This memorandum summarizes corridor design options identified as part of the preliminary design efforts for the 166th Avenue NE 4 - 3 Lane Corridor Conversion Project between NE 85th Street and approximately NE 100th Street (near the frontage of Redmond Junior High). The City’s Transportation Master Plan (TMP) classifies this roadway as a multi-modal corridor, requiring consideration for multiple modes of travel, such as by car, bus, bicycle, and walking.

In January 2009, three (3) roadway section options (Options A, B, and C) were prepared to illustrate how the corridor could be changed from the existing four lane section to a three lane section. Each developed roadway section option illustrates the base roadway section, the typical section at a new median/mid-block crosswalk, the typical section at a new bus/transit pullout, and the roadway section at the intersection with NE 85th Street. The median/mid-block crosswalks and bus pullouts are optional design elements that may either be included or excluded from the base roadway section. The concept plans and construction cost estimates include these optional design elements.

In addition to the roadway sections identified as Options A, B, and C, there is also the option to simply restripe the existing roadway section of four 11-foot vehicular lanes to three 11-foot vehicular lanes with two 5.5-foot bicycle lanes. In the fall of 2008, the 166th Avenue NE corridor between NE 100th Street and NE 104th Street was converted from 4 vehicular lanes to 3 vehicular lanes plus 2 bicycle lanes in conjunction with the installation of a new traffic signal at the intersection of 166th Avenue NE and NE 104th Street.

A challenge to using the same 4 - 3 corridor conversion roadway section on the portion of 166th Avenue NE between NE 85th Street and NE 97th Street is the existing relatively steep roadway grade which ranges between 13.6% and 5.9%. The steep grade will preclude many bicyclists from using the uphill bicycle lane. The downhill bicycle lane may not end up being fully utilized since on long steep downhill grades bicyclists tend to move further from the curb and gutter to their right, encroaching upon and effectively using the adjacent vehicular lane to their left.
Options A, B, and C take into account the steep grades of the 166th Avenue NE corridor as well as provide increased lateral separation between the pedestrians on the sidewalk and vehicles in the roadway, one of the expressed desired outcomes of corridor conversion project.

**Project Goals / Corridor Conversion Considerations**

In addition to increasing the lateral separation between pedestrians on the sidewalk and vehicles in the roadway, other stated desires of the corridor conversion project include:

- Improved ability for pedestrians to safely cross the 166th Avenue NE corridor
- Improved areas at transit stops along this TMP-classified multi-modal corridor
- Improved locations, and possible consolidations, of transit stops along the corridor
- Improved aesthetics through landscape enhancements along the corridor
- Consideration of impedance to traffic flow in the northerly (uphill) direction
- Consideration of impedance to traffic flow in the southerly (downhill) direction near NE 85th St.

**Design Option Elements**

In an effort to address each of the preceding desired outcomes for the project, each of the design options (Option A, B, and C) include:

- Four (4) median/mid-block crosswalks
- Three (3) transit/bus pullouts in the northerly (uphill) direction of travel
- Proposed locations of consolidated transit stops
- Maintains the existing southbound to westbound right-turn only lane at NE 85th Street.

The following describes the unique features of the base roadway section for each design option:

**Option A**

- Creates a 5.5 foot bicycle lane buffer to the existing sidewalk on both sides
- Maintains the existing curb, gutter, and sidewalk on both sides

**Option B**

- Creates a 5.5 foot bicycle lane buffer to the existing sidewalk on the east (uphill) side
- Creates a 15 foot shared use (bicycles and vehicles) wide curb lane on the west (downhill) side
- Maintains the existing curb, gutter, and sidewalk on the east (uphill) side
- Adds a new 2 foot landscape buffer, curb, and gutter on the west (downhill) side

**Option C**

- Adds a new wider 8 foot sidewalk on the east (uphill) side instead of a 5.5 foot bicycle lane
- Creates a 15 foot shared use (bicycles and vehicles) wide curb lane on the west (downhill) side
- Adds a new 2 foot landscape buffer, curb, and gutter on both sides
Right-of-Way Issues

The base roadway section for each roadway section option (Options A, B, and C) fits within the existing 60 foot right-of-way along the corridor. The proposed bus pullouts illustrated in the concept plans do not fit within existing right-of-way and would require approximately 8 to 10 additional feet of right-of-way to construct the widened roadway, new sidewalk, and a block retaining wall at the back of sidewalk.

