
CORRESPONDENCE/MEMORANDUM _____ State of Wisconsin

Date: November 26, 2019

To: Beth Cannestra, P.E.
Director, Bureau of Project Development
Attn: Don Greuel, P.E.

From: Olubunmi Olapo, P.E.
Project Development Chief, Southeast Region

Subject: DESIGN STUDY REPORT
2310-17-00
STH 60
Eagle Drive to STH 181
Bridge # B-66-0092
Washington and Ozaukee Counties

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

DESIGN STUDY REPORT

PROJECT I.D. 2310-17-00

STH 60

Eagle Drive to STH181

WASHINGTON & OZAUKEE COUNTIES

April 7, 2016

Updated November 26, 2019

**Wisconsin Department of Transportation
Southeast Region**



**Prepared by:
Collins Engineers, Inc.
2033 West Howard Avenue
Milwaukee, WI 53221**

DESIGN STUDY REPORT

1.0 PROJECT DESCRIPTION AND NEED

1.1. Federal Oversight Project:

No

1.2. Project Length & Termini

Project Length: 6.281 Miles

Termini/Limits: Eagle Drive to STH 181 (STA. 188+60.00 to STA. 555+40.00). Excluding the Intersections with CTH G/Division Road (STA. 249+06.64 to STA. 266+77.81) and CTH Y/Granville Road (STA. 456+50.01 to STA. 473+92.67).

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)
STH 60	Arterial	Rural	No	*No	State	2A	No	Yes

* Only the west 320' is on the NHS.

1.4. Need for the Project

The roadway can no longer be economically maintained and is in need of resurfacing. The proposed improvement would provide a 12' lane with 10' shoulders, of which 6' will be paved, to accommodate bicycles. Bypass lanes and right turn lanes at intersections will be added or improved to meet current design standards.

2.0 PRESENT FACILITY

2.1. Posted Speed

Roadway or Roadway Segment	Posted Speed	Advisory Speed
STH 60 (Eagle Drive to STH 181)	55	None

2.2. Geometrics

2.2.1. * Horizontal Alignment Features Outside of Desirable or Minimum Design Standards.

* Horizontal Feature (Curve, P.I. Deflection, etc.)	Location (Stationing)	* Size (Radius, P.I. Deflection, etc.)*	* Super-Elevation (s.e.)	Speed Rating
None				

*Controlling Criteria

Comments: No horizontal alignment features are outside of the desirable or minimum standards.

2.2.2. * Vertical Alignment Features/SSD Outside Desirable or Minimum Design Standards.

* Vertical Feature (Curve, Vertical Grade Deflection, etc.)	Location (Stationing)	Sag or Crest	* % Grades	K Value/ Grade Deflection	Speed Rating	* SSD** Met (Yes or No/ Length)	DSD Met (Yes or No/ Length)
Curve	228+25.00	Crest	+1.34% -1.60%	187	60	Desirable (N / 499) Minimum (Y / 635)	N/A
Curve	254+47.00	Crest	+3.60% -0.56%	230	65	Desirable (N / 553) Minimum (Y / 705)	N/A
Curve	294+90.00	Crest	+2.71% +0.06%	170	60	Desirable (N / 475) Minimum (Y / 605)	N/A
Curve	302+75.00	Crest	+0.06% -2.85%	172	60	Desirable (N / 478) Minimum (Y / 609)	N/A
Curve	366+00.00	Crest	+1.25% -1.15%	208	65	Desirable (N / 527) Minimum (Y / 671)	N/A
Curve	447+40.00	Crest	+1.38% -1.79%	158	60	Desirable (N / 458) Minimum (Y / 583)	N/A

*Controlling Criteria

**SSD = Stopping Sight Distance

Comments: Safe stopping distance required for 60MPH design speed is 570 ft. Desirable SSD allows for a vehicle to stop short of a 6" high object. Minimum SSD allows for a vehicle to stop short of a 24" high object. All vertical curves meet the minimum required SSD to a 24" high object. The vertical curves listed above do not meet the desirable SSD to a 6" high object. Available stopping sight distance for each case is listed in parentheses in the table above.

2.2.3 * Grades and Vertical Clearance Outside Desirable or Minimum Design Standards.

Location (Stationing, Overpass Structures, etc.)	* % Grade	* Vertical Clearance
None		

*Controlling Criteria

Comments: None**2.3 Side-Roads/Intersections/Interchanges****2.3.1 Side-roads**

Roadway Name	Functional Class	Posted Speed (MPH)	Existing Traffic*** (AADT)	Approach Grades	Pedestrian Facilities (Yes or No)	Bicycle Facilities (Yes or No)
Maple Road	Local Road	55 Not Posted	340	0.54%	No	No

Roadway Name	Functional Class	Posted Speed (MPH)	Existing Traffic*** (AADT)	Approach Grades	Pedestrian Facilities (Yes or No)	Bicycle Facilities (Yes or No)
Johnson Lane	Private Road	25 Not Posted	<100 assumed	1.73%	No	No
Center Road	Local Road	55 Not Posted	>100 assumed	2.65%	No	No
Lusan Drive	Local Road	25	>100 assumed	0.06%	No	No
Church Road	Local Road	35	>100 assumed	2.95%	No	No
Briarwood Drive	Local Road	25	>100 assumed	0.54%	No	No
Country Aire Drive/ CTH M	Collector Road	45	950	0.70%(S) 2.50%(N)	No	No
Strawberry Glen Road	Local Road	35	>100 assumed	0.49%	No	No
Elm Drive	Local Road	55 Not Posted	>100 assumed	1.30%	No	No
Lizbeth Lane	Local Road	25 Not Posted	>100 assumed	0.34%	No	No
Horns Corners Road	Local Road	45	>100 assumed	0.39%(S) 0.74%(N)	Yes, NE	Yes, NE

***If Existing Traffic volumes are not available, then state at a minimum whether AADT is assumed to be <100 or >100.

Comments: None

2.3.2 Intersections

Intersecting Roadway Names	Intersect. Type	Intersect. Angle	Traffic Control	* SSD** Met [(Y/N) / Length]	ISD** Met [(Y/N) / Length]	DSD** Met [(Y/N) / Length]	Vision Triangle (Y/N)	Corner Clearance To Driveways Present (Y/N)
Maple Road	D	91.04°	Stop	Yes > 570	Yes	N/A	Y	Y
Johnson Lane	C	90.89°	Stop	Yes > 570	Yes	N/A	N	N
Center Road	B2	90.14°	Stop	Yes > 570	Yes	N/A	Y	N
Lusan Drive	D	90.33°	Stop	Yes > 570	Yes	N/A	Y	N
Church Road	D	90.04°	Stop	Yes > 570	Yes	N/A	Y	N
Briarwood Drive	D	91.37°	Stop	Yes > 570	Yes	N/A	Y	N

Intersecting Roadway Names	Intersect. Type	Intersect. Angle	Traffic Control	* SSD** Met [(Y/N) / Length]	ISD** Met [(Y/N) / Length]	DSD** Met [(Y/N) / Length]	Vision Triangle (Y/N)	Corner Clearance To Driveways Present (Y/N)
Country Aire Drive/ CTH M	A	88.23° (N) 88.56° (S)	2-Way Stop	Yes > 570	No 785	N/A	N	N
Strawberry Glen Road	B1	90.29°	Stop	Yes > 570	Yes	N/A	Y	N
Elm Drive	D	91.49°	Stop	Yes > 570	No 1105	N/A	Y	N
Lizbeth Lane	D	88.74°	Stop	Yes > 570	Yes	N/A	Y	N
Horns Corners Road	D	90.16° (N) 90.16° (S)	2-Way Stop	Yes > 570	Yes	N/A	N	N

*Controlling Criteria

**SSD=Stopping Sight Distance, ISD=Intersection Sight Distance, and DSD=Decision Sight Distance (See FDM 11-25-1).

Comments:

Per FDM 11-10-5 Attachment 1, all intersections within the project limits are classified as Sight Distance Category 1, which requires meeting the SSD to a 6-inch object (desirable) or the SSD to a 24-inch object (minimum). Decision Sight Distance is not required.

Johnson Lane:

- Vision Triangle: Trees encroaching approximately 10' into vision triangle.
- Approach Side on STH 60: 1 drive and CTH G are less than the desired distance, but not within 25 feet of the physical area of the intersection.
- Departure side on STH 60: 4 drives less than the desired distance, but not within 25 feet of the physical area of the intersection.

Center Road:

- Approach side on STH 60, two drives are less than the desired distance for a private driveway, but not within 25 feet of the physical area of the intersection.
- Departure side on STH 60, one drive is less than the desired distance for a private driveway, but not within 25 feet of the physical area of the intersection.
- Approach side on Center Road, 2 drives are within the upstream functional length, but not within 25 feet of the physical area of the intersection.

Lusan Drive:

- Approach side on STH 60, one drive is less than the desired distance for a private driveway, but not within 25 feet of the physical area of the intersection.
- Departure side on STH 60, Church Road is less than the desired distance, but not within the downstream functional length.
- Approach side on Lusan Drive, Multiple drives less than the distance for a private driveway, but not within 25 feet of the physical area of the intersection.
- Departure side on Lusan Drive, Summer Drive is within the functional length of the intersection.

Church Road:

- Departure side on Church Road, one drive within the downstream functional length, but not within 25 feet of the physical area of the intersection.

Briarwood Drive:

- CTH M is less than the desired distance for a Minor Arterial, but not within the functional length of the intersection.
- Drives along both departure side and approach side of Briarwood Drive are within the functional length of the intersection, but not within 25 feet of the physical area of the intersection.

CTH M:

- Intersection Sight Distance: desirable ISD of 929' is not met for a passenger car on CTH M SB, looking east. The minimum ISD of 709' for a passenger car is still met. Desirable ISD of 1122' for an SU truck is met. The ISD is being obstructed by a retaining wall and guardrail. There is no record of injury or fatality accidents at this intersection as a result of the ISD encroachment.
- Vision Triangle: Trees are encroaching approximately 10 feet into the southeast vision triangle.
- Briarwood Drive and multiple private driveways are less than the desired distance from the intersection.
- At the northeast corner of the intersection, one driveway on CTH M is located within the physical area of the intersection and one driveway on STH 60 is located approximately 30 feet from the physical area of the intersection.

Strawberry Glen Road:

- Departure Side on STH 60: 2 drives are less than the desired distance, but not within 25 feet of the physical area of the intersection.

Elm Drive:

- Intersection Sight Distance: desirable ISD of 1147' is not met for an SU truck on Elm Dr NB, looking east. The minimum ISD of 927' for an SU truck is still met. Desirable ISD of 947' for a passenger car is met. The ISD is being obstructed by a vertical curve in the STH 60 roadway profile. There is no record of injury or fatality accidents at this intersection.
- Approach Side on STH 60: 1 drive is less than the desired distance, but not within the functional length of the intersection.
- Departure Side on STH 60: 1 drive is less than the desired distance, but not within the functional length of the intersection.
- Departure Side on Elm Drive: 1 drive is within the functional length of the intersection, but not within 25 feet of the physical area of the intersection.

Lizbeth Lane:

- Approach Side on STH 60: 2 drives are less than the desired distance, but not within 25 feet of the physical area of the intersection.

Horns Corners Road:

- Vision Triangle: Trees are encroaching into the vision triangle in all four quadrants, by as much as 40 feet.
- Eastbound approach on STH 60: 2 drives are less than the desired distance, but not within the functional length of the intersection.
- Westbound departure on STH 60: One drive within intersection functional area, but not within 25 feet of the physical area of the intersection.
- Westbound approach on STH 60: 1 drive is less than the desired distance, but not within 25 feet of the physical area of the intersection.

- Horns Corners Road: 1 drive on southbound approach and 1 drive on northbound departure are less than desired distance, but not within 25 feet of the physical area of the intersection.

2.3.3 Interchanges

Intersecting Roadway Names	Interchange Type	Ramp Types	Ramp Design Speed	Horizontal Curve on Ramp	Vertical Curve on Ramp	Ramp Grades	* SSD** [(Met (Y/N) / Length]	DSD** [Met (Y/N) / Length]
None								

*Controlling Criteria

**SSD = Stopping Sight Distance & DSD = Decision Sight Distance (See FDM 11-25-1).

Comments: None

2.4 Cross Section

STH 60

Number of roadways: 1

Number of lanes: 2

Median width: N/A

* Lane width: 12'

* Shoulder width (Total and Paved or Curb & Gutter): 10' Total; 3' Paved

Bicycle Facility Type: None

Sidewalk and curb ramps: None

* Cross slope: 2%

* Super-elevation: None

* Horizontal clearance: Varies – 6' minimum

Clear Zone: 18' (1995 As-built)

* Vertical clearance: No vertical clearance obstructions on the project.

Side-slopes and Ditch sections: 4:1 Normal (1995 As-built)

*Controlling Criteria

Comments: See Attachment C – Existing Typical Cross Sections

2.5 Pavement Structure/Condition

Roadway	Pavement Types & Thicknesses	Physical Description
STA 188+60.00 – 203+74.35; STA 204+55.85 – 231+00.00	5" – 7" Asphalt pavement	*PCI varies from 32 (Very Poor) to 81 (Good) Horizontal cracking
	4" – 6" Crushed aggregate base course	
	8" – 10" Concrete pavement	

STA 231+00 – 249+06.64; STA 266+77.81 – 416+00.00	6.5" – 11.5" Asphalt pavement	*PCI varies from 9 (Failed) to 58 (Fair) Horizontal and Longitudinal cracking
	5" – 10" Crushed aggregate base course	
STA 416+00.00 – 456+50.01; STA 473+92.67 – 555+40.00	6" – 10" Asphalt pavement	*PCI varies from 39 (Very Poor) to 58 (Fair) Horizontal and Longitudinal cracking
	7" – 12" Crushed aggregate base course	
	9" Sand lift	

Comments:

*PCI = Pavement Condition Index (scale of 0 – 100).

See Attachment C – Typical Existing Sections

2.6 Right Of Way

2.6.1 Encroachments

Location (Station & Distance Left or Right)	Encroachment Type
191+54, 47' – 53' RT	Storm Water Outfall Structure
270+79, 47' RT	Light pole
275+45, 55' RT	Sign & retaining wall
293+56, 51' LT	Flag pole, satellite dish & retaining wall
300+35, 57 – 64' LT	Sign
320+33 – 322+23, 51' LT	Fence
327+96 – 328+46, 54' – 58' LT	Fence
330+94 – 331+38, 57' – 60' LT	Light poles
333+66, 39' RT	Planter & flag pole
335+35, 48' RT	Sign w/ decorative boulder
347+19 – 348+08, 55' LT	Parking lot
372+27, 53' LT	Light pole
375+60, 49' LT	Abandoned brick structure
398+36 – 399+69, 59' LT	Fence
401+19 – 402+89, 59' LT	Fence
415+20, 48' RT	Decorative mailbox
429+98, 48' LT to 430+41, 44' RT	Fence

453+40 & 453+66, 27' – 29' RT	Decorative Boulders
478+65, 43' LT	Roadside Memorial
519+43 – 520+13, 93' – 97' LT	Fence

2.6.2 Unique Right of Way Issues:

None

2.7 Structures

Existing Structure I.D. #	Feature Crossed	Structure Type	Sufficiency Rating	* Clear Roadway Width	Railing Type	* Structurally Deficient or Functionally Obsolete	* Inventory Load Rating
B-66-0092	STH 60	Bridge	76.2	40 Feet	Flexible Beam	Adequate	HS23
C-66-0031	STH 60	Concrete Box Culvert	N/A	46 Feet	Flexible Beam	N/A	N/A
C-66-0032	STH 60	Concrete Box Culvert	N/A	46 Feet	Flexible Beam	N/A	N/A

*Controlling Criteria

Comments: None

2.8 Utilities

Utility Name	Type of Utility	General Location	Underground/ Overhead/Both
ATC Transmission	Electric	Crosses STH60 just east of Cedar Creek. Crosses STH60 along Horns Corner Road.	Overhead
AT&T	Cable	Overhead from Eagle Dr to Church Rd, primarily on north side of STH 60. Underground from Church Rd to CTH Y, along north side of STH 60. Overhead along north side of STH 60 from CTH Y to Horns Corners Rd, then along south side from Horns Corners Rd to STH 181.	Both
Charter Communications	Communications	North of STH 60 near Eagle Drive Crosses Between Eagle Drive and Cedar Creek.	Both
Time Warner Cable	Cable	Along and overhead north of STH 60. Under roads and private drives from Elm Road to Horns Corners Road.	Both
Village of Jackson	Sanitary and	STH 60, stubbed out just east of	Underground

	Water	Eagle Drive, at western project limits.	
WE Energies	Electric	Overhead along north side of STH60. Crosses both overhead and underground.	Both
WE Energies	Gas	Follows along the north side of STH 60 from Eagle Dr. to Strawberry Glen Dr. Follows along the south side of STH 60 from CTH Y to STH 181 Follows west side of Eagle Dr, North CTH G, Center Rd, Lusan Dr, Church Dr, Briarwood Dr, North CTH G, CTH Y, Lizbeth Ln, South Horns Corners Rd, Follows east side of South CTH G, South CTH G, Strawberry Glen Rd, North Horns Corners Rd,	Underground
West Shore Pipeline	High Pressure Liquid Petroleum	Cross under STH60 1/3 mile west of Division Road.	Underground
WisDOT	Signals	At the intersection of STH 60 & STH 181.	Underground

Comments: None

2.9 Railroad Crossings

Location (Sta.)	Railroad Name	No. of Tracks	Function	Crossing Type
None				

Comments: None within project limits

2.10 Special Soils Conditions

Some soft and loose soils were noted in the geotechnical investigation. Excavation below subgrade is anticipated, and is estimated at 5 percent of the project total (approximately 4,500 CY).

2.11 Unique Project Features

Potential hazardous materials identified at the north east corner of the County Highway M and at 1917 STH 60 (STA 231+34 – 244+75 RT). Requesting Phase 2 investigation for an Underground Storage Tank at 1917 STH 60.

3.0 TRAFFIC

3.1 Traffic Volumes/Conditions

3.1.1 See attached Traffic Forecast Report

Attachment E

3.1.2 Highway Capacity Analysis

Location (Roadway Segment or Intersection)	Existing Level of Service	Design Year Level of Service Under Existing Roadway	Design Year Level of Service Under Proposed Roadway
STH 60 (Eagle Drive to CTH G)	D	E	E
STH 60 (CTH G to STH 181)	D	D	D

Comments: Existing and Design Year Level of Service data from 2014 Metadata. Since this project is a resurfacing project, highway capacity will not be affected under proposed design.

3.2 Crash Analysis

3.2.1 Project Crash Information

Roadway	Crash Rate ⁽¹⁾ (Year)	Statewide Crash Rate ⁽¹⁾ (Year)	Number & Severity of Crashes			
			Fatal	Injury	Property Damage	Total No. Crashes
STH 60	138 (2009)	76 (2009)	2	11	16	29
STH 60	64 (2010)	70 (2010)	0	4	9	13
STH 60	113 (2011)	69 (2011)	0	11	13	24
STH 60	70 (2012)	71 (2012)	0	8	7	15
STH 60 Average (2009 – 2012)	101	72	1	9	11	21
STH 60 Total (2009 – 2012)	N/A	N/A	2	34	45	81

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

Comments: Statewide crash rates are for Rural STN with 3500 to 8700 ADT. (STH 60 2010 AADT varies from 7400 to 8600). The crashes and crash rates do not include deer crashes.

3.2.2 Significant Crash Locations or Patterns

Location or Pattern	Year	Number & Severity of Crashes				Crash Rate ⁽¹⁾	Possible Factors Contributing to Crashes
		Fatal	Injury	Property Damage	Total		
STH 60 & CTH G	2008 - 2012	1	7	5	13	0.7	High volume of traffic on CTH G attempting to cross STH 60 traffic
Sideswipe & rear end accidents at intersections	2008- 2012	0	3	1	4	0.1	Lack of existing right turn lanes and bypass lanes

⁽¹⁾ Crashes per million entering vehicles (MEV)

Comments:

The intersection of STH 60 & CTH G was reconstructed from a 2-way stop to a roundabout in 2012.

Right turn lanes and bypass lanes are being added / improved to current standards at all intersections.

The second fatal crash noted in the 2009-2012 total occurred on STH 60, 0.1 miles east of CTH M and was a head-on accident that occurred in clear, dry conditions. Centerline rumble strips are being added to address this safety issue.

4.0 PROPOSED DESIGN CRITERIA

4.1 Design Class

Roadway or Roadway Segment	Design Class
STH 60	3RA3

4.2 * Design Speed

Roadway or Roadway Segment	Design Speed	Posted Speed
STH 60	60	55

* Controlling Criteria

4.3 Design Criteria Outside Of Desirable Standards

Vertical alignment is not being modified due to project scope consisting of resurfacing. Some vertical features will remain outside of desirable standards, but will meet minimum standards.

Intersections will be brought up to current standards, with the exception of CTH M. Due to right of way constraints, the westbound right turn lane will not be widened for bicycle accommodations.

4.4 Exceptions to Standards

None.

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)

See attached Safety Screening worksheets for locations and details of Crash Flags, Improvement Flags, and Programmatic Exceptions to Standards within the project limits.

****National Highway System (NHS) Roadway- Substandard Geometric Features Covered by a Programmatic Exception to Standards (3R & PM projects)***

Roadway Name:

Location				Feature Type	Magnitude of Variance
Sta.	to Sta.	RP	to RP		

* This documentation is required only for 3R projects on the National Highway System.

These substandard features are located on highway segments containing no flags or only Crash Type Flags. These features do not contribute significantly to the crash situation on these segments of highway so these highway segments are covered by the Programmatic Exception to Standards.

See attached map

Comments: Not applicable. Only the west 320' is on the NHS.

Substandard Geometric Features NOT Covered by a Programmatic Exception to Standards and NOT corrected as part of PM project (PM Group I and Group II pavement strategy projects)

Roadway Name:

Location				Feature Type	Magnitude of Variance	Operational Improvements
Sta.	to Sta.	RP	to RP			

Construction is required for safety improvements or to correct the above sub-standard features. The region will either consider this construction for HSIP funding or address this construction with future programming. Operational improvements will be incorporated into the PM project at these locations that are consistent with the scope of the preventive maintenance work and appropriate based on the analysis of crash types.

Comments: See Attachment K – Safety Screening Worksheet

4.5 Typical Cross Section Elements Considered

(Leave blank for 3R Projects)

5.0 PROPOSED DESIGN IMPROVEMENT

5.1 Improvement Type

Resurfacing
303

5.2 Geometrics

5.2.1 * Horizontal alignment

This project does not propose modifications to existing horizontal alignments.

5.2.2 * Vertical alignment/Stopping sight distance

This project does not propose modifications to existing vertical alignments.

5.2.3 * Grades

This project does not propose modifications to existing grades.

* Controlling Criteria

5.3 Sideroads/Intersections/Interchanges

5.3.1 Side-roads

Roadway Name	Functional Class	Design Speed (MPH)	Design Year Traffic (AADT)	Design Class	Approach Grades	Ped. Facilities (Y / N)	Bike Facilities (Y / N)
Maple Road	Local Road	60*	340	TR2	0.54%	No	No
Johnson Lane	Private Road	30*	<100 assumed	N/A	1.73%	No	No
Center Road	Local Road	60*	>100 assumed	TR1	2.65%	No	No
Lusan Drive	Local Road	30	>100 assumed	TR1	0.06%	No	No
Church Road	Local Road	40	>100 assumed	TR1	2.95%	No	No
Briarwood Drive	Local Road	30	>100 assumed	TR1	0.54%	No	No
Country Aire Drive/ CTH M	Collector Road	50	950	3RC2	0.28%(S) 2.29%(N)	No	No
Strawberry Glen Road	Local Road	40	>100 assumed	TR1	0.49%	No	No
Elm Drive	Local Road	60*	>100 assumed	TR1	1.30%	No	No
Lizbeth Lane	Local Road	30*	>100 assumed	TR1	0.34%	No	No
Horns Corners Road	Local Road	50	>100 assumed	TR1	1.30%(S) 0.26%(N)	Yes, NE	Yes, NE

Comments:

*= Speed limit is not posted and is estimated based on roadway characteristics. A design speed of 5 MPH higher than the assumed speed limit is being used.

A 10-ft wide asphalt pedestrian / bicycle trail is located at the NE corner of STH 60 & Horns Corners Road.

5.3.2 Intersections

Intersecting Roadway Names	Intersect. Type	Intersect. Angle	Traffic Control	* SSD** Met [(Y/N) / Length]	ISD** Met [(Y/N) / Length]	DSD** Met [(Y/N) / Length]	Vision Triangles Proposed (Y / N)	Corner Clearance To Driveways Met (Y / N)
Maple Road	B1	91.04°	Stop	Yes > 570	Yes ^[1]	N/A	Y	Y
Center Road	B2	90.14°	Stop	Yes > 570	Yes	N/A	Y	N
Lusan Drive	B1	90.33°	Stop	Yes > 570	Yes	N/A	Y	N
Church Road	B1	90.04°	Stop	Yes > 570	Yes	N/A	Y	N
Briarwood Drive	B2	91.37°	Stop	Yes > 570	Yes	N/A	Y	N
Country Aire Drive/ CTH M	A2 ^[2]	88.23° (N) 88.56° (S)	2-Way Stop	Yes > 570	No ^[3] 785	N/A	N ^[4]	N
Strawberry Glen Road	B1	90.29°	Stop	Yes > 570	Yes	N/A	Y	N
Elm Drive	B2	91.49°	Stop	Yes > 570	No 1105	N/A	Y	Y
Lizbeth Lane	B2	88.74°	Stop	Yes > 570	Yes	N/A	Y	N
Horns Corners Road	B1	90.16° (N) 90.16° (S)	2-Way Stop	Yes > 570	Yes	N/A	N ^[4]	N
Sports Complex Driveway	B2 ^[5]	90.00°	Stop	Yes > 570	Yes	N/A	Y	N

* Controlling Criteria

**SSD = Stopping Sight Distance, ISD = Intersection Sight Distance & DSD = Decision Sight Distance (See FDM 11-25-1).

Comments:

AADT was not available for most side roads. An assumption of 10 AADT per household located on the side road was used for the purpose of determining intersection types.

Per FDM 11-25 Table 2.1, a WB-65 Intersection Check Vehicle should be accommodated with A2 degree of encroachment at all intersections, unless conditions justify consideration of a smaller vehicle. The WB-65 check vehicle is accommodated with A2 degree of encroachment for all movements at CTH M (Type A intersection). The WB-65 check vehicle is accommodated at Type B intersections with A2 degree of encroachment for left turns, and either A3 or B1 degree of encroachment for right turns. Due to the low traffic volume on the side streets, limited existing right of way, and the project being classified as 3R, the higher degree of encroachment for right turns is not anticipated to be a significant issue that would warrant the use of Type A intersections throughout the project.

No improvements are being proposed to vertical alignment. SSD and ISD will remain unchanged.

Per FDM 11-10-5 Attachment 1, all intersections within the project limits are classified as Sight Distance Category 1, which requires meeting the SSD to a 6-inch object (desirable) or the SSD to a 24-inch object (minimum). Decision Sight Distance is not required.

Right turn lanes and bypass lanes at intersections are being improved to current standards.

^[1] =Based on preliminary structure plans prepared by BOS for B-66-92 rehabilitation, the ISD will be met at Maple Dr. In order to meet the required ISD, the maximum allowable elevation for top of parapet is 846.77 at the West Abutment and 847.01 at the East Abutment.

^[2] = SB departure pavement taper length at STH 60 & CTH M is being reduced from 100-ft (per SDD) to 60-ft to

1

Addendum No. 01

avoid impacts to existing right of way. The shortened taper length has been checked and verified to meet the FDM requirement for a WB-65 check vehicle with A2 degree of encroachment.

[3] = Correcting the intersection sight distance at CTH M & STH 60 would require relocation of the existing retaining wall. This is outside the scope of this project. Furthermore, there is no history of accidents as a result of the intersection sight distance deficiency.

[4] = Improvements to the vision triangles at STH 60 & CTH M and STH 60 & Horns Corners Rd would require additional right of way to remove existing trees, and is outside the scope of this resurfacing project.

[5] = Bypass lane shoulder is being reduced from 6-ft paved / 2-ft unpaved (per SDD) to 4-ft paved / 1 ft unpaved. Right turn lane is being reduced from 12-ft to 10-ft and 5-ft bicycle slip lane is being eliminated.

Driveways and field entrances are being removed in the following locations (distance to physical area of nearest intersection is listed if driveway is located closer than desirable distance):

Addendum No. 01

- STA 191+75 RT – Eagle Drive EB departure, 700' downstream
- STA 241+00 RT – Not in proximity to any intersection
- STA 274+00 RT – Center Rd EB approach, 1000' upstream
- STA 300+50 LT – Within Lusan Drive physical area of intersection
- STA 328+70 LT – Not in proximity to any intersection
- STA 350+25 LT – Briarwood Drive WB departure, 275' downstream
- STA 516+50 LT – Horns Corners Rd WB departure, 75' downstream

5.3.3 Interchanges

Name of Intersecting Roadways	Interchange Type	Ramp Type	Ramp Design Speed	Ramp Grades	* SSD** Met [(Y/N) / Length]	DSD** Met [(Y/N) / Length]	Vision Triangle (Yes or No)
None							

* Controlling Criteria

**SSD = Stopping Sight Distance & DSD = Decision Sight Distance (See FDM 11—25-1).

Comments: None

5.4 Roundabouts

No roundabouts within the project termini. A roundabout at CTH Y (Project I.D. 2310-14-70) will be constructed at the same time and will need to be coordinated with this project.

5.5 Cross Section/Pavement Structure

See Attachment F – Typical Proposed Sections

5.6 Street Lighting

Location	Type	Break-away Requirements
None		

5.7 Structures

5.7.1 Bridge Structures

Structure I.D. #	Location	Structure Type	Length	* Clear Width	No. of Spans	* Vertical Clearance	* Horizontal Clearance
B-66-0092	STH 60	Bridge	76.2	39.4'	2	N/A	39.4'
Proposed Improvement:			Bridge will receive overlay and existing guardrail will be replaced with concrete parapet. No widening will occur.				

* Controlling Criteria

Comments: None

5.7.2 Box Culverts and Multiple Pipe Structures

Structure I.D. #	Location	Type	Length	No. Pipes
None				
Proposed Improvement:				

Comments: None

5.7.3 Retaining Walls and Noise Barrier Structures

Structure I.D. #	Location	Type	Length	Height
None				
Proposed Improvement:				

Comments: None

5.7.4 Sign Bridge Structures

Structure I.D. #	Location	Type	Length	Clear Roadway Width	* Vertical Clearance	* Horizontal Clearance	Clear Zone Under
None							
Proposed Improvement:							

* Controlling Criteria

Comments: None

5.7.5 Tunnel Structures

Other Tunnel Structures						
Structure I.D. #	Location	Type (Veh., Ped., Bicycle, etc.)	Length	Lighting Type	* Vertical Clearance	* Horizontal Clearance
None						
	Safety Features			Coordination with Local Emergency Responders		
	Proposed Improvement:					

* Controlling Criteria

Comments: None

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

Comments: None

5.9 Transportation Management Plan

See Attachment H – Transportation Management Plan

5.10 Safety Enhancements/Mitigation Measures

The paved shoulder will be increased to 6' to accommodate bicycle traffic.

Right turn lanes and bypass lanes will be improved to current standards, with the exception of the STH 60 WB approach to CTH M. Due to right of way constraints, the right turn lane at this location will not be widened to accommodate bicycles.

Existing beam guard is Class A, does not have energy absorbing terminals (EAT), and in most locations does not meet length of need (LON) requirements. Existing beam guard is being removed and replaced with MGS guardrail wherever practical. Locations are noted below where installation of MGS guardrail is not practical, or where other substandard installations are necessary:

Location	Substandard Feature	Reason for selection	Alternatives considered
STA 204+41 – 204+79 RT	Curved thrie beam approach; Class A beam guard with short radius and no height transition	The curb return for Maple Dr begins at the east abutment of B-66-92 and does not provide enough room for a tangent thrie beam approach. The thrie beam approach is being installed at a 35' radius. The close proximity of the curb return to the abutment also does not provide enough space for a height transition from thrie beam to short radius.	A crash cushion or sand barrels were considered, but there was not enough space and they wouldn't have shielded the creek. Leaving the blunt parapet end unshielded was considered since it is the downstream end and is 2' outside the clear zone for opposing traffic. Due to the limited clearance outside the clear zone and existing guardrail location, a short radius installation and end treatment is recommended for this condition.
STA 232+92.5 – 235+06 LT	Class A beam guard with short radius sections	Existing driveway located within required LON for box culvert. Use of short radii requires Class A beam guard.	Removing or relocating driveway is not practical. Installing short radius sections at driveway is better than ending the guardrail short of the required LON.
STA 364+80 LT	EAT located 37' short of LON calculation	Existing driveway in conflict. Not enough space to install short radius and extend beam guard past driveway.	Driveway access at this property was evaluated by the department and was determined that this driveway could not be removed.
STA 364+80 – 367+89 LT	Class A beam guard with short radius section; fixed objects located within short radius deflection zone	There are two existing driveways within the LON calculation on east end of the retaining wall. A short radius terminal is being installed to shield the end of retaining wall. The retaining	An EAT could be installed at the east end of the retaining wall, but due to the driveway location, it would be at the same station as the end of the retaining wall and would not provide any protection against the blunt end of the wall. Eliminating beam guard

		wall will encroach into the object free area needed for beam guard deflection. Additional beam guard is not being installed east of the driveways because it would not prevent a vehicle from impacting the short radius section at a 15 degree or 25 degree departure angle from the roadway. Eliminating one or both of the driveways is not possible.	altogether was also considered since the wall is just outside the clear zone, but this would have provided less protection than the existing condition. A short radius section is preferred because it will offer some protection against the end of the wall, even though the wall will be located within the deflection zone of the short radius. Extending the beam guard past the two driveways to the full LON was considered, but was not chosen since it will provide no further protection of the hazard, and will instead introduce a new hazard that did not previously exist.
STA 50+83 – 53+31 RT (CTH M)	Class A beam guard with short radius terminals	Existing beam guard does not completely shield retaining wall or steep slope. There is not adequate room to install EATs due to driveways and intersection.	Leaving existing beam guard in place would not provide adequate protection against hazards. Installing EAT's would still allow vehicles to runout and hit hazard behind beam guard. Short radius terminals will provide the most protection.

5.11 Real Estate

5.11.1 Real Estate Acquisition

Plat I.D.: 2310-14-20 & 2310-17-20

Relocations		Land	Permanent	Temporary	Construction
Type	Number	(Acres)	Easements	Easements	Permits
N/A	0	0.072	0.000	0.139	0.000

Comments:

Total of 0.211 acres right of way impacts. Fee acquisition = 0.072 acres, PLE = 0.000 acres, TLE = 0.139 acres.

5.11.2 Encroachment Actions

Encroachment Location	Encroachment Type	What is to be Done? (Removed, Revocable Permit, etc.)
191+54, 47'-53' RT	Storm water outfall structure	Removed
270+79, 47' RT	Light pole	Removed
275+45, 55' RT	Sign & retaining wall	Removed
293+56, 51' LT	Flag pole, satellite dish & retaining wall	Removed

300+35, 57-64' RT	Sign	Removed
320+33 – 322+23, 51' LT	Fence	Removed
327+96 – 328+46, 54-58' LT	Fence	Removed
330+94 - 331+38, 57'-60' LT	Light poles	Removed
333+66, 39' RT	Planter & flag pole	Removed
335+35, 48' RT	Sign w/ decorative boulder	Removed
347+19 – 348+08, 55' LT	Parking Lot	Removed
372+27, 53' LT	Light pole	Removed
375+60, 49' LT	Abandoned brick structure	Removed
398+36 – 399+69, 59' LT	Fence	Removed
401+19 – 402+89, 59' LT	Fence	Removed
415+20, 48' RT	Decorative mailbox	Removed
429+98, 48' LT to 430+41, 44' RT	Fence	Removed
453+40 & 453+66, 27-29' RT	Decorative Boulders	Removed
478+65, 43' LT	Roadside Memorial	Removed
519+43 – 520+13, 93'-97' LT	Fence	Removed

Comments: None

5.12 Utilities

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

Describe any special design features to accommodate utilities:

None

Major Utility Agreements:

None

Comments:

A few minor utility relocations have been identified. Work will be coordinated with utilities in accordance with Trans 220.

5.13 Railroads

Describe improvements to Railroad Facilities:

None

Railroad Agreements:

None

Comments: None

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			
2310-17-00	\$5,000,000	80%	20%	0%	Mar – Nov 2020	2310-14-70 To be let with this project	No

Describe Incentive/Disincentive Clauses:

None

Non-participating Work:

None

Deferred Construction Work (Preventative Maintenance projects) 5.15 Unique or Non-standard Features

None

5.15.1 Hazardous Waste

Potential hazardous materials identified at the north east corner of the County Highway M and at 1917 STH 60 (STA 231+34 – 244+75 RT). Phase 2 investigation for an Underground Storage Tank at 1917 STH 60. No land acquisition is required at this property.

5.15.2 Environmental Commitments

Refer to attached DNR initial scoping letter.

