

**ATTACHMENT 5
Nyloplast Basin Shop Drawings**

PROJECT INFORMATION	
ALLIED PRODUCT MANAGER:	
ADS SALES REP:	
PROJECT NO:	0



F.W. KENT PARK CAMPGROUND

OXFORD, IA

Engineered Surface Drainage Products

GENERAL

PVC surface drainage inlets shall include the drain basin type as indicated on the contract drawing and referenced within the contract specifications. The ductile iron grates for each of these fittings are to be considered an integral part of the surface drainage inlet and shall be furnished by the same manufacturer. The surface drainage inlets shall be as manufactured by Nyloplast a division of Advanced Drainage Systems, Inc., or prior approved equal.

MATERIALS

The drain basins required for this contract shall be manufactured from PVC pipe stock, utilizing a thermoforming process to reform the pipe stock to the specified configuration. The drainage pipe connection stubs shall be manufactured from PVC pipe stock and formed to provide a watertight connection with the specified pipe system. This joint tightness shall conform to ASTM D3212 for joints for drain and sewer plastic pipe using flexible elastomeric seals. The flexible elastomeric seals shall conform to ASTM F477. The pipe bell spigot shall be joined to the main body of the drain basin or catch basin. The raw material used to manufacture the pipe stock that is used to manufacture the main body and pipe stubs of the surface drainage inlets shall conform to ASTM D1784 cell class 12454.

The grates and frames furnished for all surface drainage inlets shall be ductile iron for sizes 8", 10", 12", 15", 18", 24" and 30" and shall be made specifically for each basin so as to provide a round bottom flange that closely matches the diameter of the surface drainage inlet. Grates for drain basins shall be capable of supporting various wheel loads as specified by Nyloplast. 12" and 15" square grates will be hinged to the frame using pins. Ductile iron used in the manufacture of the castings shall conform to ASTM A536 grade 70-50-05. Grates and covers shall be provided painted black.

INSTALLATION

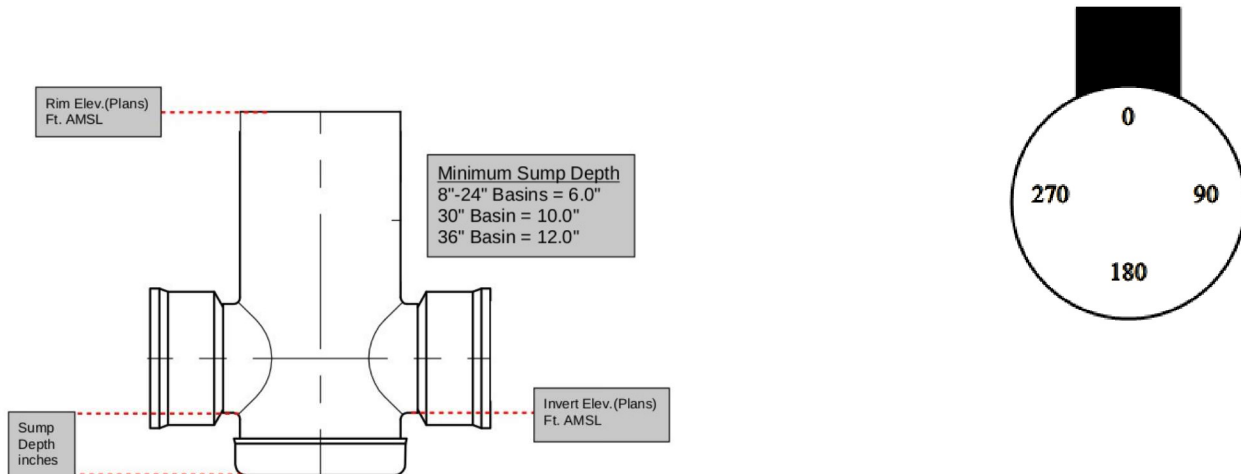
The specified PVC surface drainage inlet shall be installed using conventional flexible pipe backfill materials and procedures. The backfill material shall be crushed stone or other granular material meeting the requirements of class 1, class 2, or class 3 material as defined in ASTM D2321. Bedding and backfill for surface drainage inlets shall be well placed and compacted uniformly in accordance with ASTM D2321. The drain basin body will be cut at the time of the final grade. No brick, stone or concrete block will be required to set the grate to the final grade height. For load rated installations, a concrete slab shall be poured under and around the grate and frame. The concrete slab must be designed taking into consideration local soil conditions, traffic loading, and other applicable design factors. For other installation considerations such as migration of fines, ground water, and soft foundations refer to ASTM D2321 guidelines.

DRAIN BASIN SHOP DRAWING

PO#	
Part Number	2818AG5
Customer approval	

Project Name	F.W. Kent Park Campground	18	Structure No.	B1	Qty.	1
Prepared By	branden.maurstad@adspipe.com ADS (651) 968-6238 branden.maurstad@adspipe.com		Grate	18; Domed		
			Accessories			
Rim Elev.	839.04 ft.	Basin Height	3.04 ft.	Sump Depth	6 in.	

