

HEAVY DUTY CONCRETE PAVEMENT DETAIL

ROAD SURFACE MATERIALS			
TYPE	DESCRIPTION	THICKNESS	
1	ODOT 451 REINFORCED CONCRETE W/ 1 LAYER 6x6-W2.9xW2.9 CLASS 'S' CONC.	8"	
2	ODOT 304 AGGREGATE	3"	
3	ODOT #1's & #2's	6"	

PLAN VIEW

\_\_\_\_\_\_ 27 1/2" \_\_\_\_<del>-</del>

SECTION

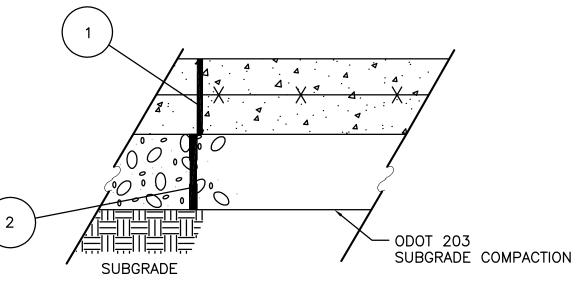
- 3/4" RAISED LETTERING

27 1/2"

1 1/2"—

SECTION

N.T.S.



REGULAR DUTY CONCRETE PAVEMENT DETAIL N.T.S.

	ROAD SURFACE MATERIALS			
TYPE	DESCRIPTION	THICKNESS		
1	ODOT 451 REINFORCED CONCRETE W/ 1 LAYER 6x6-W2.9xW2.9 CLASS 'S' CONC.	6"		
2	ODOT 304 AGGREGATE	4"		

BOTTOM VIEW

LOCATION AND ELEVATION WHEN GIVEN

ON THE PLANS IS TOP CENTER OF THE

CASTINGS SHALL BE AS EJIW AS SHOWN

EJIW FAST JORDAN

800-626-4653

www.ejiw.com

MADE IN USA

PRODUCT NUMBER

00511043

CATALOG NUMBER

5110M3

SQUARE CATCH BASIN GRATE

LOAD RATING HEAVY DUTY

> COATING DIPPED

ESTIMATED WEIGHT

GRATE: 191 LBS

MATERIAL SPECIFICATION

GRATE - GRAY IRON

OPEN AREA

320 SQ. INCHES

DESIGNATES MACHINED SURFACE

REFERENCE INFORMATION

DEW

LAST REVISE

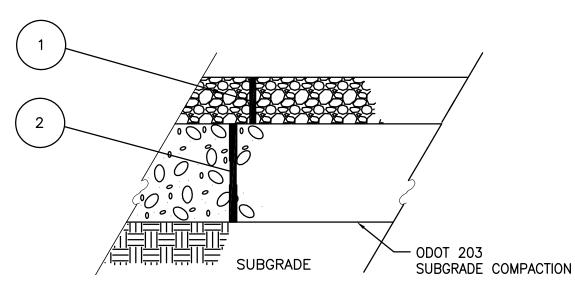
DEF

ASTM A48 CL35B

05/10/08

04/11/08

DATE



GRAVEL PAVING DETAIL NOT TO SCALE

ROAD SURFACE MATERIALS				
TYPE	DESCRIPTION	THICKNES		
1	#57 LIMESTONE AGGREGATE	6"		
	#1'S AGGREGATE	8"		

**SEWER CLEANOUT** 

BEND -

6"X6" WYE —

OPTIONAL SLOPED SIDEWALLS OR

WIDER TRENCH

Bc/2 ----

4" MIN FOR

THAN 24" &

6" FOR D 24"

D GREATER

AND LESS.

