Appendix C –
Level 1 Screening Alternatives

ALTERNATIVE 1 (SOUTH BRIDGE)

ADVANTAGES:

- Utilizes existing SR 302 corridor/alignment from Key Peninsula Highway through the curve near Springbrook Lane NW (west of the Purdy Spit).
- Provides direct tie to SR 16/Burnham Drive. interchange, which would result in improved mainline operations
- Maintains existing local access along SR 302 up to where the new alignment crosses Henderson Inlet.
- Maximizes use of the existing SR 302 right-of-way.
- Improves emergency response times by providing a direct route between the Peninsula and the new Gig Harbor Hospital.

DISADVANTAGES:

- Requires a new long span structure to across Henderson Inlet to Woodhill Drive.
- Requires additional right-of-way to extend the corridor from Springbrook Lane to Woodhill Drive and SR 16/Burnham Drive interchange.
- The new alignment from Springbrook Lane to Burnham Drive extends through existing residential neighborhoods and would include impacts to numerous properties along the waterfront.
- Requires relocation of multiple residential properties.
- Requires substantial improvement of the SR 16/Burnham Drive interchange.
- Placement of bridge and abutments would be located within Landslide Hazard Areas
- Potential impacts to aquifer recharge areas as identified in the WSDOT GeoDatabase.
- Substantial traffic impacts during construction along the existing SR 302 alignment.
- Potential impacts to the 100-year floodplain as identified in the WSDOT GeoDatabase.
- Potential impacts to the community's visual quality along Burley Lagoon/Henderson Inlet with construction of a new, larger bridge.
- Potential impacts to Minter Creek.
- Potential increase in maintenance costs with construction of larger structure

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SCALE IN FEET

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WASHINGTON STATE DEPARTMENT OF TRANSPORTATION (WSDOT)

ALTERNATIVE 1 (SOUTH BRIDGE) - SR 302

DATE

SEPTEMBER 2008

FIGURE

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SCALE IN FEET

ALTERNATIVE 2 (EXISTING ALIGNMENT)

ADVANTAGES:

- Utilizes entire SR 302 corridor between Elgin Clifton Road and SR 302 Spur.
- Maximizes use of existing SR 302 right-of-way.
- Maintains the existing local access along the entire SR 302 corridor.
- Maintains emergency response times

DISADVANTAGES:

- Potential horizontal curve sight distance concerns on SR 302 alignment between 94th Avenue and Burley Lagoon.
- Bridge construction over Burley Lagoon may impact eelgrass beds and shellfish harvest areas identified by geographic information system (GIS) mapping.
- Substantial traffic impacts during construction along the SR 302 alignment.
- Requires replacement of the existing bridges across Burley Lagoon.
- Impacts a county park along the Purdy Spit, Section 4(f).
- Potential impacts to local businesses at the intersection of SR 302 and the SR 302 Spur.
- Requires modification/deviation to horizontal/vertical curve geometrics identified along the SR 302 alignment west of Burley Lagoon.
- Existing alignment is within the Seismic Hazard Area and Landslide Hazard Area identified in the WSDOT GeoDatabase.
- Potential impacts to the 100-year floodplain as identified in the WSDOT GeoDatabase.
- Potential impacts to National Historic Register location identified in the WSDOT GeoDatabase.

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WASHINGTON STATE DEPARTMENT OF TRANSPORTATION (WSDOT)

