

1 **HAZARDOUS MATERIALS**
2 **TECHNICAL REPORT**

3
4 *NE 45th Street Viaduct*
5 *Seattle, Washington*
6

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9
10 *December 2009*
11

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1 **EXECUTIVE SUMMARY**

2 **What is the proposed project and why is it needed?**

3 The Seattle Department of Transportation (SDOT) proposes the rehabilitation of the NE 45th Street
4 Viaduct located in Seattle, Washington. The project includes the replacement of the west approach
5 structure with a new structure to carry three lanes of traffic, one lane eastbound and two lanes westbound,
6 and one pedestrian walkway; bicycles will use the traffic lanes. The project will also re-construct NE 45th
7 St. from 20th Avenue NE to the viaduct.

8 The existing bridge, which stretches across NE 25th Avenue, was built in 1938 and consists of a main
9 span with west and east approaches. The bridge experiences severe vehicle congestion and the west
10 approach structure was found to have structural deficiencies after an investigation in 1992. Several partial
11 retrofits were implemented for the main span and the east approach in the past but the west approach has
12 retained its original structural features since it was first built. At this time the bridge is in need of
13 immediate attention and rehabilitation.

14 **How will the project affect hazardous materials?**

15 Based on former and/or current land uses, 15 sites were identified that pose some potential risk to the
16 project. These sites include a current landfill, machine shop, auto repair shops, gasoline stations, print
17 shops, camera shops, and laundries. In addition, six other properties were identified that currently store or
18 have stored heating oil. The west approach of the existing bridge is constructed with wooden timbers that
19 have may have been potential treated with creosote.

20 Most of these sites were considered to meet the state definition of “reasonably predictable.” Reasonably
21 predictable sites are typically:

- 22 • Small to medium in size
- 23 • Potentially contaminated with materials that are not extremely toxic or difficult to treat

24 None of the sites investigated were considered to have the potential to be “substantially contaminated.”
25 These sites:

- 26 • Possess a potential for substantial contamination of environmental media (i.e., soil, groundwater,
27 surface water, sediment)
- 28 • Contain contaminants that are persistent or expensive to manage
- 29 • Lack information to predict remedial costs

30 Construction monitoring is recommended in the NE 45th Street Viaduct right-of-way where excavation is
31 proposed and potentially contaminated sites have been identified on adjacent properties. In accordance
32 with the SDOT Standard Specifications, SDOT will require a spill prevention control and counter
33 measures plan for dealing with hazardous materials. If contamination is encountered during project

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1 construction, mitigation measures will be taken to handle the contaminated materials. Possible mitigation
2 measures include:

- 3 • Adjusting construction methods to minimize the volume of contaminated soil and/or groundwater
4 encountered.
- 5 • Properly managing and disposing of contaminated soil and/or groundwater.

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1 **CHAPTER 1 INTRODUCTION**

2 **What is the proposed project and why is it needed?**

3 The Seattle Department of Transportation (SDOT) proposes the rehabilitation of the NE 45th Street
4 Viaduct (**Exhibit 1.**) located in Seattle, Washington. The project includes the replacement of the west
5 approach structure with a new structure to carry three lanes of traffic, one lane eastbound and two lanes
6 westbound, and one pedestrian walkway; bicycles will use the traffic lanes. The project will also re-
7 construct NE 45th St. from 20th Avenue NE to the viaduct.

8 The existing bridge, which stretches across NE 25th Avenue, was built in 1938 and consists of a main
9 span with west and east approaches. The bridge experiences severe vehicle congestion and the west
10 approach structure was found to have structural deficiencies after an investigation in 1992. Several partial
11 retrofits were implemented for the main span and the east approach in the past but the west approach has
12 retained its original structural features since it was first built, which include treated timber trestles. At
13 this time the bridge is in need of immediate attention and rehabilitation.

14 **What is the purpose of this hazardous materials report?**

15 This report identifies areas along NE 45th Street between 21st Avenue NE and Union Bay Place NE where
16 current or past property uses may have resulted in hazardous materials contamination, and assesses how
17 hazardous materials may be disturbed or encountered during construction and operation of the proposed
18 project.

19 **What policies and regulations will apply to hazardous materials found in the project**
20 **area?**

21 The federal, state and local policies and regulations that apply to hazardous materials are discussed in
22 Chapter 2 and include:

23 Federal Regulations:

- 24 • **Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)**
- 25 • **Superfund Amendments and Reauthorization Act (SARA)**
- 26 • **Resource Conservation and Recovery Act (RCRA)**
- 27 • **Toxic Substances Control Act (TSCA)**
- 28 • **Occupational Safety and Health Act (OSHA)**
- 29 • **Clean Air Act (CAA)**
- 30 • **Clean Water Act (CWA)**
- 31 • **National Environmental Policy Act (NEPA)**

32 Washington State Regulations:

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- 1 • **Model Toxics Control Act Cleanup Regulation (MTCA)**
- 2 • **Dangerous Waste Regulations**
- 3 • **Solid Waste Regulations**
- 4 • **Washington State Environmental Policy Act (SEPA)**
- 5 • **Water Pollution Control Act**
- 6 • **Washington Industrial Safety and Health Act (WISHA)**
- 7 • **WSDOT Environmental Procedures Manual M31-11 (April 2007)**

8 The City of Seattle Regulations:

- 9 • **Seattle Municipal Code Title 15**
- 10 • **Seattle Municipal Code Title 22.800**
- 11 • **Seattle Municipal Code Title 25**

12 More information on each regulation is also located in Attachment A.

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1 **CHAPTER 2 EXISTING CONDITIONS**

2 This section of the report describes how hazardous materials are regulated and discusses the location of
3 properties containing or suspected to contain hazardous materials, based on information collected during
4 the windshield survey and records review.

5 **How were potential hazardous materials in the project area identified?**

6 Information was obtained on potential or existing conditions as well as relevant historical conditions
7 within the project area. The project area studied for the hazardous materials analysis includes the
8 proposed project footprint (i.e., where construction will occur), as well as an area up to one mile from the
9 project footprint. Information was collected from multiple data sources, including the following:

- 10 • Environmental agency database record search
- 11 • Ecology Northwest Regional Office site files
- 12 • Historical land use maps (Kroll Map Company, 1938, 1956)
- 13 • Business or land use directories
- 14 • Historical fire insurance maps (Sanborn Maps, 1905, 1919, 1930, 1950, 1966)
- 15 • Washington State Archive historical tax records (Puget Sound Archives 1900-1972)
- 16 • Current topographic and geological maps
- 17 • “Windshield” reconnaissance of the project corridor
- 18 • Environmental agency records

19 An environmental database research service, Environmental Data Resources, Inc. (EDR), collected
20 information for listed sites located within one mile of the project footprint, in accordance with the ASTM
21 International (ASTM) search radius guidance (ASTM E1527), see Appendix B. EDR’s database search
22 includes the sources listed in **Exhibit 2**. The EDR results were not independently verified.
23 Environmental agency database records are based on EDR results.

24 In general, sites identified in agency databases as contaminated or potentially contaminated, located
25 greater than 0.5 mile from the project footprint were considered far enough away that it was unlikely that
26 contaminants associated with these sites would migrate to the project footprint. Additional information
27 was acquired for those sites identified in agency databases as contaminated or potentially contaminated
28 and located within 0.5 mile of the preliminary NE 45th Street Viaduct right-of-way (ROW). These sites
29 were selected because, if contamination is present, their proximity could affect the project, or the project
30 could affect the listed site.

31

1 A field reconnaissance or “windshield” survey was also conducted by a Shannon & Wilson environmental
2 professional. The field reconnaissance was conducted from public access areas to confirm general site
3 conditions (i.e., poor housekeeping, contamination, and/or cleanup activity). The primary purpose of this
4 reconnaissance was to note the general age of structures that may require demolition, identify any other
5 sites with contamination potential that had not previously been recognized, and eliminate identified sites
6 that do not pose a potential hazard to the project alternatives and boundaries.

7 Based on the review of environmental database records, historical records, and the site reconnaissance, a
8 list was compiled and those sites in the project area that have been determined to be “reasonably
9 predictable” or “substantially contaminated” were mapped.

10 **What are reasonably predictable sites?**

11 Reasonably predictable sites are identified by the nature of the site and its potential for contamination
12 based on existing investigation data, or where contamination can be reasonably predicted based on best
13 professional judgment. These sites are identified as reasonably predictable to cleanup because they are
14 typically:

- 15 • Small to medium in size
- 16 • Potentially contaminated with materials that are not extremely toxic or difficult to treat

17 Reasonably predictable sites in this report include those properties listed in the agency databases as
18 underground storage tanks (USTs), leaking underground storage tanks (LUSTs), Resource Conservation
19 and Recovery Information System hazardous waste generators, Confirmed and Suspected Contaminated
20 Sites List (CSCSL) No Further Action (NFA) sites, Comprehensive Environmental Response,
21 Compensation, and Liability Information System No Further Remedial Action Planned (NFRAP) sites,
22 Independent Cleanup Reports (ICR) sites, and CSCSL/Hazardous Sites List sites that have
23 straightforward remedial options. These sites can be listed on more than one environmental agency
24 database and more than one address may be used if the sites are immediately adjacent to each other.

25 Although some of these sites have an NFA or NFRAP status, it does not mean that all contamination has
26 been cleaned up. The NFA status may apply to a portion of the property (such as the removal of one
27 LUST), or the contamination is limited to an area that is not reachable (beneath an existing building or
28 roadbed. These sites are not considered “substantially contaminated” (see below) because it is unlikely
29 that the sites would receive an NFA status if large amounts of contamination still existed at the sites.
30 Residual contamination, if present, is likely relatively small and straightforward to treat if encountered.

31

32 **What are substantially contaminated sites?**

33 Substantially contaminated sites:

- 34 • Possess a potential for substantial contamination of environmental media (i.e., soil, groundwater,
35 surface water, sediment)

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- 1 • Contain contaminants that are persistent or expensive to manage
- 2 • Lack information to predict remedial costs

3 Examples of substantially contaminated sites are large bulk petroleum terminals, wood-treating
4 operations, or hazardous waste treatment facilities.

5 What other records were reviewed?

6 The hazardous materials technical team reviewed files at the Washington State Department of Ecology
7 (Ecology) for sites identified by the regulatory agency database search to be within 0.25 mile of the center
8 of the NE 45th Street Viaduct ROW. This additional information was collected because environmental
9 conditions at sites within 0.25 mile are more likely to result in possible effects to the project area than
10 those located at a greater distance. Site file information was reviewed at Ecology's Northwest Regional
11 Office. Files were not available for all sites. Each file was reviewed for the following:

- 12 • Enforcement action in the last five years
- 13 • Confirmed or suspected contaminated media
- 14 • Confirmed or suspected contaminants
- 15 • Depth to groundwater and flow direction
- 16 • Cleanup status

17 How could the physical environment of the project area affect hazardous materials?

18 The physical environment of the project area determines the potential fate (possible degradation of
19 contaminants) and transport of contaminants released to the environment. Fate and transport of
20 contaminants, in general, are controlled by:

- 21 • The mobility of the chemicals
- 22 • The rate of breakdown or degradation of the chemicals in the environment
- 23 • Pathways the chemicals can take to travel from their point of release, such as volatilization to the
24 air or dissolution to water (surface water or groundwater)
- 25 • Whether the transport along those pathways is enhanced or limited by the physical environment

26 For example, an environment with soils that have high permeability can provide an easy means for a
27 contaminant to travel (via groundwater) beyond the point of release. An environment where groundwater
28 occurs close to the surface can provide a mechanism for contaminants to be readily transported away from
29 the point of release.

30 What is the topography of the project area?

31 The topography of the project area traveling from east to west along the NE 45th Street Viaduct consists of
32 steeply sloping ground at the western approach that drops down and flattens at about 25th Avenue NE.

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1 East of 25th Avenue NE to Union Bay Place NE, the ground is relatively flat and low-lying as it crosses
2 the area north of Union Bay. A narrow ravine known as the Kincaid Ravine is located along the south
3 side of the western approach to the NE 45th Street Viaduct.

4 More detailed descriptions of the geology, soils, and groundwater resources are provided in the **Draft**
5 **Geology and Soils Technical Report, NE 45th Street Viaduct, Seattle, Washington** (September 2008).

6 What types of hazardous materials might be encountered in the project area?

7 Certain business activities, whether presently or formerly occurring on a site, can provide a reasonable
8 basis for assuming that contaminants are or may have been present. **Exhibit 3** provides a common list of
9 business types and the associated contaminants used by that industry.

10 **Gasoline-range petroleum** generally results from leaks and spills associated with former gasoline
11 stations and vehicle maintenance facilities. Gasoline is relatively mobile in the environment and is more
12 toxic at lower concentrations than heavier grades of hydrocarbons (diesel and oil). Depending on the age
13 of the gasoline release, it can also include benzene, toluene, ethylbenzene, and xylenes, methyl tertiary
14 butyl ether and/or lead. These volatiles can pose a substantial risk to humans and the environment, are
15 highly soluble and mobile in groundwater, and will float on the water table.

16 **Diesel- and oil-range petroleum** was used to fuel vehicles and heat businesses and homes. Oil-range
17 petroleum is also often associated with auto repair shops. For the most part, these contaminants are
18 relatively low in toxicity, and are not particularly mobile. Diesel- and oil-range petroleum tends to float
19 on the water table rather than dissolve or disperse throughout the water column. As a result, any given
20 leak or release of diesel or oil is not likely to have resulted in widespread contamination.

21 **Heavy metals**, including arsenic, cadmium, chromium, lead, zinc, and copper, are associated with metal
22 manufacturers, welders, paint manufacturers, printers, wrecking yards, and junkyards. In addition,
23 arsenic has historically been used in herbicides. Metals can become soluble and migrate to groundwater,
24 depending on the conditions of infiltrating water and/or the media in which the metals were initially
25 contained. However, metal contamination is more commonly found in shallow, subsurface soils.

26 **Creosote Constituents**, which may include polycyclic aromatic hydrocarbons (PAHs), creosols, and
27 metals, are commonly used as a wood preservative to treat timber bridge supports and pilings. Creosote-
28 contaminated soil associated with wooden timbers would be limited in extent due its low
29 solubility/mobility.

30 **Solvents** such as Trichloroethylene and tetrachloroethylene were used historically as solvents in dry
31 cleaning and for degreasing at a variety of businesses such as auto body shops and paint
32 shops/manufacturers. Dry cleaners used large volumes of these solvents. Solvents are highly toxic at low
33 concentrations and are highly mobile in soil and groundwater. Most solvents are denser than water and
34 therefore tend to move downward through the subsurface and water column. Unlike most contaminants,
35 solvents can migrate readily through fine-grained soils.

1 **Which sites were identified as potentially substantially contaminated in the project area?**

2 No properties were identified as having the potential to be substantially contaminated during this
3 investigation.

4 **Which sites were identified as reasonably predictable in the project area?**

5 Fifteen properties were identified along the project corridor as reasonably predictable. These sites are
6 discussed below and mapped in **Exhibits 4 and 5**. The number after each site name refers to the
7 numbering system on the exhibits. A list of the properties is also provided in **Exhibit 6**.

8 The **University of Washington Motor Pool & Plant Services Building (1)** property, as illustrated in
9 **Exhibit 4**, is listed on the state LUST, UST, and ICR databases. Petroleum-contaminated soil and
10 groundwater were encountered when nine USTs and two unregulated hydraulic fluid USTs were removed
11 from the property in July and August 1998. Residual soil contamination is still present at the site.
12 Excavation was not an option to remove the soil without undermining adjacent structures. A Letter of
13 Notice of Potential Release at the Site was sent to Ecology in February 1999. However, Ecology's file
14 contained no other records after February 1999.

15 This property is reasonably predictable because petroleum contamination is considered relatively easy to
16 treat and remediation approaches would most likely be straightforward.

17 Based on the Polk City Directories, a **Former Chevron Station (2)** occupied the property at 4520 25th
18 Avenue NE, as illustrated in **Exhibit 4**, from approximately 1965 to 1980. The property is listed on the
19 state LUST, UST, and ICR databases. The EDR report lists the site as a LUST site, awaiting cleanup
20 with affected soil and groundwater and indicates that three USTs were removed. Ecology files contained
21 only one report pertaining to this site. The report was an oversight report of construction activities of a
22 property adjacent to the former Chevron site. Soil samples collected during excavation activities
23 indicated the soil exceeded the MTCA Method A cleanup levels for total petroleum hydrocarbons (TPH)
24 -gasoline and TPH-diesel. However, the TPH constituents observed in these soil samples did not contain
25 compounds found in gasoline or diesel. Based on the field observations and analytical results, it is
26 believed that the soil and groundwater contamination is not associated with Chevron products such as
27 gasoline or diesel, and may be associated with wood pilings used with the structures foundation and other
28 biogenic material. This property is reasonably predictable because petroleum contamination is considered
29 relatively easy to treat and remediation approaches would most likely be straightforward.

30 **Strip Mall (University Village Ltd Partnership) (3)**, as illustrated in **Exhibit 4**, is listed on the state
31 Facility Index System (FINDS) and Resource Conservation and Recovery Act (RCRA) Non-Generator
32 databases. The property is currently a strip mall and, based on review of existing and relevant records; it
33 does not appear the property would pose a threat to the project.

34 The **University Village (4)** property, as illustrated in **Exhibit 4**, is currently a shopping center. Based on
35 the historic review, the shopping center was occupied at various times from approximately 1955 through
36 at least 1997 by a paint store, laundry, and camera shop. There were no records to review beyond the tax

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1 assessor and Sanborn maps for the laundry and paint stores located at the property. It cannot be
2 determined if the laundry had dry cleaning operations associated with it. The camera shop formerly
3 located on the property is listed on the state FINDS and RCRA Non-Generator databases with no
4 violations. Based on the review of available records, the property is considered reasonably predictable
5 because it is not expected to be grossly contaminated and remediation approaches would most likely be
6 straightforward.

7 **Kits Camera and Sixty Minute Lube (5) and Schucks Auto Supply (6)**, as illustrated in **Exhibit 5**,
8 were once part of the same parcel under a single ownership. A Phase I study conducted in January 2001
9 (Environmental Associates, Inc, 2001) indicated the subject property and the property adjacent to the
10 north (Schucks Auto Parts) were formerly occupied by two separate gas station configurations, which
11 operated at different times from approximately 1950 through 1983. A vintage cluster of USTs was once
12 located at the site, including four tanks; one 500-gallon waste oil tank, one 2,000-gallon, and two 4,000-
13 gallon tanks of undetermined liquids. Ecology files indicate that the Kits Camera and Sixty Minute Lube
14 site has contaminated soil and groundwater attributed to a petroleum release. In December 2002, a letter
15 was sent to Ecology regarding a Cleanup Proposal/Request for Assistance under the voluntary cleanup
16 program (VCP) Program. Ecology agreed with property owner but requested that they address the soil at
17 the site as well. Ecology is awaiting a response. This property is reasonably predictable because
18 petroleum contamination is considered relatively easy to treat and remediation approaches would most
19 likely be straightforward.

20 The **QFC (Former Carnation Company) (7)**, as illustrated in **Exhibit 5**, is listed on the state UST,
21 LUST, IC, and SPILLS databases. Ecology site files indicate that in October 1989 four USTs and
22 associated piping and equipment were removed from the northern portion of the property and west of the
23 main dairy processing plant adjacent to the western property boundary. The removed USTs consisted of
24 two gasoline USTs (10,000- and 1,000-gallon capacity), one 500-gallon waste oil tank, and one 8,000-
25 gallon heating oil tank. A final closure report and a request for no further action was filed in February
26 1991. Based on the sampling results from the UST removal, additional investigations were completed in
27 the area of the 1,000-gallon gasoline UST and the 8,000 gallon heating oil tank. Monitoring wells were
28 installed and soil and groundwater samples were collected adjacent to the two excavations. Additional
29 soil was excavated adjacent to the heating oil UST. Due to the instability of the boundary excavation
30 walls it was deemed unsafe to further excavate the soil. TPH at a concentration of 1,900 parts per million
31 was left in place in the northern area of the former heating oil UST at 12.5 feet below the ground surface.
32 In March 1991, Ecology granted a “limited” cleanup status to the site in regard to the UST investigation.
33 This property is reasonably predictable because petroleum contamination is considered relatively easy to
34 treat and remediation approaches would most likely be straightforward.

