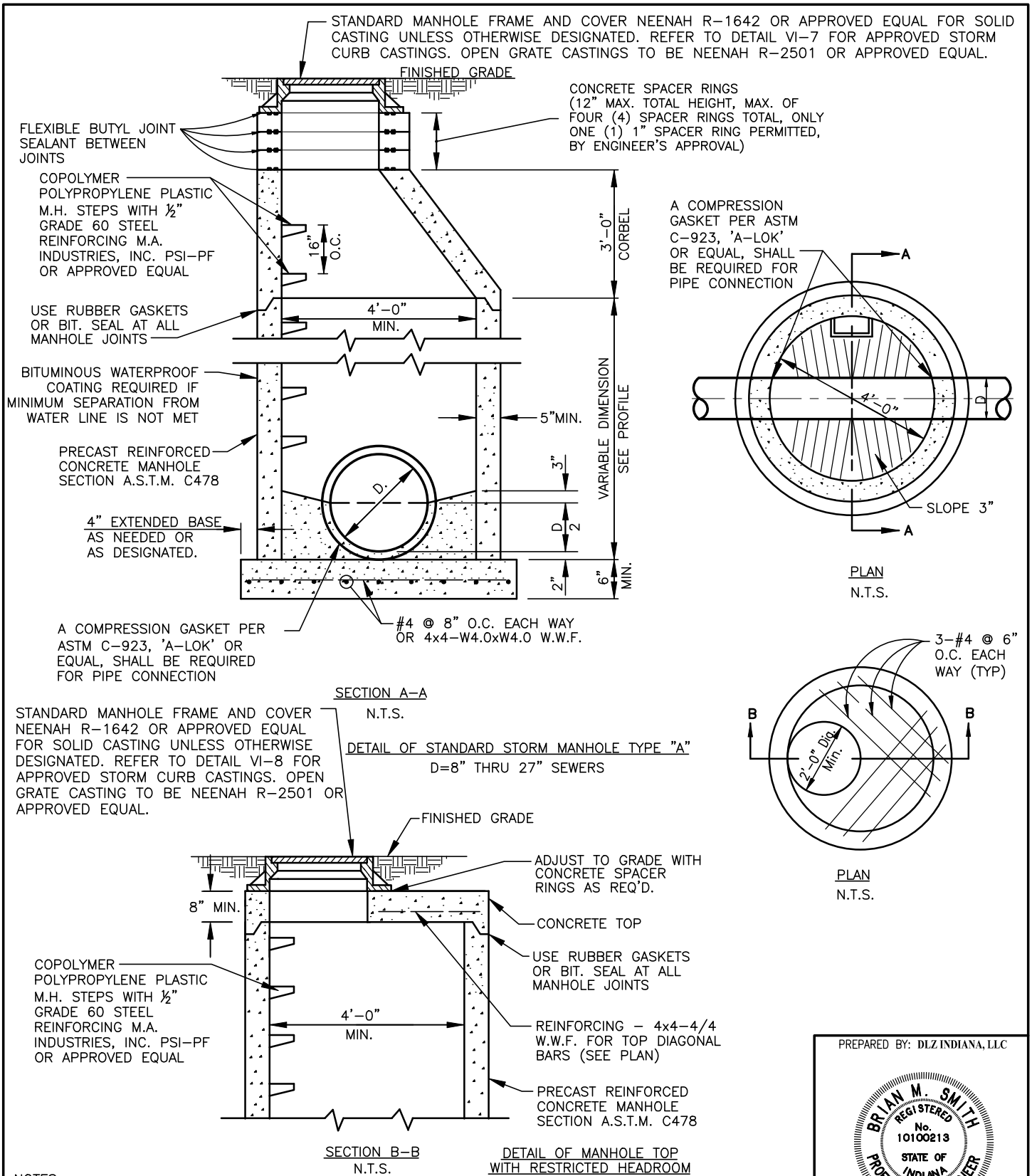


NOTES:

1. WHERE DESIGNATED OR AS NEEDED CASTING LID SHALL BE OF NON-ROCKING TYPE.
2. WHERE DESIGNATED OR AS NEEDED PROVIDE FLOTATION COLLAR.
3. MANHOLE DIAMETER IS SHOWN AS MINIMUM AND MAY INCREASE DUE TO LOCATION OF PIPES.
4. THIS TYPE "A" STORM MANHOLE SHALL BE USED FOR STORM SEWERS 27" IN DIAMETER AND SMALLER.

PREPARED BY: DLZ INDIANA, LLC

BRIAN M. SMITH REGISTERED No. 10100213 STATE OF INDIANA PROFESSIONAL ENGINEER

2/1/2022

APPROVED/REVISED BY THE BOARD OF PUBLIC WORKS & SAFETY

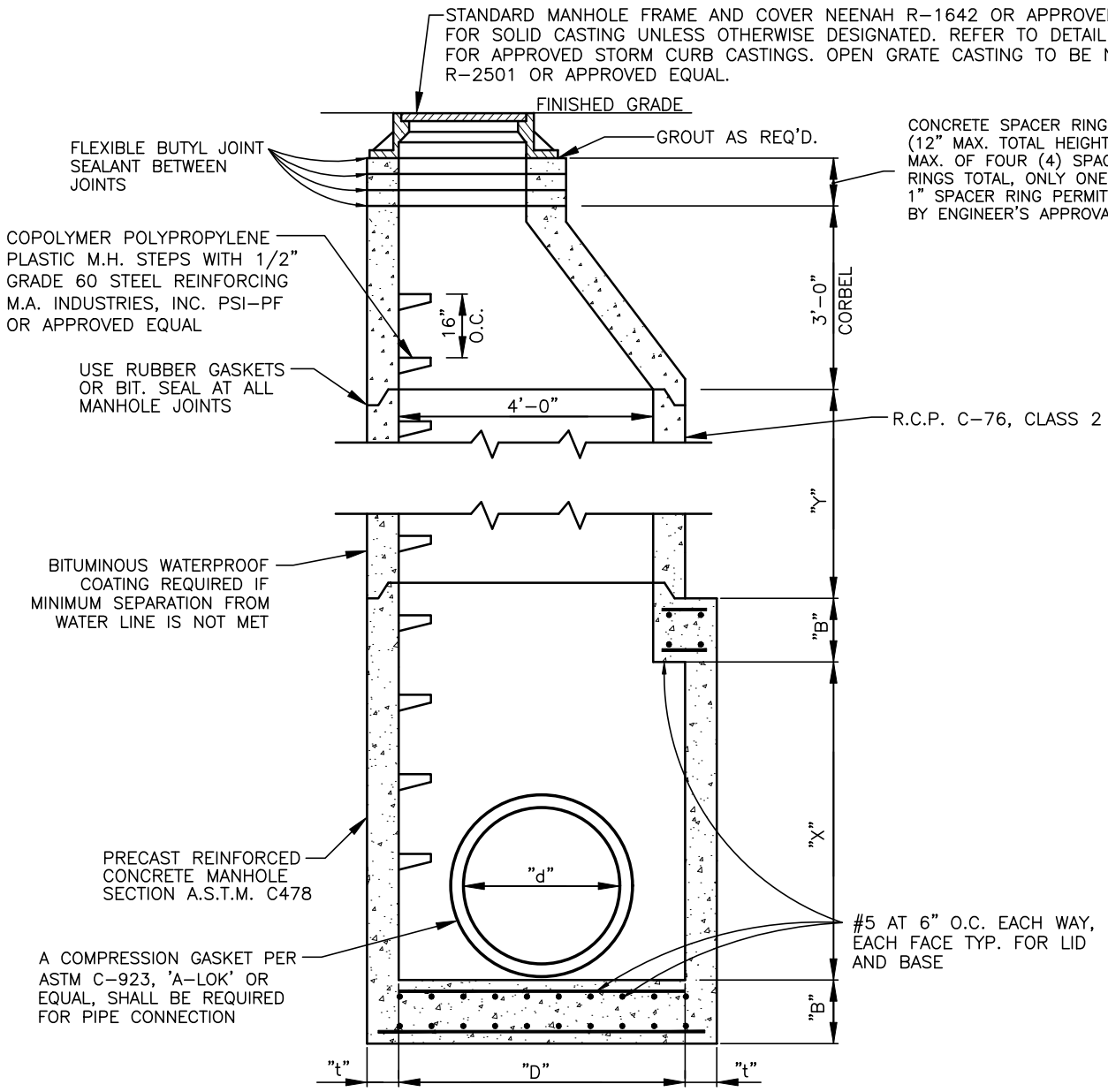
ITEM	REVISION	APPROVED DATE
	ADOPTED: NEW	MARCH 2013
	REVISED	FEBRUARY 2022

CITY OF MISHAWAKA, INDIANA

ENGINEERING STANDARDS

TYPE "A" STORM MANHOLE

SHT. NO. VI-1



NOTES:

1. MANHOLES 72" AND SMALLER SHALL HAVE AN INTEGRALLY POURED BASE. MANHOLES 78" AND LARGER SHALL HAVE AN INTEGRALLY POURED BASE OR A WATERTIGHT GASKETED JOINT.
2. MANHOLE DIAMETER "D" REQUIREMENTS ARE MINIMUMS AND MAY INCREASE DUE TO THE LOCATIONS OF THE PIPE.
3. WHERE DESIGNATED OR AS NEEDED CASTING LID SHALL BE OF NON-ROCKING TYPE.
4. WHERE DESIGNATED OR AS NEEDED PROVIDE FLOTATION COLLAR.
5. MANHOLE DIAMETER IS SHOWN AS MINIMUM AND MAY INCREASE DUE TO LOCATION OF PIPES.
6. THIS TYPE "B" STORM MANHOLE SHALL BE USED FOR STORM SEWER PIPES 30" IN DIAMETER AND LARGER.

