Mt. Rushmore Road Reconstruction

Public Meeting / Open House
August 16 2012

Phase 1:

NH0016(78)67

PCN 01TH

Pennington County

US 16 from Tower Road to Saint Andrew Street

Phase 2:

NH0016(79)67

PCN 027C

Pennington County

US 16 from Saint Andrew Street to Kansas City Street

Grading, Storm Sewer, Curb and Gutter, Sidewalk, Roadway Lighting, Traffic Signals, PCCP Surfacing, Water, Sanitary Sewer and Landscaping

South Dakota DOT Connecting South Dakota and the Nation

Ferber Engineering Company, Inc.

Contacts

SDDOT
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Chief Road Design Engineer
773-3433

City of Rapid City
Todd Peckosh
Project Manager
394-4154

Ferber Engineering Company, Inc.
John Van Beek
Project Manager
343-3311

CETEC Engineering Services, Inc.
Rich Marsh
Project Manager
341-7800

Project Location

Background Information

- Originally constructed in 1958
- Pavement repairs made in 1998
- Pavement is in poor condition throughout

Background Information (cont.)

	Current Traffic (2011)	Projected Traffic (2031)	Truck Traffic
Phase 1	22,309 vehicles/day	25,767 vehicles/day	6.1%
Phase 2	23,450 Vehicles/day	27,084 vehicles/day	1.3%

Accident History (2009 – 2011)

	Fatal Accidents	Injury Accidents	Property Damage	Accident Rate
Phase 1	**0**	**29**	**67**	**2.91**
Phase 2	**0**	**27**	**45**	**4.90**

Statewide Accident Rate (Urban Principal Arterial) 2.23

Project Improvements

- Corridor study was completed by the Rapid City MPO with significant public involvement
- Process included a steering committee, stakeholder interviews, public input workshops and an open house
- Study resulted in a vision for the future of the corridor
- This project aims to balance the goals identified in the study while serving the needs of the motorist

Project Improvements (cont.)

- Replace deteriorating concrete pavement
- Increase lane widths from 10’ to 11’ – establish consistent lane widths
- Incorporate features allowing for landscaping and beautification
- Improve storm drainage
- New roadway lighting and traffic signals
- City utilities – water and sanitary sewer
- Access management to improve safety

Project Improvements (cont.)

<u>Design for ADA compliance</u>

- New curb ramps
- Installation of push buttons
- Pavement markings
- Countdown timers
- Audible signals
- Consistent grading and slopes

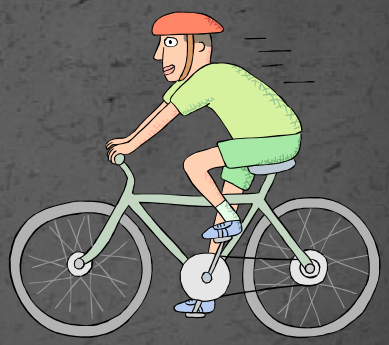
Proposed Design
Bicycles and Pedestrians

Bicycles

- No bike lanes will be incorporated; accommodated by parallel street network
- City of Rapid City - bike plan with locations laid out near Mt. Rushmore Road, but not on it

Pedestrians

- 5’ of sidewalk will be provided on both sides
- 2.33’ colored concrete boulevard - Phase 1
- 7’ grassed/landscaped boulevard – Phase 2



Proposed Design

Bicycles and Pedestrians (cont.)