35 A **Strip Mall (8)**, as illustrated in **Exhibit 5**, has been occupied by the following businesses of concern: a
36 service station (1949-1980), a truck painting company (1985) and dry cleaner (1985-2000). The property
37 is also listed on the state hazardous waste site database. Review of Ecology files indicates that the site
38 has contaminated soil and groundwater attributed to a petroleum release. Two generations of fuel USTs

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1 installed at the site were reportedly removed in 1985; however, no documentation confirming the removal
2 was ever found. The site was enrolled in to the VCP program in January 2004 but due to lack of
3 participation it was removed in February 2007. Groundwater monitoring conducted at the site in July
4 2008 indicated that gasoline, diesel, and oil-range petroleum hydrocarbons and benzene compounds were
5 detected above their respective MCTA Method A cleanup levels. The Ecology records also indicated that
6 dry cleaning activities were not conducted at the site. The dry cleaning operation was a drop off/pick up
7 facility only. Based on the historic records review, a truck painting company occupied the property
8 starting in 1985, but the records do not indicate how long the business operated. This property is
9 considered reasonably predictable because petroleum contamination is considered relatively easy to treat
10 and remediation approaches would most likely be straightforward. The solvents and metals associated
11 with the former paint shop may be an issue but since it appears the paint shop was on the property for a
12 relatively short period of time and appears to be a relatively small operation it is considered reasonably
13 predictable.

14 The **Safeway Shopping Center (9)**, as illustrated in **Exhibit 5**, has been occupied by the following
15 businesses of concern: Minute Car Wash (1953), University Three Minute Carwash (1955-1975), Bill
16 Taylors General Petroleum Service (1940), Lyman's Mobile Service (1944), Don's Mobil Service (1955),
17 Ok Tire Stores (1960-1975), Standard Stations Inc. Gas Station (1938-1970), and Dave's Chevron (1975).
18 No environmental records were found during the Ecology file review. This property is reasonably
19 predictable because contamination associated with these businesses, if present, is considered easy to treat
20 and remediation approaches would most likely be straightforward.

21 The **Burgermaster (10)** property, as illustrated in **Exhibit 5**, was occupied by service stations from 1938
22 to 1944. This property is reasonably predictable because petroleum contamination, if present, is
23 considered relatively easy to treat and remediation approaches would most likely be straightforward.

24 The **Kinko's Strip Mall. (11)**, as illustrated in **Exhibit 5**, is listed on the state UST, ICR, CSCSL NFA,
25 and VCP databases. Regulatory records reviewed indicated that petroleum-related soil and groundwater
26 contamination was encountered at the site. Multiple generations of gas stations have occupied the site
27 since approximately 1938. More than 2,700 cubic yards of petroleum-contaminated soil was removed
28 from the site. An air sparge/soil vapor extraction remediation system ran from April 1996 to October
29 1997 and was shut down after concentrations of the petroleum-related contaminants were less than the
30 MTCA Method A cleanup levels for two consecutive quarters. Groundwater had been monitored on a
31 quarterly basis since 1993. The property was sold in 1995 and developed with a retail building some time
32 in 1996 or 1997. Residual TPH in soil beneath the site was evaluated using Ecology's Interim TPH
33 Policy and it was determined that residual TPH concentrations are less than the proposed MTCA
34 Method B cleanup levels based on soil direct contact. Residual TPH in groundwater did not pose a risk
35 based on groundwater data. Ecology issued an NFA in July 1998 for the affected area of the property.
36 This property is reasonably predictable because actionable petroleum contamination, if remaining, is
37 considered relatively easy to treat and remediation approaches would most likely be straightforward.

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- 1 The **Lakeview Medical Building (12)** property, as illustrated in **Exhibit 5**, was occupied by service
2 stations from 1938 to 1975. No records of tank removal were found during historical or regulatory
3 records review. This property is reasonably predictable because petroleum contamination, if present, is
4 considered relatively easy to treat and remediation approaches would most likely be straightforward.
- 5 The **Union Bay Garage Inc. (13)** property, as illustrated in **Exhibit 5**, has been occupied by an auto
6 repair shop from 1953 to 2008. This property is reasonably predictable because petroleum contamination,
7 if present, is considered relatively easy to treat and remediation approaches would most likely be
8 straightforward.
- 9 The **Baskin Robbins (14)** property, as illustrated in **Exhibit 5**, was occupied by service stations from
10 1938 to 1970. In 1970, the service station building was torn down. No records of tank removals were
11 found during historical or regulatory records review. This property is reasonably predictable because
12 petroleum contamination, if present, is considered relatively easy to treat and remediation approaches
13 would most likely be straightforward.
- 14 The **Montlake Landfill (15)**, as illustrated in **Exhibit 5**, is located south of NE 45th Street between the
15 eastern approach of the NE 45th Street Viaduct and Mary Gates Memorial Drive NE. The landfill
16 operated as a municipal solid waste landfill from 1926 to 1971. The landfill accepted household garbage
17 and debris, biodegradable waste, and some non-biodegradable waste from the public and industries. A
18 1987 report by Ecology and Environment, Inc. indicated that the Seattle Gas Company deposited three
19 types of waste; a wet clay-like material, a sawdust containing iron oxide, and a back-acid concrete. The
20 report indicated the health risk to the local population was minimal. Methane concentrations have been a
21 concern at the landfill since 1960 after a series of French drains were built under the landfill. In October
22 2003 (Shannon & Wilson, Inc., 2003), Shannon & Wilson found that methane concentrations in the
23 subsurface ranged from non-detect levels on the eastern, western, and southern edges of the landfill, to
24 22.8 percent by volume on the northern edge, and 65.2 percent by volume under the pavement of the E-1
25 Parking Lot. Starting in 2005, the University of Washington began collecting quarterly methane gas
26 results. The site is considered reasonably predictable because if contamination is encountered it is not
27 expected to be in large quantities and remediation approaches would most likely be straightforward.
- 28 There are six other properties located along the project corridor that are considered an environmental risk,
29 only because each of them is known to have stored heating oil. These properties are considered
30 reasonably predictable because heating oil is not very mobile, and remediation approaches would most
31 likely be straightforward. These sites are not numbered on **Exhibits 4 and 5**, but are hatched as “current
32 or former heating oil use” properties.

1 **CHAPTER 3 POTENTIAL EFFECTS OF THE PROJECT**

2 Hazardous materials could affect the project during construction and operation of the viaduct. The
3 following sections describe possible direct, indirect, and cumulative effects of the project, as defined
4 below.

5 *Direct effects* are defined as effects that have a direct, cause-and-effect relationship to the proposed
6 action.

7 *Indirect effects* are defined as effects that are “caused by an action and are later in time or farther removed
8 in distance but are still reasonably foreseeable” (Federal Regulation on the Protection of the Environment
9 - 40 CFR 1508.8). These effects, which usually result from the initial action, include changes in land use,
10 water quality, social issues, and population density.

11 *Cumulative effects* are those that “result from incremental consequences of an action when added to other
12 past, present, and reasonably foreseeable future actions.” The cumulative effects of a project may be
13 undetectable when viewed in the individual context of direct or indirect effects. However, cumulative
14 effects can add to other disturbances and eventually lead to a measurable environmental change.

15 **How will construction activities be affected by hazardous materials in the project area?**

16 Hazardous materials may be encountered during construction. Proposed construction activities include
17 the complete replacement of the west approach structure and include two alternatives. The first
18 alternative includes a partial fill embankment and a partial elevated structure, while the second alternative
19 would include a fully elevated structure. Both alternatives include the possible construction of retaining
20 walls and new foundations and footings. Contaminated soil may be encountered during excavation for
21 these project components. Because groundwater is relatively shallow in the project area, contaminated
22 groundwater may also be encountered during excavation activities.

23 Although known and potentially contaminated sites have been identified in or near the project area and
24 included in this report, no level of reasonable inquiry can ensure that all contamination will be identified.
25 Encountering unknown or undocumented hazardous materials in the project area is possible, and could
26 increase project costs, delay the project schedule, and potentially affect public and worker health and
27 safety. However, with proper planning and training, any contamination not previously identified but
28 subsequently encountered during construction can be recognized, isolated, and contained or remediated to
29 minimize the cost and schedule effect.

30 **Could construction activities affect the environment?**

31 Construction activities can result in the generation of hazardous wastes and introduction of those wastes
32 to the environment. Fuel and hydraulic leaks and spills from construction machinery are possible.

NE 45th Street Viaduct

1 Chemicals that can be released from uncured asphalt used for road surfacing can be toxic. Use of these
2 and other construction materials presents some risk to the environment.

3 What are the health and safety concerns of constructing this project?

4 Direct Effects

5 Workers would be at risk from exposure to hazardous materials and waste encountered or generated
6 during construction because of the duration of their potential exposure and proximity to areas where such
7 materials may be encountered or used. The primary means of exposure would be inhalation of dusts or
8 vapors containing hazardous substances generated during excavation in areas with contaminated soils.

9 Encountering unanticipated contamination could expose workers to potentially toxic concentrations and
10 could create other hazardous situations, such as explosive environments. Air quality could be affected,
11 with associated health concerns as a result of disturbing volatile substances during construction.

12 Minor spills of materials used in construction, such as fuels, lubricants, and hydraulic fluids, can occur
13 during construction operations. Exposure to such accidental releases could damage skin, eyes, lungs, and
14 other organs. Unless a spill is a major event, it is not likely to present significant risk to human health.
15 Chemicals potentially released from uncured asphalts in road surfacing also present some exposure risk.
16 All workers have a legal right to know about potential hazardous conditions in the workplace and should
17 be trained in hazard recognition, as well as how to respond to and report such conditions.

18 Public health risk could also arise as a result of accidental release or diversion of contaminants to
19 environmentally sensitive areas, such as surface waters, groundwater, public drinking water systems, or
20 public air spaces. Releases to such areas could provide direct or indirect pathways of contaminant
21 exposure to the general public.

22 Issues related to health and safety issues discussed here are specific to potential exposure to hazardous
23 materials encountered or generated during construction activities. Physical hazards of construction
24 activities are not addressed.

25 Indirect Effects

26 Potential indirect effects associated with the project include:

- 27 • Contamination may be discovered and addressed by the project that otherwise would have
28 remained in place and potentially migrated
- 29 • Contamination may be cleaned up faster to accommodate project construction
- 30 • Contamination may be prevented by removing potential hazardous material release sources, such
31 as USTs, before a release occurs
- 32 • Contaminated materials may be uncovered, allowing more direct exposure to the public

NE 45th Street Viaduct

- 1 • Contamination may be spread as a result of construction

Cumulative Effects

2
3 There would be no adverse cumulative effects, based on this analysis; however, a positive cumulative
4 effect would be that less contamination would exist in the NE 45th Street Viaduct vicinity if cleanup
5 activities are conducted associated with the project.

How will project operations affect hazardous materials in the project area?

Direct Effects

6
7
8 The direct effects of hazardous materials and waste from normal operations of the NE 45th Street Viaduct
9 in the project vicinity will be primarily associated with runoff of contaminants entrained in stormwater.
10 Contaminants that may be encountered in stormwater runoff include fuel and lubricants, compounds from
11 tires, and automobile engine coolants such as ethylene glycol. Stormwater runoff currently is not
12 contained or treated. Stormwater and water quality treatment facilities will be designed to collect and
13 retain pollutants from traffic operations.

14 Potential spills of hazardous materials or wastes resulting from vehicle accidents may also occur, along
15 with effects from the use of pesticides as part of a vegetation management program.

Indirect and Cumulative Effects

16
17 Stormwater associated with the NE 45th Street Viaduct is currently not treated and discharges into
18 regional streams and rivers. Contamination migration in surface runoff (primarily fuel and lubricants)
19 will likely decrease due to the construction and operation of the proposed stormwater detention facility
20 for the project. Therefore, hazardous materials associated with NE 45th Street Viaduct that discharge into
21 local streams and rivers and Lake Washington may decrease over time.

What other investigations are recommended?

22
23 Construction monitoring is recommended in the NE 45th Street Viaduct ROW where excavation is
24 proposed and potentially contaminated sites are adjacent to the ROW area. In accordance with the SDOT
25 Standard Specifications, SDOT will complete a spill prevention control and counter measures plan for
26 dealing with hazardous materials. If contamination is encountered during project construction, mitigation
27 will likely include:

- 28 • Adjusting construction methods to minimize the volume of contaminated soil and/or groundwater
29 encountered.
- 30 • Disposing of contaminated soil and/or groundwater encountered.

31

NE 45th Street Viaduct

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1 **CHAPTER 4 MITIGATION MEASURES**

2 **What mitigation measures are proposed to avoid or minimize effects of the project**
3 **construction on hazardous materials?**

4 *Construction Planning*

5 Several mitigation measures will be required as part of construction planning. These include:

- 6 • The construction plans will include procedures, including best management practices, which will
7 be employed for construction of the project. The plans will include direction for: spill
8 prevention, control, and countermeasure plans, temporary erosion and sedimentation control
9 plans, and plans for handling and disposal of known and unanticipated contamination.
- 10 • To ensure the use of appropriate procedures on monitoring, a site-specific Health and Safety Plan
11 describing monitoring requirements and the use of personal protective equipment will be
12 necessary.
- 13 • If unknown contamination is encountered, a stockpile area should be designated for temporary
14 storage of soils awaiting characterization results. If soils encountered during project construction
15 are anticipated to be a dangerous waste, assignment of an identification (ID) number, along with
16 planning for soil handling and disposal can be completed prior to construction. This would
17 reduce soil handling time, as soils can be loaded onto trucks during initial excavation and hauled
18 to treatment or disposal facilities.
- 19 • There is a potential to encounter contamination associated with creosote treated timber supports
20 and associated pilings. To avoid excavation in areas of potential contamination, the treated
21 timber pilings can be cut off and left in place at or just below the ground surface. If excavation is
22 required near the bridge footings, specifications would be developed to direct proper removal,
23 screening, sampling, and disposal of the suspect soil. Soil will be disposed of based on its
24 analytical characteristics.

25 Although many of the known and potentially contaminated sites that could affect the project have been
26 identified, the possibility of encountering unknown contamination cannot be discounted. The
27 Washington State Department of Transportation (WSDOT) Construction Manual and WSDOT
28 Environmental Procedures Manual provide guidelines for addressing discoveries of unanticipated
29 contamination.

30 It is necessary to ensure that there are individuals on site who are trained in recognizing potential
31 contamination and reporting procedures. Failure to recognize such hazards can lead to spills or injury,
32 with the associated response and health implications.

NE 45th Street Viaduct

1 *Disposal of Contamination*

2 Contamination may not be avoidable in areas of the NE 45th Street Viaduct ROW where earthwork is
3 anticipated. If contamination is encountered during project construction, mitigation measures will be
4 taken to handle the contaminated materials. Possible mitigation measures include:

- 5 • Adjusting construction methods to minimize the volume of contaminated soil and/or groundwater
6 encountered.
- 7 • Properly managing and disposing of contaminated soil and/or groundwater encountered.

8 If soil contamination is encountered during construction, excavated soil will require stockpiling and
9 testing to determine its regulatory classification and the most cost-effective management strategies.
10 Concentrations of hazardous materials can be evaluated relative to MTCA Method A cleanup standards to
11 assess whether the soils would be of concern. MTCA Method A or B cleanup levels could be used to
12 determine disposal strategies where small amounts of contaminated soils are present, where soils need to
13 be removed and disposed of quickly, and where soils can be easily used as subgrade road material.

14 Soils failing the Toxicity Characteristic Leaching Procedure (TCLP) or exceeding other dangerous waste
15 criteria would need to be handled as Washington State dangerous waste.

16 If contaminated groundwater is identified, approaches are available to minimize the volume of water
17 produced during construction. As an example, for the bridge supports, the use of driven piles or drilled
18 shafts where the concrete is deposited into place with a pipe could limit the volume of water produced and
19 the impact of the project on mobilizing contaminants in the subsurface. Based on the geology of the
20 project area, groundwater is expected to be relatively shallow (3 to 25 feet below ground surface [bgs])
21 along much of the corridor.

22 Some specific options to mitigate for encountered contamination are listed below:

23 **Petroleum**

24 Petroleum contaminated soil and groundwater associated with gasoline stations, auto repair shops,
25 bulk fuel storage plants, and heating oil tanks may be encountered in the project area. Mitigation
26 options for petroleum contamination differ depending on the media contaminated. Mitigation options
27 for petroleum contaminated soil and groundwater are discussed below.

28 *Soil*

29 Petroleum-contaminated soils will be evaluated relative to current MTCA Method A cleanup
30 levels or to Ecology's risk-based TPH criteria. Method A cleanup levels are conservative and are
31 not risk based. Soil cleanup actions using Method A cleanup levels would likely result in more
32 soil having to be remediated than would be required under a risk-based cleanup. Method A
33 would be easier to implement, and would allow for more rapid determination of remediation

NE 45th Street Viaduct

1 requirements than would be realized using the risk-based evaluation. Use of the risk-based
2 approach, however, would result in more flexible cleanup levels and would allow more
3 petroleum-contaminated soil to remain on site or to be used as road fill material in the project
4 area.

5 Petroleum-contaminated soils encountered unexpectedly will require stockpiling and testing to
6 assess the regulatory classification of the soil and the most cost-effective remediation strategy.
7 Options for reusing and disposing of petroleum-contaminated soils, not in prioritized order,
8 include one of the following:

- 9 ○ Soils containing petroleum contamination at concentrations below MCTA Method A
10 cleanup levels are not restricted in use and will be used similarly to non-contaminated
11 soils.
- 12 ○ Soils containing petroleum contamination at concentrations above MCTA Method A
13 cleanup levels but below site-specific risk-based contaminant concentrations will be
14 placed under roadways, if adequate fill capacity exists and the soils meet
15 geotechnical fill requirements.
- 16 ○ Petroleum hydrocarbons-contaminated soils that exceed risk-based contaminant
17 concentrations, or soil in excess of the quantity required for fill, could be transported
18 to a thermal treatment facility. Alternatively, the soil could be disposed at a landfill
19 permitted to accept such contaminated soils.

20 *Groundwater*

21 If contaminated groundwater is identified, approaches are available to minimize the volume of
22 water produced during construction. For the bridge supports, the use of driven piles or drilled
23 shafts where the concrete is tremied into place will limit the volume of water produced and the
24 effect of the project on mobilizing contaminants in the subsurface. Based on the geology of the
25 project area, groundwater is expected to be relatively shallow (3 to 25 feet bgs) along much of the
26 corridor.

27 Where contaminated groundwater is generated during construction, containerization and
28 characterization will be required to determine the approach to treatment. Groundwater that does
29 not exceed MTCA Method A cleanup levels and conforms to criteria defined in Washington
30 Administrative Code (WAC) 173-201A, Water Quality Standards for Surface Waters in
31 Washington State may be discharged directly or indirectly to the ground surface or surface water.

32 Groundwater containing contaminants at concentrations above MTCA Method A cleanup levels
33 will be treated to meet requirements for discharge, depending on the contaminants and their
34 concentrations. After treatment, discharge could include:

NE 45th Street Viaduct

- 1 ○ Discharge to the ground surface
- 2 ○ Discharge to surface water
- 3 ○ Discharge to a publicly owned treatment works
- 4 ○ Off-site disposal at a private treatment, storage, and disposal (TSD) facility

5 Discharge of treated water to the ground surface will require conformance with MTCA Method A
6 cleanup criteria. Direct or indirect discharge to surface water will require conformance with
7 criteria defined in WAC 173-201A, Water Quality Standards for Surface Waters in Washington
8 State and will require permitting through Ecology. Discharge to a local sanitary sewer or to a
9 TSD facility will require a temporary waste water treatment permit and conformance with
10 publicly-owned treatment works (POTW) or facility-specific criteria.

