DEPARTMENT OF DESIGN AND CONSTRUCTION
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 11TH FLOOR
HONOLULU, HAWAII 96813
Phone: (808) 523-4564 • Fax: (808) 523-4567
Web site: www.honolulu.gov

MUFI HANNEMANN
MAYOR

WAYNE M. HASHIRO, P.E.
ACTING DIRECTOR

EUGENE C. LEE, P.E.
DEPUTY DIRECTOR

WW.P 05-0080

March 10, 2005

Ms. Genevieve Salmonson, Director
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawaii 96813

Dear Ms. Salmonson,

Subject: Final Environmental Assessment (EA) and Finding of No Significant Impact (FONSI)
Small Mainline Project No. 60, 1045 Fort Street Mall Sewer Rehabilitation
TMK: 2-01-001 (Por.), Honolulu, Oahu, Hawaii

The City and County of Honolulu Department of Design and Construction has approved the Final EA and FONSI determination for the subject project. Please publish notice of this project in the March 23, 2005 issue of *The Environmental Notice*.

We have enclosed a completed OEQC Publication Form with four copies of the Final EA, a copy of the cover letter to participants, and the Final EA distribution list. Please contact Mr. Bill Liu at 527-5388 if you have any questions.

Very truly your,

for WAYNE M. HASHIRO, P.E.
Acting Director

cc: Jason Lau, The Limtiaco Consulting Group

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OFC. OF ENVIRONMENTAL QUALITY CONTROL

2005-03-23 Small Mainline Project No. 60 1045
Fort Street Mall Sewer Rehabilitation

MAR 2 3 2005

Final Environmental Assessment and Finding of No Significant Impact

Small Mainline Project No. 60
1045 Fort Street Mall
Sewer Rehabilitation

Prepared for:

The City and County of Honolulu
Department of Design and Construction
Wastewater Division

Prepared by:

THE LIMTIACO CONSULTING GROUP
CIVIL ENGINEERING AND ENVIRONMENTAL CONSULTANTS

March 2005

Final Environmental Assessment
and
Finding of No Significant Impact

SMALL MAINLINE PROJECT NO. 60
1045 FORT STREET MALL
SEWER REHABILITATION
Honolulu, Oahu, Hawaii

TMK: 2-01-001 (por.)

(This environmental document has been prepared pursuant to Chapter 343, Hawaii Revised Statutes)

Responsible Officer: Eugene C. Lum **Date:** 3/7/05

Wayne Hashiro, P.E., Acting Director
City and County of Honolulu
Department of Design and Construction

Prepared For:

City and County of Honolulu
Department of Design and Construction

Prepared By:

The Limtiaco Consulting Group
Civil Engineering and Environmental Consultants
650 Iwilei Road, Suite 208
Honolulu, Hawaii 96817

March 2005

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PREFACE

This Draft Environmental Assessment (EA) has been prepared in accordance with the requirements of Chapter 343, Hawaii Revised Statutes (HRS). The City and County of Honolulu Department of Design and Construction (DDC) plans to rehabilitate the sewer lines located at the intersection of Fort Street Mall and Hotel Street, Honolulu, Oahu, Hawaii. The proposed project involves the reconstruction of a sewer segment along Fort Street Mall and the rehabilitation of a segment along Hotel Street. The project utilizes City and County of Honolulu funds and, therefore, requires the preparation of an Environmental Assessment pursuant to Chapter 343, HRS.

PROJECT SUMMARY

Proposing Agency:	City and County of Honolulu Department of Design and Construction
Approving Agency:	City and County of Honolulu Department of Design and Construction
Location:	Honolulu, Oahu, Hawaii
Tax Map Keys:	2-01-001 (por.)
Land Area:	5,000 square feet (estimated)
Recorded Fee Owner:	City and County of Honolulu
Existing Use:	Sewer Utility
State Land Use Classification:	Urban District
Development Plan Area:	Primary Urban Center
Development Plan Land Use Designation:	District Commercial
County Zoning Designation:	BMX-4 Central
Proposed Action:	The City and County of Honolulu Department of Design and Construction proposes to rehabilitate approximately 1,035 feet of a sewer line located at the intersection of Fort Street Mall and Hotel Street, Honolulu, Oahu, Hawaii (see Figure 1). The project includes 570 linear feet of 8-inch and 10-inch sewers along Fort Street Mall and 465 linear feet of 8-inch sewers along Hotel Street. The proposed sewer line rehabilitation project seeks to address inadequate capacities, localized root intrusion, and various structural deficiencies for improved sewer service.
Agency Determination:	Finding of No Significant Impact (FONSI)

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1. INTRODUCTION

The City and County of Honolulu (City) Department of Design and Construction (DDC) proposes to rehabilitate a total of approximately 1,035 feet of a sewer line located at the intersection of Fort Street Mall and Hotel Street (see Figure 1). The project includes 570 linear feet (LF) of 8-inch and 10-inch diameter sewers along Fort Street Mall and 465 linear feet of 8-inch diameter sewers along Hotel Street. The existing sewer lines consist of terra cotta pipe (TCP) and include 6 sewer manholes. The proposed project will be constructed within the City's existing right-of-way along the existing sewer alignment.

A Design Alternatives Study was completed in support of the proposed sewer improvements. The recommended design alternative includes the reconstruction of the sewer along Fort Street Mall by open cut trench and the rehabilitation of the sewer along Hotel Street using cured-in-place pipe (CIPP) lining.

The deficiencies identified for sewers within this project included inadequate capacity, various structural defects, and localized root intrusion. The proposed improvements are based on these deficiencies, and take into consideration the level of surface impacts (i.e. impacts to traffic, sidewalks and pedestrians), cost-effectiveness, ease of construction, and ability to repair identified sewer deficiencies. Sewer realignment was not considered due to inadequate space within the City's right-of-way. Figure 2 illustrates the general site plan for the recommended improvements described below. For purposes of this environmental assessment, the project corridor along Fort Street Mall will be referred to as Section A, and the project corridor along Hotel Street will be referred to as Section B.

Section A Recommended Improvements:

The existing 8-inch and 10-inch sewers along Fort Street Mall will be replaced with approximately 570 LF of 12-inch PVC pipe along the existing sewer alignment and using open cut trench construction. These improvements will provide the following benefits:

- Replacement and upsizing of the sewers will provide capacity for future peak flows and also address the existing deficiencies, which include collapsed pipe, sags, offset joints, and severe cracks.

- Eliminating sags in the existing sewer reduces the likelihood of grease buildup.

- 25 LF of reinforced concrete jacket should be provided where the sewer alignment passes directly beneath a tree to eliminate the existing problem of root intrusion.

- Two existing 18-inch storm drain lines that cross within six inches above the sewer line near Hotel Street should be raised to provide adequate clearance for the new sewer.

Section B Recommended Improvements:

The existing 465 LF of 8-inch sewers along Hotel Street will be cleaned and rehabilitated with cured-in-place pipe (CIPP) lining to address cracks in the pipe and to eliminate root intrusion. This effort will be preceded by the following localized improvements.

- Spot repair of approximately 40 LF of pipe should be performed using 8-inch PVC pipe and constructed by open cut trench to address a section of broken pipe.

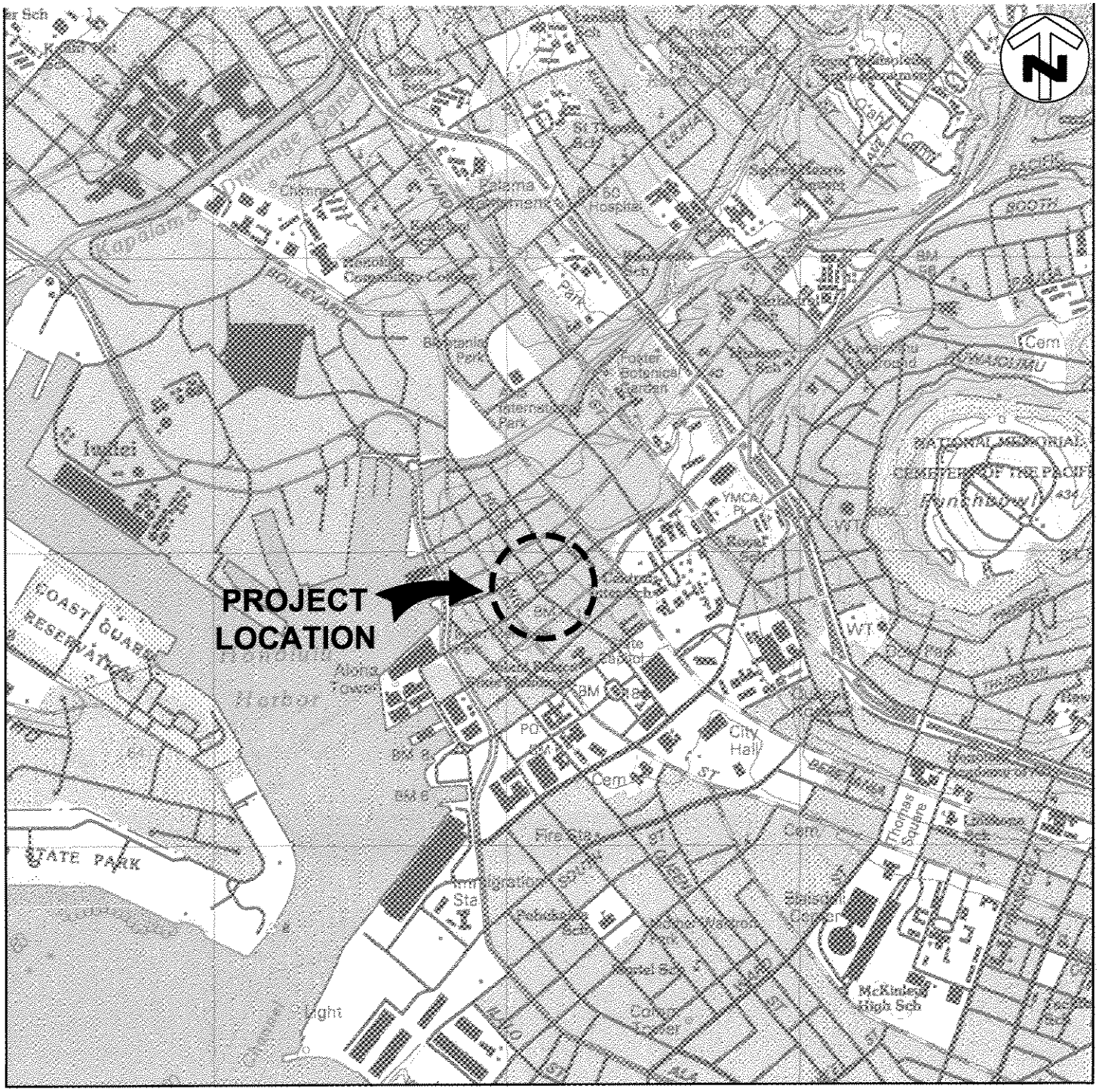
Although the existing manholes within the project area were determined to have corroded manhole rungs, replacement of rungs is not required. Therefore, no manhole improvements are included in the recommendation.

The proposed project includes design and construction considerations to minimize disruptions to existing businesses and vehicle and pedestrian traffic along Fort Street Mall and Hotel Street. Traffic and pedestrian detours will be provided, and construction work will be performed at night to minimize disruption to surrounding business and the public transit services.

The estimated costs of the proposed sewer improvements are as follows:

Design	$101,500
Construction	$580,000
Inspection	$58,000
TOTAL	**$739,500**

This Draft Environmental Assessment was prepared pursuant to the State of Hawaii environmental review process as required and defined by Chapter 343, Hawaii Revised Statutes (HRS) and Title 11, Chapter 200, Hawaii Administrative Rules of the Department of Health.



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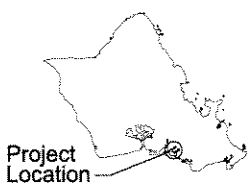
City & County of Honolulu

Department of Design & Construction



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DRAFT ENVIRONMENTAL ASSESSMENT
SEWER FACILITIES REHABILITATION - UNIT II
1045 FORT STREET MALL

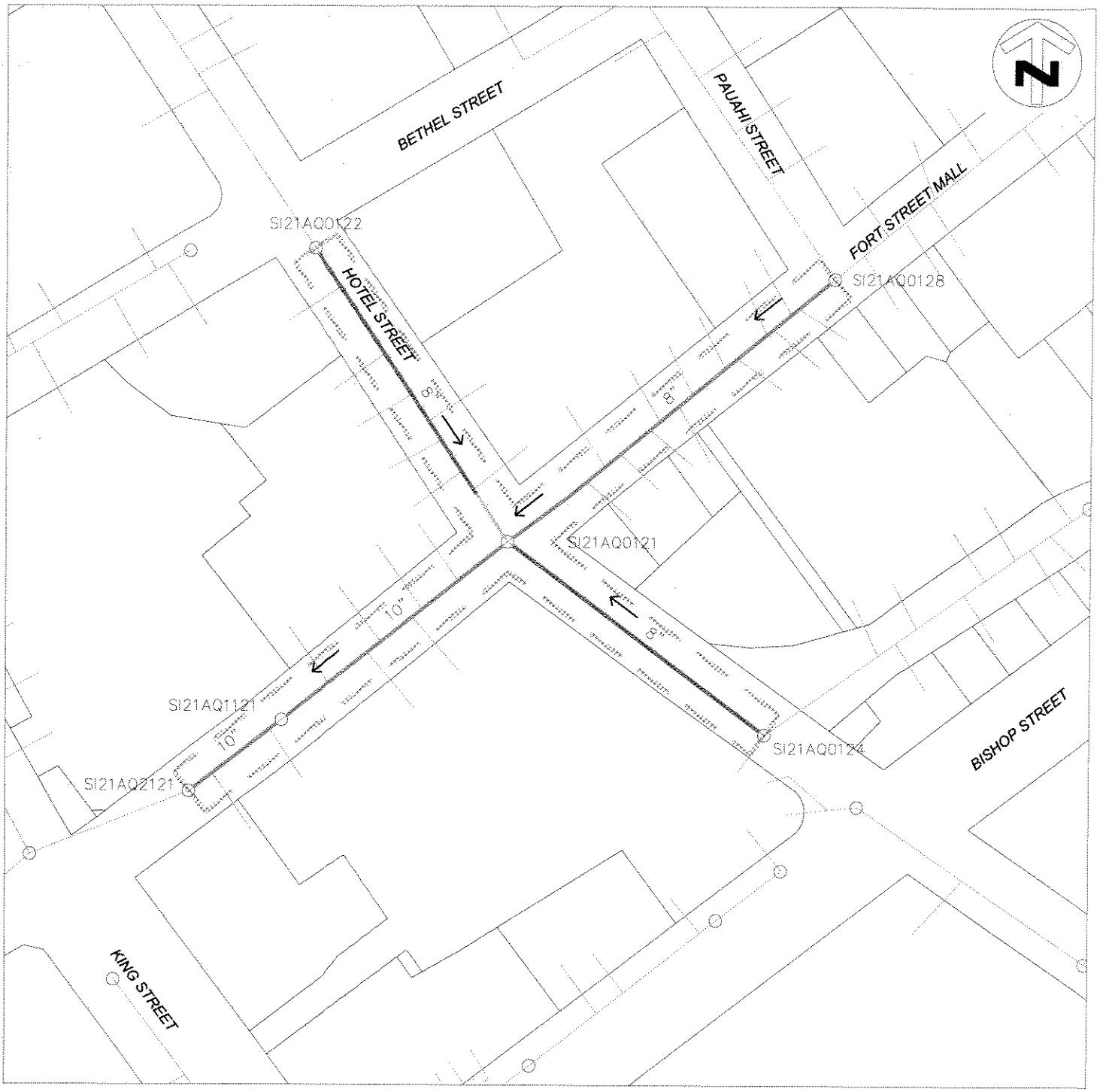
TMK: 2-1-1

LOCATION MAP

FIGURE 1

Wastewater Division - Planning

Date: December 2004

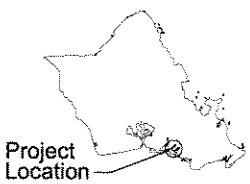


LEGEND:

- PROPERTY LINE
- EXISTING SEWER
- PROJECT AREA
- EXISTING SEWER MANHOLE
- CIPP EXISTING 8" SEWER
- OPEN CUT TRENCH AND REPLACE WITH NEW 12" SEWER
- SPOT REPAIR - OPEN CUT TRENCH AND REPLACE WITH NEW 8" SEWER
- ⟵ DIRECTION OF FLOW

City & County of Honolulu

Department of Design & Construction



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DRAFT ENVIRONMENTAL ASSESSMENT
SEWER FACILITIES REHABILITATION - UNIT II
1045 FORT STREET MALL

TMK: 2-1-1

GENERAL SITE PLAN

FIGURE 2

Wastewater Division - Planning

Date: December 2004

2. SETTING AND PROJECT DESCRIPTION

2.1. Background and Project Need

The proposed sewer rehabilitation project is required by the "Small Diameter Sewer Rehabilitation Program" as part of the Infiltration/Inflow (I/I) Consent Decree established by the Environmental Protection Agency and the State of Hawaii Department of Health. The I/I Consent Decree was established in May 1995 in response to wastewater spill violations from the City and County of Honolulu's wastewater collection system. Requirements of the I/I Consent Decree were intended to eliminate wastewater spills and included a 20-year CIP Program and five I/I Programs.

The 20-year CIP Program includes the hydraulic and structural rehabilitation of the larger sewer lines (generally 15 inches in diameter and larger) and the "higher priority" smaller lines (12 inches in diameter and smaller) which have a greater consequence in the event of failure. Rehabilitation of the "lower priority" small diameter sewer lines (12 inches in diameter and smaller) is addressed through five I/I Programs, which were mandated by the I/I Consent Decree.

The "Small Diameter Sewer Rehabilitation" Program is the I/I Program that provides for rehabilitation of sewer lines which require frequent maintenance by the Department of Environmental Services, Division of Collection System Maintenance of more than once every five years. Frequent maintenance is generally due to clogs, which may result from debris or grease buildup due to roots, sags, or offset joints. Root entries may be caused by structural defects such as cracks and joint separation. However, root entries can also occur where significant structural defects do not exist, such as at joint connections with no joint separation. Projects that are analyzed for frequent maintenance are also analyzed for hydraulic and structural adequacy.

The "Small Diameter Sewer Rehabilitation" projects are divided into two groups, SCIPs (Spills CIP Projects), which typically cover geographically larger projects, and SMPRs (Small Mainline Projects) which generally cover geographically smaller projects. The proposed sewer rehabilitation project is identified by the City as SMPR No. 60, 1045 Fort Street Mall Sewer Rehabilitation.

2.2. Project Location

The project area is located in the Honolulu Downtown District, Oahu at the intersection of Fort Street Mall and Hotel Street (see Figure 1). The proposed sewer rehabilitation affects a portion of Tax Map Key (TMK) 2-01-001 that comprises sections of the Fort Street Mall and Hotel Street right-of-ways (see Figure 3). Several parcels are located immediately adjacent to the project area, these parcels are privately owned and are currently occupied by tenants with commercial uses.

The project site includes a 570-foot long corridor along Fort Street Mall that spans from King Street through the intersection with Hotel Street to Pauahi (Section A), and a 470-foot long corridor along Hotel Street from Bethel Street to a location near Bishop Street (Section B).

The collection system primarily services private businesses and restaurants. Sewers included in the proposed project are tributary to the Sand Island Wastewater Treatment Plant.

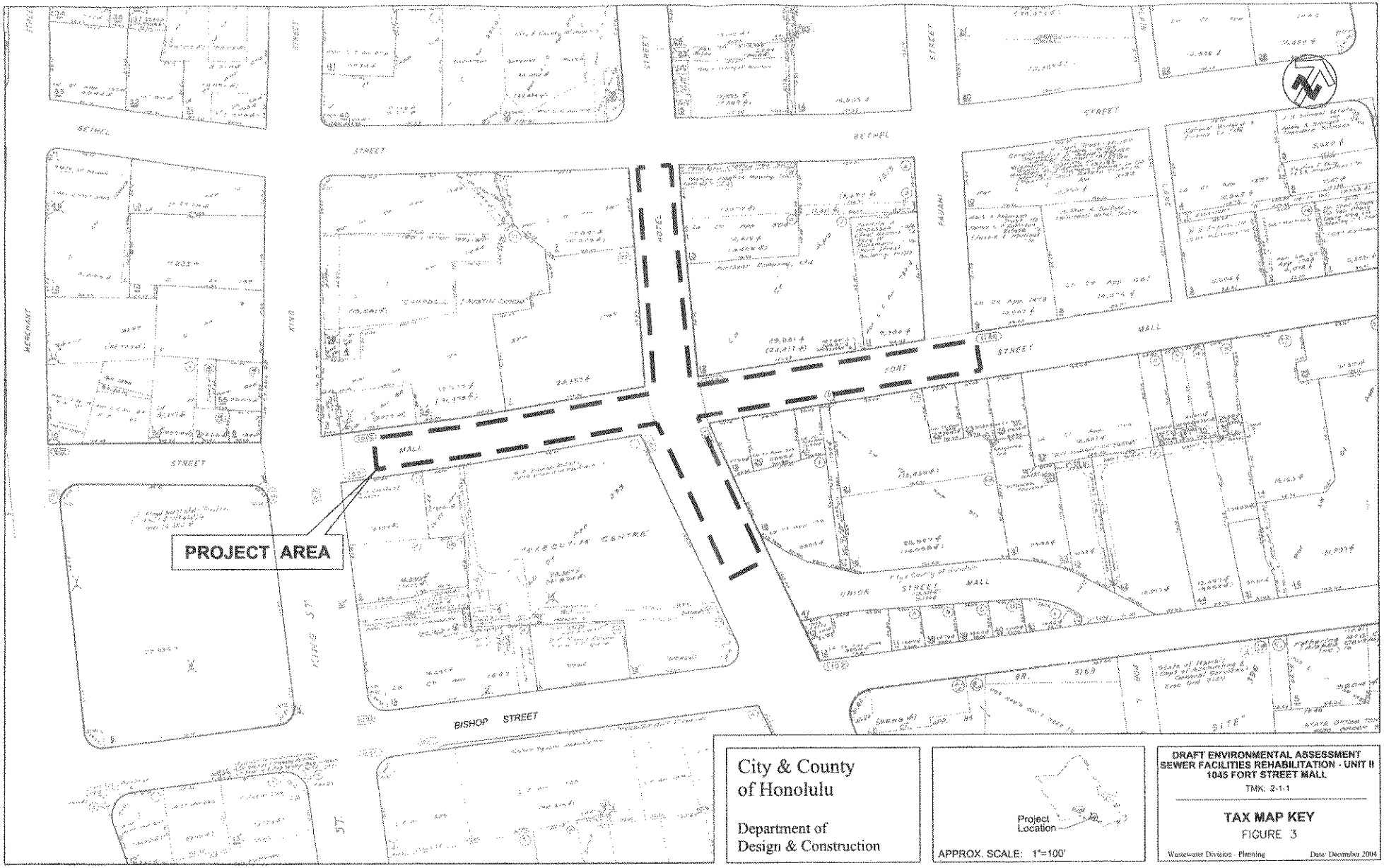
2.3. Existing Sewer Line Conditions

The proposed project was initiated due to previous wastewater spills along Fort Street Mall. CCTV footage revealed structural and hydraulic deficiencies which include broken pipe, severe cracks, sags, light root intrusion, grease and debris buildup. It was also noted that multiple laterals along Hotel Street were plugged with debris.

Upon conducting a hydraulic analysis of the sewer lines, it was determined sewers along Fort Street Mall were of inadequate capacity for both the existing and future adjusted 2-year, 6-hour peak flows. Figure 4 is a project map displaying the sewer pipe size, direction of flow, and ISAP and sewer ID number manhole designations.

