

Portsmouth 29640

US Route 1 Improvements

Public Advisory Committee Meeting - 3

November 18, 2020



Welcome and Introductions

- Jennifer Reczek, PE – NHDOT Project Manager
- David McNamara, PE – Consultant Project Manager
- Corey Spetelunas, PE – NHDOT Project Engineer
- Stephanie Micucci, PE – NHDOT Project Engineer
- Tyler Gagnon – Consultant Project Engineer

Agenda

- Welcome and Introductions
- Recap of PAC2 – December 2019
- Purpose and Need Update
- Concept Alternatives
- Review of Project Segments
- Next Steps and Schedule

Recap - PAC 2 Meeting

- Purpose and Need Discussion
 - Add Stormwater
- Minimize bypassing traffic off US Route 1 to local roads (Banfield Road)
- Discussion of Roundabouts at Walmart/Springbrook Circle
- Bike Lane Requirements/Shoulder needs
- Raised medians with U-Turns

Project Purpose and Need

– Purpose

- Improve safety
- Improve traffic flow
- Minimize bypass traffic
- Create pedestrian and bicycle facilities
- Provide transit opportunities
- Improve aesthetics
- Improve resiliency and stormwater quality

Project Purpose and Need

– Need

- Improve traffic flow and create smoother trip
- Reduce bypassing traffic to local roads, such as Banfield Road
- Difficult turning movements
- Limited to no bicycle and pedestrian facilities
- Minimal stormwater treatment and management



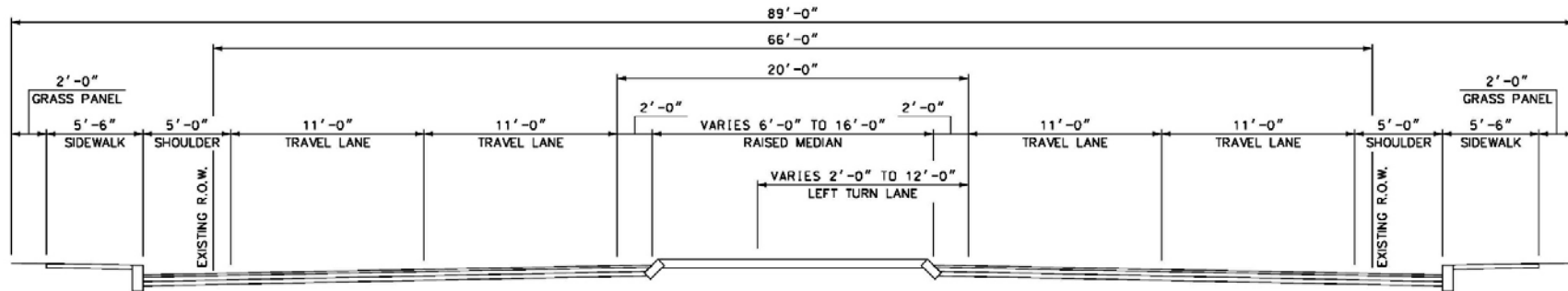
Questions/Comments?

Concept Designs

- Roadway Concepts:
 - Alternative 1 – 1984 Study
 - Alternative 2 – 5 Lane Section, no median
 - Alternative 3 – Minimal build, spot improvements
 - Alternative 4 – Walmart/Springbrook Roundabouts
- Bike/Pedestrian Concepts (Alts 2-4):
 - 6' Shoulder and 5' Sidewalk
 - 10' Multi-Use Path with 4' buffer

Concept Designs

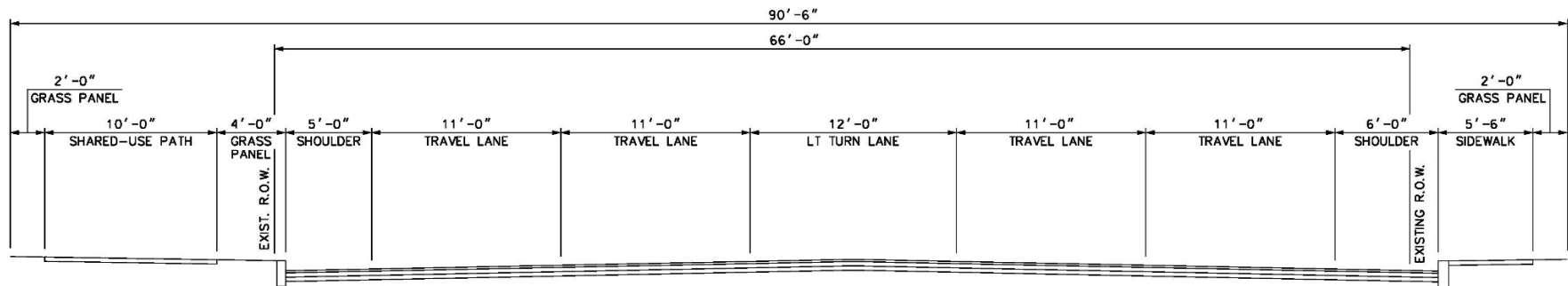
- Alternative 1 – Corridor Study 5-Lane Typical



5 Lane Section w/ raised center median
(85' width from back of sidewalks)

Concept Designs

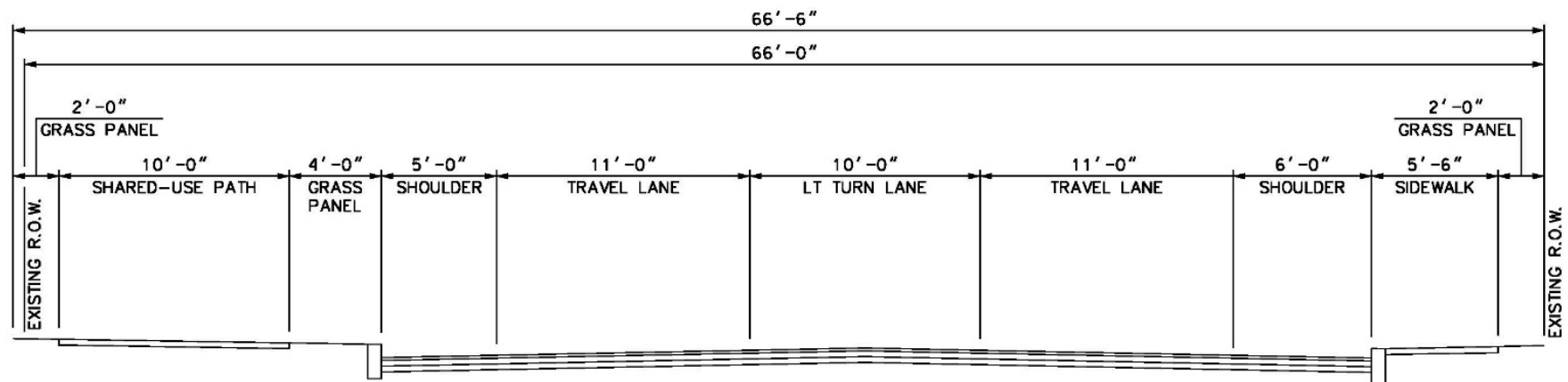
- Alternative 2 – Alternative 5-Lane Typical



5 Lane Section w/ Two-way Left Turn Lane
(86.5' width from back of sidewalk/shared use
path)

Concept Designs

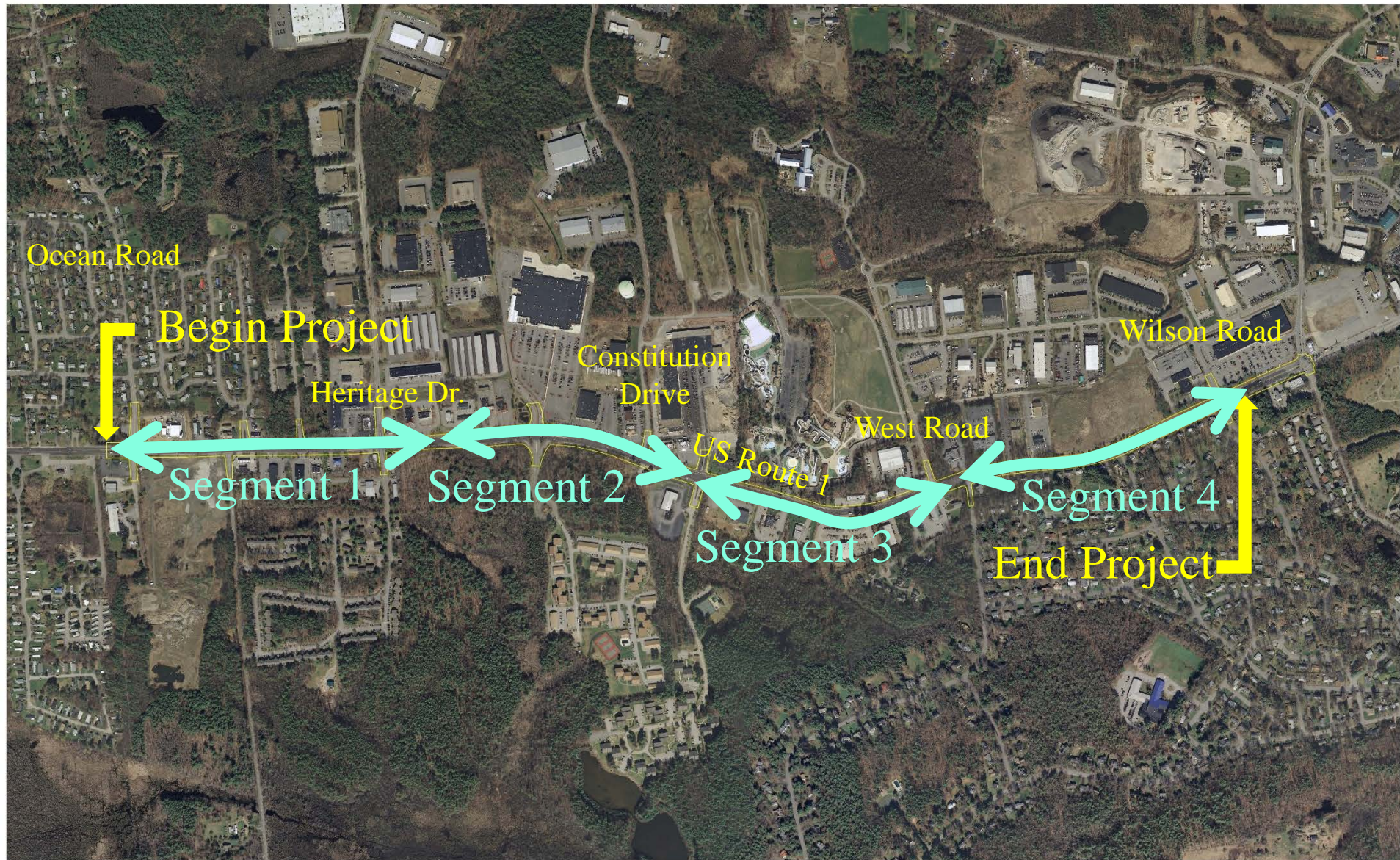
- Concept 3 – Minimal Build



Existing Lane Configuration
(62.5' width from back of sidewalks)



Questions/Comments?



