CORRESPONDENCE/MEMORANDUM **State of Wisconsin**

Date: October 22, 2015

On behalf

To: Beth Canestra, P.E.
Director, Bureau of Project Development
Attn: Don Greuel, P.E. (Project Services Chief)

From: Jerry Mentzel, P.E.
Director, Northwest Region

Subject: ABBREVIATED DESIGN STUDY REPORT
Project I.D. 1000-08-08
Northwest Region, Various Highways/Freight Mitigation
Various Locations - North
Northwest Region Wide

Having considered the economic and social effects of this project, its impact on the environment, and its consistency with the goals of community planning, we request your approval of the attached design study report.

_____
Region Project Development Chief Date

Concur:

_____
Bureau of Project Development, Date
Project Services Chief

ABBREVIATED DESIGN STUDY REPORT

Project I.D. 1000-08-08
Northwest Region, Various Highways/Freight Mitigation
Various Locations - North
Northwest Region Wide

ABBREVIATED DESIGN STUDY REPORT

1.0 PROJECT DESCRIPTION AND NEED

1.1. Federal Oversight Project (Yes or No): *No*

1.2. Project Length & Termini

Project Length: Total project for seven intersection locations is 1834-ft (0.347 mi.).

See Exhibit #1: Project Location/Overview Map

Termini/Limits:

Location No.	Intersection Description	Municipality	County	Station Limits	Length ft
Location #1	USH 8/CTH SS (S 1ST ST./E MAIN ST.)	Village of Cameron	BARRON	10+15 - 12+11	196'
Location #2	USH 2/USH 63	Town of Keystone	BAYFIELD	20+00 - 22+17	217'
Location #3	USH 63/STH 77/STH 27	City of Hayward	SAWYER	295+88 - 301+56	568'
Location #4	USH 8/STH 73	Village of Ingram	RUSK	70+00 - 74+04	404'
Location #5	STH 35/STH 77	Danbury (Unincorporated)	BURNETT	80+51 - 81.68	117'
Location #6	USH 8/EAST 3RD ST. (LAKE AVE. - E 3RD ST.)	City of Ladysmith	RUSK	356+31 - 357+89	152'
Location #7	USH 8/STH 35/208TH ST ROAND-A-BOUT	City of St Croix Falls	POLK	10+10 - 10+94 20+10 - 21+06	180'
				TOTAL	1834' (0.347 mi)

1.3. Functional Classification/Access Control

Roadway Name	Functional Class (Arterial, Collector or Local)	Rural, Urban or Transitional	Corridors 2020 or Backbone (No or State which)	NHS Route (Yes or No)	Long Truck Route (No or state Federal or State)	Access Control Tier	On Ped Trans. Plan (Yes or No)	On Bike Trans. Plan (Yes or No)
1) USH 8/CTH SS Intersection	Principal Arterial	Urban	Yes - Connector	Yes	State / Federal	2B	No	No
2) USH 2/USH 63 Intersection	Principal Arterial	Rural	Yes - Connector	Yes	State / Federal	2B	No	No
3) USH 63/STH 77/ STH 27 Intersection	Principal Arterial	Urban	Yes - Connector	Yes	State / Federal	2B	No	No
4) USH 8/STH 73 Intersection	Principal Arterial	Rural	Yes - Connector	Yes	State / Federal	2B	No	No
5) STH 35/STH 77 Intersection	Minor Arterial	Urban	No	No	State	2B	No	No
6) USH 8/East 3rd Street Intersection	Principal Arterial	Urban	Yes - Connector	Yes	State / Federal	2B	Yes	Yes
7) USH 8/STH 35/208th Street Round-a-bout	Principal Arterial	Transitional	Yes - Connector	Yes	State / Federal	2A	Yes	Yes

1.4. Need For Project

The Freight Mitigation Program identified locations within the state that are impediments to the movement of freight. This project will mitigate various identified impediments located in the Northwest Region.

2.0 PRESENT FACILITY

2.1. Posted Speed

Roadway or Roadway Segment	*Posted Speed*	*Advisory Speed*
1) USH 8/CTH SS Intersection	*35 mph*	*None*
2) USH 2/USH 63 Intersection	*55 mph*	*None*
3)USH 63/STH 77/STH 27 Intersection	*35 mph*	*None*
4) USH 8/STH 73 Intersection	*55 mph*	*None*
5) STH 35/STH 77 Intersection	*35 mph*	*None*
6) USH 8/East 3rd Street Intersection	*25 mph*	*None*
7) USH 8/STH 35/208th Street Round-a-bout	*45 mph*	*None*

2.2. Geometrics

2.2.3 * Vertical Clearance Outside of Desirable or Minimum Design Standards.

*Controlling Criteria

Comments: None at any of the seven locations.

2.4 Cross Section

	Location					
	1. USH 8/CTH SS Cameron				*2. USH 2/USH 63 Bayfield County*	
Cross Section Element	*North Leg*	*South Leg*	*West Leg*	*East Leg*	*South Leg*	*West & East Legs*
Number of roadways	*1*	*1*	*1*	*1*	*1*	*1*
Number of lanes	*4*	*5*	*3*	*3*	*3*	*4*
Median width - Ft/Type	*None*	*None*	*None*	*None*	*None*	*None*
** Lane width - Ft*	*NB 12,12; SB 12,12*	*NB 12,12, 12+ turn; SB 12,12*	*EB 10 turn, 10; WB 10+*	*WB 10 turn, 12; EB 12+*	*SB 12; NB 12,16 turn*	*WB 12 bypass,12; EB 12,12 turn*
** Shoulder width - Ft (Total & Paved or C&G)*	*None, C&G*	*None, C&G*	*None, C&G*	*None, C&G*	*10, 5 paved*	*3, 1 paved (WB only)*
Bicycle Facility Type	*None*	*None*	*None*	*None*	*Paved shoulders*	*Paved shoulders & extra lanes*
Sidewalk & Curb Ramps	*None*	*None*	*Sidewalk along north & curb ramp at NW quad.*	*None*	*None*	*None*
** Cross slope*	*2%*	*2%*	*2%*	*2%*	*Var.*	*2%*
** Super-elevation*	*NC*	*NC*	*NC*	*NC*	*NC*	*NC*
** Horizontal clearance*	*> 2' behind curb face*	*> 2' behind curb face*	*> 2' behind curb face*	*> 2' behind curb face*	*1.8' from curb face to sign post in island*	*> 2' behind curb face*
Clear Zone	*2' behind C & G*	*2' behind C & G*	*2' behind C & G*	*2' behind C & G*	*2' behind C & G*	*2' behind C & G or 18'*
** Vertical clearance*	*OH power crossing*	*OH power crossing*	*OH power crossing*	*OH power crossing east of proj.*	*OH power crossing*	*No OH utility crossings with project limits*
Side slopes & Ditch sections	*C & G*	*C & G*	*C & G*	*C & G*	*3.5:1 to 4:1 south of C&G radius*	*3.5:1 to 4:1 side slopes on north & beyond C&G radii on south*

	Location					
	3. USH 63/STH 77/STH 27 Hayward				4. USH 8/STH 73 Ingram	
Cross Section Element	North Leg	South Leg	West Leg	East Leg	South Leg	West & East Legs
Number of roadways	1	1	1	1	1	1
Number of lanes	6	6	4	4	3	4
Median width - Ft/Type	Var. width earth	Var. width concrete	Var. width concrete	5' width concrete	None	None
* Lane width - Ft	NB 12,12; SB 12 turn, 12,12,12 turn	NB 12 turn, 12,12,12 turn; SB 12,12	WB 12; EB 12 turn, 12,12 turn	WB 12 turn, 12,12 turn; EB 13	SB 11; NB 11,16 turn	WB 12 bypass,12; EB 12,12 turn
* Shoulder width - Ft (Total & Paved or C&G)	None, C&G	None, C&G	10, 9 paved	8, 3 paved	5, 3 paved	C&G WB, 1-3 EB
Bicycle Facility Type	Ped./bike path crossing	None	Ped./bike path along north	Ped./bike path along north	None	None
Sidewalk & Curb Ramps	Sidewalk behind curb & across median, curb ramps at crosswalk	Sidewalks on east & west sides, curb ramps at crosswalk	Ped. bike path along north, sidewalk behind curb, curb ramps at crosswalk	Ped. bike path along north, sidewalk behind curb, curb ramps at crosswalk	None	None
* Cross slope	2%	2%	2%	2%	2%	2%
* Super-elevation	NC	NC	NC	NC	NC	NC
* Horizontal clearance	> 2' behind curb face	> 2' behind curb face	1.0' from curb face to sign post in western median nose	1.9' from curb face to sign post in western median nose	1.8' from curb face to sign post on west side of island	> 2' behind curb face
Clear Zone	2' behind C & G	2' behind C & G	2' behind C & G	2' behind C & G	2' behind C& G or 18'	2' behind C & G or 18'
* Vertical clearance	OH power crossing diagonally from SW quad to NW quad				OH power along west, not crossing	OH power crossing west leg
Side slopes & Ditch sections	C & G	C & G	4:1, 6:1 west of C&G radius	4:1, 6:1 east of C&G radius	3:1 max. south of C&G radius	Var.side slopes on north & east & west of C&G radii on south

	Location					
	5. STH 35/STH 77 Danbury		6. USH 8/E. 3rd St. Ladysmith			
Cross Section Element	North & South Legs	West Leg	North Leg	South Leg	West Leg	East Leg
Number of roadways	1	1	1	1	1	1
Number of lanes	3	3	2	4	3	2
Median width - Ft/Type	None	None	None	None	None	None
* Lane width - Ft	NB 12; SB 12, 10	WB 12+; EB 12,16 turn	NB 12+; SB 12, 16 turn	NB 12+; SB 12+	WB 12; 12 TWLTL; EB 12	WB 12 & on-str. parking; EB 12 & on-str. parking
* Shoulder width - Ft (Total & Paved or C&G)	10 paved w/C&G	10 paved w/C&G	NB 5-16 paved w/C&G; SB C&G	NB 8 paved plus adj. angle parking; SB 12 paved on-street parking w/C&G	EB 12 paved w/C&G; WB C&G	8-12 parking w/C&G
Bicycle Facility Type	Paved shoulder	Paved shoulder	None	None	None	None
Sidewalk & Curb Ramps	Sidewalk along west side, north of int.	Sidewalk along north side(no crosswalk or curb ramp at int.)	Sidewalk, curb ramps & cross walk	Sidewalk, curb ramps & cross walk	Sidewalk, curb ramps & cross walk	Sidewalk, curb ramps & cross walk
* Cross slope	1.5%	1.5%	2%	2%	2%	2%
* Super-elevation	NC	NC	NC	NC	NC	NC
* Horizontal clearance	2' behind C & G	1.5' from curb face to sign post in west nose of island	> 2' behind curb face	> 2' behind curb face	> 2' behind curb face	Sign post at 2' behind curb face
Clear Zone	2' behind C & G	2' behind C & G	2' behind C & G	2' behind C & G	2' behind C & G	2' behind C & G
* Vertical clearance	No OH util. crossings within proj. limits	No OH utility crossings within project limits	No OH utility crossings within project limits	No OH utility crossings within project limits	No OH utility crossings within project limits	No OH utility crossings within project limits
Side slopes& ditch sect.	C & G	C & G	C & G	C & G	C & G	C & G

	Location			
	7. USH 8/STH 35/208th St. RAB St. Croix Falls			
Cross Section Element	North Leg	South Leg	West Leg	East Leg
Number of roadways	1	1	1	1
Number of lanes	2	3	4	4
Median width - Ft/Type	Var. width concrete	Var. width concrete	Var. width concrete	Var. width concrete
* Lane width - Ft	NB 12; SB 12	NB 12,12 turn; SB 12	EB 12,12; WB 12,12	EB 12,12; WB 12,12
* Shoulder width - Ft (Total & Paved or C&G)	None, C&G	None, C&G	None, C&G	None, C&G
Bicycle Facility Type	None	None	None	None
Sidewalk & Curb Ramps	None	None	None	None
* Cross slope	2%	2%	2%	2%
* Super-elevation	NC	NC	NC	NC
* Horizontal clearance	> 2' behind curb face	Sign post at 2' behind curb face at south end of RT turn island	> 2' behind curb face	> 2' behind curb face
Clear Zone	2' behind C & G	2' behind C & G	2' behind C& G or 34'	2' behind C& G or 34'
* Vertical clearance	No OH util. crossings within proj. limits	OH power crossing	No OH util. crossings within proj. limits	No OH util. crossings within proj. limits
Side slopes & Ditch sect.	C & G	C & G	4:1, 6:1 west of C&G	4:1, 6:1 east of C&G

See "Existing Typical Sections" located in <u>Exhibit #2 - Preliminary Plan</u>

2.5 Pavement Structure/Condition

Roadway	*Pavement Types & Thicknesses*	*Physical Description*
1) USH 8/CTH SS Intersection	USH 8 S. Leg: 3.5" Asph. Conc. Pavt over 9" PCC, 8" Base (Assumed) USH 8 E Leg: 3.5" Asph. Conc. Pavt over 9" PCC, 8" base (Assumed)	FAIR – Significant aging and first signs of need for strengthening. Would benefit from recycling or overlay.
2) USH 2/USH 63 Intersection	USH 2: 10.5" Asph. Conc. Pavt over 6" PCC, Unknown Base 6.5" Asph. Conc. Pavt, 8" Base, 12" Subbase	GOOD – First signs of aging. Maintain with routine crack filling.
3) USH 63/STH 77/STH 27 Intersection	USH 63/STH 27: 9" PCC Pavt, 6" Base STH 27/77: 6.5" Asph Conc. Pavt, 8" Base / 9" PCC Pavt, 6" Base	VERY GOOD – Recent sealcoat or new road mix. Little or no maintenance required.
4.USH 8/STH 73 Intersection	USH 8: 6" Asph. Conc. Pavt, 6" PCC (Assumed), Unknown Base STH 73: 5" Asph. Conc. Pavt, 8" Base	*USH 8 - GOOD – First signs of aging. Maintain with routine crack filling.* *STH 73 - EXCELLENT – Recent overlay, like new.*
5) STH 35/STH 77 Intersection	STH 35/77: 4" Asph. Conc. Pavt, 8" Base	GOOD – First signs of aging. Maintain with routine crack filling.
6) USH 8/East 3rd Street Intersection	USH 8 W Leg: 9" PCC Pavt, 8" base USH 8 N Leg: 9" PCC Pavt, 8" Base	GOOD – First signs of aging. Maintain with routine crack filling.
7) USH 8/STH 35/208th Street Round-a-bout	USH 8/STH 35: 9.5" HMA Pavt, 8" Base, 12" Select Crushed, Geogrid, 6" Pipe Underdrain	EXCELLENT – New Construction

See "Existing Typical Sections" located in <u>Exhibit #2 - Preliminary Plan</u>

2.7 Structures

*Controlling Criteria

<u>Comments:</u> No structures at any of the seven locations.

2.8 Utilities

Utility Name	*Type of Utility*	*Underground/ Overhead/Both*	*Loc. #1*	*Loc. #1*	*Loc.* #2	*Loc.* #3	*Loc.* #4	*Loc.* #5	*Loc.* #6	*Loc* #7
Bayfield Electric Cooperative	ELEC	*Overhead*	*Location: 2,*	---	*X*	---	---	---	---	---
CenturyLink - Brian Huhn	TELE	*Underground*	*Locations: 3,*	---	---	*X*	---	---	---	---
CenturyLink - Jim Arquette	TELE	*Underground*	*Locations: 4,6*	---	---	---	*X*	---	*X*	---
CenturyLink - Michael Vander Bos	TELE	*Underground*	*Locations: 5,7*	---	---	---	---	*X*	---	*X*
City of Hayward	WAT/ STORM/SAN	*Underground*	*Location: 3*	---	---	*X*	---	---	---	---
City of Ladysmith Municipal Water	WAT	*Underground*	*Location: 6*	---	---	---	---	---	*X*	---
Danbury Sanitary District	SAN	*Underground*	*Location 5*	---	---	---	---	*X*	---	---
Jump River Electric Cooperative	ELEC	*Overhead*	*Location: 4*	---	---	---	*X*	---	---	---
Merit Network, Inc.	CABLE & FIBER OPTIC	*Underground*	*Location: 2*	---	*X*	---	---	---	---	---
Mosaic Telecom	CAB	*Underground*	*Location: 1*	*X*	---	---	---	---	---	---
Northwestern WI Electric Company	ELEC	*Underground*	*Location: 5*	---	---	---	---	*X*	---	---
Norvado	CABLE & FIBER OPTIC	*Underground*	*Locations: 2,3*	---	*X*	*X*	---	---	---	---
Siren Telephone Co., Inc.	CAB	*Underground (Assumed)*	*Location: 5*	---	---	---	---	*X*	---	---
Village of Cameron Municipal Water	WAT	*Underground*	*Location: 1*	*X*	---	---	---	---	---	---
We Energies	GAS	*Underground*	*Locations: 1,3,6,7*	*X*	---	*X*	---	*X*	*X*	*X*
Xcel Energy	GAS	*Underground*	*Locations: 1,3,6*	---	---	---	---	---	---	---
Xcel Energy	ELEC	*Overhead*	*Locations: 3*	*X*	---	*X*	---	---	*X*	---

Comments:

2.9 Railroad Crossings

Comments: No railroad crossings at any of the seven locations.

2.11 Unique Project Features

The intersection of STH 35 and STH 77 in the Community of Danbury is very near the St. Croix Band of Chippewa Indians of Wisconsin's trust land that is used for a Casino. Section 106 for this intersection only was sent to the tribe. In an email dated 10/19/2015 tribal clearance was given to the intersection.

Two intersections, USH 8/STH 73 in Ingram and STH 35/STH 77 in Danbury have closed LUST sites nearby. None of the sites show contaminated ground water or soil in the intersections. USH 8/STH 73 shows the closed LUST site in the southwest quadrant. STH 35/STH 77 shows a closed LUST site in the southwest quadrant and another closed LUST site about 160 feet north of the intersection on private property.

Most of the intersections are located in rural areas with a rural cross section. The intersection of USH 8 and 3rd Street is urban with sidewalks in all four quadrants. Sidewalk exists in the northwest quadrant of the intersection of STH 35/STH 77 in Danbury.

3.0 TRAFFIC

3.1 Traffic Volumes/Conditions

3.1.1

Roadway Name	*North Leg (2016 AADT) 2036 AADT*	*South Leg (2016 AADT) 2036 AADT*	*West Leg (2016 AADT) 2036 AADT*	*East Leg (2016 AADT) 2036 AADT*
1) USH 8/CTH SS Intersection	*CTH SS (8800) 9900*	*USH 8 (5800) 6400*	*CTH W (3400) 3700*	*CTH W (5200) 6100*
2) USH 2/USH 63 Intersection	*-*	*USH 63 (2100) 2400*	*USH 2 (4500) 5200*	*USH 2 (5700) 6700*
3) USH 63/STH 77/ STH 27 Intersection	*USH 63 (4700) 5100*	*USH 63/STH 27 (8500) 10400*	*STH 77/STH 27 (5400) 6200*	*STH 77 (10700) 13500*
4) USH 8/STH 73 Intersection	*-*	*STH 73 (480) 520*	*USH 8 -*	*USH 8 (1800) 1900*
5) STH 35/STH 77 Intersection	*STH 35/STH 77 (3200) 4000*	*STH 35 (3400) 4200*	*STH 77 (3600) 4500*	*-*
6) USH 8/ East 3rd Street Intersection	*USH SS (6400) 7100*	*3rd St. E(CTH G) (1600) 1700*	*USH 8 (7100) 8000*	*Lake Ave. E -*
7) USH 8/STH 35/208th Street Round-a-bout	*208th St. -*	*208th St. (2000) 2400*	*USH 8/STH 35 (>1 mi. west) (16400) 20000*	*USH 8/STH 35 (13500) 16600*

See <u>Exhibit #3 - Traffic Forecast Reports.</u>

3.1.2 Highway Capacity Analysis *Not required.*

<u>Comments:</u> Highway Capacity Analysis not required for project with a programmatic Environmental Report or lower level environmental analysis.

3.2 CRASH ANALYSIS

3.2.1 Project Crash Information

			Number & Severity of Crashes			
Roadway	*Crash Rate [(1)] (2010 - 2014)*	*Statewide Crash Rate [(1)] (2012)*	*Fatal*	*Injury*	*Property Damage*	*Total No. Crashes*
1) USH 8/CTH SS Intersection-Cameron	*193.03*	*172.66*	*0*	*5 (no A)*	*26*	*31*
2) USH 2/USH 63 Intersection- Ashland	*19.23*	*70.98*	*0*	*0*	*2*	*2*
3) USH 63/STH 77/ STH 27 Intersection- Hayward	*92.18*	*172.66*	*0*	*7(two A)*	*11*	*18*
4) USH 8/STH 73 Intersection-Ingram	*0*	*77.80*	*0*	*0*	*0*	*0*
5) STH 35/STH 77 Intersection-Danbury	*45.66*	*172.66*	*0*	*1 (A)*	*2*	*3*
6) USH 8/ East 3rd St. Intersection-Ladysmith	*38.59*	*172.66*	*0*	*1 (not A)*	*4*	*5*
7) USH 8/STH 35/208th St. RAB - St. Croix Falls	*196.18 (2012 - 2014)*	*172.66*	*0*	*4 (one A)*	*25*	*29*

[(1)] Crash rate based on 100 million vehicles miles traveled (100 MVMT)

<u>Comments:</u> The two Severity A crashes at Location #3 were 2-vehicle collisions between USH 63 northbound vehicle and USH 63 southbound vehicle turning left onto STH 77 east; In the Severity A crash at Location #5, the first vehicle was northbound but stopped at the intersection, the second northbound vehicle rear-ended the stopped vehicle, 3 people were injured, alcohol was a factor; In the Severity A non-collision crash at Location #7, one vehicle (motorcycle) lost control negotiating a curve in the roundabout and overturned.

4.0 PROPOSED DESIGN CRITERIA

4.3 Design Criteria Outside Desirable Standards: *There are no design criteria outside desirable standards.*

4.4 Exceptions To Standards: *There are no exceptions to standards.*

4.4.1 Safety Screening Analysis (SSA) and Programmatic Exception to Standards per FDM 11-1-4 (3R projects and Preventive Maintenance (PM) Group I and Group II pavement strategy projects(FDM 3-1 Exhibit 5.1))

This is a Miscellaneous type project , so Safety Screening Analysis not required.

5.0 PROPOSED DESIGN IMPROVEMENT

5.1 Improvement Type

FIIPs Legislative program number : 303

Improvement program type definition : STATE HIGHWAY REHAB, MISC - MISCELLANEIOUS

5.5 Cross Section/Pavement Structure

	Location					
	1. USH 8/CTH SS Cameron				*2. USH 2/USH 63 Bayfield County*	
Cross Section Element	*North Leg*	*South Leg*	*West Leg*	*East Leg*	*South Leg*	*West & East Legs*
Number of roadways	*1*	*1*	*1*	*1*	*1*	*1*
Number of lanes	*4*	*5*	*3*	*3*	*3*	*4*
Median width/Type	*None*	*None*	*None*	*None*	*None*	*None*
** Lane width - Ft/Type*	*NB 12,12; SB 12,12*	*NB 12,12, 12+ turn; SB 12,12*	*EB 10 turn, 10; WB 10+*	*WB 10 turn, 12; EB 12+*	*SB 12; NB 12,16 turn*	*WB 12 bypass,12; EB 12,12 turn*
** Shoulder width - Ft (Total & Paved or C&G)*	*None, C&G*	*None, C&G*	*None, C&G*	*None, C&G*	*10, 5 paved*	*3, 1 paved (WB only)*
Bicycle facilities	*None*	*None*	*None*	*None*	*Paved shoulders*	*Paved shoulders & extra lanes*
Pedestrian facilities/sidewalk	*None*	*None*	*Sidewalk along north & curb ramp at NW quad.*	*None*	*None*	*None*
** Cross slope*	*2%*	*2%*	*2%*	*2%*	*Var.*	*2%*
** Super-elevation*	*NC*	*NC*	*NC*	*NC*	*NC*	*NC*
** Horizontal clearance*	*> 2' behind curb face*	*> 2' behind curb face*	*> 2' behind curb face*	*> 2' behind curb face*	*Sign post in island will moved to >2' behind curb face*	*> 2' behind curb face*
** Vertical clearance*	*OH power crossing*	*OH power crossing*	*OH power crossing*	*OH power crossing east of project*	*OH power crossing*	*No OH utility crossings with project limits*
Pavement Structure (proposed pavement struct. to match existing as listed in proposed work areas only)	*No proposed work*	*8" CABC, 9"PCC Pvt, 3.5" Asph. Conc. Pvt*	*No proposed work*	*8" CABC, 9"PCC Pvt, 3.5" Asph. Conc. Pvt*	*12" Granular Subbase, 8" Base Agg., 6.5"± Asph. Conc. Pvt*	*Turn lanes: 12"± CABC, 6.5"± Asphaltic Concrete Pavement*
Clear Zone	*2' behind C & G*	*2' behind C & G*	*2' behind C & G*	*2' behind C & G*	*2' behind C & G*	*2' behind C & G or 18'*
Side slopes / Ditch sect.	*C & G*	*C & G*	*C & G*	*C & G*	*3.5:1 to 4:1*	*3.5:1 to 4:1*

	Location					
	3. USH 63/STH 77/STH 27 Hayward				4. USH 8/STH 73 Ingram	
Cross Section Element	North Leg	South Leg	West Leg	East Leg	South Leg	West& East Leg
Number of roadways	1	1	1	1	1	1
Number of lanes	6	6	4	4	3	4
Median width/Type	Var. width earth	Var. width concrete	Var. width concrete	5' width concrete	None	None
* Lane width - Ft/Type	NB 12,12; SB 12 turn, 12,12,12 turn	NB 12 turn, 12,12,12 turn; SB 12,12	WB 12; EB 12 turn, 12,12 turn	WB 12 turn, 12,12 turn; EB 13	SB 11; NB 11,16 turn	WB 12 bypass,12; EB 12,12 turn
* Shoulder width - Ft (Total & Paved or C&G)	None, C&G	None, C&G	10, 9 paved	8, 3 paved	5, 3 paved	C&G WB, 1-3 EB
Bicycle facilities	None	None	Ped. bike path along north	Ped. bike path along north	None	None
Pedestrian facilities/sidewalk	Sidewalk behind curb & across median, curb ramps at crosswalk	Sidewalks on east & west sides, curb ramps at crosswalk	Ped. bike path along north, sidewalk behind curb, curb ramps at crosswalk	Ped. bike path along north, sidewalk behind curb, curb ramps at crosswalk	None	None
* Cross slope	2%	2%	2%	2%	2%	2%
* Super-elevation	NC	NC	NC	NC	NC	NC
* Horizontal clearance	> 2' behind curb face	> 2' behind curb face	1.0' from curb face to sign post in western median nose - median too narrow to move sign post	Sign post in median nose will moved to >2' behind curb face	Sign post in island will moved to >2' behind curb face	> 2' behind curb face
* Vertical clearance	OH power crossing diagonally from SW quad to NW quad				OH power along west, no crossing	OH power crossing west leg
Pavement Structure (proposed pavement structure to match existing as listed)	6" CABC, 9" PCC Concrete Pavement	6" CABC, 9" PCC Concrete Pavement	8" CABC, 6.5" Asphaltic Concrete Pavement	8" CABC, 6.5" Asphaltic Concrete Pavement	8" CABC, 5"± Asph. Concrete Pavement	10"± CABC, 7.5"± Asph. Concrete Pavement
Clear Zone	2' behind C & G	2' behind C & G	2' behind C & G	2' behind C & G	2' behind C& G or 18'	2' behind C & G or 18'
Side slopes/Ditch sect.	C & G	C & G	4:1, 6:1	4:1, 6:1	3:1 max.	Var.

	Location					
	5. STH35/STH77 Danbury		6. USH 8/E. 3rd St. Ladysmith			
Cross Section Element	North & South Legs	West Leg	North Leg	South Leg	West Leg	East Leg
Number of roadways	1	1	1	1	1	1
Number of lanes	3	3	2	4	3	2
Median width/Type	None	None	None	None	None	None
* Lane width - Ft/Type	NB 12; SB 12, 10	WB 12+; EB 12,16 turn	NB 12+; SB 12, 16 turn	NB 12+; SB 12+	WB 12; 12 TWLTL; EB 12	WB 12 & on-str. parking; EB 12 & on-str. parking
* Shoulder width - Ft (Total & Paved or C&G)	10 paved w/C&G	10 paved w/C&G	NB 5-16 paved w/C&G; SB C&G	NB 8 paved plus adj. angle parking; SB 12 paved on-street parking w/C&G	EB 12 paved w/C&G; WB C&G	8-12 parking w/C&G
Bicycle facilities	Paved shoulder	Paved shoulder	None	None	None	None
Pedestrian facilities/sidewalk	Sidewalk along west side, north of int.	Sidewalk along north side	Sidewalk, curb ramps & cross walk	Sidewalk, curb ramps & cross walk	Sidewalk, curb ramps & cross walk	Sidewalk, curb ramps & cross walk
* Cross slope	1.5%	1.5%	2%	2%	2%	2%
* Super-elevation	NC	NC	NC	NC	NC	NC
* Horizontal clearance	2' behind C & G	Sign post in island will moved to >2' behind curb face	> 2' behind curb face	> 2' behind curb face	> 2' behind curb face	Sign post at 2' behind curb face
* Vertical clearance	OH power crossing south leg	N-S OH power crosses rt turn lane	No OH utility crossings within project limits	No OH utility crossings within project limits	No OH utility crossings within project limits	No OH utility crossings within project limits
Pavement Structure (proposed pavement struct. to match existing as listed in proposed work areas only)	8" CABC, 4" Asph. Concrete Pavement	8" CABC, 4" Asph. Concrete Pavement	8" CABC, 9" PCC Pavement	No proposed work	8" CABC, 9" PCC Pavement	No proposed work
Clear Zone	2' behind C & G	2' behind C & G	2' behind C & G	2' behind C & G	2' behind C & G	2' behind C & G
Side slopes/Ditch sect.	C & G	C & G	C & G	C & G	C & G	C & G

	Location			
	7. USH 8/STH 35/208th St. RAB St. Croix Falls			
Cross Section Element	*North Leg*	*South Leg*	*West Leg*	*East Leg*
Number of roadways	*1*	*1*	*1*	*1*
Number of lanes	*2*	*3*	*4*	*4*
Median width/Type	*Var. width concrete*	*Var. width concrete*	*Var. width concrete*	*Var. width concrete*
** Lane width - Ft/Type*	*NB 12; SB 12*	*NB 12,12 turn; SB 12*	*EB 12,12; WB 12,12*	*EB 12,12; WB 12,12*
** Shoulder width - Ft (Total & Paved or C&G)*	*None, C&G*	*None, C&G*	*None, C&G*	*None, C&G*
Bicycle facilities	*None*	*None*	*None*	*None*
Pedestrian facilities/sidewalk	*None*	*None*	*None*	*None*
** Cross slope*	*2%*	*2%*	*2%*	*2%*
** Super-elevation*	*NC*	*NC*	*NC*	*NC*
** Horizontal clearance*	*> 2' behind curb face*	*Sign post at 2' behind curb face at south end of RT turn island*	*> 2' behind curb face*	*> 2' behind curb face*
** Vertical clearance*	*No OH util. crossings within proj. limits*	*OH power crossing*	*No OH util. crossings within proj. limits*	*No OH util. crossings within proj. limits*
Pavement Structure (proposed pavement struct. to match existing as listed in proposed work areas only)	*No proposed work*	*No proposed work*	*12" Select Crushed Mat'l, 8" BAD 1 1/4", 9.5" HMA Type E-10*	*12" Select Crushed Mat'l, 8" BAD 1 1/4", 9.5" HMA Type E-10*
Clear Zone	*2' behind C & G*	*2' behind C & G*	*2' behind C & G or 34'*	*2' behind C & G or 34'*
Side slopes / Ditch sect.	*C & G*	*C & G*	*4:1, 6:1*	*4:1, 6:1*

See "Proposed Typical Sections" located in <u>Exhibit #2 - Preliminary Plan</u>

5.6 Street Lighting

Location	*Type*	*Break-away Requirements*
2) USH 2/USH 63 - SE Quad	*Existing light removed. New light incorporated into TYPE 13 pole w/ 35-ft monotube arm..* *Possible one or two additional lights installed.*	*No. Outside of the clear zone. FDM 11-50-60* *YES. Outside of the clear zone. FDM 11-50-60*

5.7 Structures

5.7.1 Bridge Structures *None at any of the seven locations.*

5.7.2 Box Culverts and Multiple Pipe Structures *None at any of the seven locations.*

5.7.3 Retaining Walls and Noise Barrier Structures *None at any of the seven locations.*

5.7.4 Sign Bridge Structures *None at any of the seven locations.*

5.7.5 Tunnel Structures *None at any of the seven locations.*

5.8 Permanent Traffic Control

Will permanent signs be installed (Yes or No)? Yes

Are non-standard sign layout details needed (Yes or no)? No

<u>Comments:</u>

5.9 Transportation Management Plan

See Exhibit #4 - Transportation Management Plan.