2.4. Land Ownership

The City's utility easements are located immediately adjacent to parcels that are privately owned. Figure 5 is a Land Ownership/Easement Map that notes the location and recorded fee owners of neighboring parcels, which are primarily leased to tenants with commercial uses. The portions of Fort Street Mall and Hotel Street that are affected by the proposed project are under the jurisdiction of the City and County of Honolulu, Department of Transportation Services.



City & County of Honolulu

Department of Design & Construction

Project Location

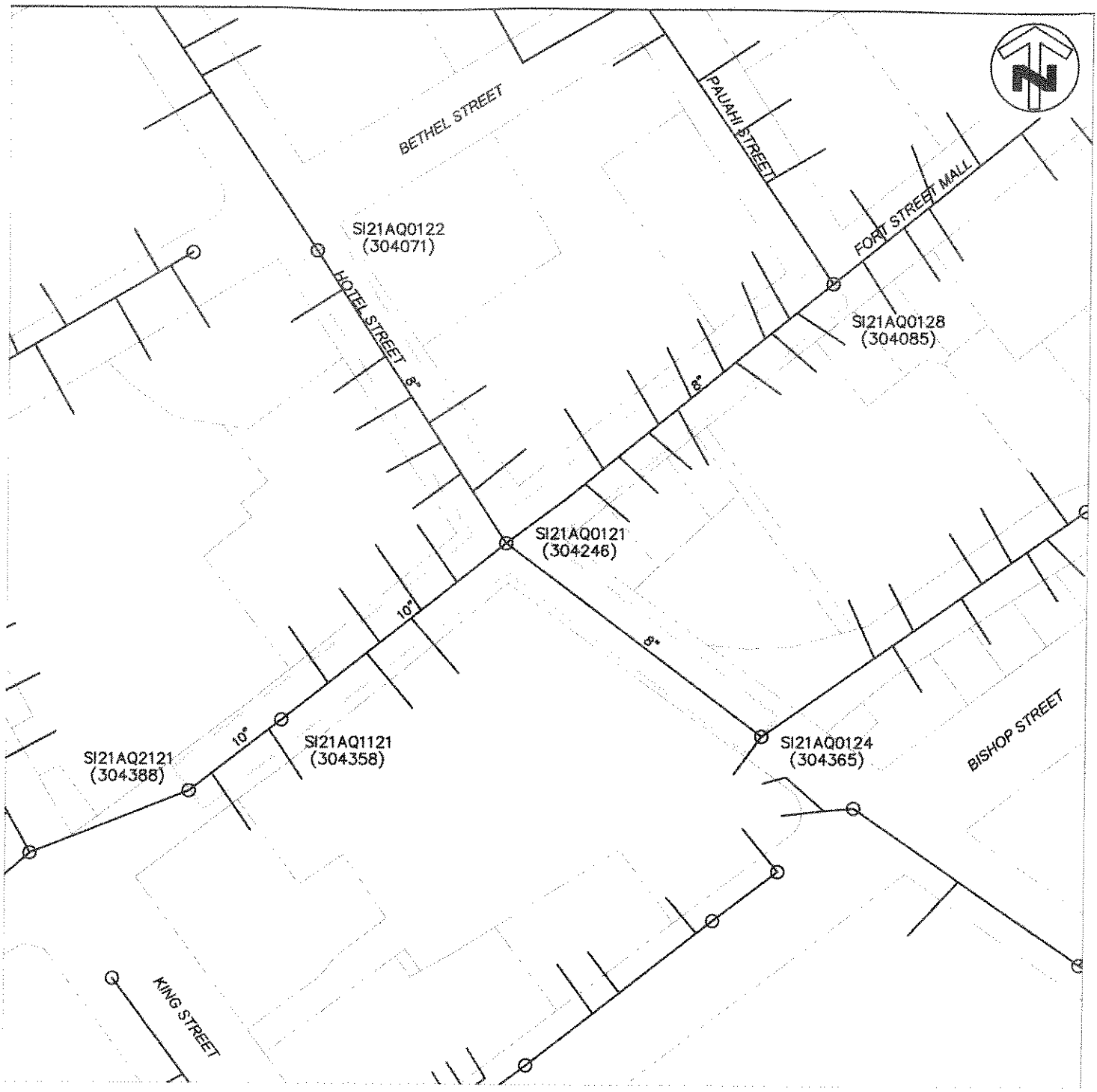
APPROX. SCALE: 1"=100'

DRAFT ENVIRONMENTAL ASSESSMENT
SEWER FACILITIES REHABILITATION - UNIT II
1045 FORT STREET MALL
TMK: 2-1-1

TAX MAP KEY
FIGURE 3

Wastewater Division - Planning

Date: December 2004



LEGEND:

PROPERTY LINE

EXISTING SEWER

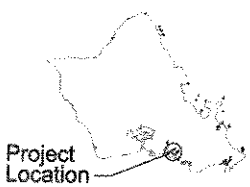
PROJECT AREA

SI21AQ2121 (304388) — SEWER ID No. — GAP No.

EXISTING SEWER MANHOLE

City & County of Honolulu

Department of Design & Construction



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DRAFT ENVIRONMENTAL ASSESSMENT
SEWER FACILITIES REHABILITATION - UNIT II
1045 FORT STREET MALL

TMK: 2-1-1

EXISTING SEWER SYSTEM

FIGURE 4

Wastewater Division - Planning

Date: December 2004

LEGEND:

PROPERTY LINE

PROJECT AREA

1 T.M.K.: 2-1-10;19
OWNER(S): FEE OWNER
ESTATE ZONING: BMX-4

2 T.M.K.: 2-1-10;20
OWNER(S): FEE OWNER
ESTATE ZONING: BMX-4

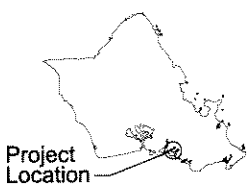
3 T.M.K.: 2-1-10;45
OWNER(S): FEE OWNER
ESTATE ZONING: BMX-4

4 T.M.K.: 2-1-10;18
OWNER(S): FEE OWNER
ESTATE ZONING: BMX-4

5 T.M.K.: 2-1-10;17
OWNER(S): FEE OWNER
ESTATE ZONING: BMX-4

City & County of Honolulu

Department of Design & Construction



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DRAFT ENVIRONMENTAL ASSESSMENT
SEWER FACILITIES REHABILITATION - UNIT II
1045 FORT STREET MALL

TMK: 2-1-1

LAND OWNERSHIP/EASEMENT MAP

FIGURE 5

Wastewater Division - Planning

Date: December 2004

2.5. Surrounding Uses

Fort Street Mall is a pedestrian mall lined with restaurant, retail, and commercial establishments. Pedestrian traffic is very high during business hours from Monday through Friday. Hotel Street is a vehicle corridor for use only by the City bus system and emergency vehicles. As is the case with Fort Street Mall, there are numerous restaurant, retail, and commercial uses fronting Hotel Street and peak traffic hours are Monday through Friday during business hours.

A major planning project being conducted by the City Department of Transportation Services and the United States Department of Transportation is the Primary Corridor Transportation Project. This project evaluates alternatives aimed at improving the transportation system in Oahu's primary transportation corridor, which extends from Kapolei in the west to the University of Hawaii-Manoa and Waikiki in the east. The transportation improvements in the corridor is expected to enhance mobility, reduce travel time and improve the quality of life for Oahu's residents and visitors.

A critical component of the Transportation Project is Hotel Street, which provides access through the urbanized downtown region. No substantial physical improvements are anticipated for Hotel Street under the Transportation Project and major conflicts with the sewer rehabilitation project are not anticipated. Coordination between the sewer improvements project and the Transportation Project will continue throughout the planning, design, and construction phases.

2.6. Additional Considerations

The Americans with Disabilities Act (ADA), passed by Congress in 1991, requires existing concrete curb ramps to conform and upgrade to federal design standards. Any construction work that affects existing pedestrian access route (i.e. crosswalk) require the associated curb ramps and access routes to be evaluated and reconstructed in accordance with ADA guidelines and recommendations, if they are determined to be non-conforming. Further investigation of pedestrian and traffic detouring, including bus stop access, should be evaluated in the design phase of this project to insure ADA compliance. Excavation along Hotel Street will impact at least two crosswalks and the existing curb ramps will need to be inspected and evaluated during the design phase. Likewise, bus stop areas that may be affected by the project should be evaluated and, if subject to construction impacts, restored to ADA compliant condition.

Several utilities exist along this corridor and it is possible that utility relocations will be required. Relocation of utilities may greatly impact the actual construction cost and should be investigated further and verified during the design phase of this project.

2.7. Proposed Action

The proposed sewer line reconstruction project seeks to achieve the following objectives:

- Increase hydraulic capacities to provide for future peak flows; and
- Address structural deficiencies.

A Design Alternatives Study was completed in support of the proposed sewer improvements, and the recommended action includes the reconstruction of sewers in Section A along Fort Street Mall by open cut trench, and the rehabilitation of sewers in Section B along Hotel Street using cured-in-place pipe (CIPP) lining. Figure 6 shows the recommended design alternative for the proposed project.

Section A will be reconstructed with the installation of 12-inch PVC pipe. Section B will be rehabilitated using CIPP as the preferred construction method. The CIPP liner will be fed into existing manholes from the surface at appropriately located staging areas. This construction method minimizes surface impacts to surrounding uses and addresses minor structural cracks and off-set joints. The engineering reports prepared for this project identified approximately 40 LF of pipe along Section B that is in critical structural condition and will require spot repair by open cut trench to install 8-inch PVC pipe prior to CIPP improvements.

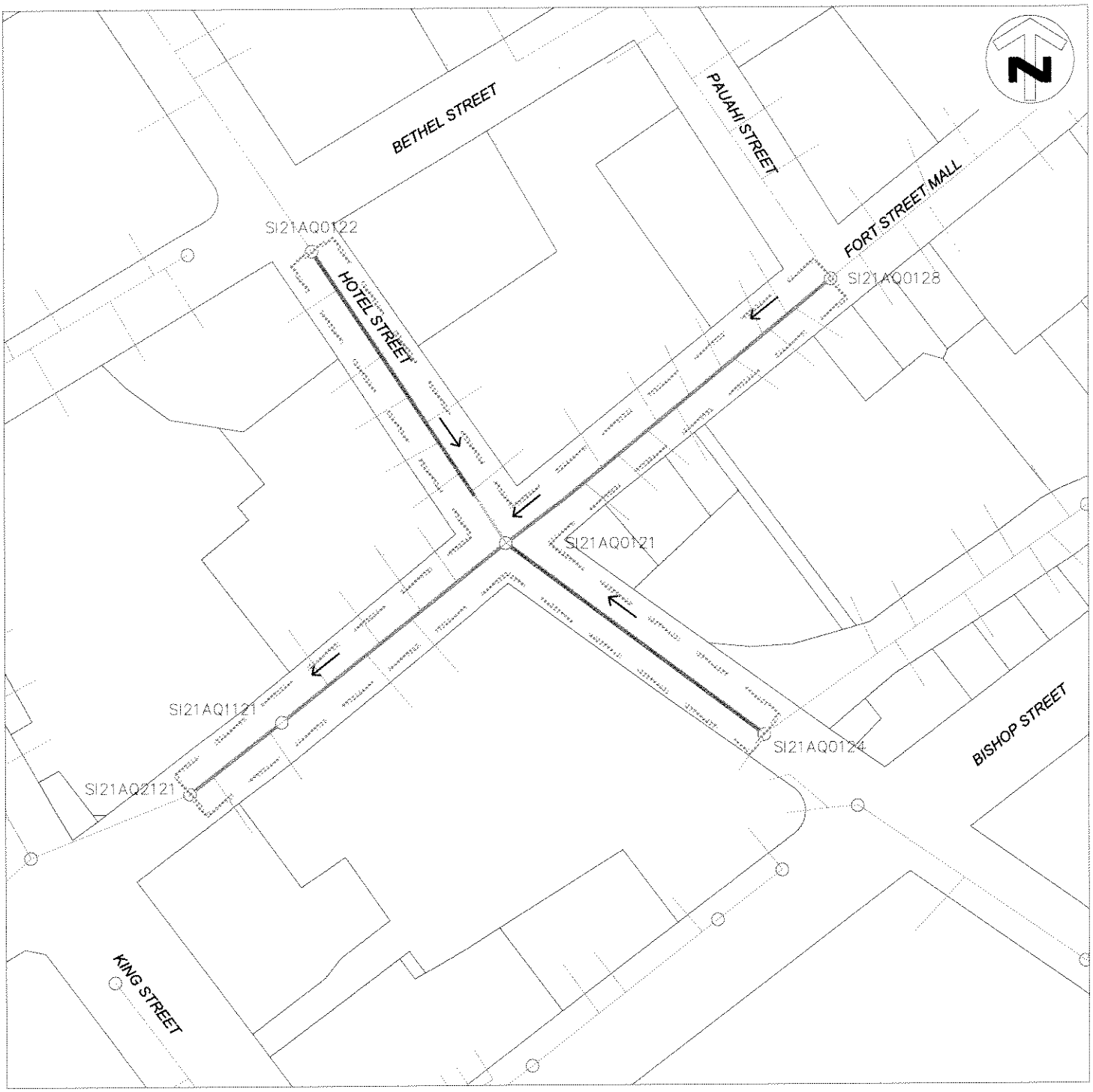
The proposed project includes the following design and construction considerations:

- Construction work will be performed at night to minimize disruption to surrounding business, pedestrians, and the public transit services. Open trenches will be covered with steel plates during daytime operating hours.
- Traffic and pedestrian detours will be provided.
- Potential ground settlement and movement that may be induced by the installation of sheet piles will be minimized through the use of appropriate construction techniques.
- Adequate trench support and use of ground-water inflow control methods will be employed during excavation to mitigate soil consolidation and compression, and to minimize necessary dewatering, if required. Ground-water levels will be monitored at temporary monitoring wells installed near excavations.
- All necessary permits and approvals will be acquired prior to the construction of the proposed sewer improvements.

The completion of the proposed project will address structural and maintenance issues and increase sewer capacity to accommodate existing flows and projected increases in flows from tributary areas. The proposed sewer upgrade will successfully improve sewer maintainability and eliminate surcharge conditions.

2.8. Project Schedule and Cost

Construction of the proposed project is anticipated to commence in March of 2006, with project completion within six months. The estimated total project cost is $739,500.

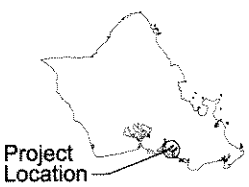


LEGEND:

- PROPERTY LINE
- EXISTING SEWER
- PROJECT AREA
- EXISTING SEWER MANHOLE
- CIPP EXISTING 8" SEWER
- OPEN CUT TRENCH AND REPLACE WITH NEW 12" SEWER
- SPOT REPAIR - OPEN CUT TRENCH AND REPLACE WITH NEW 8" SEWER
- ← DIRECTION OF FLOW

City & County of Honolulu

Department of Design & Construction



SCALE: 1"=100'

DRAFT ENVIRONMENTAL ASSESSMENT
SEWER FACILITIES REHABILITATION - UNIT II
1045 FORT STREET MALL

TMK: 2-1-1

RECOMMENDED DESIGN ALTERNATIVE

FIGURE 6

Wastewater Division - Planning

Date: December 2004

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3. DESCRIPTION OF THE EXISTING ENVIRONMENT, PROJECT IMPACTS, AND MITIGATION MEASURES

3.1. Climate

The climate at the project site is characterized by relatively constant temperatures, persistent trade winds and infrequent severe rainstorms. The prevailing northeasterly trade winds account for about 60 percent of the winds affecting the Island of Oahu. The mean monthly wind velocity varies between 10 and 15 miles per hour.

Daily maximum temperatures range from the high 70s in the winter to the upper 80s in the summer. Daily minimum temperatures vary from the low 60s in the winter to the low 70s in the summer.

Rainfall in the vicinity of the project site is relatively low, about 20 to 25 inches per year. Generally, about 50 percent of the total annual rainfall occurs during the three wettest months of December, January, and February.

Impacts

No impacts on climatic conditions are anticipated as a result of the construction and operation of the proposed sewer line reconstruction.

3.2. Geology

The project site is situated within the narrow coastal plain that spans Oahu's south-central coast, geologically referred to as the Honolulu Plain. The Honolulu Plain and much of the southern edge of Oahu is underlain by a broad, elevated coral reef, covered by alluvium deposited by streams originating in the Koolau Range. The coral reef was formed when the island was subject to higher sea levels during prehistoric times. The Honolulu Plain ranges in elevation from zero to ten feet.

Impacts and Mitigation Measures

Section A of the sewer line, located along Fort Street Mall, will be installed using the conventional construction method of open cut trenching. A trench approximately 570 feet long and four feet wide will be excavated to a depth of five to six feet for pipe installation. Excavation and grading activities are not expected to have any significant impact on the subsurface of the project site. Any application of engineering fill will augment the onsite material to provide a geotechnically sound environment. Likewise, the spot repair of approximately 40 LF within

Section B using open cut trench construction methods is not anticipated to significantly impact the subsurface.

Section B of the project will be rehabilitated using CIPP lining. As there are no excavation activities associated with CIPP installation, no impacts are anticipated to the subsurface.

3.3. Topography

The Honolulu Coastal Plain ranges in elevation from zero to ten feet above sea level. The topography in the vicinity of the project site ranges from approximately 21 feet at the intersection of Hotel and Bethel Streets to approximately 15.5 feet at the downstream end of Hotel Street near King Street. The project site is relatively flat.

Impacts and Mitigation Measures

Construction of the proposed improvements will require open cut trenching along Section A of the sewer line located beneath Fort Street Mall. The existing surface material along Section A is paved with brick, and the existing tiles shall be replaced by hand upon surface restoration. Prior to excavation activities, the tile pattern shall be documented to ensure that restoration matches the existing pattern, and during project construction the tiles shall be carefully removed and stored in such a manner as to prevent damage.

In a letter dated February 25, 2005 (see Section 8.2), the City and County of Honolulu Department of Parks and Recreation noted that the system of interlocking paving stones along Fort Street Mall was selected and installed according to a specific color, pattern and texture that would allow work, such as the proposed sewer rehabilitation, to be done with relatively minor damage to the Mall surface. The Department of Parks and Recreation made the following recommendations in their letter:

1. The contractor selected for the proposed project should consult with the company who performed the original paving stone installation to gain familiarity with removal and replacement techniques, thus, mitigating damage and ensuring proper stone replacement with respect to color and pattern;

2. The extra paving stones purchased and stored at the time of the original installation (for use in the event that stones were damaged during future construction activities) should be made available to the selected contractor; and

3. The general contractor will be required to coordinate with, and obtain the approval of the Department of Parks and Recreation's Division of Urban Forestry whenever construction involves exposure of any root structure, below-grade pruning, or any work on any tree on the Mall.

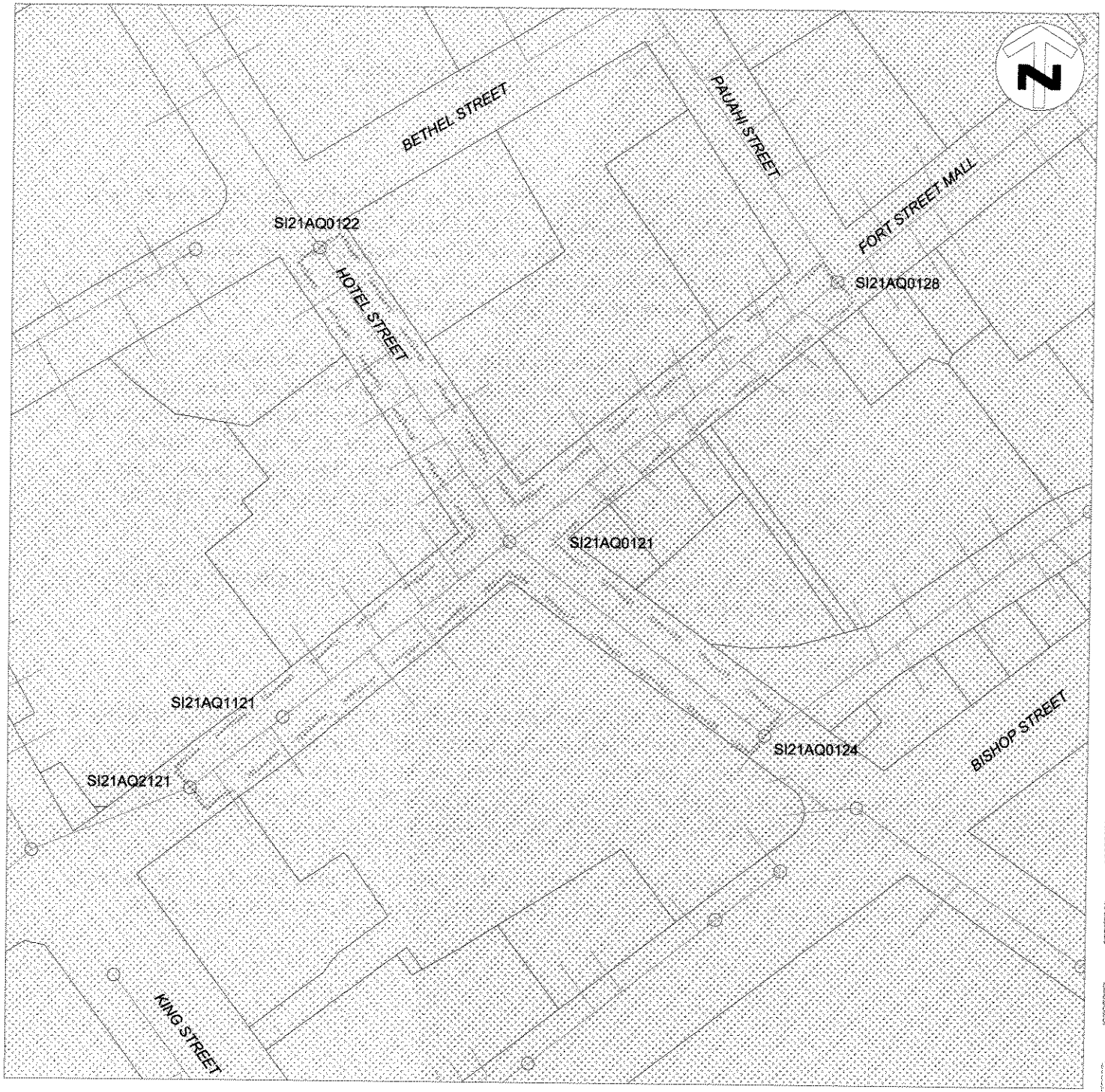
Section B will also require spot repair with open cut trenching. The existing pavement along Section B consists of reinforced concrete, and the area affected by open cut trench work will be finished and restored to match the existing pavement in thickness, color, and texture. Hawaii Revised Statutes §103D-407 requires the use of recycled glass in paving materials wherever possible and the contractor shall comply with the provisions of §103D-407 in all paving activities.

No adverse impacts to the topography of the project site are anticipated as a result of the completion of the project.

3.4. Soils

The soil at the project site is classified as Ewa silty clay loam, moderately shallow, 0 to 2 percent slopes (EmA) and Makiki clay loam, 0 to 2 percent slopes (MkA) by the USDA Soil Conservation Service, "Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii," dated August 1972. Figure 7 describes the distribution of soil types in the vicinity of the project.

Ewa silty clay loam, moderately shallow, 0 to 2 percent slopes (EmA) – Permeability is moderate, runoff is very slow, and the erosion hazard is no more than slight.

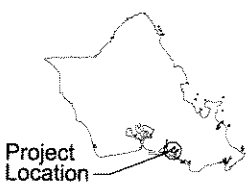


LEGEND:

		COLOR	SOIL TYPE
	PROPERTY LINE		
	EXISTING SEWER		EmA; Ewa silty clay loam
	PROJECT AREA		
○	EXISTING SEWER MANHOLE		MkA; Makiki clay loam

City & County of Honolulu

Department of Design & Construction



SCALE: 1"=100'

DRAFT ENVIRONMENTAL ASSESSMENT
SEWER FACILITIES REHABILITATION - UNIT II
1045 FORT STREET MALL

TMK: 2-1-1

SOIL TYPES

FIGURE 7

Wastewater Division - Planning

Date: December 2004

Makiki clay loam, 0 to 2 percent slopes (MkA) – Permeability is moderately rapid, runoff is slow, and the erosion hazard is no more than slight.

