

TIRZ 21 SIDEWALK CONDITION ASSESSMENT

October 2022



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1. Project Background

Sidewalks form the basis for vibrant, healthy, walkable communities. Sidewalk conditions in the TIRZ 21 area vary widely, with some corridors having substantial, high-quality pedestrian infrastructure, while others have aging or inaccessible sidewalks. Several streets lack any type of sidewalk providing gaps in the network. The objective of this study is to conduct a sidewalk condition assessment on corridors of major thoroughfares and collectors within the Zone. Corridors included are:

- Irvington Boulevard
- Collingsworth Street
- Patton Street
- Main Street (North of Boundary)
- Fulton Street (Quitman to Boundary)
- Link Road
- Hogan St/Lorraine St from bridge section near IH-10 to IH-69

Multiple field visits were conducted to determine the existing sidewalk conditions and widths. An assessment scale was used to characterize the existing widths and conditions of sidewalks along the project limits. The assessment included five color-coded categories ranging from 5-foot sidewalks in good condition to no sidewalks present.

The recommended improvements were established with goals of simultaneously creating a comprehensive, continuous, and pedestrian-friendly sidewalk system while also improving connectivity of existing sidewalks. The recommendations include 5-6-ft sidewalks, which allow pedestrians the comfort of walking side by side. Various intersections need curb ramps to be replaced due to damage and re-striping of missing or faded pavement markings.

2. Project Location

The project is located just north of downtown in Houston, Texas, within the limits of the TIRZ 21 boundary, See Figure 2.1. The project limits are as follows:

- Fulton Street: from Quitman Street to Boundary Street.
- Link Road: from North Freeway Service Road to Fulton Street.
- Irvington Blvd: from Bigelow Street to Kings Street.
- Collingsworth Street: from Edison Street to I-69.
- Patton Street: from Irvington Blvd to I-45.
- Main Street: from Boundary Street to I-45
- Hogan Street / Lorraine Street: from Glaser Drive to I-69.



Figure 2.1
Project Location Map

3. Existing Condition Evaluation

A thorough existing conditions assessment was conducted to better understand the characteristics of the project corridors. Field investigations were used to evaluate the existing conditions and widths of sidewalks that lie within the project limits. The sidewalk conditions are represented in **Exhibit 1 – Existing Sidewalk Condition** under the exhibits section.

3.1 Sidewalk Assessment Methodology

An assessment scale is used to characterize the existing widths and conditions of sidewalks along the project limits. The assessment includes four color-coded categories ranging from > 5-foot sidewalks in good condition to no sidewalks present. **See Figure 3.1** for more information.

Figure 3.1. Sidewalk Assessment Definitions



3.2 Fulton Street

Fulton Street is an undivided two-way Major Thoroughfare four lanes, two lanes in each direction. The existing sidewalks range from 4 feet to 6 feet wide, though most are 4 feet. This narrower width does not meet current City criteria. Also, there is a City of Houston Capital Improvement Project from Hogan Street to Quitman Street that will improve sidewalks.

The sidewalks vary from poor condition to good condition. There are cracks, vertical changes in level, and cross slopes greater than 2%. Also, several intersections do not have ADA ramps. The overall condition of the sidewalks is poor and should be improved. See **Figure 3.2** for photographs of sidewalk and ramp condition.



Figure 3.2
Fulton Street Existing Sidewalk and Ramp

3.3 Patton Street

Patton Street is an undivided two-way Major Collector with two lanes, one in each direction. The existing sidewalks are 4 feet wide and, in some spots, are less than 3 feet wide. This does not meet current City criteria. The sidewalks vary from poor condition to good condition. There are cracks, vertical changes in level, and cross slopes greater than 2%. The sidewalk on the north side between Averill Street to Hain Street and from Obanions Car Wash to the North Freeway Service Road was covered with grass and leaves, making the walkable area too narrow for pedestrians. Some ramps in this corridor are not ADA compliant as they are missing truncated domes, and others are broken and filled with asphalt. The overall condition of the sidewalks is poor and should be improved. See **Figure 3.3** for photographs of sidewalk and ramp conditions.



Figure 3.3
Patton Street Existing Sidewalk and Ramp

3.4 Link Road

Link Road is an undivided two-way Local Street with two lanes in each direction. The sidewalks along this stretch are 5 feet wide and in good condition. However, there is no safety buffer; there are slotted curbs to protect pedestrians from vehicles. There is 95 LF of sidewalk in front of CDA Internacional Church on the north side that is cracked and needs to be replaced. Also, there is no wheelchair ramp on the northeast side of the intersection with Dunlop Street. See **Figure 3.4** for photographs of sidewalk and ramp conditions.



Figure 3.4
Link Road Existing Sidewalk and Ramp

3.5 Main Street

Main Street is an undivided two-way Major Thoroughfare with four lanes, two in each direction. The classifications of sidewalks found on this section ranged from 3.5 to 6 feet wide (most are 4 feet). Along the Historical Hollywood Cemetery there are no sidewalks, which is due to the limited back of curb area that is caused by a fence encroaches into public right-of-way. ADA ramps are either missing or non-compliant throughout this corridor. See **Figure 3.5** for photographs of sidewalk and ramp conditions.

The City of Houston has a new upcoming retrofit project that involves narrowing the existing typical section of Main Street from four lanes of traffic to three lanes (one lane in each direction and a continuous left turn lane) and two on-street bike lanes (one in each direction). However, this project does not include any sidewalk improvements. Also, Gauge Engineering previously completed a technical memorandum for TIRZ 21 that evaluated full roadway and drainage reconstruction for Main Street. The recommended typical section included a three lane roadway section with one lane in each direction and a two-way-left-turn-lane along with a shared use path and a sidewalk.



