



# US101: SE 16<sup>th</sup> – SE 36<sup>th</sup> Street (Lincoln City) Project





# History

- September 2005 – OTIA Project US101: 19<sup>th</sup> -32<sup>nd</sup> Street (Lincoln City) Project is let to consultant for design and construction.
- December 2005 – Consultant bid and awarded contract to Pok Wan.
- January 2006 – Notice to Proceed was issued and work began.
- April 2006 – Consultant submits wall design for ODOT review. After review drawings are rejected.
- June 2006 – After third submittal, wall designs are conditionally approved pending final approval from ODOT geotechnical staff. Walls later rejected.
- August 2006 – Project is split into two parts Phase 1 and 2.
- August 2006 – Walls 1 & 2 are left in Phase 1. Wall 3 is moved to Phase 2.



## US101: 19<sup>th</sup> -32<sup>nd</sup> Street Phase 2 History

- Spring 2006 – ODOT kicks off Phase 2 project with an October 2006 bid let.
- Summer 2006 –Project limits are shortened to 29<sup>th</sup> Street.
- Fall 2006 –Project let date delayed.
- March/April 2007 – Project scope reduced to a 2 inch overlay and improvements moved to future STIP Project.



## US101 @ S 32<sup>nd</sup> Street

- 2001 – City hires consultant and looks at a signal at 32<sup>nd</sup> Street.
- 200? – Lincoln City has Nelscott Charrette – identifies the US101 @ S 32<sup>nd</sup> Street as a project in their vision plan.
- 2006(?) Project is added to the STIP as a modernization project.



## Today's Project

- The current project is a combination of the 2010 STIP Project to realign SW/SE 32<sup>nd</sup> Street and complete Phase 2 of the US101: 19<sup>TH</sup> – 32<sup>ND</sup> Street OTIA Project.
- 19<sup>th</sup> – 32<sup>nd</sup> Street – The majority of the work is already designed. There will be some changes in order to resolve the outstanding issues.
- Additionally, the previous project did not complete a traffic study. While looking at this entire section, we have identified there is a need for five lanes through this section as well as at the intersection of 32<sup>nd</sup> Street and US101.
- We understand the desire for a signal at 32<sup>nd</sup> Street. This design sets up the intersection for a signal, once it meets warrants.



# Realignment Options

- At our Project Kickoff Meeting the following options were forwarded for consideration:
  - Roundabout
  - Realign SW 32<sup>nd</sup> Street at grade with a signal (north realignment)
  - Realign SE 32<sup>nd</sup> Street at grade with a signal (south realignment)
  - Realign SW 32<sup>nd</sup> Street over US101
  - Realign SE 32<sup>nd</sup> Street over US101
  - Raise US101 over 32<sup>nd</sup> Street with a south realignment



## US101 over 32<sup>nd</sup> Street

### 32<sup>nd</sup> Street Tunnel Under US101

- Pros
  - Would not require signal power and maintenance.
  - Facilitates pedestrian crossing on 32<sup>nd</sup> Street.
  - Minimizes right of way costs.
  - Maintains frontage road along Nelscott Businesses.
- Cons
  - This area is in a sag and would create additional drainage issues.
  - Costs to tunnel are significantly higher than other options being considered.
  - Results in significant impacts to access along US101.
  - Traffic would access US101 at 29<sup>th</sup> or 35<sup>th</sup>.

### Raising US101 Grade Over 32<sup>nd</sup>

- Pros
  - Would not require signal power and maintenance.
  - Facilitates pedestrian crossing on 32<sup>nd</sup> Street.
- Cons
  - Requires minimum 16'0" clearance over 32<sup>nd</sup> Street.
  - Significant impacts to businesses along US101.
  - Does not allow access from US101 to Nelscott Businesses.
  - Eliminates the frontage road along the Nelscott Businesses.
  - Results in significant impacts to access along US101
  - Traffic would access US101 at 29<sup>th</sup> or 35<sup>th</sup>.



