

Developers Sub-Division Plan Requirements

Construction and Material Specifications

&

Standard Construction Drawings

Adopted: September 14, 2001

Revised: October 2023

Mark Wells, Village Administrator

Village of Carrollton

INDEX

of

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&

Standard Construction Drawings

INTRODUCTION

These Construction and Materials Specifications and Standard Construction Drawings apply to all improvements within the existing and proposed Village of Carrollton right-of-way. The specifications contained herein, in general, reference the State of Ohio Department of Transportation (ODOT) Construction and Materials Specifications, current edition. All applicable portions of the ODOT specifications so referenced shall apply to work performed hereunder as if incorporated herein. Specific references to materials herein shall serve to limit the acceptable ODOT materials to only those so referenced.

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CHAPTER 1

GENERAL STANDARDS

- 1. Developer or developer's designer to obtain all required permits from local and/or state regulatory agencies having jurisdiction over these types of facilities. (I.e.: Ohio EPA for approval of water and sewer systems and Ohio Basic Building Code, Division of Factory and Building for any pump stations, etc.) Provide the VILLAGE ADMINISTRATOR with copies of approval letters.
- 2. Designer to obtain Ohio EPA Storm water permit if the scope of the project is within EPA permit limits and forward copy to VILLAGE ADMINISTRATOR.
- 3. Developer's designer shall contact the Village Water and Wastewater Superintendents to verify available capacity for additional loading to systems at the point of connection to the existing water or sewer systems.
- 4. Verify with Water Superintendent whether project will fall within limits of Article 921.03 of the Codified Ordinances of the Village of Carrollton.
- 5. Developer is responsible for verifying or obtaining all of the latest copies of the Village's appropriate standards and standard details, as they are occasionally updated and revised. Incorporate the necessary standard details into the plan sheets, include the title and the dates of the standard. This will aid the Village if filing and for future reference in knowing which standard was in effect at the time of construction.
- 6. Developer is responsible for verifying if project is within a flood hazard area as determined by FEMA flood maps on file with village. If project falls within flood area, developer must comply with provisions in Chapter 1349 of VILLAGE OF CARROLLTON codified ordinances.
- 7. Include date, scale, sheet title, name of project and names of persons and firm preparing plans in title block.
- 8. Include North arrows on appropriate plan sheets.
- 9. Plan and Profile sheet's horizontal scale should be no smaller than 50 scale with a vertical scale no smaller than 5 feet to the inch.

- 10. Show all permanent utility easements outside roadway right of way or on private property. Easements shall be 15' minimum width unless more is needed. All permanent easements shall be recorded at Carroll County tax map office.
- 11. Include roadway typical section on plan-
- 12. Proposed streets with properties on both sides to be sixty (60) foot minimum right of way unless previously approved by village.
- 13. All Properties to have twenty-five (25) foot minimum frontage in accordance with village standards.
- 14. Include certification from Developer's designer or Engineer insuring that site soil conditions are adequate for proposed construction. If site has previously been underground mined, additional documentation regarding mining operations in the area will be required. The VILLAGE ADMINISTRATOR reserves the right to require additional subsurface information if the site history is questionable.
- 15. During repairs or installation of utilities or resurfacing of pavement, removal of existing walk, curb and pavement shall be to the nearest existing joint otherwise neatly saw cut or air hammer cut to provide a neat, substantially vertical and straight joint. All asphalt joints should be sealed in accordance with the latest edition of the State of Ohio Department of Transportation Construction and Material Specification Item 423.
- 16. Where proposed concrete walk or curb shall match flush against existing concrete walk or curb or drives a ½"expansion joint filler shall be installed between the proposed and existing concrete. A smooth transition shall be provided from existing walk or curb to proposed walk or curb over a distance of no more than 10 feet.

CHAPTER 2

WATER STANDARDS

- 1. All water mains to be 8" minimum diameter, unless looping or gridding of 6" size is accomplished in the network area. Other special conditions or circumstances might also warrant a smaller than 8" size. Any decrease in size from 8" minimum to be approved by Village Water Superintendent, processing through the VILLAGE ADMINISTRATOR'S office.
- 2. All water main pipe to be plastic, Polyvinyl Chloride (PVC) C-900, DR-18 or Ductile Iron, Class 52.
- 3. All water pipe to have #8 gravel bedding all around in accordance with village standard SD-116. If water pipe is in road, granular backfill shall be #304 gravel and shall be compacted every foot.
- 4. All ductile iron water pipe installed in acidic soil will be encased with polyethylene wrap.
- 5. Provide a fire hydrant assembly with concrete anchor block at each dead end of waterline. See standard detail SD-140.
- 6. Provide mainline water valves no more than 500 foot maximum spacing.
- 7. Install valve & valve box each leg at all intersections with water lines in three or more directions.
- 8. Service lines: ¾" 2" diameter, Type "K" copper, or polyethylene, type 3304, CTS, 200 psi.
- 9. Corporation Stops: "Mueller", compression fittings or "Ford".
- 10. Curb Stops: "Ford", or "Mueller".
- Curb Boxes, 2-piece, 40" 60" bury shaft screw service box. Curb boxes shall be installed at the right-of-way line. If they can not be installed at right-of-way line, location shall be approved by the Water Superintendent.
- 12. 2" Roadway Box: 4 ½" shaft, 39" 54" round cast iron.
- 13. Mainline Valve: "Mueller", AWWA C-509, Resilient wedge, cast iron, non-rising stem, open left.

- 14. Mainline Valve Box: 5 ¼" shaft, three piece valve box, 36" 48" cast iron.
- 15. Provide back-flow preventers when necessary in accordance with water superintendent and Article 921.03 of the Village's codified ordinances.
- 16. On plans, show all service tap locations, burg stop and box for each property.
- 17. Include brand names and model numbers along with material, construction and testing specifications on plans.
- 18. Maintain all clearances between water lines and sanitary sewers, both in lateral and crossing locations as required by Ohio EPA.
- 19. All tapping valves and sleeves connecting to an existing waterline will be installed by village forces. The cost of materials and labor will be billed back to the Developer.
- 20. All water main to be disinfected and have a concurrent leakage and pressure test applied after installation in accordance with AWWA C600 standards using the following formula.

$$L = SD \sqrt{P} \div 133,200$$

Where:

L = allowable leakage, in gallons per hour

S = length of pipe tested, in feet

D = nominal diameter of the pipe, in inches

P = average test pressure during the leakage test,

In pounds per square inch (gauge)

- 21. All new and replacement water lines must be inspected by the Water Superintendent or authorized personnel before being covered.
- 22. Refer to Village's Standard Details for addition information.

CHAPTER 3

SANITARY SEWER STANDARDS

Use polyvinyl chloride (PVC) pipe and fittings conforming or exceeding ASTM-D3034, SDR 35, or ASTM-F789 for pipe 6" to 15" diameter. Use ASTM-F679, Type PS-46 with T-1 minimum wall thickness, with joints meeting ASTM-D3212 for pipe 18" to 27" diameter.

All Flexible elastomeric seals meeting ASTM-F477. Solvent weld joints no permitted.

All sewer lines will be installed on a 4" bed of #8 gravel and be backfilled with 12" of #8 gravel above the pipe.

If sewer is in road, granular backfill shall be #304 gravel and shall be compacted every foot.

Minimum size of all collector sewers is 8" diameter.

- 2. Furnish all pipe fittings and accessories of same manufacturer as pipe. Use wye fittings for laterals, no saddles permitted.
- 3. Show all sewer wyes and laterals to each property line on plans.
- 4. All new or replacement laterals to be 6" and shall have a backflow device installed. Minimum grade of all service laterals shall be 1.00%.
- 5. All new or replacement laterals are to have a cleanout installed. Cleanouts shall be the same size and material as the lateral. Cleanouts shall be capped and shall be installed at the right-of-way line and at finish grade level.
- 6. If the new or replacement lateral is exclusively on private property, it shall be 6" with the cleanout installed at the "new to existing" transition.
- 7. Maintain all clearances between sanitary sewers and water lines, both lateral and crossing locations as required by Ohio EPA.
- 8. All new or upgraded restaurants will be required to install a minimum 1,000-gallon grease trap.

- Obtain approval of any proposed sanitary sewer pump station from Ohio EPA and Ohio Department of Commerce, Division of Factory and Building. Furnish copy of approval letters with plans to VILLAGE ADMINISTRATOR at time of review request. All pump stations will have a by-pass piping arrangement to allow a portable pump hook up in case of primary pump failure. Check with village sewer department for size and type of quick disconnect fitting. In lieu of piping arrangement, a spare pump can be provided to village sewer department. All pump stations will have a visible and audible high water alarm system in cast of pump failure.
- Include construction, material, and testing specifications for sanitary sewers on plans. All sewer lines shall have a low pressure air test, deflection test and visual inspection. Deflection test and visual inspection shall not be performed for at least 30 days after the final backfill has been placed. All new manholes shall have vacuum test.
- 11. All collector sewers, service laterals and sewer taps shall be inspected by Wastewater Superintendent or authorized personnel before covering over. Failure to comply with inspection may result in Village refusing to accept or maintain the line.
- 12. Refer to Village Standard Details for additional information.

CHAPTER 4

DRAINAGE DESIGN STANDARDS

- 1. Prepare general hydraulic design of drainage facilities in accordance with the latest edition of the Ohio Department of Transportation "Location and Design Manual, Volume Two, Drainage Design".
- 2. Stormwater runoff control shall follow the following minimum requirements for control of stormwater runoff leaving developments. These regulations require controlling of the discharge rate of runoff prior to its release to off-site land.

a. Design Frequency

- i. The peak rate of runoff from an area after development shall not exceed the peak rate of runoff from the same area before development for all storms from a 2-year to a 100-year frequency.
- ii. Determine the total volume of runoff from a 2-year frequency storm occurring on the area before and after development.
- iii. Using the percent increase in volume of runoff due to development, pick the critical storm from the following table:

The Perc	entage of	The Critical Storm						
Increase in	Volume of	for Discharge						
Run	off is	Limitation Shall Be						
equal to or								
greater than	and less than							
0	20	2 year						
20	50	5 year						
50	100	10 year						
100	250	25 year						
250	500	50 year						
500	25	100 year						

- iv. The peak rate of runoff from the critical storm and all more frequent storms occurring on the development area shall not exceed the peak rate of runoff from a 2-year frequency storm occurring on the same area under predevelopment conditions. Storms of less frequent occurrence than the critical storm of the 100-year storm shall have peak runoff rates from equivalent size storms under predevelopment conditions.
- v. Storage volume does not have to be provided for runoff from off-site upstream areas. Upstream runoff waters should be conveyed through the site in accordance with the current conditions.

- b. <u>Final Stormwater Runoff Control Plan</u>. A final stormwater runoff control plan shall be submitted to the VILLAGE ADMINISTRATOR for final approval. The final plan shall be developed in accordance with currently accepted policy and criteria. The final plan shall include all the engineering data required in subsection 2a, and shall also include:
 - Pre-development and post-development drainage maps drawn to scale with the breakdown of impervious and pervious areas and calculations for the entire site. Include critical storm calculations to determine design storm.
 - ii. The predevelopment rate of runoff and intensity for the various rainfall frequencies used in the analysis.
 - iii. The hydrologic data of the tributary area, including time of concentration, intensity and runoff coefficients.
 - iv. The location of the proposed detention facility in relation to the tributary area.
 - v. The inflow hydrographs for the tributary area prior to development for the various rainfall frequencies used in the analysis outlined in subsection 2a.
 - vi. The critical storm hydrograph based on the criteria outlined in subsection 2a.
 - vii. The storm hydrographs of the less frequent occurrences to check the peak runoff rates.
 - viii. The maximum permissible release rate from the detention facility (i.e., outflow hydrograph).
 - ix. The storage volume required for the detention facility.
 - x. The design of a facility for release of stored water and for bypassing excess flows of exceedingly rare rainfalls that cannot be accommodated by the storage facility.
 - xi. The design for complete and timely drainage of stored runoff by sufficient basin slope and/or alternate release mechanisms without causing secondary problems.
 - xii. Type of detention facility.
 - xiii. Safety precautions.
- 3. Base storm sewer design on a 10-year storm frequency with the hydraulic grade line checked using a 25-year storm frequency. Use Manning's "n" value in accordance with the ODOT drainage manual.
- 4. Use a 2-year storm frequency to determine catch basin or inlet spacing on all streets. Manning's "n" used for pavement drainage is 0.015.

The maximum allowable spread of flow is six (6) feet into the traveled lane.

- 5. The minimum size conduit for culverts, storm sewers and drive pipes if 12". Unless discussed with Street Department Superintendent or Village Administrator for different size.
- 6. All culverts (ODOT Type A conduits) shall be rigid pipe meeting the requirements of Item 603 of the ODOT Construction and Material Specifications.
- 7. All storm sewers (ODOT Type B & C Conduits) and drive pipe (ODOT Type D conduits) shall be rigid, gasket seal pipe, ASTM 3034 or corrugated polyethylene smooth lined pipe meeting the requirements of Item 603, Type 707.33 of the ODOT Construction and Material Specifications.
- 8. Provide headwalls and pipe outlet protection as recommended in the ODOT Drainage Manual. Additionally, provide headwalls at the open ends of all drive pipes 24" diameter or greater.
- 9. Submit all drainage calculations including catch basin or inlet spacing calculations sealed and signed by a Registered Engineer to the Village for review and approval.
- 10. Include delineated drainage areas on contour mapping with all drainage calculations submitted for review.
- 11. Include pipe underdrains on all new roadways and detail sufficiently on plans for contractor to construct underdrains correctly.
- 12. Include on plans the construction and material specifications for pipe underdrain systems.
- 13. All drainage calculations to be signed and dated by a Registered Engineer.
- 14. Refer to Village Standard Details for additional information.
- 15. Two (2) sets of plans and calculations shall be submitted for review.

CHAPTER 5

GENERAL PLAN NOTES

1. ROOF DRAIN NOTE:

Roof drains, foundation drains, and other clean water connections to the sanitary sewer system are strictly prohibited. All sump pumps shall be tied into the storm sewer system where applicable. No dumping on road unless cleared by Street Superintendent or Village Administrator.

2. PIPE UNDERDRAINS:

Pipe underdrain material to be ODOT Item 707.31, corrugated polyethylene drainage tubing (Perforated). All underdrains will outlet into proposed catch basins or storm sewer lines. A ten (10) foot section of Item 603 conduit, Type F, 707.33 (non-perforated) shall be used to connect underdrain to catch basin or storm sewer. Where possible, underdrain outlet elevation to be 6" minimum above invert elevation of drainage structure. Any underdrains crossing under street pavement will be ODOT Item 603 conduit, Type B, 707.33)non-perforated). The underdrain trench shall be lined with filter fabric in accordance with ODOT specifications.

3. WATER LINES:

Contractor to notify and coordinate with Village Water and Sewer Department prior to any connections being made to the existing water or sanitary sewer systems.

All mainline water valves will only be operated by Village Water Department employees.

4. NOTIFICATION:

Contractor to notify the VILLAGTE ADMINISTRATOR twenty four (24) hours prior to starting construction. Any time utilities are involved, other than village water and sewer, notify Ohio Utilities Protection Services at 1-800-362-2764 two working days prior to excavating.

5. EROSION CONTROL:

Contractor to allow no silt or erosion to enter existing storm sewer system or water courses during the construction phase. Contractor to used erosion control measures such as inlet filters and hay bales in accordance with ODOT Standard Drawing MC-11, ODOT specifications and State of Ohio standards for Storm Water Management, Land Development and Urban Stream Protection, second edition 1996.

CHAPTER 6

SUB-DIVISION REQUIREMENTS

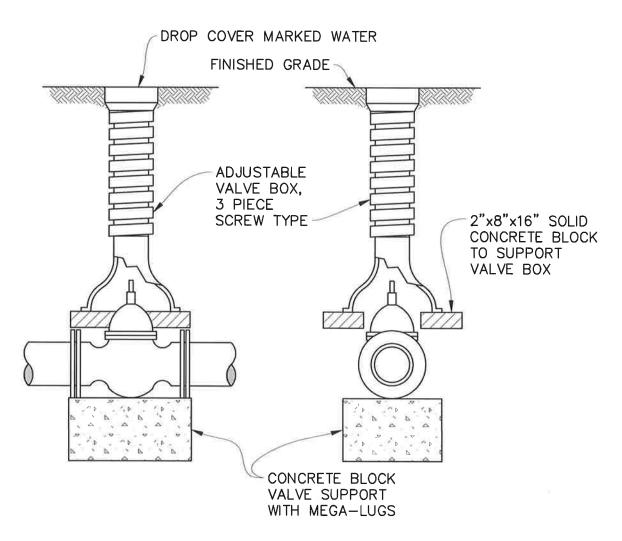
<u>ROADWAY STREET – DESIGN</u>

		Local	Main
Requirement		Residential	Collector
Description		Streets	Streets
		25 MPH	35 MPH
Crest Vertical Curve -K factor (50' V.C. minimun	n length)	12	17
Sag Vertical Curve – K factor (50' V.C. minimum	length)	16	24
Minimum Radius of Horizontal Curve		100.00 ft.	143.24 ft.
Maximum Degree of Horizontal Curve		57°-17'-45"	43°-00′
Maximum Degree of Curve without Supereleva	tion	None Req'd.	40°-00′
Maximum Centerline Deflection without Horizo	ntal Curve	5°-30′	5°-30′
Maximum Percent Change in Vertical Alignmen	t without a	1.00%	1.85%
Vertical Curve			
Maximum length for Roadways with Cul-de-sac	S	500 ft.	
Maximum Percent Grades	Level	4%	10%
Local Streets – 25 MPH	Rolling	8%	13%
	Hilly	12%	15%
Minimum Radii of Intersection Corner Returns		15 Ft. (Min.)	15 ft. (Min.)
willimum Radii of Intersection Corner Returns		20 Ft. (Desired)	20 Ft. (Desired)
Angle of Intersection Streets: (See Note 1 below	v)	85° - 95°	85° - 95°
Sidewalk curb ramps for handicap accessibility.	(Provide	*ODOT	*ODOT
curb ramp at each intersection with sidewalks i	ntended	Std. Drawing	Std. Drawing
for pedestrian crossings.)		BP-7.1	BP-7.1
Intersecting Street Grades		-2.08%	-2.08%
intersecting street draues		See Note 2	See Note 2

Note 1: Maintain a tangent length of 50' minimum from centerline of intersected street to point of curve on intersecting street.

<u>Note 2</u>: Intersected street grade shall continue at pavement slope (-2.08%) for additional 10 foot minimum from edge of pavement. This point will be point of curvature for either a vertical crest or vertical sag rounding, length based on K factor of intersection grades.