ALTERNATIVE 2 (EXISTING ALIGNMENT) - SR 302

DATE

SEPTEMBER 2008

FIGURE

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SCALE IN FEET

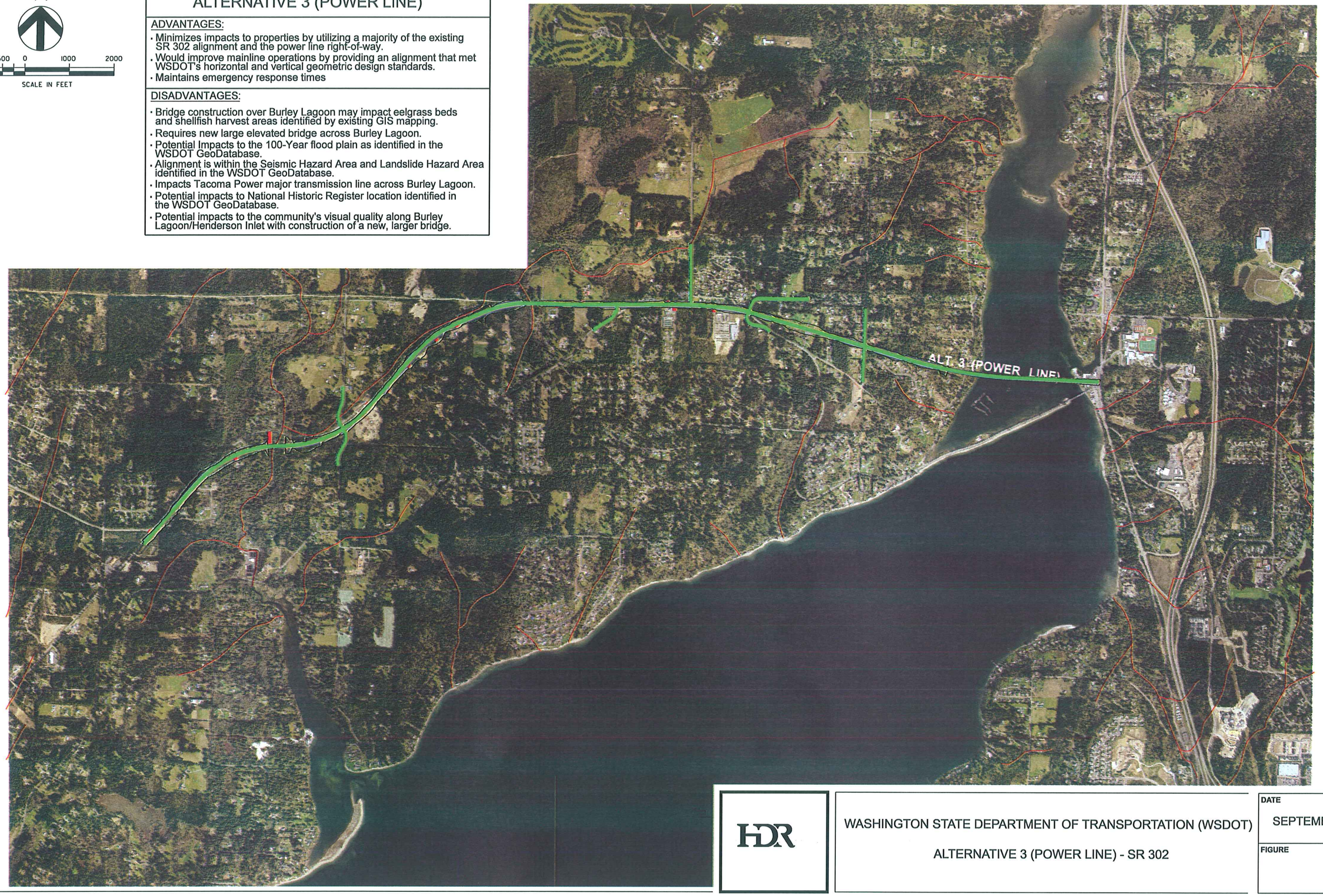
ALTERNATIVE 3 (POWER LINE)

ADVANTAGES:

- Minimizes impacts to properties by utilizing a majority of the existing SR 302 alignment and the power line right-of-way.
- Would improve mainline operations by providing an alignment that met WSDOT's horizontal and vertical geometric design standards.
- Maintains emergency response times

DISADVANTAGES:

- Bridge construction over Burley Lagoon may impact eelgrass beds and shellfish harvest areas identified by existing GIS mapping.
- Requires new large elevated bridge across Burley Lagoon.
- Potential Impacts to the 100-Year flood plain as identified in the WSDOT GeoDatabase.
- Alignment is within the Seismic Hazard Area and Landslide Hazard Area identified in the WSDOT GeoDatabase.
- Impacts Tacoma Power major transmission line across Burley Lagoon.
- Potential impacts to National Historic Register location identified in the WSDOT GeoDatabase.
- Potential impacts to the community's visual quality along Burley Lagoon/Henderson Inlet with construction of a new, larger bridge.



