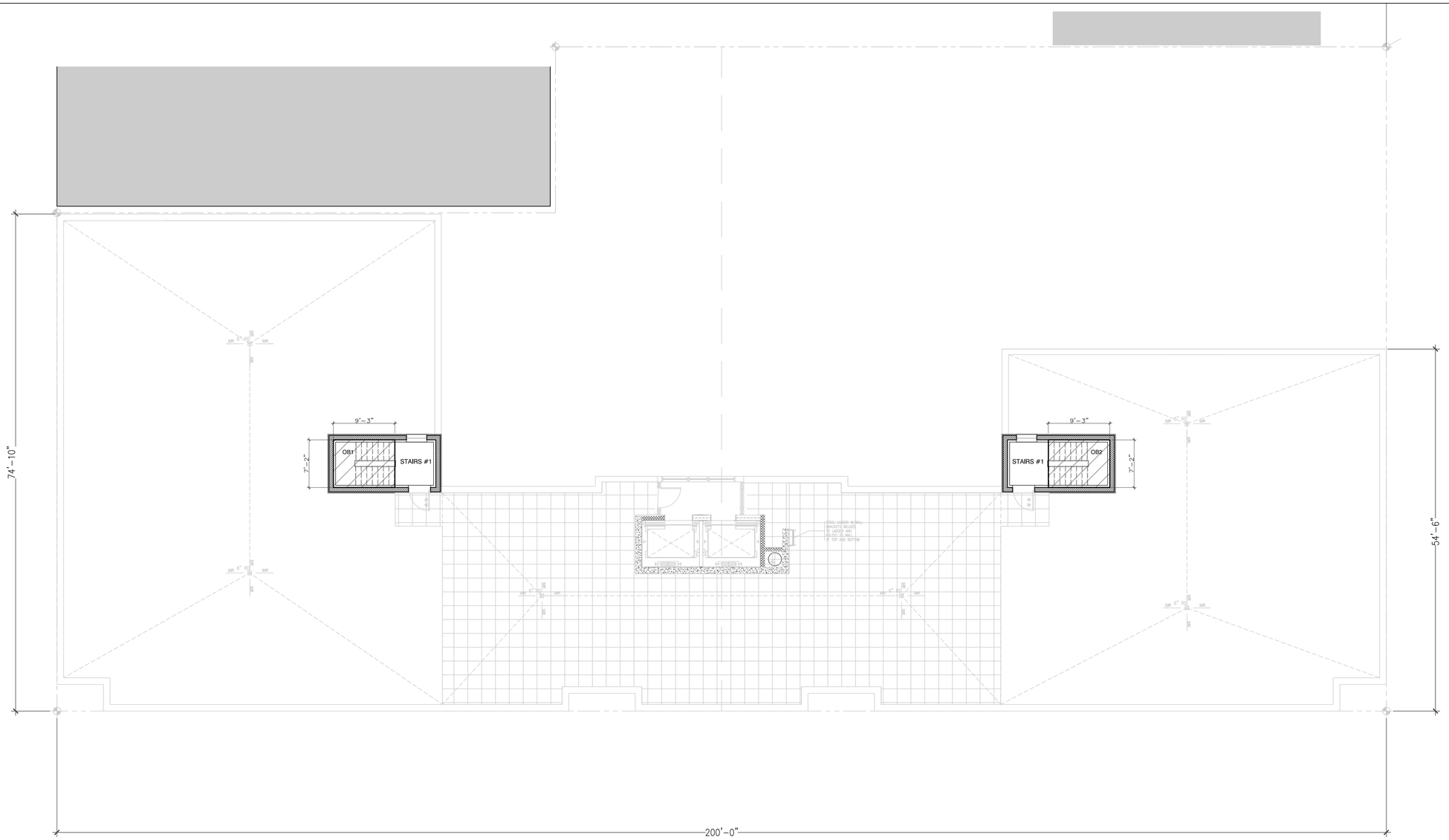
NEW MIXED USE PROJECT
BLOCK 2571 LOT 1
26 WEST STREET, BROOKLYN, 11222

drawing title

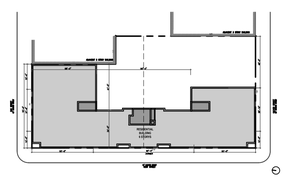
ZONING DEDUCTION CALCULATIONS
6TH FLOOR

dob no

scale 1/8"=1'-0"	project no. 14-45
date 2014-07-09	sheet no. OF
drawn SW	drawing no. Z-011
checked	

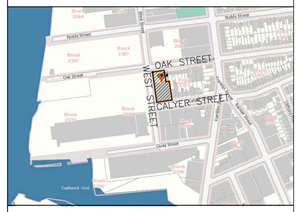


	FLOOR OPENING		
TAG	LENGTH	WIDTH	AREA
OB1	9'-3"	7'-2"	66.3 SQ. FT.
OB2	9'-3"	7'-2"	66.3 SQ. FT.
TOTAL			132.6 SQ. FT.



2 Z-012 **KEY PLAN** SCALE: 1/64"=1'-0"

KEY PLAN



BLOCK 2571 LOT 1

issue	rev	date	description
1		2014/11/25	ISSUED TO D.O.B.

ISSUES/REVISIONS

MEP ENGINEER:

STRUCTURAL ENGINEER:

CLIENT

KARL FISCHER ARCHITECT
OAQ RAIC AIA
530 BROADWAY, 9th FLOOR, NEW YORK, NY 10012
TEL: (212) 219-9733 FAX: (212) 219-8880
1420 NOTRE-DAME WEST, MONTREAL, QC H3C 1K9
TEL: (514) 933-4137 FAX: (514) 933-0409
WEB SITE: WWW.KFARCHITECT.COM
E-MAIL:KARL@KFARCHITECT.COM

SEAL

REGISTERED ARCHITECT KARL FISCHER 021262 STATE OF NEW YORK

project title

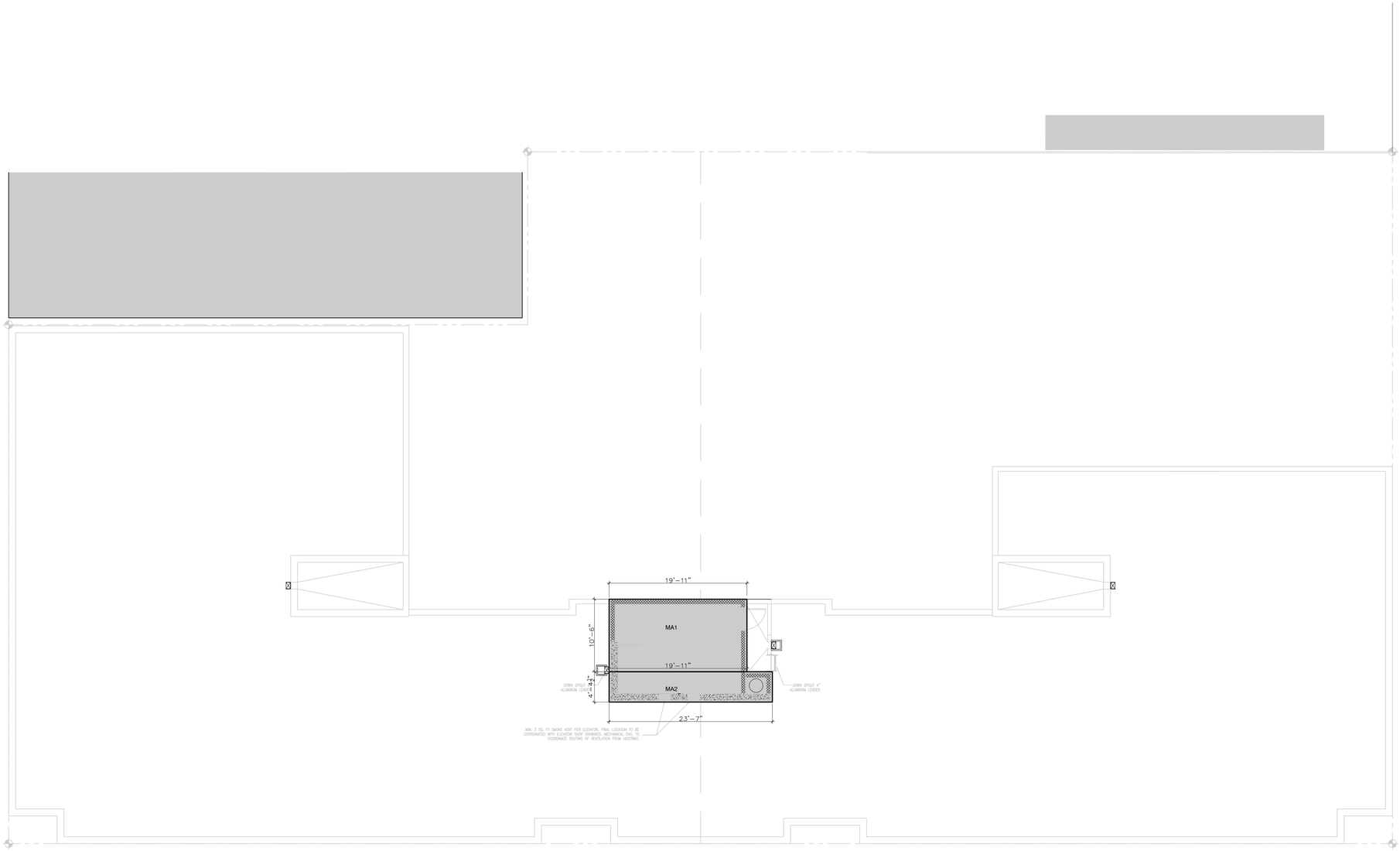
NEW MIXED USE PROJECT
BLOCK 2571 LOT 1
26 WEST STREET, BROOKLYN, 11222

drawing title

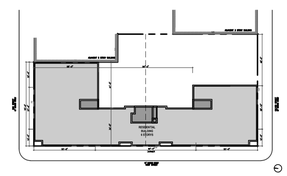
ZONING DEDUCTION CALCULATIONS
ROOF

dob no

scale 1/8"=1'-0"	project no. 14-45
date 2014-07-09	sheet no. OF
drawn SW	drawing no. Z-012
checked	

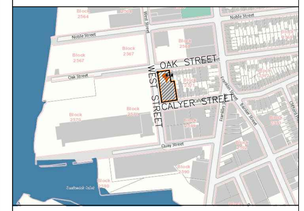


	MECHANICAL DEDUCTIONS		
TAG	LENGTH	WIDTH	AREA
MA1	19'-11"	10'-6"	209.1 SQ. FT.
MA3	23'-7"	4'-4 1/2"	103.2 SQ. FT.
TOTAL			312.3 SQ. FT.



2 Z-026 **KEY PLAN**
SCALE: 1/64"=1'-0"

KEY PLAN



BLOCK 2571 LOT 1

issue	rev	date	description
1		2014/11/25	ISSUED TO D.O.B.

ISSUES/REVISIONS

MEP ENGINEER:

STRUCTURAL ENGINEER:

CLIENT

KARL FISCHER ARCHITECT
OAQ RAIC AIA
530 BROADWAY, 9th FLOOR, NEW YORK, NY 10012
TEL: (212) 219-9733 FAX: (212) 219-8980
1420 NOTRE-DAME WEST, MONTREAL, QC H3C 1K9
TEL: (514) 933-4137 FAX: (514) 933-0409
WEB SITE: WWW.KFARCHITECT.COM
E-MAIL:KARL@KFARCHITECT.COM

SEAL

REGISTERED ARCHITECT KARL FISCHER 021282 STATE OF NEW YORK

project title

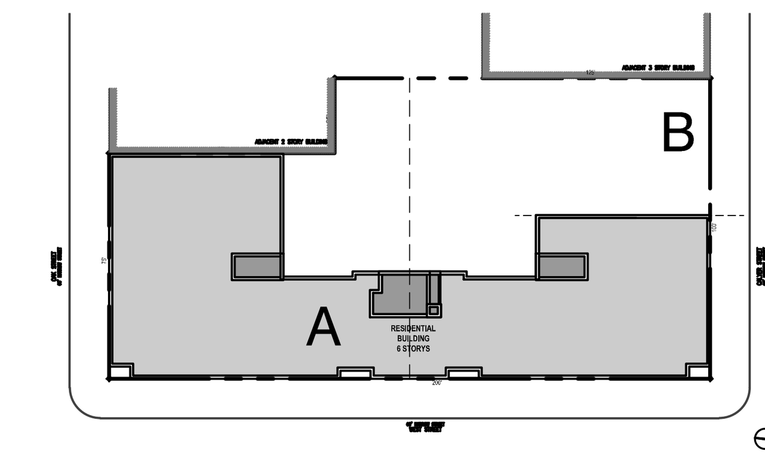
NEW MIXED USE PROJECT
BLOCK 2571 LOT 1
26 WEST STREET, BROOKLYN, 11222

drawing title

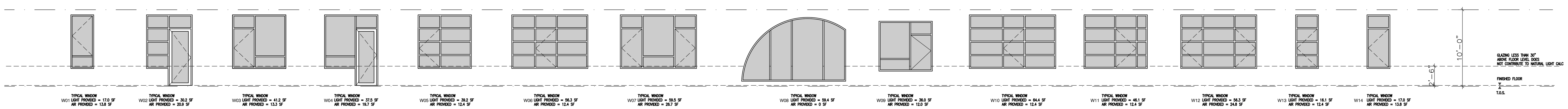
ZONING DEDUCTION CALCULATIONS
E.M.R.

dob no

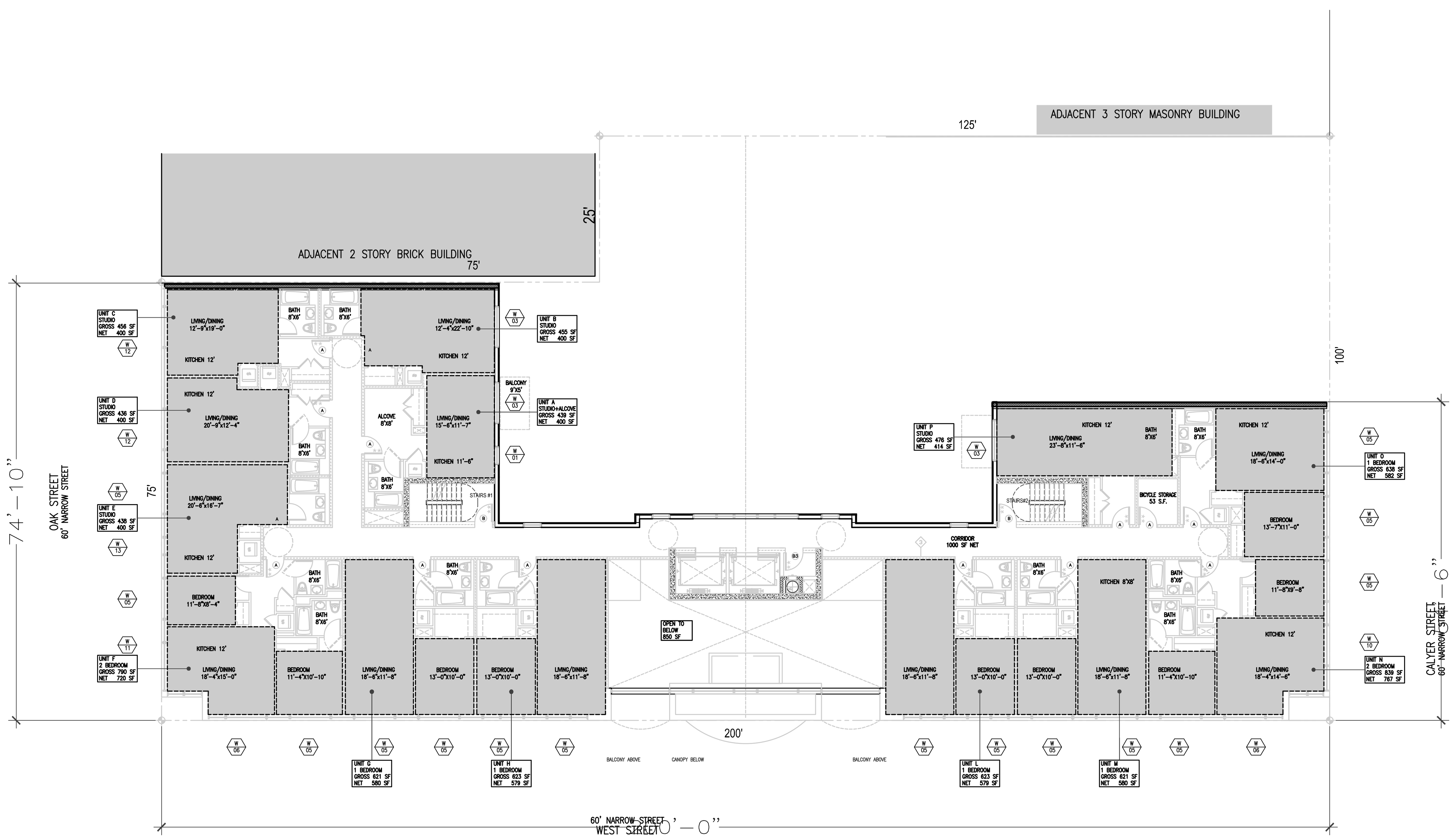
scale 1/8"=1'-0"	project no. 14-45
date 2014-07-09	sheet no. OF
drawn SW	drawing no. Z-013
checked	



KEY PLAN
3 / Z-031
SCALE: 1/64"=1'-0"



TYPICAL WINDOWS
2 / Z-013
SCALE: 1/8"=1'-0"



SECOND FLOOR LIGHT & AIR DIAGRAM
2 / Z-013
SCALE: 1/16"=1'-0"

26 WEST STREET RESIDENTIAL BUILDING

UNIT A		
LIVING ROOM		202 SQ. FT.
REQUIRED MIN. LIGHT	10%	20.2 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	10.1
PROPOSED AIR		17.0 SQ. FT.

UNIT B		
LIVING ROOM		312 SQ. FT.
REQUIRED MIN. LIGHT	10%	31.2 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	15.6
PROPOSED AIR		17.0 SQ. FT.

UNIT C		
LIVING ROOM		266 SQ. FT.
REQUIRED MIN. LIGHT	10%	26.6 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	13.3
PROPOSED AIR		17.0 SQ. FT.

UNIT D		
LIVING ROOM		280 SQ. FT.
REQUIRED MIN. LIGHT	10%	28.0 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	14.0
PROPOSED AIR		17.0 SQ. FT.

UNIT E		
LIVING ROOM		310 SQ. FT.
REQUIRED MIN. LIGHT	10%	31.0 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	15.5
PROPOSED AIR		17.0 SQ. FT.

UNIT F		
LIVING ROOM		247 SQ. FT.
REQUIRED MIN. LIGHT	10%	24.7 SQ. FT.
PROPOSED LIGHT		45.0 SQ. FT.
REQUIRED MIN. AIR	5%	12.4
PROPOSED AIR		17.5 SQ. FT.
MASTER BEDROOM		122 SQ. FT.
REQUIRED MIN. LIGHT	10%	12.2 SQ. FT.
PROPOSED LIGHT		45.0 SQ. FT.
REQUIRED MIN. AIR	5%	6.1
PROPOSED AIR		17.5 SQ. FT.
BEDROOM		97 SQ. FT.
REQUIRED MIN. LIGHT	10%	9.7 SQ. FT.
PROPOSED LIGHT		45.0 SQ. FT.
REQUIRED MIN. AIR	5%	4.9
PROPOSED AIR		17.5 SQ. FT.

UNIT G		
LIVING ROOM		309 SQ. FT.
REQUIRED MIN. LIGHT	10%	30.9 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	15.5
PROPOSED AIR		17.0 SQ. FT.
BEDROOM		130 SQ. FT.
REQUIRED MIN. LIGHT	10%	13.0 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	6.5
PROPOSED AIR		17.0 SQ. FT.

UNIT H		
LIVING ROOM		309 SQ. FT.
REQUIRED MIN. LIGHT	10%	30.9 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	15.5
PROPOSED AIR		17.0 SQ. FT.
BEDROOM		130 SQ. FT.
REQUIRED MIN. LIGHT	10%	13.0 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	6.5
PROPOSED AIR		17.0 SQ. FT.

UNIT L		
LIVING ROOM		309 SQ. FT.
REQUIRED MIN. LIGHT	10%	30.9 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	15.5
PROPOSED AIR		17.0 SQ. FT.
BEDROOM		130 SQ. FT.
REQUIRED MIN. LIGHT	10%	13.0 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	6.5
PROPOSED AIR		17.0 SQ. FT.

UNIT M		
LIVING ROOM		310 SQ. FT.
REQUIRED MIN. LIGHT	10%	31.0 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	15.5
PROPOSED AIR		17.0 SQ. FT.
BEDROOM		130 SQ. FT.
REQUIRED MIN. LIGHT	10%	13.0 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	6.5
PROPOSED AIR		17.0 SQ. FT.

UNIT N		
LIVING ROOM		275 SQ. FT.
REQUIRED MIN. LIGHT	10%	27.5 SQ. FT.
PROPOSED LIGHT		45.0 SQ. FT.
REQUIRED MIN. AIR	5%	13.8
PROPOSED AIR		17.5 SQ. FT.
MASTER BEDROOM		123 SQ. FT.
REQUIRED MIN. LIGHT	10%	12.3 SQ. FT.
PROPOSED LIGHT		45.0 SQ. FT.
REQUIRED MIN. AIR	5%	6.2
PROPOSED AIR		17.5 SQ. FT.
BEDROOM		113 SQ. FT.
REQUIRED MIN. LIGHT	10%	11.3 SQ. FT.
PROPOSED LIGHT		45.0 SQ. FT.
REQUIRED MIN. AIR	5%	5.7
PROPOSED AIR		17.5 SQ. FT.

UNIT O		
LIVING ROOM		259 SQ. FT.
REQUIRED MIN. LIGHT	10%	25.9 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	13.0
PROPOSED AIR		17.0 SQ. FT.
BEDROOM		150 SQ. FT.
REQUIRED MIN. LIGHT	10%	15.0 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	7.5
PROPOSED AIR		17.0 SQ. FT.

UNIT P		
LIVING ROOM		345 SQ. FT.
REQUIRED MIN. LIGHT	10%	34.5 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	17.3
PROPOSED AIR		17.0 SQ. FT.

issue	rev	date	description
1		2014/11/25	ISSUED TO D.O.B.

ISSUES/REVISIONS

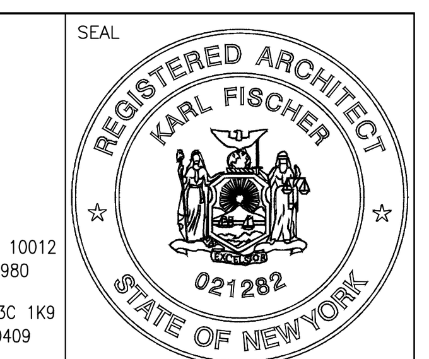
MEP ENGINEER:

STRUCTURAL ENGINEER:

CLIENT

KARL FISCHER ARCHITECT
OAQ RAIC AIA
530 BROADWAY, 9th FLOOR, NEW YORK, NY 10012
TEL: (212) 219-9733 FAX: (212) 219-8980
1420 NOTRE-DAME WEST, MONTREAL, QC H3C 1K9
TEL: (514) 933-4137 FAX: (514) 933-0409
WEB SITE: WWW.KFARCHITECT.COM
E-MAIL:KARL@KFARCHITECT.COM

SEAL

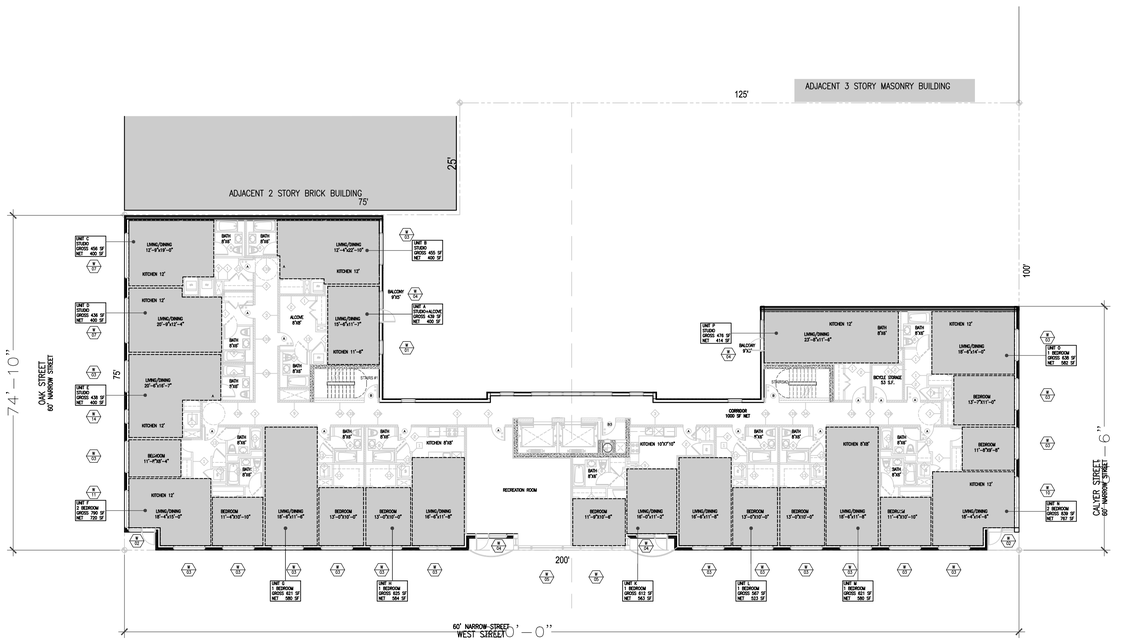


project title
NEW MIXED USE PROJECT
BLOCK 2571 LOT 1
26 WEST STREET, BROOKLYN, 11222

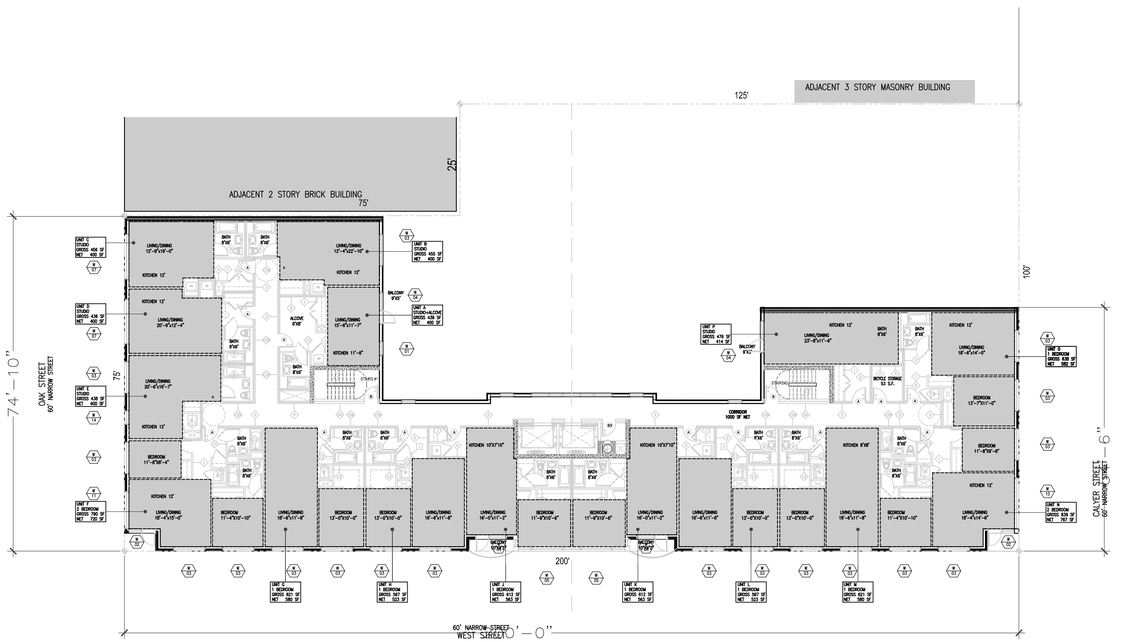
drawing title
LIGHT & AIR DIAGRAMS

dob no

scale	1/16"=1'-0"	project no.	14-45
date	2014-07-15	sheet no.	OF
drawn	SW	drawing no.	Z-014
checked			



1 Z-014 **3RD FLOOR LIGHT & AIR DIAGRAM**
SCALE: 1/16"=1'-0"



2 Z-014 **4TH FLOOR LIGHT & AIR DIAGRAM**
SCALE: 1/16"=1'-0"

26 WEST STREET RESIDENTIAL BUILDING

UNIT A		
LIVINGROOM		202 SQ. FT.
REQUIRED MIN. LIGHT	10%	20.2 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	10.1
PROPOSED AIR		17.0 SQ. FT.

UNIT B		
LIVINGROOM		312 SQ. FT.
REQUIRED MIN. LIGHT	10%	31.2 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	15.6
PROPOSED AIR		17.0 SQ. FT.

UNIT C		
LIVINGROOM		266 SQ. FT.
REQUIRED MIN. LIGHT	10%	26.6 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	13.3
PROPOSED AIR		17.0 SQ. FT.

UNIT D		
LIVINGROOM		280 SQ. FT.
REQUIRED MIN. LIGHT	10%	28.0 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	14.0
PROPOSED AIR		17.0 SQ. FT.

UNIT E		
LIVINGROOM		310 SQ. FT.
REQUIRED MIN. LIGHT	10%	31.0 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	15.5
PROPOSED AIR		17.0 SQ. FT.

UNIT F		
LIVINGROOM		247 SQ. FT.
REQUIRED MIN. LIGHT	10%	24.7 SQ. FT.
PROPOSED LIGHT		45.0 SQ. FT.
REQUIRED MIN. AIR	5%	12.4
PROPOSED AIR		17.5 SQ. FT.
MASTER BEDROOM		122 SQ. FT.
REQUIRED MIN. LIGHT	10%	12.2 SQ. FT.
PROPOSED LIGHT		45.0 SQ. FT.
REQUIRED MIN. AIR	5%	6.1
PROPOSED AIR		17.5 SQ. FT.
BEDROOM		97 SQ. FT.
REQUIRED MIN. LIGHT	10%	9.7 SQ. FT.
PROPOSED LIGHT		45.0 SQ. FT.
REQUIRED MIN. AIR	5%	4.9
PROPOSED AIR		17.5 SQ. FT.

UNIT G		
LIVINGROOM		309 SQ. FT.
REQUIRED MIN. LIGHT	10%	30.9 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	15.5
PROPOSED AIR		17.0 SQ. FT.
BEDROOM		130 SQ. FT.
REQUIRED MIN. LIGHT	10%	13.0 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	6.5
PROPOSED AIR		17.0 SQ. FT.

UNIT H		
LIVINGROOM		230 SQ. FT.
REQUIRED MIN. LIGHT	10%	23.0 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	11.5
PROPOSED AIR		17.0 SQ. FT.
BEDROOM		130 SQ. FT.
REQUIRED MIN. LIGHT	10%	13.0 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	6.5
PROPOSED AIR		17.0 SQ. FT.

UNIT J		
LIVINGROOM		262 SQ. FT.
REQUIRED MIN. LIGHT	10%	26.2 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	13.1
PROPOSED AIR		17.0 SQ. FT.
BEDROOM		124 SQ. FT.
REQUIRED MIN. LIGHT	10%	12.4 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	6.2
PROPOSED AIR		17.0 SQ. FT.

UNIT K		
LIVINGROOM		262 SQ. FT.
REQUIRED MIN. LIGHT	10%	26.2 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	13.1
PROPOSED AIR		17.0 SQ. FT.
BEDROOM		124 SQ. FT.
REQUIRED MIN. LIGHT	10%	12.4 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	6.2
PROPOSED AIR		17.0 SQ. FT.

UNIT L		
LIVINGROOM		230 SQ. FT.
REQUIRED MIN. LIGHT	10%	23.0 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	11.5
PROPOSED AIR		17.0 SQ. FT.
BEDROOM		130 SQ. FT.
REQUIRED MIN. LIGHT	10%	13.0 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	6.5
PROPOSED AIR		17.0 SQ. FT.

UNIT M		
LIVINGROOM		310 SQ. FT.
REQUIRED MIN. LIGHT	10%	31.0 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	15.5
PROPOSED AIR		17.0 SQ. FT.
BEDROOM		130 SQ. FT.
REQUIRED MIN. LIGHT	10%	13.0 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	6.5
PROPOSED AIR		17.0 SQ. FT.

UNIT N		
LIVINGROOM		275 SQ. FT.
REQUIRED MIN. LIGHT	10%	27.5 SQ. FT.
PROPOSED LIGHT		45.0 SQ. FT.
REQUIRED MIN. AIR	5%	13.8
PROPOSED AIR		17.5 SQ. FT.
MASTER BEDROOM		123 SQ. FT.
REQUIRED MIN. LIGHT	10%	12.3 SQ. FT.
PROPOSED LIGHT		45.0 SQ. FT.
REQUIRED MIN. AIR	5%	6.2
PROPOSED AIR		17.5 SQ. FT.
BEDROOM		113 SQ. FT.
REQUIRED MIN. LIGHT	10%	11.3 SQ. FT.
PROPOSED LIGHT		45.0 SQ. FT.
REQUIRED MIN. AIR	5%	5.7
PROPOSED AIR		17.5 SQ. FT.

UNIT O		
LIVINGROOM		259 SQ. FT.
REQUIRED MIN. LIGHT	10%	25.9 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	13.0
PROPOSED AIR		17.0 SQ. FT.
BEDROOM		150 SQ. FT.
REQUIRED MIN. LIGHT	10%	15.0 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	7.5
PROPOSED AIR		17.0 SQ. FT.

UNIT P		
LIVINGROOM		345 SQ. FT.
REQUIRED MIN. LIGHT	10%	34.5 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	17.3
PROPOSED AIR		17.0 SQ. FT.

26 WEST STREET RESIDENTIAL BUILDING

UNIT A
LIVINGROOM 202 SQ. FT.
REQUIRED MIN. LIGHT 10% 20.2 SQ. FT.
PROPOSED LIGHT 43.0 SQ. FT.
REQUIRED MIN. AIR 5% 10.1
PROPOSED AIR 17.0 SQ. FT.

UNIT B
LIVINGROOM 312 SQ. FT.
REQUIRED MIN. LIGHT 10% 31.2 SQ. FT.
PROPOSED LIGHT 43.0 SQ. FT.
REQUIRED MIN. AIR 5% 15.6
PROPOSED AIR 17.0 SQ. FT.

UNIT C
LIVINGROOM 266 SQ. FT.
REQUIRED MIN. LIGHT 10% 26.6 SQ. FT.
PROPOSED LIGHT 43.0 SQ. FT.
REQUIRED MIN. AIR 5% 13.3
PROPOSED AIR 17.0 SQ. FT.

UNIT D
LIVINGROOM 280 SQ. FT.
REQUIRED MIN. LIGHT 10% 28.0 SQ. FT.
PROPOSED LIGHT 43.0 SQ. FT.
REQUIRED MIN. AIR 5% 14.0
PROPOSED AIR 17.0 SQ. FT.

UNIT E
LIVINGROOM 310 SQ. FT.
REQUIRED MIN. LIGHT 10% 31.0 SQ. FT.
PROPOSED LIGHT 43.0 SQ. FT.
REQUIRED MIN. AIR 5% 15.5
PROPOSED AIR 17.0 SQ. FT.

UNIT F
LIVINGROOM 247 SQ. FT.
REQUIRED MIN. LIGHT 10% 24.7 SQ. FT.
PROPOSED LIGHT 45.0 SQ. FT.
REQUIRED MIN. AIR 5% 12.4
PROPOSED AIR 17.5 SQ. FT.
MASTER BEDROOM 122 SQ. FT.
REQUIRED MIN. LIGHT 10% 12.2 SQ. FT.
PROPOSED LIGHT 45.0 SQ. FT.
REQUIRED MIN. AIR 5% 6.1
PROPOSED AIR 17.5 SQ. FT.
BEDROOM 97 SQ. FT.
REQUIRED MIN. LIGHT 10% 9.7 SQ. FT.
PROPOSED LIGHT 45.0 SQ. FT.
REQUIRED MIN. AIR 5% 4.9
PROPOSED AIR 17.5 SQ. FT.

UNIT G
LIVINGROOM 309 SQ. FT.
REQUIRED MIN. LIGHT 10% 30.9 SQ. FT.
PROPOSED LIGHT 43.0 SQ. FT.
REQUIRED MIN. AIR 5% 15.5
PROPOSED AIR 17.0 SQ. FT.
BEDROOM 130 SQ. FT.
REQUIRED MIN. LIGHT 10% 13.0 SQ. FT.
PROPOSED LIGHT 43.0 SQ. FT.
REQUIRED MIN. AIR 5% 6.5
PROPOSED AIR 17.0 SQ. FT.

UNIT H
LIVINGROOM 230 SQ. FT.
REQUIRED MIN. LIGHT 10% 23.0 SQ. FT.
PROPOSED LIGHT 43.0 SQ. FT.
REQUIRED MIN. AIR 5% 11.5
PROPOSED AIR 17.0 SQ. FT.
BEDROOM 130 SQ. FT.
REQUIRED MIN. LIGHT 10% 13.0 SQ. FT.
PROPOSED LIGHT 43.0 SQ. FT.
REQUIRED MIN. AIR 5% 6.5
PROPOSED AIR 17.0 SQ. FT.

UNIT J
LIVINGROOM 262 SQ. FT.
REQUIRED MIN. LIGHT 10% 26.2 SQ. FT.
PROPOSED LIGHT 43.0 SQ. FT.
REQUIRED MIN. AIR 5% 13.1
PROPOSED AIR 17.0 SQ. FT.
BEDROOM 124 SQ. FT.
REQUIRED MIN. LIGHT 10% 12.4 SQ. FT.
PROPOSED LIGHT 43.0 SQ. FT.
REQUIRED MIN. AIR 5% 6.2
PROPOSED AIR 17.0 SQ. FT.

UNIT K
LIVINGROOM 262 SQ. FT.
REQUIRED MIN. LIGHT 10% 26.2 SQ. FT.
PROPOSED LIGHT 43.0 SQ. FT.
REQUIRED MIN. AIR 5% 13.1
PROPOSED AIR 17.0 SQ. FT.
BEDROOM 124 SQ. FT.
REQUIRED MIN. LIGHT 10% 12.4 SQ. FT.
PROPOSED LIGHT 43.0 SQ. FT.
REQUIRED MIN. AIR 5% 6.2
PROPOSED AIR 17.0 SQ. FT.

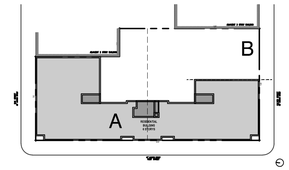
UNIT L
LIVINGROOM 230 SQ. FT.
REQUIRED MIN. LIGHT 10% 23.0 SQ. FT.
PROPOSED LIGHT 43.0 SQ. FT.
REQUIRED MIN. AIR 5% 11.5
PROPOSED AIR 17.0 SQ. FT.
BEDROOM 130 SQ. FT.
REQUIRED MIN. LIGHT 10% 13.0 SQ. FT.
PROPOSED LIGHT 43.0 SQ. FT.
REQUIRED MIN. AIR 5% 6.5
PROPOSED AIR 17.0 SQ. FT.

UNIT M
LIVINGROOM 310 SQ. FT.
REQUIRED MIN. LIGHT 10% 31.0 SQ. FT.
PROPOSED LIGHT 43.0 SQ. FT.
REQUIRED MIN. AIR 5% 15.5
PROPOSED AIR 17.0 SQ. FT.
BEDROOM 130 SQ. FT.
REQUIRED MIN. LIGHT 10% 13.0 SQ. FT.
PROPOSED LIGHT 43.0 SQ. FT.
REQUIRED MIN. AIR 5% 6.5
PROPOSED AIR 17.0 SQ. FT.

UNIT N
LIVINGROOM 275 SQ. FT.
REQUIRED MIN. LIGHT 10% 27.5 SQ. FT.
PROPOSED LIGHT 45.0 SQ. FT.
REQUIRED MIN. AIR 5% 13.8
PROPOSED AIR 17.5 SQ. FT.
MASTER BEDROOM 123 SQ. FT.
REQUIRED MIN. LIGHT 10% 12.3 SQ. FT.
PROPOSED LIGHT 45.0 SQ. FT.
REQUIRED MIN. AIR 5% 6.2
PROPOSED AIR 17.5 SQ. FT.
BEDROOM 113 SQ. FT.
REQUIRED MIN. LIGHT 10% 11.3 SQ. FT.
PROPOSED LIGHT 45.0 SQ. FT.
REQUIRED MIN. AIR 5% 5.7
PROPOSED AIR 17.5 SQ. FT.

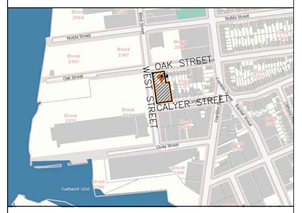
UNIT O
LIVINGROOM 259 SQ. FT.
REQUIRED MIN. LIGHT 10% 25.9 SQ. FT.
PROPOSED LIGHT 43.0 SQ. FT.
REQUIRED MIN. AIR 5% 13.0
PROPOSED AIR 17.0 SQ. FT.
BEDROOM 150 SQ. FT.
REQUIRED MIN. LIGHT 10% 15.0 SQ. FT.
PROPOSED LIGHT 43.0 SQ. FT.
REQUIRED MIN. AIR 5% 7.5
PROPOSED AIR 17.0 SQ. FT.

UNIT P
LIVINGROOM 345 SQ. FT.
REQUIRED MIN. LIGHT 10% 34.5 SQ. FT.
PROPOSED LIGHT 43.0 SQ. FT.
REQUIRED MIN. AIR 5% 17.3
PROPOSED AIR 17.0 SQ. FT.



3 Z-032 **KEY PLAN**
SCALE: 1/64"=1'-0"

KEY PLAN



BLOCK 2571 LOT 1

issue	rev	date	description
1		2014/11/25	ISSUED TO D.O.B.