5.15.3 Community Sensitive Design/Public Involvement

None

5.15.4 Value Engineering

None

6.0 SYNOPSIS

	Completion/Approval Dates	Status of Coordination or Other Information as Needed
Concept Definition Report	1/23/2008	
Scoping Document	1/23/2008	
Public Involvement Plan	Nov 2014	
Final Aesthetic & Visual Level of Impact Worksheet	N/A	
Speed Limit Change Declaration	N/A	
Environmental Document (Type: CEC)	April 11, 2016	

Public Hearing/Public Information Meetings		May 2015
SHPO Involvement	Section 106 approved 3/10/16	
DNR Involvement	4/16/2012	Initial concurrence
Agricultural Impact Statement	N/A	Letter of NSF submitted 2/6/2015. Updated 5/26/15.
Pavement Design Report	6/18/2012	
Roundabout Review	N/A	
Transportation Management Plan (Type: 2)	60% accepted 7/1/15	
Permits Required (Types: 401, 404)		Pending
Local Project Agreements	N/A	
Value Engineering Study	N/A	
Status of Statutory Actions	N/A	

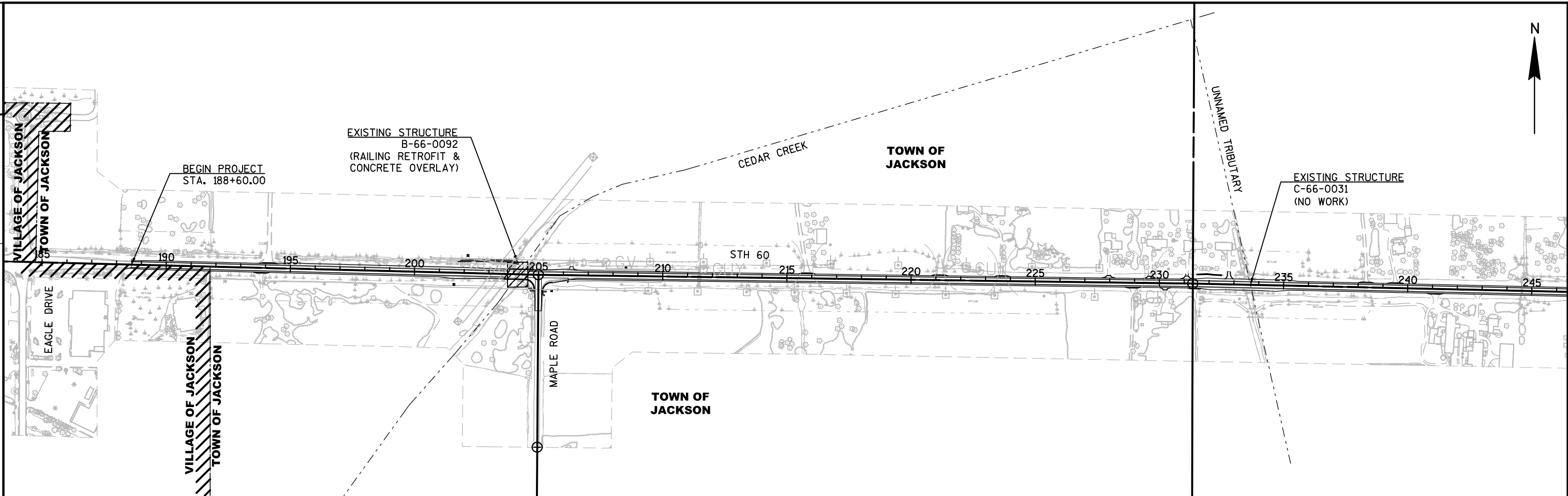
7.0 ATTACHMENTS

- A - Project Location/Overview Map
- B - As-built Plan Sheets 2310-07-70 / 2310-06-71 (STH 60 from Eagle Drive to bridge over Cedar Creek)
- C - Existing Typical Sections
- D – Encroachment Report
- E - Traffic Forecast Report
- F - Finished/Proposed Typical Sections
- G - DNR Initial Scoping Letter
- H - Transportation Management Plan Documentation and Request for Approval Form
- I - Roadside Hazard Analysis
- J – Alignment Plan
- K – Safety Screening Worksheet
- L – Section 106 Report

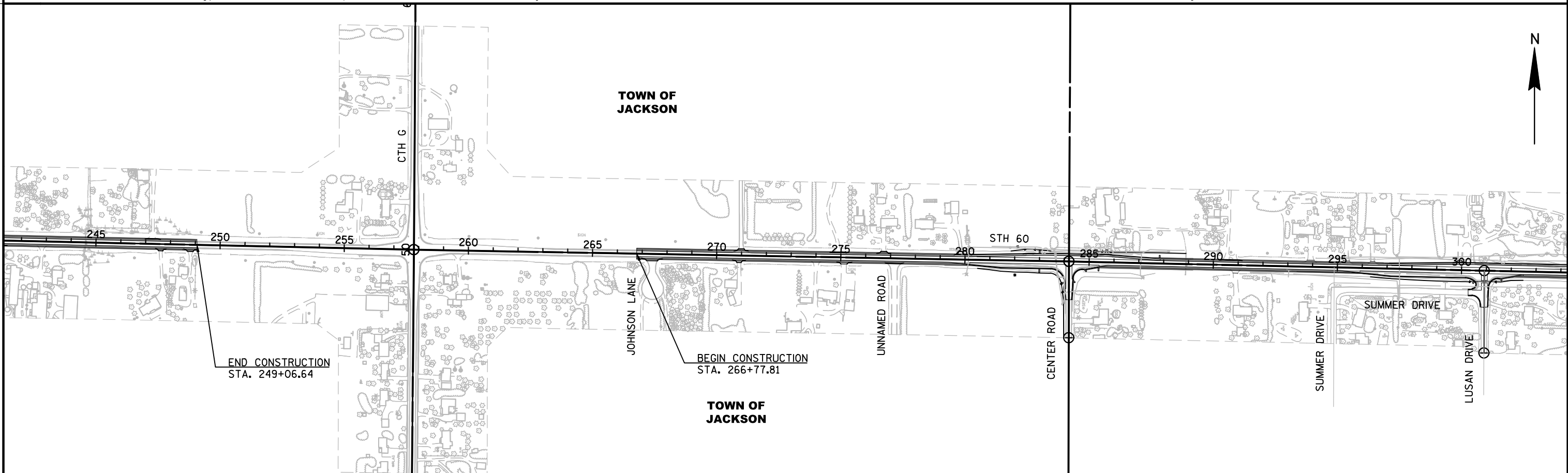
Attachment A

Project Location/Overview Map

2

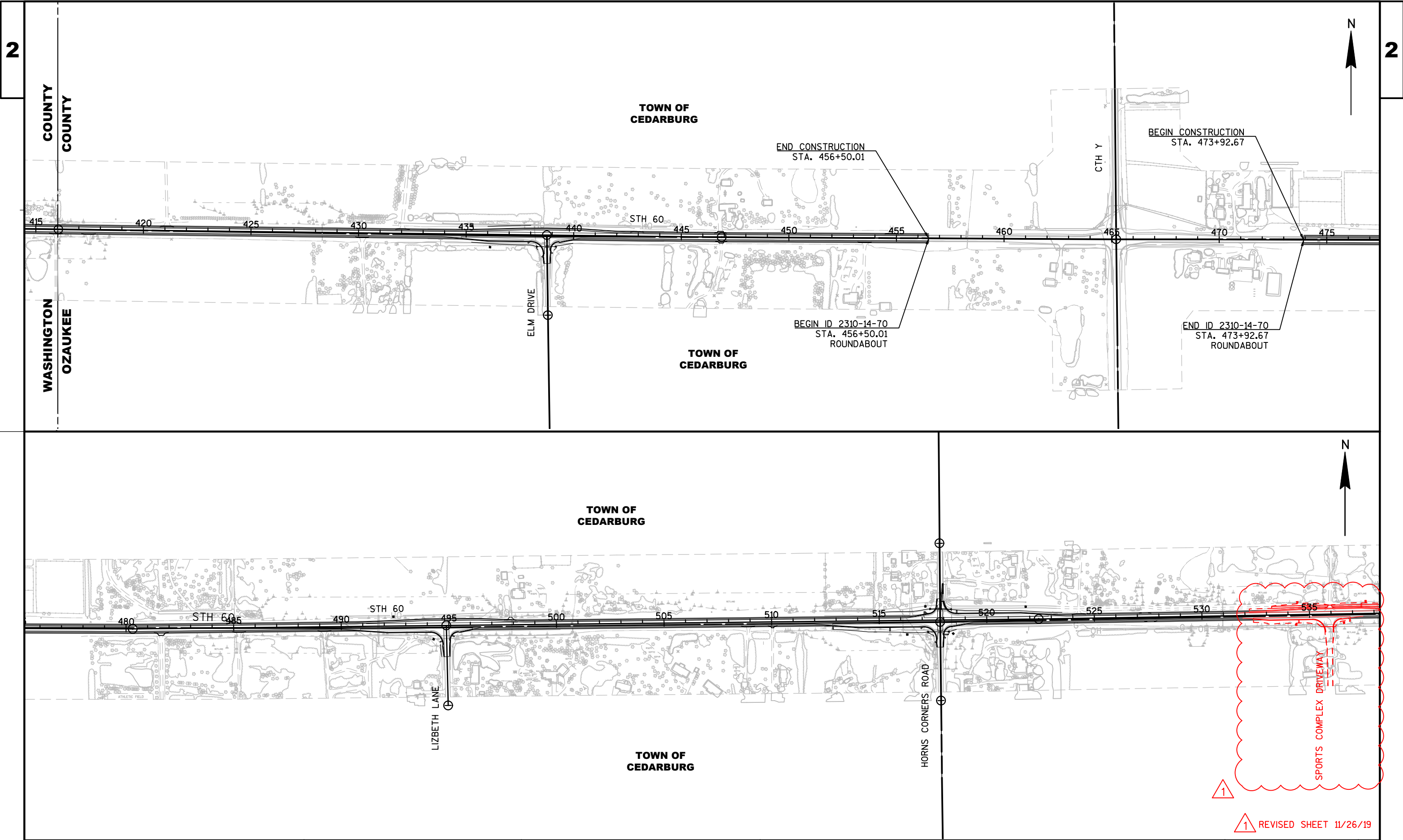


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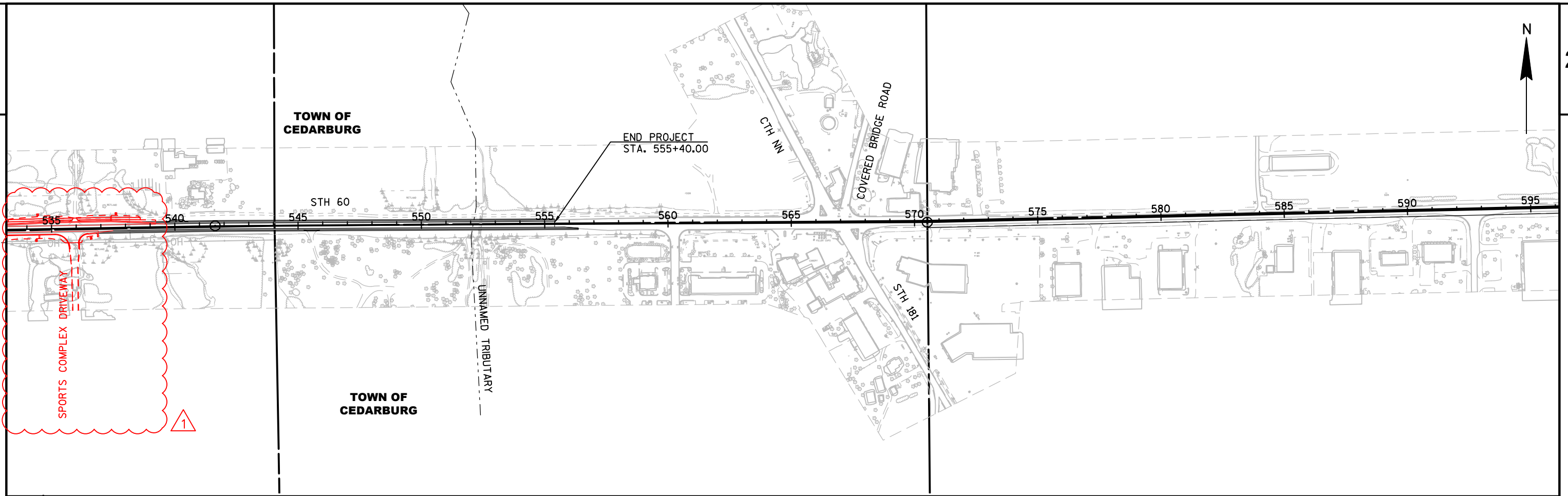
PROJECT NO:2310-17-70	HWY:STH 60	COUNTY:WASHINGTON & OZAUKEE	PROJECT OVERVIEW	SHEET 3	E
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PROJECT NO: 2310-17-70	HWY: STH 60	COUNTY: WASHINGTON & OZAUKEE	PROJECT OVERVIEW	SHEET	E
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2



2

1 REVISED SHEET 11/26/19

PROJECT NO: 2310-17-70	HWY: STH 60	COUNTY: WASHINGTON & OZAUKEE	PROJECT OVERVIEW	SHEET	E
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FILE NAME : G:\6906 - STH 60\CAD\23101700\SHEETS\PLAN\020201-PO.DWG
LAYOUT NAME - 020201-PO - 020204

PLOT DATE : 11/20/2019 1:17 PM

PLOT BY : SELENA ALEXANDER

PLOT NAME :

PLOT SCALE : 1 IN:400 FT

WISDOT/CADDs SHEET 44

Attachment B

As-built Plan Sheets

I.D. 2310-07-70 / 2310-06-71

STH 60 from Eagle Drive to bridge over Cedar Creek

WASHINGTON/OZAUKEE

2310 - 07 - 70 \ 2310 - 06 - 71

INDEX OF SHEETS

Sheet No. 1	Title
Sheet No. 2-2.10	Typical Sections and Details
Sheet No. 3-3.1	Estimate of Quantities
Sheet No. 3A-3.1	Miscellaneous Quantities
Sheet No. 4-4.20	Right of Way Plat
Sheet No. 5-5.12	Plan and Profile
Sheet No. 6-6.41	Standard Detail Drawings
Sheet No. 7-7.22	Sign Plates
Sheet No. 8-8.22	Structure Plans
Sheet No. 9-9.48	Computer Earthwork Data
Sheet No. 9.49-9.295	Cross Sections

TOTAL SHEETS = 492.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

U.S.H. 41 TO GRAFTON ROAD
EAGLE DRIVE TO FIRST AVENUE
S.T.H. 60

JACKSON TO GRAFTON ROAD
BRIDGE OVER CEDAR CREEK
S.T.H. 60

WASHINGTON AND OZAUKEE COUNTIES

OZAUKEE COUNTY



Project - Daily #940434

STATE PROJECT NUMBER
2310 - 07 - 70

START 6-1-94 SUSPENDED 12-2-94
FINISH 6-16-95

STATE PROJECT NUMBER
2310 - 06 - 71

DESIGN DESIGNATION

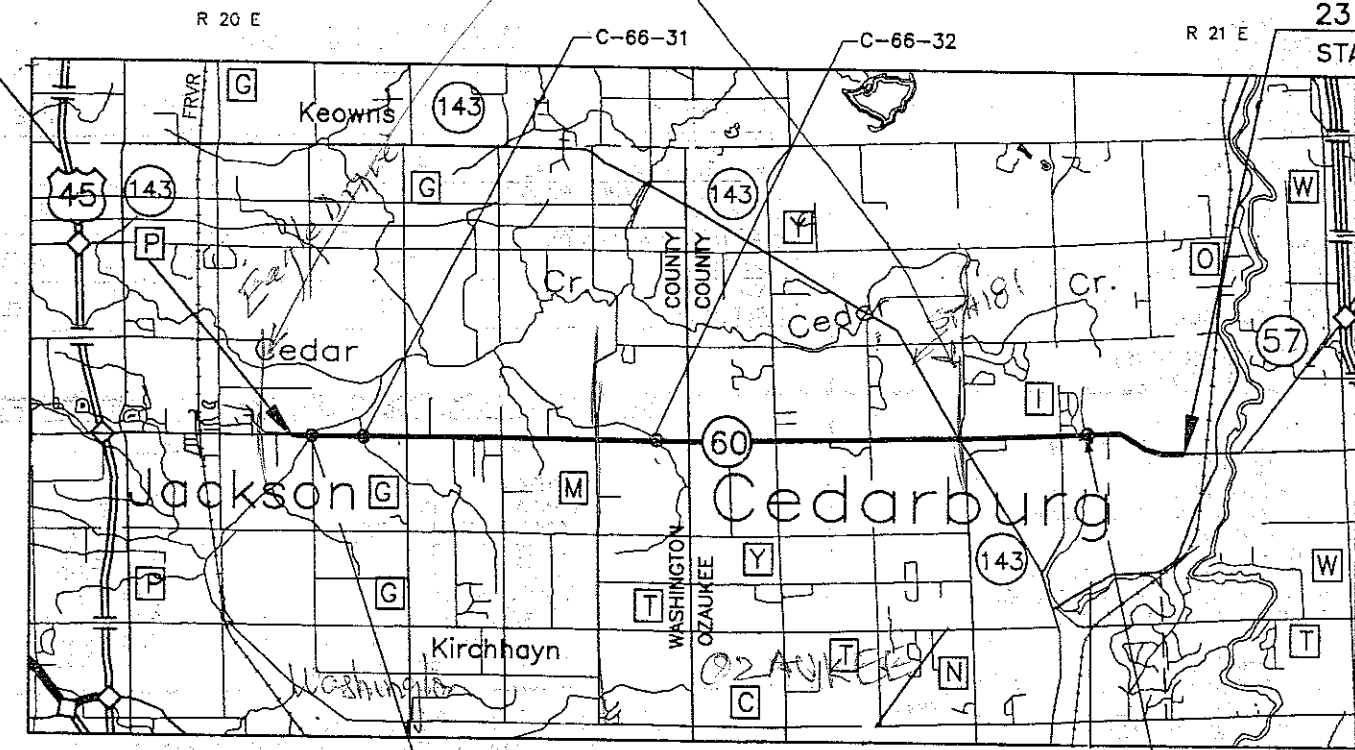
ADT (1992)	= 7300-10550
ADT (2012)	= 8720-14000
DHV (2012)	= 890 -1428
T.	= 5.5
V.	= 55/45
D.	= 60/40
ESAL'S	= 1,963,700

CONVENTIONAL SIGNS

COUNTY LINE	COMBUSTABLE FLUID (UNDER PRESSURE)
CORPORATE LIMITS	UNDERGROUND UTILITIES
PROPERTY LINE	GAS
LOT LINE	ELECTRIC
LIMITED HIGHWAY EASEMENT	TELEPHONE
EXISTING RIGHT OF WAY	SERVICE PEDESTAL
NEW RIGHT OF WAY	CABLE MARKER
REFERENCE LINE	POWER POLE, TELEPHONE POLE
SLOPE INTERCEPT	LIGHT POLE
ORIGINAL GROUND	RAILROADS
MARSH OR ROCK PROFILE	MARSH
CULVERT IN PLACE	WOODED AREA
CULVERT REQUIRED	FENCE
CULVERT REQUIRED (PROFILE)	

BEGIN PROJECT
2310 - 07 - 70
STA. 189+50.00
X = 2,492,807.58
Y = 487,888.20

END PROJECT
2310 - 07 - 70
STA. 679+24.11



EXCEPTION TO NET CENTERLINE
LENGTH STA. 203+72 - 204+53
STR. B-66-92

PROJECT 2310-06-71, B-45-84
STA. 639+18.31 TO STA. 640+40.68
EXCEPTION TO NET C/L LENGTH OF PROJECT 2310-07-70

LAYOUT

SCALE 0 1 MILE

TOTAL NET LENGTH OF CENTERLINE = 9.236 MI. PROJECT 2310-07-70 (RURAL)
= 0.023 MI. PROJECT 2310-06-71
TOTAL = 9.259 MI.

ALL COORDINATES ON THIS PLAN ARE REFERENCED
TO THE WISCONSIN COORDINATE SYSTEM, SOUTH ZONE
FOR IDENTIFICATION ONLY.

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
2310 - 07 - 70	STP 067(24)	1
2310 - 06 - 71	BRF 067(23)	1

Contractors
Rayne & Dolan, Inc.
(Prime)
Traffic Signage & Marking
Straight Arrow Construction
Cable Lite, Inc.
Cornelius Contractor Corp
Dolson, Inc.
Michels Pipeline Construction
Zenith Tech, Inc.
Mussun Bros, Inc.
Century Fence Co.
Nature's Tree Company, Inc.

Project Engineers
Bob Gutierrez
PERSONNEL
See Field Diary
#940434

ORIGINAL PLANS PREPARED BY
KOA KAPUR & ASSOCIATES
CONSULTING ENGINEERS
MILWAUKEE, WISCONSIN

1/6/94 (Date)
[Signature] (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

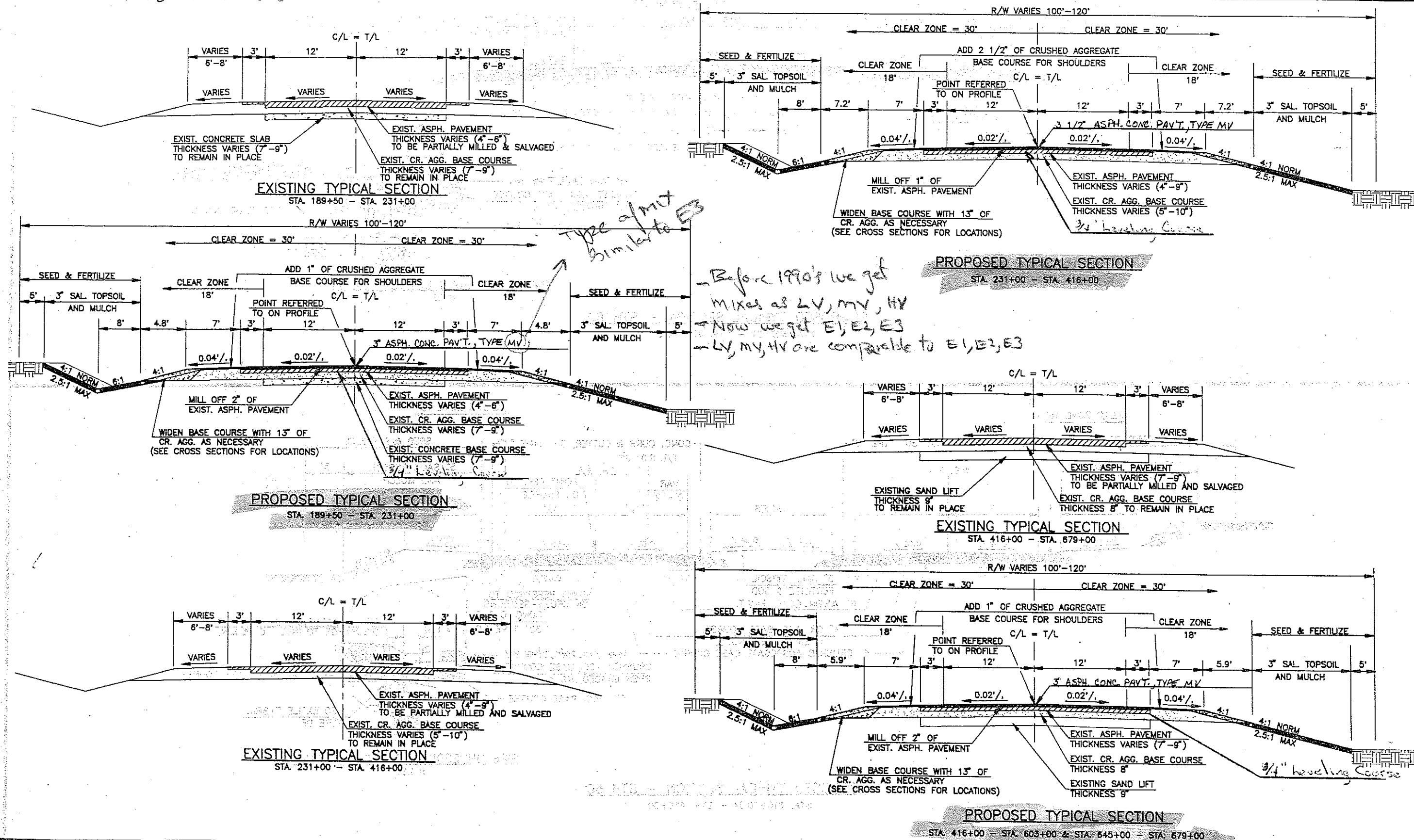
Surveyor KAPUR & ASSOC.
Designer KAPUR & ASSOC.
District Supervisor D. JOHNSON
District Checker E. MACKUS
Proj. Dev. Engineer David Spuehler
C.O. EXAMINER E. BENESH

APPROVED FOR DISTRICT OFFICE
DATE: 1-7-94 [Signature]
Signature

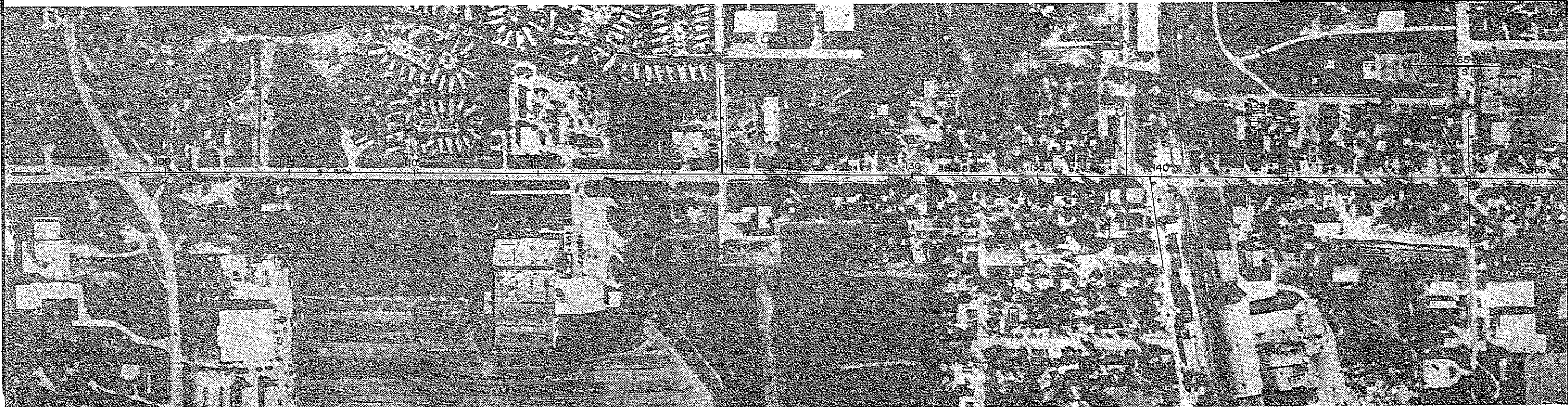
AUTHORIZED FOR CENTRAL OFFICE DESIGN
DATE: 2/18/94 [Signature]
Signature

- Maple Rd Intersection Sta. 205+00
- GTH Rd Intersection Sta. 255+00 to Sta. 266+50
- Center Rd. Intersect Sta. 282+00 to Sta. 287+00
- Church Rd. Int Sta. 308+00 to 313+00

STATE PROJECT NUMBER	SHEET NO.
2310 - 07 - 70	2.1
TYPICAL SECTIONS	
S.T.H. 60	WASHINGTON/OZAUKEE CO.



STATE PROJECT NUMBER	SHEET NO.
2310-07-70	5.0
PLAN VIEW	
STH 60	WASHINGTON/DZAUIKEE CO.



4'-16.0 extensions on 48" existing culvert
 VERTICALLY

NET EXCEPTION TO CENTERLINE LENGTH
 STA. 203+72 TO STA. 204+53
 STR. B-66-92



BENCHMARK		
STATION	DESCRIPTION	ELEVATION
204+40.22 RT	ALUM. DISK IN WINC WALL	843.85
214+55.18 RT	CONCRETE SQUARE HEADWALL OF BOX CULVERT	842.55

STA. 191+60
 CONST. P.E. RT

STA. 193+75
 CONST. P.E. RT

EXISTING STRUCTURE
 66'-21" TO BE
 REMOVED

CONST. TYPE "B" INTERSECTION
 SEE CONSTRUCTION DETAILS

STA. 227+90
CONST. P.E. LT.

STA. 229+60
CONST. P.E. LT.
118" C.P. REQ'D

STATE PROJECT NUMBER

2310-07-70

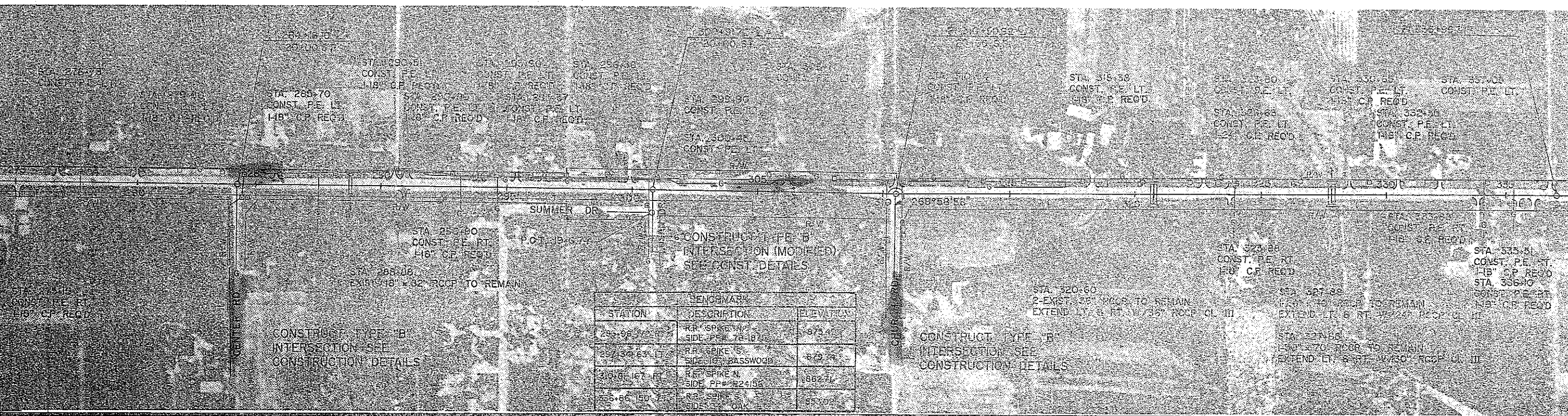
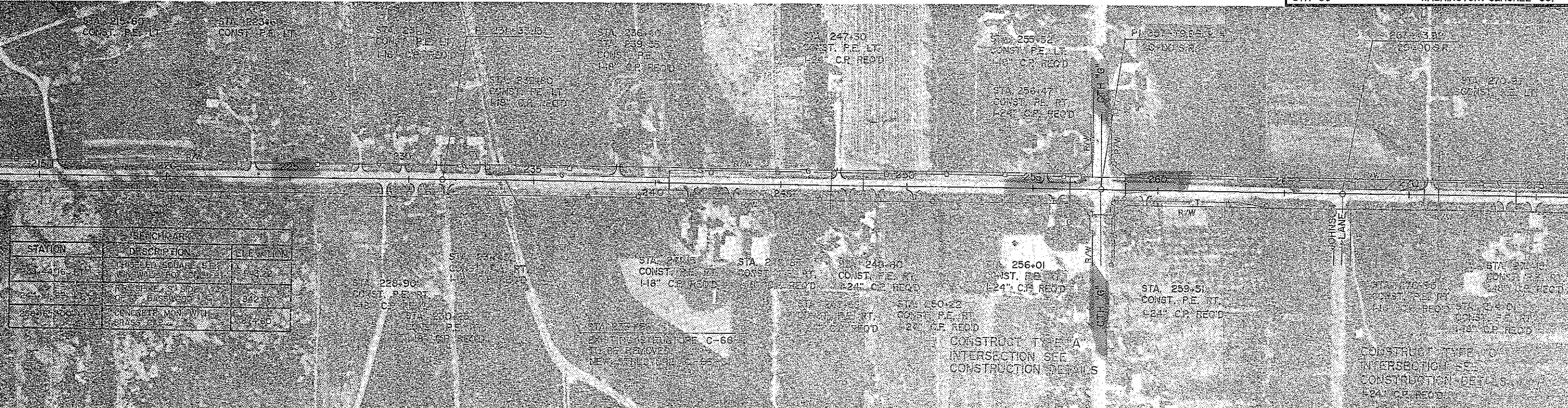
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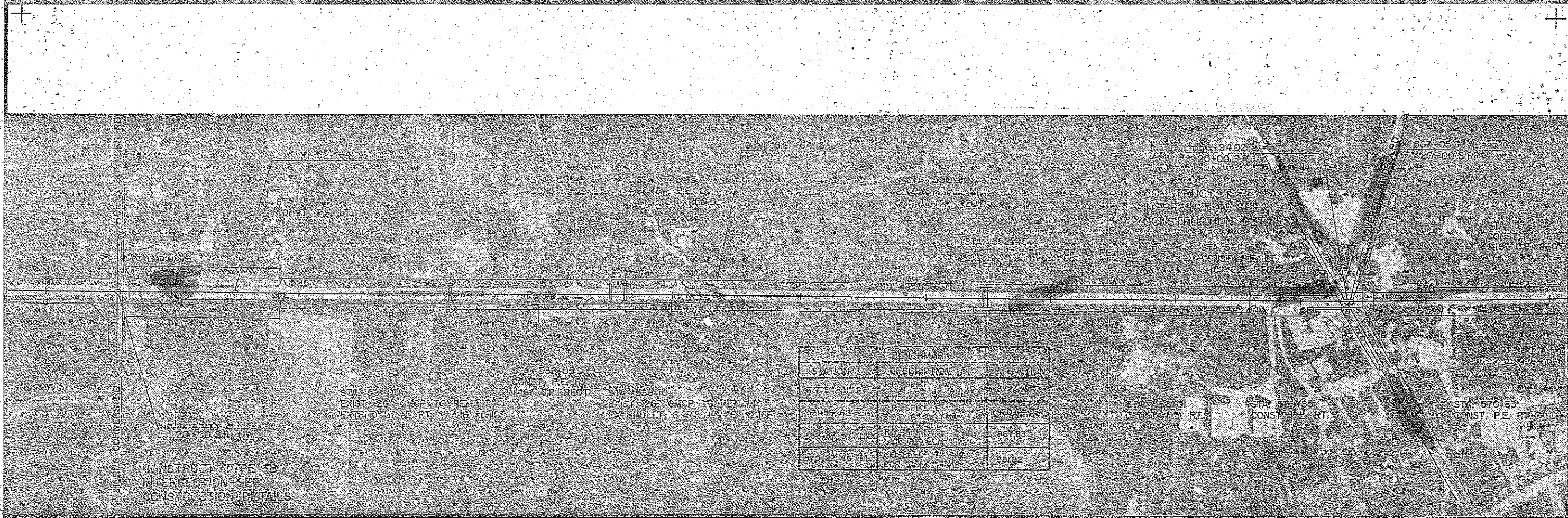
5.1

PLAN VIEW

STH 60

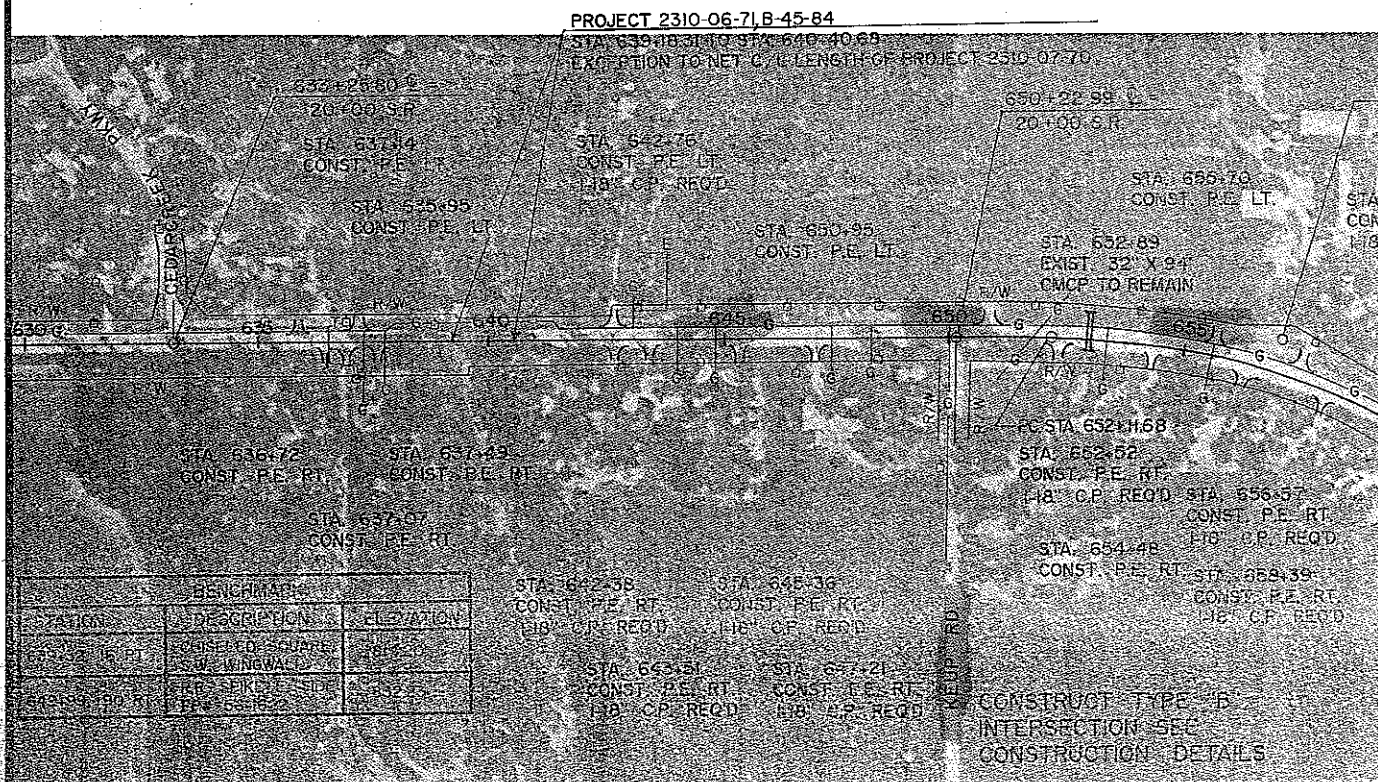
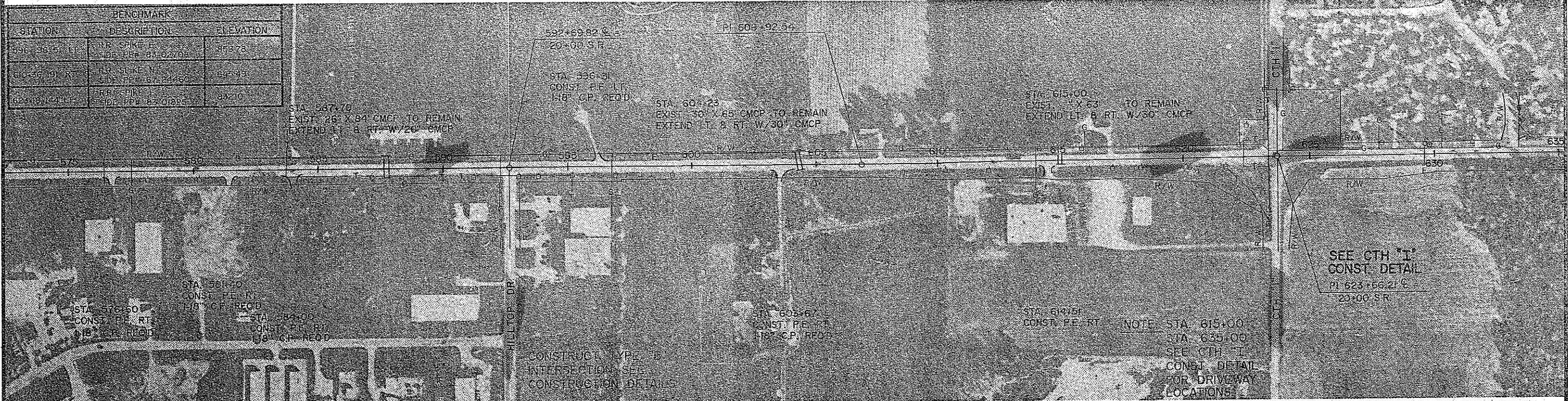
WASHINGTON/OZAUKEE CO.





BENCHMARK		
STATION	DESCRIPTION	ELEVATION
51+00	CONST. P.E. RT	88.82
52+00	CONST. P.E. LT	88.82
53+00	CONST. P.E. RT	88.82
54+00	CONST. P.E. LT	88.82
55+00	CONST. P.E. RT	88.82
56+00	CONST. P.E. LT	88.82
57+00	CONST. P.E. RT	88.82
58+00	CONST. P.E. LT	88.82
59+00	CONST. P.E. RT	88.82
60+00	CONST. P.E. LT	88.82

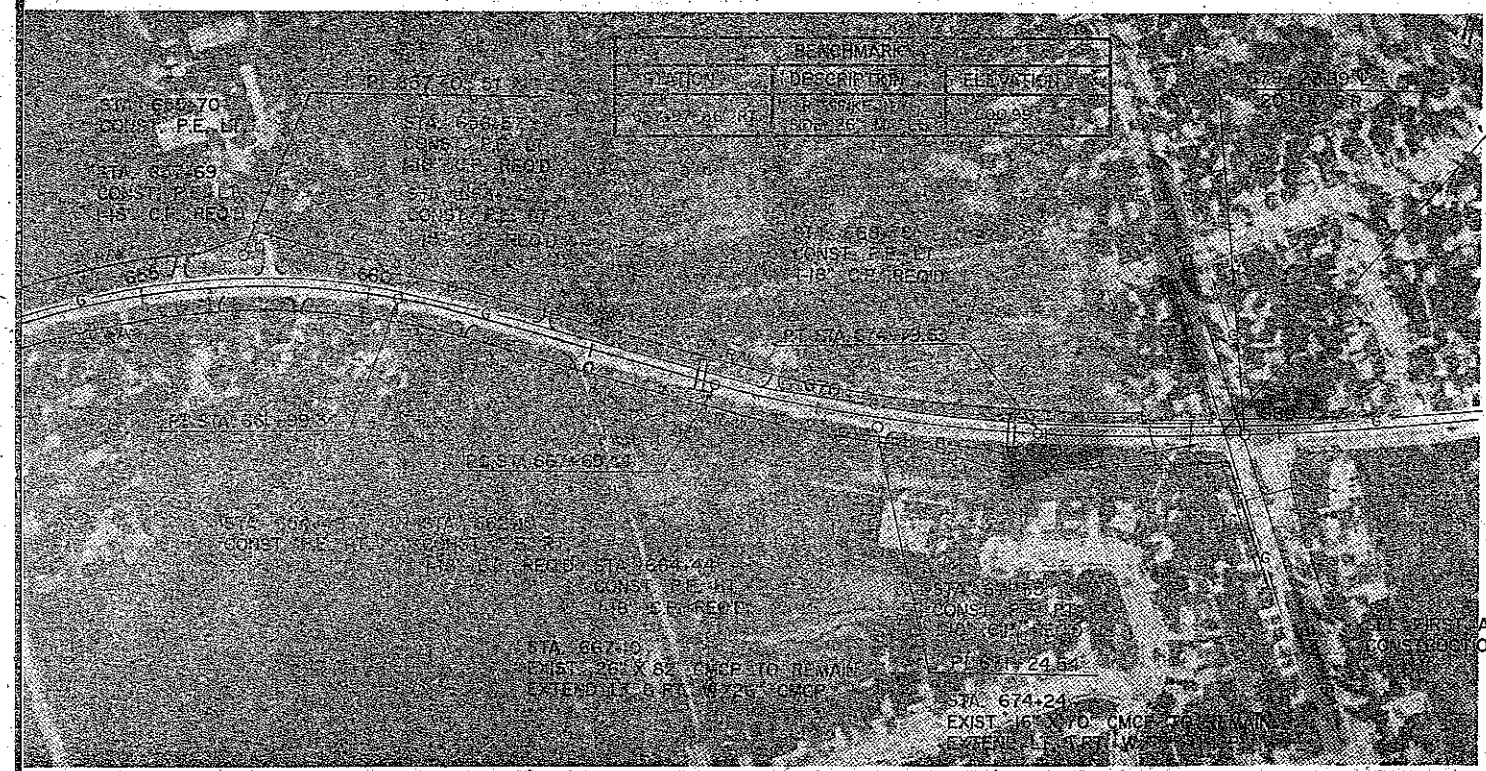
STATE PROJECT NUMBER	SHEET NO.
2310-07-70	5.4
PLAN VIEW	
STH 60	WASHINGTON/OZAUKEE CO.



