

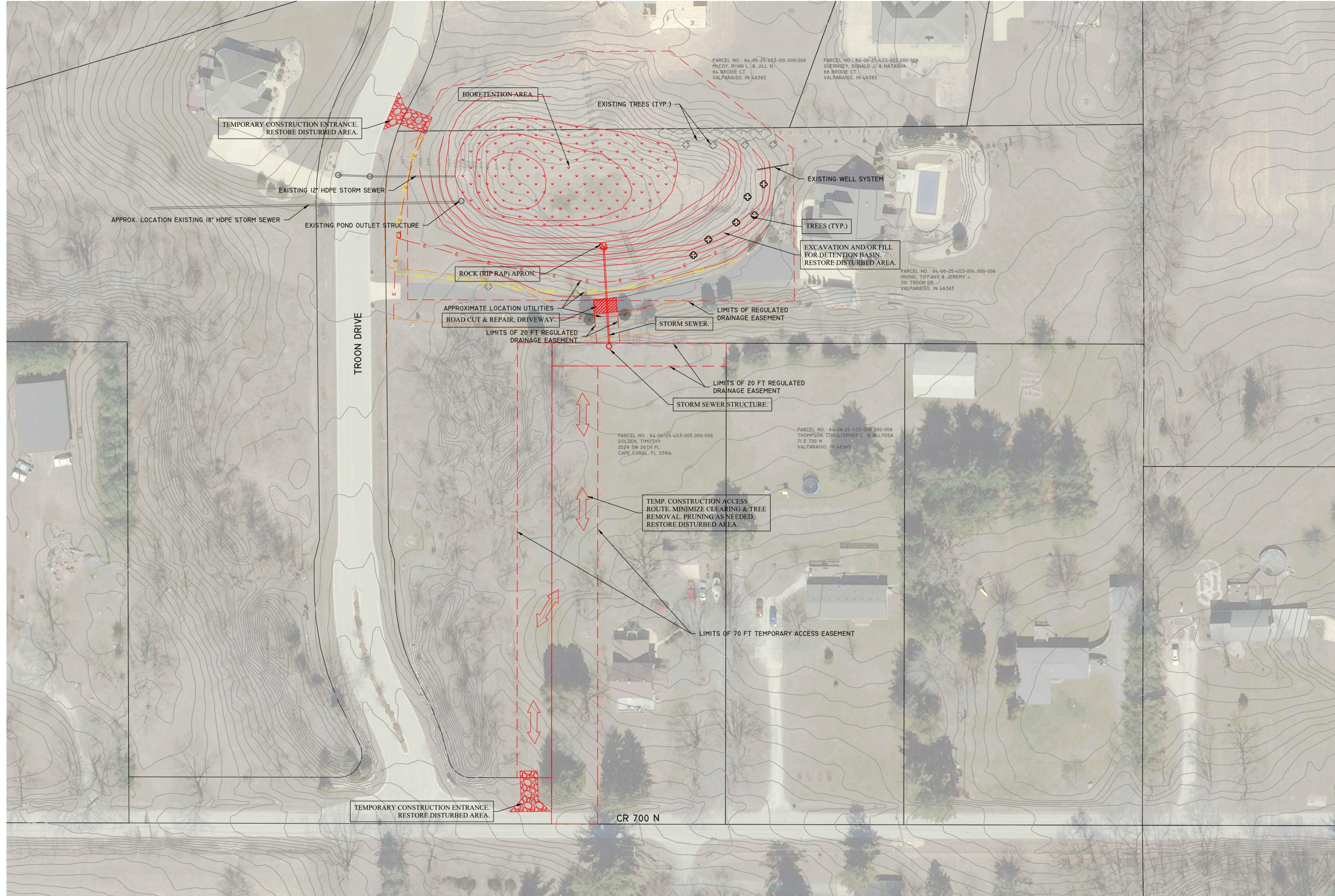
CONSTRUCTION PLANS
FOR
TROON SUBDIVISION
STORM WATER MANAGEMENT SYSTEM IMPROVEMENTS

PORTER CO. DEPARTMENT OF DEVELOPMENT & STORM WATER MANAGEMENT
DECEMBER 21, 2021

The following Construction Plans shall apply to and govern the project designated as **Troon Subdivision – Storm Water Management System Improvements**. Such Construction Plans supplement the specifications contained in the documents listed in the table below and, in case of conflict with any part or parts of said specifications, the Engineer shall determine which specifications shall take precedence and govern. The following hierarchy will be applied by the Engineer in resolving any conflict, error, ambiguity, or discrepancy in or between said specifications.

Specification	Issuing Agency	Adopted/Dated
Technical Specifications for Troon Subdivision – Storm Water Management System Improvements	Porter Co. Department of Development & Storm Water Management	December 21, 2021
Construction Plans for Troon Subdivision – Storm Water Management System Improvements	Porter Co. Department of Development & Storm Water Management	December 21, 2021
General Specifications to the Construction & Maintenance Services Agreements	Porter Co. Department of Development & Storm Water Management	February 1, 2022

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© 2024 WATER 2020 STORM WATER MANAGEMENT (SWM) PROJECT (SWM) TRON SUBDIVISION - GOLDEN R. E. 700 N. - TROON DR.