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WASHINGTON STATE DEPARTMENT OF TRANSPORTATION (WSDOT)

ALTERNATIVE 3 (POWER LINE) - SR 302

DATE

SEPTEMBER 2008

FIGURE

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SCALE IN FEET

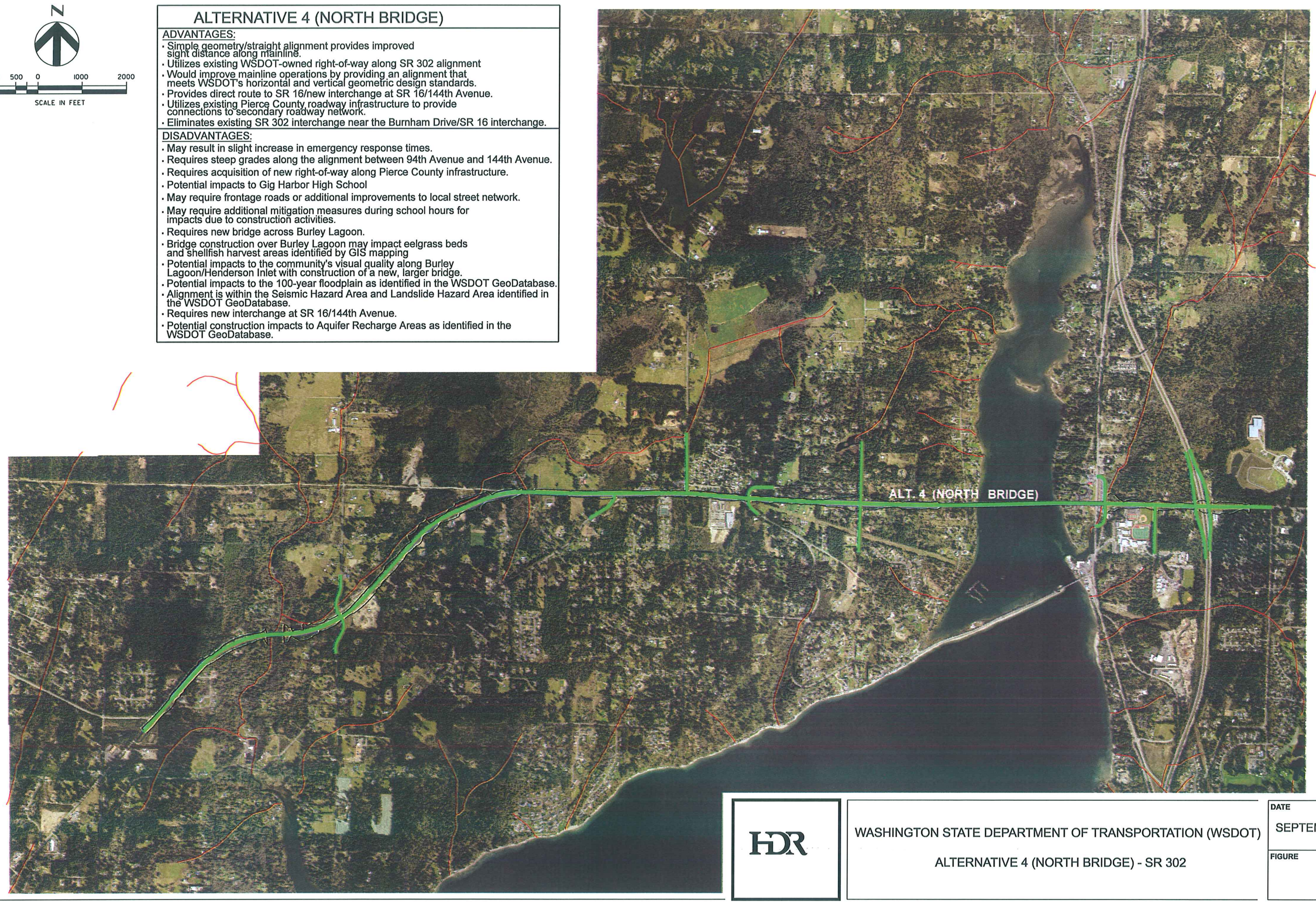
ALTERNATIVE 4 (NORTH BRIDGE)

ADVANTAGES:

- Simple geometry/straight alignment provides improved sight distance along mainline.
- Utilizes existing WSDOT-owned right-of-way along SR 302 alignment
- Would improve mainline operations by providing an alignment that meets WSDOT's horizontal and vertical geometric design standards.
- Provides direct route to SR 16/new interchange at SR 16/144th Avenue.
- Utilizes existing Pierce County roadway infrastructure to provide connections to secondary roadway network.
- Eliminates existing SR 302 interchange near the Burnham Drive/SR 16 interchange.

