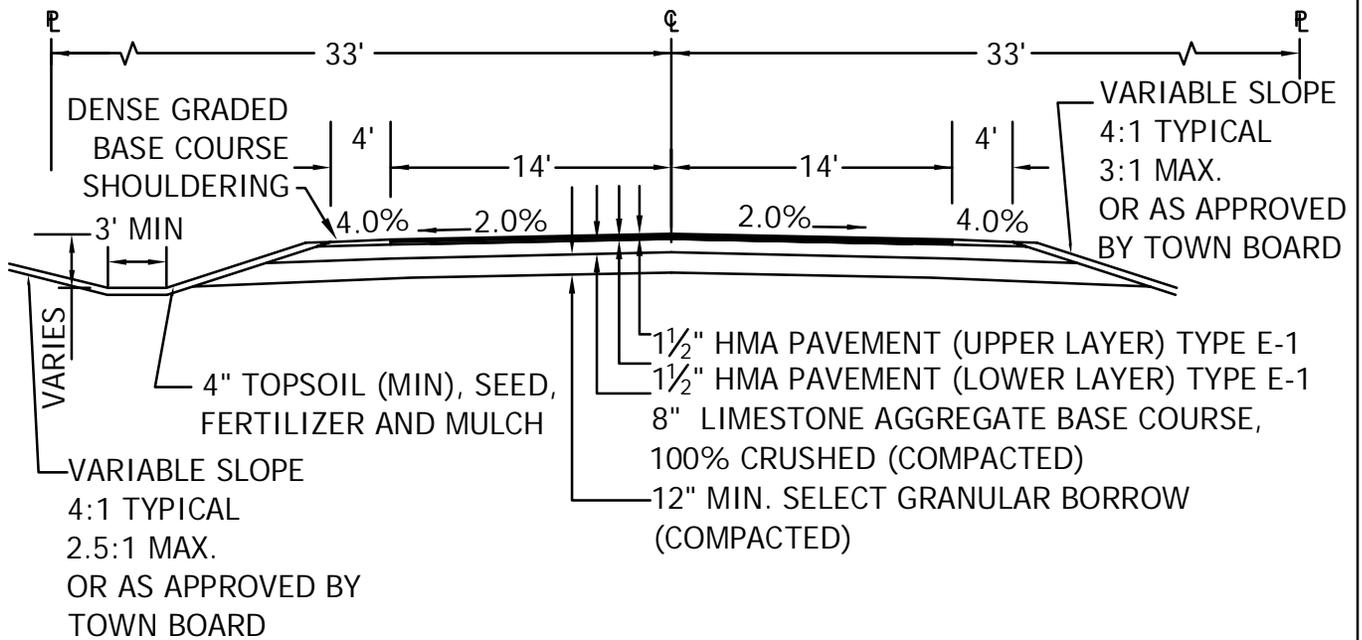


# **DETAIL PLATES**

**TOWN OF ST. JOSEPH, WISCONSIN**

**2016**





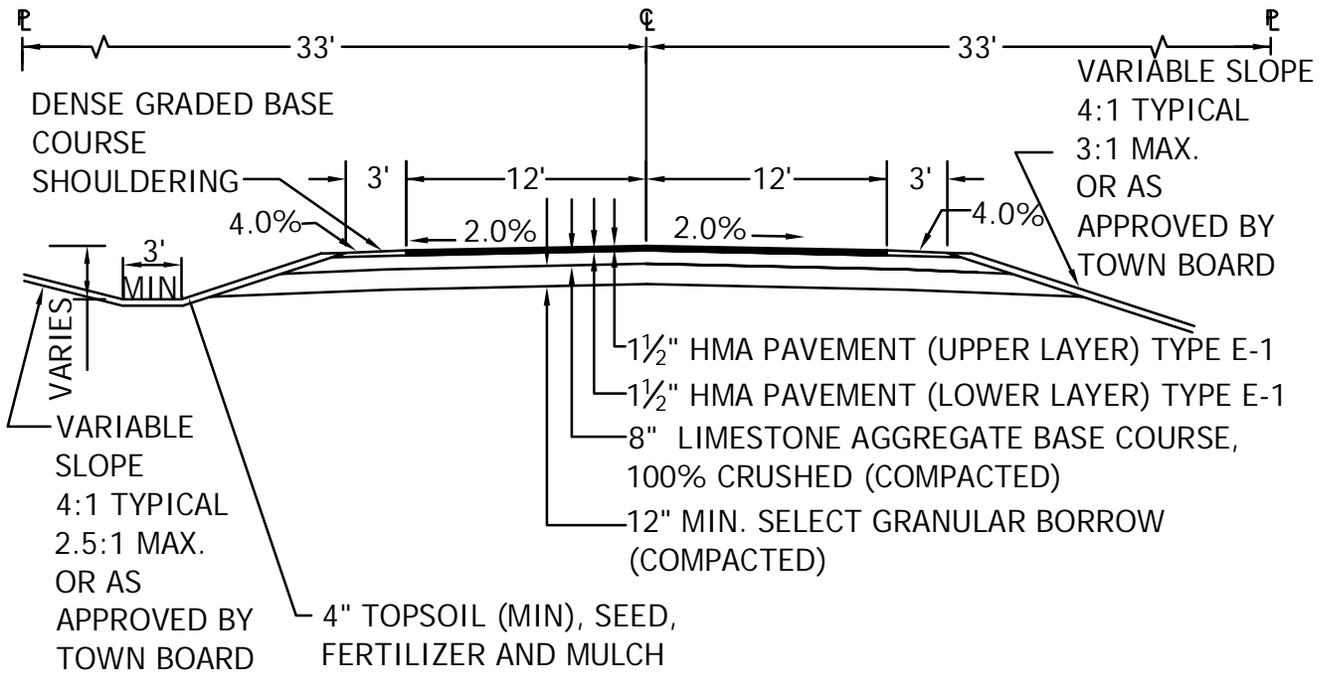
Notes:

1. Decomposable material shall not be used in construction.
2. Tack coat to be applied between asphalt lifts.
3. Intersection angle of driveway to road or road to road shall not be less than 75°.
4. Culverts to be 18" minimum size, or as approved by town board and installed with a minimum cover of 12" to the top of the select granular material. All culvert pipes shall be galvanized, corrugated steel, arch, or reinforced concrete in conformity with American Association of State Highway & Transportation Officials (AASHTO) Specification.
5. Roadway slopes as they enter other roads are limited to 2% grade for the first 50 ft and are measured from the edge of pavement. Exceeding this restriction will require town board approval.
6. Roadway slopes shall not exceed 8% in grade, or as specified by the Town of St. Joseph.
7. Suitable erosion control plans will be submitted to the town for review and approval with the preliminary and final plats. In addition, these plans will also be submitted to the St. Croix County Land and Conservation Division for their technical review and approval.
8. Various types of erosion control methods may be used but only with prior town board approval. The town prefers to control erosion with vegetation, barriers, and infiltration ponds.

COLLECTOR ROAD TYPICAL SECTION  
 TOWN OF ST. JOSEPH  
 WISCONSIN

LAST REVISION:  
 AUG 2016

PLATE NO.  
 RD-01



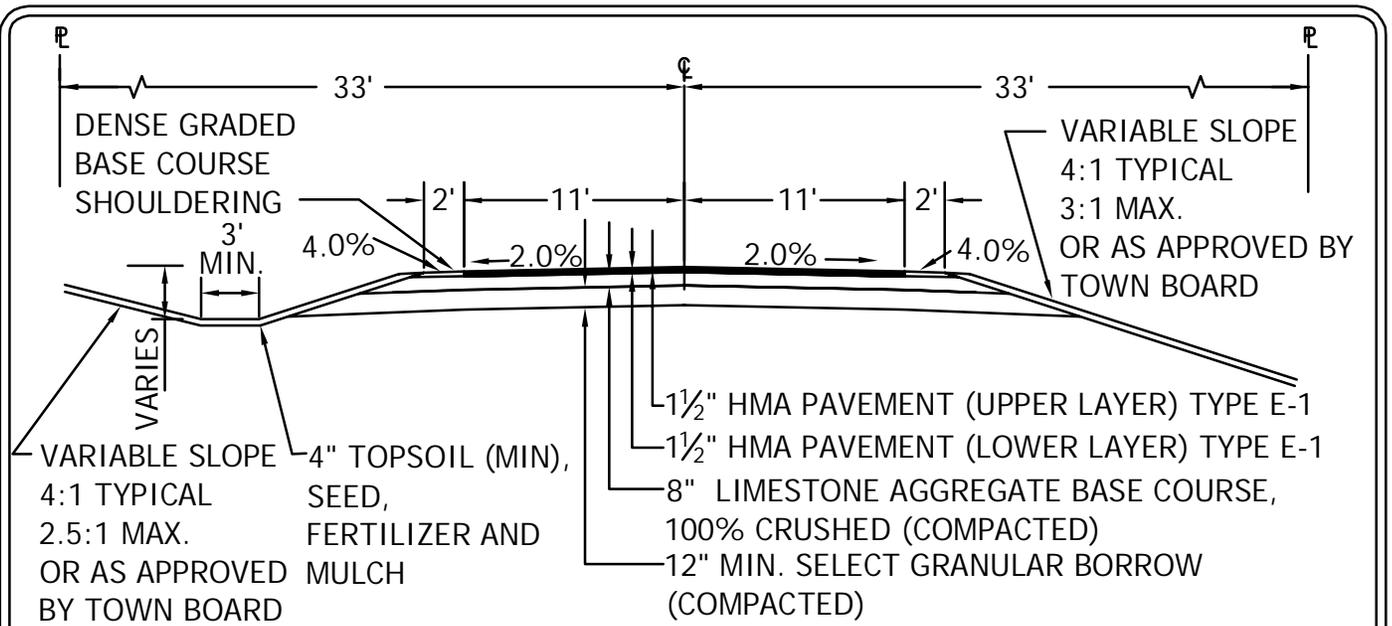
Notes:

1. Decomposable material shall not be used in construction.
2. Tack coat to be applied between asphalt lifts.
3. Intersection angle of driveway to road or road to road shall not be less than 75°.
4. Culverts to be 18" minimum size, or as approved by town board and installed with a minimum cover of 12" to the top of the select granular material. All culvert pipes shall be galvanized, corrugated steel, arch, or reinforced concrete in conformity with American Association of State Highway & Transportation Officials (AASHTO) Specification.
5. Roadway intersection slopes are limited to 2% grade for the first 50 ft and are measured from the edge of pavement. Exceeding this restriction will require town board approval.
6. Roadway slopes shall not exceed 8% in grade or as specified by the Town on St. Joseph.
7. Suitable erosion control plans will be submitted to the town for review and approval with the preliminary and final plats. In addition, these plans will also be submitted to the St. Croix County Land and Conservation Division for their technical review and approval.
8. Various types of erosion control methods may be used but only with prior town board approval. The town prefers to control erosion with vegetation, barriers, and infiltration ponds.

SUBCOLLECTOR ROAD TYPICAL SECTION  
 TOWN OF ST. JOSEPH  
 WISCONSIN

LAST REVISION:  
 AUG 2016

PLATE NO.  
 RD-02



Notes:

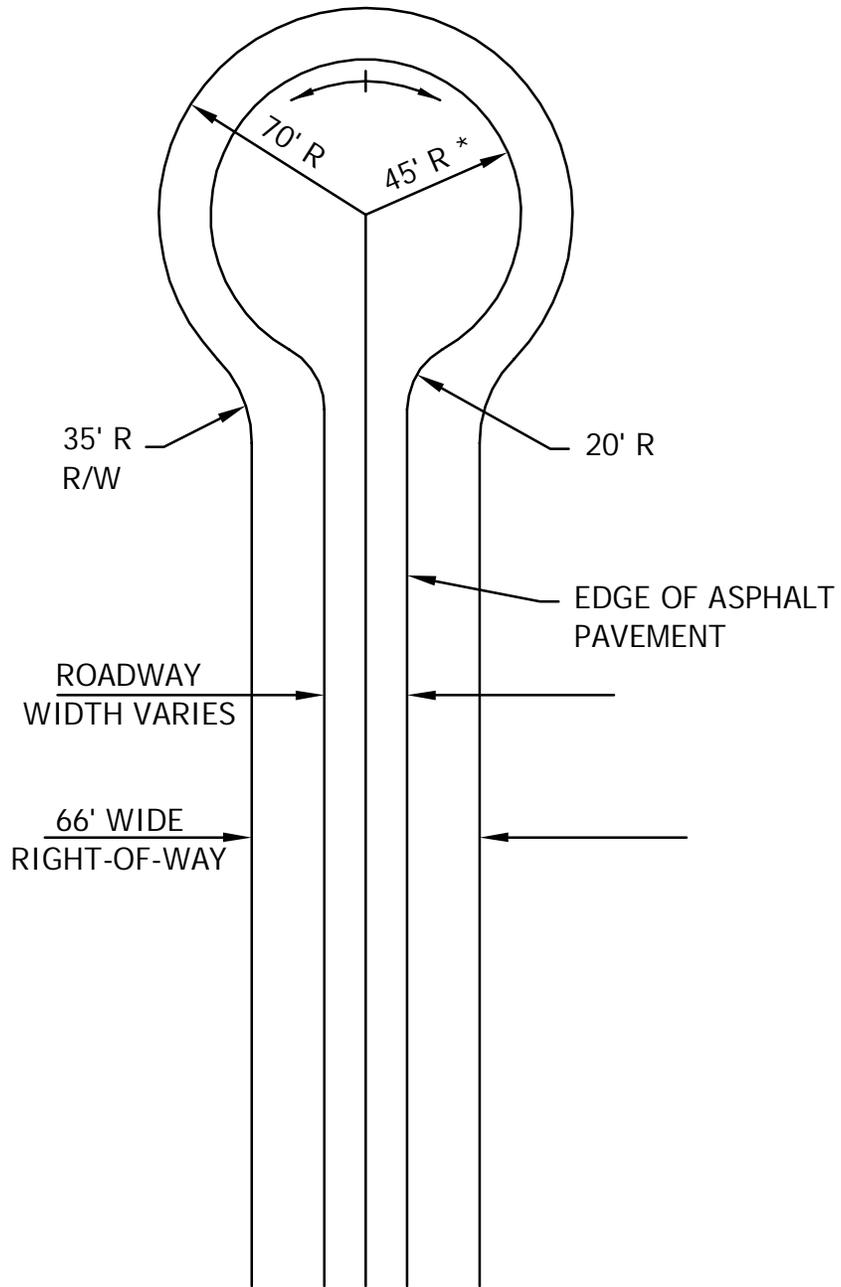
1. Decomposable material may not be used in construction.
2. Tack coat to be applied between asphalt lifts.
3. Intersection angle of driveway to road or road to road shall not be less than 75°.
4. Culverts to be 18" minimum size or as approved by town board, and installed with a minimum cover of 12" to the top of the select granular material. All culvert pipes shall be galvanized, corrugated steel, arch, or reinforced concrete in conformity with American Association of State Highway & Transportation Officials (AASHTO) Specifications.
5. Roadway intersection slopes as they enter other roads are limited to 2% grade for the first 50 ft and are measured from the edge of pavement. Exceeding this restriction will require town board approval.
6. Roadway slopes shall not exceed 8% in grade, or as specified by the Town of St. Joseph.
7. Suitable erosion control plans will be submitted to the town for review and approval with the preliminary and final plats. In addition, these plans will also be submitted to the St. Croix County Land and Conservation Division for their technical review and approval.
8. Various types of erosion control methods may be used but only with prior town board approval. The town prefers to control erosion with vegetation, barriers, and infiltration ponds.

ACCESS ROAD TYPICAL SECTION  
 TOWN OF ST. JOSEPH  
 WISCONSIN

LAST REVISION:  
 AUG 2016

PLATE NO.  
 RD-03

\* - 47' FOR COMMERCIAL ROADS

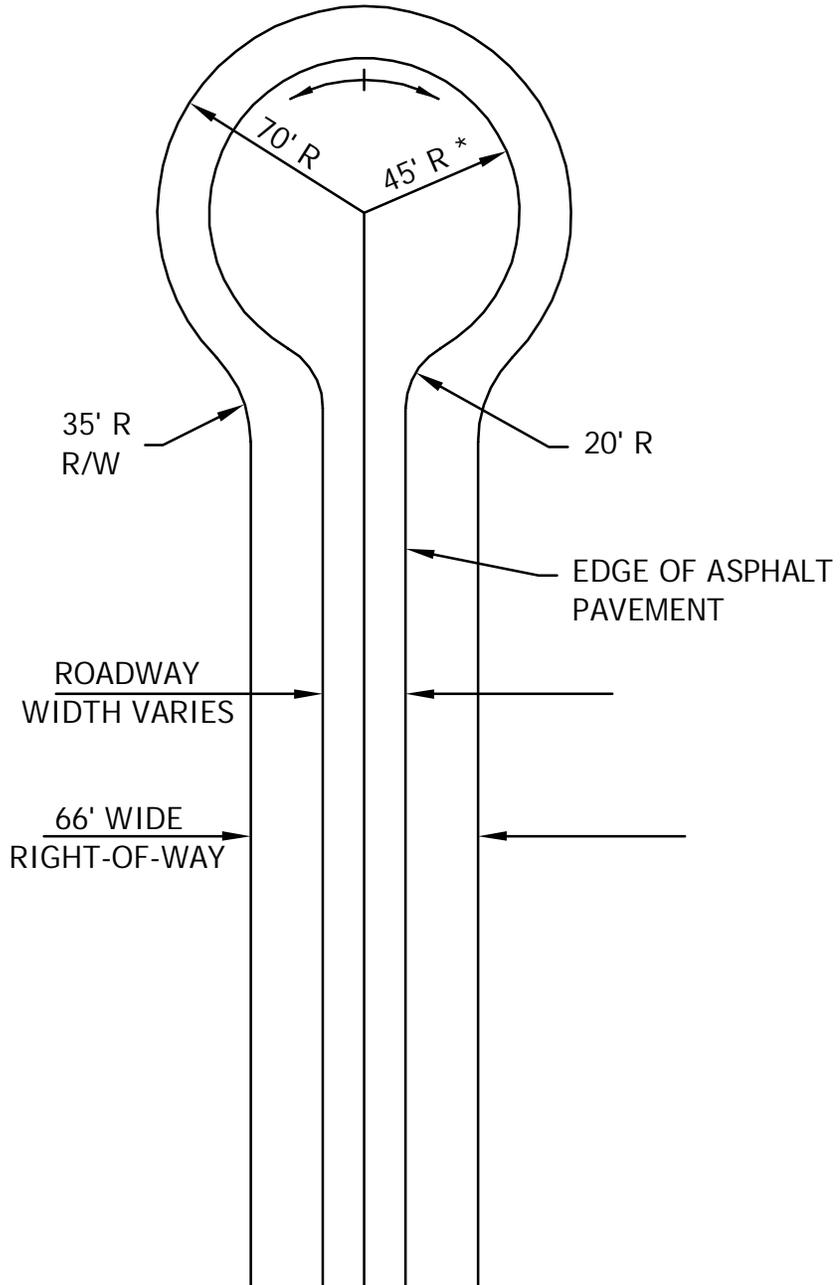


SUBCOLLECTOR ROAD CUL-DE-SAC  
TOWN OF ST. JOSEPH  
WISCONSIN

LAST REVISION:  
OCT 2016

PLATE NO.  
RD-04

\* - 47' FOR COMMERCIAL ROADS

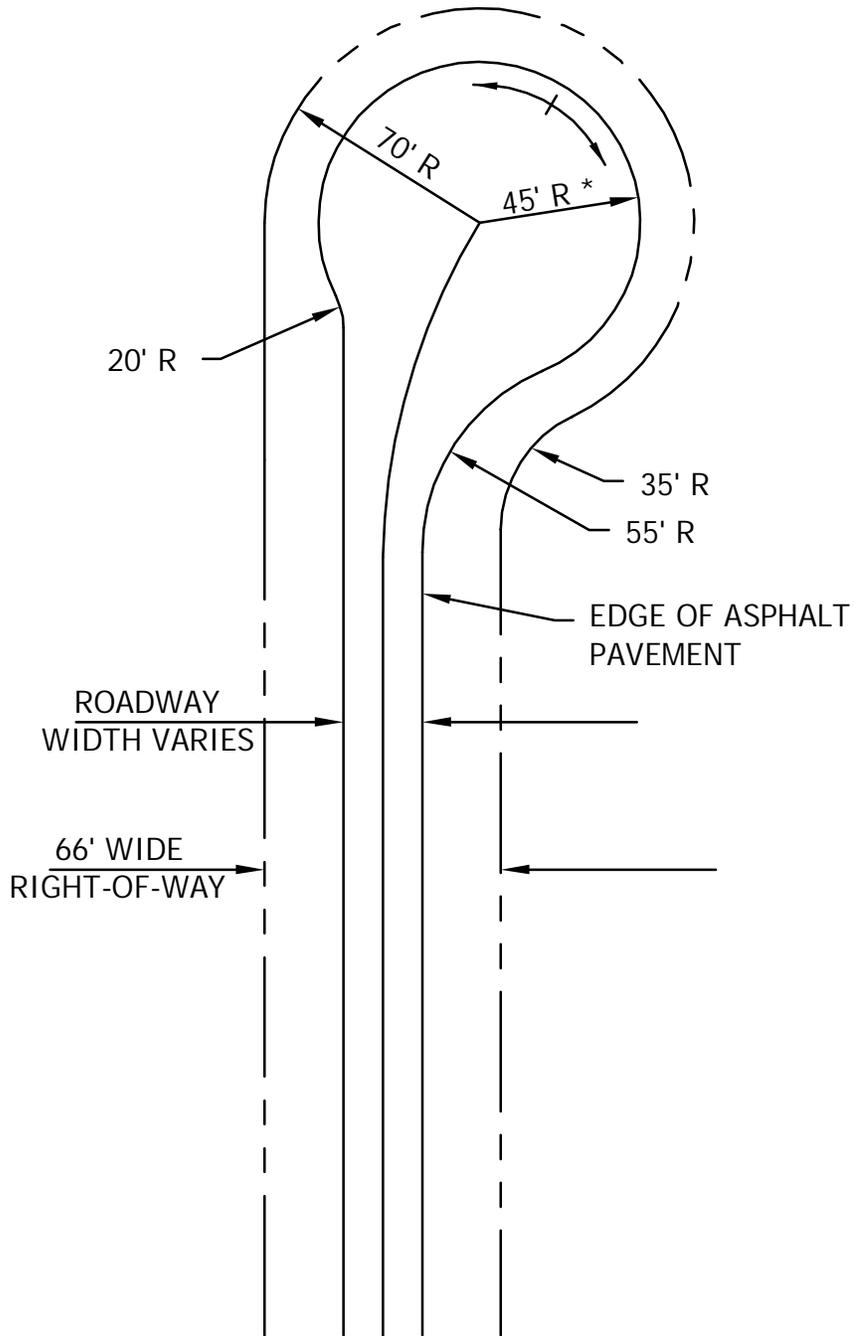


ACCESS ROAD CUL-DE-SAC  
TOWN OF ST. JOSEPH  
WISCONSIN

LAST REVISION:  
OCT 2016

PLATE NO.  
RD-05

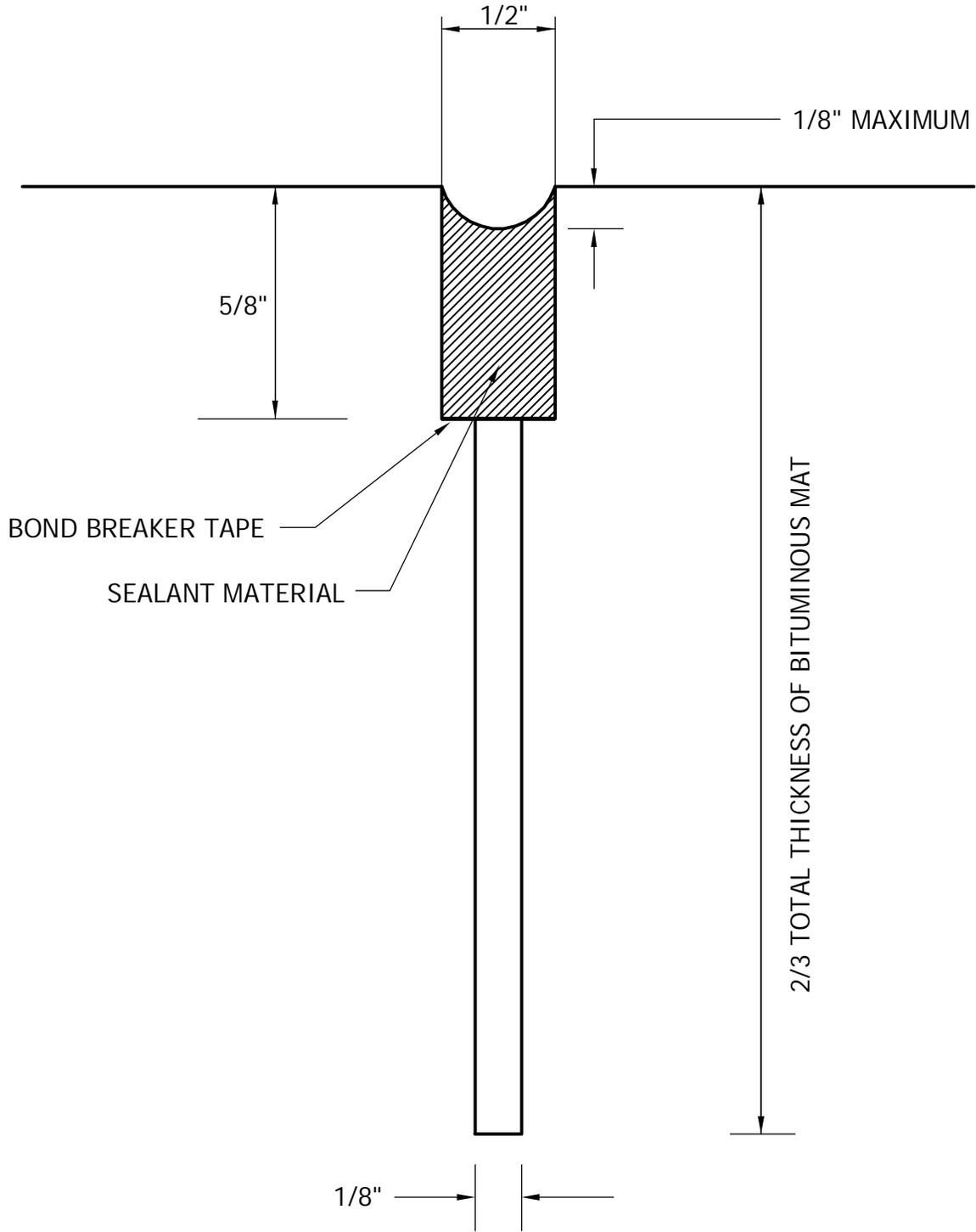
\* - 47' FOR COMMERCIAL ROADS



OFFSET CUL-DE-SAC FOR ACCESS OR  
SUBCOLLECTOR ROAD  
TOWN OF ST. JOSEPH  
WISCONSIN

LAST REVISION:  
OCT 2016

PLATE NO.  
RD-06

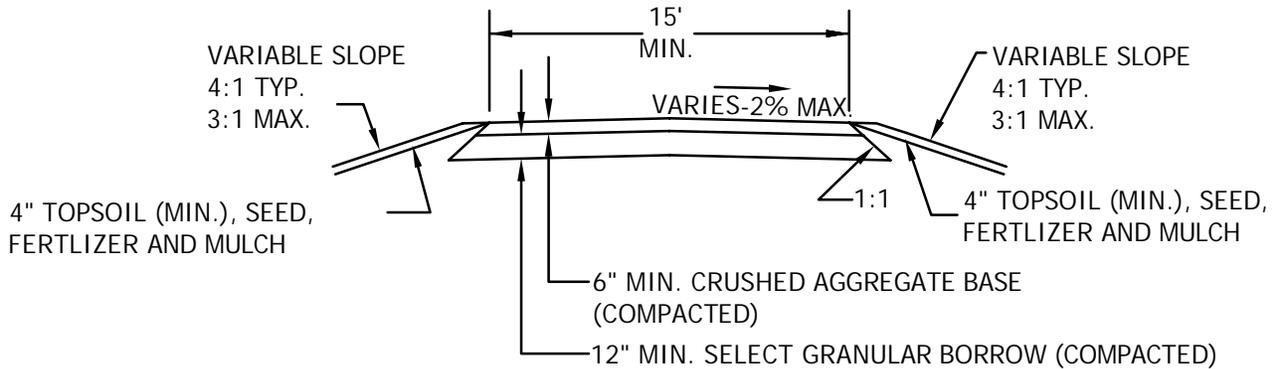


TYPICAL JOINT SECTION

BITUMINOUS JOINT SAW AND SEAL  
TOWN OF ST. JOSEPH  
WISCONSIN

LAST REVISION:  
AUG 2016

PLATE NO.  
RD-07



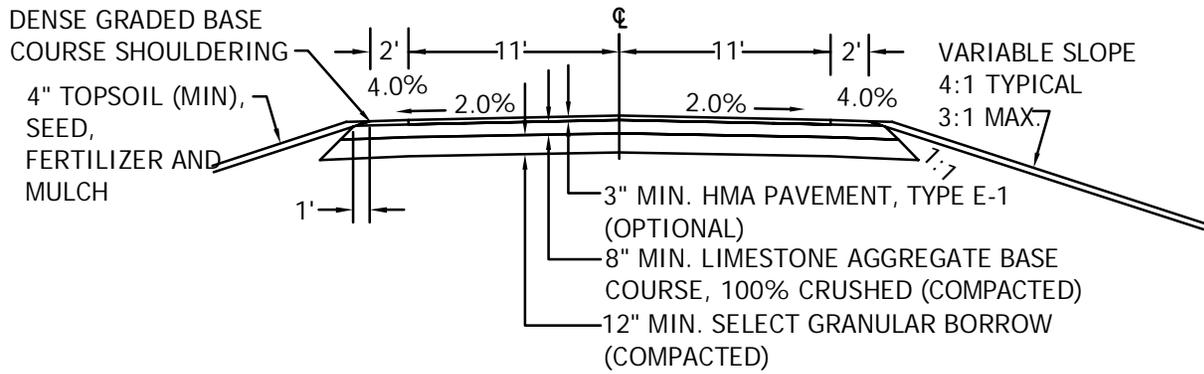
Notes:

1. Decomposable material shall not be used in construction.
2. If desired an asphaltic or concrete pavement at a minimum of 10 ft in width shall be centered on the 15 foot minimum aggregate base. Pavement thickness should be consistent with the town's required minimum weight load.
3. Driveways that require a culvert shall use a 15" minimum pipe, unless otherwise specified by the Town of St. Joseph, with a minimum cover of 12" to the top of the select granular material. All culvert pipes shall be galvanized, corrugated steel, arch, or reinforced concrete in conformity with WISDOT standards.
4. Intersection angle of driveway to road or road to road shall not be less than 75°.
5. All driveways shall have a width clearance of at least 15 ft, with a height clearance of at least 14 ft, and shall be maintained in such a way as to allow for adequate emergency vehicle access.
6. All driveways shall be constructed to the road right-of-way as part of the roadway construction. To qualify for a building permit, driveways must be extended not less than 50 ft in length from the edge of the traveled road surface into the lot. The final driveway must be constructed from the public roadway to the building location.
7. A minimum distance of 200 feet spacing shall exist between driveways and/or intersecting roadway as measured from centerline of driveways and/or roadway along the centerline of intersecting roadway.
8. All driveways in excess of 300 ft which terminate in a dead end shall have a 14 ft height clearance and shall terminate at a turnaround with either a minimum 45 ft radius or sufficient area and design to enable the turnaround of a tandem axle truck of at least 40 ft in length.
9. Driveways shall be constructed to sustain a minimum weight load of 9 tons/axle.
10. Driveway slopes as they enter other roads are limited to 2% grade for the first 50 feet and are measured from the edge of pavement or driving surface. Exceeding this restriction will require town board approval.
11. Remaining driveway slopes shall not exceed 8% in grade. Exceeding this restriction will require town board approval.
12. Approved erosion and sediment control measures per WISDOT's product acceptability list shall be installed and approved prior to, during and after construction. If applicable, suitable erosion and sediment control plans shall be submitted to the town for review and approval with the preliminary plat.

