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August 17, 2005

Gregg Zimmerman, Planning/ Building/ Public Works Administrator
City of Renton
1055 South Grady Way
Renton, WA 98055

FILE COPY

Dear Mr. Zimmerman:

Re: SR 167 Mainline Alignment – Renton Southern City Limit to I-405
Letter of Concurrence

This letter documents that the City of Renton (City) and the Washington State Department of Transportation (WSDOT) concur with the SR 167 mainline alignment from I-405 to the southern Renton city limit at the SW 43rd Street interchange.

How are I-405 Projects Defined, Funded, and Phased?

As you know, the I-405 Corridor Environmental Impact Statement was approved by the FHWA and FTA in October 2002 with a Record of Decision (ROD). The ROD identified the Selected Alternative (the I-405 Master Plan) which provided transportation improvements throughout the I-405 study area including a conceptual SR 167 mainline alignment. The design detail provided in the Selected Alternative is conceptual design, or approximately one percent design. In spring 2003, the Washington State Legislature approved a Nickel Funding Package providing more than \$4 billion over 10 years for a variety of highway improvements throughout the state. In spring 2005, the Legislature approved the Transportation Partnership Account (TPA) providing more than \$8 billion over 16 years for transportation projects statewide. Projects on I-405 and SR 167 in the City of Renton were included in both of these transportation bills. Together, the Nickel and TPA fund the overall scope defined as the “Renton Nickel Improvement Project”. The Renton Nickel Improvement Project is the first step toward achieving the I-405 Master Plan. The NEPA Environmental Assessment (EA) for the Renton Nickel Improvement Project began in January 2005, and project construction is scheduled to begin in late 2007.

Part of the original “Nickel Project” funds work to advance the I-405 Master Plan “footprint” through the City of Renton. Footprint design ensures that the Renton Nickel Improvement Project is consistent with the Master Plan and that it does not unintentionally constrain the Master Plan Projects.

What is the SR 167 Mainline Alignment?

A mainline alignment concept is provided in the I-405 ROD. To refine the Master Plan alignment concept, WSDOT and the City closely examined alignment options: widen to the west, widen to the east, and combination. The combination alignments incorporate alignment

choices from the east and west options. The alignment options were further evaluated based on the connection between SR 167 and Rainier Avenue S. Please refer to the attached document, "SR 167 Alignment and Rainier Connection Recommendation" memo, for a detailed description of the connection design and the factors evaluated in the screening process. The combination alignments were advanced to establish the Rainier connection design.

What is the Rainier Connection Design?

The Rainier connection design defines how Rainier Avenue S. connects to SR 167. WSDOT and the City closely examined two connection options: Direct Connection, which connects Rainier Avenue S. directly to SR 167 similar to its current configuration, and Indirect Connection, which connects Rainier Avenue S to East Valley Road with a new general-purpose half interchange to SR 167. Please refer to the previously mentioned memo for the detail description of the screening process. The recommended option is a direct connection between SR 167 and Rainier Avenue S, as exists today, with a SR 167 HOV only half-interchange in the vicinity of SW 27th Street and an I-405 HOV only interchange at Rainier Avenue South. The project team has worked closely with City staff to examine the assumptions used to develop the solution and to evaluate the results.

Why is there a need for Footprint Certainty?

The I-405 / SR 167 interchange is a key component of the I-405 Corridor program. Discussions are currently underway to develop a regionally funded transportation package. In order to be in a position for these funds the I-405 team needs to develop additional detail to define the project. The project team needs to understand the design of the I-405 Implementation Plan, which includes many improvements in common with the I-405 Master Plan. Two future Master Plan components that influence the design of the Implementation Plan are the SR 167 mainline alignment and the SR 167 connection design. These Master Plan components need to be understood at a footprint level to ensure that the Implementation Plan does not unintentionally constrain future projects.

What are the Next Steps?

The environmental assessment for the South Renton Implementation Plan Project is scheduled to kick off in January 2006. This environmental assessment will cover the TPA funded SR 515 (Talbot) interchange as well as improvements anticipated with additional regional funding. WSDOT will work closely with City staff to refine the mainline alignment as the engineering progresses. The project team will consider the Master Plan SR 167 mainline alignment and Rainier connection as they progress with the Implementation Plan design.

Concurrence

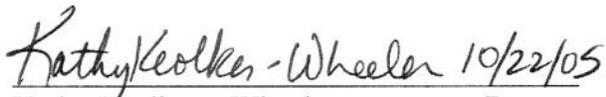
I am anticipating a project that will set a high standard of cooperation between the City and WSDOT. By signing below, the City and WSDOT concur with the combination SR 167 mainline alignment from I-405 to the southern Renton city limit and with the direct Rainier connection between SR 167 and Rainier Avenue S as we move forward in developing the I-405 Master Plan.

