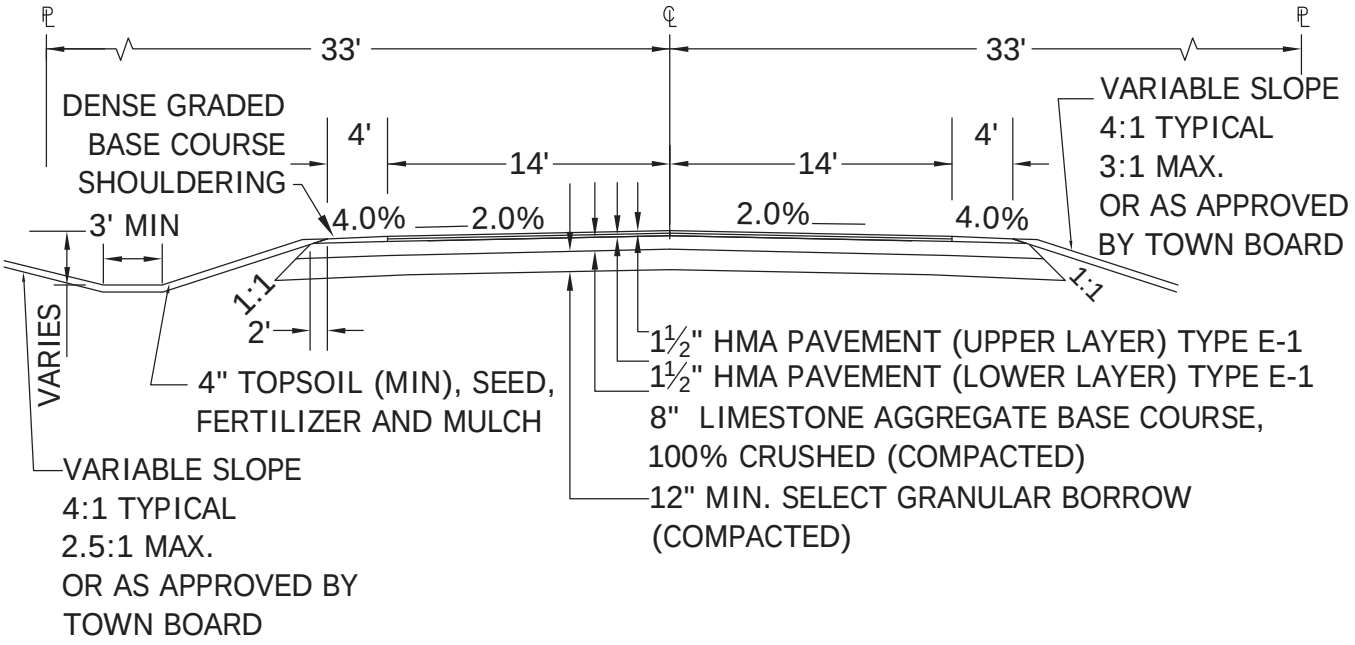
DETAIL PLATES

TOWN OF ST. JOSEPH, WISCONSIN

2009

Stantec



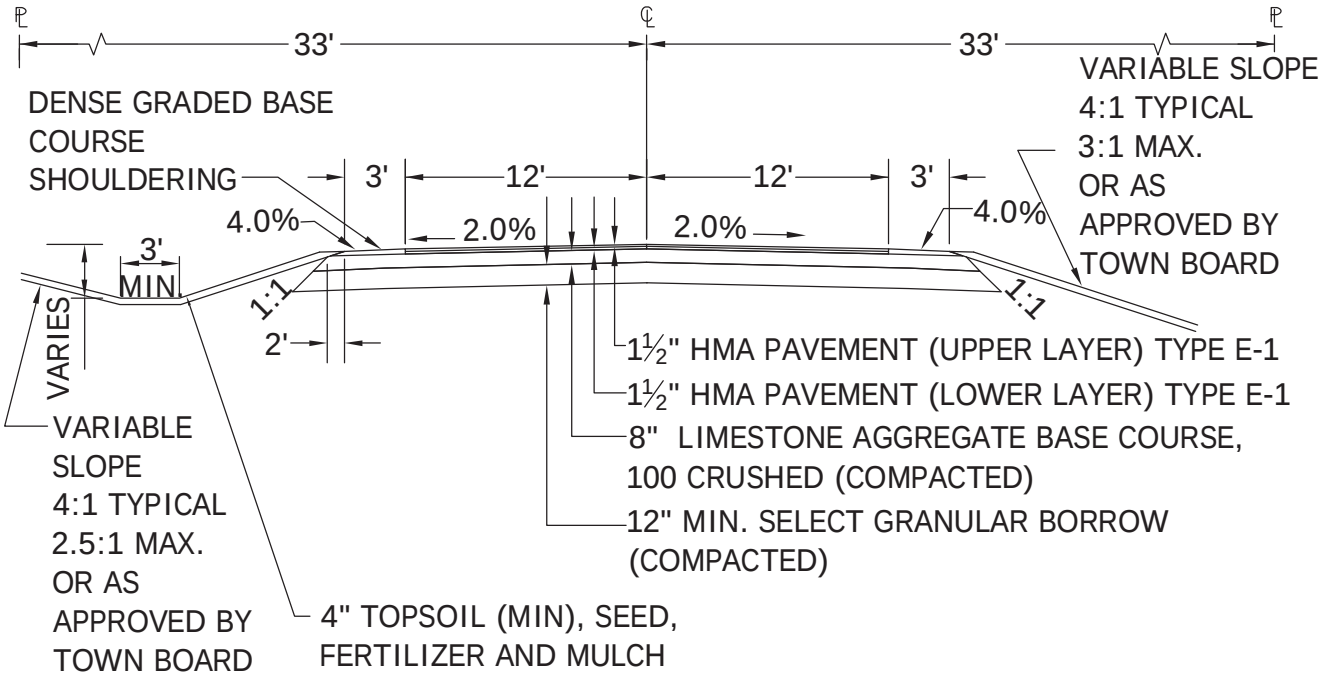
Notes:

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. All other roadway slopes shall be in accordance with table 1 of the town's standard specification.
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:
MAR 2009

PLATE NO.
RD-01



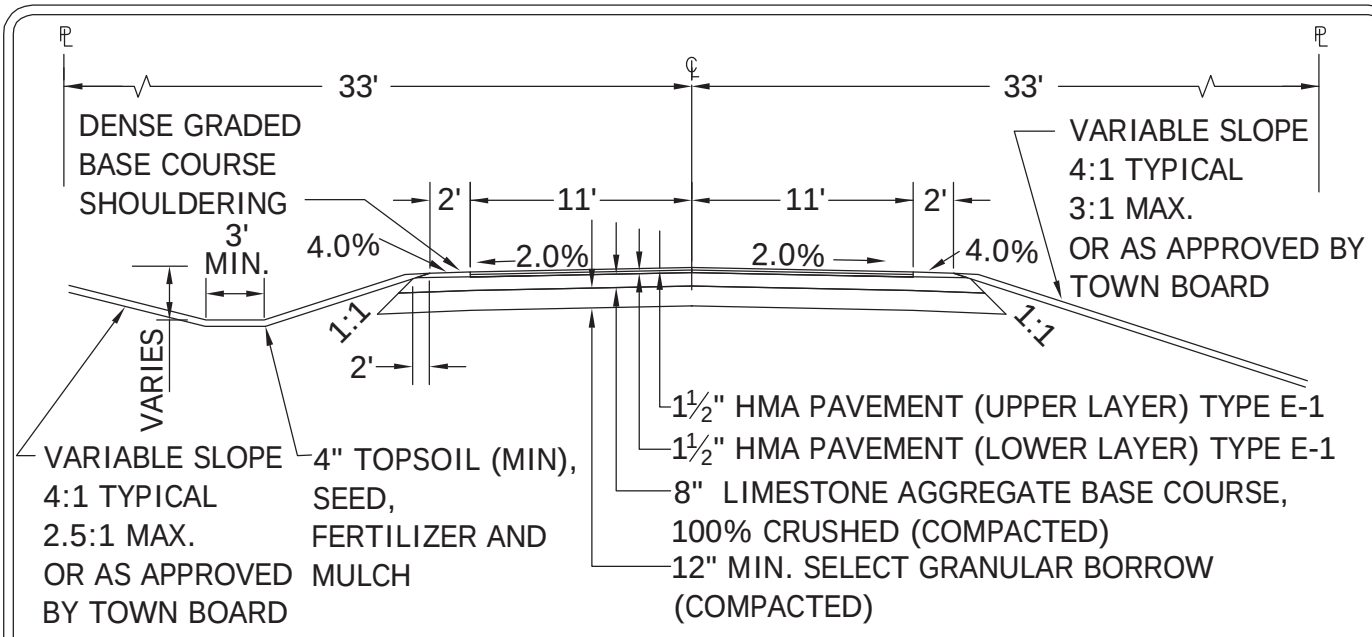
Notes:

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:
MAR 2009

PLATE NO.
RD-02



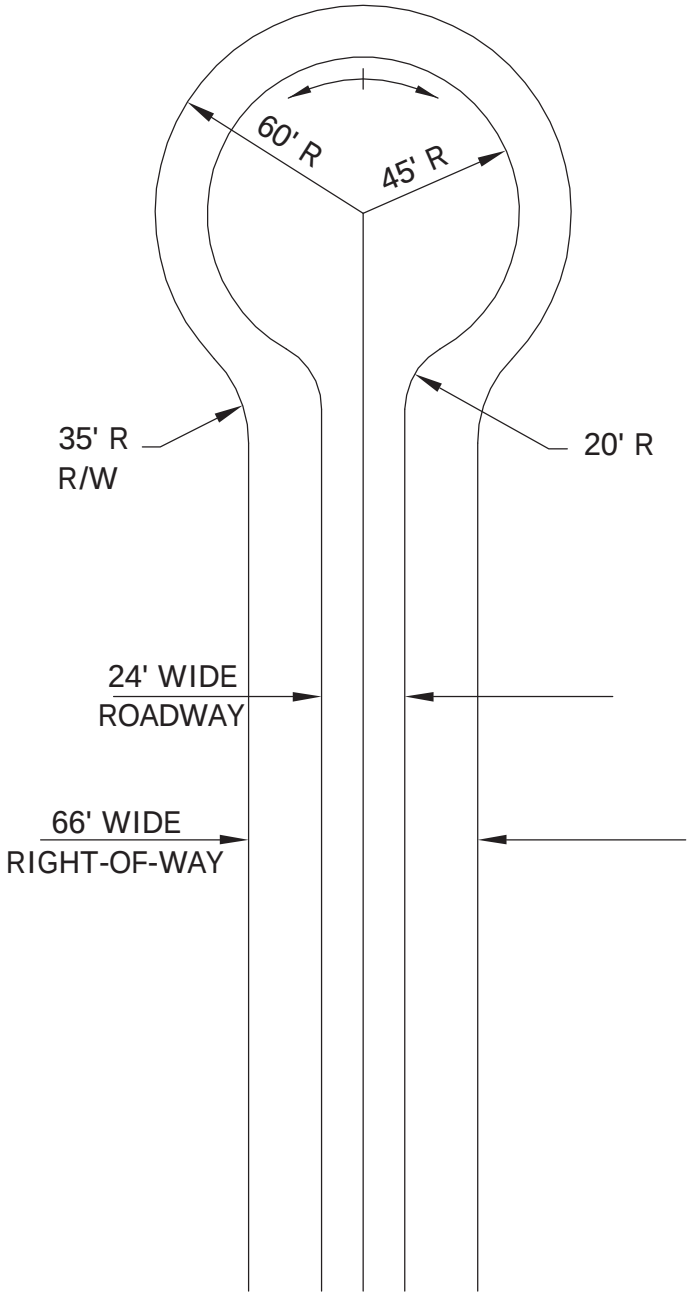
Notes:

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. All other roadway slopes shall be in accordance with table 1 of the town's standard specification.
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:
MAR 2009