	Stub size	Angle	Pipe Type	Invert Elev. AMSL	Production Depth
Stub #1	8 in.	0	ADS N-12	836.5 ft.	30.48 in.
Stub #2					
Stub #3					
Stub #4					
Stub #5					
Stub #6					



CUSTOMER NOTES

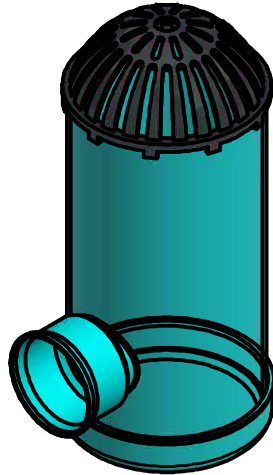
PART CODES

PRODUCTION NOTES

	1899CGD;	
--	----------	--

This product is made to order and non-Refundable
 Nyloplast, 3130 Verona Ave. Buford, GA 30518. (866) 888-8479
Nyloplast® is a registered trademark of Advanced Drainage Systems®

Nyloplast® is not responsible for accuracy of shop drawings submitted by customer through the 3D Design Tool. Submission of shop drawings for purchase and fabrication constitute an approval for production as designed by customer.



ISOMETRIC VIEW

STUB 1



PLAN VIEW

STUB 1



PLAN VIEW - NO CASTING



3130 VERONA AVE
BUFORD, GA 30518
PHN (770)932-2443
FAX (770)932-2490

DWG SIZE A

THIS DRAWING HAS BEEN PREPARED BASED ON INFORMATION PROVIDED TO ADS-NYLOPLAST UNDER THE DIRECTION OF THE SITE DESIGN ENGINEER OR OTHER PROJECT REPRESENTATIVE. THE SITE DESIGN ENGINEER SHALL REVIEW THIS DRAWING PRIOR TO CONSTRUCTION. IT IS THE ULTIMATE RESPONSIBILITY OF THE SITE DESIGN ENGINEER TO ENSURE THAT THE PRODUCT(S) DEPICTED AND ALL ASSOCIATED DETAILS MEET ALL APPLICABLE LAWS, REGULATIONS, AND PROJECT REQUIREMENTS.

PROJECT NAME:

F.W. KENT PARK CAMPGROUND

STRUCTURE NO./NAME:

B1

DATE:

04/12/2024

PROJECT LOCATION:

OXFORD, JOHNSON COUNTY, IA

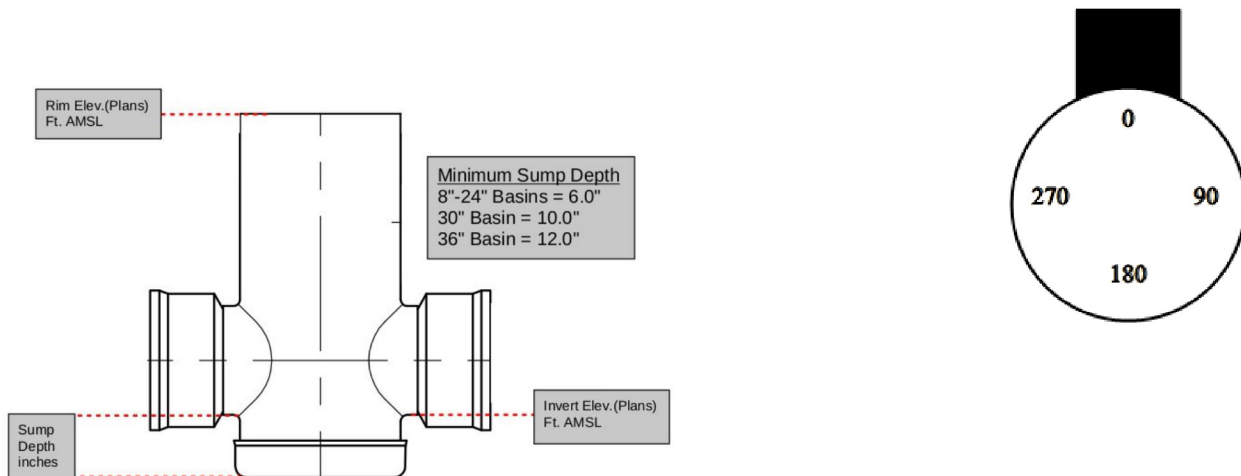
SHEET OF

DRAIN BASIN SHOP DRAWING

PO#	
Part Number	2818AG3
Customer approval	

Project Name	F.W. Kent Park Campground	18	Structure No.	B2	Qty.	1
Prepared By	branden.maurstad@adspipe.com ADS (651) 968-6238 branden.maurstad@adspipe.com		Grate	18; Domed		
			Accessories			
Rim Elev.	838.95 ft.	Basin Height	2.87 ft.	Sump Depth	6 in.	