ISSUES/REVISIONS

MEP ENGINEER:

STRUCTURAL ENGINEER:

CLIENT

KARL FISCHER ARCHITECT
OAQ RAIC AIA
530 BROADWAY, 9th FLOOR, NEW YORK, NY 10012
TEL: (212) 219-9733 FAX: (212) 219-8980
1420 NOTRE-DAME WEST, MONTREAL, QC H3C 1K9
TEL: (514) 933-4137 FAX: (514) 933-0409
WEB SITE: WWW.KFARCHITECT.COM
E-MAIL:KARL@KFARCHITECT.COM

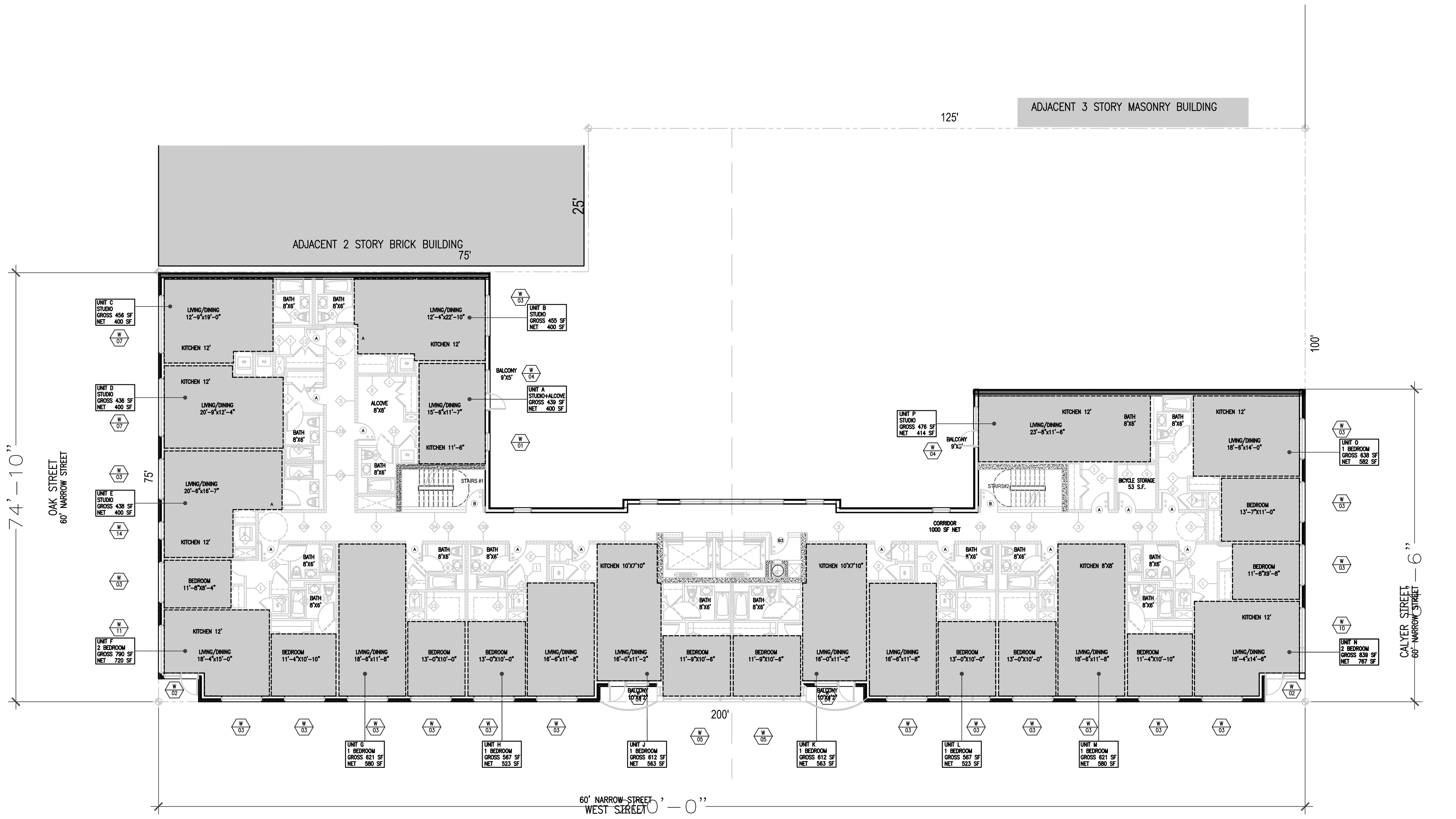
SEAL
REGISTERED ARCHITECT
KARL FISCHER
021282
STATE OF NEW YORK

project title
NEW MIXED USE PROJECT
BLOCK 2571 LOT 1
26 WEST STREET, BROOKLYN, 11222

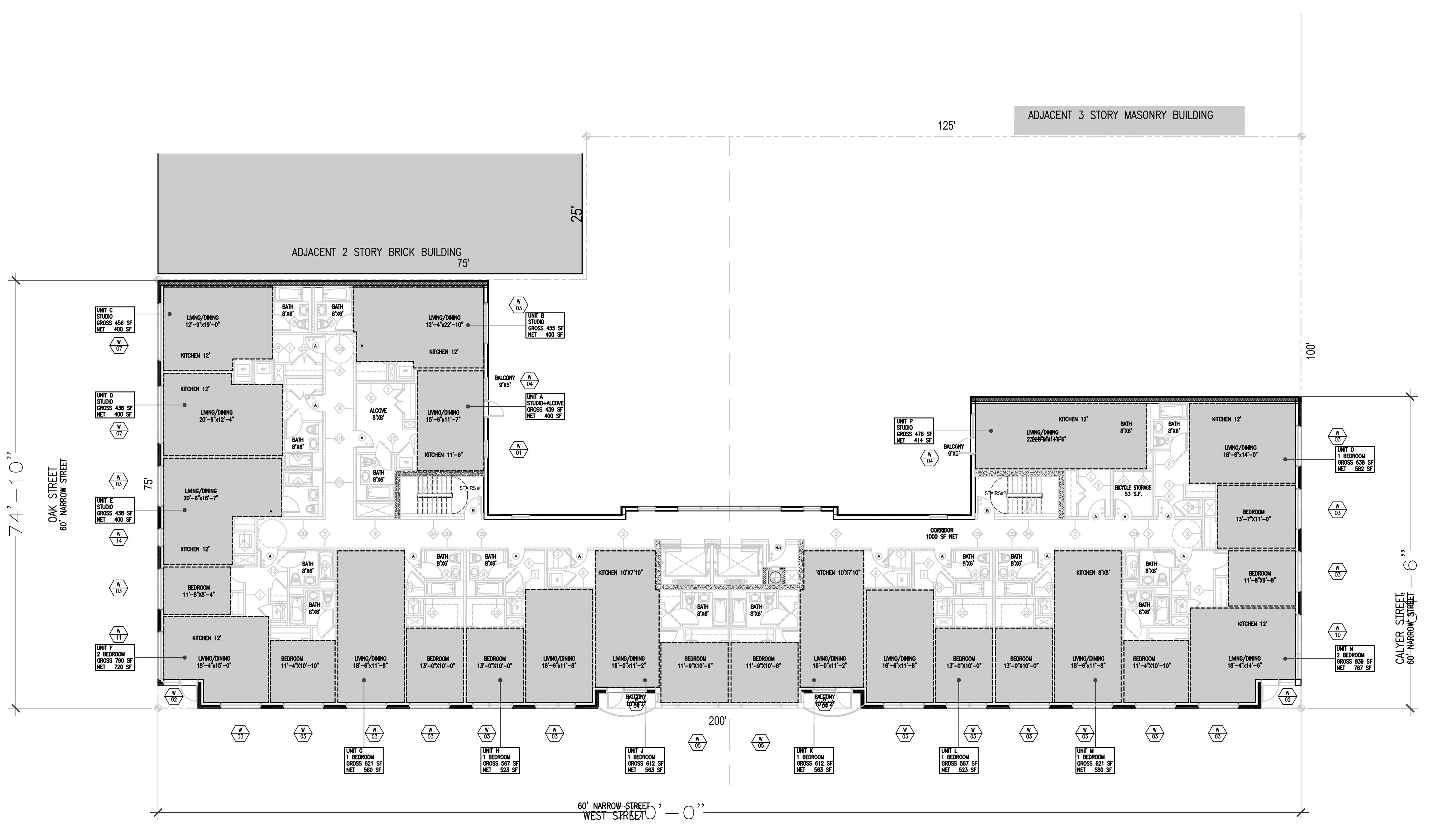
drawing title
LIGHT & AIR DIAGRAMS

dob no

scale 1/16"=1'-0"	project no. 14-45
date 2014-07-15	sheet no. OF
drawn SW	drawing no. Z-015
checked	



1 / Z-015
5TH FLOOR GROSS AREA DIAGRAM
SCALE: 1/16"=1'-0"



2 / Z-015
6TH FLOOR GROSS AREA DIAGRAM
SCALE: 1/16"=1'-0"

26 WEST STREET RESIDENTIAL BUILDING

UNIT A

LIVINGROOM		202 SQ. FT.
REQUIRED MIN. LIGHT	10%	20.2 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	10.1
PROPOSED AIR		17.0 SQ. FT.

UNIT B

LIVINGROOM		312 SQ. FT.
REQUIRED MIN. LIGHT	10%	31.2 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	15.6
PROPOSED AIR		17.0 SQ. FT.

UNIT C

LIVINGROOM		266 SQ. FT.
REQUIRED MIN. LIGHT	10%	26.6 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	13.3
PROPOSED AIR		17.0 SQ. FT.

UNIT D

LIVINGROOM		280 SQ. FT.
REQUIRED MIN. LIGHT	10%	28.0 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	14.0
PROPOSED AIR		17.0 SQ. FT.

UNIT E

LIVINGROOM		310 SQ. FT.
REQUIRED MIN. LIGHT	10%	31.0 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	15.5
PROPOSED AIR		17.0 SQ. FT.

UNIT F

LIVINGROOM		247 SQ. FT.
REQUIRED MIN. LIGHT	10%	24.7 SQ. FT.
PROPOSED LIGHT		45.0 SQ. FT.
REQUIRED MIN. AIR	5%	12.4
PROPOSED AIR		17.5 SQ. FT.
MASTER BEDROOM		122 SQ. FT.
REQUIRED MIN. LIGHT	10%	12.2 SQ. FT.
PROPOSED LIGHT		45.0 SQ. FT.
REQUIRED MIN. AIR	5%	6.1
PROPOSED AIR		17.5 SQ. FT.
BEDROOM		97 SQ. FT.
REQUIRED MIN. LIGHT	10%	9.7 SQ. FT.
PROPOSED LIGHT		45.0 SQ. FT.
REQUIRED MIN. AIR	5%	4.9
PROPOSED AIR		17.5 SQ. FT.

UNIT G

LIVINGROOM		309 SQ. FT.
REQUIRED MIN. LIGHT	10%	30.9 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	15.5
PROPOSED AIR		17.0 SQ. FT.
BEDROOM		130 SQ. FT.
REQUIRED MIN. LIGHT	10%	13.0 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	6.5
PROPOSED AIR		17.0 SQ. FT.

UNIT H

LIVINGROOM		230 SQ. FT.
REQUIRED MIN. LIGHT	10%	23.0 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	11.5
PROPOSED AIR		17.0 SQ. FT.
BEDROOM		130 SQ. FT.
REQUIRED MIN. LIGHT	10%	13.0 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	6.5
PROPOSED AIR		17.0 SQ. FT.

UNIT J

LIVINGROOM		262 SQ. FT.
REQUIRED MIN. LIGHT	10%	26.2 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	13.1
PROPOSED AIR		17.0 SQ. FT.
BEDROOM		124 SQ. FT.
REQUIRED MIN. LIGHT	10%	12.4 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	6.2
PROPOSED AIR		17.0 SQ. FT.

UNIT K

LIVINGROOM		262 SQ. FT.
REQUIRED MIN. LIGHT	10%	26.2 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	13.1
PROPOSED AIR		17.0 SQ. FT.
BEDROOM		124 SQ. FT.
REQUIRED MIN. LIGHT	10%	12.4 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	6.2
PROPOSED AIR		17.0 SQ. FT.

UNIT L

LIVINGROOM		230 SQ. FT.
REQUIRED MIN. LIGHT	10%	23.0 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	11.5
PROPOSED AIR		17.0 SQ. FT.
BEDROOM		130 SQ. FT.
REQUIRED MIN. LIGHT	10%	13.0 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	6.5
PROPOSED AIR		17.0 SQ. FT.

UNIT M

LIVINGROOM		310 SQ. FT.
REQUIRED MIN. LIGHT	10%	31.0 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	15.5
PROPOSED AIR		17.0 SQ. FT.
BEDROOM		130 SQ. FT.
REQUIRED MIN. LIGHT	10%	13.0 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	6.5
PROPOSED AIR		17.0 SQ. FT.

UNIT N

LIVINGROOM		275 SQ. FT.
REQUIRED MIN. LIGHT	10%	27.5 SQ. FT.
PROPOSED LIGHT		45.0 SQ. FT.
REQUIRED MIN. AIR	5%	13.8
PROPOSED AIR		17.5 SQ. FT.
MASTER BEDROOM		123 SQ. FT.
REQUIRED MIN. LIGHT	10%	12.3 SQ. FT.
PROPOSED LIGHT		45.0 SQ. FT.
REQUIRED MIN. AIR	5%	6.2
PROPOSED AIR		17.5 SQ. FT.
BEDROOM		113 SQ. FT.
REQUIRED MIN. LIGHT	10%	11.3 SQ. FT.
PROPOSED LIGHT		45.0 SQ. FT.
REQUIRED MIN. AIR	5%	5.7
PROPOSED AIR		17.5 SQ. FT.

UNIT O

LIVINGROOM		259 SQ. FT.
REQUIRED MIN. LIGHT	10%	25.9 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	13.0
PROPOSED AIR		17.0 SQ. FT.
BEDROOM		150 SQ. FT.
REQUIRED MIN. LIGHT	10%	15.0 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	7.5
PROPOSED AIR		17.0 SQ. FT.

UNIT P

LIVINGROOM		345 SQ. FT.
REQUIRED MIN. LIGHT	10%	34.5 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	17.3
PROPOSED AIR		17.0 SQ. FT.

26 WEST STREET RESIDENTIAL BUILDING

UNIT A

LIVINGROOM		202 SQ. FT.
REQUIRED MIN. LIGHT	10%	20.2 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	10.1
PROPOSED AIR		17.0 SQ. FT.

UNIT B

LIVINGROOM		312 SQ. FT.
REQUIRED MIN. LIGHT	10%	31.2 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	15.6
PROPOSED AIR		17.0 SQ. FT.

UNIT C

LIVINGROOM		266 SQ. FT.
REQUIRED MIN. LIGHT	10%	26.6 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	13.3
PROPOSED AIR		17.0 SQ. FT.

UNIT D

LIVINGROOM		280 SQ. FT.
REQUIRED MIN. LIGHT	10%	28.0 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	14.0
PROPOSED AIR		17.0 SQ. FT.

UNIT E

LIVINGROOM		310 SQ. FT.
REQUIRED MIN. LIGHT	10%	31.0 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	15.5
PROPOSED AIR		17.0 SQ. FT.

UNIT F

LIVINGROOM		247 SQ. FT.
REQUIRED MIN. LIGHT	10%	24.7 SQ. FT.
PROPOSED LIGHT		45.0 SQ. FT.
REQUIRED MIN. AIR	5%	12.4
PROPOSED AIR		17.5 SQ. FT.
MASTER BEDROOM		122 SQ. FT.
REQUIRED MIN. LIGHT	10%	12.2 SQ. FT.
PROPOSED LIGHT		45.0 SQ. FT.
REQUIRED MIN. AIR	5%	6.1
PROPOSED AIR		17.5 SQ. FT.
BEDROOM		97 SQ. FT.
REQUIRED MIN. LIGHT	10%	9.7 SQ. FT.
PROPOSED LIGHT		45.0 SQ. FT.
REQUIRED MIN. AIR	5%	4.9
PROPOSED AIR		17.5 SQ. FT.

UNIT G

LIVINGROOM		309 SQ. FT.
REQUIRED MIN. LIGHT	10%	30.9 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	15.5
PROPOSED AIR		17.0 SQ. FT.
BEDROOM		130 SQ. FT.
REQUIRED MIN. LIGHT	10%	13.0 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	6.5
PROPOSED AIR		17.0 SQ. FT.

UNIT H

LIVINGROOM		230 SQ. FT.
REQUIRED MIN. LIGHT	10%	23.0 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	11.5
PROPOSED AIR		17.0 SQ. FT.
BEDROOM		130 SQ. FT.
REQUIRED MIN. LIGHT	10%	13.0 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	6.5
PROPOSED AIR		17.0 SQ. FT.

UNIT J

LIVINGROOM		262 SQ. FT.
REQUIRED MIN. LIGHT	10%	26.2 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	13.1
PROPOSED AIR		17.0 SQ. FT.
BEDROOM		124 SQ. FT.
REQUIRED MIN. LIGHT	10%	12.4 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	6.2
PROPOSED AIR		17.0 SQ. FT.

UNIT K

LIVINGROOM		262 SQ. FT.
REQUIRED MIN. LIGHT	10%	26.2 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	13.1
PROPOSED AIR		17.0 SQ. FT.
BEDROOM		124 SQ. FT.
REQUIRED MIN. LIGHT	10%	12.4 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	6.2
PROPOSED AIR		17.0 SQ. FT.

UNIT L

LIVINGROOM		230 SQ. FT.
REQUIRED MIN. LIGHT	10%	23.0 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	11.5
PROPOSED AIR		17.0 SQ. FT.
BEDROOM		130 SQ. FT.
REQUIRED MIN. LIGHT	10%	13.0 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	6.5
PROPOSED AIR		17.0 SQ. FT.

UNIT M

LIVINGROOM		310 SQ. FT.
REQUIRED MIN. LIGHT	10%	31.0 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	15.5
PROPOSED AIR		17.0 SQ. FT.
BEDROOM		130 SQ. FT.
REQUIRED MIN. LIGHT	10%	13.0 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	6.5
PROPOSED AIR		17.0 SQ. FT.

UNIT N

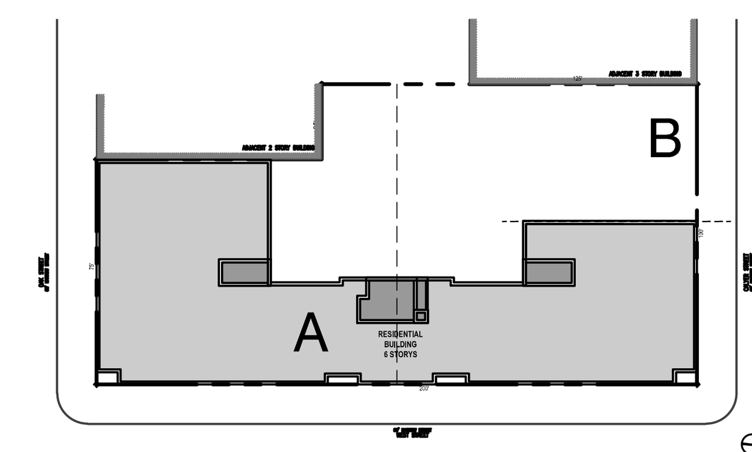
LIVINGROOM		275 SQ. FT.
REQUIRED MIN. LIGHT	10%	27.5 SQ. FT.
PROPOSED LIGHT		45.0 SQ. FT.
REQUIRED MIN. AIR	5%	13.8
PROPOSED AIR		17.5 SQ. FT.
MASTER BEDROOM		123 SQ. FT.
REQUIRED MIN. LIGHT	10%	12.3 SQ. FT.
PROPOSED LIGHT		45.0 SQ. FT.
REQUIRED MIN. AIR	5%	6.2
PROPOSED AIR		17.5 SQ. FT.
BEDROOM		113 SQ. FT.
REQUIRED MIN. LIGHT	10%	11.3 SQ. FT.
PROPOSED LIGHT		45.0 SQ. FT.
REQUIRED MIN. AIR	5%	5.7
PROPOSED AIR		17.5 SQ. FT.

UNIT O

LIVINGROOM		259 SQ. FT.
REQUIRED MIN. LIGHT	10%	25.9 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	13.0
PROPOSED AIR		17.0 SQ. FT.
BEDROOM		150 SQ. FT.
REQUIRED MIN. LIGHT	10%	15.0 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	7.5
PROPOSED AIR		17.0 SQ. FT.

UNIT P

LIVINGROOM		345 SQ. FT.
REQUIRED MIN. LIGHT	10%	34.5 SQ. FT.
PROPOSED LIGHT		43.0 SQ. FT.
REQUIRED MIN. AIR	5%	17.3
PROPOSED AIR		17.0 SQ. FT.



3 / Z-033
KEY PLAN
SCALE: 1/64"=1'-0"

KEY PLAN

BLOCK 2571 LOT 1

issue	rev	date	description
1		2014/11/25	ISSUED TO D.O.B.

ISSUES/REVISIONS

MEP ENGINEER:

STRUCTURAL ENGINEER:

CLIENT

KARL FISCHER ARCHITECT
OAQ RAIC AIA
530 BROADWAY, 9th FLOOR, NEW YORK, NY 10012
TEL: (212) 219-9733 FAX: (212) 219-8980
1420 NOTRE-DAME WEST, MONTREAL, QC H3C 1K9
TEL: (514) 933-4137 FAX: (514) 933-0409
WEB SITE: WWW.KFARCHITECT.COM
E-MAIL:KARL@KFARCHITECT.COM

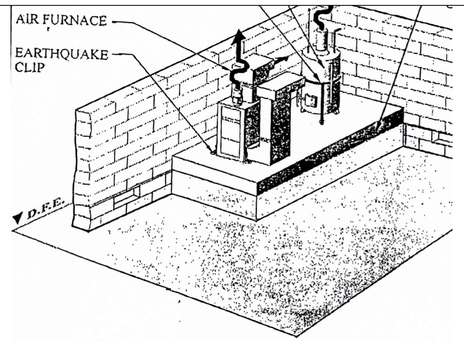
SEAL
REGISTERED ARCHITECT KARL FISCHER 021282 STATE OF NEW YORK

project title
NEW MIXED USE PROJECT
BLOCK 2571 LOT 1
26 WEST STREET, BROOKLYN, 11222

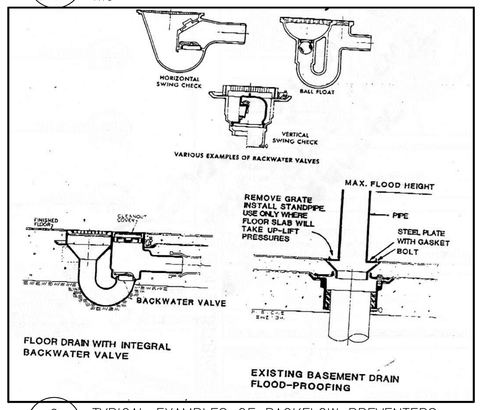
drawing title
LIGHT & AIR DIAGRAMS

dob no

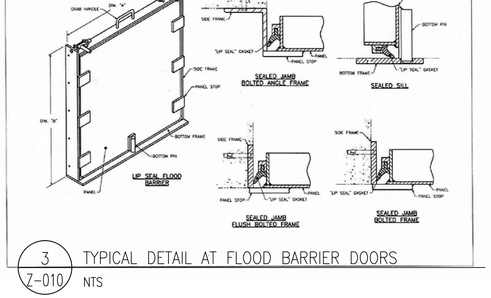
scale	project no.
1/16"=1'-0"	14-45
date 2014-07-15	sheet no. OF
drawn SW	drawing no. Z-016
checked	



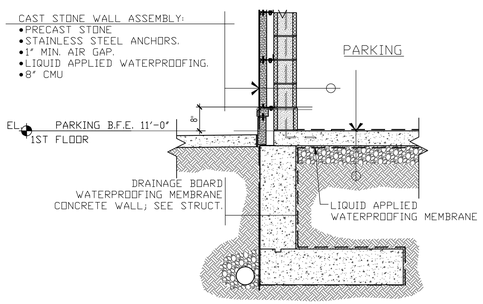
1 Z-010 MECHANICAL EQUIPM'T LOCATED AT OR ABOVE B.F.E
NTS



2 Z-010 TYPICAL EXAMPLES OF BACKFLOW PREVENTERS
NTS



3 Z-010 TYPICAL DETAIL AT FLOOD BARRIER DOORS
NTS



5 Z-010 GROUND FLOOR WALL BASE DETAIL
NTS

CERTIFICATE OF STATEMENT AS PER 27-316.1(d)

RE: WEST 26TH STREET
BLOCK #2571, LOT 1

DEAR MR. COLLGATE:

THIS LETTER IS TO CONFIRM THAT WE ARE THE ARCHITECTS FOR THE ABOVE NOTED PROJECT.
PER FEMA'S GUIDELINES, THIS PROJECT IN FLOOD ZONE AE SHALL BE CONSTRUCTED TO COMPLY WITH FLOOD PROOFING MEASURES DETAILED IN FEMA'S TECHNICAL BULLETINS 2-93, 3-93, 4-93, 7-93, AND NEW YORK CITY'S BUILDING CODE REFERENCE STANDARDS 4-5, IN ALL AREAS BELOW THE BASE FLOOD ELEVATION OF 9.35.

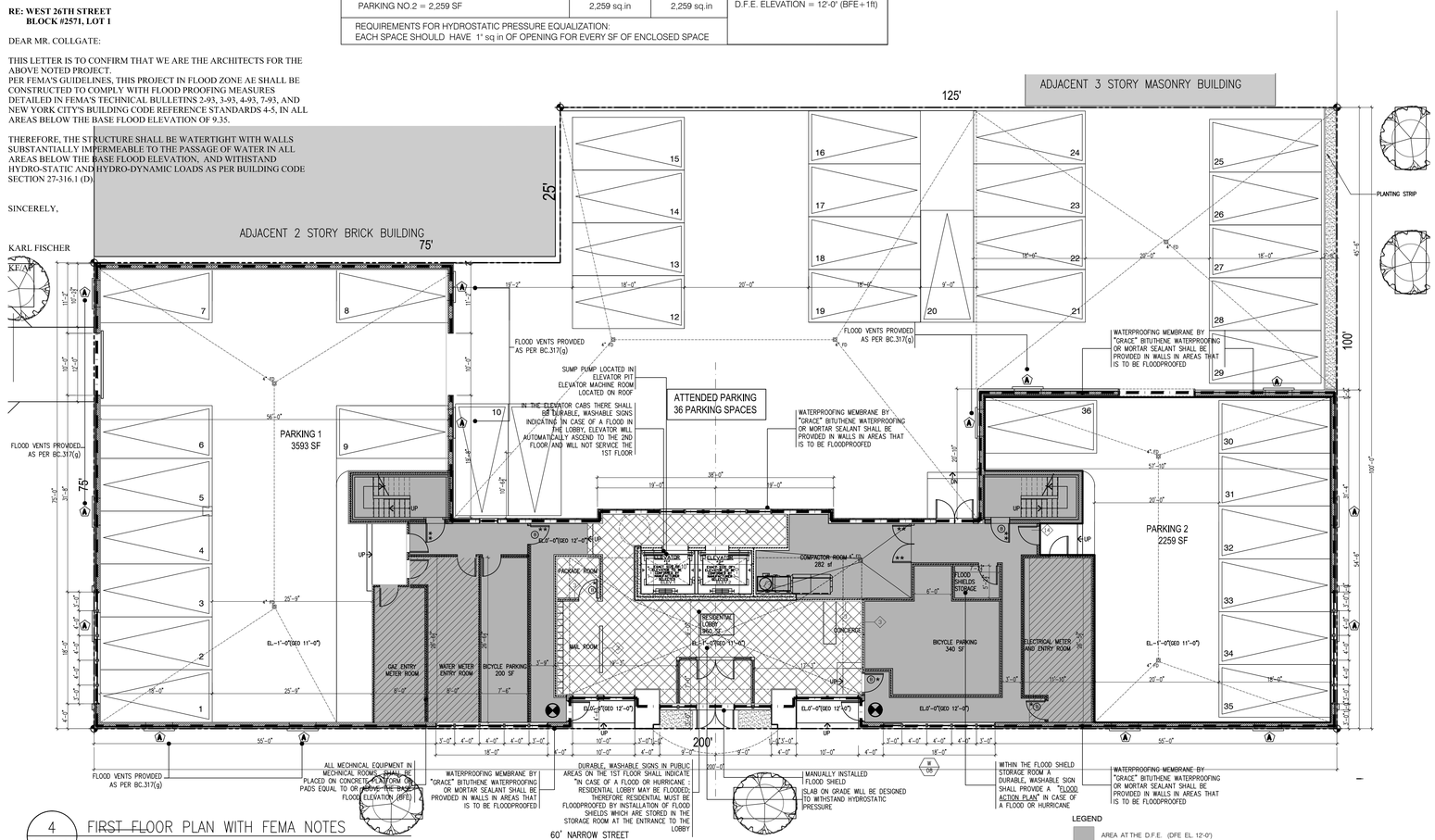
THEREFORE, THE STRUCTURE SHALL BE WATERTIGHT WITH WALLS SUBSTANTIALLY IMPERMEABLE TO THE PASSAGE OF WATER IN ALL AREAS BELOW THE BASE FLOOD ELEVATION, AND WITHSTAND HYDRO-STATIC AND HYDRO-DYNAMIC LOADS AS PER BUILDING CODE SECTION 27-316.1 (D).

SINCERELY,

KARL FISCHER
KF/AP

FLOOD VENT CALCULATION AS PER BC 27-317 (g)	REQUIRED	PROVIDED
PARKING NO.1 = 3,593 SF	3,593 sq.in	3,593 sq.in
PARKING NO.2 = 2,259 SF	2,259 sq.in	2,259 sq.in
REQUIREMENTS FOR HYDROSTATIC PRESSURE EQUALIZATION: EACH SPACE SHOULD HAVE 1" sq in OF OPENING FOR EVERY SF OF ENCLOSED SPACE		

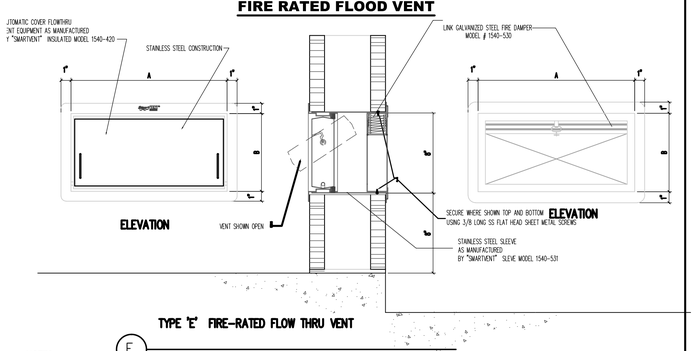
FLOOD ZONE = AE
B.F.E. ELEVATION = 11'-0" (NAVD88)
D.F.E. ELEVATION = 12'-0" (BFE+1ft)



4 Z-010 FIRST FLOOR PLAN WITH FEMA NOTES
1" = 10'-0"

FIRE RATED SOLUTION – FLOOD VENT WITH FIRE RATED DAMPER INSTALLATION INSTRUCTIONS

FIRE RATED FLOOD VENT



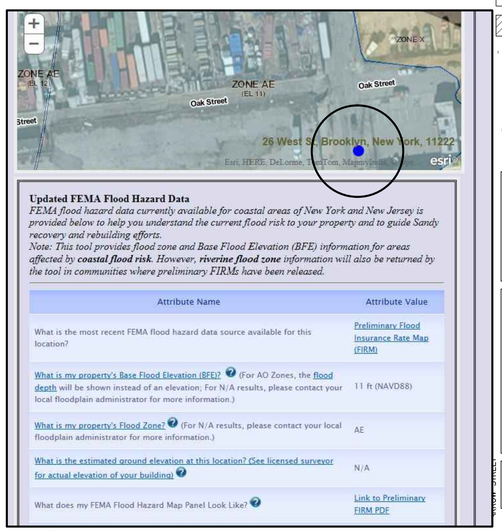
E SCALE: NTS

NOTES:
APPLY FIRE RATED CAULK AROUND SLEEVE THEN SCREW DAMPER IN FOUR PLACES BOTH TOP AND BOTTOM – USE 3/8" MAX. LONG SCREWS–
INSTALL SLEEVE INTO 16 1/4 X 8 1/4 ROUGH OPENING FILL VOIDS WITH FIRE RATED CAULK
INSTALL FLOODVENT INTO OPPOSITE SIDE OF OPENING USING ADHESIVE
INSURE SLEEVE COVERS ANY INNER BLOCK OPENINGS
INSURE FLOOD VENT DOES NOT COME IN CONTACT WITH FIRE DAMPER WHILE BEING ROTATED FULLY IN BOTH DIRECTIONS
CONSULT YOUR LOCAL BUILDING CODE FOR SPECIFIC FIRE CODE REGULATIONS

Smart VENT®
888-628 4115
WWW.SMARTVENT.COM

FIRERATEDVENT.dwg 10-15-04

6 Z-010 FLOOD VENT
NTS



Updated FEMA Flood Hazard Data
FEMA flood hazard data currently available for coastal areas of New York and New Jersey is provided below to help you understand the current flood risk to your property and to guide Sandy recovery and rebuilding efforts.
*Note: This tool provides flood zone and Base Flood Elevation (BFE) information for areas affected by **coastal flood risk**. However, **riverine flood zone** information will also be returned by the tool in communities where preliminary FIRMs have been released.*

Attribute Name	Attribute Value
What is the most recent FEMA flood hazard data source available for this location?	Preliminary Flood Insurance Rate Map (FIRM)
What is my property's Base Flood Elevation (BFE)? (For AO Zones, the flood depth will be shown instead of an elevation; For N/A results, please contact your local floodplain administrator for more information.)	11 ft (NAVD88)
What is my property's Flood Zone? (For N/A results, please contact your local floodplain administrator for more information.)	AE
What is the estimated ground elevation at this location? (See licensed surveyor for actual elevation of your building)	N/A
What does my FEMA Flood Hazard Map Panel Look Like?	Link to Preliminary FIRM PDF

7 Z-010 FEMA MAPS
NTS

LEGEND
- AREA AT THE D.F.E. (DFE EL 12'-0")
- AREA AT THE B.F.E. (BFE EL 11'-0")
- ELEVATED MECHANICAL EQUIPMENT
- WATER PROOFING MEMBRANE FOR ALL FLOOD PROOFED AREAS.
- (A) FLOOD VENT
- EXIT SIGNAGE AT ALTERNATE ELEVATED EGRESS

FLOODPROOFING NOTES

1. SLAB ON GRADE WILL BE DESIGNED TO WITHSTAND HYDROSTATIC PRESSURE, TYPICAL.

2. LIQUID APPLIED WATERPROOFING MEMBRANE OR MORTAR SEALANT SHALL BE PROVIDED IN WALLS IN AREAS THAT IS TO BE FLOODPROOFED.

3. ALL MECHANICAL EQUIPMENT IN MECHANICAL ROOMS SHALL BE PLACED ON CONCRETE PLATFORM OR PADS EQUAL TO OR ABOVE THE BASE FLOOD ELEVATION (BFE).

1. ELEVATOR'S CONTROL PANEL WILL BE DESIGNED TO CAUSE CABS TO AUTOMATICALLY GO TO THE SECOND FLOOR AND WILL NOT SERVICE THE 1ST FLOOR IF WATER IS DETECTED IN SHAFT

2. ELEVATORS SHALL BE DESIGNED TO COMPLY WITH FEMA TECHNICAL BULLETIN 4-93

3. FLOODPROOFING IS TO COMPLY WITH RS 4-5 AND FEMA BULLETIN 7-93, 3-93

4. FLOOD RESISTANCE MATERIALS IN AREAS SUBJECTED TO FLOODING IS TO COMPLY WITH FEMA TECHNICAL BULLETIN 2-93

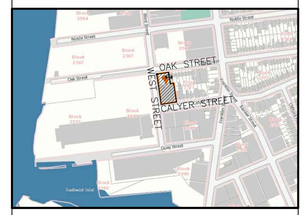
DFE = BFE +1'
Base Flood Elevation (BFE) = 11'
Design Flood Elevation (DFE) = 12'
measured from the NAVD88 .

G104.5.1 A-ZONES. FOR CONSTRUCTION IN A-ZONES, THE PERMIT APPLICATION SHALL INCLUDE THE FOLLOWING CERTIFICATIONS, AS APPLICABLE:

2. DRY FLOODPROOFING CERTIFICATION FOR NON RESIDENTIAL BUILDINGS. FOR DRY FLOODPROOFED BUILDINGS AND STRUCTURES THAT ARE NONRESIDENTIAL (FOR FLOOD ZONE PURPOSES), CONSTRUCTION DOCUMENTS SHALL INCLUDE A CERTIFICATION BY THE APPLICANT THAT THE DRY FLOODPROOFING IS DESIGNED IN ACCORDANCE WITH ASCE24.

3. UTILITY CERTIFICATION. FOR ALL APPLICANTS INVOLVING UTILITY OR MECHANICAL WORK, INCLUDED APPLICATIONS WHERE SUCH WORK IS TO BE FILED IN A SEPERATE, RELATED APPLICATION, CONSTRUCTION DOCUMENTS SHALL INCLUDE A CERTIFICATION BY THE APPLICANT THAT "ALL HEATING, VENTILATION, AIR CONDITIONING, PLUMBING, ELECTRICAL AND OTHER SERVICES FACILITIES AND EQUIPMENT WITHIN THE STRUCTURE OR SITE WILL BE LOCATED OR CONSTRUCTED SO AS TO PREVENT WATER FROM ENTERING OR ACCUMULATING WITHIN THE COMPONENTS DURING CONDITIONS OF FLOODING IN ACCORDANCE WITH ASCE24.

KEY PLAN



BLOCK 2571 LOT 1

issue	rev	date	description
	02	06/18/14	ISSUED TO DOB
1		2014/11/25	ISSUED TO D.O.B.

ISSUES/REVISIONS

MEP ENGINEER:

STRUCTURAL ENGINEER:

CLIENT

KARL FISCHER ARCHITECT
OAQ RAIC AIA
530 BROADWAY, 9th FLOOR, NEW YORK, NY 10012
TEL: (212) 219-9733 FAX: (212) 219-8980
1420 NOTRE-DAME WEST, MONTREAL, QC H3C 1K9
TEL: (514) 933-4137 FAX: (514) 933-0409
WEB SITE: WWW.KFARCHITECT.COM
E-MAIL:KARL@KFARCHITECT.COM

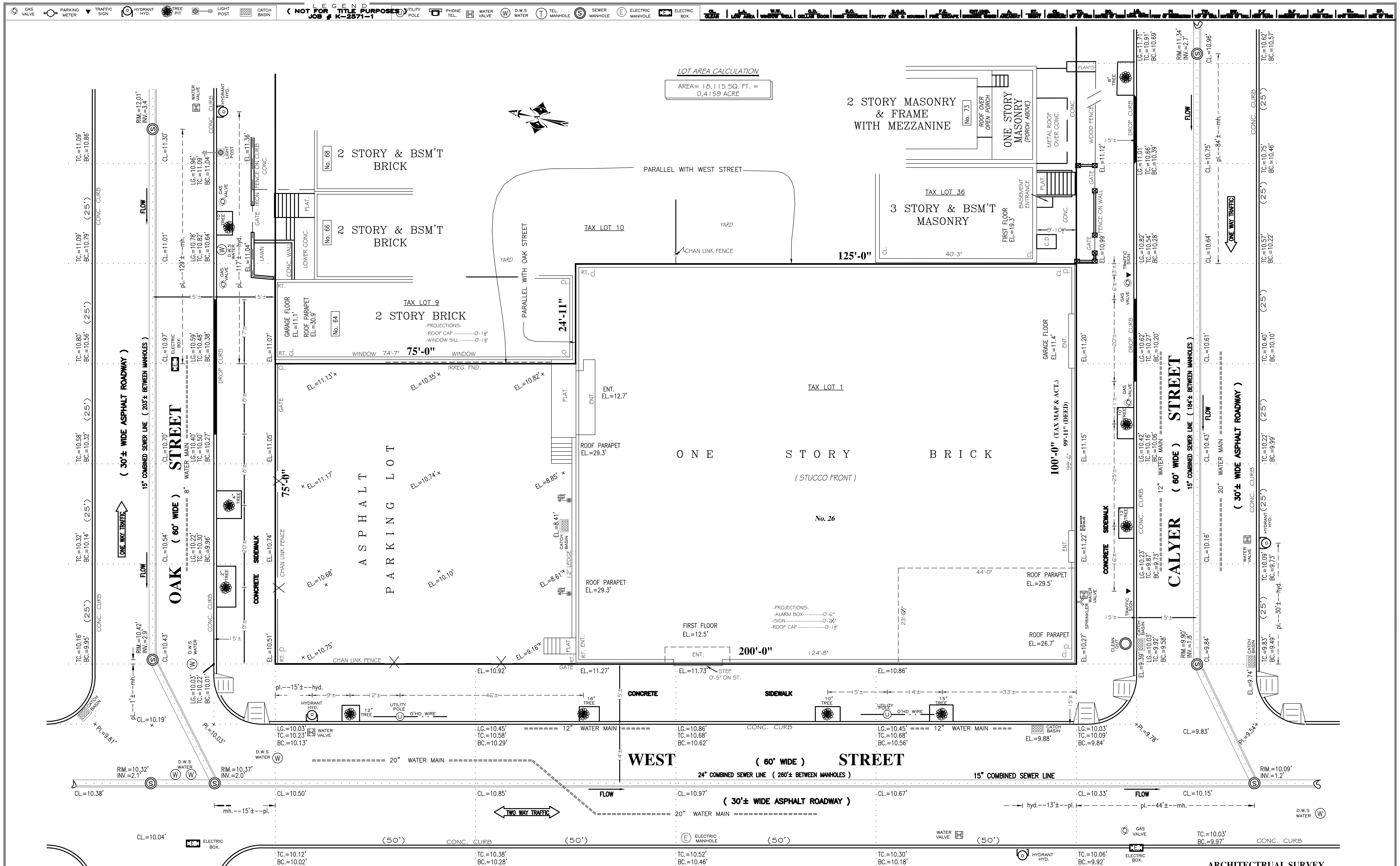
SEAL
REGISTERED ARCHITECT KARL FISCHER 021282 STATE OF NEW YORK

project title
BLOCK 2571 LOT 1
26 WEST STREET, BROOKLYN, 11222

drawing title
FEMA

dob no

scale	N.T.S.	project no.	14-45
date		sheet no.	OF
drawn		drawing no.	Z-020
checked			



UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS SURVEY IS A VIOLATION OF SECTION 7209 OF THE NEW YORK STATE EDUCATION LAW. COPIES OF THIS SURVEY MAP NOT BEARING THE LAND SURVEYOR'S INKED SEAL OR EMBOSSED SEAL SHALL NOT BE CONSIDERED TO BE A VALID TRUE COPY. GUARANTEES OR CERTIFICATIONS INDICATED HEREON SHALL RUN ONLY TO THE PERSON FOR WHOM THE SURVEY IS PREPARED, AND ON HIS BEHALF TO THE TITLE COMPANY, GOVERNMENTAL AGENCY AND LENDING INSTITUTION LISTED HEREON, AND TO THE ASSIGNEES OF THE LENDING INSTITUTION. GUARANTEES OR CERTIFICATION ARE NOT TRANSFERABLE TO ADDITIONAL INSTITUTIONS OR SUBSEQUENT OWNERS.

SURVEYED : MAY 11, 2014	
UPDATED :	
UPDATED :	
SCALE: 1"=15'	
BLOCK:	2571
LOT(s):	1
SECTION:	9
COUNTY:	KINGS
DWG BY:	AAA-Mr.L

THIS PROPERTY IS ON FLOOD INSURANCE RATE MAP PANEL 202 OF 457 IN COMMUNITY PANEL No. 360497 0202 F; LOCATED IN ZONE AE FLOOD ELEVATION = 8.92 FEET NAVD88
REVISED DATE: SEPTEMBER 05, 2007
ADVISORY BASE FLOOD ELEVATION = 11.0 FEET NAVD88

AAA GROUP
LAND SURVEYORS SERVICES
100-A BROADWAY
BROOKLYN, N.Y. 11249
TEL. (718) 387-9800 , FAX 384-5050

ARCHITECTRUAL SURVEY

CAUTION: BEFORE PERFORMING ANY DIGGING OR DRILLING ON THIS SITE, IT IS REQUIRED THAT SUBSURFACE SERVICES, INCLUDING THE UNDERGROUND MAINS BE MARKED AND IDENTIFIED BY THE UTILITY INVOLVED IN COMPLIANCE WITH INDUSTRIAL CODE 53 OF NEW YORK STATE.

1) ALL ELEVATIONS REFER TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
2) LEGAL GRADES (NAVD88) REFER TO CENTER OF RIGHT WAY IN QUEENS; FOR MANHATTAN, BRONX, BROOKLYN & RICHMOND REFER TO CURB LINE TAKEN AT PROJECTION OF PROPERTY LINE.
3) UNDERGROUND UTILITY INFORMATION SHOWN WAS OBTAINED FROM VARIOUS COMPANIES AND CITY AGENCIES AND IS NOT GUARANTEED FOR ACCURACY OR COMPLETENESS.
4) THIS IS TO CERTIFY THAT THERE ARE NO APPARENT STREAMS NATURAL WATER COURSES IN THE PROPERTY AS SHOWN ON THIS SURVEY.

0' 4' 8' 16' 24 32'

issue	rev	date	description
1		2014/11/25	ISSUED TO D.O.B.