Segment 1 – Exist

- Approximately 0.60 miles
- Mix of residential, office, and commercial properties
- Small stand-alone businesses and strip malls
- Fire Department near southerly limit
- Six side roads with 2 signalized intersections
- Generally 3-lane section, with center left turn lane

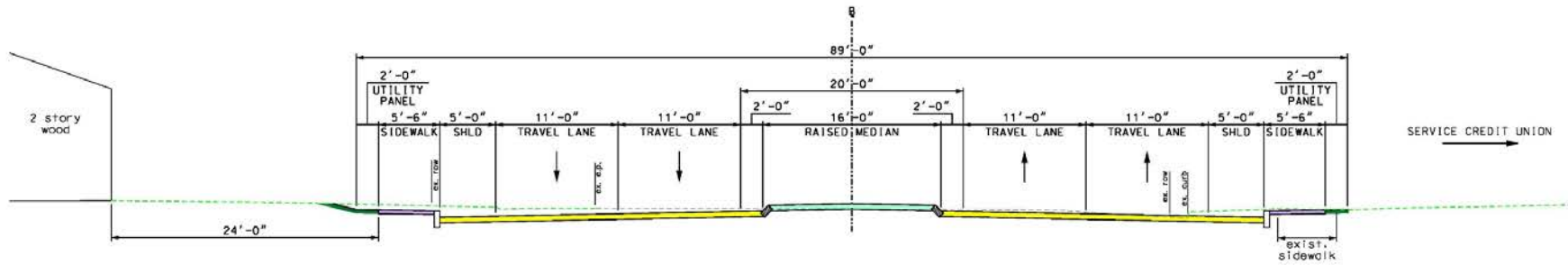
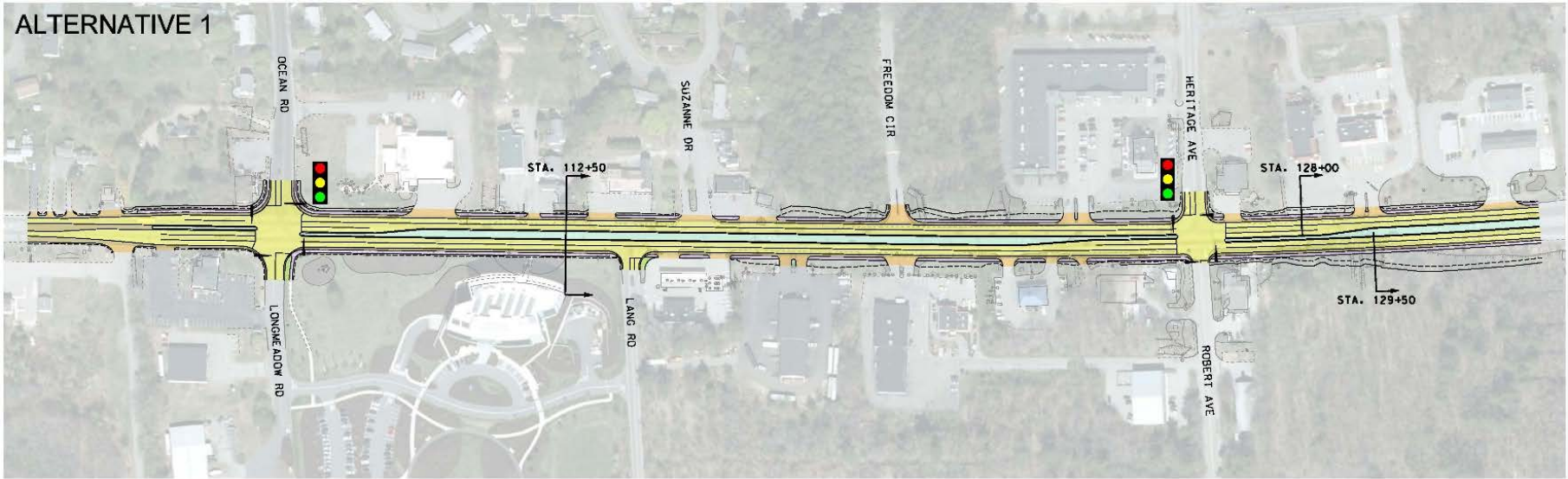


LEGEND

- TRAVEL WAY OF PROPOSED ROADWAY
- SHOULDER OF PROPOSED ROADWAY
- PROPOSED RAISED TRAFFIC ISLANDS
- PROPOSED SIDEWALK
- ACCESS POINTS TO PROPOSED ROADWAY (DRIVES, etc)

Segment 1 – Alternative 1

ALTERNATIVE 1

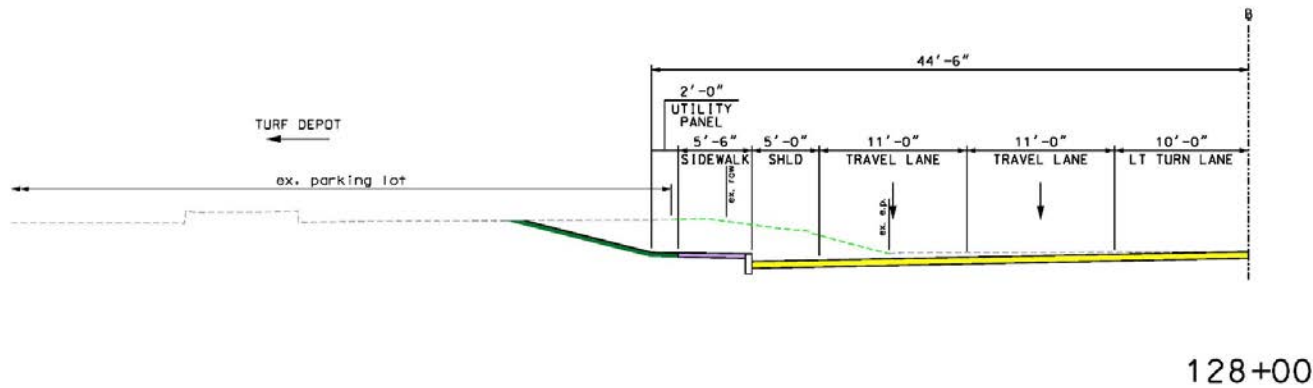


112+50

ALTERNATIVE 1
NOT TO SCALE

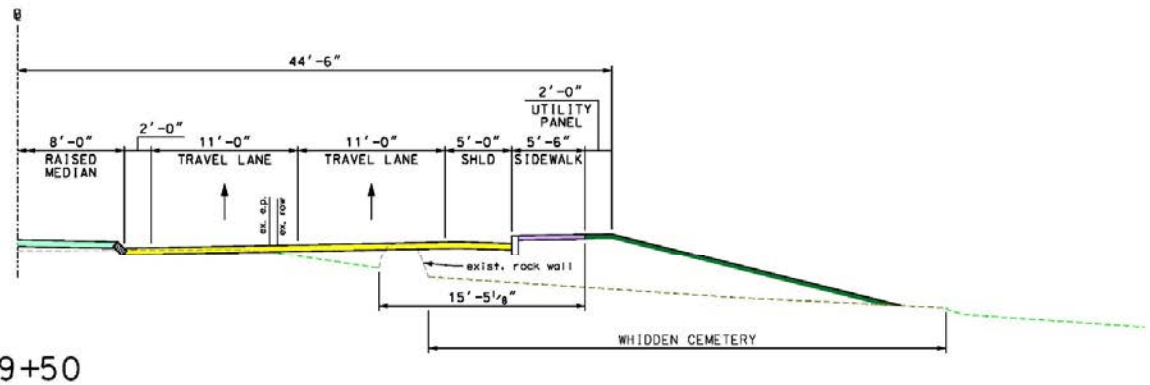
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 - ACCESS POINTS TO PROPOSED ROADWAY (DRIVES, etc)