DISADVANTAGES:

- May result in slight increase in emergency response times.
- Requires steep grades along the alignment between 94th Avenue and 144th Avenue.
- Requires acquisition of new right-of-way along Pierce County infrastructure.
- Potential impacts to Gig Harbor High School
- May require frontage roads or additional improvements to local street network.
- May require additional mitigation measures during school hours for impacts due to construction activities.
- Requires new bridge across Burley Lagoon.
- Bridge construction over Burley Lagoon may impact eelgrass beds and shellfish harvest areas identified by GIS mapping
- Potential impacts to the community's visual quality along Burley Lagoon/Henderson Inlet with construction of a new, larger bridge.
- Potential impacts to the 100-year floodplain as identified in the WSDOT GeoDatabase.
- Alignment is within the Seismic Hazard Area and Landslide Hazard Area identified in the WSDOT GeoDatabase.
- Requires new interchange at SR 16/144th Avenue.
- Potential construction impacts to Aquifer Recharge Areas as identified in the WSDOT GeoDatabase.



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ALTERNATIVE 4 (NORTH BRIDGE) - SR 302

DATE

SEPTEMBER 2008

FIGURE

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SCALE IN FEET

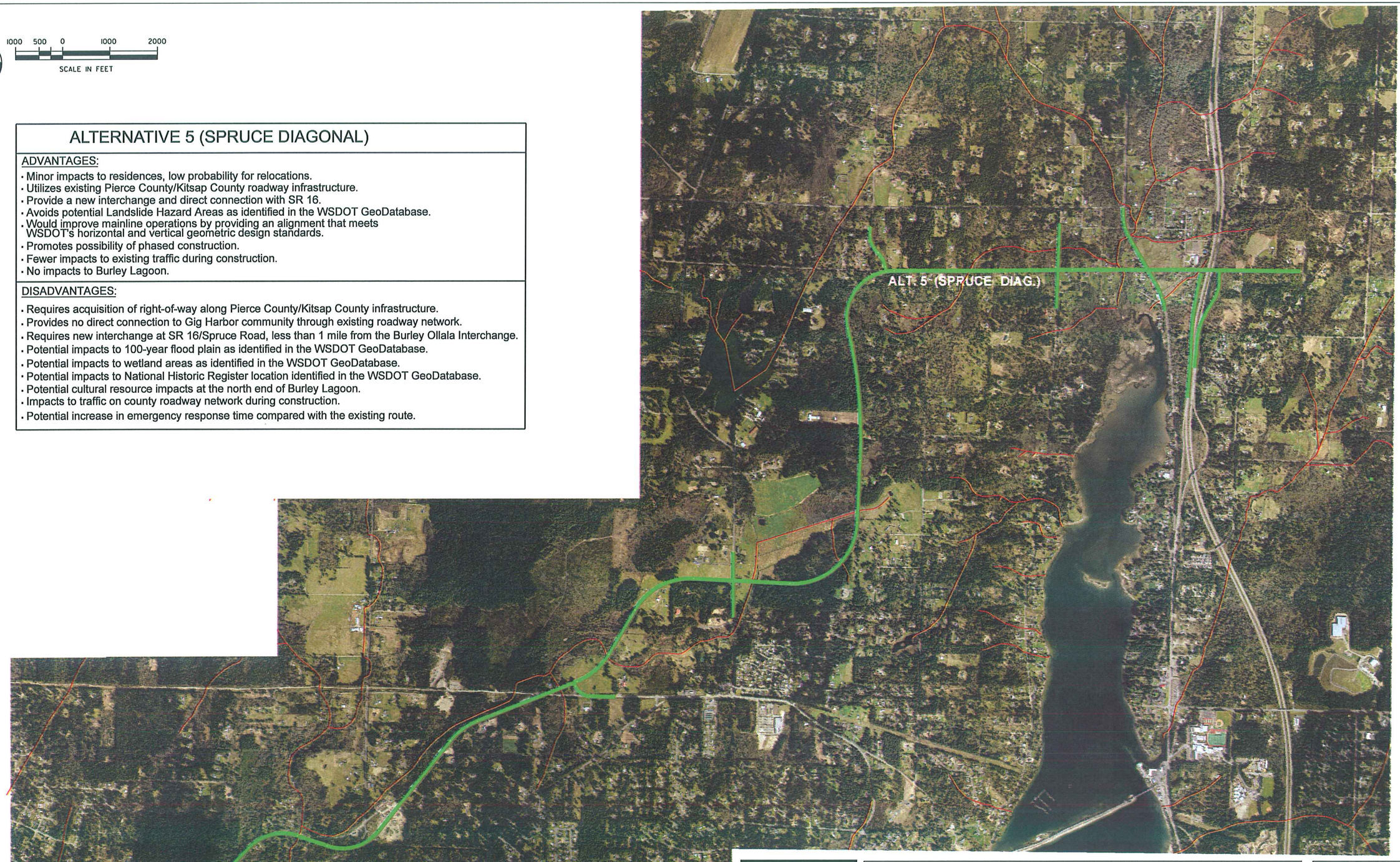
ALTERNATIVE 5 (SPRUCE DIAGONAL)

