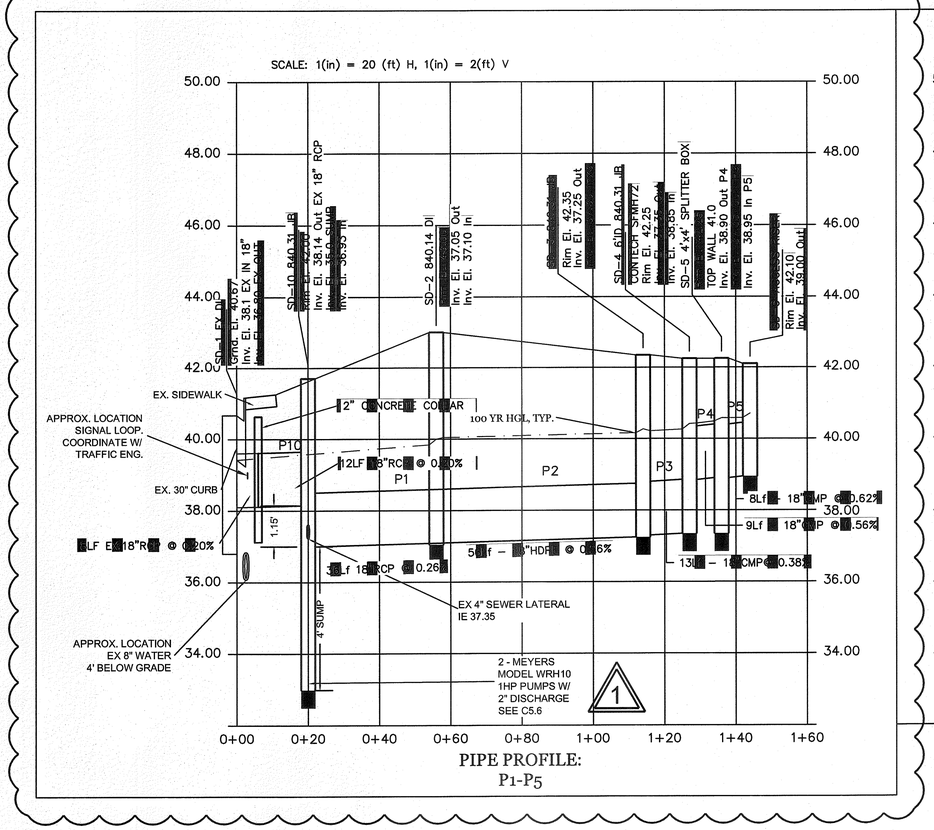
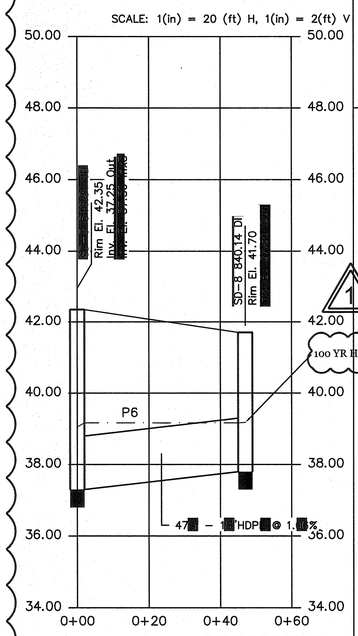
Line	To Line	Line Length	Incr. Area	Total Area	Runoff Coeff.	Incr C x A	Total C x A	Inlet Time	Time Conc	Rnfal Int	Total Runoff	Adnl Flow	Total Flow	Capac Full	Veloc	Pipe Size	Pipe Slope	Inv Elev Dn	Inv Elev Up	HGL Dn	HGL Up	Grnd/Rim Dn	Grnd/Rim Up	Line ID
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(cfs)	(cfs)	(ft/s)	(in)	(%)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	
1	Outfall	20	0.00	0.64	0.00	0.00	0.61	0.0	6.5	9.0	5.49	0.00	5.49	4.70	4.44	18	0.20	38.10	38.14	39.01	39.23	40.67	41.16	P1
2	1	36	0.00	0.64	0.00	0.00	0.61	5.0	6.3	9.1	5.52	0.00	5.52	6.06	3.12	18	0.33	36.93	37.05	39.33	39.43	41.16	43.00	P10
3	2	58	0.00	0.61	0.00	0.00	0.58	5.0	6.0	9.2	5.32	0.00	5.32	5.34	3.01	18	0.26	37.10	37.25	39.59	39.74	43.00	42.35	P2
4	3	13	0.00	0.46	0.00	0.00	0.44	5.0	5.1	9.5	4.13	0.00	4.13	4.00	3.37	15	0.38	37.30	37.35	39.85	39.91	42.35	42.25	P3
5	4	9	0.00	0.46	0.00	0.00	0.44	5.0	5.1	9.5	4.14	0.00	4.14	7.83	2.60	18	0.56	38.85	38.90	40.14	40.15	42.25	42.10	P4
6	5	8	0.46	0.46	0.95	0.44	0.44	5.0	5.0	9.5	4.15	0.00	4.15	8.30	2.50	18	0.62	38.90	38.95	40.26	40.26	42.10	41.70	P5
7	3	47	0.15	0.15	0.95	0.14	0.14	5.0	5.0	9.5	1.35	0.00	1.35	10.83	0.77	18	1.06	37.30	37.80	39.98	39.99	42.35	43.00	P6
8	2	12	0.03	0.03	0.95	0.03	0.03	5.0	5.0	9.5	0.27	0.00	0.27	0.11	3.25	1 X 12	1.00	41.85	41.97	41.93	42.05	43.00	43.00	P7
9	Outfall	20	0.20	0.20	0.95	0.19	0.19	5.0	5.0	9.5	1.80	0.00	1.80	3.23	3.20	15	0.25	39.00	39.05	39.54	39.69	42.25	41.25	P8
10	Outfall	8	0.46	0.46	0.95	0.44	0.44	5.0	5.0	9.5	4.15	0.00	4.15	8.30	4.46	18	0.62	37.30	37.35	38.08	38.13	41.20	41.25	P9