A geotechnical engineering report was prepared by C.W. Associates Inc., dba Geolabs-Hawaii, in March 1998 for a proposed development in the vicinity of the project site. The findings of the report were based on soil samples obtained from 14 borings ranging in depth from 11.0 feet to 30.8 feet below the existing ground surface. The boring indicated subsurface conditions of brown silty sand with traces of clay and gravel from depths of zero to four feet. At depths from four to seven feet, a tan/white coral formation was encountered. Subsurface conditions at the project site most likely exhibit similar characteristics. However, as the proposed sewer improvements will be accomplished within the existing sewer alignment, it is anticipated that excavated material will consist of native fill or imported backfill. The inverts for the proposed project are estimated to be installed at depths of approximately six feet.

The aforementioned geotechnical report recorded groundwater levels at depths from 11 to 16 feet below the existing ground surface. The actual groundwater level may fluctuate in response to tidal influences occurring in Honolulu Harbor.

Impacts and Mitigation Measures

No adverse impacts to soils at the project site are anticipated. The proposed sewer upgrade involves open cut trenching for the installation of the new line along Section A and spot repair along Section B. Adequate trench support and use of ground-water inflow control methods will be employed during excavation to mitigate soil consolidation and compression of soft deposits, and to minimize necessary dewatering. Ground-water levels will be monitored at temporary monitoring wells installed near excavations. Potential ground settlement and movement that may be induced by the installation of sheet piles will be minimized through the use of appropriate construction techniques. Excavation activities will comply with the City and County of Honolulu's grading ordinance and include appropriate erosion control measures.

3.5. Ground Water

According to the State Department of Land and Natural Resources (DLNR) aquifer classification system, the aquifer underlying the project site is the Nuuanu Aquifer System of the Honolulu Aquifer Sector.

Impacts and Mitigation Measures

The proposed project is not anticipated to have any impact on ground-water resources. The water table in the area likely occurs below the bottom elevation of the proposed trenching activities. Therefore, dewatering activities are not anticipated to be necessary during the construction and installation of the sewer line. However, if dewatering is required, activities will be minimized through the use of appropriate ground-water inflow control methods. The long-term use of the reconstructed sewer line is not anticipated to introduce contaminants into the ground-water aquifer. Completion of the sewer reconstruction will likely improve long-term shallow ground water conditions by repairing existing pipe deficiencies.

A National Pollutant Discharge Elimination System (NPDES) General Permit for discharges of construction dewatering effluent will be required for this project. A Notice of Intent to be covered by NPDES General Permit must be submitted to the State Department of Health, Clean Water Branch at least 30 days before the commencement of construction activities.

3.6. Flood, Tsunami, and Earthquake Hazard

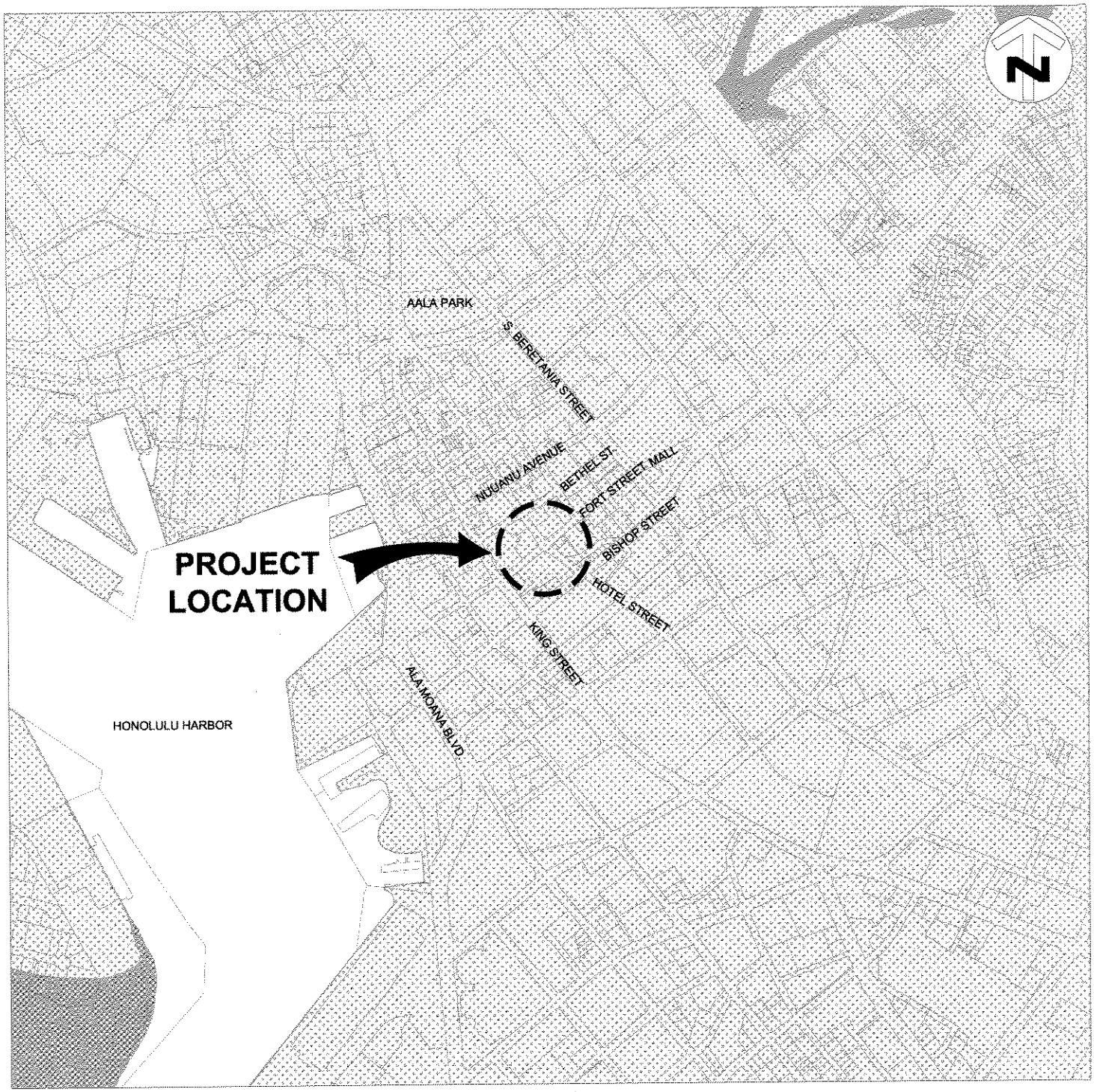
According the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), Community Panel Number 15003C 0354 E for the City and County of Honolulu, effective November 20, 2000, the project site is identified as within "Other Areas – Zone X: Areas determined to be outside the 500-year flood plain" (see Figure 8).

According to the tsunami evacuation zone maps produced by the Joint institute for Marine and Atmospheric Research and the State Civil Defense System, the project site is not within a tsunami evacuation zone.

The risk of earthquake hazard in the Honolulu Coastal Plain area is minimal, and the project site is not located within an area with a high hazard rating.

Impacts and Mitigation Measures

It is unlikely that the construction and operation of the proposed sewer line improvements will result in the flooding of the project site or the surrounding area. Possible earthquake impacts will be minimized through the construction of the new sewer lines to City and County of Honolulu design standards. After completion of construction activities, the ground surface will be finished and paved to align with existing surface elevations.



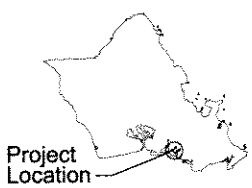
LEGEND:

PROPERTY LINE

COLOR	FLOOD ZONE
	A; 100 Yr. No Base Flood Elevation Determined
	AE; 100 Yr. Base Flood Elevation Determined
	AEF; 100 Yr. Flood Way Area w/ AE
	X; Beyond 500 Yr.
	XS; 500 Yr. Flood Plain

City & County of Honolulu

Department of Design & Construction



SCALE: 1"=1,000'

DRAFT ENVIRONMENTAL ASSESSMENT
SEWER FACILITIES REHABILITATION - UNIT II
1045 FORT STREET MALL

TMK: 2-1-1

FLOOD ZONE DESIGNATION MAP

FIGURE 8

Wastewater Division - Planning

Date: December 2004

3.7. Floral and Faunal Resources

Generally, the project site and surrounding areas are highly altered urban environments. Vegetation in the vicinity of the project corridor consists of limited landscaping that is maintained by the City or by commercial building management. . Consequently, plant life is primarily ornamental and consists mainly of trees, shrubs, and greenery confined to planter boxes. No Federal or State listed or candidate threatened or endangered species are found at the project site.

Faunal species in the vicinity consist of mammals and birds that have adapted to the urban environment. Rats, mice, and cats are common. Avifauna species that inhabit the area are those common to urban environments and include the common mynah, house finch, barred dove, house sparrow, Brazilian cardinal, red-vented bulbul, spotted dove, and pigeon.

Impacts and Mitigation Measures

Completion of the proposed project will not require the clearing of any existing vegetation at the project site. No significant impact is anticipated, as there are no known threatened or endangered species of flora or fauna inhabiting the urban environment of the project site. No loss of habitat will occur as a result of the proposed sewer line rehabilitation project.

3.8. Air Quality

Air quality at the project site is primarily affected by vehicular emissions from surrounding roadways. Beretania Street, King Street, Ala Moana Boulevard, Bishop Street, and Alakea Street are the major roadways in the project vicinity that carry heavy volumes of traffic. Hotel Street is used exclusively by buses and emergency vehicles.

Generally, air quality in the vicinity of the project area is considered to be good and meets National Ambient Air Quality Standards (NAAQS) and State Ambient Air Quality Standards (SAAQS). The State Department of Health monitors air quality at selected locations throughout the State. The Downtown Honolulu monitoring station, which measures the volume of particulate matter, and the Sand Island monitoring station, which only monitors ozone levels, are located nearest the project site and data from both stations indicate that air quality is well within Federal and State Standards.

Air quality in the project vicinity is positively influenced by northeast tradewinds that predominate throughout the year and blow pollutants from inland areas out to sea. Problems with poor air quality are more likely to occur when tradewinds diminish or

give way to southerly winds. Localized problems of poor air quality may occur under adverse Kona wind conditions in during peak traffic hours along major roadways.

Impacts and Mitigation Measures

The proposed project is anticipated to have short-term construction-related impacts on air quality, including the generation of dust and emissions from construction vehicles and equipment. The contractor will be responsible for complying with State Department of Health (DOH) Administrative Rules, Title 11, Chapter 60, "Air Pollution Control."

During the construction of the proposed sewer line improvements, two potential types of air pollution emissions will likely occur: 1) Fugitive dust from soil excavation and the movement of construction vehicles; and 2) Carbon monoxide and nitrogen oxide emissions from on-site construction equipment.

Construction activities must comply with the provisions of Hawaii Administrative Rules, Chapter 11-60.1, "Air Pollution Control," Section 11-60.1-33, Fugitive Dust. Compliance with State regulations will require adequate measures to control fugitive dust by methods such as, but not limited to:

- Planning the different phases of construction, focusing on minimizing the amount of dust generating materials and activities, centralizing on-site vehicular traffic routes, and locating potentially dusty equipment in areas of the least impact;
- Providing an adequate water source at the project site prior to initiation of construction activities;
- Frequent watering of any exposed areas;
- Landscaping and rapid covering of bare areas, including slopes, starting from the initial grading phase;
- Controlling of dust from shoulders and access roads;
- Providing adequate dust control measures during weekends, after hours, and prior to daily start-up of construction activities;
- Controlling dust from debris being hauled away from the project site; and
- Constructing a dust barrier/fence.

Exhaust emissions from construction vehicles are anticipated to have negligible impacts on air quality in the project vicinity, as emissions would be relatively small and readily dissipated.

The State Department of Health recommends that a dust control management plan be developed to identify and address all activities that have a potential to generate fugitive dust, and the contractor will be responsible for the implementation of adequate dust control measures during all phases of development and construction activities.

No significant adverse impacts are anticipated upon completion and during operation of the proposed sewer line reconstruction.

3.9. Noise

Noise levels in the vicinity of the project site are generally the result of vehicular traffic, pedestrian traffic, existing business operations, and occasional aircraft overflights. As the project corridor is located within a roadway and a pedestrian mall in the Honolulu business district, public buses and pedestrians are the primary noise sources during daily business hours.

Impacts and Mitigation Measures

Noise from construction activities will likely be unavoidable during the entire construction period. Unavoidable construction noise impacts will be mitigated to some degree by the contractor's compliance with the provisions of the State DOH Administrative Rules, Title 11, Chapter 46, "Community Noise Control" noise regulations. These rules require a noise permit if the noise level from construction activity is expected to exceed the allowable levels stated in the Chapter 46 rules. It shall be the contractor's responsibility to minimize noise by properly maintaining noise mufflers and other noise-attenuating equipment, and to maintain noise levels within regulatory limits.

It is anticipated that night construction activities will exceed allowable levels. A noise variance will be obtained prior to commencement of construction activities, in accordance with the Chapter 46 rules.

In the long-term, no significant noise impacts are anticipated due to the completion and operation of the proposed sewer upgrade, as the typical noise levels induced by the existing uses on the project site are expected to continue.

3.10. Archaeological and Cultural Resources

Due to the highly developed nature of the project site, no archaeological resources are believed to be present at the site. In a letter dated September 3, 2004 (see Section 8.1), the State Department of Land and Natural Resources, Historic

Preservation Division (SHPD), noted that "because no new ground disturbance is proposed, and no historic sites have been identified in these locations, we believe that no historic properties will be affected by this undertaking."

Any cultural activities that may have been historically associated with the Honolulu business district were terminated by the urbanization of the area, which has left little habitat for any terrestrial flora and fauna that may be of cultural value.

Impacts and Mitigation Measures

It is unlikely that any subsurface archaeological resources are present at the project site. In the aforementioned letter from the SHPD dated September 3, 2004, the agency expressed their belief that "no historic properties will be affected" by the proposed project. However, in the event that historic remains are encountered during construction activities, work in the vicinity of the find will cease immediately and the find will be protected from further damage. The contractor shall immediately contact the SHPD to assess the significance of the find and recommend an appropriate mitigation measure, if necessary.

No impacts to cultural resources are anticipated, as previous development and current use of the project site precludes the presence of any resources that may be of cultural value.

3.11. Socio-Economic Characteristics

3.11.1. Existing Businesses and Surrounding Uses

As described in Figure 5, the proposed project will affect portions of the Hotel Street and Fort Street Mall rights-of-way in TMK 2-1-1. Numerous businesses are associated with the TMK parcels located adjacent to the project corridor. These businesses include a variety of restaurant, retail, and commercial office uses.

Impacts and Mitigation Measures

The proposed sewer line reconstruction route and construction methods will minimize surface impacts while providing the necessary hydraulic capacity improvements at a feasible cost. Short-term impacts to existing businesses and surrounding uses may occur in the following areas: business operations, pedestrian and vehicular traffic, and infrastructure conflicts.

The impacts of construction activities will be primarily mitigated by scheduling work at night during non-business hours and non-peak traffic periods. Night work will ensure minimal impact to businesses and traffic. Night work will also eliminate the inconvenience of construction noise and dust-related impacts to pedestrians and neighboring establishments during operating hours.

During the day, the project site and all associated construction equipment will be secured and located so as not to impede daily business activities. Open trenches will be covered with steel plates to allow vehicular and pedestrian movement within the project site.

As all improvements are to be installed within the City and County of Honolulu's existing right-of-way, the acquisition of an easement is not necessary.

There are no adverse long-term socio-economic impacts anticipated due to the completion and operation of the proposed project.

3.11.2. Police, Fire and Ambulance Service

Police: Police protection services in the vicinity of the project site are provided by the Honolulu Police Department (HPD). The project site is located near the HPD Chinatown Substation and within a mile of the Honolulu Police Station on Beretania Street.

Fire: Fire protection services are provided by the Honolulu Fire Department. The nearest fire station in the vicinity of the project site is located on Beretania Street and near the intersection of Fort Street Mall.

Ambulance: The nearest Emergency Medical Service (EMS) ambulances are based at the Queen's Medical Center and St. Francis Hospital.

Impacts and Mitigation Measures

Although the existing businesses, Fort Street Mall, and Hotel Street may occasionally require police, fire, and ambulance services, the proposed sewer line reconstruction will not affect the demand for such services. The project site is located within existing service areas.

The contractor will be responsible for providing notice of the construction schedule to the District 1 patrol office of the Honolulu

Police Department at 529-3386. This should be done well in advance of the commencement of construction activities and as soon as the schedule becomes available.

For the duration of the project, the Honolulu Fire Department requires compliance with the following:

1. Maintain fire apparatus access throughout the construction site.
2. Maintain access to fire hydrants.
3. Notify the Fire Communication Center at 523-4411 of any interruption in the existing fire hydrant system.

The contractor will be responsible to adhering to the above requirements.

3.12. Infrastructure and Utilities

The following section includes discussions regarding roadways and utility lines, including water, drainage, wastewater, electrical, telephone, cable, and gas lines. Figure 9, Existing Utilities, describes the location of utility lines within the proposed project corridor.

3.12.1. Roadways and Traffic Considerations

Vehicular access to Hotel Street is limited to public transit system buses and specially permitted vehicles. Hotel Street is a 2-lane roadway providing a link between the Kalihi and Lower Liliha area of North King Street, through China Town, terminating at the intersection with Richards Street near the State Capitol. Fort Street Mall is a pedestrian mall where vehicles are not permitted.

Impacts and Mitigation Measures

Rehabilitation of Section B with the installation of CIPP lining is anticipated to have short-term construction impacts to traffic on Hotel Street. Although CIPP typically involves very little surface impacts, there is a 40-foot section of the line in critical structural condition that must be replaced using open cut trench excavation. Spot repair work will be scheduled during night hours when traffic volumes are low and minimal impacts to the public transit system can be expected. Trenching activities will be secured with steel plates during non-construction work hours.

Additionally, a shallow trench will be required along Hotel Street to install a temporary sewer by-pass during CIPP installation. This effort also requires night work construction and will be steel plated during the day to maintain vehicular travel along Hotel Street.

Traffic operations along Hotel Street are under the jurisdiction of the City and County of Honolulu, Department of Transportation Services. The public transit system, or The Bus, is administered by the DTS Public Transit Division and operations are under contract to Oahu Transit Services, Incorporated. Close coordination with both DTS and Oahu Transit Services will be necessary to ensure minimal impact to public transportation service. Both entities will be informed of the project schedule prior to the commencement of construction activities. The contractor should submit a traffic control plan for Hotel Street to the DTS Traffic Signals and Technology Division prior to the commencement of construction.

There are no long-term traffic related impacts associated with the completion and operation of the proposed sewer line reconstruction.

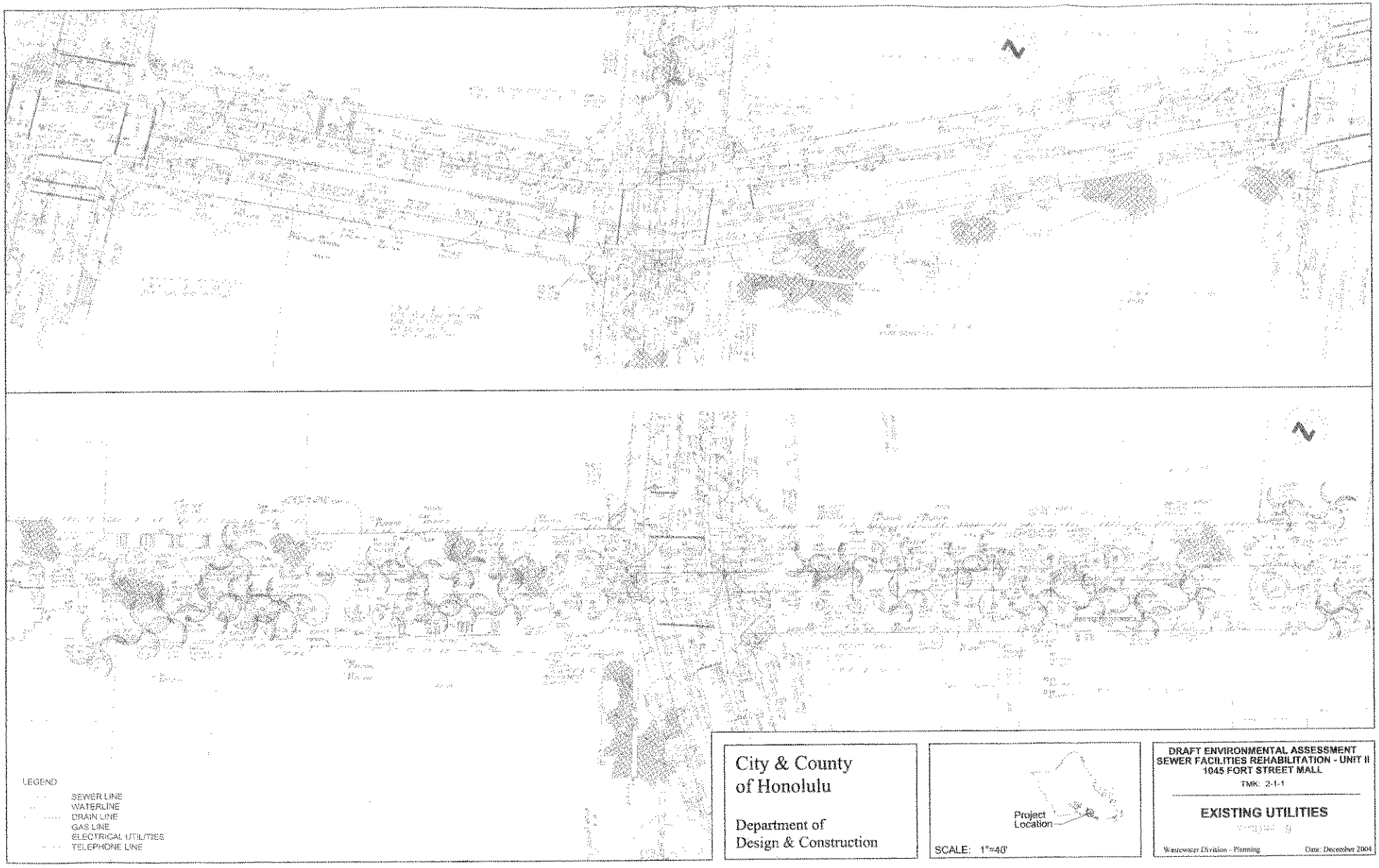
3.12.2. Water System

Businesses and restaurants in the vicinity of the project site receive water service from the Honolulu Board of Water Supply (BWS). Figure 8 indicates the utility lines located within the corridor of the proposed sewer line reconstruction.

As-built construction drawings indicate an 8-inch water line generally running parallel to the sewer line along Fort Street Mall. The water line crosses the sewer line between manholes SI21AQ1121 and SI21AQ2121. Along Hotel Street there also exists a 12-inch water line which runs parallel to the sewer between SI21AQ0121 and SI21AQ0122 and a 8-inch water line which runs parallel to the sewer between SI21AQ0121 and SI21AQ0124. The 8-inch water line along Hotel Street also crosses the Fort Street Mall sewer line.

Impacts and Mitigation Measures

Short-term construction impacts may possibly affect the BWS water lines in the project corridor. To avoid any infrastructure conflicts and any damage to the water distribution system, the final construction drawings will be submitted to the BWS for review and approval. Additionally, the construction schedule will be coordinated with the BWS to minimize any possible impacts to the water system.



City & County
of Honolulu

Department of
Design & Construction

Project
Location

SCALE: 1"=40'

DRAFT ENVIRONMENTAL ASSESSMENT
SEWER FACILITIES REHABILITATION - UNIT II
1045 FORT STREET MALL

TMK: 2-1-1

EXISTING UTILITIES

Wastewater Division - Planning

Date: December 2004

There are no long-term impacts associated with the completion and operation of the proposed sewer line reconstruction. The project will not induce any additional water demand in the vicinity of the project site.