RESIDENTIAL DRIVEWAY  
TYPICAL SECTION  
TOWN OF ST. JOSEPH  
WISCONSIN

LAST REVISION:  
AUG 2016

PLATE NO.  
RD-08



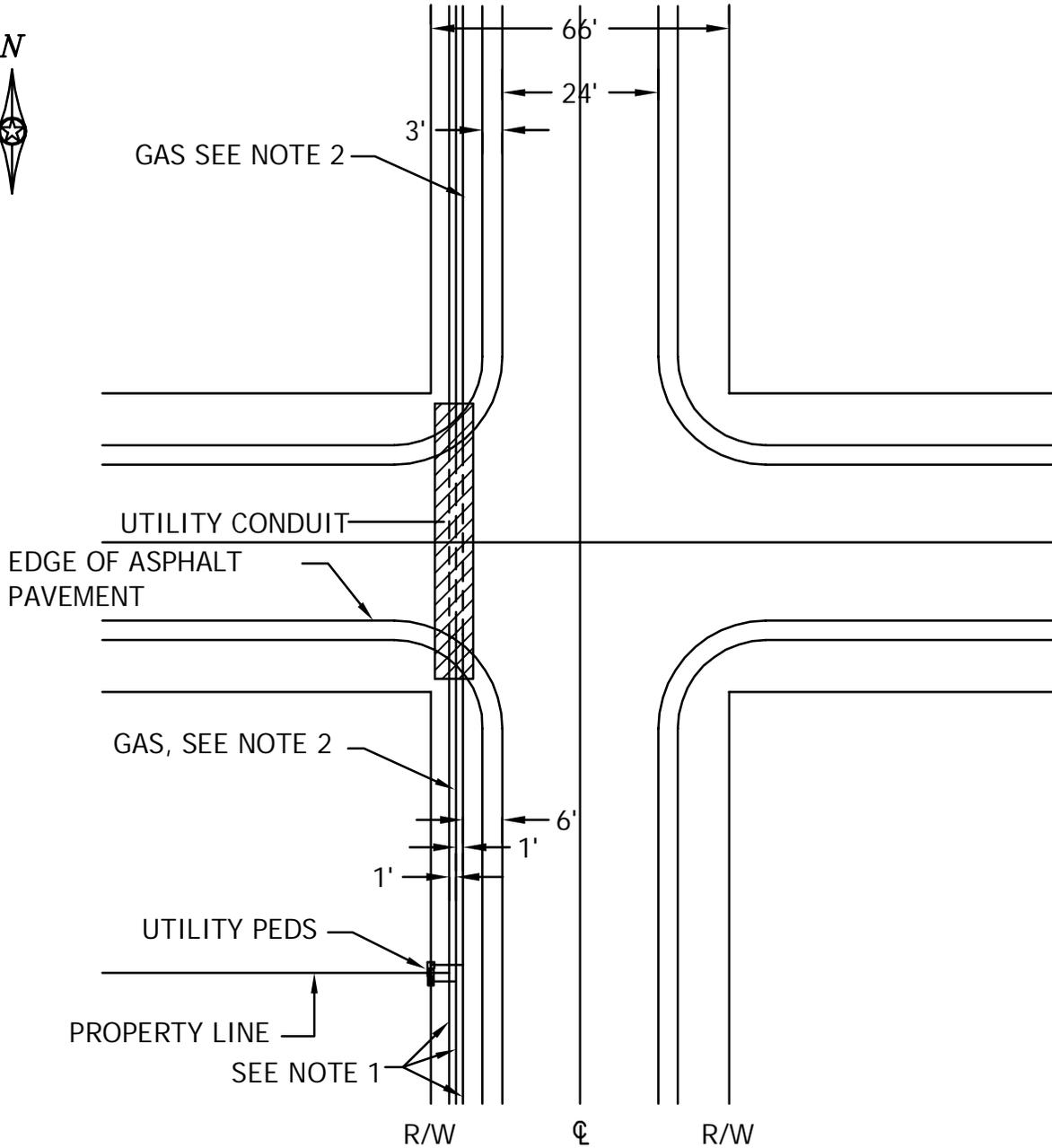
Notes:

1. Decomposable material shall not be used in construction.
2. Driveways that require a culvert shall use a 15" minimum pipe, unless otherwise specified by the Town of St. Joseph, with a minimum cover of 12" to the top of the select granular material. All culvert pipes shall be galvanized, corrugated steel, arch, or reinforced concrete in conformity with WISDOT standards.
3. Intersection angle of driveway to road or road to road shall not be less than 75°.
4. A double residential driveway shall be constructed from the road to the right-of-way line. The remaining shared driveways shall conform to either this detail plate or the residential driveway plate RD-08 as determined by the Town Board.
5. A minimum distance of 200 feet spacing shall exist between driveways and/or intersecting roadway as measured from centerline of driveways and/or intersecting roadway along the centerline of intersecting roadway.
6. All driveways in excess of 300 ft which terminate in a dead end shall have a 14 ft height clearance and should terminate at a turnaround with either a minimum 45 ft radius or sufficient area and design to enable the turnaround of a tandem axle truck of at least 40 ft in length.
7. Driveways shall be constructed to sustain a minimum weight load of 9 tons/axle.
8. Driveway slopes as they enter other roads are limited to 2% grade for the first 50 ft and are measured from the edge of pavement or driving surface. Exceeding this restriction will require town board approval.
9. Remaining driveway slopes shall not exceed 8% in grade. Exceeding this restriction will require town board approval.
10. Approved erosion and sediment control measures per WISDOT's product acceptability list shall be installed and approved prior to, during and after construction. If applicable, suitable erosion and sediment control plans shall be submitted to the town for review and approval with the preliminary plat.

DOUBLE RESIDENTIAL DRIVEWAY  
TYPICAL SECTION  
TOWN OF ST. JOSEPH  
WISCONSIN

LAST REVISION:  
AUG 2016

PLATE NO.  
RD-09



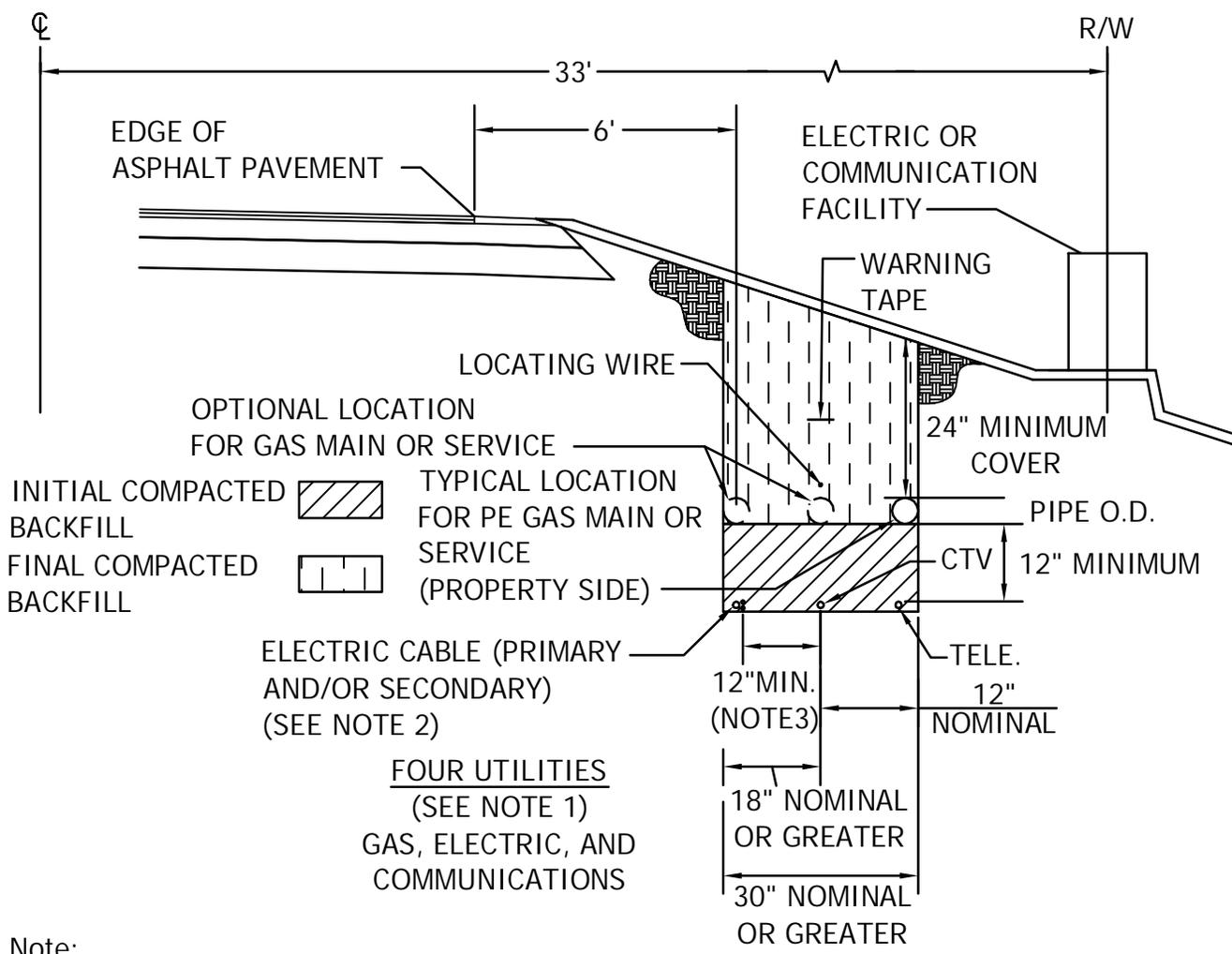
Note:

1. See plate no. RD-11 for typical private utility joint trench construction detail.
2. Gas typically located vertically over ctv, or alternatively over electric or telephone lines.
3. Utility conduit placed before street construction.

TYPICAL UTILITY LOCATIONS  
TOWN OF ST. JOSEPH  
WISCONSIN

LAST REVISION:  
AUG 2016

PLATE NO.  
RD-10



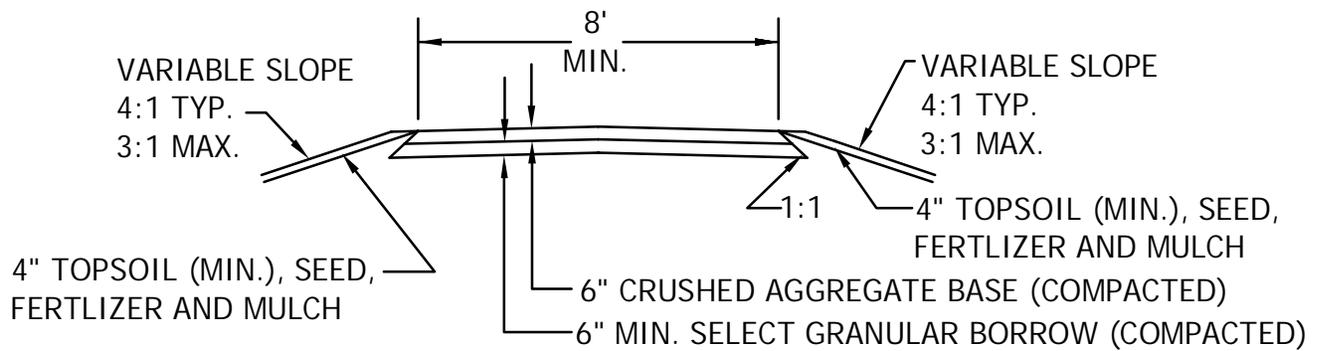
**Note:**

1. Communication cables may be buried with random separation provided all parties are in agreement.
2. Electric cables may be buried with random separation provided all parties involved are in agreement; however, 3 phase and 1 phase cables should be separated (1" or more apart) preferably on opposite sides of the trench.
3. Horizontal or vertical separation between electric cables and communication cables should be 12" minimum. Vertical clearance between gas pipe and cables should be 12" minimum.
4. Horizontal separation between gas pipes and cables at the same level should be a minimum of 12" to 24".
5. Warning tape if used shall be installed using methods agreed upon by each of the utility companies involved.
6. Locating wire shall be installed with gas pipe (and with any other cables or piping not having a metallic content that can be used for magnetic locating) using standard installation methods.

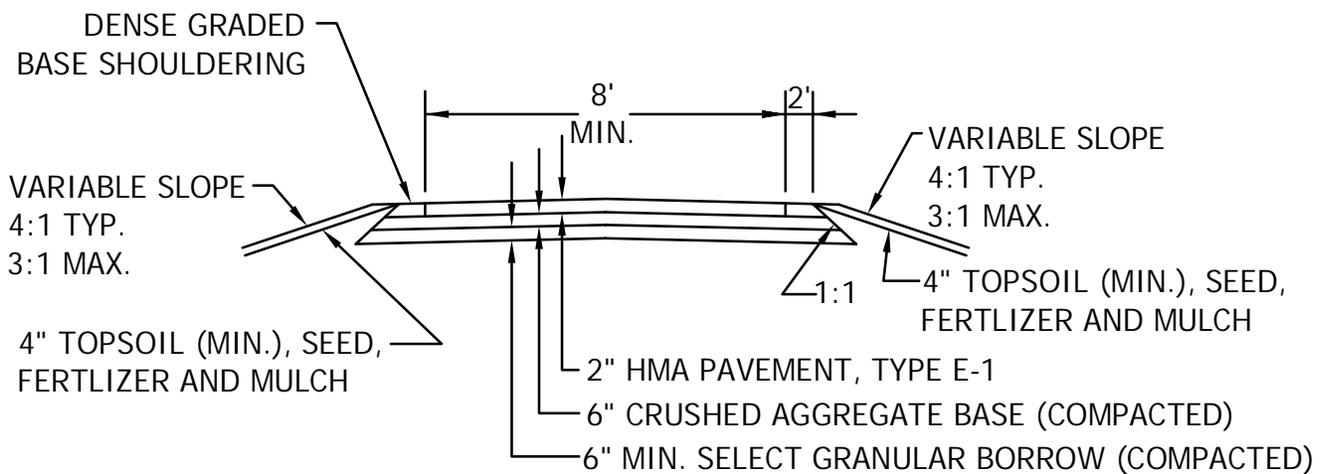
**TYPICAL UTILITY  
 JOINT TRENCH CONSTRUCTION  
 TOWN OF ST. JOSEPH  
 WISCONSIN**

LAST REVISION:  
 AUG 2016

PLATE NO.  
 RD-11



GRAVEL TRAIL SECTION



ASPHALT TRAIL SECTION

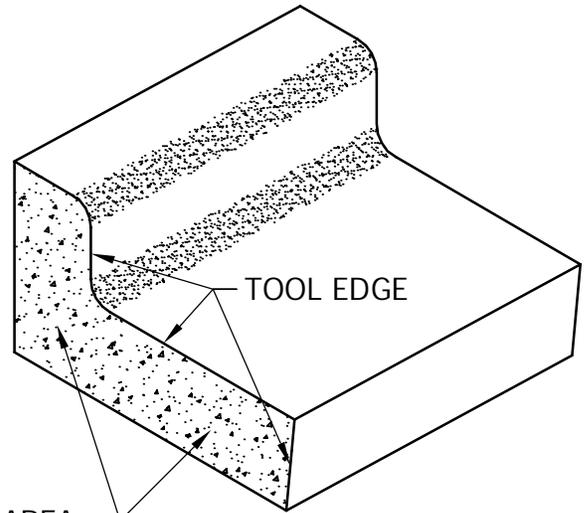
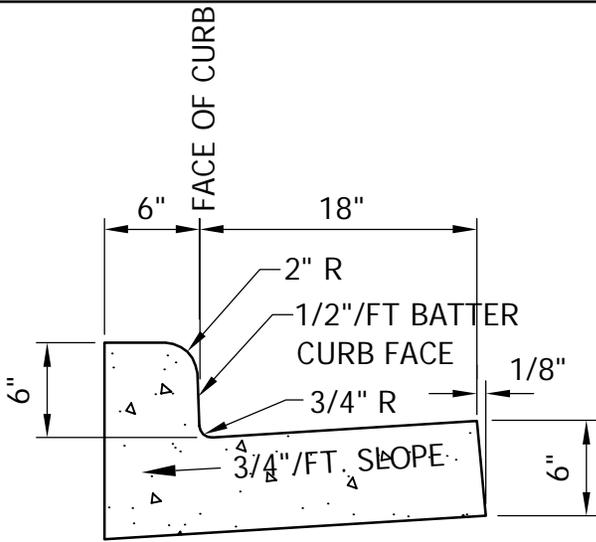
Notes:

1. Decomposable material shall not be used in construction.
2. 2" asphaltic pavement type E-1 at a minimum of 8 ft in width to be used on paved trails only.
3. All trails shall be designed to ADA requirements, or as specified by the Town of St. Joseph.
4. Suitable erosion control plans will be submitted to the town for review and approval with the preliminary and final plats. In addition, these plans will also be submitted to the St. Croix County Land and Conservation Division for their technical review and approval. Various types of erosion control methods may be used but only with prior town board approval. The town prefers to control erosion with vegetation, barriers, and infiltration ponds.

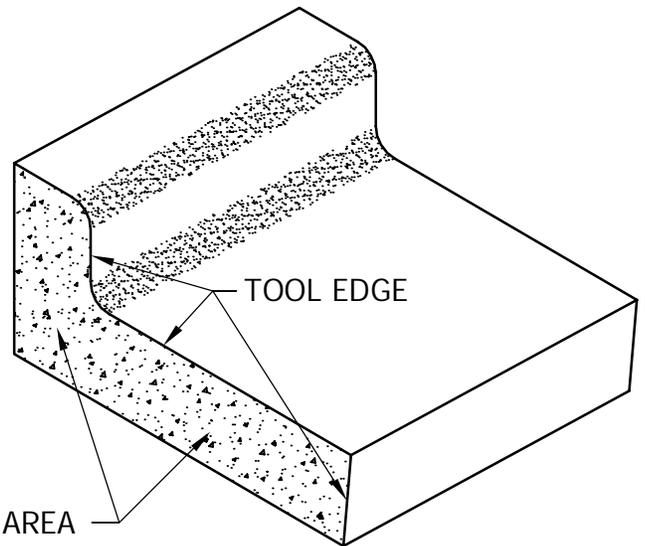
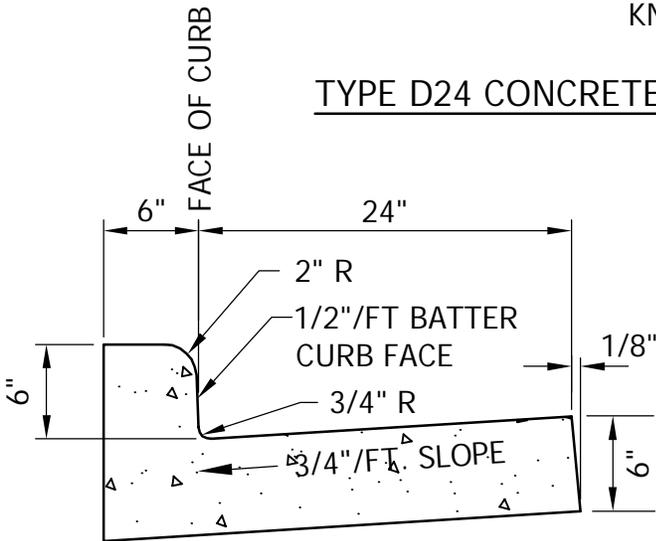
TRAIL TYPICAL SECTION  
TOWN OF ST. JOSEPH  
WISCONSIN

LAST REVISION:  
AUG 2016

PLATE NO.  
RD-12



TYPE D24 CONCRETE CURB & GUTTER



TYPE D30 CONCRETE CURB & GUTTER

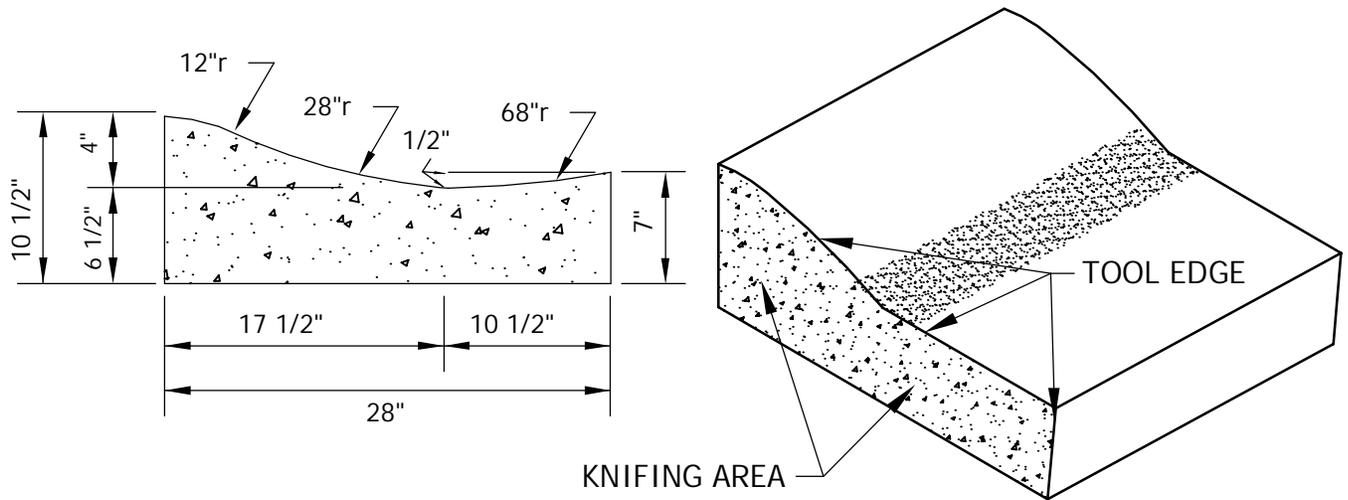
NOTES:

1. ALL EXPANSION AND CONSTRUCTION JOINTS SHALL BE TOOLED ALONG ENTIRE TOP AND FACE OF CURB AND GUTTER AND KNIFED THROUGH ENTIRE DEPTH.
2. FOR CURB & GUTTER IN AREA OF PEDESTRIAN RAMP, SEE DETAIL PLATE RD-19.

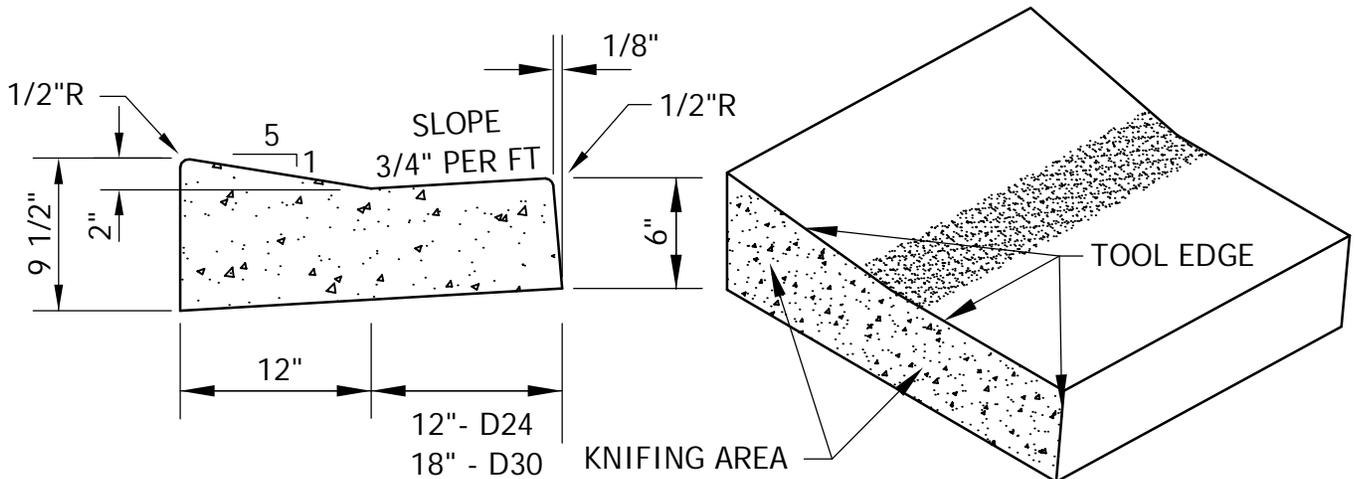
CONCRETE CURB & GUTTER  
TOWN OF ST. JOSEPH  
WISCONSIN

LAST REVISION:  
AUG 2016

PLATE NO.  
RD-13



SURMOUNTABLE



DRIVEWAY

NOTES:

1. ALL EXPANSION AND CONSTRUCTION JOINTS SHALL BE TOOLED ALONG ENTIRE TOP AND FACE OF CURB AND GUTTER AND KNIFED THROUGH ENTIRE DEPTH.
2. FOR CURB & GUTTER IN AREAS OF PEDESTRIAN RAMP, SEE DETAIL PLATE RD-19.