11 **Metals, Volatile Organic Compounds (VOCs), and Creosote Contamination**

12 Metals, VOCs, and/or creosote associated with landfills, machine shops, auto repair shops, gasoline
13 stations, laundries and timber trestles may be encountered during site construction. Mitigation
14 options for these contaminants differ depending on the media contaminated. Mitigation options for
15 soil and groundwater containing these contaminants are discussed below.

16 *Soil*

17 Soil contamination encountered during construction and excavated soil will require stockpiling
18 and testing to determine its regulatory classification and the most cost-effective management
19 strategies. Concentrations of metals, VOCs, creosote, and formaldehyde will be evaluated
20 relative to MTCA Method A cleanup standards to assess whether the soils would be of concern.
21 MTCA Method A cleanup levels may be used to determine disposal strategies where small
22 amounts of contaminated soils are present, where soils need to be removed and disposed of
23 quickly, and where soils can be easily used as subgrade road material.

24 Soils failing the TCLP or exceeding other dangerous waste criteria must be handled as
25 Washington State dangerous waste.

26 Generators of dangerous waste are required to obtain an ID number for each site (location). This
27 can be done after the soils have been determined to be dangerous waste. If pre-construction
28 explorations are used to determine where dangerous wastes will be encountered, an ID number
29 can be obtained and soil handling and disposal procedures can be set up prior to construction.
30 Options for reusing and disposing of the contaminated soils include:

- 31 ○ Soils that do not exceed Method A cleanup levels will be placed under roadways, if
32 adequate fill capacity exists and the soils meet geotechnical fill requirements.

NE 45th Street Viaduct

1

2 **Metals-, VOCs-, Creosote-, and Formaldehyde-contaminated Soil**

- 3 • Landfill Disposal/Non-Dangerous Waste: \$30 per ton
- 4 • Landfill Disposal/Dangerous Waste: \$180 per ton
- 5 • Incineration/Dangerous Waste: \$600 per ton

6 *Groundwater*

7 Groundwater treatment and/or disposal options include permitting for local discharge and/or off-site
8 treatment and disposal.

- 9 • Permitting for Local Discharge: \$2,500 to \$10,000, depending on the type and level of
10 contaminants present.
- 11 • On-site Treatment and Discharge: \$2,500 to \$5,000 per month, depending on the type and level
12 of contaminants present.
- 13 • Off-site Treatment and Disposal: \$0.25 to \$2 per gallon, depending on the type and level of
14 contaminants present and volume of discharge.

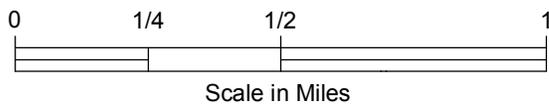
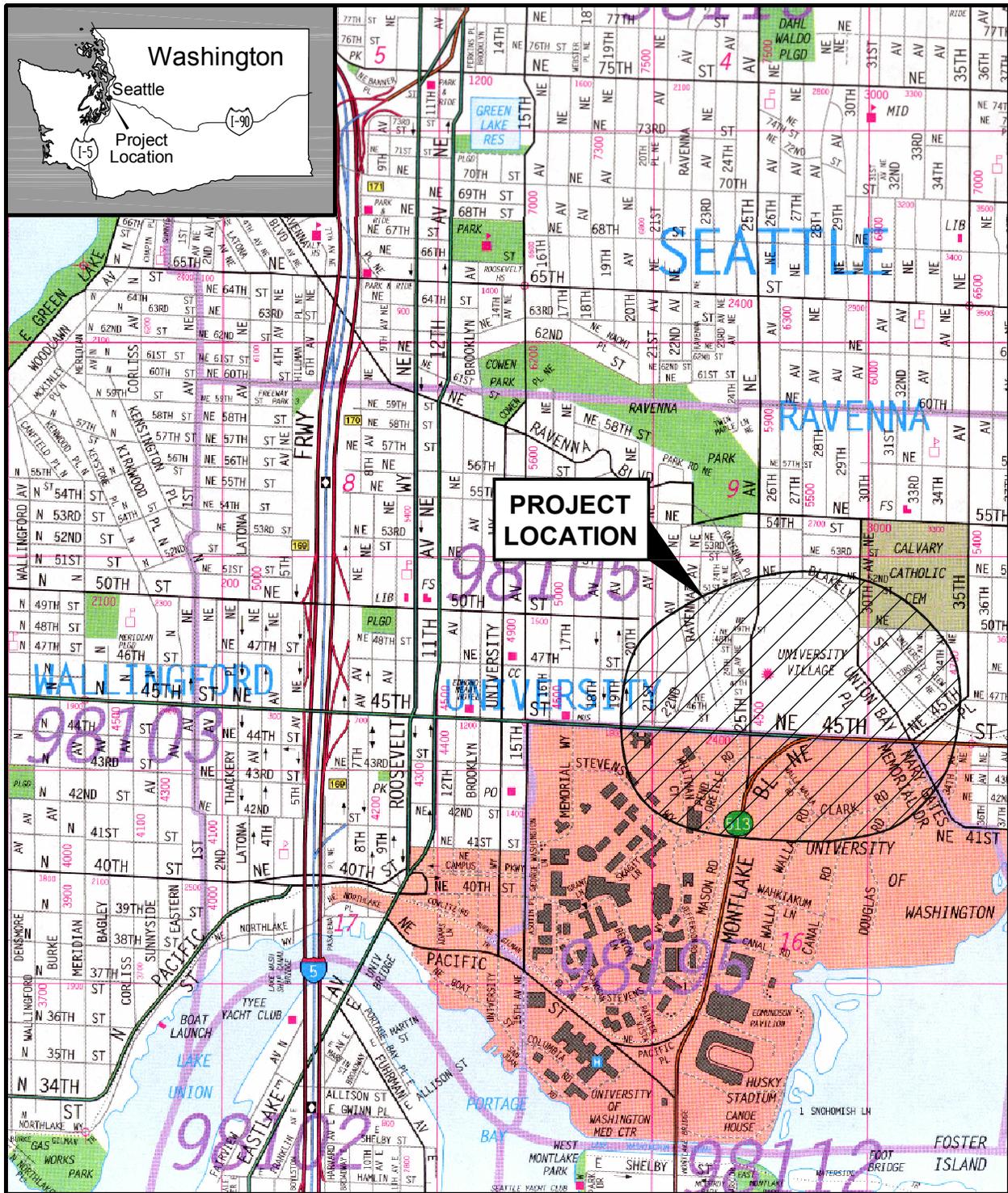
15 **What mitigation measures are proposed to avoid or minimize effects from potential** 16 **hazardous materials effects on the project operation?**

17 Contaminants associated with normal operation of the NE 45th Street Viaduct could potentially enter
18 stormwater runoff. These contaminants include fuel and lubricants, compounds from tires, and
19 automobile engine coolants such as ethylene glycol. The proposed stormwater retention/detention and
20 water quality treatment facilities will decrease the potential for these contaminants to enter adjoining
21 waterways. As part of the project, a combined sewer overflow (CSO) will be reconstructed along the
22 north side of NE 45th Street and a new underground stormwater vault will be added between 20th Avenue
23 NE and 21st Avenue NE. Stormwater run-off collected from portions of NE 45th Street, 20th Avenue NE,
24 and 21st Avenue NE will be detained in the new underground vault prior to flowing into the CSO to
25 mitigate the impervious surface area replaced by the project per the City of Seattle requirements.
26 Stormwater run-off from the remaining portion of NE 45th Street and the western approach will be
27 allowed to flow directly into the CSO. Since the CSO runs directly to the municipal treatment facility,
28 on-site treatment is not required.

29

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45th St Viaduct Project
Seattle, Washington

VICINITY MAP

November 2008

21-1-20999-007

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

EXHIBIT 1

EXHIBIT 2
ENVIRONMENTAL REGULATORY AGENCY DATABASES USED

Abbreviation	Database	Contents
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System	Lists potential hazardous waste sites reported to the USEPA.
CERCLIS-NFRAP	CERCLIS – No Further Remedial Action Planned	Sites removed from CERCLIS, because no contamination was found
NPL	National Priorities List	Hazardous waste sites for priority cleanup under the Federal Superfund
RCRIS	Resource Conservation and Recovery Information System	Sites that generate, transport, store, treat, and/or dispose of hazardous
RCRA-LQG	RCRA Large Quantity Generators	Facilities that generate (use and/or create by-products) more than 1,000
RCRA-SQG	RCRA Small Quantity Generators	Facilities that generate between 100 kilograms and 1,000 kilograms of
RCRA-CORRACTS	RCRA Corrective Action Sites	Identifies hazardous waste handlers undergoing cleanup activities.
CSCSL	State Confirmed & Suspected Contaminated Sites List	Lists sites in Washington Department of Ecology (Ecology) records with
HSL	State Hazardous Sites List/ Model Toxics Cleanup Program Sites Register	Contaminated sites that have been assessed and ranked using the
MTCA-NFA	Model Toxics Control Act – No Further Action	Lists sites where Ecology has issued a letter of no further action in
ICR	State Independent Cleanup Reports List	Sites undergoing a voluntary cleanup. Reports are submitted to Ecology for
LUST	State Leaking Underground Storage Tank List	Lists sites with reported leaking underground storage tanks (LUSTs).
UST	State Registered Underground Storage Tank List	Lists sites with reported underground storage tanks (USTs).
LF	State Landfill or Solid Waste Site Lists	Lists sites of solid waste disposal facilities or landfills.

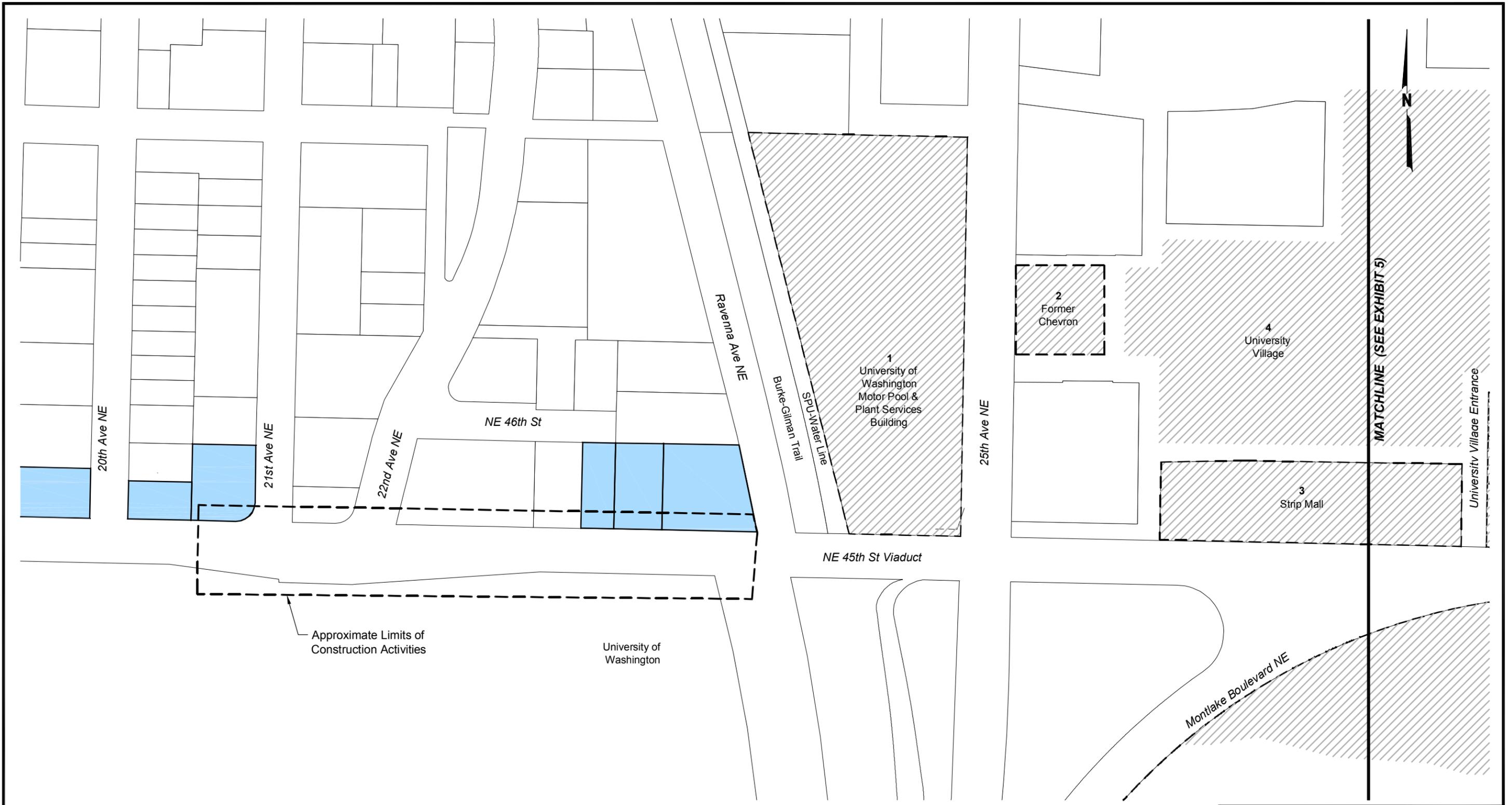
EXHIBIT 3
TYPES OF BUSINESSES AND LIKELY CONTAMINANTS

Business	Likely Contaminants
Auto Repair	Petroleum, solvents
Auto Body Shop	Metals, solvents, petroleum
Landfill	Petroleum, metals, PAHs, VOCs
Laundry/ Laundromat	Solvents
Gas station	Petroleum, BTEX
Printers	Solvents, metals
Metal Shops	Metals, solvents
Shipping facilities	Petroleum

PAHs = polycyclic aromatic hydrocarbons

VOCs = volatile organic compounds

BTEX = benzene, toluene, ethylbenzene, and xylenes



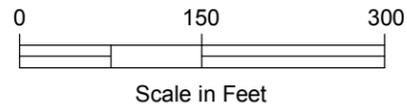
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Reasonably Predictable



Current or Former Heating Oil UST



45th St Viaduct Project
Seattle, Washington

**SITE AND ADJACENT
PROPERTIES PLAN**

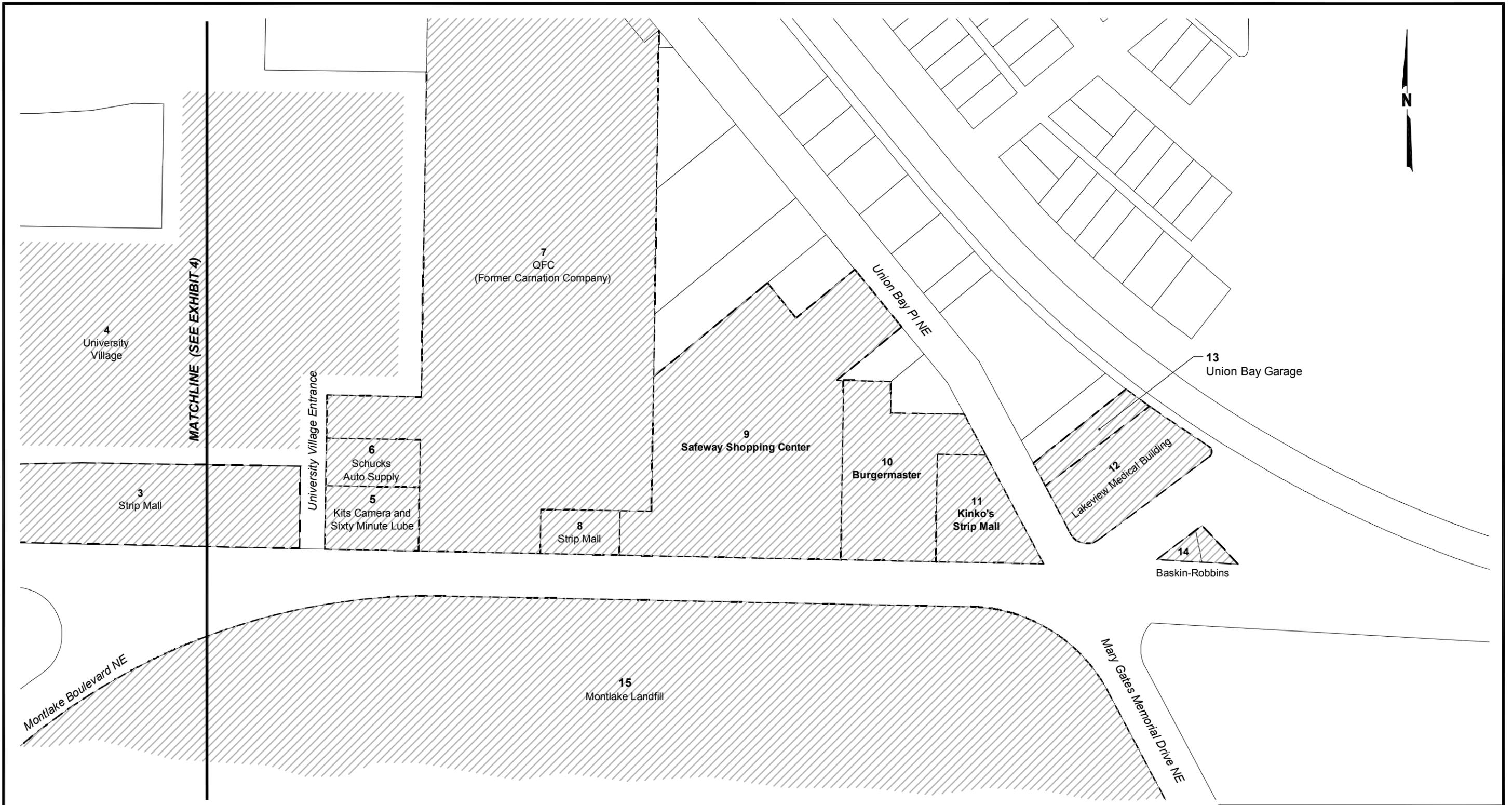
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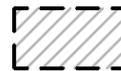
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Geotechnical and Environmental Consultants

EXHIBIT 4

Filename: J:\21120999-007\21-1-20999-007 Site and Adjacent Properties Plan (Current).dwg Date: 11-17-2009 Login: Sandy Cottrell



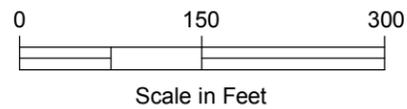
LEGEND



Reasonably Predictable



Current or Former Heating Oil UST



45th St Viaduct Project
Seattle, Washington

**SITE AND ADJACENT
PROPERTIES PLAN**

November 2009

21-1-20999-007

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EXHIBIT 5

EXHIBIT 6
PROPERTIES OF POTENTIAL ENVIRONMENTAL CONCERN

Map ID	Site Name	EDR Map ID Number	Federal, State, and/or Local Env. Database Listing	Current Site Address	Old Site Address	Environmental Records Review Findings	Historic Review Findings: (P = Polk City Directories, S = Sanborn Fire Insurance Maps, and A = Tax Assessor Information)	Potential Contaminants	Potential to Impact the Corridor
1	University of Washington / Motor Pool and Plant Services Building	A1	LUST, UST, ICR (Petroleum released to soil and groundwater)	4515 25TH Avenue NE	4515 25th Avenue NE		P - University of Washington (Carpentry Shop, Central Stores, Machine Shop, Paint Shop*, Motor Pool**) (1965-2008) (Starting in *1980, **1990), A - Plant Services Building (1969)		
		A2, A3			4549 25th Avenue NE	The site files reviewed at Ecology indicated that contaminated soil and groundwater are present at the site and are attributed to a petroleum release. A total of nine USTs and 2 unregulated hydraulic fluid USTs were decommissioned and removed in July and August of 1998. Residual soil contamination related to the USTs is still present at the site. Based on the location of the residual contamination, soil excavation was not an option with out undermining adjacent structures. A Letter of Notice of Potential Release at the Site was sent to Ecology in February of 1999. However no other records were in Ecology's file after February of 1999.	P - Earls' Texaco Gas Station (1960), Kents Texaco Station (1965), Village Texaco Service (1975), Vacant (1980)	Petroleum	Low
2	Former Chevron #96600	B4, B5 and B6	LUST, UST, ICR (Petroleum released to soil and groundwater)	4520 25th Avenue NE	4530 25th Avenue NE	The EDR report lists the site as a LUST site, awaiting cleanup with affected soil and groundwater and that three tanks were removed. Ecology files only contained one report pertaining to this site. The report was an oversight report of construction activities of a property adjacent to the former Chevron site. Soil samples collected during excavation activities indicated the soil exceeded the MTCA Method A cleanup levels for TPH-gasoline and TPH-diesel. However the TPH constituents observed in these soil samples did not contain compounds found in gasoline or diesel. Based on the field observations and analytical results it is believed that the oil and groundwater contamination is not associated with Chevron products such as gasoline or diesel and may be associated with wood pillilings used with the structures foundation and other biogenic material.	P - Standard Stations (1965-70), Unviersity Village Chevron (1975-1980), S - Gas and Oil (1966)	Petroleum	Low
3	Strip Mall	B8	FINDS, RCRA-Non Gen	2623 NE University Village #7		No files provided by Department of Ecology	A -Shopping Center (2008)		
4	University Village			University Village - 2623 NE University Village	2610 - 2616 E 45th Street		S - Paint (1966) A - University Village Shopping Center, (Laundry and Hardware Store) (1955 - 1972), Vacant Land Prior to 1955	Solvents	Low
		7	FINDS, RCRA-Non Gen	Bernies Camera	4770 University Village Place NE	No files provided by Department of Ecology			
					4500 25th Avenue NE		A - Department Stores (1955 - 1971)		