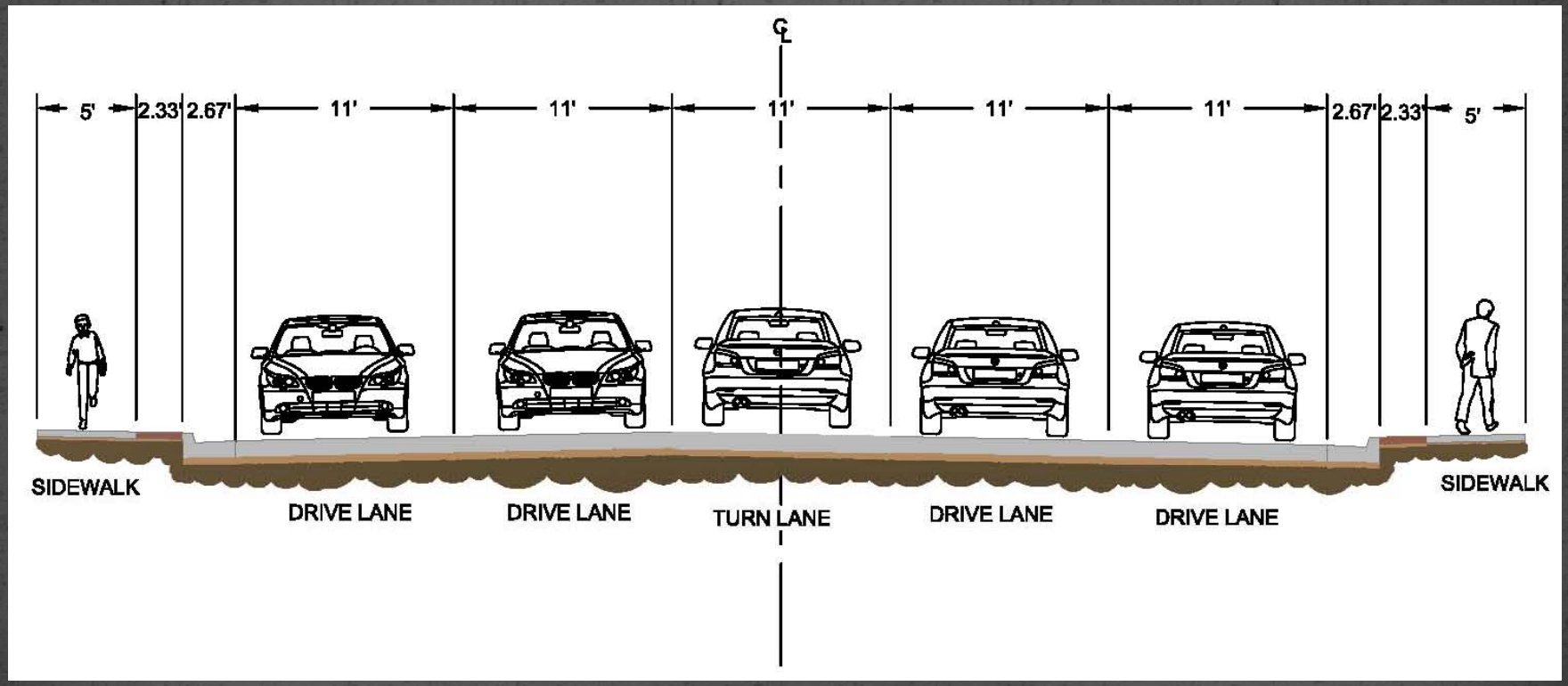
Proposed Design
Typical Section

General Considerations

- Raised medians will be installed where queue lengths allow
- Mid-block crossings will be incorporated
- Transit pullouts will be incorporated as needed
- Remove all on-street parking

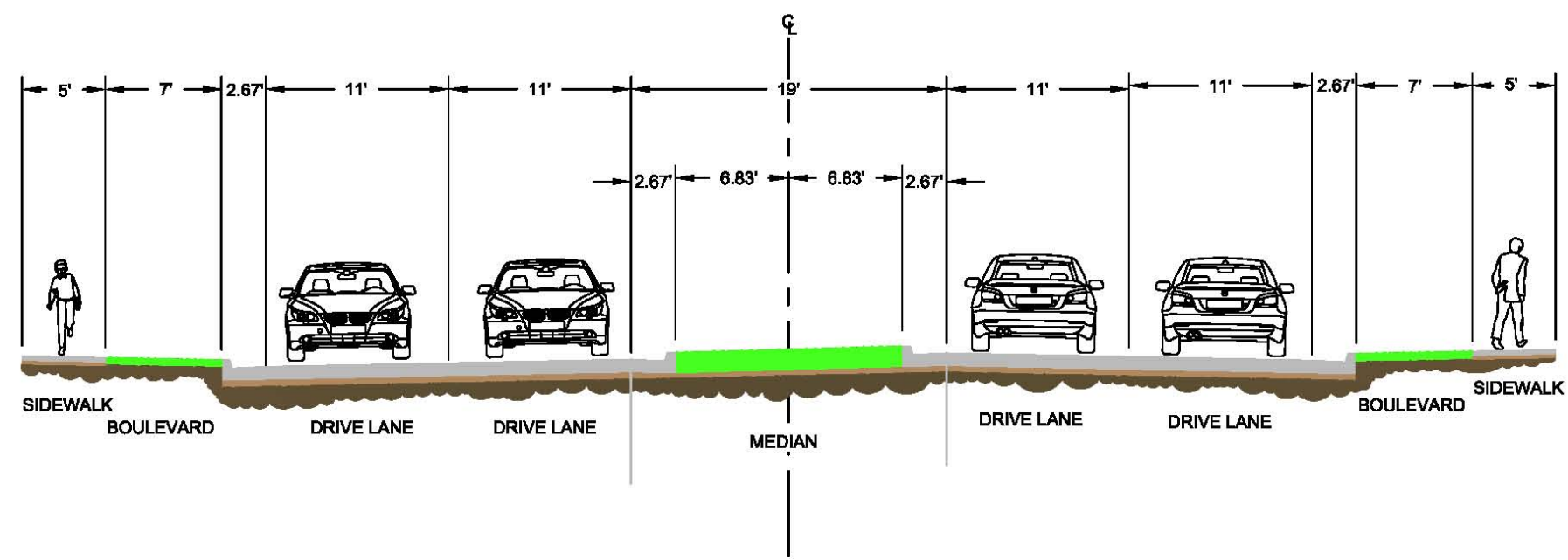
Proposed Design

Typical Section – Phase 1



Proposed Design

Typical Section – Phase 2



Proposed Design
Right of Way

Existing Right of Way (ROW)