3.12.3. Drainage System

As-Built construction drawings indicate a 30-inch diameter reinforced concrete pipe (RCP) drain line along Fort Street between Pauahi Street and Hotel Street. The drain line increases to 36 inches downstream of Hotel Street. The 36-inch drain line crosses the sewer line between manholes SI21AQ1121 and SI21AQ2121. Several drain inlets and laterals also connect to the drain line along Fort Street Mall.

Four drainage catch basins located near the intersection of Hotel Street and Fort Street Mall convey stormwater to the drain line along Fort Street Mall via 18-inch drain lines. The 18-inch connecting drain lines have less than six inches of clearance above the Fort Street Mall sewer line.

Impacts and Mitigation Measures

Short-term construction impacts may possibly affect drainage system in the project corridor. To avoid any infrastructure conflicts and any damage to the drain lines, the final construction drawings will be submitted to the City Department of Design and Construction for review and approval. Additionally, should dewatering activities be required for the proposed project, an NPDES permit will be acquired and appropriate Best Management Practices will be applied during open-cut trenching.

There are no long-term drainage impacts associated with the completion and operation of the proposed sewer line reconstruction. The project will not increase the paved surface area or induce additional run-off.

3.12.4. Wastewater System

The project corridor includes sewers that are components of the municipal wastewater collection system. There are no individual wastewater systems, such as cesspools and septic tanks within the project area.

The proposed sewer line improvements include replacement and rehabilitation of the existing sewer lines. Flows from these lines are collected by a ten-inch sewer line located downstream of the project site along the Fort

Street Mall alignment. The ten-inch line eventually conveys wastewater to the Sand Island Wastewater Treatment Plant.

As noted in Section 2, the existing lines collect wastewater from commercial uses such as restaurants, offices, and retailers. Capacity issues and deteriorating conditions have compromised the service provided by the existing lines.

Impacts and Mitigation Measures

The proposed sewer reconstruction project addresses the hydraulic capacity issues while correcting structural problems. Construction activities will require the installation of a temporary sewer by-pass line to allow continued sewer service during the installation of the new line. The long-term beneficial impacts of the project will be realized through improved wastewater service within the collection area.

3.12.5. Electrical, Telephone, Cable, and Gas Service

There are numerous utility lines located within the project corridor, During the exploration of design alternatives, Hawaiian Electric Company, Inc., GTE Hawaiian Telephone Company Incorporated (Verizon Hawaii), Oceanic Cable, and The Gas Company were consulted regarding the possible impacts to their businesses during the construction period. Copies of relevant correspondence are reproduced in Section 8.1.

Electrical Service: Hawaiian Electric Company, Inc. (HECO) provides power service in the vicinity of the project, and extreme caution is required during excavation operations. HECO has existing facilities in the area of the project and will need continued access for maintenance of HECO facilities. Design drawings to be prepared in support of the proposed sewer improvements will include information on any HECO facilities in the area, and field verification of facility locations will be necessary. HECO will be provided with two sets of the pre-final drawings along with a copy of HECO's Honolulu Ductline Map No. 2030-74-1, reference drawing number 10849 for review.

Telephone Service: Telephone service in the area is provided by Verizon Hawaii (formally GTE Hawaiian Telephone Company Incorporated). Underground telephone facilities exist within the project area. The telephone lines are relatively shallow in comparison to the sewer lines and extreme caution is required during excavation operations. Design drawings to be prepared in support of the proposed sewer improvements will include

information on any telephone facilities in the area, and field verification of facility locations will be necessary.

Cable Service: Cable service in the area is provided by Oceanic Time Warner Cable. Oceanic Cable facilities are located in the telephone conduit system within the project area. Verification of telephone conduits will thus provide information on the location of cable facilities.

Gas Service: An existing 2-inch gas line runs along the Ewa side of the Fort Street corridor with several service lateral crossings. The gas lines are relatively shallow in comparison to the sewer lines and extreme caution is required during excavation operations. Design drawings to be prepared in support of the proposed sewer improvements will include information on any gas service facilities in the area, and field verification of facility locations will be necessary.

Impacts and Mitigation Measures

The location of HECO's facilities will be confirmed during the design phase, and pre-final plans for the proposed sewer reconstruction will be submitted for HECO review. Verizon Hawaii's facilities will also be confirmed, and necessary adjustments will be made to avoid disturbance of the telephone system, as well as the co-located cable lines. Likewise, The Gas Company's utility lines will also be confirmed and avoided. HECO, Verizon, Oceanic Cable, and The Gas Company will be notified of the construction schedule and coordination activities will be executed as appropriate throughout the design and construction phases, including the affordance of provisions for any necessary utility maintenance activities.

Long-term impacts to electrical, telephone, cable, and gas service are not anticipated with regard to the completion and operation of the proposed sewer line reconstruction.

4. RELATIONSHIP TO PLANS, POLICIES, AND CONTROLS

4.1. State Land Use District

The State Land Use Law, Chapter 205, Hawaii Revised Statutes (HRS), is intended to preserve, protect, and encourage the development of lands in the State for uses which are best suited to the public health and welfare for Hawaiis people. All lands in the State are classified into four land use districts by the State Land Use Commission: Urban, Agricultural, Conservation, and Rural.

> Comment:
> The project site is within the State Urban"district . The proposed project is consistent with this designation.

4.2. Hawaii State Plan

The Hawaii State Plan, HRS Chapter 226, outlines broad goals, policies and objectives to serve as guidelines for the future growth and development of the State. The proposed project is consistent with the following objectives, policies and priority guidelines:

§226-13 Objectives and policies for the physical environment – land, air, and water quality.

(a) Planning for the State's physical environment with regard to land, air, and water quality shall be directed towards achievement of the following objectives:

(2) Maintenance and pursuit of improved quality in Hawaii's land, air, and water resources.

(3) Greater public awareness and appreciation of Hawaii's environmental resources.

(b) To achieve the land, air, and water quality objectives, it shall be the policy of this State to:

(2) Promote the proper management of Hawaii's land and water resources.

(3) Promote effective measures to achieve desired quality in Hawaii's surface, ground, and coastal waters.

(4) Encourage actions to maintain or improve aural and air quality levels to enhance the health and well-being of Hawaii's people.

(7 Encourage urban development in close proximity to existing services and facilities.

Comment:
The proposed project will have no significant long-term impact on the natural environment, including coastal water qality and air qality.

4.3. City and County of Honolulu General Plan

The General plan of the City and County of Honolulu sets forth broad statements of social, economic, environmental, and design objectives and polices which are desired over the long-term. The proposed project is consistent with the following policies and objectives:

III. Natural Environment

Objective A *To protect and preserve the natural environment.*

Policy 1: *Protect Oahu's natural environment, especially the shoreline, valleys, and ridges from incompatible development.*
Policy 7: *Protect the natural environment from damaging levels of air, water, and noise pollution.*

Comment:
The proposed project is not anticipated to have any long-term impacts on air qality, water qality, or noise levels.

IV. Physical Development and Urban Design

Objective A *To coordinate changes in the physical environment of Oahu to ensure that all new developments are timely, well designed, and appropriate for the areas in which they will be located.*

Policy 2: *Coordinate the location and timing of new development with the availability of adequate water supply, sewage treatment, drainage, transportation, and public safety facilities.*

Comment:
The proposed sewer upgrade will result in the correction of existing structural problems and hydraulic capacity issues. The flow capacity of the sewer line will be improved to accommodate existing flow levels and projected increases in flow, and will successfully eliminate surcharge conditions.

4.4. Primary Urban Center Development Plan

The Island of Oahu is divided into eight Development Plan areas; the plans for six of these areas have been designated as Sustainable Community Plans. Each plan implements the objectives and policies of the General Plan and serves as a guide for public policy, investment, and decision making within each respective region. Together with the General Plan, they guide population and land use growth over a 20-year time span. The project site is located within the region encompassed by the Primary Urban Center (PUC) Development Plan.

A major revision of the Development Plans, based on a 1992 City Charter change, was recently completed. The revised plans are visionary, conceptual plans without the parcel specific detail of the first Development Plans adopted in the early 1980s. The PUC Development Plan Revision Program was completed in June 2004.

The PUC Development Plan revision was initiated in 1996 and utilized community workshops and studies on economic development, housing, visitor facilities, infrastructure, and urban design. The revised plan establishes policy to shape the growth and development of the PUC over the next 20 years. Because the PUC includes a diverse mix of uses, the plan establishes broad regional policies and provides a foundation for more specific planning at the local level. Chapter 2 sets forth the overall vision for the PUC, Chapter 3 outlines policies for land use and transportation, Chapter 4 sets policies for infrastructure and public facilities, and Chapter 5 discusses the plan implementation.

The revised PUC Development Plan indicates that the project site is within the areas designated as District Commercial, which includes retail and office complexes in central in-town areas. Additionally, Fort Street Mall and Hotel Street are designated as components of the pedestrian network on the PUC Development Plan Land Use Map (PUC-Central). The proposed project is consistent with the PUC land use designations, and is also consistent with the following infrastructure and public facilities policies and guidelines:

4.2.2 Policies

- *Implement wastewater collection system improvements to provide adequate service and sound facilities to existing neighborhoods and timely increases in system capacity to areas planned to undergo improvement or change in use.*

4.2.3 Guidelines

- *Complete current projects needed to correct currently identified service or facility inadequacies to neighborhoods where change in service demand is not anticipated.*

Comment:
As noted in Section 4.3, the proposed project will result in the correction of existing structural problems and hydraulic capacity issues. The flow capacity of the line will be improved, and the proposed project will successfully improve sewer maintainability and eliminate surcharge conditions. The proposed sewer reconstruction project supports the revised PUC Development Plan's policies and guidelines pertaining to the region's wastewater system.

The PUC Public Infrastructure Map (PIM), adopted by the City Council on October 13, 2004, supports the implementation of the PUC Development Plan and describes the approximate location of major planned facilities projects. According to correspondence dated January 20, 2005 from the City and County of Honolulu, Department of Planning and Permitting, "underground sewer line projects are not a type of project that needs to be shown on the PIM." Therefore, a revision to the PIM is not needed for the proposed project.

4.5. City and County of Honolulu Land Use Ordinance

The City and County of Honolulu Land Use Ordinance (LUO) regulates land use in accordance with adopted land use policies, including the City and County of Honolulu General Plan and the Development/Sustainable Community Plans. The project corridor along Hotel Street is within the Business Mixed Use – Central (BMX-4) zoning district. Fort Street Mall is designated as within the Preservation – General (P-2) district; lands designated as urban areas by the State, but well-suited to the functions of providing visual relief and contrast to the city's built environment or serving as outdoor space for the public's use and enjoyment may be zoned P-2 General.

Comment:
The resulting benefits of the proposed sewer rehabilitation project will serve existing uses consistent with the City's zoning designations of Business Mixed Use and Preservation – General.

4.6. State Coastal Zone Management Program

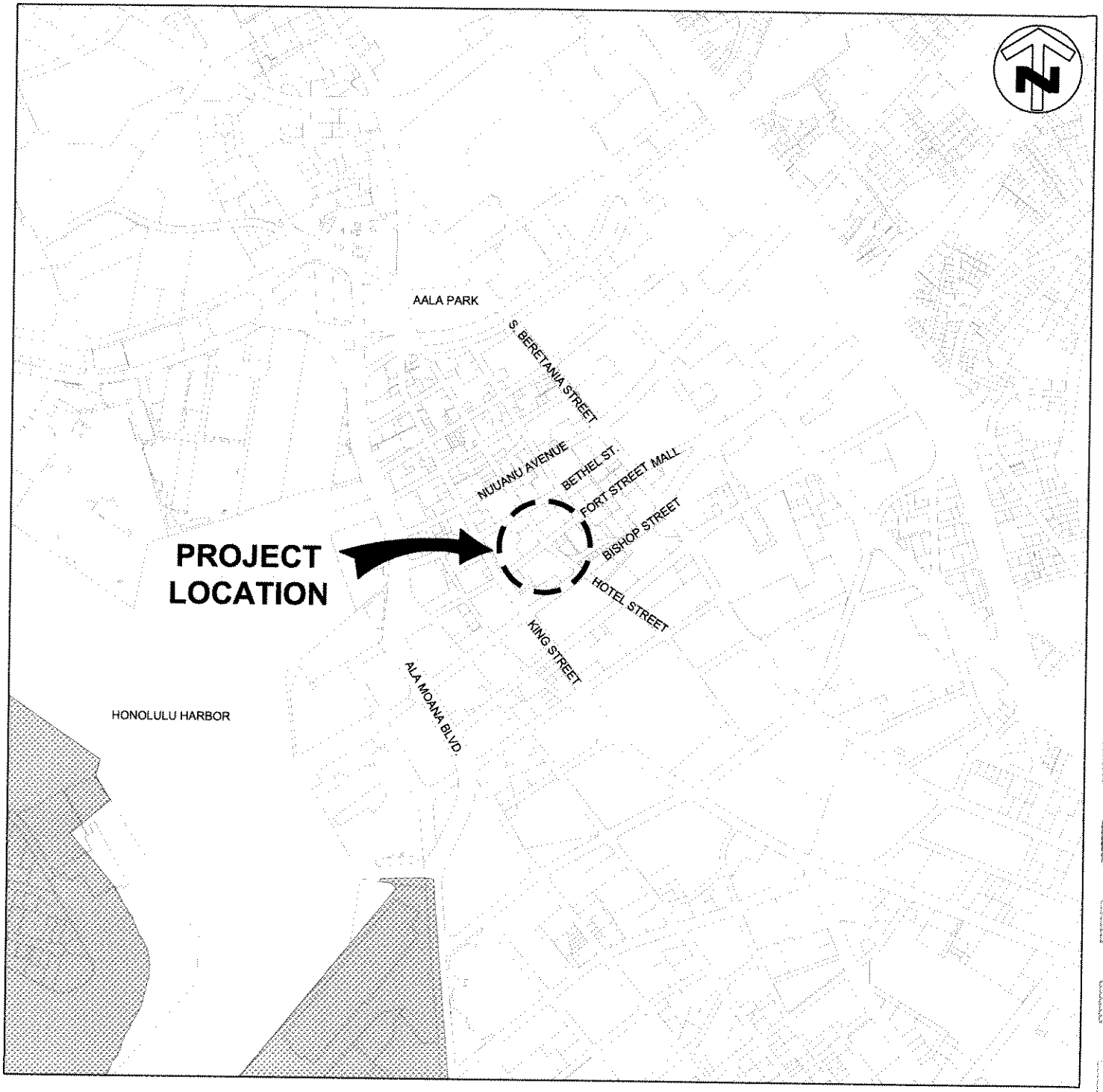
Hawaii's Coastal Zone Management (CZM) program, established pursuant to Chapter 205A, HRS, as amended, is administered by the State Office of Planning and provides for the beneficial use, protection and development of the State's coastal zone. The objectives and policies of the Hawaii CZM program encompass broad concerns such as impacts on recreational resources, historic and archaeological resources, coastal scenic resources and open space, coastal ecosystems, coastal hazards, and the management of development.

Comment:
The proposed sewer rehabilitation project is not anticipated to adversely impact recreational, historic, archaeological, scenic or coastal resources.

4.7. Special Management Area

Pursuant to the Hawaii Coastal Zone Management Act (Chapter 205A, HRS), all counties have enacted ordinances establishing Special Management Areas (SMAs). Development within the SMA, including most development proposed by the State, requires a SMA permit. On Oahu, the SMA permit is administered by the City and County of Honolulu Department of Planning and Permitting and acted upon by the City Council pursuant to Chapter 25, Revised Ordinances of Honolulu.

Comment:
Figure 10 illustrates the location of the SMA boundary relative to the proposed sewer reconstruction. The project site is located outside the boundaries of the City and County's SMA. Therefore, approval of a SMA permit is not required.



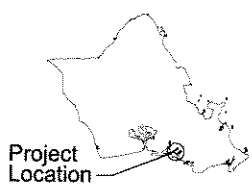
LEGEND:

PROPERTY LINE

COLOR	DESIGNATION
	INSIDE SPECIAL MANAGEMENT AREAS

City & County of Honolulu

Department of Design & Construction



SCALE: 1"=1,000'

DRAFT ENVIRONMENTAL ASSESSMENT
SEWER FACILITIES REHABILITATION - UNIT II
1045 FORT STREET MALL

TMK: 2-1-1

SPECIAL MANAGEMENT AREA BOUNDRY MAP

FIGURE 10

Wastewater Division - Planning

Date: December 2004

5. ALTERNATIVES TO THE PROPOSED ACTION

5.1. No-Action Alternative

Under the No-Action Alternative, the 8-inch and 10-inch sewer lines would remain in their existing states. Structural and capacity problems would remain and further degradation is likely. Sewer service in the area would eventually be compromised. No construction related impacts to the environment or to existing and surrounding uses would occur. There would be no commitment of funding or capital improvement costs. In the long term, the benefits of the proposed sewer line rehabilitation would not be realized.

5.2. Design Alternatives Report

The Limtiaco Consulting Group prepared a Design Alternatives Report to evaluate rehabilitation and reconstruction options for the existing sewer lines. The report identifies, evaluates, and examines design and construction requirements with preliminary layouts, and estimated construction costs for the recommended alternative.

The alternatives investigated for sewer pipe rehabilitation include chemical grouting, pipe bursting, CIPP lining, fold and form lining, sliplining, horizontal directional drilling, and open trench excavation. Sewer realignment was not considered a feasible alternative due to inadequate space along the Fort Street Mall and Hotel Street corridors

The following sections provide descriptions of the various alternatives, including the work involved and the advantages and disadvantages of each method as they specifically pertain to this project.

5.2.1. Design Alternative 1: Chemical Grouting

Chemical grouting utilizes chemical mixtures to form a waterproof barrier around the exterior of the defective pipe to reduce infiltration into structurally sound mains and laterals. The grouting process uses a cylindrical packer which is inserted via a manhole into the sewer line and positioned to straddle the pipe joint. Inflatable rings at each end of the packer expand to conform to the interior of the pipe, creating an air void. The air pressure within the void is measured to determine whether the joint is defective. If the joint is found susceptible to infiltration, chemical grout and a catalyst are pumped through separate lines into the crack where it combines with the surrounding soil to form an impermeable mass. Once the grout sets, the packer is pulled to the

next joint and the process repeated. The entire process is monitored and recorded by a closed-circuit television camera to ensure proper application.

Advantages of chemical grouting include rapid installation, minimal or no surface disruptions, minimal traffic disturbances, no laterals to reinstate, and relatively inexpensive costs.

Disadvantages of chemical grouting include: improper setting due to excessive groundwater or soil voids, longevity of grout (typically three to five years for projects in Hawaii), possibility of grout shrinkage due to changes in soil conditions, will not correct existing sags or offset joints, does not increase pipe capacity, and requires specialty contractors.

5.2.2. Design Alternative 2: Pipe Bursting

Pipe bursting is a method of pipe rehabilitation that allows an existing sewer main or lateral to be replaced with a new one having an equal or larger diameter. Pipe bursting requires using a winch to pull a pneumatic or hydraulic burster through the existing line. Attached to the burster is the new pipe to be installed. As the burster is pulled forth, the existing pipe is shattered and replaced with the new pipe. The existing laterals need to be disconnected from the main via potholes drilled from the surface prior to the bursting procedure to avoid damage. Once the new main is installed, the laterals are then reinstated.

Pipe bursting is suitable for replacing brittle types of pipe material such as vitrified clay, unreinforced concrete, terra cotta, and some types of polyvinyl chloride (PVC). The success of pipe bursting is highly dependent upon the surrounding soil as the cohesiveness of the soil dictates the allowable drive length. Soil composition is also a factor since the burster follows the path of least resistance. As a result, sags may occur in the new sewer line through areas of loose soils. A thorough soils investigation is therefore necessary to evaluate the feasibility of pipe bursting.

Advantages of pipe bursting include: increase of pipe size, rapid installation, minimal surface disruption, minimal or no traffic disturbances, and generally lower costs than open trench excavation.

Disadvantages of pipe bursting include: requires flow diversion, hazard of exerting additional pressure upon adjacent underground pipes and structures, excavation is required for entry pits and lateral reinstatements, inability to repair extensive sags, and requires specialty contractors.

5.2.3. Design Alternative 3: Cured-in-Place Pipe Lining

Cured-in-place pipe (CIPP) lining is a form of sewer rehabilitation that lines the interior surface of the deficient good host pipe or lateral with a structural liner which is resistant to infiltration and corrosion. CIPP lining can be performed on pipes with diameters ranging from 4 inches to 100 inches.

The liner used in the CIPP process is a flexible, cylindrical membrane with an inner felt lining impregnated with a thermosetting resin. The liner is inserted into the existing sewer line via a manhole or cleanout. The liner is then inverted using water or air and the resin-impregnated side is pressed flush against the interior face of the host pipe. Once the resin sets, a cutting tool is inserted in the liner to reinstate the laterals. Laterals can also be rehabilitated with the CIPP process by using the sewer cleanout for access. The entire process is visually inspected via closed-circuit video camera to ensure proper application.

The CIPP liner is structurally sound, resistant to corrosion, and has no joints or seams. Thickness of the liner depends on several factors including pipe diameter, external pressure, and liner properties. The thickness of the liner slightly reduces the flow area of the pipe. The loss in flow area, however, is compensated for by the smooth finish of the liner, which typically increases flow capacity by approximately 50 percent. Manufacturer's tests have shown a Manning's roughness coefficient of approximately 0.011 for newly installed liners.

Advantages of CIPP lining include: rapid installation, minimal or no surface disruption, minimal or no traffic disturbances, ease of lateral reconnection, and generally lower costs than open trench excavation.

Disadvantages of CIPP lining include: flow diversion requirement, susceptibility of connection point of lateral to infiltration, lack of ability to correct existing sags, possibility of wrinkles and bubbles, and specialty contractor requirement.

5.2.4. Design Alternative 4: Fold and Form Lining

Similar to the CIPP lining process, the fold and form lining process inserts a liner into the host pipe to repair the sewer deficiencies. Instead of a flexible membrane liner, the Fold and Form process uses a solid high-density polyethylene (HDPE) or PVC thermoplastic U-shaped liner. The liner is either extruded in a folded form or extruded in the conventional circular form and subsequently folded using a thermomechanical tool. Once the liner is placed

within the host pipe, it is expanded using steam against the inner surface of the pipe.

Advantages of Fold and Form lining include: rapid installation, minimal or no surface disruption, minimal or no traffic disturbances, ease of lateral reconnection, no mixing or curing of chemicals required, and generally lower costs than other trenchless forms of sewer rehabilitation.

Disadvantages of Fold and Form lining include: requires flow diversion, connection point of lateral to main is susceptible to infiltration, will not correct existing sags, reduces the flow area of the pipe, possibility of returning to folded form if not properly cured, and requires specialty contractors.

5.2.5. Design Alternative 5: Slip Lining

Slip lining is a pipe rehabilitation method that involves installing solid sections of pipe (typically polyethylene) into a deficient host pipe. Since the liner is pre-formed, it does not bend readily and requires an entry pit to provide access to the sewer line. The size of the pit depends on the depth of the sewer line and the size, length, and flexibility of the liner. The liner sections may be joined above-ground or underground prior to installation.

Advantages of slip lining include: rapid installation, no mixing or curing of chemicals required, and generally lower costs than other trenchless forms of sewer rehabilitation.

Disadvantages of slip lining include: may require flow diversion for pipes flowing partially full, difficulty of locating lateral reconnections, will not correct existing sags, reduces the flow area of the pipe, requires annular space surrounding the liner to be grouted to provide structural integrity, rigidity of the liner prevents navigation around bends in larger diameter pipes, and requires specialty contractors.