EXHIBIT 6
PROPERTIES OF POTENTIAL ENVIRONMENTAL CONCERN

Map ID	Site Name	EDR Map ID Number	Federal, State, and/or Local Env. Database Listing	Current Site Address	Old Site Address	Environmental Records Review Findings	Historic Review Findings: (P = Polk City Directories, S = Sanborn Fire Insurance Maps, and A = Tax Assessor Information)	Potential Contaminants	Potential to Impact the Corridor
5	Kits Camera and Sixty Minute Lube	C9 and C10	LUST, UST, VCP, RCRA-CESQG (Petroleum released to soil and groundwater)	2724 NE 45TH Street	2724 E 45th Street	Ecology files indicate that the site has contaminated soil and groundwater attributed to a petroleum release. A phase I conducted in January 2001 (Environmental Associates, Inc, 2001) indicated the subject property and the property adjacent to the north (Schucks Auto Parts) were formerly occupied by two separate gas station configurations which operated at different times from approximately 1950 through 1983. At one time the two parcels were under a single ownership when the gas stations existed. A vintage cluster of USTs were once at the site which included four tanks, one 500 gallon waste oil tank, one 2,000 gallon and two 4,000 gallon of undetermined liquid. In December 2002 a letter was sent to Ecology regarding a Cleanup Proposal/Request for Assistance Under the VCP Program. Ecology agreed with property owner but requested that they address the soil at the site as well. Ecology is waiting for a response.	P - Bert Rundle's Texaco Service (1953-1980), Kits Camera and Sixty Minute Tune Auto Repair (1990-1996), Village Autocare (1996) Kits Camera, Village Auto Care, Auto Tune and Lube (2000), S - Gas and Oil (1966), A - Texaco Service Station (1940)	Petroleum	Low
					2720 NE 45th Street		A - Texaco Service Station (1962)		
6	Schucks Auto Supply	C11		2728 NE 45th Street	2728 NE 45th Street		P - Schucks Auto Supply (1990-2000)	Petroleum	Low
7	QFC (Former Carnation Company)	C12, C13 and C14	UST, LUST, IC, Spills (Petroleum released to soil and groundwater)	2746 NE 45TH Street	2746 NE 45th Street	Ecology site files indicate that four USTs and associated piping and equipment were removed in October 1989. The removed USTs consisted of two gasoline USTs (10,000 and 1,000 gallons), one 500 gallon waste oil tank and one 8,000 gallon heating oil tank. A final closure report and request for no further action was requested in February 1991. Based on the results of the UST removal additional investigations were completed in the area of the 1,000 gallon gasoline UST and the heating oil tank. Monitoring wells were installed and soil and groundwater samples were collected adjacent to the two excavations. Based on the results of the investigation additional soil was excavated adjacent to the heating oil UST. Due to the instability of the boundary excavation walls it was deemed unsafe to further excavate the soil. A result of TPH at 1900 ppm at 12.5 feet was left in place in the northern area of the former heating oil UST. Based on the results of the investigation Ecology granted the site in regards to the UST investigation a "limited" cleanup status.	P - Carnation Company (1960-90)(2005-2008), S - Carnation Company Processing Plant (1966), A - Pumping Plant (Large Well House) (1955)	Petroleum	Low

EXHIBIT 6
PROPERTIES OF POTENTIAL ENVIRONMENTAL CONCERN

Map ID	Site Name	EDR Map ID Number	Federal, State, and/or Local Envr. Database Listing	Current Site Address	Old Site Address	Environmental Records Review Findings	Historic Review Findings: (P = Polk City Directories, S = Sanborn Fire Insurance Maps, and A = Tax Assessor Information)	Potential Contaminants	Potential to Impact the Corridor
8	Strip Mall	C15, C16 and C17	SHWS	2756 NE 45TH Street	2756 NE 45th Street	Review of Ecology files indicate that the site has contaminated soil and groundwater attributed to a petroleum release. Two generations of Fuel USTs installed at the site were reportedly removed in 1985 however no documentation confirming the removal was ever found. The site was enrolled in to the VCP program in January 2004 but due to lack of participation it was removed in February 2007. Groundwater monitoring conducted at the site in July 2008 indicated that TPH-G, D, and O and Benzene compounds were detected above their respective MCTA Method A cleanup levels.	P - McMillan's Shell Service (1953 -1980), Fox Dry Cleaners (1985-2000), S - Gas and Oil (1966) A - Shell Oil Company (1949 -1972)	Petroleum and Solvents	Low
					2750 NE 45th Street		P - Rainbow Truck Painting (1985)		
9	Safeway Shopping Center			3020 NE 45TH Street	3020 NE 45th Street	No files provided by Department of Ecology	P - Minute Car Wash (1953), University Three Minute Carwash (1955-1975), S - Auto Wash (1966), A - Parking Lot (1967), Grocery Store (2008)	Petroleum	Low
					3010 NE 45th Street		P - Bill Taylors General Petroleum Service (1940), Lyman's Mobile Service (1944), Don's Mobils Service (1955), Ok Tire Stores (1960-1975), Parking Lot (1980-1985), S - Tire Sales and Service (1966)		
					3000 NE 45th Street		P - Standard Stations Inc. Gas Station (1938-1970), Dave's Chervon (1975), S - Gas and Oil (1966)		
10	Burgermaster			3040 NE 45TH Street	3040 E 45th Street		P - Sig Langdon Gas Station (1938), Shell Oil Gas Co (1940, 1944), Burgermaster Drive-In (1953-70), A - Drive In Resturant (1937 - 1958) The Burgermaster (1958 -2008)	Petroleum	Low
11	Kinko's Strip Mall	D24, D25, D26	UST, ICR, CSCSL NFA, VCP	3042 NE 45TH Street	3050 NE 45th Street	An initial site assessment in 1990 indicated that petroleum-related soil and groundwater contamination was encountered at the site due to the multiple generations of gas stations that have occupied the site since approximately 1938. More then 2,700 cubic yards of petroleum-contaminated soil was removed from the site. An AS/SVE remediation system ran from April 1996 to October 1997 and was shut down after concentrations of the petroleum related contaminants were less then the MCTA Method A cleanup levels for two consecutive quarters. Groundwater had been monitored on a quarterly basis since 1993. The property was sold in 1995 and developed with a retail building sometime in 1996 or 1997. Residual TPH in soil beneath the site was evaluated using Ecology's Interim TPH Policy and it was determined that residual TPH concentrations are less then the proposed MTCA Method B cleanup levels based on soil direct contact. Residual TPH in groundwater did not pose a risk based on groundwater data. Ecology issued an NFA in July 1998 for the area affected on the property.	P - Kenneth McLeod Gas Station and Neil McLeod Auto Repair (1938, 1940), Mckale's Corp (1955-1965), Johnson Union Service (1970-1985), S - Gas and Oil (1966), A - Teaxco, Union Bay Service Station (1926), Commerical (2008)	Petroleum	Low

EXHIBIT 6
 PROPERTIES OF POTENTIAL ENVIRONMENTAL CONCERN

Map ID	Site Name	EDR Map ID Number	Federal, State, and/or Local Env. Database Listing	Current Site Address	Old Site Address	Environmental Records Review Findings	Historic Review Findings: (P = Polk City Directories, S = Sanborn Fire Insurance Maps, and A = Tax Assessor Information)	Potential Contaminants	Potential to Impact the Corridor
12	Lakeview Medical Building			3216 NE 45TH Place	4500 Union Bay Place NE		P - Laurelhurst Service Station (1938-1944, 1953-1965), Logg Lester Gas Station (1943/1944), Laurelhurst Richfield Gas (1970) Laurelhurst Arco (1975), Vacant (1980-85), A - Medical Dental Office (2008)	Petroleum	Low
13	Union Bay Garage Inc.	F35		4514 Union Bay Place NE	4514 Union Bay Place NE		P - Union Bay Repairs (1953-2008)	Petroleum	Low
14	Baskin and Robbins			3200 NE 45TH Street	3200 NE 45th Street		P - Gordon Stenerson Gas Station (1938), Vacant (1940), Allan MacLaren Service Station (1943/1944), Ken's Associated Service Station (1953-55), Crosby's Flying A (1960-65), Baskin Robbins Ice Cream (1970-85), A - Gordon Stenerson - Associated Service Station (1939 - 1958), Tidewater Oil Co (1958 - 1970), 31 Flavors Ice Cream (1969 - 2008)	Petroleum	Low
15	Landfill/ UW Campus			Address Not Available			A - Vacant (2008)		
No #	Residential			2249 NE 46TH Street			A - Residentail (1907)	Heating Oil	
No #	Apartments/ Residential			2233 NE 46TH Street			A - Apartments/Residential (1907-1959), Apartments (1960)	Heating Oil	
No #	Residential			4511 Ravenna Avenue NE			A -Residentail (1948)	Heating Oil	
No #	Sorority House			2012 NE 45TH Street			P - Delta Gamma Soroirty (1938-2008), A - Sorority House (1937-2008)	Heating Oil	
No #	Faternatiy House			4502 20TH Avenue NE			A -Faternatiy (1913), Commerical/Apartment (2008)	Heating Oil	
No #	Sorority House			1906 NE 45TH Street			A - Sorirty (1910 - 2008)	Heating Oil	

NE 45th Street Viaduct

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1 **ATTACHMENT A**

2 **Policies and regulations for hazardous materials found in the project area**

3 Hazardous materials are regulated by the following federal, state, and local laws and regulations:

- 4 • **Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)** and
5 the **Superfund Amendments and Reauthorization Act (SARA)** define liability for hazardous
6 waste contamination and require liable parties to take responsibility for cleanup. This relates to
7 acquisition of previously contaminated properties for use as part of the Project.

- 8 • **Resource Conservation and Recovery Act (RCRA)** provides requirements for the handling,
9 transportation, treatment, storage, and disposal of hazardous materials and wastes. It includes
10 provisions for identifying and classifying hazardous materials and wastes and, through the
11 Hazardous and Solid Waste Amendments (HSWA), creates treatment standards for specific
12 wastes. The HSWA also establish requirements for ownership, operation, maintenance, and
13 closure of USTs. Regulation of RCRA-regulated USTs is administered through the state under
14 Washington Administrative Code (WAC) 173-360. Any removal, treatment, or transportation of
15 contaminated soils as part of the project must be conducted in compliance with RCRA.

- 16 • **Toxic Substances Control Act (TSCA)** allows the Environmental Protection Agency (EPA) to
17 regulate existing chemicals when they pose an unreasonable risk to health or to the environment,
18 and to regulate their distribution and use. Under TSCA Section 6, EPA can limit or ban
19 manufacturing and distribution, require labeling, or place other restrictions. Chemicals regulated
20 include asbestos, lead (such as lead-based paint), and polychlorinated biphenyls. If these
21 chemicals were encountered, they would have to be handled and disposed of in compliance with
22 relevant sections of TSCA.

- 23 • **Occupational Safety and Health Act (OSHA)** establishes requirements for site safety
24 procedures, worker training, and worker safety and health standards for employees engaged in
25 work related to hazardous materials. All work involving the handling of and potential exposure
26 to, hazardous substances by workers while conducting activities associated with the project must
27 be in compliance with the relevant sections of OSHA.

- 28 • **Clean Air Act (CAA)** provides for comprehensive federal regulation of all sources of air
29 pollution. Any activities associated with the project that have the potential to introduce
30 hazardous substances to air must be in compliance with the CAA. Discharge to air (including
31 fugitive dust, asbestos, and hazardous chemicals) will be enforced at the state and local
32 municipality level through the Puget Sound Clean Air Agency.

NE 45th Street Viaduct

- 1 • **Clean Water Act (CWA)** provides for comprehensive federal regulation of all sources of water
2 pollution. Any activities associated with the project that have the potential to introduce
3 hazardous substances into surface waters, including wetlands, must be in compliance with the
4 CWA. Several permit programs have been established to address these issues. Permits and
5 approvals required under the CWA that would require the project to address hazardous substance
6 issues include a National Pollutant Discharge Elimination System (NPDES) General Stormwater
7 Permit for Construction Activities. This permit would also require the project to develop and
8 implement a Stormwater Pollution Prevention Plan.
- 9 • **National Environmental Policy Act (NEPA)** requires that all actions sponsored, funded,
10 permitted, or approved by federal agencies undergo planning to ensure that environmental
11 considerations are given due weight in project decision-making. If the project becomes partially
12 funded by the Federal Highway Administration, NEPA compliance would be required. One of
13 the major elements addressed in a NEPA assessment is environmental health. Assessment of
14 effects associated with hazardous materials and waste is a component of the environmental health
15 evaluation.

16 Washington State implements many of the federal statutes pertaining to hazardous materials and
17 wastes along with its own, often more stringent, laws and regulations. These requirements, listed
18 below, take precedence over all other laws for governing business and operations within the state.

- 19 • **Model Toxics Control Act Cleanup Regulation (MTCA)** — WAC 173-340 implements
20 MTCA, Revised Code of Washington (RCW) 70.105D. This provides strict requirements for site
21 discovery and reporting, site assessments, and hazardous site listing. This regulation defines
22 standard methods used to assess whether a site is contaminated or clean. This regulation
23 specifically relates to any hazardous materials and water investigations associated with the
24 project. Cleanup standards for hazardous wastes are promulgated under MTCA. Cleanup of
25 contaminated sites is likely to be accomplished as independent actions, with technical review
26 provided by Ecology on an as-needed basis as provided for under MTCA.
- 27 • **Dangerous Waste Regulations** — WAC 173-303 implements RCRA and the Hazardous Waste
28 Management Act, RCW 70-105. This provides for waste identification procedures and disposal
29 requirements for Washington State. It provides some unique standards for Washington State such
30 as specific land treatment standards for high levels of cadmium under WAC 173-303-655.
31 Detailed requirements for forms and rules related to manifesting and transporting of hazardous
32 waste are included. As stated above, any handling, treatment, or transport of hazardous waste
33 associated with the project must be in compliance with RCRA and also with Washington's
34 Dangerous Waste Regulations and Hazardous Waste Management Act. Contaminated materials
35 generated during construction, including soil, water, and debris, would need to be properly

NE 45th Street Viaduct

1 designated before disposal. In addition, wastes generated during construction also will need to be
2 properly designated.

- 3 • **Solid Waste Regulations** — WAC 173-304 implements the Solid Waste Management Act
4 (RCW 70.95) and establishes the Minimum Functional Standards for Solid Waste Management.
5 Solid waste facilities, including landfills, transfer stations, wood waste sites, and concrete
6 recycling facilities, are permitted and monitored to ensure proper handling of wastes to prevent
7 environmental contamination. Solid waste generated by this project could include soil
8 contaminated at concentrations below dangerous waste criteria, wood, and construction debris in
9 addition to the typical municipal waste. These waste types can be disposed of as solid waste at an
10 appropriately permitted facility.
- 11 • **Washington State Environmental Policy Act (SEPA)** —WAC 197-11 and WAC 468-12
12 implement SEPA, which provides a way to identify environmental effects that may result from
13 proposed actions. Information provided during the SEPA review process helps agency decision-
14 makers, applicants, and the public understand how a proposal would affect the environment.
15 Assessment of effects associated with hazardous materials and waste, and demonstration that the
16 project has avoided or minimized those potential effects, are components of the SEPA review
17 process.
- 18 • **Water Pollution Control Act** — RCW 90.48 implements two administrative regulations that
19 control pollution in state waters. Water Quality Standards for Surface Waters of the State of
20 Washington, WAC 173-201A, establishes standards for toxic substances, conventional
21 parameters (e.g., pH, dissolved oxygen, temperature), and aesthetic values for marine and fresh
22 surface waters. The Water Quality Standards for Ground Water of the State of Washington
23 contain similar regulations for groundwater, with special emphasis on radionuclides and
24 carcinogens, due to potability issues. Any construction or operational activities associated with
25 the project must comply with Washington’s water quality standards. Wastewater Discharges to
26 Surface Waters, WAC 173-220, regulates discharges to surface water from construction projects.
27 Under this program, it is unlawful to discharge polluting matter to surface waters without an
28 NPDES permit. A general NPDES permit for construction would be required for the project.
29 Wastewater Discharges to the Ground, WAC 173-216, regulates discharge of stormwater to
30 detention basins if this water contains unacceptable concentrations of polluting matter.
- 31 • **Washington Industrial Safety and Health Act (WISHA)** — RCW 49-17 implements the
32 Occupational Health Standards (WAC 296-62). RCW 49-17 also implements Safety Standards
33 for Construction Work (WAC 296-155) and the Safety Standards for Asbestos and Encapsulation
34 (WAC 296-65). These standards include rules covering operations at known hazardous waste
35 sites and initial investigations of sites identified by the government, which are conducted before

NE 45th Street Viaduct

1 the presence or absence of hazardous substances has been ascertained. Also included are rules on
2 site assessment and control, training, protective equipment, and emergency response. All
3 construction activities associated with the project must comply with WISHA. WISHA includes
4 specific procedures for work with lead-based paint and asbestos-containing materials.

- 5 • **WSDOT Environmental Procedures Manual M31-11 (April 2007)** establishes policies and
6 procedures for dealing with hazardous or problem materials encountered or potentially
7 encountered on property WSDOT owns, manages, plans to sell, or plans to purchase.

8 The City of Seattle (the City) also has statutes that pertain to hazardous materials and wastes. These
9 requirements, listed below, take precedence over all other laws for governing business and operations
10 within the City, where the requirements are at least as stringent as the state or federal requirements.

- 11 • **Seattle Municipal Code Title 15** – Street and Sidewalk Use includes provisions of the code that
12 relate to use, maintenance, and construction of streets and sidewalks. This code addresses dust
13 suppression requirements during construction and demolition. It also requires the timely removal
14 of excavated soil from streets and sidewalks.

- 15 • **Seattle Municipal Code Title 22.800** – Stormwater, Grading and Drainage Control Code
16 establishes the City’s authority to regulate stormwater within the City. The City has published a
17 four-volume manual that provides guidance for site activities that could affect stormwater. The
18 manual also outlines mitigation that could be applicable to protect stormwater quality.

- 19 • **Seattle Municipal Code Title 25** – Environmental Protection and Historic Preservation adopts
20 the uniform requirements of WAC 197-11 for compliance with SEPA and to establish local
21 procedures and policies where permitted. In particular, environmental health requires assessment
22 for potential exposure to toxic chemicals and mitigation planning. The code also has additional
23 requirements if the site is under an order, agreed order, or decree from Ecology.

24

NE 45th Street Viaduct

- 1 **ATTACHMENT B**
- 2 Regulatory Search Report
- 3

NE 45th Street Viaduct

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NE 45th Street Viaduct

- 1 **ATTACHMENT C**
- 2 Selected Historical Source Information

FOLIO
10477
PERMIT NO.