SURMOUNTABLE AND DRIVEWAY  
CURB & GUTTER  
TOWN OF ST. JOSEPH  
WISCONSIN

LAST REVISION:  
AUG 2016

PLATE NO.  
RD-14

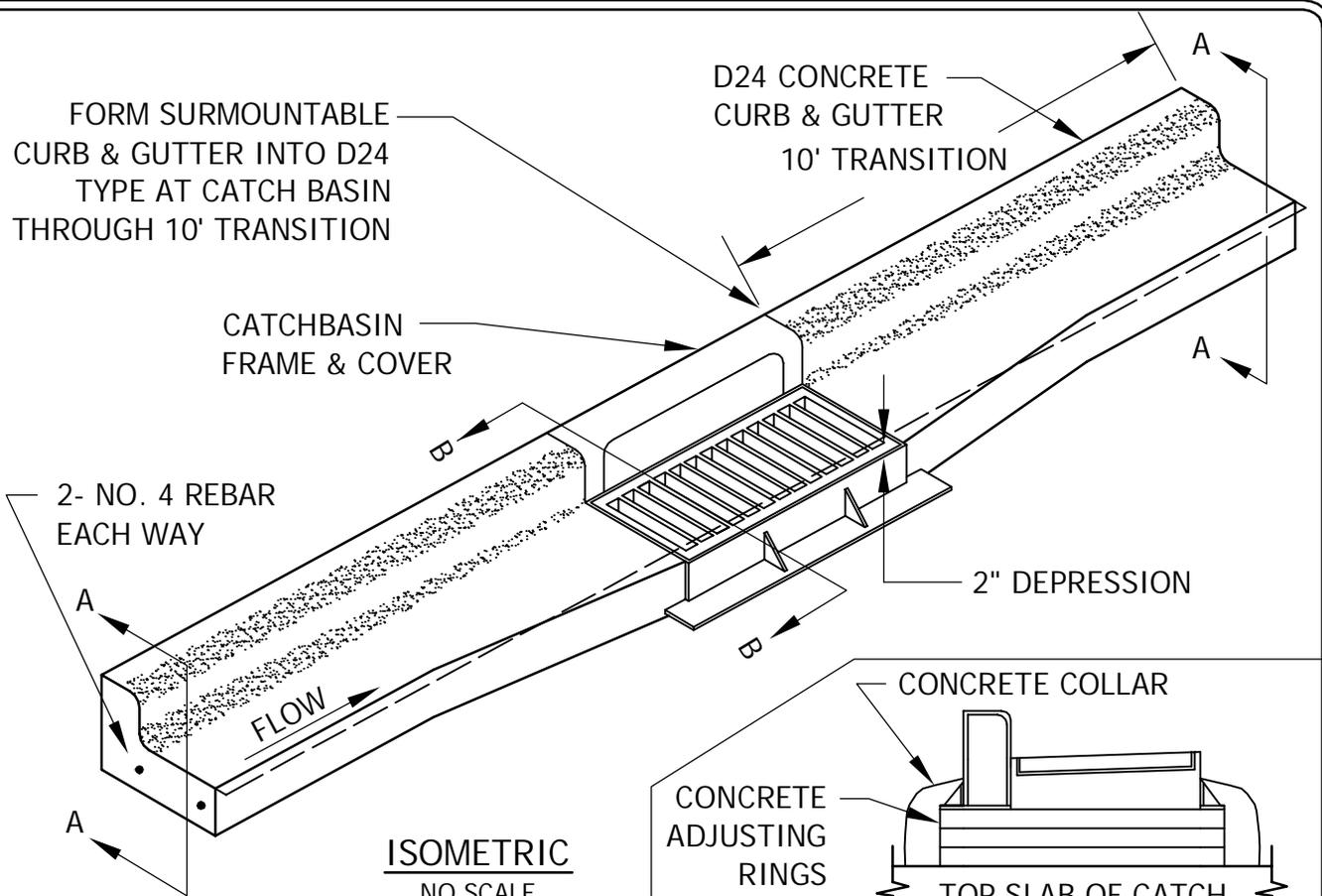
FORM SURMOUNTABLE  
CURB & GUTTER INTO D24  
TYPE AT CATCH BASIN  
THROUGH 10' TRANSITION

D24 CONCRETE  
CURB & GUTTER  
10' TRANSITION

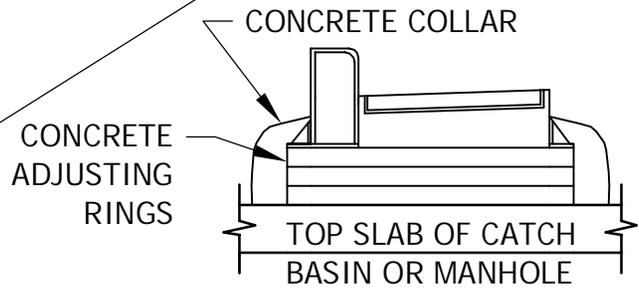
CATCHBASIN  
FRAME & COVER

2- NO. 4 REBAR  
EACH WAY

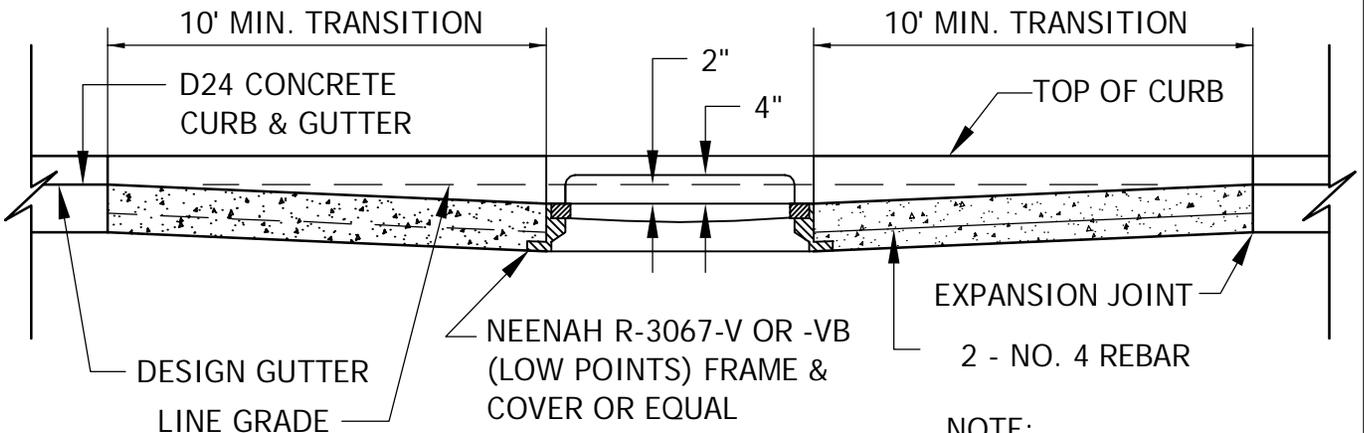
2" DEPRESSION



ISOMETRIC  
NO SCALE



SECTION B-B  
NO SCALE



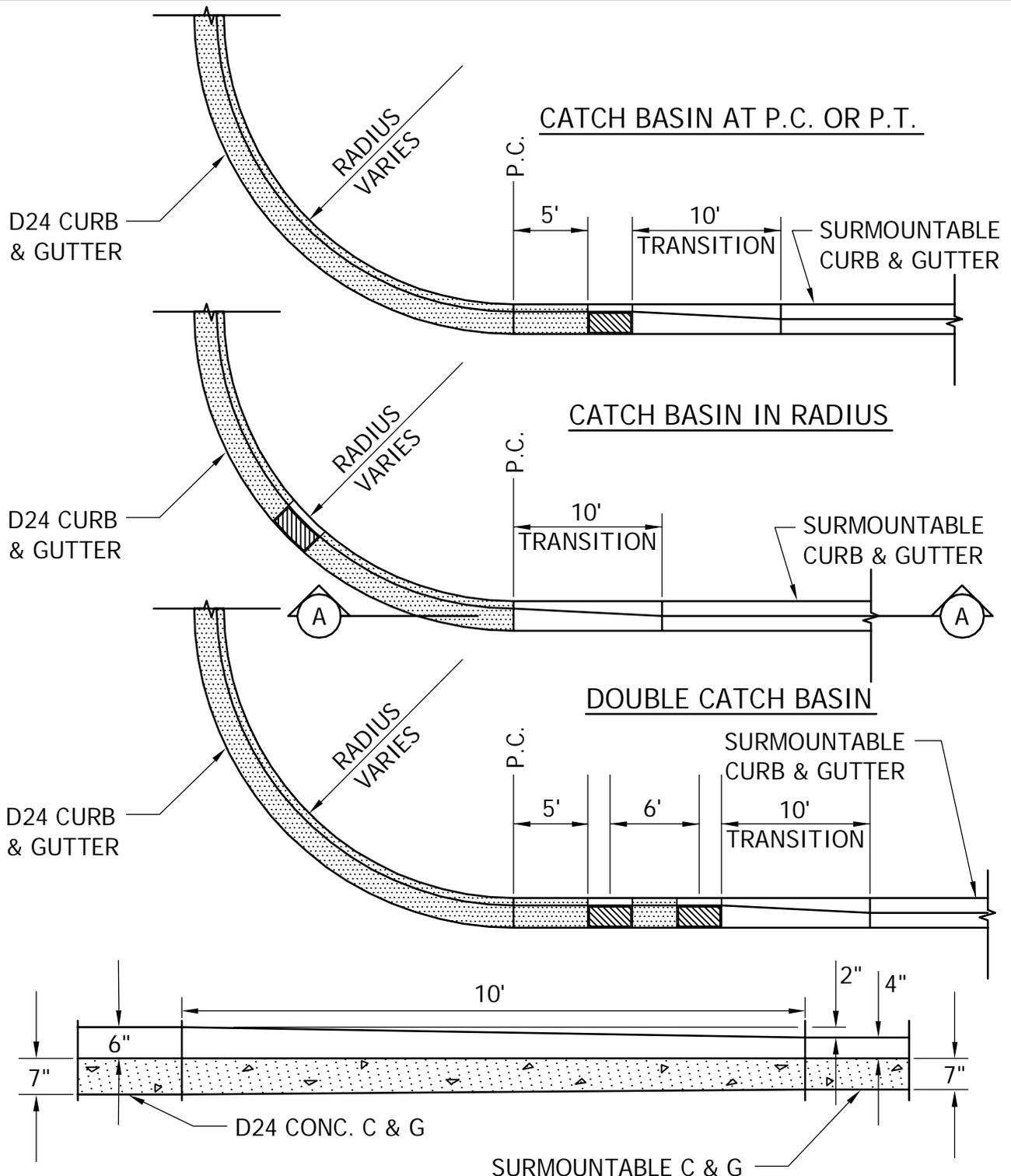
SECTION A-A  
NO SCALE

NOTE:  
EXPANSION JOINTS 10' MIN.  
FROM CATCH BASINS

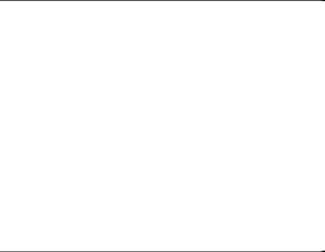
CURB & GUTTER CONSTRUCTION  
AT CATCH BASIN  
TOWN OF ST. JOSEPH  
WISCONSIN

LAST REVISION:  
AUG 2016

PLATE NO.  
RD-15



**SECTION A-A** **NOTE: ALL RADII "D" STYLE**



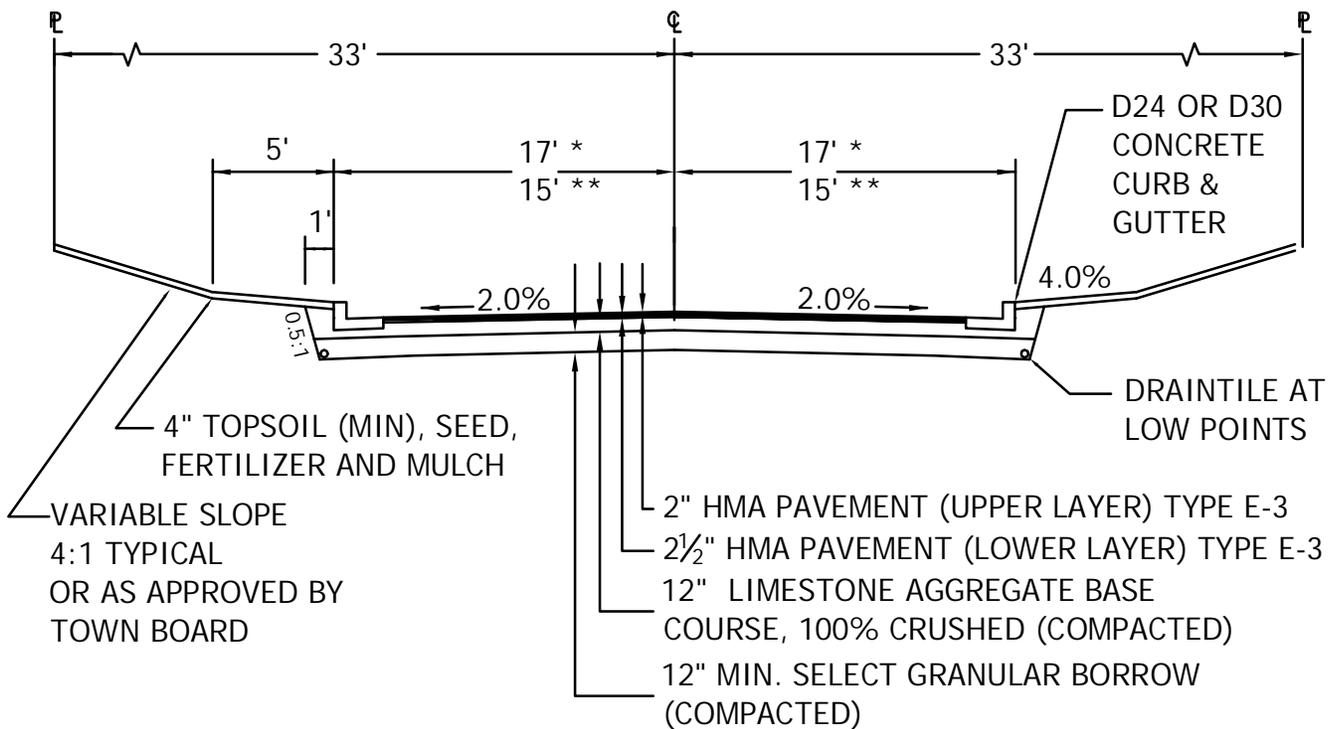
**CONCRETE CURB & GUTTER TRANSITION**  
**TOWN OF ST. JOSEPH**  
**WISCONSIN**

LAST REVISION:  
 AUG 2016

PLATE NO.  
**RD-16**

\* - SUBCOLLECTOR ROAD

\*\* - ACCESS ROAD



Notes:

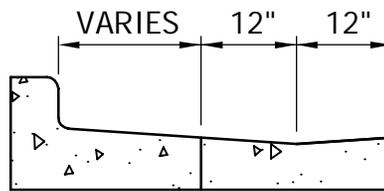
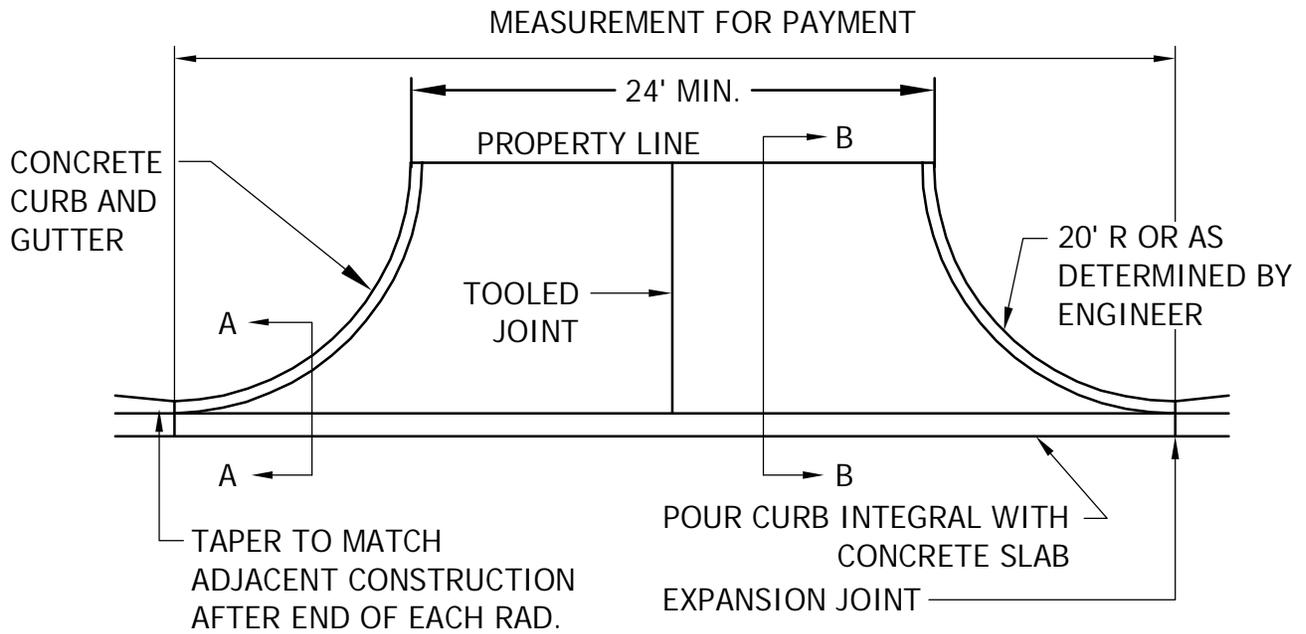
1. Decomposable material shall not be used in construction.
2. The typical section above is a minimum recommendation. Each commercial roadway section must be appropriately designed to accommodate anticipated traffic volumes and vehicle distributions. Design section is subject to review by the Town Engineer.
3. Tack coat to be applied between asphalt lifts.
4. Intersection angle of driveway to road or road to road shall not be less than 75°.
5. Storm sewer system must be designed for a 10-yr, 24-hr rainfall event. All storm sewer pipe must be Reinforced Concrete Pipe as specified. Perforated PVC drain tile pipe is required 50' each way of all catch basins at low points.
6. Roadway slopes as they enter other roads are limited to 2% grade for the first 50 ft and are measured from the edge of pavement. Exceeding this restriction will require town board approval.
7. Roadway slopes shall not exceed 6% in grade, or as specified by the Town of St. Joseph.
8. Suitable erosion control plans will be submitted to the town for review and approval with the preliminary and final plats. In addition, these plans will also be submitted to the St. Croix County Land and Conservation Division for their technical review and approval.
9. Various types of erosion control methods may be used but only with prior town board approval. The town prefers to control erosion with vegetation, barriers, and infiltration ponds.

COMMERCIAL URBAN ROAD  
TYPICAL SECTION  
TOWN OF ST. JOSEPH  
WISCONSIN

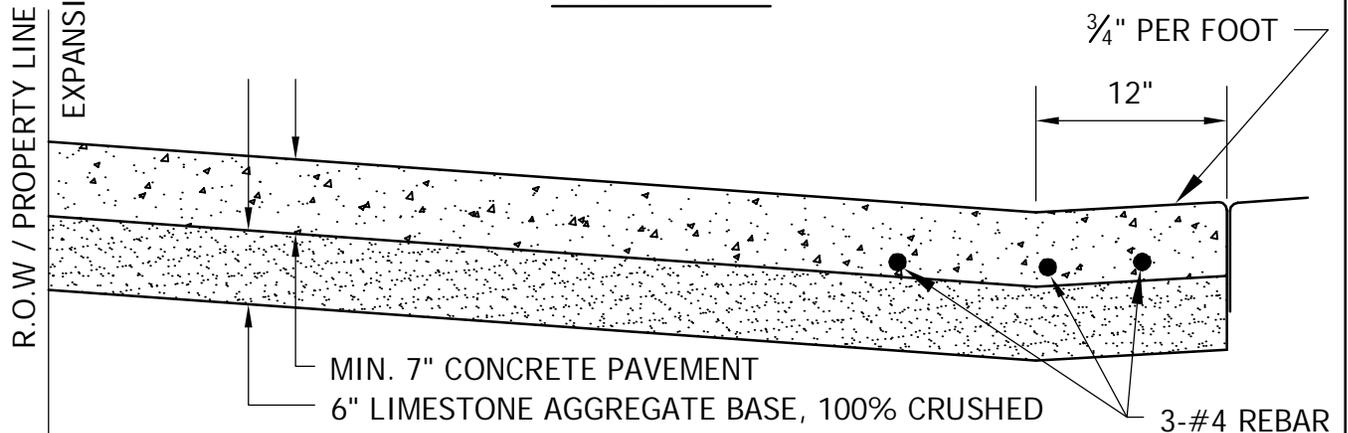
LAST REVISION:  
AUG 2016

PLATE NO.  
RD-17





SECTION A-A

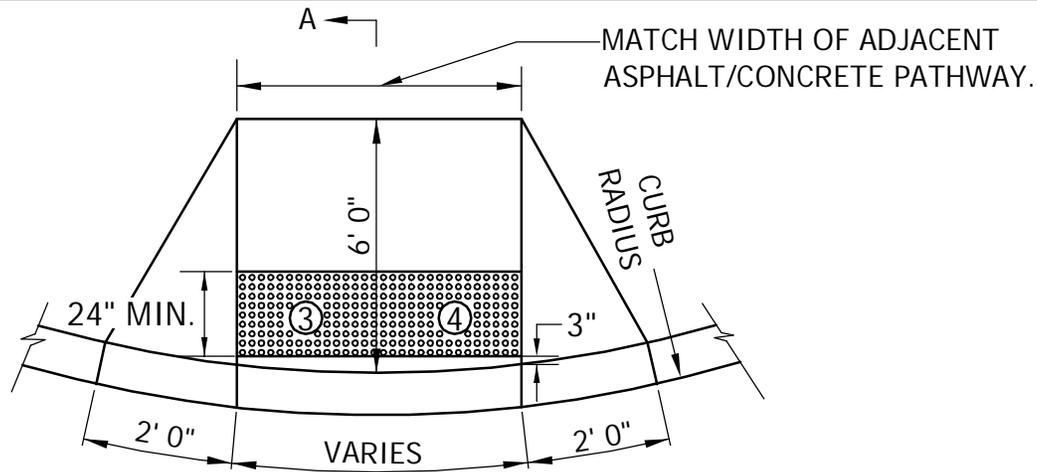


SECTION B-B  
THRU CONCRETE APRON

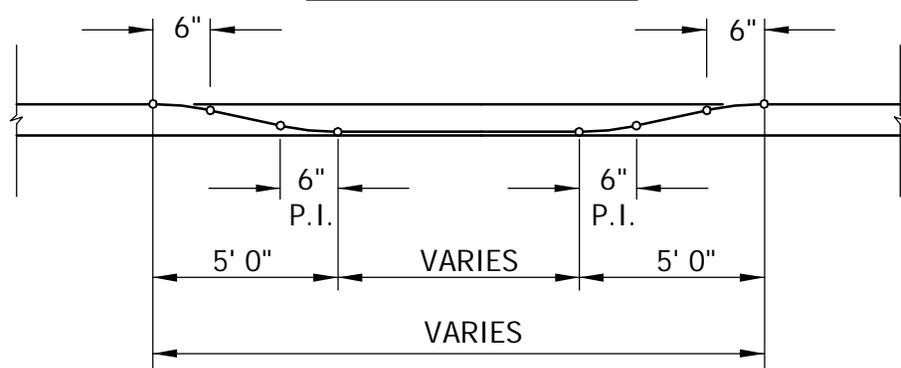
COMMERCIAL DRIVEWAY CONCRETE APRON  
TOWN OF ST. JOSEPH  
WISCONSIN

LAST REVISION:  
OCT 2016

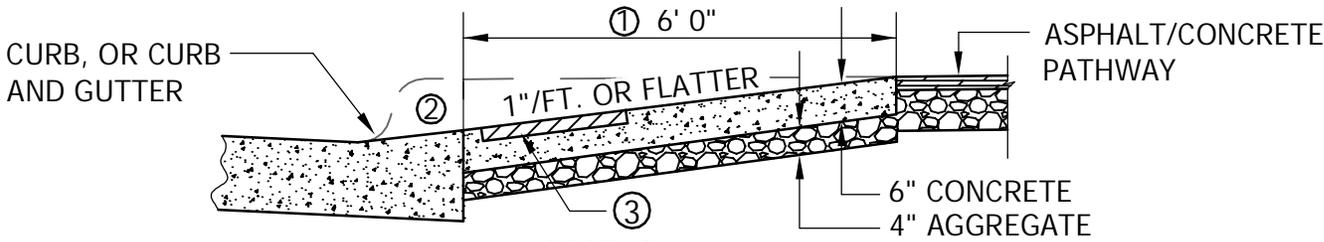
PLATE NO.  
RD-19



PLAN VIEW OF RAMP



ELEVATION OF RAMP



SECTION A-A

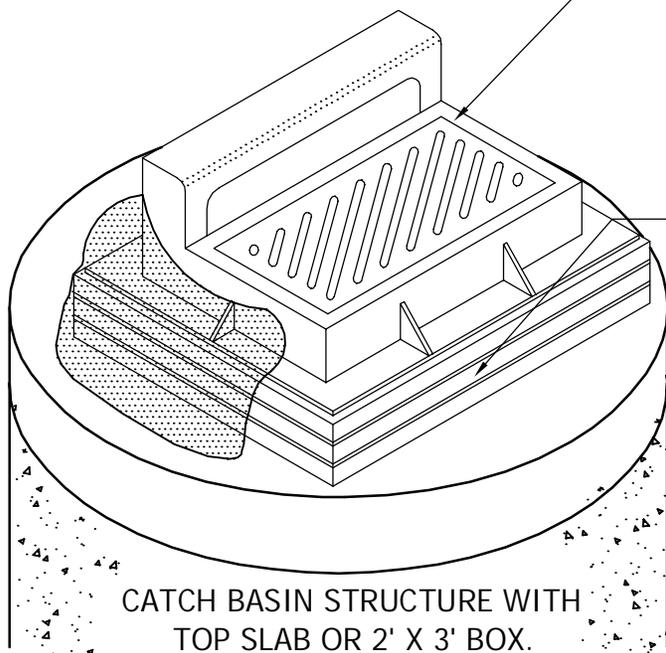
NOTES:

- THE CURB AND CURB TRANSITION ON THE RAMP WILL BE PAID FOR AS LINEAR FEET OF CONCRETE CURB OR CONCRETE CURB AND GUTTER. THE RAMP AREA WILL BE PAID FOR AS SQUARE FEET OF CONCRETE WALK.
- ① 6' 0" DIMENSION MAY BE INCREASED WHERE FEASIBLE TO PROVIDE A FLATTER SLOPE.
  - ② THE 1"/FT. SLOPE SHALL BE CONSTRUCTED THROUGH THE CURB TO THE GUTTER WITH NO LIP AT THE GUTTER SECTION.
  - ③ ADA REQUIRED TRUNCATED DOMES PER WISDOT STANDARD DETAIL DRAWINGS 8D5 AND WISDOT APPROVED PRODUCTS LIST.
  - ④ TRUNCATED DOMES SHALL BE CAST IRON 'NATURAL FINISH'.

PEDESTRIAN RAMP  
TOWN OF ST. JOSEPH  
WISCONSIN

LAST REVISION:  
AUG 2016

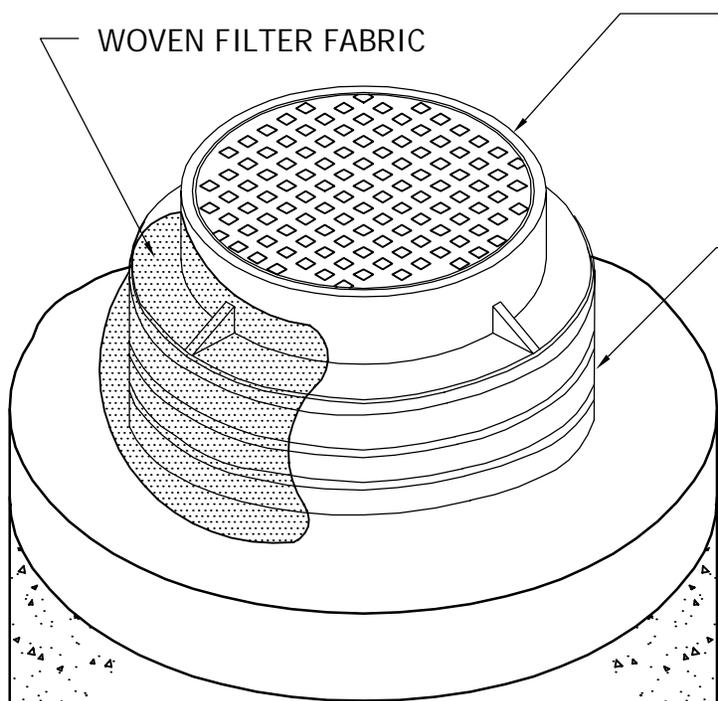
PLATE NO.  
RD-20



CATCH BASIN STRUCTURE WITH TOP SLAB OR 2' X 3' BOX.