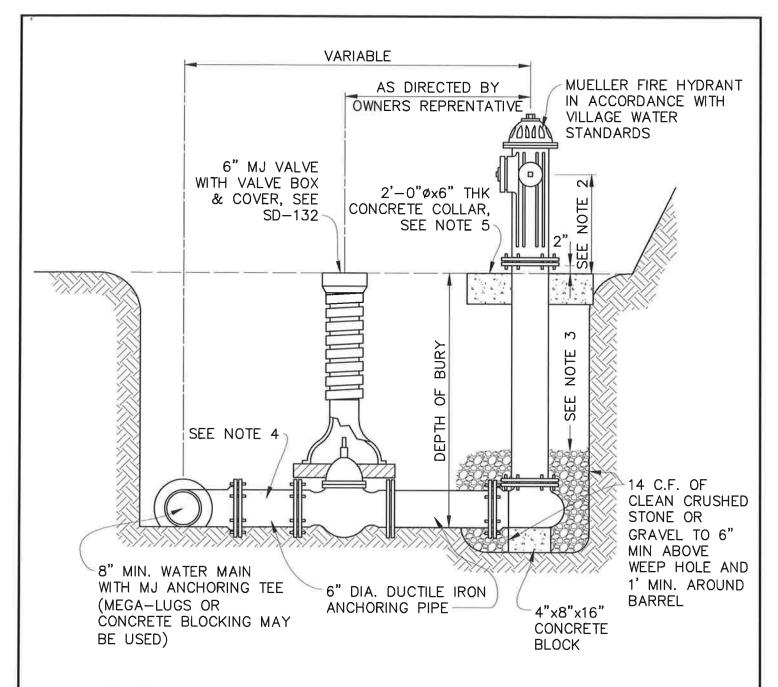
*ODOT – Ohio Department of Transportation, Standard Construction Drawings



SIDE VIEW

END VIEW

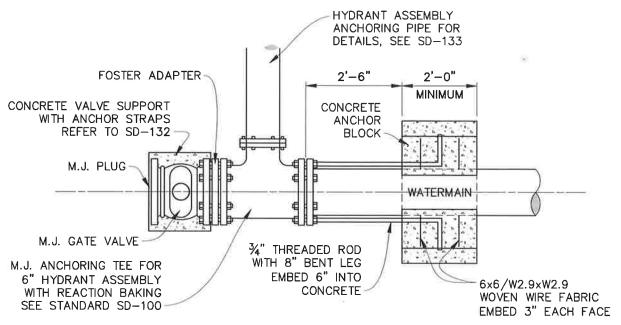
NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE VILLAGE ADMINISTRATOR. NOTE 2: BEFORE ANY EXCAVATING, CALL THE FOLLOWING NUMBER AT LEAST 48 HOURS IN ADVANCE: O.U.P.S. @ (800) 362-2764.					Village of Carrollton 80 Second Street S.W. Carrollton, Ohio 44615 Phone: (330) 627-2411					
NO. DATE REVISION					STAN	DARD (CONSTR	RUCTION	REQUIREMENTS DETAILS SETTING	
				CAD FILE: M:\13049\Auto DRWN BY: BJR	CAD\W-1 Valve APPRVD BY: MW	and Valve Box	Setting.dwg SCALE: NONE		W-1	



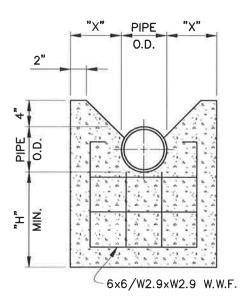
NOTES:

- 1. ALL CONCRETE IS FILL CONCRETE.
- 2. TO BE 12" MIN. OR AS RECOMMENDED BY HYDRANT MANUFACTURER.
- 3. COVER STONE WITH 8-MIL POLYETHYLENE BEFORE BACKFILLING.
- 4. HYDRANT LEAD PIPE TO BE SAME MATERIAL AS WATER MAIN PIPE.
- 5. CONCRETE COLLAR SHALL BE FLUSH WITH GROUND IN RURAL AREAS, AND 8" BELOW FINISH GRADE IN RESIDENTIAL AREAS.

NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE VILLAGE ADMINISTRATOR. NOTE 2: BEFORE ANY EXCAVATING, CALL THE FOLLOWING NUMBER AT LEAST 48 HOURS IN ADVANCE: O.U.P.S. @ (800) 362-2764.				Village of Carrollton 80 Second Street S.W. Carrollton, Ohio 44615 Phone: (330) 627-2411				
NO. DATE	REVISION		DEVELOPERS SUBDIVISION PLAN REQUIREMENTS STANDARD CONSTRUCTION DETAILS FIRE HYDRANT ASSEMBLY WITH VALVE AND VALVE BOX					MBLY
			CAD FILE: M:\13049\AutoCAD\W-2 Fire Hydrant with Valve and Valve Box.dwg DRWN BY: APPRVD BY: ISSUE DATE: SCALE: BJR MW NONE					W-2



PLAN VIEW



ANCHOR BLOCK FACE VIEW

TREADED RODS REQUIRED

6" - USE 2 TREADED RODS

8" - USE 3 TREADED RODS

10" - USE 3 TREADED RODS

12" - USE 4 TREADED RODS

THEADED RODS TO BE EQUALLY SPACED IN CONCRETE DEADMAN 2" MIN. CLEARANCE TO CONC. FACE

PIPE	"X"	®H"
O.D.	^	
6"	8"	1'-0"
8"	10"	1'-8"
10"	12"	2'-5"
12"	16"	2'-9"

MOTE: MAXIMUM AMOUNT OF SURFACE AREA OF ANCHOR BLOCK FACE TO REST AGAINST UNDISTURBED SOIL AS POSSIBLE.

WRAP WATERMAIN IN PLASTIC WHERE IN CONTACT WITH CONCRETE ANCHOR BLOCK.

CEMENT SOLIDS AND MEGA-LUGS ARE AN ACCEPTABLE ALTERNATE.

	OTHER DE	SUBMITTED TO AND APPROVED	NY GENERAL NOTES ÁND/OR / CHANGES TO THIS DETAIL SHALL · BY THE VILLAGE ADMINISTRATOR. LLOWING NUMBER AT LEAST 48 HOURS			nd Street		arrollto rollton, Ohio 27-2411	
NO.	NO. DATE REVISION				STAN	DARD (CONSTR	RUCTION	REQUIREMENTS DETAILS DETAIL
				CAD FILE: M:\13049\Auto DRWN BY: BJR	CAD\W-3 End of APPRVD BY: MW	of Water Line De	scale:		W-3

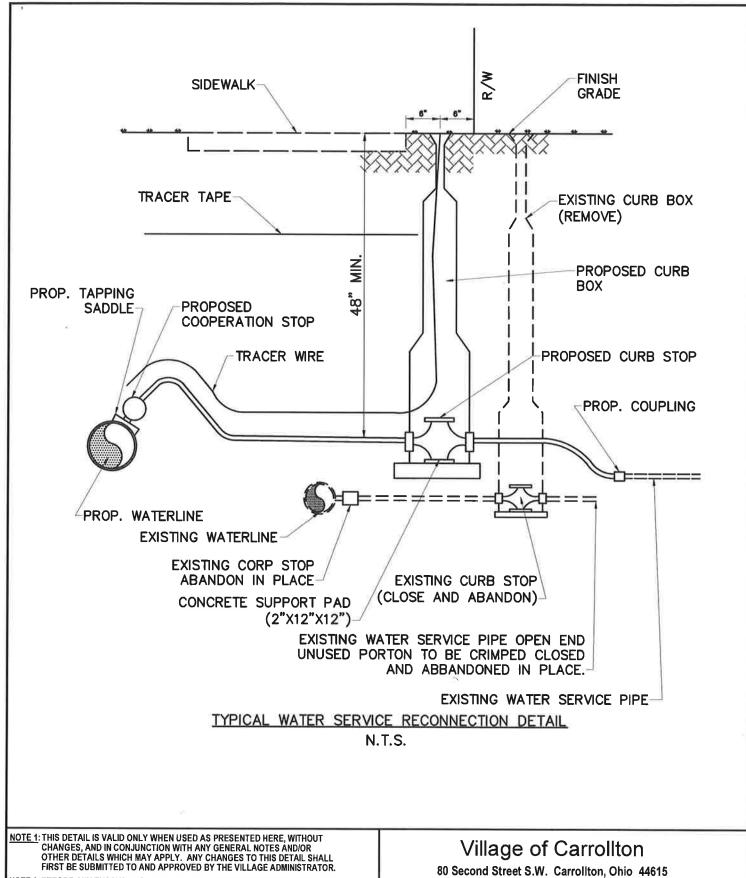
		R	ESTR	AINE	ED JO	INT	TABL	E (FT	'.)		
	DI	AMETE	R OF I	PVC PI	PE	DIAMETER OF D.I. PIPE					
FITTING TYPE	≤ 6"	8"	10"	12"	16"	≤ 6"	8"	10"	12"	16"	
90° BEND	25'	32'	38'	45'	58'	19'	25'	30'	35'	45'	
45° BEND	11'	14'	16'	19'	24'	8'	11'	13'	15'	19'	
22 ½° BEND	5'	7'	8'	9'	12'	4'	5'	6'	7'	9'	
11 1/4° BEND	3'	4'	4'	5'	6'	2'	3'	3'	4	5'	
VALVE/CAP	44'	58'	70'	83'	106'	29'	38'	45'	53'	68'	
TEE	42'	56'	67'	80'	104'	27'	36'	44'	52'	67'	
REDUCER (1 DIA.)	23'	25'	24'	25'	45'	15'	16'	15'	16'	29'	
REDUCER (2 DIA.)	30'	42'	43'	44'	63'	19'	27'	28'	28'	41'	

NOTES:

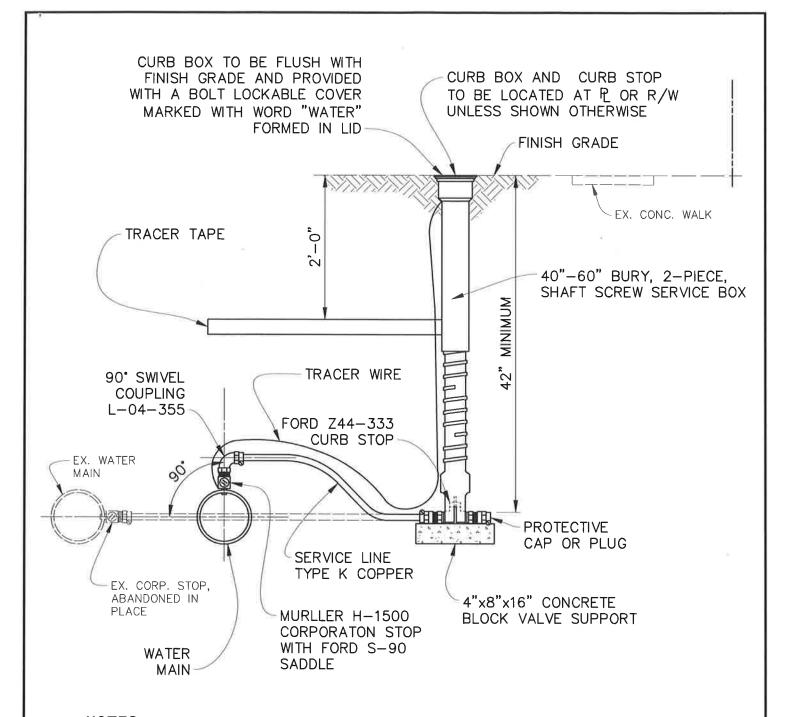
- 1. ALL JOINTS WITHIN THE SPECIFIED LENGTH SHALL BE RESTRAINED. RESTRAINED LENGTHS IN THE TABLE ARE MINIMUM VALUES FROM THE END OF THE FITTING.
- 2. LENGTH OF RESTRAINT FOR TEES APPLIES TO BRANCH, ASSUMING JOINTS ON RUN ARE RESTRAINED AND CONNECTED TO A MINIMUM OF 1' OF PIPE IN EACH DIRECTION WITHOUT JOINTS.
- 3. VALVES AND BENDS SHALL BE RESTRAINED WITHIN THE LENGTHS INDICATED ABOVE IN BOTH DIRECTIONS.
- 4. ANY JOINT OR FITTING TYPES NOT INCLUDED IN THE ABOVE TABLE SHALL BE AS REQUIRED BY THE ENGINEER.

RESTRAINED JOINT REQUIREMENTS

NOTE 1: THIS DETAI CHANGES, OTHER DET FIRST BE S NOTE 2: BEFORE AN	Village of Carrollton 80 Second Street S.W. Carrollton, Ohio 44615 Phone: (330) 627-2411							
NO. DATE	REVISION		DEVELOPERS SUBDIVISION PLAN REQUIREMENTS STANDARD CONSTRUCTION DETAILS RESTRAINED JOINT REQUIREMENTS					DETAILS
			CAD FILE: M:\t19049\AutoCAD\W-4 Restrained Joint Requirements.dwg DRWN BY: APPRVD BY: ISSUE DATE: SCALE: BJR MW NONE					W-4



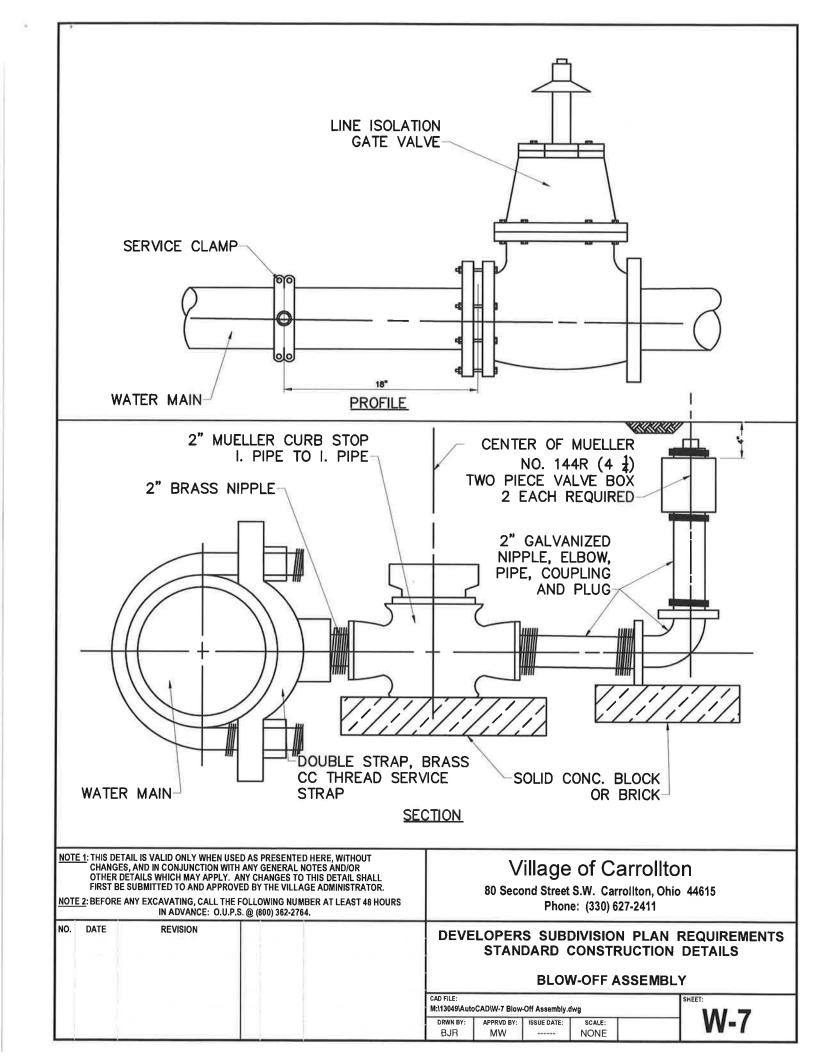
	NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE VILLAGE ADMINISTRATOR. NOTE 2: BEFORE ANY EXCAVATING, CALL THE FOLLOWING NUMBER AT LEAST 48 HOURS IN ADVANCE: O.U.P.S. @ (800) 362-2764.				Village of Carrollton 80 Second Street S.W. Carrollton, Ohio 44615 Phone: (330) 627-2411					
NO.	DATE	REVISION		DEVELOPERS SUBDIVISION PLAN REQUIREMENTS STANDARD CONSTRUCTION DETAILS TYPICAL WATER SERVICE RECONNECTION DETAIL				DETAILS		
				CAD FILE: M:13049 AutoCAD W-5 WATER SERVICE RECONNECT.dwg DRWN BY: APPRVD BY: ISSUE DATE: SCALE: BJR MW NONE				W-5		



NOTES:

- 1. PROVIDE A LOOP WITH SUFFICIENT SLACK TO PREVENT SERVICE LINE FROM BUCKING OR PULLING OUT OF CORPORATION STOP DURING BACKFILLING AND SETTLING OF TRENCH.
- 2. MINIMUM WATER SERVICE PIPE SIZE SHALL BE 3/4".

CHANG OTHER FIRST I	ETAIL IS VALID ONLY WHEN USED AS PRESEN ES, AND IN CONJUNCTION WITH ANY GENERA DETAILS WHICH MAY APPLY. ANY CHANGES BE SUBMITTED TO AND APPROVED BY THE VI E ANY EXCAVATING, CALL THE FOLLOWING N IN ADVANCE: O.U.P.S. @ (800) 362-	OTES ÁND/OR VIIIAGE OF CARROLLON THIS DETAIL SHALL 3E ADMINISTRATOR. 80 Second Street S.W. Carrollton, Ohio 44615 BER AT LEAST 48 HOURS Phone: (330) 627-2411
NO. DATE	REVISION	DEVELOPERS SUBDIVISION PLAN REQUIREMENTS STANDARD CONSTRUCTION DETAILS SERVICE LINE AND SERVICE STOP SETTING
		CAD FILE: M:\13049\AutoCAD\W-6 Service Line and Service Stop Setting.dwg DRWN BY: APPRVD BY: ISSUE DATE: SCALE: BJR MW NONE

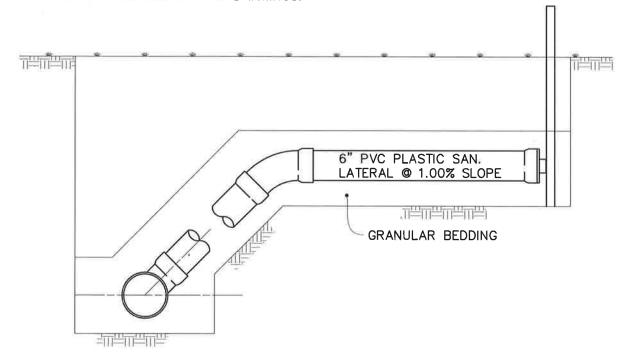


NOTE:

- 1. THE CONTRACTOR SHALL COORDINATE THE TERMINATION LOCATION AND ELEVATION OF EACH NEW LATERAL WITH THE PROPERTY OWNER BEING SERVED BY THE LATERAL.
- 2. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING THE LATERALS DEEP ENOUGH TO SERVE THE BASEMENT OF THE RESPECTIVE STRUCTURE REGARDLESS OF CURRENT BUILDING PLUMBING. RISER PIPE SHALL BE INSTALLED AS NECESSARY TO TERMINATE LATERAL AT THE REQUIRED DEPTH.