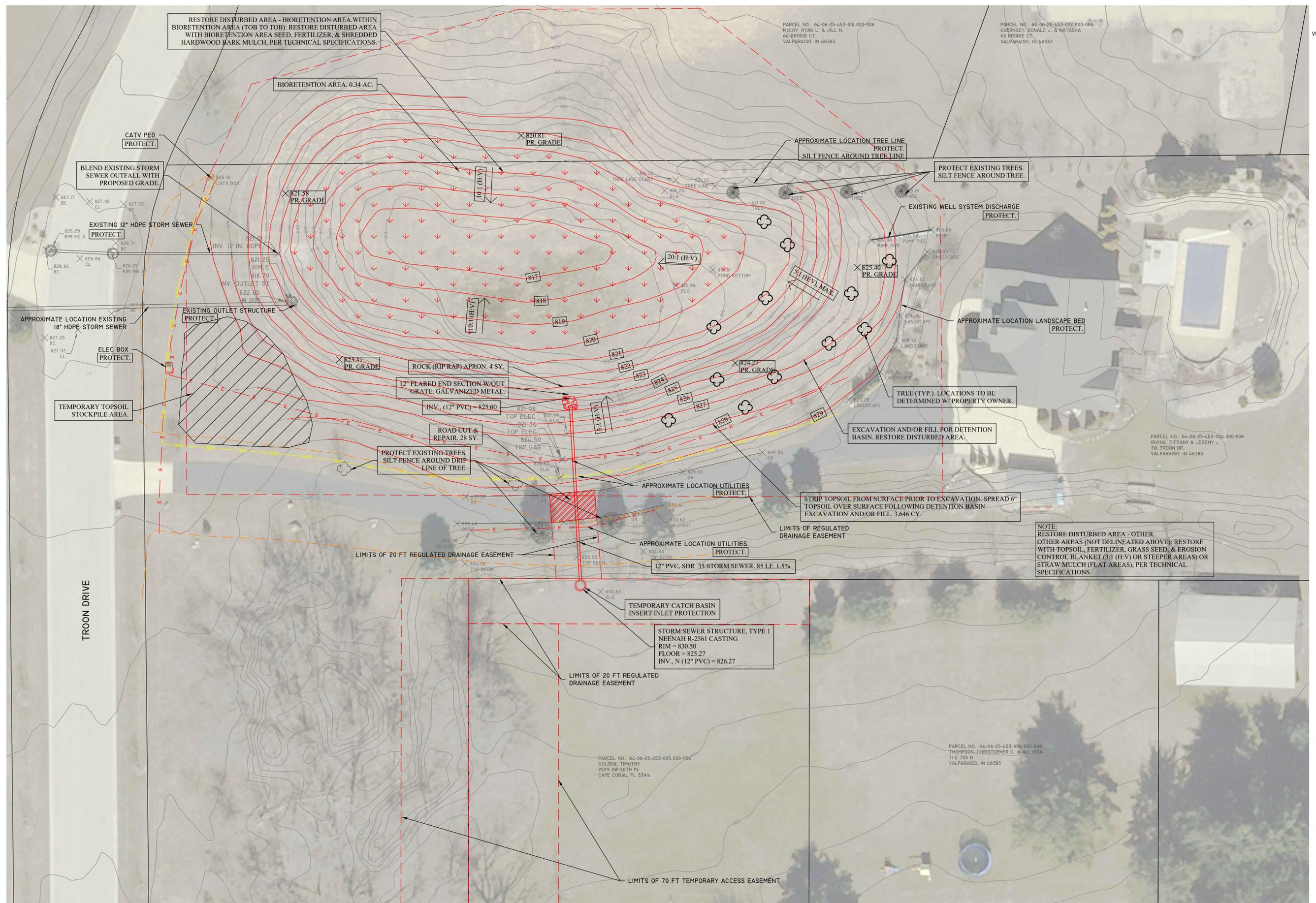
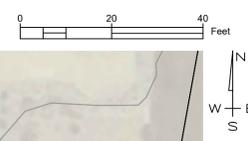
NO.	DATE	REVISION	BY
1	12/13/21	INTERNAL REVIEW	CRG