NEENAH R3067-V OR -VB (LOW POINTS) CATCH BASIN FRAME AND GRATE. SHALL BE FURNISHED WITH CURB INLET BOX AND 3" DIA. FRONT FACE AND 4" MAXIMUM OPENING.

CONCRETE ADJUSTMENT RINGS. MIN. OF 2", MAX. OF 12" WITH A MIN. 3/8" MORTAR BETWEEN TOP SLAB AND FIRST RING. WOVEN FILTER FABRIC THEN SHALL BE WRAPPED AROUND ENTIRE SYSTEM AS SPECIFIED. CONCRETE COLLAR TO BE POURED AROUND ENTIRE HEIGHT OF ADJUSTMENT RINGS.



MANHOLE STRUCTURE WITH TOP SLAB OR CONE SECTION.

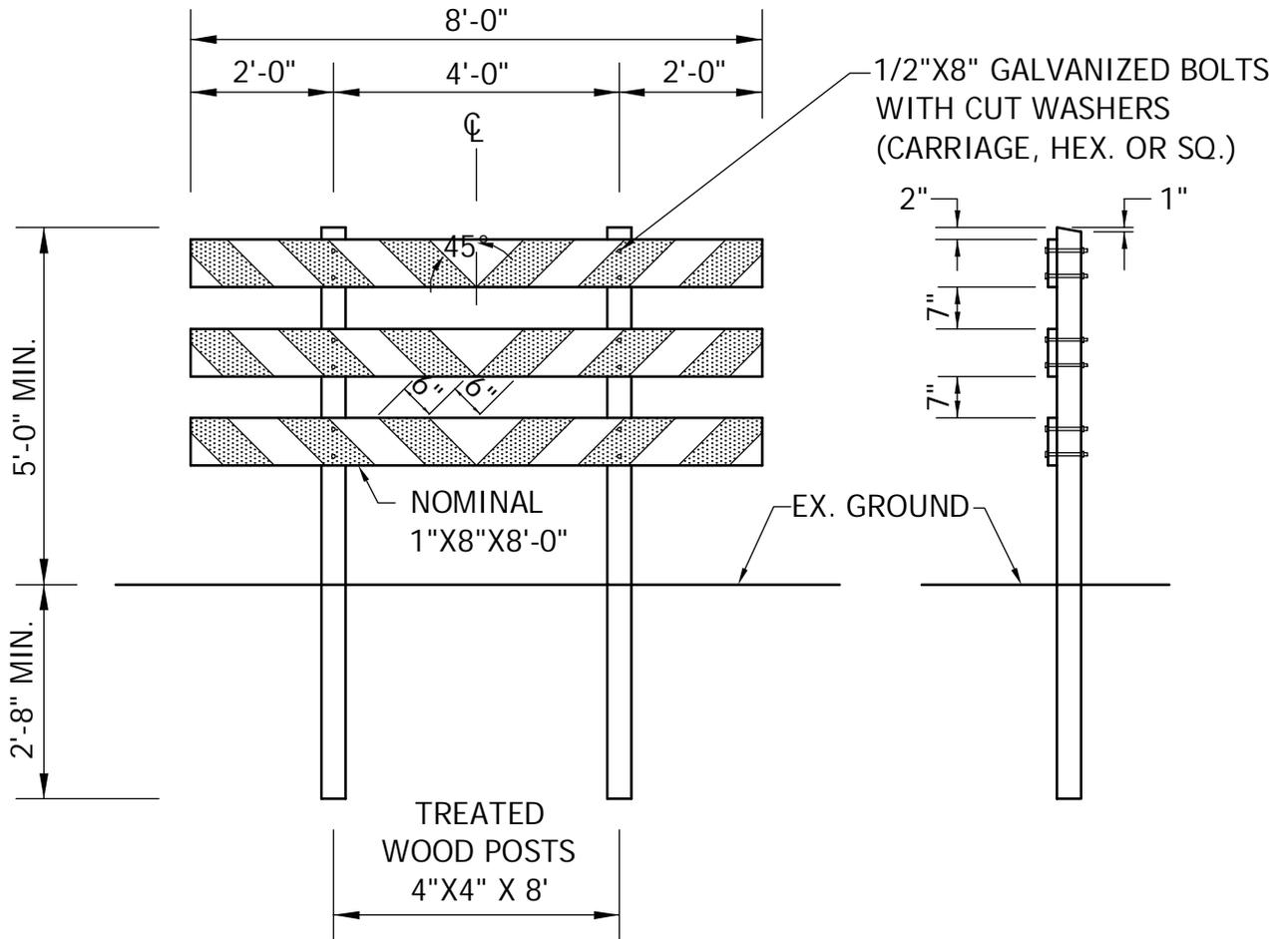
NEENAH R1642B MANHOLE FRAME AND COVER. SHALL BE FURNISHED WITH 2 CONCEALED PICK HOLES AND STAMPED "SANITARY SEWER" OR "STORM SEWER".

CONCRETE ADJUSTMENT RINGS. MIN. OF 2", MAX. OF 12" WITH A MIN. 3/8" MORTAR BETWEEN TOP SLAB AND FIRST RING. WOVEN FILTER FABRIC THEN SHALL BE WRAPPED AROUND ENTIRE SYSTEM AS SPECIFIED.

STRUCTURE CASTING ADJUSTMENT  
TOWN OF ST. JOSEPH  
WISCONSIN

LAST REVISION:  
AUG 2016

PLATE NO.  
RD-21



**NOTES:**

THE BARRICADE BOARD FACE SURFACES SHALL BE FULLY REFLECTORIZED IN ALTERNATE SILVER-WHITE AND RED STRIPING, USING HIGH INTENSITY RETRO REFLECTIVE SHEETING CONFORMING TO THE REQUIREMENTS OF WISDOT SPEC. 637.2.2.2, TYPE H REFLECTIVE SHEETING.

PRIOR TO INSTALLING THE REFLECTIVE SHEETING, THE BARRICADE BOARDS SHALL BE GIVEN A COMPLETE COATING OF WHITE PAINT FOR WOOD (INTERMEDIATE COAT) CONFORMING TO WISDOT SPEC. 517.2.6, FOLLOWED BY A SECOND COAT OF WHITE PAINT FOR WOOD (FINISH COAT) CONFORMING TO WISDOT SPEC. 517.2.6 APPLIED ONLY TO THE SURFACES NOT COVERED WITH REFLECTIVE SHEETING.

THE BARRICADE BOARDS SHALL BE COMPLETELY PAINTED AND REFLECTORIZED SHEETING APPLIED BEFORE BEING INSTALLED ON THE POSTS.

THE PLACEMENT OF THE BARRICADE SHALL BE 10'-0" FROM THE END OF THE BITUMINOUS ROAD WITH THE BARRICADE CENTERED ON THE ROADWAY FACING THE FLOW OF TRAFFIC.

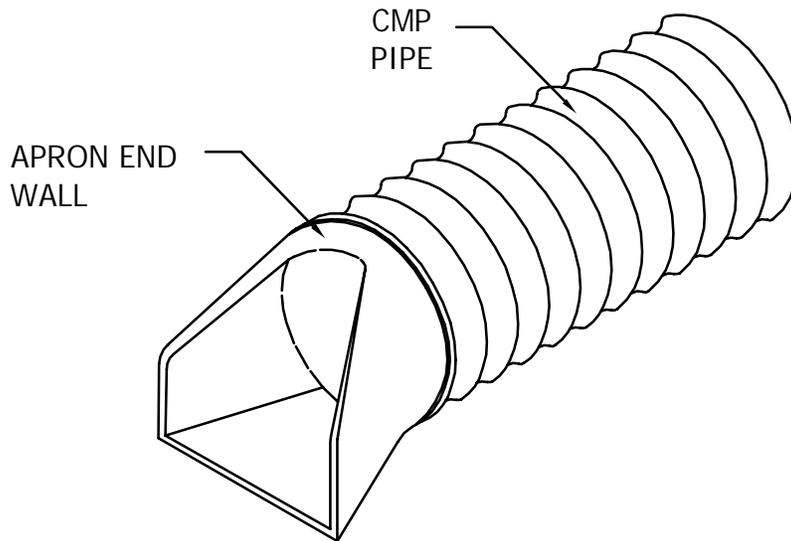
MULTIPLE BARRICADES MAY BE NECESSARY DEPENDING ON ROAD WIDTH.

PERMANENT BARRICADE  
TOWN OF ST. JOSEPH  
WISCONSIN

LAST REVISION:  
AUG 2016

PLATE NO.  
RD-22

REFER TO DETAIL STO-02 FOR RIP RAP PLACEMENT



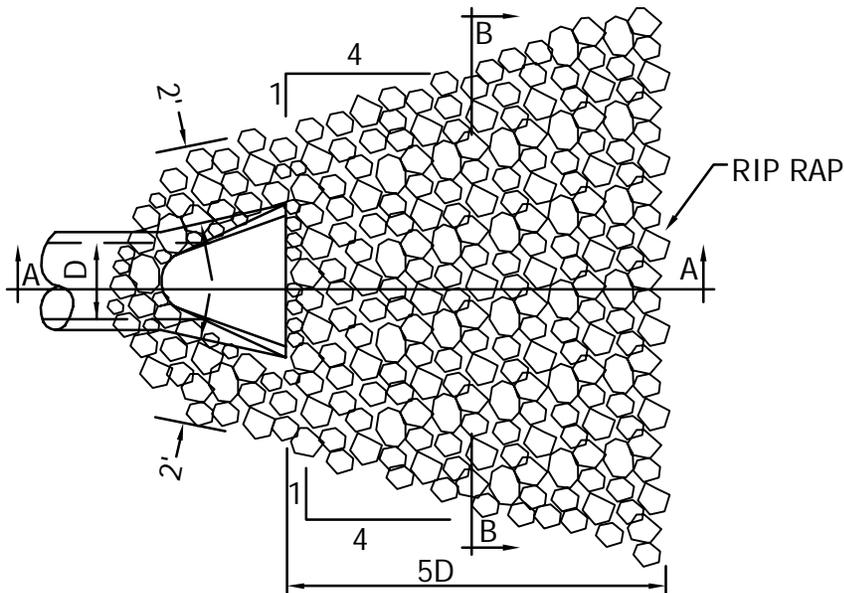
Notes:

1. All culvert pipes shall be corrugated steel, minimum 16 GA, in conformity with American Association of State Highway & Transportation Officials (AASHTO) Specification.
2. All culverts must be of adequate size to have the ability to withstand water from a 25 year rain event.
3. Apron end walls shall be used on all culverts where designated.

CMP STORM SEWER PIPE  
TOWN OF ST. JOSEPH  
WISCONSIN

LAST REVISION:  
AUG 2016

PLATE NO.  
STO-01



PLAN

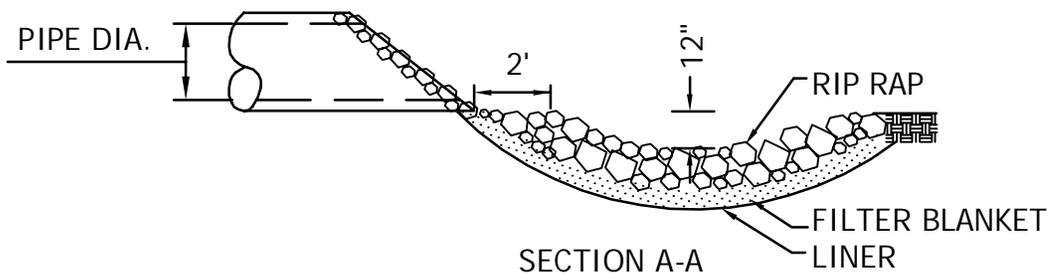
RIP RAP MINIMUM REQUIREMENTS

<u>PIPE DIA.</u>	
12" TO 18"	8 CY RIP RAP
24"	12 CY MED. RIP RAP
27"	14 CY MED. RIP RAP
30"	17 CY MED. RIP RAP
33"	20 CY MED. RIP RAP

RIP RAP MINIMUM REQUIREMENTS

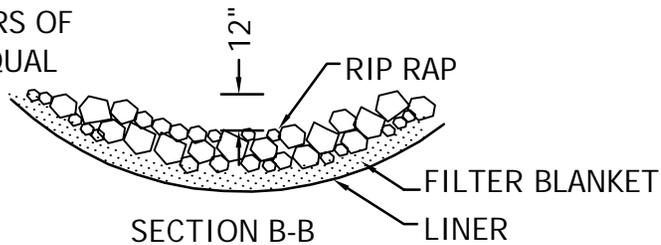
<u>PIPE DIA.</u>	
36"	23 CY MED. RIP RAP
42"	31 CY MED. RIP RAP
48"	38 CY MED. RIP RAP
54" AND UP	62 CY and up HEAVY RIP RAP

(One cubic yard is approximately 2,800 lbs.)



SECTION A-A

NOTE FILTER BLANKET REQUIRED UNDER RIP RAP OR 2 LAYERS OF 500X MIRAFI FABRIC OR EQUAL

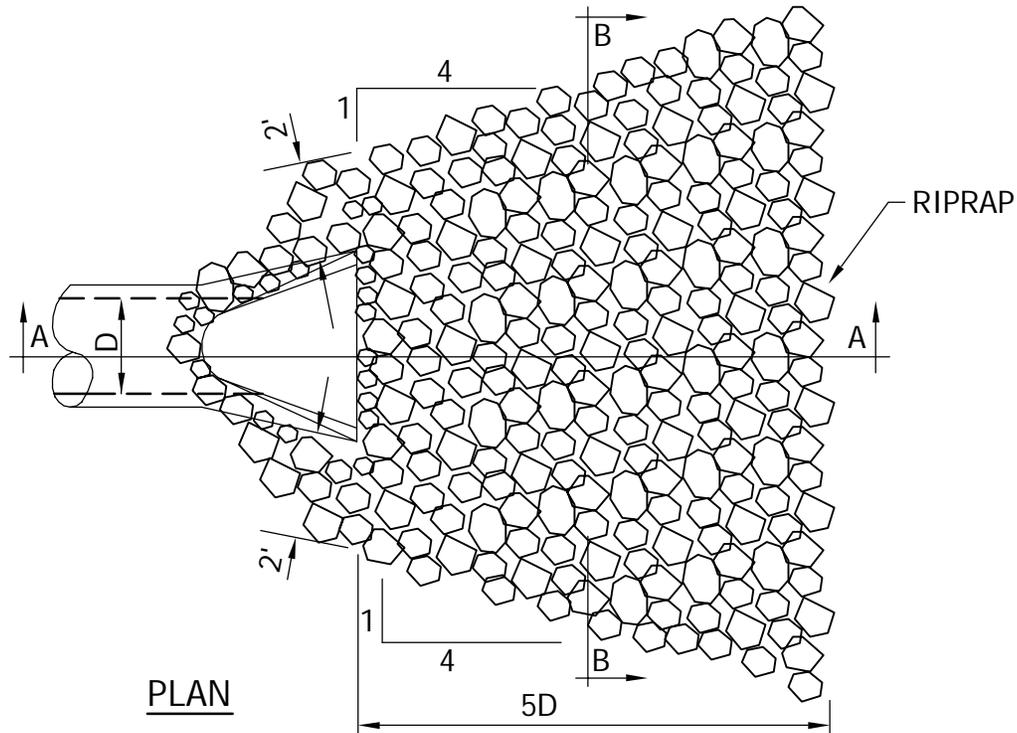


SECTION B-B

RIP RAP AT OUTLETS  
TOWN OF ST. JOSEPH  
WISCONSIN

LAST REVISION:  
AUG 2016

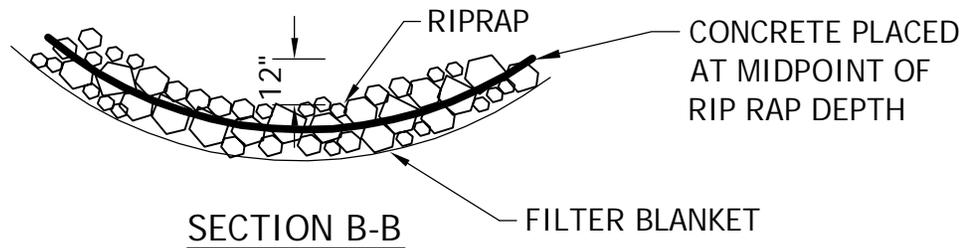
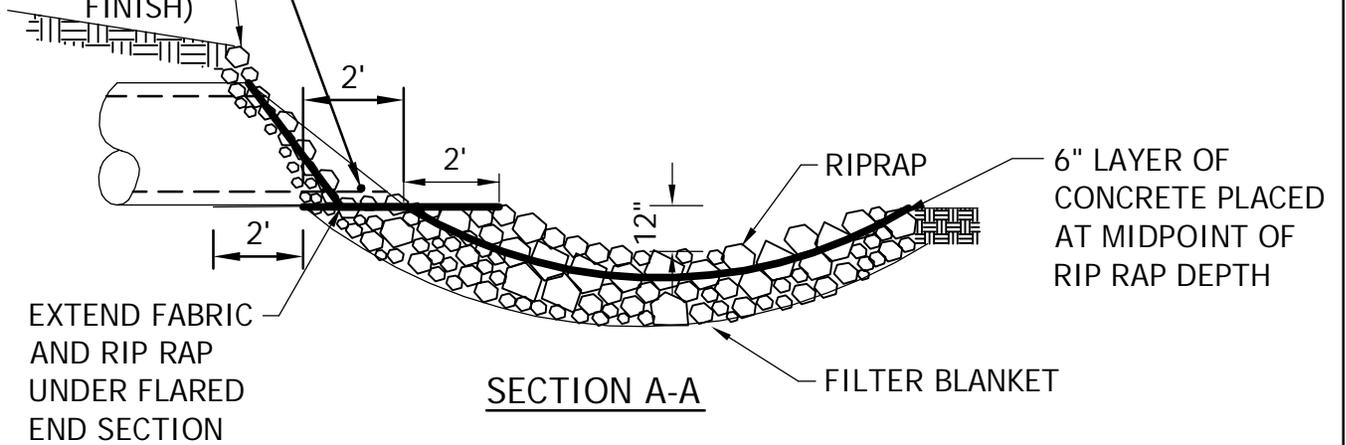
PLATE NO.  
STO-02



4" CONCRETE COVERING RIP RAP (BROOM FINISH)

MAINTAIN ACCESS TO TRASH GUARD BRACKET

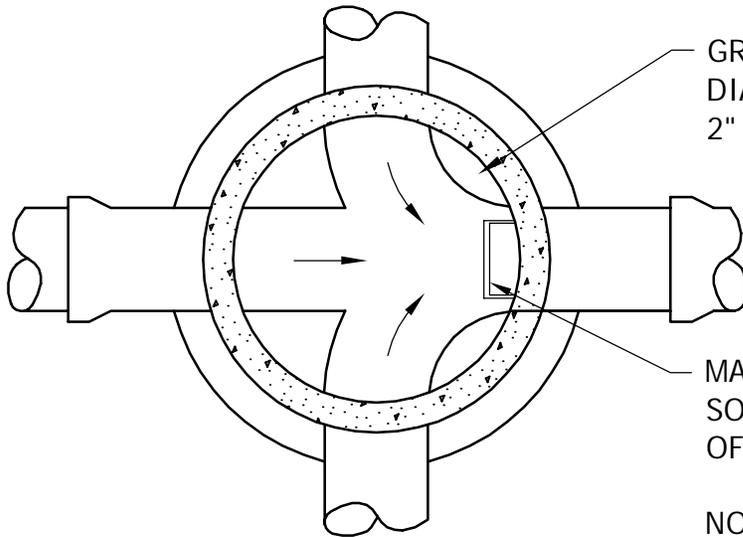
RIPRAP REQUIREMENTS REFER TO DETAIL STO-02



GROUTED RIP RAP AT OUTLETS  
TOWN OF ST. JOSEPH  
WISCONSIN

LAST REVISION:  
AUG 2016

PLATE NO.  
STO-02A

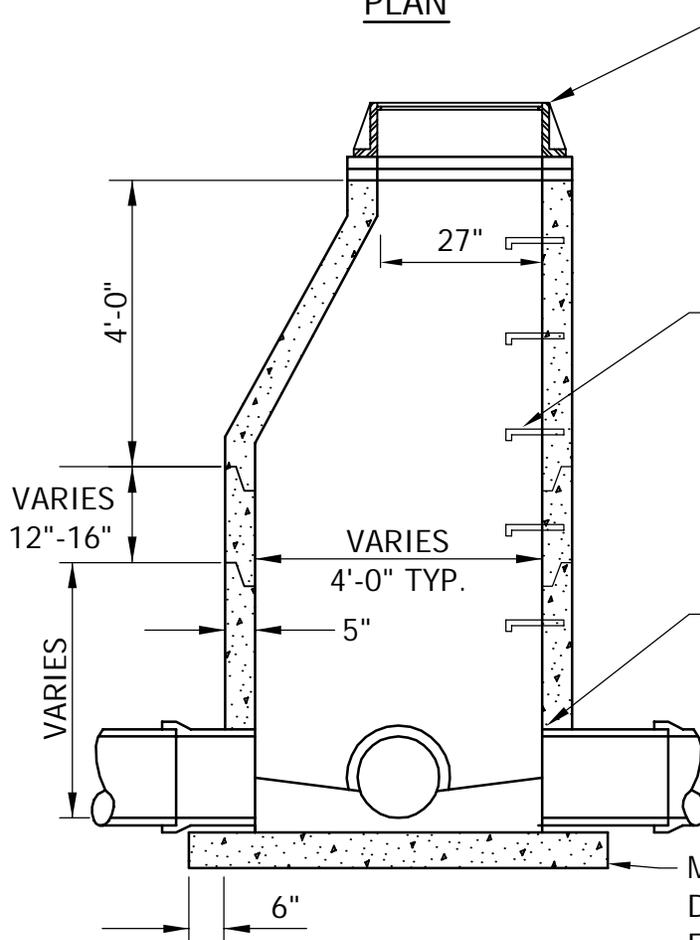


GROUT BOTTOM OF MANHOLE TO 1/2 DIAMETER AT PIPE AND SLOPE GROUT 2" TOWARD INVERT.

MANHOLE STEPS SHALL BE PLACED SO THAT OFFSET VERTICAL PORTION OF CONE IS FACING DOWNSTREAM.

NO BLOCK STRUCTURES ARE ALLOWED.

PLAN



NEENAH R-1642B CASTING OR EQUAL WITH CONCRETE ADJUSTMENT RINGS

MANHOLE STEPS, NEENAH R1981J OR EQUAL, 16" ON CENTER.

ALL JOINTS IN MANHOLE TO HAVE "O" RING RUBBER GASKETS.

PIPE SHALL BE CUT OUT FLUSH WITH INSIDE FACE OF WALL.

DOGHOUSES MUST BE GROUTED BOTH INSIDE AND OUTSIDE.

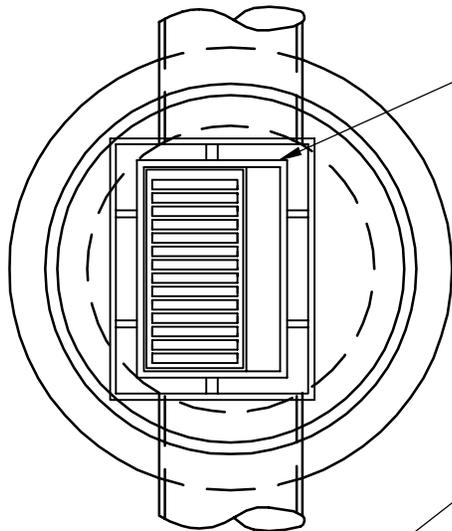
MINIMUM SLAB THICKNESS IS 6" FOR 14' DEPTH. INCREASE THICKNESS 1" FOR EVERY 4' OF DEPTH GREATER THAN 14', AND REINFORCE WITH 6" X 6" 10/10 MESH.

SECTION

STORM SEWER MANHOLE  
TOWN OF ST. JOSEPH  
WISCONSIN

LAST REVISION:  
AUG 2016

PLATE NO.  
STO-03



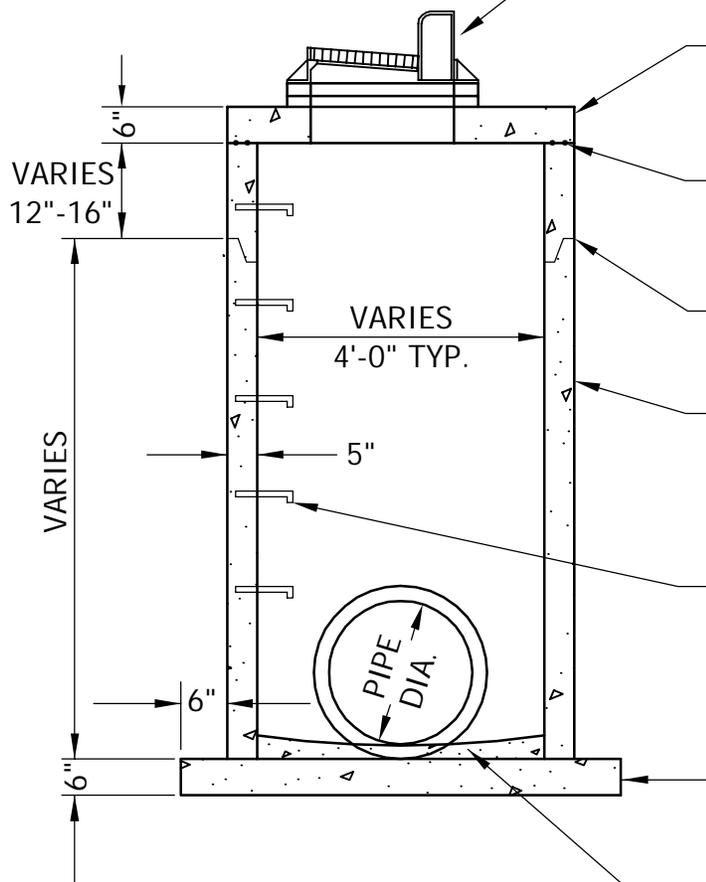
**PLAN**

24"X36" SLAB OPENING FOR CASTING AS SPECIFIED.

DIMENSION FROM BACK OF CURB TO CENTER OF PIPE.

- 4' DIA. MH - 9" IN FROM BACK OF CURB
- 5' DIA. MH - 3" IN FROM BACK OF CURB
- 6' DIA. MH - 3" BEHIND BACK OF CURB
- 7' DIA. MH - 9" BEHIND BACK OF CURB
- 8' DIA. MH - 15" BEHIND BACK OF CURB

NEENAH R3067-V OR -VB (LOW POINTS) CASTING OR EQUAL WITH 3" RADIUS CURB BOX AND CONCRETE ADJUSTMENT RINGS



**SECTION**

6" PRECAST REINFORCED CONCRETE SLAB. FOR 6' DIA. MANHOLE, AN 8" PRECAST SLAB IS REQUIRED.

TOP OF BARREL SECTION UNDER TOP SLAB TO HAVE FLAT TOP EDGE SEALED WITH 2 BEADS OF RAMNEK OR EQUAL.

ALL JOINTS IN MANHOLE TO HAVE "O" RING RUBBER GASKETS.

PRECAST CONCRETE SECTION

DOGHOUSES SHALL BE GROUTED ON BOTH THE OUTSIDE AND INSIDE.

MANHOLE STEPS, NEENAH R1981J OR EQUAL, 16" O.C.