Concept Level Cost Assumptions and Cost Estimate

Cost assumptions in support of the concept level cost estimate in Table 1 include:

- Each of the design options includes illuminated medians/mid-block crosswalks.
- Bus pullout locations were determined based upon site investigation and to minimize relocation of existing above ground utilities. Gravity block walls at the back of sidewalk are included.
- Modifications to the storm sewer system were incorporated on an as-needed basis when new curb and gutter locations warranted new laterals to the existing trunk system.
- The amount of net new impervious surface area for this project is anticipated to be less than 5,000 square feet; therefore water quality measures are not included with this cost estimate.

Table 1 – Concept Level Design Cost Estimates

<table>
<thead>
<tr>
<th>Construction Group Items</th>
<th>Stripping Only Two 5.5' Bike Lanes</th>
<th>Option A Two 5.5' Bike Lanes + X-Walks &amp; Bus Pullouts</th>
<th>Option B One 5.5' Bike Lane &amp; One 15' Shared Use Lane + X-Walks &amp; Bus</th>
<th>Option C One 5.5' Bike Lane &amp; One 8' Sidewalk + X-Walks &amp; Bus</th>
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Summary

Several improvement options exist for the 166th Avenue NE 4 – 3 Lane Corridor Conversion Project between NE 85th Street and approximately NE 100th Street (near the frontage of Redmond Junior High). Design concepts range from simply restriping the existing four-lane configuration to a three-lane configuration, to reconstructing each side of the roadway edge treatment to accommodate a particular roadway section design option.

The City’s TMP classifies this stretch of roadway as a multi-modal corridor thus requiring consideration of multiple modes of travel including, vehicular, transit, bicycling, and walking. Therefore a combination of decision factors for this project including roadway classification, the project’s goals, and its’ project costs should be taken into consideration when selecting a preferred alternative for corridor improvements. Steps to seek and incorporate public input will be another valuable part of the design development process to determine what improvements, if any, are selected by the City for this corridor.

Enclosures:

Option A
- 14 Half-size sheets (1 of Roadway Sections and 13 Plan and Profile Drawings) (3 copies)
- 2 Roll plots of 166th Avenue NE (NE 85th to NE 95th, and NE 95th to NE 104th) (1 copy)
- Construction Cost Estimate Breakdown (1 copy)

Option B
- 14 Half-size sheets (1 of Roadway Sections and 13 Plan and Profile Drawings) (3 copies)
- 2 Roll plots of 166th Avenue NE (NE 85th to NE 95th, and NE 95th to NE 104th) (1 copy)
- Construction Cost Estimate Breakdown (1 copy)

Option C
- 14 Half-size sheets (1 of Roadway Sections and 13 Plan and Profile Drawings) (3 copies)
- 2 Roll plots of 166th Avenue NE (NE 85th to NE 95th, and NE 95th to NE 104th) (1 copy)
- Construction Cost Estimate Breakdown (1 copy)
City of Redmond
166th Ave NE 4-3 Lane Conversion
Option A - Two 5.5 Foot Bike Lanes
Construction Cost Estimate