ADDITION Section 9 Tax Lot
Range 4 EWM, Block
Tax Lot 83 Tract
Legal ex book

CODE 0010 MAJOR 092504 MINOR 9183

LIMITS	ROAD	SCHOOL	WATER	FIRE	SEWER	FLOOD ZONE	HOSPITAL	PK & REC	METRO		
SEATTLE-1		/									
YR	AC	BLDGS	TOTAL	BY	DATE	REASON	CD	FEE OWNER	DATE	FILE #	PRICE
1971	82,800	-	82,800	ML	8-69	50% down loan		Community of Wash	10/17/60	Vol 4089 Pg 243	
1972	99,960	369,720	369,080	ES	12-7-70	New Employment picked up by Jacobs				RV Co	

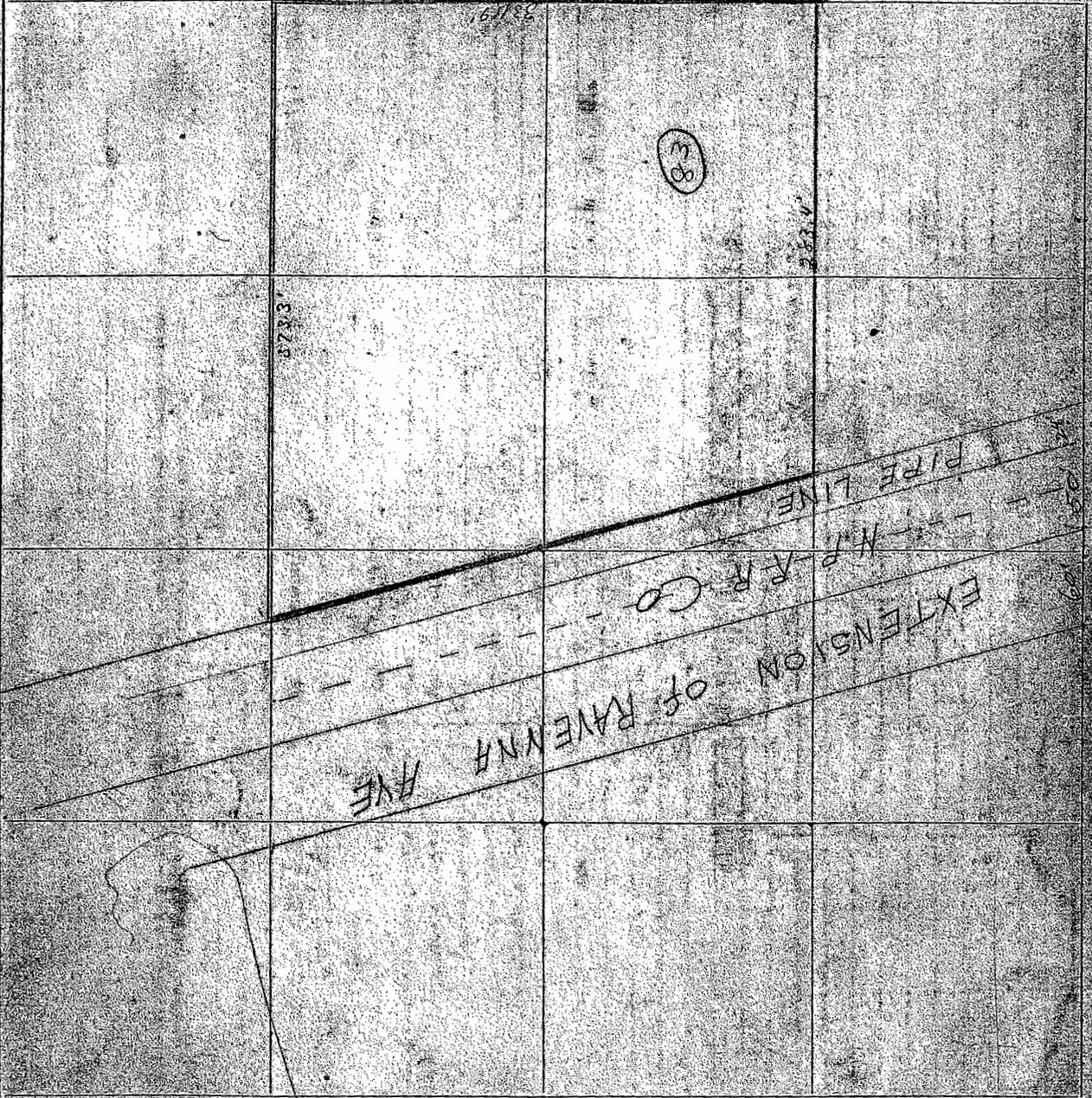
LAND CLASSIFICATION AND SEGREGATION

THIS SQUARE INDICATES 100 ACRES

INDICATE BY AREAS USE OF LAND BY MARKS AND TYPE BY LETTERS

SECTION 28 9
TWP 25 N
RANGE 4 E

TAX LOT NO 83
PARCEL NO



AERIAL PHOTO
QUARTER MAP
PLAT MAP # 116

LAND USE ACRES

11.1 CULTIVATED _____

PASTURE _____

00 TIMBER _____

XX STUMP _____

.. GRAVEL OR USELESS _____

Y SWAMP _____

LAND TYPE ACRES

A SHOT CLAY _____

B BOG _____

C PEAT _____

D SILT _____

E LOAM _____

F GRAVEL _____

G BOTTOM _____

H UPLANDS _____

K HILLY _____

IF USED AS A FEET SCALE ONE INCH = 100 FEET OR 160 ACRES OR 2640 FEET
 IF USED AS A 100 FT SCALE ONE INCH = 100 FEET OR 40 ACRES OR 1320 FEET
 IF USED AS A 200 FT SCALE ONE INCH = 200 FEET OR 10 ACRES OR 660 FEET

Legal on back

ADDITION **TAX LOT**
 SECTION **9** Twp. **25** Range **4** Ewm. Block **372** Lot or Tract
 PERMIT NO. **BN 12340** Tax Lot
 DATE **12-10-10** Address **2720-30 NE. 45TH ST.**

SPLIT VALUATION

LIMITS	ROAD	SCHOOL	WATER	FIRE	SEWER	HOSPITAL	METRO	PK & REC				
See 1												
092504-372 8100 9100 0010												
YR	AC	LAND	BLDGS	TOTAL	BY	DATE	REASON	CD	FEE OWNER	DATE	FILE #	PRICE
'63		8100	2200	10300	E.H.	6/25/62	Merge K-3357 2200 void New Ser. Sta.					
'64		8100	9450	17550	DM	12/20/62						
1965		9100			LFM	6-10-64	Split Valuation per City Dept					11-2969
1965			9100	17200	"	"	"					"
1969		8100	8250	16350	SL	10/13/67	R.V					
1969					"	"	"					
69		14000	8250	22250	SL	4-16-68	Per					
BAL. OF A.V. SEE 372-5												
71	L	28000	16500	44500	T	092504-9372-0	8/9					
72		45620	17750	63370	EM	12-10-70	R.V (U)					
1972												
1973		45620	18420	64040	EM	8-2-71	U.G tanks					
1973												
BAL. OF A.V. SEE 372-5												
72	L	36222	14094	50316	T	092504-9372-0	9/71					
73	L	45620	17750	63370	T	092504-9372-0	9/71					
1973		45620	18420	64040	EM	8-2-71	U.G tanks					
1973												
BAL. OF A.V. SEE 372-5												
1973		45620	18420	64040	EM	8-2-71	U.G tanks					

(See attached below)

(Systems connection)

FOLIO 10470

ADDITION TAX LOT

Legal on back

PERMIT NO. BN 12340

Section 9 Twp. 25 Range 4 Ewm. Block Tax Lot 372 Lot or Tract

DATE 8-7-62

Address 2720-30 N.E. 45TH ST.

Fee Owner TEXACO INC.

Architect HC NELSON

Contractor STEWART-MARTENS CO.

Condition of Exterior: A Interior: A Foundation: A Floor Plan: Good X Accept: Good

USE SERV. STA.	ROOF CONSTRUCTION	FLOOR FINISHERS	Tile Lino.	PLUMBING
1 No. Stories	METAL	Fir	Baths	28 No. Fixtures
4 No. Rooms	Fl. Lam.	Maple	Sq. Ft. Floors	2 Toilets
Basement	Mill Construction	Oak	Sq. Ft. Walls	2 Tub, Log or Pem.
1 No. Offices	Rein. Concrete	Lino.	LIn. Ft. Dr. Bds.	1 Sinks
No. Apartments	No. Trusses	Cement	Sq. Ft. Floors	1 Sinks
1 rm. 2 rm. 3 rm.	Wood Steel	Terrazo	Sq. Ft. Walls	1 Sinks
4 rm. 5 rm. 6 rm.	ROOFING MATERIAL	Rasoolith	LIn. Ft. Dr. Bds.	1 Sinks
	Tar and Gravel	Tile CER. OFFFLAYS.	Kil's Fl. Walls	1 Showers (Tub) (Stall)
	Or. AU			1 Laundry Trays
				1 H. W. Tank Fl. Drains
				1 Sprink. Sys. No. Hds.

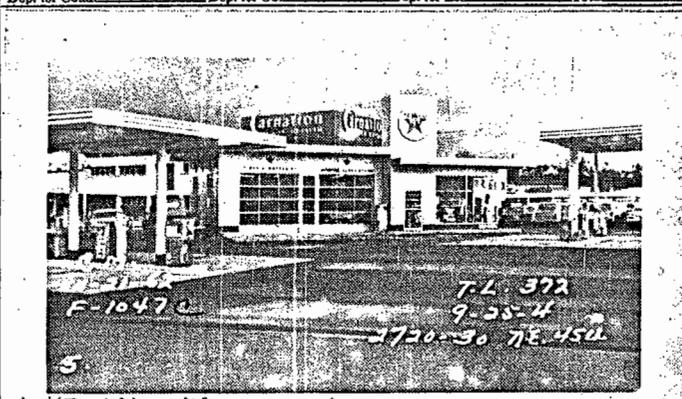
TYPE OF CONSTRUCTION

- STEEL
- Frames Enamel
- Single Double
- Ordinary Masonry
- Mill Construction
- Class A Rein. Con.
- Stru. Steel and Con.
- Tile Brick
- Con. Rein. Con.
- Good Med. Cheap

Date Built 1962 Finished Unfinished Remodeled

Effective Age 3 Years Future Life _____ Years

Dep. for Cond. _____ Dep. for Ob. _____ Dep. for Es. _____ Total _____



HEATING FA100%

Year	Assessed Value
1964	9450
1969	8550
71	17100
72	17750

FOUNDATION

- Mud Sills
- Post and Pier
- Brick
- Concrete
- Pile

BASEMENT NO

- Full %
- Sub-Basement
- Size
- Garage No. Cars
- Plastered
- Living Rooms
- Service Rooms

Auto.	Elec.	Untreated	Flex. Cable
1	1000		
4	4000		
3	PLATE STEEL POLE		
2	A.W. WELLS		
	CRK		
	Hyd.		

EXTERIOR WALL CONST.

- Single Double
- 2" x 4" Stud Walls
- 2" x 6" Stud Walls
- Brick Walls
- Brick with Pilasters
- Concrete Walls
- Con. with Pilasters
- Tile Walls
- Rein. Con. Skel.
- Filler Walls
- Laminated Walls

INTERIOR WALLS

- Stud and Plaster
- Lam. Plasterd
- Plywood
- Coiled ENAMELED S.M.
- Plaster Board
- Painted
- Stain Varnish
- Kalsomine
- Whitewashed
- Unfinished

C. H. GROUND FLOOR AREA 1370

TOTAL FLOOR AREA

EXTERIOR FACING

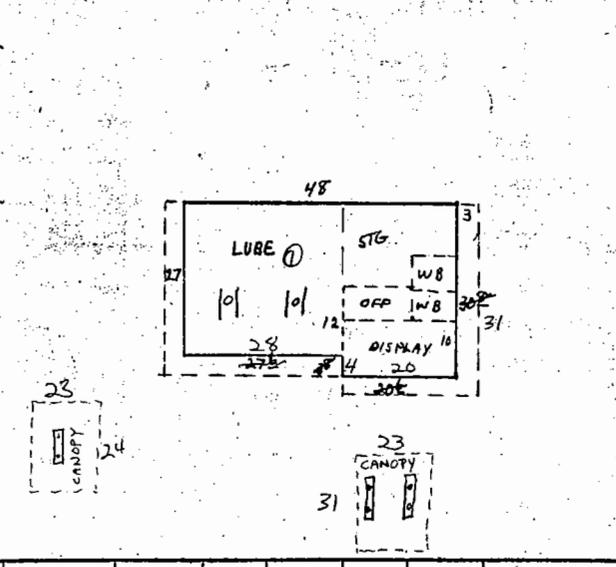
- Siding Shingles
- Shakes Stucco
- Brick Veneer
- ENAMELED S.M. Kind
- Stones Cast S.
- Terra Cotta
- Struc. Glass
- Rein. Steel

INTERIOR TRIM

- Fir
- Mah. Oak
- Metal
- METAL Doors
- METAL Windows
- Stained
- Varnished
- Painted
- Unfinished

FLOOR CONSTRUCTION

- Mill Construction
- Rein. Con.



Other Buildings	Construction	Floor	Roof	Stories	Dimensions	S. F. Area	Factor	Value	% Dep.	Depron.	Net Value
Garage											

372-5

59 F1047

DISTRICT 1B ADDITION EXPOSITION HEIGHTS TRACT A UNREC Section 9 Twp. 25 Range 4 Ewn. Block A Tract or lot 9

PERMIT No. 337137 AMT. 2500 SHEET 221

DATE 4-2-40 2724-E 45th Bldg-B

Fee Owner. Condition of Exterior GOOD Interior GOOD Foundation GOOD Address of Property 3050 E 45th Architect. Floor.

USGAS STATION ROOF CONSTRUCTION FLOOR FINISHES Tile Lino. PLUMBING

TYPE OF CONSTRUCTION Date Built 1940 Finished Unfinished Remodeled

REPRODUCTION COST Factor Make Up table with columns for Factor, Plus or Minus, Dimensions, Factor, Cost

FOUNDATION Mud Sills Post and Pier Brick Concrete Pile

BASEMENT Full Sub-Basement Size Garage No. Cars Floors Plastered Living Rooms Service Rooms



HEATING Stove Pipeless Furnace Gravity H. A. Air Cond., Fan Arcola I-Pipe Steam 2-Pipe St. or Vapor Hot Water Oil Burner Coal Stoker

WIRING Knob & Tube Flex Cable Conduit Power Wiring Range Wiring No. Outlets

ELEVATORS Pass. Freight Auto. Elec. Man. Hyd. Man.

EXTERIOR WALL CONSTR. INTERIOR WALLS GAS STATIONS C. H. GROUND FLOOR AREA TOTAL FLOOR AREA 984

Table with columns: Other Buildings, Construction, Floor, Roof, Stories, Dimensions, S. F. Area, Factor, Value, % Dep., Deprec., Net Value

DISTRICT: **1** SECTION: **1** TWP: **N** RANGE: **A** TRACT OR LOT NO: **9** NAME: **EXPOSITION HEIGHTS Tract A Unrec**

PERMIT NO: **300597** ORIGINAL COST: **\$**

3. ADDRESS --- PROPERTY: **3050 E. 45th Street.** CONT. PURCHASER: **M. E. McLeod et ux** (10-8-27)

4. FEE OWNER: **M. E. McLeod et ux** CONTRACTOR: **None**

5. ARCHITECT: **None**

BASEMENT: **None**

6. BUILDING: **Gas Station**

7. CONDITION: EXTERIOR: **Good** INTERIOR: **Good** FOUND: **Good**

8. MAIN SUPPORT COLUMN: **Concrete** INCH CENTERS BRIDGED

9. FIRST FLOOR JOIST: **Concrete** SPAN: **FT.**

10. BUILDING: **None**

11. GROSS INCOME \$: **None** NET INCOME \$: **None**

12. DEPRECIATION: COND. **33%** OBSLSE. **None** % EGAL SUIT. **None** % TOTAL **None**

YEAR BUILT: **1926** REMODELED: **None**

EFFECTIVE AGE: **10** YEARS FUTURE LIFE: **None** YEARS

DIMENSIONS: **See Floor Plan** SQUARE FEET: **None**

STORE FRONTS: **None**

EXTERIOR: **Cedar Frame.**

FOUNDATION: **Concrete**

ROOF: **Shingle**

INTERIOR: **Ceiled. Tongue & Groove.**

Fir Trim.