Bc/4, OR——

- REMOVABLE PVC CAP TOP 3" BELOW GRADE

~ GRADE

6" PVC PIPE ENCASED IN 3000# CONCRETE, 6" THICK

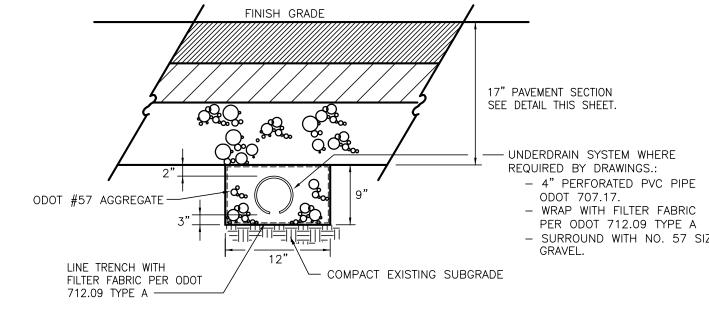
LENGTH PIPE

CAPPED AND SEALED

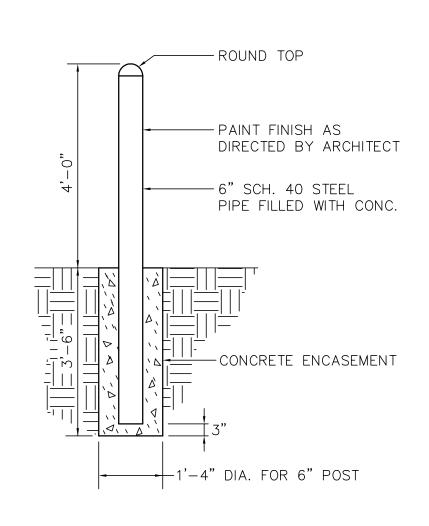
MINIMUM ALL SIDÉS.