Prepared By: KJP
Checked By: KAHA
Date: 11/23/09

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**OPTION A - PRELIMINARY CONSTRUCTION SUBTOTAL**
$547,775

**CONSTRUCTION CONTINGENCIES (20% OF CONSTRUCTION SUBTOTAL)**
$109,550

**OPTION A - PRELIMINARY CONSTRUCTION TOTAL**
$657,335

**RIGHT-OF-WAY ACQUISITION (3 BUS PULLOUTS @ 1,200SF EACH @ $25/SF)**
$90,000

**RIGHT-OF-WAY ACQUISITION SERVICES (3 PARCELS)**
$45,000

**DESIGN ENGINEERING (15% OF CONSTRUCTION SUBTOTAL)**
$88,700

**OPTION A - TOTAL PROJECT COST (INCL. BUS PULLOUTS)**
$891,035

**TOTAL PROJECT COST (STRIPING ONLY)**
$154,205
# Preliminary Construction Cost Estimate

## Option B - One 15 Foot Shared Lane and One 5.5 Foot Bike Lane

### Preliminary Construction Subtotal

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**OPTION B - PRELIMINARY CONSTRUCTION SUBTOTAL**

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**OPTION B - TOTAL PROJECT COST (INCL. BUS PULLOUTS)**

$1,336,320
# Option C - One 15 Foot Shared Lane and One 8 Foot Sidewalk

## Preliminary Construction Cost Estimate

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**OPTION C - PRELIMINARY CONSTRUCTION SUBTOTAL**

$1,682,670

**OPTION C - PRELIMINARY CONSTRUCTION CONTINGENCIES (20% OF CONSTRUCTION SUBTOTAL)**

$316,540

**OPTION C - PRELIMINARY CONSTRUCTION TOTAL**

$1,999,210

**RIGHT-OF-WAY ACQUISITION (3 BUS PULLOUTS @ 1,200SF EACH @ $25/ SF)**

$90,000

**RIGHT-OF-WAY ACQUISITION SERVICES (3 PARCELS)**

$45,000

**DESIGN ENGINEERING (15% OF CONSTRUCTION SUBTOTAL)**

$284,900

**OPTION C - TOTAL PROJECT COST (INCL. BUS PULLOUTS)**

$2,319,110
OPTION A FEATURES:
- Creates a bike lane buffer to existing sidewalk on both sides
- Maintains existing curb, gutter, and sidewalk on both sides

168TH AVE NE - EXISTING

OPTION A - BASE SECTION

OPTION A - AT BUS PULLOUT

OPTION A - AT MEDIAN/MID-BLOCK CROSSWALK

OPTION A - AT 85TH INTERSECTION
EXISTING GROUND PROFILE GENERATED FROM CITY'S GIS.

NOTES:
1. EXISTING GROUND PROFILE GENERATED FROM CITY'S GIS.

LEGEND
- PROPOSED SIDEWALK
- PROPOSED CURB
- PROPOSED STRIPING (YELLOW)
- PROPOSED STRIPING (WHITE)
- PROPOSED GRAVITY BLOCK WALL
- EXISTING FEATURES
- EXISTING TRANSIT STOP
- PROPOSED TRANSIT STOP
- EXISTING MailBOX
- EXISTING DRIVEWAY
- EXISTING TRAFFIC SIGNAL

KEY MAP
- NOT TO SCALE

166TH AVENUE NE
4-3 LANE CONVERSION
DESIGN CONCEPT - OPTION A

DAVID EVANS AND ASSOCIATES INC.
415 - 115th Avenue SE
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Phone: 425.519.6500

City of Redmond
Washington

PLAN AND PROFILE

NE 83RD ST

EXISTING SIDEWALK

166TH AVE NE

MATCHLINE STA 7.00 SHEET 1 OF 2

MATCHLINE STA 7.00 SHEET 1 OF 2

HORIZONTAL

VERTICAL

SUPERVISOR: K. HARRIS  9/2009
DESIGNED BY: K. HARRIS  9/2009
CHECKED BY: S. SOISETH  9/2009
DETAILED BY: D. AHRENFELD  9/2009

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City of Redmond
Washington

PLAN AND PROFILE

166TH AVENUE NE
4-3 LANE CONVERSION
DESIGN CONCEPT - OPTION A

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City of Redmond
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PLAN AND PROFILE

166TH AVENUE NE
4-3 LANE CONVERSION
DESIGN CONCEPT - OPTION A

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PLAN AND PROFILE

166TH AVENUE NE
4-3 LANE CONVERSION
DESIGN CONCEPT - OPTION A

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City of Redmond
Washington

PLAN AND PROFILE
NOTE:
1. EXISTING GROUND PROFILE GENERATED FROM CITY'S GIS.
1. Existing ground profile generated from City's GIS.