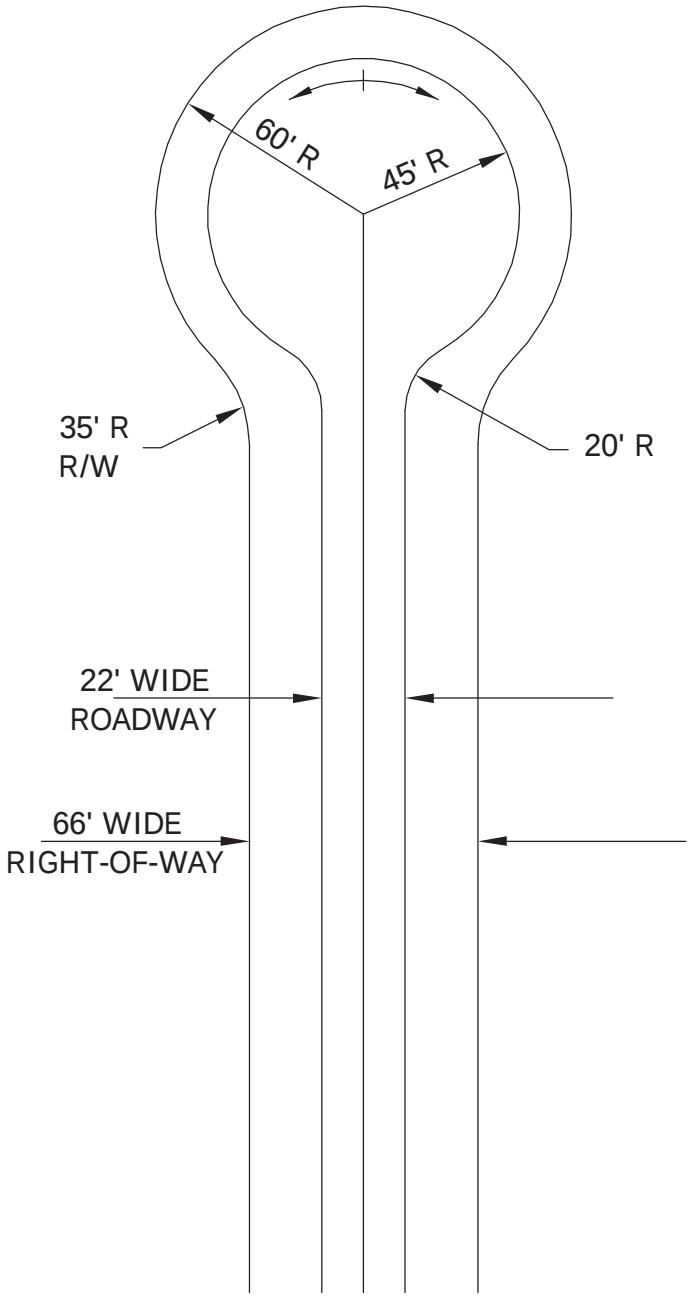
PLATE NO.
RD-03



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

LAST REVISION:
MAR 2009

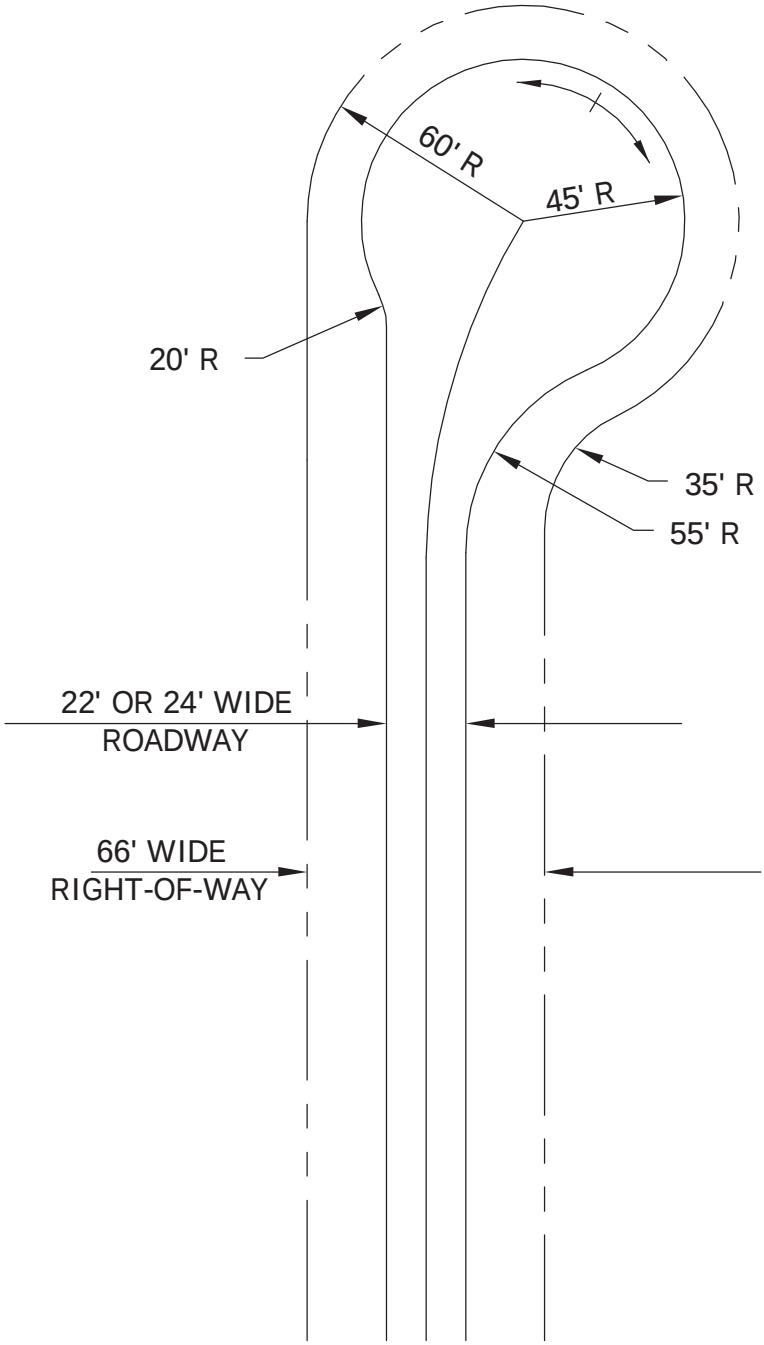
PLATE NO.
RD-04



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

LAST REVISION:
MAR 2009

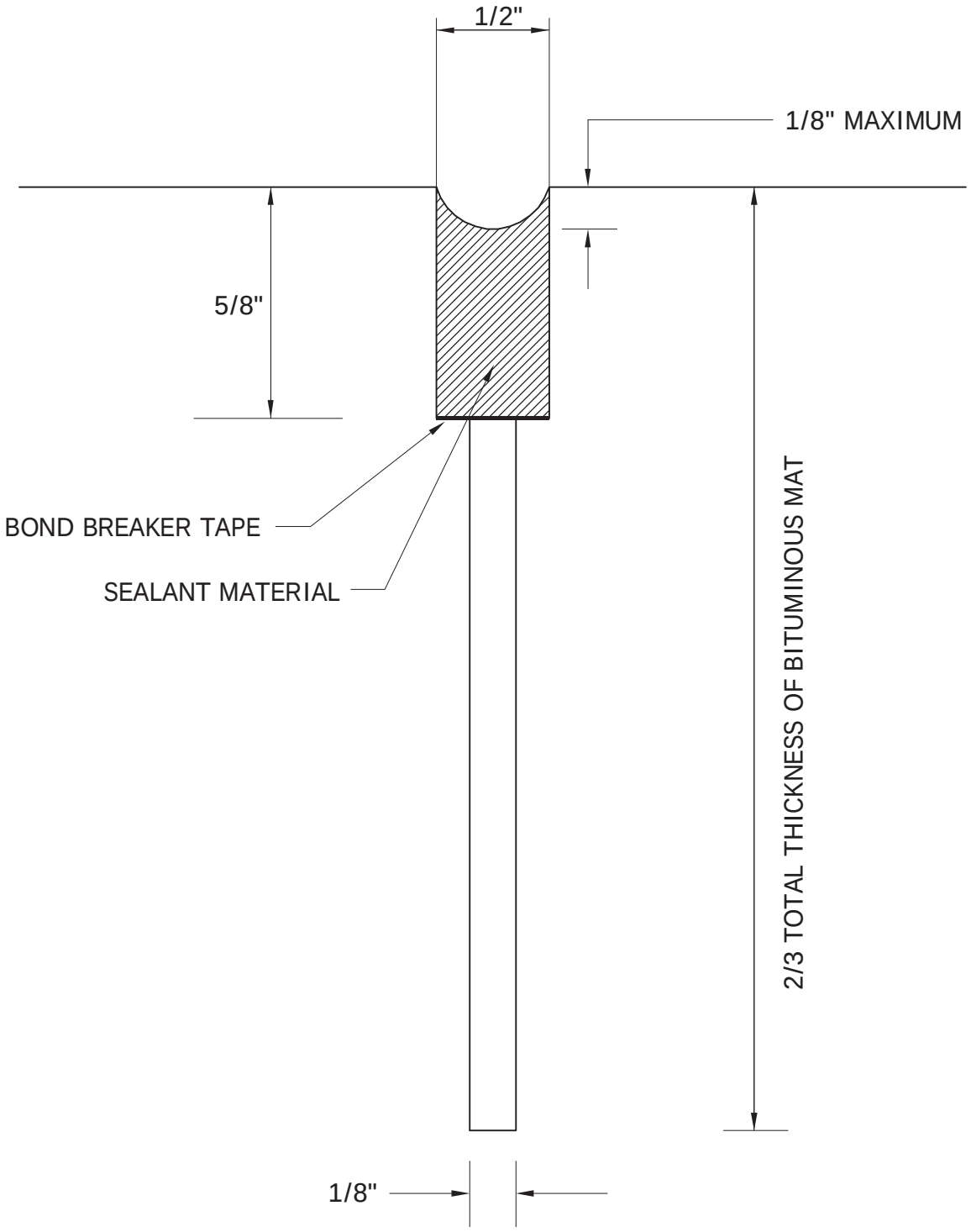
PLATE NO.
RD-05



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

LAST REVISION:
MAR 2009

PLATE NO.
RD-06



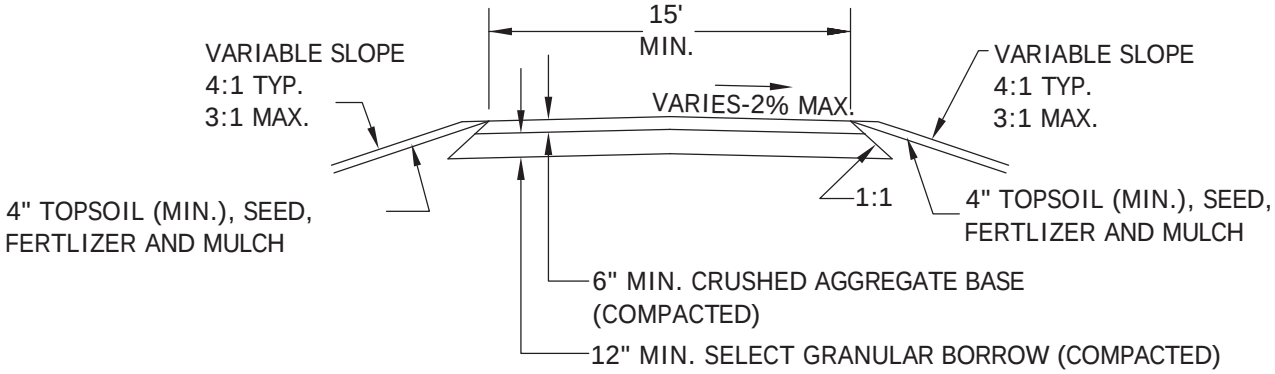
TYPICAL JOINT SECTION

BITUMINOUS JOINT SAW AND SEAL

TOWN OF ST. JOSEPH, WISCONSIN

LAST REVISION:
MAR 2009

PLATE NO.
RD-07



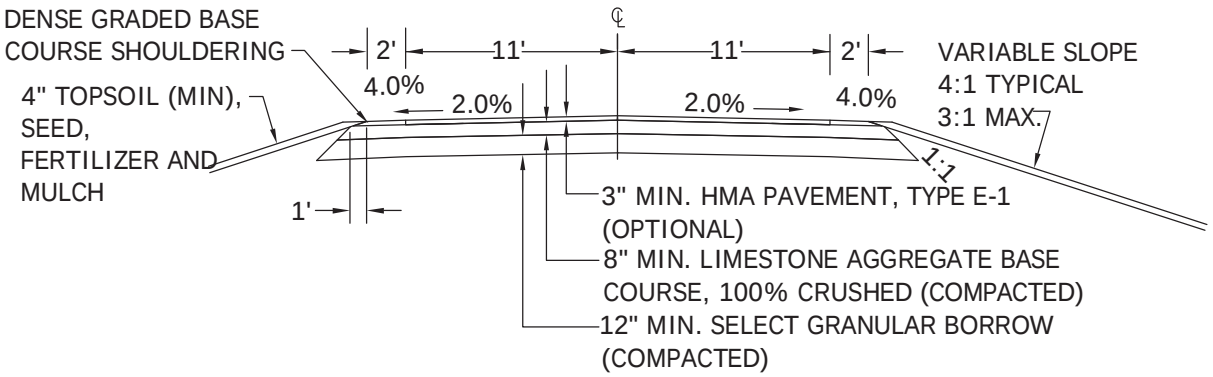
Notes:

