Ustick Road Concept Study
Duane Drive to Five Mile
Project No. 507004

FINAL CONCEPT REPORT

Prepared for

ACHD

March 2010

Prepared by:

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Introduction
The Ustick Road project is located between Duane Drive and Five Mile Road in the City of Boise and the City of Meridian, Ada County. ACHD has requested a concept design study for this section of Ustick Road to accommodate future traffic demand, improve connectivity, increase safety by evaluating bike, pedestrian and transportation options and recommend design improvements for this east-west arterial route. A strong public involvement process was included to involve the stakeholders and community in developing the recommended improvements. At the time the Concept Report was adopted, Ustick Road was scheduled in 2014 for construction as part of the Five Year Work Plan.

Project Description
This 1.75 mile long project is located along Ustick Road between Duane Drive and ends just west of Five Mile Road, see Figure 1, excluding the Cloverdale-Ustick intersection. The existing 2-lane minor arterial carries approximately 13,000 – 17,500 vehicles per day. The road has rural street cross sections serving residential areas and one major signalized intersection at Cloverdale Road. The majority of the project is located within the Boise City limits. The boundary with City of Meridian is near Duane Drive.

The existing area is a mixed use community of residential neighborhoods, an Elementary School located near the intersection of Cloverdale and Ustick Road and the Old Town Site of Ustick. Immediately east and west of the project corridor is a five lane roadway section (two lanes each direction with a center turn lane).
Figure 1

Ustick Road, Eagle Road to Five Mile Road
**Project Purpose and Scope**

The purpose of the Ustick Road Concept Study is to identify options to improve Ustick Road, recommend design improvements, guide the design process and identify early in the design process any potential coordination and design issues.

The concept design considered these key elements:

1. Stakeholder, Boise City Council, public input and the Steering Committee recommendations.
2. Integration with historical planning activities
3. Work completed in the Concept Design & Traffic Assessment (Transpo, 2008)
4. ACHD’s Livable Street Design Process to help define any land use and transportation integration issues for the project

**Historical Planning**

Both COMPASS *Regional Long-Range Transportation Plan 2030* and ACHD’s *Capital Improvement Plan* recommend that this section of Ustick Road be widened to a five-lane cross-section, with additional lane capacity to meet future demand.

*Communities in Motion Long-Range Transportation Plan* identifies Ustick Road for future bus operations. Valley Regional Transit capital improvement plan has identified two separate future transit development scenarios based on variable growth assumptions. Future transit funding and capital facility expansion plans are uncertain in the region. Consideration of pedestrian features and facilities that will better serve bus transit within the Ustick Road corridor right of way is important.

The Ustick Road Concept Design provides an opportunity to enhance pedestrian and bicycle systems in the area according to needs identified in the ACHD *Pedestrian-Bicycle Transition Plan* (March 2005). Facilities along the project route would be upgraded to meet ADA requirements.

The *Roadways to Bikeway Bicycle Master Plan*, May 2009, outlines the bicycle facility framework throughout Ada County. Providing on-street bike lanes along the entire project, both sides, will be consistent with the Draft Bicycle Master Plan.
Public Involvement Summary

Steering Committee

The Ustick Road Concept Design Steering Committee was composed of ACHD Commissioners, ACHD key staff, local city jurisdictions and design team members. Two steering committee meetings were held. The purpose of the first meeting on December 13, 2007 was to provide an overview of the concept design, discuss and identify issues, concerns and needed improvements. The second meeting held on April 17, 2008, reviewed the project activities, presented the recommended improvements and gathered input and recommendations from the steering committee.

Open Houses

Ada County Highway District (ACHD) hosted three public open houses for the Ustick Road Concept Design. The first open house was held on October 3, 2007 at Ustick Elementary. The attendees (94) were provided an aerial map of the project area and were asked three questions, 1) What issues or concerns do you have about this segment of Ustick Road 2) What improvements would you like to see along this section and where specifically would you like see the improvements and 3) What area of Ustick Road are most important for pedestrians. The most common response for the 35 comments received suggested adding pedestrian facilities.

The second open house was held on May 8, 2008 at Ustick Elementary. This open house provided the public the opportunity to 1) learn what ACHD heard at the first open house and how public input was used and 2) provide input on the Draft Ustick Road Concept Design. One hundred and seven attendees signed in and 55 individuals provided written comments.