ADVANTAGES:

- Minor impacts to residences, low probability for relocations.
- Utilizes existing Pierce County/Kitsap County roadway infrastructure.
- Provide a new interchange and direct connection with SR 16.
- Avoids potential Landslide Hazard Areas as identified in the WSDOT GeoDatabase.
- Would improve mainline operations by providing an alignment that meets WSDOT's horizontal and vertical geometric design standards.
- Promotes possibility of phased construction.
- Fewer impacts to existing traffic during construction.
- No impacts to Burley Lagoon.

DISADVANTAGES:

- Requires acquisition of right-of-way along Pierce County/Kitsap County infrastructure.
- Provides no direct connection to Gig Harbor community through existing roadway network.
- Requires new interchange at SR 16/Spruce Road, less than 1 mile from the Burley Ollala Interchange.
- Potential impacts to 100-year flood plain as identified in the WSDOT GeoDatabase.
- Potential impacts to wetland areas as identified in the WSDOT GeoDatabase.
- Potential impacts to National Historic Register location identified in the WSDOT GeoDatabase.
- Potential cultural resource impacts at the north end of Burley Lagoon.
- Impacts to traffic on county roadway network during construction.
- Potential increase in emergency response time compared with the existing route.



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ALTERNATIVE 5 (SPRUCE DIAGONAL) - SR 302

DATE

SEPTEMBER 2008

FIGURE

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SCALE IN FEET

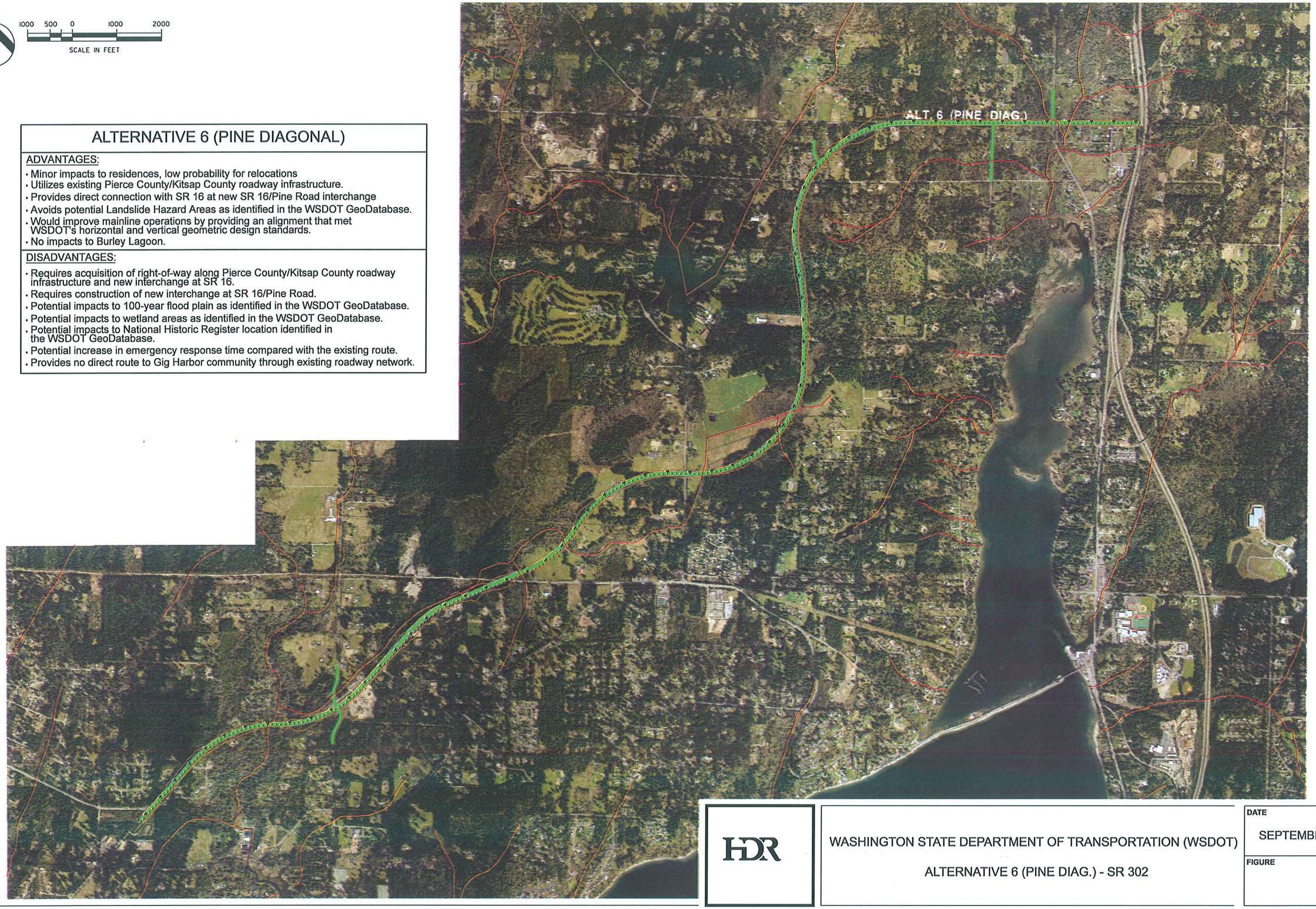
ALTERNATIVE 6 (PINE DIAGONAL)

