

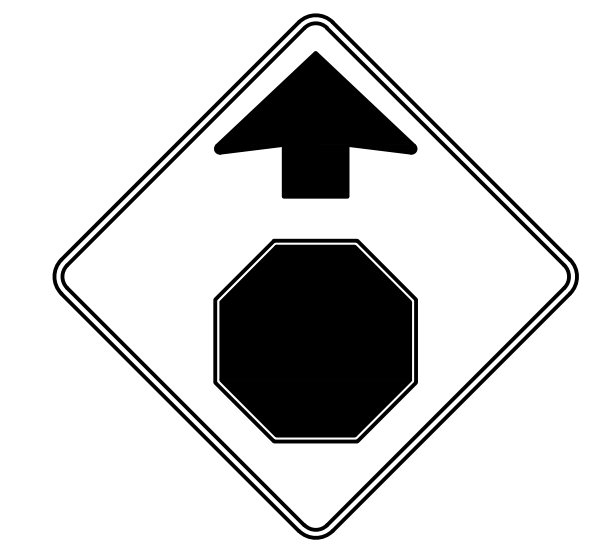
MATCHLINE NEXT SHEET

LEGEND

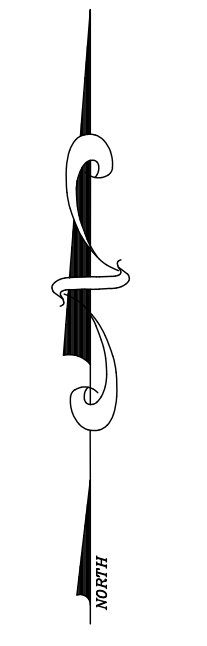
| | | | |
|--|---|--|--|
| | PROPERTY LINE | | INSTALL CROSSWALK PER COS STD PLAN G-61 |
| | EXISTING CURB | | PROPOSED SIGN |
| | INSTALL NEW CONCRETE SIDEWALK PER COS STD PLAN F-102B | | INSTALL CURB RAMP PER COS STD PLAN F-105 |
| | INSTALL NEW CURB PER COS STD PLAN F-106B | | |
| | INSTALL LANDSCAPING STRIP | | |

CONSTRUCTION NOTES

- 1 INSTALL PROPOSED SIGNAGE 200 FT FROM INTERSECTION.
- 2 INSTALL NEW CATCH BASIN TYPE I, AND 8" DIAM. PIPE AS NECESSARY. CONNECT TO EXISTING MANHOLE WHERE SHOWN.
- 3 INSTALL NEW CATCH BASIN TYPE I, AND 8" DIAM. PIPE AS NECESSARY. CONNECT TO NEW CATCH BASIN TYPE I.
- 4 REMOVE EXISTING INLET. PLUG AND ABANDON EXISTING PIPE.



PROPOSED SIGNAGE



**PRELIMINARY
 NOT FOR CONSTRUCTION**

| | | | | | | | | | |
|---|--|--|--|--|--|--|--|--|--|
| NAVD88 = (OLD CBM ELEV.) - (1.3.13) AS OF JANUARY, 2000 USE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) | | | | | | | | | |
| BENCH MARK LOCATION: None Given | | | | | | | | | |
| CURRENT C.O.S. DESIGN STANDARDS ADOPTED FEB. 2007 | | | | | | | | | |
| CITY OF SPOKANE, WASHINGTON DEPARTMENT OF ENGINEERING SERVICES 808 WEST SPOKANE FALLS BLVD. SPOKANE, WASHINGTON 99201-3343 (509) 625-6300 | | | | | | | | | |
| PROJECT NAME: SPOKANE TRAFFIC CALMING MASTER PLAN | | | | | TYPE OF IMPROVEMENT: TRAFFIC | | | | |
| SEGMENT LIMITS: WELLESLEY AVENUE AND DRISCOLL BOULEVARD | | | | | CITY PROJECT NUMBER: _____ CITY PLAN NUMBER: _____ | | | | |
| PROJECT LIMITS: NORTHWEST NEIGHBORHOOD | | | | | EPN: TRAFFIC DESIGN | | | | |
| CALL BEFORE YOU DIG 1-800-424-5555 | | | | | | | | | |

Spokane Traffic Calming Master Plan

| | |
|------------------------|---|
| District: | 3 |
| Neighborhood: | Northwest |
| Project Extent: | Francis Avenue and A Street Intersection Estimate: \$450,000 |

Problem Statement: Residents of the Northwest neighborhood raised concerns over pedestrian crossing safety at the intersection of Francis Avenue and A Street, particularly the lack of pedestrian crossing infrastructure, difficulty of crossing, and fatal collisions.



Francis Avenue and North A Street Intersection

Traffic Analysis

Francis Avenue within the study area is classified a principal arterial with a posted speed limit of 35 miles per hour, provides two lanes in each direction, and road diet for left turn movements from either direction. Francis Avenue also serves as State Route 291 and is under WSDOT jurisdiction. A Street within the study area is classified as a major collector with a posted speed limit of 30 miles per hour and provides one lane in each direction with no on-street parking. Both Francis Avenue and A Street in the study area do not provide marked shoulders or bike lanes. The study area does not have any marked pedestrian crosswalks. The Francis Avenue and A Street intersection is stop-controlled for the A Street approaches.

The following table shows the estimated 2022 daily traffic volumes and 85th percentile speeds on Francis Avenue and A Street. As shown in the table, the highest daily volume at the intersection was on Francis Avenue with 16,247 west bound vehicles. The highest 85th percentile speed was 38 miles per hour (3 miles per hour greater than the posted speed limit).

Spokane Traffic Calming Master Plan

2022 Daily Traffic and 85th Percentile Speed at Francis Avenue and North A Street Intersection

| Direction | # Lanes | 2022 Estimated Daily Traffic (Vehicles per day) | 85 th Percentile Speed (mph) | Posted Speed (mph) |
|-----------------------------|---------|--|--|-----------------------|
| Francis Avenue ^a | | | | |
| EB | 2 | 14,505 | 38 | |
| WB | 2 | 16,247 | 38 | |
| Both Dir. | 4 | 30,752 | 38 | 35 |
| North A Street ^b | | | | |
| NB | 1 | 1,860 | | |
| SB | 1 | 1,960 | | |
| Both Dir. | 2 | 3,820 | N/A | 30 |

^a Traffic data collected in March 2017. Traffic volumes were grown at a 1.0% annual growth rate, to estimate 2022 traffic conditions.

^b Traffic data collected in August 2015. Traffic volumes were grown at a 1.0% annual growth rate, to estimate 2022 traffic conditions.

Data shows that on average driver speeds are just above the posted speed limit. Speeding may be a smaller issue compared to the lack of pedestrian crossing infrastructure. More efforts should be focused on providing visibility of pedestrians to drivers and pedestrian infrastructure at the intersection.

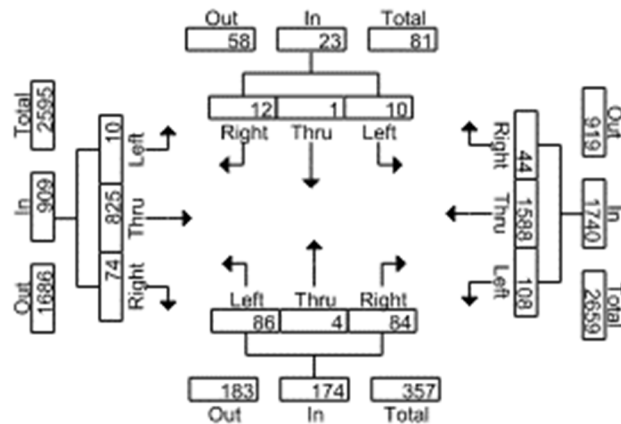
The table below shows the severity and types of crashes occurring at the intersection. None of the collisions were reported to have involved pedestrians or cyclists, however speeding and not yielding right-of-way were primary contributing circumstances to the collisions.