PI 657+05.51

CURVE 1 DATA

PC= STA. 652+11.68
 PT= STA. 661+99.34
 $\Delta = 34^{\circ}34'05''$
 R= 1637.02'
 D= 3^{\circ}30'00''
 T= 509.37'
 E= 77.42'
 L= 987.66'
 SE= 0.048



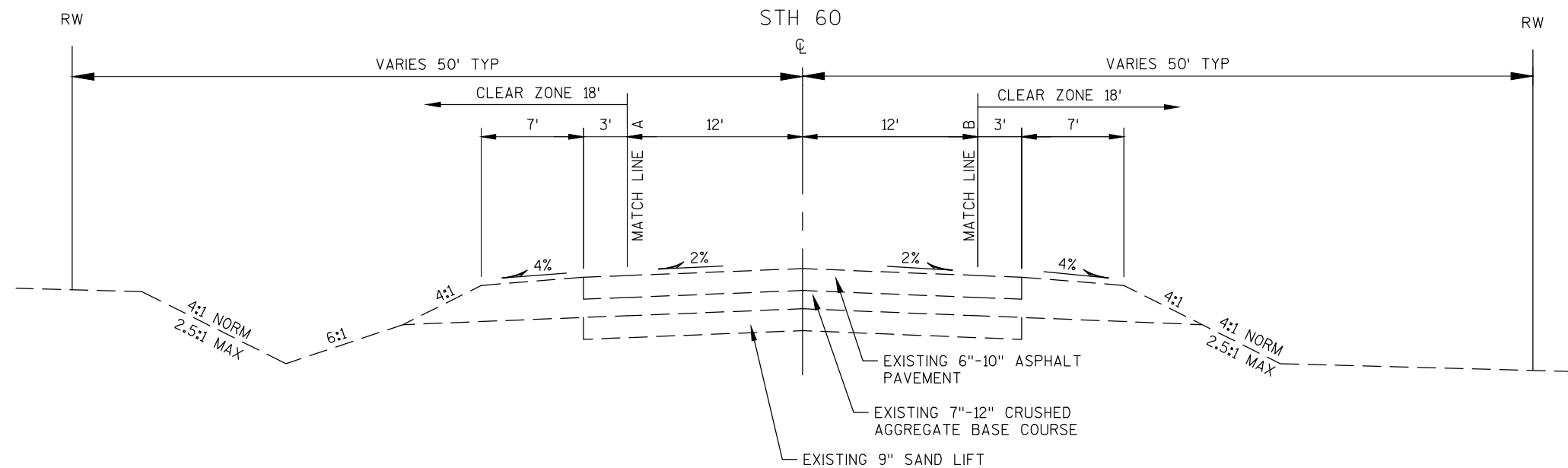
END PROJECT
STA. 679+24.11

CURVE 2 DATA
 PC = STA 667+69.44
 PT = STA 674+79.63
 $\Delta = 14^\circ 12' 13''$
 R = 2864.79
 D = $2^\circ 00' 00''$
 T = 356.92'
 E = 22.15'
 L = 710.19
 SE = 0.035

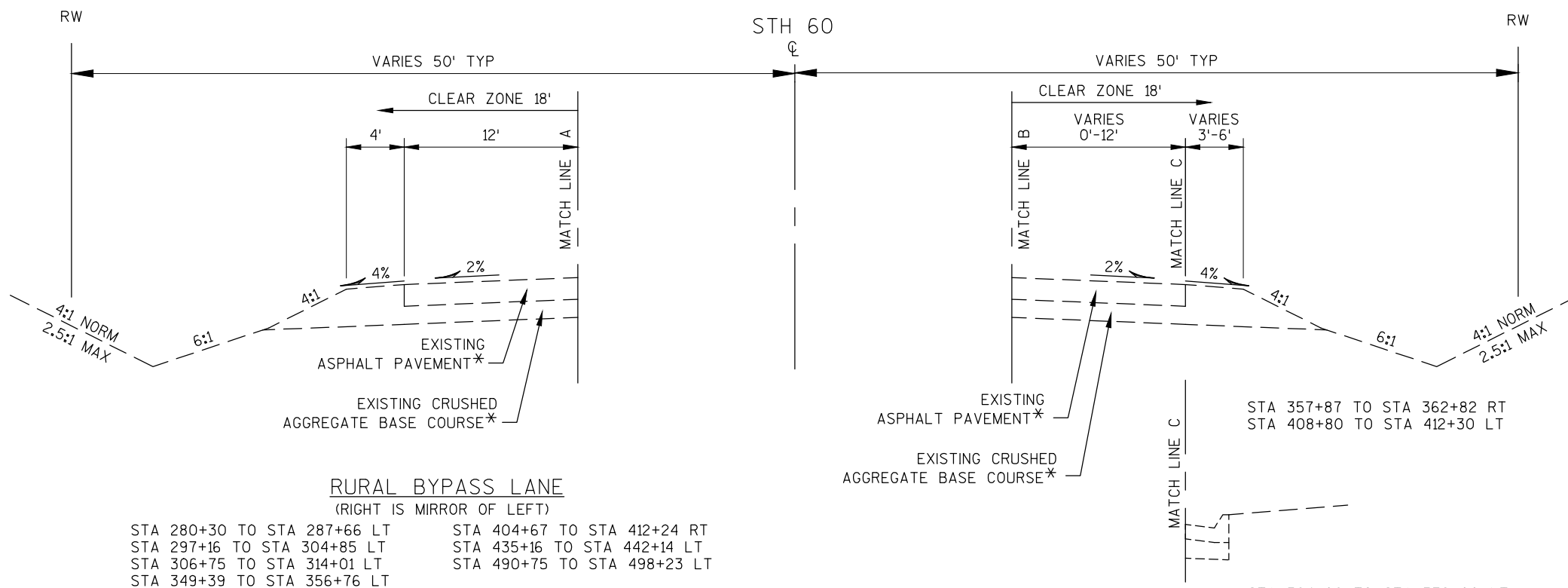


Attachment C

Existing Typical Sections

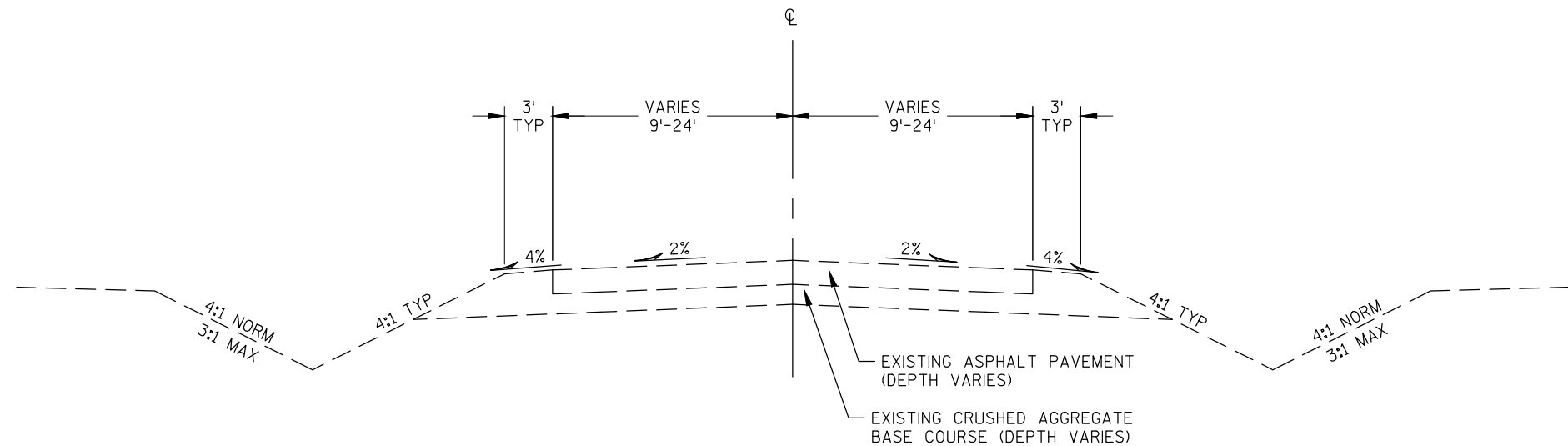
**EXISTING TYPICAL SECTION****STH 60**

STA 416+00.00 - STA 456+50.01
STA 473+92.67 - STA 555+40.00



*ASSUMED DEPTH TO BE THE SAME
AS MAINLINE PAVEMENT, NOT PART OF
PAVEMENT DESIGN REPORT

*ASSUMED DEPTH TO BE THE SAME
AS MAINLINE PAVEMENT, NOT PART OF
PAVEMENT DESIGN REPORT



EXISTING TYPICAL SECTION

- SIDE ROAD**
MAPLE ROAD
CENTER ROAD
LUSAN ROAD
CHURCH ROAD
BRIARWOOD DRIVE
CTH M
ELM ROAD
LIZBETH LANE
HORNS CORNERS ROAD

Attachment D

Encroachment Report

ENCROACHMENT REPORT

PROJECT I.D. 2310-17-00

STH 60

Eagle Drive to STH181

WASHINGTON & OZAUKEE COUNTIES

March 22, 2016

**Wisconsin Department of Transportation
Southeast Region**

**Prepared by:
Collins Engineers, Inc.
2033 West Howard Avenue
Milwaukee, WI 53221**

PROJECT DESCRIPTION

**Project I.D. 2310-17-00
STH 60
Eagle Drive to STH 181
Washington & Ozaukee Counties**

The Wisconsin Department of Transportation, Southeast Region, is working on the design for the resurfacing of STH 60. The resurfacing of STH 60 is approximately 7 miles in length and extends from Eagle Drive to STH 181. The purpose of the project is to improve pavement, riding characteristics, drainage, and intersection safety.

STH 60 will be milled and overlaid the entire length of the project. The existing STH 60 typical section consists of a two lane rural undivided roadway with 10-foot shoulders in which 3' is paved. The proposed STH 60 typical section will remain a two lane rural undivided roadway with 10' shoulders, but the shoulders will be paved a minimum of 6' wide to accommodate bicycles. Culverts will be replaced or extended as needed. Intersections will be improved to current design standards and widened as necessary to accommodate bicycles. Small areas of additional right of way will be required at intersections. The existing posted speed limit is 55 mph and is not planned to change with this project.

Two public information meetings are being held – One in Spring 2015 and one prior to the PS&E date. Construction is tentatively scheduled for 2020 and a detour is planned. Local access will be maintained during construction.

Design Contact

Heather Sackman, P.E., Project Manager
141 NW Barstow Street
WisDOT SE Region
Waukesha, WI 53187-0798
(262) 521-5376
heather.sackman@dot.wi.gov.

Rachel Tranel, P.E., Project Engineer
Collins Engineers
rtranel@collinsengr.com
(414) 282-6905

ENCROACHMENT REPORTING FORM

COUNTY: WASHINGTON	DATE: 1/12/2015
PROJECT ID: 2310-17-00	ENCRO NO: 1
TAX KEY NUMBER: V3 0197 00K	PARCEL NO: Lot 1
LETTING DATE: 9/10/2019	HIGHWAY: STH 60
REPORTER: KEVIN WEIGHNER	PHONE: 414-282-6905
DOT PROJ ENGINEER: HEATHER SACKMAN	
LEGAL DESCRIPTION OF ENCROACHMENT and WHAT ENCROACHMENT IS: STORM WATER OUTFALL STRUCTURE	

SKETCH OF ENCROACHMENT ATTACHED: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO WIDTH OF HIGHWAY ROW FROM C/L AT ENCROACHMENT: 60' NO. OF FEET FROM CENTERLINE TO ENCROACHMENT: 47' to 53' STATION: 191+54 Encroachment is within existing Right of Way by 13'	PHOTOS ATTACHED: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO NAME & ADDRESS OF OWNER OR RESPONSIBLE PARTY Cynthia R Minshall 4707 Jenna Ct Franklin, WI 53212
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RECOMMENDED ACTION: ☐ Revocable Permit ☒ Removal

<i>FOR OFFICE USE ONLY</i>	
<i>RECOMMENDED ACTION</i>	ACTION TAKEN
REMOVAL ORDER DATE: COMMENTS:	REMOVAL ORDER COMPLIANCE FIELD VERIFIED DATE: BY:
ISSUE REVOCABLE OCCUPANCY PERMIT DATE: COMMENTS:	OCCUPANCY PERMIT ISSUED DATE: BY:
POSSIBLE SALE OR LEASE ENCROACHED LANDS COMMENTS:	SALE OR LEASE OF LAND COMPLETED DATE: BY:

SEE PHOTO REVERSE SIDE
ENCROACHMENT PHOTO LOG



Encroachment Number: E-1

Encroachment Type: Storm water outfall structure

Station: 191+54

Encroachment Distance to Centerline: 47' to 53'

Existing R/W from Centerline: 60'

Owner Address: Cynthia R Minshall
4707 Jenna Ct
Franklin, WI 53212

ENCROACHMENT REPORTING FORM

COUNTY: WASHINGTON	DATE: 1/12/2015
PROJECT ID: 2310-17-00	ENCRO NO: 2
TAX KEY NUMBER: T7 0585 00A	PARCEL NO:
LETTING DATE: 9/10/2019	HIGHWAY: STH 60
REPORTER: KEVIN WEIGHNER	PHONE: 414-282-6905
DOT PROJ ENGINEER: HEATHER SACKMAN	
LEGAL DESCRIPTION OF ENCROACHMENT and WHAT ENCROACHMENT IS: LIGHT POLE	

SKETCH OF ENCROACHMENT ATTACHED: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO WIDTH OF HIGHWAY ROW FROM C/L AT ENCROACHMENT: 60' NO. OF FEET FROM CENTERLINE TO ENCROACHMENT: 47' STATION: 270+79 Encroachment is within existing Right of Way by 13'	PHOTOS ATTACHED: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO NAME & ADDRESS OF OWNER OR RESPONSIBLE PARTY CALLAN MCLELLAN 1605 STATE HWY 60 JACKSON, WI 53037
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RECOMMENDED ACTION: ☐ Revocable Permit ☒ Removal

<i>FOR OFFICE USE ONLY</i>	
<i>RECOMMENDED ACTION</i>	ACTION TAKEN
REMOVAL ORDER DATE: COMMENTS:	REMOVAL ORDER COMPLIANCE FIELD VERIFIED DATE: BY:
ISSUE REVOCABLE OCCUPANCY PERMIT DATE: COMMENTS:	OCCUPANCY PERMIT ISSUED DATE: BY:
POSSIBLE SALE OR LEASE ENCROACHED LANDS COMMENTS:	SALE OR LEASE OF LAND COMPLETED DATE: BY:

SEE PHOTO REVERSE SIDE
ENCROACHMENT PHOTO LOG



Encroachment Number: E-2

Encroachment Type: Light Pole

Station: 270+79

Encroachment Distance to Centerline: 47'

Existing R/W from Centerline: 60'

Owner Address: Callan McLellan
1605 State Hwy 60
Jackson, WI 53037

ENCROACHMENT REPORTING FORM

COUNTY:	WASHINGTON	DATE:	1/12/2015
PROJECT ID:	2310-17-00	ENCRO NO:	3
TAX KEY NUMBER:	T7 0584 00X	PARCEL NO:	
LETTING DATE:	9/10/2019	HIGHWAY:	STH 60
REPORTER:	KEVIN WEIGHNER	PHONE:	414-282-6905
DOT PROJ ENGINEER: HEATHER SACKMAN			
LEGAL DESCRIPTION OF ENCROACHMENT and WHAT ENCROACHMENT IS: SIGN & RETAINING WALL			

SKETCH OF ENCROACHMENT ATTACHED: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	PHOTOS ATTACHED: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
WIDTH OF HIGHWAY ROW FROM C/L AT ENCROACHMENT: 60'	NAME & ADDRESS OF OWNER OR RESPONSIBLE PARTY STEVEN BUBLITZ 1575 STATE HWY 60 JACKSON, WI 53037
NO. OF FEET FROM CENTERLINE TO ENCROACHMENT: 55'	
STATION: 275+45 Encroachment is within existing Right of Way by 5'	

RECOMMENDED ACTION: ☐ Revocable Permit ☒ Removal

<i>FOR OFFICE USE ONLY</i>	
<i>RECOMMENDED ACTION</i>	ACTION TAKEN
REMOVAL ORDER DATE: COMMENTS:	REMOVAL ORDER COMPLIANCE FIELD VERIFIED DATE: BY:
ISSUE REVOCABLE OCCUPANCY PERMIT DATE: COMMENTS:	OCCUPANCY PERMIT ISSUED DATE: BY:
POSSIBLE SALE OR LEASE ENCROACHED LANDS COMMENTS:	SALE OR LEASE OF LAND COMPLETED DATE: BY:

SEE PHOTO REVERSE SIDE
ENCROACHMENT PHOTO LOG



Encroachment Number: E-3

Encroachment Type: Sign & Retaining Wall

Station: 275+45

Encroachment Distance to Centerline: 55'

Existing R/W from Centerline: 60'

Owner Address: Steven Bublitz
1575 State Hwy 60
Jackson, WI 53037

ENCROACHMENT REPORTING FORM

COUNTY: WASHINGTON	DATE: 1/12/2015
PROJECT ID: 2310-17-00	ENCRO NO: 4
TAX KEY NUMBER: T7 0405 00B	PARCEL NO:
LETTING DATE: 9/10/2019	HIGHWAY: STH 60
REPORTER: KEVIN WEIGHNER	PHONE: 414-282-6905
DOT PROJ ENGINEER: HEATHER SACKMAN	
LEGAL DESCRIPTION OF ENCROACHMENT and WHAT ENCROACHMENT IS: FLAG POLE, SATELLITE DISH & RETAINING WALL	

SKETCH OF ENCROACHMENT ATTACHED: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO WIDTH OF HIGHWAY ROW FROM C/L AT ENCROACHMENT: 60' NO. OF FEET FROM CENTERLINE TO ENCROACHMENT: 51' STATION: 293+56 Encroachment is within existing Right of Way by 9'	PHOTOS ATTACHED: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO NAME & ADDRESS OF OWNER OR RESPONSIBLE PARTY DOUGLAS J BOLL 1426 STATE HWY 60 CEDARBURG, WI 53012
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RECOMMENDED ACTION: ☐ Revocable Permit ☒ Removal

<i>FOR OFFICE USE ONLY</i>	
<i>RECOMMENDED ACTION</i>	ACTION TAKEN
REMOVAL ORDER DATE: COMMENTS:	REMOVAL ORDER COMPLIANCE FIELD VERIFIED DATE: BY:
ISSUE REVOCABLE OCCUPANCY PERMIT DATE: COMMENTS:	OCCUPANCY PERMIT ISSUED DATE: BY:
POSSIBLE SALE OR LEASE ENCROACHED LANDS COMMENTS:	SALE OR LEASE OF LAND COMPLETED DATE: BY:

SEE PHOTO REVERSE SIDE
ENCROACHMENT PHOTO LOG



Encroachment Number: E-4

Encroachment Type: Flag Pole, Satellite Dish & Retaining Wall

Station: 293+56

Encroachment Distance to Centerline: 51'

Existing R/W from Centerline: 60'

Owner Address: Douglas J Boll
1426 State Hwy 60
Cedarburg, WI 53012

ENCROACHMENT REPORTING FORM

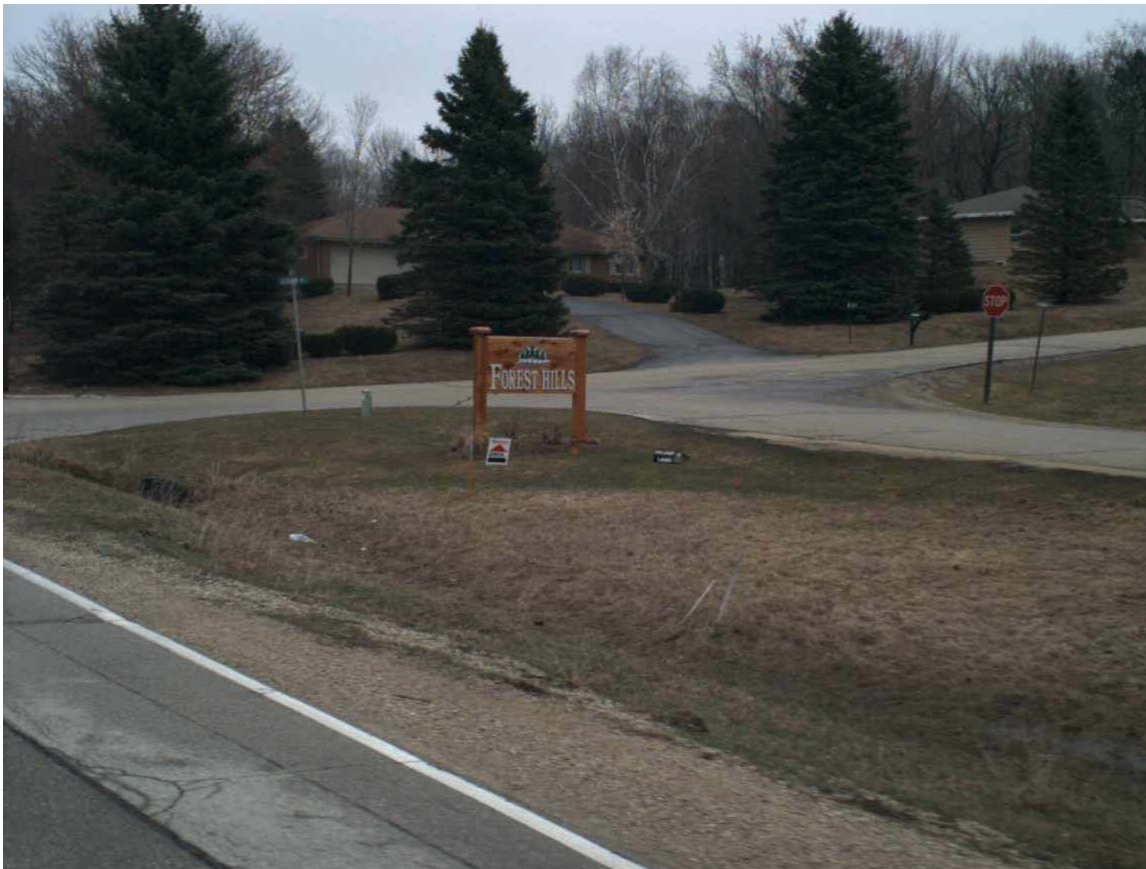
COUNTY:	WASHINGTON	DATE:	1/12/2015
PROJECT ID:	2310-17-00	ENCRO NO:	5
TAX KEY NUMBER:		PARCEL NO:	
LETTING DATE:	9/10/2019	HIGHWAY:	STH 60
REPORTER:	KEVIN WEIGHNER	PHONE:	414-282-6905
DOT PROJ ENGINEER: HEATHER SACKMAN			
LEGAL DESCRIPTION OF ENCROACHMENT and WHAT ENCROACHMENT IS:			
SIGN			

SKETCH OF ENCROACHMENT ATTACHED: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	PHOTOS ATTACHED: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
WIDTH OF HIGHWAY ROW FROM C/L AT ENCROACHMENT: 120'	NAME & ADDRESS OF OWNER OR RESPONSIBLE PARTY UNKNOWN
NO. OF FEET FROM CENTERLINE TO ENCROACHMENT: 57' to 64'	
STATION: 300+35 Encroachment is within existing Right of Way by 63'	

RECOMMENDED ACTION: ☐ Revocable Permit ☒ Removal

FOR OFFICE USE ONLY	
RECOMMENDED ACTION	ACTION TAKEN
REMOVAL ORDER DATE: COMMENTS:	REMOVAL ORDER COMPLIANCE FIELD VERIFIED DATE: BY:
ISSUE REVOCABLE OCCUPANCY PERMIT DATE: COMMENTS:	OCCUPANCY PERMIT ISSUED DATE: BY:
POSSIBLE SALE OR LEASE ENCROACHED LANDS COMMENTS:	SALE OR LEASE OF LAND COMPLETED DATE: BY:

SEE PHOTO REVERSE SIDE
ENCROACHMENT PHOTO LOG



Encroachment Number: E-5

Encroachment Type: Sign

Station: 300+35

Encroachment Distance to Centerline: 57' to 64'

Existing R/W from Centerline: 120'

Owner Address: Unknown

ENCROACHMENT REPORTING FORM

COUNTY: WASHINGTON	DATE: 1/12/2015
PROJECT ID: 2310-17-00	ENCRO NO: 6
TAX KEY NUMBER: T7 0365 00B	PARCEL NO:
LETTING DATE: 9/10/2019	HIGHWAY: STH 60
REPORTER: KEVIN WEIGHNER	PHONE: 414-282-6905
DOT PROJ ENGINEER: HEATHER SACKMAN	
LEGAL DESCRIPTION OF ENCROACHMENT and WHAT ENCROACHMENT IS: FENCE	

SKETCH OF ENCROACHMENT ATTACHED: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO WIDTH OF HIGHWAY ROW FROM C/L AT ENCROACHMENT: 60' NO. OF FEET FROM CENTERLINE TO ENCROACHMENT: 51' STATION: 320+33 TO 322+23 Encroachment is within existing Right of Way by 9'	PHOTOS ATTACHED: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO NAME & ADDRESS OF OWNER OR RESPONSIBLE PARTY JOHN N & PAMELA K KRUSE 1232 STATE HWY 60 JACKSON, WI 53037
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RECOMMENDED ACTION: ☐ Revocable Permit ☒ Removal

<i>FOR OFFICE USE ONLY</i>	
<i>RECOMMENDED ACTION</i>	ACTION TAKEN
REMOVAL ORDER DATE: COMMENTS:	REMOVAL ORDER COMPLIANCE FIELD VERIFIED DATE: BY:
ISSUE REVOCABLE OCCUPANCY PERMIT DATE: COMMENTS:	OCCUPANCY PERMIT ISSUED DATE: BY:
POSSIBLE SALE OR LEASE ENCROACHED LANDS COMMENTS:	SALE OR LEASE OF LAND COMPLETED DATE: BY:

SEE PHOTO REVERSE SIDE
ENCROACHMENT PHOTO LOG



Encroachment Number: E-6

Encroachment Type: Fence

Station: 320+33 to 322+23

Encroachment Distance to Centerline: 51'

Existing R/W from Centerline: 60'

Owner Address: John N & Pamela K Kruse
1232 State Hwy 60
Jackson, WI 53037

ENCROACHMENT REPORTING FORM

COUNTY: WASHINGTON	DATE: 1/12/2015
PROJECT ID: 2310-17-00	ENCRO NO: 7
TAX KEY NUMBER: T7 0367	PARCEL NO:
LETTING DATE: 9/10/2019	HIGHWAY: STH 60
REPORTER: KEVIN WEIGHNER	PHONE: 414-282-6905
DOT PROJ ENGINEER: HEATHER SACKMAN	
LEGAL DESCRIPTION OF ENCROACHMENT and WHAT ENCROACHMENT IS: FENCE	

SKETCH OF ENCROACHMENT ATTACHED: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO WIDTH OF HIGHWAY ROW FROM C/L AT ENCROACHMENT: 60' NO. OF FEET FROM CENTERLINE TO ENCROACHMENT: 54' to 58' STATION: 327+96 to 328+46 Encroachment is within existing Right of Way by 9'	PHOTOS ATTACHED: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO NAME & ADDRESS OF OWNER OR RESPONSIBLE PARTY MINOR'S GARDEN CENTER INC 7777 N 76TH ST MILWAUKEE, WI 53223
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RECOMMENDED ACTION: ☐ Revocable Permit ☒ Removal

<i>FOR OFFICE USE ONLY</i>	
<i>RECOMMENDED ACTION</i>	ACTION TAKEN
REMOVAL ORDER DATE: COMMENTS:	REMOVAL ORDER COMPLIANCE FIELD VERIFIED DATE: BY:
ISSUE REVOCABLE OCCUPANCY PERMIT DATE: COMMENTS:	OCCUPANCY PERMIT ISSUED DATE: BY:
POSSIBLE SALE OR LEASE ENCROACHED LANDS COMMENTS:	SALE OR LEASE OF LAND COMPLETED DATE: BY:

SEE PHOTO REVERSE SIDE
ENCROACHMENT PHOTO LOG



Encroachment Number: E-7

Encroachment Type: Fence

Station: 327+96 to 328+46

Encroachment Distance to Centerline: 54' to 58'

Existing R/W from Centerline: 60'

Owner Address: Minor's Garden Center Inc
7777 N 76th St
Milwaukee, WI 53223

ENCROACHMENT REPORTING FORM

COUNTY: WASHINGTON	DATE: 1/12/2015
PROJECT ID: 2310-17-00	ENCRO NO: 8
TAX KEY NUMBER: T7 0367	PARCEL NO:
LETTING DATE: 9/10/2019	HIGHWAY: STH 60
REPORTER: KEVIN WEIGHNER	PHONE: 414-282-6905
DOT PROJ ENGINEER: HEATHER SACKMAN	
LEGAL DESCRIPTION OF ENCROACHMENT and WHAT ENCROACHMENT IS: LIGHT POLES	

SKETCH OF ENCROACHMENT ATTACHED: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO WIDTH OF HIGHWAY ROW FROM C/L AT ENCROACHMENT: 60' NO. OF FEET FROM CENTERLINE TO ENCROACHMENT: 57' to 60' STATION: 330+94 & 331+38 Encroachment is within existing Right of Way by 3'	PHOTOS ATTACHED: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO NAME & ADDRESS OF OWNER OR RESPONSIBLE PARTY MINOR'S GARDEN CENTER INC 7777 N 76TH ST MILWAUKEE, WI 53223
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RECOMMENDED ACTION: ☐ Revocable Permit ☒ Removal

<i>FOR OFFICE USE ONLY</i>	
<i>RECOMMENDED ACTION</i>	ACTION TAKEN
REMOVAL ORDER DATE: COMMENTS:	REMOVAL ORDER COMPLIANCE FIELD VERIFIED DATE: BY:
ISSUE REVOCABLE OCCUPANCY PERMIT DATE: COMMENTS:	OCCUPANCY PERMIT ISSUED DATE: BY:
POSSIBLE SALE OR LEASE ENCROACHED LANDS COMMENTS:	SALE OR LEASE OF LAND COMPLETED DATE: BY:

SEE PHOTO REVERSE SIDE
ENCROACHMENT PHOTO LOG



Encroachment Number: E-8

Encroachment Type: Light Poles

Station: 330+94 & 331+38

Encroachment Distance to Centerline: 58' to 60'

Existing R/W from Centerline: 60'

Owner Address: Minor's Garden Center Inc.
7777 N 76th St
Milwaukee, WI 53223

ENCROACHMENT REPORTING FORM

COUNTY:	WASHINGTON	DATE:	1/12/2015
PROJECT ID:	2310-17-00	ENCRO NO:	9
TAX KEY NUMBER:	T7 0610	PARCEL NO:	
LETTING DATE:	9/10/2019	HIGHWAY:	STH 60
REPORTER:	KEVIN WEIGHNER	PHONE:	414-282-6905
DOT PROJ ENGINEER: HEATHER SACKMAN			
LEGAL DESCRIPTION OF ENCROACHMENT and WHAT ENCROACHMENT IS: PLANTER & FLAG POLE			

SKETCH OF ENCROACHMENT ATTACHED: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	PHOTOS ATTACHED: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
WIDTH OF HIGHWAY ROW FROM C/L AT ENCROACHMENT: 60'	NAME & ADDRESS OF OWNER OR RESPONSIBLE PARTY HEIMKIN LLC 1113 STATE HWY 60 CEDARBURG, WI 53012
NO. OF FEET FROM CENTERLINE TO ENCROACHMENT: 39'	
STATION: 333+66 Encroachment is within existing Right of Way by 21'	

RECOMMENDED ACTION: ☐ Revocable Permit ☒ Removal

FOR OFFICE USE ONLY	
RECOMMENDED ACTION	ACTION TAKEN
REMOVAL ORDER DATE: COMMENTS:	REMOVAL ORDER COMPLIANCE FIELD VERIFIED DATE: BY:
ISSUE REVOCABLE OCCUPANCY PERMIT DATE: COMMENTS:	OCCUPANCY PERMIT ISSUED DATE: BY:
POSSIBLE SALE OR LEASE ENCROACHED LANDS COMMENTS:	SALE OR LEASE OF LAND COMPLETED DATE: BY:

**SEE PHOTO REVERSE SIDE
ENCROACHMENT PHOTO LOG**



Encroachment Number: E-9

Encroachment Type: Planter with retaining wall

Station: 333+66

Encroachment Distance to Centerline: 39'

Existing R/W from Centerline: 60'

Owner Address: Heikman LLC
1113 State Hwy 60
Cedarburg, WI 53012

ENCROACHMENT REPORTING FORM

COUNTY: WASHINGTON	DATE: 1/12/2015
PROJECT ID: 2310-17-00	ENCRO NO: 10
TAX KEY NUMBER: T7 0610 00B	PARCEL NO:
LETTING DATE: 9/10/2019	HIGHWAY: STH 60
REPORTER: KEVIN WEIGHNER	PHONE: 414-282-6905
DOT PROJ ENGINEER: HEATHER SACKMAN	
LEGAL DESCRIPTION OF ENCROACHMENT and WHAT ENCROACHMENT IS: SIGN WITH DECORATIVE BOULDER	

SKETCH OF ENCROACHMENT ATTACHED: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO WIDTH OF HIGHWAY ROW FROM C/L AT ENCROACHMENT: 60' NO. OF FEET FROM CENTERLINE TO ENCROACHMENT: 48' STATION: 335+35 Encroachment is within existing Right of Way by 12'	PHOTOS ATTACHED: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO NAME & ADDRESS OF OWNER OR RESPONSIBLE PARTY LAVERNE F & BEVERLY A BUBLITZ TRUST 1113 STATE HWY 60 CEDARBURG, WI 53012
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RECOMMENDED ACTION: ☐ Revocable Permit ☒ Removal

<i>FOR OFFICE USE ONLY</i>	
<i>RECOMMENDED ACTION</i>	ACTION TAKEN
REMOVAL ORDER DATE: COMMENTS:	REMOVAL ORDER COMPLIANCE FIELD VERIFIED DATE: BY:
ISSUE REVOCABLE OCCUPANCY PERMIT DATE: COMMENTS:	OCCUPANCY PERMIT ISSUED DATE: BY:
POSSIBLE SALE OR LEASE ENCROACHED LANDS COMMENTS:	SALE OR LEASE OF LAND COMPLETED DATE: BY:

SEE PHOTO REVERSE SIDE
ENCROACHMENT PHOTO LOG



Encroachment Number: E-10

Encroachment Type: Sign with decorative boulder

Station: 335+35

Encroachment Distance to Centerline: 48'

Existing R/W from Centerline: 60'

Owner Address: Laverne F & Beverly A Bublitz Trust
1113 State Hwy 60
Cedarburg, WI 53012

ENCROACHMENT REPORTING FORM

COUNTY: WASHINGTON	DATE: 1/12/2015
PROJECT ID: 2310-17-00	ENCRO NO: 11
TAX KEY NUMBER: T7 0370 00A	PARCEL NO:
LETTING DATE: 9/10/2019	HIGHWAY: STH 60
REPORTER: KEVIN WEIGHNER	PHONE: 414-282-6905
DOT PROJ ENGINEER: HEATHER SACKMAN	
LEGAL DESCRIPTION OF ENCROACHMENT and WHAT ENCROACHMENT IS: PARKING LOT SURFACE	

SKETCH OF ENCROACHMENT ATTACHED: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO WIDTH OF HIGHWAY ROW FROM C/L AT ENCROACHMENT: 60' NO. OF FEET FROM CENTERLINE TO ENCROACHMENT: 55' STATION: 347+19 to 348+08 Encroachment is within existing Right of Way by 5'	PHOTOS ATTACHED: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO NAME & ADDRESS OF OWNER OR RESPONSIBLE PARTY BOEHLKE BOTTLE GAS CORP 1020 STATE HWY 60 CEDARBURG, WI 53012
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RECOMMENDED ACTION: ☐ Revocable Permit ☒ Removal

<i>FOR OFFICE USE ONLY</i>	
<i>RECOMMENDED ACTION</i>	ACTION TAKEN
REMOVAL ORDER DATE: COMMENTS:	REMOVAL ORDER COMPLIANCE FIELD VERIFIED DATE: BY:
ISSUE REVOCABLE OCCUPANCY PERMIT DATE: COMMENTS:	OCCUPANCY PERMIT ISSUED DATE: BY:
POSSIBLE SALE OR LEASE ENCROACHED LANDS COMMENTS:	SALE OR LEASE OF LAND COMPLETED DATE: BY:

SEE PHOTO REVERSE SIDE
ENCROACHMENT PHOTO LOG



Encroachment Number: E-11

Encroachment Type: Parking lot surface

Station: 347+19 to 348+08

Encroachment Distance to Centerline: 55'

Existing R/W from Centerline: 60'

Owner Address: Boehlke Bottle Gas Corp
 1020 State Hwy 60
 Cedarburg, WI 53012

ENCROACHMENT REPORTING FORM

COUNTY: WASHINGTON	DATE: 1/12/2015
PROJECT ID: 2310-17-00	ENCRO NO: 12
TAX KEY NUMBER: T7 0342 00D	PARCEL NO: LOT 1
LETTING DATE: 9/10/2019	HIGHWAY: STH 60
REPORTER: KEVIN WEIGHNER	PHONE: 414-282-6905
DOT PROJ ENGINEER: HEATHER SACKMAN	
LEGAL DESCRIPTION OF ENCROACHMENT and WHAT ENCROACHMENT IS: LIGHT POLE	

SKETCH OF ENCROACHMENT ATTACHED: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO WIDTH OF HIGHWAY ROW FROM C/L AT ENCROACHMENT: 60' NO. OF FEET FROM CENTERLINE TO ENCROACHMENT: 53' STATION: 372+27 Encroachment is within existing Right of Way by 7'	PHOTOS ATTACHED: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO NAME & ADDRESS OF OWNER OR RESPONSIBLE PARTY DENNIS K & KATHLEEN M JONES 14032 N CEDARBURG RD MEQUON, WI 53097
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RECOMMENDED ACTION: ☐ Revocable Permit ☒ Removal

<i>FOR OFFICE USE ONLY</i>	
<i>RECOMMENDED ACTION</i>	ACTION TAKEN
REMOVAL ORDER DATE: COMMENTS:	REMOVAL ORDER COMPLIANCE FIELD VERIFIED DATE: BY:
ISSUE REVOCABLE OCCUPANCY PERMIT DATE: COMMENTS:	OCCUPANCY PERMIT ISSUED DATE: BY:
POSSIBLE SALE OR LEASE ENCROACHED LANDS COMMENTS:	SALE OR LEASE OF LAND COMPLETED DATE: BY:

SEE PHOTO REVERSE SIDE
ENCROACHMENT PHOTO LOG



Encroachment Number: E-12

Encroachment Type: Light Pole

Station: 372+27

Encroachment Distance to Centerline: 53'

Existing R/W from Centerline: 60'

Owner Address: Dennis K & Kathleen M Jones
14032 N Cedarburg Rd
Mequon, WI 53097

ENCROACHMENT REPORTING FORM

COUNTY:	WASHINGTON	DATE:	1/12/2015
PROJECT ID:	2310-17-00	ENCRO NO:	13
TAX KEY NUMBER:	T7 0342 00C	PARCEL NO:	
LETTING DATE:	9/10/2019	HIGHWAY:	STH 60
REPORTER:	KEVIN WEIGHNER	PHONE:	414-282-6905
DOT PROJ ENGINEER: HEATHER SACKMAN			
LEGAL DESCRIPTION OF ENCROACHMENT and WHAT ENCROACHMENT IS: ABANDONED BRICK STRUCTURE			

SKETCH OF ENCROACHMENT ATTACHED: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	PHOTOS ATTACHED: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
WIDTH OF HIGHWAY ROW FROM C/L AT ENCROACHMENT: 60'	NAME & ADDRESS OF OWNER OR RESPONSIBLE PARTY MARK A MILLER 802 STATE HWY 60 CEDARBURG, WI 53012
NO. OF FEET FROM CENTERLINE TO ENCROACHMENT: 49'	
STATION: 375+60 Encroachment is within existing Right of Way by 11'	

RECOMMENDED ACTION: ☐ Revocable Permit ☒ Removal

FOR OFFICE USE ONLY	
RECOMMENDED ACTION	ACTION TAKEN
REMOVAL ORDER DATE: COMMENTS:	REMOVAL ORDER COMPLIANCE FIELD VERIFIED DATE: BY:
ISSUE REVOCABLE OCCUPANCY PERMIT DATE: COMMENTS:	OCCUPANCY PERMIT ISSUED DATE: BY:
POSSIBLE SALE OR LEASE ENCROACHED LANDS COMMENTS:	SALE OR LEASE OF LAND COMPLETED DATE: BY:

SEE PHOTO REVERSE SIDE
ENCROACHMENT PHOTO LOG



Encroachment Number: E-13

Encroachment Type: Abandoned Brick Structure

Station: 375+60

Encroachment Distance to Centerline: 49'

Existing R/W from Centerline: 60'

Owner Address: Mark A Miller
802 State Hwy 60
Cedarburg, WI 53012

ENCROACHMENT REPORTING FORM

COUNTY: WASHINGTON	DATE: 1/12/2015
PROJECT ID: 2310-17-00	ENCRO NO: 14A
TAX KEY NUMBER: T7 0347	PARCEL NO:
LETTING DATE: 9/10/2019	HIGHWAY: STH 60
REPORTER: KEVIN WEIGHNER	PHONE: 414-282-6905
DOT PROJ ENGINEER: HEATHER SACKMAN	
LEGAL DESCRIPTION OF ENCROACHMENT and WHAT ENCROACHMENT IS: FENCE	

SKETCH OF ENCROACHMENT ATTACHED: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO WIDTH OF HIGHWAY ROW FROM C/L AT ENCROACHMENT: 60' NO. OF FEET FROM CENTERLINE TO ENCROACHMENT: 59' STATION: 398+36 to 399+69 Encroachment is within existing Right of Way by 1'	PHOTOS ATTACHED: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO NAME & ADDRESS OF OWNER OR RESPONSIBLE PARTY WILLIAM L & CHERYL HARTWIG 626 STATE HWY 60 CEDARBURG, WI 53012
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RECOMMENDED ACTION: ☐ Revocable Permit ☒ Removal

<i>FOR OFFICE USE ONLY</i>	
<i>RECOMMENDED ACTION</i>	ACTION TAKEN
REMOVAL ORDER DATE: COMMENTS:	REMOVAL ORDER COMPLIANCE FIELD VERIFIED DATE: BY:
ISSUE REVOCABLE OCCUPANCY PERMIT DATE: COMMENTS:	OCCUPANCY PERMIT ISSUED DATE: BY:
POSSIBLE SALE OR LEASE ENCROACHED LANDS COMMENTS:	SALE OR LEASE OF LAND COMPLETED DATE: BY:

SEE PHOTO REVERSE SIDE
ENCROACHMENT PHOTO LOG



Encroachment Number: E-14A

Encroachment Type: Fence

Station: 398+36 to 399+69

Encroachment Distance to Centerline: 59'

Existing R/W from Centerline: 60'

Owner Address: William L & Cheryl Hartwig
626 State Hwy 60
Cedarburg, WI 53012

ENCROACHMENT REPORTING FORM

COUNTY:	WASHINGTON	DATE:	1/12/2015
PROJECT ID:	2310-17-00	ENCRO NO:	14B
TAX KEY NUMBER:	T7 034700A	PARCEL NO:	
LETTING DATE:	9/10/2019	HIGHWAY:	STH 60
REPORTER:	KEVIN WEIGHNER	PHONE:	414-282-6905
DOT PROJ ENGINEER: HEATHER SACKMAN			
LEGAL DESCRIPTION OF ENCROACHMENT and WHAT ENCROACHMENT IS: FENCE			

SKETCH OF ENCROACHMENT ATTACHED: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	PHOTOS ATTACHED: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
WIDTH OF HIGHWAY ROW FROM C/L AT ENCROACHMENT: 60'	NAME & ADDRESS OF OWNER OR RESPONSIBLE PARTY ERICH W & BARBARA K HILLMANN 614 STATE HWY 60 CEDARBURG, WI 53012
NO. OF FEET FROM CENTERLINE TO ENCROACHMENT: 59'	
STATION: 401+19 to 402+89 Encroachment is within existing Right of Way by 1'	

RECOMMENDED ACTION: ☐ Revocable Permit ☒ Removal

FOR OFFICE USE ONLY	
RECOMMENDED ACTION	ACTION TAKEN
REMOVAL ORDER DATE: COMMENTS:	REMOVAL ORDER COMPLIANCE FIELD VERIFIED DATE: BY:
ISSUE REVOCABLE OCCUPANCY PERMIT DATE: COMMENTS:	OCCUPANCY PERMIT ISSUED DATE: BY:
POSSIBLE SALE OR LEASE ENCROACHED LANDS COMMENTS:	SALE OR LEASE OF LAND COMPLETED DATE: BY:

SEE PHOTO REVERSE SIDE
ENCROACHMENT PHOTO LOG



Encroachment Number: E-14B

Encroachment Type: Fence

Station: 401+19 to 402+89

Encroachment Distance to Centerline: 59'