ADVANTAGES:

- Minor impacts to residences, low probability for relocations
- Utilizes existing Pierce County/Kitsap County roadway infrastructure.
- Provides direct connection with SR 16 at new SR 16/Pine Road interchange
- Avoids potential Landslide Hazard Areas as identified in the WSDOT GeoDatabase.
- Would improve mainline operations by providing an alignment that met WSDOT's horizontal and vertical geometric design standards.
- No impacts to Burley Lagoon.

DISADVANTAGES:

- Requires acquisition of right-of-way along Pierce County/Kitsap County roadway infrastructure and new interchange at SR 16.
- Requires construction of new interchange at SR 16/Pine Road.
- Potential impacts to 100-year flood plain as identified in the WSDOT GeoDatabase.
- Potential impacts to wetland areas as identified in the WSDOT GeoDatabase.
- Potential impacts to National Historic Register location identified in the WSDOT GeoDatabase.
- Potential increase in emergency response time compared with the existing route.
- Provides no direct route to Gig Harbor community through existing roadway network.



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ALTERNATIVE 6 (PINE DIAG.) - SR 302

DATE

SEPTEMBER 2008

FIGURE

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SCALE IN FEET

ALTERNATIVE 7 (PINE / 118TH)

ADVANTAGES:

- Connects into SR 16 at existing interchange at Burnham Drive via the SR 302 Spur.
- Minor impacts to residence; low probability for relocations.
- Would improve mainline operations by providing an alignment that met WSDOT's horizontal and vertical geometric design standards.
- Utilizes existing Pierce County/Kitsap County roadway infrastructure.
- Reduces impacts to traffic on SR 302 alignment during construction.

DISADVANTAGES:

- Requires steep grades along the alignment between Madrona Road and SR 16.
- Impacts traffic on 118th Avenue and SW Pine Road during construction.
- Requires multiple creek crossings (bridges) along 118th Avenue.
- Potential impacts to wetland areas as identified in the WSDOT GeoDatabase.
- Potential impacts to the100-Year floodplain as identified in the WSDOT GeoDatabase.
- Increases the overall length of the SR 302 corridor.
- Potential cultural resource impacts at the north end of Burley Lagoon.
- Potential increase in emergency response time compared with the existing route.

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ALTERNATIVE 7 (PINE/118TH) - SR 302