	Stub size	Angle	Pipe Type	Invert Elev. AMSL	Production Depth
Stub #1	8 in.	0	ADS N-12	836.58 ft.	28.44 in.
Stub #2					
Stub #3					
Stub #4					
Stub #5					
Stub #6					



CUSTOMER NOTES

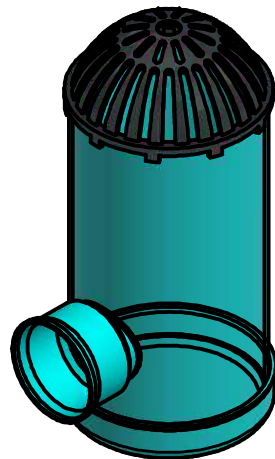
PART CODES

PRODUCTION NOTES

	1899CGD;	
--	----------	--

This product is made to order and non-Refundable
 Nyloplast, 3130 Verona Ave. Buford, GA 30518. (866) 888-8479
Nyloplast® is a registered trademark of Advanced Drainage Systems®

Nyloplast® is not responsible for accuracy of shop drawings submitted by customer through the 3D Design Tool. Submission of shop drawings for purchase and fabrication constitute an approval for production as designed by customer.



ISOMETRIC VIEW

STUB 1



PLAN VIEW

STUB 1



PLAN VIEW - NO CASTING



3130 VERONA AVE
BUFORD, GA 30518
PHN (770)932-2443
FAX (770)932-2490

DWG SIZE A

THIS DRAWING HAS BEEN PREPARED BASED ON INFORMATION PROVIDED TO ADS-NYLOPLAST UNDER THE DIRECTION OF THE SITE DESIGN ENGINEER OR OTHER PROJECT REPRESENTATIVE. THE SITE DESIGN ENGINEER SHALL REVIEW THIS DRAWING PRIOR TO CONSTRUCTION. IT IS THE ULTIMATE RESPONSIBILITY OF THE SITE DESIGN ENGINEER TO ENSURE THAT THE PRODUCT(S) DEPICTED AND ALL ASSOCIATED DETAILS MEET ALL APPLICABLE LAWS, REGULATIONS, AND PROJECT REQUIREMENTS.

PROJECT NAME:

F.W. KENT PARK CAMPGROUND

STRUCTURE NO./NAME:

B2

DATE:

04/12/2024

PROJECT LOCATION:

OXFORD, JOHNSON COUNTY, IA

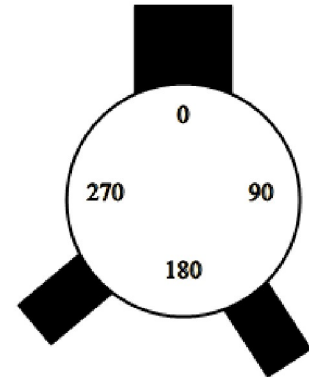
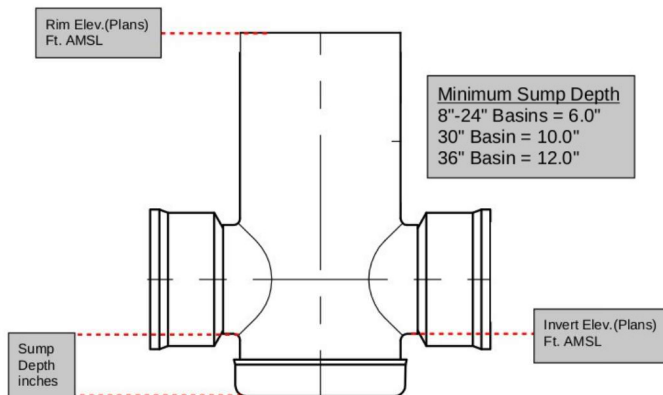
SHEET OF

DRAIN BASIN SHOP DRAWING

PO#	
Part Number	2836AG5
Customer approval	

Project Name	F.W. Kent Park Campground	36	Structure No.	B3	Qty.	1
Prepared By	branden.maurstad@adspipe.com ADS (651) 968-6238 branden.maurstad@adspipe.com		Grate	30; Domed		
			Accessories	36X30 GRATE REDUCING RING		
Rim Elev.	839.15 ft.	Basin Height	4.05 ft.	Sump Depth	12 in.	

	Stub size	Angle	Pipe Type	Invert Elev. AMSL	Production Depth
Stub #1	15 in.	0	ADS N-12	836.1 ft.	36.6 in.
Stub #2	8 in.	147	ADS N-12	836.21 ft.	35.28 in.
Stub #3	8 in.	230	ADS N-12	836.2 ft.	35.4 in.
Stub #4					
Stub #5					
Stub #6					