The third open house was held on November 6, 2008. The primary purpose of this open house was to focus on the proposed Shamrock Street connections to the north and south, and signalization of Shamrock or Bryson intersection with Ustick Road. The secondary goal of this open house was to update the community on the concept design and gather general comments. One hundred and thirty-three (133) attendees signed in and 115 individuals completed comment forms. Two petitions were submitted.

See Appendix C for Summary of Open House Meetings
Traffic Assessment
The draft Conceptual Design/Traffic Assessment Report was completed in July 2008, and finalized in December 2008. The final report is attached in Appendix A. Below is a summary of key areas covered in the Report that helped shape the Concept Design.

Level of Service/Traffic Conditions
Currently, Ustick Road carries between 13,000 to 17,500 daily vehicles and for the design year of 2030, this average daily traffic is expected to grow to 22,900 to 27,500. This growth is approximately a 25% increase in traffic volumes. The existing level of service (LOS) is F west of Five Mile and E west of Cloverdale. The 2030 LOS is estimated to be D in both segments with five lanes.

Accident Data
Crash history for the project corridor was reviewed for the past five years (2002-2006). The data showed that the most common crash type was a rear-end and more common from the Cloverdale to Five Mile segment as compared to the Eagle Road to Cloverdale Road Segment. The higher frequency of crashes east of Cloverdale suggest the need for a center-turn lane or a median to limit turns from closely spaced access points. The concept design does include center turn lanes and medians at conflict points.

Access Management Study
The access management study compared the existing access points on Ustick to the current ACHD Development Policy Manual guidance for access management to public streets. Each driveway and intersection along the project corridor was characterized to determine spacing from intersection-to-intersection, intersection-to-driveway, and driveway-to-driveway spacing issues. The study found that the access points east of Cloverdale Road had a higher number of intersection-to-driveway and driveway-to-driveway spacing concerns. The Concept Design finding directly correlates to the higher frequency of crashes in this same portion of Ustick Road and illustrates the need for the Concept Design to address the access spacing.

Design Criteria

Livable Street Design
ACHD has adopted a Livable Street Design Guide that will provide a set of tools for improving area street systems. The vision is that ACHD and local cities will partner in designing “livable street” that promote local neighborhood vitality, while still addressing
area transportation needs. Ustick Road Corridor concept design process presents one of the first planning projects that incorporate the Livable Street Design concepts.

The Livable Street Design Guide provides recommended street typologies as a starting point, initial street cross-section concepts are presented, which document the initial consensus from ACHD and city staff.

**Roadway Geometrics and Typical Sections**

Using the Livable Street Design concepts as well as information from various community plans, roadway designs, and ACHD standards and guidelines, draft conceptual typical sections were presented to stakeholders and at the public open house. These conceptual sections are located in the Conceptual Design & Traffic Assessment Report in Appendix A, Figures 5-8 of the report. In general, the sections show variation in planting buffers and sidewalk widths to fit different right-of-way widths and landscaping. A 4-foot buffer can fit street utilities and low lying vegetation but not street trees. The standard 5-foot sidewalk is recommended except for areas of higher pedestrian volumes. In these high volume areas, a 6-7 foot sidewalk is recommended if justified by pedestrian counts prior to design.

An important point to note is that the typical sections show a landscape planter, however, during the concept design, the Cities of Boise and Meridian have not committed to providing plantings or maintenance of these areas. Two right of way widths are shown on the typical sections, one width includes the planters and wider sidewalks and the second width shows no planters and minimum 5-foot sidewalks. The existing right of way width varies along Ustick Road. For each Segment, the existing right of way width is as follows:

- Segment One: 73-feet to 96-feet
- Segment Two: 80.5-feet
- Segment Three: 90-feet to 79-feet
- Segment Four: 72-feet to 49.5-feet
- Segment Five: 64-feet to 93-feet

The amount of right of way acquisition will be dependent upon whether or not a landscape buffer is included in the project.

The design speed will be 35 mph with a planned posted speed limit of 35 mph. The roadway section will be an urban design.
Using the ideas from the Conceptual Design/Traffic Assessment Study, feedback from the public involvement process and the steering committee, the final concept typical sections were develop to best fit each segment. The final Concept Typical Sections, Figures 2 through Figure 6, show the five different sections proposed for each Segment of Ustick Road.

