

TOWN OF WAKE FOREST, NC
PRE-APPROVED MATERIAL/PRODUCT LIST

STREETS & DRAINAGE

Last Revision: 3/11/14
 Effective Date: _____, 2014

Contract Number: _____

LINKS TO SPECIFIC PRODUCTS

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[Concrete Grade Rings](#)

[Catch Basin, Drop Inlet- Iron Casting](#)

[Flared End Sections - Concrete](#)

[Geotextile Fabrics - Woven](#)

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[Manholes – Precast Concrete](#)

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[Ram-Nek Joint Sealant](#)

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Streets & Drainage
 PRE-APPROVED MATERIAL/PRODUCT LIST
 Town of Wake Forest

Reinforced Concrete Pipe
 (Special Fittings and Flared Ends)



Specification Section: 02700

Standard Details: 2.52, 2.53,

Standard: ASTM C76/AASHTO M170, Class III, IV or V; ASTM C655, tongue and groove with mastic or butyl sealants

Approved Manufacturer	Size	Class
<input type="checkbox"/> Hanson Pipe & Precast	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> III <input type="checkbox"/> IV <input type="checkbox"/> V
<input type="checkbox"/> MC Precast	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> III <input type="checkbox"/> IV <input type="checkbox"/> V
<input type="checkbox"/> Oldcastle	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> III <input type="checkbox"/> IV <input type="checkbox"/> V

LINKS TO MANUFACTURERS

- Hanson Pipe & Precast: http://www.hansonpipeandprecast.com/products_drainage.htm?3
- MC Precast: <http://www.mcprecast.com/productdetails.asp?prod=16>
- Oldcastle:
<http://www.oldcastleprecast.com/plants/NCProductsGreensboro/products/drainage/stormwater/Pages/ReinforcedConcretePipe.aspx>

Precast Concrete Manholes



Specification Section: 02700

Standard Details: 2.60, 2.61

Standard: ASTM C478, Type II Cement, AASHTO M199

Approved Manufacturer/Product	Detail	Size	Other
<input type="checkbox"/> Lindsay Concrete (formerly Stay-Right Precast Concrete, Inc.)			
<input type="checkbox"/> Hanson Pipe & Precast, Inc. (formerly Carolina Precast)			
<input type="checkbox"/> Mack Industries			

LINKS TO MANUFACTURERS:

- Lindsay Concrete: <http://stayright.lindsayconcrete.com/Products/Product-5.aspx?iid=11>
- Hanson Pipe & Precast: http://www.hansonpipeandprecast.com/products_pmww.htm?3
- Mack Industries: <http://www.mackconcrete.com/precastproducts.html>

Concrete Grade Rings



Specification Section: 02700

Standard Details: 2.60, 2.61

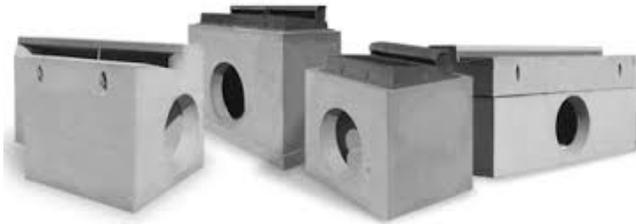
Standard: ASTM C478, Type II Cement. Thickness: Max. 6"; Min. 2". The top grade ring should be 2", total height not to exceed 18"

Approved Manufacturer/Product	Thickness
<input type="checkbox"/> Lindsay Concrete (formerly Stay-Right Precast Concrete, Inc.)	
<input type="checkbox"/> Hanson Pipe & Precast, Inc. (formerly Carolina Precast)	
<input type="checkbox"/> Mack Industries	

LINKS TO MANUFACTURERS:

- Lindsay Concrete: <http://stayright.lindsayconcrete.com/Products/Product-5.aspx?iid=11>
- Hanson Pipe & Precast: http://www.hansonpipeandprecast.com/products_pmww.htm?3
- Mack Industries: <http://www.mackconcrete.com/precastproducts.html>

Precast Concrete Catch Basins & Junction Boxes



Specification Section: 02700
Standard Details: 2.50, 2.51, 2.54, 2.55, 2.56
Standard: ASTM C913, Type II Cement, reinforced precast drainage inlets (Curb Inlets, Drop inlets and Catch Basins); rated for HS-20 as applicable.