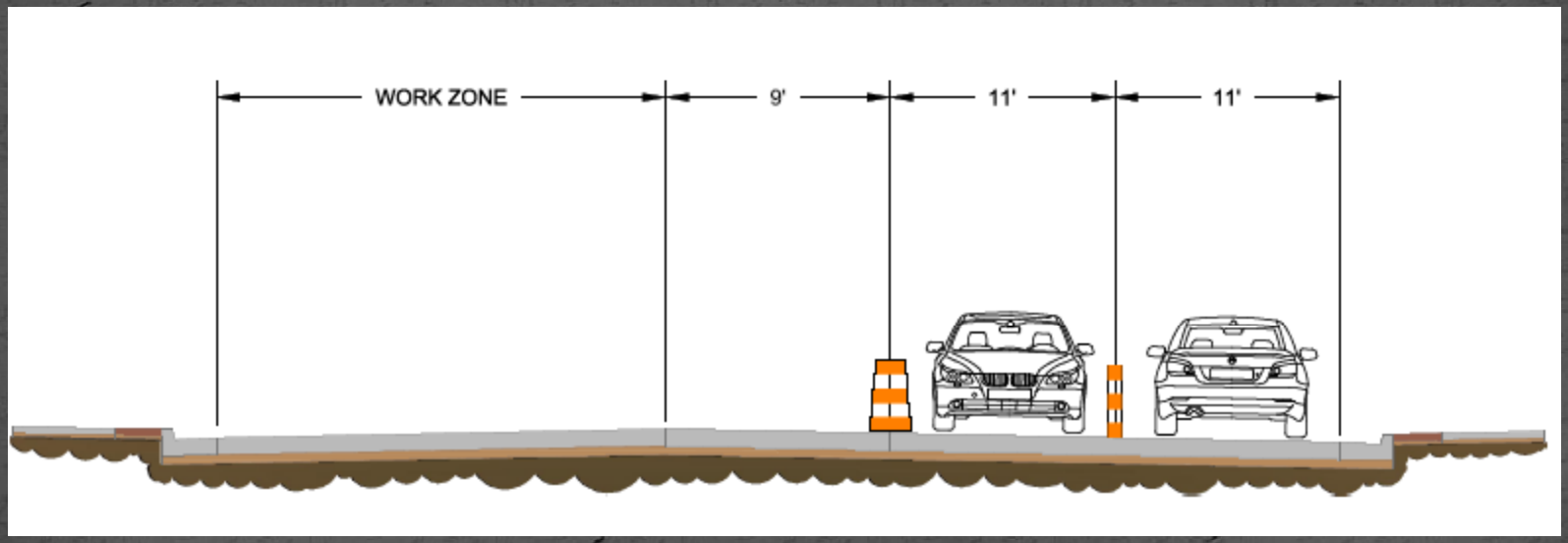
- Phase 1 – 66’ currently, need 75’; acquisition will be necessary
- Phase 2 – 97’-100’ currently; minimal acquisition necessary

General Considerations

- Temporary construction easements will be needed
- Some additional ROW may be needed for curb ramps and/or transit pullouts

Construction

- Phased
- Access maintained
- Future meetings for traffic sequencing



Environmental, Social & Economic Impacts

4(f) Property

- There are historic houses and parks within the project limits; extent of impact to be determined