**Pedestrian, Bike, and Transit Plan**

The concept design provides an opportunity to enhance pedestrian and bicycle systems in the area, according to the needs identified in the ACHD Pedestrian-bicycle Transition Plan (March 2005). The Conceptual Design and Traffic Summary Report in Appendix A provides a summary of pedestrian facilities in the project area and suggests locations of selected nearby off-corridor pedestrian improvements that would overall enhance the pedestrian mobility to the area.

The concept design is consistent with the Roadway to Bikeways Bicycle Master Plan. On-street bike lanes will be provided along the entire project length, both sides of the roadway.

Currently, there are no bus routes along Ustick Road within the project area. Valley Regional Transit has future plans for new bus transit along Ustick Road. As these plan materialize, there is generally sufficient space within the proposed typical sections to accommodate bus stops or shelters in the buffer areas between the curb and sidewalk if the right of width includes the planting buffers.
SEGMENT ONE
DUANE DRIVE TO CAMPTON WAY TYPICAL SECTION

Northside
ROW

48’
34.5’
1.5’
34.5’
47’

Southside
ROW

Segment One
DUANE DRIVE TO CAMPTON WAY TYPICAL SECTION

95’ Right-of-way (ROW)

Section Line

ROW

7’
8’
6.5’
11’
11’
11’
11’
6.5’

Sidewalk
Planter
Bike Lane
Thru Lane
Thru Lane
Two Way Left Turn Lane
Thru Lane
Thru Lane
Bike Lane

4’
7’

SIDEWALK SECTION IF CITIES DO NOT SPONSOR LANDSCAPING

87’ ROW

ROW

2’
5’
2’

Sidewalk
Stamped Concrete

2’
5’
2’

Sidewalk
Stamped Concrete

Figure 2
Ustick Road, Eagle Road to Five Mile Road
SEGMENT TWO
CAMPTON WAY TO CLOVERDALE ROAD TYPICAL SECTION

North Side

85’ ROW

ROW

37.5’

33.5’

47.5’

44.5’

Sidewalk

Bicycle Lane

Travel Lane

Travel Lane

Travel Lane

Travel Lane

Bicycle Lane

Sidewalk

Two Way Left Turn Lane Between Raised Medians

Raised Median Length Varies See Plan

Figure 3 Preferred Section
SEGMENT TWO
CAMPTON WAY TO CLOVERDALE ROAD TYPICAL SECTION

Northside

90' Right-of-way (ROW)

Southside

ROW

42.5' 33.5' 47.5'

ROW

6' 6'

Sidewalk Planter

5.5' 11' 11'

Bike Lane Thru Lane Thru Lane

ROW

33.5'

Section Line

8'

Raised Median Length Varies See Plan

85' ROW

Ustick Road, Eagle Road to Five Mile Road

Figure 3a

SIDEWALK SECTION IF CITIES DO NOT SPONSOR LANDSCAPING

NOT APPROVED
SEGMENT THREE
CLOVERDALE ROAD TO BRYSON WAY TYPICAL SECTION

Northside 92' Right-of-way (ROW) Southside

ROW 47.5' 44.5'

Section Line

6' 8' 5.5' 11' 11' 11' 11' 5.5' 4' 7'
Sidewalk Planter Bike Lane Thru Lane Thru Lane Thru Lane Thru Lane Bike Lane Planter

-.5' 2% 8' Raised Length Median Varies Plan

Two Way Left Turn Lane or Raised Medians

1% 2% 1%

* See Commission Motion for Alternative Bike Lane Width

SIDEWALK SECTION IF CITIES DO NOT SPONSOR LANDSCAPING

ROW 85' ROW

2' 5' 2'
Sidewalk Stamped Concrete

Ustick Road, Eagle Road to Five Mile Road

Figure 4
SEGMENT FOUR
BRYSAN WAY TO FRONTIER WAY TYPICAL SECTION

Northside

ROW

48.5'

33.5'

42.5'

ROW

Southside

ROW

6'

8'

5.5'

11'

11'

11'

5.5'

11'

5.5'

4'

6'

Sidewalk

Planter

Bike Lane

Thru Lane

Thru Lane

Two Way Left Turn Lane or Raised Medians

Thru Lane

Thru Lane

Bike Lane

Sidewalk

Planter

Sidewalk

Stampede Concrete

1'