CUSTOMER NOTES

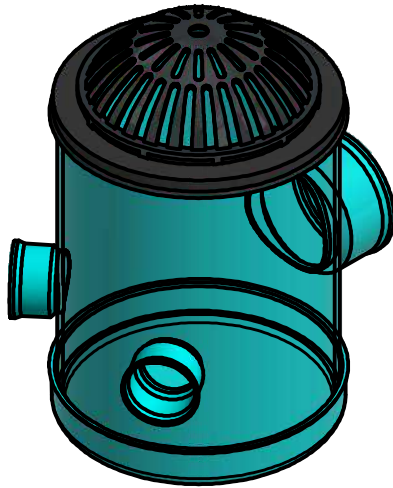
PART CODES

PRODUCTION NOTES

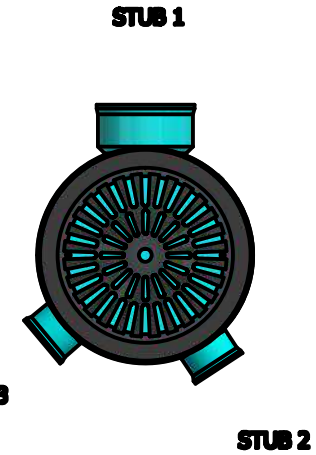
	3099CGD; 30BASE36;	
--	--------------------	--

This product is made to order and non-Refundable
 Nyloplast, 3130 Verona Ave. Buford, GA 30518. (866) 888-8479
Nyloplast® is a registered trademark of Advanced Drainage Systems®

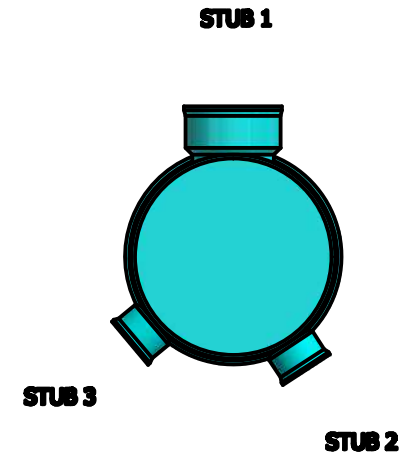
Nyloplast® is not responsible for accuracy of shop drawings submitted by customer through the 3D Design Tool. Submission of shop drawings for purchase and fabrication constitute an approval for production as designed by customer.



ISOMETRIC VIEW



PLAN VIEW



PLAN VIEW - NO CASTING

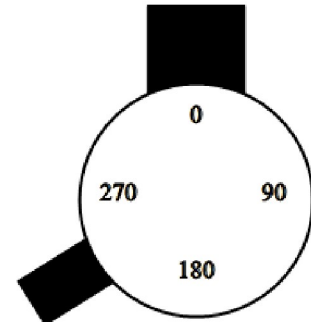
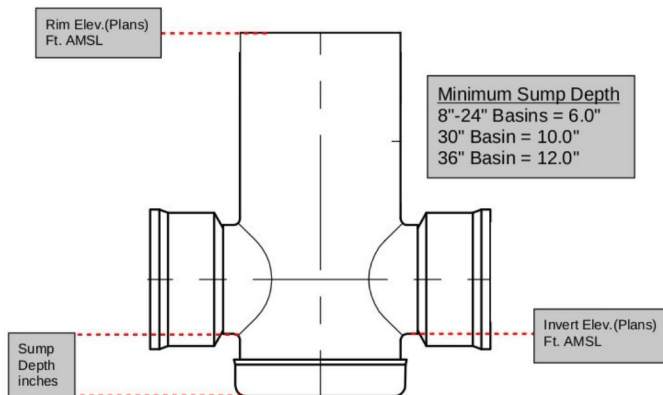
DRAIN BASIN SHOP DRAWING

PO#	
Part Number	2836AG5
Customer approval	

Project Name	F.W. Kent Park Campground	36	Structure No.	A2	Qty.	1
Prepared By	branden.maurstad@adspipe.com ADS (651) 968-6238 branden.maurstad@adspipe.com		Grate	30; Domed		
			Accessories	36X30 GRATE REDUCING RING		

Rim Elev.	838.25 ft.	Basin Height	4.16 ft.	Sump Depth	12 in.
-----------	------------	--------------	----------	------------	--------

	Stub size	Angle	Pipe Type	Invert Elev. AMSL	Production Depth
Stub #1	15 in.	0	ADS N-12	835.09 ft.	37.92 in.
Stub #2	8 in.	238	ADS N-12	835.09 ft.	37.92 in.
Stub #3					
Stub #4					
Stub #5					
Stub #6					



CUSTOMER NOTES

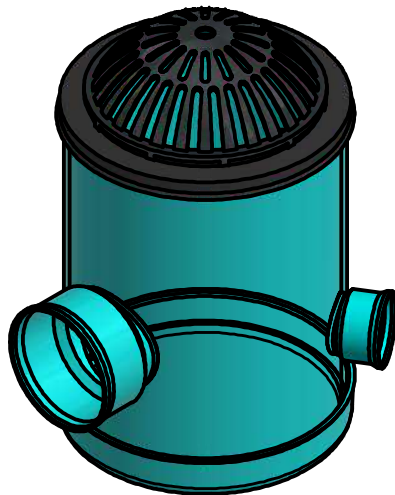
PART CODES

PRODUCTION NOTES

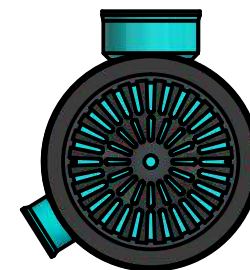
	3099CGD; 30BASE36;	
--	--------------------	--

This product is made to order and non-Refundable
 Nyloplast, 3130 Verona Ave. Buford, GA 30518. (866) 888-8479
Nyloplast® is a registered trademark of Advanced Drainage Systems®

Nyloplast® is not responsible for accuracy of shop drawings submitted by customer through the 3D Design Tool. Submission of shop drawings for purchase and fabrication constitute an approval for production as designed by customer.