EXISTING S' SIDEWALK
166TH AVE NE
NEW MEDIAN / MID-BLOCK CROSSWALK

NOTE:
1. Existing ground profile generated from City's GIS.
EXISTING 5' SIDEWALK

NEW BUS PULLOUT

NOTES:
1. EXISTING GROUND PROFILE GENERATED FROM CITY'S GIS.

LEGEND
- PROPOSED SIDEWALK
- PROPOSED CURB
- PROPOSED STRIPING (YELLOW)
- PROPOSED STRIPING (WHITE)
- PROPOSED GRAVITY BLOCK WALL
- EXISTING FEATURES
- EXISTING TRANSIT STOP
- EXISTING MAILBOX
- EXISTING DRIVEWAY
- EXISTING TRAFFIC SIGNAL

KEY MAP
NOT TO SCALE

PLAN AND PROFILE

166TH AVENUE NE
4-3 LANE CONVERSION
DESIGN CONCEPT - OPTION A

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City of Redmond
Washington

166TH AVENUE NE
4-3 LANE CONVERSION
DESIGN CONCEPT - OPTION A

PLAN AND PROFILE

PV04
EXISTING GROUND PROFILE GENERATED FROM CITY'S GIS.

NOTE:
1. EXISTING GROUND PROFILE GENERATED FROM CITY'S GIS.

LEGEND
- PROPOSED SIDEWALK
- PROPOSED BUFFER
- PROPOSED CURB
- PROPOSED SUMMER (YELLOW)
- PROPOSED STRIPING (RED)
- PROPOSED GRAVITY BLOCK WALL
- EXISTING FEATURES
  - EXISTING TRANSIT STOP
  - EXISTING CURB
  - EXISTING WALKWAY
  - EXISTING DRIVEWAY
  - EXISTING TRAFFIC SIGNAL

KEY MAP
- NOT TO SCALE

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Phone: 425.519.6500

166TH AVENUE NE
4-3 LANE CONVERSION DESIGN CONCEPT - OPTION A

PLAN AND PROFILE
1. Existing ground profile generated from city's GIS.
1. Existing ground profile generated from City's GIS.
NOTES:
1. Existing ground profile generated from City's GIS.
NOTES:
1. EXISTING GROUND PROFILE GENERATED FROM CITY'S GIS.
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NOTES:
1. EXISTING GROUND PROFILE GENERATED FROM CITY'S GIS.

EXISTING & SIDEWALK

REDMOND JUNIOR HIGH SCHOOL

EXISTING GROUND PROFILE AT CENTERLINE
Note:
1. Existing ground profile generated from city's GIS.
OPTION B FEATURES:

- CREATED A BIKE LANE BUFFER TO EXISTING SIDEWALK ON RIGHT/EAST/UPHILL SIDE
- CREATED A SHARED USE (BIKES AND VEHICLES) WIDE CURB LANE ON STEEP GRADE DOWNHILL
- ADDS A NEW A LANDSCAPE BUFFER ON LEFT/WEST/DOWNHILL SIDE
1. EXISTING GROUND PROFILE GENERATED FROM CITY'S GIS
NOTES:
1. EXISTING GROUND PROFILE GENERATED FROM CITY'S GIS.
1. Existing ground profile generated from city's GIS.
NOTES:
1. EXISTING GROUND PROFILE GENERATED FROM CITY'S GIS.
NOTES:
1. Existing ground profile generated from City's GIS.

