

**CONSTRUCTION PLANS**  
FOR  
**WINDY OAKS SUBDIVISION**  
**STORM WATER MANAGEMENT SYSTEM IMPROVEMENTS, PHASE 2**

PORTER CO. DEPARTMENT OF DEVELOPMENT & STORMWATER MANAGEMENT  
MAY 13, 2021

The following Construction Plans shall apply to and govern the project designated as **Windy Oaks Subdivision – Storm Water Management System Improvements, Phase 2**. 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.

<b>Specification</b>	<b>Issuing Agency</b>	<b>Adopted/Dated</b>
Technical Specifications for Windy Oaks Subdivision –Storm Water Management System Improvements, Phase 2	Porter Co. Department of Development & Storm Water Management	May 13, 2021
Construction Plans for Windy Oaks Subdivision –Storm Water Management System Improvements, Phase 2	Porter Co. Department of Development & Storm Water Management	May 13, 2021
General Specifications to the Construction & Maintenance Services Agreements	Porter Co. Department of Development & Storm Water Management	February 1, 2021

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# PORTER CO. DEPT. OF DEVELOPMENT & STORM WATER MANAGEMENT

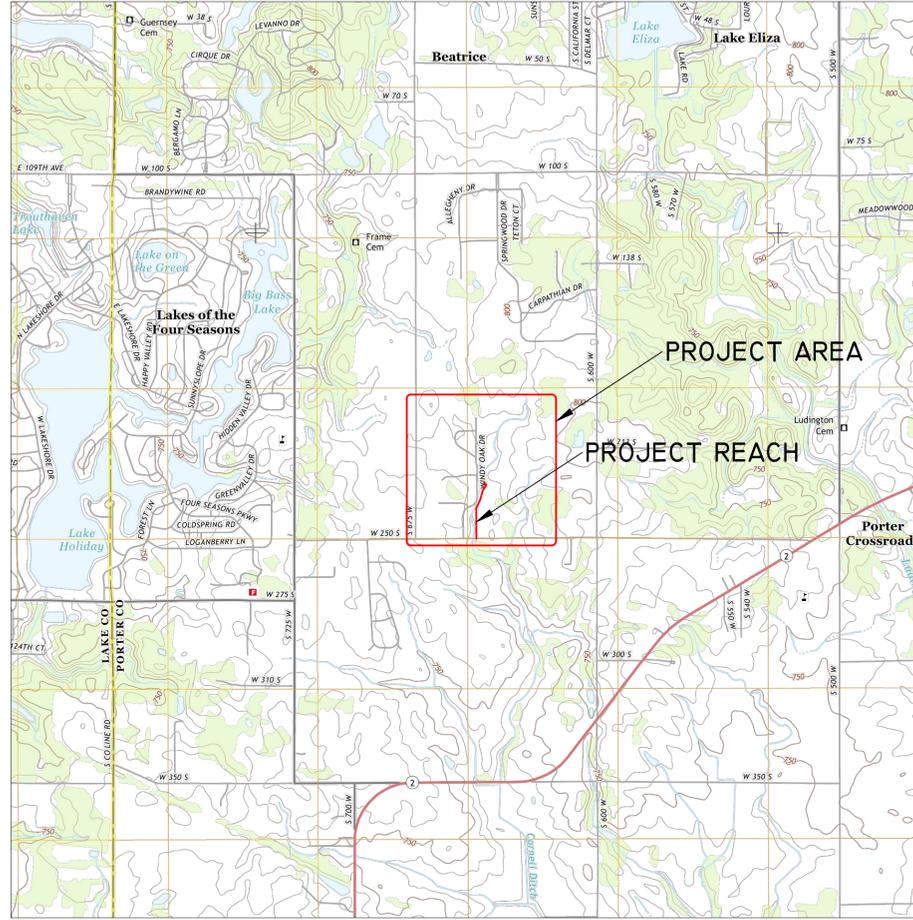
## WINDY OAKS SUBDIVISION

### STORM WATER MANAGEMENT SYSTEM IMPROVEMENTS, PHASE 2

### PORTER COUNTY, IN

**OWNER:**  
 PORTER CO. DEPT. OF DEVELOPMENT &  
 STORM WATER MANAGEMENT  
 ATTN: MICHAEL E. NOVOTNEY, P.E.  
 155 INDIANA AVE. STE. 311  
 VALPARAISO, IN 46383  
 P: (219) 465-3530

**ENGINEER:**  
 PORTER CO. DEPT. OF DEVELOPMENT &  
 STORM WATER MANAGEMENT  
 ATTN: MICHAEL E. NOVOTNEY, P.E.  
 155 INDIANA AVE. STE. 311  
 VALPARAISO, IN 46383  
 P: (219) 465-3530



PROJECT LOCATION MAP

**SHEET INDEX:**

1. COVER
2. OVERALL PLAN
3. PLAN - STA. 0+00 TO 8+50
4. PLAN - STA. 8+50 TO DETENTION BASIN
5. PROFILE
6. DETAILS
7. DETAILS
8. DETAILS & STORM SEWER STRUCTURE SCHEDULE
9. RESTORATION PLAN