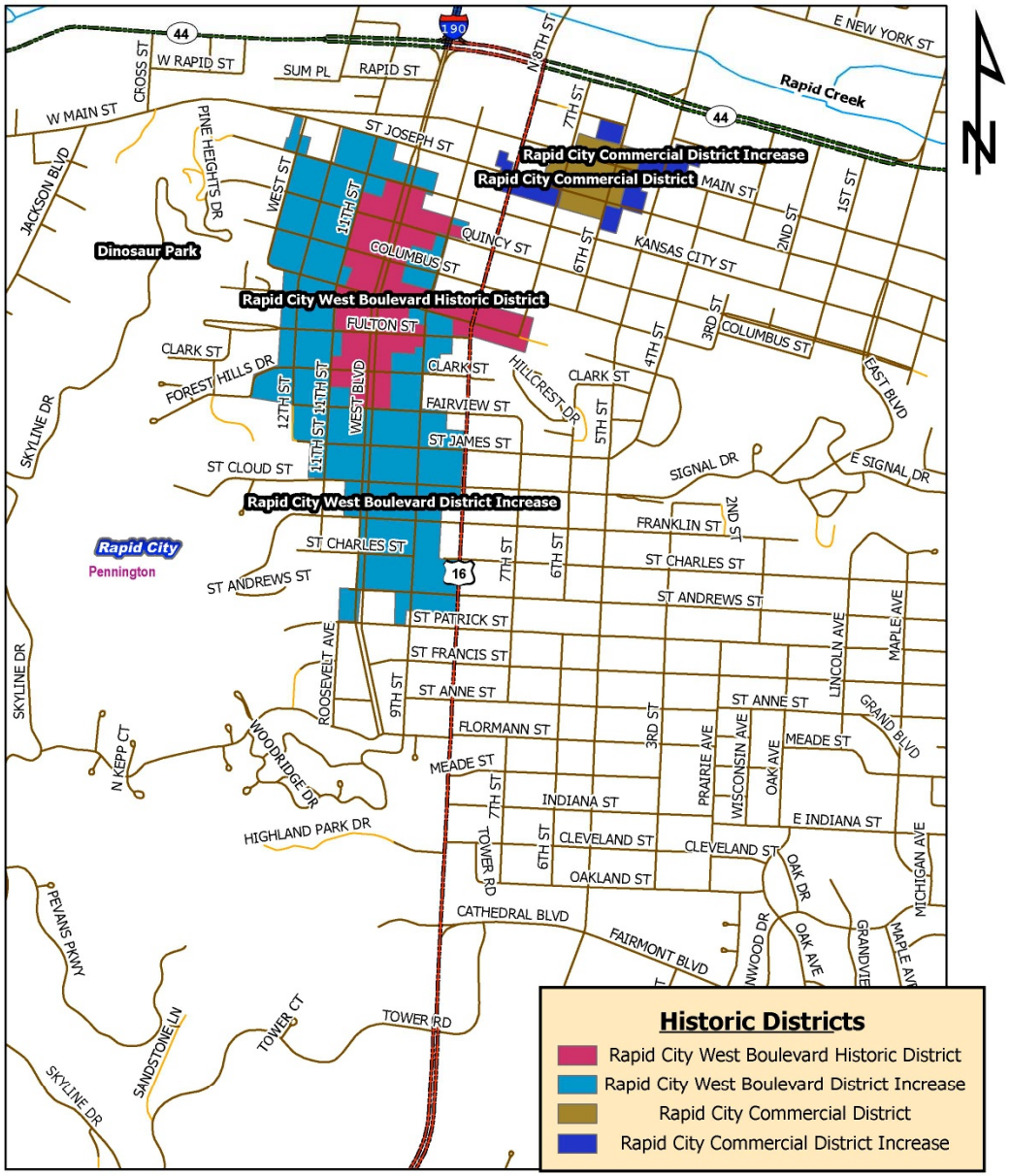
Contaminated Materials

- There is the possibility of contaminated soils due to underground fuel storage tanks

Stormwater Pollution Prevention Plan (SWPPP)

- SDDOT and CORC will coordinate stormwater MS4 permits

P 0016(78)67 ~ PCN 01TH & P 0016(79)67 ~ PCN 027C
Historic Districts



City of Rapid City Improvements

- WATER MAIN REPLACMENT
- SANITARY SEWER REPLACEMENT
- STREETSCAPE ENHANCEMENTS

WATER MAINS

- EXISTING 6”-8” MAINS (1969-1988)
- REPLACE WITH PROPOSED 12” WATER MAIN
- NONCONFORMING SERVICES
- $ FROM ENTERPRISE FUNDS
- INCREASE FIRE FLOW
- MAINTAIN SERVICE