Approved Manufacturer/Product	Detail	Size
<input type="checkbox"/> Lindsay Concrete (formerly Stay-Right Precast Concrete, Inc.)		
<input type="checkbox"/> Hanson Pipe & Precast, Inc. (formerly Carolina Precast)		
<input type="checkbox"/> MC Precast		

LINKS TO MANUFACTURERS

- Lindsay Concrete: <http://www.lindsayconcrete.com/Products/Sewer-Drainage.aspx?iid=30>
- Hanson Pipe & Precast: http://www.hansonpipeandprecast.com/products_drainage.htm?3
- MC Precast: <http://www.mcprecast.com/productdetails.asp?prod=9>

Butyl Rubber Sealant



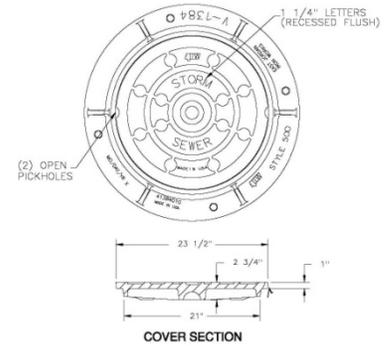
Specification Section(s): 02700
Standard Details: 2.60, 2.61
Standard: FS SS-S-00210 (210-A), ASTM C990, Type 1, Rope Form (¾" diameter [min.]) or Type 2, Flat Form

Approved Manufacturer/Product	Supplemental Information
<input type="checkbox"/> ConSeal Concrete Sealants, Inc.	<input type="checkbox"/> CS-102 (only)
<input type="checkbox"/> Henry Company, Sealants Division	<input type="checkbox"/> RN103 – Ram-Nek Joint Sealant (Coils) <input type="checkbox"/> RN101 – Ram-Nek Joint Sealant (Strips)

LINKS TO MANUFACTURERS:

- ConSeal Concrete Sealants, Inc.: http://www.conseal.com/index.php?option=com_content&view=article&id=13:cs-102-butyl-rubber-sealant-for-all-precast-structures&catid=2:by-product&Itemid=4
- Henry Company, Sealants Division.: <http://henry.com/sealants/concretesealants/jointsealants>

Manhole Frame and Cover



Specification Section: 02700
Standard Details: 2.60, 2.61
Standard: ASTM A48, Grade 35B, AASHTO M 306, uncoated

Approved Manufacturer/Product	Use	
	Standard	Watertight
<input type="checkbox"/> Capitol Foundry of Virginia, Inc.	-	MH-2001-WT
<input type="checkbox"/> East Jordan Iron Works, Inc.	V-1384 (41384056C03)	V-2384 (NCR07-3010C)
<input type="checkbox"/> US Foundry	RCR-2001; 669KL	-

LINKS TO MANUFACTURERS:

- Capital Foundry of Virginia, Inc.: *Company does not have either a website or online catalog.*
- East Jordan Iron Works, Inc.: <http://americas.ejco.com/webapp/wcs/stores/servlet/SearchView?filter=&storeId=10054&catalogId=13051&langId=-1&clear=true&fromPage=searchPage&firstSearchPage=searchPage&q=1384>
- US Foundry: <http://www.usfoundry.com/usfoundry-products/catalog/ringsandcovers/ringssummary/90>

Manhole & Valve Cast Iron Riser Rings



Specification Section: 02700

Standard Details: 2.60 (manhole)