NO.	DATE	REVISION	BY
1	05/07/21	INTERNAL REVIEW	CRG
2	05/13/21	FOR BIDDING	CRG

DESIGNED:	CRG
DRAWN:	CRG
CHECKED:	MEN
DATE:	9/10/19
PROJECT NO.:	P20-035



**The Department of  
 STORM WATER  
 MANAGEMENT**  
 Porter County, Indiana

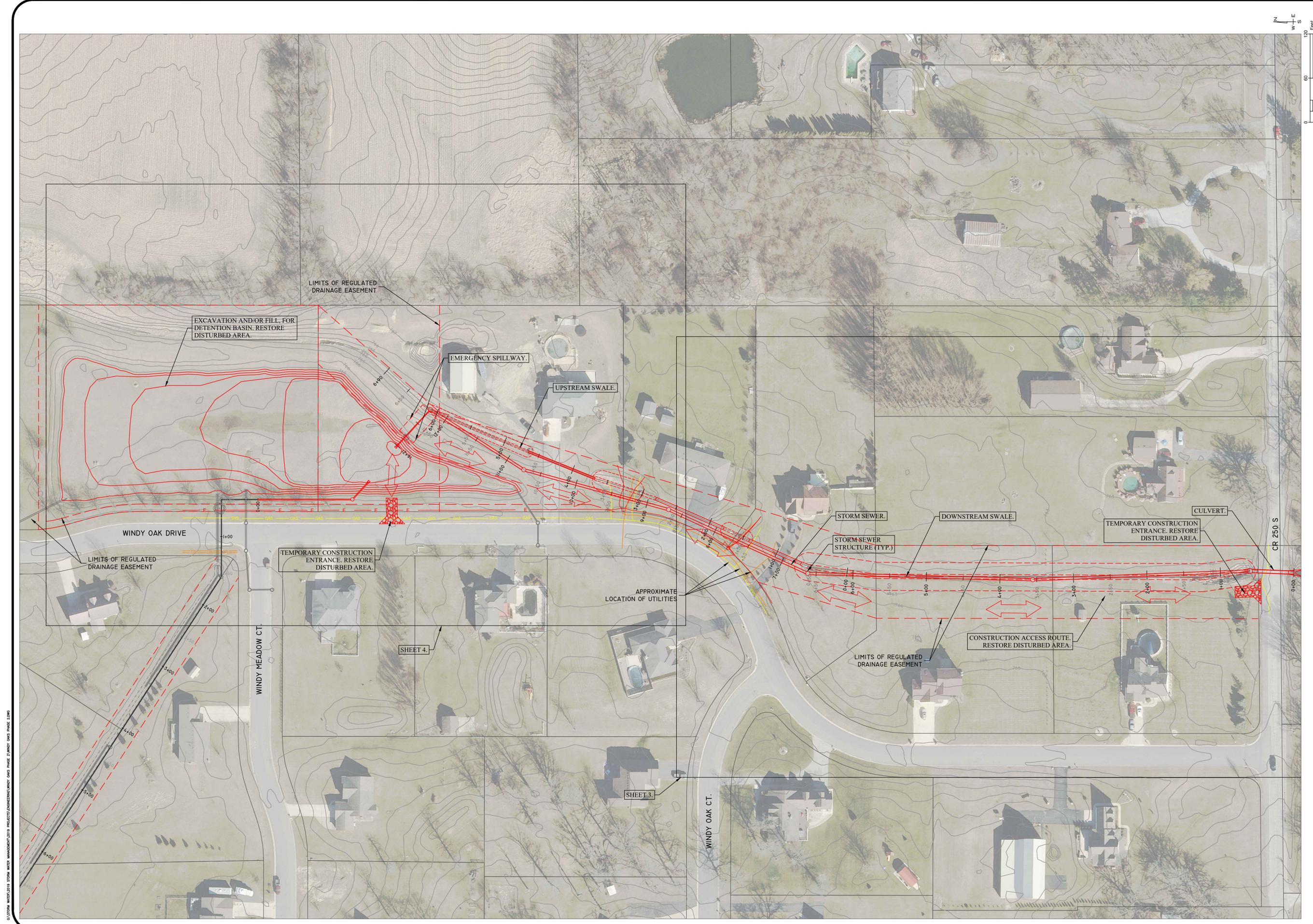
PROJECT:	WINDY OAKS SUBD.-SWM SYSTEM IMPROVEMENTS, PHASE 2
LOCATION:	WINDY OAKS SUBDIVISION
SHEET TITLE:	SHEET 1-COVER

I, THE UNDERSIGNED, A PROFESSIONAL ENGINEER REGISTERED WITH THE STATE OF INDIANA, WHOSE LICENSE IS IN GOOD STANDING, HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION.

CHELSEY R. GORDON, PE  
 INDIANA LICENSED PROFESSIONAL ENGINEER NO. PEI2100019  
 EXPIRES 7/31/2022

APPROVED FOR CONSTRUCTION BY: \_\_\_\_\_  
 MICHAEL E. NOVOTNEY, PE  
 COUNTY ENGINEER

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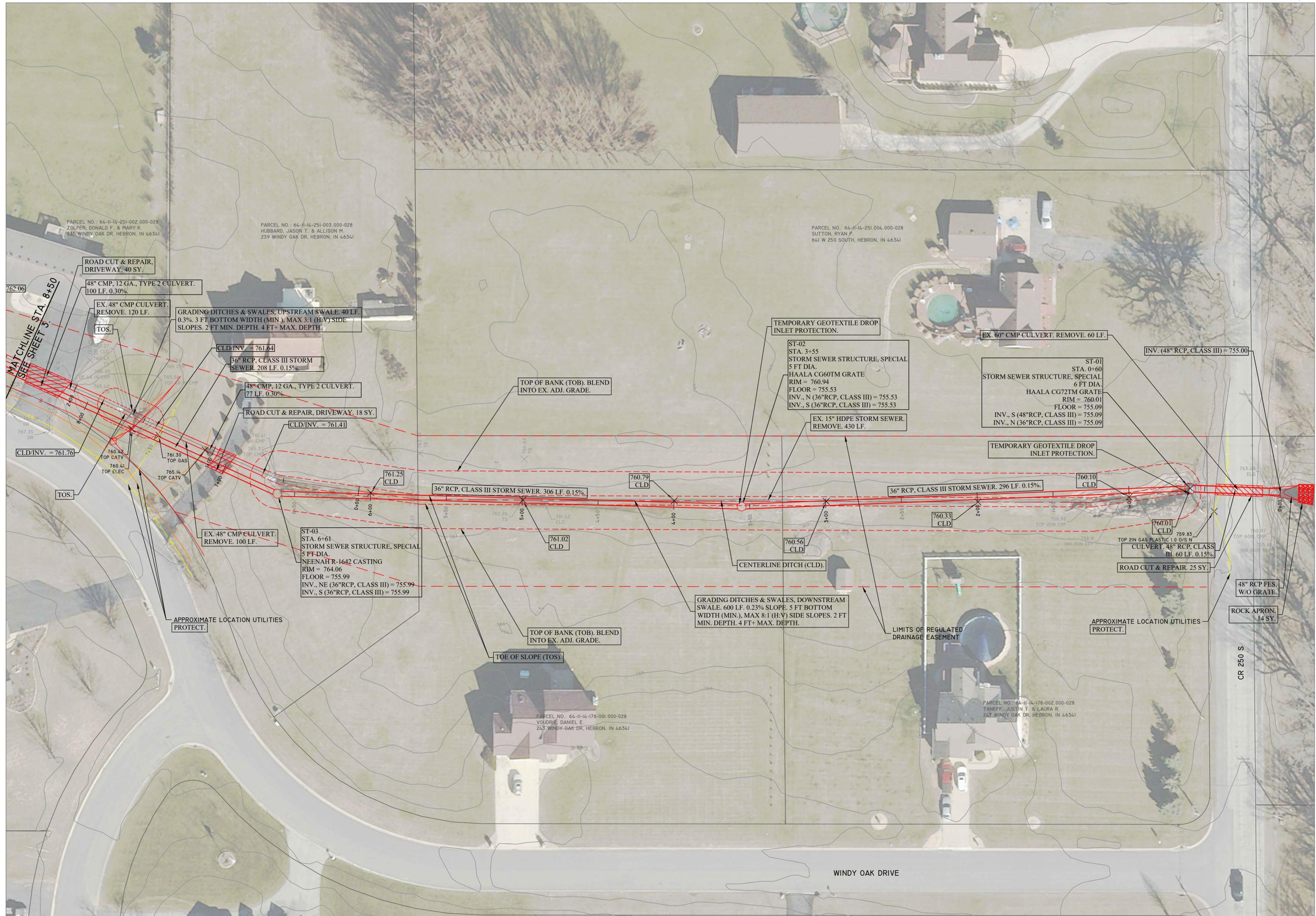
© 2019 WINDY OAK SUBD. STORM WATER MANAGEMENT 2019 PROJECT (SUBMITTAL) WINDY OAK SUBD. PHASE 2 WINDY OAKS PHASE 2 SWP

PROJECT:	WINDY OAKS SUBD. - SWM SYSTEM IMPROVEMENTS, PHASE 2		
LOCATION:	WINDY OAKS SUBDIVISION		
SHEET NO.:	2 OF 9		
SHEET TITLE:	SHEET 2-OVERALL PLAN		
DESIGNED:	CRG		
DRAWN:	CRG		
CHECKED:	MEN		
DATE:	09/10/19		
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The Department of  
**STORM WATER**  
**MANAGEMENT**  
 Porter County, Indiana