Crashes at Francis Avenue and A Street (2016 to 2021)

| Crash Type | Crash Severity | | Total |
|------------|-----------------|----------------------|-------|
| | Possible Injury | Property Damage Only | |
| Rear End | 1 | 1 | 2 |
| Angle | 3 | 4 | 7 |
| Turning | - | 1 | 1 |
| Total | 4 | 6 | 10 |

Spokane Traffic Calming Master Plan

Vehicle counts taken at the Francis Avenue/A Street intersection in 2015 during the PM peak hour are summarized below.

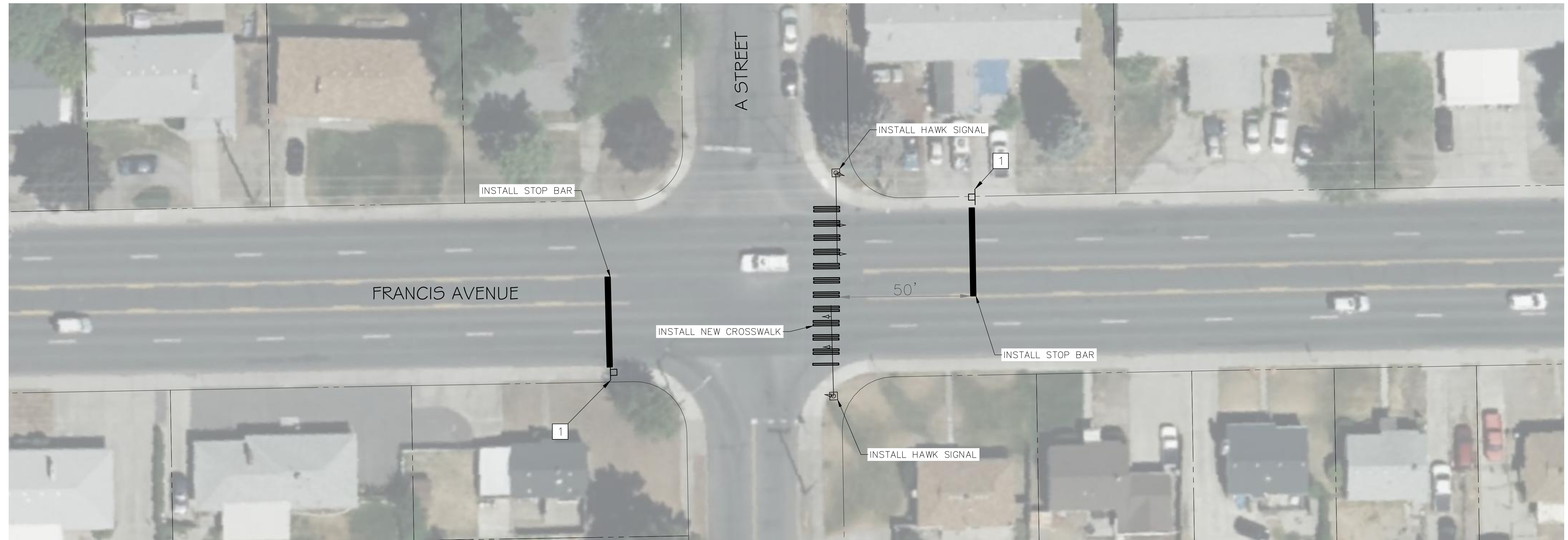


The need for enhanced pedestrian crossing treatments at the intersection was analyzed based on NCHRP Report 562. Based on the findings, a treatment with a red indication, such as a pedestrian hybrid beacon or pedestrian signal is warranted due to long crossing distances, and high vehicle volumes. The closest protected pedestrian crossings on Francis Avenue are approximately 1,100 feet west at the Indian Trail Road traffic signal and 1,200 feet east at the Alberta Street traffic signal.

Recommended Solution:

The installation of a HAWK or hybrid beacon pedestrian crossing is recommended on Francis Avenue at A Street to serve the crossing demand for the surrounding urban neighborhood. The installation of a traffic signal is an alternative to a signalized pedestrian crossing. However, the PM peak hour volumes do not warrant the installation of a traffic signal. Any improvements on Francis Avenue will require WSDOT approval.

District 3, Northwest: Francis Avenue and A Street
 Estimate: \$1,197,000



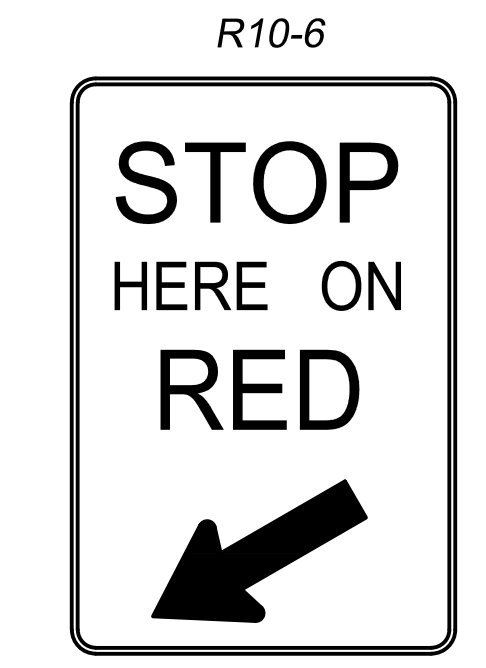
LEGEND

| | |
|--|--|
| | PROPERTY LINE |
| | INSTALL CROSSWALK PER COS STD PLAN G-G 1 |
| | PROPOSED SIGN |

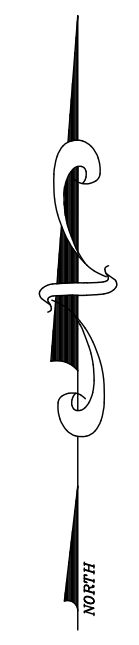
CONSTRUCTION NOTES

| | |
|---|-------------------------------------|
| 1 | INSTALL PROPOSED HAWK STOP BAR SIGN |
|---|-------------------------------------|

NOTE:
 1. PROJECT REQUIRES WSDOT APPROVAL.