5.10 Safety Enhancements/Mitigation Measures

Location #1, USH 8/CTH SS (Village of Cameron). Multi-Trip vehicles can over-track the SE radius, eliminating encroachments in the approach and departure opposing lanes.

Location #2, USH 2/USH 63 (Town of Keystone). Multi-Trip vehicles can over-track the SE radius, eliminating encroachments in the approach and departure opposing lanes. Location #3, USH 63/STH 27/STH 77 (City of Hayward).Multi-Trip vehicles can over-track STH 27/77 raised medians eliminating encroachments on to pedestrian and bicycle facilities at the radii.

Location #4, USH8/STH 73 (Village of Ingram). Multi-Trip vehicles can over-track the SE radius, eliminating encroachments in the approach and departure opposing lanes.

Location #5, STH 35/77 (Danbury-Unincorporated). Multi-Trip vehicles can over-track the SW & NW radii and island, eliminating encroachments in the STH 35 SB approach and departure opposing lanes and minimizing encroachments in the STH 77 WB approach and departure lanes. The NW radius sidewalk will be relocated back to the existing right-of-way to avoid OSOW truck over-tracking with pedestrian facilities.

Location #6, USH 8/East 3rd Street (City of Ladysmith). Multi-Trip vehicles can over-track raised island eliminating encroachments on to pedestrian and bicycle facilities at the NW radii.

Location #7, USH 8/208th Street (City of St Croix Falls). Multi-Trip vehicles can over-track the SW and NE radius, eliminating encroachments in the approach adjacent lanes.

5.12 Utilities

Is Project Trans 220 Utility Project (Yes or No)? Yes

Describe any special design features to accommodate utilities:

There are no special design features to accommodate utilities.

Major Utility Agreements:

There are no major utility agreements.

Comments: *All utility conflicts are minor and adjustments will be made during construction.*

5.13 Railroads *None at any of the seven locations.*

5.14 Financing And Scheduling

Construction I.D.	*Cost Estimate*	*Type of Funding*			*Proposed Timeframe For Construction*	*Ties to Other Work or Projects*	*Incentive/ Disincentive Clauses (Yes or No)*
		% Fed.	*% State*	*% Local*			
1000-08-88	*$379,940*	*0*	*100*	*0*	*Spring 2016*	*None*	*No*

Describe Incentive/Disincentive Clauses:

None for any of the seven locations - Check with Phil K.

Non-participating Work:

None at any of the seven locations.

Deferred Construction Work (Preventative Maintenance projects)

None at any of the seven locations. Not a Preventative Maintenance Project.

5.15 Unique Or Non-standard Features

5.15.1 Hazardous Waste

Two intersections, USH 8/STH 73 in Ingram and STH 35/STH 77 in Danbury have closed LUST sites nearby. At the USH 8/STH 73 intersection, the DNR BRRTS report indicated that contaminated soil is contained within the southwest quadrant. This intersection's proposed construction is limited to the southeast quadrant. Therefore, the project is unlikely to encounter contaminated soil at the intersection of USH 8/STH 73. At the STH 35/STH 77 intersection, due to the shallow construction of two feet below existing ground, the project is not likely to encounter contaminated soil. Special provisions will require the contractor to contact WisDOT should any contaminated soil be encountered at the two intersections.

5.15.2 Environmental Commitments

General Economics: Maintain access to businesses and driveways. Community or Residential: Ensure businesses that customers and emergency vehicles will be able to access property - This will be noted in the special provisions. Construction Stage Sound Quality: WisDOT Standard Specifications 107.8(6) and 108.7.1 will apply. Hazardous Substances or Contamination: Special provisions will require contractor to contact WisDOT should any contaminated soil be encountered at either USH 8/STH 73 or STH 35/STH 77 intersection. Erosion Control: Best Management Practices (BMP) will be noted in the special provisions and erosion control will be shown on plan sheets. An Erosion Control Implementation Plan (ECIP) will be required for the contractor. This will be noted in the project's special provisions.
See Exhibit #5 Environmental Commitments

5.15.3 Community Sensitive Design/Public Involvement

Public Involvement Plan was approved on October 12, 2015 by Phil Keppers, Project Manager and Chris Ouellette.

6.0 SYNOPSIS

	Completion/Approval Dates	*Status of Coordination or Other Information as Needed*
Concept Definition Report	*Revised CDR accepted by David Wincensten, 02/24/2015*	*Complete*
Scoping Document	*1/29/2015*	*Complete*
Public Involvement Plan	*10/12/2015*	*Complete*
Environmental Document	*Submitted to WisDOT on 10/22/15*	*Approval Pending*
Public Information Meetings	*None*	*No Public Information Meetings Required*
SHPO Involvement	*On screening list for Arch. and History 3/19/2015 for all intersections except Location #5 (STH 35/77). Location #5 cleared by James Becker (WisDOT) 10/15/2015.*	*Complete*
DNR Involvement	*WIDNR Coordination by Amy Adrihan. Final Concurrence 4/01/2015. See **Exhibit #6 Final Concurrence**. Email from DNR no NLEB on 10/15/2015.*	*Complete*
Transportation Management Plan	*Revised TMP Submitted by Jeff Stellrecht 10/21/2015*	*Approval Pending*
Permits Required (Types:)	*None*	*No permits required*
Local Project Agreements	*None*	*No Local Project Agreements*
Status of Statutory Actions	*None*	*No Statutory Actions*

7.0 ATTACHMENTS

Exhibit #1: Project Location/Overview Map

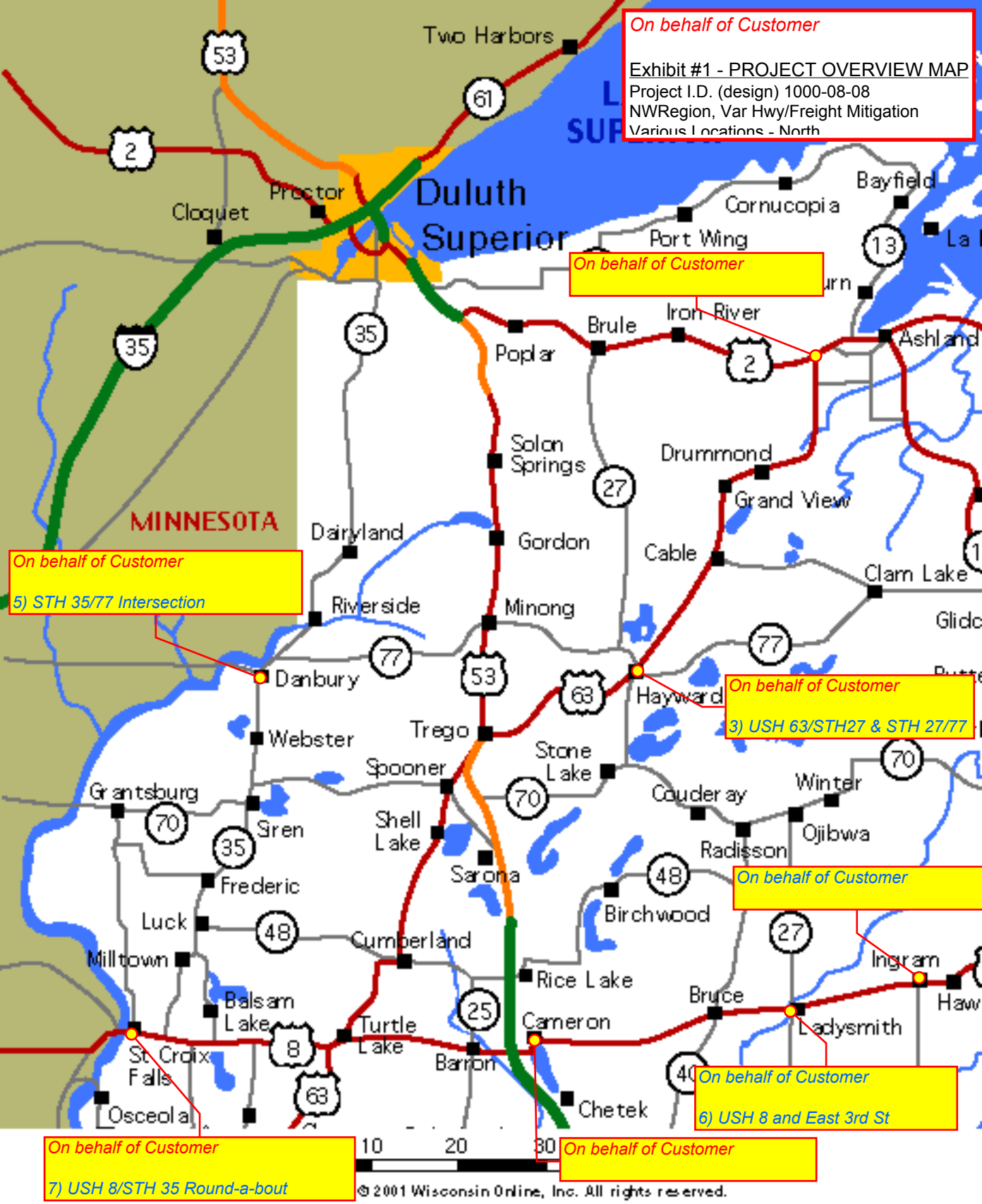
Exhibit #2: Preliminary Plan without Cross-Sections

Exhibit #3: Traffic Forecasts

Exhibit #4: Traffic Management Plan and request for approval form

Exhibit #5: Environmental Commitments

Exhibit #6: Final Concurrence


On behalf of Customer
Exhibit #1 - PROJECT OVERVIEW MAP
Project I.D. (design) 1000-08-08
NWRegion, Var Hwy/Freight Mitigation
Various Locations - North
Two Harbors
Duluth
Superior
Proctor
Cloquet
Bayfield
Cornucopia
Port Wing
Iron River
Brule
Poplar
Ashland
Solon Springs
Drummond
Grand View
Cable
Clam Lake
Dairyland
Gordon
Riverside
Minong
Danbury
Webster
Trego
Hayward
Spooner
Stone Lake
Couderay
Winter
Ojibwa
Radisson
Grantsburg
Siren
Shell Lake
Sarona
Frederic
Birchwood
Luck
Cumberland
Milltown
Rice Lake
Ingram
Bruce
Ladysmith
Balsam Lake
Turtle Lake
Cameron
St Croix Falls
Barron
Osceola
Chetek
MINNESOTA
On behalf of Customer
5) STH 35/77 Intersection
On behalf of Customer
3) USH 63/STH27 & STH 27/77
On behalf of Customer
On behalf of Customer
6) USH 8 and East 3rd St
On behalf of Customer
7) USH 8/STH 35 Round-a-bout
On behalf of Customer
10
20
30
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PROJECT ID: 1000-08-88

WITH: N/A

COUNTY: NW REGION WIDE

ORDER OF SHEETS

Section No.	1	Title
Section No.	2	Typical Sections and Details
Section No.	3	Estimate of Quantities
Section No.	3	Miscellaneous Quantities
~~Section No.~~	~~4~~	~~Right of Way Plat~~
Section No.	5	Plan and Profile
Section No.	6	Standard Detail Drawings
Section No.	7	Sign Plates
~~Section No.~~	~~8~~	~~Structure Plans~~
Section No.	9	Computer Earthwork Data
Section No.	9	Cross Sections

TOTAL SHEETS =

STATE OF WISCONSIN

DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1000-08-88		

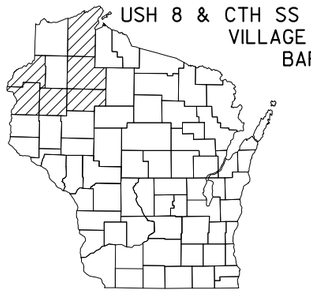
NWREGION, VAR HWY/FREIGHT MITIGATION

VARIOUS LOCATIONS - NORTH

VARIOUS HIGHWAY ← FIIPS PAGE SAYS "VAR HWY"

NORTHWEST REGION WIDE

60% PS&E



FIIPS PAGE AND CDR ARE DIFFERENT. USED FIIPS ID.

DESIGN DESIGNATION 1000-08-08

A.A.D.T.	N/A	=	N/A
A.A.D.T.	N/A	=	N/A
D.H.V.		=	N/A
D.D.		=	N/A
T.		=	N/A
DESIGN SPEED		=	N/A
ESALS		=	N/A

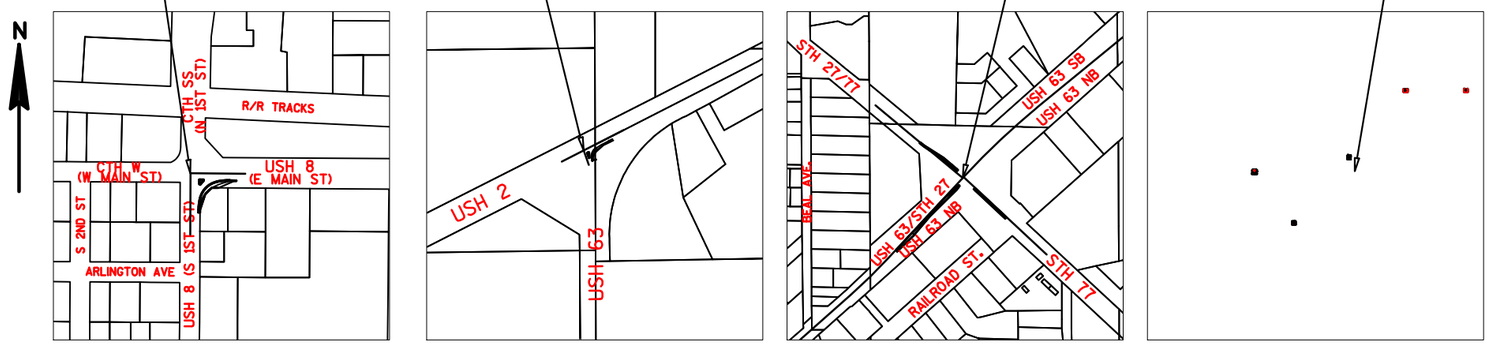
LOCATION #1
USH 8 & CTH SS INTERSECTION
VILLAGE OF CAMERON
BARRON COUNTY

LOCATION #2
USH 2 & USH 63 INTERSECTION
TOWN OF KEYSTONE
BAYFIELD COUNTY

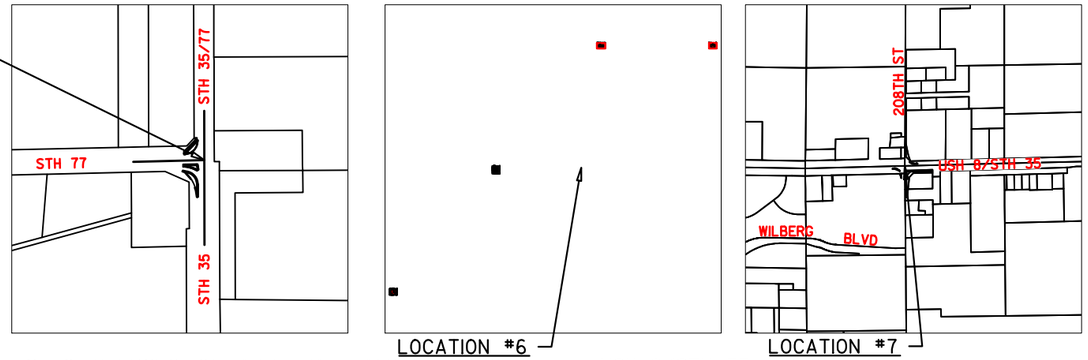
STATE PROJECT NUMBER
1000-08-88

LOCATION #3
USH 63/STH 27 & STH 27/77 INTERSECTION
CITY OF HAYWARD
SAWYER COUNTY

LOCATION #4
USH 8 & STH 73 INTERSECTION
VILLAGE OF INGRAM
RUSK COUNTY



LOCATION #5
STH 35/77 & STH 77 INTERSECTION
DANBURY (UNINCORPORATED)
BURNETT COUNTY



LOCATION #6
USH 8 INTERSECTION (LAKE AVE. AND E 3RD ST.)
CITY OF LADYSMITH
RUSK COUNTY

LOCATION #7
USH 8/STH 35 & 208TH ST.
ROUN-A-BOUT
CITY OF ST CROIX FALL
POLK COUNTY

DAN IS RETIRING. NEW NAME??

CONVENTIONAL SYMBOLS

PLAN		PROFILE	
CORPORATE LIMITS		GRADE LINE	
PROPERTY LINE		ORIGINAL GROUND	
LOT LINE		MARSH OR ROCK PROFILE (To be noted as such)	ROCK
LIMITED HIGHWAY EASEMENT		SPECIAL DITCH	LABEL
EXISTING RIGHT OF WAY		GRADE ELEVATION	95.36
PROPOSED OR NEW R/W LINE		CULVERT (Profile View)	
SLOPE INTERCEPT		UTILITIES	
REFERENCE LINE	300'EB'	ELECTRIC	E
EXISTING CULVERT		FIBER OPTIC	FO
PROPOSED CULVERT (Box or Pipe)		GAS	G
COMBUSTIBLE FLUIDS	CAUTION	SANITARY SEWER	SAN
		STORM SEWER	SS
MARSH AREA		TELEPHONE	T
		WATER	W
		UTILITY PEDESTAL	
WOODED OR SHRUB AREA		POWER POLE	
		TELEPHONE POLE	

LAYOUT ← NEED TO CHANGE.

SCALE 0 2 MILES

TOTAL NET LENGTH OF CENTERLINE = 0.00

REWORD FOR ALL COUNTIES IN PROJECT.

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, COUNTY COUNTY, NAD83 (YEAR), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ORIGINAL PLANS PREPARED BY

On behalf of Customer

Exhibit #2 -
60% Preliminary Plan

DATE:

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

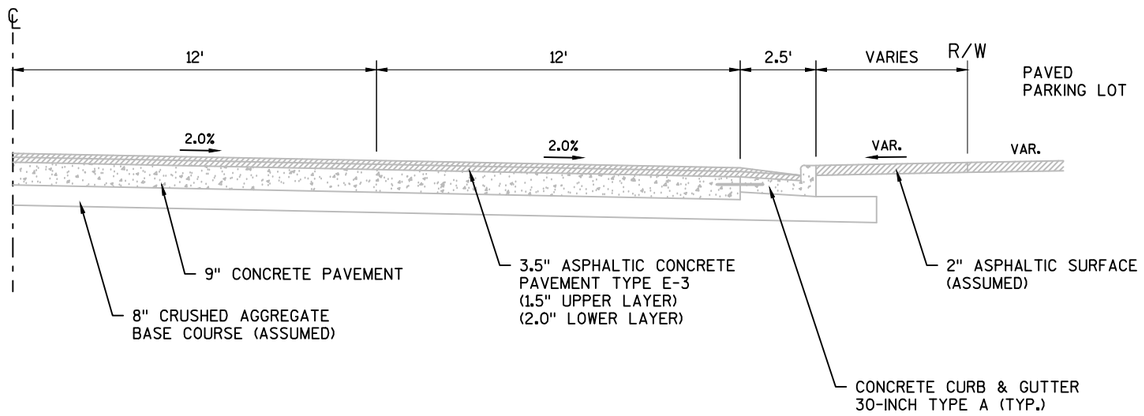
Surveyor	NWBE, INC. - JSSH
Designer	NWBE, INC. - GTC
Project Manager	PHIL KEPPERS
Regional Examiner	DAN OJIWAY
Regional Supervisor	DAVE OSTROWSKI

APPROVED FOR THE DEPARTMENT

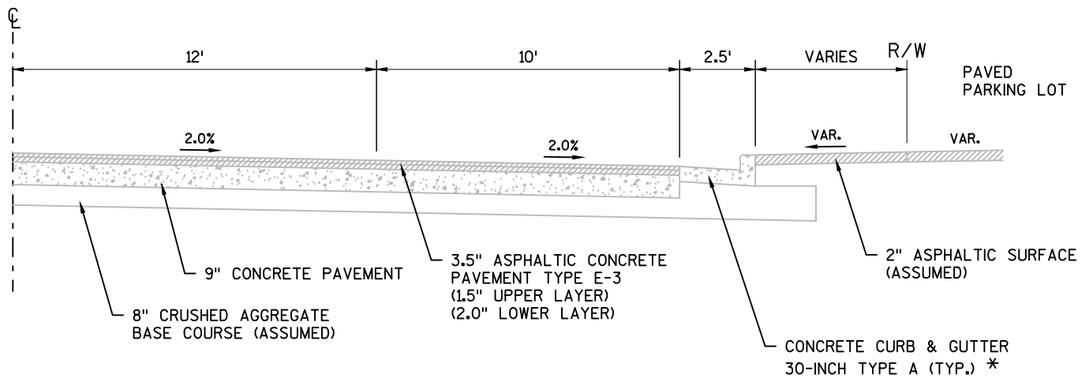
DATE: _____ (Signature)

E

LOCATION #1 - USH 8 & CTH SS INTERSECTION
(VILLAGE OF CAMERON - BARRON COUNTY)



TYPICAL EXISTING SECTION
STA. 135+40.0 - 136+70.0 (USH 8, S. 1ST STREET)



TYPICAL EXISTING SECTION
STA. 0+44.0 - 1+52.3 (USH 8, E. MAIN STREET)

* CURB & GUTTER REPLACED IN APPROX. 2002. ASSUMED FLAGLINE REPLACED AT 3.5" OVERLAY ELEVATION.

PROJECT NO: 1000-08-88	HWY: VARIOUS	COUNTY: NW REGION WIDE	PLAN: TYPICAL SECTIONS	SHEET	E

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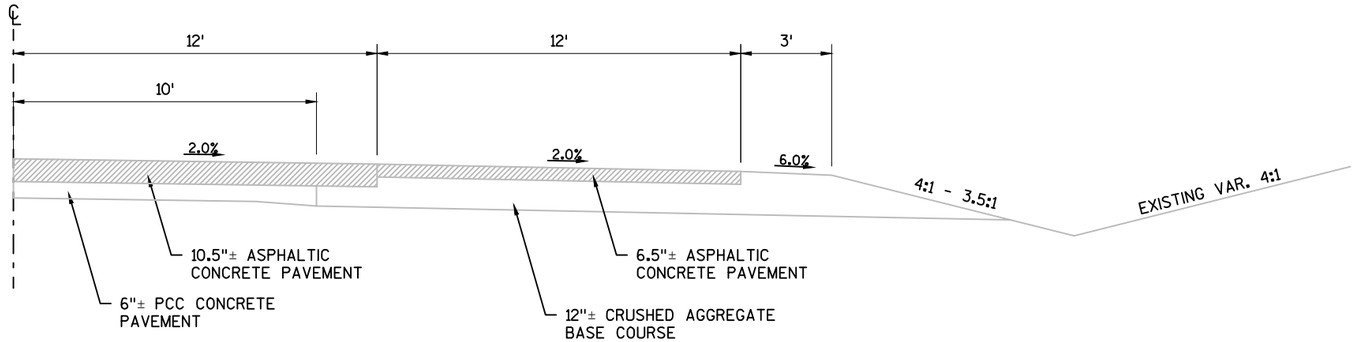
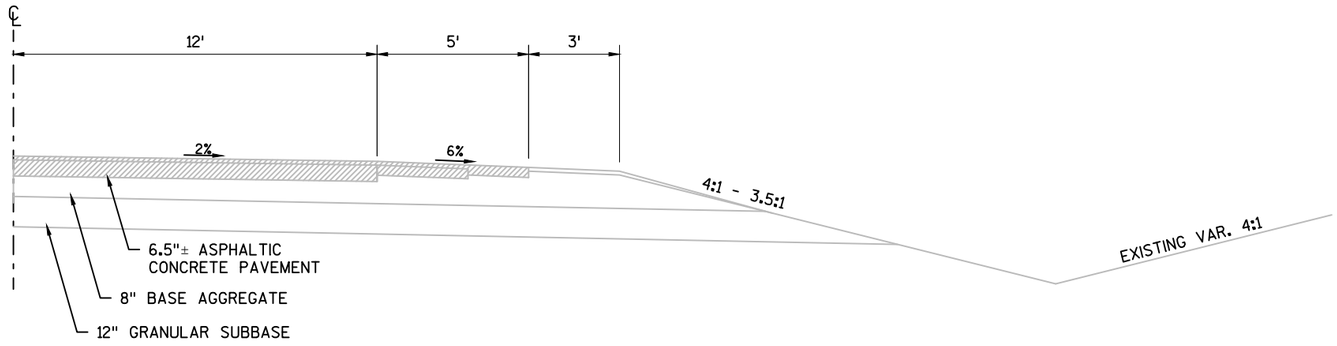
1507_020301_TS-EXISTING.DST - 01
PLOT DATE : 10/14/2015 2:32 PM PLOT BY : GARY COLBERT PLOT NAME : PLOT SCALE : 1 IN:5 FT
WISDOT/CADDS SHEET 42

LOCATION #2 - USH 2 & USH 63 INTERSECTION
(TOWN OF KEYSTONE - BAYFIELD COUNTY)



TYPICAL EXISTING 1/2-SECTION
(USH 2)



TYPICAL EXISTING 1/2-SECTION
(USH 63)

PROJECT NO: 1000-08-88	HWY: VARIOUS	COUNTY: NW REGION WIDE	PLAN: TYPICAL SECTIONS	SHEET	E

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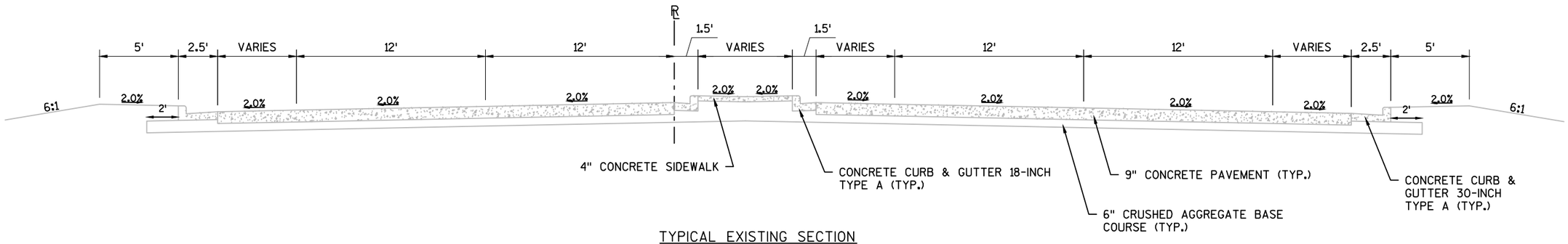
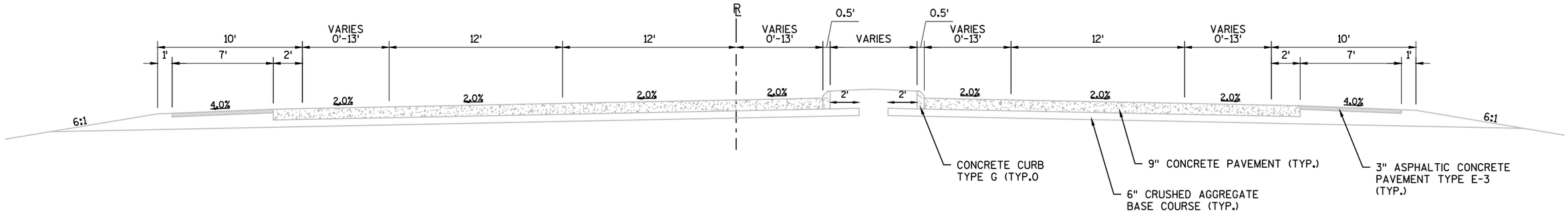
PLOT DATE : 10/14/2015 2:32 PM PLOT BY : GARY COLBERT PLOT NAME : PLOT SCALE : 1 IN:5 FT
WISDOT/CADDS SHEET 42

LOCATION #3 - USH 63/STH 27 & STH 27/77 INTERSECTION
(CITY OF HAYWARD - SAWYER COUNTY)



TYPICAL EXISTING SECTION
STA. 295+89 - 301+92 (USH 63/STH 27)



TYPICAL EXISTING SECTION
STA. 301+92 - 309+89 (USH 63/STH 27)

PROJECT NO: 1000-08-88	HWY: VARIOUS	COUNTY: NW REGION WIDE	PLAN: TYPICAL SECTIONS	SHEET	E

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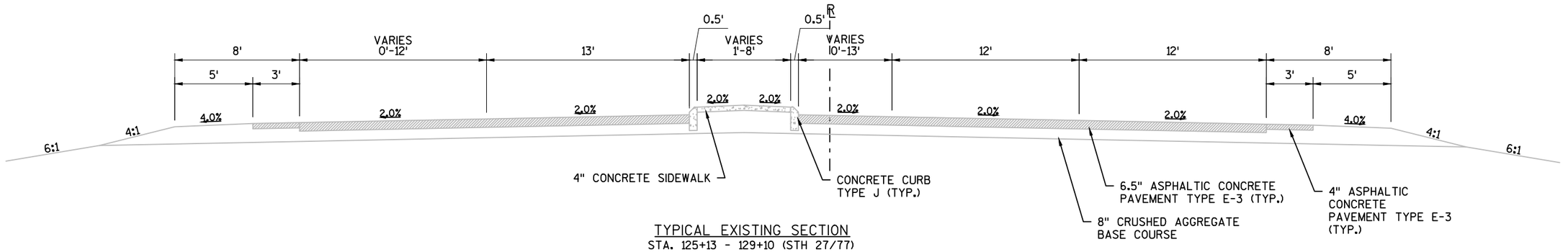
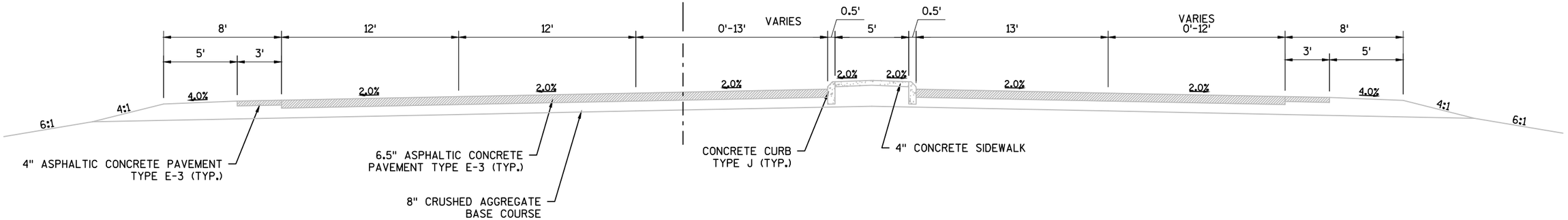
LOCATION #3 - USH 63/STH 27 & STH 27/77 INTERSECTION
(CITY OF HAYWARD - SAWYER COUNTY)



TYPICAL EXISTING SECTION
STA. 125+13 - 129+10 (STH 27/77)



TYPICAL EXISTING SECTION
STA. 131+27 - 136+36 (STH 77)

PROJECT NO: 1000-08-88	HWY: VARIOUS	COUNTY: NW REGION WIDE	PLAN: TYPICAL SECTIONS	SHEET	E

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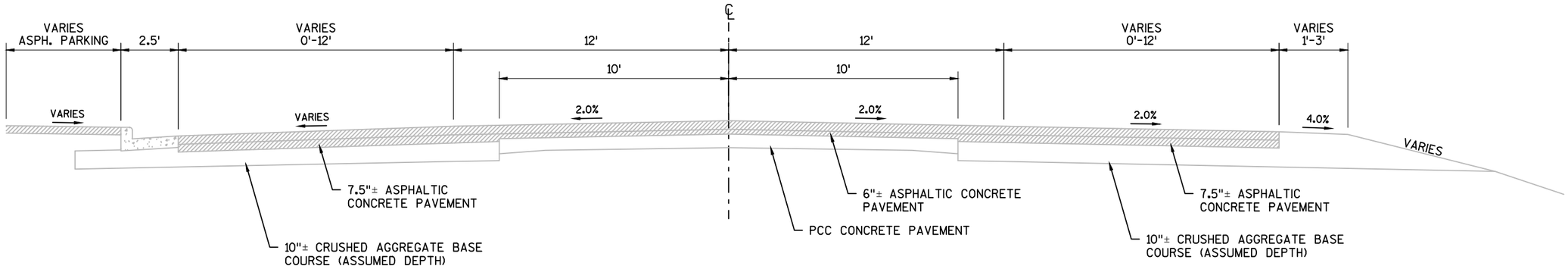
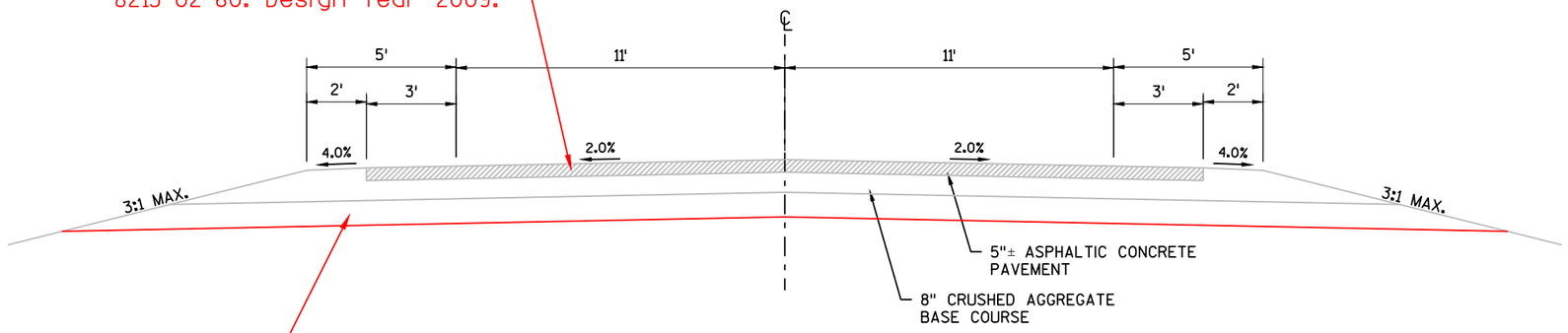
1507_020301_TS-EXISTING.DST - 06.2
PLOT DATE : 10/14/2015 2:32 PM PLOT BY : GARY COLBERT PLOT NAME : PLOT SCALE : 1 IN:7 FT
WISDOT/CADDS SHEET 42

LOCATION #4 - USH 8 & STH 73 INTERSECTION
(VILLAGE OF INGRAM - RUSK COUNTY)



TYPICAL EXISTING SECTION
(USH 8)

Dimensions from Project No. 8213-02-60. Design Year 2009.