ISSUES/REVISIONS

MEP ENGINEER:

STRUCTURAL ENGINEER:

CLIENT

KARL FISCHER ARCHITECT
OAQ RAIC AIA
530 BROADWAY, 9th FLOOR, NEW YORK, NY 10012
TEL: (212) 219-9733 FAX: (212) 219-8980
1420 NOTRE-DAME WEST, MONTREAL, QC H3C 1K9
TEL: (514) 933-4137 FAX: (514) 933-0409
WEB SITE: WWW.KFARCHITECT.COM
E-MAIL:KARL@KFARCHITECT.COM

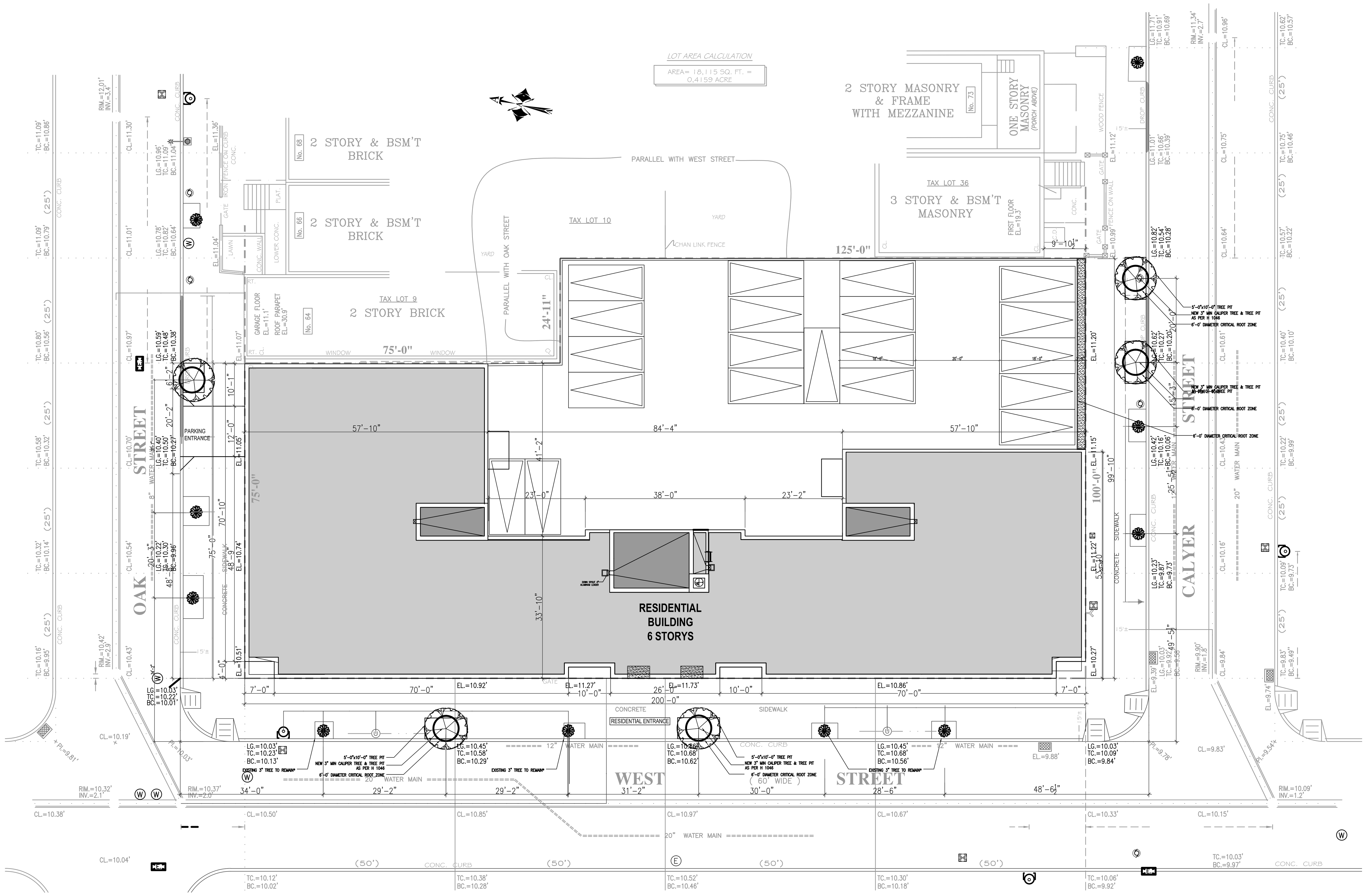
SEAL
REGISTERED ARCHITECT KARL FISCHER 021282 STATE OF NEW YORK

project title
NEW MIXED USE PROJECT
BLOCK 2571 LOT 1
26 WEST STREET, BROOKLYN, 11222

drawing title
SITE SURVEY

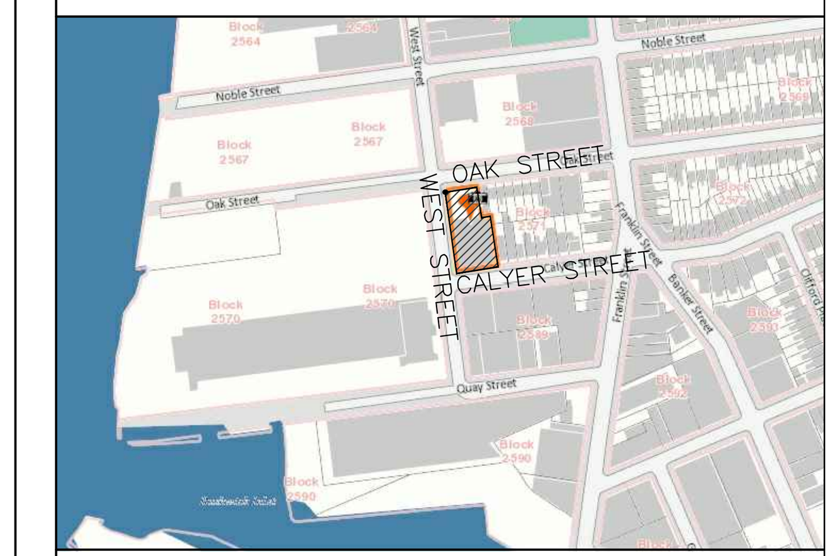
dob no

scale N.T.S.	project no. 14-45
date 2014-07-09	sheet no. OF
drawn SW	drawing no. A-010
checked	



1 SITE PLAN
A-011 SCALE: –

KEY PLAN



BLOCK 2571 LOT 1

issue	rev	date	description
1		2014/11/25	ISSUED TO D.O.B.

ISSUES/REVISIONS

MEP ENGINEER:

STRUCTURAL ENGINEER:

CLIENT

KARL FISCHER ARCHITECT
OAQ RAIC AIA
530 BROADWAY, 9th FLOOR, NEW YORK, NY 10012
TEL: (212) 219-9733 FAX: (212) 219-8980
1420 NOTRE-DAME WEST, MONTREAL, QC H3C 1K9
TEL: (514) 933-4137 FAX: (514) 933-0409
WEB SITE: WWW.KFARCHITECT.COM
E-MAIL:KARL@KFARCHITECT.COM

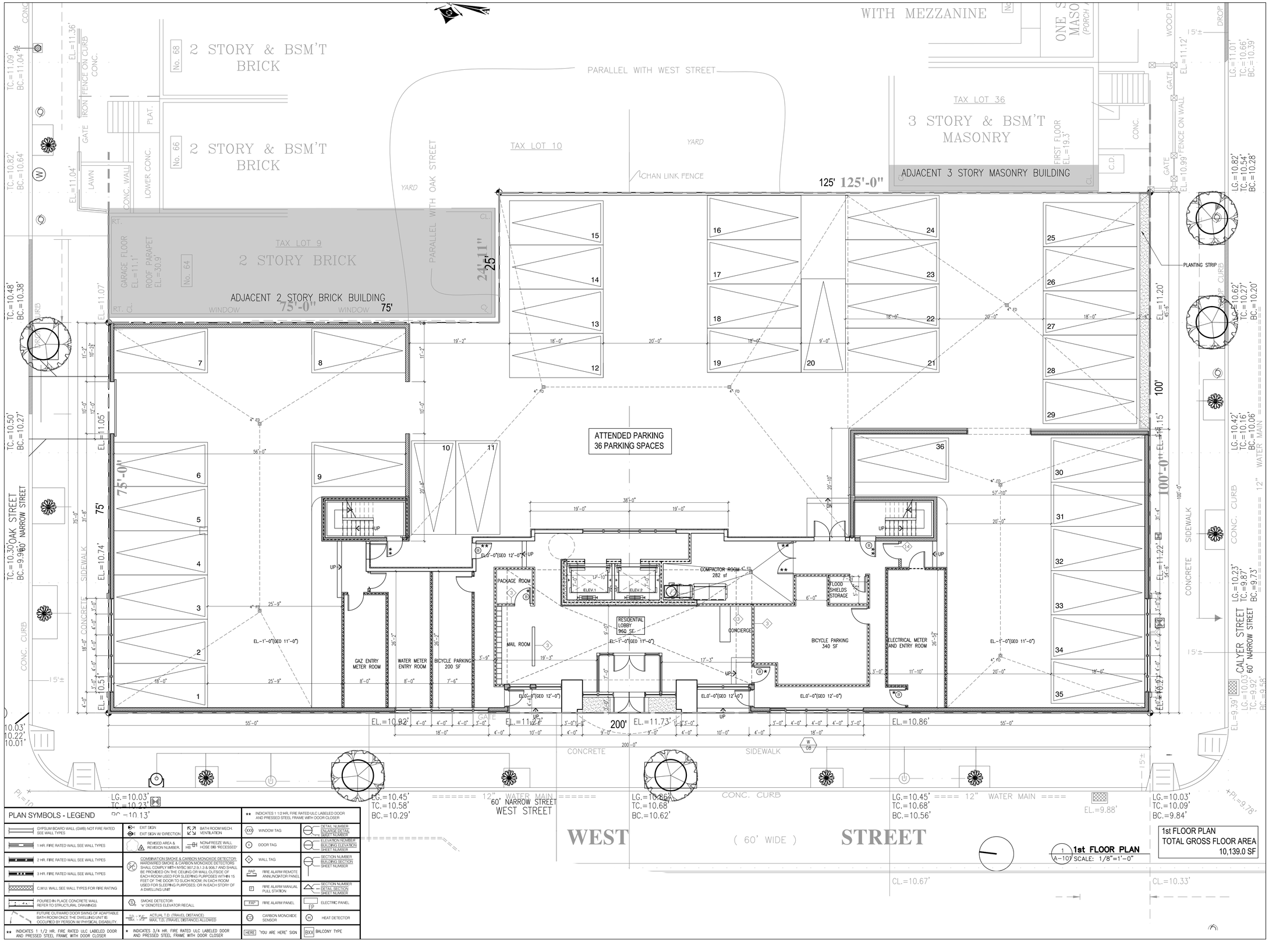
SEAL
REGISTERED ARCHITECT KARL FISCHER 021282 STATE OF NEW YORK

project title
BLOCK 2571 LOT 1
26 WEST STREET, BROOKLYN, 11222

drawing title
SITE PLAN

dob no

scale 1/16"=1'-0"	project no. 14-45
date 2014-04-02	sheet no. OF
drawn	drawing no. A-011
checked	



PLAN SYMBOLS - LEGEND

- GYPSUM BOARD WALL (GWB) NOT FIRE RATED SEE WALL TYPES
- 1 HR. FIRE RATED WALL SEE WALL TYPES
- 2 HR. FIRE RATED WALL SEE WALL TYPES
- 3 HR. FIRE RATED WALL SEE WALL TYPES
- C.M.U. WALL SEE WALL TYPES FOR FIRE RATING
- POURED IN PLACE CONCRETE WALL REFER TO STRUCTURAL DRAWINGS
- FUTURE OUTWARD DOOR SWING OF ADAPTABLE BATH ROOM ONCE THE DWELLING UNIT IS OCCUPIED BY PERSON W/ PHYSICAL DISABILITY.
- ** INDICATES 1 1/2 HR. FIRE RATED ULC LABELED DOOR AND PRESSED STEEL FRAME WITH DOOR CLOSER
- EXIT SIGN
- EXIT SIGN W/ DIRECTION
- REVISED AREA & REVISION NUMBER.
- BATH ROOM MECH. VENTILATION
- HB NON-FREEZE WALL HOSE BIB 'RECESSED'
- SD COMBINATION SMOKE & CARBON MONOXIDE DETECTOR: HARDWIRED SMOKE & CARBON MONOXIDE DETECTORS SHALL COMPLY WITH NYBC 907.2.9.1/3 & 908.7 AND SHALL BE PROVIDED ON THE CEILING OR WALL OUTSIDE OF EACH ROOM USED FOR SLEEPING PURPOSES WITHIN 15 FEET OF THE DOOR TO SUCH ROOM; IN EACH ROOM USED FOR SLEEPING PURPOSES; OR IN EACH STORY OF A DWELLING UNIT
- S SMOKE DETECTOR 'w' DENOTES ELEVATOR RECALL
- T.D. − X'-0" / MAX. − X'-0" ACTUAL T.D. (TRAVEL DISTANCE) MAX. T.D. (TRAVEL DISTANCE) ALLOWED
- * INDICATES 3/4 HR. FIRE RATED ULC LABELED DOOR AND PRESSED STEEL FRAME WITH DOOR CLOSER
- ** INDICATES 1 1/2 HR. FIRE RATED ULC LABELED DOOR AND PRESSED STEEL FRAME WITH DOOR CLOSER
- XXX WINDOW TAG
- X DOOR TAG
- WALL TAG
- FAP FIRE ALARM REMOTE ANNUNCIATOR PANEL
- FIRE ALARM MANUAL PULL STATION
- FAP FIRE ALARM PANEL
- CO CARBON MONOXIDE SENSOR
- HERE "YOU ARE HERE" SIGN
- DETAIL NUMBER / SHEET NUMBER
- ELEVATION NUMBER / BUILDING ELEVATION / SHEET NUMBER
- SECTION NUMBER / BUILDING SECTION / SHEET NUMBER
- SECTION NUMBER / DETAIL SECTION / SHEET NUMBER
- FP ELECTRIC PANEL
- H HEAT DETECTOR
- RXX BALCONY TYPE

KEY PLAN

BLOCK 2571 LOT 1

issue	rev	date	description
1		2014/11/25	ISSUED TO D.O.B.

ISSUES/REVISIONS

MEP ENGINEER:

STRUCTURAL ENGINEER:

CLIENT

KARL FISCHER ARCHITECT
OAQ RAIC AIA
530 BROADWAY, 9th FLOOR, NEW YORK, NY 10012
TEL: (212) 219-9733 FAX: (212) 219-8980
1420 NOTRE-DAME WEST, MONTREAL, QC H3C 1K9
TEL: (514) 933-4137 FAX: (514) 933-0409
WEB SITE: WWW.KFARCHITECT.COM
E-MAIL:KARL@KFARCHITECT.COM

SEAL

REGISTERED ARCHITECT
KARL FISCHER
021282
STATE OF NEW YORK

project title

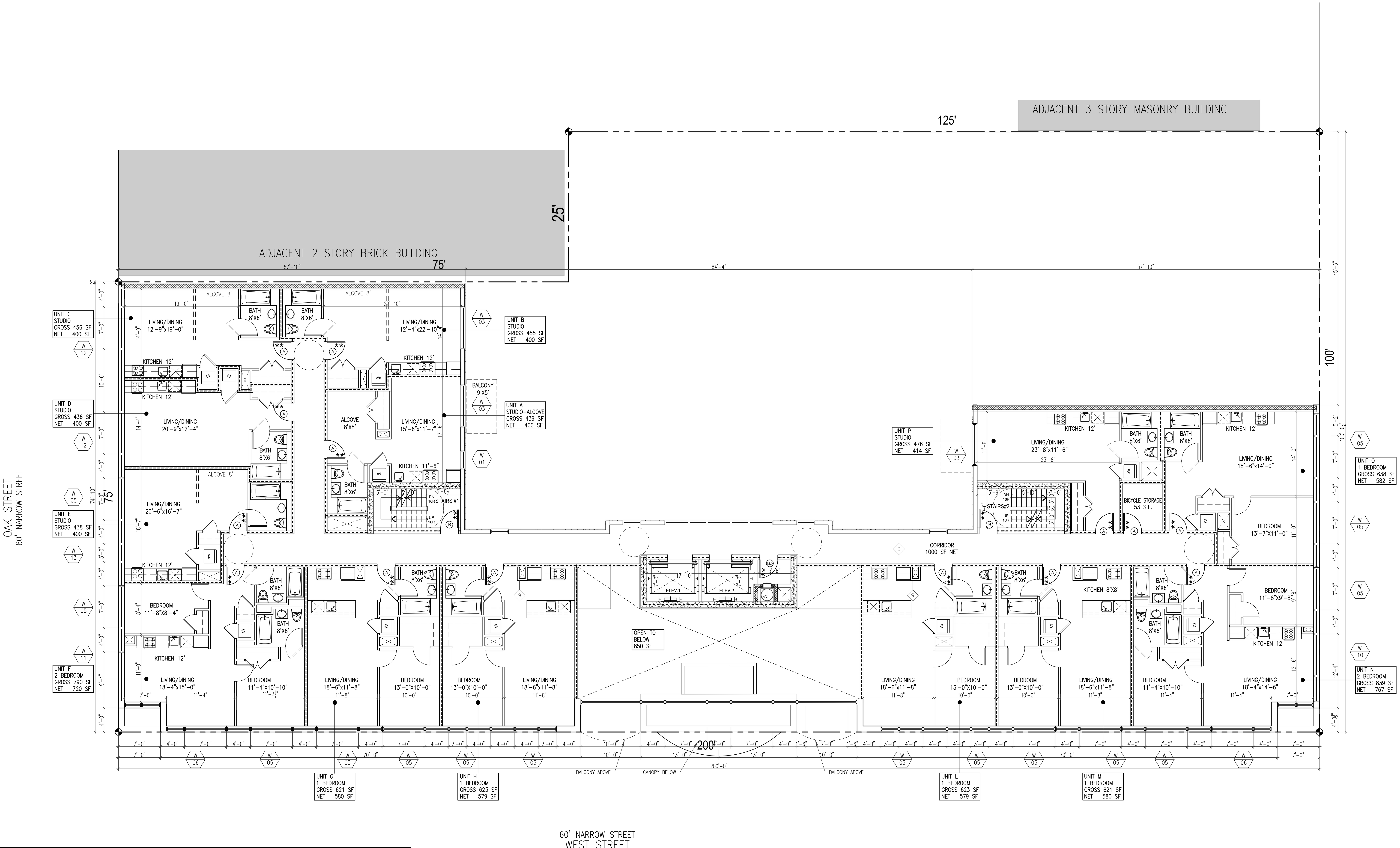
BLOCK 2571 LOT 1
26 WEST STREET, BROOKLYN, 11222

drawing title

1ST FLOOR PLAN
EL: -1'-0" (BFE 11'-0") & 0'-0" (DFE=12'-0")

dob no

scale 1/8"=1'-0"	project no. 14-45
date 2014-04-02	sheet no. OF
drawn	drawing no. A-101
checked	



PLAN SYMBOLS - LEGEND				
GYPSUM BOARD WALL (GWB) NOT FIRE RATED SEE WALL TYPES	EXIT SIGN / EXIT SIGN W/ DIRECTION	BATH ROOM MECH. VENTILATION	WINDOW TAG	DETAIL NUMBER / ENLARGE DETAIL / SHEET NUMBER
1 HR. FIRE RATED WALL SEE WALL TYPES	REVISED AREA & REVISION NUMBER.	HB NON-FREEZE WALL HOSE BIB "RECESSED"	DOOR TAG	ELEVATION NUMBER / BUILDING ELEVATION / SHEET NUMBER
2 HR. FIRE RATED WALL SEE WALL TYPES	COMBINATION SMOKE & CARBON MONOXIDE DETECTOR: HARDWIRED SMOKE & CARBON MONOXIDE DETECTORS SHALL COMPLY WITH NYBC 907.2.9.1.3 & 908.7 AND SHALL BE PROVIDED ON THE CEILING OR WALL OUTSIDE OF EACH ROOM USED FOR SLEEPING PURPOSES WITHIN 15 FEET OF THE DOOR TO SUCH ROOM; IN EACH ROOM USED FOR SLEEPING PURPOSES; OR IN EACH STORY OF A DWELLING UNIT		WALL TAG	SECTION NUMBER / BUILDING SECTION / SHEET NUMBER
3 HR. FIRE RATED WALL SEE WALL TYPES			RAP FIRE ALARM REMOTE ANNUNCIATOR PANEL	
C.M.U. WALL SEE WALL TYPES FOR FIRE RATING			FIRE ALARM MANUAL PULL STATION	SECTION NUMBER / DETAIL SECTION / SHEET NUMBER
POURED IN PLACE CONCRETE WALL REFER TO STRUCTURAL DRAWINGS	SMOKE DETECTOR: "e" DENOTES ELEVATOR RECALL		FAP FIRE ALARM PANEL	EP ELECTRIC PANEL
FUTURE OUTWARD DOOR SWING OF ADAPTABLE BATH ROOM ONCE THE DWELLING UNIT IS OCCUPIED BY PERSON W/ PHYSICAL DISABILITY.	T.D. = X'-X" ACTUAL T.D. (TRAVEL DISTANCE) / MAX. = X'-X" MAX. T.D. (TRAVEL DISTANCE) ALLOWED		CARBON MONOXIDE SENSOR	HEAT DETECTOR
** INDICATES 1 1/2 HR. FIRE RATED ULC LABELED DOOR AND PRESSED STEEL FRAME WITH DOOR CLOSER	* INDICATES 3/4 HR. FIRE RATED ULC LABELED DOOR AND PRESSED STEEL FRAME WITH DOOR CLOSER		HERE 'YOU ARE HERE' SIGN	BXX BALCONY TYPE

** INDICATES 1 1/2 HR. FIRE RATED ULC LABELED DOOR AND PRESSED STEEL FRAME WITH DOOR CLOSER

1 / A-102 **2ND FLOOR**
SCALE: 1/8"=1'-0"

2nd FLOOR PLAN
TOTAL GROSS FLOOR AREA
10,129.00 SF

issue	rev	date	description
1		2014/11/25	ISSUED TO D.O.B.

ISSUES/REVISIONS

MEP ENGINEER:

STRUCTURAL ENGINEER:

CLIENT

KARL FISCHER ARCHITECT
OAQ RAIC AIA
530 BROADWAY, 9th FLOOR, NEW YORK, NY 10012
TEL: (212) 219-9733 FAX: (212) 219-8980
1420 NOTRE-DAME WEST, MONTREAL, QC H3C 1K9
TEL: (514) 933-4137 FAX: (514) 933-0409
WEB SITE: WWW.KFARCHITECT.COM
E-MAIL:KARL@KFARCHITECT.COM

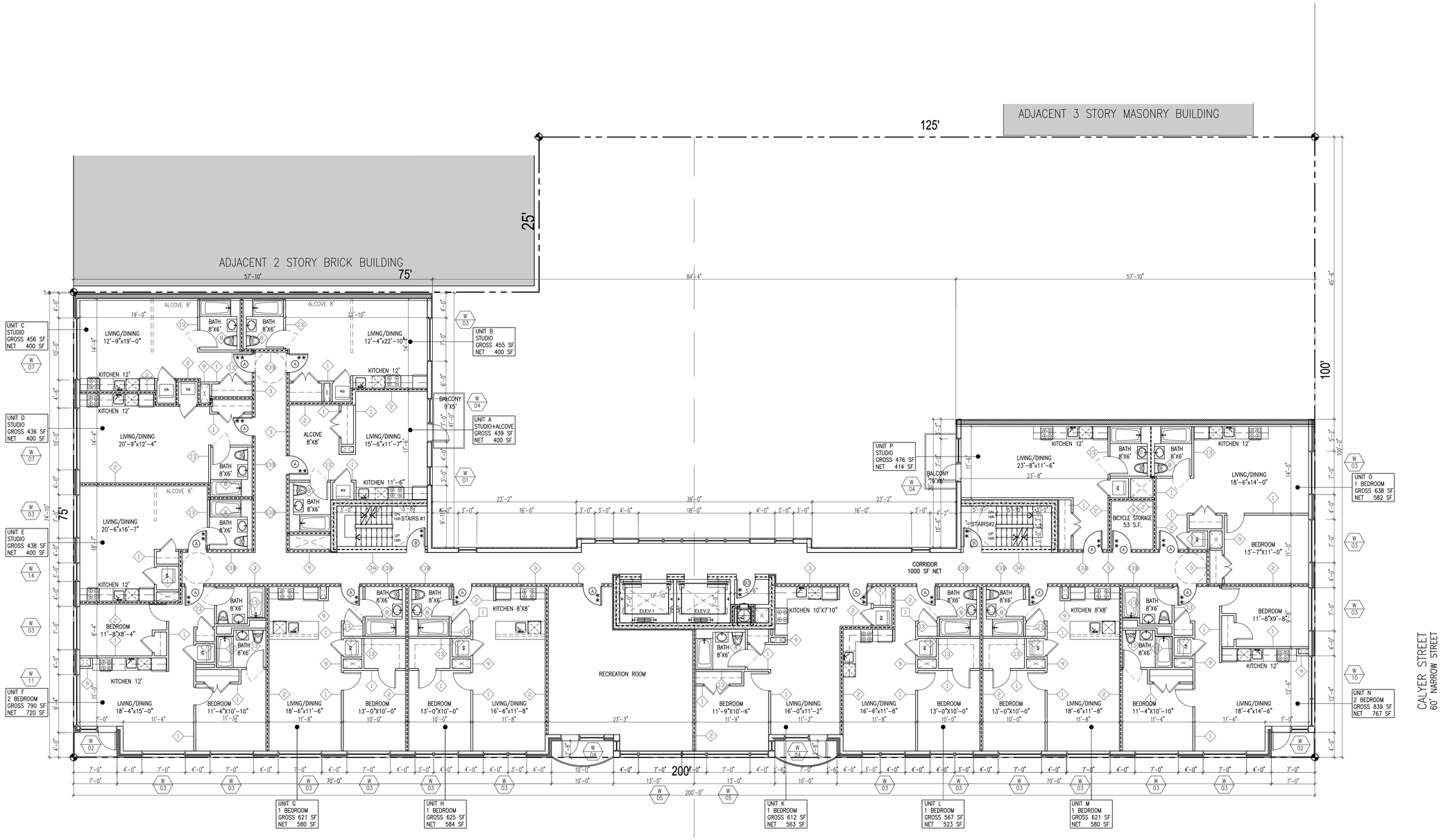
SEAL
REGISTERED ARCHITECT KARL FISCHER 021282 STATE OF NEW YORK

project title
BLOCK 2571 LOT 1
26 WEST STREET, BROOKLYN, 11222

drawing title
2ND FLOOR PLAN
EL: 10'-0"(GEO 22'-0")

dob no

scale	1/8"=1'-0"	project no.	14-45
date	2014-04-02	sheet no.	OF
drawn		drawing no.	A-102
checked			



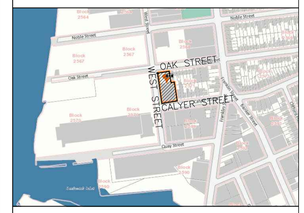
PLAN SYMBOLS - LEGEND

- GYPSUM BOARD WALL (GWB) NOT FIRE RATED SEE WALL TYPES
- 1 HR. FIRE RATED WALL SEE WALL TYPES
- 2 HR. FIRE RATED WALL SEE WALL TYPES
- 3 HR. FIRE RATED WALL SEE WALL TYPES
- C.M.U. WALL SEE WALL TYPES FOR FIRE RATING
- POURED IN PLACE CONCRETE WALL REFER TO STRUCTURAL DRAWINGS
- FUTURE OUTWARD DOOR SWING OF ADAPTABLE BATH ROOM ONCE THE DWELLING UNIT IS OCCUPIED BY PERSON W/ PHYSICAL DISABILITY.
- ** INDICATES 1 1/2 HR. FIRE RATED ULC LABELED DOOR AND PRESSED STEEL FRAME WITH DOOR CLOSER
- EXIT SIGN
- EXIT SIGN W/ DIRECTION
- REVISED AREA & REVISION NUMBER.
- BATH ROOM MECH. VENTILATION
- HB NON-FREEZE WALL HOSE BIB 'RECESSED'
- COMBINATION SMOKE & CARBON MONOXIDE DETECTORS: HARDWIRED SMOKE & CARBON MONOXIDE DETECTORS SHALL COMPLY WITH NYBC 907.2.9.1.3 & 908.7 AND SHALL BE PROVIDED ON THE CEILING OR WALL OUTSIDE OF EACH ROOM USED FOR SLEEPING PURPOSES WITHIN 15 FEET OF THE DOOR TO SUCH ROOM; IN EACH ROOM USED FOR SLEEPING PURPOSES; OR IN EACH STORY OF A DWELLING UNIT
- SD SMOKE DETECTOR: 'd' DENOTES ELEVATOR RECALL
- T.D. = X'-X" MAX. T.D. = X'-X" ACTUAL T.D. (TRAVEL DISTANCE) MAX. T.D. (TRAVEL DISTANCE) ALLOWED
- * INDICATES 3/4 HR. FIRE RATED ULC LABELED DOOR AND PRESSED STEEL FRAME WITH DOOR CLOSER
- ** INDICATES 1 1/2 HR. FIRE RATED ULC LABELED DOOR AND PRESSED STEEL FRAME WITH DOOR CLOSER
- XX WINDOW TAG
- X DOOR TAG
- WALL TAG
- FAP FIRE ALARM REMOTE ANNUNCIATOR PANEL
- FIRE ALARM MANUAL PULL STATION
- FAP FIRE ALARM PANEL
- CO CARBON MONOXIDE SENSOR
- HERE "YOU ARE HERE" SIGN
- DETAIL NUMBER / SHEET NUMBER
- ELEVATION NUMBER / BUILDING ELEVATION / SHEET NUMBER
- SECTION NUMBER / BUILDING SECTION / SHEET NUMBER
- SECTION NUMBER / DETAIL SECTION / SHEET NUMBER
- FP ELECTRIC PANEL
- H HEAT DETECTOR
- BXX BALCONY TYPE

1 3RD FLOOR
A-103 SCALE: 1/8"=1'-0"

3rd FLOOR PLAN
TOTAL GROSS FLOOR AREA
10,280.7 SF

KEY PLAN



BLOCK 2571 LOT 1

issue	rev	date	description
1		2014/11/25	ISSUED TO D.O.B.

ISSUES/REVISIONS

MEP ENGINEER:

STRUCTURAL ENGINEER:

CLIENT

KARL FISCHER ARCHITECT
OAQ RAIC AIA
530 BROADWAY, 9th FLOOR, NEW YORK, NY 10012
TEL: (212) 219-9733 FAX: (212) 219-8980
1420 NOTRE-DAME WEST, MONTREAL, QC H3C 1K9
TEL: (514) 933-4137 FAX: (514) 933-0409
WEB SITE: WWW.KFARCHITECT.COM
E-MAIL:KARL@KFARCHITECT.COM

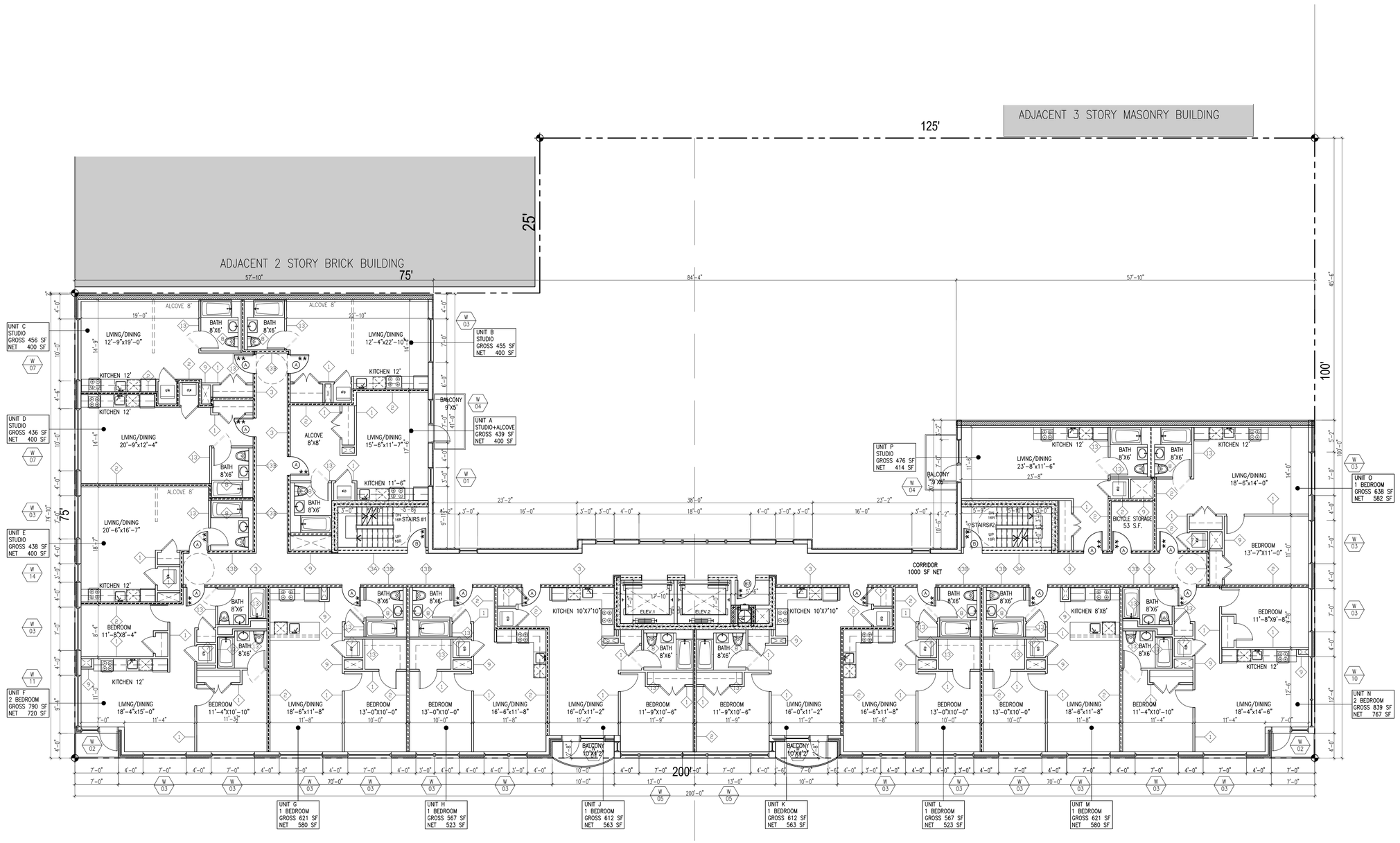
SEAL
REGISTERED ARCHITECT
KARL FISCHER
021282
STATE OF NEW YORK

project title
BLOCK 2571 LOT 1
26 WEST STREET, BROOKLYN, 11222

drawing title
3RD FLOOR PLAN
EL: 20'-0"(GEO 32'-0")

dob no

scale 1/8"=1'-0"	project no. 14-45
date 2014-04-02	sheet no. OF
drawn	drawing no. A-103
checked	



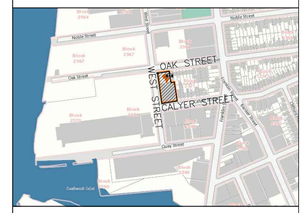
PLAN SYMBOLS - LEGEND

- GYPSUM BOARD WALL (GWB) NOT FIRE RATED SEE WALL TYPES
- 1 HR. FIRE RATED WALL SEE WALL TYPES
- 2 HR. FIRE RATED WALL SEE WALL TYPES
- 3 HR. FIRE RATED WALL SEE WALL TYPES
- C.M.U. WALL SEE WALL TYPES FOR FIRE RATING
- POURED IN PLACE CONCRETE WALL REFER TO STRUCTURAL DRAWINGS
- FUTURE OUTWARD DOOR SWING OF ADAPTABLE BATH ROOM ONCE THE DWELLING UNIT IS OCCUPIED BY PERSON W/ PHYSICAL DISABILITY.
- ** INDICATES 1 1/2 HR. FIRE RATED ULC LABELED DOOR AND PRESSED STEEL FRAME WITH DOOR CLOSER
- EXIT SIGN
- EXIT SIGN W/ DIRECTION
- REVISED AREA & REVISION NUMBER.
- COMBINATION SMOKE & CARBON MONOXIDE DETECTOR: HARDWIRED SMOKE & CARBON MONOXIDE DETECTORS SHALL COMPLY WITH NYBC 907.2.9.1.3 & 908.7 AND SHALL BE PROVIDED ON THE CEILING OR WALL OUTSIDE OF EACH ROOM USED FOR SLEEPING PURPOSES WITHIN 15 FEET OF THE DOOR TO SUCH ROOM. IN EACH ROOM USED FOR SLEEPING PURPOSES, OR IN EACH STORY OF A DWELLING UNIT
- SMOKE DETECTOR: 'w' DENOTES ELEVATOR RECALL
- T.D. - MAX. = ACTUAL T.D. (TRAVEL DISTANCE) MAX. T.D. (TRAVEL DISTANCE) ALLOWED
- * INDICATES 3/4 HR. FIRE RATED ULC LABELED DOOR AND PRESSED STEEL FRAME WITH DOOR CLOSER
- BATH ROOM MECH. VENTILATION
- NON-FREEZE WALL HOSE BIB 'RECESSED'
- WINDOW TAG
- DOOR TAG
- WALL TAG
- FAP FIRE ALARM REMOTE ANNUNCIATOR PANEL
- F FIRE ALARM MANUAL PULL STATION
- FAP FIRE ALARM PANEL
- CO CARBON MONOXIDE SENSOR
- HERE 'YOU ARE HERE' SIGN
- DETAIL NUMBER, ENLARGE DETAIL SHEET NUMBER
- ELEVATION NUMBER, BUILDING ELEVATION SHEET NUMBER
- SECTION NUMBER, BUILDING SECTION SHEET NUMBER
- SECTION NUMBER, DETAIL SECTION SHEET NUMBER
- ELECTRIC PANEL
- H HEAT DETECTOR
- BXX BALCONY TYPE

1 4TH FLOOR
A-104 SCALE: 1/8"=1'-0"

4th FLOOR PLAN
TOTAL GROSS FLOOR AREA
10,280.7 SF

KEY PLAN



BLOCK 2571 LOT 1

issue	rev	date	description
1		2014/11/25	ISSUED TO D.O.B.

ISSUES/REVISIONS

MEP ENGINEER:

STRUCTURAL ENGINEER:

CLIENT

KARL FISCHER ARCHITECT
OAQ RAIC AIA
530 BROADWAY, 9th FLOOR, NEW YORK, NY 10012
TEL: (212) 219-9733 FAX: (212) 219-8980
1420 NOTRE-DAME WEST, MONTREAL, QC H3C 1K9
TEL: (514) 933-4137 FAX: (514) 933-0409
WEB SITE: WWW.KFARCHITECT.COM
E-MAIL:KARL@KFARCHITECT.COM

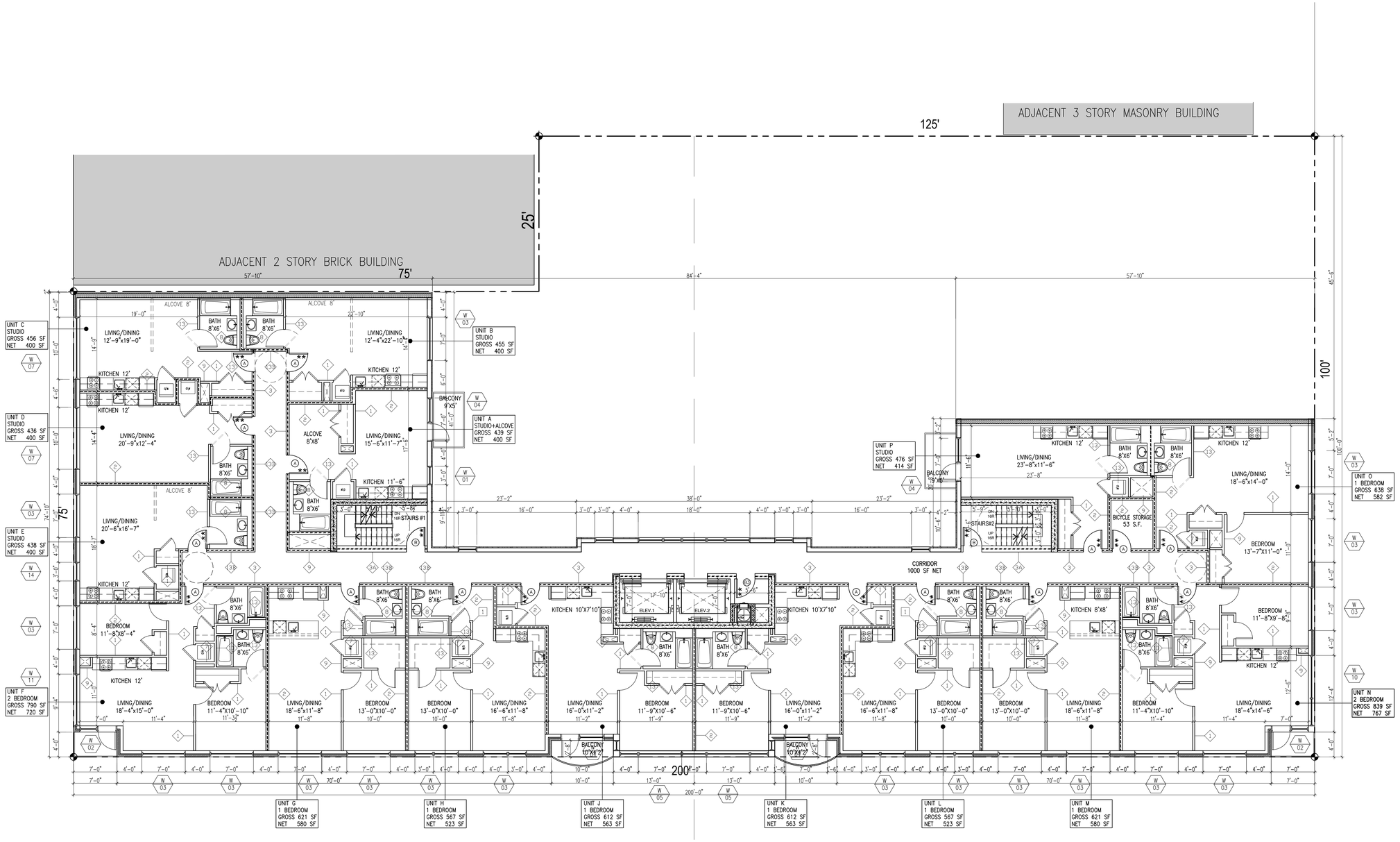
SEAL
REGISTERED ARCHITECT
KARL FISCHER
021282
STATE OF NEW YORK

project title
BLOCK 2571 LOT 1
26 WEST STREET, BROOKLYN, 11222

drawing title
4TH FLOOR PLAN
EL: 30'-0"(GEO 42'-0")

dob no

scale 1/8"=1'-0"	project no. 14-45
date 2014-04-02	sheet no. OF
drawn	drawing no. A-104
checked	

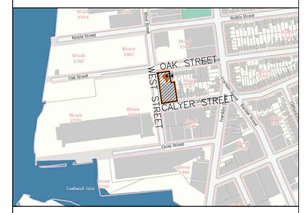


PLAN SYMBOLS - LEGEND			
GYPSUM BOARD WALL (GWB) NOT FIRE RATED SEE WALL TYPES	EXIT SIGN / EXIT SIGN W/ DIRECTION	BATH ROOM MECH. VENTILATION	** INDICATES 1 1/2 HR. FIRE RATED ULC LABELED DOOR AND PRESSED STEEL FRAME WITH DOOR CLOSER
1 HR. FIRE RATED WALL SEE WALL TYPES	REVISED AREA & REVISION NUMBER	HB NON-FREEZE WALL HOSE BIB 'RECESSED'	XXX WINDOW TAG
2 HR. FIRE RATED WALL SEE WALL TYPES	COMBINATION SMOKE & CARBON MONOXIDE DETECTOR: HARDWIRED SMOKE & CARBON MONOXIDE DETECTORS SHALL COMPLY WITH NYBC 907.2.9.1.3 & 908.7 AND SHALL BE PROVIDED ON THE CEILING OR WALL OUTSIDE OF EACH ROOM USED FOR SLEEPING PURPOSES WITHIN 15 FEET OF THE DOOR TO SUCH ROOM. IN EACH ROOM USED FOR SLEEPING PURPOSES, OR IN EACH STORY OF A DWELLING UNIT		X DOOR TAG
3 HR. FIRE RATED WALL SEE WALL TYPES			WALL TAG
C.M.U. WALL SEE WALL TYPES FOR FIRE RATING		RAP FIRE ALARM REMOTE ANNUNCIATOR PANEL	SECTION NUMBER BUILDING SECTION SHEET NUMBER
POURED IN PLACE CONCRETE WALL REFER TO STRUCTURAL DRAWINGS	SMOKE DETECTOR: 'w' DENOTES ELEVATOR RECALL	F FIRE ALARM MANUAL PULL STATION	SECTION NUMBER DETAIL SECTION SHEET NUMBER
FUTURE OUTWARD DOOR SWING OF ADAPTABLE BATH ROOM ONCE THE DWELLING UNIT IS OCCUPIED BY PERSON W/ PHYSICAL DISABILITY.	T.D. - ACTUAL T.D. (TRAVEL DISTANCE) MAX. - MAX. T.D. (TRAVEL DISTANCE) ALLOWED	FAP FIRE ALARM PANEL	ELECTRIC PANEL
** INDICATES 1 1/2 HR. FIRE RATED ULC LABELED DOOR AND PRESSED STEEL FRAME WITH DOOR CLOSER	* INDICATES 3/4 HR. FIRE RATED ULC LABELED DOOR AND PRESSED STEEL FRAME WITH DOOR CLOSER	CO CARBON MONOXIDE SENSOR	H HEAT DETECTOR
		HERE 'YOU ARE HERE' SIGN	BXX BALCONY TYPE

1 A-105 **5TH FLOOR**
SCALE: 1/8"=1'-0"

5th FLOOR PLAN
TOTAL GROSS FLOOR AREA
10,280.7 SF

KEY PLAN



BLOCK 2571 LOT 1

issue	rev	date	description
1		2014/11/25	ISSUED TO D.O.B.