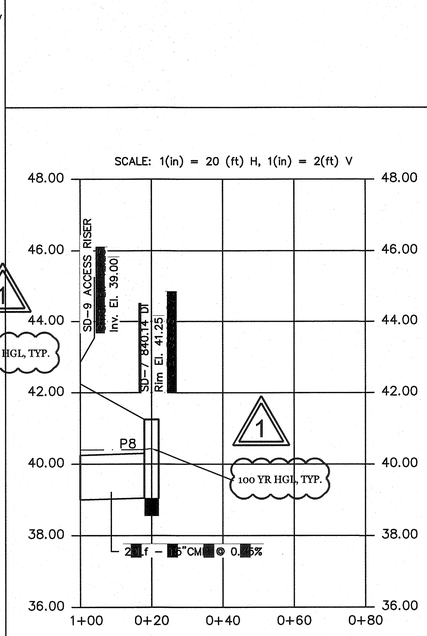
STORM SCHEDULE



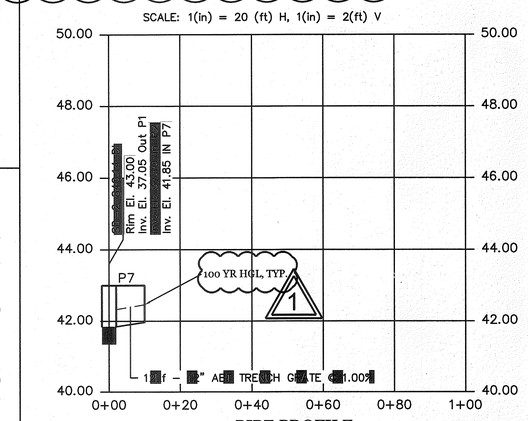
PIPE PROFILE:
P1-P5



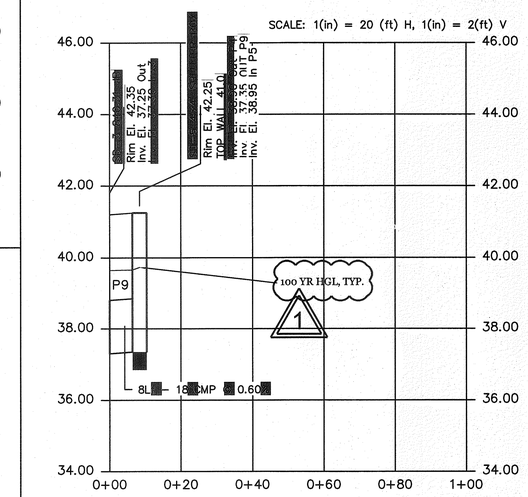
PIPE PROFILE:
P6



PIPE PROFILE:
P8



PIPE PROFILE:
P7



PIPE PROFILE:
P9

**NOTE:
1. ALL PIPE LENGTHS ARE CENTER-CENTER OF STRUCTURES
2. ALL GRATE INLETS ELEVATIONS ARE TO THROAT OF INLET AT GUTTER, NOT TOP OF CURB. NO INLETS ARE TO HAVE HOODED GRATES

CALL BEFORE YOU DIG 1-800-632-4949 NORTH CAROLINA ONE CALL SYSTEM

CAUTION!!!
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24 HOUR CONTACT:
CRAIG CONDRA
678-574-4994

CITY OF WILMINGTON NORTH CAROLINA
Public Services Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: 6/9/14 Permit # 20130271
Signed:

Approved Construction Plan
Name Date
Planning
Traffic
Fire

ONSITE CIVIL GROUP
3506 BILLINGSLEY DRIVE, MARIETTA, GA 30062
PH 1: (404) 822-9147, PH 2: (678) 449-6938
FAX: (770) 627-3214

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NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER JEREMY MICHAEL BENNER 8/12/13

REVISIONS

No.	DATE	DESCRIPTION
1	3/17/14	REV. EX W/L & STORM CHANGES DUE TO W/L

20' 10' 0' 20'
GRAPHIC SCALE: 1"=20'-0"

PAYNE UMSTEAD PROPERTIES, LLC
CONTACT: ED UMSTEAD
609 BRAE BURN DR.
MARTINEZ, GEORGIA 30907
PHONE:706-840-4988
FAX: 706-863-7935