Sincerely,



Craig J. Stone, PE
Deputy Administrator, Urban Corridors Office

City of Renton Concurrence:



Kathy Keolker – Wheeler Date
Mayor, City of Renton

Attest: Bonnie I. Walton
Bonnie I. Walton, City Clerk

- cc: Administrators Executive Committee members
- City Design Team members
- City Traffic Analysis Task Force members
- I-405 Project Files
- Attachments

CJS:bah



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SR 167 Alignment and Rainier Connection Recommendation

Presented by:

City of Renton Traffic Analysis Task Force

August 2005

Recommendation

This document presents the SR167 Rainier Avenue direct connection combination alignment as the SR 167 alignment and interchange configuration endorsed by the City of Renton Traffic Analysis Task Force for the SR 167 Master Plan design. Major features of this design include:

- A balance of wetland and business impacts along SR 167 between SW 43rd St and I-405,
- “Stacked” freeway ramps to reduce footprint size,
- Direct Connection between SR 167 and Rainier Avenue South,
- Additional improvements to Lind Avenue SW intersections with Grady Way and SW 16th Street,
- HOV Direct Access on SR 167 at SW 27th Street, and
- HOV Direct Access on I-405 at Rainier Avenue South / SR 167.

Project Description (I-405/SR 167 Vicinity)

A key component of the I-405 Congestion Relief and Bus Rapid Transit Projects program is the reconstruction of the I-405 / SR-167 interchange. Proposed improvements to the existing “clover-leaf” interchange include separating local access from “system-to-system” access as follows:

- Eliminates the existing “loop” ramps and adds HOV and general-purpose direct-connector ramps between I-405 and the south leg of SR 167,
- Replaces the I-405 access at Rainier Avenue with two new half-diamond interchanges, one with I-405 access at Lind Avenue SW and the other with I-405 access at SR 515 (Talbot Road),
- Provides a one-way couplet that connects these two new I-405 half-diamond interchanges,
- Maintains the connection between SR 167 and Rainier Avenue South,
- HOV Direct Access on SR 167 at SW 27th Street, and
- HOV Direct Access on I-405 at Rainier Avenue South / SR 167.

Description of Options

The task force considered several conceptual configurations for the SR 167 corridor. Three options were considered for the mainline alignment of SR 167. Two options were considered for the connecting SR 167 and Rainier.

The mainline alignment design options are:

- Widen to west (avoid more wetlands),
- Widen to East (avoid more businesses), and
- Combination (balance between wetland and business impacts).



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The SR 167 connection to Rainier Avenue South design options are:

- Indirect Connection: Rainier Avenue South connection to East Valley Road with a new half interchange in vicinity of SW 27th and
- Direct Connection: Rainier Avenue South connection to SR 167, similar to current configuration, with "stacked" ramps.

The above interchange options could be mixed and matched to obtain the best configuration for the SR 167 corridor.

Design Issues and Considerations

In reviewing the interchange options, the Task Force has considered the following project functions: local operations, freeway operations, and environmental impact avoidance. The evaluation of these functions considered the following:

Local Operations:

- Level of service for local roadway network,
- Queuing at intersections,
- Vehicle travel time,
- Access to local businesses, and
- Driver's expectations.

Freeway Operations:

- SR 167 mainline operations between SW 43rd Street and the I-405 and
- Driver's expectations.

Environmental Impact Avoidance:

- Wetland Impacts to Panther Creek Wetlands,
- Wetland Impacts along west side of SR 167, and
- Property impacts to businesses along East Valley Road.

Local Operations

The traffic analysis for the Lind interchange showed that the local operations for all the considered options operated at an acceptable level of service with the year 2030 traffic forecasts. The analysis of the Direct Connection assumed the eastbound dual left turns at the Rainier Ave / Grady Way intersection were in place as recommended by the Rainier Avenue Corridor Study. The Direct Connection option includes additional improvements to the Lind Ave intersections with Grady Way and SW 16th Street (these improvements are not needed with the Indirect Connection option). These improvements include dual northbound left turn lanes at Grady Way and an additional southbound through lane at SW 16th, terminating at the next driveway south.

The Direct Connection option traffic operations along Lind Ave could be further improved by eliminating the east leg of the SW 16th intersection. With this variation, East Valley Road directly connects to SW 19th St and access to the two hotels located north of SW 19th St (Hilton Garden Inn and Larkspur Landing) and the East Valley Office Complex is provided at the East Valley Road / SW 19th connection. The access road at the front of these properties is smaller than East Valley Road, allowing the footprint to be slightly reduced in this area.

The traffic analysis also showed that the SW 43rd / S 180th Street interchange and associated intersections operate acceptably. The I-405 project is showing the King County Carr Road Study recommended option (an additional southbound SR 167 off-ramp, a new southbound collector-distributor roadway, the extension of Lind Ave to the



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south, and widening of the SW 43rd Street overpass) with an additional on-ramp to southbound SR 167 from East Valley Road south of SW 43rd Street. The final configuration of this interchange will be determined with the SR 167 Corridor project and in coordination with the City of Kent and King County.

The Direct Connection option provides shorter travel times for vehicles traveling between downtown Renton and SR 167 and is more in line with driver's expectation for entering Renton. As a comparison, the Indirect Connection downtown Renton bound traffic must exit northbound SR 167 traffic near SW 43rd Street, approximately a mile and a half south I-405, and then continue along local streets to access the downtown Renton area.