- TRENCH BEDDING

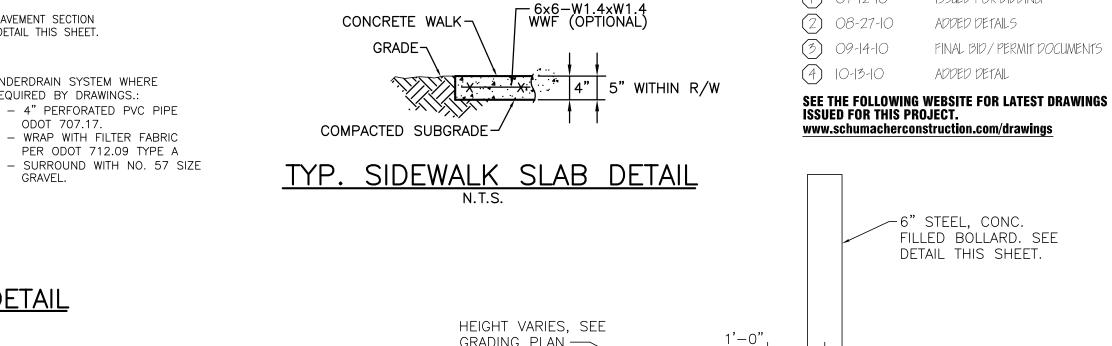
TYPICAL FLEXIBLE PIPE TRENCH DETAIL

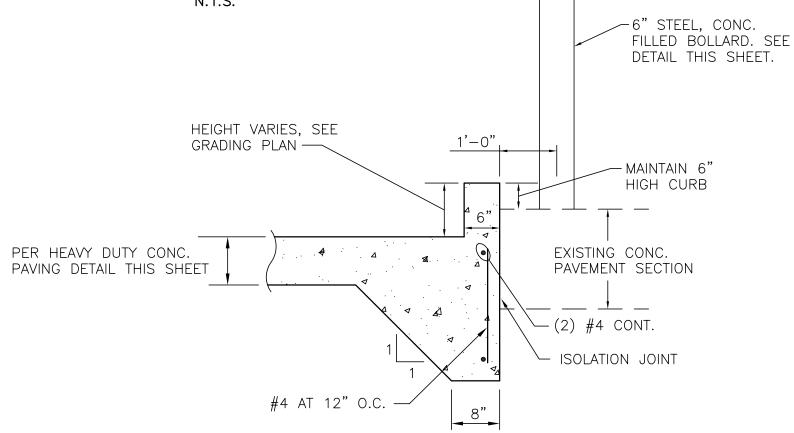


UNDERDRAIN (FINGERDRAIN) DETAIL

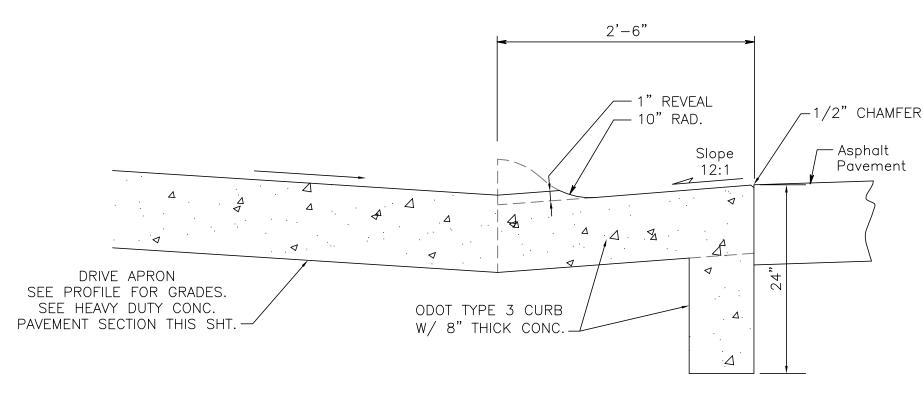


**BOLLARD DETAIL** 





MONOLITHIC CURB AND CONC. PAVEMENT (SEE SECTION A-A ON SHEET C2)



MONOLITHIC CONC. CURB, GUTTER AND DRIVE APRON DETAIL

**ALL REVISIONS MADE TO THIS** DRAWING AFTER <u>07-12-10</u> SHALL BE DATED AND DESCRIBED BELOW. THIS DRAWING WAS LAST REVISED