FLOORS: **Cement**

FIRE PLACE: **None**

PLUMBING: **4 Fixtures. 2 Toilets, 2 Basins. Average.**

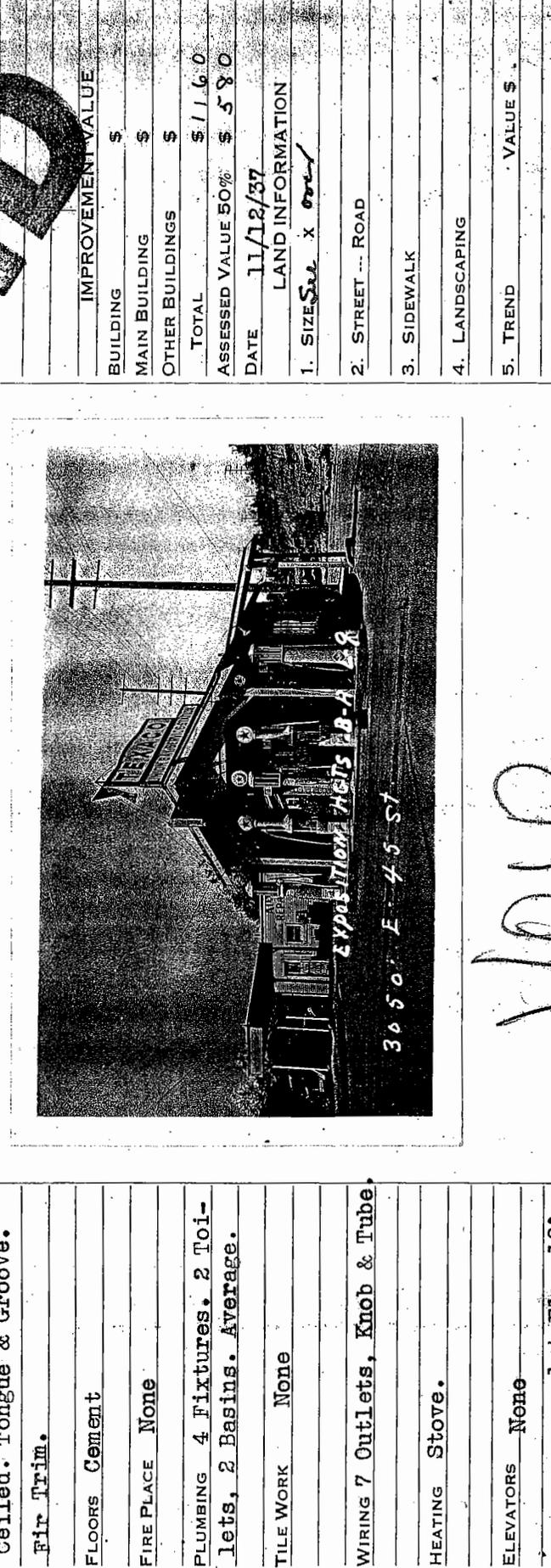
TILE WORK: **None**

WIRING: **7 Outlets, Knob & Tube.**

HEATING: **Stove.**

ELEVATORS: **None**

CEILING --- HEIGHT: **1st Flr. 10'**



VOID

VOID

IMPROVEMENT VALUE

BUILDING \$

MAIN BUILDING \$

OTHER BUILDINGS \$

TOTAL \$ **1160**

ASSESSED VALUE 50% \$ **580**

DATE: **11/12/37**

LAND INFORMATION

1. SIZE: **See x only**

2. STREET: **--- ROAD**

3. SIDEWALK

4. LANDSCAPING

5. TREND VALUE \$

6. USE

7. DISTRICT: **10M1D - COMMERCIAL**

LAND CLASSIFICATION AND SEGREGATION

SECTION S E 9

TWP. 25

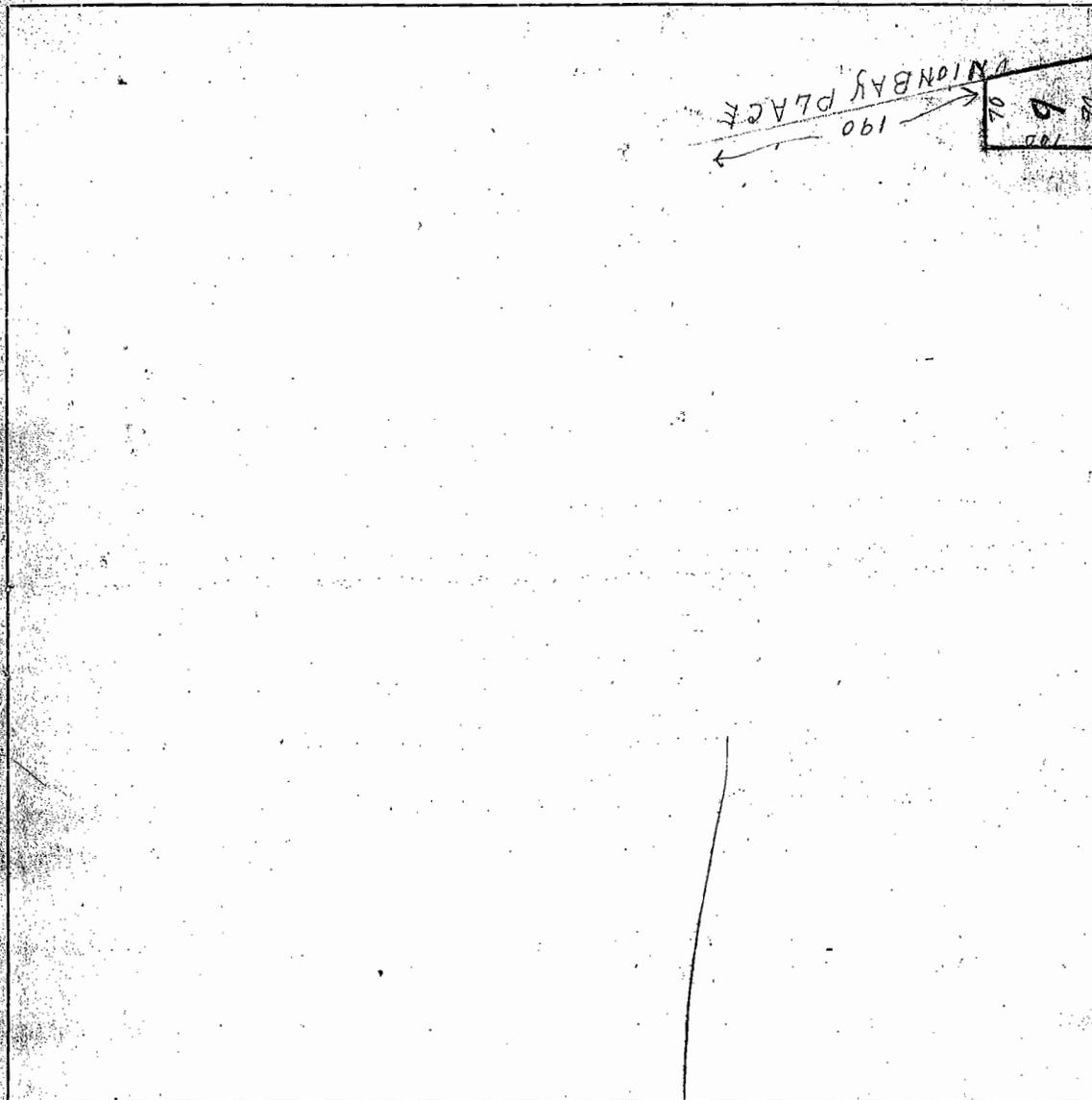
RANGE 4

AERIAL PHOTO

QUARTER MAP

PLAT MAP

* 59



E 45

TAX LOT NO.

PARCEL NO.

LOT NO.

BLOCK NO.

FOLIO

1047-C

ADDITION

Section 9 Twp. 25 Range 4 Ewm Block Tract or Lot

365

S105' of W125' of E175' of NW 1/4 Sec 9 Twp 25 N Range 4 E Wm Block 365

PERMIT No.

384997

DATE

12-31-47

Fee Owner

Condition of Exterior AX Interior AX Foundation AX

USE serv. sta

No. Stories 2

No. Rooms 2

Basement 1

No. Offices

No. Apartments

1 rm. 2 rm. 3 rm.

4 rm. 5 rm. 6 rm.

ROOF CONSTRUCTION

Frame Lam

Mill Construction

Rein. Concrete

No. Trusses

Wood Steel

FLOOR FINISHES

Fir Maple

Oak 2" x 6" T&G

Lino. 3" x 6" T&G

Cement

Terrazo

Raocolith

Tile

Tile Lino.

Fl. Walls

Sq. Ft. 2 Floors

Sq. Ft. 2 Walls causing

Lin. Ft. 2 Dr. Bds.

Sq. Ft. 1 Floors

Sq. Ft. 1 Walls

Lin. Ft. 1 Dr. Bds.

Kit's. Fl. Walls

PLUMBING

No. Fixtures 2

Toilets 2

Tube, Leg or Pan. 1

Basins, Ped. 2

Sinks 1

Urinals 1

Showers (Tub) (Stall)

Laundry Trays

H.W. Tank Fl. Drains

Sprink. Sys. No. 0 Hds.

TYPE OF CONSTRUCTION

Frame

Single Double

Ordinary Masonry

Mill Construction

Class A Rein. Con.

Stu. Steel and Con.

Tile Brick

Con. Rein. Con.

Good. Med. Cheap.

ROOFING MATERIAL

Tar and Gravel

Or X Metal

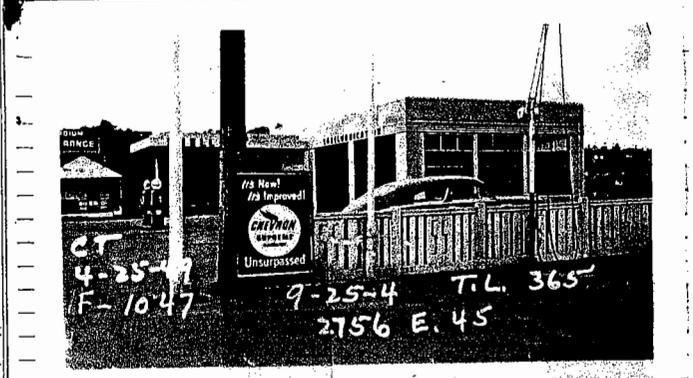
Finished Unfinished

Remodeled 54

Effective Age 1948 Years

Future Life 40 Years

Dep. for Cond. 1948 Dep. for Ob. 1948 Dep. for Es. 1948



HEATING FA100%

Store

Pipeless Furnace

Gravity H.A.

Hot Cond. Pan

3500 FA

1-Pipe Steam

2-Pipe St. or Vapor

Hot Water

Oil Burner

Coal Stoker

FOUNDATION

Mud Sills

Post and Pier

Brick

Concrete

Pile

BASEMENT

Full %

Sub-Basement

Size x

Garage No. Cars

Floors

Plastered

Living Rooms

Service Rooms

Main Building	
Other Buildings	
Total	
Assessed Value 50%	
Sup. Building A. V.	
Total	

WIRING

Knobe & Tube

Flex Cable

Conduit

Power Wiring

Range Wiring

No. Outlets

ELEVATORS

Pass. Freight

Auto. Elec.

Man. Hyd.

Man. Mch.

EXTERIOR WALL CONSTR.

Single Double

2" x 4" Stud Walls

2" x 6" Stud Walls

Brick Walls

Brick With Filasters

Concrete Walls

Con. With Filasters

Tile Walls

Rein. Con. Skel.

Filler Walls

Laminated Walls

INTERIOR WALLS

Stud and Plaster

Lam. Plastered

Ply Wood

Ceiled

Plaster Board

Painted

Stain Varnish

Kalsomine

Whitewashed

Unfinished

GAS STATIONS

Frame

Metal

Masonry

Plastered or Ceiled

Floors

SERVICE BUILDING

Frame

Metal

Masonry

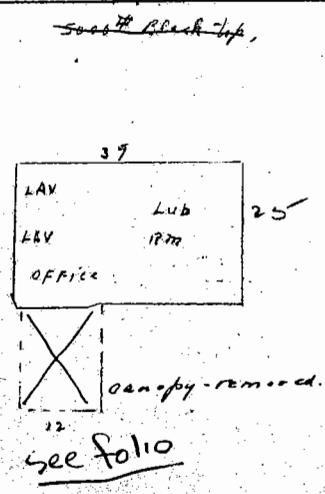
Plastered or Ceiled

Floors

C. H. GROUND FLOOR AREA

S. B.	
B	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	

TOTAL FLOOR AREA 975



EXTERIOR FACING

Siding Shingles

Shakes Stucco

Brick Veneer

Stone Cast S.

Terra Cotta

Struct. Glass Metal

INTERIOR TRIM

Fir

Mah. Oak

Metal

Doors

Windows

Stained

Varnished

Painted

Unfinished

TANKS, ETC., LIST

1 6000

2 3000

2 Hisc wells

2 Pump Compt

2 Hoists: Elec. Hyd.

DOCKS AND PIERS

Treated Piles and Timbers

Untreated

Treated Piles only

Average Length

Paved

FLOOR CONSTRUCTION

Joint Con. Size x

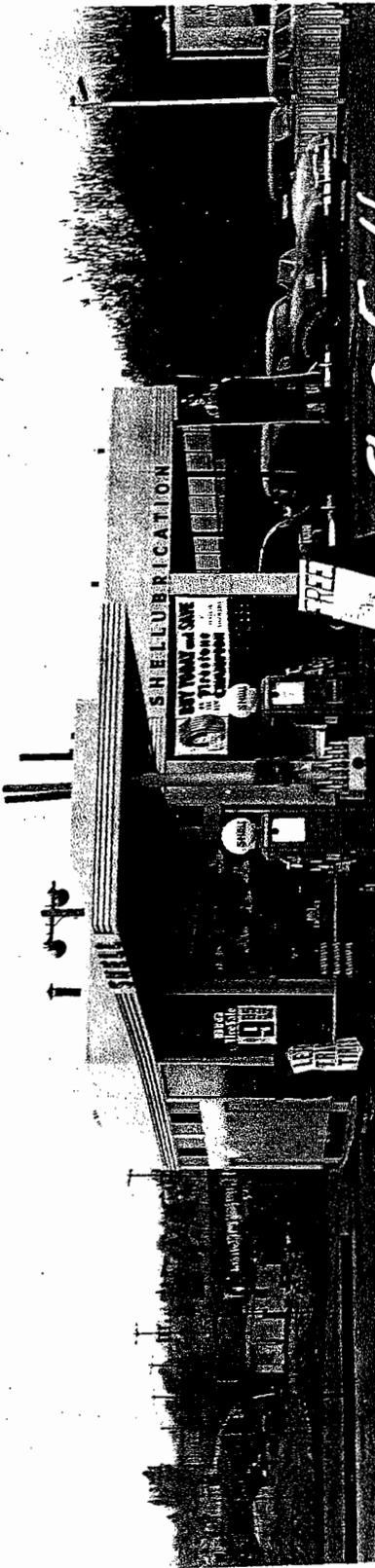
O. C. In Bridge

Mill Construction

Reia. Con.

Other Buildings	Construction	Floor	Roof	Stories	Dimensions	S.F. Area	Factor	Value	% Dep.	Deprac.	Net Value
Garage	TANK SUMP										
	PAV	Conc.				5804					
	PAV	ASP				6253					
	CANOPY	MTL				704	C-7				

TANK STL 8000 GAL

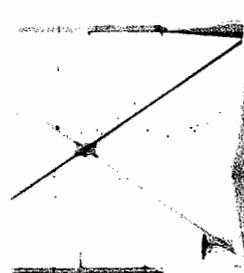


K
4.27.50
F1047

T.L 363 9.25-4

2756 E 45

(2)



HT
9-18-56
F-1047

9-25-4-72-365
2765 E-45th

FOLIO 1047

ADDITION EXPOSITION HEIGHTS-A" Section 9 Twp 25 Range 4 Evm Block TRA Tract or Lot 12 State legal on back of card

PERMIT No. 411286

DATE 10-26-51

3040 E. 45th

Fee Owner Condition of Exterior Good Interior Good Foundation Good

USE DRIVE IN No. Stories Rest No. Stores No. Rooms Basement No. Offices No. Apartments 1 rm. 2 rm. 3 rm. 4 rm. 5 rm. 6 rm.

ROOF CONSTRUCTION Frame Lam. Mill Construction Reia. Concrete No. Trusses Wood Steel

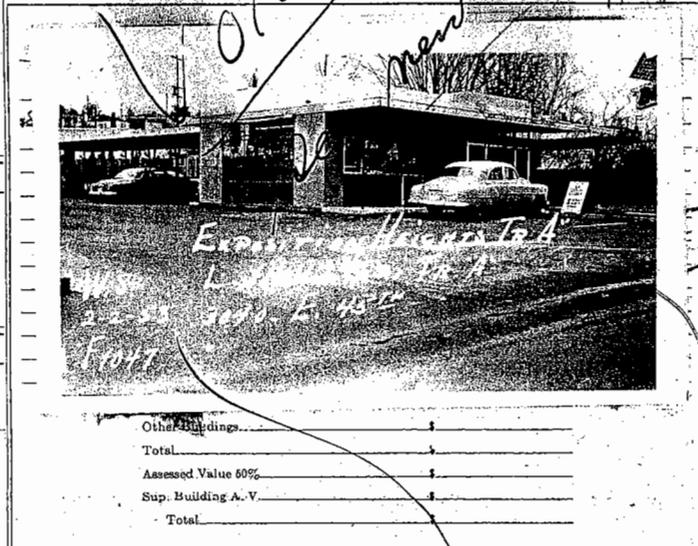
FLOOR FINISHES Fir Maple Oak 2" x 6" T&G Lino. 3" x 6" T&G Cement Terrazzo Raecolith Tile ASPH.

Baths Fl. Walls Sq. Ft. Floors Sq. Ft. Walls Lin. Ft. Dr. Bds. Sq. Ft. Floors Sq. Ft. Walls Lin. Ft. Dr. Bds.

PLUMBING No. Fixtures Toilets Tubs, Leg or Pem. Basins, Pod. Sinks Urinals Showers (Tub) (Stall) Laundry Trays H.W. Tank Fl. Drains Sprink. Sys. No. Hds.

TYPE OF CONSTRUCTION Frame METAL Single Double Ordinary Masonry Mill Construction Class A Rein. Con. Stru. Steel and Con. Tile Brick Con. Rein. Con. Good Med. Cheap

Date Built 1937 Finished MAR 3 1952 Unfinished Remodeled 1951-2 Effective Age Years Future Life Years Dep. for Cond. Dep. for Other Total



HEATING Stove Pipeless Furnace Gravity H. A. Air Cond. Fan Arcola 1-Pipe Steam 2-Pipe St. or Vapor Hot Water Oil Burner Coal Stoker

FOUNDATION Mud Sills Post and Pier Brick Concrete Pile

BASEMENT Full Sub-Basement Sire. Garage No. Cars Floors Plastered Living Rooms Service Rooms

WIRING CODE Knob & Tube Flex Cable Conduit Power Wiring Range Wiring No. Outlets

ELEVATORS Pass. Freight Auto. Elec. Man. Hyd. Man.

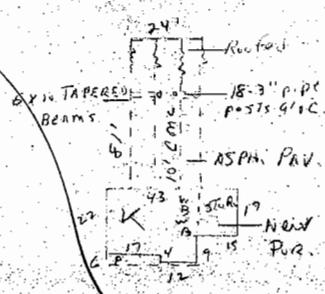
EXTERIOR WALL CONSTR. Single Double 2" x 4" Stud Walls 2" x 6" Stud Walls Brick Walls Brick With Pilasters Concrete Walls Con. With Pilasters Tile Walls Rein. Con. Skel. Filler Walls Laminated Walls

INTERIOR WALLS Stud and Plaster Lam. Plastered Ply Wood Ceiled Plaster Board. Painted Stain Varnish Kalsomine Whitewashed Unfinished

GAS STATIONS Frame Metal Masonry Plastered or Ceiled Floors

Table with columns S, D, B, 1-22 for structural details.

GROUND FLOOR AREA 915 TOTAL FLOOR AREA



EXTERIOR FACING Siding Shingles Shakes Stucco Brick Veneer Kind Stone Cast S. Terra Cotta Struct. Glass Trim

INTERIOR TRIM Fir Mah. Oak Metal Doors Windows Stained Varnished Painted Unfinished

SERVICE BUILDING Frame Metal Masonry Plastered or Ceiled Floors

TANKS, ETC., LIST Hoists: Elect. Hyd.

DOCKS AND PIERS Treated Piles and Timbers Untreated Treated Piles only Average Length Paved

FLOOR CONSTRUCTION Joint Con. Sire. O. C. In Bridge Mill Construction Rein. Con.

Table with columns: Other Buildings, Construction, Floor, Roof, Stories, Dimensions, S.F. Area, Factor, Value, % Dep., Deprec., Net Value.



FOLIO 1047

ADDITION EXPOSITION HEIGHTS (TR. A) UNREC. Section 9 Twp. 25 Range 4 Ewm. Block Lot or 12 + W 50 etc. Tax Lot Tract A 5150' of L 12 + W 50' L 11

+ page 8 (see back)

PERMIT NO. 4, 286

DATE 1-2-31

Address 3040 - E 45th Bldg B

Fee Owner THE BURKEMASTER Architect Decker-Christensen

Condition of Exterior G Interior G Foundation G Floor Plan: Good

USE Drive in, P.P.P. No. Stories No. Storerooms No. Rooms Basement No. Offices No. Apartments 1 rm. 2 rm. 3 rm. 4 rm. 5 rm. 6 rm.

ROOF CONSTRUCTION Frame Lam. Mill Construction Rein. Concrete No. Trusses Wood Steel ROOFING MATERIAL Tar and Gravel Or. B & G

FLOOR FINISHES Fir Maple Oak 2"x8" T&G Lino. 3"x8" T&G Cement Terrazzo Raecolith Tile

Tile Lino. Baths Sq. Ft. Floors Sq. Ft. Walls Lin. Ft. Dr. Bds. Sq. Ft. Floors Sq. Ft. Walls Lin. Ft. Dr. Bds. Kit's Fl. Walls

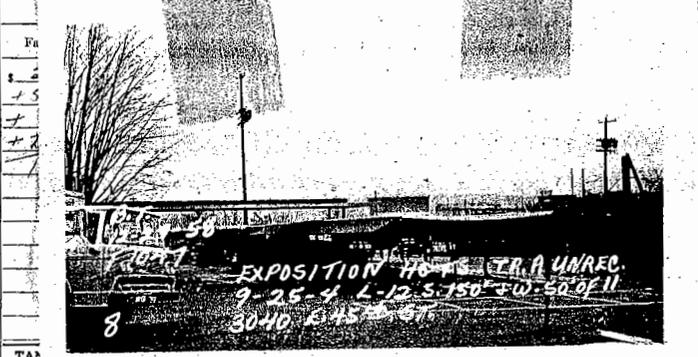
PLUMBING No. Fixtures Toilets Tub, Leg or Pem. Basins, Ped. Sinks Urinals Showers (Tub) (Stall) Laundry Trays H. W. Tank Fl. Drains Sprink. Sys. No. Hds.