KEY MAP
- NOT TO SCALE

LEGEND
- Existing features
- Existing transit stop
- Existing mailbox
- Existing driveway
- Existing traffic signal

MACHINE LINE STA 22+00
SEE SHEET PV05

MACHINE LINE STA 32+00
SEE SHEET PV07

EXISTING 5' SIDEWALK

NEW 2' LANDSCAPE BUFFER
NEW CURB AND GUTTER

NEW MEDIAN/MID-BLOCK CROSSWALK

EXISTING GROUND PROFILE
AT CENTERLINE

NEW BUS PULLOUT

EXISTING 10' CURB

PROPOSED SIDEWALK

PROPOSED CURB

PROPOSED STRIPING (YELLOW)

PROPOSED STRIPING (WHITE)

PROPOSED GRAVITY BLOCK WALL

PROPOSED SIDEWALK

PROPOSED CURB

PROPOSED STRIPING (YELLOW)

PROPOSED STRIPING (WHITE)

PROPOSED GRAVITY BLOCK WALL
NOTES:
1. EXISTING UTILITIES, PARCELS, AND RIGHT-OF-WAY FROM CITY'S GIS.
2. EXISTING GROUND PROFILE GENERATED FROM CITY'S GIS.
EXISTING S SIDEWALK

NEW BUS PULLOUT

NEW MEDIAN / MID-BLOCK CROSSWALK

1. EXISTING UTILITIES, PARCELS, AND RIGHT-OF-WAY FROM CITY'S GIS.
2. EXISTING GROUND PROFILE GENERATED FROM CITY'S GIS.

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PLAN AND PROFILE

PV08

MATCH LINE STA. 37+00
SEE SHEET PV07

MATCH LINE STA. 44+00
SEE SHEET PV08

LEGEND

PROPOSED SIDEWALK
PROPOSED BUFFER
PROPOSED CURB
PROPOSED STRIPING (WHITE)
PROPOSED GRAVITY BLOCK WALL
EXISTING FEATURES
EXISTING TRANSIT STOP
EXISTING MAILBOX
EXISTING DRIVEWAY
EXISTING TRAFFIC SIGNAL

EXISTING FEATURES
EXISTING TRANSIT STOP
EXISTING MAILBOX
EXISTING DRIVEWAY
EXISTING TRAFFIC SIGNAL

EXISTING FEATURES
EXISTING TRANSIT STOP
EXISTING MAILBOX
EXISTING DRIVEWAY
EXISTING TRAFFIC SIGNAL

EXISTING FEATURES
EXISTING TRANSIT STOP
EXISTING MAILBOX
EXISTING DRIVEWAY
EXISTING TRAFFIC SIGNAL

EXISTING FEATURES
EXISTING TRANSIT STOP
EXISTING MAILBOX
EXISTING DRIVEWAY
EXISTING TRAFFIC SIGNAL

EXISTING FEATURES
EXISTING TRANSIT STOP
EXISTING MAILBOX
EXISTING DRIVEWAY
EXISTING TRAFFIC SIGNAL
NOTES:
1. EXISTING UTILITIES, PARCELS, AND RIGHT-OF-WAY FROM CITY'S GIS.
2. EXISTING GROUND PROFILE GENERATED FROM CITY'S GIS.
NOTES:
1. EXISTING UTILITIES, PARCELS, AND RIGHT-OF-WAY FROM CITY'S GIS
2. EXISTING GROUND PROFILE GENERATED FROM CITY'S GIS.
EXISTING FEATURES
EXISTING TRANSIT STOP
EXISTING MAILBOX
EXISTING DRIVEWAY
EXISTING TRAFFIC SIGNAL

EXISTING GROUND PROFILE GENERATED FROM CITY'S GIS.

NOTES:
1. EXISTING UTILITIES, PARCELS, AND RIGHT-OF-WAY FROM CITY'S GIS.
2. EXISTING GROUND PROFILE GENERATED FROM CITY'S GIS.