Existing R/W from Centerline: 60'

Owner Address: Erich W & Barbara K Hillmann
614 State Hwy 60
Cedarburg, WI 53012

ENCROACHMENT REPORTING FORM

COUNTY: WASHINGTON	DATE: 1/12/2015
PROJECT ID: 2310-17-00	ENCRO NO: 15
TAX KEY NUMBER: T7 0624	PARCEL NO:
LETTING DATE: 9/10/2019	HIGHWAY: STH 60
REPORTER: KEVIN WEIGHNER	PHONE: 414-282-6905
DOT PROJ ENGINEER: HEATHER SACKMAN	
LEGAL DESCRIPTION OF ENCROACHMENT and WHAT ENCROACHMENT IS: DECORATIVE SIGN AND MAILBOX	

SKETCH OF ENCROACHMENT ATTACHED: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO WIDTH OF HIGHWAY ROW FROM C/L AT ENCROACHMENT: 60' NO. OF FEET FROM CENTERLINE TO ENCROACHMENT: 48' STATION: 415+20 Encroachment is within existing Right of Way by 12'	PHOTOS ATTACHED: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO NAME & ADDRESS OF OWNER OR RESPONSIBLE PARTY CHAS & ROSEMARIE MEUNIER 511 STATE HWY 60 CEDARBURG, WI 53012
--	---

RECOMMENDED ACTION: ☐ Revocable Permit ☒ Removal

<i>FOR OFFICE USE ONLY</i>	
<i>RECOMMENDED ACTION</i>	ACTION TAKEN
REMOVAL ORDER DATE: COMMENTS:	REMOVAL ORDER COMPLIANCE FIELD VERIFIED DATE: BY:
ISSUE REVOCABLE OCCUPANCY PERMIT DATE: COMMENTS:	OCCUPANCY PERMIT ISSUED DATE: BY:
POSSIBLE SALE OR LEASE ENCROACHED LANDS COMMENTS:	SALE OR LEASE OF LAND COMPLETED DATE: BY:

SEE PHOTO REVERSE SIDE
ENCROACHMENT PHOTO LOG



Encroachment Number: E-15

Encroachment Type: Decorative Sign and Mailbox

Station: 415+20

Encroachment Distance to Centerline: 48'

Existing R/W from Centerline: 60'

Owner Address: Chas & Rosemarie Meunier
511 State Hwy 60
Cedarburg, WI 53012

ENCROACHMENT REPORTING FORM

COUNTY:	OZAUKEE	DATE:	1/12/2015
PROJECT ID:	2310-17-00	ENCRO NO:	16
TAX KEY NUMBER:	03-019-05-004.00	PARCEL NO:	Lot #1 CSM #1540
LETTING DATE:	9/10/2019	HIGHWAY:	STH 60
REPORTER:	KEVIN WEIGHNER	PHONE:	414-282-6905
DOT PROJ ENGINEER: HEATHER SACKMAN			
LEGAL DESCRIPTION OF ENCROACHMENT and WHAT ENCROACHMENT IS:			
FENCE			

SKETCH OF ENCROACHMENT ATTACHED: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	PHOTOS ATTACHED: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
WIDTH OF HIGHWAY ROW FROM C/L AT ENCROACHMENT: 50'	NAME & ADDRESS OF OWNER OR RESPONSIBLE PARTY DIANE M BEZELLA 11821 STATE ROAD 60 CEDARBURG, WI 53012
NO. OF FEET FROM CENTERLINE TO ENCROACHMENT: 44' TO 48'	
STATION: 429+98 TO 430+41 Encroachment is within existing Right of Way by 6'	

RECOMMENDED ACTION: ☐ Revocable Permit ☒ Removal

FOR OFFICE USE ONLY	
RECOMMENDED ACTION	ACTION TAKEN
REMOVAL ORDER DATE: COMMENTS:	REMOVAL ORDER COMPLIANCE FIELD VERIFIED DATE: BY:
ISSUE REVOCABLE OCCUPANCY PERMIT DATE: COMMENTS:	OCCUPANCY PERMIT ISSUED DATE: BY:
POSSIBLE SALE OR LEASE ENCROACHED LANDS COMMENTS:	SALE OR LEASE OF LAND COMPLETED DATE: BY:

SEE PHOTO REVERSE SIDE
ENCROACHMENT PHOTO LOG



Encroachment Number: E-16

Encroachment Type: Fence

Station: 429+98 to 430+41

Encroachment Distance to Centerline: 44' to 48'

Existing R/W from Centerline: 50'

Owner Address: Diane M Bezella
11821 State Hwy 60
Cedarburg, WI 53012

ENCROACHMENT REPORTING FORM

COUNTY:	OZAUKEE	DATE:	1/12/2015
PROJECT ID:	2310-17-00	ENCRO NO:	17
TAX KEY NUMBER:	03-019-01-000	PARCEL NO:	
LETTING DATE:	9/10/2019	HIGHWAY:	STH 60
REPORTER:	KEVIN WEIGHNER	PHONE:	414-282-6905
DOT PROJ ENGINEER: HEATHER SACKMAN			
LEGAL DESCRIPTION OF ENCROACHMENT and WHAT ENCROACHMENT IS: DECORATIVE BOULDERS			

SKETCH OF ENCROACHMENT ATTACHED: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	PHOTOS ATTACHED: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
WIDTH OF HIGHWAY ROW FROM C/L AT ENCROACHMENT: 50'	NAME & ADDRESS OF OWNER OR RESPONSIBLE PARTY GOLLNICK, JAMES R 11103 HWY 60 CEDARBURG, WI 53012
NO. OF FEET FROM CENTERLINE TO ENCROACHMENT: 27' TO 29'	
STATION: 453+40 RT & 453+66 RT Encroachment is within existing Right of Way by 23'	

RECOMMENDED ACTION: ☐ Revocable Permit ☒ Removal

FOR OFFICE USE ONLY	
RECOMMENDED ACTION	ACTION TAKEN
REMOVAL ORDER DATE: COMMENTS:	REMOVAL ORDER COMPLIANCE FIELD VERIFIED DATE: BY:
ISSUE REVOCABLE OCCUPANCY PERMIT DATE: COMMENTS:	OCCUPANCY PERMIT ISSUED DATE: BY:
POSSIBLE SALE OR LEASE ENCROACHED LANDS COMMENTS:	SALE OR LEASE OF LAND COMPLETED DATE: BY:

SEE PHOTO REVERSE SIDE
ENCROACHMENT PHOTO LOG



Encroachment Number: E-17

Encroachment Type: Decorative Boulders

Station: 453+40 RT & 453+66 RT

Encroachment Distance to Centerline: 27' to 29'

Existing R/W from Centerline: 50'

Owner Address: Gollnick, James R
11103 Hwy 60
Cedarburg, WI 53012

ENCROACHMENT REPORTING FORM

COUNTY:	OZAUKEE	DATE:	1/12/2015
PROJECT ID:	2310-17-00	ENCRO NO:	18
TAX KEY NUMBER:	03-017-12-001.00	PARCEL NO:	
LETTING DATE:	9/10/2019	HIGHWAY:	STH 60
REPORTER:	KEVIN WEIGHNER	PHONE:	414-282-6905
DOT PROJ ENGINEER: HEATHER SACKMAN			
LEGAL DESCRIPTION OF ENCROACHMENT and WHAT ENCROACHMENT IS:			
ROADSIDE MEMORIAL			

SKETCH OF ENCROACHMENT ATTACHED: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	PHOTOS ATTACHED: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
WIDTH OF HIGHWAY ROW FROM C/L AT ENCROACHMENT: 50'	NAME & ADDRESS OF OWNER OR RESPONSIBLE PARTY OWNER UNKNOWN
NO. OF FEET FROM CENTERLINE TO ENCROACHMENT: 43'	
STATION: 478+65 LT Encroachment is within existing Right of Way by 7'	

RECOMMENDED ACTION: ☐ Revocable Permit ☒ Removal

FOR OFFICE USE ONLY	
RECOMMENDED ACTION	ACTION TAKEN
REMOVAL ORDER DATE: COMMENTS:	REMOVAL ORDER COMPLIANCE FIELD VERIFIED DATE: BY:
ISSUE REVOCABLE OCCUPANCY PERMIT DATE: COMMENTS:	OCCUPANCY PERMIT ISSUED DATE: BY:
POSSIBLE SALE OR LEASE ENCROACHED LANDS COMMENTS:	SALE OR LEASE OF LAND COMPLETED DATE: BY:

SEE PHOTO REVERSE SIDE
ENCROACHMENT PHOTO LOG



Encroachment Number: E-18

Encroachment Type: Roadside Memorial

Station: 478+65 LT

Encroachment Distance to Centerline: 43'

Existing R/W from Centerline: 50'

Owner Address: Unknown

ENCROACHMENT REPORTING FORM

COUNTY:	OZAUKEE	DATE:	1/12/2015
PROJECT ID:	2310-17-00	ENCRO NO:	19
TAX KEY NUMBER:	03-016-11-007.00	PARCEL NO:	
LETTING DATE:	9/10/2019	HIGHWAY:	STH 60
REPORTER:	KEVIN WEIGHNER	PHONE:	414-282-6905
DOT PROJ ENGINEER: HEATHER SACKMAN			
LEGAL DESCRIPTION OF ENCROACHMENT and WHAT ENCROACHMENT IS:			
FENCE			

SKETCH OF ENCROACHMENT ATTACHED: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO WIDTH OF HIGHWAY ROW FROM C/L AT ENCROACHMENT: 100' NO. OF FEET FROM CENTERLINE TO ENCROACHMENT: 93' to 97' STATION: 519+43 to 520+13 Encroachment is within existing Right of Way by 6'	PHOTOS ATTACHED: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO NAME & ADDRESS OF OWNER OR RESPONSIBLE PARTY MELODY F HAHN ET AL 1302 HORNS CORNERS RD CEDARBURG, WI 53012
---	---

RECOMMENDED ACTION: ☐ Revocable Permit ☒ Removal

FOR OFFICE USE ONLY	
RECOMMENDED ACTION	ACTION TAKEN
REMOVAL ORDER DATE: COMMENTS:	REMOVAL ORDER COMPLIANCE FIELD VERIFIED DATE: BY:
ISSUE REVOCABLE OCCUPANCY PERMIT DATE: COMMENTS:	OCCUPANCY PERMIT ISSUED DATE: BY:
POSSIBLE SALE OR LEASE ENCROACHED LANDS COMMENTS:	SALE OR LEASE OF LAND COMPLETED DATE: BY:

SEE PHOTO REVERSE SIDE
ENCROACHMENT PHOTO LOG



Encroachment Number: E-19

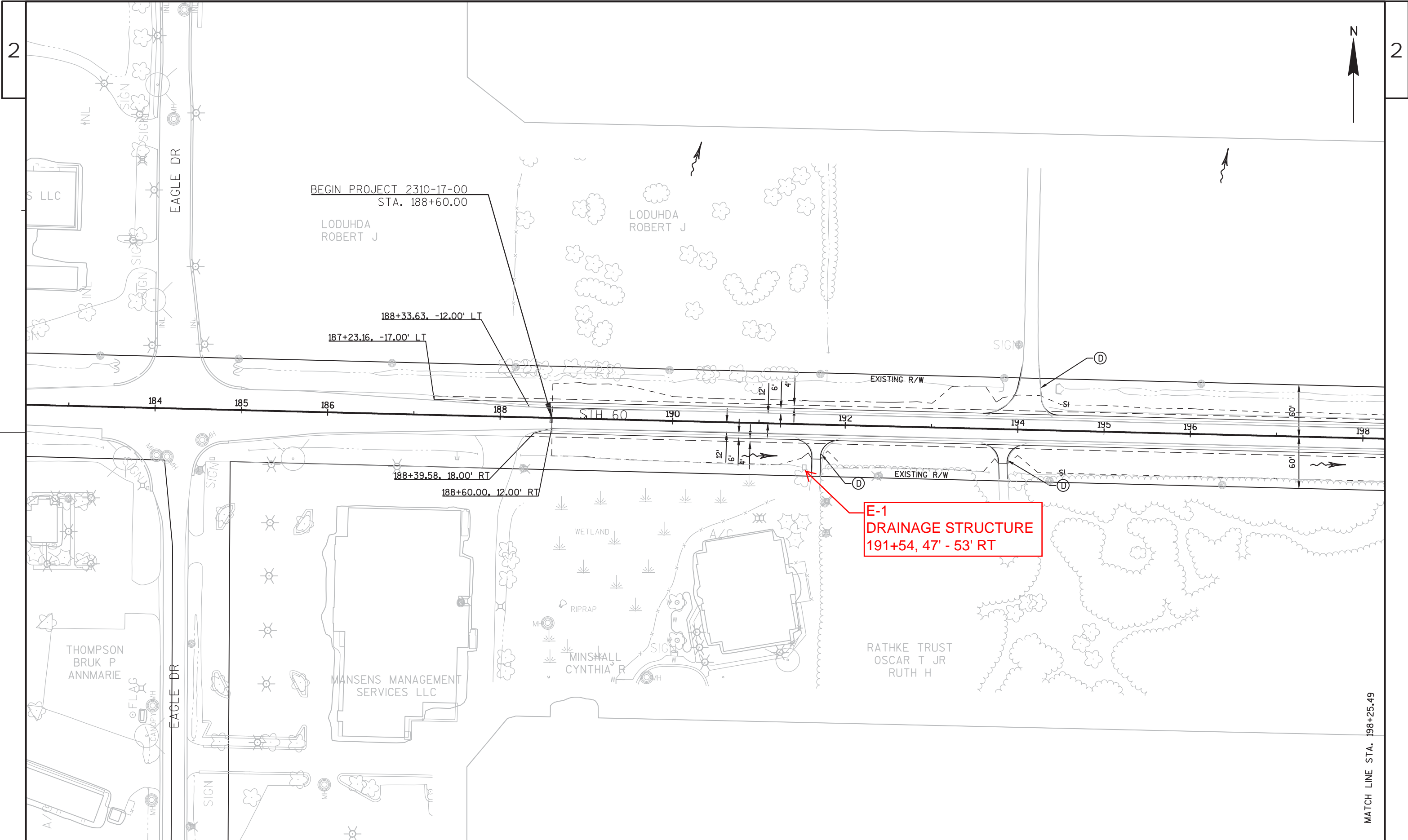
Encroachment Type: Fence

Station: 519+43 to 520+13

Encroachment Distance to Centerline: 93' to 97'

Existing R/W from Centerline: 100'

Owner Address: Melody F Hahn Et Al
1302 Horns Corners Rd
Cedarburg, WI 53012



PROJECT NO: 2310-17-00

HWY: STH 60

COUNTY: WASHINGTON & OZAUKEE

PLAN DETAILS

SCALE, FEET

0 50 100

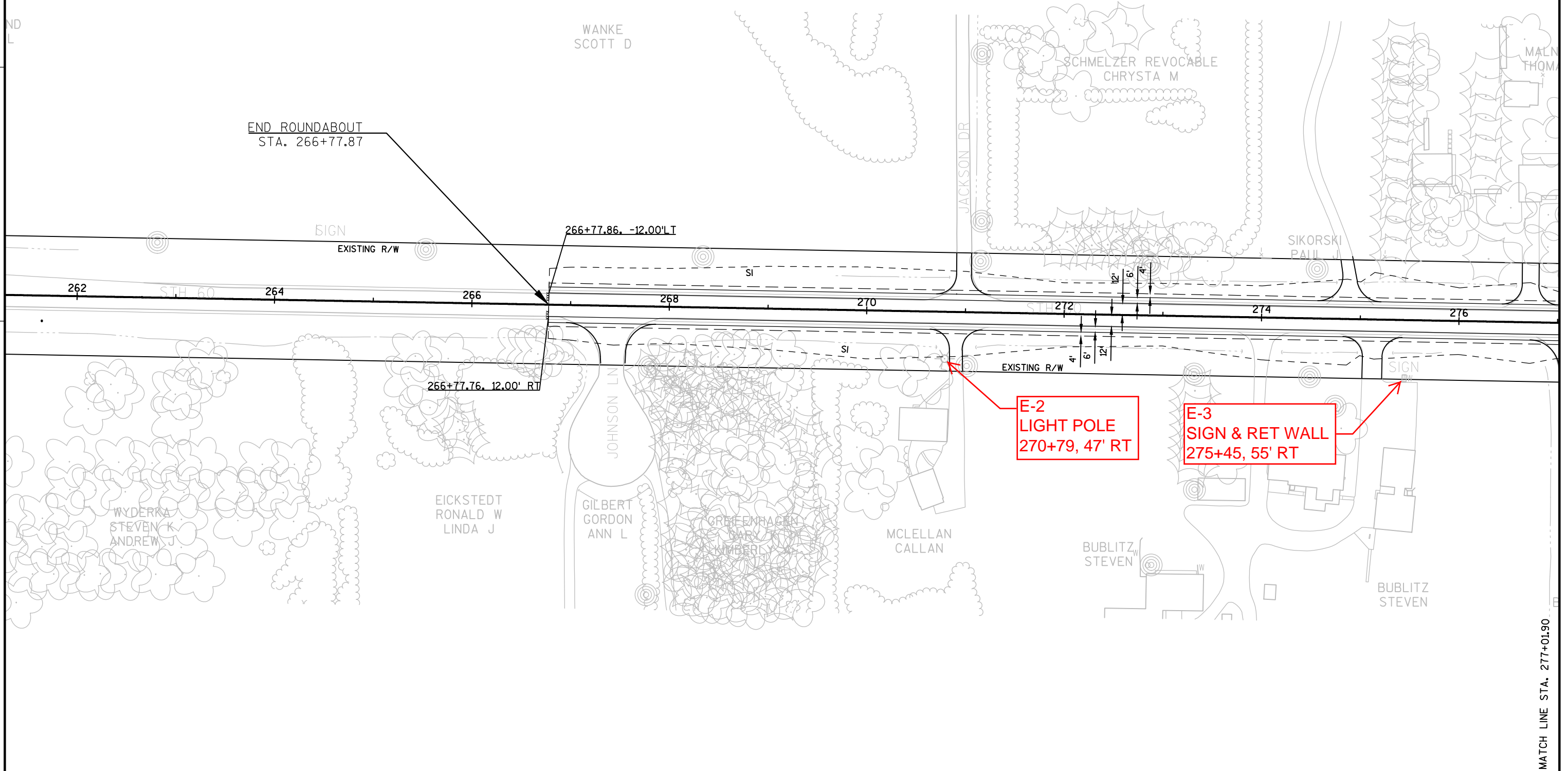
SHEET

E

2

MATCH LINE STA. 261+26.64

2

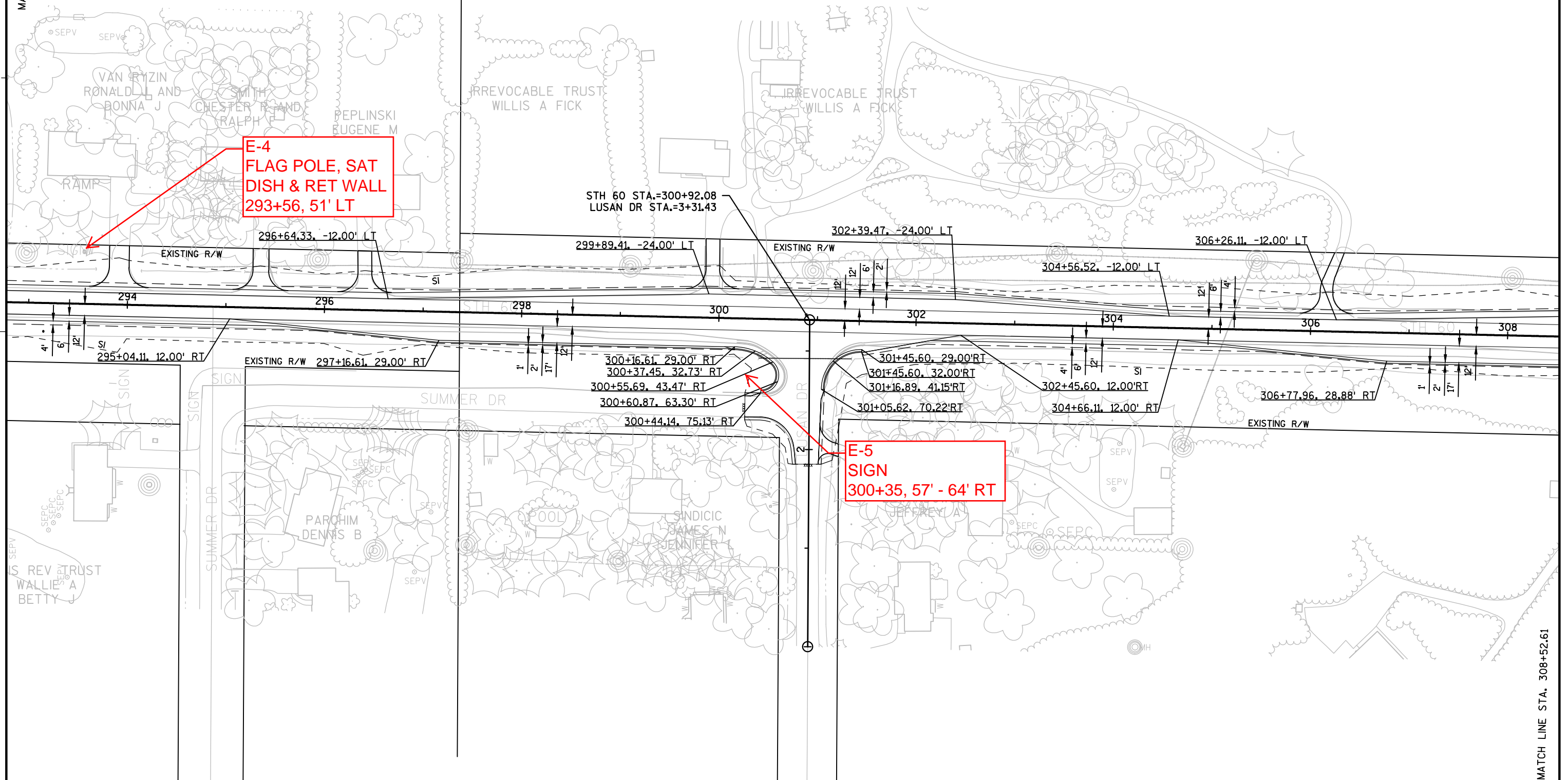


PROJECT NO:2310-17-00	HWY:STH 60	COUNTY:WASHINGTON & OZAUKEE	PLAN DETAILS	SHEET	E
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2	STA. 292+77.23
---	----------------

STA. 292+77.23

2



PROJECT NO: 2310-17-00

HWY:STH 60

COUNTY: WASHINGTON & OZAUKEE

PLAN DETAILS

SHEET

E

FILE NAME : G:\6906 STH 60\CAD\23101700\SHEETSP\PLAN\021201-PD.DWG
LAYOUT NAME - 021208

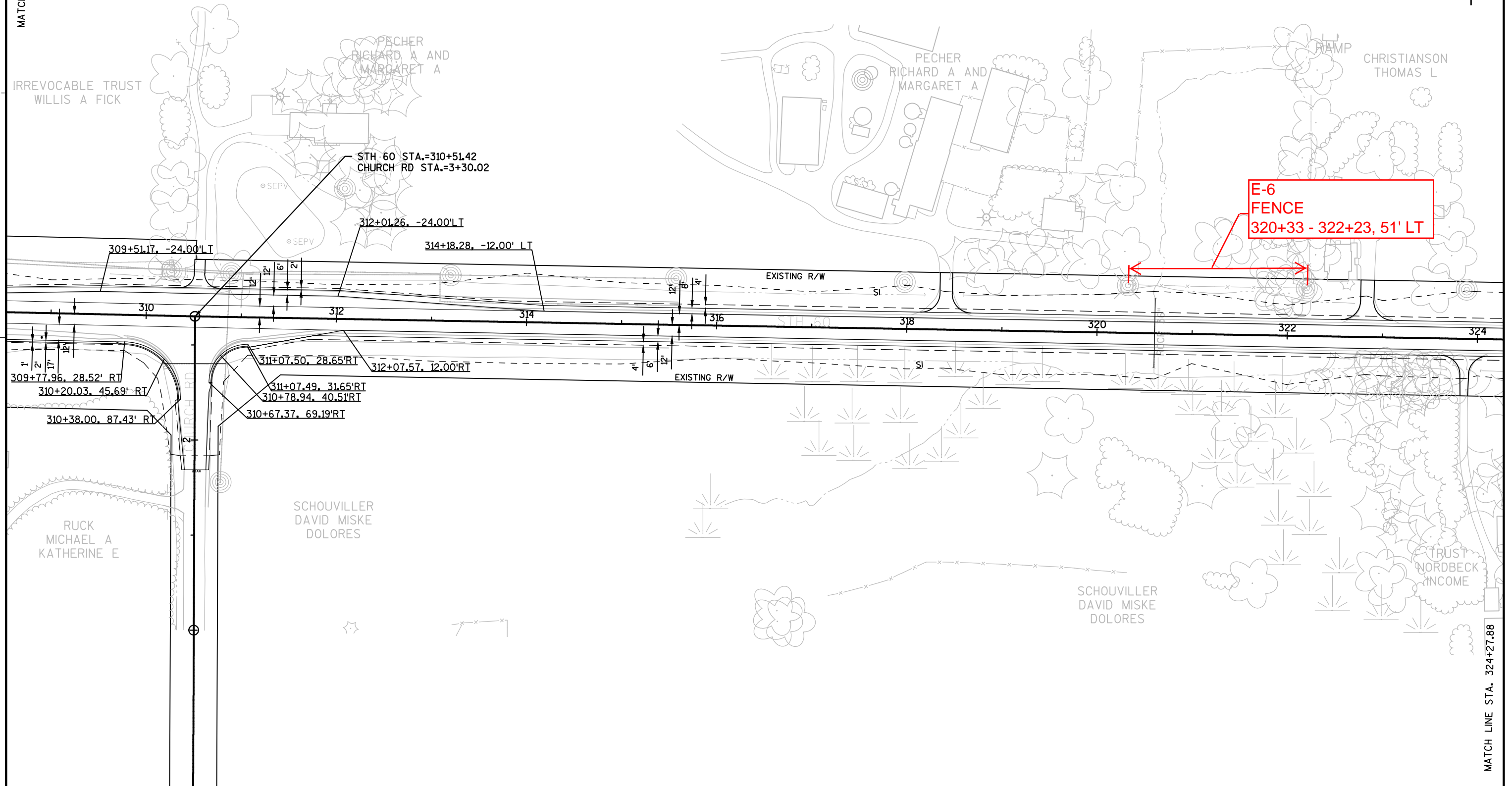
PLOT DATE : 9/17/2014 12:37 PM

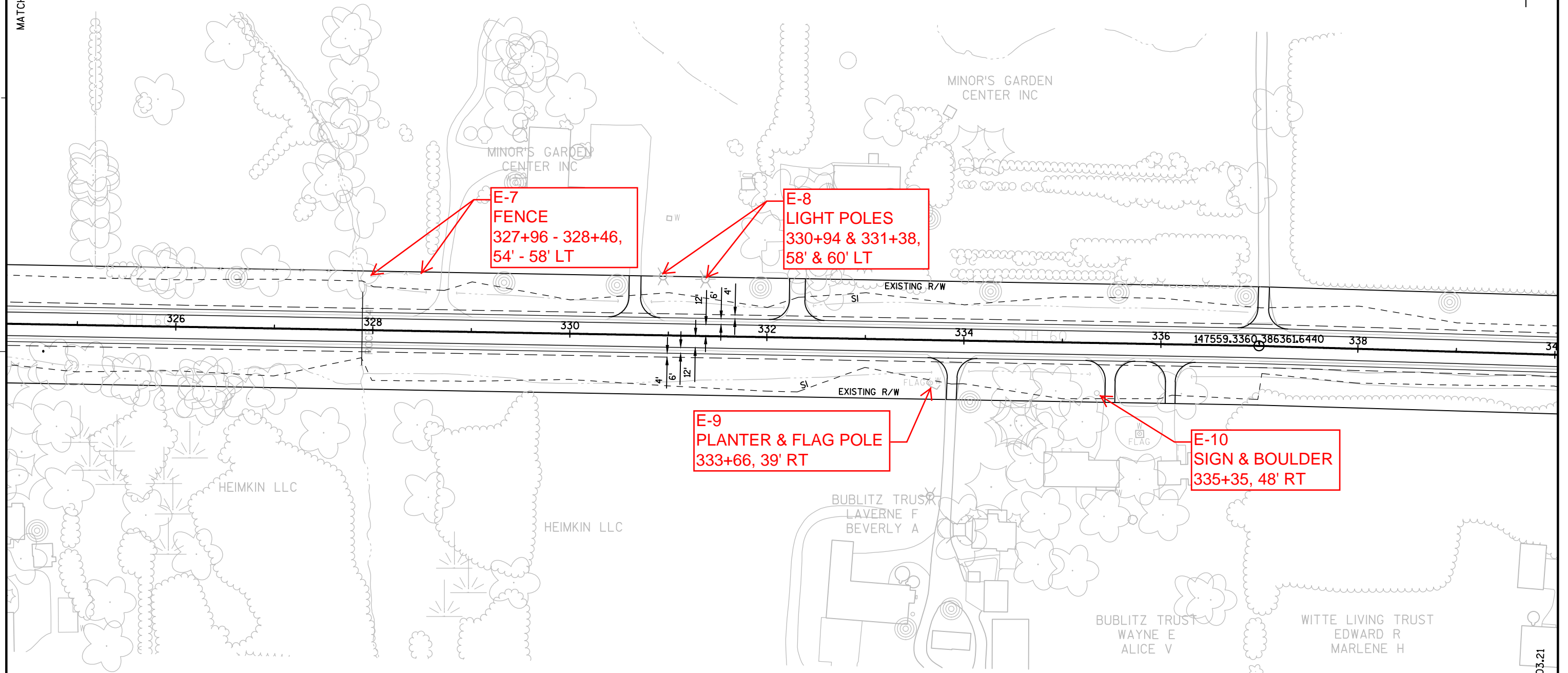
PLOT BY : CHRIS HARTZELL

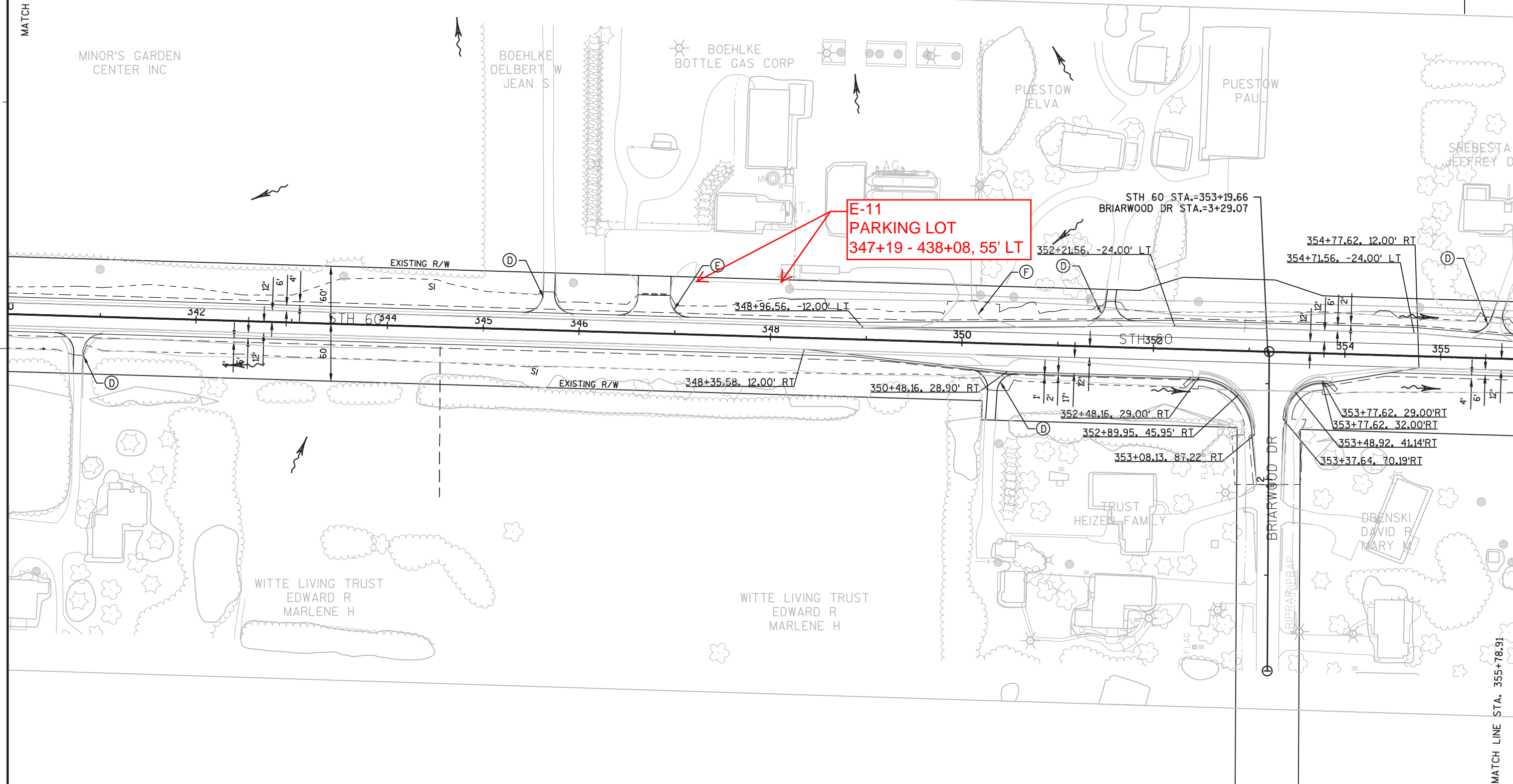
PLOT NAME :

PLOT SCALE : 1" = 100' _XREF

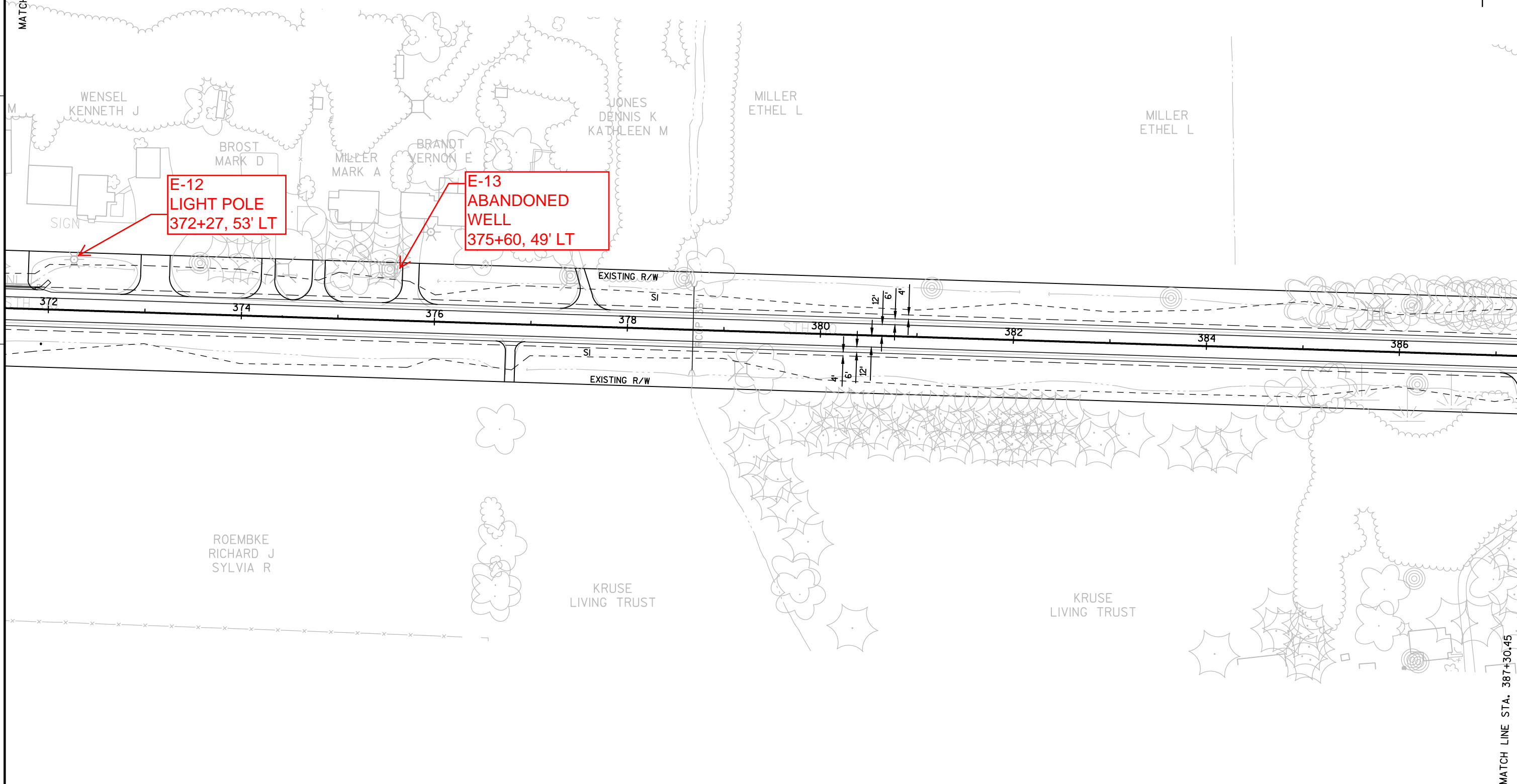
WISDOT/CADDS SHEET 42







MATCH LINE STA. 371+54.66



PROJECT NO: 2310-17-00

HWY: STH 60

COUNTY: WASHINGTON & OZAUKEE

PLAN DETAILS

SHEET

E

FILE NAME : G:\6906 STH 60\CAD\23101700\SHEETS\PLAN\021201-PD.DWG
LAYOUT NAME - 0212013

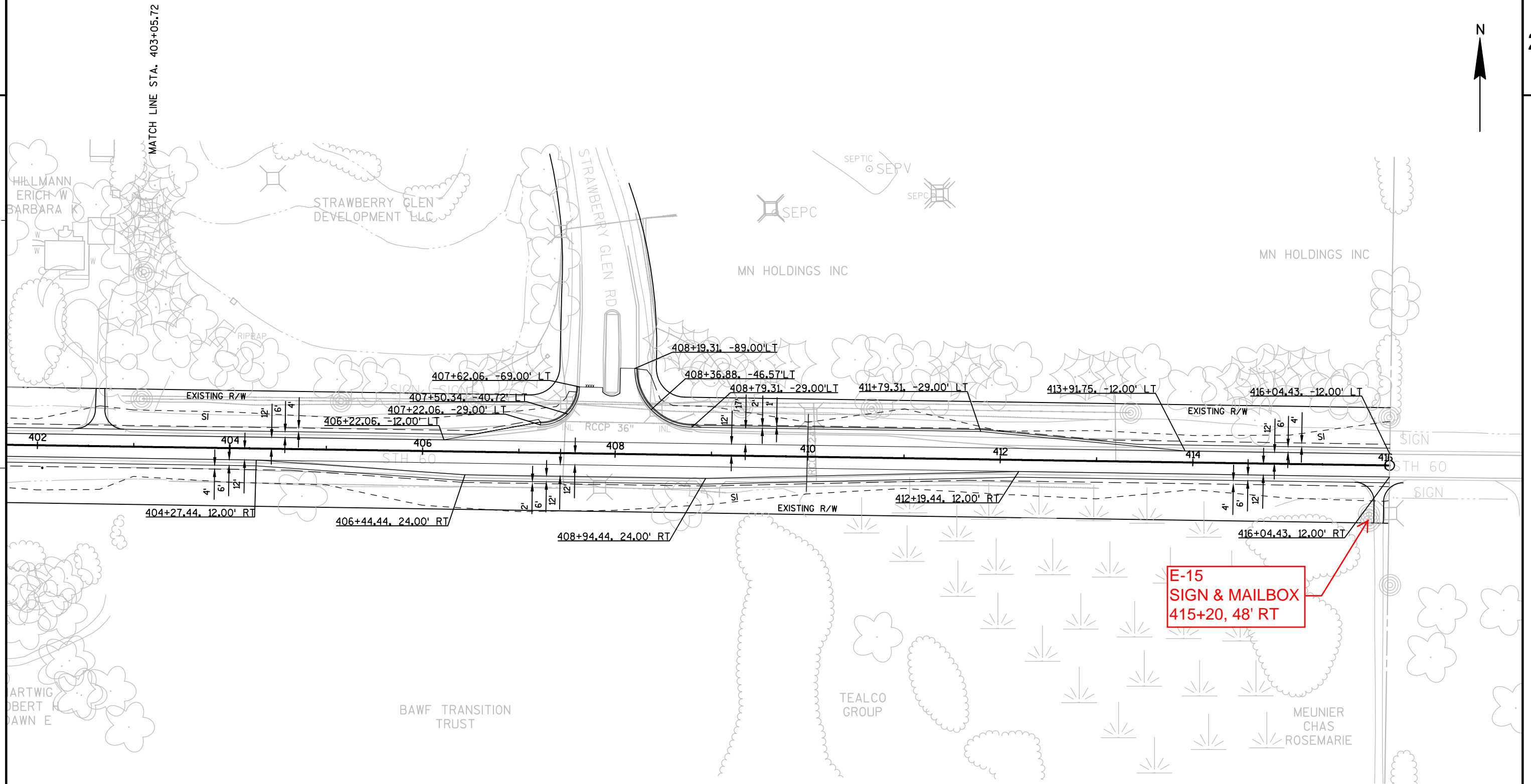
PLOT DATE : 9/17/2014 12:38 PM

PLOT BY : CHRIS HARTZELL

PLOT NAME :