Segment 1 – Alternative 1



128+00

ALTERNATIVE 1
NOT TO SCALE



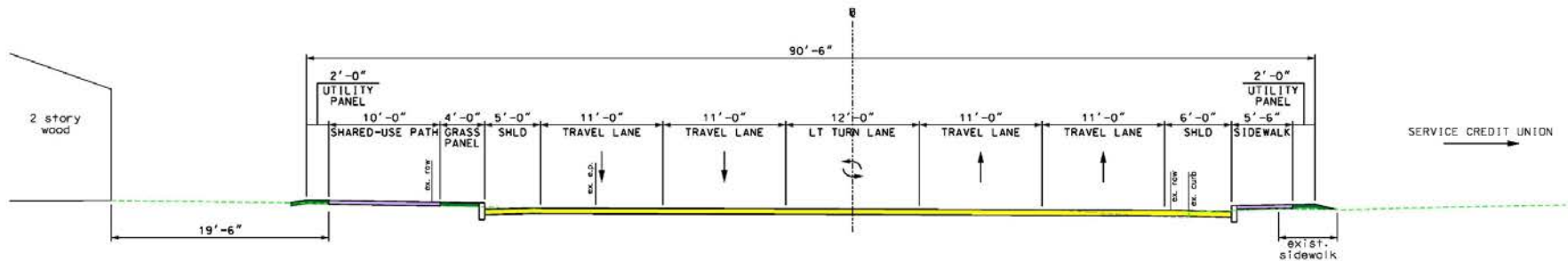
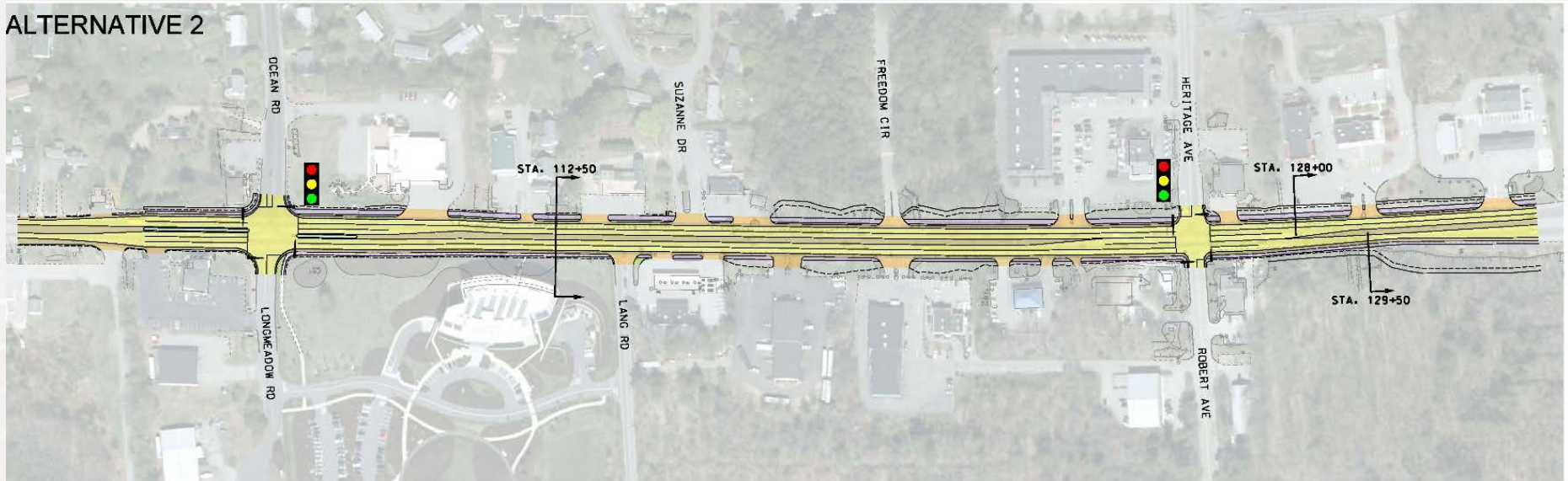
129+50

ALTERNATIVE 1
NOT TO SCALE

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Segment 1 - Alternative 2

ALTERNATIVE 2



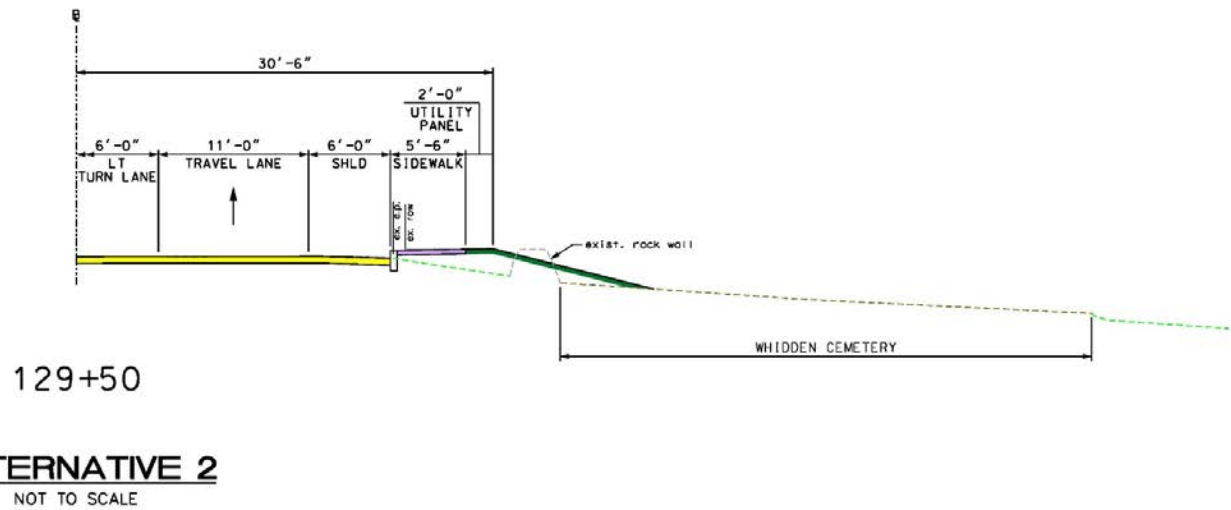
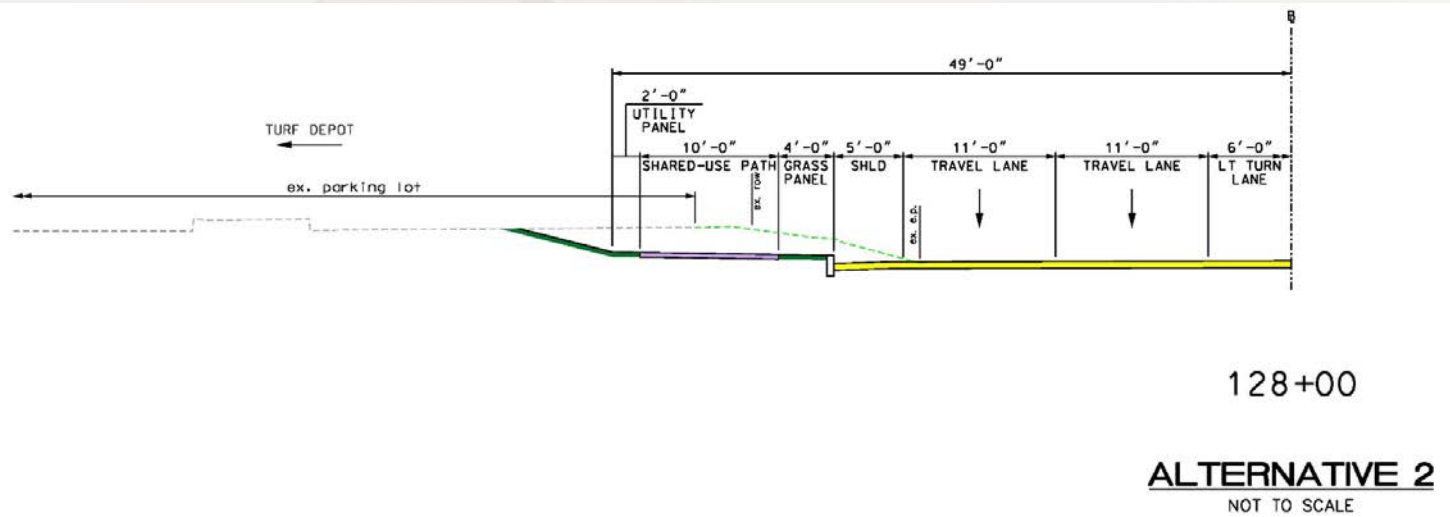
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ALTERNATIVE 2
NOT TO SCALE

LEGEND

- TRAVEL WAY OF PROPOSED ROADWAY
- SHOULDER OF PROPOSED ROADWAY
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- PROPOSED SIDEWALK
- ACCESS POINTS TO PROPOSED ROADWAY (DRIVES, etc)

Segment 1 - Alternative 2



- LEGEND**
- TRAVEL WAY OF PROPOSED ROADWAY
 - SHOULDER OF PROPOSED ROADWAY
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Segment 1 – Alternative 3

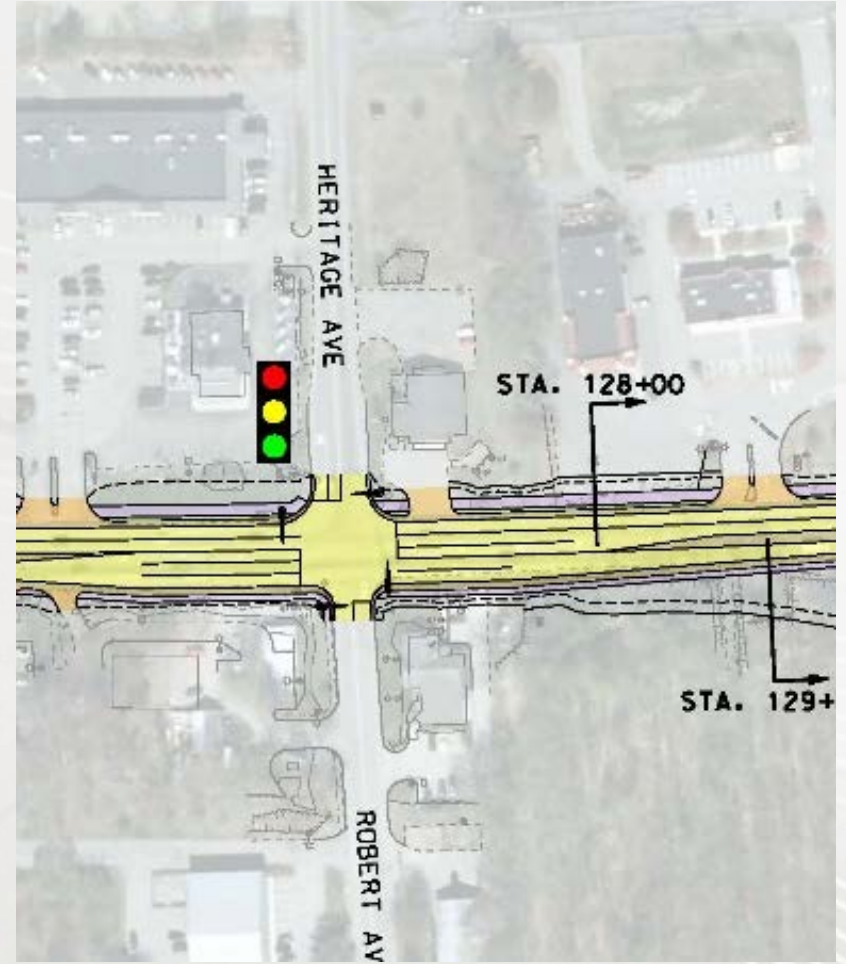
Route 1/Ocean Road

Add Right/Thru lane southbound

Route 1/Robert Ave

Add Right/Thru lane southbound

Extend two lane southbound to Walmart

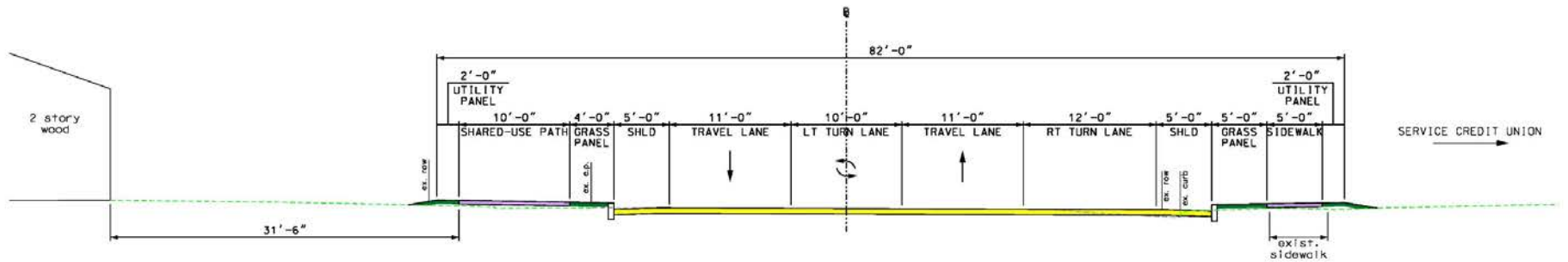


LEGEND

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- ACCESS POINTS TO PROPOSED ROADWAY (DRIVES, etc.)