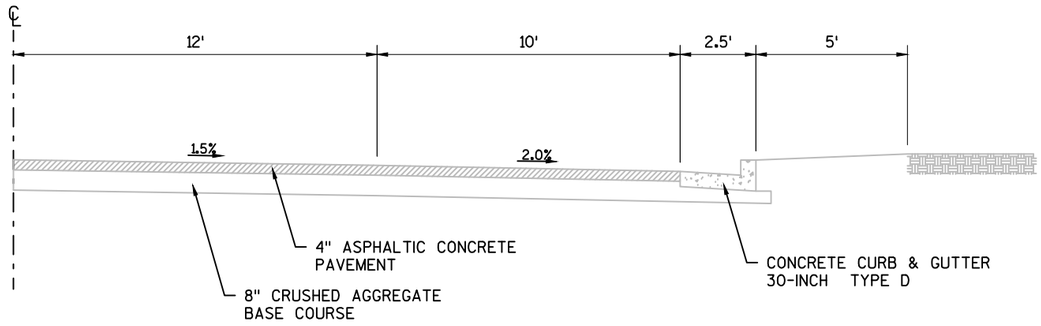
TYPICAL EXISTING SECTION
(STH 73)

Unknown depth subbase layer shown in Project No. 8213-02-60. Design Year 2009 but not in 1981 plan. Intersection built in 1981, therefore assuming no subbase.

PROJECT NO: 1000-08-88	HWY: VARIOUS	COUNTY: NW REGION WIDE	PLAN: TYPICAL SECTIONS	SHEET	E

FILE NAME : W:\NWBE_PROJECTS\DESIGN\1507_FREIGHT_MITIGATION_OSOW\C3D_14\SHEETSPLAN\020301_TS-EXISTING_ALL.DWG
1507_020301_TS-EXISTING.DST - 07
PLOT DATE : 10/14/2015 2:32 PM PLOT BY : GARY COLBERT PLOT NAME : PLOT SCALE : 1 IN:5 FT

LOCATION #5 - STH 77 & STH 35 INTERSECTION
(VILLAGE OF DANBURY - BURNETT COUNTY)

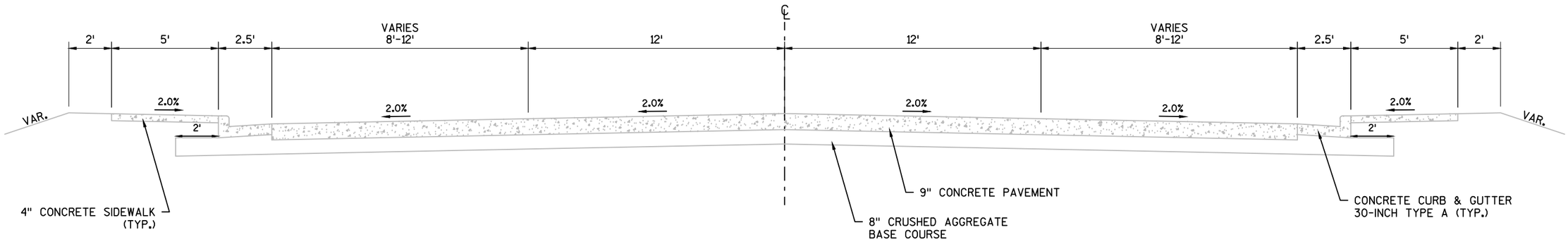


TYPICAL EXISTING 1/2-SECTION
STA. XX+XX.XX - XX+XX.XX (STH 77)
STA. XX+XX.XX - XX+XX.XX (STH 35)

PROJECT NO: 1000-08-88	HWY: VARIOUS	COUNTY: NW REGION WIDE	PLAN: TYPICAL SECTIONS	SHEET	E

FILE NAME : W:\NWBE_PROJECTS\DESIGN\1507_FREIGHT_MITIGATION_OSOW\C3D_14\SHEETSPLAN\020301_TS-EXISTING_ALL.DWG
1507_020301_TS-EXISTING.DST - 08
PLOT DATE : 10/14/2015 2:32 PM PLOT BY : GARY COLBERT PLOT NAME : PLOT SCALE : 1 IN:5 FT
WISDOT/CADDS SHEET 42

LOCATION #6 - USH 8 & EAST 3RD STREET INTERSECTION
(LAKE AVENUE & N. 3RD STREET)
(CITY OF LADYSMITH - RUSK COUNTY)

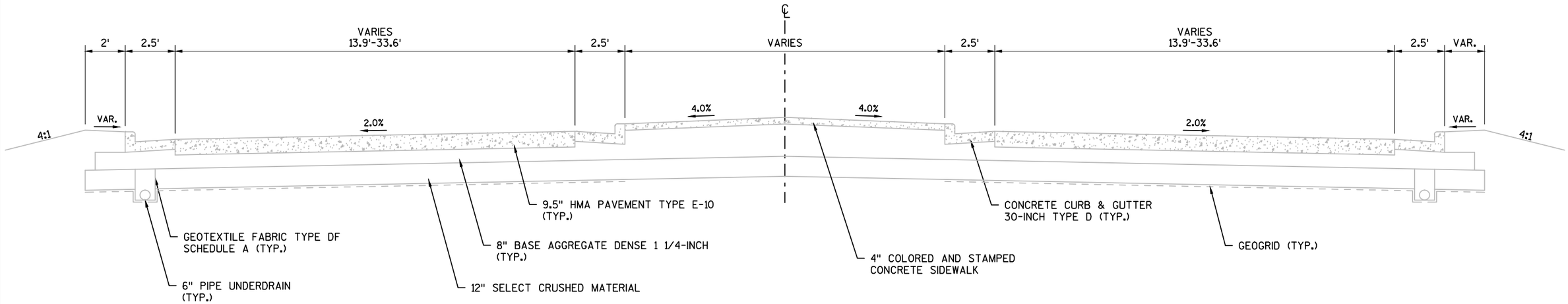


TYPICAL EXISTING SECTION
STA. XX+XX.XX - XX+XX.XX (USH 8)
STA. XX+XX.XX - XX+XX.XX (EAST 3RD STREET)

PROJECT NO: 1000-08-88	HWY: VARIOUS	COUNTY: NW REGION WIDE	PLAN: TYPICAL SECTIONS	SHEET	E

FILE NAME : W:\NWBE_PROJECTS\DESIGN\1507_FREIGHT_MITIGATION_OSOW\C3D_14\SHEETSPLAN\020301_TS-EXISTING_ALL.DWG
1507_020301_TS-EXISTING.DST - 09
PLOT DATE : 10/14/2015 2:32 PM PLOT BY : GARY COLBERT PLOT NAME : PLOT SCALE : 1 IN:5 FT

LOCATION #7 - USH 8 & 208TH STREET INTERSECTION
(W 130TH AVENUE & 208TH STREET)
(CITY OF ST CROIX FALLS - POLK COUNTY)

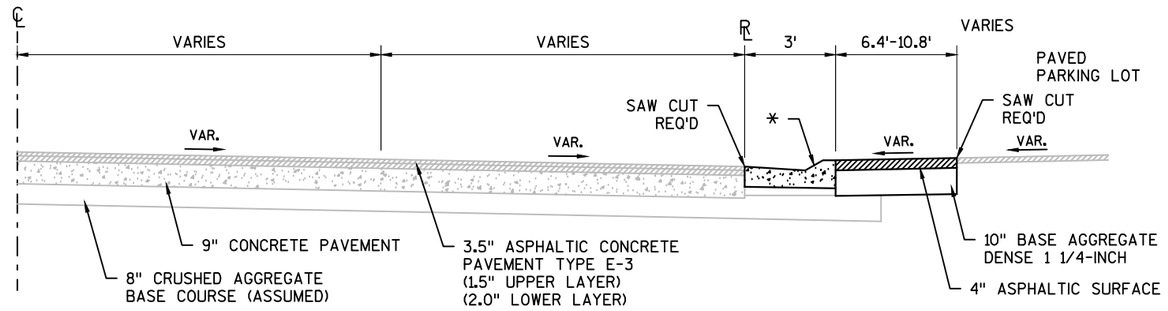


TYPICAL EXISTING SECTION
STA. XX+XX.XX - XX+XX.XX (USH 8)

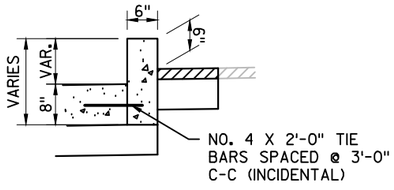
PROJECT NO: 1000-08-88	HWY: VARIOUS	COUNTY: NW REGION WIDE	PLAN: TYPICAL SECTIONS	SHEET	E

FILE NAME : W:\NWBE_PROJECTS\DESIGN\1507_FREIGHT_MITIGATION_OSOW\C3D_14\SHEETSPLAN\020301_TS-EXISTING_ALL.DWG
1507_020301_TS-EXISTING.DST - 10
PLOT DATE : 10/14/2015 2:32 PM PLOT BY : GARY COLBERT PLOT NAME : PLOT SCALE : 1 IN:5 FT
WISDOT/CADDS SHEET 42

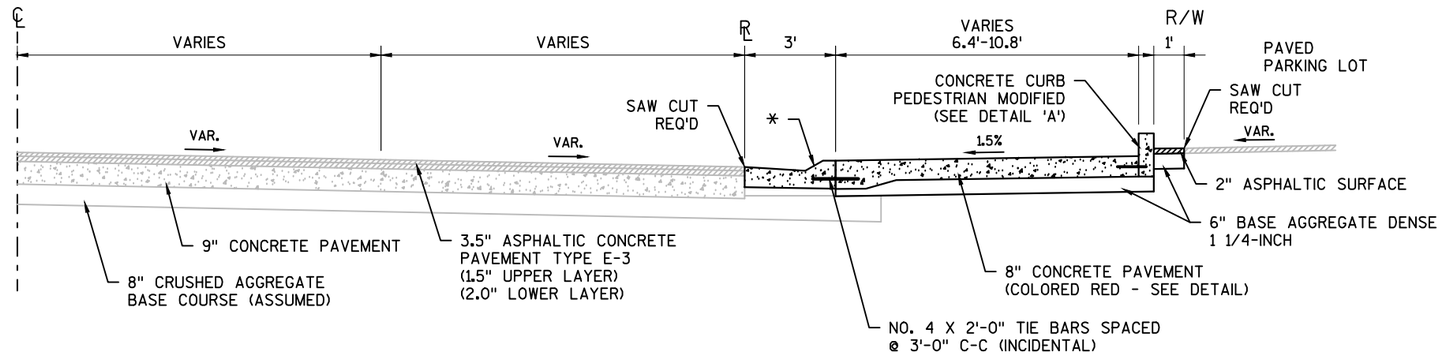
LOCATION #1 - USH 8 (LAKE AVE. & N 3RD ST. INTERSECTION)
(VILLAGE OF CAMERON - BARRON COUNTY)



TYPICAL PROPOSED SECTION
STA. 10+48.8 - 10+24.8
STA. 12+01.3 - 12+11.3



CONCRETE CURB PEDESTRIAN
MODIFIED DETAIL 'A'



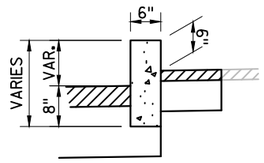
TYPICAL PROPOSED SECTION
STA. 10+24.8 - 11+21.4

* CONCRETE CURB & GUTTER 4-INCH SLOPED
36-INCH TYPE D MODIFIED

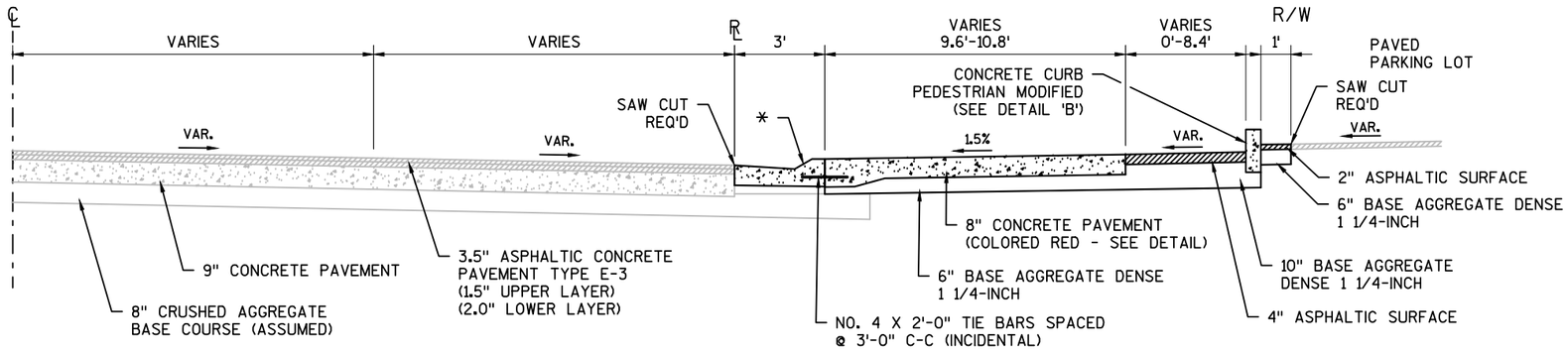
PROJECT NO: 1000-08-88	HWY: VARIOUS	COUNTY: NW REGION WIDE	PLAN: TYPICAL SECTIONS	SHEET	E

FILE NAME : W:\NWBE_PROJECTS\DESIGN\1507_FREIGHT_MITIGATION_OSOW\C3D_14\SHEETSPLAN\020302_TS-PROPOSED_ALL.DWG
1507_020301_TS-EXISTING.DST - 01.1
PLOT DATE : 10/5/2015 10:08 AM PLOT BY : GARY COLBERT PLOT NAME : PLOT SCALE : 1 IN:5 FT
WISDOT/CADDS SHEET 42

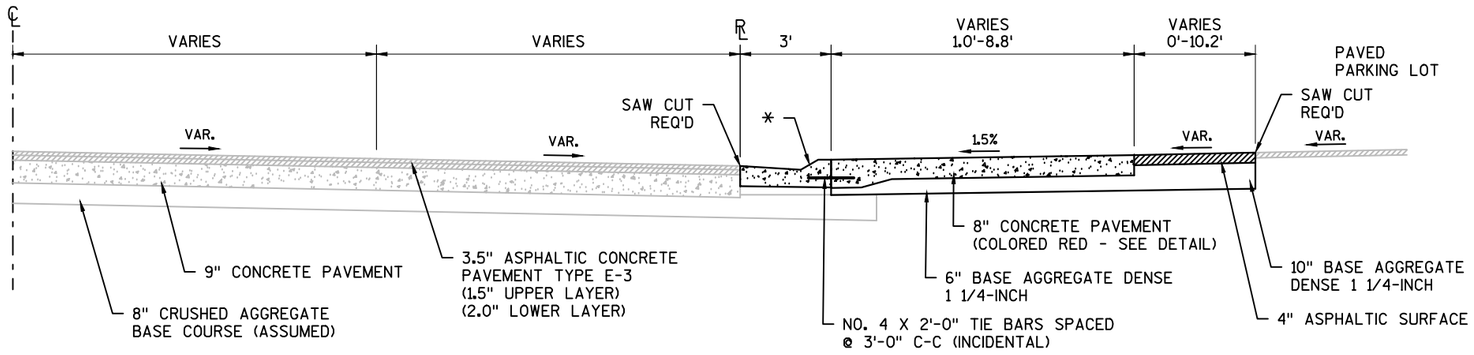
LOCATION #1 - USH 8 (LAKE AVE. & N 3RD ST. INTERSECTION)
(VILLAGE OF CAMERON - BARRON COUNTY)



CONCRETE CURB PEDESTRIAN
MODIFIED DETAIL 'B'



TYPICAL PROPOSED SECTION
STA. 11+21.4 - 11+44.1



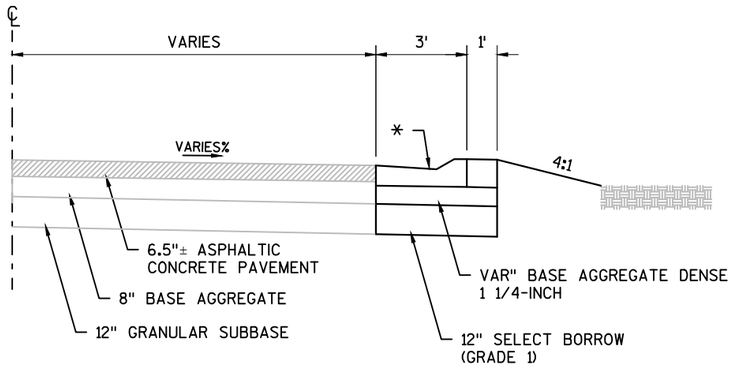
TYPICAL PROPOSED SECTION
STA. 11+44.1 - 12+01.3

* CONCRETE CURB & GUTTER 4-INCH SLOPED
36-INCH TYPE D MODIFIED

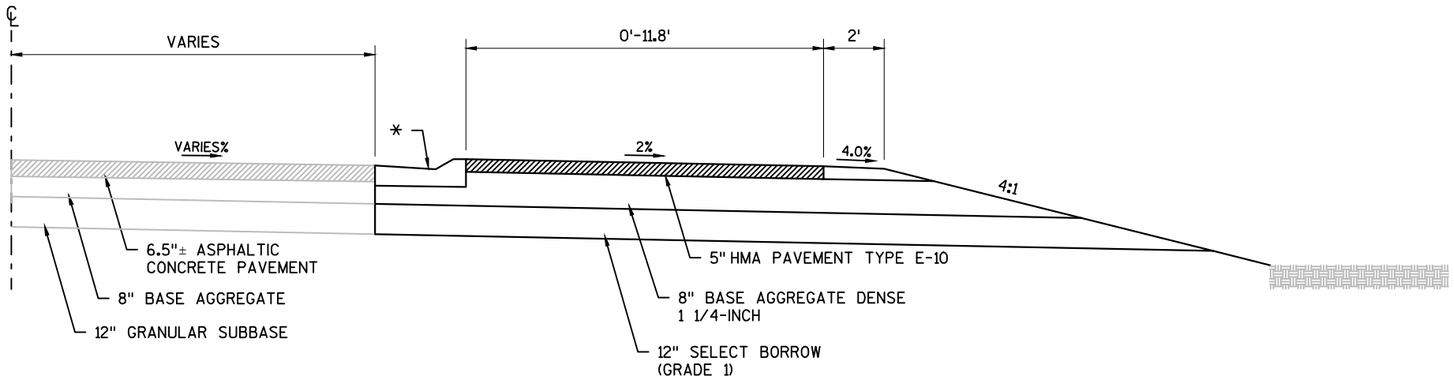
PROJECT NO: 1000-08-88	HWY: VARIOUS	COUNTY: NW REGION WIDE	PLAN: TYPICAL SECTIONS	SHEET	E

FILE NAME : W:\NWBE_PROJECTS\DESIGN\1507_FREIGHT_MITIGATION_OSOW\C3D_14\SHEETSPLAN\020302_TS-PROPOSED_ALL.DWG
1507_020301_TS-EXISTING.DST - 01.2
PLOT DATE : 10/5/2015 10:08 AM PLOT BY : GARY COLBERT PLOT NAME : PLOT SCALE : 1 IN:5 FT
WISDOT/CADDS SHEET 42

LOCATION #2 - USH 2 & USH 63 INTERSECTION
(TOWN OF KEYSTONE - BAYFIELD COUNTY)

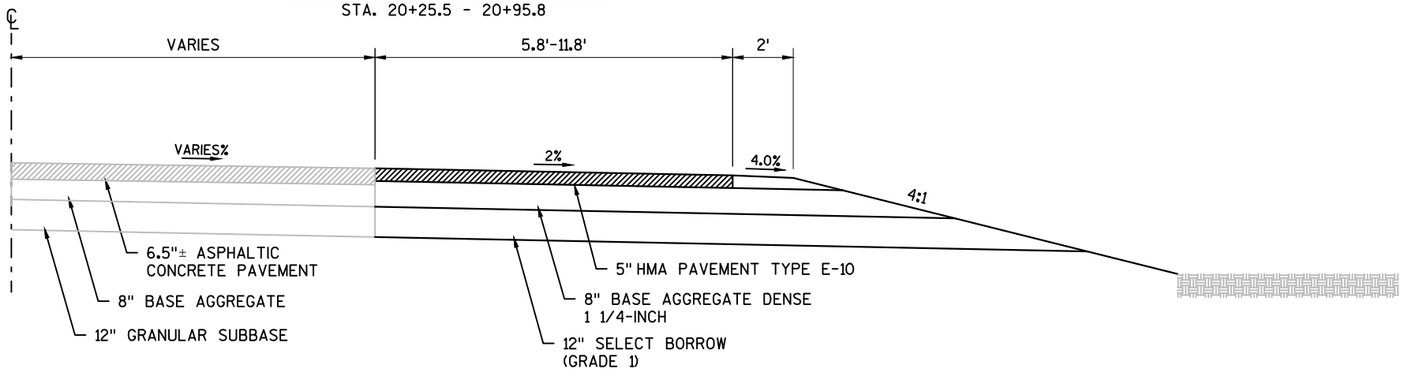


TYPICAL SECTION ALIGNMENT 'B'
STA. 20+00.0 - 20+25.5

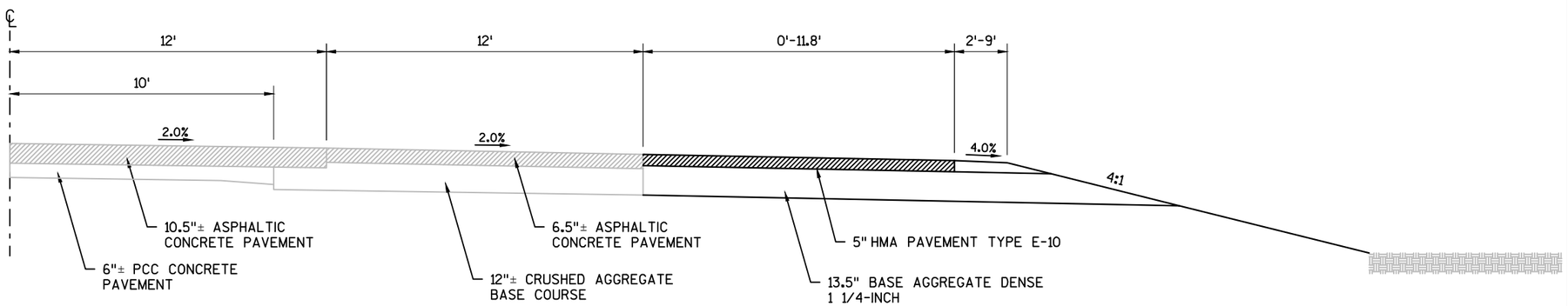


TYPICAL SECTION ALIGNMENT 'B'
STA. 20+25.5 - 20+95.8

* CONCRETE CURB & GUTTER 4-INCH
SLOPED 36-INCH TYPE D MODIFIED



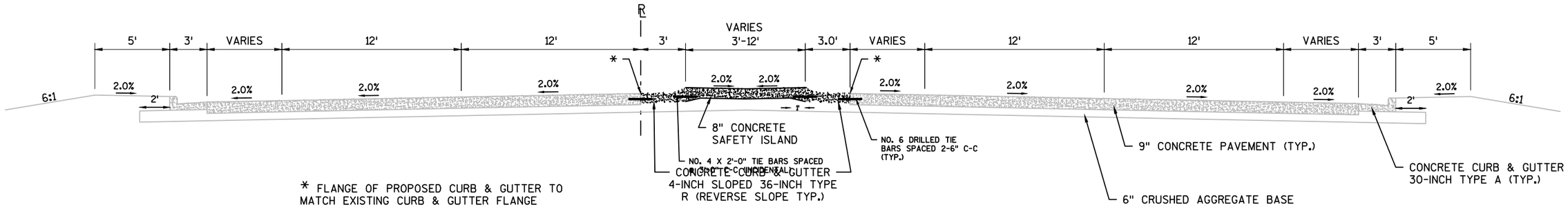
TYPICAL SECTION ALIGNMENT 'B'
STA. 20+95.8 - 21+36.1



TYPICAL SECTION ALIGNMENT 'B'
STA. 21+36.1 - 21+74.9

PROJECT NO: 1000-08-88	HWY: VARIOUS	COUNTY: NW REGION WIDE	PLAN: TYPICAL SECTIONS	SHEET	E

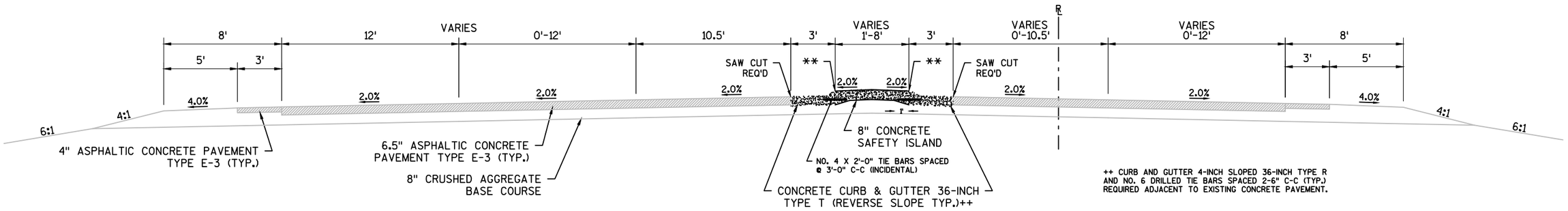
LOCATION #3 - USH 63/STH 27 & STH 27/77 INTERSECTION
(CITY OF HAYWARD - SAWYER COUNTY)



* FLANGE OF PROPOSED CURB & GUTTER TO MATCH EXISTING CURB & GUTTER FLANGE LOCATION

TYPICAL PROPOSED SECTION

STA. 297+14.4 - 300+64.9 (USH 63/STH 27)

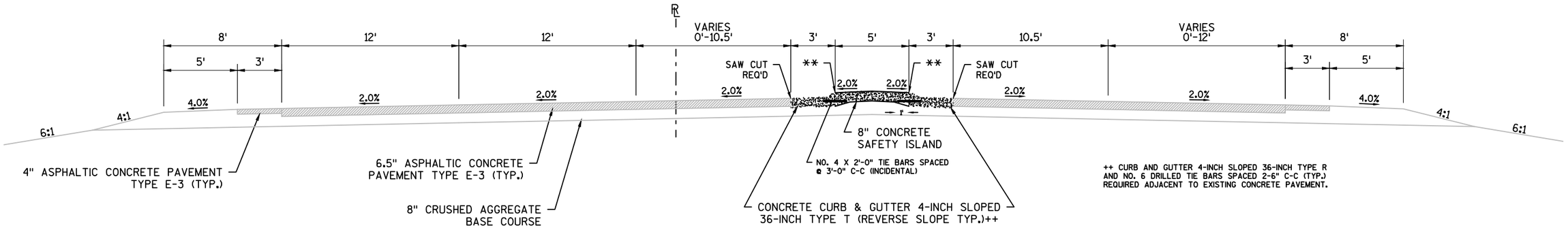


++ CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE R AND NO. 6 DRILLED TIE BARS SPACED 2-6" C-C (TYP.) REQUIRED ADJACENT TO EXISTING CONCRETE PAVEMENT.

** BACK OF PROPOSED CURB & GUTTER TO MATCH EXISTING BACK OF CURB LOCATION

TYPICAL PROPOSED SECTION

STA. 127+09.0 - 129+52.2 (STH 27/77)



++ CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE R AND NO. 6 DRILLED TIE BARS SPACED 2-6" C-C (TYP.) REQUIRED ADJACENT TO EXISTING CONCRETE PAVEMENT.