"d"	"D" MIN.	"B" MIN.	"t" MIN.	"X" MIN.	"Y"
30"	60"	8"	6"	60"	AS REQUIRED
33"	60"	8"	6"	60"	"
36"	60"	8"	6"	60"	"
42"	72"	8"	7"	72"	"
48"	72"	8"	7"	72"	"
54"	84"	10"	8"	84"	"
60"	84"	10"	8"	84"	"
66"	96"	12"	9"	96"	"
72"	96"	12"	9"	96"	"
78"	108"	12"	10"	108"	"
84"	108"	12"	10"	108"	AS REQUIRED

PREPARED BY: DLZ INDIANA, LLC

BRIAN M. SMITH REGISTERED No. 10100213 STATE OF INDIANA PROFESSIONAL ENGINEER

2/1/2022

APPROVED/REVISED BY THE BOARD OF PUBLIC WORKS & SAFETY

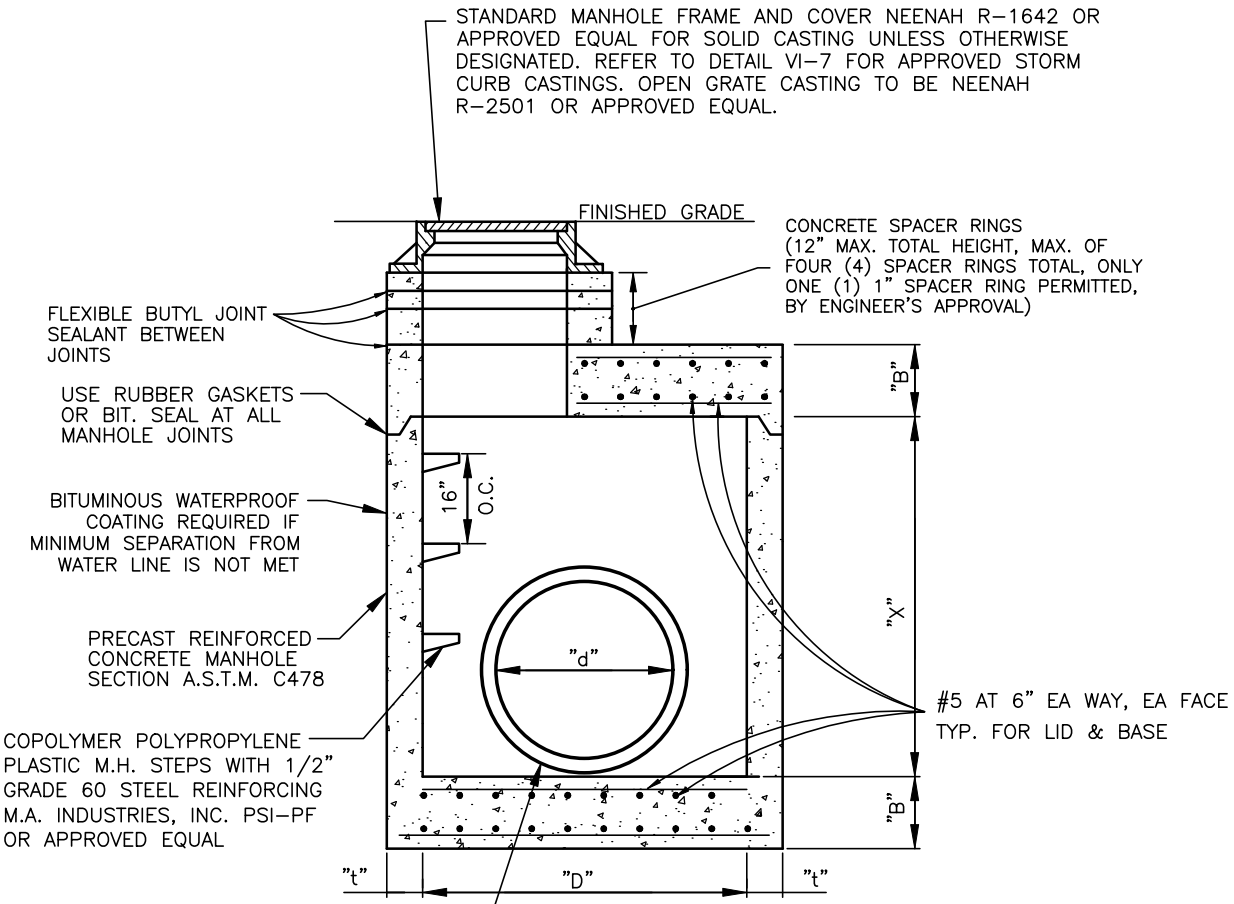
ITEM	REVISION	APPROVED DATE
	ADOPTED: NEW	MARCH 2013
	REVISED	FEBRUARY 2022

CITY OF MISHAWAKA, INDIANA

ENGINEERING STANDARDS

TYPE "B" STORM MANHOLE

SHT. NO. VI-2



"d"	"D" MIN.	"B" MIN.	"t" MIN.	"X" MIN.
30"	60"	8"	6"	60"
33"	60"	8"	6"	60"
36"	60"	8"	6"	60"
42"	72"	8"	7"	72"
48"	72"	8"	7"	72"
54"	84"	10"	8"	84"
60"	84"	10"	8"	84"
66"	96"	12"	9"	96"
72"	96"	12"	9"	96"
78"	108"	12"	10"	108"
84"	108"	12"	10"	108"

STANDARD STORM MANHOLE TYPE "B"
30" SEWER & LARGER
(RESTRICTED HEADROOM)

NOTES:
1. MANHOLES 72" AND SMALLER SHALL HAVE AN INTEGRALLY POURED BASE. MANHOLES 78" AND LARGER SHALL HAVE AN INTEGRALLY POURED BASE OR A WATERTIGHT GASKETED JOINT.
2. MANHOLE DIAMETER "D" REQUIREMENTS ARE MINIMUMS AND MAY INCREASE DUE TO THE LOCATIONS OF THE PIPE.
3. WHERE DESIGNATED OR AS NEEDED CASTING LID SHALL BE OF NON-ROCKING TYPE.
4. WHERE DESIGNATED OR AS NEEDED PROVIDE FLOTATION COLLAR.
5. MANHOLE DIAMETER IS SHOWN AS MINIMUM AND MAY INCREASE DUE TO LOCATION OF PIPES.
6. THIS TYPE "B" STORM MANHOLE SHALL BE USED FOR STORM SEWER PIPES 30" IN DIAMETER AND LARGER AND THAT REQUIRE A RESTRICTED HEADROOM MANHOLE.

PREPARED BY: DLZ INDIANA, LLC

BRIAN M. SMITH REGISTERED No. 10100213 STATE OF INDIANA PROFESSIONAL ENGINEER

2/1/2022

APPROVED/REVISED BY THE BOARD OF PUBLIC WORKS & SAFETY

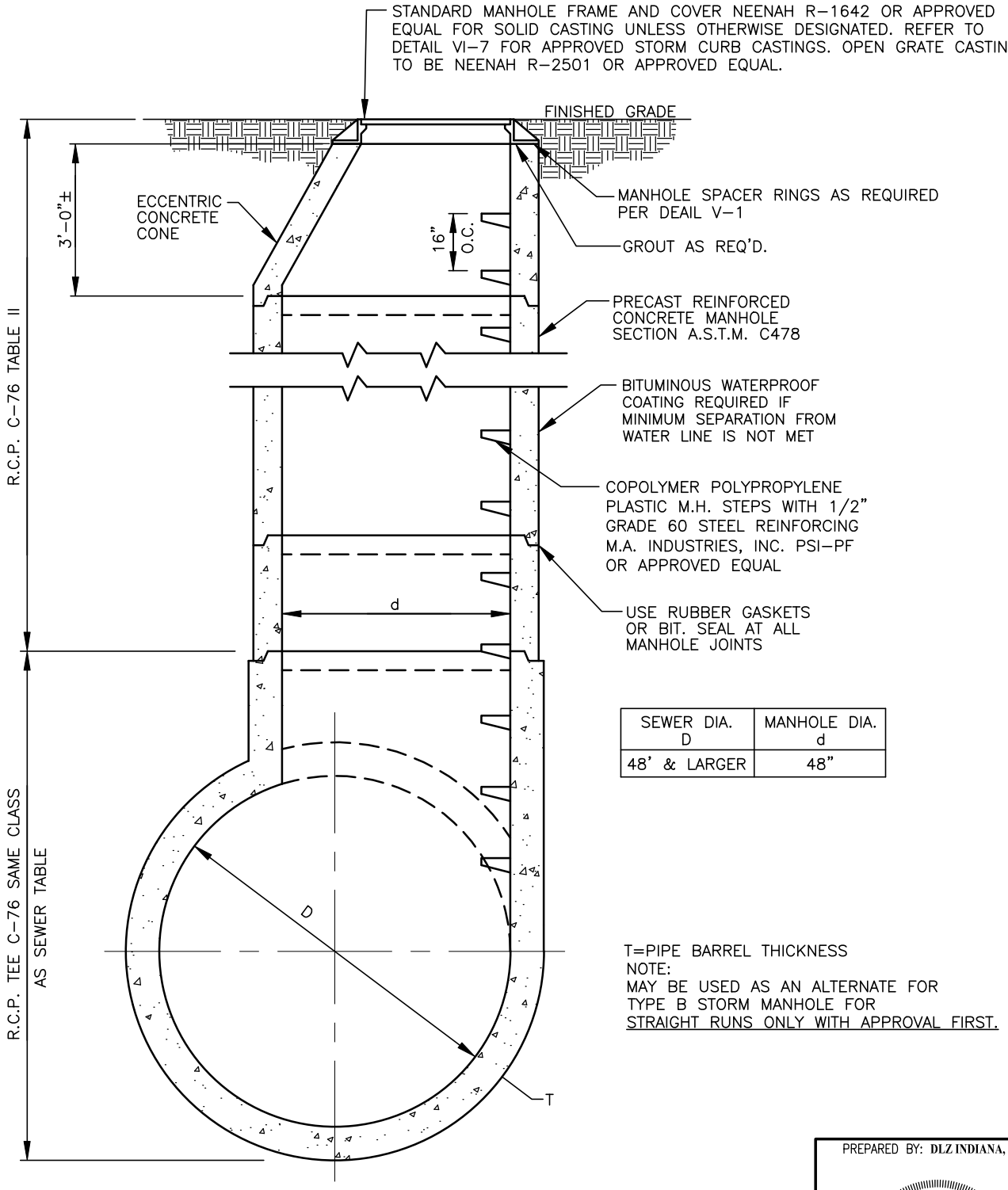
ITEM	REVISION	APPROVED DATE
	ADOPTED: NEW	MARCH 2013
	REVISED	FEBRUARY 2022

CITY OF MISHAWAKA, INDIANA

ENGINEERING STANDARDS

TYPE "B" STORM MANHOLE (RESTRICTED HEADROOM)

SHT. NO. VI-3



SEWER DIA. D	MANHOLE DIA. d
48' & LARGER	48"

STANDARD STORM MANHOLE TYPE "C"
48" SEWERS & LARGER (STRAIGHT RUNS)

NOTES:
1. WHERE DESIGNATED OR AS NEEDED CASTING LID SHALL BE OF NON-ROCKING TYPE.
2. WHERE DESIGNATED OR AS NEEDED PROVIDE FLOTATION COLLAR.
3. MANHOLE DIAMETER IS SHOWN AS MINIMUM AND MAY INCREASE DUE TO LOCATION OF PIPES.
4. THIS TYPE "C" STORM MANHOLE SHALL BE USED FOR STORM SEWERS 48" IN DIAMETER AND LARGER AND IN STRAIGHT ROWS.

