APPLICATION/PERMIT FOR CONNECTION TO STATE TRUNK HIGHWAY

Wisconsin Department of Transportation (WisDOT)
DT1504 9/2009 s. 86.07(2) Wis. Stats. & Ch. Trans 231 Wis. Adm. Code

- This form is an application for permission for a STH Connection. If approved, the permit does **not** create a **right of access** or **access easement** for the property.
- If the property has any legal restrictions that prohibit access to a state trunk highway (STH), WisDOT cannot approve a STH connection permit for the property.
- **Please type or print neatly in ink.** Fill out the required information on **both sides** of this form per the instructions. One form is required per connection. For more information, visit: http://wisconsindot.gov/Pages/doing-bus/real-estate/permits/default.aspx
- **Please provide a copy of the property deed with all applications.**

WisDOT Office Information

Document Identification Number: 13-100308294-2022

WisDOT SW Region -Madison
2101 Wright St
Madison, Wi 53704
attn: Wendy Braun

Applicant Information

1. Applicant Name and Mailing Address – Street/PO Box, City, State, ZIP Code
Village of DeForest
120 S. Stevenson Street
DeForest, WI 53532

2. Property Owner Name / Address (If not applicant)

3. If Not Property Owner, Reason for Application

Connection Location Information

4. Highway Number(s): STH 19

5. County: Dane

6. ☐ City ☒ Village ☐ Town of: DeForest

7. Side of the Highway: ☒ North ☒ South ☐ East ☐ West

8. Located within the: SE Quarter, of the SW Quarter, Section 33, Town 9 North, Range 10E

9. Fire or Street Number (If applicable)

10. Name of Nearest Side Road from Location: Williamsburg Way
Distance and Direction from Side Road: 0 (Feet or Miles) South (N, S, E, W)

11. How far is the location from the nearest non-side road connection on the same highway? 0.36 Miles (Feet or Miles)

Log Mile or Reference Point (Filled in by WisDOT): RP 028G+1.26 (Cuml Mile 24.85)

Connection Type Information

12. Proposed Activity (Check one)
☒ Construct New
☐ Alter Existing
☐ Remove Existing
☐ Permit Existing

13. Proposed Use (Check one – See instructions for category description)
☐ Urban – Commercial/Industrial
☐ Urban – Residential
☐ Rural – Commercial/Industrial
☐ Rural – Residential
☐ Rural – Agricultural
☒ Public Road
☐ Trail or Trail Crossing
Is this a change of the existing use (If applicable)? ☒ Yes ☐ No

16. Proposed Trips Per Day (Check one)
☐ Seasonal ☐ 101-1000
☐ 1-50 ☒ Over 1000
☐ 51-100
Peak hour traffic count: _____

14. Proposed Width: 81 feet

15. Proposed Surface: Asphalt

QUESTIONS 17-27 on BACK PAGE

All connections have restrictions, which include the information preprinted and filled-in on this application along with any conditions, covenants, supplemental provisions, superimposed notes, and detail drawings added by WisDOT. The applicant shall be responsible for complying with these restrictions along with the construction and maintenance of the connection. It is further understood that WisDOT's approval is subject to applicant's full compliance with relevant state statutes and administrative rules, plus any laws, codes, rules, regulations, ordinances and permit requirements of other jurisdictional agencies. The alteration of this form by the applicant is prohibited. Under s. 86.073 Wisconsin Statutes, WisDOT's permit denial or revocation may be appealed.

The applicant affirms that all information provided on and submitted with this form is correct and complete. Providing incorrect or incomplete information may result in permit denial or revocation as well as criminal prosecution under s. 946.32 Wisconsin Statutes.

x Bill Chang — 4/6/2022
(Property Owner or Authorized Representative) (Date)

608-846-6664 — changb@vi.deorest.wi.us
(Area Code and Telephone #) (E-mail address if available)

FOR OFFICIAL WISDOT USE ONLY – DO NOT WRITE BELOW THIS LINE

☒ THE FOLLOWING SUPPLEMENTAL PROVISIONS APPLY

- Please contact WisDOT– Stefan Ciobanu (WisDOT) 608.516.6832 7 days prior to work within the Right of Way
- Follow attached Provisions.
- Provide a schedule.
- If closing a lane or shoulder, provide the following advance notification to the Wisconsin Lane Closure System. (https://transportal.cee.wisc.edu/closures/)

☒ **Permit APPROVED** (THIS PERMIT IS REVOCABLE)
☐ **Permit DENIED**
☐ **Application DISMISSED**

x Wendy Braun — 4-22-2022
(WisDOT Authorized Representative) (Date)
(If Computer-filled, Brush Script Font)

☐ Temporary permit. Expiration date:

☐ This permit voids / replaces permit #

☐ Shared connection
Co-user name:
Related permit #

17. ☒ Yes ☐ No Is the property zoned? Provide documentation from the jurisdictional zoning authority.

18. Explain how the land is currently being used: B-2, O-R, C-1, RN-2, RM-3

19. ☐ Yes ☒ No Are you aware of any plan to change the zoning or land use for the property? If yes, explain.

20. ☒ Yes ☐ No Is this connection for property that was part of a land division or assemblage created on or after 2/1/99? If yes, explain. CSM 15515

21. ☒ Yes ☒ No Do you own other property abutting the highway that is next to the property that this connection will serve? If yes, describe. Fox Hill Estates Replat

Note 1: *Answering "yes" to #20 or 21 may result in a Wis. Administrative Code Trans 233 review by WisDOT. If this is needed, the processing of your application may be delayed.*

22. ☒ Yes ☐ No Does the property abut or border another public road? If yes, provide the road's name. Pederson Crossing, Bear Tree Parkway

23. ☒ Yes ☐ No Are there any existing connections to any road serving the property? If yes, how many? 4

24. ☒ Yes ☐ No Are there any restrictions on the number, use, or location of connections to the property?

25. ☐ Yes ☒ No Are there any access easements across the property (recorded or unrecorded)?

Note 2: *If you answered "yes" to #24 or 25, provide a copy of* ***all documents*** *relevant to the restrictions and/or easements*

26. Provide the property tax identification number: 0910-333-9715-1, 0910-333-9745-1, 0910-333-9805-1, 0910-334-9090-1

27. What is the proposed construction completion date for the connection? See Conditions of Issuance #9. September 1, 2022

FOR ANY NEW CONNECTION OR CONNECTION TO BE MOVED, APPLICANT SHALL PLACE A FLAG OR MARKER IN THE HIGHWAY DITCH OR FORESLOPE (VISIBLE FROM THE HIGHWAY) AT THE PROPOSED LOCATION.

CONDITIONS OF ISSUANCE

1. WisDOT reserves the right to make such changes, additions, repairs, relocations and removals within statutory limits to the connection or its appurtenances on the right-of-way as may at any time be considered necessary to facilitate relocation, reconstruction, widening, and maintenance of the highway, or to provide proper protection to life and property on or adjacent to the highway, or if alternative access to the property becomes available.

2. Except in cases where the indicated connection may be constructed by forces acting on behalf of WisDOT due to a highway improvement or maintenance project, the permittee shall do all of the following: (a) Furnish all materials, do all work, and pay all costs for the construction and maintenance of the connection and its appurtenances on the right-of-way. Materials used and the type and quality of the work shall be appropriate for the connection type specified in this permit; (b) Do all work without jeopardy to, or interference with, traffic using the highway; (c) Promptly restore to WisDOT's satisfaction and at least pre-existing conditions, highway surfaces, shoulders, ditches, vegetation, drainage appurtenances, guardrail, signs, electric conduits/cables, etc. disturbed by any work; (d) Maintain the connection and its appurtenances within the right-of-way limits, which includes keeping them in a proper state of repair, preventing the blockage or impairment of right-of-way drainage, and preventing aboveground obstacles to occur that could cause serious injury or death to a motorist in an errant vehicle; (e) Not disturb or cause the disturbance of any survey marker without the **prior written approval** of WisDOT.

3. The permittee, indicated on the reverse side, represents all parties in interest, and agrees that any connection or approach constructed by or for the permittee is for the purpose of obtaining access to the property (listed in #26) and not for the purpose of parking or servicing vehicles, or for advertising, storage, or merchandising of goods on the right-of-way.

4. The permittee shall not make any changes to the connection, its appurtenances, or adjacent right-of-way, including, without limitation, changes to the location (#4-11), use (#13), width (#14), surface (#15), or increase the number of trips per day (#16) approved by this permit without obtaining **prior written approval** from WisDOT. WisDOT will evaluate all potential highway impacts that may arise from the proposed change(s) and therefore, does not guarantee approval.

5. The permittee, successors or assigns agree to hold harmless the State of Wisconsin and its duly appointed agents and employees against any action for personal injury or property damage sustained by reason of the exercise of this permit.

6. WisDOT does not assume any responsibility for the removal or clearance of snow, ice or sleet, or the opening of windrows of such material upon any portion of any connection along any state trunk highway even though snow, ice or sleet is deposited or windrowed on said connection by its authorized representative engaged in normal winter maintenance operations.

7. Under Wisconsin Administrative Rule Trans 401, the permittee shall implement proper erosion control and storm water management measures at all times during work operations and upon completion of the connection to protect all restored areas until the replacement vegetation achieves sustained growth.

8. Rock, asphalt, concrete, timber or other embankment retention or marking treatments for the connection **are prohibited**.

9. If the permitted work has not been started by the construction completion date, this permit is **null and void**. If the work has been started but is not finished by the construction completion date, no additional work shall be done unless authorized through an approved written time extension or a subsequent permit from WisDOT. Accomplishment of any part of the work shall verify agreement by the permittee to conform to this permit and to be bound by all of its requirements, restrictions, and obligations, all of which shall continue to be in full force and effect. WisDOT does not guarantee the approval of a time extension or subsequent permit since the conditions WisDOT based its permit approval upon may have changed between the permit approval date and time extension request date.

Instructions for
APPLICATION/PERMIT FOR CONNECTION TO STATE TRUNK HIGHWAY

Wisconsin Department of Transportation (WisDOT) form DT1504 (9/2009)

GENERAL INSTRUCTIONS

- ❑ Use one form for each state trunk highway (STH) connection. A connection can be a driveway, public or private road, or a trail or trail crossing. The form initially serves as an ***application*** for a connection between a property and a STH. Then if approved, the completed form becomes a ***permit*** for the STH connection. If the property has any legal restrictions that prohibit access to a STH, WisDOT cannot approve a STH connection permit for the property, and therefore, you should not apply for this permit.
- ❑ Two copies of this application must be completed, signed and dated by the applicant. Send one copy with an original signature to the appropriate Regional Transportation Office, and ***keep*** the other for your records. Go to: http://wisconsindot.gov/Pages/doing-bus/real-estate/permits/default.aspx for a list of office addresses, staff contacts, and a regional boundary map.
- ❑ Just below the signature line, provide an area code and telephone number where you can be called between the hours of 8 a.m. and 4:30 p.m. Monday through Friday. Note at the top of the form if there are particular times of the day and/or days of the week that are more convenient to call you. If you have an e-mail address, provide that too. WisDOT may send you correspondence and/or your approved permit via e-mail in order to speed up the processing of your application.
- ❑ Fill out all required information. Processing may be delayed or a form returned if information is missing.
- ❑ ***With your application, provide a copy of the property deed***. Also provide a copy of a certified survey map, if applicable.
- ❑ If you have an existing WisDOT permit for a connection that you are planning to alter, relocate, or remove, provide a copy of that permit.
- ❑ Copies of Wisconsin Statute 86.07(2) and Administrative Code Trans 231, which regulate a STH connection, are either enclosed (if this form was mailed to you) or available on the website listed above. Contact your local government officials for other statutes, ordinances, and permit requirements that may also apply to connections.

SPECIFIC INSTRUCTIONS FOR EACH QUESTION

1. **Applicant Name and Mailing Address**: Provide the full name of the property owner or person requesting the permit. For a public road, this must be a unit of government. Also provide the street name and number and/or PO box number, city, state, and ZIP code. The address information is used to return the application/permit to the applicant.

2. **Property Owner Name / Address (if not applicant)**: Provide the full name and address.

3. **If Not Property Owner, Reason for Application?** Permits are typically issued to property owner(s), but may be issued to prospective buyers. For example, if you are not the current property owner but plan on purchasing the property, then provide a copy of the ***accepted*** "Offer to Purchase" document with your application.

4. **Highway Number(s)**: Provide the STH route number that the connection will attach to. Provide all route numbers if two or more STHs run concurrently.

5. **County**: Provide the county name.

6. **City - Village - Town**: Check the appropriate box and provide the name.

7. **Side of the Highway**: Check the appropriate box for the side of the highway of the connection location.

8. **Located Within the**: This information may be obtained from the property tax bill or by contacting the appropriate town, village, city, or county clerk. If you cannot obtain this information, leave the section blank and WisDOT will complete it. Choices for quarter are: NE, NW, SE, or SW; for Section: 1-36; for Town: 1-51; for Range: 1-20 W or 1-29 E.

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9. **Fire or Street Number (if applicable)**: Provide the fire or street number if one has been assigned to the property, or provide it to WisDOT as soon as it is assigned. A Government Lot number may be inserted if there is no fire or street number.

10. **Name of Nearest Side Road from Location**: Provide the full name of the nearest intersecting road to the connection.

    Distance and Direction from Side Road: Estimate the approximate distance (in feet or miles) by starting at the nearest side road and going along the STH until you reach the center of the connection location. Select north, south, east or west (or N, S, E, W) for the direction.

11. **How far is the location from the nearest non-side road connection on the same highway?** A non-side road connection will either be a driveway or a trail crossing, and may be on either side of the highway. For questions 10 and 11, the distance may be estimated by driving (0.1 mile equals 528 feet).

12. **Proposed activity**: Check only ***one*** of the four activity boxes:

    - ❑ ***Construct New:*** to construct a new connection. This may include removal of existing connections if required. If you are relocating a connection with a valid WisDOT permit, submit ***one*** form with "construct new" checked, and WisDOT will generate a corresponding form with "remove existing."
    - ❑ ***Alter Existing:*** to physically modify, or change the use* of, a connection with a valid WisDOT permit whose location will not change. This includes work beyond routine maintenance such as paving a connection, widening a connection, replacing a culvert, and improvements to the highway.
    - ❑ ***Remove Existing:*** to remove a legal connection.
    - ❑ ***Permit Existing:*** to obtain a valid WisDOT permit for an existing unpermitted connection.

    ***Note:** "Change the use", means any modification to a property that results in a change in the number and/or types of vehicles using a property's connection. Examples include changing from residential to commercial use, changing from single to multiple residential use, subdividing to accommodate additional residences or businesses, and changing the type of business.

13. **Proposed use**: Each connection serves a specific use. Check the ***one*** box that ***best*** defines the use. A rural-type highway typically has a ditch. An urban-type highway typically has curb and gutter.

    - ❑ ***Rural - Commercial/Industrial:*** a retail, wholesale, industrial or non-profit business next to a rural-type highway. *35' maximum*
    - ❑ ***Rural - Residential:*** a private home next to a rural-type highway. *16' minimum - 24' maximum*
    - ❑ ***Rural - Agricultural:*** a field for planting, maintaining, and/or harvesting crops or tending livestock, or land for recreational and hunting use, next to a rural-type highway. This use may serve farm buildings, but may not serve residential buildings. *16' minimum - 24' maximum*
    - ❑ ***Urban - Commercial/Industrial:*** a retail, wholesale, industrial or non-profit business next to an urban-type highway. *35' maximum*
    - ❑ ***Urban - Residential:*** a private home next to an urban-type highway. *24' maximum*
    - ❑ ***Public Road:*** a road, street, highway, etc. that connects to a STH for public travel and use and is maintained by a local unit of government.
    - ❑ ***Trail or Trail Crossing:*** a bike, snowmobile, etc. trail that is parallel to and/or crosses a STH.

    Is this a change of the existing use (if applicable)? Check yes or no. See the note in #12 for the definition of "Change the Use".

14. **Proposed Width**: Provide the proposed width of the connection as measured at the right of way line. Minimum and maximum widths are regulated in Trans 231 and are listed in *italics* in #13.

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15. **Proposed Surface**: Choose from grass, gravel, asphalt, or concrete.

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16. **Proposed Trips Per Day**: Estimate how many trips will be made daily by vehicles going in and out of the connection. One vehicle going in and out of the connection equals two trips. "Seasonal" means a connection that is only used a few times during a year, for example, a field entrance or entrance to hunting lands.

    Peak hour traffic count: For any connection that will generate 100 or more trips in any hour, 50 or more trips exiting in one hour, or 750 trips in an average day, provide the number of vehicles using the connection during the peak hour.

17. **Is the property zoned?** Check yes or no. **In either case, provide the appropriate documentation**, which may be obtained from the local zoning administrator or clerk of the appropriate township, village, city, or county where the property is located. Typically, a simple statement from the authority on its letterhead is sufficient for documentation, or WisDOT can provide a form if needed.

18. **Explain how the land is currently being used**: If the land use and zoning are the same, then write "same as zoning". If not, please explain the use. You may use the descriptions listed in #13 as a guide.

19. **Are you aware of any plan to change the zoning or land use for the property?** Check yes or no. **If yes, briefly explain** the circumstances regarding the change. For example, "construct new house" or "proposed development."

20. **Is this connection for a property that was part of a land division or assemblage created on or after 2/1/99?** Check yes or no. **If yes, provide a brief explanation**. For example, if the connection is for property that is being created from a larger piece of property, check yes. A land division can be splitting one property into two or more properties, or it can be an assemblage, which is the joining of properties or portions of properties to make a different property.

21. **Do you own other property abutting the highway that is next to the property that this connection will serve?** Check yes or no. **If yes, briefly describe**. The land may abut either side of the highway.

22. **Does the property abut or border another public road?** Check yes or no. **If yes, provide the road's name**.

23. **Are there any existing connections to any road serving this property?** Check yes or no. The road may be public or private. **If yes, how many?** Provide the total number including any field. Field entrances should be included in this amount.

24. **Are there any restrictions limiting the number, use, or location of connections to the property?** Check yes or no. See #25.

25. **Are there any access easements across the property?** Check yes or no. Access easements and/or access restrictions may be documented on a: subdivision plat, certified survey map, deed, access covenant (recorded or unrecorded), agreement, plat, map, or existing permit (WisDOT or non-WisDOT issued). Carefully review these documents when applying for a STH connection permit. An access easement is typically defined as granting another party the right of vehicular access across a property.

26. **Provide the property tax identification number**: This information may be found on the property tax bill or a county (or city) land records web site.

27. **What is the proposed construction completion date for the connection?** Provide the date. The date should not be longer than ***one year*** from the permit issuance date. If the permitted work has not been started by the date, the permit is ***null and void***. If the permitted work has started but is not finished by the date, no additional work can be done unless an approved written time extension or a subsequent permit is obtained from WisDOT. To request either one, contact the WisDOT office that issued the current permit. Time extensions and subsequent permits are not automatically approved. A field review may be required to determine if conditions have changed since the current permit was approved. WisDOT strongly recommends completing construction of an approved connection as quickly as possible. Once construction has started, it should be completed within 30 days to minimize traffic disruption.

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Wisconsin Department of Transportation (WisDOT) form DT1504 (9/2009)

If the connection is a public road:

- ❑ The applicant must be the appropriate unit of government.
- ❑ Provide a copy of the:
  - Resolution from the appropriate government Board or Council documenting the approval of the proposed road.
  - Executed deed showing the transfer of property from the landowner to the appropriate unit of government.

For all public and private roads:

- ❑ The proposed road must conform to local road standards as found in Wisconsin Statutes and WisDOT's Facilities Development Manual.
- ❑ Provide a copy of the:
  - General location map. An existing plat book map may be used for this.
  - Plat, if applicable
  - Traffic Impact Analysis (TIA), if required by WisDOT or local unit of government
  - Pictures of the proposed intersection from all four directions
- ❑ Provide highway plans for the STH and proposed road showing the:
  - Designated right-of-way widths (See s. 82.50 Wisconsin Statutes for Town Road Standards)
  - Land ties and/or reference points
  - Proposed geometrics including surface type(s), lane width(s), approach grades (in all directions), turn lanes, bypass lanes, return radii, etc.
  - Drainage patterns and drainage structures including culvert size, endwalls, and extensions, if needed
  - Closest connections (other roads, driveways, trail crossings) in both directions along the STH from the proposed road, and along the proposed road from the STH
  - Cross-sections of all road improvements every 50' showing the original ground, proposed finished pavement elevations, ditches, and right-of-way line. Cross-sections along the local road should be provided at least 100' from the STH right-of-way line.
  - Pavement marking plan including new or restored markings, if needed
  - Erosion control and restoration plans
  - Traffic control plans during construction

For all private roads:

- ❑ Provide a copy of:
  - Proof of insurance, if requested by WisDOT.
  - A road maintenance agreement, if such an agreement has been developed and implemented by a group of property owners, businesses, etc., or association.

If the connection is a trail or trail crossing:

- ❑ The applicant may be a property owner, recreational group (for example, a snowmobile club), or unit of government.
- ❑ For a trail crossing in which you are not the property owner, provide written permission from the property owners on each side of the highway that the connection can be attached to their property.
- ❑ Provide a copy of the resolution or agreement that details the maintenance of the trail.

SUPPLEMENTAL PROVISIONS

STH19 and Williamsburg Way, Deforest, Dane Co

Pursuant to Wisconsin Statutes and once approved by WisDOT, this permit allows performance of the specific work described over which WisDOT has permit authority. ***The permittee shall abide by these general provisions, and any supplemental and/or special provisions.*** (ROW = right-of-way)

- Please contact Stefan Ciobanu (WisDOT) 608.516.6832 10 days prior to work within the Right of Way.
- Provide a schedule prior to work on ROW.
- Provide the WDNR and/or Municipal/County Construction Permit.
- Provide a Municipal Resolution for the public street prior to acceptance.
- Follow Plans dated April 20, 2022.

- **WORK RESTRICTIONS:**
  - Daily, holiday and/or seasonal work restrictions apply to the permitted work as detailed:
    - From noon Friday, May 27 to 6:00 AM Tuesday May 31, 2022 for Memorial Day;
    - From noon Friday, July 1 to 6:00 AM Tuesday, July 5, 2022 for Independence Day;
    - From noon Friday, September 2 to 6:00 AM Tuesday, September 6, 2022 for Labor Day;
    - From noon Wednesday, November 23 to 6:00 AM Monday, November 28, 2022 for Thanksgiving

- Bike/Ped Accommodations:
  - Form curb cuts with construction.
  - Complete crosswalk markings prior to construction acceptance.

- Traffic Management:
  - Signage should follow Wisconsin Manual on Uniform Traffic Control Devices.
  - If closing or working near a lane or shoulder, Provide the following advance notification to the engineer for incorporation into the Wisconsin Lane Closure System (LCS). (https://transportal.cee.wisc.edu/closures/)
  - Any highway open to traffic that has an aggregate surface must be repaved with HMA within 72 hours or by the end of the week whichever occurs first.
  - Do not store equipment or materials within 24’ of traffic.
  - Any drop-off greater than 2” needs to be protected by a 3:1 slope or temporary concrete barrier is required.

Wisconsin Lane Closure System Advance Notification:

TABLE 108-1 CLOSURE TYPE AND REQUIRED MINIMUM ADVANCE NOTIFICATION

Closure type with height, weight, or width restrictions (available width, all lanes in one direction < 16’)	**MINIMUM NOTIFICATION**
Lane and shoulder closures	7 calendar days
Full roadway closures	7 calendar days
Detours	7 calendar days
Closure type without height, weight, or width restrictions (available width, all lanes in one direction ≥16’)	**MINIMUM NOTIFICATION**
Lane and shoulder closures	3 business days
Modifying all closure types	3 business days

- Utilities: Avoid or move utilities that may be in the way of the work in right of way. Ascertain that the Utilities in the area are aware of any conflicts.

- Erosion Control:
  - Do not store any materials within the State ROW.
  - Implement erosion control best management practices (BMPs) prior to and at all times during work operations. Provide and maintain erosion control BMPS to protect all restored areas upon completion of the permitted work until the replacement vegetation achieves sustained growth.
  - Any sediment that is deposited from the site onto WisDOT facilities needs to be removed and the area stabilized within 24 hours of the release.
  - Any sediment or materials tracked onto state right of way needs to be cleaned within that workday.
  - The applicant will assure that the ditches/storm sewer (down-stream) are cleaned and positively flow, prior to finalizing the construction.
  - Temporary erosion control best management practices need to be removed and the area restored.
- After temporary use is complete, the area will be restored to pre-construction conditions in accordance with applicable parts of WisDOT's Standard Specifications for Highway and Structure Construction, current edition.
- **The final restoration work needs review prior to acceptance.**

Permit #: 13-100308294-2022

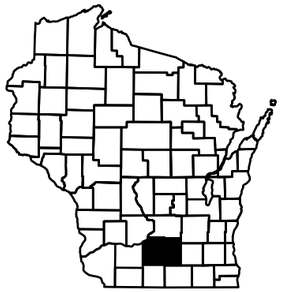
PROJECT ID: WITH: **119.0550.30**

COUNTY: **DANE COUNTY**

ORDER OF SHEETS

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

TOTAL SHEETS =



N

DESIGN DESIGNATION

A.A.D.T.	(2020)	=	17,400
A.A.D.T.	(2040)	=	21,500
D.H.V.		=	2145
D.D.		=	50/50
T.		=	6.0%
DESIGN SPEED		=	60 mph
ESALS		=	5,300,000

CONVENTIONAL SYMBOLS

PLAN

- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE (300'EB')
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE

- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (95.36)
- CULVERT (Profile View)

UTILITIES

- ELECTRIC (E)
- FIBER OPTIC (FO)
- GAS (G)
- SANITARY SEWER (SAN)
- STORM SEWER (SS)
- TELEPHONE (T)
- WATER (W)
- UTILITY PEDESTAL
- POWER POLE
- TELEPHONE POLE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

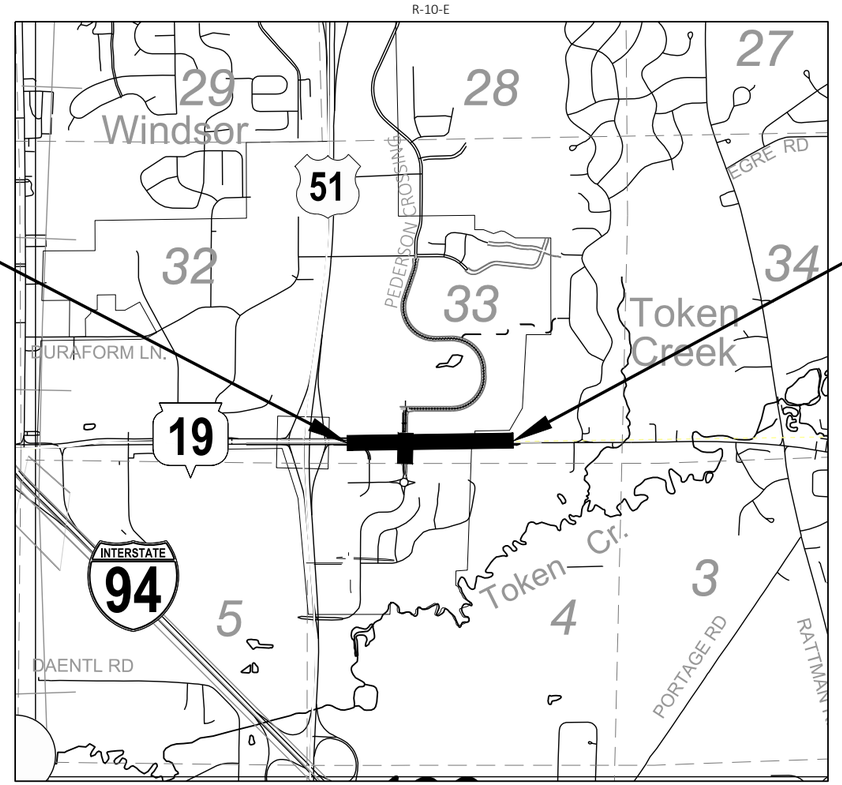
PLAN OF PROPOSED IMPROVEMENT

SNYDER PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
119.0550.30		

STATE HIGHWAY 19 & WILLIAMSBURG WAY - INTERSECTION

DANE COUNTY

SNYDER PROJECT NUMBER
119.0550.30

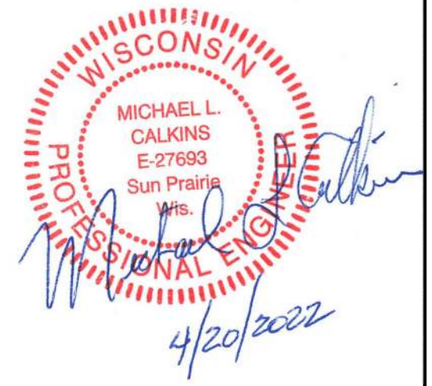


LAYOUT

SCALE 0 0.5 MI

TOTAL NET LENGTH OF CENTERLINE = 0.48 mi

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), DANE COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES. ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A.



STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	SNYDER & ASSOCIATES, INC
Designer	SNYDER & ASSOCIATES, INC
Project Manager	MICHAEL CALKINS, PE
Regional Examiner	REGIONAL EXAMINER
Regional Supervisor	REGIONAL SUPERVISOR

APPROVED FOR THE DEPARTMENT

DATE: _____ _____ (Signature)

E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\010101-TI.DWG PLOT DATE : 3/1/2022 8:43 PM PLOT BY : BLAKE RIDENOUR PLOT NAME :

GENERAL NOTES

THE CONTRACTOR SHALL CONTACT THE UTILITIES AND DIGGERS HOTLINE TO LOCATE AND FIELD VERIFY UTILITIES PRIOR TO THE START OF WORK.

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE.

THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
ANY LOCAL, MUNICIPAL OR OTHER UTILITY THAT IS NOT A MEMBER OF DIGGERS HOTLINE SHALL BE CONTACTED SEPARATELY.

NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.

THE ENGINEER SHALL ADJUST THE LOCATIONS OF ITEMS TO AVOID CONFLICT WITH THE EXISTING UTILITY FACILITIES IF ENCOUNTERED. PROTECTING INLETS WITH PROPER INLET PROTECTION ARE REQUIRED AT LOCATIONS EXHIBITING RISK OF BEING IMPACTED BY CONSTRUCTION OPERATIONS AS SHOWN ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESHAPING AND SEEDING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY ANY OPERATION OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS AT THE CONTRACTOR'S EXPENSE OR AS OTHERWISE DIRECTED BY THE FIELD ENGINEER.

RE-TOPSOIL GRADED AREAS, AS DESIGNATED BY THE ENGINEER, IMMEDIATELY AFTER GRADING IS COMPLETED WITHIN THOSE AREAS. SEED, FERTILIZER, AND MULCH/EROSION MAT TOP-SOILED AREAS, AS DESIGNATED BY THE ENGINEER, WITHIN FIVE (5) CALENDAR DAYS AFTER PLACEMENT OF TOPSOIL. IF GRADED AREAS ARE LEFT EXPOSED FOR MORE THAN FIVE (5) CALENDAR DAYS, TOPSOIL, SEED, AND MULCH THOSE AREAS WITH TEMPORARY SEED AND MULCH.

STOCKPILE EXCESS MATERIAL OR SPOILS ON UPLAND AREAS AWAY FROM WETLANDS, FLOODPLAINS AND WATERWAYS. STOCKPILED SOIL SHALL BE PROTECTED AGAINST EROSION. IF STOCKPILED MATERIAL IS LEFT FOR MORE THAN FOURTEEN (14) CALENDAR DAYS, SEED THE STOCKPILE WITH TEMPORARY SEED AND MULCH.
TEMPORARY STORAGE OF ANY EXCAVATED MATERIAL OR EQUIPMENT WITHIN WETLANDS OR PROTECTED AREAS IS NOT ALLOWED.

WHEN THE QUANTITY OF HMA PAVEMENT OR BASE AGGREGATE IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR THICKNESS OF THE LAYER SHOWN ON THE PLAN IS THE MINIMUM REQUIRED AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

BROKEN CONCRETE CONTAINING STEEL SHALL NOT BE USED AS RIPRAP OR HEAVY RIPRAP.

PRIOR TO ORDERING DRAINAGE PIPES AND STRUCTURES, THE CONTRACTOR SHALL VERIFY RELATED DRAINAGE INFORMATION IN THE PLAN AND PROVIDE DOCUMENTATION TO THE ENGINEER IN ACCORDANCE WITH THE SPECIFICATIONS. THIS ALSO INCLUDES VERIFICATION OF INVERT ELEVATIONS AT ALL PROPOSED STORM SEWER CONNECTION POINTS TO EXISTING SYSTEMS.

DIGGERS HOTLINE
Dial 811 or (800)242-8511
www.DiggersHotline.com

INLET AND DISCHARGE ELEVATIONS FOR DRAINAGE STRUCTURES SHOWN ON THE PLAN SHALL BE ADJUSTED TO FIT FIELD CONDITIONS WITH PERMISSION FROM THE ENGINEER.

ALL HOLES OR OPENINGS BELOW SUBGRADE RESULTING FROM ABANDONMENT OR REMOVAL OF EXISTING STRUCTURES SHALL BE FILLED WITH GRANULAR BACKFILL, AS DIRECTED BY THE ENGINEER.

A SAWED JOINT IS REQUIRED WHERE NEW HMA PAVEMENT MEETS EXISTING ASPHALTIC CONCRETE SURFACE.

THE EROSION CONTROL FEATURES ARE AT SUGGESTED LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.

FERTILIZER SHALL NOT BE USED WITHIN 20 FEET OF NAVIGABLE WATERWAYS OR WETLANDS.

STATIONING, DISTANCES AND OFFSETS FOR SIGNS SHOWN ON THE PLANS ARE APPROXIMATE AND THE LOCATIONS OF SIGNS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER

STANDARD ABBREVIATIONS

AP	ACCESS POINT
AC	ACRE
AGG	AGGREGATE
ASPH	ASPHALTIC
BL	BASELINE
BM	BENCH MARK
CB	CATCH BASIN
CL	CENTER LINE
CONC	CONCRETE
CO	COUNTY
CABC	CRUSHED AGGREGATE BASE COURSE
CY	CUBIC YARD
CULV	CULVERT
CP	CULVERT PIPE
C&G	CURB AND GUTTER
DIA	DIAMETER
DWY	DRIVEWAY
EB	EASTBOUND
EBL	EASTBOUND LEFT TURN LANE
EBR	EASTBOUND RIGHT TURN LANE
ELEV	ELEVATION
EW	ENDWALL
ENT	ENTRANCE
EXC	EXCAVATION
FP	FENCE POST
FERT	FERTILIZE
F	FILL
FG	FINISHED GRADE
FL	FLOW LINE
FO	FIBER OPTIC
FT	FOOT
HYD	HYDRANT
INL	INLET
INTERS	INTERSECTION
INV	INVERT
JT	JOINT
LT	LEFT
LF	LINEAR FOOT
MH	MANHOLE
MP	MARKER POST
MB	MESSAGE BOARD
NOM	NOMINAL
NB	NORTHBOUND
PAVT	PAVEMENT
PERM	PERMENANT
PU	PIPE UNDERDRAIN
PCC	PORTLAND CEMENT CONCRETE
PE	PRIVATE ENTRANCE
PROJ	PROJECT
PL	PROPERTY LINE
RL	REFERENCE LINE
RT	RIGHT
R/W	RIGHT OF WAY
RDWY	ROADWAY
SHLDR	SHOULDER
SB	SOUTHBOUND
SS	STORM SEWER
TEL	TELEPHONE
TEMP	TEMPORARY
TER	TERRACE
TV	TELEVISION
UG	UNDERGROUND
VOL	VOLUME
W	WATER
WB	WESTBOUND
WBL	WESTBOUND LEFT TURN LANE
WBR	WESTBOUND RIGHT TURN LANE

ORDER OF SECTION 2 SHEETS

PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
CONTROL INFORMATION
PAVEMENT GRADES
PAVEMENT DETAILS
EROSION CONTROL & DRAINAGE
REMOVALS (SIGNS)
PERMANENT SIGNING & PAVEMENT MARKING
PLAN PROFILES
STORM SEWER & UTILITY PLAN
CROSS SECTIONS

COMMUNICATIONS

ALLIANT ENERGY (ELECTRIC)
ATTN: MICHAEL BROLIN
4902 NORTH BILTMORE LANE
MADISON, WI 53718
(608) 458-4871

CHARTER COMMUNICATIONS (CABLE)
ATTN: KIRK UPPERMAN
2701 DANIELS ST
MADISON, WI 53718
(608) 274-3822 EXT 6741

MG&E (GAS)
ATTN: JANE ROSSING
P.O. BOX 1231
MADISON, WI 53701-1231
(608) 252-7099

VILLAGE OF DEFOREST (SEWER & WATER)
ATTN: GREG HALL
120 S. STEVENSON ST
DEFOREST, WI 53532
(608) 846-6751

TDS METROCOM LLC - (COMMUNICATION)
ATTN: JERRY MYERS
525 JUNCTION ROAD
MADISON, WI 53717
(608) 664-4404

VERIZON - (COMMUNICATION)
ATTN: RANDOLPH J (RJ) CICATELLO
15725 WEST RYERSON ROAD
NEW BERLIN, WI 53151
(262) 782-9836

2

2

2

PRESTIGIACOMO JOINT TR

CAH CO DEFOREST LLC

CAH CO DEFOREST LLC

CAH CO DEFOREST LLC

PEDERSON CROSSING BOULEVARD

105'WL'

CAH CO DEFOREST LLC

CAH CO DEFOREST LLC

VILLAGE OF DEFOREST

VILLAGE OF DEFOREST

BEGIN PROJECT
STA 18+58.00

END CONSTRUCTION
STA 102+66.90

END PROJECT
STA 48+75.00

20'WB'

25'WB'

30'WB'

35'WB'

40'WB'

45'WB'

19

19

19

100'WL'

WILLIAMSBURG WAY

SAVANNAH BROOKS LLC

SAVANNAH BROOKS LLC

BEGIN CONSTRUCTION
STA 95+50.00

N

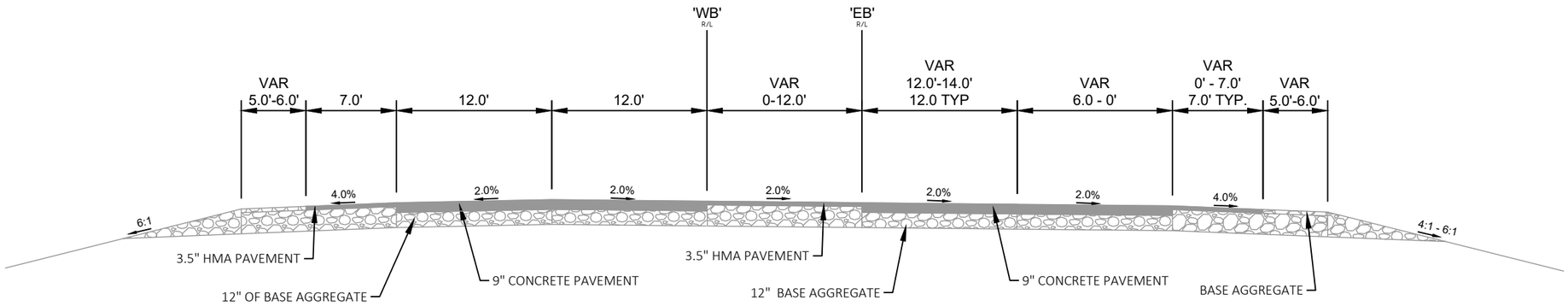
PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	PROJECT OVERVIEW	SHEET 3	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\020201-PO.DWG
LAYOUT NAME - 020201

PLOT DATE : 3/1/2022 8:49 PM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:200 FT

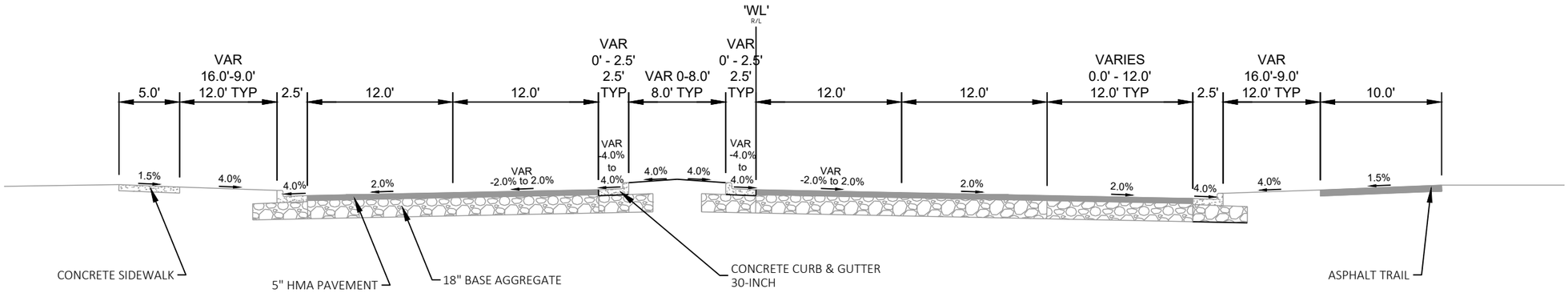
WISDOT/CADDS SHEET 42

2



EXISTING TYPICAL SECTION - STH 19

STA 36+24 - 48+73

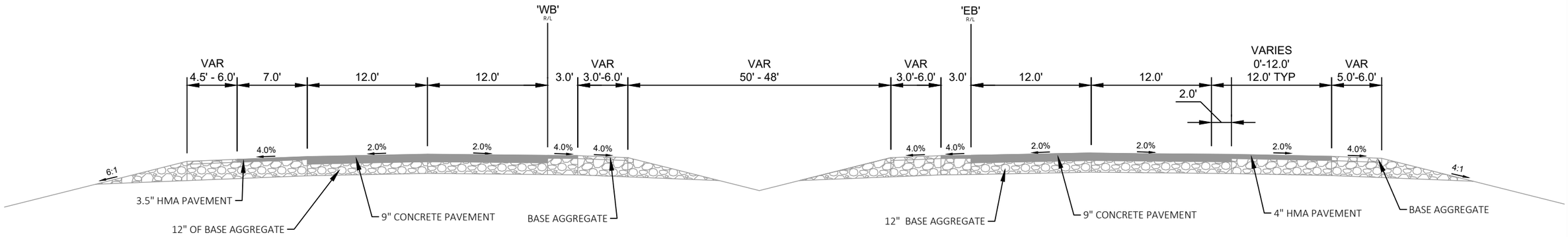


EXISTING TYPICAL SECTION - WILLIAMSBURG WAY

STA 97+50 - 100+00

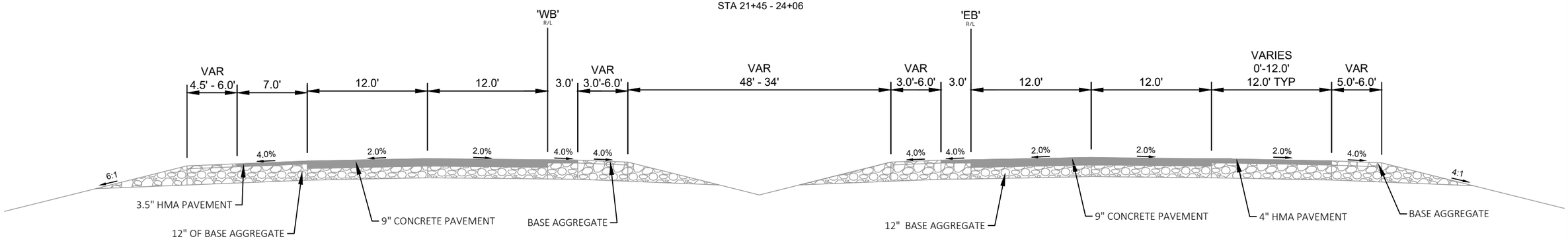
PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	TYPICAL SECTIONS	SHEET 4	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 02-10ft
PLOT DATE : 3/9/2022 1:54 PM
PLOT BY : BLAKE RIDENOUR
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42



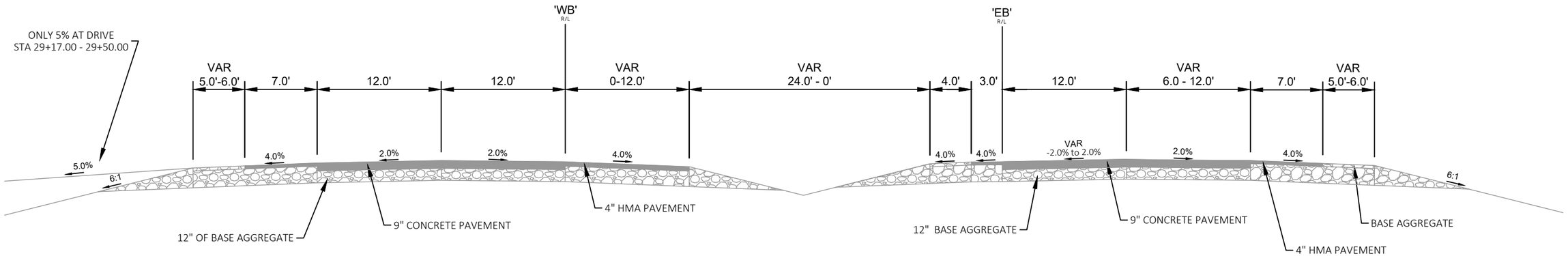
EXISTING TYPICAL SECTION - STH 19

STA 21+45 - 24+06



EXISTING TYPICAL SECTION - STH 19

STA 24+06 - 27+60



EXISTING TYPICAL SECTION - STH 19

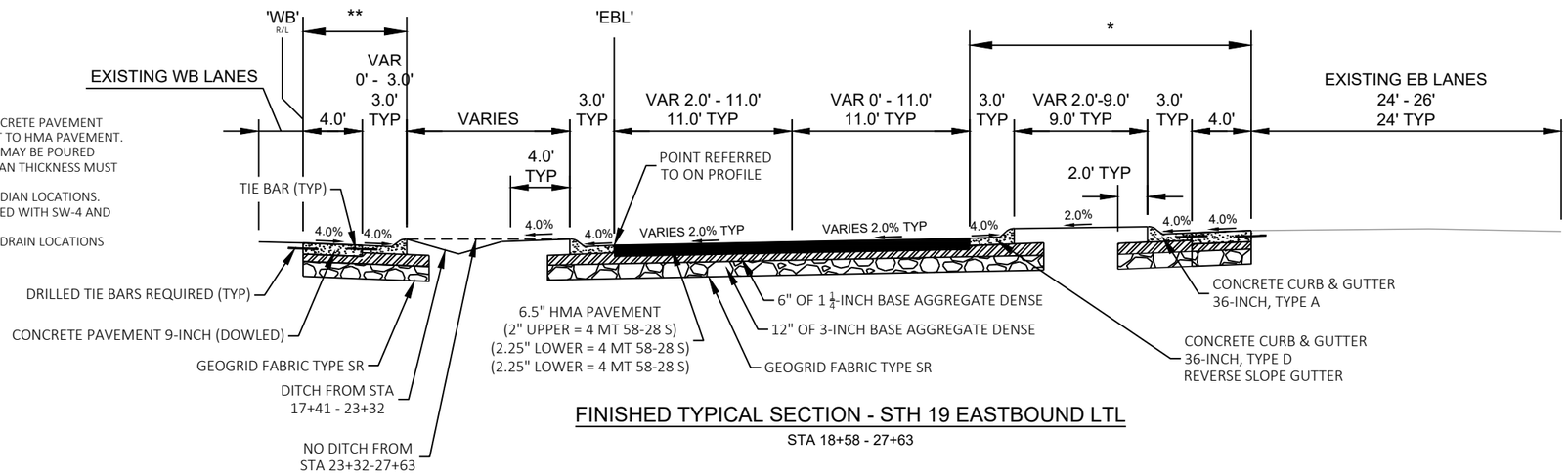
STA 29+38 - 36+24

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	TYPICAL SECTIONS	SHEET 5	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 01-10ft

PLOT DATE : 3/9/2022 1:54 PM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:10 FT

NOTES:
-TYPE A CURB & GUTTER USED NEXT TO CONCRETE PAVEMENT AND TYPE D CURB AND GUTTER USED NEXT TO HMA PAVEMENT.
-4-FOOT SECTION OF CONCRETE PAVEMENT MAY BE POURED INTEGRAL. IF POURED INTEGRALLY, CURB PAN THICKNESS MUST MATCH PAVEMENT THICKNESS
-SEE PAVEMENT DETAILS FOR CONCRETE MEDIAN LOCATIONS. LOCATIONS BETWEEN MEDIANS ARE MARKED WITH SW-4 AND SHALL BE THE WISDOT RED COLOR.
-SEE UNDERDRAIN PLAN SHEETS FOR UNDERDRAIN LOCATIONS

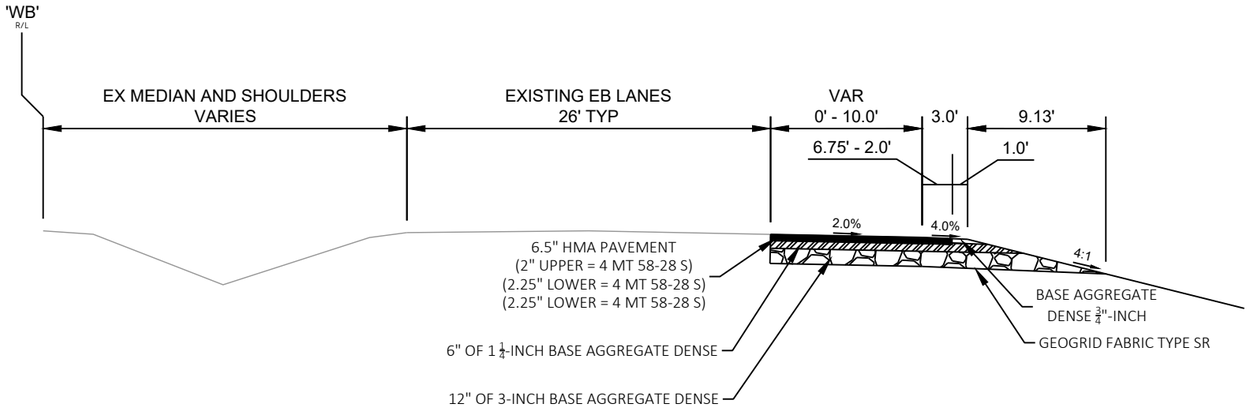


FINISHED TYPICAL SECTION - STH 19 EASTBOUND LTL

STA 18+58 - 27+63

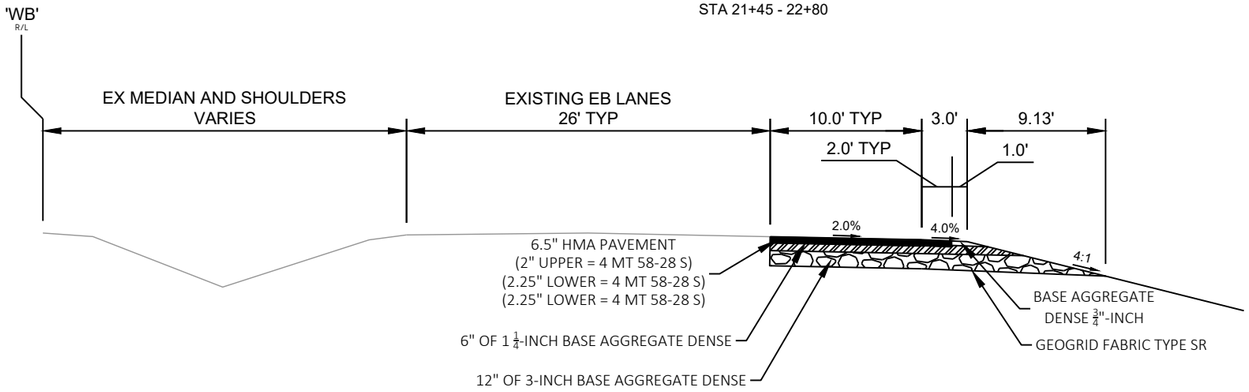
* SECTION APPLIED ONLY FROM STA. 22+87 - 27+63

** SECTION APPLIED ONLY FROM STA. 23+32 - 27+63
TIE INTO EXISTING FROM STA. 17+41 - 23+32



FINISHED TYPICAL SECTION - STH 19 EASTBOUND RTL

STA 21+45 - 22+80



FINISHED TYPICAL SECTION - STH 19 EASTBOUND RTL

STA 22+80 - 24+05

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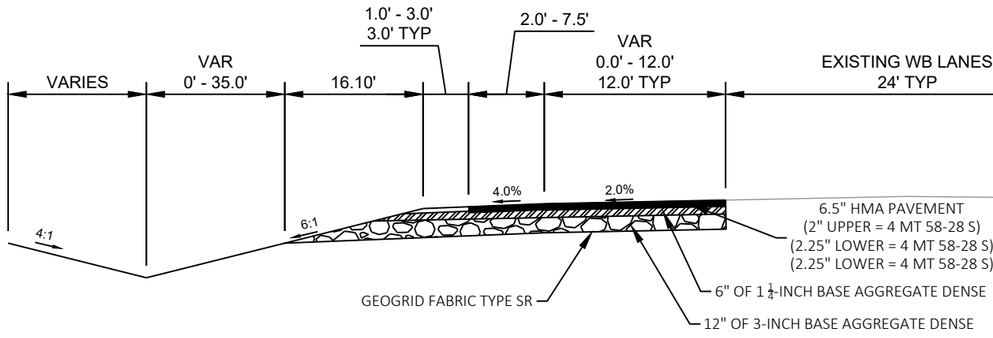
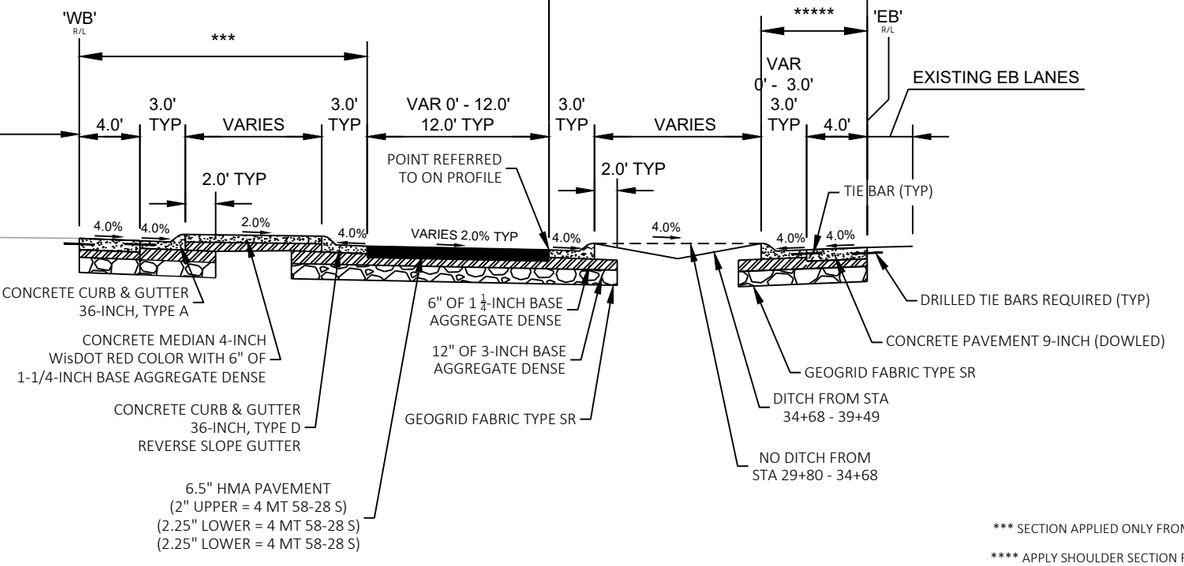


FINISHED TYPICAL SECTION - STH 19 WESTBOUND RTL

STA 29+75 - 36+73



FINISHED TYPICAL SECTION - STH 19 WESTBOUND LTL

STA 29+80 - 39+49

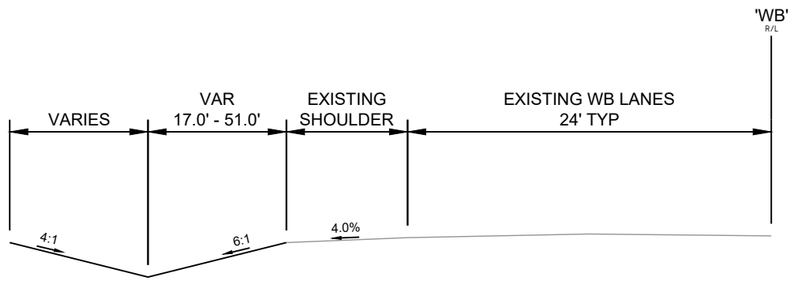
NOTES:

-TYPE A CURB & GUTTER USED NEXT TO CONCRETE PAVEMENT AND TYPE D CURB AND GUTTER USED NEXT TO HMA PAVEMENT.
-4-FOOT SECTION OF CONCRETE PAVEMENT MAY BE POURED INTEGRAL. IF POURED INTEGRALLY, CURB PAN THICKNESS MUST MATCH PAVEMENT THICKNESS
-SEE PAVEMENT DETAILS FOR CONCRETE MEDIAN LOCATIONS. LOCATIONS BETWEEN MEDIANS ARE MARKED WITH SW-4 AND SHALL BE THE WISDOT RED COLOR.
-SEE UNDERDRAIN PLAN SHEETS FOR UNDERDRAIN LOCATIONS

*** SECTION APPLIED ONLY FROM STA. 22+87 - 27+63

**** APPLY SHOULDER SECTION FROM STA. 34+68 - 39+49

***** SECTION ENDS AT STA. 35+00

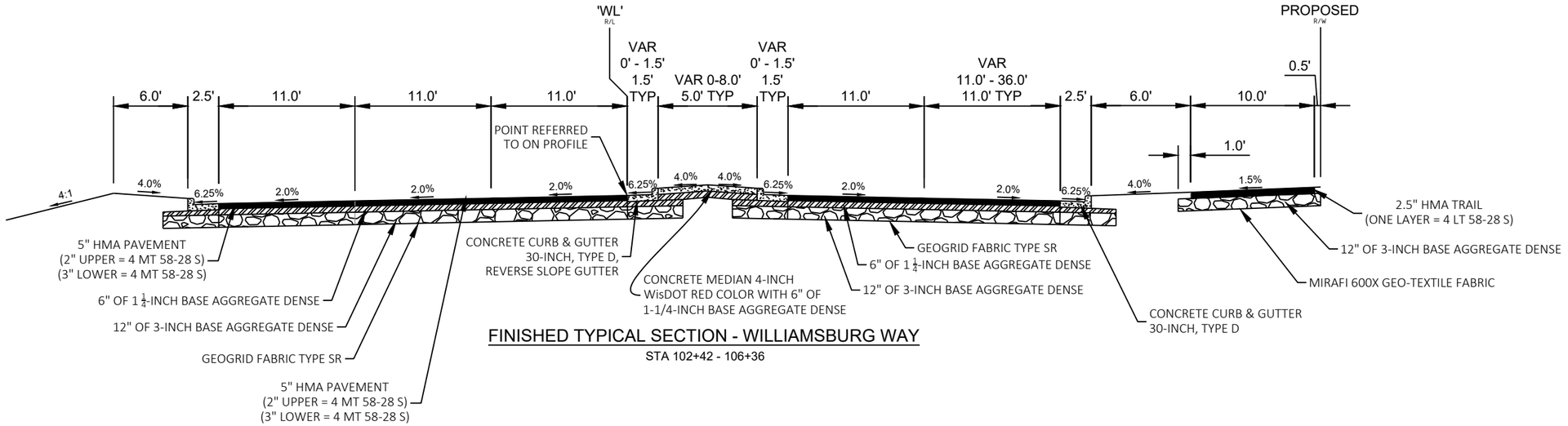


FINISHED TYPICAL SECTION - STH 19 WESTBOUND GRADING TO EXISTING DITCH

STA 36+73 - 44+06

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	TYPICAL SECTIONS	SHEET 7	E

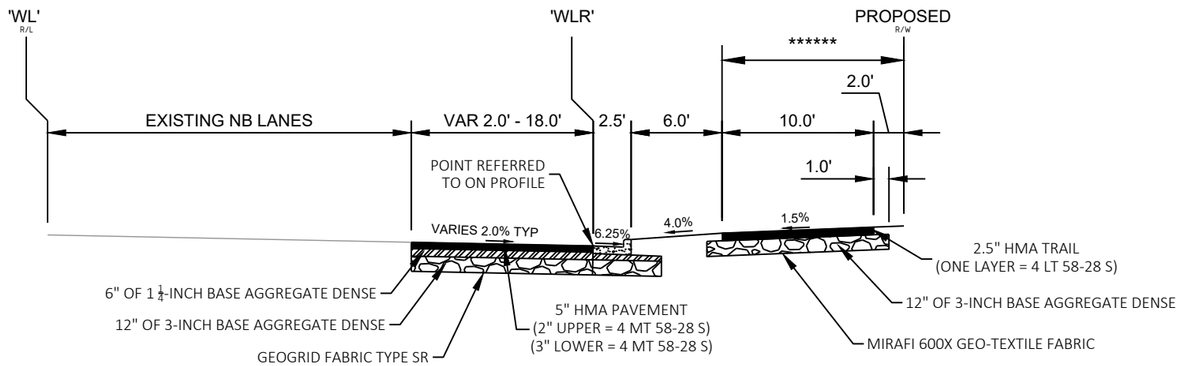
2



FINISHED TYPICAL SECTION - WILLIAMSBURG WAY

STA 102+42 - 106+36

NOTES:
-TYPE A CURB & GUTTER USED NEXT TO CONCRETE PAVEMENT AND TYPE D CURB AND GUTTER USED NEXT TO HMA PAVEMENT.
-SEE PAVEMENT DETAILS FOR CONCRETE MEDIAN LOCATIONS. LOCATIONS BETWEEN MEDIANS ARE MARKED WITH SW-4 AND SHALL BE THE WISDOT RED COLOR.

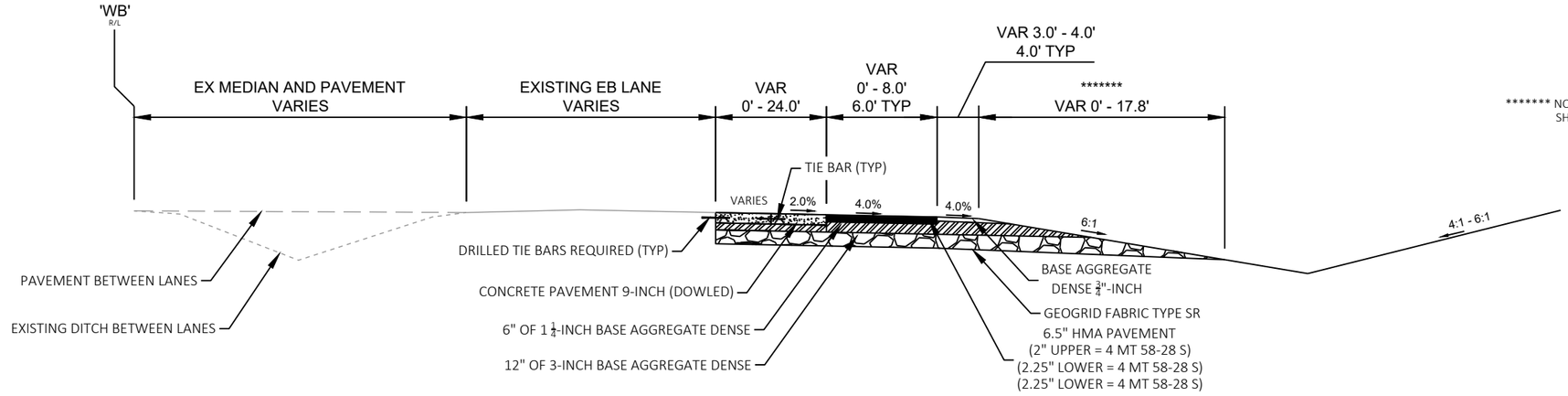


****** SECTION APPLIED ONLY FROM STA. 97+45 - 100+70

FINISHED TYPICAL SECTION - WILLIAMSBURG WAY RTL WIDENING

STA 95+50 - 100+70

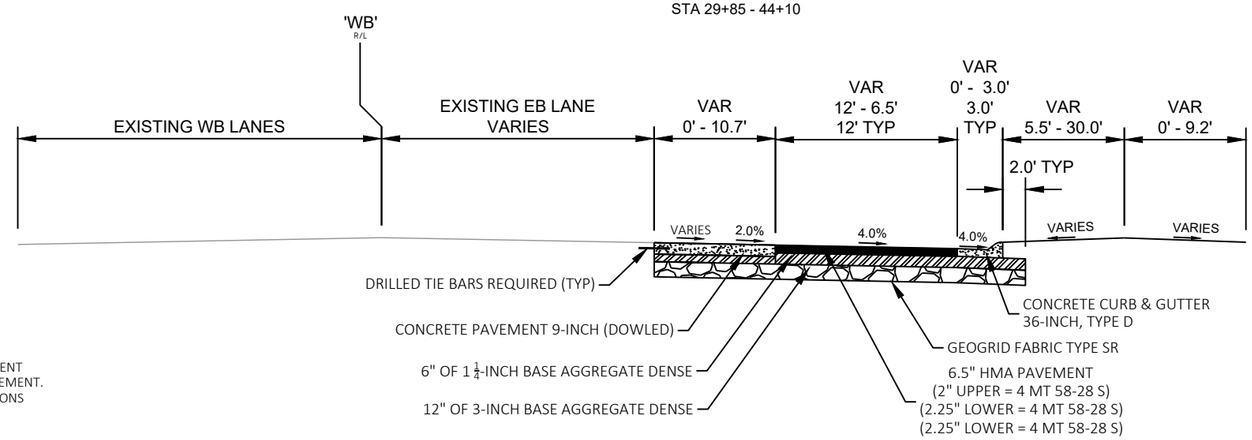
PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	TYPICAL SECTIONS	SHEET 8	E



******* NO SUBGRADE IMPROVEMENT AFTER GRAVEL SHOULDER FROM STA. 29+85 - 33+40.

FINISHED TYPICAL SECTION - STH 19 EASTBOUND LANE WIDENING

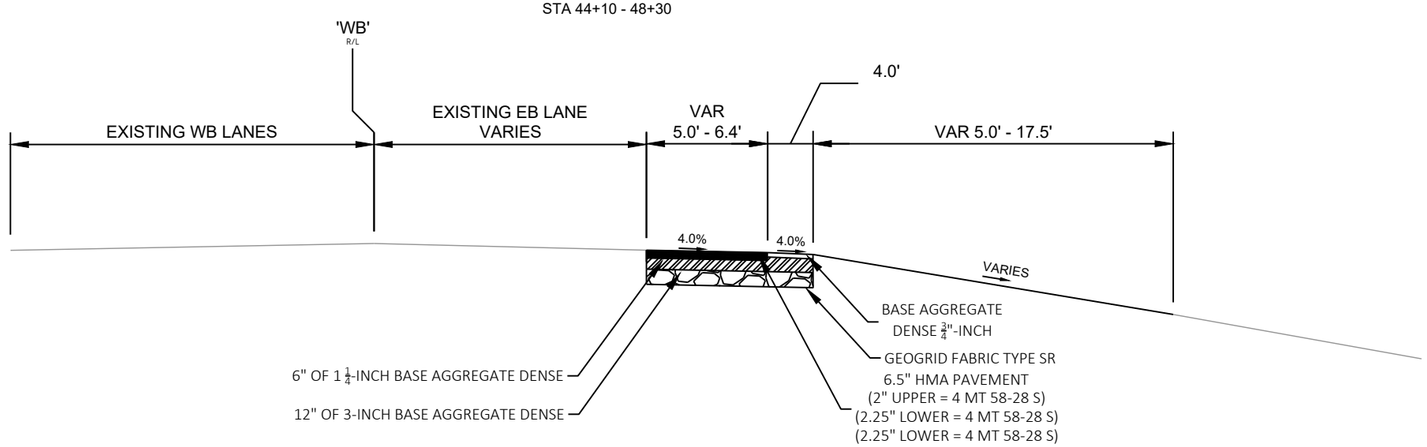
STA 29+85 - 44+10



NOTES:
-TYPE A CURB & GUTTER USED NEXT TO CONCRETE PAVEMENT AND TYPE D CURB AND GUTTER USED NEXT TO HMA PAVEMENT.
-SEE UNDERDRAIN PLAN SHEETS FOR UNDERDRAIN LOCATIONS

FINISHED TYPICAL SECTION - STH 19 EASTBOUND LANE WIDENING

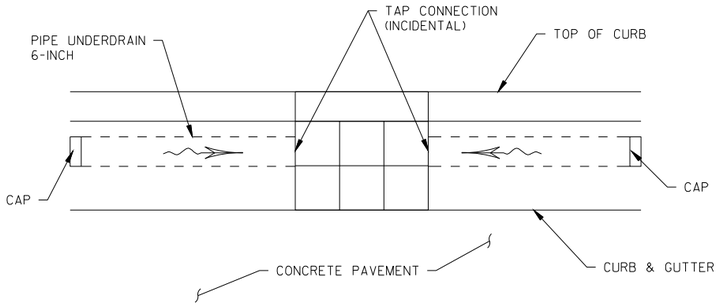
STA 44+10 - 48+30



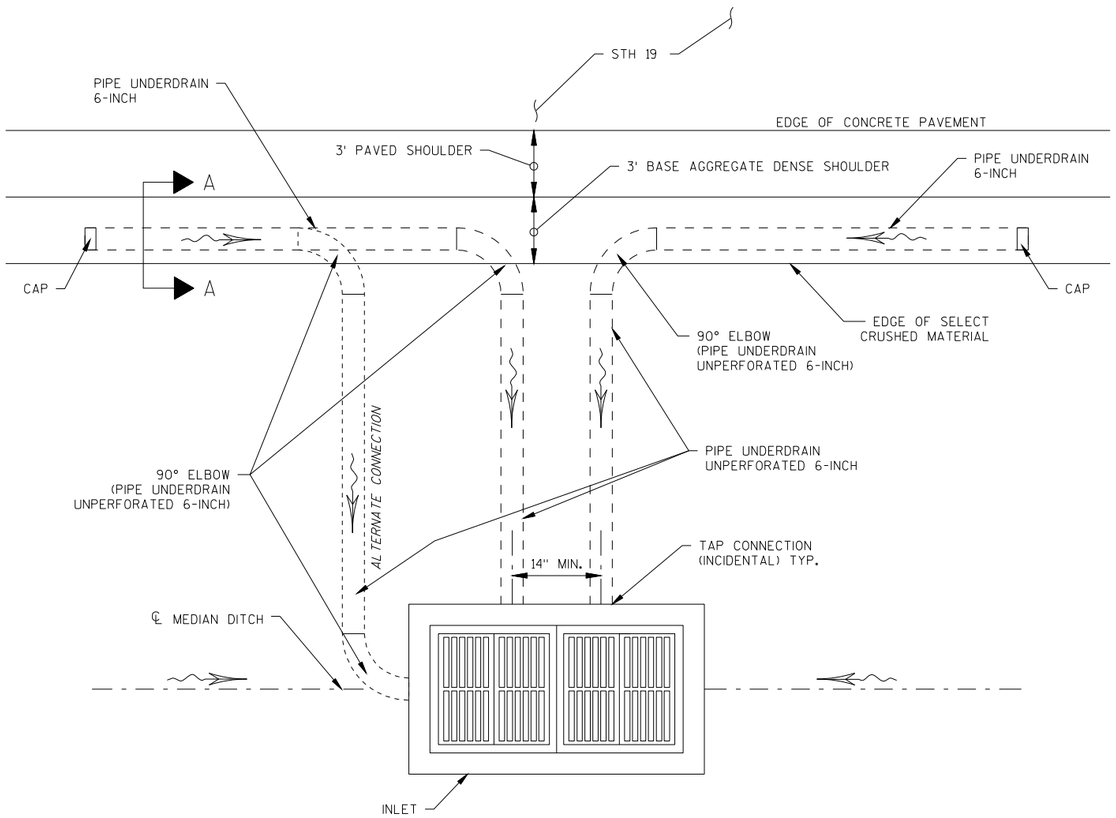
FINISHED TYPICAL SECTION - STH 19 EASTBOUND LANE WIDENING

STA 48+30 - 48+75

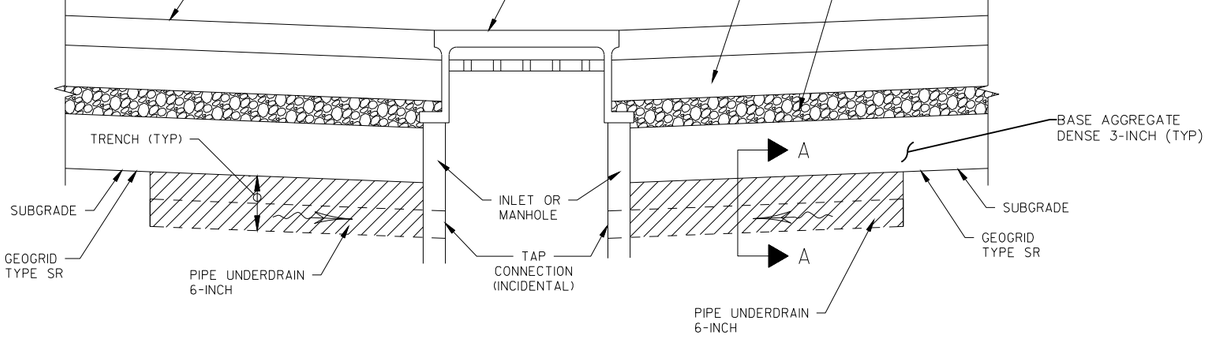
PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	TYPICAL SECTIONS	SHEET 9	E



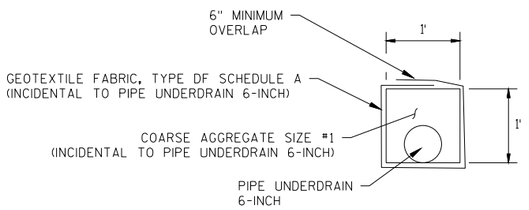
PLAN VIEW - CURB & GUTTER SECTION



PLAN VIEW - MEDIAN SHOULDER SECTION
LOW POINT SHOWN



ELEVATION VIEW - CURB & GUTTER SECTION SHOWN
LOW POINT SHOWN



SECTION A-A
PIPE UNDERDRAIN TRENCH

PIPE UNDERDRAIN DETAILS

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	CONSTRUCTION DETAILS	SHEET 10	E

2

GENERAL NOTES

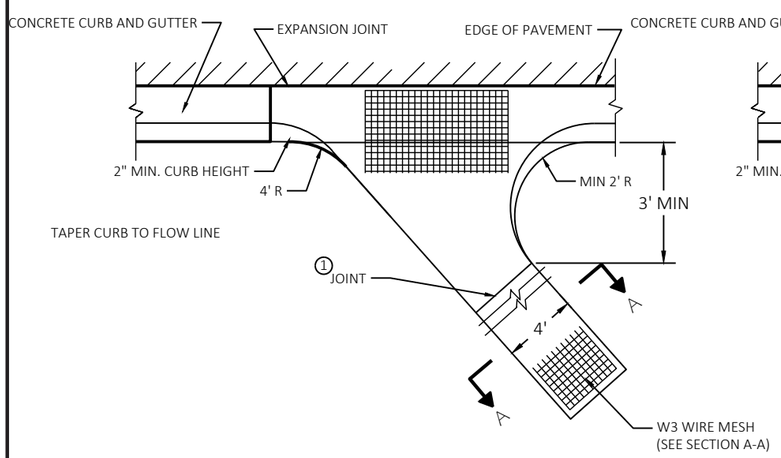
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

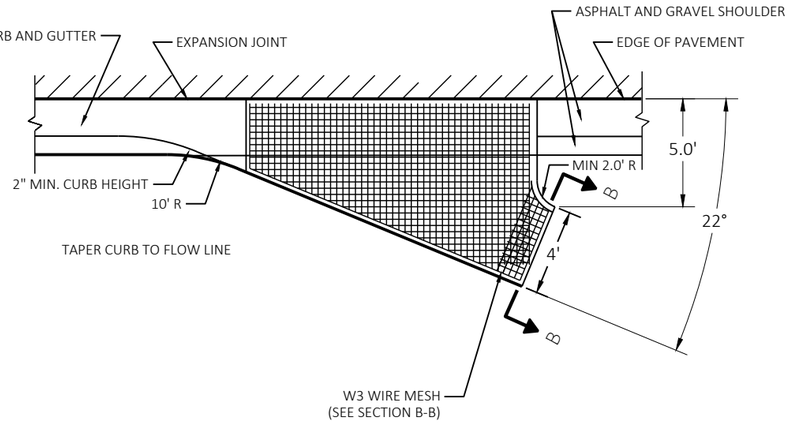
① JOINTS SHALL BE $\frac{1}{8}$ TO $\frac{1}{4}$ INCH WIDE BY $1\frac{1}{2}$ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.

② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WITH OF THE CONCRETE SURFACE DRAIN.

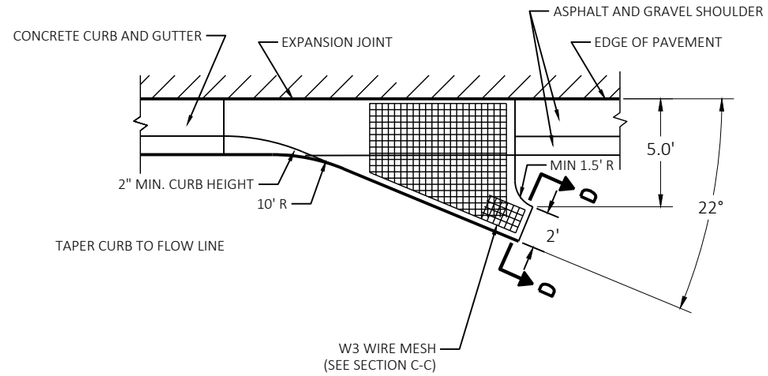
CONCRETE SURFACE DRAIN

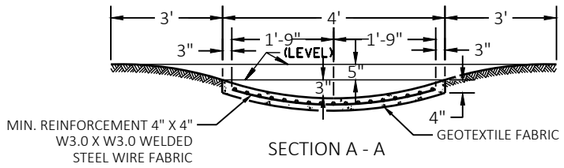


CONCRETE SURFACE DRAIN OFF EAST BOUND TRAVEL LANES

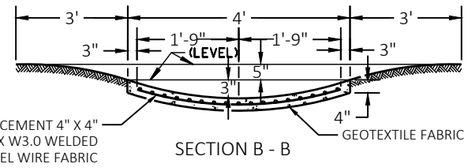


CONCRETE SURFACE DRAIN OFF WEST BOUND LEFT TURN LANE

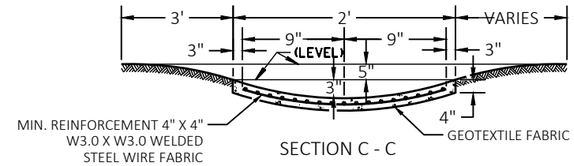




SECTION A - A



SECTION B - B



SECTION C - C

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	CONSTRUCTION DETAILS	SHEET 11	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\021001-CD.DWG
LAYOUT NAME - 11
PLOT DATE : 3/1/2022 8:51 PM
PLOT BY : BLAKE RIDENOUR
PLOT NAME :
PLOT SCALE : N.T.S.
WISDOT/CADDS SHEET 42

NOTE: RAMPS, TRAIL AND SIDEWALK IN ALL CORNERS OF THE INTERSECTION TO BE INSTALLED IN FUTURE. FUTURE SIDEWALK,TRAIL, AND RAMP SHOWN FOR CONSTRUCTION REFERENCE ONLY. CONSTRUCT TRAIL ALONG WILLIAMSBURG UP TO THE RADII AND CURB RAMP C101. KEEP FULL CURB HEAD THROUGH RAMPS.

2

2

N

103'WL'

MATCHLINE STA. 102+66.90'WL'

TRAIL, RAMPS, AND DETECTABLE WARNING FIELDS TO BE CONSTRUCTED IN FUTURE WHEN SIGNALS ARE INSTALLED.

CR-100
TYPE 2 RAMP

102'WL'

25'WB' 26'WB' 27'WB' 28'WB' 29'WB' 30'WB' 31'WB' 32'WB'

INSTALL RAMP AND DETECTABLE WARNING FIELDS IN STAGE 2.

CR-101
TYPE 5 RAMP

101'WL'

STH 19

TRAIL, RAMPS, AND DETECTABLE WARNING FIELDS TO BE CONSTRUCTED IN FUTURE WHEN SIGNALS ARE INSTALLED.

CR-104
TYPE 2 RAMP

SIDEWALK, RAMPS, AND DETECTABLE WARNING FIELDS TO BE CONSTRUCTED IN FUTURE WHEN SIGNALS ARE INSTALLED

WILLIAMSBURG WAY

100'WL'

99'WL'

CR-102
TYPE 2 RAMP

CR-103
TYPE 2 RAMP

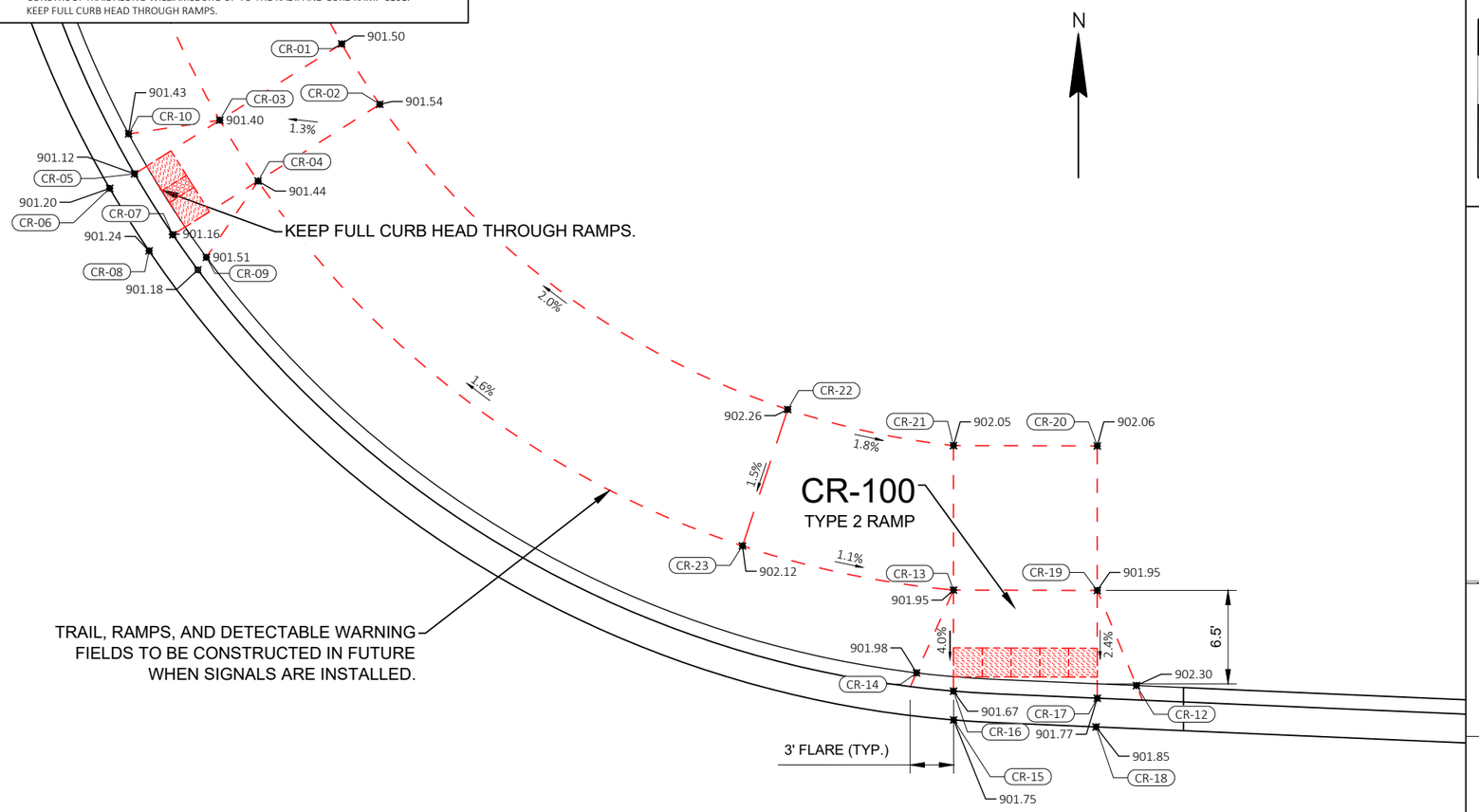
CONSTRUCT TRAIL UP TO RADIUS

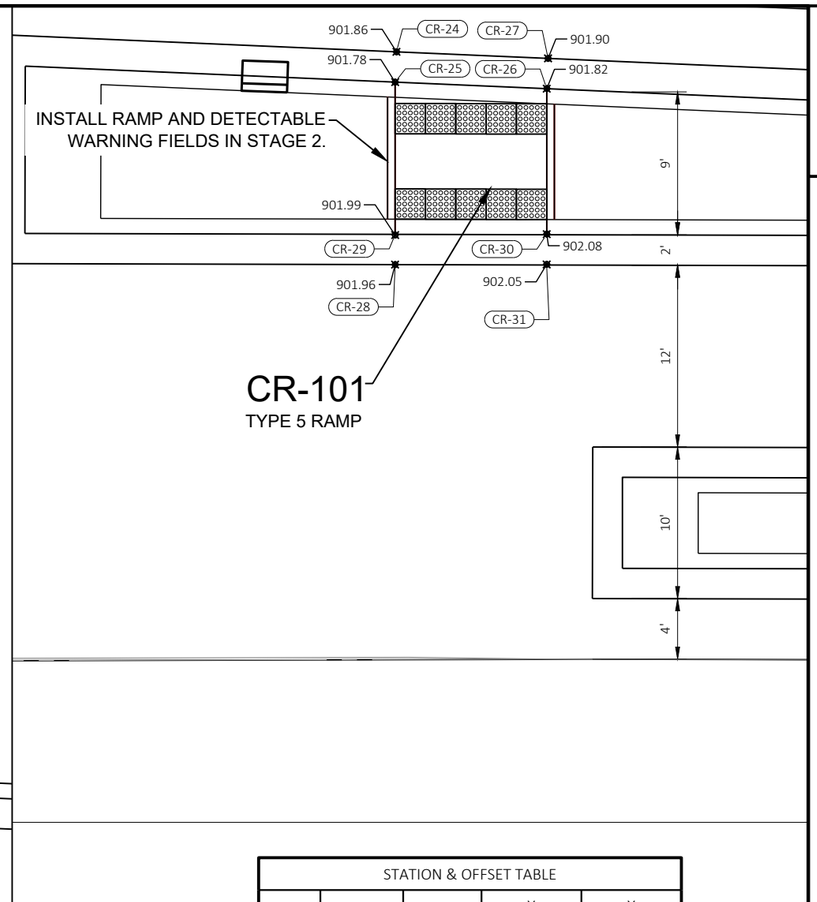
PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	CURB RAMP DETAILS	SHEET 12	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\021301-CR.DWG
LAYOUT NAME - 01

PLOT DATE : 3/2/2022 10:18 AM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 50

NOTE: RAMPS, TRAIL AND SIDEWALK IN ALL CORNERS OF THE INTERSECTION TO BE INSTALLED IN FUTURE. FUTURE SIDEWALK,TRAIL, AND RAMP SHOWN FOR CONSTRUCTION REFERENCE ONLY. CONSTRUCT TRAIL ALONG WILLIAMSBURG UP TO THE RADII AND CURB RAMP C101. KEEP FULL CURB HEAD THROUGH RAMPS.





STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
CR-01	102+27.46	58.67 RT	526704.012	838774.692
CR-02	102+23.28	61.37 RT	526699.805	838777.344
CR-03	102+22.05	50.25 RT	526698.701	838766.210
CR-04	102+17.85	52.96 RT	526694.471	838768.875
CR-05	102+18.25	44.37 RT	526694.968	838760.284
CR-06	102+17.22	42.65 RT	526693.961	838758.556
CR-07	102+14.05	47.08 RT	526690.738	838762.948
CR-08	102+12.90	45.44 RT	526689.614	838761.294
CR-09	102+12.50	49.43 RT	526689.165	838765.282
CR-10	102+21.03	43.92 RT	526697.752	838759.873

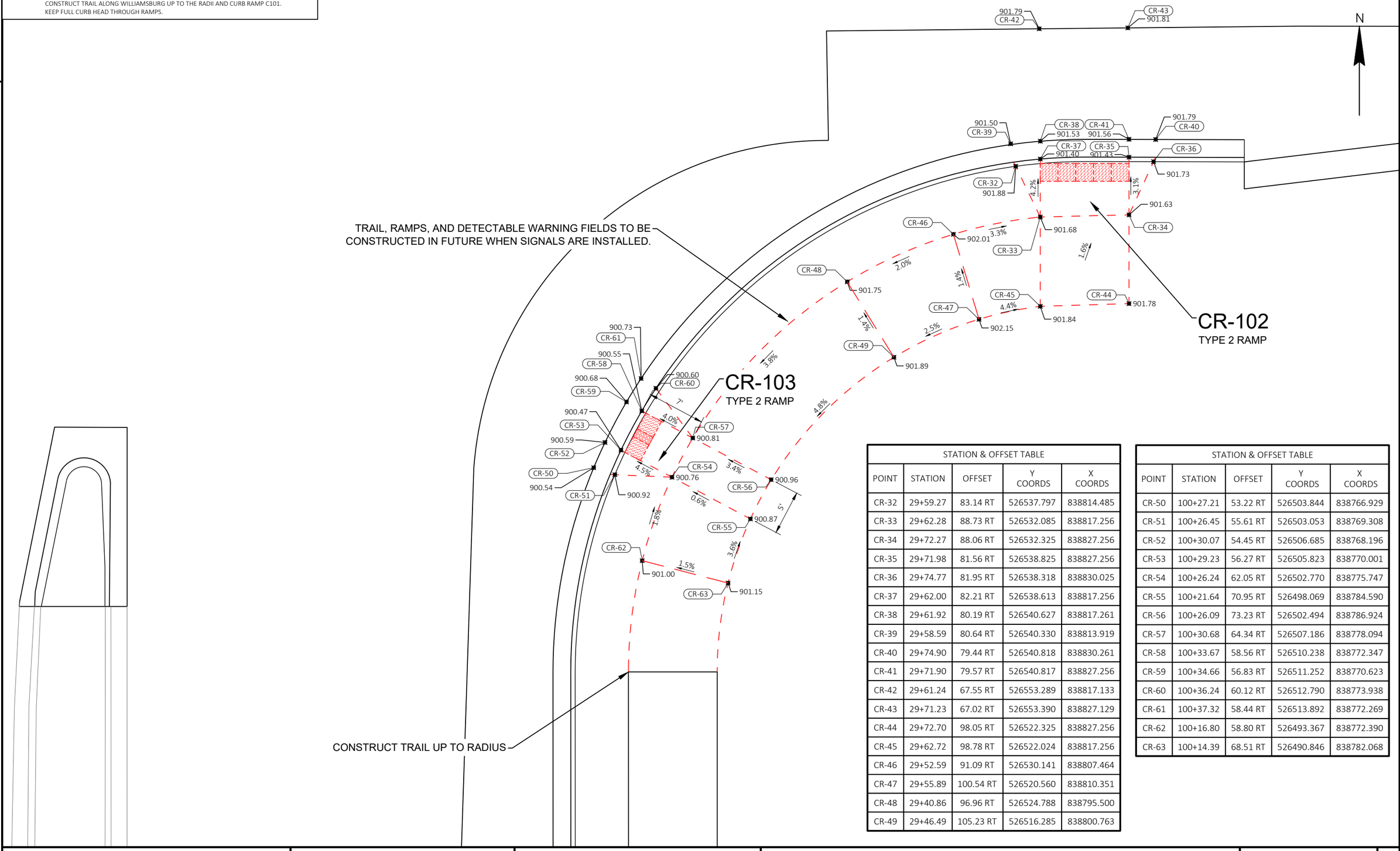
STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
CR-12	29+69.49	39.00 LT	526659.382	838829.981
CR-13	29+56.49	45.08 LT	526666.018	838817.256
CR-14	29+54.17	39.22 LT	526660.260	838814.682
CR-15	29+56.89	36.05 LT	526656.984	838817.263
CR-16	29+56.79	38.06 LT	526658.991	838817.256
CR-17	29+66.80	38.00 LT	526658.499	838827.256
CR-18	29+66.80	36.00 LT	526656.501	838827.169
CR-19	29+66.48	45.49 LT	526665.994	838827.256
CR-20	29+66.04	55.53 LT	526676.046	838827.256
CR-21	29+56.05	55.12 LT	526676.069	838817.256
CR-22	29+44.42	57.13 LT	526678.583	838805.722
CR-23	29+41.69	47.51 LT	526669.091	838802.574

STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
CR-24	29+58.70	4.00 RT	526616.889	838817.343
CR-25	29+58.70	6.00 RT	526614.891	838817.256
CR-26	29+68.71	6.00 RT	526614.458	838827.256
CR-27	29+68.71	4.00 RT	526616.456	838827.343
CR-28	29+59.22	18.03 RT	526602.849	838817.251
CR-29	29+59.14	16.03 RT	526604.849	838817.256
CR-30	29+69.13	15.59 RT	526604.861	838827.256
CR-31	29+69.21	17.59 RT	526602.861	838827.251

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	CURB RAMP DETAILS	SHEET 13	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\021301-CR.DWG
LAYOUT NAME - 02
PLOT DATE : 3/2/2022 10:19 AM
PLOT BY : BLAKE RIDENOUR
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

NOTE: RAMPS, TRAIL AND SIDEWALK IN ALL CORNERS OF THE INTERSECTION TO BE INSTALLED IN FUTURE. FUTURE SIDEWALK,TRAIL, AND RAMP SHOWN FOR CONSTRUCTION REFERENCE ONLY. CONSTRUCT TRAIL ALONG WILLIAMSBURG UP TO THE RADII AND CURB RAMP C101. KEEP FULL CURB HEAD THROUGH RAMPS.



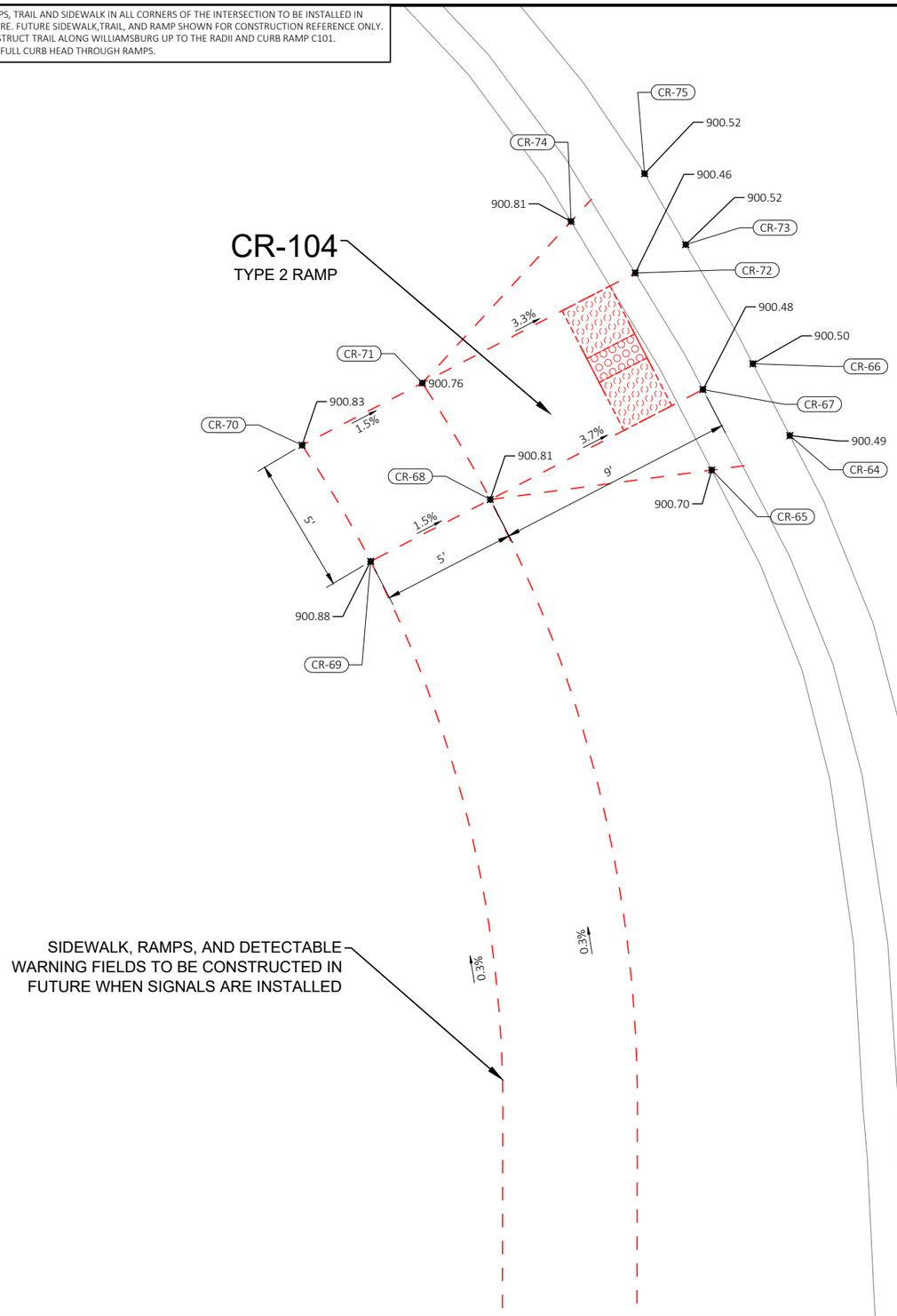
STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
CR-32	29+59.27	83.14 RT	526537.797	838814.485
CR-33	29+62.28	88.73 RT	526532.085	838817.256
CR-34	29+72.27	88.06 RT	526532.325	838827.256
CR-35	29+71.98	81.56 RT	526538.825	838827.256
CR-36	29+74.77	81.95 RT	526538.318	838830.025
CR-37	29+62.00	82.21 RT	526538.613	838817.256
CR-38	29+61.92	80.19 RT	526540.627	838817.261
CR-39	29+58.59	80.64 RT	526540.330	838813.919
CR-40	29+74.90	79.44 RT	526540.818	838830.261
CR-41	29+71.90	79.57 RT	526540.817	838827.256
CR-42	29+61.24	67.55 RT	526553.289	838817.133
CR-43	29+71.23	67.02 RT	526553.390	838827.129
CR-44	29+72.70	98.05 RT	526522.325	838827.256
CR-45	29+62.72	98.78 RT	526522.024	838817.256
CR-46	29+52.59	91.09 RT	526530.141	838807.464
CR-47	29+55.89	100.54 RT	526520.560	838810.351
CR-48	29+40.86	96.96 RT	526524.788	838795.500
CR-49	29+46.49	105.23 RT	526516.285	838800.763

STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
CR-50	100+27.21	53.22 RT	526503.844	838766.929
CR-51	100+26.45	55.61 RT	526503.053	838769.308
CR-52	100+30.07	54.45 RT	526506.685	838768.196
CR-53	100+29.23	56.27 RT	526505.823	838770.001
CR-54	100+26.24	62.05 RT	526502.770	838775.747
CR-55	100+21.64	70.95 RT	526498.069	838784.590
CR-56	100+26.09	73.23 RT	526502.494	838786.924
CR-57	100+30.68	64.34 RT	526507.186	838778.094
CR-58	100+33.67	58.56 RT	526510.238	838772.347
CR-59	100+34.66	56.83 RT	526511.252	838770.623
CR-60	100+36.24	60.12 RT	526512.790	838773.938
CR-61	100+37.32	58.44 RT	526513.892	838772.269
CR-62	100+16.80	58.80 RT	526493.367	838772.390
CR-63	100+14.39	68.51 RT	526490.846	838782.068

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	CURB RAMP DETAILS	SHEET 14	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\021301-CR.DWG
LAYOUT NAME - 03
PLOT DATE : 3/2/2022 10:19 AM
PLOT BY : BLAKE RIDENOUR
PLOT NAME :
PLOT SCALE : 1 IN:10 FT

NOTE: RAMPS, TRAIL AND SIDEWALK IN ALL CORNERS OF THE INTERSECTION TO BE INSTALLED IN FUTURE. FUTURE SIDEWALK,TRAIL, AND RAMP SHOWN FOR CONSTRUCTION REFERENCE ONLY. CONSTRUCT TRAIL ALONG WILLIAMSBURG UP TO THE RADII AND CURB RAMP C101. KEEP FULL CURB HEAD THROUGH RAMPS.



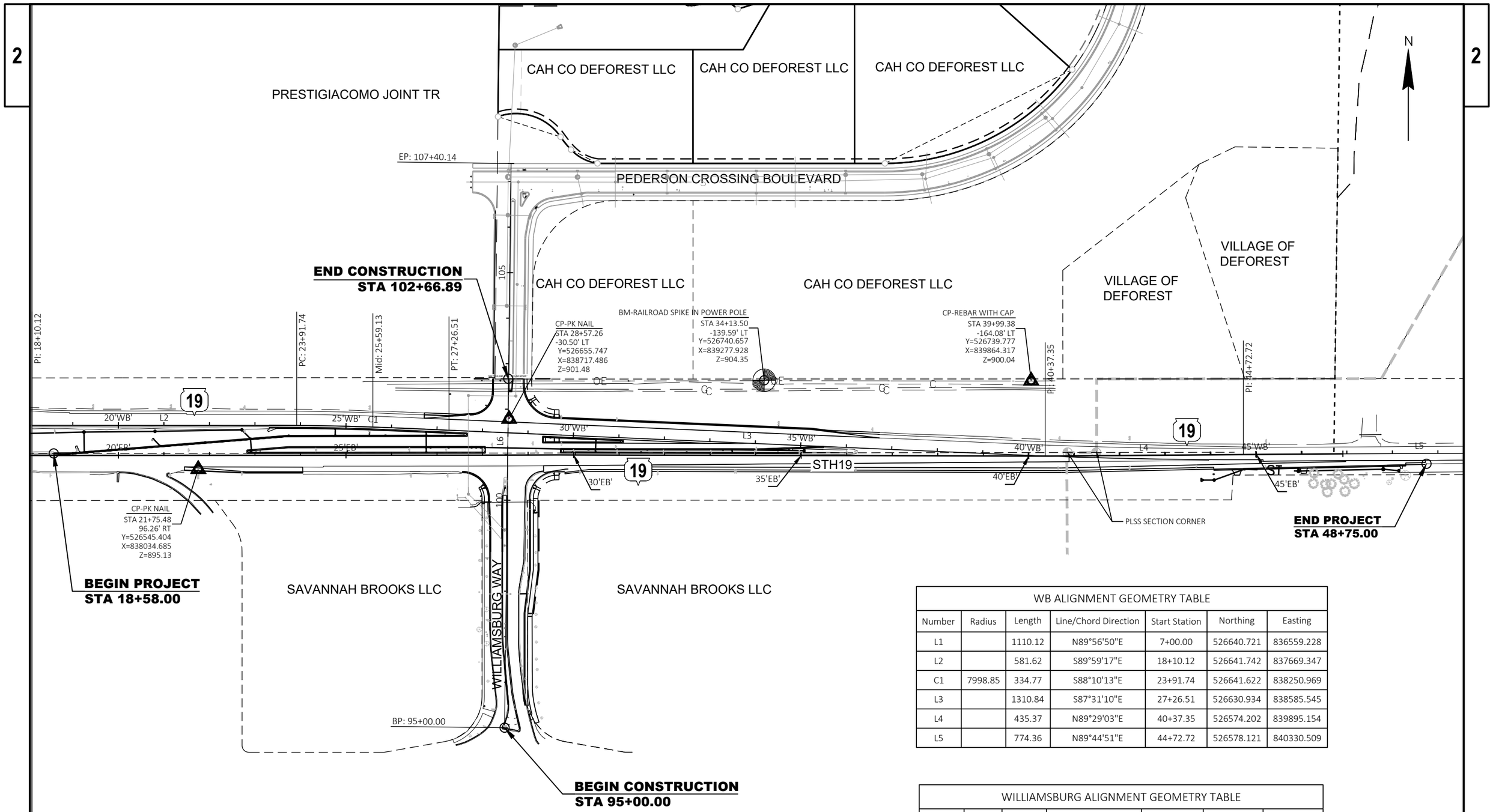
N

STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
CR-64	100+27.11	44.69 LT	526504.877	838669.025
CR-65	100+25.80	47.58 LT	526503.597	838666.121
CR-66	100+29.76	46.10 LT	526507.544	838667.650
CR-67	100+28.79	47.94 LT	526506.588	838665.797
CR-68	100+24.61	55.79 LT	526502.504	838657.894
CR-69	100+22.27	60.21 LT	526500.209	838653.452
CR-70	100+26.55	62.81 LT	526504.520	838650.903
CR-71	100+28.91	58.37 LT	526506.829	838655.371
CR-72	100+33.08	50.50 LT	526510.915	838663.280
CR-73	100+34.16	48.64 LT	526511.970	838665.156
CR-74	100+34.97	52.91 LT	526512.828	838660.895
CR-75	100+36.78	50.20 LT	526514.602	838663.629

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	CURB RAMP DETAILS	SHEET 15	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\021301-CR.DWG
LAYOUT NAME - 04

PLOT DATE : 3/2/2022 10:20 AM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:5 FT



WB ALIGNMENT GEOMETRY TABLE						
Number	Radius	Length	Line/Chord Direction	Start Station	Northing	Easting
L1		1110.12	N89°56'50"E	7+00.00	526640.721	836559.228
L2		581.62	S89°59'17"E	18+10.12	526641.742	837669.347
C1	7998.85	334.77	S88°10'13"E	23+91.74	526641.622	838250.969
L3		1310.84	S87°31'10"E	27+26.51	526630.934	838585.545
L4		435.37	N89°29'03"E	40+37.35	526574.202	839895.154
L5		774.36	N89°44'51"E	44+72.72	526578.121	840330.509

WILLIAMSBURG ALIGNMENT GEOMETRY TABLE						
Number	Radius	Length	Line/Chord Direction	Start Station	Northing	Easting
L6		1240.14	N00°39'45"E	95+00.00	525977.282	838707.618

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	CONTROL INFORMATION	SHEET 16	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\020401-CI.DWG
LAYOUT NAME - 01
PLOT DATE : 3/1/2022 9:04 PM
PLOT BY : BLAKE RIDENOUR
PLOT NAME :
PLOT SCALE : 1 IN:200 FT

NOTE: MATCH INTO EXISTING JOINTING WHEN SAW CUTTING NEW JOINTS.

2

2

N

STH 19

14'WB' 15'WB' 16'WB' 17'WB' 18'WB' 19'WB' 20'WB'

892.29
892.70
892.83
892.95
893.09
893.24
892.63
892.73
893.43

STH 19

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	PAVEMENT GRADES	SHEET 17	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\021101-PG.DWG
LAYOUT NAME - 01

PLOT DATE : 3/1/2022 9:12 PM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

NOTE: MATCH INTO EXISTING JOINTING WHEN SAW CUTTING NEW JOINTS.

2

2

N

OE

STH 19

20'WB' 21'WB' 22'WB' 23'WB' 24'WB' 25'WB' 26'WB'

896.87 897.06 897.34 897.62 897.93 898.24 898.56 898.81 899.09 899.37 899.62 899.88

896.05 896.61

896.74 897.00 897.27 897.53 897.79 898.04 898.29 898.53 898.77 899.00 899.24

896.46 896.67 896.95 897.22 897.49 897.75 898.01 898.26 898.51 898.75 898.99 899.22 899.45

896.19 896.40 896.61 896.88 897.16 897.44 897.71 897.97 898.23 898.48 898.73 898.97 899.21 899.44 899.67

896.13 896.35 896.42 896.60 896.73 897.03 897.33 897.61 897.89 898.17 898.45 898.72 898.99 899.22 899.45 899.68 899.90

2.0% 2.0% 2.0% 2.0%

895.91 895.63 895.35 895.08 894.80 894.53 894.27 894.03 893.80 893.60 893.41 893.24

896.09 895.86 895.59 895.31 895.04 894.77 894.51 894.28 894.04 893.82 893.63

895.82 895.55 895.28 895.01

893.43

STH 19

900.80 900.80

895.23 895.51 895.77 896.04 896.36 896.60 896.90 897.21 897.51 897.90

894.43 894.91 895.38 895.85 896.28 896.52 896.82 897.13 897.43 900.80

MONTICELLO DR

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	PAVEMENT GRADES	SHEET 18	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\021101-PG.DWG
LAYOUT NAME - 02

PLOT DATE : 3/1/2022 9:12 PM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

NOTE: MATCH INTO EXISTING JOINTING WHEN SAW CUTTING NEW JOINTS.

2

2

N

WILLIAMSBURG WAY

TO BE CONSTRUCTED BY OTHERS

103'WL'

102'WL'

101'WL'

100'WL'

REJECT CURB

STH 19

STH 19

WILLIAMSBURG WAY

26'WB'

27'WB'

28'WB'

29'WB'

30'WB'

31'WB'

32'WB'

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	PAVEMENT GRADES	SHEET 19	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\021101-PG.DWG
LAYOUT NAME - 03

PLOT DATE : 3/1/2022 9:12 PM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:40 FT

NOTE: MATCH INTO EXISTING JOINTING WHEN SAW CUTTING NEW JOINTS.

2

2

N

OE OE OE OE OE OE OE OE OE

C C C

NOTE: MATCH INTO EXISTING JOINTING WHEN SAW CUTTING NEW JOINTS.

2

2

N

OE OE OE

C C C

C C C C

STH 19

	38'WB'	39'WB'	40'WB'	41'WB'	42'WB'	43'WB'
	899.14	898.89	898.60	898.31	897.95	897.60
2.0%						
	898.90	898.66	898.36	898.07	897.72	897.37
4.0%						

	897.28	896.95	896.57	896.19	895.77	895.35	894.93
2.0%							
	897.04	896.72	896.34	895.95	895.53	895.11	894.69
4.0%							

	894.47	893.98	893.47	892.91	892.35	891.77	891.17	890.56	889.95	889.25	888.58	887.86
2.0%												
	894.23	893.74	893.23	892.68	892.12	891.53	890.94	890.33	889.71	889.01	888.34	887.62
4.0%												

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	PAVEMENT GRADES	SHEET 21	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\021101-PG.DWG
LAYOUT NAME - 05

PLOT DATE : 3/1/2022 9:13 PM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:40 FT

NOTE: MATCH INTO EXISTING JOINTING WHEN SAW CUTTING NEW JOINTS.

2

2

N

STH 19

44'WB' 45'WB' 46'WB' 47'WB' 48'WB' 49'WB'

xx xxxx xxxx xxxx xxxx xxxx xxxx

887.86 887.62 887.14 886.90 886.52 886.42 886.02 885.66 885.26 885.61 885.90 884.90 884.50 884.89 885.29 884.16 883.76 883.43 883.03 882.71 882.31 881.99 881.59 881.24 881.03 880.61 880.84 880.50 880.32 880.41 880.10 879.77 879.37 879.05 878.65 878.48 877.98 877.37 876.86 876.36 875.96 875.70 874.90 873.60 875.54 875.37 875.24 875.05

2.0% 4.0% 2.0% 4.0% 2.0% 4.0%

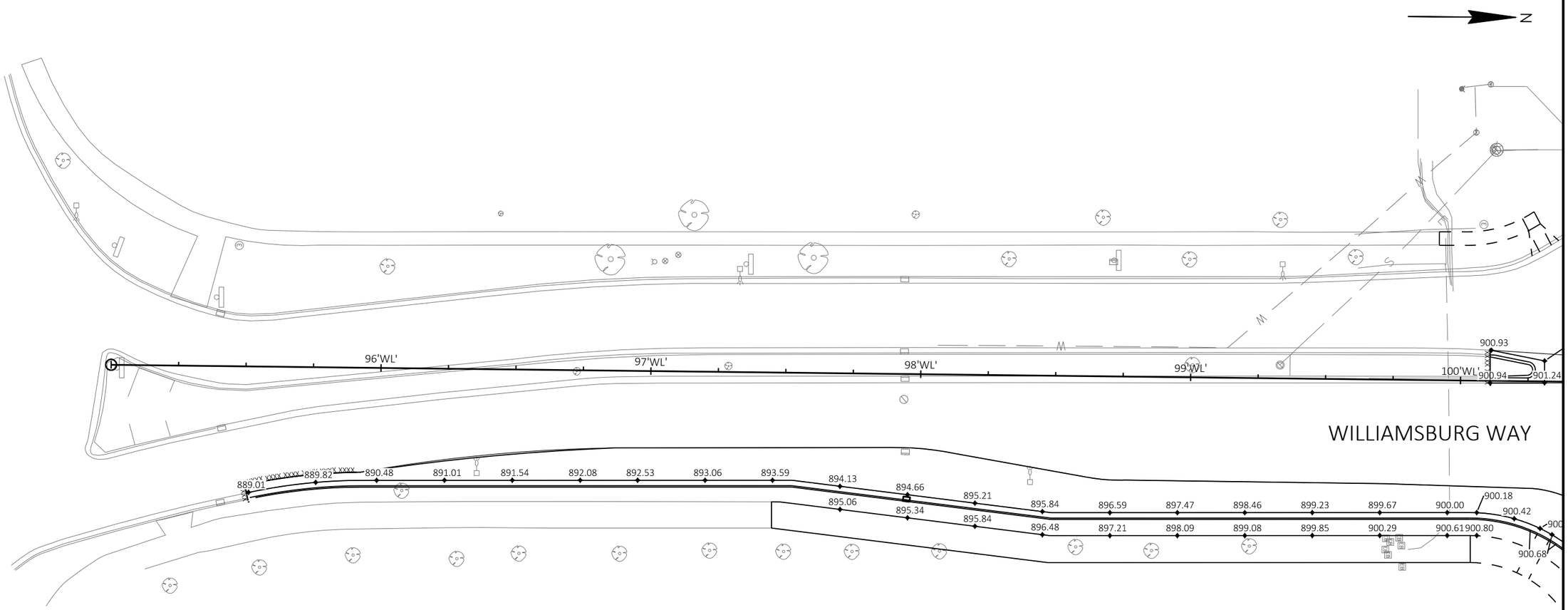
F0

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	PAVEMENT GRADES	SHEET 22	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\021101-PG.DWG
LAYOUT NAME - 06

PLOT DATE : 3/1/2022 9:13 PM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:40 FT

NOTE: MATCH INTO EXISTING JOINTING WHEN SAW CUTTING NEW JOINTS.



PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	PAVEMENT GRADES	SHEET 23	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\021101-PG.DWG
LAYOUT NAME - 07

PLOT DATE : 3/1/2022 9:13 PM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

NOTE: MATCH INTO EXISTING JOINTING WHEN SAW CUTTING NEW JOINTS.