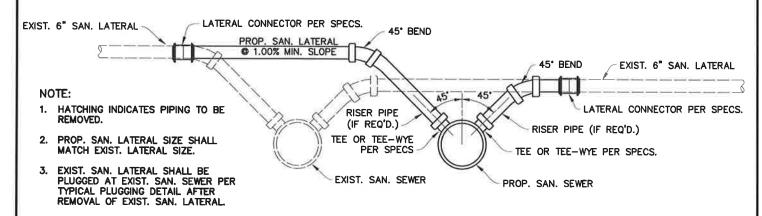
R/W OR EASEMENT

3. LATERAL SHALL TERMINATE AT THE RIGHT OF WAY OR EASEMENT LINE UNLESS SHOWN OTHERWISE ON THE DRAWINGS.



TYPICAL NEW GRAVITY SANITARY LATERAL DETAIL

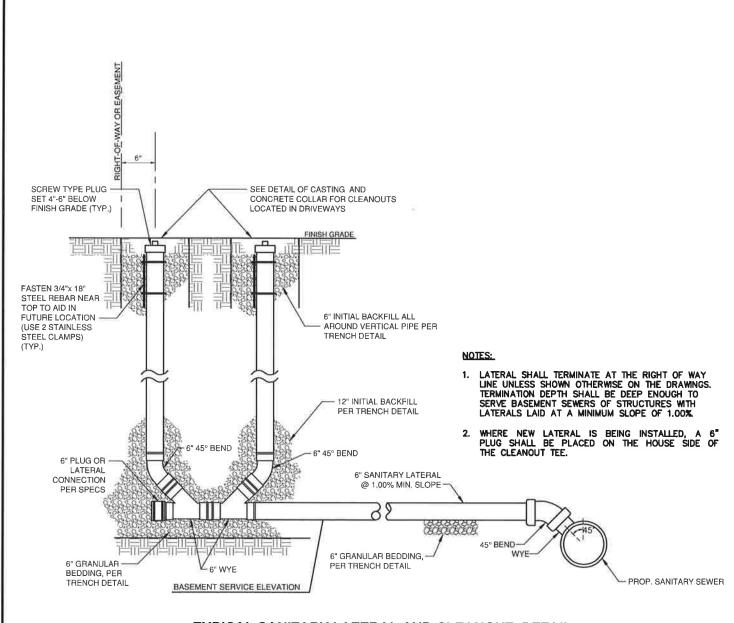
	CHANG OTHER FIRST B	ETAIL IS VALID ONLY WHEN USE ES, AND IN CONJUNCTION WITH DETAILS WHICH MAY APPLY. A IE SUBMITTED TO AND APPROVE E ANY EXCAVATING, CALL THE F IN ADVANCE: O.U.P.S	Village of Carrollton 80 Second Street S.W. Carrollton, Ohio 44615 Phone: (330) 627-2411						
NO.	DATE	REVISION		DEVELOPERS SUBDIVISION PLAN REQUIREMENTS STANDARD CONSTRUCTION DETAILS TYPICAL NEW GRAVITY SANITARY LATERAL DETAIL					
				CAD FILE: M:\13049\AutoCAD\S-1 Typical new gravity sanitary lateral detail.dwg DRWN BY: APPRVD BY: ISSUE DATE: SCALE: DRWN BY: APPRVD BY: ISSUE DATE: SCALE: DRWN BY: APPRVD BY: ISSUE DATE: SCALE:					S-1



TYPICAL SANITARY LATERAL RECONNECTION DETAIL

N.T.S.

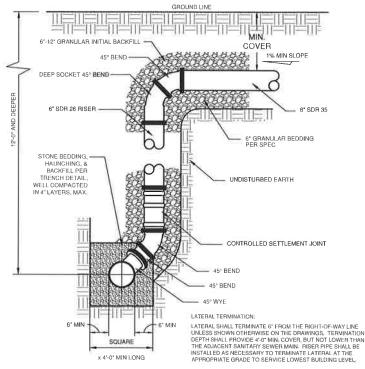
	NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE VILLAGE ADMINISTRATOR. NOTE 2: BEFORE ANY EXCAVATING, CALL THE FOLLOWING NUMBER AT LEAST 48 HOURS IN ADVANCE: O.U.P.S. @ (800) 362-2764.			Village of Carrollton 80 Second Street S.W. Carrollton, Ohio 44615 Phone: (330) 627-2411				
NO.	DATE	REVISION		l	STAN	DARD	CONSTRUCT	AN REQUIREMENTS ON DETAILS CONNECTION DETAIL
				CAD FILE: M:\13049\Auto DEDRWN UV9 BJR	CADIS-2 TYPIC APPRVD BY: MW	CAL SANITARY ISSUE DATE:	LATERAL RECONNECT SCALE: NONE	S-2



TYPICAL SANITARY LATERAL AND CLEANOUT DETAIL

N.T.S.

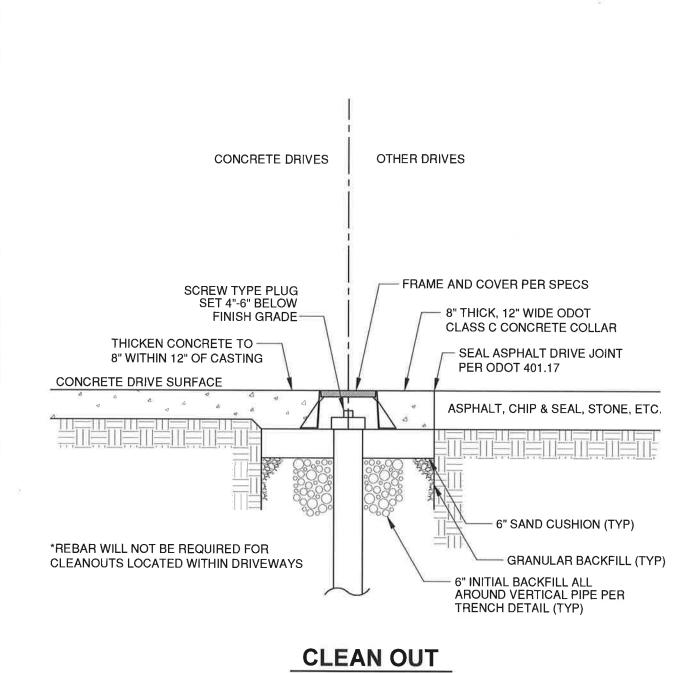
	NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE VILLAGE ADMINISTRATOR. NOTE 2: BEFORE ANY EXCAVATING, CALL THE FOLLOWING NUMBER AT LEAST 48 HOURS IN ADVANCE: O.U.P.S. @ (800) 362-2764.				Village of Carrollton 80 Second Street S.W. Carrollton, Ohio 44615 Phone: (330) 627-2411				
NO.	DATE	REVISION		DEVELOPERS SUBDIVISION PLAN REQUIREMENTS STANDARD CONSTRUCTION DETAILS TYPICAL SANITARY LATERAL AND CLEANOUT DETAI					
				CAD FILE: M:113049\AutoCADIS-3 TypicI sanitary lateral and cleanout.dwg DRWN BY: APPRVD BY: ISSUE DATE: SCALE: BJR MW NONE					



DEEP BURIAL RISERS FOR SEWERS SHALL CONTAIN A CONTROLLED SETTLEMENT JOINT, A VERTICAL RISER ADAPTER, AND A DEEP SOCKET FITTING, SOR 26 PIPE AND OTHER SOR 26 FITTINGS AS REQUIRED FOR DIRECTIONAL AND TRANSITIONAL CONNECTION. CONTROLLED SETTLEMENT JOINTS USED IN A DEEP BURIAL RISER SYSTEM SHALL PROVIDE A MINIMUM OF 5-1/2" OF AXIAL MOVEMENT WHEN FORCES OF 500 POUNDS OR GREATER ARE APPLIED AND SHALL BE FABRICATED FROM PIPE WHICH WAS MANUFACTURED TO ASTM D3034 SPECIFICATIONS. A MOLDED SOR 26 VERTICAL RISER ADAPTER SHALL BE INSTALLED BETWEEN THE CONTROLLED SETTLEMENT JOINT AND THE BOTTOM DIRECTIONAL TRANSITION GAS PER PLASTIC TRENDS TECHNICAL BULLETIN FORM #1050. A MOLDED SOR 26 DEEP SOCKET SEWER FITTING SHALL BE USED WHERE AVAILABLE AT THE TOP OF EACH RISER ASSEMBLY. SOR 26 DEEP SOCKET FITTINGS SHALL PROWDE A MINIMUM SOCKET DETH OF 6-1/2" BELOW THE FITTING GASKET RACE. ALL FITTINGS SUSED IN THE DEEP BURIAL RISER SYSTEM SHALL BE SOR 26 AND MOLDED WHERE AVAILABLE IN ACCORDANCE WITH ASTN D3034 AND F1335. MOLDED FITTING CASKET SHALL BE DIVEY WITH ASTN D3034 AND F1335. MOLDED FITTING CASKET SHALL BLOWLY WITH ASTN BOJS AND F105 MOLDED FITTING CASKET SHALL BE LISTED BY NSF. MOLDED FITTING GASKET SHALL BE LISTED BY NSF. MOLDED FITTING SHALL BE LISTED BY NSF. MOLDED FITTING SHALL BE INSTEND OF TASY DISTRIBUTED FOR MASS SHALL BE ASSEMBLED PER PLASTIC TREND'S RECOMMENDED SPECIFACATIONS, BULLETIN FORM #1090.

DEEP SANITARY LATERAL ALTERNATE CONNECTION DETAIL

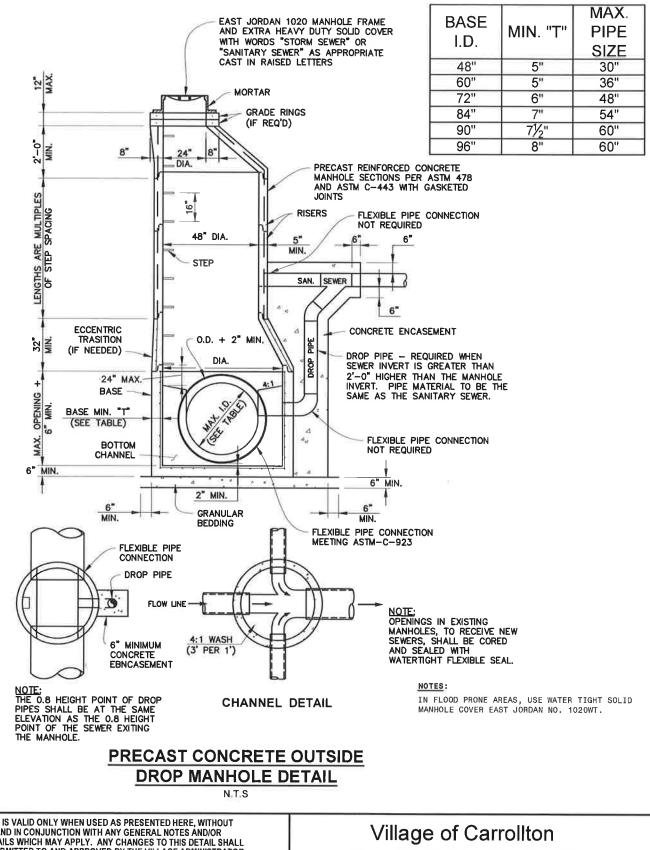
NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE. WITHOUT Village of Carrollton CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE VILLAGE ADMINISTRATOR. 80 Second Street S.W. Carrollton, Ohio 44615 NOTE 2: BEFORE ANY EXCAVATING, CALL THE FOLLOWING NUMBER AT LEAST 48 HOURS Phone: (330) 627-2411 IN ADVANCE: O.U.P.S. @ (800) 362-2764. **DEVELOPERS SUBDIVISION PLAN REQUIREMENTS** NO. DATE REVISION STANDARD CONSTRUCTION DETAILS DEEP SANITARY LATERAL ALTERNATE CONNECTION DETAIL M:\13049\AutoCAD\S-4 deep sanitary lateral alternate connection.dwg ISSUE DATE: SCALE: BJR MW NONE



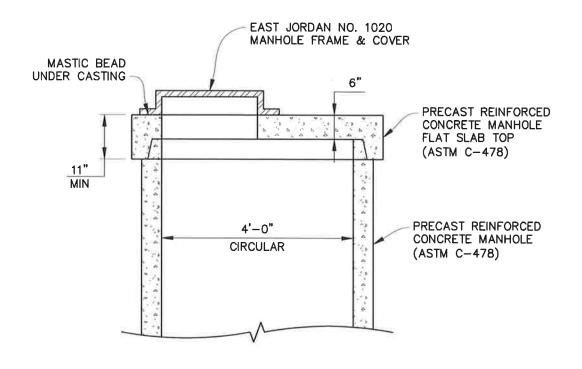
CLEAN OUT LOCATED WITHIN DRIVEWAY OR PARKING LOT

N.T.S.

	NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE VILLAGE ADMINISTRATOR. NOTE 2: BEFORE ANY EXCAVATING, CALL THE FOLLOWING NUMBER AT LEAST 48 HOURS IN ADVANCE: O.U.P.S. @ (800) 362-2764.			Village of Carrollton 80 Second Street S.W. Carrollton, Ohio 44615 Phone: (330) 627-2411				
NO. DATE REVISION DEVELOPERS SUBDIVIS STANDARD CONS					CONSTR	RUCTION N DRIVEW	DETAILS	
CAD FILE: M:\13049\AutoCAD\S-5 cleanout located within driveway or parking lot.dwg DRWN BY: APPRVD BY: ISSUE DATE: SCALE: BJR MW NONE				S-5				



NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE VILLAGE ADMINISTRATOR. 80 Second Street S.W. Carrollton, Ohio 44615 NOTE 2: BEFORE ANY EXCAVATING, CALL THE FOLLOWING NUMBER AT LEAST 48 HOURS IN ADVANCE: O.U.P.S. @ (800) 362-2764. Phone: (330) 627-2411 NO. DATE REVISION **DEVELOPERS SUBDIVISION PLAN REQUIREMENTS** STANDARD CONSTRUCTION DETAILS PRECAST CONCRETE OUTSIDE DROP MANHOLE DETAIL M:\13049\AutoCAD\S-6 Precast Concrete Outside Drop Manhole.dwg APPRVD BY: ISSUE DATE: SCALE BJR MW NONE

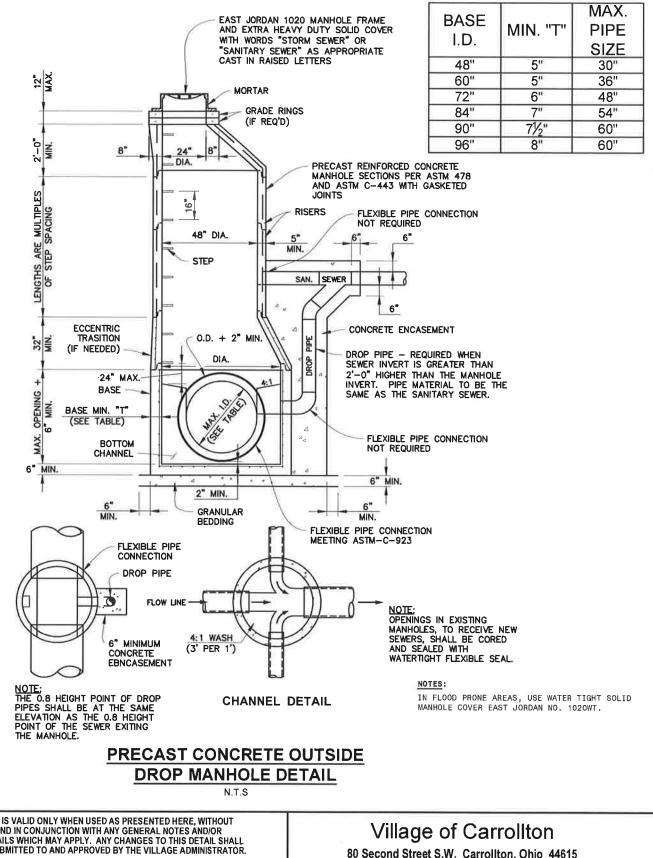


SECTION N.T.S

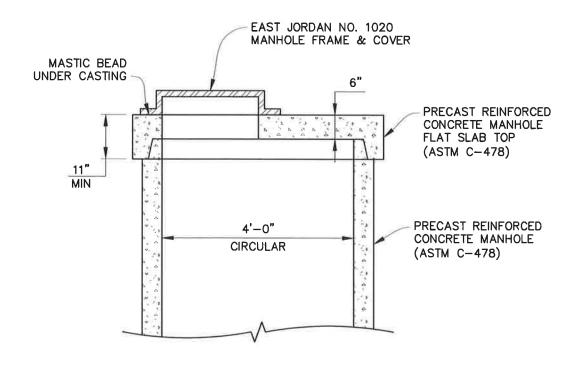
NOTES:

- 1. USE A SHALLOW MANHOLE ONLY WHEN THE DISTANCE FROM THE MANHOLE TOP TO SPRINGLINE OF OUTLET PIPE IS 5'-0" OR LESS.
- FOR ADDITIONAL MANHOLE BASE INFORMATION SEE THE FOLLOWING STANDARD DETAILS, AS APPLICABLE, SD-120 & SD-121

	NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE VILLAGE ADMINISTRATOR. NOTE 2: BEFORE ANY EXCAVATING, CALL THE FOLLOWING NUMBER AT LEAST 48 HOURS IN ADVANCE: O.U.P.S. @ (800) 362-2764.				Village of Carrollton 80 Second Street S.W. Carrollton, Ohio 44615 Phone: (330) 627-2411				
NO. DATE REVISION				DEVE	STAN	DARD (DIVISION F CONSTRUC SHALLO OP DET	CTION W MA	
		= = =		CAD FILE: M:\13049\AutoCAD\S-6.1 Precast shallow manhole.dwg DRWN BY: APPRVD BY: ISSUE DATE: SCALE: BJR MW NONE				S-6.1	



NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE VILLAGE ADMINISTRATOR. 80 Second Street S.W. Carrollton, Ohio 44615 NOTE 2: BEFORE ANY EXCAVATING, CALL THE FOLLOWING NUMBER AT LEAST 48 HOURS Phone: (330) 627-2411 IN ADVANCE: O.U.P.S. @ (800) 362-2764. DATE REVISION DEVELOPERS SUBDIVISION PLAN REQUIREMENTS STANDARD CONSTRUCTION DETAILS PRECAST CONCRETE OUTSIDE DROP MANHOLE DETAIL CAD FILE: M:\13049\AutoCAD\D-1 Precast Concrete Outside Drop Manhole.dwg DRWN BY: APPRVD BY: ISSUE DATE: SCALE: BJR MW NONE

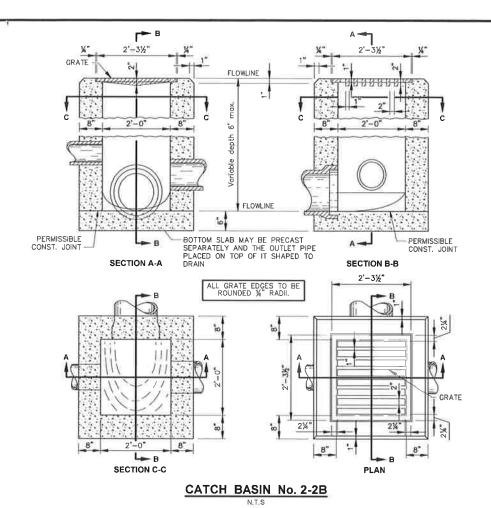


$\frac{\text{SECTION}}{_{\text{N,T,S}}}$

NOTES:

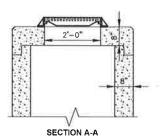
- USE A SHALLOW MANHOLE ONLY WHEN THE DISTANCE FROM THE MANHOLE TOP TO SPRINGLINE OF OUTLET PIPE IS 5'-0" OR LESS.
- FOR ADDITIONAL MANHOLE BASE INFORMATION SEE THE FOLLOWING STANDARD DETAILS, AS APPLICABLE, SD-120 & SD-121

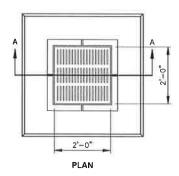
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NO. DATE						TION DETAIL MANHOL	.S	
			CAD FILE: M:\13049\Auto DRWN BY: B.JB	CAD\D-1.1 Pre APPRVD BY: MW	cast shallow ma		SHEET:	1.1



*ODOT STANDARDS INCLUDED FOR REFERENCE. ALL CATCH BASINS MUST BE IDENTIFIED BY MANUFACTURER TO MEET TRAFFIC BEARING APPLICATIONS.