SANITARY SEWER

- REPLACE LONGITUDINAL PVC & VCP MAINS
- NONCONFORMING SERVICES
- CONSTRUCTION PHASING
- $ FROM ENTERPRISE FUNDS

STREETSCAPE FUNDING

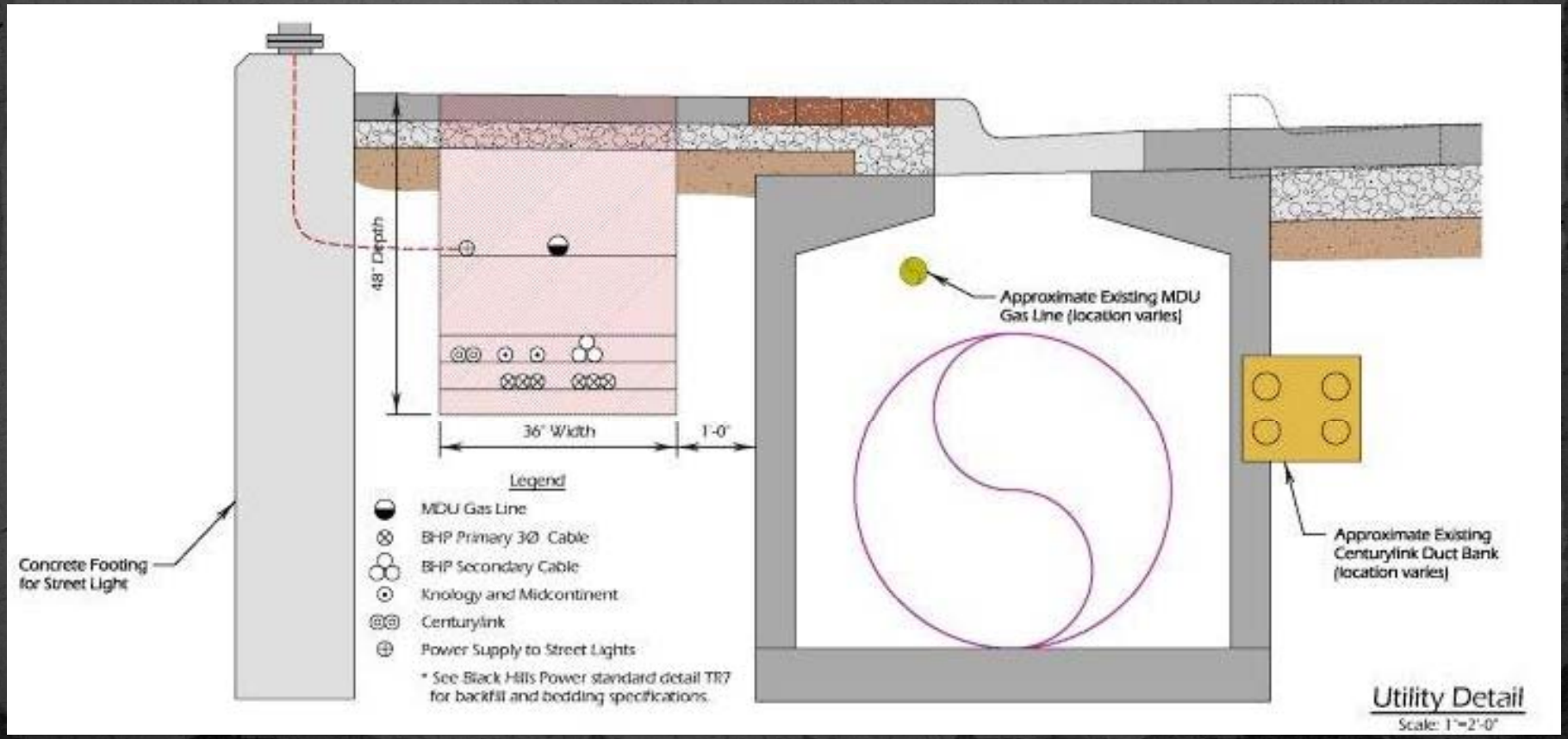
- PHASE 1 ($2.0M VISION FUND)
- FUNDING PRIORITIES (COMMENT)
  - 1. BURY OVERHEAD UTILITIES
  - 2. ROADWAY LIGHTING
  - 3. MEDIAN LANDSCAPING
  - 4. TOWER ROAD BRIDGE ENHANCEMENTS
  - 5. ROADWAY DITCHES SOUTH OF CATHEDRAL DRIVE

STREETSCAPE FUNDING

- PHASE 2 ($3.1M VISION FUND)
- FUNDING PRIORITIES (COMMENT)
  - 1. BURY PARALLEL UTILITIES
  - 2. ROADWAY LIGHTING
  - 3. MEDIAN LANDSCAPING
  - 4. BURY CROSSING UTILITIES
  - 5. MITIGATION OF PROPOSED PARKING REMOVAL

UTILITIES

UTILITIES


48" Depth
36" Width
1'-0"
Approximate Existing MDU Gas Line (location varies)
Approximate Existing Centurylink Duct Bank (location varies)
Concrete Footing for Street Light
Legend
MDU Gas Line
BHP Primary 3Ø Cable
BHP Secondary Cable
Knology and Midcontinent
Centurylink
Power Supply to Street Lights
* See Black Hills Power standard detail TR7 for backfill and bedding specifications.
Utility Detail
Scale: 1"=2'-0"

Applications

Typical Applications

- City Streets
- Urban Boulevards
- Historic Districts
- Commercial Developments
- Walkways
- Parking Lots