2

2

N

WILLIAMSBURG WAY

WILLIAMSBURG WAY

99'WL'
100'WL'
101'WL'
102'WL'
103'WL'
104'WL'

27'WB'
28'WB'
29'WB'
30'WB'

REJECT CURB

TO BE CONSTRUCTED
BY OTHERS

895.21 895.84 896.59 897.47 898.46 899.23 899.67 900.00 900.18 900.42 900.59 900.92 901.56 901.53 901.56
895.84 896.48 897.21 898.09 899.08 899.85 900.29 900.61 900.80 900.68 901.29

900.93 900.94 901.06 901.24 901.34 901.45

901.02 901.11 901.19 901.26 901.33 901.25 901.36 901.17 901.02 900.87 900.66 901.50

901.70 901.72 901.60 901.42 901.37 901.42 901.28 901.27 901.76

901.70 901.69 901.55 901.71 901.75 901.85 901.90 901.95 901.97 902.02
901.20 901.24 901.33 901.11 900.89 900.83

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	PAVEMENT GRADES	SHEET 24	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\021101-PG.DWG
LAYOUT NAME - 08

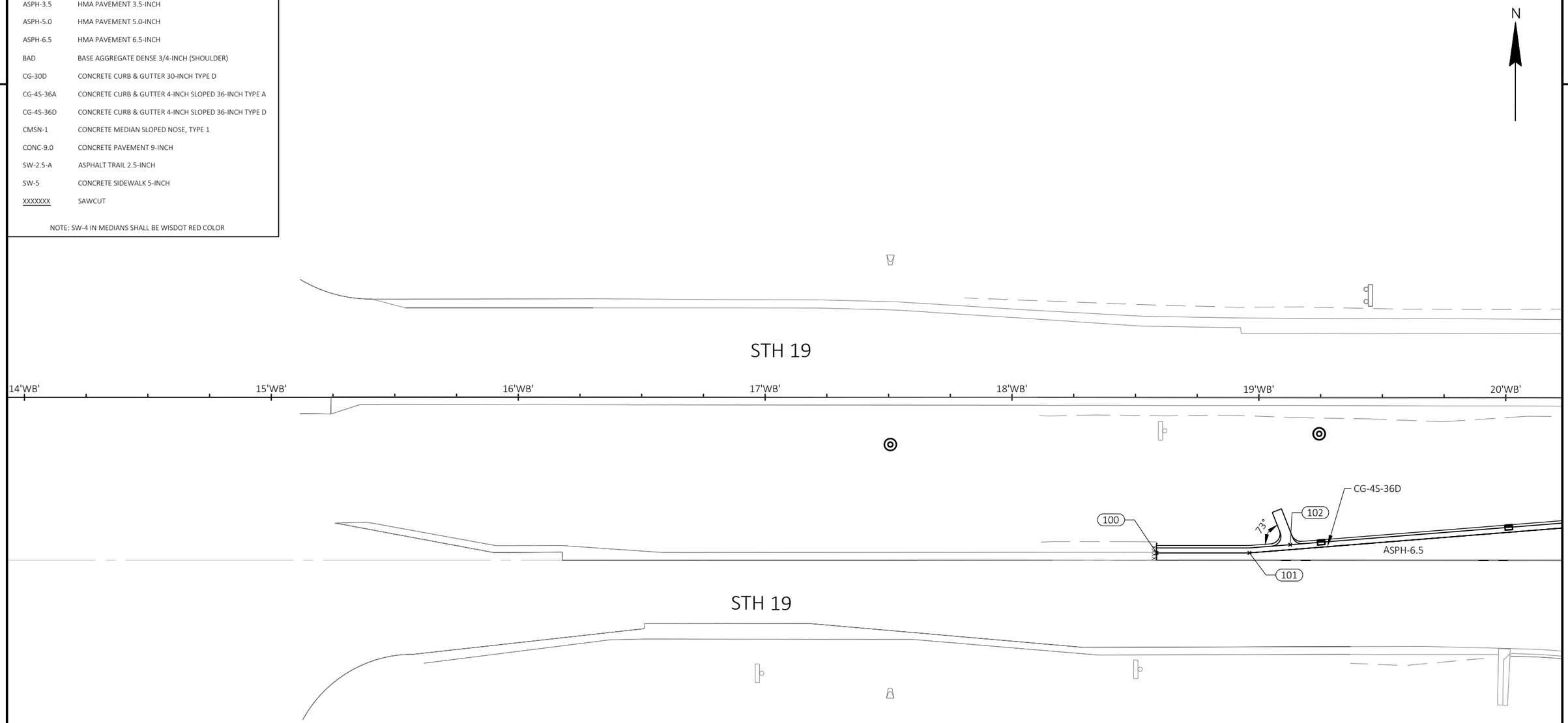
PLOT DATE : 3/1/2022 9:13 PM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

ASPH-3.5	HMA PAVEMENT 3.5-INCH
ASPH-5.0	HMA PAVEMENT 5.0-INCH
ASPH-6.5	HMA PAVEMENT 6.5-INCH
BAD	BASE AGGREGATE DENSE 3/4-INCH (SHOULDER)
CG-30D	CONCRETE CURB & GUTTER 30-INCH TYPE D
CG-4S-36A	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A
CG-4S-36D	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D
CMSN-1	CONCRETE MEDIAN SLOPED NOSE, TYPE 1
CONC-9.0	CONCRETE PAVEMENT 9-INCH
SW-2.5-A	ASPHALT TRAIL 2.5-INCH
SW-5	CONCRETE SIDEWALK 5-INCH
XXXXXXX	SAWCUT

NOTE: SW-4 IN MEDIANS SHALL BE WISDOT RED COLOR



STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y	X	RADIUS
100	18+58.61	63.03 RT	526578.703	837717.827	
101	18+96.25	62.99 RT	526578.730	837755.465	
102	19+12.74	59.66 RT	526582.063	837771.954	

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	PAVEMENT DETAILS	SHEET 25	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 01

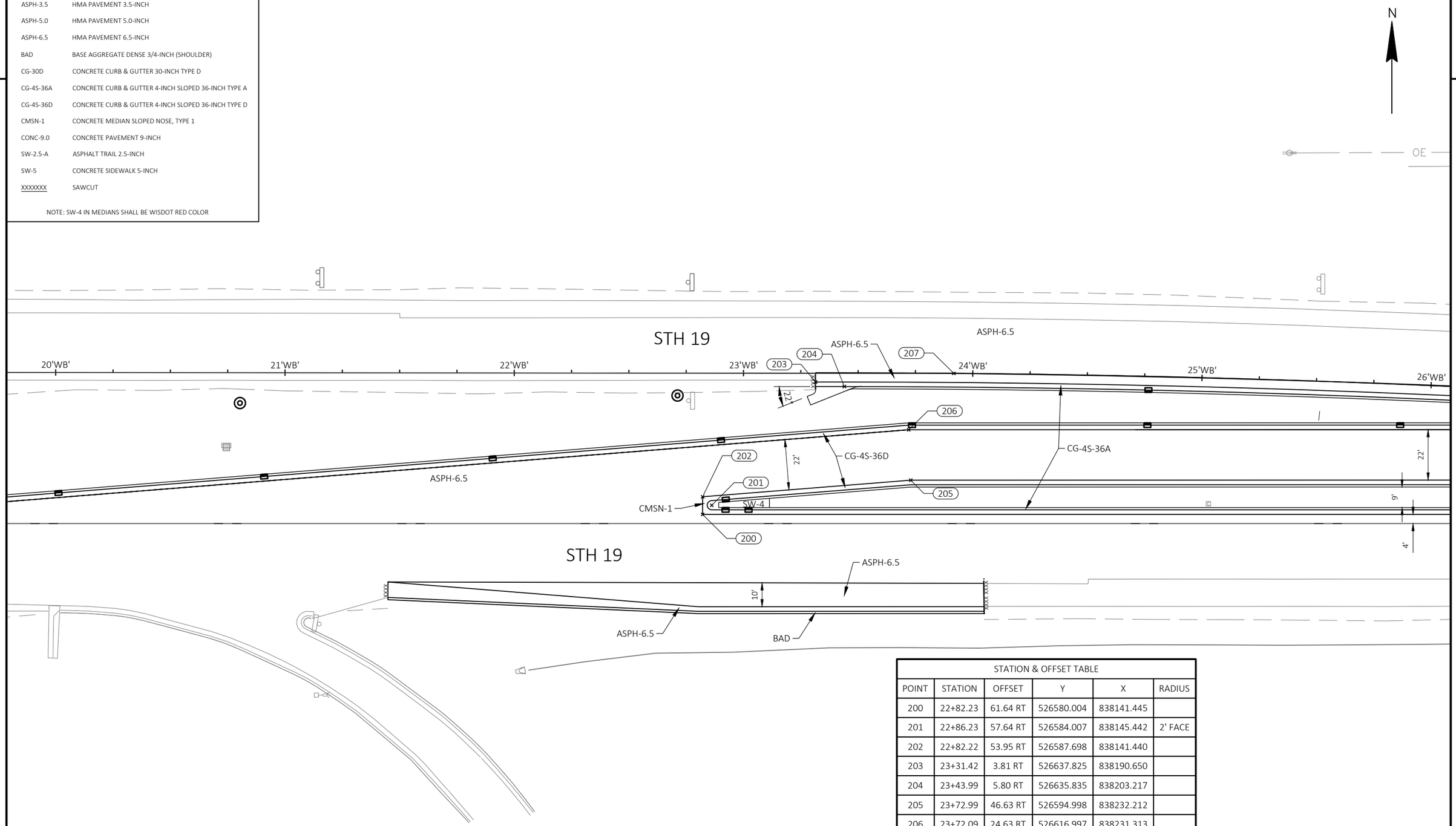
PLOT DATE : 3/9/2022 3:14 PM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1" = 40'

2

LEGEND

ASPH-3.5	HMA PAVEMENT 3.5-INCH
ASPH-5.0	HMA PAVEMENT 5.0-INCH
ASPH-6.5	HMA PAVEMENT 6.5-INCH
BAD	BASE AGGREGATE DENSE 3/4-INCH (SHOULDER)
CG-30D	CONCRETE CURB & GUTTER 30-INCH TYPE D
CG-4S-36A	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A
CG-4S-36D	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D
CMSN-1	CONCRETE MEDIAN SLOPED NOSE, TYPE 1
CONC-9.0	CONCRETE PAVEMENT 9-INCH
SW-2.5-A	ASPHALT TRAIL 2.5-INCH
SW-5	CONCRETE SIDEWALK 5-INCH
XXXXXXX	SAWCUT

NOTE: SW-4 IN MEDIANS SHALL BE WISDOT RED COLOR



STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y	X	RADIUS
200	22+82.23	61.64 RT	526580.004	838141.445	
201	22+86.23	57.64 RT	526584.007	838145.442	2' FACE
202	22+82.22	53.95 RT	526587.698	838141.440	
203	23+31.42	3.81 RT	526637.825	838190.650	
204	23+43.99	5.80 RT	526635.835	838203.217	
205	23+72.99	46.63 RT	526594.998	838232.212	
206	23+72.09	24.63 RT	526616.997	838231.313	
207	23+91.74	0.00	526641.622	838250.969	

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	PAVEMENT DETAILS	SHEET 26	E

2

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y	X	RADIUS
336	31+10.75	11.83 RT	526602.483	838968.906	
337	31+06.59	8.00 RT	526606.492	838964.916	2' FACE
338	28+04.35	125.18 RT	526502.504	838657.894	
339	30+38.01	72.86 RT	526544.665	838893.600	
340	31+30.67	69.07 RT	526544.440	838986.335	
341	31+30.40	63.07 RT	526550.440	838986.320	

CG-30D
REJECT CURB
314
315
24'
33'
SW-4
313
10'
CG-4S-36D
334
309
310
312
311
CMSN-1
316
301
CG-4S-36D
303
302
ASPH-6.5
BAD
R50
102'WL'
ASPH-6.5
R75
317
329
300
STH 19
ASPH-6.5
BAD
2'
1'
12'
26'WB'
27'WB'
304
28'WB'
29'WB'
CG-4S-36D
CG-4S-36A
330
30'WB'
337
31'WB'
32'WB'
SW-4
306
SW-4
SW-5
SW-4
305
335
ASPH-6.5
CG-4S-36D
CG-4S-36A
ASPH-6.5
CONC-9.0
CONC-9.0
331
336
22'
12'
12'
307
CMSN-1
332
9'
SW-4
SW-4
CMSN-1
308
333
CONC-9.0
4'
4'
STH 19
101'WL'
327
341
ASPH-6.5
CONC-9.0
339
CONC-9.0
4'
6'
R60
328
326
9'
CG-30A
325
SW-2.5-A
324
323
CMSN-1
318
319
338
320
SW-4
322
321
100'WL'
WILLIAMSBURG WAY
99'WL'
6'
10'
ASPH-5.0
CG-30A
SW-2.5-A

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y	X	RADIUS
300	26+70.78	23.79 LT	526657.454	838530.971	
301	26+70.81	31.09 LT	526664.742	838531.336	
302	27+60.43	34.48 LT	526663.918	838620.925	
303	27+70.43	38.64 LT	526667.636	838631.096	
304	27+67.07	4.01 RT	526625.176	838625.889	
305	27+63.24	8.01 RT	526621.346	838621.893	2' FACE
306	27+67.41	11.83 RT	526617.350	838625.896	
307	28+07.96	32.05 RT	526595.385	838665.529	
308	28+08.62	47.05 RT	526580.377	838665.540	
309	27+70.44	85.64 LT	526714.592	838633.137	
310	28+20.41	87.23 LT	526714.014	838683.134	
311	28+53.34	90.00 LT	526715.357	838716.151	
312	28+61.02	90.24 LT	526715.268	838723.827	
313	28+57.21	94.12 LT	526719.311	838720.197	3' FACE
314	28+62.46	117.72 LT	526742.657	838726.462	
315	28+84.77	108.62 LT	526732.604	838748.353	
316	29+06.92	71.41 LT	526694.471	838768.875	
317	29+66.48	45.49 LT	526665.994	838827.256	

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y	X	RADIUS
318	28+52.32	117.19 RT	526508.411	838706.166	
319	28+60.49	116.87 RT	526508.378	838714.340	
320	28+55.90	123.50 RT	526501.949	838709.462	3' FACE
321	28+49.24	136.99 RT	526488.760	838702.223	
322	28+61.17	132.56 RT	526492.666	838714.341	
323	29+09.54	139.90 RT	526483.239	838762.342	
324	29+69.62	139.79 RT	526480.752	838822.375	
325	29+22.08	119.81 RT	526502.770	838775.747	
326	29+62.28	88.73 RT	526532.085	838817.256	
327	29+37.31	68.83 RT	526553.046	838793.164	
328	29+84.99	81.53 RT	526538.293	838840.256	
329	29+72.90	36.00 LT	526656.237	838833.256	
330	29+32.19	4.00 RT	526618.036	838790.854	
331	29+32.81	19.11 RT	526602.913	838790.817	
332	29+72.76	29.49 RT	526590.818	838830.290	
333	29+73.17	39.48 RT	526580.818	838830.266	
334	29+59.73	111.00 LT	526731.737	838823.348	
335	31+10.42	3.95 RT	526610.375	838968.925	

LEGEND

ASPH-3.5	HMA PAVEMENT 3.5-INCH
ASPH-5.0	HMA PAVEMENT 5.0-INCH
ASPH-6.5	HMA PAVEMENT 6.5-INCH
BAD	BASE AGGREGATE DENSE 3/4-INCH (SHOULDER)
CG-30D	CONCRETE CURB & GUTTER 30-INCH TYPE D
CG-4S-36A	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A
CG-4S-36D	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D
CMSN-1	CONCRETE MEDIAN SLOPED NOSE, TYPE 1
CONC-9.0	CONCRETE PAVEMENT 9-INCH
SW-2.5-A	ASPHALT TRAIL 2.5-INCH
SW-5	CONCRETE SIDEWALK 5-INCH
XXXXXXX	SAWCUT

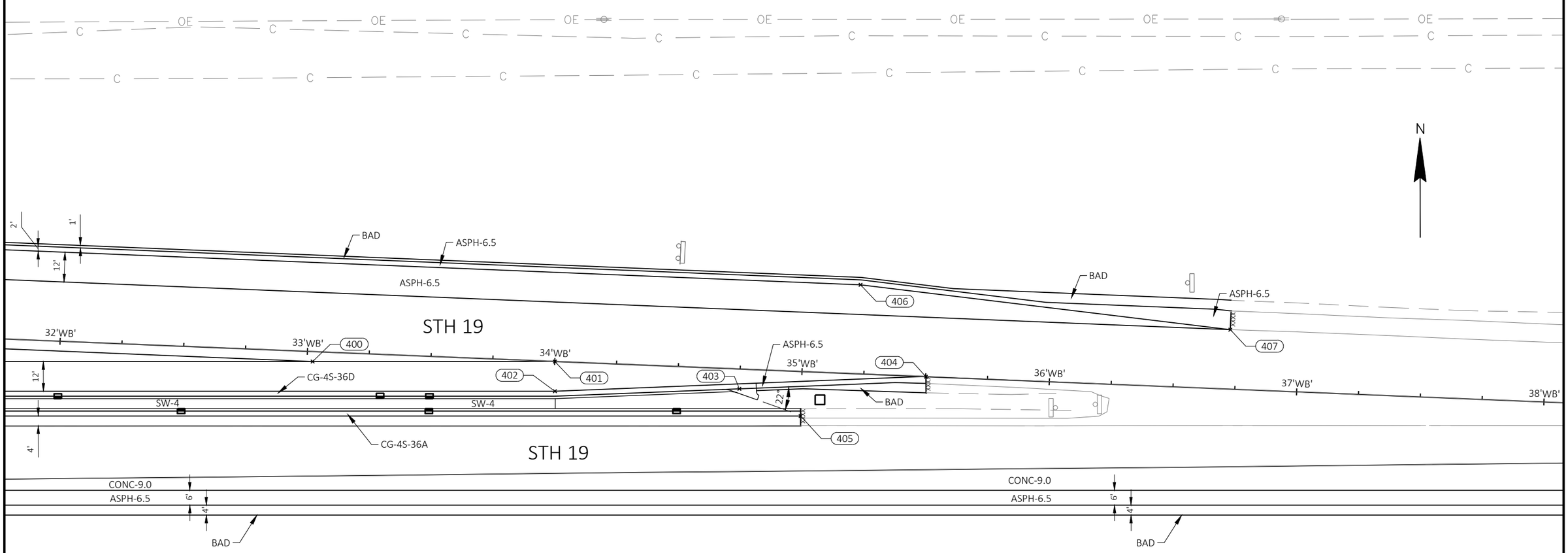
NOTE: SW-4 IN MEDIANS SHALL BE WISDOT RED COLOR

N

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	PAVEMENT DETAILS	SHEET 27	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 03
PLOT DATE : 3/9/2022 3:15 PM
PLOT BY : BLAKE RIDENOUR
PLOT NAME :
PLOT SCALE : 1" = 40'
WISDOT/CADDS SHEET 42

2



STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y	X	RADIUS
400	33+02.28	4.00 RT	526602.019	839160.597	
401	34+00.08	0.00	526601.783	839258.483	
402	34+00.57	11.99 RT	526589.783	839258.454	
403	34+75.00	7.96 RT	526590.584	839332.986	
404	35+50.09	0.00	526595.291	839408.349	
405	35+00.16	17.93 RT	526579.543	839357.687	
406	35+22.21	36.00 LT	526632.464	839382.050	
407	36+72.21	24.00 LT	526613.983	839531.390	

LEGEND

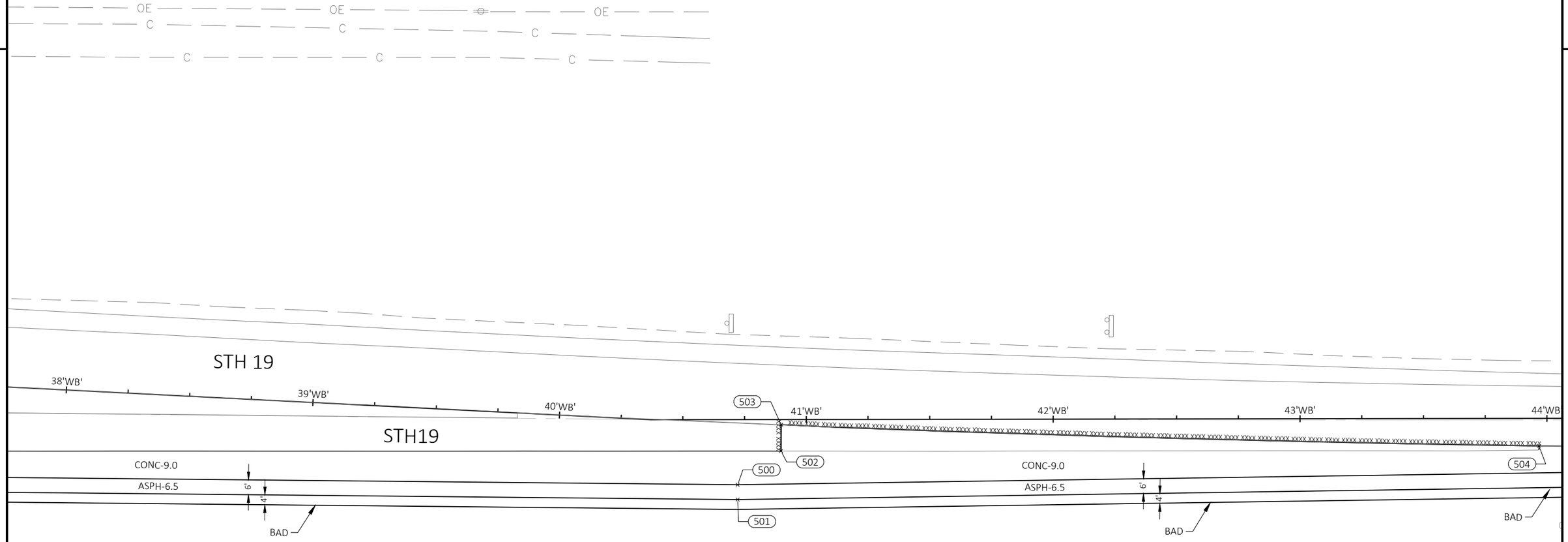
ASPH-3.5	HMA PAVEMENT 3.5-INCH
ASPH-5.0	HMA PAVEMENT 5.0-INCH
ASPH-6.5	HMA PAVEMENT 6.5-INCH
BAD	BASE AGGREGATE DENSE 3/4-INCH (SHOULDER)
CG-30D	CONCRETE CURB & GUTTER 30-INCH TYPE D
CG-4S-36A	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A
CG-4S-36D	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D
CMSN-1	CONCRETE MEDIAN SLOPED NOSE, TYPE 1
CONC-9.0	CONCRETE PAVEMENT 9-INCH
SW-2.5-A	ASPHALT TRAIL 2.5-INCH
SW-5	CONCRETE SIDEWALK 5-INCH
XXXXXXX	SAWCUT

NOTE: SW-4 IN MEDIANS SHALL BE WISDOT RED COLOR

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	PAVEMENT DETAILS	SHEET 28	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 04
PLOT DATE : 3/9/2022 3:15 PM
PLOT BY : BLAKE RIDENOUR
PLOT NAME :
PLOT SCALE : 1" = 40'
WISDOT/CADDS SHEET 42

2



STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y	X	RADIUS
500	40+72.17	26.36 RT	526548.159	839930.215	
501	40+72.18	32.36 RT	526542.159	839930.274	
502	40+89.74	12.74 RT	526561.930	839947.658	
503	40+89.79	2.07 RT	526572.601	839947.611	
504	43+96.75	11.13 RT	526566.306	840254.642	

LEGEND

ASPH-3.5	HMA PAVEMENT 3.5-INCH
ASPH-6.5	HMA PAVEMENT 5-INCH
BAD	BASE AGGREGATE DENSE 3/4-INCH (SHOULDER)
CG-30D	CONCRETE CURB & GUTTER 30-INCH TYPE D
CG-4S-36A	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A
CG-4S-36D	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D
CMSN-1	CONCRETE MEDIAN SLOPED NOSE, TYPE 1
CONC-9.0	CONCRETE PAVEMENT 9-INCH
SW-2.5-A	CONCRETE SIDEWALK 4-INCH
SW-5	CONCRETE SIDEWALK 5-INCH
XXXXXXX	SAWCUT

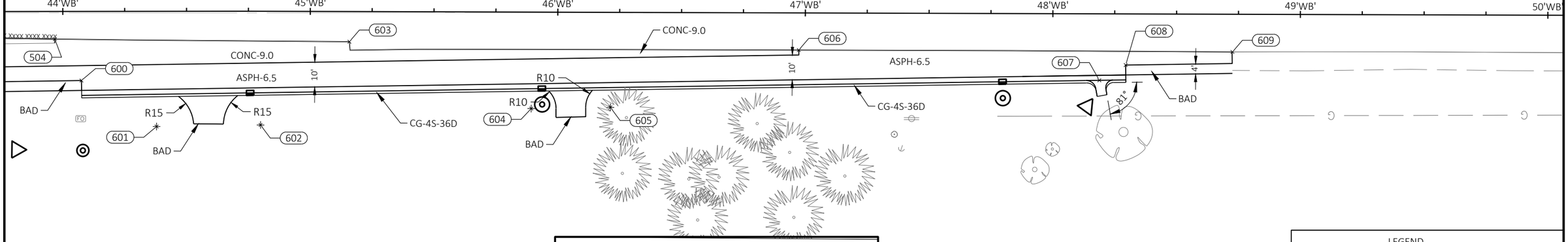
NOTE: SW-4 IN MEDIANS SHALL BE WISDOT RED COLOR

2

N

STH 19

44'WB' 45'WB' 46'WB' 47'WB' 48'WB' 49'WB' 50'WB'



STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y	X	RADIUS
600	44+07.48	27.89 RT	526549.645	840265.524	
601	44+37.81	46.49 RT	526531.316	840296.013	
602	44+80.03	45.90 RT	526532.258	840338.021	
603	45+15.82	12.18 RT	526566.127	840373.658	
604	45+89.36	38.93 RT	526539.701	840447.318	
605	46+21.36	38.36 RT	526540.415	840479.313	
606	46+97.41	14.99 RT	526564.117	840555.255	
607	48+18.87	26.82 RT	526552.827	840676.775	
608	48+29.48	20.63 RT	526559.065	840687.357	
609	48+72.60	15.20 RT	526564.685	840730.452	

LEGEND

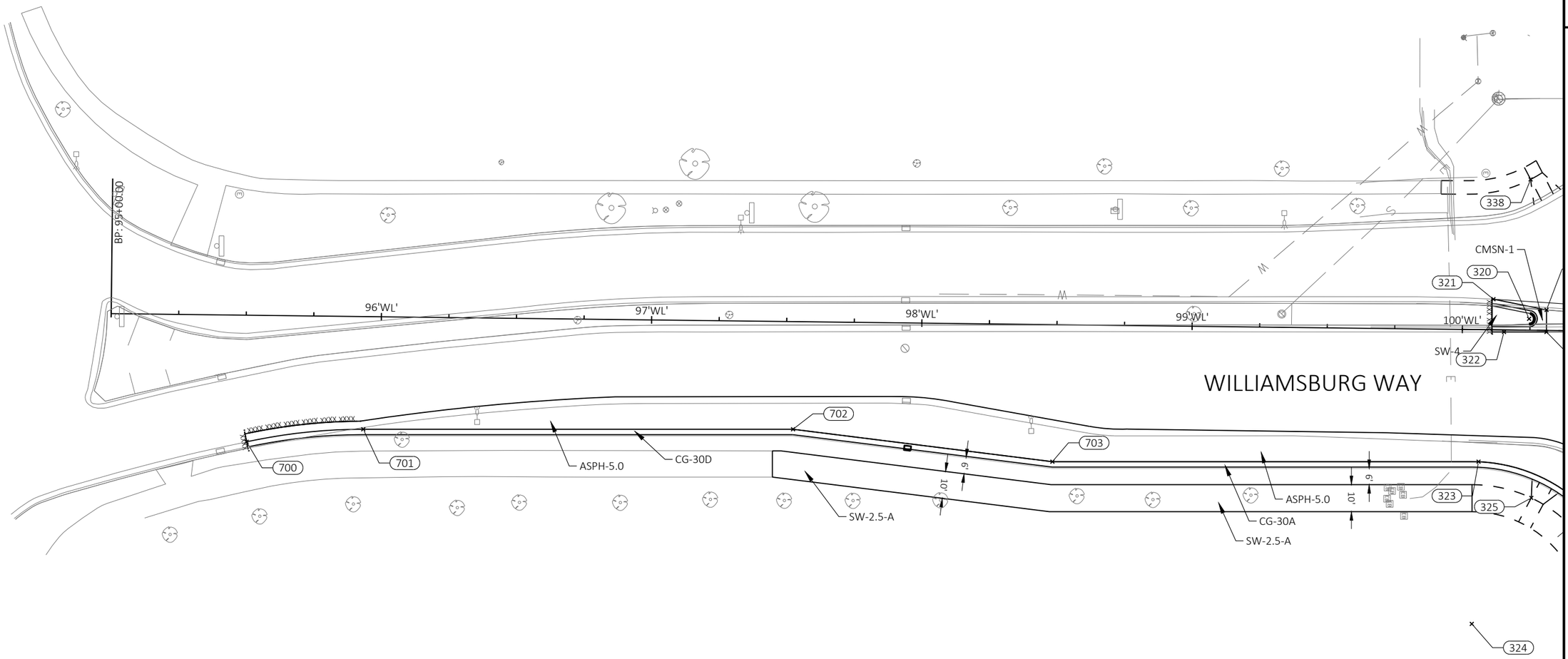
ASPH-3.5	HMA PAVEMENT 3.5-INCH
ASPH-6.5	HMA PAVEMENT 5-INCH
BAD	BASE AGGREGATE DENSE 3/4-INCH (SHOULDER)
CG-30D	CONCRETE CURB & GUTTER 30-INCH TYPE D
CG-4S-36A	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A
CG-4S-36D	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D
CMSN-1	CONCRETE MEDIAN SLOPED NOSE, TYPE 1
CONC-9.0	CONCRETE PAVEMENT 9-INCH
SW-2.5-A	CONCRETE SIDEWALK 4-INCH
SW-5	CONCRETE SIDEWALK 5-INCH
XXXXXXX	SAWCUT

NOTE: SW-4 IN MEDIANS SHALL BE WISDOT RED COLOR

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	PAVEMENT DETAILS	SHEET 30	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 06
PLOT DATE : 3/9/2022 3:15 PM
PLOT BY : BLAKE RIDENOUR
PLOT NAME :
PLOT SCALE : 1" = 40'
WISDOT/CADDS SHEET 42

2



STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y	X	RADIUS
700	95+50.65	46.82 RT	526027.385	838755.025	
701	95+93.79	41.69 RT	526070.580	838750.387	
702	97+52.78	39.83 RT	526229.583	838750.370	
703	98+48.89	50.71 RT	526325.565	838762.359	

LEGEND

ASPH-3.5	HMA PAVEMENT 3.5-INCH
ASPH-5.0	HMA PAVEMENT 5.0-INCH
ASPH-6.5	HMA PAVEMENT 6.5-INCH
BAD	BASE AGGREGATE DENSE 3/4-INCH (SHOULDER)
CG-30D	CONCRETE CURB & GUTTER 30-INCH TYPE D
CG-4S-36A	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A
CG-4S-36D	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D
CMSN-1	CONCRETE MEDIAN SLOPED NOSE, TYPE 1
CONC-9.0	CONCRETE PAVEMENT 9-INCH
SW-2.5-A	ASPHALT TRAIL 2.5-INCH
SW-5	CONCRETE SIDEWALK 5-INCH
XXXXXXX	SAWCUT

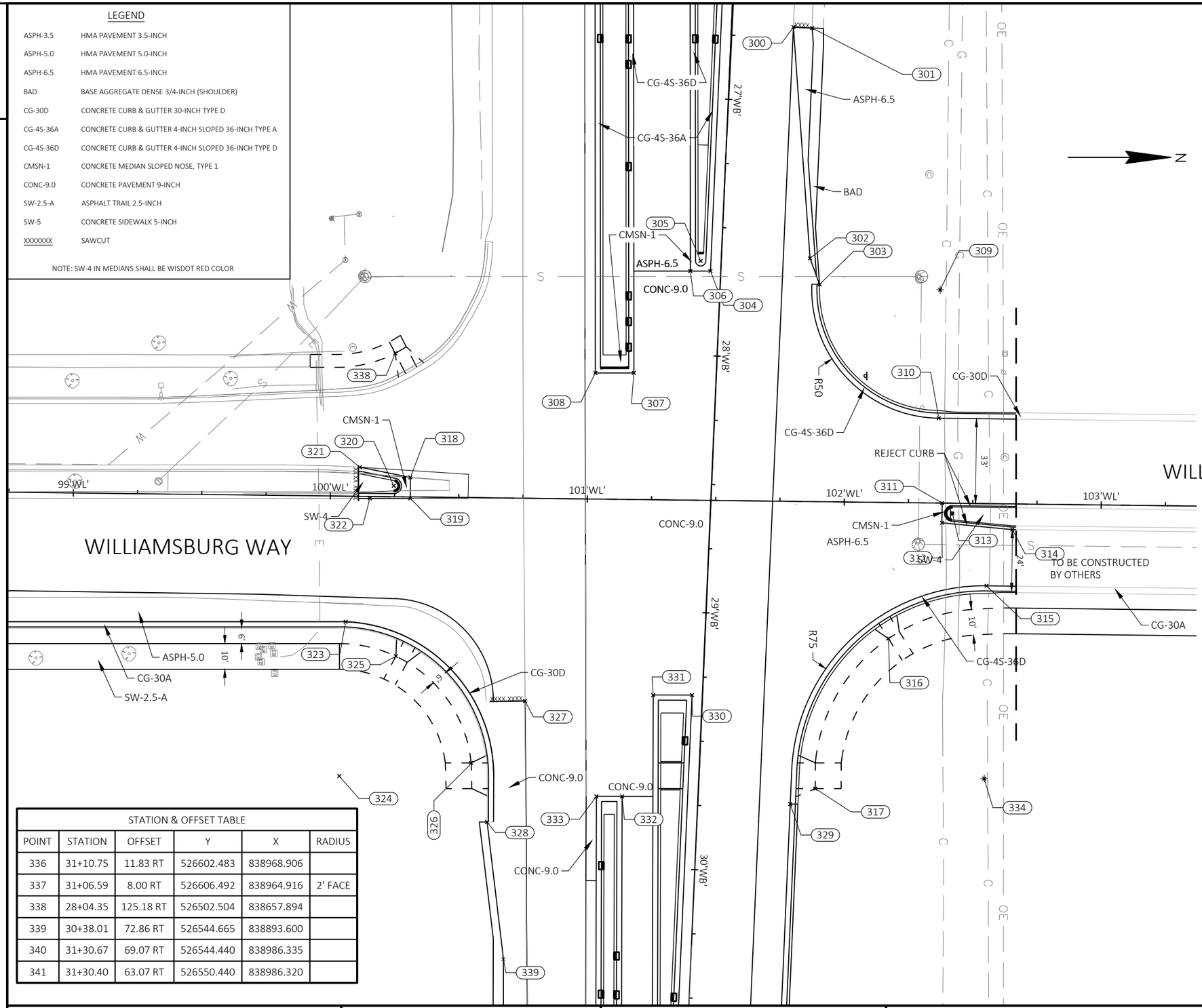
NOTE: SW-4 IN MEDIANS SHALL BE WISDOT RED COLOR

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	PAVEMENT DETAILS	SHEET 31	E

LEGEND

ASPH-3.5	HMA PAVEMENT 3.5-INCH
ASPH-5.0	HMA PAVEMENT 5.0-INCH
ASPH-6.5	HMA PAVEMENT 6.5-INCH
BAD	BASE AGGREGATE DENSE 3/4-INCH (SHOULDER)
CG-30D	CONCRETE CURB & GUTTER 30-INCH TYPE D
CG-4S-36A	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A
CG-4S-36D	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D
CMSN-1	CONCRETE MEDIAN SLOPED NOSE, TYPE 1
CONC-9.0	CONCRETE PAVEMENT 9-INCH
SW-2.5-A	ASPHALT TRAIL 2.5-INCH
SW-5	CONCRETE SIDEWALK 5-INCH
XXXXXXX	SAWCUT

NOTE: SW-4 IN MEDIANS SHALL BE WISDOT RED COLOR



STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y	X	RADIUS
300	26+70.78	23.79 LT	526657.454	838530.971	
301	26+70.81	31.09 LT	526664.742	838531.336	
302	27+60.43	34.48 LT	526663.918	838620.925	
303	27+70.43	38.64 LT	526667.636	838631.096	
304	27+67.07	4.01 RT	526625.176	838625.889	
305	27+63.24	8.01 RT	526621.346	838621.893	2' FACE
306	27+67.41	11.83 RT	526617.350	838625.896	
307	28+07.96	32.05 RT	526595.385	838665.529	
308	28+08.62	47.05 RT	526580.377	838665.540	
309	27+70.44	85.64 LT	526714.592	838633.137	
310	28+20.41	87.23 LT	526714.014	838683.134	
311	28+53.34	90.00 LT	526715.357	838716.151	
312	28+61.02	90.24 LT	526715.268	838723.827	
313	28+57.21	94.12 LT	526719.311	838720.197	3' FACE
314	28+62.46	117.72 LT	526742.657	838726.462	
315	28+84.77	108.62 LT	526732.604	838748.353	
316	29+06.92	71.41 LT	526694.471	838768.875	
317	29+66.48	45.49 LT	526665.994	838827.256	

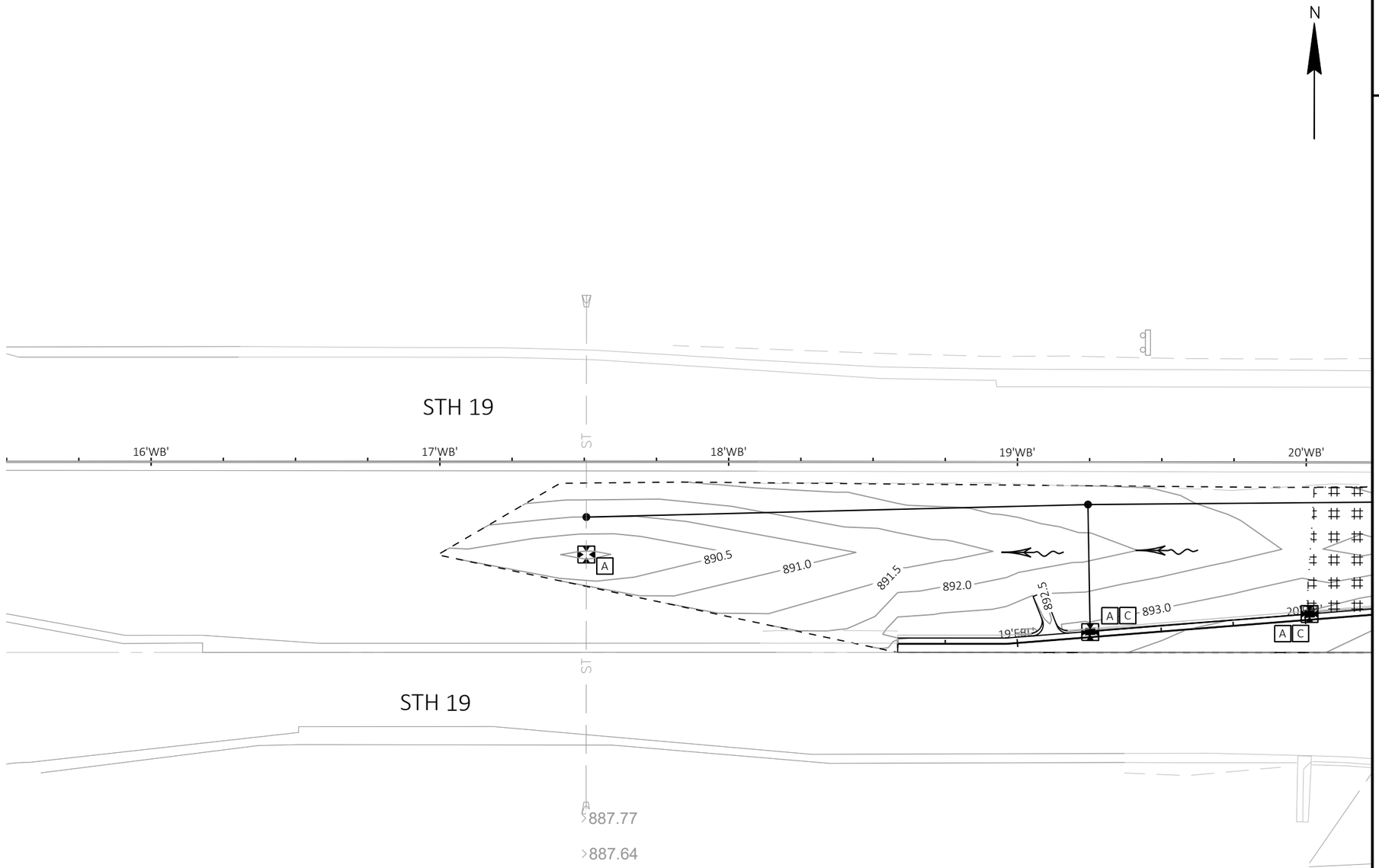
STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y	X	RADIUS
318	28+52.32	117.19 RT	526508.411	838706.166	
319	28+60.49	116.87 RT	526508.378	838714.340	
320	28+55.90	123.50 RT	526501.949	838709.462	3' FACE
321	28+49.24	136.99 RT	526488.760	838702.223	
322	28+61.17	132.56 RT	526492.666	838714.341	
323	29+09.54	139.90 RT	526483.239	838762.342	
324	29+69.62	139.79 RT	526480.752	838822.375	
325	29+22.08	119.81 RT	526502.770	838775.747	
326	29+62.28	88.73 RT	526532.085	838817.256	
327	29+37.31	68.83 RT	526553.046	838793.164	
328	29+84.99	81.53 RT	526538.293	838840.256	
329	29+72.90	36.00 LT	526656.237	838833.256	
330	29+32.19	4.00 RT	526618.036	838790.854	
331	29+32.81	19.11 RT	526602.913	838790.817	
332	29+72.76	29.49 RT	526590.818	838830.290	
333	29+73.17	39.48 RT	526580.818	838830.266	
334	29+59.73	111.00 LT	526731.737	838823.348	
335	31+10.42	3.95 RT	526610.375	838968.925	

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y	X	RADIUS
336	31+10.75	11.83 RT	526602.483	838968.906	
337	31+06.59	8.00 RT	526606.492	838964.916	2' FACE
338	28+04.35	125.18 RT	526502.504	838657.894	
339	30+38.01	72.86 RT	526544.665	838893.600	
340	31+30.67	69.07 RT	526544.440	838986.335	
341	31+30.40	63.07 RT	526550.440	838986.320	

2

LEGEND

- EROSION MAT CLASS I, TYPE B
- SILT FENCE
- SLOPE INTERCEPT
- CONC — CONCRETE FLUME
- INLET PROTECTION
- C D — INLET PROTECTION TYPE
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- RIP RAP OR STONE DITCH CHECK
- SURFACE WATER FLOW



2

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	EROSION CONTROL & DRAINAGE	SHEET 33	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 01

PLOT DATE : 3/2/2022 10:44 AM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- EROSION MAT CLASS I, TYPE B
- SILT FENCE
- SLOPE INTERCEPT
- [CONC] CONCRETE FLUME
- INLET PROTECTION
- [C][D] INLET PROTECTION TYPE
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- RIP RAP OR STONE DITCH CHECK
- SURFACE WATER FLOW

N

2

OE

STH 19

20'WB' 21'WB' 22'WB' 23'WB' 24'WB' 25'WB' 26'WB'

24'EBL' 25'EBL' 26'EBL'

893.5 894.0 894.5 895.0 895.5 896.0 896.5 897.0 897.5 898.0 898.5 899.0 899.5

ST ST ST

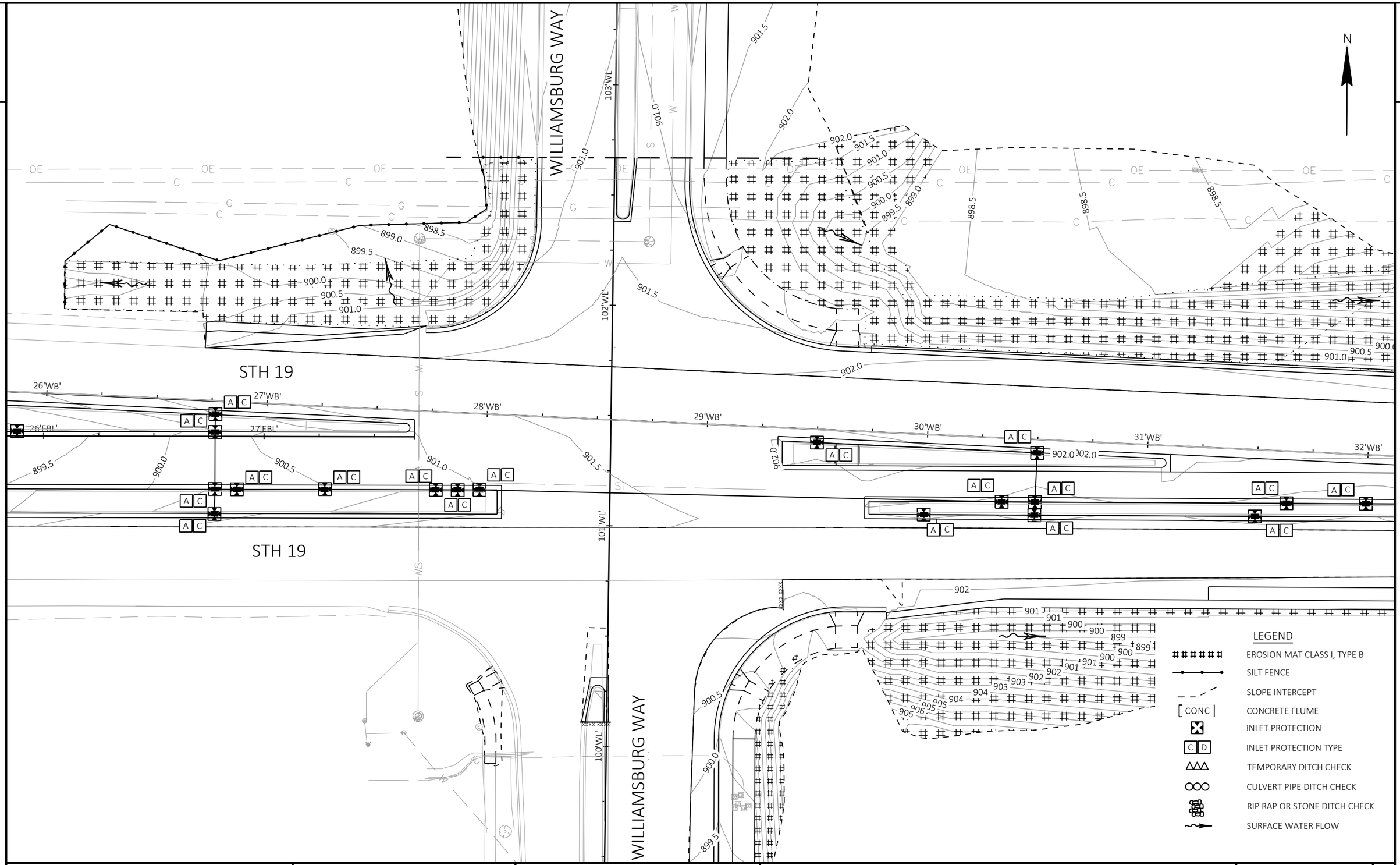
STH 19

896.0 896.5 897.0 897.5

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	EROSION CONTROL & DRAINAGE	SHEET 34	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 02

PLOT DATE : 3/2/2022 10:44 AM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:40 FT



PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	EROSION CONTROL & DRAINAGE	SHEET 35	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 03

PLOT DATE : 3/2/2022 10:44 AM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

STH 19

STH 19

LEGEND

- EROSION MAT CLASS I, TYPE B
- SILT FENCE
- SLOPE INTERCEPT
- [CONC] CONCRETE FLUME
- INLET PROTECTION
- [C][D] INLET PROTECTION TYPE
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- RIP RAP OR STONE DITCH CHECK
- SURFACE WATER FLOW

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	EROSION CONTROL & DRAINAGE	SHEET 36	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 04

PLOT DATE : 3/2/2022 10:45 AM

PLOT BY : BLAKE RIDENOUR

PLOT NAME :

PLOT SCALE : 1 IN:40 FT

2

2

N

OE OE OE

C C C

C C C

STH 19

38'WB' 39'WB' 40'WB' 41'WB' 42'WB' 43'WB' 44'WB'

LEGEND

- EROSION MAT CLASS I, TYPE B
- SILT FENCE
- SLOPE INTERCEPT
- [CONC] CONCRETE FLUME
- INLET PROTECTION
- [C][D] INLET PROTECTION TYPE
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- RIP RAP OR STONE DITCH CHECK
- SURFACE WATER FLOW

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	EROSION CONTROL & DRAINAGE	SHEET 37	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 05

PLOT DATE : 3/2/2022 10:45 AM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

STH 19

44'WB' 45'WB' 46'WB' 47'WB' 48'WB' 49'WB' 50'WB'

888 887 887 886 886 885 885 884 884 883 883 882 882 881 881 880 880 879 879 878 878 877 877 876 876

A C A C A C A C A

ADD RIP RAP FOR ENDWALL AND FLUME

LEGEND

- EROSION MAT CLASS I, TYPE B
- SILT FENCE
- SLOPE INTERCEPT
- CONC — CONCRETE FLUME
- INLET PROTECTION
- C D — INLET PROTECTION TYPE
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- RIP RAP OR STONE DITCH CHECK
- SURFACE WATER FLOW

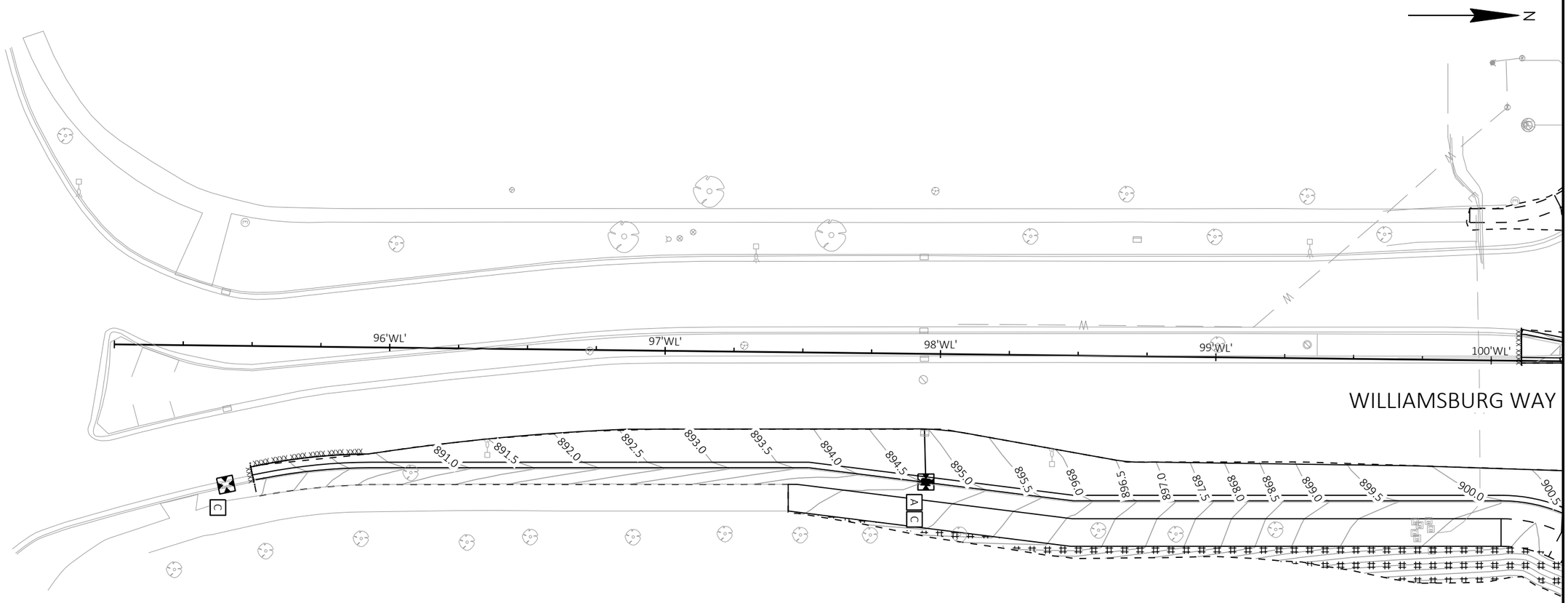
PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	EROSION CONTROL & DRAINAGE	SHEET 38	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 08

PLOT DATE : 3/2/2022 10:45 AM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2



LEGEND

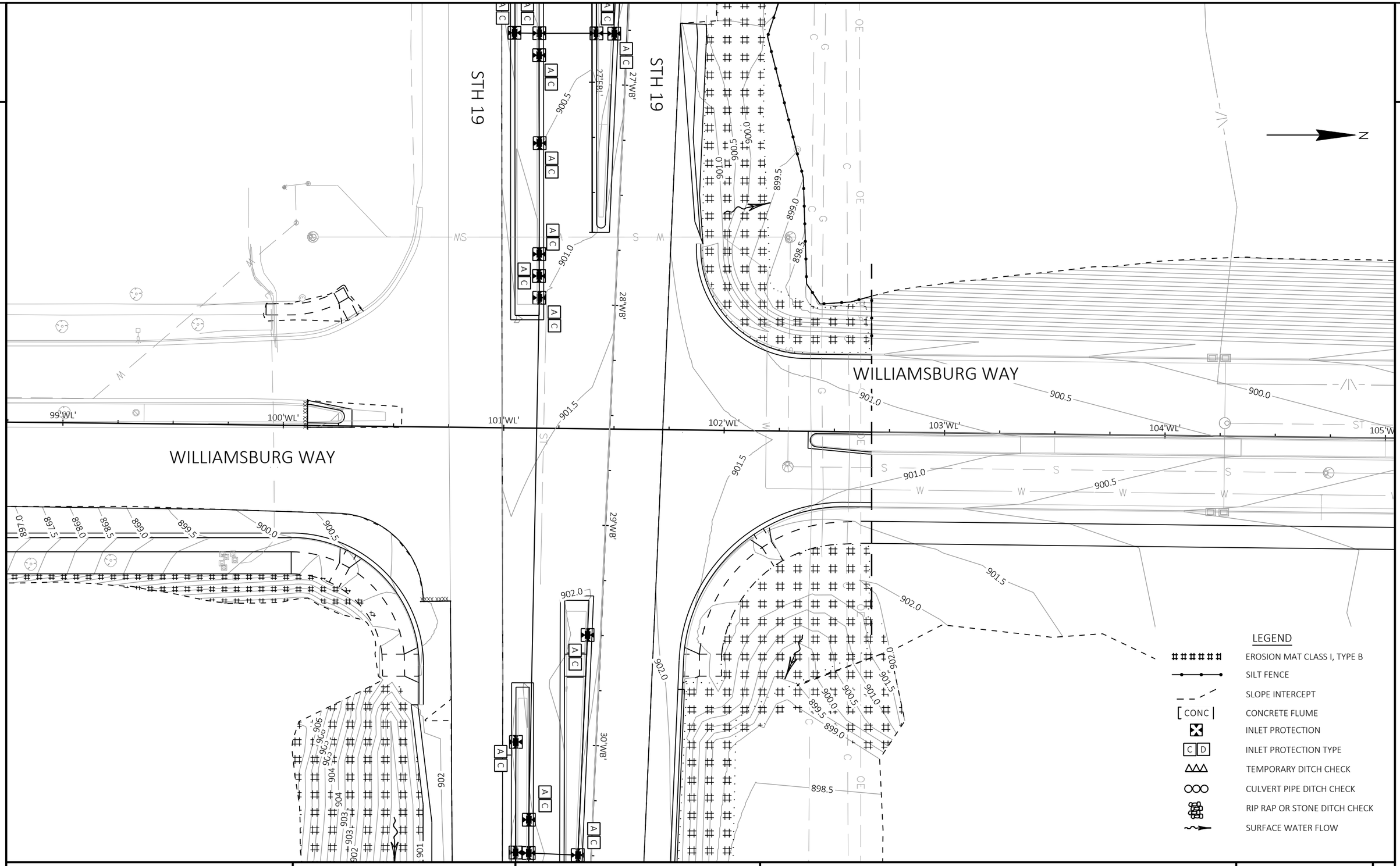
- EROSION MAT CLASS I, TYPE B
- SILT FENCE
- SLOPE INTERCEPT
- [CONC] CONCRETE FLUME
- INLET PROTECTION
- [C|D] INLET PROTECTION TYPE
- TEMPORARY DITCH CHECK
- CULVERT PIPE DITCH CHECK
- RIP RAP OR STONE DITCH CHECK
- SURFACE WATER FLOW

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	EROSION CONTROL & DRAINAGE	SHEET 39	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 06

PLOT DATE : 3/2/2022 10:46 AM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:40 FT

2



PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	EROSION CONTROL & DRAINAGE	SHEET 40	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 07

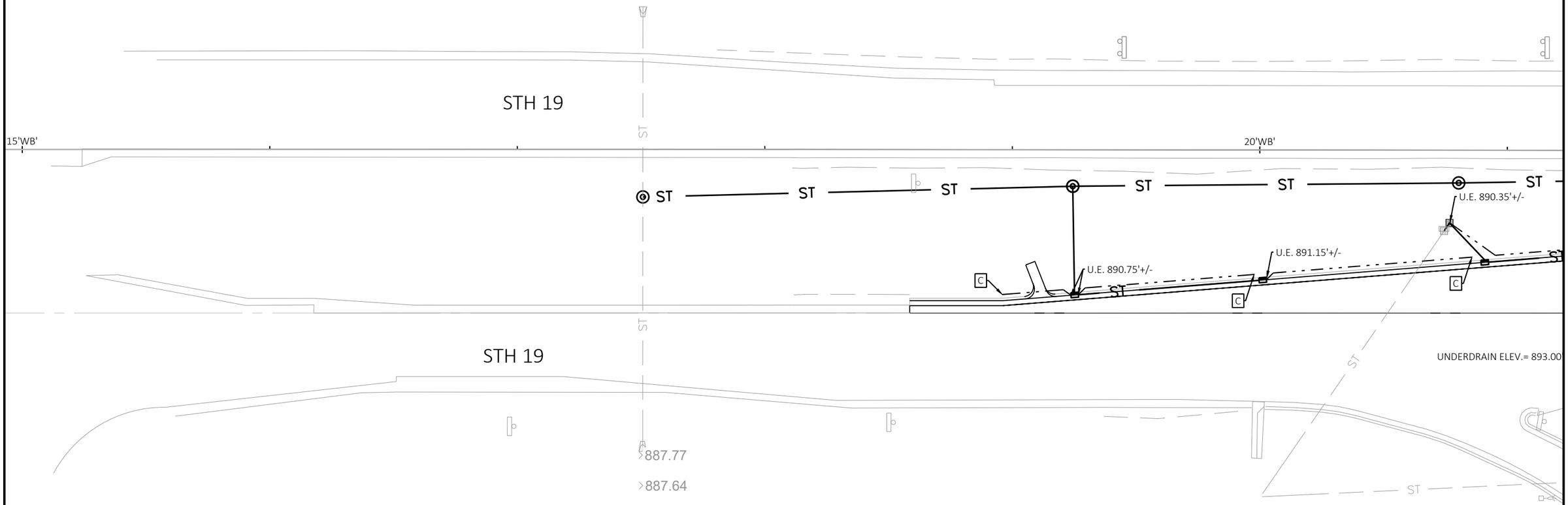
PLOT DATE : 3/2/2022 10:46 AM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PIPE UNDERDRAIN 6-INCH PERFORATED
- C → CAPPED END OF PIPE UNDERDRAIN (INCIDENTAL TO PIPE UNDERDRAIN ITEMS)
- U.E. 881.17'+/- ELEVATION OF UNDERDRAIN TAP CONNECTION (INCIDENTAL TO PIPE UNDERDRAIN ITEMS) (SEE CONSTRUCTION DETAILS FOR PIPE UNDERDRAIN)

N



2

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	UNDERDRAIN PLAN	SHEET 41	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\022601-PU.DWG
LAYOUT NAME - 01

PLOT DATE : 3/9/2022 4:57 PM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PIPE UNDERDRAIN 6-INCH PERFORATED
- C → CAPPED END OF PIPE UNDERDRAIN (INCIDENTAL TO PIPE UNDERDRAIN ITEMS)
- U.E. 881.17'+/- ELEVATION OF UNDERDRAIN TAP CONNECTION (INCIDENTAL TO PIPE UNDERDRAIN ITEMS) (SEE CONSTRUCTION DETAILS FOR PIPE UNDERDRAIN)

N

OE

STH 19

20'WB'

ST

U.E. 890.35'+/-

U.E. 891.15'+/-

U.E. 892.15'+/-

U.E. 892.50'+/-

U.E. 892.70'+/-

U.E. 893.60'+/-

U.E. 893.75'+/-

U.E. 894.65'+/-

U.E. 896.25'+/-

25'WB'

C

STH 19

UNDERDRAIN ELEV.= 893.00'+/-

UNDERDRAIN ELEV.= 893.00'+/-

INSTALL REINFORCED CONCRETE APRON ENDWALL FOR UNDERDRAIN. ELEV.=892.00'

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	UNDERDRAIN PLAN	SHEET 42	E

2

2

N

WILLIAMSBURG WAY

INSTALL REINFORCED CONCRETE APRON ENDWALL FOR UNDERDRAIN. ELEV.=899.50'

STH 19

U.E. 898.00'+/-

U.E. 896.90'+/-

U.E. 897.75'+/-

STH 19

UNDERDRAIN WILL HAVE TO BE INSTALLED IN SUBGRADE TO DRAIN TO INLET.

30'WB'

U.E. 898.60'+/-

U.E. 899.25'+/-

U.E. 898.00'+/-

U.E. 898.40'+/-

102'WL'

101'WL'

100'WL'

UNDERDRAIN ELEV.= 899.00'+/-

WILLIAMSBURG WAY

LEGEND

- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PIPE UNDERDRAIN 6-INCH PERFORATED
- C — CAPPED END OF PIPE UNDERDRAIN (INCIDENTAL TO PIPE UNDERDRAIN ITEMS)
- U.E. 881.17'+/- — ELEVATION OF UNDERDRAIN TAP CONNECTION (INCIDENTAL TO PIPE UNDERDRAIN ITEMS) (SEE CONSTRUCTION DETAILS FOR PIPE UNDERDRAIN)

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	UNDERDRAIN PLAN	SHEET 43	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\022601-PU.DWG
LAYOUT NAME - 03

PLOT DATE : 3/9/2022 4:57 PM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

OE C

STH 19

U.E. 898.00'+/-

35'WB'

ST

C

U.E. 897.87'+/-

U.E. 898.92'+/-

STH 19

UNDERDRAIN ELEV.= 898.00'+/-

INSTALL REINFORCED CONCRETE APRON
ENDWALL FOR UNDERDRAIN.
ELEV.=897.00'

LEGEND

- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PIPE UNDERDRAIN 6-INCH PERFORATED
- C — CAPPED END OF PIPE UNDERDRAIN (INCIDENTAL TO PIPE UNDERDRAIN ITEMS)
- U.E. 881.17'+/- — ELEVATION OF UNDERDRAIN TAP CONNECTION (INCIDENTAL TO PIPE UNDERDRAIN ITEMS) (SEE CONSTRUCTION DETAILS FOR PIPE UNDERDRAIN)

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	UNDERDRAIN PLAN	SHEET 44	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\022601-PU.DWG
LAYOUT NAME - 04

PLOT DATE : 3/9/2022 4:57 PM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

N

OE OE OE

C C C

C C C

STH 19

40'WB'

LEGEND

- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PIPE UNDERDRAIN 6-INCH PERFORATED
- C → CAPPED END OF PIPE UNDERDRAIN (INCIDENTAL TO PIPE UNDERDRAIN ITEMS)
- U.E. 881.17'+/- → ELEVATION OF UNDERDRAIN TAP CONNECTION (INCIDENTAL TO PIPE UNDERDRAIN ITEMS) (SEE CONSTRUCTION DETAILS FOR PIPE UNDERDRAIN)

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	UNDERDRAIN PLAN	SHEET 45	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\022601-PU.DWG
LAYOUT NAME - 05

PLOT DATE : 3/9/2022 4:58 PM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

STH 19

45'WB'

50'WB'

C

ST

ST

ST

ST

ST

ST

C

C

FO

U.E. 882.00+/-

U.E. 878.60'+/-

U.E. 874.40'+/-

LEGEND

- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PIPE UNDERDRAIN 6-INCH PERFORATED
- C → CAPPED END OF PIPE UNDERDRAIN (INCIDENTAL TO PIPE UNDERDRAIN ITEMS)
- U.E. 881.17'+/- → ELEVATION OF UNDERDRAIN TAP CONNECTION (INCIDENTAL TO PIPE UNDERDRAIN ITEMS) (SEE CONSTRUCTION DETAILS FOR PIPE UNDERDRAIN)

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	UNDERDRAIN PLAN	SHEET 46	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\022601-PU.DWG
LAYOUT NAME - 06

PLOT DATE : 3/9/2022 4:58 PM

PLOT BY : BLAKE RIDENOUR

PLOT NAME :

PLOT SCALE : 1 IN:40 FT

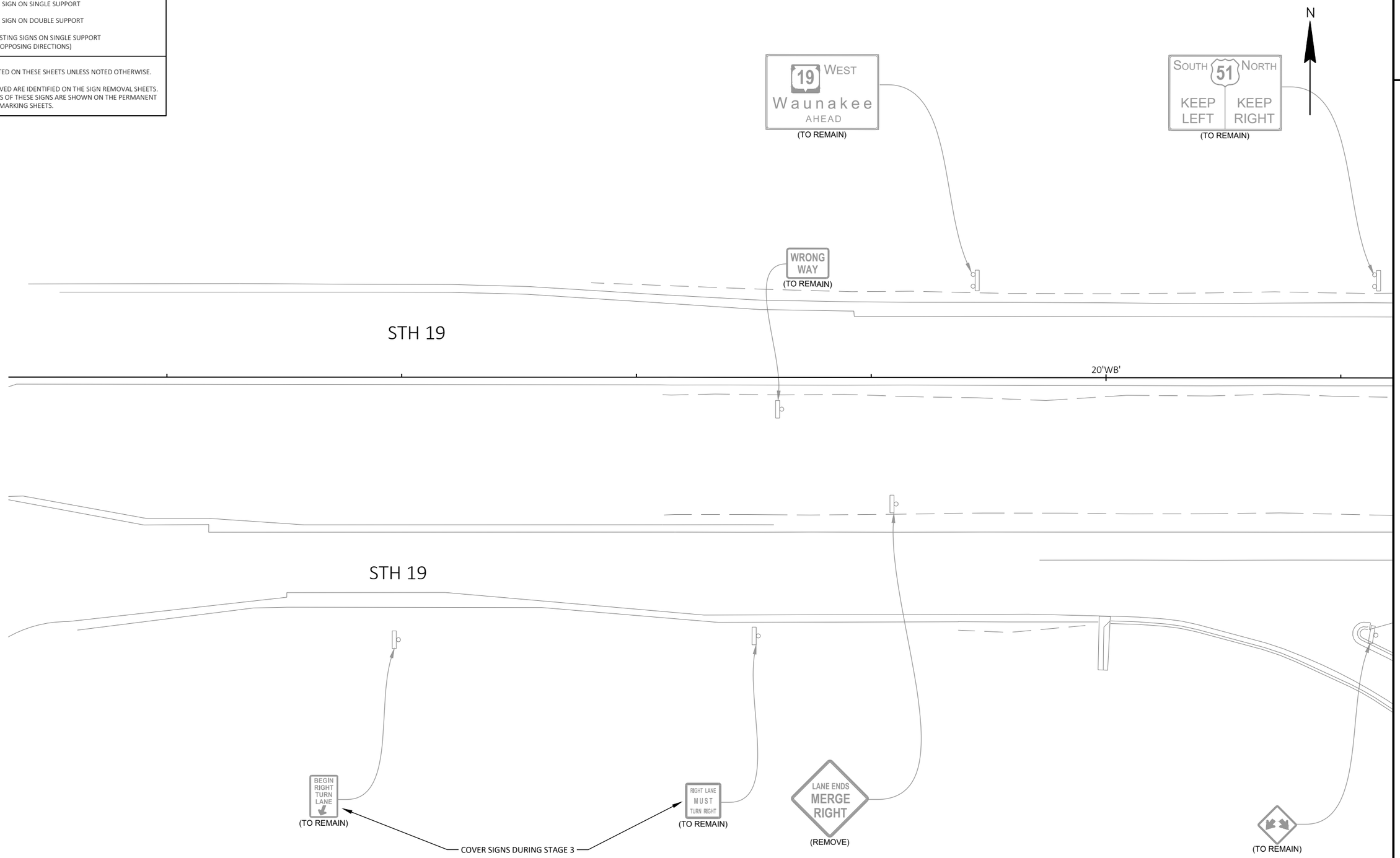
2

LEGEND

- EXISTING SIGN ON SINGLE SUPPORT
- EXISTING SIGN ON DOUBLE SUPPORT
- TWO EXISTING SIGNS ON SINGLE SUPPORT (FACING OPPOSING DIRECTIONS)

NOTES:
REMOVE ALL SIGNS DEPICTED ON THESE SHEETS UNLESS NOTED OTHERWISE.

EXISTING SIGNS TO BE MOVED ARE IDENTIFIED ON THE SIGN REMOVAL SHEETS. THE PROPOSED LOCATIONS OF THESE SIGNS ARE SHOWN ON THE PERMANENT SIGNING AND PAVEMENT MARKING SHEETS.



PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	REMOVALS (SIGN)	SHEET 47	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\023201-PS.DWG
LAYOUT NAME - 01

PLOT DATE : 4/5/2022 11:37 AM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1" = 40'

2

2

N

SOUTH 51 NORTH
KEEP LEFT | KEEP RIGHT
(TO REMAIN)

(TO REMAIN)

JCT JCT
51 CV
(MOVE)

STH 19

20'WB'

25'WB'

SPEED LIMIT 55
(REMOVE)

STH 19

MONTICELLO DR

WILLIAMSBURG WAY
REMOVE

BEGIN RIGHT TURN LANE
(REMOVE)

(TO REMAIN)

(REMOVE)

LEGEND

- EXISTING SIGN ON SINGLE SUPPORT
- EXISTING SIGN ON DOUBLE SUPPORT
- TWO EXISTING SIGNS ON SINGLE SUPPORT (FACING OPPOSING DIRECTIONS)

NOTES:
REMOVE ALL SIGNS DEPICTED ON THESE SHEETS UNLESS NOTED OTHERWISE.

EXISTING SIGNS TO BE MOVED ARE IDENTIFIED ON THE SIGN REMOVAL SHEETS. THE PROPOSED LOCATIONS OF THESE SIGNS ARE SHOWN ON THE PERMANENT SIGNING AND PAVEMENT MARKING SHEETS.

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	REMOVALS (SIGN)	SHEET 48	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\023201-PS.DWG
LAYOUT NAME - 02

PLOT DATE : 4/5/2022 11:37 AM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1" = 40'

2

2

N

103'

102'WL'

101'WL'

100'WL'

30'WB'

STH 19

STH 19

WILLIAMSBURG WAY

WRONG WAY (MOVE)

(MOVE)

(MOVE)

DO NOT ENTER (MOVE)

(MOVE)

DO NOT ENTER (MOVE)

DO NOT ENTER (MOVE)

WRONG WAY (MOVE)

WRONG WAY (REMOVE)

REMOVE

(REMOVE)

EAST 19 (MOVE)

Sun Prairie 2
Watertown 31
(MOVE)

WRONG WAY (TO REMAIN)

DO NOT ENTER (MOVE)

LEGEND

EXISTING SIGN ON SINGLE SUPPORT

EXISTING SIGN ON DOUBLE SUPPORT

TWO EXISTING SIGNS ON SINGLE SUPPORT (FACING OPPOSING DIRECTIONS)

NOTES:
REMOVE ALL SIGNS DEPICTED ON THESE SHEETS UNLESS NOTED OTHERWISE.

EXISTING SIGNS TO BE MOVED ARE IDENTIFIED ON THE SIGN REMOVAL SHEETS. THE PROPOSED LOCATIONS OF THESE SIGNS ARE SHOWN ON THE PERMANENT SIGNING AND PAVEMENT MARKING SHEETS.

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	REMOVALS (SIGN)	SHEET 49	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\023201-PS.DWG
LAYOUT NAME - 03

PLOT DATE : 4/5/2022 11:37 AM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1" = 40'

2

N

WILLIAMSBURG WAY
(REMOVE)

BEGIN LEFT TURN LANE
(MOVE)

(TO REMAIN)

(REMOVE)
45 MPH
(REMOVE)

STH 19

35'WB'

STH 19

(REMOVE)

(MOVE)

WRONG WAY
(MOVE)

DO NOT ENTER
(MOVE)

LEGEND

- EXISTING SIGN ON SINGLE SUPPORT
- EXISTING SIGN ON DOUBLE SUPPORT
- TWO EXISTING SIGNS ON SINGLE SUPPORT (FACING OPPOSING DIRECTIONS)

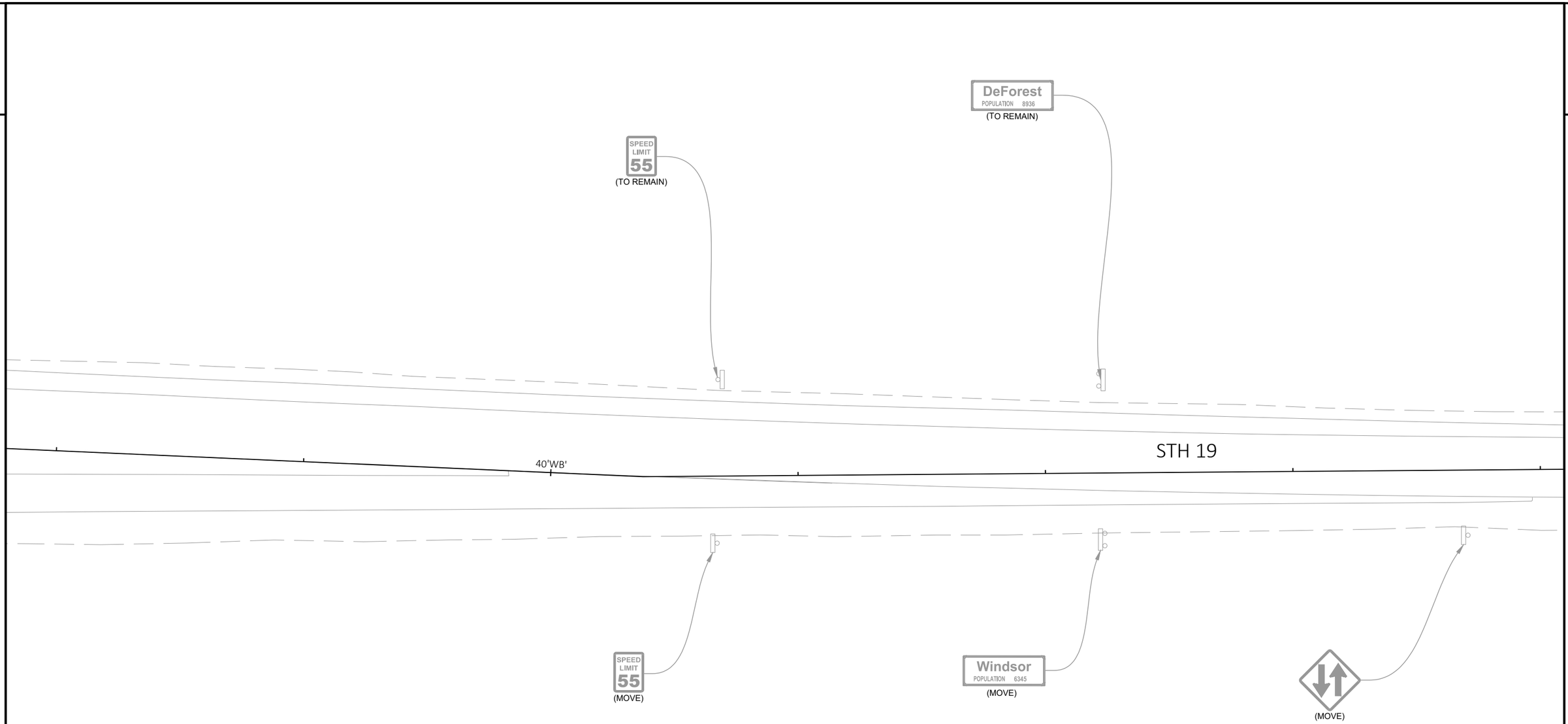
NOTES:
REMOVE ALL SIGNS DEPICTED ON THESE SHEETS UNLESS NOTED OTHERWISE.

EXISTING SIGNS TO BE MOVED ARE IDENTIFIED ON THE SIGN REMOVAL SHEETS. THE PROPOSED LOCATIONS OF THESE SIGNS ARE SHOWN ON THE PERMANENT SIGNING AND PAVEMENT MARKING SHEETS.

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	REMOVALS (SIGN)	SHEET 50	E

2

2



LEGEND

- EXISTING SIGN ON SINGLE SUPPORT
- EXISTING SIGN ON DOUBLE SUPPORT
- TWO EXISTING SIGNS ON SINGLE SUPPORT (FACING OPPOSING DIRECTIONS)

NOTES:
REMOVE ALL SIGNS DEPICTED ON THESE SHEETS UNLESS NOTED OTHERWISE.

EXISTING SIGNS TO BE MOVED ARE IDENTIFIED ON THE SIGN REMOVAL SHEETS. THE PROPOSED LOCATIONS OF THESE SIGNS ARE SHOWN ON THE PERMANENT SIGNING AND PAVEMENT MARKING SHEETS.

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	REMOVALS (SIGN)	SHEET 51	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\023201-PS.DWG
LAYOUT NAME - 05
PLOT DATE : 4/5/2022 11:37 AM
PLOT BY : BLAKE RIDENOUR
PLOT NAME :
PLOT SCALE : 1" = 40'
WISDOT/CADDS SHEET 42

2

2

N

FIRE #4052
(REMAIN)

(TO REMAIN)

STH 19

45'WB'

50'WB'

(MOVE)

FIRE #4061
(MOVE)

LEGEND

EXISTING SIGN ON SINGLE SUPPORT

EXISTING SIGN ON DOUBLE SUPPORT

TWO EXISTING SIGNS ON SINGLE SUPPORT
(FACING OPPOSING DIRECTIONS)

NOTES:
REMOVE ALL SIGNS DEPICTED ON THESE SHEETS UNLESS NOTED OTHERWISE.

EXISTING SIGNS TO BE MOVED ARE IDENTIFIED ON THE SIGN REMOVAL SHEETS. THE PROPOSED LOCATIONS OF THESE SIGNS ARE SHOWN ON THE PERMANENT SIGNING AND PAVEMENT MARKING SHEETS.

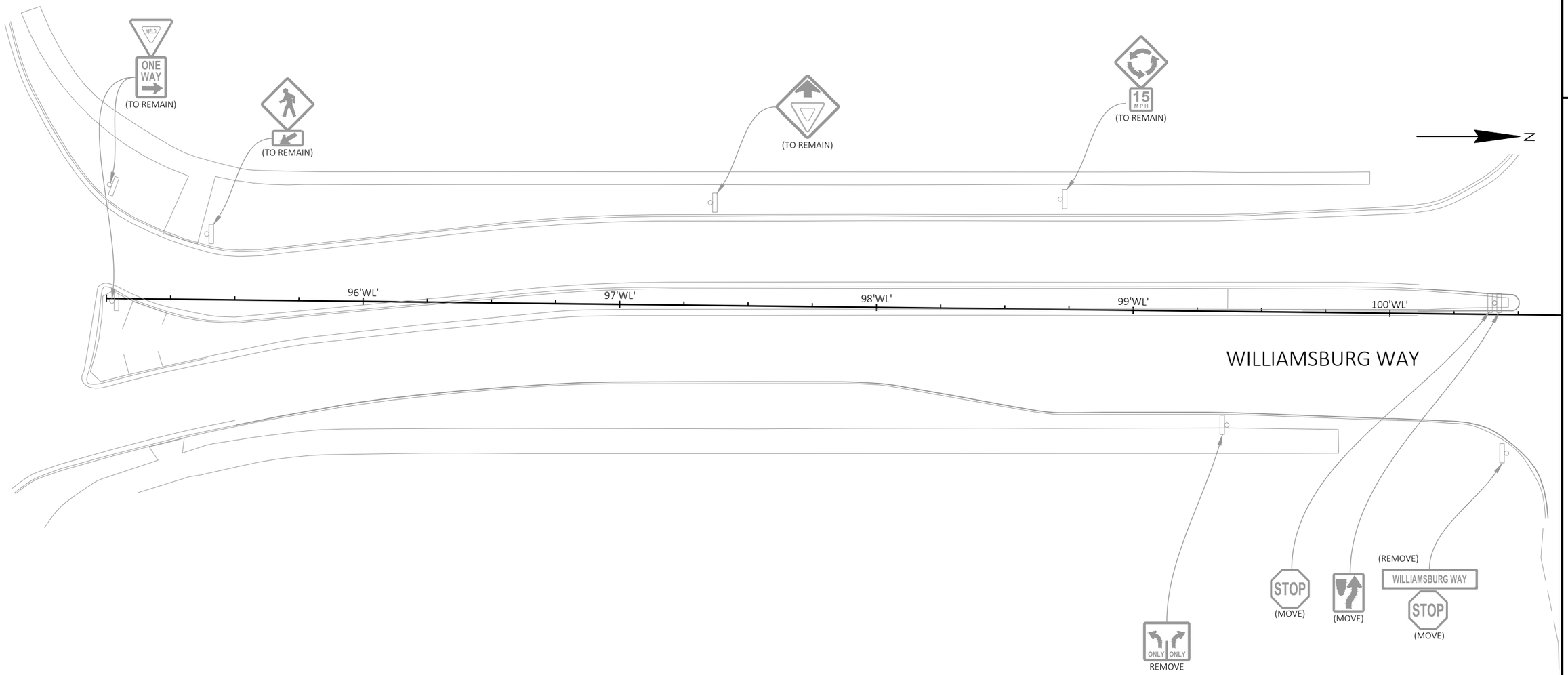
PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	REMOVALS (SIGN)	SHEET 52	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\023201-PS.DWG
LAYOUT NAME - 06

PLOT DATE : 4/5/2022 11:37 AM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1" = 40'

2

2



LEGEND

- EXISTING SIGN ON SINGLE SUPPORT
- EXISTING SIGN ON DOUBLE SUPPORT
- TWO EXISTING SIGNS ON SINGLE SUPPORT (FACING OPPOSING DIRECTIONS)

NOTES:
REMOVE ALL SIGNS DEPICTED ON THESE SHEETS UNLESS NOTED OTHERWISE.

EXISTING SIGNS TO BE MOVED ARE IDENTIFIED ON THE SIGN REMOVAL SHEETS. THE PROPOSED LOCATIONS OF THESE SIGNS ARE SHOWN ON THE PERMANENT SIGNING AND PAVEMENT MARKING SHEETS.

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	REMOVALS (SIGN)	SHEET 53	E

2

2

N

15 MPH
(TO REMAIN)

99'WL'

100'WL'

101'WL'

102'WL'

103'WL'

104'WL'

WILLIAMSBURG WAY

WILL

30'WB'

ONLY ONLY
REMOVE

STOP
(MOVE)

(MOVE)

(REMOVE)
WILLIAMSBURG WAY
STOP
(MOVE)

LEGEND

EXISTING SIGN ON SINGLE SUPPORT

EXISTING SIGN ON DOUBLE SUPPORT

TWO EXISTING SIGNS ON SINGLE SUPPORT
(FACING OPPOSING DIRECTIONS)

NOTES:
REMOVE ALL SIGNS DEPICTED ON THESE SHEETS UNLESS NOTED OTHERWISE.

EXISTING SIGNS TO BE MOVED ARE IDENTIFIED ON THE SIGN REMOVAL SHEETS. THE PROPOSED LOCATIONS OF THESE SIGNS ARE SHOWN ON THE PERMANENT SIGNING AND PAVEMENT MARKING SHEETS.

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	REMOVALS (SIGN)	SHEET 54	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\023201-PS.DWG
LAYOUT NAME - 08

PLOT DATE : 4/5/2022 11:37 AM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1" = 40'

WISDOT/CADDS SHEET 42

2

LEGEND

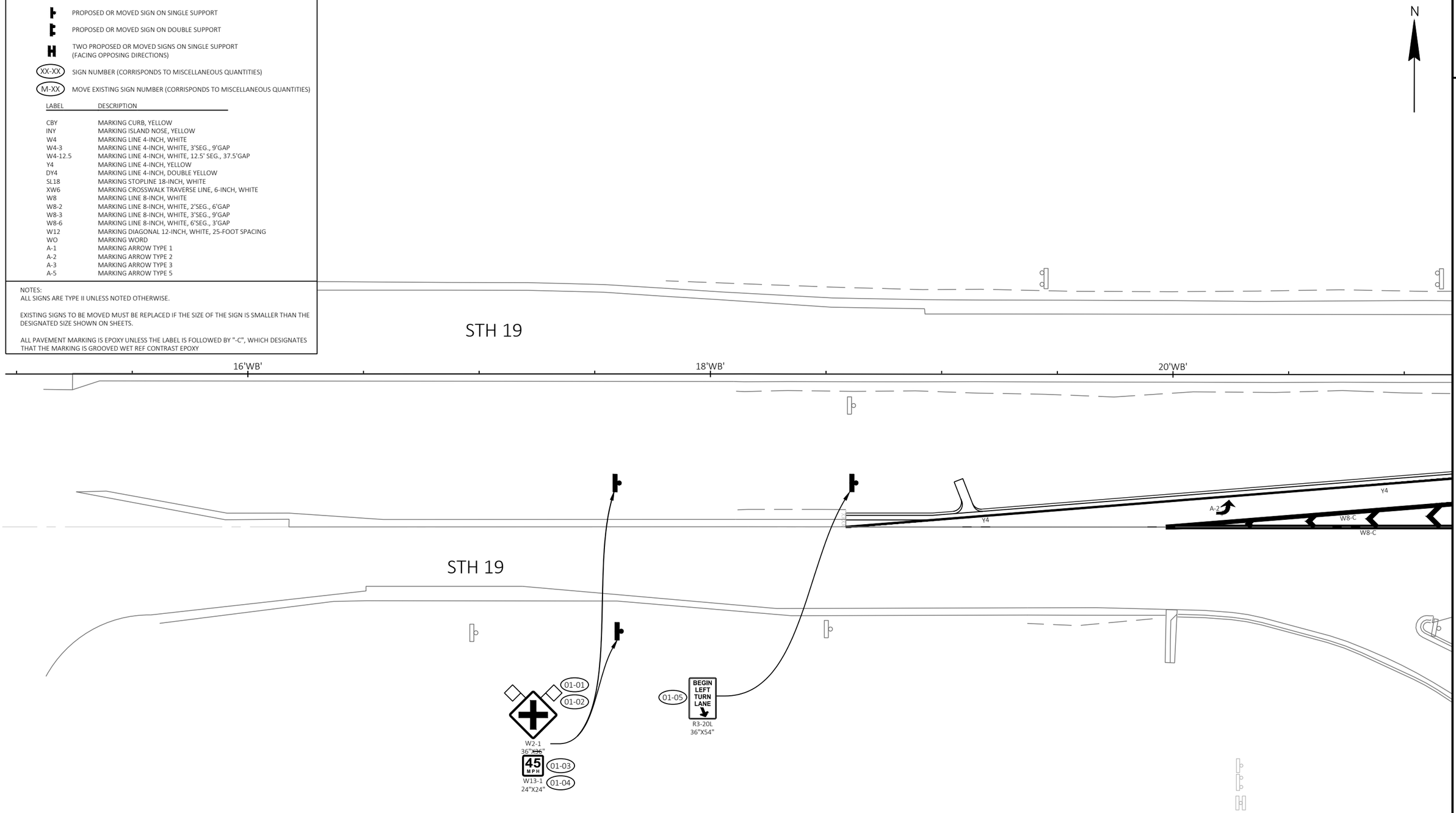
- PROPOSED OR MOVED SIGN ON SINGLE SUPPORT
- PROPOSED OR MOVED SIGN ON DOUBLE SUPPORT
- H — TWO PROPOSED OR MOVED SIGNS ON SINGLE SUPPORT (FACING OPPOSING DIRECTIONS)
- (XX-XX) SIGN NUMBER (CORRISPONDS TO MISCELLANEOUS QUANTITIES)
- (M-XX) MOVE EXISTING SIGN NUMBER (CORRISPONDS TO MISCELLANEOUS QUANTITIES)

LABEL	DESCRIPTION
CBY	MARKING CURB, YELLOW
INY	MARKING ISLAND NOSE, YELLOW
W4	MARKING LINE 4-INCH, WHITE
W4-3	MARKING LINE 4-INCH, WHITE, 3'SEG., 9'GAP
W4-12.5	MARKING LINE 4-INCH, WHITE, 12.5' SEG., 37.5'GAP
Y4	MARKING LINE 4-INCH, YELLOW
DY4	MARKING LINE 4-INCH, DOUBLE YELLOW
SL18	MARKING STOPLINE 18-INCH, WHITE
XW6	MARKING CROSSWALK TRAVERSE LINE, 6-INCH, WHITE
W8	MARKING LINE 8-INCH, WHITE
W8-2	MARKING LINE 8-INCH, WHITE, 2'SEG., 6'GAP
W8-3	MARKING LINE 8-INCH, WHITE, 3'SEG., 9'GAP
W8-6	MARKING LINE 8-INCH, WHITE, 6'SEG., 3'GAP
W12	MARKING DIAGONAL 12-INCH, WHITE, 25-FOOT SPACING
WO	MARKING WORD
A-1	MARKING ARROW TYPE 1
A-2	MARKING ARROW TYPE 2
A-3	MARKING ARROW TYPE 3
A-5	MARKING ARROW TYPE 5

NOTES:
ALL SIGNS ARE TYPE II UNLESS NOTED OTHERWISE.

EXISTING SIGNS TO BE MOVED MUST BE REPLACED IF THE SIZE OF THE SIGN IS SMALLER THAN THE DESIGNATED SIZE SHOWN ON SHEETS.

ALL PAVEMENT MARKING IS EPOXY UNLESS THE LABEL IS FOLLOWED BY "-C", WHICH DESIGNATES THAT THE MARKING IS GROOVED WET REF CONTRAST EPOXY



2

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET 55	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\023202-PS.DWG
LAYOUT NAME - 01

PLOT DATE : 4/7/2022 10:22 AM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1" = 40'

WISDOT/CADDS SHEET 42

2

LEGEND

- PROPOSED OR MOVED SIGN ON SINGLE SUPPORT
- PROPOSED OR MOVED SIGN ON DOUBLE SUPPORT
- TWO PROPOSED OR MOVED SIGNS ON SINGLE SUPPORT (FACING OPPOSING DIRECTIONS)
- (XX-XX) SIGN NUMBER (CORRISPONDS TO MISCELLANEOUS QUANTITIES)
- (M-XX) MOVE EXISTING SIGN NUMBER (CORRISPONDS TO MISCELLANEOUS QUANTITIES)

LABEL	DESCRIPTION
CBY	MARKING CURB, YELLOW
INY	MARKING ISLAND NOSE, YELLOW
W4	MARKING LINE 4-INCH, WHITE
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W4-12.5	MARKING LINE 4-INCH, WHITE, 12.5' SEG., 37.5'GAP
Y4	MARKING LINE 4-INCH, YELLOW
DY4	MARKING LINE 4-INCH, DOUBLE YELLOW
SL18	MARKING STOPLINE 18-INCH, WHITE
XW6	MARKING CROSSWALK TRAVERSE LINE, 6-INCH, WHITE
W8	MARKING LINE 8-INCH, WHITE
W8-2	MARKING LINE 8-INCH, WHITE, 2'SEG., 6'GAP
W8-3	MARKING LINE 8-INCH, WHITE, 3'SEG., 9'GAP
W8-6	MARKING LINE 8-INCH, WHITE, 6'SEG., 3'GAP
W12	MARKING DIAGONAL 12-INCH, WHITE, 25-FOOT SPACING
WO	MARKING WORD
A-1	MARKING ARROW TYPE 1
A-2	MARKING ARROW TYPE 2
A-3	MARKING ARROW TYPE 3
A-5	MARKING ARROW TYPE 5

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N

W3-3
(TO REMAIN)

W3-3
(MOVE)
M-01

M-02
M-03
JCT JCT
51 CV
J1-2
(MOVE)

STH 19

20'WB' 22'WB' 24'WB' 26'WB'

Y4 W8-C W12 A-2 W4 W4-12.5-C

STH 19

W12-1D
30"X30"
02-03

M-04
M-05
WRONG WAY
R5-1A
42"X30"
(MOVE)

MONTICELLO DR

BEGIN RIGHT TURN LANE
R3-20R
24"X36"
02-01

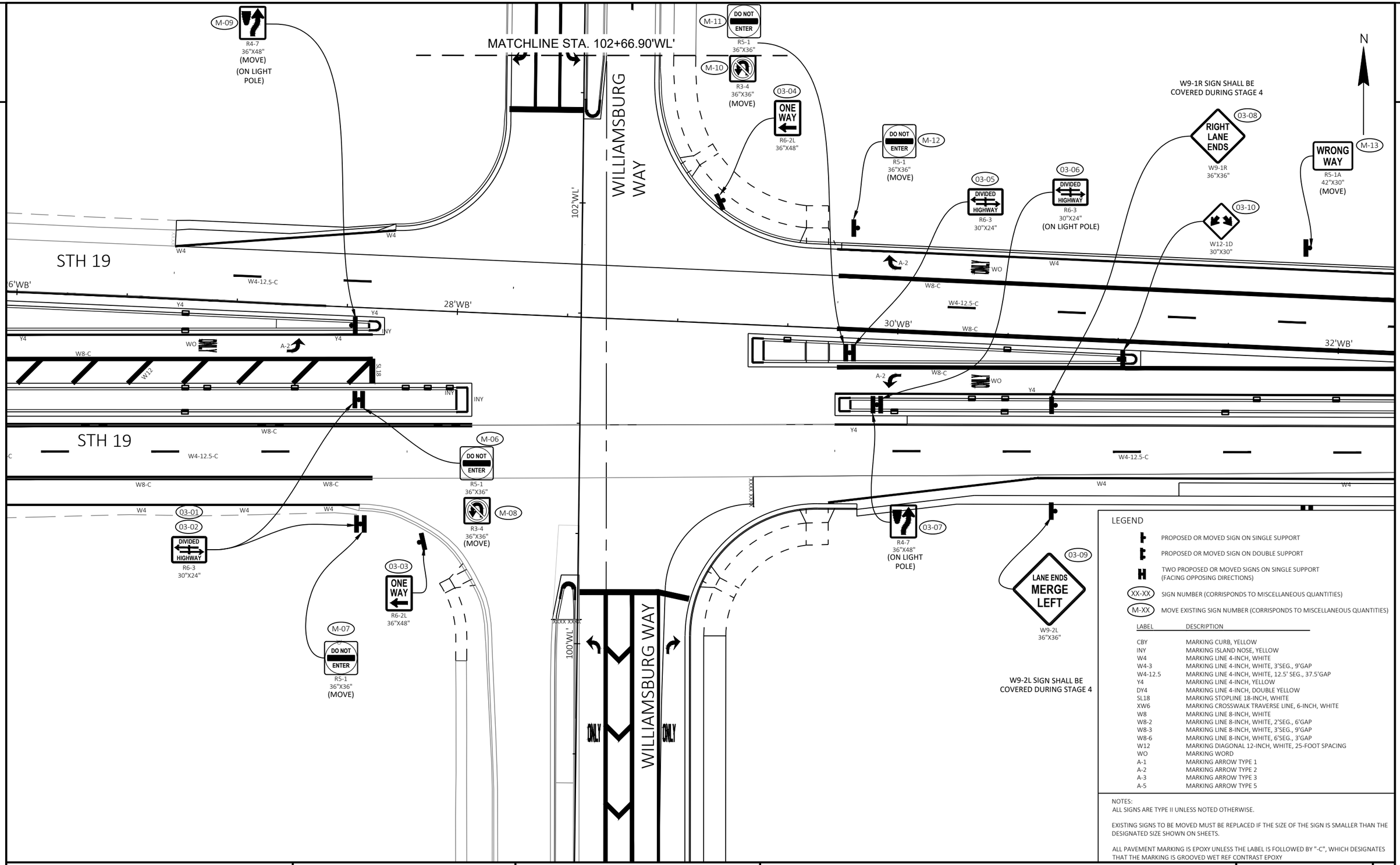
WILLIAMSBURG WAY
D1-61
126X30"
02-02

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET 56	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\023202-PS.DWG
LAYOUT NAME - 02

PLOT DATE : 4/7/2022 10:22 AM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1" = 40'

WISDOT/CADDS SHEET 42



LEGEND

- PROPOSED OR MOVED SIGN ON SINGLE SUPPORT
- PROPOSED OR MOVED SIGN ON DOUBLE SUPPORT
- H — TWO PROPOSED OR MOVED SIGNS ON SINGLE SUPPORT (FACING OPPOSING DIRECTIONS)
- (XX-XX) — SIGN NUMBER (CORRISPONDS TO MISCELLANEOUS QUANTITIES)
- (M-XX) — MOVE EXISTING SIGN NUMBER (CORRISPONDS TO MISCELLANEOUS QUANTITIES)

LABEL	DESCRIPTION
CBY	MARKING CURB, YELLOW
INY	MARKING ISLAND NOSE, YELLOW
W4	MARKING LINE 4-INCH, WHITE
W4-3	MARKING LINE 4-INCH, WHITE, 3'SEG., 9'GAP
W4-12.5	MARKING LINE 4-INCH, WHITE, 12.5' SEG., 37.5'GAP
Y4	MARKING LINE 4-INCH, YELLOW
DY4	MARKING LINE 4-INCH, DOUBLE YELLOW
SL18	MARKING STOPLINE 18-INCH, WHITE
XW6	MARKING CROSSWALK TRAVERSE LINE, 6-INCH, WHITE
W8	MARKING LINE 8-INCH, WHITE
W8-2	MARKING LINE 8-INCH, WHITE, 2'SEG., 6'GAP
W8-3	MARKING LINE 8-INCH, WHITE, 3'SEG., 9'GAP
W8-6	MARKING LINE 8-INCH, WHITE, 6'SEG., 3'GAP
W12	MARKING DIAGONAL 12-INCH, WHITE, 25-FOOT SPACING
WO	MARKING WORD
A-1	MARKING ARROW TYPE 1
A-2	MARKING ARROW TYPE 2
A-3	MARKING ARROW TYPE 3
A-5	MARKING ARROW TYPE 5

NOTES:
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EXISTING SIGNS TO BE MOVED MUST BE REPLACED IF THE SIZE OF THE SIGN IS SMALLER THAN THE DESIGNATED SIZE SHOWN ON SHEETS.

ALL PAVEMENT MARKING IS EPOXY UNLESS THE LABEL IS FOLLOWED BY "-C", WHICH DESIGNATES THAT THE MARKING IS GROOVED WET REF CONTRAST EPOXY

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET 57	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\023202-PS.DWG
LAYOUT NAME - 03

PLOT DATE : 4/7/2022 10:22 AM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1" = 40'

2

2

04-01 WILLIAMSBURG WAY
D1-61
126X30"

N

WRONG WAY M-13
R5-1A
42"X30"
(MOVE)

04-03
W2-1
36"X36"
45 MPH 04-04
W13-1
24"X24"

M-20 SPEED LIMIT 55
R2-1
24"X30"
(MOVE)

STH 19

W4
W8-C
A-2
32'WB'
34'WB'
36'WB'
38'WB'
Y4
W4-12.5-C
A-5

STH 19

M-18 BEGIN LEFT TURN LANE
R3-20L
36"X54"

WRONG WAY M-15
R5-1A
42"X30"
(MOVE)

EAST 19 M-16 M-17
J4-1
36"X54"
(MOVE)

04-02
W4-2R
36"X36"

W4-2R SIGN SHALL BE COVERED DURING STAGE 4

DO NOT ENTER M-19
R5-1
36"X36"
(MOVE)

M-14
W6-2
36"X36"
(MOVE)

LEGEND

- PROPOSED OR MOVED SIGN ON SINGLE SUPPORT
- PROPOSED OR MOVED SIGN ON DOUBLE SUPPORT
- H TWO PROPOSED OR MOVED SIGNS ON SINGLE SUPPORT (FACING OPPOSING DIRECTIONS)
- (XX-XX) SIGN NUMBER (CORRISPONDS TO MISCELLANEOUS QUANTITIES)
- (M-XX) MOVE EXISTING SIGN NUMBER (CORRISPONDS TO MISCELLANEOUS QUANTITIES)

LABEL	DESCRIPTION
CBY	MARKING CURB, YELLOW
INY	MARKING ISLAND NOSE, YELLOW
W4	MARKING LINE 4-INCH, WHITE
W4-3	MARKING LINE 4-INCH, WHITE, 3'SEG., 9'GAP
W4-12.5	MARKING LINE 4-INCH, WHITE, 12.5' SEG., 37.5'GAP
Y4	MARKING LINE 4-INCH, YELLOW
DY4	MARKING LINE 4-INCH, DOUBLE YELLOW
SL18	MARKING STOPLINE 18-INCH, WHITE
XW6	MARKING CROSSWALK TRAVERSE LINE, 6-INCH, WHITE
W8	MARKING LINE 8-INCH, WHITE
W8-2	MARKING LINE 8-INCH, WHITE, 2'SEG., 6'GAP
W8-3	MARKING LINE 8-INCH, WHITE, 3'SEG., 9'GAP
W8-6	MARKING LINE 8-INCH, WHITE, 6'SEG., 3'GAP
W12	MARKING DIAGONAL 12-INCH, WHITE, 25-FOOT SPACING
WO	MARKING WORD
A-1	MARKING ARROW TYPE 1
A-2	MARKING ARROW TYPE 2
A-3	MARKING ARROW TYPE 3
A-5	MARKING ARROW TYPE 5

NOTES:
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ALL PAVEMENT MARKING IS EPOXY UNLESS THE LABEL IS FOLLOWED BY "-C", WHICH DESIGNATES THAT THE MARKING IS GROOVED WET REF CONTRAST EPOXY

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET 58	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\023202-PS.DWG
LAYOUT NAME - 04
PLOT DATE : 4/7/2022 10:22 AM
PLOT BY : BLAKE RIDENOUR
PLOT NAME :
PLOT SCALE : 1" = 40'

2

2

N

Windsor
POPULATION 6345
M-23
I2-3
(MOVE)

STH 19

38'WB'

40'WB'

42'WB'

44'WB'

A-5

W4

W4

W4

W4

Sun Prairie 2
Watertown 31
D2-2
(MOVE)
M-21

M-22
W6-3
36"X36"
(MOVE)

LEGEND

- PROPOSED OR MOVED SIGN ON SINGLE SUPPORT
- PROPOSED OR MOVED SIGN ON DOUBLE SUPPORT
- TWO PROPOSED OR MOVED SIGNS ON SINGLE SUPPORT (FACING OPPOSING DIRECTIONS)
- (XX-XX) SIGN NUMBER (CORRISPONDS TO MISCELLANEOUS QUANTITIES)
- (M-XX) MOVE EXISTING SIGN NUMBER (CORRISPONDS TO MISCELLANEOUS QUANTITIES)

LABEL	DESCRIPTION
CBY	MARKING CURB, YELLOW
INY	MARKING ISLAND NOSE, YELLOW
W4	MARKING LINE 4-INCH, WHITE
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W4-12.5	MARKING LINE 4-INCH, WHITE, 12.5' SEG., 37.5'GAP
Y4	MARKING LINE 4-INCH, YELLOW
DY4	MARKING LINE 4-INCH, DOUBLE YELLOW
SL18	MARKING STOPLINE 18-INCH, WHITE
XW6	MARKING CROSSWALK TRAVERSE LINE, 6-INCH, WHITE
W8	MARKING LINE 8-INCH, WHITE
W8-2	MARKING LINE 8-INCH, WHITE, 2'SEG., 6'GAP
W8-3	MARKING LINE 8-INCH, WHITE, 3'SEG., 9'GAP
W8-6	MARKING LINE 8-INCH, WHITE, 6'SEG., 3'GAP
W12	MARKING DIAGONAL 12-INCH, WHITE, 25-FOOT SPACING
WO	MARKING WORD
A-1	MARKING ARROW TYPE 1
A-2	MARKING ARROW TYPE 2
A-3	MARKING ARROW TYPE 3
A-5	MARKING ARROW TYPE 5

NOTES:
ALL SIGNS ARE TYPE II UNLESS NOTED OTHERWISE.

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ALL PAVEMENT MARKING IS EPOXY UNLESS THE LABEL IS FOLLOWED BY "-C", WHICH DESIGNATES THAT THE MARKING IS GROOVED WET REF CONTRAST EPOXY

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET 59	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\023202-PS.DWG
LAYOUT NAME - 05

PLOT DATE : 4/7/2022 10:22 AM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1" = 40'

2

2

N

M-24

I55-56
(MOVE)

M-25

FIRE #4061
(MOVE)

06-01

W6-1
36"X36"

STH 19

44'WB'

46'WB'

48'WB'

50'WB'

W4

W4

W4

LEGEND

- PROPOSED OR MOVED SIGN ON SINGLE SUPPORT
- PROPOSED OR MOVED SIGN ON DOUBLE SUPPORT
- TWO PROPOSED OR MOVED SIGNS ON SINGLE SUPPORT (FACING OPPOSING DIRECTIONS)
- XX-XX SIGN NUMBER (CORRISPONDS TO MISCELLANEOUS QUANTITIES)
- M-XX MOVE EXISTING SIGN NUMBER (CORRISPONDS TO MISCELLANEOUS QUANTITIES)

LABEL	DESCRIPTION
CBY	MARKING CURB, YELLOW
INY	MARKING ISLAND NOSE, YELLOW
W4	MARKING LINE 4-INCH, WHITE
W4-3	MARKING LINE 4-INCH, WHITE, 3'SEG., 9'GAP
W4-12.5	MARKING LINE 4-INCH, WHITE, 12.5' SEG., 37.5'GAP
Y4	MARKING LINE 4-INCH, YELLOW
DY4	MARKING LINE 4-INCH, DOUBLE YELLOW
SL18	MARKING STOPLINE 18-INCH, WHITE
XW6	MARKING CROSSWALK TRAVERSE LINE, 6-INCH, WHITE
W8	MARKING LINE 8-INCH, WHITE
W8-2	MARKING LINE 8-INCH, WHITE, 2'SEG., 6'GAP
W8-3	MARKING LINE 8-INCH, WHITE, 3'SEG., 9'GAP
W8-6	MARKING LINE 8-INCH, WHITE, 6'SEG., 3'GAP
W12	MARKING DIAGONAL 12-INCH, WHITE, 25-FOOT SPACING
WO	MARKING WORD
A-1	MARKING ARROW TYPE 1
A-2	MARKING ARROW TYPE 2
A-3	MARKING ARROW TYPE 3
A-5	MARKING ARROW TYPE 5

NOTES:
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ALL PAVEMENT MARKING IS EPOXY UNLESS THE LABEL IS FOLLOWED BY "-C", WHICH DESIGNATES THAT THE MARKING IS GROOVED WET REF CONTRAST EPOXY

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET 60	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\023202-PS.DWG
LAYOUT NAME - 06

PLOT DATE : 4/7/2022 10:22 AM

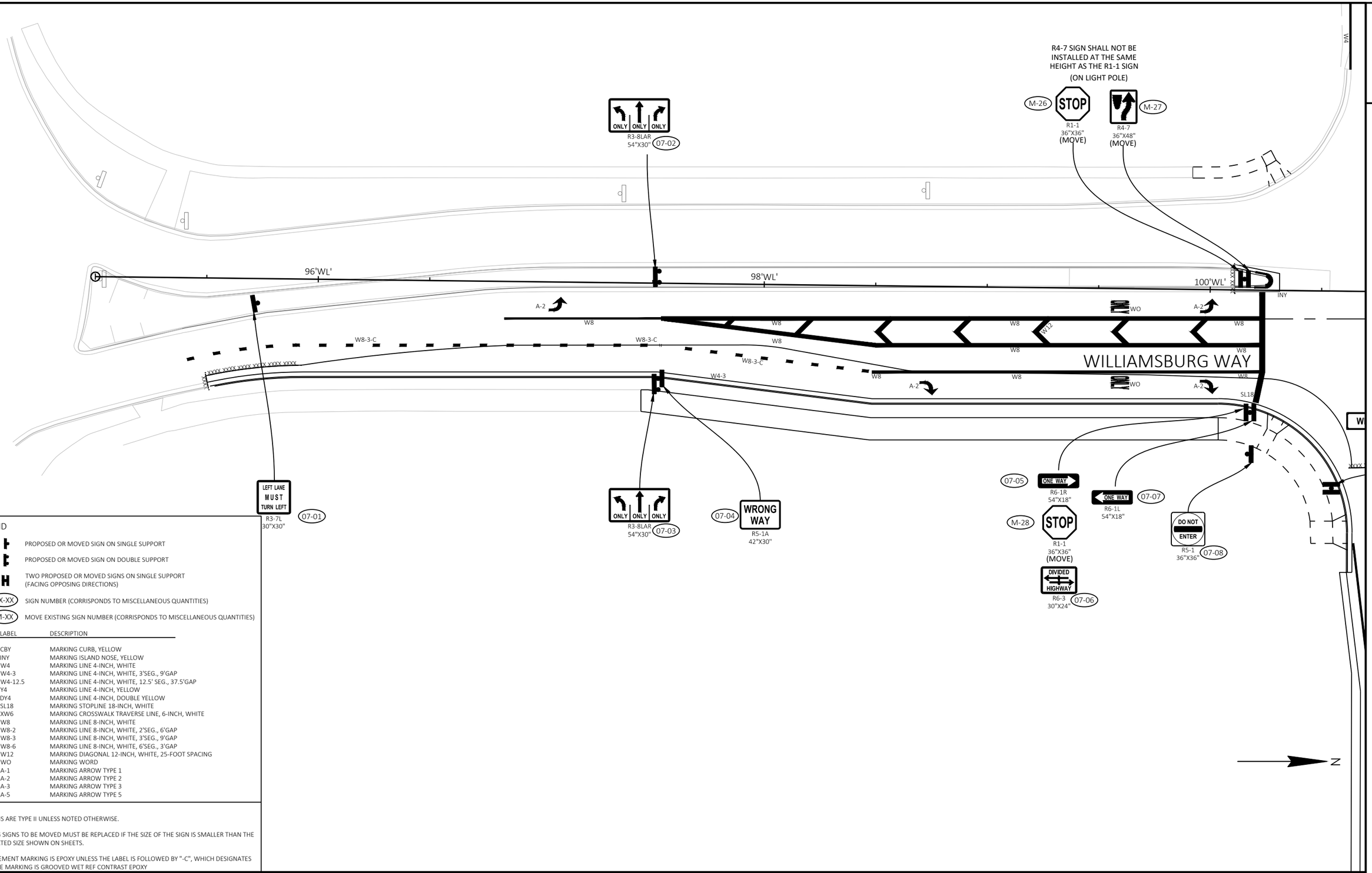
PLOT BY : BLAKE RIDENOUR

PLOT NAME :

PLOT SCALE : 1" = 40'

WISDOT/CADDS SHEET 42

2



LEGEND

- PROPOSED OR MOVED SIGN ON SINGLE SUPPORT
- PROPOSED OR MOVED SIGN ON DOUBLE SUPPORT
- TWO PROPOSED OR MOVED SIGNS ON SINGLE SUPPORT (FACING OPPOSING DIRECTIONS)
- XX-XX SIGN NUMBER (CORRISPONDS TO MISCELLANEOUS QUANTITIES)
- M-XX MOVE EXISTING SIGN NUMBER (CORRISPONDS TO MISCELLANEOUS QUANTITIES)

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W4-3	MARKING LINE 4-INCH, WHITE, 3'SEG., 9'GAP
W4-12.5	MARKING LINE 4-INCH, WHITE, 12.5' SEG., 37.5'GAP
Y4	MARKING LINE 4-INCH, YELLOW
DY4	MARKING LINE 4-INCH, DOUBLE YELLOW
SL18	MARKING STOPLINE 18-INCH, WHITE
XW6	MARKING CROSSWALK TRAVERSE LINE, 6-INCH, WHITE
W8	MARKING LINE 8-INCH, WHITE
W8-2	MARKING LINE 8-INCH, WHITE, 2'SEG., 6'GAP
W8-3	MARKING LINE 8-INCH, WHITE, 3'SEG., 9'GAP
W8-6	MARKING LINE 8-INCH, WHITE, 6'SEG., 3'GAP
W12	MARKING DIAGONAL 12-INCH, WHITE, 25-FOOT SPACING
WO	MARKING WORD
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A-3	MARKING ARROW TYPE 3
A-5	MARKING ARROW TYPE 5

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PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET 61	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\023202-PS.DWG
LAYOUT NAME - 07

PLOT DATE : 4/7/2022 10:22 AM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1" = 40'

2

R4-7 SIGN SHALL NOT BE INSTALLED AT THE SAME HEIGHT AS THE R1-1 SIGN (ON LIGHT POLE)

M-26 STOP R1-1 36"X36" (MOVE)

M-27 R4-7 36"X48" (MOVE)

WILLIAMSBURG WAY

100'WL'

102'WL'

104'WL'

28'WB'

30'WB'

48"X12"

SL18

INY

WO

W8

W12

A-2

W4-12.5-C

MATCHLINE STA. 102+66.90 WL

08-01 DO NOT ENTER R5-1 36"X36"

08-02 ONE WAY R6-1L 54"X18"

08-03 ONE WAY R6-1R 54"X18"

08-04 STOP R1-1 36"X36"

08-05 DIVIDED HIGHWAY R6-3 30"X24"

08-06 R4-7 36"X48"

08-07 STOP R1-1 36"X36"

(ON LIGHT POLE)

R4-7 SIGN SHALL NOT BE INSTALLED AT THE SAME HEIGHT AS THE R1-1 SIGN

R3-8LAR SIGNS SHALL BE COVERED DURING STAGE 2

08-08 R3-8LAR 54"X30" (ONLY ONLY ONLY)

08-09 WRONG WAY R5-1A 42"X30"

08-10 R3-8LAR 54"X30" (ONLY ONLY ONLY)

08-11

08-12

WILLIAMSBURG WAY

07-05 ONE WAY R6-1R 54"X18"

07-06 DIVIDED HIGHWAY R6-3 30"X24"

M-28 STOP R1-1 36"X36" (MOVE)

07-07 ONE WAY R6-1L 54"X18"

07-08 DO NOT ENTER R5-1 36"X36"

WILLIAMSBURG WAY

07-09

07-10

ONLY

ONLY

N

LEGEND

- PROPOSED OR MOVED SIGN ON SINGLE SUPPORT
- PROPOSED OR MOVED SIGN ON DOUBLE SUPPORT
- H TWO PROPOSED OR MOVED SIGNS ON SINGLE SUPPORT (FACING OPPOSING DIRECTIONS)
- (XX-XX) SIGN NUMBER (CORRISPONDS TO MISCELLANEOUS QUANTITIES)
- (M-XX) MOVE EXISTING SIGN NUMBER (CORRISPONDS TO MISCELLANEOUS QUANTITIES)

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DY4	MARKING LINE 4-INCH, DOUBLE YELLOW
SL18	MARKING STOPLINE 18-INCH, WHITE
XW6	MARKING CROSSWALK TRAVERSE LINE, 6-INCH, WHITE
W8	MARKING LINE 8-INCH, WHITE
W8-2	MARKING LINE 8-INCH, WHITE, 2'SEG., 6'GAP
W8-3	MARKING LINE 8-INCH, WHITE, 3'SEG., 9'GAP
W8-6	MARKING LINE 8-INCH, WHITE, 6'SEG., 3'GAP
W12	MARKING DIAGONAL 12-INCH, WHITE, 25-FOOT SPACING
WO	MARKING WORD
A-1	MARKING ARROW TYPE 1
A-2	MARKING ARROW TYPE 2
A-3	MARKING ARROW TYPE 3
A-5	MARKING ARROW TYPE 5

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PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	PERMANENT SIGNING AND PAVEMENT MARKING	SHEET 62	E

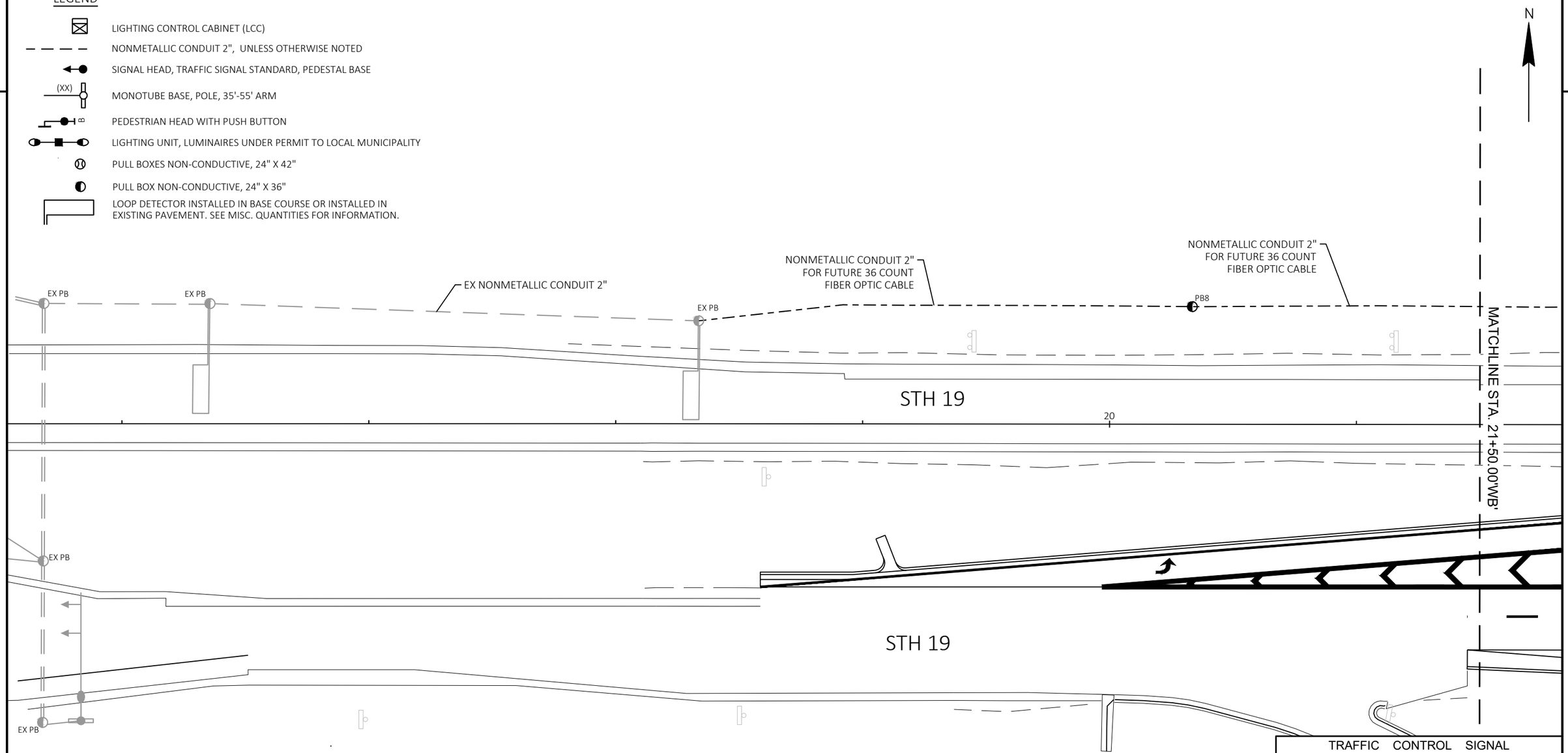
FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\023202-PS.DWG
LAYOUT NAME - 08

PLOT DATE : 4/7/2022 10:22 AM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1" = 40'

2

LEGEND

- LIGHTING CONTROL CABINET (LCC)
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LIGHTING UNIT, LUMINAIRES UNDER PERMIT TO LOCAL MUNICIPALITY
- PULL BOXES NON-CONDUCTIVE, 24" X 42"
- PULL BOX NON-CONDUCTIVE, 24" X 36"
- LOOP DETECTOR INSTALLED IN BASE COURSE OR INSTALLED IN EXISTING PAVEMENT. SEE MISC. QUANTITIES FOR INFORMATION.



CONSTRUCTION NOTES

1. LOCATION OF LOOP DETECTORS IS FRONT CENTER OF LOOP UNLESS OTHERWISE NOTED.
2. LOOPS SHALL BE CENTERED IN THEIR RESPECTIVE LANES UNLESS OTHERWISE NOTED.
3. ALL LOOP DETECTORS SHALL BE TESTED AS DESCRIBED IN SECTION 655 OF THE STANDARD SPECIFICATIONS.
4. ALL CONDUIT RUNS SHALL CONTAIN PULL WIRE AS DESCRIBED IN SECTION 652 OF THE STANDARD SPECIFICATIONS.
5. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN.
6. THE ENGINEER SHALL ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING AND PROPOSED UTILITY FACILITIES.
7. SIGNAL HEADS SHALL BE CENTERED OVER THE LANES.

TRAFFIC CONTROL SIGNAL
INTERSECTION
MUNICIPALITY
COUNTY

SIGNAL NO. S13-0977
CABINET TYPE: TYPE
CONTROLLER TYPE: TYPE

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
DATE DATE — TRAFFIC ENGINEER
REGION TRAFFIC ENGINEER

APPROVED
DATE DATE — STATE ENGINEER
STATE TRAFFIC ENGINEER

REGION CONTACT: REGION CONTACT
DESIGNED BY: DESIGNED BY
REVISED BY: REVISED BY

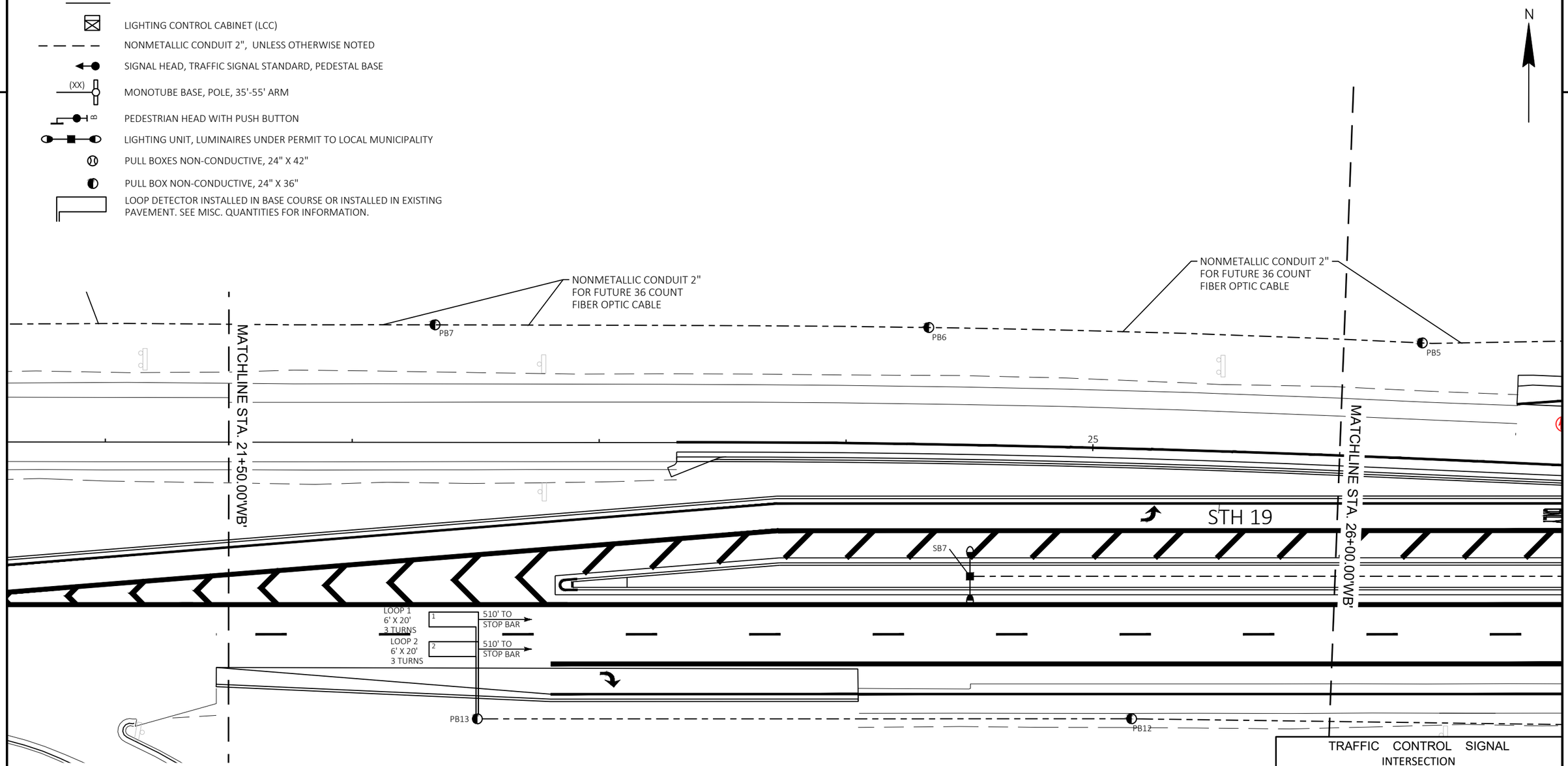
PAGE XX OF XX

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	SIGNAL AND INTERCONNECT PLAN	SHEET 63	E

2

LEGEND

- LIGHTING CONTROL CABINET (LCC)
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM
- B PEDESTRIAN HEAD WITH PUSH BUTTON
- LIGHTING UNIT, LUMINAIRES UNDER PERMIT TO LOCAL MUNICIPALITY
- PULL BOXES NON-CONDUCTIVE, 24" X 42"
- PULL BOX NON-CONDUCTIVE, 24" X 36"
- LOOP DETECTOR INSTALLED IN BASE COURSE OR INSTALLED IN EXISTING PAVEMENT. SEE MISC. QUANTITIES FOR INFORMATION.



CONSTRUCTION NOTES

1. LOCATION OF LOOP DETECTORS IS FRONT CENTER OF LOOP UNLESS OTHERWISE NOTED.
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TRAFFIC CONTROL SIGNAL
INTERSECTION
MUNICIPALITY
COUNTY

SIGNAL NO. S13-0977
CABINET TYPE: TYPE
CONTROLLER TYPE: TYPE

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
DATE DATE — TRAFFIC ENGINEER / REGION TRAFFIC ENGINEER

APPROVED
DATE DATE — STATE ENGINEER / STATE TRAFFIC ENGINEER

REGION CONTACT: REGION CONTACT
DESIGNED BY: DESIGNED BY
REVISED BY: REVISED BY

PAGE XX OF XX

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	SIGNAL AND INTERCONNECT PLAN	SHEET 64	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\024201-SP.DWG
LAYOUT NAME - 04
PLOT DATE : 3/1/2022 11:09 PM
PLOT BY : BLAKE RIDENOUR
PLOT NAME :
PLOT SCALE : 1" = 40'

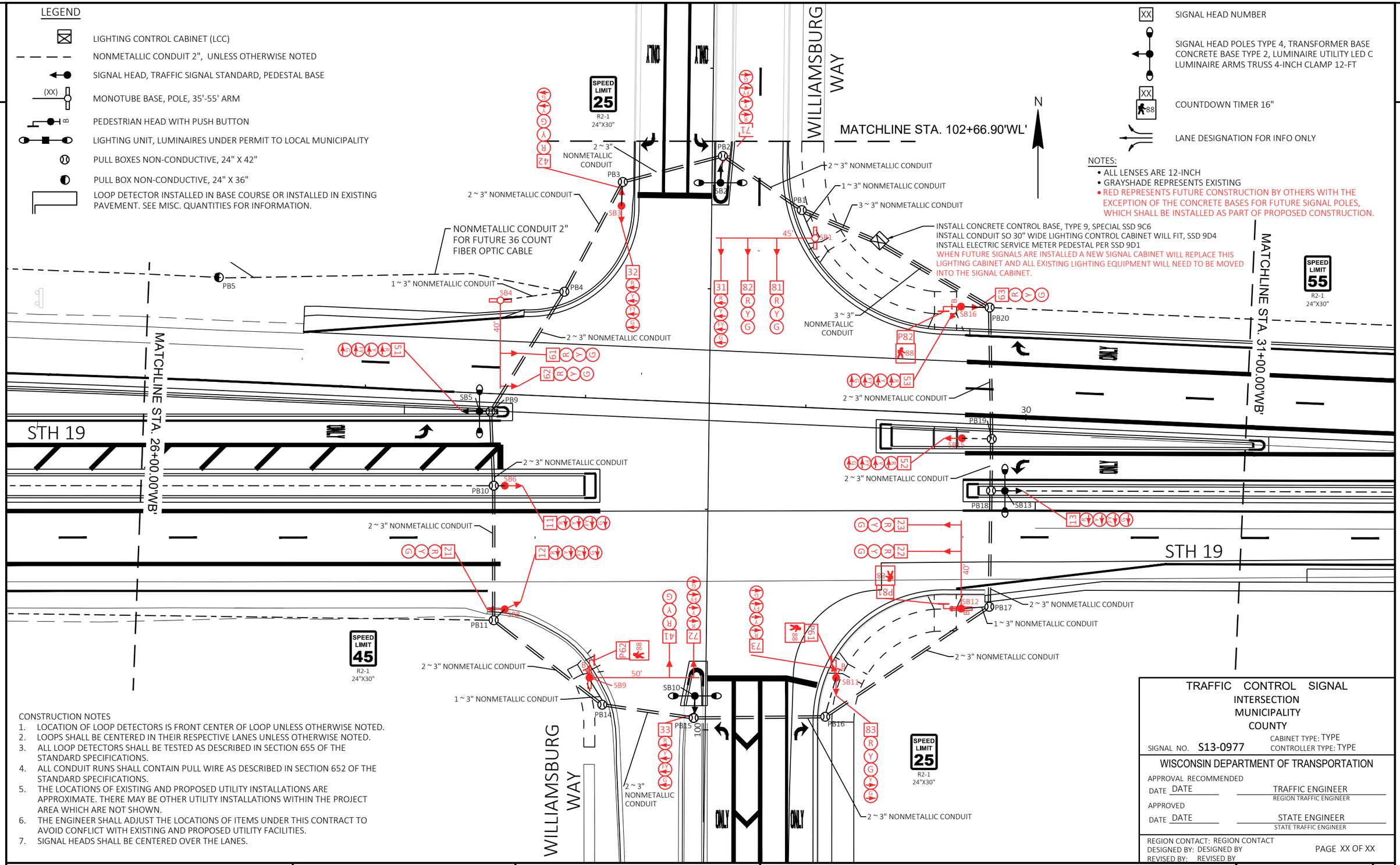
2

LEGEND

- LIGHTING CONTROL CABINET (LCC)
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM
- B PEDESTRIAN HEAD WITH PUSH BUTTON
- LIGHTING UNIT, LUMINAIRES UNDER PERMIT TO LOCAL MUNICIPALITY
- PULL BOXES NON-CONDUCTIVE, 24" X 42"
- PULL BOX NON-CONDUCTIVE, 24" X 36"
- LOOP DETECTOR INSTALLED IN BASE COURSE OR INSTALLED IN EXISTING PAVEMENT. SEE MISC. QUANTITIES FOR INFORMATION.

- XX SIGNAL HEAD NUMBER
- SIGNAL HEAD POLES TYPE 4, TRANSFORMER BASE CONCRETE BASE TYPE 2, LUMINAIRE UTILITY LED C LUMINAIRE ARMS TRUSS 4-INCH CLAMP 12-FT
- XX 88 COUNTDOWN TIMER 16"
- LANE DESIGNATION FOR INFO ONLY

NOTES:
- ALL LENSES ARE 12-INCH
- GRAYSHADE REPRESENTS EXISTING
- RED REPRESENTS FUTURE CONSTRUCTION BY OTHERS WITH THE EXCEPTION OF THE CONCRETE BASES FOR FUTURE SIGNAL POLES, WHICH SHALL BE INSTALLED AS PART OF PROPOSED CONSTRUCTION.



CONSTRUCTION NOTES
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7. SIGNAL HEADS SHALL BE CENTERED OVER THE LANES.

TRAFFIC CONTROL SIGNAL
INTERSECTION
MUNICIPALITY
COUNTY
SIGNAL NO. S13-0977
CABINET TYPE: TYPE
CONTROLLER TYPE: TYPE

WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVAL RECOMMENDED
DATE DATE — TRAFFIC ENGINEER, REGION TRAFFIC ENGINEER
APPROVED
DATE DATE — STATE ENGINEER, STATE TRAFFIC ENGINEER

REGION CONTACT: REGION CONTACT
DESIGNED BY: DESIGNED BY
REVISED BY: REVISED BY
PAGE XX OF XX

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	SIGNAL AND INTERCONNECT PLAN	SHEET 65	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\024201-SP.DWG
LAYOUT NAME - 08 LP
PLOT DATE : 4/14/2022 9:17 PM
PLOT BY : BLAKE RIDENOUR
PLOT NAME :
PLOT SCALE : 1" = 40'

2

TYPE 9, SPECIAL SSD 9C6
HTING CONTROL CABINET WILL FIT, SSD 9D4
'EDESTAL PER SSD 9D1
LLED A NEW SIGNAL CABINET WILL REPLACE THIS
IG LIGHTING EQUIPMENT WILL NEED TO BE MOVED

MATCHLINE STA. 31+00.00'WB'

SPEED LIMIT 55
R2-1
24"X30"

N

LEGEND

- LIGHTING CONTROL CABINET (LCC)
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) MONOTUBE BASE, POLE, 35'-55' ARM
- PEDESTRIAN HEAD WITH PUSH BUTTON
- LIGHTING UNIT, LUMINAIRES UNDER PERMIT TO LOCAL MUNICIPALITY
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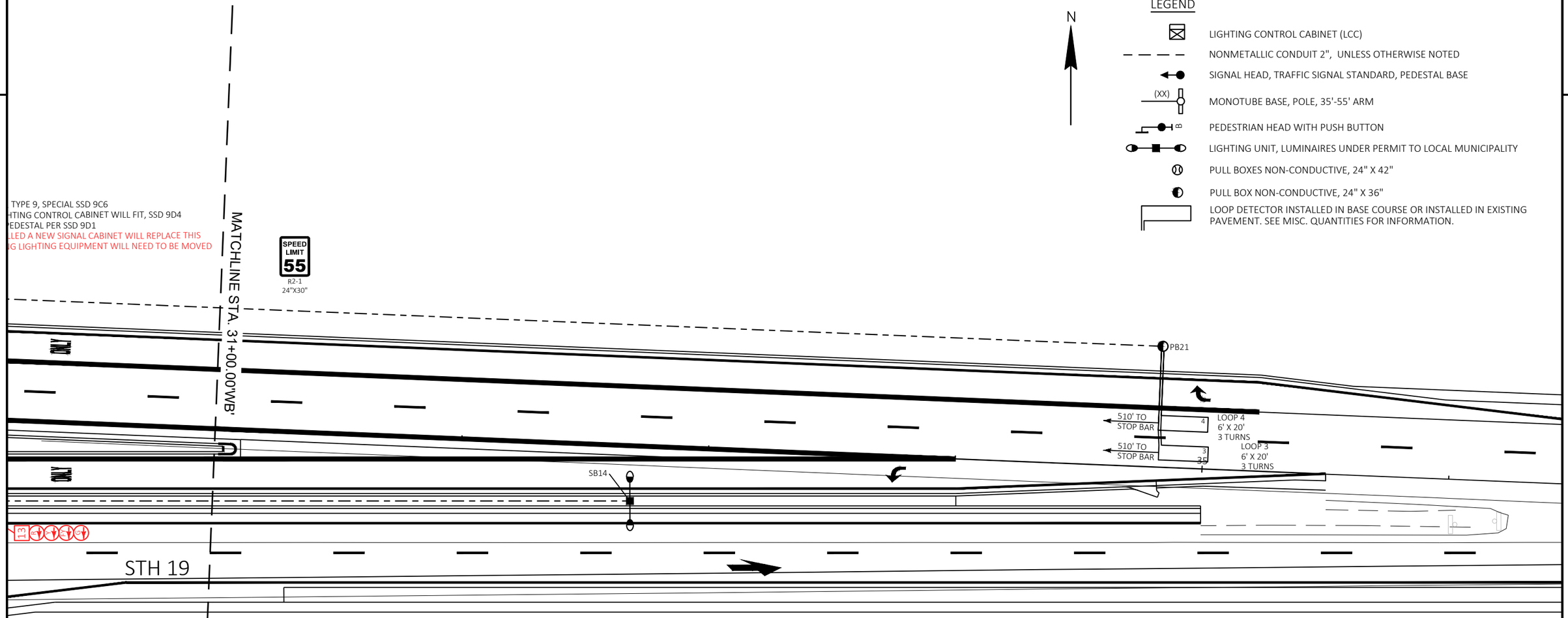
- LOOP DETECTOR INSTALLED IN BASE COURSE OR INSTALLED IN EXISTING PAVEMENT. SEE MISC. QUANTITIES FOR INFORMATION.



NMETALLIC CONDUIT

C CONDUIT

CONSTRUCTION NOTES
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TRAFFIC CONTROL SIGNAL
INTERSECTION
MUNICIPALITY
COUNTY

SIGNAL NO. S13-0977
CABINET TYPE: TYPE
CONTROLLER TYPE: TYPE

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
DATE DATE — TRAFFIC ENGINEER
REGION TRAFFIC ENGINEER

APPROVED
DATE DATE — STATE ENGINEER
STATE TRAFFIC ENGINEER

REGION CONTACT: REGION CONTACT
DESIGNED BY: DESIGNED BY
REVISED BY: REVISED BY

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	SIGNAL AND INTERCONNECT PLAN	SHEET 66	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\024201-SP.DWG
LAYOUT NAME - 09
PLOT DATE : 4/14/2022 9:17 PM
PLOT BY : BLAKE RIDENOUR
PLOT NAME :
PLOT SCALE : 1" = 40'
WISDOT/CADDS SHEET 42

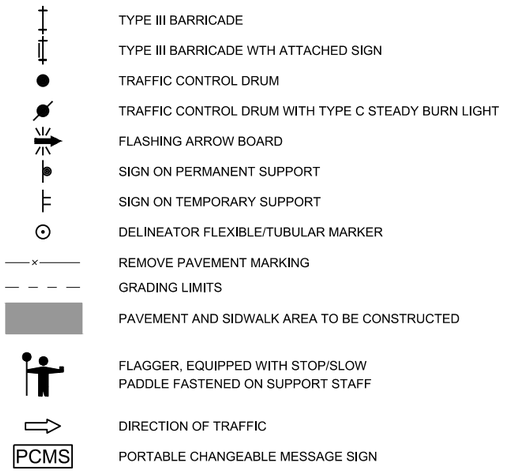
REFERENCED STANDARD DETAIL DRAWINGS

STANDARD DETAIL DRAWINGS	DESCRIPTION
15C02-F	ADVANCED WIDTH RESTRICTION SIGNING
15C03	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15D12-A	TRAFFIC CONTROL, LANE CLOSURE
15D20-A	TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NOT-FREEWAY/EXPRESSWAY
15D21-A	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE RIGHT LANE CLOSURE
15D21-B	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LEFT LANE CLOSURE
15D27	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH
15D39	TRAFFIC CONTROL, DROP-OFF SIGNING
15D46	TRAFFIC CONTROL, ONE-WAY SIGNING
15D50-A	TRAFFIC CONTROL, ADDED LANE CLOSURE WITHOUT LANE SHIFT
15D50-B	TRAFFIC CONTROL, ADDED LANE CLOSURE WITH LANE SHIFT

PAVEMENT MARKING AND MARKING REMOVALS

ABBREVIATION	DESCRIPTION
CBY	MARKING CURB, YELLOW
INY	MARKING ISLAND NOSE, YELLOW
W4	MARKING LINE 4-INCH, WHITE
W4-3	MARKING LINE 4-INCH, WHITE, 3'SEG., 9'GAP
W4-12.5	MARKING LINE 4-INCH, WHITE, 12.5' SEG., 37.5'GAP
Y4	MARKING LINE 4-INCH, YELLOW
DY4	MARKING LINE 4-INCH, DOUBLE YELLOW
SL18	MARKING STOPLINE 18-INCH, WHITE
XW6	MARKING CROSSWALK TRAVERSE LINE, 6-INCH, WHITE
W8	MARKING LINE 8-INCH, WHITE
W8-2	MARKING LINE 8-INCH, WHITE, 2'SEG., 6'GAP
W8-3	MARKING LINE 8-INCH, WHITE, 3'SEG., 9'GAP
W8-6	MARKING LINE 8-INCH, WHITE, 6'SEG., 3'GAP
W12	MARKING DIAGONAL 12-INCH, WHITE, 25-FOOT SPACING
Y12	MARKING DIAGONAL 12-INCH, YELLOW, 25-FOOT SPACING
W18-2	MARKING DOTTED EXTENSION 18-INCH, WHITE, 2'SEG., 2'GAP
WO	MARKING WORD
A-1	MARKING ARROW TYPE 1
A-2	MARKING ARROW TYPE 2
A-3	MARKING ARROW TYPE 3
A-3R	MARKING ARROW TYPE 3R
TRT-4W	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH WHITE - SOLID
TRT-4WD	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH WHITE - DASHED (12.5-FOOT SEG, 37.5-FOOT GAP)
TRT-4Y	TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH YELLOW - SOLID
TRT-18W	TEMPORARY MARKING LINE REMOVABLE TAPE 18-INCH WITH - SOLID

LEGEND



NOTES

ALL SIGN ARE 48" X 48"

TYPE III BARRICADES SHALL HAVE TWO "TYPE A" FLASHING LIGHTS ON EACH BARRICADE AND HAVE A WIDTH OF 8-FEET.

"WO" SIGNS ARE THE SAME AS "W" SIGNS, EXCEPT THE BACKGROUND IS ORANGE.

PCMS SIGN SHALL BE INSTALLED PRIOR TO CONSTRUCTION AND REMAIN THROUGHOUT ALL PHASES UNTIL ALL CONSTRUCTION IS COMPLETED.

ANY SIGNS PERMANENT, TEMPORARY, OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER; SEE PERMANENT SIGNING AND PAVEMENT MARKING SHEET FOR ADDITIONAL DETAILS. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

CONTRACTOR TO ADJUST TRAFFIC CONTROL SIGNS/DRUMS/DEVICES IN ACCORDANCE WITH THE WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD DETAIL DRAWINGS. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

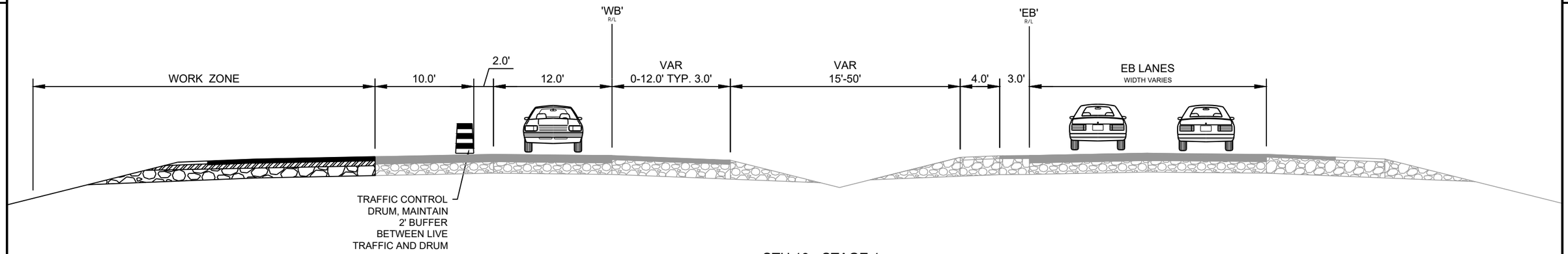
TRAFFIC CONTROL DRUMS SPACING IS REDUCED TO 25' ALONG EXISTING TURN LANES AND ALONG INTERSECTION MEDIAN PAVEMENT THAT WILL BE CLOSED DURING STAGING. DRUMS WILL ALSO BE SPACED EVERY 25' AT TURN LANES BEING UTILIZED DURING STAGES. SEE TRAFFIC CONTROL/STAGING SHEETS FOR MORE INFORMATION.

TEMPORARY PAVEMENT MARKINGS SHALL BE INSPECTED DAILY AND FAILING AREAS SHALL BE REPAIRED IMMEDIATELY.

CONTRACTOR SHALL CONSTRUCT TEMPORARY 3:1 WEDGES AT PAVEMENT EDGE DROP OFFS IN CONFORMANCE WITH SECTION 104.6.1.2.3 OF THE HIGHWAY AND STRUCTURE CONSTRUCTION IMMEDIATELY AFTER REMOVALS HAVE BEEN MADE.

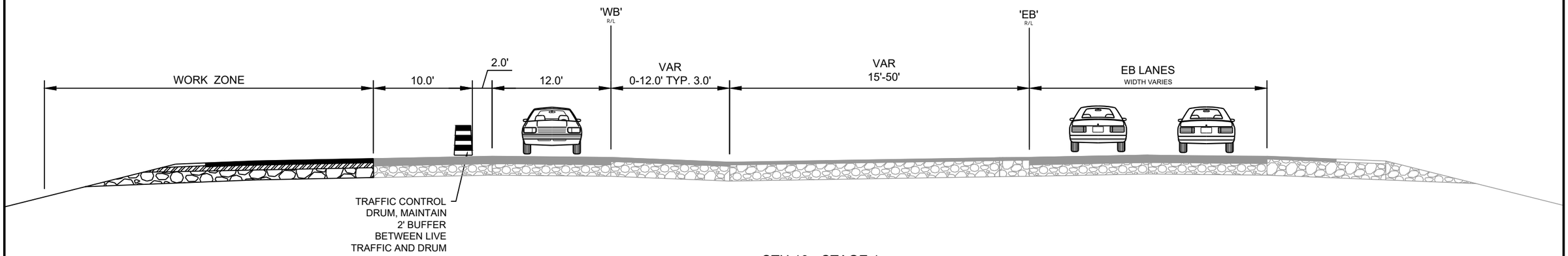
PERMANENT SIGNAGE WILL BE INSTALLED AFTER EACH STAGE. SEE MISCELLANEOUS QUANTITIES - SIGN REMOVALS AND MISCELLANEOUS - PERMANENT SIGNING TYPE 2, FOR INFORMATION ON WHICH SIGNS ARE IN STALLED AT THE END OF EACH STAGE.

2



STH 19 - STAGE 1

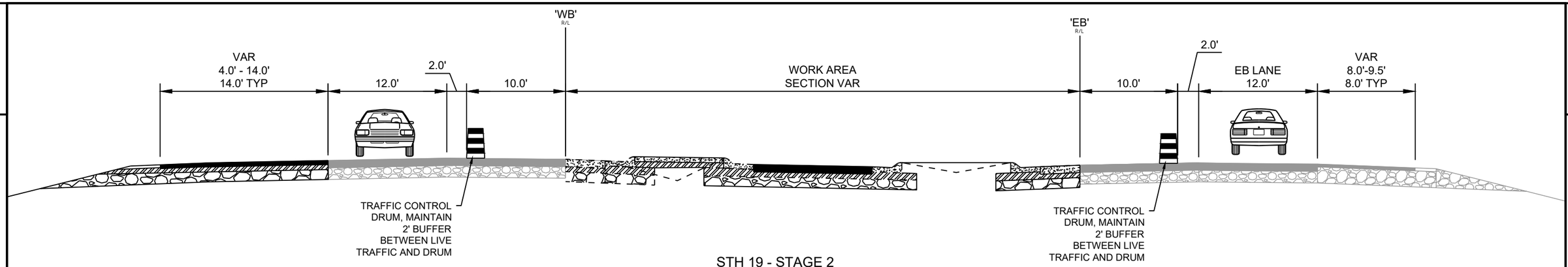
ADDING RIGHT TURN LANES ALONG EXISTING
WB STA 26+70 - 27+70
WB STA 29+25 - 36+73



STH 19 - STAGE 1

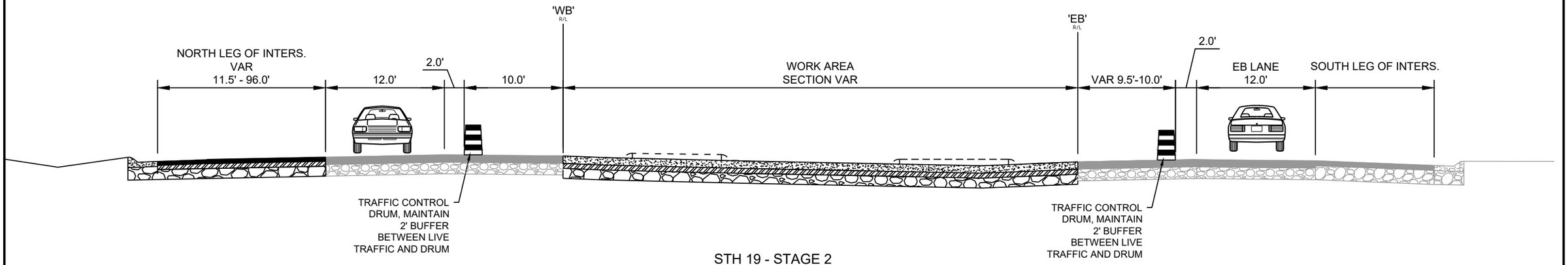
ADDING RIGHT TURN LANES ALONG EXISTING
WB STA 27+70 - 29+25

2



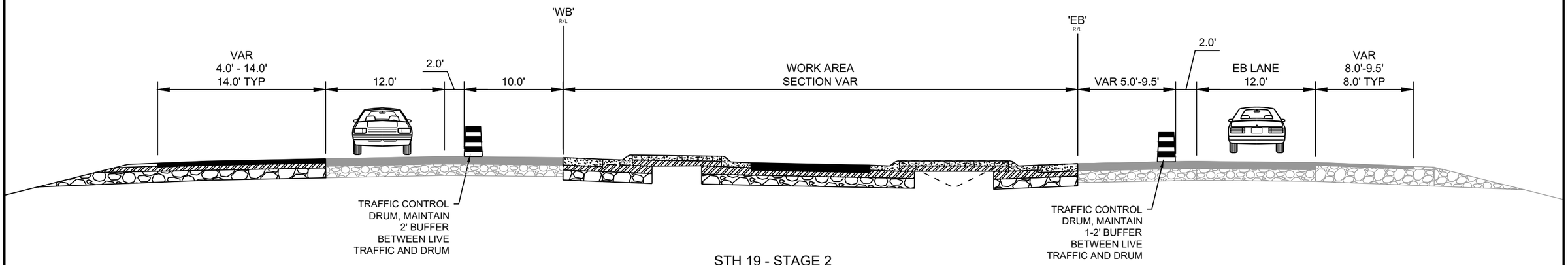
STH 19 - STAGE 2

ADDING LEFT TURN LANES ALONG WB AND EB
WB STA 18+58 - 27+70



STH 19 - STAGE 2

ADDING LEFT TURN LANES ALONG WB AND EB
WB STA 27+70 - 29+73



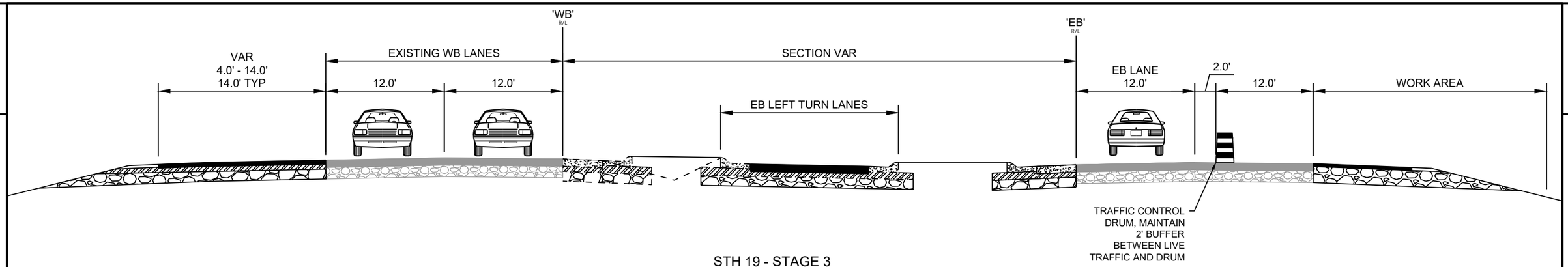
STH 19 - STAGE 2

ADDING LEFT TURN LANES ALONG WB AND EB
WB STA 29+73 - 35+50

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	TRAFFIC CONTROL - TYPICAL SECTIONS	SHEET 69	E

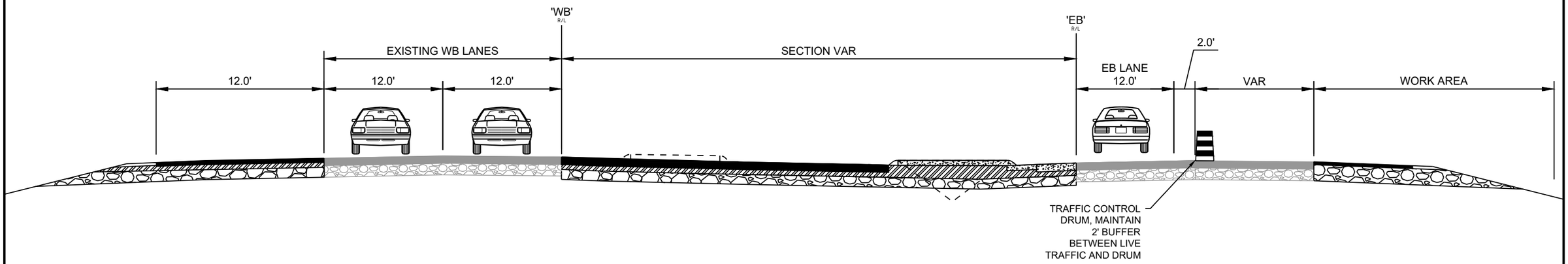
FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\022701-TYP.DWG
LAYOUT NAME - 02-10ft

PLOT DATE : 4/14/2022 8:51 PM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : N.T.S.