PLOT SCALE : 1" = 100' _XREF

WISDOT/CADDs SHEET 42





BEL-FORD
FARM LLC

TEALCO GROUP

EXISTING R/W

EXISTING R/W

E-16
FENCE
429+98 - 430+41,
44' - 48' RT

BEZELLA
DIANE

KASTEN FARM LLC

MATCH LINE STA. 431+79.54

PROJECT NO: 2310-17-00

HWY: STH 60

COUNTY: WASHINGTON & OZAUKEE

PLAN DETAILS

SHEET

E

FILE NAME : G:\6906 STH 60\CAD\23101700\SHEETS\PLAN\021201-PD.DWG
LAYOUT NAME - 0212016

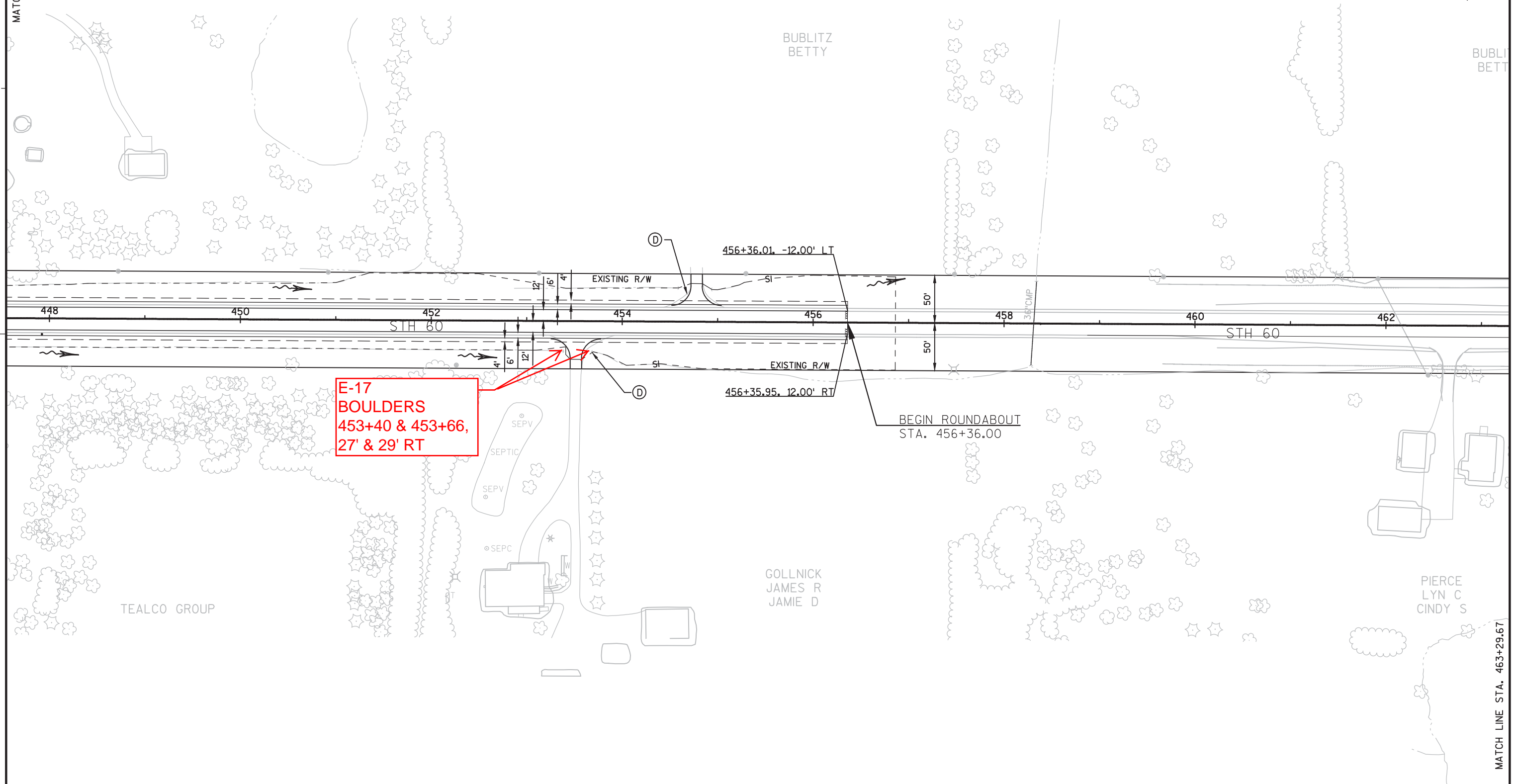
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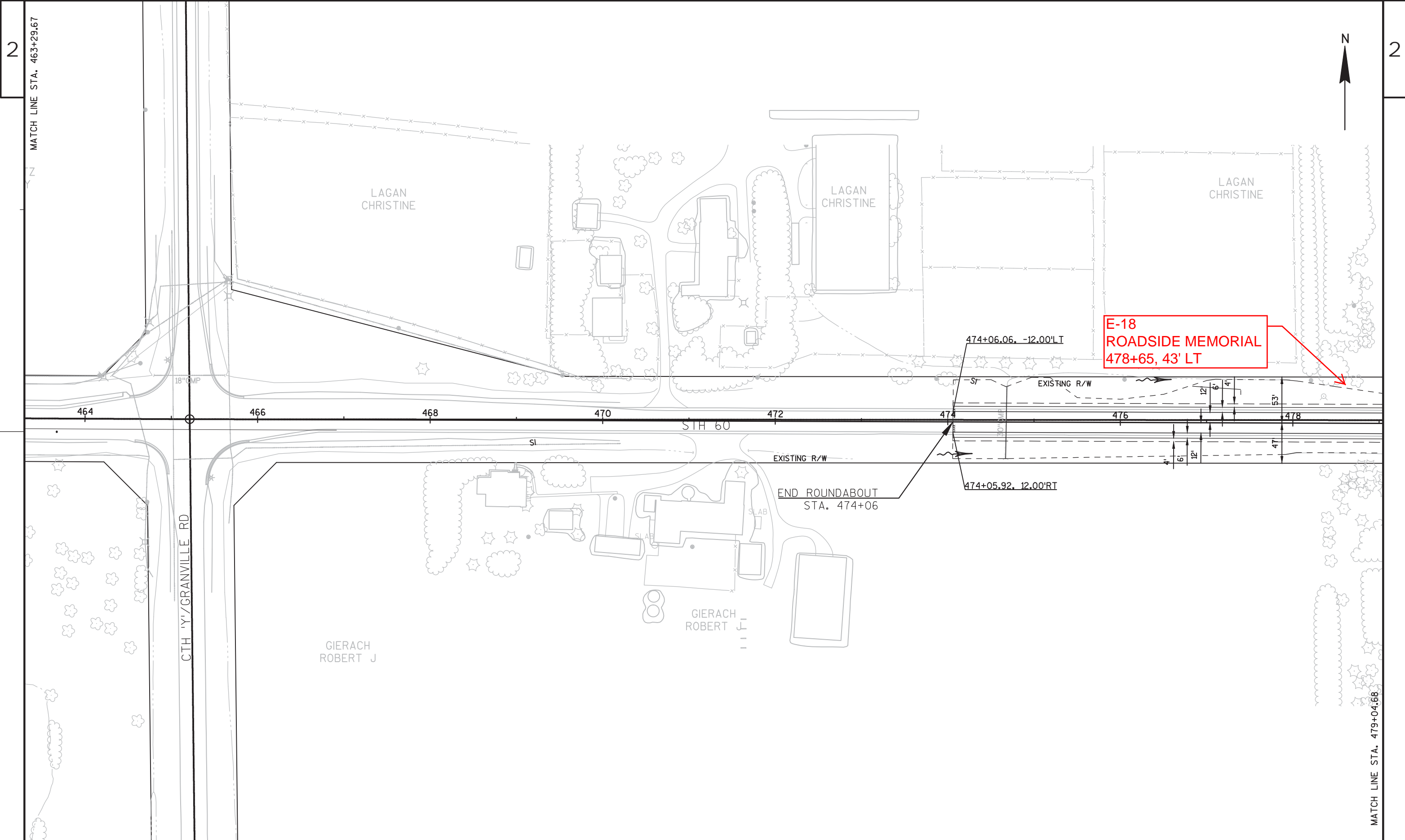
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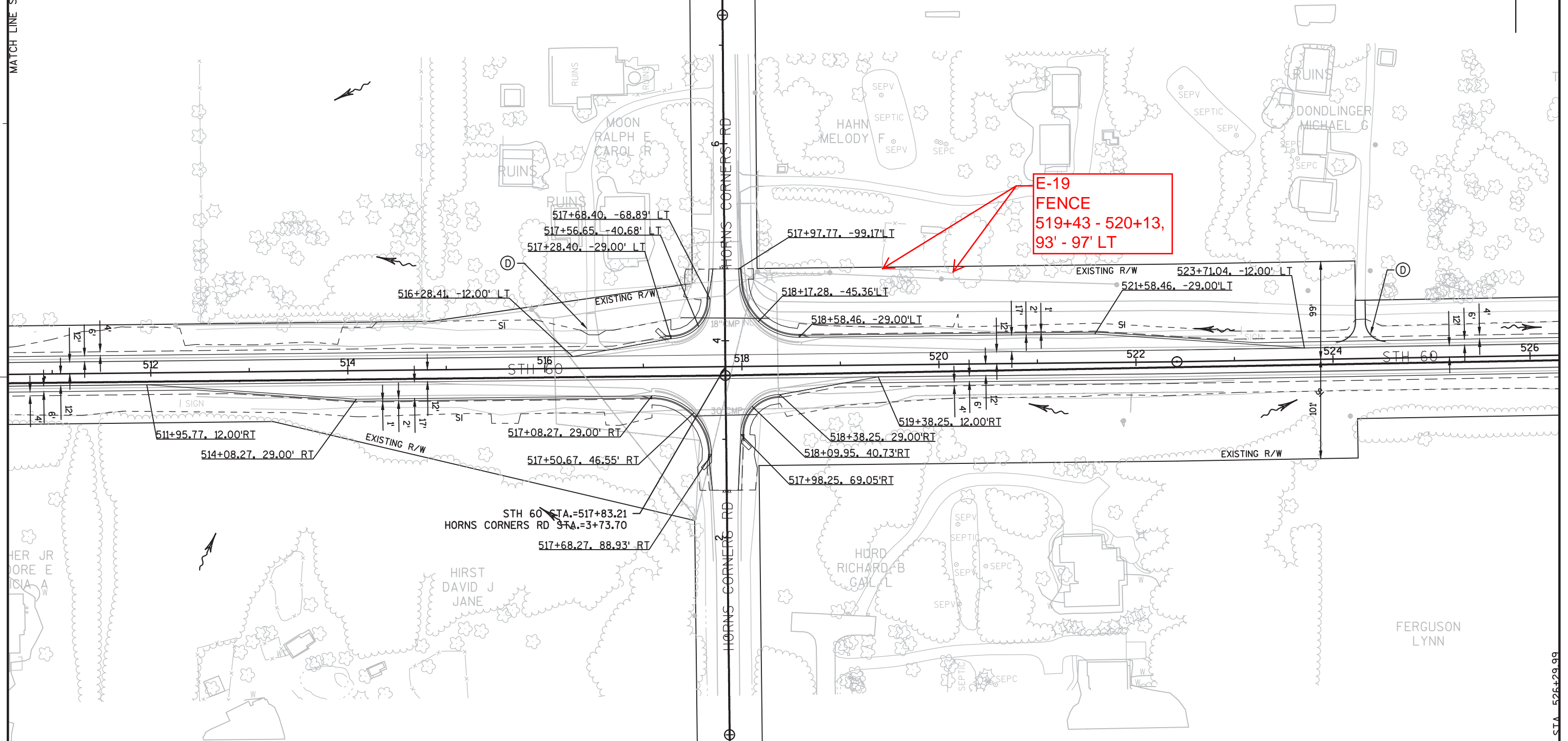
PLOT NAME :

PLOT SCALE : 1" = 100' _XREF

WISDOT/CADDs SHEET 42







Attachment E

Traffic Forecast Report

TRAFFIC FORECAST REPORT

PROJECT ID(S): 2310-00-02

ROUTE(S): STH 60

REGION/COUNTY(IES): SE/Washington

LOCATION: USH 45 to East County Line

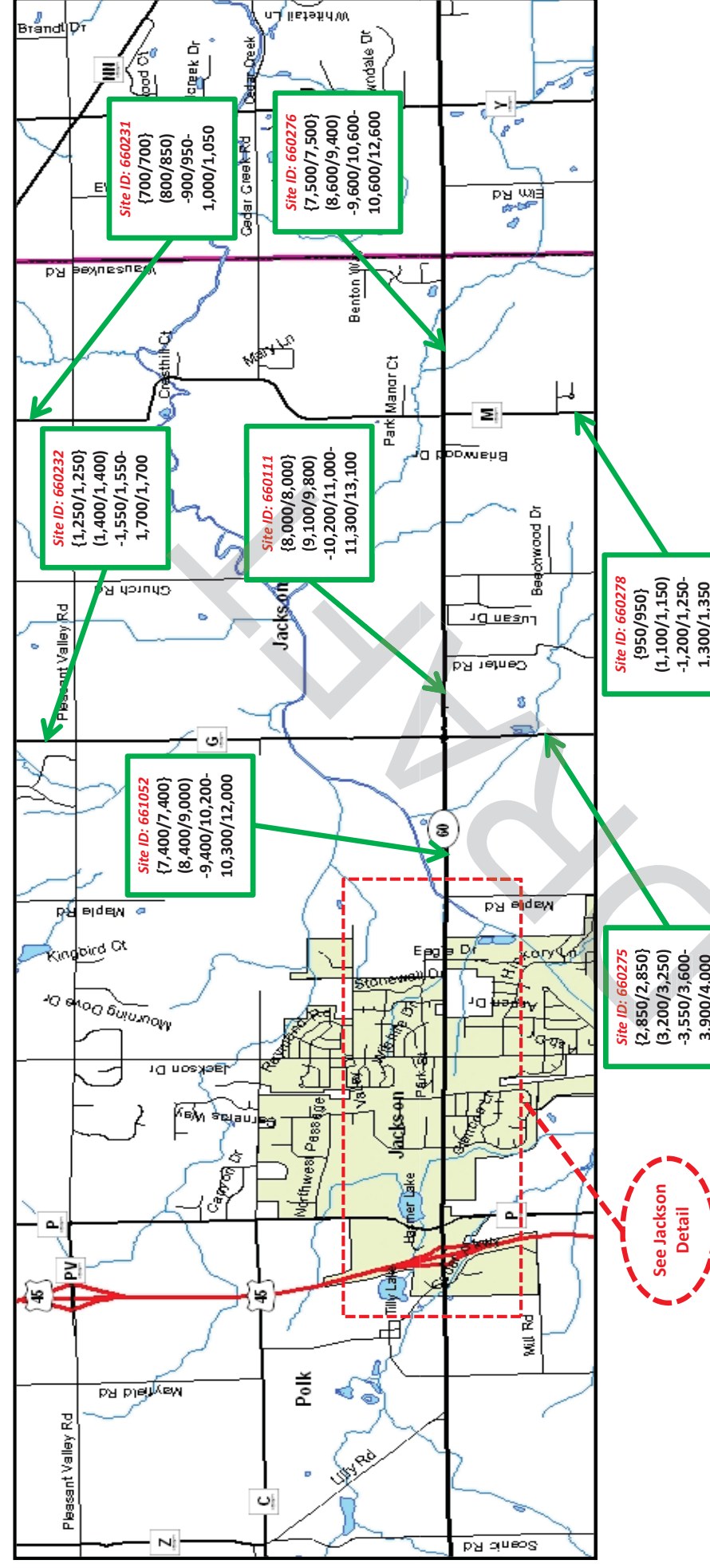
COMPLETED: November 6, 2012; Revised November 30, 2012

SCENARIO: Without/With Development Traffic

SHEET: Washington County Full Extent

Developed by: Vicki S. Haskell / Jim Harris
Phone: (608) 266-2571 / (262)-521-5455
FAX #: (608) 267-0294
E-Mail ID: vicki.haskell@dot.wi.gov /

c Forecasting Section; Bureau of Planning and Economic Development; Division of Transportation Investment Management / SE Region



Design Values (%)

Routes →	Urban - STH 60	Rural - STH 60
Design Volume(s):	34,000	17,200
K250	8.9	9.5
K100	9.7	10.0
K30	10.3	11.0
T(DHV)	4.6	4.4
D(Dsgn. Hr.)	59/41	60/40
K8(ADT)	--	--
T(A8HV)	--	--

Last Count/Forecast Years:

[000/000]	2007 AADT - Count without/with development
[000/000]	2010 AADT - Count without/with development
[000/000]	2020 AADT - without/with development
[000/000]	2030 AADT - without/with development
[000/000]	2040 AADT - without/with development

Truck Class %'s

Class	Seg. 1	Seg. 2	Seg. 3
2D	1.6	1.7	--
3AX	1.6	1.0	--
2S1+2S2	0.7	1.0	--
3-S2	1.2	1.3	--
DBL-BTM	0.3	0.2	--
TOTAL	5.4%	5.2%	--

NOTES ON THE FORECAST:

1. This projection includes traffic from the following development projects: Grafton West Subdivision, Five Corners Town Center, and Cedarburg Business Park.
2. The historical traffic count trends will continue increasing at a decreasing rate. BoxCox regression is used to project past count data.
3. Truck classification percentages were taken from a table representative of similar facilities and locations throughout the state of Wisconsin.

MORE NOTES ON THE FORECAST:

4. STH 60 between USH 45 and Maple Road, and between STH 181/CTH NN and 11th Avenue (Grafton) is a factor group II highway indicating low to moderate fluctuation in traffic throughout the year. These segments of STH 60 are classified as urban principal arterials for count purposes.
5. STH 60 between Maple Road and STH 181/CTH NN is a factor group IV highway indicating low to moderate fluctuation in traffic throughout the year. These segments of STH 60 are classified as rural minor arterials for count purposes.

TRAFFIC FORECAST REPORT

PROJECT ID(S): 2310-00-02

ROUTE(S): STH 60

REGION/COUNTY(IES): SE/Ozaukee

LOCATION: West County Line to 11th Ave

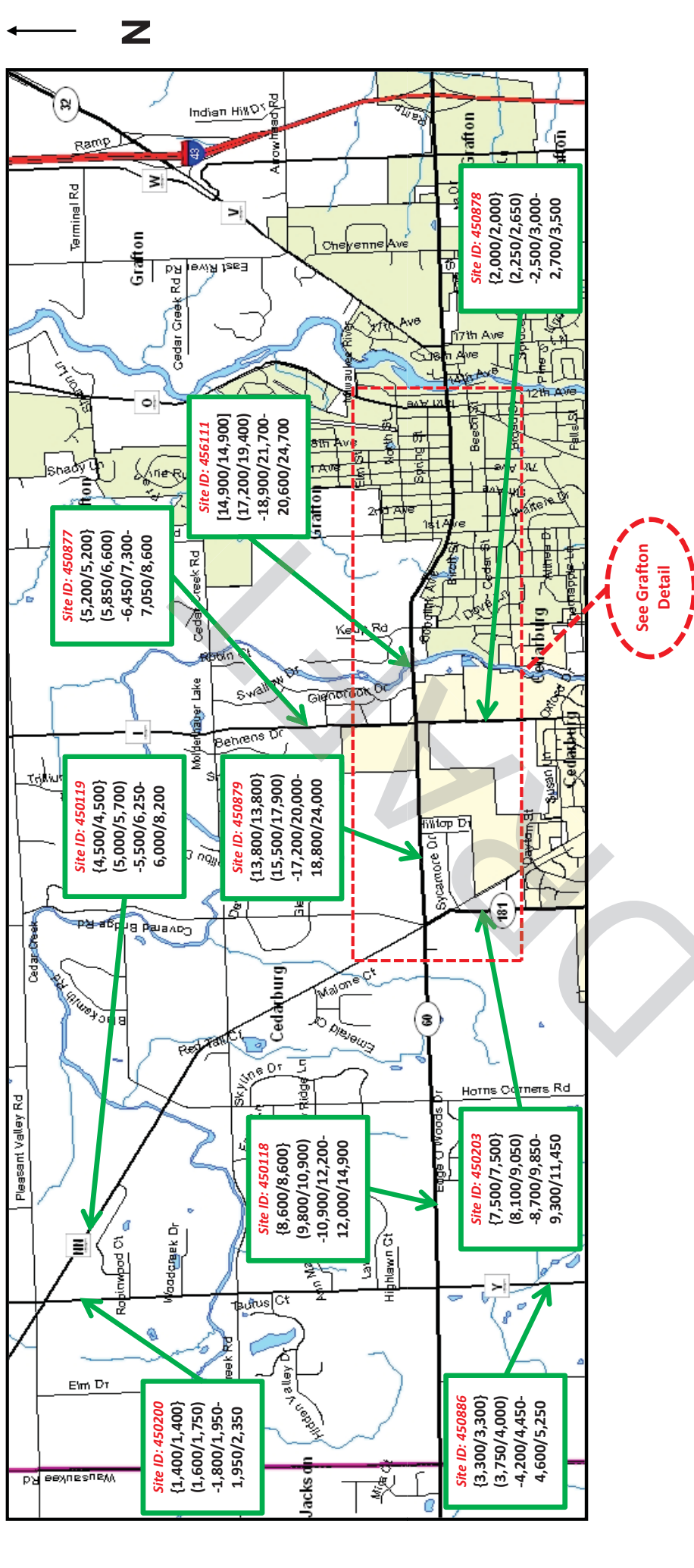
COMPLETED: November 6, 2012; Revised November 30, 2012

SCENARIO: Without/With Development Traffic

SHEET: Ozaukee County Full Extent

Developed by: Vicki S. Haskell / Jim Harris
Phone: (608) 266-2571 / (262) 521-5455
FAX #: (608) 267-0294
E-Mail ID: vicki.haskell@dot.wi.gov / jim.harris@dot.wi.gov

c Forecasting Section; Bureau of Planning and Economic Development; Division of Transportation Investment Management / SE Region



Design Values (%)			Last Count/Forecast Years:				NOTES ON THE FORECAST:	MORE NOTES ON THE FORECAST:
Routes → Design Volume(s):	Urban - STH 60	Rural - STH 60	{000/000}	2007 AADT - Count without/with development	{000/000}	2010 AADT - Count without/with development		
	34,000	17,200	--	--	--	--		
K250	8.9	9.5	--	--	--	--		
K100	9.7	10.0	--	--	--	--		
K30	10.3	11.0	--	--	--	--		
T(DHV)	4.6	4.4	--	--	--	--		
D(Dsgn. Hr.)	59/41	60/40	--	--	--	--		
K8(ADT)	--	--	--	--	--	--		
T(A8HV)	--	--	--	--	--	--		
Truck Class %'s			Seg. 1	Seg. 2	Seg. 3			
Class			2D	1.6	1.7	--		
			3AX	1.6	1.0	--		
			2S1+2S2	0.7	1.0	--		
			3-S2	1.2	1.3	--		
			DBL-BTM	0.3	0.2	--		
TOTAL			5.4%	5.2%	--	--		
1. This projection includes traffic from the following development projects: Grafton West Subdivision, Five Corners Town Center, and Cedarburg Business Park.							1. This projection includes traffic from the following development projects: Grafton West Subdivision, Five Corners Town Center, and Cedarburg Business Park.	
2. The historical traffic count trends will continue increasing at a decreasing rate. BoxCox regression is used to project past count data.								
3. Truck classification percentages were taken from a table representative of similar facilities and locations throughout the state of Wisconsin.								
4. STH 60 between USH 45 and Maple Road, and between STH 181/CTH NN and 11th Avenue (Grafton) is a factor group II highway indicating low to moderate fluctuation in traffic throughout the year. These segments of STH 60 are classified as rural minor arterials for count purposes.							4. STH 60 between USH 45 and Maple Road, and between STH 181/CTH NN and 11th Avenue (Grafton) is a factor group II highway indicating low to moderate fluctuation in traffic throughout the year. These segments of STH 60 are classified as rural minor arterials for count purposes.	
5. STH 60 between Maple Road and STH 181/CTH NN is a factor group IV highway indicating low to moderate fluctuation in traffic throughout the year. These segments of STH 60 are classified as rural minor arterials for count purposes.								

NOTES ON THE FORECAST:

- This projection includes traffic from the following development projects: Grafton West Subdivision, Five Corners Town Center, and Cedarburg Business Park.
- The historical traffic count trends will continue increasing at a decreasing rate. BoxCox regression is used to project past count data.
- Truck classification percentages were taken from a table representative of similar facilities and locations throughout the state of Wisconsin.

MORE NOTES ON THE FORECAST:

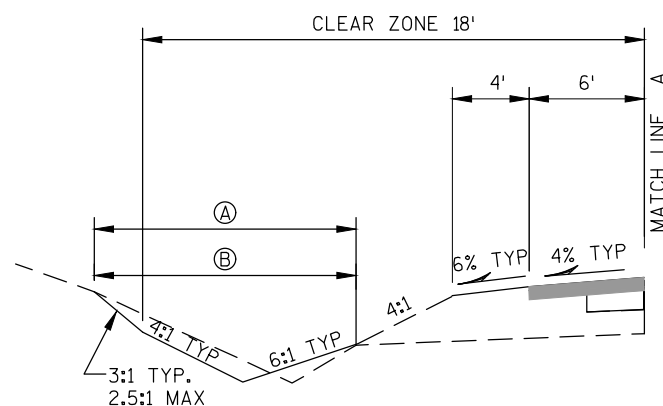
- STH 60 between USH 45 and Maple Road, and between STH 181/CTH NN and 11th Avenue (Grafton) is a factor group II highway indicating low to moderate fluctuation in traffic throughout the year. These segments of STH 60 are classified as urban principal arterials for count purposes.
- STH 60 between Maple Road and STH 181/CTH NN is a factor group IV highway indicating low to moderate fluctuation in traffic throughout the year. These segments of STH 60 are classified as rural minor arterials for count purposes.

Attachment F

Proposed Typical Sections

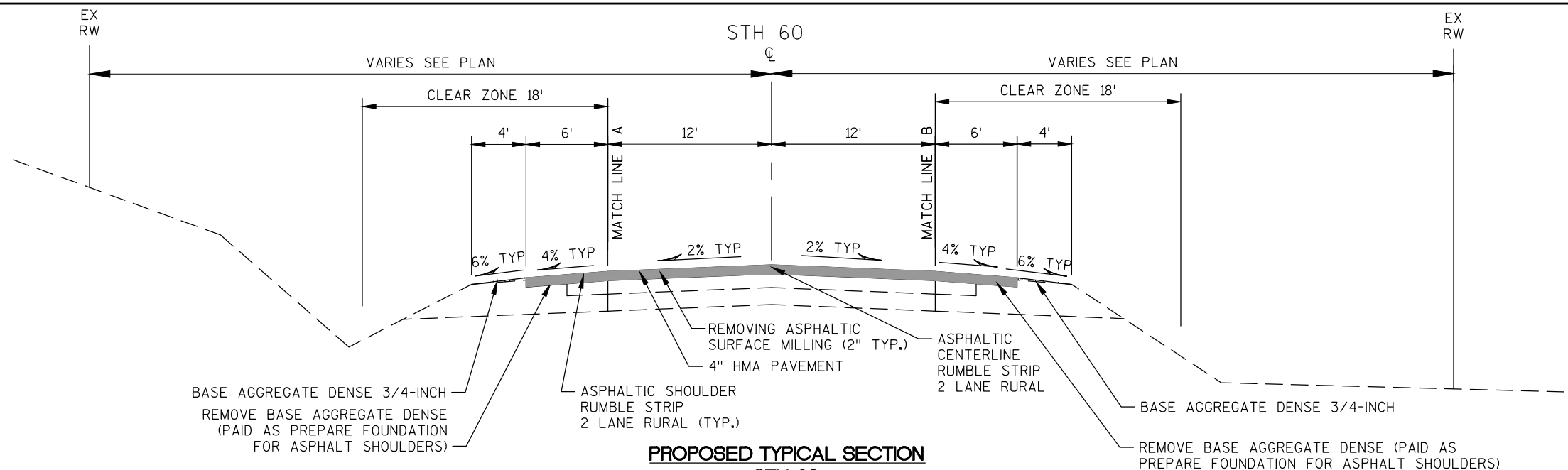


① SEEDING MIXTURE NO. 30 AND FERTILIZER
② 4" TOPSOIL AND MULCHING OR EROSION MAT AS SPECIFIED ON PLAN



DITCH GRADING

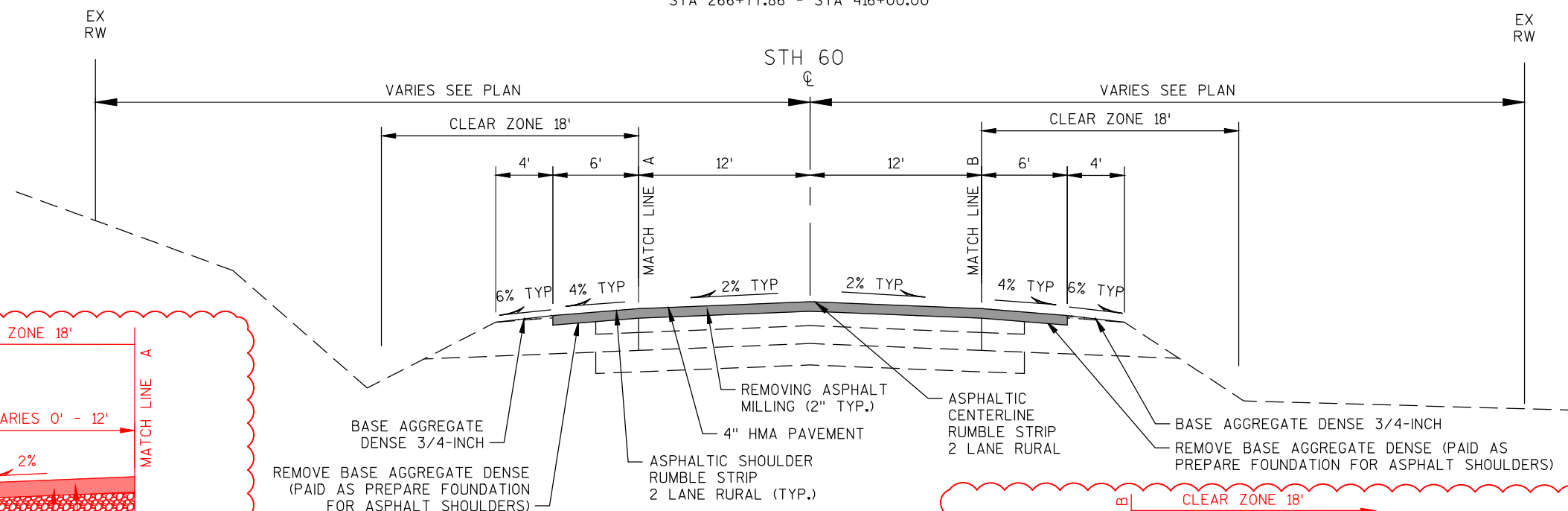
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STA 404+63 TO STA 406+57 LT
STA 515+08 TO STA 517+08 LT



PROPOSED TYPICAL SECTION

STH 60

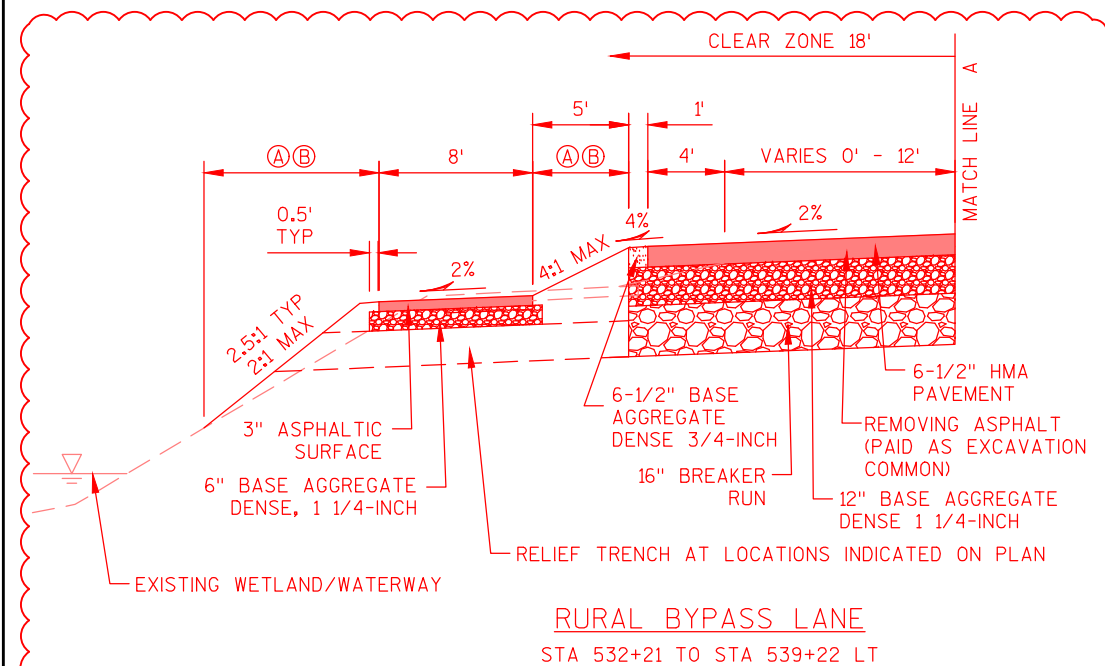
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STA 266+77.86 - STA 416+00.00



PROPOSED TYPICAL SECTION

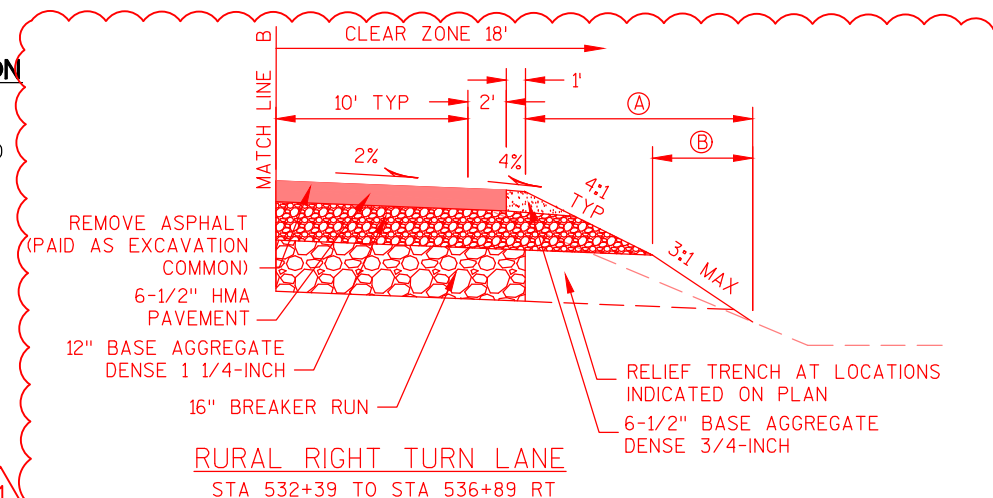
STH 60

STA 416+00.00 - STA 456+50.01
STA 473+92.67 - STA 555+40.00



RURAL BYPASS LANE

STA 532+21 TO STA 539+22 LT



RURAL RIGHT TURN LANE

STA 532+39 TO STA 536+89 RT

PROJECT NO: 2310-17-70

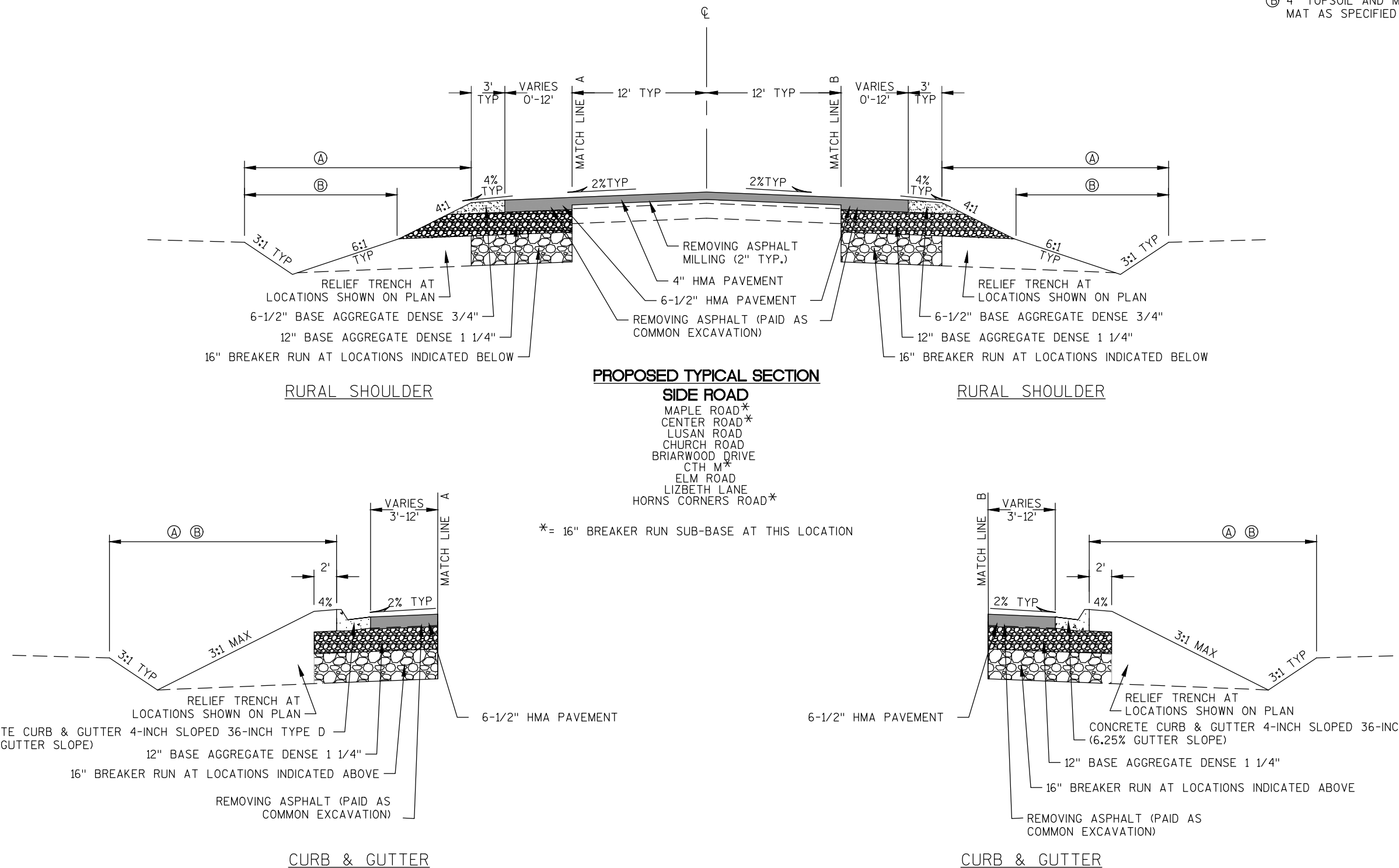
HWY:STH 60

COUNTY: WASHINGTON & OZAUKEE

TYPICAL SECTIONS

SHEET

[illegible]



Attachment G

DNR Initial Scoping Letter



April 16, 2012

Mohammad Hossain
Wisconsin Department of Transportation
141 NW Barstow Street
Waukesha, WI 53187-0798

Subject: Initial Scoping Comments for WisDOT ID: 2310-17-00, State Highway 60 Rehabilitation; Eagle Drive to STH 181, Washington and Ozaukee Counties

Dear Mr. Hossain:

Thank you for the opportunity to provide scoping comments for the State Highway 60 Rehabilitation. It is understood that the Project will include improvements to State Highway 60 from just east of Eagle Drive in the Village of Jackson, Washington County, to State Highway 181 in the Town of Cedarburg, Ozaukee County. Improvements consist of the resurfacing the mainline of STH 60, minor reconstruction of various intersections, beam guard replacement, culvert replacement/extension and shoulder reconstruction with ditch grading. The purpose of the project is to improve the condition of the pavement and safety in the corridor. I have listed Department initial review comments below.

Air

- 1) DNR recommends that the environmental analysis assess existing and projected air pollutant emissions, health risks; identify sensitive receptors, and alternatives to minimize temporary construction and long term air quality impacts. The State of Wisconsin Implementation Plan for Air Quality http://dnr.wi.gov/org/aw/air/hot/1hrsip_p2.htm establishes emission budgets for mobile sources in Wisconsin.
- 2) If the project includes structural demolition work a **Notification of Demolition and/or Renovation and Application for Permit Exemption (NR 406, 410, and 447 Wis. Adm. Code)** may be required. Please contact Mark Davis, Asbestos Specialist (414) 263-8674 to request additional information and permit application materials.

Remediation and Redevelopment/Waste and Materials Management

- 1) Properties having documented soil and groundwater contamination in the right-of-way of WIS 60 exist in the project area. A Hazardous Materials Assessment is recommended as part of the environmental project. Please coordinate with the Department in determining the extent of this contamination and minimizing the risk of encountering hazardous waste during construction. The Department can also assist in removal and disposal of hazardous wastes that cannot be avoided during construction. Please contact me for a list of properties of concern in the project area.
- 2) Should contaminated soil or groundwater be encountered within the right-of-way either before or during construction, you must notify the appropriate person in the DNR Solid Waste Section at 1-800-943-0003 prior to continuing operations.

Land

- 1) Primary and Secondary Environmental Corridors and Areas of Isolated Resources exists in the project area. The majority of the primary corridor is along Cedar Creek and Cedarburg Creek, and in the vicinity of the Jackson Swamp. Endangered resources and species habitat may exist in these corridors. See the SEWRPC website for more information on Environmental Corridors at: <http://www.sewrpc.org/regionallandinfo/regionalmapping/default.shtm>.
- 2) DNR managed lands exist in the project area. DNR initial review indicates that the acquisition of selected properties was funded by State Stewardship Grants and US Geological Survey Great Lakes Aquatic Gap Analysis Program (USGS GAP). According to Section 6(f) of the federal Land and Water Conservation (L&WC) Act, lands acquired with L&WC funds that are taken by a highway project must be replaced with other property of equal market value and equivalent usefulness and location. Please discuss land conversion requirements with the Department if these properties will be impacted by the WIS 60 project.
- 3) DNR managed trails intersect STH 60 near Cedar Creek in Washington County, near Horns Corners Road in Ozaukee County, at the Five Corners intersection, and near County Highway O in Grafton. Any construction impacts on the trails shall be replaced at or above current condition.