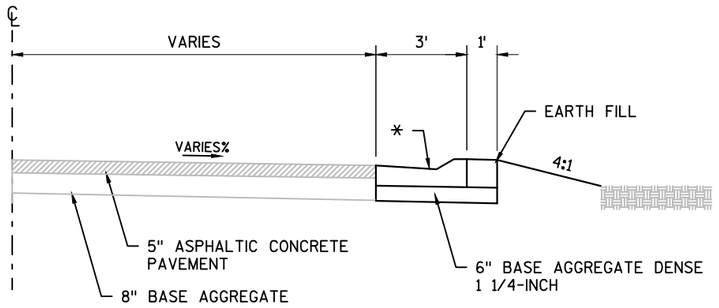
** BACK OF PROPOSED CURB & GUTTER TO MATCH EXISTING BACK OF CURB LOCATION

TYPICAL PROPOSED SECTION

STA. 130+85.8 - 133+06.4 (STH 77)

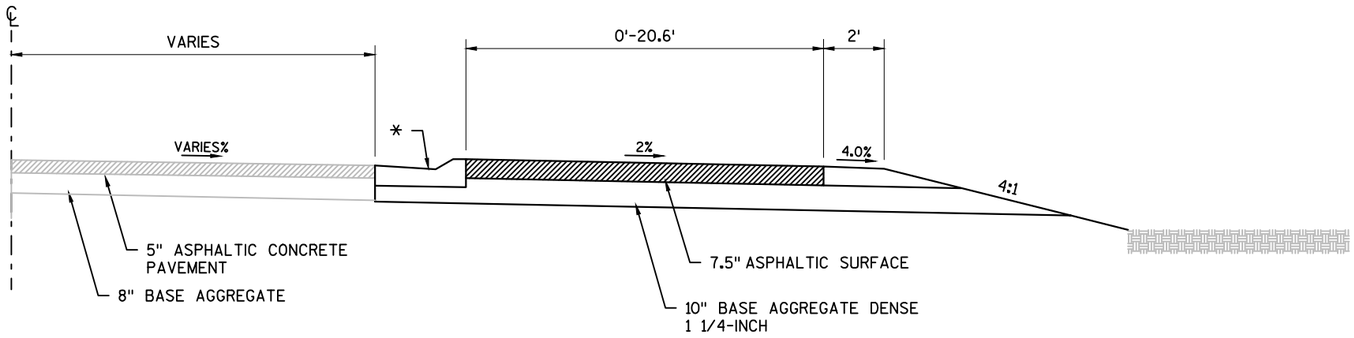
PROJECT NO: 1000-08-88	HWY: VARIOUS	COUNTY: NW REGION WIDE	PLAN: TYPICAL SECTIONS	SHEET	E

LOCATION #4 - USH 8 & STH 73 INTERSECTION
(VILLAGE OF INGRAM - RUSK COUNTY)

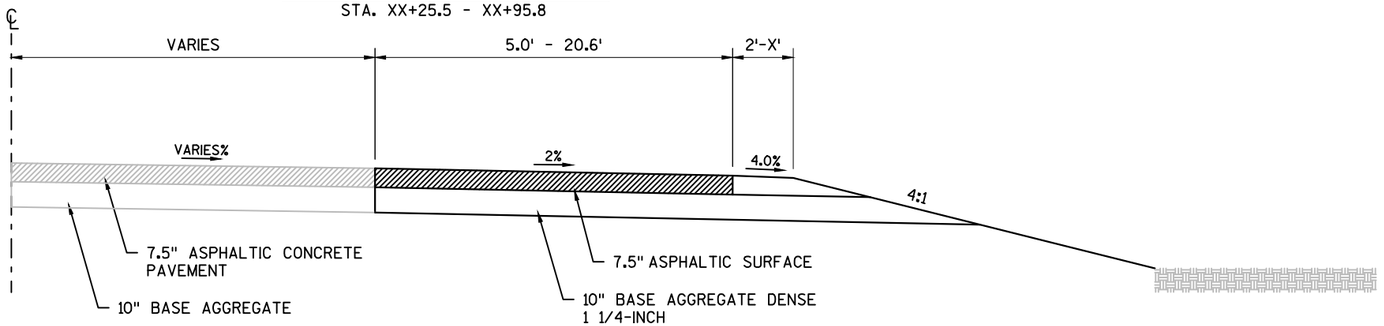


TYPICAL SECTION ALIGNMENT 'B'
STA. 70+00.0 - XX+25.5

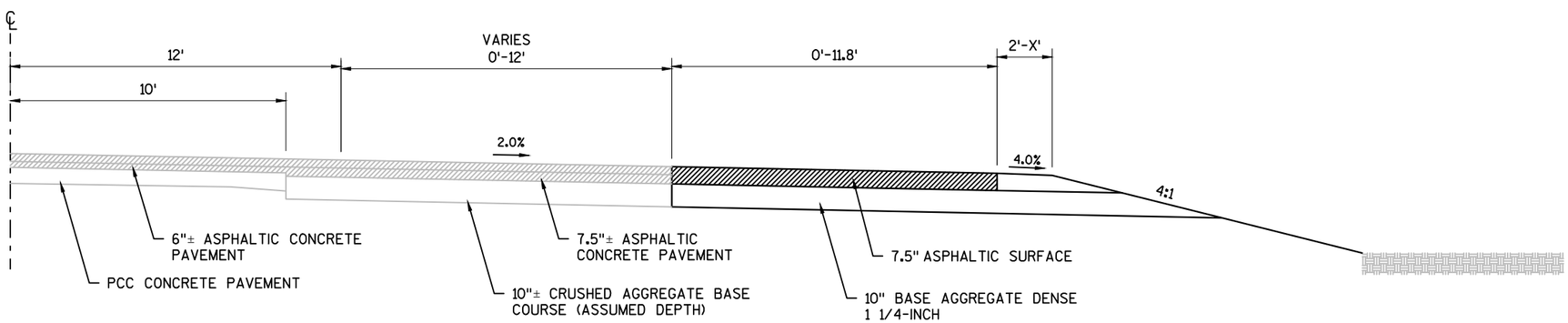
* CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D MODIFIED



TYPICAL SECTION ALIGNMENT 'B'
STA. XX+25.5 - XX+95.8



TYPICAL SECTION ALIGNMENT 'B'
STA. XX+95.8 - XX+36.1

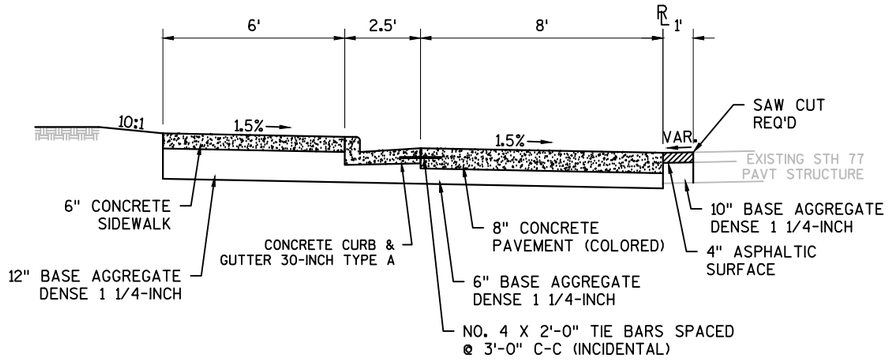


TYPICAL SECTION ALIGNMENT 'B'
STA. XX+36.1 - XX+74.9

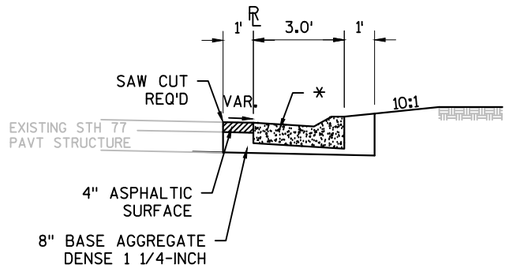
PROJECT NO: 1000-08-88	HWY: VARIOUS	COUNTY: NW REGION WIDE	PLAN: TYPICAL SECTIONS	SHEET	E

FILE NAME : W:\NWBE_PROJECTS\DESIGN\1507_FREIGHT_MITIGATION_OSOW\C3D_14\SHEETSPLAN\020302_TS-PROPOSED_ALL.DWG
1507_020301_TS-EXISTING.DST - 07
PLOT DATE : 10/5/2015 10:08 AM PLOT BY : GARY COLBERT PLOT NAME : PLOT SCALE : 1 IN:5 FT
WISDOT/CADDS SHEET 42

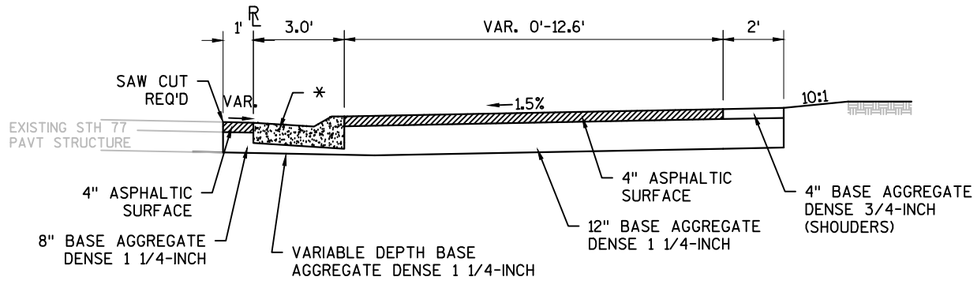
LOCATION #5 - STH 77 & STH 35 INTERSECTION
(VILLAGE OF DANBURY - BURNETT COUNTY)



PROPOSED TYPICAL SECTION
8+59.5 - 9+40.0



PROPOSED TYPICAL SECTION
STA. 80+51.5 - 80+57.4



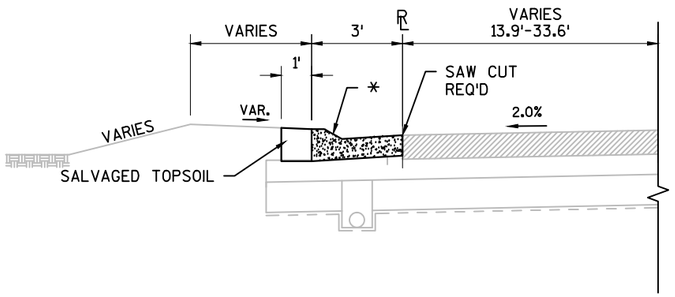
PROPOSED TYPICAL SECTION
80+57.4 - 81+67.7

* CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D MODIFIED

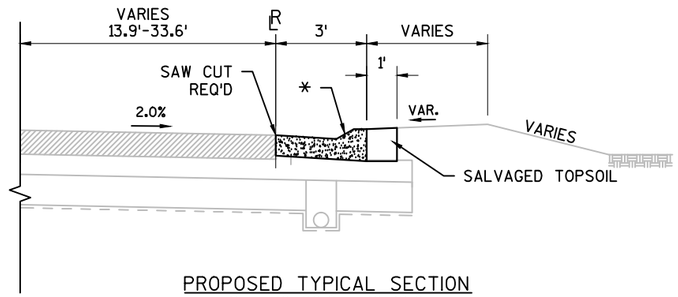
PROJECT NO: 1000-08-88	HWY: VARIOUS	COUNTY: NW REGION WIDE	PLAN: TYPICAL SECTIONS	SHEET	E

FILE NAME : W:\NWBE_PROJECTS\DESIGN\1507_FREIGHT_MITIGATION_OSOW\C3D_14\SHEETSPLAN\020302_TS-PROPOSED_ALL.DWG
1507_020301_TS-EXISTING.DST - 08
PLOT DATE : 10/5/2015 10:08 AM PLOT BY : GARY COLBERT PLOT NAME : PLOT SCALE : 1 IN:5 FT
WISDOT/CADDS SHEET 42

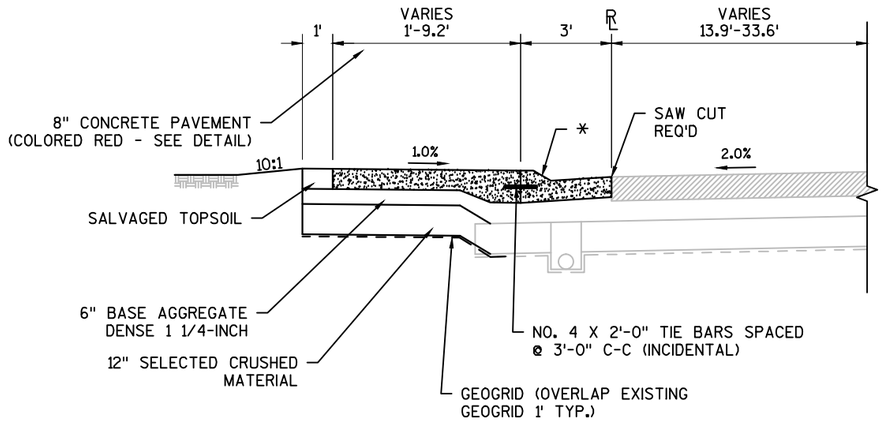
LOCATION #7 - USH 8/STH 35 & 208TH STREET ROUND-A-BOUT
(130TH AVENUE & 208TH STREET)
(CITY OF ST CROIX FALLS)



PROPOSED TYPICAL SECTION
STA. 20+00.0 - 20+10.0
STA. 21+05.9 - 21+15.9

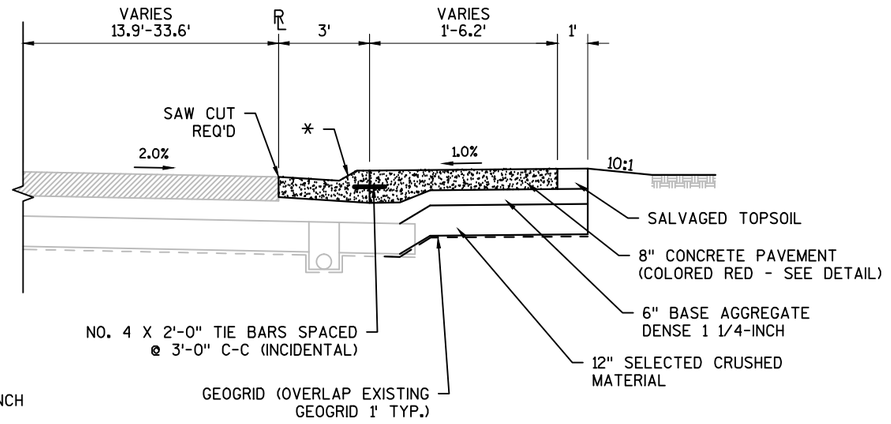


PROPOSED TYPICAL SECTION
STA. 10+00.0 - 10+10.0
STA. 10+93.7 - 11+03.7



PROPOSED TYPICAL SECTION
STA. 20+10.0 - 21+05.9

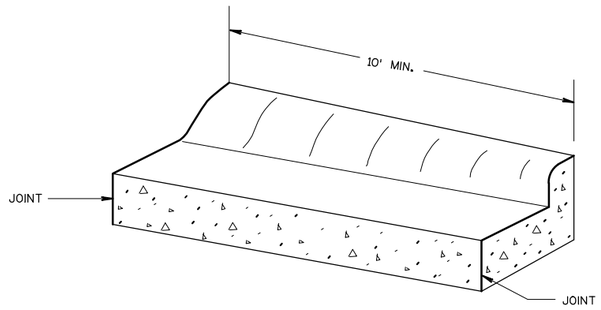
* CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D MODIFIED



PROPOSED TYPICAL SECTION
STA. 10+10.0 - 10+93.7

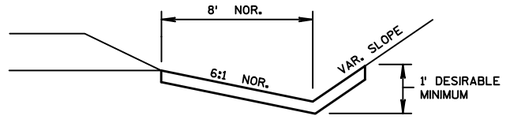
PROJECT NO: 1000-08-88	HWY: VARIOUS	COUNTY: NW REGION WIDE	PLAN: TYPICAL SECTIONS	SHEET	E

FILE NAME : W:\NWBE_PROJECTS\DESIGN\1507_FREIGHT_MITIGATION_OSOW\C3D_14\SHEETSPLAN\020302_TS-PROPOSED_ALL.DWG
1507_020301_TS-EXISTING.DST - 10
PLOT DATE : 10/5/2015 10:08 AM PLOT BY : GARY COLBERT PLOT NAME : PLOT SCALE : 1 IN:5 FT
WISDOT/CADDS SHEET 42

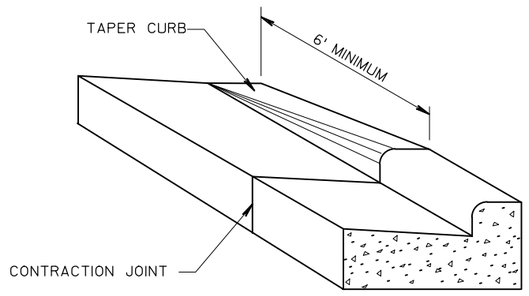


TRANSITION DETAIL

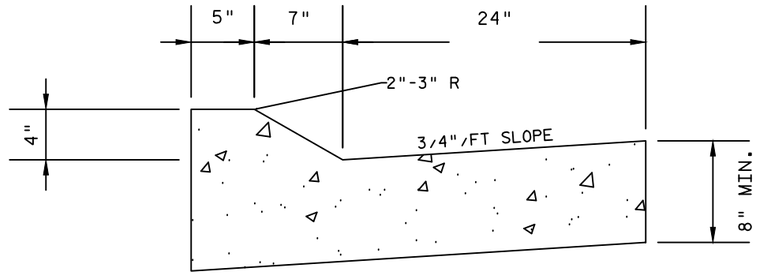
36" TYPE "T/R" CURB & GUTTER TO 30" TYPE "A/D" CURB & GUTTER (TO BE MEASURED & PAID FOR AS 36" CONC. C&G)



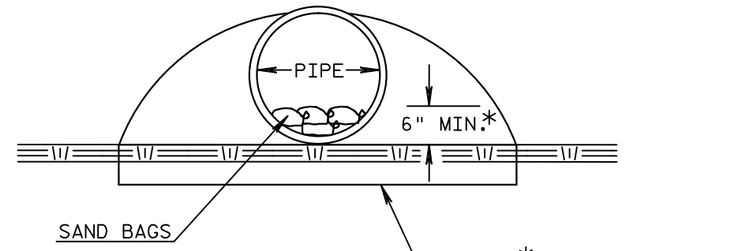
EROSION MAT DETAIL FOR DITCHES



DETAIL OF CURB & GUTTER TERMINI

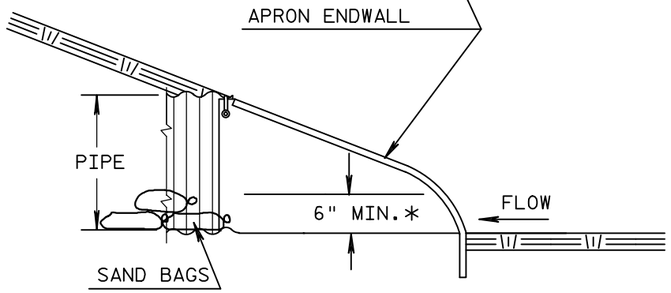


DETAIL FOR CONCRETE CURB & GUTTER,
4-INCH SLOPED 36-INCH TYPE A OR D MODIFIED



END VIEW

* OR AS DIRECTED BY THE ENGINEER



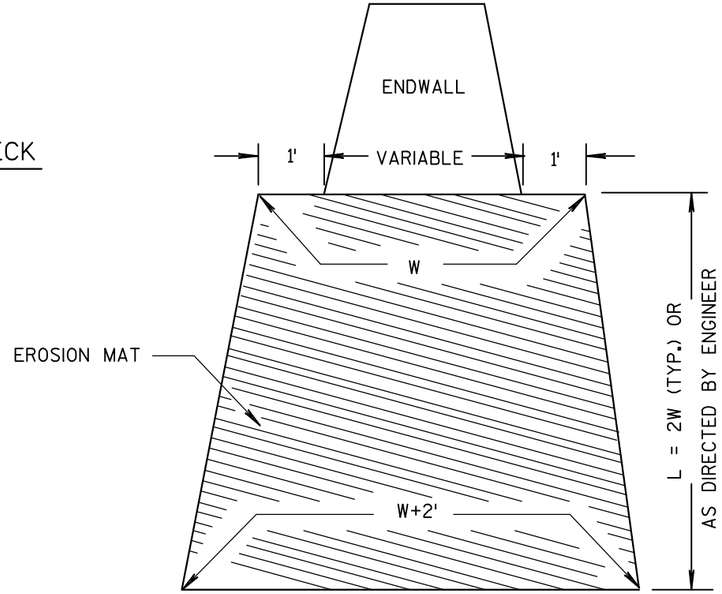
SIDE VIEW

CULVERT PIPE DITCH CHECK

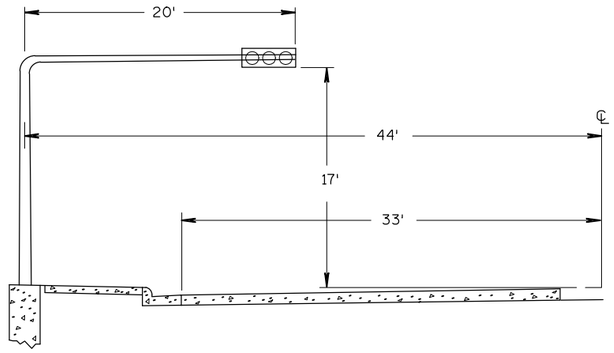
RUNOFF COEFFICIENT TABLE

	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .50	.19 .34	.28 .41	.38 .56
MEDIAN STRIP- TURF	.19 .24	.20 .26	.24 .30	.19 .25	.22 .28	.26 .33	.20 .26	.23 .30	.30 .37	.20 .27	.25 .32	.30 .40
SIDE SLOPE- TURF			.25 .32			.27 .34			.28 .36			.30 .38
PAVEMENT:												
ASPHALT	.70 - .95											
CONCRETE	.80 - .95											
BRICK	.70 - .80											
DRIVES, WALKS	.75 - .85											
ROOFS	.75 - .95											
GRAVEL ROADS, SHOULDERS	.40 - .60											

TOTAL PROJECT AREA = _____ ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = _____ACRES

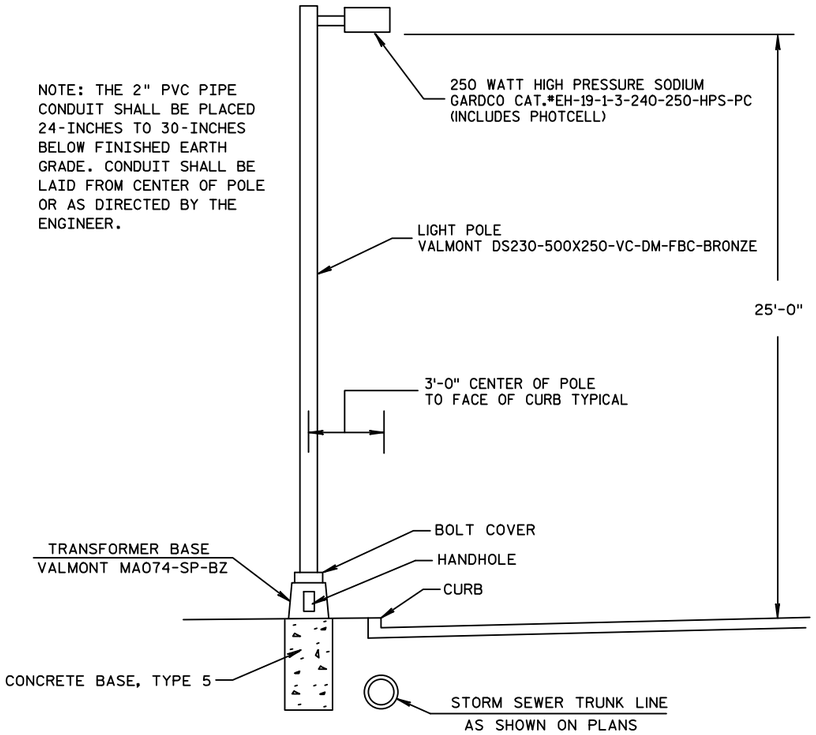


EROSION MAT TREATMENT AT CULVERTS

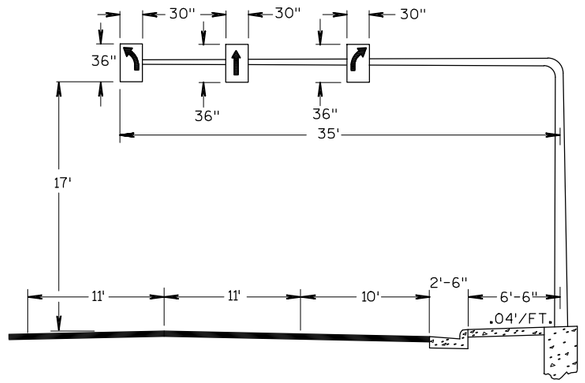


OVERHEAD SIGNAL MOUNTING STRUCTURE - 20' SPAN

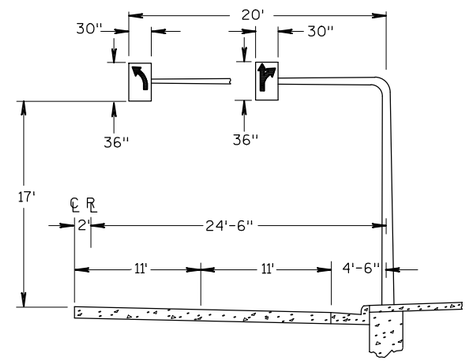
NOTE: THE 2" PVC PIPE CONDUIT SHALL BE PLACED 24-INCHES TO 30-INCHES BELOW FINISHED EARTH GRADE. CONDUIT SHALL BE LAID FROM CENTER OF POLE OR AS DIRECTED BY THE ENGINEER.



LIGHT POLE DETAIL



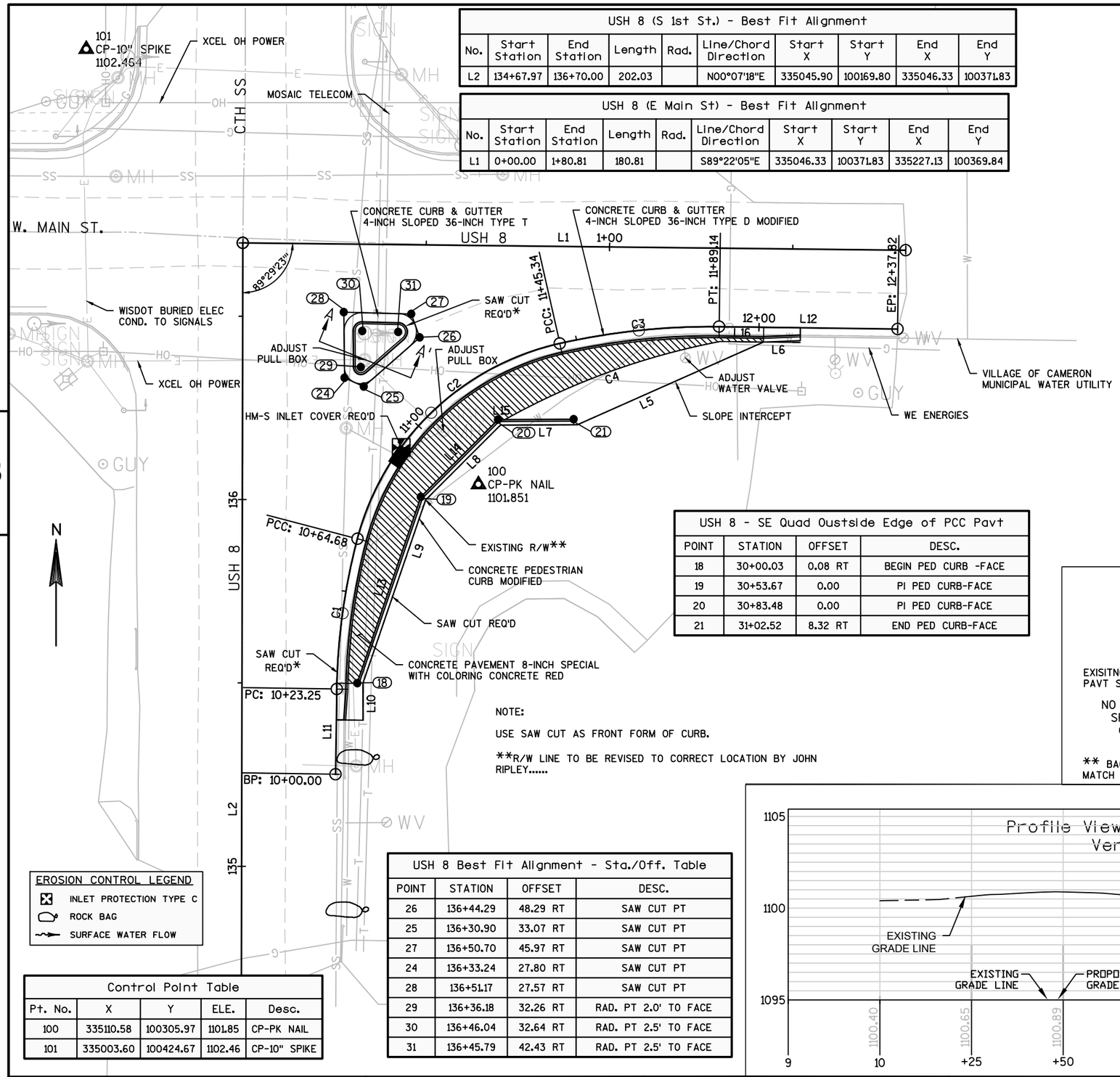
OVERHEAD SIGN MOUNTING STRUCTURE - 35' SPAN



OVERHEAD SIGN MOUNTING STRUCTURE - 20' SPAN

PROJECT NO: 1000-08-88	HWY: VARIOUS	COUNTY: NW REGION WIDE	PLAN: CONSTRUCTION DETAILS	SHEET	E

FILE NAME : W:\NWBE_PROJECTS\DESIGN\1507_FREIGHT_MITIGATION_OSOW\C3D_14\SHEETSPLAN\021001_CD.DWG
1507_021001_CD.DST - 03
PLOT DATE : 10/5/2015 10:45 AM PLOT BY : GARY COLBERT PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42



USH 8 (S 1st St.) - Best Fit Alignment									
No.	Start Station	End Station	Length	Rad.	Line/Chord Direction	Start X	Start Y	End X	End Y
L2	134+67.97	136+70.00	202.03		N00°07'18"E	335045.90	100169.80	335046.33	100371.83

USH 8 (E Main St) - Best Fit Alignment									
No.	Start Station	End Station	Length	Rad.	Line/Chord Direction	Start X	Start Y	End X	End Y
L1	0+00.00	1+80.81	180.81		S89°22'05"E	335046.33	100371.83	335227.13	100369.84

USH 2 - SE Quad Inside Edge of Pavement (Gutter Flag Line)									
No.	Start Station	End Station	Length	Rad.	Line/Chord Direction	Start X	Start Y	End X	End Y
L11	10+00.00	10+23.25			N00°53'25"E	335071.62	100226.92	335071.98	100250.17
C1	10+23.25	10+64.68	41.43	171.60	N07°48'27"E	335071.98	100250.17	335077.59	100291.12
C2	10+64.68	11+45.34	80.65	73.87	N46°00'16"E	335077.59	100291.12	335132.77	100344.40
C3	11+45.34	11+89.14	43.80	186.51	N84°00'43"E	335132.77	100344.40	335176.23	100348.96
L12	11+89.14	12+37.82			S89°15'38"E	335176.23	100348.96	335224.91	100348.33

USH 8 - SE Quad Parking Lot Saw Cut									
No.	Start Station	End Station	Length	Rad.	Line/Chord Direction	Start X	Start Y	End X	End Y
L10	0+00.00	0+10.10			N00°10'26"W	335079.11	100241.66	335079.08	100251.75
L9	0+10.10	0+62.91			N18°53'58"E	335079.08	100251.75	335096.18	100301.72
L8	0+62.91	0+91.76			N44°55'47"E	335096.18	100301.72	335116.56	100322.14
L7	0+91.76	1+12.76			N89°44'09"E	335116.56	100322.14	335137.56	100322.24
L5	1+12.76	1+68.31			N66°02'57"E	335137.56	100322.24	335188.33	100344.79
L6	1+68.31	1+78.36			S89°19'05"E	335188.33	100344.79	335198.38	100344.67

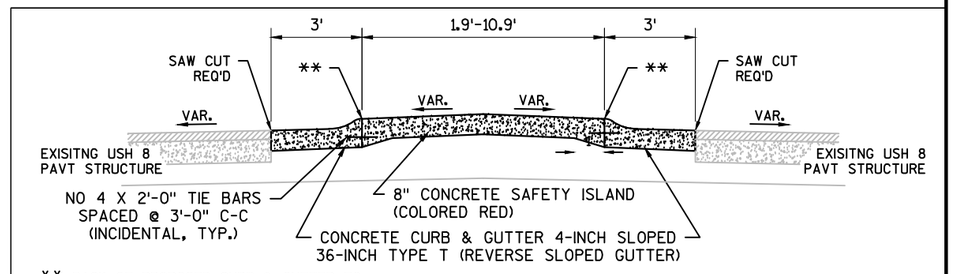
USH 8 - SE Quad Oustside Edge of PCC Pavement									
No.	Start Station	End Station	Length	Rad.	Line/Chord Direction	Start X	Start Y	End X	End Y
L13	30+00.00	30+53.67			N18°53'58"E	335077.49	100251.76	335094.88	100302.53
L14	30+53.67	30+83.48			N44°55'47"E	335094.88	100302.53	335115.93	100323.64
L15	30+83.48	30+85.40			N89°44'09"E	335115.93	100323.64	335117.85	100323.65
C4	30+85.40	31+48.17	62.77	194.53	N70°04'19"E	335117.85	100323.65	335176.61	100344.95
L16	31+48.17	31+59.89			S89°15'38"E	335176.61	100344.95	335188.33	100344.80

USH 8 - SE Quad Oustside Edge of PCC Pavt			
POINT	STATION	OFFSET	DESC.
18	30+00.03	0.08 RT	BEGIN PED CURB -FACE
19	30+53.67	0.00	PI PED CURB-FACE
20	30+83.48	0.00	PI PED CURB-FACE
21	31+02.52	8.32 RT	END PED CURB-FACE

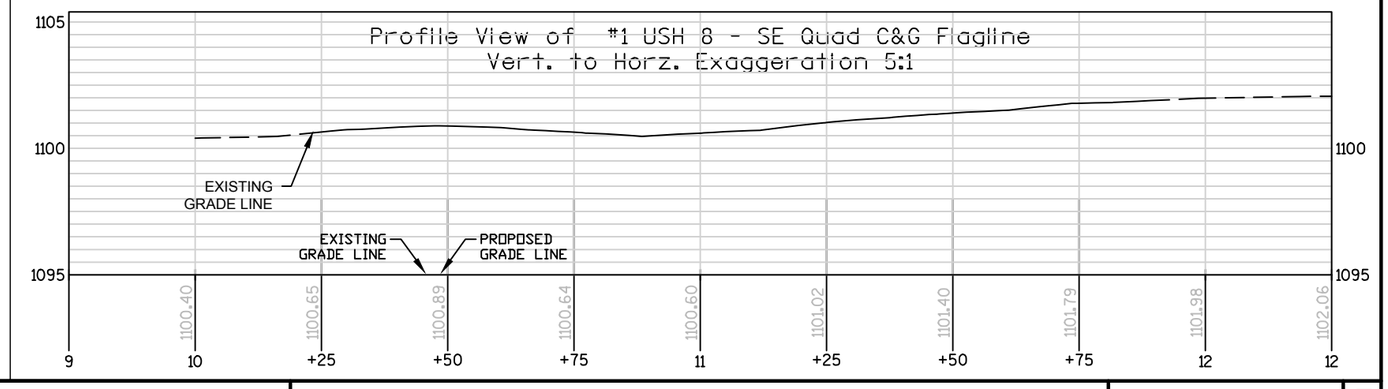
NOTE:

USE SAW CUT AS FRONT FORM OF CURB.