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:
MAR 2009

PLATE NO.
RD-08



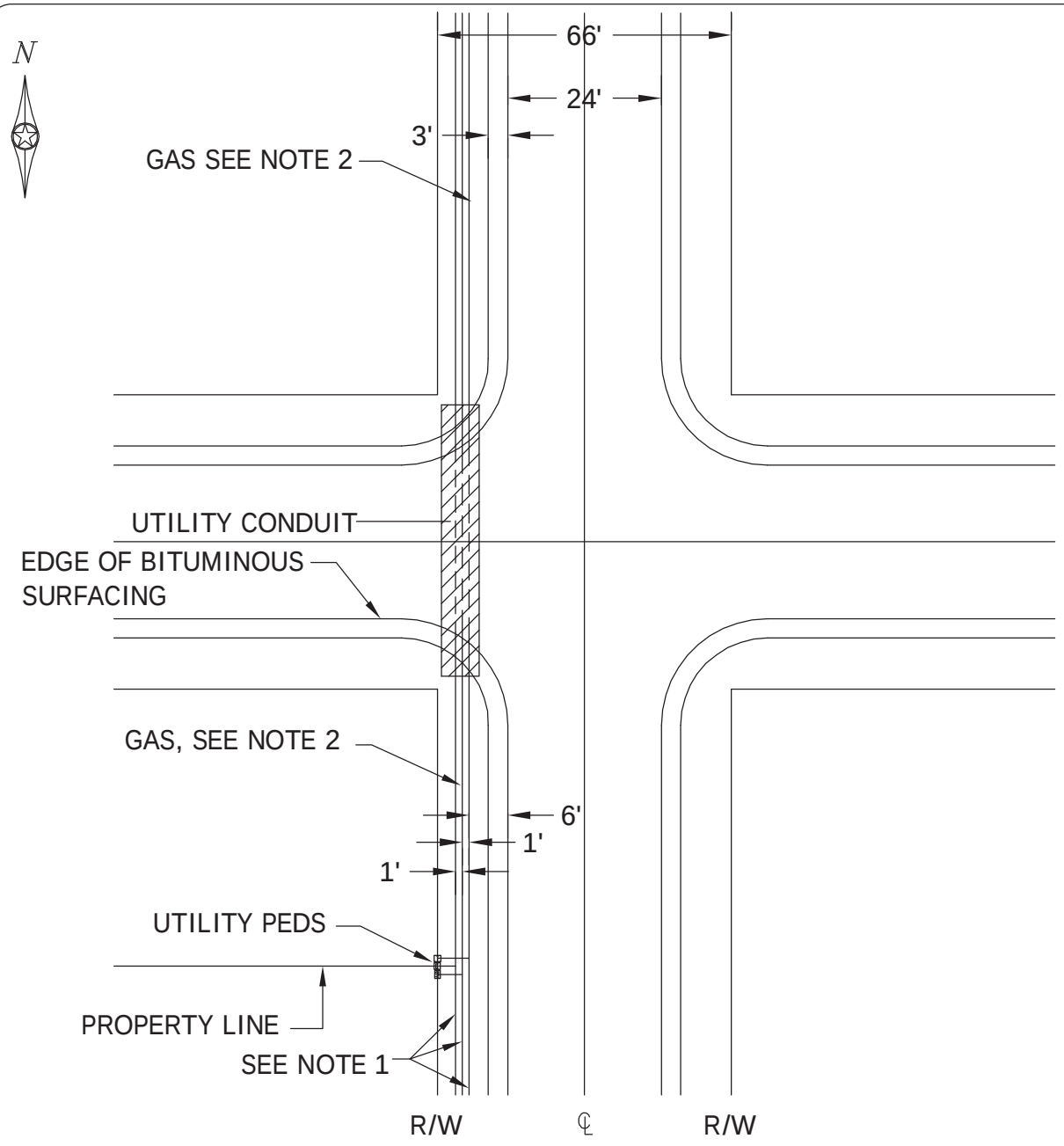
Notes:

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:
MAR 2009

PLATE NO.
RD-09



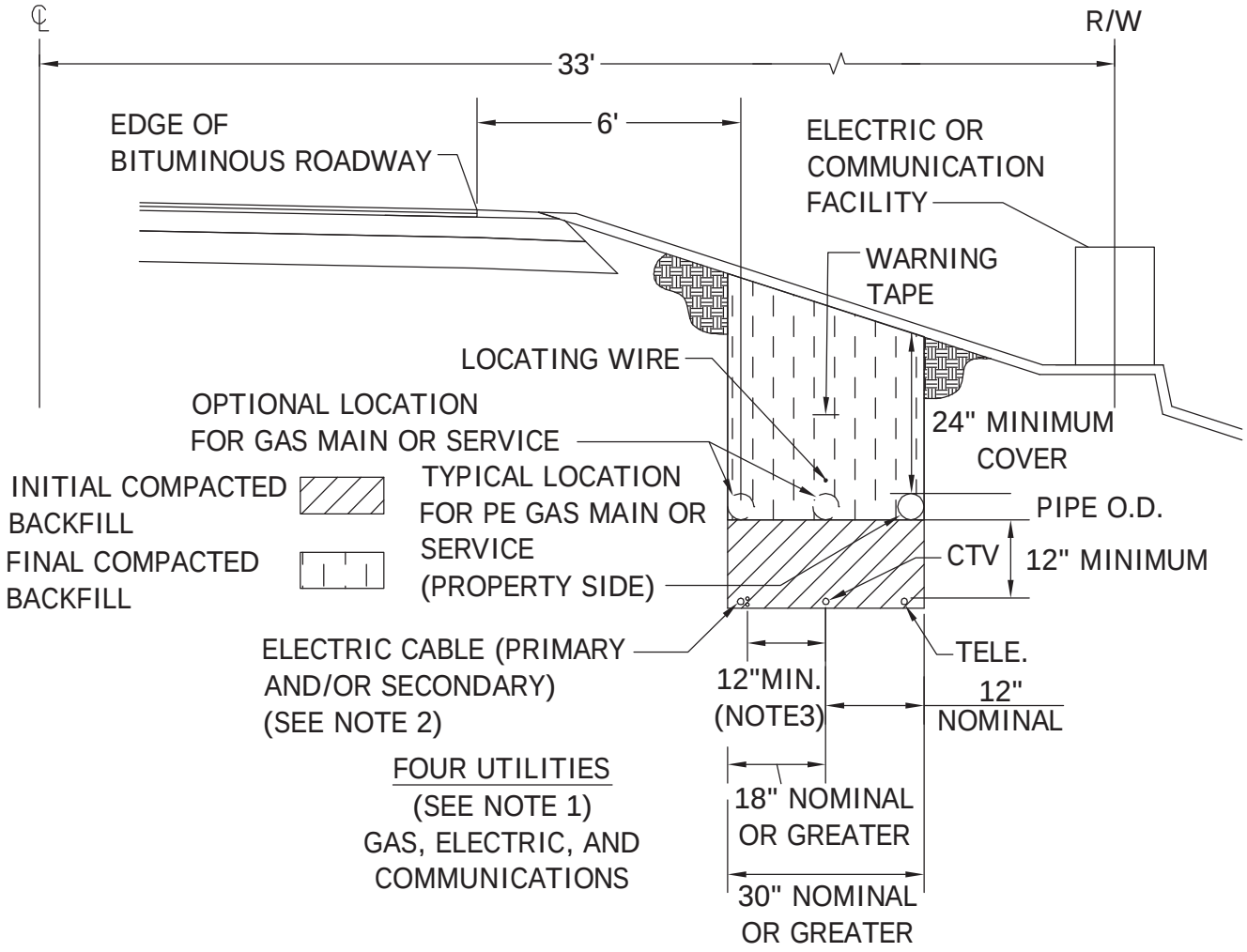
Note:

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:
MAR 2009

PLATE NO.
RD-10



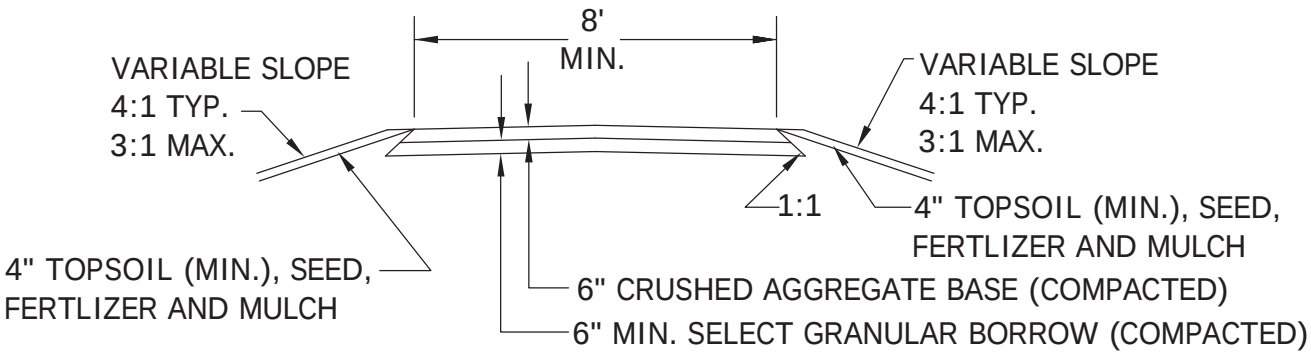
Note:

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 12" to 24".
5. Warning tape if used shall be installed using methods agreed upon be each of the utility companies involved.
6. Locating wire shall be installed with gas pipe using standard installation methods.

TYPICAL UTILITY
JOINT TRENCH CONSTRUCTION
TOWN OF ST. JOSEPH
WISCONSIN

LAST REVISION:
MAR 2009

PLATE NO.
RD-11



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.

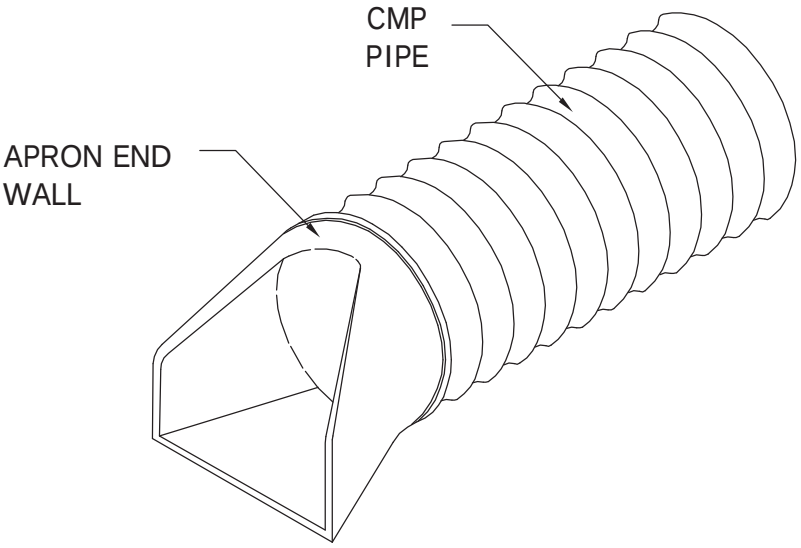
4. Suitable erosion control plans will be submitted to the town for review and approval with the preliminary and final plats. In addition, these plans will also be submitted to the St. Croix County Land and Conservation Division for their technical review and approval. Various types of erosion control 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:
MAR 2009

PLATE NO.
RD-12

SEE PLATE NO. STO-02 FOR RIP RAP PLACEMENT



Notes:

1. All culvert pipes shall be corrugated steel, in conformity with American Association of State Highway & Transportation Officials (AASHTO) Specification.