Access to commercial properties from East Valley Road was considered to be a critical element for local access; therefore, connection options that restricted access along East Valley Road were less desirable than the options that maintained full access. Both connection options restrict access along SW 27th to allow for the HOV Direct Access ramps; however the Indirect Connection option impacts accesses to more businesses than the Direct Connection option because of the new half interchange. As seen in the SR 167 Alignment Comparisons table, the Direct Connection impacts four business accesses while the Indirect Connection impacts twelve business accesses.

Freeway Operations

The traffic analysis of the freeways in the vicinity of the I-405 / SR 167 interchange showed that both the Direct Connection and Indirect Connection operate at acceptable levels of service with the year 2030 forecasts.

The Indirect Connection requires additional improvements to eliminate the weaves northbound and southbound between the SW 43rd interchange and the SW 27th St general-purpose half-interchange. These improvements, such as braided ramps, are necessary to separate the entering and exiting traffic along SR 167.

With the Direct Connection, the SW 27th St general-purpose half interchange is not needed as Rainier Avenue South connects directly to SR 167. No additional improvements for weaving vehicles are required along SR 167 with this configuration.

Environmental Impact Avoidance

All configurations have impacts on nearby properties and the wetlands and surface water along the eastside and westside of SR 167, though to a varying degree. Indirect connection options have a larger footprint increasing the amount of impacts as compared to the direct connection options. East Valley Road widens to accommodate Rainier to SR 167 traffic routed onto East Valley Road, and SR 167 footprint is wider without stacking. The SR 167 Alignment and Rainier Connection Comparisons table details the different impacts for each option.

The Traffic Task force realizes the importance of the Panther Creek Wetlands and has attempted to strike a balance between wetland impacts and business impacts. It is understood that the final SR 167 mainline alignment will be determined through the NEPA process in determining what level of impacts to wetlands are acceptable to the regulatory agencies.

The widen west options reduce impacts to the Panther Creek Wetlands that run along the eastside of SR 167. Conversely, these same options increase impacts to the commercial properties between SR 167 and East Valley Road. These impacts include two hotels, the Hilton Garden Inn and the Larkspur Landing, the East Valley Office Complex (EVOC), Imperials Bingo, an office park near SW 27th Street, and other businesses.



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Options widening to the east reduce the impacts to the businesses along East Valley Road by widening further into the Panther Creek Wetlands. The only property impacts that could not be avoided are businesses impacted by the HOV direct access or the general-purpose ramps (indirect connection options only) at SW 27th Street.

The combination options create a balance of wetland impacts and business impacts by shifting the alignment between the east and west alignment limits to minimize impacts to businesses while limiting impacts to the Panther Creek Wetlands. Impacts to the two hotels and the EVOC are reduced to planting strip impacts, avoiding impacts to the associated parking lots, by shifting the alignment to the east at the SR 167 interchange.

The Direct Connection options have reduced impacts to businesses and wetlands as compared with the Indirect Connection options because of the smaller "footprint". The Direct Connection has a smaller footprint with no general-purpose half interchange near SW 27th and "stacking" select ramps within the I-405 / SR 167 interchange. East Valley Road is also maintained in its current 3-lane configuration with the Direct Connection options, while the Indirect Connection requires additional lanes to accommodate traffic between Rainier and SR 167 which shifts onto East Valley Road.

Summary

The aforementioned issues have been considered in evaluating the various proposed SR 167 Alignment and Rainier Connection options. Based on the resulting impacts and related functions, the Traffic Analysis Task Force recommends the Combination alignment with a Direct Connection between Rainier Avenue South and SR 167, as the preferred configuration for the SR 167 alignment and Rainier connection. The traffic analysis completed demonstrates the proposed configuration concept operates at an acceptable level for the year 2030 conditions. Compared to a 2030 "Do Nothing" option, there is significantly less delay and more vehicles served on the surrounding street network with the recommended option, particularly in the vicinity of the Rainier Avenue / Grady Way intersection which currently operates at LOS F. .

Although the Lind interchange configuration of the recommended option operates at an acceptable level, the operations could be improved further by eliminating the east leg of the Lind Ave intersection with SW 16th St. Impacts to the Panther Creek Wetlands in this area are also reduced from a slightly smaller footprint. With the rerouting of East Valley Road and the revision to the access to the two hotels and EVOC, the final decision on this variation will be done with further coordination with the City of Renton and the property owners.