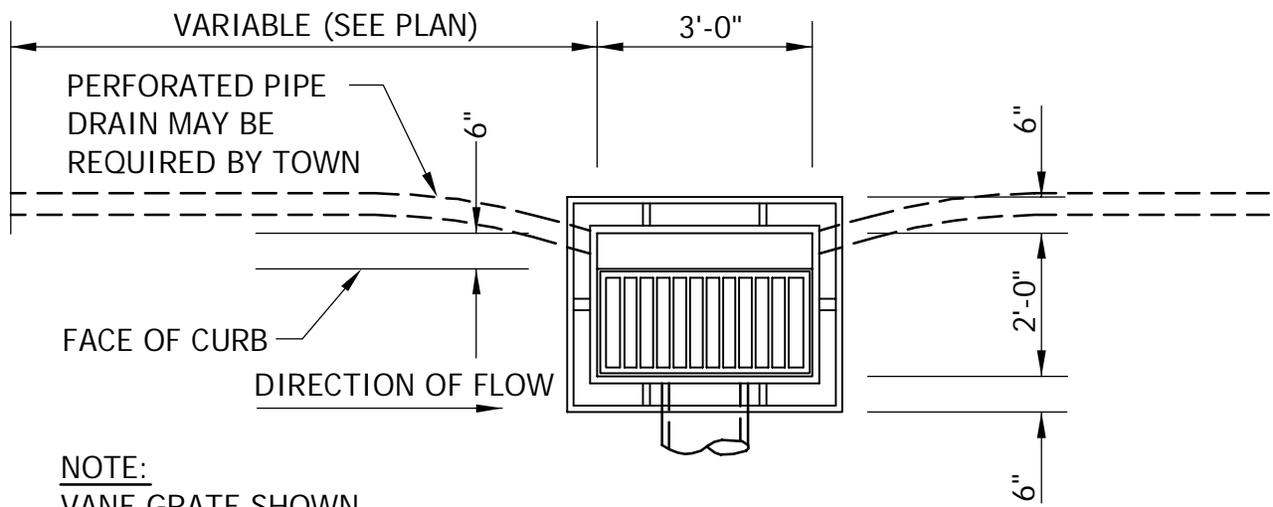
NO BLOCK STRUCTURES ARE ALLOWED.

MINIMUM SLAB THICKNESS, 6" FOR 14' DEPTH. INCREASE THICKNESS 1" FOR EACH 4' OF DEPTH GREATER THAN 14', AND REINFORCE WITH 6"X6" 10/10 MESH. GROUT BOTTOM

CATCH BASIN MANHOLE  
TOWN OF ST. JOSEPH  
WISCONSIN

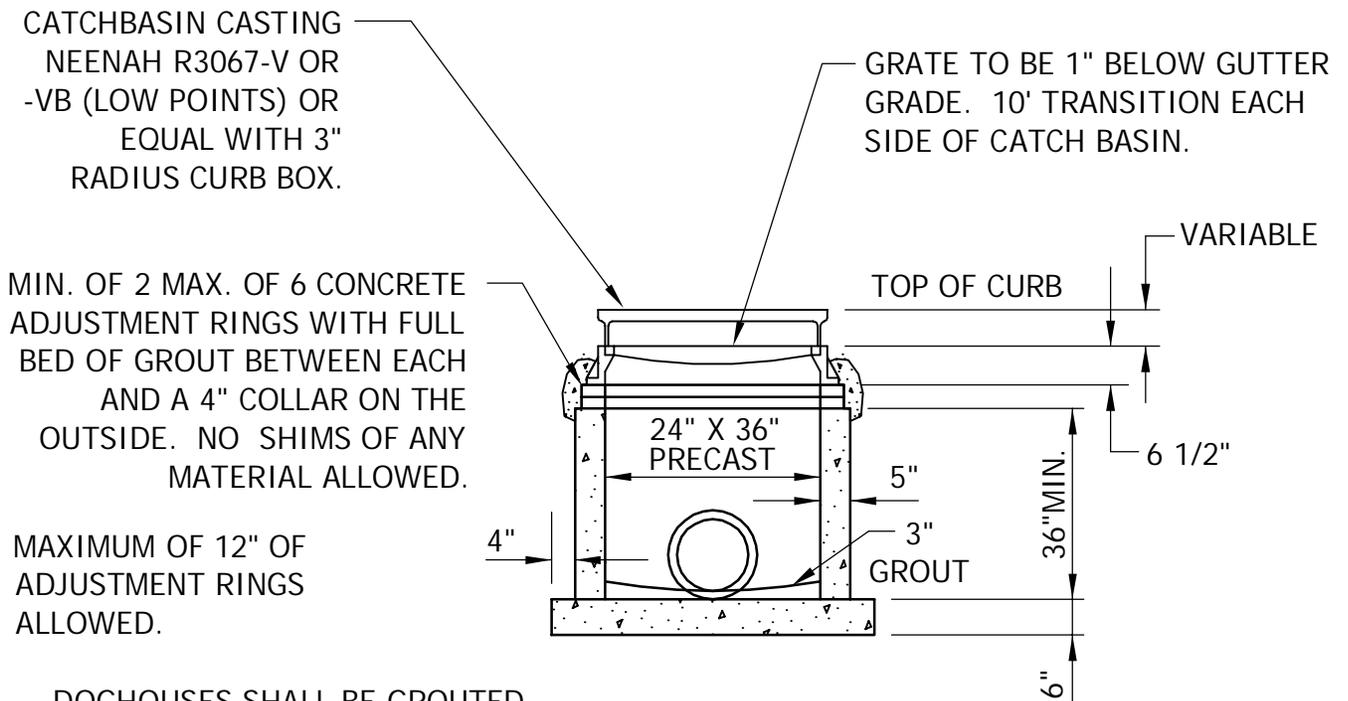
LAST REVISION:  
AUG 2016

PLATE NO.  
STO-04



NOTE:  
VANE GRATE SHOWN

PLAN



MIN. OF 2 MAX. OF 6 CONCRETE  
ADJUSTMENT RINGS WITH FULL  
BED OF GROUT BETWEEN EACH  
AND A 4" COLLAR ON THE  
OUTSIDE. NO SHIMS OF ANY  
MATERIAL ALLOWED.

MAXIMUM OF 12" OF  
ADJUSTMENT RINGS  
ALLOWED.

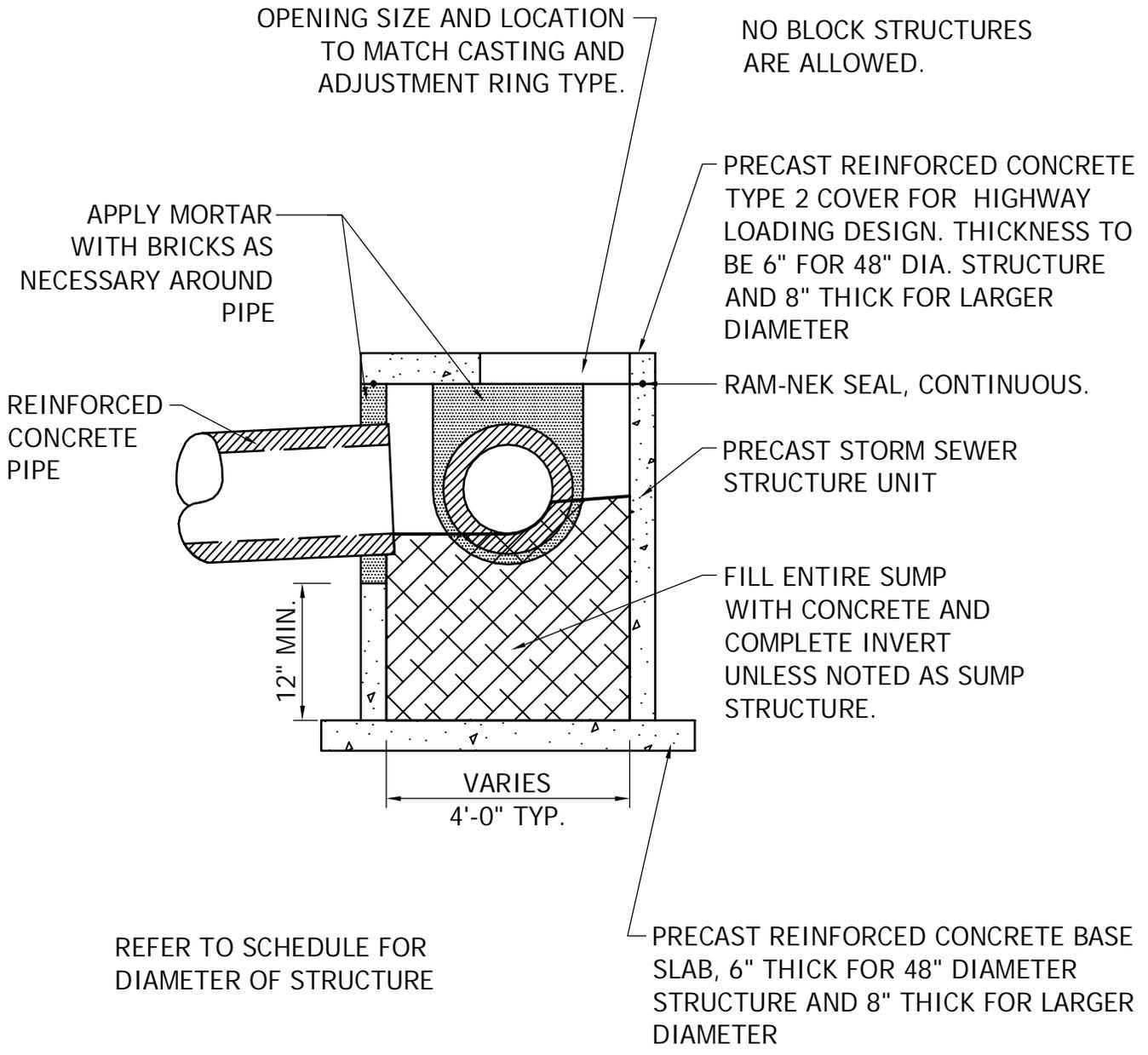
DOGHOUSES SHALL BE GROUTED  
ON BOTH THE OUTSIDE AND  
THE INSIDE.

SECTION

CATCH BASIN  
TOWN OF ST. JOSEPH  
WISCONSIN

LAST REVISION:  
AUG 2016

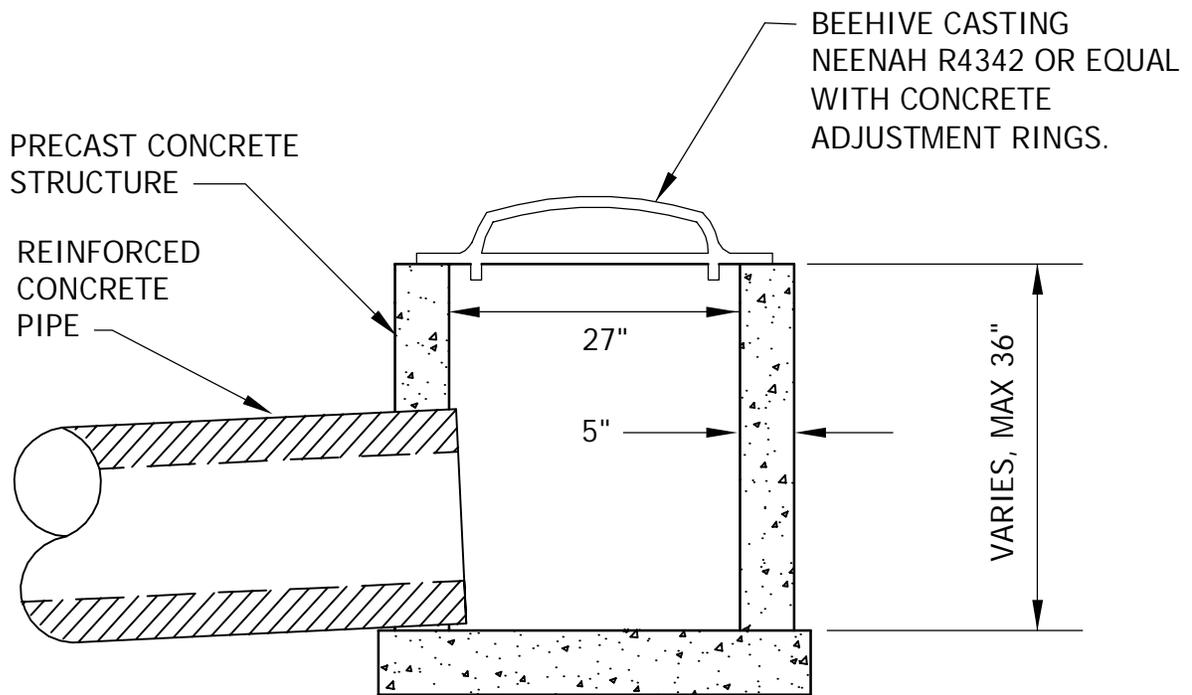
PLATE NO.  
STO-05



PRECAST SHALLOW  
STORM SEWER STRUCTURE  
TOWN OF ST. JOSEPH  
WISCONSIN

LAST REVISION:  
AUG 2016

PLATE NO.  
STO-06



DOGHOUSES SHALL BE  
GROUTED ON BOTH THE  
OUTSIDE AND THE INSIDE.

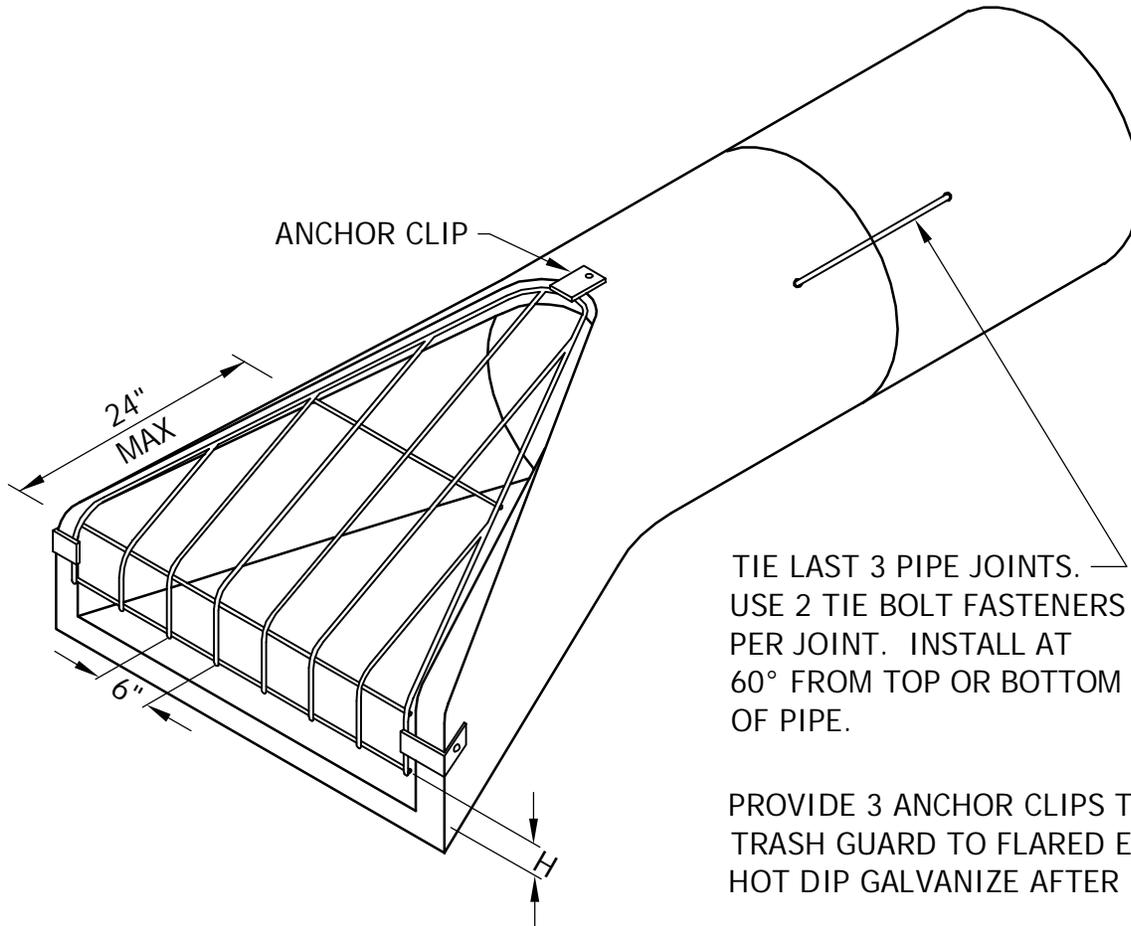
40" DIA. x 5" THICK  
PRECAST REINFORCED  
CONCRETE BASE SLAB.

PRECAST 27" SHALLOW  
DEPTH CATCH BASIN  
TOWN OF ST. JOSEPH  
WISCONSIN

LAST REVISION:  
AUG 2016

PLATE NO.  
STO-07

REFER TO DETAIL STO-02 FOR RIPRAP PLACEMENT.



ISOMETRIC

TIE LAST 3 PIPE JOINTS. USE 2 TIE BOLT FASTENERS PER JOINT. INSTALL AT 60° FROM TOP OR BOTTOM OF PIPE.

PROVIDE 3 ANCHOR CLIPS TO FASTEN TRASH GUARD TO FLARED END SECTION. HOT DIP GALVANIZE AFTER FABRICATION.

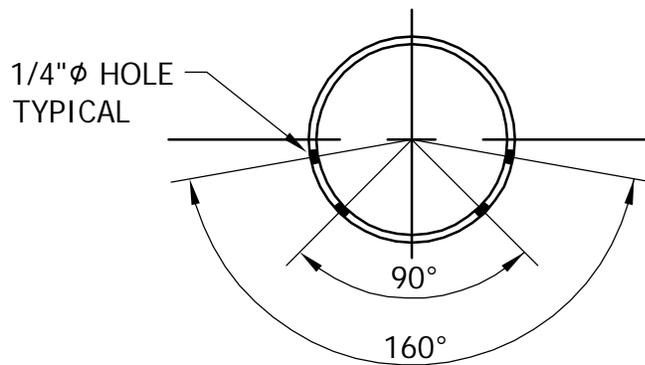
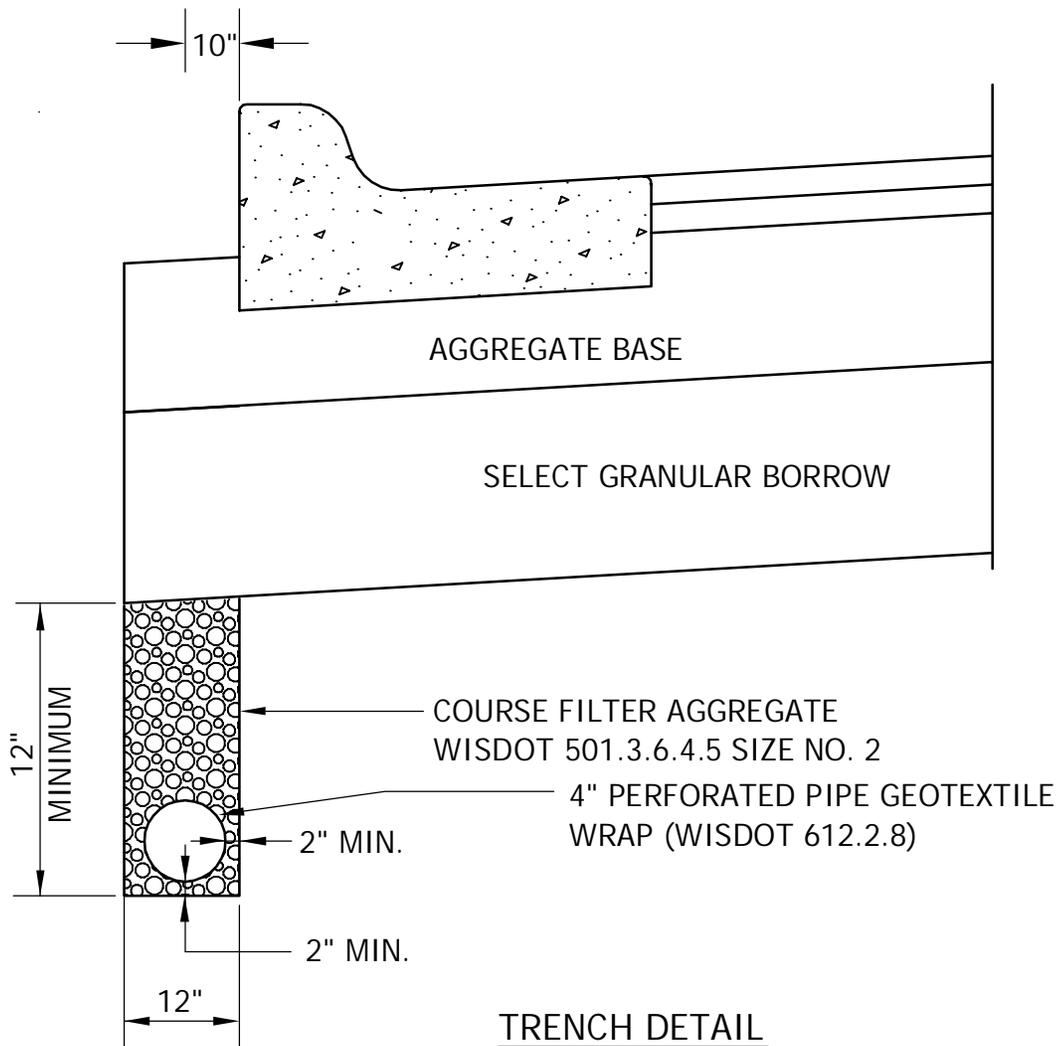
ANCHOR BOTH SIDES.

PIPE SIZE	TRASH GUARD SIZING		
	BARS	H	BOLTS
12"-18"	3/4" $\phi$	4"	5/8"
21"-42"	1" $\phi$	6"	3/4"
48"-72"	1 1/4" $\phi$	12"	1"

FLARED END SECTION AND TRASH GUARD  
TOWN OF ST. JOSEPH  
WISCONSIN

LAST REVISION:  
AUG 2016

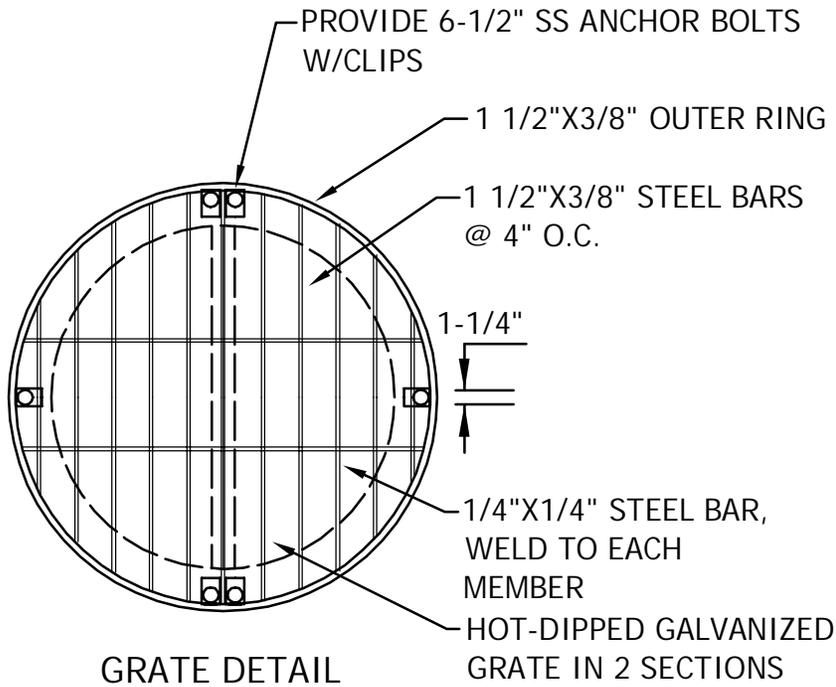
PLATE NO.  
STO-08



PVC PERFORATED PIPE  
BELOW CONCRETE CURB  
TOWN OF ST. JOSEPH  
WISCONSIN

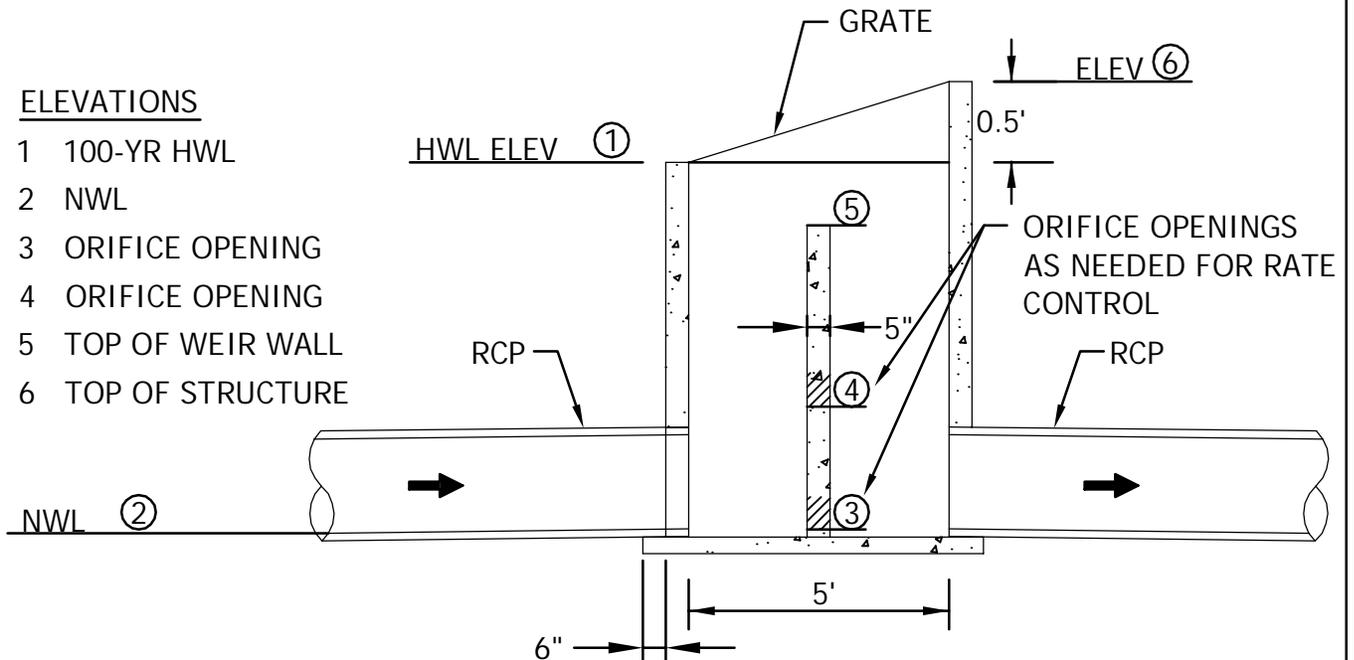
LAST REVISION:  
AUG 2016

PLATE NO.  
STO-09



ELEVATIONS

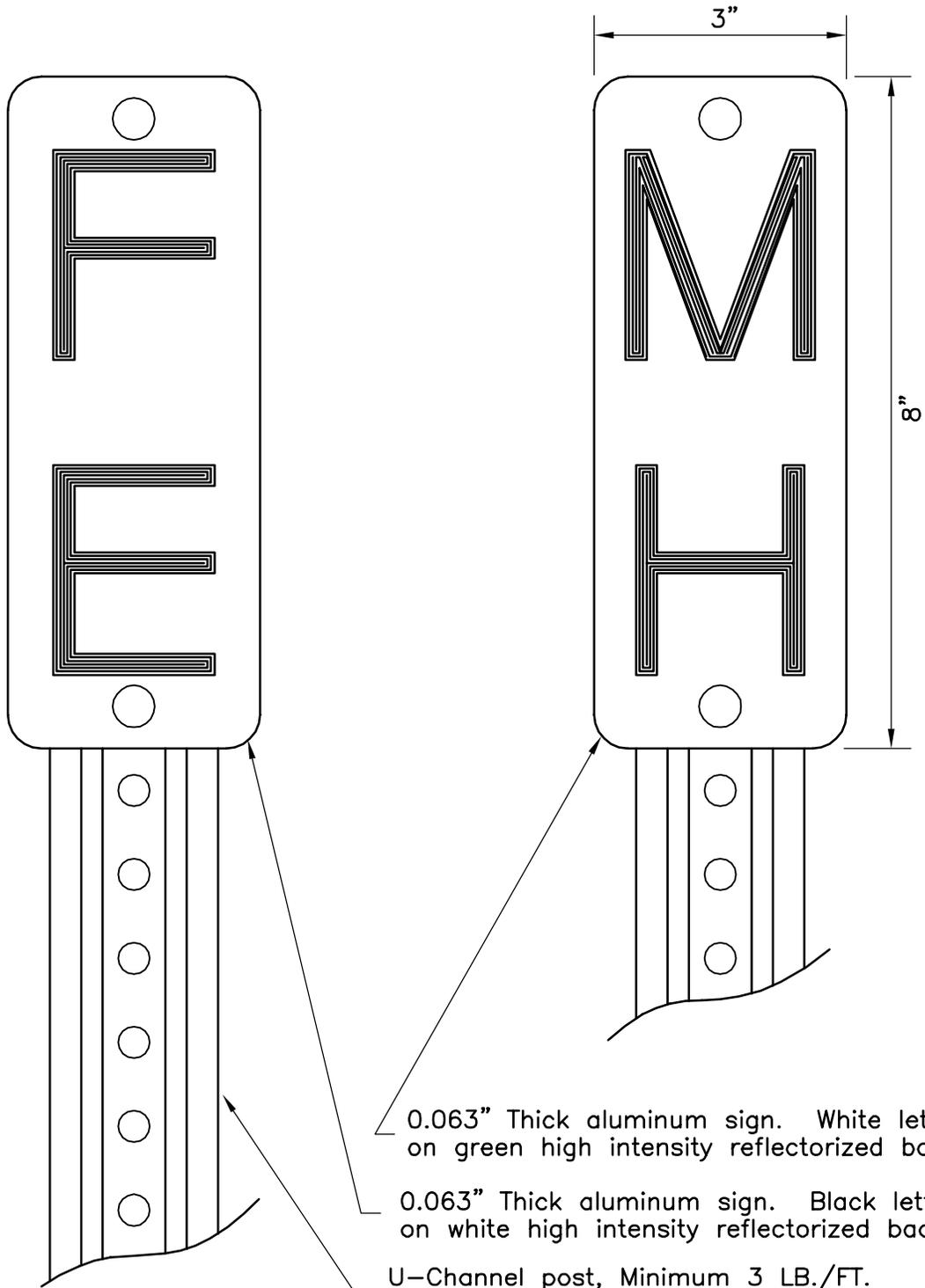
- 1 100-YR HWL
- 2 NWL
- 3 ORIFICE OPENING
- 4 ORIFICE OPENING
- 5 TOP OF WEIR WALL
- 6 TOP OF STRUCTURE



POND OUTLET STRUCTURE  
TOWN OF ST. JOSEPH  
WISCONSIN

LAST REVISION:  
AUG 2016

PLATE NO.  
STO-10



0.063" Thick aluminum sign. White letters on green high intensity reflectorized background.