5.2.6. Design Alternative 6: Horizontal Directional Drilling

Horizontal directional drilling (HDD) is a trenchless method of installing pipe by boring a hole horizontally along the proposed pipe alignment and pulling the new pipe through the hole. Once the new pipe is installed, laterals are reinstated via open-trench excavation. Horizontal directional drilling is ideal for installing utilities in areas where there are minimal existing utilities and exact slopes and invert elevations are not critical.

The drilling equipment consists of a drilling rig, slurry mixing system, power station and ancillary accessories. The drilling length is limited by the capacity of the equipment, site soil conditions, and pipe material selected. A bentonite slurry mixture may be utilized during drilling to provide lubrication and to prevent collapse of the hole.

Staging areas for drilling and receiving are required where the pipe enters or exits the ground. Typically, the staging areas are approximately 12 feet wide by 60 feet long to provide adequate space for boring and hydraulic equipment. Since it is impossible to predict exactly what will be encountered below the surface, HDD typically involves a level of uncertainty regarding existing soil conditions. A thorough geotechnical investigation must be done prior to construction and is critical to determine the type of boring head and slurry mixture to be used. The soils report should include, at a minimum, boring logs, soil/rock type, permeability, density, and moisture content.

Advantages of HDD include: minimal surface disruption along the pipe alignment, minimal or no pipe settlement because installation is done upon in-place soils, quick installation if few obstacles exist.

Disadvantages of HDD include: uncertainties concerning underground soil conditions, creates traffic disturbances at entry pits, connection point of lateral to main is susceptible to infiltration, difficult navigation around existing underground utilities, and requires specialty contractors.

5.2.7. Design Alternative 7: Open Trench Excavation and Replacement

Considered the "conventional" method, open trench replacement requires extensive trenching from the ground surface to expose and replace the defective portions of the sewer line.

Advantages of open trench construction include ability to redesign size and slope of new sewer line, elimination of sags and offset joints, familiarity of contractors with installation procedures, and elimination of uncertainties concerning underground soil conditions.

Disadvantages of open trench construction include: significant impact on environment and traffic, requires flow diversion, requires storage space and/or disposal of excavated material, and may incur higher construction costs especially if dewatering and shoring is required.

5.2.8. Evaluation of Design Alternatives

The evaluation of design alternatives was completed separately for the portion of the sewer line beneath Fort Street Mall and the portion of the line located beneath Hotel Street. The alternatives were evaluated based on several criteria including surface disruptions, construction cost, ease of construction, and ability to repair the identified defects.

5.2.8.1. Surface Disruptions

The level of surface disruption corresponding to each construction alternative is significant since several businesses are located along Fort Street Mall and Hotel Street. It is also preferable that surface disruptions (lane closures, detours, trenching, noise, dust, etc.) caused by the sewer improvements be kept to a minimum since the surface of Fort Street Mall is tiled with bricks and Hotel Street is a major component of the City's Bus transit system.

Construction methods that require extensive excavation (trenching, drilling and receiving pits, lateral reconnections, etc.) are considered less desirable while methods that cause little or no surface disturbance are more desirable.

5.2.8.2. Construction Cost

One of the main factors in determining the most feasible alternative is the construction cost. Alternatives with minimal construction costs are considered more desirable.

The construction costs in the design alternatives report are estimated based on information gathered during the site visits and from existing construction drawings. Additional data obtained during the design phase (boring logs, geotechnical reports, etc.) may significantly affect the construction cost estimates and feasibility for each method.

5.2.8.3. Ease of Construction

This criterion evaluates the constructability of each construction method in terms of the contractor's familiarity with each method and the potential for any unforeseen problems. For example, trenchless methods of repair may pose a higher risk of uncertainty than open-trench excavation due to the inability to visually see the pipe and surrounding utilities. A project with

several unknown variables runs the risk of increased change orders and exceeding the allotted budget and construction time.

5.2.8.4. Ability to Repair Defects

The main defects identified during the CCTV inspection included broken pipe, severe cracks, sags, root intrusion, and grease buildup. The construction methods evaluated have varying rates of success in terms of repairing the identified defects. Rehabilitation/repair methods that can successfully address all defects are considered more desirable while other methods that mainly correct only one or two defects are considered less desirable.

5.2.9. Comparison of Design Alternatives

A matrix, presented in Table 5-1 below, was generated to allow comparison of the various rehabilitation/repair alternatives by assigning numerical values to various criteria of each construction method. The matrix scored each criteria with a number between 1 and 10 with "10" being a favorable rating and "1" being an unfavorable rating. A total score is then derived for each alternative based on the individual ratings.

Alternatives that were evaluated but not given further consideration due to its inability to repair the identified defects were not rated and given a score of "NR". These options were not considered as being possible options for the recommendation.

5.2.10. Recommended Design Alternative

The Design Alternatives Report concluded that reconstruction of the portion of the sewer line located beneath Fort Street Mall should be accomplished with open-cut trench excavation. Rehabilitation of the portion of the sewer line located beneath Hotel Street should be accomplished with CIPP lining.

5.2.10.1. Fort Street Mall

Based on the hydraulic analysis of the sewers along Fort Street Mall it is recommended that the sewer segments between manholes SI21AQ0128 and SI21AQ2121 be replaced with 12-inch diameter PVC pipe. It was found that the three existing sewer segments along Fort Street Mall within the project, under existing adjusted 2-year, 6-hour peak flow conditions, would be surcharged by 101%, 105%, and 144%.

Table 5-1: Alternatives Comparison Matrix

Design Alternative	Surface Disruptions	Construction Cost	Ease of Construction	Repair Defects	Total Score	Rank
FORT STREET MALL						
1. Chemical Grouting	9	NR	7	2	**NR**	**NR**
2. Pipe Bursting	5	6	3	7	**21**	**2**
3. CIPP Lining	8	NR	8	5	**NR**	**NR**
4. Fold and Form Lining	8	NR	5	5	**NR**	**NR**
5. Slip Lining	8	NR	5	5	**NR**	**NR**
6. Directional Drilling	5	NR	2	10	**NR**	**NR**
7. Open Trench Excavation	2	4	8	10	**24**	**1**
HOTEL STREET						
1. Chemical Grouting	9	NR	7	2	**NR**	**NR**
2. Pipe Bursting	5	7	3	6	**21**	**3**
3. CIPP Lining	8	8	8	8	**32**	**1**
4. Fold and Form Lining	8	NR	5	5	**NR**	**NR**
5. Slip Lining	8	6	5	5	**24**	**2**
6. Directional Drilling	5	NR	2	10	**NR**	**NR**
7. Open Trench Excavation	1	3	7	10	**21**	**4**

*NR score given for alternatives that are not able to repair the identified defects

Thus, upsizing the sewers are required to provide the capacity for the existing and future adjusted 2-year, 6-hour peak flow. Replacement of this sewer line will also address broken and collapsed sections of pipe and eliminate sags. This will minimize the amount of grease buildup and thereby decrease the required cleaning frequency. In addition, 25 LF of reinforced concrete jacket should be provided at the location where the

sewer alignment passes directly beneath a tree to eliminate the existing problem of root intrusion.

The existing sewer manholes had no severe structural deficiencies, except for the corroded manhole rungs, for which replacement is not recommended. Two existing 18-inch stormwater drain lines that cross within six inches above the existing sewer line near Hotel Street may need to be raised to provide adequate clearance for the new sewer line.

Being that the sewers along Fort Street Mall require upsizing, the only viable alternatives are pipe bursting and open trench excavation. Due to the quantity of sewer lateral connections and the numerous existing underground utilities in close proximity or crossing the sewer alignment, it is recommended that open trench excavation be used for sewer replacement along Fort Street Mall. Alternatively, pipe bursting is less favorable since excavation would still be required for the launch pits, receiving pits, to expose the existing utilities, and to reinstate the laterals. Sewer realignment along Fort Street Mall was not investigated due to inadequate space within the City's right-of-way.

5.2.10.2. Hotel Street

Based on the hydraulic analysis for Hotel Street it was determined that upsizing the sewer lines was not required since existing sewers were of adequate capacity for the existing adjusted 2-year, 6-hour peak flow. The general deficiencies identified for the sewers along Hotel Street were broken pipe, cracks, offset joints, roots, and debris. In addition, a segment of broken and severely cracked pipe, approximately 35 feet in length, was identified between sewer manholes SI21AQ0122 and SI21AQ0121. In evaluating the alternatives, careful consideration was given to the fact that Hotel Street serves as a critical transportation corridor through the downtown region. Since surface disruption from construction activities would have a significant impact, a trenchless rehabilitation method presented itself as the most advantageous alternative for most of the sewer along Hotel Street. With exception of the broken pipe segment, a trenchless rehabilitation method would adequately correct the identified deficiencies.

CIPP lining was selected as the recommended alternative for sewers along Hotel Street between manhole SI21AQ0122 and SI21AQ0124. This alternative is the most cost effective and advantageous due to the minimal installation time required. CIPP lining is also the most favorable where the mobility costs associated for such a short replacement length makes other

trenchless alternatives unfeasible. It is also recommended that spot repair be performed to replace 40 LF of existing sewer with 8-inch PVC pipe to correct the structurally deficient segment. This 40-foot segment will also require a reinforced concrete jacket since it crosses over two 8-inch water mains. During construction, traffic will require detouring since the roadway is not wide enough to accommodate the rehabilitation work while the busses are in service.

The existing sewer manholes along both Fort Street Mall and Hotel Street were determined to have no structural deficiencies except for corroded manhole rungs, in which no replacement is recommended. It is also recommended that construction work be performed at night to minimize disruption to surrounding business and the public transit services.

6. REQUIRED PERMITS AND APPROVALS

6.1. State of Hawaii

National Pollutant Discharge Elimination System General Permit (Discharges of construction dewatering effluent)

Initial Noncovered Source Permit Application

Community Noise Permit

Community Noise Variance

Conformance with Accessibility Guidelines

6.2. City and County of Honolulu

Building Permit

Grubbing, Grading, and Stockpiling Permit

Construction Dewatering Permit (Temporary)

Repaving Plan

Permit to Discharge Effluent (Non-Storm Water) (Temporary)

Street Usage Permit

Detour Plans

Erosion Control Plan/BMPs

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7. AGENCY DETERMINATION

A Finding of No Significant Impact (FONSI) determination for the proposed project has been made by the Department of Design and Construction. The proposed sewer rehabilitation is not anticipated to induce significant impacts based on the criteria set forth in the State Department of Health Rules, Chapter 200, Title 11, Section 12. The proposed project's relationship to the criteria is discussed below.

(1) Involves an irrevocable commitment to loss or destruction of any natural or cultural resource;

Completion of the proposed sewer rehabilitation would involve an irrevocable commitment of labor, capital, and materials. No loss or destruction of natural or cultural resources is anticipated.

(2) Curtails the range of beneficial uses of the environment;

The proposed project would improve the capacity of the existing sewer collection system and correct existing structural problems. The proposed project will enhance sewer service in the system collection area, and therefore contribute to increased environmental quality.

(3) Conflicts with the state's long-term environmental policies or goals and guidelines as expressed in Chapter 344, HRS, and any revisions thereof and amendments thereto, court decisions, or executive orders;

The proposed project is consistent with the environmental policies, goals and guidance set forth in Chapter 344, HRS. The proposed sewer rehabilitation upgrades the sewer line with the design intent of minimizing impacts to surrounding resources.

(4) Substantially affects the economic of social welfare of the community or state;

The proposed project is anticipated to have short-term beneficial economic impacts due to the hiring of construction workers and the purchasing of materials. Any short-term negative impacts or inconveniences to surrounding businesses and traffic will be minimized through the application of appropriate mitigation measures and best management practices. In the long-term, the project will have beneficial economic impacts through the avoidance of additional maintenance and rehabilitation costs.

(5) Substantially affects public health;

Public health will not be adversely affected by the proposed project, and the sewer upgrade will provide positive public health benefits to residents and businesses in the collection area.

(6) Involves substantial secondary impacts, such as population changes or effects on public facilities;

No substantial secondary impacts are anticipated. The proposed sewer rehabilitation will serve to correct existing structural deficiencies and improve the sewer line capacity, avoiding future problems with surcharge conditions.

(7) Involves a substantial degradation of environmental quality;

The proposed sewer rehabilitation is not anticipated to involve a substantial degradation of environmental quality. When completed, the project will contribute to increased environmental quality. Environmental impacts that may occur during construction will be mitigated through the implementation of Best Management Practices, as appropriate.

(8) Is individually limited but cumulatively has considerable effect upon the environment or involves a commitment for larger actions;

The proposed project will meet the existing and future needs of the service area. The project will have no foreseeable cumulative impacts and does not involve a commitment for larger actions.

(9) Substantially affects a rare, threatened, or endangered species, or its habitat;

There are no known proposed, candidate, or listed threatened or endangered species present at the project site.

(10) Detrimentally affects air or water quality or ambient noise levels;

Short-term impacts to air, water quality or ambient noise levels may occur during construction. Environmental impacts will be mitigated through proper construction techniques and compliance with applicable Department of Health rules and regulations.

(11) Affects or is likely to suffer damage by being located in an environmentally sensitive area such as a flood plain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters;

The project site is not situated within an environmentally sensitive area and is not anticipated to affect such areas.

(12) Substantially affects scenic vistas and view planes identified in county or state plans or studies; or

The project site is not identified as having significant scenic views by the Primary Urban Center Development Plan. The Coastal View Study prepared by the City and County of Honolulu does not identify the project site as a scenic resource. The project site does not provide views of any scenic resources nor will the sewer line rehabilitation detract from views of any such resources.

(13) Requires substantial energy consumption.

Completion of the proposed sewer line upgrade is not anticipated to increase energy consumption, as the proposed project represents a continuation of the current use of the collection system.

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8. CONSULTATION

8.1. Pre-Assessment Consultation

The following agencies and entities were consulted prior to and during the preparation of the Draft EA. Appropriate correspondence are reproduced herein.

State of Hawaii

Department of Land & Natural Resources, Historic Preservation Division

City and County of Honolulu

Department of Planning and Permitting

Utilities

GTE Hawaiian Telephone Company Incorporated (currently Verizon Hawaii, Inc.)
Hawaiian Electric Company Inc.
Oceanic Time Warner Cable
The Gas Company

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12001

THE LIMTIACO CONSULTING GROUP

October 25, 2000

Ms. Sarah Collins
Department of Land and Natural Resources
State of Hawaii
Historic Preservation District
601 Kamokila Boulevard, Suite 555
Kapolei, Hawaii 96707

Re: Historic Site Review

Dear Ms. Collins,

The City and County of Honolulu, Department of Design and Construction has contracted The Limtiaco Consulting Group for the planning and design of the Sewer Facilities Rehabilitation, Unit II project. The project involves the repair and/or replacement of inadequate sewers at various locations in the Honolulu district. Attached are the various location maps with the proposed sewer work indicated.

The client has requested that we seek your assistance in determining any impacts the project may have on historic sites. Please respond with a letter stating the project's impact (if any) upon historic sites within each project area. Also list any concerns that you may have regarding anticipated conflicts.

If there are any questions or if additional information is required, please do not hesitate to call us at (808) 596-7790.

Very truly yours,

The Limtiaco Consulting Group, Inc.

Jason H. Lau, P.E.
Project Manager

fhlst001.doc

Enclosures
cc: Mr. Cedric Takamoto (City DDC)

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII

STATE OF HAWAII

DEPARTMENT OF LAND AND NATURAL RESOURCES

HISTORIC PRESERVATION DIVISION
Kakuhihewa Building, Room 555
601 Kamokila Boulevard
Kapolei, Hawaii 96707

TIMOTHY E. JOHNS, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

DEPUTIES
JANET E. KAWELO
LINNEL NISHIOKA

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
CONSERVATION AND RESOURCES ENFORCEMENT
CONVEYANCES
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
LAND
STATE PARKS
WATER RESOURCE MANAGEMENT

November 17, 2000

Mr. Jason H. Lau, Project Manager
Limtiaco Consulting Group
615 Piikoi Street, Suite 1605
Honolulu, Hawaii 96814

LOG NO: 26525
DOC NO: 0011SC14

Dear Mr. Lau:

SUBJECT: Chapter 6E-8 Historic Preservation Review of the Proposed Sewer Facilities Rehabilitation, Unit II, Project
Kewalo-Uka, Honolulu, Kalihi & Nu`uanu, Kona District, O`ahu
TMK: 1 and 2, various

Thank you for the opportunity to comment on the initial planning and design for the proposed Sewer Facilities Rehabilitation project to be carried out in various parts of Honolulu. Our review is based on historic maps, aerial photographs, records, and reports maintained at the State Historic Preservation Division; no field inspection was made of the proposed project sites. The project will involve the repair and/or replacement of inadequate sewers in several sections of Honolulu. Specific tasks include replacement and lining of existing sewers and lining of existing sewers.

Specific project areas include Kalihi (in the vicinity of Kamehameha IV Road, Linapuni and Rose Streets), Tantalus (along portions of Tantalus Drive), Chinatown (along Hotel Street between Bethel and Fort Streets), and Pacific Heights (along portions of Pacific Heights Road). In Makiki and Pacific Heights the proposed work will take place along the sewer easements that abut private residential properties.

We have no record of significant historic sites being present in the locations shown as project areas in Kalihi, Tantalus, and Pacific Heights, but these areas generally have few archaeological surveys and historic sites could be present. In each of these areas, not too far from the various project sites, there have been inadvertent burial finds made during both private and public construction projects. We would like to request that we be provided with more specific information – including construction plans showing the extents and depths of excavation as well as data on types of excavation (e.g., directional drilling vs. open trenching). When we have this information to review, we anticipate being able to offer more specific recommendations.

Therefore, at this time, we can only provide comments for the proposed work along Hotel Street. The Chinatown area is known to contain significant historic sites in subsurface areas below existing buildings and pavements. Our prior experience with water, sewer, and utility line excavations in this area suggests that the probable depth of construction needed for installation of the proposed eight-inch replacement sewer line will have an "adverse effect" on subsurface sites such as archaeological deposits and human burials. Therefore, we would recommend that a qualified archaeologist conduct on-site monitoring of all excavations that extend below the existing base course of the roadway – to identify any historic sites that might be present, to properly document them, and to ensure proper treatment of any such sites. Prior to beginning construction work, an acceptable archaeological monitoring plan should be submitted for review and approval by our office.

> An acceptable archaeological monitoring plan must contain the following eight specifications: (1) The kinds of resources that are anticipated and where in the construction area the resources are likely to be found; (2) How the resources and deposits will be documented; (3) How the expected types of resources will be treated; (4) The archaeologist conducting the monitoring has the authority to halt construction in the immediate area of a find in order to carry out the plan; (5) A coordination meeting between the archaeologist and construction crew is scheduled, so that the construction team is aware of the plan; (6) What laboratory work will be done on remains that are collected; (7) A schedule for report preparation; and (8) Details concerning the archiving of any collections that are made.

If an acceptable archaeological monitoring plan is implemented for the proposed work in the Chinatown area, then we believe that the planned installation of new sewer lines and appurtenances in this area will have "no adverse effect" on significant historic sites.

Should you have any questions, please feel free to contact Sara Collins at 692-8026.

Aloha,

DON HIBBARD, Administrator
State Historic Preservation Division

SC:jk

c: Mr. A. Van Horn, Diamond, Chair, O`ahu Island Burial Council
Mr. Kala`au Wahilani, Burial Sites Program

LINDA LINGLE
GOVERNOR OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING, ROOM 555
601 KAMOKILA BOULEVARD
KAPOLEI, HAWAII 96707

PETER T. YOUNG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

DAN DAVIDSON
DEPUTY DIRECTOR - LAND

YVONNE Y. IZU
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

JL ✓
DN ✓
FW

September 3, 2004

Jason H. Lau, P. E.
Project Manager
Limtiaco Consulting Group
615 Piikoi Street, Suite 1605
Honolulu, Hawaii 96814

Log No: 2004.2610
Doc No: 0408EJ20

Dear Mr. Lau:

SUBJECT: Chapter 6E-8 Historic Preservation Review-Sewer Facilities Rehabilitation
SMPR No. 60 Fort Street Mall
Honolulu, Kona, O`ahu
TMK: (1) 2-1-002, -003, 010, 011, 012

Thank you for the opportunity to comment on the proposed to rehabilitate sewer lines within the Hotel Street and Fort Street Mall area of Honolulu. We have not previously reviewed this project under Chapter 6E-8. We received a 10% design drawings from you and additional information provided by you regarding the proposed project. Our review is based on historic reports, maps, and aerial photographs maintained at the State Historic Preservation Division; no field inspection was made of the project areas. We received the subject plans from your office August 9, 2004.

Sewer rehabilitation proposed for Hotel Street (between Bethel and Bishop Streets) consists of cure in place lining in existing 8-inch sewers and spot repair of a 40-foot segment using open cut trench. According to you, all work will be done in previously disturbed substrates and will not exceed existing base course.

Sewer rehabilitation proposed for Fort Street Mall consists of replacing existing 10-inch and 12-inch sewers using open cut trench methods. According to you, the work will including removing the old lines and replacing new lines in the same location and thus is within previously disturbed substrates.

Because no new ground disturbance is proposed, and no historic sites have been identified in these locations, we believe that no historic properties will be affected by this undertaking. However, in the unlikely event that historic sites, including human burials, are uncovered during routine construction activities, all work in the vicinity must stop and the State Historic Preservation division must be contacted at 692-8015.

Should you have any questions about archaeology, please feel free to call Sara Collins at 692-8026 or Elaine Jourdane at 692-8027. Should you have questions regarding burial or cultural matters, please feel free to contact Nathan Napoka at 587-0192.

Aloha,

P. Holly McEldowney

P. Holly McEldowney, Administrator
State Historic Preservation Division

EJ: sky

C: Mr. A. Van Horn Diamond, Chair, O'ahu Island Burial Council
Mr. Nathan Napoka, Branch Chief, History and Culture Branch

THE LIMTIACO CONSULTING GROUP

October 25, 2000

Mr. Randall K. Fujiki
Department of Planning and Permitting
City and County of Honolulu
650 South King Street
Honolulu, Hawaii 96813

Re: Permitting Requirements
Sewer Facilities Rehabilitation, Unit II

Dear Mr. Fujiki,

The City and County of Honolulu, Department of Design and Construction has contracted The Limtiaco Consulting Group for the planning and design of the Sewer Facilities Rehabilitation, Unit II project. The project involves the repair and/or replacement of inadequate sewers at various locations in the Honolulu district. Attached are the various location maps with the proposed sewer work indicated.

The client has requested that we seek your assistance in determining whether any of the permits under the jurisdiction of the Department of Planning and Permitting apply to this project.

If there are any questions or if additional information is required, please do not hesitate to call us at (808) 596-7790.

Very truly yours,

The Limtiaco Consulting Group, Inc.

Jason H. Lau, P.E.
Project Manager

ldpp001.doc

Enclosures
cc: Mr. Cedric Takamoto (City DDC)

GTE Hawaiian Tel

Beyond the call

GTE Hawaiian Telephone Company Incorporated
P.O. Box 2200 • Honolulu, HI 96841 • (808) 546-4511

December 22, 1999

Mr. Jason H. Lau, P.E.
The Limtiaco Consulting Group
615 Piikoi Street, Suite 1605
Honolulu, Hawaii 96814

Dear Mr. Lau:

Subject: Sewer Facilities Rehabilitation

Attached are maps that indicate GTE's underground facilities in the areas submitted for review. I have also attached a copy of our general construction notes, which should be incorporated into your plans.

Should you have any questions, please call me at 840-5889.

Sincerely,

Lynette Kimura

Lynette Kimura
Project Engineer - Access Design and Construction

Attachments

C: file

A part of GTE Corporation

Form 90006055

Hawaiian Electric Company, Inc. • PO Box 2750 • Honolulu, HI 96840-0001

12001

February 16, 2000

The Limtiaco Consulting Group
1210 Auahi Street, Suite 208 A
Honolulu, HI 96814

Attention: Jason Lau

Dear Mr. Lau:

Re: CDDC: Sewer Facilities Rehabilitation @ Various Locations
HECO Work Order No.: CE016686

This is in response to your subject request of December 14, 1999.