Water

- 1) The WIS 60 project area is located in the Cedar Creek Watershed and the Milwaukee River South Watershed. These watersheds are in the Milwaukee River Basin. Detailed basin reports can be found at: <http://dnr.wi.gov/water/basin/milw/index.htm>
- 2) The project area crosses Cedar Creek and Cedarburg Creek. In addition, several unnamed tributaries to these creeks also intersect the STH 60 corridor. Existing culverts and/or bridges need to be assessed as well as temporary or permanent alterations to the water crossings that may be necessary due to proposed construction.
- 3) Channel stability and fish and wildlife passage should be standard design and construction objectives for any bridge or culvert replacements or extensions.
- 4) Wetlands are present in the project area. DNR initial review finds wetland classifications in the project area to include:
 - Southern Messic Forest
 - Harwood Swamp
 - Southern Hardwood Swamp
- 5) Wetland impacts should be avoided or minimized. Wetland impacts that can not be avoided should be addressed through the DNR-DOT Cooperative Agreement process and compensatory mitigation plans need to be arranged. A Section 404 permit may be necessary from the U.S. Army Corps of Engineers.
- 6) Storm water facilities and erosion control best management practices should be designed to meet Trans 401 standards. Coordinate with local municipalities on designing stormwater facilities.

Endangered Resources

- 1) State endangered species have been observed recently in the project area. Please coordinate with the Department on laws pertaining to these species and to identify the presence of and minimize impacts to these species. An Endangered Resources Incidental Take Authorization permit (Wis. Stats 29.604) may be needed for work in species' habitat. These species include:

Regina septemvittata (Queesnake)
Villosa iris (Rainbow Shell Mussel)
Luxilus chrysocephalus (Striped Shiner Fish)

- 2) State threatened species are present in the project area. Please coordinate with the Department to identify the presence of and minimize impacts to these species. These species include:

Lythrurus umbratilis (Redfin Shiner Fish)
Moxostoma valenciennesi (Greater Redhorse Fish)
Venustaconcha ellipsiformis (Ellipse Mussel)

- 1) DNR and DOT should discuss endangered resources occurrences in the large project area and determine if specific field surveys or investigations are needed.

Thanks again for the opportunity to provide scoping comments for the project of the State Highway 60 Rehabilitation Eagle Drive to STH 181, Washington and Ozaukee Counties. I would be glad to speak or meet with you to discuss the Department's comments and provide additional information.

Sincerely,

Kristina Betzold

Kristina Betzold
Environmental Analysis and Review Specialist
(414) 263-8517
kristina.betzold@wiscosin.gov

Cc: Rachel Tranel, Collins Engineering
Karla Leithoff, WDOT
Scott Lee, WDOT

Attachment H

TMP Documentation and Request for Approval Form

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: SE
Local Program: No
Created Comment: Created from Scratch. User comment: FIIPS Link search option did not find ID

Design ID: 2310-17-00
Project Title: Eagle Drive to STH 181
County: OZAUKEE
Highway: WIS 60

Construction ID: 2310-14-70
Project Type: Reconstruction
Project Limits: STH 60/CTH Y Intersection
Project Length: 0.33 Mile(s)
Project Duration: 90 Day(s)
Engineer's Estimate: \$1M-3M
PS&E Date: 05/01/2019
LET Date: 09/10/2019
NHS Route: No
AADT: 8600
AADT Year: 2015
Federal Oversight: No

Construction ID: 2310-17-70
Project Type: PE/Resurface
Project Limits: Eagle Drive to STH 181
Project Length: 6.6 Mile(s)
Project Duration: 270 Day(s)
Engineer's Estimate: \$3M-10M
PS&E Date: 05/01/2019
LET Date: 09/10/2019
NHS Route: No
AADT: 8600
AADT Year: 2015
Federal Oversight: No

1B. Project Impacts:

Anticipated Begin: 03/2020
Anticipated End: 11/2020
Delay: Moderate
OSOW Route: No

1C. Location:

Highway

Begin County: WASHINGTON
End County: OZAUKKEE
Highway: WIS 60 EB
Begin Landmark: EAGLE DR | WIS 60 EB | WASHINGTON
Direction From: E
Distance From: 0.1 Mile(s)
End Landmark: WIS 181 NB | WIS 60 EB | OZAUKKEE
Direction From: W
Distance From: 0.2 Mile(s)

2. Brief description of work activities.

The roadway can no longer be economically maintained and needs resurfacing. The proposed improvement would be a 12' lane with 6' paved shoulder and 4' gravel shoulder on both sides to accommodate bicycles. The intersection of STH 60 & CTH Y will be reconstructed as a roundabout. The remaining intersections will be brought up to current WisDOT rural standards with 12' bypass lanes and 12' right turn lanes. The bridge over Cedar Creek (B-66-92) will be widened and will have a concrete overlay along with other repairs.

3. Briefly describe the staging planned for maintaining traffic.

Construction will occur along STH 60 from a point east of Eagle Drive (STA 188+60) to a point west of Washington Ave/STH 181 (STA 555+40). STH 60 will be closed to through traffic during this time. Traffic will be detoured north around the Village of Jackson along CTH P, to CTH NN all the way to STH 60. Emergency and local access will be maintained at all times.

Through traffic will be maintained on CTH G crossing STH 60. Only local cross traffic will be maintained on the other cross streets - CTH M, CTH Y & Horns Corners Rd. The local streets / CTH's will not have signed detour routes.

Due to the length of the project, the following construction staging is recommended in order to provide efficient and consistent access for local and emergency traffic:

Stage 1:

Construction will occur in the westbound lane & shoulder. Emergency and local access will be

maintained on the existing eastbound lane & shoulder.

Stage 2:

Construction will occur in the eastbound lane & shoulder. Emergency and local access will be maintained on the new westbound lane & shoulder.

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

☐ Yes ☒ No

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?

Local access within the work site will be maintained at all times. Through traffic will be detoured around the work zone. The only existing bicycle or pedestrian facility on the project is a 10' wide asphalt multi-use trail located along the north side of STH 60 from Horns Corner Rd to the east project limits. The trail will not be impacted by construction.

b) Is access to bus stops affected?

☐ Yes ☒ No

6. Will the project have lane closures?

☐ Yes ☒ No

7. Please provide the following.

a) Minimum lane width to be maintained.

10' lane width will be provided for local traffic only. Through traffic will be detoured.

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

N/A

c) Minimum height (if less than typically available)

No height restrictions within project limits.

8. Will the project be detoured?

☒ Yes ☐ No

a) Explain length of detour, travel times, improvements required for signal timing, surface and shoulder conditions, capacity, etc

The detour route will increase the length travelled from 9 miles to 13 miles. Free flow travel time along STH 60 is 11 minutes, free flow travel time along the detour route is 15 minutes, and peak hour travel time along the detour route is 18 minutes, using HCM 2000 Equation 20-5 to determine an average

travel speed of 44 mph during peak hour. Travel times are the same for EB & WB.

Signal timing changes are recommended at the intersection of STH 60 & CTH P and at the intersection of STH 60 & STH 181/CTH NN.

Existing pavement along the detour route is in good condition. Patching/overlay work is not anticipated as a result of the detour traffic.

Roadway capacity along the detour route is adequate to accommodate the increase in traffic.

There are two existing roundabouts located on the detour route at the intersections of CTH P & CTH PV and CTH P & CTH NN. There is one proposed roundabout located on the detour route at the intersection of CTH NN & CTH G, currently scheduled for 2018 construction. The three roundabouts were checked for a WB-65 design vehicle and OSOW-MT check vehicles (WB-92 & 80' mobile home) in both travel directions of the signed detour route. All three roundabouts can accommodate the WB-65 design vehicle. All three roundabouts can accommodate OSOW-MT vehicles, except for CTH P & CTH NN, which cannot accommodate a WB-92 in either direction of travel.

b) Are there width and height restrictions on the detour?

☐ Yes ☒ No

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

STSP 107-005 will be used to prohibit hauling on STH 60 & STH 181 during the following holiday periods:

Noon Friday, May 22, 2020 to 6 AM Tuesday, May 26, 2020 (Memorial Day).

Noon Friday, July 3, 2020 to 6 AM Monday, July 6, 2020 (4th of July).

Noon Friday, September 4, 2020 to 6 AM Tuesday, September 8, 2020 (Labor Day).

The special provisions will state that STH 60 is to be re-opened to through traffic by Friday, 11/20/2020 (prior to deer hunting & Thanksgiving).

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).

Motorist delays were estimated by using HCM 2000 Equation 20-5 to determine the average travel speed along the detour route, then compare it to the existing travel times along STH 60.

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.

The anticipated travel delay will range from 4 minutes in free flow conditions to 7 minutes during peak travel periods. FDM 11-50-30 only applies to traffic being routed through a work zone. Since traffic is being detoured around the work zone, HCM 2000 Equation 20-5 was used to determine the average travel speed along the detour route.

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

Traffic will be detoured north around the Village of Jackson along CTH P, to CTH NN, all the way to STH 60. Detour signing will be provided in accordance with SDD "Detour Signing for Mainline Closures".

Additional permanent signing to USH 45 will be provided on CTH P approaching CTH PV to aide drivers attempting to find their way back to USH 45.

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

15. Does the project affect other regions/states?

☐ Yes ☒ No

16. Check mitigation strategies planned

STRATEGY

☒ Public information campaigns

☐ Off-peak lane closures

☐ Temporary widening to maintain traffic lanes

☒ Changeable message signs (PCMS)

☐ Ramp closures

COMMENTS

Two PI meetings will be held - one in early 2015 and one prior to the PS&E date.

PCMS signs will be installed 5 days in advance of the STH 60 road closure.

- | | |
|--|--|
| <input checked="" type="checkbox"/> Temporary signals/timing revisions | Timing changes are recommended at STH 60 & CTH P and STH 181 & STH 60. |
| <input checked="" type="checkbox"/> Coordination with adjacent projects | Coordination will be needed with the construction of the CTH Y roundabout (Project ID 2310-14-70) as construction will be occurring during the detour. |
| <input type="checkbox"/> Innovative contracting, (lane rental, A+B, etc) | |
| <input type="checkbox"/> Temporary Emergency Pullouts | |
| <input type="checkbox"/> Motorist service patrols | |
| <input type="checkbox"/> Nighttime Work | |
| <input type="checkbox"/> Enhanced Traffic control devices
(Wet reflective pavement marking, temp concrete barrier, etc) | |
| <input type="checkbox"/> 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).

Two public information meetings will be held - one in early 2015 and one prior to the PS&E date.

18. Describe incident management strategies planned.

Law enforcement agencies including police, fire, and EMS will be invited to the PIM and will be updated during construction. Emergency access will be maintained at all times.

19. Describe how transit impacts will be mitigated.

Not applicable to this project.

Attachments:

Attachments for TMP ID 1576 are listed below.

- [f] 2310-14-00_010101_ti.pdf
- [f] 2310-14-00_staging overview.pdf
- [f] 2310-17-00_010101_ti.pdf
- [f] 2310-17-00_020201_po.pdf
- [F] Signed Detour Proposals
 - [f] Ozaukee County.pdf
 - [f] Town of Cedarburg.pdf
 - [f] Town of Jackson - Detour Proposal.pdf
 - [f] Town of Trenton.pdf
 - [f] Village of Jackson.pdf
 - [f] Washington County.pdf
- [f] 2310-17-00_025001-tc.pdf
- [f] 2310-17-00_027001-dt.pdf
- [f] STH 60 PIOP.pdf
- [f] STH 60 TOP.pdf

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

Approvals:

Attachment I

Roadside Hazard Analysis

Roadside Hazard Analysis

Project I.D. 2310-17-00

Entered by: Kevin Weighner

Checked by: _____

Speed (MPH) = 55 (Posted) / 60 (Design)

AADT = 7,400 – 8,600 (2007);

10,300 – 12,000 (2040)

Alignment = STH 60

Hazard ID	Station or Stations	Offset (ft)	L/R	Total length of hazard FT	Description	Action	Discussion
1	200+87	14'	R	393'	Beam guard	Replace with B-66-92 reconstruction	Has short radius terminal instead of EAT (undesirable for speeds >45 MPH)
2	206+03	15'	L	1167'	Beam guard	Replace with B-66-92 reconstruction	Has short radius terminal instead of EAT
3	232+90	15'	R	167'	Beam guard	Extend beam guard & add EAT	Has short radius terminal instead of EAT; runout length is inadequate
4	234+22	15'	L	116'	Beam guard	Extend beam guard & add EAT	Has short radius terminal instead of EAT; runout length is inadequate
5	333+65 – 334+10	18'	R	45'	Grading	Extend culvert pipe & flatten slope	Parallel slope is too steep at driveway (existing 3:1). Max is 6:1
6	335+25	18'	R	15'	Grading	Extend culvert pipe & flatten slope	Parallel slope is too steep at driveway (existing 3:1)
7	366+34	17'	L	153'	Beam guard	Replace with beam guard meeting current standards (shorter post spacing, EAT, short radii at driveways)	Does not have EAT, obstructions located in runout area, retaining wall does not allow enough deflection behind beam guard

Hazard ID	Station or Stations	Offset (ft)	L/R	Total length of hazard FT	Description	Action	Discussion
8	366+36	18'	L	1'	Utility junction box	Relocate behind proposed beam guard	Box will be located in front of proposed beam guard short radius.
9	391+13	18'	R	1'	Wood pole	Relocate	Will coordinate with Wisconsin Bell
10	397+26	15'	R	141'	Beam guard	Extend beam guard & add EAT	Has short radius terminal instead of EAT; inadequate runout length
11	398+67	15'	L	141'	Beam guard	Extend beam guard & add EAT	Has short radius terminal instead of EAT; inadequate runout length
12	397+97	16'	L/R	18'	Box culvert	None	Shielded. Drop-off is past beam guard deflection zone.
13	407+85	11'	R	1'	Utility junction box	Relocate outside clear zone	Will coordinate with Ameritech
14	409+99	15'	R	1'	Wood marker post for culvert pipe	Replace with flexible marker post	Post is not designed to breakaway and poses a safety hazard
15							
16							
17							

Roadside Hazard Analysis

Project I.D. 2310-17-00

Entered by: Kevin Weighner

Speed (MPH) = 45 (Posted)

Checked by: _____

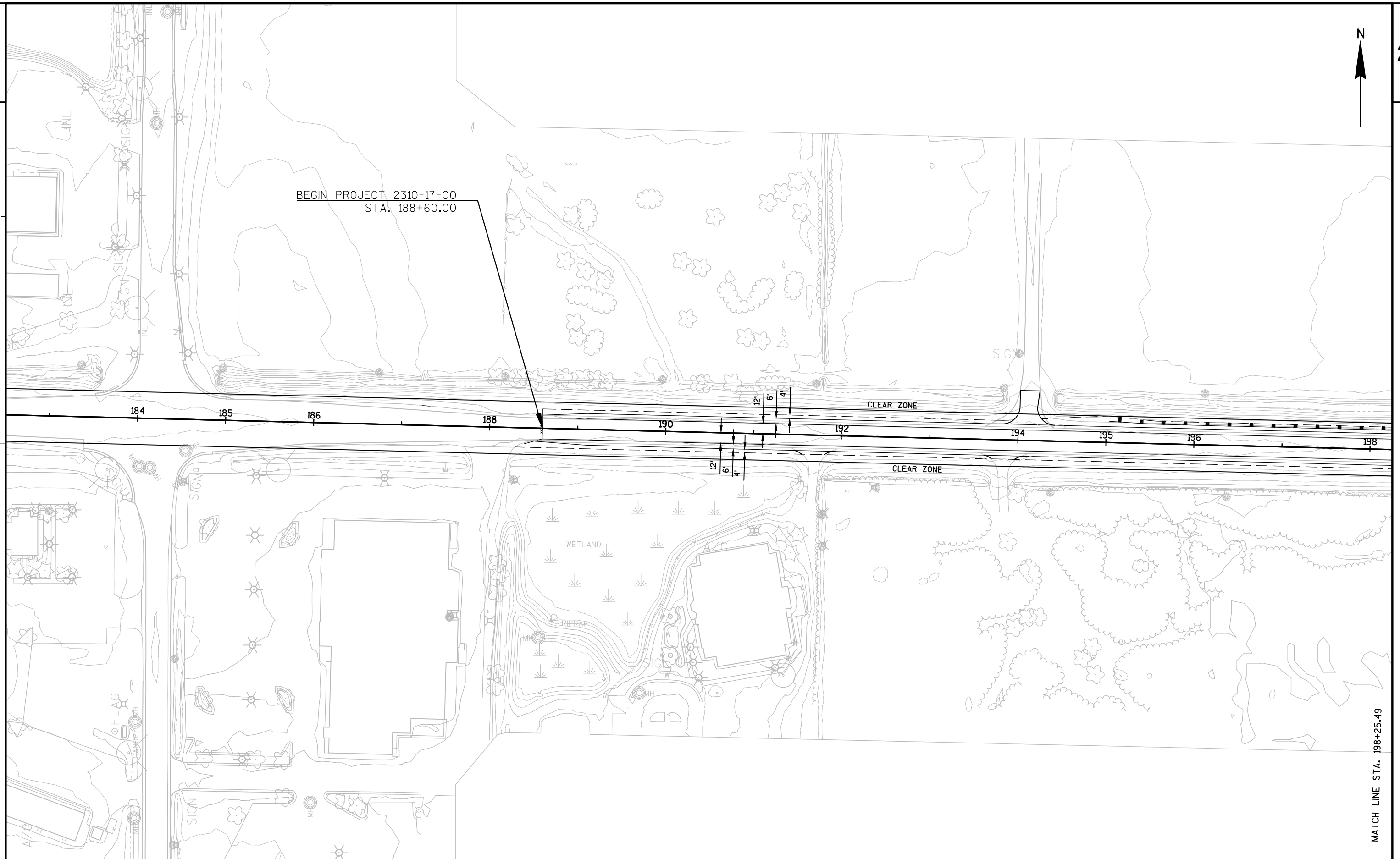
AADT = 950 (2007); 1,300 (2040)

Alignment = CTH M

Hazard ID	Station or Stations	Offset (ft)	L/R	Total length of hazard FT	Description	Action	Discussion
1	48+59	13'	L	1'	Wood pole	Relocate	Will coordinate with We Energies
2							
3							
4							
5							
6							
7							
8							
9							

2

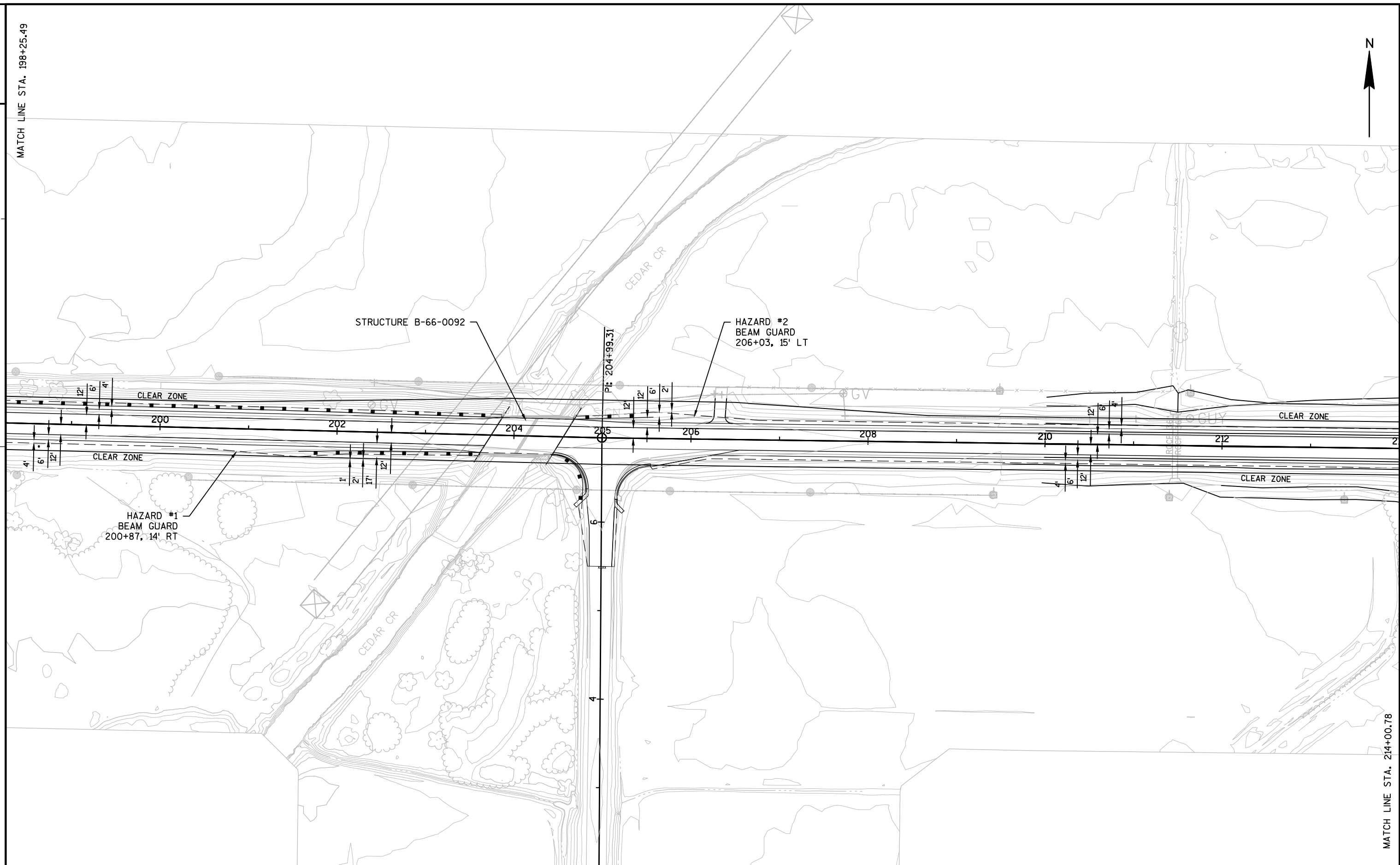
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PROJECT NO:2310-17-00	HWY:STH 60	COUNTY:WASHINGTON & OZAUKEE	PLAN DETAILS	SHEET 1	E
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2

STA. 198+25.49



2

MATCH LINE STA. 214+00.78

PROJECT NO: 2310-17-00

HWY: STH 60

COUNTY: WASHINGTON & OZAUKEE

PLAN DETAILS

SHEET	2
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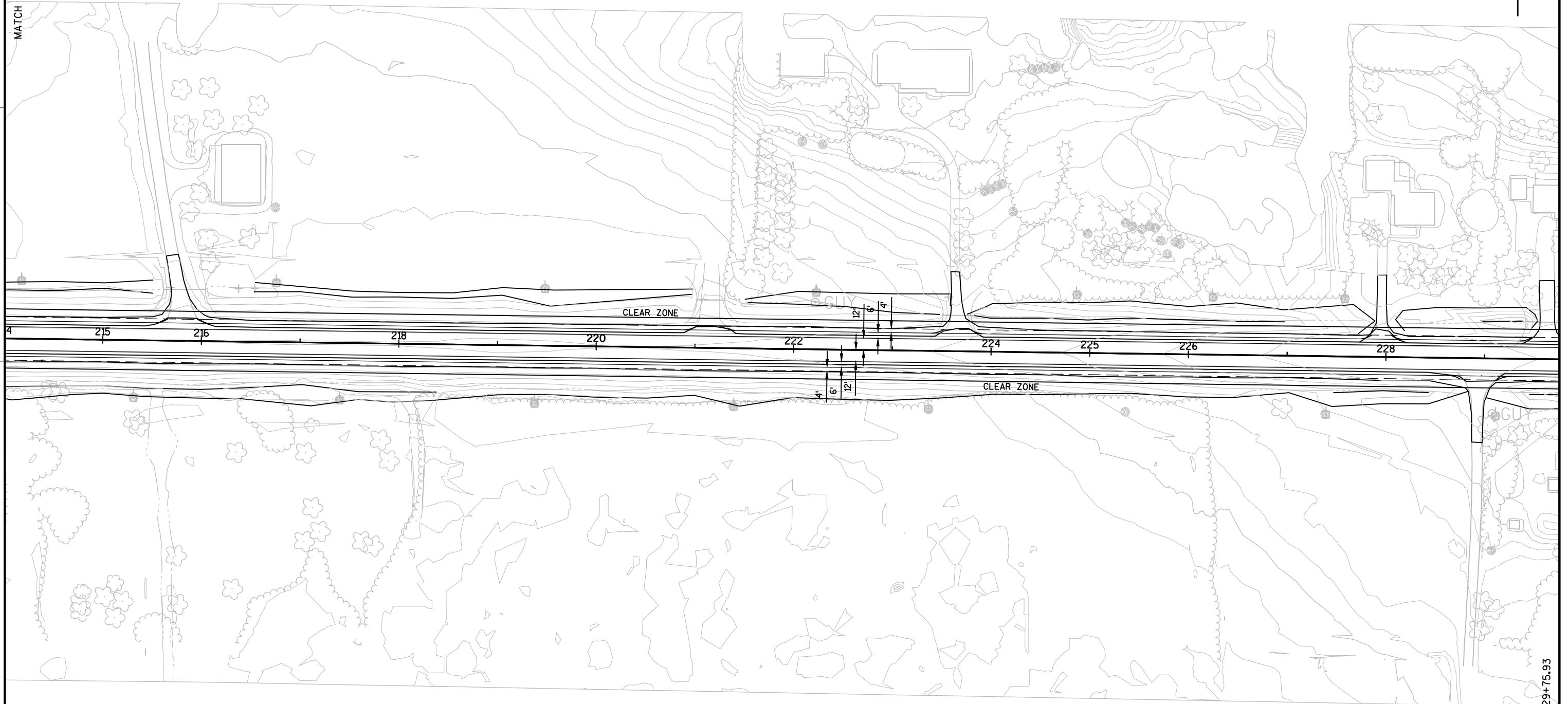
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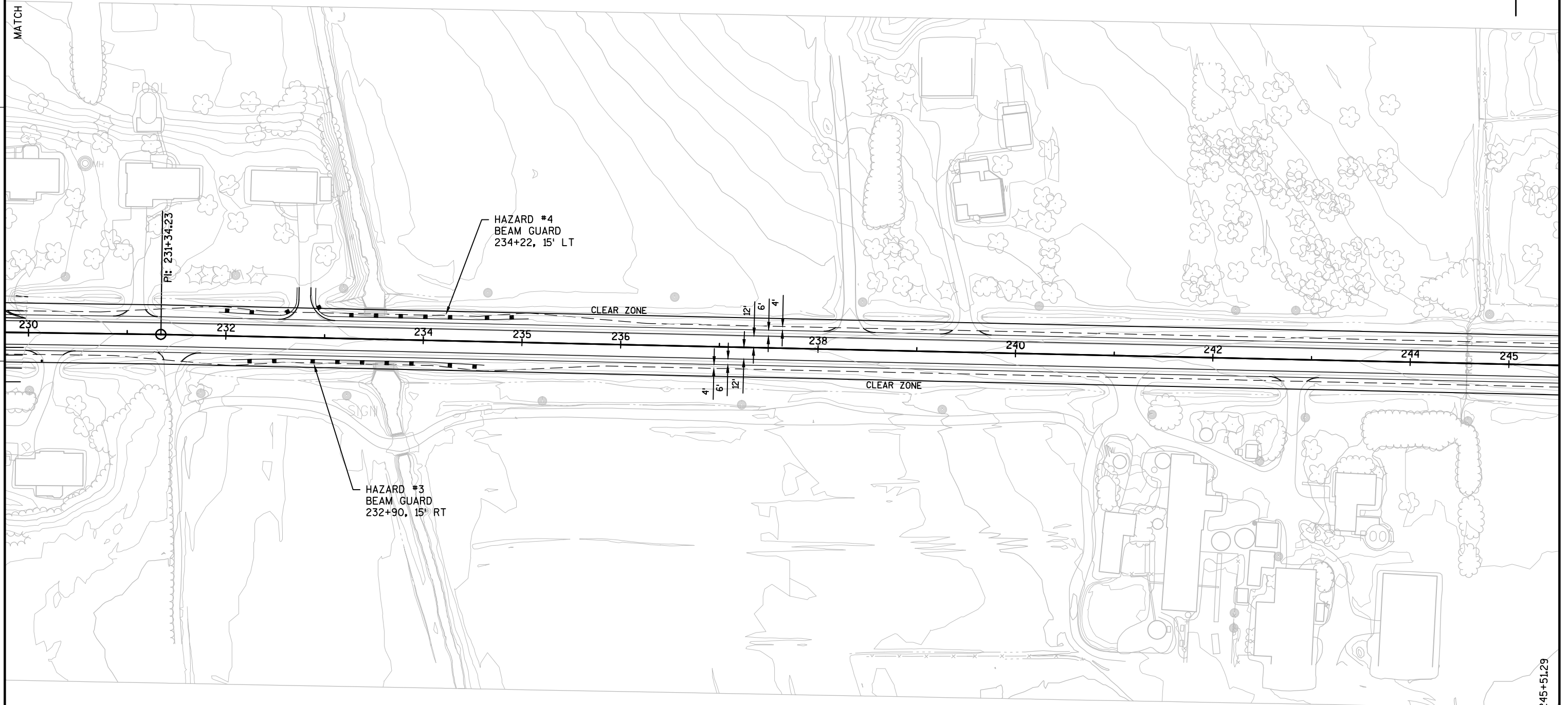
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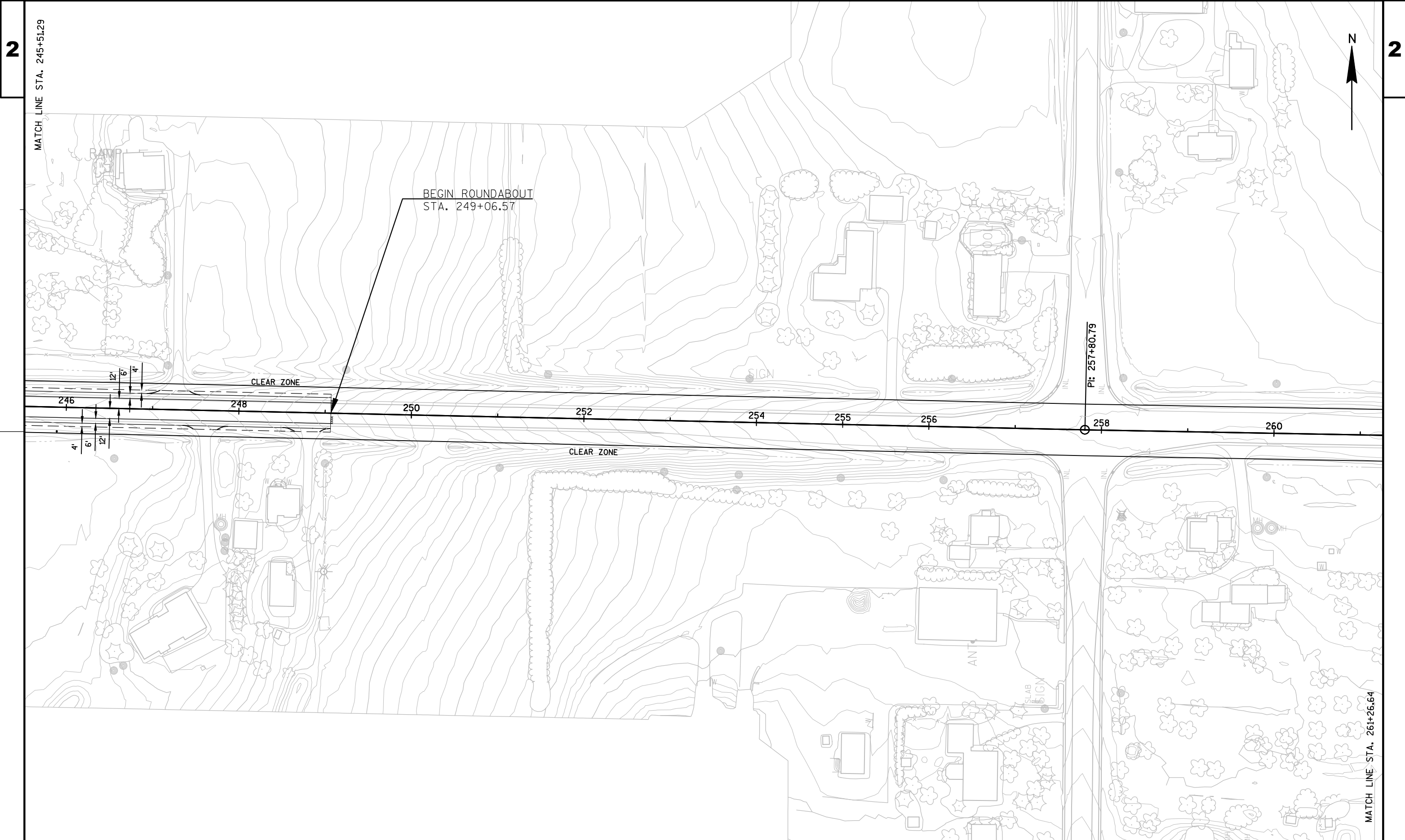
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PROJECT NO:2310-17-00

HWY:STH 60

COUNTY:WASHINGTON & OZAUKEE

PLAN DETAILS

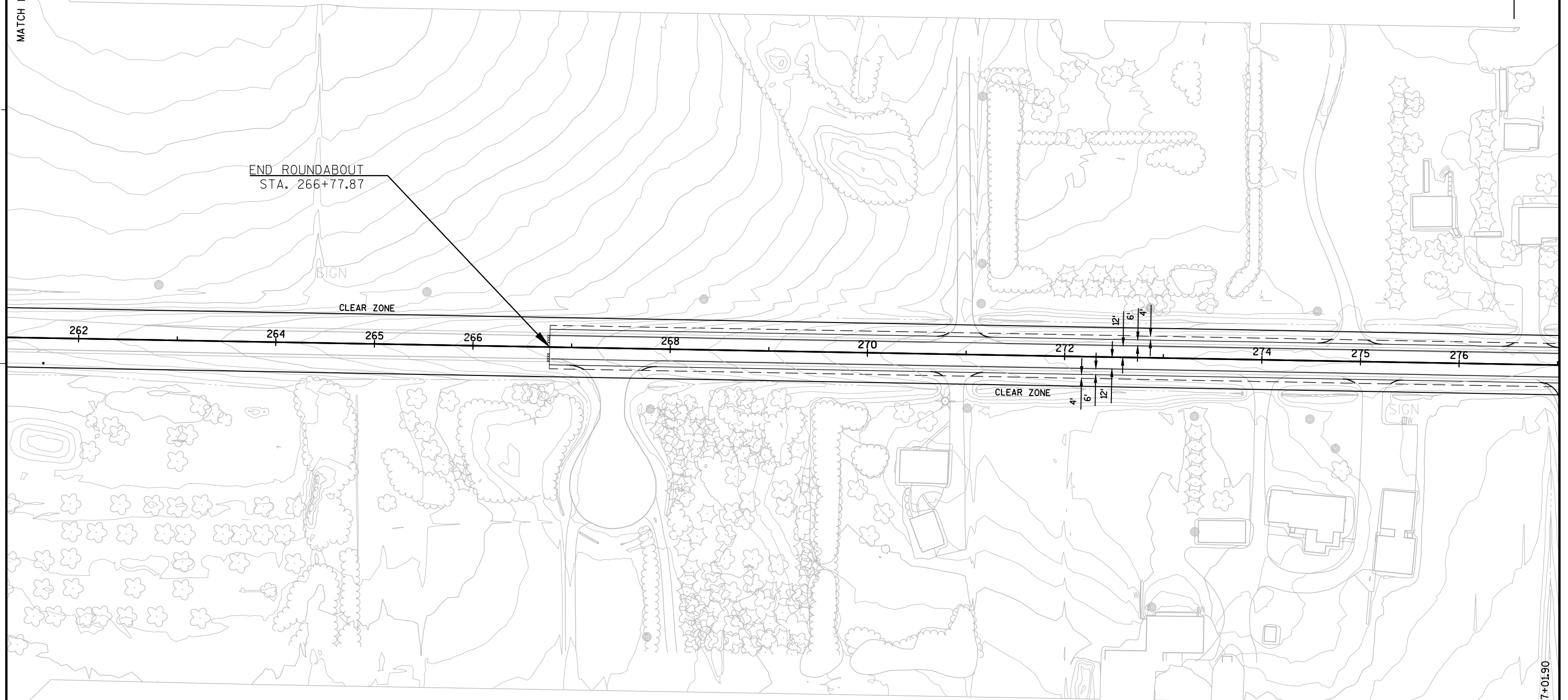
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5

E

2

MATCH LINE STA. 261+26.64



MATCH LINE STA. 277+01.90

2

PROJECT NO:2310-17-00

HWY:STH 60

COUNTY:WASHINGTON & OZAUKEE

PLAN DETAILS

SHEET

6

E

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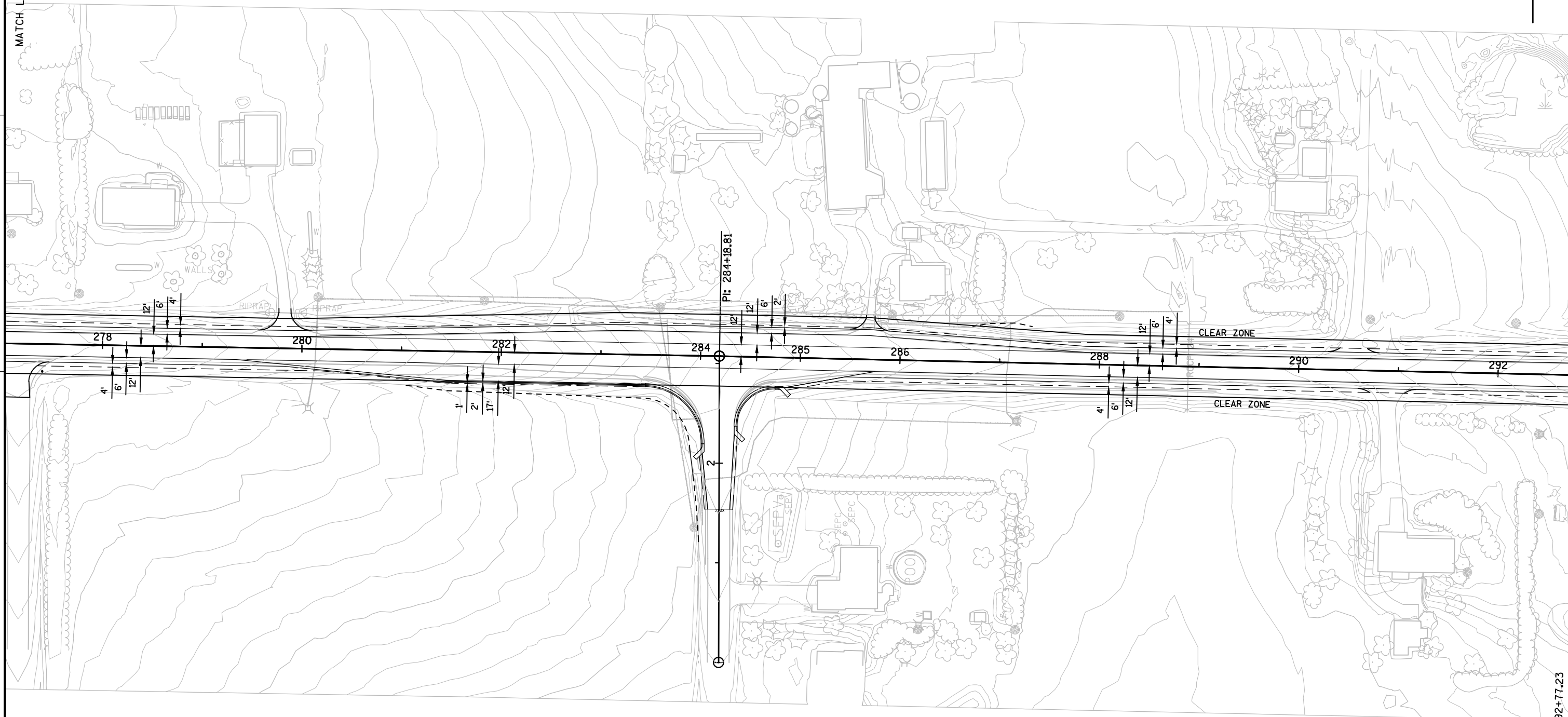
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WISDOT/CADDs SHEET 42