G:\UTAH\WINDY OAKS\2018 STORM WATER MANAGEMENT\2018 PROJECTS\WINDY OAKS PHASE 2\WINDY OAKS PHASE 2.DWG

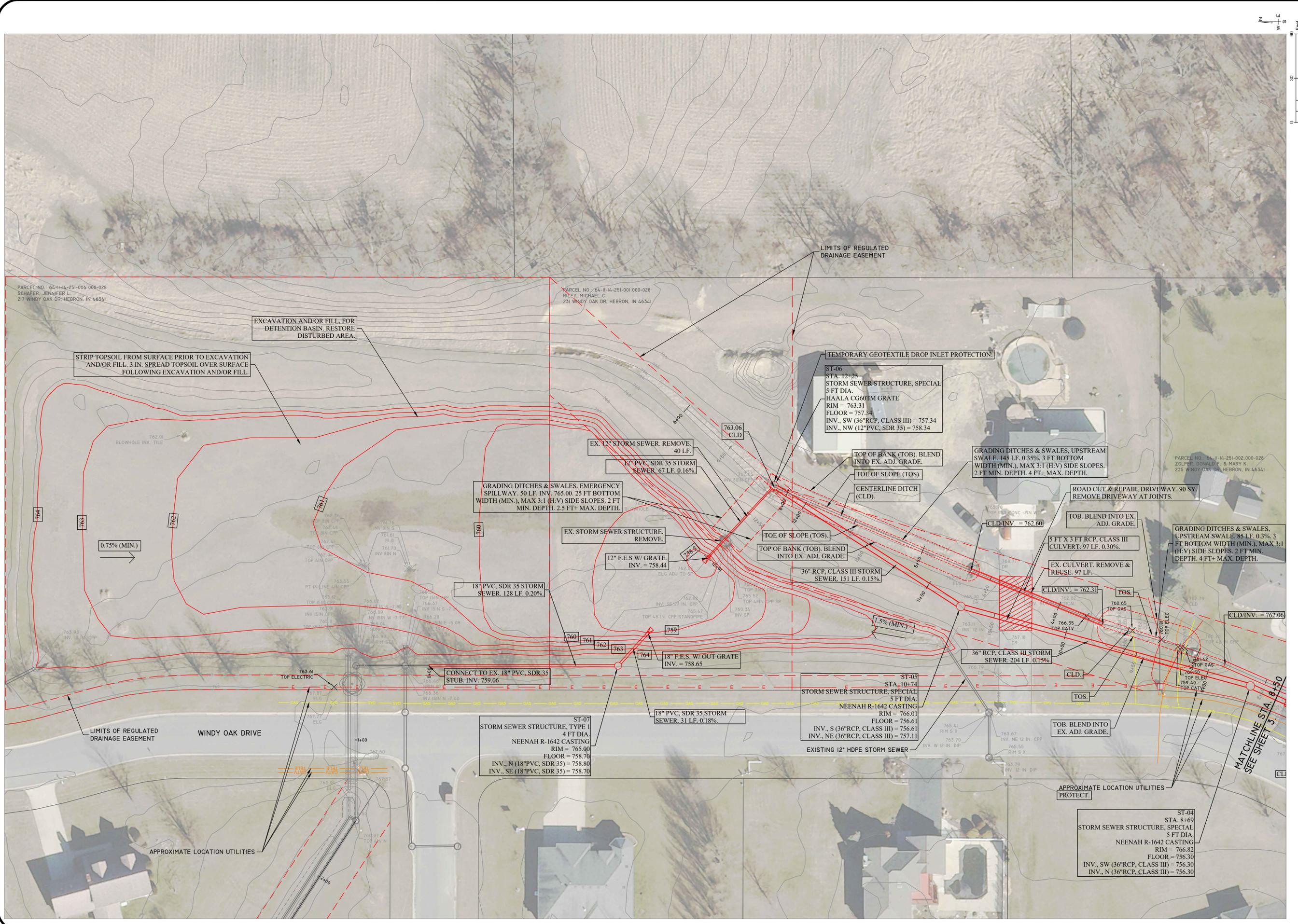


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PROJECT:	WINDY OAKS SUBD. - SWM SYSTEM IMPROVEMENTS, PHASE 2
LOCATION:	WINDY OAKS SUBDIVISION
SHEET TITLE:	SHEET 3-PLAN STA. 0+00 TO 8+50



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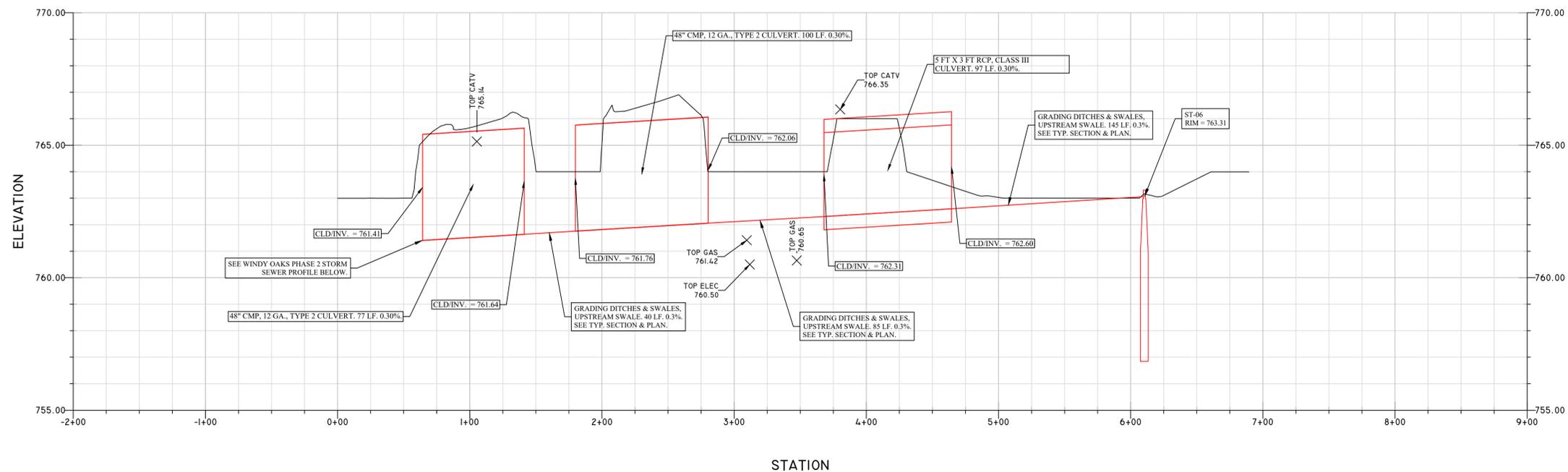
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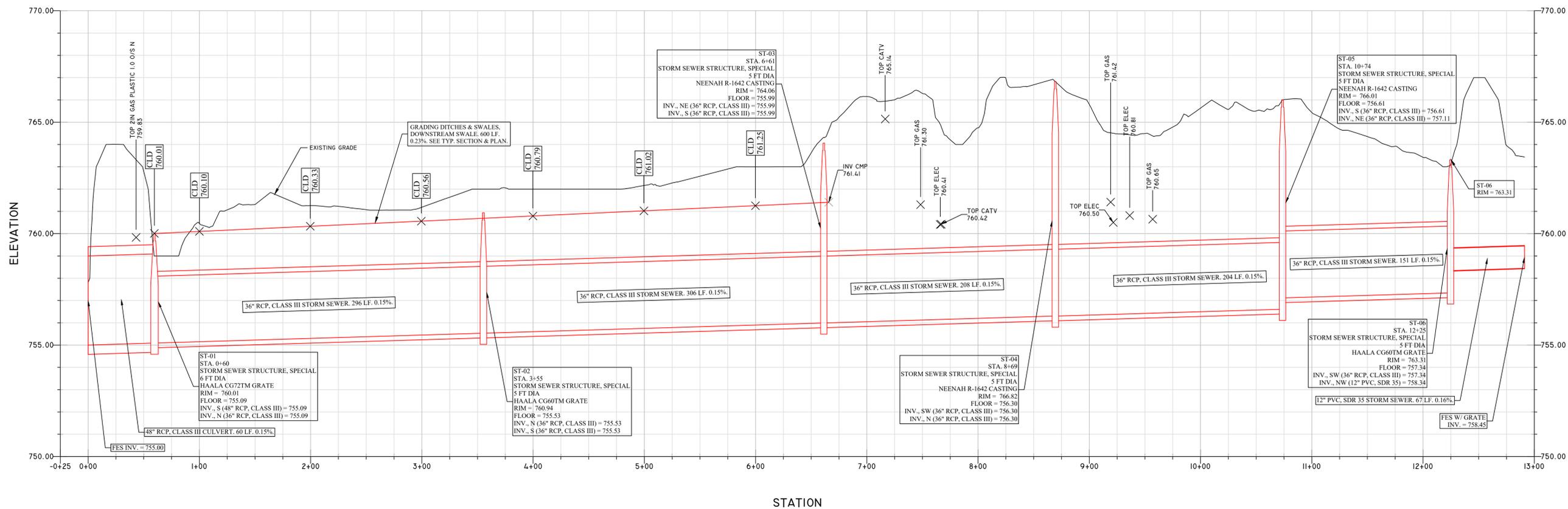
The Department of  
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 Porter County, Indiana