TYPE OF CONSTRUCTION Frame Single Double Ordinary Masonry Mill Construction Class A Rein. Con. Stra. Steel and Con. Tile Brick Con. Rein. Con. Good Med. Cheap

Date Built 1937 Effective Age 19 Years Future Life 1951-52 1952-4 ADP Dep. for Cond. Dep. for Job. Dep. for Est. Total 16.7

HEATING 2 5 m. A 1000 H.P. Stoves Pipeless Furnace Gravity H. A. Air Cond., Fan Suspended Gas, Hot Water Steam Heat Hot Water Oil Burner

FOUNDATION Mud Sills Post and Pier Brick Concrete Pile



BASEMENT Full Sub-Basement Size Garage No. Cars Floors Plastered Living Rooms Service Rooms

Hoists: Elec. Hyd. Auto. Elec. Man. Hyd. Man. Untreated Treated Piles only Average Length Paved Knob & Tube Flex. Cable Conduit Power Wiring Range Wiring No. Outlets

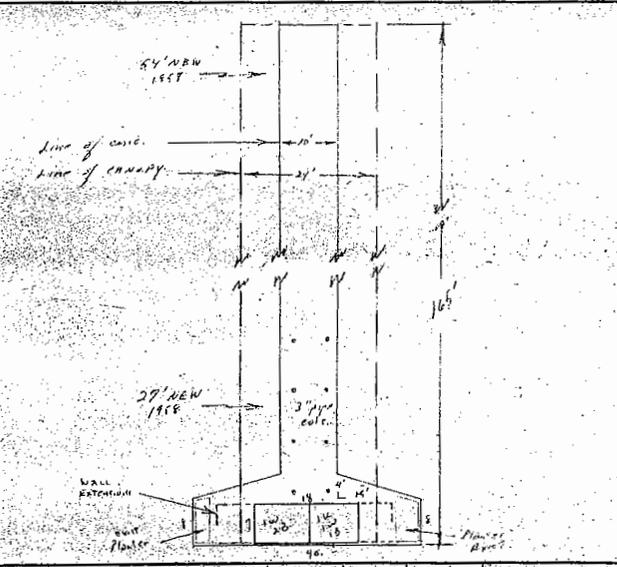
Year Assessed Value 1941 3700 1942 6400

EXTERIOR WALL CONST. Single Double 2" x 4" Stud Walls 2" x 6" Stud Walls Brick Walls Brick with Pilasters Concrete Walls Con. with Pilasters Tile Walls Rein. Con. Skel. Filler Walls Laminated Walls

INTERIOR WALLS Stud and Plaster Lam. Plastered Plywood Ceiled Plaster Board - L.V. Painted Stain Varnish Kasomino Whitewashed Unfinished

C. H. B 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22

GROUND FLOOR AREA 126 TOTAL FLOOR AREA



EXTERIOR FACING Siding Shingles Shakes Stucco Brick Veneer Kind Stone Cast S. Terra Cotta Struc. Glass Trim

INTERIOR TRIM Fir Mah. Oak Metal WOOD Doors Stained Varnished Painted Unfinished

FLOOR CONSTRUCTION Joist Con. Size O.C. In Bridg. Mill Construction Rein. Con. 5/16"

Other Buildings	Construction	Floor	Roof	Stories	Dimenaions	S. F. Area	Factor	Value	% Dep.	Deprec.	Net Value
Garage											

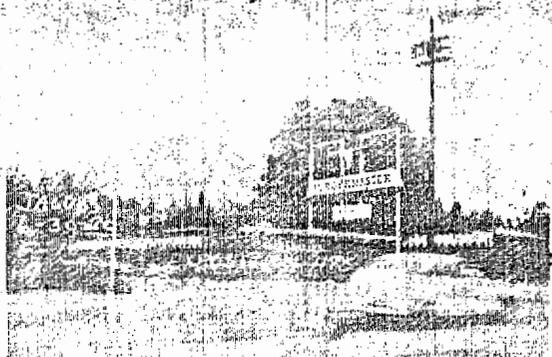
FOLIO 12-1-11 SECTION 7 Twp. Range E.W.M. Block 11 Lot or 12-1-11
 PERMIT NO. 51501212 + 1051211 Tax Lot Tract
 DATE Aug 6-25-10 Address 1915 S. E. 15th LAND TRAIL
EA. 3-5700 RA 1510

Fee Owner MOORE CONSTRUCTION CO. Architect Contractor
 Zoning Condition of Exterior Interior Foundation Floor Plan Good Accept Poor

USE	ROOF CONSTRUCTION	FLOOR FINISHES	PLUMBING
No. Stories <u>1</u>	Frame-Joist <input checked="" type="checkbox"/>	Fir <input type="checkbox"/> Maple <input type="checkbox"/>	Bath Floor <u>13</u>
No. Stories	Mill-Deck	Oak <input type="checkbox"/> 2x6TG	Bath Walls <u>4</u>
No. Rooms	Rein. Conc. <u>GLB</u>	Lino <input type="checkbox"/> 3x6TG	Tub Recess
Basement	Steel Fr. Metal Deck <input checked="" type="checkbox"/>	Cement <input checked="" type="checkbox"/> Lgtwtg Conc.	Drain Bds. <u>4</u>
No. Offices <u>1</u>	Trusses <u>5</u> on	Terrazzo <input checked="" type="checkbox"/> Vinyl Tile	Vanities <u>3</u>
No. Apartments	Wood <u>Steel</u>	Asphalt Tile <input type="checkbox"/>	No. Fixtures
1. m. <input type="checkbox"/> 2. m. <input type="checkbox"/> 3. m. <input type="checkbox"/>			Toilets <u>Urinals</u>
4. m. <input type="checkbox"/> 5. m. <input type="checkbox"/> 6. m. <input type="checkbox"/>			Tubs Leg. or Pem.
			Basins <u>Dr. Fins.</u>
			Sinks
			Washers <u>Dryers</u>
			Showers (tub) (stall)
			H.W. Tanks <u>Ldy. Trays</u>
			D. Washers <u>Disposals</u>

Date Built 1956 Date Add. Built Finished Unfinished Remodeled
 Effective Age 10 Years Future Life Years
 Dep. for Cond. FAC Dep. for Ob. Dep. for Es. Total
 Sprinkler Sys. HEATING

TYPE OF CONSTRUCTION
 Frame
 Metal-Prefab
 Ordinary Masonry
 Mill Construction
 Class A Rein. Conc.
 Struc. Steel and Conc.
 Struct. Steel, Frame
 or
 QUALITY-TYPE
 Good Med. Cheap
 FOUNDATION
 Mud Sill Post Pier
 Conc. Brick
 Load Hgt. Piling
 BASEMENT
 Full % Part.
 Sub-Basement
 Size
 Garage No. Cars
 Floors
 Plastered Pl. Bd.
 No. Apartments
 Service Rooms



HEATING
 Elec. Oil Gas
 H.W. St. H.A.
 B.Bd. Suspended
 FHA/38 Pipeless
 A. Cond. Wall Unit
 Comb. Unit Custom
 Refrig. Convector
 Heat Pump Fireplace

YEAR 72 ASSESSED VALUE 27390

MISC. TANKS, Etc.	ELEVATORS	DOCKS AND PIERS	WIRING
HOISTS: Elec. Hydr.	Pass. <u>Frigh</u>	Hvy. <u>Med.</u> <u>Lgt</u>	Knob & Tube
<u>4 COMP. 47 STAIRS - 1</u>	Auto. <u>Elec.</u>	Untrtd. Pile Tmbr.	Flex. Cable
<u>7211X7 UNTRTD CON. PILES</u>	Man. <u>Hydr.</u>	Conc. Piles & Bms	Conduit
<u>7211X7 UNTRTD CON. PILES</u>	Escalators	Ttrd. Pile Tmbr.	Pwr. Wiring
<u>1 UNTRTD CON. PILE</u>	Stops <u>Speed</u>	Paved	Range Wiring
	Deck	Dolphins	Outlets

EXTERIOR WALL CONST.	INSULATION	INTERIOR WALLS & CEILING	GROUND FLOOR AREA
Single <input type="checkbox"/> Double <input type="checkbox"/>	Exter. <u>Partitions</u>	Stud <input checked="" type="checkbox"/> Wood <input type="checkbox"/> Metal	C. Hgr. <u>SB</u>
Stud Walls	Roof <u>Floor</u>	Plaster <input checked="" type="checkbox"/> Dry Wall	1
Brick <input type="checkbox"/> Bl. <input type="checkbox"/>		Acc. Tile <u>Celotex</u>	2
Conc. <u>BLK</u> <input checked="" type="checkbox"/> Bl. <input type="checkbox"/>		Ceiled <input checked="" type="checkbox"/> Plywood	3
Rein. Conc. Skeleton		Solid <input type="checkbox"/> Block	4
Str. Stl.-Frame		Sound Proofed <u>Lamin.</u>	5
Pre-Fab Metal		Finished <u>Unfinished</u>	6
Tilt-Up		Painted <u>Varnished</u>	7
Filler Wall		Conc. <u>Blk.</u>	8
Curtain Wall		INSULATION	9

EXTERIOR FACING	INSULATION	INTERIOR TRIM
Siding <u>11/4" AD</u>	Exter. <u>Partitions</u>	Fir <u>Birch</u>
Stucco <u>Shakes</u>	Roof <u>Floor</u>	Mah. <u>Oak</u>
Marblecrete <u>10"</u>		Metal
Brick <input checked="" type="checkbox"/> Veneer <input checked="" type="checkbox"/>		Wood <u>Metal Doors</u>
Conc. <input checked="" type="checkbox"/> Conc. Blk. <input type="checkbox"/>		Wood <u>Metal Sash</u>
		Stained <u>Varnish</u>
		Pointed <u>Unfin.</u>

FLOOR CONSTRUCTION	ROOF COVERING
Joist <u>x</u> <u>x</u> O.C.	Blk-Up <u>Tar.&Gr.</u>
Mill <u>Car Deck</u>	Comp. <u>Metal</u>
Rein. Conc. <u>1 1/2" Elev.</u>	
Steel <u>GLB.</u>	

SEE OVER



NATIONAL BANK OF COMMERCE BANK

DS

3-22-56

F-1047

Exposition Hqs. TR. A. Unrec.

9-25-4 B-A L-10

3046 E. 45th

2

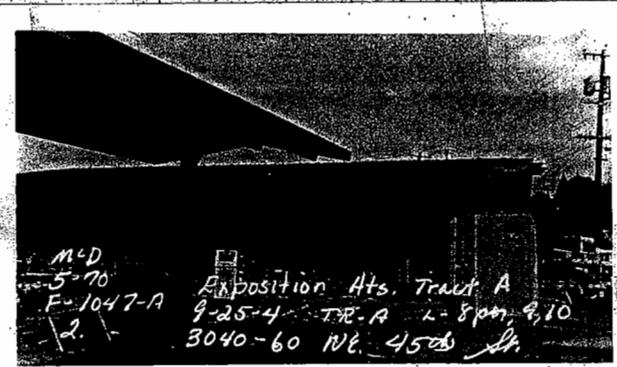
FOLIO 1047-11 ADDITION EXPOSITION HEIGHTS TRACT A
 Section SE 9 Twp 25 Range 4 EWM. Block Lot or 9-10-POR-8
 PERMIT NO. BN 35886 Tax Lot Tract A
 DATE 9-69 Address 3040-60 NE 45TH ST. Jacobs Co 977 R-11 R1-7-5

Fee Owner UNION OIL CO. Architect HARVEY B. DODD Contractor
 Zoning CG Condition of Exterior G Interior G Foundation G Floor Plan: Good Accept. Poor

USE (FHC SECTION)	ROOF CONSTRUCTION	FLOOR FINISHES	PLUMBING
1 No. Stories 3 No. Rooms Basement No. Offices No. Apartments 1 rm. 2 rm. 3 rm. 4 rm. 5 rm. 6 rm.	Frame-Joist Mill-Deck Rein. Conc. GLB Steel Fr. Metal Deck Trusses Span Wood Steel	Fir Maple Oak 2x6TG Lino 3x6TG Cement Lgtwtg. Terrazzo Conc. Asphalt Tile Vinyl Tile Office	5 No. Fixtures 2 Toilets 1 Urinals Tubs Log. or Pem. 2 Basins Dr. Fins. Sinks Washers Dryers Showers (tub) (stall) H.W. Tanks Ldy. Trays D-Washers Disposals

Date Built 1970 Date Add. Built Finished Unfinished Remodeled
 Effective Age 1 Years Future Life _____ Years
 Dep. for Cond. Dep. for Ob. Dep. for Es. Total

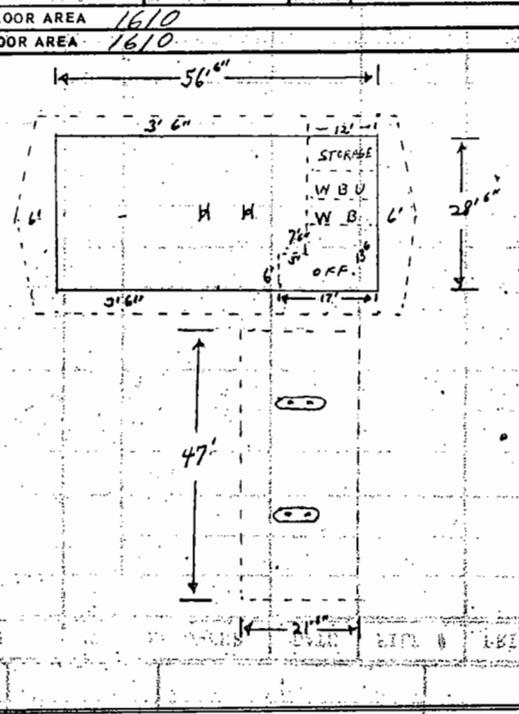
TYPE OF CONSTRUCTION	HEATING																								
<input checked="" type="checkbox"/> Frame <input checked="" type="checkbox"/> Metal-PreFab <input type="checkbox"/> Ordinary Masonry <input type="checkbox"/> Mill Construction <input type="checkbox"/> Class A Rein. Conc. <input type="checkbox"/> Stru. Steel and Conc. <input type="checkbox"/> Struct. Steel, Frame or QUALITY-TYPE S Good <input checked="" type="checkbox"/> Med. <input type="checkbox"/> Cheap	<table border="1"> <tr><td>Elec.</td><td><input checked="" type="checkbox"/> Oil</td><td><input type="checkbox"/> Gas</td></tr> <tr><td>H.W.</td><td><input type="checkbox"/> St.</td><td><input type="checkbox"/> H.A.</td></tr> <tr><td>B.Bd.</td><td colspan="2"><input type="checkbox"/> Suspended</td></tr> <tr><td>FHA</td><td colspan="2"><input checked="" type="checkbox"/> Pipeless</td></tr> <tr><td>A. Cond.</td><td colspan="2"><input type="checkbox"/> Wall Unit</td></tr> <tr><td>Comb. Unit</td><td colspan="2"><input type="checkbox"/> Custom</td></tr> <tr><td>Refrig.</td><td colspan="2"><input type="checkbox"/> Convectur</td></tr> <tr><td>Heat Pump</td><td colspan="2"><input type="checkbox"/> Fireplace</td></tr> </table>	Elec.	<input checked="" type="checkbox"/> Oil	<input type="checkbox"/> Gas	H.W.	<input type="checkbox"/> St.	<input type="checkbox"/> H.A.	B.Bd.	<input type="checkbox"/> Suspended		FHA	<input checked="" type="checkbox"/> Pipeless		A. Cond.	<input type="checkbox"/> Wall Unit		Comb. Unit	<input type="checkbox"/> Custom		Refrig.	<input type="checkbox"/> Convectur		Heat Pump	<input type="checkbox"/> Fireplace	
Elec.	<input checked="" type="checkbox"/> Oil	<input type="checkbox"/> Gas																							
H.W.	<input type="checkbox"/> St.	<input type="checkbox"/> H.A.																							
B.Bd.	<input type="checkbox"/> Suspended																								
FHA	<input checked="" type="checkbox"/> Pipeless																								
A. Cond.	<input type="checkbox"/> Wall Unit																								
Comb. Unit	<input type="checkbox"/> Custom																								
Refrig.	<input type="checkbox"/> Convectur																								
Heat Pump	<input type="checkbox"/> Fireplace																								



FOUNDATION	BASEMENT	ASSESSED VAL.
<input checked="" type="checkbox"/> Mud Sill <input type="checkbox"/> Post Pile <input type="checkbox"/> Conc. <input type="checkbox"/> Brick Load Hgt. <input type="checkbox"/> Piling	Full <input type="checkbox"/> % Part. Sub-Basement Size Garage <input type="checkbox"/> No. Car. Floor Plastered <input type="checkbox"/> Pl. Bd. No. Apartments Service Rooms	11680 1971 11680 M-D-70 "PARTIAL" 72 22930

EXTERIOR WALL CONST.	EXTERIOR FACING	INSULATION
<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double Stud Walls Brick <input type="checkbox"/> Pil. Conc. <input type="checkbox"/> Pil. Rein. Conc. Skeleton <input checked="" type="checkbox"/> Str. Stl.-Frame Pre-Fab Metal Tilt-Up Filler Wall Curtain Wall	Siding Stucco Shakes Marblecrete Brick <input checked="" type="checkbox"/> Stone Veneer Conc. <input type="checkbox"/> Conc. Blk. VSTA 9th REM	Exter. Partitions Roof Floor

FLOOR CONSTRUCTION	INTERIOR TRIM	ROOF COVERING
Jaist x x O.C. Mill Cor Deck R-Conc. Mesh Elev. Steel GLB.	Fir Birch Moh. Oak Metal Wood Metal Doors Wood Metal Sash Stained Varnish Painted Unfin.	Bit-Up Tar & Gr. Comp. Metal



EXTERIOR WALL CONST.	EXTERIOR FACING	INSULATION
<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double Stud Walls Brick <input type="checkbox"/> Pil. Conc. <input type="checkbox"/> Pil. Rein. Conc. Skeleton <input checked="" type="checkbox"/> Str. Stl.-Frame Pre-Fab Metal Tilt-Up Filler Wall Curtain Wall	Siding Stucco Shakes Marblecrete Brick <input checked="" type="checkbox"/> Stone Veneer Conc. <input type="checkbox"/> Conc. Blk. VSTA 9th REM	Exter. Partitions Roof Floor

1 DISTRICT **OB** EXPOSITION HEIGHTS Tract A Unrec NAME **222**
 SECTION **OB** TWP. **N. RANGE** EWM: BLOCK **A** TRACT OR LOT No. **10**
 DESCRIPTION **LIMITS**

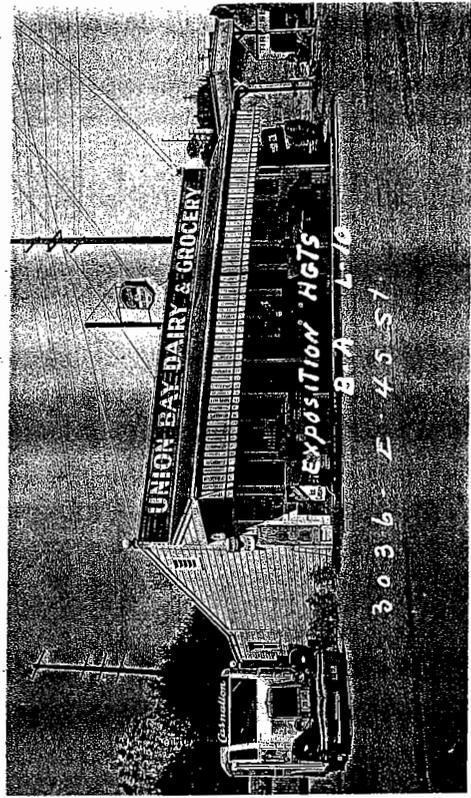
2 ADDRESS --- PROPERTY **3036 E 45th Street** CONT. PURCHASER
 4 FEE OWNER **FRED SOPHER - 3-30-39** CONTRACTOR
 5 ARCHITECT

ORIG. COST \$
 6 BUILDING Store
 4 ROOMS

BASEMENT None
 STORE FRONTS Common glass
 Wood sash
 Frame bulkhead
 EXTERIOR Frame Rustic
 FOUNDATION P & B
 ROOF Composition
 INTERIOR 4 Beaverboard
 4 Partitions

FLOORS 3 Fir, 1 Cement
 FIRE PLACE None
 PLUMBING 4 Fixtures:
 1 Tub, 1 shower, 1 basin
 1 Toilet, 1 Sink: Average
 TILE WORK None
 WIRING Conduit
 HEATING Stove
 ELEVATORS None
 CEILING --- HEIGHT 1st floor: 8'

EXTRA FEATURES None
 CONSTRUCTION Single Cheap
 MISCELLANEOUS
 7 CONDITION: EXTERIOR Fair INTERIOR Fair FOUND. Fair
 8 MAIN SUPPORT COLUMN 6 X 6 FOOTING SPAN FT.
 9 FIRST FLOOR JOIST 2 X 6 16 INCH CENTERS BRIDGED YES
 10 BUILDING Finished
 11 GROSS INCOME \$ EXPENSE \$ NET INCOME \$
 12 DEPRECIATION: COND 37 % OBSLSE. 1925 REMODELED % ECON. SUIT. % TOTAL %
 YEAR BUILT EFFECTIVE AGE 11 YEARS FUTURE LIFE 19 YEARS
 DIMENSIONS See floor x plan SQUARE FT. AREA CUBIC FT.