DESIGNED: CRG
 DRAWN: CRG
 CHECKED: MEN
 DATE: 06/27/20
 PROJECT NO.: P22-001



The Department of
STORM WATER MANAGEMENT
 Porter County, Indiana

PROJECT:	TRON SUBD. -SWM SYSTEM IMPROVEMENTS
LOCATION:	TRON SUBD. -701 TROON DRIVE
SHEET TITLE:	SHEET 2-OVERALL PLAN



NO.	DATE	REVISION	BY
1	12/13/21	INTERNAL REVIEW	CRG

DESIGNED:	CRG
DRAWN:	CRG
CHECKED:	MEN
DATE:	06/27/20
PROJECT NO.:	P22-001



The Department of
DEVELOPMENT & STORM WATER MANAGEMENT
Porter County, Indiana

PROJECT:	TRON SUBD. -SWM SYSTEM IMPROVEMENTS
LOCATION:	TRON SUBD. -701 TRON DRIVE
SHEET TITLE:	SHEET 3-PLAN

© 2021 WATER AND SEWER MANAGEMENT DISTRICT PROJECTS/ENGINEERING/STORM SUBDIVISION - GOLDEN R. E. 700 N. - TRONDRIVE

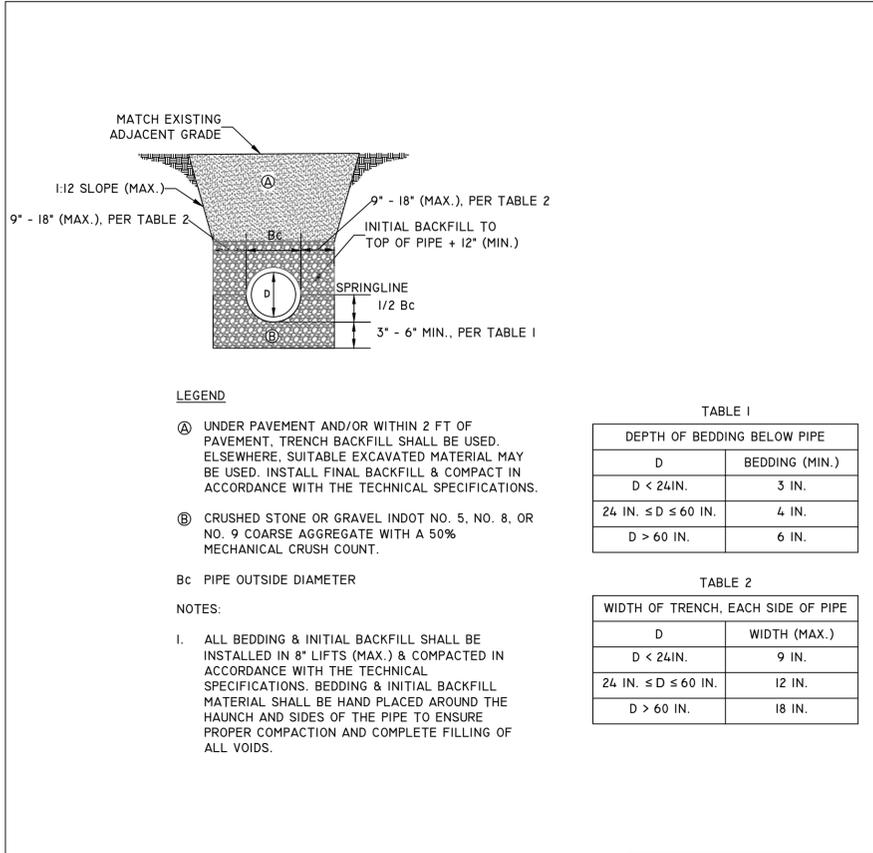


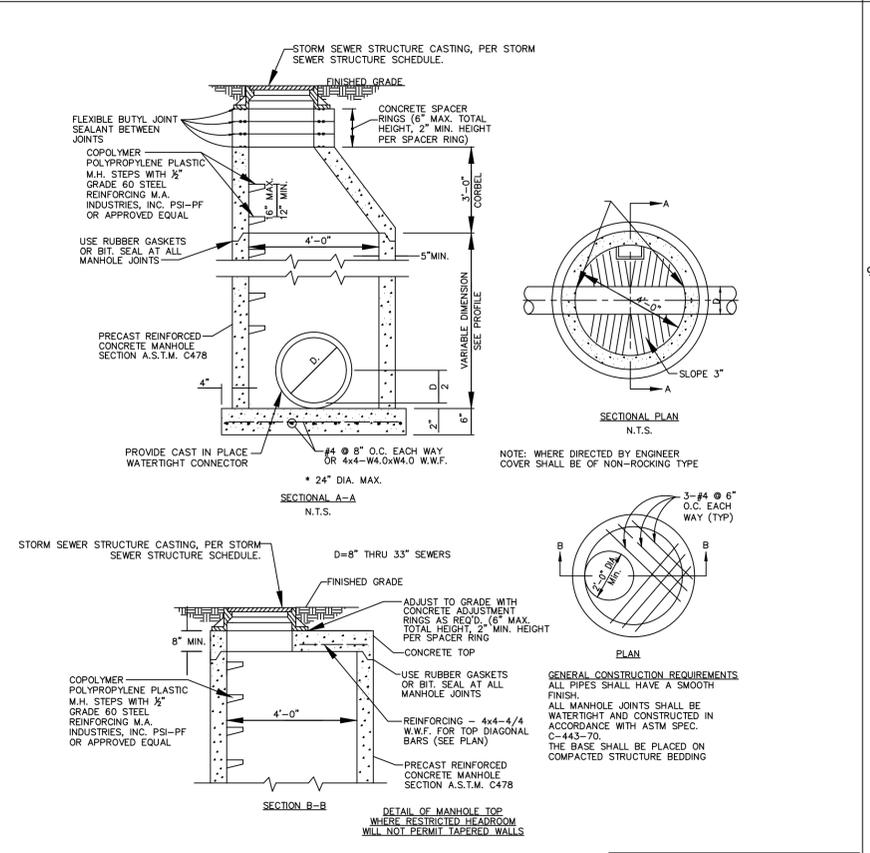
TABLE 1

DEPTH OF BEDDING BELOW PIPE	
D	BEDDING (MIN.)
D < 24IN.	3 IN.
24 IN. ≤ D ≤ 60 IN.	4 IN.
D > 60 IN.	6 IN.