ISOMETRIC VIEW



STUB 1
STUB 2

PLAN VIEW



STUB 1
STUB 2

PLAN VIEW - NO CASTING



3130 VERONA AVE
BUFORD, GA 30518
PHN (770)932-2443
FAX (770)932-2490

DWG SIZE A

THIS DRAWING HAS BEEN PREPARED BASED ON INFORMATION PROVIDED TO ADS-NYLOPLAST UNDER THE DIRECTION OF THE SITE DESIGN ENGINEER OR OTHER PROJECT REPRESENTATIVE. THE SITE DESIGN ENGINEER SHALL REVIEW THIS DRAWING PRIOR TO CONSTRUCTION. IT IS THE ULTIMATE RESPONSIBILITY OF THE SITE DESIGN ENGINEER TO ENSURE THAT THE PRODUCT(S) DEPICTED AND ALL ASSOCIATED DETAILS MEET ALL APPLICABLE LAWS, REGULATIONS, AND PROJECT REQUIREMENTS.

PROJECT NAME:
F.W. KENT PARK CAMPGROUND

STRUCTURE NO./NAME:
A2

PROJECT LOCATION:
OXFORD, JOHNSON COUNTY, IA

DATE:
04/12/2024

SHEET OF



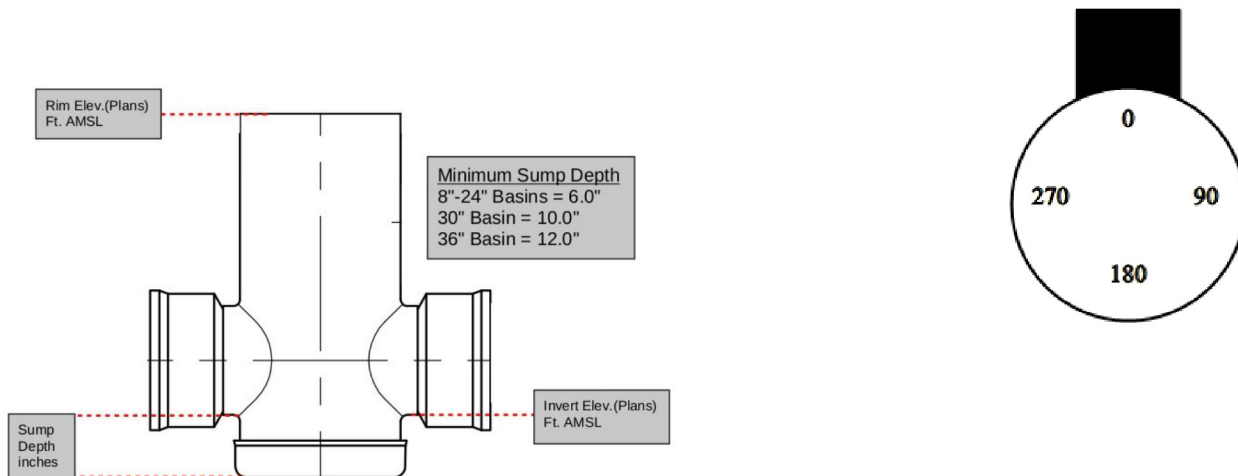
DRAIN BASIN SHOP DRAWING

PO#	
Part Number	2818AG3
Customer approval	

Project Name	F.W. Kent Park Campground	18	Structure No.	A1	Qty.	1
Prepared By	branden.maurstad@adspipe.com ADS (651) 968-6238 branden.maurstad@adspipe.com		Grate	18; Domed		
			Accessories			

Rim Elev.	839.25 ft.	Basin Height	2.92 ft.	Sump Depth	6 in.
-----------	------------	--------------	----------	------------	-------

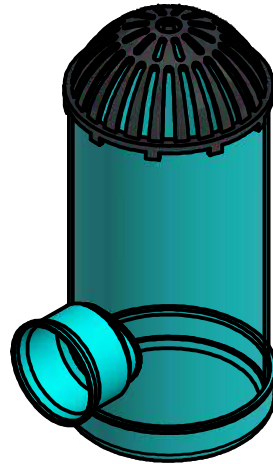
	Stub size	Angle	Pipe Type	Invert Elev. AMSL	Production Depth
Stub #1	8 in.	0	ADS N-12	836.83 ft.	29.04 in.
Stub #2					
Stub #3					
Stub #4					
Stub #5					
Stub #6					



CUSTOMER NOTES	PART CODES	PRODUCTION NOTES
	1899CGD;	

