

MEMORANDUM

To: Nate Morgan, City of Sultan, Public Works Director
From: Brad Lincoln, PE *BL*
Subject: Wyndham Highlands (PP19-003)
Response to Hearing Examiner Decision
Date: February 18, 2019

Gibson Traffic Consultants (GTC) has been requested to provide a response to the Hearing Examiner's Decision for the Wyndham Highlands development. Specifically, this memorandum addresses the request for additional information and analysis of the T-57 project identified in the Comprehensive Plan (Conclusions of Law 1) and analysis of the warrant for a left-turn lane on Sultan Basin Road at either of the proposed accesses (Conclusions of Law 2).

1. Conclusions of Law 1 – Comprehensive Plan Project T-57**1.1. Background**

Comprehensive Plan Project T-57 is identified as a minor arterial extension of 132nd Street SE from Sultan Basin Road northwest to Trout Farm Road/307th Avenue SE. The Hearing Examiner concluded that a direct extension 132nd Street SE to the west is not feasible due to Yew Avenue in the *Miller Farms* development. The Hearing Examiner identified that it may be feasible to have the T-57 project off-set from 132nd Street SE when intersecting Sultan Basin Road. However, the Hearing Examiner noted that neither of the proposed roadways in the Wyndham Highlands development appear to have sufficient right-of-way and would therefore not be sufficient for bike lanes or 6,000 daily trips. The Hearing Examiner has therefore requested analysis on if the roadways identified within the Wyndham Highlands development would be sufficient to address the T-57 improvement.

1.2. Response

The City of Sultan has recently hired Transportation Solutions, Inc. (TSI) to address the Comprehensive Plan and specifically future east-west connections to Sultan Basin Road. The TSI analysis from January 30, 2020 shows that an east-west connection north of US-2 between the downtown area and Sultan Basin Road will carry more trips the farther south it is located. The TSI analysis identified that the Friday PM peak period is the highest period of the week in the study area. Table 3 in the TSI analysis identified that 530 PM peak-hour Friday trips (approximately 5,300 daily trips) would use a connection through Wyndham Highlands in the year 2040 if it is the only east-west connection. It is important to note that the number of weekday PM peak-hour trips, which is typically utilized to evaluate traffic impacts, would be lower. However, a connection via Bryant Road would carry approximately 600 Friday PM peak-hour trips (6,000 daily trips) and a connection through the Wyndham Highlands development would only carry 190 Friday PM peak-hour trips (1,900 daily trips) if both connections are made. The volume through Wyndham Highlands would decrease with

additional connections. The TSI analysis clearly shows that a connection farther south is better utilized and that a connection through Wyndham Highlands would be anticipated to carry less than 2,000 daily trips if a second connection is made.

Additional geotechnical analysis performed by Associated Earth Sciences, Inc. and documented in the February 13, 2020 report identified that a connection via Bryant Road or 141st Street SE is more feasible than a connection via Wyndham Highlands. The TSI analysis show that a connection via Bryant Road or 141st Street SE would be used by more traffic and the geotechnical data identified that Bryant Road and 141st Street SE are more feasible than a connection through Wyndham Highlands.

The applicant has provided a cross-section showing that a 3-lane section with bike lanes is feasible within the 60-foot right-of-way that is currently available along Bryant Road. A 3-lane section would adequately handle the anticipated traffic shown in the TSI analysis, even if Bryant Road is the only connection. The Bryant Road corridor therefore represents a much more feasible and constructible location for the first connection between the downtown area and Sultan Basin Road and would arguably meet the off-set of T-57 the hearing examiner eluded to. GTC has also independently evaluated the TSI PM peak-hour traffic volumes at key intersections along Sultan Basin Road and conclude that traffic control options within the available/proposed right-of-way sections would enable intersections to operate at LOS D or better even at full build-out with just one arterial type connection, specifically along the Bryant Road alignment.

The Wyndham Highlands development is proposed to include a roadway that would provide a potential connection to Sultan Basin Road from the west. This current proposal includes 50-feet of right-of-way with direct access from the residential units. The roadway is proposed to include two travel lanes and a parking lane. This configuration will be sufficient for the anticipated traffic based on the analysis by TSI, assuming this is not the only connection between the downtown area and Sultan Basin Road. The proposed connection should therefore be deemed sufficient to meet the needs identified in the comprehensive plan.