2

MATCH LINE STA. 277+01.90



MATCH LINE STA. 292+77.23

2

PROJECT NO:2310-17-00

HWY:STH 60

COUNTY: WASHINGTON & OZAUKEE

PLAN DETAILS

SHEET

7

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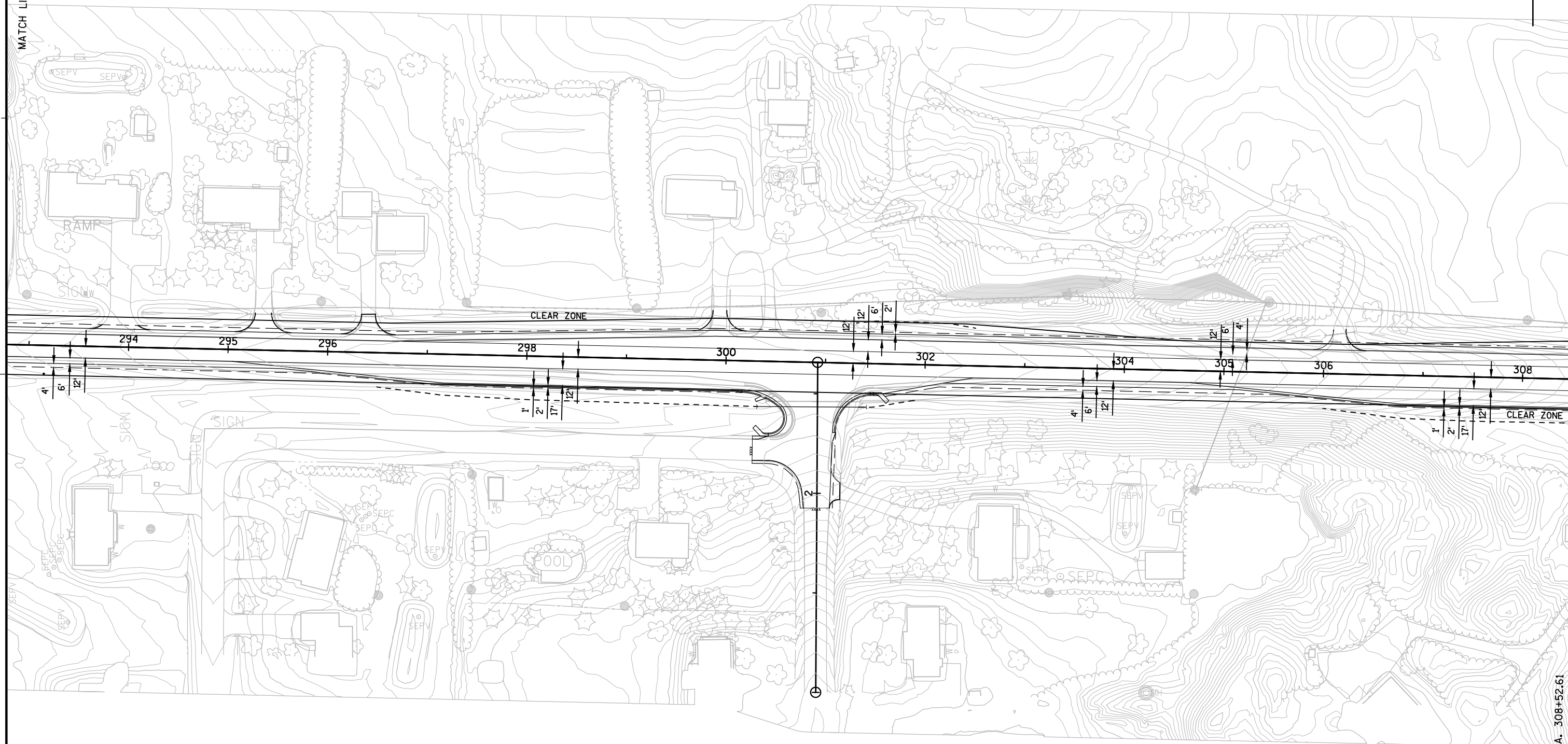
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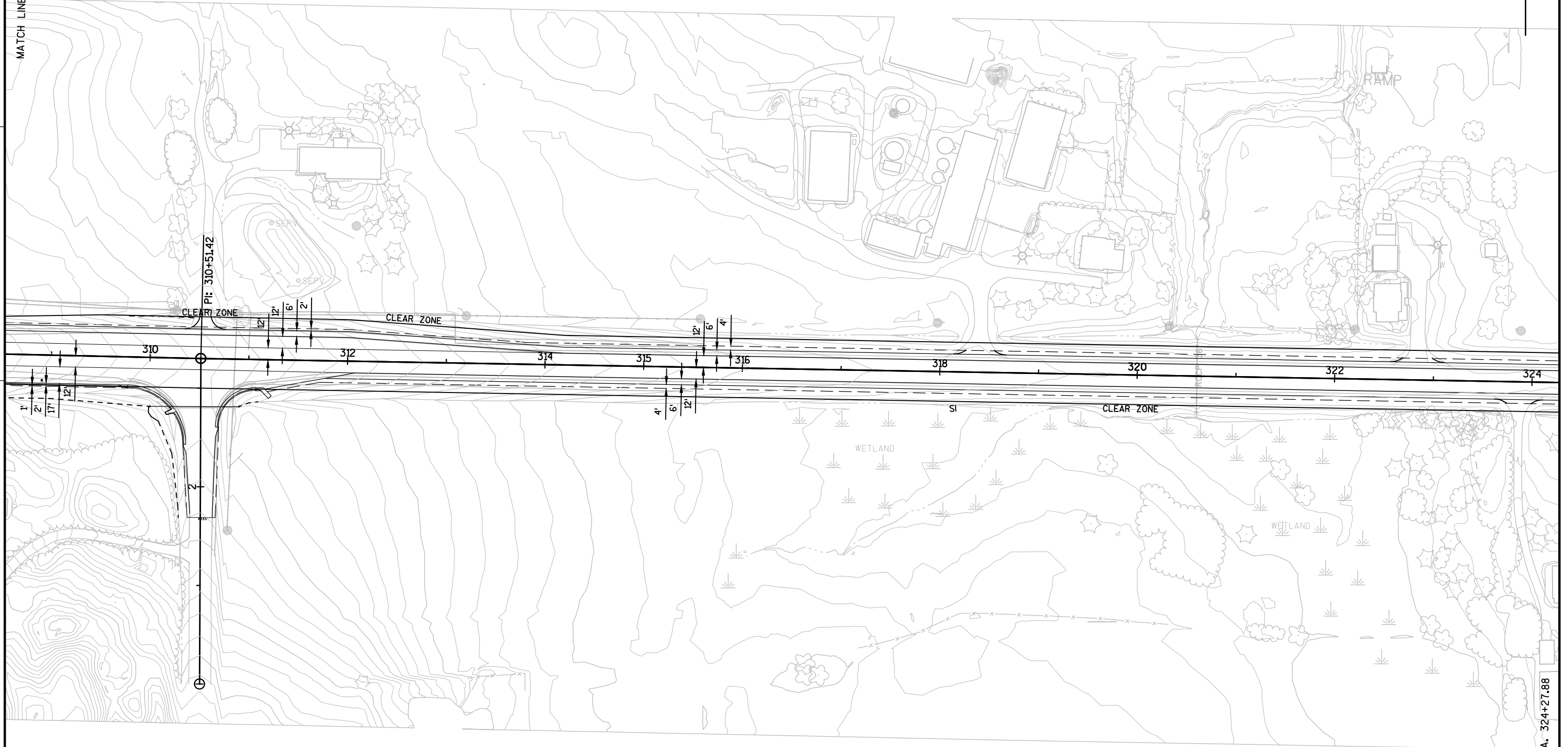
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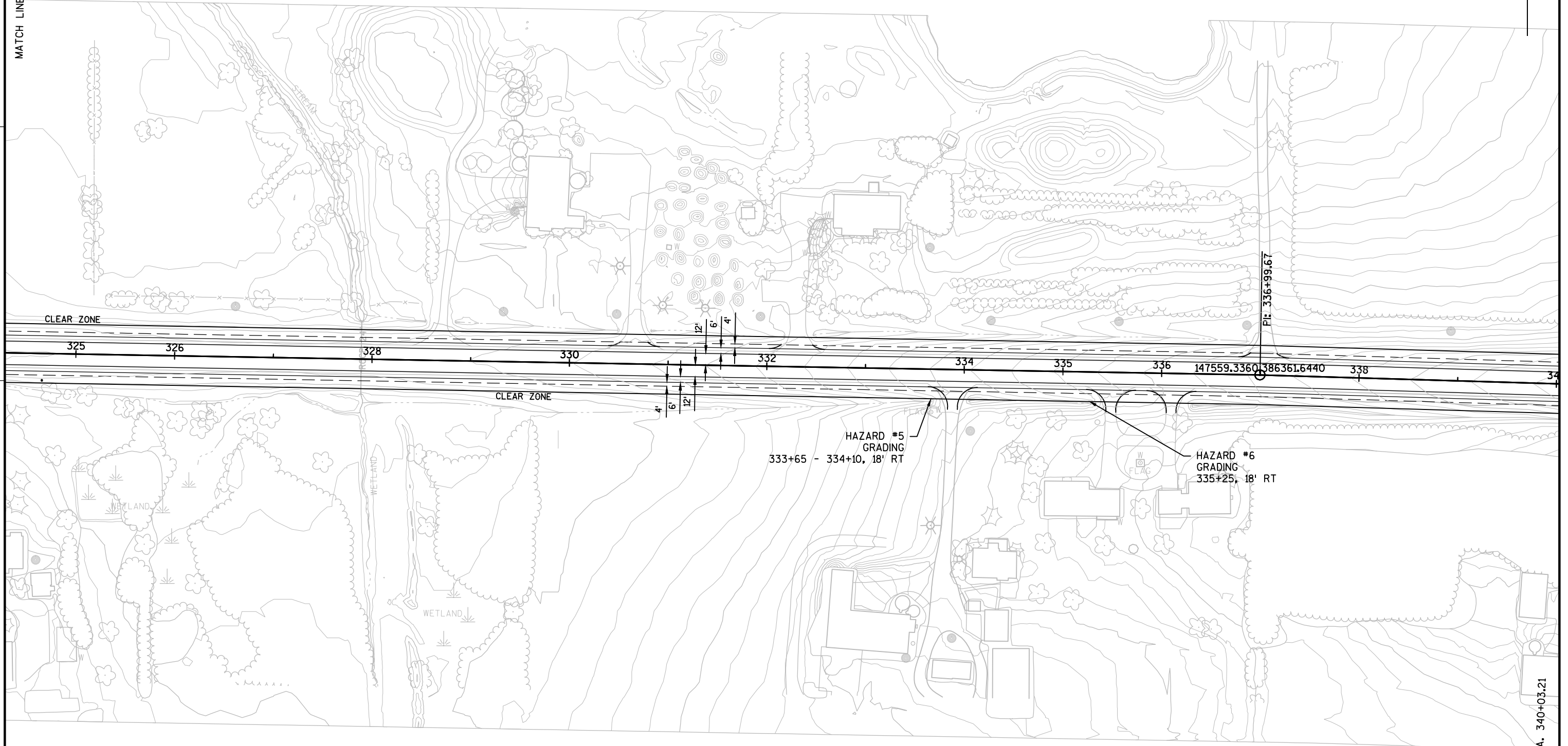
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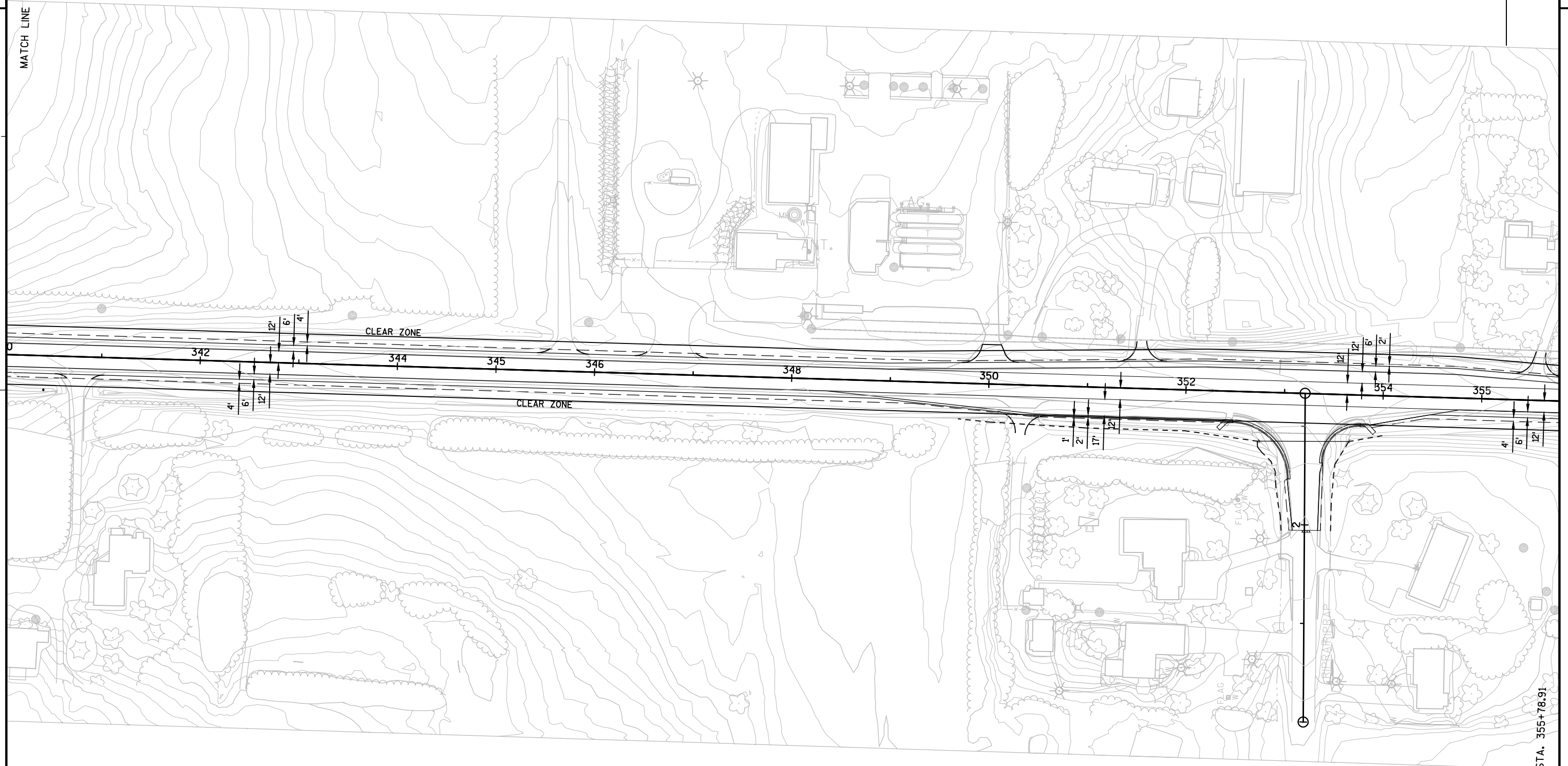
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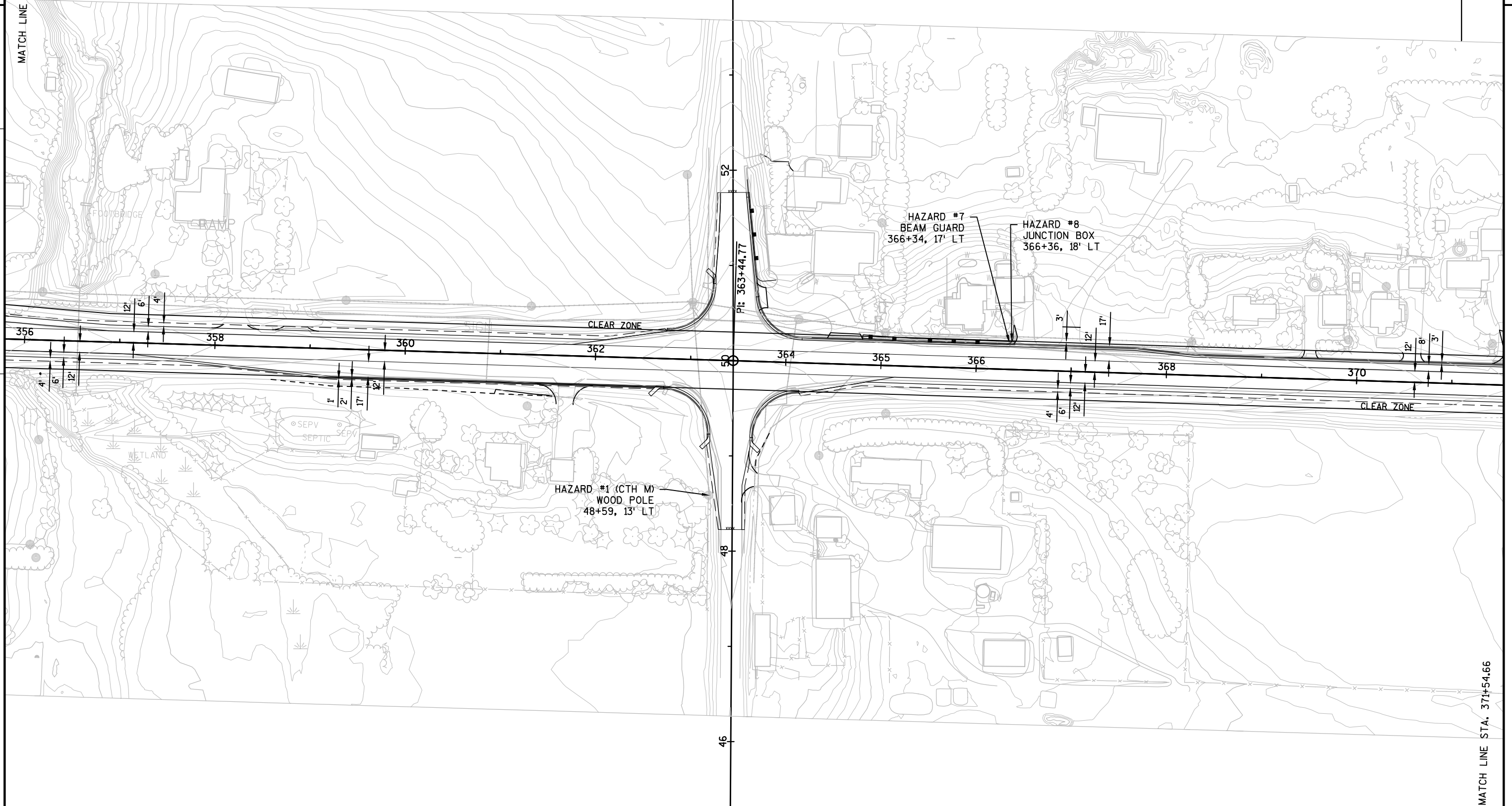
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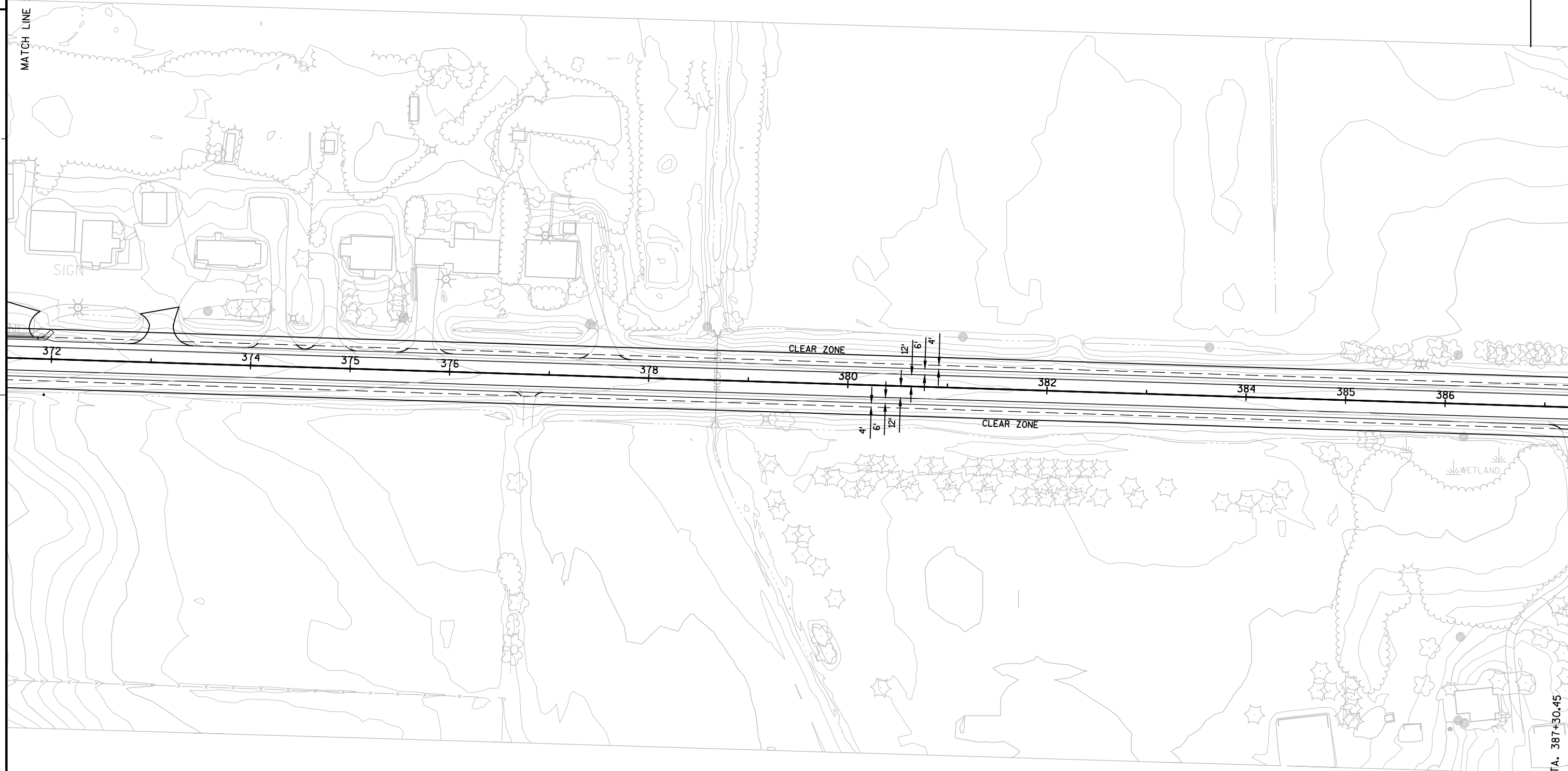


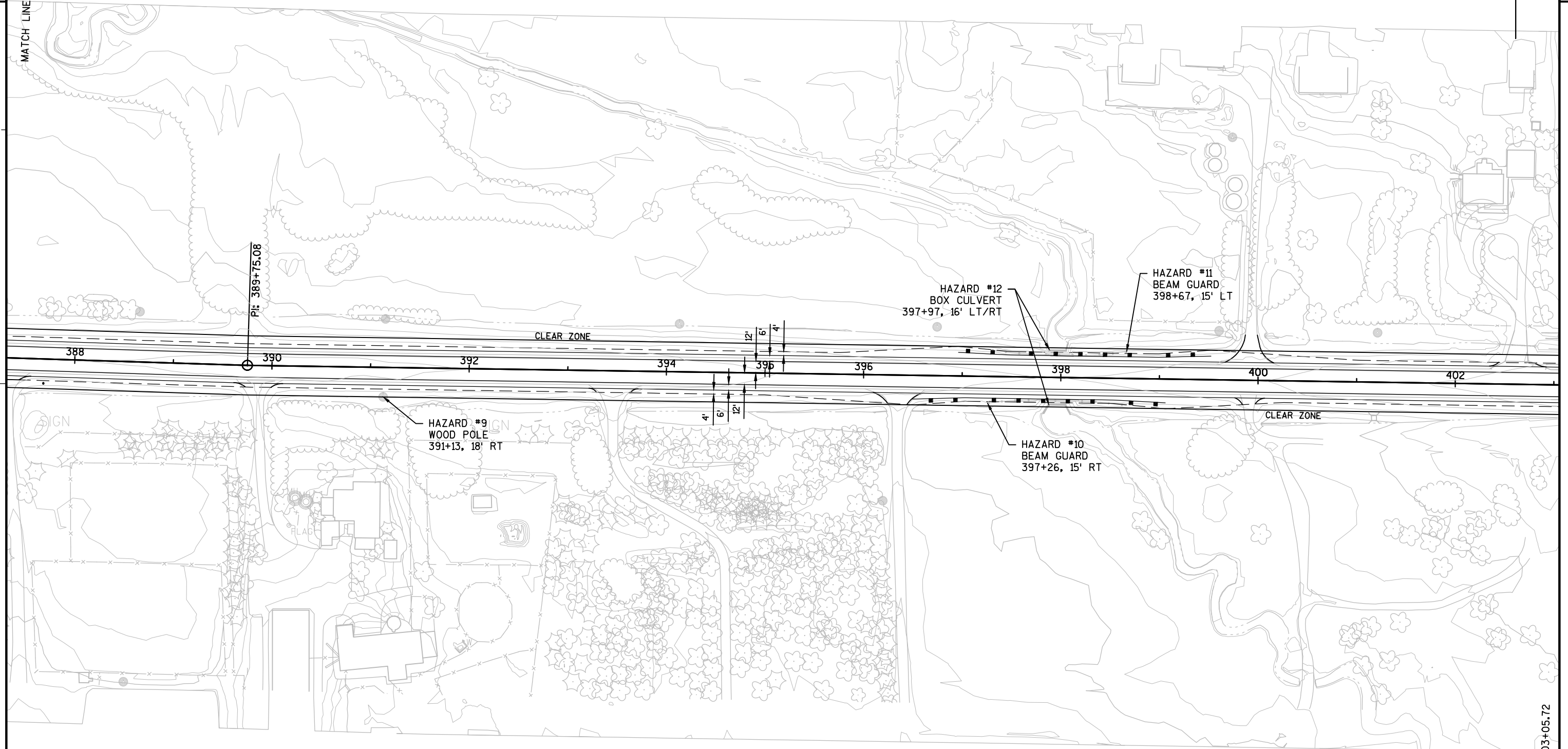






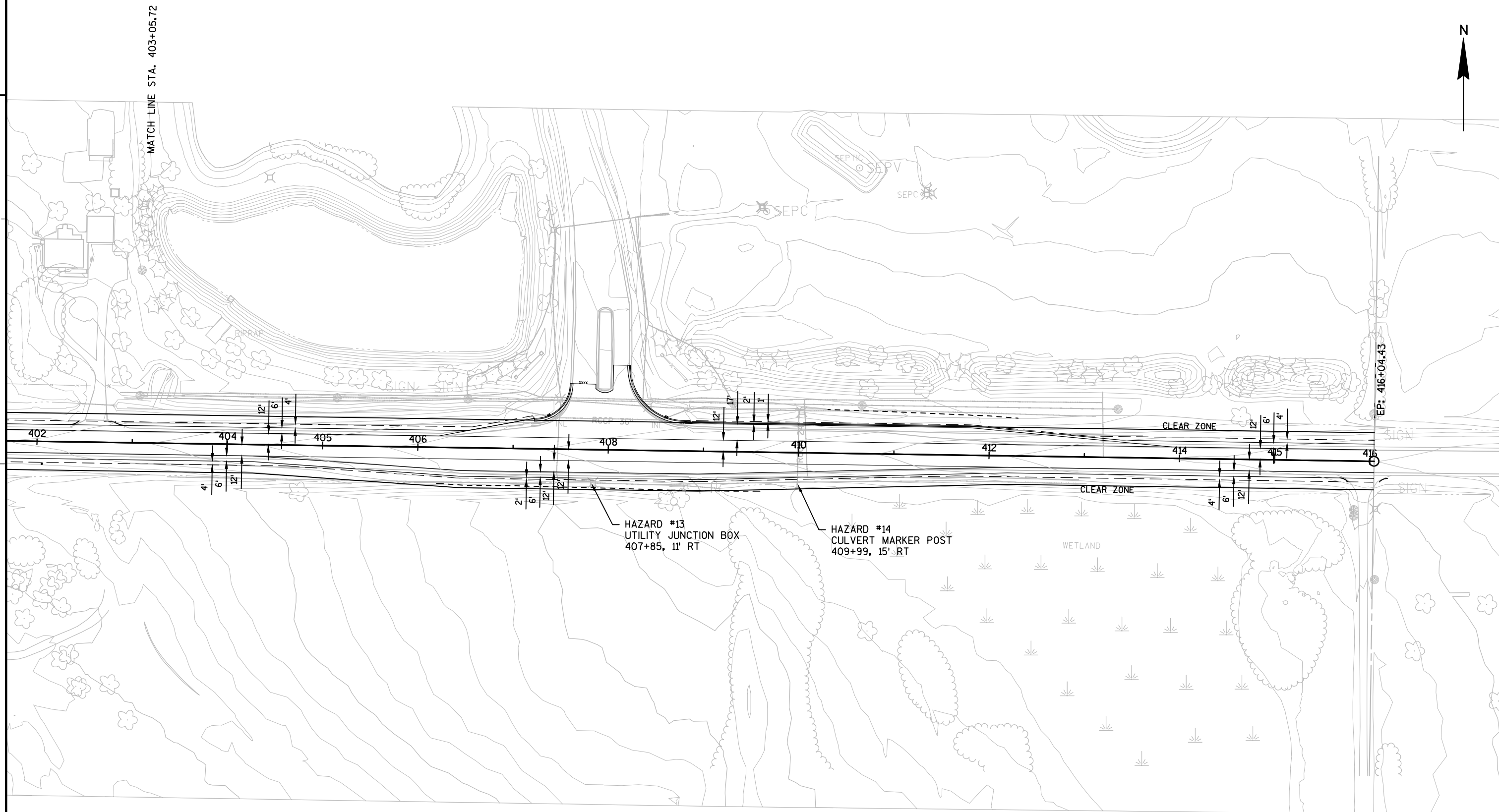






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2



PROJECT NO:2310-17-00	HWY:STH 60	COUNTY:WASHINGTON & OZAUKEE	PLAN DETAILS	SHEET 15	E
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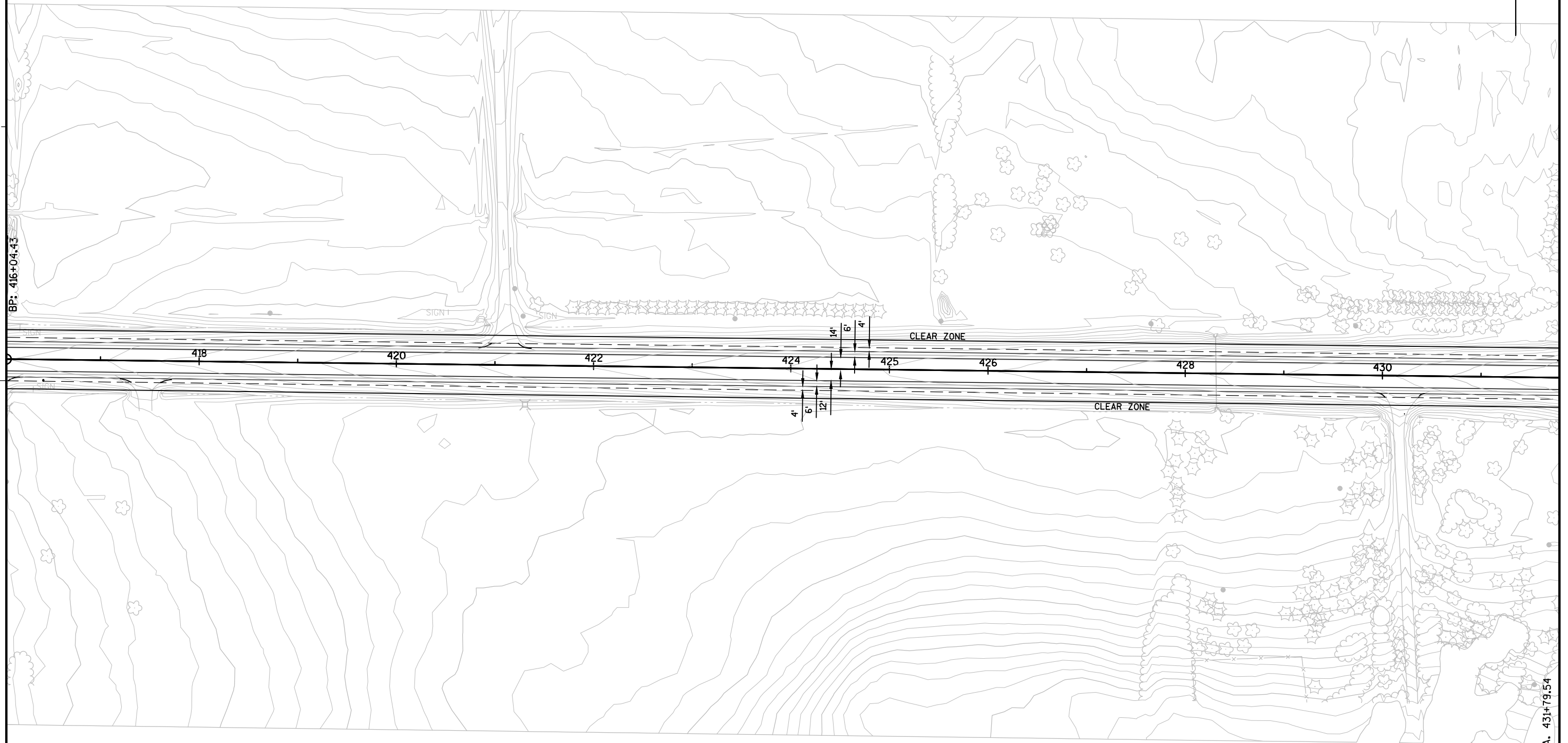
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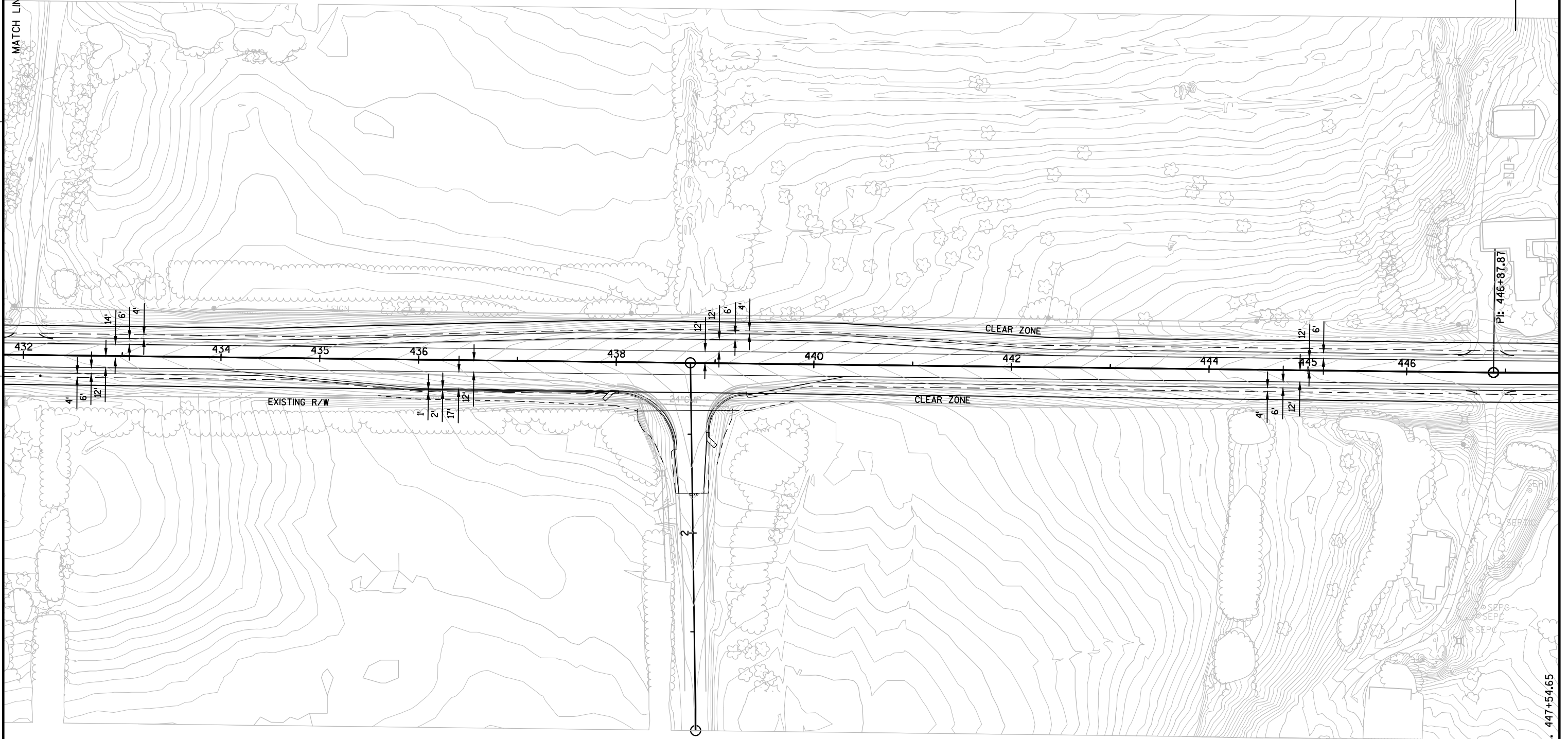
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PLOT NAME :

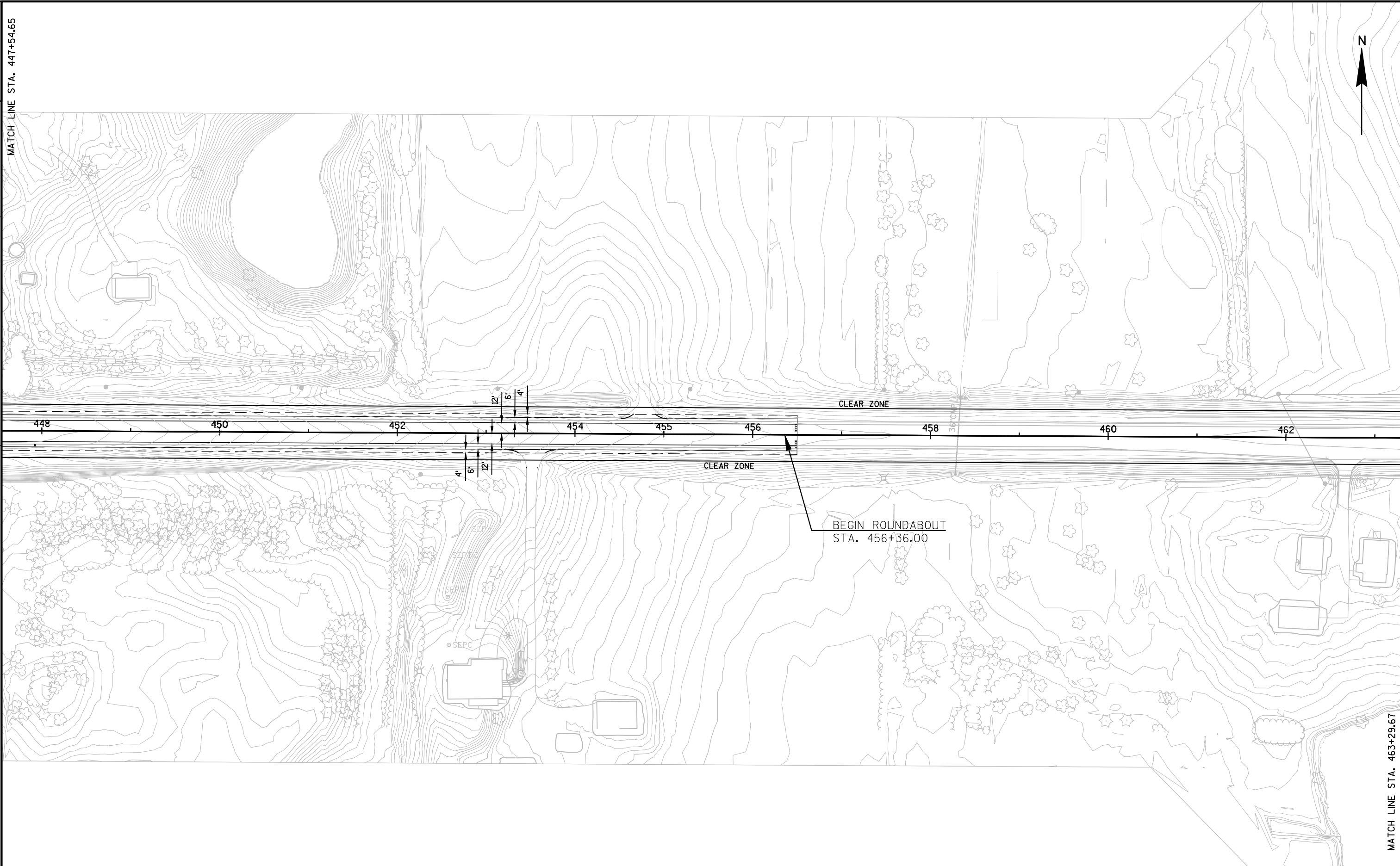
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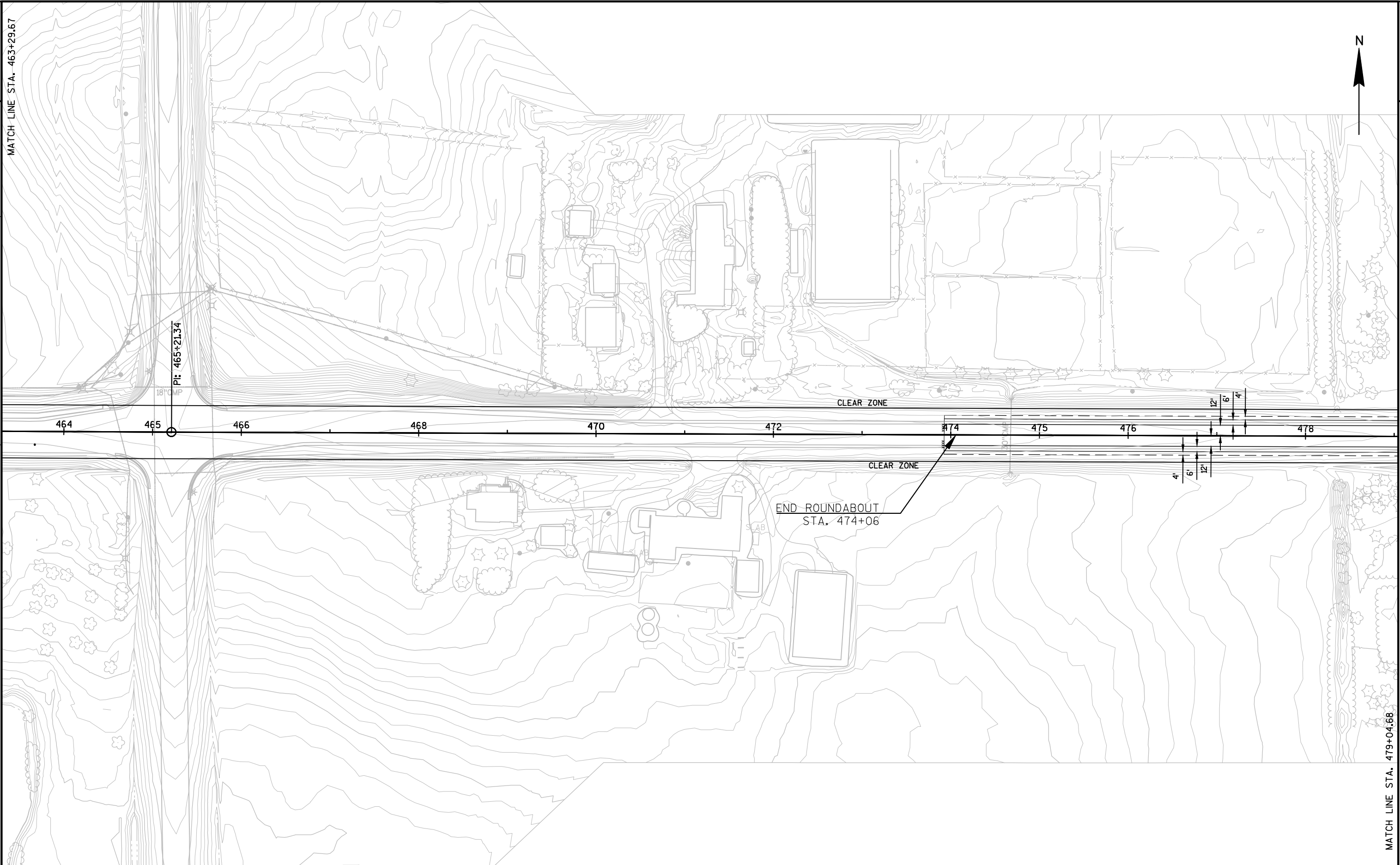