Figure 3.5
Main Street Existing Sidewalk and Ramp

3.6 Irvington Boulevard

Irvington Boulevard is a divided two-way Major Thoroughfare with two travel lanes and a dedicated bike lane in each direction. The classifications of sidewalks found on this section ranged from 3.5 to 6 feet wide (most are 4 feet). However, there was no sidewalk in some places. ADA ramps are missing or non-compliant throughout this corridor. See **Figure 3.6** for photographs of sidewalk and ramp conditions.



Figure 3.6
Irvington Blvd Existing Sidewalk and Ramp

3.7 Hogan / Lorraine Street

Hogan / Lorraine Street is an undivided two-way Major Collector. Hogan Street is four lanes, two in each direction, and Lorraine Street is two lanes, one in each direction. The existing sidewalks range from 3 to 7 feet wide. Most of the north sidewalks are in good condition, but the south sidewalks vary from good to poor condition. There were recent roadway improvements in the area where 7-foot-wide sidewalks were constructed (CIP No. N-100028-0001) from Elysian Street to just east of West Street. Shrubs and bushes within the City ROW are along the back of the sidewalk and within the safety buffer in several locations on both sides of the street. There was no sidewalk in some places. Also, there were many obstacles in the middle of the existing sidewalk, such as fire hydrants and power poles, See **Figure 3.7** for photographs of sidewalk and ramp conditions.

The City of Houston has previously completed a Preliminary Engineering Report for Lorraine Street Paving and Drainage (WBS No. N-100028-0001-3) from Houston Avenue to Jensen Drive. This project is currently on hold until the City can secure design and construction funds. TIRZ 21 is also currently evaluating a retrofit option that involves reducing the roadway configuration and rebuilding/widening the existing sidewalks and a full roadway and drainage reconstruction option. TIRZ 21 will continue to coordinate with the City on these efforts.



Figure 3.7
Hogan / Lorraine Street Existing Sidewalk and Ramp

3.8 Collingsworth Street

Collingsworth Street is an undivided two-way Major Collector with two lanes, one in each direction, from Irvington Boulevard to Elysian Street and is four lanes, two in each direction, from Elysian Street to Eastex Freeway Road. The existing sidewalks range from 4 to 5 feet wide. The condition varies from good to poor condition, and there was no sidewalk on the south side due to existing ditches. Shrubs and bushes within the City ROW are along the back of the sidewalk on the north side of the street. Also, there were a lot of obstacles in the middle of the existing sidewalk and ramps such as fire hydrant and power poles. See **Figure 3.8** for photographs of sidewalk and ramp conditions.



Figure 3.8
Collingsworth Street Existing Sidewalk and Ramp

4. Recommended Improvements

The recommended improvements were established with goals of simultaneously creating a comprehensive, continuous, and pedestrian-friendly sidewalk system while also improving connectivity of existing sidewalks. The recommendation is to replace existing deteriorated narrow sidewalks with uninterrupted continuous 6-foot sidewalks, to meet current criteria and promote a pedestrian friendly environment. 5-foot sidewalks will be recommended at constrained back of curb areas. The pedestrian ramps will be improved to meet ADA requirements regarding slope and the inclusion of truncated domes. These ramps will also be aligned with each other crossing the street. The existing sidewalk and curb ramp conditions with the recommended improvements are represented in **Exhibit 2 – Recommended Sidewalk/Curb ramp Condition** under the exhibits section.

4.1 Fulton Street

- The existing sidewalks that do not meet the city criteria will be removed and replaced with a 6-foot-wide sidewalk.
- Existing curb ramps will be removed and replaced with ADA compliant ramps.
- Rebuild the driveways that have damaged sidewalk to maintain the required slope.
- Adding crosswalk / stop bar markings at intersections with Fulton Street.



Legend

- 4-ft, Good Condition
- 5-ft, Good Condition
- 4-ft, Poor Condition
- No Sidewalk

Figure 4.1.1 Existing Sidewalks



Legend

- 6-ft Sidewalk

Figure 4.1.2 Recommended Sidewalks

4.2 Patton Street

- The existing sidewalks that do not meet the city criteria will be removed and replaced with a 5 to 6-foot-wide sidewalk.
- Gaps in the sidewalk will be filled.
- Existing curb ramps will be removed and replaced with ADA compliant ramps.
- Close the driveway that leads to nowhere (Chain fence).
- Rebuild the driveways that have damaged sidewalk to maintain the required slope.
- Adding crosswalk / stop bar markings at intersections with Patton Street.



Legend

Figure 4.2.1 Existing Sidewalks

- 4-ft, Good Condition
- 5-ft, Good Condition
- 4-ft, Poor Condition
- No Sidewalk



Legend

Figure 4.2.2 Recommended Sidewalks

- 5-6 ft Sidewalk

4.3 Link Road

- Remove and replace 95 LF of sidewalk in front of CDA Internacional Church on the north side.
- Install curb extension at the northeast corner of Link Road and Dunlop Street to ensure that pedestrians can cross more safely.
- Realign the existing ramp on the northwest corner with the proposed ramp on the northeast corner.
- Adding crosswalk / stop bar markings at intersections with Patton Street.



Legend

Figure 4.3.1 Existing Sidewalks

- 4-ft, Good Condition
- 5-ft, Good Condition
- 4-ft, Poor Condition
- No Sidewalk



Legend

Figure 4.3.2 Recommended Sidewalks

- 5-ft Sidewalk

4.4 Main Street

- The existing sidewalks that do not meet the city criteria will be removed and replaced with a 5 to 6-foot-wide sidewalk.
- Existing curb ramps will be removed and replaced with ADA compliant ramps.
- Remove and replace the damaged part of the handrail in front of Main St. – Embry St intersection.
- Remove driveways no longer in use.
- Adding crosswalk / stop bar markings at intersections with Main Street.



