2. Please provide your education.

B.S. Civil Engineering, Oregon State University, 1990.

M.S. Civil Engineering – Transportation, Oregon State University, 1995.

3. How long have you been employed by the City of Kennewick?

Two years and four months.

4. Please describe your work duties?

Provide oversight to the traffic division in the Public Works Department directing the preparation of and reviews plans and specifications for all traffic control devices, roadway and intersection projects, electrical equipment and materials, construction detours, and highway lighting. Manage the maintenance of all the traffic control devices and the electrical maintenance on City facilities; prepares traffic and safety studies; provides transportation planning review and coordination activities, administers the City's traffic safety, bicycle, pedestrian and transit programs; prepares and administration of the division budget; responds to and coordinates with various public and private individuals, agencies, officials, committees, commissions on traffic and transportation programs and issues.

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5. Can you describe your role on the Center Parkway extension project?

Assist Engineering staff in the determination of the appropriate layout and design standards for the project to include travel lanes, bicycle lanes, and sidewalks.

Responsible for final striping and signing on the project.

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<i>6</i> .	If the Crossing is granted, what would be the design speed	if the tracks are
	unchanged?	

The profile is similar to that of half of a speed hump (the type designed for traffic calming, not commercial parking lots) or a standard commercial driveway entry which goes over the sidewalk. Therefore, the design speed would be in the range of 15-20 mph at the crossing and marked with appropriate warnings. The design speed on either side would be about 30-35 mph.

7. Would the speeds be any different with and change in elevation of the track? With a change in elevation, the entire facility could be designed with a 30-35 mph design speed.

8. What kind of hazards, if any, would exist if the current tracks/spur remains active?

Primarily train collisions with vehicles, pedestrians, or bicycles. Vehicles that ignore the warning signs and driving too fast for the conditions, may launch over the second track or bottom out, depending on their speed and which direction they are going.

9. What is the projected traffic count for the extended Center Parkway in the first year, five years, ten years. Included in this analysis, please reference any studies provided to the City by outside consultants?

I started my analysis with the SCM Design Report for the N. Center Parkway Extension (see Exhibit 1 to Steve Plummer's testimony). The current traffic is 800 vehicles per day (vpd) with a projection at opening of 2200 vpd. Extrapolating an annual growth rate

between Figures 3b and 3c in the report, I determined that there would be 2600 vpd after five years and 3060 vpd ten years after opening.

10. Can you apply any statistical standards on traffic counts that justify the Center Parkway extension?

Not really, except that this connection would eliminate the 1-2 mile trip required to drive between Gage Boulevard and Tapteal Drive. This trip is generally made on Gage Boulevard and Steptoe, or more commonly on Columbia Center Boulevard and the Tapteal overpass via a shortcut through the Columbia Center Mall which is private property. The Center Parkway Extension would eliminate the need for this "detour" reducing congestion, exposure to crashes, and vehicle emissions. Quantifying these benefits would require a more exhaustive study.

11. To your knowledge, is the justification for the crossing based on existing and future traffic patterns, or other reasons?

The primary need is to stimulate economic growth on both sides of the tracks. The difficulty in going between the two areas limits the desirablility of building on available sites.

12. Can you describe how the extension of Center Parkway will impact the current burden on Steptoe and Columbia Center Boulevard?

The traffic projections predict a jump in traffic on Center Parkway of 1400 vehicles per day between current traffic and projected traffic at opening. These are trips that are removed from the most heavily traveled segment of Columbia Center Boulevard (and also the most heavily traveled segment of roadway within City of Kennewick jurisdiction).

The extension will also remove traffic from Gage Boulevard and Steptoe Street which are quite heavily traveled as well. As background traffic increases on the surrounding roadways, and commercial development occurs in the Tapteal Drive area, it is important to have this connection in order to reduce the congestion on these heavily traveled roadways.

- 13. Is there any other logical area for a crossing that could be above or below grade that would provide relief to Columbia Center Boulevard and Steptoe?

 No.
 - 14. You previously submitted testimony in Cause No. TR-040664. The issue before the Commission at that time was related to the City of Kennewick's petition to cross Union Pacific Railroad's two tracks used for switching operations. Was the analysis in your prior testimony limited to the City's ability to cross just the two Union Pacific Railroad tracks.

No. If the current trackage remains in place there is a total of four tracks that would have to be crossed. I previously testified that if the tracks remained unchanged, the design speed would be in the range of 15-20 mph at the crossing. That opinion was not limited to crossing the two Union Pacific tracks but all four tracks.

15. What type of road is Center Parkway and its intended traffic capacity?

Center Parkway would be considered a minor arterial. Ideally traffic on a minor arterial such as this would be in the range of 16,000 vehicles per day or less, though higher volumes are attainable. That is more than enough to handle the anticipated volumes on the Center Parkway extension even when accounting for delay caused by the grade changes and train crossings.

16. What problems do the changes in elevation between the four tracks present when attempting to construct this particular street extension?

Certainly the grade changes are less than ideal for a typical minor arterial. However, it is within reasonable limits based on the specific function this segment of roadway is intended to perform, which is to significantly shorten travel time from the retail area on Tapteal Drive to Gage Boulevard and the Columbia Center Mall. The City has intentionally installed a raised crosswalk on Young Street south of the Okanogan and Young roundabout that has some similar grade changes to those at railroad crossings.

- 17. Union Pacific has previously provided testimony from Raymond Wright Jr.

 Have you had an opportunity to review Mr. Wright's testimony?

 Yes.
 - 18. Mr. Wright presented testimony that there is over a four-foot difference in elevation between the closest Union Pacific track and Port of Benton track, creating over a 9% grade between the two. However, a 7% grade is the maximum allowed for urban arterials streets by the Washington State Department of Transportation. Do you concur with this conclusion?