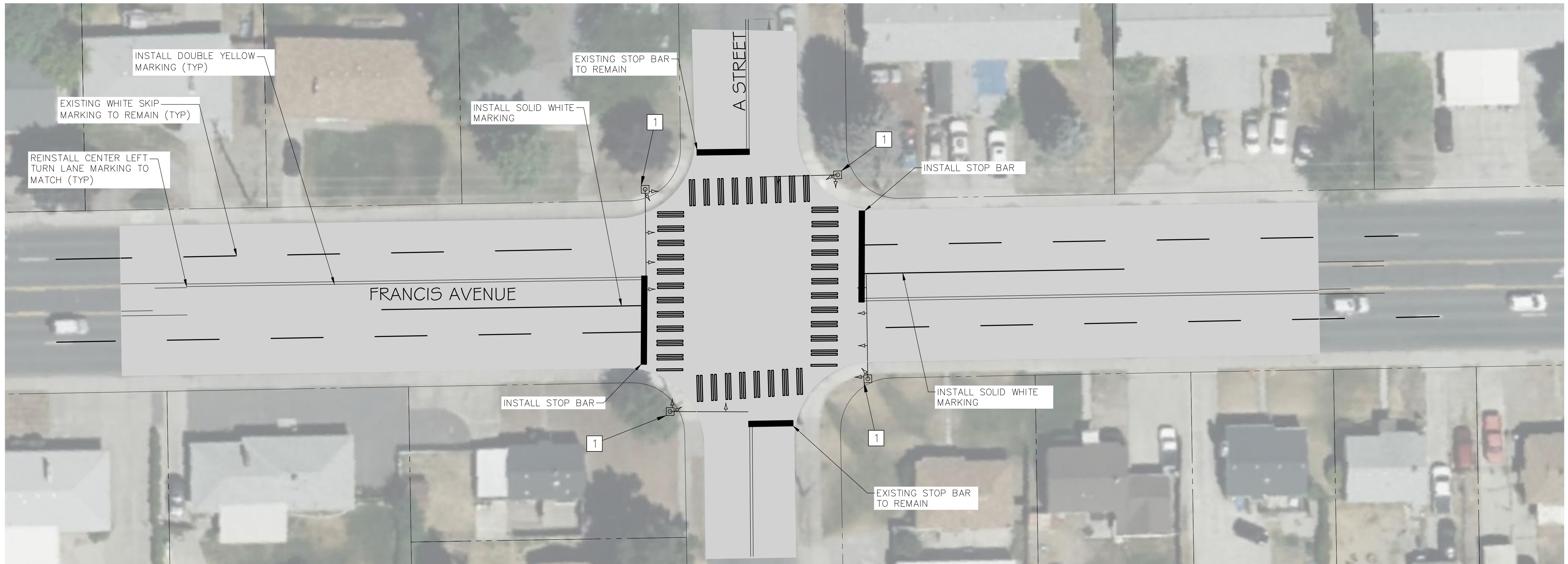
PROPOSED HAWK STOP BAR SIGNAGE



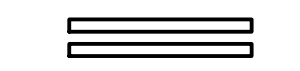
**PRELIMINARY
 NOT FOR CONSTRUCTION**

2
 2 of 7

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|--|--|--|--|--|--|--|--|--|--|--|--|---|---|--|--|------------------------------------|--|
| NAVD88 = (OLD CBM ELEV.) - (1.3.1.3) AS OF JANUARY, 2000 USE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) | | | | | | | | | | CURRENT C.O.S. DESIGN STANDARDS ADOPTED FEB. 2007 | | | CITY OF SPOKANE, WASHINGTON DEPARTMENT OF ENGINEERING SERVICES 808 WEST SPOKANE FALLS BLVD. SPOKANE, WASHINGTON 99201-3343 (509) 625-6300 | PROJECT NAME: SPOKANE TRAFFIC CALMING MASTER PLAN | | | |
| BENCH MARK LOCATION: None Given | | | | | | | | | | BY: [blank] DATES: [blank] | | | | TYPE OF IMPROVEMENT: TRAFFIC | | | |
| NAVD88 ELEV: None Given BAR IS ONE INCH ON ORIGINAL DRAWING. HORIZONTAL PLANS/PROFILE: 1" = 20' VERTICAL PROFILE ONLY: N/A | | | | | | | | | | DRAWN: DRV 02/2023 REVISED: DRV 05/2023 CHECKED: JS 02/2023 APPROVED: AM 02/2023 | | SEGMENT LIMITS: FRANCIS AVENUE AND A STREET | | CITY PROJECT NUMBER: [blank] CITY PLAN NUMBER: [blank] | | | |
| IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY | | | | | | | | | | SCALE: [blank] | | PROJECT LIMITS: NORTHWEST NEIGHBORHOOD | | EPN: TRAFFIC DESIGN | | | |
| REVISIONS | | | | | | | | | | AS BUILT | | GRADE ORDINANCE LIST | | NAVD88 DATUM | | CALL BEFORE YOU DIG 1-800-424-5555 | |



LEGEND

-  PROPERTY LINE
-  INSTALL CROSSWALK PER COS STD PLAN G-61

CONSTRUCTION NOTES

- 1 INSTALL NEW TRAFFIC SIGNAL BASE, MAST ARM, SIGNAL HEAD(S), AND LUMINAIRE

NOTE:

- 1. PROJECT REQUIRES WSDOT APPROVAL.



**PRELIMINARY
NOT FOR CONSTRUCTION**

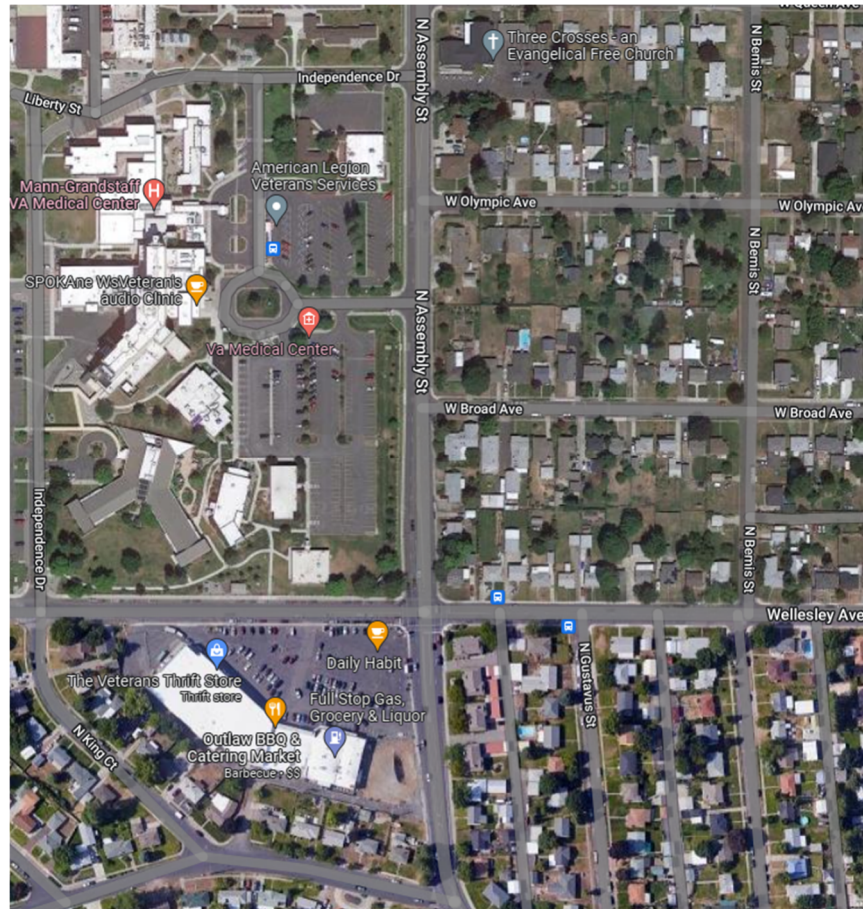
3
3 of 7

| | | | | | | | | | |
|---|--|--|--|--|---|--|--|--|--|
| NAVD88 = (OLD CBM ELEV.) - (13.13) AS OF JANUARY, 2000 USE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) | | | | | | | | | |
| BENCHMARK LOCATION: None Given | | | | | | | | | |
| NAVD88 ELEV: None Given HORIZONTAL PLANS/PROFILE: 1" = 20' CBM NO: None Given VERTICAL PROFILE ONLY: N/A | | | | | | | | | |
| BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY. | | | | | | | | | |
| SCALE | | | | | | | | | |
| CURRENT C.O.S. DESIGN STANDARDS ADOPTED FEB. 2007 | | | | | | | | | |
| CITY OF SPOKANE, WASHINGTON DEPARTMENT OF ENGINEERING SERVICES 808 WEST SPOKANE FALLS BLVD. SPOKANE, WASHINGTON 99201-3343 (509) 625-6300 | | | | | | | | | |
| PROJECT NAME: SPOKANE TRAFFIC CALMING MASTER PLAN | | | | | TYPE OF IMPROVEMENT: TRAFFIC | | | | |
| SEGMENT LIMITS: FRANCIS AVENUE AND A STREET | | | | | CITY PROJECT NUMBER: CITY PLAN NUMBER: | | | | |
| PROJECT LIMITS: NORTHWEST NEIGHBORHOOD | | | | | EPN: TRAFFIC DESIGN | | | | |

Spokane Traffic Calming Master Plan

| | |
|------------------------|---|
| District: | 3 |
| Neighborhood: | Northwest |
| Project Extent: | Wellesley Avenue and Assembly Street Intersection |
| | Estimate: \$586,000 |

Problem Statement: Residents of the Northwest neighborhood raised concerns over pedestrian crossing safety and how a new school route may impact it.