**ALL CATCH BASINS SHALL HAVE A MODIFIED TOP AS SHOWN IN THE DETAIL BELOW.





PRECAST CATCH BASIN, 2-2B, MODIFIED DETAIL

GENERAL NOTES FOR CATCH BASINS

NO.

DATE

LOCATION AND ELEVATION, when given on the plans, shall be the top center of

BRICK OR CONCRETE BLOCK will not be permitted for use to build, after, modify, adjust or repair any catch basin, infet, manhole, junction box or any other

CAST-IN-PLACE CONCRETE WALLS shall have a nominal thickness of 8". Bottom slab shall have a nominal thickness of 6".

PRE-CAST CONCRETE WALLS and bottom slab shall have a nominal thickness of 6° and be reinforced sufficiently to permit shipping and handling without damage to the structure. Lifting hooks shall be cast into the catch basin to permit shipping and handling. Lifting hooks shall be removed after catch basin installation. The lifting holes shall be plugged watertight with nonshrink grout.

CATCH BASINS that have a depth greater than 42" shall be constructed in sections. Each section shall not exceed 42" in depth.

STEPS shall be provided where depth exceeds 6'.

CONCRETE, cast-in-place, shall be Class QC1, All pre-cast concrete shall meet current ODOT requirements; $6\%(\pm2\%)$ air void content in the hardened concrete and be marked with the catch basin number.

OPENINGS for any pipe shall be OD+2* when fabricated or field cut. All field cut openings shall be mechanically cored. The use of saw-cutting, hammering or other impact devices is prohibited.

ADJUSTMENT RINGS OR COLLARS used to modify the main structure, when necessary, shall be precast concrete, 2" minimum thickness and shall be downled and grouted to tire base. Dowels shall be 1/2" diameter bars (#4 rebar) on 12" centers around the perimeter; 6" in from any corner and 3" in from the outside edges. Core dfill and embed 6" into the main structure and into 1/2 the thickness of the added piece.

PIPE CONNECTIONS to catch basins shall be sealed using Class QC1 concrete with #8 coarse aggregate. Concrete collars shall be 6" thick minimum around the

REVISION

- CATCH BASINS MAY BE CAST-IN-PLACE OR PRE-CAST CONCRETE. CAST-IN-PLACE CONCRETE SHALL BE CLASS C. REINFORCED PRE-CAST CONCRETE SHALL CLASS C. REINFO BE AS SPECIFIED.
- MINIMUM WALL THICKNESS OF CAST-IN-PLACE BASINS SHALL BE 8". MINIMUM WALL THICKNESS OF PRE-CAST INLETS AND BASINS SHALL BE 6".
- MINIMUM THICKNESS FOR BASES OF BASINS SHALL BE 6", CAST-IN-PLACE AND PRE-CAST.
- CATCH BASINS WITH PRE-CAST CONCRETE BASES SHALL BE PLACED ON A COMPACTED GRAVEL BED OF NO. 57 AGGREGATE, HAVING A MINIMUM THICKNESS
- BRICK AND CONCRETE BLOCK ARE NOT PERMITTED MATERIALS FOR THE CONSTRUCTION OR MODIFICATION OF INLETS AND CATCH BASINS.
- 6. INVERTS SHALL BE FORMED IN ALL BASIN STRUCTURES TO PROVIDE POSITIVE FLOW. USE NON-SHRINK GROUT TO FORM INVERTS.
- ALL PIPING THROUGH CATCH BASIN WALLS SHALL BE SEALED WITH A CLASS OCI CONCRETE COLLAR (MIN. OF 6" THICK) OR WITH CONSEAL CS-2100 (WATER PLUG) OR APPROVED EQUAL.

B. CASTINGS:

APPROVED FRAMES/GRATES FOR BASINS ARE SHOWN BELOW:

STRUCTURE TYPE	EJIW					
CHROCIONE THE	FRAME	GRATE	BACK			
2-2B CATCH BASINS	V-5626-2	V-5726 (HEAVY DUTY)	\times			

- ALL GRATES SHALL BE BICYCLE-SAFE AND SET CORRECTLY WITH THE DIRECTION OF WATER FLOW.
- THE FRAME AND GRATE SHALL BE SO FITTED AND FINISHED AS TO PROVIDE A FIRM AND EVEN SEAT FOR ALL PORTIONS OF THE GRATE IN THE FRAME.
- BASINS SHALL BE PLACED TRUE TO LINE AND GRADE, PER PLAN.
- THE FRAMES AND GRATES SHALL BE FITTED, MATCHED AND MARKED PRIOR TO DELIVERY TO THE PROJECT.
- ANY SUBSTITUTIONS OF EQUAL QUALITY AND DIMENSIONS SHALL FIRST BE APPROVED BY THE ENGINEER PRIOR TO PROCUREMENT.
- ALL FRAMES AND GRATES SHALL BE COATED WITH A WATERBASED BITUMINOUS COATING, OR EQUAL.
- ALL CASTINGS SHALL HAVE THE WORDS "DUMP NO WASTE" AND "DRAINS TO WATERWAY" ALONG WITH A FISH LOGO CAST INTO THE GRATE AND/OR CURB BOX.

NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE VILLAGE ADMINISTRATOR.

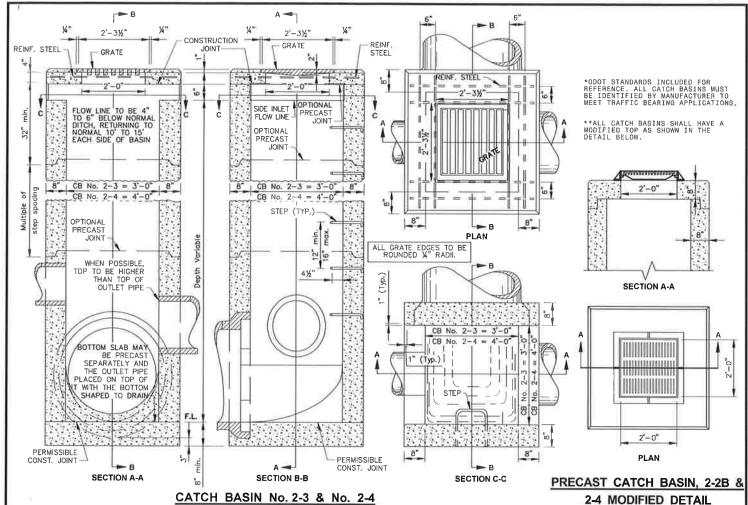
NOTE 2: BEFORE ANY EXCAVATING, CALL THE FOLLOWING NUMBER AT LEAST 48 HOURS IN ADVANCE: O.U.P.S. @ (800) 362-2764.

Village of Carrollton

80 Second Street S.W. Carrollton, Ohio 44615 Phone: (330) 627-2411

DEVELOPERS SUBDIVISION PLAN REQUIREMENTS STANDARD CONSTRUCTION DETAILS

CATCH BASIN No. 2-2B CAD FILE: M:\13049\AutoCAD\D-2 Catch Basin 2-2B.dwg APPRVD BY DRWN BY ISSUE DATE: SCALE: BJR MW NONE



GENERAL NOTES FOR CATCH BASINS

LOCATION AND ELEVATION, when given on the plans, shall be the top center of the grate for catch basins.

BRICK OR CONCRETE BLOCK will not be permitted for use to build, alter, modify, adjust or repair any catch basin, inlet, manhole, junction box or any other such structure.

CAST-IN-PLACE CONCRETE WALLS shall have a nominal thickness of 8". Bottom slab shall have a nominal thickness of 6".

PRE-CAST CONCRETE WALLS and bottom slab shall have a nominal thickness of 6" and be reinforced sufficiently to permit shipping and handling without damage to the structure. Litting hooks shall be cast into the catch basin to permit shipping and handling. Litting hooks shall be removed after catch basin in shipping and handling. Litting hooks shall be removed after catch basin installation. The litting holes shall be plugged watertight with nonshrink grout.

CATCH BASINS that have a depth greater than 42" shall be constructed in sections. Each section shall not exceed 42" in depth

STEPS shall be provided where depth exceeds 6'.

CONCRETE, cast-in-place, shall be Class QC1. All pre-cast concrete shall meet current ODOT requirements; 6%(±2%) air void content in the hardened concrete and be marked with the catch basin number.

OPENINGS for any pipe shall be OD+2" when fabricated or field cut. All field cut openings shall be mechanically cored. The use of saw-cutting, hammering or other impact devices is prohibited.

ADJUSTMENT RINGS OR COLLARS used to modify the main structure, when necessary, shall be precast concrete, 2° minimum thickness and shall be doweled and grouted to 18' base. Dowels shall be 12° diameter bars (#4 rebar) on 12° centers around the perimeter; 6° in from any corner and 3° in from the outside odges. Core dell and embed 6° into the main structure and into 12° the thickness

PIPE CONNECTIONS to catch basins shall be sealed using Class QC1 concrete with #8 coarse aggregate. Concrete collars shall be 6" thick minimum around the

CONSTRUCTION:

- CATCH BASINS MAY BE CAST-IN-PLACE OR PRE-CAST CONCRETE. CAST-IN-PLACE CONCRETE SHALL BE CLASS C. REINFORCED PRE-CAST CONCRETE SHALL BE AS SPECIFIED.
- MINIMUM WALL THICKNESS OF CAST-IN-PLACE BASINS SHALL BE B". MINIMUM WALL THICKNESS OF PRE-CAST INLETS AND BASINS SHALL BE 6".
- MINIMUM THICKNESS FOR BASES OF BASINS SHALL BE 6", CAST-IN-PLACE AND PRE-CAST.
- CATCH BASINS WITH PRE-CAST CONCRETE BASES SHALL BE PLACED ON A COMPACTED GRAVEL BED OF NO. 57 AGGREGATE, HAVING A MINIMUM THICKNESS OF 3%
- BRICK AND CONCRETE BLOCK ARE NOT PERMITTED MATERIALS FOR THE CONSTRUCTION OR MODIFICATION OF INLETS AND CATCH BASINS.
- INVERTS SHALL BE FORMED IN ALL BASIN STRUCTURES TO PROVIDE POSITIVE FLOW. NON-SHRINK GROUT TO FORM INVERTS.
- ALL PIPING THROUGH CATCH BASIN WALLS SHALL BE SEALED WITH A CLASS QCT CONCRETE COLLAR (MIN. OF 6" THICK) OR WITH CONSEAL CS-2100 (WATER PLUG) OR APPROVED EQUAL,

CASTINGS:

APPROVED FRAMES/GRATES FOR BASINS ARE SHOWN BELOW:

STRUCTURE TYPE	EJIW					
STRUCTURE TIPE	FRAME	GRATE	BACK			
2-3 & 2-4 CATCH BASINS	V-5626-2	V-5726 (HEAVY DUTY)	\times			

N.T.S

- ALL GRATES SHALL BE BICYCLE-SAFE AND SET CORRECTLY WITH THE DIRECTION OF WATER FLOW.
- THE FRAME AND GRATE SHALL BE SO FITTED AND FINISHED AS TO PROVIDE A FIRM AND EVEN SEAT FOR ALL PORTIONS OF THE GRATE IN THE FRAME.
- BASINS SHALL BE PLACED TRUE TO LINE AND GRADE, PER
- THE FRAMES AND GRATES SHALL BE FITTED, MATCHED AND MARKED PRIOR TO DELIVERY TO THE PROJECT.
- ANY SUBSTITUTIONS OF EQUAL QUALITY AND DIMENSIONS SHALL FIRST BE APPROVED BY THE ENGINEER PRIOR TO PROCUREMENT.
- ALL FRAMES AND GRATES SHALL BE COATED WITH A WATERBASED BITUMINOUS COATING, OR EQUAL.
- ALL CASTINGS SHALL HAVE THE WORDS "DUMP NO WASTE" AND "DRAINS TO WATERWAY" ALONG WITH A FISH LOGO CAST INTO THE GRATE AND/OR CURB BOX.

NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT
CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR
OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE VILLAGE ADMINISTRATOR.

NOTE 2: BEFORE ANY EXCAVATING, CALL THE FOLLOWING NUMBER AT LEAST 48 HOURS

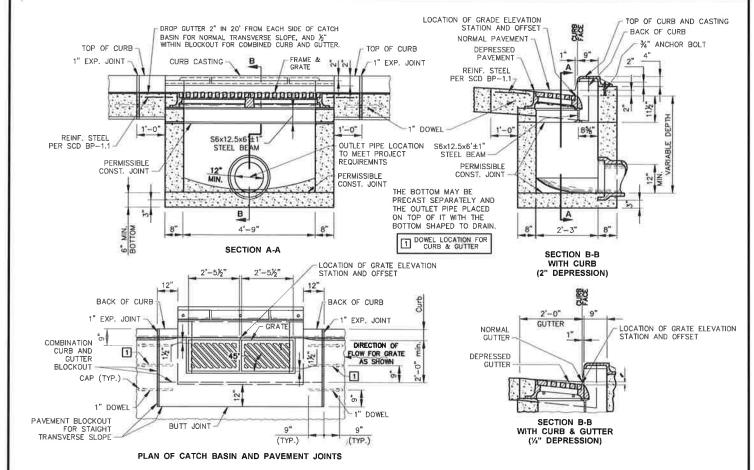
Village of Carrollton

80 Second Street S.W. Carrollton, Ohio 44615 Phone: (330) 627-2411

IN ADVANCE: O.U.P.S. @ (800) 362-2764. NO. DATE REVISION **DEVELOPERS SUBDIVISION PLAN REQUIREMENTS** STANDARD CONSTRUCTION DETAILS

CATCH BASIN No. 2-3 & 2-4

CAD FILE: M:\13049\Auto	CAD\D-2.1 Cate	SHEET:		
DRWN BY: BJR	APPRVD BY: MW	ISSUE DATE:	scale: NONE	D-Z.1



CATCH BASIN No. 3

GENERAL NOTES FOR CATCH BASINS

NOTES

LOCATION AND ELEVATION, when given on the plans, shall be the top center of the grate for catch basins.

BRICK OR CONCRETE BLOCK will not be permitted for use to build, aller, modify, adjust or repair any catch basin, inlet, manhole, junction box or any other such structure.

CAST-IN-PLACE CONCRETE WALLS shall have a nominal thickness of 8". Bottom slab shall have a nominal thickness of 6".

PRE-CAST CONCRETE WALLS and bottom slab shall have a nominal thickness of 6° and be reinforced sufficiently to permit shipping and handling without damage to the structure. Litting hooks shall be cast into the catch basin to permit shipping and handling. Litting hooks shall be removed after catch basin installation. The litting holes shall be plugged watertight with nonshrink grout.

CATCH BASINS that have a depth greater than 42" shall be constructed in sections. Each section shall not exceed 42" in depth,

STEPS shall be provided where depth exceeds 6's

CONCRETE, cast-in-place, shall be Class QC1. All pre-cast concrete shall meet current ODOT requirements; 6%(£2%) air void content in the hardened concrete and be marked with the catch basin number.

OPENINGS for any pipe shall be OD+2" when fabricated or field cut. All field cut openings shall be mechanically cored. The use of saw-cutting, hammering or other impact devices is prohibited.

ADJUSTMENT RINGS OR COLLARS used to modify the main structure, when necessary, shall be precast concrete, 2" minimum thickness and shall be doweled and grouted to it's base. Dowels shall be 12" diameter bars (#4 rebar) on 12" centers around the perimeter; 6" in from any corner and 3" in from the outside edges. Core drill and embed 6" into the main structure and into 1/2 the thickness of the added piece.

PIPE CONNECTIONS to catch basins shall be sealed using Class QC1 concrete with #8 coarse aggregate. Concrete collars shall be 6" thick minimum around the pipe.

A. CONSTRUCTION:

- 1. CATCH BASINS MAY BE CAST-IN-PLACE OR PRE-CAST CONCRETE, CAST-IN-PLACE CONCRETE SHALL BE CLASS C. REINFORCED PRE-CAST CONCRETE SHALL BE AS SPECIFIED.
- 2. MINIMUM WALL THICKNESS OF CAST-IN-PLACE BASINS SHALL BE 8". MINIMUM WALL THICKNESS OF PRE-CAST INLETS AND BASINS SHALL BE 6".
- MINIMUM THICKNESS FOR BASES OF BASINS SHALL BE 6", CAST-IN-PLACE AND PRE-CAST.
- 4. CATCH BASINS WITH PRE-CAST CONCRETE BASES SHALL BE PLACED ON A COMPACTED GRAVEL BED OF NO. 57 AGGREGATE, HAVING A MINIMUM THICKNESS OF 3".
- BRICK AND CONCRETE BLOCK ARE NOT PERMITTED MATERIALS FOR THE CONSTRUCTION OR MODIFICATION OF INLETS AND CATCH BASINS.
- INVERTS SHALL BE FORMED IN ALL BASIN STRUCTURES TO PROVIDE POSITIVE FLOW. U NON-SHRINK GROUT TO FORM INVERTS.
- ALL PIPING THROUGH CATCH BASIN WALLS SHALL BE SEALED WITH A CLASS GC1 CONCRETE COLLAR (MIN. OF 6" THICK) OR WITH CONSEAL CS-2100 (WATER PLUG) OR APPROVED EQUAL.

B. CASTINGS:

. APPROVED FRAMES/GRATES FOR BASINS ARE SHOWN BELOW:

STRUCTURE TYPE	EJIW						
OIRCOTORE TIPE	FRAME	GRATE	BACK				
2-3 & 2-4 CATCH BASINS	V-5626-2	V-5726 (HEAVY DUTY)	\times				

- 2. ALL GRATES SHALL BE BICYCLE-SAFE AND SET CORRECTLY WITH THE DIRECTION OF WATER FLOW.
- THE FRAME AND GRATE SHALL BE SO FITTED AND FINISHED AS TO PROVIDE A FIRM AND EVEN SEAT FOR ALL PORTIONS OF THE GRATE IN THE FRAME.
- 4. BASINS SHALL BE PLACED TRUE TO LINE AND GRADE, PER
- 5. THE FRAMES AND GRATES SHALL BE FITTED, MATCHED AND MARKED PRIOR TO DELIVERY TO THE PROJECT.
- 6. ANY SUBSTITUTIONS OF EQUAL QUALITY AND DIMENSIONS SHALL FIRST BE APPROVED BY THE ENGINEER PRIOR TO PROCUREMENT.
- 7. ALL FRAMES AND GRATES SHALL BE COATED WITH A WATERBASED BITUMINOUS COATING, OR EQUAL.
- 8. ALL CASTINGS SHALL HAVE THE WORDS "DUMP NO WASTE" AND "DRAINS TO WATERWAY" ALONG WITH A FISH LOGO CAST INTO THE GRATE AND/OR CURB BOX.