Standard: ASTM A48, Grade 35B, AASHTO M306, uncoated

Approved Manufacturer/Product	Use			
	Manhole Riser Rings w/ Set Screws		Valve Riser Rings	
	Height	Item No.	Height	Item No.
<input type="checkbox"/> American Highway Products, Ltd ^{a,b}	<input type="checkbox"/> 1-inch <input type="checkbox"/> 1 ½-inch <input type="checkbox"/> 2-inch		<input type="checkbox"/> 1-inch <input type="checkbox"/> 2-inch <input type="checkbox"/> 3-inch	
<input type="checkbox"/> Capitol Foundry ^a	<input type="checkbox"/> 1-inch <input type="checkbox"/> 1 ½-inch <input type="checkbox"/> 2-inch	2001-1 2001-1 ½ 2001-2	<input type="checkbox"/> 1-inch <input type="checkbox"/> 2-inch <input type="checkbox"/> 3-inch	VBX-1 VBX-2 VBX-3
<input type="checkbox"/> East Jordan Iron Works, Inc.	<input type="checkbox"/> 1-inch <input type="checkbox"/> 1 ½-inch <input type="checkbox"/> 2-inch	M7235010102R M1235010152R M123501202R	<input type="checkbox"/> 1-inch <input type="checkbox"/> 2-inch <input type="checkbox"/> 3-inch	85008011 85008016 85008021

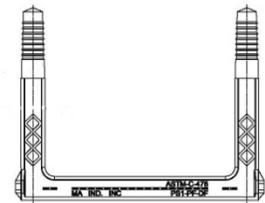
^aDoes not have set screw

^bSpecify riser height when ordering

LINKS TO MANUFACTURERS:

- American Highway Products, Ltd.: <http://www.ahp1.com/index.php>
- Capital Foundry of Virginia, Inc.: *Company does not have either a website or an online catalog.*
- East Jordan Iron Works, Inc.:
<http://americas.ejco.com/webapp/wcs/stores/servlet/SearchView?filter=&storeId=10054&catalogId=13051&langId=-1&clear=true&fromPage=searchPage&firstSearchPage=searchPage&q=1384> (type in item number in search box for the various items listed above)

Manhole Steps



Specification Section: 02700

Standard Details: 2.50, 2.51, 2.54, 2.55, 2.56, 2.60, 2.61

Standard: ASTM C478 and D4101, AASHTO M199.

Copolymer polypropylene plastic with embedded ½" diameter ASTM A615 Grade 60 steel reinforcement.

Manufacturer & Product	Model	Reinforcement
<input type="checkbox"/> M. A. Industries, Inc.	PS1-PF	½" dia. grade 60 rebar
<input type="checkbox"/>		

LINKS TO MANUFACTURERS:

- M. A. Industries, Inc.
http://www.manholestep.com/index.php?option=com_virtuemart&Itemid=87&vmcchk=1&Itemid=87.

Geotextile Fabrics



Woven



Nonwoven

Specification Section: 02700

Standard Details: N/A

Standard: NCDOT Standard Specifications for Roadways and Structures, Section 1056; Type 1 for Subsurface Drains, NCDOT Type 2 for Filter Fabric below rip rap, NCDOT Type 3 Class A or B for Silt Fence, and NCDOT Type 4 for Soil Stabilization

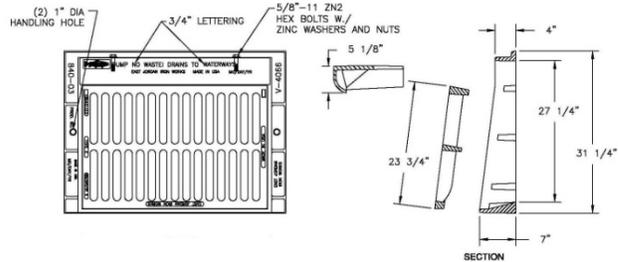
Approved Manufacturer	Product
<input type="checkbox"/> Geotextile Systems by Propex	<input type="checkbox"/>
<input type="checkbox"/> Huesker, Inc.	<input type="checkbox"/>
<input type="checkbox"/> Tensar Intl. Corp	<input type="checkbox"/>
<input type="checkbox"/> US Fabrics, Inc.	<input type="checkbox"/>

LINKS TO MANUFACTURES:

- Huesker: <http://www.huesker.fr/usa/geosynthetics?PHPSESSID=3dc70b6f4ff3e5795ceaa0f9550cab93>
- Geotextile Systems by Propex: <http://geotextile.com/product/geotex.html>
- Tensar: <http://www.tensarcorp.com/>
- US Fabrics Inc.: <http://www.usfabricsinc.com/products/categories>



Iron Castings
(Catch Basin Grate & Frames, Combination Frame, Cover & Hood)