This product is made to order and non-Refundable
Nyloplast, 3130 Verona Ave. Buford, GA 30518. (866) 888-8479
Nyloplast® is a registered trademark of Advanced Drainage Systems®

**Nyloplast® is not responsible for accuracy of shop drawings submitted by customer through the 3D Design Tool.
Submission of shop drawings for purchase and fabrication constitute an approval for production as designed by customer.**



ISOMETRIC VIEW

STUB 1



PLAN VIEW

STUB 1



PLAN VIEW - NO CASTING



3130 VERONA AVE
BUFORD, GA 30518
PHN (770)932-2443
FAX (770)932-2490

DWG SIZE A

THIS DRAWING HAS BEEN PREPARED BASED ON INFORMATION PROVIDED TO ADS-NYLOPLAST UNDER THE DIRECTION OF THE SITE DESIGN ENGINEER OR OTHER PROJECT REPRESENTATIVE. THE SITE DESIGN ENGINEER SHALL REVIEW THIS DRAWING PRIOR TO CONSTRUCTION. IT IS THE ULTIMATE RESPONSIBILITY OF THE SITE DESIGN ENGINEER TO ENSURE THAT THE PRODUCT(S) DEPICTED AND ALL ASSOCIATED DETAILS MEET ALL APPLICABLE LAWS, REGULATIONS, AND PROJECT REQUIREMENTS.

PROJECT NAME:

F.W. KENT PARK CAMPGROUND

STRUCTURE NO./NAME:

A1

DATE:

04/12/2024

PROJECT LOCATION:

OXFORD, JOHNSON COUNTY, IA

SHEET OF



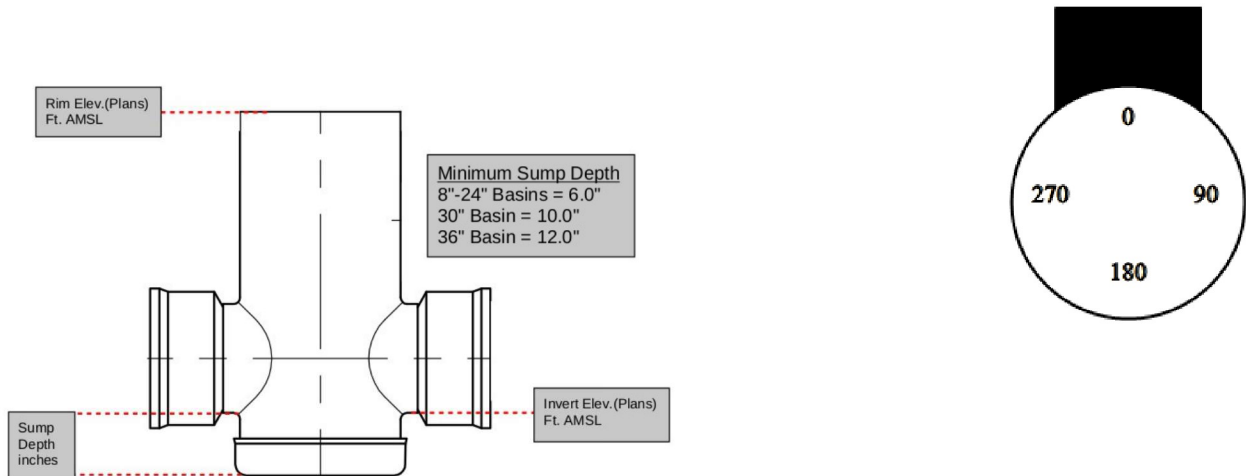
DRAIN BASIN SHOP DRAWING

PO#	
Part Number	2824AG7
Customer approval	

Project Name	F.W. Kent Park Campground	24	Structure No.	B3 (1)	Qty.	1
Prepared By	branden.maurstad@adspipe.com ADS (651) 968-6238 branden.maurstad@adspipe.com		Grate	24; Domed		
			Accessories			

Rim Elev.	832.71 ft.	Basin Height	5.21 ft.	Sump Depth	6 in.
-----------	------------	--------------	----------	------------	-------

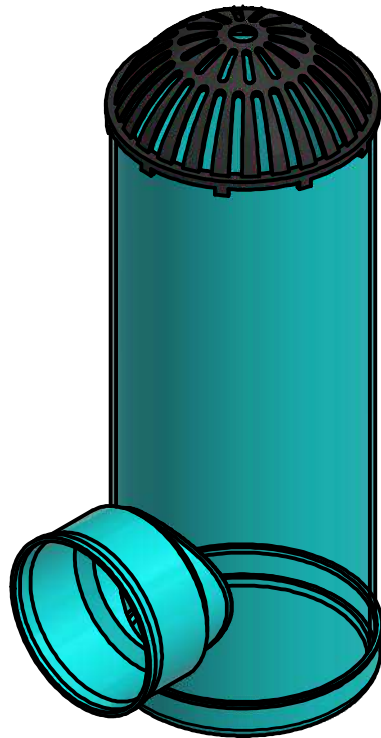
	Stub size	Angle	Pipe Type	Invert Elev. AMSL	Production Depth
Stub #1	15 in.	0	ADS N-12	828 ft.	56.52 in.
Stub #2					
Stub #3					
Stub #4					
Stub #5					
Stub #6					