PROJECT:	WINDY OAKS SUBD. - SWM SYSTEM IMPROVEMENTS, PHASE 2
LOCATION:	WINDY OAKS SUBDIVISION
SHEET TITLE:	SHEET 4-PLAN 8+50 TO DETENTION POND

PROFILE VIEW OF WINDY OAKS PHASE 2 UPSTREAM SWALE



PROFILE VIEW OF WINDY OAKS PHASE 2 STORM SEWER

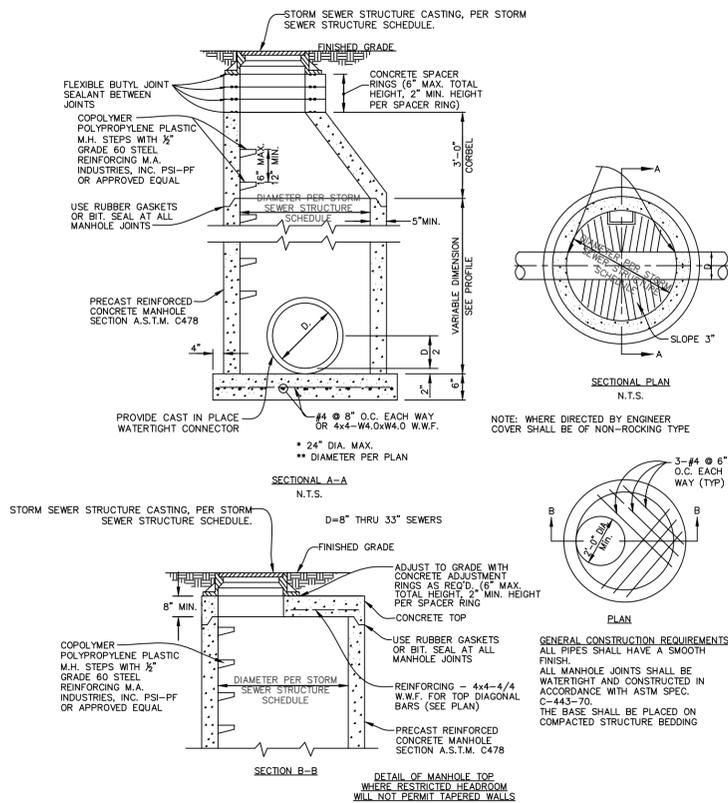


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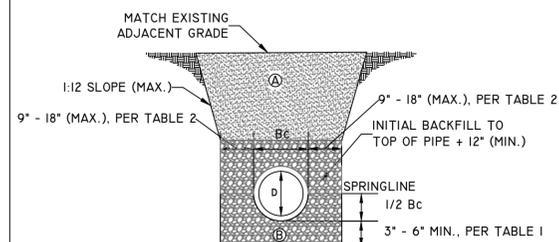
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PROJECT: WINDY OAKS SUBD. - SWM SYSTEM IMPROVEMENTS, PHASE 2  
 LOCATION: WINDY OAKS SUBDIVISION  
 SHEET TITLE: SHEET 5-PROFILE



STORM SEWER STRUCTURE, SPECIAL



LEGEND

- Ⓐ UNDER PAVEMENT AND/OR WITHIN 2 FT OF PAVEMENT, TRENCH BACKFILL SHALL BE USED. ELSEWHERE, SUITABLE EXCAVATED MATERIAL MAY BE USED. INSTALL FINAL BACKFILL & COMPACT IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS.
- Ⓑ CRUSHED STONE OR GRAVEL INDOT NO. 5, NO. 8, OR NO. 9 COARSE AGGREGATE WITH A 50% MECHANICAL CRUSH COUNT.

Bc PIPE OUTSIDE DIAMETER

NOTES:

- ALL BEDDING & INITIAL BACKFILL SHALL BE INSTALLED IN 8" LIFTS (MAX.) & COMPACTED IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS. BEDDING & INITIAL BACKFILL MATERIAL SHALL BE HAND PLACED AROUND THE HAUNCH AND SIDES OF THE PIPE TO ENSURE PROPER COMPACTION AND COMPLETE FILLING OF ALL VOIDS.

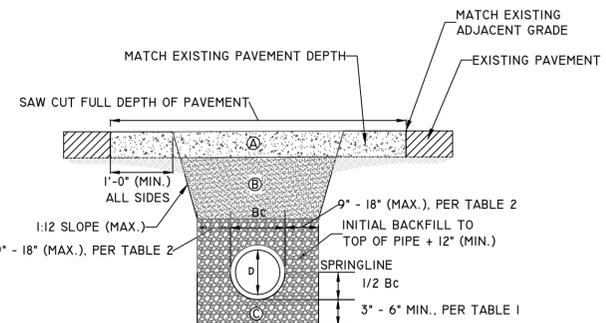
TABLE 1

DEPTH OF BEDDING BELOW PIPE	
D	BEDDING (MIN.)
$d \leq 24$ IN.	3 IN.
$24$ IN. $\leq d \leq 60$ IN.	4 IN.
$d \geq 60$ IN.	6 IN.

TABLE 2

WIDTH OF TRENCH, EACH SIDE OF PIPE	
D	WIDTH (MAX.)
$d \leq 24$ IN.	9 IN.
$24$ IN. $\leq d \leq 60$ IN.	12 IN.
$d \geq 60$ IN.	18 IN.

STORM SEWER & CULVERT BEDDING AND BACKFILL



LEGEND

- Ⓐ FULL DEPTH HMA REPAIR. SEE DETAIL.
- Ⓑ TRENCH BACKFILL. B BORROW OR CRUSHED STONE OR GRAVEL INDOT NO. 53 OR NO. 73 COARSE AGGREGATE. BACKFILL IN 8" LIFTS (MAX.) & COMPACT IN ACCORDANCE WITH TECHNICAL SPECIFICATIONS.
- Ⓒ CRUSHED STONE OR GRAVEL INDOT NO. 5, NO. 8, OR NO. 9 COARSE AGGREGATE WITH A 50% MECHANICAL CRUSH COUNT.