Wellesley Avenue and Assembly Street Intersection

Traffic Analysis:

Both Wellesley Avenue and Assembly Street have a functional classification of principal arterial within the study area. Wellesley Avenue has a posted speed limit of 30 miles per hour and provides one lane in each direction with on-street parking available on both sides of the roadway. Assembly Street has a posted speed limit of 30 miles per hour and provides one lane for each direction and a road diet for left turn movements, except at the intersection where Assembly expands to two lanes in each direction and one as a left-turn-only lane. The intersection is controlled by a four-way stop with red light flashers and has marked crosswalks on all approaches. The study area has an established sidewalk network.

Spokane Traffic Calming Master Plan

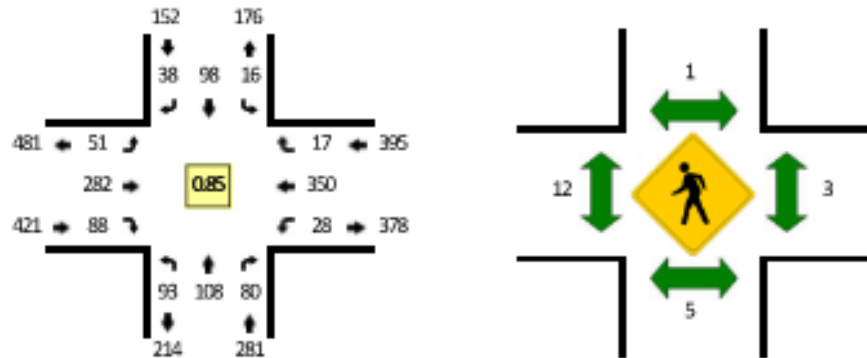
The table below shows the 2022 daily traffic volumes on Wellesley Avenue and Assembly Street. Speed data was not available.

2022 Daily Traffic at Wellesley Avenue and Assembly Street Intersection

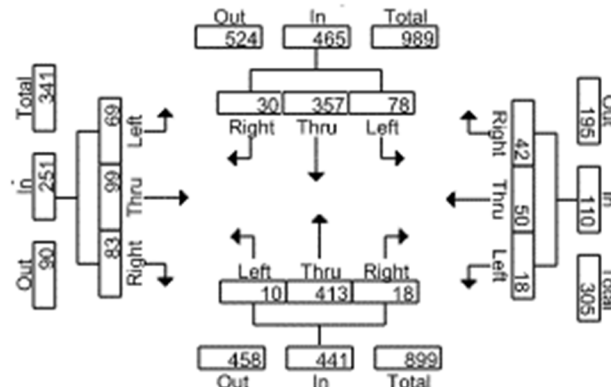
| Direction | # Lanes | 2022 Estimated Daily Traffic (Vehicles per day) | 85 th Percentile Speed (mph) | Posted Speed (mph) |
|-------------------------------|---------|--|--|-----------------------|
| Wellesley Avenue ^a | | | | |
| EB | 1 | 4,210 | N/A | 30 |
| WB | 1 | 4,810 | | |
| Both Dir. | 2 | 9,020 | | |
| Assembly Street ^a | | | | |
| NB | 1 | 2,810 | N/A | 30 |
| SB | 1 | 2,140 | | |
| Both Dir. | 2 | 4,950 | | |

^a Traffic data collected in November 2022

Turning movement counts taken at the Wellesley Avenue/Assembly Street intersection in November 2022 for the afternoon peak hour (3:30 to 4:30 p.m.) show the following vehicle and pedestrian volumes.



Turning movement counts taken at the Wellesley Avenue/Assembly Street intersection in 2017 during the PM peak hour are summarized below.



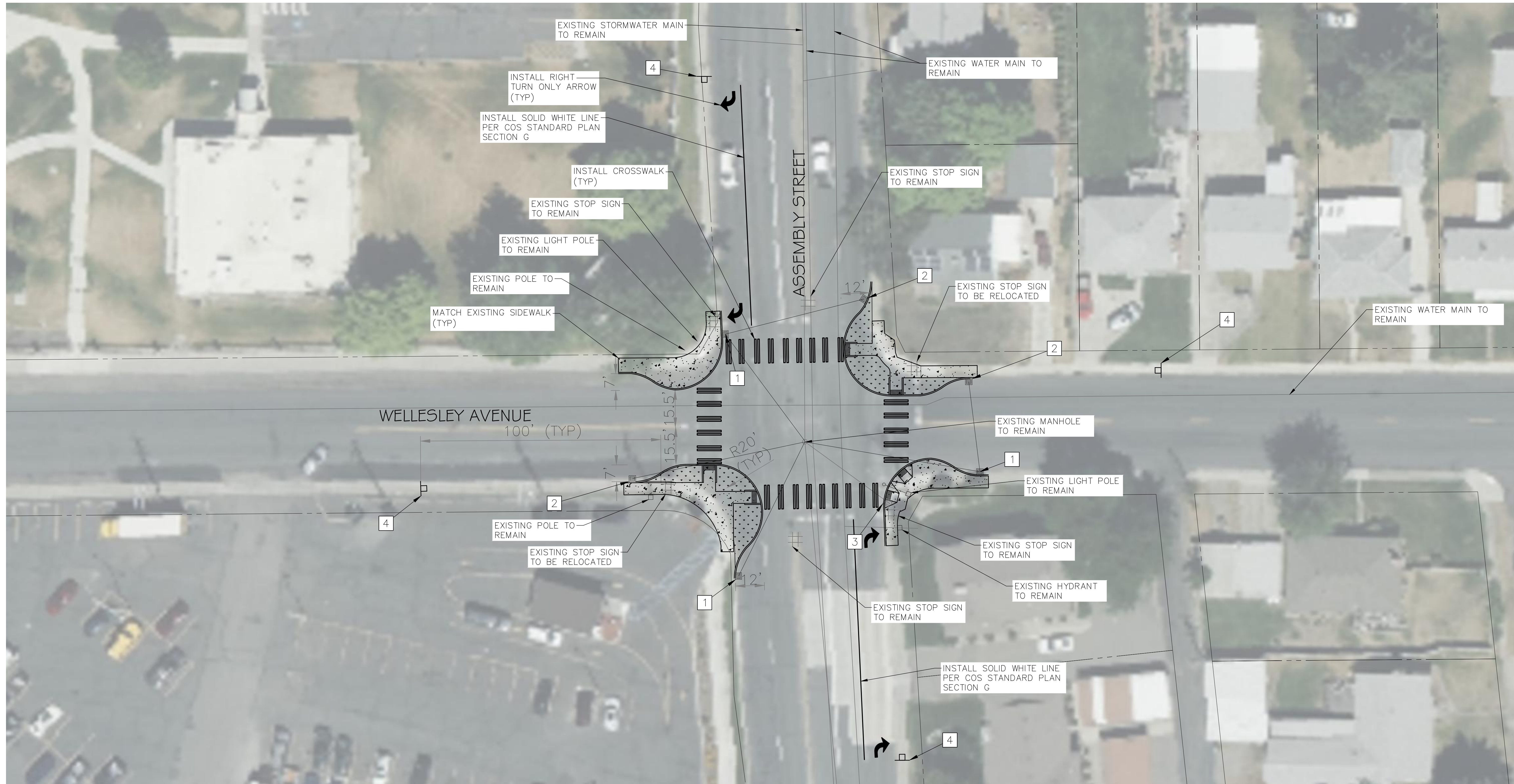
Spokane Traffic Calming Master Plan

The installation of a traffic signal was evaluated; however, the PM peak hour volumes do not warrant the installation of a traffic signal.

The need for enhanced pedestrian crossing treatments across Assembly Street was analyzed based on NCHRP Report 562, using collected traffic data. While the crossing distance is quite wide, the vehicle volumes are moderate, thus a crosswalk is the level of recommendation here. Given the low volumes for a five-lane facility, the location would not meet signal warrants.

