

## **CITY OF FORT SASKATCHEWAN**

### **Southfort Transportation Study Update**

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#### **Motion:**

That Council adopt the Southfort Transportation Study Update (September 2015) with the Addendum to the Transportation Study dated April 21, 2016.

#### **Purpose:**

To provide Council with the findings of the Southfort Transportation Study Update and the Addendum to the Study, which addresses concerns raised by Council at the January 12, 2016 regular Council Meeting.

#### **Background:**

In 2013, an update of the Southfort Area Structure Plan (SF-ASP) was approved. This Plan adjusted some of the proposed land uses and major road networks within the Southfort Development Area.

As a result of this SF-ASP update in 2014, a review of the Southfort Transportation Plan was undertaken in 2014 to determine expected traffic volumes, road classifications, and intersection treatments.

The resulting Study was conducted using traffic simulations of the Southfort area at 50% development and at full development. The findings of these simulations resulted in the following recommendations:

1. Southfort Drive can be reclassified as a Collector Road south of Southfort Boulevard and should terminate at Southridge Boulevard, rather than extending to the south boundary.
2. The 94 Street / Southridge Boulevard corridor can be reclassified as a Collector Road between Southfort Drive and Sienna Boulevard.
3. Six additional signalized intersections will be required in the SF-ASP.
4. Six single lane round-a-bouts should be installed at the intersections of major collectors, rather than signals as the moderate off-peak traffic volumes do not require signals.
5. An additional access to Highway 21 south of the SF-ASP area will be required at full development to relieve congestion at the Highway intersections.
6. The Highway 15 / 21 Corridor adjacent to the Study area will require six lanes within the 50% development horizon. This confirms the 2008 Road Right-of-Way Master Plan findings.

At the January 12, 2016 Council Meeting, Council referred the Study back to Administration with concerns regarding the 94 Street Classification as a two-lane collector and the recommendation for round-a-bouts on 94 Street.

Because the report is a technical document based on a scientific process, the original report remains unchanged. An addendum to the report was prepared by the Consultant to address Council's concerns.

The April 21, 2016 Addendum addresses three aspects of the original report.

1. Southfort Drive Classification: The south end of Southfort Drive between Southfort Boulevard and Southridge Boulevard is changed in classification from collector to arterial. While the

projected traffic volumes do not meet the arterial classification, this road has already been constructed to the arterial standard, therefore the addendum reflects the current configuration.

2. Round-a-bout intersections on 94 Street: The projected traffic volumes on 94 Street and the intersecting roads demonstrate that they do not need to be signalized and that stop control on the intersecting roadways will perform adequately. However, with 94 Street configured as a long straight roadway with no stop control, it is likely that traffic speeds will tend to be higher than what is acceptable through a neighbourhood. The round-a-bouts will create a traffic calmed streetscape reducing future speed and noise complaints, they will reduce shortcutting through the neighbourhood and will allow easier access to 94 Street from the intersecting roadways.
3. 94 Street Classification: Council had concerns regarding 94 Street being constructed to two lanes only. The projected traffic volumes do not meet the criteria for a four-lane roadway. However, to mitigate these concerns, a modified cross-section has been developed that will allow for the widening to four-lanes sometime in the future. Projected traffic volumes on 94 Street are between 3,800 and 7,850 vehicles per day.

The Southfort Transportation Study is a technical document that forms the basis of what transportation projects can and will be included in the Southfort Levy. If the technical merit of a project cannot be demonstrated within a supporting technical study, the project cannot be included in the Levy and becomes a future cost to the City. If the recommendations of the Study are followed then the projects identified within the Study will be constructed either at the developer's expense at the time of construction or by the Levy (also developer money). This will help mitigate future City costs like retro-fitting traffic calming features, intersection control, and roadway widening.

The round-a-bouts and intersection treatments will be investigated during the planning of construction. This is done at all intersection construction / improvement projects to ensure that the best option is used to accommodate the users. The recommendation of round-a-bouts ensures that a sufficient right-of-way is set aside and that this option is given a thorough review (it is new to Fort Saskatchewan). Without the round-a-bouts it is likely that speed and noise complaints similar to those the City receives about Westpark Drive and 95A Avenue will be duplicated in this area and that a future traffic calming plan may have to be implemented at the City's expense.

The 99 Avenue ring road in Pineview has traffic volumes of 9,000 vehicles per day and 95A Avenue has traffic volumes of 6,000 vehicles per day. Both of these roadways function very well as 2-lane collectors, however, the City does receive complaints about excessive speed and noise on these roadways. Over-building 94 Street will result in speed issues and short-cutting through predominantly residential areas rather than pushing the through traffic to the Highway, Southfort Drive (arterial), or the future arterial at 101 Street (with annexation).

Constructing 94 Street to a collector standard now will provide the City with a much more functional roadway regardless of what happens in the future. A two-lane collector standard is actually built three-lanes wide to allow for an auxiliary lane to accommodate transit stops, emergency relief (flat tire) and cyclists. If an arterial roadway classification were used, the first two lanes would be constructed (Southfort Drive) with no auxiliary lane, with the final two lanes not being constructed until warranted (if ever).

**Plans/Standards/Legislation:**

- Southfort Area Structure Plan.
- Transportation Association of Canada – Geometric Design Guide for Canadian Roads (2007).
- Institute of Traffic Engineers trip generation rates.
- Transportation Research Board of the National Academies of Science – Highway Capacity Manual (HCM).

**Financial Implications:**

The results of this Study will require an update to the Southfort Levy. The Levy will be updated in 2016 using internal staff capacity. Once complete, the Levy Bylaw will be brought to Council for approval and the projects will be staged within the long-term Capital Plan. As the projects will be levy-funded, there will be no tax impact on the City, other than operating.

If Council approves a Plan beyond the recommendations of the Study, the over-built projects cannot be included in the Levy and these costs will be the responsibility of the City.

**Internal Impacts:**

With the adoption of the Southfort Transportation Study Update, the SF-ASP will require an update to reflect the changes in classifications. As well, the Levy Bylaw will require an update. Both of these projects will be completed using existing internal resources.

**Recommendation:**

That Council adopt the Southfort Transportation Study Update (September 2015) and the Addendum to the Transportation Study dated April 21, 2016.

**Attachments:**

1. Appendix A - Southfort Transportation Study Update (September 2015)
2. Appendix B - Addendum to Transportation Study for the Southfort Area Structure Plan (April 21, 2016)

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File No.:

Prepared by:	Grant Schaffer Director Project Management	Date: May 30, 2016
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Approved by:	Troy Fleming General Manager, Infrastructure and Community Services	Date: June 8, 2016
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Reviewed by:	Kelly Kloss City Manager	Date: June 8, 2016
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Submitted to:	City Council	Date: June 14, 2016
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