Bc PIPE OUTSIDE DIAMETER

NOTES:

- ALL BEDDING, INITIAL BACKFILL, & FINAL BACKFILL SHALL BE INSTALLED IN 8" LIFTS (MAX.) & COMPACTED IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS. BEDDING & INITIAL BACKFILL MATERIAL SHALL BE HAND PLACED AROUND THE HAUNCH AND SIDES OF THE PIPE TO ENSURE PROPER COMPACTION AND COMPLETE FILLING OF ALL VOIDS.

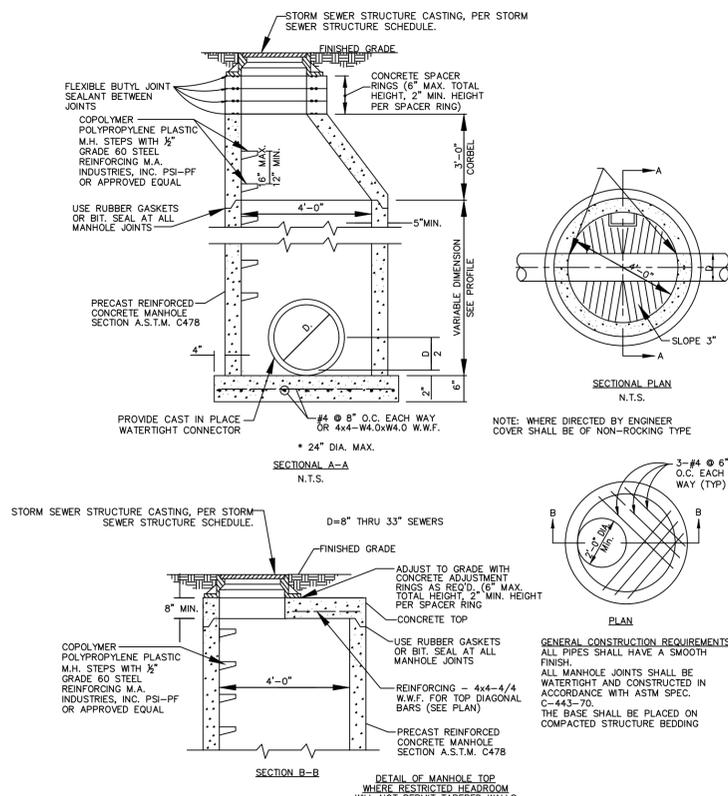
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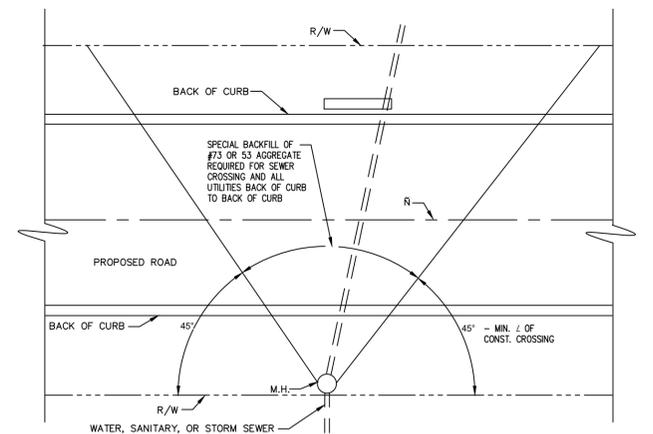
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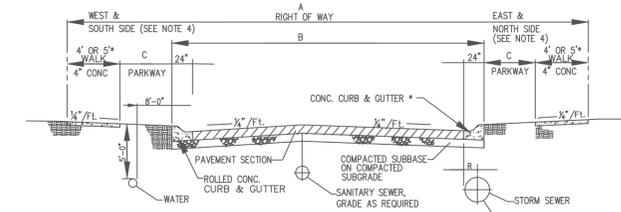
ROAD CUT & REPAIR



STORM SEWER STRUCTURE, TYPE 1



BACKFILL REQUIREMENTS (CONTINUED)



\* EXTERNAL ROADWAYS SHALL HAVE 5' SIDEWALKS. INTERNAL ROADWAYS SHALL HAVE 4' SIDEWALKS UNLESS IT IS PART OF A MAJOR PATHWAY OR PEDESTRIAN NETWORK.

CLASSIFICATION	MIN. GRADE	MAX. GRADE	MIN. SIGHT DISTANCE
ARTERIAL	0.5%	8.0%	500'
COLLECTOR STREET	0.5%	8.0%	300'
LOCAL STREET, BOULEVARD	0.5%	8.0%	150'
ALLEY	0.5%	8.0%	--

CLASSIFICATION	HMA SURFACE (INCHES)	HMA BASE (INCHES)	AGG. BASE (SUBBASE)	GEOTEXT. REINFC.
ARTERIAL	1 1/2"	3"	20"	YES
COLLECTOR STREET	1 1/2"	3"	10"	YES
LOCAL STREET, BOULEVARD	1 1/2"	2 1/2"	10"	YES
ALLEY **	1 1/2"	2 1/2"	8"	YES

\*\* NEW OR RECONSTRUCTED.

CLASSIFICATION	A	B	C	MIN. CURVE RADIUS	MIN. TANGENT	NOTES
ARTERIAL	80'	*	*	500**	100'	SIDEWALKS MAY BE REQUIRED*
COLLECTOR	80'	*	17.5'	300**	60'	SIDEWALKS REQUIRED
BOULEVARD (ONE WAY)	*	20'	0-11'	200**	40'	SIDEWALKS REQUIRED
LOCAL (RESIDENTIAL)	60'	30'	0-11'	100**	40'	SIDEWALKS REQUIRED
ALLEY	16.5'	12'	N/A	N/A	N/A	NO SIDEWALK
FRONTAGE	40'	24'	*	100**	40'	SIDEWALKS MAY BE REQUIRED* 4' SHLDR., NO PARKING
FRONTAGE	40'	28'	*	100**	40'	SIDEWALKS MAY BE REQUIRED* 4' SHLDR., ONE SIDE PARKING

\* PORTER COUNTY ENGINEERING DEPARTMENT DETERMINATION  
\*\* MINIMUM TANGENT OF 100' SHALL SEPARATE ALL REVERSE CURVES.

- NOTES:
- UNDERDRAINS SHALL BE PROVIDED AT LOW POINTS.
  - INDUSTRIAL STREETS SHALL HAVE MINIMUM ROADWAY DIMENSIONS AS LOCAL STREETS. MINIMUM PAVEMENT SECTION SHALL BE SAME AS LOCAL STREETS, BUT A THICKER SECTION SHALL BE USED IF TRAFFIC NEEDS AND SOIL CONDITIONS WARRANT. DESIGN AND CALCULATIONS SHALL BE PROVIDED BY REGISTERED PROFESSIONAL ENGINEER.
  - FRONTAGE ROADS SHALL HAVE MINIMUM R/W WIDTH OF 40'.
  - VARIATIONS TO THE EAST, WEST, NORTH, SOUTH RULE MAY BE APPROVED ON CASE-BY-CASE BASIS.
  - HOUSE TELEPHONE DROPS SHALL BE 24" DEEP.