It should be noted the traffic mitigation fees associated with the Wyndham Highlands development would be creditable against the construction and right-of-way associated with a 3-lane roadway through the property. The construction of an internal connection non-arterial with the T-57 shift occurring to the Bryant Road alignment eliminated the credit for the east-west connection. The traffic mitigation fees could therefore be used towards improving the Bryant Road or 141st Street SE arterial connections. Thereby focusing City of Sultan resources on the most feasible and beneficial east-west connection.

In summary, the roadway design identified in the Wyndham Highland development is appropriate based on the TSI analysis and geotechnical analysis showing Bryant Road and 141st Street SE are the more appropriate/feasible east-west arterial routes. The anticipated volumes of less than 2,000 ADT can be easily handled by the Wyndham Road design. The Hearing Examiner should therefore not overturn the staff recommendation.

2. Conclusion of Law 2 – Left-Turn Lane on Sultan Basin Road

2.1. Background

The Hearing Examiner questions why a left-turn lane was not identified on Sultan Basin Road at the Wyndham Highlands access(es) since there is a left-turn lane at the *Eagle Ridge* development, which has fewer units, and there are also 200+ homes in the *SkyRidge* development that will travel along Sultan Basin Road.

2.2. Response

The City of Sultan has identified that Sultan Basin Road is to be a 3-lane section in the Comprehensive Plan, which would include one lane in each direction and a left-turn lane. The portion of Sultan Basin Road that the Hearing Examiner identified at the *Eagle Ridge* development has been fully constructed on both sides and therefore the left-turn lane is present. The frontage along Sultan Basin Road will only have improvements along the west side with the Wyndham Highlands development since the east side of the roadway is undeveloped and not currently submitted for development. The improvements with the Wyndham Highlands development should allow for sufficient pavement for a temporary 3-lane section that can include one lane in each direction and a left-turn lane (see proposed road section in the attachments). The frontage improvements will match the existing curb south of the property. This temporary 3-lane section would satisfy the need for a left-turn lane. The standard 3-lane section once the east side develops.



The east-west corridor alternatives were ranked by City staff in order of priority and were evaluated additively in four 2040 scenarios, as described below:

- **Baseline:** No new east-west connector roadways
- **Alternative A:** New street beginning at Sultan Basin Rd to the north of the existing 132nd St St/Yew Rd intersection and connecting to Gohr Rd to the west. This connector is hereafter referred to as the 132nd St Connector.
- **Alternative B:** 132nd St Connector + New street beginning at the existing 135th St SE/Bryant Rd terminus and connecting to 8th St adjacent to Sultan High School. This connector is hereafter referred to as the 135th St Connector.
- **Alternative C:** 132nd St Connector + 135th St Connector + New street beginning at or near the existing intersection of 141st St SE at Sultan Basin Rd and connecting to Fir Ave to the west. This connector is hereafter referred to as the Fir Ave Connector.
- **Alternative D:** 132nd St Connector + 135th St Connector + Fir Ave Connector + New street beginning at 124th St SE east of Rosewood Dr and connecting to 307th Ave SE to the south and west. This connector is hereafter referred to as the 124th St Connector.

Baseline Transportation Improvements

All 2040 scenarios assumed construction of the following transportation capacity improvement projects:

- US 2 & Sultan Basin Rd: Restripe southbound (Sultan Basin Rd) approach to include shared through-left and exclusive right-turn lane.
- US 2 & Main St: New roundabout with 120-foot Inscribed Circle Diameter (ICD). Various roundabout channelization scenarios were evaluated and are summarized later in this memo.
- US 2 & 5th St/Mann Rd: Restripe southbound (5th St) approach to include exclusive left and shared through-right lane.