Segment 1 – Alternative 3

ALTERNATIVE 3

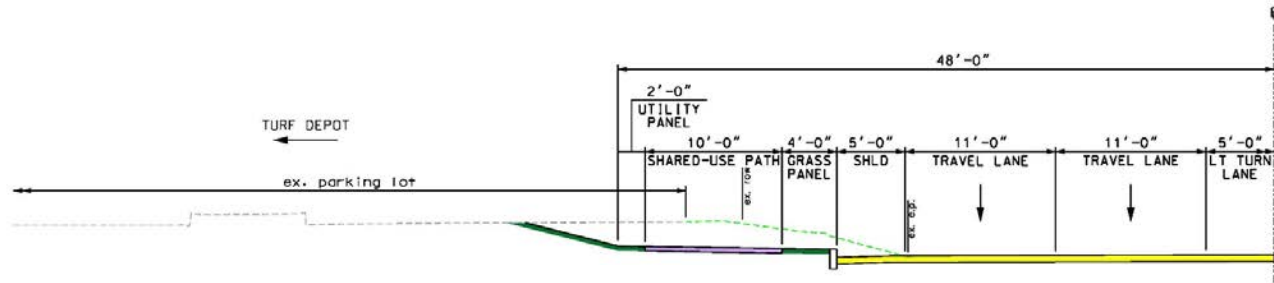


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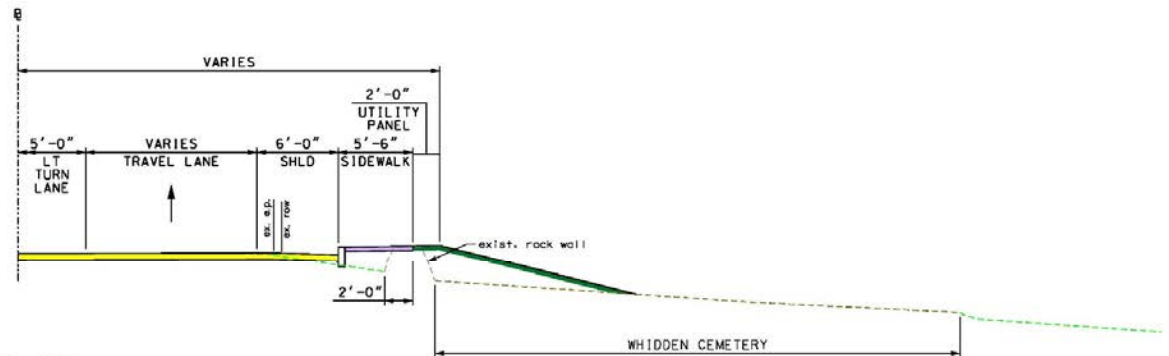
- LEGEND**
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 - PROPOSED SIDEWALK
 - ACCESS POINTS TO PROPOSED ROADWAY (DRIVES, etc)

Segment 1 – Alternative 3



128+00

ALTERNATIVE 3
NOT TO SCALE



129+50

ALTERNATIVE 3
NOT TO SCALE

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Alternative Comparison Summary

Portsmouth Route 1 Segment 1






	Alternative 1 5-Lane, with Median	Alternative 2 5-Lane, no Median	Alternative 3 Minimal Build	Alternative 4 Roundabout
Roadway Width	89'	90.5'	66.5'	Varies
Traffic Capacity	●	●	●	N/A
Bike and Ped Safety	●	●	●	N/A
Traffic Safety	●	●	●	N/A
Access Management	●	●	●	N/A
Utility Conflicts	●	●	●	N/A
ROW Impact	●	●	●	N/A
Cultural Resource Impacts	●	●	●	N/A
Stormwater Treatment/MS4 Compliance	●	●	●	N/A
Construction Impacts	●	●	●	N/A
Construction Cost	●	●	●	N/A

Segment 2 – Exist

- Approximately 0.45 miles
- Mix of multi-family, office, and commercial properties
- Bigger box businesses and larger strip mall
- Large undeveloped land adjacent to White Cedar Blvd
- One side road with 2 signalized intersections
- Generally 5-lane section, with center left turn lane

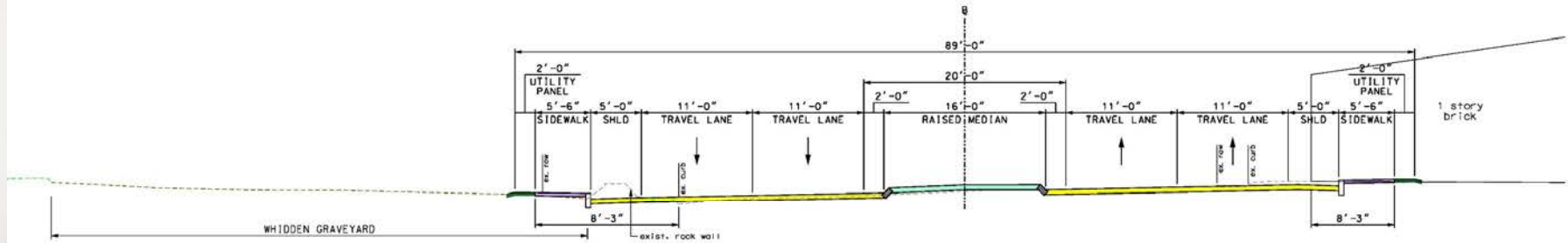
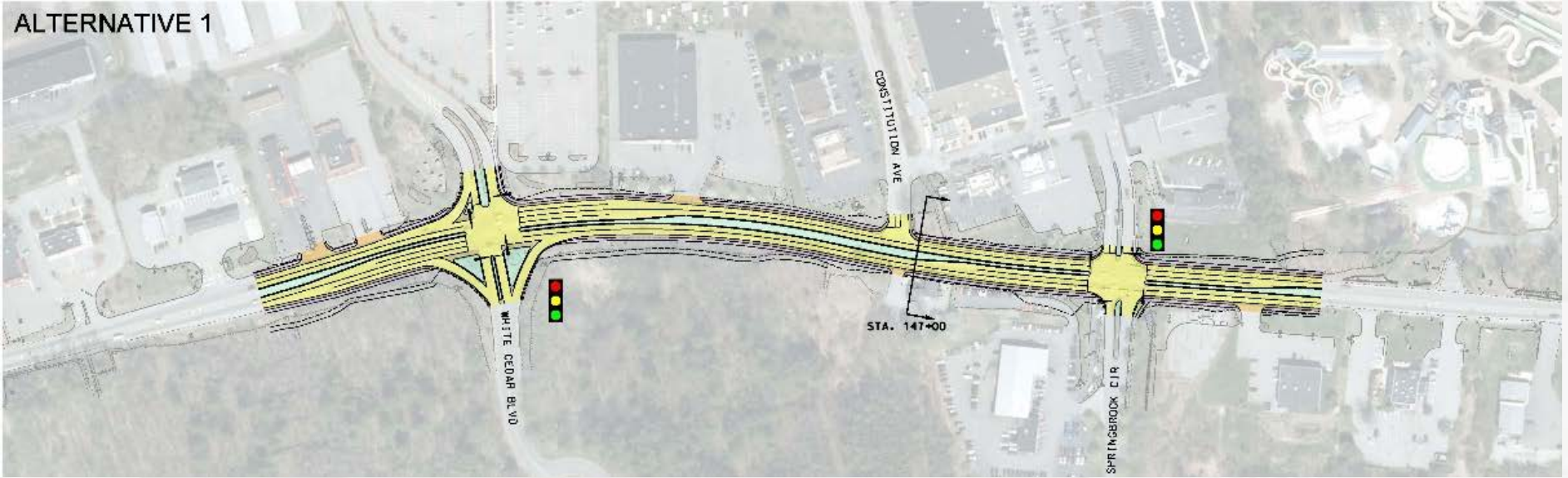


LEGEND

	TRAVEL WAY OF PROPOSED ROADWAY
	SHOULDER OF PROPOSED ROADWAY
	PROPOSED RAISED TRAFFIC ISLANDS
	PROPOSED SIDEWALK
	ACCESS POINTS TO PROPOSED ROADWAY (DRIVES, etc)

Segment 2 – Alternative 1

ALTERNATIVE 1



147+00

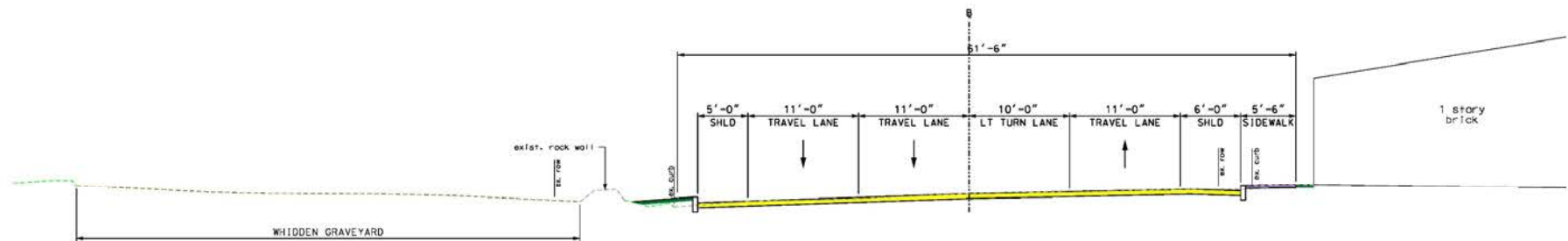
ALTERNATIVE 1
NOT TO SCALE

LEGEND

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- SHOULDER OF PROPOSED ROADWAY
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- PROPOSED SIDEWALK
- ACCESS POINTS TO PROPOSED ROADWAY (DRIVES, etc)