Specification Section: 02700

Standard Details: 2.50, 2.51, 2.55, 2.56, 2.71, 2.72

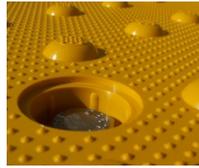
Standard: ASTM A48, Grade 35B, AASHTO M306, Heavy Duty, uncoated; Fish logo (Dump No Waste Drains to Waterways) required on grate or hood as applicable

Approved Manufacturer/Product	Catalog Number/Description	Product No
<input type="checkbox"/> Capitol Foundry	<input type="checkbox"/> DI 840.03 Comb Frame, Cover & Hood (NCDOT 840.03) <input type="checkbox"/> CB-2000 2x3 Grate & Frame	<input type="checkbox"/> Same <input type="checkbox"/> Same
<input type="checkbox"/> East Jordan Iron Works, Inc.	<input type="checkbox"/> V4066-1 Comb Frame, Cover & Hood (NCDOT 840.03) <input type="checkbox"/> V4867-2 2x3 Grate & 7" high Frame <input type="checkbox"/> V5660 2x3 Grate & 4" high Frame (reversible frame)	<input type="checkbox"/> 44066130B01 <input type="checkbox"/> 44867261 <input type="checkbox"/> 45660010 (4" frame) <input type="checkbox"/> 45660033 (2x3 grate)
<input type="checkbox"/> US Foundry	<input type="checkbox"/> USF 5181 Comb Frame, Cover & Hood (NCDOT 840.03) <input type="checkbox"/> USF 4137 (7" high frame)	<input type="checkbox"/> USF 5181-6420 (type E) <input type="checkbox"/> USF 4137-6237

LINKS TO MANUFACTURERS:

- Capitol Foundry: *Company does not have either a website or an online catalog.*
- East Jordan Iron Works:
http://americas.ejco.com/webapp/wcs/stores/servlet/Category?requestKey=1377792486355&grid=&page=0&langId=1&storeId=10054&catalogId=13051&categoryId=32554&filterQueries=ATTR_STR_7741124012283343355%3ARectangle (type in item number in search box for the various items listed above)
- US Foundry: <http://www.usfoundry.com/flipbook/#/167>; <http://www.usfoundry.com/flipbook/#/125> (type in item number in search box for other items)

ADA Detectable Warning System Surface



Composite



Cast Iron

Specification Section: 02700

Standard Details: 2.13, sheet 4

Standard: Meets ADAAG, PROWAG, and ANSI A117.1 requirements. Minimum light reflectance contrasting color between adjacent surface to be 70%. Acceptable detectable warning surface pad colors: red, yellow, black.

1. **Cast-In-Place Composite Replaceable Paver Tiles:** Slip resistant glass and/or carbon reinforced composite, min 11,600 psi tensile strength, colorfast UV resistant; can either be pre-filled with concrete and set in place or pressed into place (with penetrator anchors designed to permit replacement) in freshly poured concrete. Color to be dark gray or black. Curved in 5' radii increments.
2. **Cast Iron:** Cast iron non-slip textured surface with integral lugs on plate bottom. ASTM A48 Gray Iron, Class 35.

Manufacturer	Catalog Number/Description	Product
Composite:		
ADA Solutions, Inc.	<input type="checkbox"/> Cast-In-Place System	<input type="checkbox"/> ADA-CIP2448_2
	<input type="checkbox"/> Cast-In-Place Replaceable Radius System	<input type="checkbox"/> ADA-REP24RAD
Alerttile Detectable Warning Systems	<input type="checkbox"/> Alertcast Cast-In-Place Replaceable	<input type="checkbox"/>
Cast Iron		
East Jordan Iron Works (EJIW)	<input type="checkbox"/> Duralast 7005 Series	<input type="checkbox"/> 00700571 (24"x24")
	<input type="checkbox"/>	<input type="checkbox"/>

LINKS TO MANUFACTURERS:

- ADA Solutions, Inc.: http://adatile.reachlocal.net/replaceable_wet_set.php
- Alerttile: <http://alerttile.com/products-alertcast.shtml>
- EJIW: <http://americas.ejco.com/webapp/wcs/stores/servlet/SearchView?filter=&storeId=10054&catalogId=10001&langId=-1&clear=true&fromPage=searchPage&firstSearchPage=searchPage&q=7005>