ISSUES/REVISIONS

MEP ENGINEER:

STRUCTURAL ENGINEER:

CLIENT

KARL FISCHER ARCHITECT
OAQ RAIC AIA
530 BROADWAY, 9th FLOOR, NEW YORK, NY 10012
TEL: (212) 219-9733 FAX: (212) 219-8980
1420 NOTRE-DAME WEST, MONTREAL, QC H3C 1K9
TEL: (514) 933-4137 FAX: (514) 933-0409
WEB SITE: WWW.KFARCHITECT.COM
E-MAIL:KARL@KFARCHITECT.COM

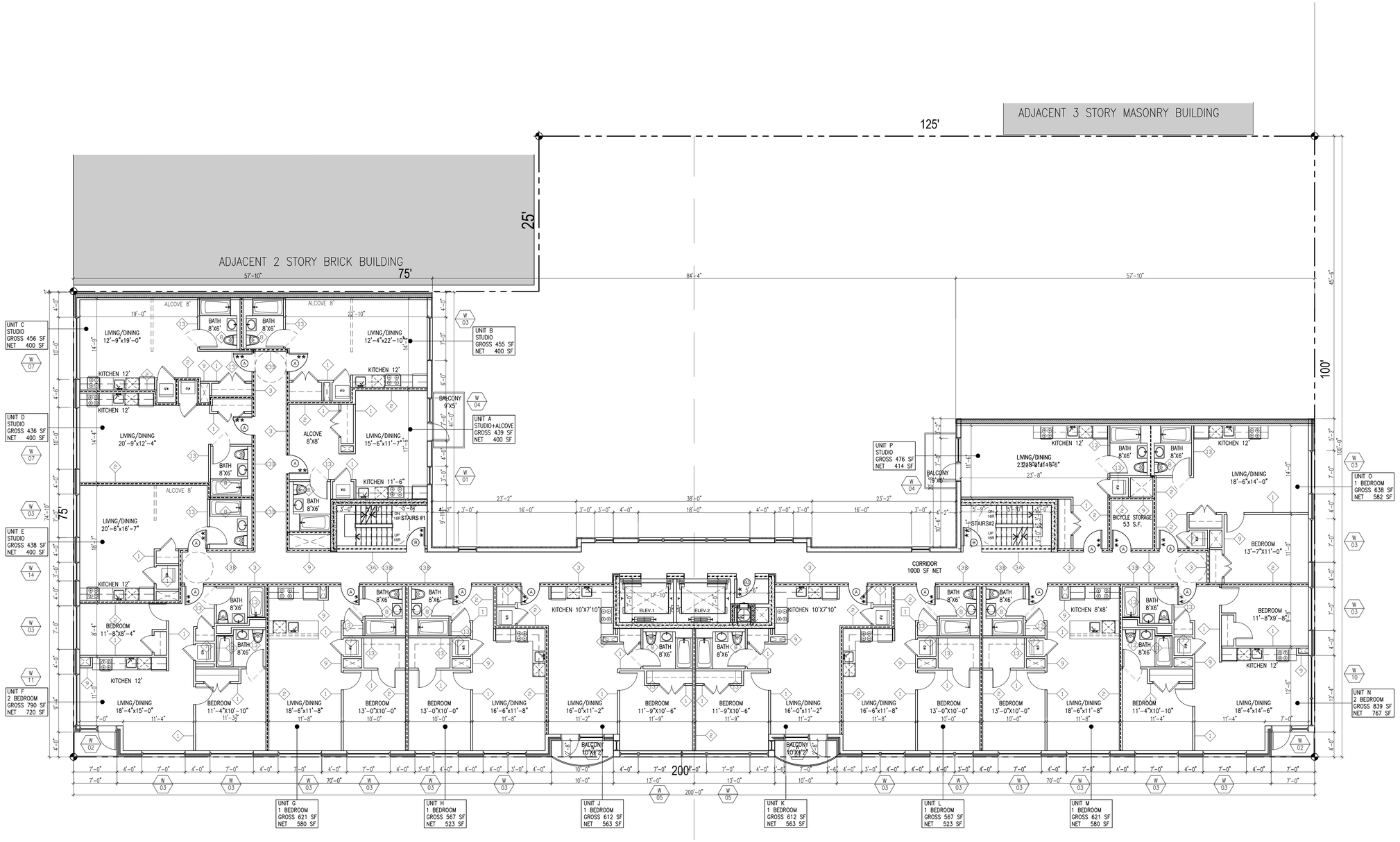
SEAL
REGISTERED ARCHITECT
KARL FISCHER
021262
STATE OF NEW YORK

project title
BLOCK 2571 LOT 1
26 WEST STREET, BROOKLYN, 11222

drawing title
5TH FLOOR PLAN
EL: 40'-0"(GEO 52'-0")

dob no

scale 1/8"=1'-0"	project no. 14-45
date 2014-04-02	sheet no. OF
drawn	drawing no. A-105
checked	



PLAN SYMBOLS - LEGEND

- GYPSUM BOARD WALL (GWB) NOT FIRE RATED SEE WALL TYPES
- 1 HR. FIRE RATED WALL SEE WALL TYPES
- 2 HR. FIRE RATED WALL SEE WALL TYPES
- 3 HR. FIRE RATED WALL SEE WALL TYPES
- C.M.U. WALL SEE WALL TYPES FOR FIRE RATING
- POURED IN PLACE CONCRETE WALL REFER TO STRUCTURAL DRAWINGS
- FUTURE OUTWARD DOOR SWING OF ADAPTABLE BATH ROOM ONCE THE DWELLING UNIT IS OCCUPIED BY PERSON W/ PHYSICAL DISABILITY.
- ** INDICATES 1 1/2 HR. FIRE RATED ULC LABELED DOOR AND PRESSED STEEL FRAME WITH DOOR CLOSER

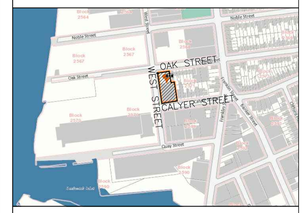
- EXIT SIGN
- EXIT SIGN W/ DIRECTION
- BATH ROOM MECH. VENTILATION
- REVISED AREA & REVISION NUMBER.
- HB NON-FREEZE WALL HOSE BIB 'RECESSED'
- COMBINATION SMOKE & CARBON MONOXIDE DETECTOR: HARDWIRED SMOKE & CARBON MONOXIDE DETECTORS SHALL COMPLY WITH NYBC 907.2.9.1.3 & 908.7 AND SHALL BE PROVIDED ON THE CEILING OR WALL OUTSIDE OF EACH ROOM USED FOR SLEEPING PURPOSES WITHIN 15 FEET OF THE DOOR TO SUCH ROOM. IN EACH ROOM USED FOR SLEEPING PURPOSES, OR IN EACH STORY OF A DWELLING UNIT
- SMOKE DETECTOR: 'e' DENOTES ELEVATOR RECALL
- T.D. = Max. ACTUAL T.D. (TRAVEL DISTANCE) MAX. T.D. (TRAVEL DISTANCE) ALLOWED
- * INDICATES 3/4 HR. FIRE RATED ULC LABELED DOOR AND PRESSED STEEL FRAME WITH DOOR CLOSER

- ** INDICATES 1 1/2 HR. FIRE RATED ULC LABELED DOOR AND PRESSED STEEL FRAME WITH DOOR CLOSER
- XXX WINDOW TAG
- X DOOR TAG
- WALL TAG
- RAP FIRE ALARM REMOTE ANNUNCIATOR PANEL
- F FIRE ALARM MANUAL PULL STATION
- FAP FIRE ALARM PANEL
- CO CARBON MONOXIDE SENSOR
- HERE 'YOU ARE HERE' SIGN
- DETAIL NUMBER: ENLARGE DETAIL SHEET NUMBER
- ELEVATION NUMBER: BUILDING ELEVATION SHEET NUMBER
- SECTION NUMBER: BUILDING SECTION SHEET NUMBER
- SECTION NUMBER: DETAIL SECTION SHEET NUMBER
- ELECTRIC PANEL
- H HEAT DETECTOR
- BXX BALCONY TYPE

1 6TH FLOOR
A-106 SCALE: 1/8"=1'-0"

6th FLOOR PLAN
TOTAL GROSS FLOOR AREA
10,280.7 SF

KEY PLAN



BLOCK 2571 LOT 1

issue	rev	date	description
1		2014/11/25	ISSUED TO D.O.B.

ISSUES/REVISIONS

MEP ENGINEER:

STRUCTURAL ENGINEER:

CLIENT

KARL FISCHER ARCHITECT
OAQ RAIC AIA
530 BROADWAY, 9th FLOOR, NEW YORK, NY 10012
TEL: (212) 219-9733 FAX: (212) 219-8980
1420 NOTRE-DAME WEST, MONTREAL, QC H3C 1K9
TEL: (514) 933-4137 FAX: (514) 933-0409
WEB SITE: WWW.KFARCHITECT.COM
E-MAIL:KARL@KFARCHITECT.COM

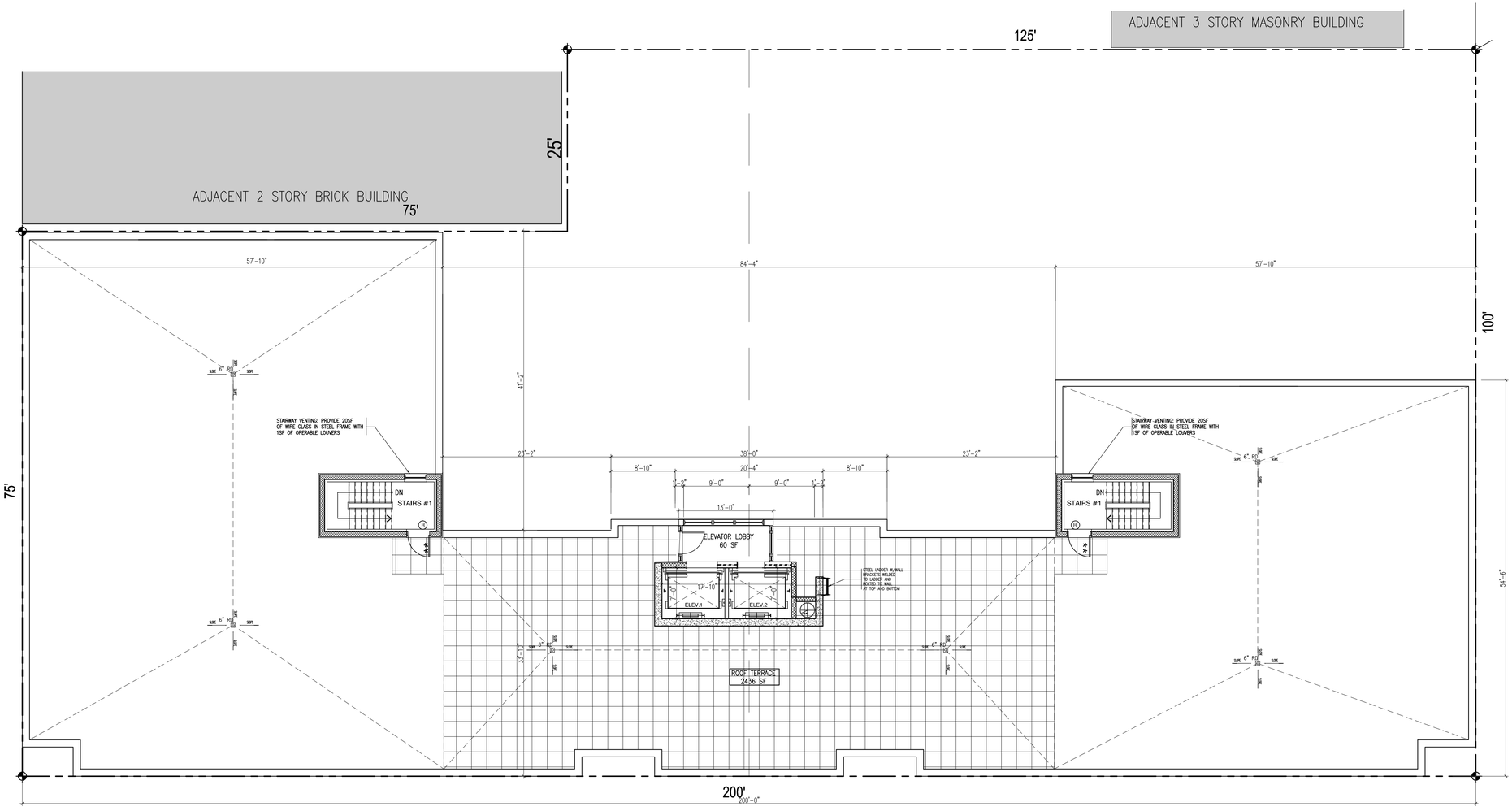
SEAL
REGISTERED ARCHITECT
KARL FISCHER
021262
STATE OF NEW YORK

project title
BLOCK 2571 LOT 1
26 WEST STREET, BROOKLYN, 11222

drawing title
6TH FLOOR PLAN
EL: 50'-0"(GEO 62'-0")

dob no

scale 1/8"=1'-0"	project no. 14-45
date 2014-04-02	sheet no. OF
drawn	drawing no. A-106
checked	



PLAN SYMBOLS - LEGEND			
GYPSUM BOARD WALL (GWB) NOT FIRE RATED SEE WALL TYPES	EXIT SIGN / EXIT SIGN W/ DIRECTION	BATH ROOM MECH. VENTILATION	WINDOW TAG
1 HR. FIRE RATED WALL SEE WALL TYPES	REVISED AREA & REVISION NUMBER	NON-FREEZE WALL HOSE BIB 'RECESSED'	DOOR TAG
2 HR. FIRE RATED WALL SEE WALL TYPES	COMBINATION SMOKE & CARBON MONOXIDE DETECTOR: HARDWIRED SMOKE & CARBON MONOXIDE DETECTORS SHALL COMPLY WITH NYBC 907.2.9.1.3 & 908.7 AND SHALL BE PROVIDED ON THE CEILING OR WALL OUTSIDE OF EACH ROOM USED FOR SLEEPING PURPOSES WITHIN 15 FEET OF THE DOOR TO SUCH ROOM. IN EACH ROOM USED FOR SLEEPING PURPOSES, OR IN EACH STORY OF A DWELLING UNIT		WALL TAG
3 HR. FIRE RATED WALL SEE WALL TYPES			RAP FIRE ALARM REMOTE ANNUNCIATOR PANEL
C.M.U. WALL SEE WALL TYPES FOR FIRE RATING			FIRE ALARM MANUAL PULL STATION
POURED IN PLACE CONCRETE WALL REFER TO STRUCTURAL DRAWINGS	SMOKE DETECTOR: 'e' DENOTES ELEVATOR RECALL		FAP FIRE ALARM PANEL
FUTURE OUTWARD DOOR SWING OF ADAPTABLE BATH ROOM ONCE THE DWELLING UNIT IS OCCUPIED BY PERSON W/ PHYSICAL DISABILITY.	T.D. - ACTUAL T.D. (TRAVEL DISTANCE) MAX. - MAX. T.D. (TRAVEL DISTANCE) ALLOWED		CO CARBON MONOXIDE SENSOR
** INDICATES 1 1/2 HR. FIRE RATED ULC LABELED DOOR AND PRESSED STEEL FRAME WITH DOOR CLOSER	* INDICATES 3/4 HR. FIRE RATED ULC LABELED DOOR AND PRESSED STEEL FRAME WITH DOOR CLOSER		HERE 'YOU ARE HERE' SIGN

** INDICATES 1 1/2 HR. FIRE RATED ULC LABELED DOOR AND PRESSED STEEL FRAME WITH DOOR CLOSER			
DETAIL NUMBER ENLARGE DETAIL SHEET NUMBER			
ELEVATION NUMBER BUILDING ELEVATION SHEET NUMBER			
SECTION NUMBER BUILDING SECTION SHEET NUMBER			
SECTION NUMBER DETAIL SECTION SHEET NUMBER			
ELECTRIC PANEL			
H HEAT DETECTOR			
BXX BALCONY TYPE			

1 ROOF PLAN
A-107 SCALE: 1/8"=1'-0"

ROOF PLAN
TOTAL GROSS FLOOR AREA
531.80 SF

KEY PLAN

BLOCK 2571 LOT 1

issue	rev	date	description
1		2014/11/25	ISSUED TO D.O.B.

ISSUES/REVISIONS

MEP ENGINEER:

STRUCTURAL ENGINEER:

CLIENT

KARL FISCHER ARCHITECT
OAQ RAIC AIA
530 BROADWAY, 9th FLOOR, NEW YORK, NY 10012
TEL: (212) 219-9733 FAX: (212) 219-8980
1420 NOTRE-DAME WEST, MONTREAL, QC H3C 1K9
TEL: (514) 933-4137 FAX: (514) 933-0409
WEB SITE: WWW.KFARCHITECT.COM
E-MAIL:KARL@KFARCHITECT.COM

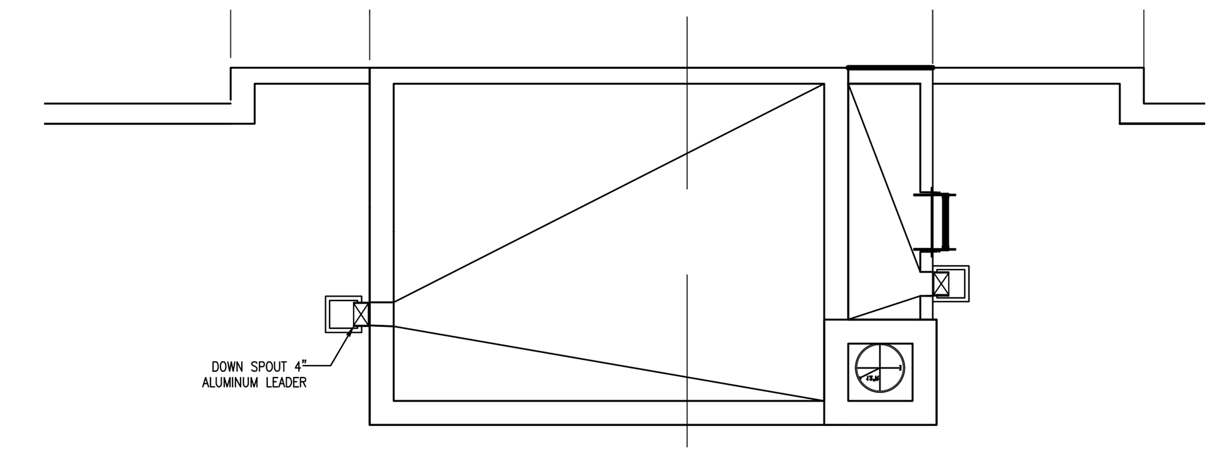
SEAL
REGISTERED ARCHITECT
KARL FISCHER
021282
STATE OF NEW YORK

project title
BLOCK 2571 LOT 1
26 WEST STREET, BROOKLYN, 11222

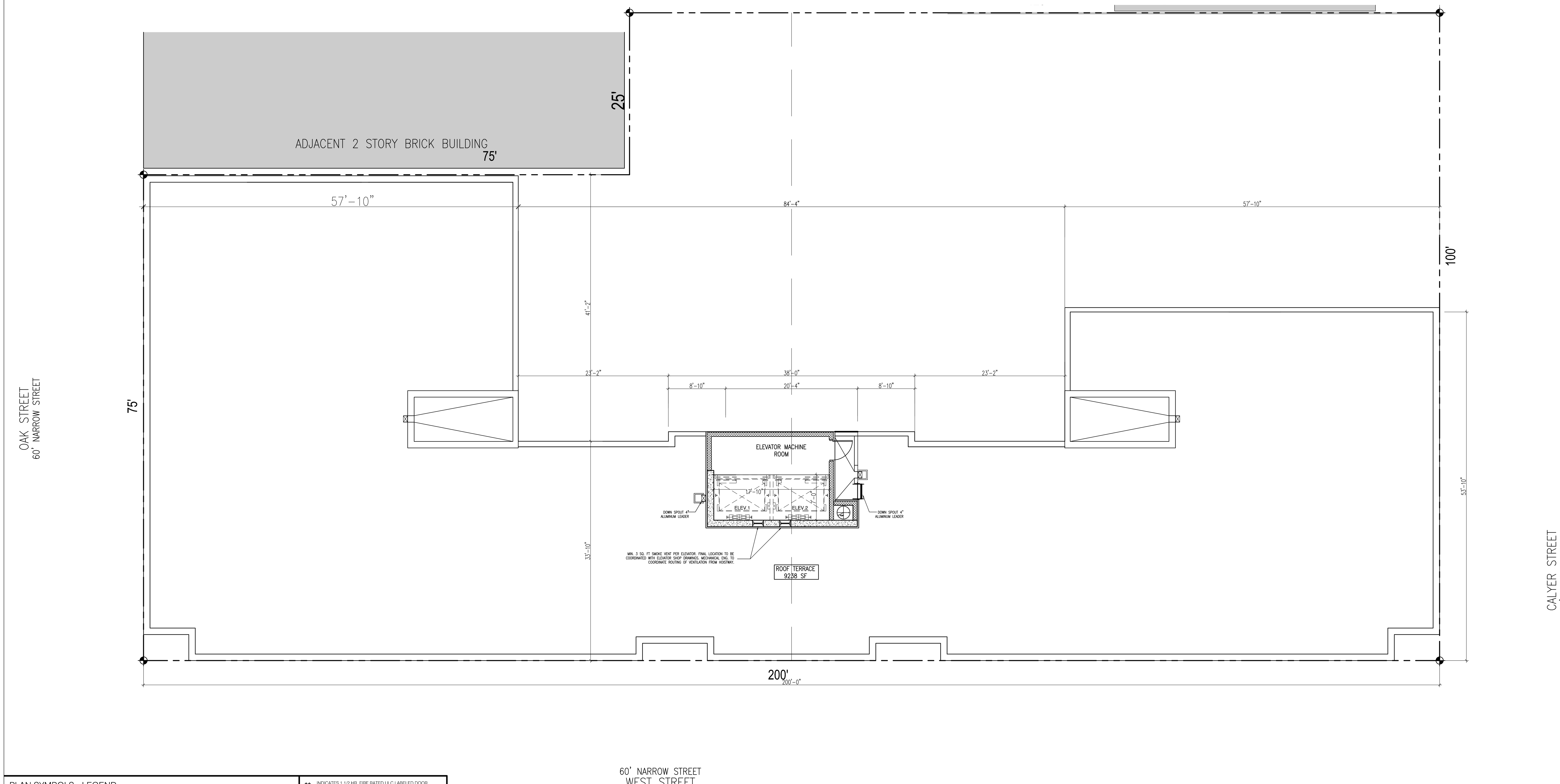
drawing title
ROOF PLAN
EL: 60'-0" (T.O.S.)(GEO 72'-0")

dob no

scale	1/8"=1'-0"	project no.	14-45
date	2014-04-02	sheet no.	OF
drawn		drawing no.	A-107
checked			



2 ROOF ABOVE E.M.R. PLAN
A-108 SCALE: 1/8"=1'-0"



1 E.M.R. PLAN
A-108 SCALE: 1/8"=1'-0"

PLAN SYMBOLS - LEGEND

GYPSUM BOARD WALL (GWB) NOT FIRE RATED SEE WALL TYPES	EXIT SIGN / EXIT SIGN W/ DIRECTION	BATH ROOM MECH. VENTILATION	WINDOW TAG	DETAIL NUMBER / ENLARGE DETAIL / SHEET NUMBER
1 HR. FIRE RATED WALL SEE WALL TYPES	REVISED AREA & REVISION NUMBER.	HB NON-FREEZE WALL HOSE BIB "RECESSED"	DOOR TAG	ELEVATION NUMBER / BUILDING ELEVATION / SHEET NUMBER
2 HR. FIRE RATED WALL SEE WALL TYPES	COMBINATION SMOKE & CARBON MONOXIDE DETECTOR: HARDWIRED SMOKE & CARBON MONOXIDE DETECTORS SHALL COMPLY WITH NYBC 907.2.9.1.3 & 908.7 AND SHALL BE PROVIDED ON THE CEILING OR WALL OUTSIDE OF EACH ROOM USED FOR SLEEPING PURPOSES WITHIN 15 FEET OF THE DOOR TO SUCH ROOM; IN EACH ROOM USED FOR SLEEPING PURPOSES; OR IN EACH STORY OF A DWELLING UNIT		WALL TAG	SECTION NUMBER / BUILDING SECTION / SHEET NUMBER
3 HR. FIRE RATED WALL SEE WALL TYPES			RAP FIRE ALARM REMOTE ANNUNCIATOR PANEL	
C.M.U. WALL SEE WALL TYPES FOR FIRE RATING			FIRE ALARM MANUAL PULL STATION	SECTION NUMBER / DETAIL SECTION / SHEET NUMBER
POURED IN PLACE CONCRETE WALL REFER TO STRUCTURAL DRAWINGS	SMOKE DETECTOR: "e" DENOTES ELEVATOR RECALL		FAP FIRE ALARM PANEL	EP ELECTRIC PANEL
FUTURE OUTWARD DOOR SWING OF ADAPTABLE BATH ROOM ONCE THE DWELLING UNIT IS OCCUPIED BY PERSON W/ PHYSICAL DISABILITY.	T.D. = X'-X" ACTUAL T.D. (TRAVEL DISTANCE) / MAX. = X'-X" MAX. T.D. (TRAVEL DISTANCE) ALLOWED		CARBON MONOXIDE SENSOR	HEAT DETECTOR
** INDICATES 1 1/2 HR. FIRE RATED ULC LABELED DOOR AND PRESSED STEEL FRAME WITH DOOR CLOSER	* INDICATES 3/4 HR. FIRE RATED ULC LABELED DOOR AND PRESSED STEEL FRAME WITH DOOR CLOSER		HERE 'YOU ARE HERE' SIGN	BXX BALCONY TYPE

** INDICATES 1 1/2 HR. FIRE RATED ULC LABELED DOOR AND PRESSED STEEL FRAME WITH DOOR CLOSER

KEY PLAN

BLOCK 2571 LOT 1

issue	rev	date	description
1		2014/11/25	ISSUED TO D.O.B.

ISSUES/REVISIONS

MEP ENGINEER:

STRUCTURAL ENGINEER:

CLIENT

KARL FISCHER ARCHITECT
OAQ RAIC AIA
530 BROADWAY, 9th FLOOR, NEW YORK, NY 10012
TEL: (212) 219-9733 FAX: (212) 219-8980
1420 NOTRE-DAME WEST, MONTREAL, QC H3C 1K9
TEL: (514) 933-4137 FAX: (514) 933-0409
WEB SITE: WWW.KFARCHITECT.COM
E-MAIL:KARL@KFARCHITECT.COM

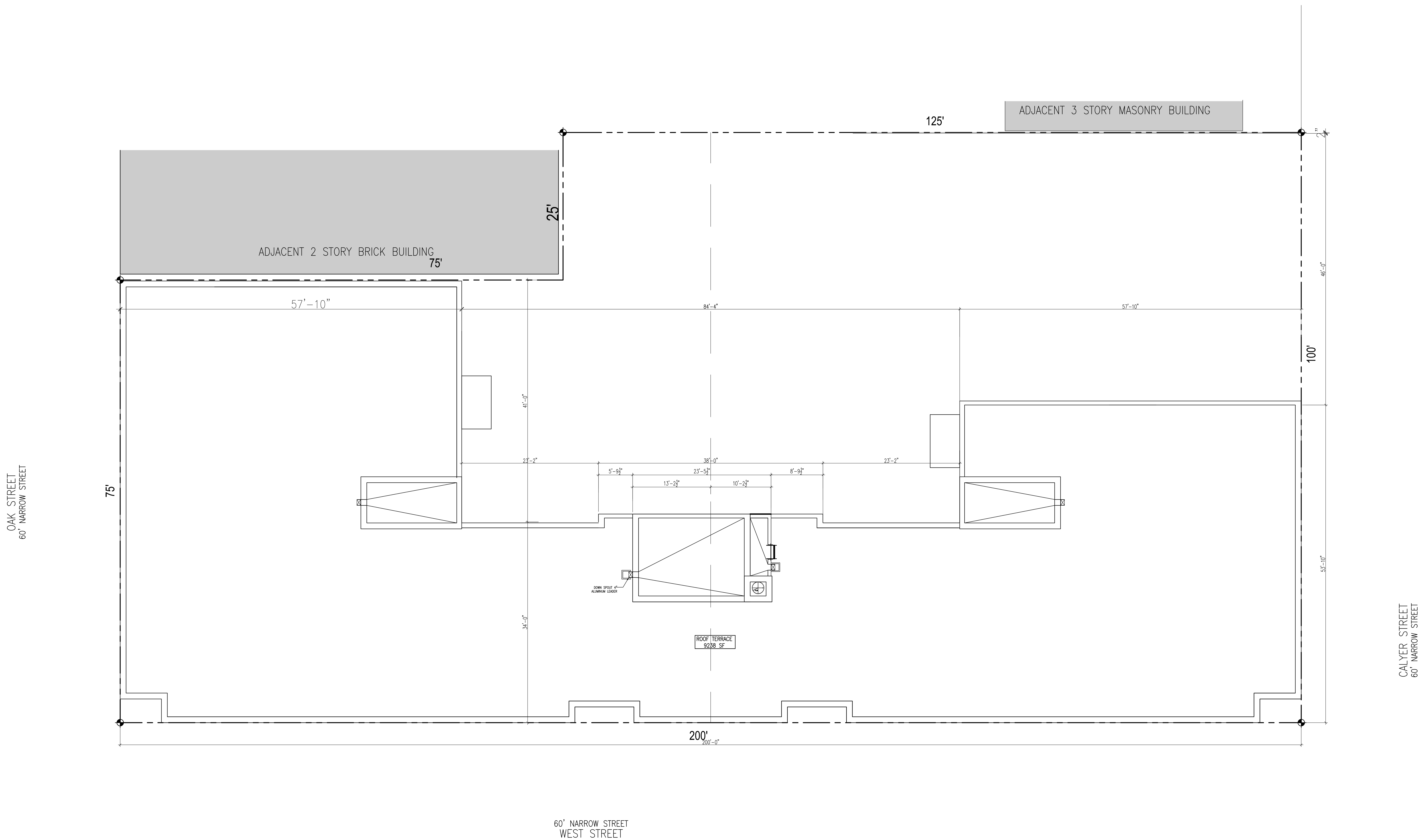
SEAL
REGISTERED ARCHITECT KARL FISCHER 021282 STATE OF NEW YORK

project title
BLOCK 2571 LOT 1
26 WEST STREET, BROOKLYN, 11222

drawing title
E.M.R. PLAN
EL: 70'-0" T.O.S.(GEO 82'-0")

dob no

scale 1/8"=1'-0"	project no. 14-45
date 2014-04-02	sheet no. OF
drawn	drawing no. A-108
checked	



1 ROOF PLAN
A-109 SCALE: 1/8"=1'-0"

PLAN SYMBOLS - LEGEND

GYPSUM BOARD WALL (GWB) NOT FIRE RATED SEE WALL TYPES	EXIT SIGN / EXIT SIGN W/ DIRECTION	BATH ROOM MECH. VENTILATION	WINDOW TAG	DETAIL NUMBER / ENLARGE DETAIL / SHEET NUMBER
1 HR. FIRE RATED WALL SEE WALL TYPES	REVISED AREA & REVISION NUMBER.	HB NON-FREEZE WALL HOSE BIB "RECESSED"	DOOR TAG	ELEVATION NUMBER / BUILDING ELEVATION / SHEET NUMBER
2 HR. FIRE RATED WALL SEE WALL TYPES	COMBINATION SMOKE & CARBON MONOXIDE DETECTOR: HARDWIRED SMOKE & CARBON MONOXIDE DETECTORS SHALL COMPLY WITH NYBC 907.2.9.1.3 & 908.7 AND SHALL BE PROVIDED ON THE CEILING OR WALL OUTSIDE OF EACH ROOM USED FOR SLEEPING PURPOSES WITHIN 15 FEET OF THE DOOR TO SUCH ROOM; IN EACH ROOM USED FOR SLEEPING PURPOSES; OR IN EACH STORY OF A DWELLING UNIT		WALL TAG	SECTION NUMBER / BUILDING SECTION / SHEET NUMBER
3 HR. FIRE RATED WALL SEE WALL TYPES			RAP FIRE ALARM REMOTE ANNUNCIATOR PANEL	
C.M.U. WALL SEE WALL TYPES FOR FIRE RATING			F FIRE ALARM MANUAL PULL STATION	SECTION NUMBER / DETAIL SECTION / SHEET NUMBER
POURED IN PLACE CONCRETE WALL REFER TO STRUCTURAL DRAWINGS	SMOKE DETECTOR: "e" DENOTES ELEVATOR RECALL		FAP FIRE ALARM PANEL	EP ELECTRIC PANEL
FUTURE OUTWARD DOOR SWING OF ADAPTABLE BATH ROOM ONCE THE DWELLING UNIT IS OCCUPIED BY PERSON W/ PHYSICAL DISABILITY.	T.D. = X'-X" / MAX. = X'-X" ACTUAL T.D. (TRAVEL DISTANCE) / MAX. T.D. (TRAVEL DISTANCE) ALLOWED		CO CARBON MONOXIDE SENSOR	H HEAT DETECTOR
** INDICATES 1 1/2 HR. FIRE RATED ULC LABELED DOOR AND PRESSED STEEL FRAME WITH DOOR CLOSER	* INDICATES 3/4 HR. FIRE RATED ULC LABELED DOOR AND PRESSED STEEL FRAME WITH DOOR CLOSER		HERE 'YOU ARE HERE' SIGN	BXX BALCONY TYPE

** INDICATES 1 1/2 HR. FIRE RATED ULC LABELED DOOR AND PRESSED STEEL FRAME WITH DOOR CLOSER

KEY PLAN

BLOCK 2571 LOT 1

ISSUES/REVISIONS

issue	rev	date	description
1		2014/11/25	ISSUED TO D.O.B.

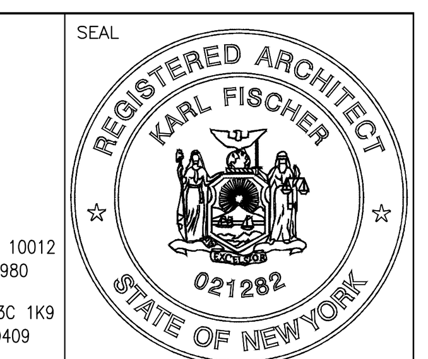
MEP ENGINEER:

STRUCTURAL ENGINEER:

CLIENT

KARL FISCHER ARCHITECT
OAQ RAIC AIA
530 BROADWAY, 9th FLOOR, NEW YORK, NY 10012
TEL: (212) 219-9733 FAX: (212) 219-8980
1420 NOTRE-DAME WEST, MONTREAL, QC H3C 1K9
TEL: (514) 933-4137 FAX: (514) 933-0409
WEB SITE: WWW.KFARCHITECT.COM
E-MAIL:KARL@KFARCHITECT.COM

SEAL

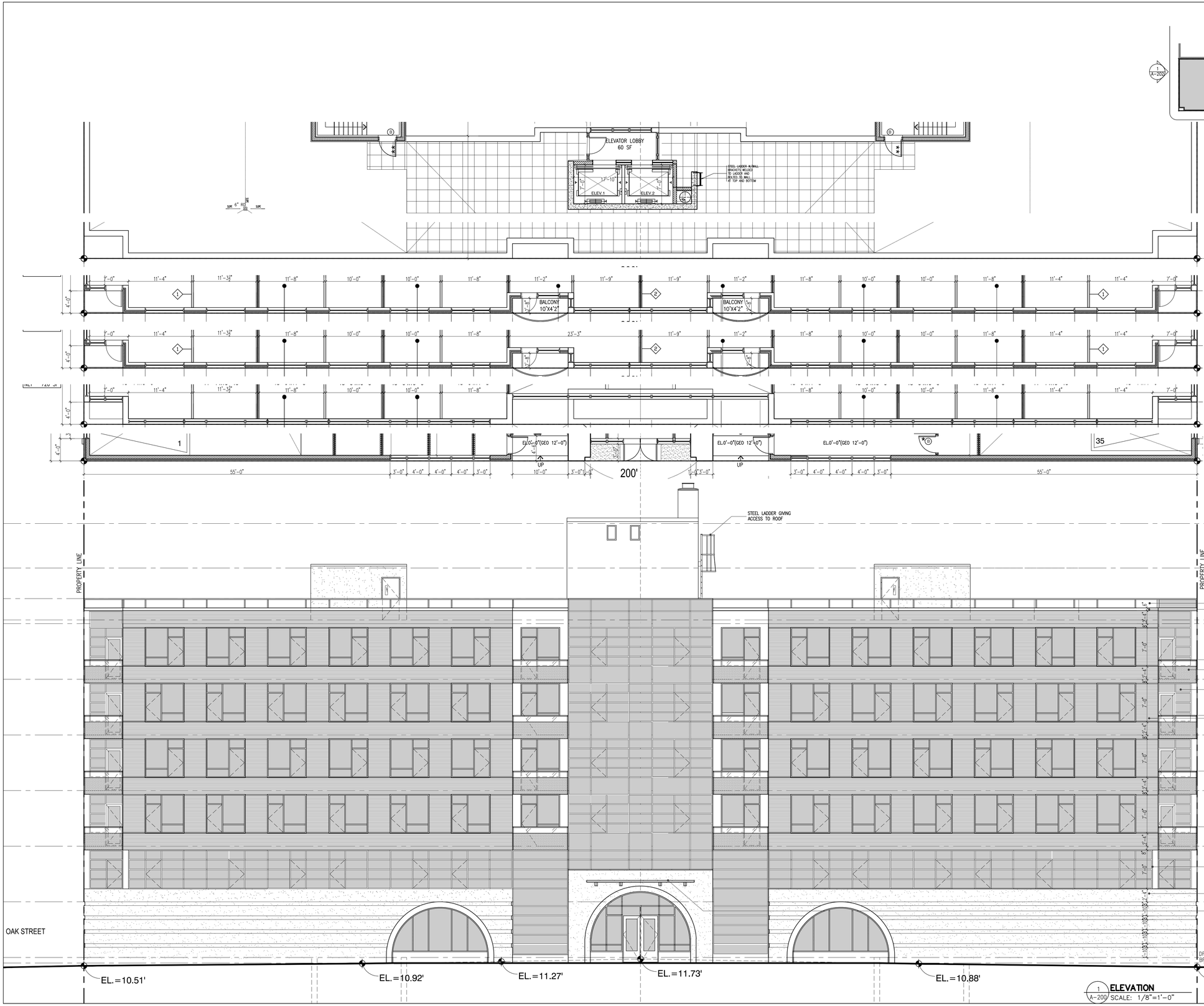


project title
BLOCK 2571 LOT 1
26 WEST STREET, BROOKLYN, 11222

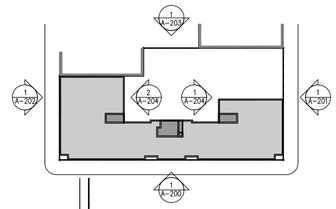
drawing title
ROOF PLAN

dob no

scale 1/8"=1'-0"	project no. 14-45
date 2014-04-02	sheet no. OF
drawn	drawing no. A-109
checked	



1 A-200 **ELEVATION**
SCALE: 1/8"=1'-0"



2 A-200 **KEY PLAN**
SCALE: 1/64"=1'-0"

1E A-200 **PARTIAL ROOF FLOOR PLAN**
SCALE: 1/8"=1'-0"

1D A-200 **PARTIAL 4-6 FLOOR PLAN**
SCALE: 1/8"=1'-0"

1C A-200 **PARTIAL 3RD FLOOR PLAN**
SCALE: 1/8"=1'-0"

1B A-200 **PARTIAL 2ND FLOOR PLAN**
SCALE: 1/8"=1'-0"

1A A-200 **PARTIAL 1ST FLOOR PLAN**
SCALE: 1/8"=1'-0"

KEY PLAN

BLOCK 2571 LOT 1

issue	rev	date	description
1		2014/11/25	ISSUED TO D.O.B.