Legend

Figure 4.4.1 Existing Sidewalks

- 4-ft, Good Condition
- 5-ft, Good Condition
- 4-ft, Poor Condition
- No Sidewalk



Legend

Figure 4.4.2 Recommended Sidewalks

- 5-6 ft Sidewalk

Note: A Technical Memorandum for Main Street Reconstruction was completed by Gauge Engineering for TIRZ 21 in November 2021. The improvements involved full roadway and drainage reconstruction. The preferred typical section included a three-lane section, one lane of traffic in each direction and a two-way-left-turn-lane. Improvements also included a 6-foot-wide sidewalk on one side with a 10-foot-wide shared use path on the other side.

4.5 Irvington Boulevard

- The existing sidewalks that do not meet the city criteria will be removed and replaced with a 6-foot-wide sidewalk.
- Gaps in the sidewalk will be filled.
- In certain segments of the roadway there are steep slopes between the curb and the sidewalk and other segments where there are steep slopes between the sidewalk and the ROW. With the widening of the sidewalk, this steep slope would become steeper and may not be feasible without a short retaining wall.
- Existing curb ramps will be removed and replaced with ADA compliant ramps, and to propose new curb ramps at intersection that doesn't has one.
- Adding crosswalk / stop bar markings at intersections with Irvington Street.



Legend

Figure 4.5.1 Existing Sidewalks

- 4-ft, Good Condition
- 5-ft, Good Condition
- 4-ft, Poor Condition
- No Sidewalk



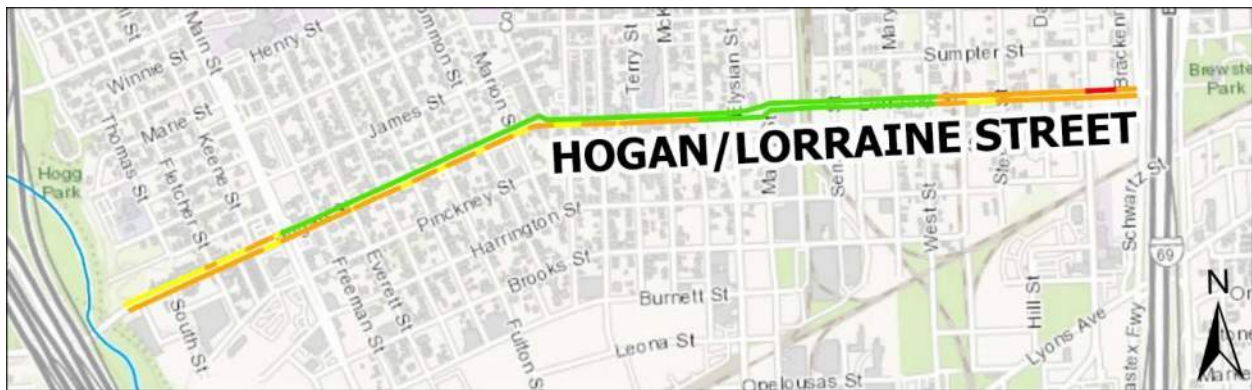
Legend

Figure 4.5.2 Recommended Sidewalks

- 6-ft Sidewalk

4.6 Hogan / Lorraine Street

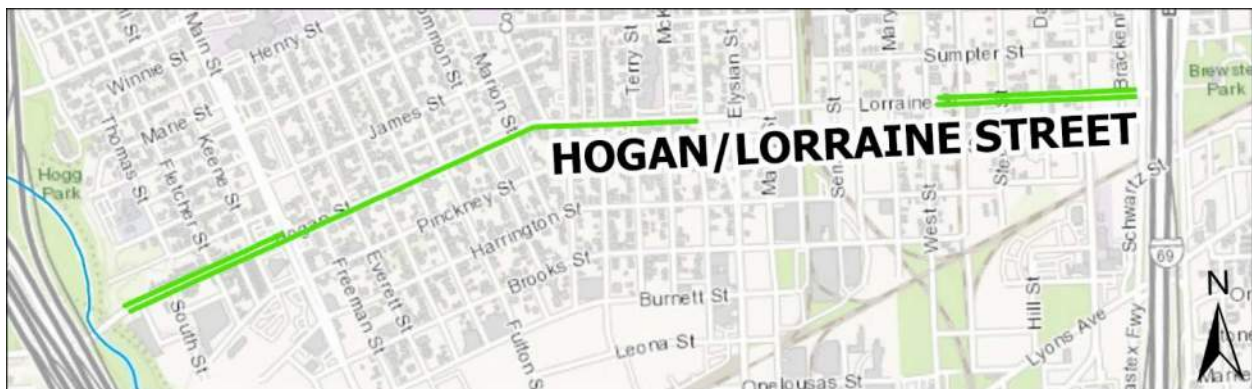
- The existing sidewalks that do not meet the city criteria will be removed and replaced with a 5 to 6-foot-wide sidewalk.
- Gaps in the sidewalk will be filled.
- Existing curb ramps will be removed and replaced with ADA compliant ramps. New curb ramps will be proposed at intersections where there are no ramps.
- Relocate the existing obstacles that are obstructing sidewalks (fire hydrant, power poles, and guy wires).
- Remove driveways no longer in use.
- Remove shrubs and bushes along the sidewalks and ramps if necessary.
- Adding crosswalk / stop bar markings at intersections with Hogan/Lorraine Street
- TIRZ 21 will coordinate its current ongoing preliminary engineering efforts with the City along with the future of the City's Lorraine Improvements project.