	CHANGE OTHER D FIRST BE	S, AND IN CONJUNCTION W ETAILS WHICH MAY APPLY SUBMITTED TO AND APPR ANY EXCAVATING, CALL TH	SED AS PRESENTED HERE, WITHOUT TH ANY GENERAL NOTES AND/OR ANY CHANGES TO THIS DETAIL SHALL DVED BY THE VILLAGE ADMINISTRATOR. E FOLLOWING NUMBER AT LEAST 48 HOURS P.S. @ (800) 362-2764.	Village of Carrollton 80 Second Street S.W. Carrollton, Ohio 44615 Phone: (330) 627-2411					
NO.	DATE	DATE REVISION		DEVELOPERS SUBDIVISION P STANDARD CONSTRUC					
				CATCH BASIN	No. 3				
				CAD FILE: M:\13049\AutoCAD\D-2.2 Catch Basin No. 3.dwg	SHEET:				

DRWN BY:

R.IR

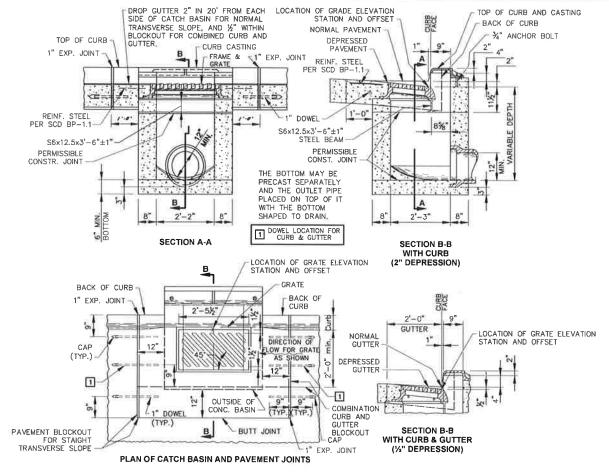
APPRVD BY:

MW

ISSUE DATE:

SCALE

NONE



CATCH BASIN No. 3A

GENERAL NOTES FOR CATCH BASINS

NOTES:

LOCATION AND ELEVATION, when given on the plans, shall be the top center of the grate for catch basins.

BRICK OR CONCRETE BLOCK will not be permitted for use to build, alter, modify, adjust or repair any catch basin, inlet, manhole, junction box or any other such structure.

CAST-IN-PLACE CONCRETE WALLS shall have a nominal thickness of 8^{*}_{*} Bottom slab shall have a nominal thickness of 6^{*}_{*}

PRE-CAST CONCRETE WALLS and bottom slab shall have a nominal thickness of 6° and be reinforced sufficiently to permit shipping and handling without damage to the structure. Lifting hooks shall be cast into the catch basin to permit shipping and handling. Lifting hooks shall be removed after catch basin installation. The lifting holes shall be plugged watertight with nonshrink grout.

CATCH BASINS that have a depth greater than 42" shall be constructed in sections. Each section shall not exceed 42" in depth.

STEPS shall be provided where depth exceeds 6'

CONCRETE, cast-in-place, shall be Class QC1. All pre-cast concrete shall meet current ODOT requirements; 69:(42%) air void content in the hardened concrete and be marked with the catch basin number.

OPENINGS for any pipe shall be OD+2" when fabricated or field cut. All field cut openings shall be mechanically cored. The use of saw-cutting, hammering or other impact devices is prohibited.

ADJUSTMENT RINGS OR COLLARS used to modify the main structure, when necessary, shall be precast concrete, 2" minimum thickness and shall be doweled and grouted to it's base. Dowels shall be 1/2" diameter bars (44 rebar) on 12" centers around the perimeter; 5" in from any corner and 3" in from the outside edges. Core drill and embed 6" into the main structure and into 1/2 the thickness of the added place.

PIPE CONNECTIONS to catch basins shall be sealed using Class QC1 concrete with #6 coarse aggregate. Concrete collars shall be 6" thick minimum around the pipe.

A. CONSTRUCTION:

- 1. CATCH BASINS MAY BE CAST-IN-PLACE OR PRE-CAST CONCRETE. CAST-IN-PLACE CONCRETE SHALL BE CLASS C. REINFORCED PRE-CAST CONCRETE SHALL BE AS SPECIFIED.
- 2. MINIMUM WALL THICKNESS OF CAST-IN-PLACE BASINS SHALL BE 8". MINIMUM WALL THICKNESS OF PRE-CAST INLETS AND BASINS SHALL BE 6".
- 3. MINIMUM THICKNESS FOR BASES OF BASINS SHALL BE 6", CAST-IN-PLACE AND PRE-CAST.
- CATCH BASINS WITH PRE-CAST CONCRETE BASES SHALL BE PLACED ON A COMPACTED GRAVEL BED OF NO, 57 AGGREGATE, HAVING A MINIMUM THICKNESS OF 3".
- BRICK AND CONCRETE BLOCK ARE NOT PERMITTED MATERIALS FOR THE CONSTRUCTION OR MODIFICATION OF INLETS AND CATCH BASINS,
- 6. INVERTS SHALL BE FORMED IN ALL BASIN STRUCTURES TO PROVIDE POSITIVE FLOW. US NON-SHRINK GROUT TO FORM INVERTS.
- 7. ALL PIPING THROUGH CATCH BASIN WALLS SHALL BE SEALED WITH A CLASS OCT CONCRETE COLLAR (MIN. OF 6" THICK) OR WITH CONSEAL CS-2100 (WATER PLUG) OR APPROVED EQUAL.

B. CASTINGS

1. APPROVED FRAMES/GRATES FOR BASINS ARE SHOWN BELOW:

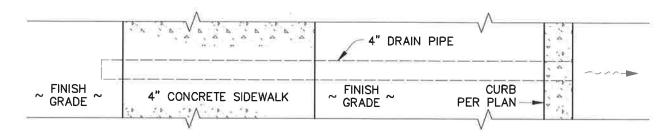
STRUCTURE TYPE	EJIW					
STREET ONE TITE	FRAME	GRATE	BACK			
2-3 & 2-4 CATCH BASINS	V-5626-2	V-5726 (HEAVY DUTY)	\times			

- ALL GRATES SHALL BE BICYCLE-SAFE AND SET CORRECTLY WITH THE DIRECTION OF WATER FLOW.
- THE FRAME AND GRATE SHALL BE SO FITTED AND FINISHED AS TO PROVIDE A FIRM AND EVEN SEAT FOR ALL PORTIONS OF THE GRATE IN THE FRAME.
- 4. BASINS SHALL BE PLACED TRUE TO LINE AND GRADE, PER
- 5. THE FRAMES AND GRATES SHALL BE FITTED, MATCHED AND MARKED PRIOR TO DELIVERY TO THE PROJECT.
- 6. ANY SUBSTITUTIONS OF EQUAL QUALITY AND DIMENSIONS SHALL FIRST BE APPROVED BY THE ENGINEER PRIOR TO PROCUREMENT.
- ALL FRAMES AND GRATES SHALL BE COATED WITH A WATERBASED BITUMINOUS COATING, OR EQUAL.
- 8. ALL CASTINGS SHALL HAVE THE WORDS "DUMP NO WASTE" AND "DRAINS TO WATERWAY" ALONG WITH A FISH LOGO CAST INTO THE GRATE AND/OR CURB BOX.

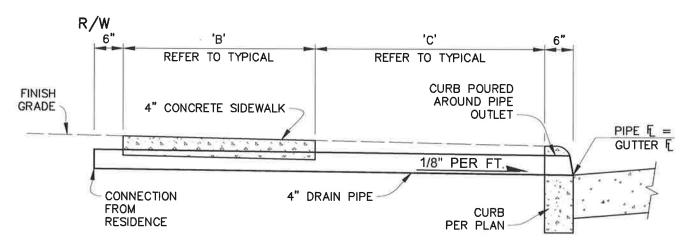
NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT
CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR
OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL
FIRST BE SUBMITTED TO AND APPROVED BY THE VILLAGE ADMINISTRATOR.

Village of Carrollton

NOT	OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE VILLAGE ADMINISTRATOR. NOTE 2: BEFORE ANY EXCAVATING, CALL THE FOLLOWING NUMBER AT LEAST 48 HOURS IN ADVANCE: O.U.P.S. @ (800) 362-2764.			80 Second Street S.W. Carrollton, Ohio 44615 Phone: (330) 627-2411					
NO.	NO. DATE REVISION				DEVELOPERS SUBDIVISION PLAN REQUIREMENTS STANDARD CONSTRUCTION DETAILS CATCH BASIN No. 3A				
				CAD FILE: M:\13049\AutoCAD\D-2.3 Catch Basin 3A.dwg DRWN BY: APPRVD BY: ISSUE DATE: SCALE: BJR MW NONE					D-2.3



PLAN

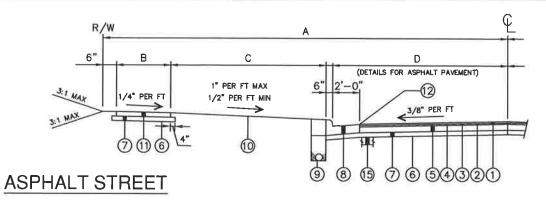


SECTION

NOTES:

- ROOF DRAIN OUTLETS THROUGH CURB AR NOT PERMITTED WHERE THERE IS NO STORM SEWER SYSTEM TO COLLECT RUN-OFF IN STREET.
- 2. CUTTING OF CURB FOR PLACEMENT OF ROOF DRAIN PIPING WILL NOT BE PERMITTED, UNLESS OTHERWISE AUTHORIZED BY THE BUILDING INSPECTOR.
- 3. WHERE ROOF DRAIN PIPE OUTLETS THROUGH CURB ARE PERMITTED, CONTRACTOR SHALL LOCATE AND PLACE DRAIN PIPE PRIOR TO FORMING OF NEW CURB AND SIDEWALK.
- 4. CUT TRAVERSE JOINT IN WALK OVER CENTER OF ROOF DRAIN PIPE, EITHER SAWED, TROWEL CUT OR FORMED TO DEPTH NOT LESS THAN ONE INCH DEEP. JOINTS TO BE 1/2 INCH MIN. WIDE AND SPACED NO MORE THAN FIVE (5) FEET MAXIMUM ON CENTERS THROUGHOUT LENGTH OF SIDEWALK.

NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE VILLAGE ADMINISTRATOR. NOTE 2: BEFORE ANY EXCAVATING, CALL THE FOLLOWING NUMBER AT LEAST 48 HOURS IN ADVANCE: O.U.P.S. @ (800) 362-2764.			Village of Carrollton 80 Second Street S.W. Carrollton, Ohio 44615 Phone: (330) 627-2411						
NO.	DATE	REVISION		DEVELOPERS SUBDIVISION PLAN REQUIREMENTS STANDARD CONSTRUCTION DETAILS THRU CURB ROOF DRAIN DETAILS WHEN CATCH BASINS ARE LOCATED ALONG CURB					
				CAD FILE: M:\13049\AutoCAD\D-3 Thru Curb Roof Drain.dwg DRWN BY: APPRVD BY: ISSUE DATE: SCALE:					D-3
				BJR	MW		NONE		D-0



LEGEND

(1) ITEM 441 (9) ITEM 605 1 1/2" ASPHALT CONCRETE SURFACE COURSE. UNDERDRAINS (SEE DETAIL PV-5) TYPE 1, MEDIUM DUTY, PG64-22, (448) (2) ITEM 407 TACK COAT FOR SURFACE COURSE (10) ITEM 659 SEEDING AND MULCHING (0.04 GAL/S.Y.) (11) ITEM 608 (3) ITEM 441 ASPHALT CONCRETE INTERMEDIATE COURSE, CONCRETE SIDEWALK WITH BASE; 6" DRIVE 1 1/2" TYPE 2, MEDIUM DUTY, PG64-22, (448) APPROACH AND 6" SIDEWALK BEHIND APPROACH. (12) ITEM 452 (4) ITEM 407 TACK COAT FOR INTERMEDIATE COURSE REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT WITH TYPE 2A INTEGRAL CURB (0.08 GAL/S.Y.) 5) ITEM 301 **BITUMINOUS AGGREGATE BASE** (13) ITEM 451.09 LONGITUDINAL BUTT OR SAWED JOINT W/30"x #5 6) ITEM 204 SUBGRADE COMPACTION AND PROOF ROLLING EPOXY COATED TIE BAR (24" C/C) SAW CUT AND SEAL JOINT; LONGITUDINAL, (14) ITEM 705.04 SUBBASE: TRANSVERSE AND CURB & GUTTER JOINTS **ASPHALT** 304 LIMESTONE CONCRETE 6" 304 LIMESTONE ALTERNATE SUBGRADE PREP. (SEE NOTE 4 BELOW) SIDEWALK 304 LIMESTONE (15) ITEM 206 EITHER EXCAVATION OF SOFT SUBGRADE WITH GEOGRID AND ADDITIONAL 304 LIMESTONE OR (8) ITEM 609 COMBINATION CURB & GUTTER;

> CONCRETE PAVEMENT *WHERE GRANULAR FILL IS USED TO REPLACE SOFT SUBBASE AREAS, EXTEND CUT AND GRANULAR TO UNDERDRAIN.

NOTES: 1, COMPACTION OF TRENCHES IN THE RIGHT-OF-WAY IS REQUIRED FOR ALL UTILITIES.

TYPE 2 MODIFIED (SEE DETAIL PV-6.0)

2. LIMESTONE SHALL BE USED FOR ALL AGGREGATE SUBBASE, FOR AGGREGATE IN ASPHALT CONCRETE SURFACE COURSE, AND FOR AGGREGATE IN CONCRETE.

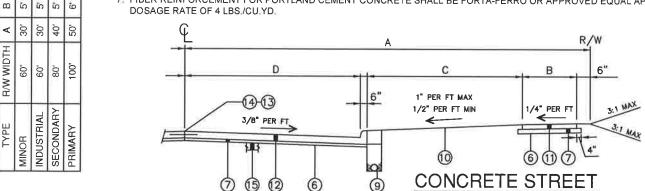
BLAST FURNACE SLAG IS NOT PERMITTED IN PORTLAND CEMENT CONCRETE MIXES.

4. IF SOIL-CEMENT STABILIZATION IS USED FOR SUBGRADE STABILIZATION, THE DESIGN PAVEMENT BUILDUP SHALL BE BASED ON GEOTECHNICAL RECOMMENDATIONS.

CONCRETE PAVEMENT TRANSVERSE JOINTS (SEE PV-16.0) ARE REQUIRED EVERY 15 FT. ON CENTER AND AT RE-ENTRY CORNERS; SKEW JOINTS 3' FROM PERPENDICULAR WITH BACK OF CURB.

SEAL ALL PAVEMENT PENETRATIONS (MANHOLES, WATER VALVES, ETC.) PER ODOT 451.16/705.04.

FIBER REINFORCEMENT FOR PORTLAND CEMENT CONCRETE SHALL BE FORTA-FERRO OR APPROVED EQUAL APPLIED AT A DOSAGE RATE OF 4 LBS./CU.YD.



NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE VILLAGE ADMINISTRATOR.

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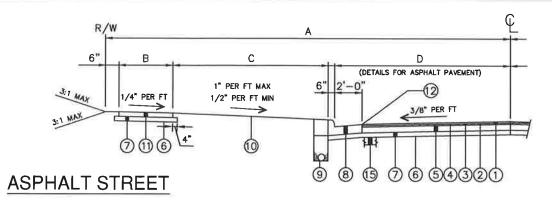
NOTE 2: BEFORE ANY EXCAVATING, CALL THE FOLLOWING NUMBER AT LEAST 48 HOURS

Village of Carrollton

SOIL-CEMENT STABILIZATION FOR ASPHALT OR

80 Second Street S.W. Carrollton, Ohio 44615 Phono: (330) 627 2411

	IN ADVANCE: O.U.P.S. @ (300) 362-2764.	Phone. (330) 627-2411
NO. DATE	REVISION		DEVELOPERS SUBDIVISION PLAN REQUIREMENTS STANDARD CONSTRUCTION DETAILS RESIDENTIAL PAVEMENT
			CAD FILE: M.13049\AutoCAD\R-1 Residential Pavement.dwg
			DRWN BY: APPRVD BY: ISSUE DATE: SCALE: JSB MW 03/24/20 NONE



LEGEND

(1) ITEM 441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, MEDIUM DUTY, PG64-22, (448) (2) ITEM 407 TACK COAT FOR SURFACE COURSE

(0.04 GAL/S.Y.)

(3) ITEM 441 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, MEDIUM DUTY, PG64-22, (448)

(4) ITEM 407 TACK COAT FOR INTERMEDIATE COURSE (0.08 GAL/S.Y.)

(5) ITEM 301 BITUMINOUS AGGREGATE BASE

6) ITEM 204 SUBGRADE COMPACTION AND PROOF ROLLING

SUBBASE: ASPHALT 304 LIMESTONE CONCRETE 6" 304 LIMESTONE SIDEWALK 304 LIMESTONE

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(8) ITEM 609 COMBINATION CURB & GUTTER; TYPE 2 MODIFIED (SEE DETAIL PV-6.0) (9) ITEM 605 UNDERDRAINS (SEE DETAIL PV-5)

(10) ITEM 659 SEEDING AND MULCHING

(11) ITEM 608 CONCRETE SIDEWALK WITH BASE: 6" DRIVE APPROACH AND 6" SIDEWALK BEHIND APPROACH.

(12) ITEM 452 REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT WITH TYPE 2A INTEGRAL CURB

(13) ITEM 451.09 LONGITUDINAL BUTT OR SAWED JOINT W/30"x #5 EPOXY COATED TIE BAR (24" C/C)

(14) ITEM 705.04 SAW CUT AND SEAL JOINT; LONGITUDINAL, TRANSVERSE AND CURB & GUTTER JOINTS

ALTERNATE SUBGRADE PREP, (SEE NOTE 4 BELOW)

(15) ITEM 206 EITHER EXCAVATION OF SOFT SUBGRADE WITH GEOGRID AND ADDITIONAL 304 LIMESTONE OR SOIL-CEMENT STABILIZATION FOR ASPHALT OR CONCRETE PAVEMENT

*WHERE GRANULAR FILL IS USED TO REPLACE SOFT SUBBASE AREAS, EXTEND CUT AND GRANULAR TO UNDERDRAIN.

NOTES: 1. COMPACTION OF TRENCHES IN THE RIGHT-OF-WAY IS REQUIRED FOR ALL UTILITIES.