Mr. Wright's testimony on this is somewhat confusing. There is approximately 200 feet between the Union Pacific and Port of Benton tracks. Therefore, the grade between the two sets of tracks is actually 1.8% as shown on Figures 6 and 7 in his own report entitled "Traffic Impacts at Richland Junction Crossing", dated November 7th, 2005. The 9% grade difference is basically a 0.6 foot total vertical grade change over a distance of 6 or 7 feet which is less severe than a standard commercial driveway. Suggesting that 7% be the absolute maximum grade makes no sense in this situation.

There are urban arterial streets throughout Washington, including within Kennewick that have much longer segments (several hundred feet or more) at grades that exceed 7%. Though not desirable, these instances do occur. For instance on 10th Avenue approaching Olympia Street, we have an 8% grade approaching a traffic signal for almost

200 feet. This segment of road is a minor arterial carrying over 13,000 vehicles per day. Garfield Street, a collector, has a 300 foot segment of 15% grade followed by a 400 foot segment at 8%. This roadway segment carries over 4000 vehicles per day.

The Washington State Department of Transportation Design manual suggests in the very first paragraph of the Forward that "The Design Manual is developed for state facilities and may not be appropriate for all county roads or city streets that are not state highways." Simply put, state facilities have a need to function at a much higher level than city streets. A short, steep grade at this location, though not ideal, by no means renders the proposed crossing solution impractical as suggested by Mr. Wright.

19. Mr. Wright has offered an opinion that the extension of Center Parkway without changing the elevation of the four tracks would create a very uneven roadway surface and violate several roadway engineering standards. Do you agree with his conclusion?

With the exception of the maximum grade which has already been discussed, Mr. Wright fails to state in his testimony what other roadway engineering standards are being violated. There is a more in depth discussion about these standards in the HNTB produced report "Traffic Impacts at Richland Junction Crossing", dated November 7th, 2005. In addition to the concerns over roadway grade, the report details concerns regarding inadequate stopping sight distance for a 6-inch object in the roadway, and also that the connecting grades between tracks are inadequate to meet the Washington State Department of Transportation (WSDOT) guidelines. On closer inspection of the requisite standards, I disagree with both of these points from the report which appear to be the "other roadway engineering standards" that Mr. Wright believes the City is violating. Also, keep in mind that the Figures 6 & 7 in the HNTB report have a vertical to horizontal exaggeration of approximately 8 to 1. This makes the grade changes look extreme when in fact a representation at a 1 to 1 scale would look much more reasonable.

20. In what ways does your opinion differ from the conclusion of Mr. Wright?

First, with regard to stopping sight distance requirements. According to the AASHTO publication "A Policy on Geometric Design of Highways and Streets", 2004, stopping sight distance is 200 feet for a 30 mph facility. As drivers approach the crossing they would be expected to slow down to around 20 mph or less, which has a stopping sight distance requirement of 115 feet. The worst case scenario places a 6-inch boulder between the dip in the Union Pacific tracks. Based on the planned roadway profiles, a driver should be able to see this object with no problems.

In addition, I disagree with this statement because the requirement is no longer that a driver be able to see a 6-inch object. The 1990 edition of AASHTO's "A Policy on Geometric Design of Highways and Streets" states that the 6-inch requirement was arbitrarily set based on possible hazardous object size. Subsequent editions of the policy in 1994, 2001, and 2004, lean more and more strongly towards an object height for stopping sight distance of 2.0 feet. The 2004 edition states on page 127 that: "It is considered that an object 600mm [2.0 ft] high is representative of an object that involves risk to drivers and can be recognized by a driver in time to stop before reaching it. Using object heights of less than 600 mm [2.0 ft] for stopping sight distance calculations would result in longer crest vertical curves without documented safety benefits." The design profile of the roadway including the grade changes due to the four railroad tracks will easily meet this sight distance requirement as well as the more restrictive requirement used in the past.

Second, there is a concern over the roadway profile and the WSDOT and American Railway Engineering and Maintenance-of-Way Association (AREMA) requirements for roadway profile in the 30 feet in either side of the tracks. Upon further inspection of Section 630.06 of the WSDOT Design Manual, it is clear the stated requirement is in order to prevent a low hung vehicle from damaging or getting hung up on the tracks. The 2004 edition of AASHTO's "A Policy on Geometric Design of Highways and Streets" goes further, having more restrictive requirements than WSDOT and AREMA, but also suggests that when approach grades are not level and when track

superelevation exists, then a site specific analysis for rail clearance is necessary. The City of Kennewick's City Engineer performed this analysis to validate that a low-boy tractor-trailor combination could successfully pass over both sets of railroad tracks.

21. Could you summarize your opinion regarding the ability to extend Center Parkway under a scenario where track elevations remain in place?

The four tracks can be effectively crossed. With the elevations unchanged, there would be an uneven roadway but we are talking about a profile that is very similar to a raised crosswalk used for traffic calming, or more appropriately, a commercial driveway where the driveway goes over the sidewalk. With these changes in elevation, the City would install appropriate warning signs and speeds, possibly with flashing beacons to notify drivers of the change in profile and the need to reduce speed. At a speed of 15-20 mph, the tracks can be crossed by all vehicles, including low-boy tractor-trailor rigs.

DECLARATION

I, John Deskins, declare under penalty of perjury under the laws of the State of Washington that the foregoing PREPARED TESTIMONY OF JOHN DESKINS is true and correct to the best of my knowledge and belief.

DATED this 19th day of June, 2006.

JOHN DESKINS