Wrecked

IMPROVEMENT VALUE
 BUILDING \$
 MAIN BUILDING \$ 840
 OTHER BUILDINGS \$ 40
 TOTAL \$ 880
 ASSESSED VALUE 50% \$ 440
 DATE 11/12/37
 LAND INFORMATION
 1. SIZE 75 x 150 Level On grade
 2. STREET --- Road Graded & Paved, No alley
 3. SIDEWALK CONCRETE
 4. LANDSCAPING None
 5. TREND Static VALUE \$
 6. USE Business
 7. DISTRICT Medium Old

LAND CLASSIFICATION AND SEGREGATION

SECTION S 1 E 19

TWP. 25

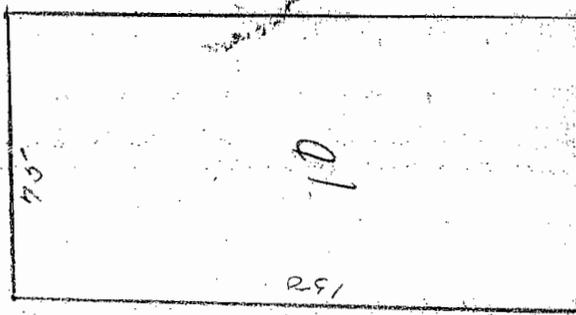
RANGE 4

19.4' of E87.61' Meas on Sline of lot 8 and all of lot 10

AERIAL PHOTOS
QUARTER MAP
PLAT MAP

58
59

Union Bay Pt



TAX LOT No.

PARCEL No.

LOT No.

BLOCK No.

ADDITION EXPOSITION HEIGHTS
 Section SE 9 Twp 25 Range 4 EWM, Block 8 Lot or POF 8+10
 Tax Lot _____ Tract Legal on Back
 Address 3200 - 08 N.E. 45th ST

FOLIO 1051
 PERMIT NO. BN 35149
 DATE 1-1-72

CODE 0010 MAJOR 243620 MINOR 0900

LIMITS	ROAD	SCHOOL	WATER	FIRE	SEWER	FLOOD ZONE	HOSPITAL	PK & REC	METRO			
									Metro			
YR	AC	LAND	BLDGS	TOTAL	BY	DATE	REASON	CD	FEE OWNER	DATE	FILE #	PRICE
71		6000		6000		8/69	50% Cont.					
71		6000	7600	13600	HL	11/10/69	New Group Jan '69					
92		6160	7800	13960	JL	12-4-70	Bent					
72 L	4891 B		6193 T	11084	*243620-0900-0	9/71						
73 L	6160 B		7800 T	13960	*243620-0900-0	9/71						

Jacobs
 1972 Rell
 S2-A

FOLIO 1051
 PERMIT NO. BN 35149
 DATE 5-16-69

ADDITION EXPOSITION HEIGHTS
 Section SE 9 Twp 25 Range 4 E.W.M. Block 8 Lot or Pop 8+10
 Tax Lot _____ Tract Legal on Back
 Address 3200-08 N.E. 45th ST

Fee Owner 31 FLAVORS ICE CREAM Architect _____ Contractor EARL ROBERTS
 Zoning _____ Condition of Exterior A Interior A Foundation A Floor Plan: Good _____ Accept. _____ Poor _____

USE ICE CREAM STOR.	ROOF CONSTRUCTION	FLOOR FINISHES	PLUMBING
1 No. Stories <u>1085</u>	Frome-Joist _____	Fir <input type="checkbox"/> Maple <input type="checkbox"/>	Bath Floor <u>5</u>
No. Stories _____	Mill-Deck _____	Oak <input type="checkbox"/> 2x6TG <input type="checkbox"/>	Bath Walls <u>1</u>
2 No. Rooms _____	Rain. Conc. _____ GLB _____	Lino <input type="checkbox"/> 3x6TG <input type="checkbox"/>	Tub Recess _____
Basement _____	Steel Fr. _____ Metal Deck _____	Cement <input type="checkbox"/> Lgtwgt. Conc. _____	Drain Bds. <u>1</u>
No. Offices _____ Sq. Ft. _____	Trusses _____ Spon _____	Terrazzo <input type="checkbox"/> Vinyl <input type="checkbox"/>	Vanities _____
No. Apartmts. _____	Wood _____ Steel _____	Asphalt Tile <input type="checkbox"/> Vinyl Tile _____	No. Fixtures _____
1 rm. <input type="checkbox"/> 2 rm. <input type="checkbox"/> 3 rm. <input type="checkbox"/>			Toilets _____ Urinals _____
4 rm. <input type="checkbox"/> 5 rm. <input type="checkbox"/> 6 rm. <input type="checkbox"/>			Tubs Leg. or Pam. _____
			Basins _____ Dr. Ftns. _____
			Sinks _____
			Washers _____ Dryers _____
			Showers (tub) (stall) _____
			H.W. Tanks _____ Ldy. Trays _____
			D. Washers _____ Disposals _____
			Sprinkler Sys. _____

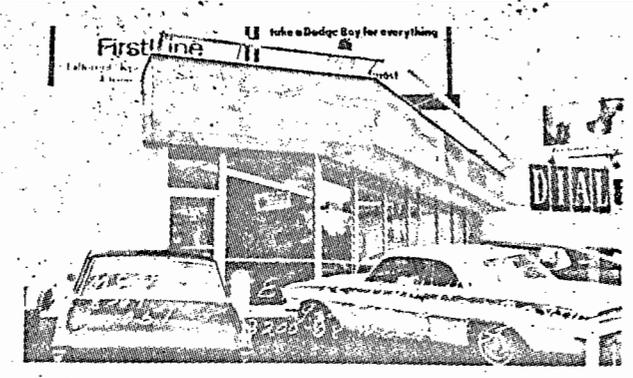
Date Built 1969 Date Add. Built _____ Finished Unfinished Remodeled
 Effective Age _____ Years Future Life _____ Yrs
 Dep. for Cond. _____ Dep. for Ob. _____ Dep. for Es. _____ Total _____

TYPE OF CONSTRUCTION
 Frame
 Metal-Prefab
 Ordinary Masonry
 Mill Construction
 Class A Rein. Conc.
 Str. Steel and Conc.
 Struct. Steel, Frame
 or _____

QUALITY-TYPE 7.2
 Good _____ Med. Cheap _____

FOUNDATION
 Mud Sill Post Pier
 Conc. Brick
 Load Hgt. Piling

BASEMENT
 Full Part.
 Sub-Basement
 Size _____
 Garage No. Cars _____
 Floors _____
 Plastered Pl. Bd.
 No. Apartments _____
 Service Rooms _____



HEATING
 Elec. _____ Oil _____ Gas _____
 H.W. _____ St. _____ H.A. _____
 B.Bd. _____ Suspended _____
 FHA _____ Pipeless _____
 A. Cond. _____ Wall Unit _____
 Comb. Unit _____ Custom _____
 Refrig. _____ Convactor _____
 Heat Pump _____ Fireplace _____

YEAR ASSESSED VALUE
 1971 7600
 1972 7800

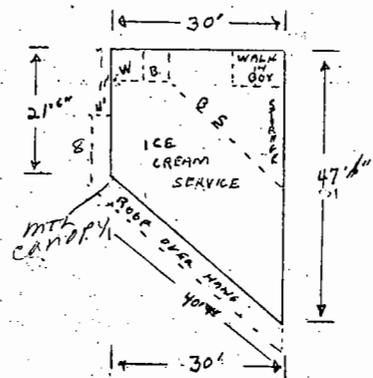
MISC. TANKS, Etc.	ELEVATORS	DOCKS AND PIERS	WIRING CODE
HOISTS: Elec. Hydr. _____	Pass. _____ Frght _____	Hvy. _____ Med. _____ Lgt _____	Knob & Tube _____
<u>444E STEEL MTL</u>	Auto. _____ Elec. _____	Untrtd. Pile Tmbr. _____	Flex. Cable _____
<u>4X4S MTL CONC</u>	Man. _____ Hydr. _____	Conc. Piles & Bms. <input checked="" type="checkbox"/>	Conduit _____
<u>8X10X11 WALL</u>	Doors-Auto _____ Man. _____	Trid. Pile Tmbr. _____	Pwr. Wiring _____
	Escalators _____	Paved _____	Range Wiring _____
	Stops _____ Speed _____	Dolphins _____	Outlets _____
	Deck _____		

EXTERIOR WALL CONST. 1" OR FG 3/4" OR 9/20' SUSP MTL
 Single Double
 Stud Walls
 Brick Pil.
 Conc. Pil.
 Rein. Conc. Skeleton
 Str. Stl.-Frame
 Pre-Fab Metal
 Tilt-Up
 Filler Wall
 Curtain Wall

EXTERIOR FACING	INSULATION	FLOOR CONSTRUCTION	INTERIOR TRIM
<input type="checkbox"/> Siding <input type="checkbox"/> Stucco _____ Shakes _____ <input type="checkbox"/> Marblecrete _____ <input type="checkbox"/> Brick <input type="checkbox"/> Veneer <input checked="" type="checkbox"/> Conc. <input checked="" type="checkbox"/> Conc. Blk.	<input type="checkbox"/> Exter. _____ Partitions _____ <input checked="" type="checkbox"/> Roof _____ Floor _____	Joist _____ x _____ O.C. _____ <input type="checkbox"/> Mill _____ Cor Deck _____ <input checked="" type="checkbox"/> R. Conc. _____ Elev. _____ <input type="checkbox"/> Steel _____ GLB. _____ or _____	<input type="checkbox"/> Fir _____ Birch _____ <input type="checkbox"/> Mah. _____ Oak _____ <input checked="" type="checkbox"/> Metal _____ <input type="checkbox"/> Wood _____ Metal Doors _____ <input type="checkbox"/> Wood _____ Metal Sash _____ <input type="checkbox"/> Stained _____ Varnish _____ <input type="checkbox"/> Painted _____ Unfin. _____

EXTERIOR WALL CONST. 1" OR FG 3/4" OR 9/20' SUSP MTL
 Single Double
 Stud Walls
 Brick Pil.
 Conc. Pil.
 Rein. Conc. Skeleton
 Str. Stl.-Frame
 Pre-Fab Metal
 Tilt-Up
 Filler Wall
 Curtain Wall

EXTERIOR FACING	INSULATION	FLOOR CONSTRUCTION	INTERIOR TRIM
<input type="checkbox"/> Siding <input type="checkbox"/> Stucco _____ Shakes _____ <input type="checkbox"/> Marblecrete _____ <input type="checkbox"/> Brick <input type="checkbox"/> Veneer <input checked="" type="checkbox"/> Conc. <input checked="" type="checkbox"/> Conc. Blk.	<input type="checkbox"/> Exter. _____ Partitions _____ <input checked="" type="checkbox"/> Roof _____ Floor _____	Joist _____ x _____ O.C. _____ <input type="checkbox"/> Mill _____ Cor Deck _____ <input checked="" type="checkbox"/> R. Conc. _____ Elev. _____ <input type="checkbox"/> Steel _____ GLB. _____ or _____	<input type="checkbox"/> Fir _____ Birch _____ <input type="checkbox"/> Mah. _____ Oak _____ <input checked="" type="checkbox"/> Metal _____ <input type="checkbox"/> Wood _____ Metal Doors _____ <input type="checkbox"/> Wood _____ Metal Sash _____ <input type="checkbox"/> Stained _____ Varnish _____ <input type="checkbox"/> Painted _____ Unfin. _____



F1051

ADDITION EXPOSITION HEIGHTS

DISTRICT 1 B Section 9 Typ. 2.5 Range 4 Evm. Block 8

PERMIT NO. 334847 DATE 1-27-40

Legal on back

24362 0900 243620-0900 1750 3150 0010

YEAR	AC.	LAND	BLDGS.	TOTAL	BY	DATE	REASON	FEE OWNER	DATE
1942		1400	2690	4090					
1950		1500	2690	4190	NS	7-48		MARTIN STEPHENSON	10-12-39
1952		1500	2950	4450	RM.	8/50		5-20	1900-246
1958		1500	3150	4650	RM.	12/10/50			12-13-49
1958		1500	3150	4650	RM.	5-21-57		Tidewater Oil Co	
1961		1500	3150	4650	EA	4/13/60			
1962		1500	3150	4650	EA	3/16/62			
1964		1750	3150	4900	EA	2-3-64			
1969		1750	1900	3650	EA	10/25/69			
1964		3000	1900	4900	EA	4-6-68			
1970		3000	0	3000	EA	5-29-68			
19	L	6000 B		6000*243620-0900-0		8/9			
19									
19									
19									
19									
19									
19									
19									

★

BALL OF N. V. SEE 0900

REC'D Frank S. Muehler et ux 5-1-62 E-469779/2/150

piece 2M - 0585

6000*243620-0900-0 8/9

RD 25

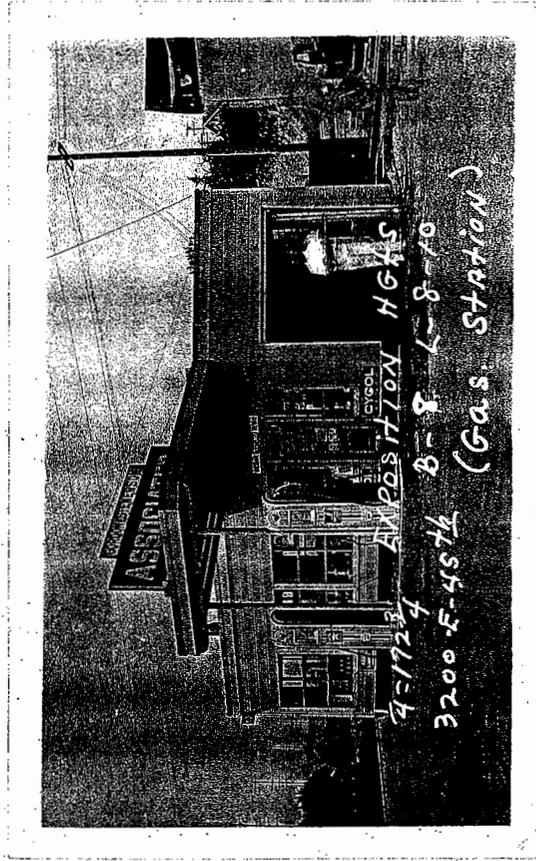
1. DISTRICT 9-1 EXPOSITION HEIGHTS
 SECTION 8 TWP. 8 N. RANGE 8 E.W.M. BLOCK 8 TRACT OR LOT NO. Por of lots 8 & 10
 DESCRIPTION Beg at inters of E 47th St., with N En of E 45th St., th NELY alg rd E 47th St. 78', th SELY to a pt on N En of E 45th St. 112' Ely from E In of sd E 47th St., th WY alg N En of E 45th St. 112' to Beg.
 3. ADDRESS -- PROPERTY 3200 E 45th Street CONT. PURCHASER E. McLeod 9/26/36
 4. FEE OWNER Martin Stoner - Stuy 9-12-39 CONTRACTOR
 5. ARCHITECT

6. BUILDING GAS STATION
 1-Story
 1-Store
 1-Room
 INTERIOR
 P&B
 FLOORS Cement
 FIRE PLACE None
 PLUMBING None
 TILE WORK None
 WIRING
 HEATING Stove
 ELEVATORS None
 CEILING -- HEIGHT 1st Flr. 10'

BASEMENT None
 STORE FRONTS Common Glass
 FOUNDATION Conc
 ROOF Flat, Truss 8'
Tar & Gravel

EXTRA FEATURES None
 CONSTRUCTION Solid - Medium - Frame
 MISCELLANEOUS 4-Gas Pumps; 1-4x19x5' Conc Grease Pit
 7. CONDITION: EXTERIOR Good INTERIOR Good FOUND. Good
 8. MAIN SUPPORT COLUMN 6 x 6 FOOTING Conc SPAN 8 FT.
 9. FIRST FLOOR JOIST None BUILDING FINISHED No
 10. GROSS INCOME \$ EXPENSE \$ NET INCOME \$
 12. DEPRECIATION: COND. OBSLSE. % ECON. SUIT. % TOTAL %
 YEAR BUILT 1936-7 REMODELED No
 EFFECTIVE AGE 1 YEARS FUTURE LIFE 29 YEARS
 DIMENSIONS (See Remarks) SQUARE FT. AREA CUBIC FT.

IMPROVEMENT VALUE
 MAIN BUILDING \$
 OTHER BUILDINGS \$
 TOTAL \$ 1720.00
 ASSESSED VALUE 50% \$ 860.00
 DATE 10/11/37
 LAND INFORMATION
 1. SIZE x
Sloping - ON Grade
 2. STREET -- ROAD Graded-Pvd.
No Alley
 3. SIDEWALK Conc
Sewer & City Water
 4. LANDSCAPING None
 5. TREND Static VALUE \$
 6. USE Res
 7. DISTRICT New-Floor



LAND CLASSIFICATION AND SEGREGATION

AERIAL PHOTO

QUARTER MAP

PLAT MAP

38

4
Beg at inter of E ln of E 47th St., with N ln of E 45th St.; th Nely alg sd E 47th St., 78'; th Sely to a pt on N ln of E 45th St., 112'; Ely from E ln of sd E 47th St.; th Wly alg N ln of E 45th St., 112'; go beg.

8 & 10 8 0010 24362 0900
EXPOSITION HEIGHTS Por of Lots 8 & 10
Daf: Beg at Intsn of Sely mgn of E 47th St with N mgn of E 45th St as now estbd th Nely alg sd mgn of E 47th St

87' th Sely to pt on N mgn of E 45th St
128' E of Pob th W alg sd N mgn 128' to
Pob

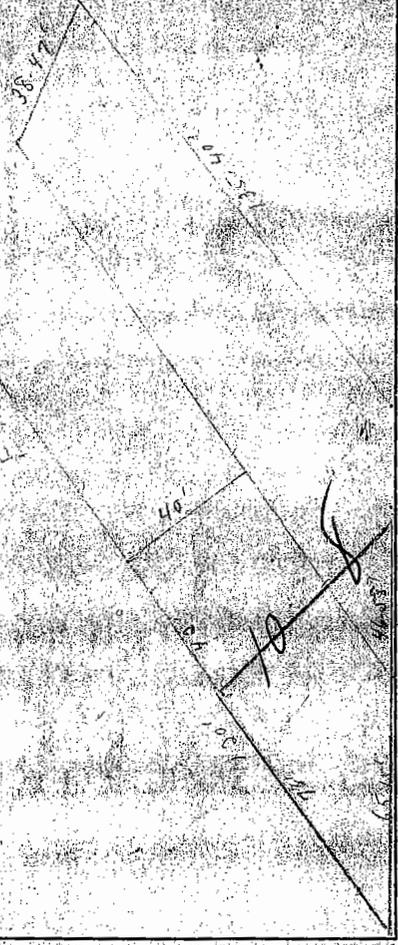
TAX LOT NO.

PARCEL NO. A

LOT NO.

BLOCK NO.

EXPOSITION PLATS



E 45th St

SECTION 29
TWP. 29
RANGE 4