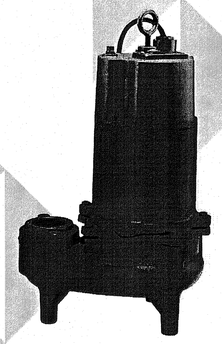
SPLASH N DASH CARWASH
5044 MARKET STREET
CITY OF WILMINGTON
NEW HANOVER COUNTY,
NORTH CAROLINA

UTILITY PROFILES & SCHEDULE

DATE: APRIL 7, 2014
PROJECT: 13-012

C 5.5

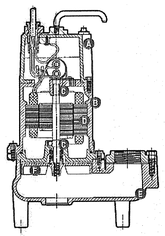
PENTAIR

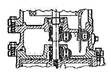


MYERS®
MODELS WHR & WHR-DS
2" SOLIDS HANDLING SEWAGE PUMPS
SINGLE AND DOUBLE SEAL

WWW.FEMYERS.COM

Pump Features and Applications





A. Separate Capacitor Housing
Franklin capacitor replacement (single phase only) within; dismantling motor.

B. Motor Housing
Cast iron; pressed-in stator for best heat transfer and alignment.

C. Bearings
Support rotor. Take radial and thrust loads.

D. Motor
~~1 HP~~ 1 HP. Single or three phase. 60 Hz. 1750 RPM. Oil-cooled and lubricated. Permanent split capacitor (PSC).

E. Volute Case
Cast iron with support legs. Passes 2" solids.

F. Impeller
Recessed completely out of volute passage.

G. Seal Leak Probe
Optional probes (single phase only) detect water leakage in seal housing. Activates warning light.

H. Shaft Seals
Carbon and ceramic faces. Dual tandem seals extends motor life.

Durable Motor.
- Oil-filled for cooler operation and constant bearing lubrication.
- Single phase PSC motors have no starting switch to fail.
- Recessed impeller reduces radial bearing loads, increases bearing life.