FULL DEPTH HMA REPAIR

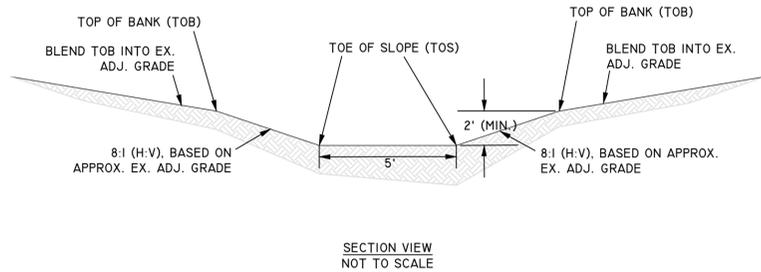
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Porter County, Indiana

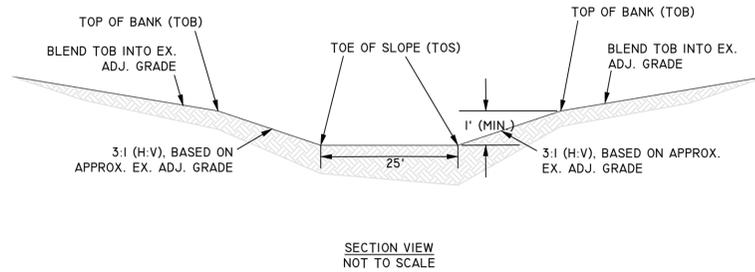
PROJECT: WINDY OAKS SUBD. - SWM SYSTEM IMPROVEMENTS, PHASE 2  
LOCATION: WINDY OAKS SUBDIVISION  
SHEET TITLE: SHEET 6-DETAILS

SHEET NO.: 6 OF 9



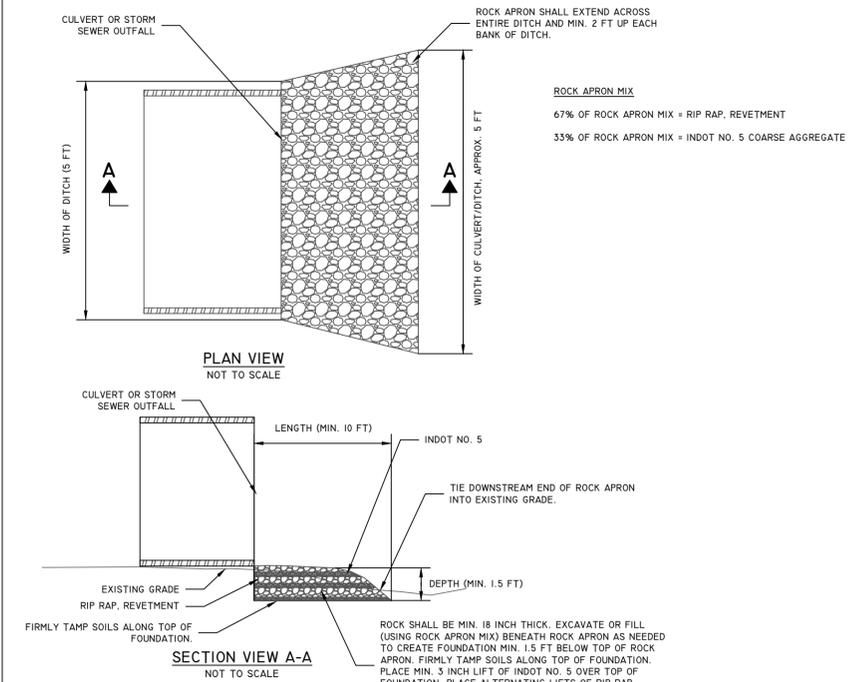
NOTES:  
 I. RESTORE DISTURBED AREA WITHIN SWALE AS FOLLOWS:  
 A. WITHIN SWALE (TOB TO TOB). RESTORE DISTURBED AREA WITH TOPSOIL, FERTILIZER, GRASS SEED, & EROSION CONTROL BLANKET (NAG S75BN), PER TECHNICAL SPECIFICATIONS.

DOWNSTREAM SWALE



NOTES:  
 I. RESTORE DISTURBED AREA WITHIN SPILLWAY AS FOLLOWS:  
 A. WITHIN SPILLWAY (TOB TO TOB). RESTORE DISTURBED AREA WITH TOPSOIL, FERTILIZER, GRASS SEED, & EROSION CONTROL BLANKET (NAG C125N), PER TECHNICAL SPECIFICATIONS.

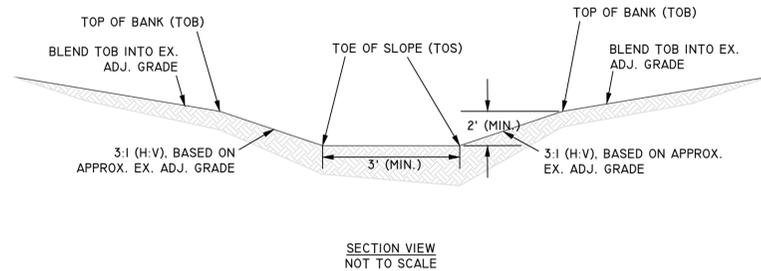
EMERGENCY SPILLWAY



**ROCK APRON MIX**  
 67% OF ROCK APRON MIX = RIP RAP, REVETMENT  
 33% OF ROCK APRON MIX = INDOT NO. 5 COARSE AGGREGATE

**INSTALLATION**  
 1. EXCAVATION OR FILL (USING ROCK APRON MIX) BENEATH ROCK APRON AS NEEDED TO CREATE FOUNDATION MIN. 1.5 FT BELOW TOP OF APRON.  
 2. FIRMLY TAMP ALONG TOP OF FOUNDATION.  
 3. PLACE MIN. 3 INCH LIFT OF INDOT NO. 5 OVER TOP OF FOUNDATION.  
 4. PLACE ALTERNATING LIFTS OF RIP RAP, REVETMENT, INDOT NO. 5, AND RIP RAP, REVETMENT AS NEEDED TO ACHIEVE LINES AND GRADES SHOWN. INDOT NO. 5 SHALL FILL VOID SPACE BETWEEN LARGER STONE IN RIP RAP, REVETMENT.  
 5. RE-SHAPE BANKS OF DITCH ABOVE ROCK APRON TO 2:1 OR FLATTER (TYP.). BLEND INTO ADJ. GRADE.  
 6. RESTORE DISTURBED AREAS ON AND ABOVE RE-SHAPED BANKS OF DITCH PER DITCH TYPICAL SECTION AND TECHNICAL SPECIFICATIONS.