2'

2'

2'

1'

2'

1'

* See Commission Motion for Alternative Bike Lane Width

SIDEWALK SECTION IF CITIES DO NOT SPONSOR LANDSCAPING

ROW

85' ROW

ROW

SIDEWALK

Stampede Concrete

Figure 5

Ustick Road, Eagle Road to Five Mile Road
SEGMENT FIVE
FRONTIER WAY TO FIVE MILE ROAD TYPICAL SECTION

Northside

ROW

7’ Sidewalk

8’ Planter

46.5’ 33.5’ 46.5’

5.5’ Bike Lane

11’ Thru Lane

11’ Thru Lane

11’ Two Way

Left Turn

Lane

11’ Thru Lane

11’ Thru Lane

5.5’ Bike Lane

7’ Sidewalk

* See Commission Motion for
Altimate Bike Lane Width

Southside

ROW

1% 2% 2%

Figure 6

SIDEWALK SECTION IF CITIES DO NOT SPONSOR LANDSCAPING

ROW

2’ 5’ 2’

Sidewalk

Stamped Concrete

Ustick Road, Eagle Road to Five Mile Road
Concept Segment Alternatives

The Boise City Council on February 16, 2010 made their recommendations to ACHd and on February 24, 2010 the ACHD Commissioners approved the Concept Report with two clarifications. Refer to these documents in Appendix E. The corridor was separated into five segments. All segments will have a 5-lane section, which includes four 11-ft lanes, an 11-foot two-way-left-turn-lane or raised center median and 5.5-foot or 6.5-foot bike lanes on both sides of the roadway (67-feet or 69-feet back of curb to back of curb). The planter and sidewalk widths vary by segment.

Segment 1- Duane Way to N. Campton Way

Segment 1 has new residential development located on both sides of the roadway and access points to Ustick are minimal. The existing roadway is two-lanes with a continuous two way left turn lane with roadside swales and some curb/gutter at Duane Way and Grenadier Way. The proposed right of way width of 95-feet will accommodate a 5-lane section, planters and sidewalks located on both sides of the roadway. The new sidewalk will tie into the existing sidewalk at approach streets, if sidewalk exists. The new 7-foot sidewalk and 6.5-foot bike lane is proposed for both sides of Ustick Road. A planter will separate the sidewalk and bike lanes. In addition, a traffic signal is proposed at the intersection of Ustick and Grenadier Way. The plan view for Segment 1 is shown on Figure 7.

Segment 2- N. Campton Way to N. Cloverdale Road

Ustick Elementary is located in Segment 2 and presents a design challenge to efficiently move motorized traffic on an arterial street and provide for school traffic. ACHD has identified a need to help improve overall school site circulation and accessibility. The on-site school traffic circulation directly impacts the arterial traffic on Ustick Road. The Conceptual Design and Traffic Assessment Report (Appendix A) includes a School Site Circulation & Accessibility Plan on page 30. Several of the recommendations have been included in the Concept Design, including adding a crosswalk, a raised center median and closing W. Gumwood Ct. Other recommendations on the school property are outside the scope of this project.
The existing roadway is two-lanes with a continuous two-way-left-turn lane and a bike lane on the north side beginning at Campton Way. Some existing curb/gutter and roadside swales are used for drainage. The preferred typical section of 85-foot right-of-way width will accommodate a 5-lane section, planters and sidewalks. The sidewalk will be 7-feet on the north side and 7-feet on the south with a 4-foot planter. Both sides will have 5.5-foot bike lanes. A 90-foot typical section is included for reference. Potential issue: Residents have expressed concern for removing mature trees along the north side of Ustick to accommodate the proposed sidewalk width. The plan view for Segment 2 is shown on Figure 8.

*See ACHD Commission motion of 2/24/10 for alternative outside curb in letter dated 3/10/10 in Appendix E.*
Segment Two
Campton to Cloverdale
90' Right-of-way

Key
- Existing Property Line
- Proposed Right-of-Way
- Proposed Lanes
- Proposed Sidewalk
- Proposed Landscape
- Proposed Median

Segment Two Issues
• School Access

Ustick Elementary School
Idaho Power Transmission Line

Idaho Power has a main overhead transmission line along the south side of Ustick Road east of Cloverdale through Segments 3, 4 and 5. As part of the concept study, adjusting the alignment to miss the transmission lines was considered. However, the impacts were greater to the established residences than a utility relocation.