Features

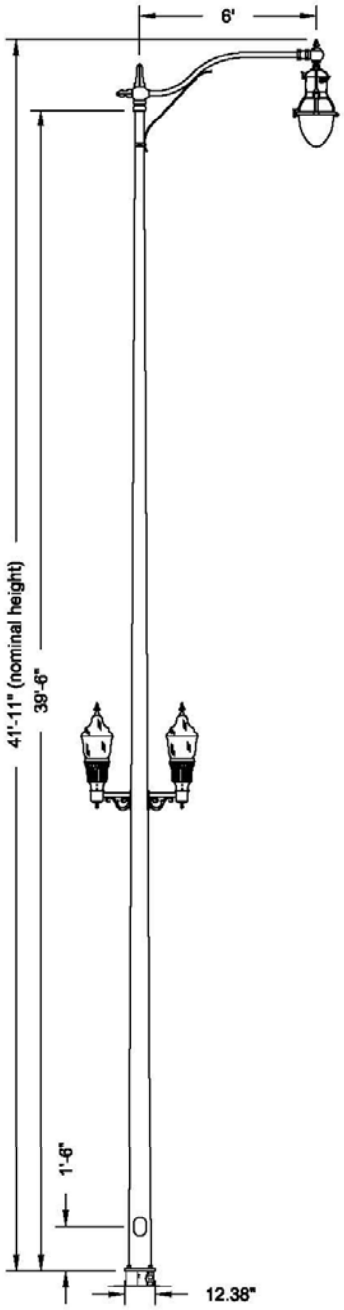
- Urban scale, boulevard lighting
- Classic styling
- Permanent, durable borosilicate prismatic glass optics
- IESNA cutoff optics
- Tool-less electrical component access
- Tool-less lamp access
- IP66 rating
- Reliability

Lamp Types

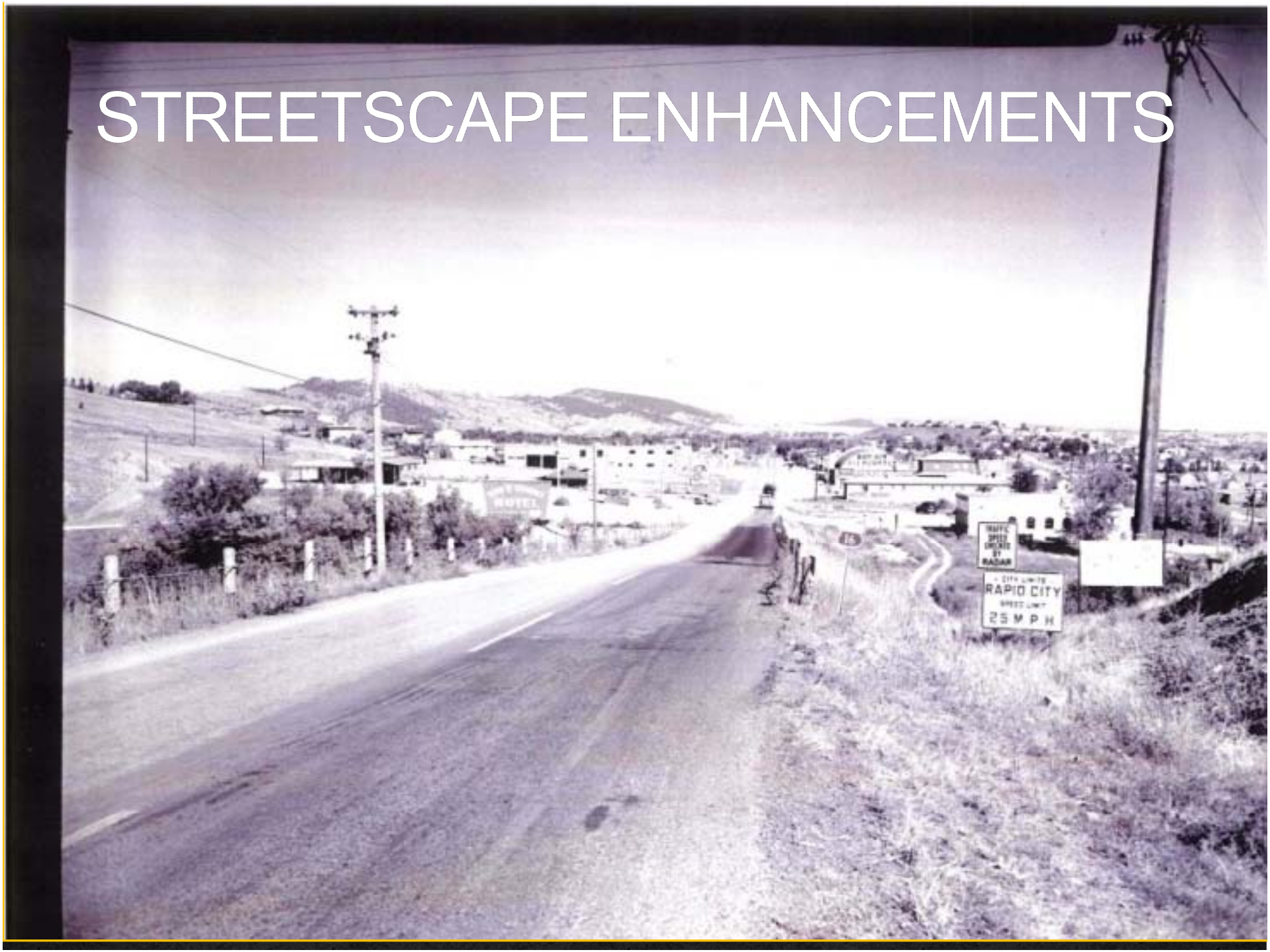
- 70 - 400 watt metal halide
- 175 - 400 watt pulse start metal halide
- 175 - 400 watt high pressure sodium

