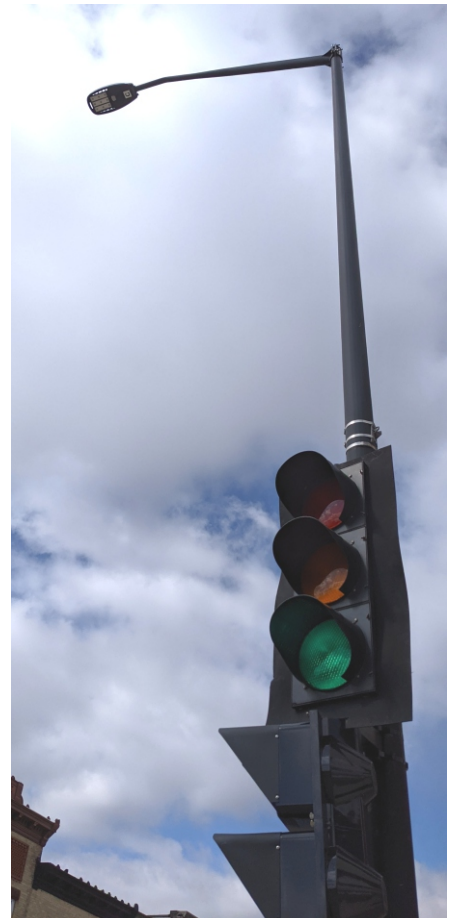




1. Project Identification

PROJECT LOCATION MAP
INTERSECTION OF STH 19/CTH N/E. MAIN STREET AT CHURCH STREET
SUN PRAIRIE, WISCONSIN

3-face signal on metal
light pole with
pedestrian
walk/don't walk
indicators



Multiple 3-face signals on
metal pole with pedestrian
walk/don't walk indicators

3b. Existing Conditions

SITE PHOTOS
INTERSECTION OF STH 19/CTH N/E. MAIN STREET AT CHURCH STREET
SUN PRAIRIE, WISCONSIN

Traditional metal signal poles attached to concrete bases

Metal base appears to be cracked



Painting metal bases is recommended



3b. Existing Conditions

SITE PHOTOS
INTERSECTION OF STH 19/CTH N/E. MAIN STREET AT CHURCH STREET
SUN PRAIRIE, WISCONSIN

Pedestrian
push button



Pedestrian push button
- awkward placement
with proximity to fire hydrant



Signal with
pedestrian
countdown timer
(Ped timer
- NW corner only)



Signal with
walk/don't walk
pedestrian signal
(no countdown timer)

3b. Existing Conditions

SITE PHOTOS
INTERSECTION OF STH 19/CTH N/E. MAIN STREET AT CHURCH STREET
SUN PRAIRIE, WISCONSIN

Loop detection locations have deteriorating pavement



3b. Existing Conditions

SITE PHOTOS
INTERSECTION OF STH 19/CTH N/E. MAIN STREET AT CHURCH STREET
SUN PRAIRIE, WISCONSIN

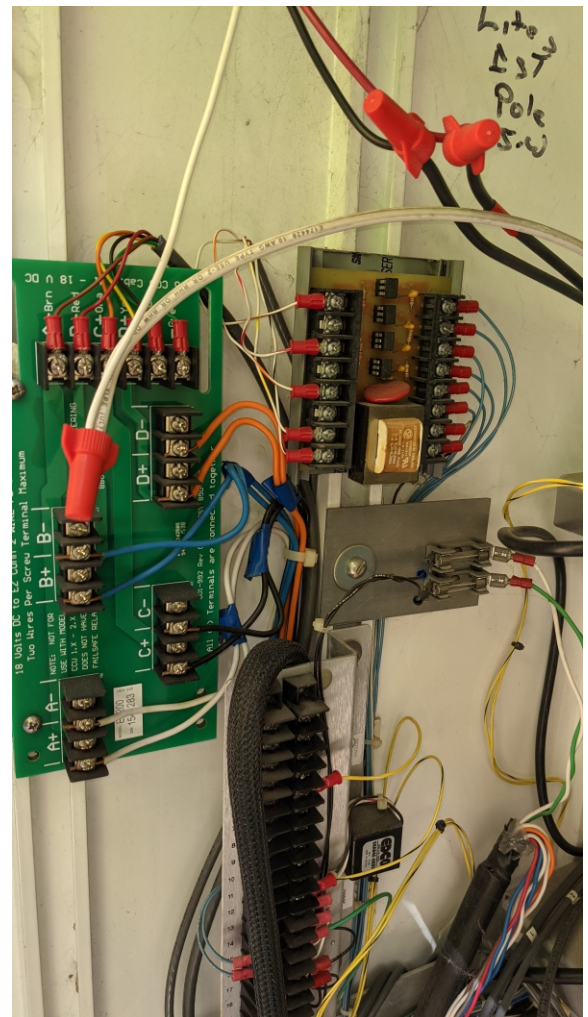
Existing signal controller cabinet requires painting