TABLE 2

WIDTH OF TRENCH, EACH SIDE OF PIPE	
D	WIDTH (MAX.)
D < 24IN.	9 IN.
24 IN. ≤ D ≤ 60 IN.	12 IN.
D > 60 IN.	18 IN.

STORM SEWER & CULVERT BEDDING AND BACKFILL



STORM SEWER STRUCTURE, TYPE 1

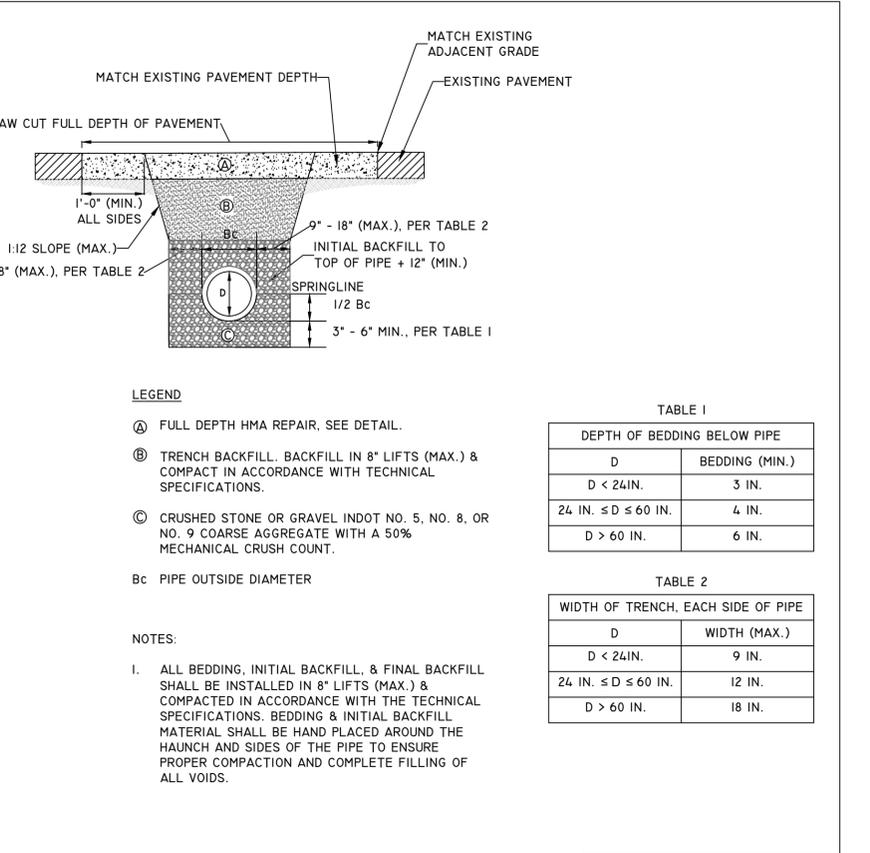


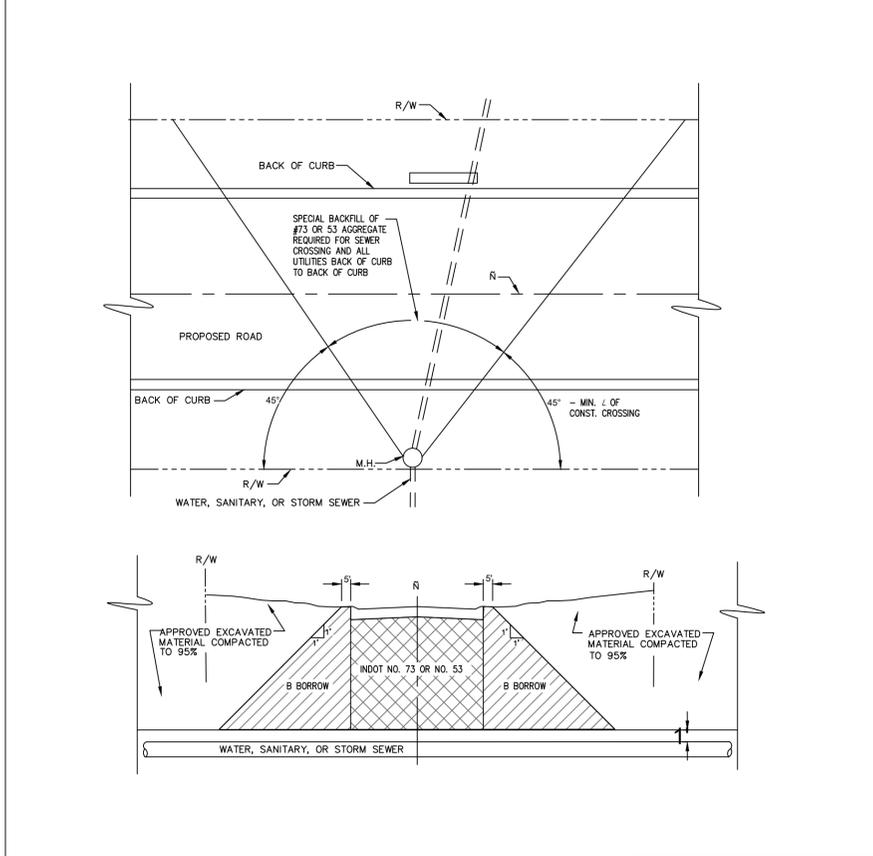