Legend

Figure 4.6.1 Existing Sidewalks

- 4-ft, Good Condition
- 5-ft, Good Condition
- 4-ft, Poor Condition
- No Sidewalk



Legend

Figure 4.6.2 Recommended Sidewalks

- 5-6 ft Sidewalk

4.7 Collingsworth Street

- The existing sidewalks that do not meet the city criteria will be removed and replaced with a 6-foot-wide sidewalk.
- Existing curb ramps will be removed and replaced with ADA compliant ramps. New curb ramps will be proposed at intersections where there are no ramps.
- Relocate the existing obstacles that are obstructing sidewalks (fire hydrant, power poles, and guy wires).
- Remove shrubs and bushes along the sidewalks and ramps if necessary.
- Adding crosswalk / stop bar markings at intersections with Irvington Street



Legend

- 4-ft, Good Condition
- 5-ft, Good Condition
- 4-ft, Poor Condition
- No Sidewalk

Figure 4.7.1 Existing Sidewalks



Legend

- 6-ft Sidewalk

Figure 4.7.2 Recommended Sidewalks

5. Opinion on Probable Construction Cost

The estimated construction cost of the recommended improvements is as follows:

Street Name	Approximate Cost*
Fulton Street	\$419,764
Patton Street	\$784,545
Link Road	\$19,417
Main Street	\$764,929
Irvington Boulevard	\$2,148,721
Hogan / Lorraine Street	\$1,459,219
Collingsworth Street	\$748,257
*Cost Estimated accounts for unit price of sidewalk, mobilization, curb ramps, and contingency	

A detailed estimate of probable construction costs is provided in Appendix 1.

6. Conclusion







In conclusion, the existing sidewalks do not meet current Infrastructure Design Manual (IDM) design standards. Narrow, uneven and damaged sidewalk segments exist at multiple locations. The majority of the existing ramps are not ADA compliant. The recommendations presented in this report are to improve the access, connectivity, and safety of sidewalks.

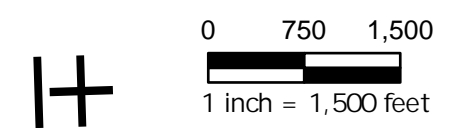
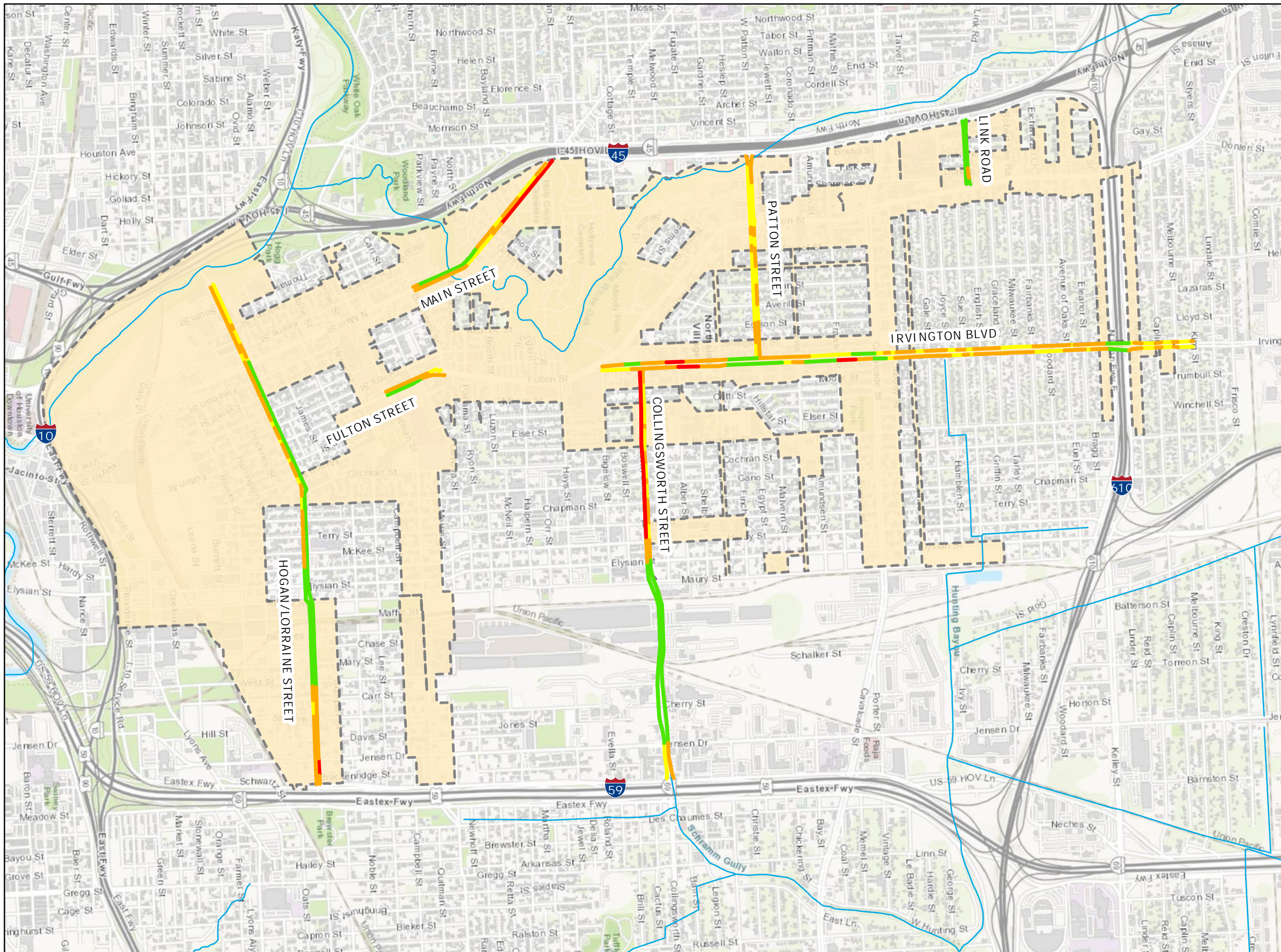
EXHIBITS