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I-405 Tukwila-to-Renton SR 167 Alignment Comparisons

Indirect Connection (Rainier Avenue to East Valley Road)

Description	Business Property Impacts			Wetland Impacts		
	Access	Acquisition		East Side	West Side	Total
		Properties	Acres			
Each	Each	Acres	Acres	Acres	Acres	
Widen to West (Avoid More Wetlands)	12	30	33.8	6.6	7.9	14.5
Widen to East (Avoid More Businesses)	12	7	12.9	21.0	3.5	24.5
Combination	12	23	16.9	7.2	6.3	13.5

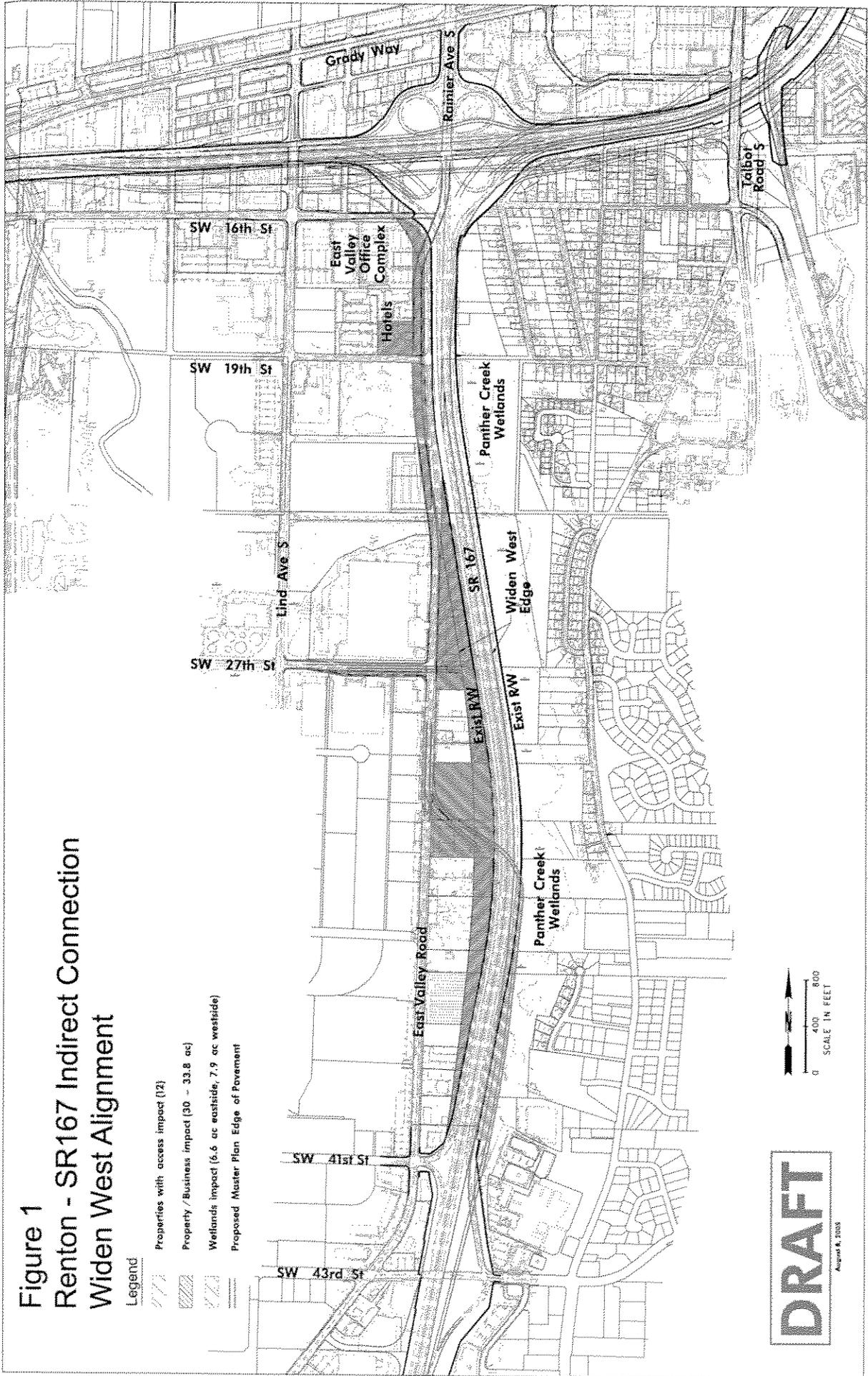
Direct Connection (Stacked: Rainier Avenue to SR 167)

Description	Business Property Impacts			Wetland Impacts		
	Access	Acquisition		East Side	West Side	Total
		Properties	Acres			
Each	Each	Acres	Acres	Acres	Acres	
Widen to West (Avoid More Wetlands)	4	25	18.6	3.5	7.5	11.0
Widen to East (Avoid More Businesses)	4	4	2.7	15.0	4.7	19.7
Combination	4	21	8.0	5.8	6.6	12.4

Figure 1 Renton - SR167 Indirect Connection Widen West Alignment

Legend

-  Properties with access impact (12)
-  Property / Business impact (30 - 33.8 ac)
-  Wetlands impact (6.6 ac eastside, 7.9 ac westside)
-  Proposed Master Plan Edge of Pavement