Segment 2 – Alternative 2

ALTERNATIVE 2



147+00

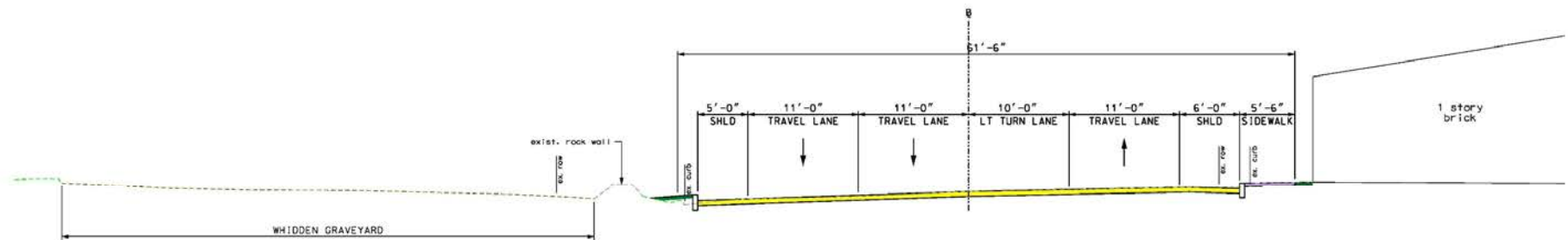
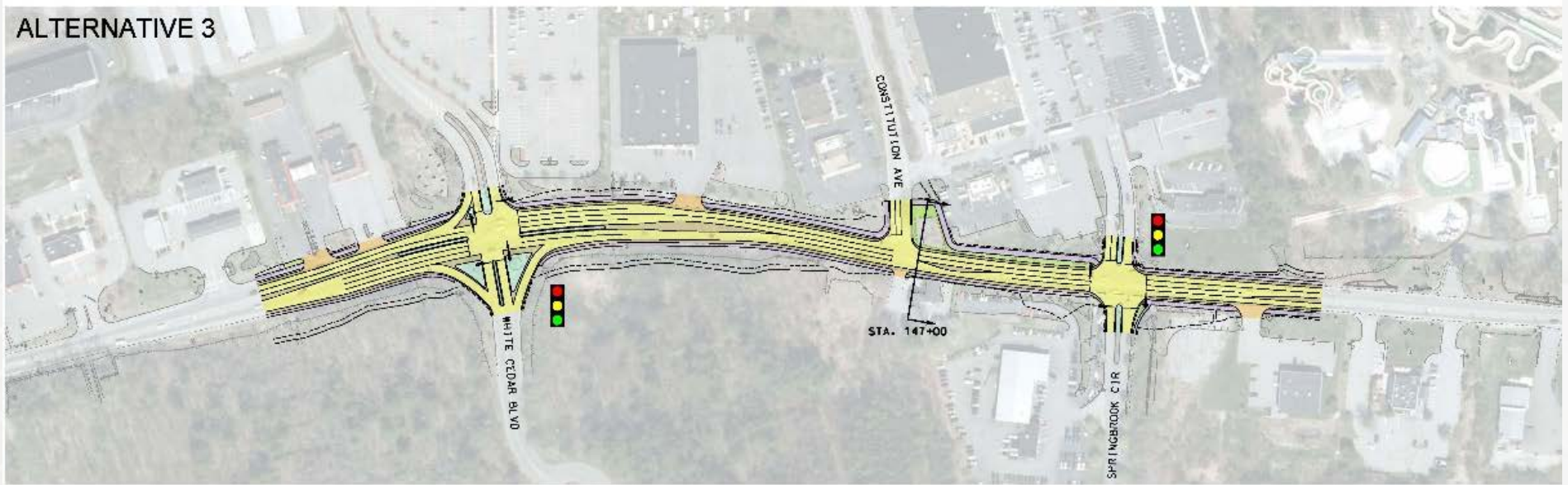
ALTERNATIVE 2
NOT TO SCALE

LEGEND

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- PROPOSED SIDEWALK
- ACCESS POINTS TO PROPOSED ROADWAY (DRIVES, etc)

Segment 2 – Alternative 3

ALTERNATIVE 3



147+00

ALTERNATIVE 3
NOT TO SCALE

LEGEND

- TRAVEL WAY OF PROPOSED ROADWAY
- SHOULDER OF PROPOSED ROADWAY
- PROPOSED RAISED TRAFFIC ISLANDS
- PROPOSED SIDEWALK
- ACCESS POINTS TO PROPOSED ROADWAY (DRIVES, etc)

Segment 2 – Alternatives 4A & 4B

ALTERNATIVE 4A



ALTERNATIVE 4B



LEGEND

- TRAVEL WAY OF PROPOSED ROADWAY
- SHOULDER OF PROPOSED ROADWAY
- PROPOSED RAISED TRAFFIC ISLANDS
- PROPOSED SIDEWALK
- ACCESS POINTS TO PROPOSED ROADWAY (DRIVES, etc)

Alternative Comparison Summary

Portsmouth Route 1 Segment 2

	Alternative 1 5-Lane, with Median	Alternative 2 5-Lane, no Median	Alternative 3 Minimal Build	Alternative 4 Roundabout
Roadway Width	89'	90.5'	66.5'	Varies
Traffic Capacity	●	●	●	●
Bike and Ped Safety	●	●	●	●
Traffic Safety	●	●	●	●
Access Management	●	●	●	●
Utility Conflicts	●	●	●	●
ROW Impact	●	●	●	●
Cultural Resource Impacts	●	●	●	●
Stormwater Treatment/MS4 Compliance	●	●	●	●
Construction Impacts	●	●	●	●
Construction Cost	●	●	●	●

Segment 3 – Existing

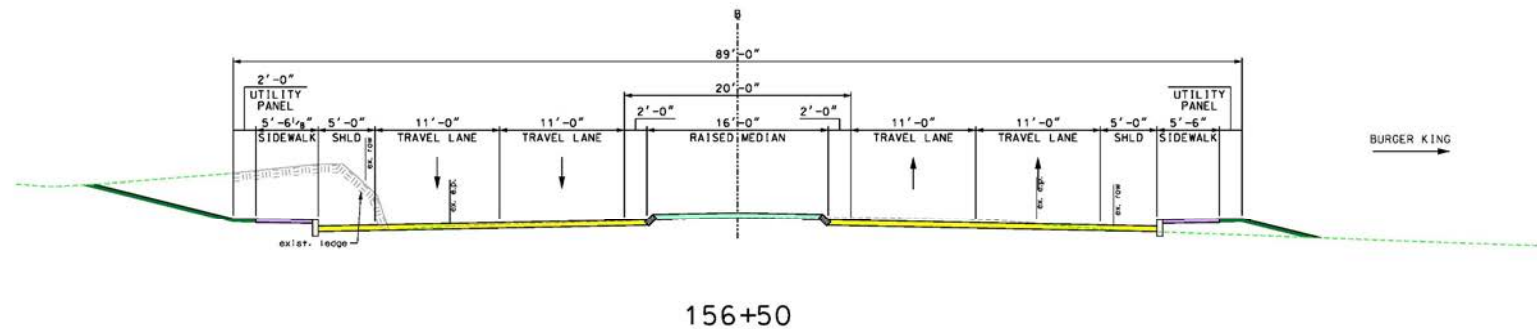
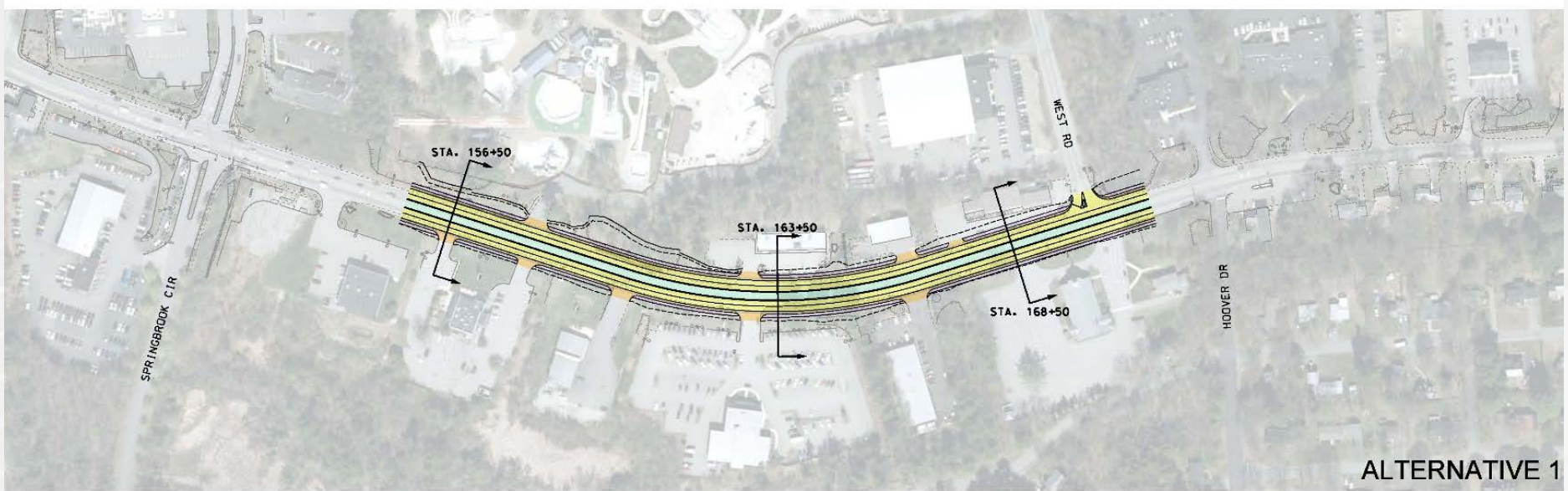
- Approximately 0.3 miles
- Mix of multi-family, office, and commercial properties
- Bigger box businesses and larger strip mall
- Water Country and West Road to industrial park
- One side road with no signalized intersections
- Generally 3-lane section, with center left turn lane



LEGEND

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- ACCESS POINTS TO PROPOSED ROADWAY (DRIVES, etc.)