PREPARED BY: DLZ INDIANA, LLC

BRIAN M. SMITH REGISTERED No. 10100213 STATE OF INDIANA PROFESSIONAL ENGINEER

2/1/2022

APPROVED/REVISED BY THE BOARD OF PUBLIC WORKS & SAFETY

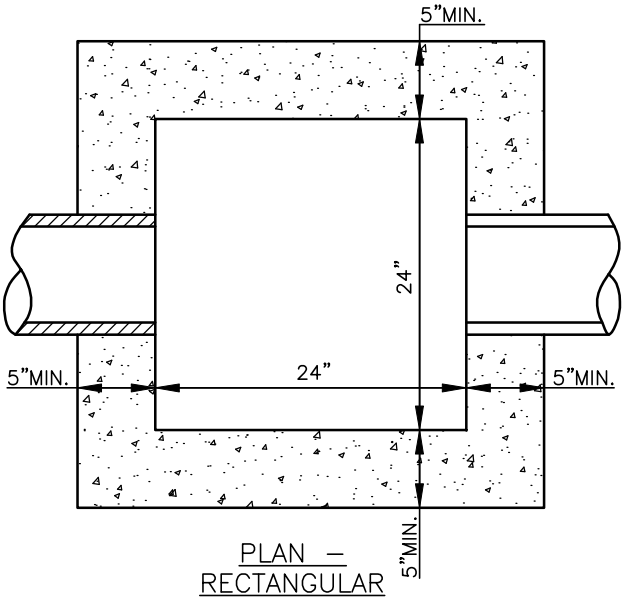
ITEM	REVISION	APPROVED DATE
	ADOPTED: NEW	MARCH 2013
	REVISED	FEBRUARY 2022

CITY OF MISHAWAKA, INDIANA

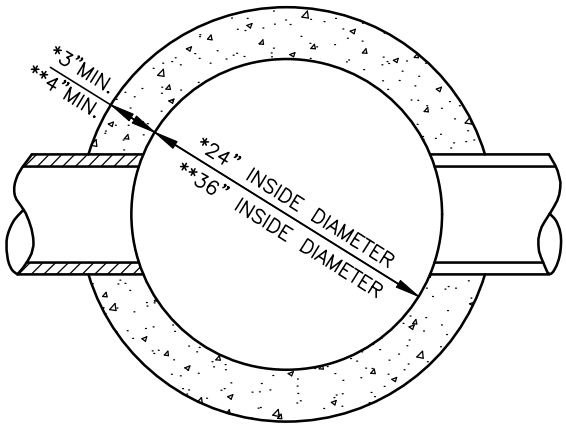
ENGINEERING STANDARDS

TYPE "C" STORM MANHOLE

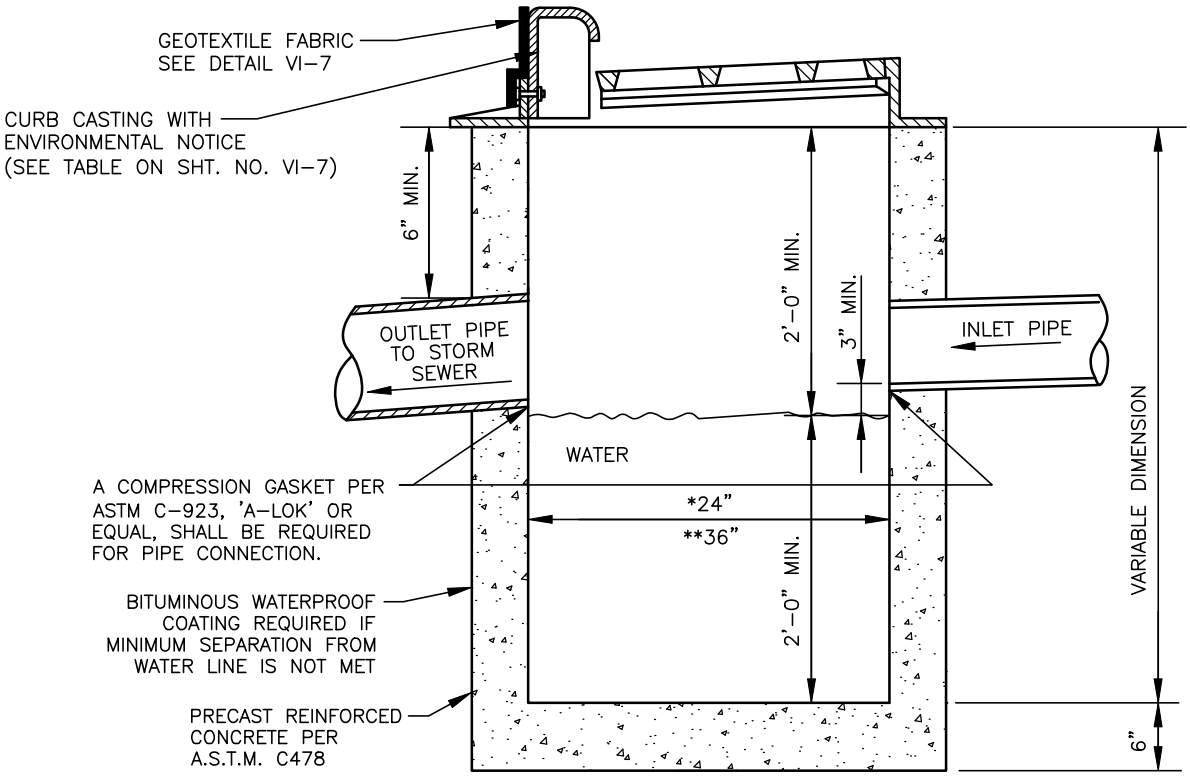
SHT. NO. VI-4



PLAN – RECTANGULAR



PLAN – ROUND



SECTION

CATCH BASIN

PREPARED BY: DLZ INDIANA, LLC

BRIAN M. SMITH REGISTERED No. 10100213 STATE OF INDIANA PROFESSIONAL ENGINEER

2/1/2022

NOTES:

1. MINIMUM OF 1/2" CEMENT MORTAR SHALL BE UTILIZED TO SEAL EACH JOINT BETWEEN FRAME AND MANHOLE CASTING OR RISERS.
2. MAXIMUM INLET AND/OR OUTLET STORM PIPE SHALL BE 12" IN DIAMETER.
3. HIGH VOLUME / MAJOR THOROUGHFARE ROADWAYS, AS DEFINED IN THE MISHAWAKA STANDARD SPECIFICATION (SEC I–2–M), SHALL USE INDOT STANDARD CATCH BASINS AND CASTINGS, E.G. TYPE K CATCH BASIN WITH TYPE 10 CASTING (NEENAH R–3287–10V OR APPROVED EQUAL), AS APPROVED BY ENGINEER.

APPROVED/REVISED BY THE BOARD OF PUBLIC WORKS & SAFETY

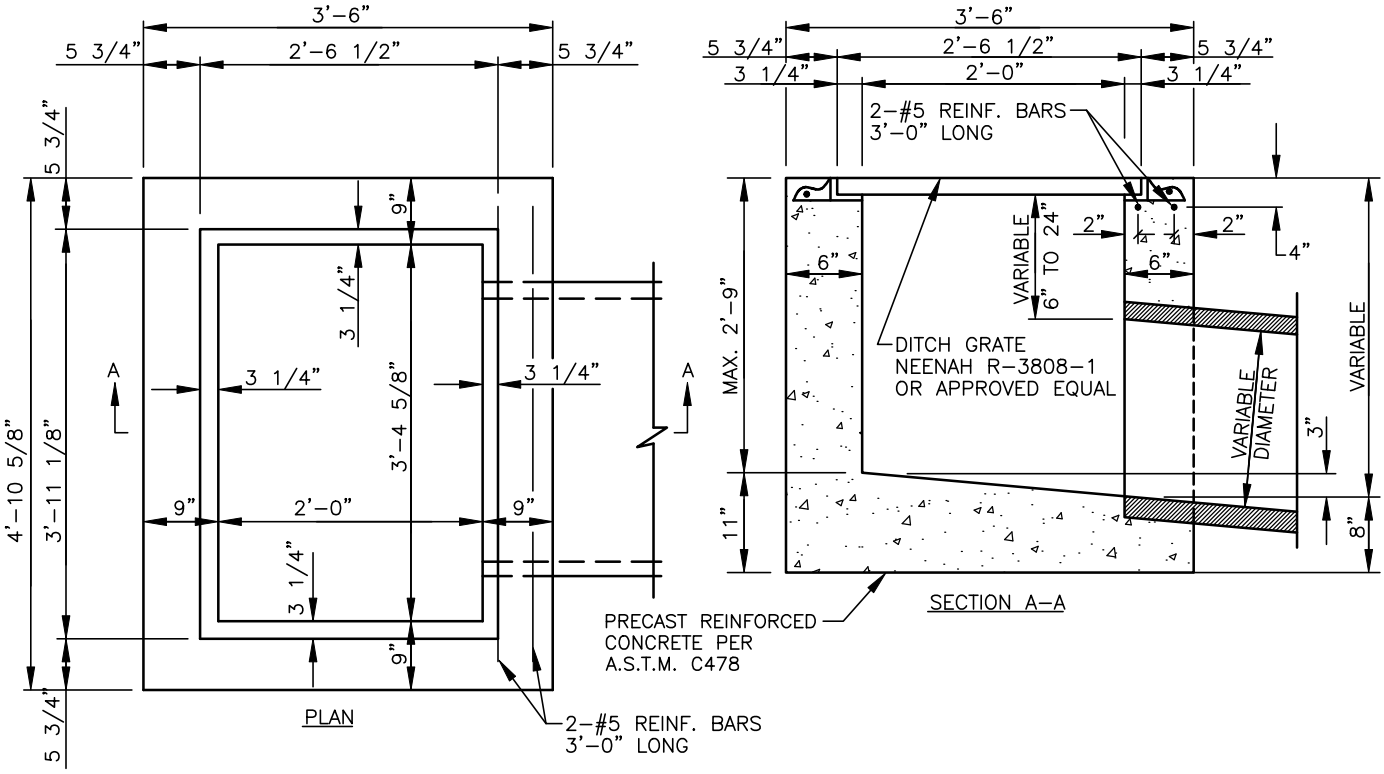
ITEM	REVISION	APPROVED DATE
	EFFECTIVE	APRIL 2007
	REVISED	MARCH 2013
	REVISED	FEBRUARY 2022