REVISION DESCRIPTION

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PICARD

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**ENERGY STAF** 

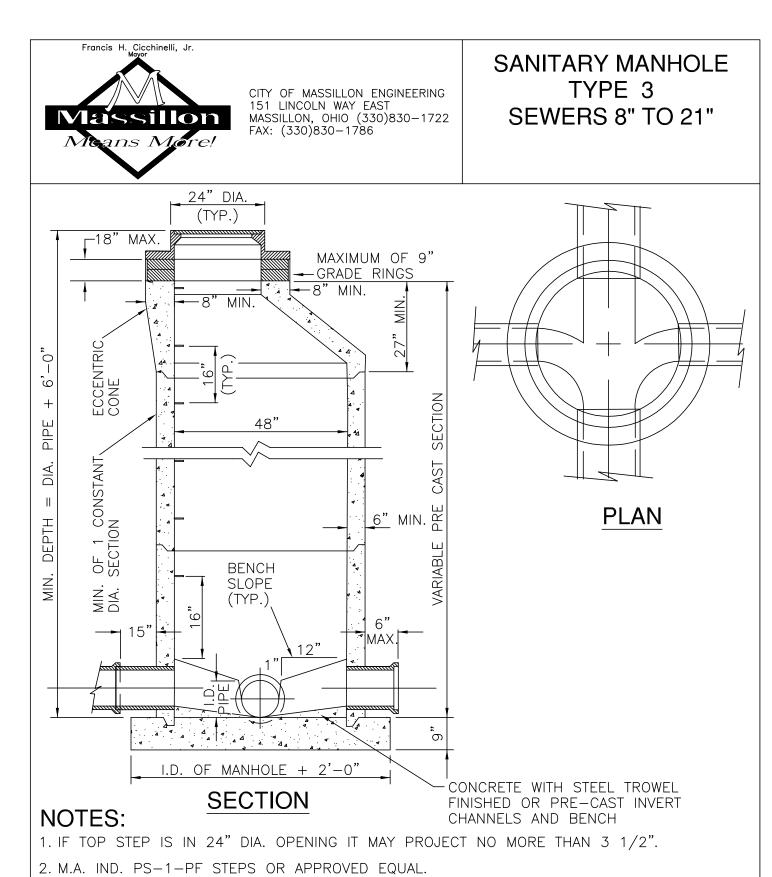
**PARTNER** 

ISSUED FOR BIDDING

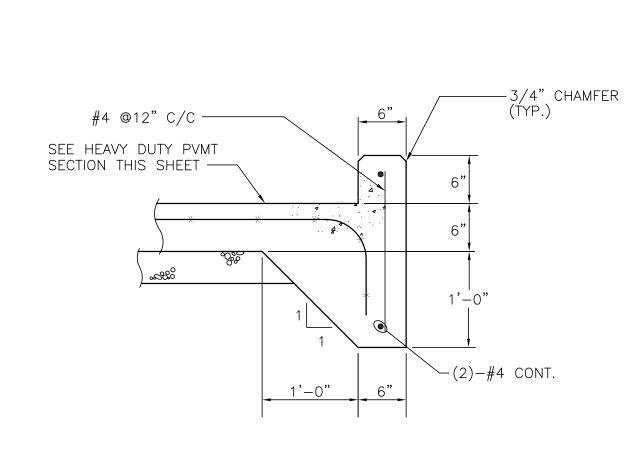
ADDED DETAILS

ADDED DETAIL

(1) 07-12-10



- 3. FOR SPECIFICATIONS REGARDING CONCRETE TO BE USED IN MANHOLES SEE ITEM NO. 4&16. 4. FOR PVC & ABS PIPE CONNECTIONS USE ASTM C-923 FLEXIBLE GASKET SUCH AS A-LOK, DURA SEAL III, KOR-N-SEAL OR APPROVED EQUAL. THIS METHOD ALSO ACCEPTABLE FOR VCP.
- 5. PRE CAST MANHOLES SECTIONS SHALL MEET ASTM C478.
  - 6. MANHOLE JOINTS SHALL MEET ASTM C443.
  - . MANHOLE ADJUSTMENTS TO GRADE WILL BE NO GREATER THAN 18", USING PRECAST COLLARS MEETING ASTM C-32



BUI

**ENGINEERING** 

UNDERGROUND UTILITIES

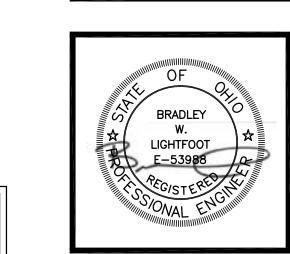
2 WORKING DAYS

BEFORE YOU DIG

Call...800-362-2764 (Toll Free)