**R/W LINE TO BE REVISED TO CORRECT LOCATION BY JOHN RIPLEY.....



SECTION A-A'

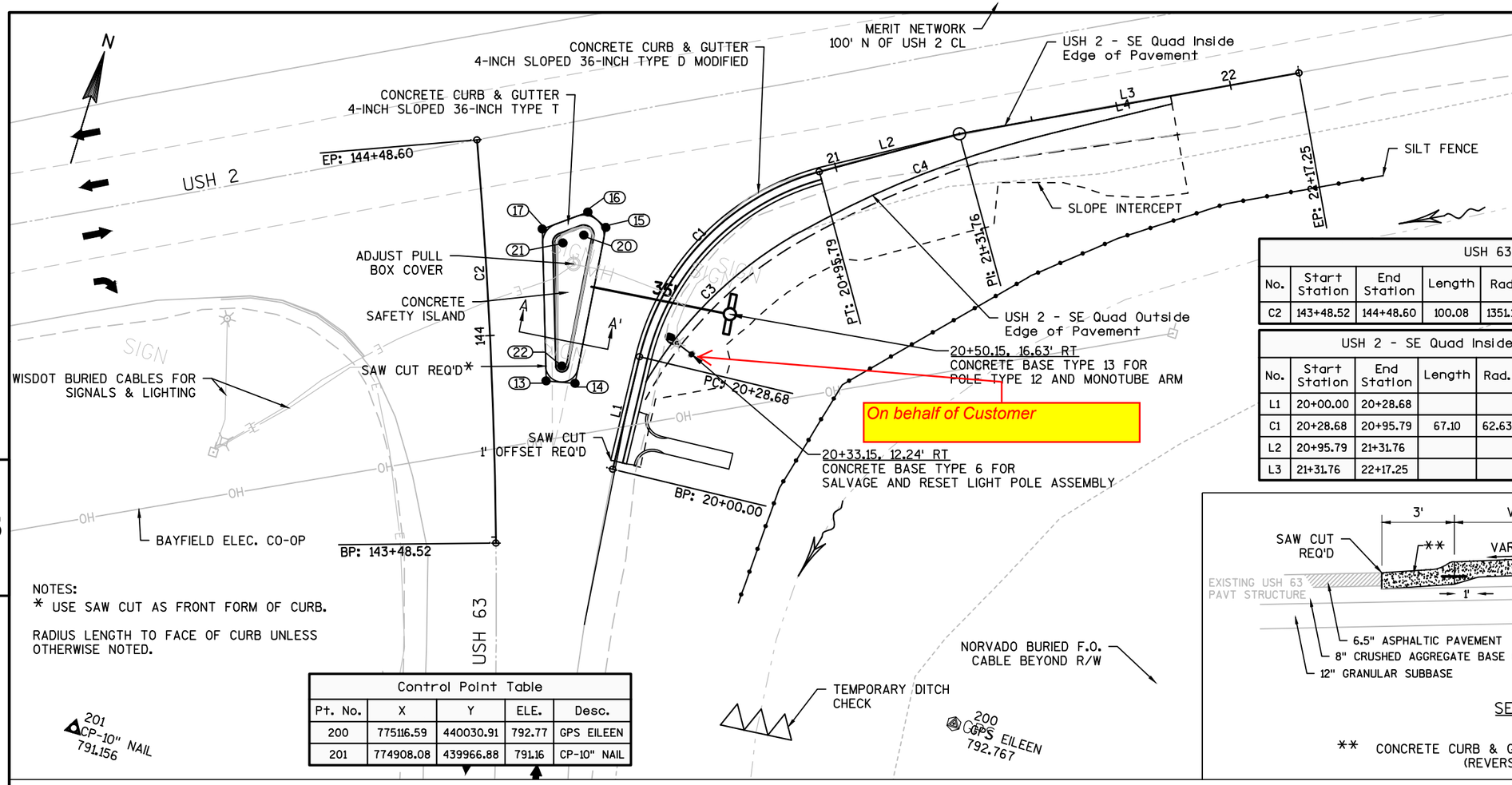


EROSION CONTROL LEGEND
INLET PROTECTION TYPE C
ROCK BAG
SURFACE WATER FLOW

Control Point Table				
Pt. No.	X	Y	ELE.	Desc.
100	335110.58	100305.97	1101.85	CP-PK NAIL
101	335003.60	100424.67	1102.46	CP-10" SPIKE

USH 8 Best Fit Alignment - Sta./Off. Table			
POINT	STATION	OFFSET	DESC.
26	136+44.29	48.29 RT	SAW CUT PT
25	136+30.90	33.07 RT	SAW CUT PT
27	136+50.70	45.97 RT	SAW CUT PT
24	136+33.24	27.80 RT	SAW CUT PT
28	136+51.17	27.57 RT	SAW CUT PT
29	136+36.18	32.26 RT	RAD. PT 2.0' TO FACE
30	136+46.04	32.64 RT	RAD. PT 2.5' TO FACE
31	136+45.79	42.43 RT	RAD. PT 2.5' TO FACE

PROJECT NO: 1000-08-88	HWY: USH 8	COUNTY: BARRON	PLAN: LOCATION #1 - VILLAGE OF CAMERON	SHEET	E



NOTES:
* USE SAW CUT AS FRONT FORM OF CURB.

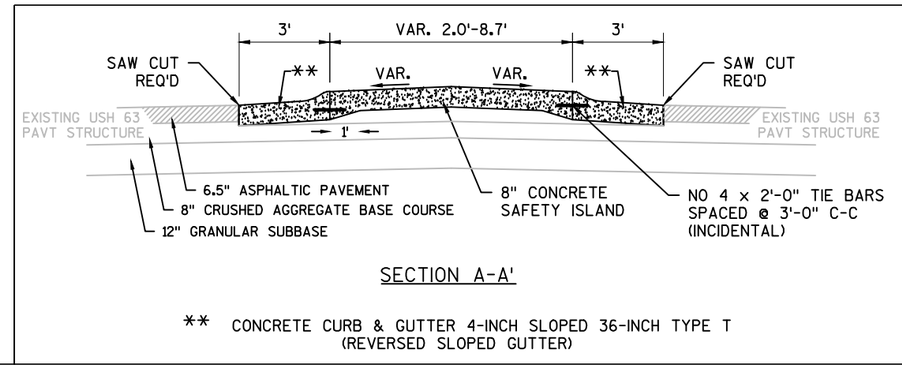
RADIUS LENGTH TO FACE OF CURB UNLESS OTHERWISE NOTED.

Control Point Table				
Pt. No.	X	Y	ELE.	Desc.
200	775116.59	440030.91	792.77	GPS EILEEN
201	774908.08	439966.88	791.16	CP-10" NAIL

USH 63 Best Fit Alignment - Sta./Off. Table			
POINT	STATION	OFFSET	DESC.
13	143+88.21	13.446	SAW CUT PT.
21	144+21.74	19.344	2.5' RAD. PT.
14	143+87.33	20.551	SAW CUT PT.
22	143+91.68	17.500	1.5' RAD. PT.
15	144+24.80	30.235	SAW CUT PT.
16	144+28.81	26.044	SAW CUT PT.
17	144+25.47	14.492	SAW CUT PT.
20	144+23.29	24.647	2.5' RAD. PT.

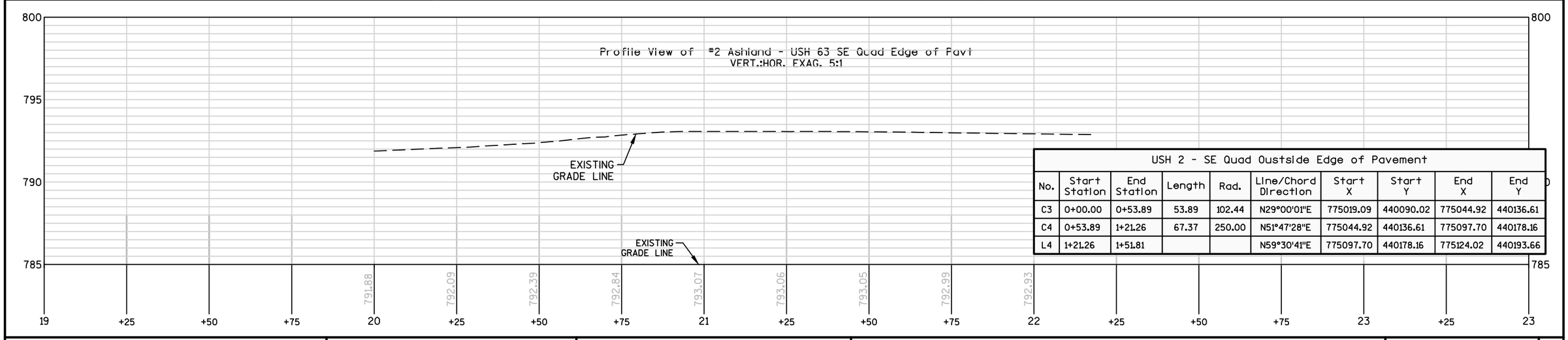
USH 63 - Best Fit Alignment									
No.	Start Station	End Station	Length	Rad.	Line/Chord Direction	Start X	Start Y	End X	End Y
C2	143+48.52	144+48.60	100.08	1351.10	N19°29'38"W	774995.02	440041.02	774961.63	440135.34

USH 2 - SE Quad Inside Edge of Pavement (Gutter Flag Line)									
No.	Start Station	End Station	Length	Rad.	Line/Chord Direction	Start X	Start Y	End X	End Y
L1	20+00.00	20+28.68			N03°20'26"W	775017.44	440066.86	775015.77	440095.50
C1	20+28.68	20+95.79	67.10	62.63	N27°21'20"E	775015.77	440095.50	775045.15	440152.29
L2	20+95.79	21+31.76			N58°03'07"E	775045.15	440152.29	775075.67	440171.32
L3	21+31.76	22+17.25			N63°03'15"E	775075.67	440171.32	775151.88	440210.06



SECTION A-A'

** CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE T
(REVERSED SLOPED GUTTER)



USH 2 - SE Quad Oustside Edge of Pavement									
No.	Start Station	End Station	Length	Rad.	Line/Chord Direction	Start X	Start Y	End X	End Y
C3	0+00.00	0+53.89	53.89	102.44	N29°00'01"E	775019.09	440090.02	775044.92	440136.61
C4	0+53.89	1+21.26	67.37	250.00	N51°47'28"E	775044.92	440136.61	775097.70	440178.16
L4	1+21.26	1+51.81			N59°30'41"E	775097.70	440178.16	775124.02	440193.66

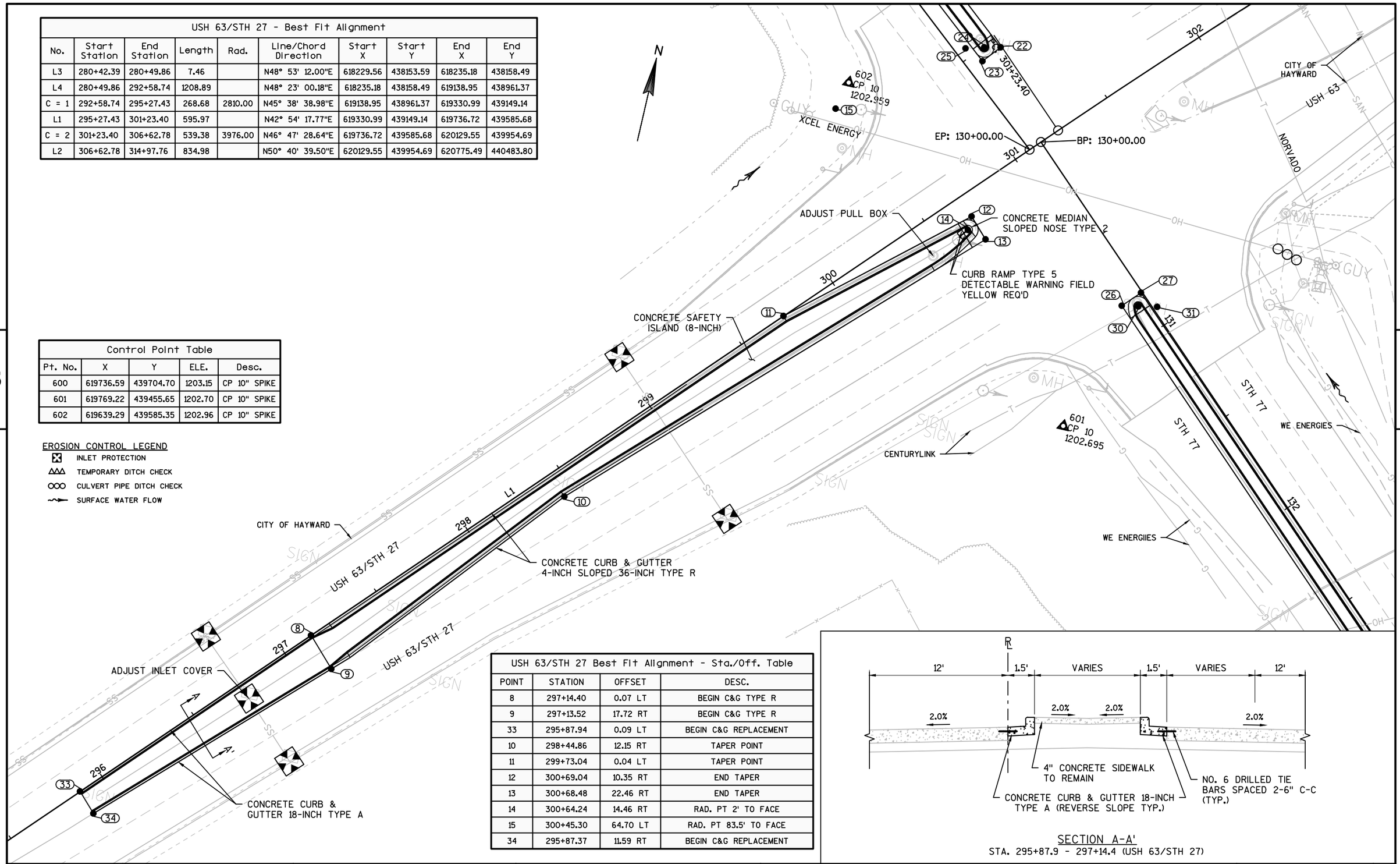
PROJECT NO: 1000-08-88	HWY: USH 2 & USH 63	COUNTY: BAYFIELD	PLAN AND PROFILE: LOCATION #2 - TOWN OF KEYSTONE	SHEET	E

FILE NAME : W:\NWBE_PROJECTS\DESIGN\1507_FREIGHT_MITIGATION_OSOW\C3D_14\SHEETSPLAN\050202_PN-ASHLAND_USH_2&63.DWG
LAYOUT NAME - #2_ASHLAND_PP-1
PLOT DATE : 10/22/2015 8:18 AM PLOT BY : GARY COLBERT PLOT NAME : PLOT SCALE : **********

USH 63/STH 27 - Best Fit Alignment									
No.	Start Station	End Station	Length	Rad.	Line/Chord Direction	Start X	Start Y	End X	End Y
L3	280+42.39	280+49.86	7.46		N48° 53' 12.00"E	618229.56	438153.59	618235.18	438158.49
L4	280+49.86	292+58.74	1208.89		N48° 23' 00.18"E	618235.18	438158.49	619138.95	438961.37
C = 1	292+58.74	295+27.43	268.68	2810.00	N45° 38' 38.98"E	619138.95	438961.37	619330.99	439149.14
L1	295+27.43	301+23.40	595.97		N42° 54' 17.77"E	619330.99	439149.14	619736.72	439585.68
C = 2	301+23.40	306+62.78	539.38	3976.00	N46° 47' 28.64"E	619736.72	439585.68	620129.55	439954.69
L2	306+62.78	314+97.76	834.98		N50° 40' 39.50"E	620129.55	439954.69	620775.49	440483.80

Control Point Table				
Pt. No.	X	Y	ELE.	Desc.
600	619736.59	439704.70	1203.15	CP 10" SPIKE
601	619769.22	439455.65	1202.70	CP 10" SPIKE
602	619639.29	439585.35	1202.96	CP 10" SPIKE

EROSION CONTROL LEGEND
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- SURFACE WATER FLOW



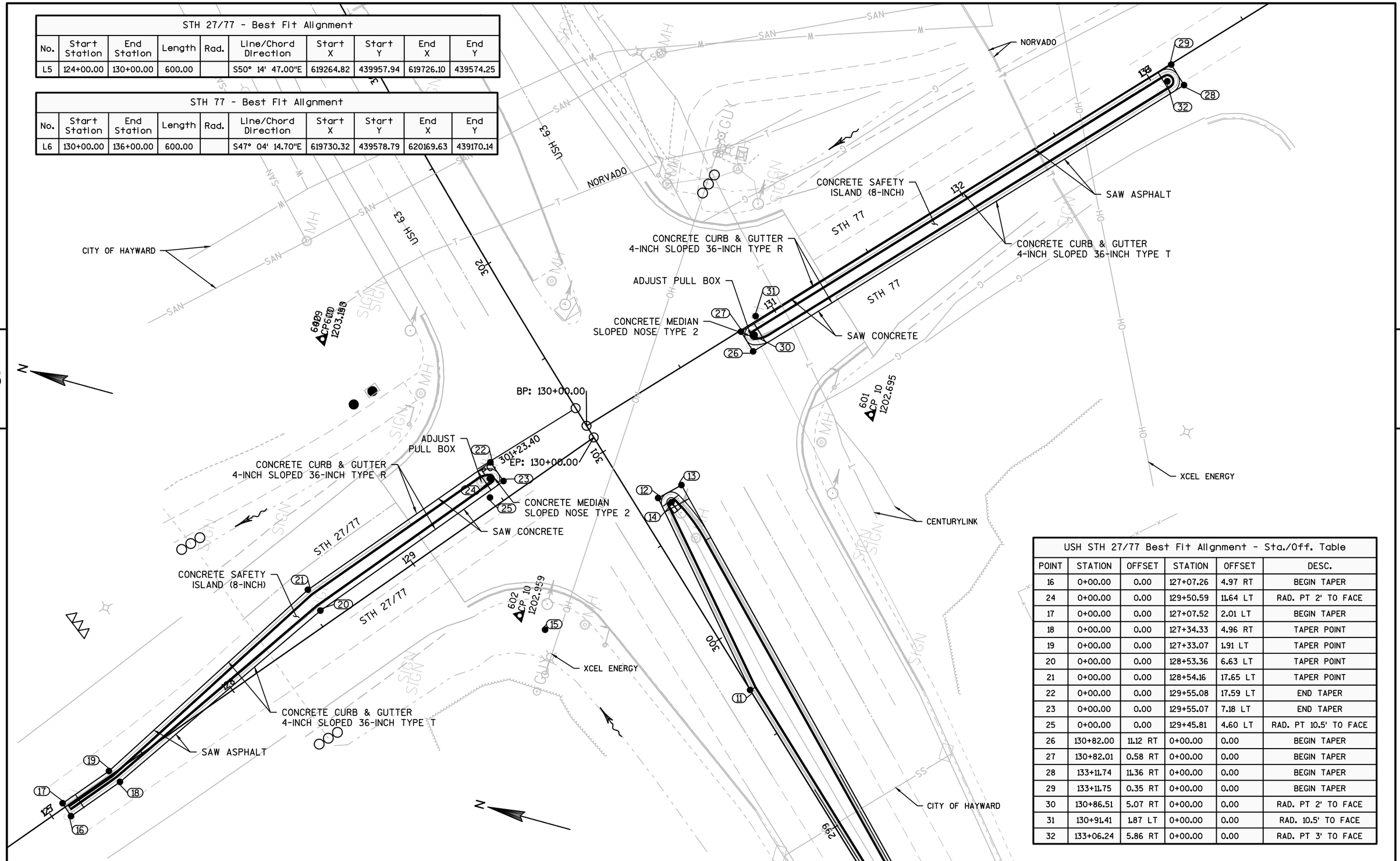
USH 63/STH 27 Best Fit Alignment - Sta./Off. Table			
POINT	STATION	OFFSET	DESC.
8	297+14.40	0.07 LT	BEGIN C&G TYPE R
9	297+13.52	17.72 RT	BEGIN C&G TYPE R
33	295+87.94	0.09 LT	BEGIN C&G REPLACEMENT
10	298+44.86	12.15 RT	TAPER POINT
11	299+73.04	0.04 LT	TAPER POINT
12	300+69.04	10.35 RT	END TAPER
13	300+68.48	22.46 RT	END TAPER
14	300+64.24	14.46 RT	RAD. PT 2' TO FACE
15	300+45.30	64.70 LT	RAD. PT 83.5' TO FACE
34	295+87.37	11.59 RT	BEGIN C&G REPLACEMENT

SECTION A-A'
STA. 295+87.9 - 297+14.4 (USH 63/STH 27)

PROJECT NO: 1000-08-88	HWY: USH 63/STH 27/77	COUNTY: SAWYER	PLAN: LOCATION #3 - CITY OF HAYWARD	SHEET	E

STH 27/77 - Best Fit Alignment									
No.	Start Station	End Station	Length	Rad.	Line/Chord Direction	Start X	Start Y	End X	End Y
L5	124+00.00	130+00.00	600.00		S50° 14' 47.00"E	619264.82	439957.94	619726.10	439574.25

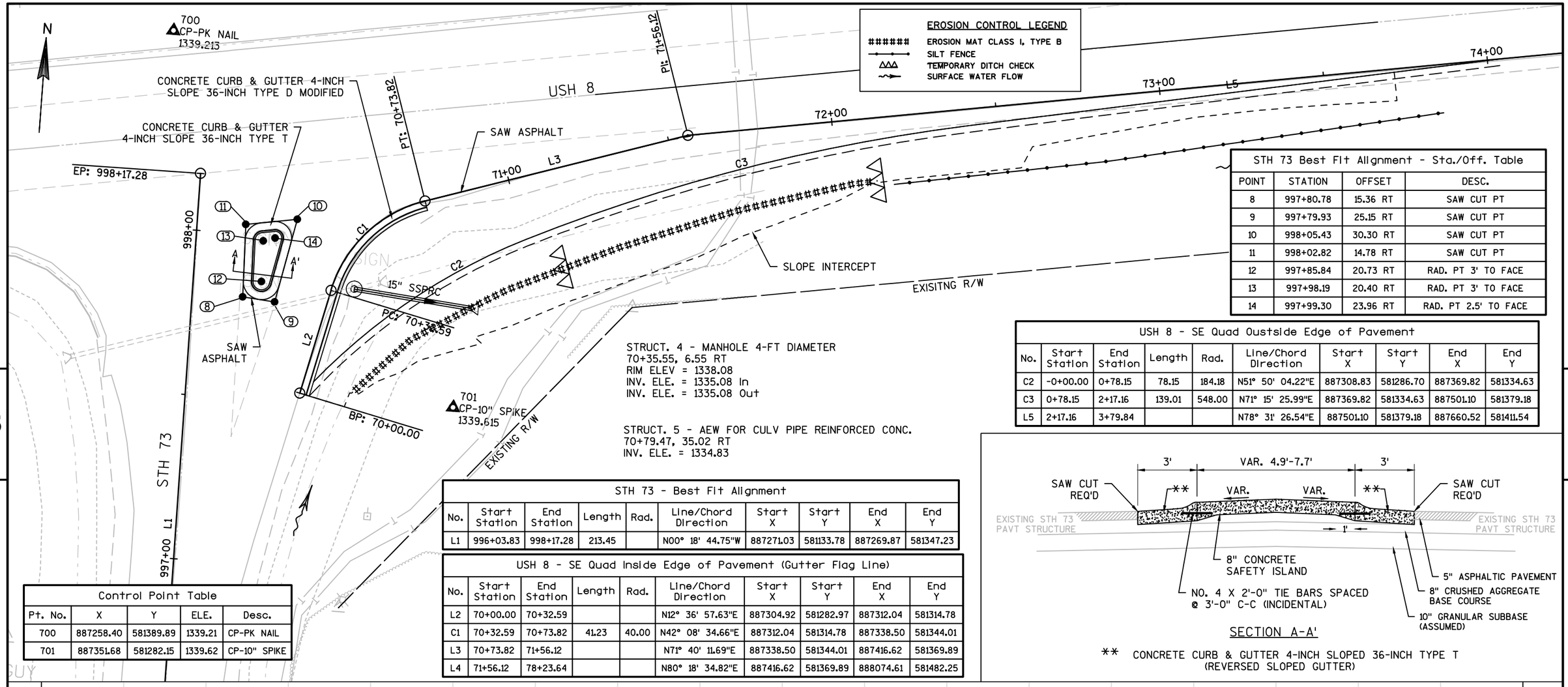
STH 77 - Best Fit Alignment									
No.	Start Station	End Station	Length	Rad.	Line/Chord Direction	Start X	Start Y	End X	End Y
L6	130+00.00	136+00.00	600.00		S47° 04' 14.70"E	619730.32	439578.79	620169.63	439170.14



USH STH 27/77 Best Fit Alignment - Sta./Off. Table					
POINT	STATION	OFFSET	STATION	OFFSET	DESC.
16	0+00.00	0.00	127+07.26	4.97 RT	BEGIN TAPER
24	0+00.00	0.00	129+50.59	11.64 LT	RAD. PT 2' TO FACE
17	0+00.00	0.00	127+07.52	2.01 LT	BEGIN TAPER
18	0+00.00	0.00	127+34.33	4.96 RT	TAPER POINT
19	0+00.00	0.00	127+33.07	1.91 LT	TAPER POINT
20	0+00.00	0.00	128+53.36	6.63 LT	TAPER POINT
21	0+00.00	0.00	128+54.16	17.65 LT	TAPER POINT
22	0+00.00	0.00	129+55.08	17.59 LT	END TAPER
23	0+00.00	0.00	129+55.07	7.18 LT	END TAPER
25	0+00.00	0.00	129+45.81	4.60 LT	RAD. PT 10.5' TO FACE
26	130+82.00	11.12 RT	0+00.00	0.00	BEGIN TAPER
27	130+82.01	0.58 RT	0+00.00	0.00	BEGIN TAPER
28	133+11.74	11.36 RT	0+00.00	0.00	BEGIN TAPER
29	133+11.75	0.35 RT	0+00.00	0.00	BEGIN TAPER
30	130+86.51	5.07 RT	0+00.00	0.00	RAD. PT 2' TO FACE
31	130+91.41	1.87 LT	0+00.00	0.00	RAD. 10.5' TO FACE
32	133+06.24	5.86 RT	0+00.00	0.00	RAD. PT 3' TO FACE

PROJECT NO: 1000-08-88	HWY: USH 63/STH 27/77	COUNTY: SAWYER	PLAN: LOCATION #3 - CITY OF HAYWARD	SHEET	E

FILE NAME : W:\NWBE_PROJECTS\DESIGN\1507_FREIGHT_MITIGATION_OSOW\C3D_14\SHEETSPLAN\050206_PN-HAYWARD_USH63&STH77.DWG
LAYOUT NAME - *6_HAYWARD_PN-2
PLOT DATE : 10/14/2015 3:42 PM
PLOT BY : GARY COLBERT
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44



STH 73 Best Fit Alignment - Sta./Off. Table			
POINT	STATION	OFFSET	DESC.
8	997+80.78	15.36 RT	SAW CUT PT
9	997+79.93	25.15 RT	SAW CUT PT
10	998+05.43	30.30 RT	SAW CUT PT
11	998+02.82	14.78 RT	SAW CUT PT
12	997+85.84	20.73 RT	RAD. PT 3' TO FACE
13	997+98.19	20.40 RT	RAD. PT 3' TO FACE
14	997+99.30	23.96 RT	RAD. PT 2.5' TO FACE

USH 8 - SE Quad Oustside Edge of Pavement									
No.	Start Station	End Station	Length	Rad.	Line/Chord Direction	Start X	Start Y	End X	End Y
C2	-0+00.00	0+78.15	78.15	184.18	N51° 50' 04.22"E	887308.83	581286.70	887369.82	581334.63
C3	0+78.15	2+17.16	139.01	548.00	N71° 15' 25.99"E	887369.82	581334.63	887501.10	581379.18
L5	2+17.16	3+79.84			N78° 31' 26.54"E	887501.10	581379.18	887660.52	581411.54