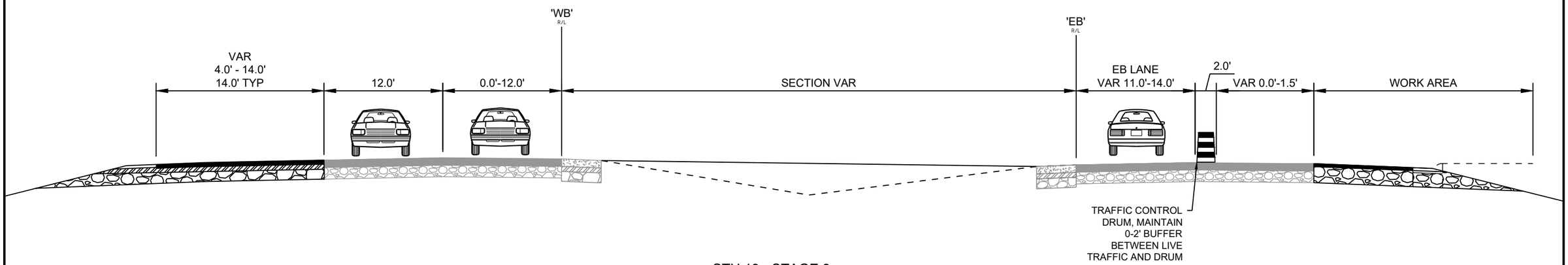
STH 19 - STAGE 3

EXTENDING RIGHT TURN LANE ALONG EXISTING EB
WB STA 21+45 - 24+05



STH 19 - STAGE 3

WIDENING ALONG EXISTING EB
WB STA 29+73 - 35+50



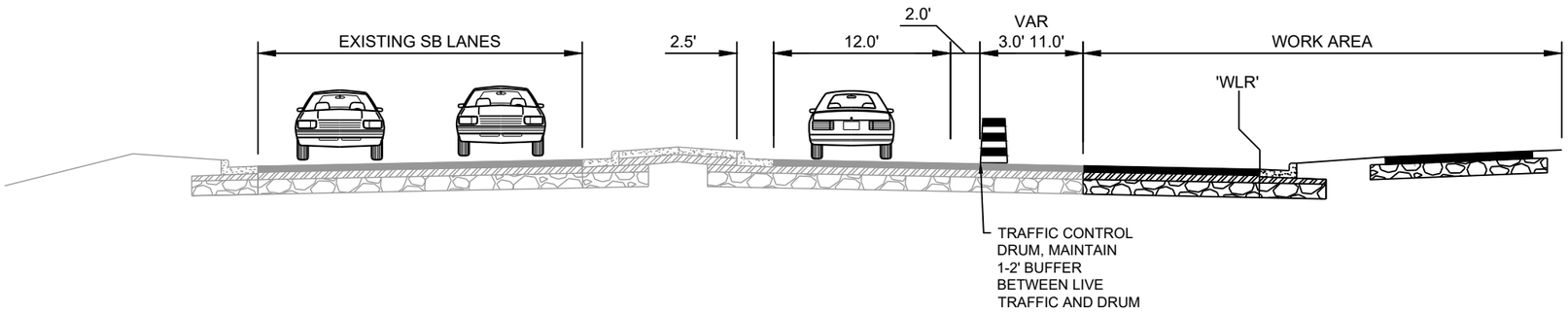
STH 19 - STAGE 3

WIDENING ALONG EXISTING EB
WB STA 35+50 - 48+75

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	TRAFFIC CONTROL - TYPICAL SECTIONS	SHEET 70	E

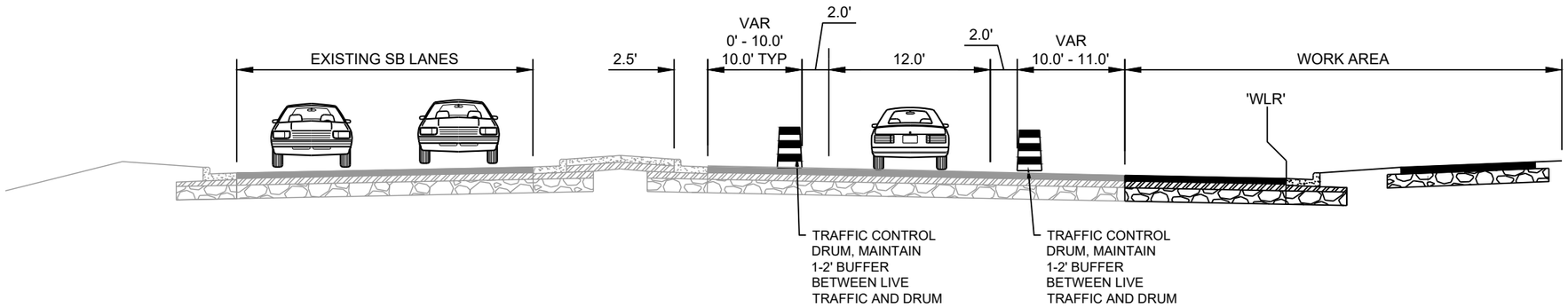
FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\022701-TYP.DWG
LAYOUT NAME - 03-10ft
PLOT DATE : 4/20/2022 10:53 AM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : N.T.S.
WISDOT/CADDS SHEET 42

2



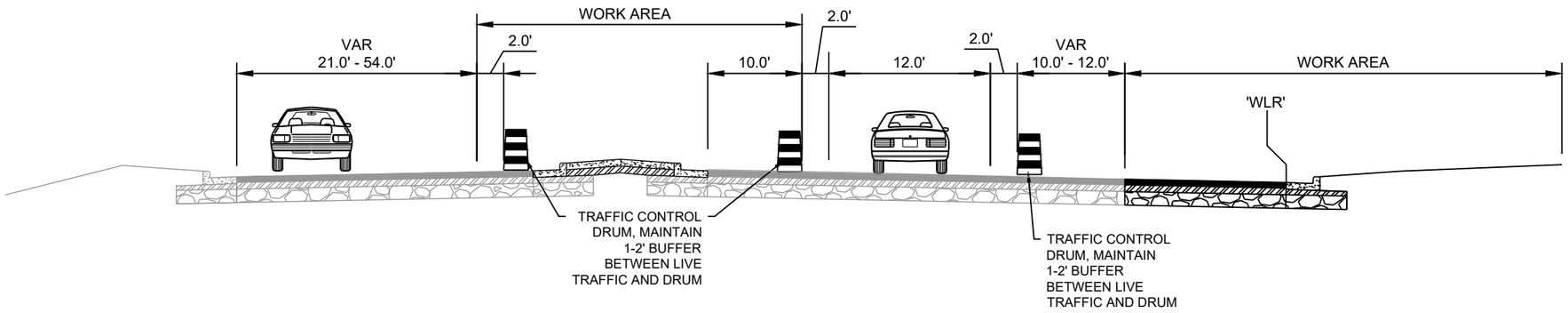
WILLIAMSBURG WAY - STAGE 3

LANE WIDENING ALONG NB
STA 95+50 - 97+80



WILLIAMSBURG WAY - STAGE 3

LANE WIDENING ALONG NB
STA 97+80 - 100+11

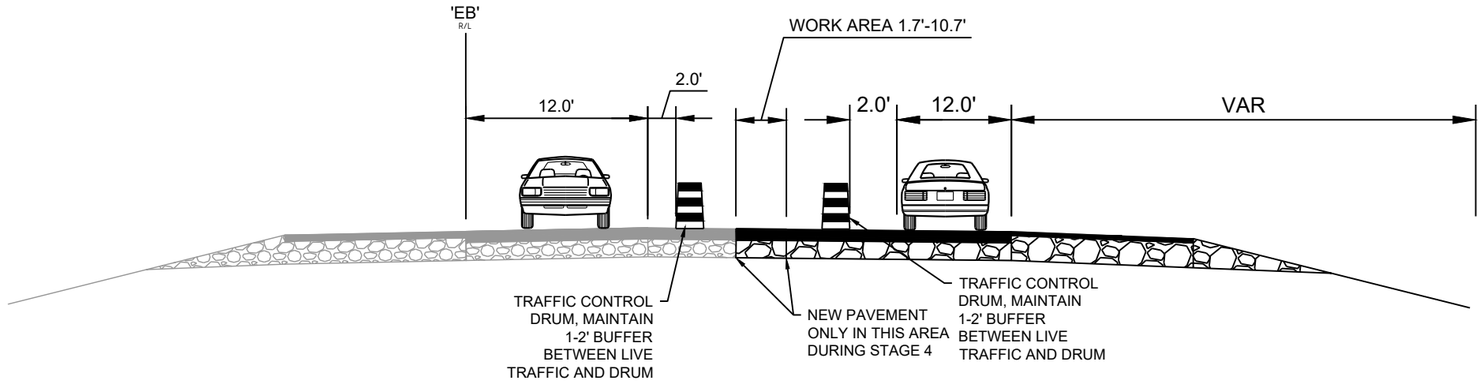


WILLIAMSBURG WAY - STAGE 3

LANE WIDENING ALONG NB
STA 100+11- 100+47

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	TRAFFIC CONTROL - TYPICAL SECTIONS	SHEET 71	E

2



STH 19 - STAGE 4

REPLACING CONCRETE PAVEMENT IN EB LANE
STA 40+90 - 43+97

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	TRAFFIC CONTROL - TYPICAL SECTIONS	SHEET 72	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\022701-TYP.DWG
LAYOUT NAME - 05-10ft
PLOT DATE : 4/14/2022 8:51 PM
PLOT BY : BLAKE RIDENOUR
PLOT NAME :
PLOT SCALE : N.T.S.
WISDOT/CADDS SHEET 42

2

PCMS SIGNS SHALL BE INSTALLED WITH MESSAGES DISPLAYED ONE WEEK PRIOR TO CONSTRUCTION.

MESSAGE FOR ALL PCMS PRIOR TO CONSTRUCTION SHALL BE:
1ST FRAME: ROAD WORK BEGINS

2ND FRAME (START DATE IN THE FOLLOWING FORMAT): MON APRIL 25TH

MESSAGES BETWEEN STAGES SHOULD BE DISPLAYED FOR A MINIMUM OF A WEEK BEFORE AND AFTER STAGES EXCEPT FOR STAGE 4.

MESSAGE FOR ALL PCMS BETWEEN STAGES 1, 2, &3:
1ST FRAME: TRAFFIC PATTERN CHANGES

2ND FRAME (DATE THAT STAGE 1, 2, & 3 CONSTRUCTION END, SHOWN IN THE FOLLOWING FORMAT): THUR MAY 4TH

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	PCMS LAYOUT	SHEET 73	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\022701-STAG.DWG
LAYOUT NAME - 01 (4)
PLOT DATE : 4/14/2022 8:51 PM
PLOT BY : BLAKE RIDENOUR
PLOT NAME :
PLOT SCALE : 1 IN:500 FT

2

2

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE
TYPE III BARRICADE
TYPE III BARRICADE

N

ROAD CLOSED 500 FT
W20-3D

PEDERSON CROSSING BOULEVARD

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE
TYPE III BARRICADE
TYPE III BARRICADE

DO NOT PLACE PERMANENT PAVEMENT MARKINGS ON THE NORTH LEG OF STH 19 AND WILLIAMSBURG WAY INTERSECTION FOR SB TRAFFIC UNTIL STAGE 2 IS COMPLETE. SEE STAGE 2 TRAFFIC CONTROL SHEET FOR ADDITIONAL DETAILS.

105'WL'

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

WILLIAMSBURG WAY

GRADING LIMITS

REMOVE 1001' OF EXISTING PAVEMENT MARKING WHITE 4" SOLID. ONCE STAGE IS COMPLETE PLACE PAVEMENT MARKINGS ACCORDING TO THE PERMANENT SIGNING AND PAVEMENT MARKING SHEETS.

20'WB'

STH 19

25'WB'

MATCH EXISTING PAVEMENT EDGE

30'WB'

STH 19

35'W

50 TYP.

100'WL'

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	STAGE 1	SHEET 74	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\022701-STAG.DWG
LAYOUT NAME - 01

PLOT DATE : 4/14/2022 8:51 PM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

N

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

GRADING LIMITS

REMOVE EXISTING PAVEMENT MARKINGS 85' OF WHITE 4" DASHED 455' OF YELLOW 4" SOLID AND 455' OF YELLOW 4" DASHED (YELLOW SOLID AND YELLOW DASHED ARE ASIDE OF EACH OTHER).

MATCH EXISTING PAVEMENT EDGE

35'WB'

STH 19

40'WB'

TRT-4W

TRT-4Y

15'

45'WB'

STH 19

50'WB'

STH 19

PLACE 540' OF TRT-4Y(SOUTH) AND 540' OF TRT-4W(NORTH), THEN ONCE STAGE IS COMPLETE REMOVE THE TEMPORARY REMOVABLE TAPE

MAX. 13' WIDTH
W12-52
48"X48"

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	STAGE 1	SHEET 75	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\022701-STAG.DWG
LAYOUT NAME - 02

PLOT DATE : 4/14/2022 8:51 PM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

BEAR TREE PARKWAY

N

ROAD WORK AHEAD W20-1A

PEDERSON CROSSING BOULEVARD

ROAD WORK AHEAD W20-1A

FOREST PARK DR

50'WB'

STH 19

MAX. 13' WIDTH

W12-52
48"X48"

N

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	STAGE 1	SHEET 76	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\022701-STAG.DWG
LAYOUT NAME - 03

PLOT DATE : 4/14/2022 8:51 PM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

N

WEST
19
M3-4
24"X12"
M1-4
24"X24"

MAX.
13'
WIDTH
W12-52
48"X48"

PORTAGE RD

1 MILE
AHEAD
WO57-52
48"X36"

STH 19

WEST
19
M3-4
24"X12"
M1-4
24"X24"

MAX.
13'
WIDTH
W12-52
48"X48"

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	STAGE 1	SHEET 77	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\022701-STAG.DWG
LAYOUT NAME - 01 (2)

PLOT DATE : 4/14/2022 8:52 PM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

N

N TOWNE RD

STH 19

STH 19

ROAD WORK AHEAD
W20-1A

LEFT LANE CLOSED AHEAD
W20-5A

W04-2L

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	STAGE 2	SHEET 78	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\022701-STAG.DWG
LAYOUT NAME - 04

PLOT DATE : 4/14/2022 10:37 PM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

N

WO1-6
48" X 24"

TYPE III BARRICADE

END
ROAD WORK
G20-2A
48"X24"

SPEED
LIMIT
55
R2-1
24"X30"

US 51

US 51

STH 19

10'WB'

15'WB'

20'WB'

GRADING LIMITS

STH 19

TRT-4Y

TRT-4WD

TRT-4W

PLACE 212' OF TRT-4Y, 91' OF TRT-4WD, AND 237' OF TRT-4W. ONCE THE STAGE IS COMPLETE REMOVE THE 540' OF TEMPORARY REMOVABLE TAPE

BEGIN
LEFT
TURN
LANE
R3-20L
24"X36"

REMOVE 540' OF EXISTING PAVEMENT MARKINGS WHITE 4" DASHED

R11-2L
48" X 30"

LANE
CLOSED

TYPE III BARRICADE

ONCE STAGE IS COMPLETE ADD PERMANENT MARKINGS, 540' OF W4-12.5 STARTING HERE, GOING EAST UNTIL CONNECTING BACK INTO EXISTING PAVEMENT MARKINGS

MONTICELLO DR

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	STAGE 2	SHEET 79	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\022701-STAG.DWG
LAYOUT NAME - 05

PLOT DATE : 4/14/2022 8:52 PM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

(COVER PERMANENT SIGNAGE INSTALLED IN STAGE 1 THAT ARE IN CONFLICT WITH STAGE 2 TRAFFIC CONTROL. SEE PERMANENT SIGNING AND PAVEMENT MARKING SHEETS FOR ADDITIONAL INFORMATION.)

N

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

105'WL'

WILLIAMSBURG WAY

REMOVE 350', 366', AND 63' OF EXISTING PAVEMENT MARKING YELLOW 4" SOLID, WHITE 8" SOLID, AND YELLOW 4" SOLID. ONCE STAGE IS COMPLETE PLACE PAVEMENT MARKINGS ACCORDING TO THE PERMANENT SIGNING AND PAVEMENT MARKING SHEETS.

REMOVE 1000' OF EXISTING PAVEMENT MARKING WHITE 4" DASHED. ONCE STAGE IS COMPLETE PLACE PAVEMENT MARKINGS ACCORDING TO THE PERMANENT SIGNING AND PAVEMENT MARKING SHEETS.

R3-2
24"X24"

STH 19

25'WB'

30'WB

35'WB

GRADING LIMITS

25'

REMOVE 942' AND 603' OF EXISTING PAVEMENT MARKING YELLOW 4" SOLID. ONCE STAGE IS COMPLETE PLACE PAVMENT MARKINGS ACCORDING TO THE PERMANENT SIGNING AND PAVEMENT MARKING SHEETS.

TRAFFIC CONTROL DRUMS SPACING REDUCED TO 25' SINCE TRAFFIC GETS CLOSER TO WORK AREA TO ALLOW 12' WIDE EASTBOUND LANE

R3-2
24"X24"

STH 19

100'WL'

WILLIAMSBURG WAY

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

2

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	STAGE 2	SHEET 80	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\022701-STAG.DWG
LAYOUT NAME - 06

PLOT DATE : 4/14/2022 8:52 PM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

N

ONCE STAGE IS COMPLETE ADD PERMANENT MARKINGS, 85' OF W4-12.5 & 455' OF Y4 -12.5. THE Y4-12.5 WILL HAVE A Y4 MARKING DIRECTLY ASIDE OF IT. START W4-12.5 HERE, CHANGE TO THE YELLOW PAVEMENT MARKINGS AND CONTINUE GOING EAST UNTIL CONNECTING BACK INTO EXISTING PAVEMENT MARKINGS

W01-4R

ROAD WORK AHEAD
W20-1A

FOREST PARK DR

35'WB'

40'WB'

45'WB'

STH 19

50'WB'

PLACE 391' OF TRT-4Y, THEN ONCE STAGE IS COMPLETE REMOVE THE TEMPORARY REMOVABLE TAPE

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

W01-6
48" X 24"
TYPE III BARRICADE

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	STAGE 2	SHEET 81	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\022701-STAG.DWG
LAYOUT NAME - 07

PLOT DATE : 4/14/2022 8:52 PM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

2

2

N

ROAD WORK AHEAD
W20-1A

LEFT LANE CLOSED AHEAD
W20-5SA

W04-2L

ONE WAY
R6-2R
24"X30"

ONE WAY
R6-1R
36"X12"

R3-2
24"X24"

PLACE 125' OF TRT-4Y

100'WL'

WILLIAMSBURG WAY

R11-2L
48" X 30"

LANE CLOSED

TYPE III BARRICADE

REMOVE 125' OF EXISTING PAVEMENT MARKING WHITE 4" DASHED.

STH 19

STH 19

300'WB'

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	STAGE 2	SHEET 82	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\022701-STAG.DWG
LAYOUT NAME - 13 (2)

PLOT DATE : 4/14/2022 8:52 PM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

N

ONE WAY
R6-2R
24"X30"

ONE WAY
R6-1R
36"X12"

R3-2
24"X24"

PLACE 125' OF TRT-4Y

100'WL'

WILLIAMSBURG WAY

REMOVE 125' OF EXISTING PAVEMENT MARKING WHITE 4" DASHED.

R11-2L
48" X 30"

LANE CLOSED

TYPE III BARRICADE

30'WB'

35'WB'

ONE WAY
R6-2R
24"X30"

(INSTALL R3-2 ON REVERSE SIDE OF PERMANENT SIGN R5-1. SEE PERMANENT SIGNING AND PAVEMENT MARKING SHEETS FOR LOCATION OF R5-1.)

R3-2
24"X24"

PLACE 14' OF TRT-18W AND TEMPORARY PAVEMENT MARKING ARROW - TYPE 2. ONCE THE STAGE IS COMPLETE REMOVE THE 14' OF TEMPORARY REMOVABLE TAPE AND TEMPORARY PAVEMENT MARKING ARROW.

PLACE 250' OF TRT-4Y. ONCE THE STAGE IS COMPLETE REMOVE THE 240' OF TEMPORARY REMOVABLE TAPE AND PLACE PAVEMENT MARKINGS ACCORDING TO THE PERMANENT SIGNING AND PAVEMENT MARKING SHEETS ON THE NORTH LEG OF STH 19 AND WILLIAMSBURG WAY INTERSECTION.

WILLIAMSBURG WAY

105'WL

R11-2L
48" X 30"

LANE CLOSED

TYPE III BARRICADE

ROAD WORK AHEAD
W20-1A

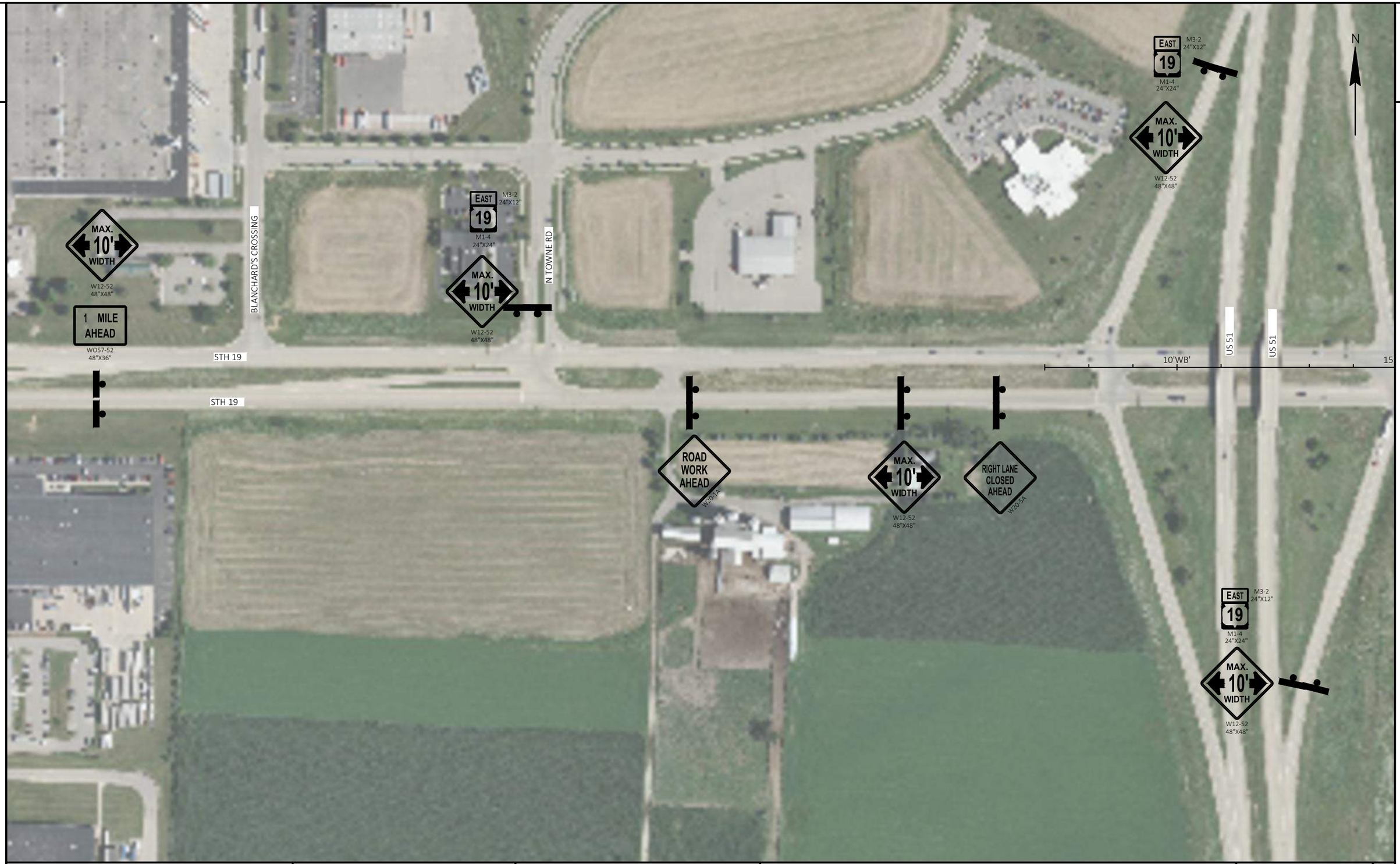
PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	STAGE 2	SHEET 83	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\022701-STAG.DWG
LAYOUT NAME - 14 (2)

PLOT DATE : 4/14/2022 8:52 PM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2



PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	STAGE 3	SHEET 84	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\022701-STAG.DWG
LAYOUT NAME - 08

PLOT DATE : 4/14/2022 8:52 PM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

2

2

N

US 51

US 51

10'WB'

15'WB'

20'WB'

STH 19

ONCE STAGE IS COMPLETE ADD PERMANENT MARKINGS, 540' OF W4-12.5 STARTING HERE, GOING EAST.

SPEED LIMIT 55

R2-1
24"X30"

REMOVE 540' OF EXISTING PAVEMENT MARKINGS WHITE 4" DASHED

STH 19

TRT-4W

MATCH EXISTING PAVEMENT EDGE.

GRADING LIMITS

R11-2R
48" X 30"

RAMP CLOSED

TYPE III BARRICADE

R11-2L
48" X 30"

LANE CLOSED

TYPE III BARRICADE

BEGIN RIGHT TURN LANE

R3-2OR
24"X36"

RIGHT SHOULDER CLOSED AHEAD

W21-5B

W04-2R

("BEGIN RIGHT TURN LANE" AND "RIGHT LANE MUST TURN RIGHT" SIGNS SHALL BE COVERED IN STAGE 3. SEE REMOVALS (SIGN) SHEETS FOR ADDITIONAL DETAILS.)

PLACE 540' OF TRT-4W, THEN ONCE THE STAGE IS COMPLETE REMOVE THE 540' OF TEMPORARY REMOVABLE TAPE

MONTICELLO DR

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	STAGE 3	SHEET 85	E

2

2

N

ROAD WORK AHEAD
W20-1A

105'WL'

WILLIAMSBURG WAY

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

25'WB'

STH 19

30'WB'

35'WB'

14'

12'

40'WB

25'

STH 19

MATCH EXISTING PAVEMENT EDGE.

MATCH EXISTING PAVEMENT EDGE.

MATCH EXISTING PAVEMENT EDGE.

PLACE TEMPORARY PAVEMENT MARKING ARROW - TYPE 6. ONCE STAGE IS COMPLETE REMOVE TEMPORARY PAVEMENT MARKING ARROW

GRADING LIMITS

GRADING LIMITS

GRADING LIMITS

REMOVE 1068' OF EXISTING PAVEMENT MARKING WHITE 4" SOLID.

RIGHT SHOULDER CLOSED
W21-5A

SHOULDER DROP - OFF
W8-9A
48"X48"

100'WL'

WILLIAMSBURG WAY

MATCH EXISTING PAVEMENT EDGE.

GRADING LIMITS

REMOVE 830', 354' AND 354' OF EXISTING PAVEMENT MARKING WHITE 4" DASHED, WHITE 8" SOLID, AND WHITE 4" SOLID. ONCE STAGE IS COMPLETE PLACE PAVEMENT MARKINGS ACCORDING TO THE PERMANENT SIGNING AND PAVEMENT MARKING SHEETS, BUT PERMANENT PAVEMENT MARKINGS FOR STH19 EB TRAFFIC SHOULD NOT BE PLACED AFTER WILLIAMSBURG WAY. FURTHERMORE, PERMANENT PAVEMENT MARKING W4-12.5C FROM STA. 21+38.54 TO STA. 38+25.64 SHALL NOT BE PLACED UNTIL STAGE 4 IS COMPLETE.

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	STAGE 3	SHEET 86	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\022701-STAG.DWG
LAYOUT NAME - 10

PLOT DATE : 4/14/2022 8:52 PM

PLOT BY : BLAKE RIDENOUR

PLOT NAME :

PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

N

ROAD WORK AHEAD
W20-1A

12' 40'WB'

45'WB'

STH 19 12'

13' 50'WB'

MATCH EXISTING PAVEMENT EDGE.

MATCH EXISTING PAVEMENT EDGE.

GRADING LIMITS

GRADING LIMITS

REMOVE 357' OF EXISTING PAVEMENT MARKING WHITE 4" SOLID.

END ROAD WORK
G20-2A
48"X24"

MAINTAIN A MINIMUM 11' EB TRAVEL LANE THROUGHOUT THIS SECTION.

THIS SECTION OF WIDENING SHALL BE CONSTRUCTED WITHIN 72 HOURS BEFORE A WEEKEND OR FEDERAL HOLIDAY, WHICHEVER COMES FIRST. IF THE WIDENING CANNOT BE CONSTRUCTED 72 HOURS BEFORE A WEEKEND OR FEDERAL HOLIDAY, THE DROP-OFF SHALL BE ELIMINATED BY INSTALLING AGGREGATE AND COMPACTING AT SLOPES NO STEEPER THAN 3:1 M WITHIN 72 HOURS BEFORE A WEEKEND OR FEDERAL HOLIDAY, WHICHEVER COMES FIRST. ADDITIONALLY, THE DROP-OFF CANNOT EXIST FOR MORE THAN 48 HOURS.

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	STAGE 3	SHEET 87	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\022701-STAG.DWG
LAYOUT NAME - 11

PLOT DATE : 4/14/2022 8:52 PM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

MONTICELLO DR

ROAD WORK AHEAD W20-1A

SAVANNAH DR

N

MATCH EXISTING PAVEMENT EDGE.

STH 19

25'WB'

ROAD WORK AHEAD W20-1A

RIGHT LANE CLOSED AHEAD W20-5A

W04-2R

ONCE STAGE IS COMPLETE ADD PERMANENT MARKINGS, 35' OF W8-6 STARTING HERE, GOING NORTH UNTIL CONNECTING TO CROSSWALK PAVEMENT MARKINGS

REMOVE 329' AND 110' OF EXISTING PAVEMENT MARKINGS WHITE 4" DASHED AND WHITE 4" SOLID

REMOVE ALL EXISTING PAVEMENT MARKINGS SYMBOLS ON NORTH BOUND WILLIAMSBURG FROM STA. 96+11 TO 100+50. STOP BAR WILL BE REMOVED AND REPLACED ONCE STAGE IS COMPLETE. ONCE STAGE IS COMPLETE ADD PAVEMENT MARKINGS ACCORDING TO THE PERMANENT SIGNING AND PAVEMENT MARKING SHEETS.

STOP R1-1 36"X36"

(INSTALL R4-7 ON REVERSE SIDE OF R1-1, BUT NOT DIRECTLY BEHIND R1-1. R4-7 SIGN SHALL BE INSTALLED ABOVE OR BELOW SIGN R1-1.)

R4-7 24"X30"

GRADING LIMITS

WILLIAMSBURG WAY

100'WB'

PLACE TEMPORARY PAVEMENT MARKING ARROW - TYPE 6. ONCE STAGE IS COMPLETE REMOVE TEMPORARY PAVEMENT MARKING ARROW.

MATCH EXISTING PAVEMENT EDGE.

PLACE 125' OF TRT-4W, THEN ONCE THE STAGE IS COMPLETE REMOVE THE 125' OF TEMPORARY REMOVABLE TAPE. ONCE STAGE IS COMPLETE, ALSO REMOVE THE 125' OF TRT-4Y THAT WAS PLACED IN STAGE 2.

R11-2L 48" X 30"

LANE CLOSED

TYPE III BARRICADE

ONE WAY R6-1R 36"X12"

ONE WAY R6-1L 36"X12" (ON REVERSE SIDE OF R6-1R)

STOP R1-1 36"X36"

DIVIDED HIGHWAY R6-3 30"X24"

490'

SAVANNAH DR

ROAD WORK AHEAD W20-1A

30'WB'

GRADING LIMITS

MATCH EXISTING PAVEMENT EDGE.

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	STAGE 3	SHEET 88	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\022701-STAG.DWG
LAYOUT NAME - 13

PLOT DATE : 4/20/2022 11:55 AM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

SAVANNAH DR

ONCE STAGE IS COMPLETE ADD PERMANENT MARKINGS, 35' OF W8-6 STARTING HERE, GOING NORTH UNTIL CONNECTING TO CROSSWALK PAVEMENT MARKINGS

REMOVE 329' AND 110' OF EXISTING PAVEMENT MARKINGS WHITE 4" DASHED AND WHITE 4" SOLID

REMOVE ALL EXISTING PAVEMENT MARKINGS SYMBOLS ON NORTH BOUND WILLIAMSBURG FROM STA. 96+11 TO 100+50. STOP BAR WILL BE REMOVED AND REPLACED ONCE STAGE IS COMPLETE. ONCE STAGE IS COMPLETE ADD PAVEMENT MARKINGS ACCORDING TO THE PERMANENT SIGNING AND PAVEMENT MARKING SHEETS.

(INSTALL R4-7 ON REVERSE SIDE OF R1-1, BUT NOT DIRECTLY BEHIND R1-1. R4-7 SIGN SHALL BE INSTALLED ABOVE OR BELOW SIGN R1-1.)

STOP
R1-1
36"X36"

R4-7
24"X30"

STH 19

25'WB'

STH 19

N

ROAD WORK AHEAD
W20-3A

GRADING LIMITS

WILLIAMSBURG WAY

100'WL'

WILLIAMSBURG WAY

105'WL'

PLACE TEMPORARY PAVEMENT MARKING ARROW - TYPE 6. ONCE STAGE IS COMPLETE REMOVE TEMPORARY PAVEMENT MARKING ARROW.

MATCH EXISTING PAVEMENT EDGE.

PLACE 125' OF TRT-4W, THEN ONCE THE STAGE IS COMPLETE REMOVE THE 125' OF TEMPORARY REMOVABLE TAPE. ONCE STAGE IS COMPLETE, ALSO REMOVE THE 125' OF TRT-4Y THAT WAS PLACED IN STAGE 2.

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

ONE WAY
R6-1R
36"X12"

ONE WAY
R6-1L
36"X12"
(ON REVERSE SIDE OF R6-1R)

STOP
R1-1
36"X36"

DIVIDED HIGHWAY
R6-3
30"X24"

GRADING LIMITS

MATCH EXISTING PAVEMENT EDGE.

30'WB'

SAVANNAH DR

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	STAGE 3	SHEET 89	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\022701-STAG.DWG
LAYOUT NAME - 14

PLOT DATE : 4/20/2022 11:55 AM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

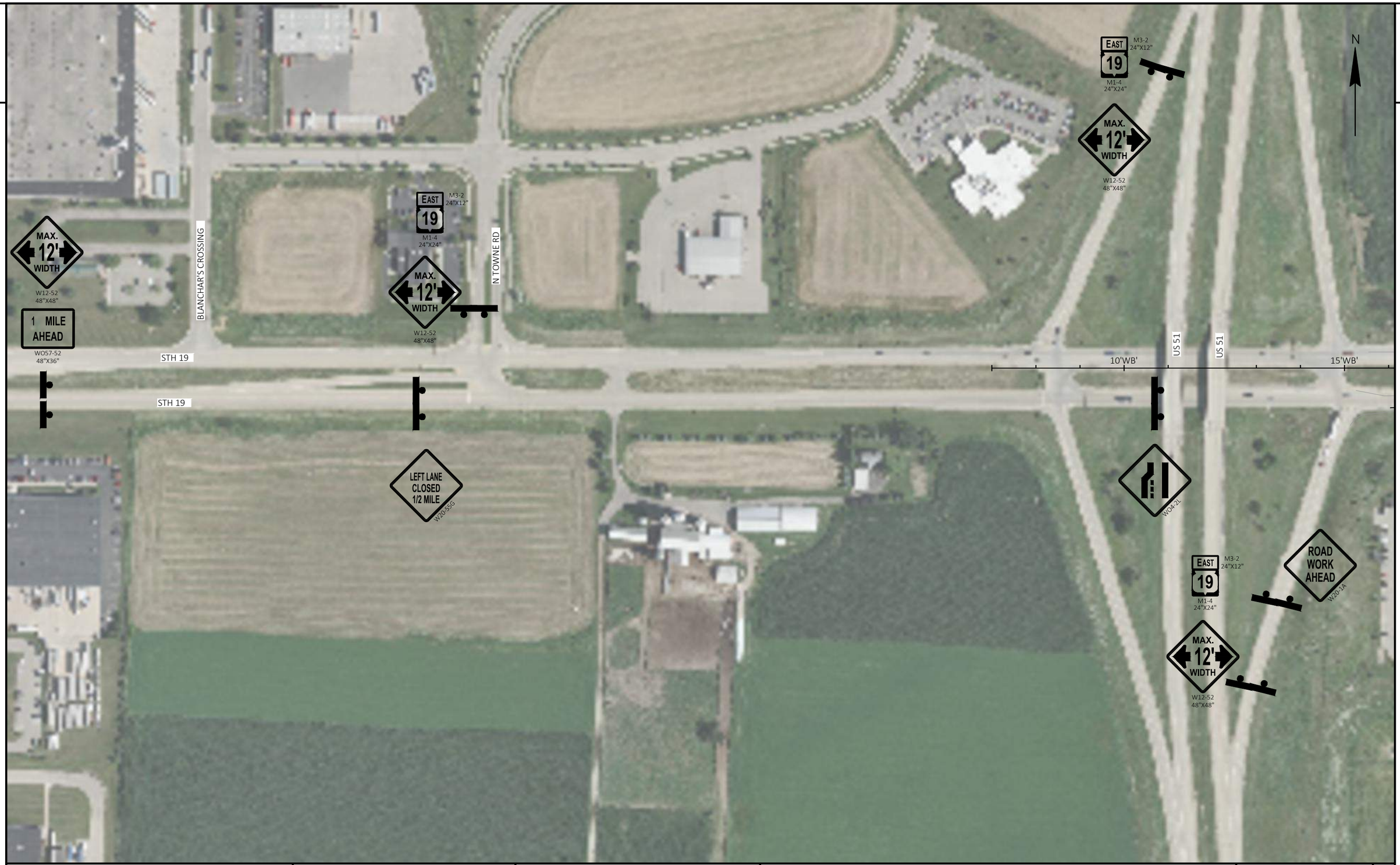
2

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	STAGE 4	SHEET 90	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\022701-STAG.DWG
LAYOUT NAME - 08 (4)

PLOT DATE : 4/20/2022 10:53 AM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42



PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	STAGE 4	SHEET 91	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\022701-STAG.DWG
LAYOUT NAME - 08 (3)

PLOT DATE : 4/20/2022 10:54 AM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

2

2

N

105'WL'

WILLIAMSBURG WAY

BARRELS PLACED WITHIN PERMANENT CHANNELIZED ISLAND
PAINTED AFTER STAGE 2 CONSTRUCTION WAS COMPLETED.

STH 19

20'WB'

25'WB'

30'WB'

STH 19

PLACE 660' OF TRT-4W, THEN ONCE THE STAGE IS COMPLETE
REMOVE THE 660' OF TEMPORARY REMOVABLE TAPE AND
PLACE PAVEMENT MARKINGS ACCORDING TO THE
PERMANENT SIGNING AND PAVEMENT MARKING SHEETS.

MAX.
12'
WIDTH

W12-52
48"X48"

MONTICELLO DR

100'WL'

WILLIAMSBURG WAY

R11-2L
48" X 30"

LANE
CLOSED

TYPE III BARRICADE

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	STAGE 4	SHEET 92	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\022701-STAG.DWG
LAYOUT NAME - 15

PLOT DATE : 4/20/2022 10:54 AM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

N

(COVER PERMANENT SIGNAGE INSTALLED IN STAGE 3 THAT ARE IN CONFLICT WITH STAGE 4 TRAFFIC CONTROL. SEE PERMANENT SIGNING AND PAVEMENT MARKING SHEETS FOR ADDITIONAL INFORMATION.)

END ROAD WORK
G20-2A
48"X24"

30'WB'

STH 19

35'WB'

STH 19

40'WB'

THIS SECTION OF WIDENING SHALL BE CONSTRUCTED WITHIN 72 HOURS BEFORE A WEEKEND OR FEDERAL HOLIDAY, WHICHEVER COMES FIRST. IF THE WIDENING CANNOT BE CONSTRUCTED 72 HOURS BEFORE A WEEKEND OR FEDERAL HOLIDAY, THE DROP-OFF SHALL BE ELIMINATED BY INSTALLING AGGREGATE AND COMPACTING AT SLOPES NO STEEPER THAN 3:1 M WITHIN 72 HOURS BEFORE A WEEKEND OR FEDERAL HOLIDAY, WHICHEVER COMES FIRST. ADDITIONALLY, THE DROP-OFF CANNOT EXIST FOR MORE THAN 48 HOURS.

MATCH EXISTING PAVEMENT EDGE

TRT-4Y

TRT-4W

25'

14'

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

AFTER STATION 29+93 PLACE 1800' OF TRT-4Y(NORTH) AND PLACE 1800' OF TRT-4W(SOUTH) FOR EB TRAFFIC LANE DURING STAGE 4. ONCE THE STAGE IS COMPLETE REMOVE THE 3600' OF TEMPORARY REMOVABLE TAPE AND PLACE PAVEMENT MARKINGS ACCORDING TO THE PERMANENT SIGNING AND PAVEMENT MARKING SHEETS.

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

TYPE III BARRICADE

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	STAGE 4	SHEET 93	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\022701-STAG.DWG
LAYOUT NAME - 16

PLOT DATE : 4/20/2022 10:54 AM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

N

THIS SECTION OF WIDENING SHALL BE CONSTRUCTED WITHIN 72 HOURS BEFORE A WEEKEND OR FEDERAL HOLIDAY, WHICHEVER COMES FIRST. IF THE WIDENING CANNOT BE CONSTRUCTED 72 HOURS BEFORE A WEEKEND OR FEDERAL HOLIDAY, THE DROP-OFF SHALL BE ELIMINATED BY INSTALLING AGGREGATE AND COMPACTING AT SLOPES NO STEEPER THAN 3:1 M WITHIN 72 HOURS BEFORE A WEEKEND OR FEDERAL HOLIDAY, WHICHEVER COMES FIRST. ADDITIONALLY, THE DROP-OFF CANNOT EXIST FOR MORE THAN 48 HOURS.

ROAD WORK AHEAD
W20-1A

45'WB'

MATCH EXISTING PAVEMENT EDGE

45'WB'

17'

50'WB'

STH 19

TRT-4Y

TRT-4W

25'

14'

TYPE III BARRICADE

END ROAD WORK
G20-2A
48"X24"

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	STAGE 4	SHEET 94	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\022701-STAG.DWG
LAYOUT NAME - 17

PLOT DATE : 4/20/2022 10:54 AM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

N

STORM SEWER PIPE REMOVAL
133 LF

20'WB'

25'WB'

STH 19

30'WB'

REMOVE EXISTING INLET

STH 19

887.77
887.64

ASPHALT REMOVAL
214 SY

ASPHALT REMOVAL
1873 SY

100'WE

REMOVE, RELOCATE AND
REINSTALL UTILITIES

REMOVE EXISTING
MEDIAN NOSE

ASPHALT TRAIL REMOVAL
257 SY

CURB REMOVAL
536 LF

REMOVE, RELOCATE AND
INSTALL LIGHT POLES BEHIND
PROPOSED BACK OF CURB

REMOVE TREES

REMOVE EXISTING INLET

ASPHALT REMOVAL
10 SY

WILLIAMSBURG WAY

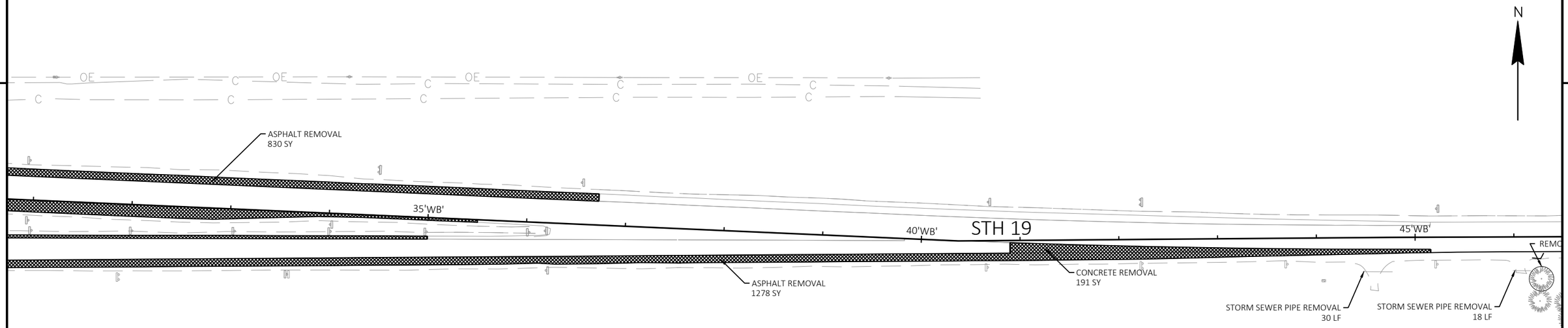
PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	REMOVALS	SHEET 95	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\022702-RM.DWG
LAYOUT NAME - 01

PLOT DATE : 3/1/2022 11:24 PM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2



PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	REMOVALS	SHEET 96	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\022702-RM.DWG
LAYOUT NAME - 02

PLOT DATE : 3/1/2022 11:24 PM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:100 FT

Line	Item	Item Description	Unit	Total	Qty
0001	201.0105	Clearing	STA	1.750	1.750
0002	201.0205	Grubbing	STA	1.750	1.750
0003	204.0100	Removing Pavement	SY	242.000	242.000
0004	204.0110	Removing Asphaltic Surface	SY	4,462.000	4,462.000
0005	204.0150	Removing Curb & Gutter	LF	536.000	536.000
0006	204.0220	Removing Inlets	EACH	2.000	2.000
0007	204.0245	Removing Storm Sewer 18-Inch	LF	181.000	181.000
0008	205.0100	Excavation Common	CY	26,643.000	26,643.000
0009	209.2500	Backfill Granular Grade 2	TON	1,814.000	1,814.000
0010	213.0100	Finishing Roadway (project) 01. XXXX-XX-XX	EACH	1.000	1.000
0011	305.0110	Base Aggregate Dense 3/4-Inch	TON	783.000	783.000
0012	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	4,510.000	4,510.000
0013	305.0130	Base Aggregate Dense 3-Inch	TON	15,580.000	15,580.000
0014	405.0100	Coloring Concrete WisDOT Red	CY	36.000	36.000
0015	415.0090	Concrete Pavement 9-Inch	SY	3,635.000	3,635.000
0016	416.0610	Drilled Tie Bars	EACH	1,445.000	1,445.000
0017	416.0620	Drilled Dowel Bars	EACH	53.000	53.000
0018	416.1010	Concrete Surface Drains	CY	4.000	4.000
0019	455.0605	Tack Coat	GAL	516.000	516.000
0020	460.5224	HMA Pavement 4 LT 58-28 S	TON	40.000	40.000
0021	460.6224	HMA Pavement 4 MT 58-28 S	TON	2,620.000	2,620.000
0022	520.8000	Concrete Collars for Pipe	EACH	2.000	2.000
0023	522.1030	Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	EACH	2.000	2.000
0024	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	600.000	600.000
0025	601.0551	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type A	LF	1,740.000	1,740.000
0026	601.0553	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type D	LF	2,685.000	2,685.000
0027	602.0405	Concrete Sidewalk 4-Inch	SF	2,878.000	2,878.000
0028	602.0410	Concrete Sidewalk 5-Inch	SF	108.000	108.000
0029	602.0515	Curb Ramp Detectable Warning Field Natural Patina	SF	40.000	40.000
0030	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	971.000	971.000
0031	608.0315	Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	LF	169.000	169.000
0032	608.0318	Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	LF	406.000	406.000
0033	608.0324	Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	LF	1,081.000	1,081.000
0034	608.0330	Storm Sewer Pipe Reinforced Concrete Class III 30-Inch	LF	429.000	429.000
0035	611.0530	Manhole Covers Type J	EACH	6.000	6.000
0036	611.0612	Inlet Covers Type C	EACH	1.000	1.000
0037	611.0615	Inlet Covers Type F	EACH	18.000	18.000
0038	611.0624	Inlet Covers Type H	EACH	1.000	1.000
0039	611.0627	Inlet Covers Type HM	EACH	20.000	20.000
0040	611.0642	Inlet Covers Type MS	EACH	2.000	2.000
0041	611.1004	Catch Basin 4-FT Diameter	EACH	10.000	10.000
0042	611.1005	Catch Basin 5-FT Diameter	EACH	2.000	2.000
0043	611.2004	Manholes 4-FT Diameter	EACH	4.000	4.000
0044	611.2005	Manholes 5-FT Diameter	EACH	3.000	3.000
0045	611.1230	Inlets 2x3-FT	EACH	21.000	21.000
0046	611.1253	Inlets 2.5x3-FT	EACH	6.000	6.000
0047	611.3901	Inlets Median 1 Grate	EACH	1.000	1.000
0048	611.3902	Inlets Median 2 Grate	EACH	1.000	1.000
0049	612.0806	Pipe Underdrain 6-Inch	LF	3,821.000	3,821.000
0050	612.0206	Apron Endwalls for Underdrain Reinforced Concrete 6-Inch	EACH	3.000	3.000
0051	619.1000	Mobilization	EACH	1.000	1.000

Line	Item	Item Description	Unit	Total	Qty
0052	620.0300	Concrete Median Sloped Nose	SF	621.000	621.000
0053	624.0100	Water	MGAL	140.000	140.000
0054	625.0500	Salvaged Topsoil	SY	26,530.000	26,530.000
0055	627.0200	Mulching	SY	4,550.000	4,550.000
0056	628.1504	Silt Fence	LF	497.000	497.000
0057	628.1520	Silt Fence Maintenance	LF	497.000	497.000
0058	628.1905	Mobilizations Erosion Control	EACH	1.000	1.000
0059	628.2004	Erosion Mat Class I Type B	SY	21,601.000	21,601.000
0060	628.7005	Inlet Protection Type A	EACH	47.000	47.000
0061	628.7015	Inlet Protection Type C	EACH	40.000	40.000
0062	628.7555	Culvert Pipe Checks	EACH	2.000	2.000
0063	628.7560	Tracking Pads	EACH	2.000	2.000
0064	628.7570	Rock Bags	EACH	8.000	8.000
0065	629.0210	Fertilizer Type B	CWT	18.000	18.000
0066	630.0120	Seeding Mixture No. 20	LB	685.000	685.000
0067	630.0140	Seeding Mixture No. 40	LB	21.000	21.000
0068	630.0500	Seed Water	MGAL	1,225.000	1,225.000
0069	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	30.000	30.000
0070	637.2210	Signs Type II Reflective H	SF	304.770	304.770
0071	637.2230	Signs Type II Reflective F	SF	87.600	87.600
0072	638.2102	Moving Signs Type II	EACH	35.000	35.000
0073	638.2602	Removing Signs Type II	EACH	21.000	21.000
0074	638.3000	Removing Small Sign Supports	EACH	21.000	21.000
0075	638.4000	Moving Small Sign Supports	EACH	25.000	25.000
0076	643.0300	Traffic Control Drums	DAY	15,705.000	15,705.000
0077	643.0420	Traffic Control Barricades Type III	DAY	855.000	855.000
0078	643.0705	Traffic Control Warning Lights Type A	DAY	1,920.000	1,920.000
0079	643.0800	Traffic Control Arrow Boards	DAY	225.000	225.000
0080	643.0900	Traffic Control Signs	DAY	4,170.000	4,170.000
0081	643.0920	Traffic Control Covering Signs Type II	EACH	7.000	7.000
0082	643.1050	Traffic Control Signs PCMS	DAY	168.000	168.000
0083	643.5000	Traffic Control	EACH	1.000	1.000
0084	645.0220	Geogrid Type SR	SY	18,150.000	18,150.000
0085	646.1020	Marking Line Epoxy 4-Inch	LF	6,325.000	6,325.000
0086	646.1545	Marking Line Grooved Wet Ref Contrast Epoxy 4-Inch	LF	645.000	645.000
0087	646.3020	Marking Line Epoxy 8-Inch	LF	1,258.000	1,258.000
0088	646.3545	Marking Line Grooved Wet Ref Contrast Epoxy 8-Inch	LF	3,540.000	3,540.000
0089	646.5020	Marking Arrow Epoxy	EACH	18.000	18.000
0090	646.5120	Marking Word Epoxy	EACH	7.000	7.000
0091	646.6120	Marking Stop Line Epoxy 18-Inch	LF	94.660	94.660
0092	646.7120	Marking Diagonal Epoxy 12-Inch	LF	580.000	580.000
0093	646.8220	Marking Island Nose Epoxy	EACH	8.000	8.000
0094	646.9000	Marking Removal Line 4-Inch	LF	6,279.000	6,279.000
0095	646.9100	Marking Removal Line 8-Inch	LF	720.000	720.000
0096	646.9200	Marking Removal Line Wide	LF	47.000	47.000
0097	646.9300	Marking Removal Special Marking	EACH	6.000	6.000
0098	649.0150	Temporary Marking Line Removable Tape 4-Inch	LF	7,243.000	7,243.000
0099	649.0505	Temporary Marking Arrow Paint	EACH	2.000	2.000
0100	649.0850	Temporary Marking Line Removable Tape 18-Inch	LF	14.000	14.000
0101	650.0000.S	Construction Staking	LS	1.000	1.000

Line	Item	Item Description	Unit	Total	Qty
0102	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	2,617.000	2,617.000
0103	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	2,726.000	2,726.000
0104	652.0700.S	Install Conduit into Existing Item	EACH	1.000	1.000
0105	652.0800	Conduit Loop Detector	LF	468.000	468.000
0106	653.0154	Pull Boxes Non-Conductive 24x36-Inch	EACH	7.000	7.000
0107	653.0164	Pull Boxes Non-Conductive 24x42-Inch	EACH	14.000	14.000
0108	654.0101	Concrete Bases Type 1	EACH	4.000	4.000
0109	654.0102	Concrete Bases Type 2	EACH	4.000	4.000
0110	654.0106	Concrete Bases Type 6	EACH	2.000	2.000
0111	654.0110	Concrete Bases Type 10	EACH	2.000	2.000
0112	654.0113	Concrete Bases Type 13	EACH	4.000	4.000
0113	654.0217	Concrete Control Babinet Bases Type 9 Special	EACH	1.000	1.000
0114	655.0305	Cable Type UF 12 AWG Grounded	LF	2,386.000	2,386.000
0115	656.0200	Electrical Service Meter Breaker Pedestal (location) XXX+XX	LS	1.000	1.000
0116	657.0100	Pedestal Bases	EACH	1.000	1.000
0117	657.0255	Transformer Bases Breakaway 11 1/2-inch Bolt Circle	EACH	6.000	6.000
0118	657.0315	Poles Type 4	EACH	4.000	4.000
0119	657.0715	Luminaire Arms Truss Type 4-1/2-Inch Clamp 15-FT	EACH	12.000	12.000
0120	659.1125	Luminaires Utility LED C	EACH	12.000	12.000
0121	659.2130	Lighting Control Cabinets 120/240 30-Inch	EACH	1.000	1.000
0122	690.0150	Sawing Asphalt	LF	140.000	140.000
0123	690.0250	Sawing Concrete	LF	440.000	440.000
0124	204.0400.S	Remove, Relocate and Reinstall Light Pole	EACH	2.000	2.000

3

					SIGN REMOVALS					
					638.2102 MOVING SIGN TYPE II EACH	638.2602 REMOVING SIGN TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	638.4000 MOVING SMALL SIGN SUPPORTS EACH	INSTALL SIGN AT THE END OF STAGE	COMMENTS
SIGN NO.	**STA**	**OFFSET**	**ALIGN**	**SIGN WORDING & PICTORIALS**						
	19+10.63	53.9' RT	WB	LANE ENDS MERGE RIGHT	-	1	1	-	-	REMOVE
	21+76.47	111.1' RT	WB	WILLIAMSBURG WAY	-	1	1	-	-	REMOVE
	22+73.02	105.8' RT	WB	BEGIN RIGHT TURN LANE	-	1	1	-	-	REMOVE
M-01	22+76.06	12.0' RT	WB	TRAFFIC SIGNAL AHEAD	1	-	-	1	2	MOVE TO STA 22+76.06 'WB' 18.8' RT
	24+36.23	53.5' RT	WB	LANE ENDS MERGE RIGHT	-	1	1	-	-	REMOVE
M-02	25+49.74	39.8' LT	WB	JUNCTION - 51 STATE HIGHWAY BADGE/CV COUNTY ROAD BADGE	4	-	-	2	1	MOVE TO STA 25+50.47 'WB' 42.4' LT
M-03	25+50.82	10.2' RT	WB	JUNCTION - 51 STATE HIGHWAY BADGE/CV COUNTY ROAD BADGE	4	-	-	2	2	MOVE STA TO 25+50.44 'WB' 10.2' RT
M-04	26+39.88	46.6' RT	WB	WRONG WAY	1	-	-	1	2	MOVE TO STA 25+51.63 'WB' 50.6' RT
M-05	26+45.67	103.6' RT	WB	WRONG WAY	1	-	-	1	3	MOVE TO STA 25+53.28 'WB' 106.3' RT
M-06	27+21.37	43.4' RT	WB	DO NOT ENTER	1	-	-	1	2	MOVE TO STA 27+57.04 'WB' 41.8' RT, SHARE POST WITH SIGN NO. 03-01
M-07	27+26.28	99.5' RT	WB	DO NOT ENTER	1	-	-	1	3	MOVE TO STA 27+60.27 'WB' 98.1' RT, SHARE POST WITH SIGN NO. 03-02
M-08	28+05.92	39.8' RT	WB	NO U TURN	1	-	1	-	2	SHARE POST WITH SIGN NO. M-06
M-09	28+21.02	27.5' RT	WB	STAY RIGHT	1	-	1	-	2	MOVE TO STA 27+52.24 'WB' 8.2' RT ON LIGHT POLE
M-10	29+10.25	20.8' RT	WB	NO U TURN	1	-	1	-	2	MOVE TO STA 29+78.55 'WB' 10.7' RT
M-11	29+72.93	40.0' LT	WB	DO NOT ENTER	1	-	1	-	2	SHARE POST WITH SIGN NO. M-12
M-12	29+76.10	19.1' RT	WB	DO NOT ENTER	1	-	1	-	1	MOVE TO STA 29+79.72 'WB' 46.0' LT
	29+21.11	38.2' RT	WB	SINGLE ARROW DOWN RIGHT	-	1	1	-	-	REMOVE
	30+03.65	34.3' RT	WB	SINGLE ARROW DOWN RIGHT	-	1	1	-	-	REMOVE
M-13	30+95.24	40.2' LT	WB	WRONG WAY	1	-	-	1	1	MOVE TO STA 31+85.00 'WB' 46.0' LT
M-14	33+59.50	63.7' RT	WB	DIVIDED HIGHWAY ENDS	1	-	-	1	3	MOVE TO STA 31+89.01 'WB' 74.7' RT
M-15	33+59.50	63.7' RT	WB	WRONG WAY	1	-	-	-	3	SHARE POST WITH SIGN NO. M-14
M-16	30+19.36	79.8' RT	WB	EAST - CARDINAL DIRECTION SIGN	1	-	-	-	3	SHARE POST WITH SIGN NO. M-17
M-17	30+19.36	79.8' RT	WB	HWY 19 STATE ROUTE SIGN	1	-	-	1	3	POST WITH SIGN NO. M-16
M-18	34+01.25	11.4' LT	WB	BEGIN LEFT TURN LANE	1	-	1	-	2	MOVE TO STA 35+50.23 'WB' 5.2' RT
	30+95.64	20.6' RT	WB	WRONG WAY	-	1	1	-	-	REMOVE
	30+99.28	30.5' LT	WB	SINGLE ARROW DOWN RIGHT	-	1	1	-	-	REMOVE
M-19	36+21.53	48.3' RT	WB	DO NOT ENTER	1	-	-	1	3	MOVE TO STA 36+20.89 'WB' 57.0' RT
M-20	40+67.07	27.1' RT	WB	SPEED LIMIT 55 M.P.H.	1	-	-	1	3	MOVE TO STA 37+25.00 'WB' 52.8' RT
M-21	31+88.87	73.9' RT	WB	DESTINATION AND DISTANCE SIGN	1	-	-	2	3	MOVE TO STA 38+50.00 'WB' 47.7' RT

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					SIGN REMOVALS					
					638.2102 MOVING SIGN TYPE II EACH	638.2602 REMOVING SIGN TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	638.4000 MOVING SMALL SIGN SUPPORTS EACH	INSTALL SIGN AT THE END OF STAGE	COMMENTS
SIGN NO.	**STA**	**OFFSET**	**ALIGN**	**SIGN WORDING & PICTORIALS**						
	32+01.16	26.7' LT	WB	5INGLE ARROW DOWN RIGHT	-	1	1	-	-	REMOVE
	33+04.81	22.4' LT	WB	SINGLE ARROW DOWN RIGHT	-	1	1	-	-	REMOVE
	34+01.94	18.4' LT	WB	5INGLE ARROW DOWN RIGHT	-	1	1	-	-	REMOVE
	34+48.17	43.7' RT	WB	WILLIAM5BURG WAY	-	1	1	-	-	REMOVE
	34+99.02	14.5' LT	WB	5INGLE ARROW DOWN RIGHT	-	1	1	-	-	REMOVE
	36+02.87	10.4' RT	WB	5INGLE ARROW DOWN RIGHT	-	1	1	-	-	REMOVE
	21+55.89	54.9' RT	WB	5PEED LIMIT 55 M.P.H.	-	1	1	-	-	REMOVE
	36+54.20	42.2' LT	WB	3-WAY INTER5ECTION/ADVI5ORY 5PEED 45 M.P.H.	-	2	-	1	-	REMOVE
M-22	43+70.54	26.4' RT	WB	TWO WAY TRAFFIC	1	-	-	1	3	MOVE TO 5TA 40+48.11 'WB' 48.1' RT
M-23	42+22.91	26.9' RT	WB	WIND5OR CITY LIMIT5/POPULATION 5IGN	1	-	-	2	3	MOVE TO 5TA 42+22.16 'WB' 42.6' RT
M-24	45+22.47	27.4; RT	WB	ADOPT-A-HIGHWAY/TOKEN CREEK,	2	-	-	1	3	MOVE TO 5TA 45+22.31 'WB' 36.1' RT
M-25	45+99.03	24.1' RT	WB	FIRE #4061 SIGN	1	-	-	1	3	MOVE TO STA 45+97.43 'WB' 38.5' RT
	36+54.20	42.2' LT	WB	3-WAY INTER5ECTION WARNING	-	1	-	-	-	REMOVE
	99+36.95	44.2' RT	WL	TURN ARROW LEFT/TURN ARROW RIGHT	-	1	-	1	-	REMOVE, U5E PO5T FOR 5IGN NO. 07-01
M-26	100+40.75	4.5' LT	WL	5TOP	1	-	-	1	3	MOVE TO 5TA 100+15.34 'WL' 4.9' RT ON LIGHT POLE. U5E PO5T/5IGN 5UPPORT FOR 5IGN NO. 07-09 & 07-10
M-27	100+40.75	4.5' LT	WL	KEEP RIGHT	1	-	-	-	3	MOVE TO STA 100+15.34 'WL' 4.9' RT ON LIGHT POLE. 5HARE PO5T WITH 5IGN NO. M-26, IN5TALL AT 5EPARATE HEIGHT THAN 5TOP
M-28	100+46.08	54.0' RT	WL	STOP	1	-	-	1	3	MOVE TO STA 100+18.47 'WL' 54.9' RT. SHARE PO5T WITH 5IGN NO. 07-05, 07-06 & 07-07
	100+46.08	54.0' RT	WL	WILLIAM5BUR WAY	-	2	-	-	-	REMOVE
				PROJECT TOTAL5	35	21	21	25		

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PERMANENT SIGNING TYPE II

SIGN NO. STH 19	STA	OFFSET	ALIGN	SIGN WORDING & PICTORIALS	SIGN CODE	(INCH)	X (INCH)	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING SF	637.2230 SIGNS TYPE REFLECTIVE F SF	634.0612 POSTS WOOD 4X6-INCH X 12 FT EACH	634.0614 POSTS WOOD 4X6-INCH X 14 FT EACH	634.0616 POSTS WOOD 4X6-INCH X 16 FT EACH	634.0618 POSTS WOOD 4X6-INCH X 18 FT EACH	634.0622 POSTS WOOD 4X6-INCH X 22 FT EACH	INSTALL SIGN AT THE END OF STAGE	COMMENTS
01-01	17+60.S4	47.1' RT	WB	ADVANCE INTERSECTION	W2-1	36	36	--	--	9.00	--	--	1	--	--	2	INSTALL TWO 18" X 18" FLAGS,
01-02	17+61.41	111.2' RT	WB	ADVANCE INTERSECTION	W2-1	36	36	--	--	9.00	--	--	1	--	--	3	INSTALL TWO 18" X 18" FLAGS,
01-03	17+60.S4	47.1' RT	WB	ADVISORY SPEED PLAQUE	W13-1	24	24	--	--	4.00	--	--	--	--	--	2	SHARE POST WITH SIGN NO. 01-01
01-04	17+61.41	111.2' RT	WB	ADVISORY SPEED PLAQUE	W13-1	24	24	--	--	4.00	--	--	--	--	--	3	SHARE POST WITH SIGN NO. 01-02
01-0S	18+62.96	47.0' RT	WB	BEGIN LEFT TURN LANE	R3-20L	36	S4	13.S0	--	--	--	--	1	--	--	2	
02-01	21+46.38	10S.7' RT	WB	BEGIN RIGHT TURN LANE	R3-20R	36	54	13.50	--	--	--	--	1	--	--	3	
02-02	21+76.47	111.1' RT	WB	WILLIAMSBURG WAY	D1-61	126	30	26.30	--	--	--	--	3	--	--	3	
02-03	22+97.79	S7.1' RT	WB	DOUBLE DOWN ARROW	W12-1D	30	30	--	--	6.30	--	--	1	--	--	2	
03-01	27+S7.04	41.8' RT	WB	DIVIDED HIGHWAY	R6-3	30	24	S.00	--	--	--	--	--	--	--	2	SHARE POST WITH SIGN NO. M-06 & M-08
03-02	27+60.27	98.1' RT	WB	DIVIDED HIGHWAY	R6-3	30	24	S.00	--	--	--	--	--	--	--	3	SHARE POST WITH SIGN NO. M-07
03-03	27+87.32	10S.2' RT	WB	ONE WAY	R6-2L	36	48	12.00	--	--	--	--	1	--	--	3	
03-04	29+18.24	55.9' RT	WB	ONE WAY	R6-2L	36	48	12.00	--	--	--	--	1	--	--	1	
03-0S	29+78.SS	10.7' RT	WB	DIVIDED HIGHWAY	R6-3	30	24	S.00	--	--	--	--	--	--	--	2	SHARE POST WITH SIGN NO. M-10 & M-11
03-06	29+91.93	33.7' RT		DIVIDED HIGHWAY	R6-3	30	24	S.00	--	--	--	--	--	--	--	2	SHARE POST WITH SIGN NO. 03-07, ON LIGHT POLE
03-07	29+91.93	33.7' RT	WB	KEEP RIGHT	R4-7	36	48	12.00	--	--	--	--		--	--	2	SHARE POST WITH SIGN NO. 03-06, ON LIGHT POLE
03-08	30+72.89	30.4' RT	WB	RIGHT LANE ENDS	W9-1R	36	36	--	--	9.00	--	--	1	--	--	2	
03-09	30+74.8S	78.4' RT	WB	LANE ENDS MERGE LEFT	W9-2L	36	36	--	--	9.00	--	--	1	--	--	3	
03-10	31+00.71	8.2' RT	WB	DOUBLE DOWN ARROW	W12-1D	30	30	--	--	6.30	--	--	--	--	--	2	
04-01	34+47.64	S1.8' LT	WB	WILLIAMSBURG WAY	D1-61	126	30	26.30	--	--	--	--	3	--	--	1	
04-02	3S+7S.00	S8.9' LT	WB	RIGHT LANE ENDS	W4-2R	36	36	--	--	9.00	--	--	1	--	--	3	
04-03	37+60.00	39.6' LT	WB	ADVANCE INTERSECTION WARNING	W2-1	36	36	--	--	9.00	--	--	1	--	--	1	INSTALL TWO 18" X 18" FLAGS, INCIDENTAL TO SIGN
04-04	37+60.00	39.6' LT	WB	ADVISORY SPEED 4S M.P.H.	W13-1	24	24	--	--	4.00	--	--	--	--	--	1	SHARE POST WITH SIGN NO. 04-03
06-01	46+60.00	27.2' LT	WB	DIVIDED HIGHWAY	W6-1	36	36	--	--	9.00	--	--	1	--	--	1	
					STH 19 SUBTOTAL			13S.60	--	87.60	--	--	18.00	--	--		

PERMANENT SIGNING TYPE II

SIGN NO.	STA	OFFSET	ALIGN	SIGN WORDING & PICTORIALS	SIGN CODE	(INCH)	X (INCH)	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING SF	637.2230 SIGNS TYPE REFLECTIVE F SF	634.0612 POSTS WOOD 4X6-INCH X 12 FT EACH	634.0614 POSTS WOOD 4X6-INCH X 14 FT EACH	634.0616 POSTS WOOD 4X6-INCH X 16 FT EACH	634.0618 POSTS WOOD 4X6-INCH X 18 FT EACH	634.0622 POSTS WOOD 4X6-INCH X 22 FT EACH	INSTALL SIGN AT THE END OF STAGE	COMMENTS
WILLIAM5BURG WAY																	
07-01	95+73.00	11.0' RT	WL	LEFT LANE MU5T TURN LEFT	R3-7L	42	30	8.75	--	--	--		1	--	--	3	
07-02	97+52.00	2.9' LT	WL	ADVANCE INTER5ECTION LANE CONTROL	R3-8LAR	54	30	11.25	--	--	--	--	2	--	--	3	
07-03	97+52.00	45.3' RT	WL	ADVANCE INTER5ECTION LANE CONTROL	R3-8LAR	54	30	11.25	--	--	--	--	2	--	--	3	
07-04	97+52.00	45.3' RT	WL	WRONG WAY	RS-1A	42	30	8.7S	--	--	--	--	--	--	--	3	5HARE PO5T WITH 5IGN NO. 07-03
07-05	100+18.47	54.9' RT	WL	ONE WAY	R6-1R	54	18	6.75	--	--	--	--	--	--	--	3	5HARE PO5T WITH 5IGN NO. M-28, 07-06, & 07-07
07-06	100+18.47	54.9' RT	WL	DIVIDED HIGHWAY	R6-3	30	24	5.00	--	--	--	--	--	--	--	3	5HARE PO5T WITH 5IGN NO. M-28 07-05, & 07-07
07-07	100+18.47	S4.9' RT	WL	ONE WAY	R6-1R	54	18	6.7S	--	--	--	--	--	--	--	3	5HARE POST WITH SIGN NO. M-28, 07-05 & 07-06
07-08	100+17.47	73.6' RT	WL	DO NOT ENTER	R5-1	36	36	9.00	--	--	--	--	1	--	--	3	
07-09	100+55.38	88.5' RT	WL	WILLIAM5BURG WAY	D3-1	48	12	4.00	--	--	--	--	--	--	--	3	U5E PO5T FROM 5IGN NO. M-26, 5HARE PO5T WITH 5IGN NO. 07-10
07-10	100+5S.38	88.5' RT	WL	WILLIAM5BURG WAY	D3-1	48	12	4.00	--	--	--	--	--	--	--	3	5HARE PO5T WITH 5IGN NO. 07-09
08-01	102+41.42	45.9' LT	WL	DO NOT ENTER	R5-1	36	36	9.00	--	--	--	--	1	--	--	1	
08-02	102+44.31	39.2' LT	WL	ONE WAY	R6-1R	54	18	6.75	--	--	--	--	--	--	--	1	5HARE PO5T WITH 5IGN NO. 08-03, 08-04 & 08-0S
08-03	102+44.31	39.2' LT	WL	ONE WAY	R6-1R	54	18	6.75	--	--	--	--	--	--	--	1	5HARE PO5T WITH 5IGN NO. 08-02, 08-04 & 08-05
08-04	102+44.31	39.2' LT	WL	5TOP	R1-1	36	36	7.46	--	--	--	--	--	--	--	1	5HARE PO5T WITH 5IGN NO. 08-02, 08-03 & 08-05
08-0S	102+44.31	39.2' LT	WL	DIVIDED HIGHWAY	R6-3	30	24	S.00	--	--	--	--	--	--	--	1	SHARE POST WITH SIGN NO. 08-02, 08-03 & 08-04
08-06	102+48.12	3.8' RT	WL	KEEP RIGHT	R4-7	36	48	12.00	--	--	--	--	--	--	--	1	SHARE POST WITH SIGN NO. 08-07 ON LIGHT POLE, IN5TALL AT 5EPARATE HEIGHT THAN 5TOP 5IGN
08-07	102+48.12	3.8' RT	WL	STOP	R1-1	36	36	7.46	--	--	--	--	--	--	--	1	5HARE POST WITH 5IGN NO. 08-06 ON LIGHT POLE
08-08	104+87.00	5.0' RT	WL	ADVANCE INTER5ECTION LANE CONTROL	R3-8LAR	54	30	11.25	--	--	--	--	2	--	--	1	
08-09	104+86+59	42.8' LT	WL	WRONG WAY	R5-1A	42	30	8.75	--	--	--	--	--	--	--	1	5HARE PO5T WITH 5IGN NO. 08-10
08-10	104+87.00	42.6' LT	WL	ADVANCE INTER5ECTION LANE CONTROL	R3-8LAR	54	30	11.25	--	--	--	--	2	--	--	1	
08-11	101+99.68	60.6' LT	WL	WILLIAM5BURG WAY	D3-1	48	12	4.00	--	--	--	--	1	--	--	1	
08-12	101+99.68	60.6' LT	WL	WILLIAM5BURG WAY	D3-1	48	12	4.00	--	--	--	--	--	--	--	1	5HARE PO5T WITH 5IGN NO. 08-07
					5TH 19 5UBTOTAL			169.17	--	--	--	--	12.00	--	--		
					PROJECT TOTAL5			304.77	0	87.6	0	0	30	0	0		

STORM SEWER STRUCTURES

STRUCTURE	STATION	OFFSET*	LOCATION	522.1030 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH 30-INCH EACH	611.0530 MANHOLE COVERS TYPE J EACH	611.0612 INLET COVERS TYPE C EACH	611.0615 INLET COVERS TYPE F EACH	611.0624 INLET COVERS TYPE H EACH	611.0627 INLET COVERS TYPE HM EACH	611.0642 INLET COVERS TYPE MS EACH	611.1004 CATCH BASINS 4-FT DIAMETER EACH	611.1005 CATCH BASINS 5-FT DIAMETER EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	611.2005 MANHOLES 5-FT DIAMETER EACH	611.3230 INLETS 2X3-FT EACH	611.3253 INLETS 2.5X3-FT EACH	611.3901 INLETS MEDIAN 1 GRATE EACH	611.3902 INLETS MEDIAN 2 GRATE EACH	RIM** ELEVATION	INVERT*** ELEVATION	DEPTH**** FT
1.1	17+50.72	19.18' RT	19-WBL		1									1					891.00	887.44	2.57
1.2	19+24.42	14.72' RT	19-WBL		1								1						892.30	888.41	2.90
1.3	19+25.24	58.65' RT	19-WBL						1						1				892.76	889.46	2.46
1.3A	20+01.21	52.52' RT	19-WBL						1						1				893.17	889.92	2.42
1.4	20+80.36	13.24' RT	19-WBL		1								1						893.18	889.30	2.89
1.5	22+71.20	9.81' RT	19-WBL		1								1						895.56	890.38	4.19
1.6	22+90.28	29.22' RT	19-WBL				1				1								896.00	890.54	4.75
1.6A	23+73.52	22.63' RT	19-WBL				1				1								896.91	891.00	5.20
1.7	22+92.37	55.14' RT	19-WBL						1						1				896.56	892.81	2.92
1.8	22+92.23	59.63' RT	19-WBL						1						1				896.38	892.95	2.59
1.8A	23+02.23	59.62' RT	19-WBL						1						1				896.67	893.17	2.66
1.9	24+76.75	21.15' RT	19-WBL				1				1								897.97	891.58	5.69
1.9A	25+87.14	17.91' RT	19-WBL				1				1								899.03	892.20	6.12
1.1	24+76.75	5.84' RT	19-WBL						1						1				898.50	895.50	2.17
1.11	26+77.07	14.14' RT	19-WBL				1					1							900.20	892.70	6.79
1.11A	26+76.85	6.00' RT	19-WBL						1						1				900.48	897.00	2.65
1.12	26+78.32	40.11' RT	19-WBL				1					1							900.20	892.85	6.65
1.12A	26+78.68	51.23' RT	19-WBL						1						1				900.36	896.86	2.66
1.12B	26+88.35	39.63' RT	19-WBL				1				1								900.26	892.90	6.65
1.12C	27+27.85	37.60' RT	19-WBL				1				1								900.49	893.12	6.65
1.12D	27+78.07	35.38' RT	19-WBL				1				1								900.79	893.41	6.67
1.12E	27+88.06	34.94' RT	19-WBL				1				1								900.88	893.46	6.71
1.13	27+98.06	34.49' RT	19-WBL				1				1								900.97	893.52	6.74
1.14	30+50.00	28.33' RT	19-WBL				1									1			901.32	895.43	5.14
1.14A	30+34.92	28.95' RT	19-WBL				1									1			901.41	895.35	5.32
1.15	30+50.00	6.00' RT	19-WBL						1						1				901.91	896.44	4.64
1.16	29+50.00	6.00' RT	19-WBL						1						1				901.75	898.75	2.17
1.17	30+50.00	34.33' RT	19-WBL						1						1				901.37	896.07	4.48
1.18	30+00.00	36.38' RT	19-WBL						1						1				901.42	898.42	2.16
1.19	31+50.00	30.24' RT	19-WBL						1						1				901.32	898.32	2.17
1.2	32+00.00	22.19' RT	19-WBL				1									1			901.17	896.27	4.15
1.20A	31+64.03	23.67' RT	19-WBL				1									1			901.35	896.07	4.53
1.21	33+50.00	16.06' RT	19-WBL				1									1			901.17	897.12	3.28
1.21A	33+30.07	16.88' RT	19-WBL				1									1			901.27	897.04	3.46
1.22	33+50.00	22.06' RT	19-WBL						1						1				901.20	897.43	2.93
1.23	32+50.00	26.15' RT	19-WBL						1						1				901.27	898.27	2.17
1.24	34+50.00	17.98' RT	19-WBL						1						1				901.10	898.42	1.85
1.25	35+07.68	11.05' RT	19-WBL							1							1		900.60	898.00	2.77
2.1	20+76.66	29.39' RT	19-WBL							1								1	891.81	888.60	3.41
2.2	20+90.92	45.29' RT	19-WBL						1						1				893.87	890.37	2.66
2.3	21+90.60	37.26' RT	19-WBL						1						1				894.89	891.40	2.66
3.1	97+95.20	46.65' RT	WILL-CNTR-PRL					1							1				894.54	891.90	1.82
4.1	43+85.49	55.91' RT	19-WBL	1																883.20	
4.2	44+08.01	56.11' RT	19-WBL			1							1						888.21	882.17	5.09
4.3	44+75.80	32.97' RT	19-WBL				1				1								884.40	878.91	4.83
4.4	45+93.75	37.27' RT	19-WBL		1									1					881.10	876.55	3.60
4.5	45+93.65	30.86' RT	19-WBL						1						1				880.95	878.15	1.97
4.6	47+79.88	34.14' RT	19-WBL		1									1					878.18	874.23	3.01
4.7	47+79.76	27.52' RT	19-WBL						1						1				876.75	874.33	1.58
4.8	48+09.81	36.87' RT	19-WBL	1																873.85	
			TOTALS	2	6	1	18	1	20	2	10	2	4	3	21	6	1	1			

REMARKS:
*STATIONS AND OFFSETS ARE TO CENTER OF STRUCTURE
**RIM ELEV IS AT THE INLET COVER FLANGE LOCATION
***FOR STRUCTURES WITH SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE SUMP. FOR STRUCTURES WITHOUT SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE LOWEST PIPE FLOW LINE
****DEPTH = RIM ELEV - TOP OF STRUCTURE BASE ELEV - COVER HEIGHT - 6-INCH ADJUSTMENT RING HEIGHT

STORM SEWER PIPES

FROM	-	TO	LOCATION	608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH LF	608.0315 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH LF	608.0318 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH LF	608.0324 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH LF	608.0330 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 30-INCH LF	INLET ELEVATION	DISCHARGE ELEVATION	SLOPE FT/FT
1.2	-	1.1	19-WBL				174		888.41	887.44	0.0056
1.3	-	1.2	19-WBL	44					889.46	889.19	0.0061
1.3A	-	1.3	19-WBL	76					889.92	889.46	0.0060
1.4	-	1.2	19-WBL				156		889.30	888.41	0.0057
1.5	-	1.4	19-WBL				191		890.38	889.30	0.0057
1.6	-	1.5	19-WBL				27		890.54	890.38	0.0057
1.6A	-	1.6	19-WBL				84		891.00	890.54	0.0055
1.7	-	1.6	19-WBL	26					892.81	891.54	0.0488
1.8	-	1.7	19-WBL	5					892.95	892.81	0.0311
1.8A	-	1.8	19-WBL	10					893.17	892.95	0.0220
1.9	-	1.6A	19-WBL				103		891.58	891.00	0.0056
1.9A	-	1.9	19-WBL				110		892.20	891.58	0.0056
1.10	-	1.9	19-WBL	15					895.50	893.97	0.1000
1.11	-	1.9A	19-WBL				90		892.70	892.20	0.0056
1.11A	-	1.11	19-WBL	8					897.00	896.25	0.0922
1.12	-	1.11	19-WBL				26		892.85	892.70	0.0056
1.12A	-	1.12	19-WBL	11					896.86	895.75	0.0998
1.12B	-	1.12	19-WBL				10		892.90	892.85	0.0056
1.12C	-	1.12B	19-WBL				40		893.12	892.90	0.0056
1.12D	-	1.12C	19-WBL				50		893.41	893.12	0.0056
1.12E	-	1.12D	19-WBL				10		893.46	893.41	0.0056
1.13	-	1.12E	19-WBL				10		893.52	893.46	0.0056
1.14	-	1.14A	19-WBL			15			895.43	895.35	0.0056
1.14A	-	1.13	19-WBL			237			895.35	894.02	0.0056
1.15	-	1.14	19-WBL	22					896.44	895.93	0.0228
1.16	-	1.15	19-WBL	100					898.75	896.44	0.0231
1.17	-	1.14	19-WBL	6					896.06	895.93	0.0225
1.18	-	1.17	19-WBL	50					898.42	896.06	0.0471
1.19	-	1.17	19-WBL	100					898.32	896.06	0.0225
1.20	-	1.20A	19-WBL			36			896.27	896.07	0.0056
1.20A	-	1.14	19-WBL			114			896.07	895.43	0.0056
1.21	-	1.21A	19-WBL		20				897.12	897.04	0.0040
1.21A	-	1.20	19-WBL		130				897.04	896.52	0.0040
1.22	-	1.21	19-WBL	6					897.43	897.37	0.0100
1.23	-	1.22	19-WBL	100					898.27	897.43	0.0084
1.24	-	1.22	19-WBL	100					898.42	897.43	0.0099
1.25	-	1.21	19-WBL	158					898.00	897.37	0.0040
2.1	-		19-WBL			4			888.60	888.43	0.0434
2.2	-	2.1	19-WBL	21					890.37	889.10	0.0595
2.3	-	2.2	19-WBL	100					891.40	890.37	0.0103
3.1	-		19-WBL		19				891.90	891.78	0.0062
4.1	-	4.2	19-WBL					23	883.20	882.17	0.0456
4.2	-	4.3	19-WBL					72	882.17	878.91	0.0456
4.3	-	4.4	19-WBL					118	878.91	876.55	0.0200
4.4	-	4.6	19-WBL					186	876.55	874.23	0.0125
4.5	-	4.4	19-WBL	6					878.15	878.05	0.0156
4.6	-	4.8	19-WBL					30	874.23	873.85	0.0125
4.7	-	4.6	19-WBL	7					874.33	874.23	0.0151
			TOTALS	971	169	406	1081	429			

*NON-BID ITEM: FOR INFORMATION ONLY

PULL BOXES NON-CONDUCTIVE

NAME	STATION	OFFSET	ALIGN	653.0154* PULL BOXES NON-CONDUCTIVE 24X36-INCH EACH	653.0164 PULL BOXES NON-CONDUCTIVE 24X42-INCH EACH	653.0900 ADJUSTING PULL BOXES EACH
EX PB	18+33.52	41.64	WB	-	-	
PB8	20+33.43	47.62	WB	1	-	
PB7	22+33.43	47.58	WB	1	-	
PB6	24+32.68	47.23	WB	1	-	
PB5	26+31.51	46.84	WB	1	-	
PB4	27+88.28	47.62	WB	-	1	
PB3	102+47.93	40.50	WL	-	1	
PB2	102+60.30	4.77	WL	-	1	
PB1	102+36.18	40.83	WL	-	1	
PB20	29+81.33	49.00	WB	-	1	
PB21	34+82.17	49.00	WB	1	-	
PB19	29+84.91	10.49	WB	-	1	
PB18	29+85.61	33.96	WB	-	1	
PB17	29+87.18	86.57	WB	-	1	
PB16	100+06.62	54.37	WL	-	1	
PB15	100+05.34	5.34	WL	-	1	
PB14	100+10.83	46.87	WL	-	1	
PB11	27+62.85	102.60	WB	-	1	
PB12	25+18.65	109.30	WB	1	-	
PB13	22+50.71	111.90	WB	1	-	
PB10	27+60.17	41.67	WB	-	1	
PB9	27+57.24	8.14	WB	-	1	
PROJECT TOTAL				7	14	

LOOP DETECTORS

CAT	LOOP NO.	HOME RUN PB	STATION	OFFSET	ALIGN	SIZE (FT. X FT.)	NO OF TURNS	SSD INSTALLATION REFERENCE	652.0800 CONDUIT LOOP DETECTOR LF	652.0700 LOOP DETECTOR LEAD-IN CABLE LF	655.0800 LOOP DETECTOR WIRE LF
	2	PB 13	22+51	84'	WB	6' X 20'	-	LOOP DETECTOR INSTALLED IN EXISTING CONCRETE PAVEMENT SSD 9F12	102	*	*
	1	PB 13	22+51	72'	WB	6' X 20'	-	LOOP DETECTOR INSTALLED IN EXISTING CONCRETE PAVEMENT SSD 9F12	126	*	*
	4	PB 21	34+82	-18'	WB	6' X 20'	-	LOOP DETECTOR INSTALLED IN EXISTING CONCRETE PAVEMENT SSD 9F12	108	*	*
	3	PB 21	34+82	-6'	WB	6' X 20'	-	LOOP DETECTOR INSTALLED IN EXISTING CONCRETE PAVEMENT SSD 9F12	132	*	*
LOOP DETECTOR INSTALLED IN EXISTING CONCRETE PAVEMENT SSD 9F12									**4**	**468**	
								PROJECT TOTALS	**4**	**468**	

NOTE: * WIRE AND CABLE TO BE INSTALLED IN FUTURE BY OTHERS

3

3

LIGHTING UNITS

CAT	BASE NO.	STATION	OFFSET	ALIGN	654.0101 CONCRETE BASES TYPE 1 EACH	654.0102 CONCRETE BASES TYPE 2 EACH	654.0106 CONCRETE BASES TYPE 6 EACH	654.0110 CONCRETE BASES TYPE 10 EACH	654.0113 CONCRETE BASES TYPE 13 EACH	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH	657.0315 POLES TYPE 4 EACH	657.0715 LUMINAIRE ARMS TRUSS TYPE 4 1/2-INCH CLAMP 15-FT EACH	659.1125 LIGHTING UTILITY LED C EACH
	SB3	102+37.12	-40.96	WL	1	-	-	-	-	-	-	-	-
	SB2	102+48.12	3.84	WB	-	1	-	-	-	1	1	2	2
	SB1	102+23.56	47.10	WL	-	-	-	-	1	-	-	-	-
	SB16	29+68.34	-48.87	WB	1	-	-	-	-	-	-	-	-
	SB15	29+71.41	10.76	WB	-	-	-	1	-	-	-	-	-
	SB13	29+91.93	33.69	WB	-	1	-	-	-	1	1	2	2
	SB14	32+69.01	22.38	WB	-	-	1	-	-	1	-	2	2
	SB12	29+74.47	87.96	WB	-	-	-	-	1	-	-	-	-
	SB11	100+24.34	59.07	WL	1	-	-	-	-	-	-	-	-
	SB10	100+15.34	-4.87	WL	-	1	-	-	-	1	1	2	2
	SB5	27+52.24	8.25	WB	-	1	-	-	-	1	1	2	2
	SB9	100+23.03	-52.78	WL	-	-	-	-	1	-	-	-	-
	SB8	27+67.63	97.38	WB	1	-	-	-	-	-	-	-	-
	SB6	27+65.17	41.45	WB	-	-	-	1	-	-	-	-	-
	SB4	27+59.47	-42.42	WB	-	-	-	-	1	-	-	-	-
	SB7	24+51.25	53.16	WB	-	-	1	-	-	1	-	2	2
			PROJECT TOTAL		4	4	2	2	4	6	4	12	12

3

3

SIGNAL/LIGHTING CONTROL CABINET

CAT	STATION	OFFSET	ALIGN	DESCRIPTION	654.0217 CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL EACH	656.0200 ELECTRICAL SERVICE METER BREAKER PEDESTAL (LCC) LS	659.2130 LIGHTING CONTROL CABINETS 120/240 30-INCH EACH
	29+29.47	76.36' LT	WB	CABINET	1	1	1
				PROJECT TOTAL	1	1	1

NOTE: STATION AND OFFSET TO CENTER OF CONCRETE CONTROL CABINET BASE

LIGHTING WIRE

CAT	FROM	TO	655.0305 CABLE TYPE UF NO. 12 AWG W/ GROUND LF
	CABINET	SB2	163
	CABINET	SB13	218
	CABINET	SB10	527
	CABINET	SB5	323
	CABINET	SB7	660
	CABINET	SB14	495
	PROJECT TOTAL		2386

SIGNAL/LIGHTING CONTROL CABINET

CAT	STATION	OFFSET	ALIGN	DESCRIPTION	654.0217 CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL EACH	656.0200 ELECTRICAL SERVICE METER BREAKER PEDESTAL (LCC) LS	659.2130 LIGHTING CONTROL CABINETS 120/240 30-INCH EACH
	29+29.47	76.36' LT	WB	CABINET	1	1	1
				PROJECT TOTAL	1	1	1

NOTE: STATION AND OFFSET TO CENTER OF CONCRETE CONTROL CABINET BASE

LIGHTING WIRE

CAT	FROM	TO	655.0305 CABLE TYPE UF NO. 12 AWG W/ GROUND LF
	CABINET	SB2	163
	CABINET	SB13	218
	CABINET	SB10	527
	CABINET	SB5	323
	CABINET	SB7	660
	CABINET	SB14	495
		PROJECT TOTAL	2386

3

3

PCMS SIGNS

CAT	LOCATION	STAGE	DAYS	NO. IN SERVICE EACH	643.1050 SIGNS PCMS DAYS
0010	19-EASTBOUND, 19-WESTBOUND, WL-NORTHBOUND, WL-SOUTHBOUND	1	7	4	28
	19-EASTBOUND, 19-WESTBOUND, WL-NORTHBOUND, WL-SOUTHBOUND	2	14	4	56
	19-EASTBOUND, 19-WESTBOUND, WL-NORTHBOUND, WL-SOUTHBOUND	3	14	4	56
	19-EASTBOUND, 19-WESTBOUND, WL-NORTHBOUND, WL-SOUTHBOUND	4	7	4	28
			CATEGORY 0010 PROJECT TOTAL		168

TRAFFIC CONTROL COVERING SIGNS

CAT	LOCATION	STAGE	643.0920 TRAFFIC CONTROL COVERING SIGN TYPE II EACH	COMMENTS
0010				
	16+97.71 'WB'	3	1	COVER "BEGIN RIGHT TURN LANE" SIGN
	18+51.12 'WB'	3	1	COVER "RIGHT LANE MUST TURN RIGHT" SIGN
	104+87.00 'WB'	2	2	COVER SIGNS R3-8LAR
	30+74.85 'WB'	4	1	COVER SIGN W9-2L
	30+72.89 'WB'	4	1	COVER SIGN W9-1R
	35+75.00 'WB'	4	1	COVER SIGN W4-2R
	PROJECT TOTAL		7	

3

TRAFFIC CONTROL

				643.0300		643.0420		643.0705		643.0800		643.0900	
CAT	LOCATION	STAGE	DAYS	DRUMS EACH	DRUMS DAYS	BARRICADES TYPE III EACH	BARRICADES TYPE III DAYS	WARNING LIGHTS TYPE A EACH	WARNING LIGHTS TYPE A DAYS	ARROW BOARDS EACH	ARROW BOARDS DAYS	SIGNS EACH	TRAFFIC CONTROL SIGNS DAYS
0010													
	STH 19	1	30	40	1200	9	270	18	540		0	17	510
			STAGE 1 SUBTOTAL		1200		270		540		0		510
0010													
	STH 19	2	45	175	7875	8	360	16	720	3	135	29	1305
			STAGE 2 SUBTOTAL		7875		360		720		135		1305
0010													
	STH 19	3	30	170	5100	6	180	12	360	2	60	59	1770
			STAGE 3 SUBTOTAL		5100		180		360		60		1770
0010													
	STH 19	4	15	102	1530	3	45	20	300	2	30	39	585
			STAGE 4 SUBTOTAL		1530		45		300		30		585
			CATEGORY 0010 PROJECT TOTAL		15705		855		1920		225		4170

3

TEMPORARY MARKING

CAT	STAGE	649.0150 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH WHITE LF	649.0150 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH YELLOW LF	649.0505 TEMPORARY MARKING ARROW PAINT EACH	649.0850 TEMPORARY MARKING LINE REMOVABLE TAPE 18-INCH WHITE LF
0010					
	1	540	540		
	2	260	978		14
	3	665		2	
	4	2460	1800		
CATEGORY PROECT TOTAL		3265	3978	2	14
		7243			

REMOVING PAVEMENT MARKINGS

CAT	STAGE	LOCATION	646.9000 MARKING REMOVAL LINE 4-INCH LF	646.9100 MARKING REMOVAL LINE 8-INCH LF	646.9200 MARKING REMOVAL LINE WIDE LF	646.9300 MARKING REMOVAL SPECIAL MARKING EACH
0010						
	1		1591			
	2		2343	366		
	3		2345	354	47	6
CATEGORY 0010 PROJECT TOTAL			6279	720	47	6

DIVISION	FROM/TO STATION	205.0100 COMMON EXCAVATION (1) CUT (2)	205.0100 COMMON EXCAVATION (1) EBS EXCAVATION (3)	SALVAGED/UNUSABLE PAVEMENT MATERIAL (4)	AVAILABLE MATERIAL (5)	UNEXPANDED FILL	EXPANDED FILL (13) FACTOR 1.00	MASS ORDINATE +/- (14)	WASTE	208.0100 BORROW	COMMENT
QR-19	17+51/49+00	25,480	0	0	25,480	2,159	2,159	23,321	23,321	0	
QR-WILL	96+50/100+90	1,163	0	0	1,163	0	0	1,163	1,163	0	
GRAND TOTAL		26,643	0	0	26,643	2,159	2,159	24,484	24,484	0	
	TOTAL COMMON EXC	26,643									

NOTES:

(1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100

(2) SALVAGED/UNSUABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.

(3) EBS EXCAVATION TO BE BACKFILLED WITH SELECT BORROW MATERIAL. NOTE: THIS IS DESIGNERS CHOICE, CAN BE BACKFILLED WITH BORROW, OR CUT AS WELL.

(4) SALVAGED/UNUSABLE PAVEMENT MATERIAL

(5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL

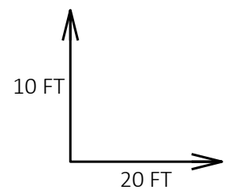
(6) EXPANDED FILL FACTOR = 1.15

EXPANDED FILL = UNEXPANDED FILL * FILL FACTOR

(7) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.

(8) FACTORS USED TO COMPUTE ANTICIPATED WASTE AND THE COMPUTED WASTE VOLUME IDENTIFIED ARE FOR GENERAL INFORMATION ONLY.

(9) ALL QUANTITIES SHOWN IN CY.

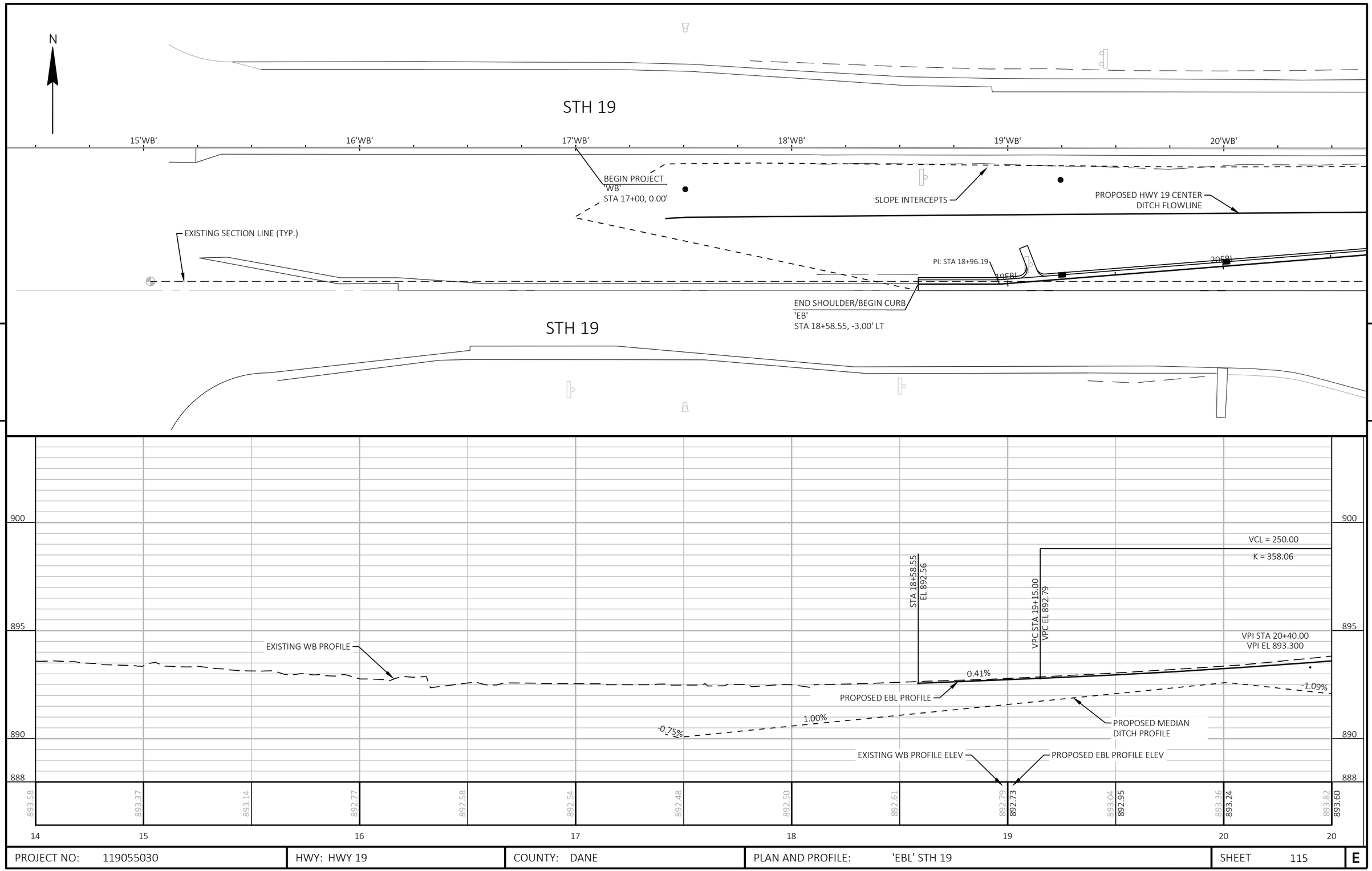


9

9

PROJECT NO: 119055030 | HWY: HWY 19 | COUNTY: DANE | CROSS SECTIONS: MISCELLANEOUS QUANTITIES | SHEET 114 | E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\090101-EW.DWG
LAYOUT NAME - 03
PLOT DATE : 3/2/2022 7:17 AM
PLOT BY : BLAKE RIDENOUR
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



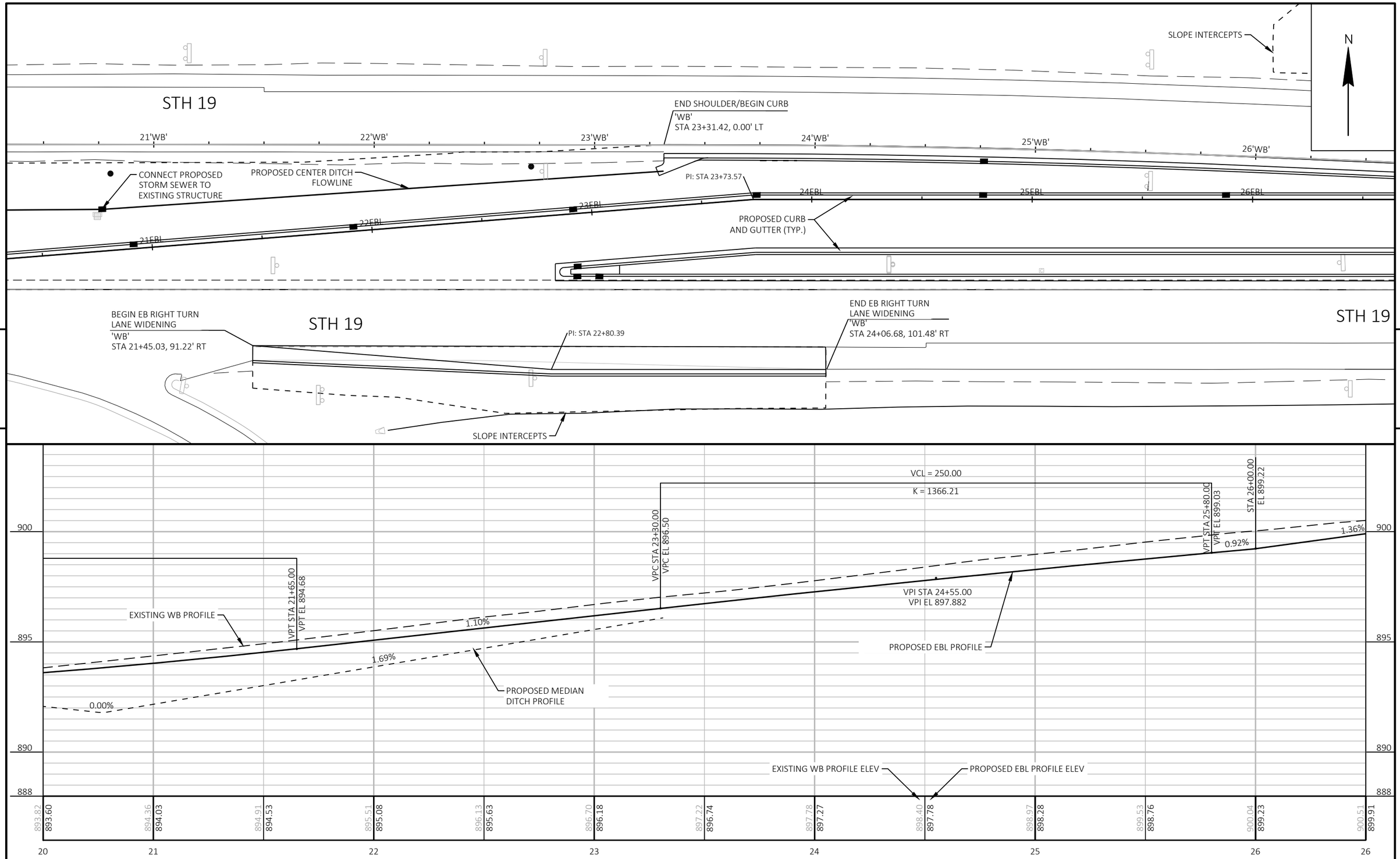
5

5

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	PLAN AND PROFILE: 'EBL' STH 19	SHEET 115	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 01

PLOT DATE : 3/2/2022 7:26 AM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:40 FT



PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	PLAN AND PROFILE: 'EBL' STH 19	SHEET 116 E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 02
PLOT DATE : 3/2/2022 7:26 AM
PLOT BY : BLAKE RIDENOUR
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

SLOPE INTERCEPTS

PROPOSED ASPHALT AND GRAVEL SHOULDER

STH 19

26'WB'

27'WB'

28'WB'

29'WB'

30'WB'

31'WB'

26EBL

27EBL

30'WBL'

31'WBL'

STORM INLET (TYP.)

STH 19

BEGIN EB LANE WIDENING
'WB'
STA 29+37.31, 68.83' RT

28'EBR'

29'EBR'

30'EBR'

31'EBR'

END LANE WIDENING
WLR
STA 100+71.76, -6.52' LT

101WLR

102'WL'

101'WL'

N

5

5

905

900

895

890

STA 27+00.00
EL 900.58

STA 27+68.16
EL 900.94

STA 29+74.40
EL 901.87

STA 30+52.00
EL 901.40

STA 31+12.00
EL 901.70

EXISTING WB PROFILE

0.53%

1.36%

PROPOSED EBL PROFILE

0.61%

0.50%

PROPOSED WBL PROFILE

SEE THE PAVEMENT DETAILS AND PAVEMENT GRADE SHEETS FOR INTERSECTION INFORMATION.

-1.00%

PROPOSED LEFT DITCH PROFILE

EXISTING WB PROFILE ELEV

PROPOSED EBL PROFILE ELEV

EXISTING WB PROFILE ELEV

PROPOSED WBL PROFILE ELEV

899.53	898.76	900.04	899.23	900.51	899.91	900.91	900.58	901.20	900.85	901.44	901.69	901.89	901.99	902.13	901.70	902.21	901.40	902.19	901.65	902.11	901.50
25		26				27		28				29			30			31			31

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	PLAN AND PROFILE: 'EBL' AND 'WBL' STH 19	SHEET 117	E

ALLIANT ENERGY

OE(B) C(B) G(B)

PROPOSED HWY 19
DITCH LEFT FLOWLINE

SLOPE
INTERCEPTS

PROPOSED HWY 19
DITCH LEFT FLOWLINE

MADISON GAS AND ELECTRIC

SLOPE INTERCEPTS

STH 19

31'WB' 32'WB' 33'WB' 34'WB' 35'WB' 36'WB'

BEGIN CURB
'WB'
STA 34+67.89, 6.53' RT

BEGIN WB LEFT TURN LANE
'WB'
STA 35+50.57, 0.00' LT

SLOPE INTERCEPTS

PI: STA 34+00.57

31'WBL' 32'WBL' 33'WBL' 34'WBL'

5

5

STH 19

31'EBR' 32'EBR' 33'EBR' 34'EBR' 35'EBR' 36'EBR'

905
900
895
890

STA 32+02.00
EL 901.25

STA 32+77.00
EL 901.63

STA 33+52.00
EL 901.25

STA 34+27.00
EL 901.55

STA 34+75.00
EL 901.36

STA 35+52.57
EL 901.39

EXISTING WB PROFILE

-0.50% 0.50% -0.50% 0.40% -0.40% 0.04%

PROPOSED WBL PROFILE

-1.00%

PROPOSED LEFT DITCH
PROFILE

EXISTING WB PROFILE ELEV

PROPOSED WBL PROFILE ELEV

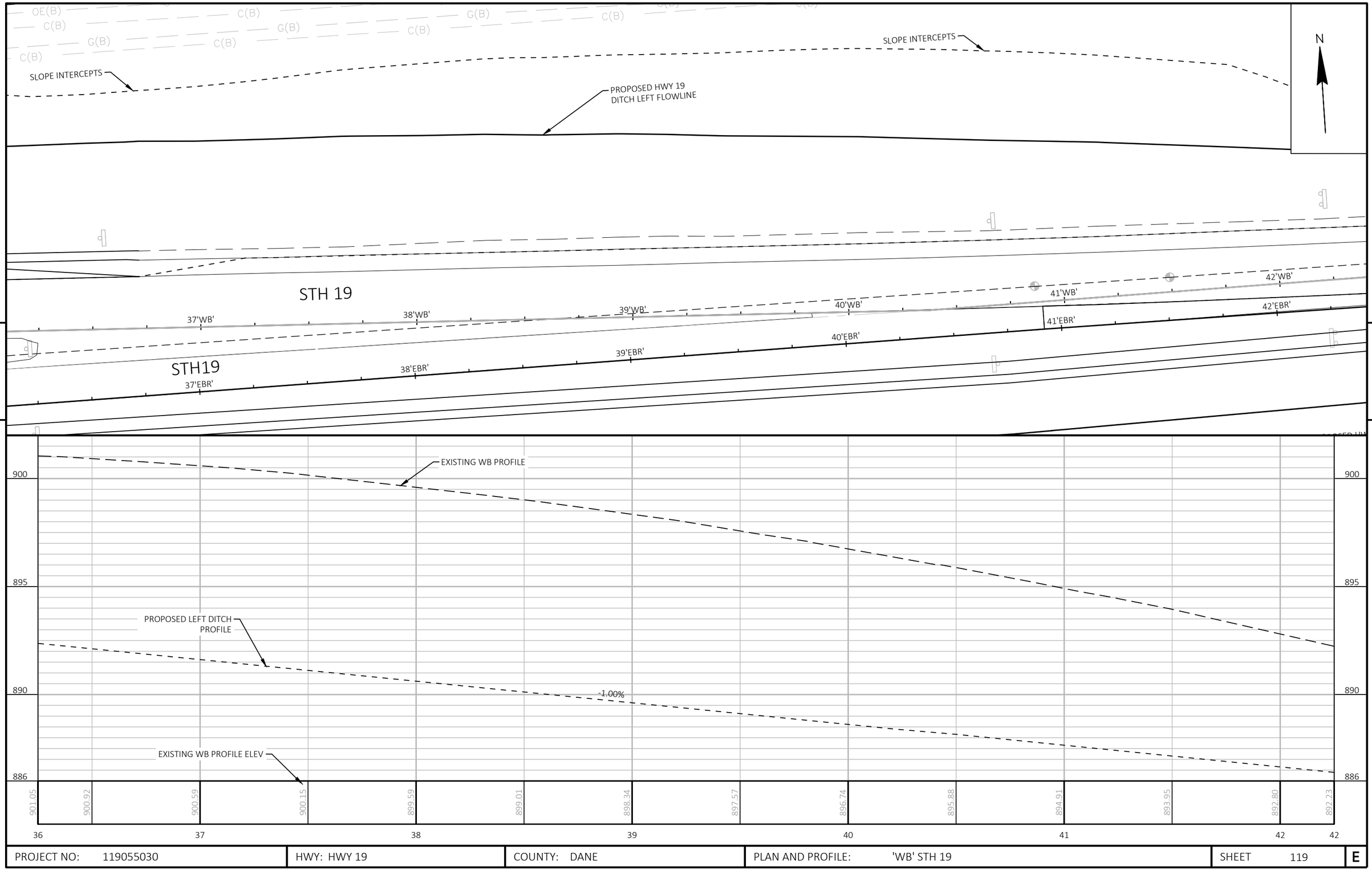
902.21	902.19	902.11	902.06	902.02	901.92	901.81	901.72	901.57	901.48	901.39	901.21	900.92	900.76
901.52	901.65	901.50	901.25	901.50	901.50	901.25	901.45	901.45	901.37	901.39			

30 31 32 33 34 35 36 36

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	PLAN AND PROFILE: 'WBL' STH 19	SHEET 118	E

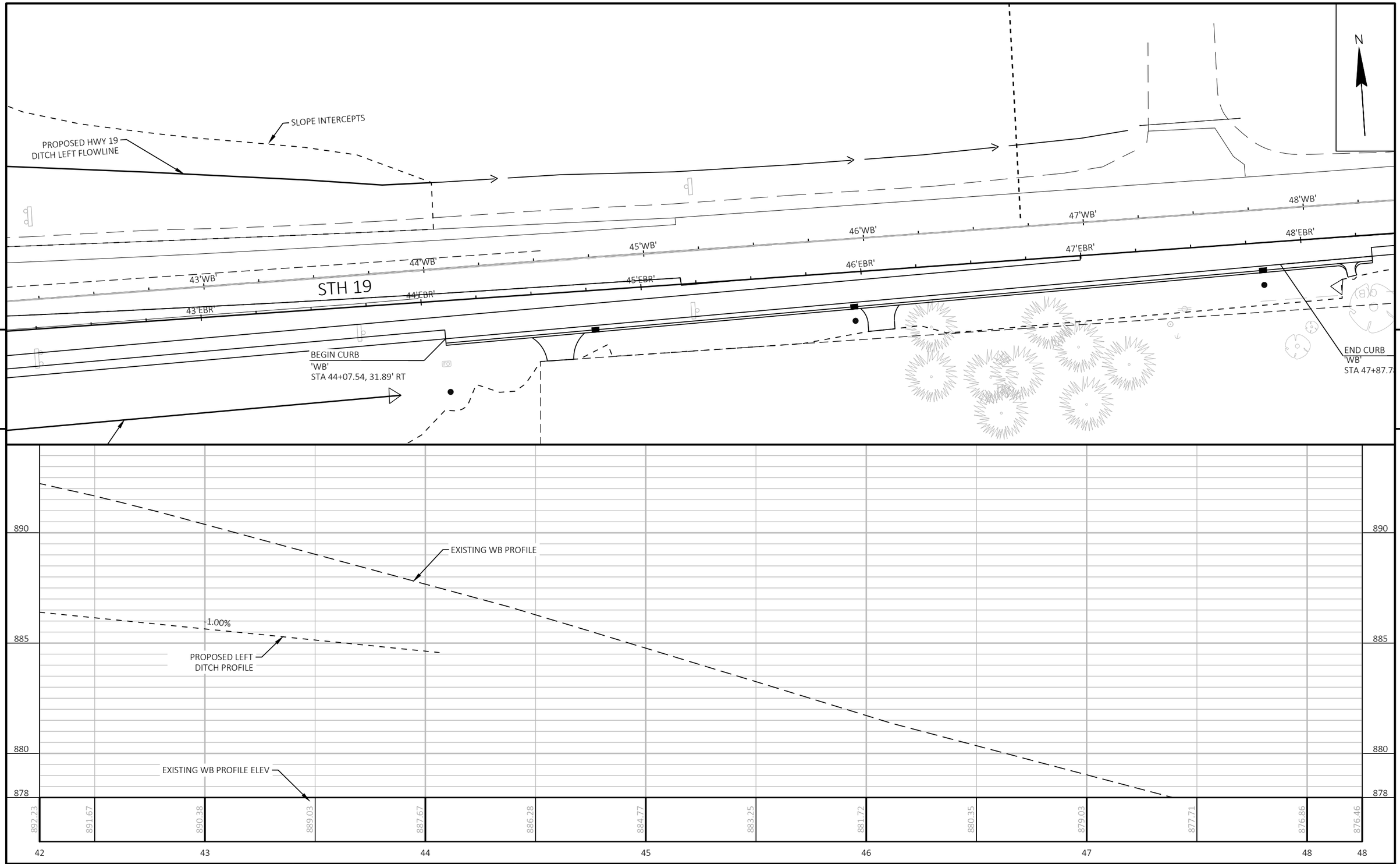
FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 04

PLOT DATE : 3/2/2022 7:27 AM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:40 FT



PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	PLAN AND PROFILE: 'WB' STH 19	SHEET 119	E

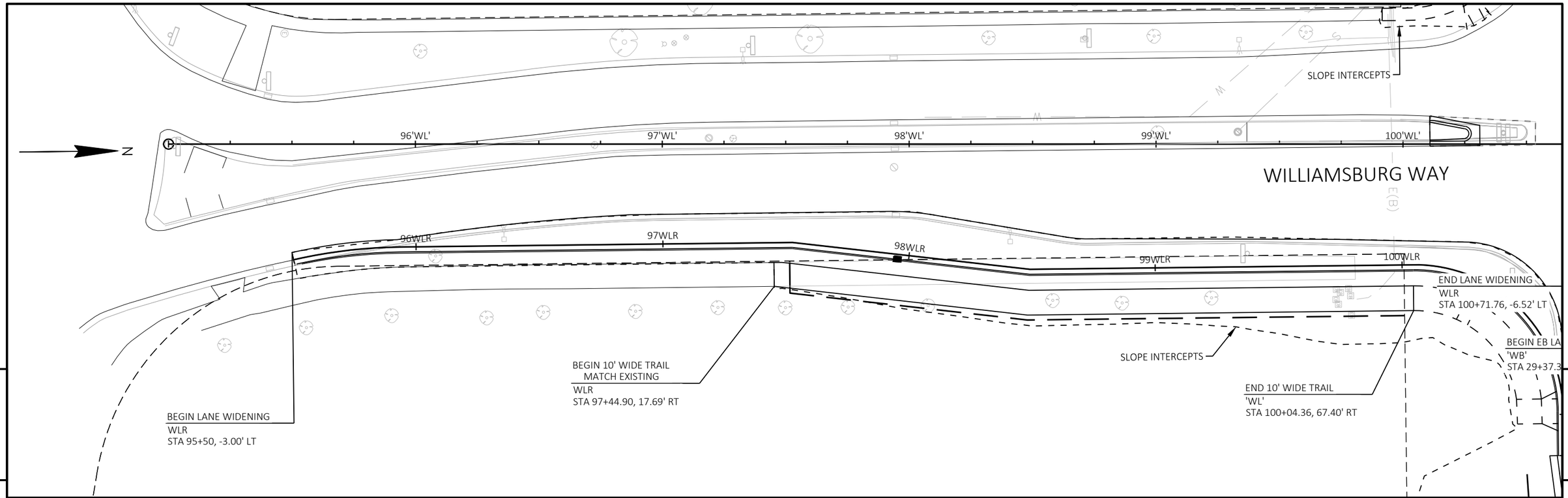
FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 05
PLOT DATE : 3/2/2022 7:28 AM
PLOT BY : BLAKE RIDENOUR
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

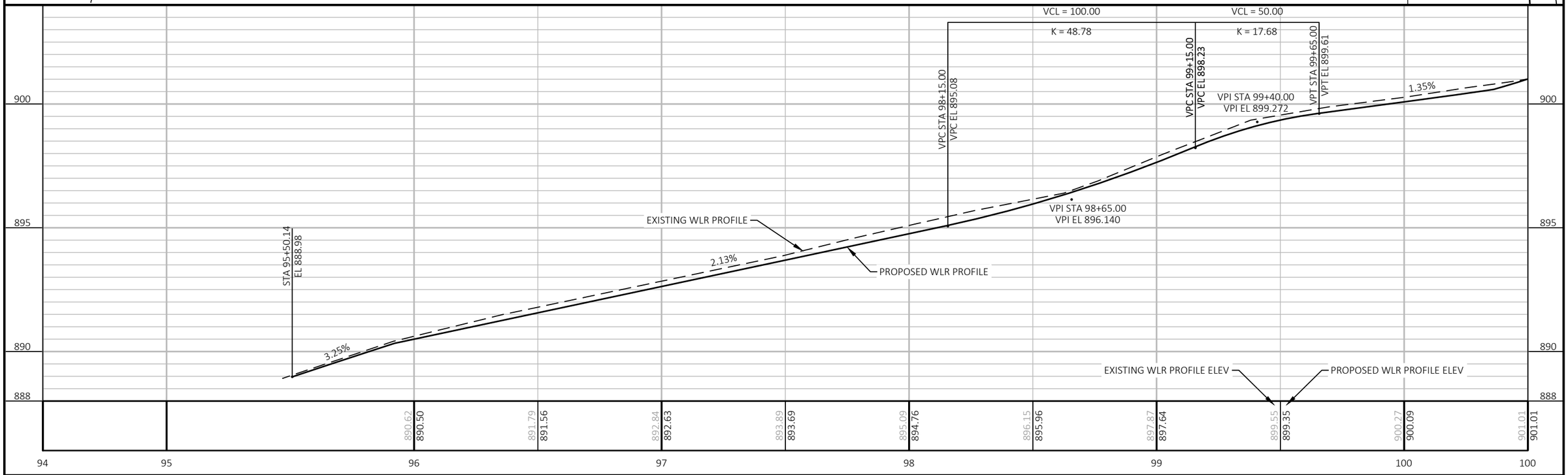


PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	PLAN AND PROFILE: 'WB' STH 19	SHEET 120	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 06

PLOT DATE : 3/2/2022 7:28 AM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:40 FT





PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	PLAN AND PROFILE: 'WLR' WILLIAMSBURG WAY	SHEET 121	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 07

PLOT DATE : 3/2/2022 7:29 AM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:40 FT

WILLIAMSBURG WAY

EXISTING R/W (TYP.)

SLOPE INTERCEPTS

EXISTING R/W (TYP.)

EXISTING R/W

CURB AND GUTTER (TYP.)

28'EBR'

28'WB'

SLOPE INTERCEPTS

100'WL' 101'WL' 102'WL' 103'WL' 104'WL' 105'WL'

MATCHLINE

TO BE CONSTRUCTED BY OTHERS

WILLIAMSBURG WAY

29'EBR'

29'WB'

100WLR

END LANE WIDENING WLR
STA 100+71.76, -6.52' LT

BEGIN EB LANE WIDENING 'WB'
STA 29+37.31, 68.83' RT

10' WIDE TRIAL (TYP.)

SLOPE INTERCEPTS

END 10' WIDE TRAIL

5

5

905

900

895

890

STA 100+37.75
EL 900.59

STA 100+68.10
EL 901.34

STA 101+71.97
EL 901.80

STA 102+21.97
EL 901.50

EXISTING WLR PROFILE

2.46%

-0.60%

-0.50%

PROPOSED WL PROFILE

PROPOSED WLR PROFILE

EXISTING WL PROFILE

SEE THE PAVEMENT DETAILS AND PAVEMENT GRADE SHEETS FOR INTERSECTION INFORMATION.

EXISTING WLR PROFILE ELEV

PROPOSED WLR PROFILE ELEV

EXISTING WL PROFILE ELEV

PROPOSED WL PROFILE ELEV

899.55	899.35	900.27	900.09			900.92	901.63	900.39	901.36	900.14	901.11	899.89	900.86
899.64	900.61	899.39	900.36	899.14	900.11	898.89	899.86						

99 100 101 102 103 104 105 105

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	PLAN AND PROFILE: 'WL' WILLIAMSBURG WAY	SHEET 122 E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 08

PLOT DATE : 3/2/2022 7:30 AM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:40 FT

NOTE: ALL STORM SEWER CURB CASTING
RIMS ARE TO FLOWLINE.

N

STH 19

16'WB' 17'WB' 18'WB' 19'WB' 20'WB' 21'WB' 22'WB'

STA 17+51 'WB', 19.2' RT
MANHOLES 5-J
CONNECT TO EX PIPE
"DOG-HOUSE"
1.1

STA 19+24 'WB', 14.7' RT
MANHOLES 4-J
1.2

STA 20+80 'WB', 13.2' RT
MANHOLES 4-J
1.4

STA 21+91 'WB', 37.3' RT
INLETS 2x3-HM
2.3

STA 20+77 'WB', 29.4' RT
INLETS MEDIAN 2G-MS
REMOVE EX INLET
CONNECT TO EX RCP
2.1

STA 19+25 'WB', 58.7' RT
INLETS 2x3-HM
1.3

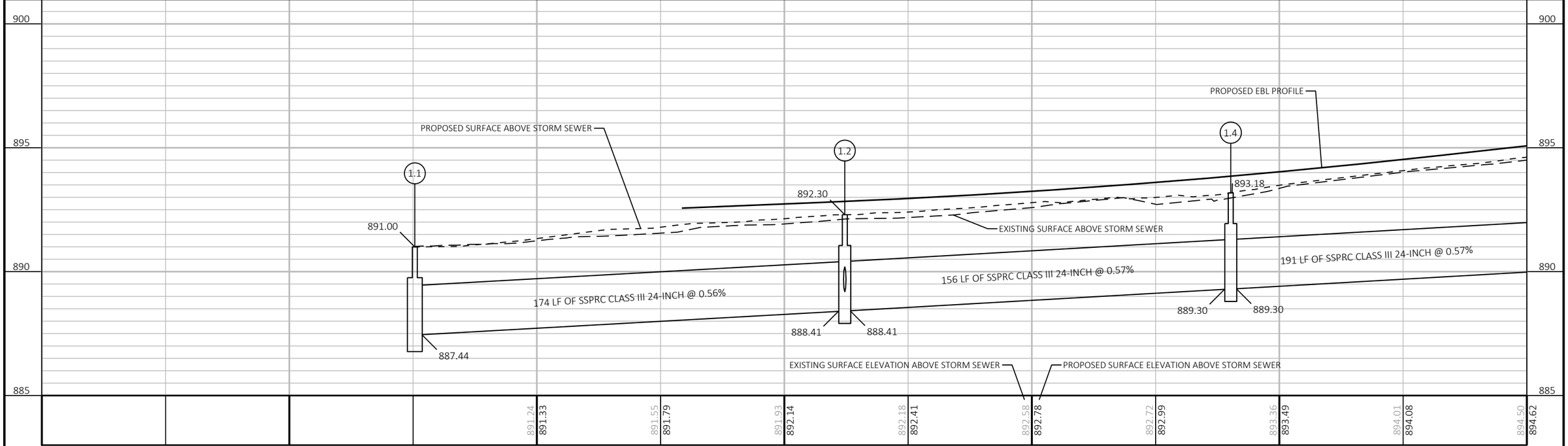
STA 20+91 'WB', 45.3' RT
INLETS 2x3-HM
2.2

STA 20+01 'WB', 52.5' RT
INLETS 2x3-HM
1.3A

5

5

STH 19



PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	PLAN AND PROFILE: STORM SEWER	SHEET 123	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\022501-SS.DWG
LAYOUT NAME - 01

PLOT DATE : 3/2/2022 7:36 AM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:40 FT

NOTE: ALL STORM SEWER CURB CASTING
RIMS ARE TO FLOWLINE.

N

STH 19

16'WB' 17'WB' 18'WB' 19'WB' 20'WB' 21'WB' 22'WB'

STA 17+51 'WB', 19.2' RT
MANHOLES 5-J
CONNECT TO EX PIPE
"DOG-HOUSE"
1.1

STA 19+24 'WB', 14.7' RT
MANHOLES 4-J
1.2

STA 20+80 'WB', 13.2' RT
MANHOLES 4-J
1.4

STA 21+91 'WB', 37.3' RT
INLETS 2x3-HM
2.3

STA 20+77 'WB', 29.4' RT
INLETS MEDIAN 2G-MS
REMOVE EX INLET
CONNECT TO EX RCP
2.1

STA 19+25 'WB', 58.7' RT
INLETS 2x3-HM
1.3

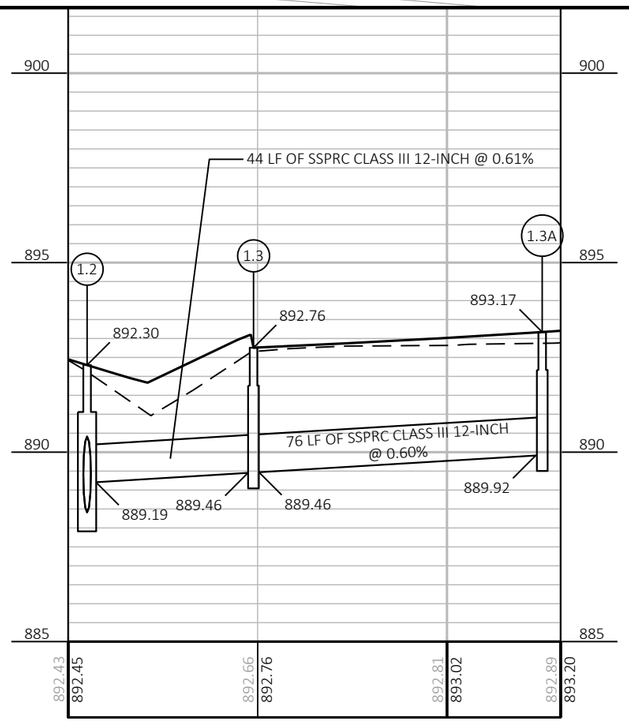
STA 20+91 'WB', 45.3' RT
INLETS 2x3-HM
2.2

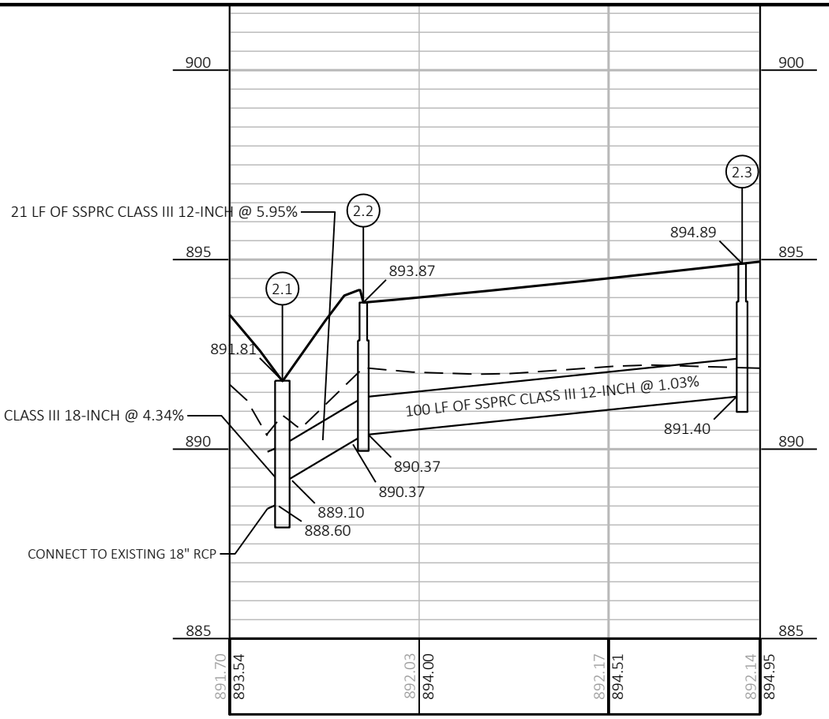
STA 20+01 'WB', 52.5' RT
INLETS 2x3-HM
1.3A

5

5

STH 19

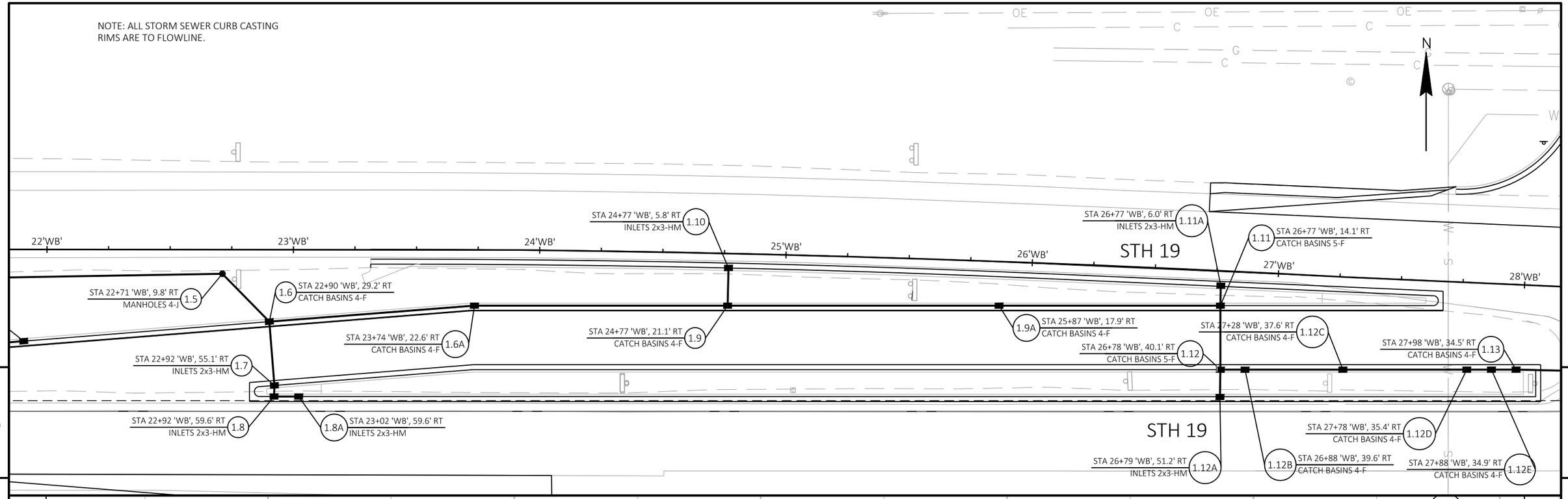


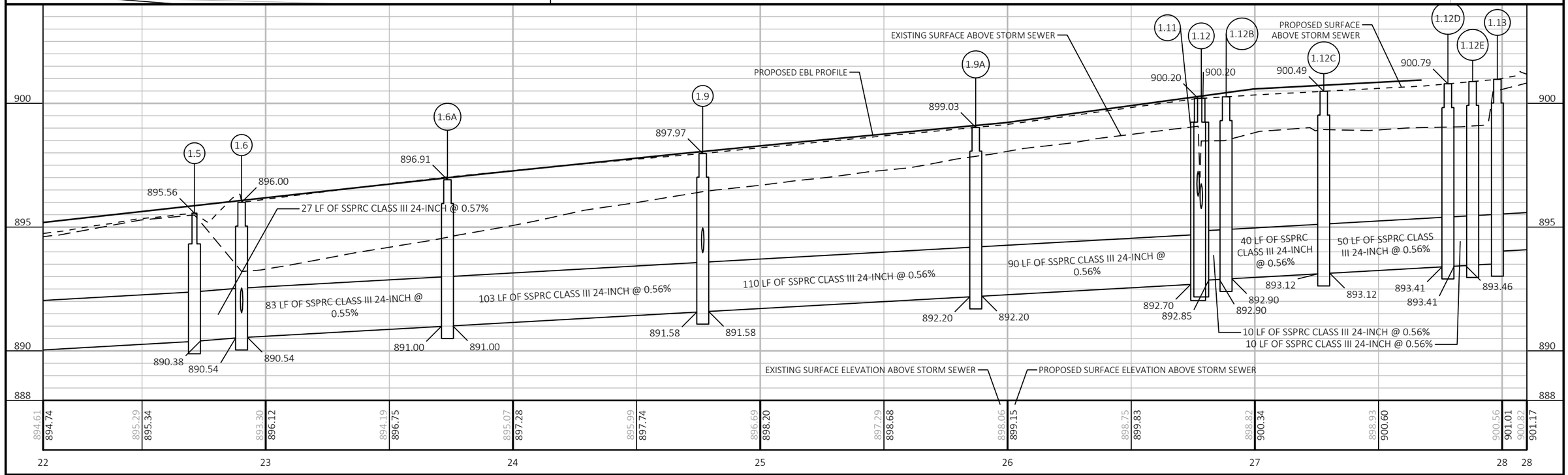


PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	PLAN AND PROFILE: STORM SEWER	SHEET 124	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\022501-SS.DWG
LAYOUT NAME - 02
PLOT DATE : 3/2/2022 7:37 AM
PLOT BY : BLAKE RIDENOUR
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

NOTE: ALL STORM SEWER CURB CASTING
RIMS ARE TO FLOWLINE.