OHIO UTILITIES PROTECTION SERVICE

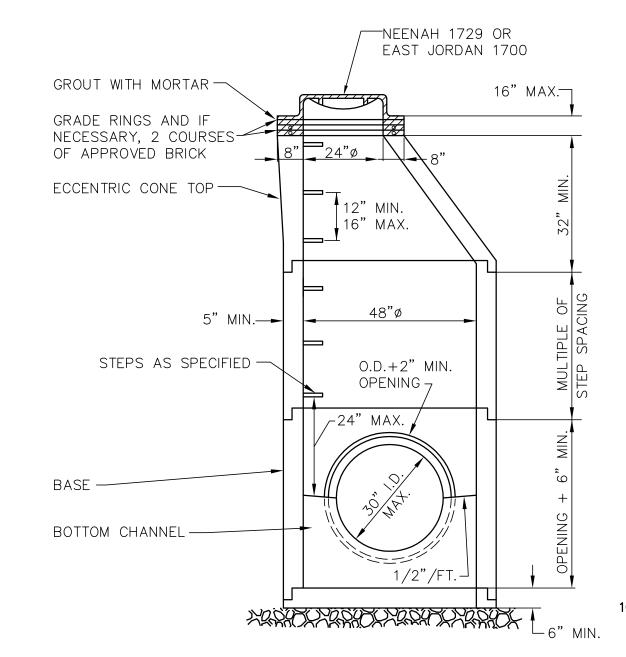
NON-MEMBERS MUST BE CALLED DIRECTLY



Project Number 10003 07-09-10 AS SHOWN

ABOVE THIS DETAIL BRICK, CONCRETE BLOCK OR CAST-IN-PLACE WALLS HAVE NOMINAL THICKNESS OF 8 INCHES. PRECAST WALLS SHALL HAVE A MINIMUM THICKNESS OF 6 INCHES AND BE REINFORCED SUFFICIENTLY TO PERMIT SHIPPING AND HANDLING WITHOUT DAMAGE. CONCRETE, CAST-IN-PLACE, TO BE CLASS C. ALL PRECAST CONCRETE SHALL MEET THE REQUIREMENTS OF 706.13 WITH 6 ±2% AIR VOID CONTENT IN THE HARDENED CONCRETE PERMISSIBLE CONSTRUCTION JOINT -AND BE MARKED WITH CATCH BASIN NUMBER. BOTTOM SLAB MAY BE PRECAST SEPARATELY AND THE OUTLET PIPE PLACED ON TOP OF IT WITH THE BOTTOM SHAPED TO DRAIN. OPENINGS FOR PIPES SHALL BE O.D. +2" WHEN FABRICATED OR FIELD CUT. SECTION A-A ALL GRATE EDGES TO BE ROUNDED 1/4" RADIUS SECTION THROUGH SECTION C-C ANGLE FRAME

CATCH BASIN - ODOT 2-2-B



1. SECTIONS OF THE PRECAST MANHOLE SHALL BE CAST AND ASSEMBLED WITH EITHER ALL TONGUE OR ALL GROOVE ENDS UP. LIFT HOLES MAY BE PROVIDED IN EACH SECTION FOR HANDLING.

NO. 57, 6, 67 OR 68

AGGREGATE BEDDING

9" MIN. \_ 12" MAX. FOR 24" PIPE AND LESS \_ 15" MAX. FOR 27" TO 54" PIPE

24" MAX. FOR 60" PIPE AND OVER

BE PERMITTED.

ALL BACKFILL SHALL BE

MOUNTED TAMPING EQUIPMENT. NO FLOODING, JETTING OR

PUDDING OF BACKFILL WILL

BACKFILL UNDER PAVEMENT

COMPACTED TO 98% STANDARD

ALL BACKFILL UNDER PAVEMENT

ALL OTHER AREAS MAY BE BACKFILLED

SHALL BE PREMIUM BACKFILL.

WITH WITH SUITABLE SOIL OR

GRANULAR EMBANKMENT MATERIAL.

SLAG SHALL NOT BE USED.

PROCTOR PER A.S.T.M. D698

& 95% IN ALL OTHER AREAS.

AND DRIVES SHALL BE

TAMPED WITH MACHINE

2. TOP AND TRANSITION (OR REDUCER) SECTIONS MAY BE EITHER ECCENTRIC CONE, CONCRETE CONE OR FLAT SLAB.

5. BASES FOR MANHOLES ARE SHOWN WITH MONOLITHIC FLOOR AND RISERS WHICH MAY BE CAST IN ONE OR TWO OPERATIONS. A PERMISSIBLE ALTERNATE IS TO CAST AND SHIP THE FLOOR AND BARREL SEPERATELY. OPENINGS FOR INLET AND OUTLET PIPES SHALL BE PROVIDED, EITHER WHEN THE UNIT IS CAST OR LATER, TO MEET PROJECT REQUIREMENTS. BOTTOM CHANNELS MAY BE FORMED OF CONCRETE PRECAST IN THE BASE OR BY FIELD CONSTRUCTION. BASES MAY ALSO BE POURED IN PLACE.

4. OPENINGS IN RISER SECTIONS FOR 18" AND SMALLER INLET PIPES SHALL BE PREFABRICATED. FLEXIBLE CONNECTIONS SHALL BE PROVIDED FOR SANITARY AND COMBINED SEWERS.

5. BRICK SHALL CONFORM TO ASTM C-32.

6. JOINT SEAL BETWEEN PRECAST MANHOLE SECTIONS ON SEWERS SHALL BE RESILIENT AND FLEXIBLE GASKET JOINTS PER ASTM C-443

- 7. MATERIALS FOR BASES AND OTHER PRECAST SECTIONS, INCLUDING REINFORCEMENT NOT SPECIFIED HEREON, SHALL COMPLY WITH THE SPECIFICATIONS.
- 8. PRECAST MANHOLE SHALL CONFORM TO THE REQUIREMENTS OF ASTM C-478.
- 9. SEAL LIFT HOLES WITH APPROVED CONCRETE PLUGS AND BIT. 10. MANHOLE STEPS - PLASTIC MEETING THE REQUIREMENTS OF ASTM 2146-68 TYPE II GRADE 49108 AND ODOT S.S.

PRECAST CONCRETE STORM MANHOLE

SITE DETAILS

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