These poles will require relocation to accommodate the recommended cross-section. The power poles are proposed to be located in the 4-foot planting buffer on the south side.

Segment 3-N. Cloverdale Road to N. Bryson Way

Segment 3 is the longest segment and has a mixed use of residential, businesses and ongoing development. There are numerous access points, including seven street intersections and driveways that create issues with turning movements. Tattenham Avenue and Tylerson Ave. are examples of offset intersections in this segment. Tattenham Avenue will be right-in/right-out controlled with a raised median. Local traffic can also outlet to Ustick using Gretchen Way. A cross walk will be added at Tattenham.

The irrigation canal crosses Ustick Road in a box culvert just west of Bryson Way.

The existing roadway is two-lanes with a two-way-left-turn lane that ends at Tattenham Avenue. West of Tattenham, the roadway is two-lanes. Some existing curb/gutter and roadside swales are used for drainage.

The proposed typical section is 92-foot right-of-way width will accommodate a 5-lane section, planters and sidewalks located on both sides of the roadway. The sidewalk will be 6-feet on the north side with an 8-foot planter and a 7-foot sidewalk on the south with a 4-foot planter. Both sides will have 5.5-foot bike lanes. The plan view for Segment 3 is shown on Figure 9.

*See ACHD Commission motion of 2/24/10 for alternative outside curb in letter dated 3/10/10 in Appendix E.

A raised center median will be added between North Gretchen Way and Tylerson Avenue to control the left turning movements at the church.

Potential Issue: With the right-of-way needed a drive way for two properties west of Tattenham Ave. will become unusable due to the proximity to Ustick Road.

Future analysis should be included as part of the design, such as property access.
**Segment 4 – N. Bryson Way to N. Frontier Way**

The Ustick Old Town Site is located in Segment 4. This area was originally platted as an eventual town site but never fully matured. Several buildings from the original town site still exist. The local community has expressed their desire to preserve and revitalize this community center.

The existing roadway is two lanes without a center turn lane and has roadside swales for drainage. The irrigation canal parallels the south side of Ustick Road from Wildwood to Frontier Way and an irrigation lateral parallels the north side of the roadway. The lateral is within proposed right of way width and will require relocation to the north. A retaining wall may be required along the north side of the canal to support the sidewalk.

The proposed typical section is 91-foot right-of-way width will accommodate a 5-lane section, planters and sidewalks located on both sides of the roadway. The sidewalk will be 6-feet on the north side with an 8-foot planter and 6-feet on the south with a 4-foot planter. Both sides will have 5.5-foot bike lanes. The plan view for Segment 4 is shown on Figure 10. Medians will be added between Wildwood and Frontier to limit left turns and provide a “town site” feel to the area.

*See ACHD Commission motion of 2/24/10 for alternative outside curb in letter dated 3/10/10 in Appendix E.*

Stakeholder input led to additional analysis of the possibility of moving the proposed signal at Shamrock Street to Bryson Way. Currently, Shamrock Street is not a connected neighborhood street due to gaps located just north and south of Ustick Road. To connect Shamrock, some property acquisition is necessary. Bryson Avenue, however, is not ideal because the neighborhood street connection it provides is south of the Ustick town site and out of direction on Montana Street. Future warrants for the signal are dependent on serving the redeveloped town site.

The Shamrock Street connections and intersection signalization were the main topics at the November 2008 Open House. The Open House Summary is located in Appendix C. Figure 11 highlights the preferred option of connecting Shamrock to the neighborhood street network and placing the proposed signal at Shamrock Street. Figure 12 shows the proposed signal being placed at Bryson Road. Refer to the Conceptual Design/Traffic Assessment Report Appendix B for a detailed analysis of this issue.
**Segment 5- N. Frontier Way to Project End**

This Segment will tie into the existing 5-lane section near Five Mile Road. The existing section is two lanes with a center turn lane that begins just east of Frontier Way. Curb and gutter exists on both sides and Ustick road crosses a canal near Albertsons. The proposed typical section is 93-foot right-of-way width with planters and sidewalks located on both sides of the roadway. The sidewalk will be 7-feet on the north side with an 8-foot planter and 7-feet on the south side with a 4-foot planter. The plan view for Segment 4 is shown on Figure 13.