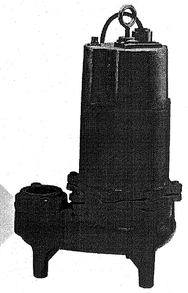
Solids Handling Operation.
- Recessed vortex impeller passes 2" solids.
- Impeller operates completely out of volute passage.
- Passes stringy trash and other solids which conventional semi-open impellers cannot.

Available With Automatic Piggy-Back Switch For Maintenance-Free Operation.
- Piggy-backed mechanical float switch allows pump to operate automatically or can be unplugged for manual operation.

MYERS® MODELS WHR & WHR-DS
Solids Handling Sewage Pumps

The Right Choice

The WHR Series pumps are designed for use in light commercial and residential raw sewage applications. WHR pumps will pass a full 2-inch sphere. The recessed vortex impeller provides an unobstructed passage in the volute case which allows these pumps to handle stringy, trashy solids without plugging the impeller. The vortex impeller also greatly extends the pumps bearing life. Available in double seal configuration for extended motor life. For more information, call your Myers distributor or the Myers Ohio sales office at 419-289-1898.



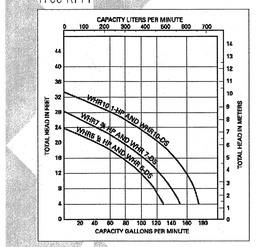
Product Capabilities		
Capacities to	175 gpm	662 lpm
Heads to	33 ft	10.1 m
Solids Handling	2 in	50.8 mm
Liquids Handling	raw, domestic and light commercial sewage	
Intermittent Liquid Temp.	140°F	60°C
Winding Insulation Temp. (Class F)	266°F	130°C
Motor Electrical Data	1/2 HP, 115V, 1Ø, 60 Hz, PSC 1/2, 3/4, 1 HP, 230V 1Ø, 60 Hz, PSC 208/230/460/575V, 3Ø, 60 Hz	
Acceptable pH Range	6 – 9	
Specific Gravity	9 – 1.1	
Discharge, NPT	2 in	50.8 mm
Optional	~~3 in~~	~~76.2 mm~~
Min. Sump Diameter		
Simplex	24 in.	609.6 cm
Duplex	38 in	762.0 cm

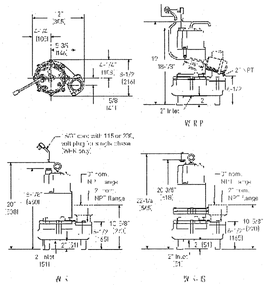
Note: Consult factory for applications outside these recommendations.

Construction Materials		
Motor Housing	cast iron	
Volute Case	cast iron.	
Impeller	cast iron, vortex	
Power Cord	Single Seal 16/3, 3Ø 16/4, 3Ø SJOW/SJOWA	Double Seal 14/4, 1Ø 14/3, 1Ø L/D 14/4, 3Ø L/D
Mechanical Seals: Standard Optional	single, type 21, carbon and ceramic double tandem, carbon and ceramic	
Pump, Motor Shaft	416 SST	

Performance Data and Dimensions [Dimensions in inches]

1750 RPM





PENTAIR

THE MYERS PUMP STORE
401 N. BEND, OH 10 44905
WWW.FEMYERS.COM

2697 INDUSTRIAL PARKWAY, BRANTFORD,
ONTARIO, CANADA N3V 4W5
WWW.FEMYERS.COM

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NORTH CAROLINA REGISTERED ENGINEER JEFFREY MICHAEL BENDER

4/7/14

REVISIONS

No.	DATE	DESCRIPTION
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SPLASH N DASH CARWASH
5044 MARKET STREET
CITY OF WILMINGTON
NEW HANOVER COUNTY,
NORTH CAROLINA

PUMP SPECS

DATE: APRIL 7, 2014
PROJECT: 13-012

C 5.6

City of WILMINGTON NORTH CAROLINA
Public Services Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: 6/4/14 Permit # 2013D278
Signed:

Approved Construction Plan
Name Date
Planning
Traffic
Fire