As you requested, we are providing the following:

1. SMPR 50, 51 & 52: Project areas are clear of HECO underground facilities
2. SMPR 54: Secondary underground lines are indicated on the landbase map Ref. Dwg #36392
3. SMPR 55: Secondary underground lines are indicated on the landbase map Ref Dwg #35481
4. SMPR 56: Duplicate of a prior request
5. SMPR 57: Ref Dwg: #35130, #70421, #70422
6. SMPR 60: Honolulu Ductline Map #2030-74-1, Ref Dwg #10649
7. SMPR 66, 67 & 68: HECO Distribution Grid Map #5296 (1"=200')
8. SMPR 69: Project area is clear of HECO underground facilities
9. SMPR 77: Secondary underground lines are indicated on the landbase map Ref Dwg #31141

showing our underground electrical facilities in the area of your project.

If not previously provided, you will find a copy of our revised HECO Notes attached. Please add these to your plans and keep them on file for future use.

This information is provided as a free service to you and is subject to the following:

1. Please note that any review, information, documents, maps or drawings provided by HECO are provided solely for your convenience. HECO makes no representation or warranty regarding the accuracy, completeness or adequacy of such review. Review by HECO is not a professional design service, and shall in no way impose upon HECO any responsibility for any engineering, design, construction or other such work being performed. All underground electrical facilities are shown in their approximate locations according to our records. Our review shall not relieve you or the contractor of your obligation to make independent field investigations.

2. You acknowledge and agree that you are responsible for independently verifying the actual location of HECO surface lines, facilities and equipment (poles, overhead lines, anchors, guy lines, manholes, handholes, transformers, etc).

WINNER OF THE EDISON AWARD
FOR DISTINGUISHED INDUSTRY LEADERSHIP

3. Should you choose to go forward with plans for construction, we request that you include with sufficient accuracy all of the information on HECO's overhead and underground facilities on your plans (to include our underground profile) and provide us with two sets of your pre-final drawings along with the enclosed HECO reference drawing.

Please direct all future review and comment correspondence to me referring to the HECO Work Order Number shown above.

Should you have any questions, call me at 543-7590.

Sincerely,

Eric Shimono
Lead Engineer
Customer Installations Department

Attachments

cc: K. Morikami

ceanic
200 Akamainui Street * Mililani, Hawaii 96789-3999 * Telephone: (808) 625-2100

December 28, 1999

The Limtiaco Consulting Group
1210 Auahi Street, Suite 208A
Honolulu, Hawaii 96814

Attention: Jason H. Lau, P.E.

Subject: Sewer Facilities Rehabilitation

Dear Jason,

Although the letter was addressed to The Gas Company I feel it was necessary to respond to your request. **Oceanic Cable facilities are all located within GTE's conduit system and on joint poles throughout the project areas.** We do not keep records of underground drop conduits placed by our subscribers.

We usually request a copy for our records and one to mark up for your use, please make note of this for future inquiries. I don't believe it's necessary to return the drawings to you since only a portion of our facilities are within GTE's conduit system. GTE will need to verify the location of their facilities. Should you have any questions, please contact me at 625-8346.

Sincerely,

Randy Makizura
OSP Engineer

THE GAS COMPANY
Citizens Energy Services

January 24, 2000

The Limtiaco Consulting Group
1210 Auahi Street, Suite 208 A
Honolulu, Hawaii 96814

Attention: Mr. Jason H. Lau, P.E.
Project Manager

Gentlemen:

Subject: Sewer Facilities Rehabilitation

In response to your letter dated December 14, 1999, we are sending 26 maps of our gas facilities in the project areas for your use and information. Also enclosed is a copy of our gas line legend.

All information provided by The Gas Company, including but not limited to maps, prints, and site indications are approximations only of its facilities and its pipelines. The party receiving such information shall have sole responsibility for field verification to determine the actual locations of such facilities and pipelines.

Should there be any questions, or if additional information is desired, please call me at 594-5574.

Very truly yours,

The Gas Company

Keith K. Yamamoto
Supervisor, Engineering

KKY:kn
00-103

Attachments

8.2. Draft EA Consultation

The following agencies and entities were consulted during the Draft EA public review period. A total of eleven (11) comment letters were received from parties, as indicated with a √ below. All comment letters along with responses are reproduced herein.

State of Hawaii

Department of Business, Economic Development and Tourism, Office of Planning
Department of Health (3 copies)
√ Department of Health, Office of Environmental Quality Control (4 copies)
√ Department of Land and Natural Resources (5 copies)
Department of Land and Natural Resources, Historic Preservation Division
√ Department of Transportation
Office of Hawaiian Affairs
Senator Gordon Trimble, 12th Senatorial District
Representative Kenneth T. Hiraki., 28th Representative District

City and County of Honolulu

√ Board of Water Supply
Department of Environmental Services
√ Department of Facility Maintenance
√ Department of Parks and Recreation
√ Department of Planning and Permitting (5 copies)
Department of Planning and Permitting, Wastewater Division
√ Department of Transportation Services
√ Fire Department
√ Police Department
Councilman Rod Tam, District 6
Downtown Neighborhood Board No. 13

Utilities

Verizon Hawaii, Inc.
Hawaiian Electric Company Inc.
Oceanic Time Warner Cable
√ The Gas Company

Libraries and Repositories

Hawaii State Library
Legislative Reference Bureau
Municipal Reference and Records Center

(This page intentionally left blank.)

LINDA LINGLE
GOVERNOR OF HAWAII

GENEVIEVE SALMONSON
DIRECTOR

STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL
235 SOUTH BERETANIA STREET
SUITE 702
HONOLULU, HAWAII 96813
TELEPHONE (808) 586-4185
FACSIMILE (808) 586-4186
E-mail: oeqc@health.state.hi.us

January 7, 2005

Mr. Timothy Steinberger
Mr. Bill Liu
City and County of Honolulu, Department of Design and Construction
650 South King Street, 14th Floor
Honolulu, Hawai'i 96813

Mr. Jason Lau
The Limtiaco Consulting Group
615 Pi'ikoi Street Street, Suite 1605
Honolulu, Hawai'i 96814

Dear Messrs. Steinberger, Liu and Lau:

The Office of Environmental Quality Control has reviewed your December 2004, draft environmental assessment for the Small Mainline Project No. 60, 1045 Fort Street Mall, TMK 2-01-001 (portion), in the judicial district of Honolulu, and offers the following comments for your consideration and response.

1. **TRAFFIC IMPACT MITIGATION:** Prior to implementation of the project, please contact the appropriate neighborhood boards and to inform them in advance of what areas of the Sewer Rehabilitation Project will be affected by road work and construction so that residents and businesses may find alternate motor/bus routes.
2. **CUSTOMER EDUCATION:** As the disposal of grease in the sewer system remains problematic, the Office would like to suggest that the Department work in conjunction with the agency responsible for billing customers to send out a flyer asking customers not to dispose of grease in their sewer.
3. **SEGMENTATION AND MASTER PLAN FOR SEWER IMPROVEMENTS:** As this project appears to be one of several currently being proposed by the City related to sewer improvements we would like to take this opportunity to note that Section 11-200-7, Hawai'i Administrative Rules mandates that projects not be segmented as such an action precludes a thorough examination of cumulative impacts on a project on the environment. We respectfully recommend that you and your policy makers in the City's administration consider preparing a master plan.

Thank you for the opportunity to comment. If there are any questions, please call Mr. Leslie Segundo, Environmental Health Specialist, at (808) 586-4185.

Sincerely,

Genevieve Salmonson

GENEVIEVE SALMONSON
Director

DEPARTMENT OF DESIGN AND CONSTRUCTION
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 11TH FLOOR
HONOLULU, HAWAII 96813
Phone: (808) 523-4564 • Fax: (808) 523-4567
Web site: www.honolulu.gov

MUFI HANNEMANN
MAYOR

WAYNE M. HASHIRO, P.E.
DIRECTOR

WW.P 05-0046

February 16, 2005

Ms. Genevieve Salmonson, Director
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawaii 96813

Dear Ms. Salmonson:

Subject: Draft Environmental Assessment (EA)
Small Mainline Project No. 60, 1045 Fort Street Mall Sewer Rehabilitation
TMK: 2-01-001 (Por.)
Honolulu, Oahu, Hawaii

Thank you for your comment letter dated January 7, 2005 completing your review of the subject Draft EA. We offer the following in response to your comments.

1. TRAFFIC IMPACT MITIGATION: Section 3.12.1 of the Draft EA describes traffic impact mitigation measures, including night work and coordination with Oahu Transit Services, Inc. and the City Department of Transportation Services to minimize impacts on public transportation. The Draft EA notes that construction activities will be scheduled during night hours to mitigate traffic impacts to pedestrians, residents and businesses during daily business and peak traffic hours. As Hotel Street is the only vehicular right-of-way that will be affected by night construction work, and considering that street access is limited to busses and emergency vehicles, it is anticipated that any impacts to private motorists will be negligible.

   The Department of Design and Construction (DDC) consulted the Downtown Neighborhood Board No. 13 during the public review period. A copy of the Draft EA was delivered to the Chairperson, care of the Neighborhood Board Commission Office on Monday, December 20, 2004. Subsequently, an informational presentation was made at the January 6, 2005 Neighborhood Board meeting. The DDC intends to maintain this dialogue with the community through the design and construction phases of this project when information becomes available regarding construction scheduling and necessary road closures. The DDC feels that prior dissemination of construction information to vicinity residents and businesses is important and will contribute to the successful completion of the project.

2. CUSTOMER EDUCATION: The DDC agrees that grease disposal in sewer systems is problematic. The DDC is aware that the City Department of Environmental Services, Regulatory Control Branch is continuing with the Grease Interceptor

Program Compliance implementation and outreach activities. The DDC acknowledges OEQC's suggestion of an informational mailer to customers, and would like to note that an on-going and multifaceted public education and outreach campaign is being executed by the appropriate agency.

3. SEGMENTATION AND MASTER PLAN FOR SEWER IMPROVEMENTS: The proposed action is intended to address sewer lines within the project limits that have been identified as prone to frequent maintenance, hydraulic and structural problems due to long-term deterioration of the pipe and history of wastewater spills. The DDC understands Section 11-200-7 of the Hawaii Administrative Rules and acknowledges OEQC's comment. As you may be aware, the project is being proposed in conjunction with the recommendations of the City's *Sewer Rehabilitation and Infiltration & Inflow Minimization Plan*, which is a comprehensive long-range planning document for the management of the City's wastewater system.

We appreciate your participation in the Draft EA public review phase of the environmental review process. Your letter, along with this response, will be included in the forthcoming Final EA. Should you have any questions, please contact Mr. Bill Liu at 527-5388.

Very truly yours,

for WAYNE HASHIRO, P.E.
Acting Director

cc: Jason Lau, The Limtiaco Consulting Group

LINDA LINGLE
GOVERNOR OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

PETER T. YOUNG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

YVONNE Y. IZU
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

January 18, 2005 LD-NAV
SMALLMAINLINE.RCM

Jason Lau, P.E.
The Limtiaco Consulting Group
615 Piikoi Street, Suite 1605
Honolulu, Hawaii 96814

Dear Mr. Lau:

SUBJECT: Draft Environmental Assessment
Project: Small Mainline Project No. 60
TMK: (1) 2-1-001 portion

Thank you for the opportunity to review and comment on the subject matter

A copy of the document pertaining to the subject matter was transmitted or made available to the following Department of Land and Natural Resources' Divisions for their review and comment:

- Division of Aquatic Resources
- Division of Forestry and Wildlife
- Division of State Parks
- Engineering Division
- Commission on Water Resource Management
- Office of Conservation and Coastal Lands
- Land-Oahu District Land Office

Enclosed please find a copy of the Engineering Division comment.

Based on the attached responses, the Department of Land and Natural Resources has no other comment to offer on the subject matter.

If you have any questions, please contact Nicholas A. Vaccaro of the Land Division Support Services Branch at 587-0384.

Very truly yours,

DIERDRE S. MAMIYA
Administrator

C: ODLO

LINDA LINGLE
GOVERNOR OF HAWAII

RECEIVED
LAND DIVISION
2005 JAN -5 P 3:29

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

PETER T. YOUNG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

DAN DAVIDSON
DEPUTY DIRECTOR - LAND

YVONNE Y. IZU
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

December 20,2004 LD/NAV
SMALLMARINEPRJ60-1045.CMT Suspense Date: 1/14/05

MEMORANDUM:

TO: XXX Division of Aquatic Resources
✓*XXX Division of Forestry & Wildlife
✓*XXX Division of State Parks
XXX Engineering Division
*XXX Commission on Water Resource Management
XXX Office of Conservation and Coastal Lands
*XXX Oahu District Land Office

From

FROM: Dierdre S. Mamiya, Administrator
Land Division

To

SUBJECT: Draft Environmental Assessment (DEA)
Small Marine Project No. 60, 1045 Fort Street Mall Sewer
Rehabilitation TMK: 2-1:001 (portion)

RECEIVED
2004 DEC 23 P 1:
DEPT OF LAND & NATURAL RESOURCES
STATE PARKS

Please review the DEA pertaining to the subject matter and submit your comments (if any) on Division letterhead signed and dated by the suspense date.

***Note: One copy of the DEIS is available for your review in the Land Division Office, Room 220.**

Should you have any questions, please contact Nicholas A. Vaccaro at 587-0384.

If this office does not receive your comments by the suspense date, we will assume there are no comments.

(✓) We have no comments. ( ) Comments attached.

Date: 12/27/04

Signed:

Name: David S. Quinn

LINDA LINGLE
GOVERNOR OF HAWAII

RECEIVED
LAND DIVISION
2004 DEC 29 P 3:18
DEPT OF LAND & NATURAL RESOURCES
STATE OF HAWAII

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

PETER T. YOUNG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

DAN DAVIDSON
DEPUTY DIRECTOR - LAND

YVONNE Y. IZU
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

December 20,2004 LD/NAV
SMALLMARINEPRJ60-1045.CMT Suspense Date: 1/14/05

MEMORANDUM:

TO: ✓XXX Division of Aquatic Resources
*XXX Division of Forestry & Wildlife
*XXX Division of State Parks
XXX Engineering Division
*XXX Commission on Water Resource Management
XXX Office of Conservation and Coastal Lands
*XXX Oahu District Land Office

FROM: Dierdre S. Mamiya, Administrator
Land Division

SUBJECT: Draft Environmental Assessment (DEA)
Small ~~Marine~~ Sewer Project No. 60, 1045 Fort Street Mall Sewer
Rehabilitation TMK: 2-1:001 (portion)

Please review the DEA pertaining to the subject matter and submit your comments (if any) on Division letterhead signed and dated by the suspense date.

***Note: One copy of the DEIS is available for your review in the Land Division Office, Room 220.**

Should you have any questions, please contact Nicholas A. Vaccaro at 587-0384.

If this office does not receive your comments by the suspense date, we will assume there are no comments.

(✓) We have no comments. ( ) Comments attached.

Date: 12/27/04

Signed:

Name: WILLIAM DEVICK

cc: Richard Sakamoto
to LD 12/29/04

LINDA LINGLE
GOVERNOR OF HAWAII

'04 DEC 23 PM 12:25 ENGINEERING

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

PETER T. YOUNG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

DAN DAVIDSON
DEPUTY DIRECTOR - LAND

YVONNE Y. IZU
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

December 20,2004 LD/NAV
SMALLMARINEPRJ60-1045.CMT Suspense Date: 1/14/05

MEMORANDUM:

TO: XXX Division of Aquatic Resources
*XXX Division of Forestry & Wildlife
*XXX Division of State Parks
✓XXX Engineering Division
*XXX Commission on Water Resource Management
XXX Office of Conservation and Coastal Lands
*XXX Oahu District Land Office

FROM: Dierdre S. Mamiya, Administrator
Land Division

SUBJECT: Draft Environmental Assessment (DEA)
Small ~~Marine~~ Boat Harbor Project No. 60, 1045 Fort Street Mall Sewer Rehabilitation TMK: 2-1:001 (portion)

Please review the DEA pertaining to the subject matter and submit your comments (if any) on Division letterhead signed and dated by the suspense date.

***Note: One copy of the DEIS is available for your review in the Land Division Office, Room 220.**

Should you have any questions, please contact Nicholas A. Vaccaro at 587-0384.

If this office does not receive your comments by the suspense date, we will assume there are no comments.

( ) We have no comments.

(X) Comments attached.

Date: 12/30/04

Signed: Andrew M. Monden

Name: Andrew M. Monden

DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION

REF.: SMALLMARINEPRJ60-1045.CMT
OAHU.474

COMMENTS

(X) **We confirm that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Zone, area determined to be outside the 500-year flood plain. The Flood Insurance Program does not have any regulations for development within Zone X.**

( ) Please take note that the project site, according to the Flood Insurance Rate Map (FIRM), are located in Zone ____.

( ) Please note that the correct Flood Zone Designation for the project site according to the Flood Insurance Rate Map (FIRM) is ____.

( ) Please note that the project must comply with the rules and regulations of the National Flood Insurance Program (NFIP) presented in Title 44 of the Code of Federal Regulations (44CFR), whenever development within a Special Flood Hazard Area is undertaken. If there are any questions, please contact the State NFIP Coordinator, Ms. Carol Tyau-Beam, of the Department of Land and Natural Resources, Engineering Division at (808) 587-0267.

Please be advised that 44CFR indicates the minimum standards set forth by the NFIP. Your Community's local flood ordinance may prove to be more restrictive and thus take precedence over the minimum NFIP standards. If there are questions regarding the local flood ordinances, please contact the applicable County NFIP Coordinators below:

( ) Mr. Robert Sumimoto at (808) 523-4254 or Mr. Mario Siu Li at (808) 523-4247 of the City and County of Honolulu, Department of Planning and Permitting.
( ) Mr. Kelly Gomes at (808) 961-8327 (Hilo) or Mr. Kiran Emler at (808) 327-3530 (Kona) of the County of Hawaii, Department of Public Works.
( ) Mr. Francis Cerizo at (808) 270-7771 of the County of Maui, Department of Planning.
( ) Mr. Mario Antonio at (808) 241-6620 of the County of Kauai, Department of Public Works.

( ) The applicant should include project water demands and infrastructure required to meet water demands. Please note that the implementation of any State-sponsored projects requiring water service from the Honolulu Board of Water Supply system must first obtain water allocation credits from the Engineering Division before it can receive a building permit and/or water meter.

( ) The applicant should provide the water demands and calculations to the Engineering Division so it can be included in the State Water Projects Plan Update.

( ) Additional Comments: _____

(X) **Other: Please correct information on page 3-6 of the Draft Environmental Assessment, 3.6. Flood, Tsunami, and Earthquake Hazards. Reference to Flood Insurance Rate Map, Panel Number 15003C 0354 E, effective November 20,2000, instead of Panel Number 150001 0115C, revised September 28, 1990.**

Should you have any questions, please call Mr. Andrew Monden of the Planning Branch at 587-0229.

Signed: Andrew M. Monden
For ERIC T. HIRANO, CHIEF ENGINEER

Date: 12/30/04

LINDA LINGLE
GOVERNOR OF HAWAII

PETER T. YOUNG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

DAN DAVIDSON
DEPUTY DIRECTOR - LAND

YVONNE Y. IZU
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

December 20,2004 LD/NAV
SMALLMARINEPRJ60-1045.CMT Suspense Date: 1/14/05

MEMORANDUM:

TO: XXX Division of Aquatic Resources
*XXX Division of Forestry & Wildlife
*XXX Division of State Parks
XXX Engineering Division
*XXX Commission on Water Resource Management
XXX Office of Conservation and Coastal Lands
✓*XXX Oahu District Land Office

FROM: Dierdre S. Mamiya, Administrator
Land Division

SUBJECT: Draft Environmental Assessment (DEA)
Small ~~Marine~~ Project No. 60, 1045 Fort Street Mall Sewer Rehabilitation TMK: 2-1:001 (portion)

Please review the DEA pertaining to the subject matter and submit your comments (if any) on Division letterhead signed and dated by the suspense date.

***Note: One copy of the DEIS is available for your review in the Land Division Office, Room 220.**

Should you have any questions, please contact Nicholas A. Vaccaro at 587-0384.

If this office does not receive your comments by the suspense date, we will assume there are no comments.

(X) We have no comments. ( ) Comments attached.

Date: 12/27/04 Signed: Cecil Santos
Name: CECIL SANTOS

LINDA LINGLE
GOVERNOR OF HAWAII

RECEIVED
LAND DIVISION
2004 DEC 29 P 3:25
DEPT. OF LAND & NATURAL RESOURCES
STATE OF HAWAII

PETER T. YOUNG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

DAN DAVIDSON
DEPUTY DIRECTOR - LAND

YVONNE Y. IZU
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
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LAND
STATE PARKS

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

December 20,2004 LD/NAV
SMALLMARINEPRJ60-1045.CMT Suspense Date: 1/14/05

MEMORANDUM:

~~TO:~~ Re: XXX Division of Aquatic Resources
*XXX Division of Forestry & Wildlife
*XXX Division of State Parks
XXX Engineering Division
✓*XXX Commission on Water Resource Management
XXX Office of Conservation and Coastal Lands
*XXX Oahu District Land Office

~~FROM:~~ To: Dierdre S. Mamiya, Administrator
Land Division

SUBJECT: Draft Environmental Assessment (DEA)
Small ~~Marine~~ Project No. 60, 1045 Fort Street Mall Sewer Rehabilitation TMK: 2-1:001 (portion)

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Should you have any questions, please contact Nicholas A. Vaccaro at 587-0384.

If this office does not receive your comments by the suspense date, we will assume there are no comments.

(✓) We have no comments. ( ) Comments attached.

Date: 12/29/04 Signed: W. Roy Hardy
Name: Roy Hardy

LINDA LINGLE
GOVERNOR OF HAWAII

PETER T. YOUNG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

DAN DAVIDSON
DEPUTY DIRECTOR - LAND

YVONNE Y. IZU
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
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STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

December 20,2004 LD/NAV
SMALLMARINEPRJ60-1045.CMT Suspense Date: 1/14/05

MEMORANDUM:

TO: XXX Division of Aquatic Resources
*XXX Division of Forestry & Wildlife
*XXX Division of State Parks
XXX Engineering Division
*XXX Commission on Water Resource Management
✓XXX Office of Conservation and Coastal Lands
*XXX Oahu District Land Office

FROM: Dierdre S. Mamiya, Administrator
Land Division

SUBJECT: Draft Environmental Assessment (DEA)
Small ~~Marine~~ Project No. 60, 1045 Fort Street Mall Sewer Rehabilitation TMK: 2-1:001 (portion)

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Should you have any questions, please contact Nicholas A. Vaccaro at 587-0384.

If this office does not receive your comments by the suspense date, we will assume there are no comments.

X We have no comments. ( ) Comments attached.

Date: Dec. 27, 2004 Signed: Dawn Heggar

Name: Dawn Heggar

RECEIVED
OFFICE OF CONSERVATION AND COASTAL LANDS
2004 DEC 23 A 10 53
DEPT OF LAND & NATURAL RESOURCES
STATE OF HAWAII

RECEIVED
LAND DIVISION
2004 DEC 30 P 3 31

LINDA LINGLE
GOVERNOR OF HAWAII

PETER T. YOUNG
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

DAN DAVIDSON
DEPUTY DIRECTOR - LAND

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DEPUTY DIRECTOR - WATER

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STATE PARKS

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

December 20,2004 LD/NAV
SMALLMARINEPRJ60-1045.CMT Suspense Date: 1/14/05

MEMORANDUM:

TO: ✓XXX Division of Aquatic Resources
✓*XXX Division of Forestry & Wildlife
*XXX Division of State Parks
XXX Engineering Division
*XXX Commission on Water Resource Management
XXX Office of Conservation and Coastal Lands
*XXX Oahu District Land Office

FROM: Dierdre S. Mamiya, Administrator
Land Division

SUBJECT: Draft Environmental Assessment (DEA)
Small ~~Marine~~ Project No. 60, 1045 Fort Street Mall Sewer Rehabilitation TMK: 2-1:001 (portion)

Please review the DEA pertaining to the subject matter and submit your comments (if any) on Division letterhead signed and dated by the suspense date.