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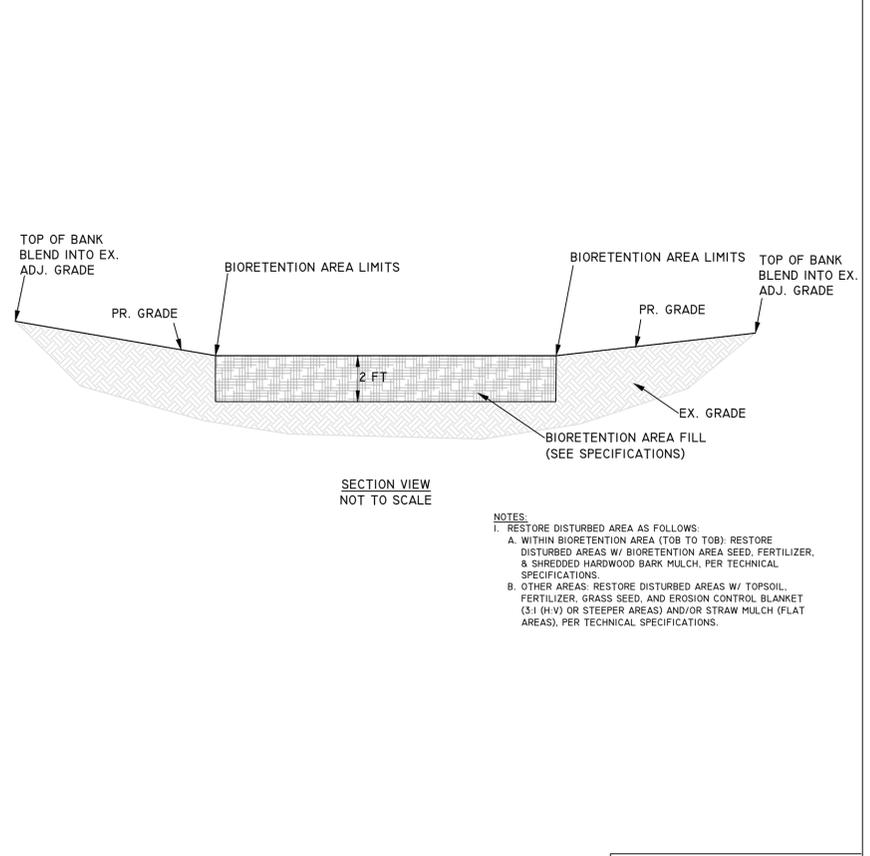
TABLE 2

WIDTH OF TRENCH, EACH SIDE OF PIPE	
D	WIDTH (MAX.)
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24 IN. ≤ D ≤ 60 IN.	12 IN.
D > 60 IN.	18 IN.