DATE

SEPTEMBER 2008

FIGURE

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1200 600 0 1200 2400

SCALE IN FEET

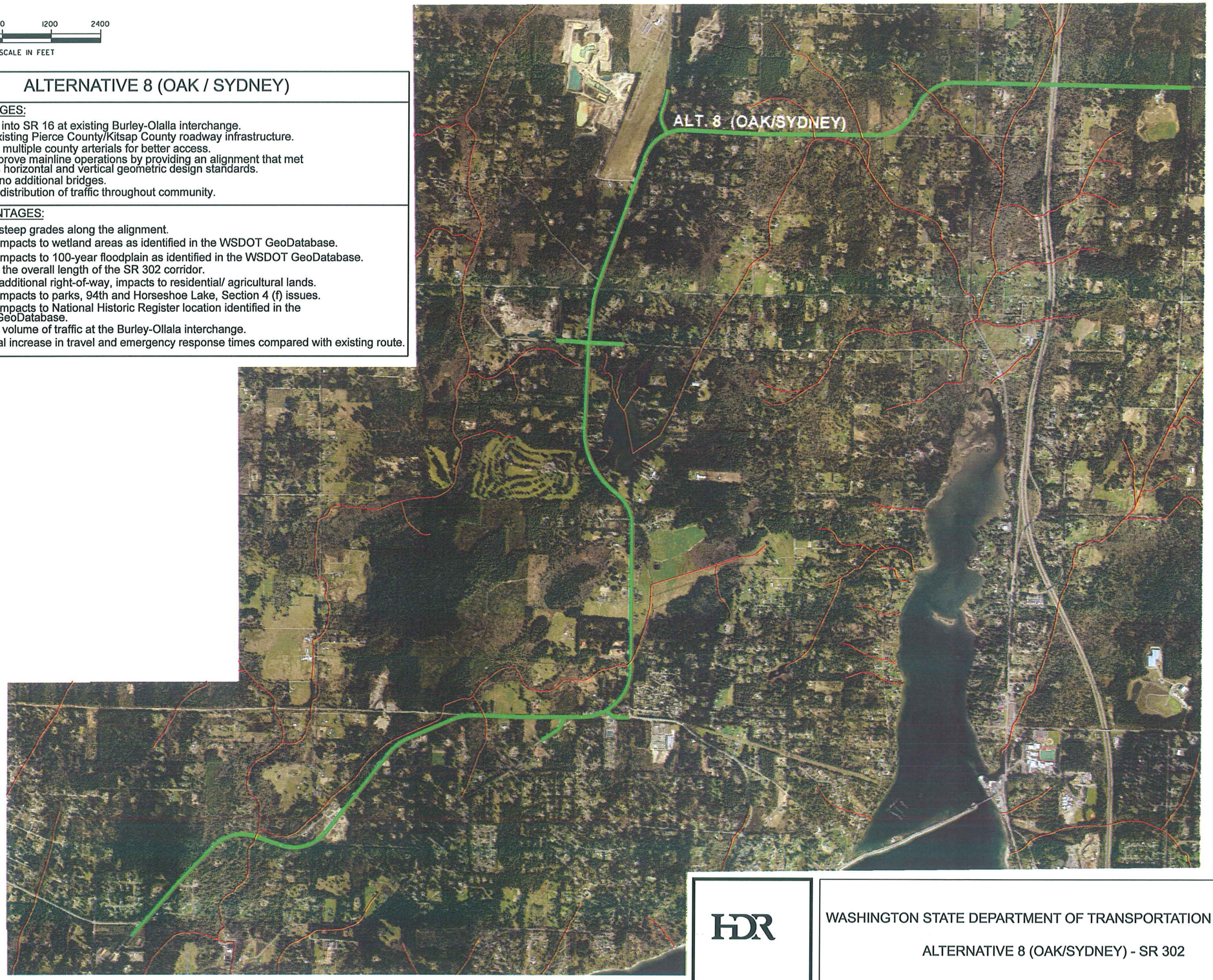
ALTERNATIVE 8 (OAK / SYDNEY)

ADVANTAGES:

- Connects into SR 16 at existing Burley-Olalla interchange.
- Utilizes existing Pierce County/Kitsap County roadway infrastructure.
- Intersects multiple county arterials for better access.
- Would improve mainline operations by providing an alignment that met WSDOT's horizontal and vertical geometric design standards.
- Requires no additional bridges.
- Improves distribution of traffic throughout community.

DISADVANTAGES:

- Requires steep grades along the alignment.
- Potential impacts to wetland areas as identified in the WSDOT GeoDatabase.
- Potential impacts to 100-year floodplain as identified in the WSDOT GeoDatabase.
- Increases the overall length of the SR 302 corridor.
- Requires additional right-of-way, impacts to residential/ agricultural lands.
- Potential impacts to parks, 94th and Horseshoe Lake, Section 4 (f) issues.
- Potential impacts to National Historic Register location identified in the WSDOT GeoDatabase.
- Increases volume of traffic at the Burley-Ollala interchange.
- Substantial increase in travel and emergency response times compared with existing route.