CITY OF MISHAWAKA, INDIANA

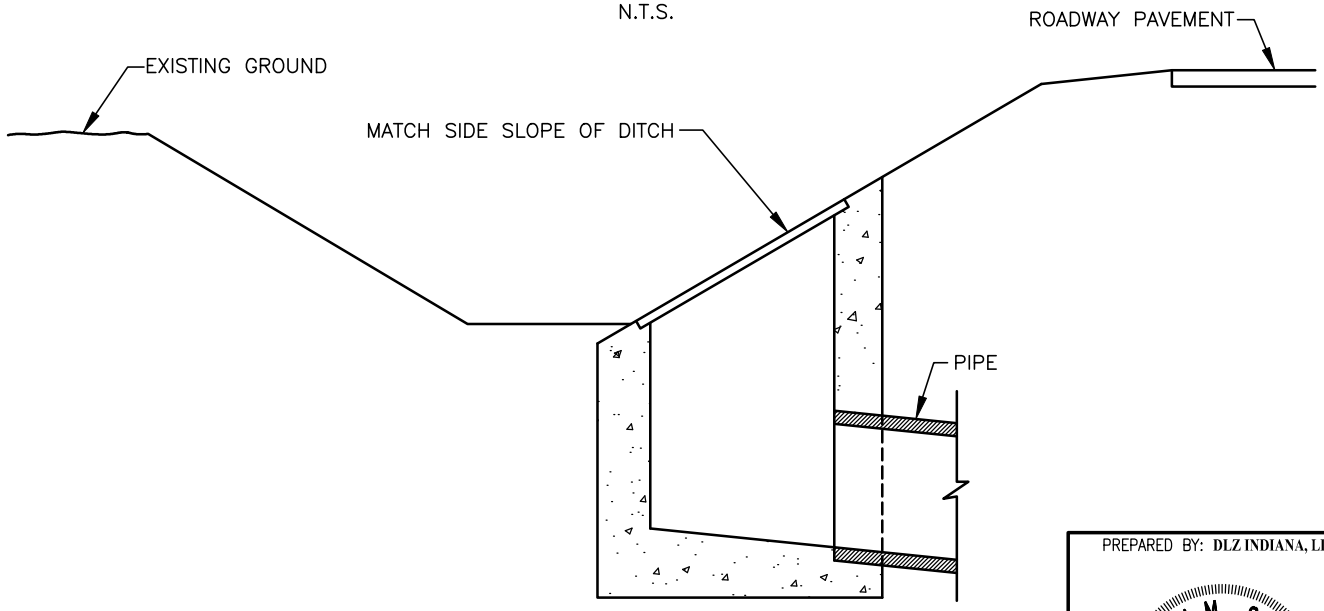
ENGINEERING STANDARDS

CATCH BASIN

SHT. NO. VI-5



INLET TYPE "E"
N.T.S.



TYPICAL DITCH INSTALLATION – INLET TYPE "E"
N.T.S.

PREPARED BY: DLZ INDIANA, LLC

BRIAN M. SMITH
REGISTERED
No. 10100213
STATE OF INDIANA
PROFESSIONAL ENGINEER

2/1/2022

APPROVED/REVISED BY THE BOARD OF PUBLIC WORKS & SAFETY

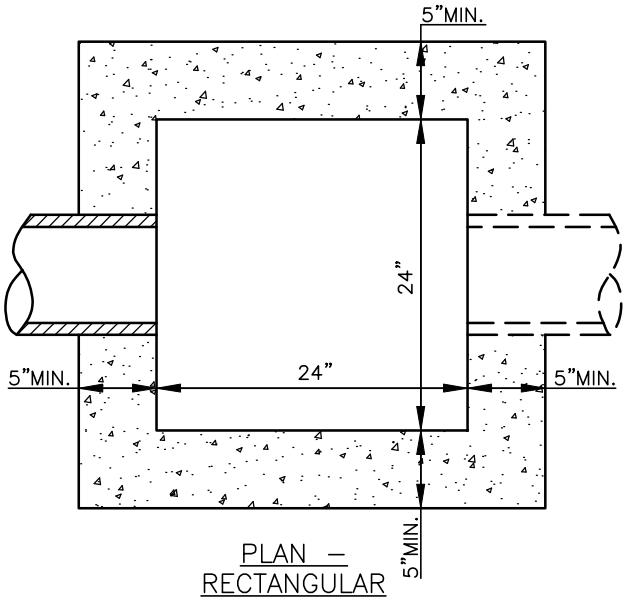
ITEM	REVISION	APPROVED DATE
	EFFECTIVE	APRIL 2007
	REVISED	MARCH 2013
	REVISED	FEBRUARY 2022

CITY OF MISHAWAKA, INDIANA

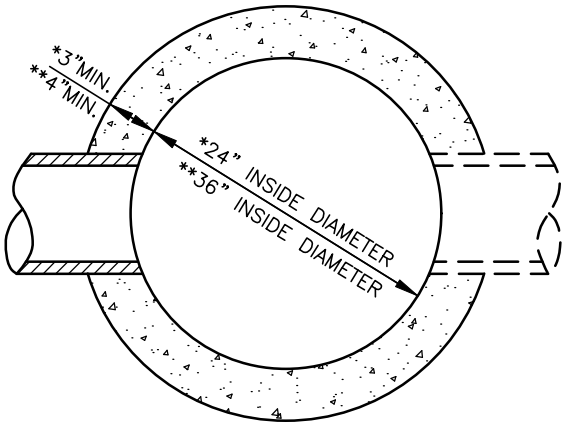
ENGINEERING STANDARDS

TYPE "E" INLET

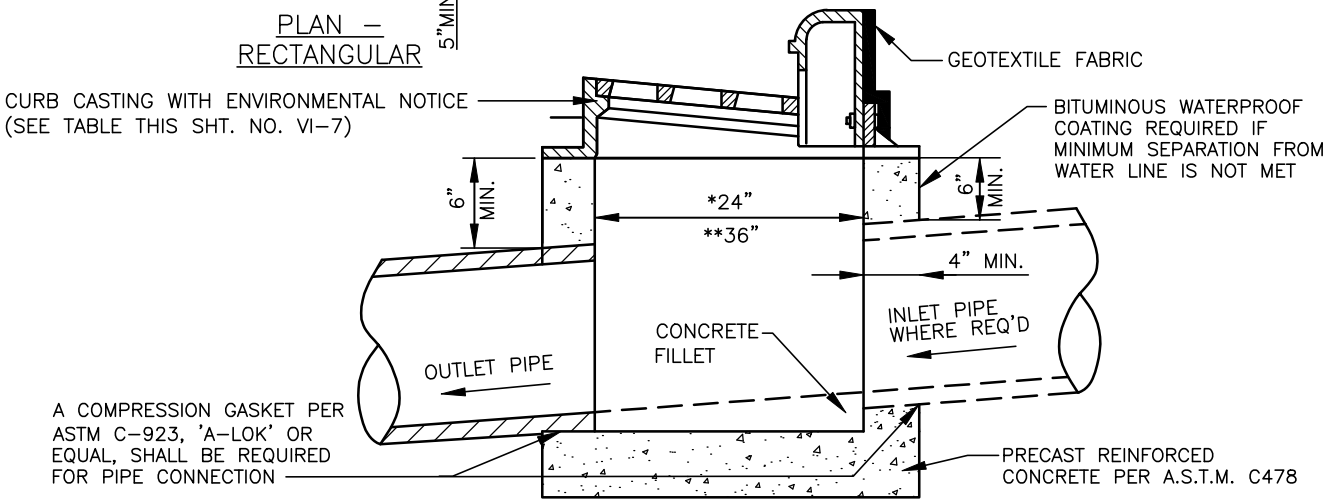
SHT. NO.
VI-6



PLAN – RECTANGULAR



PLAN – ROUND



SECTION

INLET

NOTES:
1. MINIMUM OF 1/2" CEMENT MORTAR SHALL BE UTILIZED TO SEAL EACH JOINT BETWEEN FRAME AND MANHOLE CASTING OR RISERS.
2. MAXIMUM INLET AND/OR OUTLET STORM PIPE SHALL BE 12" IN DIAMETER.
3. HIGH VOLUME / MAJOR THOROUGHFARE ROADWAYS, AS DEFINED IN THE MISHAWAKA STANDARD SPECIFICATION (SEC I–2–M), SHALL USE INDOT STANDARD INLETS, E.G. TYPE J OR M INLET WITH TYPE 10 CASTING (NEENAH R–3287–10V, EJIW 7505, OR APPROVED EQUAL), AS APPROVED BY THE ENGINEER.