*See ACHD Commission motion of 2/24/10 for alternative outside curb in letter dated 3/10/10 in Appendix E.*

A pedestrian signalized crossing is proposed at the west side of the Settlers Canal. This adds pedestrian connections to the north and south side of Ustick Rd.
Segment Three
Cloverdale to Bryson
92’ Right-of-way

Segment Three Issues
• Turning On/Off the Roadway

Key
- Existing Property Line
- Proposed Right-of-Way
- Proposed Lanes
- Proposed Sidewalk
- Proposed Landscape
- Proposed Median
Segment Four Issues

- Irrigation Canal
- Transmission Power Lines
- Ustick Town Site
SHAMROCK INTERSECTION WITH SIGNAL
STAFF PREFERRED OPTION

Figure 11
Ustick Road, Eagle Road to Five Mile Road
Bryson Intersection with Signal

Figure 12
Ustick Road, Eagle Road to Five Mile Road
Segment Five
Frontier to End of Project
93' Right-of-way

Segment Five Issues
• Bike Lanes End at Albertson's
Other Design Elements

Drainage

A storm drain system does not currently exist for most of the corridor. Drainage design will be included during preliminary design. An existing storm drain is located at Five Mile as well as Duane Drive. Future drainage patterns, volumes and outlet locations were not included in the scope of this report.

Utilities

Utility relocation will be necessary in all segments. A utility design field locate has not been completed but visual inspection indicates that Idaho Power, cable, phone, water, sewer, irrigation and fiber optics exist along Ustick Road. Idaho Power has large transmission lines located on the south side of Ustick Road, east of Cloverdale Road through the project that will be moved. These transmission lines require a long lead time, anywhere from 12-18 months to relocate.

Cost Estimate

A concept construction cost estimate for the entire project was prepared early in the concept design process. The estimate was based upon very limited actual data. The conceptual cost estimate is shown on the following two pages.
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<td>S.F.</td>
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<td>$4,400</td>
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<td>TRAFFIC CONTROL BARRICADE</td>
<td>16</td>
<td>EA.</td>
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<td>$3,675</td>
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<td>1103.4.1.E.1</td>
<td>ADVANCED WARNING ARROW PANEL</td>
<td>550</td>
<td>HR.</td>
<td>$1.20</td>
<td>$420</td>
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<td>TRAFFIC CONTROL MAINTENANCE</td>
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<td>1103.4.1.I.1</td>
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<td>HR.</td>
<td>$21.00</td>
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<td>1131.03.01</td>
<td>TRAFFIC SIGNAL INTERCONNECT COMPLETE</td>
<td>2</td>
<td>JOB</td>
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<td>$300,000</td>
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<td>1134.03.08</td>
<td>STRIPING DETAIL #3 (PAINT)</td>
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<td>PREPARE GENERAL STORMWATER PERMIT</td>
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<td>SP-07030</td>
<td>DETECTABLE WARNING</td>
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<td>SP-08120A</td>
<td>ASPHALT REPAIR</td>
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<td>S.Y.</td>
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<td>EA.</td>
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<td>SP-11333</td>
<td>REPLACE DETECTOR LOOP</td>
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<td>LUMP SUM</td>
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<td>SP-20003</td>
<td>TEMPORARY CONSTRUCTION FENCING</td>
<td>600</td>
<td>L.F.</td>
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<td>SP-20009</td>
<td>REMOVE AND RESET FENCE</td>
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<td>SP-20012</td>
<td>SPECIAL BARRIER FENCE</td>
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<td>SP-25080</td>
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<td>UNIT</td>
<td>UNIT PRICE</td>
<td>ITEM TOTAL</td>
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<td>SP-25099</td>
<td>INSTALL TEMPORARY COFFERDAM</td>
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<td>LUMP SUM</td>
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<td>SP-25110</td>
<td>INLET AND BASIN PROTECTION</td>
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<td>SILT FENCE</td>
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<td>SP-25115</td>
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<td>SP-29100</td>
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<td>1 JOB</td>
<td>LUMP SUM</td>
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<td>CULVERT (WILLOWD)</td>
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<td>RELOCATE POWER DIST. POLES</td>
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**PROJECT TOTAL:** $7,614,857
APPENDIX A

CONCEPTUAL DESIGN/TRAFFIC ASSESSMENT REPORT