It is recommended that video detection be installed at this intersection.

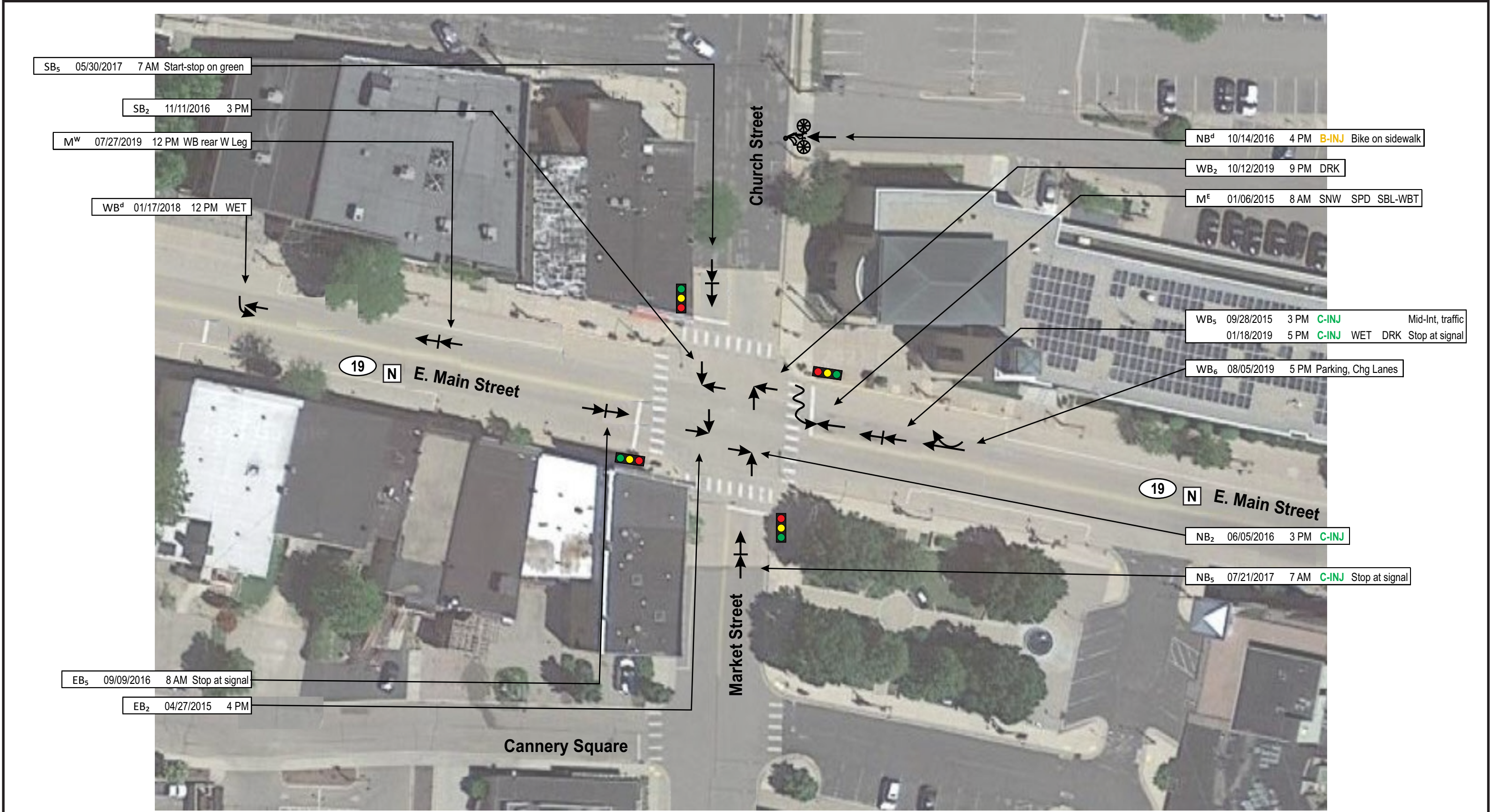


SIEMENS
MODEL: 8133-0000-099
S/O: 3006739572
DATE CODE: H17
SER #: 158066
Intelligent Transportation Systems