APPROVED STORM CURB CASTINGS

COMB. CONC. CURB & GUTTER	NEENAH R–3010 EJIW 7010
COMB. CONC CURB & GUTTER TYPE "A" (ROLL)	NEENAH R–3501–N EJIW 7490–M1
COMB. CONC. CURB & GUTTER TYPE "C" (8")	NEENAH R–3287–10V EJIW 7505
NOTES: a. EQUAL CASTINGS MAY BE USED IF APPROVED BY CITY ENGINEER. b. ALL INLET GRATES SHALL BE BICYCLE SAFE AND ADA COMPLIANT. c. ENVIRONMENTAL NOTICE REQUIRED ON ALL STORM SEWER CASTINGS, E.G., "DUMP NO WASTE! DRAINS TO WATERWAYS!" MESSAGE WITH FISH IMAGE. d. GEOTEXTILE FABRIC, CARTHAGE MILLS 30% OR APPROVED EQUAL, SHALL BE PLACED BEHIND CASTINGS.	

PREPARED BY: DLZ INDIANA, LLC

BRIAN M. SMITH REGISTERED No. 10100213 STATE OF INDIANA PROFESSIONAL ENGINEER

2/1/2022

APPROVED/REVISED BY THE BOARD OF PUBLIC WORKS & SAFETY

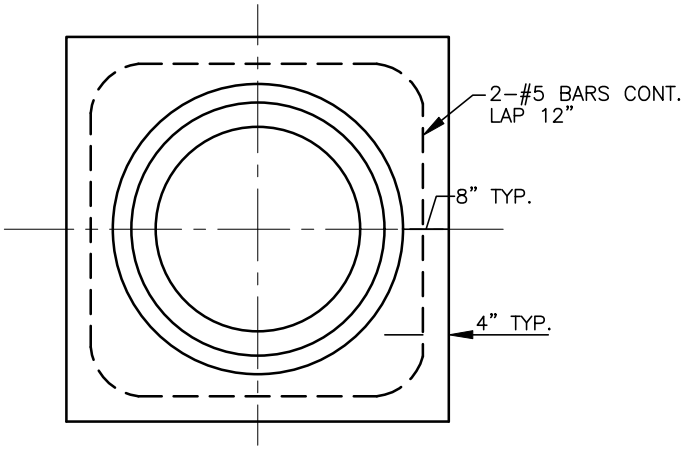
ITEM	REVISION	APPROVED DATE
	EFFECTIVE	APRIL 2007
	REVISED	MARCH 2013
	REVISED	FEBRUARY 2022

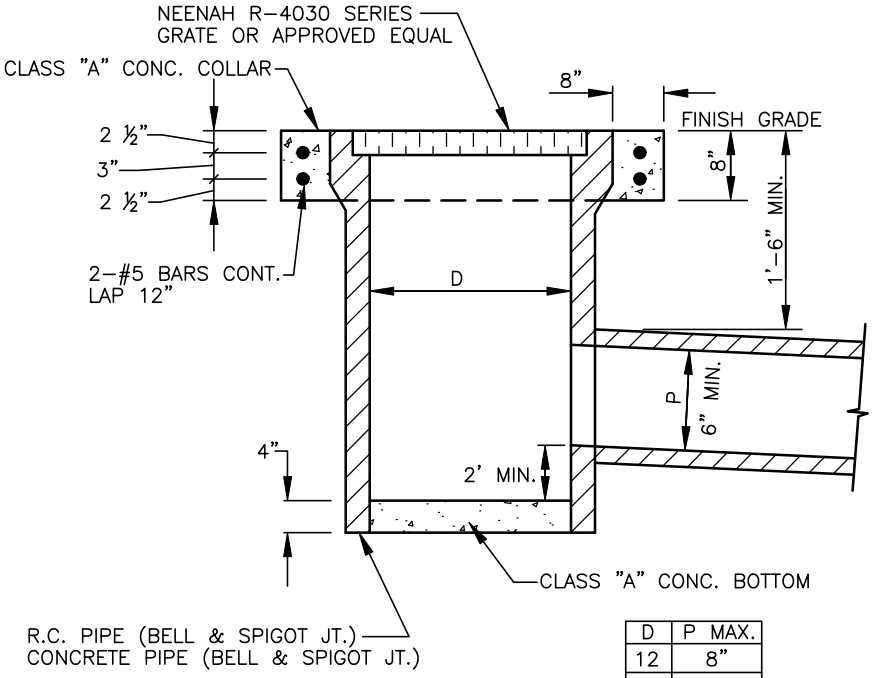
CITY OF MISHAWAKA, INDIANA

ENGINEERING STANDARDS

INLET

SHT. NO. VI-7





D	P MAX.
12	8"
15	10"
18	12"
24	12"

PIPE CATCH BASIN

NOTES:
1. CLASS "A" CONCRETE IN COLLAR AND BOTTOM TO BE INCLUDED IN THE PRICE OF THE ITEM.
2. USE OF A PIPE CATCH BASIN SHALL BE APPROVED BY THE ENGINEER PRIOR TO PLACEMENT.

PREPARED BY: DLZ INDIANA, LLC

BRIAN M. SMITH
REGISTERED
No. 10100213
STATE OF INDIANA
PROFESSIONAL ENGINEER

2/1/2022

APPROVED/REVISED BY THE BOARD OF PUBLIC WORKS & SAFETY

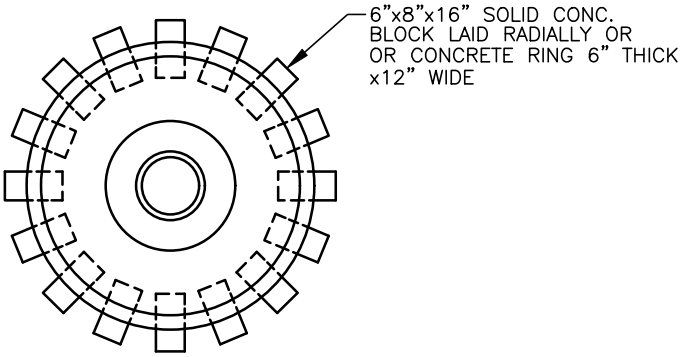
ITEM	REVISION	APPROVED DATE
	EFFECTIVE	APRIL 2007
	REVISED	MARCH 2013
	REVISED	FEBRUARY 2022

CITY OF MISHAWAKA, INDIANA

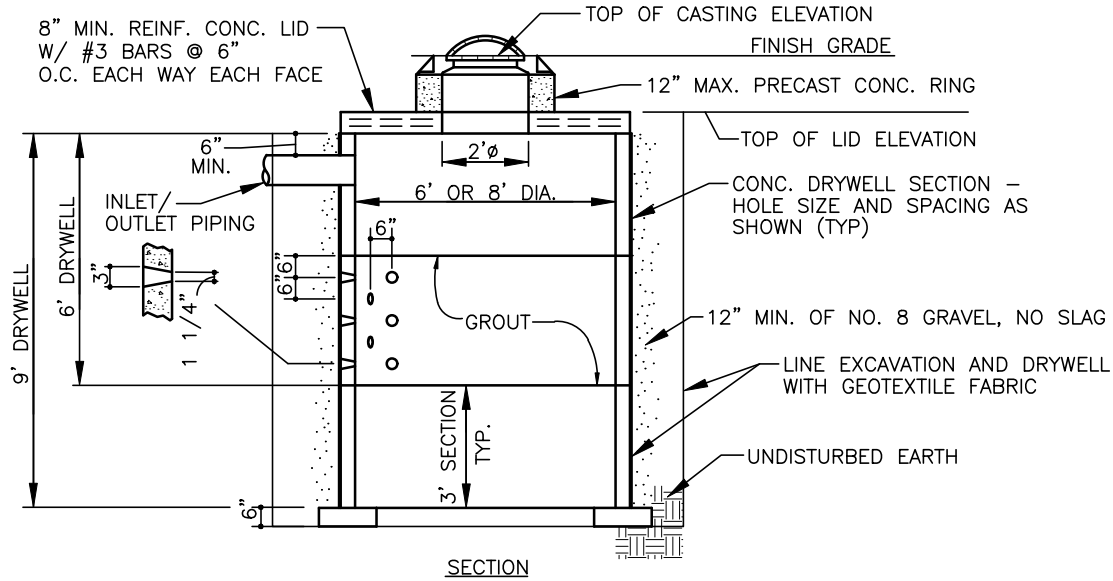
ENGINEERING STANDARDS

PIPE CATCH BASIN

SHT. NO. VI-8



PLAN



SECTION

NOTES:

1. A LAYER OF GEOTEXTILE FABRIC, CARTHAGE MILLS 30% OR APPROVED EQUAL SHALL BE PLACED BETWEEN THE DRYWELL AND THE NO. 8 AGGREGATE AND SHALL LINE THE EXCAVATION. ANY FABRIC JOINTS SHALL HAVE AN OVERLAP OF 18". THE NO. 8 AGGREGATE, THE GEOTECHNICAL FABRIC LAYERS AND THE FRAME AND GRATE TO BE INCLUDED IN THE COST OF THE DRYWELL.
2. AFTER INSTALLATION OF THE DRYWELLS AND BACKFILLING WITH THE NO. 8 AGGREGATE, THE CONTRACTOR WILL SURCHARGE EACH DRYWELL WITH A MINIMUM OF 3,000 GALLONS OF WATER PRIOR TO ANY PAVEMENT PLACEMENT. SURCHARGE WATER SHALL BE APPLIED AT A RATE THAT WILL COMPLETELY FILL THE DRYWELL.
3. WHERE NO CASTING IS REQ'D. PROVIDE CONCRETE REMOVABLE LID FOR THE 2' DIA. OPENING.
4. IN GRASS, AN OPEN GRATE CASTING SHALL BE NEENAH R–2561–A OR APPROVED EQUAL.
5. IN PAVEMENT, AN OPEN GRATE CASTING SHALL BE NEENAH R–2501 OR APPROVED EQUAL.
6. IN CURB CASTING SHALL BE PER TABLE ON DETAIL VI–7.
7. DRYWELLS ARE NOT PERMITTED WITHIN WELLHEAD PROTECTION AREAS.
8. ALL OPEN GRATE CASTINGS SHALL HAVE THE ENVIRONMENTAL NOTICE STAMPED ON THE CASTING LID, E.G., "DUMP NO WASTE! DRAINS TO WATERWAYS!" MESSAGE WITH THE FISH IMAGE.