# Conceptual Drawing of Roundabout





# Coast Ave/SW 32<sup>nd</sup> Intersection





# SW 32<sup>nd</sup> Street





# SW 32<sup>nd</sup> ST. Looking West





# Eagles Lodge @ SW 32nd





# SW 32<sup>nd</sup> St Looking East





# Intersection of US101 & SW 32<sup>nd</sup> St





# Public Parking Area on SW 32<sup>nd</sup> ST





# Preliminary Evaluation- Roundabout

## PROS

- Does not require signal power
- Retains Historic Nelscott Businesses
- Potential environmental mitigation in roundabout
- Potential detention in roundabout
- Compatible with future 5 lane section

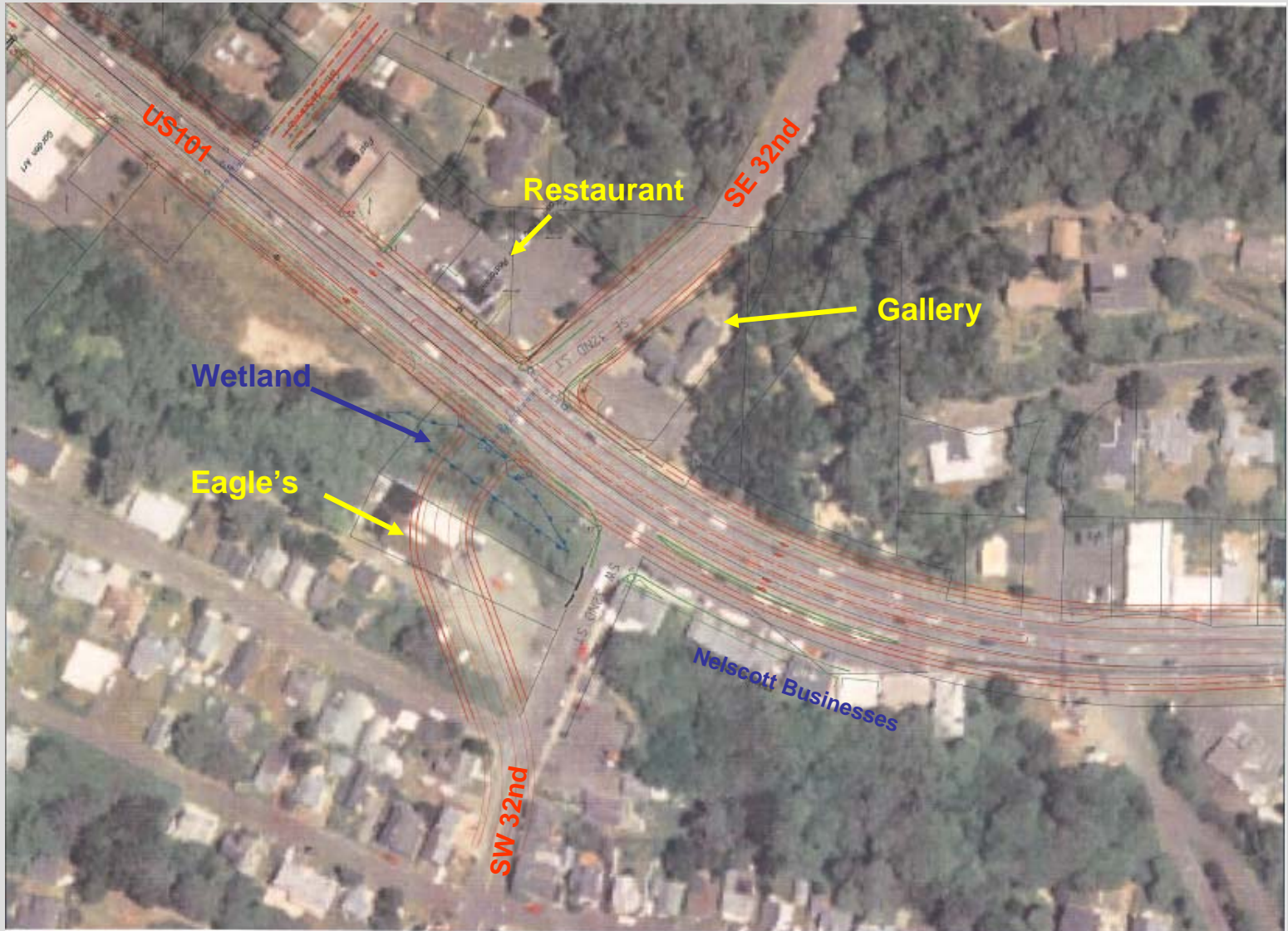
## CONS

- High volume of commercial vehicles
- Curve limits the sight distance on the SE Quad
- **Unbalanced volumes on legs\*\***
- **Functional classes of legs are different\*\***
- High Right of Way costs
- Impacts Eagle's Lodge, Art Gallery and Chinese Restaurant, possible two residents at Coast Ave
- Does not provide vehicle access to Nelscott Businesses
- Construction Staging may be difficult
- Storm drainage could be challenging due to sag
- Will impact the wetland area
- Needs 5 lanes at the time of construction

\*\* Indicates a Fatal Flaw



# Conceptual Drawing of North Realignment





# Intersection of SE 32nd ST & US101





# Art Gallery at SE 32<sup>nd</sup> ST





# Preliminary Evaluation for At Grade Signal North Alignment

## PROS

- Meets the needs for commercial vehicle volumes
- Provides pedestrian crossings at signal
- Retains Historic Nelscott Businesses
- Potential on-site environmental mitigation in NW Quad
- Potential Detention area in NW Quad
- Compatible with future 5 lane section

## CONS

- Curve limits sight distance of signal (visibility of signal SE Quad)
- Long term maintenance of signal power costs
- High Right of Way costs
- Impacts Eagle's Lodge and possibly two residences on Coast Ave
- May need to redirect access to Nelscott Businesses
- Storm drainage may be challenging due to sag
- Impacts wetlands
- Needs 5 lanes at construction

**\*\*Indicates Fatal Flaw**



# Conceptual Drawing of South Realignment





# Preliminary Evaluation for At Grade Signal South Alignment

## PROS

- Meets needs for commercial vehicle volumes
- Provides pedestrian crossings at signal
- Minimizes Right of Way costs