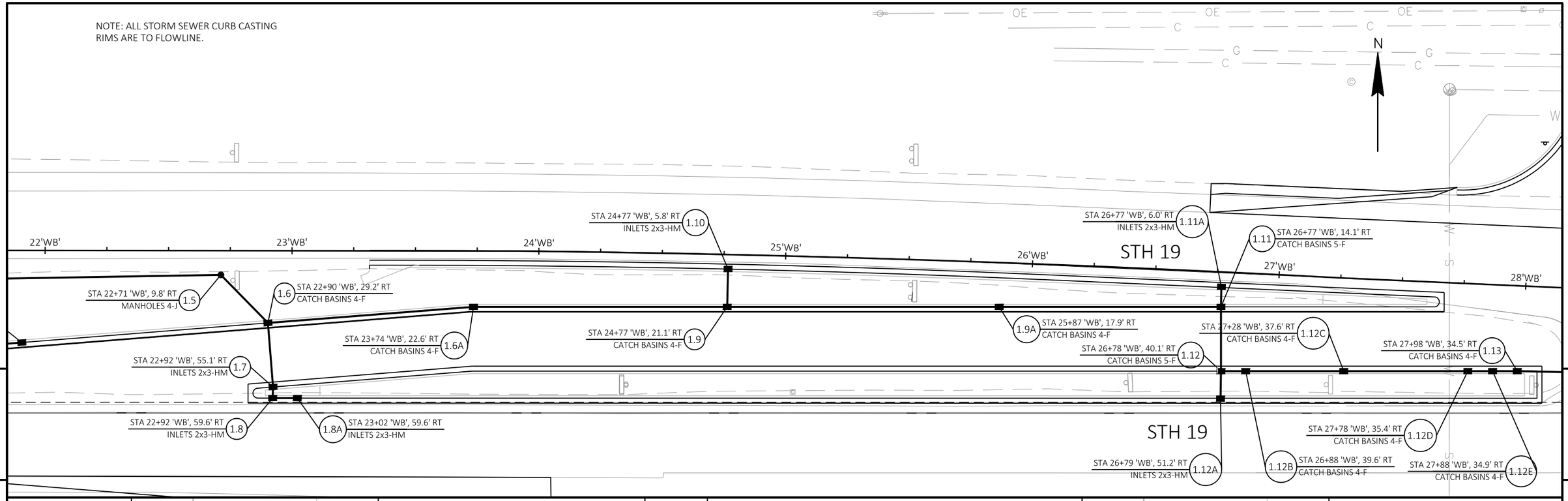


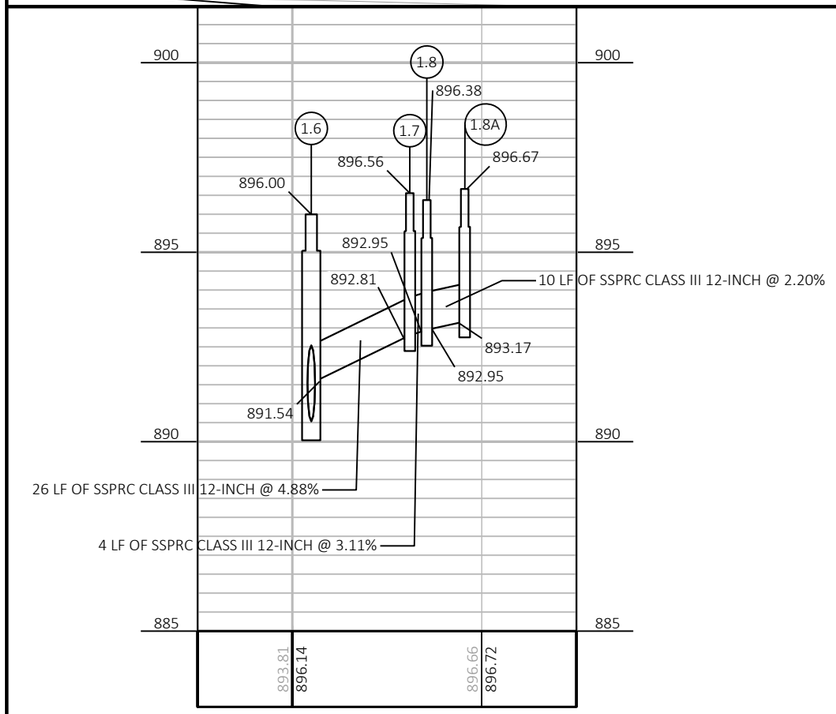


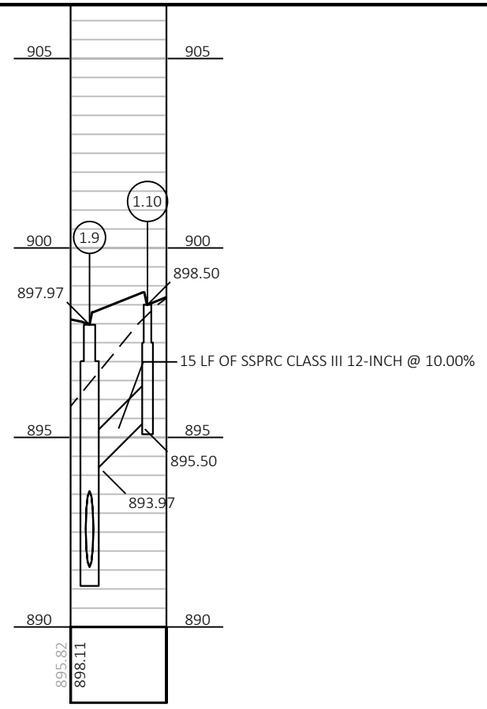
PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	PLAN AND PROFILE: STORM SEWER	SHEET 125	E

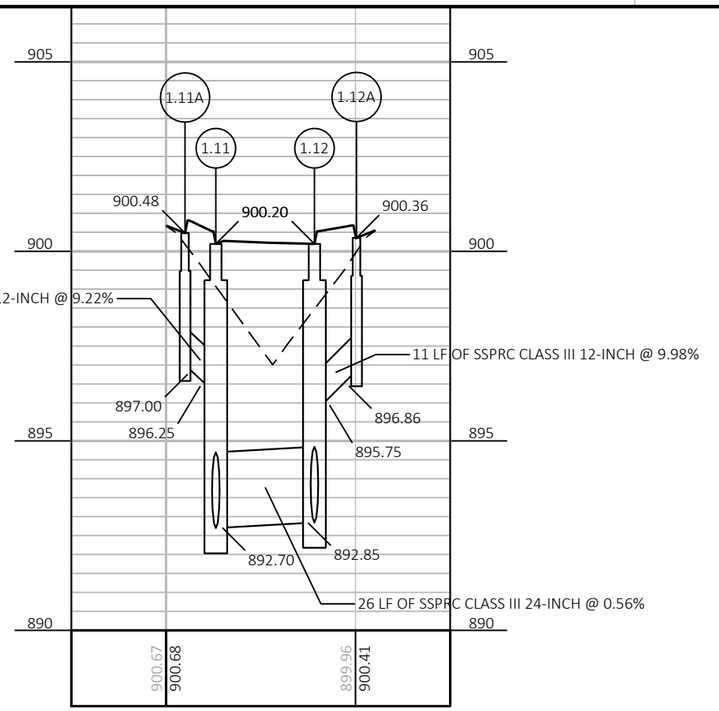
FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\022501-SS.DWG
LAYOUT NAME - 03
PLOT DATE : 3/2/2022 7:37 AM
PLOT BY : BLAKE RIDENOUR
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

NOTE: ALL STORM SEWER CURB CASTING
RIMS ARE TO FLOWLINE.









PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	PLAN AND PROFILE: STORM SEWER	SHEET 126	E

NOTE: ALL STORM SEWER CURB CASTING RIMS ARE TO FLOWLINE.

N

STH 19

STH 19

MATCH LINE 28+14.82

STA 26+77 'WB', 6.0' RT
INLETS 2x3-HM 1.11A

STA 26+77 'WB', 14.1' RT
CATCH BASINS 5-F 1.11

STA 25+87 'WB', 17.9' RT
CATCH BASINS 4-F 1.9A

STA 26+78 'WB', 40.1' RT
CATCH BASINS 5-F 1.12

STA 27+28 'WB', 37.6' RT
CATCH BASINS 4-F 1.12C

STA 27+98 'WB', 34.5' RT
CATCH BASINS 4-F 1.13

STA 27+78 'WB', 35.4' RT
CATCH BASINS 4-F 1.12D

STA 26+79 'WB', 51.2' RT
INLETS 2x3-HM 1.12A

1.12B STA 26+88 'WB', 39.6' RT
CATCH BASINS 4-F

STA 27+88 'WB', 34.9' RT
CATCH BASINS 4-F 1.12E

STA 29+50 'WB', 6.0' RT
INLETS 2x3-HM 1.16

STA 30+50 'WB', 6.0' RT
INLETS 2x3-HM 1.15

STA 31+64 'WB', 23.7' RT
INLETS 2.5x3-F 1.20A

STA 32+00 'WB', 22.2' RT
INLETS 2.5x3-F 1.20

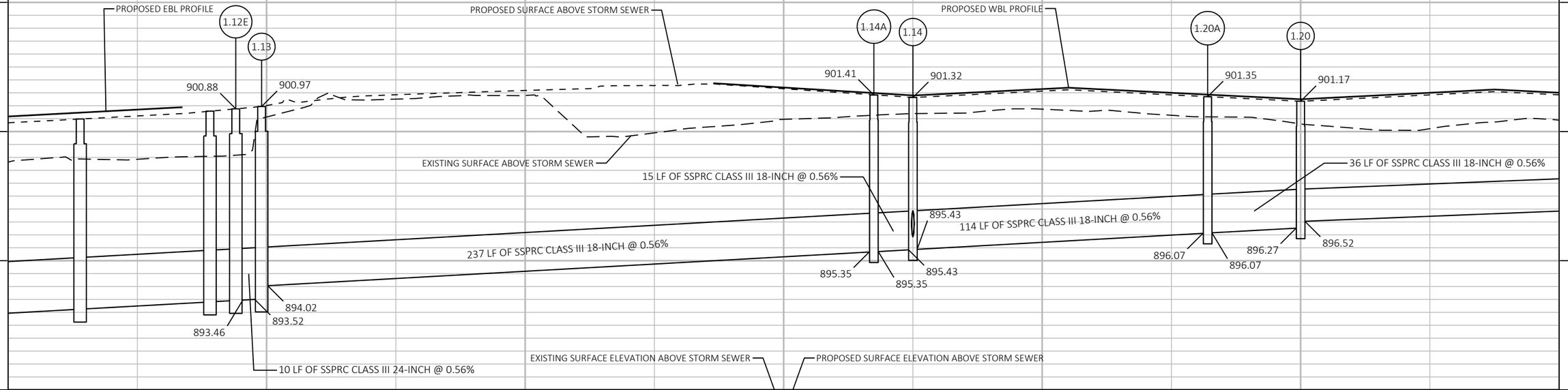
STA 30+50 'WB', 28.3' RT
INLETS 2.5x3-F 1.14

STA 31+50 'WB', 30.2' RT
INLETS 2x3-HM 1.19

STA 30+00 'WB', 36.4' RT
INLETS 2x3-HM 1.18

1.17 STA 30+50 'WB', 34.3' RT
INLETS 2x3-HM

STA 30+35 'WB', 28.9' RT
INLETS 2.5x3-F 1.14A



EXISTING SURFACE ELEVATION ABOVE STORM SEWER
PROPOSED SURFACE ELEVATION ABOVE STORM SEWER

898.82	900.34	898.93	900.60	900.56	901.01	901.25	901.42	901.40	901.59	899.95	901.78	900.47	901.66	900.69	901.32	900.87	901.57	900.63	901.42	900.29	901.17	900.11	901.42	900.44	901.42

27 28 29 30 31 32 33

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	PLAN AND PROFILE: STORM SEWER	SHEET 127 E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\022501-SS.DWG
LAYOUT NAME - 05
PLOT DATE : 3/2/2022 7:38 AM
PLOT BY : BLAKE RIDENOUR
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

NOTE: ALL STORM SEWER CURB CASTING RIMS ARE TO FLOWLINE.

N

STA 29+50 'WB', 6.0' RT
INLETS 2x3-HM
1.16

STA 30+50 'WB', 6.0' RT
INLETS 2x3-HM
1.15

STA 31+64 'WB', 23.7' RT
INLETS 2.5x3-F
1.20A

STA 32+00 'WB', 22.2' RT
INLETS 2.5x3-F
1.20

STA 33+50 'WB', 16.1' RT
INLETS 2.5x3-F
1.21

STH 19

29'WB'
30'WB'
31'WB'
32'WB'
33'WB'
34'WB'
35'W

STA 30+50 'WB', 28.3' RT
INLETS 2.5x3-F
1.14

STA 31+50 'WB', 30.2' RT
INLETS 2x3-HM
1.19

STA 33+30 'WB', 16.9' RT
INLETS 2.5x3-F
1.21A

STA 30+00 'WB', 36.4' RT
INLETS 2x3-HM
1.18

1.17
STA 30+50 'WB', 34.3' RT
INLETS 2x3-HM

STA 30+35 'WB', 28.9' RT
INLETS 2.5x3-F
1.14A

STA 32+50 'WB', 26.2' RT
INLETS 2x3-HM
1.23

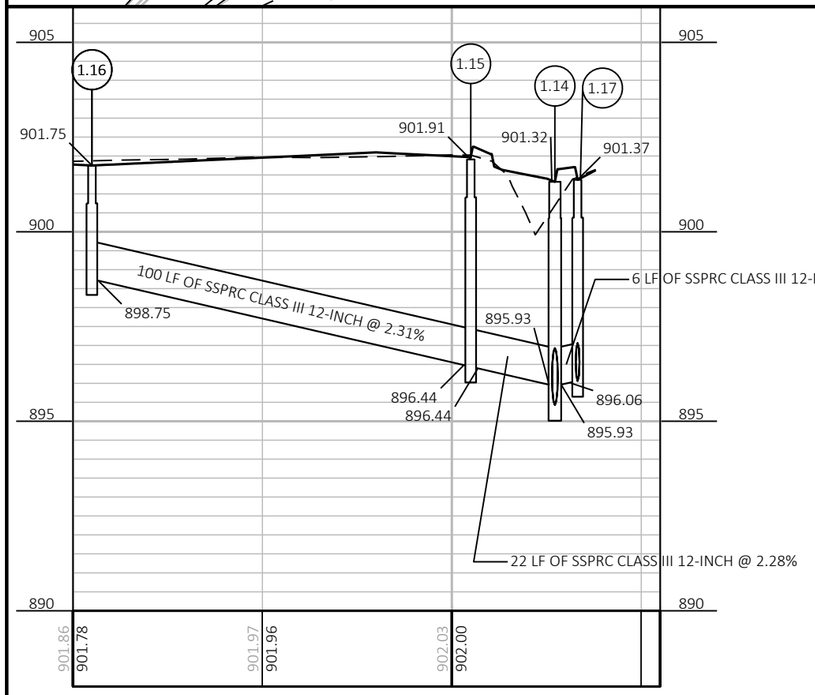
STA 33+50 'WB', 22.1' RT
INLETS 2x3-HM
1.22

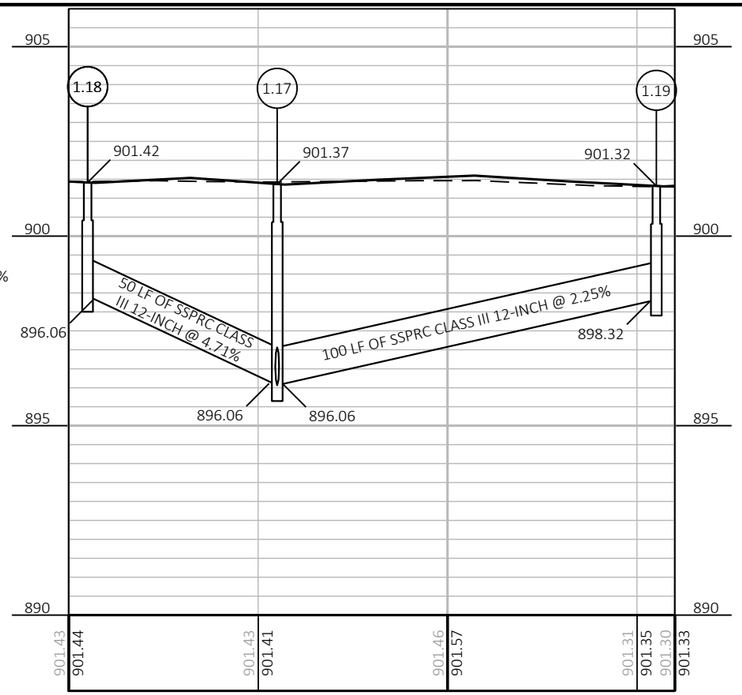
STH 19

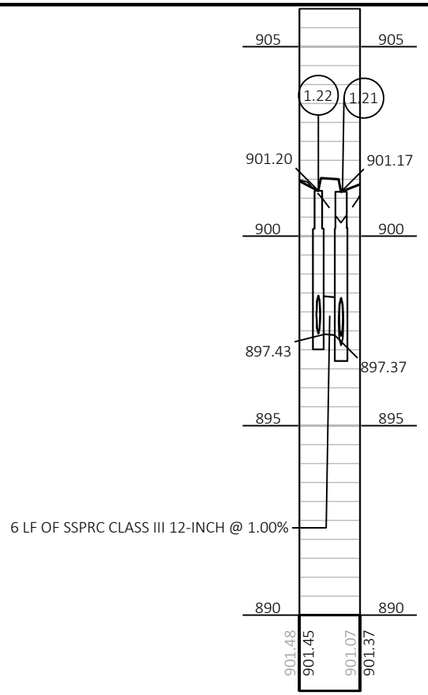
STA 34+50 'WB', 18.0' RT
INLETS 2x3-HM
1.24

5

5







PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	PLAN AND PROFILE: STORM SEWER	SHEET 128	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\022501-SS.DWG
LAYOUT NAME - 06

PLOT DATE : 3/2/2022 7:38 AM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:40 FT

NOTE: ALL STORM SEWER CURB CASTING RIMS ARE TO FLOWLINE.

N

STA 32+00 'WB', 22.2' RT
INLETS 2.5x3-F
1.20

STA 33+50 'WB', 16.1' RT
INLETS 2.5x3-F
1.21

STH 19

32'WB'
33'WB'
34'WB'
35'WB'
36'WB'
37'WB'

STA 33+30 'WB', 16.9' RT
INLETS 2.5x3-F
1.21A

1.25
STA 35+08 'WB', 11.0' RT
INLETS MEDIAN 1G-MS
NO SLOPE ON GRADE

STA 32+50 'WB', 26.2' RT
INLETS 2x3-HM
1.23

STA 33+50 'WB', 22.1' RT
INLETS 2x3-HM
1.22

STH 19

STA 34+50 'WB', 18.0' RT
INLETS 2x3-HM
1.24

5

5

PROPOSED WBL PROFILE

PROPOSED SURFACE ABOVE STORM SEWER

EXISTING SURFACE ABOVE STORM SEWER

20 LF OF SSPRC CLASS III 15-INCH @ 0.40%

130 LF OF SSPRC CLASS III 15-INCH @ 0.40%

158 LF OF SSPRC CLASS III 12-INCH @ 0.40%

100 LF OF SSPRC CLASS III 12-INCH @ 0.84%

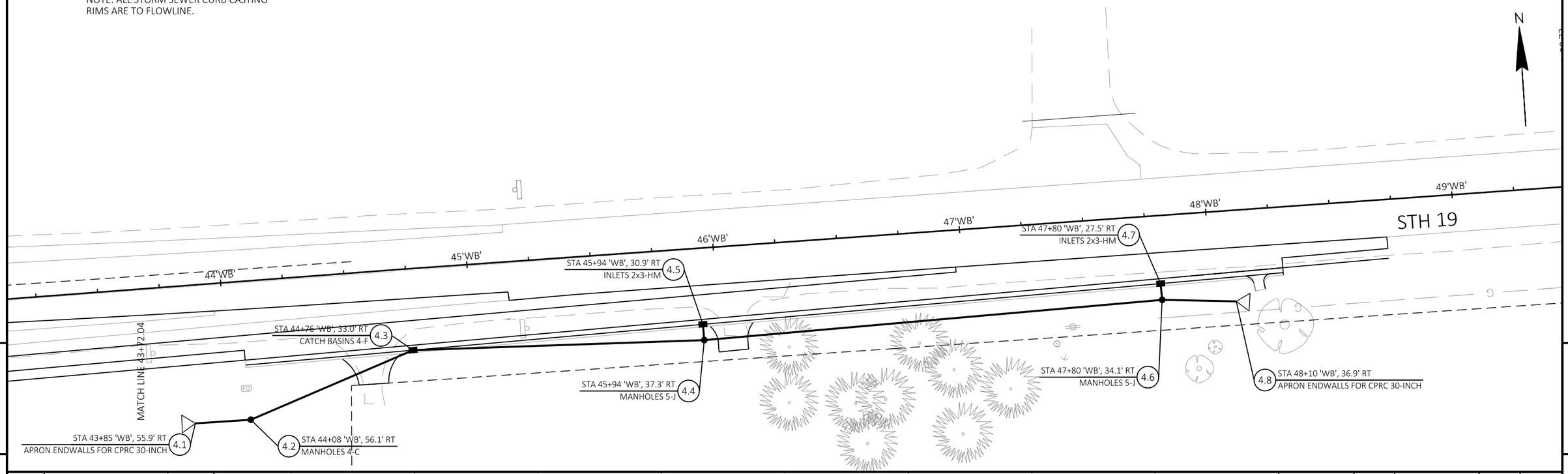
100 LF OF SSPRC CLASS III 12-INCH @ 0.99%

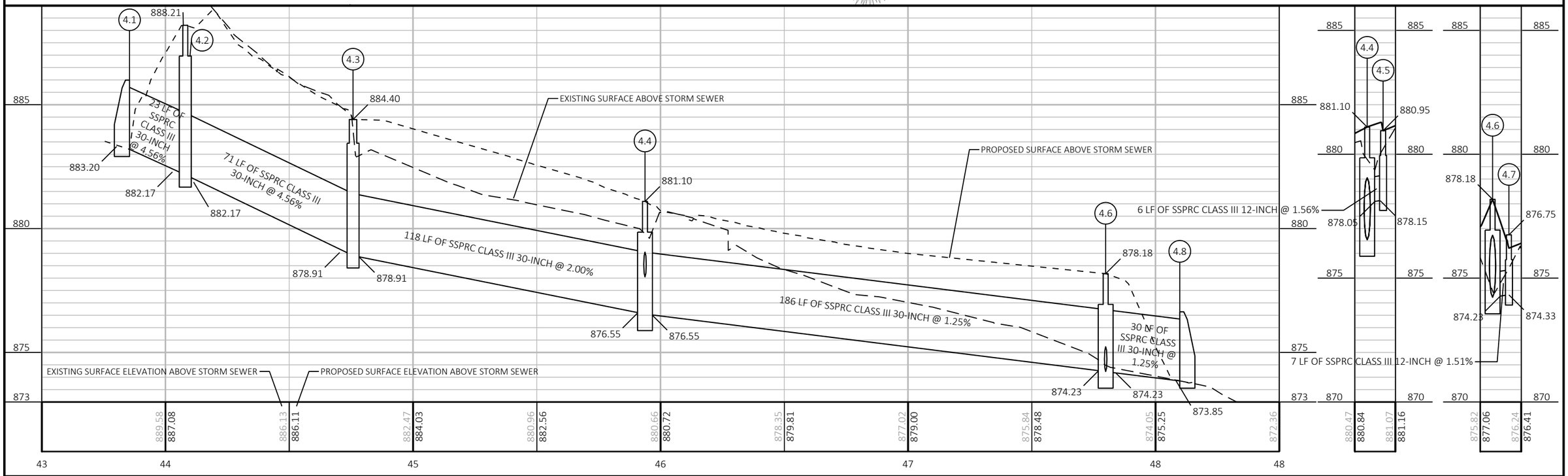
EXISTING SURFACE ELEVATION ABOVE STORM SEWER

PROPOSED SURFACE ELEVATION ABOVE STORM SEWER

| | | |

NOTE: ALL STORM SEWER CURB CASTING
RIMS ARE TO FLOWLINE.





PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	PLAN AND PROFILE: STORM SEWER	SHEET 130	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\022501-SS.DWG
LAYOUT NAME - 09
PLOT DATE : 3/2/2022 7:39 AM
PLOT BY : BLAKE RIDENOUR
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

NOTE: ALL STORM SEWER CURB CASTING
RIMS ARE TO FLOWLINE.

N

STA 27+78 'WB', 3
CATCH BAS

STA 27+88 'WB', 34.9' RT
CATCH BASINS 4-F

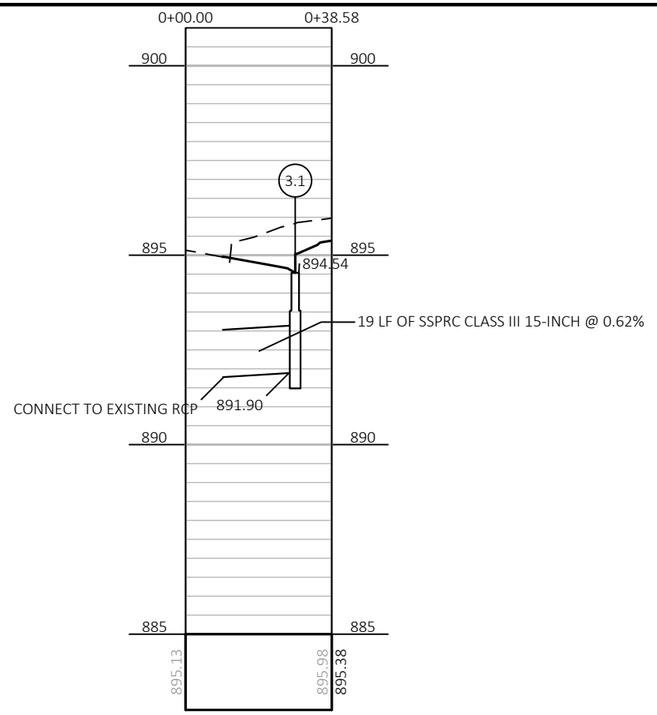
WILLIAMSBURG WAY

96'WL' 97'WL' 98'WL' 99'WL' 100'WL'

STA 97+95 'WL', 46.6' RT
INLETS 2x3-H
REMOVE EXISTING INLET
CONNECT TO EX RCP
3.1

5

5



PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	PLAN AND PROFILE: STORM SEWER	SHEET 131	E

STANDARD DETAIL DRAWING LIST

08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-19B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A05-19C	INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S
08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08A08-02	CATCH BASINS 3-FT, 4-FT, 5-FT, AND 6-FT DIAMETER
08A09-02	CATCH BASINS 2x3-FT AND 2.5x3-FT
08B09-02	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08C07-02	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08C08-02	INLETS MEDIAN 1 AND 2 GRATE
08D01-22A	CONCRETE CURB & GUTTER
08D01-22B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D05-20A	CURB RAMPS TYPE 1 AND 1-A
08D05-20B	CURB RAMPS TYPE 2 AND 3
08D05-20E	CURB RAMPS TYPE 5, 6, 7A, 7B & 8
08D05-20F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-20G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPES A, B, C AND D
08E14-01	TRACKING PAD
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
08F06-04	REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN
09A01-13B	AT-GRADE SIDE ROAD INTERSECTION, TYPE "A1" & "A2"
09B02-10	CONDUIT
09B04-11	PULL BOX
09B16-01	PULL BOX NON-CONDUCTIVE
09C02-09	CONCRETE BASES TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C06-07	CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL
09C11-10	CONCRETE BASE TYPE 10
09C12-09B	CONCRETE BASE TYPE 13
09C14-03	CONCRETE CONTROL CABINET BASE, TYPE L
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09D02-03	SIGNAL CONTROL CABINET
09D04-03	LIGHTING CONTROL CABINET 120/240 VOLT
09E01-15C	POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 4
09E01-15E	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 6 (35 FEET)
09E01-15G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E03-06	NON-FREEWAY LIGHTING UNIT POLE WIRING
09E05-06	TRAFFIC SIGNAL STANDARD ORNAMENTAL BRACKET MOUNTINGS TYPICAL FOR 13 FT. OR 15 FT.
09E08-09A	TYPE 9 POLE 15'-30' MONOTUBE ARM
09E08-09I	TYPE 12 POLE 35'-55' MONOTUBE ARM
09E08-09J	TYPE 13 POLE 35'-55' MONOTBE ARM
09E08-09K	GENERAL NOTES AND HARDWARE FOR TYPES 9, 10, 9/10 SPECIAL, 12 AND 13 POLES WITH MONOTUBE ARMS
09F12-04	LOOP DETECTOR INSTALLED IN EXISTING CONCRETE PAVEMENT
09F15-04B	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)
11B02-02	CONCRETE MEDIAN NOSE
13A05-05A	SHOULDER RUMBLE STRIP, MILLING
13A10-02A	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-02C	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13C01-19	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C11-12A	RURAL DOWELED CONCRETE PAVEMENT
13C11-12B	RURAL DOWELED CONCRETE PAVEMENT
13C13-09	URBAN DOWELED CONCRETE PAVEMENT
13C16-02A	DETAIL FOR RIGHT TURN LANE/TEE INTERSECTION BYPASS LANE ON A CONCRETE ROADWAY
13C18-07A	CONCRETE PAVEMENT JOINTING
13C18-07B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-07C	CONCRETE PAVEMENT JOINT TYPES
13C18-07D	CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES
13C18-07E	CONCRETE PAVEMENT JOINTING AND STEEL REINFORCEMENT IN ROUNDABOUTS
13C18-07F	CONCRETE PAVEMENT INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER
14B29-01	SAFETY EDGE
15C02-08F	ADVANCED WIDTH RESTRICTION SIGNING
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C05-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C07-15B	PAVEMENT MARKING WORDS
15C07-15C	PAVEMENT MARKING ARROWS
15C08-20A	LONGITUDINAL MARKING (MAINLINE)
15C08-20C	PAVEMENT MARKING (TURN LANES)
15C11-09B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C18-05A	MEDIAN ISLAND PAVEMENT MARKINGS
15C18-05B	PAVEMENT MARKINGS, MEDIAN ISLAND NOSE
15C18-05C	MEDIAN PAVEMENT MARKINGS, DOUBLE ARROW WARNING SIGN PLACEMENT
15C19-06A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C19-06C	MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY
15C21-10	SIGNING AND MARKING TWO LANE TO FOUR LANE DIVIDED TRANSITIONS
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D12-09A	TRAFFIC CONTROL, LANE CLOSURE
15D20-05A	TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY
15D21-07A	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE RIGHT LANE CLOSURE
15D21-07B	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LEFT LANE CLOSURE
15D27-03	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH
15D28-04	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D29-06	TRAFFIC CONTROL, VEHICLE ENTRANCE/EXIT OR HAUL ROAD
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING
15D40-02A	TRAFFIC CONTROL, FULL LANE SHIFT, NON-FREEWAY/EXPRESSWAY OR MULTILANE DIVIDED 45 MPH AND UNDER
15D40-02B	TRAFFIC CONTROL, FULL LANE SHIFT, MULTI-LANE DIVIDED 50 MPH AND OVER
15D40-02C	TRAFFIC CONTROL, PARTIAL LANE SHIFT, NON-FREEWAY/EXPRESSWAY OR MULTI-LANE DIVIDED 45 MPH AND UNDER
15D40-02D	TRAFFIC CONTROL, PARTIAL LANE SHIFT, MULTI-LANE DIVIDED 50 MPH AND GREATER
15D46-01	TRAFFIC CONTROL, ONE-WAY SIGNING
15D50-02A	TRAFFIC CONTROL, ADDED LANE CLOSURE WITHOUT LANE SHIFT
15D50-02B	TRAFFIC CONTROL, ADDED LANE CLOSURE WITH LANE SHIFT

6

6

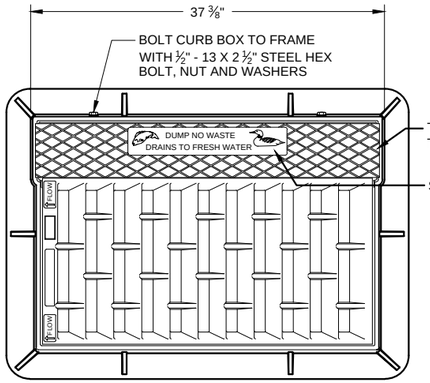
PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	STANDARD DETAIL DRAWING LIST	SHEET 132	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\060101-DL.DWG
LAYOUT NAME - 060101

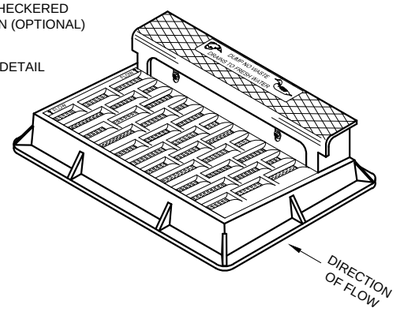
PLOT DATE : 4/7/2022 12:11 PM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET

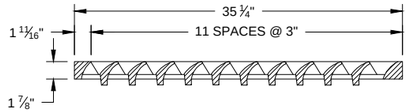
SDD 8a5-a Inlet Covers Type A, H, A-S, H-S and Z

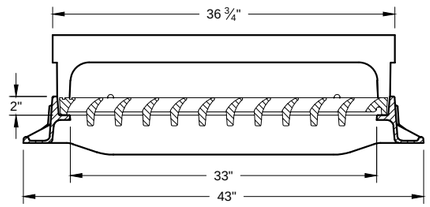


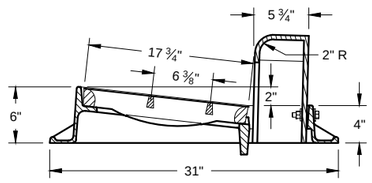
NOTE: EITHER CASTING IS ACCEPTABLE

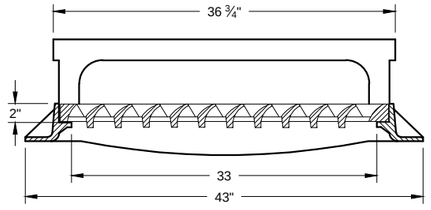


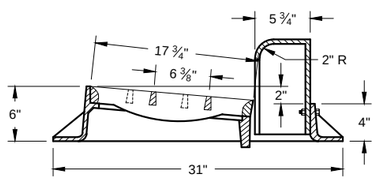
NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"







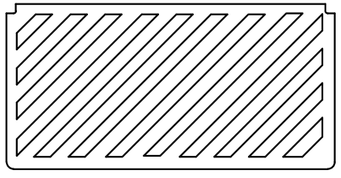




TYPE "H"

NOTE: EITHER CASTING IS ACCEPTABLE

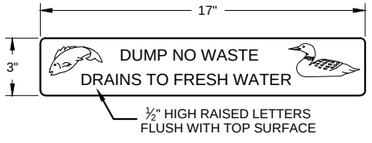
1 ⅛" DIAGONAL BARS WITH 1 ⅝" OPENINGS



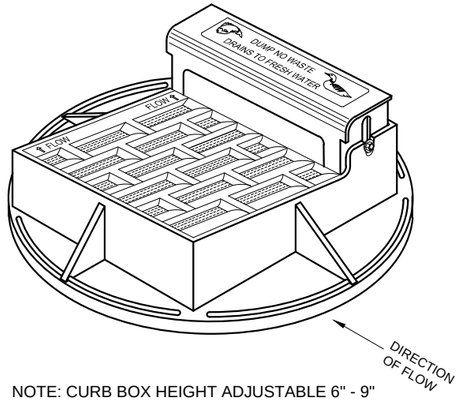
SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 35" X 17 ¾" X 2")

(NOTED AS TYPE H-S ON DRAINAGE TABLE)

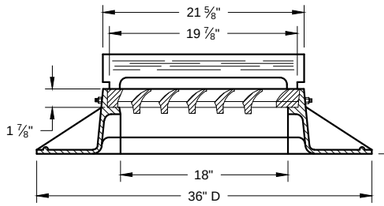


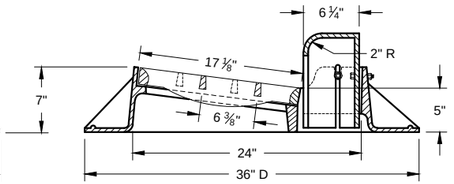
LOGO DETAIL



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"

NOTE: EITHER CASTING IS ACCEPTABLE





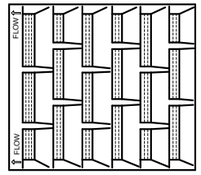
TYPE "A"

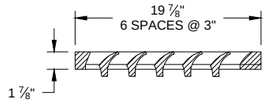
GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

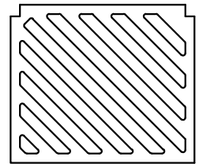
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.





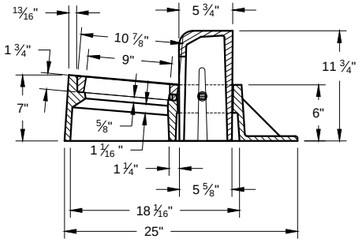
1" DIAGONAL BARS WITH 1 ½" OPENINGS

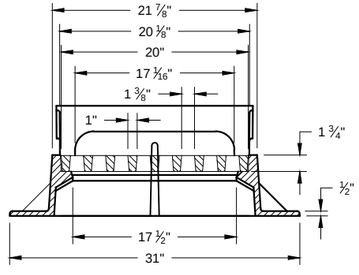


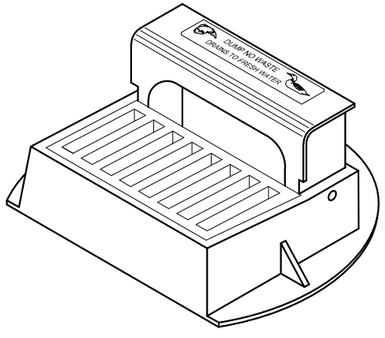
SPECIAL GRATE FOR TYPE "A" COVER

(MEASURES 19 ¾" X 17" X 1 ⅞")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)







TYPE "Z"

INLET COVERS
TYPE A, H, A-S, H-S & Z

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

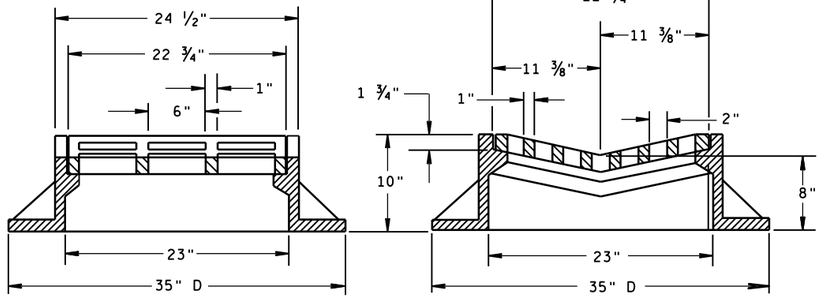
APPROVED
11-27-13 — DATE
/S/ Jerry H. Zogg — APPROVING ENGINEER
FHWA

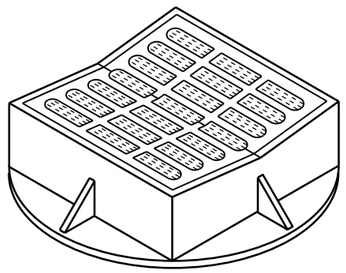
SDD 08A05-19a

SDD 08A05-19a

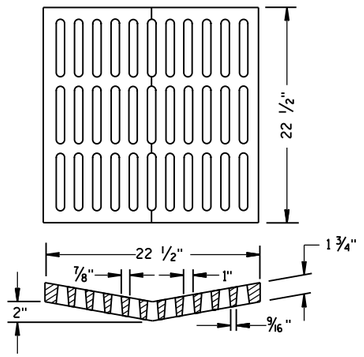
6

6



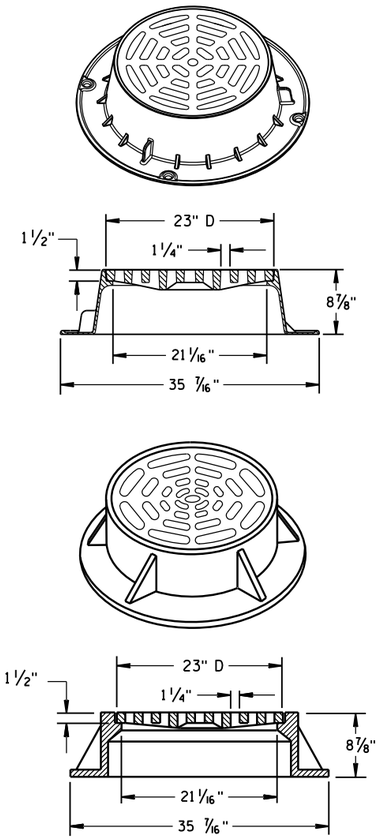


TYPE "B"



ALTERNATIVE GRATE FOR TYPE "B" COVER

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE.
NOTED AS TYPE B-A ON THE DRAINAGE TABLE



TYPE "C"

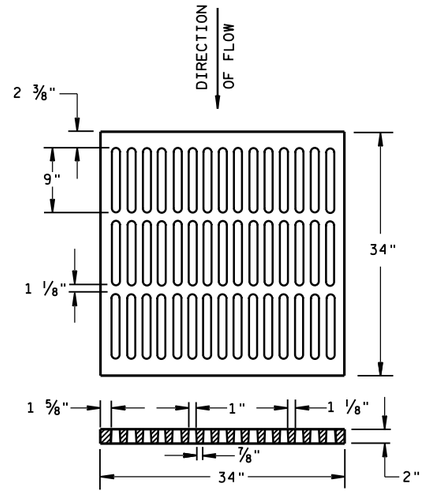
NOTE: EITHER CASTING IS ACCEPTABLE

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

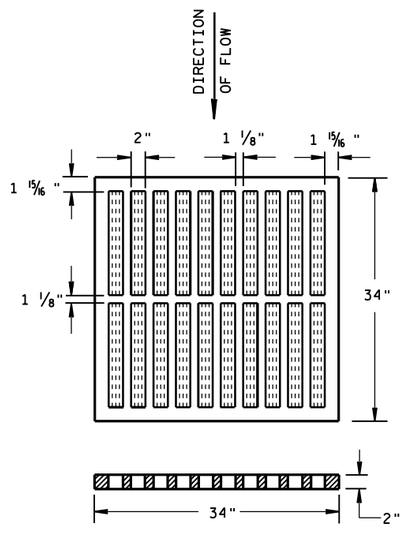
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.



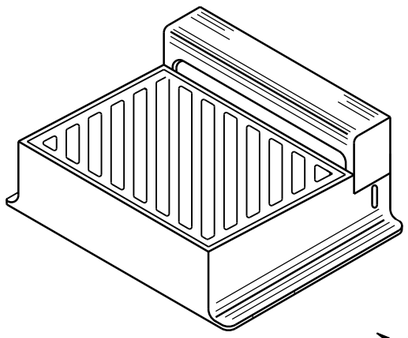
ALTERNATIVE TYPE "MS"

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED
NOTED AS TYPE MS-A ON THE DRAINAGE TABLE



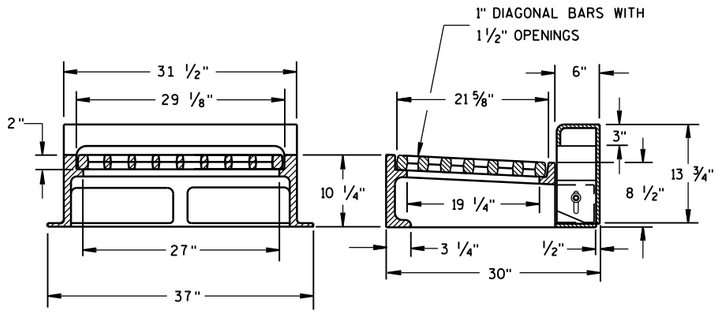
TYPE "MS"

USE ON FREEWAYS AND EXPRESSWAYS
NOTED AS TYPE MS ON DRAINAGE TABLE



DIRECTION OF FLOW

DIAGONAL SLOTS, SHALL BE ORIENTED TO THE DIRECTION OF FLOW AS ILLUSTRATED. GRATES ARE MANUFACTURED TO BE REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"

INLET COVERS
TYPE B, B-A, C,
MS, MS-A, & WM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

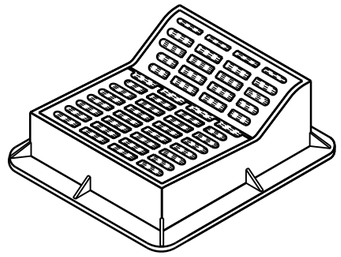
APPROVED
11/27/2013
DATE

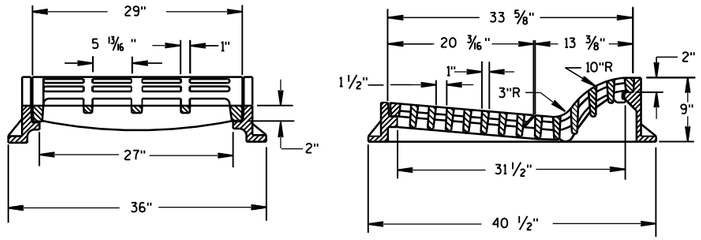
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

6

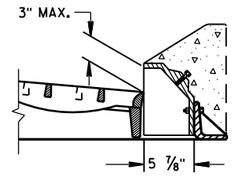
S.D.D. 8 A 5-19b





TYPE "F"

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.



ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

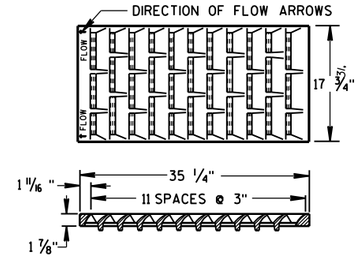
USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH
NOTED AS TYPE HM-GJ ON DRAINAGE TABLE

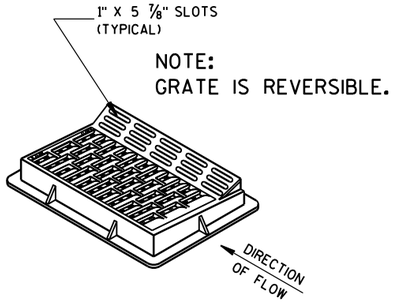
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

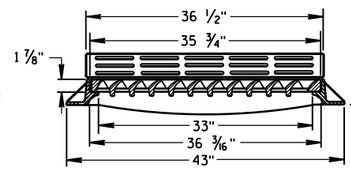
GENERAL NOTES

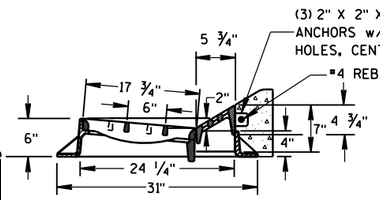
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.





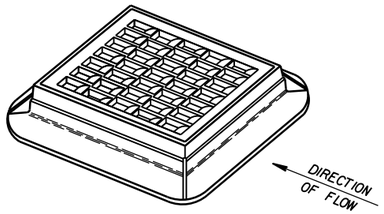


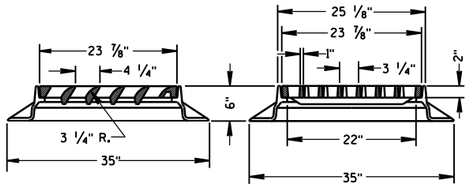


TYPE "HM"

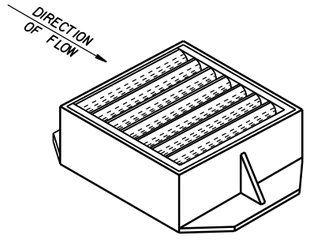
USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

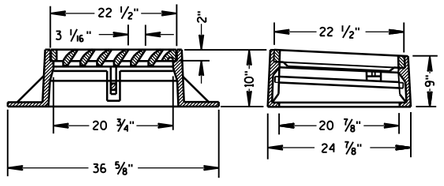
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM" COVER
NOTED AS TYPE HM-S ON DRAINAGE TABLE



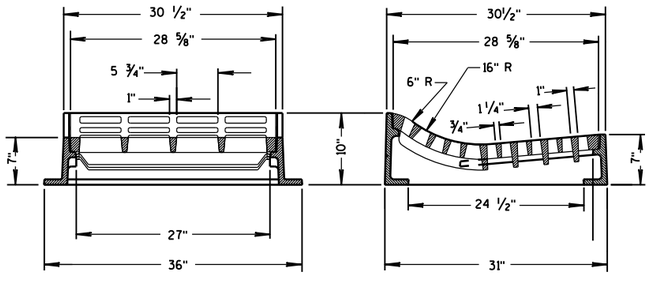


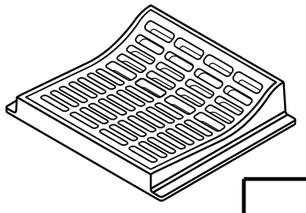
TYPE "S"





TYPE "V"





TYPE "T"

USE WITH TYPES R & T CONCRETE CURB & GUTTER, 36 INCH.

INLET COVERS
TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S

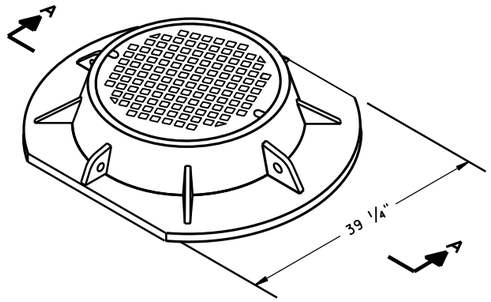
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

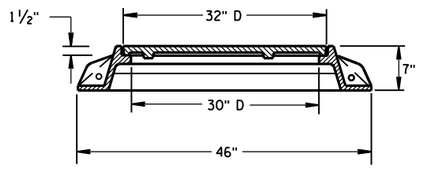
APPROVED
11/27/2013
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

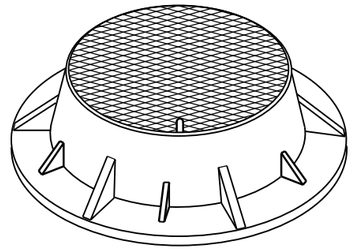
FHWA

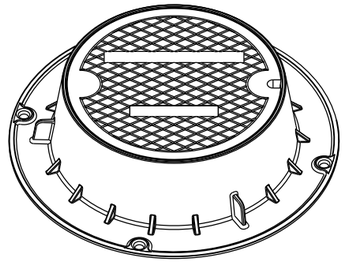
SDD 8a5-d Inlet Covers Type BW; Manhole Covers Type J, J-S, K, L and M

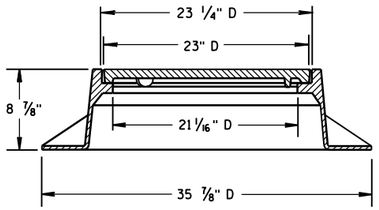


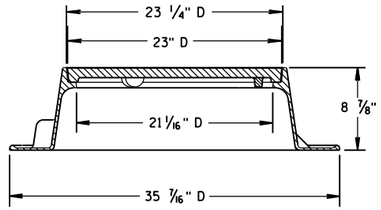


SECTION A-A
TYPE "K"









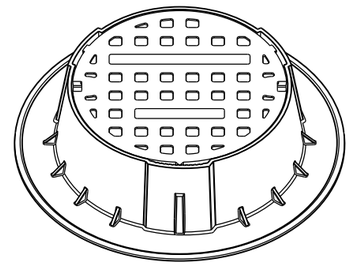
TYPE "J"
NOTE: EITHER CASTING IS ACCEPTABLE

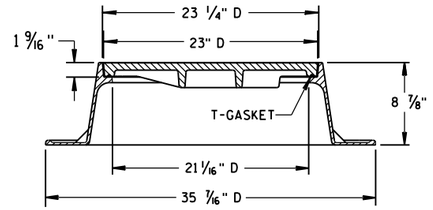
GENERAL NOTES

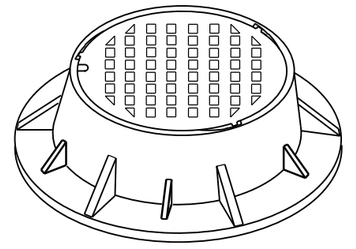
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

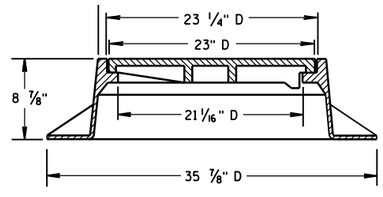
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

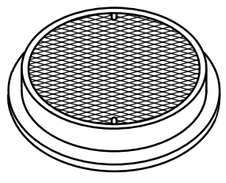


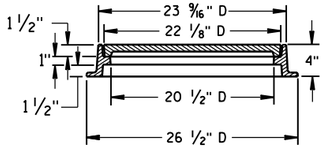




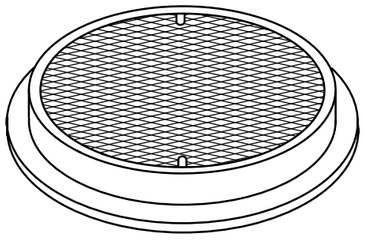


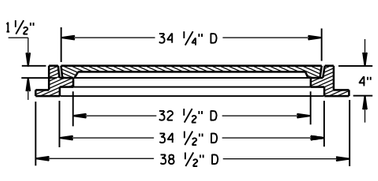
TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)
NOTE: EITHER CASTING IS ACCEPTABLE



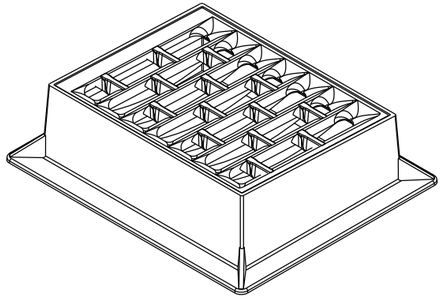


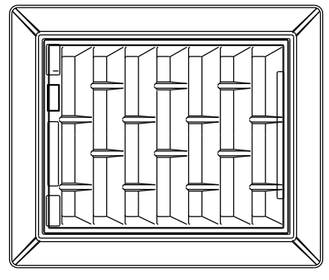
TYPE "L"

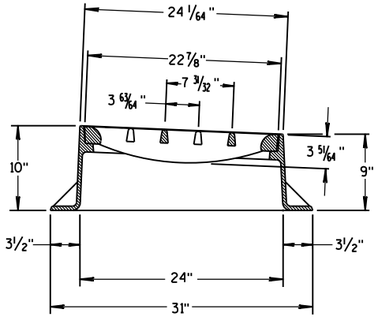


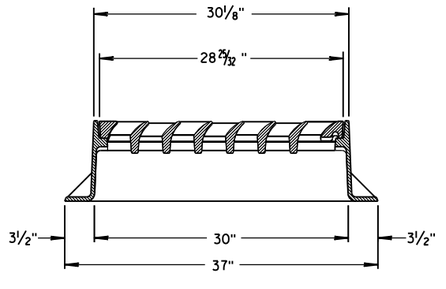


TYPE "M"









INLET COVER TYPE "BW"

INLET COVER TYPE BW
MANHOLE COVERS, TYPE K, J, J-S, L & M

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE
FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

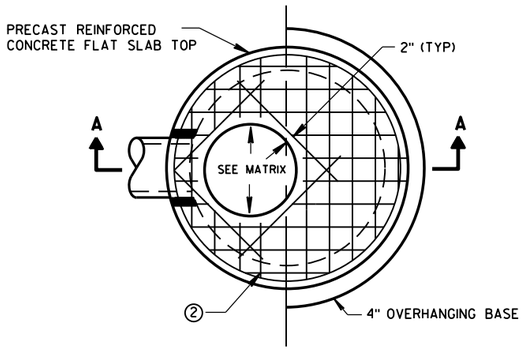
6

S.D.D. 8 A 5-19d

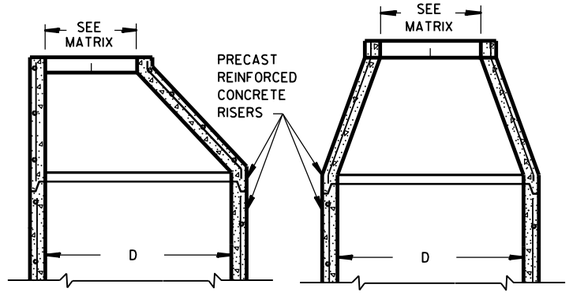
6

S.D.D. 8 A 5-19d

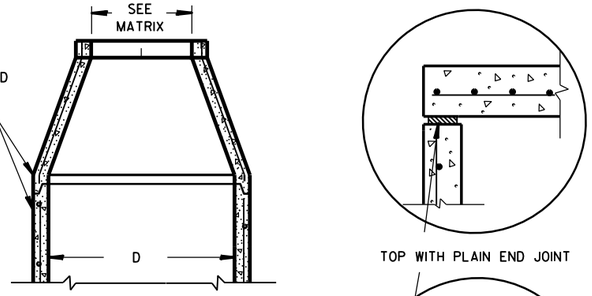
SDD 8a8 Catch Basins 3-FT, 4-FT, 5-FT and 6-FT Diameter



PLAN VIEW CIRCULAR OPENING

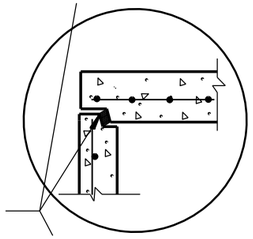


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

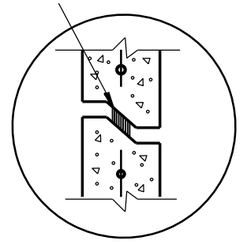


OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

TOP WITH PLAIN END JOINT

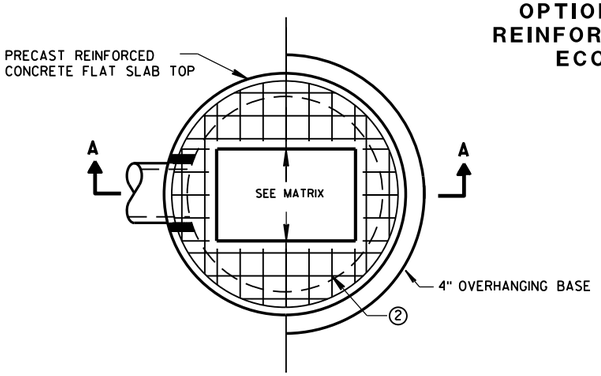


TOP WITH TONGUE AND GROOVE JOINT

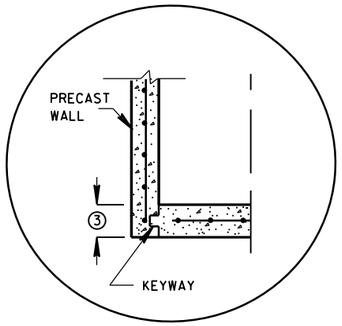


RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

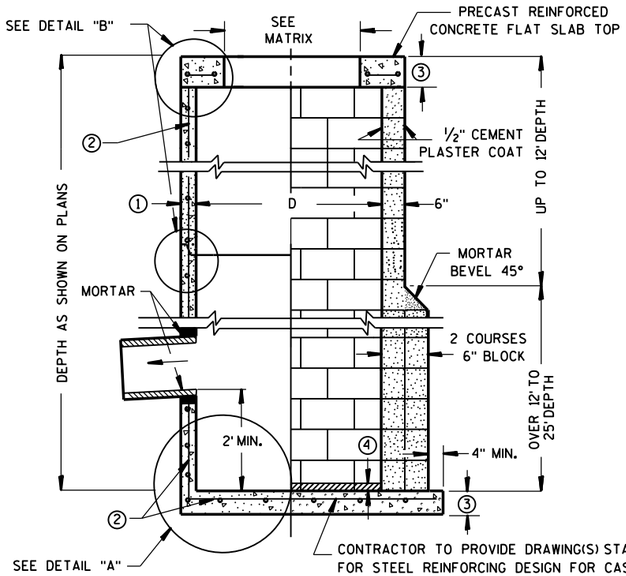


PLAN VIEW RECTANGULAR OPENING



PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)

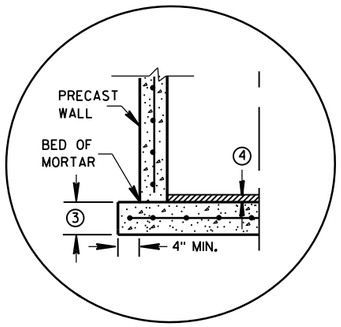


CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES

SECTION A-A

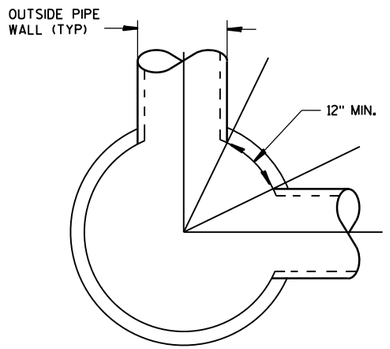
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST CATCH BASIN UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONCRETE CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½ INCH AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

CONCRETE BLOCK WILL NOT BE PERMITED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT AND 7 INCHES FOR 6-FT DIAMETER PRECAST CATCH BASINS.

② FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

④ 1" CONCRETE KEY POURED AFTER INSTALLATION. 2' SUMP MEASURED FROM TOP OF KEY.

CATCH BASIN COVER OPENING MATRIX

CATCH BASIN SIZE	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
	OPENING SIZE (FT)											
3-FT	2X2	X	X					X		X		
	2 DIA.				X							X
4-FT-6-FT	2X2	X	X					X		X		
	2X2.5			X				X	X	X	X	
	2 DIA.				X							X
	2X3						X					
	2.5X3					X						

PIPE MATRIX

CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	30

CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
FHWA

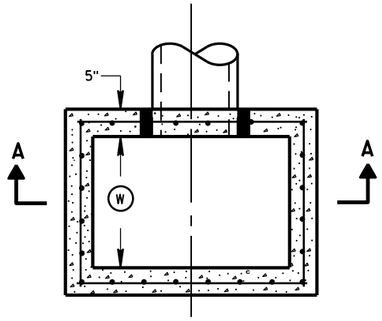
CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER

6

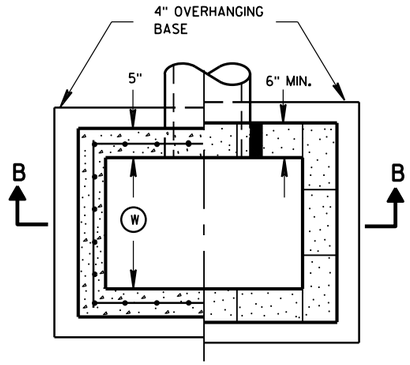
S.D.D. 8 A 8-2

6

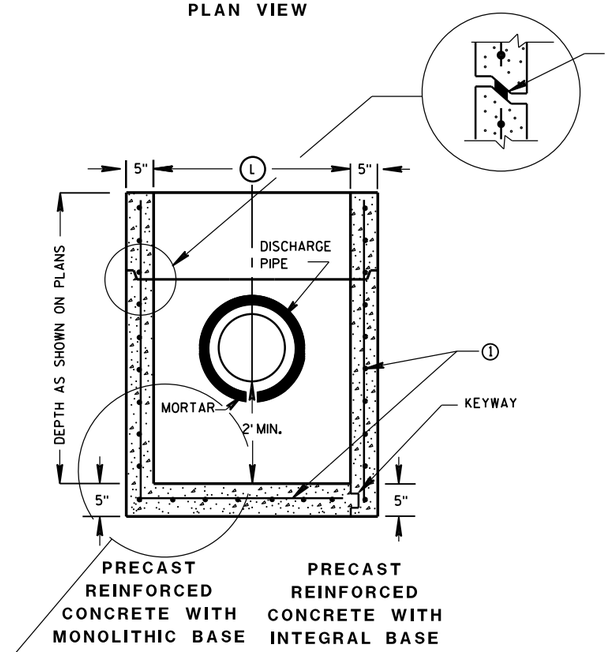
S.D.D. 8 A 8-2



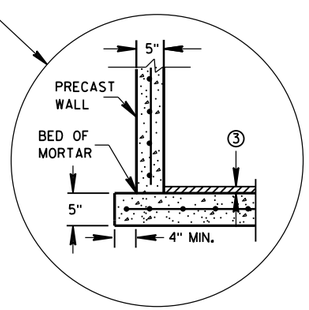
PLAN VIEW



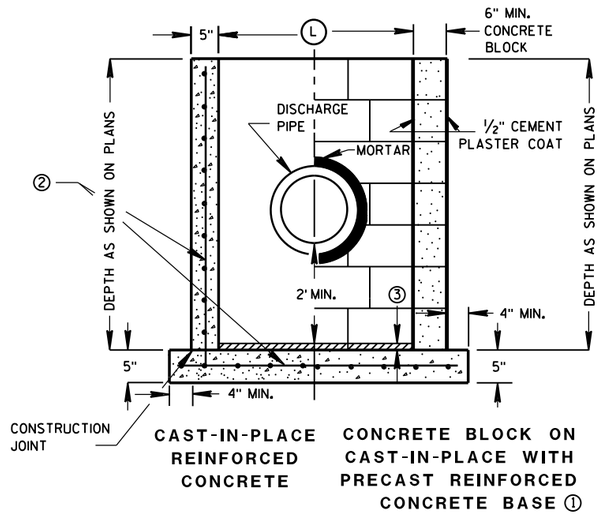
PLAN VIEW



SECTION A-A



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION



SECTION B-B

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST CATCH BASIN UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL PRECAST CATCH BASIN UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATES THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND CONCRETE BLOCK INSTALLATIONS.
4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED.
OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

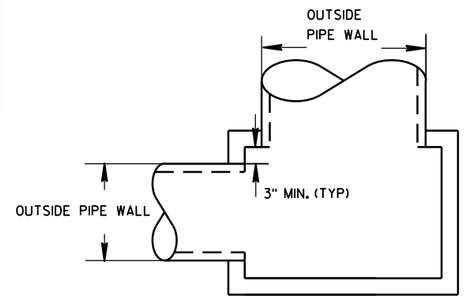
③ 1" CONCRETE KEY POURED AFTER INSTALLATION. 2' SUMP MEASURED FROM TOP OF KEY.

CATCH BASIN COVER MATRIX

CATCH BASIN SIZE		INLET COVER TYPE	F	ALL H'S
	WIDTH (W) (FT)	LENGTH (L) (FT)		
2X3-FT	2	3		X
2.5X3-FT	2.5	3	X	

PIPE MATRIX

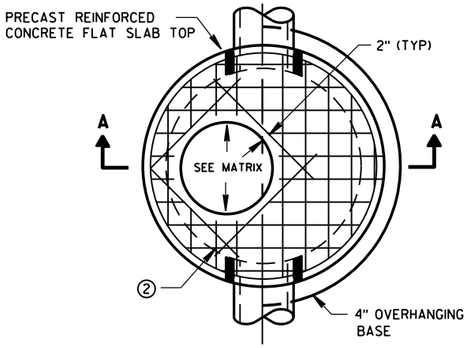
CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	WIDTH (IN)	LENGTH (IN)
2X3-FT	12	24
2.5X3-FT	18	24



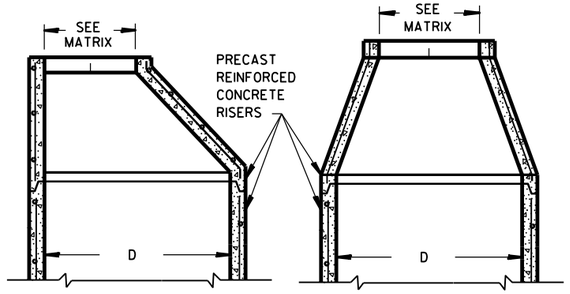
DETAIL "A"

CATCH BASINS 2X3-FT AND 2.5X3-FT

CATCH BASINS 2X3-FT AND 2.5X3-FT	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED Sept., 2016 DATE FHWA	/S/ Rodney Taylor ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

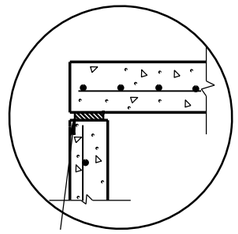


PLAN VIEW CIRCULAR OPENING

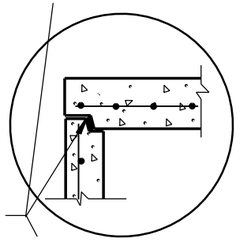


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

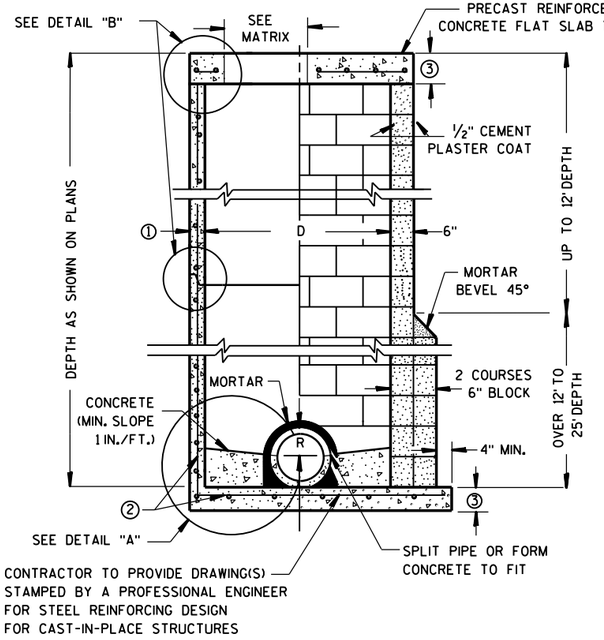
OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP



TOP WITH PLAIN END JOINT

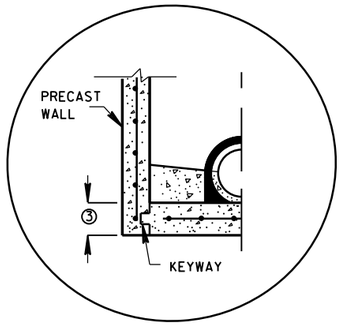


TOP WITH TONGUE AND GROOVE JOINT

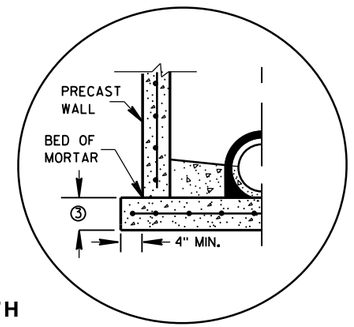


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

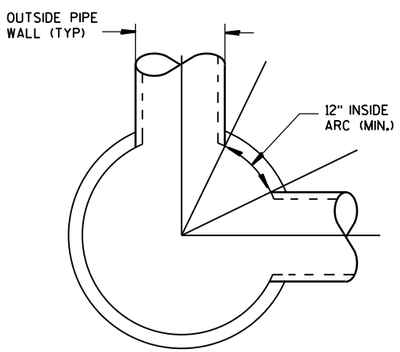


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

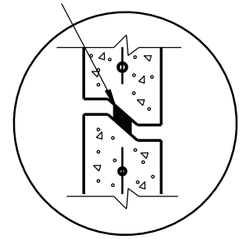


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST MANHOLE UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½" AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

CONCRETE BLOCK WILL NOT BE PERMITED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT, 7 INCHES FOR 6-FT, 8 INCHES FOR 7-FT AND 9 INCHES FOR 8-FT DIAMETER PRECAST MANHOLES.

② FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

MANHOLE COVER OPENING MATRIX

MANHOLE COVER TYPE	C	ALL J'S	K	L	M
OPENING SIZE (FT)					
2 DIA.	X	X		X	
3 DIA.			X		X

PIPE MATRIX

MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	36
7-FT	48	36
8-FT	60	42

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

STATE OF WISCONSIN
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Sept., 2016
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

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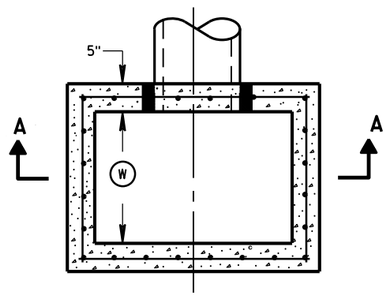
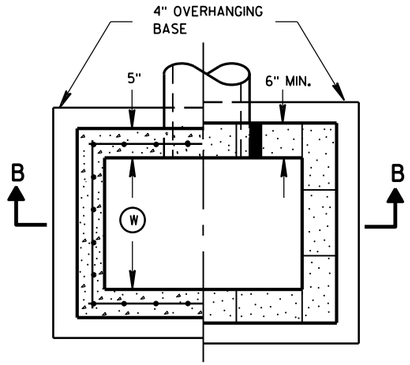
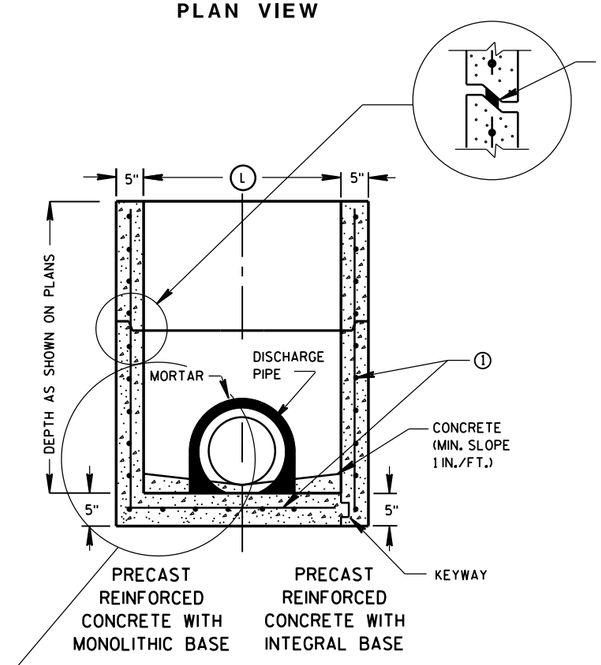
S.D.D. 8 B 9-2



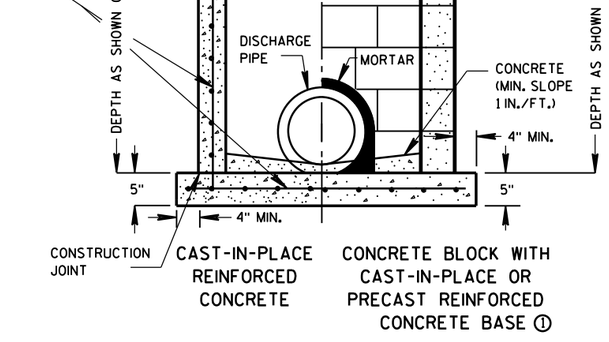
PLAN VIEW



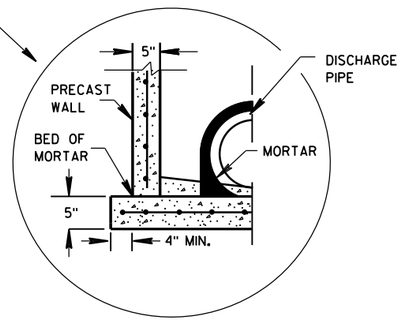
PLAN VIEW



SECTION A-A



SECTION B-B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

GENERAL NOTES

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ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATES THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND CONCRETE BLOCK INSTALLATIONS.
4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED.
OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3 INCH CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

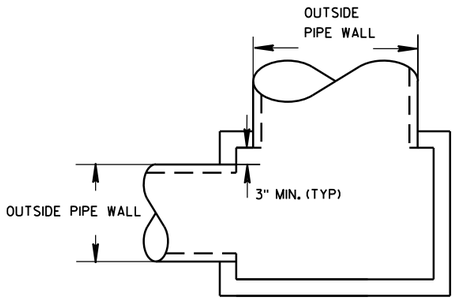
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

INLET SIZE		INLET COVER TYPE	ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM
	WIDTH (W) (FT)	LENGTH (L) (FT)									
2X2-FT	2	2	X	X				X		X	
2X2.5-FT	2	2.5			X			X	X	X	X
2X3-FT	2	3					X				
2.5X3-FT	2.5	3				X					

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER	
	WIDTH (IN)	LENGTH (IN)
2X2-FT	12	12
2X2.5-FT	12	18
2X3-FT	12	24
2.5X3-FT	18	24



DETAIL "A"

INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN
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ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

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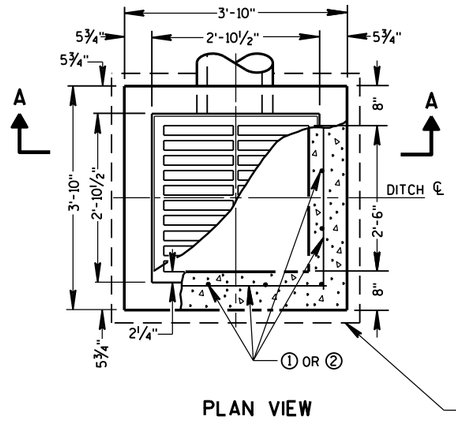
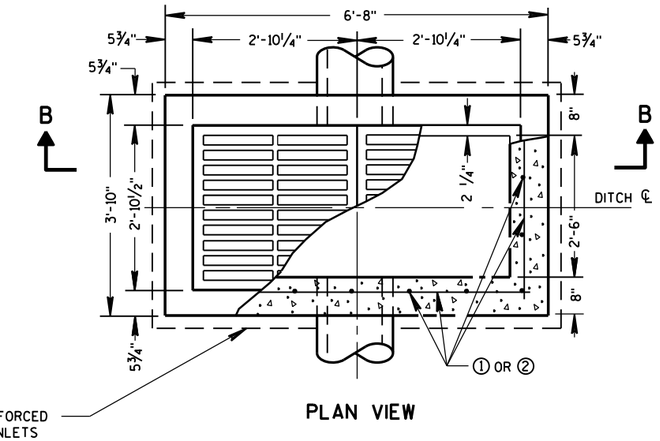
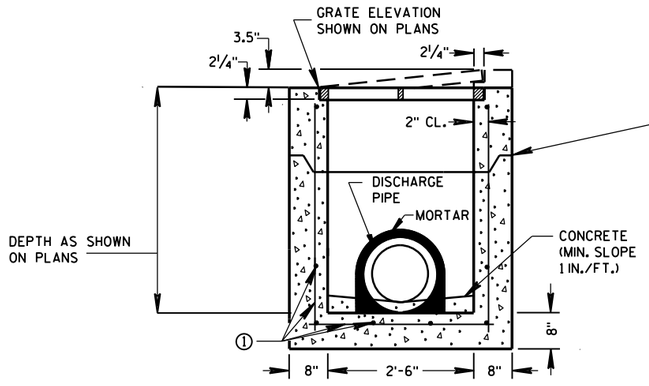


PLAN VIEW

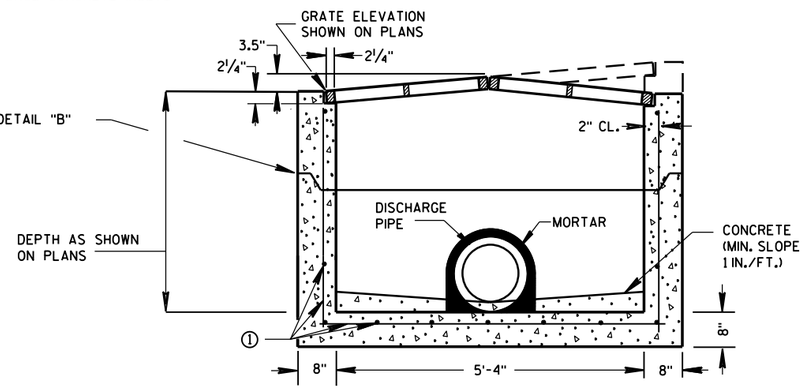


PLAN VIEW

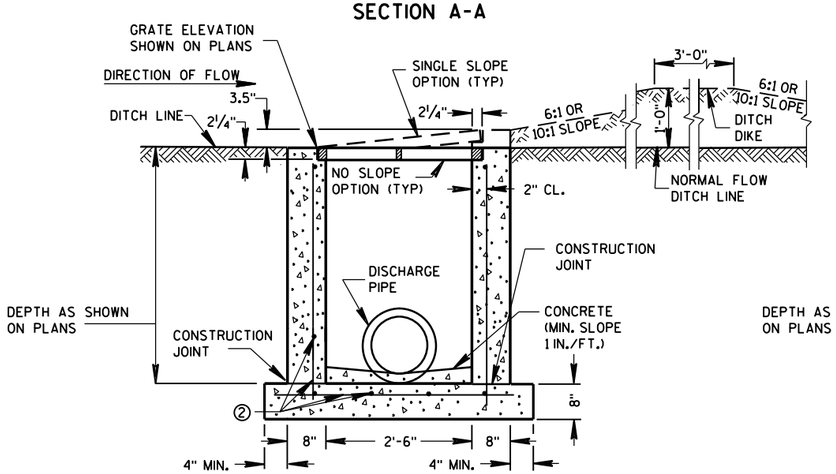
4" OVERHANGING BASE ON REINFORCED CAST-IN-PLACE CONCRETE INLETS



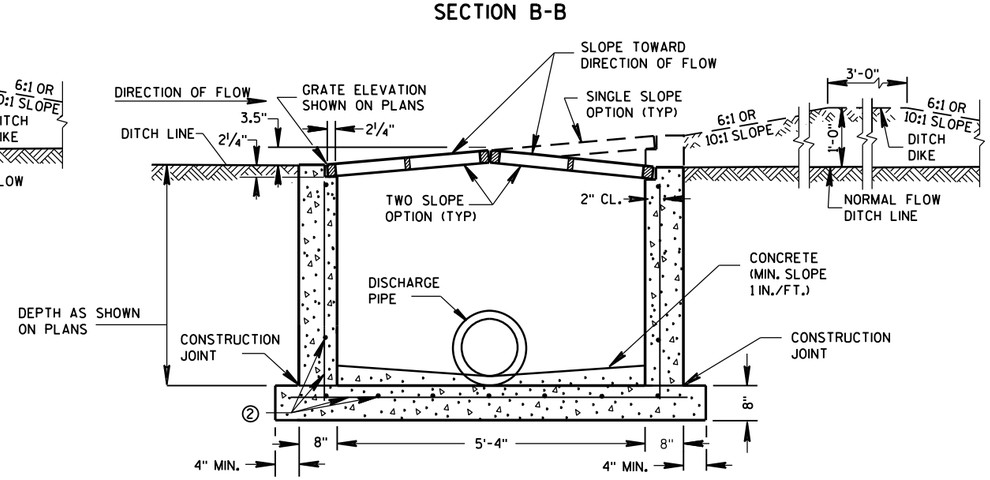
PRECAST REINFORCED CONCRETE SECTION A-A



PRECAST REINFORCED CONCRETE SECTION B-B



REINFORCED CAST-IN-PLACE CONCRETE SECTION A-A



REINFORCED CAST-IN-PLACE CONCRETE SECTION B-B

INLETS MEDIAN 1 GRATE

INLETS MEDIAN 2 GRATE

GENERAL NOTES

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DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLETS WHICH MAY INCLUDE PRECAST REINFORCED CONCRETE INLETS, SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL MEDIAN INLETS ARE DESIGNATED ON THE PLANS AS "INLETS, IG-MS", ETC. THE FIRST NUMBER AND LETTER DESIGNATE THE TYPE OF STRUCTURE, AND THE FOLLOWING LETTERS DESIGNATE THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

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ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

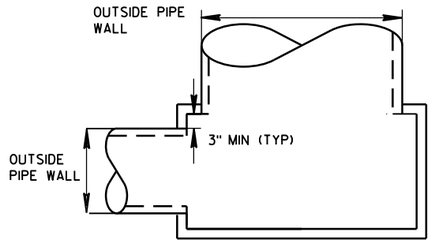
MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

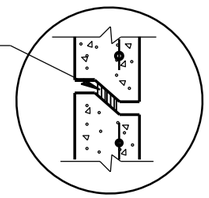
PIPE MATRIX

	MAXIMUM INSIDE PIPE DIAMETER	
INLET SIZE	WIDTH (IN)	LENGTH (IN)
1 GRATE	18	18
2 GRATE	18	42



DETAIL "A"

JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)



DETAIL "B"

INLETS MEDIAN 1 AND 2 GRATE

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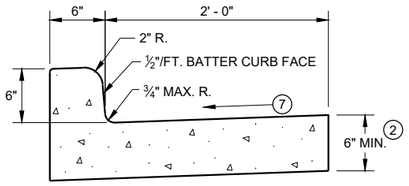
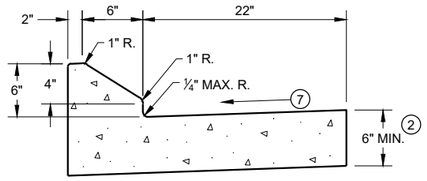
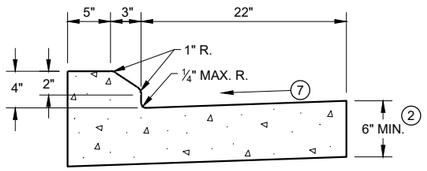
SDD 08D01-a Concrete Curb and Gutter



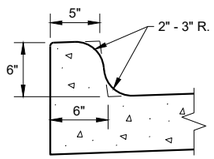
TYPES A (1) & D



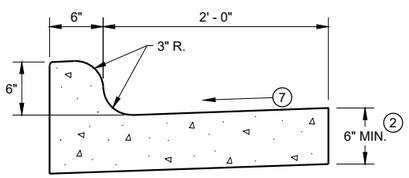
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

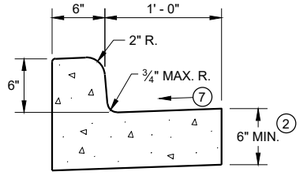


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



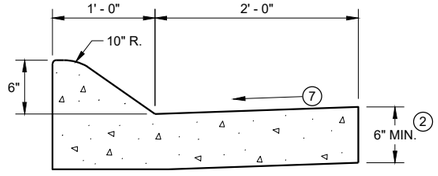
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

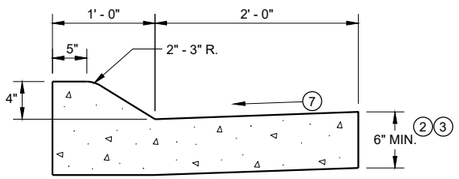


TYPES A (1) & D

CONCRETE CURB AND GUTTER 18"

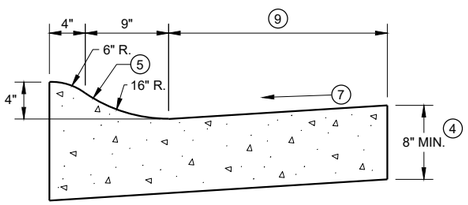


6" SLOPED CURB TYPES A (1) & D



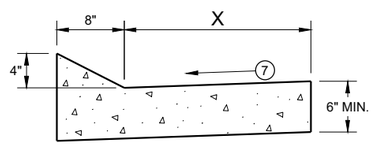
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T

TBT & TBTT	X
30"	22"
36"	28"

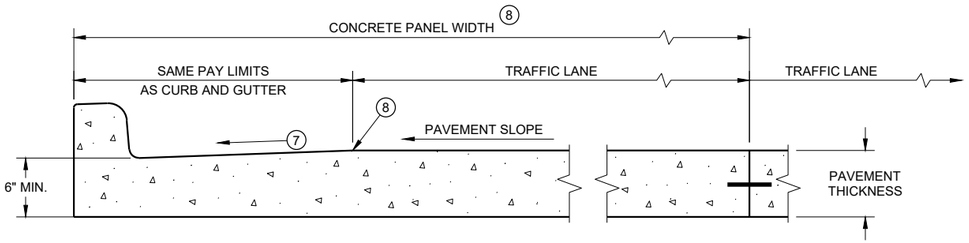


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

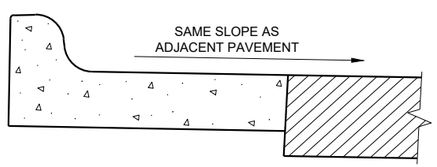
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

PAVEMENT THICKNESS	MAXIMUM PANEL WIDTH
LESS THAN 10"	12'
10" & ABOVE	15'



PARTIAL SECTION OF PAVEMENT * WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



REVERSE SLOPE GUTTER (6)
(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(3) USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.

(4) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(5) UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

(6) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

(7) USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.

(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

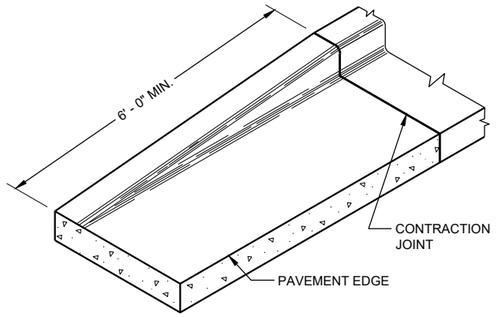
(9) CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE "R" AND "T" = 17 INCHES
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE "R" AND "T" = 23 INCHES

CONCRETE CURB AND GUTTER

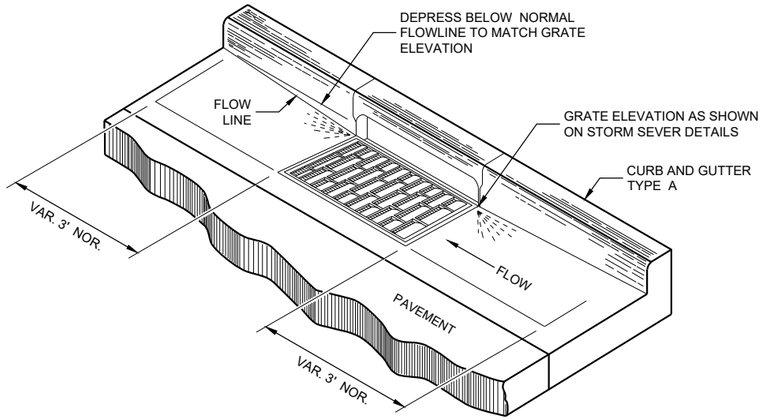
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 08D01 - 22a

SDD 08D01-b Concrete Gutter, Ties, and Curb and Gutter Applications



END SECTIONCURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS
(TYPICAL H INLET COVER SHOWN)

GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

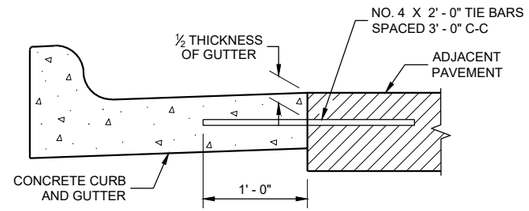
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

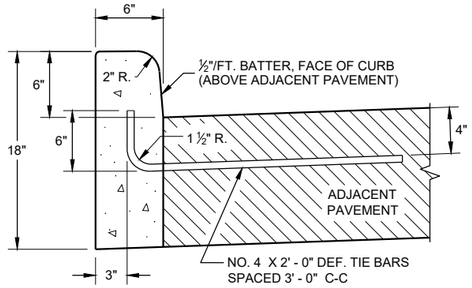
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

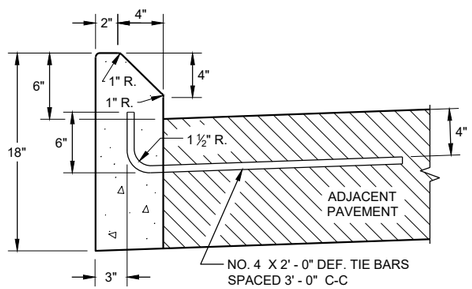
(9) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.



TYPICAL TIE BAR LOCATION (1)

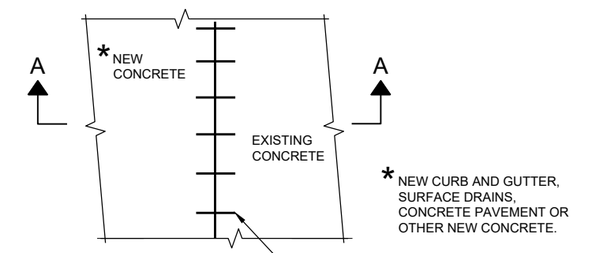


TYPES A (1) & D

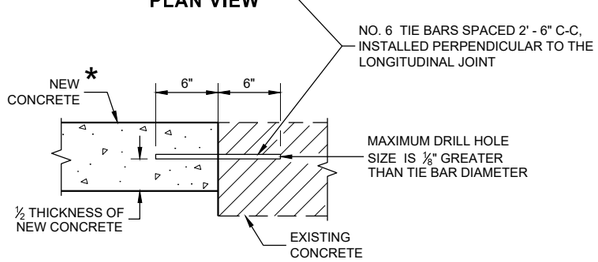


TYPES G (1) & J

CONCRETE CURB

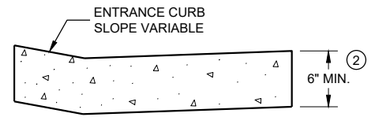


PLAN VIEW



SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



DRIVEWAY ENTRANCE CURB (9)
(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

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SDD 08D01 - 22b

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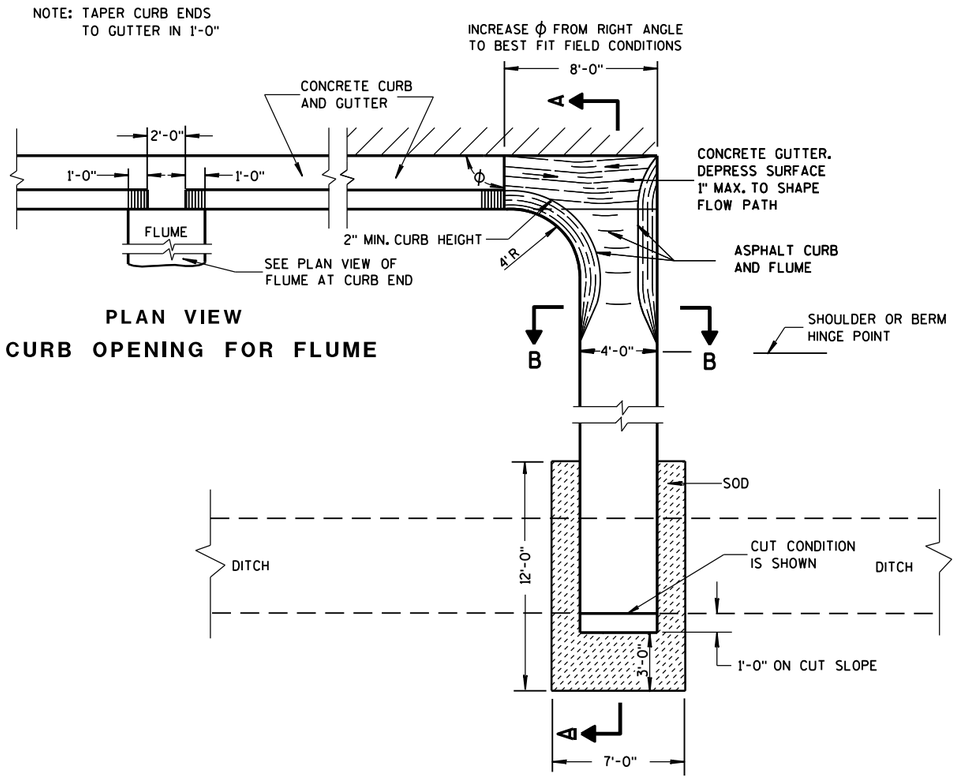
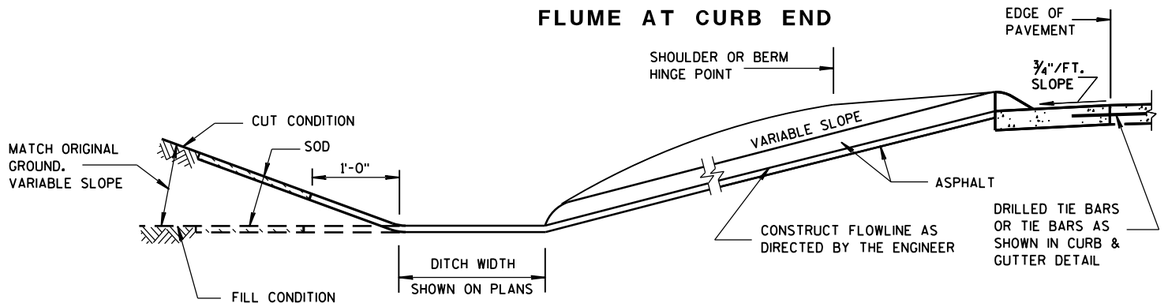
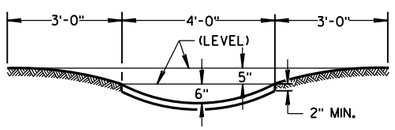
SDD 08D01 - 22b

ASPHALTIC FLUME





SECTION A-A



SECTION B-B

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

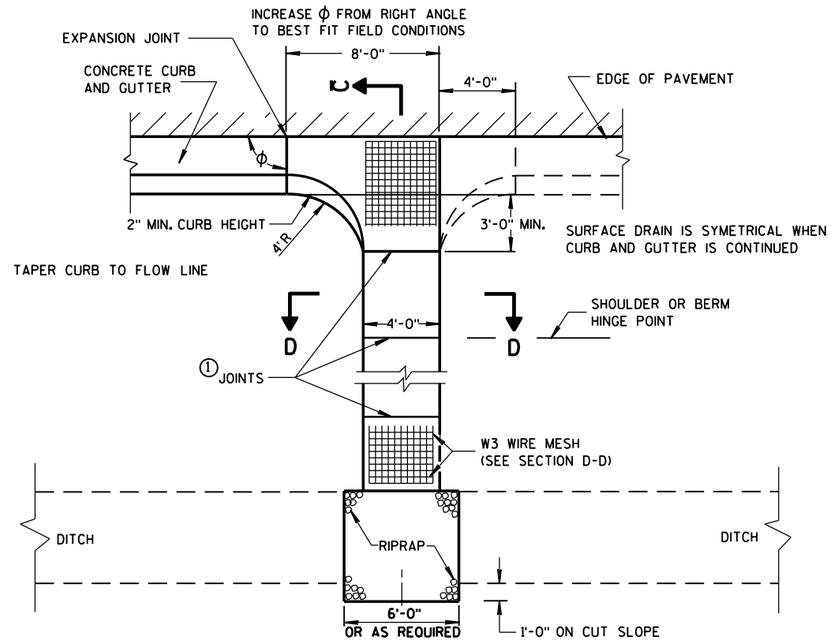
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

① JOINTS SHALL BE ⅛ TO ¼ INCH WIDE BY 1½ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.

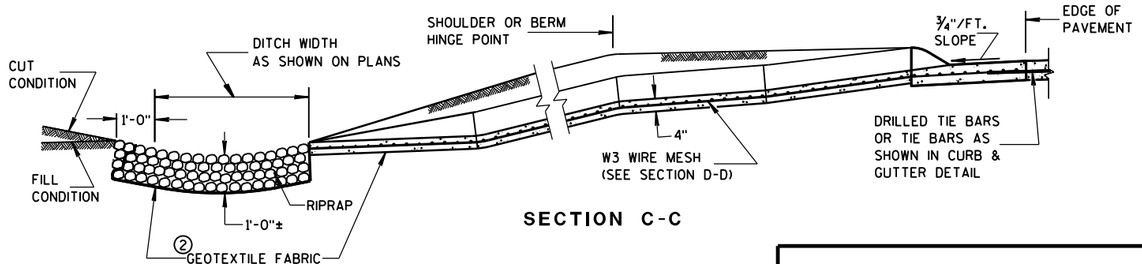
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

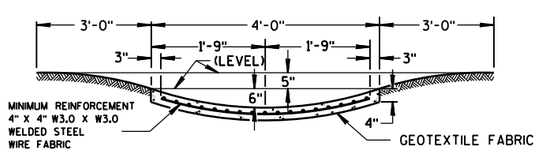
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9/4/08 DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

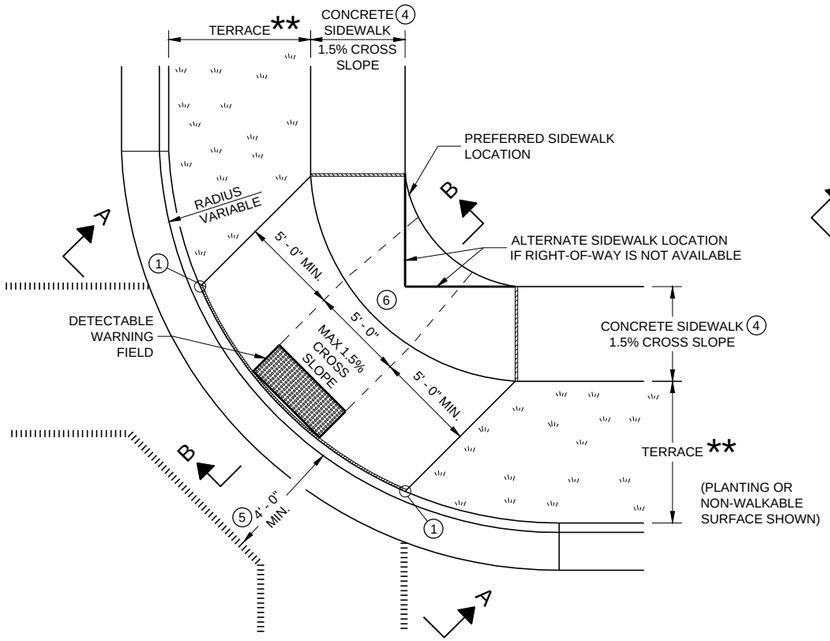
6

S.D.D. 8 D 4-5

6

S.D.D. 8 D 4-5

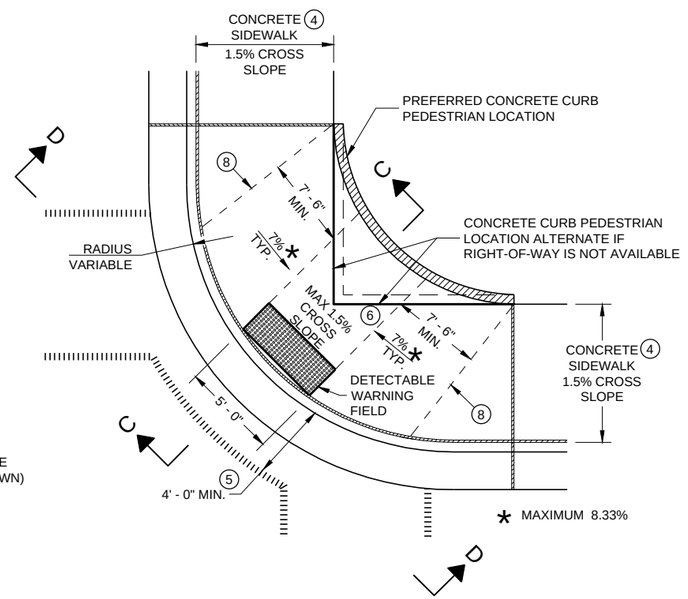
SDD 08D05-a: Curb Ramps Types 1 and 1-A



PLAN VIEW

CURB RAMP TYPE 1

(CENTER OF CORNER RADIUS)



PLAN VIEW

CURB RAMP TYPE 1 - A

(NO TERRACE)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 CURB RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FILED SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAR FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD"

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

(1) THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

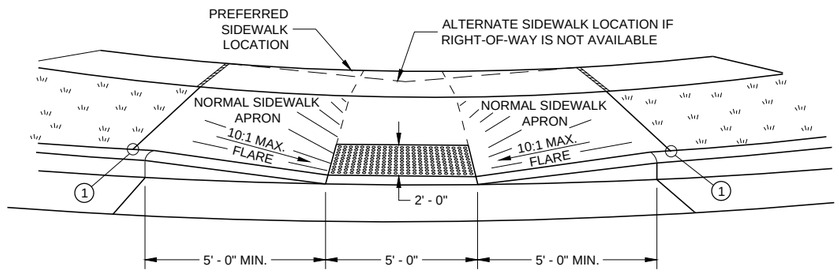
(3) MAXIMUM 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

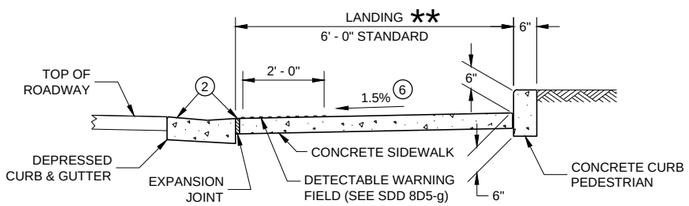
(5) PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.



VIEW A - A FOR TYPE 1

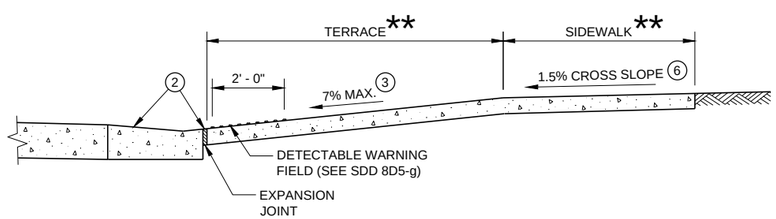


SECTION C - C FOR TYPE 1 - A

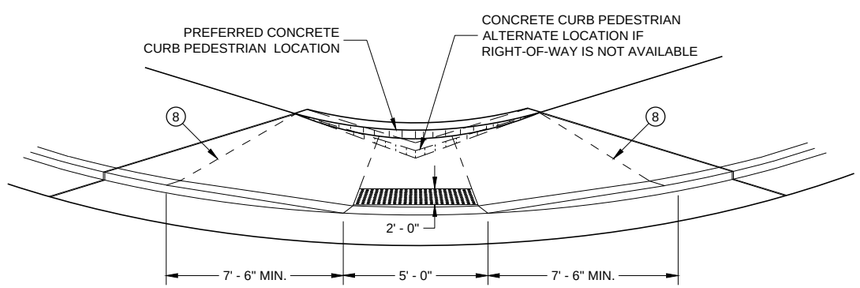
LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B - B FOR TYPE 1



VIEW D - D FOR TYPE 1 - A

CURB RAMPS
TYPE 1 AND 1-A

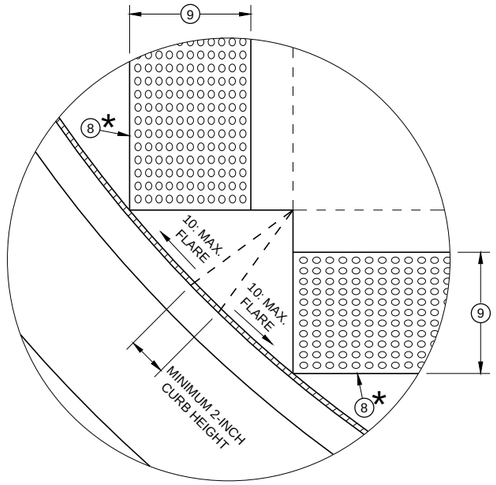
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 08D05 - 20a

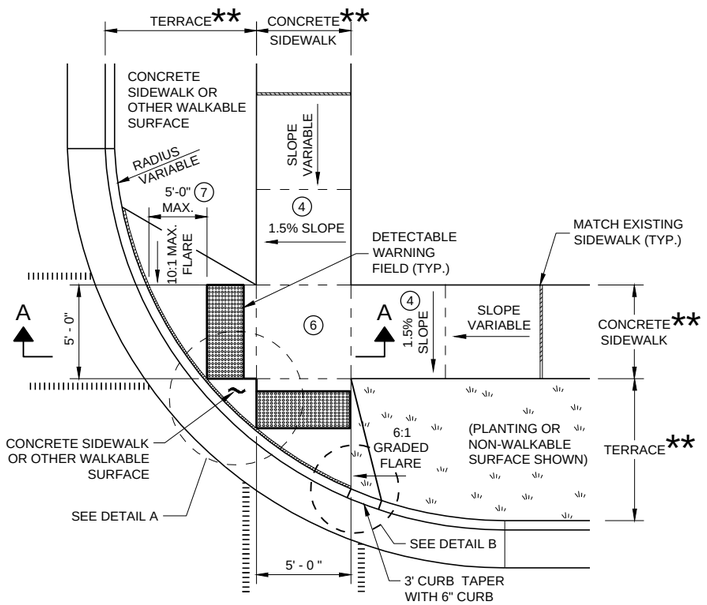
6

SHEET 145

SDD 08D05-b Curb Ramps Types 2 and 3



DETAIL A



PLAN VIEW
CURB RAMP TYPE 2
(CENTER OF CORNER RADIUS)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE (2.67% OR LESS) AND NOT TO EXCEED 11% GRADE CHANGE.

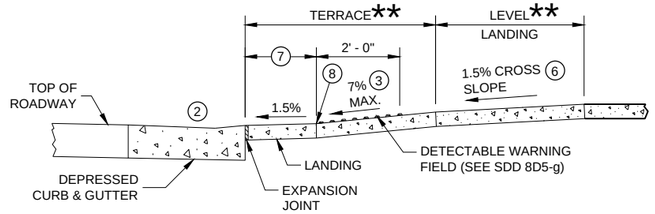
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET X 5 FEET.

(7) WHEN GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

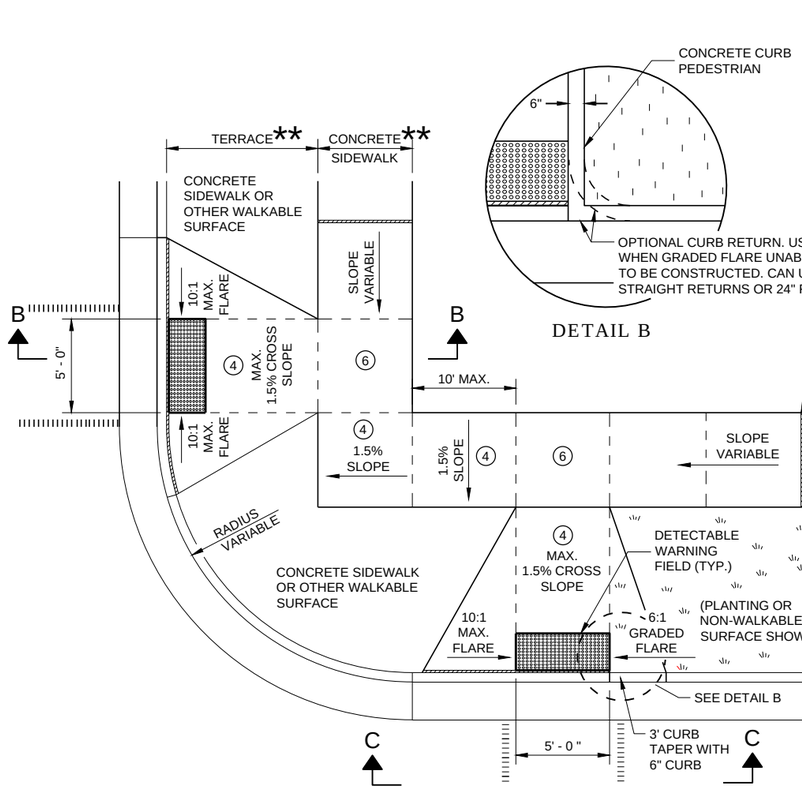
(9) WHEN DISTANCE IS LESS THAN 6' - 0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.



SECTION A - A FOR TYPE 2

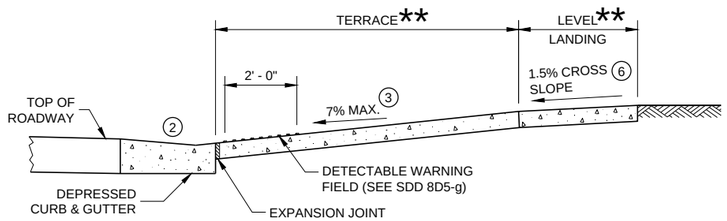
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

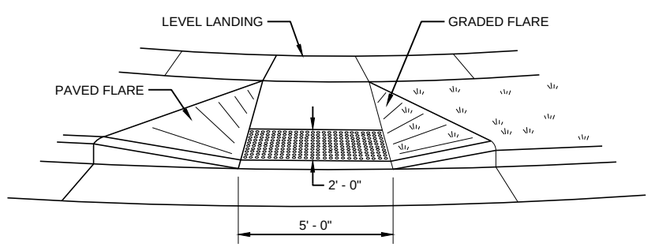


DETAIL B

PLAN VIEW
CURB RAMP TYPE 3
(OUTSIDE OF CROSSWALK AREA)



SECTION B - B FOR TYPE 3



VIEW C - C FOR TYPE 3

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPE 2 AND 3

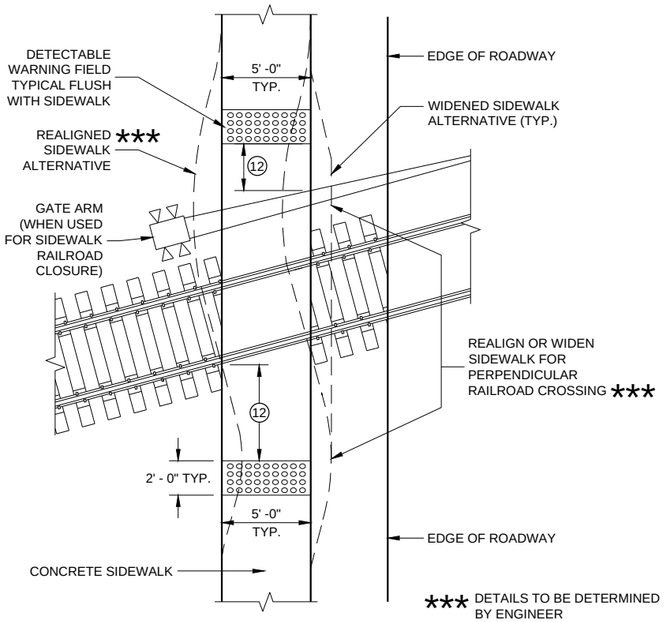
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D05 - 20b

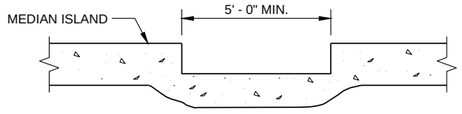
SHEET 146

SDD 08D05-e: Curb Ramps Types 5, 6, 7A, 7B and 8

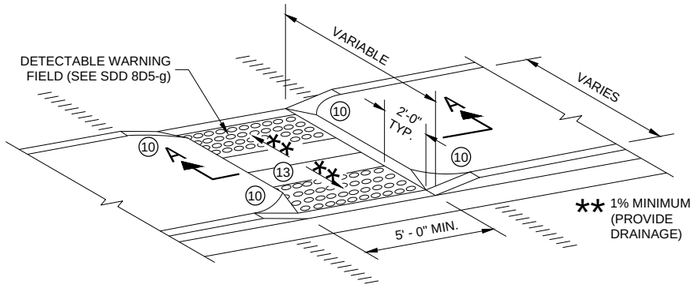


CURB RAMP TYPE 8

DETECTABLE WARNINGS AT RAILROAD CROSSING



SECTION A - A FOR TYPE 5



CURB RAMP TYPE 5

MEDIAN ISLAND
NON-ELEVATED PEDESTRIAN CROSSING

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ½ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

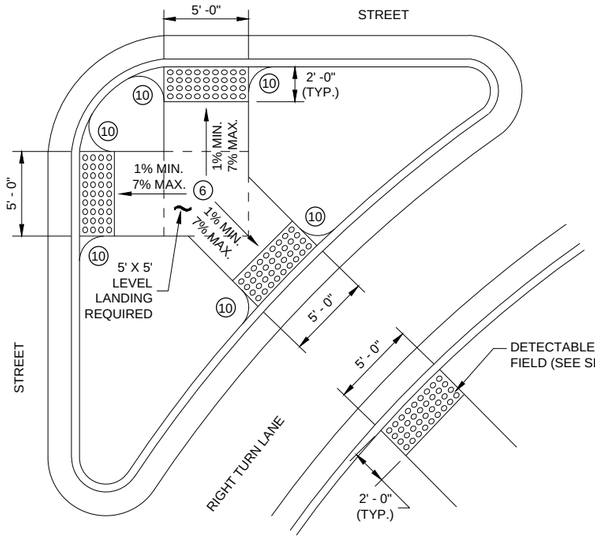
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(12) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ±0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.

(13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STEET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2 FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.

LEGEND

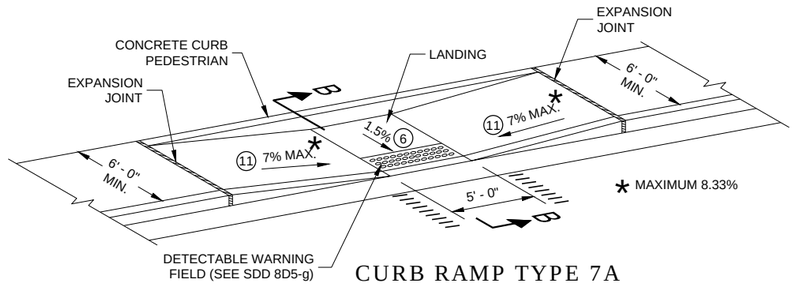
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)



CURB RAMP TYPE 6

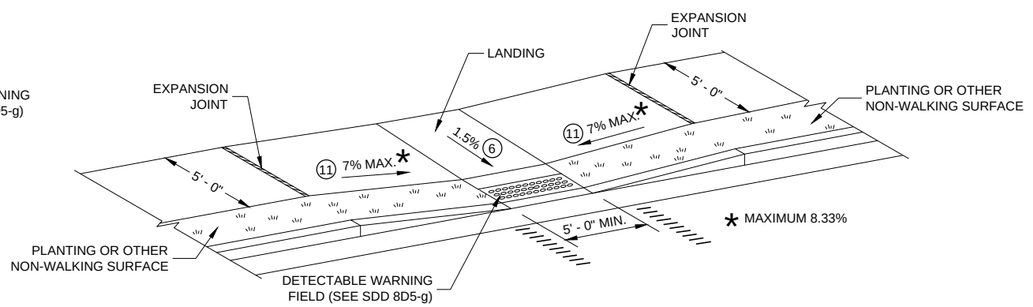
DETECTABLE WARNING AT ISLANDS

REFER TO GENERAL NOTES (2) AND (3) FOR ALL ISLAND CURB RAMPS



CURB RAMP TYPE 7A

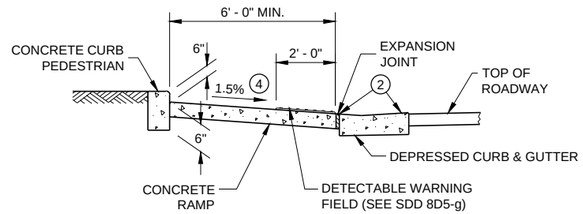
MID BLOCK CROSSING



CURB RAMP TYPE 7B

MID BLOCK CROSSING

NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.



SECTION B - B FOR TYPE 7A

CURB RAMPS
TYPE 5, 6, 7A, 7B & 8

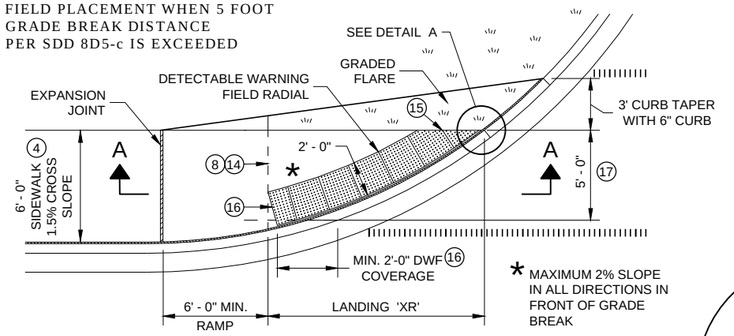
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D05 - 20e

SDD 08D05-f Curb Ramps Radial Detectable Warning Field Applications

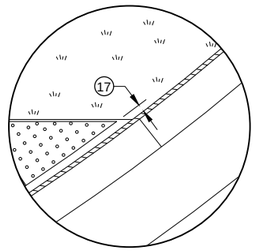
RADIAL DETECTABLE WARNING
FIELD PLACEMENT WHEN 5 FOOT
GRADE BREAK DISTANCE
PER SDD 8D5-c IS EXCEEDED



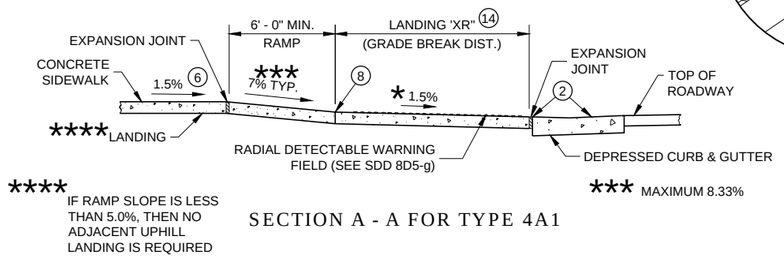
PLAN VIEW

CURB RAMP TYPE 4A1

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)

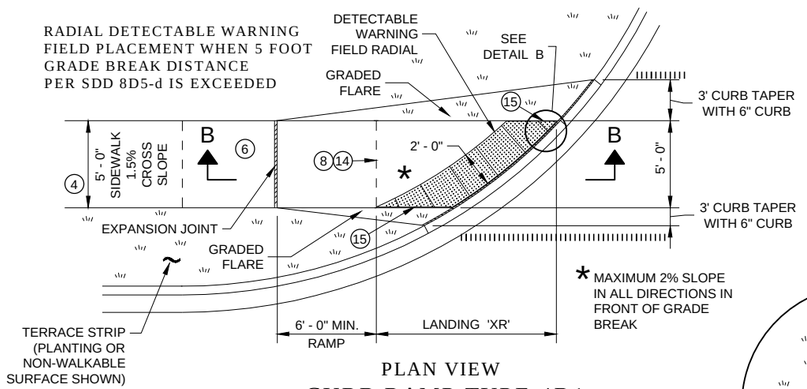


DETAIL A



SECTION A - A FOR TYPE 4A1

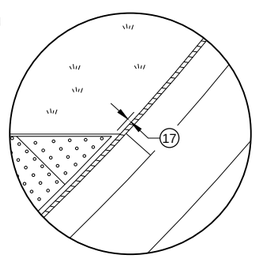
RADIAL DETECTABLE WARNING
FIELD PLACEMENT WHEN 5 FOOT
GRADE BREAK DISTANCE
PER SDD 8D5-d IS EXCEEDED



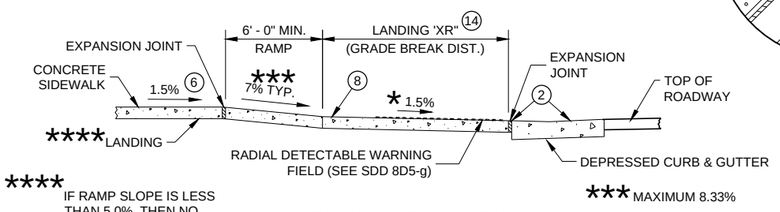
PLAN VIEW

CURB RAMP TYPE 4B1

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



DETAIL B



SECTION B - B FOR TYPE 4B1

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

APPLY RADIAL DETECTABLE WARNING PLACEMENT SIMILARLY FOR TYPE 4A AND 4A1 CURB RAMPS AND SIMILARLY FOR TYPE 4B AND 4B1 CURB RAMPS. TYPE 4A AND 4B CURB RAMPS ARE NOT SHOWN.

REFER TO SDD 8D5-g FOR ADDITIONAL RADIAL PLATE REQUIREMENTS.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AD ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET BY 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

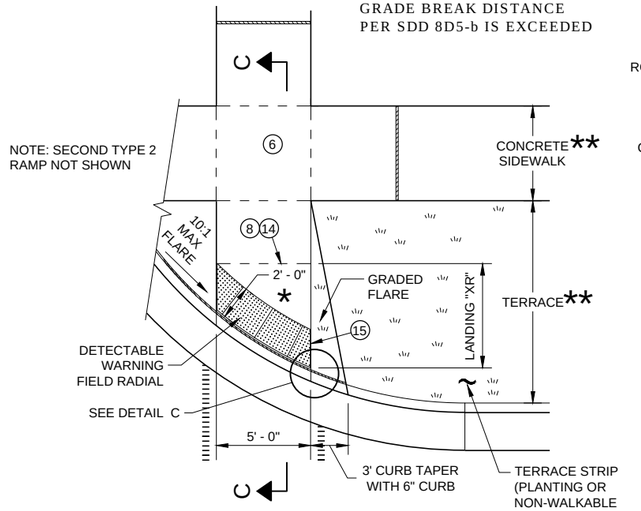
(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

(16) USE 1' X 2" RECTANGULAR END PLATE AT END OF TYPE 4A1 RAMP AND PROVIDE MINIMUM 2' - 0" DETECTABLE WARNING FIELD COVERAGE (IN DIRECTION OF PEDESTRIAN TRAVEL) ALONG THE ENTIRE CURB RAMP WIDTH.

(17) A MAXIMUM 3 INCH CONCRETE BORDER WITH IS ALLOWABLE IN FROM OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.

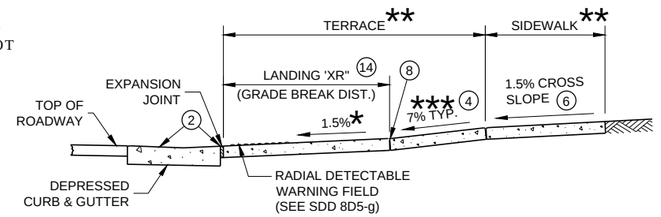
RADIAL DETECTABLE WARNING
FIELD PLACEMENT WHEN 5 FOOT
GRADE BREAK DISTANCE
PER SDD 8D5-b IS EXCEEDED



PLAN VIEW

CURB RAMP TYPE 2

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)
(ON LINE WITH SIDEWALK)

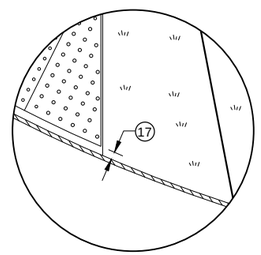


SECTION C - C FOR TYPE 2

* MAXIMUM 2% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

*** MAXIMUM 8.33%



DETAIL C

CURB RAMPS
RADIAL DETECTABLE WARNING
FIELD APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

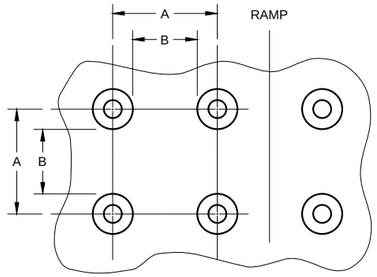
SDD 08D05 - 20f

SHEET 148

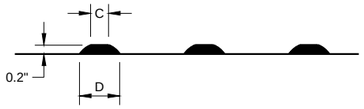
SDD 08D05-g: Curb Ramps Rectangular and Radial Detectable Warning Plates

	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



PLAN VIEW



ELEVATION VIEW

GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AT A CURB RAMP SHALL BE FROM THE SAME MANUFACTURER.

PLACE ALL DETECTABLE WARNING FIELD SYSTEMS IN ACCORDANCE TO THE MANUFACTURER'S RECOMMENDATION.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

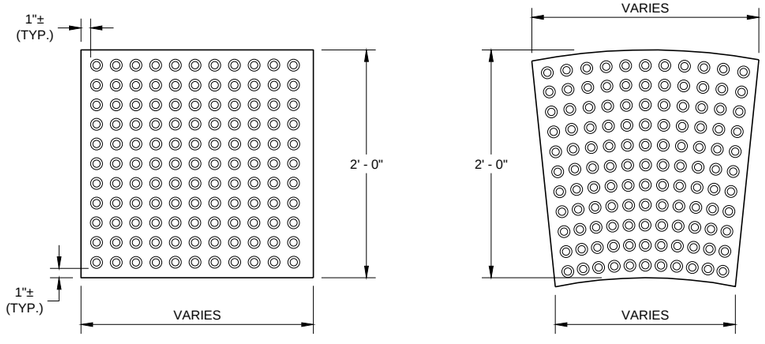
FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGE PLATES IN COMBINATION WITH SQUARE PLATES ARE ALSO ACCEPTABLE. FOLLOW MANUFACTURER'S RECOMMENDATIONS.

REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

DO NOT EMBED IN CONCRETE ANY FIELD-CUT PLATES WITH CUT EDGES SHORTER THAN 6 INCHES. CONSULT WITH MANUFACTURER FOR RE-DRILLING AND ANCHORING REQUIREMENTS OF FIELD-CUT PLATES.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

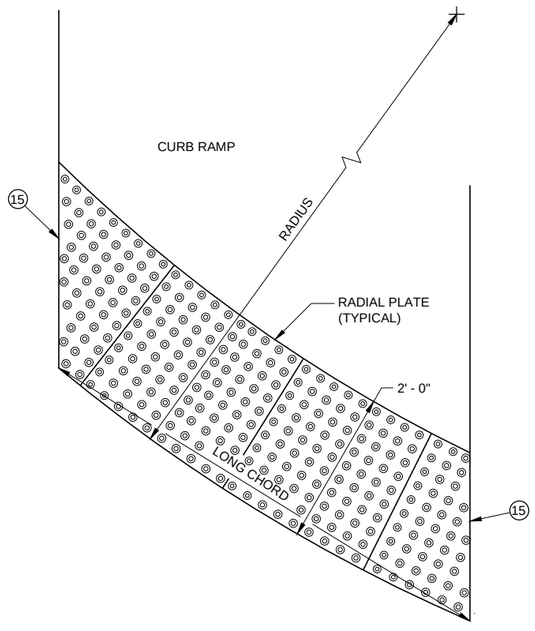
TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



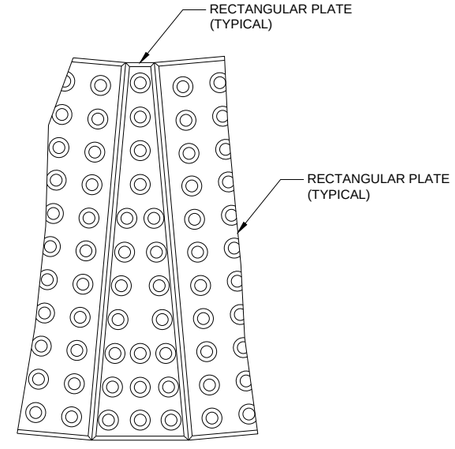
RECTANGULAR PLATES

RADIAL PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)



PLAN VIEW
RADIAL DETECTABLE
WARNING FIELD ATTRIBUTES



PLAN VIEW
RADIAL WEDGE PLATE
CONNECTION DETAIL

CURB RAMPS
RECTANGULAR AND RADIAL
DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

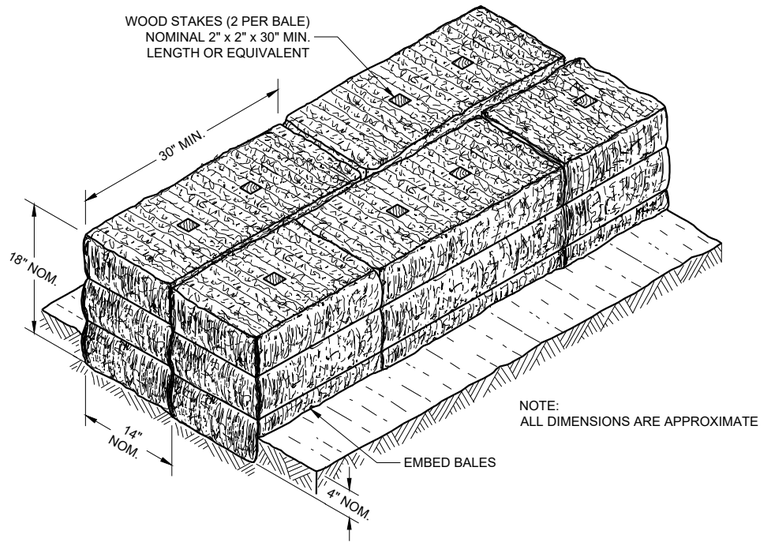
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERVISOR

FHWA

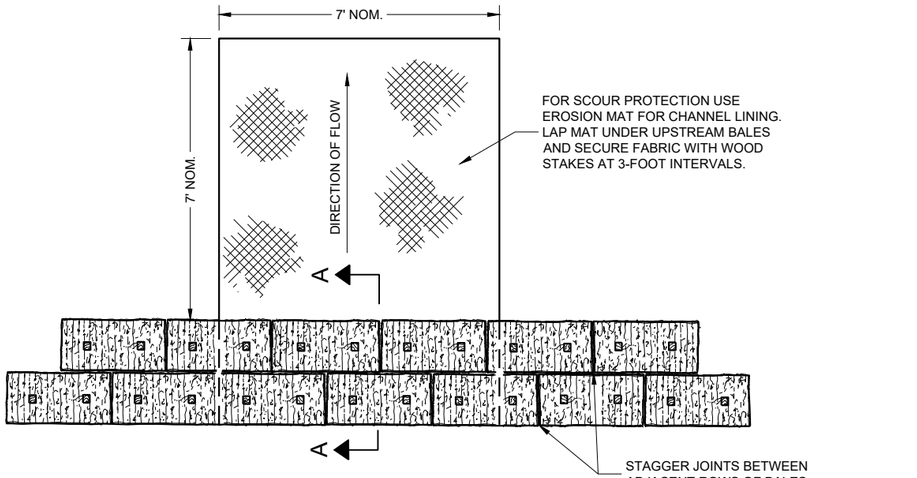
6

SDD 08D05 - 20g

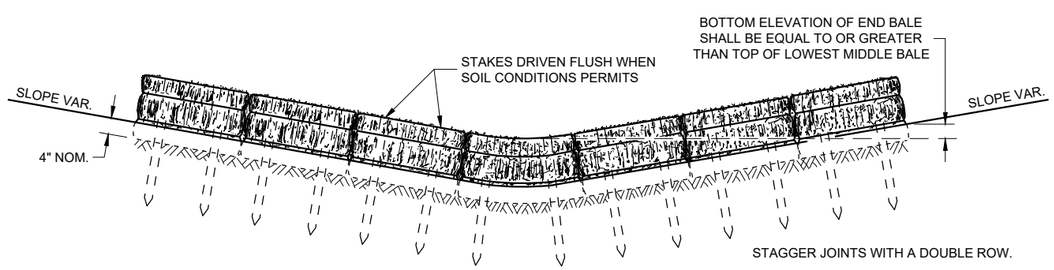
SDD 08E08 Typical Installations of Erosion Bales / Temporary Ditch Checks



SECTION A - A



PLAN VIEW



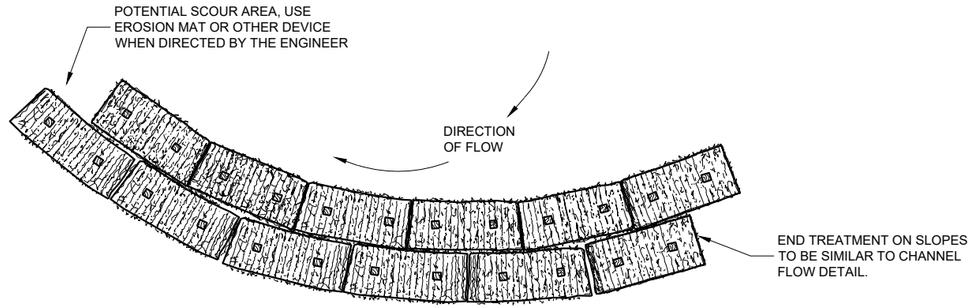
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

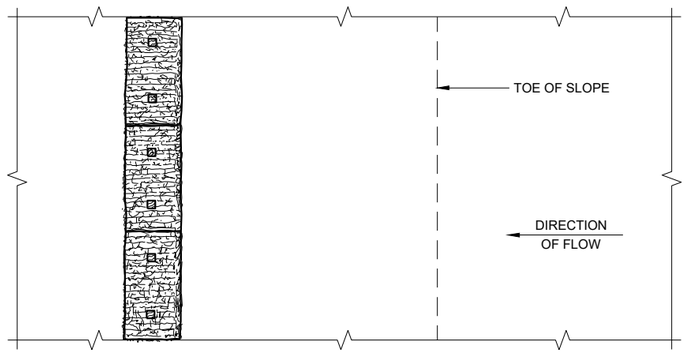
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(1) TEMPORARY DITCH CHECKS, EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

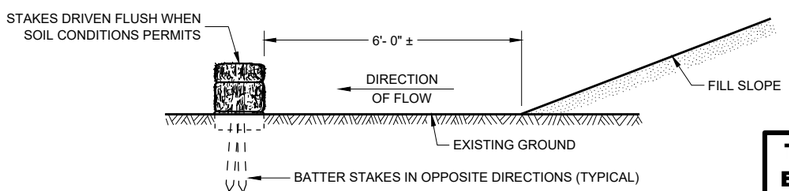


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN ELEVATION



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES/TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

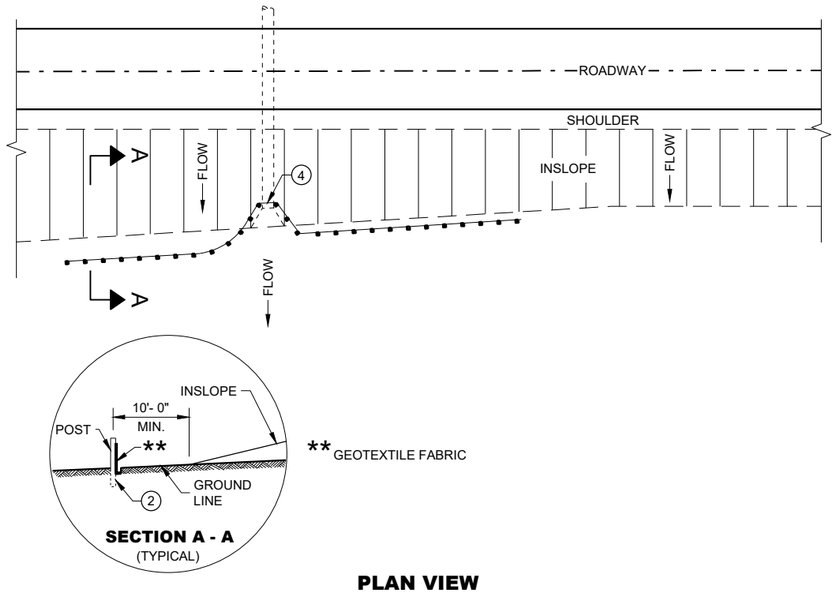
APPROVED
6/4/02 — DATE
/S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

SDD 08E08 - 03

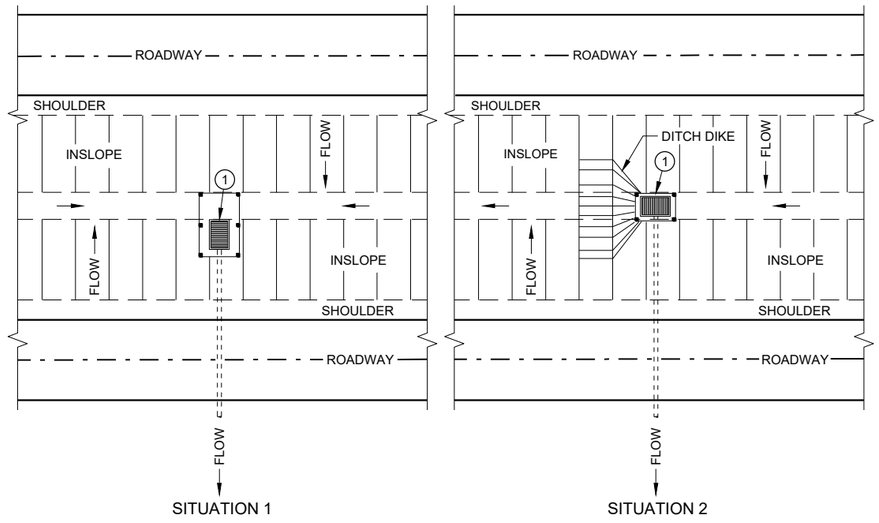
6

SDD 08E08 - 03



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



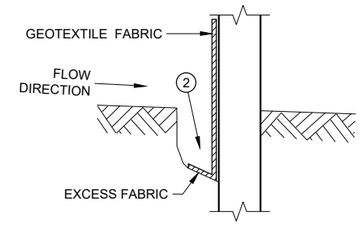
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

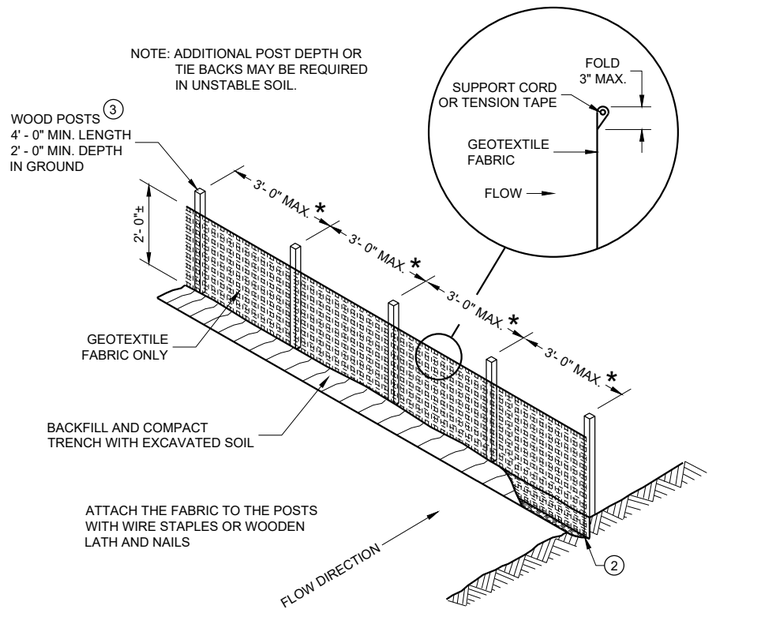
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

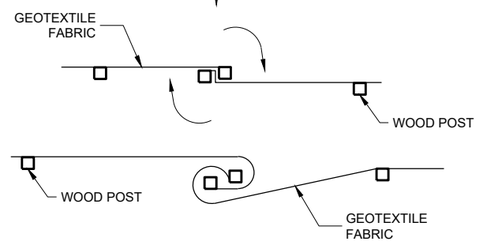
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE AND 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL AND COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1 ⅛" X 1 ⅛" OF OAK OR HICKORY.
4. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
5. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



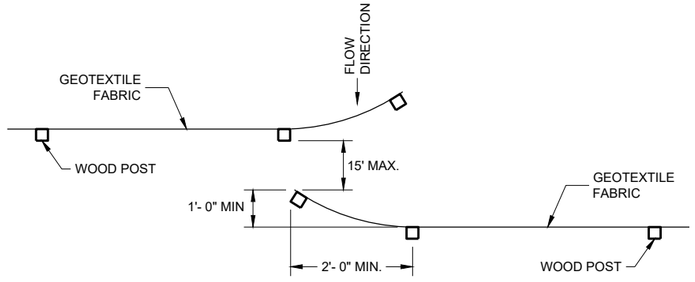
TRENCH DETAIL



SILT FENCE

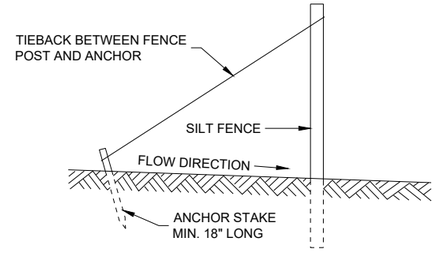


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

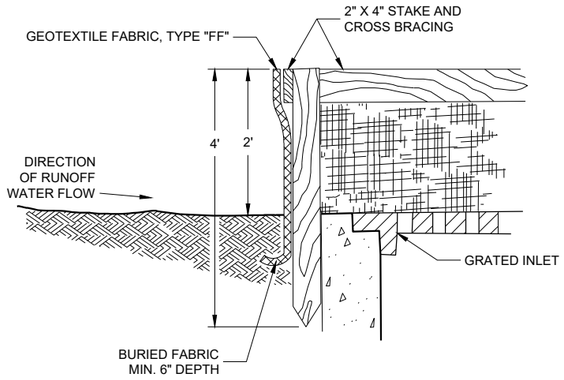
(WHEN REQUIRED BY THE ENGINEER)

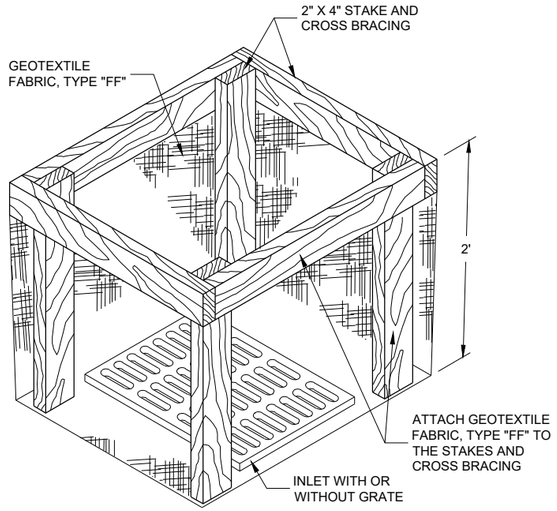
SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

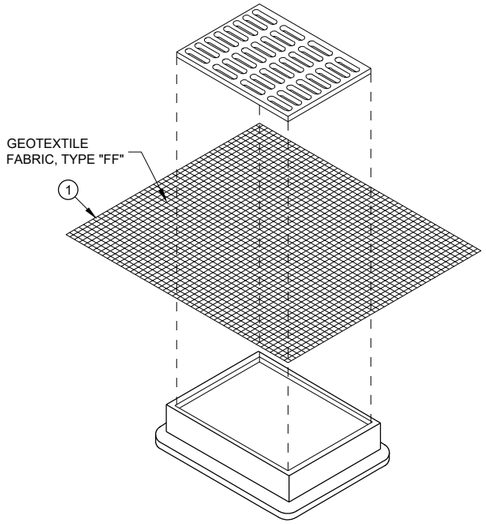
APPROVED
4/29/05 — DATE
/S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

SDD 08E10 Inlet Protection, Types A, B, C and D



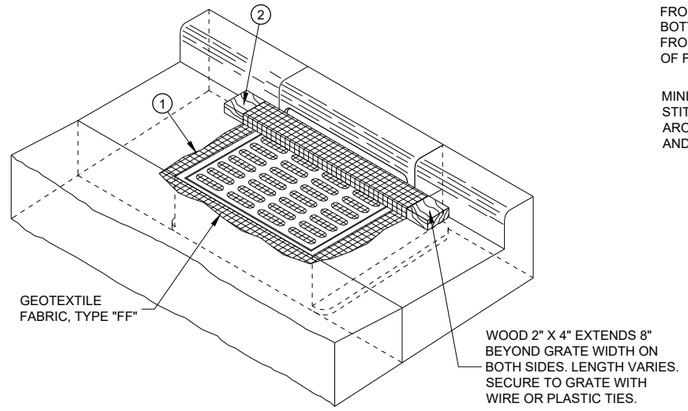


INLET PROTECTION, TYPE "A"

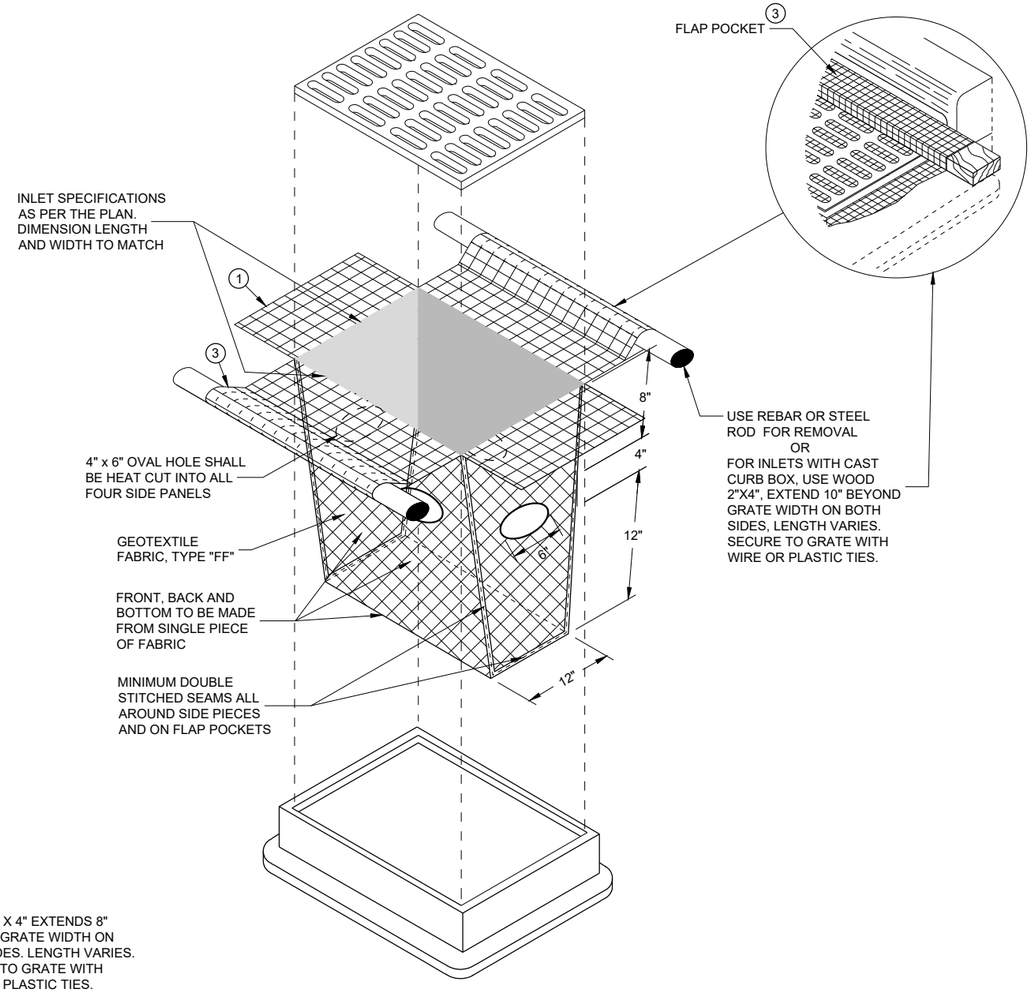


INLET PROTECTION, TYPE "B" (WITHOUT CURB BOX)

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE "C" (WITH CURB BOX)



INLET PROTECTION, TYPE "D"

(CAN BE INSTALLED IN ANY INLET WITH OR WITHOUTA CURB BOX AS PER NOTE (2))

GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

(1) FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

(2) FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

(3) FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES

TYPES B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

INLET PROTECTION TYPES A, B, C AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02 — DATE
/S/ Beth Cannestra — ROADWAY STANDARDS DEVELOPMENT ENGINEER

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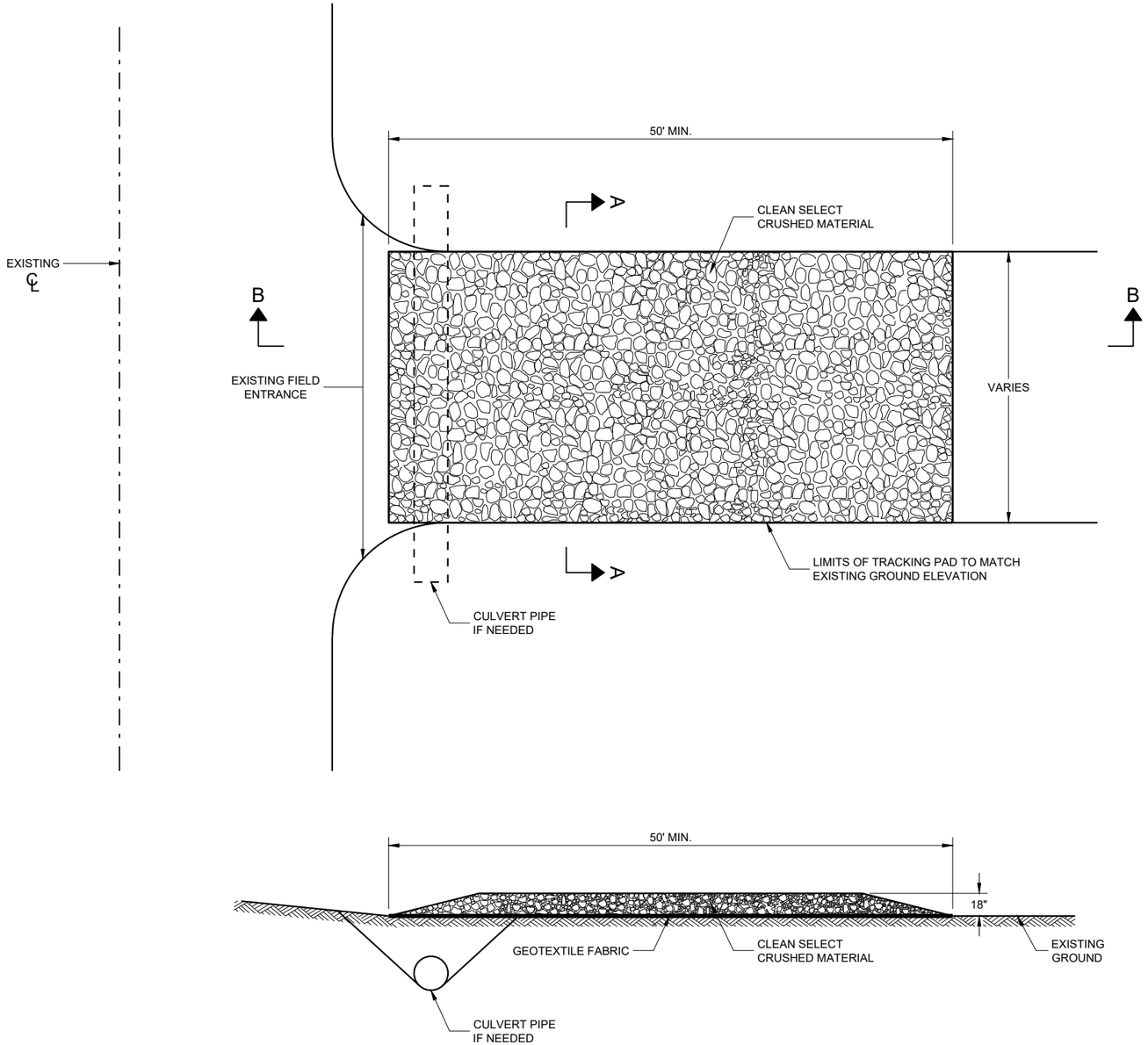
SDD 08E10 - 02

6

SDD 08E10 - 02



SECTION B - B

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

TRACKING PAD SHALL BE INSPECTED DAILY. DEFICIENT AREAS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.

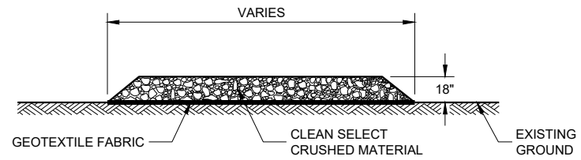
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT.

SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FLOWS SHALL BE DIVERTED AWAY, AROUND OR CONVEYED UNDER THE TRACKING PAD.

CULVERT PIPE OR OTHER BMP USED TO DIVERT WATER AWAY, AROUND OR UNDER THE TRACKING PAD SHALL BE DESIGNED TO CONVEY THE 2 YEAR - 24 HOUR EVENT.

THE COST OF ADDITIONAL BMP TO DIVERT WATER ARE INCIDENTAL TO THE TRACKING PAD BID ITEM.



SECTION A - A

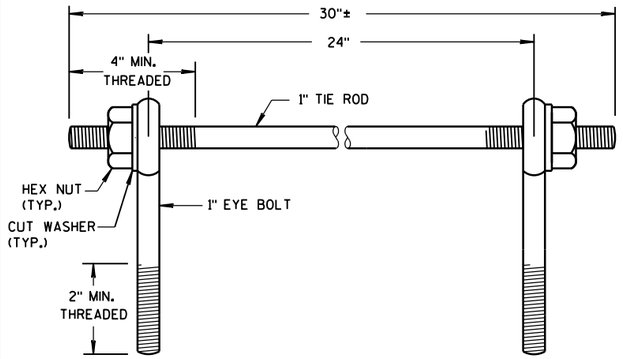
TRACKING PAD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

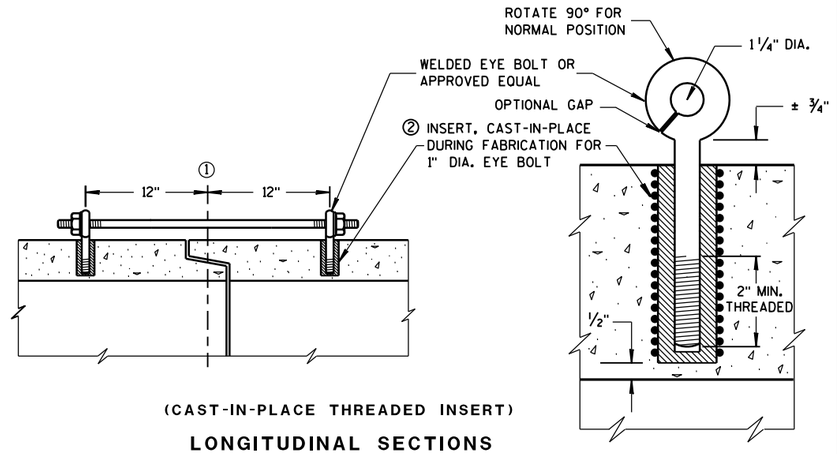
APPROVED
3/24/2011 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6
SDD 08E14 - 01

SDD 8f4 Joint Ties for Concrete Pipe and Concrete Pipe Collars



EYE BOLTS AND TIE ROD



(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

① ℄ OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

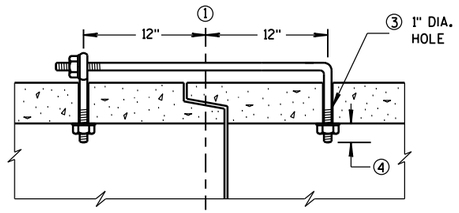
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

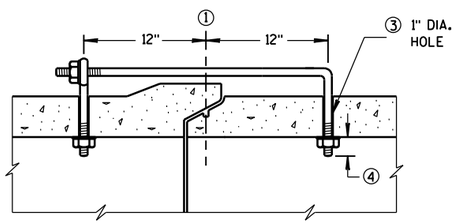
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.



(TONGUE & GROOVE PIPE)

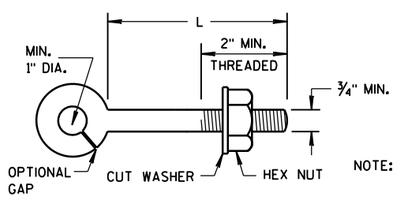


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

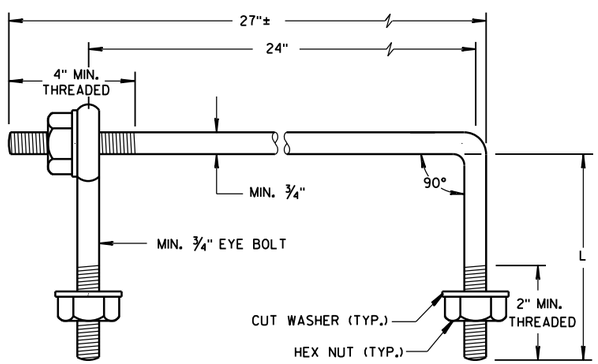
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



NOTE:

EYE BOLT

NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD

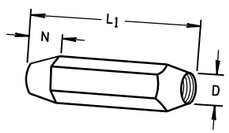
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

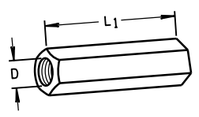
ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12-60	5/8	5/8	5	1/2
66-84	3/4	3/4	5	1/2
90-108	1	1	7	1 1/16

DIMENSIONS SHOWN ARE IN INCHES



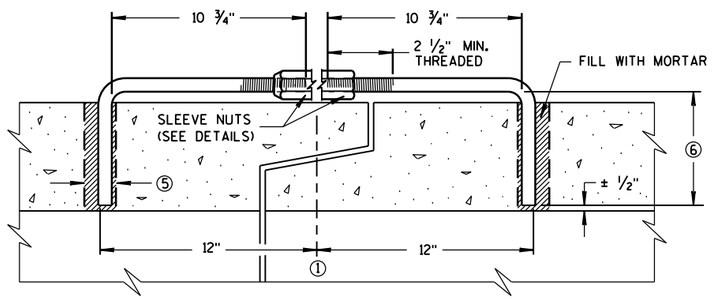
TAPERED



PLAIN

RIGHT AND LEFT THREADS

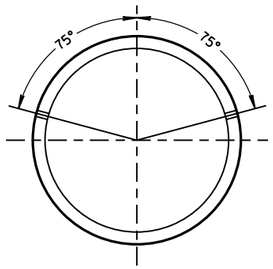
SLEEVE NUTS



LONGITUDINAL SECTION

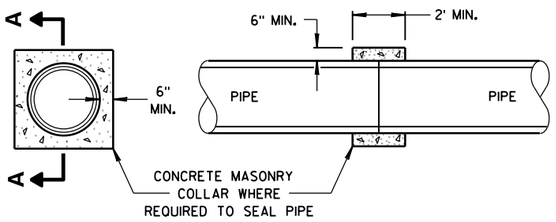
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



SECTION A-A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6-5-2012
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

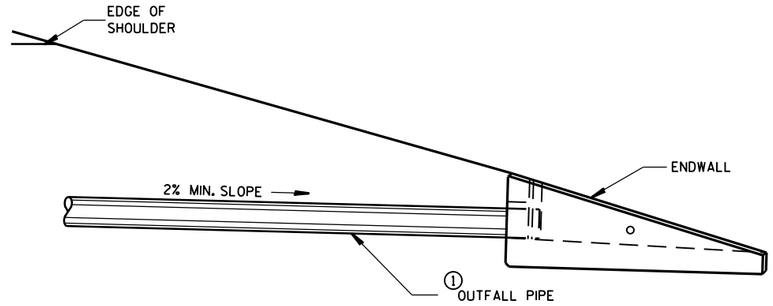
S.D.D. 8 F 4-7

6

S.D.D. 8 F 4-7

DIMENSIONS IN INCHES											
PIPE DIA.	A	B	C	D	E	F	G	H	J	L	Z
**4	6	12	5¼	9	8	32	36	11	2⅜	6½	4
6	8	14	7¼	11	10	42	44	13	3⅝	8½	6

**APRON ENDWALL FOR 6 INCH DIAMETER PIPE MAY BE SUBSTITUTED FOR THIS SIZE PROVIDED THE HOLE IN THE HEADWALL IS SIZED AND LOCATED TO CONFORM TO THE 4 INCH DIAMETER PIPE DIMENSIONS (C & J)



INSTALLATION DETAIL

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

ALTERNATIVE DESIGNS WHICH PROVIDE EQUIVALENT CAPACITY AND STRENGTH MAY BE USED WHEN APPROVED BY THE ENGINEER. ENDWALL MAY BE EITHER PRECAST OR CAST-IN-PLACE CONCRETE.

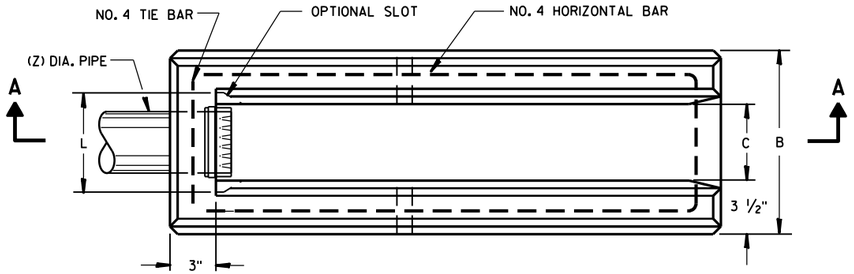
THE UNDERDRAIN PIPE SHALL BE FULLY INSERTED AND SEALED INTO THE ENDWALL WITH CEMENT MORTAR PRIOR TO BACKFILLING AROUND THE STRUCTURE.

THE UPPERMOST POINT OF THE ENDWALL SHALL BE PLACED FLUSH WITH THE ROADWAY SLOPE. ADJACENT EMBANKMENT SLOPES SHALL BE SHAPED TO FIT THE SIDES AND TOE OF THE ENDWALL. EXACT PLACEMENT OF THE OUTFALL PIPE AND ENDWALL SHALL BE DETERMINED BY THE ENGINEER TO MATCH THE ELEVATIONS AND FLOW DIRECTION OF THE ROADSIDE DITCH.

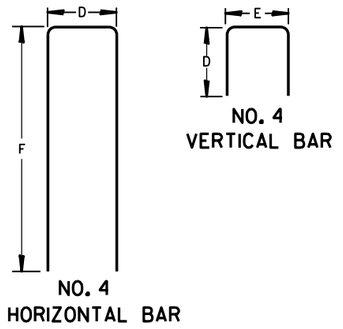
① THE OUTFALL PIPE UNDERDRAIN AND FITTINGS SHALL CONFORM TO THE REQUIREMENTS OF THE SPECIFICATION FOR POLY (VINYL CHORIDE) (PVC) PLASTIC DRAIN, WASTE AND VENT PIPE AND FITTINGS, ASTM DESIGNATION: D 2665, SCHEDULE 40 PVC OR THE STANDARD SPECIFICATION FOR TYPE PSM POLY (VINYL CHORIDE) (PVC) SEWER PIPE AND FITTINGS, ASTM DESIGNATION: D 3034, TYPE PSM SDR 23.5 PVC SEWER PIPE, ALL JOINTS SHALL BE SOLVENT WELDED.

THE OUTFALL PIPE INCLUDING ALL FITTINGS AND THE RODENT SHIELD SHALL BE MEASURED AND PAID FOR AS PIPE UNDERDRAIN UNPERFORATED.

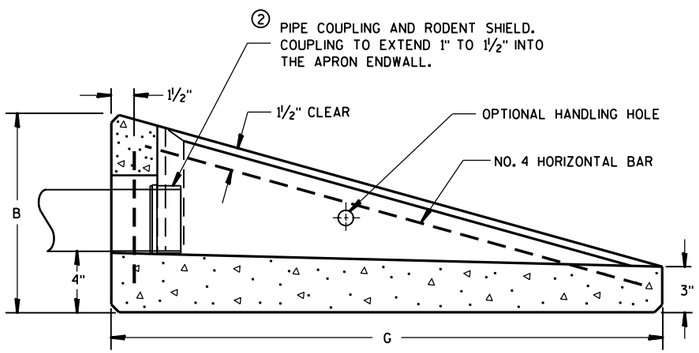
② THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE OUTFALL PIPE. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.



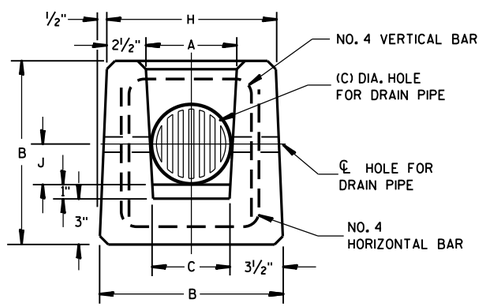
PLAN VIEW



BAR STEEL REINFORCEMENT DETAILS

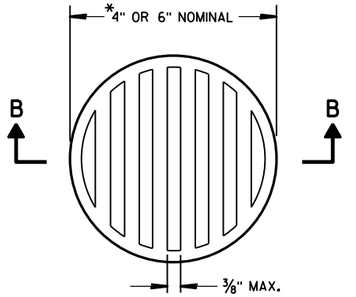


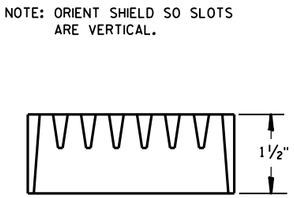
SECTION A-A



END VIEW

CONCRETE APRON ENDWALL FOR UNDERDRAIN





SECTION B-B

② RODENT SHIELD

*NOTE: DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING.

REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN

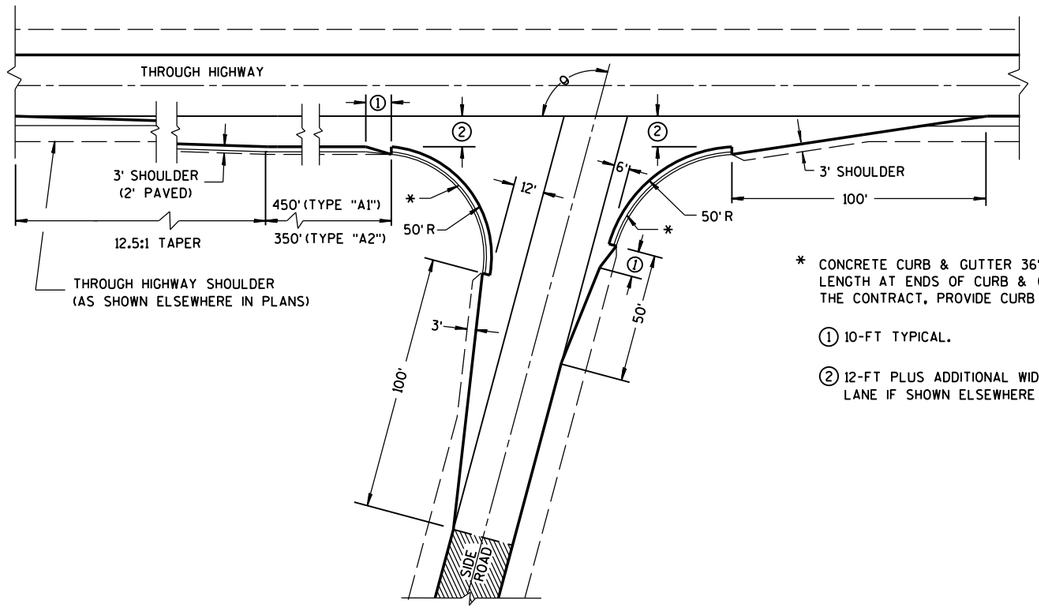
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3-10-98 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 F 6-4

SDD 9a1-b At-Grade Side Road Intersection, Type A1 and A2



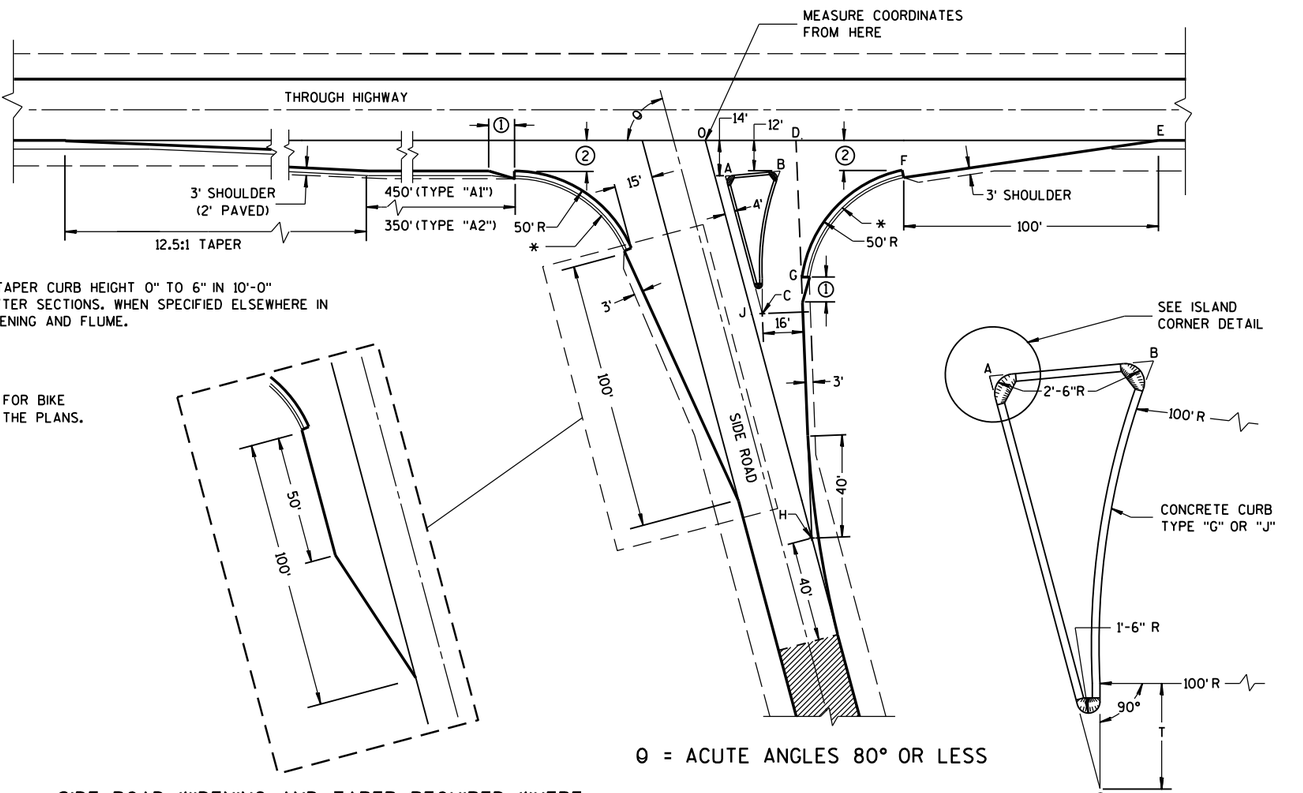
θ = MORE THAN 80°

* CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

① 10-FT TYPICAL.

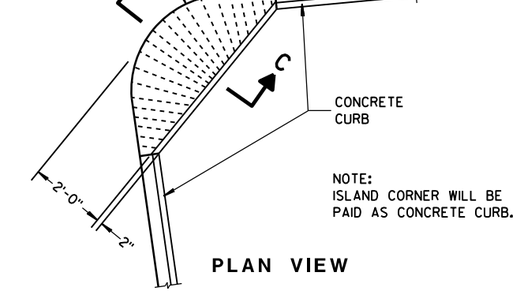
② 12-FT PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLANS.

EXISTING PAVED SURFACE

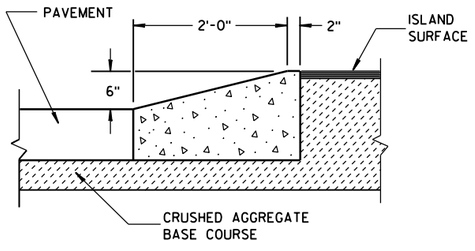


θ = ACUTE ANGLES 80° OR LESS

SIDE ROAD WIDENING AND TAPER REQUIRED WHERE THE THROUGH HIGHWAY CARRIES TWO-WAY TRAFFIC
θ = ACUTE ANGLES 70° OR LESS



PLAN VIEW



SECTION C-C

ISLAND CORNER DETAIL

(TO BE CONSTRUCTED AT ALL ISLAND CORNERS)

TABLE OF DIMENSIONS FOR
VARIABLE SIDE ROAD INTERSECTION ANGLES
(INTERPOLATE VALUES FOR ANGLES NOT SHOWN)

ANGLE θ DEGREES	COORDINATES IN FEET (MEASURED FROM POINT "O") X/Y								LENGTH IN FEET				
	A	B	C	D	E	F	G	H	AB	AC	T	OJ	OH
60	12.7 / -14.0	44.9 / -12.0	46.4 / -72.4	41.9 / 0.0	205.0 / 0.0	104.6 / -12.0	64.0 / -75.5	85.0 / -147.1	32.3	67.4	4.9	85.9	169.9
65	10.9 / -14.0	39.0 / -12.0	37.8 / -71.6	39.4 / 0.0	196.1 / 0.0	95.7 / -12.0	54.1 / -71.5	70.5 / -151.3	28.2	63.6	8.5	80.9	166.9
70	9.4 / -14.0	33.9 / -12.0	29.8 / -70.1	37.4 / 0.0	188.3 / 0.0	87.8 / -12.0	45.6 / -67.5	56.1 / -154.2	24.6	59.7	11.5	76.1	164.1
75	7.9 / -14.0	29.3 / -12.0	22.3 / -67.9	35.7 / 0.0	181.2 / 0.0	80.7 / -12.0	38.2 / -63.4	41.8 / -155.9	21.5	55.8	13.8	71.4	161.4
80	6.5 / -14.0	25.4 / -12.0	15.6 / -65.2	34.4 / 0.0	174.8 / 0.0	74.4 / -12.0	31.8 / -59.3	27.6 / -156.5	18.9	52.0	15.6	66.9	158.9

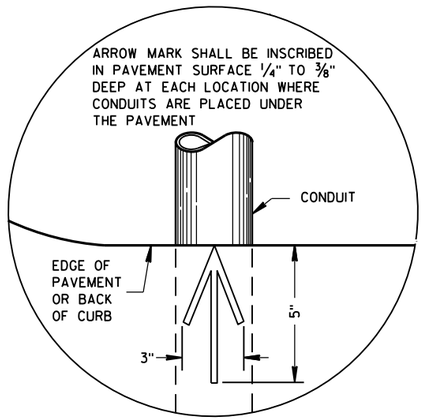
TYPE "A1" & "A2" SIDE ROAD INTERSECTION DETAILS

AT-GRADE SIDE ROAD INTERSECTION, TYPE "A1" & "A2"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/18/12 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

S.D.D. 9 A 1-13b



PLAN VIEW

ARROW MARK

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

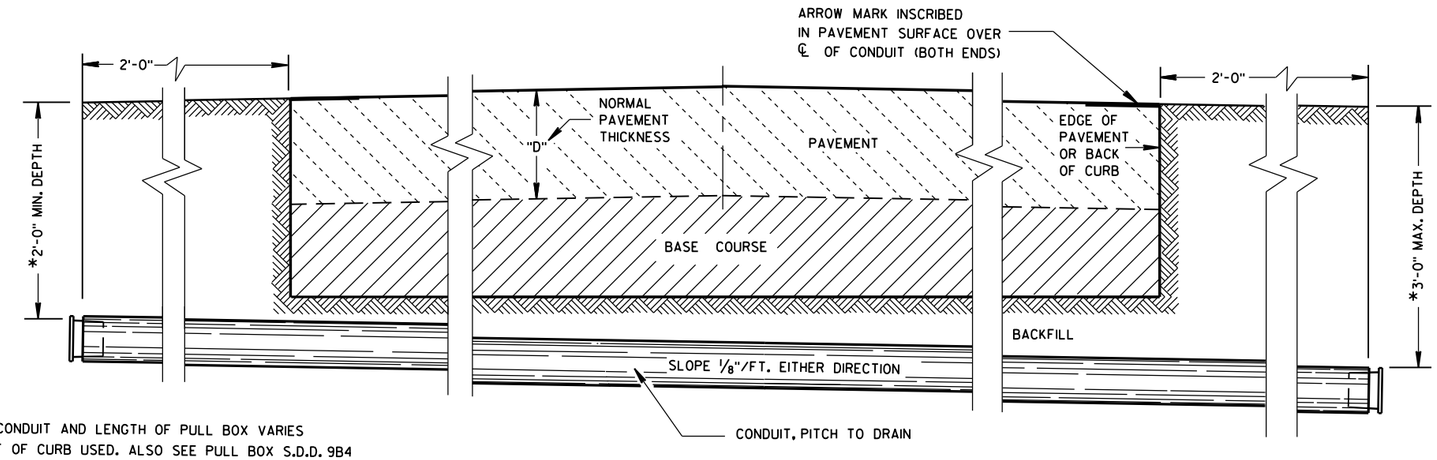
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March, 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL ENGINEER
FHWA

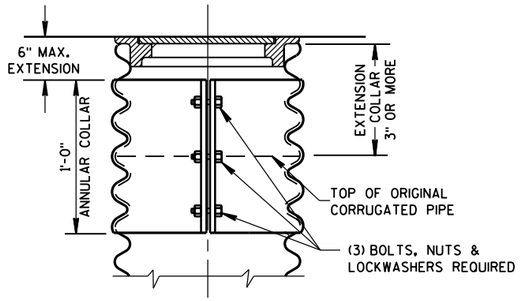
SDD 9b4 Pull Box

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

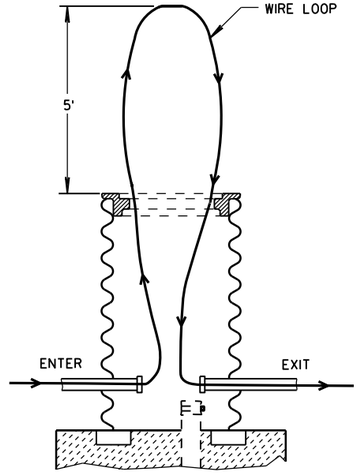
DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2	26 1/2	26 1/2	26 1/2
FRAME	F	8 1/2	8 1/2	8 1/2	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2
FRAME	G	11 1/2	11 1/2	11 1/2	17 1/2	17 1/2	17 1/2	23 1/2	23 1/2	23 1/2
WEIGHT IN POUNDS *										
FRAME AND COVER		60	60	60	110	110	110	155	155	155

* THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

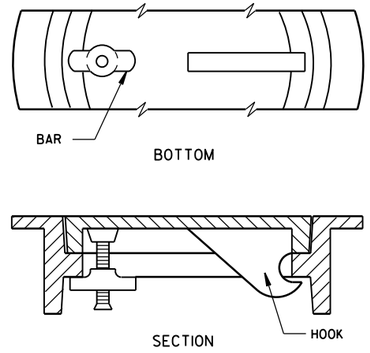
** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.



CORRUGATED PIPE EXTENDER

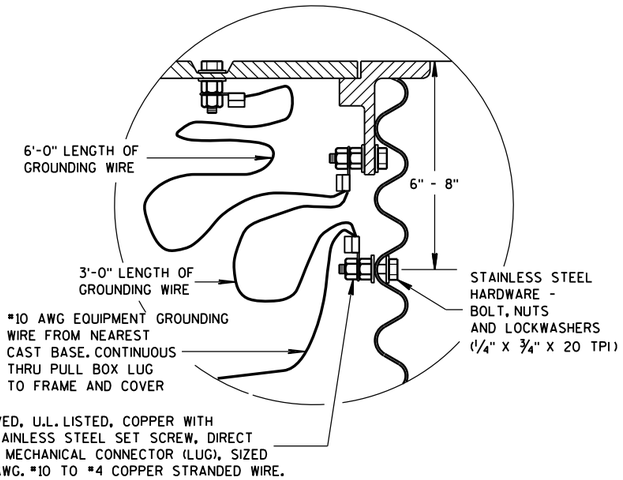


MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX

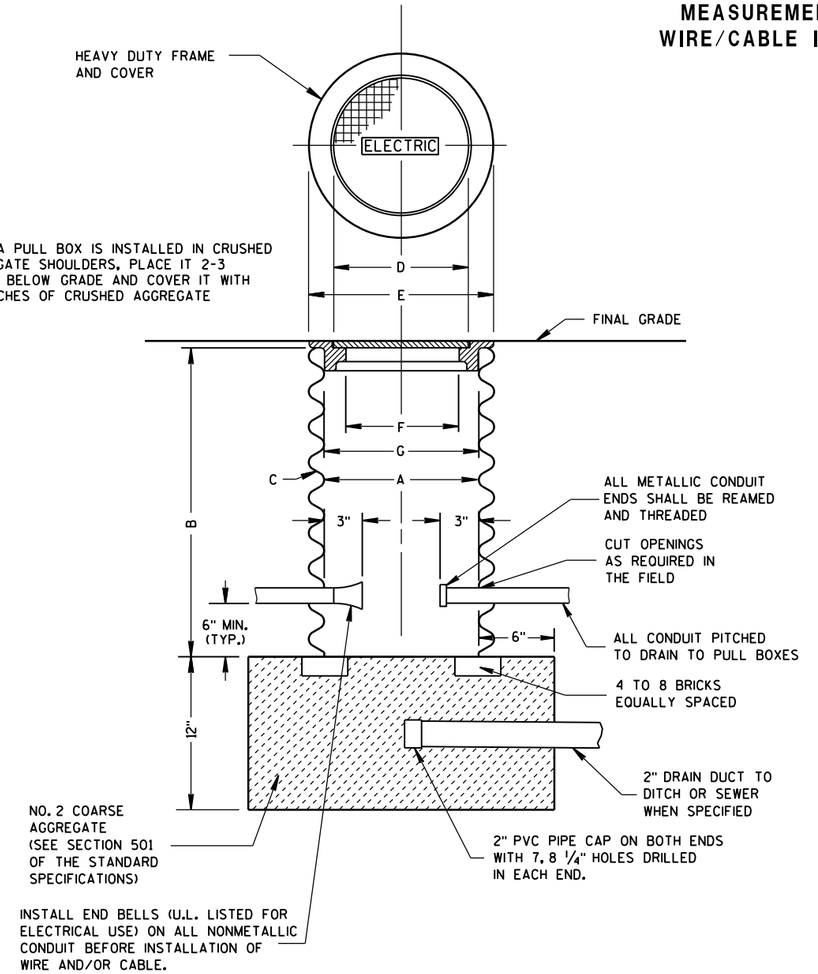


ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



PULL BOX

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS.

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

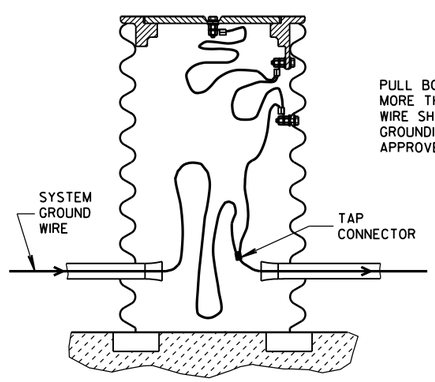
ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.



PULL BOX TO NEAREST BASE DISTANCE MORE THAN 20 FEET. PULL BOX GROUND WIRE SHALL CONNECT AT SYSTEM GROUNDING WIRE. USE DEPARTMENT APPROVED TAP CONNECTOR.

EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL ENGINEER
FHWA

6

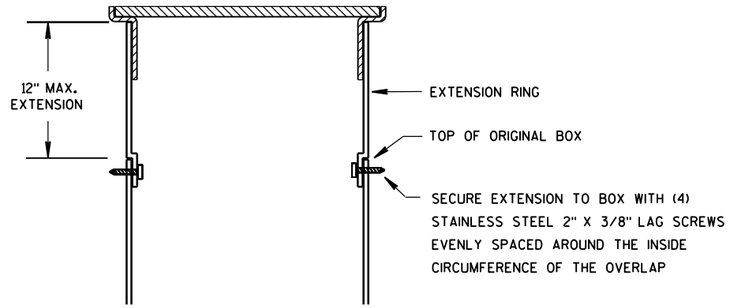
S.D.D. 9 B 4-11

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

DIMENSION IN INCHES		NON-CONDUCTIVE PULL BOX	
BOX DIAMETER ** (INSIDE)	A	24	24
BOX OVERALL OUTSIDE DIAMETER	B	27	27
BOX LENGTH	C	36	42
FRAME OPENING	D	22 1/2	22 1/2
WEIGHT IN POUNDS *			
COVER		50	50
BOX ONLY		75	85

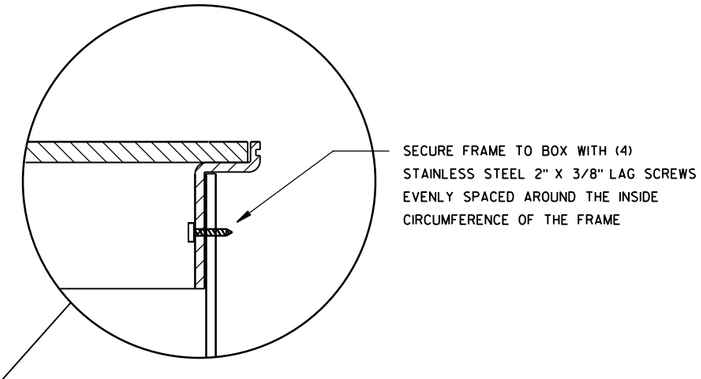
* THE ACTUAL WEIGHT OF THE COVER OR BOX ONLY MAY VARY NOT TO EXCEED 100 LBS INDIVIDUALLY.

** DIAMETER VARIES FROM TOP TO BOTTOM WITH THE DIAMETER LARGER AT THE BOTTOM TO PREVENT FROST HEAVE

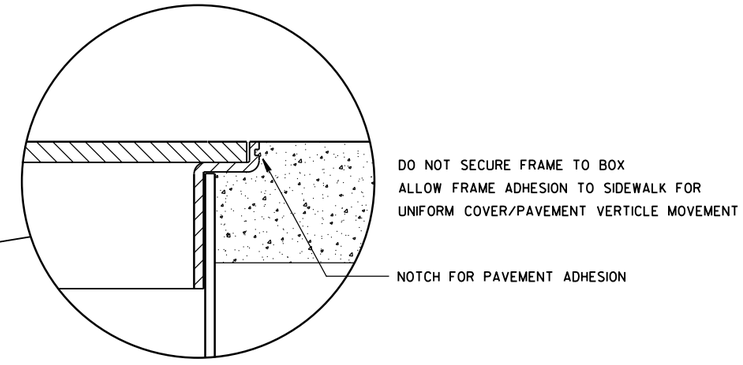


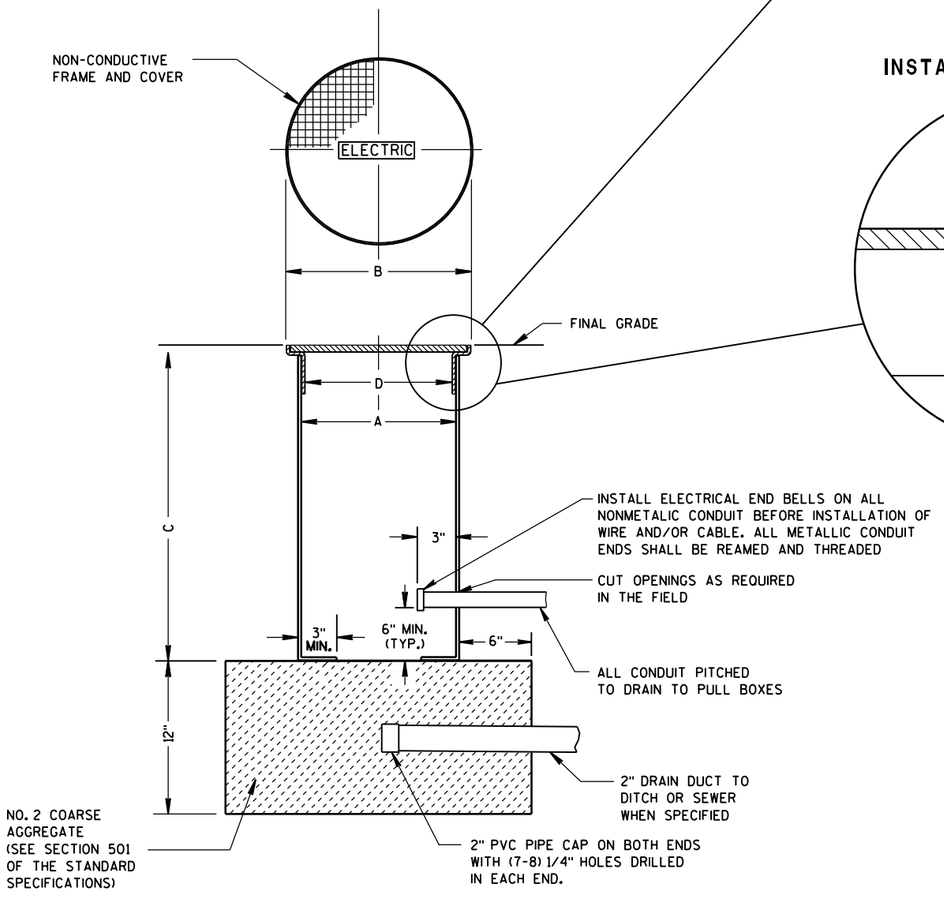
BOX EXTENSION

INSTALLED IN SOD OR CRUSHED AGGREGATE



INSTALLED IN SIDEWALK





NON-CONDUCTIVE PULL BOX

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ALL BOXES, FRAMES AND COVERS SHALL BE SUITABLE FOR TIER 15 LOADING AS SPECIFIED IN ANSI/SCTE 77.

PROVIDE AN OPENING FOR TOOL ASSISTED COVER REMOVAL NOT LARGE ENOUGH TO PERMIT PASSAGE OF A SPHERE MORE THAN 1/2" DIAMETER

ENSURE COVER SURFACE IS SKID RESISTANT WITH A COEFFICIENT OF FRICTION OF AT LEAST 0.5 AND VERTICAL SURFACE DICONTINUITIES LESS THAN 1/4".

COVER SHALL BE MAGNETICALLY LOCATABLE.

BOXES AND EXTENSIONS ARE TRIMMABLE FOR CUSTOM LENGTHS. TRIMMED PIECES SHALL MAINTAIN A UNIFORM LENGTH.

ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

ENTIRE BOX MUST BE CONSTRUCTED OF NON-CONDUCTIVE MATERIALS WITH THE EXCEPTION OF STAINLESS STEEL FASTENERS AND MAGNETIC LOCATABLE DEVICE.

WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE

LABEL ON COVER SHALL READ "ELECTRIC" FOR SIGNAL AND LIGHTING SYSTEMS, "WISDOT ITS" FOR COMMUNICATIONS AND ITS EQUIPMENT SYSTEMS.

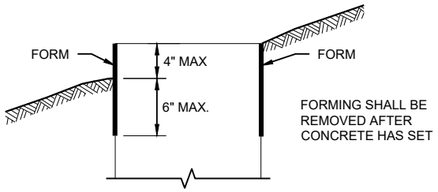
PULL BOX NON-CONDUCTIVE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL ENGINEER
FHWA

SDD 9C2 Concrete Bases, Types 1, 2, 5 & 6

FORM DEPTH SHALL BE NO MORE THAN 6" BELOW GRADE ON THE LOWER SIDE OF BASE



FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5 & 6
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWINGSHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN A THE ENTRANCE OF THE BASE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FRO FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION.

WHEN REQUIRED TO CONNECT NON-METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 2, TYPE 5 AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER ALL BASE TYPES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

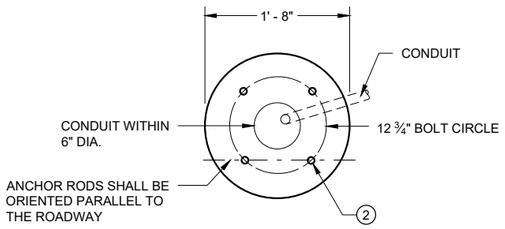
WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

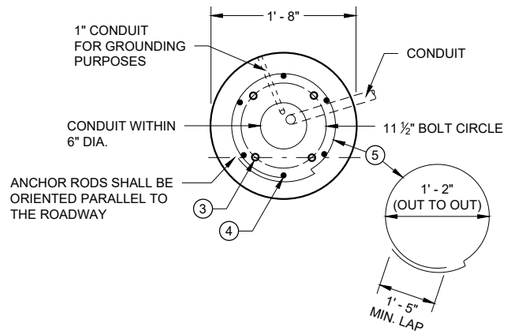
WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4 INCH"L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.

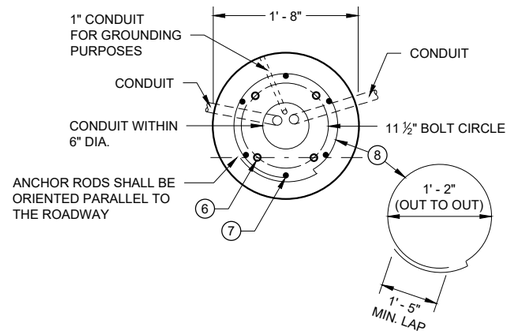
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).







1 THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL OF THE ENGINEER.

2 (4) 1" DIA. X 3' - 6" ANCHOR RODS.

3 (4) 1" DIA. X 5' - 0" ANCHOR RODS.

4 (6) NO. 6 X 6' - 8" BAR STEEL REINFORCEMENT.

5 (7) NO. 4 X 5' - 1" BAR STEEL REINFORCEMENT @ 1' - 0" C - C.

6 (4) 1" DIA. X 3' - 6" ANCHOR RODS.

7 (6) NO. 4 X 4' - 8" BAR STEEL REINFORCEMENT.

8 (5) NO. 4 X 5' - 1" BAR STELL REINFORCEMENT @ 1' - 0" C -C.

9 EXOTHERMIC CONNECTION TO EUIPMENT GROUNDING CONDUCTOR

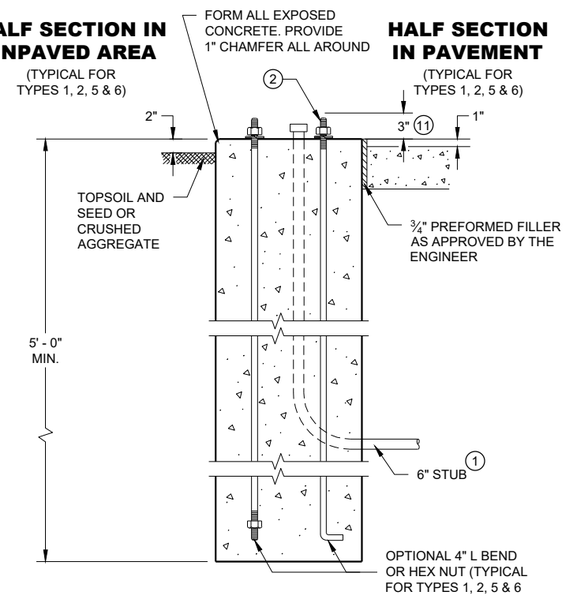
10 ⅝" DIA. X 8' -0" COPPERCLAD EQUIPMENT GROUNDING ELECTRODE REQUIRED

11 ANY ANCHOR ROD PROJECTION SHORTER THAN 2 ¾" OR LONGER THAN 3 ¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

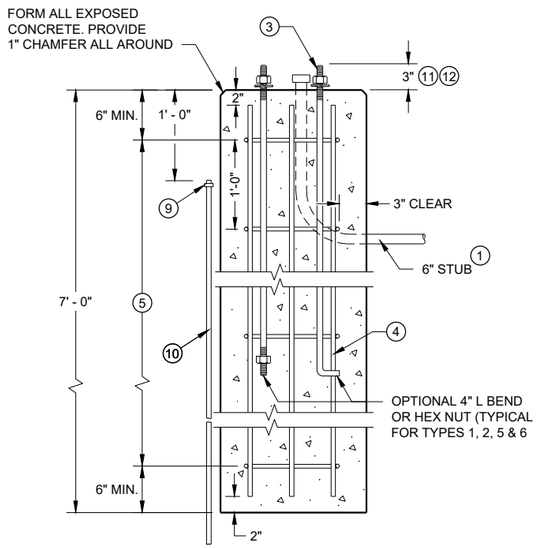
12 FOR NON - BREAKAWAY INSTALLATIONS, 4 ½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

HALF SECTION IN UNPAVED AREA
(TYPICAL FOR TYPES 1, 2, 5 & 6)

HALF SECTION IN PAVEMENT
(TYPICAL FOR TYPES 1, 2, 5 & 6)



TYPE 1



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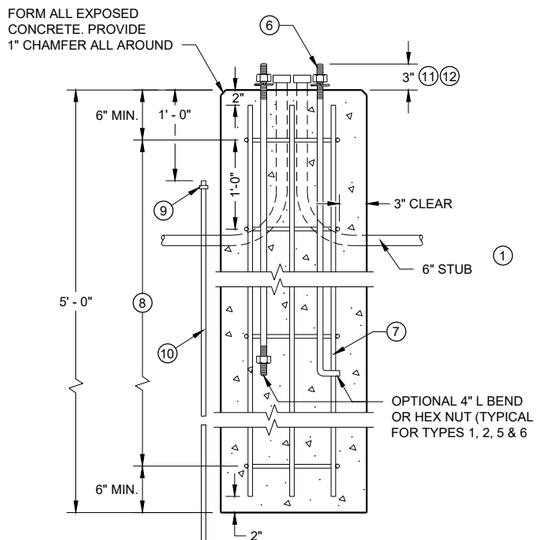


TYPE 5 & 6

CONCRETE BASES

CONCRETE BASES TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGINEER

FHWA

SDD 09C02 - 09

SDD 09C02 - 09

6

6

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATIONS.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

SHIM LENGTH SHALL BE LONG ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

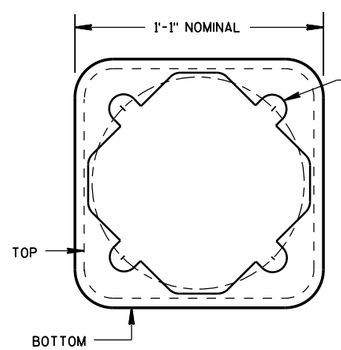
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

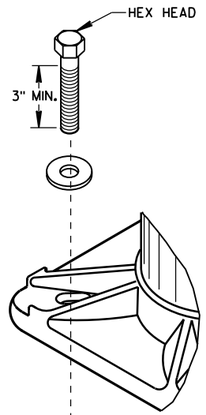
PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

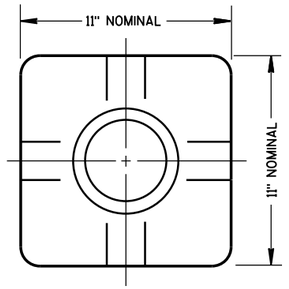
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

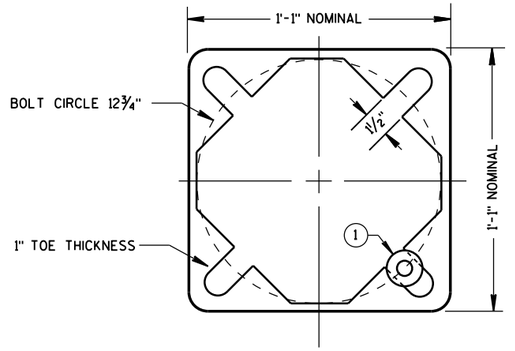


BOTTOM VIEW
(TRANSFORMER BASE)

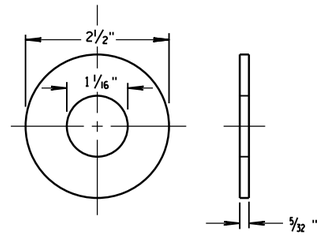




TOP VIEW
(PEDESTAL BASE)

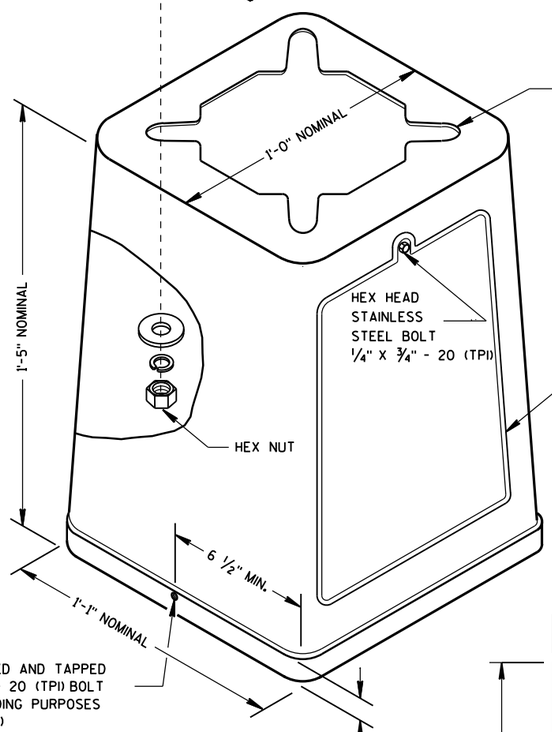


BOTTOM VIEW
(PEDESTAL BASE)

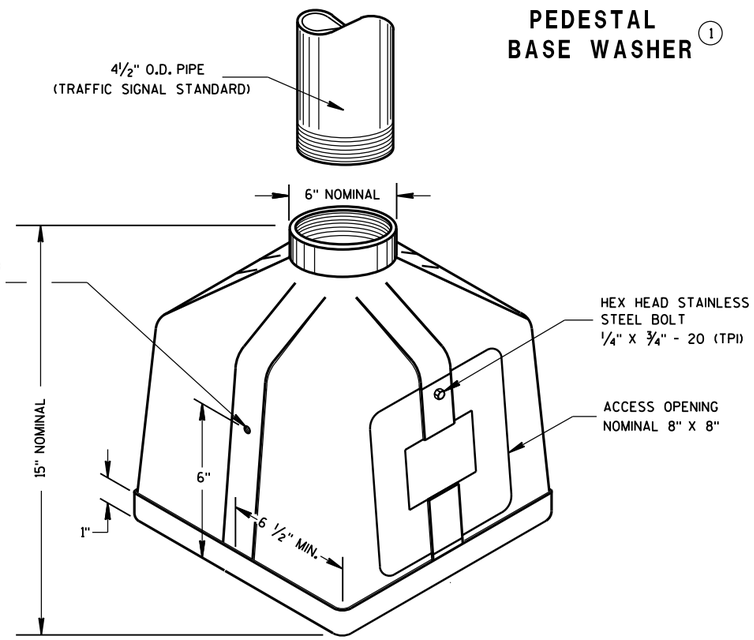


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

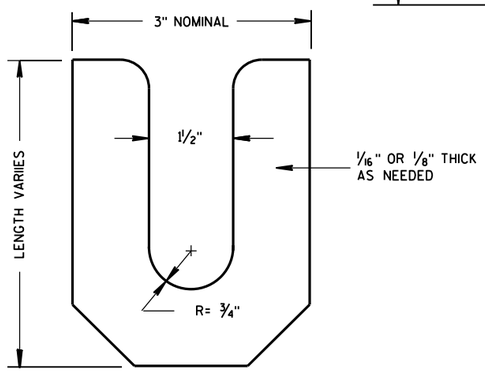
PEDESTAL BASE WASHER (1)



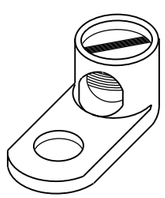
ISOMETRIC VIEW



ISOMETRIC VIEW
PEDESTAL BASE



LEVELING SHIM



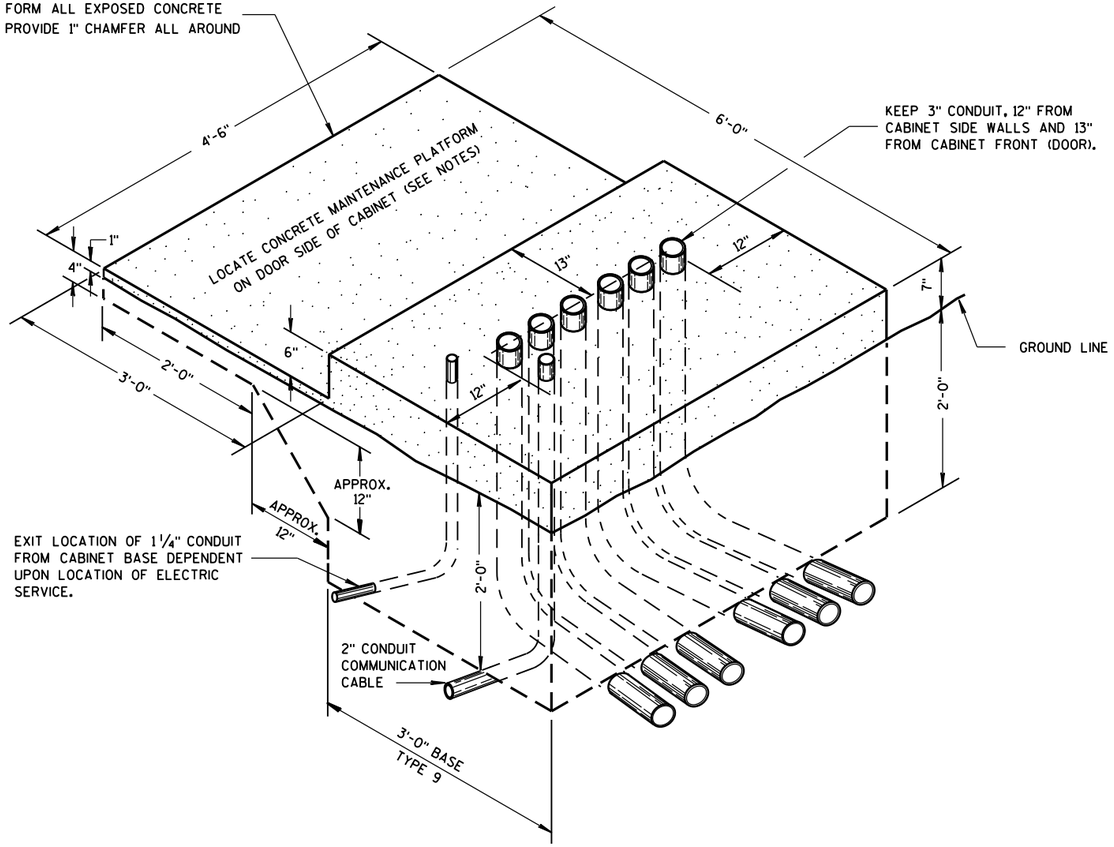
TYPICAL MECHANICAL
CONNECTOR LUG
TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE
INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES

TRANSFORMER/PEDESTAL BASES
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED Sept. 2014 (DATE) — /S/ Ahmet Demirbilek (STATE ELECTRICAL ENGINEER) FHWA

6

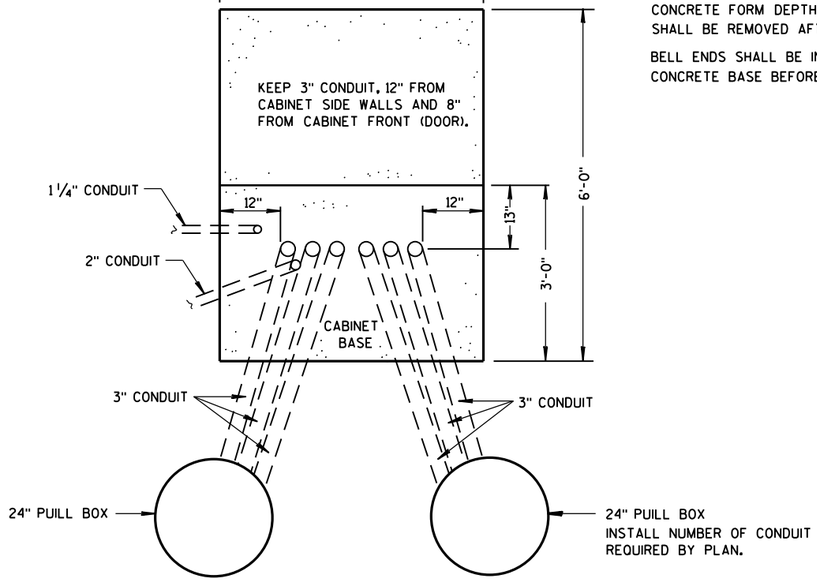
S.D.D. 9 C 3-4



ISOMETRIC VIEW

TYPE 9, SPECIAL

(C.Y. CONCRETE = APPROX. 1.56)



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

INSTALL FOUR ½ INCH MINIMUM DIAMETER X 4 INCH MINIMUM LENGTH STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS WITH A PULLOUT STRENGTH OF 9,000 LBS. TO ANCHOR THE CABINET TO TYPE 6, 7, 8, AND 9 BASES. THE ANCHOR STUDS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

CONTROL CABINET BASE TOP SURFACE SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND BE LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

PLUG ALL BELOW GRADE NONMETALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

CONDUIT EXITING THE CONCRETE BASE (SIX THREE INCH) SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL ENGINEER
FHWA

SDD 9c11 Concrete Base Type 10

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN AT THE ENTRANCE OF THE BASE.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 4 INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NONMETALLIC CONDUIT SHALL HAVE BELL END INSTALLED. ALL CONDUIT SHALL BE SLOPED TO PULL BOX.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUIT IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL ENTER THE BASE THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TEMPLATES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

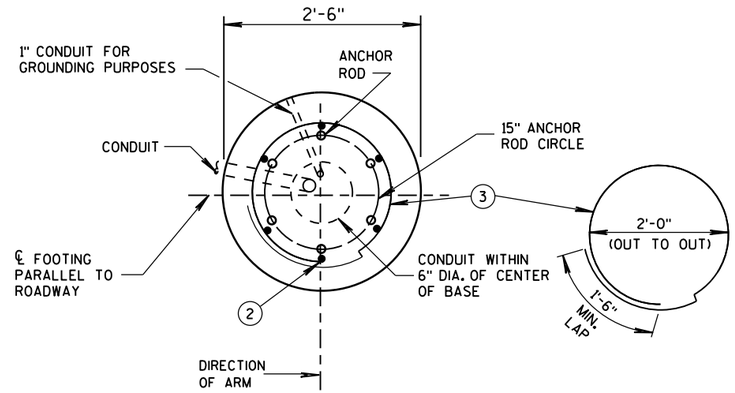
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

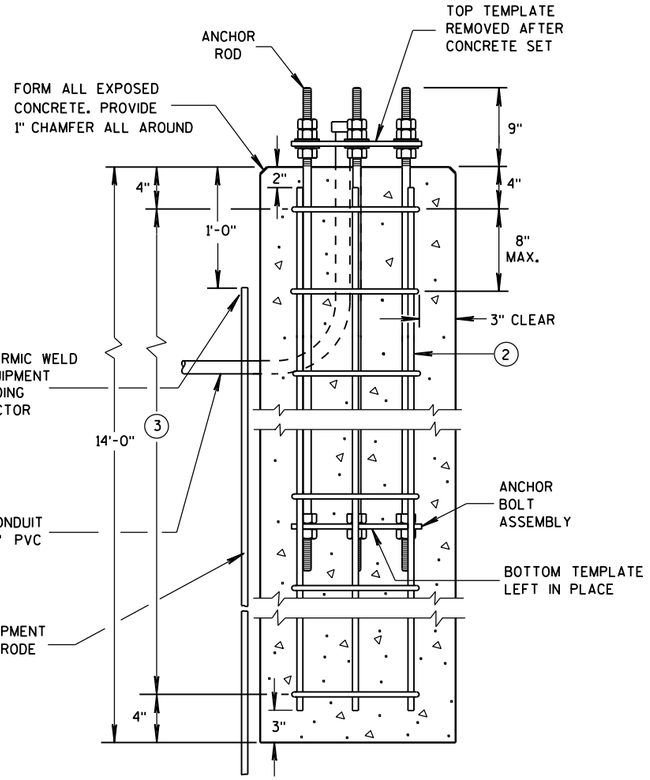
(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES. (GREATER THAN 36 INCHES IF INSTALLED IN BREAKER-RUN), EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.

(2) (6) NO. 6 X 13'-7" BAR STEEL REINFORCEMENT.

(3) (21) NO. 5 X 7'-10" BAR STEEL REINFORCEMENT @ 8" MAX. C-C.

CONCRETE MASONRY	fc=3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60	fy=60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55 (IN ACCORDANCE WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATION)	fy=55,000 p.s.i.
TEMPLATES, ASTM, A709 GRADE 36	fy=36,000 p.s.i.

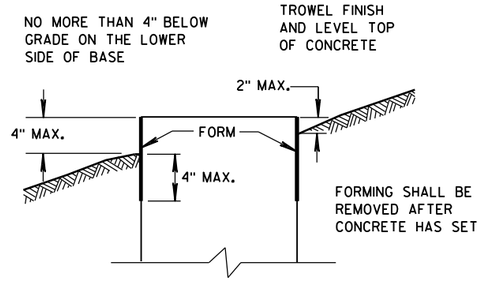




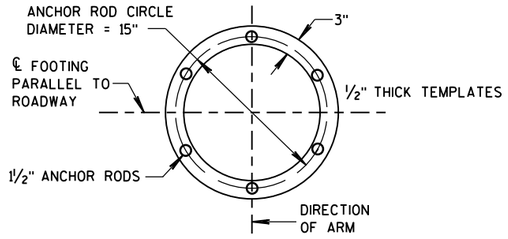
CONCRETE BASE TYPE 10

(FOR TYPE 9 & 10 & OVER HEIGHT (OH) POLES)

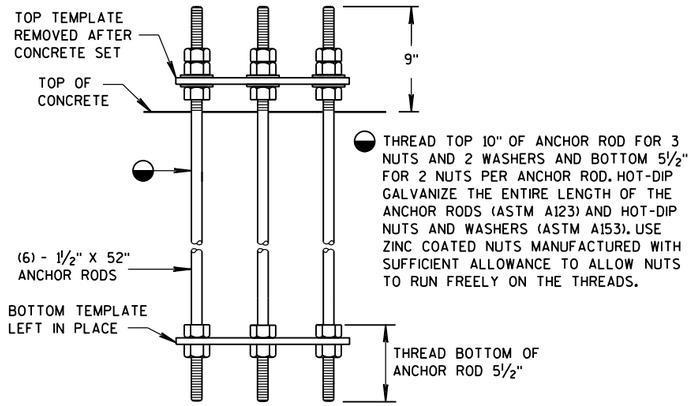
TO BE USED WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION. SEE S.D.D. 9C13-2 WHEN GROUND ELEVATION AT BASE IS LOWER THAN HIGH POINT OF ROADWAY ELEVATION.



FORMING DETAIL



TOP AND BOTTOM TEMPLATES



ANCHOR BOLT ASSEMBLY DETAIL

CONCRETE BASE TYPE 10 ANCHOR ASSEMBLY

QUANTITY REQUIREMENTS	
APPROX. CUBIC YARDS OF CONCRETE	2.5
LBS. OF HOOP BAR STEEL	172
LBS. OF VERTICAL BAR STEEL	122

CONCRETE BASE TYPE 10

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2017 — DATE

/S/ Ahmet Demirbilek — STATE ELECTRICAL ENGINEER

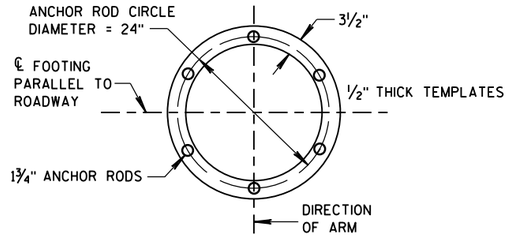
FHWA

6

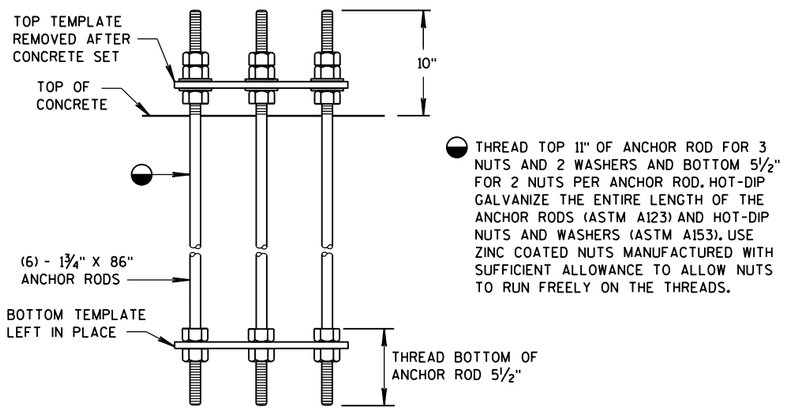
S.D.D. 9 C 11-10

6

S.D.D. 9 C 11-10

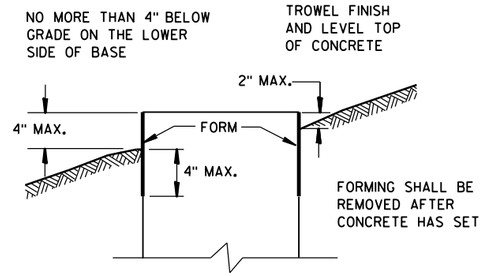


TOP AND BOTTOM TEMPLATES



ANCHOR BOLT ASSEMBLY DETAIL

CONCRETE BASE TYPE 13 ANCHOR ASSEMBLY



FORMING DETAIL

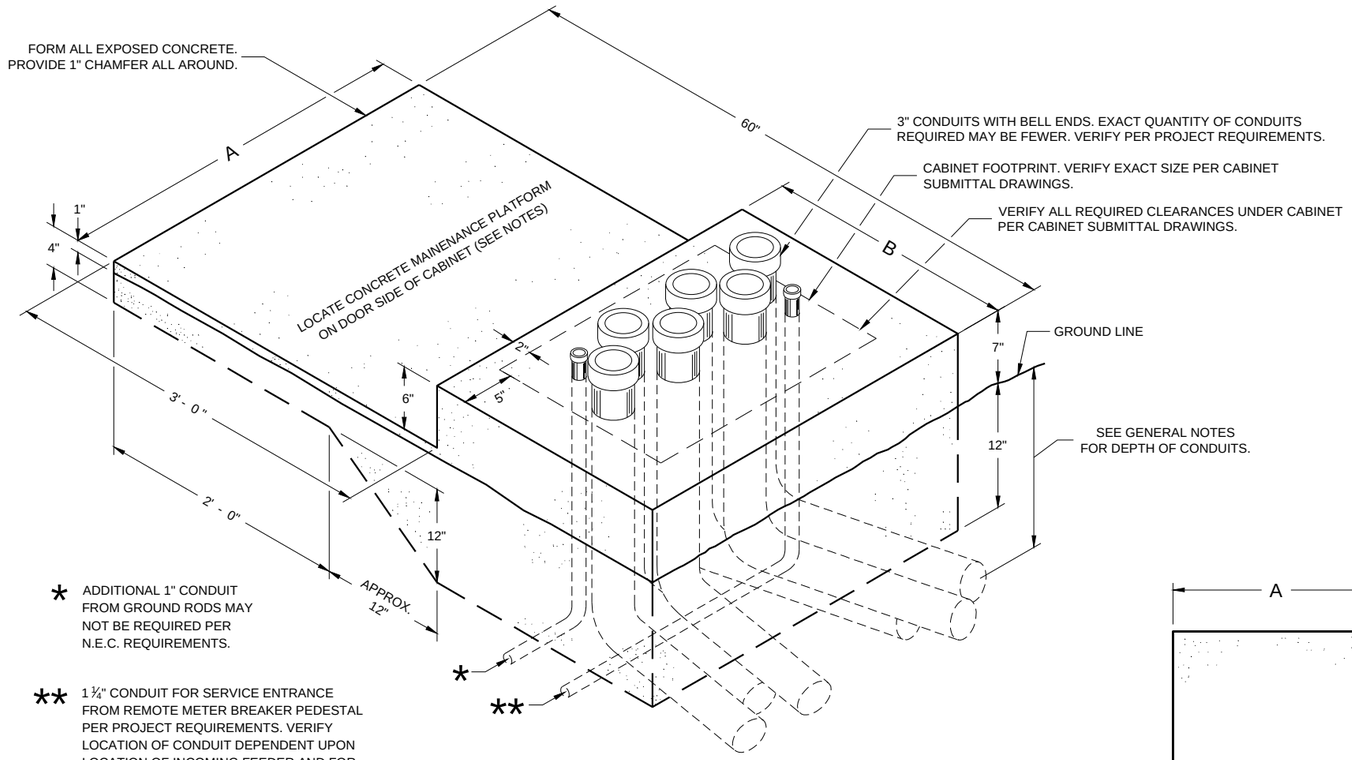
CONCRETE BASE TYPE 13	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2017 DATE FHWA	/S/ Ahmet Demirbilek STATE ELECTRICAL ENGINEER

6

S.D.D. 9 C 12-9b

6

S.D.D. 9 C 12-9b



* ADDITIONAL 1" CONDUIT FROM GROUND RODS MAY NOT BE REQUIRED PER N.E.C. REQUIREMENTS.

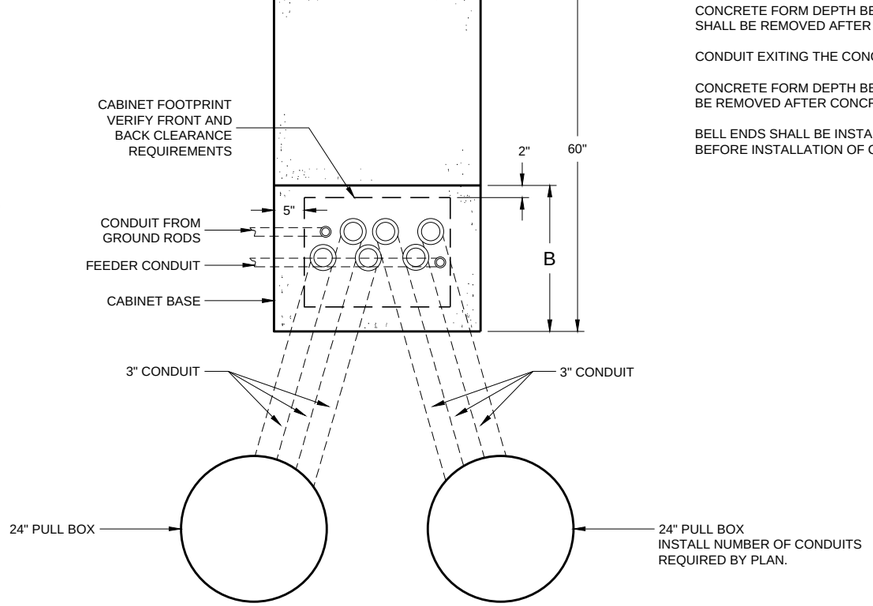
** 1 ¼" CONDUIT FOR SERVICE ENTRANCE FROM REMOTE METER BREAKER PEDESTAL PER PROJECT REQUIREMENTS. VERIFY LOCATION OF CONDUIT DEPENDENT UPON LOCATION OF INCOMING FEEDER AND FOR EASE OF CONNECTION TO LOAD CENTER.

ISOMETRIC VIEW

CONCRETE CONTROL CABINET BASE, TYPE L

(C.Y. CONCRETE = APPROX. 0.4)

CONCRETE BASE TYPE	CABINET WIDTH	DIMENSIONS		MAXIMUM 3" CONDUITS
		A	B	
L24	24"	34"	24"	4
L30	30"	40"	24"	6



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE L

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

INSTALL FOUR STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS TO ANCHOR THE CABINET BASES. THE ANCHORS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NON - METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U. L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

LOCATIONS SHALL BE AS SHOWN ON THE PLANS UNLESS DETERMINED BY THE ENGINEER IN THE FIELD.

CONTROL CABINET BASE TOP SURFACE SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT EQUALS 6 TIMES THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

PLUG ALL BELOW GRADE NON - METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON - METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6 INCHES MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

CONDUIT EXITING THE CONCRETE BASE SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6 INCH MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

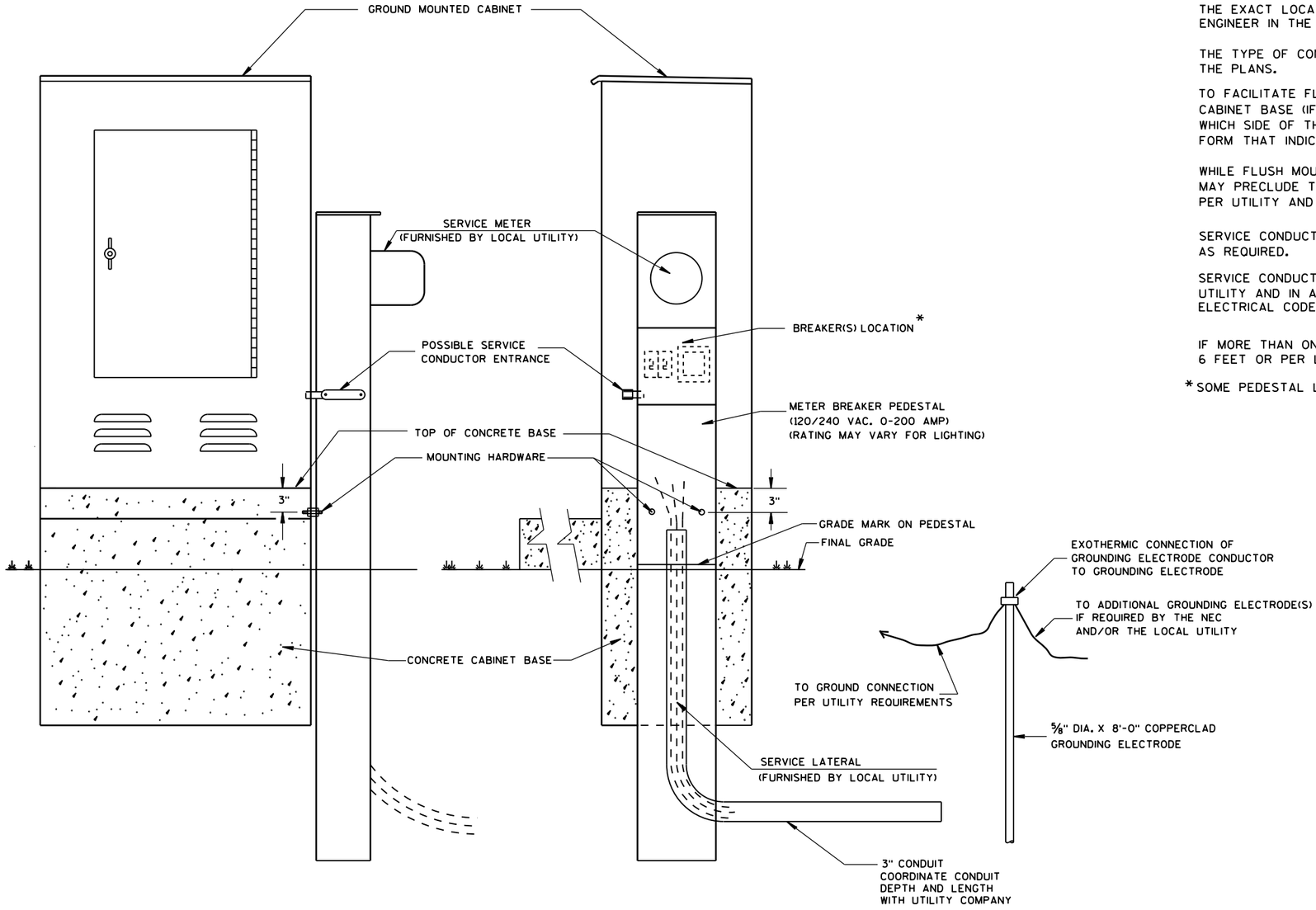
CONCRETE CONTROL CABINET BASE, TYPE L

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGINEER

FHWA



TYPICAL CABINET SERVICE INSTALLATION

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE EXACT LOCATION OF THE METER BREAKER PEDESTAL SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE TYPE OF CONCRETE CABINET BASE TO BE INSTALLED SHALL BE AS CALLED FOR IN THE PLANS.

TO FACILITATE FLUSH MOUNTING OF THE METER BREAKER PEDESTAL AGAINST THE SIDE OF THE CABINET BASE (IF FLUSH MOUNTING POSSIBLE. CONFER WITH THE LOCAL UTILITY TO DETERMINE WHICH SIDE OF THE CONCRETE BASE THE ELECTRICAL SERVICE LATERAL WILL APPROACH. THEN FORM THAT INDICATED SIDE FOR FULL SIDE DEPTH.

WHILE FLUSH MOUNTING IS THE MOST DESIRABLE MOUNTING CONFIGURATION UTILITY REQUIREMENTS MAY PRECLUDE THIS OPTION. CONTRACTOR MUST PROVIDE UTILITY APPROVED PEDESTAL AND INSTALL PER UTILITY AND MANUFACTURERS REQUIREMENTS.

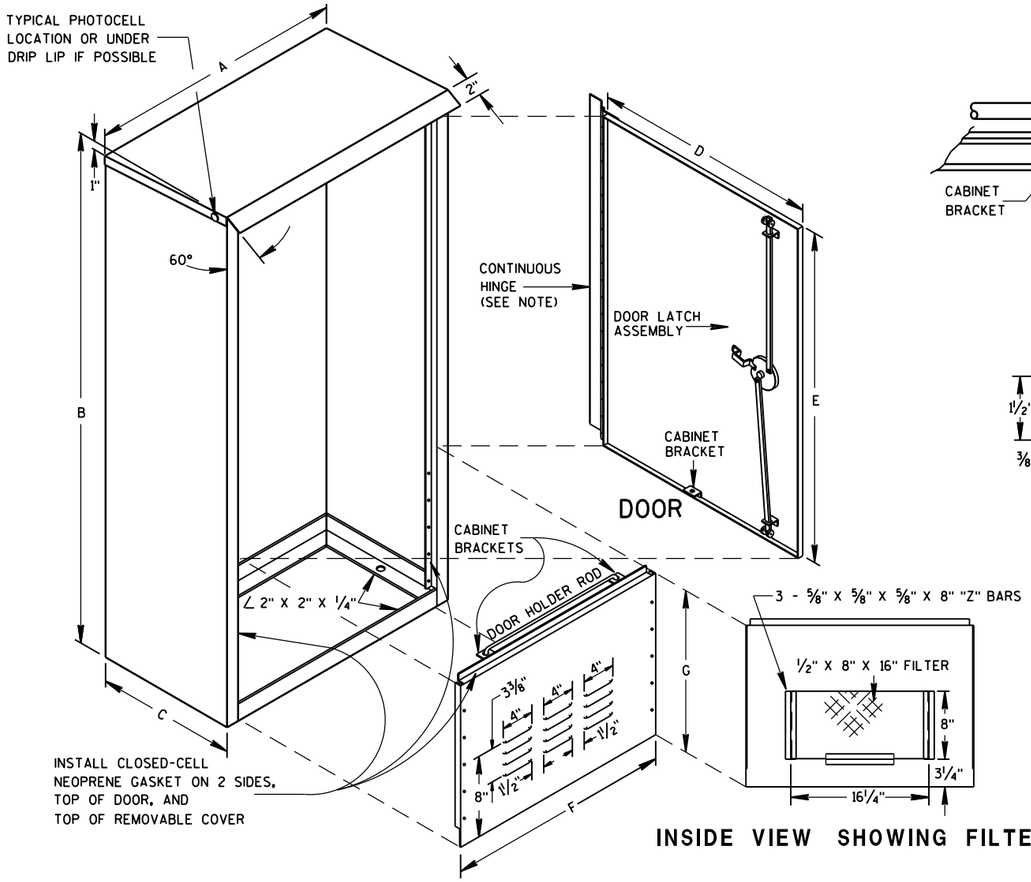
SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID METALLIC CONDUIT, NIPPLES AND/OR CONDULETS AS REQUIRED.

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AND LOCATED AS REQUIRED BY THE LOCAL UTILITY AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED NATIONAL ELECTRICAL CODE.

IF MORE THAN ONE GROUNDING ELECTRODE IS REQUIRED, THE DISTANCE APART SHALL BE 6 FEET OR PER LOCAL UTILITY REGULATIONS.

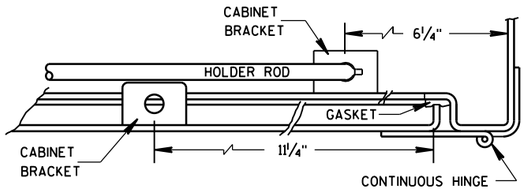
* SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
Sept. 2014 DATE	/S/ Ahmet Demirbilek STATE ELECTRICAL ENGINEER
FHWA	

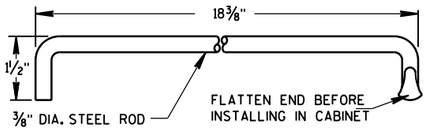


INSIDE VIEW SHOWING FILTER

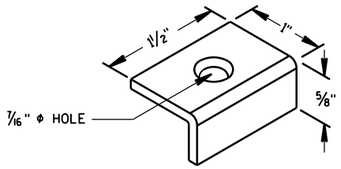
REMOVABLE COVER



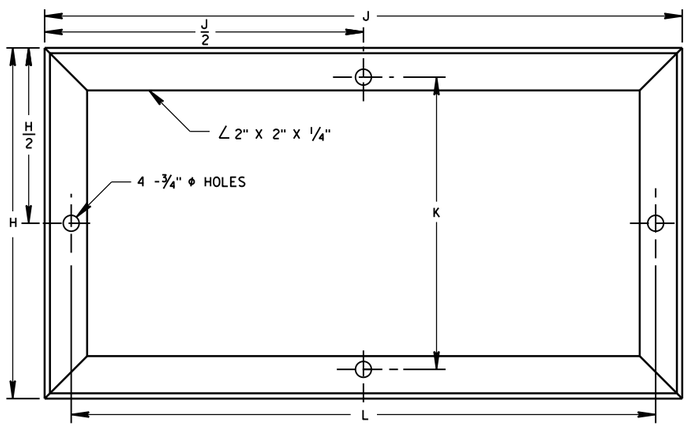
HINGE & DOOR HOLDER



HOLDER ROD



CABINET BRACKET



MOUNTING BASE

TABLE OF DIMENSIONS (INCHES)

MARK	CABINET TYPE		
	3060	3860	3866
A	30	38	38
B	60	60	66
C	16 1/2	16 1/2	24
D	26 1/2	34 3/4	33 3/4
E	38 3/4	38 3/4	38 3/4
F	26 1/2	34 3/4	33 3/4
G	19	19	25
H	16 1/2	16 1/2	24
H/2	8 1/4	8 1/4	12
J	30	38	38
J/2	15	19	19
K	13 3/4	13 3/4	21 1/4
L	27 1/2	35 1/2	35 1/2

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

PRIME WITH PHOSPHATE TREATMENT AND PRIMER.

FINISH EXTERIOR SURFACES WITH RUSTOLEUM #906 SILVER GRAY OR APPROVED EQUAL.

FINISH INTERIOR WITH RUSTOLEUM #2766 HIGH GLOSS WHITE ENAMEL OR APPROVED EQUAL.

ALL SHEET METAL PARTS SHALL BE .125 INCH THICK ALUMINUM.

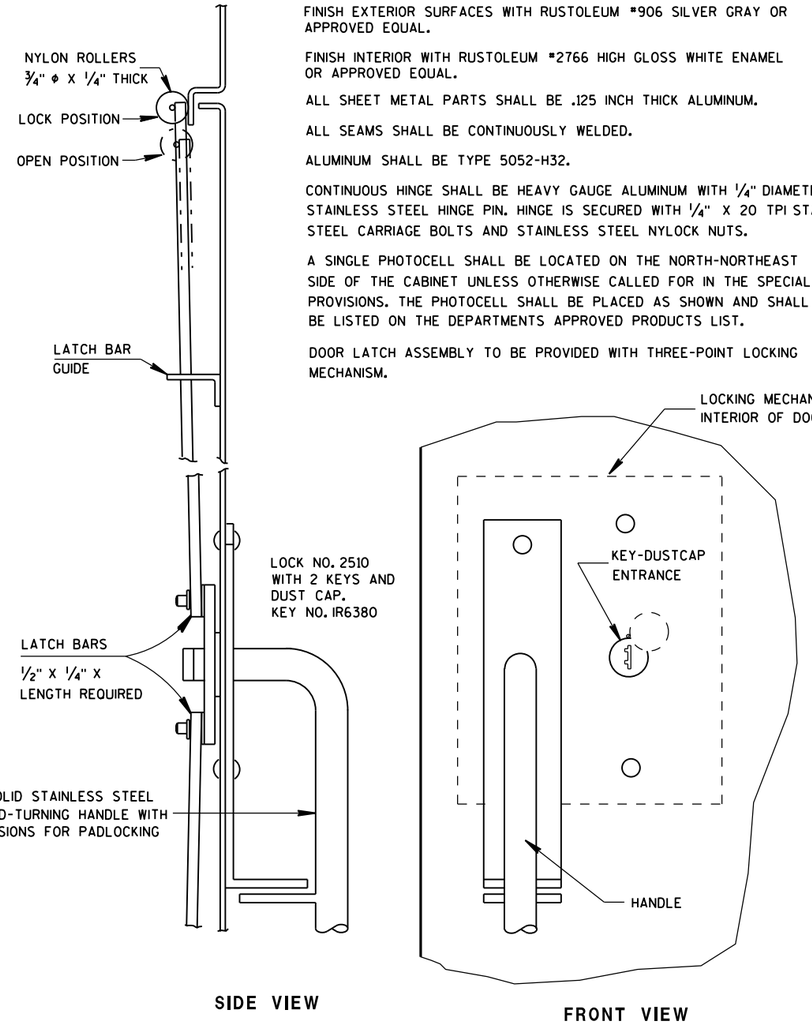
ALL SEAMS SHALL BE CONTINUOUSLY WELDED.

ALUMINUM SHALL BE TYPE 5052-H32.

CONTINUOUS HINGE SHALL BE HEAVY GAUGE ALUMINUM WITH 1/4" DIAMETER STAINLESS STEEL HINGE PIN. HINGE IS SECURED WITH 1/4" X 20 TPI STAINLESS STEEL CARRIAGE BOLTS AND STAINLESS STEEL NYLOCK NUTS.

A SINGLE PHOTOCELL SHALL BE LOCATED ON THE NORTH-NORTHEAST SIDE OF THE CABINET UNLESS OTHERWISE CALLED FOR IN THE SPECIAL PROVISIONS. THE PHOTOCELL SHALL BE PLACED AS SHOWN AND SHALL BE LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST.

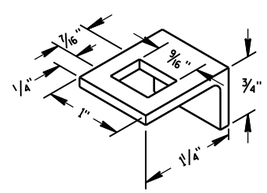
DOOR LATCH ASSEMBLY TO BE PROVIDED WITH THREE-POINT LOCKING MECHANISM.



SIDE VIEW

FRONT VIEW

LATCH ASSEMBLY



LATCH BAR GUIDE

SIGNAL CONTROL CABINET

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGINEER

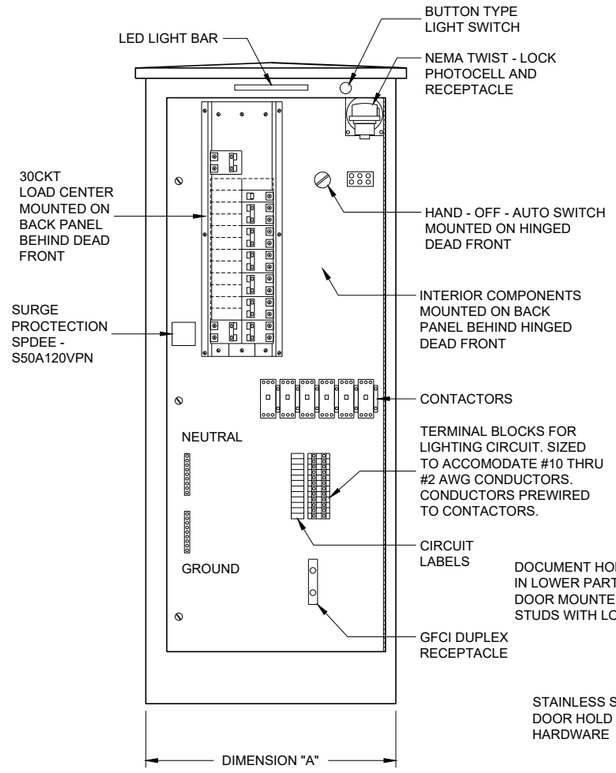
FHWA

6

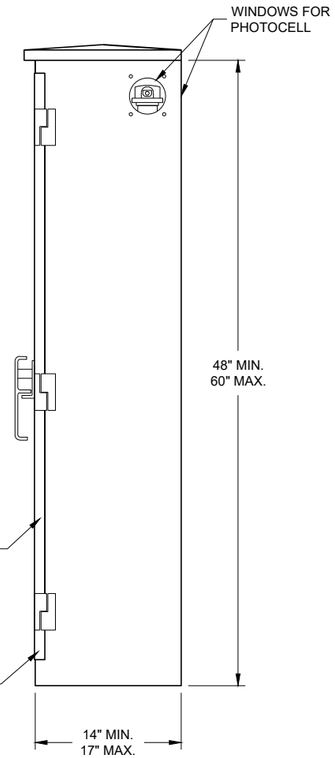
S.D.D. 9 D 2-3

SDD 09D04 Lighting Control Cabinet 120/240 Volt

FRONT INTERIOR ELEVATION



SIDE VIEW



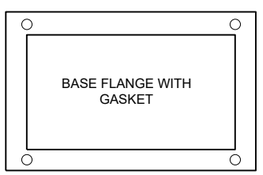
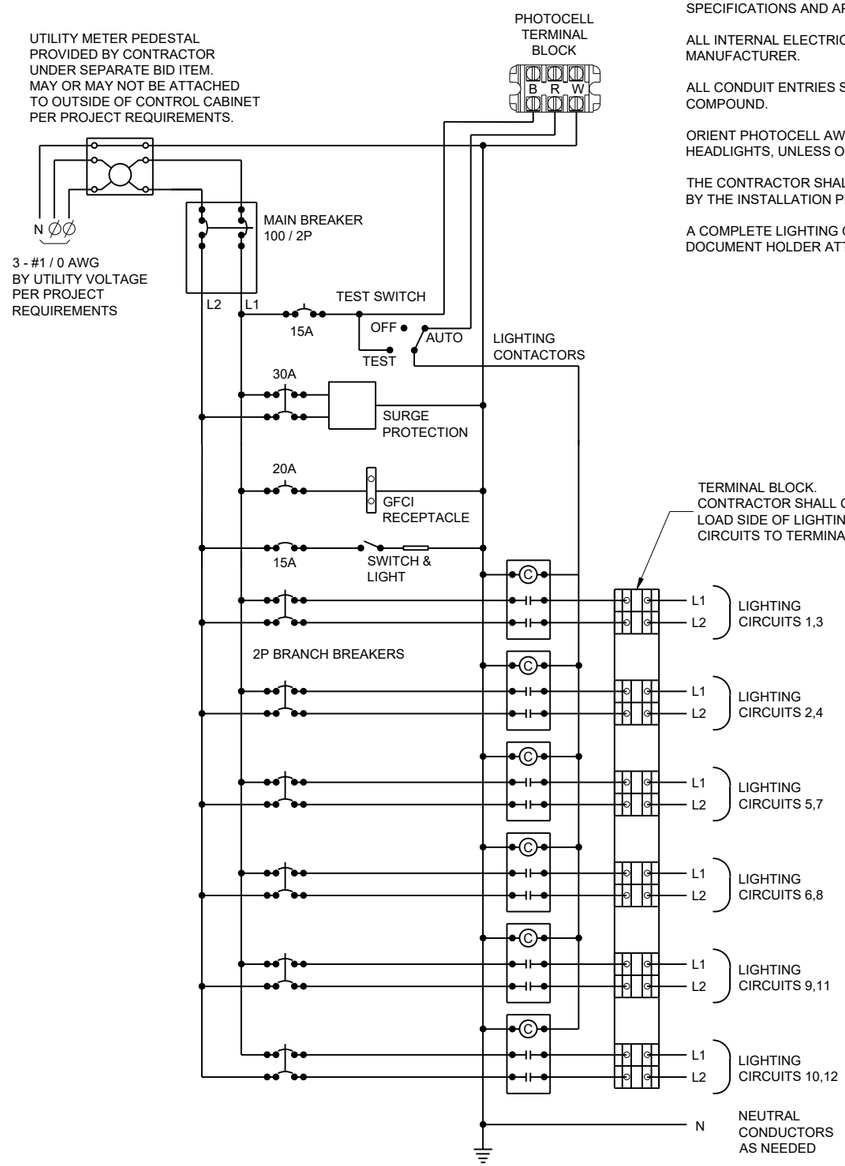


TABLE OF DIMENSIONS (INCHES)		
CONCRETE BASE TYPE	CABINET WIDTH	DIMENSION "A"
L24	24"	24"
L30	30"	30"

LIGHTING CONTROL CABINET



CONTROL CABINET SCHEMATIC

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

ALL INTERNAL ELECTRICAL COMPONENTS WILL BE PRE - WIRED BY THE CABINENT MANUFACTURER.

ALL CONDUIT ENTRIES SHALL BE SEALED WITH AN APPROPRIATE DUCT SEALING COMPOUND.

ORIENT PHOTOCELL AWAY FROM AMBIENT LIGHT SOURCES AND ONCOMING TRAFFIC HEADLIGHTS, UNLESS OTHERWISE CALLED FOR IN THE SPECIAL PROVISION.

THE CONTRACTOR SHALL TOUCH UP ANY DAMAGE TO THE ANODIZED FINISH CAUSED BY THE INSTALLATION PROCESS. COLOR MATCH PAINT SHALL BE USED.

A COMPLETE LIGHTING OR ELECTRICAL PLAN SHALL BE SECURELY PLACED IN THE DOCUMENT HOLDER ATTACHED TO THE DOOR.

LIGHTING CONTROL CABINET
120 / 240 VOLT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGINEER

FHWA

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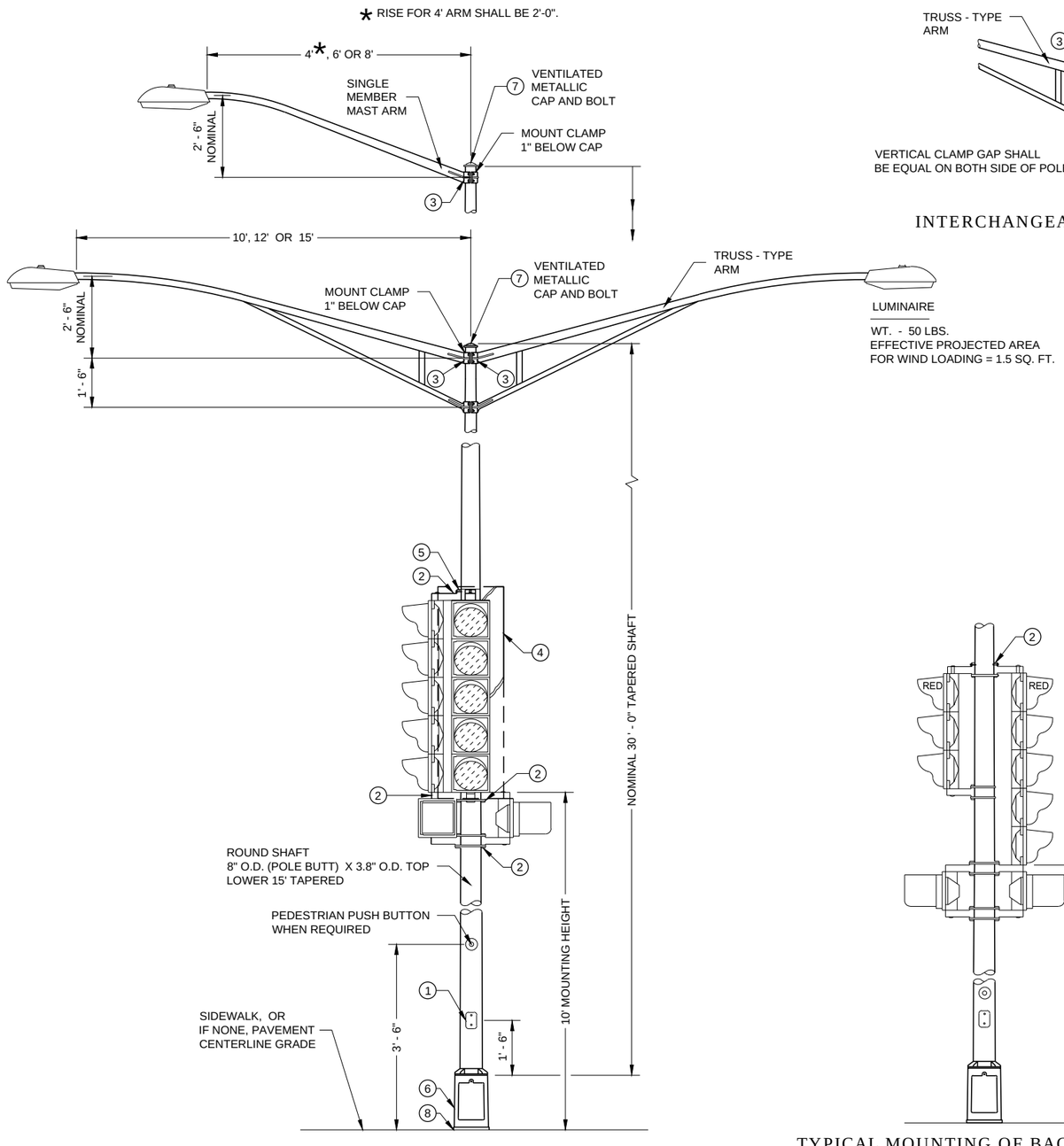
SDD 09D04 - 03

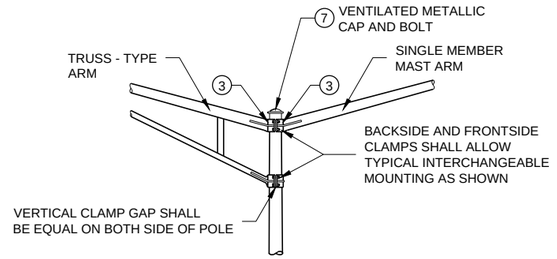
6

SDD 09D04 - 03

SDD 09E01-c Pole Mountings for Traffic Signals and Lighting Units, Type 4



(MAXIMUM LOAD)



INTERCHANGEABLE MOUNTING DETAIL

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ALL TYPE 4 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL WITH A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (.1196").

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

A PULL WIRE / ROPE SHALL BE INSTALLED IN EACH TROMBONE ARM RACEWAY DURING THE MANUFACTURING PROCESS.

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 3/8 INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) ¼" X ¾" - 20 TPI , STAINLESS STEEL, HEX HEAD BOLTS.

(2) SIGNAL FACE MOUNTING BRACKETS. MOUNT WITH CAP SCREWS AND BANDING.

(3) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 3/8" HOLE IN POLE SHAFT FOR WIRING.

(4) SECURELY MOUNT DULL BLACK POLYCARBONATE BACK PLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURER'S RECOMMENDATIONS.

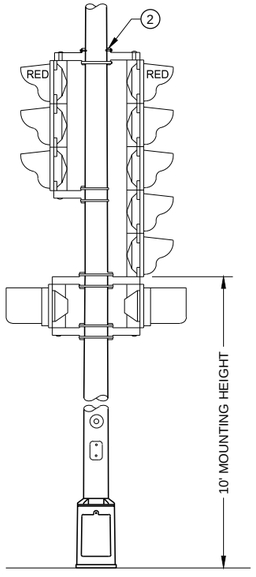
(5) POLE MOUNTED SIGNAL FACES SHALL REQUIRE ONE OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACE.

(6) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

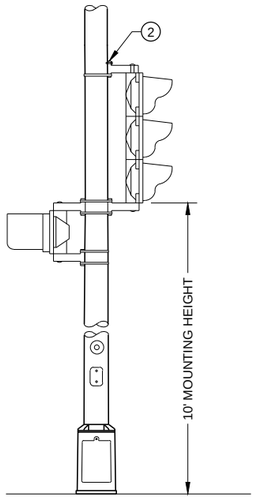
(7) FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(8) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

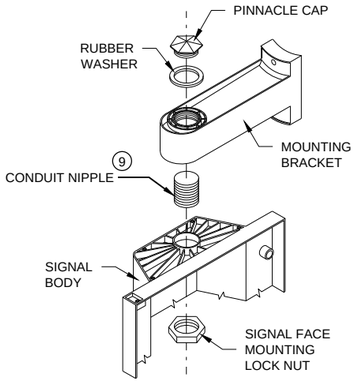
(9) USE 1 ½" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOT INTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE TYPE HARDWARE FROM A DEPARTMENT APPROVED MANUFACTURER TO CLOSE THE UNUSED 1 ½" OPENING IN SIGNAL FACES AND BRACKET ENDS.



TYPICAL MOUNTING OF BACK TO BACK 3 AND 5 SECTION SIGNAL FACES



TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE



SIGNAL FACE MOUNTING DETAIL
(BANDED)

TYPE 4 POLE MOUNTING CONFIGURATION

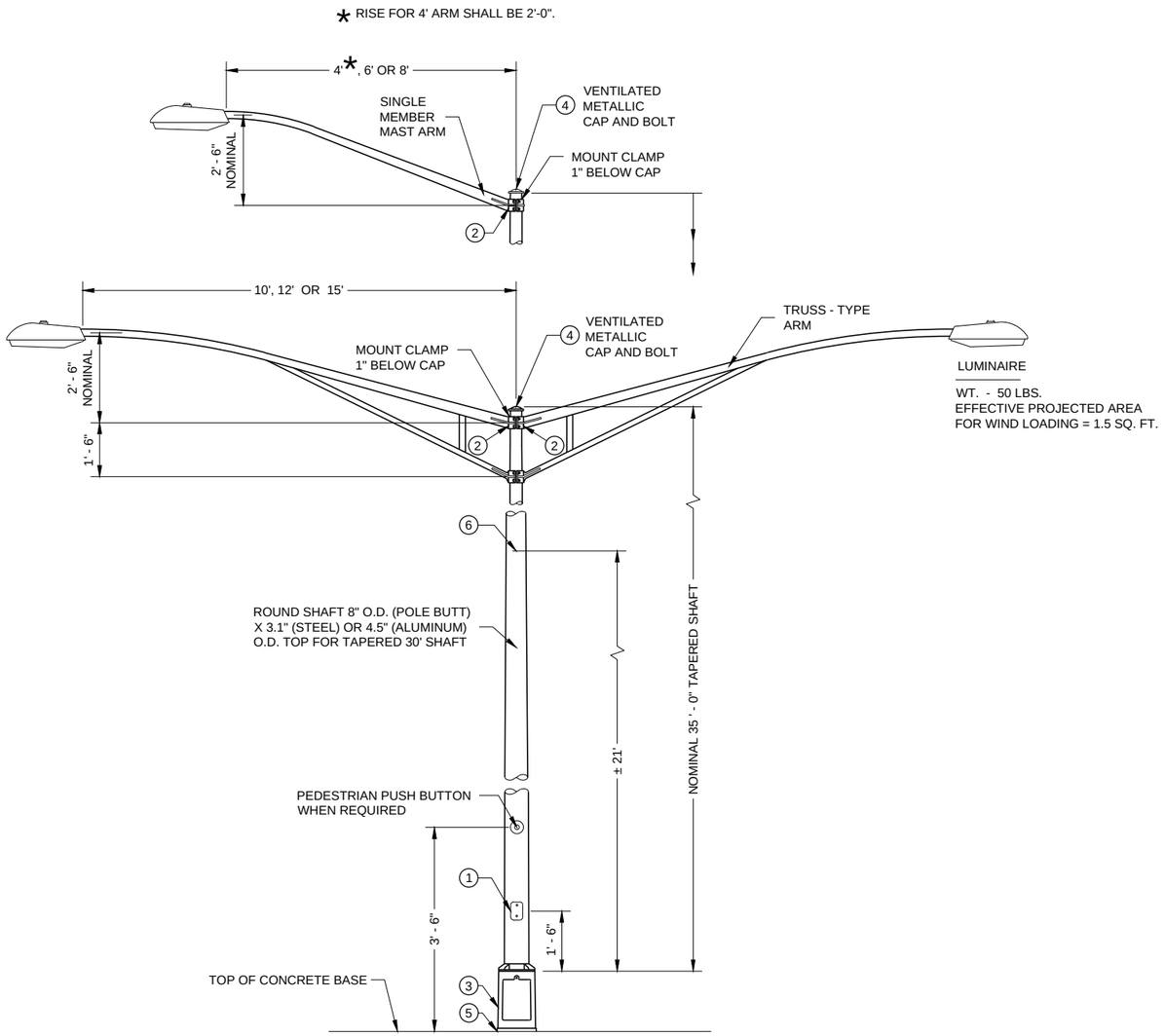
POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 4

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 09E01 - 15c

SDD 09E01-e Pole Mountings for Lighting Units, Type 6 (35 feet)



TYPE 6 POLE MOUNTING CONFIGURATION
(MAXIMUM LOAD)
LIGHTING ONLY

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

ALL TYPE 6 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL OR ALUMINUM, AS CALLED FOR IN THE CONTRACT.

TYPE 6 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063 - T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

TYPE 6 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.219".

TYPE 6 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (0.1196").

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 ⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) ¼" X ¾" - 20 TPI , STAINLESS STEEL, HEX HEAD BOLTS.

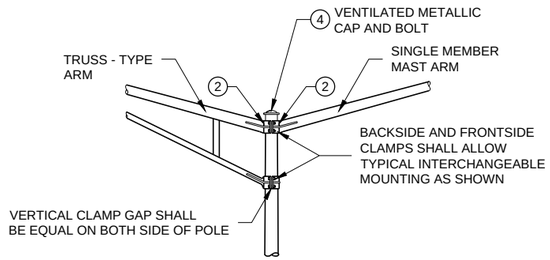
(2) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.

(3) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

(4) FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(5) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

(6) INTERNAL DUMBBELL - TYPE VIBRATION DAMPER.



INTERCHANGEABLE MOUNTING DETAIL

POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 6
(35 FEET)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

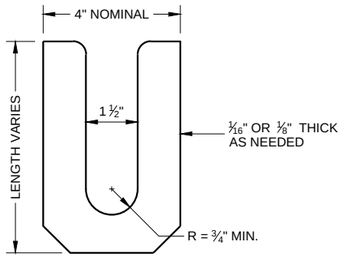
6

SDD 09E01 - 15e

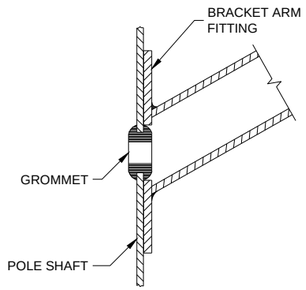
6

SDD 09E01 - 15e

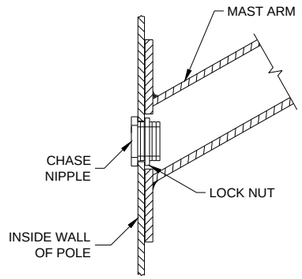
SDD 09E01-g Hardware Details for Pole Mounting



LEVELING SHIM (1)
SHALL BE ALUMINUM



TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

GENERAL NOTES

CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

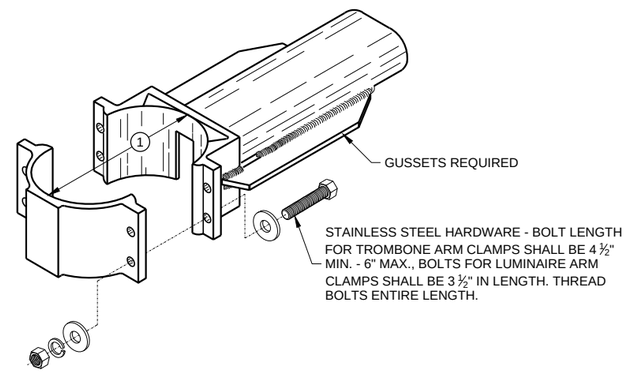
(1) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP. 6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(2) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

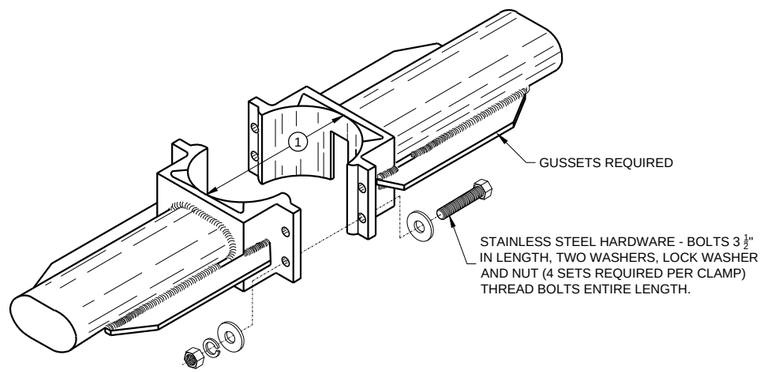
(3) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(4) LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

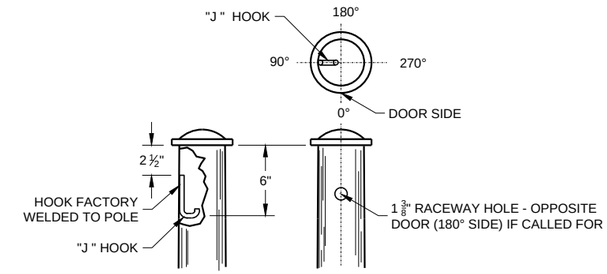
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



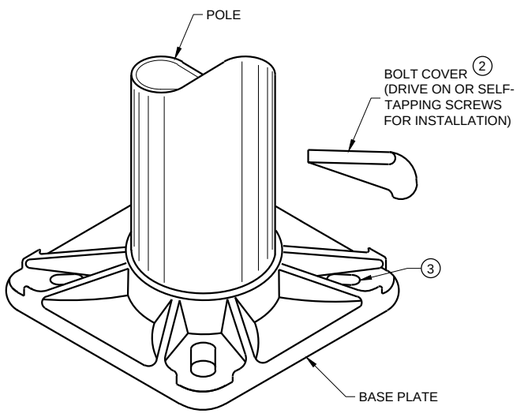
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



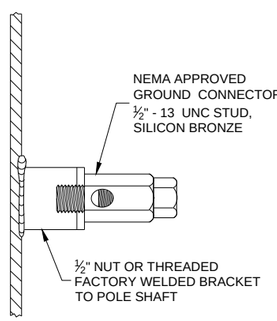
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

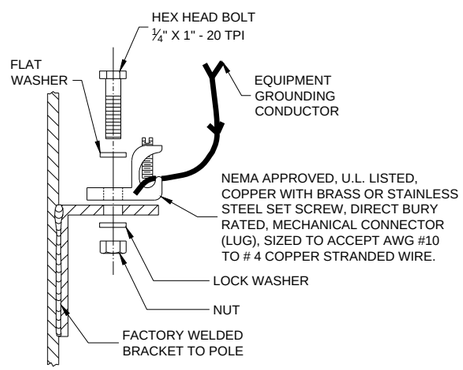


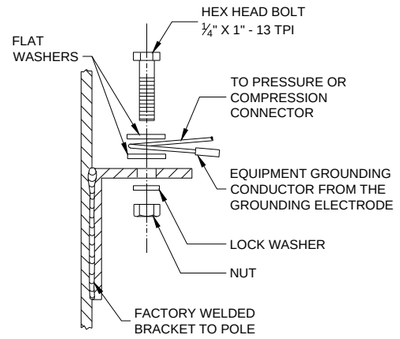
TYPICAL "J" HOOK LOCATION



BASE PLATE







TYPICAL GROUNDING CONNECTIONS

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

HARDWARE DETAILS FOR POLE MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGINEER

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SDD09A01 - 15g

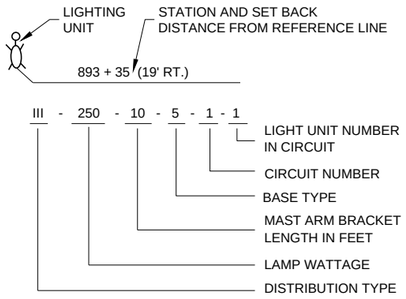
SDD 09E03 Non-Freeway Lighting Unit Pole Wiring

GENERAL NOTES

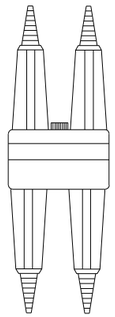
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE EQUIPMENT GROUND CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.