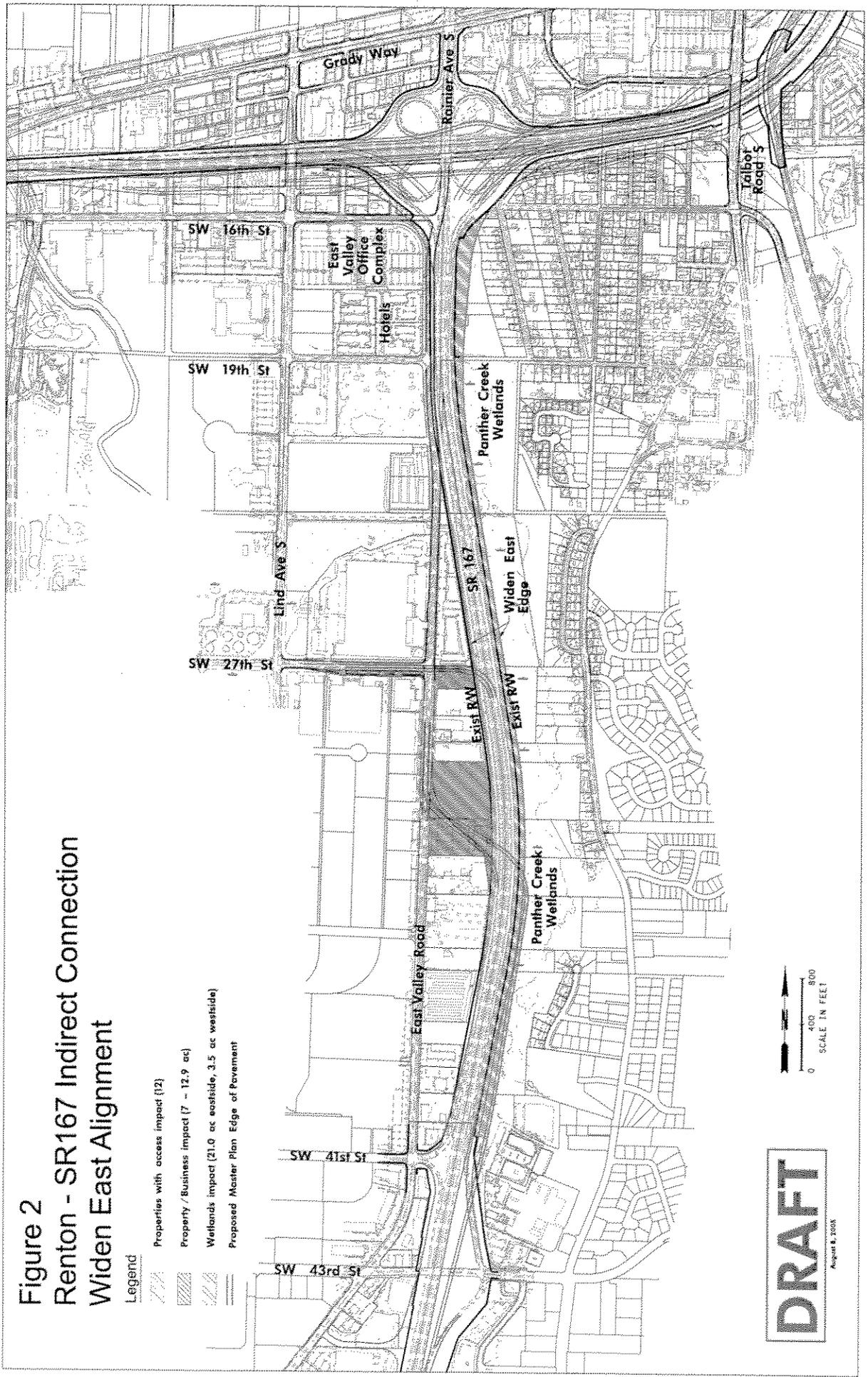
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Figure 2 Renton - SR167 Indirect Connection Widen East Alignment

Legend

-  Properties with access impact (12)
-  Property / Business impact (7 - 12.9 ac)
-  Wetlands impact (21.0 ac eastside, 3.5 ac westside)
-  Proposed Master Plan Edge of Pavement