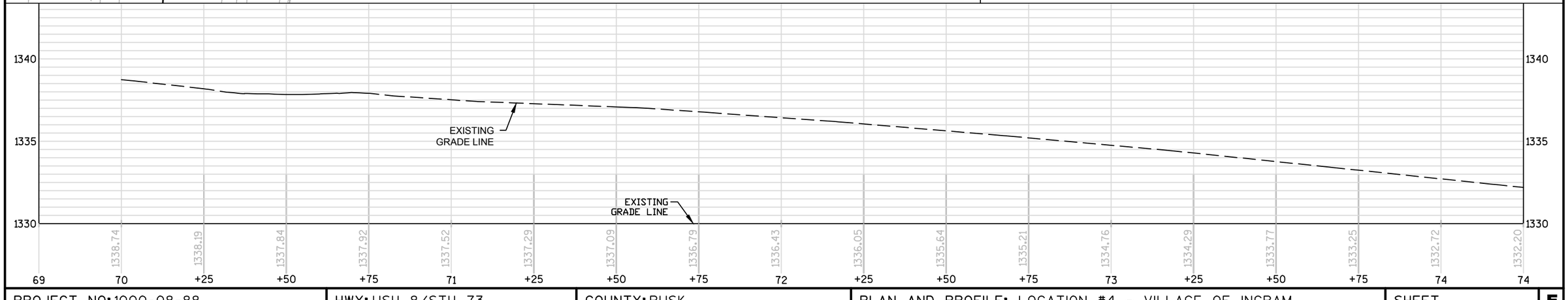
STH 73 - Best Fit Alignment									
No.	Start Station	End Station	Length	Rad.	Line/Chord Direction	Start X	Start Y	End X	End Y
L1	996+03.83	998+17.28	213.45		N00° 18' 44.75"W	887271.03	581133.78	887269.87	581347.23

USH 8 - SE Quad Inside Edge of Pavement (Gutter Flag Line)									
No.	Start Station	End Station	Length	Rad.	Line/Chord Direction	Start X	Start Y	End X	End Y
L2	70+00.00	70+32.59			N12° 36' 57.63"E	887304.92	581282.97	887312.04	581314.78
C1	70+32.59	70+73.82	41.23	40.00	N42° 08' 34.66"E	887312.04	581314.78	887338.50	581344.01
L3	70+73.82	71+56.12			N71° 40' 11.69"E	887338.50	581344.01	887416.62	581369.89
L4	71+56.12	78+23.64			N80° 18' 34.82"E	887416.62	581369.89	888074.61	581482.25

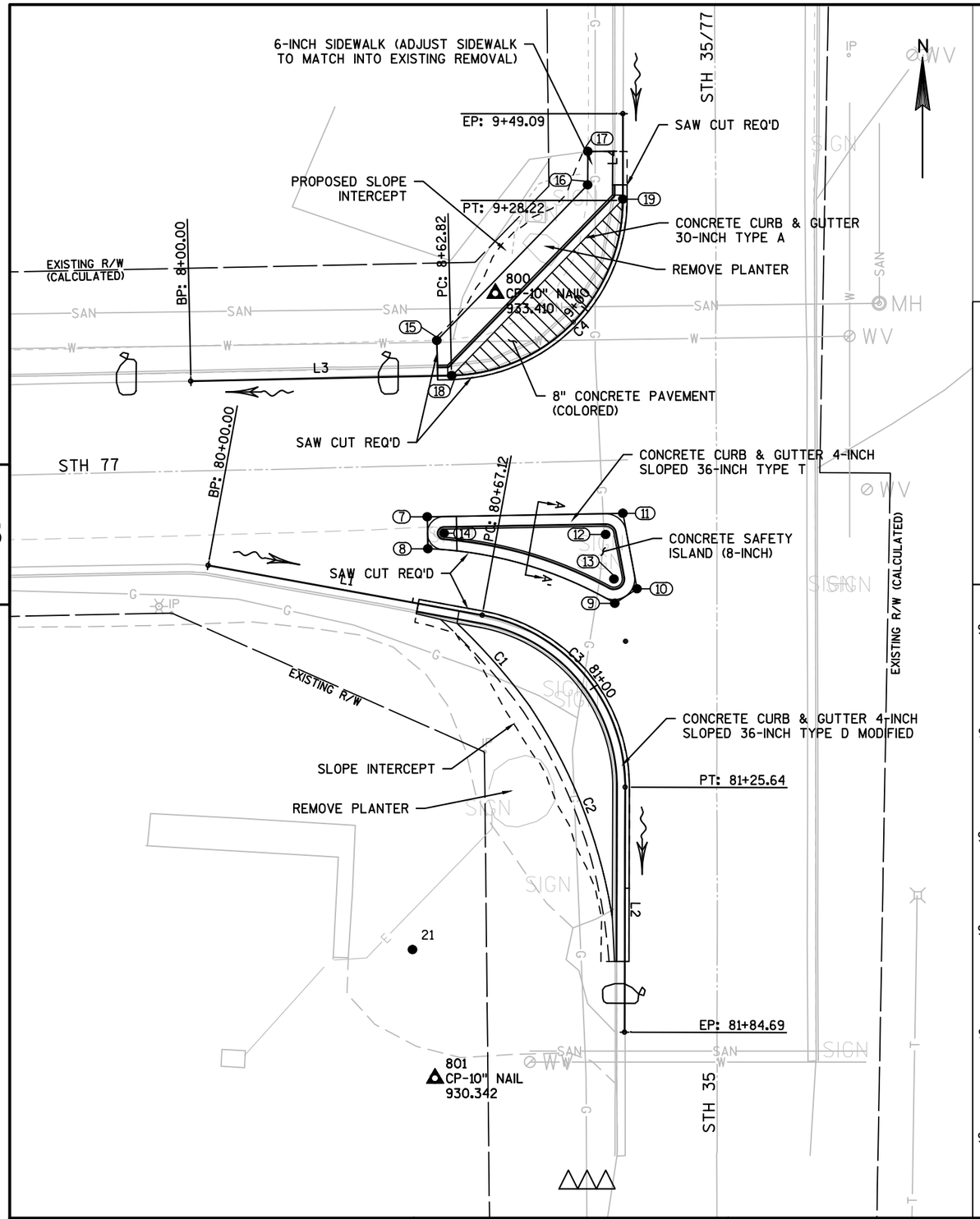
Control Point Table				
Pt. No.	X	Y	ELE.	Desc.
700	887258.40	581389.89	1339.21	CP-PK NAIL
701	887351.68	581282.15	1339.62	CP-10" SPIKE

SECTION A-A'

** CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE T (REVERSED SLOPED GUTTER)

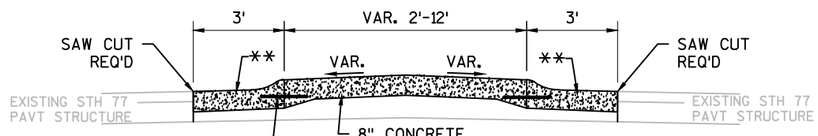


PROJECT NO: 1000-08-88	HWY: USH 8/STH 73	COUNTY: RUSK	PLAN AND PROFILE: LOCATION #4 - VILLAGE OF INGRAM	SHEET	E



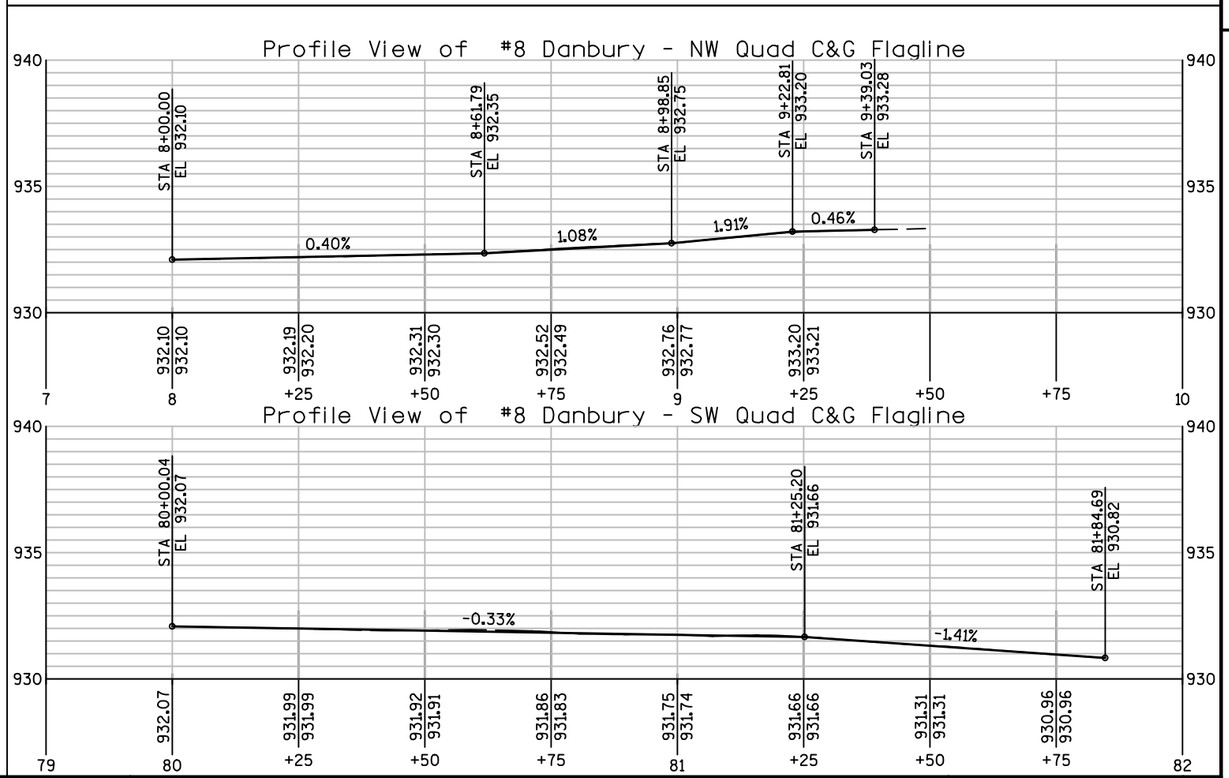
EROSION CONTROL LEGEND	
ΔΔΔ	TEMPORARY DITCH CHECK
OOO	CULVERT PIPE DITCH CHECK
	ROCK BAG
~→	SURFACE WATER FLOW

Control Point Table				
Pt. No.	X	Y	ELE.	Desc.
800	234037.77	234600.01	933.41	CP-10" NAIL
801	234023.24	234410.83	930.34	CP-10" NAIL



** CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE T (REVERSED SLOPED GUTTER)

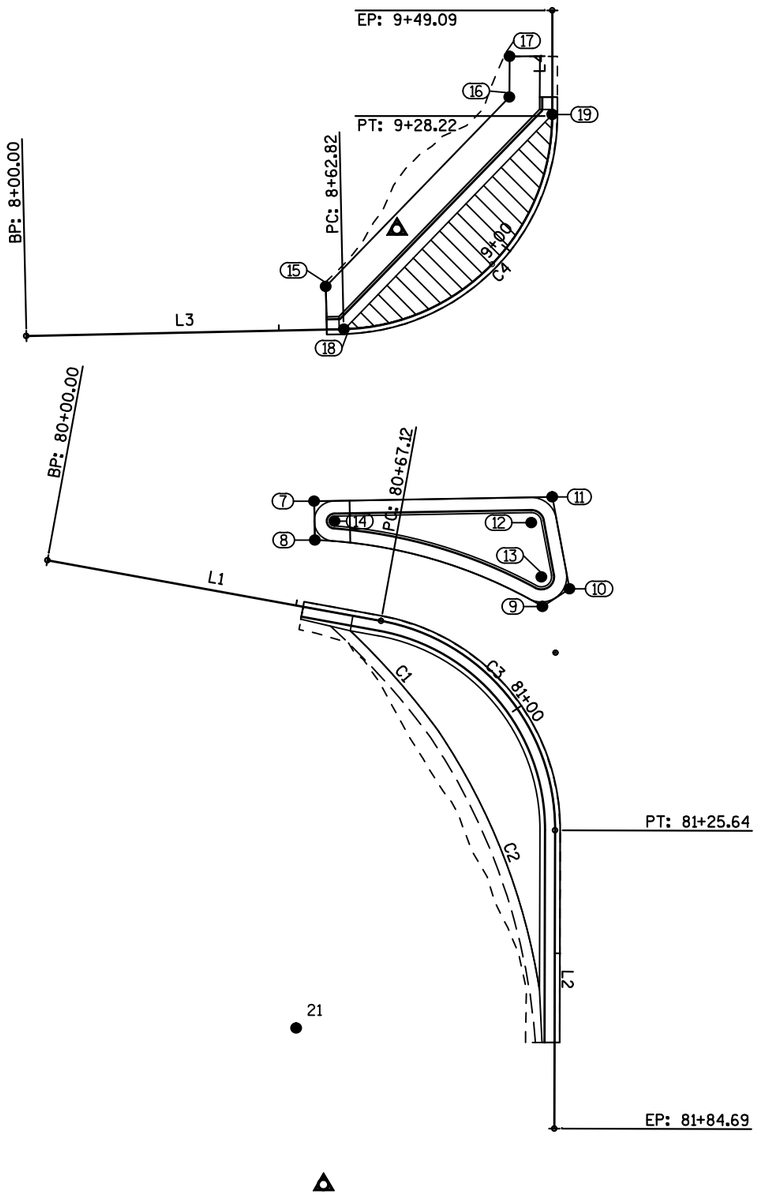
SECTION A-A'



PROJECT NO: 1000-08-88	HWY: STH77/35	COUNTY: BURNETT	PLAN: LOCATION #5 - VILLAGE OF DANBURY (UNINCORPORATED)	SHEET	E

FILE NAME : W:\NWBE_PROJECTS\DESIGN\1507_FREIGHT_MITIGATION_OSOW\C3D_14\SHEETSPLAN\050208_PN-DANBURY_STH_77&35.DWG
LAYOUT NAME - PLAN 1 IN 30 FT

PLOT DATE : 10/14/2015 8:25 AM PLOT BY : GARY COLBERT PLOT NAME : PLOT SCALE : 1 IN: 30 FT



STH35 SW Quad C&G Flag Line-Sta./Off. Table			
POINT	STATION	OFFSET	DESC.
7	80+49.85	20.94 LT	SAW CUT PT
8	80+51.36	13.38 LT	SAW CUT PT
9	80+90.18	17.26 LT	SAW CUT PT
10	80+91.25	23.44 LT	SAW CUT PT
11	80+83.14	35.80 LT	SAW CUT PT
12	80+82.67	29.31 LT	RAD. PT 2.5' TO FACE
13	80+87.52	21.62 LT	RAD. PT 2.5' TO FACE
21	81+64.94	51.16 RT	RAD. PT 99.2' TO FACE
14	80+54.56	17.80 LT	RAD. PT 1.5' TO FACE

STH 77 NW Quad C&G Flag Line - Sta./Off. Table			
POINT	STATION	OFFSET	DESC.
15	8+59.49	8.49 LT	BACK OF SDWLK
16	9+31.96	8.47 LT	BACK OF SDWLK
17	9+40.00	8.46 LT	BACK OF SDWLK
18	8+62.90	RT	BEGIN CONC PAVT
19	9+28.52	0.03 RT	END CONC PAVT

STH 35/77 - SW Quad Oustside Edge of Pavement									
No.	Start Station	End Station	Length	Rad.	Line/Chord Direction	Start X	Start Y	End X	End Y
C1	-0+00.00	0+26.76	26.76	148.21	S41° 16' 14.40"E	234028.50	234520.50	234046.12	234500.42
C2	0+26.76	0+81.90	55.14	126.87	S21° 17' 29.54"E	234046.12	234500.42	234065.99	234449.44

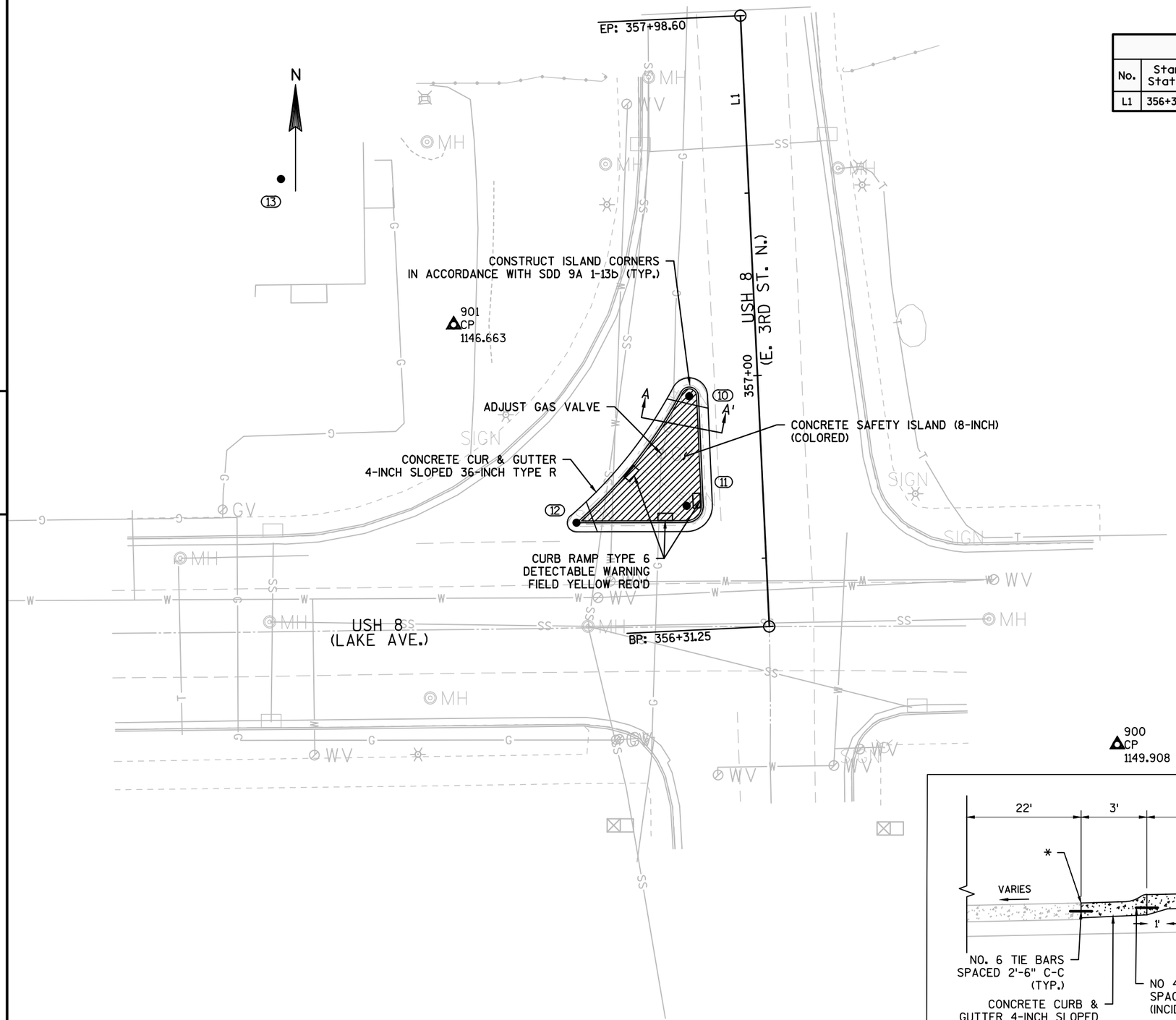
STH 35/77 - SW Quad C&G FLag Line									
No.	Start Station	End Station	Length	Rad.	Line/Chord Direction	Start X	Start Y	End X	End Y
L1	80+00.00	80+67.12			S79° 40' 38.64"E	233968.57	234534.47	234034.60	234522.44
C3	80+67.12	81+25.64	58.52	42.00	S39° 45' 46.06"E	234034.60	234522.44	234069.07	234481.01
L2	81+25.64	81+84.69			S00° 09' 06.53"W	234069.07	234481.01	234068.92	234421.95

STH 35/77 - NW Quad C&G FLag Line									
No.	Start Station	End Station	Length	Rad.	Line/Chord Direction	Start X	Start Y	End X	End Y
L3	8+00.00	8+62.82			N88° 45' 36.53"E	233964.39	234578.84	234027.20	234580.20
C4	8+62.82	9+28.22	65.40	42.22	N44° 23' 15.87"E	234027.20	234580.20	234068.50	234622.40
L4	9+28.22	9+49.09			N00° 00' 55.22"E	234068.50	234622.40	234068.51	234643.28

5

5

PROJECT NO: 1000-08-88	HWY: STH77/35	COUNTY: BURNETT	PLAN: LOCATION #5 - VILLAGE OF DANBURY (UNINCORPORATED)	SHEET	E

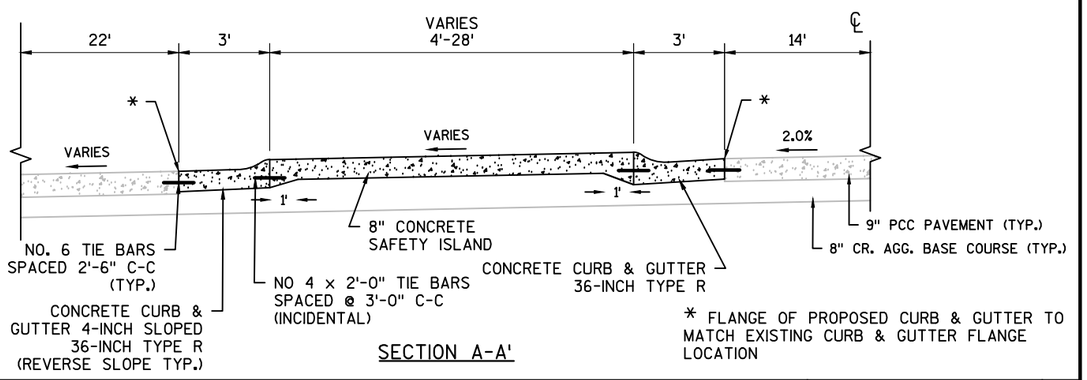


USH 8 - Best Fit Alignment									
No.	Start Station	End Station	Length	Rad.	Line/Chord Direction	Start X	Start Y	End X	End Y
L1	356+31.25	357+98.60	167.35		N02° 42' 26.68"W	813892.75	563591.92	813884.84	563759.09

USH 8 Best Fit Alignment - Sta./Off. Table			
POINT	STATION	OFFSET	DESC.
12	356+62.08	51.36 LT	FACE
13	357+59.87	127.70 LT	RAD. PT 124.0' TO FACE
10	356+95.18	18.92 LT	RAD. PT 2.5' TO FACE
11	356+65.28	21.03 LT	RAD. PT 4.5' TO FACE

Control Point Table				
Pt. No.	X	Y	ELE.	Desc.
900	813988.00	563559.61	1149.91	CP-PK NAIL
901	813806.36	563674.51	1146.66	CP-PK NAIL

900
CP
1149.908



SECTION A-A'

PROJECT NO: 1000-08-88	HWY: USH 8	COUNTY: RUSK	PLAN: LOCATION #6 - CITY OF LADYSMITH	SHEET	E

FILE NAME : W:\NWBE_PROJECTS\DESIGN\1507_FREIGHT_MITIGATION_OSOW\C3D_14\SHEETSPLAN\050209_PN-LADYSMITH_USH8.DWG
LAYOUT NAME - PLAN 1 IN 30 FT
PLOT DATE : 10/14/2015 9:48 AM PLOT BY : GARY COLBERT PLOT NAME : PLOT SCALE : **********

EROSION CONTROL LEGEND

- SILT FENCE
- INLET PROTECTION TYPE C
- ROCK BAG
- SURFACE WATER FLOW

N

Control Point Table				
Pt. No.	X	Y	ELE.	Desc.
10001	477338.77	268672.93	1220.82	CP-ETCH SQR IN CONC
10002	477319.82	268428.38	1224.85	CP-1/4" REBAR

USH 8/STH 35 (WB)
(130TH STREET)

10002
CP-1/4" REBAR
1224.853

CONCRETE CURB & GUTTER 4-INCH
SLOPED 36-INCH TYPE D MODIFIED

BP: 10+00.00
PC: 10+22.48
PCC: 10+58.84
PCC: 10+92.58
EP: 11+04.12
L9
L5
L6
L4
L7
L8
C5
C6
WHEEL TRACKING PATH

8" CONCRETE PAVEMENT
(COLORED)

SLOPE INTERCEPT

SLOPE INTERCEPT
INLET COVER TYPE HM
INLET COVER TYPE HM-S
BP: 20+00.00
L1
L2
L3
L4
C2
C3
WHEEL TRACKING PATH
21+00

CONCRETE CURB & GUTTER 4-INCH
SLOPED 36-INCH TYPE D MODIFIED

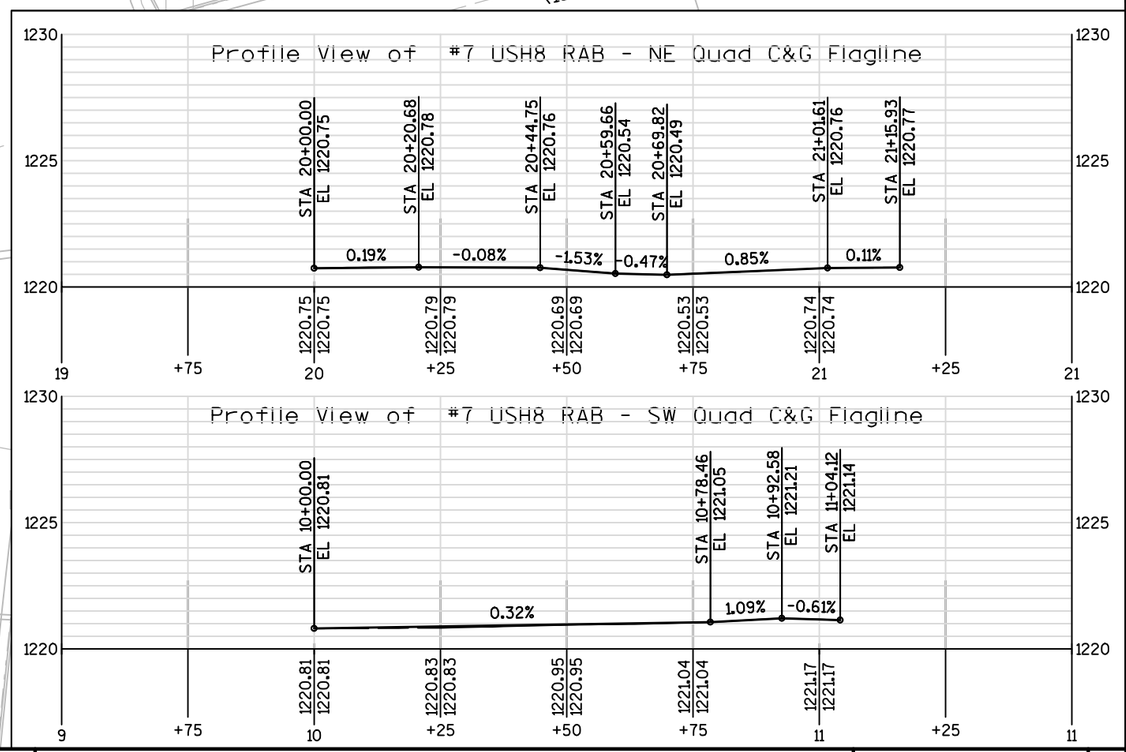
PCC: 20+43.43
PT: 20+80.38
EP: 21+15.93

8" CONCRETE PAVEMENT
(COLORED)

USH 8/STH 35 (EB)
(130TH STREET)

208th STREET (SB)

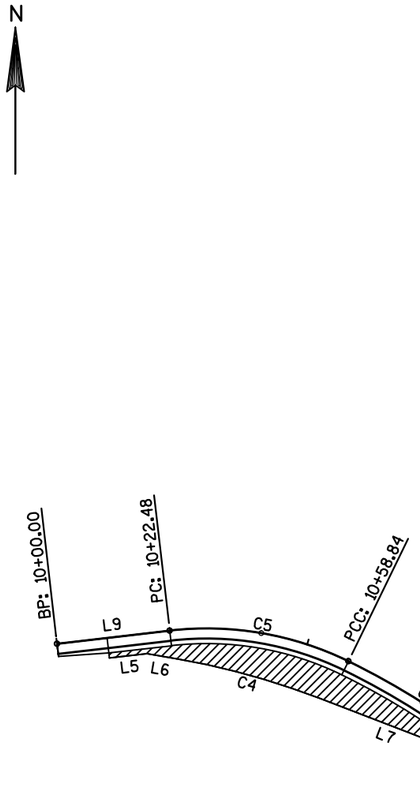
208th STREET (NB)

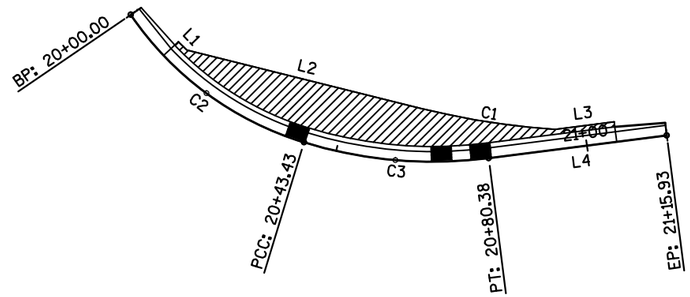


PROJECT NO: 1000-08-88	HWY: USH 8/STH 35	COUNTY: POLK	PLAN: LOCATION #7 - CITY OF ST CROIX FALLS	SHEET E

FILE NAME : W:\NWBE_PROJECTS\DESIGN\1507_FREIGHT_MITIGATION_OSOW\C3D_14\SHEETSPLAN\050210_PN-ST CROIX FALLS_USH8.DWG
LAYOUT NAME - PLAN 1 IN 30 FT

PLOT DATE : 10/5/2015 1:15 PM PLOT BY : GARY COLBERT PLOT NAME : PLOT SCALE : **********





USH 8/STH 35 - SW Quad Outside Edge of Pavement									
No.	Start Station	End Station	Length	Rad.	Line/Chord Direction	Start X	Start Y	End X	End Y
L5	1+00.00	1+07.51			N83° 23' 27.03"E	477175.00	268396.70	477182.47	268397.57
L6	1+07.51	1+13.64			S80° 06' 04.45"E	477182.47	268397.57	477188.50	268396.52
C4	1+13.64	1+42.80	29.16	150.00	S74° 31' 58.15"E	477188.50	268396.52	477216.55	268388.75
L7	1+42.80	1+72.16			S68° 57' 51.84"E	477216.55	268388.75	477243.96	268378.21
L8	1+72.16	1+78.60			S51° 57' 37.00"E	477243.96	268378.21	477249.03	268374.24

USH 8/STH 35 - SW Quad C& G Flag Line									
No.	Start Station	End Station	Length	Rad.	Line/Chord Direction	Start X	Start Y	End X	End Y
L9	10+00.00	10+22.48			N83° 23' 27.03"E	477164.63	268399.53	477186.96	268402.12
C5	10+22.48	10+58.84	36.37	63.86	S80° 17' 43.82"E	477186.96	268402.12	477222.32	268396.07
C6	10+58.84	10+92.58	33.74	150.86	S57° 34' 32.11"E	477222.32	268396.07	477250.74	268378.02
C7	10+92.58	11+04.12	11.54	54.85	S45° 08' 39.53"E	477250.74	268378.02	477258.90	268369.90

USH 8/STH 35 - NE Quad C& G Flag Line									
No.	Start Station	End Station	Length	Rad.	Line/Chord Direction	Start X	Start Y	End X	End Y
C2	20+00.00	20+43.43	43.43	64.32	S53° 37' 21.30"E	477385.74	268488.83	477420.05	268463.55
C3	20+43.43	20+80.38	36.95	87.10	S85° 07' 15.64"E	477420.05	268463.55	477456.59	268460.43
L4	20+80.38	21+15.93			N82° 43' 36.02"E	477456.59	268460.43	477491.86	268464.94

USH 8/STH 35 - NE Quad Oustside Edge of Pavement									
No.	Start Station	End Station	Length	Rad.	Line/Chord Direction	Start X	Start Y	End X	End Y
L1	2+00.00	2+02.38			S44° 40' 12.50"E	477395.16	268483.50	477396.84	268481.81
L2	2+02.38	2+50.30			S76° 02' 44.51"E	477396.84	268481.81	477443.35	268470.25
C1	2+50.30	2+77.03	26.73	150.00	S81° 09' 02.80"E	477443.35	268470.25	477469.72	268466.14
L3	2+77.03	2+88.84			N82° 43' 36.02"E	477469.72	268466.14	477481.43	268467.64