ROCK APRON



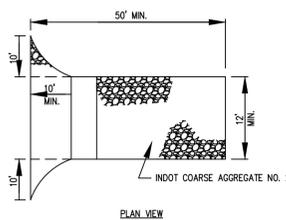
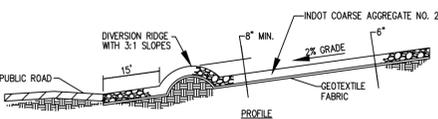
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UPSTREAM SWALE

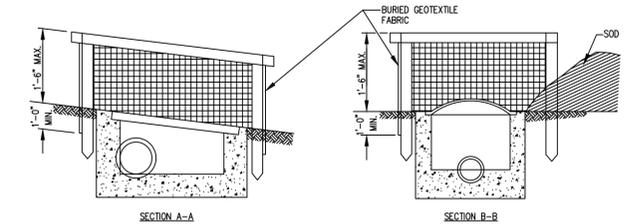
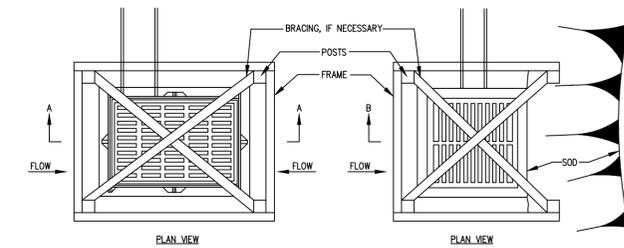
**REQUIREMENTS:**  
 MATERIAL: 1-2.5 IN. WASHED STONE (INDOT CA NO. 2) OVER A STABLE FOUNDATION. THICKNESS: 6 IN. MINIMUM.  
 WIDTH: 12 FT. MINIMUM OR FULL WIDTH OF ENTRANCE/EXIT ROADWAY, WHICHEVER IS GREATER.  
 LENGTH: 50 FT. MINIMUM. THE LENGTH CAN BE SHORTER FOR SMALL SITES SUCH AS FOR AN INDIVIDUAL 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.  
 • TOPRESS 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



**INSTALLATION:**  
 1. DIG A 12-INCH DEEP, 4-INCH WIDE TRENCH AROUND THE PERIMETER OF THE INLET.  
 2. IF USING PRE-ASSEMBLED GEOTEXTILE FABRIC AND POSTS, DRIVE THE POSTS INTO THE SOIL, TIGHTLY STRETCHING THE GEOTEXTILE FABRIC BETWEEN POSTS AS EACH IS DRIVEN. (POSTS MUST BE PLACED ON THE INLET SIDE OF THE ANCHOR TRENCH WITH THE GEOTEXTILE FABRIC ON THE SIDE OF THE TRENCH FARTHEST FROM THE INLET.)  
 3. THE FRAME SHALL BE WRAPPED WITH ONE CONTINUOUS PIECE OF GEOTEXTILE FABRIC, AND A 2"-0" OVERLAP SHALL BE PROVIDED.  
 4. PLACE THE BOTTOM 16-INCHES OF GEOTEXTILE FABRIC INTO THE 12-INCH DEEP TRENCH AND EXTENDING AWAY FROM THE INLET.  
 5. BACKFILL THE TRENCH WITH SOIL MATERIAL AND COMPACT IT IN PLACE.  
 6. BRACE THE POSTS BY NAILING BRACES INTO EACH CORNER POST OR UTILIZE RIGID PANELS TO SUPPORT FABRIC.  
 7. IN SITUATIONS WHERE STORM WATER MAY BYPASS THE STRUCTURE, EITHER:  
 - SET THE TOP OF FABRIC FILTER AT LEAST 6" LOWER THAN THE GROUND ELEVATION ON THE DOWN-SLOPE SIDE OF THE STORM DRAIN INLET.  
 - BUILD A TEMPORARY DIKE, COMPACTED TO 6" HIGHER THAN THE FABRIC ON THE DOWN-SLOPE SIDE OF THE STORM DRAIN INLET, AND/OR  
 - USE IN CONJUNCTION WITH EXCAVATED DROP INLET PROTECTING (SHT. NO. II-7).

**MAINTENANCE:**  
 1. INSPECT DAILY. MAKE NEEDED REPAIRS TO GEOTEXTILE FABRIC IMMEDIATELY.  
 2. REMOVE SEDIMENT FROM POOL AREA TO PROVIDE STORAGE FOR THE NEXT STORM EVENT. AVOID DAMAGING OR UNDERCUTTING FABRIC DURING SEDIMENT REMOVAL.  
 3. WHEN CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED, REMOVE SEDIMENT, PROPERLY DISPOSE OF ALL CONSTRUCTION MATERIAL, GRADE AREA TO THE ELEVATION OF THE STORM DRAIN INLET TOP, THEN STABILIZE IMMEDIATELY.

GEOTEXTILE DROP INLET PROTECTION

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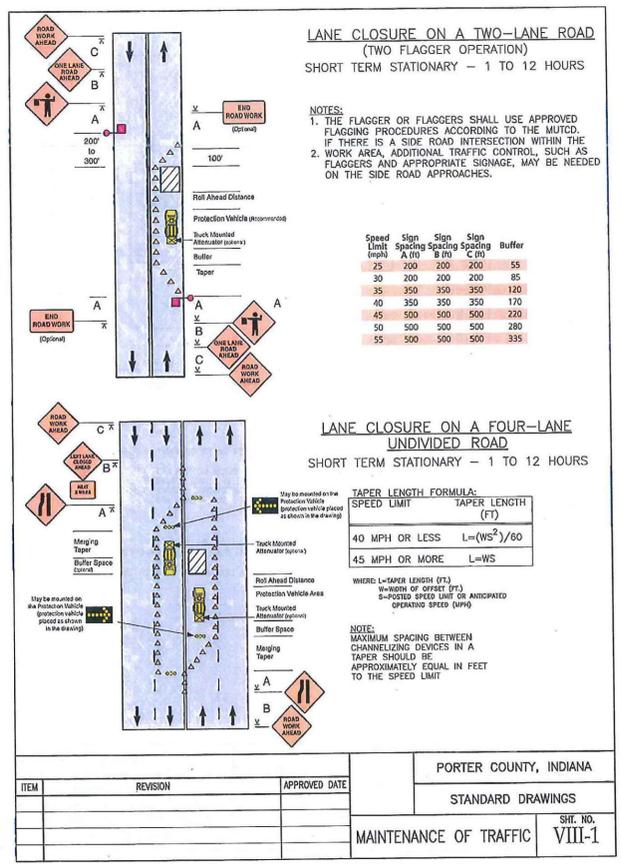
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LOCATION: WINDY OAKS SUBDIVISION

SHEET TITLE: SHEET 7-DETAILS

SHEET NO.:

WINDY OAKS PHASE 2 STORM SEWER STRUCTURE SCHEDULE									
STRUCTURE NO.	STATION	NORTHING	EASTING	DIAMETER	RIM ELEV.	FLOOR ELEV.	PIPE OUT, INVERT(S)	PIPE IN, INVERT(S) AND ANGLE(S) (FROM OUT)	CASTINGS
ST-01	0+60	2240204.41	2923258.60	6 FT	760.01	755.09	S 48° RCP, CLASS III 755.09	N 36° RCP, CLASS III 755.09 185°	HAALA CG72TM GRATE
ST-02	3+55	2240499.82	2923246.67	5 FT	760.94	755.53	S 36° RCP, CLASS III 755.53	N 36° RCP, CLASS III 755.53, 184°	HAALA CG60TM GRATE
ST-03	6+61	2240805.73	2923255.17	5 FT	764.06	755.99	S 36° RCP, CLASS III 755.99	NE 36° RCP, CLASS III 755.99, 203°	NEENAH R-1642 CASTING
ST-04	8+69	2240994.97	2923341.80	5 FT	766.82	756.30	SW 36° RCP, CLASS III 756.30	N 36° RCP, CLASS III 756.30, 171°	NEENAH R-1642 CASTING
ST-05	10+74	2241191.89	2923395.83	5 FT	766.01	756.61	S 36° RCP, CLASS III 756.61	NE 36° RCP, CLASS III 757.11, 197°	NEENAH R-1642 CASTING
ST-06	12+25	2241318.87	2923477.55	5 FT	763.31	757.34	SW 36° RCP, CLASS III 757.34	NW 12° PVC, SDR 35 758.34, 100°	HAALA CG60TM GRATE
ST-07	N/A	2241424.87	2923355.55	4 FT	765.00	758.70	SE 15° PVC, SDR 35 758.70	N 15° PVC, SDR 35 758.80, 228°	NEENAH R-1642 CASTING