SIDEWALK CONDITION ASSESSMENT

**EXHIBIT 1
EXISTING SIDEWALK CONDITION**

Legend





-  Channels
-  TIRZ 21 Boundary
- Sidewalk Condition**
-  4-ft, Good Condition
-  5-ft, Good Condition
-  4-ft, Poor Condition
-  No Sidewalk

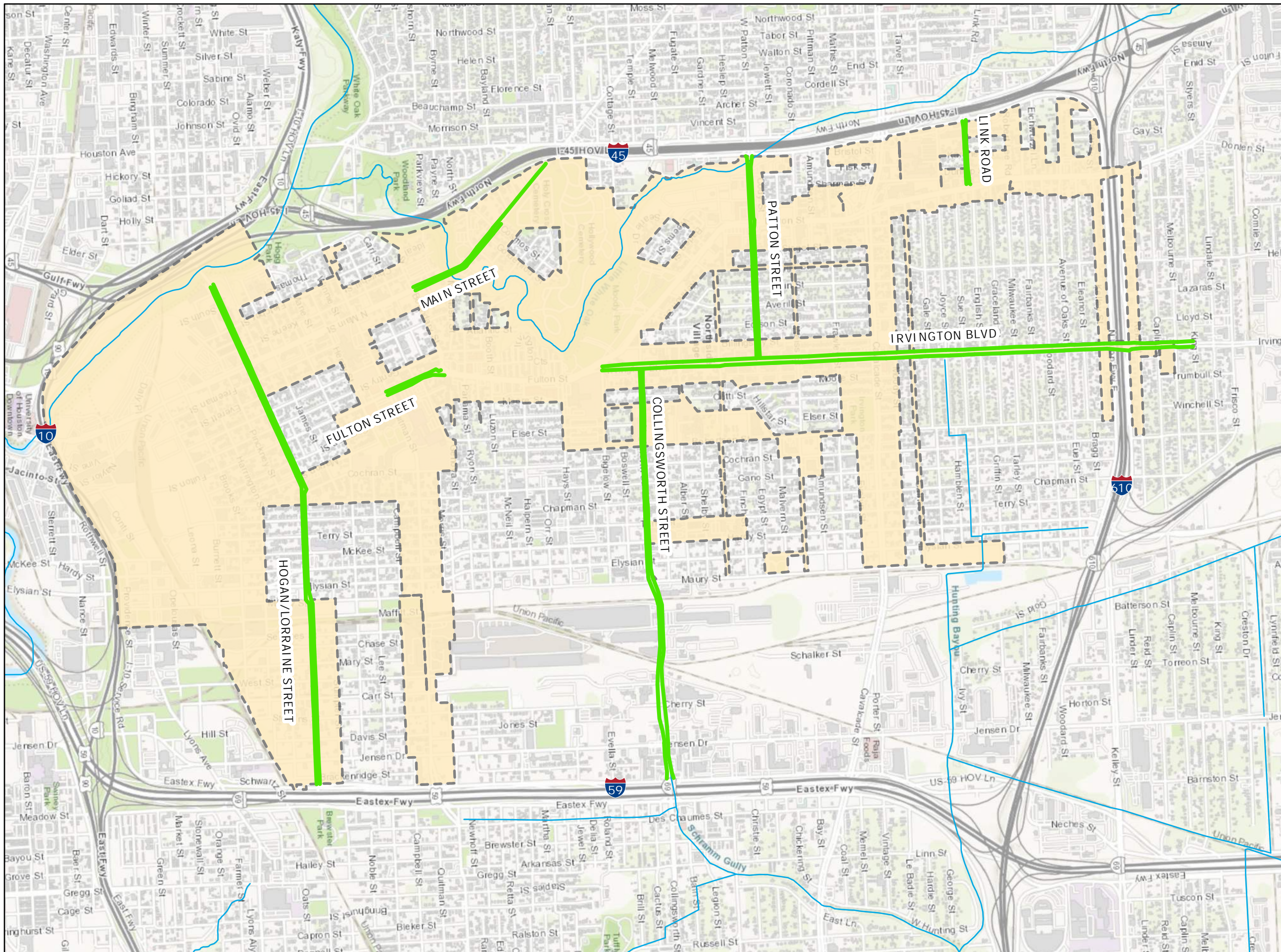
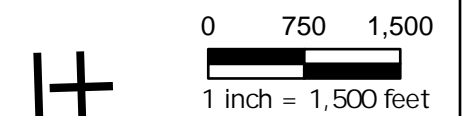