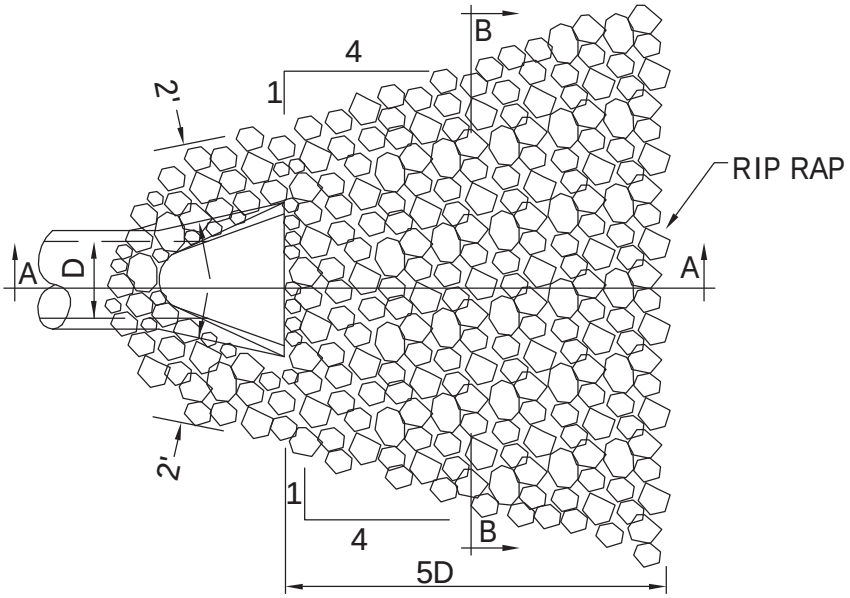
2. All culverts must be of adequate size to have the ability to withstand water from a 25 year rain event.

3. Apron end walls shall be used on all culverts where designated.

CMP STORM SEWER PIPE
TOWN OF ST. JOSEPH
WISCONSIN

LAST REVISION:
MAR 2009

PLATE NO.
STO-01



PLAN

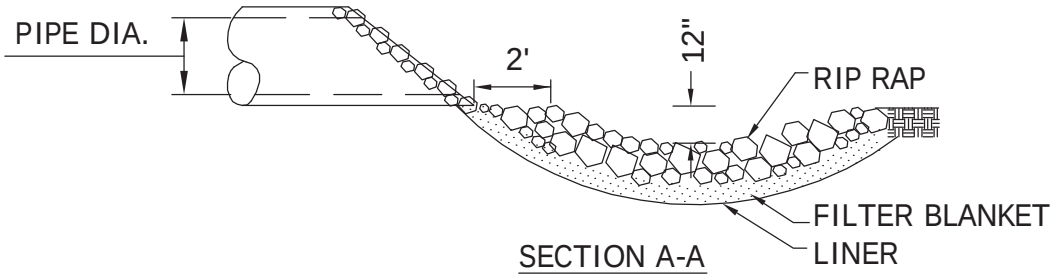
RIP RAP MINIMUM REQUIREMENTS

PIPE DIA.	
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

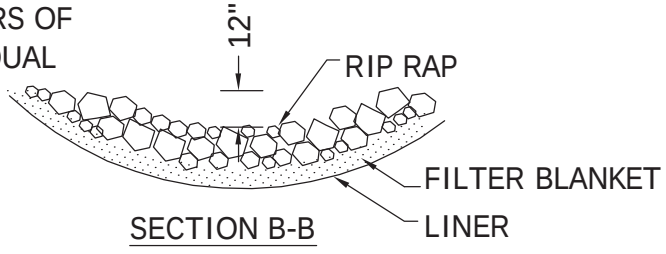
PIPE DIA.	
36"	23 CY MED. RIP RAP
42"	31 CY MED. RIP RAP
48"	38 CY MED. RIP RAP
54" AND UP	62 CY and up HEAVY RIP RAP

(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

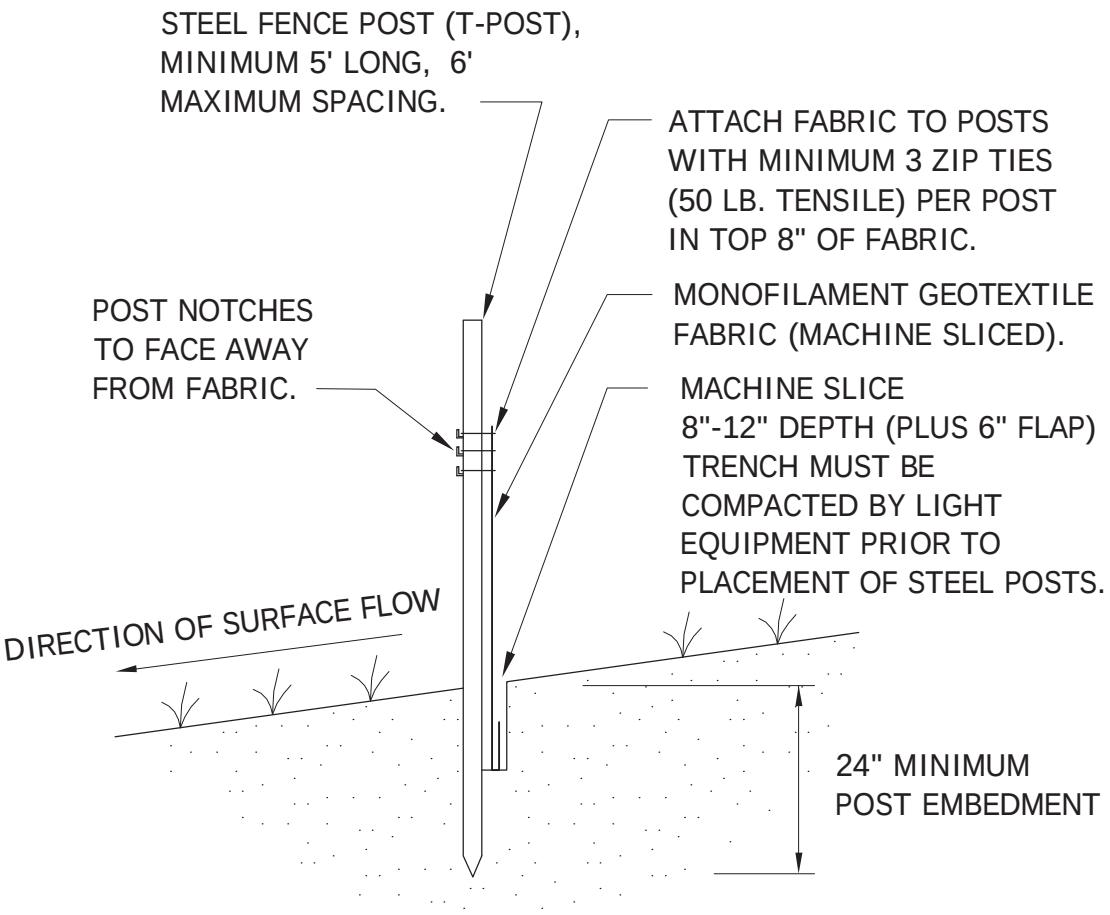


SECTION B-B

RIP RAP AT OUTLETS
TOWN OF ST. JOSEPH
WISCONSIN

LAST REVISION:
MAR 2009

PLATE NO.
STO-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.

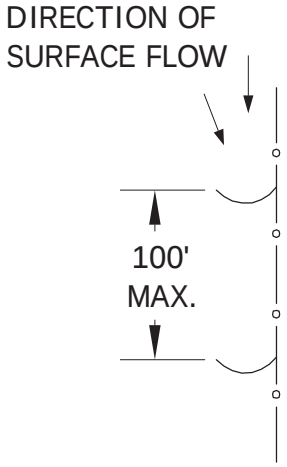
SILT FENCE MACHINE SLICED
TOWN OF ST. JOSEPH, WISCONSIN

LAST REVISION:
MAR 2009

PLATE NO.
ERO-01

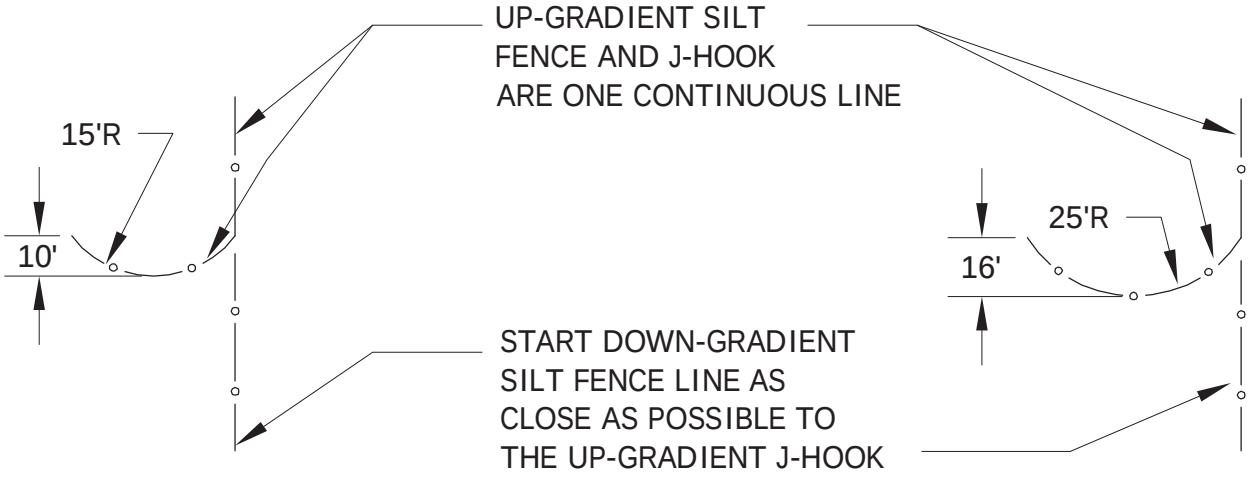
PLAN VIEW

I. SPACING REQUIREMENTS



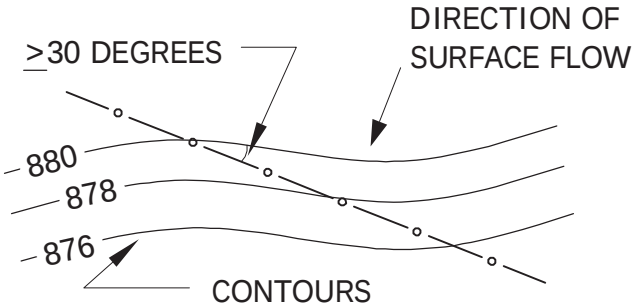
NOTE: SPACING DISTANCES WILL VARY, BUT ARE NOT TO EXCEED 100 FEET.

II. SIZING REQUIREMENTS: J15, J25



J15 - FOR CATCHMENT AREA <0.25 ACRES

J25 - FOR CATCHMENT AREA ≥0.25 ACRES



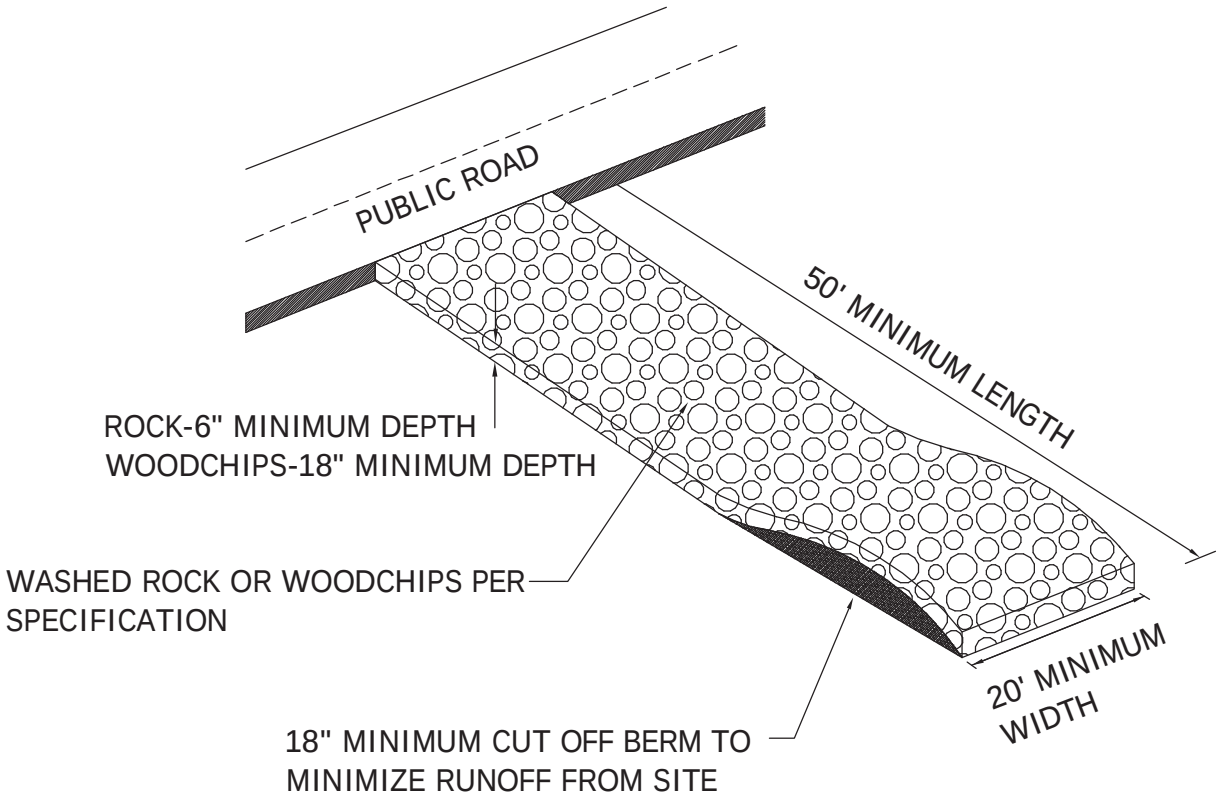
NOTE:
J-HOOKS SHALL BE USED WHEN THE SILT FENCE IS INSTALLED AT AN ANGLE OF 30 DEGREES OR GREATER FROM PARALLEL TO THE CONTOURS.