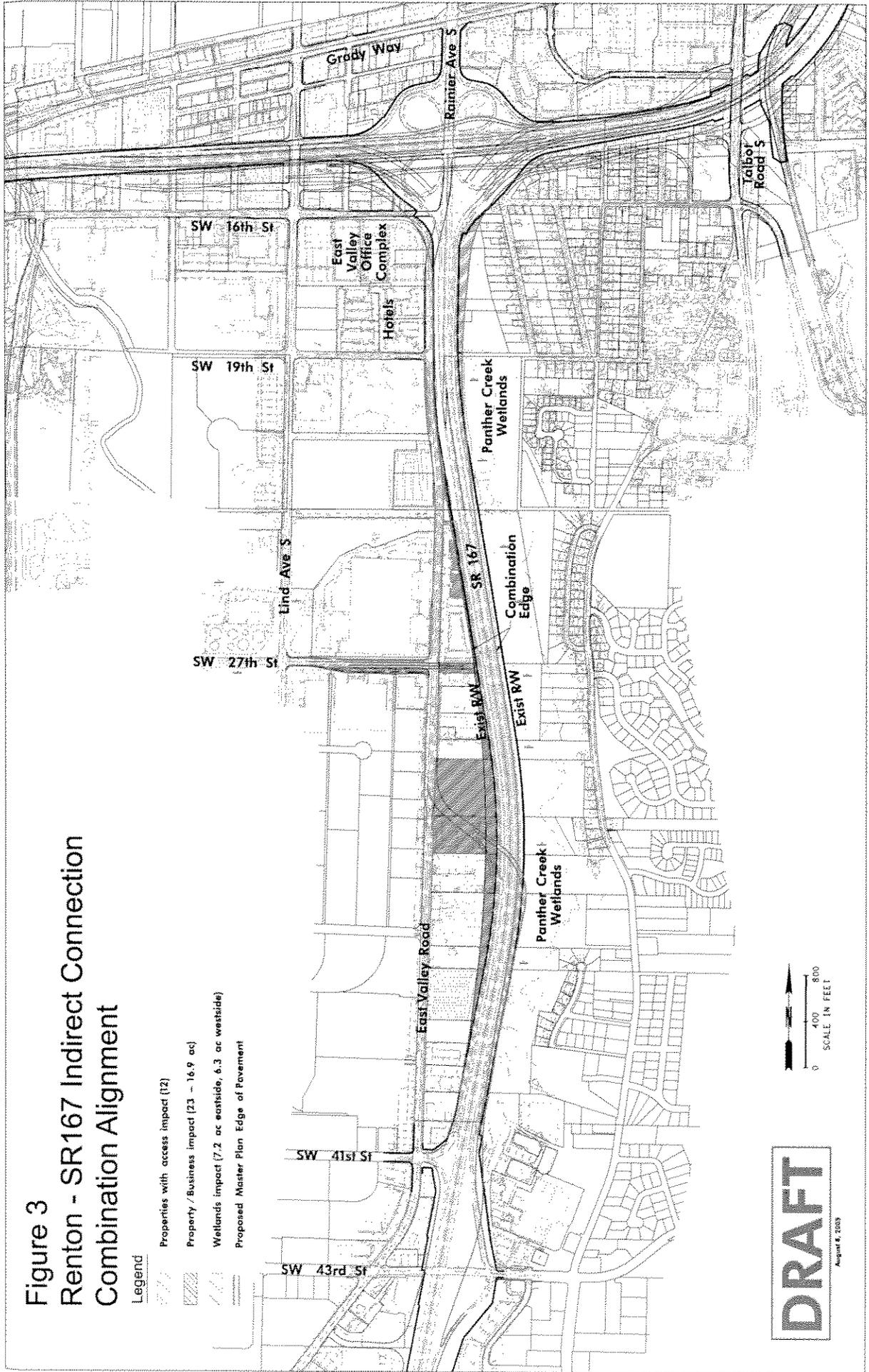
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August 8, 2008

Figure 3
Renton - SR167 Indirect Connection
Combination Alignment

Legend

-  Properties with access impact (12)
-  Property / Business impact (23 - 16.9 ac)
-  Wetlands impact (7.2 ac eastside, 6.3 ac westside)
-  Proposed Master Plan Edge of Pavement



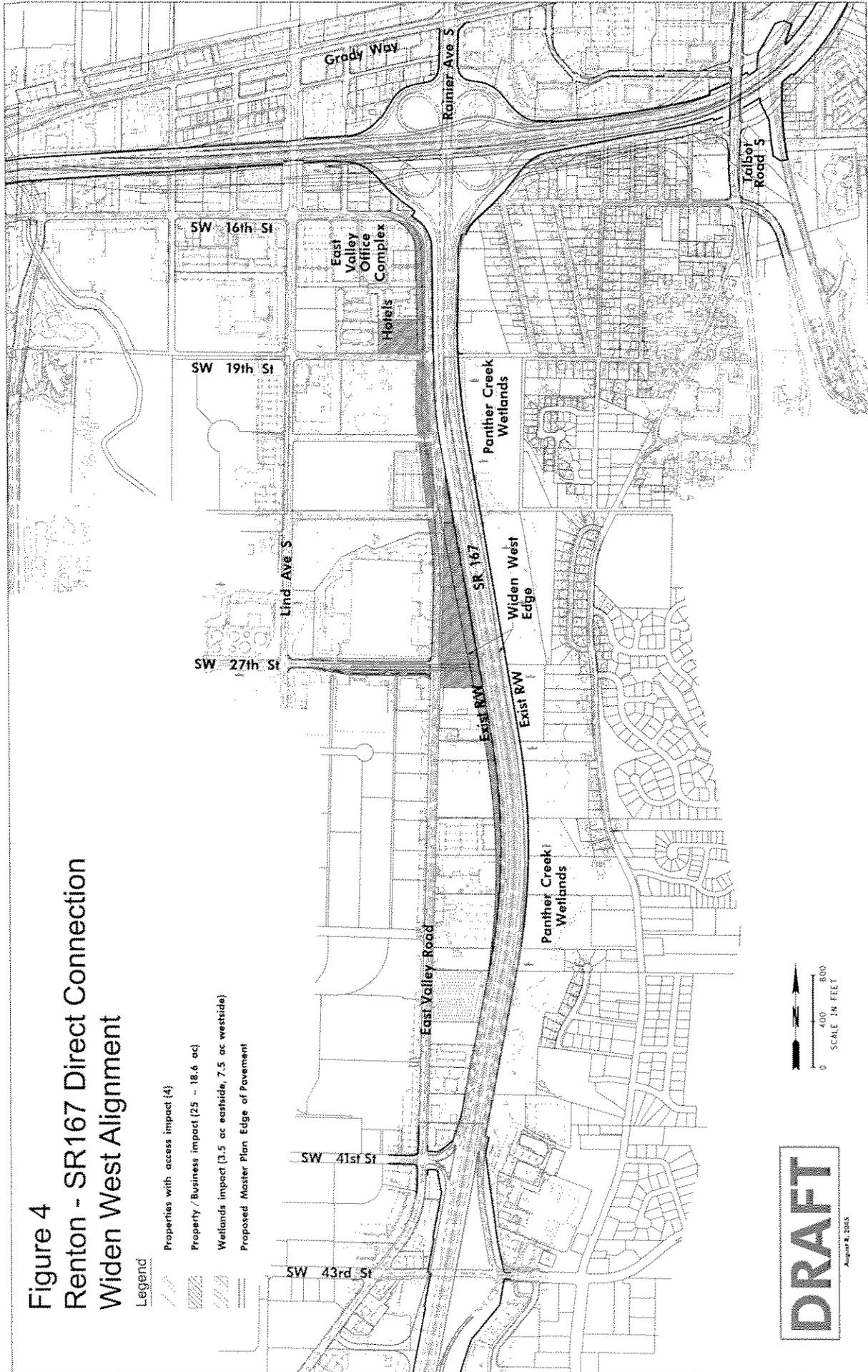
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Figure 4
Renton - SR167 Direct Connection
Widen West Alignment