SIDEWALK CONDITION ASSESSMENT

**EXHIBIT 2
RECOMMENDED IMPROVEMENTS**

Legend

-  Channels
-  TIRZ 21 Boundary
-  Recommended Sidewalks
-  5-6 ft Sidewalk



Appendix 1

**FULTON STREET FROM IRVINGTON TO BOUNDARY STREET
OPINION OF PROBABLE CONSTRUCTION COST (OPCC) - DRAFT**

Item No.	Specs No.	Base Unit Short Title	Unit of Measure	Estimated Quantity	Unit Price	Total in figures
GENERAL ITEMS						
1	1110	Project Sign	EA	1	\$ 1,500.00	\$1,500.00
2	01502	Mobilization	LS	1	\$ 15,000.00	\$15,000.00
3	01555	Traffic Control and Regulation(Including Flaggers)	LS	1	\$ 7,000.00	\$7,000.00
4	01562 & 01110	Tree and Plant Protection	LS	1	\$ 5,000.00	\$5,000.00
5	02085	Water Meter Boxes (Conc or Plastic)	EA	15	\$ 500.00	\$7,500.00
6	02086	Adjust Manhole Frame & Cover to Match Prop Elevations And Grades	EA	5	\$ 1,000.00	\$5,000.00
7	02086	Adjust Existing Valve Box to New Grade	EA	10	\$ 500.00	\$5,000.00
8	02922	Sodding	SY	550	\$ 6.00	\$3,300.00
9	01270S	Irrigation System Repair and Adjustment, complete in place	LS	1	\$ 7,500.00	\$7,500.00
GENERAL TOTAL						\$56,800.00
ROADWAY ITEMS						
10	02315	Excavation	CY	122	\$ 25.00	\$3,056.00
11		Coarse Sand	CY	61	\$ 85.00	\$5,195.00
12	01270S	Retaining Wall	LF	20	\$ 200.00	\$4,000.00
13	02221	Remove & Dispose Conc Sidewalk, driveway and Ramp, all thickness	SY	1,667	\$ 13.00	\$21,667.00
14	02754	7 Inch High Early Strength Concrete Driveway, Including Excavation And Base	SF	8,400	\$ 13.00	\$109,200.00
15	02775	4 1/2-Inch Concrete Sidewalk and ADA Complaint Wheelchair Ramp, Including ADA Truncated Domes (complete in place)	SF	7,920	\$ 8.00	\$63,360.00
ROADWAY TOTAL						\$206,478.00
SIGNS ITEMS						
16	01554	Signs	LS	1	\$ 3,500.00	\$3,500.00
SIGNS TOTAL						\$3,500.00
SWPPP ITEMS						
17	02765	SWPPP	LS	1	\$ 4,000.00	\$4,000.00
SWPPP TOTAL						\$4,000.00
CASH ALLOWANCE						
18		COH Permit	LS	1	\$ 10,000.00	\$10,000.00
CASH ALLOWNCE TOTAL						\$10,000.00
Subtotal						\$280,778.00
Contingency 30%						\$84,234.00
Total						\$365,012.00
Design/Bid/CA (15%)						\$54,752.00
Grand Total						\$419,764.00

**PATTON STREET FROM IRVINGTON BLVD TO I-45
OPINION OF PROPABLE CONSTRUCTION COST (OPCC) - DRAFT**

Item No.	Specs No.	Base Unit Short Title	Unit of Measure	Estimated Quantity	Unit Price	Total in figures
GENERAL ITEMS						
1	1110	Project Sign	EA	2	\$ 1,500.00	\$3,000.00
2	01502	Mobilization	LS	1	\$ 29,000.00	\$29,000.00
3	01555	Traffic Control and Regulation(Including Flaggers)	LS	1	\$ 12,000.00	\$12,000.00
4	01562 & 01110	Tree and Plant Protection	LS	1	\$ 7,500.00	\$7,500.00
5	02085	Water Meter Boxes (Conc or Plastic)	EA	10	\$ 500.00	\$5,000.00
6	02086	Adjust Manhole Frame & Cover to Match Prop Elevations And Grades	EA	8	\$ 1,000.00	\$8,000.00
7	02086	Adjust Existing Valve Box to New Grade	EA	10	\$ 500.00	\$5,000.00
8	02922	Sodding	SY	2,133	\$ 6.00	\$12,800.00
9	01270S	Irrigation System Repair and Adjustment, complete in place	LS	1	\$ 5,000.00	\$5,000.00
GENERAL TOTAL						\$87,300.00
ROADWAY ITEMS						
10	02315	Excavation	CY	474	\$ 25.00	\$11,852.00
11		Coarse Sand	CY	237	\$ 85.00	\$20,149.00
12	01270S	Retaining Wall	LF	80	\$ 200.00	\$16,000.00
13	02221	Remove & Dispose Conc Sidewalk, driveway and Ramp, all thickness	SY	3,492	\$ 13.00	\$45,402.00
14	02754	7 Inch High Early Strength Concrete Driveway, Including Excavation And Base	SF	5,832	\$ 13.00	\$75,816.00
15	02775	4 1/2-Inch Concrete Sidewalk and ADA Complaint Wheelchair Ramp, Including ADA Truncated Domes (complete in place)	SF	30,720	\$ 8.00	\$245,760.00
ROADWAY TOTAL						\$414,979.00
SIGNS ITEMS						
16	01554	Signs	LS	1	\$ 5,000.00	\$5,000.00
SIGNS TOTAL						\$5,000.00
SWPPP ITEMS						
17	02765	SWPPP	LS	1	\$ 7,500.00	\$7,500.00
SWPPP TOTAL						\$7,500.00
CASH ALLOWANCE						
18		COH Permit	LS	1	\$ 10,000.00	\$10,000.00
CASH ALLOWNCE TOTAL						\$10,000.00
Subtotal						\$524,779.00
Contingency 30%						\$157,434.00
Total						\$682,213.00
Design/Bid/CA (15%)						\$102,332.00
Grand Total						\$784,545.00

**LINK ROAD FROM NORTH FREEWAY SERVICE ROAD TO FULTON STREET
OPINION OF PROPABLE CONSTRUCTION COST (OPCC) - DRAFT**

Item No.	Specs No.	Base Unit Short Title	Unit of Measure	Estimated Quantity	Unit Price	Total in figures
ROADWAY ITEMS						
1	01502	Mobilization	LS	1	\$ 5,000.00	\$5,000.00
2	01555	Traffic Control and Regulation(Including Flaggers)	LS	1	\$ 500.00	\$500.00
3	02221	Remove & Dispose Conc Sidewalk, driveway and Ramp, all thickness	SY	53	\$ 13.00	\$687.00
4	02775	4 1/2-Inch Concrete Sidewalk and ADA Complaint Wheelchair Ramp, Including ADA Truncated Domes (complete in place)	SF	725	\$ 8.00	\$5,800.00
5	2771	Concrete Slotted Curb	LF	50	\$ 20.00	\$1,000.00
		ROADWAY TOTAL				\$12,987.00
					Contingency 30%	\$3,897.00
					Total	\$16,884.00
					Design/Bid/CA (15%)	\$2,533.00
					Grand Total	\$19,417.00