PROJECT NO: 1000-08-88	HWY: USH 8/STH 35	COUNTY: POLK	PLAN: LOCATION #7 - CITY OF ST CROIX FALLS	SHEET	E

On behalf of Customer

WisDOT TRAFFIC FORECAST REPORT

PROJECT ID(S): 1000-08-88
ROUTE(S): USH 8 & CTH SS

Region/COUNTY(IES): NW / Barron
LOCATION: USH 8 & CTH SS Intersection
COMPLETED: 9/3/2015

Traffic Forecasting Section; Bureau of Planning and Economic Development; Division of Transportation Investment Management

Developed by: Kory Dercks
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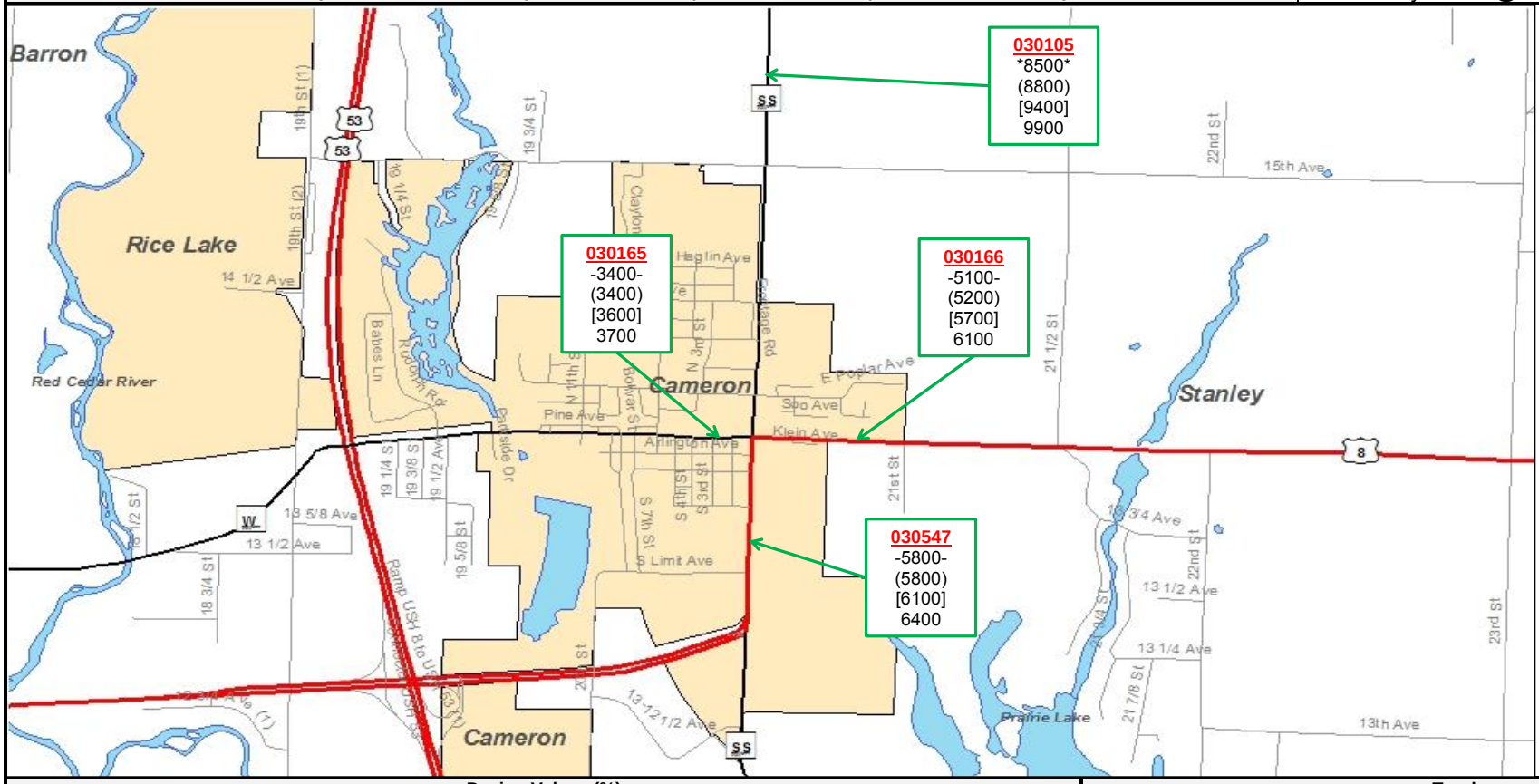
E-Mail: kory.dercks@dot.wi.gov



Site(s)	Route(s)	Volume(s)	Site Growth %	Design Values (%) K250	K100	K30	P	D(Dsgn. Hr.)	T(DHV)	T(PHV)	Trucks AADTT	2D	3AX	2S1+2S2	3-S2	DBL-BTM	Total %
030547	USH 8/CTH SS	6400	0.50%	9.4	10.1	10.9	12.8	60/40	11.0	5.9	750	3.9	1.5	1.6	6.1	0.1	13.1%
030166	USH 8	6100	0.85%	9.4	10.1	10.9	12.9	60/40	13.1	7.0	800	7.4	1.4	2.5	4.2	0.1	15.6%
030105	CTH SS	9950	0.70%	10.0	11.2	12.3	15.0	60/40	7.2	3.9	730	5.7	0.4	1.6	0.8	0.1	8.6%

SITE ID = Colored, **bolded**, and underlined

Symbol	Count	Symbol	Forecast
-000-	2014 Count	(000)	2016 AADT
000	2011 Count	[000]	2026 AADT
		000	2036 AADT

NOTES ON THE FORECAST:

1. This projection assumes that no major new traffic generators will be developed in the area served by the roadway or intersection over the course of the planning period.
2. Truck classification percentage totals for USH 8 / CTH SS were based on the 2008 count at site Id# 030547, USH 8 & CTH SS North of CTH SS, Barron County, which is estimated at 13.1%.
3. Truck classification percentage totals for USH 8 were based on the 2011 count at site Id# 030166, USH 8 East of CTH SS Stanley Tnshp, Barron County, which is estimated at 15.6%.
4. Truck classification percentage totals for CTH SS were based on the 2011 count at site Id# 030105, CTH SS 1.0 mi North of USH 8 Stanley Tnshp, Barron County, which is estimated at 8.6%.
5. The historical traffic count trends will continue increasing at a decreasing rate. Box-Cox regression is used to project past count data.
6. USH 8 is a Factor Group IV (Rural-Other) highway (indicating low to moderate fluctuation in traffic from a seasonal perspective). It is functionally classified as a Rural Principal Arterial (2) for count purposes.

WisDOT TRAFFIC FORECAST REPORT

PROJECT ID(S): 1000-08-88
ROUTE(S): USH 2 & USH 63

Region/COUNTY(IES): NW / Bayfield
LOCATION: USH 2 & USH 63 Intersection
COMPLETED: 9/3/2015

Traffic Forecasting Section; Bureau of Planning and Economic Development; Division of Transportation Investment Management

Developed by: Kory Dercks
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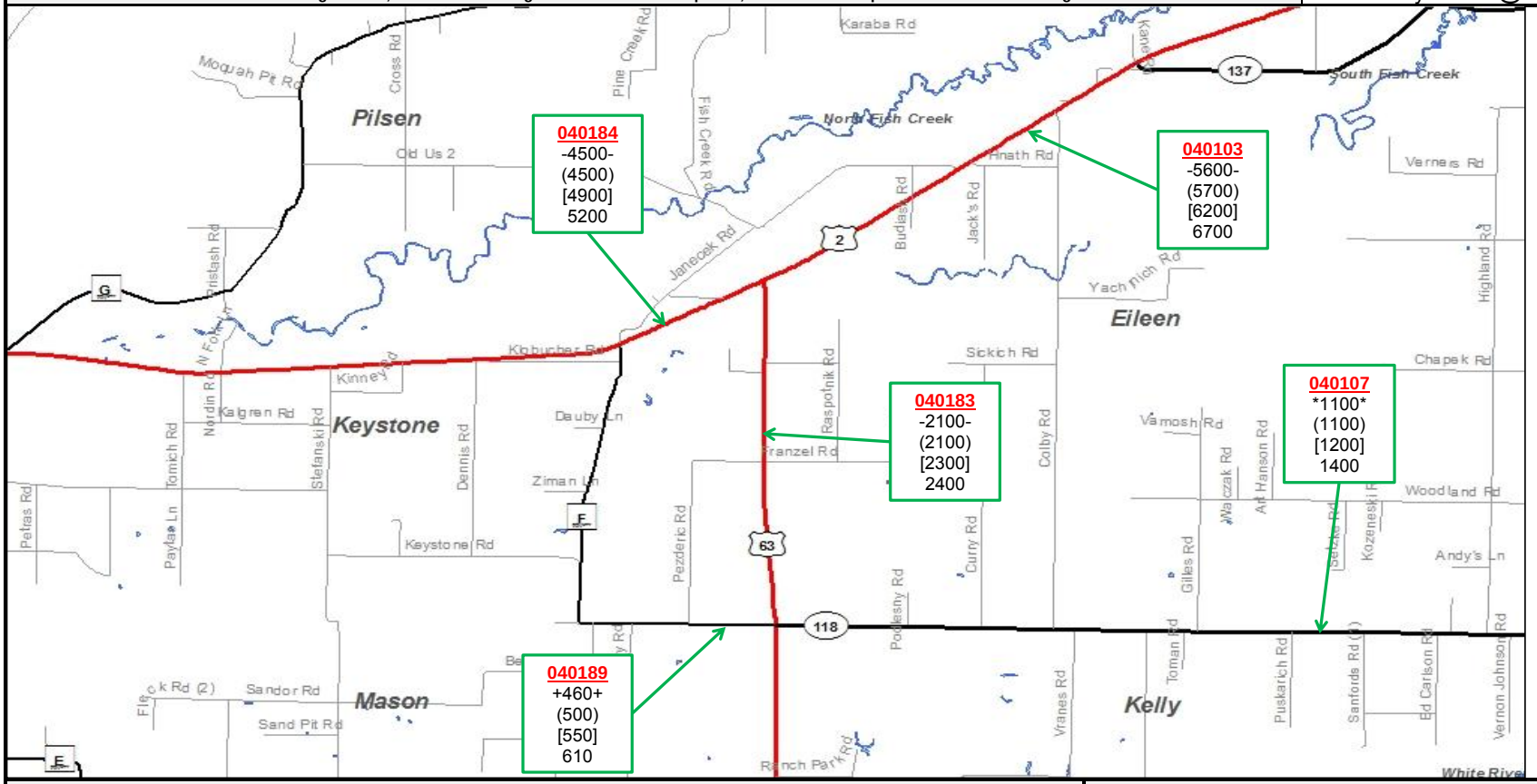


Freight Mitigation Project Site #2

Site(s)	Route(s)	Volume(s)	Site Growth %	Design Values (%) K250	K100	K30	P	D(Dsgn. Hr.)	T(DHV)	T(PHV)	Trucks AADTT	2D	3AX	2S1+2S2	3-S2	DBL-BTM	Total %
040103	USH 2	6710	0.93%	10.6	11.9	13.4	17.5	61/39	16.5	10.5	980	3.4	2.8	3.0	6.9	1.4	17.5%
040183	USH 63	2420	0.77%	9.9	11.0	12.3	15.7	60/40	19.9	10.7	490	12.0	2.2	5.6	3.8	0.2	23.7%

SITE ID = Colored, **bolded**, and underlined

Symbol	Count
-000-	2015 Count
000	2012 Count
+000+	2009 Count

Symbol	Forecast
(000)	2016 AADT
[000]	2026 AADT
000	2036 AADT

NOTES ON THE FORECAST:

1. This projection assumes that no major new traffic generators will be developed in the area served by the roadway or intersection over the course of the planning period.
2. Truck classification percentage totals for USH 2 were based on the 2014 count at site Id# 040002, USH 2 - 1.5 mi West of CTH E, Bayfield County, which is estimated at 17.5%%.
3. Truck classification percentage totals for USH 63 were based on the 2015 count at site Id# 040183, USH 63 0.5 mi South of USH 2 Eileen Tnshp, Bayfield County, which is estimated at 23.7%.
4. USH 2 is a Factor Group VI (Tourist / Recreational - Other) highway (indicating high fluctuation in traffic from a seasonal perspective). It is functionally classified as a Rural Principal Arterial (2) for count purposes.
5. USH 63 is a Factor Group IV (Rural-Other) highway (indicating low to moderate fluctuation in traffic from a seasonal perspective). It is functionally classified as a Rural Principal Arterial (2) for count purposes.

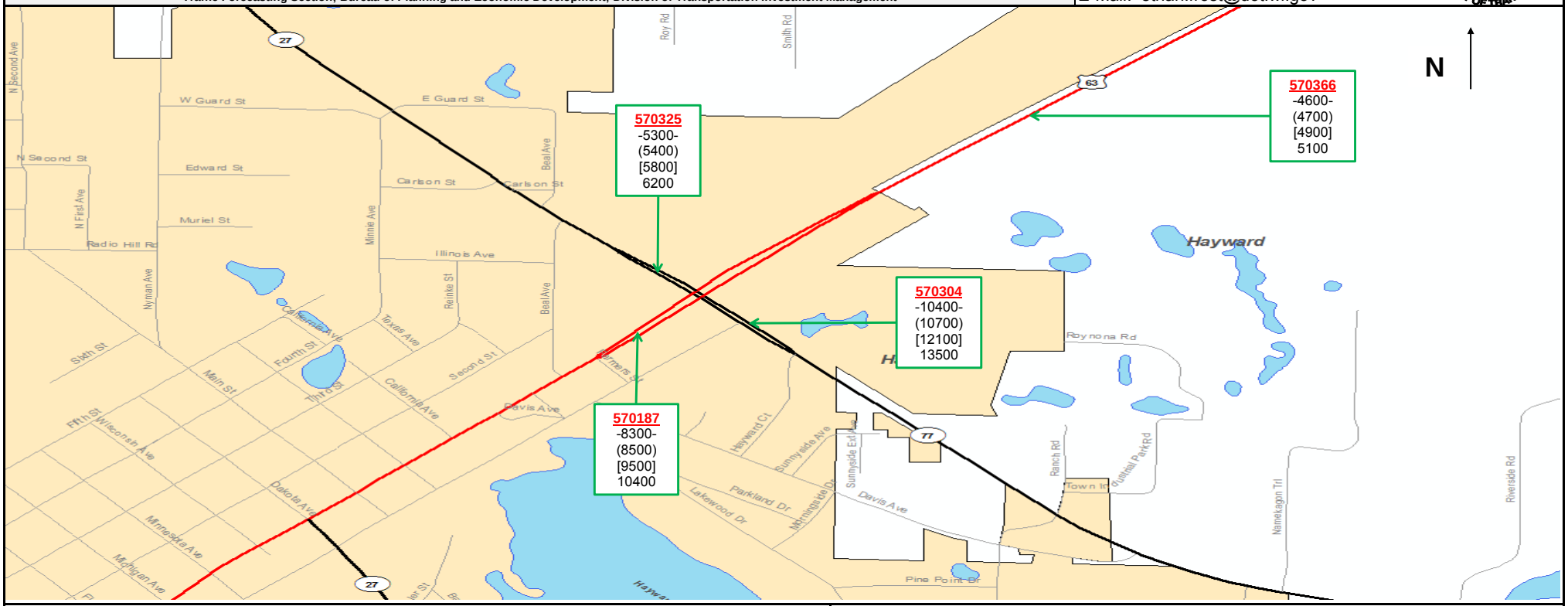
WisDOT TRAFFIC FORECAST REPORT

PROJECT ID(S): 1000-08-88
ROUTE(S): USH 63, STH 77, STH 27

Region/COUNTY(IES): NW/Sawyer
LOCATION: Intersection of USH 63 and STH 77, Hayward
COMPLETED: 8/19/2015

Traffic Forecasting Section; Bureau of Planning and Economic Development; Division of Transportation Investment Management

Developed by: Ethan Frost
Phone: (608) 267-3640
FAX #: (608) 267-0294
E-Mail: ethan.frost@dot.wi.gov



Design Values (%)											Trucks						
Site(s)	Route(s)	Volume(s)	Site Growth %	K250	K100	K30	P	D(Dsgn. Hr.)	T(DHV)	T(PHV)	AADTT	2D	3AX	2S1+2S2	3-S2	DBL-BTM	Total %
570304	**STH 77**	13490	1.33%	9.2	9.8	10.4	11.9	60/40	6.6	3.6	820	3.6	0.5	0.6	3.0	0.2	7.9%

SITE ID = Colored, **bolded**, and underlined

Symbol	Count
-000-	2014 Count

Symbol	Forecast
(000)	2016 AADT
[000]	2026 AADT
000	2036 AADT

NOTES ON THE FORECAST:

1. This location does not fall within any Wisconsin Travel Demand Model area.
2. Truck classification percentages were taken from observed 2014 Wisconsin Vehicle Classification Data (Site # 576051).
3. STH 27 is a Factor Group VI (Tourist/Rec. - Other) roadway (indicating high fluctuation in traffic from a seasonal perspective). It is functionally classified as a Rural Minor Arterial (6) for count purposes.
4. STH 77 is a Factor Group IV (Rural - Other) roadway (indicating low to moderate fluctuation in traffic from a seasonal perspective). It is functionally classified as a Rural Minor Arterial (6) for count purposes.
5. USH 63 is a Factor Group II (Urban - Other) roadway (indicating low to moderate fluctuation in traffic from a seasonal perspective). It is functionally classified as a Rural Principal Arterial (2) for count purposes.

WisDOT TRAFFIC FORECAST REPORT

PROJECT ID(S): 1000-08-88
ROUTE(S): USH 8

Region/COUNTY(IES): NW/RUSK
LOCATION: USH 8 & STH 73
COMPLETED: 08/13/2015

Traffic Forecasting Section; Bureau of Planning and Economic Development; Division of Transportation Investment Management

Developed by: Vu Dang
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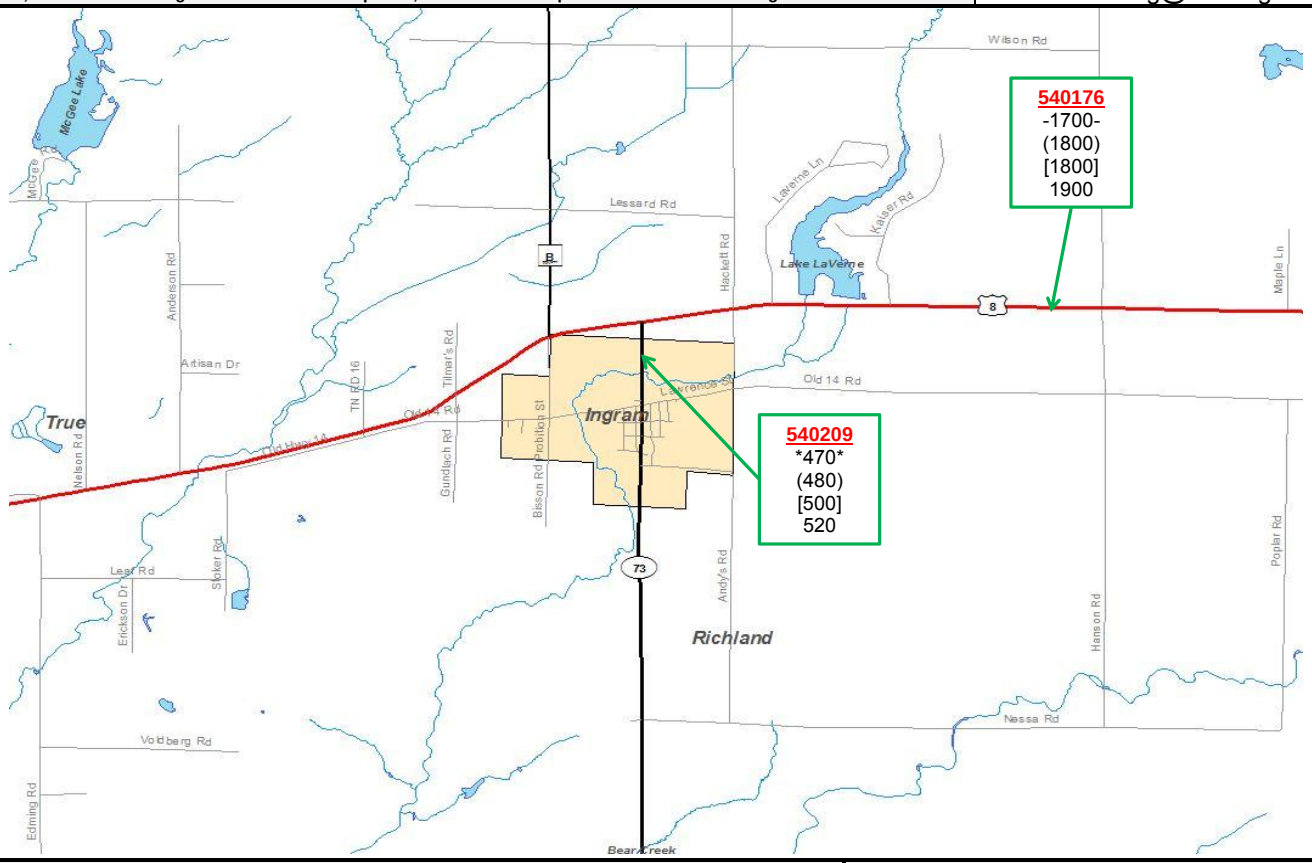
E-Mail: Vu.Dang@dot.wi.gov



Design Values (%)											Trucks						
Site(s)	Route(s)	Volume(s)	Site Growth %	K250	K100	K30	P	D(Dsgn. Hr.)	T(DHV)	T(PHV)	AADTT	2D	3AX	2S1+2S2	3-S2	DBL-BTM	Total %
540176	**USH 8**	1940	0.50%	10.1	11.3	12.9	16.9	60/40	11.8	6.3	240	3.2	1.6	2.1	6.7	0.3	14.0%
540209	**STH 73**	520	0.51%	12.9	16.0	20.7	32.9	60/40	20.7	11.1	110	6.5	5.0	1.5	11.6	0.0	24.7%

SITE ID = Colored, **bolded**, and underlined

Symbol	Count	Symbol	Forecast
-000-	2014 Count		
000	2011 Count		
		(000)	2016 AADT
		[000]	2026 AADT
		000	2036 AADT

NOTES ON THE FORECAST:

1. This projection is not within the scope of any Wisconsin Travel Demand Model.
2. Truck classification percentages were taken from a table representative of similar facilities and locations throughout the state of Wisconsin.
3. STH 72 is a Factor Group IV (Rural-Other) roadway (indicating low to moderate fluctuation in traffic from a seasonal perspective). It is functionally classified as a Rural Minor Arterial (6) for count purposes.
4. USH 8 is a Factor Group VI (Tourist/Rec-Other) roadway (indicating low to moderate fluctuation in traffic from a seasonal perspective). It is functionally classified as a Rural Principal Arterial (2) for count purposes.

WisDOT TRAFFIC FORECAST REPORT

PROJECT ID(S): 1000-08-88
ROUTE(S): STH 35

Region/COUNTY(IES): NW/BURNETT
LOCATION: STH 35 & STH 77
COMPLETED: 08/18/2015

Traffic Forecasting Section; Bureau of Planning and Economic Development; Division of Transportation Investment Management

Developed by: Vu Dang
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FAX #: (608) 267-0294
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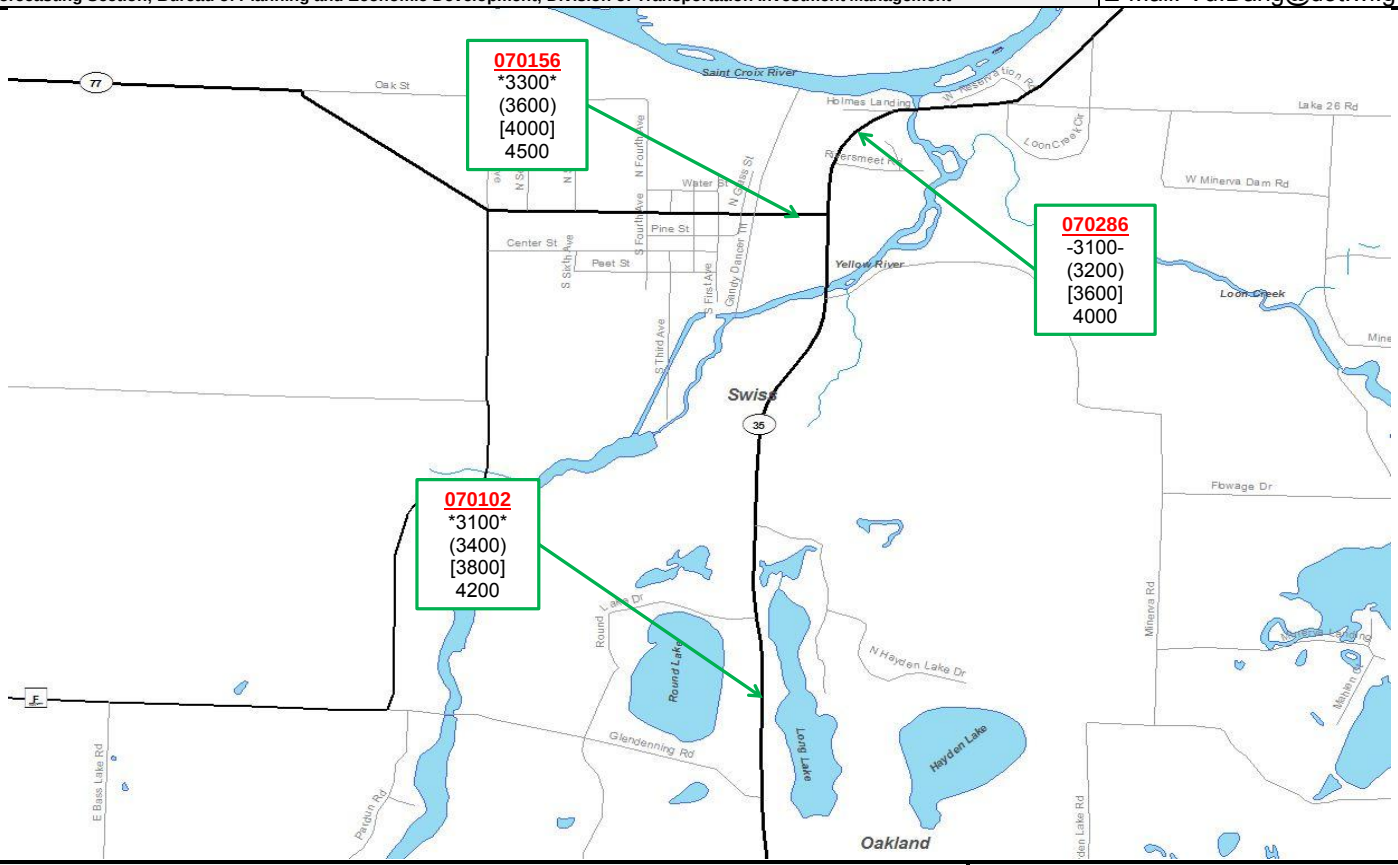


Site(s)	Route(s)	Volume(s)	Site Growth %	Design Values (%) K250	K100	K30	P	D(Dsgn. Hr.)	T(DHV)	T(PHV)	Trucks AADTT	2D	3AX	2S1+2S2	3-S2	DBL-BTM	Total %
070156	**STH 77**	4480	1.38%	10.8	12.1	13.8	18.5	61/39	6.8	4.3	240	2.2	1.4	1.1	2.4	0.1	7.2%
070286	**STH 35**	4020	1.30%	10.8	12.2	13.9	18.8	61/39	10.9	6.9	360	4.3	2.6	2.6	2.0	0.0	11.6%

SITE ID = Colored, **bolded**, and underlined

Symbol	Count	Symbol	Forecast
-000-	2013 Count		
000	2010 Count		
		(000)	2016 AADT
		[000]	2026 AADT
		000	2036 AADT

NOTES ON THE FORECAST:

1. This projection is not within the scope of any Wisconsin Travel Demand Model.
2. Truck classification percentages were taken from a table representative of similar facilities as that of site #070156 throughout the state of Wisconsin.
3. Truck classification percentages were taken for STH 35 from observed 2007 Wisconsin Vehicle Classification Data at site #070184, located 5.3 miles south of the intersection of STH 77 and STH 35 in the Town of Swiss.
4. STH 77 is a Factor Group VI (Tourist/Rec-Other) roadway (indicating low to moderate fluctuation in traffic from a seasonal perspective). It is functionally classified as a Rural Minor Arterial (6) for count purposes.
5. STH 35 is a Factor Group VI (Tourist/Rec-Other) roadway (indicating low to moderate fluctuation in traffic from a seasonal perspective). It is functionally classified as a Rural Minor Arterial (6) for count purposes.

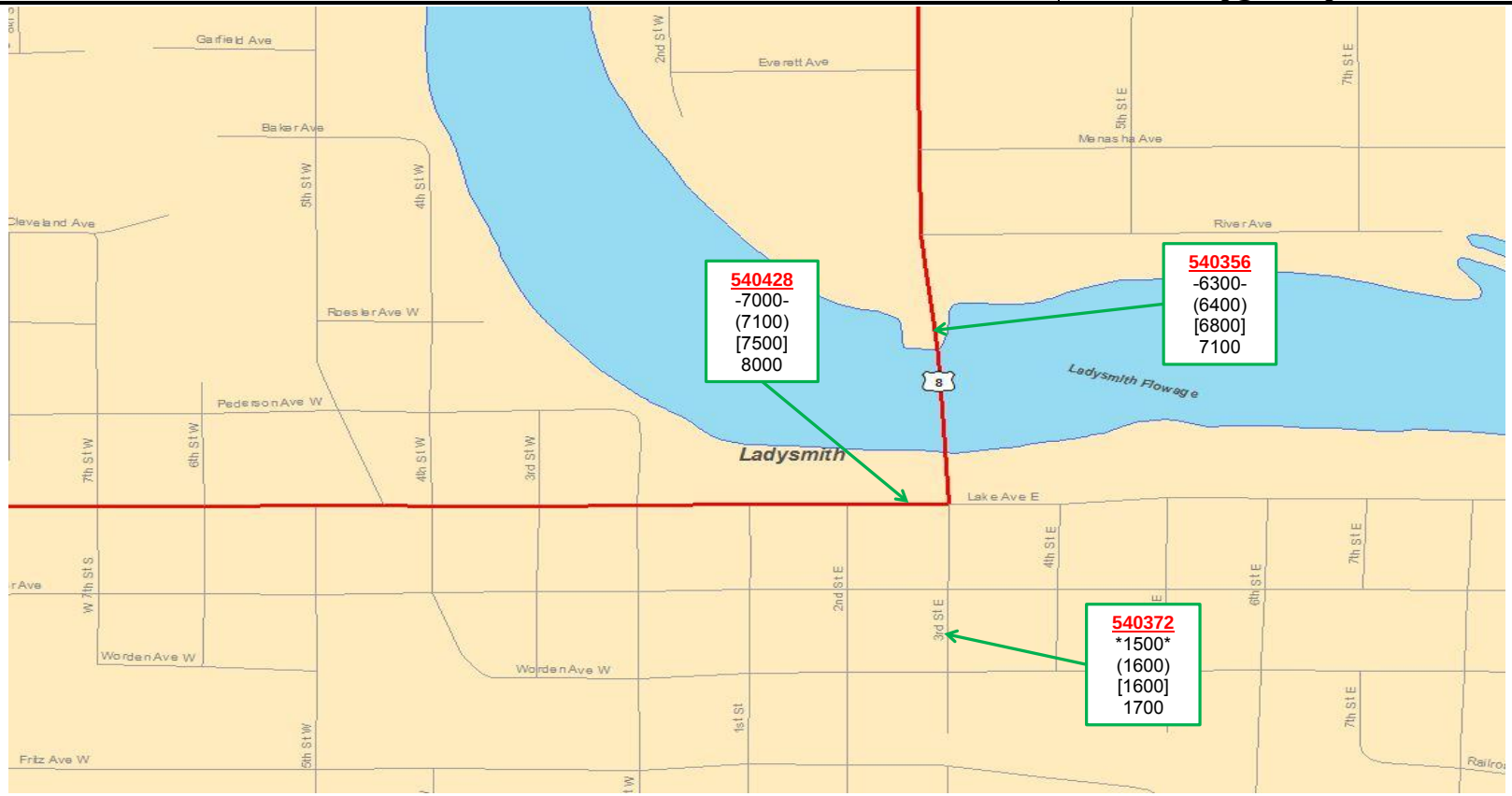
WisDOT TRAFFIC FORECAST REPORT

PROJECT ID(S): 1000-08-88
ROUTE(S): USH 8

Region/COUNTY(IES): NW/RUSK
LOCATION: USH 8 & E 3rd St
COMPLETED: 08/12/2015

Traffic Forecasting Section; Bureau of Planning and Economic Development; Division of Transportation Investment Management

Developed by: Vu Dang
Phone: (608) 266-2571
FAX #: (608) 267-0294
E-Mail: Vu.Dang@dot.wi.gov



Design Values (%)											Trucks						
Site(s)	Route(s)	Volume(s)	Site Growth %	K250	K100	K30	P	D(Dsgn. Hr.)	T(DHV)	T(PHV)	AADTT	2D	3AX	2S1+2S2	3-S2	DBL-BTM	Total %
540428	**USH 8**	8030	0.70%	10.7	11.4	12.0	13.3	59/41	15.6	13.6	1260	7.6	2.2	3.5	4.6	0.2	18.2%

SITE ID = Colored, **bolded**, and underlined

Symbol	Count
-000-	2014 Count
000	2011 Count

Symbol	Forecast
(000)	2016 AADT
[000]	2026 AADT
000	2036 AADT

NOTES ON THE FORECAST:

1. This projection is not within the scope of any Wisconsin Travel Demand Model.
2. Truck classification percentages were taken from observed 2008 Wisconsin Vehicle Classification Data (Site # 540102, located on 3.5 miles west of STH 27 in Ladysmith).
3. Truck classification percentages from a table representative of similar facilities and locations throughout the state of Wisconsin yielded low result of 9.1% whereas two sites with observed truck percents, 540102 and 540103 (located on STH 27 in the SW portion of Ladysmith) were in the range of 18.0% or more. Therefore, site 540102 was used.
4. USH 8 is a Factor Group II (Urban-Other) roadway (indicating low to moderate fluctuation in traffic from a seasonal perspective). It is functionally classified as a Rural Principal Arterial (2) for count purposes.
5. Site #540355, located on the east leg of the intersection of USH 8/W Lake Ave & E 3rd St, was last counted in 2004. Therefore, this site was not included in the forecast.