PREPARED BY: DLZ INDIANA, LLC

BRIAN M. SMITH
REGISTERED
No. 10100213
STATE OF INDIANA
PROFESSIONAL ENGINEER

2/1/2022

APPROVED/REVISED BY THE BOARD OF PUBLIC WORKS & SAFETY

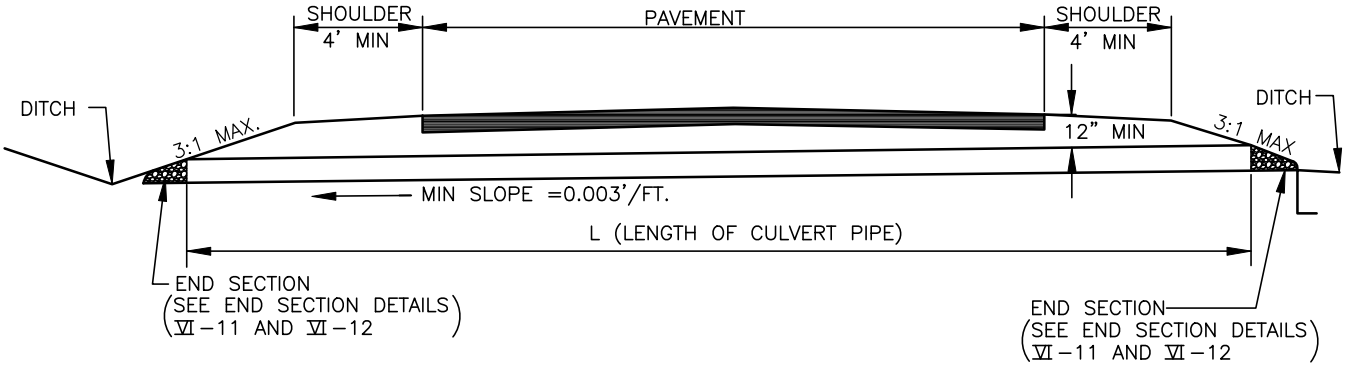
ITEM	REVISION	APPROVED DATE
	EFFECTIVE	APRIL 2007
	REVISED	MARCH 2013
	REVISED	FEBRUARY 2022

CITY OF MISHAWAKA, INDIANA

ENGINEERING STANDARDS

PRECAST PERFORATED DRYWELL

SHT. NO. VI-9



TYPICAL CULVERT INSTALLATION

NOTES:
1. INSTALL MIN 15" DIA OR NECESSARY SIZE AND SLOPED DRAINAGE PATTERNS.
2. LOCATIONS UPON ENGINEERS APPROVAL ON NON-CURBED PAVEMENT SECTIONS.
3. PIPE MATERIALS SHALL MEET THE MISHAWAKA ENGINEERING STANDARD SPECIFICATIONS, SECTION VI-STORM SEWERS.

PREPARED BY: DLZ INDIANA, LLC

BRIAN M. SMITH
REGISTERED
No. 10100213
STATE OF INDIANA
PROFESSIONAL ENGINEER

2/1/2022

APPROVED/REVISED BY THE BOARD OF PUBLIC WORKS & SAFETY

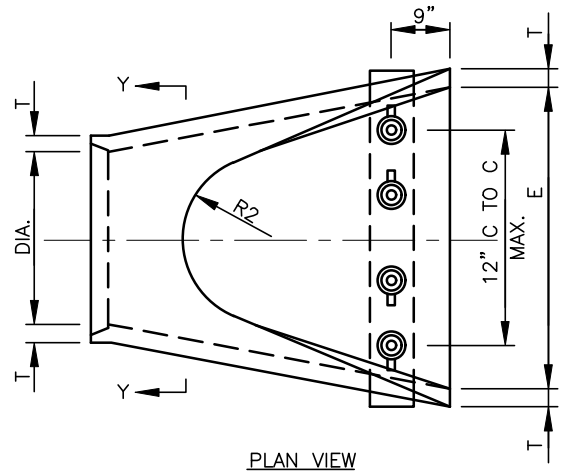
ITEM	REVISION	APPROVED DATE
	EFFECTIVE	APRIL 2007
	REVISED	MARCH 2013
	REVISED	FEBRUARY 2022

CITY OF MISHAWAKA, INDIANA

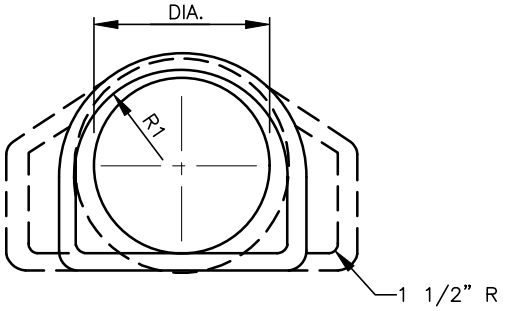
ENGINEERING STANDARDS

CULVERT INSTALLATION

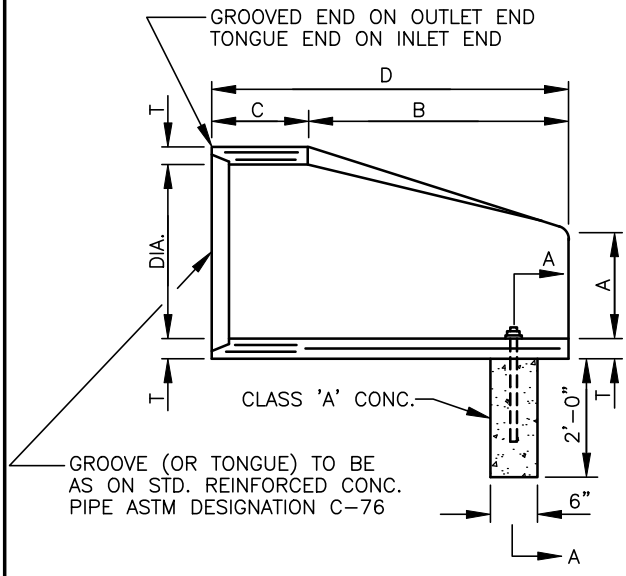
SHT. NO.
VI-10



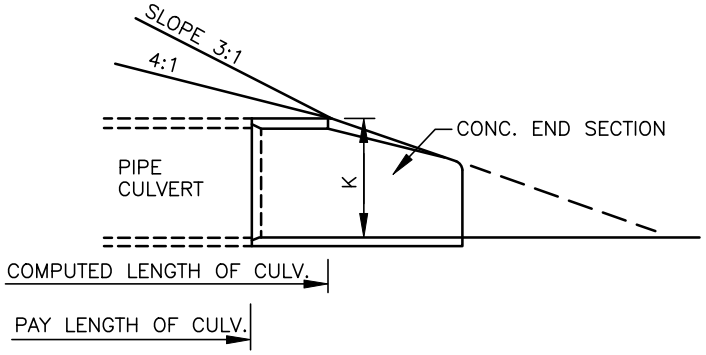
PLAN VIEW



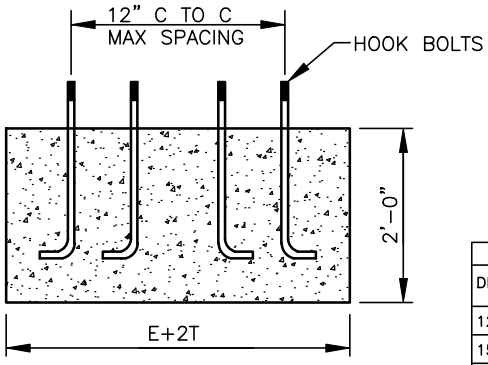
SECTION Y–Y



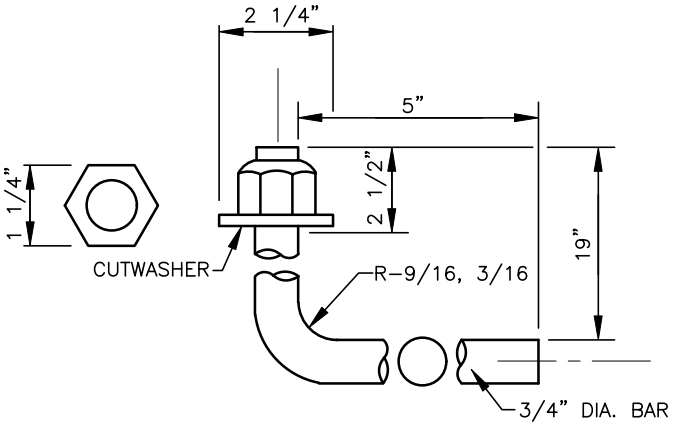
LONGITUDINAL SECTION



SLOPE DETAIL



SECTION A–A



HOOK BOLT & NUT

CONCRETE END SECTION

TABLE OF DIMENSIONS									
DIA.	T (MIN.)	A (±1")	C (±1")	D (±1")	E (±1")	K	R1	R2	APPROX. WEIGHT lb.
12"	2"	5"	4'-3"	6'-2"	2'-0"	1.3	10 1/8"	9"	800
15"	2 1/4"	7"	4'-0"	6'-3"	2'-6"	1.5	12 1/2"	11"	1100
18"	2 1/2"	11"	4'-1"	6'-2"	3'-0"	1.8	15 1/2"	12"	1300
21"	2 3/4"	11"	3'-6"	6'-3"	3'-6"	2.1	16 1/8"	13"	1500
24"	3"	1'-0"	2'-8"	6'-3"	4'-0"	2.3	16 3/16"	14"	1800
27"	3 1/4"	1'-1"	2'-5"	6'-3"	4'-6"	2.6	18 9/16"	14 1/2"	2100
30"	3 1/2"	1'-2"	1'-10"	6'-3"	5'-0"	2.9	18 1/2"	15"	2400
33"	3 3/4"	1'-3"	3'-6"	8'-3"	5'-6"	3.1	23 3/4"	17 1/2"	4100
36"	4"	1'-5"	3'-1"	8'-3"	6'-0"	3.4	24 5/16"	20"	4200