***Note: One copy of the DEIS is available for your review in the Land Division Office, Room 220.**

Should you have any questions, please contact Nicholas A. Vaccaro at 587-0384.

If this office does not receive your comments by the suspense date, we will assume there are no comments.

(X) We have no comments. ( ) Comments attached.

Date: DEC 27 2004 Signed: [illegible]

Name: for PAUL J. CONRY, ADMINISTRATOR
DIVISION OF FORESTRY AND WILDLIFE

RECEIVED
LAND DIVISION
2004 DEC 28 P 3 40

DEPARTMENT OF DESIGN AND CONSTRUCTION
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 11TH FLOOR
HONOLULU, HAWAII 96813
Phone: (808) 523-4564 • Fax: (808) 523-4567
Web site: www.honolulu.gov

MUFI HANNEMANN
MAYOR

WAYNE M. HASHIRO, P.E.
DIRECTOR

WW.P 05-0042

February 16, 2005

Ms. Dierdre S. Mamiya, Administrator
State of Hawaii
Department of Land and Natural Resources
Land Division
P.O. Box 621
Honolulu, Hawaii 96809

Dear Ms. Mamiya:

Subject: Draft Environmental Assessment (EA)
Small Mainline Project No. 60, 1045 Fort Street Mall Sewer Rehabilitation
TMK: 2-01-001 (Por.)
Honolulu, Oahu, Hawaii

Thank you for your letter dated January 18, 2005 completing your review of the subject Draft EA. Your comment confirming the location of the project site as within Zone X, according to the Flood Insurance Rate Map (FIRM), is acknowledged and appreciated. Additionally, references to the FIRM panel number in the Final EA will be revised to cite Panel Number 15003C 0354 E, effective November 20, 2000.

We appreciate your interest and participation in the Draft EA public review phase of the environmental review process. Your letter, along with this response, will be included in the forthcoming Final EA. Should you have any questions, please contact Mr. Bill Liu at 527-5388.

Very truly yours,

for WAYNE HASHIRO, P.E.
Acting Director

cc: Jason Lau, The Limtiaco Consulting Group

LINDA LINGLE
GOVERNOR

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097

RODNEY K. HARAGA
DIRECTOR

Deputy Directors
BRUCE Y. MATSUI
BARRY FUKUNAGA
BRIAN H. SEKIGUCHI

IN REPLY REFER TO:

STP 8.1533

January 3, 2005

Mr. Timothy E. Steinberger, P.E. Director
Department of Design and Construction
City and County of Honolulu
650 South King Street, 14th Floor
Honolulu, Hawaii 96813

Attention: Bill Liu

Dear Mr. Steinberger:

Subject: Small Mainline Project No. 60, 1045 Fort Street Mall Sewer Rehabilitation
Draft Environmental Assessment (DEA)
TMK: 2-01-001 (Por.)

Thank your for your transmittal requesting our review on the subject application.

The proposed project will not have any impact on our State transportation facilities.

We appreciate the opportunity to provide our comments.

Very truly yours,

for RODNEY K. HARAGA
Director of Transportation

c: Jason Lau, The Limtiaco Consulting Group
Genevieve Salmonson, Office of Environmental Quality Control

DEPARTMENT OF DESIGN AND CONSTRUCTION
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 11TH FLOOR
HONOLULU, HAWAII 96813
Phone: (808) 523-4564 • Fax: (808) 523-4567
Web site: www.honolulu.gov

MUFI HANNEMANN
MAYOR

WAYNE M. HASHIRO, P.E.
DIRECTOR

WW.P 05-0041

February 16, 2005

Mr. Rodney K. Haraga, Director
State of Hawaii
Department of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813-5097

Dear Mr. Haraga:

Subject: Draft Environmental Assessment (EA)
Small Mainline Project No. 60, 1045 Fort Street Mall Sewer Rehabilitation
TMK: 2-01-001 (Por.)
Honolulu, Oahu, Hawaii

Thank you for your letter dated January 3, 2005 completing your review of the subject Draft EA. Your comment noting that the proposed project is not anticipated to impact State transportation facilities is acknowledged.

We appreciate your interest and participation in the Draft EA public review phase of the environmental review process. Your letter, along with this response, will be included in the forthcoming Final EA. Should you have any questions, please contact Mr. Bill Liu at 527-5388.

Very truly yours,

for WAYNE HASHIRO, P.E.
Acting Director

cc: Jason Lau, The Limtiaco Consulting Group

BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU
630 SOUTH BERETANIA STREET
HONOLULU, HI 96843

MUFI HANNEMANN, Mayor

EDDIE FLORES, JR., Chairman
CHARLES A. STED, Vice-Chairman
HERBERT S. K. KAOPUA, SR.
DAROLYN H. LENDIO

RODNEY K. HARAGA, Ex-Officio
LARRY J. LEOPARDI, Ex-Officio

CLIFFORD S. JAMILE
Manager and Chief Engineer

DONNA FAY K. KIYOSAKI
Deputy Manager and Chief Engineer

January 12, 2005

TO: TIMOTHY E. STEINBERGER, P.E., DIRECTOR
DEPARTMENT OF DESIGN AND CONSTRUCTION

FROM: CLIFFORD S. JAMILE, MANAGER AND CHIEF ENGINEER
BOARD OF WATER SUPPLY

ATTENTION: BILL LIU

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT FOR SMALL MAINLINE PROJECT NO. 60 1045 FORT STREET MALL SEWER REHABILITATION, TMK: 2-1-001

The construction drawings should be submitted for our review and approval. The construction schedule should be coordinated to minimize impact to the water system.

If you have any questions, please contact Joseph Kaakua at 748-5442.

Cc: Ms. Genevieve Salmonson
Mr. Jason Lau

Water for Life . . . Ka Wai Ola

DEPARTMENT OF DESIGN AND CONSTRUCTION
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 11TH FLOOR
HONOLULU, HAWAII 96813
Phone: (808) 523-4564 • Fax: (808) 523-4567
Web site: www.honolulu.gov

MUFI HANNEMANN
MAYOR

WAYNE M. HASHIRO, P.E.
DIRECTOR

WW.P 05-0039

February 16, 2005

TO: MR. CLIFFORD S. JAMILE, MANAGER AND CHIEF ENGINEER
BOARD OF WATER SUPPY

ATTENTION: JOSEPH KAAKUA

FROM: for WAYNE HASHIRO, P.E., ACTING DIRECTOR
DEPARTMENT OF DESIGN AND CONSTRUCTION

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT (EA), SMALL MAINLINE PROJECT NO. 60, 1045 FORT STREET MALL SEWER REHABILITATION, TMK: 2-01-001 (POR.)

Thank you for your letter dated January 12, 2005 completing your review of the subject Draft EA. Your comments are addressed in Section 3.12.2, page 3-17 of the Draft EA as follows:

> *Short-term construction impacts may possibly affect the BWS water lines in the project corridor. To avoid any infrastructure conflicts and any damage to the water distribution system, the final construction drawings will be submitted to the BWS for review and approval. Additionally, the construction schedule will be coordinated with the BWS to minimize any possible impacts to the water system.*

We appreciate your interest and participation in the Draft EA public review phase of the environmental review process. Your letter, along with this response, will be included in the forthcoming Final EA. Should you have any questions, please contact Mr. Bill Liu at 527-5388.

cc: Jason Lau, The Limtiaco Consulting Group

DEPARTMENT OF FACILITY MAINTENANCE
CITY AND COUNTY OF HONOLULU
1000 ULUOHIA STREET, SUITE 215, KAPOLEI, HAWAII 96707
TELEPHONE : (808) 692-5054 FAX: (808) 692-5857
Website: www.honolulu.gov

MUFI HANNEMANN
MAYOR

LAVERNE HIGA, P.E.
ACTING DIRECTOR AND CHIEF ENGINEER

GEORGE "KEOKI" MIYAMOTO
DEPUTY DIRECTOR

IN REPLY REFER TO:
DRM 05-

January 14, 2005

MEMORANDUM

TO: TIMOTHY E. STEINBERGER, P.E., DIRECTOR
DEPARTMENT OF DESIGN AND CONSTRUCTION

ATTN: BILL LIU

FROM: LAVERNE HIGA, P.E., ACTING DIRECTOR AND CHIEF ENGINEER
DEPARTMENT OF FACILITY MAINTENANCE

SUBJECT: **DRAFT ENVIRONMENTAL ASSESSMENT (DEA)**
SMALL MAINLINE PROJECT NO. 60
FORT STREET MALL SEWER REHABILITATION

Thank you for the opportunity to provide comments on the DEA for the subject project.

We support the cured-in-place pipe (CIPP) lining method for rehabilitating the existing sewer line within Hotel Street. To lessen the impact on project roadways we request that open trench construction be kept to a minimum and utilized only where less destructive method may not be feasible.

The DEA should indicate that the existing pavement on Hotel Street is reinforced concrete and pavement restoration due to the short section of open cut trenching shall match the existing pavement in thickness, color and texture.

Also, the surface of Fort Street Mall is brick tiles. The DEA should indicate that the existing tiles shall be used in the final trench restoration for the open cut trenching along the mall. The tiles shall be carefully removed and stored in such a manner as to ensure they are not damaged and the tile pattern shall be documented to ensure restoration of the trench matches the existing pattern.

The DEA indicates that two existing 18" storm drain pipes near Hotel Street that cross in close proximity to the rehabilitated sewer lines will have to be raised. The DEA should address what, if any, impacts increasing the invert elevation of these pipes will have on the flow within the existing system. Also, is there sufficient cover to allow raising the pipes?

Returned for your use is the DEA document.

Should you have any questions, please call Charles Pignataro of our Division of Road Maintenance, at 484-7697.

Attachment

cc: Office of Environmental Quality Control
The Limtiaco Consulting Group

DEPARTMENT OF DESIGN AND CONSTRUCTION
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 11TH FLOOR
HONOLULU, HAWAII 96813
Phone: (808) 523-4564 • Fax: (808) 523-4567
Web site: www.honolulu.gov

MUFI HANNEMANN
MAYOR

WAYNE M. HASHIRO, P.E.
DIRECTOR

WW.P 05-0043

February 16, 2005

TO: MS. LAVERNE HIGA, P.E., ACTING DIRECTOR AND CHIEF ENGINEER
DEPARTMENT OF FACILITY MAINTENANCE

FROM: for WAYNE HASHIRO, P.E., ACTING DIRECTOR
DEPARTMENT OF DESIGN AND CONSTRUCTION

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT (EA), SMALL MAINLINE PROJECT NO. 60, 1045 FORT STREET MALL SEWER REHABILITATION, TMK: 2-01-001 (POR.)

Thank you for your letter dated January 14, 2005 completing your review of the subject Draft EA. We offer the following in response to your comments.

We acknowledge your support of the cured-in-place pipe (CIPP) lining method for sewer rehabilitation within the project area along Hotel Street. As stated in Section 3.12.1 of the Draft EA, CIPP typically involves very little surface disruption. However, open cut trench excavation must be employed to replace a 40-foot section that is in critical structural condition. The open cut trench work will be scheduled during night hours to minimize impacts to traffic and roadways.

Regarding pavement restoration within the aforementioned 40-foot section along Hotel Street, Section 3.3 of the Draft EA states, "The affected areas will be finished and restored to match the existing surface material and grade." Your comments will be incorporated into Section 3.3 of the Final EA as follows:

> *The existing pavement along Section B consists of reinforced concrete, and the area affected by open cut trench work will be finished and restored to match the existing pavement in thickness, color and texture.*

Regarding the surface restoration of Fort Street Mall subsequent to open cut trench work, Section 3.3 of the DEA states "The existing surface material along Section A is paved with brick, which will need to be placed by hand upon surface restoration." Your comments will be incorporated into Section 3.3 of the Final EA as follows:

> *The existing surface material along Section A is paved with brick, and the existing tiles shall be replaced by hand upon surface restoration. Prior to*

> *excavation activities, the tile pattern shall be documented to ensure that restoration matches the existing pattern, and during project construction the tiles shall be carefully removed and stored in such a manner as to prevent damage.*

Regarding the presence of two existing 18-inch storm drains in proximity to the project sewer line along Hotel Street, the design phase of the project shall investigate and determine whether the proposed sewer improvements will require alterations to the drainage lines. At the current planning stage of the project, it cannot be determined whether such alterations will be necessary.

We appreciate your interest and participation in the Draft EA public review phase of the environmental review process. Your letter, along with this response, will be included in the forthcoming Final EA. Should you have any questions, please contact Mr. Bill Liu at 527-5388.

cc: Jason Lau, The Limtiaco Consulting Group

DEPARTMENT OF PARKS & RECREATION
CITY AND COUNTY OF HONOLULU
1000 Ulu'ohia Street, Suite 309, Kapolei, Hawaii 96707
Phone: (808) 692-5561 • Fax: (808) 692-5131
Website: www.co.honolulu.gov

MUFI HANNEMANN
MAYOR

LESTER K. C. CHANG
ACTING DIRECTOR

DANA L. TAKAHARA-DIAS
DEPUTY DIRECTOR

IN REPLY REFER TO:

12001
SMPR-60

JL ✓
TM

February 25, 2005

TO: WAYNE HASHIRO, P.E., ACTING DIRECTOR
DEPARTMENT OF DESIGN AND CONSTRUCTION

FROM: LESTER K. C. CHANG, ACTING DIRECTOR

SUBJECT: DRAFT ENVIROMENTAL ASSESSMENT (EA)
SMALL MAINLINE PROJECT NO. 60, 1045 FORT STREET MALL
SEWER REHABILITATION TMK: 2-01-001

Thank you for the opportunity to review and comment on the Draft Environmental Assessment relating to the Small Mainline Sewer Rehabilitation Project on the Fort Street Mall.

When the City upgraded the Fort Street Mall some years ago they selected an interlocking paving stone system of specific color, pattern and texture that would permit work such as the proposed sewer rehabilitation to be done with relatively minor damage to the malls surface. We recommend that the contractor consult with Ono Construction Company who installed the interlocking paving stones, to familiarize themselves with the techniques of removal and replacement of the stones to mitigate damage and insure proper replacement of the proper color stones in the proper pattern.

Anticipating that there would be future construction work on the Fort Street Mall, the City purchased and stored extra pavers of various colors and sizes that would permit the few pavers damaged during construction to be replaced at no additional cost to the City. These pavers should be made available to the selected general contractor.

The Draft Environmental Assessment states that among the identified sewer deficiencies is root infestation. We recommend that the general contractor be required to coordinate with and obtain the approval of the Department of Parks and Recreation's

Division of Urban Forestry whenever their construction involves exposure of any root structure, below grade pruning, or any work on any tree on the Mall.

Should you have any questions, please contact Mr. John Reid, Planner, at 692-5454.

LESTER K.C. CHANG
Acting Director

LKCC:mk
(95816)

cc: Ms. Genevieve Salmonson, Director, Office of Environmental Quality Control
Mr. Jason Lau, Project Manager, The Limtiaco Consulting Group

DEPARTMENT OF DESIGN AND CONSTRUCTION
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 11TH FLOOR
HONOLULU, HAWAII 96813
Phone: (808) 523-4564 • Fax: (808) 523-4567
Web site: www.honolulu.gov

MUFI HANNEMANN
MAYOR

WAYNE M. HASHIRO, P.E
ACTING DIRECTOR

EUGENE C. LEE, P.E.
DEPUTY DIRECTOR

WW.P 05-0079

March 10, 2005

TO: LESTER K. C. CHANG, ACTING DIRECTOR
DEPARTMENT OF PARKS AND RECREATION

FROM: for WAYNE M. HASHIRO, P.E., ACTING DIRECTOR
DEPARTMENT OF DESIGN AND CONSTRUCTION

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT (EA), SMALL MAINLINE PROJECT NO. 60, 1045 FORT STREET MALL SEWER REHABILITATION, TMK: 2-01-001 (POR.)

Thank you for your letter dated February 25, 2005 completing your review of the subject Draft EA. Your comments regarding the removal and reinstallation of the interlocking paving stones along Fort Street Mall will be incorporated into Section 3.3 of the forthcoming Final EA as follows:

In a letter dated February 25, 2005 (see Section 8.2), the City and County of Honolulu Department of Parks and Recreation noted that the system of interlocking paving stones along Fort Street Mall was selected and installed according to a specific color, pattern and texture that would allow work, such as the proposed sewer rehabilitation, to be done with relatively minor damage to the Mall surface. The Department of Parks and Recreation made the following recommendations in their letter:

1. *The contractor selected for the proposed project should consult with the company who performed the original paving stone installation to gain familiarity with removal and replacement techniques, thus, mitigating damage and ensuring proper stone replacement with respect to color and pattern;*

2. *The extra paving stones purchased and stored at the time of the original installation (for use in the event that stones were damaged during future construction activities) should be made available to the selected contractor; and*

3. *The general contractor will be required to coordinate with, and obtain the approval of the Department of Parks and Recreation's Division of Urban Forestry whenever construction involves exposure of any root structure, below-grade pruning, or any work on any tree on the Mall.*

We appreciate your interest and participation in the Draft EA public review phase of the environmental review process. Your letter, along with this response, will be included in the forthcoming Final EA. Should you have any questions, please contact Mr. Bill Liu at 527-5388.

cc: Jason Lau, The Limtiaco Consulting Group

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 523-4432 • FAX: (808) 527-6743
DEPT. WEB SITE: www.honoluludpp.org • CITY WEB SITE: www.honolulu.gov

MUFI HANNEMANN
MAYOR

HENRY ENG, FAICP
ACTING DIRECTOR

DAVID K. TANOUE
DEPUTY DIRECTOR

05WWB010 (SG)
2005/ELOG-2886

January 20, 2005

MEMORANDUM

TO: TIMOTHY E. STEINBERGER, P.E., ACTING DIRECTOR
DEPARTMENT OF DESIGN AND CONSTRUCTION

ATTN: BILL LIU
WASTEWATER DIVISION

FROM: Dennis M. Nishimura for HENRY ENG, FAICP, ACTING DIRECTOR
DEPARTMENT OF PLANNING AND PERMITTING

SUBJECT: **DRAFT ENVIRONMENTAL ASSESSMENT (DEA)**
SMALL MAINLINE PROJECT NO. 60
1045 FORT STREET MALL SEWER REHABILITATION

This is in response to Mr. Jason Lau's letter dated December 17, 2004, requesting comments for the proposed rehabilitation of the municipal sewer system on Fort Street Mall. We have reviewed the DEA and have the following comments:

1. Project Summary: We recommend including the following information: "**Development Plan Area**: Primary Urban Center," and **Development Plan Land Use Designation**: District Commercial."

2. Section 4: Recommend adding a short description of the Primary Urban Center (PUC) Public Infrastructure Map (PIM) between Sections 4.4 and 4.5. The PUC PIM was adopted by Resolution 04-246, CD1 on October 13, 2004 and shows the approximate location of certain major municipal Capital Improvement Program projects. Underground sewer line projects are not a type of project that needs to be shown on the PIM.

3. Page 4-3: In the fourth paragraph, change the "period" after the word "Additionally" to a "comma" and the word "Pedestrial" to "Pedestrian." We recommend that this section of the DEA also mention that Fort Street Mall and Hotel Street are designated as part of the pedestrian network on the PUC DP Land Use Map (PUC-Central).

4. Page 4-4: In the first paragraph, we recommend revising the last sentence to read: "The proposed sewer reconstruction project supports the revised PUC DP's policies and guidelines pertaining to the region's wastewater system."

5. Suggest the scope of the project be increased to extend the 12-inch relief sewer line to connect to the 28-inch interceptor located at the intersection of Fort Street and Queen Street.

If you have any questions, please contact Mr. Scott Gushi of the Wastewater Branch at 523-4886.

HE:dl
[347310]

cc: Ms. Genevieve Salmonson, Director (Department of Health)
Mr. Jason Lau, Project Manager (The Limtiaco Consulting Group, Inc.)

DEPARTMENT OF DESIGN AND CONSTRUCTION
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 11TH FLOOR
HONOLULU, HAWAII 96813
Phone: (808) 523-4564 • Fax: (808) 523-4567
Web site: www.honolulu.gov

MUFI HANNEMANN
MAYOR

WAYNE M. HASHIRO, P.E.
DIRECTOR

WW.P 05-0040

February 16, 2005

TO: MR. HENRY ENG, FAICP, ACTING DIRECTOR
DEPARTMENT OF PLANNING AND PERMITTING

ATTN: SCOTT GUSHI
WASTEWATER BRANCH

FROM: for WAYNE HASHIRO, P.E., ACTING DIRECTOR
DEPARTMENT OF DESIGN AND CONSTRUCTION

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT (EA), SMALL MAINLINE PROJECT NO. 60, 1045 FORT STREET MALL SEWER REHABILITATION, TMK: 2-01-001 (POR.)

Thank you for your letter dated January 20, 2005 completing your review of the subject Draft EA. We offer the following in response to your comments:

1. Project Summary: The information recommended for inclusion will be added to the project summary in the Final EA.
2. Section 4: A discussion of the Primary Urban Center (PUC) Public Infrastructure Map will be added to Section 4.4 of the Final EA.
3. Page 4-3: All suggested changes will be incorporated in the Final EA.
4. Page 4-4: The suggested sentence revision will be made in the Final EA.
5. The Department of Design and Construction acknowledges this comment and will investigate the matter further during the design phase of the project.

We appreciate your interest and participation in the Draft EA public review phase of the environmental review process. Your letter, along with this response, will be included in the forthcoming Final EA. Should you have any questions, please contact Mr. Bill Liu at 527-5388.

cc: Jason Lau, The Limtiaco Consulting Group

DEPARTMENT OF TRANSPORTATION SERVICES
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 3RD FLOOR • HONOLULU, HAWAII 96813
TELEPHONE: (808) 523-4529 • FAX: (808) 523-4730 • INTERNET: www.co.honolulu.hi.us

MUFI HANNEMANN
MAYOR

EDWARD Y. HIRATA
ACTING DIRECTOR

TPD05-00030

January 27, 2005

MEMORANDUM

TO: TIMOTHY E. STEINBERGER, P.E., DIRECTOR
DEPARTMENT OF DESIGN AND CONSTRUCTION

ATTN: BILL LIU

FROM: EDWARD Y. HIRATA, ACTING DIRECTOR

SUBJECT: SMALL MAINLINE PROJECT NO. 60
1045 FORT STREET MALL SEWER REHABILITATION

In response to the December 17, 2004 letter from The Limtiaco Consulting Group, we have reviewed the draft environmental assessment for the subject project. The following comments are the result of this review:

1. If the proposed project has an impact on bus stop areas, those stop areas should be restored to ADA (Americans with Disabilities Act) compliant condition.
2. On Page 3-17, the second sentence of the second paragraph should be revised to read, "...TheBus, is administered by the DTS Public Transit Division and operations are under contract to Oahu Transit Services, Inc., ..."
3. The second paragraph on Page 3-17 states that a traffic plan for night work on Hotel Street may be required. Traffic control plans are required for work on any City roadway that will impact vehicle and/or pedestrian use. Prior to construction, a traffic control plan for Hotel Street should be submitted to the DTS Traffic Signals and Technology Division.
4. The City Department of Parks and Recreation should be consulted regarding this project since the management and maintenance of Fort Street Mall is under its jurisdiction.

Should you have any questions regarding these comments, please contact Faith Miyamoto of the Transportation Planning Division at Local 6976.