Legend

-  Properties with access impact (4)
-  Property / Business impact (25 - 18.6 ac)
-  Wetlands impact (3.5 ac eastside, 7.5 ac westside)
-  Proposed Master Plan Edge of Pavement



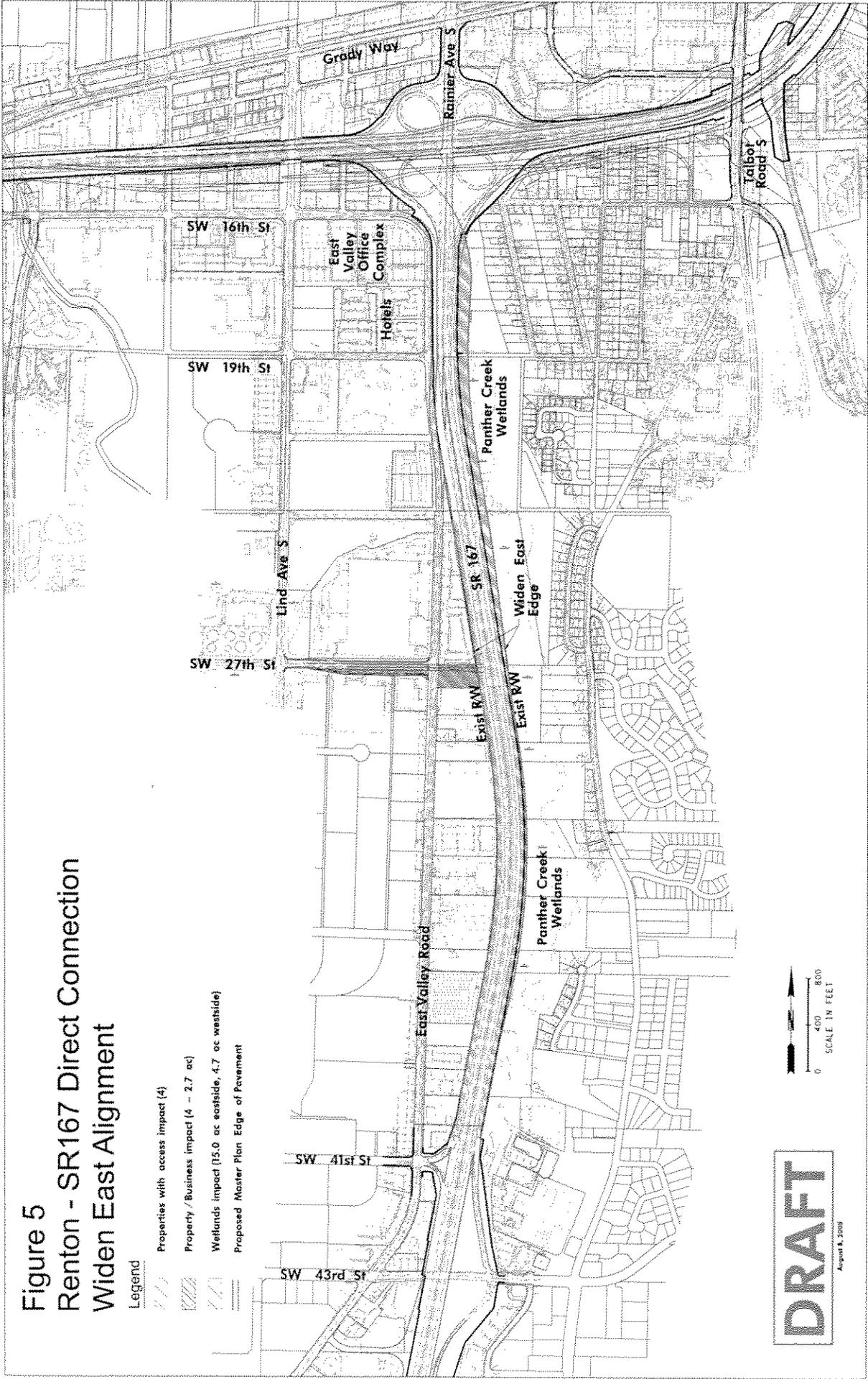
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Figure 5 Renton - SR167 Direct Connection Widen East Alignment