SILT FENCE J-HOOK

TOWN OF ST. JOSEPH, WISCONSIN

LAST REVISION:
MAR 2009

PLATE NO.
ERO-02



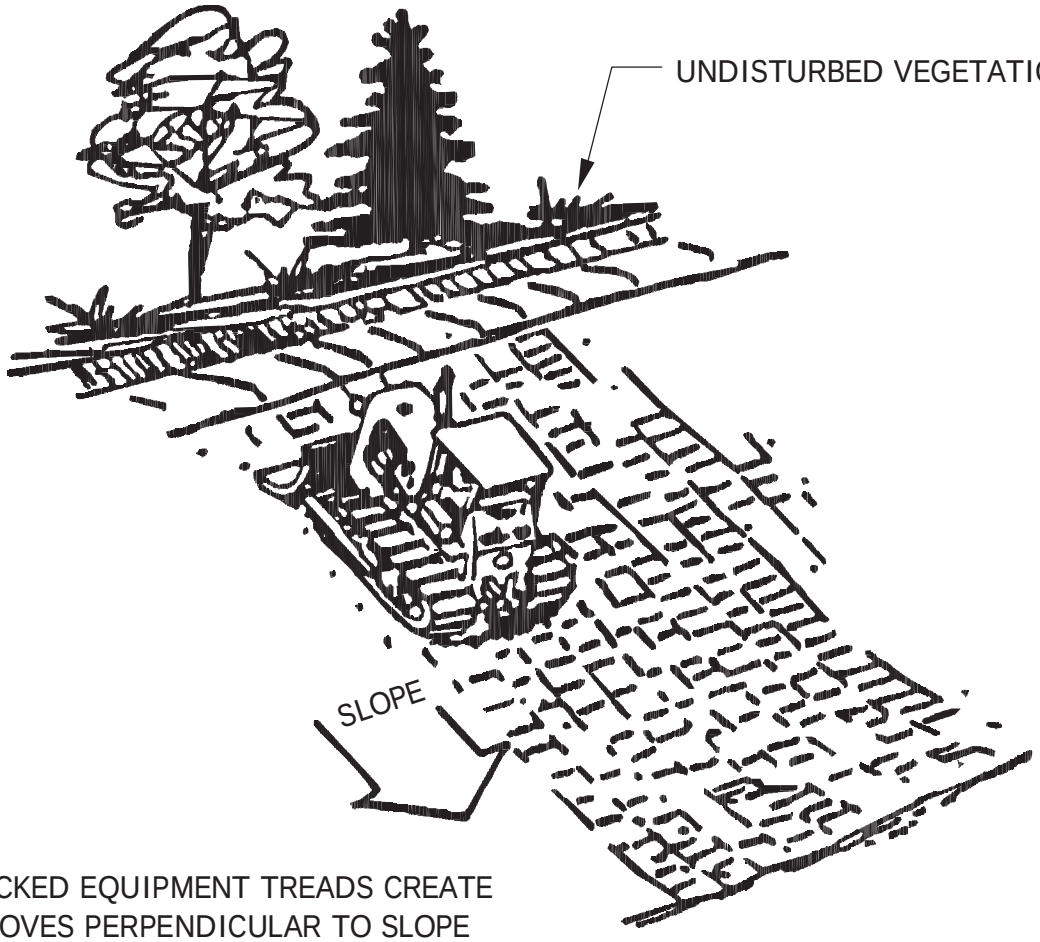
Notes:

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:
MAR 2009

PLATE NO.
ERO-03



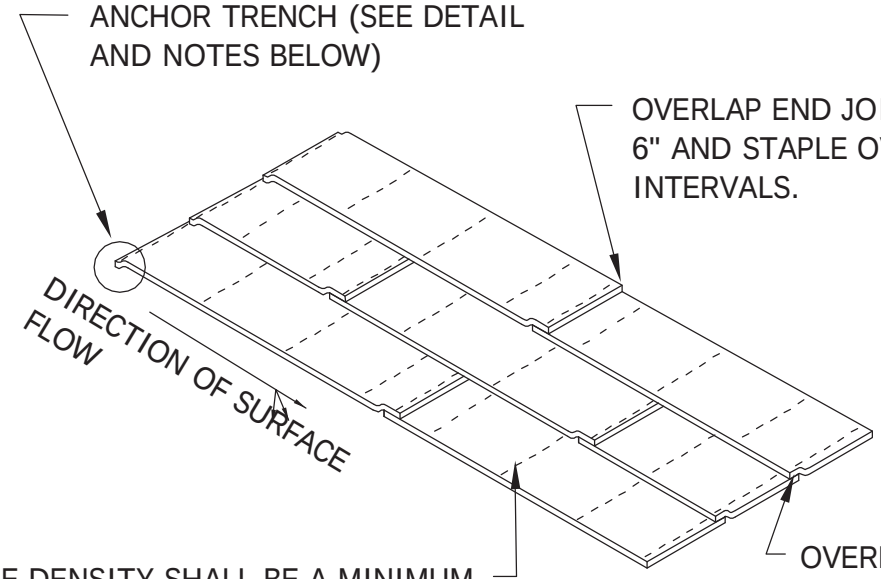
TRACKED EQUIPMENT TREADS CREATE GROOVES PERPENDICULAR TO SLOPE DIRECTION.

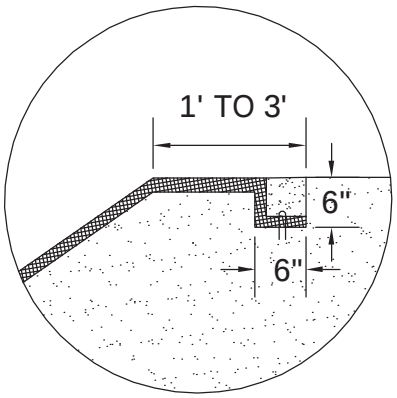
Note:
All slopes with a grade equal to or steeper than 3:1 require slope tracking. Slopes with a grade more gradual than 3:1 require slope tracking if the stabilization method is erosion control blanket or hydromulch.