2040 CONDITIONS

Travel Demand Redistribution

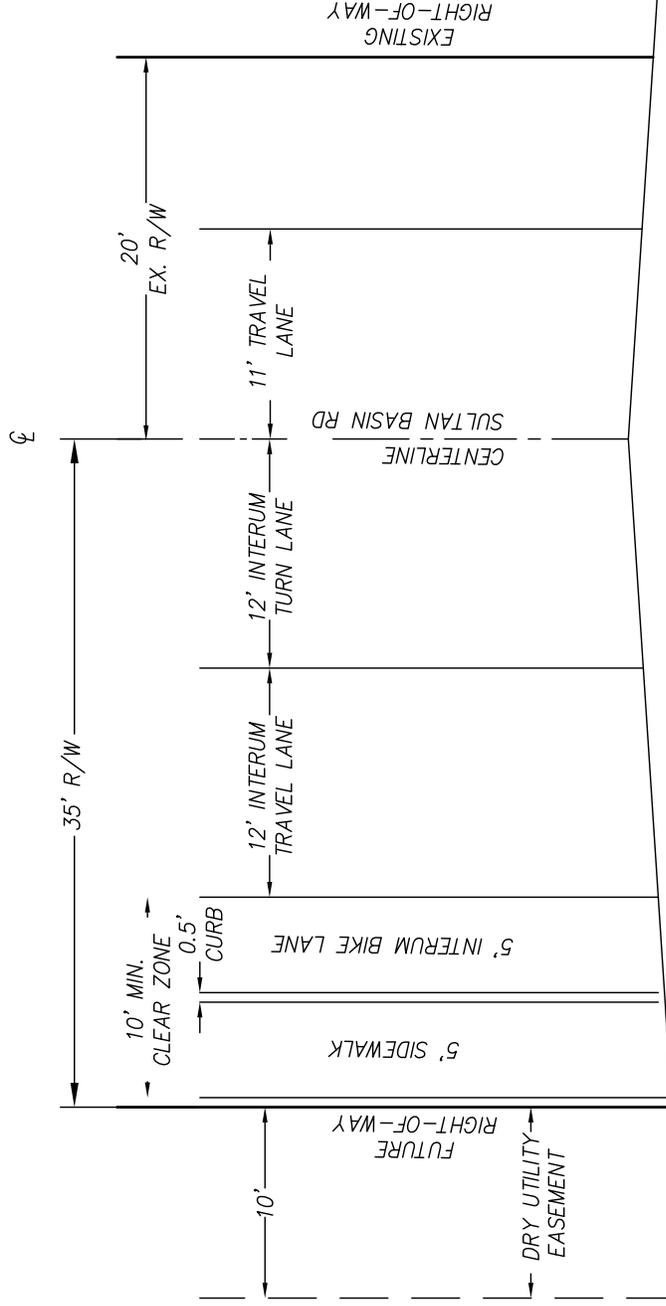
Friday PM peak hour travel demand forecasts for each east-west route connecting Sultan Basin Rd with downtown Sultan are summarized in **Table 3**.

Table 3. 2040 Friday PM Peak Hour Traffic Volume Forecasts

Route	Baseline	Alternative A	Alternative B	Alternative C	Alternative D
US 2 west of Sultan Basin Rd	3,410	2,930	2,700	2,560	2,560
132 nd St Connector	-	530	190	160	90
135 th St Connector	-	-	600	380	370
Fir Ave Connector	-	-	-	390	380
124 th St Connector	-	-	-	-	100

The first east-west connector will provide the greatest marginal reduction in travel demand on US 2, reducing 2040 Friday PM peak hour travel demand west of Sultan Basin Rd by approximately 480 vehicles per hour in Alternative A.

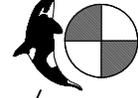
**INTERUM ROAD SECTION
SULTAN BASIN ROAD**
CITY OF SULTAN, WASHINGTON



SCALE: 1" = 10'

NOTES:
INTERUM ROAD SECTION EAST OF WYNDHAM HIGHLANDS.

EXISTING R/W SULTAN BASIN ROAD 30' WEST OF CENTERLINE. 5' DEDICATION TO CITY OF SULTAN AT TIME OF RECORDING.



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JOB NO. 2017-068
DATE: 2/18/2020
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SHEET 1 OF 1