Recommended Solution:

Improve the existing crosswalk facilities by re-striping crosswalk pavement markings. Add MUTCD compliant pedestrian crossing warning signs before the approach (i.e., R1-5, R1-6, etc.) on both Wellesley Avenue and Assembly Street. Add school zone signage, especially signs that indicate warnings when children are present. Additionally, add curb extensions on Wellesley Avenue where on-street parking is present to shorten the crossing distance in the intersection.



LEGEND

| | | | |
|--|---|--|--|
| | PROPERTY LINE | | INSTALL CROSSWALK PER COS STD PLAN G-61 |
| | EXISTING CURB | | PROPOSED PEDESTRIAN CROSSING SIGN |
| | INSTALL NEW CONCRETE SIDEWALK PER COS STD PLAN F-102B | | INSTALL CURB RAMP PER COS STD PLAN F-105 |
| | INSTALL NEW CURB PER COS STD PLAN F-106B | | |
| | INSTALL LANDSCAPING STRIP | | |

CONSTRUCTION NOTES

- 1 INSTALL NEW CATCH BASIN TYPE 1 AND 8" DIAM. PIPE AS NECESSARY. CONNECT TO EXISTING MANHOLE WHERE SHOWN.
- 2 INSTALL NEW CATCH BASIN TYPE 1 AND 8" DIAM. PIPE AS NECESSARY. CONNECT TO NEW CATCH BASIN TYPE 1.
- 3 REMOVE EXISTING INLET. PLUG AND ABANDON EXISTING PIPE.
- 4 INSTALL PROPOSED SIGNAGE



**PRELIMINARY
NOT FOR CONSTRUCTION**

| DATE | BY | PROJ. | DESCRIPTION | DATE | BY | PROJ. | F.P.N. | U.S.N. | FROM | TO | COUNCIL ACCEPT DATE | FROM | TO | ORD. NO. | DATE | FILE NO. |
|------|----|-------|-------------|------|----|-------|--------|--------|------|----|---------------------|------|----|----------|------|----------|
| | | | AS BUILT | | | | | | | | | | | | | |

| | |
|--|--|
| NAVD88 = (OLD CBM ELEV.) - (1.3, 1.3) | AS OF JANUARY, 2000 USE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) |
| BENCH MARK LOCATION | None Given |
| NAVD88 ELEV. | None Given |
| CBM NO. | None Given |
| BAR IS ONE INCH ON ORIGINAL DRAWING. | HORIZONTAL PLANIMETER 1" = 20' |
| IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY | VERTICAL PROFILE ONLY N/A |
| | SCALE |

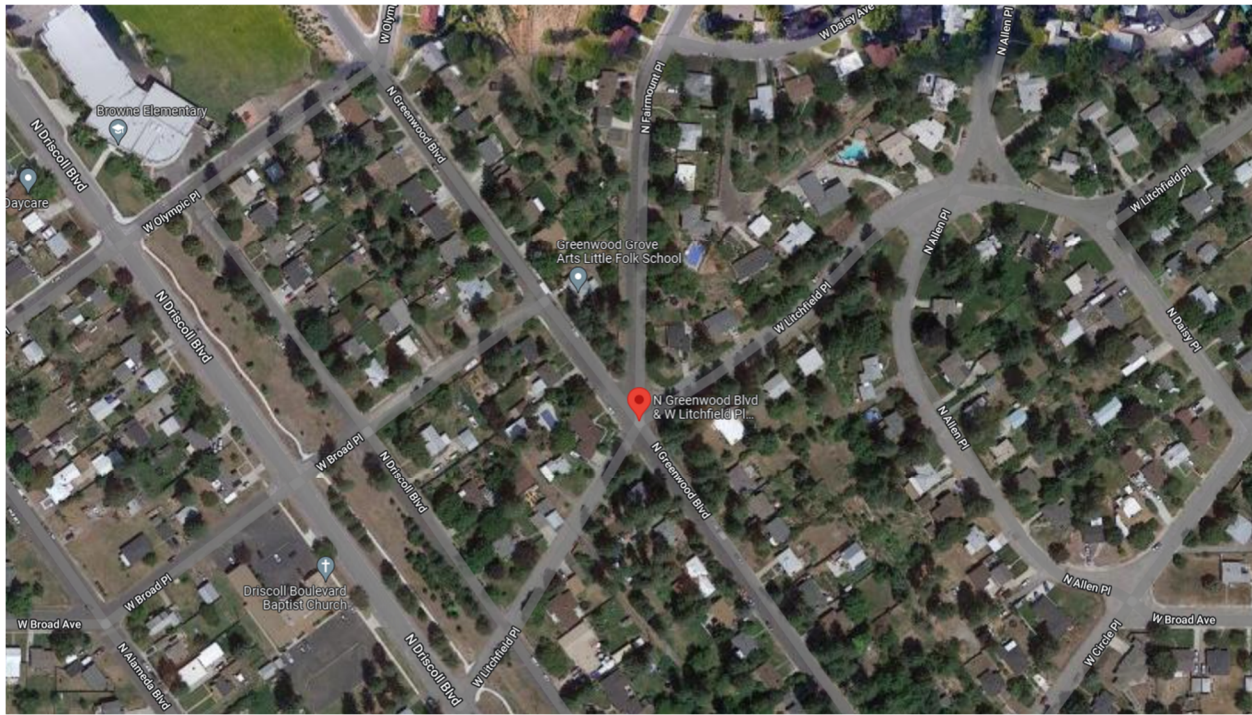
CITY OF SPOKANE, WASHINGTON
DEPARTMENT OF ENGINEERING SERVICES
808 WEST SPOKANE FALLS BLVD.
SPOKANE, WASHINGTON 99201-3343
(509) 625-6300

| | | |
|----------------------|--------------------------------------|-------------------|
| PROJECT NAME: | SPOKANE TRAFFIC CALMING MASTER PLAN | |
| SEGMENT LIMITS: | WELLESLEY AVENUE AND ASSEMBLY STREET | |
| PROJECT LIMITS: | NORTHWEST NEIGHBORHOOD | |
| TYPE OF IMPROVEMENT: | TRAFFIC | |
| CITY PROJECT NUMBER: | | CITY PLAN NUMBER: |
| EPN: | TRAFFIC DESIGN | |

Spokane Traffic Calming Master Plan

| | |
|------------------------|--|
| District: | 3 |
| Neighborhood: | Northwest |
| Project Extent: | Greenwood Boulevard, Litchfield Place, and Fairmount Place Intersection Estimate: \$413,000 |

Problem Statement: Residents of the Northwest neighborhood raised concerns over confusion when traveling through the five-leg intersection, pedestrian safety, and vehicles speeding in the area.



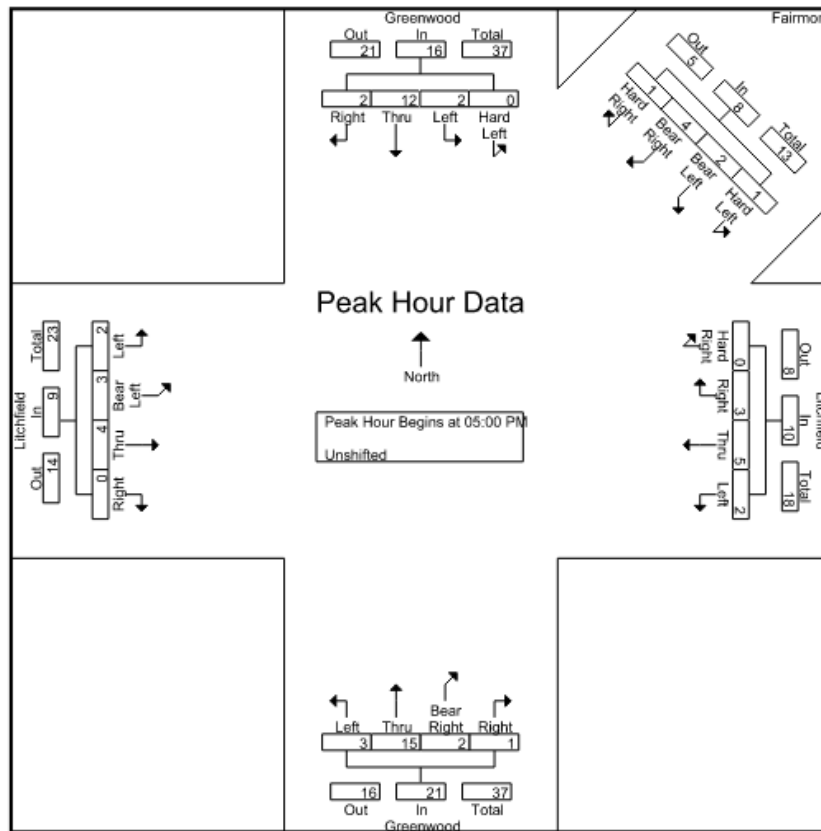
Greenwood Boulevard, Litchfield Place, and Fairmount Place Intersection