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ALTERNATIVE 8 (OAK/SYDNEY) - SR 302

DATE

SEPTEMBER 2008

FIGURE

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SCALE IN FEET

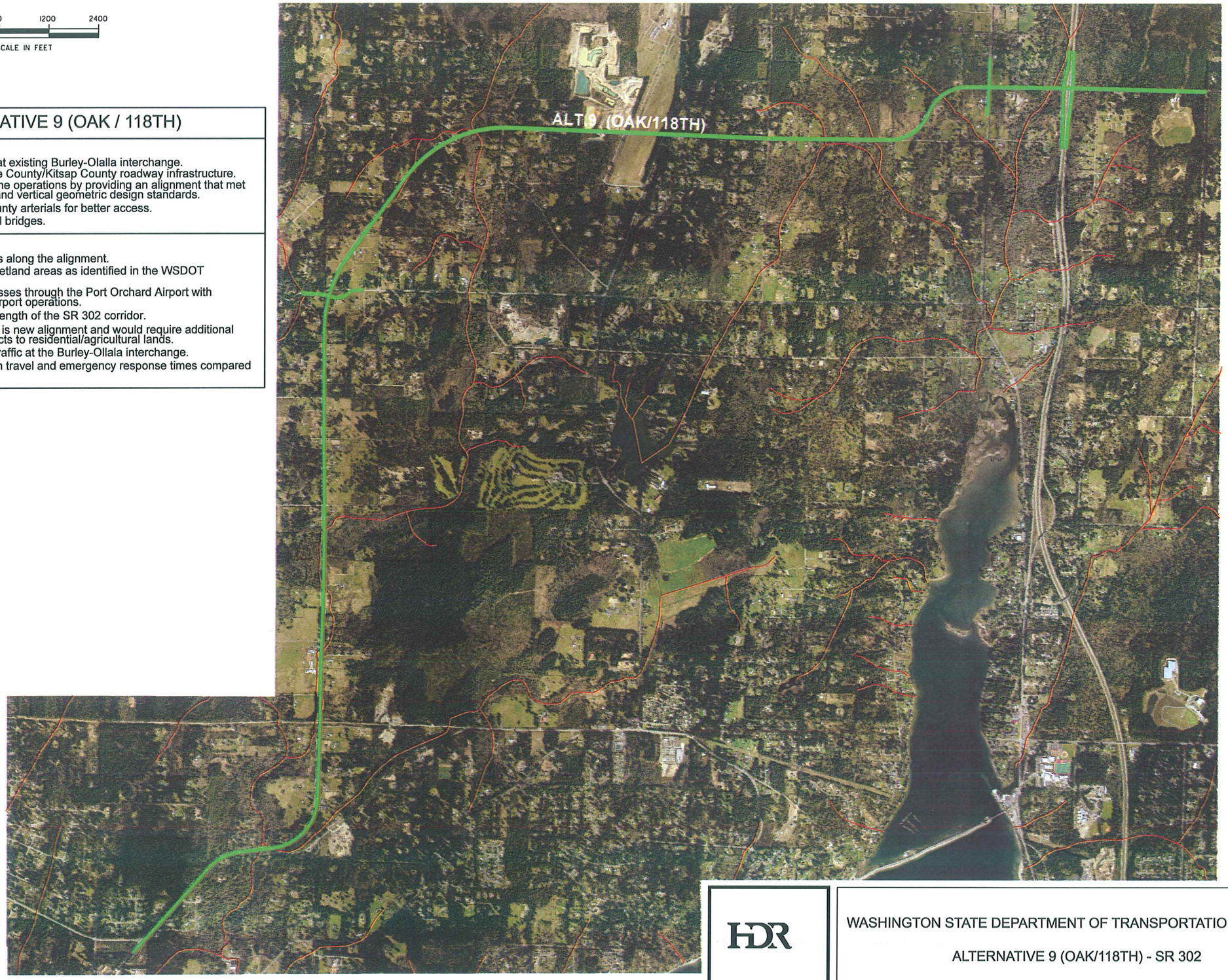
ALTERNATIVE 9 (OAK / 118TH)

ADVANTAGES:

- Connects into SR 16 at existing Burley-Olalla interchange.
- Utilizes existing Pierce County/Kitsap County roadway infrastructure.
- Would improve mainline operations by providing an alignment that met WSDOT's horizontal and vertical geometric design standards.
- Intersects multiple county arterials for better access.
- Requires no additional bridges.

DISADVANTAGES:

- Requires steep grades along the alignment.
- Potential impacts to wetland areas as identified in the WSDOT GeoDatabase.
- Proposed corridor crosses through the Port Orchard Airport with potential impacts to airport operations.
- Increases the overall length of the SR 302 corridor.
- Part of this alternative is new alignment and would require additional right-of-way and impacts to residential/agricultural lands.
- Increased volume of traffic at the Burley-Ollala interchange.
- Substantial increase in travel and emergency response times compared with existing route.



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ALTERNATIVE 9 (OAK/118TH) - SR 302

DATE

SEPTEMBER 2008

FIGURE