**MAIN STREET FROM BOUNDARY STREET TO I-45
OPINION OF PROPABLE CONSTRUCTION COST (OPCC) - DRAFT**

Item No.	Specs No.	Base Unit Short Title	Unit of Measure	Estimated Quantity	Unit Price	Total in figures
GENERAL ITEMS						
1	1110	Project Sign	EA	2	\$ 1,500.00	\$3,000.00
2	01502	Mobilization	LS	1	\$ 28,000.00	\$28,000.00
3	01555	Traffic Control and Regulation(Including Flaggers)	LS	1	\$ 12,000.00	\$12,000.00
4	01562 & 01110	Tree and Plant Protection	LS	1	\$ 7,500.00	\$7,500.00
5	02085	Water Meter Boxes (Conc or Plastic)	EA	15	\$ 500.00	\$7,500.00
6	02086	Adjust Manhole Frame & Cover to Match Prop Elevations And Grades	EA	10	\$ 1,000.00	\$10,000.00
7	02086	Adjust Existing Valve Box to New Grade	EA	15	\$ 500.00	\$7,500.00
8	02922	Sodding	SY	1,457	\$ 6.00	\$8,740.00
9	01270S	Irrigation System Repair and Adjustment, complete in place	LS	1	\$ 15,000.00	\$15,000.00
GENERAL TOTAL						\$99,240.00
ROADWAY ITEMS						
10	02315	Excavation	CY	243	\$ 25.00	\$6,070.00
11		Coarse Sand	CY	162	\$ 85.00	\$13,758.00
12	01270S	Retaining Wall	LF	1,300	\$ 100.00	\$130,000.00
13	02221	Remove & Dispose Conc Sidewalk, driveway and Ramp, all thickness	SY	2,442	\$ 13.00	\$31,749.00
14	02754	7 Inch High Early Strength Concrete Driveway, Including Excavation And Base	SF	4,500	\$ 13.00	\$58,500.00
15	02775	4 1/2-Inch Concrete Sidewalk and ADA Complaint Wheelchair Ramp, Including ADA Truncated Domes (complete in place)	SF	17,480	\$ 8.00	\$139,840.00
16		Hand rail	LF	50	\$ 150.00	\$7,500.00
ROADWAY TOTAL						\$387,417.00
SIGNS ITEMS						
17	01554	Signs	LS	1	\$ 7,500.00	\$7,500.00
SIGNS TOTAL						\$7,500.00
SWPPP ITEMS						
18	02765	SWPPP	LS	1	\$ 7,500.00	\$7,500.00
SWPPP TOTAL						\$7,500.00
CASH ALLOWANCE						
19		COH Permit	LS	1	\$ 10,000.00	\$10,000.00
CASH ALLOWNCE TOTAL						\$10,000.00
Subtotal						\$511,657.00
Contingency 30%						\$153,498.00
Total						\$665,155.00
Design/Bid/CA (15%)						\$99,774.00
Grand Total						\$764,929.00

**IRVINGTON BLVD FROM KING STREET TO BIGELOW STREET
OPINION OF PROPABLE CONSTRUCTION COST (OPCC) - DRAFT**

Item No.	Specs No.	Base Unit Short Title	Unit of Measure	Estimated Quantity	Unit Price	Total in figures
GENERAL ITEMS						
1	1110	Project Sign	EA	2	\$ 1,500.00	\$3,000.00
2	01502	Mobilization	LS	1	\$ 79,000.00	\$79,000.00
3	01555	Traffic Control and Regulation(Including Flaggers)	LS	1	\$ 33,000.00	\$33,000.00
4	01562 & 01110	Tree and Plant Protection	LS	1	\$ 15,000.00	\$15,000.00
5	02085	Water Meter Boxes (Conc or Plastic)	EA	40	\$ 500.00	\$20,000.00
6	02086	Adjust Manhole Frame & Cover to Match Prop Elevations And Grades	EA	20	\$ 1,000.00	\$20,000.00
7	02086	Adjust Existing Valve Box to New Grade	EA	40	\$ 500.00	\$20,000.00
8	02922	Sodding	SY	5,369	\$ 6.00	\$32,212.00
9	01270S	Irrigation System Repair and Adjustment, complete in place	LS	1	\$ 25,000.00	\$25,000.00
GENERAL TOTAL						\$247,212.00
ROADWAY ITEMS						
10	02315	Excavation	CY	1,193	\$ 25.00	\$29,826.00
11		Coarse Sand	CY	597	\$ 85.00	\$50,705.00
12	01270S	Retaining Wall	LF	100	\$ 200.00	\$20,000.00
13	02221	Remove & Dispose Conc Sidewalk, driveway and Ramp, all thickness	SY	9,758	\$ 13.00	\$126,857.00
14	02754	7 Inch High Early Strength Concrete Driveway, Including Excavation And Base	SF	23,400	\$ 13.00	\$304,200.00
15	02775	4 1/2-Inch Concrete Sidewalk and ADA Complaint Wheelchair Ramp, Including ADA Truncated Domes (complete in place)	SF	77,309	\$ 8.00	\$618,471.00
ROADWAY TOTAL						\$1,150,059.00
SIGNS ITEMS						
16	01554	Signs	LS	1	\$ 15,000.00	\$15,000.00
SIGNS TOTAL						\$15,000.00
SWPPP ITEMS						
17	02765	SWPPP	LS	1	\$ 15,000.00	\$15,000.00
SWPPP TOTAL						\$15,000.00
CASH ALLOWANCE						
18		COH Permit	LS	1	\$ 10,000.00	\$10,000.00
CASH ALLOWNCE TOTAL						\$10,000.00
Subtotal						\$1,437,271.00
Contingency 30%						\$431,182.00
Total						\$1,868,453.00
Design/Bid/CA (15%)						\$280,268.00
Grand Total						\$2,148,721.00