2. LIMESTONE SHALL BE USED FOR ALL AGGREGATE SUBBASE, FOR AGGREGATE IN ASPHALT CONCRETE SURFACE COURSE, AND FOR AGGREGATE IN CONCRETE

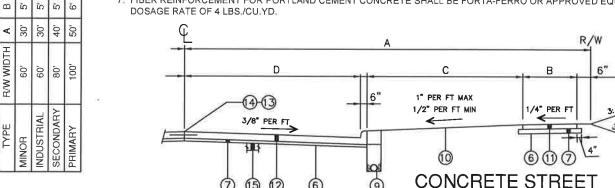
BLAST FURNACE SLAG IS NOT PERMITTED IN PORTLAND CEMENT CONCRETE MIXES.

4. IF SOIL-CEMENT STABILIZATION IS USED FOR SUBGRADE STABILIZATION, THE DESIGN PAVEMENT BUILDUP SHALL BE BASED ON GEOTECHNICAL RECOMMENDATIONS.

CONCRETE PAVEMENT TRANSVERSE JOINTS (SEE PV-16.0) ARE REQUIRED EVERY 15 FT. ON CENTER AND AT RE-ENTRY CORNERS; SKEW JOINTS 3' FROM PERPENDICULAR WITH BACK OF CURB.

SEAL ALL PAVEMENT PENETRATIONS (MANHOLES, WATER VALVES, ETC.) PER ODOT 451.16/705.04.

FIBER REINFORCEMENT FOR PORTLAND CEMENT CONCRETE SHALL BE FORTA-FERRO OR APPROVED EQUAL APPLIED AT A



NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE. WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE VILLAGE ADMINISTRATOR

NOTE 2: BEFORE ANY EXCAVATING, CALL THE FOLLOWING NUMBER AT LEAST 48 HOURS IN ADVANCE: O.U.P.S. @ (800) 362-2764.

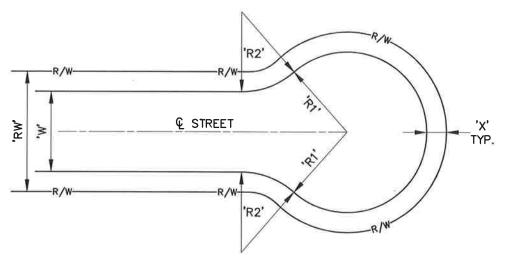
Village of Carrollton

80 Second Street S.W. Carrollton, Ohio 44615 Phone: (330) 627-2411

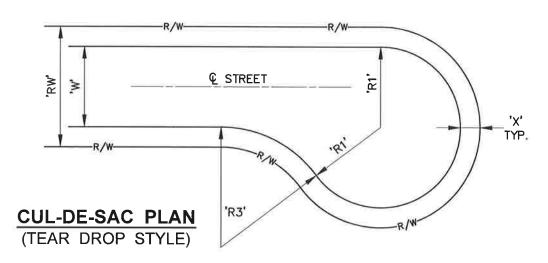
R-2

D. DATE	REVISION	DEVELOPERS SUBDIVISION PLAN REQUIREMENTS STANDARD CONSTRUCTION DETAILS COMMERCIAL-HEAVY TRUCK PAVEMENT
		CAD FILE: SHEET:

ISSUE DATE APPRVD BY MW 03/24/20 NONE



CUL-DE-SAC PLAN (HAMMER HEAD STYLE)



NOTE: TEAR DROP CUL-DE-SAC MAY BE CONSTRUCTED OPPOSITE HAND IF DESIRED.

TABLE OF DIMENSIONS

TYPE	'RW'	PAV'T WIDTH 'W'	RADIUS 'R1'	RADIUS 'R2'	RADIUS 'R3'	'W / 2'	'X'
MINOR	60'	24'	32'	24'	50'	12'	18'
INDUSTRIAL	60'	36'	40'	30'	50'	18'	12'
SECONDARY	80'	44"	50'	30'	50'	22'	18'
PRIMARY	100'	50'	60'	30'	50'	25'	25'

NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE VILLAGE ADMINISTRATOR. Village of Carrollton 80 Second Street S.W. Carrollton, Ohio 44615 NOTE 2: BEFORE ANY EXCAVATING, CALL THE FOLLOWING NUMBER AT LEAST 48 HOURS Phone: (330) 627-2411 IN ADVANCE: O.U.P.S. @ (800) 362-2764. DATE REVISION **DEVELOPERS SUBDIVISION PLAN REQUIREMENTS** STANDARD CONSTRUCTION DETAILS STANDARD CUL-DE-SAC DETAILS M:\13049\AutoCAD\R-3 Standard Cul De Sac Details.dwg R-3

DRWN BY:

BJR

APPRVD BY:

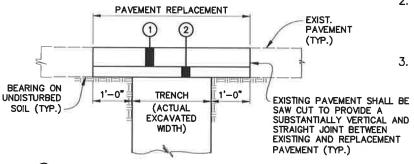
MW

ISSUE DATE:

SCALE:

NONE

PAVEMENT REPLACEMENT OVER UTILITY TRENCH, CONTINUED

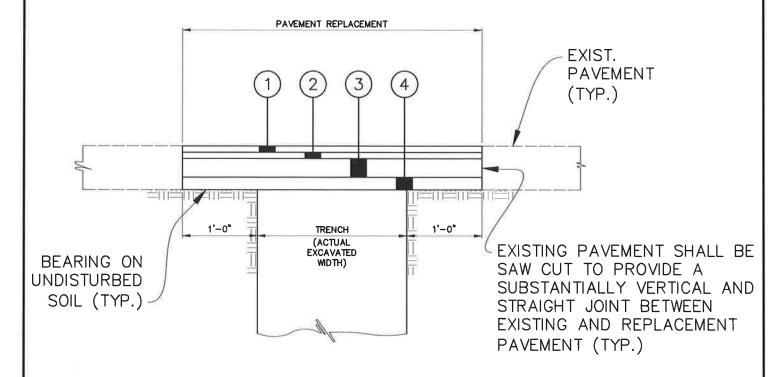


- (1) 6" TO 7" -- ITEM 452 NON-REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT (LIMESTONE AGGREGATE), MATCH EXISTING THICKNESS
- (2) 4" ITEM 304 AGGREGATE BASE (LIMESTONE)

CONCRETE SURFACE

- 1. ALL PAVEMENT AND SIDEWALK REPLACEMENT DETAILS SHOWN REPRESENT THE MINIMUM ACCEPTABLE REPAIR. IF EXISTING SURFACES EXCEED THESE DETAILS, THEN REPAIRED SURFACES SHALL MATCH THE EXISTING.
- 2. ALL JOINT BETWEEN EXISTING CURB OR PAVEMENT AND PAVEMENT REPLACEMENT SURFACE SHALL BE SEALED WITH A HOT APPLIED JOINT SEALER CONFORMING TO O.D.O.T. 705.04.
- 3. THE INTEGRITY OF CONCRETE PAVEMENTS WILL BE COMPROMISED BY SAW CUTTING. THEREFORE, THE ENTIRE PANEL OF PAVEMENT AFFECTED MUST BE REPLACED, UNLESS OTHERWISE AUTHORIZED BY THE SAFETY- SERVICE DIRECTOR OR THEIR DESIGNEE. IF DAMAGE OR SPALLING OCCURS DURING CONSTRUCTION ON AN ADJACENT PANEL. SAW CUTTING AND REPLACEMENT OF A PART OF THE ADJACENT PANEL WILL ALSO BE REQUIRED.
- 4. PAVEMENT REPLACEMENT SHALL INCLUDE RESTORATION OR REPLACEMENT OF ALL DAMAGED PAVEMENT MARKINGS.
- 5. LIMESTONE AGGREGATE SHALL BE USED IN ALL ASPHALT AND CONCRETE USED FOR PAVEMENT REPLACEMENT.
- 6. REFER TO ST-11, UT-2 AND UT-3 FOR UTILITY TRENCH BACKFILL REQUIREMENTS.
- 7. THESE NOTES ALSO APPLY TO PV-3-0.

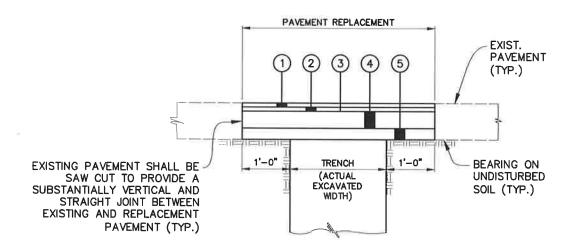
	NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE VILLAGE ADMINISTRATOR. NOTE 2: BEFORE ANY EXCAVATING, CALL THE FOLLOWING NUMBER AT LEAST 48 HOURS IN ADVANCE: O.U.P.S. @ (800) 362-2764.			Village of Carrollton 80 Second Street S.W. Carrollton, Ohio 44615 Phone: (330) 627-2411					
NO.	NO. DATE REVISION			DEV	STAN	IDARD (CONSTR		REQUIREMENTS DETAILS ACE
				CAD FILE: M:\13049\Auto DRWN BY: BJR	APPRVD BY:	rete surface.dw	scale:	Y	R-4



- 1) 1½" ITEM 441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, MEDIUM DUTY
- 2) 1½" TO 2" ITEM 441 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, MEDIUM DUTY, MATCH EXISTING THICKNESS
- 3 7" TO 8" ITEM 301 BITUMINOUS AGGREGATE BASE (PLACED IN 2 EQUAL LAYERS) MATCH EXISTING THICKNESS
- 4 4" ITEM 304 AGGREGATE BASE (LIMESTONE)

FULL DEPTH ASPHALT SURFACE

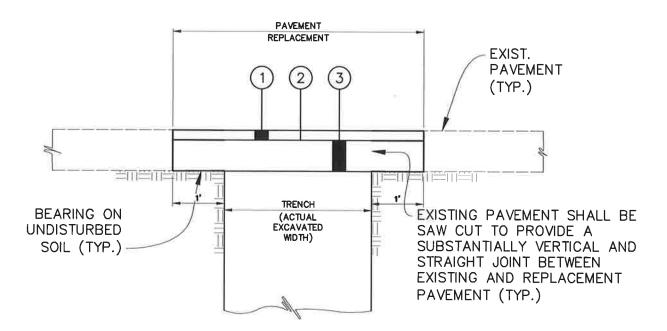
	NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE VILLAGE ADMINISTRATOR. NOTE 2: BEFORE ANY EXCAVATING, CALL THE FOLLOWING NUMBER AT LEAST 48 HOURS IN ADVANCE: O.U.P.S. @ (800) 362-2764.			Village of Carrollton 80 Second Street S.W. Carrollton, Ohio 44615 Phone: (330) 627-2411					
NO.	NO. DATE REVISION			STAN	DARD (CONSTR	RUCTION	REQUIREMENTS DETAILS SURFACE	
				CAD FILE: M:\13049\Auto DRWN BY: BJR	APPRVD BY:	depth Asphalt ISSUE DATE:	Surface.dwg SCALE: NONE		R-4.1



- 1½" ITEM 441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, MEDIUM DUTY
- 2 1½" TO 2" ITEM 441 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, MEDIUM DUTY
- (3) ITEM 407 TACK COAT (0.1 GAL. BITUMINOUS MATERIAL PER SQ. YD.)
- (4) 6" TO 7" ITEM 305 PORTLAND CEMENT CONCRETE BASE, MATCH EXISTING THICKNESS
- 5 4" ITEM 304 AGGREGATE BASE (LIMESTONE)

ASPHALT SURFACE ON CONCRETE OR BRICK BASE

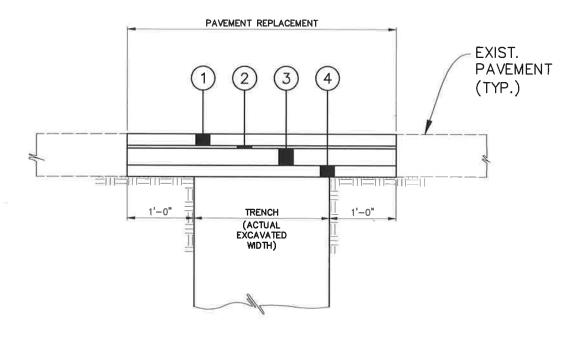
	NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE VILLAGE ADMINISTRATOR. NOTE 2: BEFORE ANY EXCAVATING, CALL THE FOLLOWING NUMBER AT LEAST 48 HOURS IN ADVANCE: O.U.P.S. @ (800) 362-2764.					ond Street		arrollto	
NO.	DATE	REVISION			STAN	DARD	CONSTI	RUCTION	REQUIREMENTS DETAILS OR BRICK BASE
				CAD FILE: M:\13049\Auto DRWN BY: BJR	OCAD\R-4.2 asp APPRVD BY: MW	halt surface on ISSUE DATE:	concrete or bri	ck base.dwg	R-4.2



- 3" ITEM 441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1, MEDIUM DUTY
- 2 ITEM 407 PRIME COAT (0.5 GAL. BITUMINOUS MATERIAL PER SQ. YD.)
- (3) 6" ITEM 304 AGGREGATE BASE (LIMESTONE)

CHIP & SEAL SURFACE ON AGGREGATE BASE

	NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE VILLAGE ADMINISTRATOR. NOTE 2: BEFORE ANY EXCAVATING, CALL THE FOLLOWING NUMBER AT LEAST 48 HOURS IN ADVANCE: O.U.P.S. @ (800) 362-2764.					ond Street		arrollto rollton, Ohi 27-2411	
NO.	NO. DATE REVISION			STAN	DARD	CONST	RUCTION	REQUIREMENTS DETAILS REGATE BASE	
				CAD FILE: M:\13049\Auto DRWN BY: BJR	OCAD\R-4.3 Chi APPRVD BY: MW		scale:	te Base.dwg	R-4.3

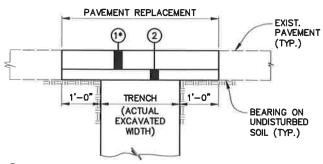


- (1) RELAID OR REPLACEMENT BRICKS
- (2) 1" ITEM 703.6 SAND CUSHION
- (3) 6" ITEM 305 PORTLAND CEMENT CONCRETE BASE
- (4) 4" ITEM 304 AGGREGATE BASE (LIMESTONE)

BRICK PAVEMENT

	NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE VILLAGE ADMINISTRATOR. NOTE 2: BEFORE ANY EXCAVATING, CALL THE FOLLOWING NUMBER AT LEAST 48 HOURS IN ADVANCE: O.U.P.S. @ (800) 362-2764.			Village of Carrollton 80 Second Street S.W. Carrollton, Ohio 44615 Phone: (330) 627-2411				
NO.				DEVELOPERS SUBDIVISION PL STANDARD CONSTRUCT				
				BRICK PAVEME	NT			
				CAD FILE: M:\tag{M:\tag{13049\AutoCAD\R-4.4 Brick Pavement.dwg}} DRWN BY: APPRVD BY: ISSUE DATE: SCALE: R.IR MW NONE	R-4.4			

PAVEMENT REPLACEMENT OVER UTILITY TRENCH, CONTINUED



- 1 4" ITEM 608 CONCRETE WALKS (LIMESTONE AGGREGATE)
- 6" ITEM 608 CONCRETE WALKS IN DRIVE APPROACH (LIMESTONE AGGREGATE)
- (2) 4" ITEM 304 AGGREGATE BASE (LIMESTONE)

SIDEWALKS N.T.S.

- ALL PAVEMENT AND SIDEWALK REPLACEMENT DETAILS SHOWN REPRESENT THE MINIMUM ACCEPTABLE REPAIR. IF EXISTING SURFACES EXCEED THESE DETAILS, THEN REPAIRED SURFACES SHALL MATCH THE EXISTING.
- 2. ALL JOINT BETWEEN EXISTING CURB OR PAVEMENT AND PAVEMENT REPLACEMENT SURFACE SHALL BE SEALED WITH A HOT APPLIED JOINT SEALER CONFORMING TO O.D.O.T. 705.04.
- 3. THE INTEGRITY OF CONCRETE PAVEMENTS WILL BE COMPROMISED BY SAW CUTTING. THEREFORE, THE ENTIRE PANEL OF PAVEMENT AFFECTED MUST BE REPLACED, UNLESS OTHERWISE AUTHORIZED BY THE SAFETY— SERVICE DIRECTOR OR THEIR DESIGNEE. IF DAMAGE OR SPALLING OCCURS DURING CONSTRUCTION ON AN ADJACENT PANEL, SAW CUTTING AND REPLACEMENT OF A PART OF THE ADJACENT PANEL WILL ALSO BE REQUIRED.
- 4. PAVEMENT REPLACEMENT SHALL INCLUDE RESTORATION OR REPLACEMENT OF ALL DAMAGED PAVEMENT MARKINGS.
- LIMESTONE AGGREGATE SHALL BE USED IN ALL ASPHALT AND CONCRETE USED FOR PAVEMENT REPLACEMENT.
- REFER TO ST-11, UT-2 AND UT-3 FOR UTILITY TRENCH BACKFILL REQUIREMENTS.
- 7. THESE NOTES ALSO APPLY TO PV-3-0.

CHANGES, AND II OTHER DETAILS FIRST BE SUBMIT NOTE 2: BEFORE ANY EXC	ALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT NOONJUNCTION WITH ANY GENERAL NOTES AND/OR WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL TED TO AND APPROVED BY THE VILLAGE ADMINISTRATOR. CAVATING, CALL THE FOLLOWING NUMBER AT LEAST 48 HOUR IN ADVANCE: O.U.P.S. @ (800) 362-2764.	Village of Carrollton 80 Second Street S.W. Carrollton, Ohio 44615 Phone: (330) 627-2411			
NO. DATE REVISION		DEVELOPERS SUBDIVISION PLAN RE STANDARD CONSTRUCTION D SIDEWALKS			
		CAD FILE: SH M:\13049\AutoCAD\R-4.5 sidewalks.dwg	EET:		
		DRWN BY: APPRVD BY: ISSUE DATE: SCALE: BJR MW NONE	K-4.5		

PAVEMENT REPLACEMENT OVER UTILITY TRENCH, CONTINUED

PAVEMENT REPLACEMENT 1 2 TRENCH (ACTUAL EXCAVATED WIDTH) EXIST. PAVEMENT (TYP.) EXIST. PAVEMENT (TYP.) EXIST. PAVEMENT (TYP.)

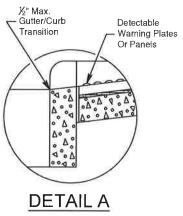
- 1 2" ITEM 411 STABILIZED CRUSHED AGGREGATE (LIMESTONE, SLAG, GRAVEL OR CINDERS TO MATCH EXISTING),
- 2 4" ITEM 304 AGGREGATE BASE (LIMESTONE)

CRUSHED AGGREGATE SURFACE

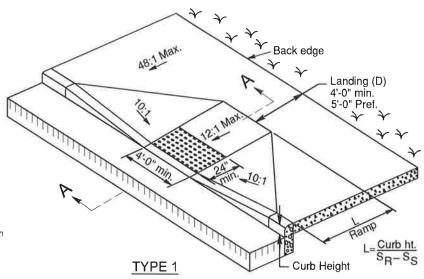
N.T.S.