3b. Existing Conditions

SITE PHOTOS
INTERSECTION OF STH 19/CTH N/E. MAIN STREET AT CHURCH STREET
SUN PRAIRIE, WISCONSIN



NOT TO SCALE

CRASH STATISTICS

14 Crashes

0.60 Crashes Per Million Entering Vehicles

0 Fatal Crash (K)
0 Incapacitating (Type A)
1 Non-Incapacitating (Type B)
4 Possible (Type C)
9 Property Damage Only

LEGEND

→ Moving Vehicle	🚦 Traffic Signal	↗ Angle (Right Angle)	↔ Head-On
↔ Backing Vehicle	🛑 Stop/Yield Sign	↖ Angle (Left Turn)	↔ Rear-End
--- Pedestrian	🌳 Tree	↘ Angle (Right Turn)	🌀 Out of Control
--- Bicyclist	🅅 Fixed Object	↔ Sideswipe-Same	↔ Overtake
🚗 Parked Vehicle	🅇 Non-Fixed Object	↔ Sideswipe-Opposite	↔ Overturn

= CRASH FREQUENCY (if > 1 NON-PED/BIKE)

LABEL, DATE OF CRASH, TIME, SEVERITY, ROAD CONDITIONS, LIGHT, ALCOHOL, DRUGS, SPEED-RELATED, NOTES ABOUT CRASH

Note: Deer Crashes Not Included
*Economic Loss = \$85k (KAB), \$25k (C), \$4k (PDO)

CRASH SEVERITY DEFINITIONS

FATAL = Fatal Crash
A-Inj = Incapacitating Injury Crash
B-Inj = Non-Incapacitating Injury Crash
C-Inj = Possible Injury Crash
= Property Damage Only Crash

HIGHLIGHTED CRASHES

👤 Pedestrian or bicyclist struck by vehicle

3g. Safety Improvements

CRASH HISTORY (2015-2019)
INTERSECTION OF
E. MAIN STREET/STH 19/CTH N &
CHURCH STREET/MARKET STREET
SUN PRAIRIE, WISCONSIN

COST SUMMARY

Design:	\$	30,600
Real Estate:	\$	-
Construction:	\$	244,800
Total Project Cost:	\$	275,400

Municipal Funding (10%*): \$ 27,540

* 10% of Design and Construction Cost

SIGNAL ITEMS			
Conceptual Cost Estimate			
Main at Church			
Sun Prairie, WI			
4/7/2021			
Item	Quantity	Unit Price	Total
Remove existing signal items	1	\$ 4,500.00	\$ 4,500.00
Overhead signals w/trombone arms	4	\$ 8,500.00	\$ 34,000.00
Signal standards	4	\$ 2,250.00	\$ 9,000.00
Vehicular signal heads	12	\$ 925.00	\$ 11,100.00
Pdestrian signal heads	8	\$ 675.00	\$ 5,400.00
Pedestrian push buttons	8	\$ 625.00	\$ 5,000.00
Replacement wiring and misc.	1	\$ 49,000.00	\$ 49,000.00
Video vehicle detection	1	\$ 24,000.00	\$ 24,000.00
Street lighting adjustments	1	\$ 15,000.00	\$ 15,000.00
Mobilization	1	\$ 12,500.00	\$ 12,500.00
Traffic control	1	\$ 4,500.00	\$ 4,500.00
Temporary signals	1	\$ 30,000.00	\$ 30,000.00
Contingencies	10%		\$ 20,400.00
Design Engineering	15%		\$ 30,600.00
Construction Engineering	10%		\$ 20,400.00
Total			\$ 275,400.00

4. Project Cost

TRAFFIC SIGNAL WORK
INTERSECTION OF STH 19/CTH N/E. MAIN STREET AT CHURCH STREET
SUN PRAIRIE, WISCONSIN