- Retains Historic Nelscott Businesses
- Minimizes impact to Eagle's Lodge, Chinese Restaurant and Art Gallery
- Minimal impact to wetlands
- Potential on-site mitigation in NW Quad
- Potential Detention in NW Quad
- Compatible with future 5 lane section

## CONS

- Curve limits sight distance of signal in SE Quad
- Long term maintenance of signal power costs
- Does not provide vehicle access to Nelscott Businesses
- Needs 5 lanes at the time of construction

**\*\*Indicates Fatal Flaw**



# Preliminary Evaluation of 32<sup>nd</sup> Street over US101

## PROS

- Possibly meets volume to capacity ratios (mobility standards)
- Mitigate US101 crossing with a pedestrian island
- Two alternative routes for left turn movements (29<sup>th</sup> or 35<sup>th</sup>)
- Does not require signal power costs
- Minimizes Right of Way Costs
- Retains Historic Nelscott Businesses
- Minimizes take on Eagle's Lodge, Chinese Restaurant and Art Gallery
- Possibly would maintain vehicle access at Nelscott
- Minimal impacts to wetland
- Potential on-site mitigation in NW Quad
- Potential detention in NW Quad
- Needs 3 lanes on US101 at time of construction, compatible with future 5 lanes.

## CONS

- Pedestrian crossing would be on the structure
- Access issues at City Parking and Eagle's Lodge
- Additional Bridge Construction Costs (\$1.5 to \$2 Million)



# Project Funding

## Current Funding

Preliminary Engineering:	\$500,000
Right of Way:	250,000

## 2006-2009 STIP Funding

Construction:	\$4,250,000
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## Funding from OTIA Project

Construction:	<u>\$4,600,000</u>
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<b>Total Available:</b>	<b>\$9,600,000</b>
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## Scoping Estimates

Preliminary Engineering:	\$840,000
Right of Way:	2,000,000*
Possible Access Plan:	80,000
Air/Noise Study:	75,000
Structures:	1,700,000
Construction:	<u>10,200,000**</u>
<b>Total Needed:</b>	<b>\$14,895,000</b>

**Additional Funds Needed: \$5,295,000**

\*These costs are based on an average of the costs from the different design alternatives. Depending on the alternative chosen, the costs could be slightly less.

\*\*Costs for each option at 32<sup>nd</sup> Street are approximately \$5.6M, assuming no structures are built.