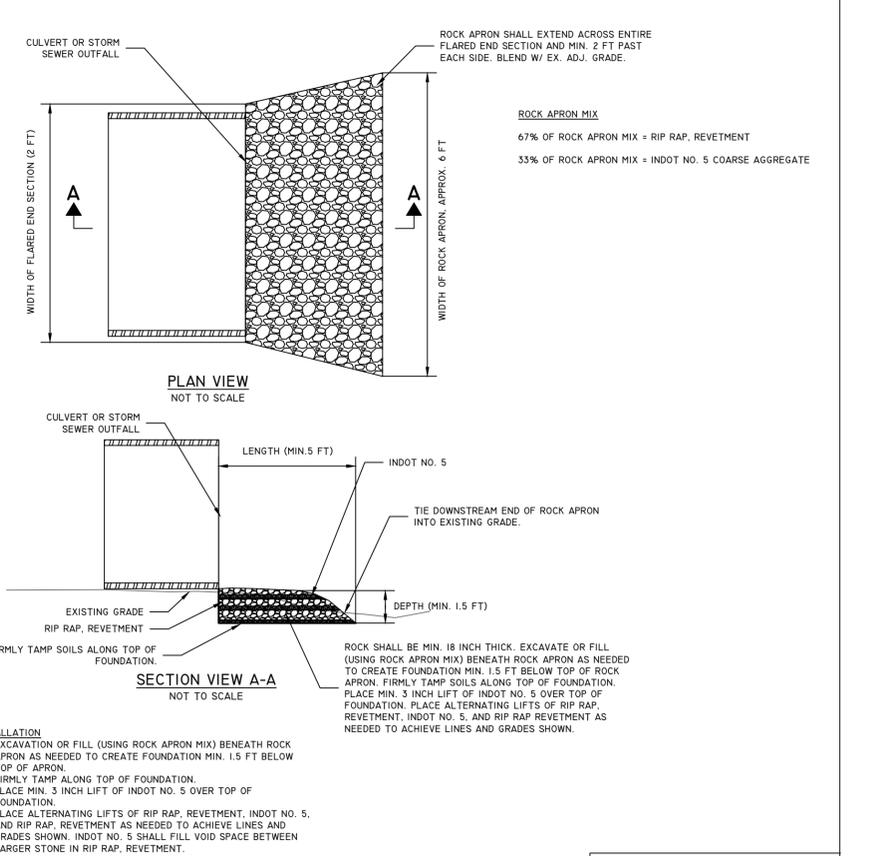
ROAD CUT & REPAIR



BACKFILL REQUIREMENTS (CONTINUED)



BIORETENTION AREA



ROCK APRON

DESIGNED: CRG
DRAWN: CRG
CHECKED: MEN
DATE: 06/27/20
PROJECT NO.: P22-001

REVISION
INTERNAL REVIEW

DATE
12/13/21

NO.

BY
CRG

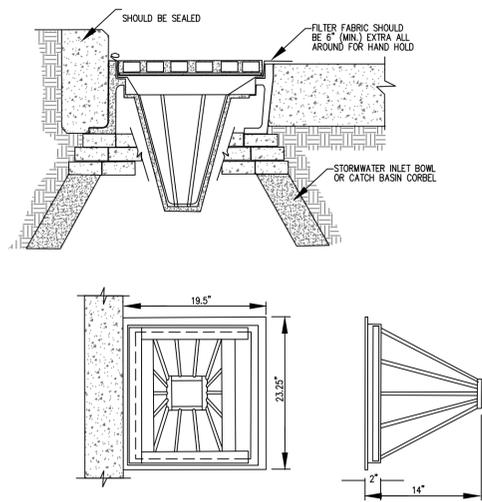
PROJECT: TROON SUBD. - SWM SYSTEM IMPROVEMENTS
LOCATION: TROON SUBD. - 701 TROON DRIVE
SHEET TITLE: SHEET 4-DETAILS

4 of 5

The Department of
DEVELOPMENT & STORM WATER MANAGEMENT
Porter County, Indiana

Botanical Name	Common Name	PLS Oz/Acre
Permanent Grasses/Sedges		
<i>Andropogon gerardii</i>	Big Bluestem	18.00
<i>Bouteloua curtipendula</i>	Side-Oats Grama	8.00
<i>Carex spp.</i>	Prairie Sedge Mix	4.00
<i>Elymus canadensis</i>	Canada Wild Rye	24.00
<i>Panicum virgatum</i>	Switch Grass	4.00
<i>Schizachyrium scoparium</i>	Little Bluestem	28.00
<i>Sorghastrum nutans</i>	Indian Grass	12.00
	Total	98.00
Temporary Cover		
<i>Avena sativa</i>	Common Oat	512.00
	Total	512.00
Forbs		
<i>Asclepias syriaca</i>	Common Milkweed	2.00
<i>Asclepias tuberosa</i>	Butterfly Weed	1.00
<i>Baptisia alba</i>	White Wild Indigo	2.00
<i>Baptisia bracteata</i>	Cream Wild Indigo	0.50
<i>Chamaecrista fasciculata</i>	Partridge Pea	10.00
<i>Coreopsis lanceolata</i>	Sand Coreopsis	4.00
<i>Coreopsis palmata</i>	Prairie Coreopsis	0.75
<i>Desmanthus illinoensis</i>	Illinois Sensitive Plant	2.00
<i>Desmodium illinoense</i>	Illinois Tick Trefoil	0.50
<i>Echinacea purpurea</i>	Broad-Leaved Purple Coneflower	8.00
<i>Eryngium yuccifolium</i>	Rattlesnake Master	2.00
<i>Lespedeza capitata</i>	Round-Headed Bush Clover	2.00
<i>Liatris aspera</i>	Rough Blazing Star	1.00
<i>Liatris pycnostachya</i>	Prairie Blazing Star	2.00
<i>Lupinus perennis v. occidentalis</i>	Wild Lupine	2.00
<i>Monarda fistulosa</i>	Wild Bergamot	1.00
<i>Oligoneuron rigidum</i>	Stiff Goldenrod	2.00
<i>Parthenium integrifolium</i>	Wild Quinine	1.00
<i>Drymocalis arguta</i>	Prairie Cinquefoil	0.50
<i>Pycnanthemum virginianum</i>	Common Mountain Mint	0.25
<i>Ratibida pinnata</i>	Yellow Coneflower	4.00
<i>Rudbeckia hirta</i>	Black-Eyed Susan	5.00
<i>Staphium integrifolium</i>	Rosin Weed	3.00
<i>Staphium laciniatum</i>	Compass Plant	2.00
<i>Staphium terebinthaceum</i>	Prairie Dock	3.00
<i>Solidago nemoralis</i>	Old-Field Goldenrod	0.25
<i>Solidago speciosa</i>	Showy Goldenrod	0.50
<i>Symphoricarum laeve</i>	Smooth Blue Aster	1.00
<i>Symphoricarum novae-angliae</i>	New England Aster	0.50
<i>Symphoricarum oolentangiense</i>	Sky-Blue Aster	1.00
<i>Tradescantia ohioensis</i>	Common Spiderwort	1.00
<i>Veronicastrum virginicum</i>	Culver's Root	0.25
	Total	66.00