Approvals

- UL/CUL



STREETSCAPE ENHANCEMENTS

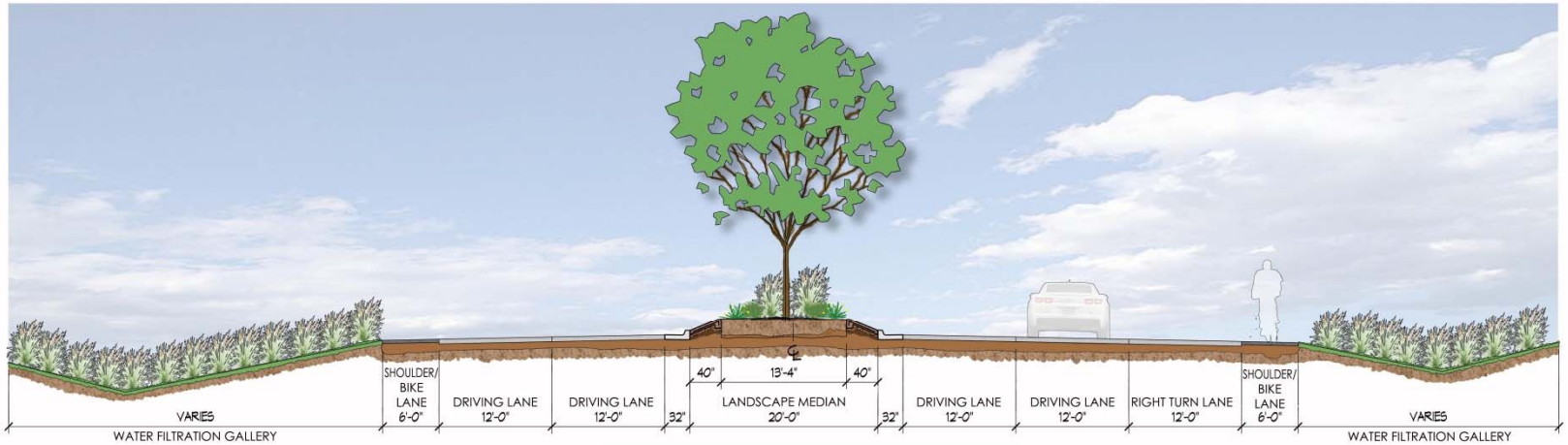


Best Western
TOWN & COUNTRY
SAFELY
SUBWAY
SPEED LIMIT 35
SWIFTEC INC.
605-721-1193

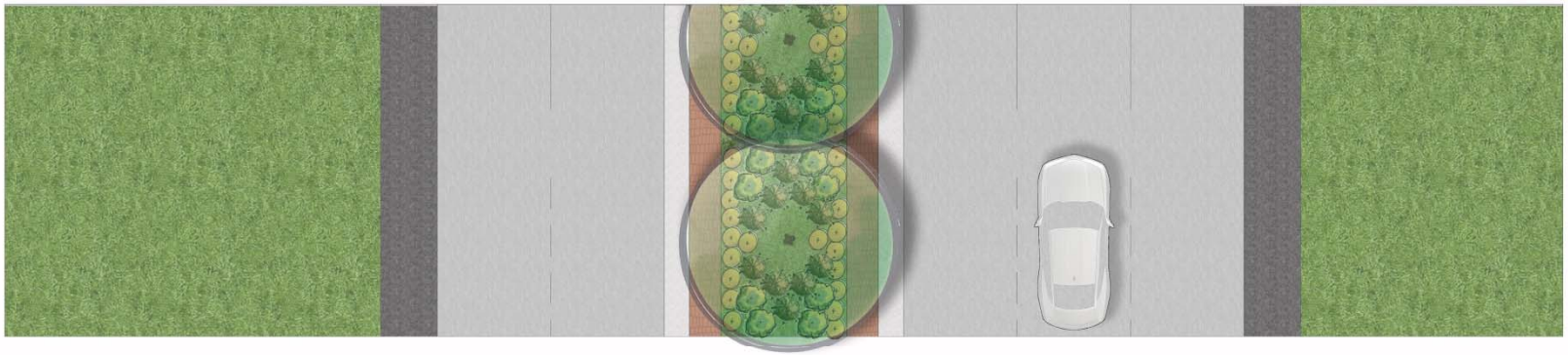
Streetscape Enhancements

- Goals:
  - Improve existing green space
  - Enhance the South Entry into our community
  - Enhance the safety for the Pedestrians and Vehicular traffic
  - Soften the Streetscape with Landscape material.