WisDOT TRAFFIC FORECAST REPORT

PROJECT ID(S): 1000-08-88
ROUTE(S): USH 8

Region/COUNTY(IES): NW/POLK
LOCATION: USH 8 & 208th St
COMPLETED: 08/18/2015

Traffic Forecasting Section; Bureau of Planning and Economic Development; Division of Transportation Investment Management

Developed by: Vu Dang
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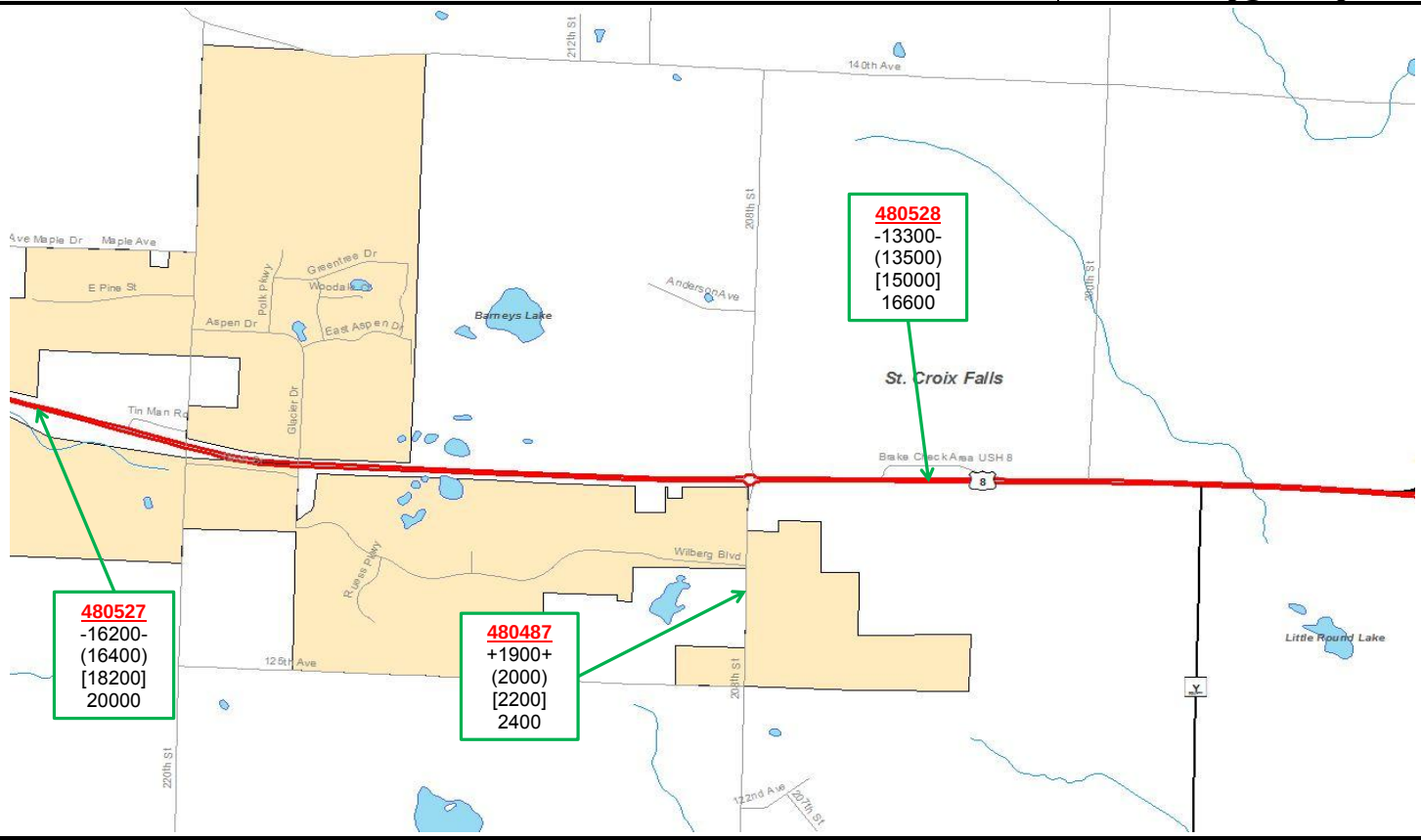

Design Values (%)											Trucks						
Site(s)	Route(s)	Volume(s)	Site Growth %	K250	K100	K30	P	D(Dsgn. Hr.)	T(DHV)	T(PHV)	AADTT	2D	3AX	2S1+2S2	3-S2	DBL-BTM	Total %
480527	USH 8	20040	1.13%	9.7	10.9	11.7	14.2	60/40	7.0	3.7	1340	2.0	1.3	1.3	3.5	0.2	8.3%

SITE ID = Colored, **bolded**, and underlined

Symbol	Count
-000-	2015 Count
+000+	2009 Count

Symbol	Forecast
(000)	2016 AADT
[000]	2026 AADT
000	2036 AADT

NOTES ON THE FORECAST:

1. This projection uses the 2000/2030 St. Croix Travel Demand Model.
2. Truck classification percentages were taken from a table representative of similar facilities as that of site #480528 throughout the state of Wisconsin.
3. USH 8 is a Factor Group IV (Rural-Other) roadway (indicating low to moderate fluctuation in traffic from a seasonal perspective). It is functionally classified as a Rural Principal Arterial (2) for count purposes.
4. The 2000/2030 St. Croix Travel Demand Model was used to complete this forecast. Traffic Analysis Forecasting Information System output was used as a comparison tool to check against the model output. Adjustments were made as needed.
5. TAFIS Model 1.1 growth rate of site 480102, located east of the USH 8 & STH 29 interchange in St. Croix Falls, was used as a guidance for the growth rate of 480528. Assumption was that most traffic were attracted towards businesses in east St. Croix Falls, i.e. Menards, Wal-Mart Supercenter, Marketplace Foods, St. Croix Falls Cinema, and restaurants.

On behalf of

WisDOT TMP Documentation and Request for Approval

TMP ID: 2573

Version: Current

This is a request for approval of the Transportation Management Plan (TMP) for the project detailed below. Impacts resulting from project activities meet the current work zone policies of the Wisconsin Department of Transportation.

1A. Project Information:

TMP Type:	Type 2
Region:	NW
Local Program:	No
Created Comment:	Created from Scratch. User comment:
Design ID:	1000-08-08
Project Title:	NW Region Various Highways Freight Mitigation
County:	BARRON
Highway:	Other - Various Highways
Construction ID:	1000-08-88
Project Type:	MISC
Project Limits:	NW Region various
Project Length:	0.35 Mile(s)
Project Duration:	90 Day(s)
Engineer's Estimate:	less than $1 Million
PS&E Date:	02/01/2016
LET Date:	05/10/2016
NHS Route:	Yes
AADT:	
AADT Year:	2016
Federal Oversight:	No

1B. Project Impacts:

Anticipated Begin:	06/2016
Anticipated End:	09/2016
Delay:	Minor
OSOW Route:	Yes

1C. Location:

Highway

Begin County:	BARRON
End County:	BARRON
Highway:	US 8 EB
Begin Landmark:	WISCONSIN AVE | US 8 EB | BARRON

Direction From: N
Distance From: 0.1 Mile(s)
End Landmark: COUNTY SS | US 8 EB | BARRON
Direction From: E
Distance From: 0.02 Mile(s)

Begin County: BAYFIELD
End County: BAYFIELD
Highway: US 63 NB
Begin Landmark: ZEPCZYK RD | US 63 NB | BAYFIELD
Direction From: N
Distance From: 0.6 Mile(s)
End Landmark: US 2 EB | US 63 NB | BAYFIELD
Direction From: E
Distance From: .02 Mile(s)

Begin County: SAWYER
End County: SAWYER
Highway: US 63 NB
Begin Landmark: FARMERS ST | US 63 NB/WIS 27 NB | SAWYER
Direction From: N
Distance From: .06 Mile(s)
End Landmark: US 63 SB | US 63 NB/WIS 27 NB | SAWYER
Direction From: W
Distance From: .06 Mile(s)

Begin County: RUSK
End County: RUSK
Highway: WIS 73 NB
Begin Landmark: MID FK MAIN CREEK (B-54-0102 BEGIN) | WIS 73 NB | RUSK
Direction From: N
Distance From: 0.29 Mile(s)
End Landmark: US 8 EB | WIS 73 NB | RUSK
Direction From: E
Distance From: .07 Mile(s)

Begin County: BURNETT
End County: BURNETT
Highway: WIS 77 EB
Begin Landmark: GANDY DANCER TRAIL | WIS 77 EB | BURNETT
Direction From: E
Distance From: 0.2 Mile(s)
End Landmark: WIS 77 EB | WIS 35 NB/WIS 77 EB | BURNETT
Direction From: S

Distance From:	0.03 Mile(s)
Begin County:	RUSK
End County:	RUSK
Highway:	US 8 EB
Begin Landmark:	E 2ND ST N | US 8 EB | RUSK
Direction From:	E
Distance From:	0.05 Mile(s)
End Landmark:	E 3RD ST N | US 8 EB | RUSK
Direction From:	N
Distance From:	0.01 Mile(s)
Begin County:	POLK
End County:	POLK
Highway:	US 8 EB
Begin Landmark:	208TH ST (SB) | US 8 EB/WIS 35 NB | POLK
Direction From:	W
Distance From:	0.03 Mile(s)
End Landmark:	208TH ST (NB) | US 8 EB/WIS 35 NB | POLK
Direction From:	E
Distance From:	0.03 Mile(s)

2. Brief description of work activities.

Location #1 USH 8/CTH SS Intersection-Village of Cameron: Replace southeast radius curb with mountable curb, make signal island curb mountable, and replace signs on single sleeved posts.

Location #2 USH 2/USH 63 Intersection-Town of Keystone: Widen southeast radius and add mountable curb, make island curb mountable, and replace signs on sleeved posts. Add overhead sign support with flashing red lights and redundant stop signs.

Location #3 USH 63/STH 77/STH 27 Intersection-City of Hayward: Replace south leg of USH 63 and STH 77 median islands with mountable curb & gutter. Replace signs on sleeved posts, replace median concrete sidewalk with 18-inch concrete safety island.

Location #4 USH 8/STH 73 Intersection-Village of Ingram: Widen southeast radius and add mountable curb, make island curb mountable, and replace signs on sleeved posts.

Location #5 STH 35/STH 77 Intersection-Danbury (unincorporated): Replace southwest radius curb with mountable curb, make island curb mountable, and replace signs on sleeved posts. Move sidewalk in northwest radius to follow RW line, add 6-inch vertical face curb along sidewalk, and add colored PCC pavement between new curb and existing pavement.

Location #6 USH 8/East 3rd St Intersection-City of Ladysmith: Replace intersection island with mountable curb island and replace signs on sleeved posts.

Location #7 USH 8/208th St Roundabout-City of St. Croix Falls: Add mountable curb at southwest and northeast radii with PCC pavement behind curb. This location is a roundabout and widening of concrete truck aprons is limited to the areas being over-tracked.

3. Briefly describe the staging planned for maintaining traffic.

Each location will be single stage construction with lane or shoulder closures. Advance warning signs, type III barricades and/or drums will be used at each location during construction. Lane closures will be used during construction activities that require equipment and personnel to occupy the closed lane, and during concrete curing periods. Shoulder and curb & gutter closures are permitted for the duration of construction or until the improvements are open to OSOW vehicles.

Location #1 eastbound vehicles (on USH 8) will have to travel to the left of the right turn lane island during certain phases of construction. Approaching semitrailer WB-65/WB-67 vehicles will encroach into opposing lane of traffic approximately 150 feet south of the island, and they will remain in WB USH 8 lane for approximately 125 feet east of the island before entry into the EB USH 8 lane. This impact scenario will be during normal working hours Monday through Friday for construction activities of removing and pouring concrete. Special provisions will require flagger personnel to be available to stop traffic on all of the intersecting highways when the right turn lane is closed, thereby allowing the space required for large truck turning maneuvers. The right turn lane will be opened as soon as possible each day by placing drums adjacent to flag line so all vehicles can maneuver through the right turn lane. Construction adjacent to the right turn lane will be half at a time with the right turn island work separate from the turning radius work. It is expected that the right turn lane will be compromised for a maximum of 3 weeks.

Location #2 northbound vehicles on USH 63 turning east onto USH 2 will have to travel to the left of the right turn lane island during certain phases of construction. Semitrailer WB-65/WB-67 vehicles will encroach into opposing lane of traffic upon turning east, and they remain in WB USH 2 lane for approximately 130 feet east of the island before entry into the EB USH 2 lane. This impact scenario will be during normal working hours Monday through Friday for construction activities of pouring concrete curb & gutter and asphalt paving in southeast radius. Special provisions will require flagger personnel to be available to stop traffic in each direction of USH 2 when the right turn lane is closed, thereby allowing the space required for large truck turning maneuvers. The right turn lane will be opened as soon as possible each day by placing drums adjacent to flag line so all vehicles can maneuver through the right turn lane. Construction adjacent to the right turn lane will be half at a time with the right turn island work separate from the turning radius work. It is expected that the right turn lane will be compromised for a maximum of 3 weeks.

The median island work at Location #3 will require left turn lane closures for consecutive work days on northbound USH 63/STH 27, westbound STH 77/STH 27 and eastbound STH 77. During the same time period, the inside lane (lane adjacent to the left turn lane) will be designated as a left turn and through traffic lane. Also, 700 feet of the southbound USH 63 left through (inside) lane will be closed north of the intersection, and 500 feet of the left through lane will be closed south of the intersection for USH 63 median work south of the intersection. However, the southbound left turn lane to eastbound STH 77 will remain open. When the median island curb & gutter concrete is cured, drums can be moved to the gutter pan so all lanes can be opened for traffic.

Location #4 northbound vehicles on STH 73 turning east onto USH 8 will have to travel to the left of the right turn lane island during certain phases of construction. Semitrailer WB-65/WB-67 vehicles will encroach into opposing lane of traffic upon turning east, and they will remain in WB USH 8 lane for approximately 130 feet east of the island before entry into the EB USH 8 lane. This impact scenario will be during normal working hours Monday through Friday for construction activities of pouring concrete curb & gutter and asphalt paving in southeast radius. Special provisions will require flagger personnel to be available to stop traffic in each direction of USH 8 when the right turn lane is closed, thereby allowing the space required for large truck turning maneuvers. The right turn lane will be opened as soon as possible each day by placing drums adjacent to flag line so all vehicles can maneuver through the right turn lane. Construction adjacent to the right turn lane will be half at a time with the right turn island work separate from the turning radius work. It is expected that the right turn lane will be compromised for a maximum of 3 weeks.

Location #5 eastbound vehicles on STH 77 turning south onto STH 35 will have to travel to the left of the right turn lane island during certain phases of construction. Semitrailer WB-65/WB-67 vehicles will encroach into opposing lane of traffic upon turning south, and they will remain in NB STH 35 lane for approximately 150 feet south of the island before entry into the SB STH 35 lane. This impact scenario will be during normal working hours Monday through Friday for construction activities of removing/pouring concrete curb & gutter and asphalt paving in southwest radius. Special provisions will require flagger personnel to be available to stop traffic in each direction of STH 35 when the right turn lane is closed, thereby allowing the space required for large truck turning maneuvers. The right turn lane will be opened as soon as possible each day by placing drums adjacent to flag line so all vehicles can maneuver through the right turn lane. Construction adjacent to the right turn lane will be half at a time with the right turn island work separate from the turning radius work. It is expected that the right turn lane will be compromised for a maximum of 3 weeks.

Location #5 southbound WB-65/WB-67 vehicles on STH 35 turning west onto STH 77 encroach into opposing NB STH 35 traffic approximately 190 feet north of the island, and they will remain in opposing lane halfway through the right turn onto WB STH 77. Drums will be placed approximately 10 feet from existing northwest flag line to allow for normal work day construction of removing curb & gutter, paving void with asphaltic surface, and adding concrete pavement in radius. Westbound truckers will have to pull farther into opposing lane of NB STH 35, and they will require assistance from flagger personnel to stop NB STH 35 traffic and EB STH 77 traffic to maneuver the right turn. Drums will be placed adjacent to flag line as soon as possible so all vehicles can maneuver through this right turn movement. It is expected that northwest radius work will take up to 2 weeks, which includes final concrete curing.

The island replacement at USH 8 (East 3rd St.) for Location #6 will affect the right turn lane for westbound USH 8 traffic. The turn lane is 22.5 feet wide (flag line to flag line). The inside 5 feet of the turn lane may be used for construction operations, which will allow a WB-65/67 vehicle adequate clearance to make a right turn onto WB USH 8.

Location #7 construction will affect the outside lanes of USH 8 in each direction at the roundabout. Closure of the approach outside lanes will still allow one lane of traffic to make the necessary turning maneuvers in the roundabout. Therefore the lane closures can be in place for consecutive work days.

4. Will there be restrictions on pedestrian/bicycle access?

☑ Yes ☐ No

If Yes:

a) Will sidewalk/multiuse path be closed?

☑ Yes ☐ No

b) Describe how pedestrian and bicyclists will be accommodated

At Location #3 crosswalks exist on all 4 legs of the intersection. During replacement of the south leg (USH 63) median island, the south leg crosswalk will be closed. Pedestrians and bicyclists will be directed to use the west and east leg crosswalks crossing STH 77, and the north leg crosswalk to cross USH 63.

At Location #5 the northwest quadrant sidewalk will be moved north. Pedestrians and bicyclists will be directed to use a 5-foot paved path directly northwest of the gas station business sign in order to bypass the work zone.

At Location #6 the crosswalks crossing East 3rd St. & Lake Ave., to the island that is being replaced, will need to be closed during construction. Pedestrians and bicyclists will be directed to use the sidewalk on the south side of Lake Ave./USH 8 to access the crosswalk at East 2nd St.

c) Will crosswalks be provided? What is the spacing of crosswalks?

Yes, existing crosswalks will be available for Locations 3 & 6. At Location #3 the crosswalks on the west and east legs (STH 77) will be open for use during construction. These crosswalks will pass by median island work on STH 77 legs that will be shielded with drums. The north leg (USH 63) crosswalk is on the far side of this intersection (approximately 110 feet northerly of the south leg crosswalk).

At Location #6 the next available crosswalk is one block west of East 3rd St. (approximately 275 feet).

d) Are the strategies in compliance with ADA?

Yes

5. Briefly describe how access to traffic generators, businesses, school buses, garbage trucks, postal services, and transit impacts will be mitigated (alternate routes, etc.).

a) Are the strategies in compliance with ADA?

Accesses to businesses/services will not be impacted during construction.

b) Is access to bus stops affected?

☐ Yes ☑ No

6. Will the project have lane closures?

☑ Yes ☐ No

If Yes:

a) Are there restrictions on when lane closures are allowed?

☑ Yes ☐ No

b) What hours/days are lane closures permitted?

Full lane closures may be used Monday through Friday during working hours of 6:00 AM to 8:00 PM. Drums are required for concrete cure time, and may be used during consecutive days for shoulder closures and median island work. Lane closures will also not be allowed during extended holiday weekends as described in Section 9.

c) How were traffic counts used in determining permitted lane closure times?(For multi-lane road, indicate typical peak hour volume per direction of travel.For two-lane, two-way road indicate AADT)?

All location highways are two-lane two-way roads except that the intersection of USH 63/STH 27 and STH 77/27 (Location 3) is divided highway. 2016 AADT is as follows:

Location 1: 5800 (EB USH 8/CTH SS)

Location 2: 2100 (NB USH 63)

Location 3: 8500 (South side - USH 63), 10700 (East side - STH 77), 5400 (West side - STH 77)

Location 4: 480 (NB STH 73)

Location 5: 3600 (STH 77)

Location 6: 7100 (EB USH 8)

Location 7: 13500 (USH 8)

7. Please provide the following.

a) Minimum lane width to be maintained.

11 feet minimum for short-term durations (one direction only).

b) Minimum lane width plus shoulder width to accommodate OSOW.

During construction OSOW vehicles will be directed to use different routes.

c) Minimum height (if less than typically available)

Height restrictions will not be an issue.

8. Will the project be detoured?

☐ Yes ☑ No

9. List major special events and holidays, and how traffic disruptions will be minimized.

Traffic disruptions during the summer holidays of Independence Day and Labor Day will be

avoided by allowing no construction activity beginning at noon the Friday before and ending early Tuesday morning the day after each holiday.

10. Describe the method(s) (LCAT, Quadro, FDM 11-50-30, etc.) used to estimate motorist delays or queue length? (Applicable only for freeways, expressways, and signalized corridors).

The project locations do no involve any freeways, expressways, or signalized corridors.

11. What is the anticipated travel delay during peak travel periods (also indicate frequency, e.g. daily and duration). Please compare the peak hour volumes per lane with the work zone capacity criteria in 11-50-30. If it exceeds the estimated capacity, a delay calculation is required. If the delay is more than 15 minutes, the TMP will be a type 3 and if less than 15 minutes, it generally will be a type 2. The Regional Work Zone Engineer can assist you in determining your delay.

No substantial delays (over 15 minutes) are expected at any of the locations.

12. Identify alternate routes anticipated, and any alternate route improvements or signing planned.

No alternate routes or signing is planned.

13. Are any intersection traffic control changes proposed such as temporary signals, temporary changes to an all way stop, etc?

No

14. Are there anticipated traffic impacts from the proposed project on other roads/routes in the region/corridor? Identify other projects in the corridor (only if delay anticipated on this project).

No impacts anticipated to other road/routes or other locations along the corridor.

15. Does the project affect other regions/states?

☐ Yes ☑ No

16. Check mitigation strategies planned

STRATEGY	COMMENTS
☑ Public information campaigns	Local radio public service announcements and local newspapers

- [ ] Off-peak lane closures
- [ ] Temporary widening to maintain traffic lanes
- [ ] Changeable message signs (PCMS)
- [ ] Ramp closures
- [ ] Temporary signals/timing revisions
- [ ] Coordination with adjacent projects
- [ ] Innovative contracting, (lane rental, A+B, etc)
- [ ] Temporary Emergency Pullouts
- [ ] Motorist service patrols
- [ ] Nighttime Work
- [ ] Enhanced Traffic control devices (Wet reflective pavement marking, temp concrete barrier, etc)
- [ ] Reduced regulatory speed limit (requires declaration approved by Regional Traffic Engineer, & by BTO if 65-mph hwy.)

17. Describe public information strategies planned (coordinate this activity with your Regional Communications Manager).

Wisconsin State Patrol, county law enforcement officers, and local/county government officials must be notified prior to construction. The construction project engineer will enter each project location into the Lane Closure System and notify the Communications Manager for listing in the 511 system.

News releases in local newspapers and on local radio stations will be used prior to and during construction.

18. Describe incident management strategies planned.

Local police, fire, and emergency personnel will be contacted by the construction project engineer and invited to the pre-construction meeting. Concerns and appropriate strategies will be addressed at that time. During construction, lane closures will be updated on the State Traffic Operations Center database, and law enforcement agencies will have access to that information through the Wisconsin Lane Closure system. Access to businesses and residences will be maintained at all times. The regional incident management plan will be followed.

19. Describe how transit impacts will be mitigated.

There are no transit impacts anticipated.

Attachments:

Attachments for TMP ID 2573 are listed below.

[f] #1_Cameron_Exh2.pdf
[f] #2_USH 2 & USH 63_Exh3.pdf
[f] #3_Hayward_Exh4.pdf
[f] #4_Ingram_Exh5.pdf
[f] #5_Danbury_Exh6.pdf
[f] #7_St Croix Falls_Exh8.pdf
[f] #6_Ladysmith_Exh7.pdf
[f] Project Overview Map_Exh1.pdf

*** [F] represents folder and [f] represents file.**

Approvals:

On behalf of Customer

VII. Mitigation & Commitments – List any environmental mitigation measures or commitments that will be incorporated into the project. Any items listed below must be incorporated into the project plans and contract documents. *Attach a copy of this page to the design study report (DSR) and the plans, specifications, and estimate (PS&E) submittal package.*

Environmental Factor	Commitment (If none, include 'No special or supplemental commitments required.')
General Economics	Maintain access to businesses and driveways. This will be noted in the special provisions.
Business	Maintain access to businesses and driveways. This will be noted in the special provisions.
Agriculture	None required.
Community or Residential	Ensure businesses that customers and emergency vehicles will be able to access property.
Indirect Effects	None required.
Cumulative Effects	None required.
Environmental Justice	None required.
Historic Resources	On screening list for all intersections except STH 35/77 in Danbury. WisDOT-CR acknowledges a reasonable and prudent effort was put forth in complying with appropriate provisions of FDM 26, and concurs that the current proposed actions have little to no likelihood to adversely affect historic properties that would be eligible for the NRHP. Email received on 10/19/2015, St. Croix Band gave tribal clearance for the intersection.
Archaeological/Burial Sites	On screening list for all intersections except STH 35/STH 77 intersection in Danbury. If any inadvertent discoveries (human or significant archaeological) during construction additional Section 106 coordination and consultation will be required. This will be noted in the special provisions. Email received on 10/19/2015, St. Croix Band gave tribal clearance for the intersection.
Tribal Coordination/Consultation	Letters to tribes sent on 5/19/2015. Letters sent to St. Croix Tribe on 7/16/2015, 8/6/2015 and handed over to NW Region's tribal coordinator on 9/9/2015. NW Region tribal coordinator spoke with St. Croix Tribe on 9/28/2015. Email received on 10/19/2015. Commitments at STH 35/STH 77 intersection: Contractor may not enter tribal property without written permission. Also, the contractor may not use the tribal lands for staging, grading or accessing. These will be noted in the special provisions.
Section 4(f) and 6(f) or Other Unique Areas	None required.
Aesthetics	None required.
Wetlands	No wetlands impacted. Project's drainage protected with erosion control devices.
Rivers, Streams and Floodplains	No rivers, streams or floodplains.
Lakes or other Open Water	No lakes or other open water.
Groundwater, Wells and Springs	None on project.
Upland Wildlife and Habitat	No upland wildlife habitat.
Coastal Zones	Intersection of USH 2/USH 63 is in Bayfield County, a Wisconsin coastal county. The intersection is not near any current coastal zone projects.

Threatened and Endangered Species	No clearing of trees nor work with bridges or box culverts is expected. Northern Long-eared bat should not be affected. All intersections are over 1/4 mile from a known maternity roost tree and is more than 1/4 mile from a known hibernacula.
Air Quality	Not required.
Construction Stage Sound Quality	WisDOT Standard Specifications 107.8(6) and 108.7.1 will apply.
Traffic Noise	Not required.
Hazardous Substances or Contamination	Two intersections, USH 8/STH 73 in Ingram and STH 35/STH 77 in Danbury have closed LUST sites nearby. At the USH 8/STH 73 intersection the DNR BRRTS report indicated that contaminated soil is contained within the southwest quadrant. The intersection's proposed construction is limited to the southeast quadrant. Therefore, the project is unlikely to encounter contaminated soil at the intersection of USH 8/STH 73. At the STH 35/STH 77 intersection, due to the shallow construction of two feet below existing ground, the project is not likely to encounter contaminated soil at the STH 35/STH 77 intersection. However, special provisions will require the contractor to contact WisDOT should any contaminated soil be encountered at the two intersections.
Storm Water	Best Management Practices during construction will be noted in the special provisions and erosion control will be shown on plan sheets.
Erosion Control	Best Management Practices during construction will be noted in the special provisions and erosion control will be shown on plan sheets. An Erosion Control Implementation Plan(ECIP) will be required for the contractor. This will be noted in the project's special provisions.
Other	

On behalf of Customer

Subject:	FW: Freight Mitigation Project - ID# 1000-08-88 (Northern Counties)
From:	Heather Harrington (heather@cheqnet.net)
To:	jolson.nwbe@yahoo.com; gcolbert@cheqnet.net;
Date:	Wednesday, April 1, 2015 9:21 AM

Sent from my Verizon Wireless 4G LTE Smartphone

-------- Original message --------
From: "Keppers, Philip - DOT"
Date:04/01/2015 7:54 AM (GMT-07:00)
To: 'Jane Olson'
Cc: 'Heather Harrington' , "Adrihan, Amy - DOT"
Subject: FW: Freight Mitigation Project - ID# 1000-08-88 (Northern Counties)

Amy completed the DNR coordination for the freight mitigation project. This email is final concurrence based on the scoping documents. For documentation this is what was sent to DNR:

ftp://ftp.dot.wi.gov/dtsd/nw-region/nw-projects/10000886

Note: There is no region wide sleeving component to the project as indicated on the excel file, just the 10 specific locations.

From: Clark, William H - DNR
Sent: Wednesday, April 01, 2015 8:07 AM
To: Adrihan, Amy - DOT
Cc: Cronk, Amy L - DNR; Haseleu, Shawn - DNR; Keppers, Philip - DOT
Subject: Freight Mitigation Project - ID# 1000-08-88 (Northern Counties)

Amy: This is in follow-up to the information you provided on the Region-Wide Freight Mitigation Project which will be managed under three construction let projects. As recently discussed, we still need to complete our review of projects in the southern counties based on some additional information to be provided by the consultant once hired. Karen Kalvelage will provide initial review and final concurrence on the bridge replacement project in Trempealeau County under separate cover using our normal liaison

review procedures. The purpose of this response is to address the northern county projects.

Based on the information project for the northern county projects, they appear to be limited in scope and should not materially affect our natural resource interests. Therefore, we hereby provide final concurrence for these projects. If the scope of any of these projects changes, we may need to complete further review and consultation regarding any potential environmental effects.

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Visit our survey at http://dnr.wi.gov/customersurvey to evaluate how I did.

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