EDWARD Y. HIRATA

cc: Ms. Genevieve Salmonson
Office of Environmental Quality Control

Mr. Jason Lau
The Limtiaco Consulting Group

DEPARTMENT OF DESIGN AND CONSTRUCTION
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 11TH FLOOR
HONOLULU, HAWAII 96813
Phone: (808) 523-4564 • Fax: (808) 523-4567
Web site: www.honolulu.gov

MUFI HANNEMANN
MAYOR

WAYNE M. HASHIRO, P.E.
DIRECTOR

WW.P 05-0048

February 16, 2005

TO: MR. EDWARD Y. HIRATA, ACTING DIRECTOR
DEPARTMENT OF PLANNING AND PERMITTING

FROM: for WAYNE HASHIRO, P.E., ACTING DIRECTOR
DEPARTMENT OF DESIGN AND CONSTRUCTION

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT (EA), SMALL MAINLINE PROJECT NO. 60, 1045 FORT STREET MALL SEWER REHABILITATION, TMK: 2-01-001 (POR.)

Thank you for your letter dated January 27, 2005 completing your review of the subject Draft EA. We offer the following in response to your comments:

1. ADA compliance at bus stops: Section 2.6 of the Final EA will be revised to state that bus stop areas, which may be affected by the project, should be evaluated and, if subject to construction impacts, restored to ADA compliant condition.

2. Page 3-17, second sentence: Your suggested revision will be incorporated into the Final EA.

3. Page 3-17, second paragraph: Your clarification is acknowledged and appreciated. The text in the Final EA will be revised to reflect that the contractor should submit a traffic control plan for Hotel Street to the DTS Traffic Signals and Technology Division prior to the commencement of construction.

4. Consultation with the Department of Parks and Recreation: A copy of the Draft EA was mailed to the Department of Parks and Recreation on February 9, 2005, accompanied by a letter requesting any comments on the document by February 24, 2005. Attached for reference was a copy of the comments submitted by the Department of Facility Maintenance.

We appreciate your interest and participation in the Draft EA public review phase of the environmental review process. Your letter, along with this response, will be included in the forthcoming Final EA. Should you have any questions, please contact Mr. Bill Liu at 527-5388.

cc: Jason Lau, The Limtiaco Consulting Group

FIRE DEPARTMENT
CITY AND COUNTY OF HONOLULU
3375 Koapaka Street, Suite H-425
Honolulu, Hawaii 96819-1869
Phone: (808) 831-7761 Fax: (808) 831-7750 Internet: www.honolulufire.org

MUFI HANNEMANN
MAYOR

ATTILIO K. LEONARDI
FIRE CHIEF

JOHN CLARK
DEPUTY FIRE CHIEF

January 6, 2005

TO: TIMOTHY E. STEINBERGER, P.E., DIRECTOR
DEPARTMENT OF DESIGN AND CONSTRUCTION

FROM: ATTILIO K. LEONARDI, FIRE CHIEF

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT (DEA)
SMALL MAINLINE PROJECT NO. 60
1045 FORT STREET MALL SEWER REHABILITATION
HONOLULU, OAHU, HAWAII
TAX MAP KEY: 2-01-001 (PORTION)

We received a letter dated December 17, 2004, from Mr. Jason Lau of The Limtiaco Consulting Group requesting that our comments on the above-mentioned DEA be submitted to you.

The Honolulu Fire Department requires that the following be complied with for the duration of the project:

1. Maintain fire apparatus access throughout the construction site.

2. Maintain access to fire hydrants. Notify the Fire Communication Center at 523-4411 regarding any interruption of the existing fire hydrant system.

Should you have any questions, please call Battalion Chief Lloyd Rogers of our Fire Prevention Bureau at 831-7778.

ATTILIO K. LEONARDI
Fire Chief

AKL/SY:lt

cc: Ms. Genevieve Salmonson, Director
State of Hawaii, Department of Health, Office of Environmental Quality Control
Mr. Jason Lau, Project Manager
The Limtiaco Consulting Group

DEPARTMENT OF DESIGN AND CONSTRUCTION
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 11TH FLOOR
HONOLULU, HAWAII 96813
Phone: (808) 523-4564 • Fax: (808) 523-4567
Web site: www.honolulu.gov

MUFI HANNEMANN
MAYOR

WAYNE M. HASHIRO, P.E.
DIRECTOR

WW.P 05-0044

February 16, 2005

TO: MR. ATTILIO K. LEONARDI, CHIEF
FIRE DEPARTMENT

FROM: for WAYNE HASHIRO, P.E., ACTING DIRECTOR
DEPARTMENT OF DESIGN AND CONSTRUCTION

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT (EA), SMALL MAINLINE PROJECT NO. 60, 1045 FORT STREET MALL SEWER REHABILITATION, TMK: 2-01-001 (POR.)

Thank you for your letter dated January 6, 2005 completing your review of the subject Draft EA. Your comments will be incorporated into Section 3.11.2 the Final EA as follows:

For the duration of the project, the Honolulu Fire Department requires compliance with the following:

1. *Maintain fire apparatus access throughout the construction site.*
2. *Maintain access to fire hydrants.*
3. *Notify the Fire Communication Center at 523-4411 of any interruption in the existing fire hydrant system.*

The contractor will be responsible to adhering to the above requirements.

We appreciate your interest and participation in the Draft EA public review phase of the environmental review process. Your letter, along with this response, will be included in the forthcoming Final EA. Should you have any questions, please contact Mr. Bill Liu at 527-5388.

cc: Jason Lau, The Limtiaco Consulting Group

POLICE DEPARTMENT
CITY AND COUNTY OF HONOLULU
801 SOUTH BERETANIA STREET
HONOLULU, HAWAII 96813 - AREA CODE (808) 529-3111
http://www.honolulupd.org
www.honolulu.gov

MUFI HANNEMANN
MAYOR

BOISSE P. CORREA
CHIEF

GLEN R. KAJIYAMA
PAUL D. PUTZULU
DEPUTY CHIEFS

OUR REFERENCE CS-KP

January 12, 2005

TO: TIMOTHY E. STEINBERGER, P.E., ACTING DIRECTOR
DEPARTMENT OF DESIGN AND CONSTRUCTION

ATTENTION: WILLIAM K. LIU, PROJECT ENGINEER

FROM: BOISSE P. CORREA, CHIEF OF POLICE
HONOLULU POLICE DEPARTMENT

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT, SMALL MAINLINE PROJECT NO. 60, 1045 FORT STREET MALL SEWER REHABILITATION, TMK: 2-01-001(POR.)

Thank you for the opportunity to review and comment on the subject project.

This project should have minimal impact on the facilities and services of the Honolulu Police Department. However, we anticipate the inevitable dust and noise complaints and would appreciate being advised of the construction schedule. Please call the District 1 patrol office at 529-3386 when it becomes available.

If there are any questions, please call Major Kevin Lima of District 1 at 529-3386 or Ms. Carol Sodetani of the Support Services Bureau at 529-3658.

BOISSE P. CORREA
Chief of Police

By
KARL GODSEY
Assistant Chief of Police
Support Services Bureau

cc: Ms. Genevieve Salmonson (OEQC)
✓Mr. Jason Lau (The Limtiaco Consulting Group)

Serving and Protecting with Aloha

DEPARTMENT OF DESIGN AND CONSTRUCTION
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 11TH FLOOR
HONOLULU, HAWAII 96813
Phone: (808) 523-4564 • Fax: (808) 523-4567
Web site: www.honolulu.gov

MUFI HANNEMANN
MAYOR

WAYNE M. HASHIRO, P.E.
DIRECTOR

WW.P 05-0047

February 16, 2005

TO: BOISSE P. CORERA, CHIEF OF POLICE
HONOLULU POLICE DEPARTMENT

ATTENTION: MAJOR KEVIN LIMA, DISTRICT 1

FROM: for WAYNE HASHIRO, P.E., ACTING DIRECTOR
DEPARTMENT OF DESIGN AND CONSTRUCTION

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT (EA), SMALL MAINLINE PROJECT NO. 60, 1045 FORT STREET MALL SEWER REHABILITATION, TMK: 2-01-001 (POR.)

Thank you for your letter dated January 12, 2005 completing your review of the subject Draft EA. Your comment regarding the anticipation of construction-related dust and noise complaints is acknowledged, and the Police Department will be advised of the construction schedule prior to the commencement of work. Section 3.11.2 of the Draft EA discusses Police, Fire and Ambulance Service in the vicinity of the proposed project. Based on the comments you provided, the following paragraph will be inserted following the fourth paragraph of Section 3.11.2:

> *The contractor will be responsible for providing notice of the construction schedule to the District 1 patrol office of the Honolulu Police Department at 529-3386. This should be done well in advance of the commencement of construction activities and as soon as the schedule becomes available.*

We appreciate your interest and participation in the Draft EA public review phase of the environmental review process. Your letter, along with this response, will be included in the forthcoming Final EA. Should you have any questions, please contact Mr. Bill Liu at 527-5388.

cc: Jason Lau, The Limtiaco Consulting Group

12001
SMPR 60

THE GAS COMPANY

P.O. Box 3000
Honolulu, Hawaii 96802-3000

JL ✓
TM ✓
file

January 7, 2005

Mr. Timothy E. Steinberger, P.E., Director
City & County of Honolulu
Department of Design and Construction
650 South King Street, 14th Floor
Honolulu, Hawaii 96813

Attention: Mr. Bill Liu

Gentlemen:

Subject: Draft Environmental Assessment (DEA)
Small Mainline Project No. 60,
1045 Fort Street Mall Sewer Rehabilitation

Please be advised that The Gas Company maintains underground utility gas mains in the project vicinity, which serves commercial and residential customers in the area. We would appreciate your consideration during the project planning and design process to minimize any potential conflicts with the existing gas facilities in the project area.

Thank you for the opportunity to comment on the Draft Environmental Assessment. Should there be any questions, or if additional information is desired, please call me at 594-5570.

Very truly yours,

Charles E. Calvet, P.E.
Manager, Engineering

05-100
CEC:krs

Cc: Ms. Genevieve Salmonson, Director, Office of Environmental Quality Control
Mr. Jason Lau, Project Manager, The Limtiaco Consulting Group

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DEPARTMENT OF DESIGN AND CONSTRUCTION
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 11TH FLOOR
HONOLULU, HAWAII 96813
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Web site: www.honolulu.gov

MUFI HANNEMANN
MAYOR

WAYNE M. HASHIRO, P.E.
DIRECTOR

WW.P 05-0045

February 16, 2005

Mr. Charles Calvet, P.E., Manager
The Gas Company
Engineering Department
PO Box 3000
Honolulu, Hawaii 96802-3000

Dear Mr. Calvet:

Subject: Draft Environmental Assessment (EA)
Small Mainline Project No. 60, 1045 Fort Street Mall Sewer Rehabilitation
TMK: 2-01-001 (Por.)
Honolulu, Oahu, Hawaii

Thank you for your letter dated January 7, 2005 completing your review of the subject Draft EA. Section 3.12.5 of the Draft EA describes The Gas Company's facilities located within the project corridor and notes precautionary and mitigative measures to be implemented throughout the design and construction phases of the proposed project with the purpose of minimizing any potential conflicts with existing gas lines. As stated on page 3-20 of the Draft EA, The Gas Company will be notified of the construction schedule, and coordination activities will be executed as appropriate, including the affordance of provisions for any necessary utility maintenance activities.

We appreciate your interest and participation in the Draft EA public review phase of the environmental review process. Your letter, along with this response, will be included in the forthcoming Final EA. Should you have any questions, please contact Mr. Bill Liu at 527-5388.

Very truly yours,

for WAYNE HASHIRO, P.E.
Acting Director

cc: Jason Lau, The Limtiaco Consulting Group

8.3. Final EA Distribution

The following agencies, organizations, and individuals were provided copies of the Final EA.

State of Hawaii

Department of Health, Office of Environmental Quality Control (4 copies)
Department of Land and Natural Resources
Department of Transportation

City and County of Honolulu

Board of Water Supply
Department of Environmental Services
Department of Facility Maintenance
Department of Parks and Recreation
Department of Planning and Permitting
Department of Transportation Services
Fire Department
Police Department
Downtown Neighborhood Board No. 13

Utilities

Verizon Hawaii, Inc.
Hawaiian Electric Company Inc.
Oceanic Time Warner Cable
The Gas Company

Libraries and Repositories

Hawaii State Library
Legislative Reference Bureau
Municipal Reference and Records Center

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9. REFERENCES

City & County of Honolulu Department of Planning and Permitting (June 2004). *Primary Urban Center Development Plan* [electronic version]. Retrieved September 18, 2004, from the Department of Planning and Permitting website: http://www.honoluludpp.org/planning/DevSust_PrimaryUrbanCenter.asp.

Macdonald, Gordon A., et al. *Volcanoes in the Sea, The Geology of Hawaii, Second Edition*. 1986.

Stearns, Harold T. *Geology of the State of Hawaii, Second Edition*. 1985.

The Limtiaco Consulting Group. *Sewer Facilities Rehabilitation – Unit II, Small Mainline Project No. 60, 1045 Fort Street Mall ewer Rehablitation, Honolulu, Oahu, Hawaii, TMK 2-1-1, Design Alternatives Report.* Prepared for the City and County of Honolulu Department of Design and Construction, Wastewater Division. September 2004.

The Limtiaco Consulting Group. *Final Environmental Assessment and Finding of No Significant Impact, Nimitz Highway Sewer Reconstruction at OCCC, Kalihi Kai, Oahu, Hawaii.* Prepared for the City and County of Honolulu Department of Design and Construction. Febuary 2004.

U.S. Department of Agriculture, Soil Conservation Service, in cooperation with the University of Hawaii Agricultural Station. *Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii.* August 1972.

U.S. Federal Emergency Management Agency. *Flood Insurance Rate Map, Map Number 150001 0115C.* September 28, 1990.

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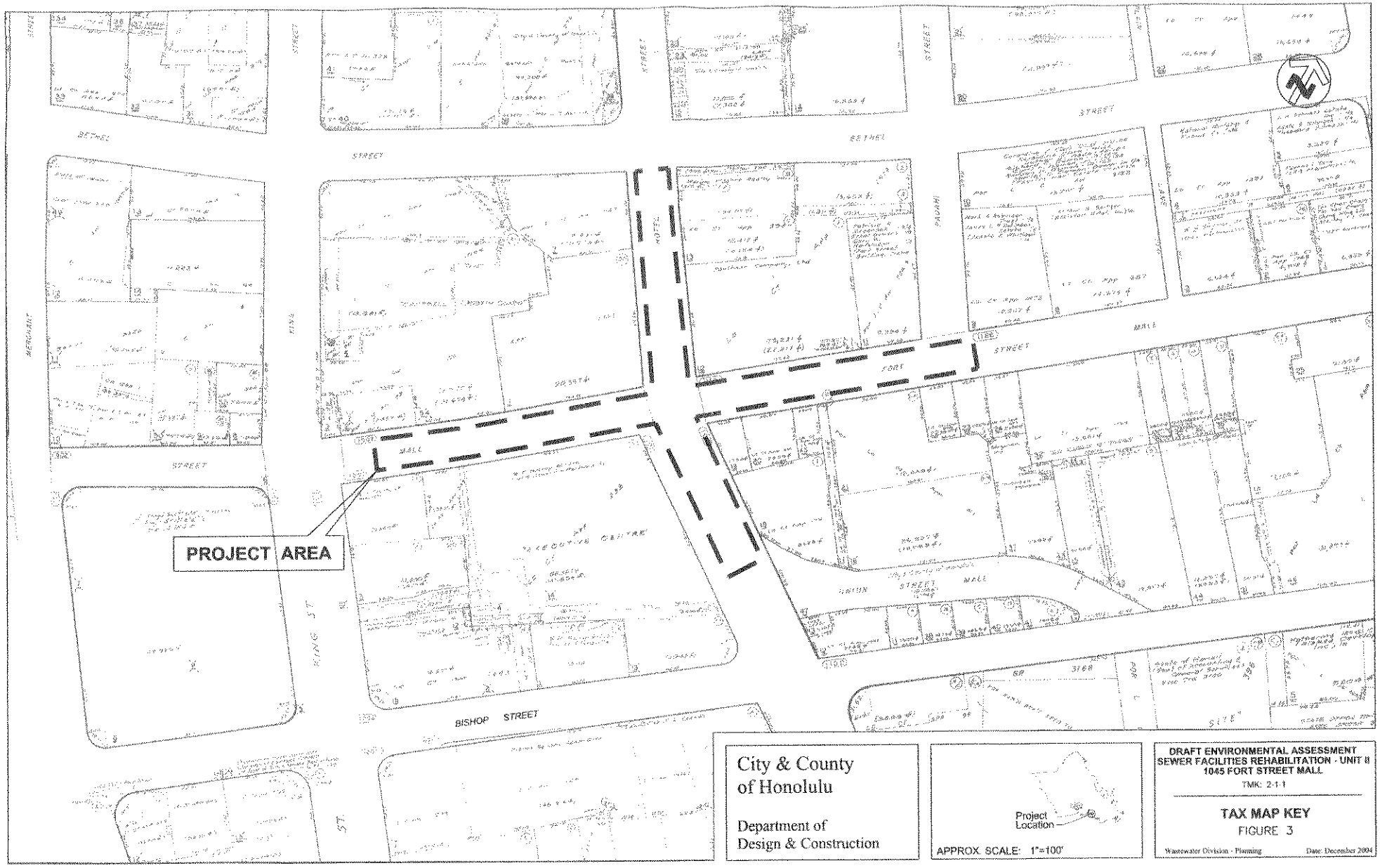


City & County of Honolulu

Department of Design & Construction

DRAFT ENVIRONMENTAL ASSESSMENT
SEWER FACILITIES REHABILITATION - UNIT II
1045 FORT STREET MALL

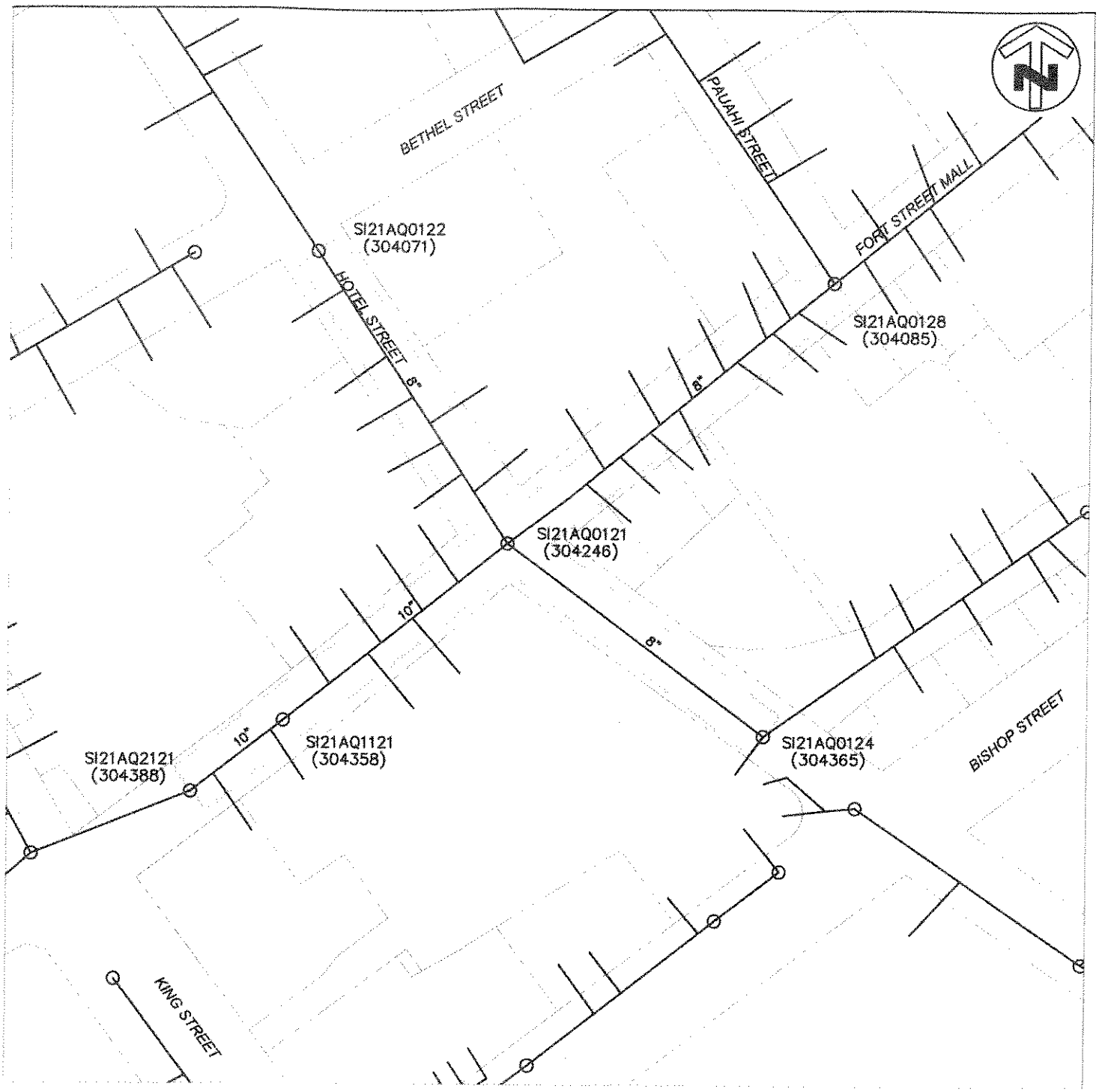
TMK: 2-1-1

TAX MAP KEY

FIGURE 3

Wastewater Division - Planning

Date: December 2004



LEGEND:

PROPERTY LINE

EXISTING SEWER

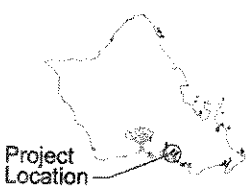
PROJECT AREA

SI21AQ2121 (304388) — SEWER ID No. — ISAP No.

EXISTING SEWER MANHOLE

City & County of Honolulu

Department of Design & Construction



SCALE: 1"=100'

DRAFT ENVIRONMENTAL ASSESSMENT
SEWER FACILITIES REHABILITATION - UNIT II
1045 FORT STREET MALL

TMK: 2-1-1

EXISTING SEWER SYSTEM

FIGURE 4

Wastewater Division - Planning

Date: December 2004

City & County
of Honolulu

Department of
Design & Construction

Project Location

SCALE: 1"=40'

DRAFT ENVIRONMENTAL ASSESSMENT
SEWER FACILITIES REHABILITATION - UNIT II
1045 FORT STREET MALL
TMK: 2-1-1

EXISTING UTILITIES
FIGURE 3

Wastewater Division - Planning

Date: December 2004

There are no long-term impacts associated with the completion and operation of the proposed sewer line reconstruction. The project will not induce any additional water demand in the vicinity of the project site.

3.12.3. Drainage System

As-Built construction drawings indicate a 30-inch diameter reinforced concrete pipe (RCP) drain line along Fort Street between Pauahi Street and Hotel Street. The drain line increases to 36 inches downstream of Hotel Street. The 36-inch drain line crosses the sewer line between manholes SI21AQ1121 and SI21AQ2121. Several drain inlets and laterals also connect to the drain line along Fort Street Mall.

Four drainage catch basins located near the intersection of Hotel Street and Fort Street Mall convey stormwater to the drain line along Fort Street Mall via 18-inch drain lines. The 18-inch connecting drain lines have less than six inches of clearance above the Fort Street Mall sewer line.

Impacts and Mitigation Measures

Short-term construction impacts may possibly affect drainage system in the project corridor. To avoid any infrastructure conflicts and any damage to the drain lines, the final construction drawings will be submitted to the City Department of Design and Construction for review and approval. Additionally, should dewatering activities be required for the proposed project, an NPDES permit will be acquired and appropriate Best Management Practices will be applied during open-cut trenching.

There are no long-term drainage impacts associated with the completion and operation of the proposed sewer line reconstruction. The project will not increase the paved surface area or induce additional run-off.

3.12.4. Wastewater System

The project corridor includes sewers that are components of the municipal wastewater collection system. There are no individual wastewater systems, such as cesspools and septic tanks within the project area.

The proposed sewer line improvements include replacement and rehabilitation of the existing sewer lines. Flows from these lines are collected by a ten-inch sewer line located downstream of the project site along the Fort