Traffic Analysis:

Greenwood Boulevard, Litchfield Place, and Fairmount Place are local streets. Greenwood Boulevard, Litchfield Place and Fairmount place are roadways with one lane in each direction, on-street parking available on both sides of the street, and no posted speed limit on any of the roadways in this study area. Greenwood Boulevard is the only roadway in this study area with a robust sidewalk network. Both Litchfield Place and Fairmount Place have very little sidewalks or none at all. There are no bike lanes or pedestrian crosswalks in this study area.

The following figure shows the estimated 2022 pm peak hour traffic volumes at the study intersection. As shown in the table, the intersection has evenly dispersed volumes on the approaches that are relatively low. Speed data was not available.

Spokane Traffic Calming Master Plan

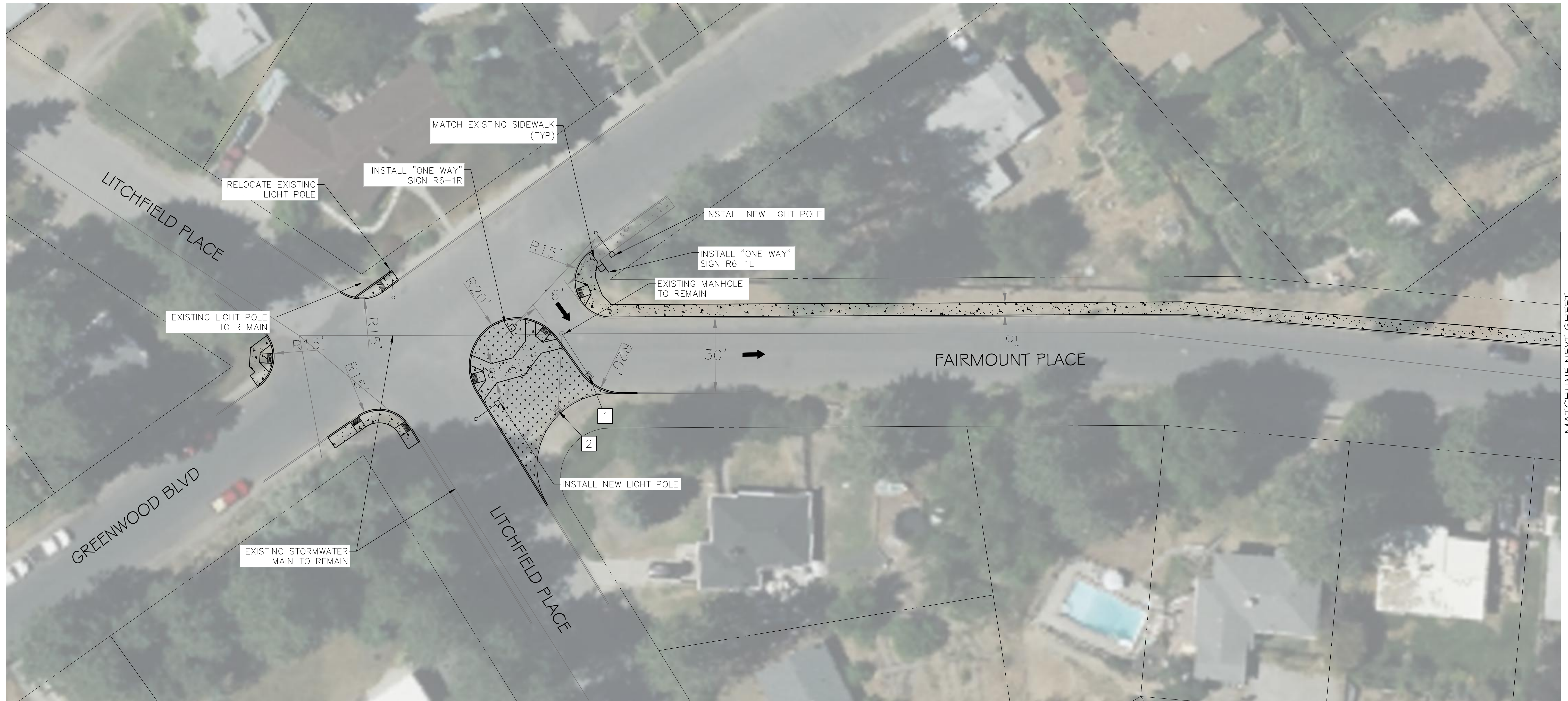


^a Traffic data collected in 2015. Traffic volumes were grown at a 1.0% annual growth rate, to estimate 2022 traffic conditions.

Recommended Solution:

The configuration of the five lane intersection results in confusion for all users traveling through the intersection. Intersection operations and safety would benefit if the intersection was configured as a common four-lane intersection with perpendicular approaches. Both the Fairmont Place and Litchfield Place east leg approaches are candidates for closure at Greenwood Boulevard. Both operate with very low peak hour volume (less than 20 vehicles per hour) at Greenwood Boulevard. The local street system east of the intersection is well connected and provides both Fairmont Place and Litchfield Place alternative routes to redirect traffic.

The closure of the Fairmont Place approach at Greenwood Boulevard is recommended due it's skewed approach to the intersection. Fairmont Place should remain open to pedestrians and cyclists. Vehicle trips on Fairmont Place are low and could reroute to the north to Daisy Avenue. The remaining intersection approaches would be close to a perpendicular four leg intersection.



MATCHLINE NEXT SHEET

LEGEND

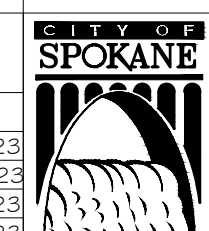
| | | | |
|--|---|--|--|
| | PROPERTY LINE | | INSTALL LANDSCAPING STRIP |
| | EXISTING CURB | | PROPOSED SIGN |
| | EXISTING CONCRETE SIDEWALK | | INSTALL CURB RAMP PER COS STD PLAN F-105 |
| | INSTALL NEW CONCRETE SIDEWALK PER COS STD PLAN F-102B | | INSTALL NEW TRAFFIC ISLAND CONCRETE PER COS STD PLAN F-108 |
| | INSTALL NEW CURB PER COS STD PLAN F-106B | | |

CONSTRUCTION NOTES

- 1 INSTALL NEW CATCH BASIN TYPE 1 AND 8" DIAM. PIPE AS NECESSARY. CONNECT TO EXISTING MANHOLE WHERE SHOWN.
- 2 REMOVE EXISTING INLET. PLUG AND ABANDON EXISTING PIPE.

| DATE | BY | PROJ. | DESCRIPTION | DATE | BY | PROJ. | F.P.N. | U.S.N. | FROM | TO | COUNCIL ACCEPT DATE | FROM | TO | ORD. NO. | DATE | FILE NO. |
|----------------------|----|-------|-------------|------|----|-------|--------|--------|------|----|---------------------|------|----|----------|------|----------|
| REVISIONS | | | | | | | | | | | | | | | | |
| AS BUILT | | | | | | | | | | | | | | | | |
| GRADE ORDINANCE LIST | | | | | | | | | | | | | | | | |