REDMOND JUNIOR HIGH SCHOOL

EXISTING SIDEWALK

MATCHLINE STA 55+00
SEE SHEET P8/10

MATCHLINE STA 51+00
SEE SHEET P7/10

MATCHLINE STA 56+00
SEE SHEET P12/12

5.7

166TH AVE NE

3.8

0.4

1.05

EXISTING GROUND AT CENTERLINE

DAVID EVANS AND ASSOCIATES INC.
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Phone: 425.519.8900

166TH AVENUE NE
4-3 LANE CONVERSION
DESIGN CONCEPT - OPTION B

PLAN AND PROFILE
NOTES:
1. EXISTING UTILITIES, PARCELS, AND RIGHT-OF-WAY FROM CITY'S GIS.
2. EXISTING GROUND PROFILE GENERATED FROM CITY'S GIS.

LEGEND
- PROPOSED SIDEWALK
- PROPOSED CURB
- PROJECTED CURB
- PROPOSED BUFFER
- PROPOSED STRIPING (YELLOW)
- PROPOSED STRIPING (WHITE)
- PROPOSED GRAVITY BLOCK WALL
- EXISTING FEATURES
- EXISTING TRANSIT STOP
- EXISTING TRANSIT STOP
- EXISTING MAILBOX
- EXISTING DRIVEWAY
- EXISTING TRAFFIC SIGNAL

DRAWN BY
K. HARRIS
K. HARRIS
S. SOISETH
G. AHRENSFELD

CHECKED BY
K. HARRIS
K. HARRIS
G. WAGNFIELD

DESIGNATED BY
415 - 118th Avenue NE
Bellevue, Washington 98005-3518
Phone: 425.519.6500

REVIEWED BY
K. HARRIS

168TH AVENUE NE
4-3 LANE CONVERSION
DESIGN CONCEPT - OPTION B

David Evans and Associates Inc.

City of Redmond
Washington
NOTES:
1. Existing ground profile generated from City's GIS.
OPTION C FEATURES:

- Creates a shared use (bikes and vehicles) wide curb lane on steep grade downhill
- Adds a new wider uphill sidewalk instead of uphill bike lane
- Adds a new landscape buffer to both sides
NOTES:
1. EXISTING GROUND PROFILE GENERATED FROM CITY'S GIS.
EXISTING 5' SIDEWALK

166TH AVE NE

NOTES:
1. EXISTING GROUND PROFILE GENERATED FROM CITY'S GIS.

LEGEND
- PROPOSED SIDEWALK
- PROPOSED BUFFER
- PROPOSED CURB
- PROPOSED STRIPING (YELLOW)
- PROPOSED STRIPING (WHITE)
- PROPOSED GRAVITY BLOCK WALL
- EXISTING FEATURES
  - EXISTING TRANSIT STOP
  - EXISTING MAILBOX
  - EXISTING DRIVEWAY
  - EXISTING TRAFFIC SIGNAL

166TH AVENUE NE
4-3 LANE CONVERSION
DESIGN CONCEPT - OPTION C
NOTES:
1. Existing ground profile generated from City's GIS.

LEGEND
- Proposed sidewalk
- Proposed buffer
- Proposed curb
- Proposed striping (white)
- Proposed gravity block wall
- Existing features
- Existing transit stop
- Existing driveway
- Existing traffic signal

DESIGN CONCEPT - OPTION C
166TH AVENUE NE
4-3 LANE CONVERSION
PLANS AND PROFILES
PV03

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City of Redmond
WASHINGTON

PLAN AND PROFILE
NOTES:
1. EXISTING GROUND PROFILE GENERATED FROM CITY'S GIS.
NOTES:
1. Existing ground profile generated from City's GIS.