MATCH LINE STA. 447+54.65



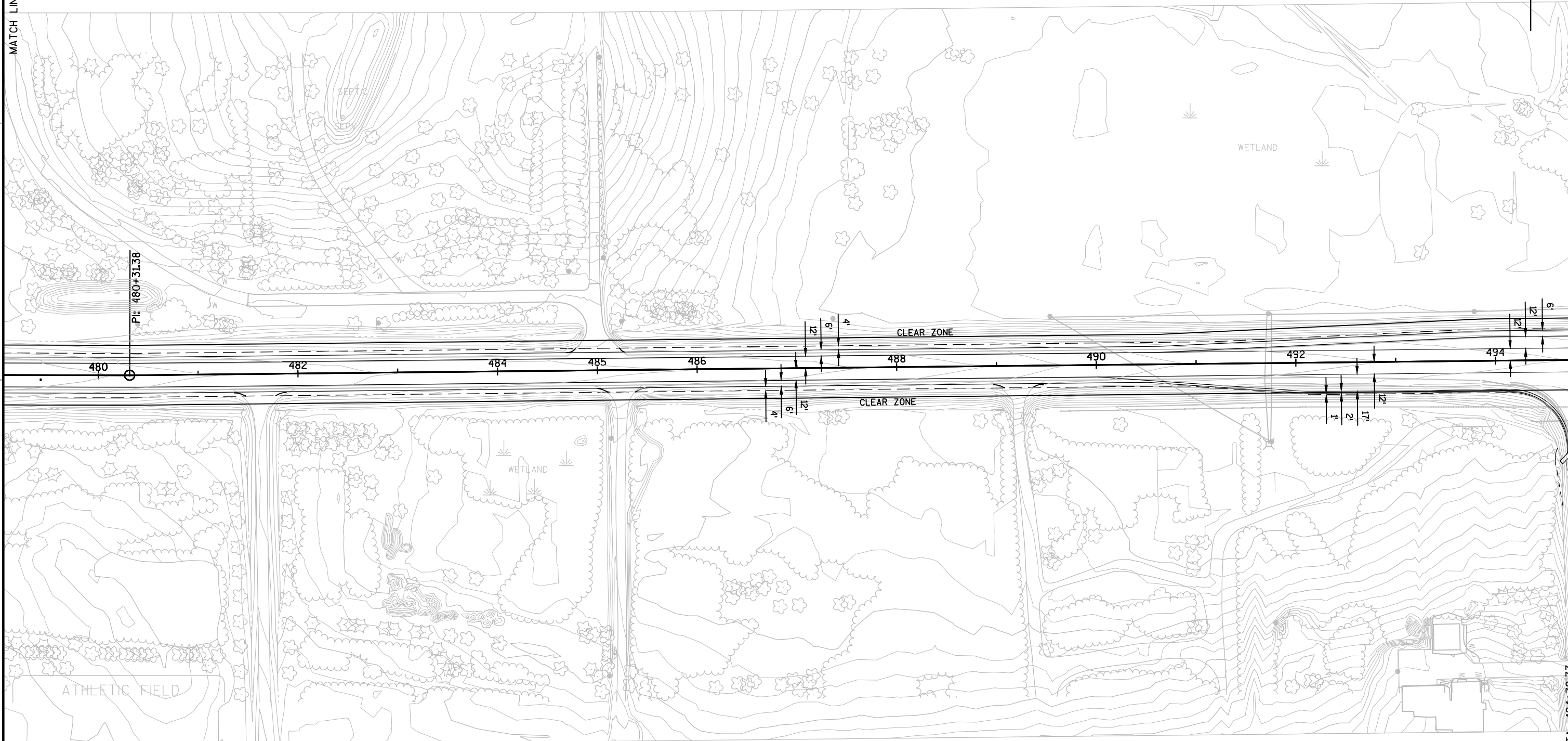
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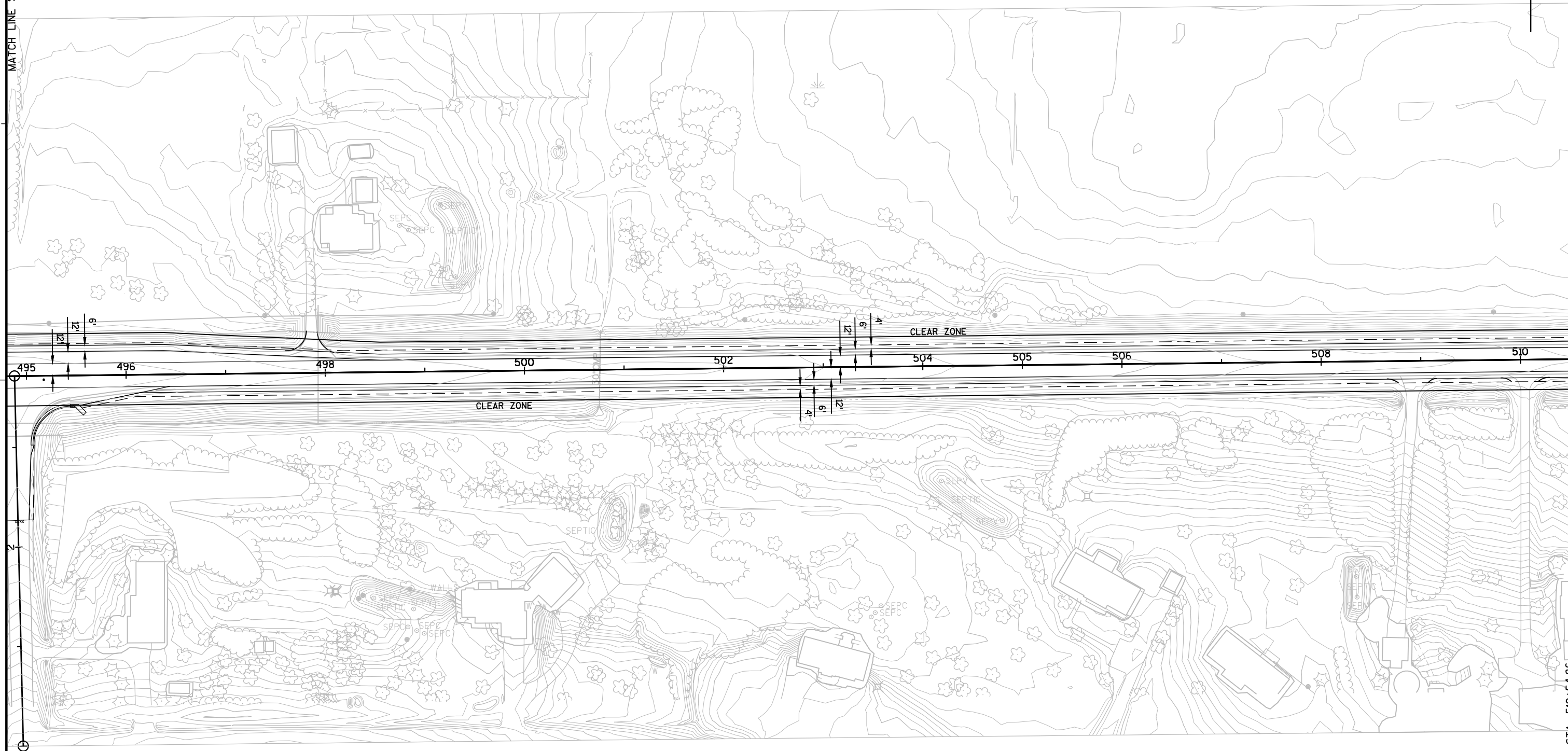
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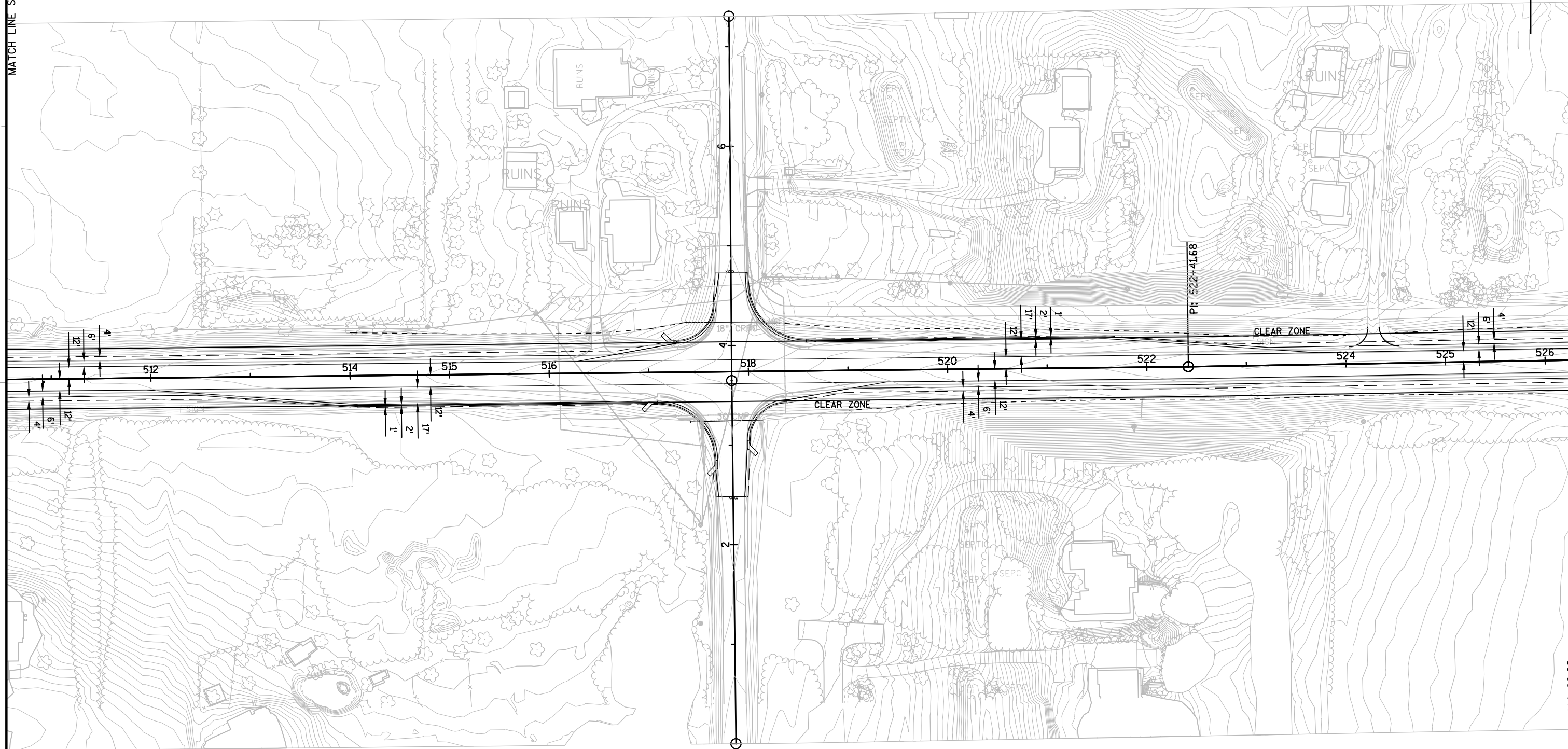


MATCH LINE STA. 479+04.68

PROJECT NO: 2310-17-00	HWY: STH 60	COUNTY: WASHINGTON & OZAUKEE	PLAN DETAILS	SHEET 19	E
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2

MATCH LINE STA. 526+25.39

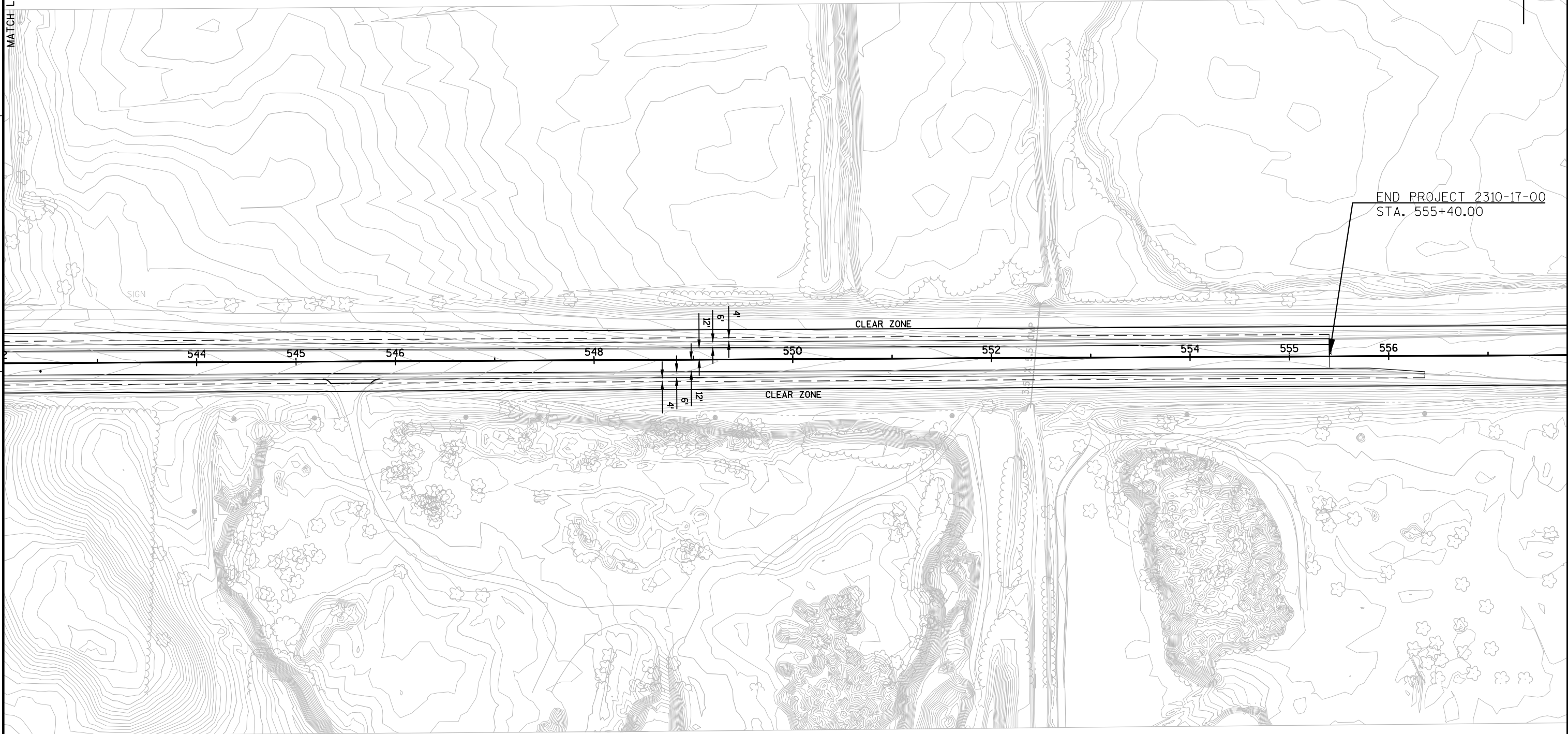


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MATCH LINE STA. 542+05.21

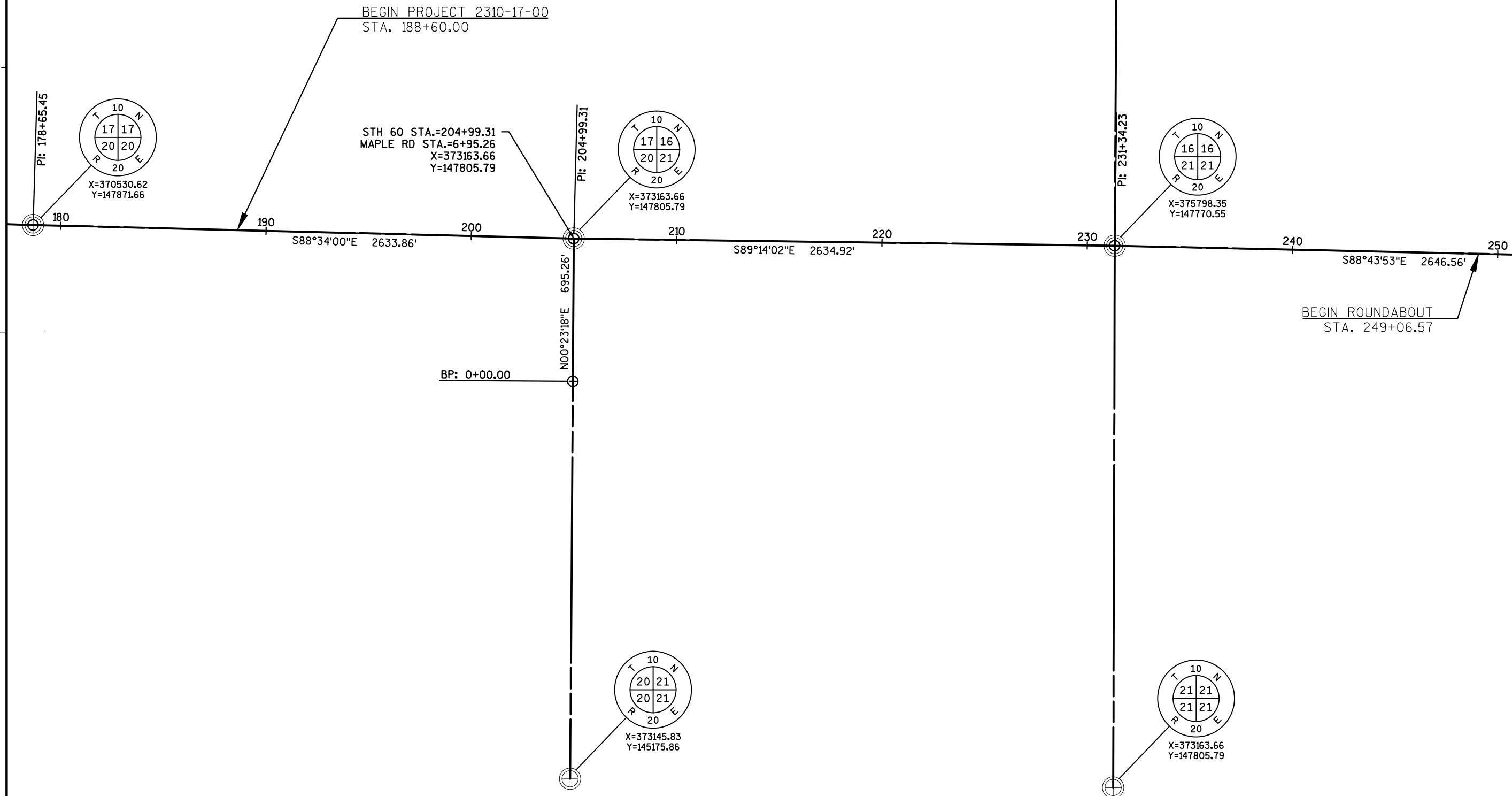
PROJECT NO:2310-17-00	HWY:STH 60	COUNTY:WASHINGTON & OZAUKEE	PLAN DETAILS	SHEET 23	E
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Attachment J

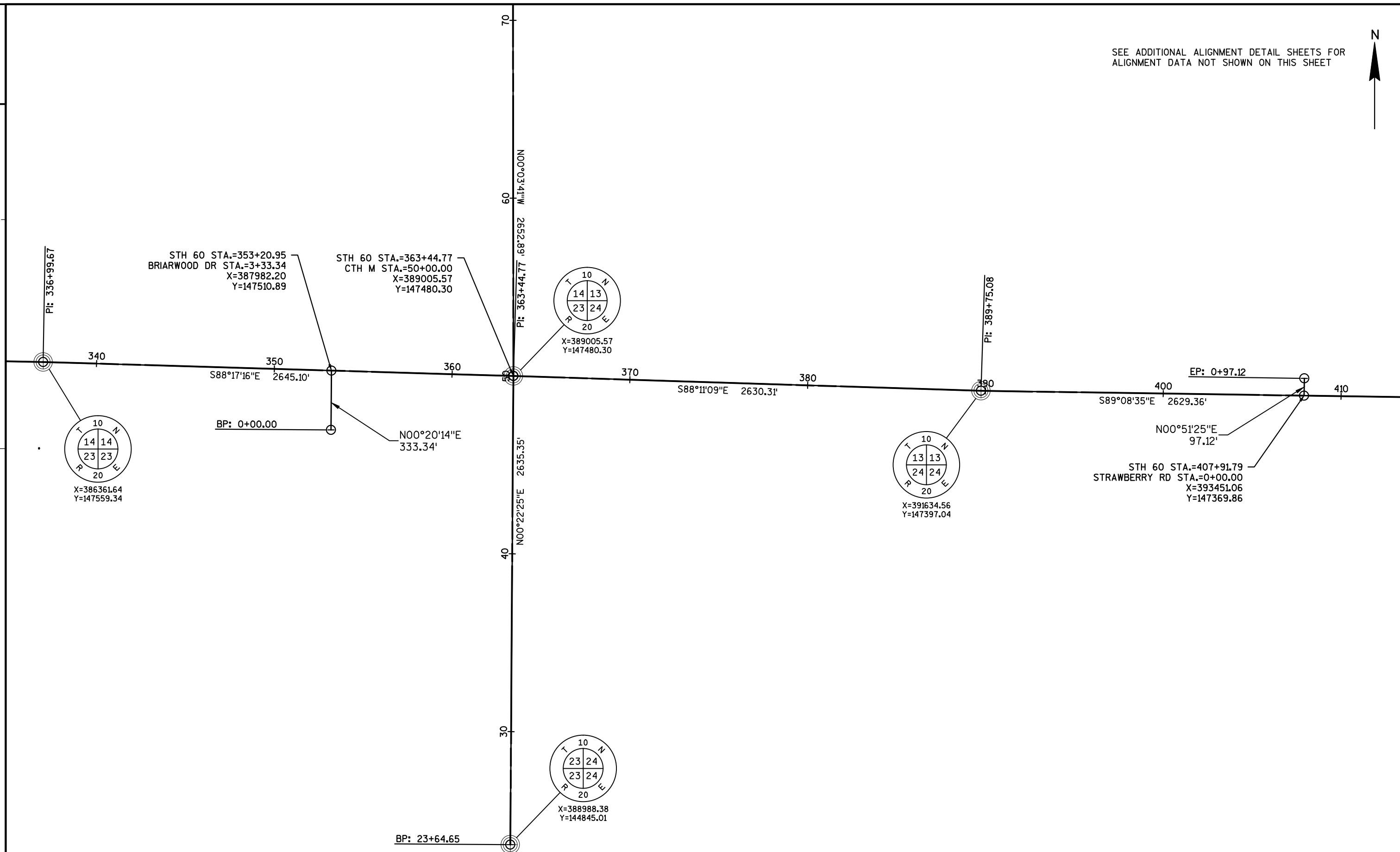
Alignment Plan

SEE ADDITIONAL ALIGNMENT DETAIL SHEETS FOR
ALIGNMENT DATA NOT SHOWN ON THIS SHEET

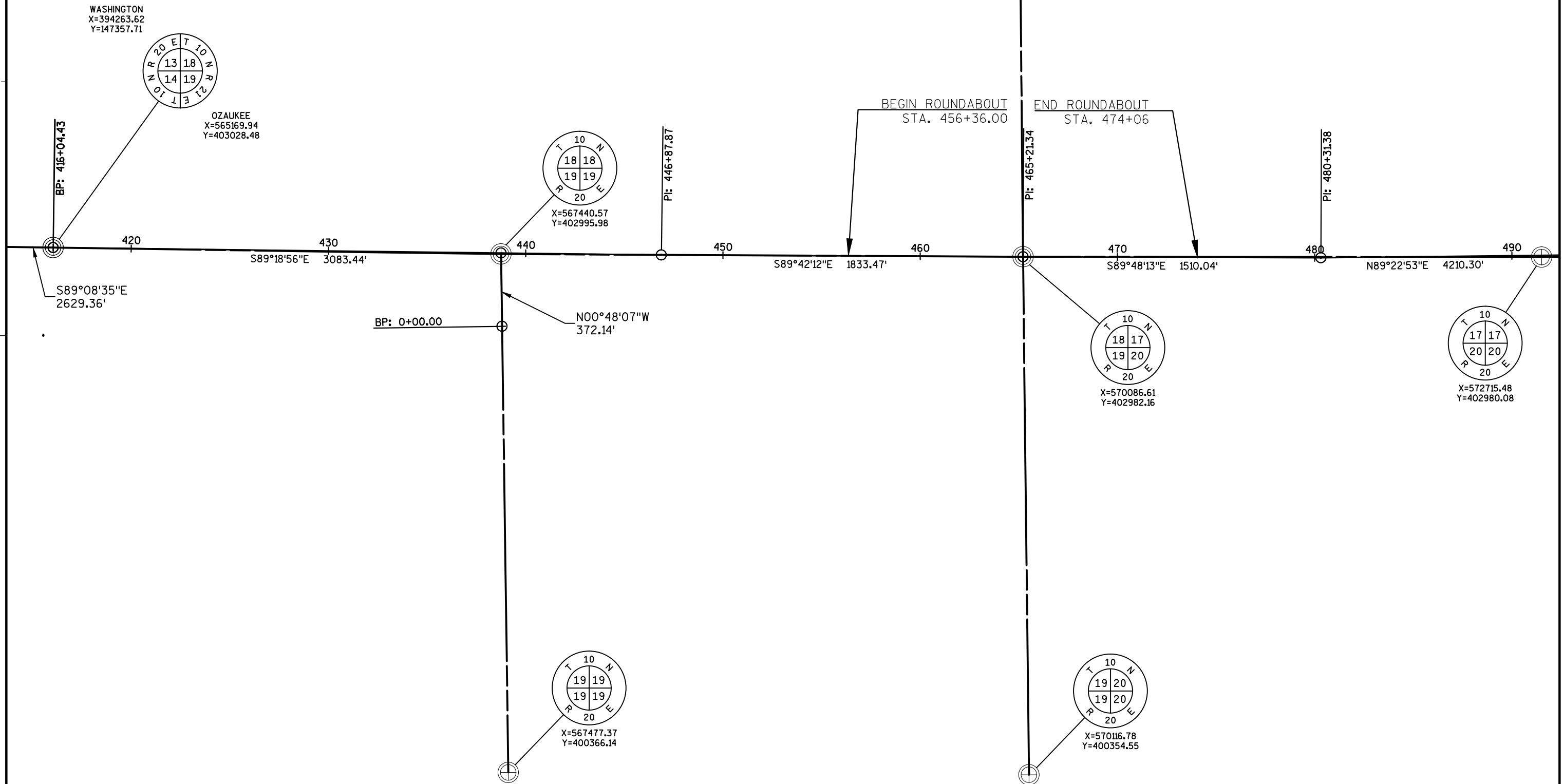




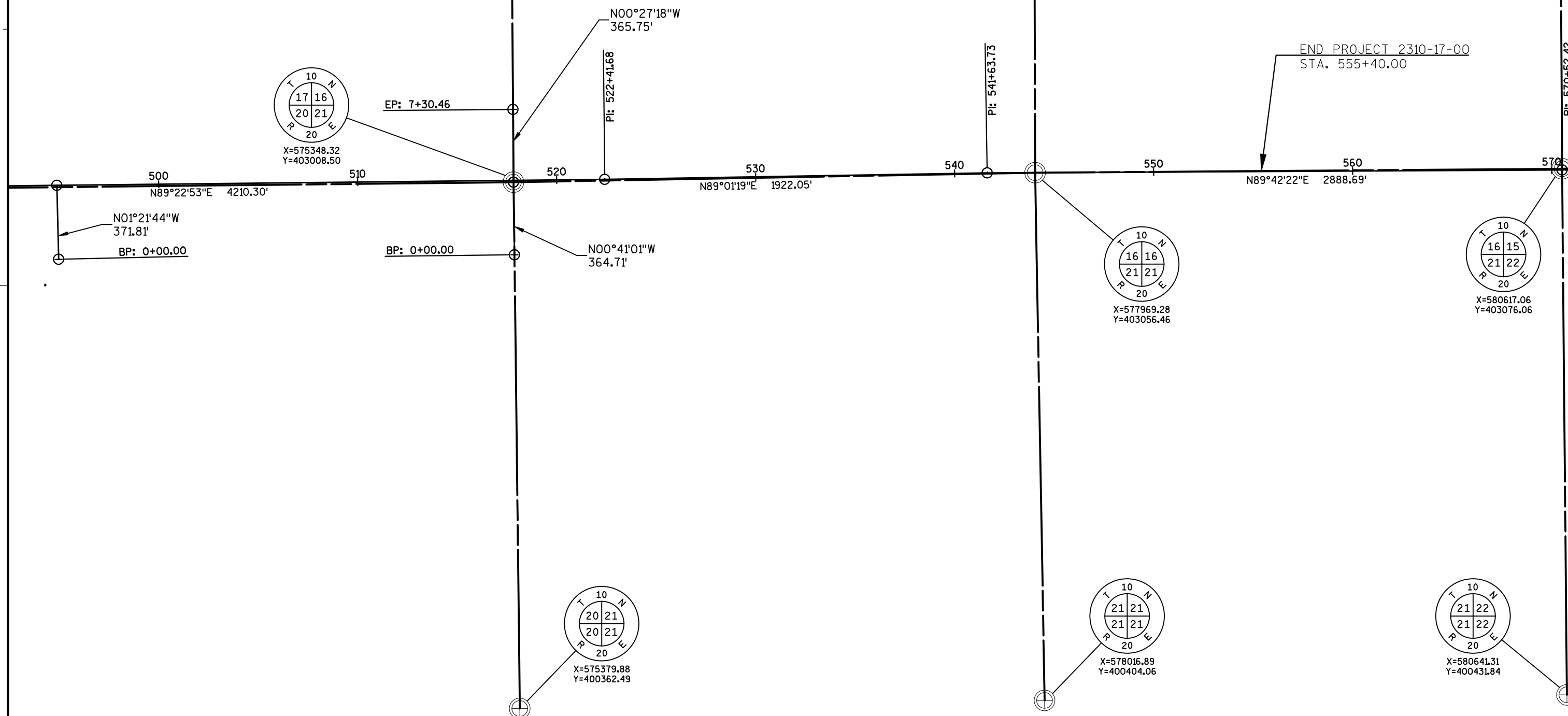
SEE ADDITIONAL ALIGNMENT DETAIL SHEETS FOR
ALIGNMENT DATA NOT SHOWN ON THIS SHEET



SEE ADDITIONAL ALIGNMENT DETAIL SHEETS FOR
ALIGNMENT DATA NOT SHOWN ON THIS SHEET



SEE ADDITIONAL ALIGNMENT DETAIL SHEETS FOR
ALIGNMENT DATA NOT SHOWN ON THIS SHEET



Attachment K

Safety Screening Worksheet

PROJECT ID: 2310-17-00
HIGHWAY: STH 60
TERMINI: EAGLE DRIVE TO STH 181
COUNTY: WASHINGTON & OZAUKEE
ANALYSIS BY: KEVIN WEIGHNER

Safety Screening Worksheet													
				Step 1 Meta-Manager Analysis						Step 2 Crash Report Analysis		Step 3 Geometric Standards	
PDP Segments				Improve- ment Flag	Crash Type Flag					Traffic Data	Improve- ment Flag	Sub- standard Geometrics	Con- tributing Cause
RP From:	RP To:	STA From:	STA To:	LOP	CRFLAG	AKFLAG	RORFLAG	INTFLAG	CRSH SPOT	ADT	Yes/No	Yes/No	Yes/No
060E198 000	060E199 000	310+50	363+50	12	0.00	1.79	1.27	0.00	0	8508	YES	NO	N/A
060E199 000	060E199 102	363+50	416+00	--	0.00	0.00	0.00	1.01	1	7872	NO	YES	NO
060E201 000	060E202 000	465+00	518+00	99	0.00	2.23	0.00	0.00	0	8732	CHK	NO	N/A
060E202 000	060E203M000	518+00	555+40	99	0.00	1.59	0.00	0.00	0	8732	CHK	NO	N/A

NOTES:

Crest vertical curve from STA 363+50 to 368+50 meets minimum stopping sight distance (SSD) to a 24" object, but not desirable SSD to a 6" object. One crash (PD only) is attributed to intersection sight distance (ISD) meeting minimum but not desirable standards. ISD is not a controlling criteria and is greater than SSD due to the additional time required to cross the highway. ISD is based on sight distance to a 3.5' object, in which case SSD would still be met on this vertical curve.

Attachment L

Section 106 Report



SECTION 106 REVIEW ARCHAEOLOGICAL/HISTORICAL INFORMATION

Wisconsin Department of Transportation
DT1635 6/2014

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15-0443/02/WT
SHPO

For instructions, see FDM Chapter 26.

I. PROJECT INFORMATION

☒ Amended Submittal (include new information only)

Project ID 2310-17-00	Highway BT Street STH 60	County Washington, Ozaukee
Project Termini Eagle Drive to STH 181	Region - Office Southeast	
Regional Project Engineer - Project Manager Heather Sackman	(Area Code) Telephone Number (262)521-5376	
Consultant Project Engineer - Project Manager Collins Engineers, Inc.	(Area Code) Telephone Number (414)282-6905	
Archaeological Consultant Cultural Resource Management UWM	(Area Code) Telephone Number 414-229-3078	
Architecture/History Consultant Cultural Resource Management UWM	(Area Code) Telephone Number 414-229-3078	
Date of Need	SHSW Number 15-0443/02	
Return a Signed Copy of This Form to Heather Sackman		

II. PROJECT DESCRIPTION

Project Length 6.28 miles	Land to be Acquired: Fee Simple 0.205 acres	Land to be Acquired: Easement 0.106 acres
------------------------------	--	--

Distance as measured from existing centerline	Existing	Proposed	Other Factors	Existing	Proposed
Right-of-Way Width	50'-100'	50'-100'	Terrace Width	N/A	N/A
Shoulder	10'	10'	Sidewalk Width	N/A	N/A
Slope Intercept	50'-100'	50'-100'	Number of Lanes	2 Drive Bypass RT Turn	2 Drive Bypass RT Turn
Edge of Pavement Paved 3' of existing shoulder for bike lane	15'	18'	Grade Separated Crossing	N/A	N/A
Back of Curb Line	N/A	N/A	Vision Triangle acres	N/A	N/A
Realignment	N/A	N/A	Temporary Bypass acres	N/A	N/A
Other - List:	---	---	Stream Channel Change	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Attach Map(s) that Depict "Maximum" Impacts.	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Tree Topping and/or Grubbing	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

Brief Narrative Project Description: Include all ground disturbing activities. For archaeology, include plan view map indicating the maximum area of ground disturbance and/or new right-of-way, whichever is greater. Include all temporary, limited and permanent easements. For amendments (e.g. design refinements, scope changes, etc) description should only include new/added project actions and materials.

The proposed action includes the rehabilitation of roadway pavement for State Highway 60 from Eagle Drive to State Highway 181. The proposed construction limits are located in Township 10 North, Range 20 East, Township 10 North, Range 21 East. The purpose of the project is to improve pavement conditions; add bicycle accommodations; and improve intersections to current WisDOT standards.

STH 60 will be milled and overlaid from Eagle Drive to STH 181. Exclusions include the intersection of CTH Y which will be constructed as a roundabout under a separate project ID 2310-14-70 and the intersection of CTH G which was

constructed as a roundabout in 2012. The existing STH 60 typical section consists of a rural undivided roadway the entire length with two 12-foot lanes and 10-foot shoulders in which 3-feet of shoulder is paved. The proposed STH 60 typical section will remain a rural undivided roadway with two 12-foot lanes and 10-foot shoulders. The shoulders will be paved to a minimum of 6 feet wide to accommodate bicycles.

Intersections will be improved to current WisDOT standards, widened as necessary to accommodate bicycles, right turn, and bypass lanes. These intersections include: Maple Road, Center Road, Lusan Drive, Church Road, Briarwood Drive, Elm Drive, CTH M, Strawberry Glen Rd, Lizbeth Lane, and Horns Corners Road. Right of way acquisitions and easements are required at intersections and consist of 0.205 Acres of Fee Acquisition, 0.010 Acres of Permanent Easements and 0.096 Acres of Temporary Easements. Existing beam guard will be removed and replaced with energy absorbing terminals installed. Cross culverts will be replaced or extended as needed.

There are wetland areas present along STH 60. The existing posted speed limit is 55 mph and is not planned to change with this project. Box culverts C-66-0031 and C-66-0032 are within the project limits and are in fair condition and improvements are not included with this project.

☐ Add continuation sheet, if needed.

SECTION 106 REVIEW ARCHAEOLOGICAL/HISTORICAL INFORMATION (continued)

Wisconsin Department of Transportation DT1635

III. CONSULTATION

How has notification of the project been provided to:

- | | | |
|---|--|--|
| <input checked="" type="checkbox"/> Property Owners | <input checked="" type="checkbox"/> Historical Societies/Organizations | <input checked="" type="checkbox"/> Native American Tribes |
| <input type="checkbox"/> Public Information Meeting Notice | <input type="checkbox"/> Public Information Meeting Notice | <input type="checkbox"/> Public Info. Mtg. Notice |
| <input checked="" type="checkbox"/> Letter - Required for Archaeology | <input type="checkbox"/> Letter | <input checked="" type="checkbox"/> Letter |
| <input type="checkbox"/> Telephone Call | <input type="checkbox"/> Telephone Call | <input type="checkbox"/> Telephone Call |
| <input type="checkbox"/> Other: | <input checked="" type="checkbox"/> Other: email | <input type="checkbox"/> Other: |

Attach one copy of the base letter, list of addresses and comments received. For history include telephone memos as appropriate.

IV. AREA OF POTENTIAL EFFECTS - APE**ARCHAEOLOGY:** Area of potential effect for archaeology is the existing and proposed ROW, temporary and permanent easements. Agricultural practices do not constitute a ground disturbance exemption.**HISTORY:** Describe the area of potential effects for buildings/structures.

Given the project description and its potential to impact the project area, an APE was established that included all properties immediately adjacent to the proposed project corridor and the entire proposed roadway right of way. All resources that were at least 40 years old and possessed a degree of historic integrity were examined for potential historical significance

V. PHASE I - ARCHAEOLOGICAL OR RECONNAISSANCE HISTORY SURVEY NEEDED

ARCHAEOLOGY	HISTORY
<input checked="" type="checkbox"/> Archaeological survey is needed	<input checked="" type="checkbox"/> Architecture/History survey is needed
<input type="checkbox"/> Archaeological survey is not needed	<input type="checkbox"/> Architecture/History survey is not needed
<input type="checkbox"/> Screening list (date)	<input type="checkbox"/> Screening list (date)
<input type="checkbox"/> Burial site in project area, Wis. Stat. 157.70 applies	<input type="checkbox"/> No structures or buildings of any kind within APE
	<input type="checkbox"/> Non-Survey History Documentation attached

VI. SURVEY COMPLETED

ARCHAEOLOGY	HISTORY
<input checked="" type="checkbox"/> NO archaeological sites(s) identified - ASFR attached	<input type="checkbox"/> NO buildings/structures identified - Report attached
<input type="checkbox"/> NO potentially eligible site(s) in project area - Phase I Report attached	<input checked="" type="checkbox"/> Potentially eligible buildings/structures identified in the APE - Report attached
<input type="checkbox"/> Potentially eligible site(s) identified-Phase I Report attached	<input type="checkbox"/> Avoided through redesign
<input type="checkbox"/> Avoided through redesign	<input type="checkbox"/> Previously listed/eligible property identified in the APE - Report attached
<input type="checkbox"/> Phase II conducted - go to VII (Evaluation)	
<input type="checkbox"/> Phase I Report - Cemetery/cataloged burial documentation	

VII. DETERMINATION OF ELIGIBILITY (EVALUATION) COMPLETED

<input type="checkbox"/> No arch site(s) eligible for NRHP - Phase II Report attached	<input checked="" type="checkbox"/> No buildings/structure(s) eligible for NRHP - DOE attached
<input type="checkbox"/> Arch site(s) eligible for NRHP - Phase II Report attached	<input type="checkbox"/> Building/structure(s) eligible for NRHP - DOE attached
<input type="checkbox"/> Site(s) eligible for NRHP - DOE attached	





VIII. COMMITMENTS/SPECIAL PROVISIONS - must be included with special provisions language

- ☐ Per Wis. Stat. 157.70 obtain burial authorization from WHS one year prior to construction.
None

IX. PROJECT DECISION

- ☒ No historic properties (historical or archaeological) in the APE.
☐ No historic properties (historical or archaeological) affected.
☐ Historic properties (historical and/or archaeological) may be affected by project;
☐ Go to Step 4: Assess affects and begin consultation on affects.
☐ Documentation for Determination of No Adverse Effects is included with this form. WisDOT has concluded that this project will have No Adverse Effect on historic properties. Signature by SHPO below indicates SHPO concurrence in the DNAE and concludes the Section 106 Review process for this project.

X. SIGNATURES

<input checked="" type="checkbox"/>  (Regional Project Manager Signature)	11/17/15 (Date - m/d/yy)	<input checked="" type="checkbox"/>  (WisDOT Historic Preservation Officer Signature)	12/10/15 (Date - m/d/yy)	<input checked="" type="checkbox"/>  (State Preservation Officer Signature)	March 10 2016 (Date - m/d/yy)
<input checked="" type="checkbox"/>  (Consultant Project Manager Signature)	11/10/15 (Date - m/d/yy)				

15-0443/02/WT

Wisconsin Historical Society
Determination of Eligibility Form 3819

(Revised May 2013)

WisDOT Project ID #: 2310-17-00

WHS #: _____

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BY: _____

Property Name(s): Thiel Farmstead
Address/Location: 3696 Country Aire Drive
City & County: Town of Jackson, Washington County Zip Code: 53012
Town: 10N Range: 20E Section: 24
Date of Construction: c.1900, c.1910, c.1920, c.1945, c.1950,
c.1960, c.1965

WisDOT Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this request for Determination of Eligibility:

- ☐ Meets the National Register of Historic Places criteria.
☒ Does not meet the National Register of Historic Places criteria.

Rebecca Burkel, WisDOT Historic Preservation Officer

Date

State Historic Preservation Office

In my opinion, the property:

- ☐ Meets the National Register of Historic Places criteria.
☒ Does not meet the National Register of Historic Places criteria.


Jim Draeger, State Historic Preservation Officer

Date

1/6/15

Comments (FOR AGENCY USE ONLY):

Division of Historic Preservation
Wisconsin Historical Society
816 State Street
Madison, WI 53706