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|-------------------------------------|--|--|--|
| NAVD88 = (OLD CBM ELEV.) - (1.3.13) | | AS OF JANUARY, 2000 USE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) | |
| BENCHMARK LOCATION: None Given | | | |
| NAVD88 ELEV: None Given | | CURRENT C.O.S. DESIGN STANDARDS ADOPTED FEB. 2007 | |
| CBM NO: None Given | | BY: AM | |
| DRAWN: DRV | | DATE: 02/2023 | |
| REVISION: DRV | | DATE: 05/2023 | |
| CHECKED: JS | | DATE: 02/2023 | |
| APPROVED: AM | | DATE: 02/2023 | |



CITY OF SPOKANE, WASHINGTON
DEPARTMENT OF ENGINEERING SERVICES
808 WEST SPOKANE FALLS BLVD.
SPOKANE, WASHINGTON 99201-3343
(509) 625-6300

| | | | |
|---|--|--|--|
| PROJECT NAME: SPOKANE TRAFFIC CALMING MASTER PLAN | | TYPE OF IMPROVEMENT: TRAFFIC | |
| SEGMENT LIMITS: FAIRMOUNT PLACE AND GREENWOOD BOULEVARD | | CITY PROJECT NUMBER: [] CITY PLAN NUMBER: [] | |
| PROJECT LIMITS: NORTHWEST NEIGHBORHOOD | | DATE: TRAFFIC DESIGN | |

PRELIMINARY
NOT FOR CONSTRUCTION

5
5 of 7

MATCHLINE PREVIOUS SHEET



LEGEND

| | | | |
|--|--|--|---|
| | PROPERTY LINE | | INSTALL LANDSCAPING STRIP |
| | EXISTING CURB | | PROPOSED SIGN |
| | EXISTING CONCRETE SIDEWALK | | INSTALL CURB RAMP PER COS STD PLAN F-1 05 |
| | INSTALL NEW CONCRETE SIDEWALK PER COS STD PLAN F-1 02B | | INSTALL NEW TRAFFIC ISLAND CONCRETE PER COS STD PLAN F-1 06 |
| | INSTALL NEW CURB PER COS STD PLAN F-1 06B | | |

CONSTRUCTION NOTES

- 1 INSTALL NEW CATCH BASIN TYPE 1 AND 8" DIAM. PIPE AS NECESSARY. CONNECT TO EXISTING MANHOLE WHERE SHOWN.
- 2 REMOVE EXISTING INLET. PLUG AND ABANDON EXISTING PIPE.



**PRELIMINARY
NOT FOR CONSTRUCTION**

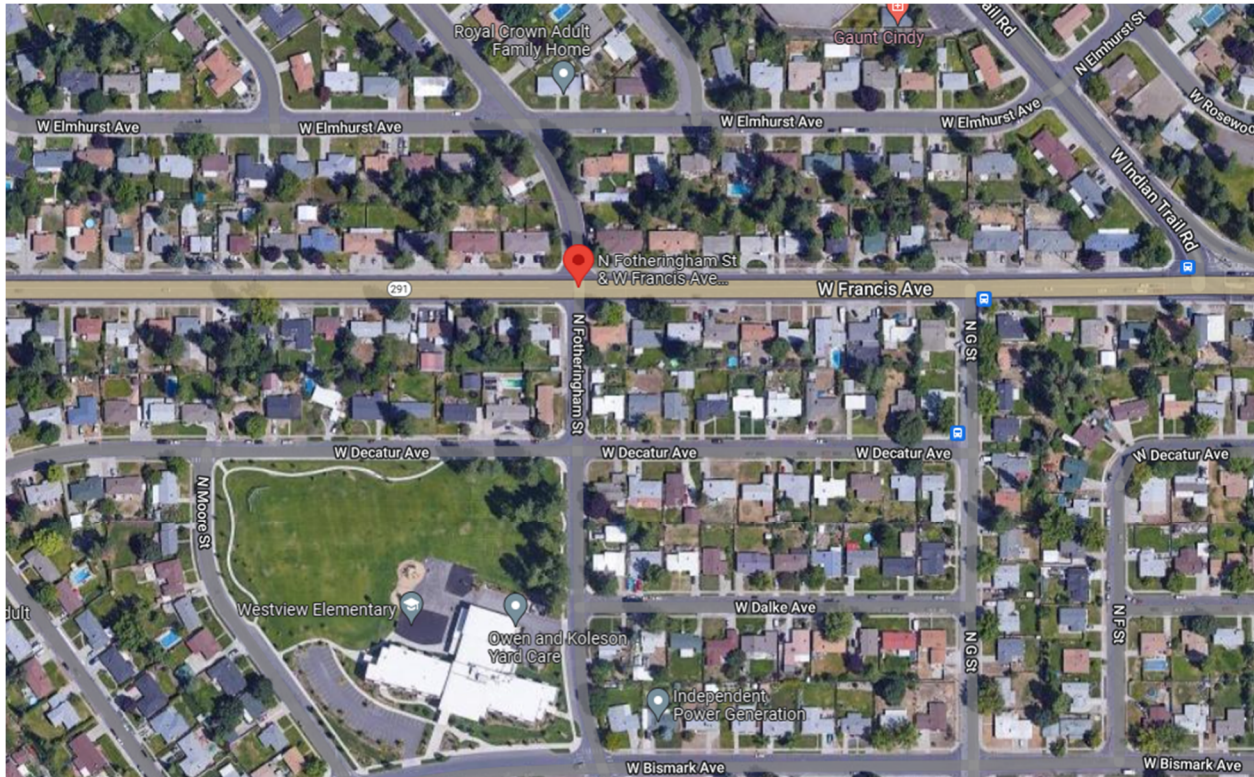
6
6 of 7

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|-----------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | | NAVD88 = (GDD CEM ELEV.) - (13.13) AS OF JANUARY, 2000 USE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) | | | | | | | | | | CURRENT C.O.S. DESIGN STANDARDS ADOPTED FEB. 2007 | | | | | | | | | |
| | | | | | | | | | | BENCHMARK LOCATION: None Given | | | | | | | | | | CITY OF SPOKANE DEPARTMENT OF ENGINEERING SERVICES 808 WEST SPOKANE FALLS BLVD. SPOKANE, WASHINGTON 99201-3343 (509) 625-6300 | | | | | | | | | |
| | | | | | | | | | | NAVD88 ELEV: None Given CEM NO: None Given BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY. | | | | | | | | | | HORIZONTAL PLAN/PROFILE: 1" = 20' VERTICAL PROFILE ONLY: N/A SCALE: | | | | | | | | | |
| | | | | | | | | | | NAVD88 DATUM | | | | | | | | | | DATE: 02/20/23 DRAWN: DRV REVISION: DRV 05/20/23 CHECKED: JS 02/20/23 APPROVED: AM 02/20/23 | | | | | | | | | |
| REVISIONS | | | | | | | | | | AS BUILT | | | | | | | | | | GRADE ORDINANCE LIST | | | | | | | | | |
| | | | | | | | | | | PROJECT NAME: SPOKANE TRAFFIC CALMING MASTER PLAN | | | | | | | | | | SEGMENT LIMITS: FAIRMOUNT PLACE AND GREENWOOD BOULEVARD | | | | | | | | | |
| | | | | | | | | | | PROJECT LIMITS: NORTHWEST NEIGHBORHOOD | | | | | | | | | | TYPE OF IMPROVEMENT: TRAFFIC CITY PROJECT NUMBER: _____ CITY PLAN NUMBER: _____ | | | | | | | | | |
| | | | | | | | | | | CALL BEFORE YOU DIG 1-800-424-5555 | | | | | | | | | | | | | | | | | | | |

Spokane Traffic Calming Master Plan

| | |
|------------------------|---|
| District: | 3 |
| Neighborhood: | Northwest |
| Project Extent: | Francis Avenue and Fotheringham Street Intersection |
| | Estimate: \$450,000 |

Problem Statement: Residents of the Northwest neighborhood raised concerns over the lack of a pedestrian crossing facility at the intersection of Francis Avenue and Fotheringham Street.