ISSUES/REVISIONS

MEP ENGINEER:

STRUCTURAL ENGINEER:

CLIENT

KARL FISCHER ARCHITECT
OAQ RAIC AIA
530 BROADWAY, 9th FLOOR, NEW YORK, NY 10012
TEL: (212) 219-9733 FAX: (212) 219-8980
1420 NOTRE-DAME WEST, MONTREAL, QC H3C 1K9
TEL: (514) 933-4137 FAX: (514) 933-0409
WEB SITE: WWW.KFARCHITECT.COM
E-MAIL:KARL@KFARCHITECT.COM

SEAL

REGISTERED ARCHITECT KARL FISCHER 021282 STATE OF NEW YORK

project title

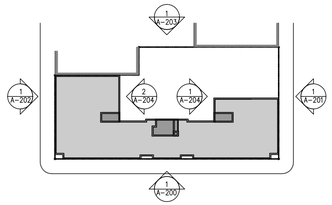
BLOCK 2571 LOT 1
26 WEST STREET, BROOKLYN, 11222

drawing title

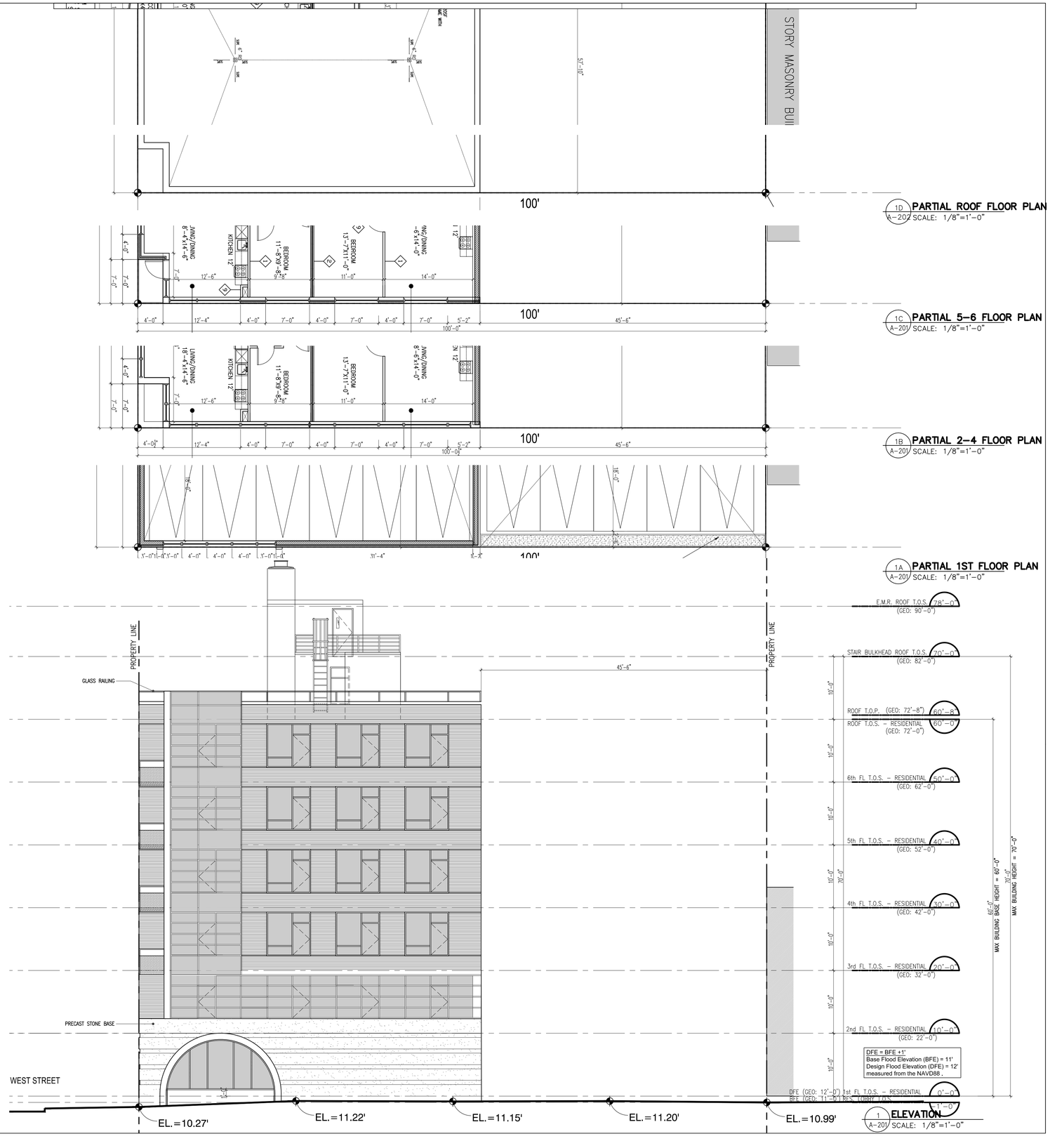
ELEVATION
WEST STREET

dob no

scale	1/8"=1'-0"	project no.	14-45
date	2014-04-02	sheet no.	OF
drawn		drawing no.	A-200
checked			



2 A-201 **KEY PLAN**
SCALE: 1/64"=1'-0"



1D A-202 **PARTIAL ROOF FLOOR PLAN**
SCALE: 1/8"=1'-0"

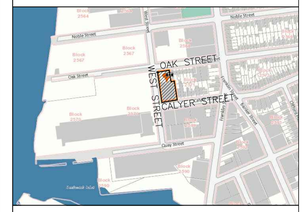
1C A-201 **PARTIAL 5-6 FLOOR PLAN**
SCALE: 1/8"=1'-0"

1B A-201 **PARTIAL 2-4 FLOOR PLAN**
SCALE: 1/8"=1'-0"

1A A-201 **PARTIAL 1ST FLOOR PLAN**
SCALE: 1/8"=1'-0"

1 A-201 **ELEVATION**
SCALE: 1/8"=1'-0"

KEY PLAN



BLOCK 2571 LOT 1

issue	rev	date	description
1		2014/11/25	ISSUED TO D.O.B.

ISSUES/REVISIONS

MEP ENGINEER:

STRUCTURAL ENGINEER:

CLIENT

KARL FISCHER ARCHITECT
OAQ RAIC AIA
530 BROADWAY, 9th FLOOR, NEW YORK, NY 10012
TEL: (212) 219-9733 FAX: (212) 219-8980
1420 NOTRE-DAME WEST, MONTREAL, QC H3C 1K9
TEL: (514) 933-4137 FAX: (514) 933-0409
WEB SITE: WWW.KFARCHITECT.COM
E-MAIL:KARL@KFARCHITECT.COM

SEAL

project title

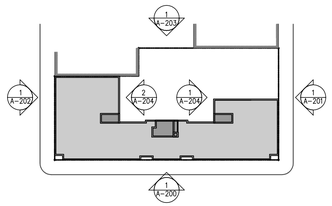
BLOCK 2571 LOT 1
26 WEST STREET, BROOKLYN, 11222

drawing title

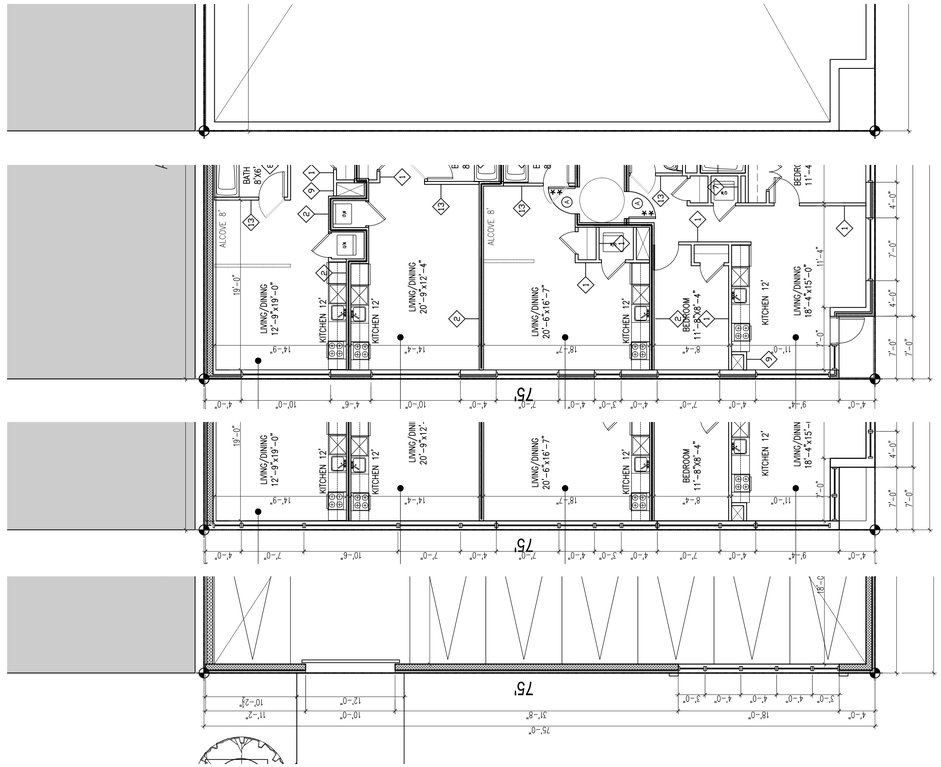
ELEVATION
CALYER STREET

dob no

scale 1/8"=1'-0"		project no. 14-45	
date 2014-04-02		sheet no. OF	
drawn		drawing no. A-201	
checked			



2 **KEY PLAN**
A-202 SCALE: 1/64"=1'-0"

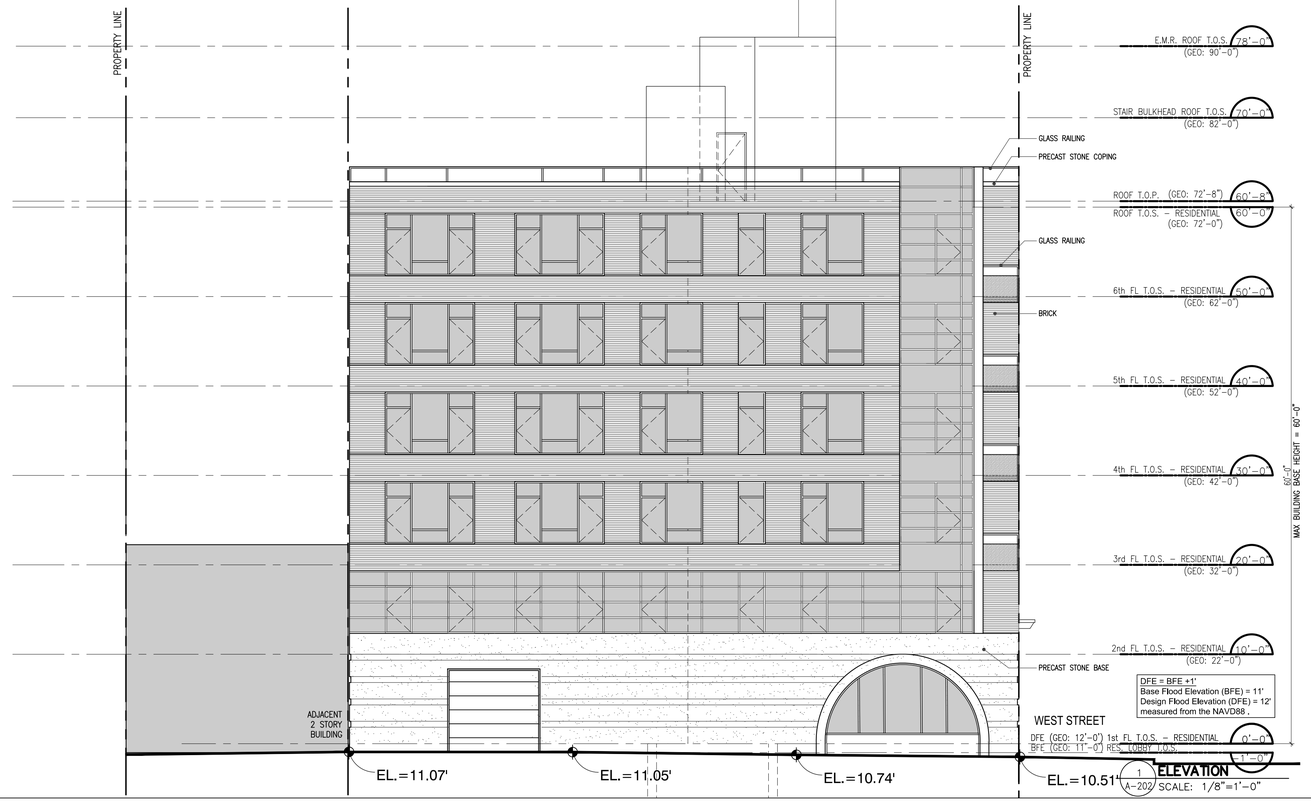


1D **PARTIAL 7TH FLOOR PLAN**
A-202 SCALE: 1/8"=1'-0"

1C **PARTIAL 4–6 FLOOR PLAN**
A-202 SCALE: 1/8"=1'-0"

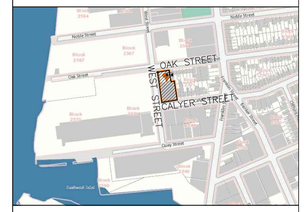
1B **PARTIAL 2ND FLOOR PLAN**
A-202 SCALE: 1/8"=1'-0"

1A **PARTIAL 1ST FLOOR PLAN**
A-202 SCALE: 1/8"=1'-0"



1 **ELEVATION**
A-202 SCALE: 1/8"=1'-0"

KEY PLAN



BLOCK 2571 LOT 1

issue	rev	date	description
1		2014/11/25	ISSUED TO D.O.B.

ISSUES/REVISIONS

MEP ENGINEER:

STRUCTURAL ENGINEER:

CLIENT:

KARL FISCHER ARCHITECT
OAQ RAIC AIA
530 BROADWAY, 9th FLOOR, NEW YORK, NY 10012
TEL: (212) 219-9733 FAX: (212) 219-8980
1420 NOTRE-DAME WEST, MONTREAL, QC H3C 1K9
TEL: (514) 933-4137 FAX: (514) 933-0409
WEB SITE: WWW.KFARCHITECT.COM
E-MAIL:KARL@KFARCHITECT.COM

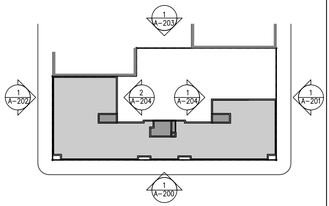
SEAL
REGISTERED ARCHITECT
KARL FISCHER
021282
STATE OF NEW YORK

project title
BLOCK 2571 LOT 1
26 WEST STREET, BROOKLYN, 11222

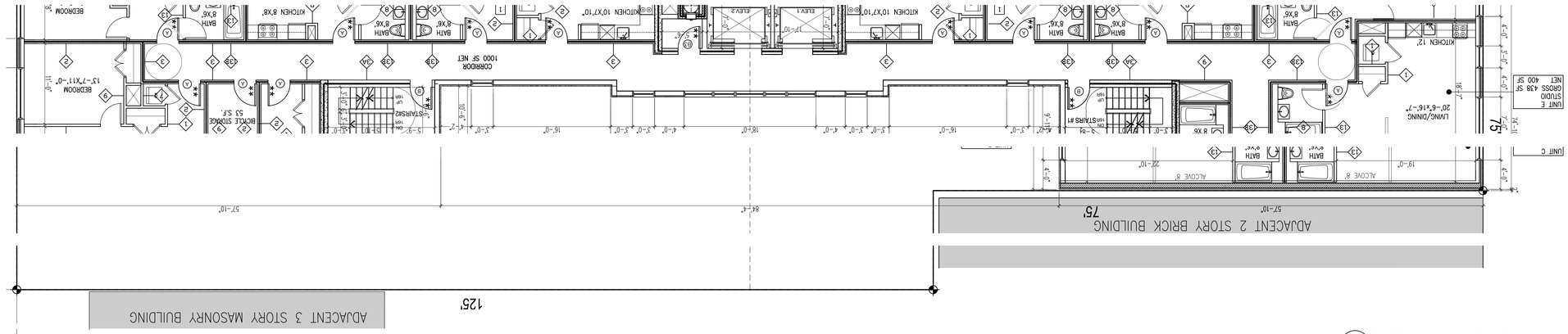
drawing title
ELEVATION
OAK STREET

dob no

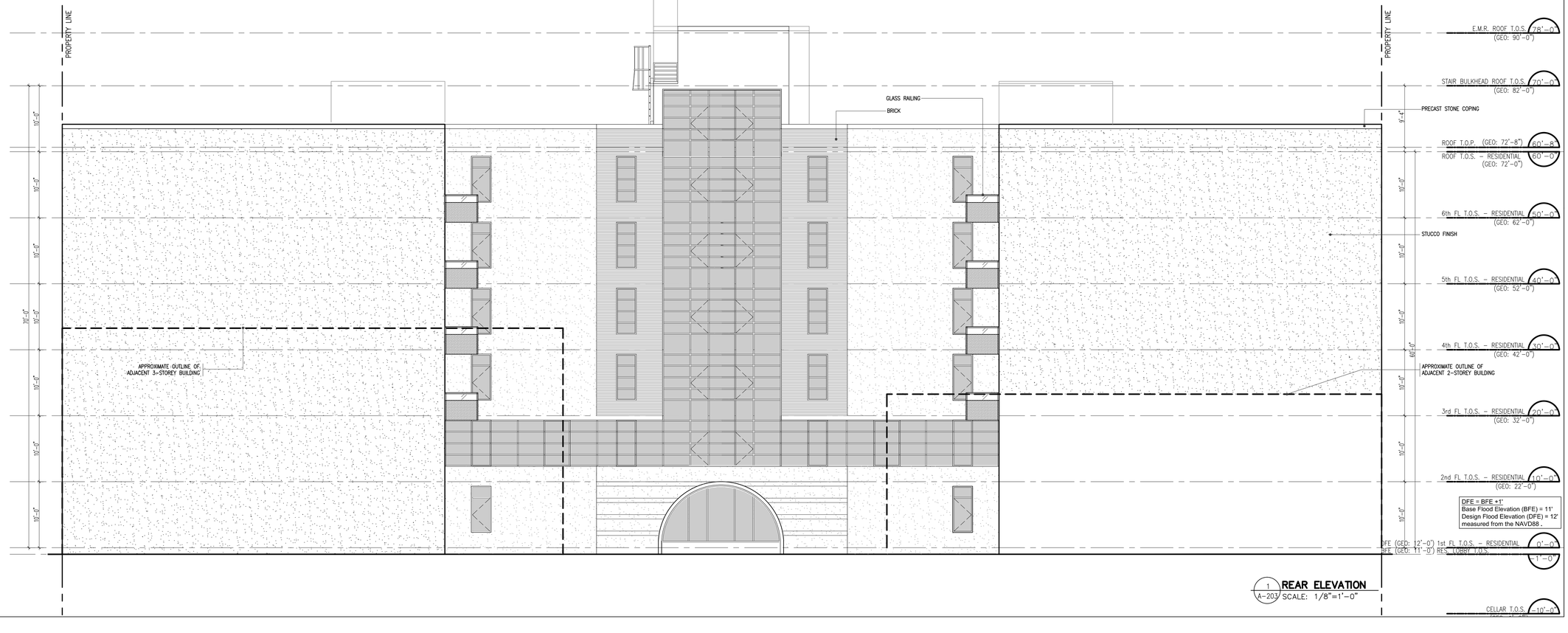
scale 1/8"=1'-0"	project no. 14-45
date 2014-04-02	sheet no. OF
drawn	drawing no. A-202
checked	



2 A-203 **KEY PLAN**
SCALE: 1/64"=1'-0"



1A A-203 **PARTIAL 4th-6th FLOOR PLAN**
SCALE: 1/8"=1'-0"



1 A-203 **REAR ELEVATION**
SCALE: 1/8"=1'-0"

KEY PLAN

BLOCK 2571 LOT 1

issue	rev	date	description
1		2014/11/25	ISSUED TO D.O.B.

ISSUES/REVISIONS

MEP ENGINEER:

STRUCTURAL ENGINEER:

CLIENT

KARL FISCHER ARCHITECT
OAQ RAIC AIA
530 BROADWAY, 9th FLOOR, NEW YORK, NY 10012
TEL: (212) 219-9733 FAX: (212) 219-8980
1420 NOTRE-DAME WEST, MONTREAL, QC H3C 1K9
TEL: (514) 933-4137 FAX: (514) 933-0409
WEB SITE: WWW.KFARCHITECT.COM
E-MAIL:KARL@KFARCHITECT.COM

SEAL

REGISTERED ARCHITECT KARL FISCHER 021282 STATE OF NEW YORK

project title

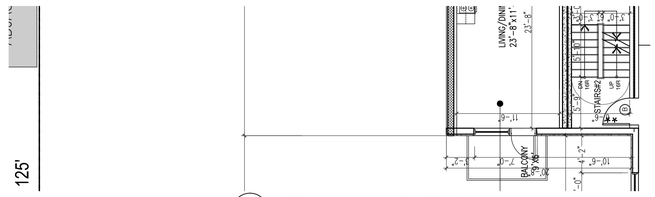
BLOCK 2571 LOT 1
26 WEST STREET, BROOKLYN, 11222

drawing title

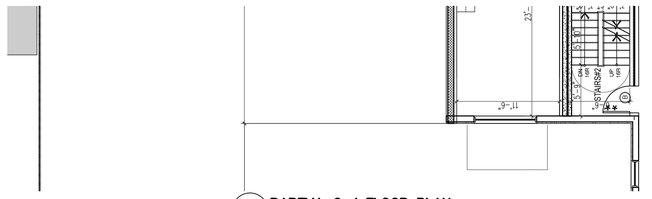
REAR ELEVATIONS

dob no

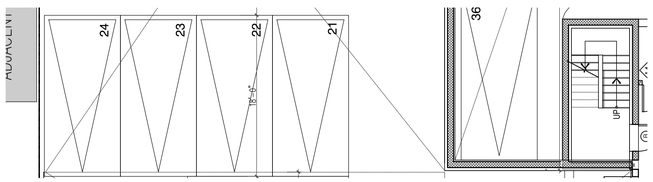
scale	1/8"=1'-0"	project no.	14-45
date	2014-04-02	sheet no.	OF
drawn		drawing no.	A-203
checked			



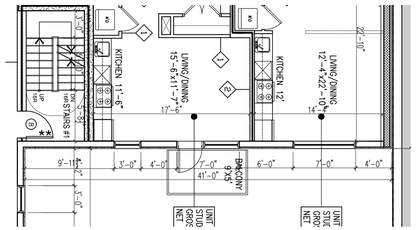
1C A-204 **PARTIAL 4th–6th FLOR PLAN**
SCALE: 1/8"=1'-0"



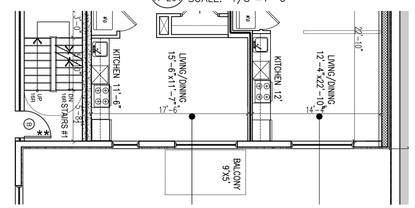
1B A-204 **PARTIAL 2nd FLOOR PLAN**
SCALE: 1/8"=1'-0"



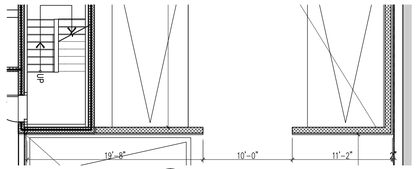
1A A-204 **PARTIAL 1ST FLOOR PLAN**
SCALE: 1/8"=1'-0"



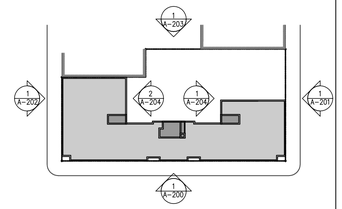
2C A-204 **PARTIAL 4th–6th FLOR PLAN**
SCALE: 1/8"=1'-0"



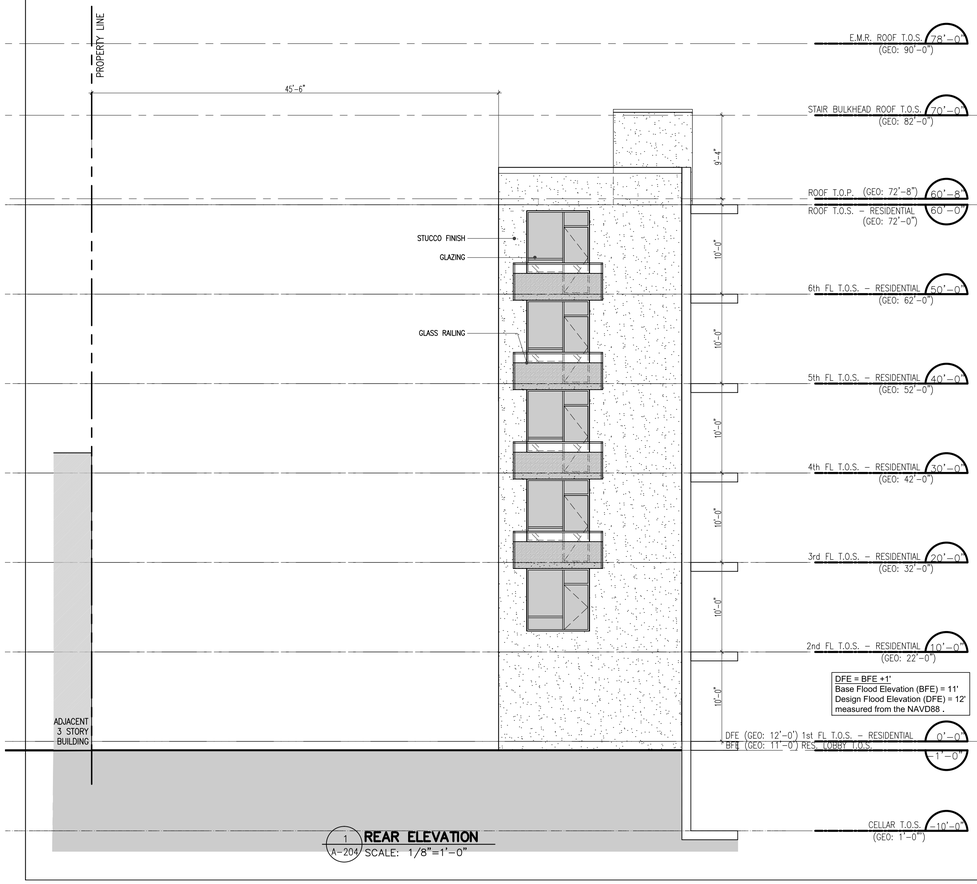
2B A-204 **PARTIAL 2nd FLOOR PLAN**
SCALE: 1/8"=1'-0"



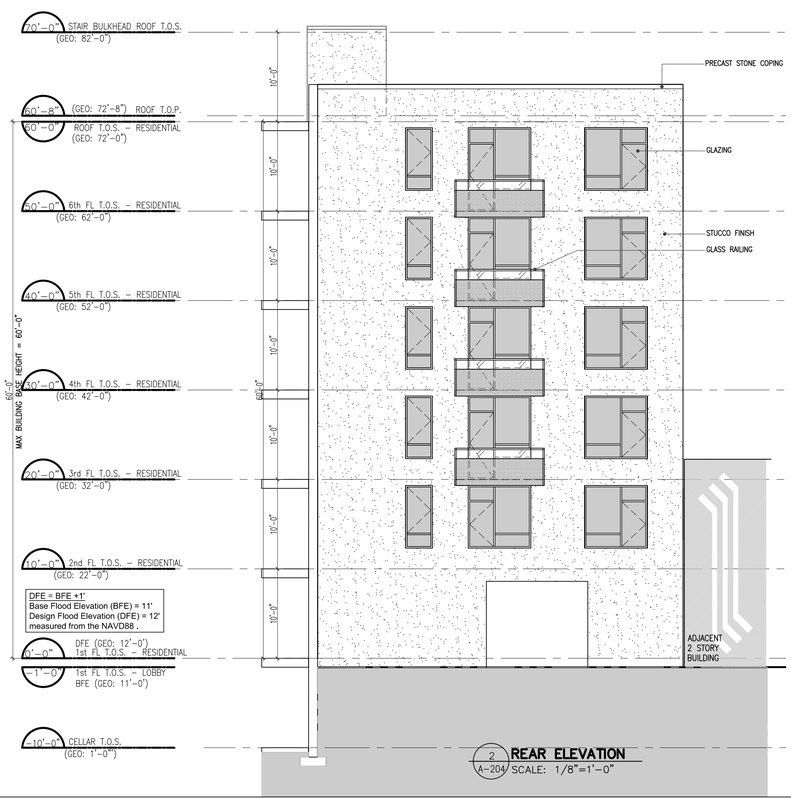
2A A-204 **PARTIAL 1ST FLOOR PLAN**
SCALE: 1/8"=1'-0"



3 A-204 **KEY PLAN**
SCALE: 1/64"=1'-0"

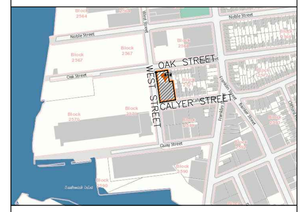


1 A-204 **REAR ELEVATION**
SCALE: 1/8"=1'-0"



2 A-204 **REAR ELEVATION**
SCALE: 1/8"=1'-0"

KEY PLAN



BLOCK 2571 LOT 1

issue	rev	date	description
1		2014/11/25	ISSUED TO D.O.B.

ISSUES/REVISIONS

MEP ENGINEER:

STRUCTURAL ENGINEER:

CLIENT

KARL FISCHER ARCHITECT
OAQ RAIC AIA
530 BROADWAY, 9th FLOOR, NEW YORK, NY 10012
TEL: (212) 219-9733 FAX: (212) 219-8980
1420 NOTRE-DAME WEST, MONTREAL, QC H3C 1K9
TEL: (514) 933-4137 FAX: (514) 933-0409
WEB SITE: WWW.KFARCHITECT.COM
E-MAIL:KARL@KFARCHITECT.COM

SEAL
REGISTERED ARCHITECT
KARL FISCHER
021282
STATE OF NEW YORK

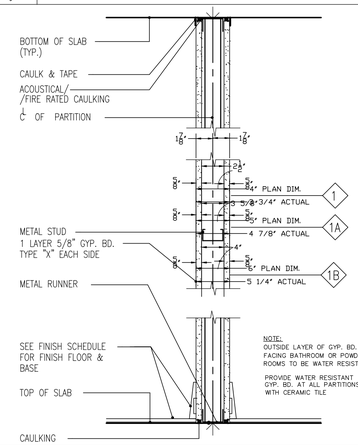
project title
5
BLOCK 2571 LOT 1
26 WEST STREET, BROOKLYN, 11222

drawing title
REAR ELEVATIONS

dob no

scale 1/8"=1'-0"	project no. 14-45
date 2014-07-14	sheet no. OF
drawn	drawing no. A-204
checked	

1 — 1 HR 39 STC – MEA #81-98-M — INTERIOR PARTITION

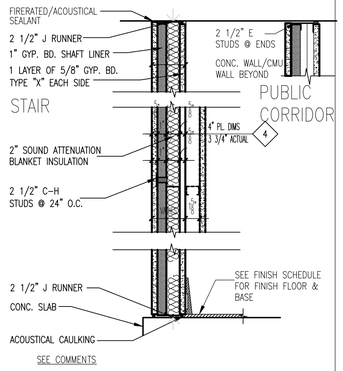


1 PARTITONS WITHTIN APTARTMENTS TO BE AS FOLLOWS: 1 LAYER OF 5/8" GYP. BD. ON EACH SIDE OF 2 1/2" MTL STUDS @ 24" O.C. (12" O.C. @ KITCHEN CABINET LOCATIONS)

1A PARTITONS WITHTIN APTARTMENTS TO BE AS FOLLOWS: 1 LAYER 5/8" GYP. BD. ON EACH SIDE OF 3 5/8" MTL STUDS @ 24" O.C.

1B PARTITIONS AT ELECTRICAL PANEL TO BE AS FOLLOWS; 5/8" GYP. BD. ON EACH SIDE OF 4" MTL STUDS @ 24" O.C.

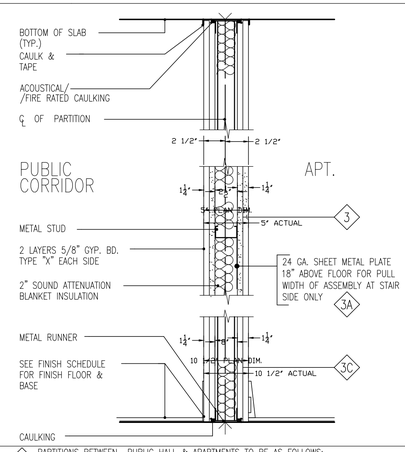
4 — 2 HR. 39 STC – BSA #542-68-SM — CAVITY SHAFTWALL BETWEEN STAIR & CORRIDOR



NOTE: SHAFT WALL BETWEEN STAIRS AND CORRIDORS TYPICAL.

4 SHAFT WALL TO BE AS FOLLOWS: 1 LAYERS OF 5/8" GYP. BD. TYPE "X" ON EACH SIDE OF A 2 1/2" C-H METAL STUDS @ 24" O.C. WITH 1" GYP. BD. LINER PANEL AND 2" SOUND ATTENUATION BLANKET INSULATION.

3 — 2 HR 51 STC – MEA #81-98-M — PARTITION BETWEEN PUBLIC HALL AND APARTMENTS & APARTMENT AND APARTMENT



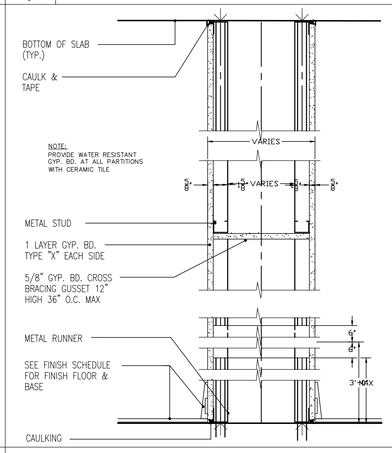
3 PARTITIONS BETWEEN PUBLIC HALL & APARTMENTS TO BE AS FOLLOWS: 2 LAYER OF 5/8" GYP. BD. TYPE "X" ON EACH SIDE OF 2 1/2" METAL STUDS @ 24" O.C. WITH 2" SOUND ATTENUATION BLANKET INSULATION BETWEEN STUDS.

3A PARTITIONS BETWEEN APARTMENTS AND STAIRS, BETWEEN STAIRS AND PUBLIC HALLS TO BE AS FOLLOWS: 2 LAYER OF 5/8" GYP. BD. TYPE "X" ON EACH SIDE OF 2 1/2" METAL STUDS @ 24" O.C.

3B PARTITION 3B SAME AS 3A WITH 3 5/8" METAL STUDS @ 24" O.C.

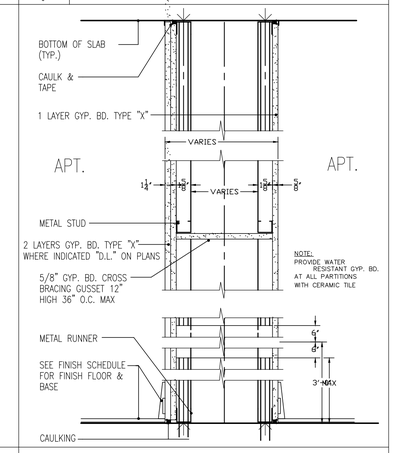
3C PARTITIONS BETWEEN PUBLIC HALL & APARTMENTS TO BE AS FOLLOWS: 2 LAYERS OF 5/8" GYP. BD. TYPE "X" ON EACH SIDE OF 8" STEEL STUDS @ 24" O.C. WITH 2" SOUND ATTENUATION BLANKET INSULATION BETWEEN STUDS.

7 — 1 HR. 50 STC – BSA# 173-77-SM — PIPE CHASE WITHIN APARTMENT



7 PIPE CHASE WITHIN APARTMENT TO BE AS FOLLOWS: 1 LAYER OF 5/8" WR GYP. BD. ON 1 5/8" METAL STUDS @ 24" O.C. 1 LAYER OF 5/8" WR GYP. BD. ON 1 5/8" METAL STUDS @ 24" O.C. OPPOSITE SIDE.

8 — 2 HR. 50 STC – BSA #173-77-SM — PIPE CHASE BETWEEN APARTMENTS



8 PIPE CHASE BETWEEN APARTMENTS TO BE AS FOLLOWS: 1 LAYER OF 5/8" WR GYP. BD. TYPE "X" ON 1 5/8" METAL STUDS @ 24" O.C. 2 LAYERS OF 5/8" WR GYP. BD. TYPE "X" ON 1 5/8" METAL STUDS @ 24" O.C. OPPOSITE SIDE.

8A PIPE CHASE BETWEEN APARTMENTS AND PUBLIC CORRIDOR TO BE AS FOLLOWS: TWO LAYERS OF 5/8" WR GYP. BD. TYPE "X" ON 1 5/8" METAL STUDS @ 24" O.C. 2 LAYERS OF 5/8" WR GYP. BD. TYPE "X" ON 1 5/8" METAL STUDS @ 24" O.C. OPPOSITE SIDE.

18 — – — PIPE CHASE @ CORRIDOR OR @ C.M.U. OR CONC. WALL

18 5/8" GYP. BD OVER 1 5/8" METAL STUDS @ 24" O.C. W/ 2" SOUND ATTENUATION BLANKET INSULATION.

6 — 2 HR. 50STC –BSA#542-68-SM — CAVITY SHAFTWALL @ ELEVATORS SHAFTS

6 ELEVATOR SHAFT WALL TO BE AS FOLLOWS: 2 LAYERS OF 5/8" GYP. BD. TYPE "X" ON CORRIDOR SIDE & 1" GYP. BD. LINER PANEL ON SHAFT SIDE OF 2 1/2" C-H METAL STUDS @ 24" O.C. MAX. W/ 2" SOUND ATTENUATION BLANKET INSULATION. OMIT SOUND INSULATION @ DUCT SHAFTS & ELEC. RISER SHAFTS

17 — 3 HR. – MEA #1-74-M — FURRING ON INTERIOR CONCRETE OR C.M.U. WALL

17 5/8" GYP. BD OVER 1 5/8" METAL STUDS @ 24" O.C.

17A 5/8" GYP. BD OVER 7/8" FURRING METAL STUDS @ 24" O.C.

2 — BETWEEN APARTMENTS — 1 HR. 50 STC – MEA # 81-98-M

2 PARTITIONS BETWEEN APARTMENTS TO BE AS FOLLOWS: 2 LAYERS OF 5/8" GWB. TYPE 'X' ON ONE SIDE W/ ONE LAYER GWB. TYPE 'X' ON OTHER SIDE OF 3-5/8" METAL STUDS @ 16" O.C. WITH 2" SOUND ATTENUATION BLANKET INSULATION BETWEEN STUDS. (12" O.C. @ KITCHEN CABINET LOCATIONS)

9 — 2 HR.– BSA #898-47-SM — SOLID SHAFTWALL W/ METAL DUCT

9 1" GYP. BD. LINER PANEL LAMINATED TO 1 LAYER 5/8" GYP. BD. TYPE "X" EACH SIDE.

9A SAME AS PARTITION #10 WITH 1 LAYER OF 5/8" W.R. GYP. BD. ON 1 5/8" MTL STUD OVER PARTITION

10 — – — FREE STANDING WALL FURRING

10 5/8" GYP. BD OVER 2 1/2" METAL STUDS @ 24" O.C.

11 — – — INSULATED WALL FURRING

11 5/8" GYP. BD OVER 1 5/8" METAL STUDS @ 24" O.C. W/ 2" SOUND ATTENUATION BLANKET INSULATION.

11A 5/8" GYP. BD OVER 1 5/8" METAL STUDS @ 24" O.C. W/ 2" SOUND ATTENUATION BLANKET INSULATION WITH WATER RESISTANT GYP. BD. ONE SIDE.

5 — – — FURRING AT EXTERIOR WALL

5 5/8" GYP. BD OVER 1 5/8" METAL STUDS @ 24" O.C. W/ 3 1/2" BATT INSULATION.

5A 5/8" GYP. BD OVER 2 1/2" METAL STUDS @ 24" O.C. W/ 3 1/2" BATT INSULATION.

13 — 1 HR 52 STC – MEA# 81-98-M — PARTITION @ BATH

13 PARTITIONS WITHIN APARTMENT BETWEEN APT. & BATHROOM TO BE AS FOLLOWS: 1 LAYER OF 5/8" GYP. BD. TYPE "X" ON EACH SIDE OF 2 1/2" METAL STUDS @ 24" O.C. WITH 2" SOUND ATTENUATION BLANKET INSULATION BETWEEN STUDS.

13A PARTITIONS BETWEEN APARTMENTS AT BATHROOM TO BE AS FOLLOWS: 2 LAYERS OF 5/8" GYP. BD. TYPE "X" ON ONE W/ONE LAYER GYP. BD. TYPE "X" ON OTHER SIDE OF 2 1/2" MTL STUDS @ 24" O.C. WITH 2" SOUND ATTENUATION BLANKET INSULATION BETWEEN STUDS.

13B PARTITIONS BETWEEN APARTMENT BATHROOM & PUBLIC HALL TO BE AS FOLLOWS: 2 LAYERS OF 5/8" GYP. BD. TYPE "X" ON EACH SIDE OF 2 1/2" METAL STUDS @ 24" O.C. WITH 2" SOUND ATTENUATION BLANKET INSULATION BETWEEN STUDS.

13 — 1 HR 52 STC – MEA# 81-98-M — PARTITION @ BATH

13C PARTITIONS AT CMU TO BE AS FOLLOWS: 2 LAYERS OF 5/8" GYP. BD. TYPE "X" ON EACH SIDE OF 1 5/8" METAL STUDS @ 24" O.C. WITH 2" SOUND ATTENUATION BLANKET INSULATION BETWEEN STUDS.

13D PARTITIONS AT EXTERIOR TO BE AS FOLLOWS: 2 LAYERS OF 5/8" GYP. BD. TYPE "X" ON EACH SIDE OF 3 5/8" METAL STUDS @ 24" O.C. WITH 3 1/2" BATT INSULATION BETWEEN STUDS.

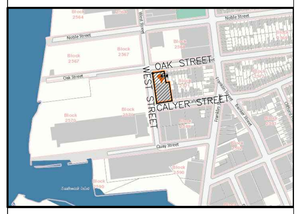
14 — 2 HR 39 STC –#MEA 638-41-SM — CONC. BLOCK PART.

14 6" CONC. BLOCK PART.

14A 8" CONC. BLOCK PART.

14B 8" CONC. BLOCK, 100%FILLED SOLID (3-HR RATING)

KEY PLAN



BLOCK 2571 LOT 1

issue	rev	date	description
1		04/27/21	ISSUED TO D.O.B.

ISSUES/REVISIONS

MEP ENGINEER:

STRUCTURAL ENGINEER:

CLIENT

KARL FISCHER ARCHITECT
OAQ RAIC AIA
530 BROADWAY, 9th FLOOR, NEW YORK, NY 10012
TEL: (212) 219-9733 FAX: (212) 219-8980
1420 NOTRE-DAME WEST, MONTREAL, QC H3C 1K9
TEL: (514) 933-4137 FAX: (514) 933-0409
WEB SITE: WWW.KFARCHITECT.COM
E-MAIL:KARL@KFARCHITECT.COM

SEAL: REGISTERED ARCHITECT — KARL FISCHER — 021282 — STATE OF NEW YORK

project title

BLOCK 2571 LOT 1
26 WEST STREET, BROOKLYN, 11222

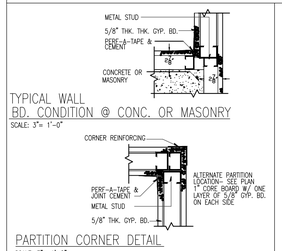
drawing title

PARTITION TYPES

dob no

scale: N.T.S.	project no.: 14–45
date: 2014–07–10	sheet no.: OF
drawn: SW	drawing no.: A-500.00
checked:	

MISCELLANEOUS DETAILS

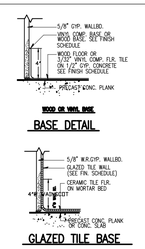


TYPICAL WALL BD. CONDITION @ CONC. OR MASONRY

SCALE: 3"= 1'-0"

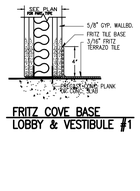
PARTITION CORNER DETAIL

SCALE: 3"= 1'-0"

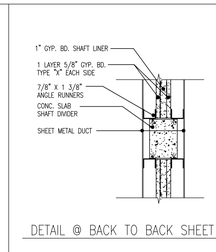


BASE DETAIL

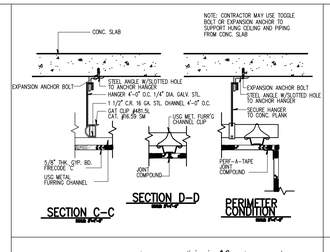
GLAZED TILE BASE



FRITZ COVE BASE LOBBY & VESTIBULE #1



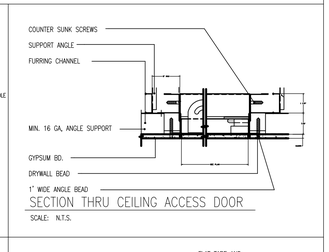
DETAIL @ BACK TO BACK SHEET MET.