Legend

-  Properties with access impact (4)
-  Property / Business impact [4 - 2.7 ac]
-  Wetlands impact [15.0 ac eastside, 4.7 ac westside]
-  Proposed Master Plan Edge of Pavement



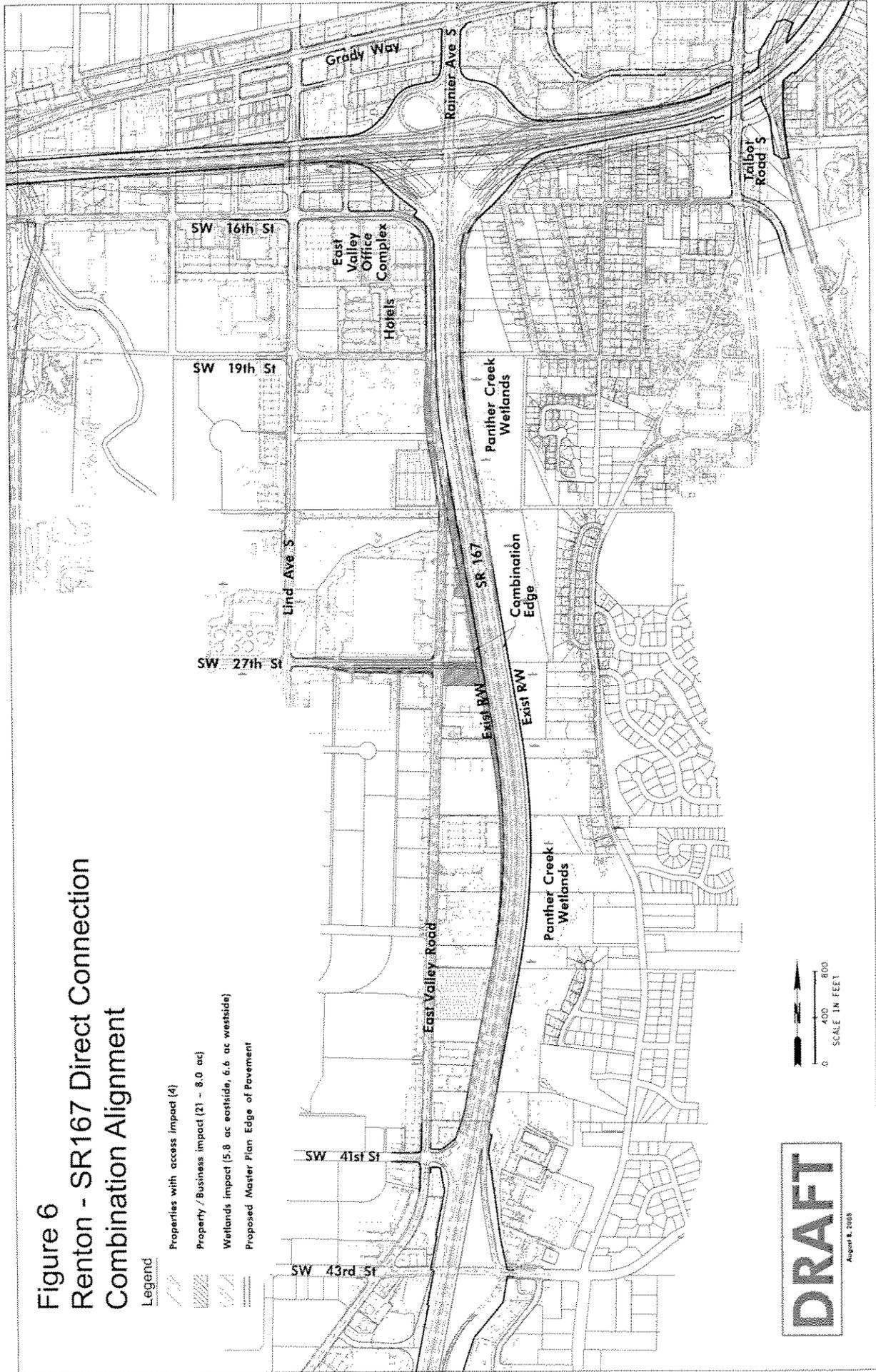
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Figure 6
Renton - SR167 Direct Connection
Combination Alignment

Legend

-  Properties with access impact (4)
-  Property / Business impact (21 - 8.0 ac)
-  Wetlands impact (5.8 ac eastside, 6.6 ac westside)
-  Proposed Master Plan Edge of Pavement



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