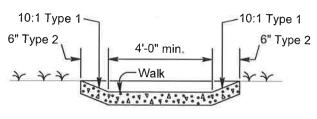
- ALL PAVEMENT AND SIDEWALK REPLACEMENT DETAILS SHOWN REPRESENT THE MINIMUM ACCEPTABLE REPAIR. IF EXISTING SURFACES EXCEED THESE DETAILS, THEN REPAIRED SURFACES SHALL MATCH THE EXISTING.
- 2. ALL JOINT BETWEEN EXISTING CURB OR PAVEMENT AND PAVEMENT REPLACEMENT SURFACE SHALL BE SEALED WITH A HOT APPLIED JOINT SEALER CONFORMING TO O.D.O.T. 705.04.
- 3. THE INTEGRITY OF CONCRETE PAVEMENTS WILL BE COMPROMISED BY SAW CUTTING. THEREFORE, THE ENTIRE PANEL OF PAVEMENT AFFECTED MUST BE REPLACED, UNLESS OTHERWISE AUTHORIZED BY THE SAFETY— SERVICE DIRECTOR OR THEIR DESIGNEE. IF DAMAGE OR SPALLING OCCURS DURING CONSTRUCTION ON AN ADJACENT PANEL, SAW CUTTING AND REPLACEMENT OF A PART OF THE ADJACENT PANEL WILL ALSO BE REQUIRED.
- PAVEMENT REPLACEMENT SHALL INCLUDE RESTORATION OR REPLACEMENT OF ALL DAMAGED PAVEMENT MARKINGS.
- LIMESTONE AGGREGATE SHALL BE USED IN ALL ASPHALT AND CONCRETE USED FOR PAVEMENT REPLACEMENT.
- REFER TO ST-11, UT-2 AND UT-3 FOR UTILITY TRENCH BACKFILL REQUIREMENTS.
- 7. THESE NOTES ALSO APPLY TO PV-3-0.

	NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE VILLAGE ADMINISTRATOR. NOTE 2: BEFORE ANY EXCAVATING, CALL THE FOLLOWING NUMBER AT LEAST 48 HOURS IN ADVANCE: O.U.P.S. @ (800) 362-2764.			Village of Carrollton 80 Second Street S.W. Carrollton, Ohio 44615 Phone: (330) 627-2411						
NO.	DATE	REVISION		DEVELOPERS SUBDIVISION PLAN REQUI STANDARD CONSTRUCTION DETA CRUSHED AGGREGATE SURFACE			DETAILS	гѕ		
П					CRUSH	IED AG	GREG	AIE SU		
					PPRVD BY: ISSUE	DATE: SO	e.dwg		R-4.6	



Detectable Warnings (truncated domes) are to be installed in the location shown. Dimensions of the domes are 24" from the back of the curb by the width of the ramp.





SECTION D-D

TRUNCATED DOMES: Install detectable warnings (truncated domes) for a distance of 24" from the back of the curb for the entire width of the ramp opening.

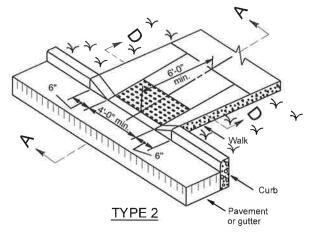
Panels will be laid on top of a 6" nonreinforced concrete base. Setting bed and joints to be mortared in accordance with manufacturer's instruction, or with a maximum 1/2" thick bed of latex modified cement

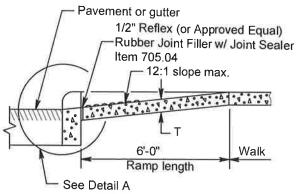
Panels shall be laid such that joints are level with adjoining joints so as to provide a smooth transition from panel to panel and from panel to concrete surface. The surface of any two adjacent units should not differ by more than 1/8" in height.

Detectable warning plates shall be East Jordan Iron Works Product #00700571 or approved equal. Installation of warning plates shall be in accordance with the manufacturer's written instructions. Lettering on the warning plates shall be oriented in the same direction on each

Refer to ODOT SCD BP-7.1 and BP-7.2 for additional notes regarding curb ramps and detectable warnings.

Handicap Ramps Must Be ADA Compliant.





SECTION A-A

T= 6" MIN. FOR RESIDENTIAL STREETS T= 8" MIN. FOR COMMERCIAL/HIGH TRAFFIC STREETS

NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE VILLAGE ADMINISTRATOR.

Village of Carrollton

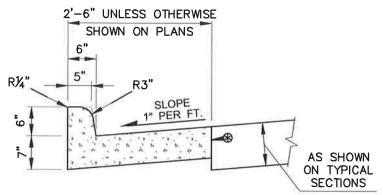
80 Second Street S.W. Carrollton, Ohio 44615 Phone: (330) 627-2411

DEVELOPERS SUBDIVISION PLAN REQUIREMENTS STANDARD CONSTRUCTION DETAILS

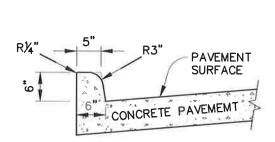
CLIDE DAMP DETAILS

	COND NAIME DETAILS								
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DRWN BY:	APPRVD BY:	ISSUE DATE:	SCALE:		K -カ				
JSB	MW	03/24/20	NONE						

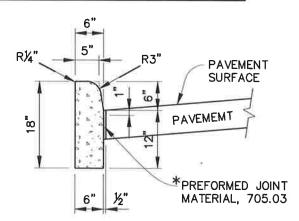
NOTE		RE ANY EXCAVATING, CALL THE IN ADVANCE: O.U.P.	FOLLOWING NUMBER AT LEAST 48 HOURS
NO.	DATE	REVISION	



TYPE 2 COMBINATION CONCRETE CURB & GUTTER



TYPE 2A-INTEGRAL CONCRETE CURB



TYPE 6 CONCRETE CURB

NOTES:

JOINTS: WHEN RIGID PAVEMENT IS CONSTRUCTED, ONE INCH PAVEMENT EXPANSION JOINTS SHALL EXTEND UP TO THE TOP OF THE CURB AND BE CONSTRUCTED IN THE CURB AND GUTTER SECTION IN SUCH A MANNER THAT JOINT SEAL WILL EXTEND FULL WIDTH OF GUTTER AND INTO CURB FACE A SUFFICIENT DISTANCE TO SEAL THE JOINT TO AN ELEVATION AT LEAST TWO (2) INCHES ABOVE FLOW LINE OF GUTTER. INSTALL DOWEL BARS IN THE CURB AND GUTTER SECTION AT EXPANSION JOINTS IDENTICAL WITH JOINTS IN PAVEMENT. ALL JOINTS CONSTRUCTED PERPENDICULAR TO EDGE OF CURB AND SURFACE OF THE PAVEMENT. TRAVERSE EXPANSION JOINT MATERIAL TO MEET REQUIREMENTS OF 705.03.

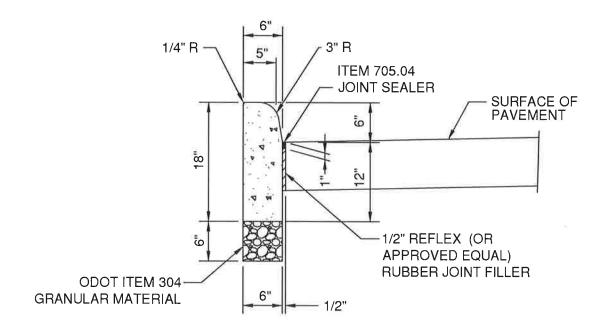
* EXPANSION JOINT MATERIAL AND JOINT SEALER IS NOT REQUIRED FOR PORTION OF CURB ADJACENT TO FLEXIBLE TYPE PAVEMENT. BOTH MATERIALS REQUIRED AS SHOWN FOR FULL HEIGHT OF RIGID PAVEMENT AND CONCRETE BASES.

® PROVIDE BUTT JOINTS BETWEEN COMBINED CURB ND GUTTER AND NEW RIGID PAVEMENT WITH TIE BARS OR HOOK BOLTS SPACED AT FIVE (5) FOOT INTERVALS. WHEN COMBINED CURB AND GUTTER ADJOINS NEW RIGID BASE OR EXISTING RIGID BASE OR PAVEMENT TO BE SURFACED WITH BITUMINOUS MATERIAL, A BUTT SHALL BE PROVIDED, BUT TIE BARS, HOOK BOLTS OR EXPANSION HOOKS BOLTS TO BE OMITTED.

PROVIDE 1/4 INCH CONTRACTION JOINT CONSTRUCTED AT TEN (10) FOOT INTERVALS. JOINT MAY BE MADE WITH USE OF METAL SEPARATOR PLATES, BY USE OF A GROOVING TOOL OR SAWED. DEPTH OF JOINT SHALL AVERAGE 1/5 OR MORE OF THE CURB HEIGHT.

TOP OF CURB OVER RESIDENTIAL SEWER LATERAL AND WATER SERVICE LINE SHALL BE STAMPED OR ETCHED WITH A "W" AND "S" BEFORE CONCRETE CURB CURES.

_									
	OTHER DI FIRST BE	AIL IS VALID ONLY WHEN USED S, AND IN CONJUNCTION WITH A ETAILS WHICH MAY APPLY. AN SUBMITTED TO AND APPROVEI ANY EXCAVATING, CALL THE FO IN ADVANCE: O.U.P.S.	Village of Carrollton 80 Second Street S.W. Carrollton, Ohio 44615 Phone: (330) 627-2411						
NO.	DATE	REVISION		DEVELOPERS SUBDIVISION PLAN REQUIREMENTS STANDARD CONSTRUCTION DETAILS CONCRETE CURBS AND					
			С					GUTTER	
				CAD FILE: M:\13049\AutoCAD\R-5.1 Concrete Curbs and Combined Curb and Gutter.dwg					
				DRWN 8Y:	APPRVD BY: MW	ISSUE DATE:	SCALE: NONE		K-5.1

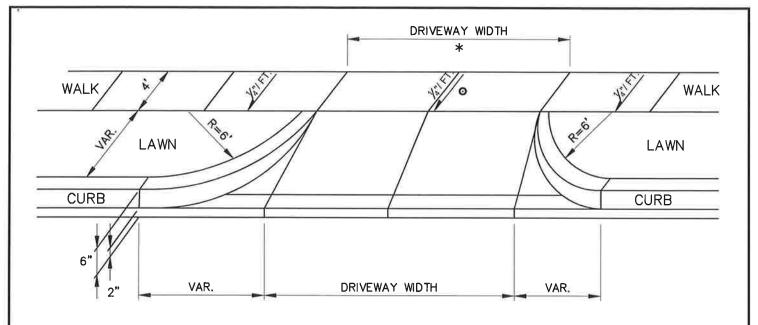


ODOT TYPE 6 CURB

NOTES:

 PREFORMED EXPANSION JOINT FILLER IS NOT REQUIRED WHERE CURB IS ADJACENT TO ASPHALT PAVEMENT.

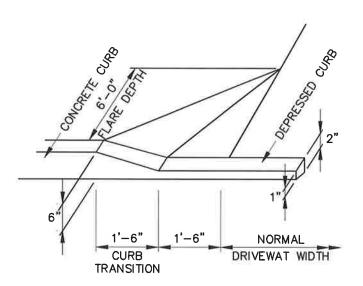
CHANGES, DETAILS W SUBMITTED	NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE VILLAGE ADMINISTRATOR. NOTE 2: BEFORE ANY EXCAVATING, CALL THE FOLLOWING NUMBER AT LEAST 48 HOURS IN ADVANCE: Q,U,P.S. @ (800) 362-2764.				Village of Carrollton 80 Second Street S.W. Carrollton, Ohio 44615 Phone: (330) 627-2411					
NO. DATE	REVISION		DEVELOPERS SUBDIVISION PLAN REQUIREME STANDARD CONSTRUCTION DETAILS					DETAILS		
			TYPE 6 CURB DETAIL					AIL		
			CAD FILE: M:\13049\Auto	CAD FILE: M:\13049\AutoCAD\R-5,2 Type 6 Curb delail.dwg				SHEET:		
			DRWN BY: JSB	APPRVD BY: MW	04/16/20	SCALE: NONE		R-5.2		



^{*} MATCH EXISTING DRIVE WIDTH UNLESS OTHERWISE DIRECTED.

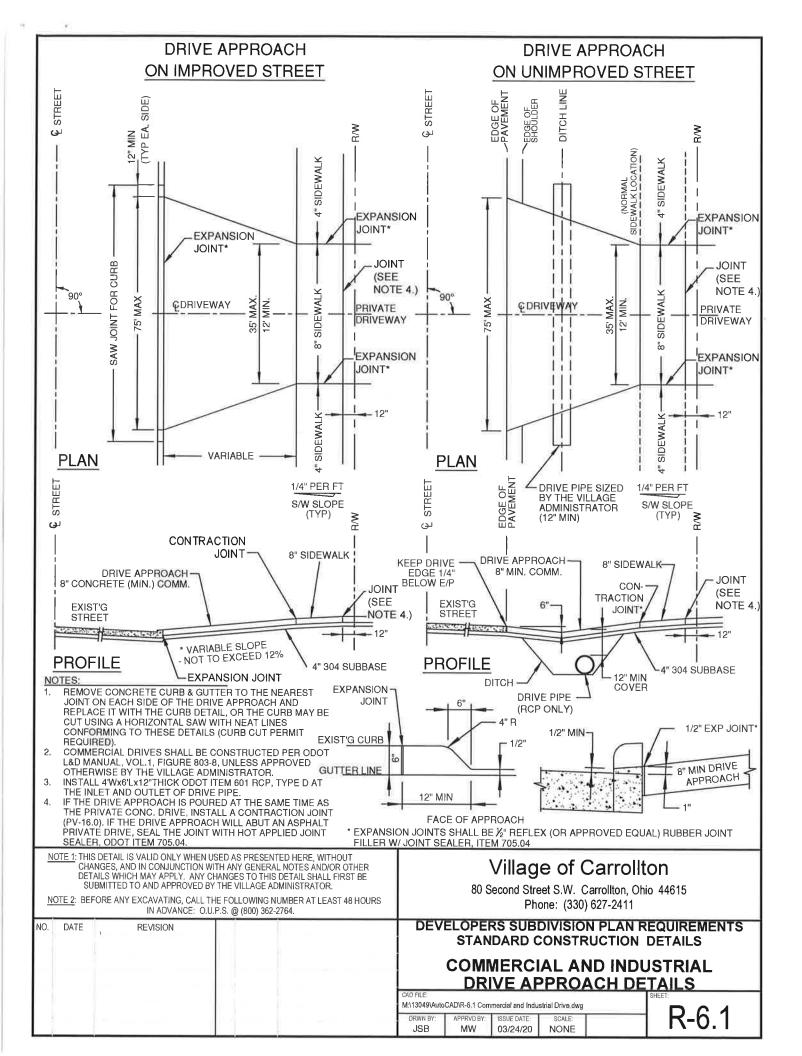
ISOMETRIC VIEW OF DRIVE OR ALLEY WITH CURB RETURNS

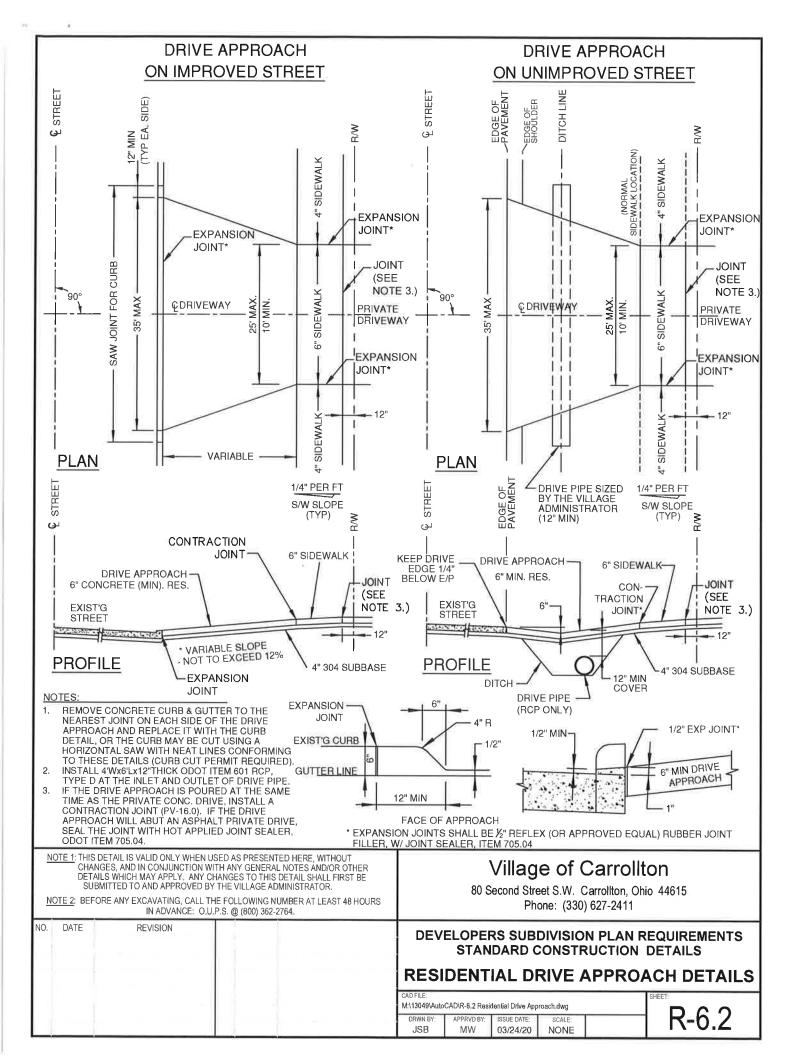
 $^{\mbox{\scriptsize O}}$ maintain slope regardless of whether sidewalk is present or not.