Streetscape Enhancements



SECTIONS 3+50 TO 7+00

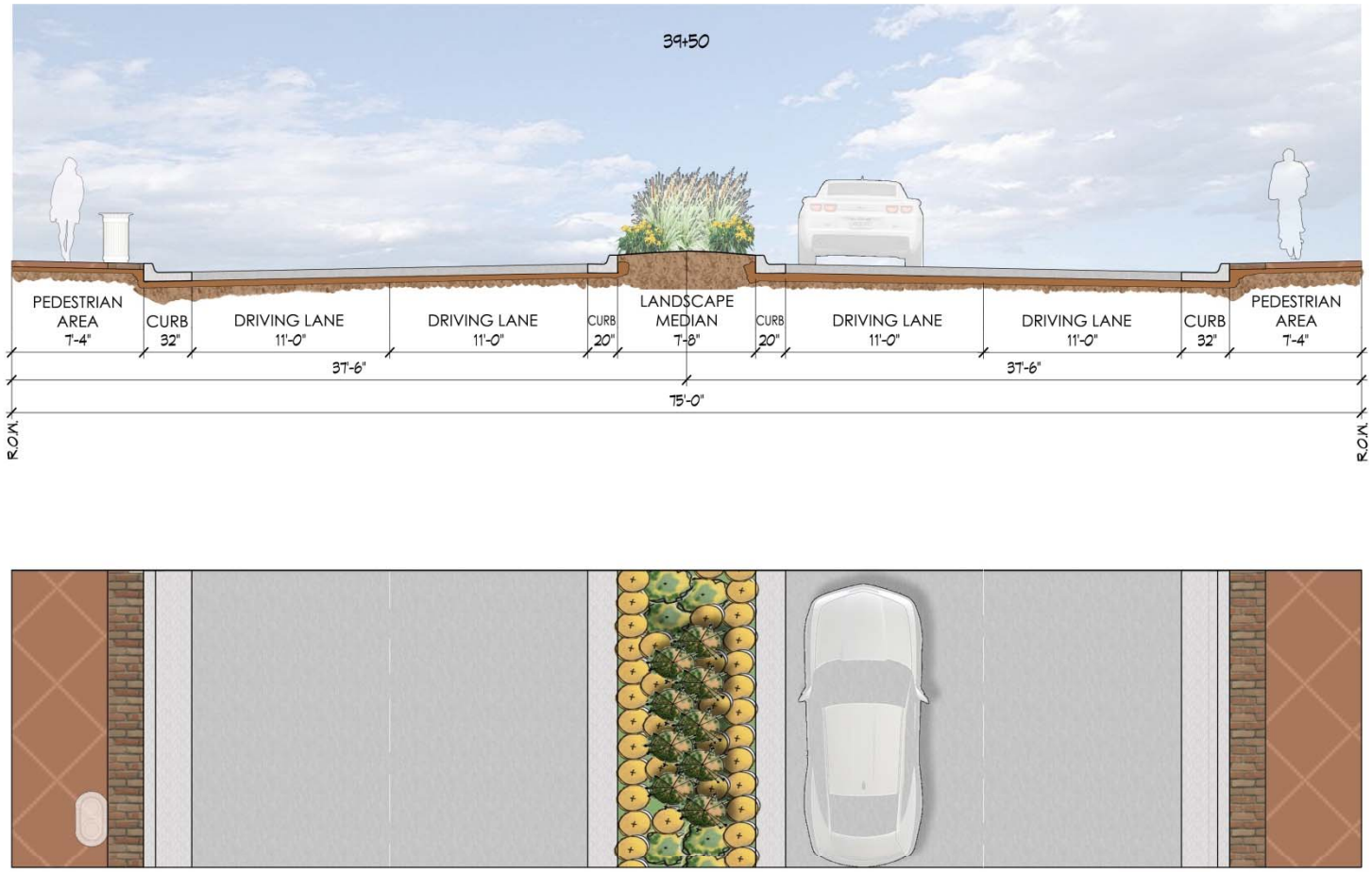


TYPICAL URBAN ROADWAY SECTION (LARGE ROW)

SCALE: 1/12" = 1'-0"

Wyss Associates, Inc.

Streetscape Enhancements



TYPICAL URBAN ROADWAY SECTION

SCALE: 3/16" = 1'-0"

Wyss Associates, Inc.

Streetscape Enhancements

Anticipated Schedule

	Phase 1	**Phase 2**
Public Meeting	08/16/2012	08/16/2012
Landowners Meeting	Fall 2012	Spring 2013
Final Design	Nov 2012	May 2013
Land Appraisal/Negotiation	2013	2013/2014
Construction	2014	2015
Estimated Construction Cost	$7.170 Million	$5.525 Million

Questions or Comments

Comment Forms or Letters to:

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Rapid City, SD 57701

johnvanbeek@ferberengineering.com

http://sddot.com/dot/publicmeetings/default.aspx

Please provide comments by August 30, 2012