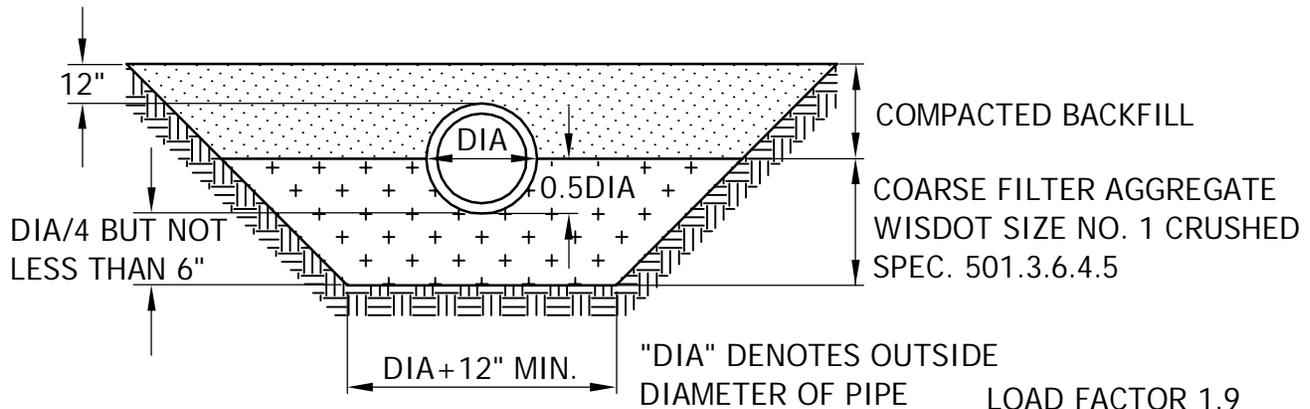
0.063" Thick aluminum sign. Black letters on white high intensity reflectorized background.

U-Channel post, Minimum 3 LB./FT. 6'-6" long, painted green.

STRUCTURE MARKER POST  
TOWN OF ST. JOSEPH  
WISCONSIN

LAST REVISION:  
AUG 2016

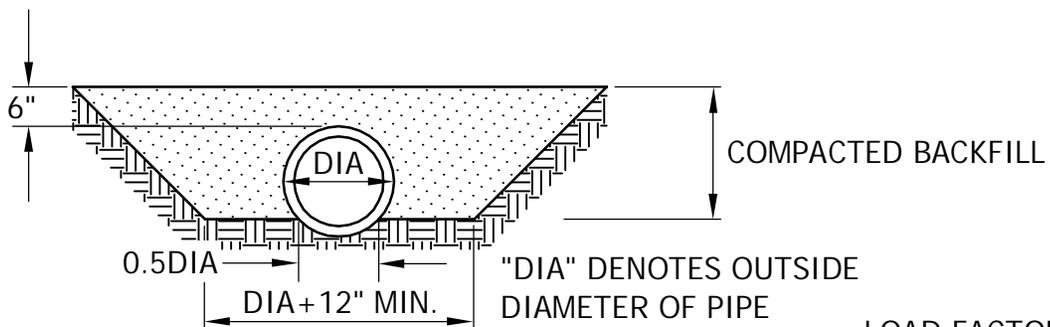
PLATE NO.  
STO-11



LOAD FACTOR 1.9

CLASS B

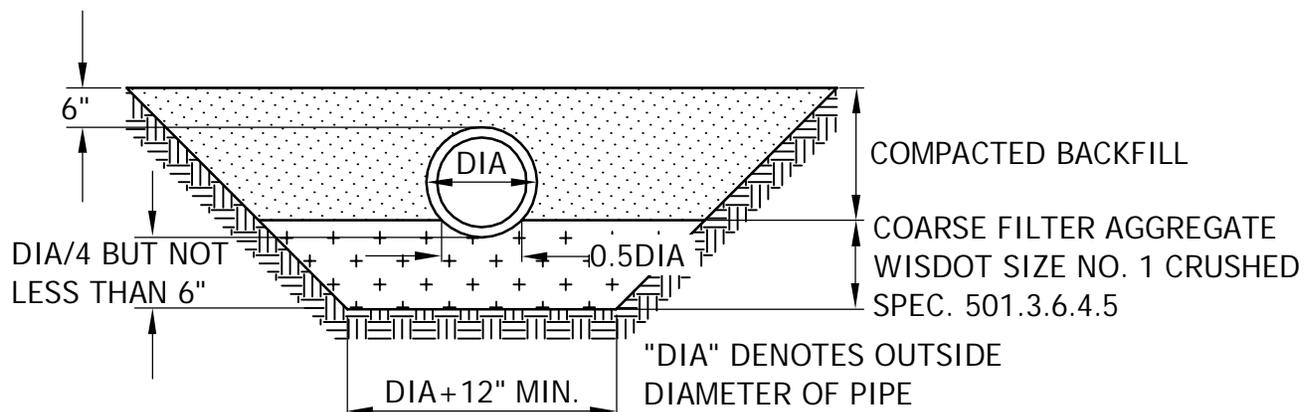
HAND SHAPED FROM  
ANGULAR BEDDING MATERIAL



LOAD FACTOR 1.5

CLASS C-1

HAND SHAPED FROM FIRM  
UNDISTURBED SOIL



LOAD FACTOR 1.5

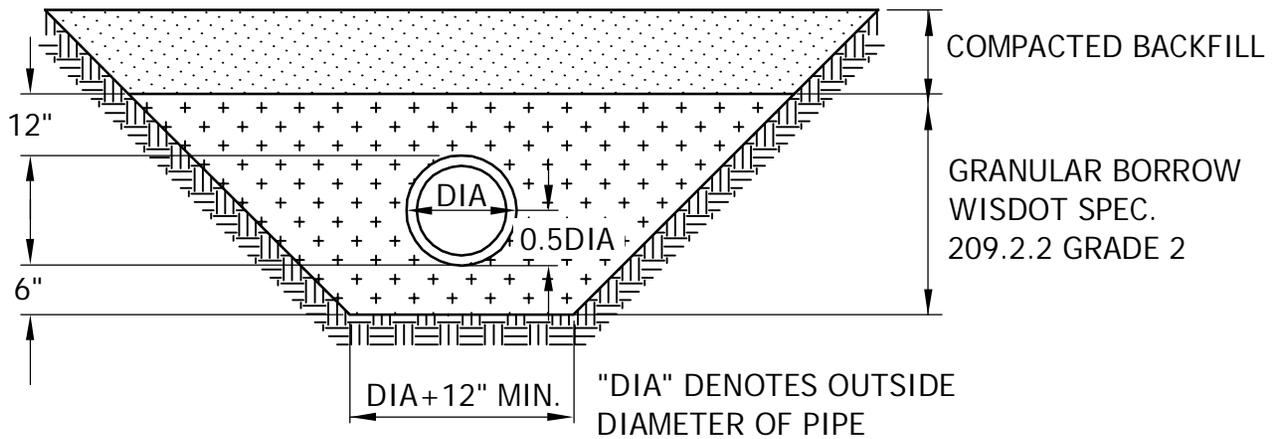
CLASS C-2

HAND SHAPED FROM  
ANGULAR BEDDING MATERIAL

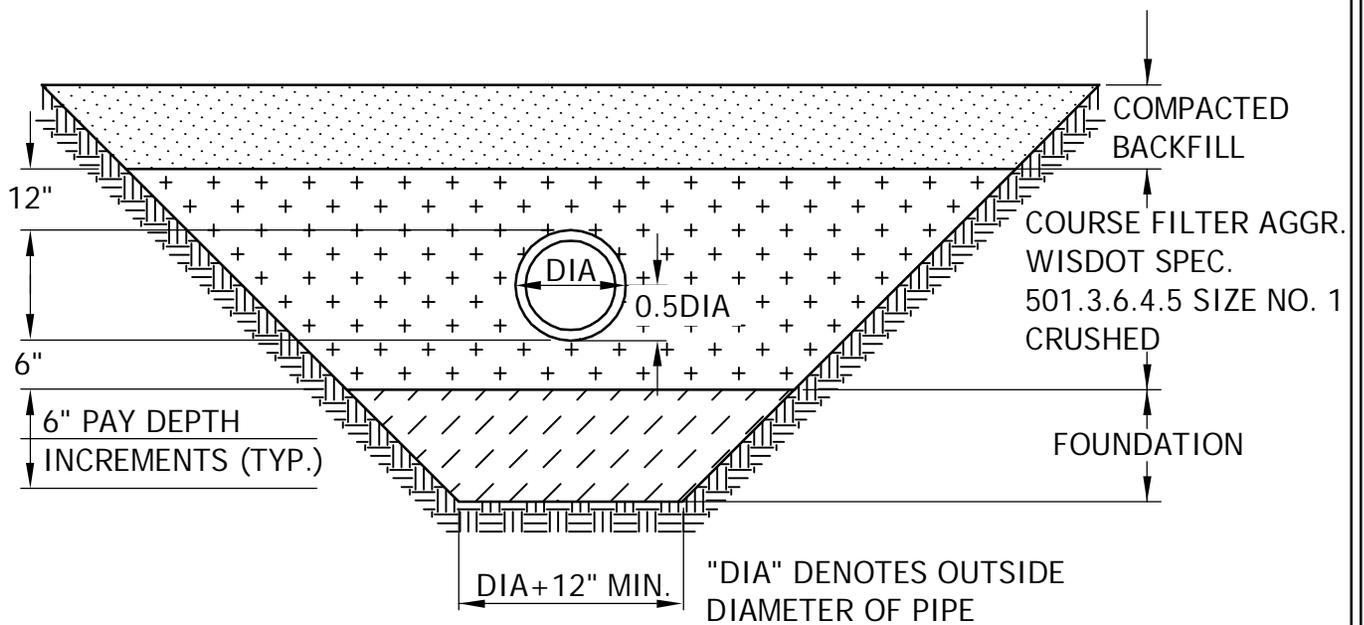
BEDDING METHODS FOR RCP AND DIP  
TOWN OF ST. JOSEPH  
WISCONSIN

LAST REVISION:  
AUG 2016

PLATE NO.  
BED-01



PIPE FOUNDATION & BEDDING IN GOOD SOILS

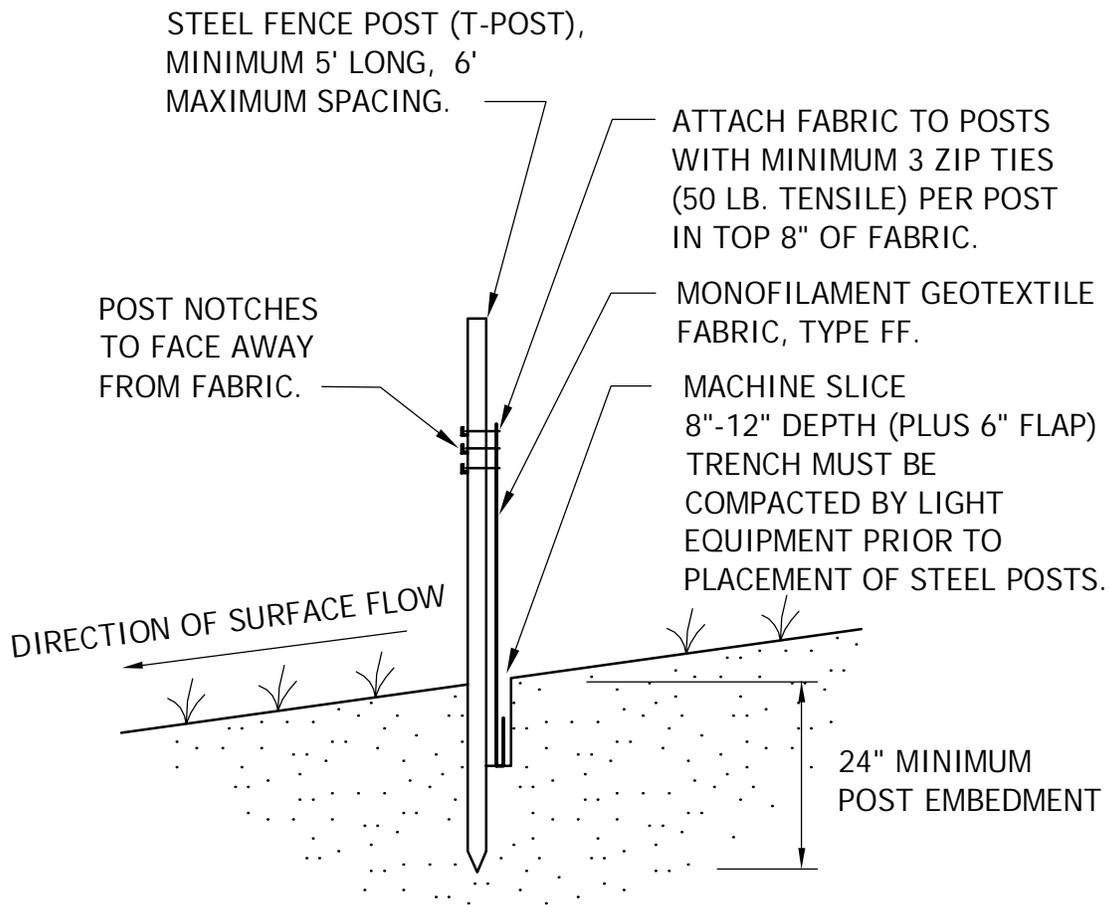


PIPE FOUNDATION & BEDDING IN POOR SOILS

BEDDING METHODS FOR PVC  
TOWN OF ST. JOSEPH  
WISCONSIN

LAST REVISION:  
AUG 2016

PLATE NO.  
BED-02



**NOTE:**

The machine sliced method (this detail) is the standard silt fence installation method. Heavy-duty or standard silt fence installation methods should only be used when approved or directed by the Town.

SILT FENCE MACHINE SLICED  
TOWN OF ST. JOSEPH  
WISCONSIN

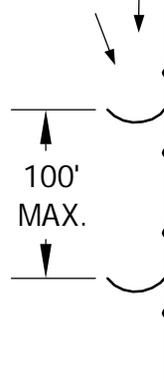
LAST REVISION:  
AUG 2016

PLATE NO.  
ERO-01

PLAN VIEW

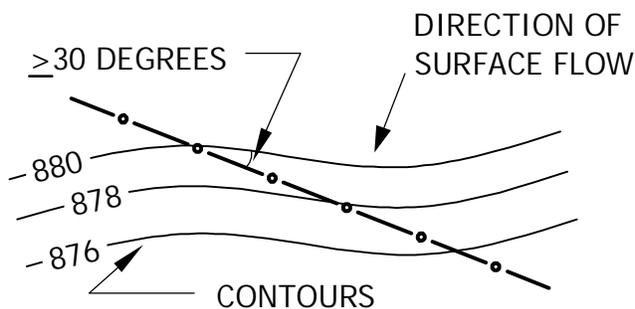
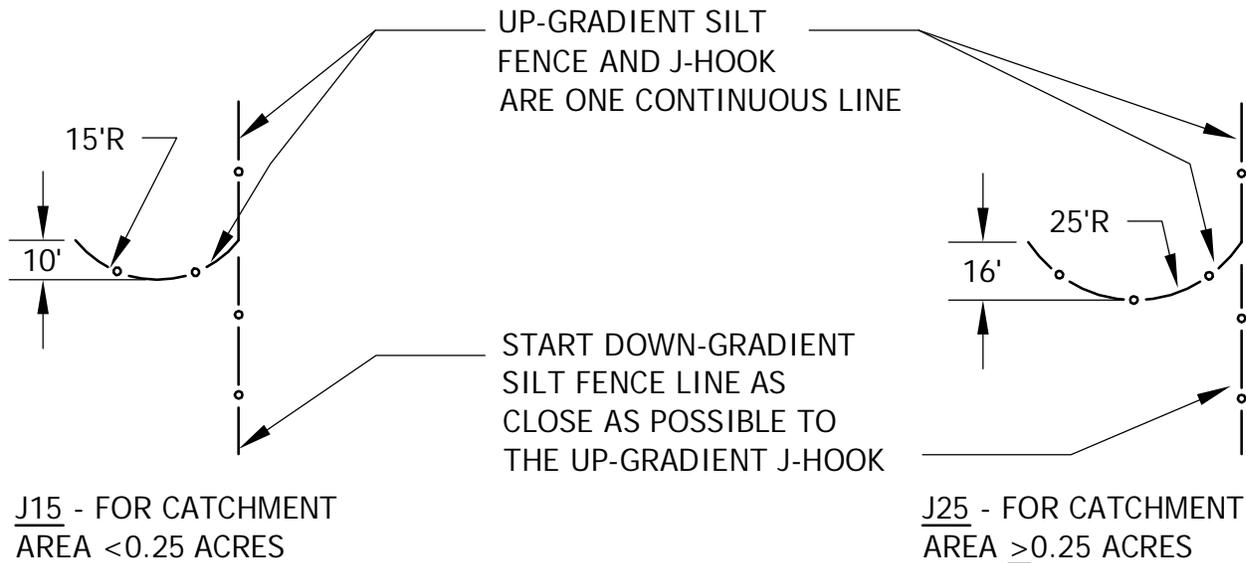
I. SPACING REQUIREMENTS

DIRECTION OF SURFACE FLOW



NOTE: SPACING DISTANCES WILL VARY, BUT ARE NOT TO EXCEED 100 FEET.

II. SIZING REQUIREMENTS: J15, J25

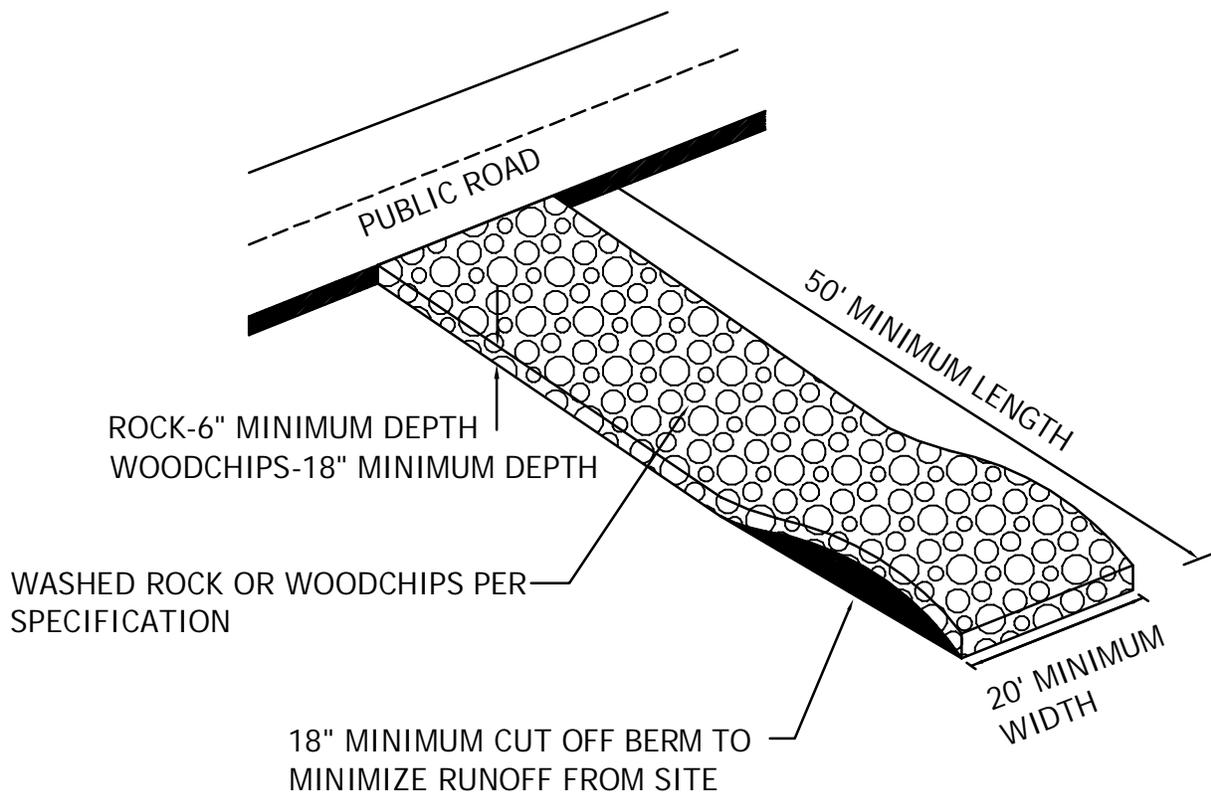


NOTE:  
J-HOOKS SHALL BE USED WHEN THE SILT FENCE IS INSTALLED AT AN ANGLE OF 30 DEGREES OR GREATER FROM PARALLEL TO THE CONTOURS.

SILT FENCE J-HOOK  
TOWN OF ST. JOSEPH  
WISCONSIN

LAST REVISION:  
AUG 2016

PLATE NO.  
ERO-02



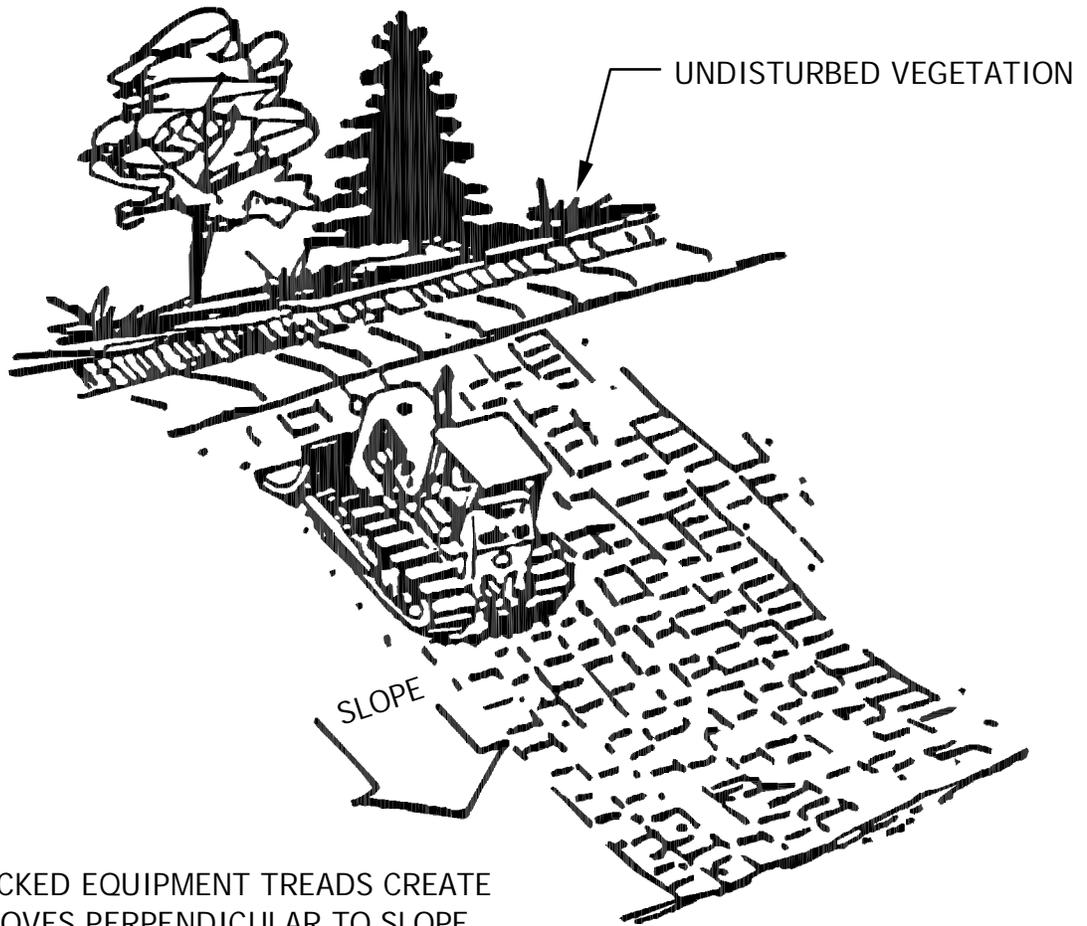
Notes:

1. Filter fabric shall be placed under rock to stop mud migration through rock.
2. Filter fabric is not required under woodchips.
3. Entrance must be maintained regularly to prevent sedimentation on public roadways.

CONSTRUCTION ENTRANCE  
ROCK OR WOOD CHIP  
TOWN OF ST. JOSEPH  
WISCONSIN

LAST REVISION:  
AUG 2016

PLATE NO.  
ERO-03



TRACKED EQUIPMENT TREADS CREATE GROOVES PERPENDICULAR TO SLOPE DIRECTION.

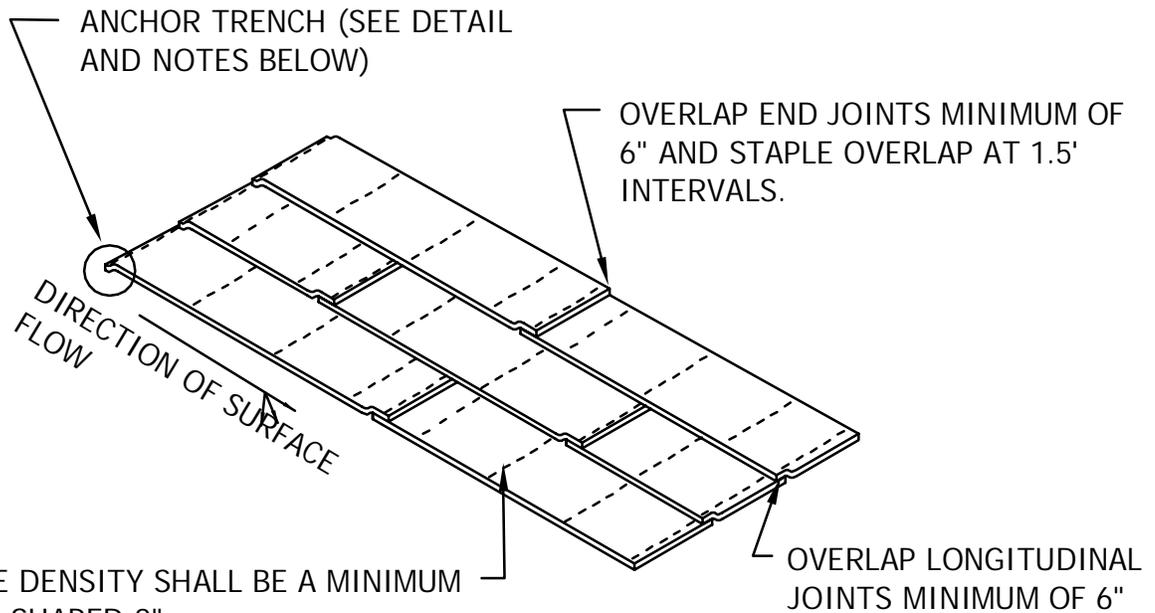
Note:

All slopes with a grade equal to or steeper than 3:1 require slope tracking. Slopes with a grade more gradual than 3:1 require slope tracking if the stabilization method is erosion control blanket or hydromulch.