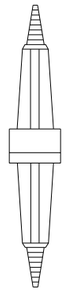
WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.



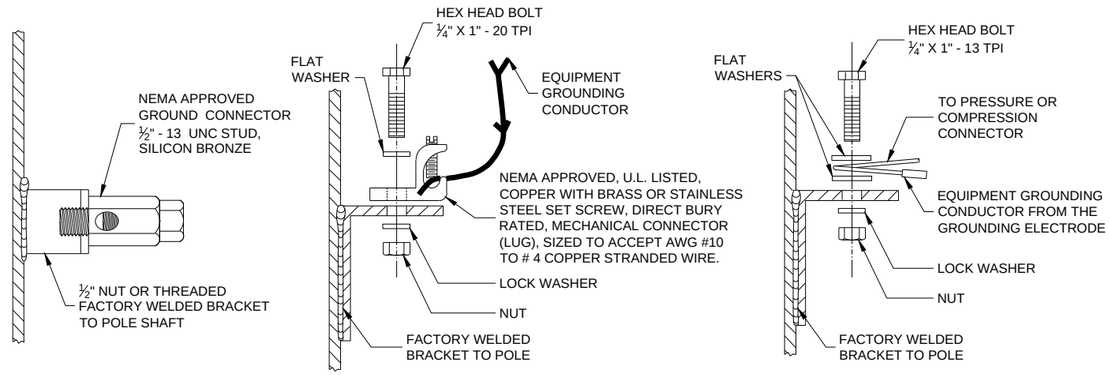
LIGHTING UNIT CODE
(TYPICAL)



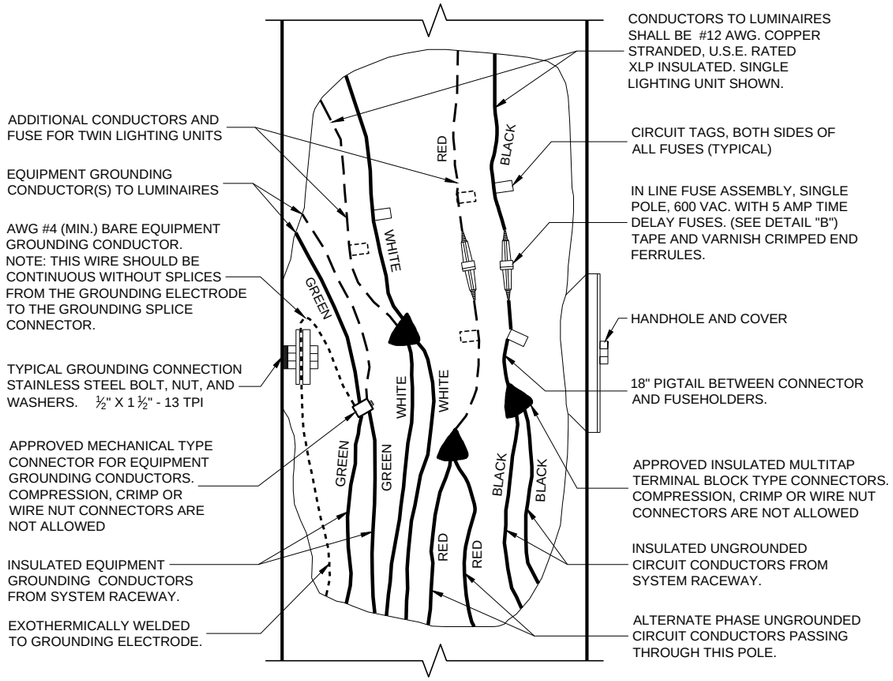
DETAIL "A"
BREAKAWAY DOUBLE POLE WITH WATERPROOF INSULATING BOOT



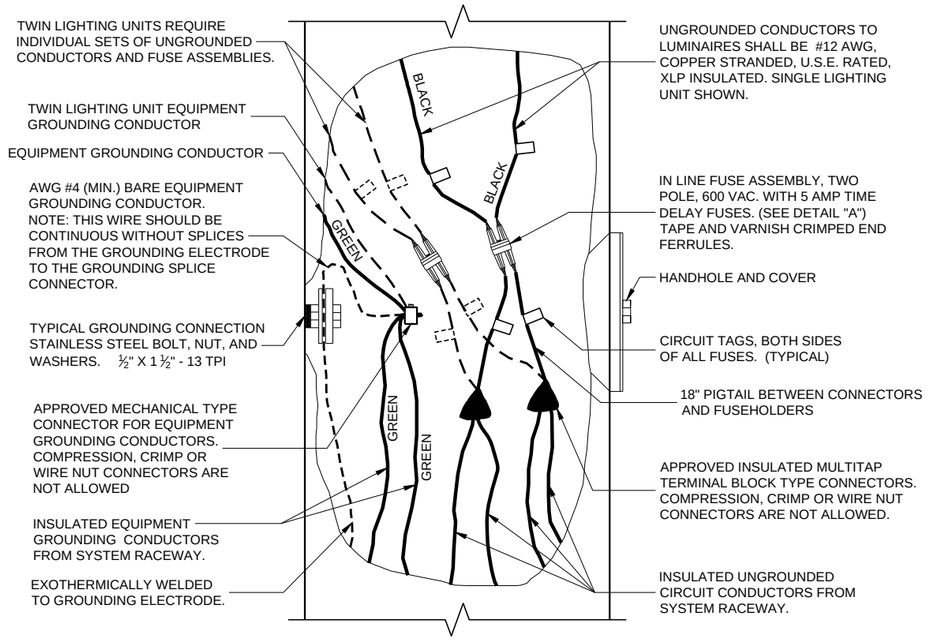
DETAIL "B"
BREAKAWAY SINGLE POLE WITH WATERPROOF INSULATING BOOT



TYPICAL GROUNDING CONNECTIONS
NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



3 WIRE - 120, 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH GROUNDING CONDUCTOR AND EQUIPMENT GROUNDING CONDUCTOR



2 WIRE - 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH EQUIPMENT GROUNDING CONDUCTOR

NON - FREEWAY LIGHTING UNIT
POLE WIRING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGINEER

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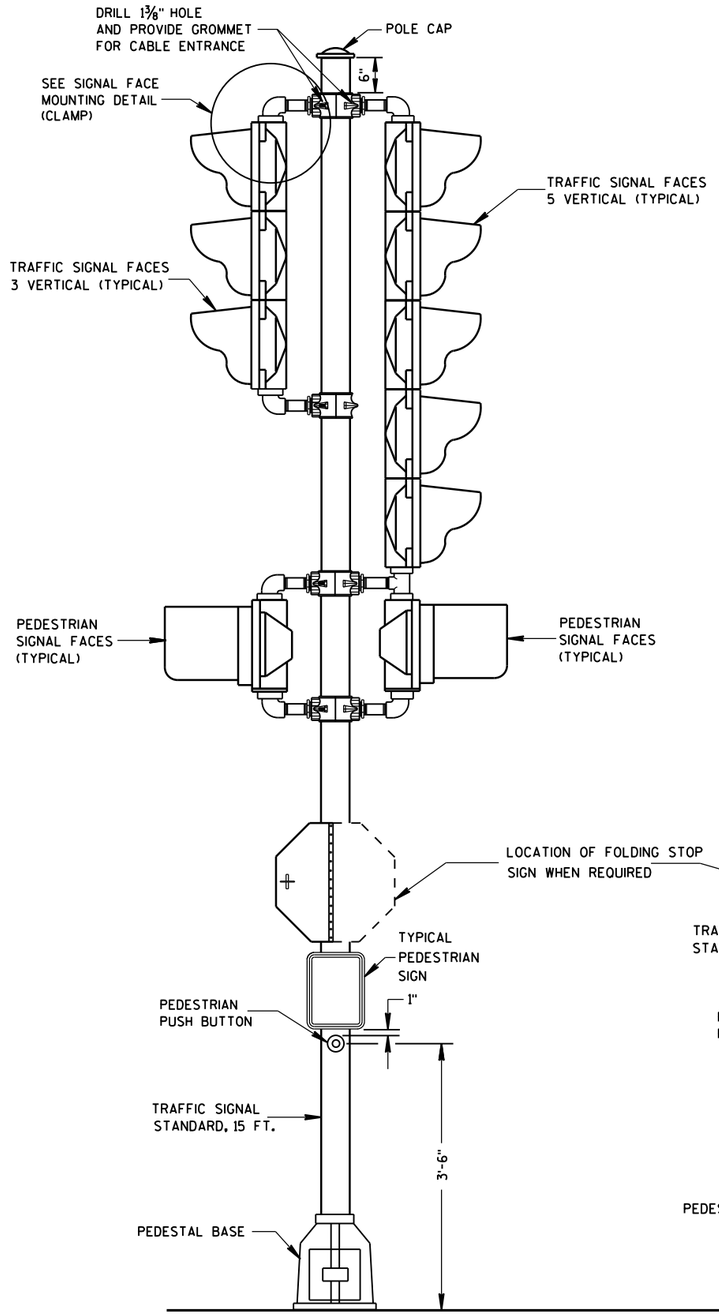
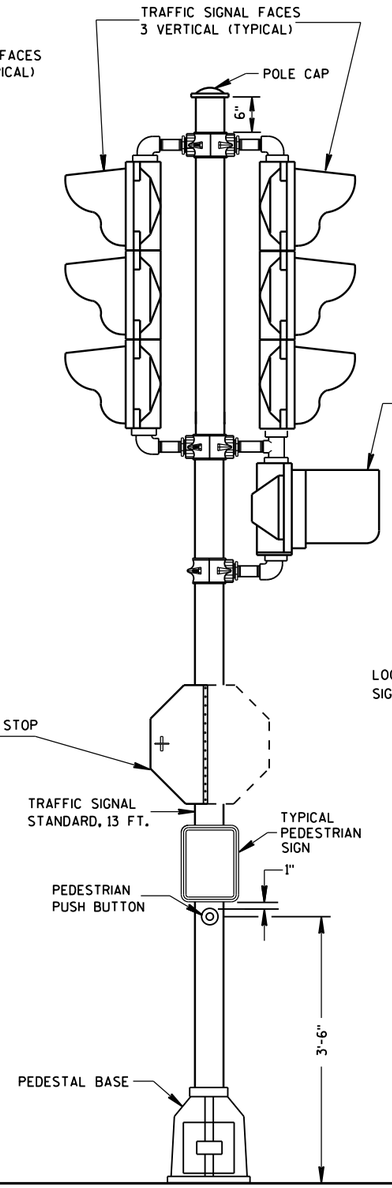
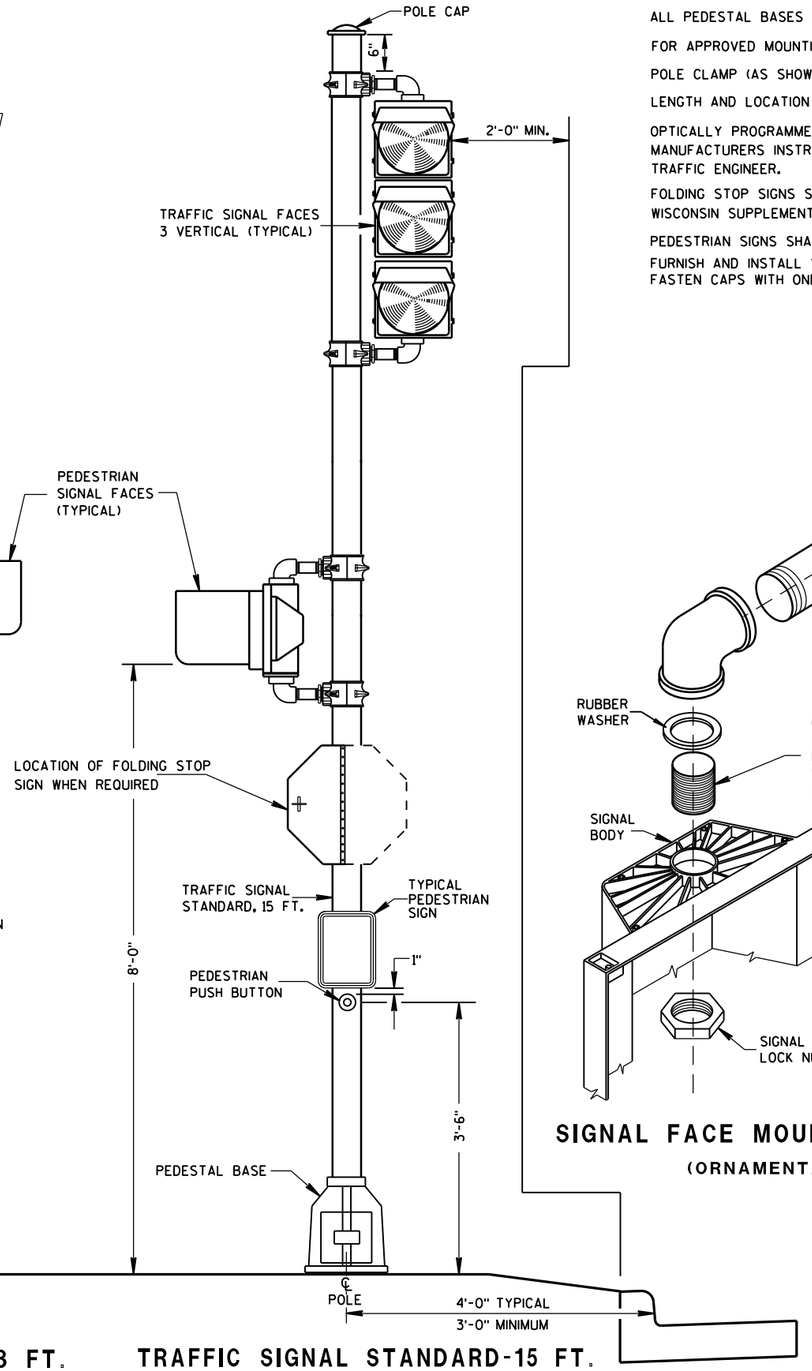
SDD 9e5 Traffic Signal Standard Ornamental Bracket Mountings (Typical) for 13 ft. or 15 ft.



TRAFFIC SIGNAL STANDARD-15 FT.



TRAFFIC SIGNAL STANDARD-13 FT.



TRAFFIC SIGNAL STANDARD-15 FT.
3M MOUNTING (TYPICAL)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIAL PROVISIONS.

POLE CLAMP (AS SHOWN) MOUNTING BRACKETS SHALL BE USED.

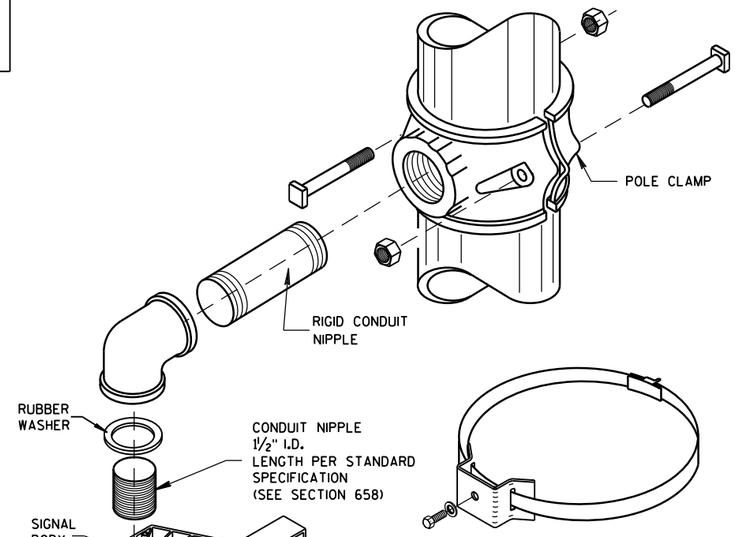
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

OPTICALLY PROGRAMMED SIGNAL FACES SHALL BE MASKED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS, AND UNDER THE DIRECTIONS OF THE REGION TRAFFIC ENGINEER.

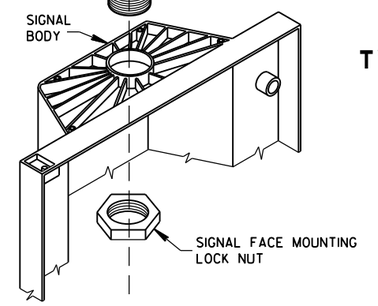
FOLDING STOP SIGNS SHALL BE IN ACCORDANCE WITH THE MUTCD AND/OR THE LATEST WISCONSIN SUPPLEMENT. THE SIGNS SHALL BE SIZED AND LOCATED AS CALLED FOR IN THE PLANS.

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) 1/4" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



SIGNAL FACE MOUNTING DETAIL
(ORNAMENTAL)

TRAFFIC SIGNAL STANDARD
ORNAMENTAL BRACKET MOUNTINGS
TYPICAL FOR 13 FT. OR 15 FT.

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2/28/2013 DATE
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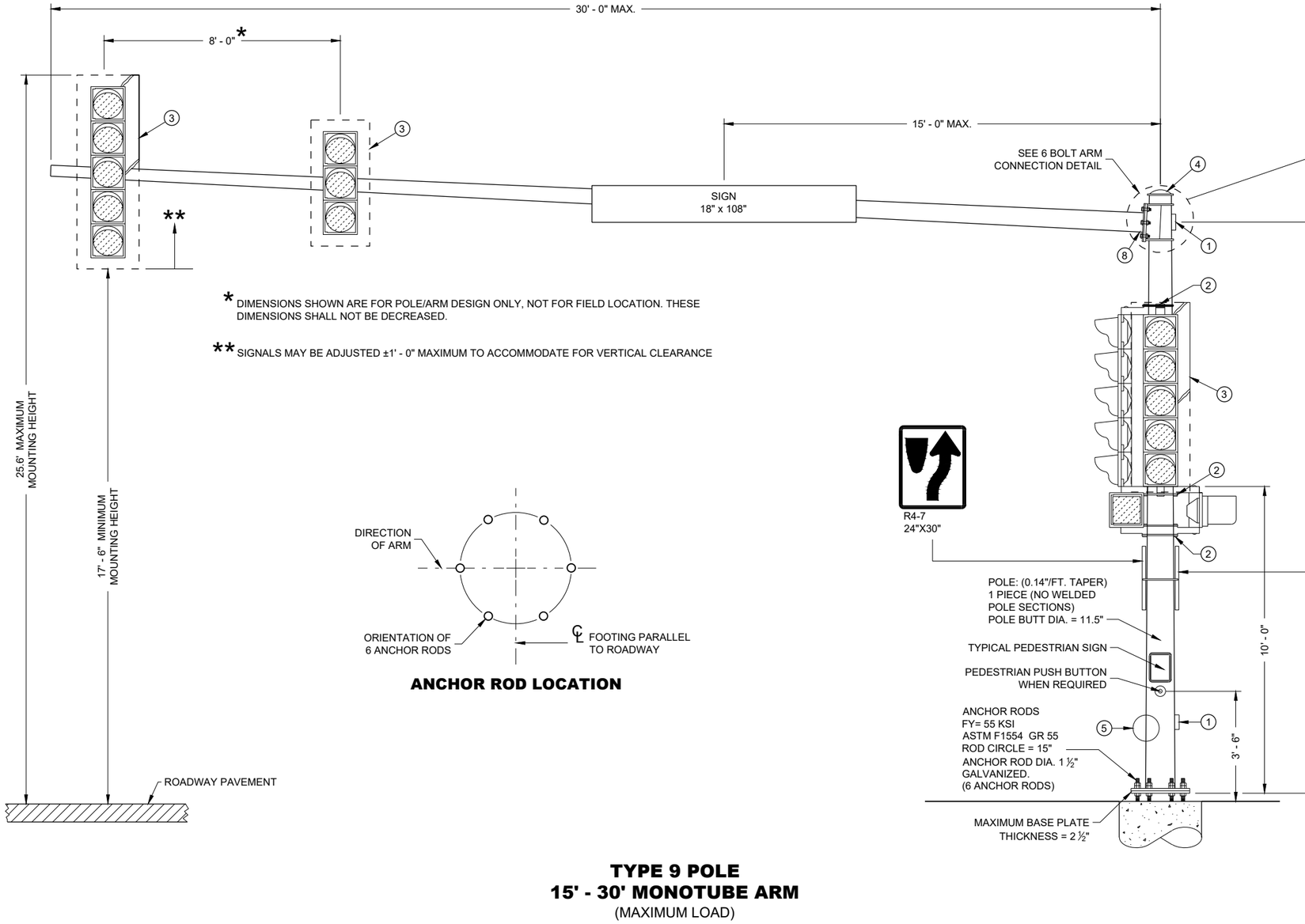
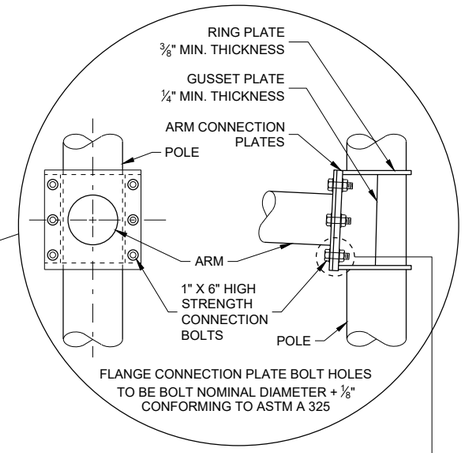


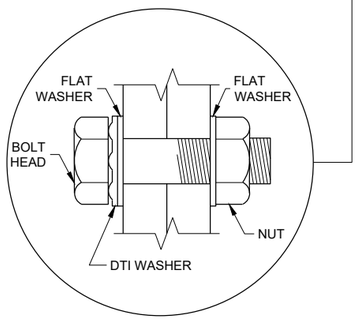
* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

** SIGNALS MAY BE ADJUSTED ±1' - 0" MAXIMUM TO ACCOMMODATE FOR VERTICAL CLEARANCE

ANCHOR ROD LOCATION



6 BOLT ARM CONNECTION DETAIL



RECOMMENDED BOLT ASSEMBLY DETAIL

TYPE 9 POLE
15' - 30' MONOTUBE ARM
(MAXIMUM LOAD)

TYPE 9 POLE
15' - 30' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
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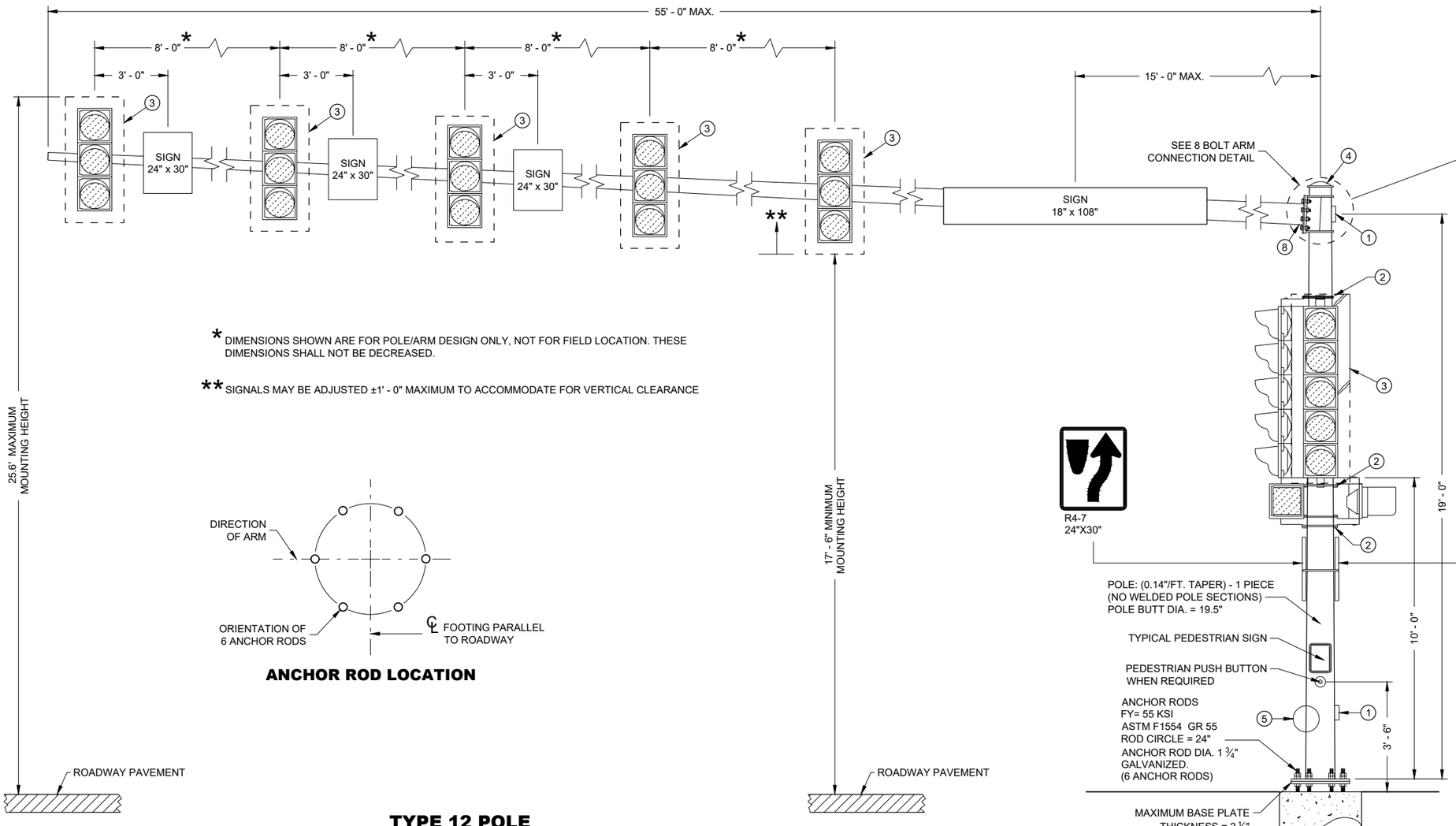
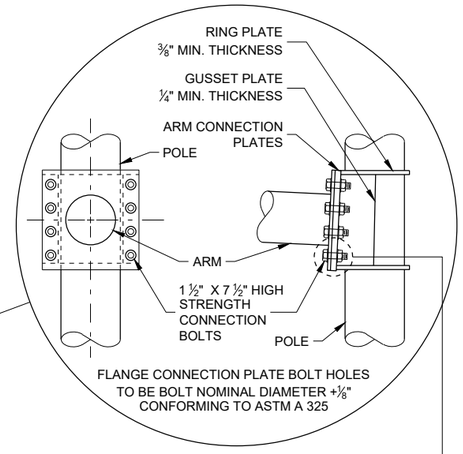


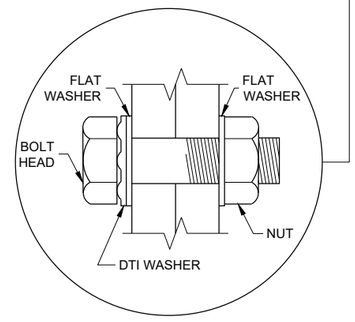
* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

** SIGNALS MAY BE ADJUSTED ±1' - 0" MAXIMUM TO ACCOMMODATE FOR VERTICAL CLEARANCE

ANCHOR ROD LOCATION



8 BOLT ARM CONNECTION DETAIL



RECOMMENDED BOLT ASSEMBLY DETAIL

TYPE 12 POLE
35' - 55' MONOTUBE ARM
(MAXIMUM LOAD)

TYPE 12 POLE
35' - 55' MONOTUBE ARM

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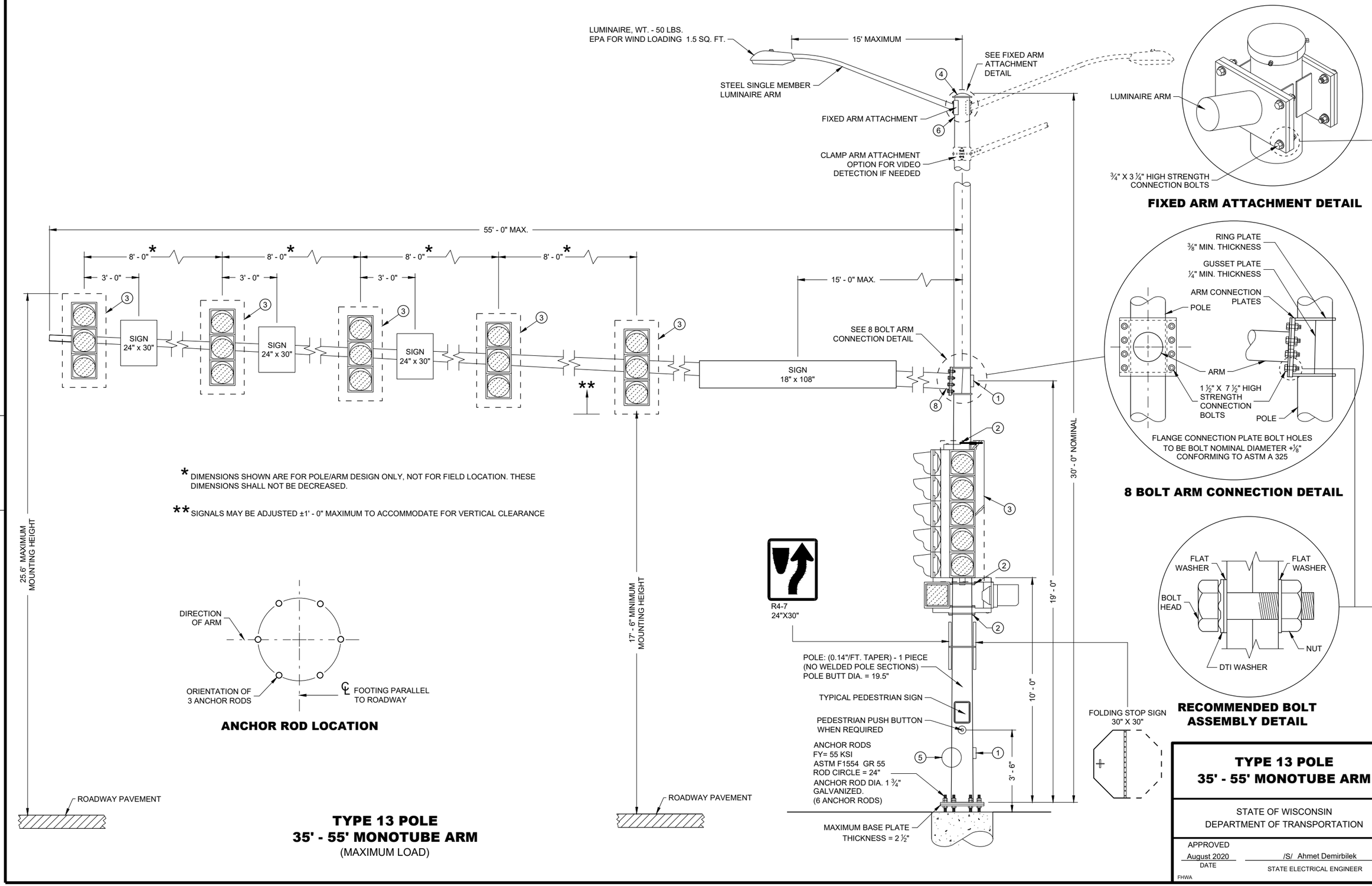
SDD 09E08-j Type 13 Pole, 35' - 55' Monotube Arm



FIXED ARM ATTACHMENT DETAIL

8 BOLT ARM CONNECTION DETAIL

RECOMMENDED BOLT ASSEMBLY DETAIL

* DIMENSIONS SHOWN ARE FOR POLE/ARM DESIGN ONLY, NOT FOR FIELD LOCATION. THESE DIMENSIONS SHALL NOT BE DECREASED.

** SIGNALS MAY BE ADJUSTED ±1' - 0" MAXIMUM TO ACCOMMODATE FOR VERTICAL CLEARANCE

ANCHOR ROD LOCATION

TYPE 13 POLE
35' - 55' MONOTUBE ARM
(MAXIMUM LOAD)

TYPE 13 POLE
35' - 55' MONOTUBE ARM

STATE OF WISCONSIN
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SDD 09E08-k General Notes and Hardware Details for Type 9, 10, 9/10 Special,12, and 13 Poles with Monotube Arms

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

POLE TYPES 9 AND 10 ARE FOR ARM LENGTHS 15 FOOT TO 30 FOOT.

POLE TYPES 9 SPECIAL AND 10 SPECIAL ARE FOR ARM LENGTHS 35 FOOT, 40 FOOT, AND 45 FOOT.

POLE TYPES 12 AND 13 ARE FOR ARM LENGTHS 35 FOOT TO 55 FOOT.

MONOTUBE POLES AND ARMS SHALL BE GALVANIZED STEEL.

RING STIFFENED BUILT UP BOX TYPE OF ATTACHMENT FOR TRAFFIC SIGNAL ARM.

ONE PIECE POLE CONSTRUCTION (NO WELDED POLE SECTIONS).

STANDARD STRAIGHT ARM DESIGN (3% ± RISE).

SECTION 657, POLES OF THE STANDARD SPECIFICATION SHALL APPLY TO THIS DRAWING.

PROVIDE WIREWAY THRU POLE WALL AND ARM CONNECTION PLATES. PROVIDE ROUND, SMOOTH INSIDE SURFACE.

MANUFACTURER'S SUBMITTED POLE DESIGNS AND DRAWINGS SHALL BE SIGNED AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER AND CERTIFIED AS BEING IN COMPLIANCE WITH THE AASHTO "LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNAL 2015 1ST EDITION (INCLUDING INTERIM REVISIONS)" AND ALL PERTINENT WISDOT SPECIFICATIONS AND DRAWINGS FOR THE LIGHTING STRUCTURES AS FOLLOWS:

CATEGORY III FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 AND TYPE 10 STRUCTURES.

CATEGORY II FATIGUE LOADS OF TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 SPECIAL AND TYPE 10 SPECIAL STRUCTURES. IN LIEU OF DESIGNING FOR GALLOPING, A VIBRATION DAMPER MITIGATION DEVICE IS REQUIRED TO BE SUPPLIED AND INSTALLED AT THE END OF THE MAST ARM.

CATEGORY II FATIGUE FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE12 AND TYPE 13 STRUCTURES.

115 MPH (700 YEAR MRI BASIC WIND SPEED).

SECURE THE OPENING BELOW THE BASE PLATE WITH STAINLESS STEEL OR GALVANIZED STEEL MESH AND SECURE THE MESH WITH ¾" STAINLESS STEEL BANDING AROUND THE LEVELING NUTS.

INDENT PRINT (NOMINAL ½" HIGH) THE POLE LENGTH AND FIRST TWO LETTERS OF THE MANUFACTURERS NAME ON TWO SIDES OF THE BASE PLATE 180 DEGREES APART, BEFORE GALVANIZING. THE ARM SHALL BE IDENTIFIED WITH THE SAME INFORMATION BY INDENT PRINT.

SIGNAL FACE SHALL BE MOUNTED 6 INCHES (NOMINAL) FROM THE END OF THE MONOTUBE ARM OR AS SHOWN ON THE PLAN CONSTRUCTION DETAIL OR A S DIRECTED BY THE PROJECT ENGINEER/ELECTRICAL OPERATIONS PERSONNEL. MOUNT ALL LIKE HEAD AT SAME ELEVATION.

SIGN MOUNTING BRACKETS SHALL BE FURNISHED IN ACCORDANCE WITH SECTION 637 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

(1) DESIGN FOR MAXIMUM ALLOWABLE HAND HOLE WITH COVER ASSEMBLY WITH TWO ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLTS.

(2) SIGNAL MOUNTING BRACKETS FOR POLE MOUNTING, MOUNT WITH CAP SCREW AND BANDING (SEE SPECIFICATION SECTION 658).

(3) SECURELY MOUNT BACK PLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURERS RECOMMENDATIONS.

(4) THE TOP OF THE POLE SHAFT AND THE MONOTUBE ARM SHALL BE EQUIPPED WITH A REMOVABLE, VENTILATED CAP HELD SECURELY IN PLACE WITH SET SCREWS.

(5) FACTORY WELDED BRACKET FOR GROUNDING LUG, OPPOSITE HAND HOLD, (LUG AND HARDWARE PAID UNDER SEPARATE ITEM). PROVIDE HOLE IN BRACKET FOR ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLT.

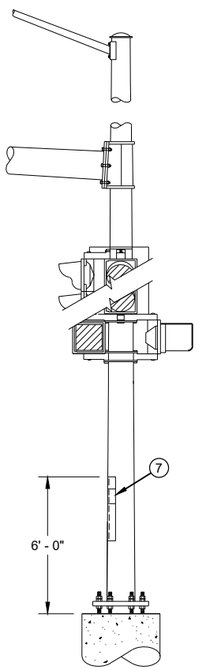
(6) FACTORY WELDED "J" HOOK FOR STRAIN RELIEF FOR POLE LUMINAIRE WIRE.

(7) INSTALL STRUCTURAL IDENTIFICATION PLAQUES.

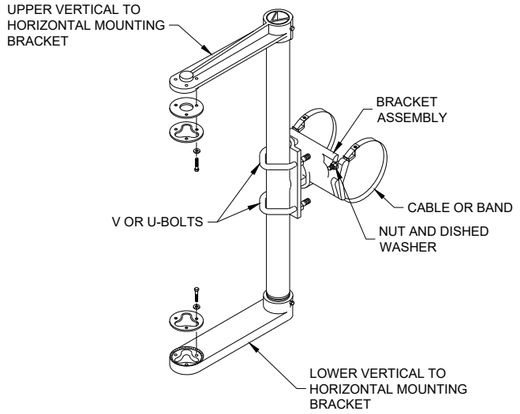
STRUCTURAL IDENTIFICATION PLAQUES SHALL BE PLACED ON THE POLES IN THE SAME DIRECTION AS THE ARM.

MOUNTING HEIGHT SHALL BE 6' - 0" ABOVE THE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL BE OBSTRUCTED.

(8) FACTORY DRILLED ½" DRAIN HOLE 2" FROM FLANGE CONNECTION PLATE.

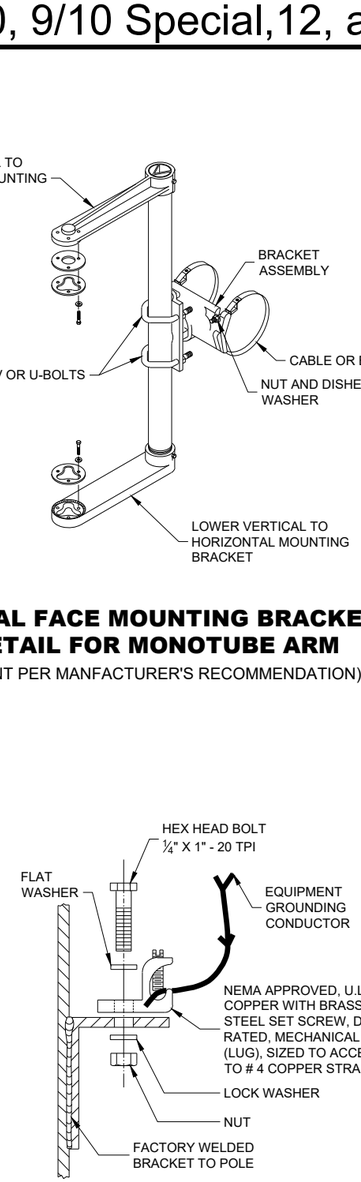


STRUCTURAL IDENTIFICATION PLAQUE PLACEMENT



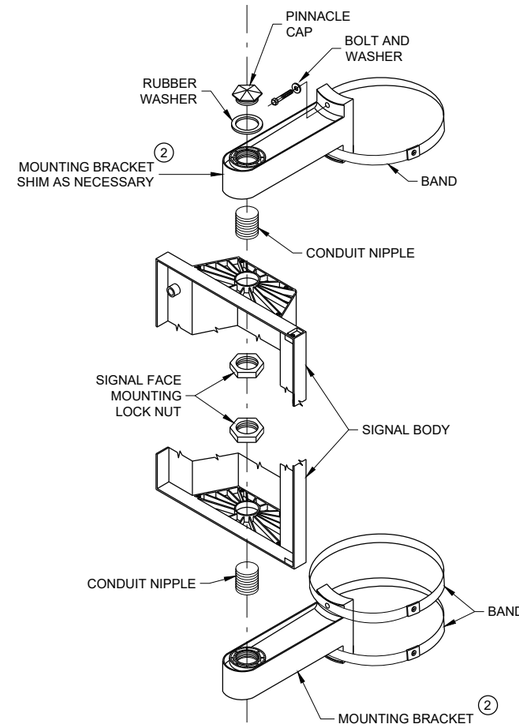
SIGNAL FACE MOUNTING BRACKET DETAIL FOR MONOTUBE ARM

(MOUNT PER MANFACTURER'S RECOMMENDATION)

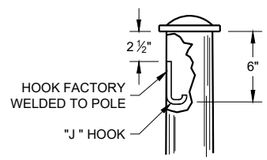


TYPICAL GROUNDING (5) CONNECTIONS

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



SIGNAL FACE VERTICAL MOUNTING DETAIL



TYPICAL "J" HOOK (6) WIRE SUPPORT

GENERAL NOTES AND HARDWARE FOR TYPES 9,10, 9/10 SPECIAL, 12 AND 13 POLES WITH MONOTUBE ARMS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL ENGINEER

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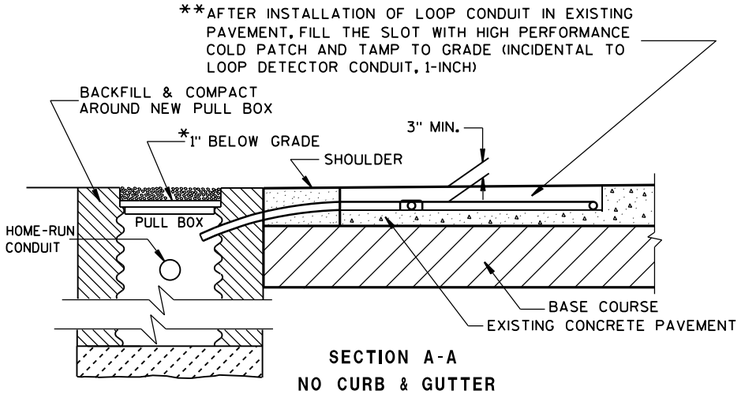
SDD 09E08 - 09k

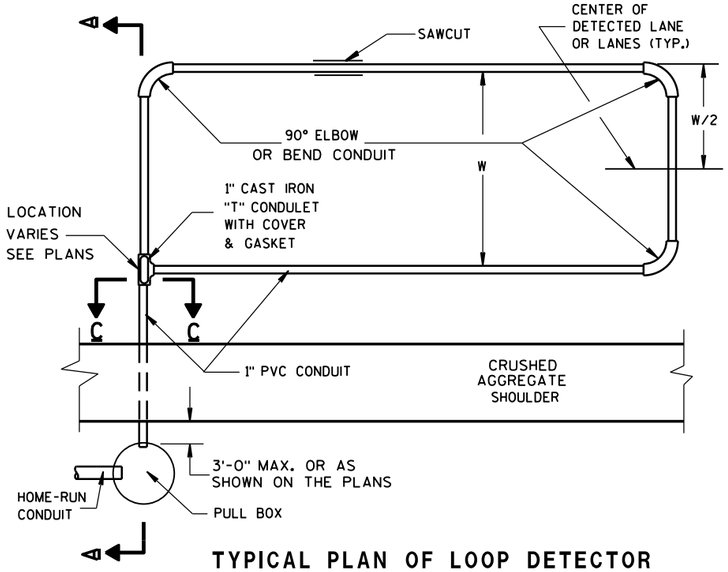
SDD 9f12 Loop Detector Installed in Existing Concrete Pavement



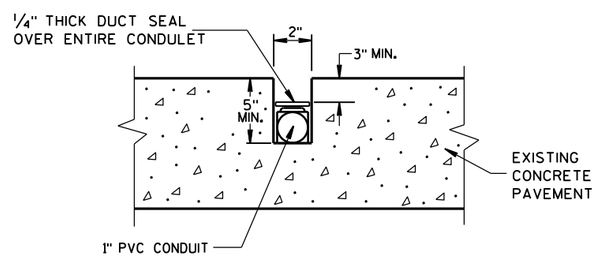
SECTION A-A
NO CURB & GUTTER

LOOP DETECTOR INSTALLATION DETAIL

*RECESS PULL BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.



TYPICAL PLAN OF LOOP DETECTOR



SIDE VIEW
SECTION C-C

LOOP DETECTOR SLOT DETAIL

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

LOOP SIZE, LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL BOX.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST OR AN ENGINEER APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISITANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READINGS TO THE PROJECT ENGINEER FOR EVALUATION.

BEFORE PLACING THE 1 INCH CONDUIT IN THE CLEANED OUT SLOT, PLACE SOME OF THE TAR OR EPOXY SEALANT IN THE SLOT TO A DEPTH OF APPROXIMATELY 1/2 INCH.

ONCE THE 2" LOOP SLOT HAS BEEN CHIPPED OUT, THE LOOP INSTALLATION SHALL BE COMPLETED PRIOR TO OPENING THE LANE(S) TO TRAFFIC.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

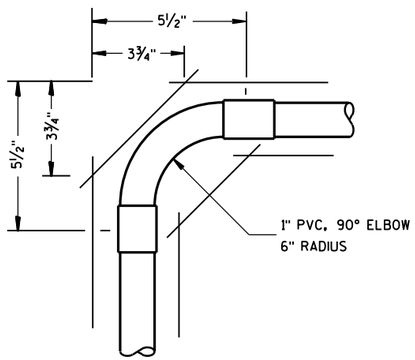
THE #12 AWG LOOP WIRE FROM THE LOOP TO THE ROADSIDE PULL BOX, SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE INSTALLATION.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL BOXES AT THE SIDE OF THE ROAD.

THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL BOX, THROUGH THE LOOP CONDUIT BACK TO THE ROADSIDE PULL BOX, AND BE INSTALLED IN ONE, NON-SPLICED, CONTINUOUS LENGTH.

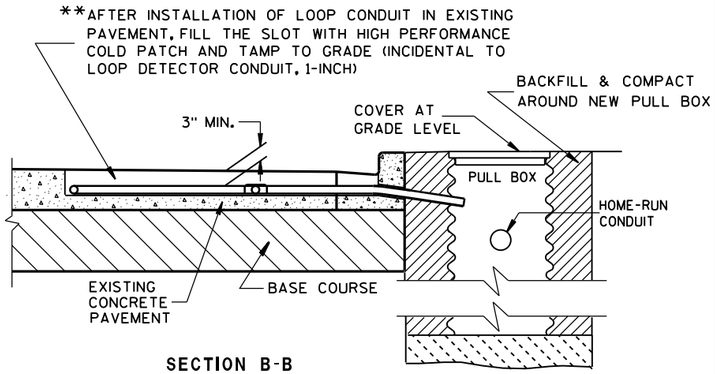
** AFTER THE HIGH PERFORMANCE COLD PATCH HAS BEEN TAMPED, SEAL THE SLOT/HIGH PERFORMANCE COLD PATCH/ PAVEMENT OPENING WITH HOT POURED ELASTIC TYPE MATERIAL CONFORMING TO THE REQUIREMENTS OF THE "SPECIFICATION FOR JOINT SEALANTS, HOT POURED, FOR CONCRETE AND ASPHALT PAVEMENTS, ASTM DESIGNATION: D3405".

IN THE EVENT HIGH PERFORMANCE COLD PATCH IS NOT AVAILABLE, AND FLEXIBLE TYPE EPOXY IS USED AS A LOOP SLOT FILLER, THE 2 INCH SLOT SHALL BE TOTALLY CLEAN AND DRY BEFORE ITS INSTALLATION. EPOXY USE SHALL BE APPROVED BY THE DISTRICT TRAFFIC ENGINEER AND THE FURNISHED EPOXY SHALL BE INSTALLED AFTER WRITTEN APPROVAL BY THE PROJECT ENGINEER.



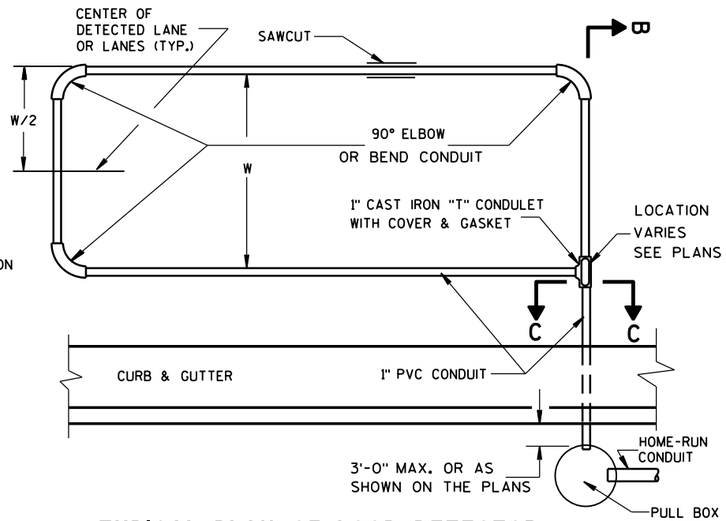
TOP VIEW

CORNER SAW SLOT DETAIL

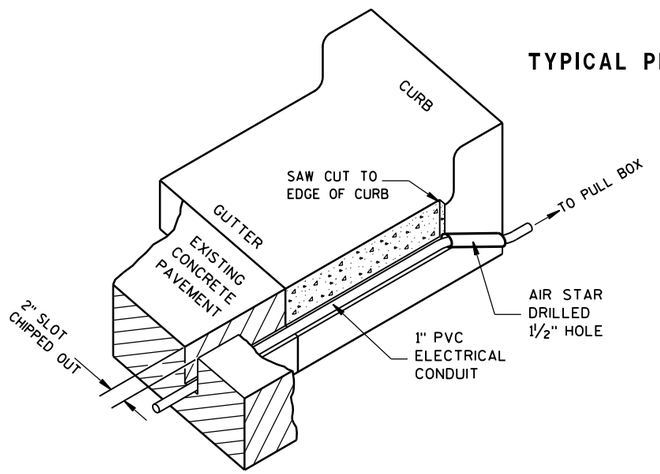


SECTION B-B
CURB & GUTTER

LOOP DETECTOR INSTALLATION DETAIL



TYPICAL PLAN OF LOOP DETECTOR



ISOMETRIC VIEW

TYPICAL SAW CUT DETAIL FOR LEAD-IN CONDUIT

LOOP DETECTOR INSTALLED IN EXISTING CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL ENGINEER
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S.D.D. 9 F 12-4

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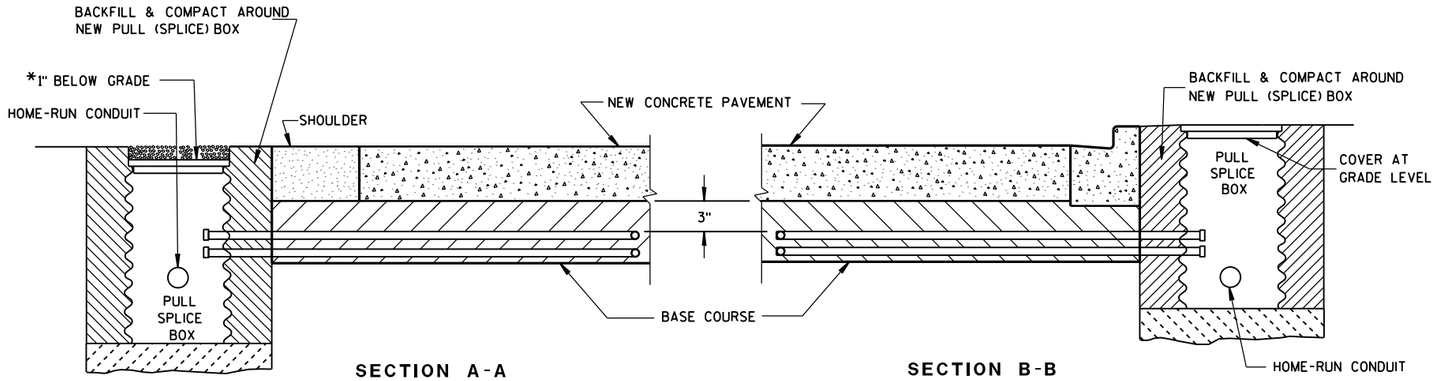
S.D.D. 9 F 12-4

SDD 9f15-b Loop Detector Installed in Base Course with Pull (Splice) Box Off Roadway (Option 2)



SECTION A-A
NO CURB & GUTTER

SECTION B-B
CURB & GUTTER

*RECESS PULL (SPLICE) BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.

LOOP DETECTOR INSTALLATION DETAIL

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

LOOP SIZE, CONFIGURATION LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL (SPLICE) BOX.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST OR AN ENGINEER APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISTANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READINGS TO THE PROJECT ENGINEER FOR EVALUATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

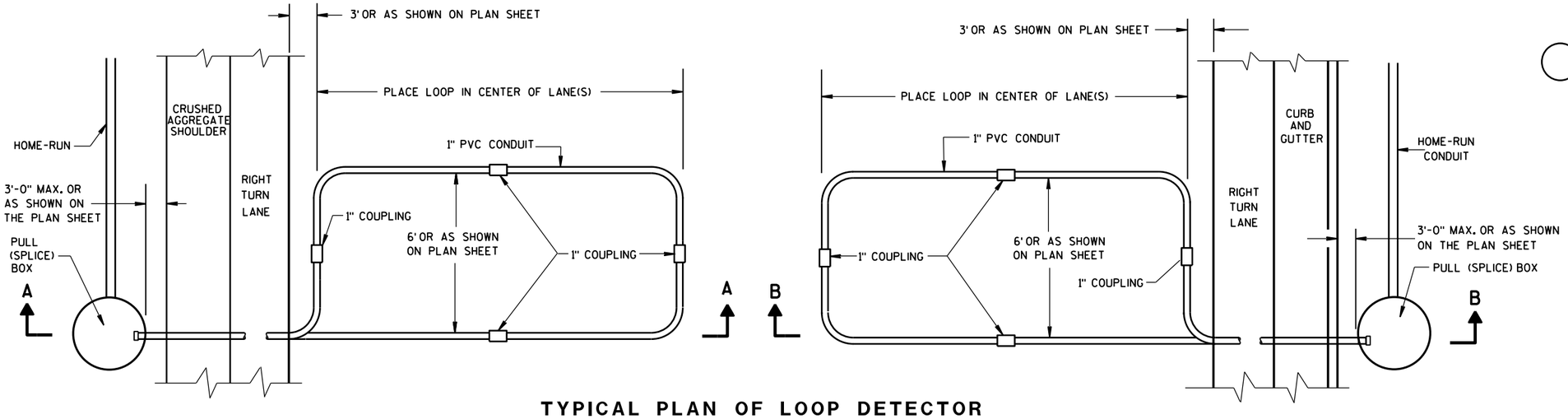
THE #12 AWG. LOOP WIRE IN THE PULL (SPLICE) BOX SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE BEING SPLICED TO THE LOOP LEAD-IN CABLE.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL (SPLICE) BOXES AT THE SIDE OF THE ROAD.

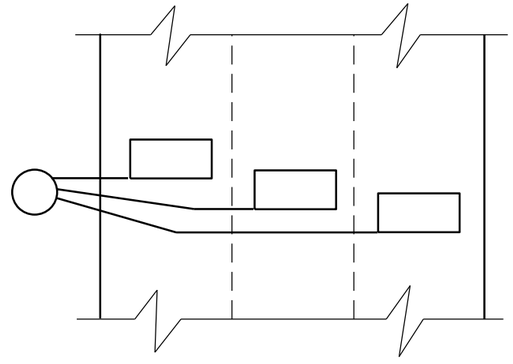
THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL (SPLICE) BOX, THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL (SPLICE) BOX, AND BE INSTALLED IN ONE, NON-SPLICED CONTINUOUS LENGTH.

PROTECTION OF THE CONDUITS IN THE BASE COURSE SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE NEW PAVEMENT IS INSTALLED.

SHOULD INSTALLATION REPAIR BE REQUIRED, IT SHALL BE DONE UNDER THE DIRECTION OF THE PROJECT ENGINEER.



TYPICAL PLAN OF LOOP DETECTOR WITH 24" PULL (SPLICE) BOX



MULTI-LANE INSTALLATION

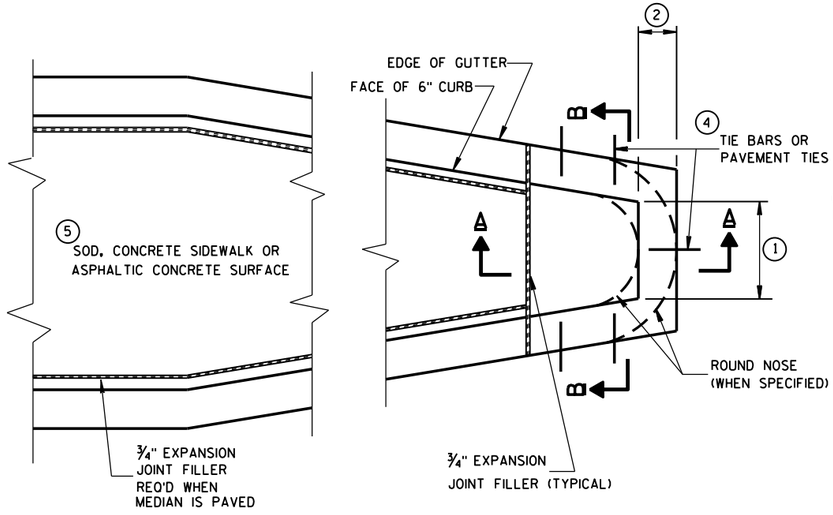
LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED Sept. 2014 — DATE /S/ Ahmet Demirbilek — STATE ELECTRICAL ENGINEER FHWA

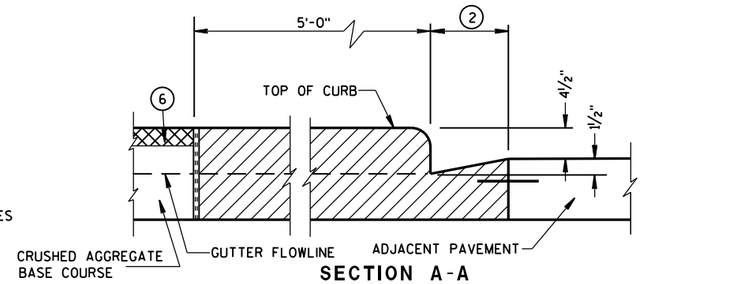
6

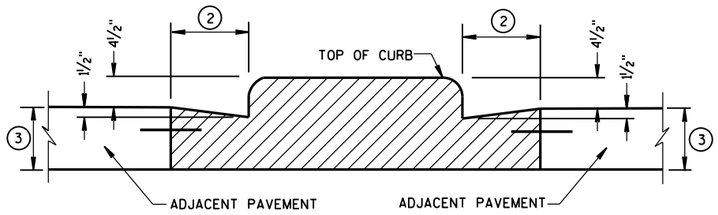
S.D.D. 9 F 15-4b

6

S.D.D. 9 F 15-4b







CONCRETE MEDIAN BLUNT NOSE DETAIL

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(1) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

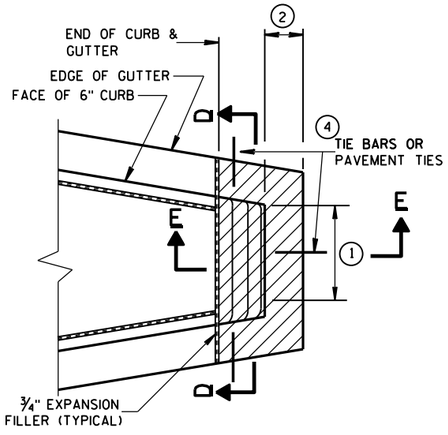
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

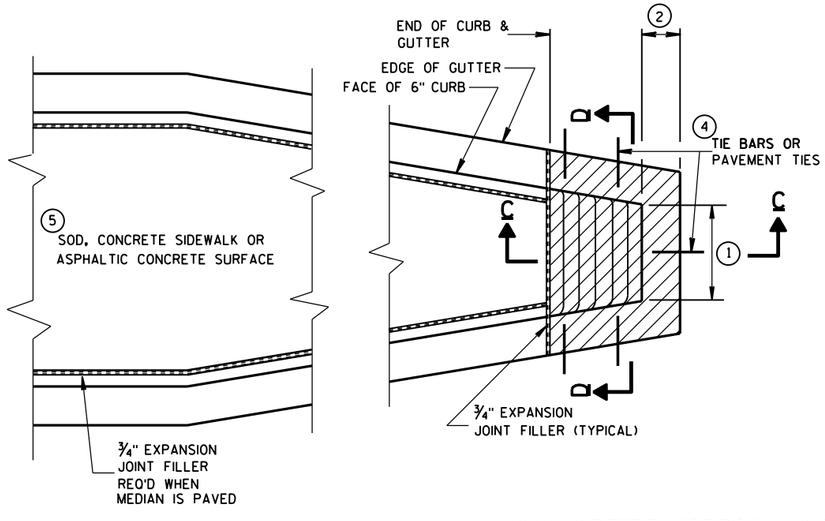
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

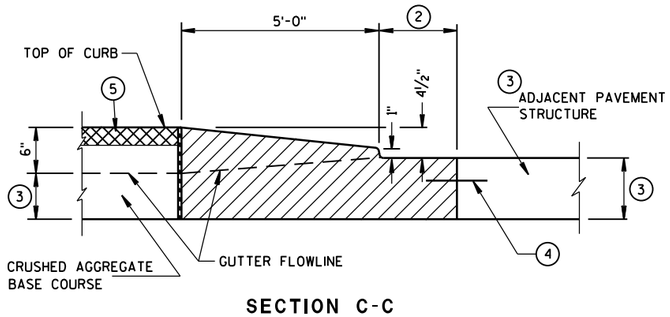
(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

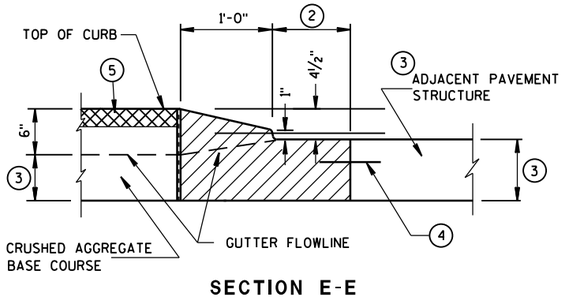
PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.



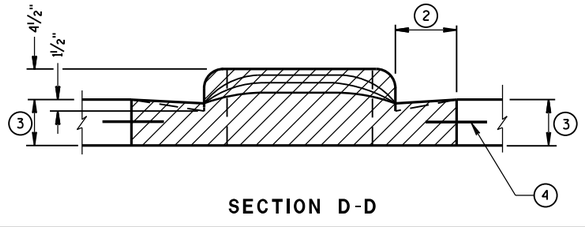






CONCRETE MEDIAN SLOPED NOSE TYPE 2

CONCRETE MEDIAN SLOPED NOSE TYPE 1



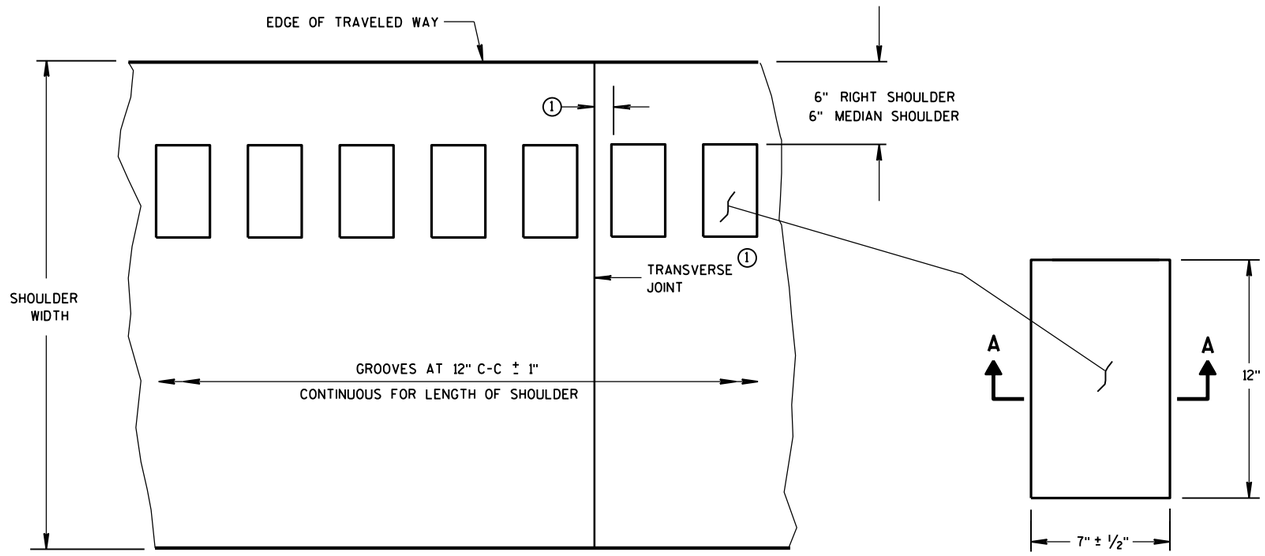
CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6-8-2006
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

S.D.D. 11 B 2-2

SDD 13a5-a Shoulder Rumble Strip, Milling



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR MILLED RUMBLE STRIP

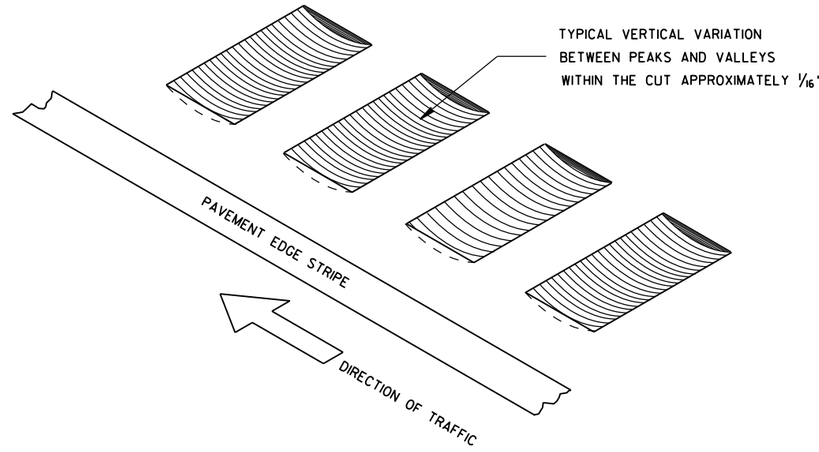
GENERAL NOTES

DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

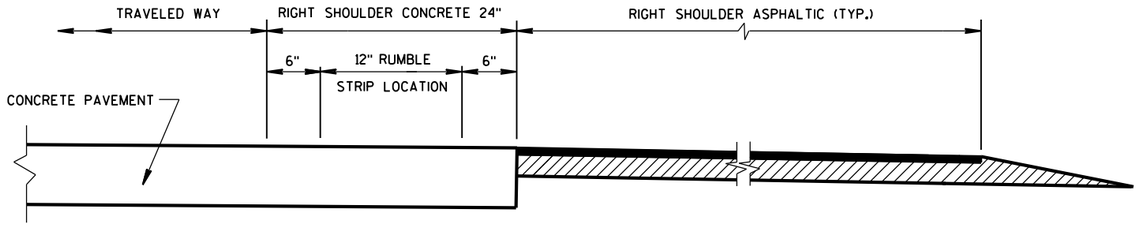
RUMBLE STRIPS ON EXPRESSWAYS

DO NOT INSTALL RUMBLE STRIPS ACROSS SIDE ROAD INTERSECTIONS, COMMERCIAL DRIVEWAYS, PRIVATE DRIVEWAYS OR ADJACENT TO RIGHT TURN LANES, LEFT TURN LANES, TURN LANE TAPERS, BRIDGE DECKS, BRIDGE APPROACHES, OR 100 FEET IN ADVANCE OF RAILROAD CROSSING. THE ATTACHED STANDARD DETAIL DRAWING SHOWS THE LOCATION OF THE RUMBLE STRIPS AT INTERCHANGE AREAS.

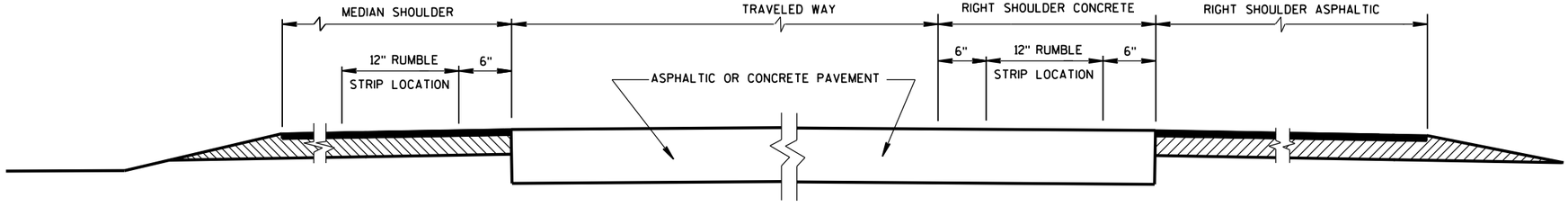
(1) CONCRETE PAVEMENT - RUMBLE STRIPS SHALL BE A MINIMUM OF 6" AWAY FROM TRANSVERSE JOINTS.



ISOMETRIC

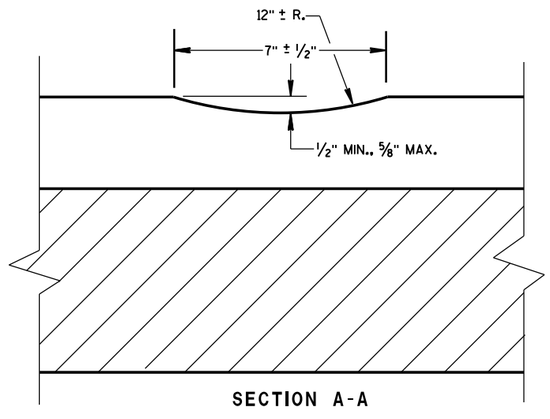


SECTION VIEW
CONCRETE PAVEMENT EXTENDS INTO RIGHT SHOULDER)



SECTION VIEW

TYPICAL LOCATIONS OF SHOULDER RUMBLE STRIPS
IN RURAL DIVIDED HIGHWAYS
(ONE ROADWAY IS SHOWN)



SECTION A-A

SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 13 A 5-5a

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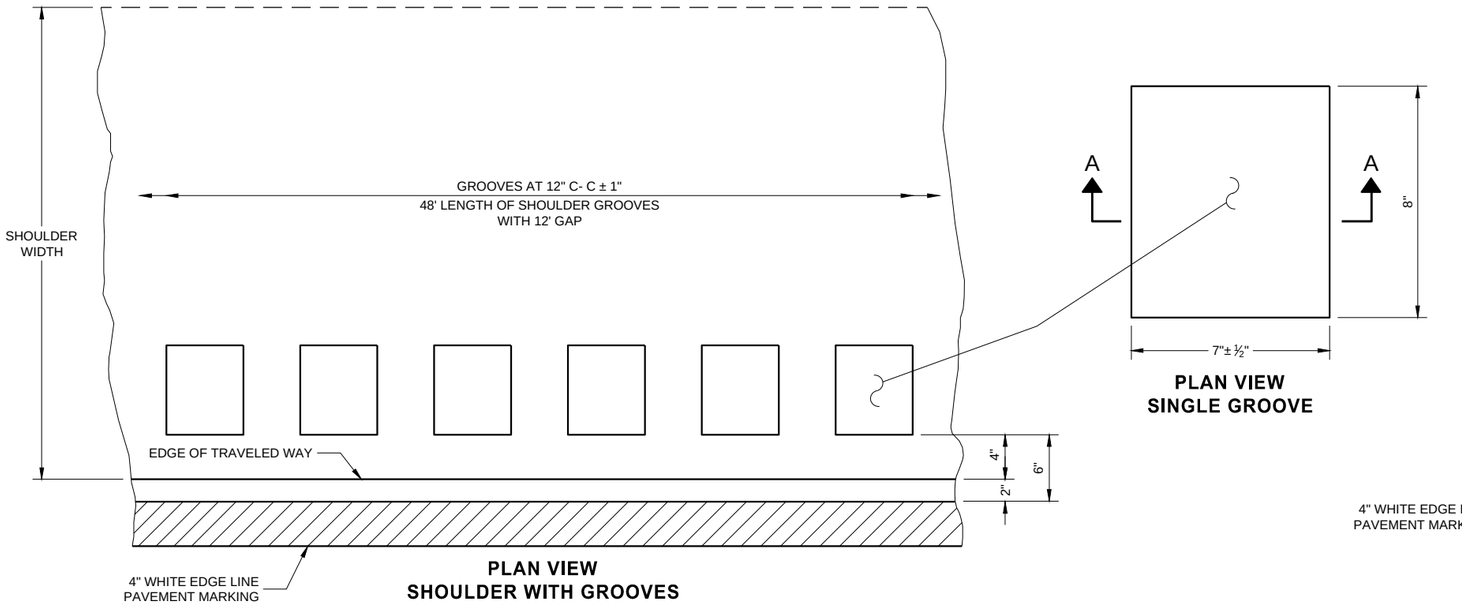
S.D.D. 13 A 5-5a

SDD 13A10-a 2-Lane Rural Shoulder Rumble Strip, Milling - Type 1



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
SINGLE GROOVE

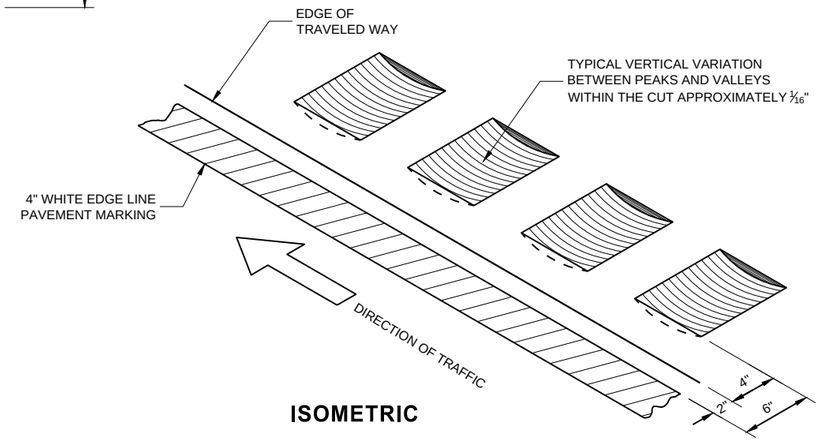
PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP

GENERAL NOTES

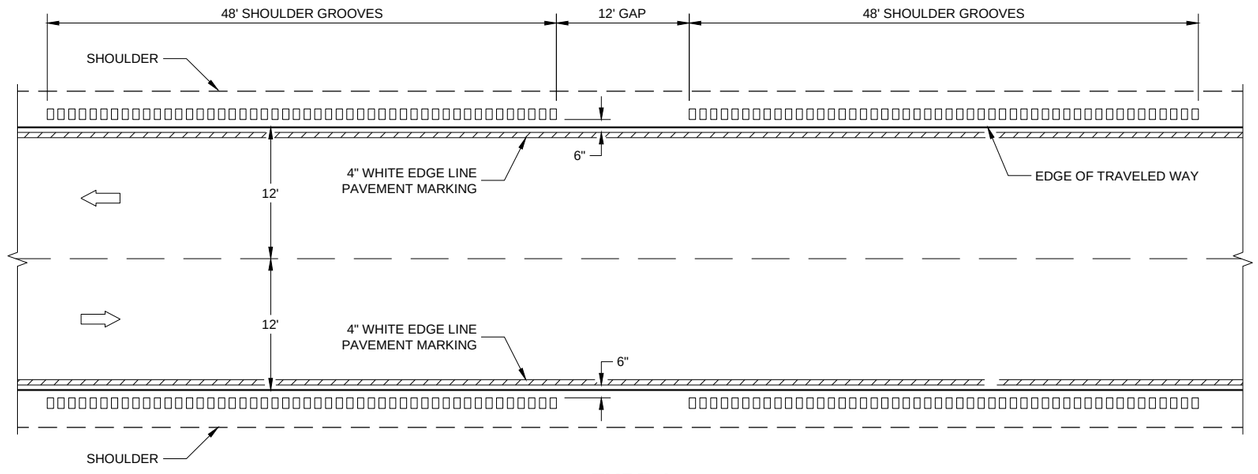
DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL SHOULDER GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

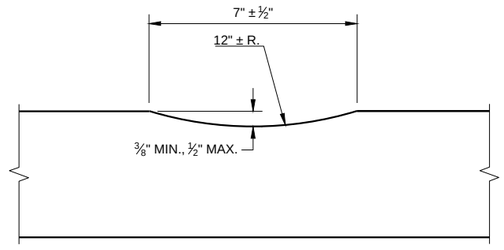
(1) SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.



ISOMETRIC



TYPE 1
2 - LANE SHOULDER RUMBLE STRIP



SECTION A - A

2-LANE RURAL SHOULDER
RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

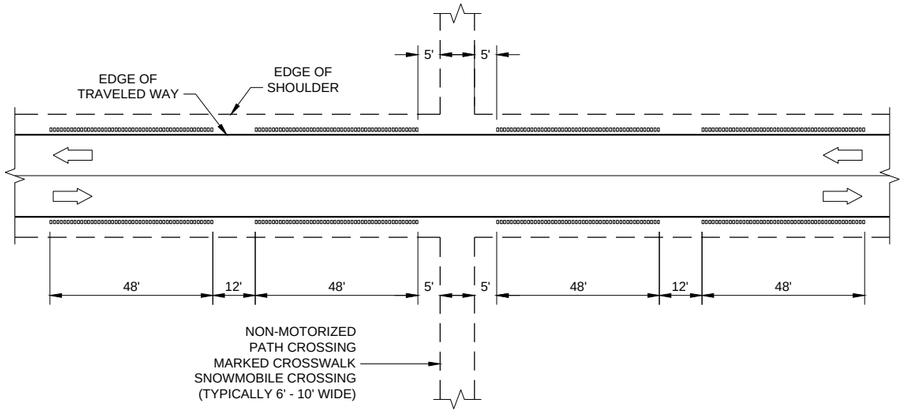
6

SDD 13A10 - 02a

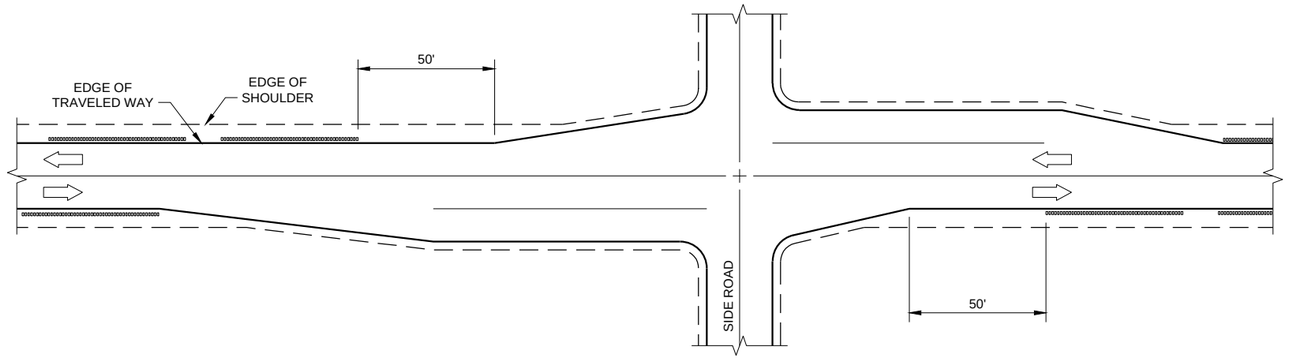
6

SDD 13A10 - 02a

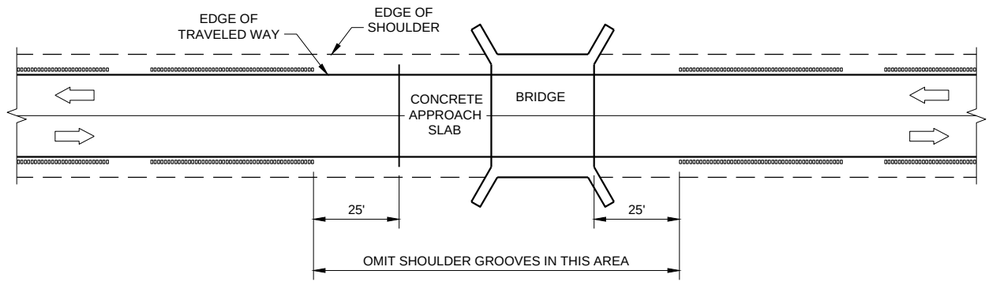
SDD 13A10-c 2-Lane Rural Shoulder Rumble Strip, Milling - Crossings, Intersections, Bridges, Driveways



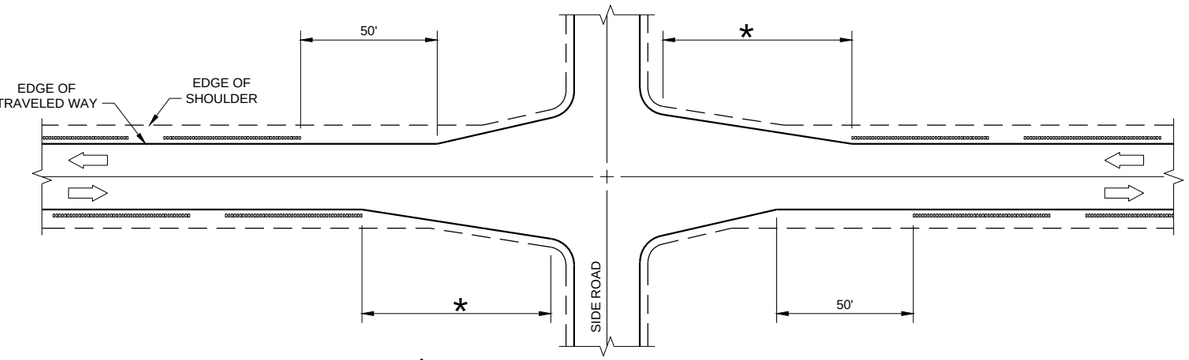
SHOULDER GROOVES AT MISCELLANEOUS CROSSINGS



SHOULDER GROOVES AT RIGHT TURN LANE

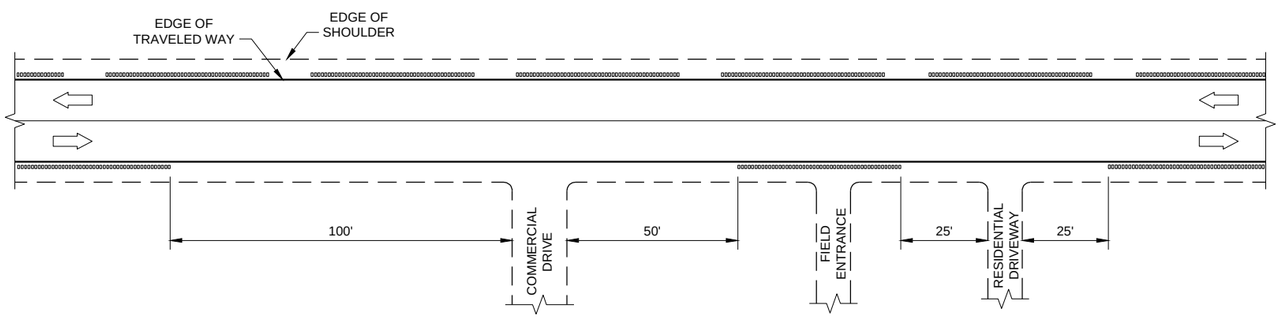


SHOULDER GROOVES AT BRIDGES



*GREATER OF 100' OR APPROACH TAPER LENGTH

SHOULDER GROOVES AT INTERSECTIONS WITH APPROACH TAPER



SHOULDER GROOVES AT DRIVEWAYS (1)

GENERAL NOTES

(1) SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.

2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

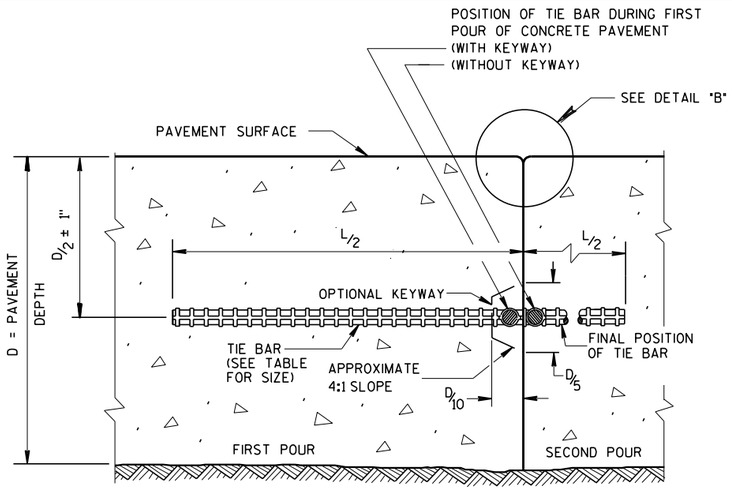
6

SDD 13A10 - 02c

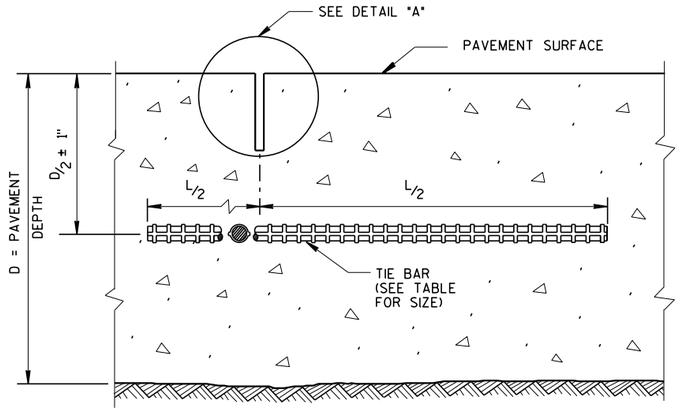
6

SDD 13A10 - 02c

SDD 13c1 Concrete Pavement Longitudinal Joints and Ties



CONSTRUCTION JOINT



SAWED JOINT

GENERAL NOTES

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

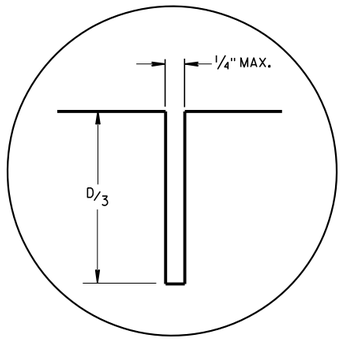
(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.

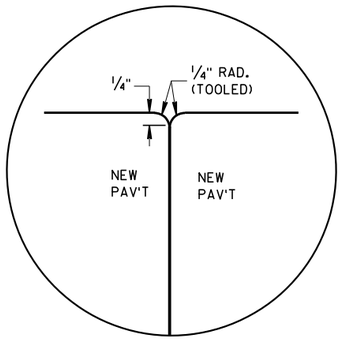
PLAN VIEW

SECTION A-A

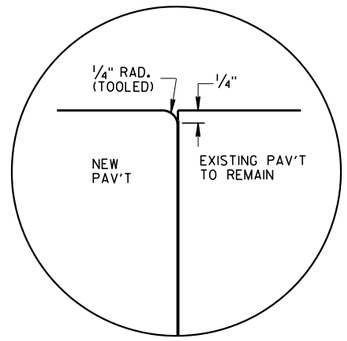
LONGITUDINAL CONSTRUCTION JOINT
TIE BARS ANCHORED
INTO EXISTING PAVEMENT



DETAIL "A"



DETAIL "B"



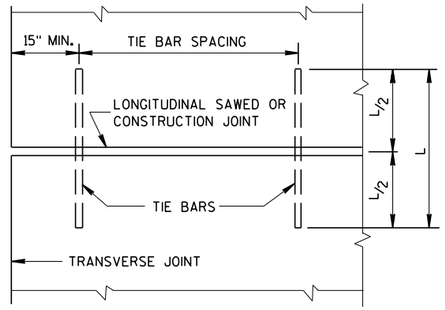
DETAIL "C"

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.



PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT
LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Peter Kemp, P.E. — PAVEMENT SUPERVISOR
FHWA

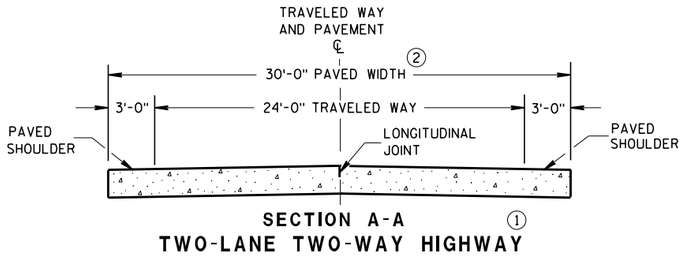
6

S.D.D. 13 C 1-19

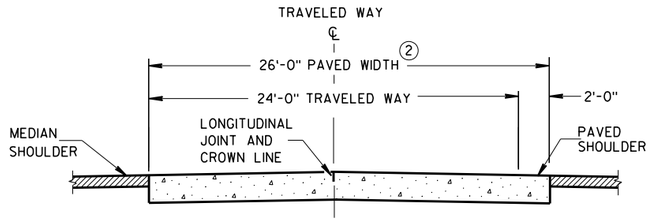
6

S.D.D. 13 C 1-19

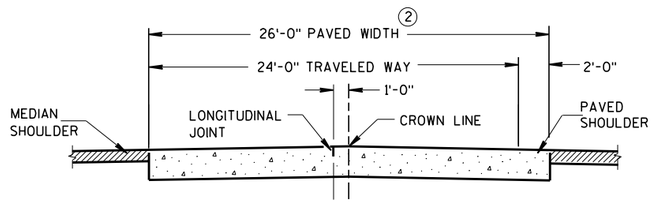
SDD 13c11-a Rural Doweled Concrete Pavement



SECTION A-A
TWO-LANE TWO-WAY HIGHWAY ①



SECTION B-B



ALTERNATIVE SECTION B-B
①
DIVIDED HIGHWAY

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES AND A MAXIMUM OF 18 INCHES FROM THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

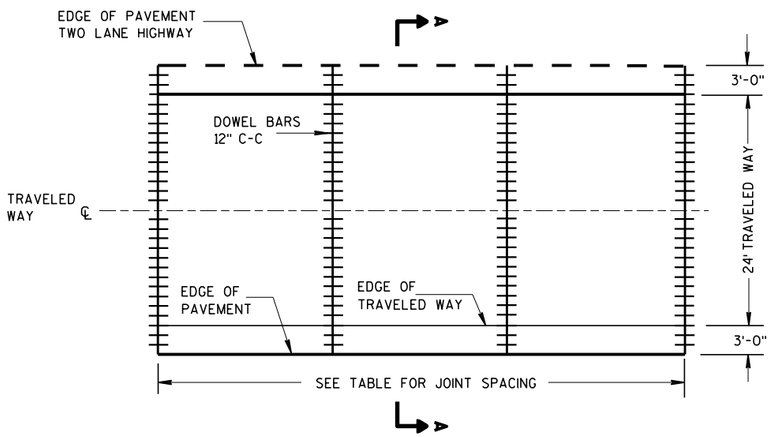
LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

① REFER TO TYPICAL CROSS SECTIONS FOR ADDITIONAL DETAILS.

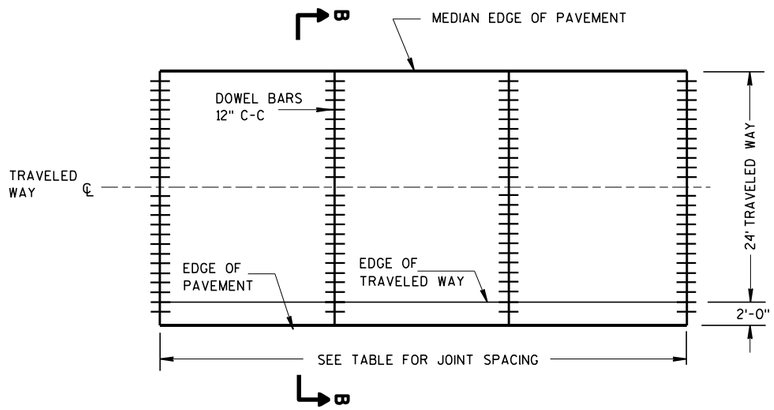
② MEASURE THE ENTIRE PAVED WIDTH INCLUDING THE PORTION(S) LABELED PAVED SHOULDER AS CONCRETE PAVEMENT.

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 ½", 6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8", 8 ½"	1 ¼"	15'
9", 9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'



CONTRACTION JOINT LAYOUT
FOR TWO-LANE TWO-WAY HIGHWAY



CONTRACTION JOINT LAYOUT
FOR DIVIDED HIGHWAY

RURAL DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

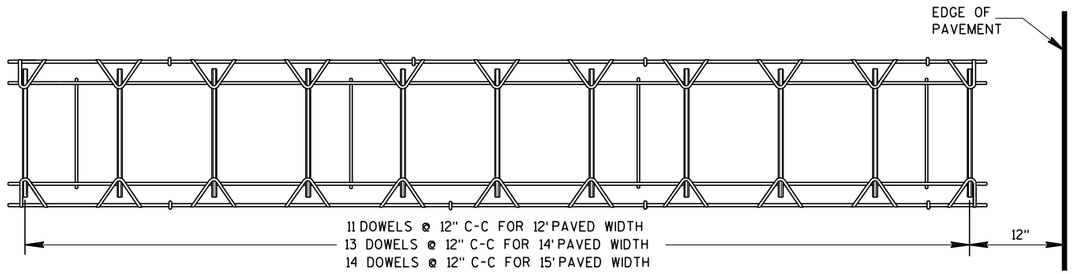
6

S.D.D. 13 C 11-12a

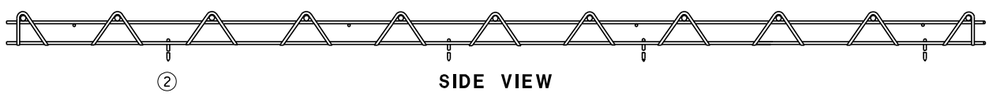
6

S.D.D. 13 C 11-12a

SDD 13c11-b Rural Doweled Concrete Pavement



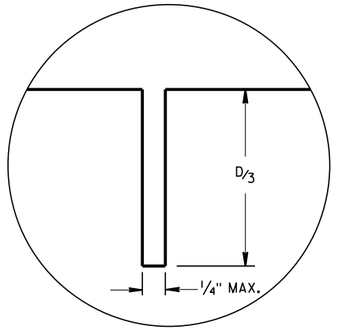
PLAN VIEW



SIDE VIEW

(NORMAL TO CENTERLINE)

CONTRACTION JOINT DOWEL ASSEMBLY ①



JOINT DETAIL

GENERAL NOTES

① OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTING CONTRACTION JOINTS.

② SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

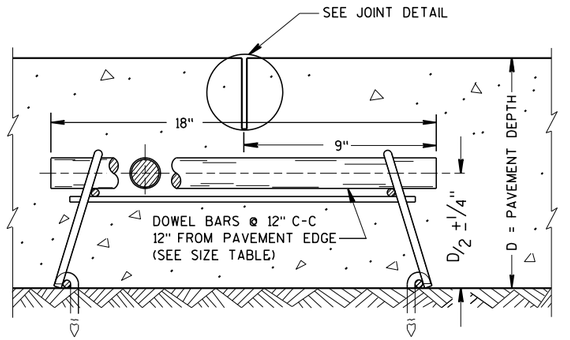
③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A 1/4-INCH RADIUS AT FORMED JOINTS.

④ PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

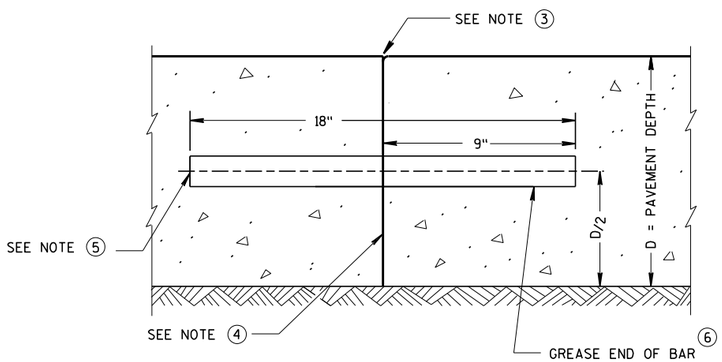
⑤ INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C-C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO *DRILLED DOWEL BAR CONSTRUCTION JOINT* DETAIL.

⑥ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

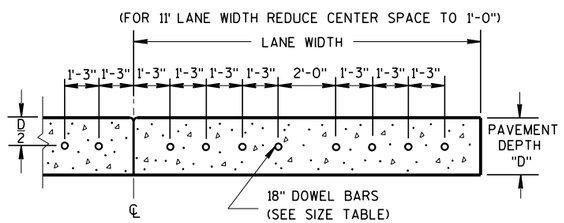
⑦ ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS 1/8-INCH GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



DOWELED CONTRACTION JOINT



TRANSVERSE CONSTRUCTION JOINT



DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦

RURAL DOWELED CONCRETE PAVEMENT	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
March 2018 DATE	/S/ Peter Kemp, P.E. PAVEMENT SUPERVISOR
FHWA	

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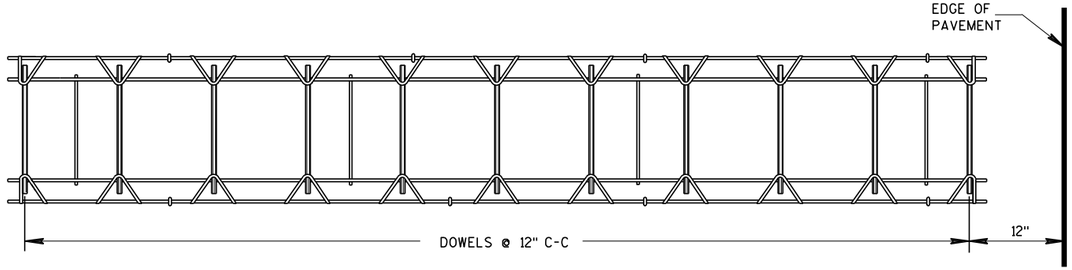
S.D.D. 13 C 11-12b

6

S.D.D. 13 C 11-12b

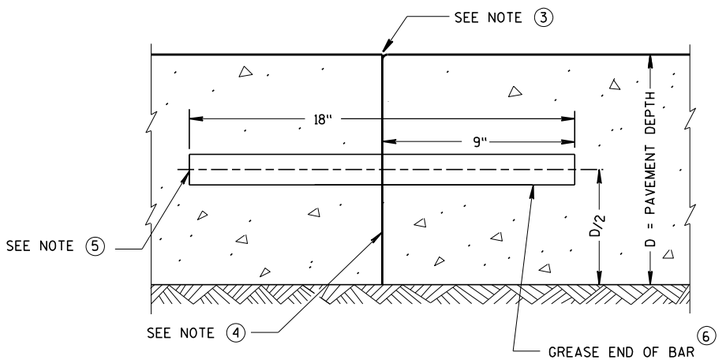
SDD 13c13 Urban Doweled Concrete Pavement



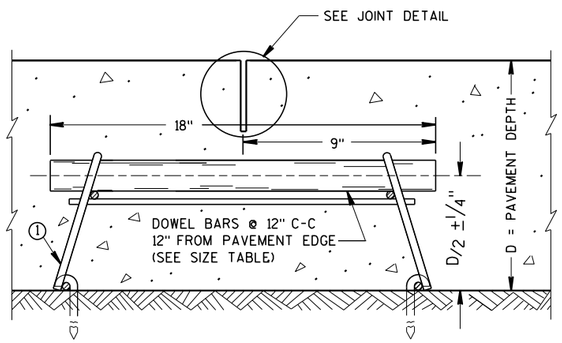
PLAN VIEW

SIDE VIEW

CONTRACTION JOINT DOWEL ASSEMBLY ①



TRANSVERSE CONSTRUCTION JOINT



DOWELED CONTRACTION JOINT

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 ½", 6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
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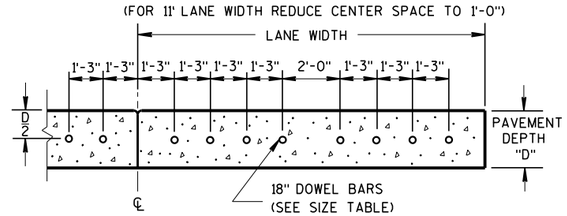
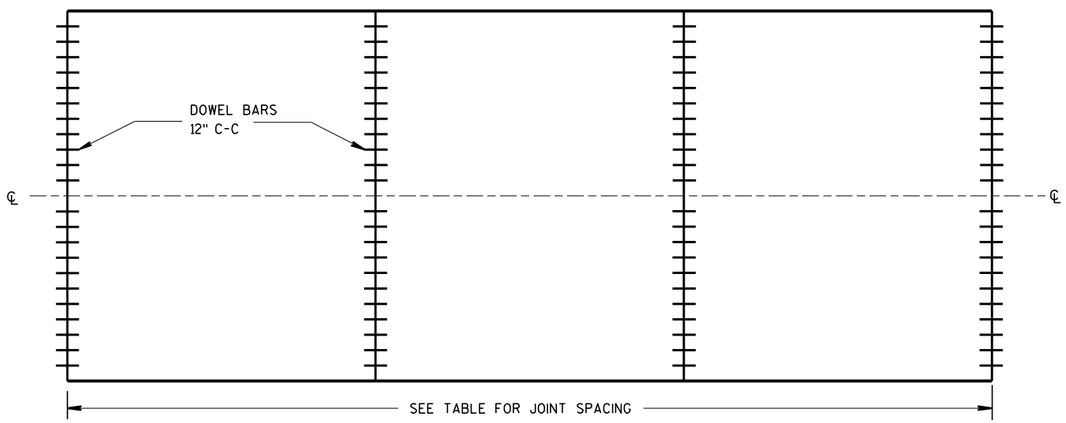


DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦



CONTRACTION JOINT LOCATIONS

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES AND A MAXIMUM OF 18 INCHES FROM THE LONGITUDINAL JOINT AND THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

① OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTING CONTRACTION JOINTS.

② SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

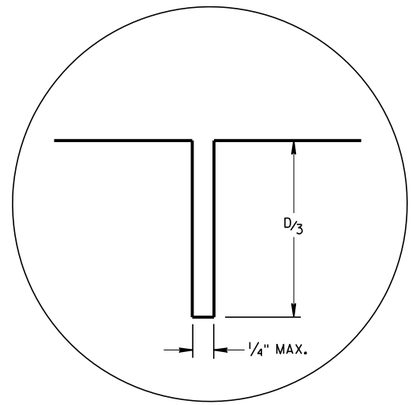
③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼-INCH RADIUS AT FORMED JOINTS.

④ PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

⑤ INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C-C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO *DRILLED DOWEL BAR CONSTRUCTION JOINT* DETAIL.

⑥ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

⑦ ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS ⅛-INCH GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



JOINT DETAIL

URBAN DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Peter Kemp, P.E. — PAVEMENT SUPERVISOR
FHWA

6

S.D.D. 13 C 13-9

6

S.D.D. 13 C 13-9

SDD 13c16-a Detail for Right Turn Lane/ Tee Intersection Bypass Lane on a Concrete Roadway

THROUGH HIGHWAY MONOLITHIC PCCP SHOULDER WIDTH (FEET)	DISTANCE (FEET) ①	②
2	13.3	0.0
3	20.0	12.5
TAPER RATE : 1	6.67	12.5

GENERAL NOTES

PCCP = PORTLAND CEMENT CONCRETE PAVEMENT.

SHLDR = SHOULDER.

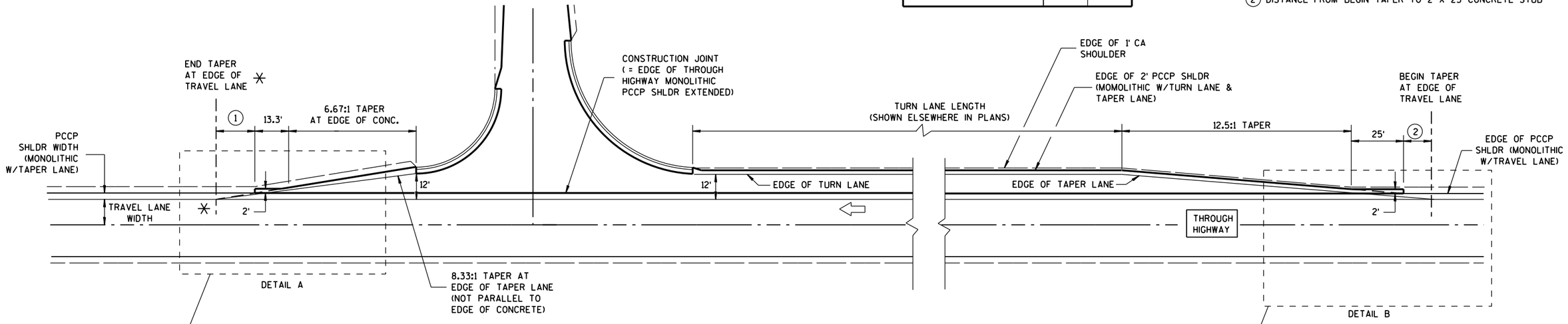
CONTINUE SAW CUT CONTRACTION JOINT ACROSS TURN LANE, EXIT TAPER AND PASSING LANE.

PAVEMENT MARKING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

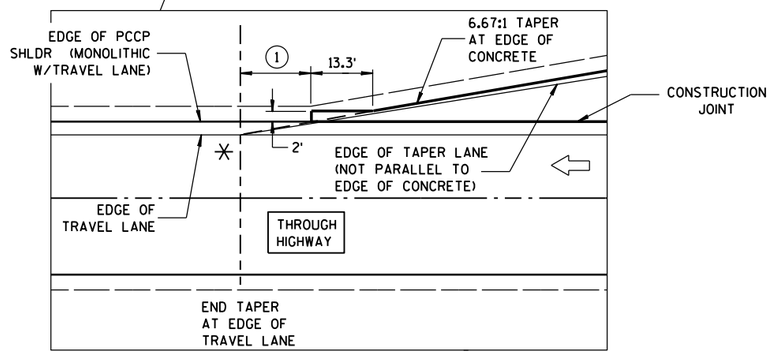
THROUGH HIGHWAY LANE WIDTH AND PCCP SHOULDER WIDTH ARE SHOWN ELSEWHERE IN PLANS

① DISTANCE FROM END TAPER TO 2' X 13.3' CONCRETE STUB

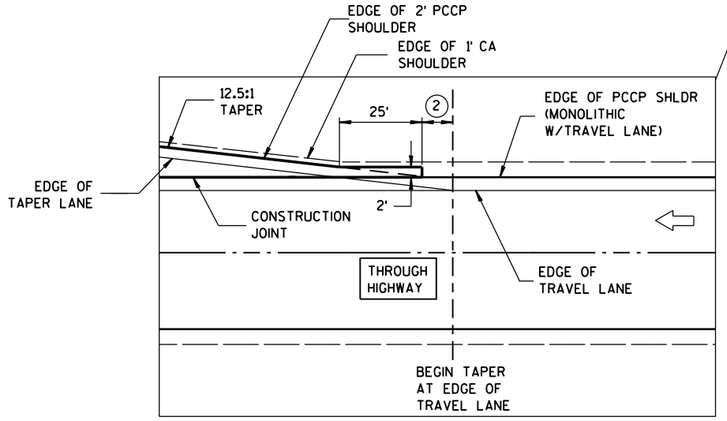
② DISTANCE FROM BEGIN TAPER TO 2' X 25' CONCRETE STUB



NOTE: EDGE OF CONCRETE TAPER (EXTENDED) & EDGE OF TAPER LANE CONVERGE



DETAIL A



DETAIL B

RIGHT TURN LANE AND EXIT TAPER

DETAIL FOR RIGHT TURN LANE/ TEE INTERSECTION BYPASS LANE ON A CONCRETE ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

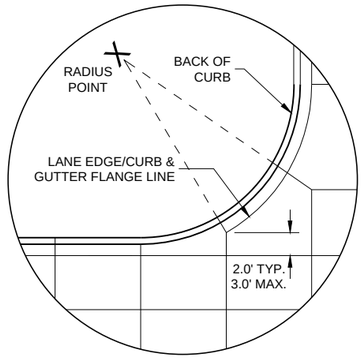
6

S.D.D. 13 C 16-2a

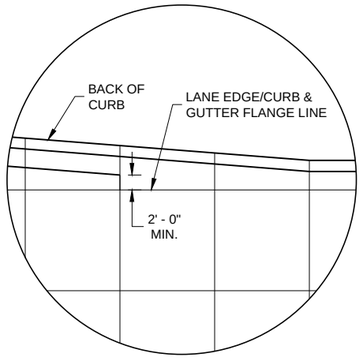
6

S.D.D. 13 C 16-2a

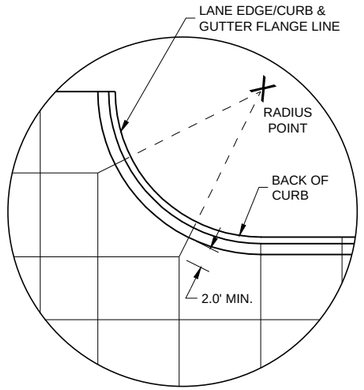
SDD 13C18-a Concrete Pavement Jointing



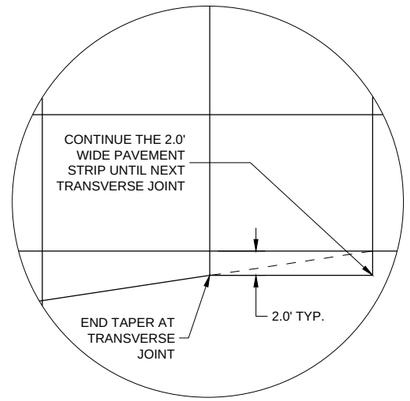
DETAIL "A"



DETAIL "B"



DETAIL "C"



DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.

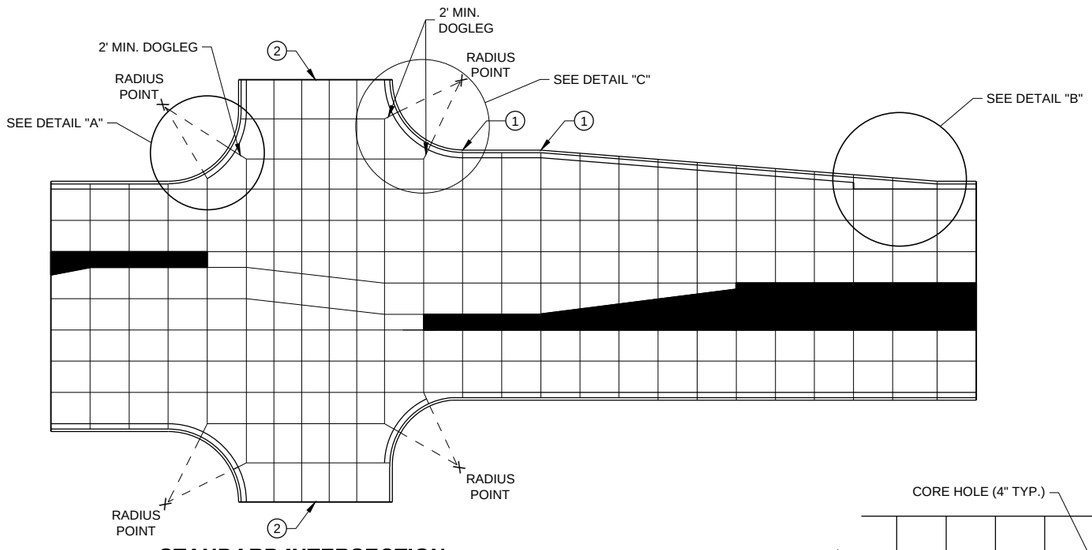
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.

AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

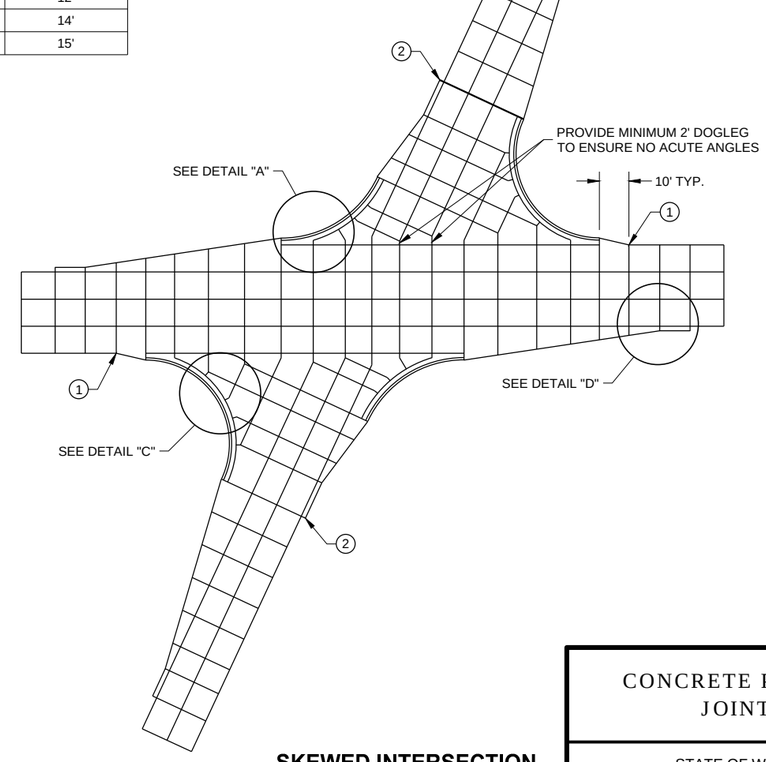
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



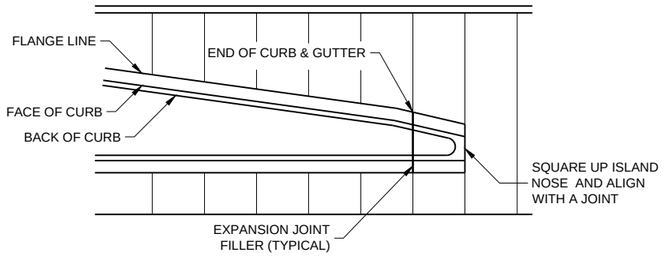
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

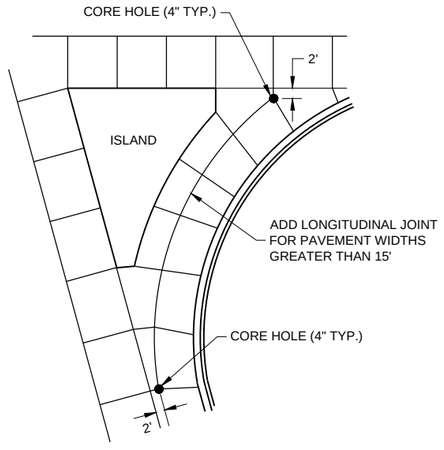
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6 ½"	12'
7", 7 ½"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 13C18 - 07a

6

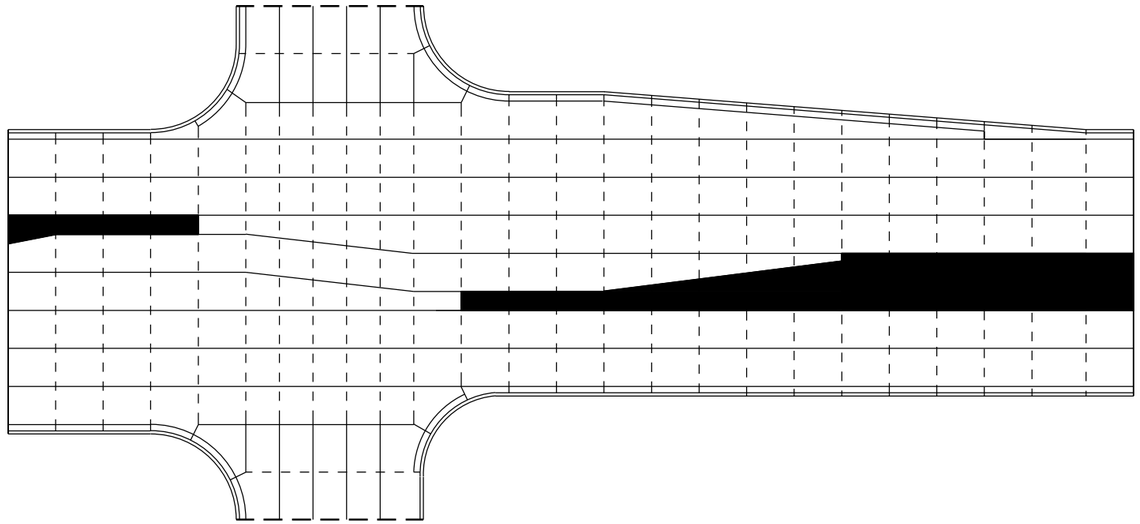
SDD 13C18 - 07a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

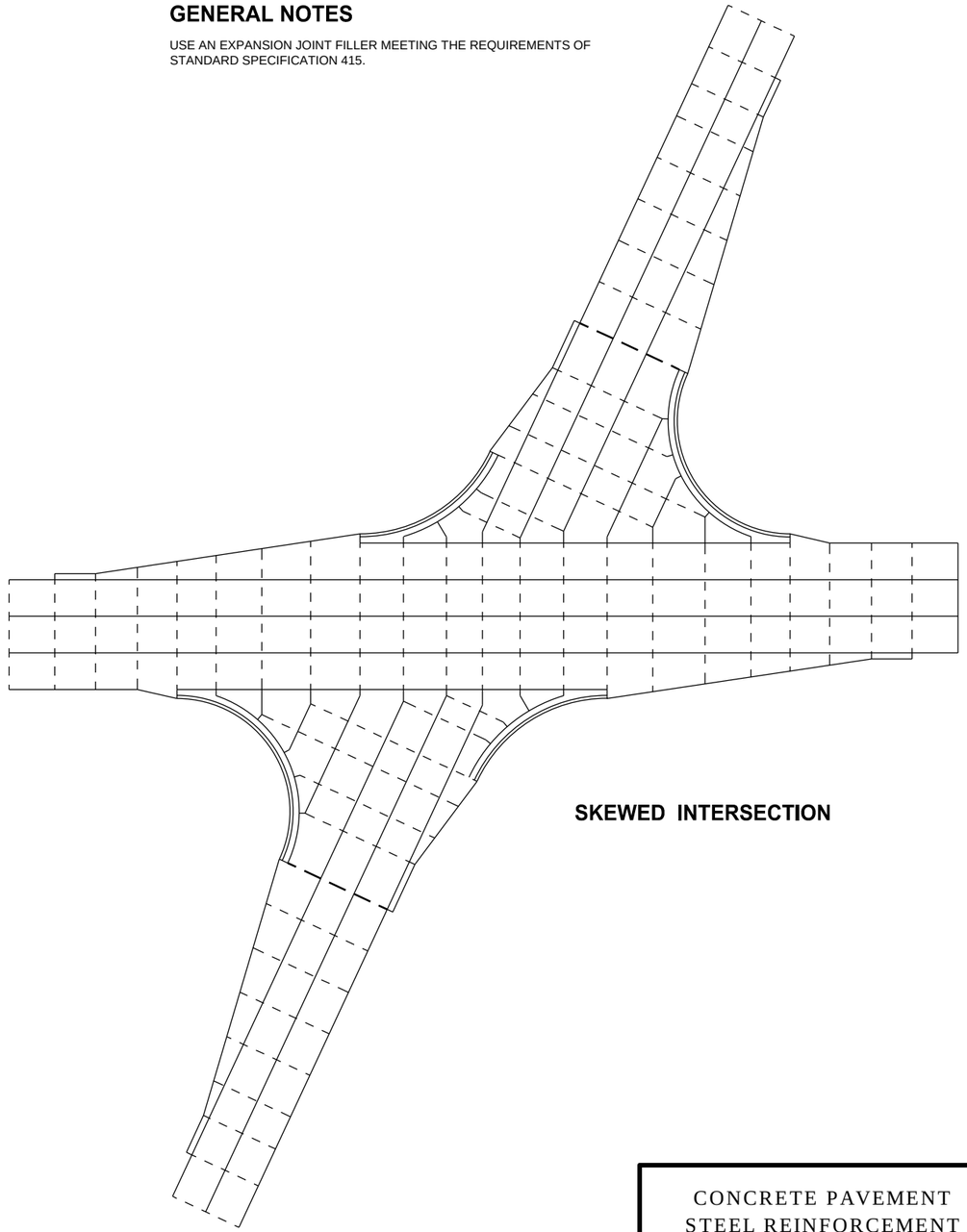
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

6

SDD 13C18 - 07b

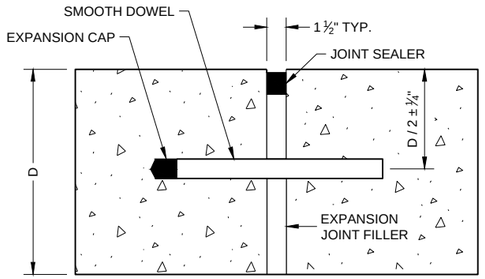
CONCRETE PAVEMENT
STEEL REINFORCEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

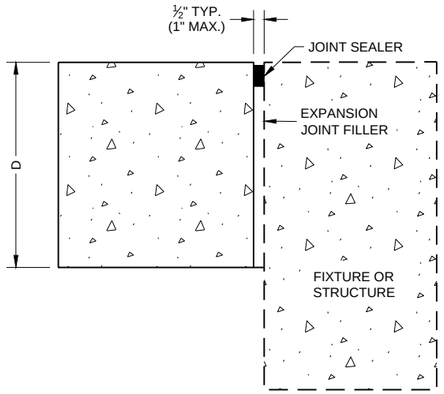
6

SDD 13C18 - 07b

SDD 13C18-c Concrete Pavement Joint Types



DOWELED TRANSVERSE (1)



UNTIED - LONGITUDINAL

EXPANSION JOINTS

TIE BAR TABLE

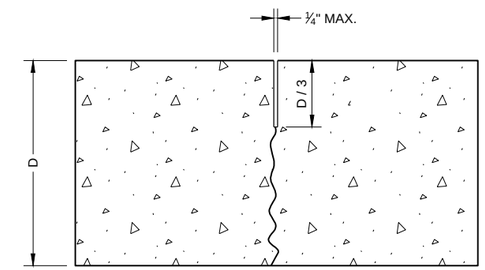
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10½"	NO. 4	30"	36"
≥ 10½"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

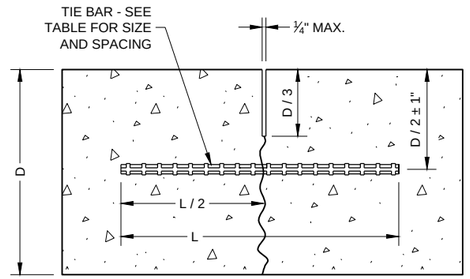
** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

GENERAL NOTES

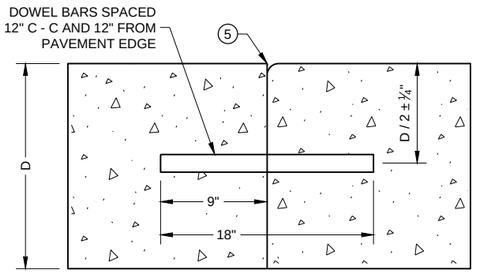
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATETHE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
5. IF JOINT IS FORMED, PROVIDE A ¼" RADIUS.
6. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



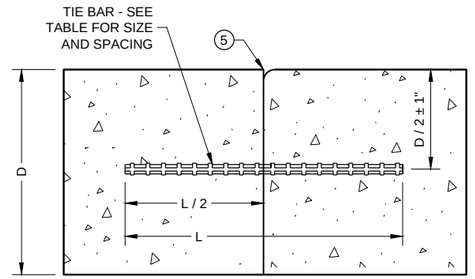
UNDOWELED TRANSVERSE



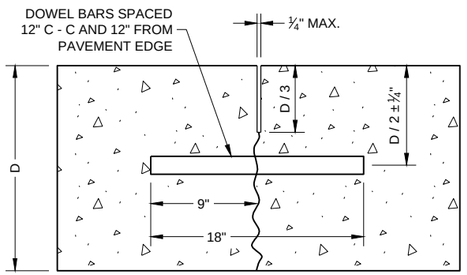
TIED LONGITUDINAL



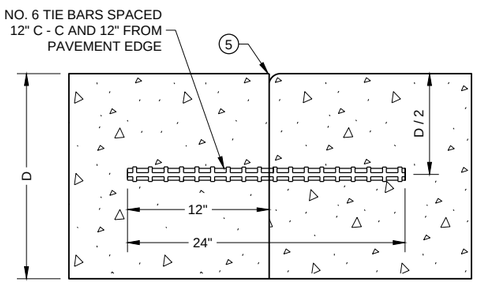
DOWELED TRANSVERSE (3)



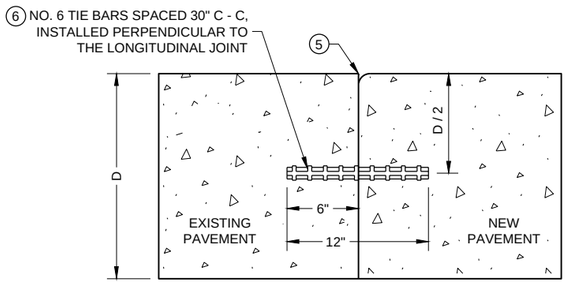
TIED LONGITUDINAL



DOWELED TRANSVERSE



TIED TRANSVERSE (3)
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL TO EXISTING

CONTRACTION JOINTS (2)

CONSTRUCTION JOINTS (4)

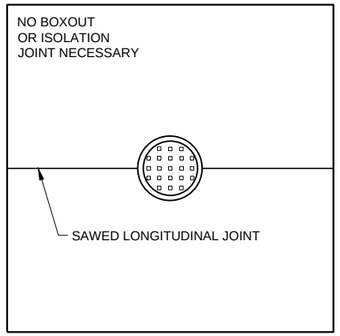
CONCRETE PAVEMENT
JOINT TYPES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

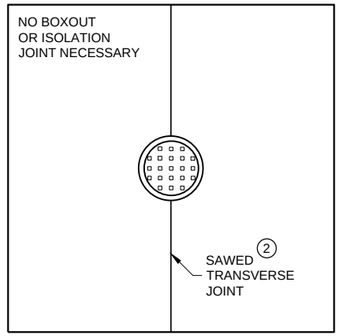
SDD 13C18 - 07c

SHEET 191

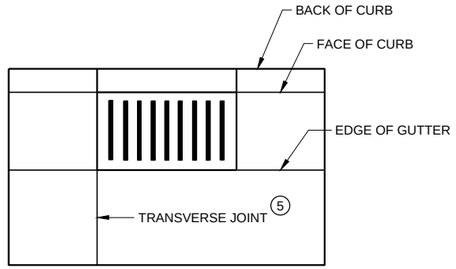
SDD 13C18-d Concrete Pavement Jointing at Utility Fixtures



MANHOLE WITH LONGITUDINAL JOINT



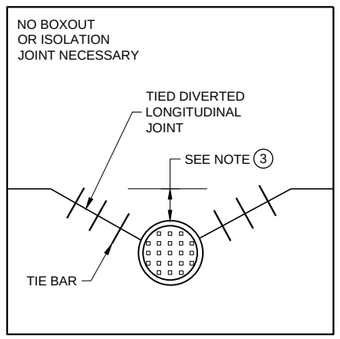
MANHOLE WITH TRANSVERSE JOINT



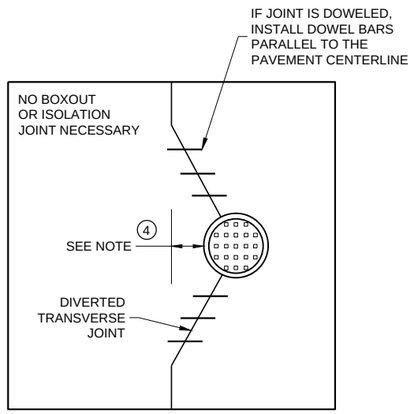
INLET WITH TRANSVERSE JOINT

GENERAL NOTES

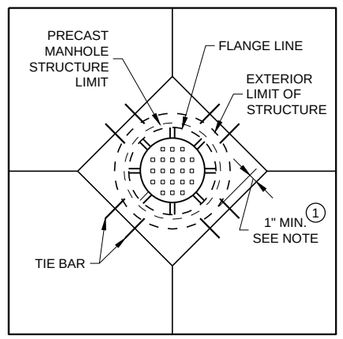
1. USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1 FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.
2. ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.
3. IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDINAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
4. IF THE DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS LESS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
5. ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT



MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT



DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS

CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVISOR

FHWA

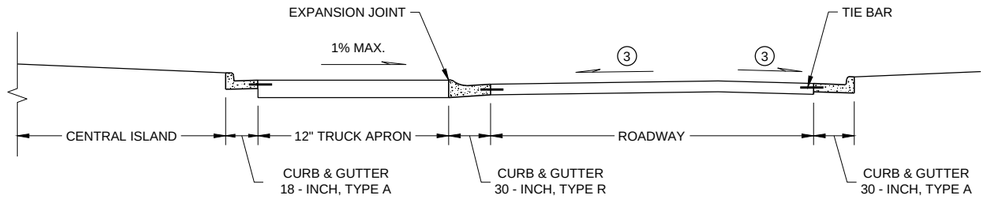
6

SDD 13C18 - 07d

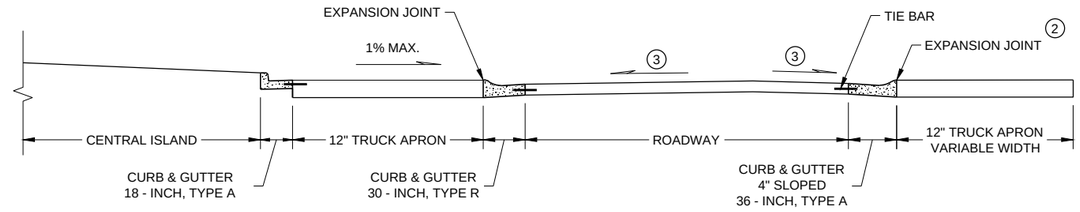
6

SDD 13C18 - 07d

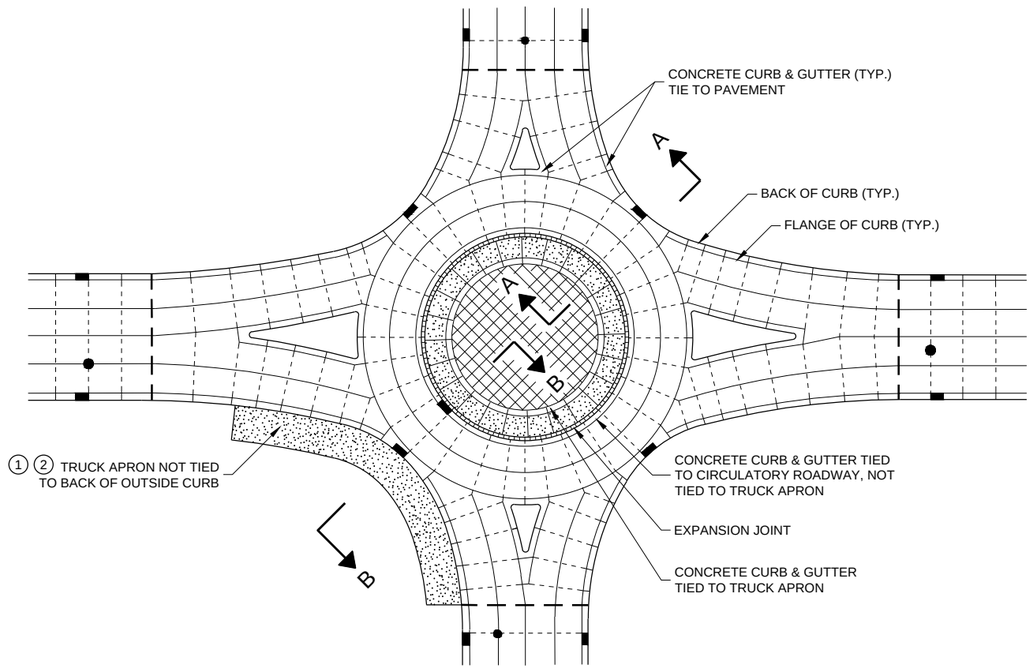
SDD 13C18-e Concrete Pavement Jointing and Steel Reinforcement in Roundabouts



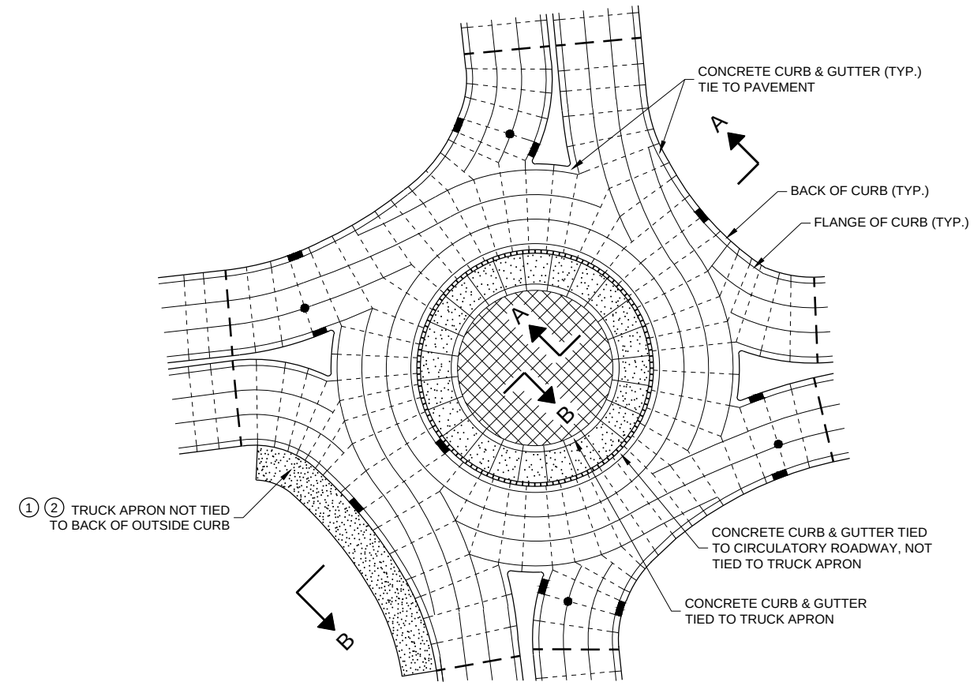
SECTION A - A



SECTION B - B



ISOLATED CIRCLE JOINT LAYOUT FOR ROUNDABOUTS



PINWHEEL JOINT LAYOUT FOR ROUNDABOUTS

GENERAL NOTES

MAXIMUM JOINT SPACING IS IN ACCORDANCE WITH THE TABLE SHOWN ON SDD 13C18 - SHEET "a"

USE EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.