TEMPORARY SLOPE GRADING
TOWN OF ST. JOSEPH
WISCONSIN

LAST REVISION:
MAR 2009

PLATE NO.
ERO-04





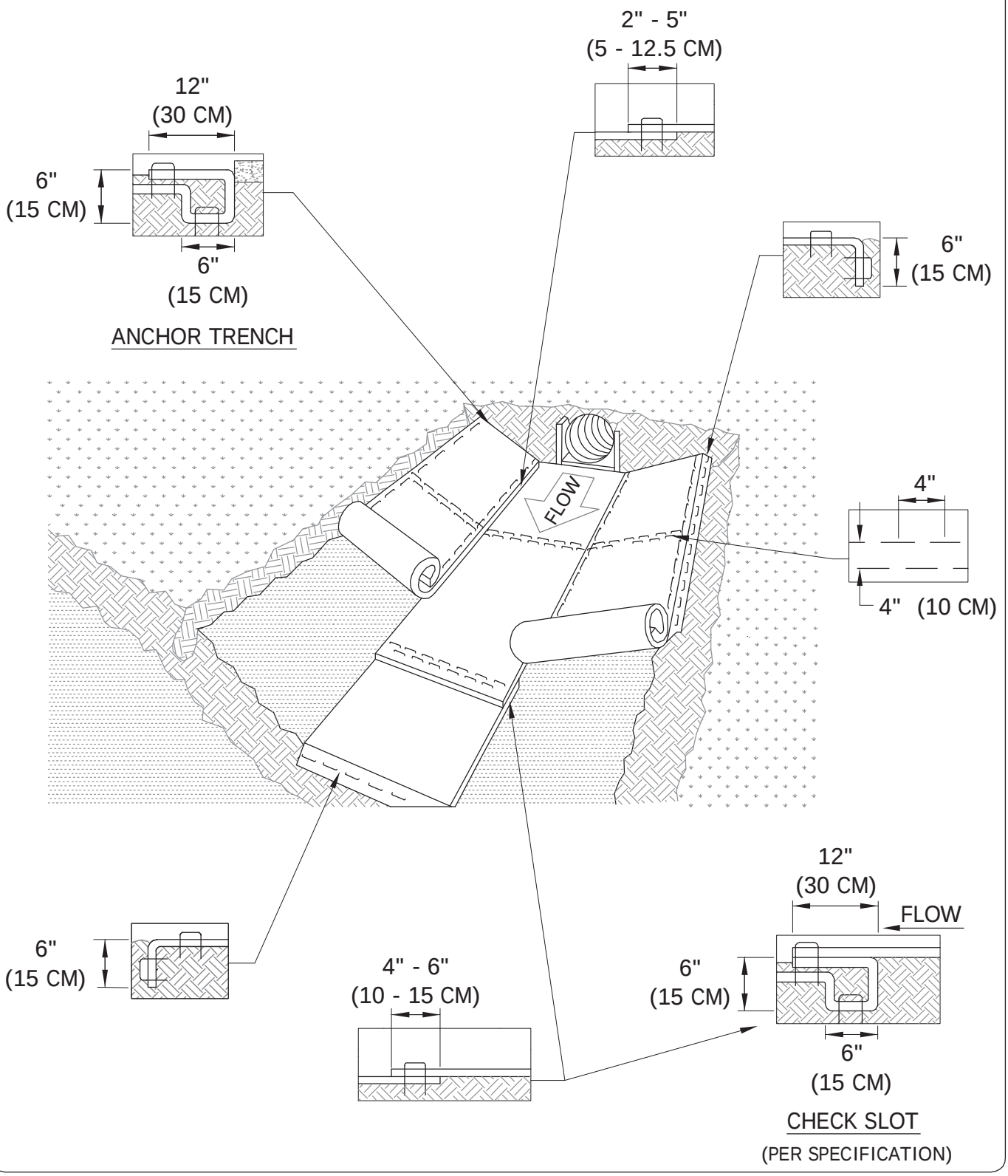
ANCHOR TRENCH

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:
MAR 2009

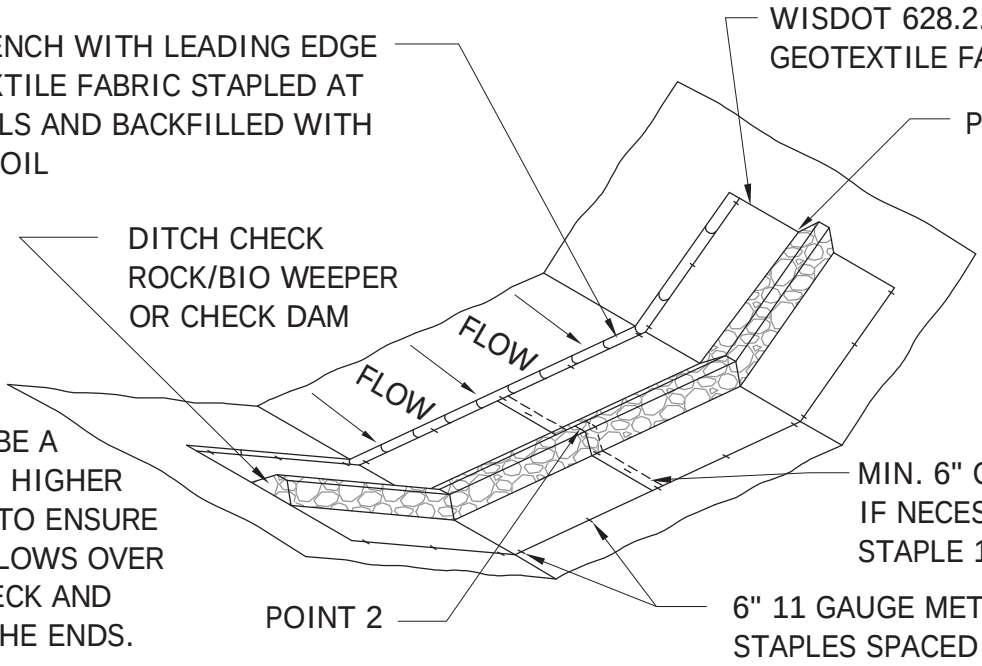
PLATE NO.
ERO-05



EROSION CONTROL BLANKET
CHANNEL INSTALLATION
TOWN OF ST. JOSEPH, WISCONSIN

LAST REVISION:
MAR 2009

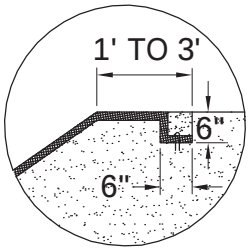
PLATE NO.
ERO-06



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 ½" WASHED ROCK

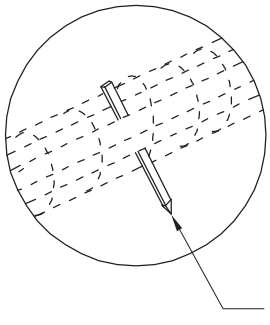
ANCHOR TRENCH
1. DIG 6" X 6" TRENCH
2. LAY BLANKET IN TRENCH
3. STAPLE AT 1.5' INTERVALS
4. BACKFILL WITH NATURAL SOIL AND COMPACT

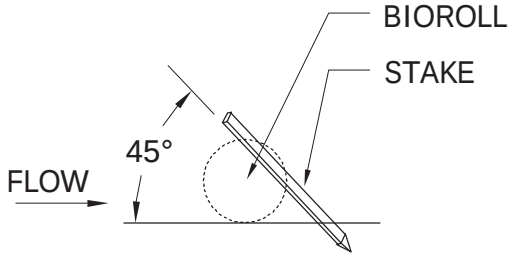


ROCK DITCH CHECK / WEEPER SIZING & MATERIALS TOWN OF ST. JOSEPH, WISCONSIN

LAST REVISION: MAR 2009

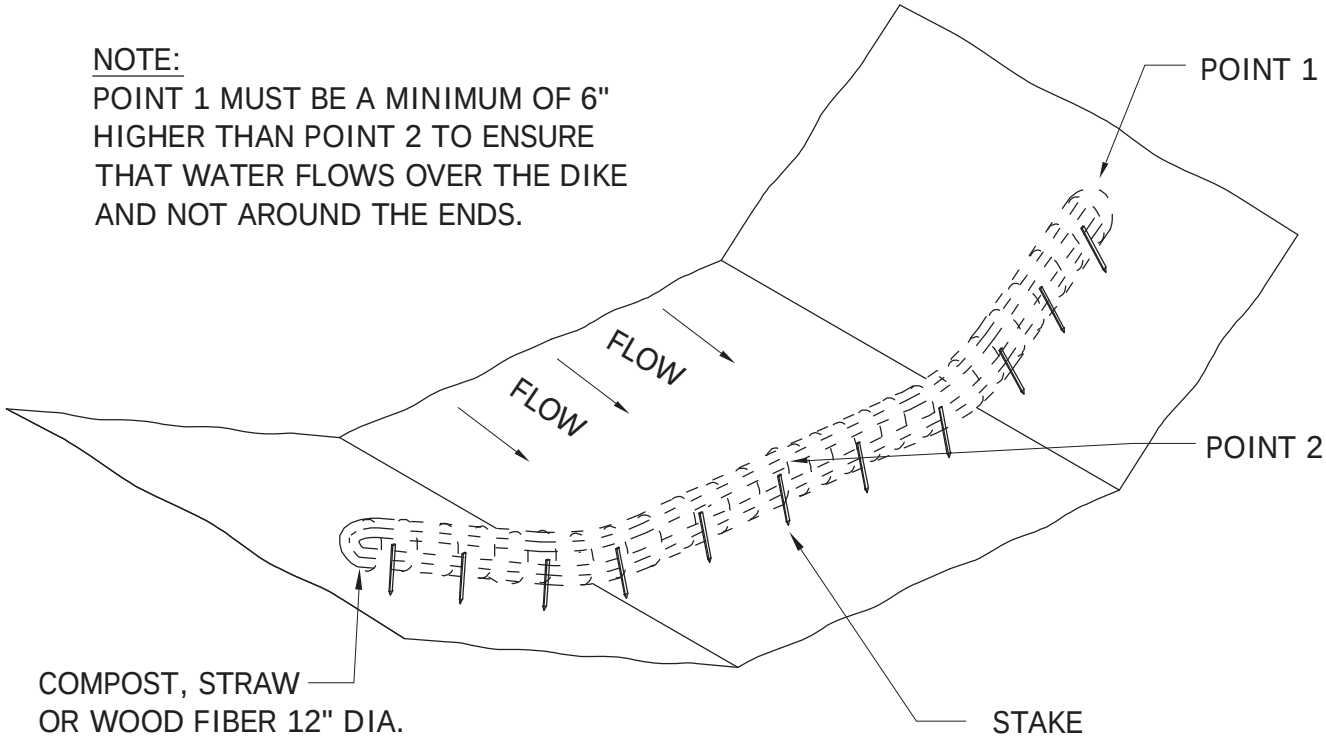
PLATE NO. ERO-07





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.

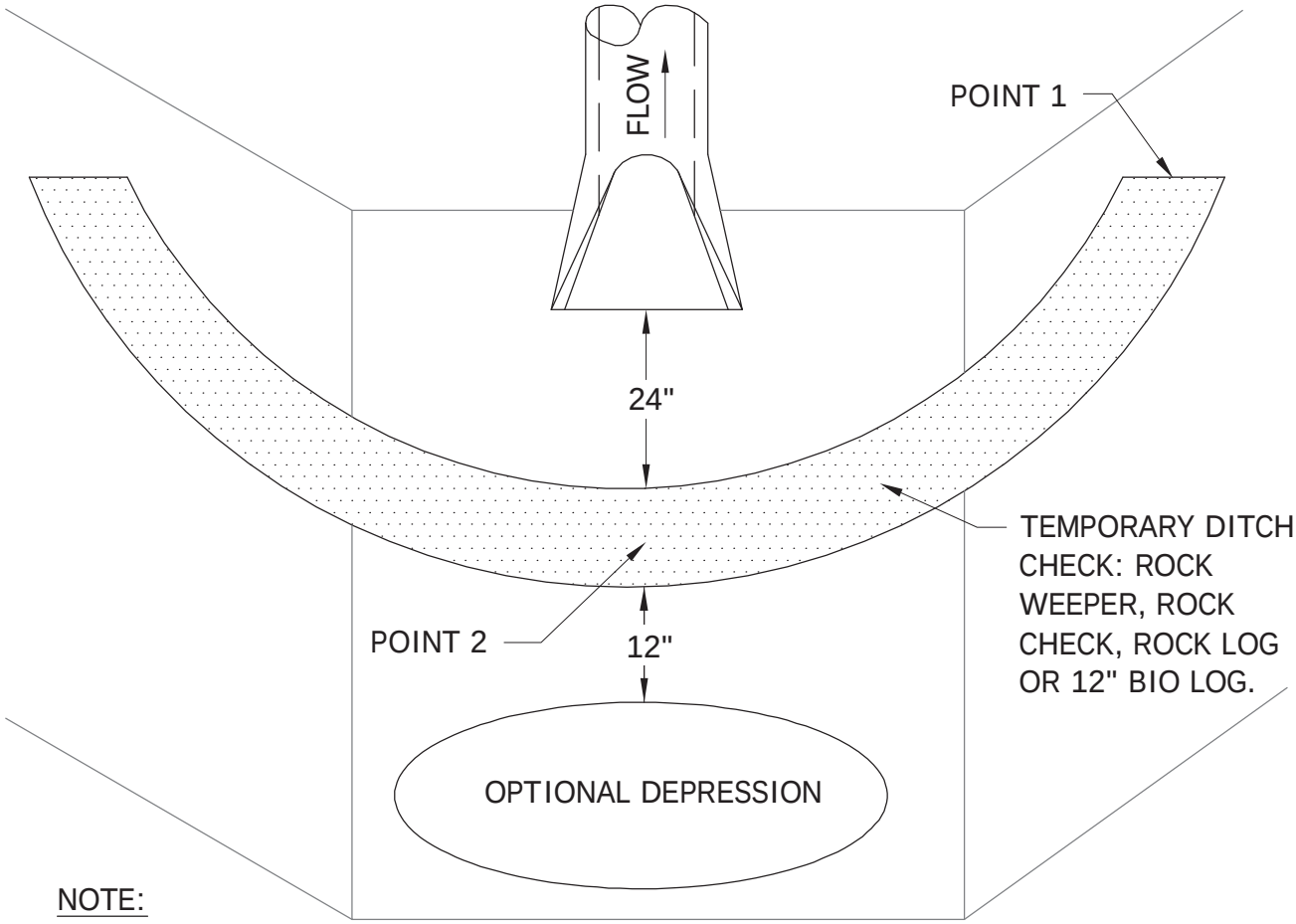


COMPOST, STRAW OR WOOD FIBER 12" DIA. ROLL ENCLOSED IN POLYPROPYLENE NETTING OR A GEOTEXTILE BAG.