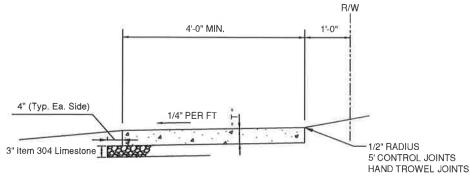


DRIVE WITHOUT CURB RETURNS

	NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE VILLAGE ADMINISTRATOR. NOTE 2: BEFORE ANY EXCAVATING, CALL THE FOLLOWING NUMBER AT LEAST 48 HOURS IN ADVANCE: O.U.P.S. @ (800) 362-2764.				Village of Carrollton 80 Second Street S.W. Carrollton, Ohio 44615 Phone: (330) 627-2411				
NO.	DATE	REVISION	DEVELOPERS SUBDIVISION PLAN REQUIREMENTS STANDARD CONSTRUCTION DETAILS DRIVEWAY TYPICAL DETAILS					DETAILS	
					APPRVD BY:	R-6			

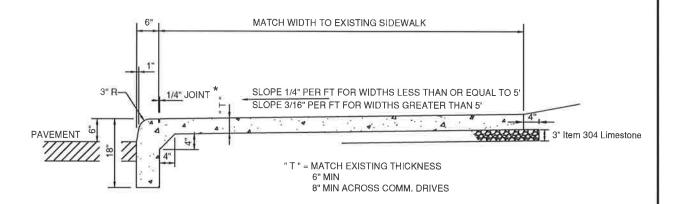






- "T" = 4" MIN FOR STD. WALKS
- "T" = 6" MIN FOR WALKS ACROSS RES. DRIVES & HANDICAP RAMPS
- "T" = 8" MIN FOR WALKS ACROSS COMM. DRIVES & HANDICAP RAMPS

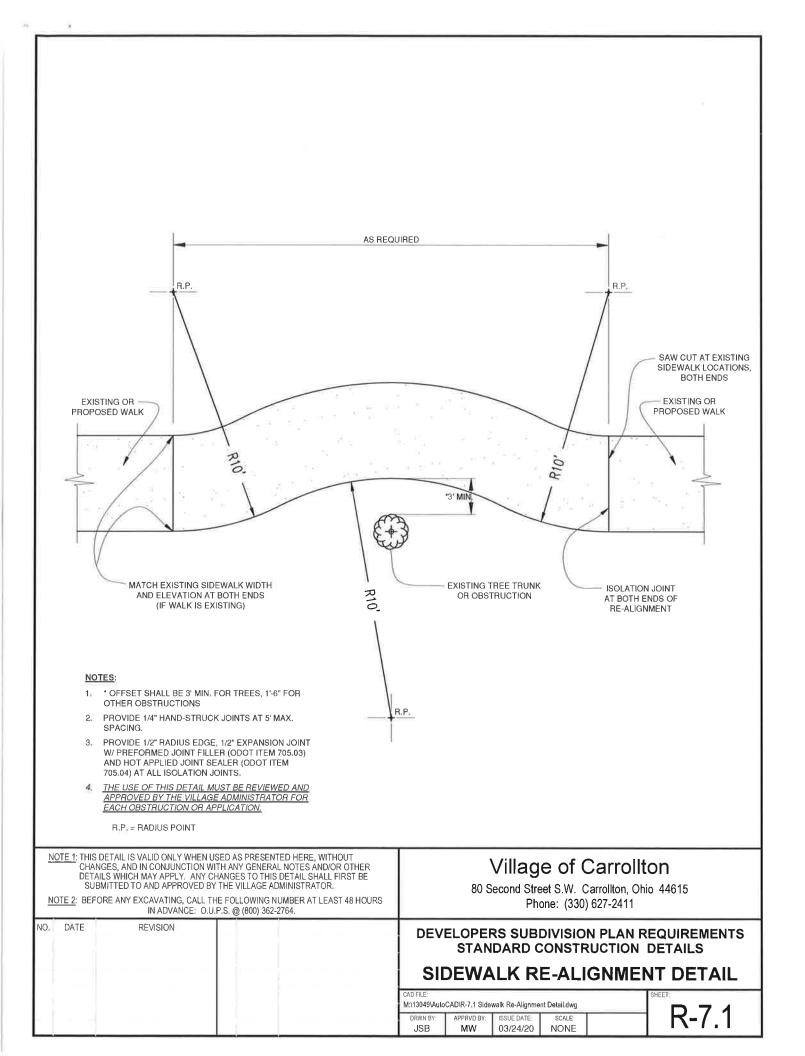
STANDARD SIDEWALK RESIDENTIAL/COMMERCIAL

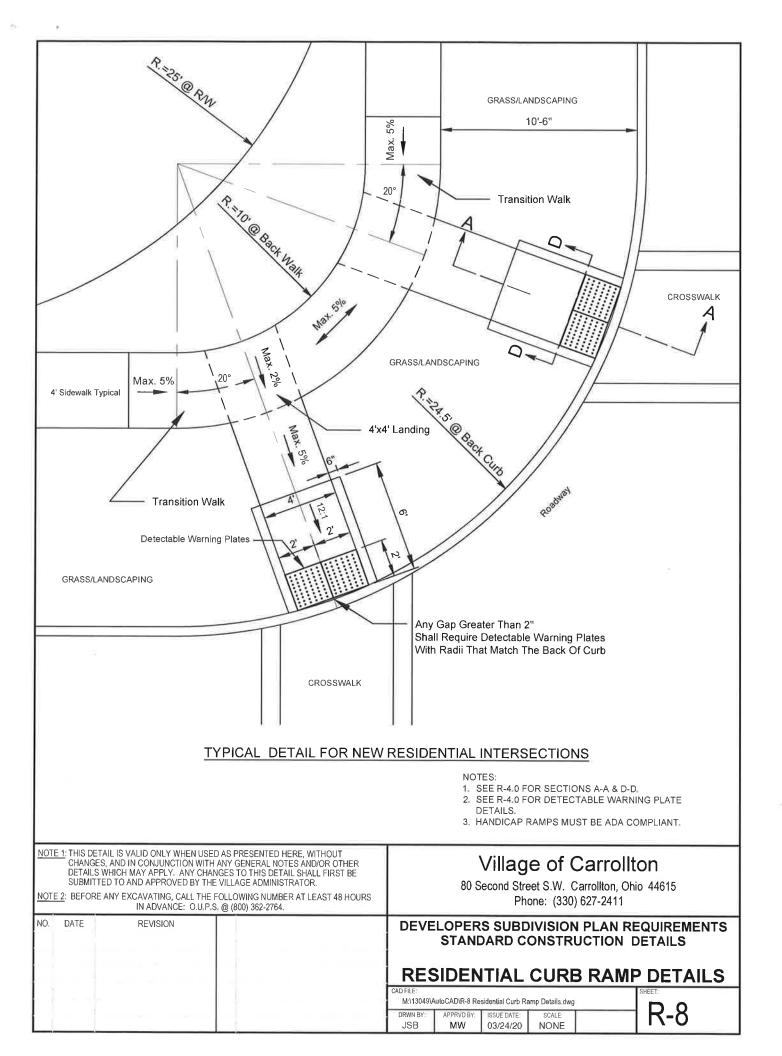


REPLACEMENT MONOLITHIC SIDEWALK/CURB

- 1. INSPECTION REQUIRED BEFORE SIDEWALKS ARE POURED.
- 2. PRIOR TO SIDEWALK CONSTRUCTION, EXCAVATE (OR CONSTRUCT FILL MATERIAL) TO FINAL SIDEWALK GRADE. THEN EXCAVATE MATERIAL TO A DEPTH OF "T" + 3". OVER EXCAVATE ANY REMAINING ORGANICS OR ORGANIC SOIL. PLACE BASE MATERIAL AS SPECIFIED HEREIN AND CONSTRUCT SIDEWALK. AFTER CONCRETE HAS CURED, BACKFILL WITH EXCAVATED MATERIAL AGAINST EACH SIDE OF THE SIDEWALK. BACKFILL SHALL BE FREE OF STONES LARGER THAN 2", REFUSE, OR ORGANIC MATERIAL.
- ALL CONCRETE SHALL BE 4000 PSI (ODOT ITEM 499.03) AND SHALL BE MADE WITH LIMESTONE AGGREGATE.
- 4. CONTINUOUS SECTIONS OF CONCRETE SIDEWALK SHALL BE ISOLATED (EXPANSION JOINT) INTO 55 FOOT SECTIONS OR AT PROPERTY LINES, WHICHEVER IS LESS. EXPANSION JOINTS SHALL BE CONSTRUCTED WITH 1/2" REFLEX (OR APPROVED EQUAL) RUBBER JOINT FILLER. HOT APPLIED JOINT SEALER (ODOT ITEM 705.04) SHALL BE PLACED ON TOP OF THE JOINT FILLER FOR A DEPTH OF 1/2". EXPANSION JOINTS SHALL ALSO BE USED WHERE CONCRETE SIDEWALK ABUTS CONCRETE CURBS, STRUCTURES, POLES, HYDRANTS AND BUILDINGS.

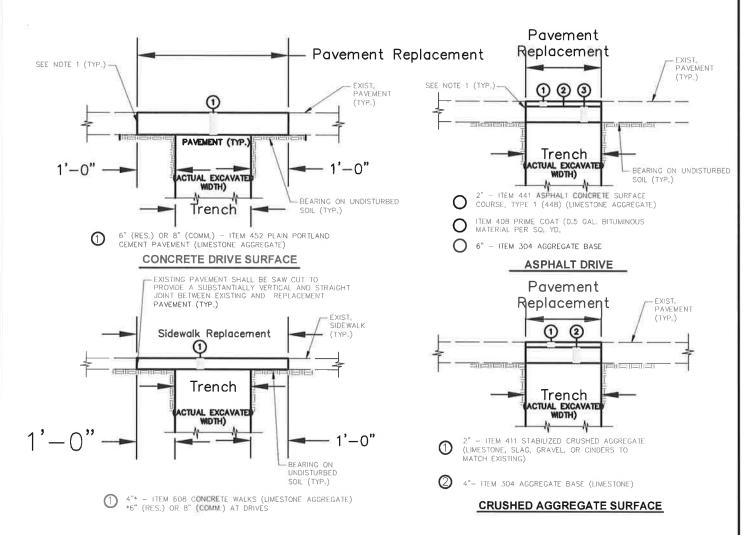
CHANG DETAIL SUBM	NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE VILLAGE ADMINISTRATOR. NOTE 2: BEFORE ANY EXCAVATING, CALL THE FOLLOWING NUMBER AT LEAST 48 HOURS IN ADVANCE: O.U.P.S. @ (800) 362-2764.				Village of Carrollton 80 Second Street S.W. Carrollton, Ohio 44615 Phone: (330) 627-2411					
NO. DATE	REVISION		DEVELOPERS SUBDIVISION PLAN REQUIREMENTS STANDARD CONSTRUCTION DETAILS SIDEWALK DETAILS					DETAILS		
		M:\1	D FILE: \13049\AutoC DRWN BY: JSB	CAD\R-7 Sidealk APPRVD BY: MW	Detail.dwg ISSUE DATE: 03/24/20	scale: NONE		R-7		





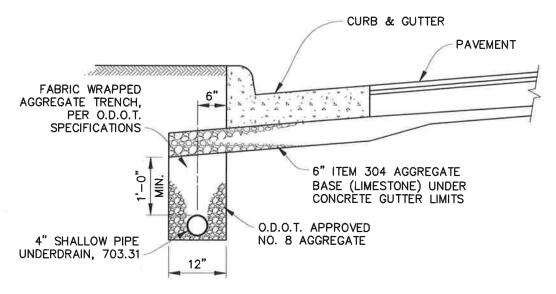
PAVEMENT REPLACEMENT NOTES:

- 1. ALL PAVEMENT AND SIDEWALK REPLACEMENT DETAILS SHOWN REPRESENT THE MINIMUM ACCEPTABLE REPAIR. IF EXISTING SURFACES EXCEED THESE DETAILS, THEN REPAIRED SURFACES SHALL MATCH THE EXISTING.
- 2. ALL EDGES OF PATCHED AREAS SHALL BE SEALED USING ODOT ITEM 409.
- ALL CURB REPLACEMENT SHALL BE INCLUDED WITH PAVEMENT REPLACEMENT. CURB REPLACEMENT SHALL MATCH THE WIDTH AND REVEAL OF CURB BEING REPLACED, AND SHALL EXTEND A MINIMUM OF 12" BELOW GRADE.

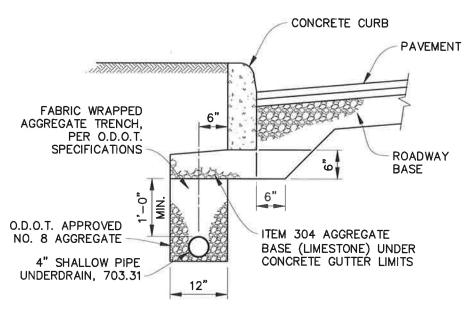


CONCRETE SIDEWALKS

	CHANGES OTHER DE FIRST BE	AIL IS VALID ONLY WHEN USE , AND IN CONJUNCTION WITH TAILS WHICH MAY APPLY. A SUBMITTED TO AND APPROV INY EXCAVATING, CALL THE IN ADVANCE: O.U.P.	Village of Carrollton 80 Second Street S.W. Carrollton, Ohio 44615 Phone: (330) 627-2411							
NO.	DATE	REVISION			STAN	DARD (CONSTI	RUCTION	REQUIREMENTS DETAILS NSTRUCTION	
					CAD FILE: M:113049lAutoCADIR-9 Drive and Sidewalk Reconstruction.dwg DRWN BY: APPRVD BY: ISSUE DATE: SCALE: BJR MW NONE					



WITH TYPE 2 OR TYPE 2-A CURB



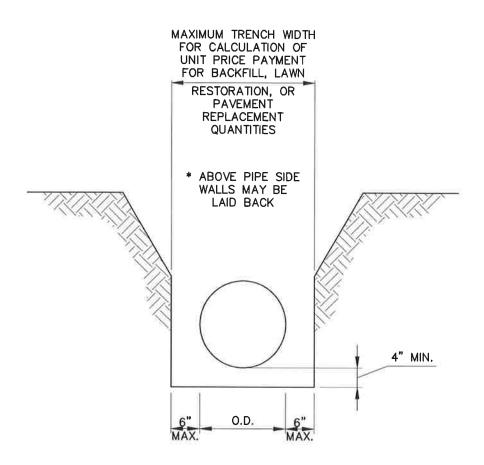
WITH TYPE 6 CONCRETE CURB

NOTES:

MATERIALS & METHODS OF INSTALLATION IN ACCORDANCE WITH LATEST EDITION OF O.D.O.T. "CONSTRUCTION AND MATERIALS SPECIFICATIONS" ITEM 605.

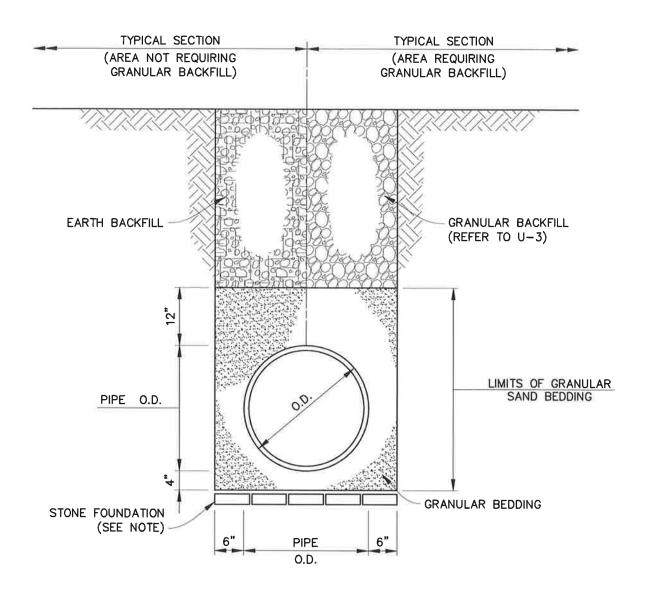
TRANSITION UNDERDRAIN TO OUTLET AS REQUIRED.

NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE VILLAGE ADMINISTRATOR. NOTE 2: BEFORE ANY EXCAVATING, CALL THE FOLLOWING NUMBER AT LEAST 48 HOURS IN ADVANCE: O.U.P.S. @ (800) 362-2764.					Village of Carrollton 80 Second Street S.W. Carrollton, Ohio 44615 Phone: (330) 627-2411					
NO.	DATE	REVISION			STAN	DARD (CONSTI	RUCTION	REQUIREMENTS DETAILS	
				CAD FILE: M:\13049\AutoCAD\R:\10 4 in. Pipe Underdrain Details.dwg DRWN BY: APPRVD BY: ISSUE DATE: SCALE: BJR MW NONE						



- 1. * INCLUDE ANY COSTS ASSOCIATED WITH RESTORATION, REPAIR AND REPLACEMENT, OUTSIDE THE ALLOWABLE TRENCH WIDTH IN THE COST OF WORK WITHIN THE ALLOWABLE TRENCH WIDTH.
- 2. THE WIDTH OF THE ACTUAL TRENCH BELOW THE ELEVATION OF THE TOP OF THE PIPE IS LIMITED TO THE WIDTHS ALLOWED BY THE APPLICABLE ASTM STANDARD FOR THE TYPE OF PIPE BEING USED.

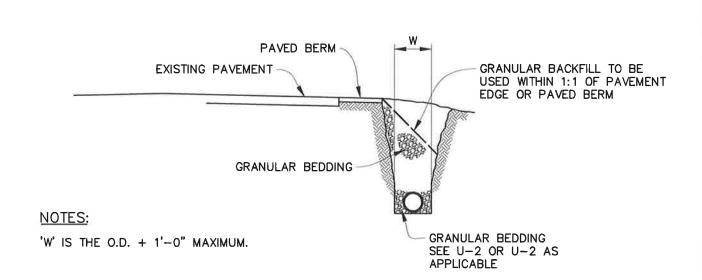
	NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE VILLAGE ADMINISTRATOR. NOTE 2: BEFORE ANY EXCAVATING, CALL THE FOLLOWING NUMBER AT LEAST 48 HOURS IN ADVANCE: O.U.P.S. @ (800) 362-2764.				Village of Carrollton 80 Second Street S.W. Carrollton, Ohio 44615 Phone: (330) 627-2411					
NO.	DATE	REVISION	DEV	STAN	DARD	CONSTR	RUCTION	REQUIREMENTS DETAILS DETAIL		
				CAD FILE: M:\13049\Auto DRWN BY: BJR	oCAD\U-1 Typic APPRVD BY: MW	al Trench Detai	I.dwg scale: NONE		U-1	



NOTES:

1. USE STONE FOUNDATION WHEN THE NATURAL FOUNDATION PROVES UNSUITABLE AS DETERMINED BY THE RESIDENT PROJECT INSPECTOR OR VILLAGE REPRESENTATIVE. STONE FOUNDATION SHALL BE DETERMINED BY VILLAGE.

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NO.	NO. DATE REVISION				STAN	DARD	CONSTI	RUCTION	REQUIREMENTS DETAILS L DETAILS		
				CAD FILE: M:\13049\AutoCAD\U-2 Pipe Bedding and Backfill Detail.dwg DRWN BY: APPRVD BY: ISSUE DATE: SCALE: BJR MW NONE					U-2		



NOTE 1: THIS DETAIL IS VALID ONLY WHEN USED AS PRESENTED HERE, WITHOUT CHANGES, AND IN CONJUNCTION WITH ANY GENERAL NOTES AND/OR OTHER DETAILS WHICH MAY APPLY. ANY CHANGES TO THIS DETAIL SHALL FIRST BE SUBMITTED TO AND APPROVED BY THE VILLAGE ADMINISTRATOR. NOTE 2: BEFORE ANY EXCAVATING, CALL THE FOLLOWING NUMBER AT LEAST 48 HOURS IN ADVANCE: O.U.P.S. @ (800) 362-2764.					Village of Carrollton 80 Second Street S.W. Carrollton, Ohio 44615 Phone: (330) 627-2411						
NO.	DATE	REVISION		1	STAN	DARD (CONSTRUC	FILL	EQUIREMENTS DETAILS DETAIL		
l				CAD FILE: M:1/3049iAutoCADIU-3 Granular Backfill Detail Trench.dwg DRWN BY: APPRVD BY: ISSUE DATE: SCALE: BJR MW NONF							