**HOGAN STREET FROM GLASER DRIVE TO RASTEX FWY ROAD
OPINION OF PROPABLE CONSTRUCTION COST (OPCC) - DRAFT**

Item No.	Specs No.	Base Unit Short Title	Unit of Measure	Estimated Quantity	Unit Price	Total in figures
GENERAL ITEMS						
1	1110	Project Sign	EA	2	\$ 1,500.00	\$3,000.00
2	01502	Mobilization	LS	1	\$ 54,000.00	\$54,000.00
3	01555	Traffic Control and Regulation(Including Flaggers)	LS	1	\$ 23,000.00	\$23,000.00
4	01562 & 01110	Tree and Plant Protection	LS	1	\$ 20,000.00	\$20,000.00
5	02085	Water Meter Boxes (Conc or Plastic)	EA	50	\$ 500.00	\$25,000.00
6	02086	Adjust Manhole Frame & Cover to Match Prop Elevations And Grades	EA	40	\$ 1,000.00	\$40,000.00
7	02086	Adjust Existing Valve Box to New Grade	EA	50	\$ 500.00	\$25,000.00
8	02922	Sodding	SY	2,963	\$ 6.00	\$17,776.00
9	01270S	Irrigation System Repair and Adjustment, complete in place	LS	1	\$ 25,000.00	\$25,000.00
GENERAL TOTAL						\$232,776.00
ROADWAY ITEMS						
10	02315	Excavation	CY	667	\$ 25.00	\$16,682.00
11		Coarse Sand	CY	329	\$ 85.00	\$27,981.00
12	01270S	Retaining Wall	LF	200	\$ 200.00	\$40,000.00
13	02221	Remove & Dispose Conc Sidewalk, driveway and Ramp, all thickness	SY	5,564	\$ 13.00	\$72,327.00
14	02754	7 Inch High Early Strength Concrete Driveway, Including Excavation And Base	SF	15,000	\$ 13.00	\$195,000.00
15	2771	Concrete Curb and Gutter	LF	500	\$ 20.00	\$10,000.00
16	02775	4 1/2-Inch Concrete Sidewalk and ADA Complaint Wheelchair Ramp, Including ADA Truncated Domes (complete in place)	SF	42,662	\$ 8.00	\$341,300.00
ROADWAY TOTAL						\$703,290.00
SIGNS ITEMS						
17	01554	Signs	LS	1	\$ 15,000.00	\$15,000.00
SIGNS TOTAL						\$15,000.00
SWPPP ITEMS						
18	02765	SWPPP	LS	1	\$ 15,000.00	\$15,000.00
SWPPP TOTAL						\$15,000.00
CASH ALLOWANCE						
19		COH Permit	LS	1	\$ 10,000.00	\$10,000.00
CASH ALLOWNCE TOTAL						\$10,000.00
Subtotal						\$976,066.00
Contingency 30%						\$292,820.00
Total						\$1,268,886.00
Design/Bid/CA (15%)						\$190,333.00
Grand Total						\$1,459,219.00

**COLLINGSWORTH STREET FROM EASTEX FWY ROAD TO IRVINGTON BLVD
OPINION OF PROPABLE CONSTRUCTION COST (OPCC) - DRAFT**

Item No.	Specs No.	Base Unit Short Title	Unit of Measure	Estimated Quantity	Unit Price	Total in figures
GENERAL ITEMS						
1	1110	Project Sign	EA	2	\$ 1,500.00	\$3,000.00
2	01502	Mobilization	LS	1	\$ 28,000.00	\$28,000.00
3	01555	Traffic Control and Regulation(Including Flaggers)	LS	1	\$ 12,000.00	\$12,000.00
4	01562 & 01110	Tree and Plant Protection	LS	1	\$ 10,000.00	\$10,000.00
5	02085	Water Meter Boxes (Conc or Plastic)	EA	10	\$ 500.00	\$5,000.00
6	02086	Adjust Manhole Frame & Cover to Match Prop Elevations And Grades	EA	10	\$ 1,000.00	\$10,000.00
7	02086	Adjust Existing Valve Box to New Grade	EA	10	\$ 500.00	\$5,000.00
8	02922	Sodding	SY	1,852	\$ 6.00	\$11,110.00
9	01270S	Irrigation System Repair and Adjustment, complete in place	LS	1	\$ 7,500.00	\$7,500.00
GENERAL TOTAL						\$91,610.00
ROADWAY ITEMS						
10	02315	Excavation	CY	467	\$ 25.00	\$11,676.00
11		Coarse Sand	CY	206	\$ 85.00	\$17,488.00
12	01270S	Retaining Wall	LF	100	\$ 200.00	\$20,000.00
13	02221	Remove & Dispose Conc Sidewalk, driveway and Ramp, all thickness	SY	2,140	\$ 13.00	\$27,820.00
14	02754	7 Inch High Early Strength Concrete Driveway, Including Excavation And Base	SF	7,200	\$ 13.00	\$93,600.00
15	02775	4 1/2-Inch Concrete Sidewalk and ADA Complaint Wheelchair Ramp, Including ADA Truncated Domes (complete in place)	SF	26,664	\$ 8.00	\$213,312.00
ROADWAY TOTAL						\$383,896.00
SIGNS ITEMS						
16	01554	Signs	LS	1	\$ 7,500.00	\$7,500.00
SIGNS TOTAL						\$7,500.00
SWPPP ITEMS						
17	02765	SWPPP	LS	1	\$ 7,500.00	\$7,500.00
SWPPP TOTAL						\$7,500.00
CASH ALLOWANCE						
18		COH Permit	LS	1	\$ 10,000.00	\$10,000.00
CASH ALLOWNCE TOTAL						\$10,000.00
Subtotal						\$500,506.00
Contingency 30%						\$150,152.00
Total						\$650,658.00
Design/Bid/CA (15%)						\$97,599.00
Grand Total						\$748,257.00