FILTER LOG DITCH CHECK
TOWN OF ST. JOSEPH, WISCONSIN

LAST REVISION:
MAR 2009

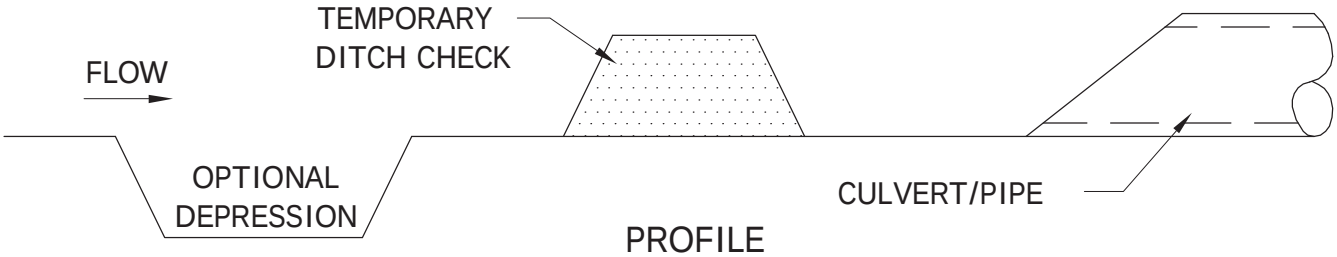
PLATE NO.
ERO-08



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 ½" WASHED ROCK



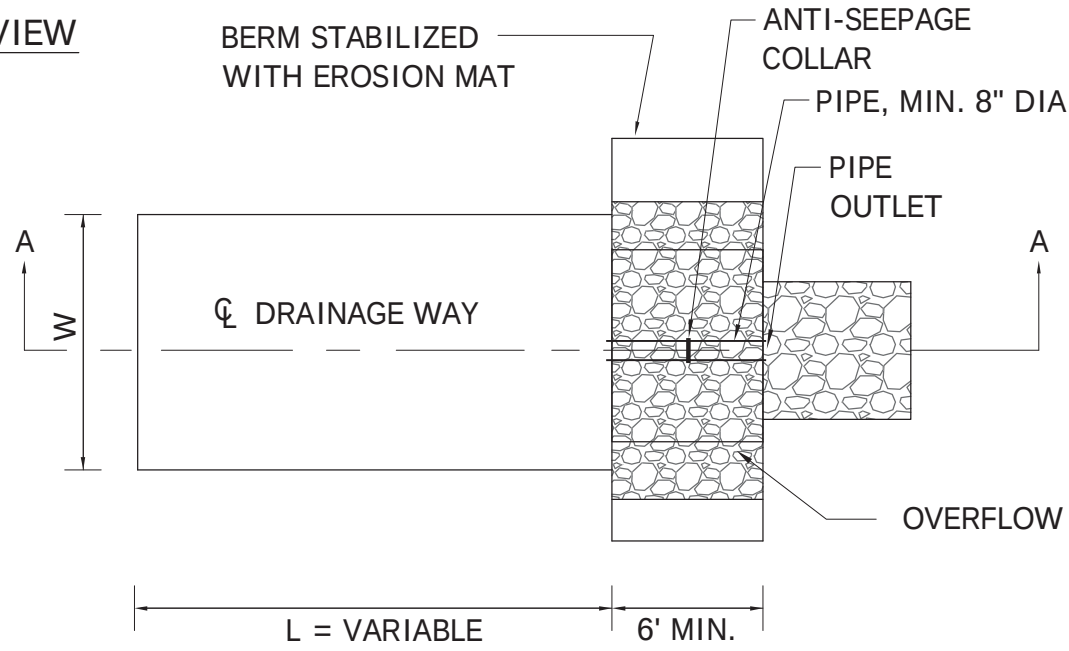
PROFILE

CULVERT/PIPE PROTECTION

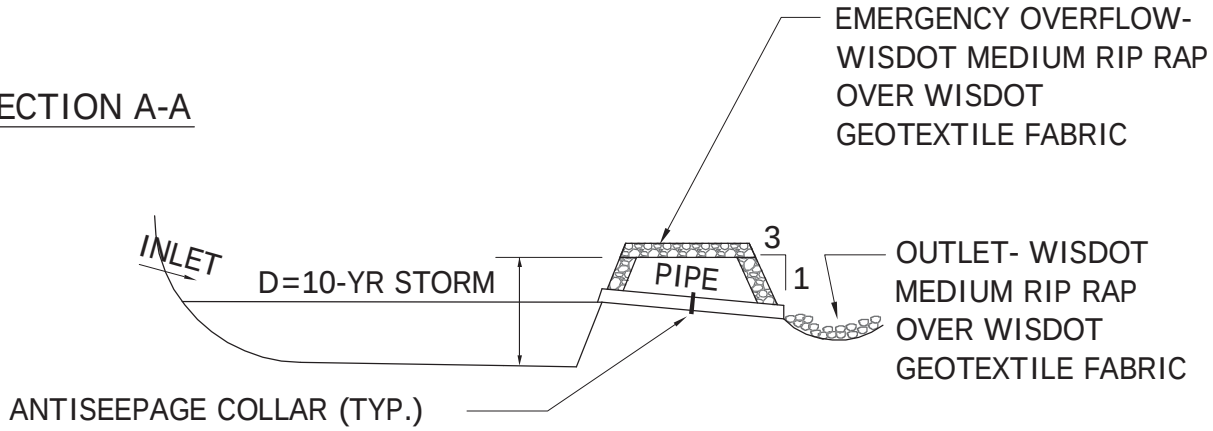
LAST REVISION:
MAR 2009

PLATE NO.
ERO-09

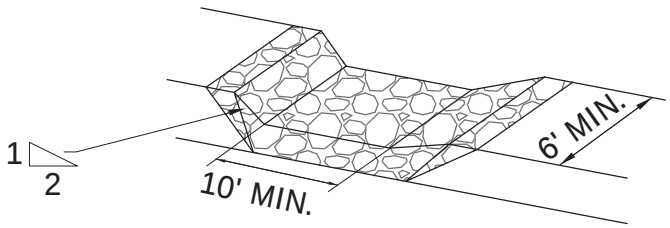
I. PLAN VIEW



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.

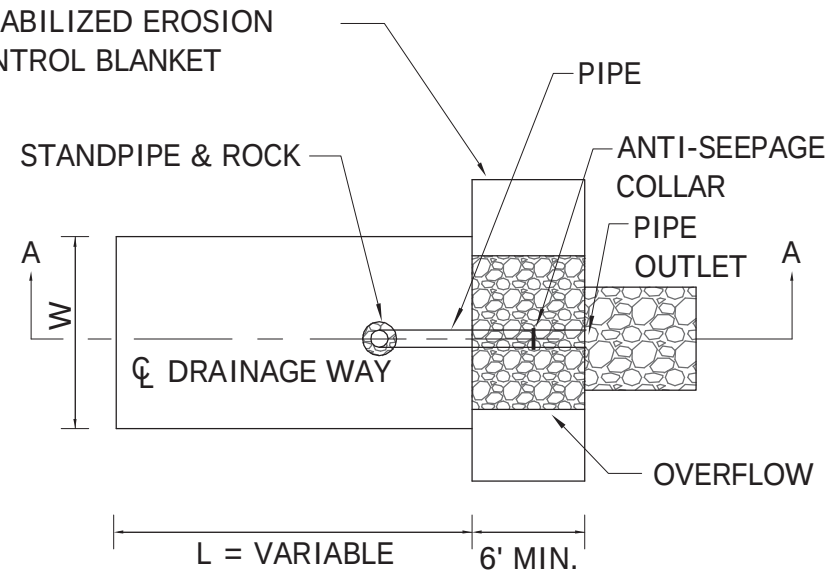
SEE PLANS/SPECIFICATIONS FOR BASIN DIMENSIONS AND PIPE SIZE AND SLOPE.

TEMPORARY SEDIMENTATION BASIN
PIPE OUTLET

LAST REVISION:
MAR 2009

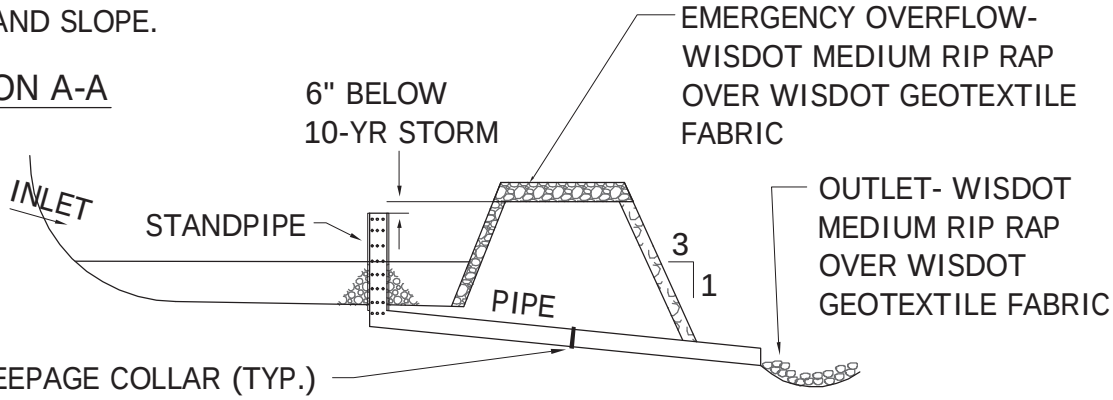
PLATE NO.
ERO-10

I. PLAN VIEW

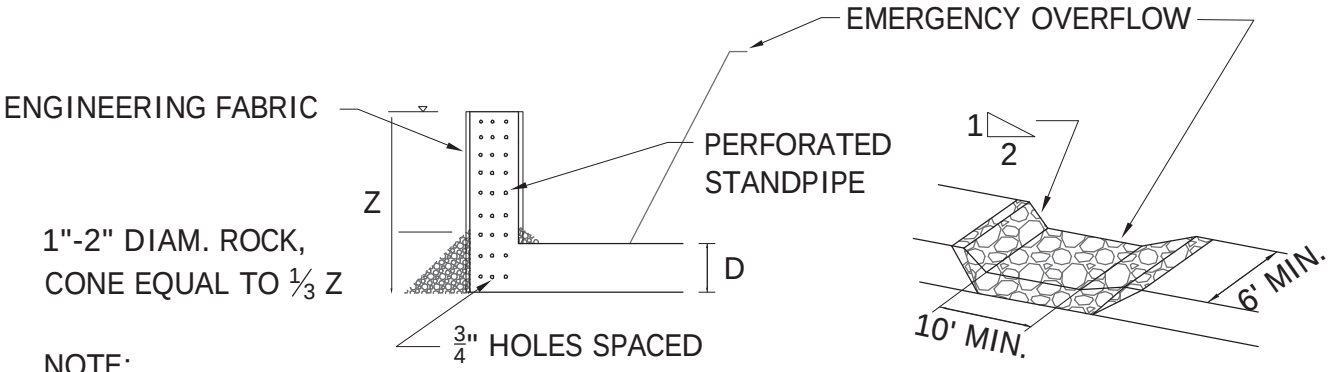


NOTES:
BASIN USED FOR 10 ACRES DRAINAGE AREA OR MORE. DESIGN RUNOFF VOLUME IS FROM A 2-YR, 24-HR STORM PER ACRE DRAINED TO THE BASIN. BASIN VOLUME MUST BE A MIN. OF 1800 CUBIC FEET/ACRE.
SEE PLANS/SPECIFICATIONS FOR BASIN DIMENSIONS AND PIPE SIZE AND SLOPE.