CUSTOMER NOTES	PART CODES	PRODUCTION NOTES
	2499CGD;	

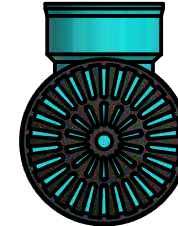
This product is made to order and non-Refundable
Nyloplast, 3130 Verona Ave. Buford, GA 30518. (866) 888-8479
Nyloplast® is a registered trademark of Advanced Drainage Systems®

Nyloplast® is not responsible for accuracy of shop drawings submitted by customer through the 3D Design Tool. Submission of shop drawings for purchase and fabrication constitute an approval for production as designed by customer.



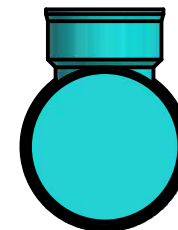
ISOMETRIC VIEW

STUB 1



PLAN VIEW

STUB 1



PLAN VIEW - NO CASTING



3130 VERONA AVE
BUFORD, GA 30518
PHN (770)932-2443
FAX (770)932-2490

DWG SIZE A

THIS DRAWING HAS BEEN PREPARED BASED ON INFORMATION PROVIDED TO ADS-NYLOPLAST UNDER THE DIRECTION OF THE SITE DESIGN ENGINEER OR OTHER PROJECT REPRESENTATIVE. THE SITE DESIGN ENGINEER SHALL REVIEW THIS DRAWING PRIOR TO CONSTRUCTION. IT IS THE ULTIMATE RESPONSIBILITY OF THE SITE DESIGN ENGINEER TO ENSURE THAT THE PRODUCT(S) DEPICTED AND ALL ASSOCIATED DETAILS MEET ALL APPLICABLE LAWS, REGULATIONS, AND PROJECT REQUIREMENTS.

PROJECT NAME:

F.W. KENT PARK CAMPGROUND

STRUCTURE NO./NAME:

B3 (1)

DATE:

04/12/2024

PROJECT LOCATION:

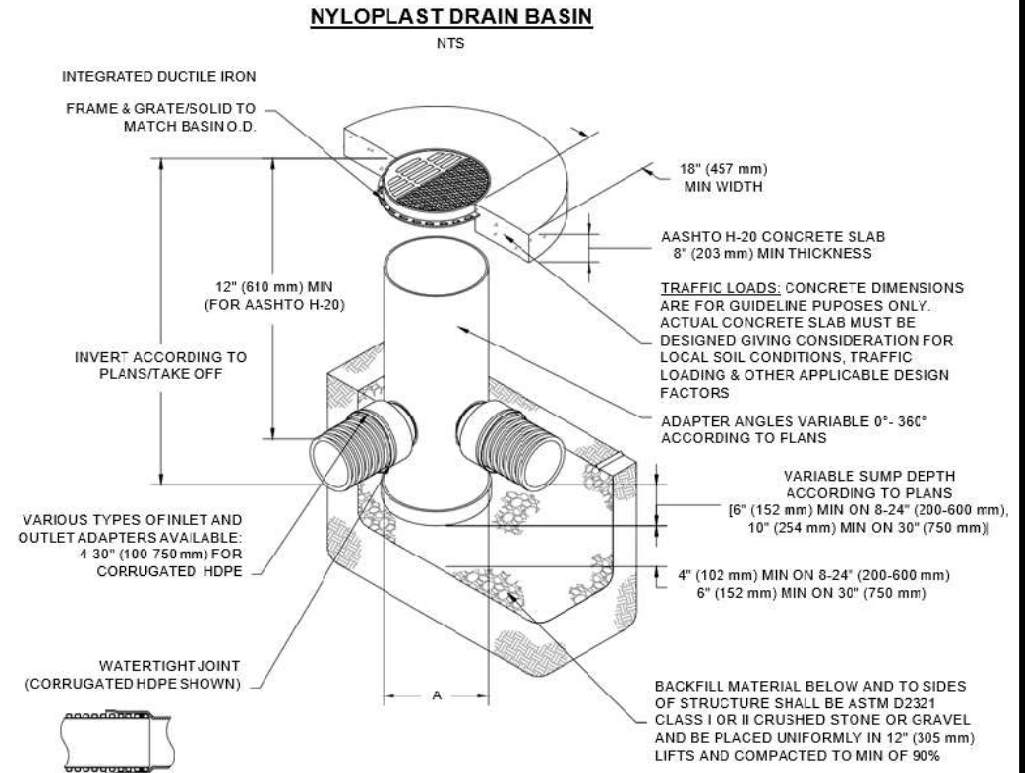
OXFORD, JOHNSON COUNTY, IA

SHEET OF

NOTES

- 8-30" (200-750 mm) GRATES/SOLID COVERS SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
- 12-30" (300-750 mm) FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
- DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS
- DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS & HANCOR DUAL WALL) & SDR 35 PVC
- FOR COMPLETE DESIGN AND PRODUCT INFORMATION: WW.ADPIPE.COM/NYLOPLAST