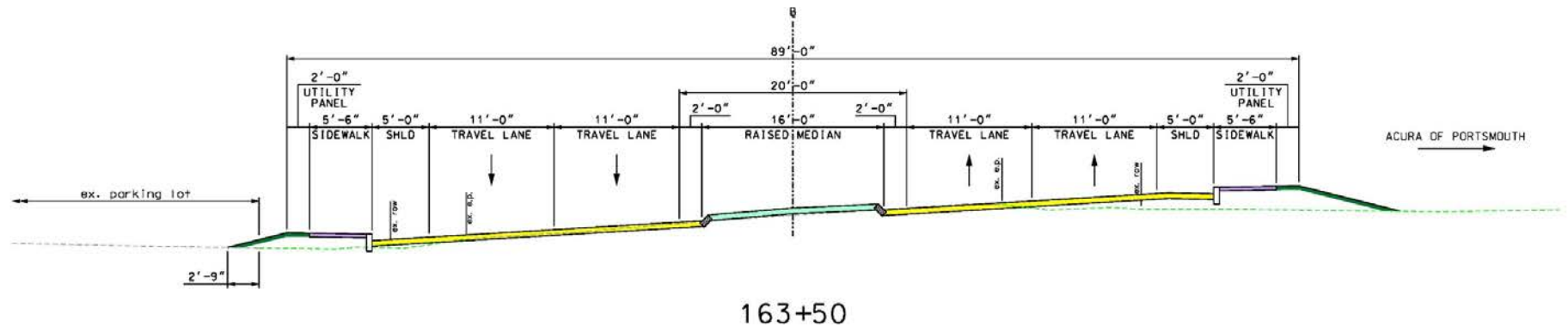
Segment 3 – Alternative 1



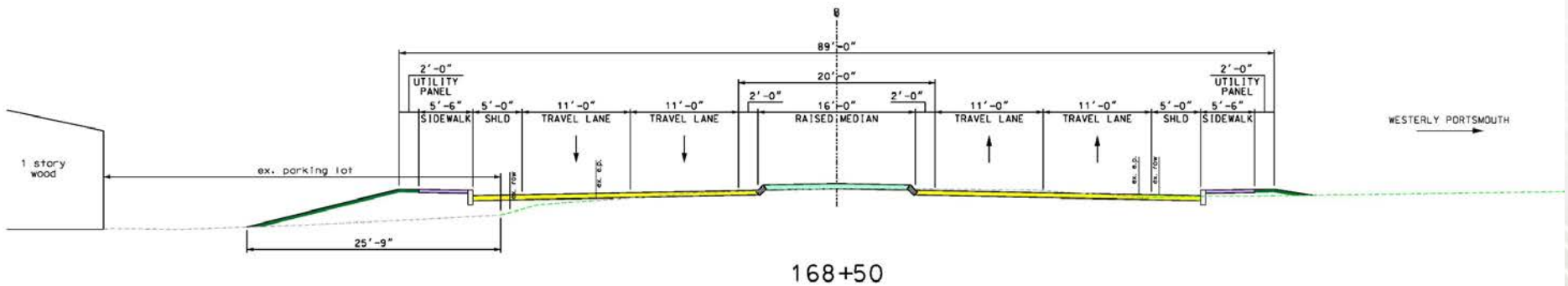
ALTERNATIVE 1
NOT TO SCALE

- LEGEND**
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Segment 3 – Alternative 1



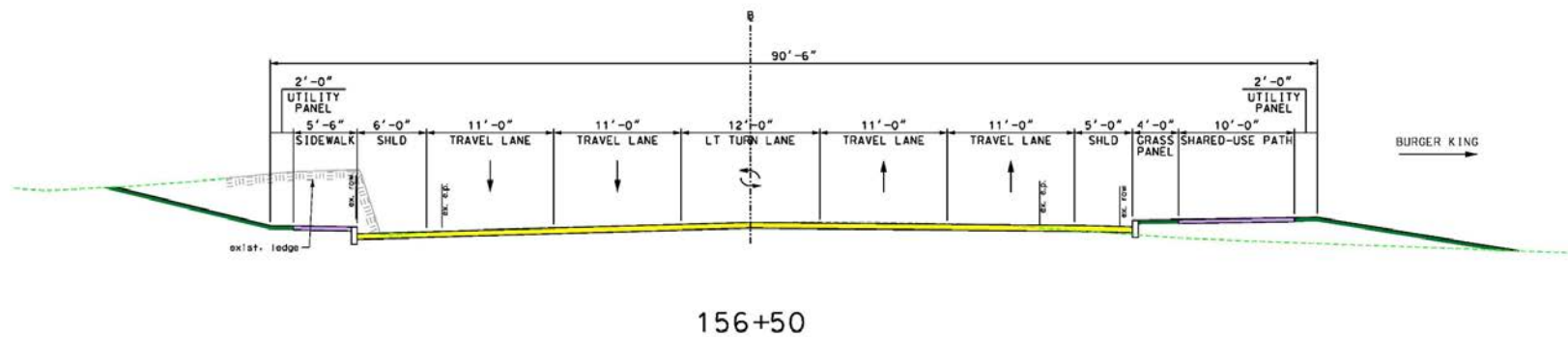
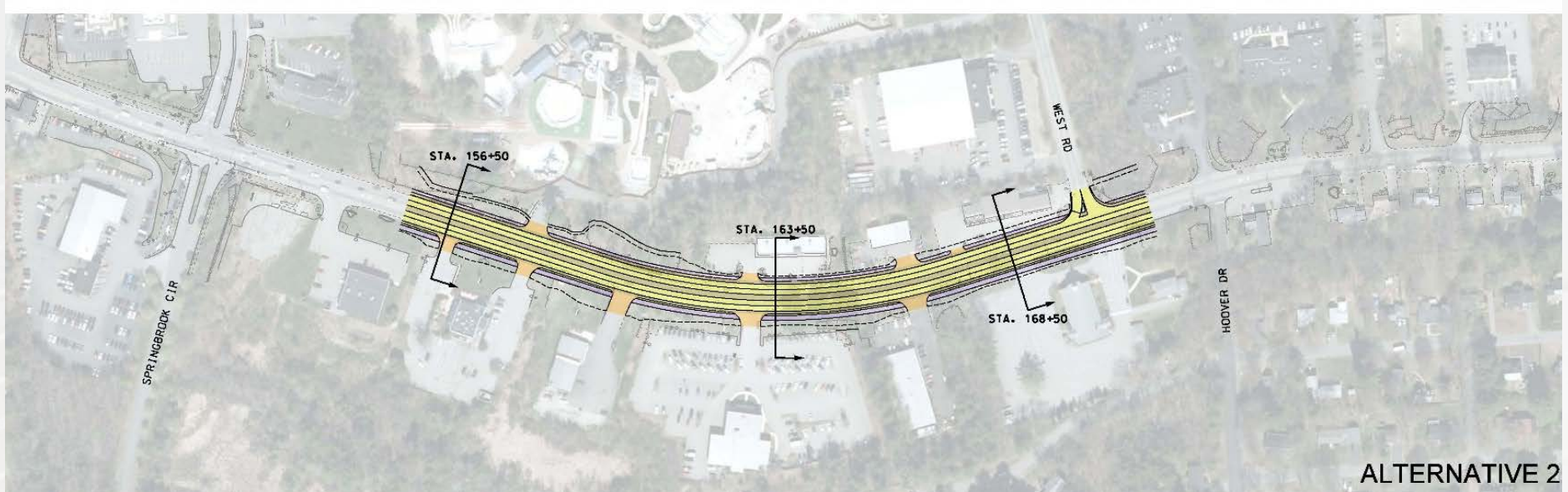
ALTERNATIVE 1
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ALTERNATIVE 1
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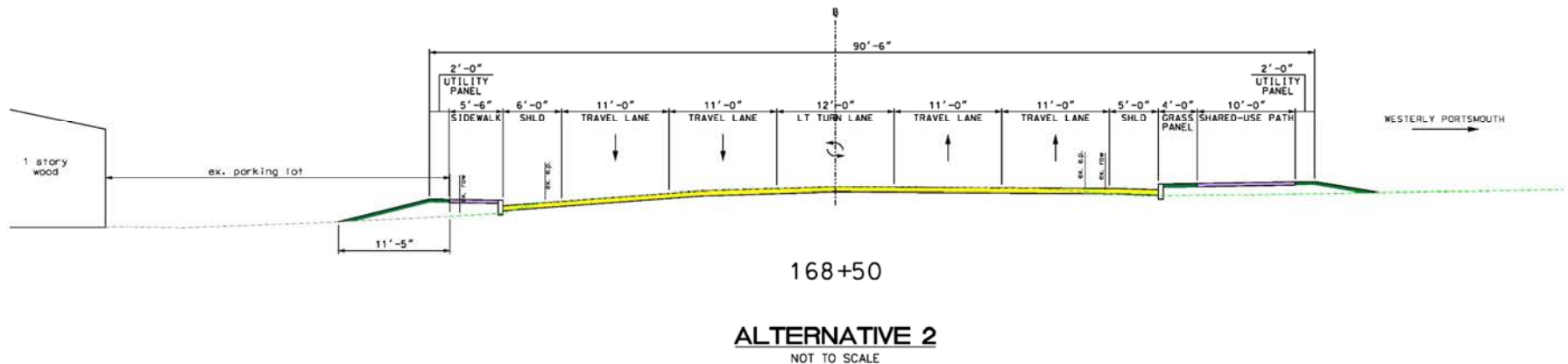
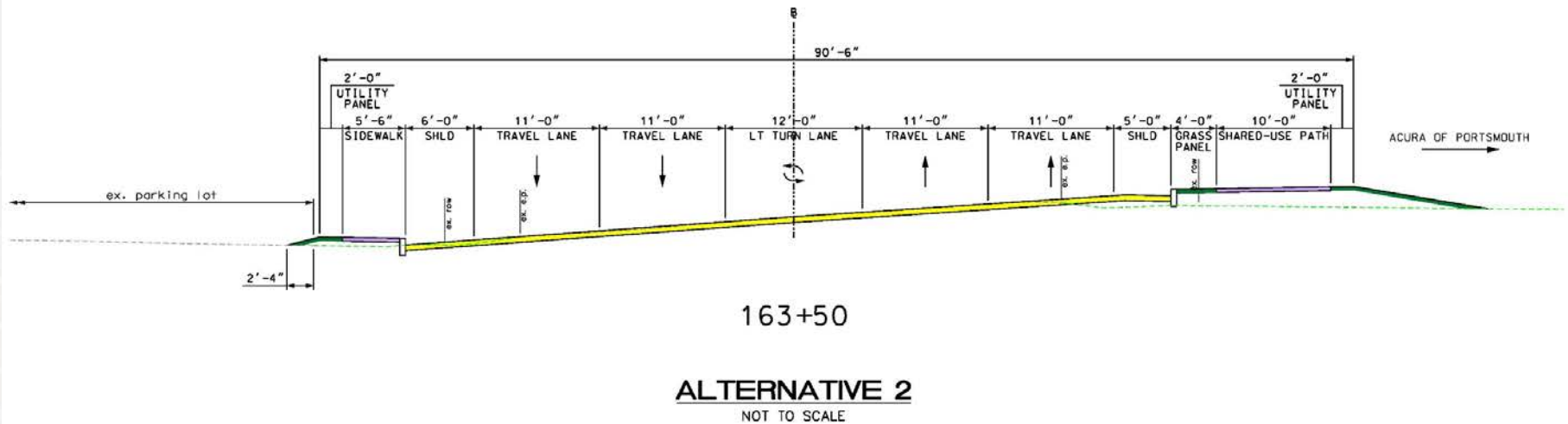
Segment 3 – Alternative 2