II. SECTION A-A



III. BASIN STANDPIPE AND EMERGENCY OVERFLOW



1"-2" DIAM. ROCK, CONE EQUAL TO ⅓ Z

NOTE:
PIPE MATERIAL SHOULD BE RIGID

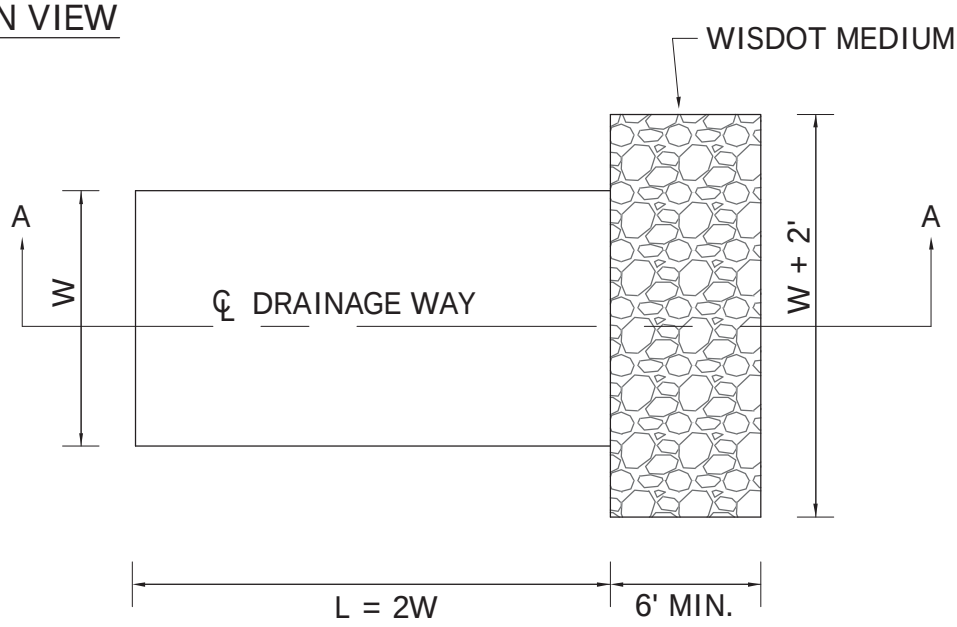
D = DIAMETER OF STANDPIPE EQUAL TO DIAMETER OF PIPE

TEMPORARY SEDIMENTATION BASIN
STANDPIPE OUTLET
TOWN OF ST. JOSEPH, WISCONSIN

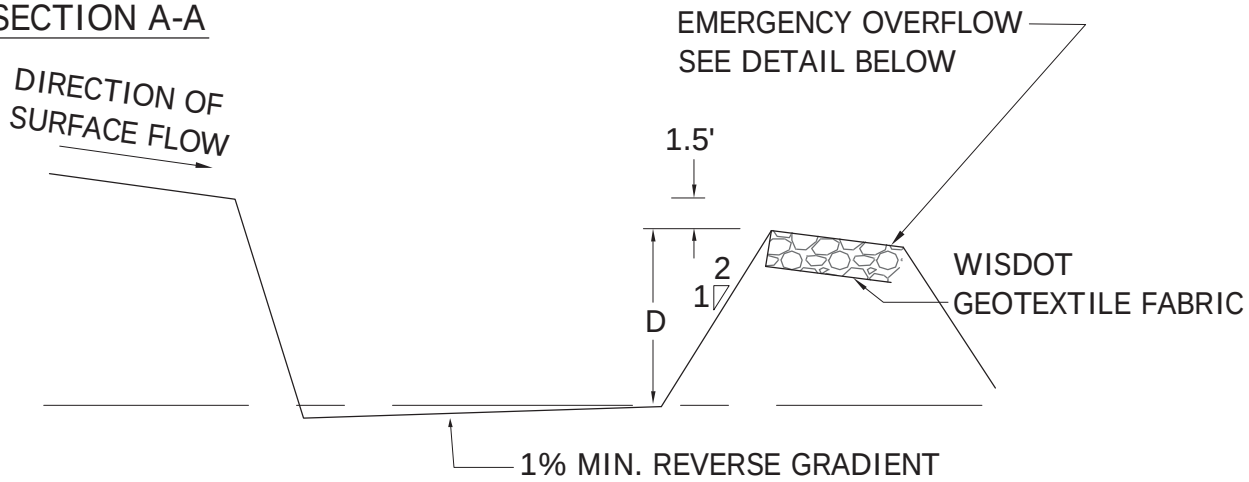
LAST REVISION:
MAR 2009

PLATE NO.
ERO-11

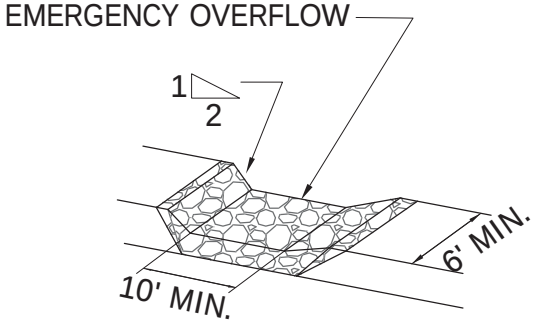
I. PLAN VIEW



II. SECTION A-A



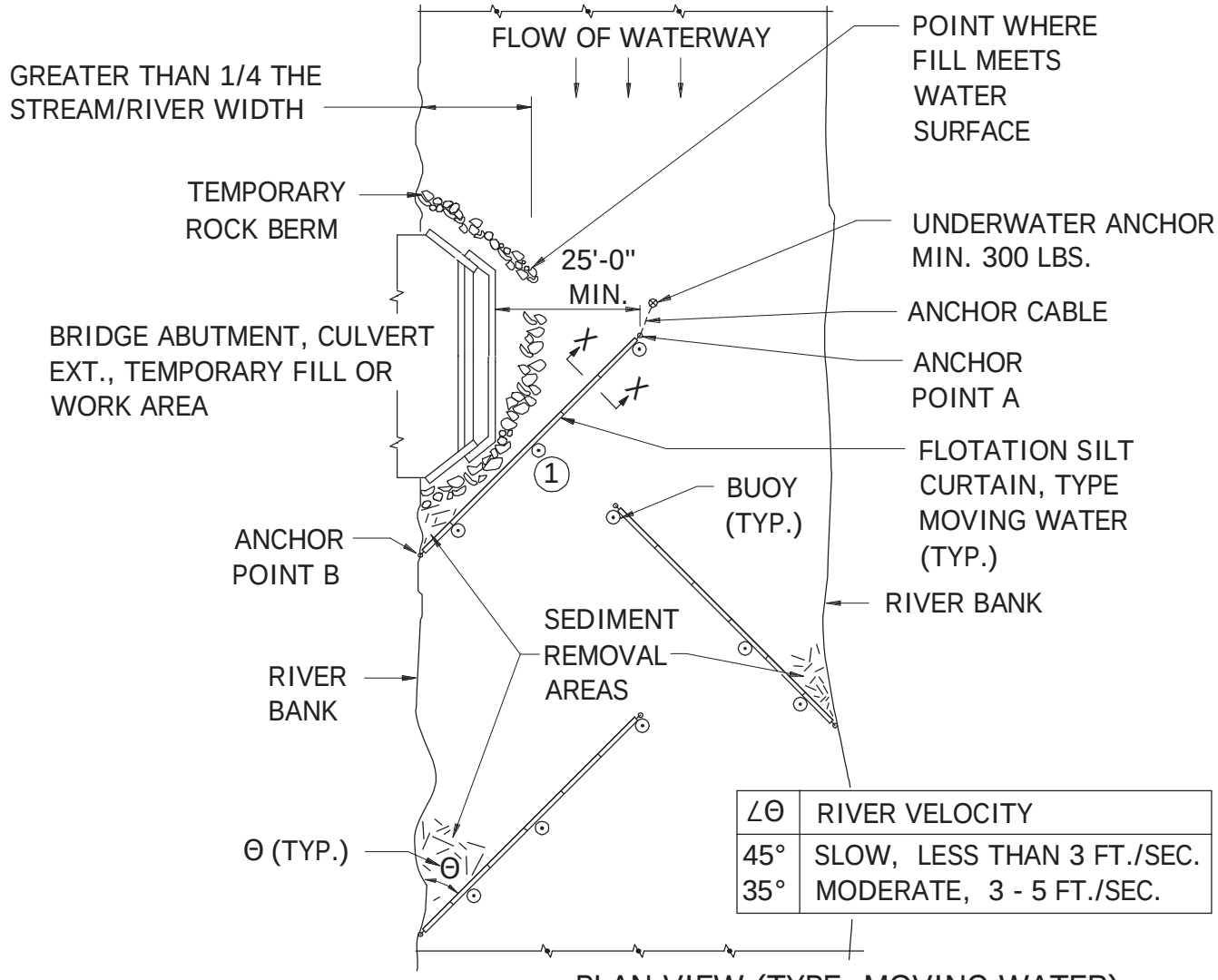
NOTE:
D=3' MIN, 5' MAX
W=10' MIN, 25' MAX
W(FT.)= 10 X DRAINAGE AREA (AC.)



TEMPORARY SEDIMENT TRAP
TOWN OF ST. JOSEPH, WISCONSIN

LAST REVISION:
MAR 2009

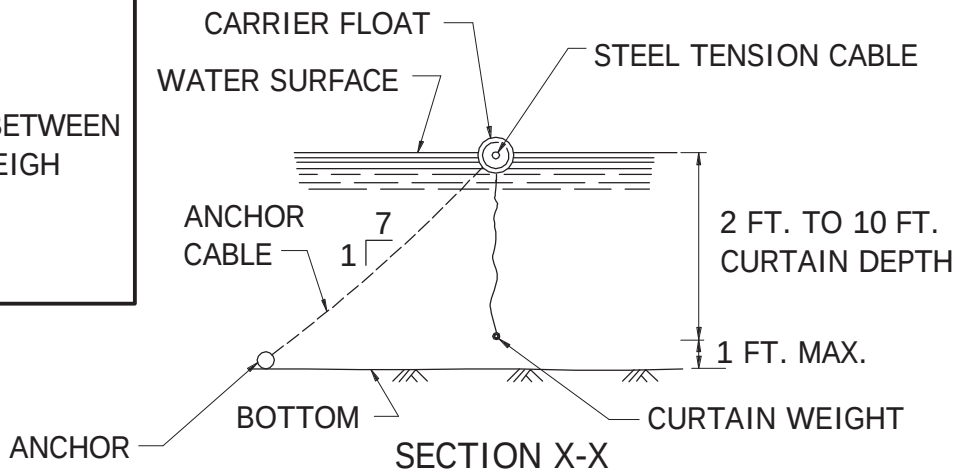
PLATE NO.
ERO-12



PLAN VIEW (TYPE: MOVING WATER)

NOTE:

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

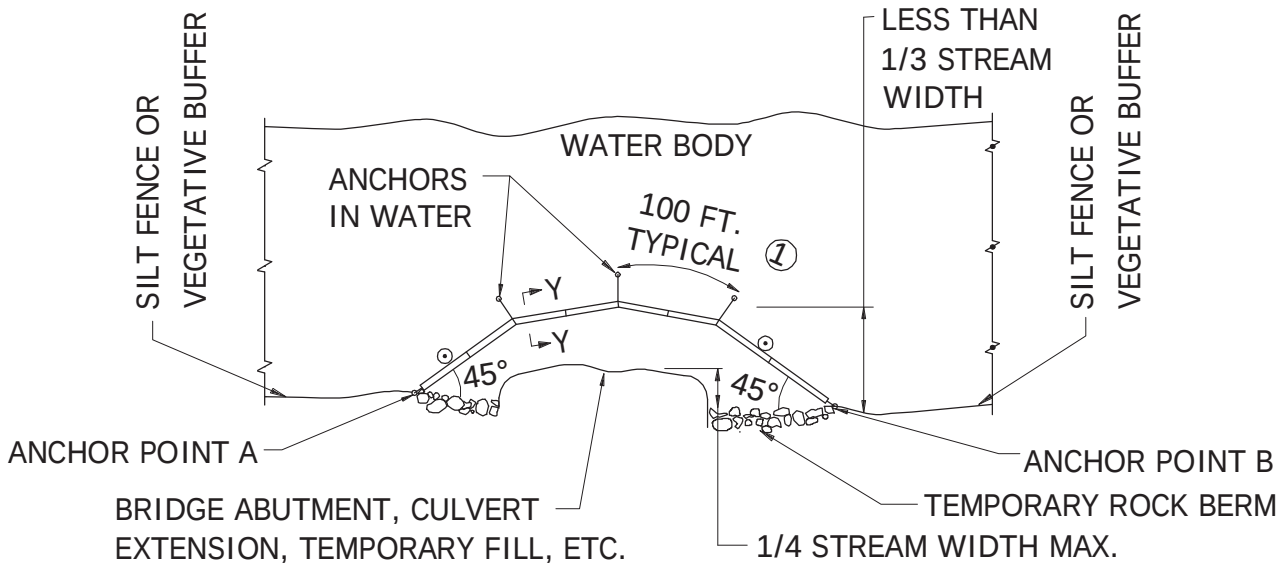


SECTION X-X

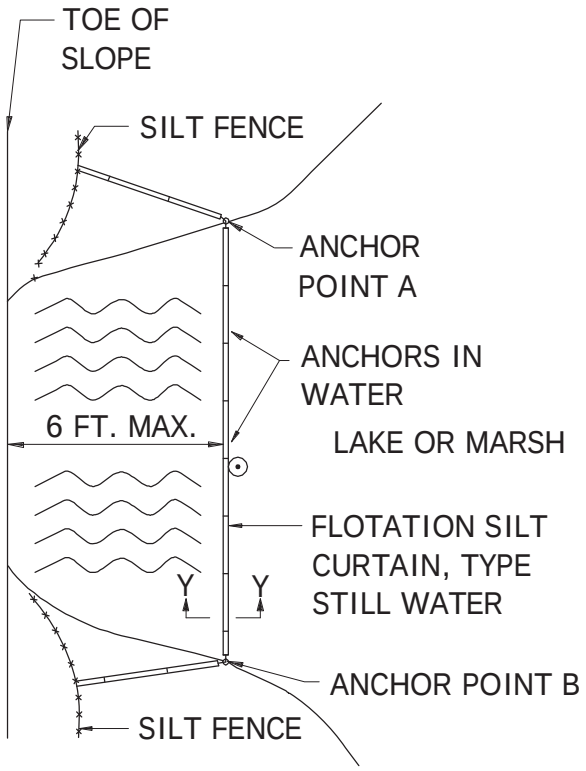
FLOATING SILT CURTAIN
MOVING WATER
TOWN OF ST. JOSEPH, WISCONSIN

LAST REVISION:
MAR 2009

PLATE NO.
ERO-13



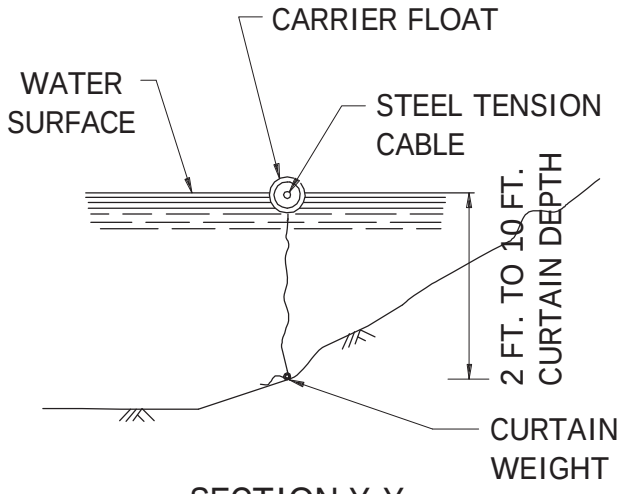
PLAN VIEW (TYPE: WORK AREA)



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:
MAR 2009

PLATE NO.
ERO-14