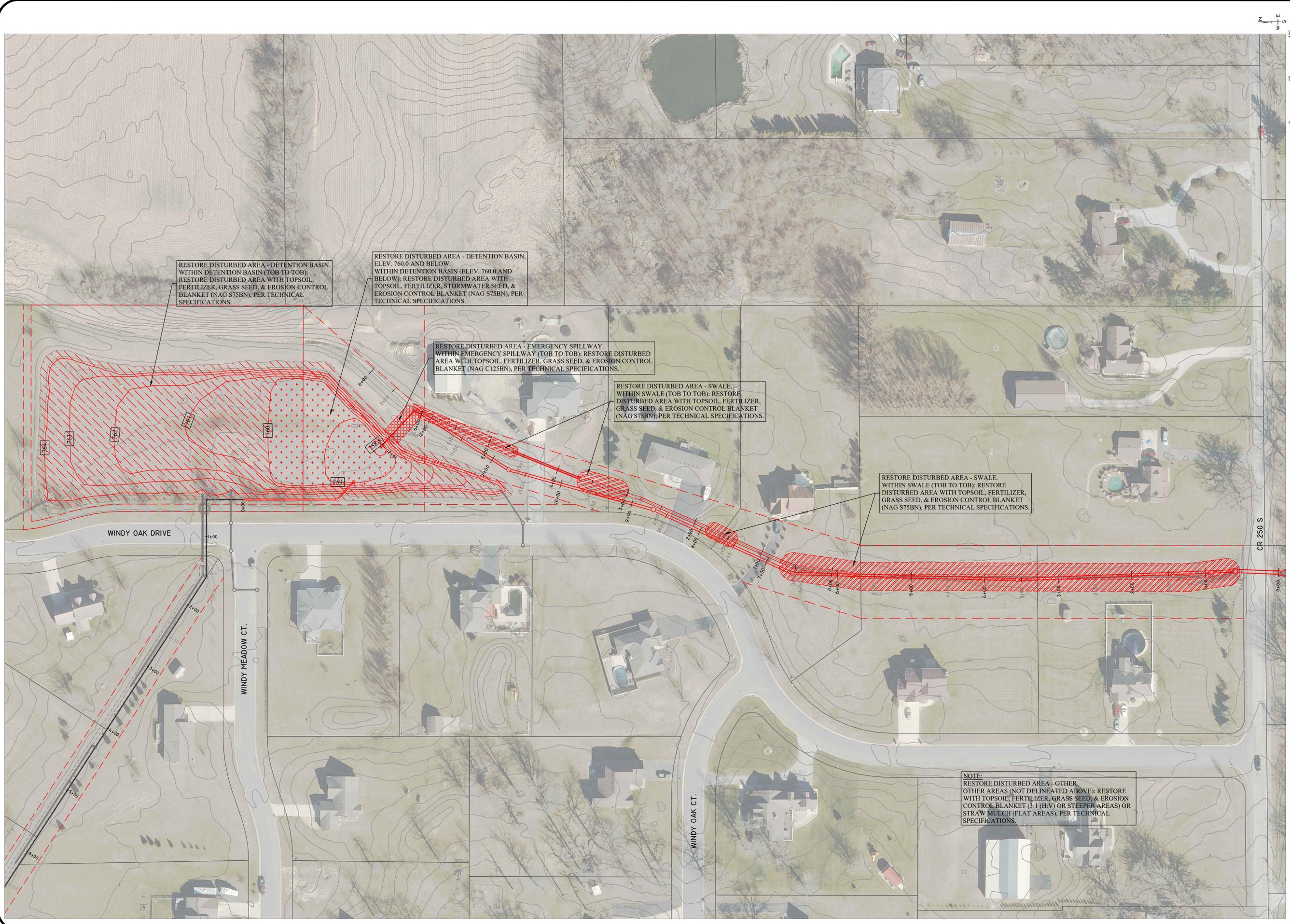


NO.	DATE	REVISION	BY
1	05/07/21	INTERNAL REVIEW	CRG
2	05/13/21	FOR BIDDING	CRG

DESIGNED: CRG  
DRAWN: CRG  
CHECKED: MEN  
DATE: 9/10/19  
PROJECT NO.: 20-035



PROJECT: WINDY OAKS SUBD. - SWM SYSTEM IMPROVEMENTS, PHASE 2  
LOCATION: WINDY OAKS SUBDIVISION  
SHEET TITLE: SHEET 8-STORM SEWER STRUCTURE SCHEDULE & DETAILS



RESTORE DISTURBED AREA - DETENTION BASIN. WITHIN DETENTION BASIN (TOB TO TOB); RESTORE DISTURBED AREA WITH TOPSOIL, FERTILIZER, GRASS SEED, & EROSION CONTROL BLANKET (NAG S75BN), PER TECHNICAL SPECIFICATIONS.

RESTORE DISTURBED AREA - DETENTION BASIN. ELEV. 760.0 AND BELOW. WITHIN DETENTION BASIN (ELEV. 760.0 AND BELOW); RESTORE DISTURBED AREA WITH TOPSOIL, FERTILIZER, STORMWATER SEED, & EROSION CONTROL BLANKET (NAG S75BN), PER TECHNICAL SPECIFICATIONS.

RESTORE DISTURBED AREA - EMERGENCY SPILLWAY. WITHIN EMERGENCY SPILLWAY (TOB TO TOB); RESTORE DISTURBED AREA WITH TOPSOIL, FERTILIZER, GRASS SEED, & EROSION CONTROL BLANKET (NAG C125BN), PER TECHNICAL SPECIFICATIONS.

RESTORE DISTURBED AREA - SWALE. WITHIN SWALE (TOB TO TOB); RESTORE DISTURBED AREA WITH TOPSOIL, FERTILIZER, GRASS SEED, & EROSION CONTROL BLANKET (NAG S75BN), PER TECHNICAL SPECIFICATIONS.

RESTORE DISTURBED AREA - SWALE. WITHIN SWALE (TOB TO TOB); RESTORE DISTURBED AREA WITH TOPSOIL, FERTILIZER, GRASS SEED, & EROSION CONTROL BLANKET (NAG S75BN), PER TECHNICAL SPECIFICATIONS.

NOTE:  
RESTORE DISTURBED AREA - OTHER. OTHER AREAS (NOT DELINEATED ABOVE); RESTORE WITH TOPSOIL, FERTILIZER, GRASS SEED, & EROSION CONTROL BLANKET (3:1 (H:V) OR STEEPER AREAS) OR STRAW MULCH (FLAT AREAS), PER TECHNICAL SPECIFICATIONS.



PROJECT:	WINDY OAKS SUBD. - SWM SYSTEM IMPROVEMENTS, PHASE 2		
LOCATION:	WINDY OAKS SUBDIVISION		
SHEET TITLE:	SHEET 9-RESTORATION PLAN		
SHEET NO.:	9 of 9		
DESIGNED:	CRG		
DRAWN:	CRG		
CHECKED:	MEN		
DATE:	09/10/19		
PROJECT NO.:	P20-035		
NO.	DATE	REVISION	BY
1	05/07/21	INTERNAL REVIEW	CRG
2	05/13/21	FOR BIDDING	CRG