DO NOT DOWEL OR TIE THE TRUCK APRON TRANSVERSE JOINTS.

(1) DESIGNER DETERMINES SIZE AND LOCATION(S) OF TRUCK APRON TO ACCOMMODATE TRACKING OF OVERSIZE / OVERWEIGHT VEHICLES.

(2) TIE THE OUTSIDE TRUCK APRON TO THE BACK SIDE OF CURB ONLY WHEN ENTIRE TRUCK APRON IS LESS THAN 3 FEET.

(3) CONFORM TO PLAN CONSTRUCTION DETAILS FOR CIRCULATORY ROADWAY CROSS SLOPE.

LEGEND

- DOWELED JOINT
- TIED JOINT
- EXPANSION JOINT
- POTENTIAL DOWELED EXPANSION JOINT
- TRUCK APRON
- CENTRAL ISLAND
- UTILITY STRUCTURES

CONCRETE PAVEMENT JOINTING
AND STEEL REINFORCEMENT
IN ROUNDABOUTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVISOR

FHWA

6

SDD 13C18 - 07e

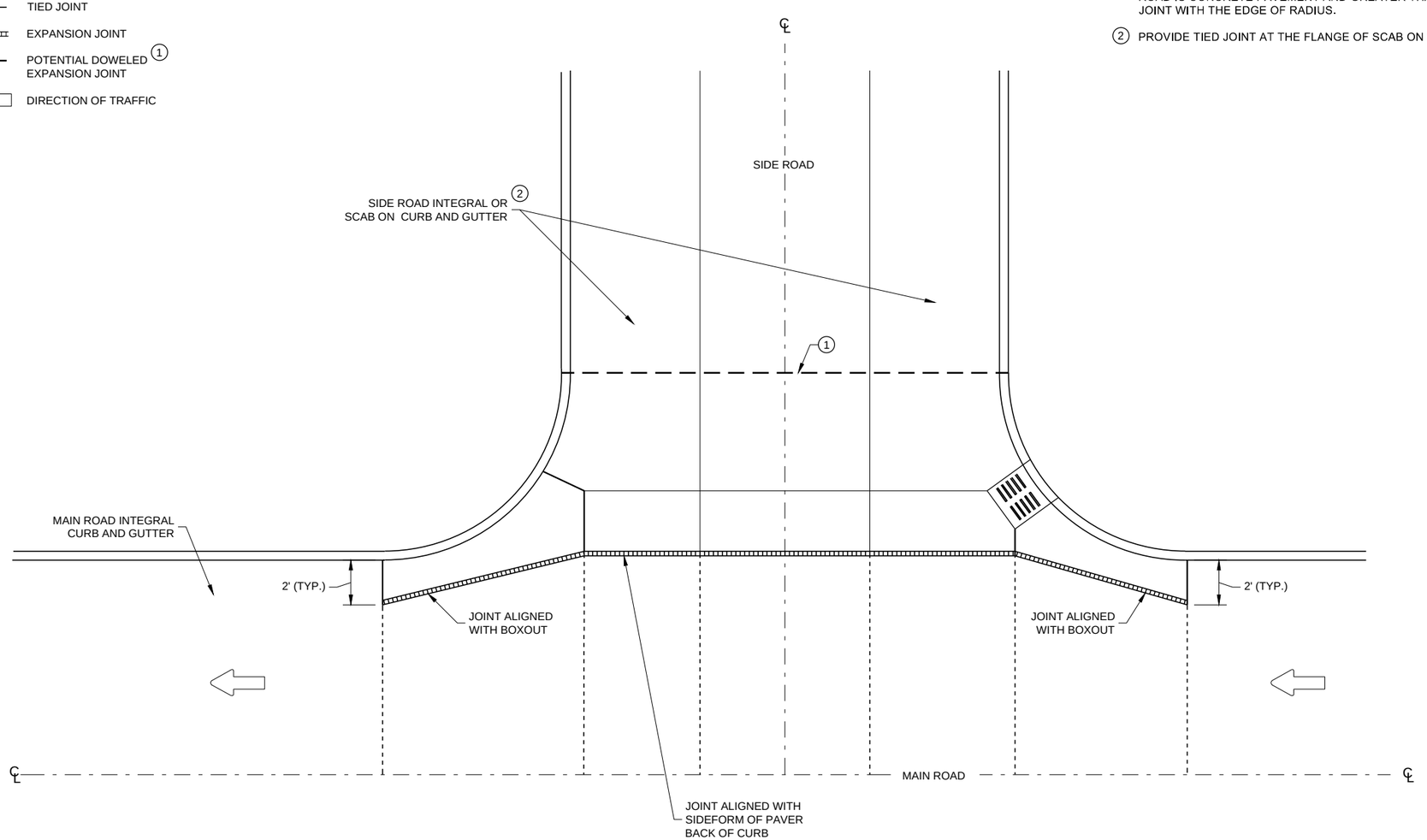
6

SDD 13C18 - 07e

SDD 13C18-f Concrete Pavement Intersection Boxout for Integral Curb and Gutter

LEGEND

- DOWELED JOINT
- TIED JOINT
- EXPANSION JOINT
- POTENTIAL DOWELED EXPANSION JOINT (1)
- DIRECTION OF TRAFFIC



GENERAL NOTES

1. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH THE EDGE OF RADIUS.
2. PROVIDE TIED JOINT AT THE FLANGE OF SCAB ON CURB IF SCAB ON CURB AND GUTTER IS USE.

INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER

CONCRETE PAVEMENT INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVISOR

FHWA

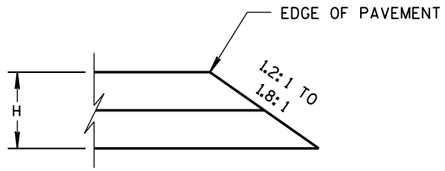
6

SDD 13C18 - 07f

6

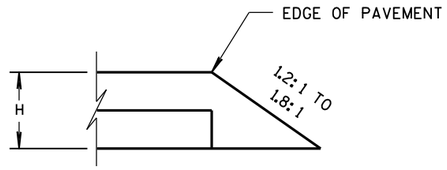
SDD 13C18 - 07f

SDD 14B29 Safety Edge



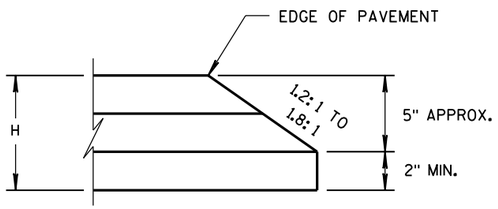
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



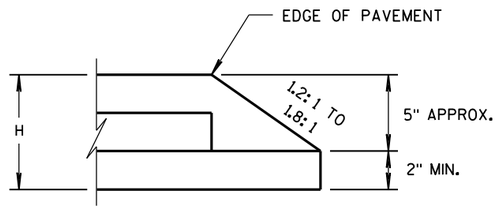
CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL TWO LAYERS

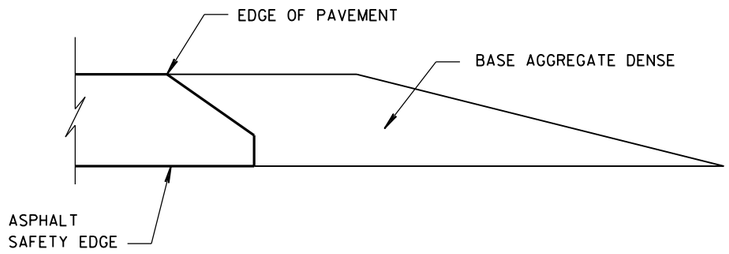
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER

FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

6

6

S.D.D. 14 B 29-1

S.D.D. 14 B 29-1

SAFETY EDGE SM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

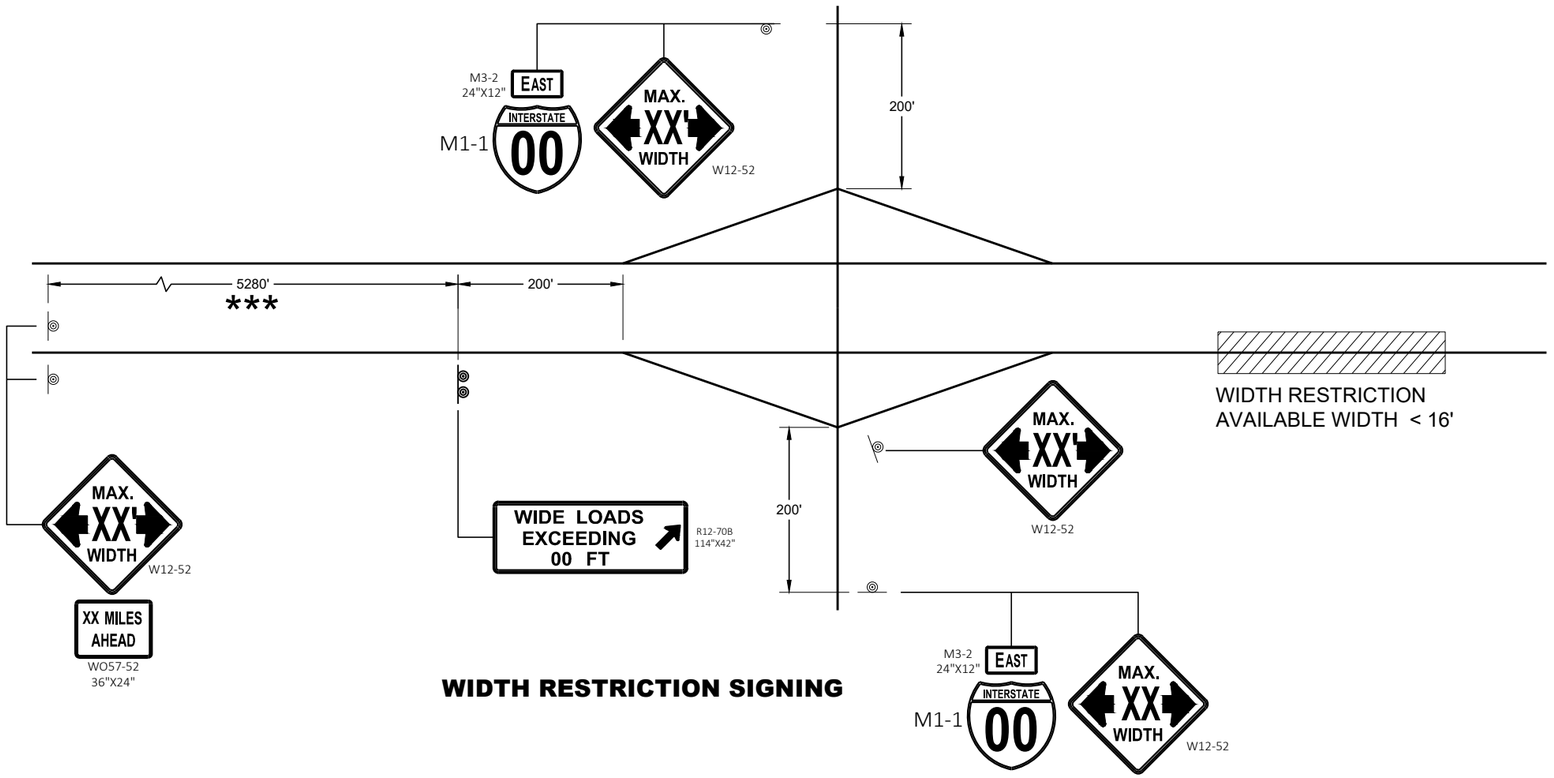
APPROVED

11/30/2012
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

SDD 15C02-f Advanced Width Restriction Signing



WIDTH RESTRICTION SIGNING

LEGEND

SIGN ON PERMANENT SUPPORT

GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL " IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

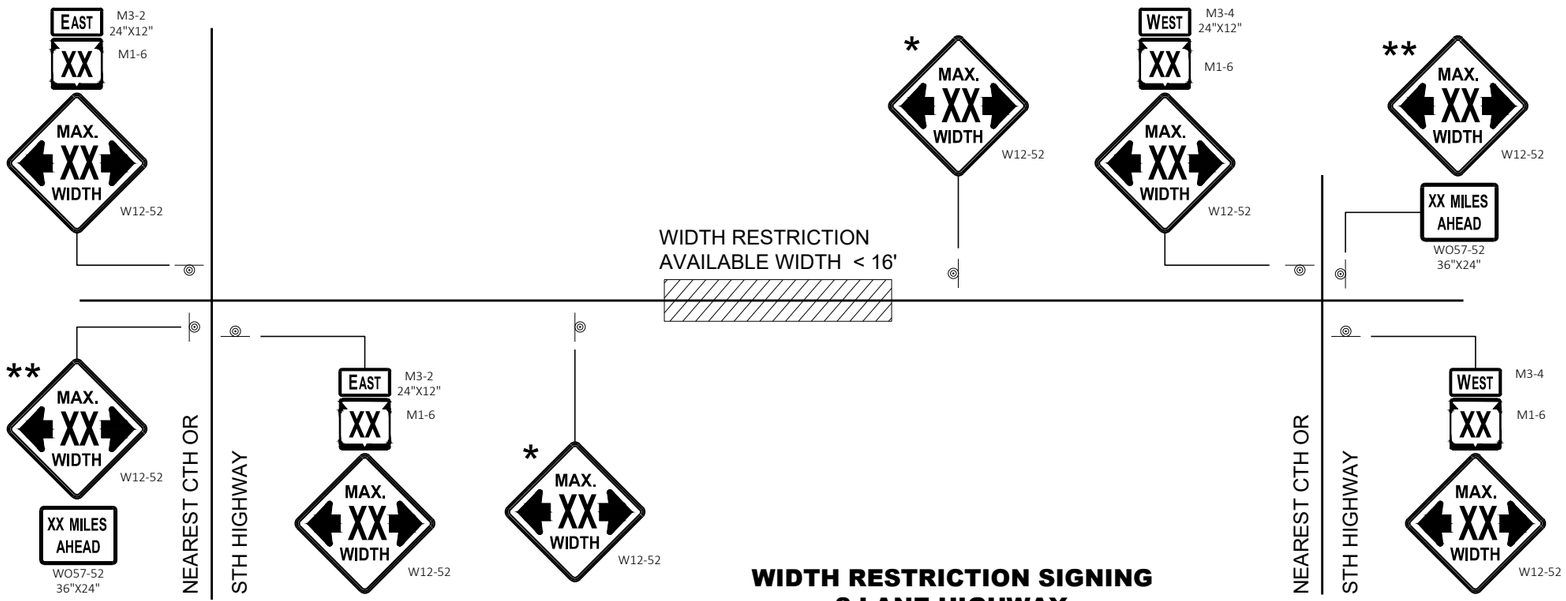
WIDTH ON SIGN TO BE APPROXIMATELY ONE FOOT LESS THAN AVAILABLE WIDTH.

* PLACE 500 FEET AFTER THE W20 - 1A AND 500 FEET BEFORE ADDITIONAL SIGNS FOR ROADWAYS WITH A PRE - CONSTRUCTION SPEED LIMIT OF 45 MPH OR MORE. FOR 35-40 MPH, USE 350 FOOT TYPICAL SPACING. FOR 25-30 MPH, USE 200 FOOT TYPICAL SPACING.

** SIGN SHALL BE VISIBLE FROM ROADWAY.

*** ADDITIONAL SIGNS NEEDED IF THERE IS AN ON RAMP BETWEEN SIGNS.

WIDTH ON SIGN TO BE APPROX. 1 - FOOT LESS THAN AVAILABLE WIDTH



WIDTH RESTRICTION SIGNING
2 LANE HIGHWAY

ADVANCED WIDTH RESTRICTION SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

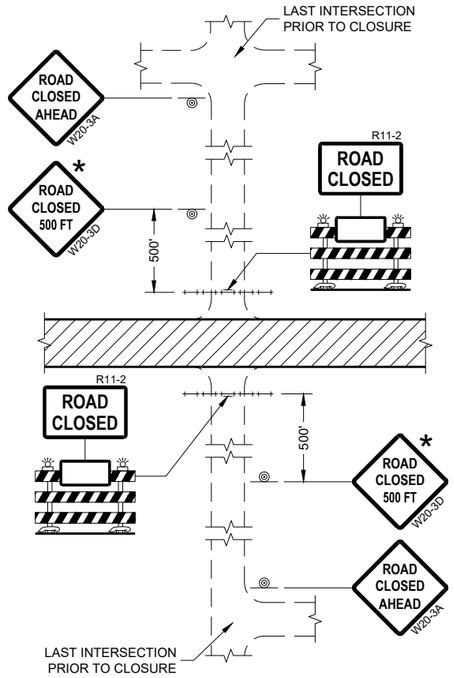
6

SDD 15C02 - 08f

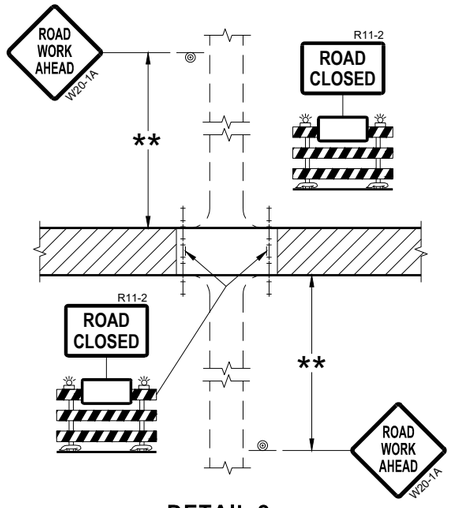
6

SDD 15C02 - 08f

SDD 15C03 Barricades and Signs for Sideroad Closures



DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT)

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE (500 FEET DESIRABLE) TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS REESTABLISHED.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

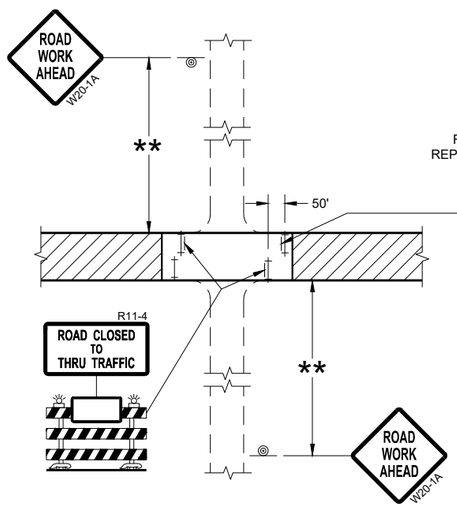
TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

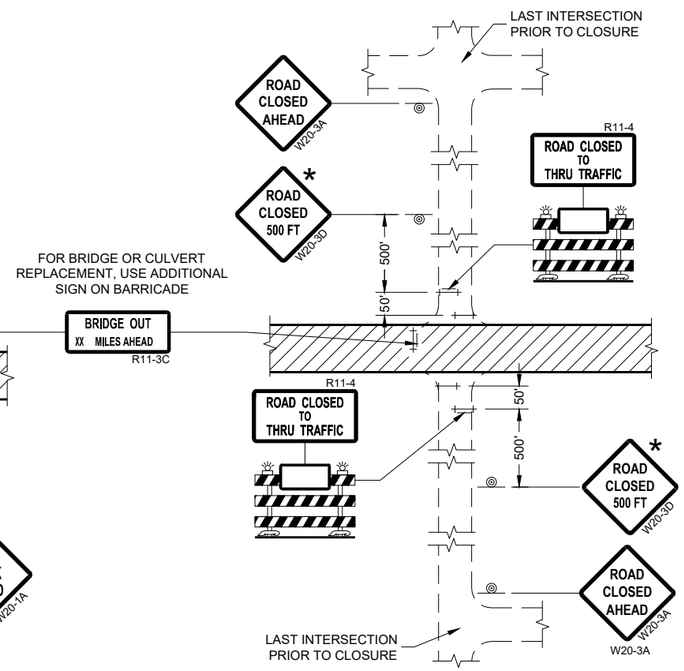
ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

* OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FEET OR LESS FROM THE WORK ZONE.

** 500' MAX. OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST.



DETAIL 3
(PUBLIC CROSS-TRAFFIC MAINTAINED.
CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)



DETAIL 4
(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6
SDD 15C03 - 05

SDD 15C04 Traffic Control, Advance Warning Signs 45 MPH or Greater Undivided Road Open to Traffic

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

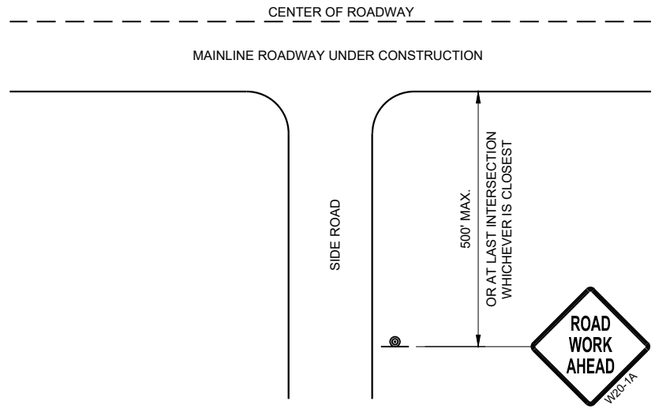
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS REESTABLISHED.

* OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS

** PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



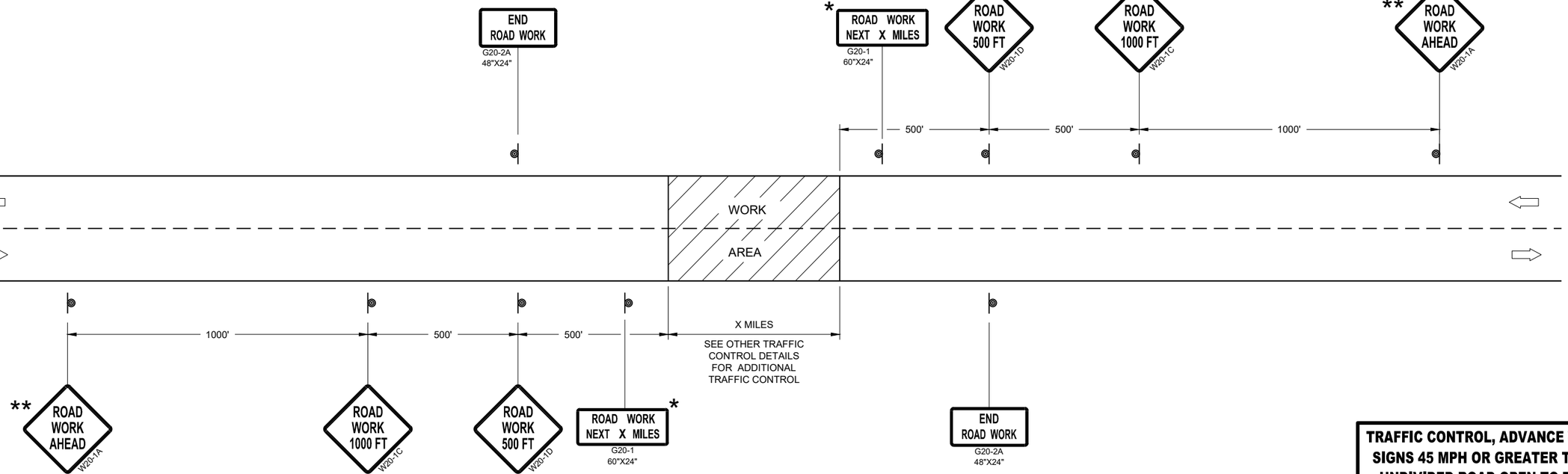
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15C04 - 05

6

SDD 15C04 - 05

SDD 15C05 Traffic Control, Advance Warning Signs 40 MPH or Less Two Way Undivided Road Open to Traffic

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

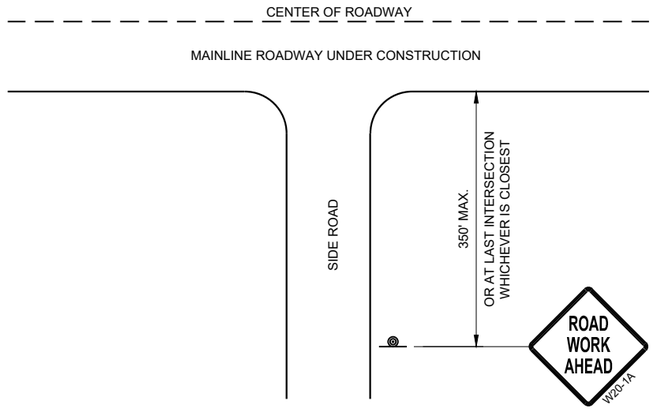
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"X36" SIGNS MAY BE USED INSTEAD OF 48" X 48" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS REESTABLISHED.

* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FEET" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.



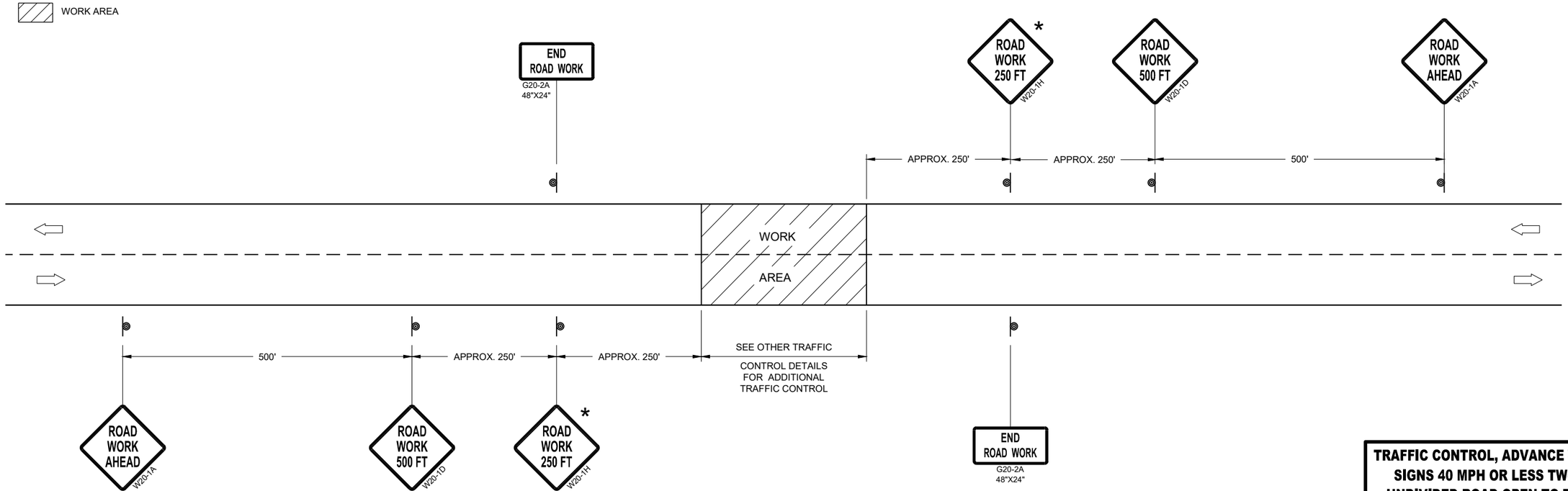
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40MPH OR LESS

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

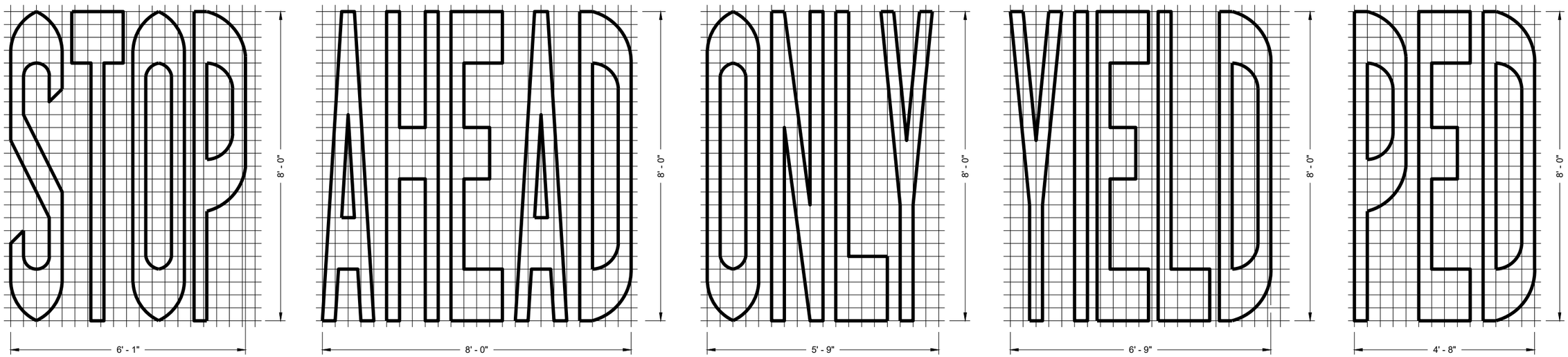
6

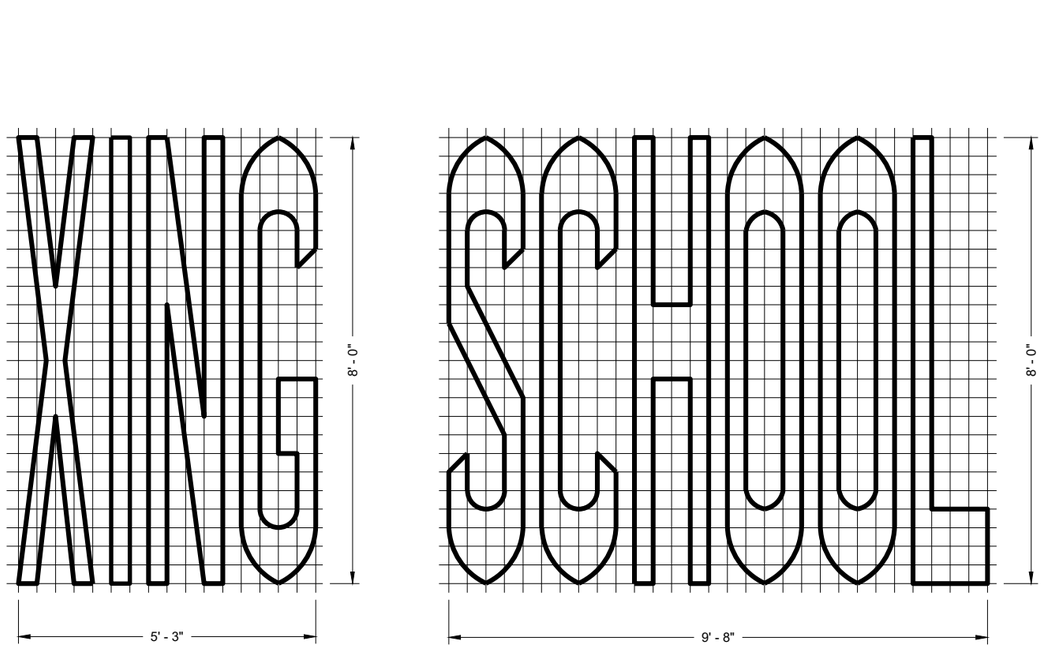
SDD 15C05 - 05

6

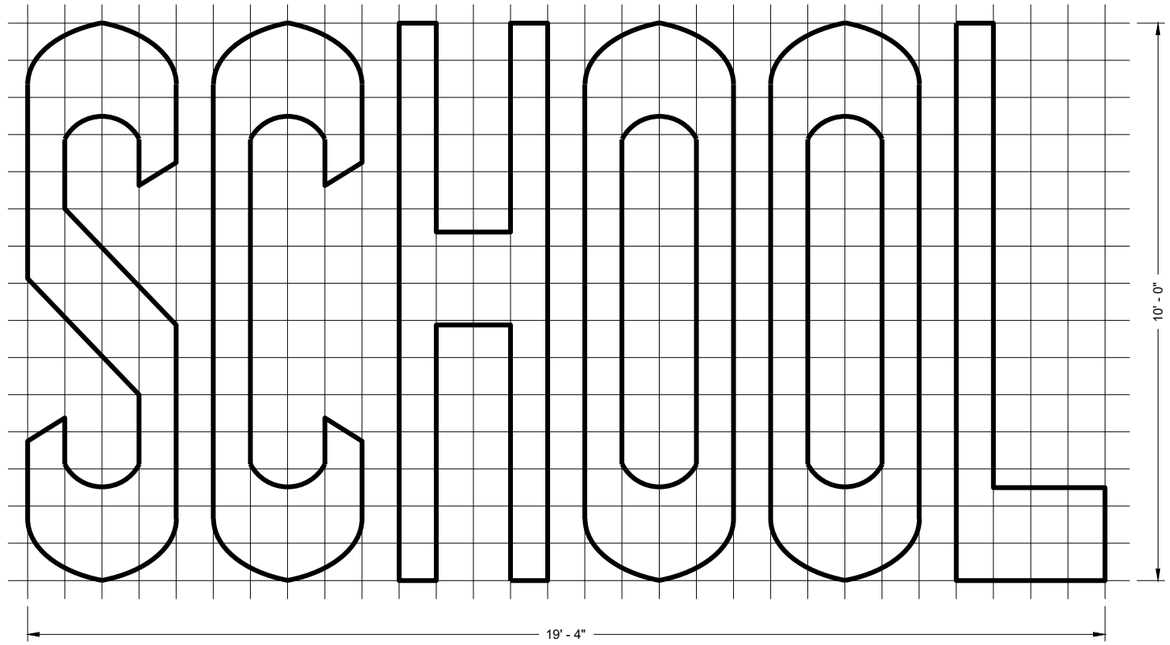
SDD 15C05 - 05

SDD 15C07-b Pavement Marking Words





SINGLE LANE



TWO - LANE

GENERAL NOTES

DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MARKING ENGINEER

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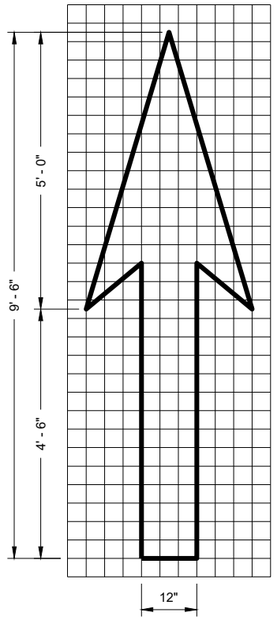
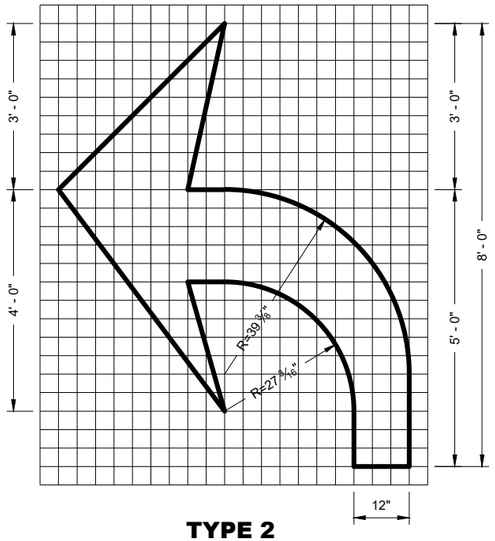
SDD 15C07 - 15b

SDD 15C07 - 15b

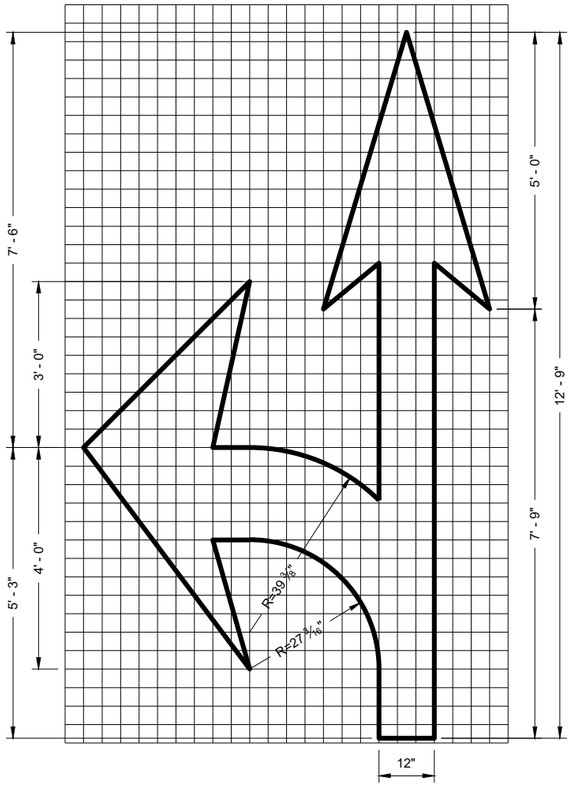
SDD 15C7-c Pavement Marking Arrows



TYPE 1



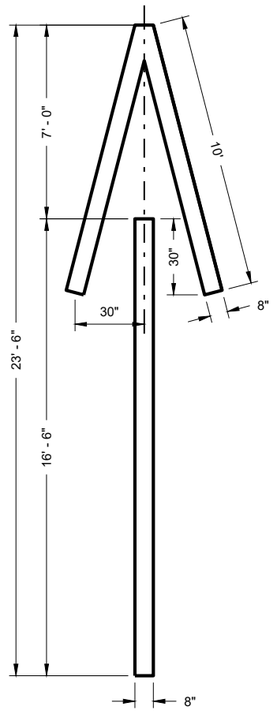
TYPE 2



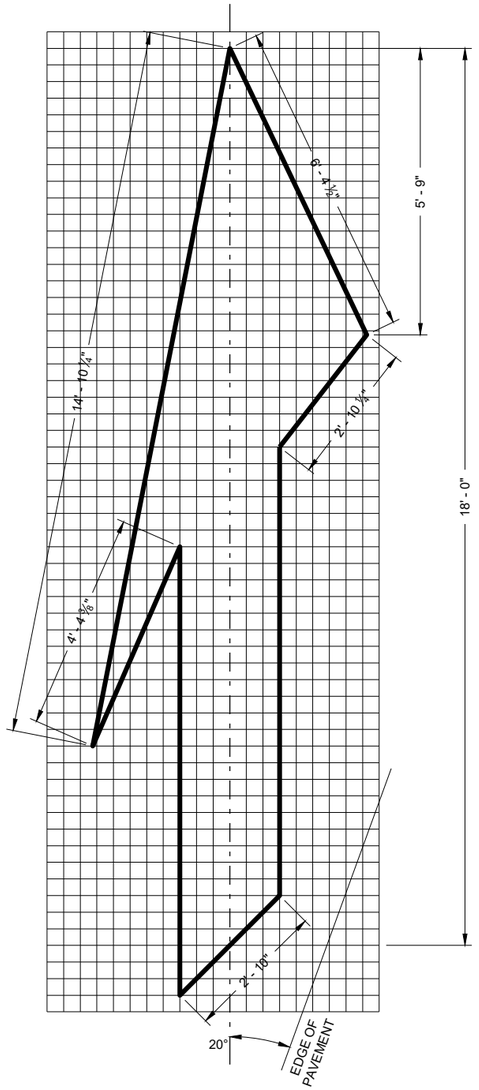
TYPE 3

GENERAL NOTES

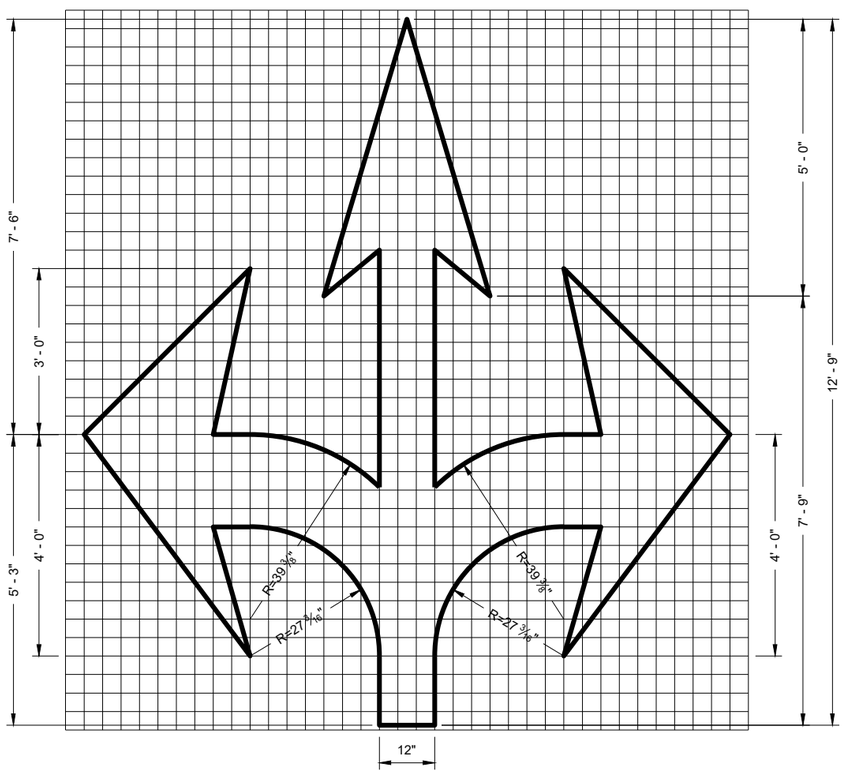
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



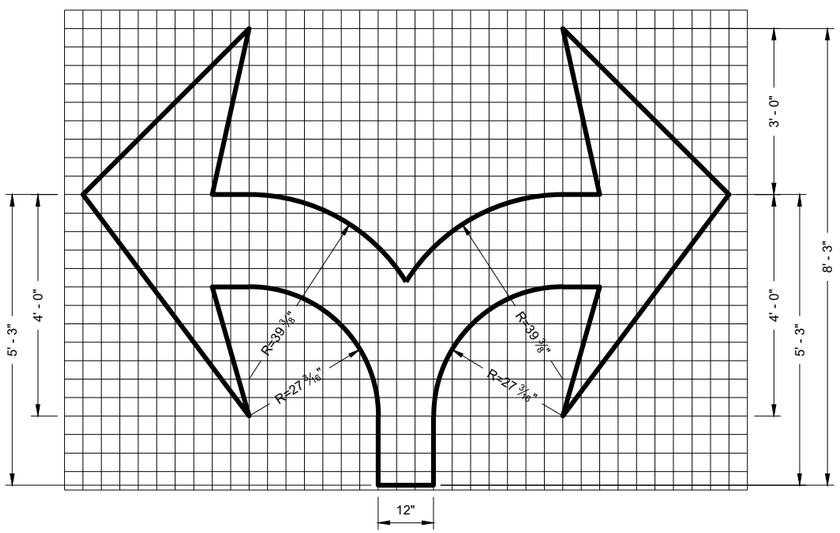
TYPE 4



TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER
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SDD 15C07 - 15c

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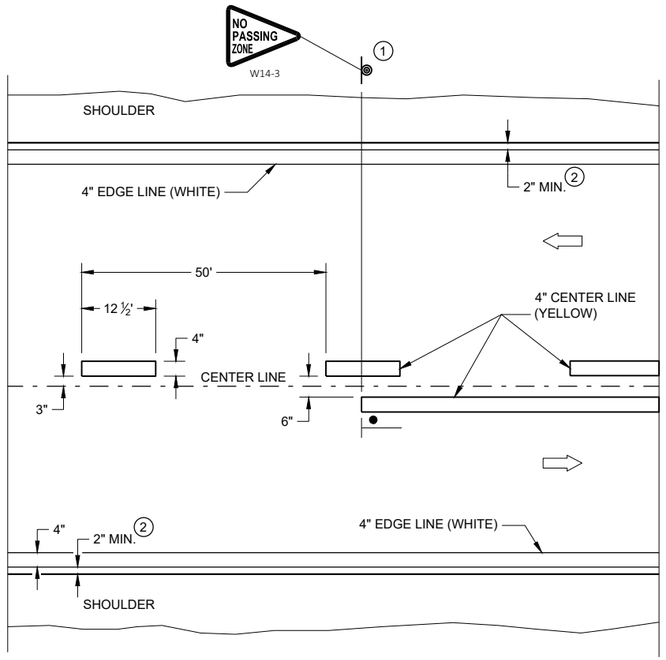
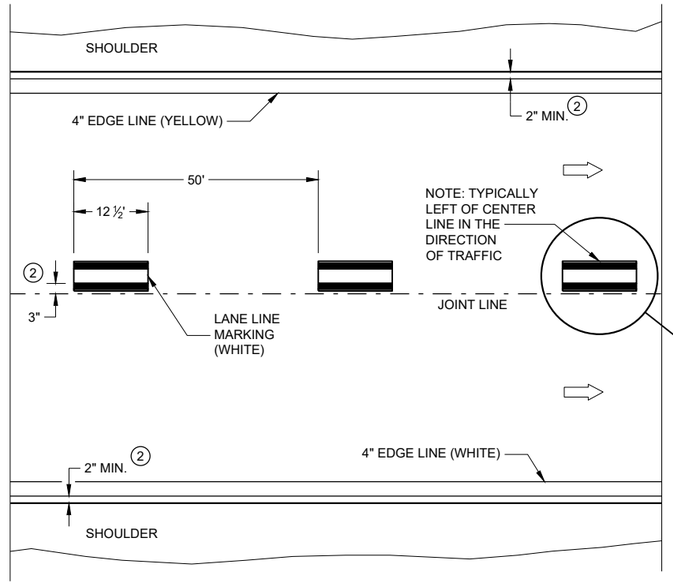
SDD 15C07 - 15c

SDD 15C08-a Longitudinal Marking (Mainline)

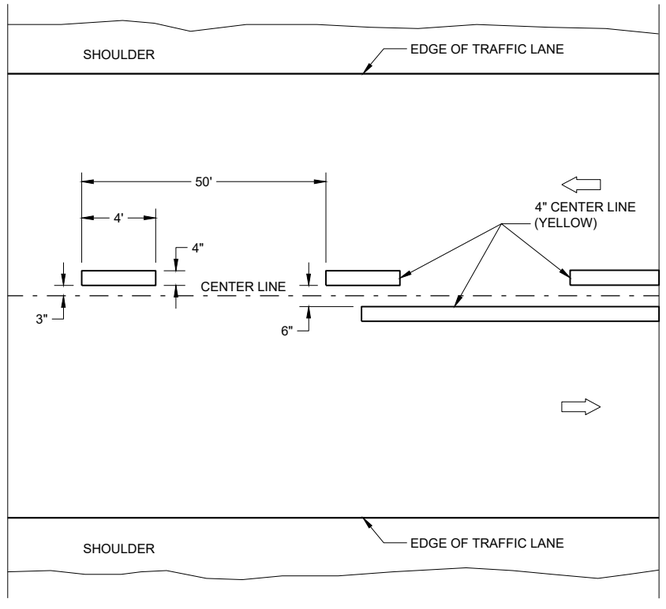


TWO WAY TRAFFIC

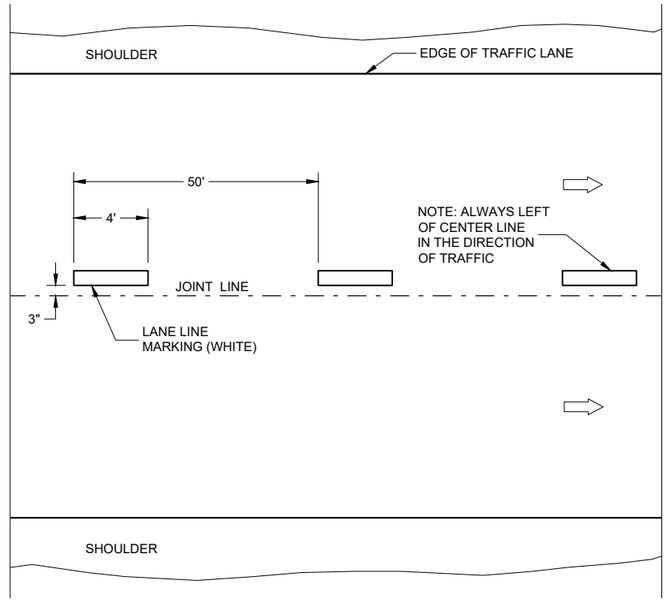


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

GENERAL NOTES

DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

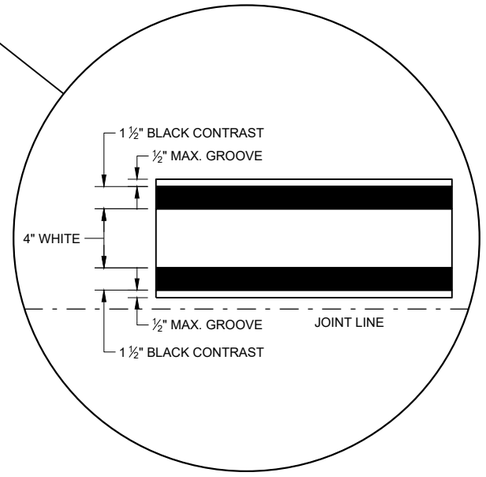
1. LOCATE THE NO PASSING ZONE W14-3 SIGN WITH 50 FEET OF THE "T" MARKING
2. MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



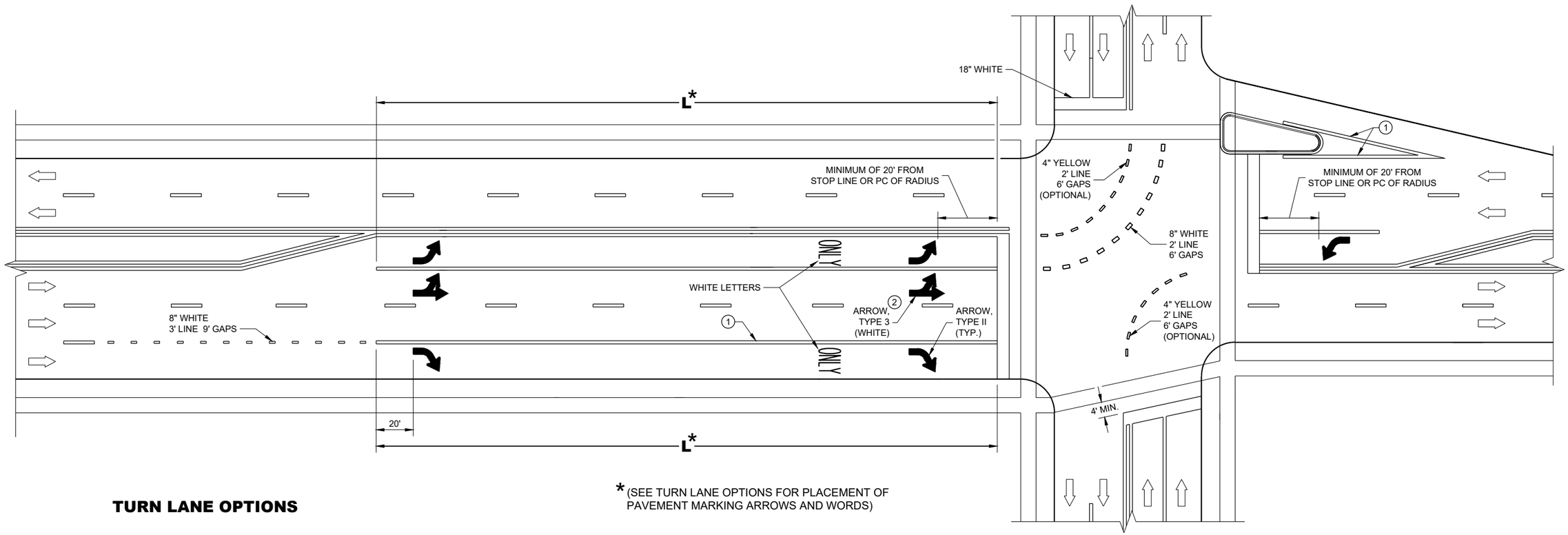
LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 — DATE
/S/ Matthew Rauch — STATEWIDE SIGNING AND MARKING ENGINEER

FHWA

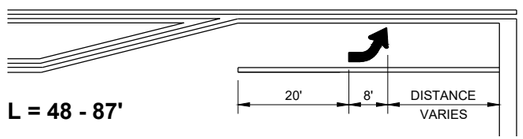
SDD 15C08 - 20a



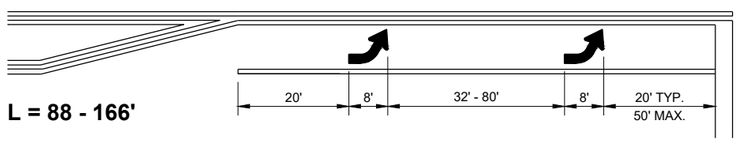
* (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

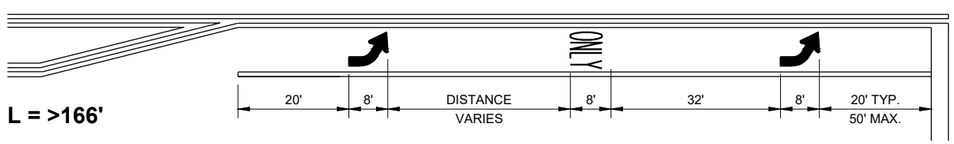
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48 - 87'



L = 88 - 166'



L = >166'

GENERAL NOTES

1. 8" WHITE
2. QUANTITY AND LOCATION OF TYPE 3 ARROWS ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION IN THE SAME DIRECTION OF TRAVEL, THE ARROWS AND "ONLY" MARKING MAY BE ELIMINATED.

DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

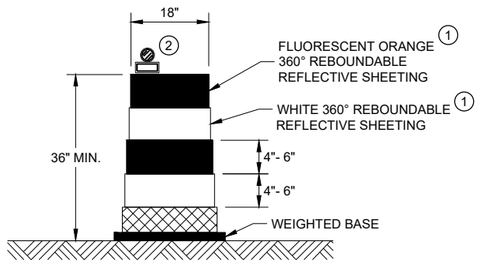
6
SDD 15C08 - 20c

SDD 15C11-b Channelizing Devices, Drums, Cones, Barricades and Vertical Panels

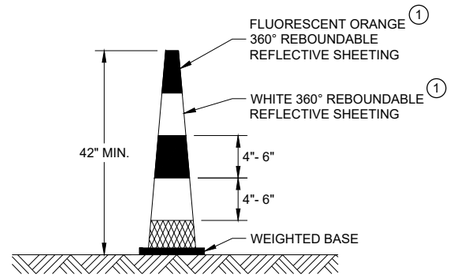
GENERAL NOTES

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

(2) LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.

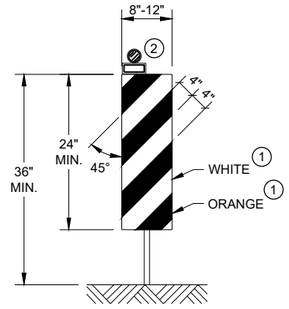


DRUM



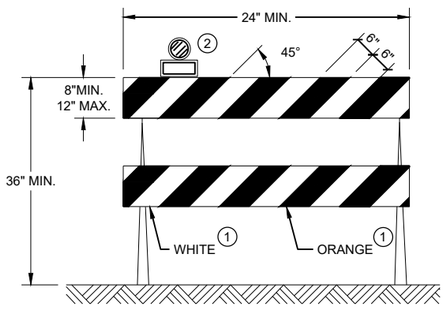
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



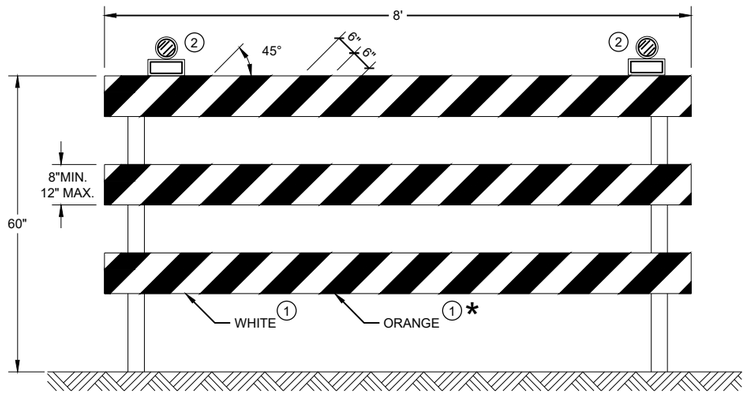
VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO
THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE II BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES
MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD
TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE III BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP
TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

**CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

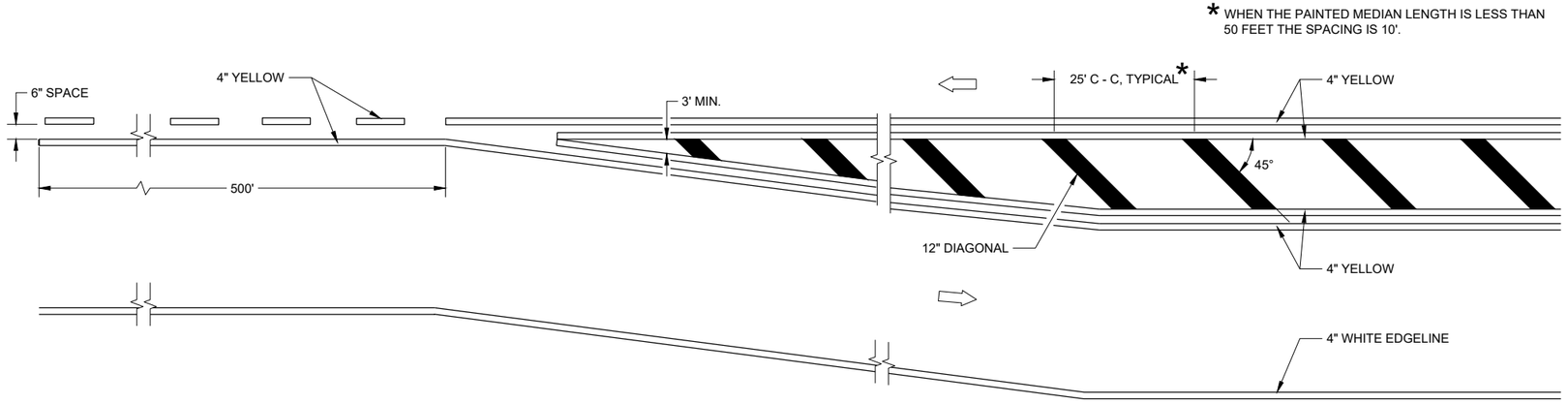
FHWA

6

6

SDD 15C11 - 09b

SDD 15C11 - 09b

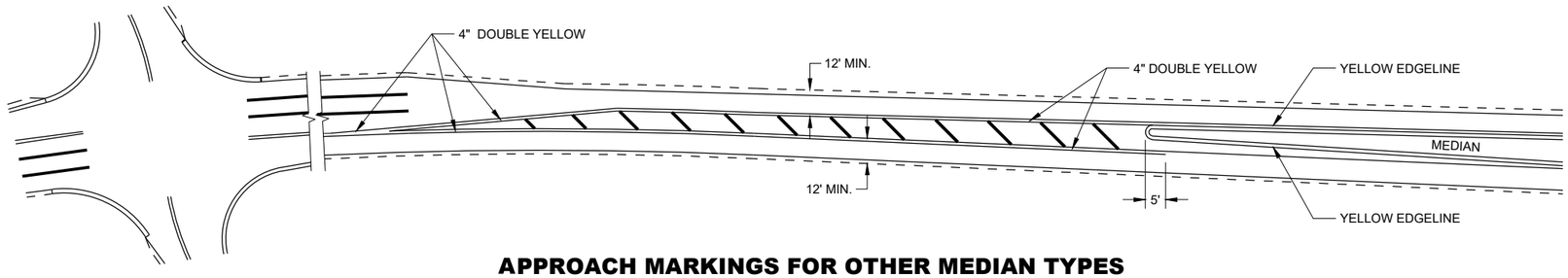


MEDIAN ISLAND DETAIL

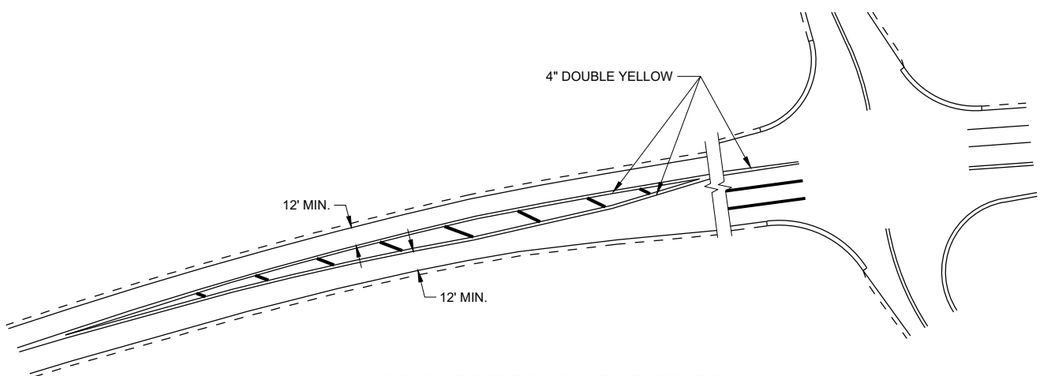
GENERAL NOTES

DIAGONALS ARE OPTIONAL WHEN PAINED ISLAND IS LESS THAN 6 FEET AT WIDEST POINT.

DIRECTION OF TRAVEL



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON-APPROACH MARKINGS

MEDIAN ISLAND PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

February 2021
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MARKING ENGINEER

FHWA

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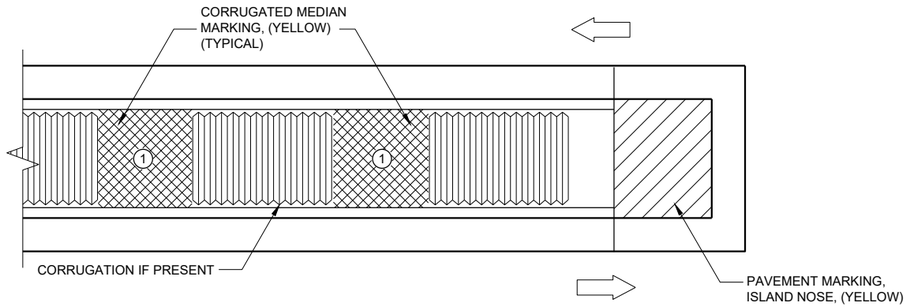
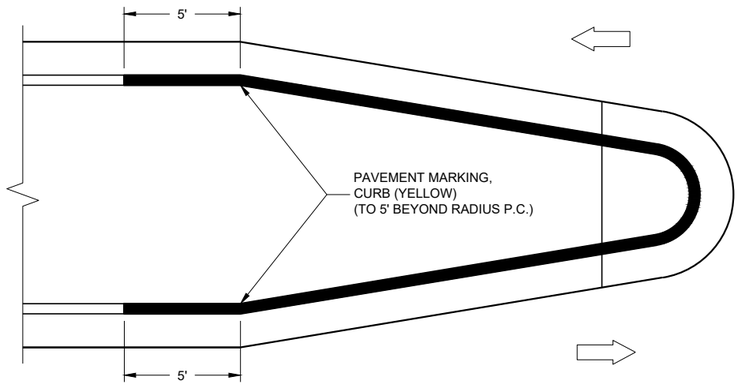
SDD 15C18 - 05a

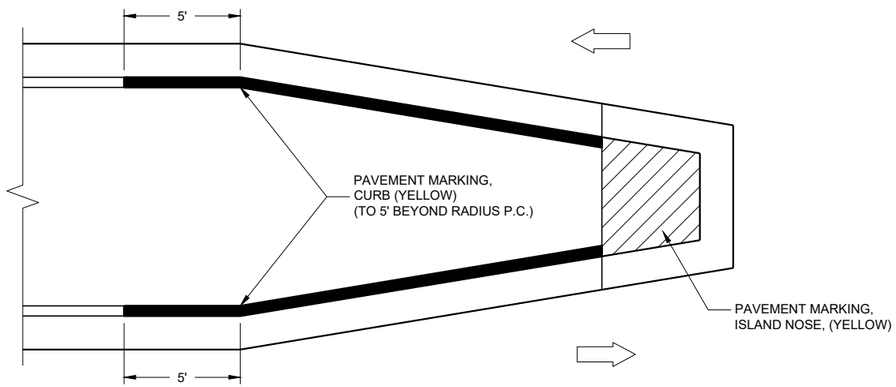
SDD 15C18 - 05a



MEDIAN ISLAND WITH SQUARE BLUNT NOSE



MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

GENERAL NOTES

WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION, YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.

ISLAND NOSE MARKING

CURB MARKING

CORRUGATED MEDIAN MARKING

DIRECTION OF TRAVEL

PAVEMENT MARKINGS, MEDIAN ISLAND NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

February 2021
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MARKING ENGINEER

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SDD 15C18 - 05b

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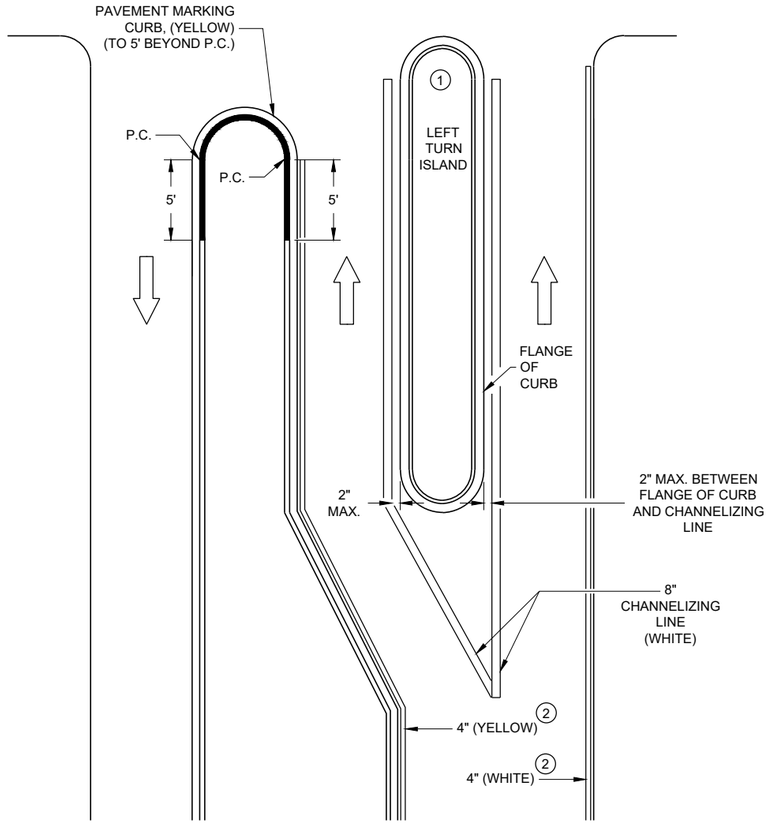
SDD 15C18 - 05b

REQUIREMENTS FOR EDGE LINES		
POSTED SPEED	IS THERE CONTINUOUS LIGHTING?	
	YES	NO
≤ 30 MPH	NO	OPTIONAL
35 OR 40 MPH	OPTIONAL	RECOMMENDED
≥ 45 MPH	RECOMMENDED	REQUIRED



LEFT TURN & MEDIAN ISLAND

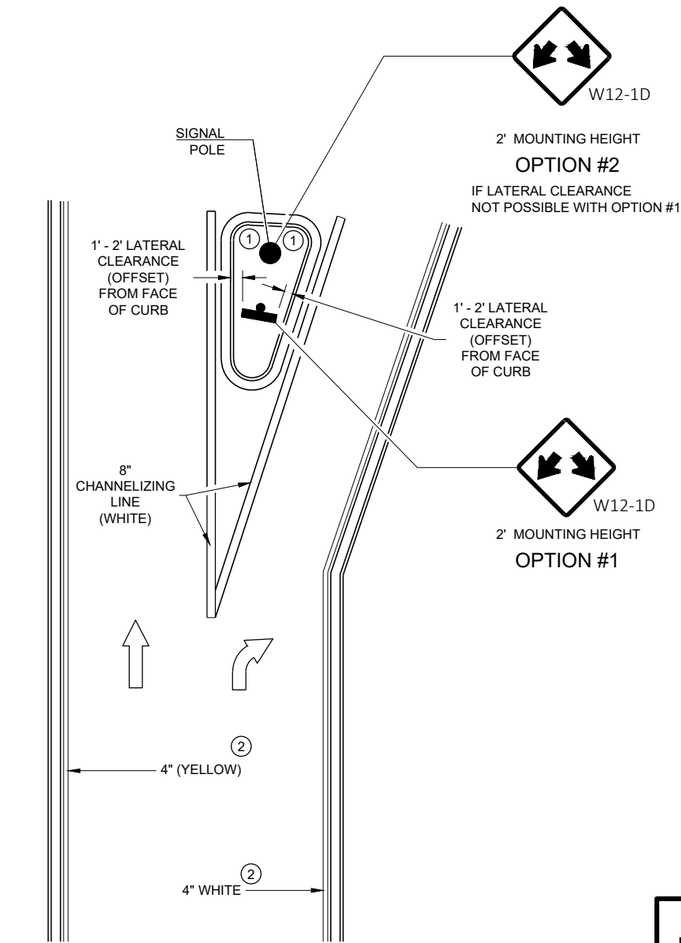
GENERAL NOTES

APPLIES TO ISLANDS AT LEFT TURNS AT ONE WAY ROADWAYS AS WELL.

SEE MISCELLANEOUS QUANTITIES FOR SIGN SIZE.

1. MARK CURB NOSES YELLOW.
2. MARK ACCORDING TO TABLE.

DIRECTION OF TRAVEL



RIGHT TURN ISLAND

MEDIAN PAVEMENT MARKINGS, DOUBLE ARROW WARNING SIGN PLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MARKING ENGINEER

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SDD 15C18 - 05c

SDD 15C19-a Moving Pavement Marking Operation, Two-Lane Two-Way Roadway

LEGEND

- V1 LEAD VEHICLE
- V2 MARKING VEHICLE
- V3 SHADOW VEHICLE
- TRUCK MOUNTED ATTENUATOR (TMA)
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- FLASHING ARROW PANEL (CAUTION)

GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL OPERATING IN CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE SPECIFIED.

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL AND HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

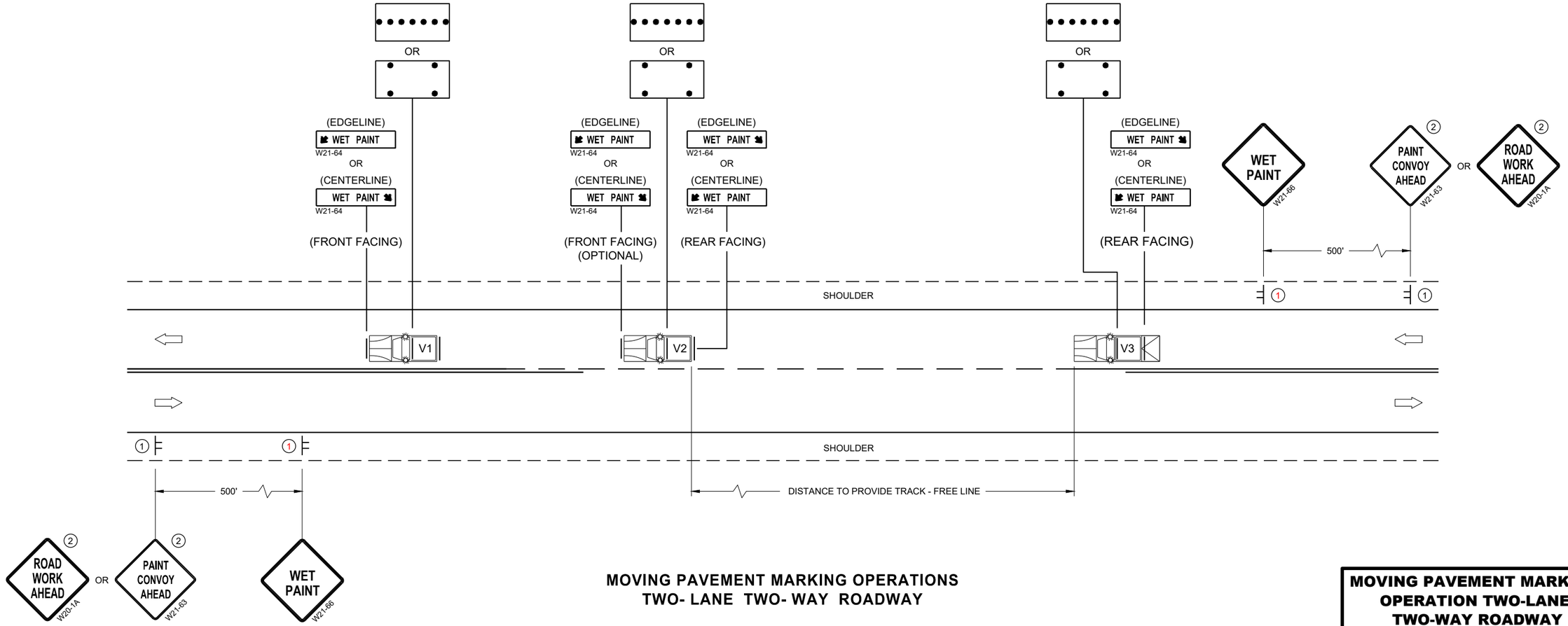
WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

CONES SHALL BE A MINIMUM OF 18" FOR WET PAVEMENT MARKING .

(1) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

(2) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.



MOVING PAVEMENT MARKING OPERATIONS
TWO- LANE TWO- WAY ROADWAY

MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15C19 - 06a

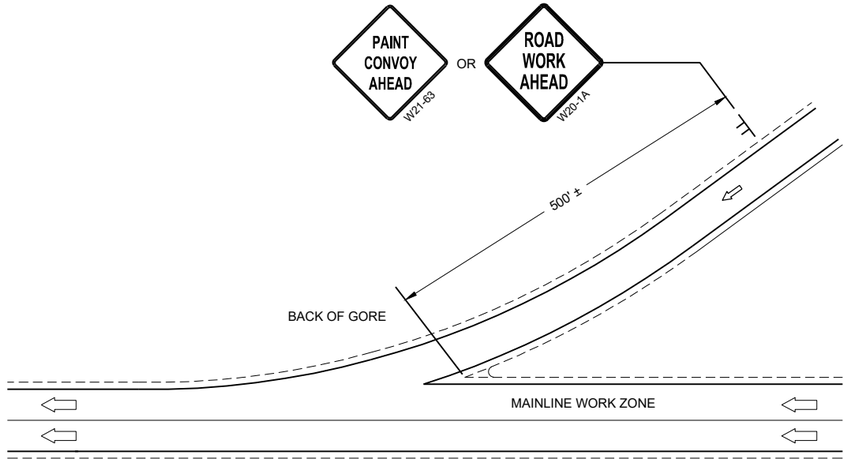
6

SDD 15C19 - 06a

SDD 15C19-c Moving Pavement Marking Operation, Multi-Lane Divided Roadway

LEGEND

- V1 MARKING VEHICLE
- V2 SHADOW VEHICLE
- V3 TRAIL VEHICLE
- TRUCK MOUNTED ATTENUATOR (TMA)
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- FLASHING ARROW PANEL (MERGE)
- FLASHING ARROW PANEL (CAUTION)



GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE SPECIFIED.

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL AND HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

WHEN WORK ACTIVITY BLOCKS THE LEFT LANE, REVERSE TRAFFIC CONTROL.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, PROVIDE ADDITIONAL TRAFFIC CONTROLS AS SPECIFIED IN THE CONTRACT OR AS APPROVED BY THE ENGINEER.

USE AN ATTENUATOR ON THE REARMOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.

IF THE SHOULDER IS TOO NARROW TO ACCOMMODATE THE LAST TRAILING VEHICLE, THE VEHICLE SHOULD STRADDLE THE EDGE LINE.

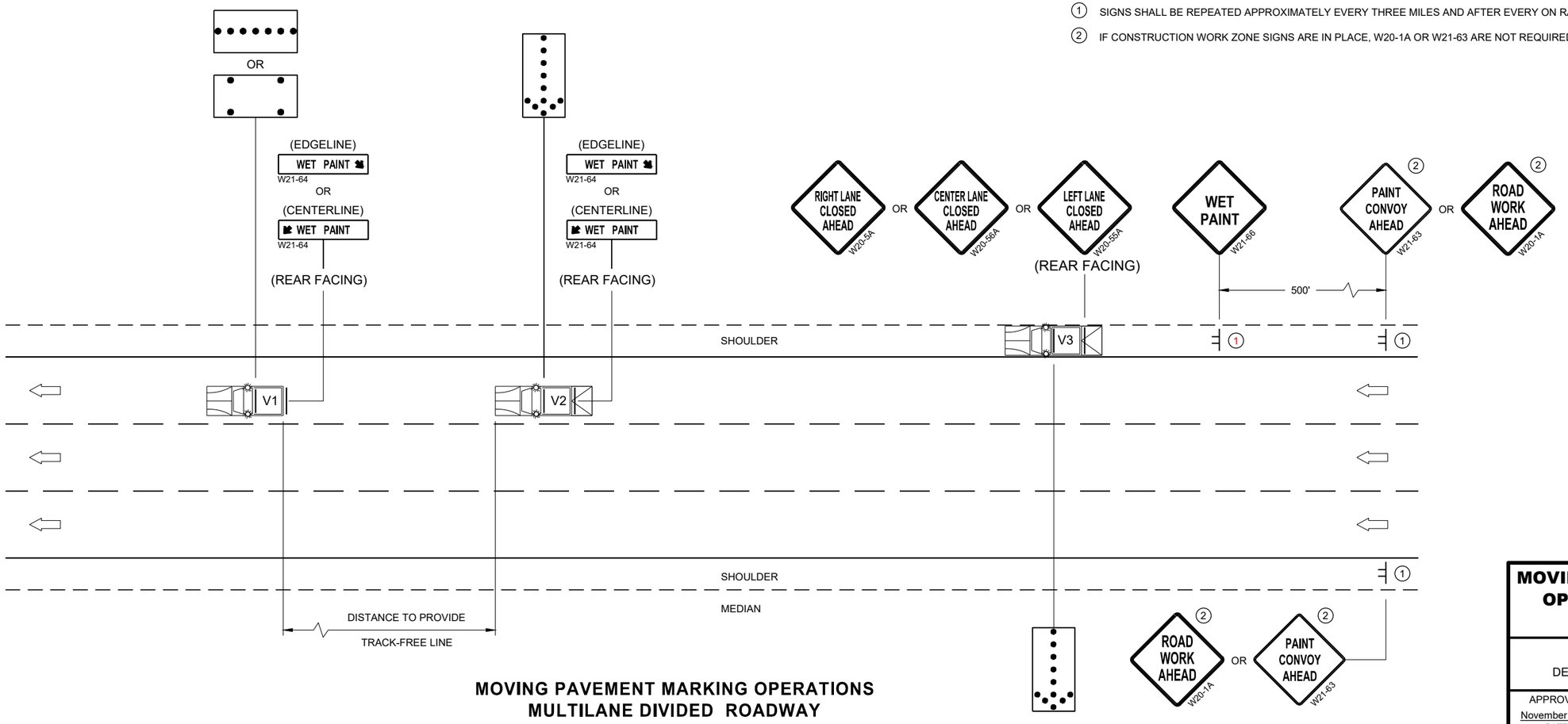
WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC

CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

CONES SHALL BE A MINIMUM HEIGHT OF 28" FOR WET PAVEMENT MARKINGS

① SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES AND AFTER EVERY ON RAMP.

② IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.



MOVING PAVEMENT MARKING OPERATIONS
MULTILANE DIVIDED ROADWAY

MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15C19 - 06c

6

SDD 15C19 - 06c

SDD 15C21 Signing and Marking for Two Lane to Four Lane Divided Transitions

GENERAL NOTES

SIGNING AND MARKING IS SHOWN AS TYPICAL PLACEMENT. FIELD CONDITIONS MAY DICTATE CHANGES IN SIGNING AND MARKING PLACEMENT.

(1) USED ONLY WHEN APPROVED BY REGION TRAFFIC ENGINEER.

* SIGNS MAY BE OMITTED IF SPACE DOES NOT PERMIT PLACEMENT.

** IF POSTED SPEED IS 45 MPH OR GREATER, PLACE W5-54 SIGN UNDER R4-7 SIGN. MOUNT W5-54 SIGN AT 4' MOUNTING HEIGHT (TOP OF ROADWAY TO BOTTOM OF SIGN).

LEGEND

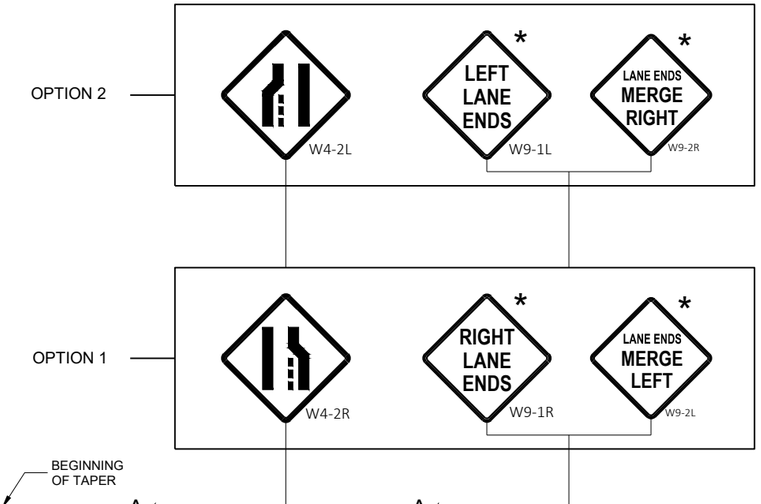
A DISTANCE DEPENDENT ON SPEED (SEE TABLE)

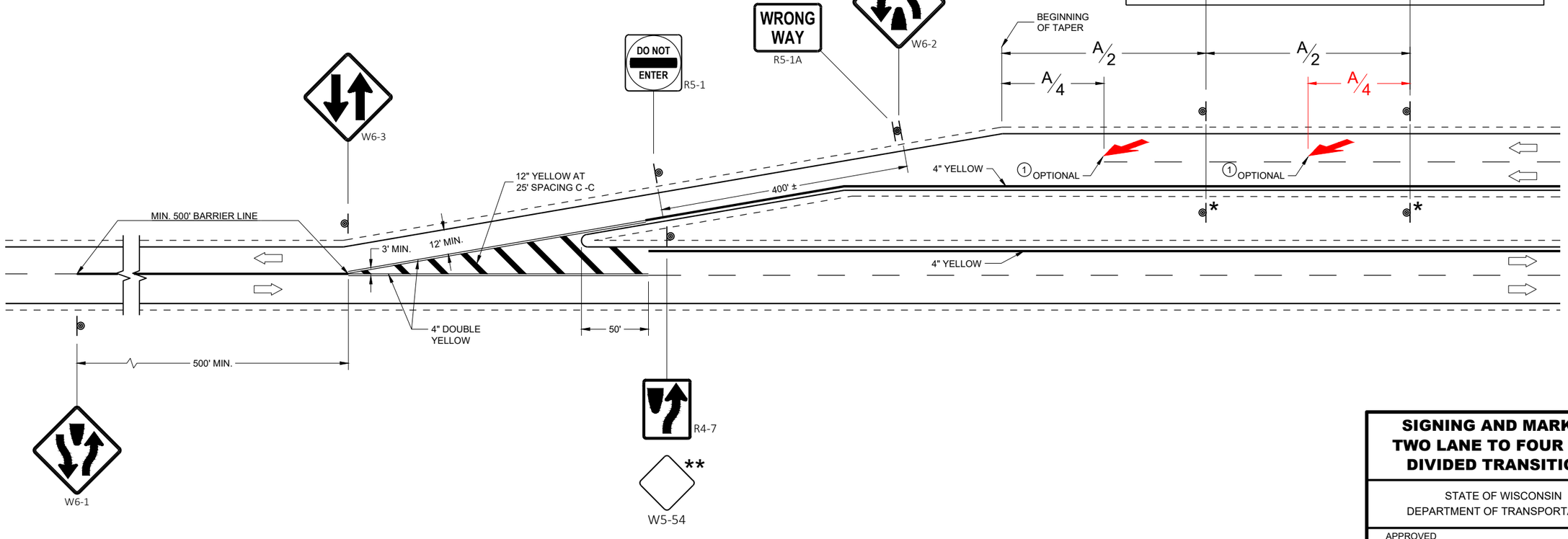
SIGN MOUNTED ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

DISTANCE TABLE

POSTED OR 85TH PERCENTILE SPEED	DISTANCE "A"
25	325'
30	460'
35	565'
40	670'
45	775'
50	885'
55	990'
65	1200'
70	1250'





SIGNING AND MARKING TWO LANE TO FOUR LANE DIVIDED TRANSITIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER
FHWA

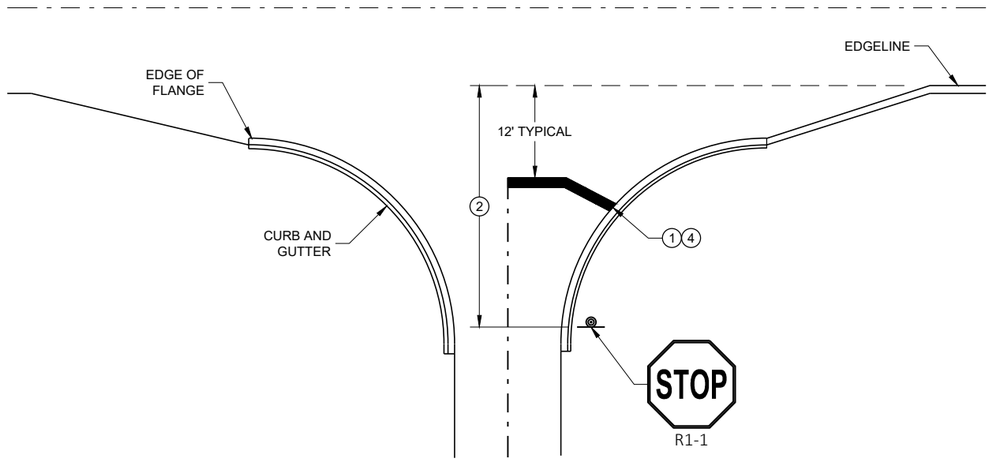
SDD 15C21 - 10

SDD 15C21 - 10

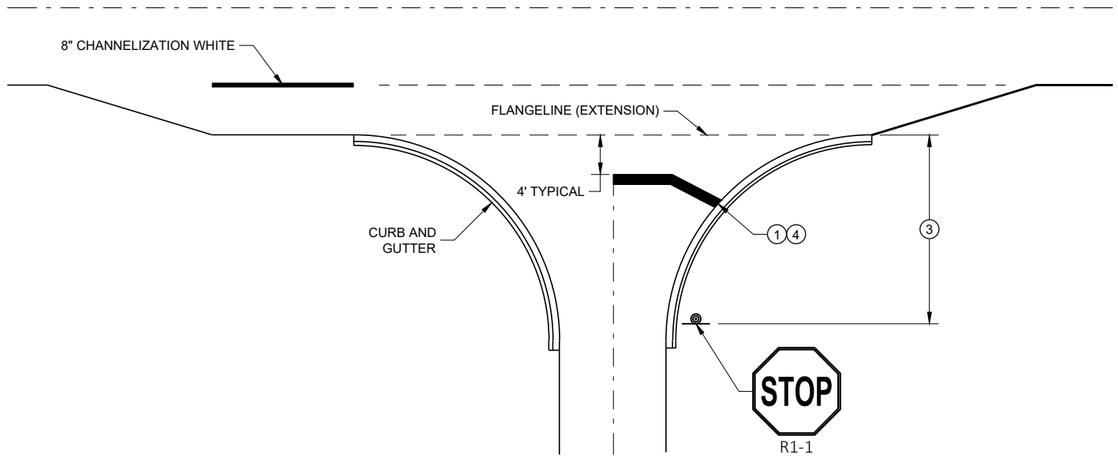
GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

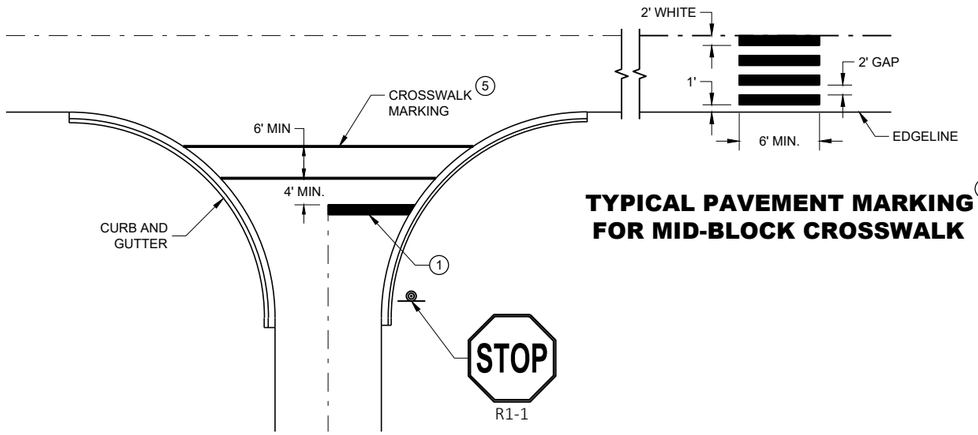
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGE LINE EXTENSION.
4. MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
5. LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES INSTEAD.



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

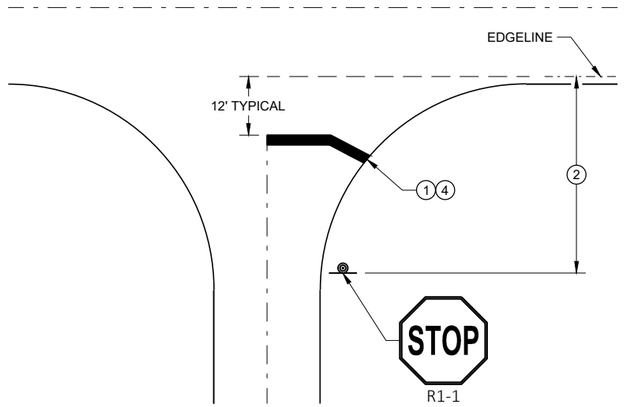


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDE ROADS WITH RIGHT TURN LANE



TYPICAL PAVEMENT MARKING 5 FOR MID-BLOCK CROSSWALK

TYPICAL STOP LINE PAVEMENT MARKING FOR SIDE ROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER

FHWA

6

SDD 15C33 - 04

6

SDD 15C33 - 04

SDD 15D12-a Traffic Control, Lane Closure

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

ALL SIGNS ARE 48" x 48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED OR AS APPROVED BY THE ENGINEER.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

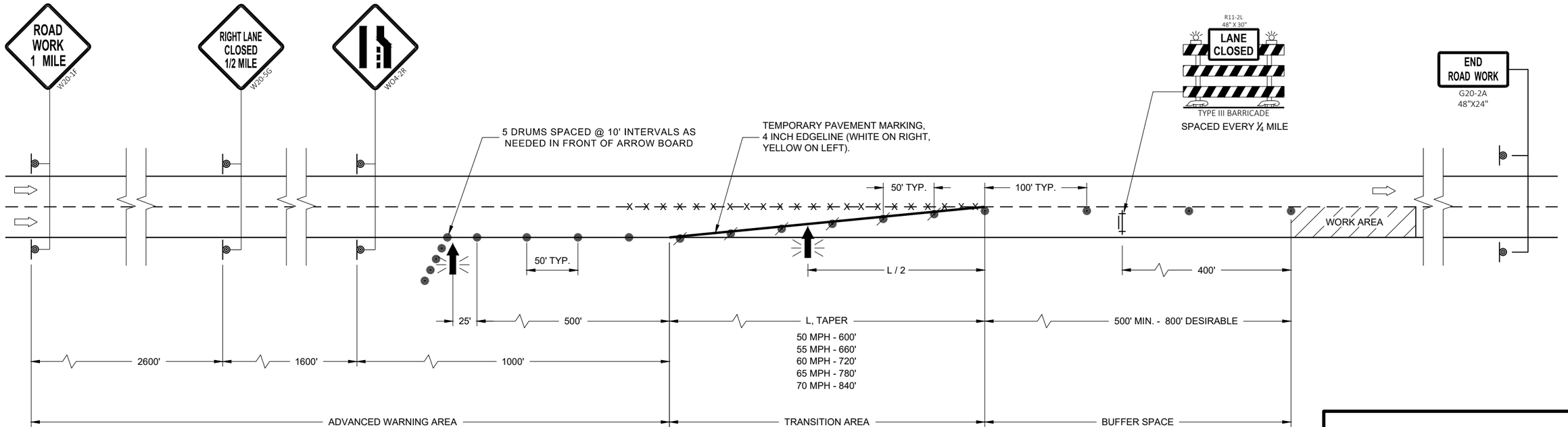
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ONE HALF THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- FLASHING ARROW BOARD



TRAFFIC CONTROL LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D12 - 09a

6

SDD 15D12 - 09a

SDD 15D20-a Traffic Control, Single Lane Closure, Divided Non-Freeway/Expressway

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

FOR WORK ON ROADWAYS WITH SPEEDS GREATER THAN 45MPH, USE SDD 15D12.

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"X 36" SIGNS MAY BE USED IF APPROVED BY REGIONAL TRAFFIC UNIT.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON TEMPORARY SUPPORTS.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

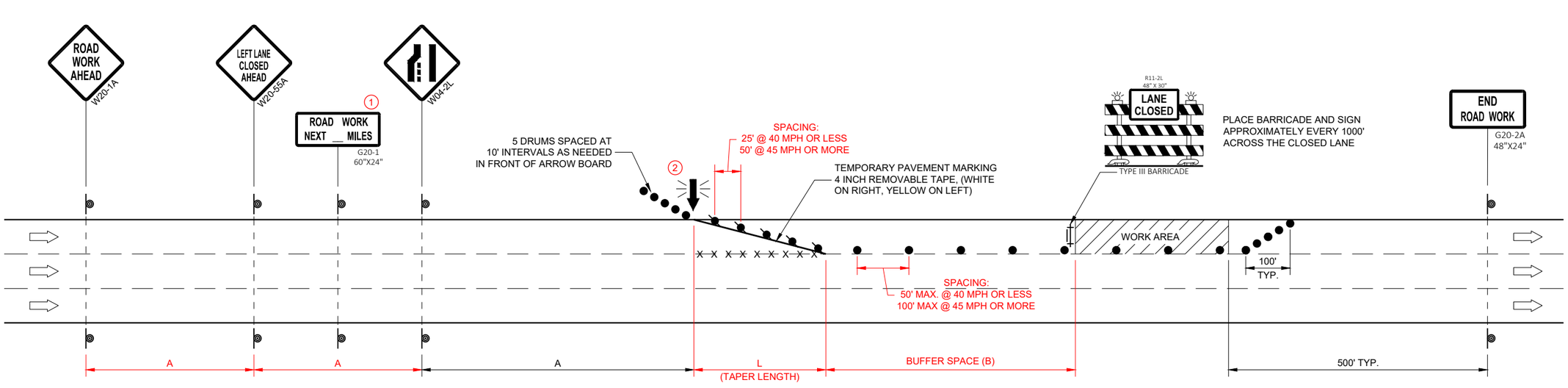
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

(1) OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

(2) WHERE THE SHOULDER OR TERRACE HAS INSUFFICIENT SPACE TO PLACE THE ARROW BOARD AS SHOWN, PLACE THE ARROW BOARD AT THE END OF THE TAPER.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
40	350'	320'	170'
45	500'	540'	220'

TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020
DATE

/S/ Andrew Heidtke
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER

FHWA

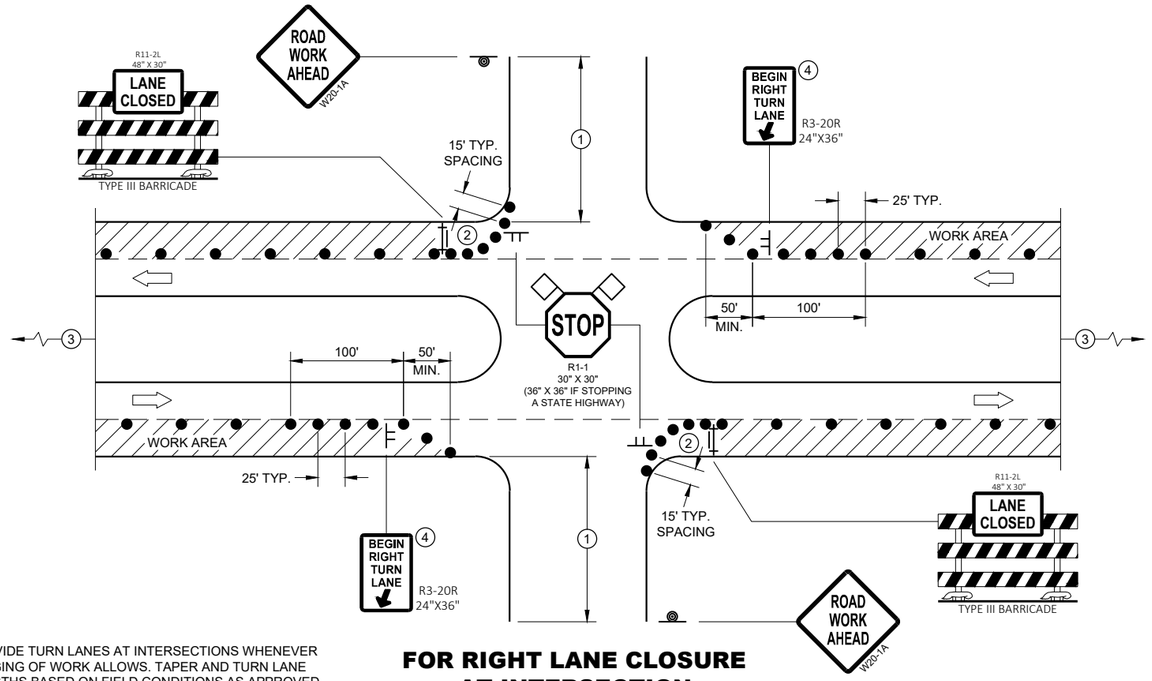
6

6

SDD 15D20 - 05a

SDD15D20 - 05a

SDD 15D21-a Traffic Control, Intersection Within Single Right Lane Closure



FOR RIGHT LANE CLOSURE AT INTERSECTION

PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL REMAIN IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON PORTABLE SUPPORTS.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

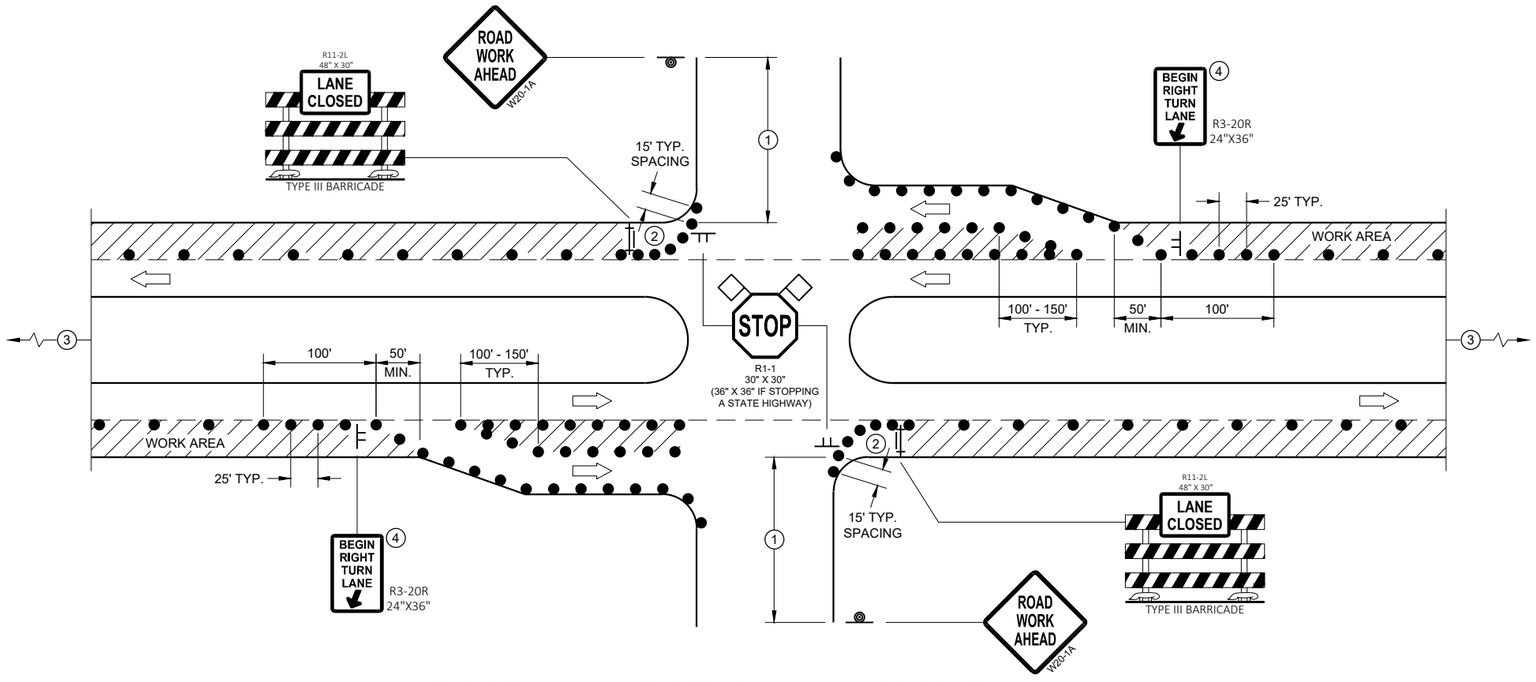
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

(1) 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35 - 40 MPH.
200' IF 25 - 30 MPH.

(2) ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS

(3) SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

(4) MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.



FOR RIGHT LANE CLOSURE AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE RIGHT LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

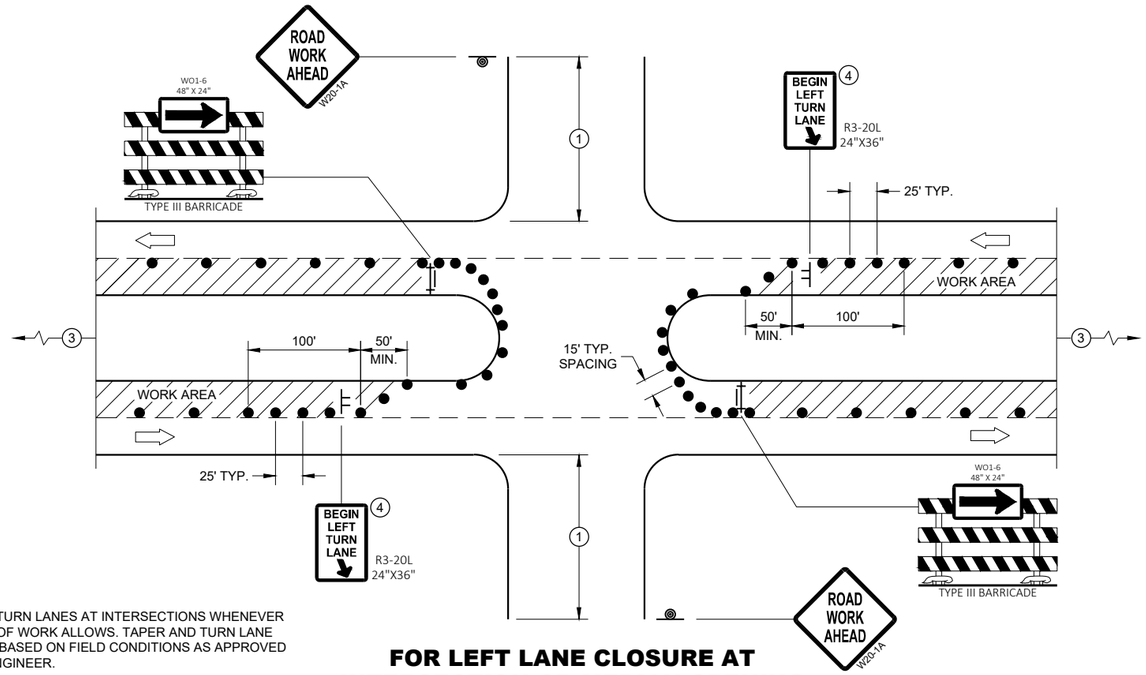
6

SDD 15D21 - 07a

6

SDD 15D21 - 07a

SDD 15D21-b Traffic Control, Intersection Within Single Left Lane Closure



PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL REMAIN IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON PORTABLE SUPPORTS.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

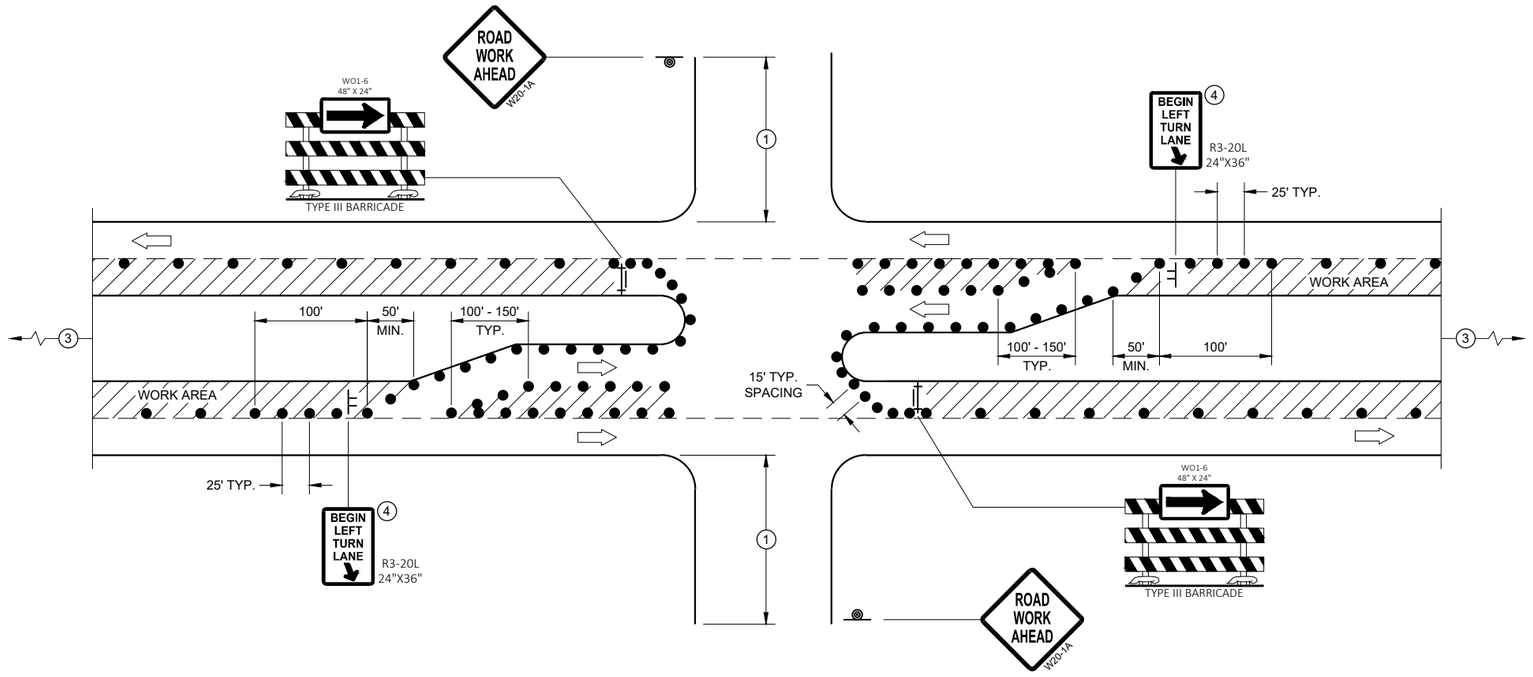
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

(1) 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35 - 40 MPH.
200' IF 25 - 30 MPH.

(2) ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS

(3) SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

(4) MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.



FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING (WITH LEFT TURN BAY OPEN)

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LEFT LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

6

SDD 15D21 - 07b

6

SDD 15D21 - 07b

SDD 15D27 Traffic Control, Shoulder Closure on Divided Roadway, Speeds Greater Than 40 MPH

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- DIRECTION OF TRAFFIC
- FLASHING ARROW BOARD
- WORK AREA

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT SHOULDER. FOR CLOSING THE LEFT SHOULDER, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR DIVIDED ROADWAYS WITH ANY NUMBER OF TRAVEL LANES.

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

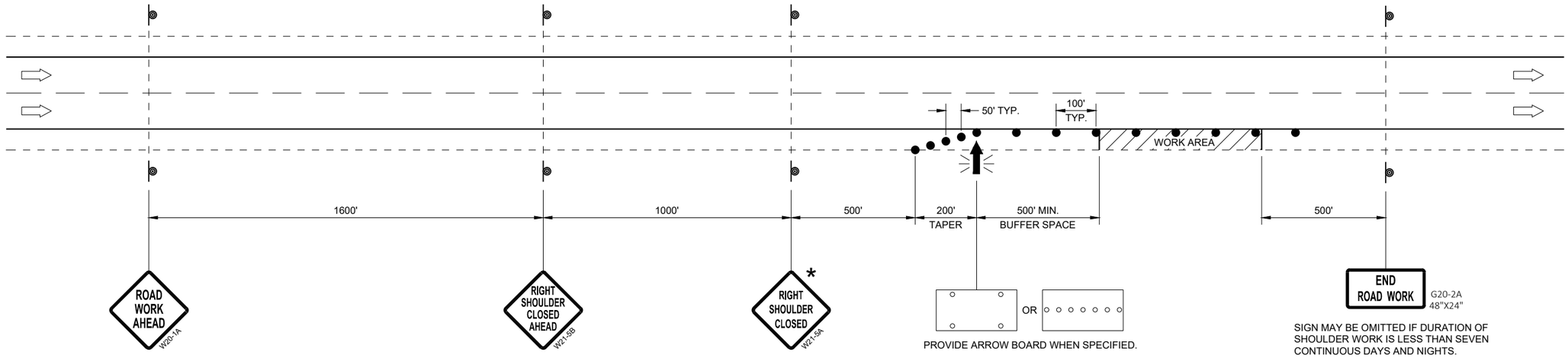
WHEN A RAMP OR SIDE ROAD INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

* FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOURM THE W21-5A SIGN MAY BE OMITTED.



TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2016
DATE

/S/ Andrew Heidtke
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER

FHWA

6
SDD 15D27 - 03

SDD 15D28 Traffic Control, Work on Shoulder or Parking Lane, Undivided Roadway

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- DIRECTION OF TRAFFIC
- WORK ZONE

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY THE REGIONAL TRAFFIC UNIT.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

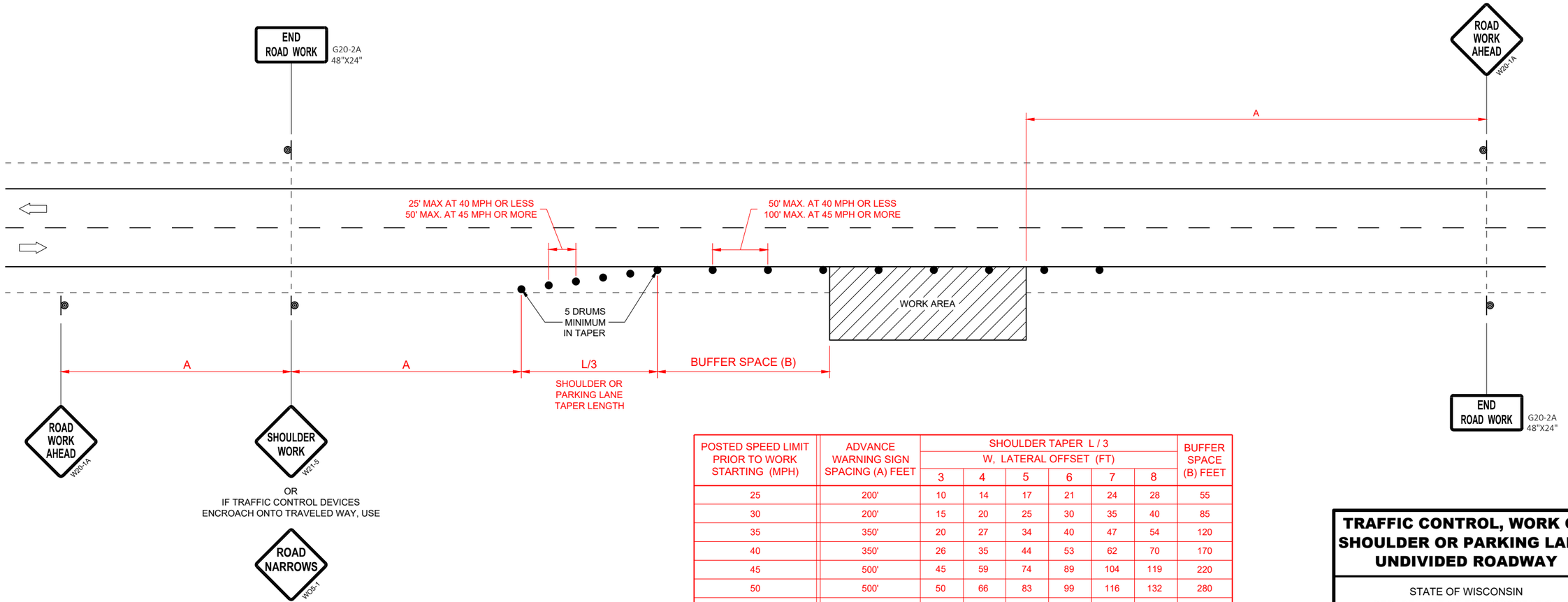
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

W20-1A AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHOULDER TAPER L / 3 W, LATERAL OFFSET (FT)						BUFFER SPACE (B) FEET
		3	4	5	6	7	8	
25	200'	10	14	17	21	24	28	55
30	200'	15	20	25	30	35	40	85
35	350'	20	27	34	40	47	54	120
40	350'	26	35	44	53	62	70	170
45	500'	45	59	74	89	104	119	220
50	500'	50	66	83	99	116	132	280
55	500'	54	73	91	109	127	145	335'

TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020
DATE

/S/ Andrew Heidtke
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER

FHWA

SDD 15D29 Traffic Control, Vehicle Entrance/Exit or Haul Road

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET
0-30	200'
35-40	350'
45-55	500'

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

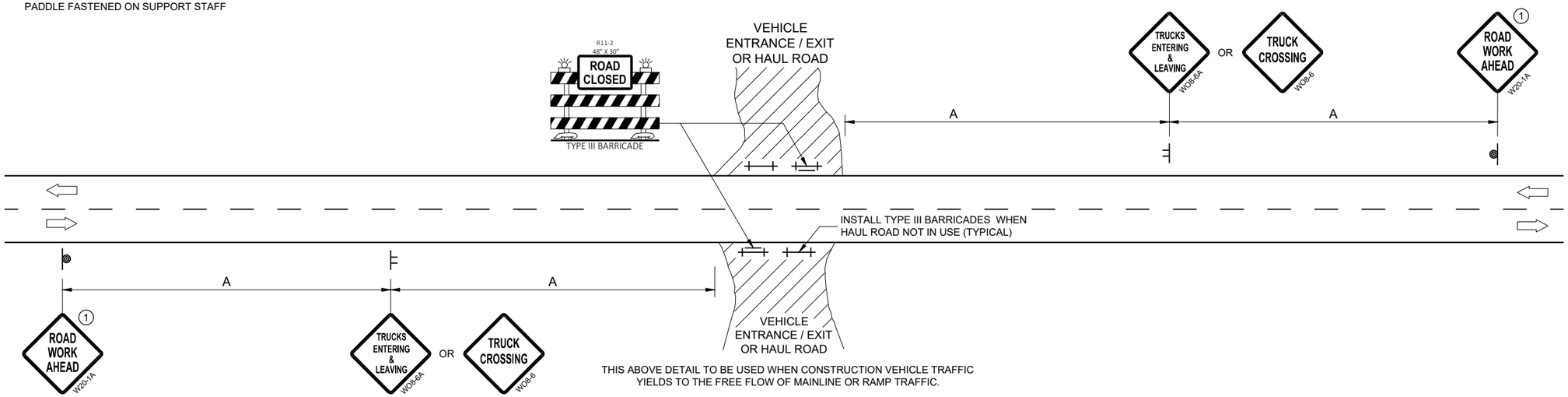
WARNING SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

WHEN ACTIVITY REFLECTED BY THE SIGN IS NOT CURRENTLY TAKING PLACE, THE HIGHWAY SHALL BE RESTORED TO NORMAL CONDITION AND THE SIGNS SHALL BE REMOVED, COVERED OR TURNED AWAY FROM TRAFFIC.

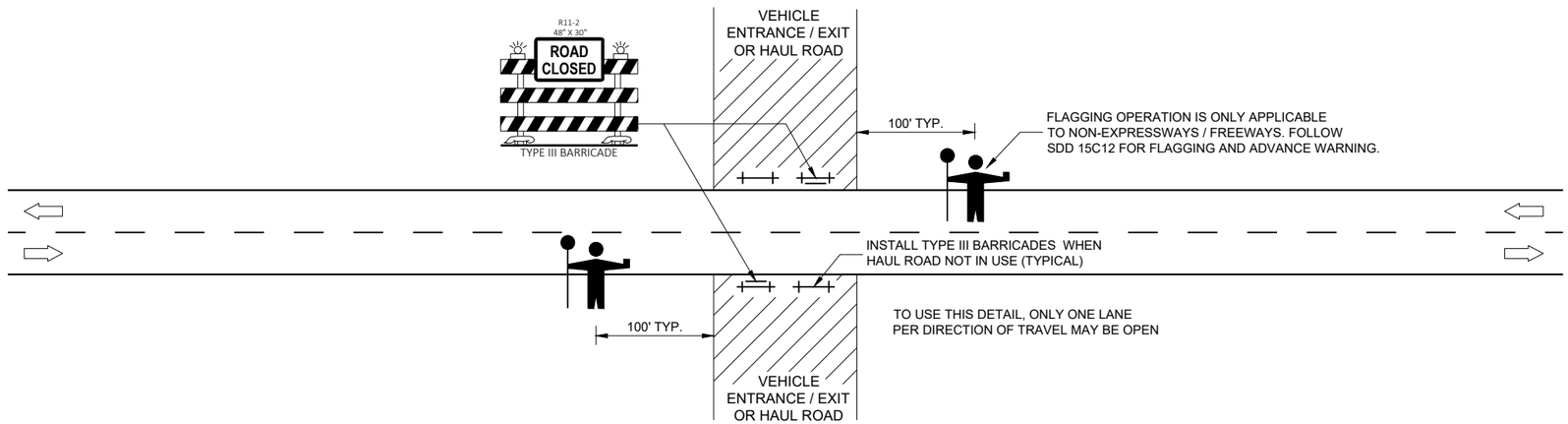
WHEN A SIDE ROAD OR RAMP INTERSECTS WITHIN THE ADVANCE SIGNING AREA, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND / OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

PLACE SIGNS ON BOTH SIDES IF USED ON DIVIDED HIGHWAY.

(1) THESE SIGNS ARE TO BE USED ONLY WHEN VEHICLE ENTRANCE / EXIT CONDITIONS ARE SEPARATED BY MORE THAN TWO MILES FROM PREVIOUS WORK AREA OR SIGNING OR AS DIRECTED BY THE ENGINEER.



THIS ABOVE DETAIL TO BE USED WHEN CONSTRUCTION VEHICLE TRAFFIC YIELDS TO THE FREE FLOW OF MAINLINE OR RAMP TRAFFIC.



TO USE THIS DETAIL, ONLY ONE LANE PER DIRECTION OF TRAVEL MAY BE OPEN

THIS DETAIL TO BE USED WHEN CONSTRUCTION WORK INCLUDING TRUCKING ACTIVITY REQUIRES MAINLINE TRAFFIC TO BE TEMPORARILY STOPPED IN ONE OR BOTH DIRECTIONS. DELAY TO HIGHWAY TRAFFIC SHALL BE MINIMIZED.

TRAFFIC CONTROL, VEHICLE ENTRANCE/EXIT OR HAUL ROAD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

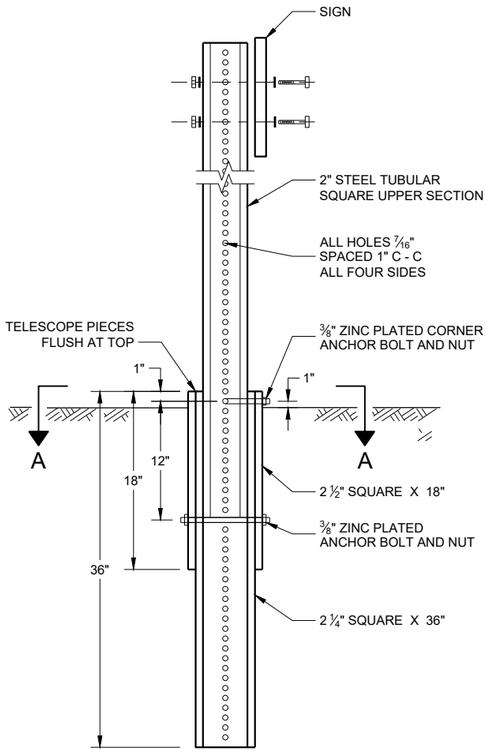
6

SDD 15D29 - 06

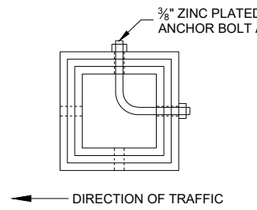
6

SDD 15D29 - 06

SDD 15D38-a Temporary Traffic Control Sign Mounting



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A - A

TUBULAR STEEL POSTS

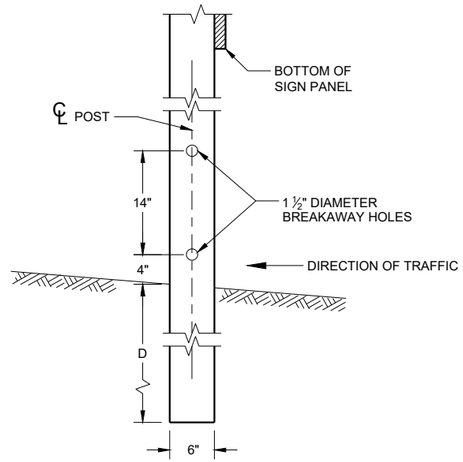
AREA OF SIGN INSTALLATION (SQ FT.)	NUMBER OF REQUIRED TUBULAR STEEL POSTS
9 OR LESS	1
GREATER THAN 9, LESS THAN OR EQUAL TO 18	2
GREATER THAN 18, LESS THAN OR EQUAL TO 27	3

SIGNS WIDER THAN 3 FEET OR LARGER THAN 9 SQ. FT. SHALL BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE).

SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.

GENERAL NOTES

1. 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.
2. THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR WHERE PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.
3. FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.



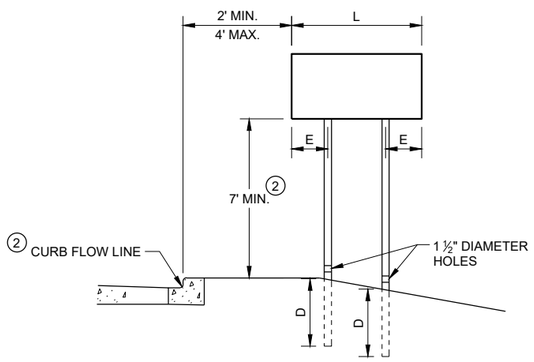
4" X 6" WOOD POST MODIFICATION

4" X 6" WOOD POST (3)

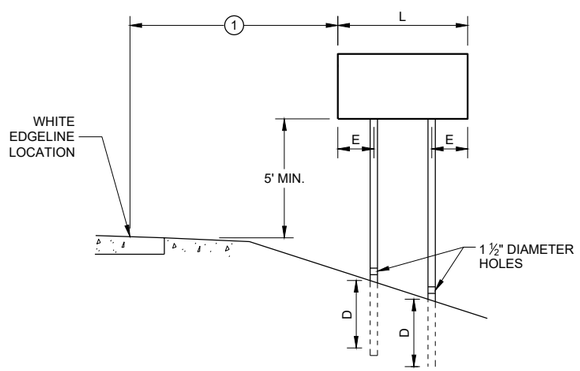
POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAT 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

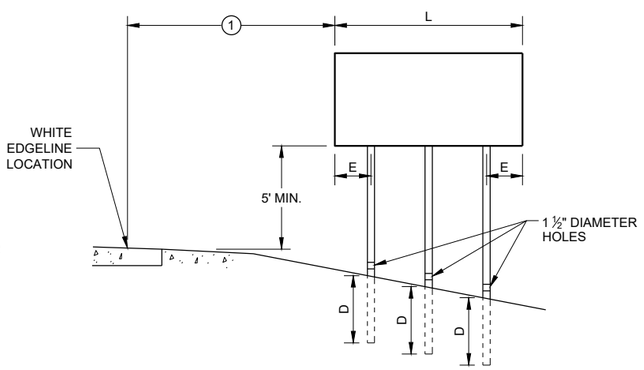
WOOD POST EMBEDMENT DEPTH

AREA OF SIGN INSTALLATION (SQ FT.)	D (MIN.)
20 OR LESS	4'
GREATER THAN 20	5'



URBAN AREA





RURAL AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

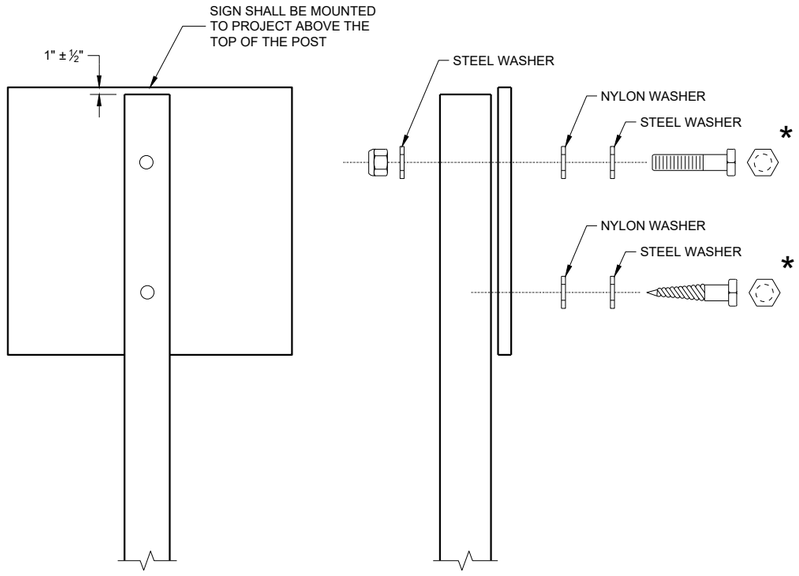
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D38 - 02a

6

SDD 15D38 - 02a



NUTS, BOLTS AND LAGS USED FOR MOUNTING SIGNS SHALL HAVE HEXAGONAL HEADS AND SHALL BE EITHER:

A. HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: A 153, CLASS D, OR SC 3
B. ELECTRO-GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: B 633, TYPE III, SC 3

THREADS ON BOLTS AND NUTS SHALL BE MANUFACTURED WITH SUFFICIENT ALLOWANCE FOR THE CADMIUM PLATE OR GALVANIZED COATING TO PERMIT THE NUTS TO RUN FREELY ON THE BOLTS.