PREPARED BY: DLZ INDIANA, LLC

BRIAN M. SMITH
REGISTERED
No. 10100213
STATE OF INDIANA
PROFESSIONAL ENGINEER

2/1/2022

APPROVED/REVISED BY THE BOARD OF PUBLIC WORKS & SAFETY

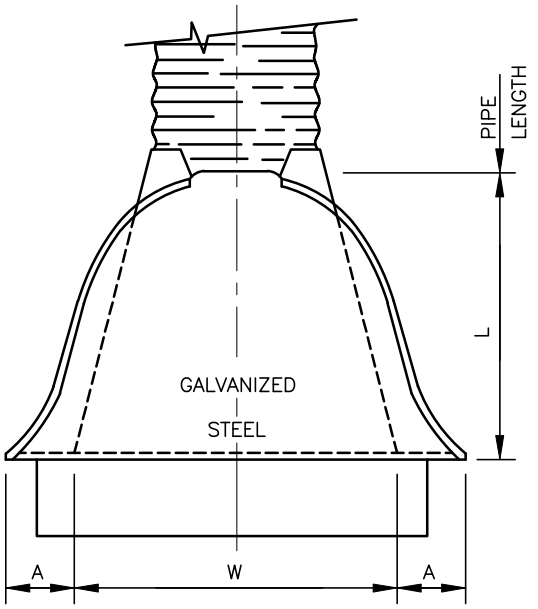
ITEM	REVISION	APPROVED DATE
	EFFECTIVE	APRIL 2007
	REVISED	MARCH 2013
	REVISED	FEBRUARY 2022

CITY OF MISHAWAKA, INDIANA

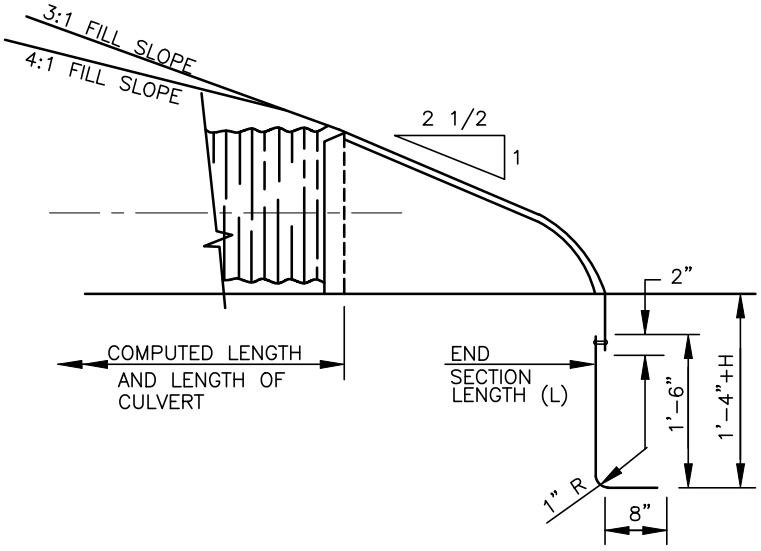
ENGINEERING STANDARDS

CONCRETE END SECTIONS

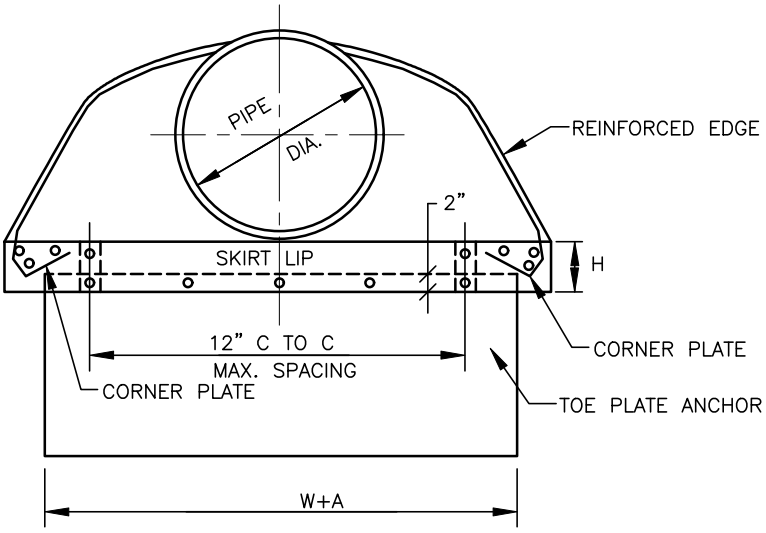
SHT. NO. VI-11



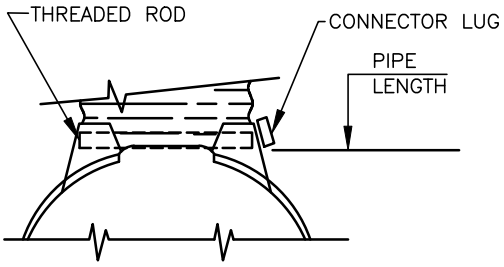
PLAN VIEW



SIDE VIEW



END VIEW



TYPE #3

FOR 12" THRU 24"

METAL END SECTION

PIPE DIA.	END SECTION THICK. (IN.)	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	W (±2")	APPROX. SLOPE	BODY
12"	.064	6"	6"	6"	21"	24"	2 1/2":1	1 PC.
15"	.064	7"	8"	6"	26"	30"	2 1/2":1	1 PC.
18"	.064	8"	10"	6"	31"	36"	2 1/2":1	1 PC.
21"	.064	9"	12"	6"	36"	42"	2 1/2":1	1 PC.
24"	.064	10"	13"	6"	41"	48"	2 1/2":1	1 PC.
30"	.079	12"	16"	8"	51"	60"	2 1/2":1	1 PC.
36"	.079	14"	19"	9"	60"	72"	2 1/2":1	2 PC.

PREPARED BY: DLZ INDIANA, LLC

BRIAN M. SMITH
REGISTERED
No. 10100213
STATE OF INDIANA
PROFESSIONAL ENGINEER

2/1/2022

APPROVED/REVISED BY THE BOARD OF PUBLIC WORKS & SAFETY

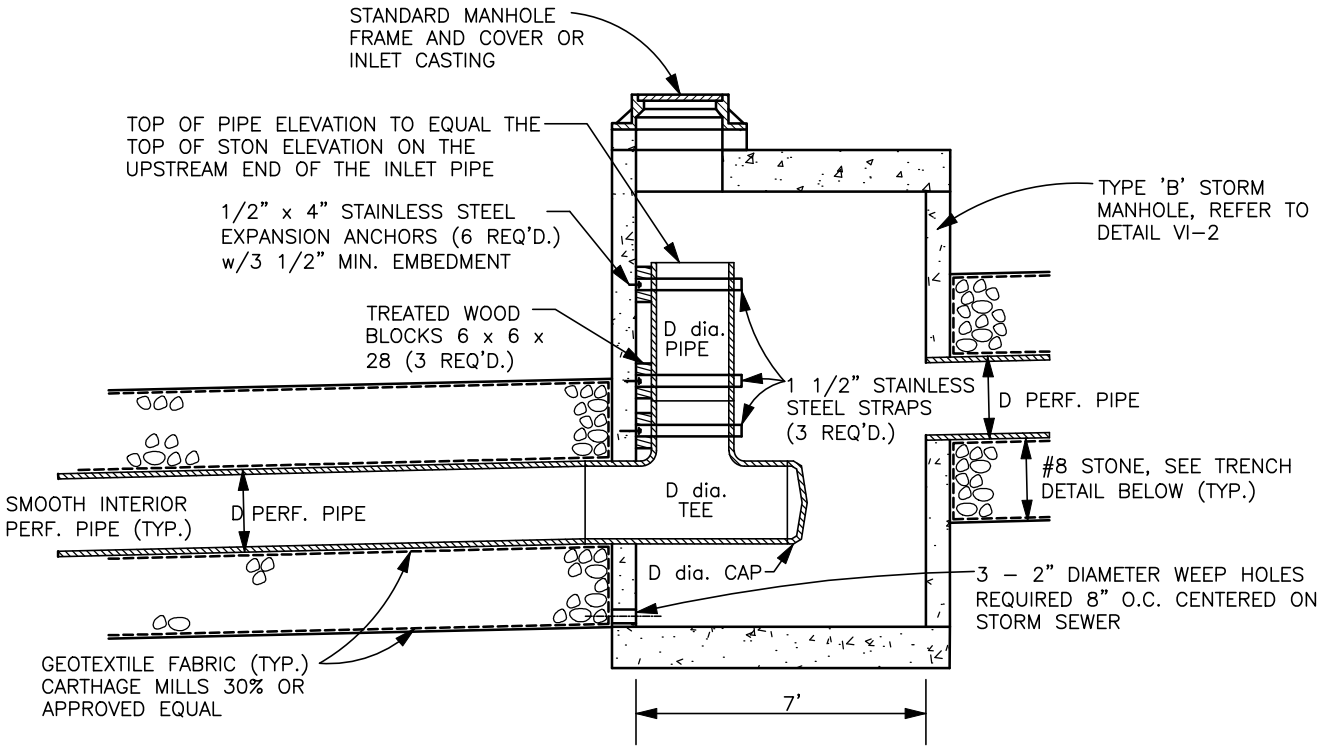
ITEM	REVISION	APPROVED DATE
	EFFECTIVE	APRIL 2007
	REVISED	MARCH 2013
	REVISED	FEBRUARY 2022

CITY OF MISHAWAKA, INDIANA

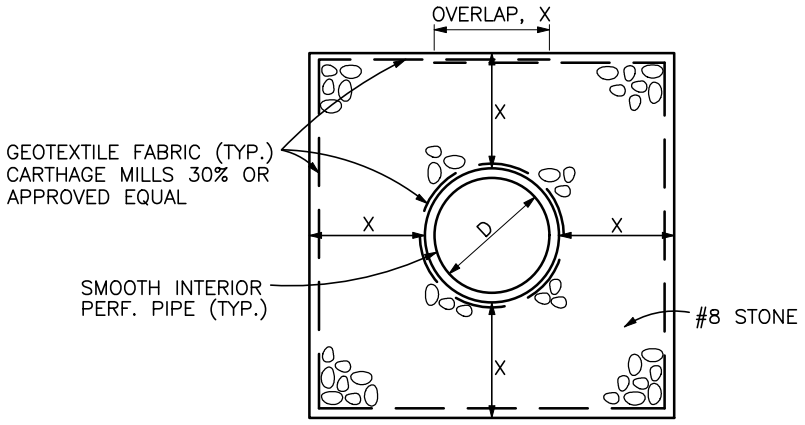
ENGINEERING STANDARDS

METAL END SECTIONS

SHT. NO. VI-12



MODIFIED TYPE 'B' STORM MANHOLE



D, PIPE SIZE (IN)	X (IN)
12	12
15	15
18	18
24	24

TRENCH DETAIL

NOTES:
1. THIS SYSTEM IS NOT APPROVED FOR INSTALLATION UNDER STREET PAVEMENT
2. PERFORATED PIPES ARE NOT PERMITTED WITHIN WELLHEAD PROTECTION AREAS.
3. STONE SIZE TO BE DEPENDENT UPON DESIGN REQUIREMENTS.