TEMPORARY SLOPE GRADING  
TOWN OF ST. JOSEPH  
WISCONSIN

LAST REVISION:  
AUG 2016

PLATE NO.  
ERO-04

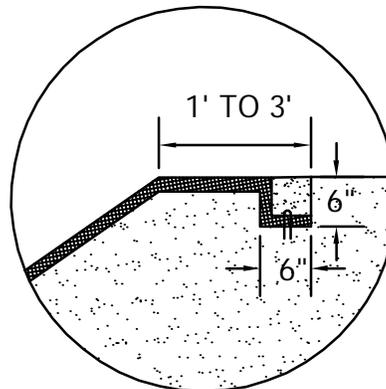


STAPLE DENSITY SHALL BE A MINIMUM OF 3 U-SHAPED 8", 11 GAUGE METAL STAPLES PER SQUARE YARD (THIS MAY VARY AS DIRECTED BY THE TOWN).

OVERLAP LONGITUDINAL JOINTS MINIMUM OF 6"

ANCHOR TRENCH

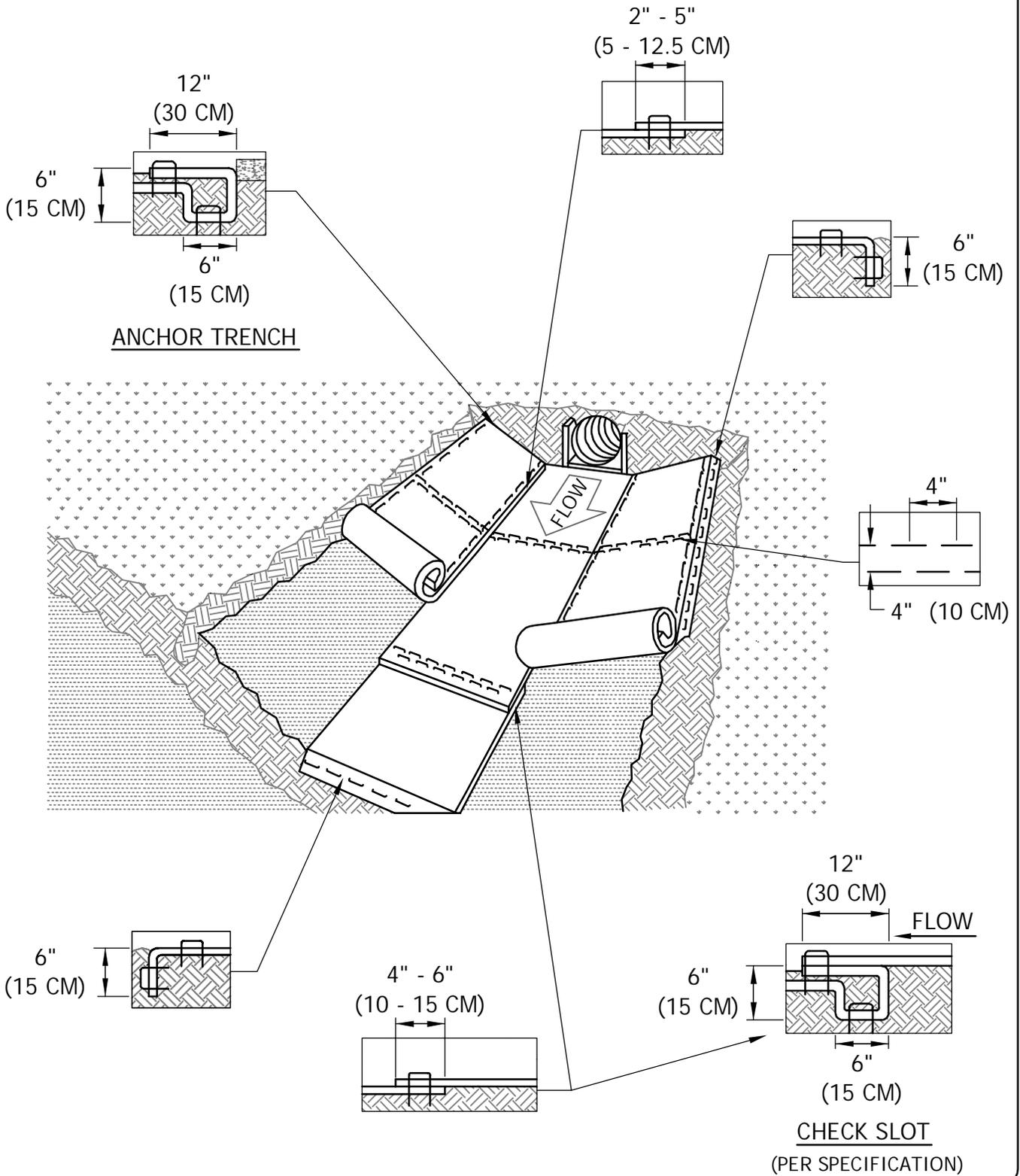
1. DIG 6" X 6" TRENCH
2. LAY BLANKET IN TRENCH
3. STAPLE AT 1.5' INTERVALS
4. BACKFILL WITH NATURAL SOIL AND COMPACT
5. BLANKET LENGTH SHALL NOT EXCEED 100' WITHOUT AN ANCHOR TRENCH



EROSION CONTROL BLANKET  
TOWN OF ST. JOSEPH  
WISCONSIN

LAST REVISION:  
AUG 2016

PLATE NO.  
ERO-05



EROSION CONTROL BLANKET  
CHANNEL INSTALLATION  
TOWN OF ST. JOSEPH  
WISCONSIN

LAST REVISION:  
AUG 2016

PLATE NO.  
ERO-06

6" X 6" TRENCH WITH LEADING EDGE OF GEOTEXTILE FABRIC STAPLED AT 1' INTERVALS AND BACKFILLED WITH NATURAL SOIL

WISDOT 628.2.6 GEOTEXTILE FABRIC

POINT 1

DITCH CHECK  
ROCK/BIO WEEPER  
OR CHECK DAM

FLOW  
FLOW  
FLOW

MIN. 6" OVERLAP  
IF NECESSARY,  
STAPLE 1' O.C.

POINT 2

6" 11 GAUGE METAL  
STAPLES SPACED 2' O.C.

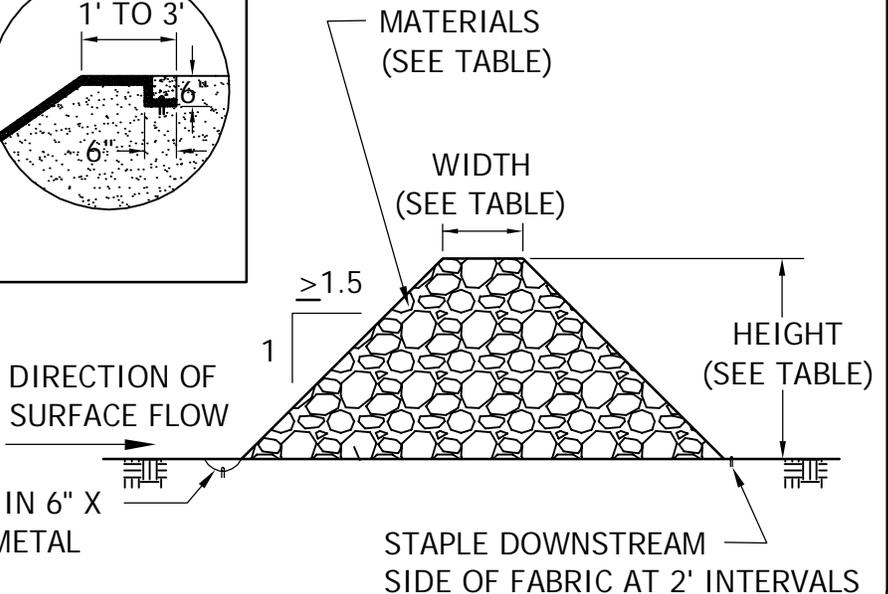
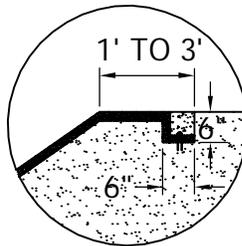
**NOTE:**

POINT 1 MUST BE A MINIMUM OF 6" HIGHER THAN POINT 2 TO ENSURE THAT WATER FLOWS OVER THE DITCH CHECK AND NOT AROUND THE ENDS.

	HEIGHT (INCHES)	WIDTH (INCHES)	MATERIAL
SMALL CHECK	24	12 - 18	WISDOT MED. RIP RAP
LARGE CHECK	36	24 - 30	WISDOT MED. RIP RAP
ROCK WEEPER	18	6 - 12	1 1/2" WASHED ROCK

**ANCHOR TRENCH**

1. DIG 6" X 6" TRENCH
2. LAY BLANKET IN TRENCH
3. STAPLE AT 1.5' INTERVALS
4. BACKFILL WITH NATURAL SOIL AND COMPACT



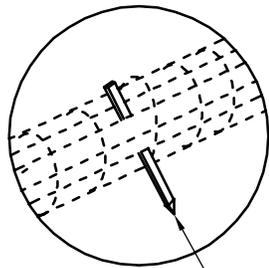
GEOTEXTILE FABRIC ANCHORED IN 6" X 6" TRENCH WITH 6", 11 GAUGE METAL STAPLES AT 1' INTERVALS

STAPLE DOWNSTREAM SIDE OF FABRIC AT 2' INTERVALS

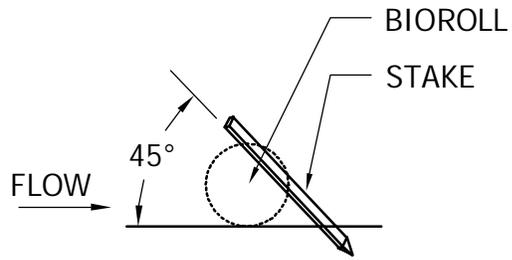
ROCK DITCH CHECK / WEEPER  
SIZING & MATERIALS  
TOWN OF ST. JOSEPH  
WISCONSIN

LAST REVISION:  
AUG 2016

PLATE NO.  
ERO-07



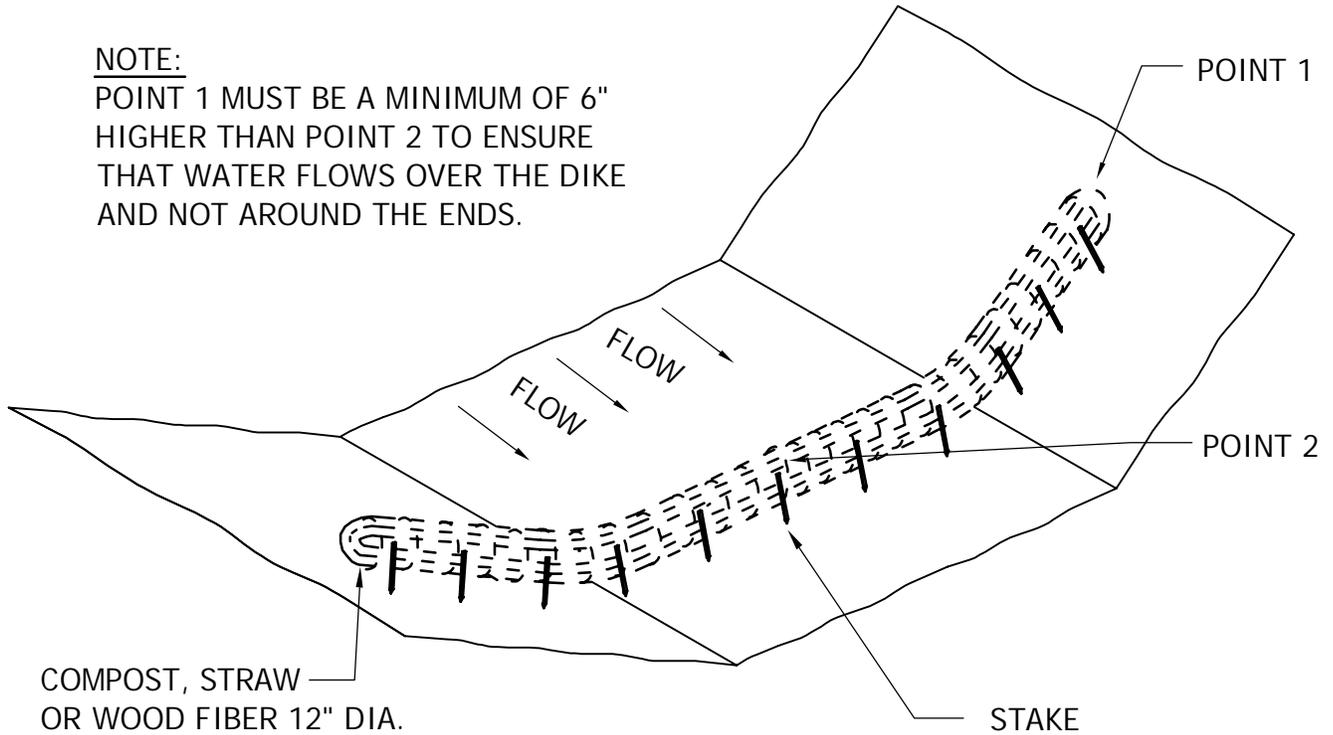
STAKE



2" x 2" x 16" LONG WOODEN STAKES AT 1'-0" SPACING . STAKES SHALL BE DRIVEN THROUGH THE BACK HALF OF THE FILTER LOG AT AN ANGLE OF 45° WITH THE TOP OF THE STAKE POINTING UPSTREAM.

NOTE:

POINT 1 MUST BE A MINIMUM OF 6" HIGHER THAN POINT 2 TO ENSURE THAT WATER FLOWS OVER THE DIKE AND NOT AROUND THE ENDS.

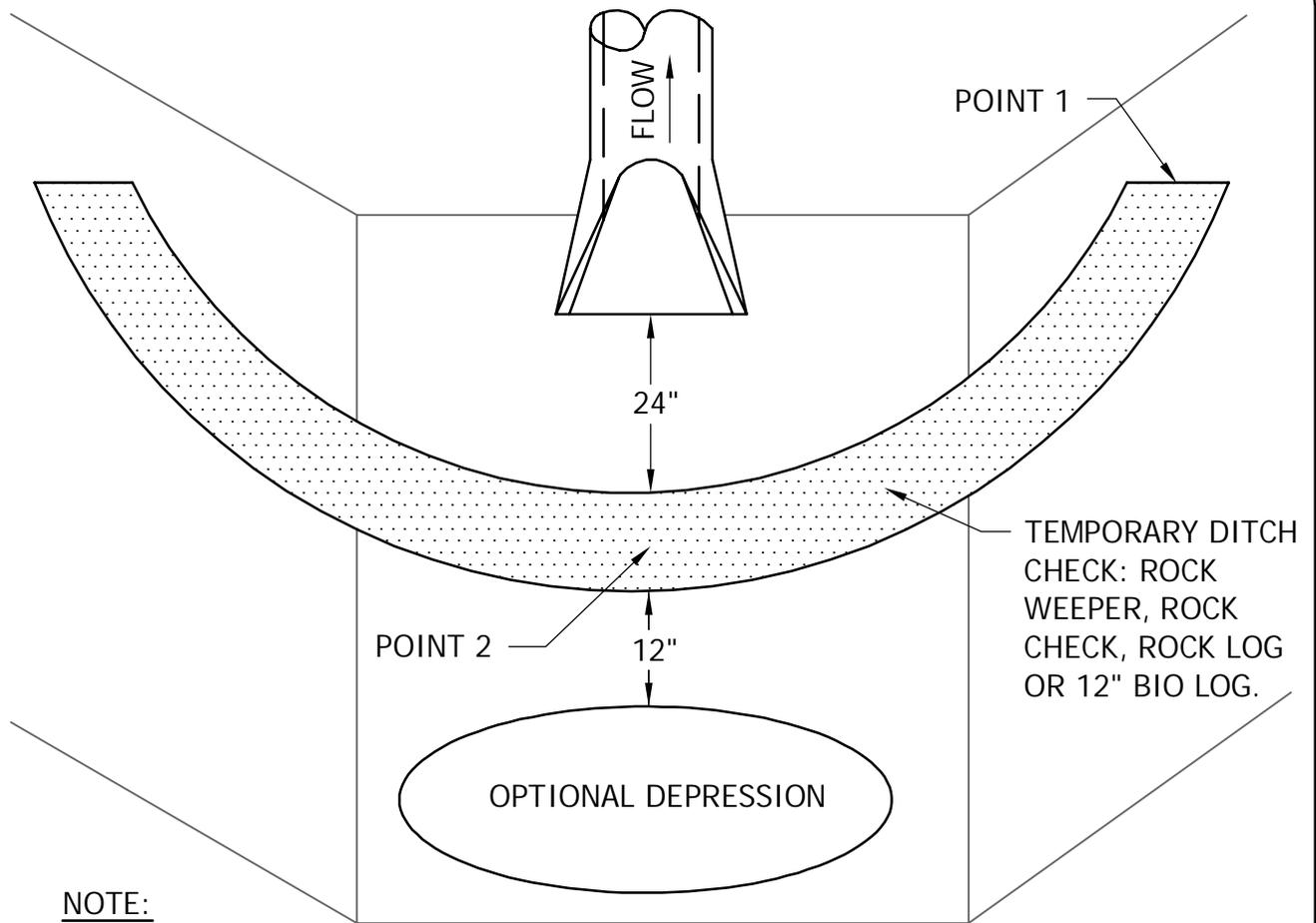


COMPOST, STRAW OR WOOD FIBER 12" DIA. ROLL ENCLOSED IN POLYPROPYLENE NETTING OR A GEOTEXTILE BAG.

FILTER LOG DITCH CHECK  
TOWN OF ST. JOSEPH  
WISCONSIN

LAST REVISION:  
AUG 2016

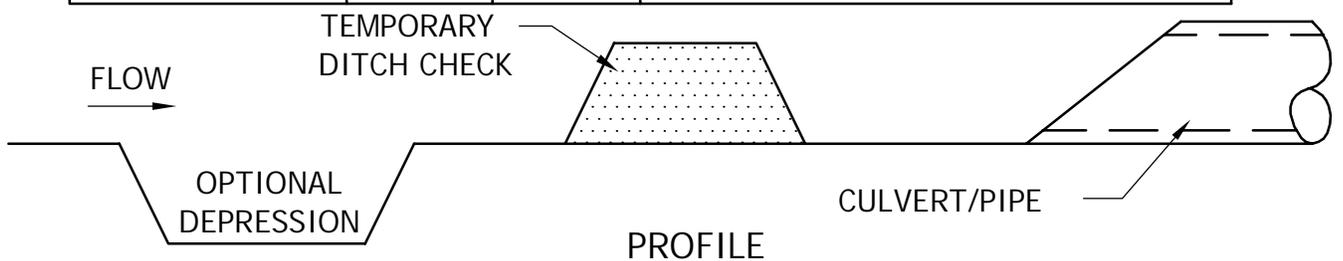
PLATE NO.  
ERO-08



NOTE:  
 POINT 1 MUST BE MINIMUM OF 6" HIGHER THAN POINT 2, TO ENSURE WATER FLOWS THROUGH AND OVER THE CHECK AND NOT AROUND THE ENDS

PLAN VIEW

	HEIGHT (inches)	WIDTH (inches)	MATERIAL
SMALL CHECK	24	12-18	WISDOT MEDIUM RIP-RAP
ROCK WEEPER	18	6-12	1 1/2" WASHED ROCK



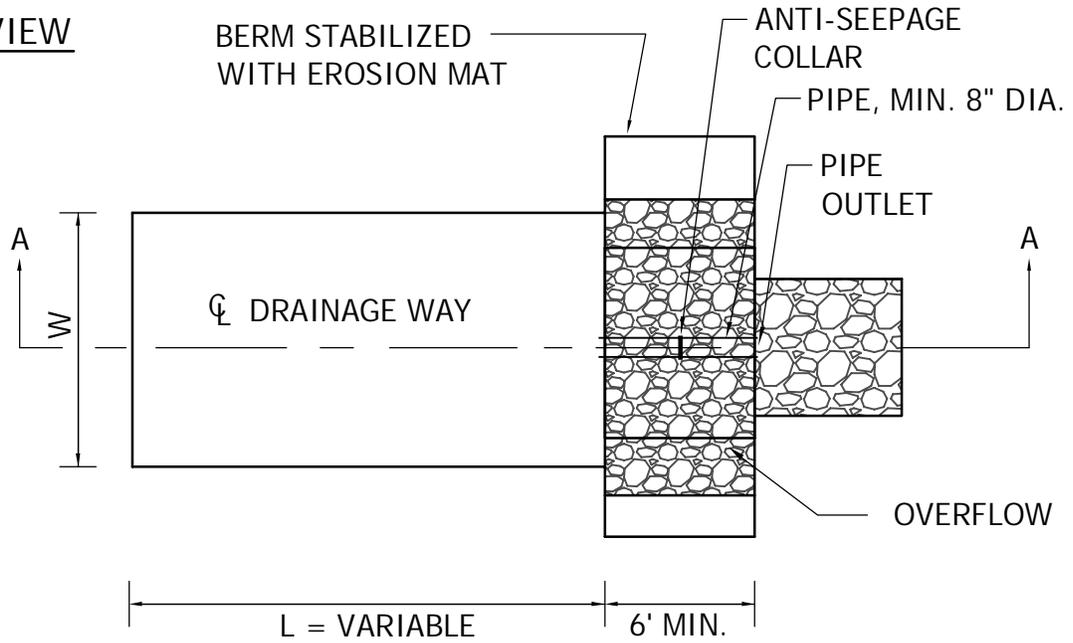
PROFILE

CULVERT/PIPE PROTECTION  
 TOWN OF ST. JOSEPH  
 WISCONSIN

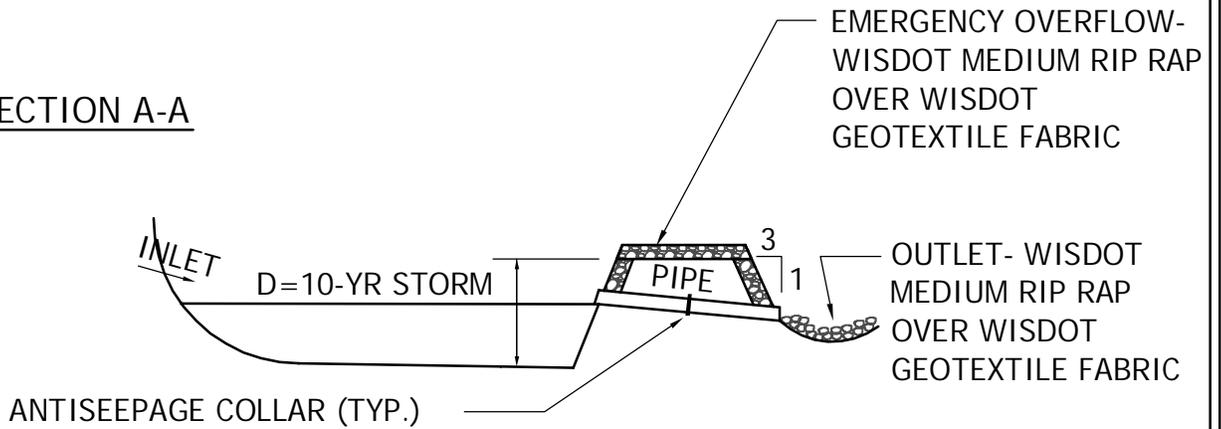
LAST REVISION:  
 AUG 2016

PLATE NO.  
 ERO-09

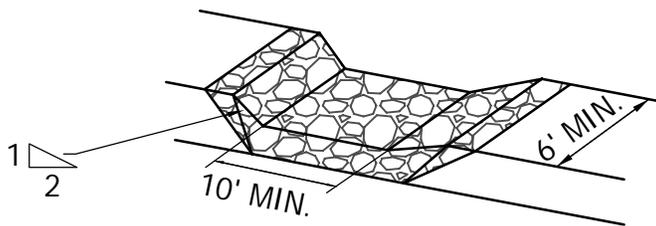
I. PLAN VIEW



II. SECTION A-A



III. BASIN EMERGENCY OVERFLOW



NOTES:

BASIN USED FOR 10 ACRES DRAINAGE AREA OR MORE. DESIGN RUNOFF VOLUME IS FROM A 2-YR, 24-HR STORM PER ACRE DRAINED TO THE BASIN. BASIN VOLUME MUST BE A MIN. OF 1800 CUBIC FEET/ACRE. SEE PLANS/SPECIFICATIONS FOR BASIN DIMENSIONS AND PIPE SIZE AND SLOPE.

TEMPORARY SEDIMENTATION BASIN  
PIPE OUTLET  
TOWN OF ST. JOSEPH  
WISCONSIN

LAST REVISION:  
AUG 2016

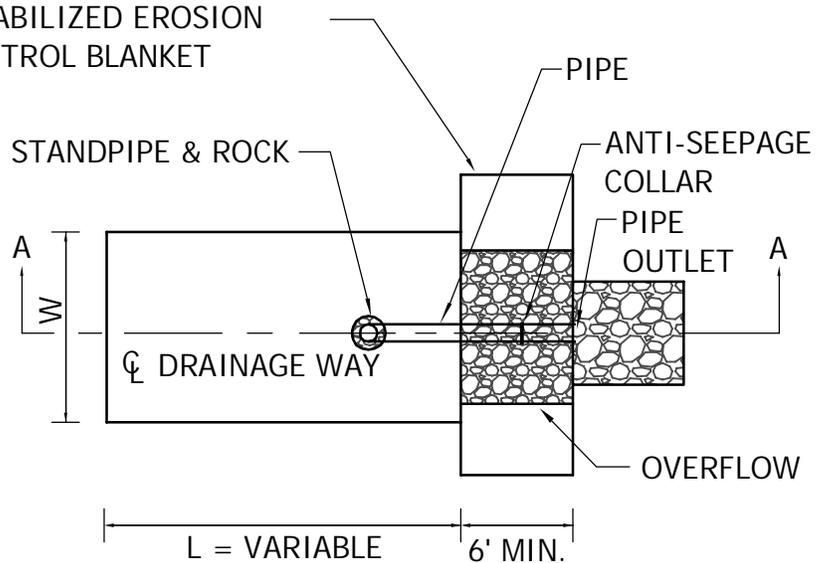
PLATE NO.  
ERO-10

**I. PLAN VIEW**

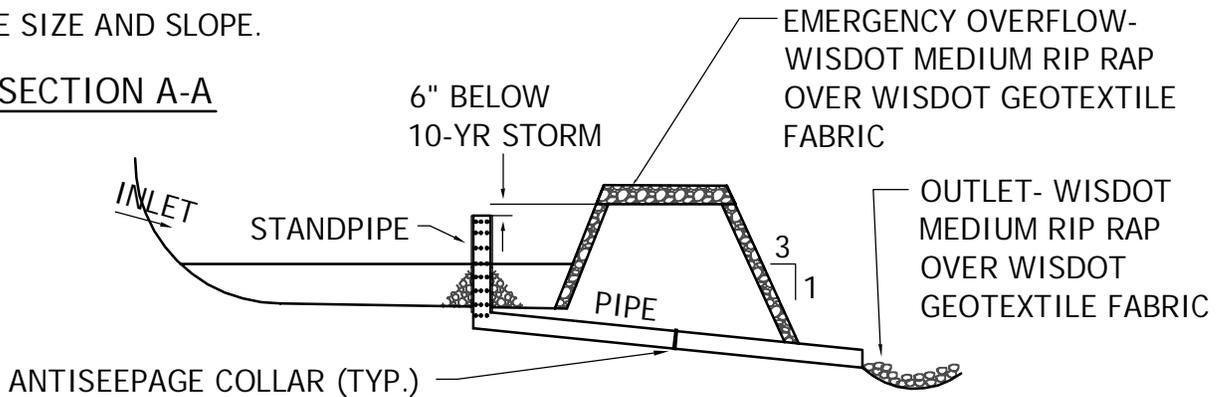
**NOTES:**

BASIN USED FOR 10 ACRES DRAINAGE AREA OR MORE. DESIGN RUNOFF VOLUME IS FROM A 2-YR, 24-HR STORM PER ACRE DRAINED TO THE BASIN. BASIN VOLUME MUST BE A MIN. OF 1800 CUBIC FEET/ACRE. SEE PLANS/SPECIFICATIONS FOR BASIN DIMENSIONS AND PIPE SIZE AND SLOPE.