BIORETENTION AREA SEED MIX



PURPOSE: 1. TO PREVENT EXCESSIVE SEDIMENT FROM ENTERING STORM SEWERS AT CURB INLETS, ALLOWING FULL USE OF THE STORM DRAIN SYSTEM DURING THE CONSTRUCTION PERIOD.

REQUIREMENTS: 1. BASKET: FABRICATED METAL WITH TOP WIDTH-LENGTH DIMENSIONS SUCH THAT THE BASKET FITS INTO THE INLET WITHOUT CAPS, AND LINE IT WITH GEOTEXTILE FABRIC FOR FILTRATION.

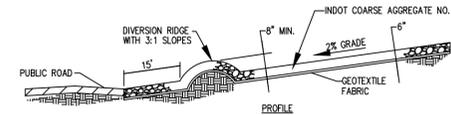
INSTALLATION: 1. INSTALL BASKET CURB INLET PROTECTIONS AS SOON AS INLET BOXES ARE INSTALLED IN A NEW DEVELOPMENT OR BEFORE LAND DISTURBING ACTIVITIES BEGIN IN A STABILIZED AREA.
2. REMOVE THE GRATE AND PLACE THE BASKET IN THE INLET.
3. CUT AND INSTALL A PIECE OF FILTER FABRIC LARGE ENOUGH TO LINE THE INSIDE OF THE BASKET AND EXTEND AT LEAST 6\"/>

MAINTENANCE: 1. INSPECT WITHIN 24 HOURS AFTER EACH STORM EVENT.
2. REMOVE BUILT-UP SEDIMENT AND REPLACE THE GEOTEXTILE FABRIC AFTER EACH STORM EVENT.
3. REPLACE BASKET EVERY SIX (6) MONTHS.
4. REPLACE BASKET AFTER ANY OIL, GASOLINE OR SOLVENT SPILL, OR IF THERE IS A HOLE IN THE FABRIC.

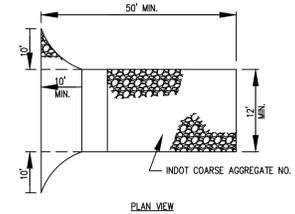
CATCH BASIN INSERT INLET PROTECTION

REQUIREMENTS: MATERIAL: 1-2.5 IN. WASHED STONE (INDOT CA NO. 2) OVER A STABLE FOUNDATION. THICKNESS: 6 IN. MINIMUM.
WIDTH: 12 FT. MINIMUM OR FULL WIDTH OF ENTRANCE/EXIT ROADWAY, WHICHEVER IS GREATER.
LENGTH: 50 FT. MINIMUM. THE LENGTH CAN BE SHORTER FOR SMALL SITES SUCH AS FOR AN INDIVIDUAL HOME, BUT SHALL BE OF SUFFICIENT LENGTH TO PREVENT TRACKING.
WASHING FACILITY (OPTIONAL): LEVEL AREA WITH 3 IN. WASHED STONE MINIMUM OR A COMMERCIAL RACK, AND WASTE WATER DIVERTED TO A SEDIMENT TRAP OR BASIN.
GEOTEXTILE FABRIC UNDERLAYER: REQUIRED TO PROVIDE GREATER BEARING STRENGTH.