ALTERNATIVE 2
NOT TO SCALE

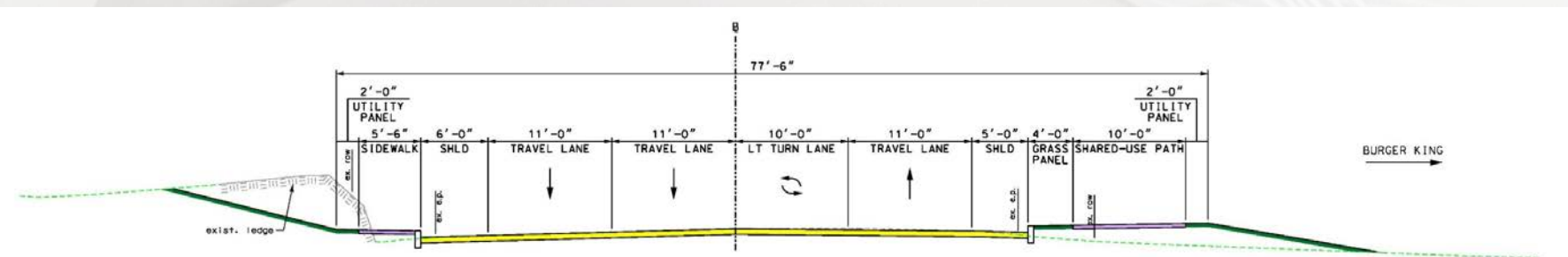
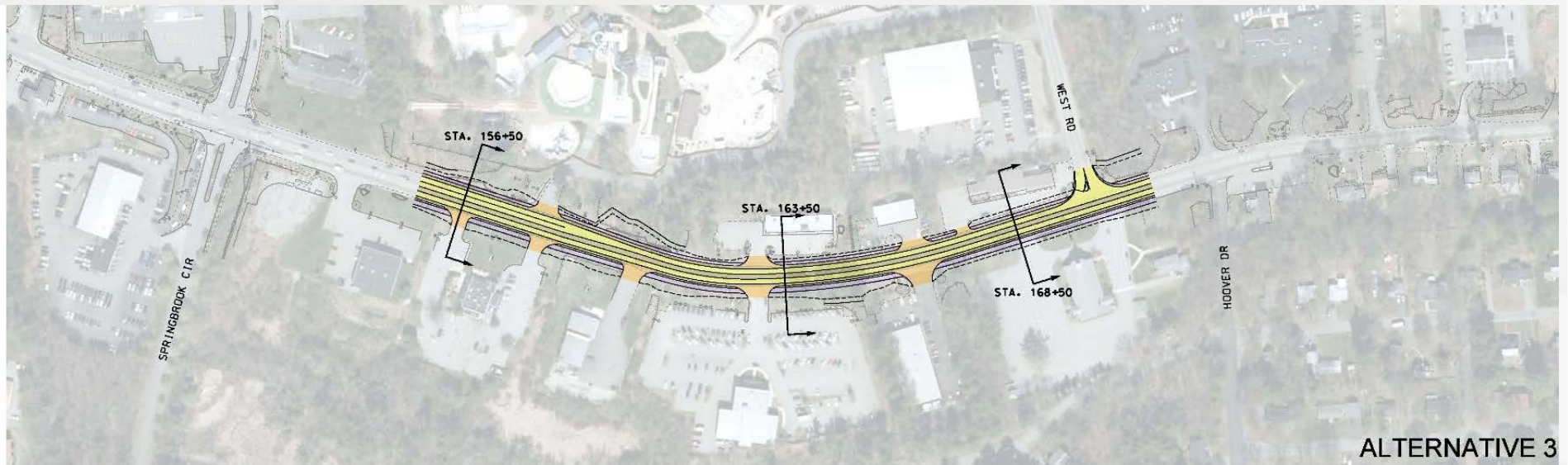
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Segment 3 – Alternative 2



- LEGEND**
- TRAVEL WAY OF PROPOSED ROADWAY
 - SHOULDER OF PROPOSED ROADWAY
 - PROPOSED RAISED TRAFFIC ISLANDS
 - PROPOSED SIDEWALK
 - ACCESS POINTS TO PROPOSED ROADWAY (DRIVES, etc)

Segment 3 – Alternative 3

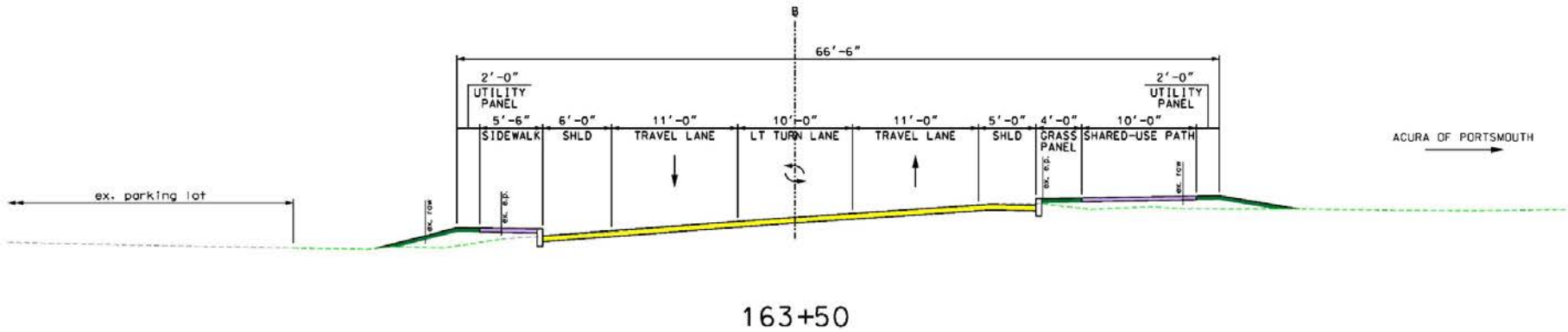


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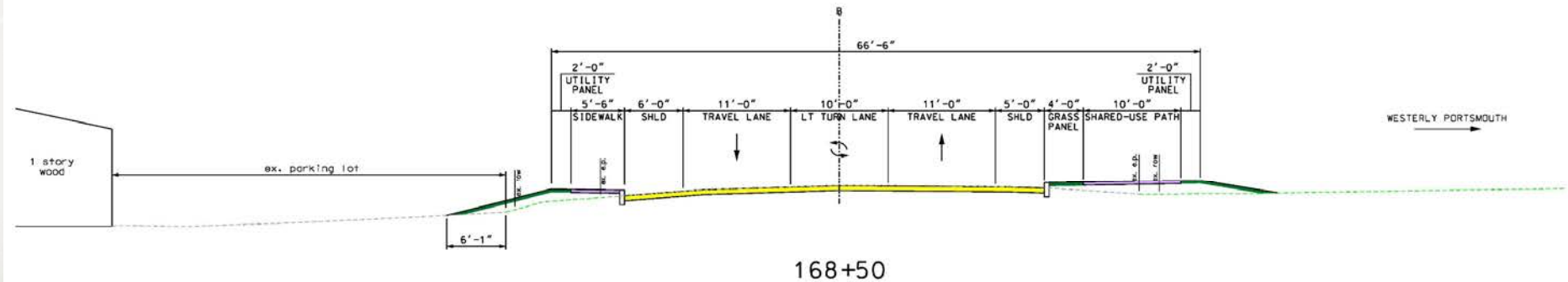
ALTERNATIVE 3
NOT TO SCALE

- LEGEND**
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 - SHOULDER OF PROPOSED ROADWAY
 - PROPOSED RAISED TRAFFIC ISLANDS
 - PROPOSED SIDEWALK
 - ACCESS POINTS TO PROPOSED ROADWAY (DRIVES, etc)

Segment 3 – Alternative 3



ALTERNATIVE 3
NOT TO SCALE



ALTERNATIVE 3
NOT TO SCALE

LEGEND

- TRAVEL WAY OF PROPOSED ROADWAY
- SHOULDER OF PROPOSED ROADWAY
- PROPOSED RAISED TRAFFIC ISLANDS
- PROPOSED SIDEWALK
- ACCESS POINTS TO PROPOSED ROADWAY (DRIVES, etc.)