WOOD POST (4" x 6")
LAG SCREWS - ⅜" x 3"
MACHINE BOLTS - 5/16" x 6 ½" OR 7" LENGTH W/NUTS

SQUARE STEEL POST (2" x 2")
MACHINE BOLTS - ⅜" x 3 ¼" LENGTH W/NUTS
RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL O.D. FLANGE 0.720 - 0.765 INCH, GRIP RANGE 0.042 - 0.375 INCH

WASHERS (ALL POSTS) -
1 ¼" O.D. x ⅜" I.D. x 1/16" STEEL
1 ¼" O.D. x ⅜" I.D. x 0.080 NYLON

* TWO DIFFERENT FASTENING SYSTEMS ARE SHOWN FOR ILLUSTRATION PURPOSES. ON ANY INDIVIDUAL SIGN, EITHER ONE OR THE OTHER SYSTEM SHALL BE USED. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

6

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SDD 15D38 - 02b

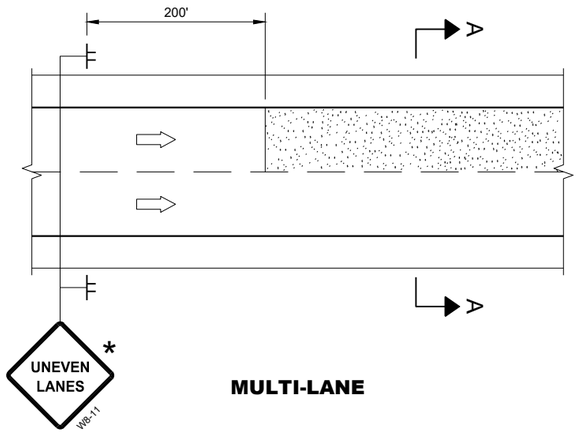
SDD 15D38 - 02b

ATTACHMENT OF SIGNS TO POSTS

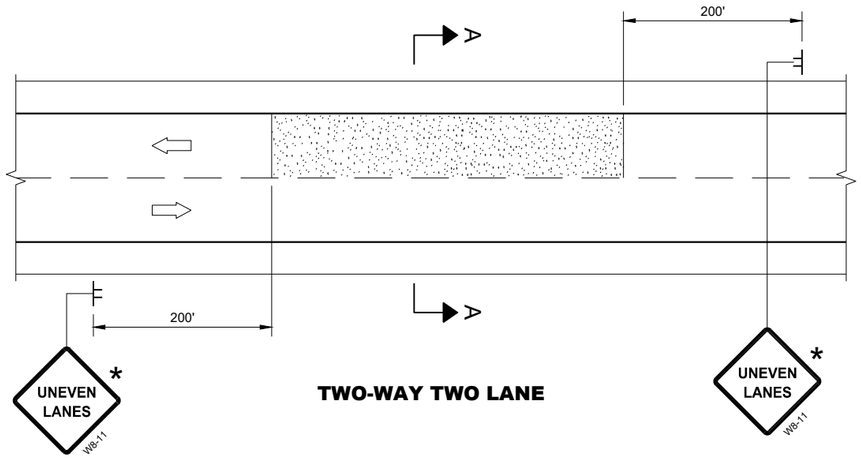
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER
FHWA

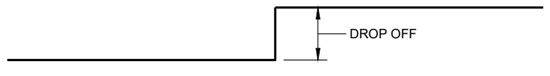
SDD 15D39 Traffic Control, Drop-off Signing



MULTI-LANE

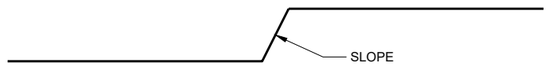


TWO-WAY TWO LANE

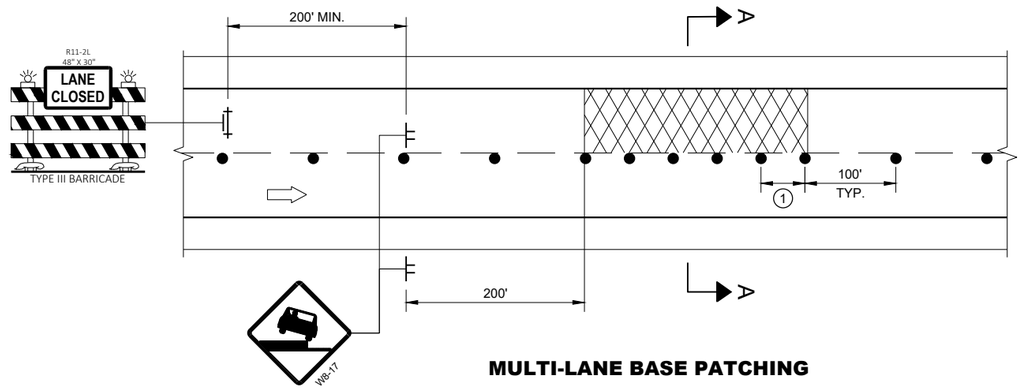


SECTION A - A

OR



SECTION A - A



MULTI-LANE BASE PATCHING

ADJACENT LANE DROP-OFFS

GENERAL NOTES

FOR SPOT LOCATIONS USE ENGINEERING JUDGEMENT WHEN PLACING ADDITIONAL SIGNS.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

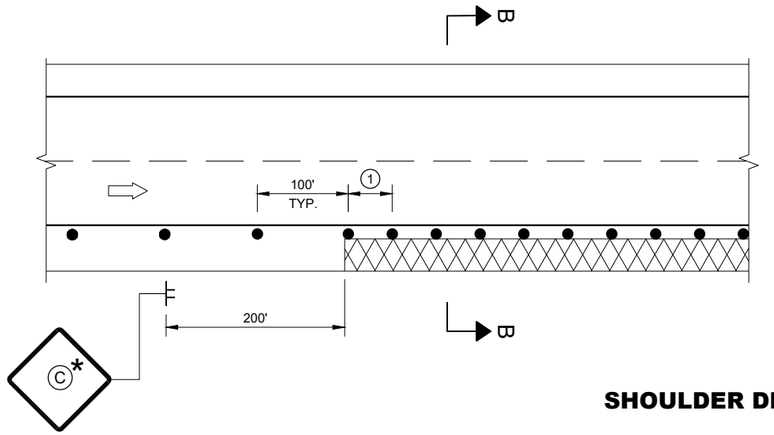
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

* IF THE DROP-OFF IS CONTINUOUS ALONG THE PROJECT, PLACE ADDITIONAL SIGNS EVERY 1 MILE AND AFTER EVERY ENTRANCE RAMP.

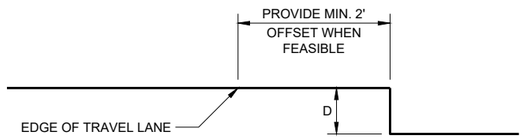
(1) USE CLOSER SPACING WHEN DELINEATING DROP-OFF.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA WITH DROP-OFF
- MILLED SURFACE



SHOULDER DROP-OFFS



SECTION B - B

D	SIGN (C)
< 2" WITH A SLOPE STEEPER THAN 3:1	LOW SHOULDER WO8-9
2" < 6" WITH A SLOPE STEEPER THAN 3:1	SHOULDER DROP - OFF W8-9A PROVIDE A 3:1 OR FLATTER SLOPE OF MATERIAL ADJACENT TO THE PAVEMENT

TRAFFIC CONTROL, DROP-OFF SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

6

SDD 15D39 - 02

6

SDD 15D39 - 02

SDD 15D40-a Traffic Control, Full Lane Shift Non-Freeway/Expressway or Multilane Divided 45 MPH and Under

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIREABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR LANE SHIFT RIGHT - REVERSE FOR SHIFTING LEFT.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON ANY "COVERED" OR "DOWNED" SIGNS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

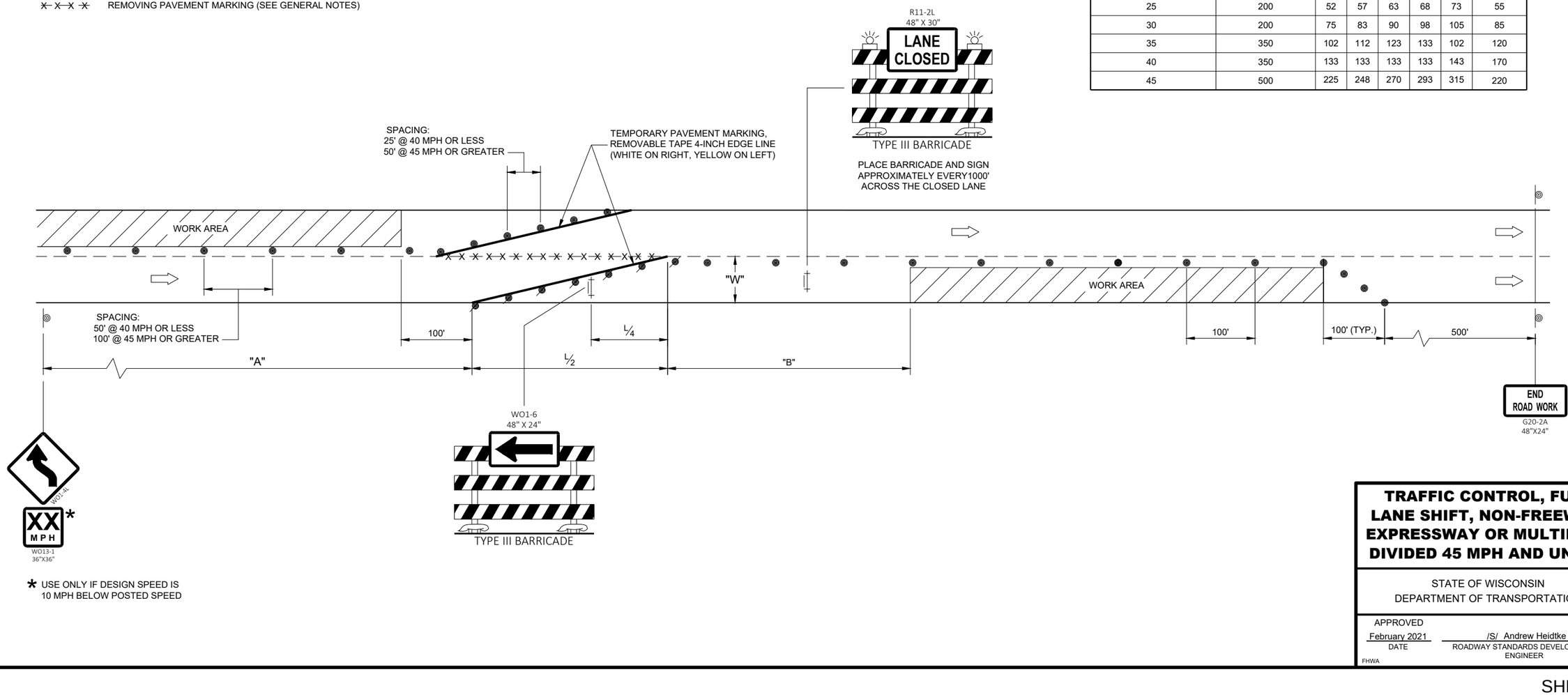
REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE SHIFT OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE SHIFT MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHIFTING TAPER L/2 W, LATERAL OFFSET (FT)					BUFFER SPACE (B) FEET
		10	11	12	13	14	
25	200	52	57	63	68	73	55
30	200	75	83	90	98	105	85
35	350	102	112	123	133	102	120
40	350	133	133	133	133	143	170
45	500	225	248	270	293	315	220



* USE ONLY IF DESIGN SPEED IS 10 MPH BELOW POSTED SPEED

TRAFFIC CONTROL, FULL LANE SHIFT, NON-FREEWAY/ EXPRESSWAY OR MULTILANE DIVIDED 45 MPH AND UNDER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021 — DATE
/S/ Andrew Heidtke — ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

6

SDD 15D40 - 02a

6

SDD 15D40 - 02a

SDD 15D40-b Traffic Control, Full Lane Shift Multilane Divided 50 MPH and Over

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIREABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR LANE SHIFT RIGHT - REVERSE FOR SHIFTING LEFT.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON ANY "COVERED" OR "DOWNED" SIGNS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

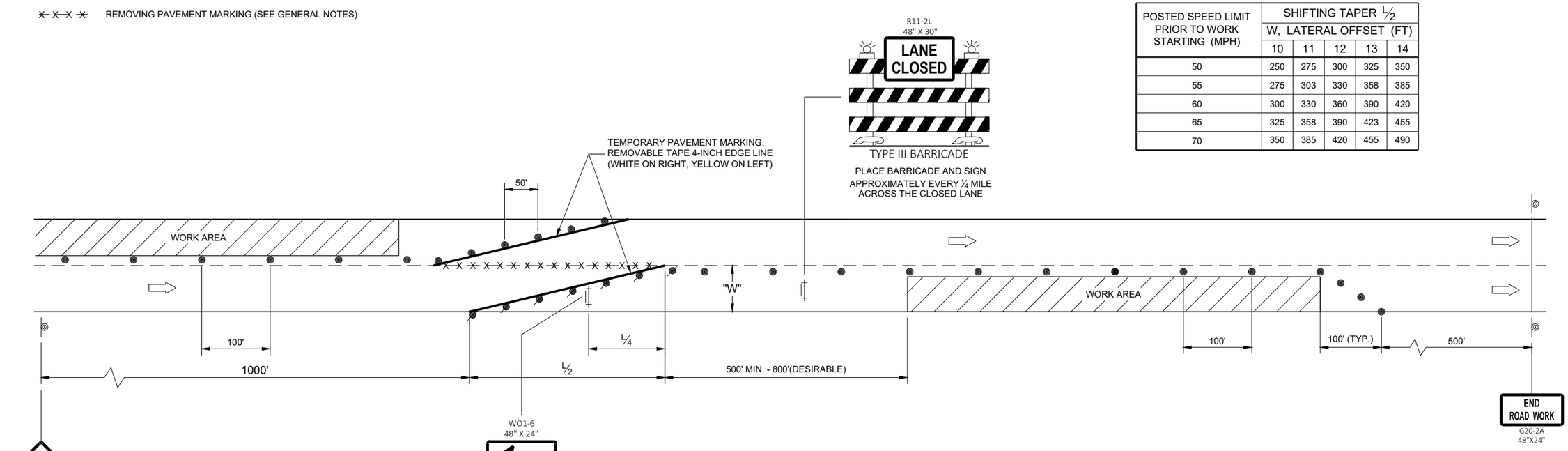
REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE SHIFT OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE SHIFT MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	SHIFTING TAPER L/2 W, LATERAL OFFSET (FT)				
	10	11	12	13	14
50	250	275	300	325	350
55	275	303	330	358	385
60	300	330	360	390	420
65	325	358	390	423	455
70	350	385	420	455	490



TRAFFIC CONTROL, FULL LANE SHIFT, MULTI-LANE DIVIDED 50 MPH AND OVER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

SDD 15D40 - 02b

SDD 15D40-c Traffic Control, Partial Lane Shift Non-Freeway/Expressway or Multilane Divided 45 MPH and Under

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA
- REMOVE PAVEMENT MARKING

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIRABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR LANE SHIFT LEFT - REVERSE FOR SHIFTING RIGHT.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON ANY "COVERED" OR "DOWNED" SIGNS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

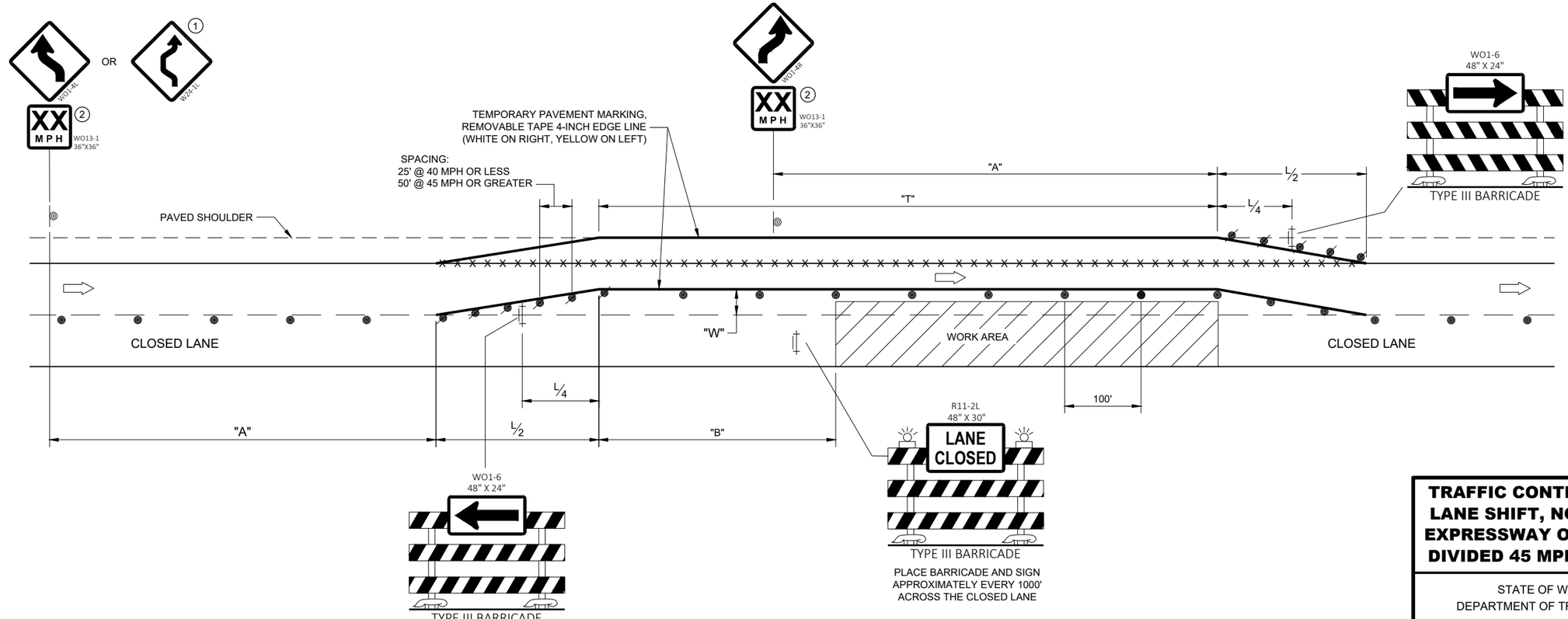
IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE SHIFT OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE SHIFT MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

(1) USE ONLY WHEN T<600', OMIT WO1-4R.

(2) IF NEEDED, USE ONLY IF DESIGN SPEED IS 10 MPH BELOW POSTED SPEED.

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHIFTING TAPER L/2 W, LATERAL OFFSET (FT)									BUFFER SPACE (B) FEET
		1	2	3	4	5	6	7	8	9	
25	200	5	10	16	21	26	31	36	42	47	55
30	200	8	15	23	30	38	45	53	60	68	85
35	350	10	20	31	41	51	61	71	82	92	120
40	350	13	27	40	53	67	80	93	107	120	170
45	500	23	45	68	90	113	135	158	180	203	220



TRAFFIC CONTROL, PARTIAL LANE SHIFT, NON-FREEWAY/ EXPRESSWAY OR MULTILANE DIVIDED 45 MPH AND UNDER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021
DATE

/S/ Andrew Heidtke
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

6

SDD 15D40 - 02c

SDD 15D40-d Traffic Control, Partial Lane Shift Multilane Divided 50 MPH and Greater

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA
- REMOVE PAVEMENT MARKING

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIRABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR LANE SHIFT LEFT - REVERSE FOR SHIFTING RIGHT.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON ANY "COVERED" OR "DOWNED" SIGNS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

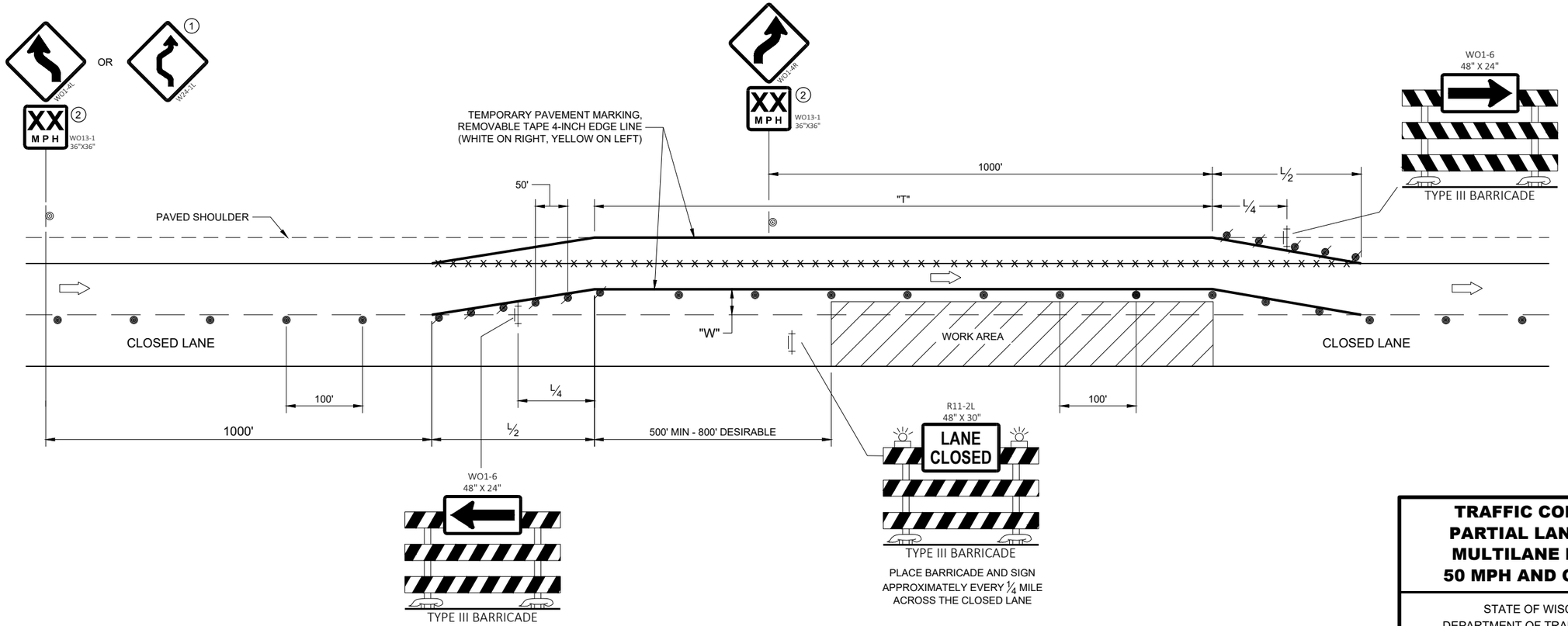
IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE SHIFT OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE SHIFT MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

(1) USE ONLY WHEN T<600', OMIT WO1-4R.

(2) IF NEEDED, USE ONLY IF DESIGN SPEED IS 10 MPH BELOW POSTED SPEED.

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	SHIFTING TAPER L/2 W, LATERAL OFFSET (FT)								
	1	2	3	4	5	6	7	8	9
50	25	50	75	100	125	150	175	200	225
55	28	55	83	110	138	165	193	220	248
60	30	60	90	120	150	180	210	240	270
65	33	65	98	130	163	195	228	260	293
70	35	70	105	140	175	210	245	280	315



TRAFFIC CONTROL, PARTIAL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021 — DATE
/S/ Andrew Heidtke — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6
SDD 15D40 - 02d

LEGEND

- EXISTING SIGN ON PERMANENT SUPPORT
- NEW SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK ZONE

GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

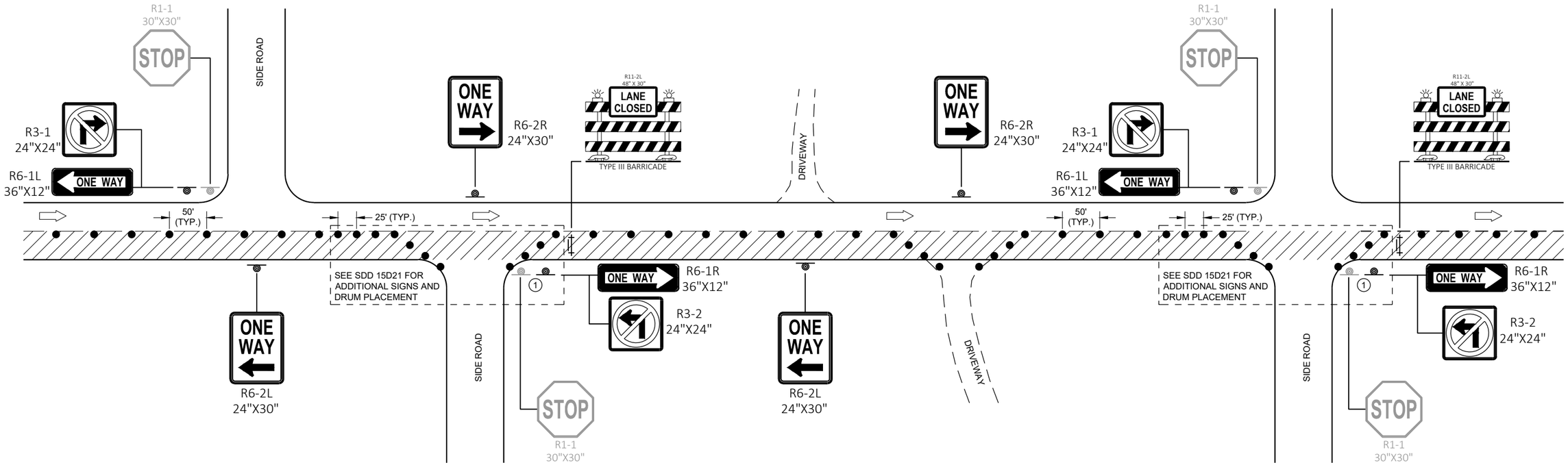
ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD). SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISDOT STANDARD SIGN PLATES.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

(1) IF WORK OPERATIONS ALLOWS, MOVE R1-1, R6-1R, AND R3-2 CLOSER TO INTERSECTION.



TRAFFIC CONTROL
ONE - WAY SIGNING

TRAFFIC CONTROL ONE-WAY SIGNING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2020 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	

SDD 15D50-a Traffic Control, Added Lane Closure without Lane Shift

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHIFTING TAPER L/2 W, LATERAL OFFSET (FT)					
		3	4	5	6	7	8
25	200	10	14	17	21	24	28
30	200	15	20	25	30	35	40
35	350	20	27	34	40	47	54
40	350	26	35	44	53	62	70
45	500	45	59	74	89	104	119
50	500	50	66	83	99	116	132
55	500	54	73	91	109	127	145

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"x36" SIGNS MAY BE USED IF APPROVED BY THE REGIONAL TRAFFIC UNIT.

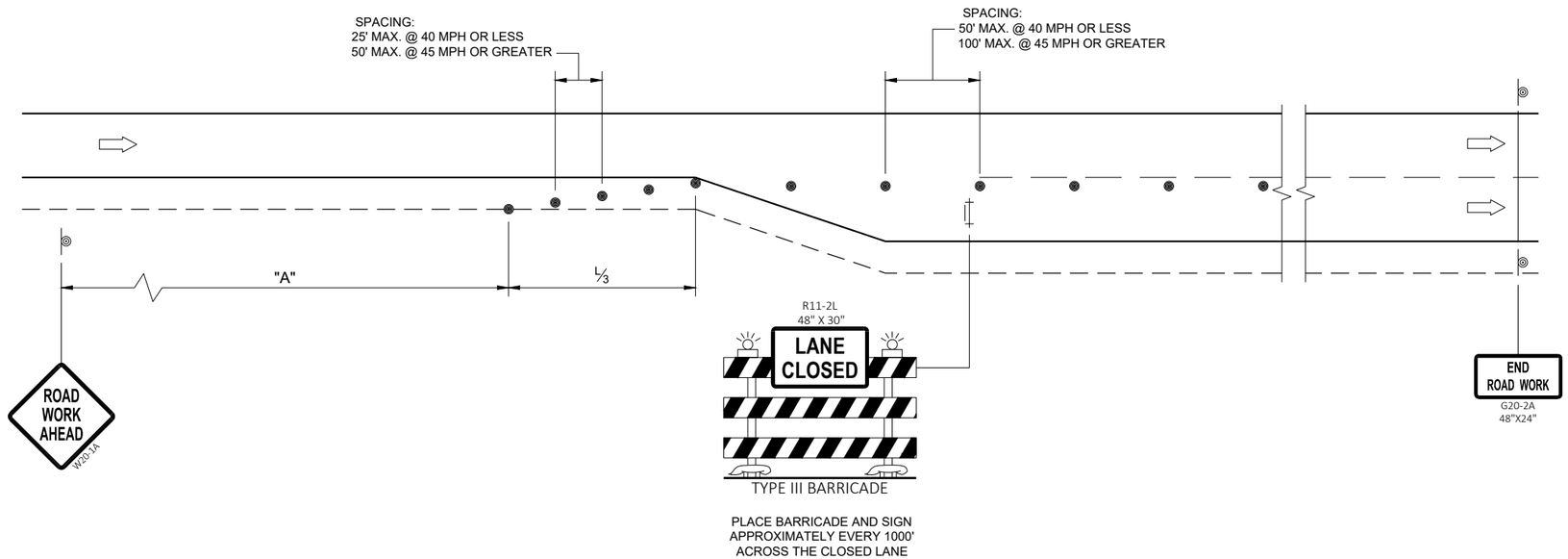
"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

W20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION WORK IS LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS.



PLACE BARRICADE AND SIGN APPROXIMATELY EVERY 1000' ACROSS THE CLOSED LANE

TRAFFIC CONTROL
ADDED LANE CLOSURE
WITHOUT LANE SHIFT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

SDD 15D50 - 02a

SDD 15D50-b Traffic Control, Added Lane Closure with Lane Shift

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHIFTING TAPER (L/2) FEET
25	200	60
30	200	90
35	350	120
40	350	160
45	500	270
50	500	300
55	500	330

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"x36" SIGNS MAY BE USED IF APPROVED BY THE REGIONAL TRAFFIC UNIT.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

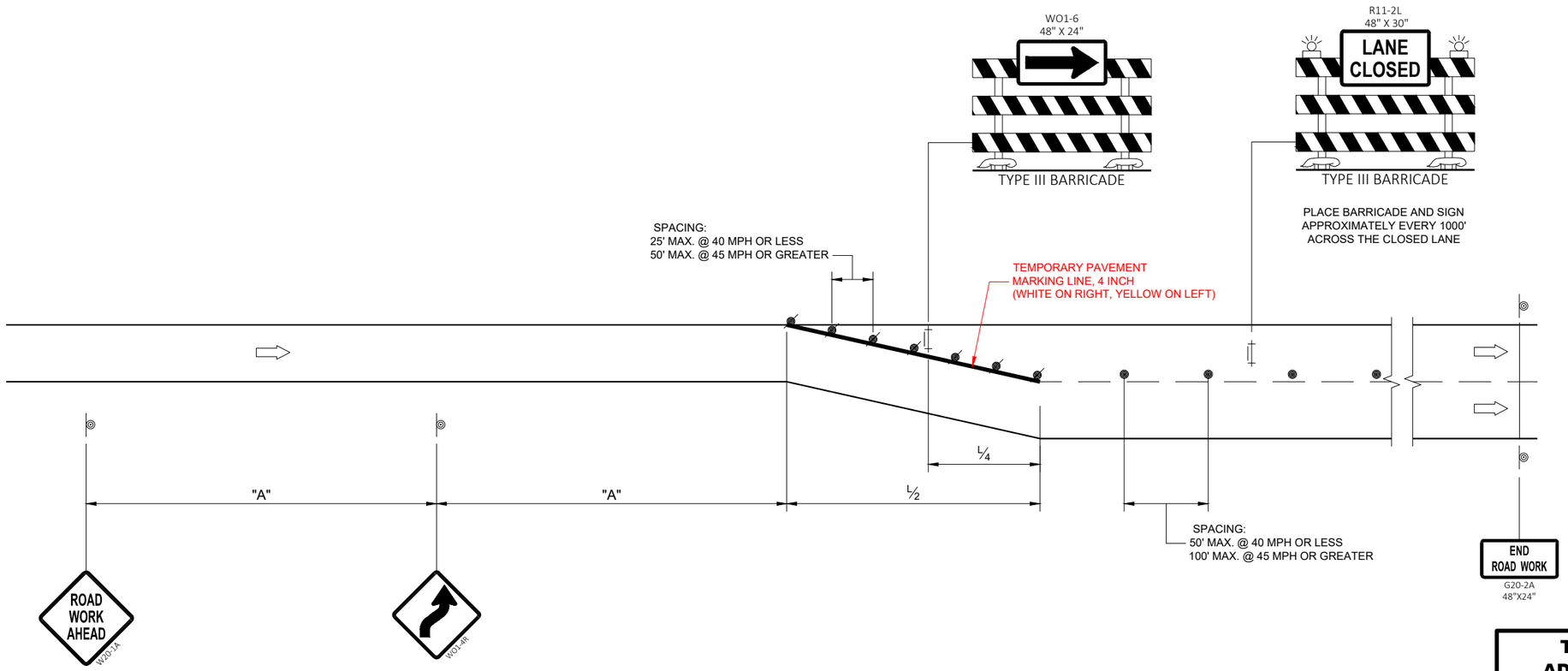
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

W20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION WORK IS LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS.

PLACE TEMPORARY PAVEMENT MARKING AND PLACE TEMPORARY PAVEMENT LINE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.



TRAFFIC CONTROL, ADDED LANE CLOSURE WITH LANE SHIFT

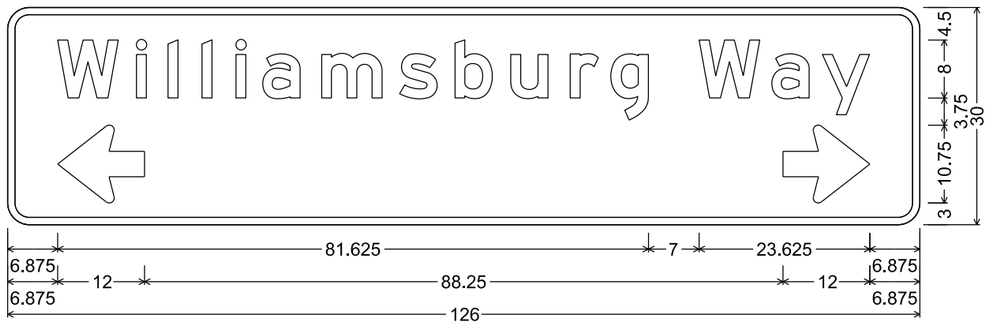
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2022
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER
FHWA

SDD 15D50 - 02b

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E



D1-61; 3.000" Radius, 1.000" Border

7

7

DIVISION 1 - 19-WBL

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.00	MASS ORDINATE
					NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
17+51	0.00	0.59	0.00	0.95	0	0	0	0	0	0
18+00	49.00	0.01	0.00	9.89	1	0	10	1	10	-9
18+59	59.24	15.89	0.00	27.23	17	0	41	18	51	-33
19+00	40.76	16.69	0.00	28.33	25	0	42	43	93	-50
19+50	50.00	24.72	0.00	24.50	38	0	49	81	142	-61
20+00	50.00	30.64	0.00	21.31	51	0	42	132	184	-52
20+50	50.00	31.67	0.00	25.90	58	0	44	190	228	-38
21+00	50.00	27.56	0.00	32.04	55	0	54	245	282	-37
21+50	50.00	40.31	0.00	28.94	63	0	56	308	338	-30
22+00	50.00	42.89	0.00	32.71	77	0	57	385	395	-10
22+50	50.00	45.08	0.00	32.27	81	0	60	466	455	11
23+00	50.00	54.49	0.00	32.42	92	0	60	558	515	43
23+50	50.00	73.71	0.00	34.16	119	0	62	677	577	100
24+00	50.00	70.62	0.00	35.70	134	0	65	811	642	169
24+50	50.00	43.54	0.00	28.51	106	0	59	917	701	216
25+00	50.00	43.71	0.00	25.70	81	0	50	998	751	247
25+50	50.00	43.30	0.00	24.45	81	0	46	1,079	797	282
26+00	50.00	45.71	0.00	20.82	82	0	42	1,161	839	322
26+50	50.00	45.94	0.00	29.08	85	0	46	1,246	885	361
27+00	50.00	62.16	0.00	32.41	100	0	57	1,346	942	404
27+50	50.00	83.19	0.00	35.22	135	0	63	1,481	1,005	476
28+00	50.00	143.03	0.00	103.05	209	0	128	1,690	1,133	557
28+50	50.00	260.41	0.00	0.00	374	0	95	2,064	1,228	836
29+00	50.00	100.72	0.00	27.22	334	0	25	2,398	1,253	1,145
29+50	50.00	153.20	0.00	168.48	235	0	181	2,633	1,434	1,199
30+00	50.00	176.32	0.00	96.05	305	0	245	2,938	1,679	1,259
30+50	50.00	222.09	0.00	41.05	369	0	127	3,307	1,806	1,501
31+00	50.00	211.70	0.00	47.80	402	0	82	3,709	1,888	1,821
31+50	50.00	197.19	0.00	8.29	379	0	52	4,088	1,940	2,148
32+00	50.00	207.75	0.00	9.02	375	0	16	4,463	1,956	2,507
32+50	50.00	259.11	0.00	8.72	432	0	16	4,895	1,972	2,923
33+00	50.00	317.91	0.00	12.49	534	0	20	5,429	1,992	3,437
33+50	50.00	374.40	0.00	1.78	641	0	13	6,070	2,005	4,065
34+00	50.00	423.46	0.00	3.29	739	0	5	6,809	2,010	4,799
34+50	50.00	457.85	0.00	3.91	816	0	7	7,625	2,017	5,608
35+00	50.00	423.87	0.00	6.08	816	0	9	8,441	2,026	6,415
35+50	50.00	351.23	0.00	4.57	718	0	10	9,159	2,036	7,123
36+00	50.00	321.33	0.00	3.96	623	0	8	9,782	2,044	7,738
36+50	50.00	337.85	0.00	2.35	610	0	6	10,392	2,050	8,342
37+00	50.00	345.72	0.00	1.67	633	0	4	11,025	2,054	8,971
37+50	50.00	404.09	0.00	1.60	694	0	3	11,719	2,057	9,662
38+00	50.00	459.09	0.00	1.17	799	0	3	12,518	2,060	10,458
38+50	50.00	510.09	0.00	1.25	897	0	2	13,415	2,062	11,353
39+00	50.00	553.33	0.00	1.42	985	0	2	14,400	2,064	12,336
39+50	50.00	623.90	0.00	1.31	1,090	0	3	15,490	2,067	13,423
40+00	50.00	686.60	0.00	2.72	1,213	0	4	16,703	2,071	14,632

PROJECT NO: 119055030 | HWY: HWY 19 | COUNTY: DANE | CROSS SECTIONS: EARTHWORK DATA | SHEET 230 | E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\090101-EW.DWG
LAYOUT NAME - 01

PLOT DATE : 3/2/2022 8:32 AM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

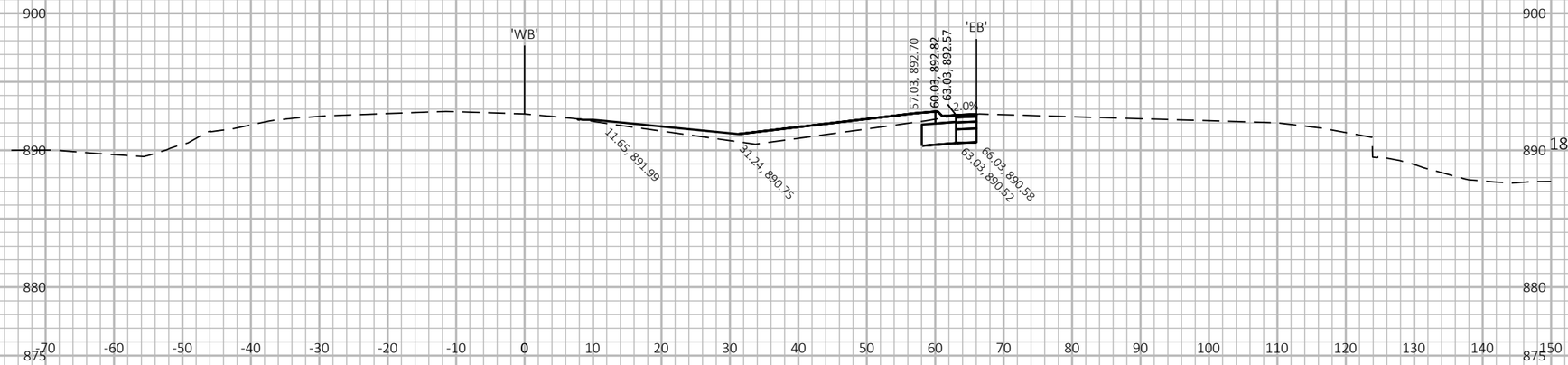
WISDOT/CADDS SHEET 49

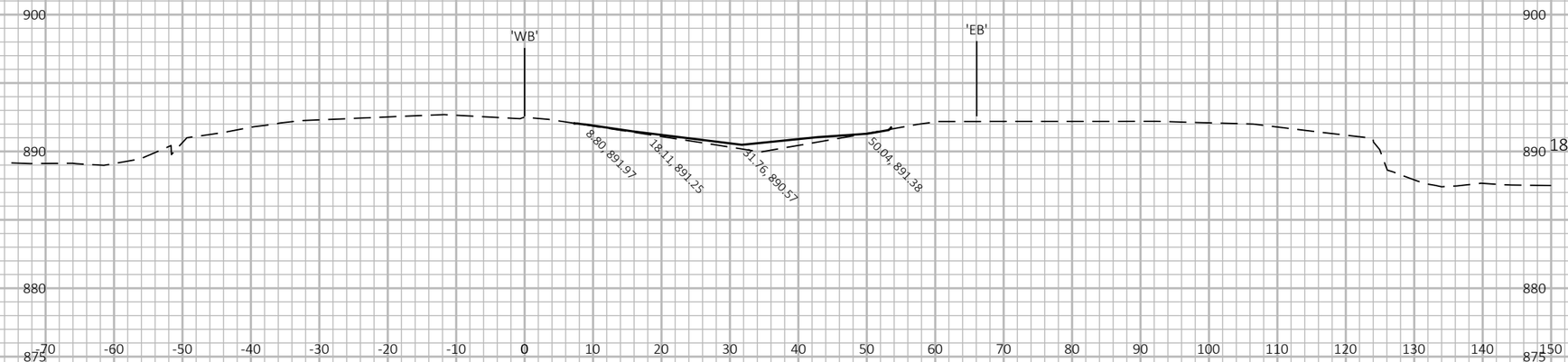
DIVISION 1 - 19-WBL - CONTINUED

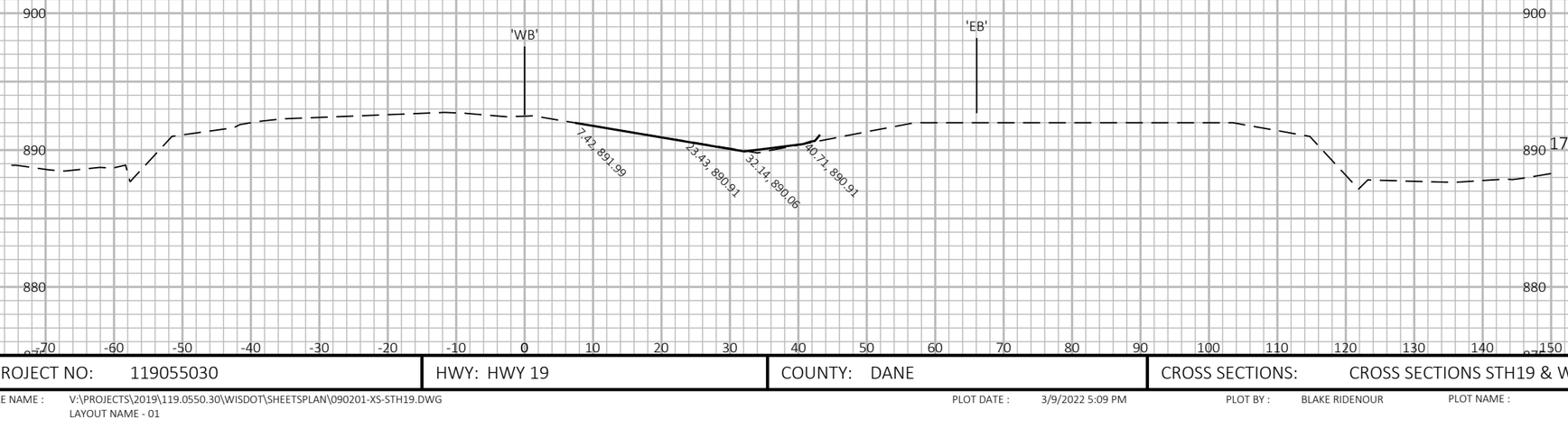
STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
		CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.00	MASS ORDINATE
					NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
40+50	50.00	699.23	0.00	1.58	1,283	0	4	17,986	2,075	15,911
41+00	50.00	713.98	0.00	1.20	1,309	0	3	19,295	2,078	17,217
41+50	50.00	673.63	0.00	1.14	1,285	0	2	20,580	2,080	18,500
42+00	50.00	571.49	0.00	0.83	1,153	0	2	21,733	2,082	19,651
42+50	50.00	418.67	0.00	0.62	917	0	1	22,650	2,083	20,567
43+00	50.00	316.33	0.00	0.59	681	0	1	23,331	2,084	21,247
43+50	50.00	235.49	0.00	0.57	511	0	1	23,842	2,085	21,757
44+00	50.00	195.88	0.00	0.72	399	0	1	24,241	2,086	22,155
44+50	50.00	145.35	0.00	0.00	316	0	1	24,557	2,087	22,470
45+00	50.00	130.81	0.00	0.00	256	0	0	24,813	2,087	22,726
45+50	50.00	112.81	0.00	0.00	226	0	0	25,039	2,087	22,952
46+00	50.00	50.76	0.00	7.33	151	0	7	25,190	2,094	23,096
46+50	50.00	25.48	0.00	6.44	71	0	13	25,261	2,107	23,154
47+00	50.00	24.91	0.00	6.14	47	0	12	25,308	2,119	23,189
47+50	50.00	39.26	0.00	4.67	59	0	10	25,367	2,129	23,238
48+00	50.00	21.40	0.00	6.16	56	0	10	25,423	2,139	23,284
48+50	50.00	20.04	0.00	7.38	38	0	13	25,461	2,152	23,309
49+00	50.00	0.00	0.00	0.00	19	0	7	25,480	2,159	23,321

DIVISION 2 - WILL-CNTR-PRL

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.00	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
96+50	9650.00	0.00	37.71	0.00	0.00	0	0	0	0	0	0
97+00	9700.00	50.00	44.61	0.00	0.00	76	0	0	76	0	76
97+50	9750.00	50.00	59.80	0.00	0.00	97	0	0	173	0	173
98+00	9800.00	50.00	87.12	0.00	0.00	136	0	0	309	0	309
98+50	9850.00	50.00	85.65	0.00	0.00	160	0	0	469	0	469
99+00	9900.00	50.00	69.37	0.00	0.00	144	0	0	613	0	613
99+50	9950.00	50.00	72.69	0.00	0.00	132	0	0	745	0	745
100+00	10000.00	50.00	86.85	0.00	0.00	148	0	0	893	0	893
100+50	10050.00	50.00	114.02	0.00	0.15	186	0	0	1,079	0	1,079
100+90	10090.00	40.00	0.00	0.00	0.00	84	0	0	1,163	0	1,163







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PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	CROSS SECTIONS: CROSS SECTIONS STH19 & WILLIAMSBURG	SHEET 232	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\090201-XS-STH19.DWG
LAYOUT NAME - 01

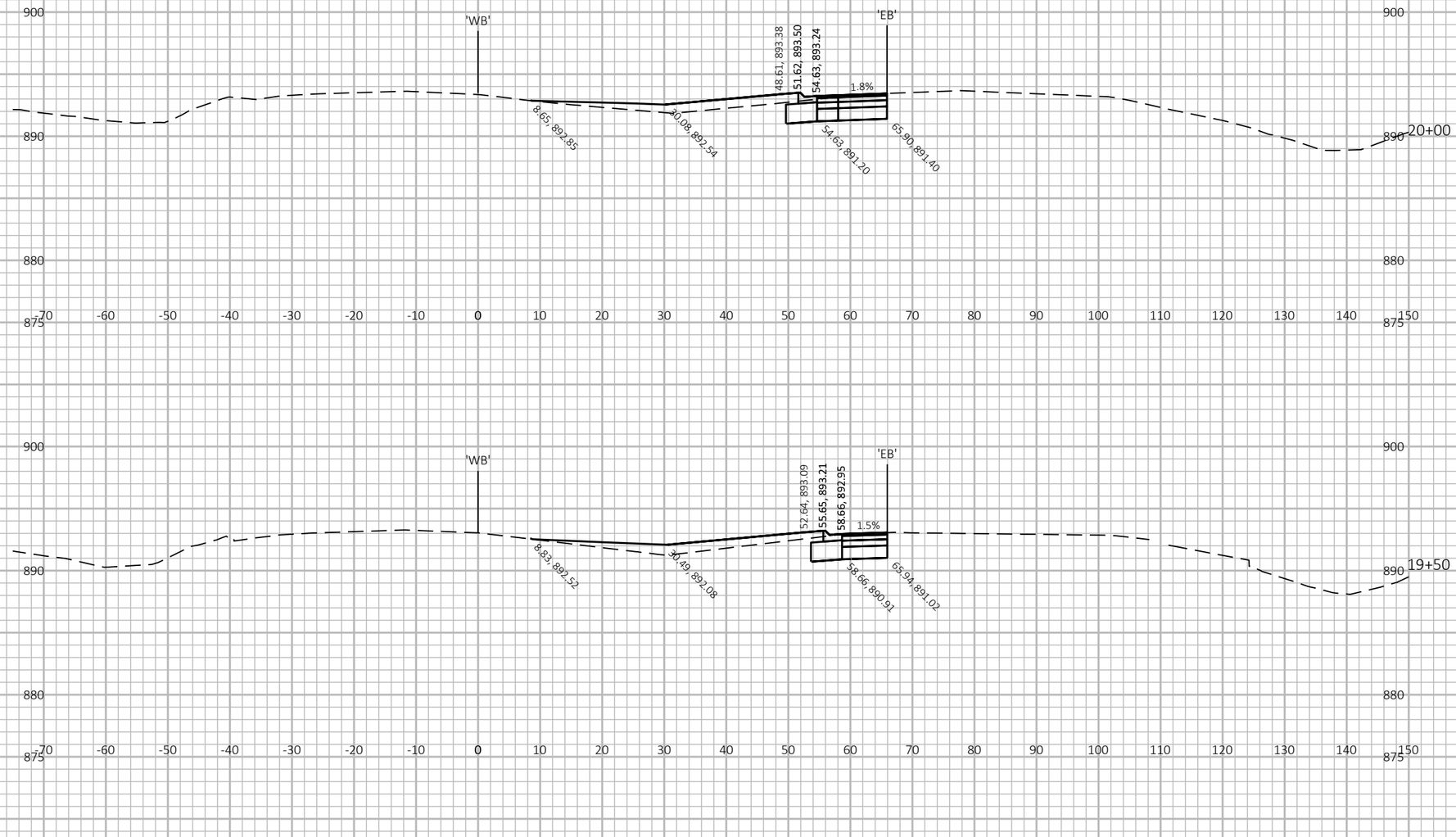
PLOT DATE : 3/9/2022 5:09 PM

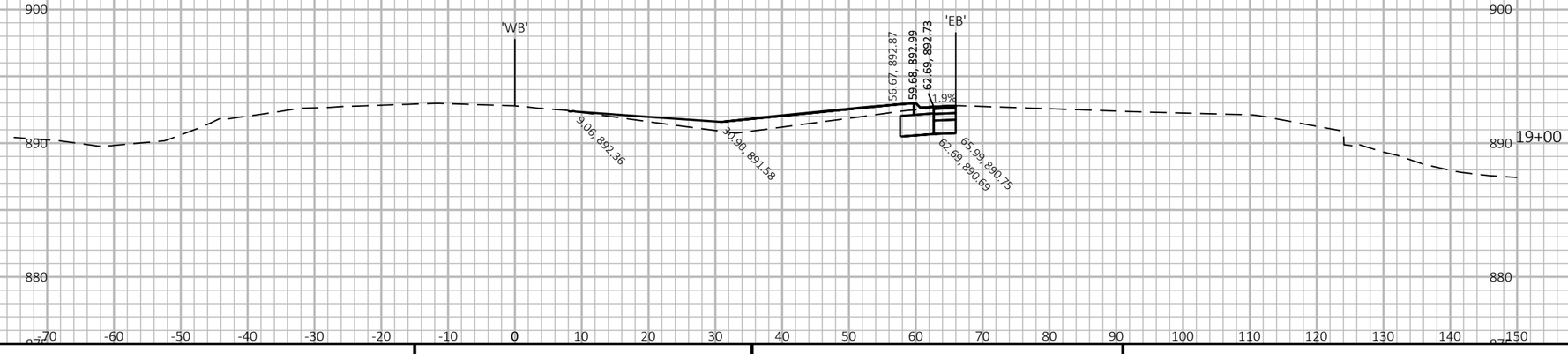
PLOT BY : BLAKE RIDENOUR

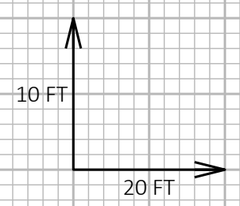
PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49







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PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	CROSS SECTIONS: CROSS SECTIONS STH19 & WILLIAMSBURG	SHEET 233	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\090201-XS-STH19.DWG
LAYOUT NAME - 02

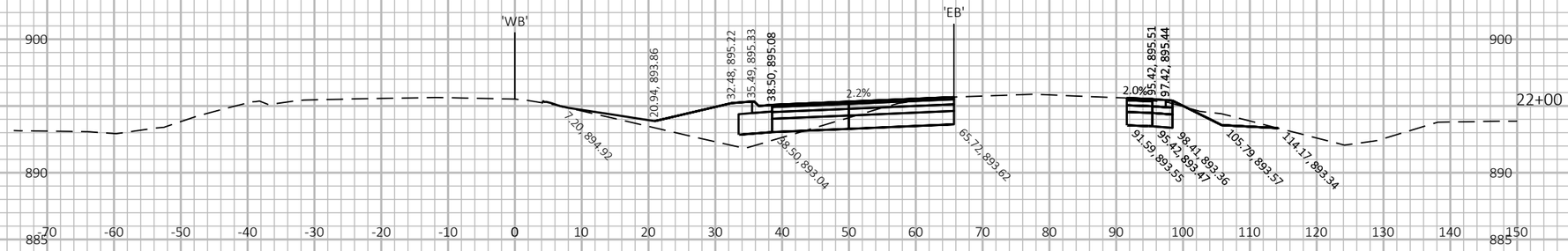
PLOT DATE : 3/9/2022 5:10 PM

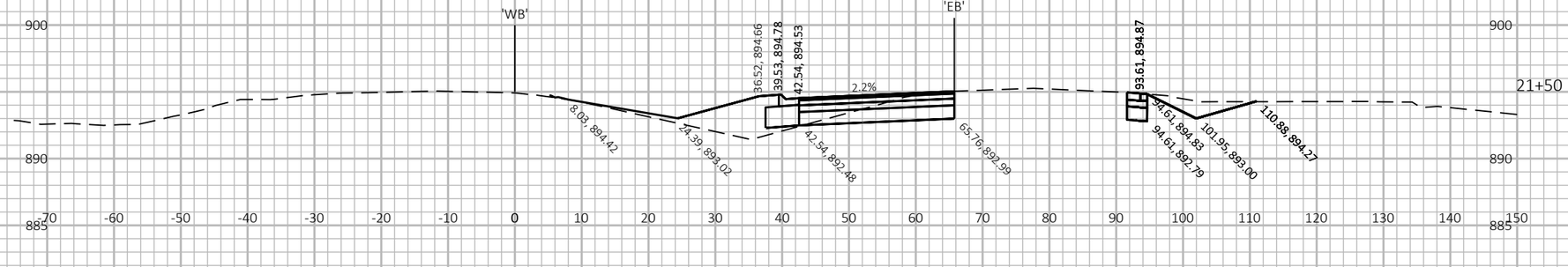
PLOT BY : BLAKE RIDENOUR

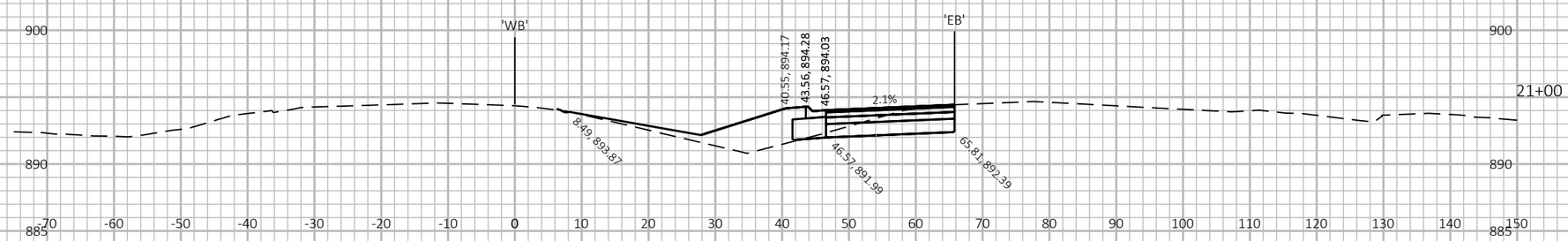
PLOT NAME :

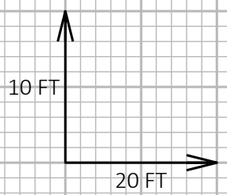
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49









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PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	CROSS SECTIONS: CROSS SECTIONS STH19 & WILLIAMSBURG	SHEET 234	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\090201-XS-STH19.DWG
LAYOUT NAME - 03

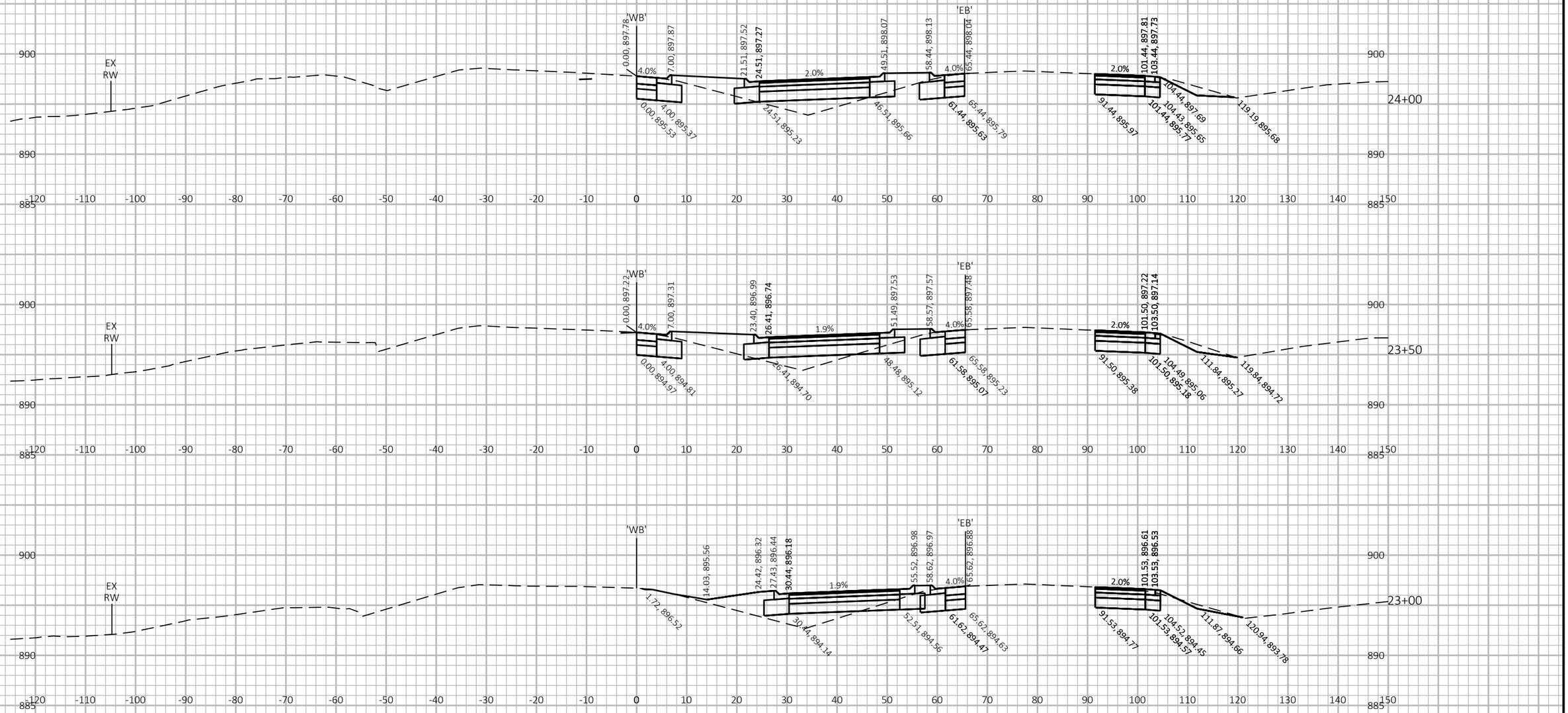
PLOT DATE : 3/9/2022 5:11 PM

PLOT BY : BLAKE RIDENOUR

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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9

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	CROSS SECTIONS: CROSS SECTIONS STH19 & WILLIAMSBURG	SHEET 235 E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\090201-XS-STH19.DWG
LAYOUT NAME - 04

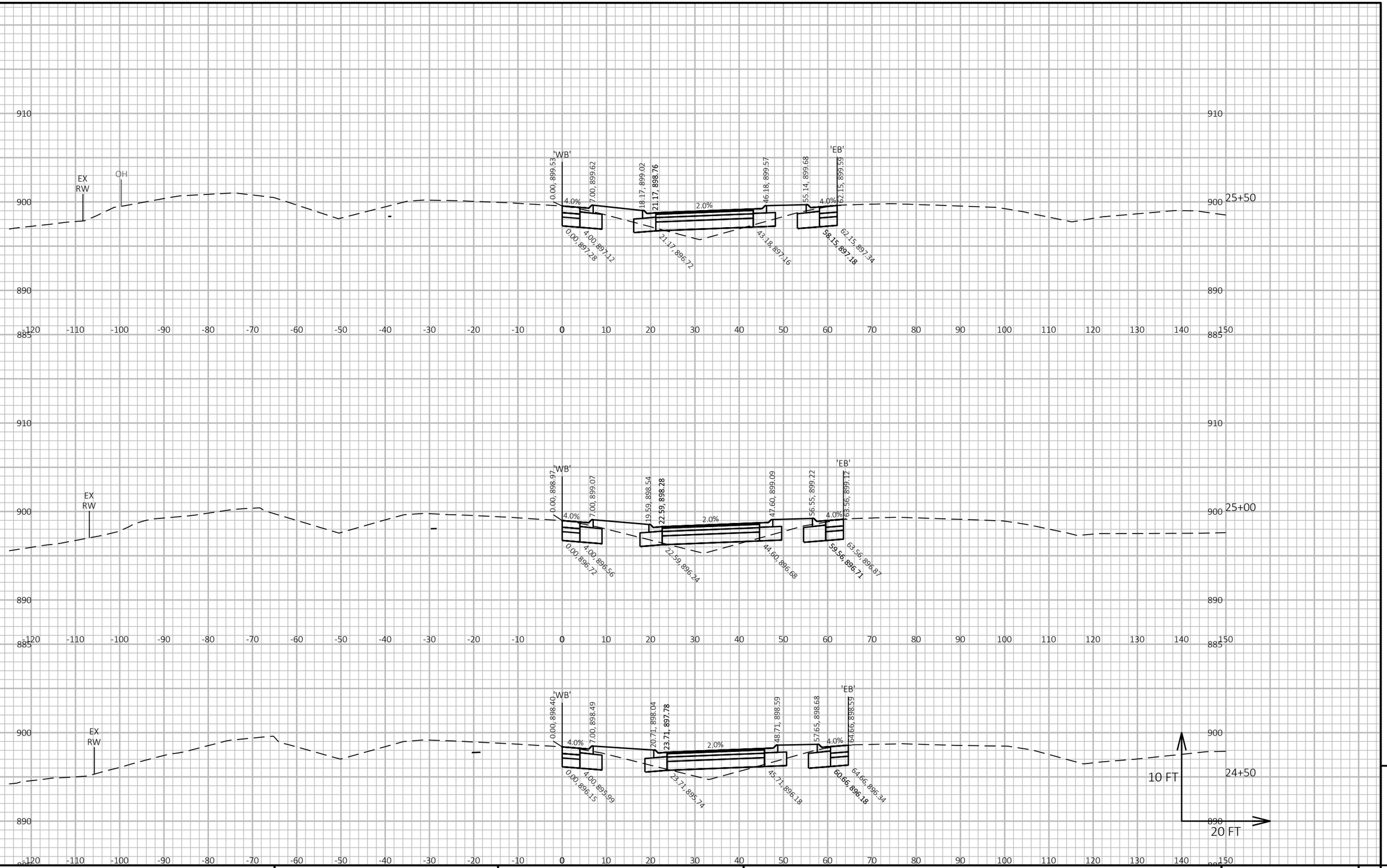
PLOT DATE : 3/9/2022 5:12 PM

PLOT BY : BLAKE RIDENOUR

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	CROSS SECTIONS: CROSS SECTIONS STH19 & WILLIAMSBURG	SHEET 236	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\090201-XS-STH19.DWG
LAYOUT NAME - 05

PLOT DATE : 3/9/2022 5:12 PM

PLOT BY : BLAKE RIDENOUR

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

9

9

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	CROSS SECTIONS: CROSS SECTIONS STH19 & WILLIAMSBURG	SHEET 237	E

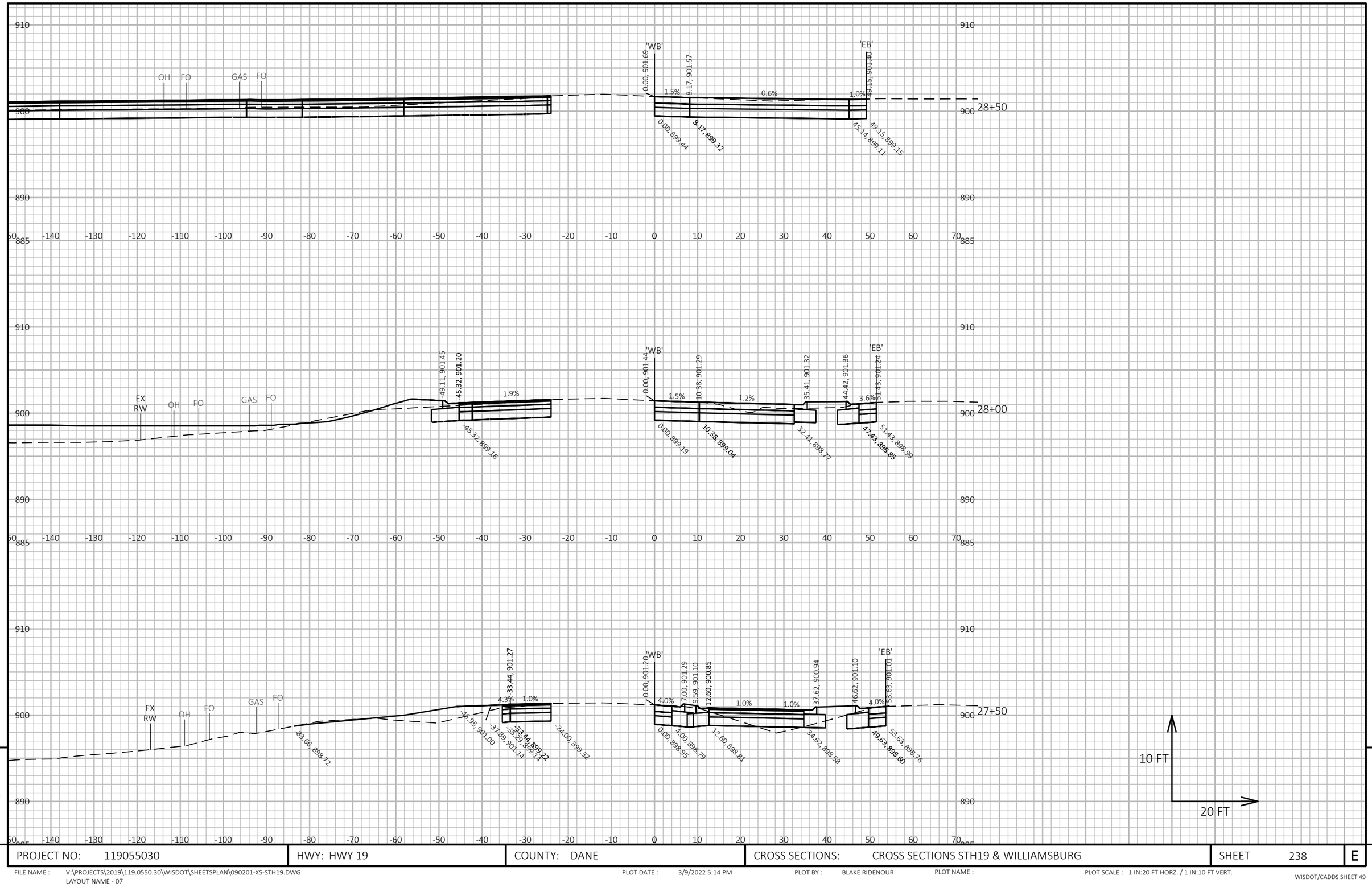
FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\090201-XS-STH19.DWG
LAYOUT NAME - 06

PLOT DATE : 3/9/2022 5:13 PM

PLOT BY : BLAKE RIDENOUR

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	CROSS SECTIONS: CROSS SECTIONS STH19 & WILLIAMSBURG	SHEET 238 E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\090201-XS-STH19.DWG
LAYOUT NAME - 07

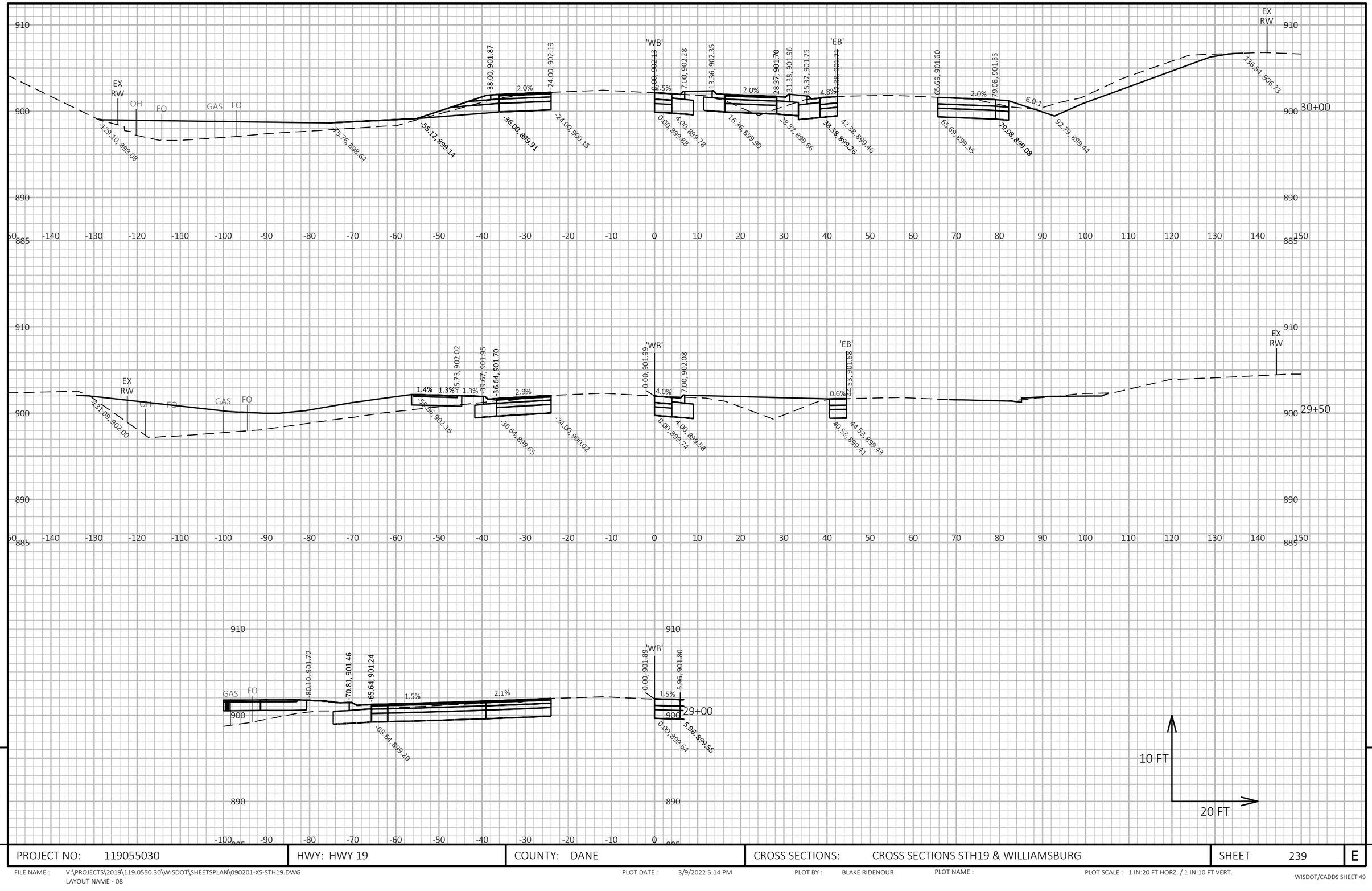
PLOT DATE : 3/9/2022 5:14 PM

PLOT BY : BLAKE RIDENOUR

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	CROSS SECTIONS: CROSS SECTIONS STH19 & WILLIAMSBURG	SHEET 239	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\090201-XS-STH19.DWG
LAYOUT NAME - 08

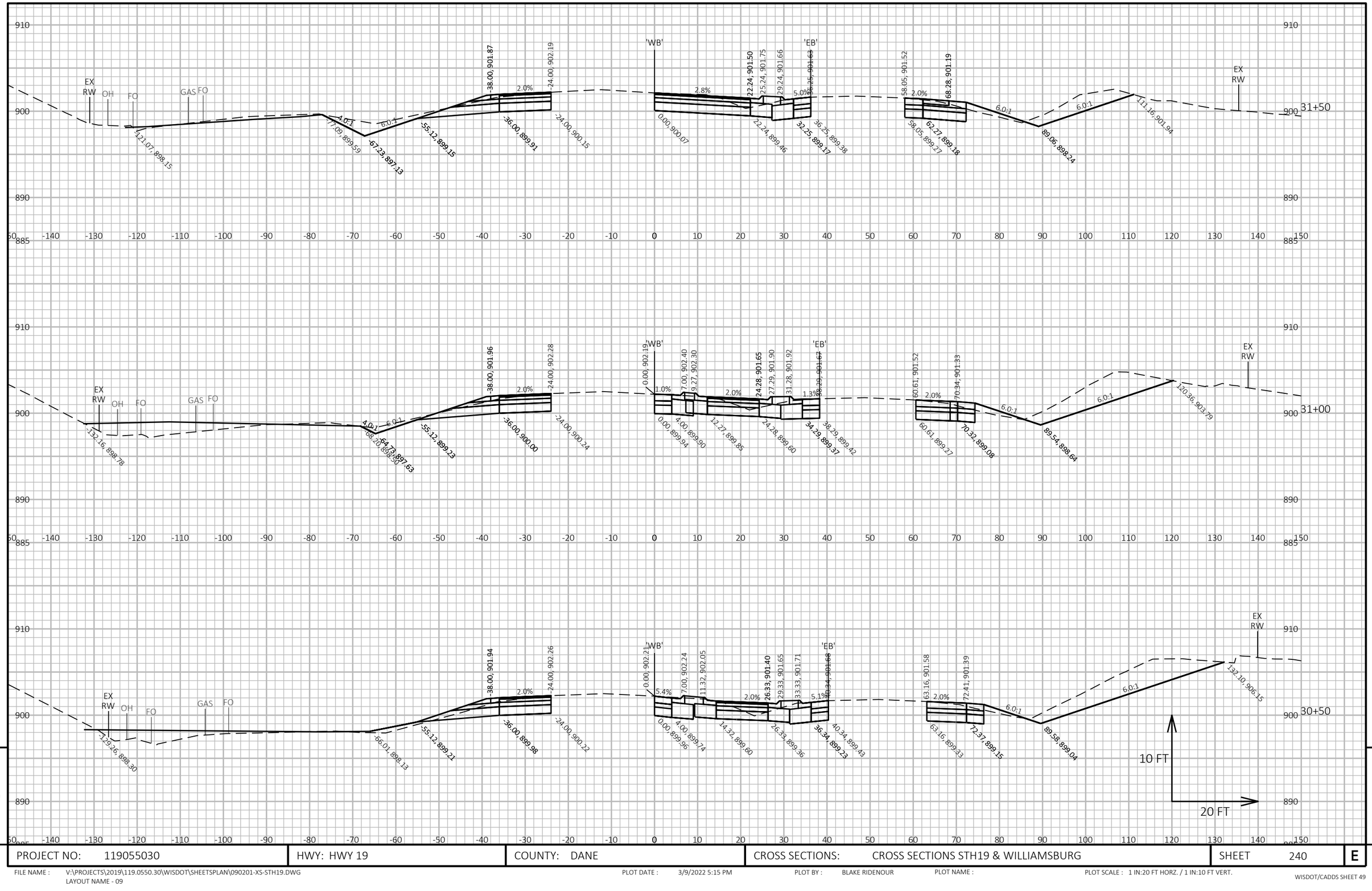
PLOT DATE : 3/9/2022 5:14 PM

PLOT BY : BLAKE RIDENOUR

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

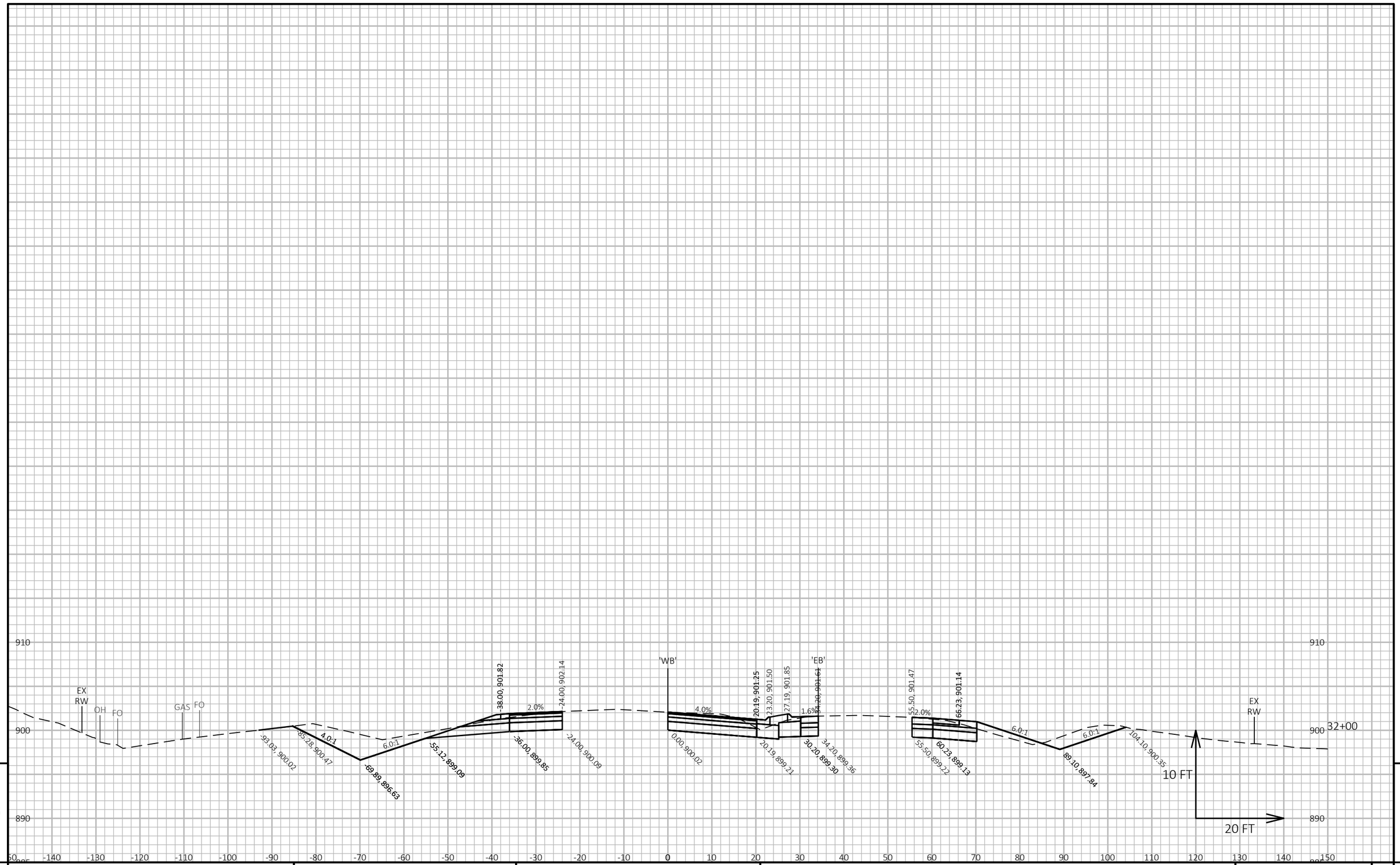


9 9

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	CROSS SECTIONS: CROSS SECTIONS STH19 & WILLIAMSBURG	SHEET 240	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\090201-XS-STH19.DWG
LAYOUT NAME - 09

PLOT DATE : 3/9/2022 5:15 PM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

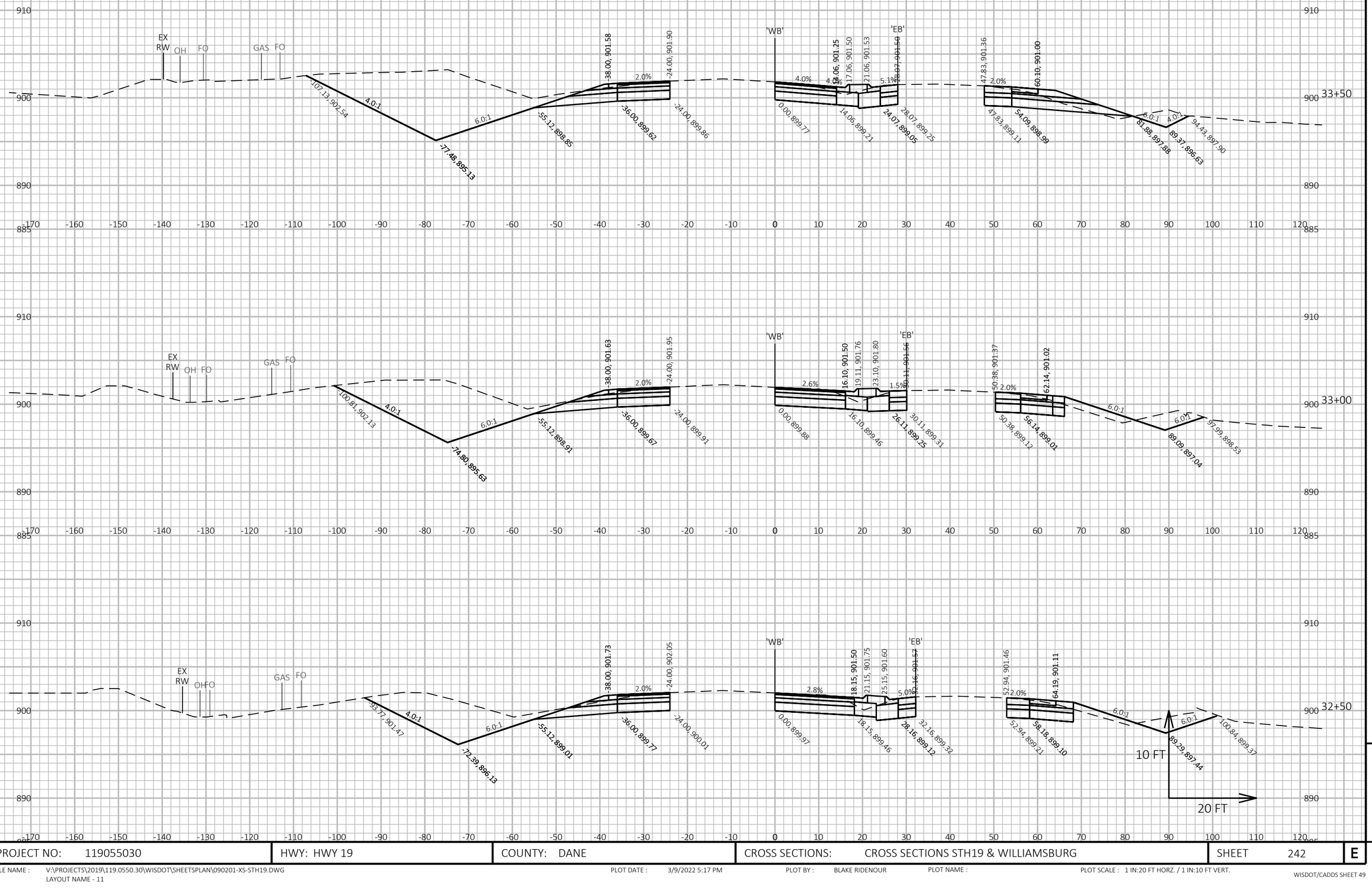


9 9

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	CROSS SECTIONS: CROSS SECTIONS STH19 & WILLIAMSBURG	SHEET 241	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\090201-XS-STH19.DWG
LAYOUT NAME - 10

PLOT DATE : 3/9/2022 5:16 PM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



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PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	CROSS SECTIONS: CROSS SECTIONS STH19 & WILLIAMSBURG	SHEET 242	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\090201-XS-STH19.DWG
LAYOUT NAME - 11

PLOT DATE : 3/9/2022 5:17 PM

PLOT BY : BLAKE RIDENOUR

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

9

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PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	CROSS SECTIONS: CROSS SECTIONS STH19 & WILLIAMSBURG	SHEET 243	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\090201-XS-STH19.DWG
LAYOUT NAME - 12

PLOT DATE : 3/9/2022 5:17 PM

PLOT BY : BLAKE RIDENOUR

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

9

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PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	CROSS SECTIONS: CROSS SECTIONS STH19 & WILLIAMSBURG	SHEET 244	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\090201-XS-STH19.DWG
LAYOUT NAME - 13

PLOT DATE : 3/9/2022 5:18 PM

PLOT BY : BLAKE RIDENOUR

PLOT NAME :

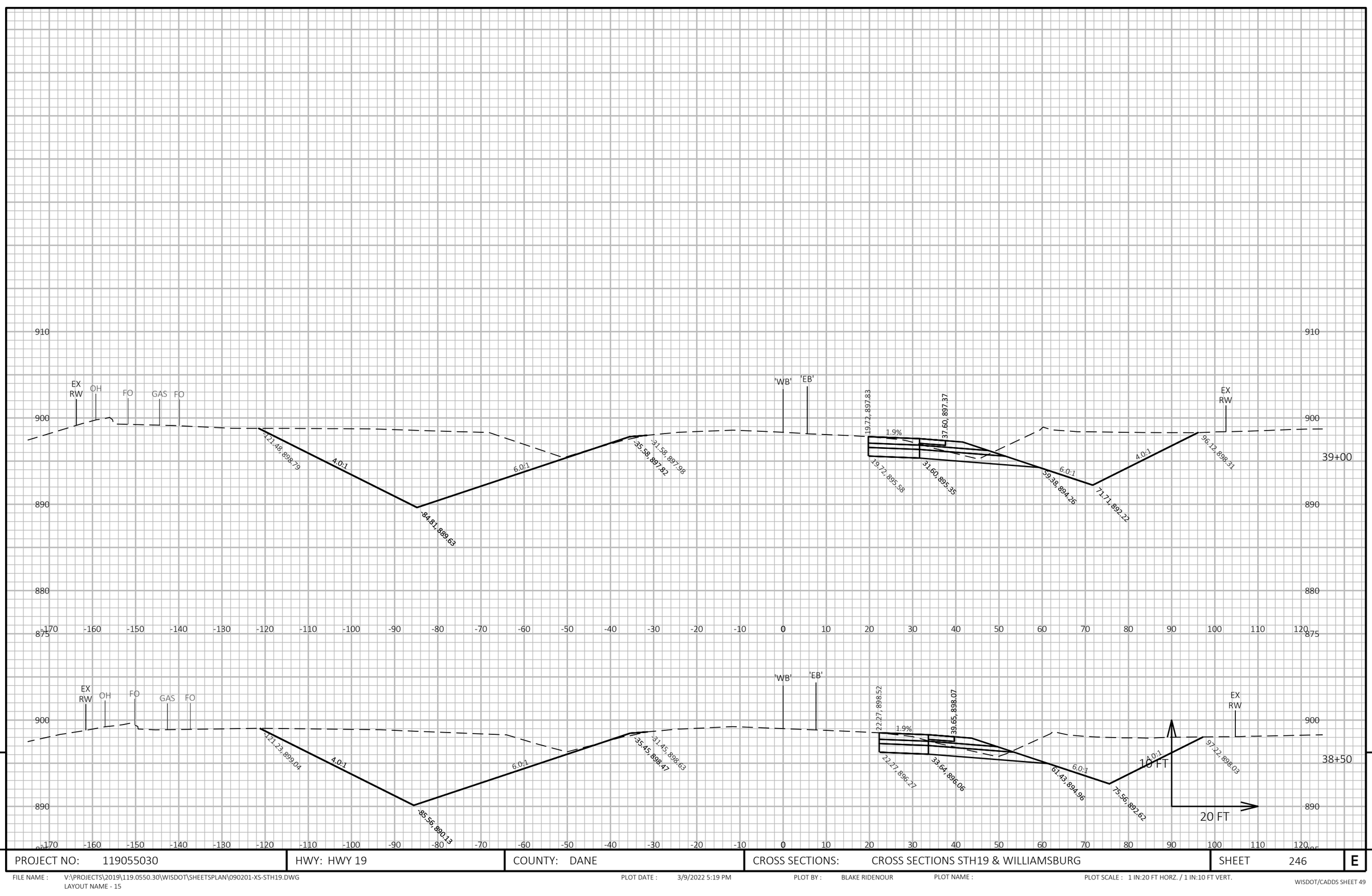
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	CROSS SECTIONS: CROSS SECTIONS STH19 & WILLIAMSBURG	SHEET 245 E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\090201-XS-STH19.DWG
LAYOUT NAME - 14

PLOT DATE : 3/9/2022 5:19 PM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

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PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	CROSS SECTIONS: CROSS SECTIONS STH19 & WILLIAMSBURG	SHEET 246	E

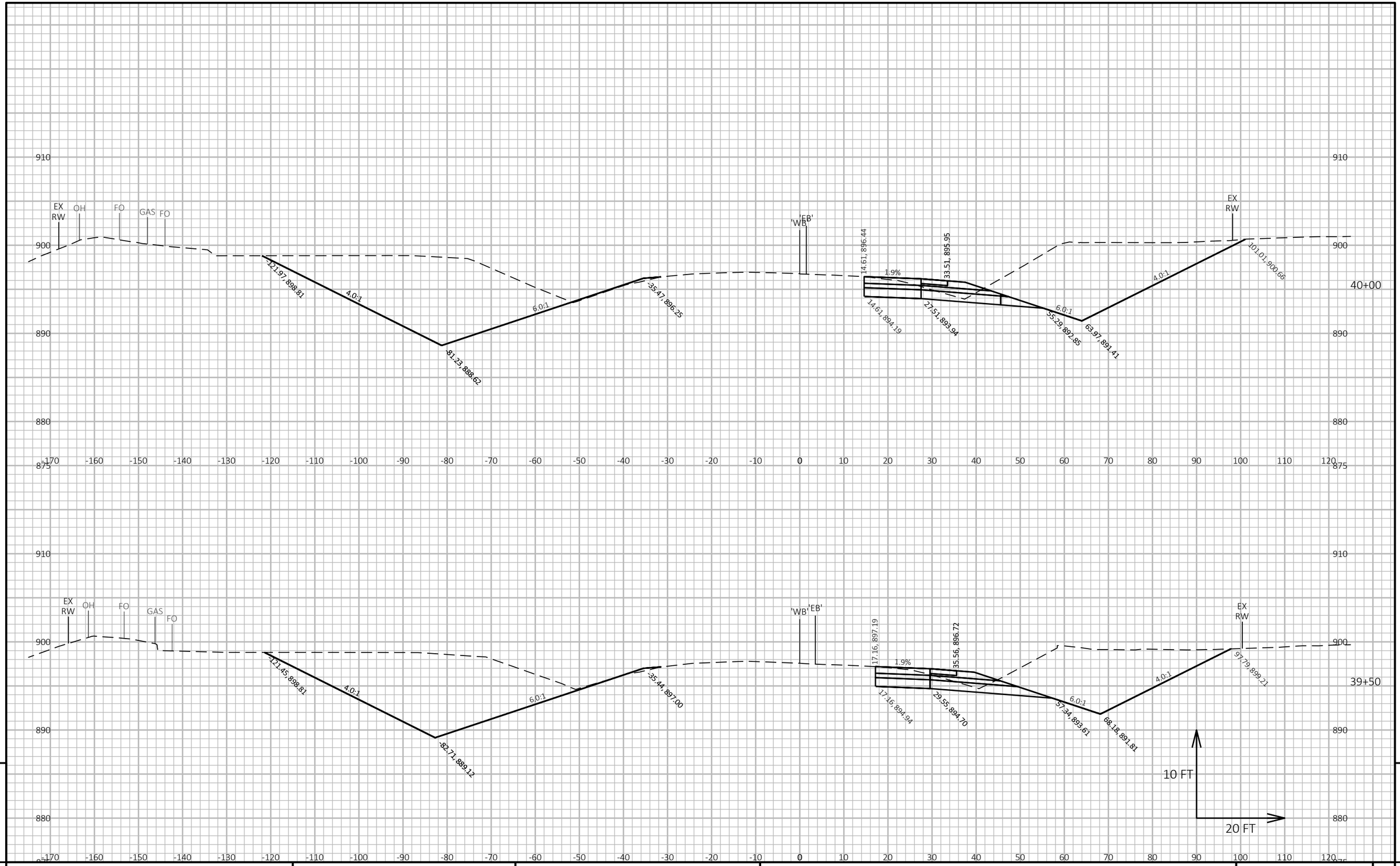
FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\090201-XS-STH19.DWG
LAYOUT NAME - 15

PLOT DATE : 3/9/2022 5:19 PM

PLOT BY : BLAKE RIDENOUR

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



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PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	CROSS SECTIONS: CROSS SECTIONS STH19 & WILLIAMSBURG	SHEET 247	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\090201-XS-STH19.DWG
LAYOUT NAME - 16

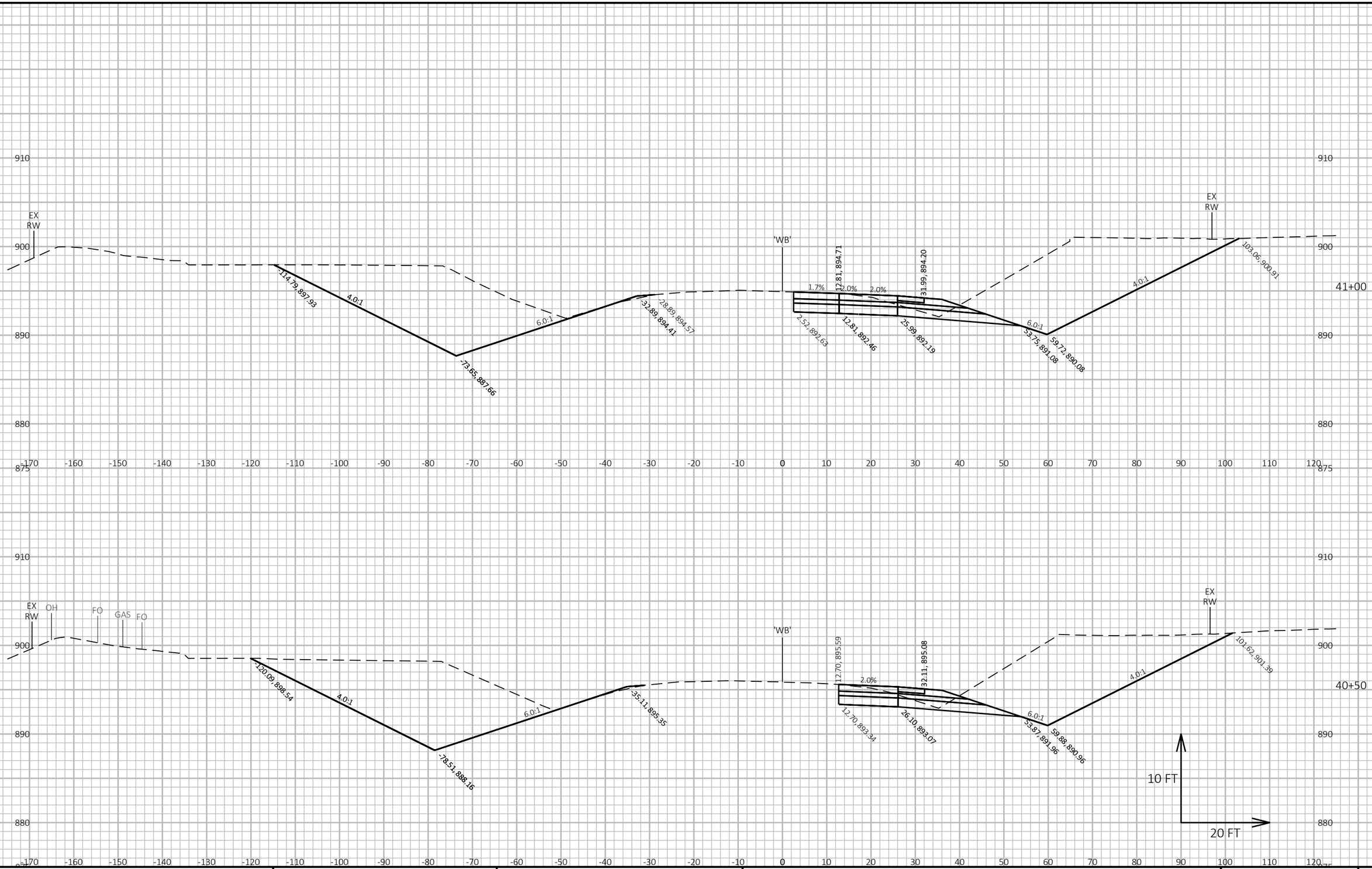
PLOT DATE : 3/9/2022 5:20 PM

PLOT BY : BLAKE RIDENOUR

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	CROSS SECTIONS: CROSS SECTIONS STH19 & WILLIAMSBURG	SHEET 248	E

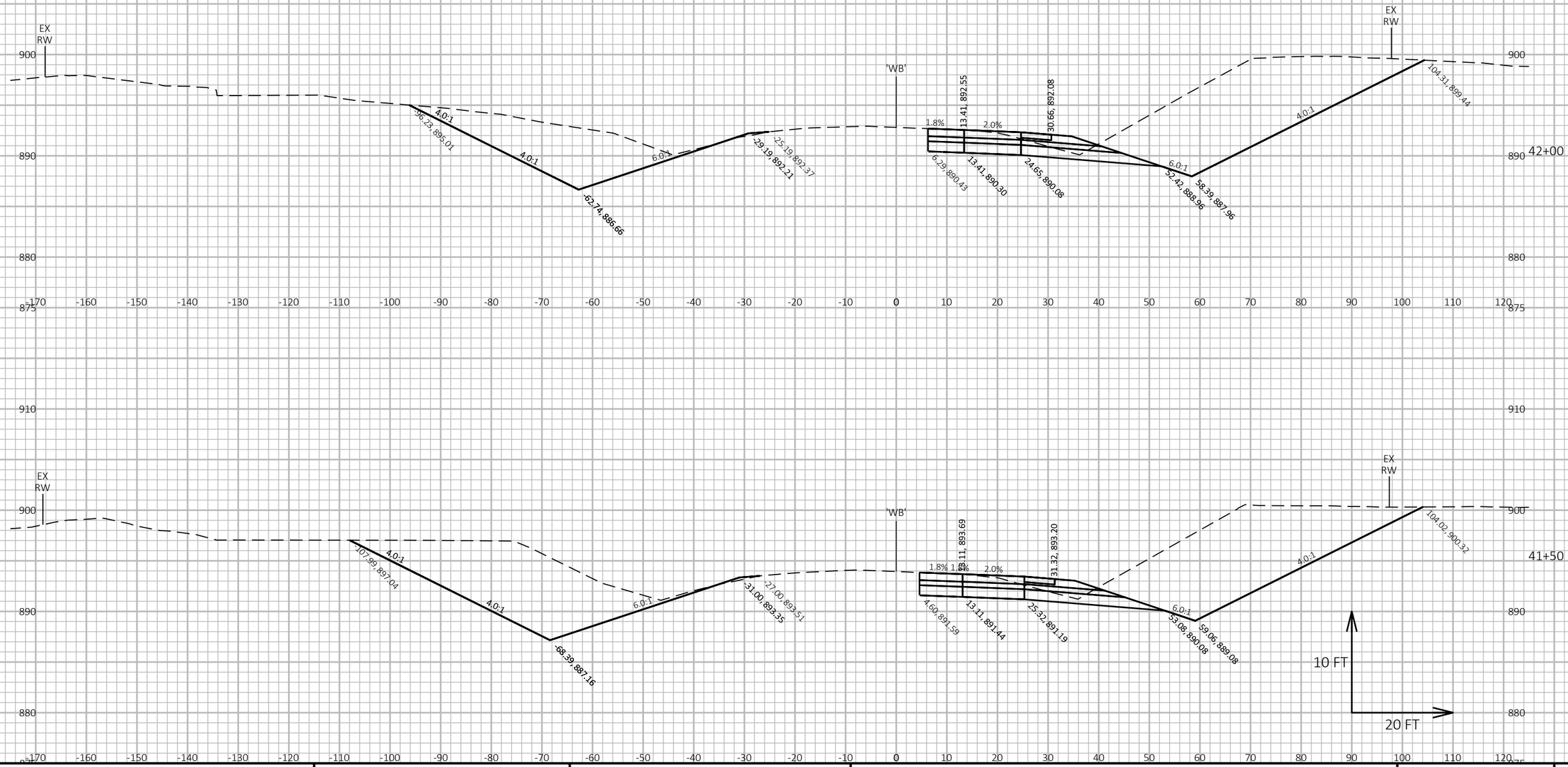
FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\090201-XS-STH19.DWG
LAYOUT NAME - 17

PLOT DATE : 3/9/2022 5:21 PM

PLOT BY : BLAKE RIDENOUR

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



9

9

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	CROSS SECTIONS: CROSS SECTIONS STH19 & WILLIAMSBURG	SHEET 249	E

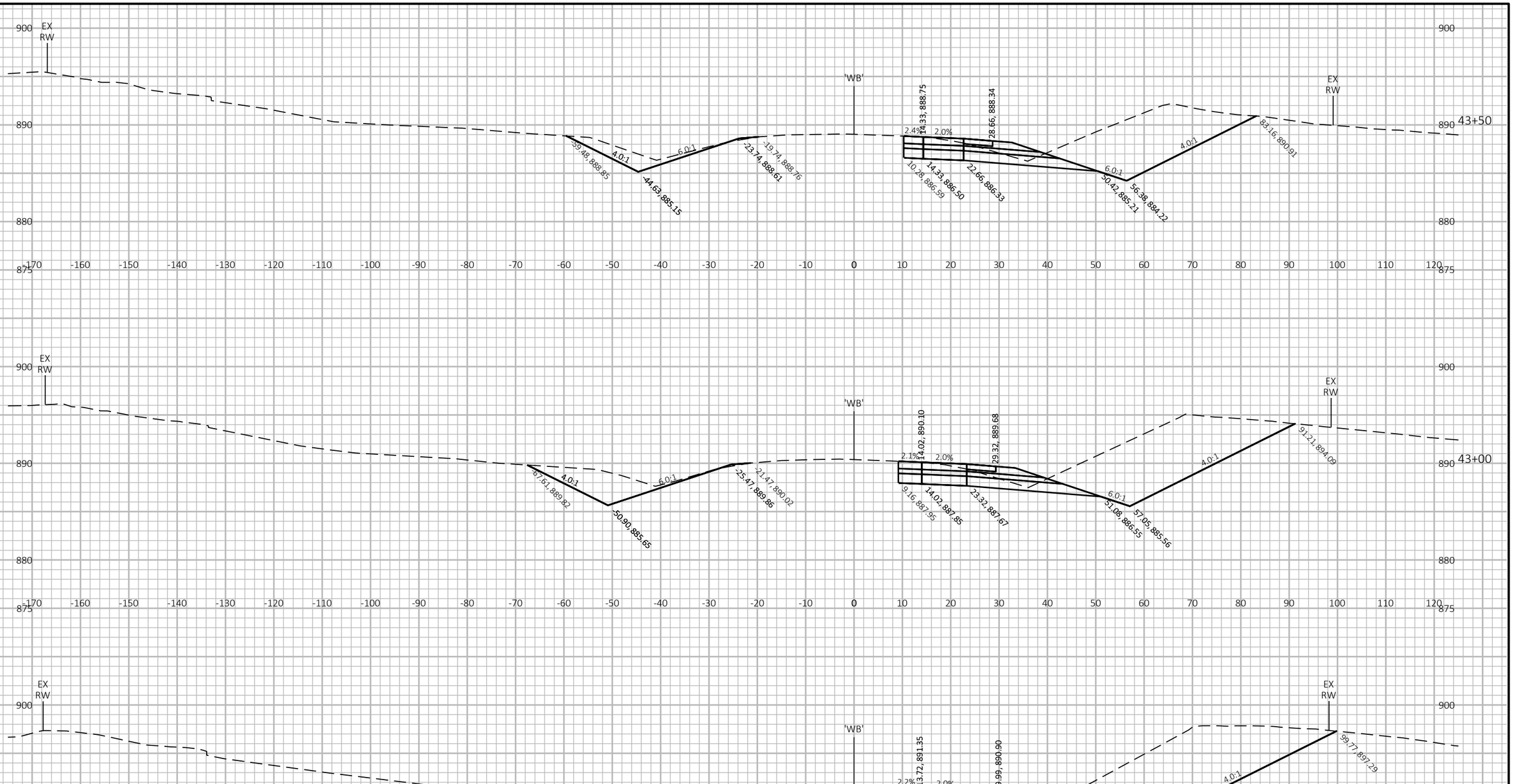
FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\090201-XS-STH19.DWG
LAYOUT NAME - 214

PLOT DATE : 3/9/2022 5:22 PM

PLOT BY : BLAKE RIDENOUR

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



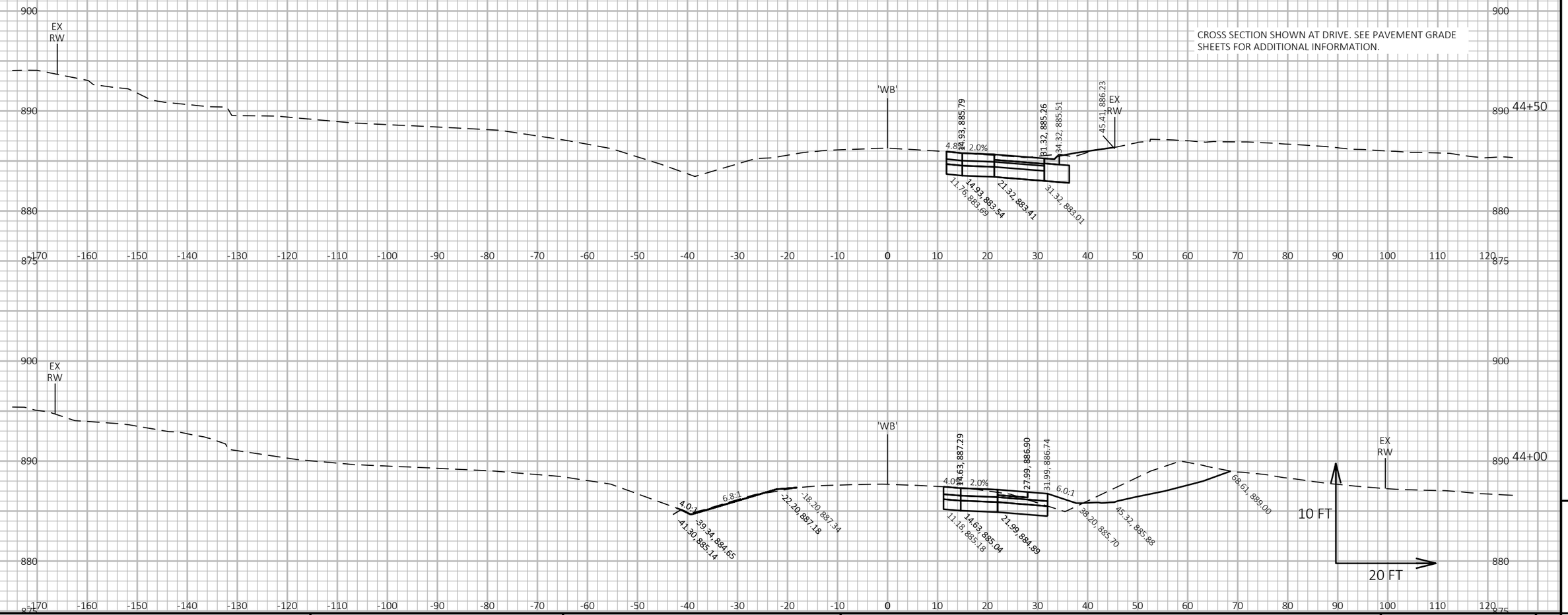
PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	CROSS SECTIONS: CROSS SECTIONS STH19 & WILLIAMSBURG	SHEET 250	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\090201-XS-STH19.DWG
LAYOUT NAME - 215

PLOT DATE : 3/9/2022 5:22 PM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

CROSS SECTION SHOWN AT DRIVE. SEE PAVEMENT GRADE SHEETS FOR ADDITIONAL INFORMATION.

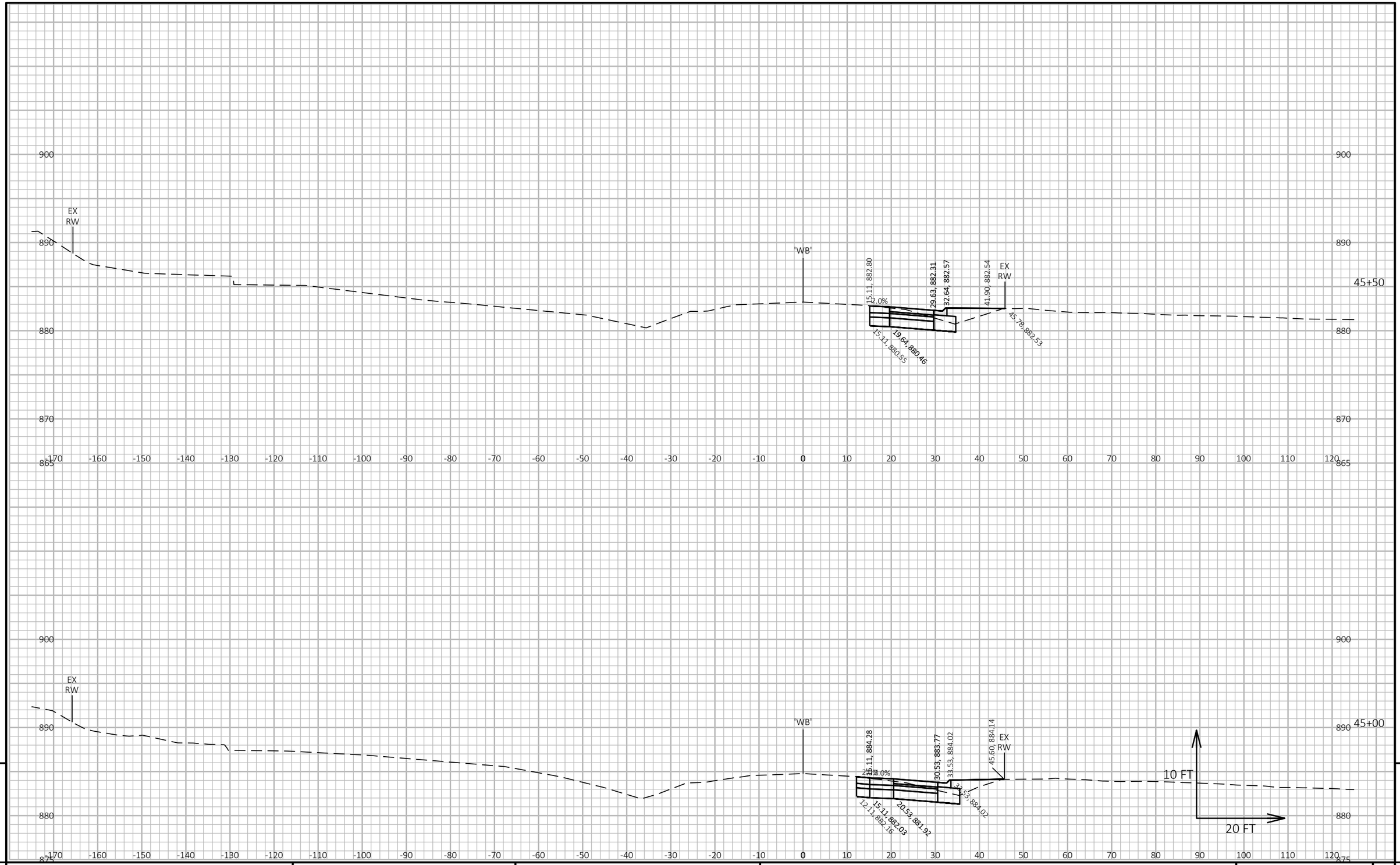


PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	CROSS SECTIONS: CROSS SECTIONS STH19 & WILLIAMSBURG	SHEET 251	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\090201-XS-STH19.DWG
LAYOUT NAME - 216

PLOT DATE : 3/9/2022 5:23 PM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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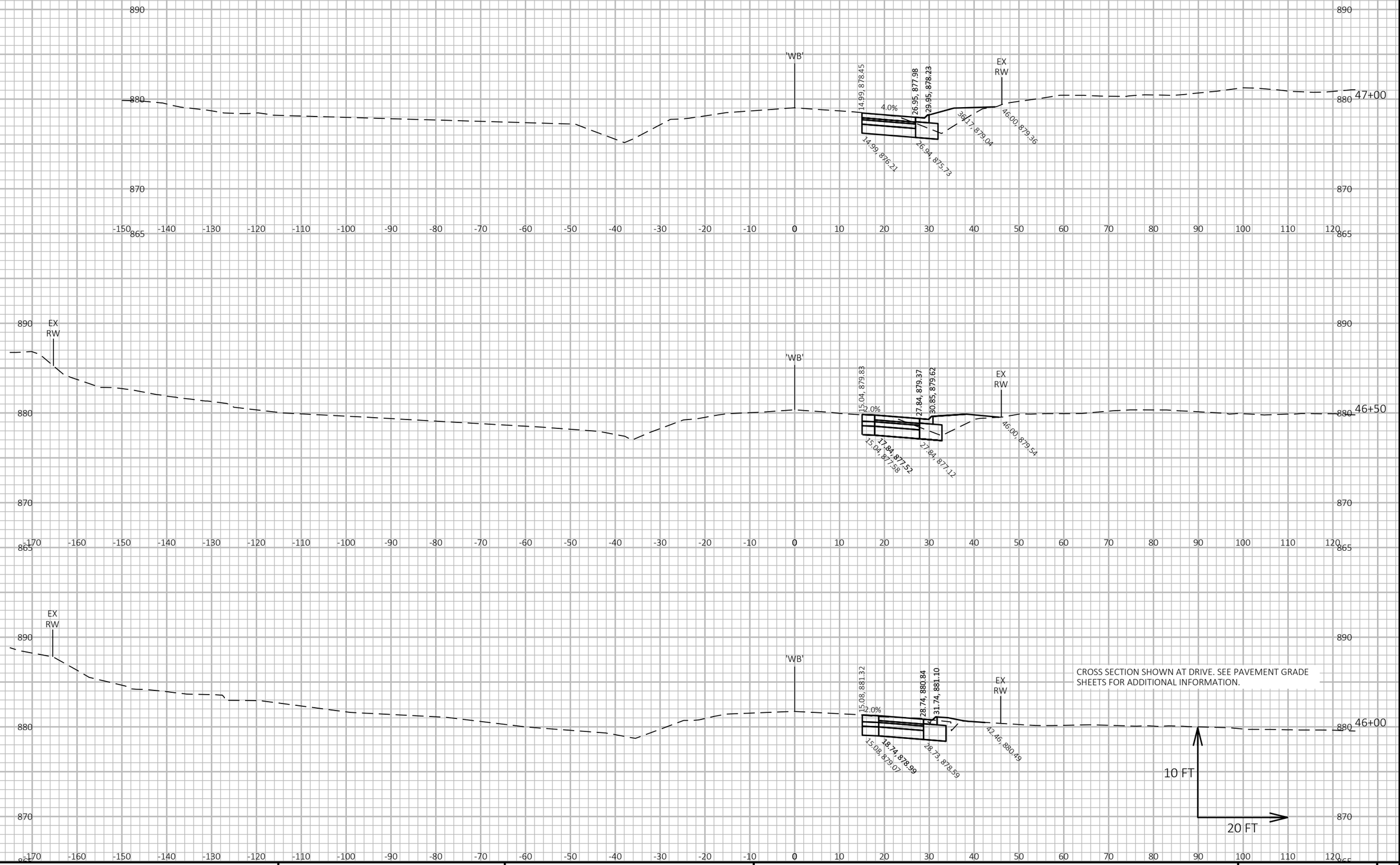
PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	CROSS SECTIONS: CROSS SECTIONS STH19 & WILLIAMSBURG	SHEET 252	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\090201-XS-STH19.DWG
LAYOUT NAME - 217

PLOT DATE : 3/9/2022 5:24 PM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	CROSS SECTIONS: CROSS SECTIONS STH19 & WILLIAMSBURG	SHEET 253	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\090201-XS-STH19.DWG
LAYOUT NAME - 218

PLOT DATE : 3/9/2022 5:25 PM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

9

9

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	CROSS SECTIONS: CROSS SECTIONS STH19 & WILLIAMSBURG	SHEET 254	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\090201-XS-STH19.DWG
LAYOUT NAME - 218 (2)

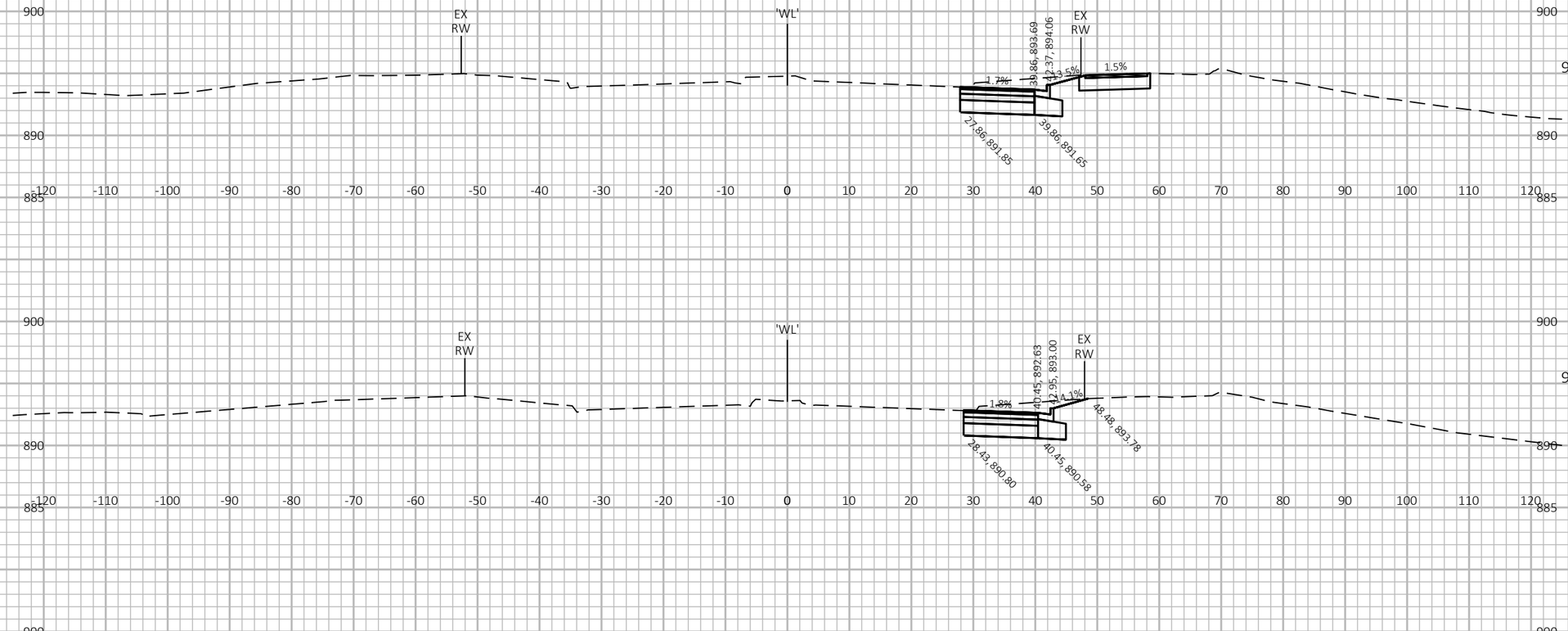
PLOT DATE : 3/9/2022 5:25 PM

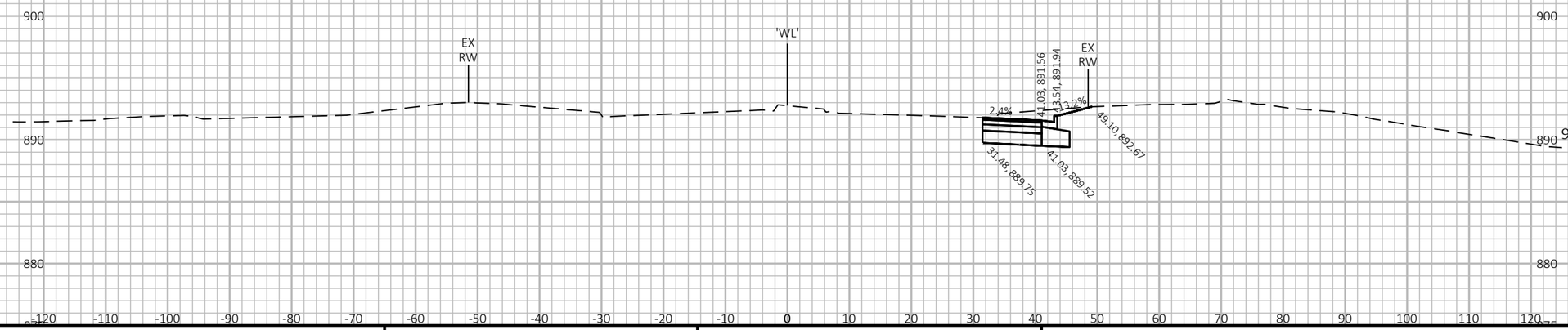
PLOT BY : BLAKE RIDENOUR

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49





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9

PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	CROSS SECTIONS: CROSS SECTIONS STH19 & WILLIAMSBURG	SHEET 255	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\090201-XS-STH19.DWG
LAYOUT NAME - 219

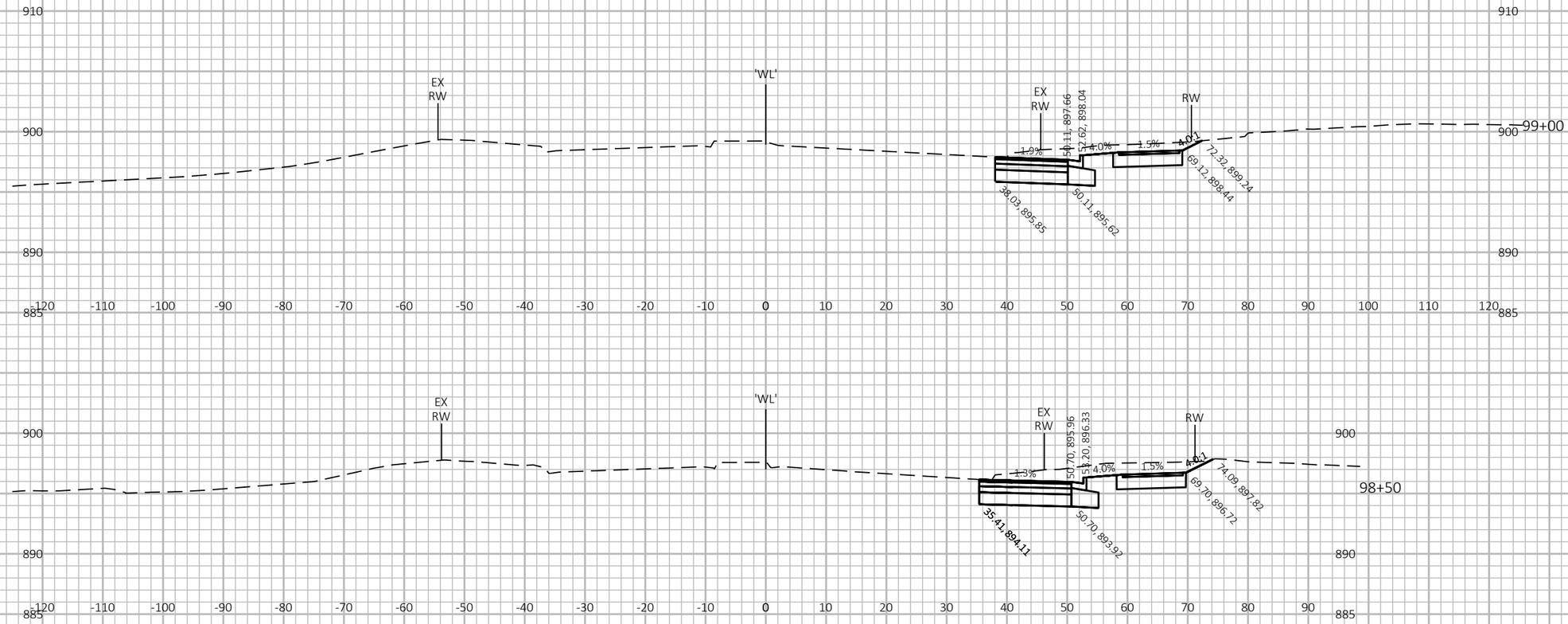
PLOT DATE : 3/9/2022 9:01 PM

PLOT BY : BLAKE RIDENOUR

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	CROSS SECTIONS: CROSS SECTIONS STH19 & WILLIAMSBURG	SHEET 256	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\090201-XS-STH19.DWG
LAYOUT NAME - 220

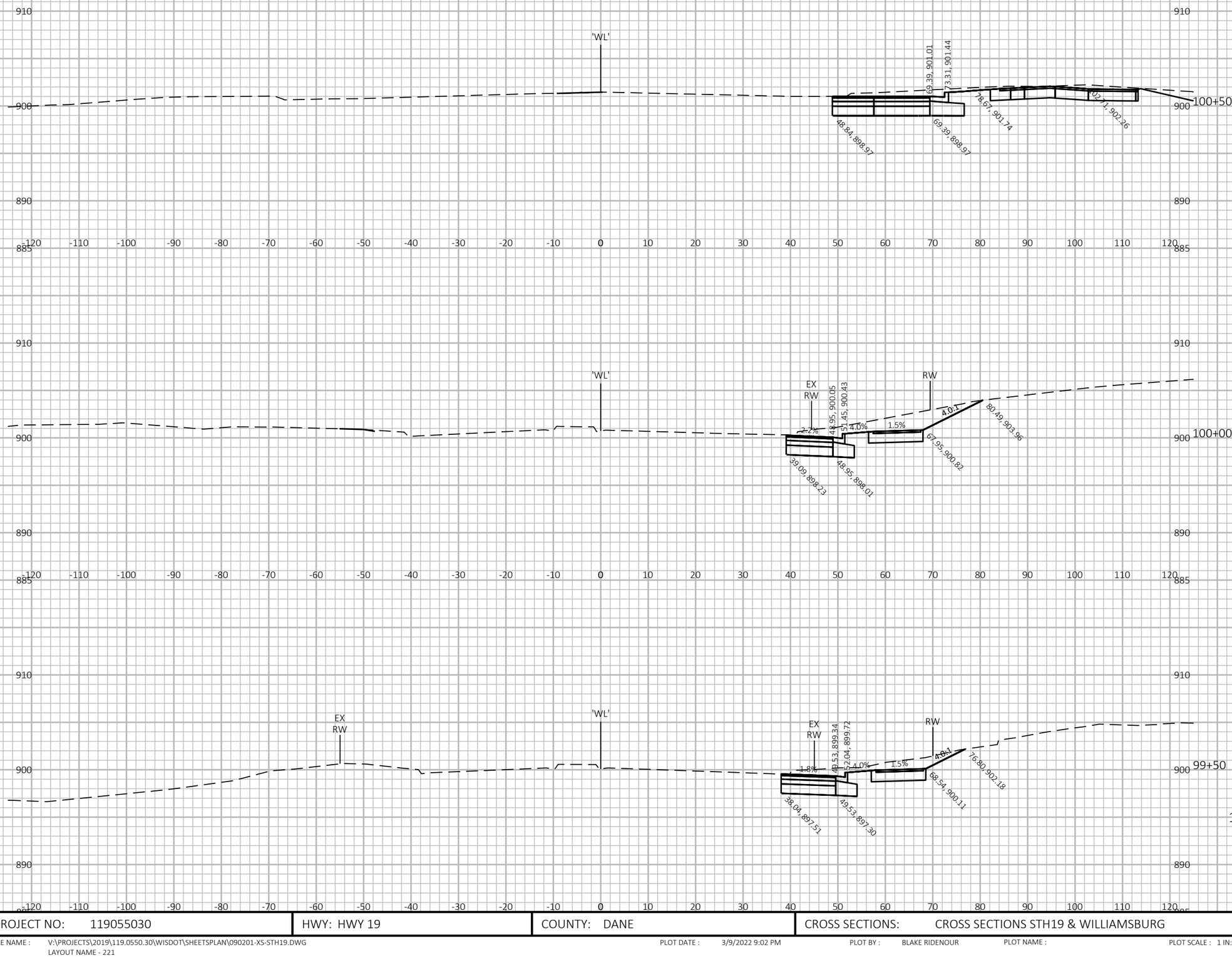
PLOT DATE : 3/9/2022 9:02 PM

PLOT BY : BLAKE RIDENOUR

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

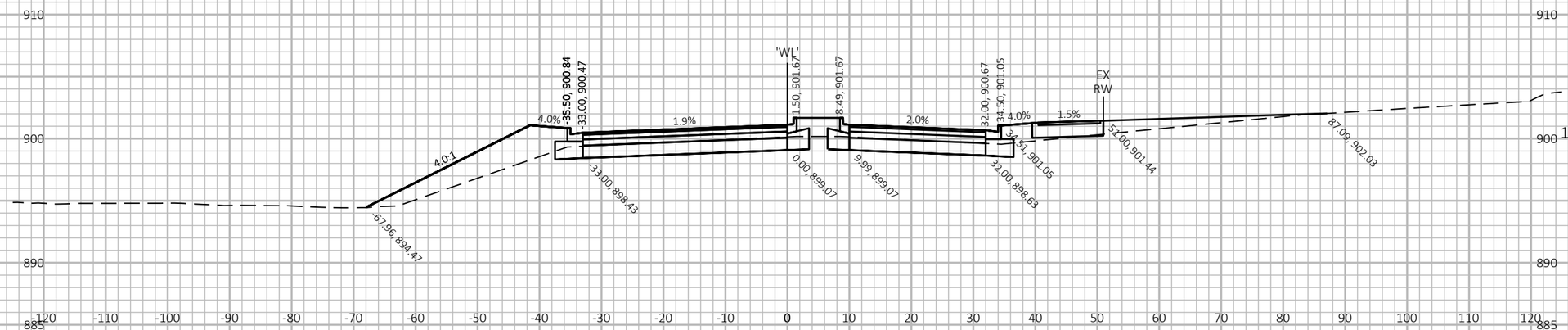


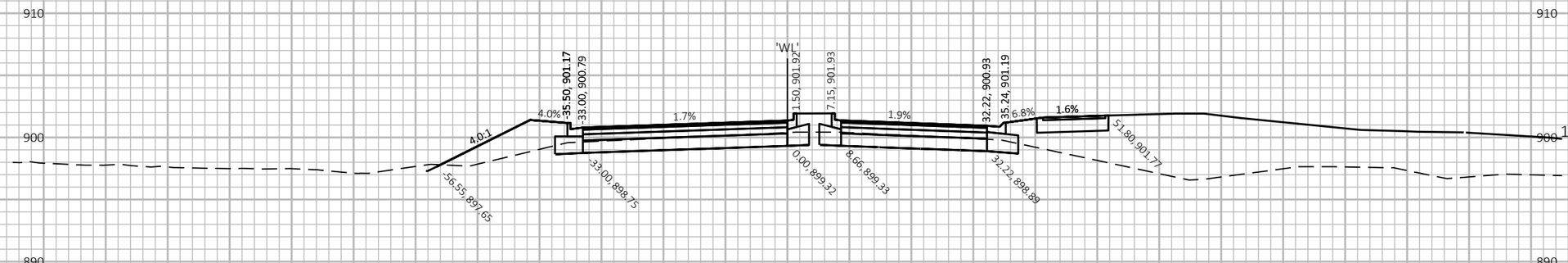
PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	CROSS SECTIONS: CROSS SECTIONS STH19 & WILLIAMSBURG	SHEET 257 E

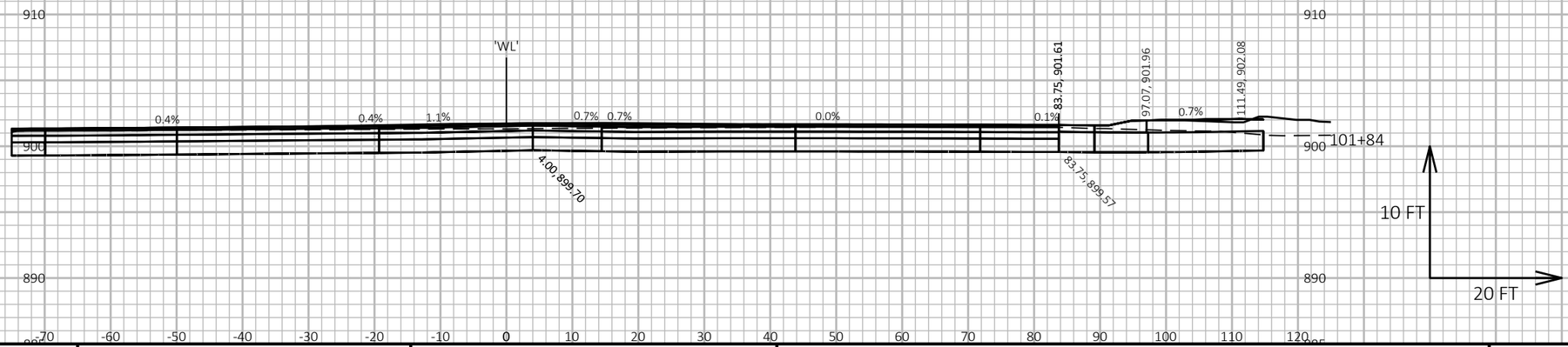
FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\090201-XS-STH19.DWG
LAYOUT NAME - 221

PLOT DATE : 3/9/2022 9:02 PM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49







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PROJECT NO: 119055030	HWY: HWY 19	COUNTY: DANE	CROSS SECTIONS: CROSS SECTIONS STH19 & WILLIAMSBURG	SHEET 258	E

FILE NAME : V:\PROJECTS\2019\119.0550.30\WISDOT\SHEETSPLAN\090201-XS-STH19.DWG
LAYOUT NAME - 222

PLOT DATE : 3/9/2022 9:03 PM PLOT BY : BLAKE RIDENOUR PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.