A	PART #	GRATE/SOLID COVER OPTIONS		
8" (200 mm)	2808AG	PEDESTRIAN LIGHT DUTY	STANDARD LIGHT DUTY	SOLID LIGHT DUTY
10" (250 mm)	2810AG	PEDESTRIAN LIGHT DUTY	STANDARD LIGHT DUTY	SOLID LIGHT DUTY
12" (300 mm)	2812AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
15" (375 mm)	2815AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
18" (450 mm)	2818AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
24" (600 mm)	2824AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
30" (750 mm)	2830AG	PEDESTRIAN AASHTO H-20	STANDARD AASHTO H-20	SOLID AASHTO H-20



3130 VERONA AVE
BUFORD, GA 30518
(770) 932-2443
WWW.ADPIPE.COM

THIS DRAWING HAS BEEN PREPARED BASED ON
INFORMATION PROVIDED TO ADS UNDER THE
DIRECTION OF THE SITE DESIGN ENGINEER OR
OTHER PROJECT REPRESENTATIVE. THE SITE
DESIGN ENGINEER SHALL REVIEW THIS
DRAWING PRIOR TO CONSTRUCTION. IT IS THE
ULTIMATE RESPONSIBILITY OF THE SITE DESIGN
ENGINEER TO ENSURE THAT THE PRODUCT(S)
DEPICTED AND ALL ASSOCIATED DETAILS MEET
ALL APPLICABLE LAWS, REGULATIONS, AND
PROJECT REQUIREMENTS.

PROJECT NAME:

F.W. KENT PARK CAMPGROUND

STRUCTURE NO./NAME:

0

PROJECT LOCATION:

OXFORD, IA

DATE:

4/12/24

#3 SHEET OF #4

Step-by-Step Process



STEP 1: Excavate Drain Basin location to depth. Provide a stone base. (Width of excavation can be the same width as pipe trench)



STEP 2: Set Drain Basin in place and level.



STEP 3: Install provided F-477 gasket for HDPE/PP corrugated pipe into last corrugation of the pipe. Lube the gasketed pipe and the inside of the drain basin bell.



NOTE: For H-20 or heavier load rated installations, set elevation of frame and grate. Then pour a concrete collar around and knife flowable fill under edges to support the frame.



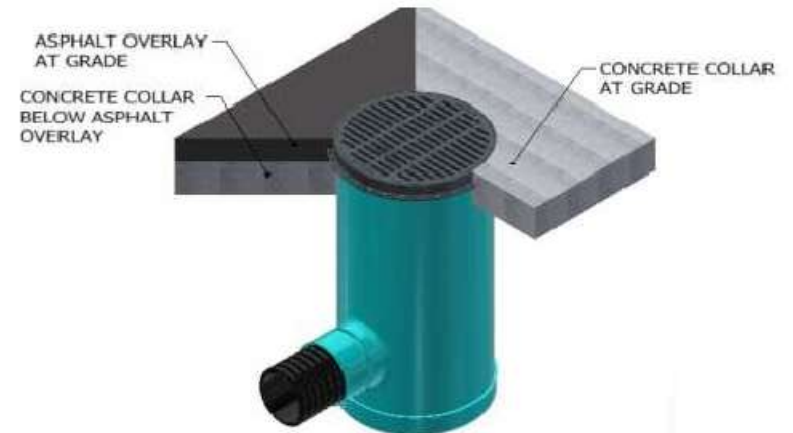
STEP 4: Backfill the back side of structures and push the pipe home to the seat position. Re-check Drain Basin depth, level and position.



STEP 5: Backfill uniformly around structures with class I, II, or III material and compact in lifts according to ASTM D2321.



STEP 6: The drain basin body can be cut at the time of the final grade or raised with riser. No brick, stone or concrete block will be required to set the grate to the final grade height.



3130 VERONA AVE
BUFORD, GA 30518
(770) 932-2443
WWW.ADPIPE.COM

THIS DRAWING HAS BEEN PREPARED BASED ON INFORMATION PROVIDED TO ADS UNDER THE DIRECTION OF THE SITE DESIGN ENGINEER OR OTHER PROJECT REPRESENTATIVE. THE SITE DESIGN ENGINEER SHALL REVIEW THIS DRAWING PRIOR TO CONSTRUCTION. IT IS THE ULTIMATE RESPONSIBILITY OF THE SITE DESIGN ENGINEER TO ENSURE THAT THE PRODUCT(S) DEPICTED AND ALL ASSOCIATED DETAILS MEET ALL APPLICABLE LAWS, REGULATIONS, AND PROJECT REQUIREMENTS.

PROJECT NAME:

F.W. KENT PARK CAMPGROUND

PROJECT LOCATION:

OXFORD, IA

STRUCTURE NO./NAME:

0

DATE:

4/12/24

#4 SHEET OF #4