PREPARED BY: DLZ INDIANA, LLC

BRIAN M. SMITH REGISTERED No. 10100213 STATE OF INDIANA PROFESSIONAL ENGINEER

2/1/2022

APPROVED/REVISED BY THE BOARD OF PUBLIC WORKS & SAFETY

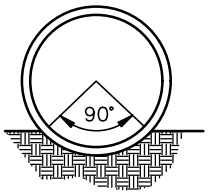
ITEM	REVISION	APPROVED DATE
	EFFECTIVE	APRIL 2007
	REVISED	MARCH 2013
	REVISED	FEBRUARY 2022

CITY OF MISHAWAKA, INDIANA

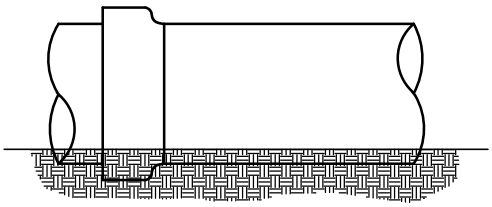
ENGINEERING STANDARDS

PERFORATED PIPE DETAIL

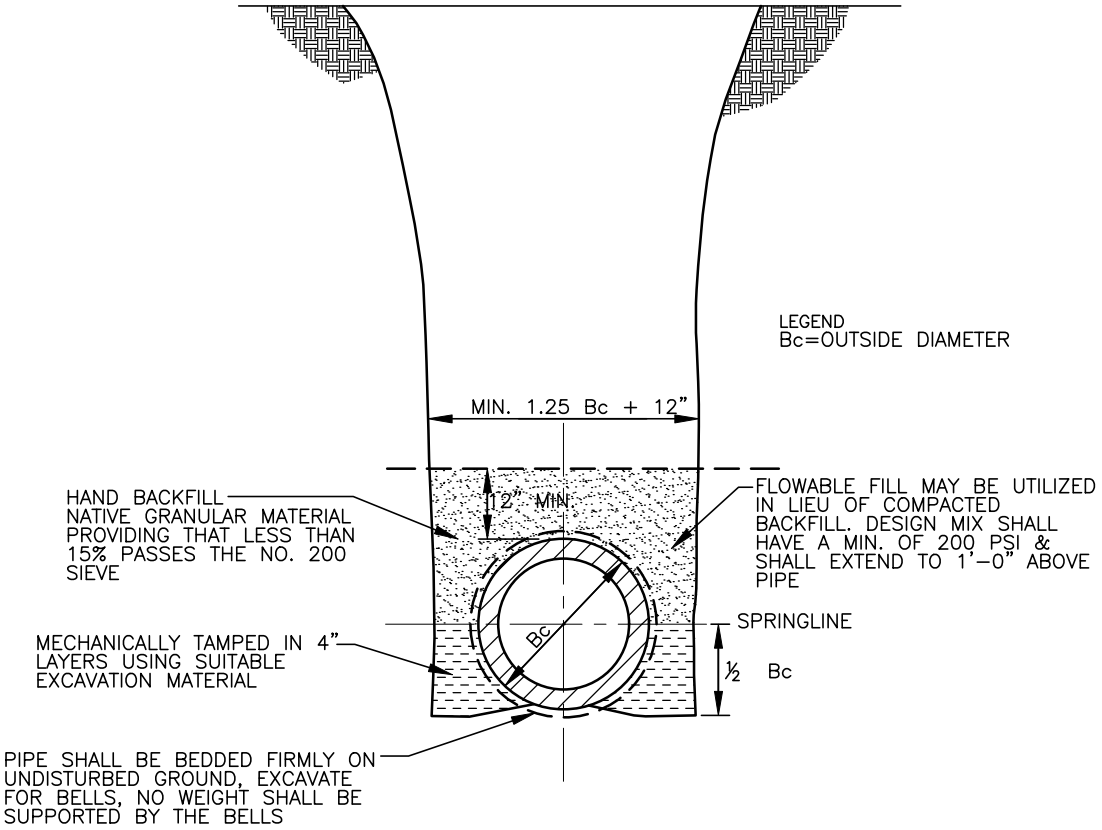
SHT. NO. VI-13



THE LOWER 90 ARC OF THE BARREL OF THE PIPE SHOULD BE IN FIRM CONTACT WITH UNDISTURBED EARTH.



SMALL EXCAVATIONS SHOULD BE MADE FOR THE BELLS. THESE SHOULD BE NO LARGER THAN NECCESSARY TO CLEAR THE BELL.



NOTES:

1. THIS BEDDING DETAIL IS NOT PERMITTED FOR THE INSTALLATION OF ANY FLEXIBLE STORM SEWER PIPE. REFER TO SHEET NUMBER VI-15 FOR THE STORM SEWER PIPE INSTALLATION DETAIL FOR FLEXIBLE PIPE.
2. IF NATIVE MATERIAL IS GREATER THAN 15% PASSING THE NO. 200 SIEVE THEN BEDDING DETAIL 'B' WILL BE USED EXCLUSIVELY.
3. BACK-FILL IN STREETS, ALLEYS, SIDEWALKS, OR DRIVING AREAS SHALL BE IN 6" LAYERS, SOLIDLY TAMPED TO SUB-GRADE OF STREET BASE.
4. BACKFILL SHALL BE COMPACTED TO 95% STANDARD PROCTOR
5. BACK-FILL IN EASEMENT OR OPEN AREAS SHALL BE IN 12" LAYERS SOLIDLY TAMPED.

PREPARED BY: DLZ INDIANA, LLC

BRIAN M. SMITH REGISTERED No. 10100213 STATE OF INDIANA PROFESSIONAL ENGINEER

2/1/2022

APPROVED/REVISED BY THE BOARD OF PUBLIC WORKS & SAFETY

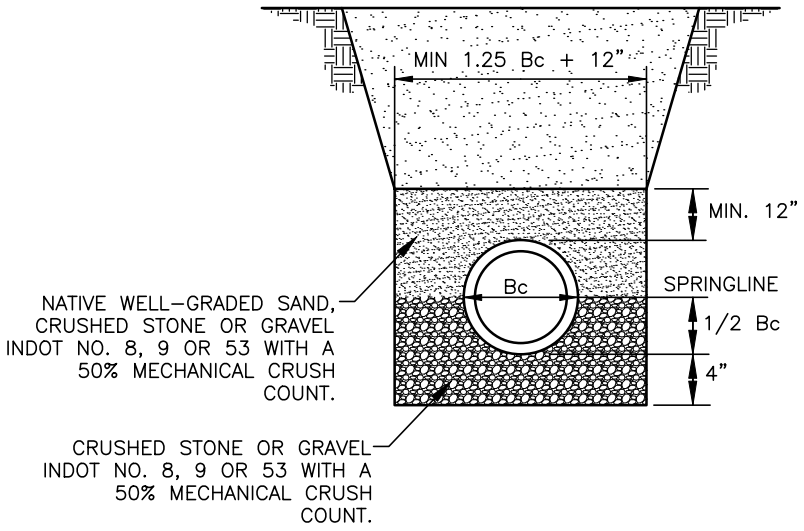
ITEM	REVISION	APPROVED DATE
	ADOPTED: NEW FOR STORM SEWER	MARCH 2013
	REVISED	FEBRUARY 2022

CITY OF MISHAWAKA, INDIANA

ENGINEERING STANDARDS

STORM SEWER PIPE BEDDING DETAIL "A"

SHT. NO. VI-14



LEGEND
Bc=OUTSIDE DIAMETER OF PIPE

NOTES:

1. ALL BEDDING AND INITIAL BACKFILL SHALL BE INSTALLED IN 4" TO 6" BALANCED LIFTS AND MECHANICALLY TAMPED.
2. BEDDING MATERIAL SHALL BE HAND PLACED AROUND THE HAUNCH AND SIDES OF THE PIPE TO ENSURE PROPER COMPACTION AND COMPLETE FILLING OF ALL VOIDS.
3. THE MATERIALS IN AND AROUND THE PIPE HAUNCH SHALL BE COMPACTED IN PLACE BY SHOVEL SLICING DURING THE INSTALLATION.
4. BACK-FILL – IN STREETS, ALLEYS, SIDEWALKS OR DRIVING AREAS:
   a. 6" LAYERS, SOLIDLY TAMPED TO SUB-GRADE OF STREET BASE.
   b. BACKFILL WILL BE GRANULAR MATERIAL WITH LESS THAN 15% PASSING THE NO. 200 SIEVE.
   c. BACKFILL SHALL BE COMPACTED TO 95% STANDARD PROCTOR
5. BACK-FILL – IN EASEMENT OR OPEN AREAS:
   a. 12" LAYERS SOLIDLY TAMPED.
   b. FOR BACKFILL IN EASEMENTS OR OPEN AREAS NATIVE MATERIAL WILL BE ACCEPTABLE.
5. THIS BEDDING DETAIL SHALL BE USED FOR THE INSTALLATION OF ALL FLEXIBLE STORM SEWER PIPE MATERIALS.

PREPARED BY: DLZ INDIANA, LLC

BRIAN M. SMITH
REGISTERED
No. 10100213
STATE OF INDIANA
PROFESSIONAL ENGINEER

2/1/2022

APPROVED/REVISED BY THE BOARD OF PUBLIC WORKS & SAFETY

ITEM	REVISION	APPROVED DATE
	ADOPTED: NEW FOR STORM SEWER	MARCH 2013
	REVISED	FEBRUARY 2022

CITY OF MISHAWAKA, INDIANA

ENGINEERING STANDARDS

STORM SEWER PIPE BEDDING DETAIL "B"

SHT. NO. VI-15