SECTION C-C

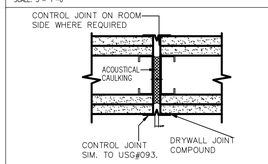
SECTION D-D

PERIMETER CONDITION

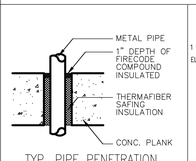


SECTION THRU CEILING ACCESS DOOR

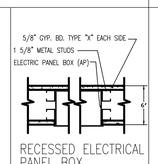
SCALE: N.T.S.



INTERIOR CONTROL JOINT DETAIL

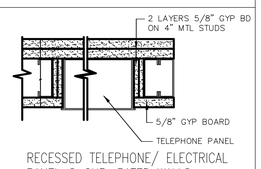


TYP. PIPE PENETRATION FIRE ASSEMBLY DETAIL

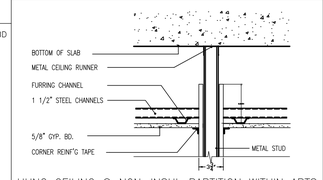


RECESSED ELECTRICAL PANEL BOX

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

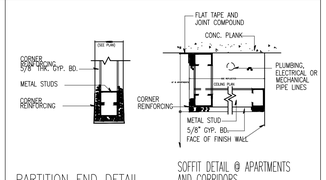


RECESSED TELEPHONE/ ELECTRICAL PANEL @ 2HR. RATED WALLS



HUNG CEILING @ NON-INSUL PARTITION WITHIN APTS

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

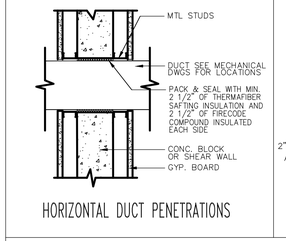


PARTITION END DETAIL

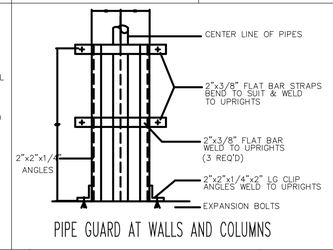
SCALE: 3"= 1'-0"

SOFFIT DETAIL @ APARTMENTS AND CORRIDORS

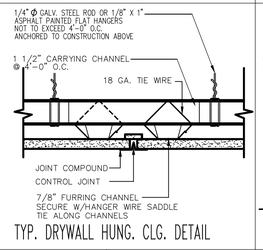
SCALE: 3"=1'-0"



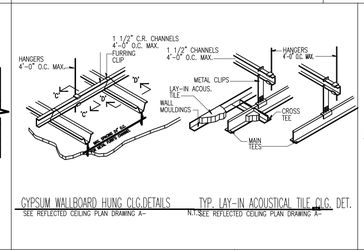
HORIZONTAL DUCT PENETRATIONS



PIPE GUARD AT WALLS AND COLUMNS



TYP. DRYWALL HUNG. CLG. DETAIL

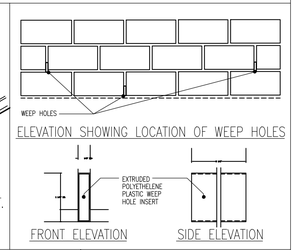


GYPSUM WALLBOARD HUNG CLG.DETAILS

SEE REFLECTED CEILING PLAN DRAWING A-

TYP. LAY-IN ACOUSTICAL TILE CLG. DET.

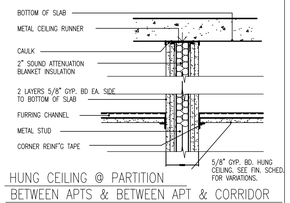
N.T.S.SEE REFLECTED CEILING PLAN DRAWING A-



ELEVATION SHOWING LOCATION OF WEEP HOLES

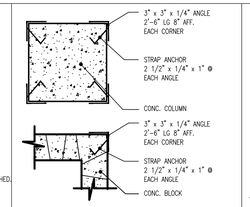
FRONT ELEVATION

SIDE ELEVATION

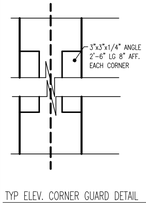


HUNG CEILING @ PARTITION BETWEEN APTS & BETWEEN APT & CORRIDOR

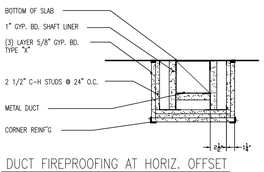
SCALE: 1 1/2" = 1'-0"



TYP CORNER GUARD DETAIL COL AND CONC. BLOCK

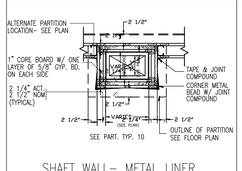


TYP ELEV. CORNER GUARD DETAIL COL AND CONC. BLOCK (GARAGE)



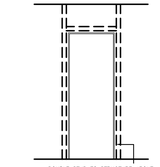
DUCT FIREPROOFING AT HORIZ. OFFSET (ALT. DETAIL)

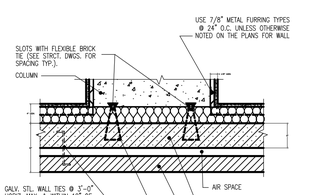
SCALE: 1 1/2" = 1'-0"



SHAFT WALL- METAL LINER

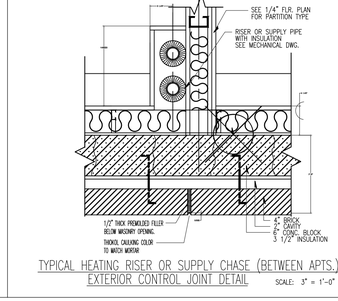
SCALE: 1 1/2"= 1'-0"





TYPICAL ANCHOR DETAIL

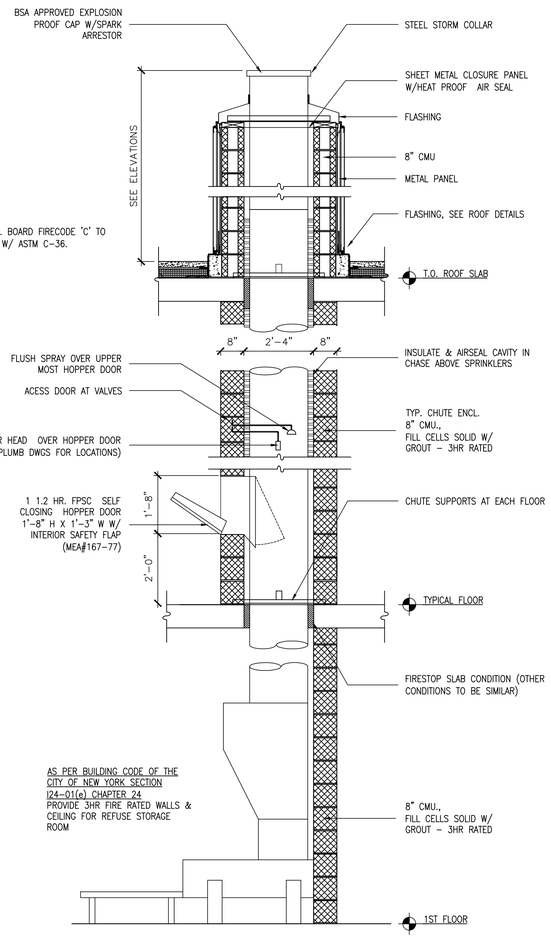
SCALE: N.T.S.



TYPICAL HEATING RISER OR SUPPLY CHASE (BETWEEN APTS.) EXTERIOR CONTROL JOINT DETAIL

SCALE: 3" = 1'-0"

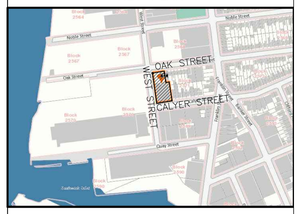
SECTION: REFUSE CHUTE DETAIL



1 A-501 **REFUSE CHUTE DETAIL**

N.T.S.

KEY PLAN



BLOCK 2571 LOT 1

issue	rev	date	description
1		04/27/14	ISSUED TO D.O.B.

ISSUES/REVISIONS

MEP ENGINEER:

STRUCTURAL ENGINEER:

CLIENT

KARL FISCHER ARCHITECT
OAQ RAIC AIA
530 BROADWAY, 9th FLOOR, NEW YORK, NY 10012
TEL: (212) 219-9733 FAX: (212) 219-8980
1420 NOTRE-DAME WEST, MONTREAL, QC H3C 1K9
TEL: (514) 933-4137 FAX: (514) 933-0409
WEB SITE: WWW.KFARCHITECT.COM
E-MAIL:KARL@KFARCHITECT.COM

SEAL

REGISTERED ARCHITECT KARL FISCHER 021282 STATE OF NEW YORK

project title

NEW MIXED USE PROJECT

26 WEST STREET, BROOKLYN, 11222

drawing title

MISCELLANEOUS DETAILS

dob no

scale: N.T.S.	project no.: 14-45
date: 2014-04-28	sheet no.: OF
drawn: SW	drawing no.: A-501.00
checked:	

ATTACHMENT B
CITIZEN PARTICIPATION PLAN

ATTACHMENT B
CITIZEN PARTICIPATION PLAN

The NYC Office of Environmental Remediation and The Rabsky Group have established this Citizen Participation Plan because the opportunity for citizen participation is an important component of the NYC Voluntary Cleanup Program. This Citizen Participation Plan describes how information about the project will be disseminated to the Community during the remedial process. As part of its obligations under the NYC VCP, The Rabsky Group will maintain a repository for project documents and provide public notice at specified times throughout the remedial program. This Plan also takes into account potential environmental justice concerns in the community that surrounds the project Site. Under this Citizen Participation Plan, project documents and work plans are made available to the public in a timely manner. Public comment on work plans is strongly encouraged during public comment periods. Work plans are not approved by the NYC Office of Environmental Remediation (OER) until public comment periods have expired and all comments are formally reviewed. An explanation of cleanup plans in the form of a public meeting or informational session is available upon request to OER's project manager assigned to this Site, Samantha Morris, who can be contacted about these issues or any others questions, comments or concerns that arise during the remedial process at (212) 788-8484.

Project Contact List. OER has established a Site Contact List for this project to provide public notices in the form of fact sheets to interested members of the Community. Communications will include updates on important information relating to the progress of the cleanup program at the Site as well as to request public comments on the cleanup plan. The Project Contact List includes owners and occupants of adjacent buildings and homes, principal administrators of nearby schools, hospitals and day care centers, the public water supplier that serves the area, established document repositories, the representative Community Board, City Council members, other elected representatives and any local Brownfield Opportunity Area (BOA) grantee organizations. Any member of the public or organization will be added to the Site Contact List on request. A copy of the Site Contact List is maintained by OER's project manager. If you would like to be added to the Project Contact List, contact NYC OER at (212) 788-8841 or by email at

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
Ph: 631.504.6000
Fax: 631.928.2780

brownfields@cityhall.nyc.gov.

Repositories. A document repository is maintained in online. Internet access to view OER's document repositories is available at public libraries. This document repository is intended to house, for community review, all principal documents generated during the cleanup program including Remedial Investigation plans and reports, Remedial Action work plans and reports, and all public notices and fact sheets produced during the lifetime of the remedial project.

The library nearest the Site is:

Brooklyn Public Library - Greenpoint Branch
107 Norman Avenue, Brooklyn, NY 11222
Telephone Number: 718-349-8504
Hours of Operation:

Mon	10:00AM - 6:00PM
Tue	10:00AM - 8:00PM
Wed	10:00AM - 8:00PM
Thu	10:00AM - 8:00PM
Fri	10:00AM - 6:00PM
Sat	10:00AM - 5:00PM
Sun	closed

Digital Documentation. NYC OER strongly encourages the use of digital documents in repositories as a means of minimizing paper use while also increasing convenience in access and ease of use.

Identify Issues of Public Concern. The major issues of concern to the public will be potential impacts of nuisance odors and dust during the disturbance of historic fill soils at the Site. This work will be performed in accordance with procedures which will be specified under a detailed

EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
1808 MIDDLE COUNTRY ROAD
RIDGE, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

Remedial Program which considers and takes preventive measures for exposures to future residents of the property and those on adjacent properties during construction. Detailed plans to monitor the potential for exposure including a Construction Health and Safety Plan and a Community Air Monitoring Plan are required components of the remedial program. Implementation of these plans will be under the direct oversight of the New York City Department of Environmental Remediation (NYCOER).

These plans will specify the following worker and community health and safety activities during remedial activity at the Site:

- On-Site air monitoring for worker protection,
- Perimeter air monitoring for community protection.

The Health and Safety Plan and the Community Air Monitoring Plan prepared as part of the Remedial Action Work Plan will be available for public review at the document repository.

Public Notice and Public Comment. Public notice to all members of the Project Contact List is required at three major steps during the performance of the cleanup program (listed below) and at other points that may be required by OER. Notices will include Fact Sheets with descriptive project summaries, updates on recent and upcoming project activities, repository information, and important phone and email contact information. All notices will be prepared by The Rabsky Group, reviewed and approved by OER prior to distribution and mailed by The Rabsky Group. Public comment is solicited in public notices for all work plans developed under the NYC Voluntary Cleanup Program. Final review of all work plans by OER will consider all public comments. Approval will not be granted until the public comment period has been completed.

Citizen Participation Milestones. Public notice and public comment activities occur at several steps during a typical NYC VCP project. See flow chart on the following page, which identifies when during the NYC VCP public notices are issued: These steps include:

- **Public Notice of the availability of the Remedial Investigation Report and Remedial Action Work Plan and a 30-day public comment period on the Remedial Action**

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

Work Plan.

Public notice in the form of a Fact Sheet is sent to all parties listed on the Site Contact List announcing the availability of the Remedial Investigation Report and Remedial Action Work Plan and the initiation of a 30-day public comment period on the Remedial Action Work Plan. The Fact Sheet summarizes the findings of the RIR and provides details of the RAWP. The public comment period will be extended an additional 15 days upon public request. A public meeting or informational session will be conducted by OER upon request.

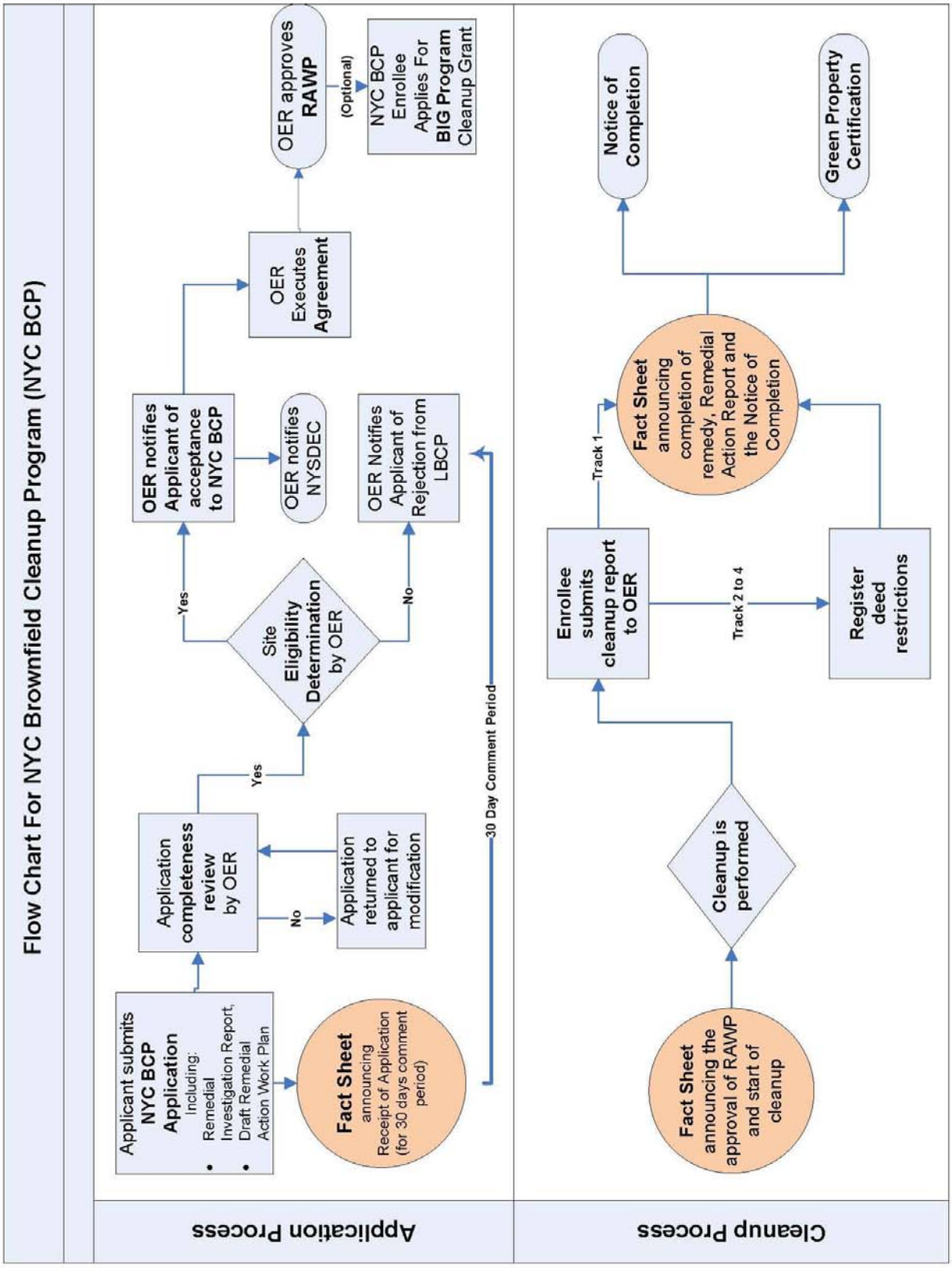
- **Public Notice announcing the approval of the RAWP and the start of remediation**

  Public notice in the form of a Fact Sheet is sent to all parties listed on the Site Contact List announcing the approval of the RAWP and the start of remediation.

- **Public Notice announcing the completion of remediation, designation of Institutional and Engineering Controls and issuance of the Notice of Completion**

  Public notice in the form of a Fact Sheet is sent to all parties listed on the Site Contact List announcing the completion of remediation, providing a list of all Institutional and Engineering Controls implemented for to the Site and announcing the issuance of the Notice of Completion

EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
1808 MIDDLE COUNTRY ROAD
RIDGE, NY 11961
PH: 631.504.6000
FAX: 631.928.2780



EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

ATTACHMENT C
SUSTAINABILITY STATEMENT

ATTACHMENT C
SUSTAINABILITY STATEMENT

This Sustainability Statement documents sustainable activities and green remediation efforts planned under this remedial action.

Reuse of Clean, Recyclable Materials. Reuse of clean, locally-derived recyclable materials reduces consumption of non-renewable virgin resources and can provide energy savings and greenhouse gas reduction.

This project intends to use recycled concrete aggregate wherever possible in grading and backfilling the Site. An estimate of the quantity (in tons) of clean, non-virgin materials (reported by type of material) reused under this plan will be quantified and reported in the RAR.

Reduce Consumption of Virgin and Non-Renewable Resources. Reduced consumption of virgin and non-renewable resources lowers the overall environmental impact of the project on the region by conserving these resources.

The project will reduce the consumption of virgin materials by substituting recycled concrete aggregate for mined gravel and/or sand backfill whenever possible. An estimate of the quantity (in tons) of virgin and non-renewable resources, the use of which will be avoided under this plan, will be quantified and reported in the RAR.

Reduced Energy Consumption and Promotion of Greater Energy Efficiency. Reduced energy consumption lowers greenhouse gas emissions, improves local air quality, lessens in-city power generation requirements, can lower traffic congestion, and provides substantial cost savings.

Recycled concrete materials and other backfill materials will be locally sourced reducing the energy consumption associated with transporting these materials to the Site. Best efforts will be made to quantify energy efficiencies achieved during the remediation and will be reported in the Remedial Action Report (RAR). Where energy savings cannot be easily quantified, a gross indicator of the amount of energy saved or the means by which energy savings was achieved will

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
Ph: 631.504.6000
Fax: 631.928.2780

be reported.

Paperless Voluntary Cleanup Program. The Rabsky Group is participating in OER's Paperless Voluntary Cleanup Program. Under this program, submission of electronic documents will replace submission of hard copies for the review of project documents, communications and milestone reports.

Low-Energy Project Management Program. The Rabsky Group is participating in OER's low-energy project management program. Under this program, whenever possible, meetings are held using remote communication technologies, such as videoconferencing and teleconferencing to reduce energy consumption and traffic congestion associated with personal transportation.

EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
1808 MIDDLE COUNTRY ROAD
RIDGE, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

ATTACHMENT D
SOIL/MATERIALS MANAGEMENT PLAN

ATTACHMENT D
SOIL/MATERIALS MANAGEMENT PLAN

1.1 SOIL SCREENING METHODS

Visual, olfactory and PID soil screening and assessment will be performed under the supervision of a Qualified Environmental Professional and will be reported in the RAR. Soil screening will be performed during invasive work performed during the remedy and development phases prior to issuance of the Notice of Completion.

1.2 STOCKPILE METHODS

Excavated soil from suspected areas of contamination (e.g., hot spots, USTs, drains, etc.) will be stockpiled separately and will be segregated from clean soil and construction materials. Stockpiles will be used only when necessary and will be removed as soon as practicable. While stockpiles are in place, they will be inspected daily, and before and after every storm event. Results of inspections will be recorded in a logbook and maintained at the Site and available for inspection by OER. Excavated soils will be stockpiled on, at minimum, double layers of 8-mil minimum sheeting, will be kept covered at all times with appropriately anchored plastic tarps, and will be routinely inspected. Broken or ripped tarps will be promptly replaced.

All stockpile activities will be compliant with applicable laws and regulations. Soil stockpile areas will be appropriately graded to control run-off in accordance with applicable laws and regulations. Stockpiles of excavated soils and other materials shall be located at least of 50 feet from the property boundaries, where possible. Hay bales or equivalent will surround soil stockpiles except for areas where access by equipment is required. Silt fencing and hay bales will be used as needed near catch basins, surface waters and other discharge points.

1.3 CHARACTERIZATION OF EXCAVATED MATERIALS

Soil/fill or other excavated media that is transported off-Site for disposal will be sampled in a manner required by the receiving facility, and in compliance with applicable laws and regulations. Soils proposed for reuse on-Site will be managed as defined in this plan.

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
Ph: 631.504.6000
Fax: 631.928.2780

1.4 MATERIALS EXCAVATION, LOAD-OUT AND DEPARTURE

The PE/QEP overseeing the remedial action will:

- oversee remedial work and the excavation and load-out of excavated material;
- ensure that there is a party responsible for the safe execution of invasive and other work performed under this work plan;
- ensure that Site development activities and development-related grading cuts will not interfere with, or otherwise impair or compromise the remedial activities proposed in this RAWP;
- ensure that the presence of utilities and easements on the Site has been investigated and that any identified risks from work proposed under this plan are properly addressed by appropriate parties;
- ensure that all loaded outbound trucks are inspected and cleaned if necessary before leaving the Site; and
- ensure that all egress points for truck and equipment transport from the Site will be kept clean of Site-derived materials during Site remediation.

Locations where vehicles exit the Site shall be inspected daily for evidence of soil tracking off premises. Cleaning of the adjacent streets will be performed as needed to maintain a clean condition with respect to Site-derived materials.

Open and uncontrolled mechanical processing of historical fill and contaminated soil on-Site will not be performed without prior OER approval.

1.5 OFF-SITE MATERIALS TRANSPORT

Loaded vehicles leaving the Site will comply with all applicable materials transportation requirements (including appropriate covering, manifests, and placards) in accordance with applicable laws and regulations, including use of licensed haulers in accordance with 6 NYCRR Part 364. If loads contain wet material capable of causing leakage from trucks, truck liners will be used. Queuing of trucks will be performed on-Site, when possible in order to minimize off Site disturbance. Off-Site queuing will be minimized. The outbound truck transport route is shown on Figure 11.

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

This routing takes into account the following factors: (a) limiting transport through residential areas and past sensitive sites; (b) use of mapped truck routes; (c) minimizing off-Site queuing of trucks entering the facility; (d) limiting total distance to major highways; (e) promoting safety in access to highways; and (f) overall safety in transport. To the extent possible, all trucks loaded with Site materials will travel from the Site using these truck routes. Trucks will not stop or idle in the neighborhood after leaving the project Site.

1.6 MATERIALS DISPOSAL OFF-SITE

The following documentation will be established and reported by the PE/QEP for each disposal destination used in this project to document that the disposal of regulated material exported from the Site conforms with applicable laws and regulations: (1) a letter from the PE/QEP or Enrollee to each disposal facility describing the material to be disposed and requesting written acceptance of the material. This letter will state that material to be disposed is regulated material generated at an environmental remediation Site in Brooklyn, New York under a governmental remediation program. The letter will provide the project identity and the name and phone number of the PE/QEP or Enrollee. The letter will include as an attachment a summary of all chemical data for the material being transported; and (2) a letter from each disposal facility stating it is in receipt of the correspondence (1, above) and is approved to accept the material. These documents will be included in the RAR.

The Remedial Action Report will include an itemized account of the destination of all material removed from the Site during this remedial action. Documentation associated with disposal of all material will include records and approvals for receipt of the material. This information will be presented in the RAR.

All impacted soil/fill or other waste excavated and removed from the Site will be managed as regulated material and will be disposed in accordance with applicable laws and regulations. Historic fill and contaminated soils taken off-Site will be handled as solid waste and will not be disposed at a Part 360-16 Registration Facility (also known as a Soil Recycling Facility).

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

Waste characterization will be performed for off-Site disposal in a manner required by the receiving facility and in conformance with its applicable permits. Waste characterization sampling and analytical methods, sampling frequency, analytical results and QA/QC will be reported in the RAR. A manifest system for off-Site transportation of exported materials will be employed. Manifest information will be reported in the RAR. Hazardous wastes derived from on-Site will be stored, transported, and disposed of in compliance with applicable laws and regulations.

If disposal of soil/fill from this Site is proposed for unregulated disposal (i.e., clean soil removed for development purposes), including transport to a Part 360-16 Registration Facility, a formal request will be made for approval by OER with an associated plan compliant with 6NYCRR Part 360-16. This request and plan will include the location, volume and a description of the material to be recycled, including verification that the material is not impacted by site uses and that the material complies with receipt requirements for recycling under 6NYCRR Part 360. This material will be appropriately handled on-Site to prevent mixing with impacted material.

1.7 MATERIALS REUSE ON-SITE

Soil and fill that is derived from the property that meets the soil cleanup objectives established in this plan may be reused on-Site. The soil cleanup objectives for on-Site reuse are listed in Table 1. 'Reuse on-Site' means material that is excavated during the remedy or development, does not leave the property, and is relocated within the same property and on comparable soil/fill material, and addressed pursuant to the NYC VCP agreement subject to Engineering and Institutional Controls. The PE/QEP will ensure that reused materials are segregated from other materials to be exported from the Site and that procedures defined for material reuse in this RAWP are followed.

Organic matter (wood, roots, stumps, etc.) or other waste derived from clearing and grubbing of the Site will not be buried on-Site. Soil or fill excavated from the site for grading or other purposes will not be reused within a cover soil layer or within landscaping berms.

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

1.8 DEMARCATION

After completion of hotspot removal and any other invasive remedial activities, and prior to backfilling, the top of the residual soil/fill will be defined by one of three methods: (1) placement of a demarcation layer. The demarcation layer will consist of geosynthetic fencing or equivalent material to be placed on the surface of residual soil/fill to provide an observable reference layer. A description or map of the approximate depth of the demarcation layer will be provided in the SMP; or (2) a land survey of the top elevation of residual soil/fill before the placement of cover soils, pavement and associated sub-soils, or other materials or structures or, (3) all materials beneath the approved cover will be considered impacted and subject to site management after the remedy is complete. Demarcation may be established by one or any combination of these three methods. As appropriate, a map showing the method of demarcation for the Site and all associated documentation will be presented in the RAR.

This demarcation will constitute the top of the site management horizon. Materials within this horizon require adherence to special conditions during future invasive activities as defined in the Site Management Plan.

1.9 IMPORT OF BACKFILL SOIL FROM OFF-SITE SOURCES

This Section presents the requirements for imported fill materials to be used below the cover layer and within the clean soil cover layer. All imported soils will meet OER-approved backfill and cover soil quality objectives for this Site. The backfill and cover soil quality objectives are listed in Table 1.

A process will be established to evaluate sources of backfill and cover soil to be imported to the Site, and will include an examination of source location, current and historical use(s), and any applicable documentation. Material from industrial sites, spill sites, environmental remediation sites or other potentially contaminated sites will not be imported to the Site.

The following potential sources may be used pending attainment of backfill and cover soil quality objectives:

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

- Clean soil from construction projects at non-industrial sites in compliance with applicable laws and regulations;
- Clean soil from roadway or other transportation-related projects in compliance with applicable laws and regulations;
- Clean recycled concrete aggregate (RCA) from facilities permitted or registered by the regulations of NYS DEC.

All materials received for import to the Site will be approved by a PE/QEP and will be in compliance with provisions in this RAWP. The RAR will report the source of the fill, evidence that an inspection was performed on the source, chemical sampling results, frequency of testing, and a Site map indicating the locations where backfill or soil cover was placed.

Source Screening and Testing

Inspection of imported fill material will include visual, olfactory and PID screening for evidence of contamination. Materials imported to the Site will be subject to inspection, as follows:

- Trucks with imported fill material will be in compliance with applicable laws and regulations and will enter the Site at designated locations;
- The PE/QEP is responsible to ensure that every truck load of imported material is inspected for evidence of contamination; and
- Fill material will be free of solid waste including pavement materials, debris, stumps, roots, and other organic matter, as well as ashes, oil, perishables or foreign matter.

Composite samples of imported material will be taken at a minimum frequency of one sample for every 500 cubic yards of material. Once it is determined that the fill material meets imported backfill or cover soil chemical requirements and is non-hazardous, and lacks petroleum contamination, the material will be loaded onto trucks for delivery to the Site.

Recycled concrete aggregate (RCA) will be imported from facilities permitted or registered by NYSDEC. Facilities will be identified in the RAR. A PE/QEP is responsible to ensure that the facility is compliant with 6NYCRR Part 360 registration and permitting requirements for the period of acquisition of RCA. RCA imported from compliant facilities will not require additional

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

testing, unless required by NYSDEC under its terms for operation of the facility. RCA imported to the Site must be derived from recognizable and uncontaminated concrete. RCA material is not acceptable for, and will not be used as cover material.

1.10 FLUIDS MANAGEMENT

All liquids to be removed from the Site, including dewatering fluids, will be handled, transported and disposed in accordance with applicable laws and regulations. Liquids discharged into the New York City sewer system will receive prior approval by New York City Department of Environmental Protection (NYC DEP). The NYC DEP regulates discharges to the New York City sewers under Title 15, Rules of the City of New York Chapter 19. Discharge to the New York City sewer system will require an authorization and sampling data demonstrating that the groundwater meets the City's discharge criteria. The dewatering fluid will be pretreated as necessary to meet the NYC DEP discharge criteria. If discharge to the City sewer system is not appropriate, the dewatering fluids will be managed by transportation and disposal at an off-Site treatment facility.

Discharge of water generated during remedial construction to surface waters (i.e. a stream or river) is prohibited without a SPDES permit issued by New York State Department of Environmental Conservation.

1.11 STORM-WATER POLLUTION PREVENTION

Applicable laws and regulations pertaining to storm-water pollution prevention will be addressed during the remedial program. Erosion and sediment control measures identified in this RAWP (silt fences and barriers, and hay bale checks) will be installed around the entire perimeter of the remedial construction area and inspected once a week and after every storm event to ensure that they are operating appropriately. Discharge locations will be inspected to determine whether erosion control measures are effective in preventing significant impacts to receptors. Results of inspections will be recorded in a logbook and maintained at the Site and available for inspection by OER. All necessary repairs shall be made immediately. Accumulated sediments will be removed as required to keep the barrier and hay bale check functional. Undercutting or erosion of the silt fence toe anchor will be repaired immediately with appropriate backfill materials.

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

Manufacturer's recommendations will be followed for replacing silt fencing damaged due to weathering.

1.12 CONTINGENCY PLAN

This contingency plan is developed for the remedial construction to address the discovery of unknown structures or contaminated media during excavation. Identification of unknown contamination source areas during invasive Site work will be promptly communicated to OER's Project Manager. Petroleum spills will be reported to the NYS DEC Spill Hotline. These findings will be included in the daily report. If previously unidentified contaminant sources are found during on-Site remedial excavation or development-related excavation, sampling will be performed on contaminated source material and surrounding soils and reported to OER. Chemical analytical testing will be performed for TAL metals, TCL volatiles and semi-volatiles, TCL pesticides and PCBs, as appropriate.

1.13 ODOR, DUST AND NUISANCE CONTROL

Odor Control

All necessary means will be employed to prevent on- and off-Site odor nuisances. At a minimum, procedures will include: (a) limiting the area of open excavations; (b) shrouding open excavations with tarps and other covers; and (c) use of foams to cover exposed odorous soils. If odors develop and cannot otherwise be controlled, additional means to eliminate odor nuisances will include: (d) direct load-out of soils to trucks for off-Site disposal; and (e) use of chemical odorants in spray or misting systems.

This odor control plan is capable of controlling emissions of nuisance odors. If nuisance odors are identified, work will be halted and the source of odors will be identified and corrected. Work will not resume until all nuisance odors have been abated. OER will be notified of all odor complaint events. Implementation of all odor controls, including halt of work, will be the responsibility of the PE/QEP's certifying the Remedial Action Report.

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

Dust Control

Dust management during invasive on-Site work will include, at a minimum:

- Use of a dedicated water spray methodology for roads, excavation areas and stockpiles.
- Use of properly anchored tarps to cover stockpiles.
- Exercise extra care during dry and high-wind periods.
- Use of gravel or recycled concrete aggregate on egress and other roadways to provide a clean and dust-free road surface.

This dust control plan is capable of controlling emissions of dust. If nuisance dust emissions are identified, work will be halted and the source of dusts will be identified and corrected. Work will not resume until all nuisance dust emissions have been abated. OER will be notified of all dust complaint events. Implementation of all dust controls, including halt of work, will be the responsibility of the PE/QEP's responsible for certifying the Remedial Action Report.

Other Nuisances

Noise control will be exercised during the remedial program. All remedial work will conform, at a minimum, to NYC noise control standards.

Rodent control will be provided, during Site clearing and grubbing, and during the remedial program, as necessary, to prevent nuisances.

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
PH: 631.504.6000
FAX: 631.928.2780

ATTACHMENT E
SITE SPECIFIC CONSTRUCTION HEALTH AND SAFETY PLAN

REDEVELOPMENT PROJECT

26 WEST STREET

BROOKLYN, NEW YORK

CONSTRUCTION HEALTH AND SAFETY PLAN

DECEMBER 2014

Prepared for:

The Rabsky Group
505 Flushing Avenue, Suite 1D
Brooklyn, New York 11205

Prepared By:

EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
1808 Middle Country Road
Ridge, NY 11961

HEALTH AND SAFETY PLAN

Site:	**Redevelopment Project**
Location:	**26 West Street, Brooklyn, NY**
Prepared By:	**ENVIRONMENTAL BUSINESS CONSULTANTS**
Date Prepared:	**December - 2014**
Version:	**1**
Revision:	**0**

Project Description:

Waste types:	Solid
Characteristics:	SVOCs, PCBs, Pesticides and metals – in historic fill (Grade to 4 ft of soil)
Overall Hazard:	Low

ENVIRONMENTAL BUSINESS CONSULTANTS (EBC) AND EBC'S SUBCONTRACTORS DO NOT GUARANTEE THE HEALTH OR SAFETY OF ANY PERSON ENTERING THIS SITE. DUE TO THE NATURE OF THIS SITE AND THE ACTIVITY OCCURRING THEREON, IT IS NOT POSSIBLE TO DISCOVER, EVALUATE, AND PROVIDE PROTECTION FOR ALL POSSIBLE HAZARDS WHICH MAY BE ENCOUNTERED. STRICT ADHERENCE TO THE HEALTH AND SAFETY GUIDELINES SET FORTH HEREIN WILL REDUCE, BUT NOT ELIMINATE, THE POTENTIAL FOR INJURY AT THIS SITE. THE HEALTH AND SAFETY GUIDELINES IN THIS PLAN WERE PREPARED SPECIFICALLY FOR THIS SITE AND SHOULD NOT BE USED ON ANY OTHER SITE WITHOUT PRIOR RESEARCH AND EVALUATION.

CONSTRUCTION HEALTH AND SAFETY PLAN
Table of Contents

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY11961
Phone 631.604.4000
Fax 631.924.2870

Table of Contents (Continued)

FIGURES

APPENDICES

EBC
ENVIRONMENTAL BUSINESS CONSULTANTS
1808 MIDDLE COUNTRY ROAD
RIDGE, NY11961
PHONE 631.604.4000
FAX 631.924.2870

STATEMENT OF COMMITMENT

This Health and Safety Plan (HASP) has been prepared to ensure that workers are not exposed to risks from hazardous materials during the Remedial Activities planned for 26 West Street, Brooklyn, New York.

This HASP, which applies to persons present at the site actually or potentially exposed to hazardous materials, describes emergency response procedures for actual and potential chemical hazards. This HASP is also intended to inform and guide personnel entering the work area or exclusion zone. Persons are to acknowledge that they understand the potential hazards and the contents of this Health and Safety policy by signing off on receipt of their individual copy of the document. The General Contractor and their subcontractors and suppliers are retained as independent contractors and are responsible for ensuring the health and safety of their own employees. The General contractor has the option of adopting this HASP or providing its own for the planned scope of work under the Remedial Action Plan.

1.0 INTRODUCTION

This document describes the health and safety guidelines developed by Environmental Business Consultants (EBC) for implementation of a Remedial Action Work Plan at the Redevelopment - Project located at 26 West street, Brooklyn, NY, to protect on-site personnel, visitors, and the public from physical harm and exposure to hazardous materials or wastes during the removal of underground storage tanks and the excavation and loading of contaminated soil. In accordance with the Occupational Safety and Health Administration (OSHA) 29 CFR Part 1910.120 Hazardous Waste Operations and Emergency Response Final rule, this CHASP, including the attachments, addresses safety and health hazards related to subsurface sample collection activities and is based on the best information available. The CHASP may be revised by EBC at the request of The Rabsky Group ("the Developer") and/or the New York State Department of Environmental Conservation (NYSDEC) or New York City Office of Environmental Remediation (NYCOER) upon receipt of new information regarding site conditions. Changes will be documented by written amendments signed by EBC's Project Manager, site safety officer and/or the EBC Health and Safety Consultant.

1.1 Scope

This CHASP addresses the potential hazards related to the site Remedial Action Plan (RAP). The RAP activities are as described below:

1) Site mobilization of General Contractor (GC) and Subcontractors to install the building foundation.
    a) Excavate up to 3 feet of historic fill for proposed building's foundation.

1.2 Application

The HASP applies to all personnel involved in the above tasks who wish to gain access to active work areas, including but not limited to:

- General Contractor
- EBC employees and subcontractors;
- Client representatives; and
- Federal, state or local representatives.

1.3 Site Safety Plan Acceptance, Acknowledgment and Amendments

The project superintendent and the site safety officer are responsible for informing personnel (EBC employees and/or owner or owners representatives) entering the work area of the contents of this plan and ensuring that each person signs the safety plan acknowledging the on-site hazards and procedures required to minimize exposure to adverse effects of these hazards. A copy of the Acknowledgement Form is included in **Appendix A**.

Site conditions may warrant an amendment to the HASP. Amendments to the HASP are acknowledged by completing forms included in **Appendix B**.

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
Phone 631.504.6000
Fax 631.924.2870

1.4 Key Personnel - Roles and Responsibilities

Personnel responsible for implementing this Construction Health and Safety Plan are:

Name	Title	Address	Contact Numbers
Mr. Kevin Brussee	EBC Project Manager	1808 Middle Country Road Ridge, NY 11961	(631) 504-6000 Cell (631) 338-1749
Mr. Kevin Waters	EBC Site Safety Officer	1808 Middle Country Road Ridge, NY 11961	(631) 504-6000

The project manager is responsible for overall project administration and, with guidance from the site safety officer, for supervising the implementation of this CHASP. The site safety officer will conduct daily (tail gate or tool box) safety meetings at the project site and oversee daily safety issues. Each subcontractor and supplier (defined as an OSHA employer) is also responsible for the health and safety of its employees. If there is any dispute about health and safety or project activities, on-site personnel will attempt to resolve the issue. If the issue cannot be resolved at the site, then the project manager will be consulted.

The site safety officer is also responsible for coordinating health and safety activities related to hazardous material exposure on-site. The site safety officer is responsible for the following:

1. Educating personnel about information in this CHASP and other safety requirements to be observed during site operations, including, but not limited to, decontamination procedures, designation of work zones and levels of protection, air monitoring, fit testing, and emergency procedures dealing with fire and first aid.

2. Coordinating site safety decisions with the project manager.

3. Designating exclusion, decontamination and support zones on a daily basis.

4. Monitoring the condition and status of known on-site hazards and maintaining and implementing the air quality monitoring program specified in this CHASP.

5. Maintaining the work zone entry/exit log and site entry/exit log.

6. Maintaining records of safety problems, corrective measures and documentation of chemical exposures or physical injuries (the site safety officer will document these conditions in a bound notebook and maintain a copy of the notebook on-site).

The person who observes safety concerns and potential hazards that have not been addressed in the daily safety meetings should immediately report their observations/concerns to the site safety officer or appropriate key personnel.

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
Phone 631.504.6000
Fax 631.924.2870

2.0 SITE BACKGROUND AND SCOPE OF WORK

The Site is located at 26 West Street in the Greenpoint section of Brooklyn, New York, and is currently identified as Block 2571, Lot 1 on the New York City Tax Map. Lot 1 is corner through lot located on the east side of West Street between Oak Street and Calyer Street. Lot 1 consists of 200 feet of street frontage on West Street, 100 feet of street frontage on Calyer Street and 75 feet of street frontage on Oak Street for a total of approximately 18,125 ft^2 (0.42 acres). The Site is bordered by 1 & 2 family homes to the east, Oak Street to the north, West Street to the west, and Calyer Street to the south.

Currently, the Site is improved with a vacant 1 story office building/warehouse and an asphalt paved parking lot. The office building was recently used by a commercial air conditioning company and as office building.

2.1 Prior Investigations

2.1.1 Phase I Environmental Site Assessment

A Phase I Environmental Site Assessment was performed by ENVIRON International Corporation in January of 2014. The past operations conducted the Site according to the Phase I Report are the following: The Site was utilized as a warehouse (1880s-1900s), for iron working (1900s-1910s), as a lumber yard (1930s-1960s), and vehicle repair, sale of auto supplies, vehicle rental, vehicle storage and a trade school (1970s-1980s). The Phase I Report identified no recognized environmental conditions (RECs) in connection with the Site.

2.1.2 Remedial Investigation Report

EBC performed the following scope of work at the Site:

1. Conducted a Site inspection to identify AOCs and physical obstructions (i.e. structures, buildings, etc.);
2. Installed eight soil borings across the Site, and collected 16 soil samples for chemical analysis from the soil borings to evaluate soil quality;
3. Installed four groundwater monitoring wells throughout the Site and collected four groundwater samples for chemical analysis to evaluate groundwater quality; and
4. Installed seven soil vapor implants and collected seven soil vapor samples for chemical analysis.