LEGEND
- Proposed sidewalk
- Proposed buffer
- Proposed curb
- Proposed striping (yellow)
- Proposed striping (white)
- Proposed gravity block wall
- Existing features
- Existing transit stop
- Proposed transit stop
- Existing mailbox
- Existing driveway
- Existing traffic signal

EXISTING 5' SIDEWALK
NEW 2' LANDSCAPE BUFFER
NEW CURB AND GUTTER
NEW MEDIAN / MID-BLOCK CROSSWALK
NEW 2' LANDSCAPE BUFFER
NEW 5' SIDEWALK
NEW CURB AND GUTTER

Drawn by: S. Suwas
Prepared by: K. Harris
Version: 7.05
Printed: 5/18/2008
Checklist: David L. Evans
Design Concept - Option C

City of Redmond
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Belleview, Washington 98005-3518
Phone: 425-519-6950

Draft
Plan and Profile
PV05
166TH AVE NE
STATE FED.
4-3 LANE CONVERSION
DESIGN CONCEPT - OPTION C

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City of Redmond
WASHINGTON

166TH AVENUE NE
4-3 LANE CONVERSION
DESI GN CONCEPT - OPTION C

PLAN AND PROFILE

MATCHLINE STA. 27+00
SEE SHEET PG 6

MATCHLINE STA. 33+00
SEE SHEET PG 7

NOTES:
1. EXISTING GROUND PROFILE GENERATED FROM CITY'S GIS.

LEGEND
- PROPOSED SIDEWALK
- PROPOSED BUFFER
- PROPOSED STRIPING (YELLOW)
- PROPOSED STRIPING (WHITE)
- PROPOSED GRAVITY BLOCK WALL
- EXISTING FEATURES
- EXISTING TRANSIT STOP
- PROPOSED TRANSIT STOP
- EXISTING MAILBOX
- EXISTING DRIVEWAY
- EXISTING TRAFFIC SIGNAL

NEW 2' LANDSCAPE BUFFER
NEW 6' SIDEWALK
NEW CURB AND GUTTER

EXISTING 5' SIDEWALK

NEW MEDIAN / MID-BLOCK CROSSWALK

EXISTING GROUND PROFILE GENERATED FROM CITY'S GIS

NEW 2' LANDSCAPE BUFFER
NEW 8' SIDEWALK
NEW CURB AND GUTTER

NEW BUS PULLOUT

MATCHLINE STA. 32+00
SEE SHEET PG 6

MATCHLINE STA. 22+00
SEE SHEET PG 5

KEY MAP
NOT TO SCALE
1. Existing ground profile generated from City's GIS.
NOTES:

1. EXISTING PROFILE GENERATED FROM CITY’S GIS.
1. Existing ground profile generated from City's GIS.
EXISTING GROUND PROFILE GENERATED FROM CITY'S GIS.

NOTES:
1. EXISTING GROUND PROFILE GENERATED FROM CITY'S GIS.

LEGEND
- PROPOSED SIDEWALK
- PROPOSED BUFFER
- PROPOSED CURB
- PROPOSED STRIPING (YELLOW)
- PROPOSED STRIPING (WHITE)
- PROPOSED MEXICAN BLOCK WALL
- EXISTING FEATURES
- EXISTING TRANSIT STOP
- PROPOSED TRANSIT STOP
- EXISTING MEDIAN
- PROPOSED MEDIAN
- EXISTING TRAFFIC SIGNAL
- PROPOSED TRAFFIC SIGNAL

P. M. HARRIS

9/2009

SUPERVISOR

DESIGNED BY

CHECKED BY

DRAFTED BY

4-3 LANE CONVERSION
DESIGN CONCEPT - OPTION C

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166TH AVENUE NE
WASHINGTON

PLAN AND PROFILE

REVISION

BY DAVID EVANS

DATE

PV10

11/11/2009
NOTES:

1. EXISTING GROUND PROFILE GENERATED FROM CITY'S GIS.
NOTES:
1. EXISTING GROUND PROFILE GENERATED FROM CITY'S GIS.
1. Existing ground profile generated from City's GIS.