Alternative Comparison Summary

Portsmouth Route 1 Segment 3

	Alternative 1 5-Lane, with Median	Alternative 2 5-Lane, no Median	Alternative 3 Minimal Build	Alternative 4 Roundabout
Roadway Width	89'	90.5'	66.5'	Varies
Traffic Capacity	●	●	●	N/A
Bike and Ped Safety	●	●	●	N/A
Traffic Safety	●	●	●	N/A
Access Management	●	●	●	N/A
Utility Conflicts	●	●	●	N/A
ROW Impact	●	●	●	N/A
Cultural Resource Impacts	●	●	●	N/A
Stormwater Treatment/MS4 Compliance	●	●	●	N/A
Construction Impacts	●	●	●	N/A
Construction Cost	●	●	●	N/A

Segment 4 – Existing

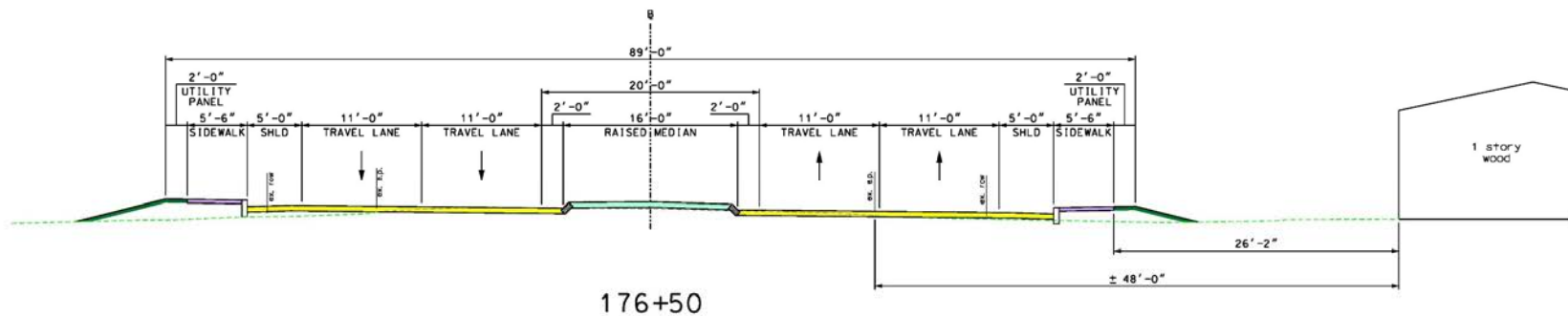
- Approximately 0.5 miles
- Mix of residential, office, and commercial properties
- Residential frontage to Elwyn Park
- Office parks along the west edge
- Four side roads with one signalized intersections
- Generally 3-lane section, with center left turn lane



LEGEND

- TRAVEL WAY OF PROPOSED ROADWAY
- SHOULDER OF PROPOSED ROADWAY
- PROPOSED RAISED TRAFFIC ISLANDS
- PROPOSED SIDEWALK
- ACCESS POINTS TO PROPOSED ROADWAY (DRIVES, etc.)

Segment 4 – Alternative 1



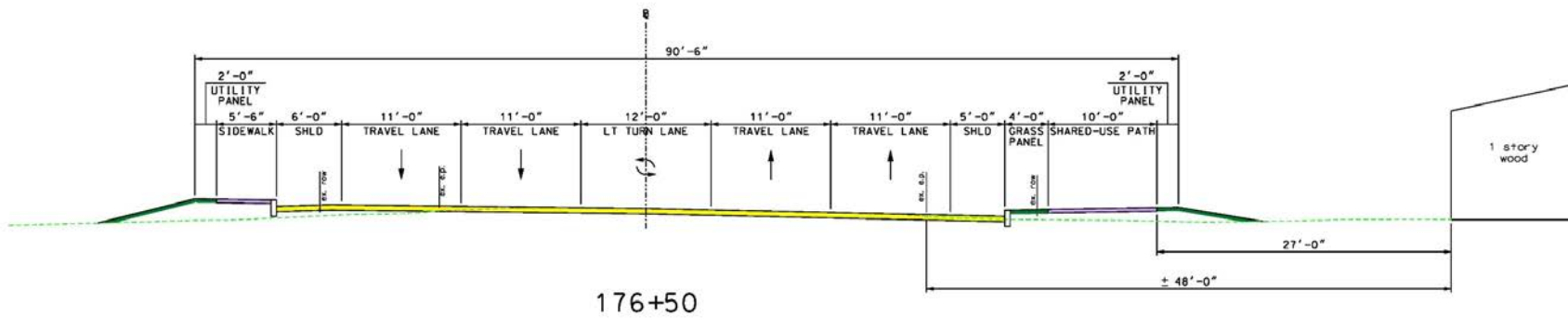
ALTERNATIVE 1
NOT TO SCALE

LEGEND

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- SHOULDER OF PROPOSED ROADWAY
- PROPOSED RAISED TRAFFIC ISLANDS
- PROPOSED SIDEWALK
- ACCESS POINTS TO PROPOSED ROADWAY (DRIVES, etc)

Segment 4 – Alternative 2

ALTERNATIVE 2



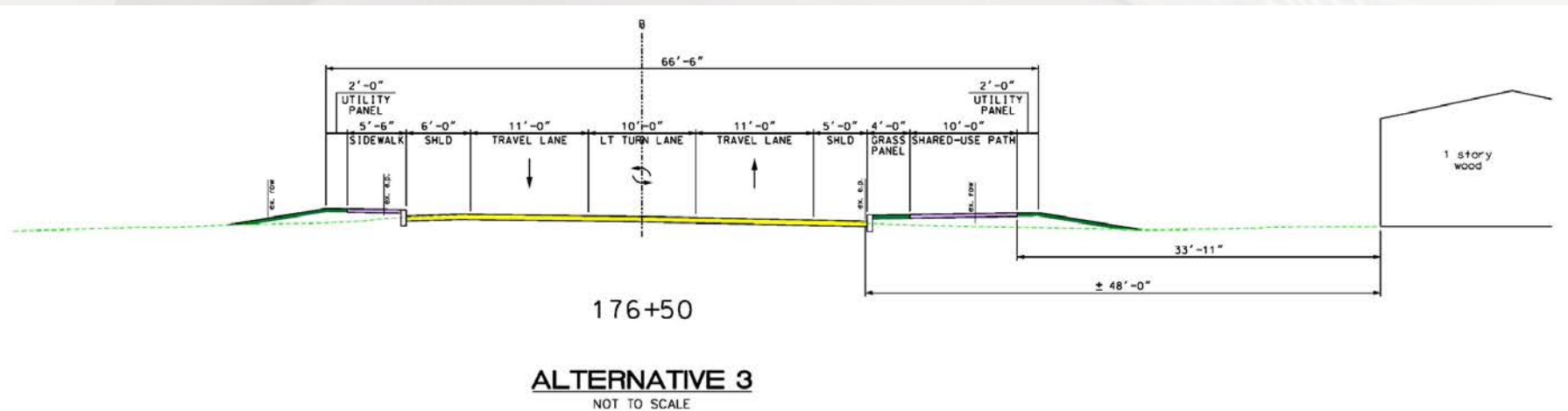
176+50

ALTERNATIVE 2

NOT TO SCALE

- LEGEND**
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Segment 4 – Alternative 3



- LEGEND**
- TRAVEL WAY OF PROPOSED ROADWAY
 - SHOULDER OF PROPOSED ROADWAY
 - PROPOSED RAISED TRAFFIC ISLANDS
 - PROPOSED SIDEWALK
 - ACCESS POINTS TO PROPOSED ROADWAY (DRIVES, etc.)

Alternative Comparison Summary

Portsmouth Route 1 Segment 4

	Alternative 1 5-Lane, with Median	Alternative 2 5-Lane, no Median	Alternative 3 Minimal Build	Alternative 4 Roundabout
Roadway Width	89'	90.5'	66.5'	Varies
Traffic Capacity	●	●	●	N/A
Bike and Ped Safety	●	●	●	N/A
Traffic Safety	●	●	●	N/A
Access Management	●	●	●	N/A
Utility Conflicts	●	●	●	N/A
ROW Impact	●	●	●	N/A
Cultural Resource Impacts	●	●	●	N/A
Stormwater Treatment/MS4 Compliance	●	●	●	N/A
Construction Impacts	●	●	●	N/A
Construction Cost	●	●	●	N/A

Project Costs

- Full Segment Construction Costs
- Includes Contingency and Construction Engineering

	1: 5 Lanes w/Median (85' Width)	2: 5 Lanes w/TWLTL (87' Width)	3: 3 Lanes w/TWLTL (63' Width)	4: Two Multi Lane Roundabouts*
Segment 1 Sub-Total	\$5,800,000	\$3,900,000	\$2,900,000	--
Segment 2 Sub-Total	\$3,800,000	\$2,700,000	\$2,400,000	\$5,100,000
Segment 3 Sub-Total	\$4,200,000	\$2,300,000	\$1,500,000	--
Segment 4 Sub-Total	\$5,000,000	\$2,800,000	\$2,100,000	--
Corridor Total	\$18,800,000	\$11,700,000	\$8,900,000	--

*Alternative 4 is 0.4 miles long and can replace any other Alternative's Segment 2.

Project Costs and Budget

- Budget
 - \$4.5 million – Construction
 - \$3.4 million – Right of Way
- Overall Cost
 - Segment Costs
 - Preferred Alternative per Segment

Project Costs and Budget

	1: 5 Lanes w/Median (85' Width)	2: 5 Lanes w/TWLTL (87' Width)	3: 3 Lanes w/TWLTL (63' Width)	4: Two Multi Lane Roundabouts*
Segment 1 Sub- Total	\$5,800,000	\$3,900,000	\$2,900,000	--
Segment 2 Sub- Total	\$3,800,000	\$2,700,000	\$2,400,000	\$5,100,000
Segment 3 Sub- Total	\$4,200,000	\$2,300,000	\$1,500,000	--
Segment 4 Sub- Total	\$5,000,000	\$2,800,000	\$2,100,000	--
Total	\$18,800,000	\$11,700,000	\$8,900,000	--

- Individual Alternatives by Segment
- Corridor Construction Cost - **\$14,500,000**

Project Costs and Budget

- Funding
 - 10 Year Plan Process
 - City CIP
 - Augment Bike and Pedestrian Elements
- Segment Priorities
 - Need
 - Costs
 - Connectivity
 - Phased Construction

Questions/Comments?



Next Steps

- Public Informational Meeting – Winter 2021
- Continue Data Gathering and Analysis
 - Environmental
 - Noise
 - Traffic Analysis
- Refine Conceptual Designs

Schedule

- Finalize Alternatives – Winter 2021
- Environmental Evaluation – Spring 2021
- Public Informational Meeting – Winter 2021
- Public Hearing – Summer/Fall 2021
- Finalize NEPA – Fall 2021
- Final Design - 2022 to 2024
- Construction – Beginning in 2025



Questions/Comments?

Contact Information

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