Summary of Environmental Findings

1. The elevation of the Site is approximately 10 feet.
2. Depth to groundwater is approximately 9 feet below sidewalk grade.
3. Groundwater flow is generally west.
4. Depth to bedrock is at the Site is greater than 100 feet.
5. The stratigraphy of the Site consists of historic fill material to depths as great as 4 feet, underlain by native brown silty sand.
6. Soil/fill samples results were compared to NYSDEC Unrestricted Use Soil Cleanup Objectives and Restricted Residential Soil Cleanup Objectives as presented in 6NYCRR Part 375-6.8 and CP51. Soil/fill samples detected no VOCs, with the exception of methylene chloride (maximum [max] of 6.2 µg/kg), acetone (12 µg/kg), and naphthalene (140 µg/kg), all below Unrestricted Use SCOs. Six SVOCs, including benz(a)anthracene

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
Phone 631.504.6000
Fax 631.924.2870

(max of 9,100 µg/kg), benzo(a)pyrene (max of 9,700 µg/kg), benzo(b)-fluoranthene (max of 12,000 µg/kg), benzo(k)fluoranthene (max of 4,300 µg/kg), chrysene (max of 9,100 µg/kg), and indeno(1,2,3-cd)pyrene (maximum of 4,500 µg/kg), were detected above Restricted Residential Use SCOs within four of the eight shallow soil samples. The pesticide 4,4'-DDD (56 µg/kg) was detected within one of the shallow soil samples exceeding Unrestricted Use SCOs but below Restricted Residential Use SCOs. PCB-1248 (270 µg/kg) exceeded Unrestricted Use SCOs in one shallow soil sample. Four metals including copper (max of 55.1 mg/kg), lead (max of 801 mg/kg), mercury (max of 1.08 mg/kg), and zinc (max of 272 mg/kg) exceeded Unrestricted Use SCOs within shallow soil samples. Of these metals, lead and mercury also exceeded Restricted Residential Use SCOs. No VOCs, SVOCs, pesticides, PCBs or metals were detected above Unrestricted Use SCOs within any of the deeper soil samples. Overall, the soil results were consistent with data identified at sites with historic fill material in NYC.

7. Groundwater samples results were compared to New York State 6NYCRR Part 703.5 Class GA groundwater quality standards (GQS). Groundwater samples showed no PCBs or pesticides at detectable concentrations. No VOCs were detected above GQS, but the following VOCs were detected at trace amounts; acetone (max of 3.2 µg/L), naphthalene (0.32 µg/L), and trichloroethene (0.27 µg/L). Five SVOCs, including benz(a)anthracene (max of 0.06 µg/L), benzo(b)fluroanthene (max of 0.06 µg/L), benzo(k)fluroanthene (0.03 µg/L), chrysene (max of 0.06 µg/L), and indeno(1,2,3-cd)pyrene (0.02 µg/L) were detected above GQS in three of the four groundwater samples. Several metals were identified, but only iron, manganese and sodium exceeded their respective GQS in all four filtered groundwater samples. No pesticides or PCBs were detected in the groundwater samples.
8. Soil vapor results collected during the RI were compared to the compounds listed in Vapor Intrusion Matrices in the New York State Department of Health (NYSDOH) Final Guidance for Evaluating Soil Vapor Intrusion, dated October 2006. Total concentrations of petroleum-related VOCs (BTEX) ranged from 67 µg/m^3 to 235 µg/m^3. Highest concentrations were reported for ethanol (maximum of 591 µg/m^3). The chlorinated VOC, trichloroethylene (TCE) was detected in six of the seven soil gas samples ranging in concentration from 0.268 to 8.32 µg/m^3. Tetrachloroethylene was detected in all seven soil gas samples ranging in concentration from 2.44 to 10.2 µg/m^3. Carbon tetrachloride was detected in one of the seven soil gas samples at a concentration of 0.314 µg/m^3 and 1,1,1-trichloroethane (maximum of 6.6 µg/m^3) was detected within two of the seven soil gas samples. The concentrations of all chlorinated compounds were below the monitoring level ranges established within the NYSDOH Final Guidance on Soil Vapor Intrusion, with the exception of trichloroethene which was detected in one of the seven soil gas samples above the monitoring level range.

2.2 Redevelopment Plans

The proposed future use of the Site will consist of a new 6-story apartment building that will occupy the entire footprint of the lot. The first floor will consist of parking for 36 cars, a 960 ft^2 residential lobby, a compactor room, bicycle storage room, electrical meter room, water meter room, gas meter room. The second through sixth floors will consist of apartments.

The building will consist of a 24" thick mat slab, which will require excavation of the top 2 to 3 feet across the Site to construct. An estimated 2,000 cubic yards (3,000 tons) of soil will be removed for the 24 inch thick mat slab.

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
Phone 631.504.6000
Fax 631.924.2870

2.3 Description of Remedial Action Plan

Site activities included within the Remedial Action Plan that are included within the scope of this HASP include the following:

The proposed remedial action will consist of:

1. Preparation of a Community Protection Statement and performance of all required NYC VCP Citizen Participation activities according to an approved Citizen Participation Plan.
2. Performance of a Community Air Monitoring Program for particulates and volatile organic carbon compounds.
3. Establishment of Site-Specific (Track 4) Soil Cleanup Objectives (SCOs).
4. Site mobilization involving Site security setup, equipment mobilization, utility mark outs and marking & staking excavation areas.
5. Completion of a Waste Characterization Study prior to excavation activities. Waste characterization soil samples will be collected at a frequency dictated by disposal facility. A Waste Characterization Report documenting sample procedures, location, analytical results shall be submitted to NYCOER prior to start of remedial action.
6. Excavation and removal of soil/fill exceeding Track 4 Site-Specific SCOs. For development purposes, excavation of the top 2 to 3 feet would occur to construct the 24 inch thick mat slab. Approximately 3,000 tons of soil will be removed.
7. Screening of excavated soil/fill during intrusive work for indications of contamination by visual means, odor, and monitoring with a PID. Appropriate segregation of excavated media on-Site.
8. Management of excavated materials including temporarily stockpiling and segregating to prevent co-mingling of contaminated material and non-contaminated materials.
9. Removal of underground storage tanks (if encountered) and closure of petroleum spills (if evidence of a spill/leak is encountered during Site excavation) in compliance with applicable local, State and Federal laws and regulations.
10. Transportation and off-Site disposal of all soil/fill material at permitted facilities in accordance with applicable laws and regulations for handling, transport, and disposal, and this plan. Sampling and analysis of excavated media as required by disposal facilities. Appropriate segregation of excavated media on-Site.
11. Collection and analysis of end-point samples to determine the performance of the remedy with respect to attainment of SCOs.
12. Import of materials to be used for backfill and cover in compliance with this plan and in accordance with applicable laws and regulations.
13. Installation of a vapor barrier below the 24 inch thick mat slab. The vapor barrier to be installed below the 24 inch thick mat slab will consist of Raven Industries' VaporBlock 20 Plus, which is a seven layer co-extruded barrier made from state-of-the-art polyethylene and EVOH resins.
14. Construction and maintenance of an engineered composite cover consisting of the 24 inch thick concrete mat building slab to prevent human exposure to residual soil/fill remaining under the Site.
15. Implementation of storm-water pollution prevention measures in compliance with applicable laws and regulations.
16. Performance of all activities required for the remedial action, including permitting requirements and pretreatment requirements, in compliance with applicable laws and regulations.

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
Phone 631.504.6000
Fax 631.924.2870

17. Submission of a Remedial Action Report (RAR) that describes the remedial activities, certifies that the remedial requirements have been achieved, defines the Site boundaries, and describes all Engineering and Institutional Controls to be implemented at the Site, and lists any changes from this RAWP.
18. Submission of an approved Site Management Plan (SMP) in the RAR for long-term management of residual contamination, including plans for operation, maintenance, monitoring, inspection and certification of Engineering and Institutional Controls and reporting at a specified frequency.
19. The property will continue to be registered with an E-Designation by the NYC Buildings Department. Establishment of Engineering Controls and Institutional Controls in this RAWP and a requirement that management of these controls must be in compliance with an approved SMP. Institutional Controls will include prohibition of the following: (1) vegetable gardening and farming; (2) use of groundwater without treatment rendering it safe for the intended use; (3) disturbance of residual contaminated material unless it is conducted in accordance with the SMP; and (4) higher level of land usage without OER-approval.

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
Phone 631.504.6000
Fax 631.924.2870

3.0 HAZARD ASSESSMENT

This section identifies the hazards associated with the proposed scope of work, general physical hazards that can be expected at most sites; and presents a summary of documented or potential chemical hazards at the site. Every effort must be made to reduce or eliminate these hazards. Those that cannot be eliminated must be guarded against using engineering controls and/or personal protective equipment.

3.1 Physical Hazards

3.1.1 Tripping Hazards

An area of risk associated with on-site activities are presented by uneven ground, concrete, curbstones or equipment which may be present at the site thereby creating a potential tripping hazard. During intrusive work, care should be taken to mark or remove any obstacles within the exclusion zone.

3.1.2 Climbing Hazards

During site activities, workers may have to work on excavating equipment by climbing. The excavating contractor will conform with any applicable NIOSH and OSHA requirements or climbing activities.

3.1.3 Cuts and Lacerations

Field activities that involve excavating activities usually involve contact with various types of machinery. A first aid kit approved by the American Red Cross will be available during all intrusive activities.

3.1.4 Lifting Hazards

Improper lifting by workers is one of the leading causes of industrial injuries. Field workers in the excavation program may be required to lift heavy objects. Therefore, all members of the field crew should be trained in the proper methods of lifting heavy objects. All workers should be cautioned against lifting objects too heavy for one person.

3.1.5 Utility Hazards

Before conducting any excavation, the excavation contractor will be responsible for locating and verifying all existing utilities at each excavation.

3.1.6 Traffic Hazards

All traffic, vehicular and pedestrian, shall be maintained and protected at all times consistent with local, state and federal agency regulations regarding such traffic and in accordance with NYCDOT guidelines. The excavation contractor shall carry on his operations without undue interference or delays to traffic. The excavation contractor shall furnish all labor, materials, guards, barricades, signs, lights, and anything else necessary to maintain traffic and to protect his work and the public, during operations.

3.2 Work in Extreme Temperatures

Work under extremely hot or cold weather conditions requires special protocols to minimize the chance that employees will be affected by heat or cold stress.

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
Phone 631.504.6000
Fax 631.924.2870

3.2.1 Heat Stress

The combination of high ambient temperature, high humidity, physical exertion, and personal protective apparel, which limits the dissipation of body heat and moisture, can cause heat stress.

The following prevention, recognition and treatment strategies will be implemented to protect personnel from heat stress. Personnel will be trained to recognize the symptoms of heat stress and to apply the appropriate treatment.

1. Prevention
    a. Provide plenty of fluids. Available in the support zone will be a 50% solution of fruit punch and water or plain water.
    b. Work in Pairs. Individuals should avoid undertaking any activity alone.
    c. Provide cooling devices. A spray hose and a source of water will be provided to reduce body temperature, cool protective clothing and/or act as a quick-drench shower in case of an exposure incident.
    d. Adjustment of the work schedule. As is practical, the most labor-intensive tasks should be carried out during the coolest part of the day.

2. Recognition and Treatment
    a Heat Rash (or prickly heat):
        Cause: Continuous exposure to hot and humid air, aggravated by chafing clothing.
        Symptoms: Eruption of red pimples around sweat ducts accompanied by intense itching and tingling.
        Treatment: Remove source or irritation and cool skin with water or wet cloths.

    b. Heat Cramps (or heat prostration)
        Cause: Profuse perspiration accompanied by inadequate replenishment of body water and electrolytes.
        Symptoms: Muscular weakness, staggering gait, nausea, dizziness, shallow breathing, pale and clammy skin, approximately normal body temperature.
        Treatment: Perform the following while making arrangement for transport to a medical facility. Remove the worker to a contamination reduction zone. Remove protective clothing. Lie worker down on back in a cool place and raise feet 6 to 12 inches. Keep warm, but loosen all clothing. If conscious, provide sips of salt-water solution, using one teaspoon of salt in 12 ounces of water. Transport to a medical facility.
    c. Heat Stroke
        Cause: Same as heat exhaustion. This is also an extremely serious condition.
        Symptoms: Dry hot skin, dry mouth, dizziness, nausea, headache, rapid pulse.
        Treatment: Cool worker immediately by immersing or spraying with cool water or sponge bare skin after removing protective clothing. Transport to hospital.

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
Phone 631.504.6000
Fax 631.924.2870

3.2.2 Cold Exposure

Exposure to cold weather, wet conditions and extreme wind-chill factors may result in excessive loss of body heat (hypothermia) and /or frostbite. To guard against cold exposure and to prevent cold injuries, appropriate warm clothing should be worn, warm shelter must be readily available, rest periods should be adjusted as needed, and the physical conditions of on-site field personnel should be closely monitored. Personnel and supervisors working on-site will be made aware of the signs and symptoms of frost bite and hypothermia such as shivering, reduced blood pressure, reduced coordination, drowsiness, impaired judgment, fatigue, pupils dilated but reactive to light and numbing of the toes and fingers.

3.3 Chemical Hazards

Soil collected from the site as part of several subsurface investigations performed at the site have revealed elevated levels of SVOCs, metals and pesticides in historic fill at the Site.

Metals reported to be present at elevated concentrations in historic fill material at the Site include the following:

Copper	Lead	Mercury	Zinc

SVOCs reported to be present at elevated concentrations in historic fill material at the Site include the following:

Benz(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene
Chyrsene	Indeno(1,2,3-cd)pyrene		

Pesticides reported to be present at elevated concentrations in historic fill material at the Site include the following:

4,4'-DDD

PCBs reported to be present at elevated concentrations in historic fill material at the Site include the following:

PCB-1248

The primary routes of exposure to identified contaminants in soil to on-site construction workers are through inhalation, ingestion and absorption.

Appendix C includes information sheets for all detected chemicals that may be encountered at the site.

3.3.1 Respirable Dust

Dust may be generated from vehicular traffic and/or excavation activities. If visible observation detects elevated levels of dust, a program of wetting will be employed by the site safety officer. If elevated dust levels persist, the site safety office will employ dust monitoring using a particulate monitor (Miniram or equivalent). If monitoring detects concentrations greater than 150 µg/m3 over daily background, the site safety officer will take corrective actions as defined herein, including the use of water for dust suppression and if this is not effective, requiring workers to wear APRs with efficiency particulate air (HEPA) cartridges.

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
Phone 631.504.6000
Fax 631.924.2870

Absorption pathways for dust and direct contact with soils or groundwater will be mitigated with the implementation of latex gloves, hand washing and decontamination exercises when necessary.

3.3.2 Dust Control and Monitoring During Earthwork

Dust generated during excavation activities or other earthwork may contain contaminants identified in soils at the site. Dust will be controlled by wetting the working surface with water. Calcium chloride may be used if the problem cannot be controlled with water. Air monitoring and dust control techniques are specified in a site specific Dust Control Plan (if applicable). Site workers will not be required to wear APR's unless dust concentrations are consistently over 150 $\mu g/m^3$ over site-specific background in the breathing zone as measured by a dust monitor unless the site safety officer directs workers to wear APRs. The site safety officer will use visible dust as an indicator to implement the dust control plan.

3.3.3 Organic Vapors

Although no VOCs were detected within any of the soil samples collected at the Site, the site safety officer will periodically monitor organic vapors with a Photo-ionization Detector (PID) during excavation activities to determine whether organic vapor concentrations exceed action levels shown in Section 5 and/or the Community Air Monitoring Plan.

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
Phone 631.504.6000
Fax 631.924.2870

4.0 PERSONAL PROTECTIVE EQUIPMENT

Personal protective equipment (PPE) shall be selected in accordance with the site air monitoring program, OSHA 29 CFR 1910.120(c), (g), and 1910.132. Protective equipment shall be NIOSH approved and respiratory protection shall conform to OSHA 29 CFR Part 1910.133 and 1910.134 specifications; head protection shall conform to 1910.135; eye and face protection shall conform to 1910.133; and foot protection shall conform to 1910.136. The only true difference among the levels of protection from D thru B is the addition of the type of respiratory protection. **It is anticipated that work will be performed in Level D PPE.**

4.1 Level D

Level D PPE shall be donned when the atmosphere contains no known hazards and work functions preclude splashes, immersion, or the potential for inhalation of, or contact with, hazardous concentrations of harmful chemicals. Level D PPE consists of:

- standard work clothes, coveralls, or tyvek, as needed;
- steel toe and steel shank work boots;
- hard hat;
- gloves, as needed;
- safety glasses;
- hearing protection;
- equipment replacements are available as needed.

4.2 Level C

Level C PPE shall be donned when sustained concentrations of measured total organic vapors in the breathing zone exceed background concentrations (using a portable OVA, or equivalent), by more than 5 ppm. The specifications on the APR filters used must be appropriate for contaminants identified or expected to be encountered. Level C PPE shall be donned when the identified contaminants have adequate warning properties and criteria for using APR have been met. Level C PPE consists of:

- chemical resistant or coated tyvek coveralls;
- steel-toe and steel-shank workboots;
- chemical resistant overboots or disposable boot covers;
- disposable inner gloves (surgical gloves);
- disposable outer gloves;
- full face APR fitted with organic vapor/dust and mist filters or filters appropriate for the identified or expected contaminants;
- hard hat;
- splash shield, as needed; and,
- ankles/wrists taped with duct tape.

The site safety officer will verify if Level C is appropriate by checking organic vapor concentrations using compound and/or class-specific detector tubes.

The exact PPE ensemble is decided on a site-by-site basis by the Site Safety Officer with the intent to provide the most protective and efficient worker PPE.

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
Phone 631.504.6000
Fax 631.924.2870

4.3 Activity-Specific Levels of Personal Protection

The required level of PPE is activity-specific and is based on air monitoring results (Section 4.0) and properties of identified or expected contaminants. **It is expected that site work will be performed in Level D.** If air monitoring results indicate the necessity to upgrade the level of protection, engineering controls (i.e. Facing equipment away from the wind and placing site personnel upwind of excavations, active venting, etc.) will be implemented before requiring the use of respiratory protection.

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
Phone 631.504.6000
Fax 631.924.2870

5.0 AIR MONITORING AND ACTION LEVELS

29 CFR 1910.120(h) specifies that monitoring shall be performed where there may be a question of employee exposure to hazardous concentrations of hazardous substances in order to assure proper selection of engineering controls, work practices and personal protective equipment so that employees are not exposed to levels which exceed permissible exposure limits, or published exposure levels if there are no permissible exposure limits, for hazardous substances.

5.1 Air Monitoring Requirements

If excavation work is performed, air will be monitored for VOCs with a portable ION Science 3000EX photo-ionization detector, or the equivalent. If necessary, Lower Explosive Limit (LEL) and oxygen will be monitored with a Combustible Gas Indicator (CGI). If appropriate, fugitive dust will be monitored using a MiniRam Model PDM-3 aerosol monitor. Air will be monitored when any of the following conditions apply:

- initial site entry;
- during any work where a potential IDLH condition or flammable atmosphere could develop;
- excavation work begins on another portion of the site;
- contaminants, other than those previously identified, have been discovered;
- each time a different task or activity is initiated;
- during trenching and/or excavation work.

The designated site safety officer will record air monitoring data and ensure that air monitoring instruments are calibrated and maintained in accordance with manufacturer's specifications. Instruments will be zeroed daily and checked for accuracy. Monitoring results will be recorded in a field notebook and will be transferred to instrument reading logs.

5.2 Work Stoppage Responses

The following responses will be initiated whenever one or more of the action levels necessitating a work stoppage are exceeded:

1 The SSO will be consulted immediately
2 All personnel (except as necessary for continued monitoring and contaminant migration, if applicable) will be cleared from the work area (eg from the exclusion zone).
3 Monitoring will be continued until intrusive work resumes.

5.3 Action Levels During Excavation Activities

Instrument readings will be taken in the breathing zone above the excavation pit unless otherwise noted. Each action level is independent of all other action levels in determining responses.

Organic Vapors (PID)	LEL %	Responses
0-1 ppm above background	0%	• Continue excavating • Level D protection • Continue monitoring every 10 minutes
1-5 ppm Above Background, Sustained Reading	1-10%	• Continue excavating • Go to Level C protection or employ

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
Phone 631.504.6000
Fax 631.924.2870

		engineering controls • Continue monitoring every 10 minutes
5-25 ppm Above Background, Sustained Reading	10-20%	• Discontinue excavating, unless PID is only action level exceeded. • Level C protection or employ engineering controls • Continue monitoring for organic vapors 200 ft downwind • Continuous monitoring for LEL at excavation pit
>25 ppm Above Background, Sustained Reading	>20%	• Discontinue excavating • Withdraw from area, shut off all engine ignition sources. • Allow pit to vent • Continuous monitoring for organic vapors 200 ft downwind.

Notes: Air monitoring will occur in the breathing zone 30 inches above the excavation pit. Readings may also be taken in the excavation pit but will not be used for action levels.

If action levels for any one of the monitoring parameters are exceeded, the appropriate responses listed in the right hand column should be taken. If instrument readings do not return to acceptable levels after the excavation pit has been vented for a period of greater than one-half hour, a decision will then be made whether or not to seal the pit with suppressant foam.

If, during excavation activities, downwind monitoring PID readings are greater than 5 ppm above background for more than one-half hour, excavation will stop until sustained levels are less then 5 ppm (see Community Air Monitoring Plan).

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
Phone 631.504.6000
Fax 631.924.2870

6.0 SITE CONTROL

6.1 Work Zones

The primary purpose of site controls is to establish the perimeter of a hazardous area, to reduce the migration of contaminants into clean areas, and to prevent access or exposure to hazardous materials by unauthorized persons. When operations are to take place involving hazardous materials, the site safety officer will establish an exclusion zone, a decontamination zone, and a support zone. These zones "float" (move around the site) depending on the tasks being performed on any given day. The site safety officer will outline these locations before work begins and when zones change. The site safety officer records this information in the site log book.

Due to the dimensions of the Site and the work area, it is expected that an exclusion zone will include the entire fenced area with the exception of the construction entrance area, which will serve as the decontamination zone. A support zone if needed will be located outside of the fenced area. All onsite workers during excavation of historic fill materials must provide evidence of OSHA 24 or 40-hour Hazardous Waste Operations and Emergency Response Operations training to conduct work within the exclusion zone established by the site safety officer. The exclusion zone is defined by the site safety officer but will typically be a 50-foot area around work activities. Gross decontamination (as determined by the site Health and Safety Officer) is conducted in the exclusion zone; all other decontamination is performed in the decontamination zone or trailer, if provided.

Protective equipment is removed in the decontamination zone. Disposable protective equipment is stored in receptacles staged in the decontamination zone, and non-disposable equipment is decontaminated. All personnel and equipment exit the exclusion zone through the decontamination zone. If a decontamination trailer is provided the first aid equipment, an eye wash unit, and drinking water are kept in the decontamination trailer.

The support zone is used for vehicle parking, daily safety meetings, and supply storage. Eating, drinking, and smoking are permitted only in the support zone. When a decontamination trailer is not provided, the eye wash unit, first aid equipment, and drinking water are kept at a central location designated by the site safety officer.

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
Phone 631.504.6000
Fax 631.924.2870

7.0 CONTINGENCY PLAN/EMERGENCY RESPONSE PLAN

Site personnel must be prepared in the event of an emergency. Emergencies can take many forms: illnesses, injuries, chemical exposure, fires, explosions, spills, leaks, releases of harmful contaminants, or sudden changes in the weather.

Emergency telephone numbers and a map to the hospital will be posted in the command post. Site personnel should be familiar with the emergency procedures, and the locations of site safety, first aid, and communication equipment.

7.1 Emergency Equipment On-site

Private telephones:	Site personnel.
Two-way radios:	Site personnel where necessary.
Emergency Alarms:	On-site vehicle horns*.
First aid kits:	On-site, in vehicles or office.
Fire extinguisher:	On-site, in office or on equipment.

* Horns: Air horns will be supplied to personnel at the discretion of the project superintendent or site safety officer.

7.2 Emergency Telephone Numbers

General Emergencies	911
Police	911
NYC Fire Department	911
Woodhull Medical Center	1-718-963-8000
NYSDEC Spills Hotline	1-800-457-7362
NYSDEC Project Manager	(718) 482-4010
NYC Department of Health	(212) 676-2400
National Response Center	1-800-424-8802
Poison Control	1-800-222-1222
Project Manager	1-631-504-6000
Site Safety Officer	1-631-504-6000

7.3 Personnel Responsibilities During an Emergency

The project manager is primarily responsible for responding to and correcting any emergency situations. However, in the absence of the project manager, the site safety officer shall act as the project manager's on-site designee and perform the following tasks:

- Take appropriate measures to protect personnel including: withdrawal from the exclusion zone, evacuate and secure the site, or upgrade/downgrade the level of protective clothing and respiratory protection;

- Ensure that appropriate federal, state, and local agencies are informed and emergency response plans are coordinated. In the event of fire or explosion, the local fire department should be summoned immediately. If toxic materials are released to the air, the local authorities should be informed in order to assess the need for evacuation;

- Ensure appropriate decontamination, treatment, or testing for exposed or injured

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
Phone 631.504.6000
Fax 631.924.2870

personnel;

- Determine the cause of incidents and make recommendations to prevent recurrence; and,

- Ensure that all required reports have been prepared.

The following key personnel are planned for this project:

- Project Manager — Mr. Kevin Brussee (631) 504-6000
- Site Safety Officer — Mr. Kevin Waters (631) 504-6000

7.4 Medical Emergencies

A person who becomes ill or injured in the exclusion zone will be decontaminated to the maximum extent possible. If the injury or illness is minor, full decontamination will be completed and first aid administered prior to transport. First aid will be administered while waiting for an ambulance or paramedics. A Field Accident Report (**Appendix D**) must be filled out for any injury.

A person transporting an injured/exposed person to a clinic or hospital for treatment will take the directions to the hospital (**Appendix D**).and information on the chemical(s) to which they may have been exposed (**Appendix C**).

7.5 Fire or Explosion

In the event of a fire or explosion, the local fire department will be summoned immediately. The site safety officer or his designated alternate will advise the fire commander of the location, nature and identification of the hazardous materials on-site. If it is safe to do so, site personnel may:

- use fire fighting equipment available on site; or,
- remove or isolate flammable or other hazardous materials that may contribute to the fire.

7.6 Evacuation Routes

Evacuation routes established by work area locations for each site will be reviewed prior to commencing site operations. As the work areas change, the evacuation routes will be altered accordingly, and the new route will be reviewed.

Under extreme emergency conditions, evacuation is to be immediate without regard for equipment. The evacuation signal will be a continuous blast of a vehicle horn, if possible, and/or by verbal/radio communication. When evacuating the site, personnel will follow these instructions:

- Keep upwind of smoke, vapors, or spill location.
- Exit through the decontamination corridor if possible.
- If evacuation through the decontamination corridor is not possible, personnel should remove contaminated clothing once they are in a safe location and leave it near the exclusion zone or in a safe place.
- The site safety officer will conduct a head count to ensure that all personnel have been

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
Phone 631.504.6000
Fax 631.924.2870

evacuated safely. The head count will be correlated to the site and/or exclusion zone entry/exit log.

- If emergency site evacuation is necessary, all personnel are to escape the emergency situation and decontaminate to the maximum extent practical.

7.7 Spill Control Procedures

Spills associated with site activities may be attributed to project equipment and include gasoline, diesel and hydraulic oil. In the event of a leak or a release, site personnel will inform their supervisor immediately, locate the source of spillage and stop the flow if it can be done safely. A spill containment kit including absorbent pads, booms and/or granulated speedy dry absorbent material will be available to site personnel to facilitate the immediate recovery of the spilled material. Daily inspections of site equipment components including hydraulic lines, fuel tanks, etc. will be performed by their respective operators as a preventative measure for equipment leaks and to ensure equipment soundness. In the event of a spill, site personnel will immediately notify the NYSDEC (1-800-457-7362), and a spill number will be generated.

7.8 Vapor Release Plan

If work zone organic vapor (excluding methane) exceeds 5 ppm, then a downwind reading will be made either 200 feet from the work zone or at the property line, whichever is closer. If readings at this location exceed 5 ppm over background, the work will be stopped.

If 5 ppm of VOCs are recorded over background on a PID at the property line, then an off-site reading will be taken within 20 feet of the nearest residential or commercial property, whichever is closer. If efforts to mitigate the emission source are unsuccessful for 30 minutes, then the designated site safety officer will:

- contact the local police;
- continue to monitor air every 30 minutes, 20 feet from the closest off-site property. If two successive readings are below 5 ppm (non-methane), off-site air monitoring will be halted.
- All property line and off site air monitoring locations and results associated with vapor releases will be recorded in the site safety log book.

EBC
Environmental Business Consultants
1808 Middle Country Road
Ridge, NY 11961
Phone 631.504.6000
Fax 631.924.2870

APPENDIX A

SITE SAFETY ACKNOWLEDGEMENT FORM

DAILY BREIFING SIGN-IN SHEET

Date:_____ Person Conducting Briefing:_____

Project Name and Location:_____

1. AWARENESS (topics discussed, special safety concerns, recent incidents, etc…):

_____

_____

_____

_____

2. OTHER ISSUES (HASP changes, attendee comments, etc…):

_____

_____

_____

3. ATTENDEES (Print Name):

1.	11.
2.	12.
3.	13.
4.	14.
5.	15.
6.	16.
7.	17.
8.	18.
9.	19.
10.	20.

APPENDIX B

SITE SAFETY PLAN AMENDMENTS

SITE SAFETY PLAN AMENDMENT FORM

Site Safety Plan Amendment #: _____

Site Name: _____

Reason for Amendment: _____

_____

_____

_____

Alternative Procedures: _____

_____

_____

_____

Required Changes in PPE: _____

_____

_____

_____

_____ _____

Project Superintendent (signature) **Date**

_____ _____

Health and Safety Consultant (signature) **Date**

_____ _____

Site Safety Officer (signature) **Date**

APPENDIX C

CHEMICAL HAZARDS

CHEMICAL HAZARDS

The attached International Chemical Safety Cards are provided for contaminants of concern that have been identified in soils and/or groundwater at the site.

International Chemical Safety Cards

COPPER

ICSC: 0240

Cu
(powder)

ICSC # 0240
CAS # 7440-50-8
RTECS # GL5325000
September 24, 1993 Validated

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Combustible.	NO open flames.	Special powder, dry sand, NO other agents.
EXPLOSION			
EXPOSURE		PREVENT DISPERSION OF DUST!	
•INHALATION	Cough. Headache. Shortness of breath. Sore throat.	Local exhaust or breathing protection.	Fresh air, rest. Refer for medical attention.
•SKIN	Redness.	Protective gloves.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
•EYES	Redness. Pain.	Safety goggles.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION	Abdominal pain. Nausea. Vomiting.	Do not eat, drink, or smoke during work.	Rinse mouth. Refer for medical attention.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Sweep spilled substance into containers. Carefully collect remainder. Then remove to safe place. (Extra personal protection: P2 filter respirator for harmful particles).	Separated from - See Chemical Dangers.	R: S:

SEE IMPORTANT INFORMATION ON BACK

ICSC: 0240

International Chemical Safety Cards

COPPER

ICSC: 0240

I

M

P

PHYSICAL STATE; APPEARANCE:
RED POWDER, TURNS GREEN ON EXPOSURE TO MOIST AIR.

PHYSICAL DANGERS:

CHEMICAL DANGERS:

ROUTES OF EXPOSURE:
The substance can be absorbed into the body by inhalation and by ingestion.

INHALATION RISK:
Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly when dispersed.

O **R** **T** **A** **N** **T** **D** **A** **T** **A**	Shock-sensitive compounds are formed with acetylenic compounds, ethylene oxides and azides. Reacts with strong oxidants like chlorates, bromates and iodates, causing explosion hazard. **OCCUPATIONAL EXPOSURE LIMITS:** TLV: 0.2 mg/m³ fume (ACGIH 1992-1993). TLV (as Cu, dusts & mists): 1 mg/m³ (ACGIH 1992-1993). Intended change 0.1 mg/m³ Inhal., A4 (not classifiable as a human carcinogen); MAK: 0.1 mg/m³ (Inhalable fraction) Peak limitation category: II(2) Pregnancy risk group: D (DFG 2005). OSHA PEL*: TWA 1 mg/m^3 *Note: The PEL also applies to other copper compounds (as Cu) except copper fume. NIOSH REL*: TWA 1 mg/m^3 *Note: The REL also applies to other copper compounds (as Cu) except Copper fume. NIOSH IDLH: 100 mg/m^3 (as Cu) See: 7440508	**EFFECTS OF SHORT-TERM EXPOSURE:** Inhalation of fumes may cause metal fume fever. See Notes. **EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:** Repeated or prolonged contact may cause skin sensitization.
PHYSICAL PROPERTIES	Boiling point: 2595°C Melting point: 1083°C Relative density (water = 1): 8.9	Solubility in water: none
ENVIRONMENTAL DATA		

N O T E S

The symptoms of metal fume fever do not become manifest until several hours.

ADDITIONAL INFORMATION

ICSC: 0240 **COPPER**

IMPORTANT LEGAL NOTICE:	Neither NIOSH, the CEC or the IPCS nor any person acting on behalf of NIOSH, the CEC or the IPCS is responsible for the use which might be made of this information. This card contains the collective views of the IPCS Peer Review Committee and may not reflect in all cases all the detailed requirements included in national legislation on the subject. The user should verify compliance of the cards with the relevant legislation in the country of use. The only modifications made to produce the U.S. version is inclusion of the OSHA PELs, NIOSH RELs and NIOSH IDLH values.

International Chemical Safety Cards

LEAD

ICSC: 0052

Lead metal
Plumbum
Pb
Atomic mass: 207.2
(powder)

ICSC # 0052
CAS # 7439-92-1
RTECS # OF7525000
October 08, 2002 Peer reviewed

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Not combustible. Gives off irritating or toxic fumes (or gases) in a fire.		In case of fire in the surroundings: use appropriate extinguishing media.
EXPLOSION	Finely dispersed particles form explosive mixtures in air.	Prevent deposition of dust; closed system, dust explosion-proof electrical equipment and lighting.	
EXPOSURE	See EFFECTS OF LONG-TERM OR REPEATED EXPOSURE.	PREVENT DISPERSION OF DUST! AVOID EXPOSURE OF (PREGNANT) WOMEN!	
•INHALATION		Local exhaust or breathing protection.	Fresh air, rest.
•SKIN		Protective gloves.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
•EYES		Safety spectacles.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION	Abdominal pain. Nausea. Vomiting.	Do not eat, drink, or smoke during work. Wash hands before eating.	Rinse mouth. Give plenty of water to drink. Refer for medical attention.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Sweep spilled substance into containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder, then remove to safe place. Do NOT let this chemical enter the environment. Personal protection: P3 filter respirator for toxic particles.	Separated from food and feedstuffs incompatible materials See Chemical Dangers.	R: S:

SEE IMPORTANT INFORMATION ON BACK

ICSC: 0052

Prepared in the context of cooperation between the International Programme on Chemical Safety & the Commission of the European Communities (C) IPCS CEC 1994. No modifications to the International version have been made except to add the OSHA PELs, NIOSH RELs and NIOSH IDLH values.

International Chemical Safety Cards

LEAD

ICSC: 0052

I M P O R T A N T D A T A

PHYSICAL STATE; APPEARANCE:
BLUISH-WHITE OR SILVERY-GREY SOLID IN VARIOUS FORMS. TURNS TARNISHED ON EXPOSURE TO AIR.

PHYSICAL DANGERS:
Dust explosion possible if in powder or granular form, mixed with air.

CHEMICAL DANGERS:
On heating, toxic fumes are formed. Reacts with oxidants. Reacts with hot concentrated nitric acid, boiling concentrated hydrochloric acid and sulfuric acid. Attacked by pure water and by weak organic acids in the presence of oxygen.

OCCUPATIONAL EXPOSURE LIMITS:
TLV: 0.05 mg/m³ A3 (confirmed animal carcinogen with unknown relevance to humans); BEI issued (ACGIH 2004).
MAK:
Carcinogen category: 3B; Germ cell mutagen group: 3A; (DFG 2004).
EU OEL: as TWA 0.15 mg/m³ (EU 2002).
OSHA PEL*: 1910.1025 TWA 0.050 mg/m^3 See Appendix C *Note: The PEL also applies to other lead compounds (as Pb) -- see Appendix C.
NIOSH REL*: TWA 0.050 mg/m^3 See Appendix C
*Note: The REL also applies to other lead compounds (as Pb) -- see Appendix C.
NIOSH IDLH: 100 mg/m^3 (as Pb) See: 7439921

ROUTES OF EXPOSURE:
The substance can be absorbed into the body by inhalation and by ingestion.

INHALATION RISK:
A harmful concentration of airborne particles can be reached quickly when dispersed, especially if powdered.

EFFECTS OF SHORT-TERM EXPOSURE:

EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:
The substance may have effects on the blood bone marrow central nervous system peripheral nervous system kidneys , resulting in anaemia, encephalopathy (e.g., convulsions), peripheral nerve disease, abdominal cramps and kidney impairment. Causes toxicity to human reproduction or development.

PHYSICAL PROPERTIES		
	Boiling point: 1740°C	Density: 11.34 g/cm3
	Melting point: 327.5°C	Solubility in water: none

ENVIRONMENTAL DATA	
	Bioaccumulation of this chemical may occur in plants and in mammals. It is strongly advised that this substance does not enter the environment. 

N O T E S

Depending on the degree of exposure, periodic medical examination is suggested. Do NOT take working clothes home.

Transport Emergency Card: TEC (R)-51S1872

ADDITIONAL INFORMATION

ICSC: 0052 **LEAD**

International Chemical Safety Cards

MERCURY

ICSC: 0056

Quicksilver
Liquid silver
Hg
Atomic mass: 200.6

ICSC # 0056
CAS # 7439-97-6
RTECS # OV4550000
UN # 2809
EC # 080-001-00-0
April 22, 2004 Peer reviewed

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Not combustible. Gives off irritating or toxic fumes (or gases) in a fire.		In case of fire in the surroundings: use appropriate extinguishing media.
EXPLOSION	Risk of fire and explosion.		In case of fire: keep drums, etc., cool by spraying with water.
EXPOSURE		STRICT HYGIENE! AVOID EXPOSURE OF (PREGNANT) WOMEN! AVOID EXPOSURE OF ADOLESCENTS AND CHILDREN!	IN ALL CASES CONSULT A DOCTOR!
•INHALATION	Abdominal pain. Cough. Diarrhoea. Shortness of breath. Vomiting. Fever or elevated body temperature.	Local exhaust or breathing protection.	Fresh air, rest. Artificial respiration if indicated. Refer for medical attention.
•SKIN	MAY BE ABSORBED! Redness.	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap. Refer for medical attention.
•EYES		Face shield, or eye protection in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION		Do not eat, drink, or smoke during work. Wash hands before eating.	Refer for medical attention.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Evacuate danger area in case of a large spill! Consult an expert! Ventilation. Collect leaking and spilled liquid in sealable non-metallic containers as far as possible. Do NOT wash away into sewer. Do NOT let this chemical enter the environment. Chemical protection suit including self-contained breathing apparatus.	Provision to contain effluent from fire extinguishing. Separated from food and feedstuffs Well closed.	Special material. Do not transport with food and feedstuffs. T symbol N symbol R: 23-33-50/53 S: 1/2-7-45-60-61 UN Hazard Class: 8 UN Packing Group: III

SEE IMPORTANT INFORMATION ON BACK

International Chemical Safety Cards

MERCURY

ICSC: 0056

IMPORTANT DATA

PHYSICAL STATE; APPEARANCE:
ODOURLESS, HEAVY AND MOBILE SILVERY LIQUID METAL.

PHYSICAL DANGERS:

CHEMICAL DANGERS:
Upon heating, toxic fumes are formed. Reacts violently with ammonia and halogens causing fire and explosion hazard. Attacks aluminium and many other metals forming amalgams.

OCCUPATIONAL EXPOSURE LIMITS:
TLV: 0.025 mg/m³ as TWA (skin) A4 BEI issued (ACGIH 2004).
MAK: 0.1 mg/m³ Sh
Peak limitation category: II(8) Carcinogen category: 3B (DFG 2003).
OSHA PEL†: C 0.1 mg/m^3
NIOSH REL: Hg Vapor: TWA 0.05 mg/m^3 skin
Other: C 0.1 mg/m^3 skin
NIOSH IDLH: 10 mg/m^3 (as Hg) See: 7439976

ROUTES OF EXPOSURE:
The substance can be absorbed into the body by inhalation of its vapour and through the skin , also as a vapour!

INHALATION RISK:
A harmful contamination of the air can be reached very quickly on evaporation of this substance at 20°C.

EFFECTS OF SHORT-TERM EXPOSURE:
The substance is irritating to the skin. Inhalation of the vapours may cause pneumonitis. The substance may cause effects on the central nervous systemandkidneys. The effects may be delayed. Medical observation is indicated.

EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:
The substance may have effects on the central nervous system kidneys , resulting in irritability, emotional instability, tremor, mental and memory disturbances, speech disorders. Danger of cumulative effects. Animal tests show that this substance possibly causes toxic effects upon human reproduction.

PHYSICAL PROPERTIES

Boiling point: 357°C
Melting point: -39°C
Relative density (water = 1): 13.5
Solubility in water:
none

Vapour pressure, Pa at 20°C: 0.26
Relative vapour density (air = 1): 6.93
Relative density of the vapour/air-mixture at 20°C (air = 1): 1.009

ENVIRONMENTAL DATA

The substance is very toxic to aquatic organisms. In the food chain important to humans, bioaccumulation takes place, specifically in fish.

N O T E S

Depending on the degree of exposure, periodic medical examination is indicated. No odour warning if toxic concentrations are present. Do NOT take working clothes home.

Transport Emergency Card: TEC (R)-80GC9-II+III

ADDITIONAL INFORMATION

ICSC: 0056 **MERCURY**

International Chemical Safety Cards

ZINC POWDER

ICSC: 1205

Blue powder
Merrillite
Zn
Atomic mass: 65.4
(powder)

ICSC # 1205
CAS # 7440-66-6
RTECS # ZG8600000
UN # 1436 (zinc powder or dust)
EC # 030-001-00-1
October 24, 1994 Peer reviewed

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Highly flammable. Many reactions may cause fire or explosion. Gives off irritating or toxic fumes (or gases) in a fire.	NO open flames, NO sparks, and NO smoking. NO contact with acid(s), base (s) and incompatible substances (see Chemical Dangers).	Special powder, dry sand, NO other agents. NO water.
EXPLOSION	Risk of fire and explosion on contact with acid(s), base(s), water and incompatible substances.	Closed system, ventilation, explosion-proof electrical equipment and lighting. Prevent build-up of electrostatic charges (e.g., by grounding). Prevent deposition of dust.	In case of fire: cool drums, etc., by spraying with water but avoid contact of the substance with water.
EXPOSURE		PREVENT DISPERSION OF DUST! STRICT HYGIENE!	
•**INHALATION**	Metallic taste and metal fume fever. Symptoms may be delayed (see Notes).	Local exhaust.	Fresh air, rest. Refer for medical attention.
•**SKIN**	Dry skin.	Protective gloves.	Rinse and then wash skin with water and soap.
•**EYES**		Safety spectacles.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•**INGESTION**	Abdominal pain. Nausea. Vomiting.	Do not eat, drink, or smoke during work. Wash hands before eating.	Rinse mouth. Refer for medical attention.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Extinguish or remove all ignition sources. Do NOT wash away into sewer. Sweep spilled substance into containers. then remove to safe place. Personal protection: self-contained breathing apparatus.	Fireproof. Separated from acids, bases oxidants Dry.	Airtight. F symbol N symbol R: 15-17-50/53 S: 2-7/8-43-46-60-61 UN Hazard Class: 4.3 UN Subsidiary Risks: 4.2

SEE IMPORTANT INFORMATION ON BACK

International Chemical Safety Cards

ZINC POWDER

ICSC: 1205

I M P O R T A N T D A T A

PHYSICAL STATE; APPEARANCE:
ODOURLESS GREY TO BLUE POWDER.

PHYSICAL DANGERS:
Dust explosion possible if in powder or granular form, mixed with air. If dry, it can be charged electrostatically by swirling, pneumatic transport, pouring, etc.