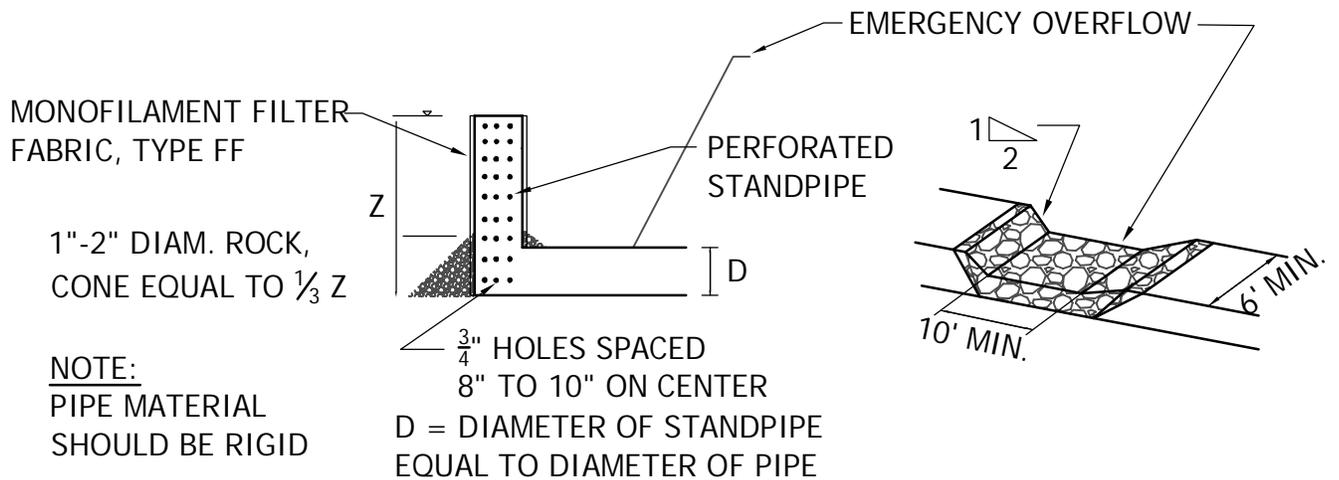
BERM STABILIZED EROSION MAT CONTROL BLANKET



**II. SECTION A-A**



**III. BASIN STANDPIPE AND EMERGENCY OVERFLOW**



**NOTE:**

PIPE MATERIAL SHOULD BE RIGID

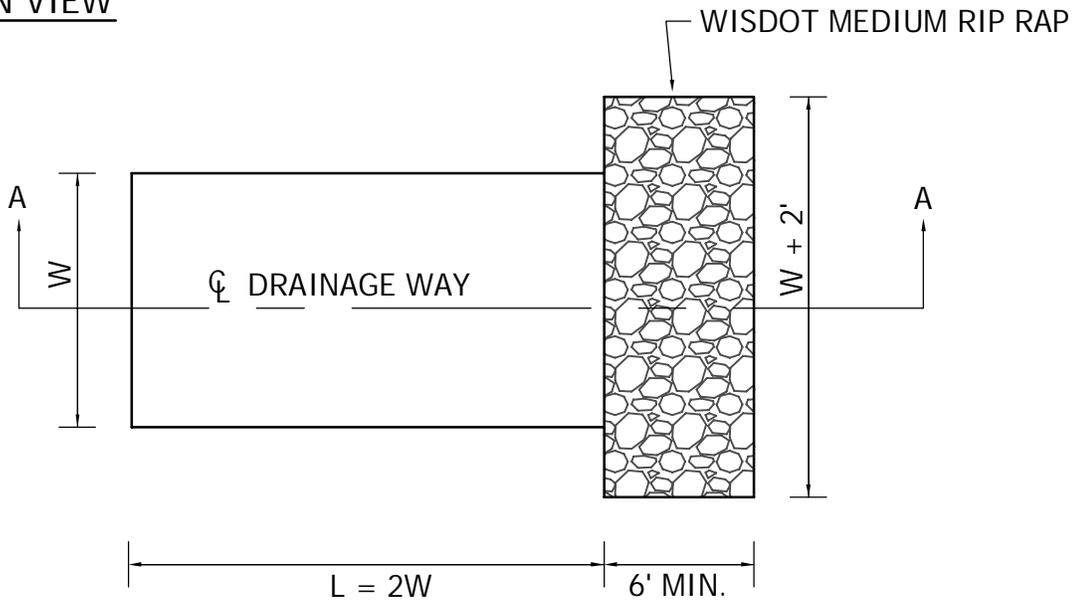
D = DIAMETER OF STANDPIPE EQUAL TO DIAMETER OF PIPE

TEMPORARY SEDIMENTATION BASIN  
STANDPIPE OUTLET  
TOWN OF ST. JOSEPH  
WISCONSIN

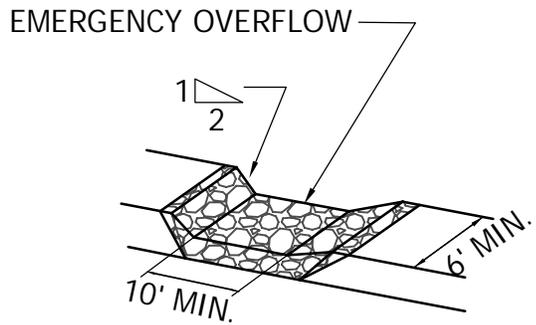
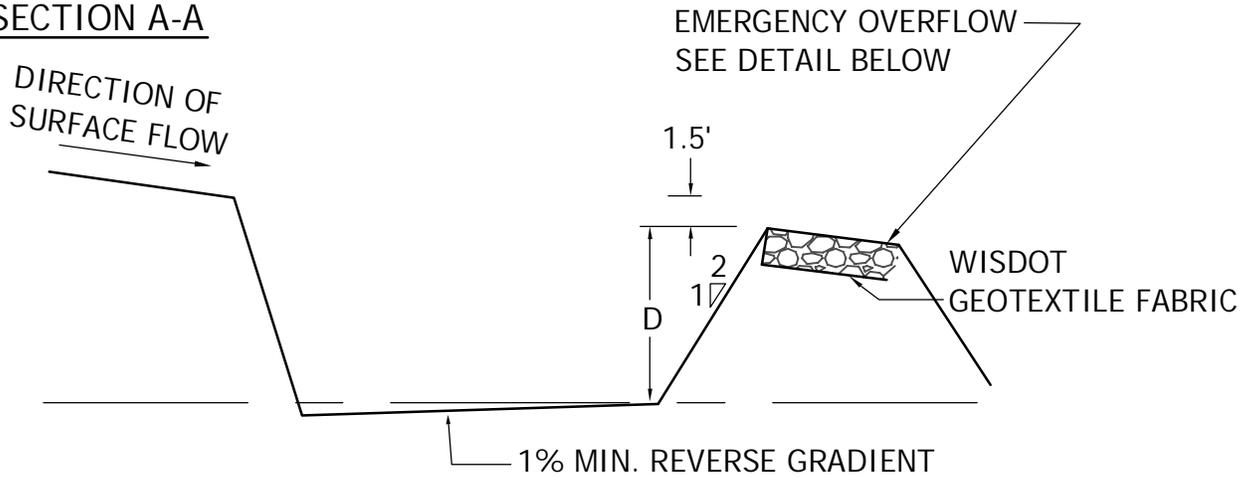
LAST REVISION:  
AUG 2016

PLATE NO.  
ERO-11

I. PLAN VIEW



II. SECTION A-A



NOTE:

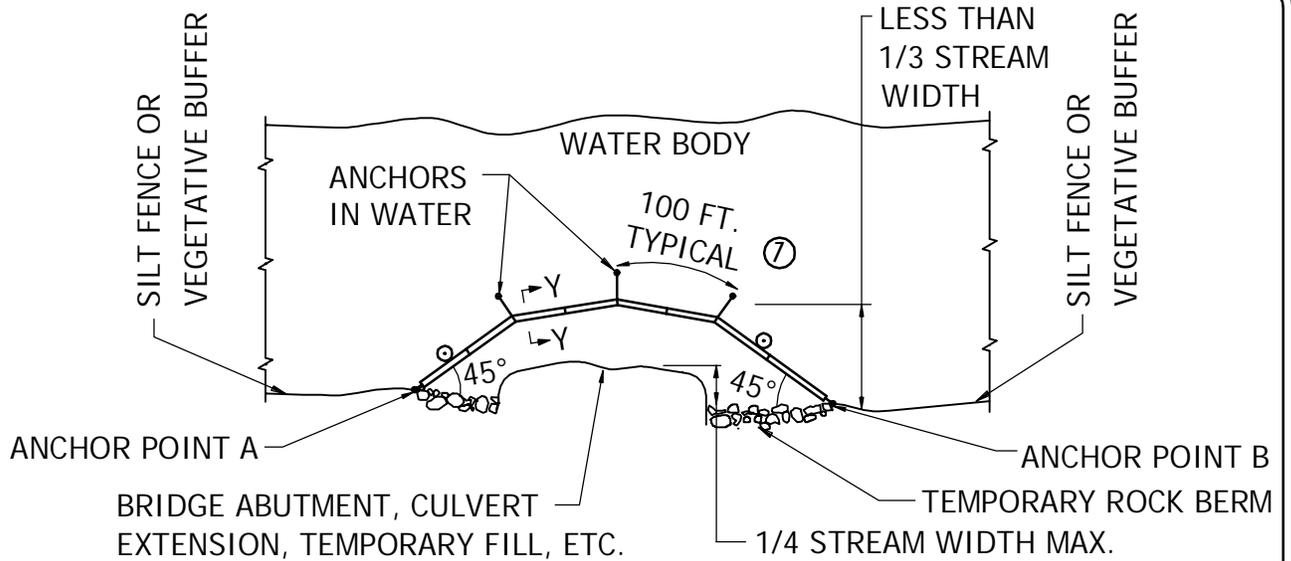
D=3' MIN, 5' MAX  
 W=10' MIN, 25' MAX  
 W(FT.)= 10 X DRAINAGE  
 AREA (AC.)

TEMPORARY SEDIMENT TRAP  
 TOWN OF ST. JOSEPH  
 WISCONSIN

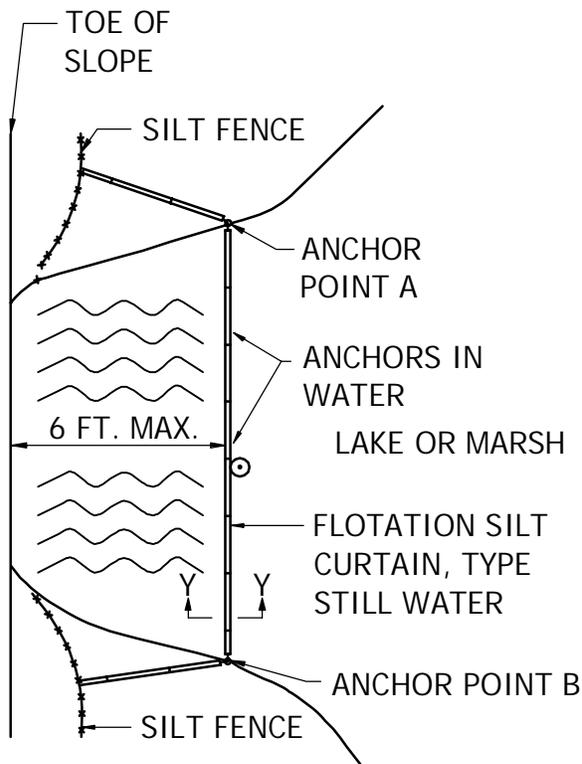
LAST REVISION:  
 AUG 2016

PLATE NO.  
 ERO-12





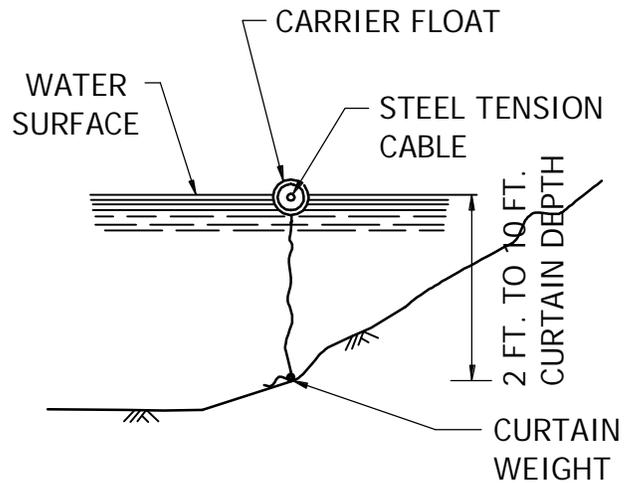
PLAN VIEW (TYPE: WORK AREA)



PLAN VIEW (TYPE: STILL WATER)

NOTES:

- ① 100 FT. MAX. SPACING BETWEEN ANCHORS. ANCHORS WEIGH MIN. 40 LBS.



SECTION Y-Y

FLOATING SILT CURTAIN  
STILL WATER  
TOWN OF ST. JOSEPH  
WISCONSIN

LAST REVISION:  
AUG 2016

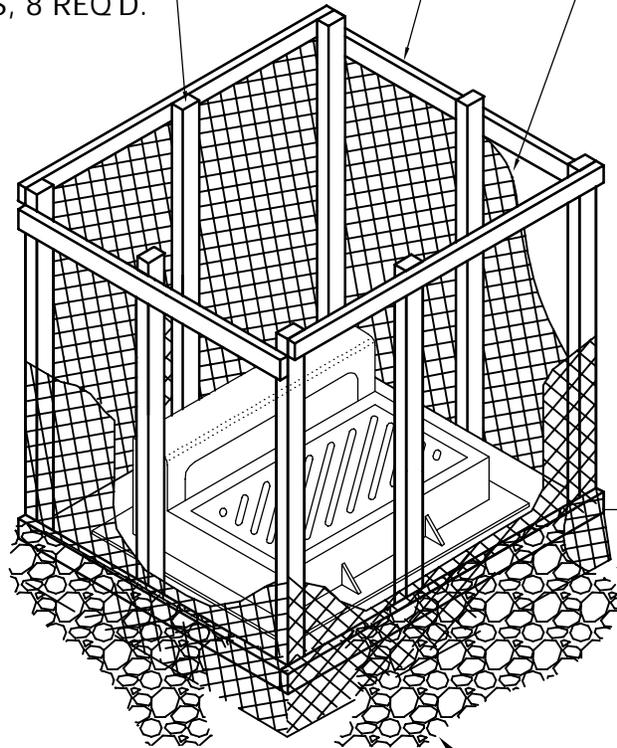
PLATE NO.  
ERO-14

WOODEN LATH SHALL BE NAILED SECURELY TO THE POST MEMBER TO SECURE FILTER FABRIC.

2" X 4" HORIZONTAL MEMBERS CONTINUOUS AROUND TOP AND BOTTOM. FASTENED TO EACH POST USING 2-20D COMMON NAILS

2" X 4" X 2.5' LONG WOOD POSTS, 8 REQ'D.

MONOFILAMENT GEOTEXTILE FABRIC, TYPE FF. ADDITIONAL 8-10" OF FABRIC FLAP AT BOTTOM OF BOX



2'-6"

8-10" FABRIC FLAP EXTENDING BEYOND BOTTOM 2"x4" - BURY UNDER ROCK TO PREVENT UNDERWASHING

1 1/2" WASHED ROCK  
1' DEEP X 1' WIDE

**NOTES:**  
CONTRACTOR SHALL CONSTRUCT SILT BOX TO FIT AROUND THE INLET STRUCTURE WITH 6" MINIMUM CLEARANCE TO EDGES OF STRUCTURE. SILT BOX TO BE PLACED ON AN EVEN SURFACE 6" BELOW STRUCTURE OPENING. TOP OF SILT BOX TO EXTEND 18" MINIMUM ABOVE EXISTING GRADE.

INLET PROTECTION FOR CATCH BASIN  
TOWN OF ST. JOSEPH  
WISCONSIN

LAST REVISION:  
AUG 2016

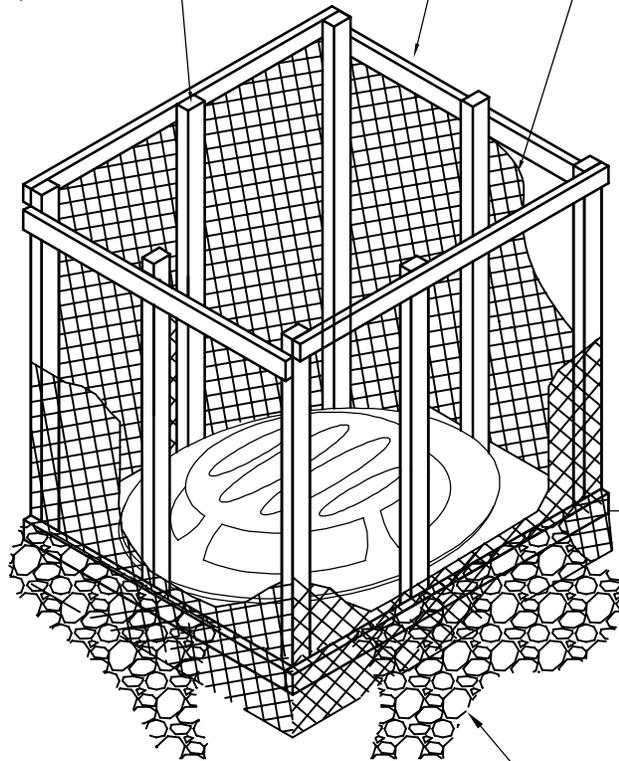
PLATE NO.  
ERO-15

WOODEN LATH SHALL BE NAILED SECURELY TO THE POST MEMBER TO SECURE FILTER FABRIC.

2" X 4" HORIZONTAL MEMBERS CONTINUOUS AROUND TOP AND BOTTOM. FASTENED TO EACH POST USING 2-20D COMMON NAILS

2" X 4" X 2.5' LONG WOOD POSTS, 8 REQ'D.

MONOFILAMENT GEOTEXTILE FABRIC, TYPE FF. ADDITIONAL 8-10" OF FABRIC FLAP AT BOTTOM OF BOX



2'-6"

8-10" FABRIC FLAP EXTENDING BEYOND BOTTOM 2"X4" - BURY UNDER ROCK TO PREVENT UNDERWASHING

1 1/2" WASHED ROCK  
1' DEEP X 1' WIDE

NOTES:

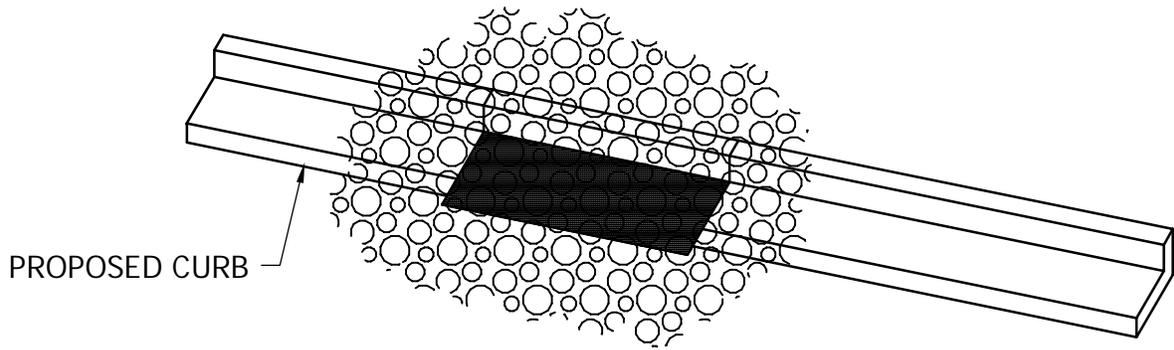
CONTRACTOR SHALL CONSTRUCT SILT BOX TO FIT AROUND THE INLET STRUCTURE WITH 6" MINIMUM CLEARANCE TO EDGES OF STRUCTURE. SILT BOX TO BE PLACED ON AN EVEN SURFACE 6" BELOW STRUCTURE OPENING. TOP OF SILT BOX TO EXTEND 18" MINIMUM ABOVE EXISTING GRADE.

INLET PROTECTION FOR  
BEEHIVE CATCH BASIN  
TOWN OF ST. JOSEPH  
WISCONSIN

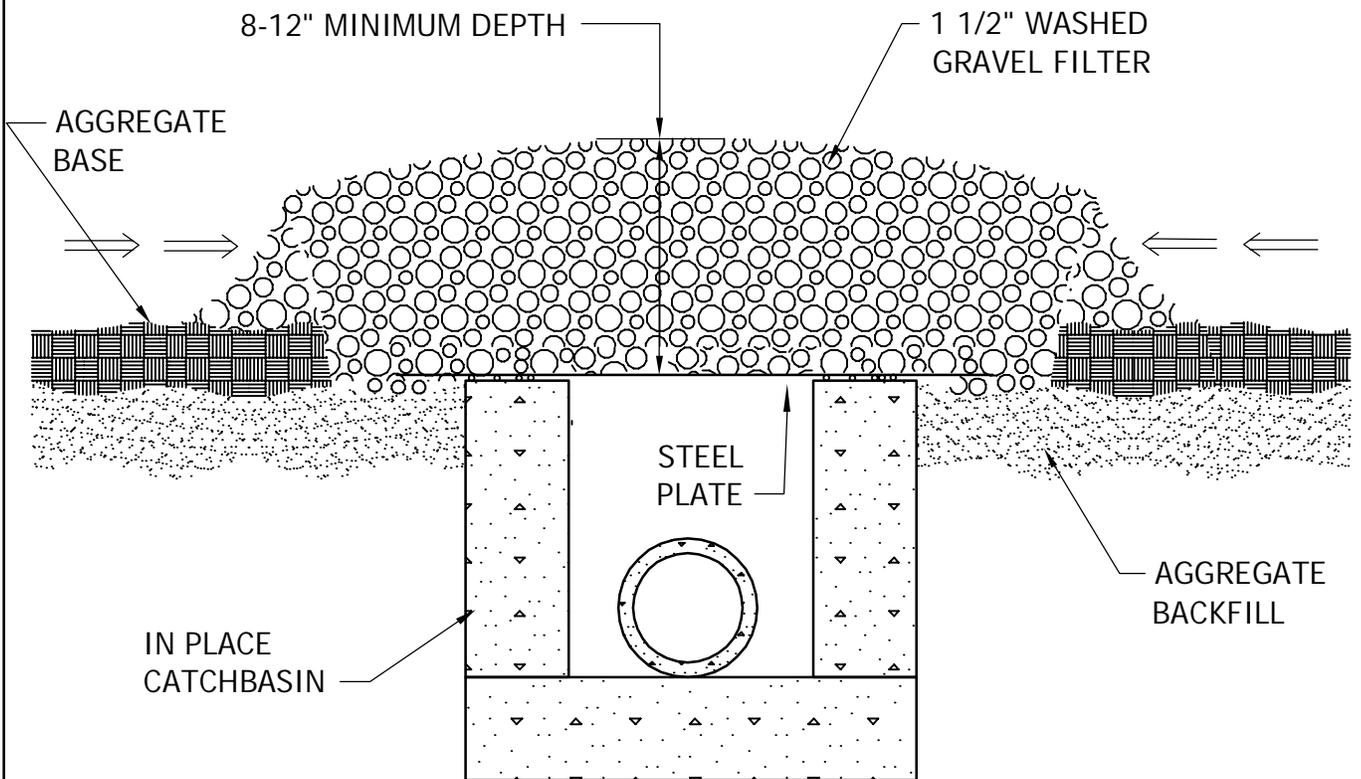
LAST REVISION:  
AUG 2016

PLATE NO.  
ERO-16

PLAN



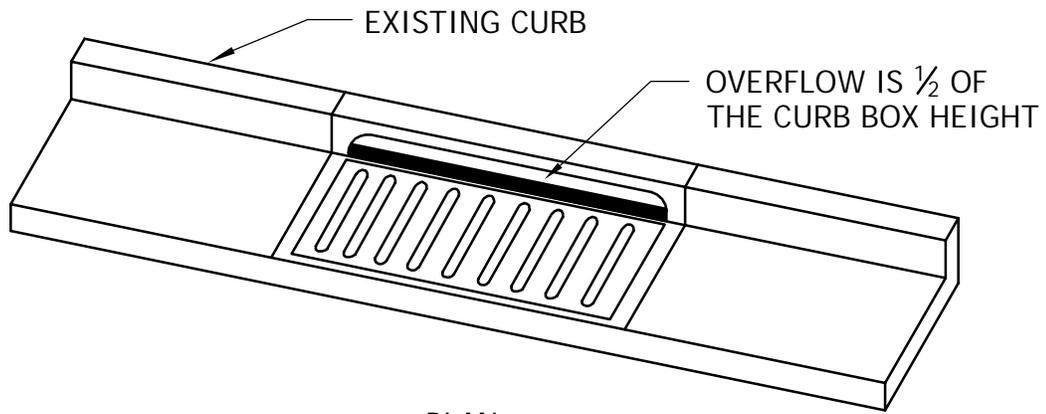
← ← = DIRECTION OF SURFACE FLOW



INLET PROTECTION ROCK FILTER  
FOR CATCH BASIN  
TOWN OF ST. JOSEPH  
WISCONSIN

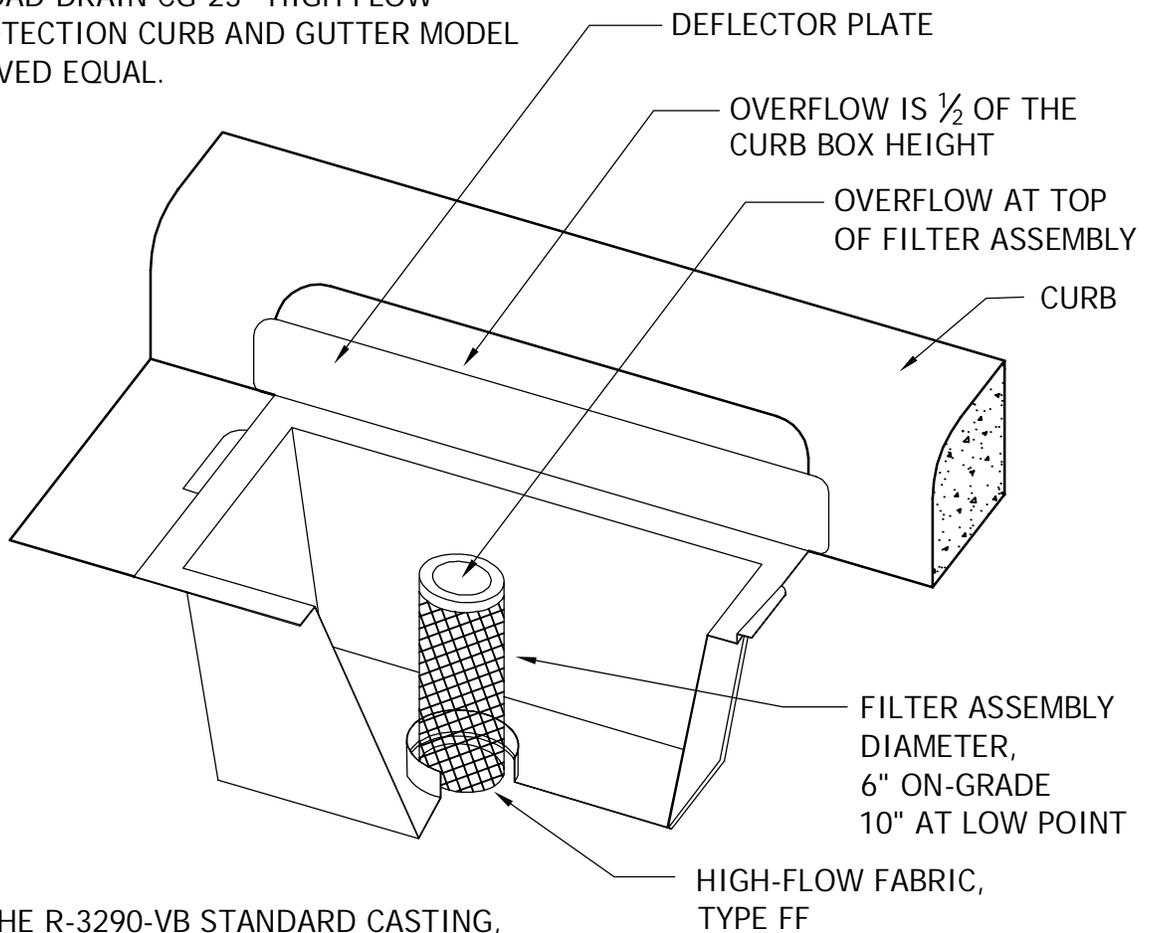
LAST REVISION:  
AUG 2016

PLATE NO.  
ERO-17



PLAN

WIMCO ROAD DRAIN CG-23\* HIGH FLOW  
INLET PROTECTION CURB AND GUTTER MODEL  
OR APPROVED EQUAL.



\* FOR THE R-3290-VB STANDARD CASTING,  
INSTALL WIMCO ROAD DRAIN  
CG-3290 OR APPROVED EQUAL.

CATCH BASIN INLET PROTECTION  
FOR AFTER PAVING  
TOWN OF ST. JOSEPH  
WISCONSIN

LAST REVISION:  
AUG 2016

PLATE NO.  
ERO-18