Francis Avenue and Fotheringham Street Intersection

Traffic Analysis:

Francis Avenue within the study area is classified as a principal arterial with a posted speed limit of 35 miles per hour and provides two lanes in each direction. Francis Avenue also serves as State Route 291 and is under WSDOT jurisdiction. Fotheringham Street is a local street. Fotheringham Street has one lane in each direction with available on-street parking on either side of the roadway. Fotheringham Street has a posted speed limit of 25 miles per hour and a 20 mile per hour posted school zone speed limit when children are present. The sidewalk network in the study corridor is complete. Bike lanes are not provided in the study corridor. The pedestrian crossing facilities are found only at intersections with Fotheringham Street that are directly adjacent to the school. The intersection of Francis Avenue and Fotheringham Street does not have any pedestrian crossing facilities.

Spokane Traffic Calming Master Plan

The table below shows the estimated 2022 daily traffic volumes and 85th percentile speeds on Francis Avenue at the 3500 block, which is the intersection with Fotheringham Street. As shown in the table, the highest daily volume at the intersection was on Francis Avenue with 8,712 west bound vehicles. The highest 85th percentile speed was 42 miles per hour (7 miles per hour greater than the posted speed limit).

2022 Daily Traffic and 85th Percentile Speeds at Francis Avenue and Fotheringham Street Intersection

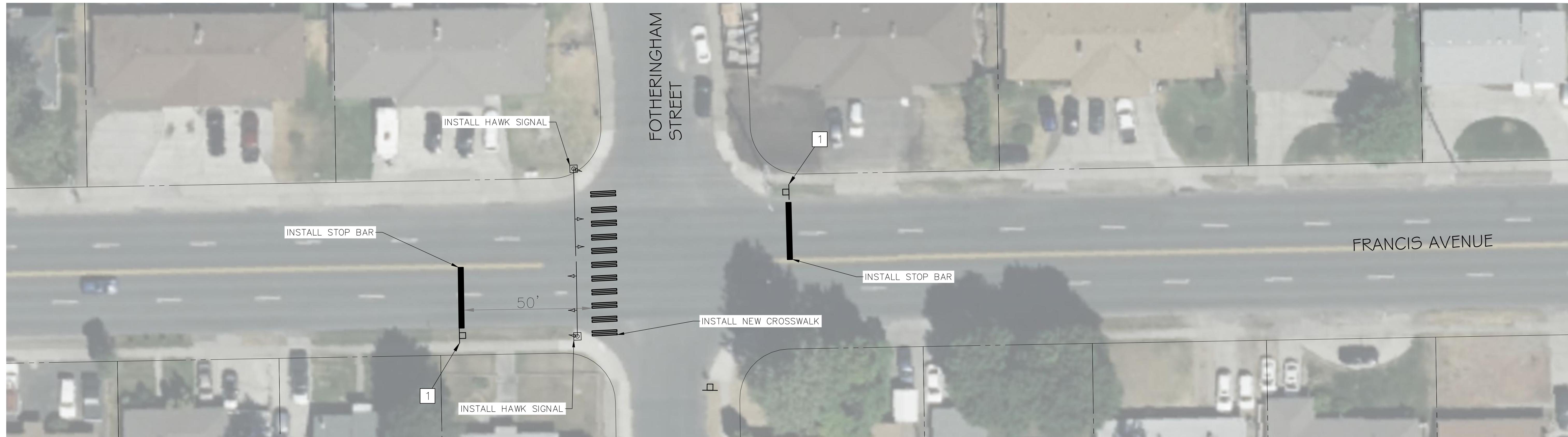
| Direction | # Lanes | 2022 Estimated Daily Traffic (Vehicles per day) | 85 th Percentile Speed (mph) | Posted Speed (mph) |
|-----------------------------|---------|--|--|-----------------------|
| Francis Avenue ^a | | | | |
| EB | 2 | 8,394 | 41 | |
| WB | 2 | 8,712 | 42 | |
| Both Dir. | 4 | 17,106 | N/A | 35 |

^a Traffic data collected in March 2012. Traffic volumes were grown at a 1.0% annual growth rate, to estimate 2022 traffic conditions.

The need for enhanced pedestrian crossing treatments was analyzed based on NCHRP Report 562. Based on the findings, red treatment (e.g., HAWK signal beacon, midblock pedestrian signal) is the preferred treatment if there are 20 or more pedestrian crossings during the peak hour. Although pedestrian data is not available, it is assumed the 20 or more pedestrian crossing threshold is met due to nearby commercial uses and the surrounding urban neighborhood.

Recommended Solution:

The installation of a HAWK or hybrid beacon pedestrian crossing is recommended on Francis Avenue at Fotheringham Street to serve the crossing demand from nearby commercial uses and the designation as a city Bike Friendly Route. Any improvements on Francis Avenue will require WSDOT approval.



LEGEND

- PROPERTY LINE
- INSTALL CROSSWALK PER COS STD PLAN G-61
- PROPOSED PEDESTRIAN CROSSING SIGN

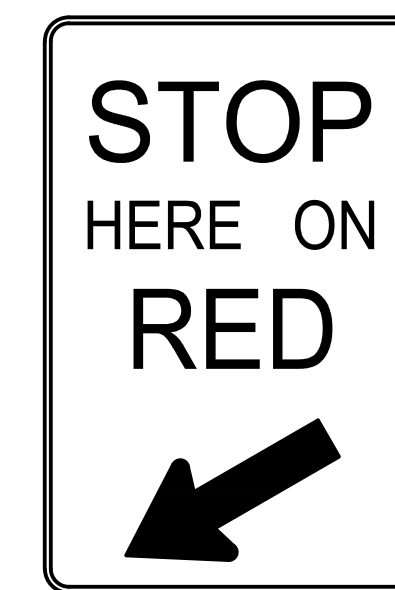
CONSTRUCTION NOTES

- 1 INSTALL PROPOSED HAWK STOP BAR SIGN
- 2 RELOCATE EXISTING BUS STOP FROM G STREET TO FOTHERINGHAM STREET

NOTE:

- 1. PROJECT REQUIRES WSDOT APPROVAL.

R10-6



PROPOSED HAWK STOP BAR SIGNAGE

**PRELIMINARY
NOT FOR CONSTRUCTION**

7
7 of 7

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|
| NAVD88 = (OLD CBM ELEV) - (1.313) AS OF JANUARY, 2000 USE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) | | | | | | | | | | BENCHMARK LOCATION: None Given | | | | | | | | | | CURRENT C.O.S. DESIGN STANDARDS ADOPTED FEB. 2007 | | | | | | | | | |
| NAVD88 ELEV: None Given | | | | | | | | | | BAR IS ONE INCH ON ORIGINAL DRAWING. | | | | | | | | | | HORIZONTAL PLANS/PROFILE: 1" = 20' | | | | | | | | | |
| CBM NO: None Given | | | | | | | | | | VERTICAL PROFILE ONLY: N/A | | | | | | | | | | SCALE: | | | | | | | | | |
| IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY | | | | | | | | | | DRAWN: DRV 02/2023 | | | | | | | | | | CHECKED: JS 02/2023 | | | | | | | | | |
| APPROVED: AM 02/2023 | | | | | | | | | | CITY OF SPOKANE, WASHINGTON DEPARTMENT OF ENGINEERING SERVICES 808 WEST SPOKANE FALLS BLVD. SPOKANE, WASHINGTON 99201-3343 (509) 625-6300 | | | | | | | | | | PROJECT NAME: SPOKANE TRAFFIC CALMING MASTER PLAN SEGMENT LIMITS: FRANCIS AVENUE AND FOTHERINGHAM STREET TYPE OF IMPROVEMENT: TRAFFIC PROJECT LIMITS: NORTHWEST NEIGHBORHOOD | | | | | | | | | |