CHEMICAL DANGERS:
Upon heating, toxic fumes are formed. The substance is a strong reducing agent and reacts violently with oxidants. Reacts with water and reacts violently with acids and bases forming flammable/explosive gas (hydrogen - see ICSC0001) Reacts violently with sulfur, halogenated hydrocarbons and many other substances causing fire and explosion hazard.

OCCUPATIONAL EXPOSURE LIMITS:
TLV not established.

ROUTES OF EXPOSURE:
The substance can be absorbed into the body by inhalation and by ingestion.

INHALATION RISK:
Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly when dispersed.

EFFECTS OF SHORT-TERM EXPOSURE:
Inhalation of fumes may cause metal fume fever. The effects may be delayed.

EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:
Repeated or prolonged contact with skin may cause dermatitis.

PHYSICAL PROPERTIES

Boiling point: 907°C
Melting point: 419°C
Relative density (water = 1): 7.14
Solubility in water: reaction
Vapour pressure, kPa at 487°C: 0.1
Auto-ignition temperature: 460°C

ENVIRONMENTAL DATA

N O T E S

Zinc may contain trace amounts of arsenic, when forming hydrogen, may also form toxic gas arsine (see ICSC 0001 and ICSC 0222). Reacts violently with fire extinguishing agents such as water, halons, foam and carbon dioxide. The symptoms of metal fume fever do not become manifest until several hours later. Rinse contaminated clothes (fire hazard) with plenty of water.

Transport Emergency Card: TEC (R)-43GWS-II+III
NFPA Code: H0; F1; R1;

ADDITIONAL INFORMATION

ICSC: 1205 **ZINC POWDER**

IMPORTANT LEGAL NOTICE:

Material Safety Data Sheet

Version 4.0
Revision Date 03/12/2010
Print Date 12/09/2011

1. PRODUCT AND COMPANY IDENTIFICATION

Product name	:	4,4'-DDD PESTANAL,250 MG (2,2-BIS(4-CHL&
Product Number	:	35486
Brand	:	Fluka
Company	:	Sigma-Aldrich 3050 Spruce Street SAINT LOUIS MO 63103 USA
Telephone	:	+1 800-325-5832
Fax	:	+1 800-325-5052
Emergency Phone #	:	(314) 776-6555

2. HAZARDS IDENTIFICATION

Emergency Overview

OSHA Hazards
Toxic by ingestion, Harmful by skin absorption., Possible carcinogen.

GHS Label elements, including precautionary statements

Pictogram

Signal word Danger

Hazard statement(s)

H301	Toxic if swallowed.
H312	Harmful in contact with skin.
H351	Suspected of causing cancer.
H400	Very toxic to aquatic life.
H413	May cause long lasting harmful effects to aquatic life.

Precautionary statement(s)

P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

HMIS Classification

Health hazard:	2
Chronic Health Hazard:	*
Flammability:	0
Physical hazards:	0

NFPA Rating

Health hazard:	2
Fire:	0
Reactivity Hazard:	0

Potential Health Effects

Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Skin	Harmful if absorbed through skin. May cause skin irritation.
Eyes	May cause eye irritation.
Ingestion	Toxic if swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : 1,1-Dichloro-2,2-bis(4-chlorophenyl)ethane
4,4′-DDD
TDE

Formula : $C_{14}H_{10}Cl_4$
Molecular Weight : 320.04 g/mol

CAS-No.	EC-No.	Index-No.	Concentration
2,2-bis(4-Chlorophenyl)-1,1-dichloro-ethane			
72-54-8	200-783-0	-	-

4. FIRST AID MEASURES

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

If inhaled
If breathed in, move person into fresh air. If not breathing give artificial respiration Consult a physician.

In case of skin contact
Wash off with soap and plenty of water. Consult a physician.

In case of eye contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters
Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions
Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up
Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling
Avoid contact with skin and eyes. Avoid formation of dust and aerosols.
Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Conditions for safe storage
Keep container tightly closed in a dry and well-ventilated place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection
Handle with gloves.

Eye protection
Face shield and safety glasses

Skin and body protection
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form	solid

Safety data

pH	no data available
Melting point	94.0 - 96.0 °C (201.2 - 204.8 °F)
Boiling point	193.0 °C (379.4 °F) at 1.3 hPa (1.0 mmHg)
Flash point	no data available
Ignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Vapour pressure	< 0.00001 hPa (< 0.00001 mmHg) at 25.0 °C (77.0 °F)
Density	1.38 g/cm3
Water solubility	no data available
Partition coefficient: n-octanol/water	log Pow: 6.02

10. STABILITY AND REACTIVITY

Chemical stability
Stable under recommended storage conditions.

Conditions to avoid
no data available

Materials to avoid
Strong oxidizing agents

Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen chloride gas
Hazardous decomposition products formed under fire conditions. - Nature of decomposition products not known.

11. TOXICOLOGICAL INFORMATION

Acute toxicity
LD50 Oral - Hamster - > 5,000 mg/kg

TDLo Oral - Human - 428.5 mg/kg
Remarks: Endocrine:Adrenal cortex hypoplasia.

TDLo Oral - rat - 6,000 mg/kg
Remarks: Cardiac:Other changes. Gastrointestinal:Other changes. Kidney, Ureter, Bladder:Changes in both tubules and glomeruli.

TDLo Oral - rat - 14 mg/kg
Remarks: Liver:Changes in liver weight. Endocrine:Estrogenic. Musculoskeletal:Other changes.

TDLo Oral - rat - 2,100 mg/kg
Remarks: Behavioral:Altered sleep time (including change in righting reflex).

LD50 Dermal - rabbit - 1,200 mg/kg
Remarks: Behavioral:Excitement. Behavioral:Convulsions or effect on seizure threshold. Skin irritation

Skin corrosion/irritation
no data available

Serious eye damage/eye irritation
no data available

Respiratory or skin sensitization
no data available

Germ cell mutagenicity

no data available

Carcinogenicity

This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.

Limited evidence of carcinogenicity in animal studies

IARC:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH:	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP:	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA:	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure (GHS)
no data available

Specific target organ toxicity - repeated exposure (GHS)
no data available

Aspiration hazard
no data available

Potential health effects

Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Ingestion	Toxic if swallowed.
Skin	Harmful if absorbed through skin. May cause skin irritation.

Eyes May cause eye irritation.

Signs and Symptoms of Exposure
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Additional Information
RTECS: KI0700000

12. ECOLOGICAL INFORMATION

Toxicity

Toxicity to fish	LC50 - other fish - 1.18 - 9 mg/l - 96.0 h
	LC50 - Lepomis macrochirus (Bluegill) - 0.04 - 0.05 mg/l - 96.0 h
	LC50 - Oncorhynchus mykiss (rainbow trout) - 0.06 - 0.09 mg/l - 96.0 h
	LC50 - Pimephales promelas (fathead minnow) - 3.47 - 5.58 mg/l - 96.0 h
Toxicity to daphnia and other aquatic invertebrates.	EC50 - Daphnia pulex (Water flea) - 0.01 mg/l - 48 h

Persistence and degradability
no data available

Bioaccumulative potential
Indication of bioaccumulation.

Mobility in soil
no data available

PBT and vPvB assessment
no data available

Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

13. DISPOSAL CONSIDERATIONS

Product
Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging
Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)
UN-Number: 2811 Class: 6.1 Packing group: III
Proper shipping name: Toxic solids, organic, n.o.s. (2,2-bis(4-Chlorophenyl)-1,1-dichloro-ethane)
Reportable Quantity (RQ): 1 lbs
Marine pollutant: No
Poison Inhalation Hazard: No

IMDG
UN-Number: 2811 Class: 6.1 Packing group: III EMS-No: F-A, S-A
Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. (2,2-bis(4-Chlorophenyl)-1,1-dichloro-ethane)
Marine pollutant: No

IATA
UN-Number: 2811 Class: 6.1 Packing group: III
Proper shipping name: Toxic solid, organic, n.o.s. (2,2-bis(4-Chlorophenyl)-1,1-dichloro-ethane)

15. REGULATORY INFORMATION

OSHA Hazards
Toxic by ingestion, Harmful by skin absorption., Possible carcinogen.

DSL Status
This product contains the following components that are not on the Canadian DSL nor NDSL lists.

	CAS-No.
2,2-bis(4-Chlorophenyl)-1,1-dichloro-ethane	72-54-8

SARA 302 Components
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components
SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards
Acute Health Hazard

Massachusetts Right To Know Components

	CAS-No.	Revision Date
2,2-bis(4-Chlorophenyl)-1,1-dichloro-ethane	72-54-8	

Pennsylvania Right To Know Components

	CAS-No.	Revision Date
2,2-bis(4-Chlorophenyl)-1,1-dichloro-ethane	72-54-8	

New Jersey Right To Know Components

	CAS-No.	Revision Date
2,2-bis(4-Chlorophenyl)-1,1-dichloro-ethane	72-54-8	

California Prop. 65 Components

	CAS-No.	Revision Date
WARNING! This product contains a chemical known to the State of California to cause cancer. 2,2-bis(4-Chlorophenyl)-1,1-dichloro-ethane	72-54-8	

16. OTHER INFORMATION

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Co., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.

Material Safety Data Sheet

Version 4.1
Revision Date 01/13/2011
Print Date 12/09/2011

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Aroclor 1248

Product Number : 48589
Brand : Supelco
Product Use : For laboratory research purposes.

Supplier : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

Manufacturer : Sigma-Aldrich Corporation
3050 Spruce St.
St. Louis, Missouri 63103
USA

Telephone : +1 800-325-5832
Fax : +1 800-325-5052
Emergency Phone # (For both supplier and manufacturer) : (314) 776-6555
Preparation Information : Sigma-Aldrich Corporation
Product Safety - Americas Region
1-800-521-8956

2. HAZARDS IDENTIFICATION

Emergency Overview

OSHA Hazards
Target Organ Effect

Target Organs

LiverLiver

GHS Classification
Acute aquatic toxicity (Category 1)
Chronic aquatic toxicity (Category 1)

GHS Label elements, including precautionary statements

Pictogram

Signal word Warning

Hazard statement(s)
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)
P273 Avoid release to the environment.
P501 Dispose of contents/ container to an approved waste disposal plant.

HMIS Classification
Health hazard: 0
Flammability: 0
Physical hazards: 0

NFPA Rating
Health hazard: 0
Fire: 0
Reactivity Hazard: 0

Potential Health Effects

Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Skin	May be harmful if absorbed through skin. May cause skin irritation.
Eyes	May cause eye irritation.
Ingestion	May be harmful if swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS-No.	EC-No.	Index-No.	Concentration
Aroclor 1248			
12672-29-6	-	-	-

4. FIRST AID MEASURES

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact
Wash off with soap and plenty of water. Consult a physician.

In case of eye contact
Flush eyes with water as a precaution.

If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters
Wear self contained breathing apparatus for fire fighting if necessary.

Hazardous combustion products
Hazardous decomposition products formed under fire conditions. - Nature of decomposition products not known.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions
Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up
Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling
Normal measures for preventive fire protection.

Conditions for safe storage
Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection
Respiratory protection not required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection
impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form	liquid
Colour	no data available

Safety data

pH	no data available
Melting/freezing point	no data available
Boiling point	no data available
Flash point	no data available
Ignition temperature	no data available
Autoignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Vapour pressure	no data available
Density	no data available
Water solubility	no data available
Partition coefficient: n-octanol/water	no data available
Relative vapour density	no data available
Odour	no data available
Odour Threshold	no data available
Evaporation rate	no data available

10. STABILITY AND REACTIVITY

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
no data available

Conditions to avoid
no data available

Materials to avoid
Strong oxidizing agents

Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Nature of decomposition products not known.
Other decomposition products - no data available

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Oral LD50
LD50 Oral - rat - 11,000 mg/kg

Inhalation LC50
no data available

Dermal LD50
no data available

Other information on acute toxicity
no data available

Skin corrosion/irritation
no data available

Serious eye damage/eye irritation
no data available

Respiratory or skin sensitization
no data available

Germ cell mutagenicity
no data available

Carcinogenicity

IARC:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH:	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP:	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA:	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity
Reproductive toxicity - Monkey - Oral
Maternal Effects: Menstrual cycle changes or disorders.
Reproductive toxicity - Monkey - Oral
Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants).
Reproductive toxicity - Monkey - Oral
Effects on Fertility: Abortion.
Reproductive toxicity - Monkey - Oral

Effects on Newborn: Growth statistics (e.g., reduced weight gain). Effects on Newborn: Behavioral. Effects on Newborn: Other postnatal measures or effects.

no data available

Teratogenicity

Developmental Toxicity - rabbit - Oral
Specific Developmental Abnormalities: Immune and reticuloendothelial system.

no data available

Specific target organ toxicity - single exposure (Globally Harmonized System)
no data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System)
no data available

Aspiration hazard
no data available

Potential health effects

Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Ingestion	May be harmful if swallowed.
Skin	May be harmful if absorbed through skin. May cause skin irritation.
Eyes	May cause eye irritation.

Signs and Symptoms of Exposure
Nausea, Dizziness, Headache, muscle pain, muscle weakness, neck stiffness, trunk stiffness, stiffness of extremities, thick feeling in the tongue, Thirst

Synergistic effects
no data available

Additional Information
RTECS: Not available

12. ECOLOGICAL INFORMATION

Toxicity

Toxicity to fish	LC50 - Lepomis macrochirus - 0.278 mg/l - 96.0 h
Toxicity to algae	Growth inhibition EC50 - Thalassiosira rotula - 0.02 mg/l - 44 h

Persistence and degradability
no data available

Bioaccumulative potential

Bioaccumulation	Pimephales promelas (fathead minnow) - 250 d Bioconcentration factor (BCF): 120,000

Mobility in soil
no data available

PBT and vPvB assessment
no data available

Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Very toxic to aquatic life with long lasting effects.

no data available

13. DISPOSAL CONSIDERATIONS

Product
Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging
Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)
UN-Number: 2315 Class: 9 Packing group: II
Proper shipping name: Polychlorinated biphenyls, liquid (Aroclor 1248)
Reportable Quantity (RQ): 1 lbs
Marine pollutant: No
Poison Inhalation Hazard: No

IMDG
UN-Number: 2315 Class: 9 Packing group: II EMS-No: F-A, S-A
Proper shipping name: POLYCHLORINATED BIPHENYLS, LIQUID (Aroclor 1248)
Marine pollutant: Marine pollutant

IATA
UN-Number: 2315 Class: 9 Packing group: II
Proper shipping name: Polychlorinated biphenyls, liquid (Aroclor 1248)

15. REGULATORY INFORMATION

OSHA Hazards
Target Organ Effect

DSL Status
This product contains the following components that are not on the Canadian DSL nor NDSL lists.

	CAS-No.
Aroclor 1248	12672-29-6

SARA 302 Components
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components
SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards
Chronic Health Hazard

Massachusetts Right To Know Components

	CAS-No.	Revision Date
Aroclor 1248	12672-29-6	1993-04-24

Pennsylvania Right To Know Components

	CAS-No.	Revision Date
Aroclor 1248	12672-29-6	1993-04-24

New Jersey Right To Know Components

	CAS-No.	Revision Date
Aroclor 1248	12672-29-6	1993-04-24

California Prop. 65 Components

	CAS-No.	Revision Date
WARNING! This product contains a chemical known to the State of California to cause cancer. Aroclor 1248	12672-29-6	2008-08-01

California Prop. 65 Components

	CAS-No.	Revision Date
WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. Aroclor 1248	12672-29-6	2008-08-01

16. OTHER INFORMATION

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Co., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.

International Chemical Safety Cards

BENZ(a)ANTHRACENE

ICSC: 0385

1,2-Benzoanthracene
Benzo(a)anthracene
2,3-Benzphenanthrene
Naphthanthracene
$C_{18}H_{12}$
Molecular mass: 228.3

ICSC # 0385
CAS # 56-55-3
RTECS # CV9275000
EC # 601-033-00-9
October 23, 1995 Validated

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Combustible.		Water spray, powder. In case of fire in the surroundings: use appropriate extinguishing media.
EXPLOSION	Finely dispersed particles form explosive mixtures in air.	Prevent deposition of dust; closed system, dust explosion-proof electrical equipment and lighting.	
EXPOSURE		AVOID ALL CONTACT!	
•INHALATION		Local exhaust or breathing protection.	Fresh air, rest.
•SKIN		Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
•EYES		Safety goggles face shield or eye protection in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION		Do not eat, drink, or smoke during work. Wash hands before eating.	Rinse mouth.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Sweep spilled substance into sealable containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder, then remove to safe place. Personal protection: complete protective clothing including self-contained breathing apparatus.	Well closed.	T symbol N symbol R: 45-50/53 S: 53-45-60-61

SEE IMPORTANT INFORMATION ON BACK

ICSC: 0385

International Chemical Safety Cards

BENZ(a)ANTHRACENE

I M P O R T A N T D A T A

PHYSICAL STATE; APPEARANCE:
COLOURLESS TO YELLOW BROWN FLUORESCENT FLAKES OR POWDER.

PHYSICAL DANGERS:
Dust explosion possible if in powder or granular form, mixed with air.

CHEMICAL DANGERS:

OCCUPATIONAL EXPOSURE LIMITS:
TLV: A2 (suspected human carcinogen); (ACGIH 2004).
MAK:
Carcinogen category: 2 (as pyrolysis product of organic materials)
(DFG 2005).

ROUTES OF EXPOSURE:
The substance can be absorbed into the body by inhalation, through the skin and by ingestion.

INHALATION RISK:
Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly.

EFFECTS OF SHORT-TERM EXPOSURE:

EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:
This substance is probably carcinogenic to humans.

PHYSICAL PROPERTIES

Sublimation point: 435°C
Melting point: 162°C
Relative density (water = 1): 1.274
Solubility in water:
none

Vapour pressure, Pa at 20°C: 292
Octanol/water partition coefficient as log Pow: 5.61

ENVIRONMENTAL DATA

Bioaccumulation of this chemical may occur in seafood.

N O T E S

This substance is one of many polycyclic aromatic hydrocarbons - standards are usually established for them as mixtures, e.g., coal tar pitch volatiles. However, it may be encountered as a laboratory chemical in its pure form. Insufficient data are available on the effect of this substance on human health, therefore utmost care must be taken. Do NOT take working clothes home. Tetraphene is a common name. Card has been partly updated in October 2005 and August 2006: see sections Occupational Exposure Limits, EU classification.

ADDITIONAL INFORMATION

ICSC: 0385 **BENZ(a)ANTHRACENE**

BENZO(a)PYRENE

ICSC: 0104

Benz(a)pyrene
3,4-Benzopyrene
Benzo(d,e,f)chrysene
$C_{20}H_{12}$
Molecular mass: 252.3

ICSC # 0104
CAS # 50-32-8
RTECS # DJ3675000
EC # 601-032-00-3
October 17, 2005 Peer reviewed

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Combustible.	NO open flames.	Water spray, foam, powder, carbon dioxide.
EXPLOSION			
EXPOSURE	See EFFECTS OF LONG-TERM OR REPEATED EXPOSURE.	AVOID ALL CONTACT! AVOID EXPOSURE OF (PREGNANT) WOMEN!	
•INHALATION		Local exhaust or breathing protection.	Fresh air, rest.
•SKIN	MAY BE ABSORBED!	Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
•EYES		Safety goggles or eye protection in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION		Do not eat, drink, or smoke during work.	Induce vomiting (ONLY IN CONSCIOUS PERSONS!). Refer for medical attention.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Evacuate danger area! Personal protection: complete protective clothing including self-contained breathing apparatus. Do NOT let this chemical enter the environment. Sweep spilled substance into sealable containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder, then remove to safe place.	Separated from strong oxidants.	T symbol N symbol R: 45-46-60-61-43-50/53 S: 53-45-60-61

SEE IMPORTANT INFORMATION ON BACK

ICSC: 0104

Prepared in the context of cooperation between the International Programme on Chemical Safety & the Commission of the European Communities (C) IPCS CEC 1994. No modifications to the International version have been made except to add the OSHA PELs, NIOSH RELs and NIOSH IDLH values.

BENZO(a)PYRENE

ICSC: 0104

I M P O R T A N T D A T A

PHYSICAL STATE; APPEARANCE:
PALE-YELLOW CRYSTALS

PHYSICAL DANGERS:

CHEMICAL DANGERS:
Reacts with strong oxidants causing fire and explosion hazard.

OCCUPATIONAL EXPOSURE LIMITS:
TLV: Exposure by all routes should be carefully controlled to levels as low as possible A2 (suspected human carcinogen); (ACGIH 2005).
MAK:
Carcinogen category: 2; Germ cell mutagen group: 2; (DFG 2005).

ROUTES OF EXPOSURE:
The substance can be absorbed into the body by inhalation of its aerosol, through the skin and by ingestion.

INHALATION RISK:
Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly when dispersed.

EFFECTS OF SHORT-TERM EXPOSURE:

EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:
This substance is carcinogenic to humans. May cause heritable genetic damage to human germ cells. Animal tests show that this substance possibly causes toxicity to human reproduction or development.

PHYSICAL PROPERTIES

Boiling point: 496°C
Melting point: 178.1°C
Density: 1.4
g/cm³

Solubility in water: none (<0.1 g/100 ml)
Vapour pressure :
negligible
Octanol/water partition coefficient as log Pow: 6.04

ENVIRONMENTAL DATA

The substance is very toxic to aquatic organisms. Bioaccumulation of this chemical may occur in fish, in plants and in molluscs. The substance may cause long-term effects in the aquatic environment.

N O T E S

Do NOT take working clothes home. Benzo(a)pyrene is present as a component of polycyclic aromatic hydrocarbons (PAHs) in the environment, usually resulting from the incomplete combustion or pyrolysis of organic matters, especially fossil fuels and tobacco.

ADDITIONAL INFORMATION

International Chemical Safety Cards

BENZO(b)FLUORANTHENE

ICSC: 0720

Benz(e)acephenanthrylene
2,3-Benzofluoroanthene
Benzo(e)fluoranthene
3,4-Benzofluoranthene
$C_{20}H_{12}$
Molecular mass: 252.3

ICSC # 0720
CAS # 205-99-2
RTECS # CU1400000
EC # 601-034-00-4
March 25, 1999 Peer reviewed

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE			In case of fire in the surroundings: use appropriate extinguishing media.
EXPLOSION			
EXPOSURE		AVOID ALL CONTACT!	
•INHALATION		Local exhaust or breathing protection.	Fresh air, rest.
•SKIN		Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
•EYES		Safety spectacles or eye protection in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION		Do not eat, drink, or smoke during work.	Rinse mouth. Refer for medical attention.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Sweep spilled substance into covered containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder, then remove to safe place. Do NOT let this chemical enter the environment.	Provision to contain effluent from fire extinguishing. Well closed.	T symbol N symbol R: 45-50/53 S: 53-45-60-61

SEE IMPORTANT INFORMATION ON BACK

ICSC: 0720

Prepared in the context of cooperation between the International Programme on Chemical Safety & the Commission of the European Communities (C) IPCS CEC 1994. No modifications to the International version have been made except to add the OSHA PELs, NIOSH RELs and NIOSH IDLH values.

International Chemical Safety Cards

BENZO(b)FLUORANTHENE

ICSC: 0720

I	**PHYSICAL STATE; APPEARANCE:** COLOURLESS CRYSTALS	**ROUTES OF EXPOSURE:** The substance can be absorbed into the body by inhalation

IMPORTANT DATA	**PHYSICAL DANGERS:** **CHEMICAL DANGERS:** Upon heating, toxic fumes are formed. **OCCUPATIONAL EXPOSURE LIMITS:** TLV: A2 (suspected human carcinogen); (ACGIH 2004). MAK: Carcinogen category: 2; (DFG 2004).	of its aerosol and through the skin. **INHALATION RISK:** Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly. **EFFECTS OF SHORT-TERM EXPOSURE:** **EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:** This substance is possibly carcinogenic to humans. May cause genetic damage in humans.
PHYSICAL PROPERTIES	Boiling point: 481°C Melting point: 168°C Solubility in water: none	Octanol/water partition coefficient as log Pow: 6.12
ENVIRONMENTAL DATA	This substance may be hazardous to the environment; special attention should be given to air quality and water quality. 	

N O T E S

Benzo(b)fluoranthene is present as a component of polycyclic aromatic hydrocarbons (PAH) content in the environment usually resulting from the incomplete combustion or pyrolysis of organic matters, especially fossil fuels and tobacco.ACGIH recommends environment containing benzo(b)fluoranthene should be evaluated in terms of the TLV-TWA for coal tar pitch volatile, as benzene soluble 0.2 mg/m^3. Insufficient data are available on the effect of this substance on human health, therefore utmost care must be taken.

ADDITIONAL INFORMATION

ICSC: 0720 **BENZO(b)FLUORANTHENE**

International Chemical Safety Cards

BENZO(k)FLUORANTHENE

ICSC: 0721

Dibenzo(b,jk)fluorene
8,9-Benzofluoranthene
11,12-Benzofluoranthene
$C_{20}H_{12}$
Molecular mass: 252.3

ICSC # 0721
CAS # 207-08-9
RTECS # DF6350000
EC # 601-036-00-5
March 25, 1999 Peer reviewed

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE			In case of fire in the surroundings: use appropriate extinguishing media.
EXPLOSION			
EXPOSURE		AVOID ALL CONTACT!	
•INHALATION		Local exhaust or breathing protection.	Fresh air, rest.
•SKIN		Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
•EYES		Safety spectacles or eye protection in combination with breathing protection if powder.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION		Do not eat, drink, or smoke during work.	Rinse mouth. Refer for medical attention.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Sweep spilled substance into covered containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder, then remove to safe place. Do NOT let this chemical enter the environment.	Provision to contain effluent from fire extinguishing. Well closed.	T symbol N symbol R: 45-50/53 S: 53-45-60-61

SEE IMPORTANT INFORMATION ON BACK

ICSC: 0721

Prepared in the context of cooperation between the International Programme on Chemical Safety & the Commission of the European Communities (C) IPCS CEC 1994. No modifications to the International version have been made except to add the OSHA PELs, NIOSH RELs and NIOSH IDLH values.

International Chemical Safety Cards

BENZO(k)FLUORANTHENE

ICSC: 0721

I **M**	**PHYSICAL STATE; APPEARANCE:** YELLOW CRYSTALS	**ROUTES OF EXPOSURE:** The substance can be absorbed into the body by inhalation of its aerosol and through the skin.

P O R T A N T D A T A	**PHYSICAL DANGERS:** **CHEMICAL DANGERS:** Upon heating, toxic fumes are formed. **OCCUPATIONAL EXPOSURE LIMITS:** TLV not established. MAK: Carcinogen category: 2; (DFG 2004). **INHALATION RISK:** Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly. **EFFECTS OF SHORT-TERM EXPOSURE:** **EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:** This substance is possibly carcinogenic to humans.
PHYSICAL PROPERTIES	Boiling point: 480°C Melting point: 217°C Solubility in water: none Octanol/water partition coefficient as log Pow: 6.84
ENVIRONMENTAL DATA	This substance may be hazardous to the environment; special attention should be given to air quality and water quality. Bioaccumulation of this chemical may occur in crustacea and in fish. 

N O T E S

Benzo(k)fluoranthene is present as a component of polycyclic aromatic hydrocarbons (PAH) content in the environment usually resulting from the incomplete combustion or pyrolysis of organic matters, especially fossil fuels and tobacco.ACGIH recommends environment containing benzo(k)fluoranthene should be evaluated in terms of the TLV-TWA for coal tar pitch volatile, as benzene soluble 0.2 mg/m^3. Insufficient data are available on the effect of this substance on human health, therefore utmost care must be taken.

ADDITIONAL INFORMATION

ICSC: 0721 **BENZO(k)FLUORANTHENE**

International Chemical Safety Cards

CHRYSENE

ICSC: 1672

Benzoaphenanthrene
1,2-Benzophenanthrene
1,2,5,6-Dibenzonaphthalene
$C_{18}H_{12}$
Molecular mass: 228.3

ICSC # 1672
CAS # 218-01-9
RTECS # GC0700000
UN # 3077
EC # 601-048-00-0
October 12, 2006 Validated

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE	Combustible.	NO open flames.	Water spray. Dry powder. Foam. Carbon dioxide.
EXPLOSION	Finely dispersed particles form explosive mixtures in air.	Prevent deposition of dust; closed system, dust explosion-proof electrical equipment and lighting.	
EXPOSURE	See EFFECTS OF LONG-TERM OR REPEATED EXPOSURE.	AVOID ALL CONTACT!	
•INHALATION		Local exhaust or breathing protection.	Fresh air, rest.
•SKIN		Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
•EYES		Safety goggles	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION		Do not eat, drink, or smoke during work.	Rinse mouth.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Personal protection: P3 filter respirator for toxic particles. Do NOT let this chemical enter the environment. Sweep spilled substance into sealable containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder, then remove to safe place.	Separated from strong oxidants, Provision to contain effluent from fire extinguishing. Store in an area without drain or sewer access.	T symbol N symbol R: 45-68-50/53 S: 53-45-60-61 UN Hazard Class: 9 UN Packing Group: III Signal: Warning Aqua-Cancer Suspected of causing cancer Very toxic to aquatic life with long lasting effects Very toxic to aquatic life

SEE IMPORTANT INFORMATION ON BACK

Prepared in the context of cooperation between the International Programme on Chemical Safety & the Commission of the European

International Chemical Safety Cards

CHRYSENE

ICSC: 1672

IMPORTANT DATA

PHYSICAL STATE; APPEARANCE:
COLOURLESS TO BEIGE CRYSTALS OR POWDER

PHYSICAL DANGERS:
Dust explosion possible if in powder or granular form, mixed with air.

CHEMICAL DANGERS:
The substance decomposes on burning producing toxic fumes Reacts violently with strong oxidants

OCCUPATIONAL EXPOSURE LIMITS:
TLV: A3 (confirmed animal carcinogen with unknown relevance to humans); (ACGIH 2006).
MAK not established.

ROUTES OF EXPOSURE:
The substance can be absorbed into the body by inhalation of its aerosol, through the skin and by ingestion.

INHALATION RISK:
A harmful concentration of airborne particles can be reached quickly when dispersed

EFFECTS OF SHORT-TERM EXPOSURE:

EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:
This substance is possibly carcinogenic to humans.

PHYSICAL PROPERTIES

Boiling point: 448°C
Melting point: 254 - 256°C
Density: 1.3 g/cm³

Solubility in water:
very poor
Octanol/water partition coefficient as log Pow: 5.9

ENVIRONMENTAL DATA

The substance is very toxic to aquatic organisms. Bioaccumulation of this chemical may occur in seafood. It is strongly advised that this substance does not enter the environment.

NOTES

Depending on the degree of exposure, periodic medical examination is suggested. Do NOT take working clothes home. This substance does not usually occur as a pure substance but as a component of polyaromatic hydrocarbon (PAH) mixtures. Human population studies have associated PAH's exposure with cancer and cardiovascular diseases.

Transport Emergency Card: TEC (R)-90GM7-III

ADDITIONAL INFORMATION

International Chemical Safety Cards

INDENO(1,2,3-cd)PYRENE

ICSC: 0730

o-Phenylenepyrene
2,3-Phenylenepyrene
$C_{22}H_{12}$
Molecular mass: 276.3

ICSC # 0730
CAS # 193-39-5
RTECS # NK9300000
March 25, 1999 Peer reviewed

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/ SYMPTOMS	PREVENTION	FIRST AID/ FIRE FIGHTING
FIRE			In case of fire in the surroundings: use appropriate extinguishing media.
EXPLOSION			
EXPOSURE		AVOID ALL CONTACT!	
•INHALATION		Local exhaust or breathing protection.	Fresh air, rest.
•SKIN		Protective gloves. Protective clothing.	Remove contaminated clothes. Rinse and then wash skin with water and soap.
•EYES		Safety spectacles or eye protection in combination with breathing protection.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
•INGESTION		Do not eat, drink, or smoke during work.	Rinse mouth. Refer for medical attention.

SPILLAGE DISPOSAL	STORAGE	PACKAGING & LABELLING
Sweep spilled substance into covered containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder, then remove to safe place. Do NOT let this chemical enter the environment.	Provision to contain effluent from fire extinguishing. Well closed.	R: S:

SEE IMPORTANT INFORMATION ON BACK

ICSC: 0730

International Chemical Safety Cards

INDENO(1,2,3-cd)PYRENE

ICSC: 0730

I **M** **P**	**PHYSICAL STATE; APPEARANCE:** YELLOW CRYSTALS **PHYSICAL DANGERS:**	**ROUTES OF EXPOSURE:** The substance can be absorbed into the body by inhalation of its aerosol and through the skin. **INHALATION RISK:**

O R T A N T D A T A	**CHEMICAL DANGERS:** Upon heating, toxic fumes are formed. **OCCUPATIONAL EXPOSURE LIMITS:** TLV not established. MAK: Carcinogen category: 2; (DFG 2004).	Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly. **EFFECTS OF SHORT-TERM EXPOSURE:** **EFFECTS OF LONG-TERM OR REPEATED EXPOSURE:** This substance is possibly carcinogenic to humans.
PHYSICAL PROPERTIES	Boiling point: 536°C Melting point: 164°C Solubility in water: none	Octanol/water partition coefficient as log Pow: 6.58
ENVIRONMENTAL DATA	This substance may be hazardous to the environment; special attention should be given to air quality and water quality. Bioaccumulation of this chemical may occur in fish. 	

N O T E S

Indeno(1,2,3-cd)pyrene is present as a component of polycyclic aromatic hydrocarbons (PAH) content in the environment usually resulting from the incomplete combustion or pyrolysis of organic matters, especially fossil fuels and tobacco.ACGIH recommends environment containing Indeno(1,2,3-c,d)pyrene should be evaluated in terms of the TLV-TWA for coal tar pitch volatile, as benzene soluble 0.2 mg/m^3. Insufficient data are available on the effect of this substance on human health, therefore utmost care must be taken.

ADDITIONAL INFORMATION

ICSC: 0730 **INDENO(1,2,3-cd)PYRENE**

APPENDIX D

HOSPITAL INFORMATION AND MAP

FIELD ACCIDENT REPORT

FIELD ACCIDENT REPORT

This report is to be filled out by the designated Site Safety Officer after EVERY accident.

PROJECT NAME _____ PROJECT. NO._____

Date of Accident _____ Time _____ Report By _____

Type of Accident (Check One):

( ) Vehicular ( ) Personal ( ) Property

Name of Injured _____ DOB or Age _____

How Long Employed _____

Names of Witnesses _____

_____

Description of Accident _____

_____

_____

Action Taken _____

_____

_____

Did the Injured Lose Any Time? _____ How Much (Days/Hrs.)? _____

Was Safety Equipment in Use at the Time of the Accident (Hard Hat, Safety Glasses, Gloves, Safety Shoes, etc.)? _____

_____

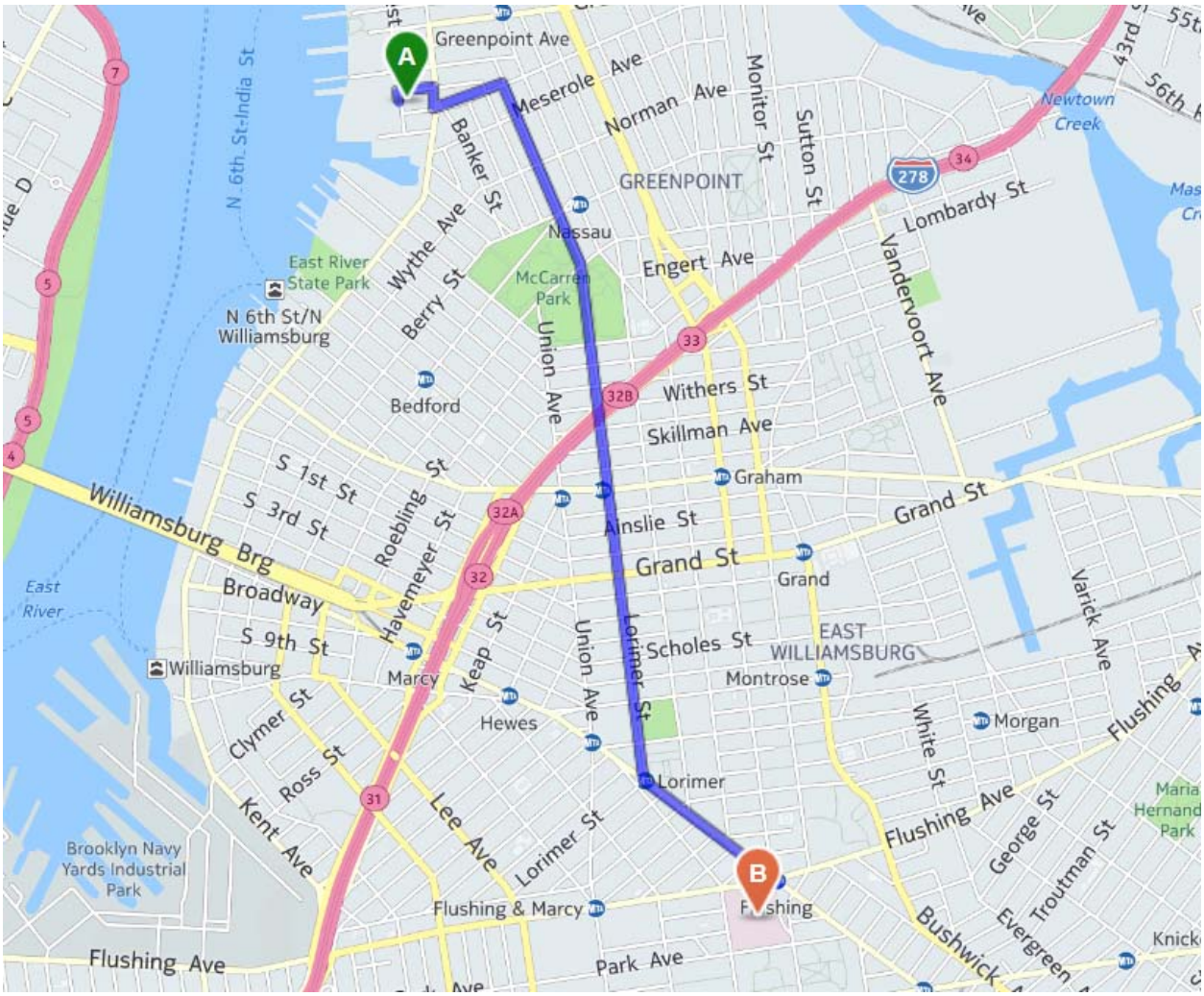
(If not, it is the EMPLOYEE'S sole responsibility to process his/her claim through his/her Health and Welfare Fund.)

INDICATE STREET NAMES, DESCRIPTION OF VEHICLES, AND NORTH ARROW

HOSPITAL INFORMATION AND MAP

The hospital nearest the site is:

WOODHULL MEDICAL CENTER
760 Broadway, Brooklyn, New York 11206
718-963-8000
2.4 Miles – About 8 Minutes



START: 26 West Street, Brooklyn, NY 11222

1. Head toward Oak Street on West Street
2. Turn right onto Oak Street (continue 456 ft)
3. Turn right onto Franklin Street (continue 262 ft)
4. Turn Left onto Calyer Street (continue 0.2 mi)
5. Turn right onto Lorimer Street (continue 1.7 mi)
6. Turn left onto Broadway (continue 0.4 miles)
7. Your destination on Broadway is on the left after approximately 1 mile.

HOSPITAL: 760 Broadway, Brooklyn, NY 11206-5317

ATTACHMENT F
VAPOR BARRIER SPECIFICATIONS

VAPORBLOCK® PLUS™ VBP20

Under-Slab Vapor / Gas Barrier

RAVEN INDUSTRIES

Product Description

VaporBlock® Plus™ 20 is a seven-layer co-extruded barrier made from state-of-the-art polyethylene and EVOH resins to provide unmatched impact strength as well as superior resistance to gas and moisture transmission. VaporBlock® Plus™ 20 is a highly resilient underslab / vertical wall barrier designed to restrict naturally occurring gases such as radon and/or methane from migrating through the ground and concrete slab. VaporBlock® Plus™ 20 is more than 100 times less permeable than typical high-performance polyethylene vapor retarders against Methane, Radon and other harmful VOCs.

VaporBlock® Plus™ 20 is one of the most effective underslab gas barriers in the building industry today far exceeding ASTM E-1745 (Plastic Water Vapor Retarders Used in Contact with Soil or Granular Fill Under Concrete Slabs) Class A, B and C requirements. Available in a 20 (Class A) mil thicknesses designed to meet the most stringent requirements. VaporBlock® Plus™ 20 is produced within the strict guidelines of our ISO 9001:2008 Certified Management System.

Product Use

VaporBlock® Plus™ 20 resists gas and moisture migration into the building envelop when properly installed to provide protection from toxic/harmful chemicals. It can be installed as part of a passive or active control system extending across the entire building including floors, walls and crawl spaces. When installed as a passive system it is recommended to also include a ventilated system with sump(s) that could be converted to an active control system with properly designed ventilation fans.

VaporBlock® Plus™ 20 works to protect your flooring and other moisture-sensitive furnishings in the building's interior from moisture and water vapor migration, greatly reducing condensation, mold and degradation.

Size & Packaging

VaporBlock® Plus™ 20 is available in 10' x 150' rolls to maximize coverage. All rolls are folded on heavy-duty cores for ease in handling and installation. Other custom sizes with factory welded seams are available based on minimum volume requirements. Installation instructions and ASTM E-1745 classifications accompany each roll.

Under-Slab Vapor/Gas Retarder

Product	Part #
VaporBlock Plus 20	VBP 20

APPLICATIONS

- Radon Barrier
- Methane Barrier
- VOC Barrier
- Under-Slab Vapor Retarder
- Foundation Wall Vapor Retarder

VaporBlock® Plus™
UNDERSLAB VAPOR RETARDER / GAS BARRIER

VAPORBLOCK® PLUS™ VBP20

ISO 9001:2008 CERTIFIED MANAGEMENT SYSTEM

Under-Slab Vapor / Gas Barrier

		VAPORBLOCK PLUS 20	
PROPERTIES	**TEST METHOD**	**IMPERIAL**	**METRIC**
Appearance		White/Gold	
Thickness, Nominal		20 mil	0.51 mm
Weight		102 lbs/MSF	498 g/m²
Classification	ASTM E 1745	CLASS A, B & C	
Tensile Strength lbf/in (N/cm) average MD & TD (new material)	ASTM E 154 Section 9 (D-882)	58 lbf	102 N
Impact Resistance	ASTM D 1709	2600 g	
Maximum Use Temperature		180° F	82° C
Minimum Use Temperature		-70° F	-57° C
Permeance (new material)	ASTM E 154 Section 7 ASTM E 96 Procedure B	0.0051 Perms grains/(ft²·hr·in·Hg)	0.0034 Perms g/(24hr·m²·mm Hg)
Radon Diffusion Coeffiecient	K124/02/95	$< 1.1 \times 10^{-13}$ m²/s	
Methane Permeance	ASTM D 1434	$< 1.7 \times 10^{-10}$ m²/d• atm 0.32 GTR (Gas Transmission Rate) ml/m²•D•ATM	

VaporBlock® Plus™ Placement

All instructions on architectural or structural drawings should be reviewed and followed.
Detailed installation instructions accompany each roll of VaporBlock® Plus™ and can also be located on our website.
ASTM E-1643 also provides general installation information for vapor retarders.

VaporBlock® Plus™
UNDERSLAB VAPOR RETARDER / GAS BARRIER

VaporBlock® Plus™ is a seven-layer co-extruded barrier made using high quality virgin-grade polyethylene and EVOH resins to provide unmatched impact strength as well as superior resistance to gas and moisture transmission.

RAVEN INDUSTRIES
Engineered Films Division
P.O. Box 5107
Sioux Falls, SD 57117-5107
Ph: (605) 335-0174 • Fx: (605) 331-0333

Toll Free: **800-635-3456**
Email: **efdsales@ravenind.com**
www.ravenefd.com

Limited Warranty available at www.RavenEFD.com