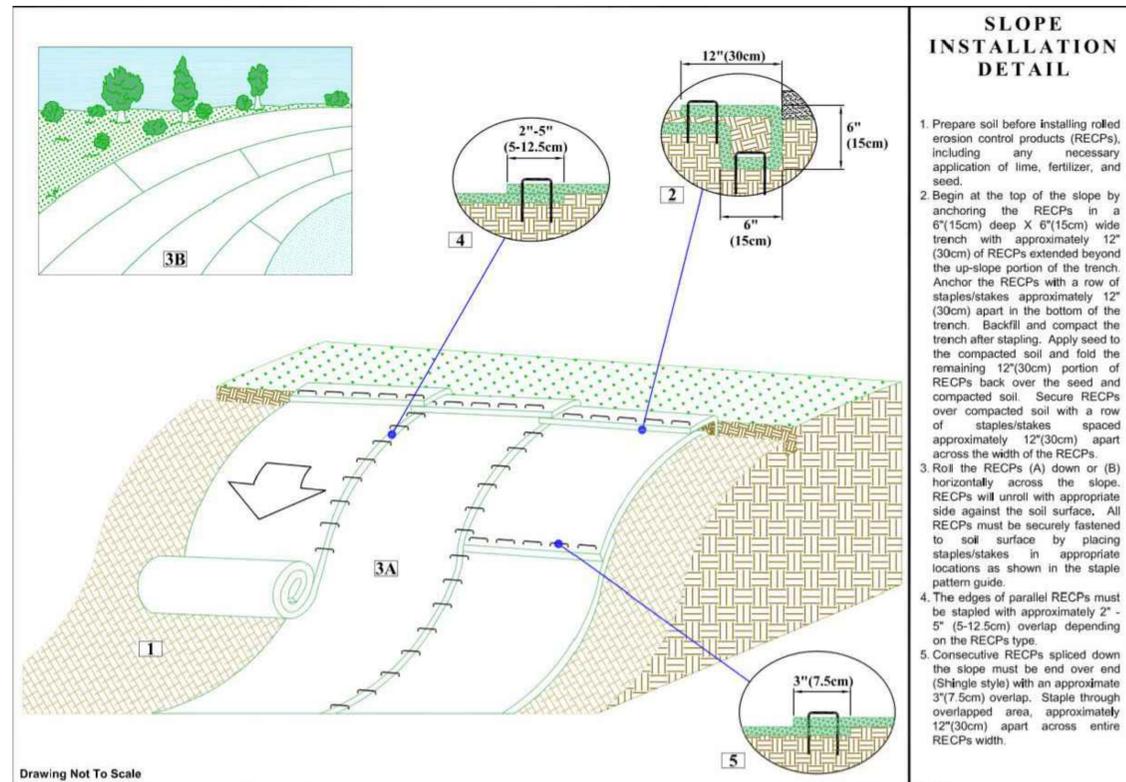
INSTALLATION: 1. AVOID LOCATING ON STEEP SLOPES OR AT CURVES IN PUBLIC ROADS.
2. REMOVE ALL VEGETATION AND OTHER OBJECTIONABLE MATERIAL FROM THE FOUNDATION AREA, AND GRADE AND CROWN FOR POSITIVE DRAINAGE.
3. IF SLOPE TOWARDS THE ROAD EXCEEDS 2%, CONSTRUCT A 6-8 IN.-HIGH WATER BAR (RIDGE) WITH 3:1 SIDE SLOPES ACROSS THE FOUNDATION AREA ABOUT 15 FT. FROM THE ENTRANCE TO DIVERT RUNOFF AWAY FROM THE ROAD (SEE PROFILE).
4. INSTALL PIPE UNDER THE PAD IF NEEDED TO MAINTAIN PROPER PUBLIC ROAD DRAINAGE.
5. PLACE STONE TO DIMENSIONS AND GRADE SHOWN IN THE EROSION/SEDIMENT CONTROL PLAN, LEAVING THE SURFACE SMOOTH AND SLOPED FOR DRAINAGE.
6. DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE STONE PAD TO A SEDIMENT TRAP OR BASIN.



MAINTENANCE: • INSPECT ENTRANCE PAD, SEDIMENT DISPOSAL AREA, AND ALL OTHER EROSION CONTROL MEASURES WEEKLY AND AFTER STORM EVENTS OR HEAVY USE. REQUIRED REPAIRS SHOULD BE COMPLETED IMMEDIATELY.
• RESHAPE PAD AS NEEDED FOR DRAINAGE AND RUNOFF CONTROL.
• TOPDRESS WITH CLEAN STONE AS NEEDED.
• IMMEDIATELY REMOVE MUD AND SEDIMENT TRACKED OR WASHED ONTO PUBLIC ROADS BY BRUSHING OR SWEEPING. FLUSHING SHOULD ONLY BE USED IF THE WATER IS CONVEYED INTO A SEDIMENT TRAP OR BASIN.
• REPAIR ANY BROKEN ROAD PAVEMENT IMMEDIATELY.



TEMPORARY CONSTRUCTION ENTRANCE



SLOPE INSTALLATION DETAIL

1. Prepare soil before installing rolled erosion control products (RECPs), including any necessary application of lime, fertilizer, and seed.
2. Begin at the top of the slope by anchoring the RECPs in a 6\"/>

Drawing Not To Scale

EROSION CONTROL BLANKET

DESIGNED:	CRG
DRAWN:	CRG
CHECKED:	MEN
DATE:	06/27/20
PROJECT NO.:	P22-001



The Department of
DEVELOPMENT & STORM WATER MANAGEMENT
Porter County, Indiana

PROJECT:	TRON SUBD. - SWM SYSTEM IMPROVEMENTS
LOCATION:	TRON SUBD. - 701 TRON DRIVE
SHEET TITLE:	SHEET 5-DETAILS

SHEET NO.: