COCONINO COUNTY ARIZONA
COMMUNITY DEVELOPMENT DEPARTMENT

Jay Christelman
Director

March 3rd, 2014

Tamarron Pines Homeowners Association
C/o Mary Parke, P.E.
3652 Durango Dr.
Happy Jack, AZ 86024

RE: Omni Grind Plus (OGP), Model OGP2032L

Dear Ms. Parke,

After review of the product information provided for the Omni Grind Plus by Crane Pumps it has been determined that the model OGP2032L will provide equal or better performance that the Environment One GP2010 model currently in use for the Tamarron Pines Subdivision wastewater collection and treatment system. The OGP2032L will be included in the Tamarron Pines wastewater system application packet as an approved substitute for the Environment One GP2010. If you have any questions or concerns please feel free to contact me at (928) 679-8753 or by e-mail at bbuzzell@coconino.az.gov.

Sincerely,

Brian Buzzell, R.S.
Coconino County Community Development
Environmental Quality Program

Cc: File

COCONINO COUNTY ARIZONA
COMMUNITY DEVELOPMENT DEPARTMENT

Jay Christelman
Director

Tamarron Pines Subdivision Packet

In order to obtain a septic permit in the Tamarron Pines Subdivision, Environmental Services must set the following guidelines and receive the appropriate paperwork:

1. **One (1) set of house plans and plans for any other buildings with water-using devices.**
2. **Three (3) sets of plot plans showing a detailed system layout.**
   - **Scaled drawing (1" = 20 ft.)**
   - **Applicable setbacks**
   - **Location of 2-way cleanout**
   - **Specifications provided for pipe, including size and slope**
   - **Specifications for material, backfill and cover**
   - **Include tank(s) & pump with their correct size, material and manufacturer**
   - **Contour / elevations**
3. A completed application (included in this packet).
4. Application for sewer services form signed by representative of the Tamarron Pines Homeowners Association.
5. Completed "System Design Flow" calculation sheet with determined size of your tank and pump. Please indicate the brand and model number of the pump and pump basin to be used.
6. Submit all of the above to our office with the appropriate fee. Please allow **10** working days for processing.

Any deviation from the use of Environment One pump, Omni Grind Plus pump, or tank size will require the above information as well as the following requirements. Please allow additional time for plan review.

1. The submittal of specification sheets on the pump or pump tank
2. Pump calculations and design with the relevant pump curves
3. Plot plan showing a cross-sectional system profile with design elevations
4. Design calculations showing the fixture count/bedroom count with the higher number utilized for the flow.

2500 North Fort Valley Road, Building 1 ♦ Flagstaff, AZ 86001-1287
(928) 679-8850 Fax (928) 679-8851
www.coconino.az.gov

COCONINO COUNTY ARIZONA
COMMUNITY DEVELOPMENT DEPARTMENT

Jay Christelman
Director

NOTICE OF INTENT TO DISCHARGE FOR
AN ALTERNATE ON-SITE WASTEWATER TREATMENT FACILITY

PAYMENT INFORMATION	
FEE PAID: _____	DATE: _____
RECEIPT # _____	
SUBMITTED TO: _____	

SITE INFORMATION

SUBDIVISION: _____ UNIT # _____ LOT # _____

ASSESSOR'S PARCEL # _____ SIZE IN ACRES: _____

PROPERTY ADDRESS: _____

TOWNSHIP: _____ RANGE: _____ SECTION: _____ , _____ ¼ _____ ¼ _____ ¼

LATITUDE: _____ ° _____ ' _____ " N LONGITUDE: _____ ° _____ ' _____ " W

APPLICANT (person responsible for operation and overall compliance):

NAME/COMPANY: _____ PHONE/FAX # _____

ADDRESS: _____ CITY/STATE/ZIP: _____

E-MAIL: _____

DESIGNER/ENGINEER:

NAME/COMPANY: _____ PHONE/FAX # _____

ADDRESS: _____ CITY/STATE/ZIP: _____

E-MAIL: _____

CONTRACTOR INFORMATION:

NAME/COMPANY: _____ PHONE/FAX # _____

ADDRESS: _____ CITY/STATE/ZIP: _____

LICENSE # _____ LICENSE CLASSIFICATION: _____

E-MAIL: _____

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DISPOSAL SYSTEM INTENDED TO SERVE (check category & give requested figures)		
☐ NEW RESIDENCE	☐ EXISTING RESIDENCE	
_____ # OF BEDROOMS	_____ # OF EXISTING BEDROOMS	_____ # OF DENS/OFFICES
_____ # OF DENS/OFFICES	_____ # OF PROPOSED BEDROOMS	
TOTAL # OF PLUMBING FIXTURE UNITS: _____	DESIGN FLOW: _____	

Available General Permits for On-site Wastewater Treatment Facilities and Information Submission Requirements: Please indicate which general permits are being applied for and check appropriate boxes to indicate that the required information has been submitted with this NOI.

A. Information submission requirements with all NOIs:
- ☐ Site Investigation Report [AAC R18-9-A309(B)(1)].
- ☐ Site Plan [AAC R18-9-A309(B)(2)].

B. Information submission requirements with NOIs for General Permits 4.03 through 4.23.
- ☐ Construction quality drawings [AAC R18-9-A309(B)(4)].
- ☐ List of materials, components, and equipment for constructing the on-site wastewater treatment facility [AAC R18-9-A309(B)(5)].
- ☐ Operation and maintenance plan [AAC R18-9-A309(B)(6)].

C. General permits, corresponding information submission requirements, and Coconino County Environmental Quality fees*:

☐ **4.02** Septic Tank With Disposal by Trench, Bed, Chamber Technology or Seepage Pit, Less than 3,000 Gallons Per Day Daily Flow [AAC R18-9-E302].

☐ **4.03** Composting Toilet, Less than 3,000 GPD Daily Flow [AAC R18-9-E303].
- ☐ Name and address of manufacturer.
- ☐ Product model number.
- ☐ Rate of composting and capacity calculations.
- ☐ Documentation of listing by a national listing organization indicating that the composting toilet meets the stated manufacturer's specifications for loading, treatment performance, and operation.
- ☐ The method of vector control.
- ☐ The calculation of waste volume and planned method for disposing of the composted human excrement residue.

☐ **4.04** Pressure Distribution System, Less than 3,000 GPD Daily Flow [AAC R18-9-E304].
- ☐ A copy of operation, maintenance, and warranty materials for the principal components.
- ☐ A copy of dosing specifications, including pump curves, dispersing component curves, and float switch settings.

☐ **4.05** Gravelless Trench, Less than 3,000 GPD Daily Flow [AAC R18-9-E305].
- ☐ The soil absorption area that is required if a conventional disposal field trench filled with aggregate is used.
- ☐ The configuration and size of the proposed gravelless disposal field.
- ☐ The manufacturer's installation instructions and warranty of performance for absorbing wastewater into the native soil.

☐ **4.06** Natural Seal Evapotranspiration Bed, Less than 3,000 GPD Daily Flow [AAC R18-9-E306].

☐ **4.07** Lined Evapotranspiration Bed, Less than 3,000 GPD Daily Flow [AAC R18-9-E307].
- ☐ Capillary rise potential test results for the media used to fill the evapotranspiration bed, unless sand meeting a D_{50} of 0.1 millimeter (50% by weight of grains equal to or smaller than 0.1 millimeter in size) is used.
- ☐ Water mass balance calculations used to size the evapotranspiration bed.

☐ **4.08** Wisconsin Mound, Less than 3,000 GPD Daily Flow [AAC R18-9-E308].
- ☐ Specifications for the internal wastewater distribution system media proposed for use in the mound.
- ☐ Two scaled or dimensioned cross sections of the mound (1 of the shortest basal area footprint dimension and one of the lengthwise dimension).
- ☐ Design calculations following the "Wisconsin Mound Soil Absorption System: Siting, Design, and Construction Manual," published by the University of Wisconsin - Madison, January 1990 Edition.

☐ **4.09** Engineered Pad, Less than 3,000 GPD Daily Flow [AAC R18-9-E309] Fee.
- ☐ Design materials and construction specifications for the engineered pad system.

☐ **4.10** Intermittent Sand Filter, Less than 3,000 GPD Daily Flow [AAC R18-9-E310].
- ☐ Specifications for the media proposed for use as the sand filter.

☐ **4.11** Peat Filter, Less than 3,000 GPD Daily Flow [AAC R18-9-E311].
- ☐ Specifications for the peat media proposed for use in the filter or provided in the peat module, including the porosity, surface area, and moisture content.
- ☐ A statement of whether the peat is air dried, and whether the peat is from sphagnum moss or bog cotton.
- ☐ A description of the degree of decomposition.
- ☐ Specifications for installing the peat media.
- ☐ If a peat module is used, the name and address of the manufacturer, the model number, and a copy of the manufacturer's warranty.

☐ **4.12** Textile Filter, Less than 3,000 GPD Daily Flow [AAC R18-9-E312].
- ☐ The name and address of the filter manufacturer.
- ☐ The filter model number.
- ☐ A copy of the manufacturer's filter warranty.
- ☐ If the system is for nitrogen reduction to 15 milligrams per liter, five-month arithmetic mean, specifications on the nitrogen reduction performance of the filter system, and corroborating third-party test data.
- ☐ The manufacturer's operation and maintenance recommendations to achieve a 20-year life.
- ☐ If a pump or aerator is required for proper operation, the pump or aerator model number and a copy of the manufacturer's warranty.

☐ **4.13** Ruck® System, Less than 3,000 GPD Daily Flow [AAC R18-9-E313].

☐ **4.14** Sewage Vault, Less than 3,000 GPD Daily Flow [AAC R18-9-E314].

☐ **4.15** Aerobic System with Subsurface Disposal, Less than 3,000 GPD Daily Flow [AAC R18-9-E315].
- ☐ Evidence of performance specified in AAC R18-9-E315(B).
- ☐ The name and address of the treatment unit manufacturer.
- ☐ The model number.
- ☐ A copy of the manufacturer's warranty and operation and maintenance recommendations to achieve performance for a 20-year life.
- ☐ If nitrogen reduction to a level from 15 to less than 53 milligrams per liter is proposed, specifications on system nitrogen reduction performance and corroborating third party test data.

☐ **4.16** Aerobic System with Surface Disposal, Less than 3,000 GPD Daily Flow [AAC R18-9-E316].

☐ **4.17** Cap System, Less than 3,000 GPD Daily Flow [AAC R18-9-E317].
- ☐ Specifications for the proposed cap fill material.

☐ **4.18** Constructed Wetlands, Less than 3,000 GPD Design Flow [AAC R18-9-E318].

☐ **4.19** Sand Lined Trench, Less than 3,000 GPD Design Flow [AAC R18-9-E319].
- ☐ Specifications for the proposed media in the trench.

☐ **4.20** Disinfection Devices, Less than 3,000 GPD Design Flow [AAC R18-9-E320].

☐ **4.21** Sequencing Batch Reactor, Less than 3,000 GPD Design Flow [AAC R18-9-E321].

☐ **4.22** Subsurface Drip Irrigation, Less than 3,000 GPD Design Flow [AAC R18-9-E322].
- ☐ Documentation of the pretreatment method proposed to achieve the wastewater criteria specified in AAC R18-9-A322(B)(1), such as the type of pretreatment system and the manufacturer's warranty.
- ☐ Initial filter and drip irrigation flushing settings.
- ☐ Calculations of the site evaporation rate.
- ☐ Design calculations, showing the number of perennial plants needed to achieve the required evapotranspiration rate.
- ☐ If supplemental irrigation water is introduced to the drip system, the volume and volume percent of the supplemental water.

☐ **4.23** On-site Wastewater Treatment Facility, 3,000 to 24,000 GPD Design Flow [AAC R18-9-E323].
- ☐ A performance assurance plan consisting of task, schedules, and estimated annual costs for operating, maintaining, and monitoring performance over a 20-year useful service life.
- ☐ Design documents and the performance assurance plan sealed by an Arizona-registered professional engineer.
- ☐ Any documentation submitted under the alternative design procedure in R18-9-A312(G) that pertains to achievement of better performance levels than those specified in the general permit for the corresponding facility with a design flow of less than 3,000 gallons per day, or for any other alternative design, construction, or operational change proposed by the applicant.
- ☐ A demonstration of total nitrogen discharge control specified in A.A.C. R18-9-E323(A)(4).
- ☐ A Water Quality Management (208) Consistency Review Form.

DESCRIBE PROPOSED TREATMENT AND DISPOSAL TRAIN AND INDICATE ALL APPLICABLE GENERAL PERMIT NUMBERS; INDICATE DESIGN FLOW AND EXPECTED DATE OF OPERATION; DESCRIBE SEWAGE SOURCES AND CHARACTERISTICS:
TREATMENT & DISPOSAL:
Permit Numbers:
Design Flow:
Expected date of operation:
Sewage source/characteristics:

ALTERNATIVE DESIGN, INSTALLATION, OR OPERATION FEATURES (A312G); INCLUDE RULE REFERNECE FOR WHICH RULE CHANGE IS REQUESTED AND A SHORT DESCRIPTION. IF THERE ARE NONE PROPOSED WRITE "NONE" IN THE FIRST ROW:

No:	Rule Reference:	Description:
1.		
2.		
3.		
4.		

EXISTING ENVIRONMENTAL PERMITS:

List any state or federal environmental permits already held by the applicant or owner at this location or that are needed

☐ New installation of an on-site wastewater treatment facility. No other environmental permits exist or are needed.

☐ Other environmental permits exist or are needed (describe): _____

CERTIFICATION OF COMPLIANCE: To be completed by the homeowner or authorized agent.

I _____ , on this date of, _____ certify that this **Notice of Intent To Discharge** and attachments were prepared under my direction or authorization and all information is, to the best of my knowledge, true, accurate, and complete. I also certify that the treatment and disposal system described in this form is or will be designed, constructed, and operated in accordance with the terms and conditions of Arizona Administrative Code, Title 18, Chapter 9, Article 3 regarding aquifer protection permits and applicable requirements of Arizona Revised Statutes Title 45, Chapter 2.

I am aware that there are significant penalties for submitting false information including permit revocation as well the possibility of fine and imprisonment for knowing violations.

_____ _____

SIGNATURE **DATE**

2500 North Fort Valley Road, Building 1 • Flagstaff, AZ 86001-1287
(928) 679-8850 Fax (928) 679-8851
www.coconino.az.gov

COCONINO COUNTY
COMMUNITY DEVELOPMENT

ENVIRONMENTAL QUALITY PROGRAM

SYSTEM DESIGN FLOW FORM

Use the fixture count chart below to determine the total number of fixture units in your home. Check the corresponding box on the system design flow chart based on your fixture count and the number of bedrooms to determine the system design flow that is required. Enter the information at the bottom of the page.

FIXTURE COUNT CHART

Residential Fixture Type	Proposed # of Each Fixture Type	x	Fixture Units	=	Total # of Fixtures For Each Type
Bathtub			2	=	
Bidet		x	2	=	
Dishwasher, service		x	2	=	
Clothes washer (with or without laundry tub)		x	2	=	
Utility tub or sink separate from clothes		x	2	=	
Sink, kitchen (with or without dishwasher)		x	2	=	
Shower, single stall		x	2	=	
Sink, bar		x	1	=	
Sink, service		x	3	=	
Lavatory, single or double		x	1	=	
*Toilet, 1.6 gallons per flush (gpf)		x	3	=	
Toilet, >1.6 to 3.2 gpf		x	4		
Toilet, greater than 3.2 gpf		x	6	=	
			FIXTURE COUNT TOTAL	=	
			PHYSICAL NO. OF BEDROOMS		

*** To receive credit for toilet of 1.6 gallons per flush, obtain the Low Flush Affidavit Form at our front desk. Complete and submit with this packet. Credit will not be issued without a notarized Low Flush Affidavit Form.**

SYSTEM DESIGN FLOW CHART

√	No. of Bedrooms*	Fixture Count	Minimum Tank Size (gal)	System Design Flow (gpd)
☐	1	7 or less / more than 7	1000 / 1000	150 / 300
☐	2	14 or less / more than 14	1000 / 1000	300 / 450
☐	3	21 or less / more than 21	1000 / 1250	450 / 600
☐	4	28 or less / more than 28	1250 / 1500	600 / 750
☐	5	35 or less / more than 35	1500 / 2000	750 / 900
☐	6	42 or less / more than 42	2000 / 2500	900 / 1050
☐	7	49 or less / more than 49	2500 / 3000	1050 / 1200
☐	8	56 or less / more than 56	3000 / 3000	1200 / 1350

NOTE: For a single residence with more than 7 bedrooms, use R18-9-A314(D)(2) as the basis for determining minimum septic tank size and system design flow.

Tamarron Pines Homeowners Association

3652 Durango Dr.
Happy Jack, AZ 86024
Phone: 928-477-2602 FAX: 928-477-2295
tamarronpineshoa@gmail.com

Revision Date: January 2014

APPLICATION FOR SEWER SERVICES

Name_____**Telephone**_____

Address_____**Lot No./Unit No.**_____

_____**No. of Bedrooms**_____

I/We hereby submit 3 sets of drawings/plans for individual sewer services for the above described lot in **Tamarron Pines** Unit ____ (Drawings to be 11" x 17"" or 24" x 36"). Topography map to be included. Enclosed herewith is a plan check fee in the amount of $100.00, payable to **Mary Parke, P.E., Environmental Engineering Consulting LLC (maryparke@cox.net),** and inspection fee in the amount of $100.00 payable to **Doug Lendt, Forest Management LLC.** I understand that a separate set of plans or drawings are to be submitted to Coconino County Health Dept. for their approval.

___Approved for Construction
___Disapproved for Construction with remarks

By:_____
Mary Parke, P.E. Wastewater Operator
Tamarron Pines Homeowners' Association

NOTE: Approval by Coconino County Health Dept also needed

Tamarron Pines Homeowners Association

3652 Durango Dr.
Happy Jack, AZ 86024
Phone: 928-477-2602 FAX: 928-477-2295
tamarronpineshoa@gmail.com

APPROVAL OF CONSTRUCTION

(Call Doug Lendt, (602)-228-8032 - 24 hours in advance for inspection)
$100.00 Fee per Inspection

Date of Inspection_____

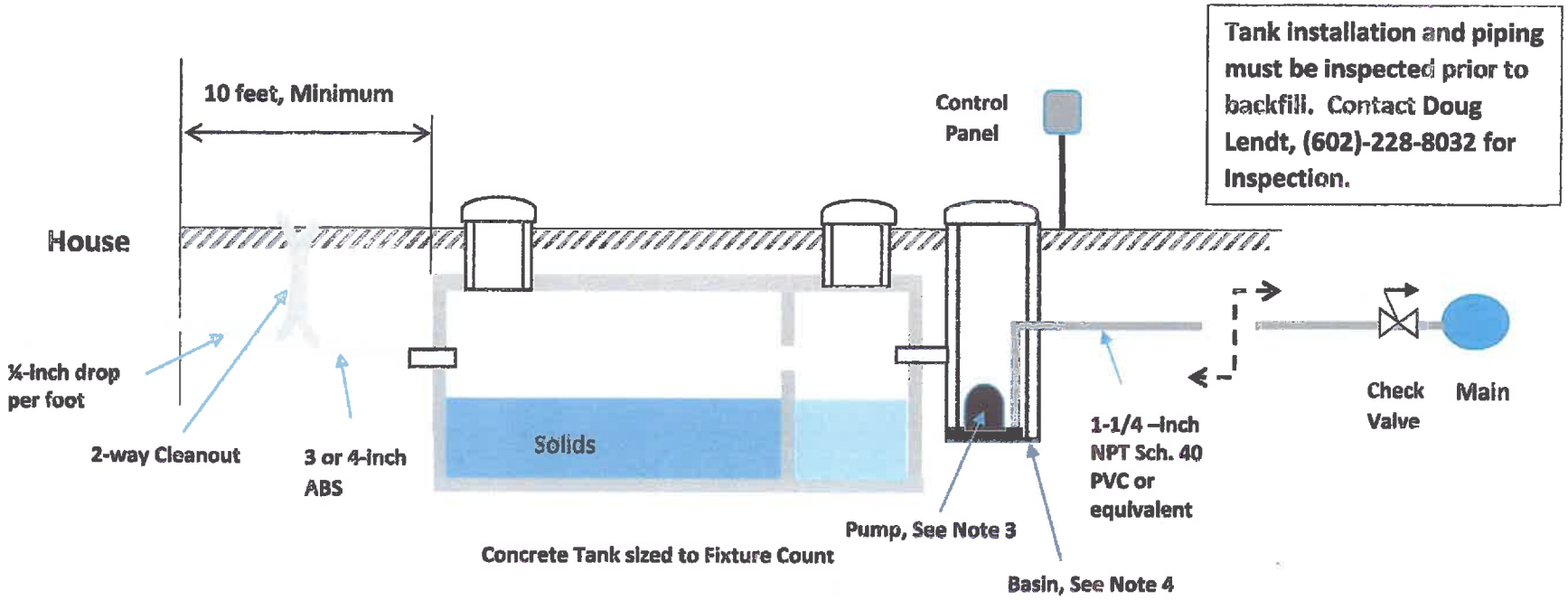
_____Disapproval of Construction Date:_____

_____Approval of Construction Date:_____("As Builts" to be Furnished)

Remarks:

By:_____
Inspector for Tamarron Pines Homeowners' Association

Doug Lendt
Forest Management LLC
2782 Durango
Happy Jack, AZ 86024
(602)-228-8032



Tamarron Pines Homeowners Association
Happy Jack, Arizona

Septic Tank and Grinder Pump Installation
February 2014 Revision

Notes:

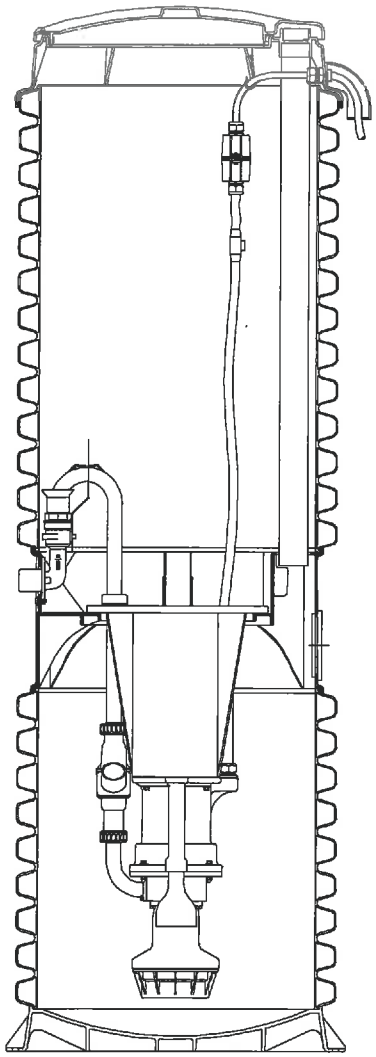
1. Installation must conform to all applicable building, mechanical, electrical codes.
2. Discharge line shall be installed below the frost line or insulated to protect from freezing.
3. Install grinder pumper per manufacturer's specifications –Crane Pumps, Barnes, Omni Grind Plus (OGP) - 2 HP, Model OGP2032L, or equivalent.
4. Crane Pumps, EasyELECTRIC™ Factory Prewired Basin Package Stainless Rail with Stealth™ Panel & UltraCAP2™ , 24 inch diameter by 60 inch depth, can be purchased as a package unit with pump and control panel, or equivalent.

Not to Scale

E/One Sewers™

option #1

GP2010



Patent Numbers: 5,752,315
5,562,254 5,439,180

* Discharge data includes loss through check valve, which is minimal.

PA1346P01 Rev. D, 1/02

General Applications

The size, efficiency and operating economy of the GP 2010 make it your best choice for single dwellings, waterfront property, subdivision developments and marinas. The GP 2010 is ideally suited for both new and existing communities.

General Features

The GP 2010 Grinder Pump is a complete unit that includes: the grinder pump, check valve, HDPE (high density polyethylene) tank and controls. The GP 2010 is packaged into a single complete unit, ready for installation.

All solids are ground into fine particles, allowing them to pass easily through the pump, check valve and small diameter pipelines. Even objects not normally found in sewage, such as plastic, rubber, fiber, wood, etc., are ground into fine particles.

The 1 1/4-inch discharge connection is adaptable to any piping materials, thereby allowing us to meet your local code requirements.

The tank is made of tough corrosion-resistant HDPE. The optimum tank capacity of 70 gallons is based on computer studies of water usage patterns. A single GP 2010 is ideal for one, average single-family home and can also be used for up to two average single-family homes where codes allow and with consent of the factory. This model can accommodate flows of 700 GPD.

The internal check valve assembly, located in the grinder pump, is custom-designed for non-clog, trouble-free operation.

The grinder pump is automatically activated and runs infrequently for very short periods. The annual energy consumption is typically that of a 40-watt light bulb.

Units are available for indoor and outdoor installations. Outdoor units are designed to accommodate a wide range of burial depths.

Operational Information

Motor
1 hp, 1,725 rpm, high torque, capacitor start, thermally protected, 120/240V, 60 Hz, 1 phase

Inlet Connections
4-inch inlet grommet standard for DWV pipe. Other inlet configurations available from the factory.

Discharge Connections
Pump discharge terminates in 1 1/4-inch NPT female thread. Can easily be adapted to 1 1/4-inch PVC pipe or any other material required by local codes.

*Discharge**
15 gpm at 0 psig

11 gpm at 40 psig

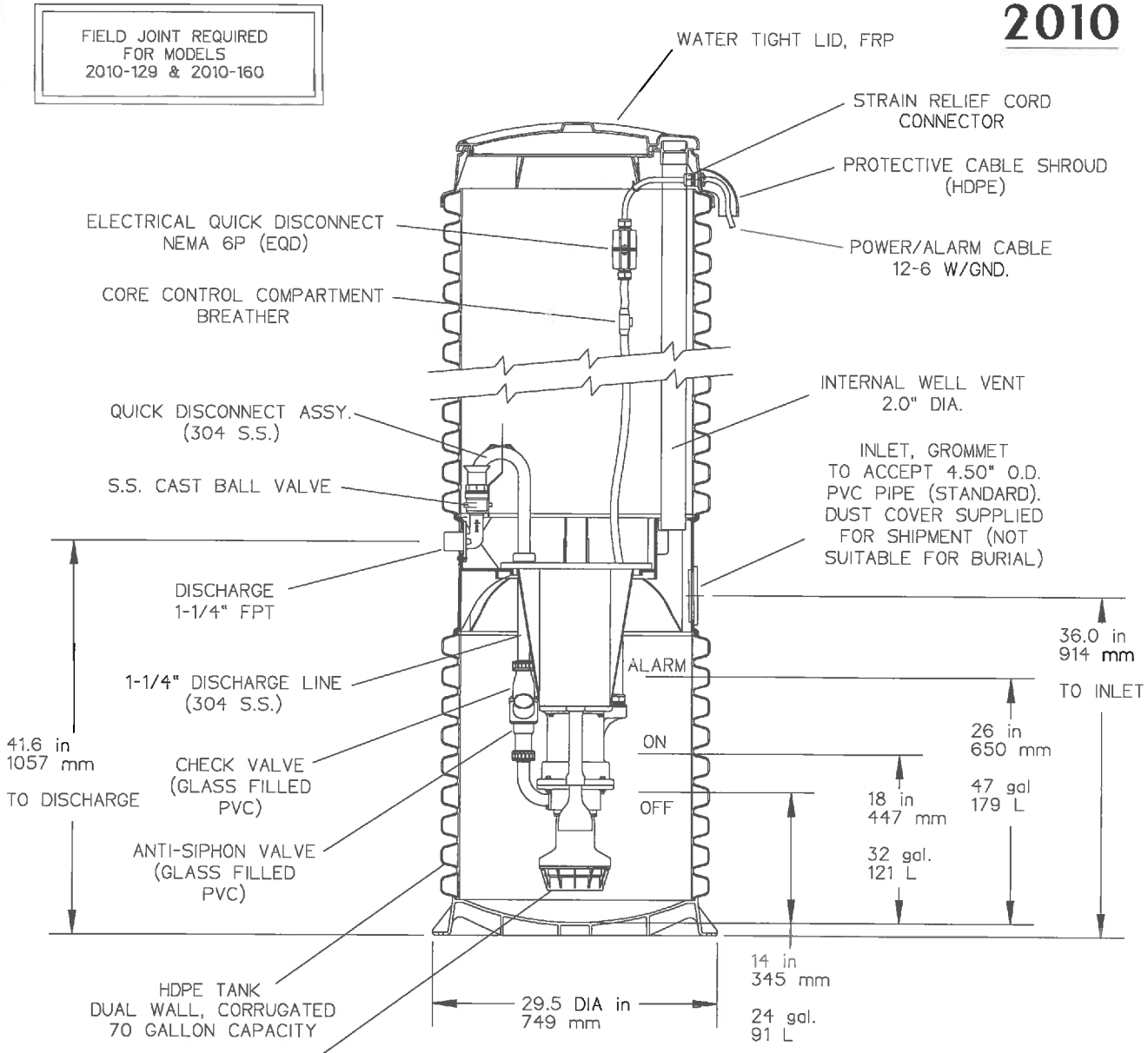
9 gpm at 60 psig

Overload Capacity

The maximum pressure that the pump can generate is limited by the motor characteristics. The motor generates a pressure well below the rating of the piping and appurtenances. The automatic reset feature does not require manual operation following overload.

2010

FIELD JOINT REQUIRED
FOR MODELS
2010-129 & 2010-160



BALLAST REQUIREMENTS

A CONCRETE ANCHOR IS REQUIRED
ON ALL OUTDOOR MODEL 2010 STATIONS

SPECIFIC CONCRETE DIMENSIONS ARE REQUIRED
TO ACHIEVE NECESSARY BALLAST EFFECT

SEE INSTALLATION INSTRUCTIONS FOR FURTHER DETAILS

SGS	CAH	01/10/02	H	1/16
DR BY	CHK'D	DATE	ISSUE	SCALE

SEWER SYSTEMS

MODEL 2010, DETAIL SHEET

PA0908P01

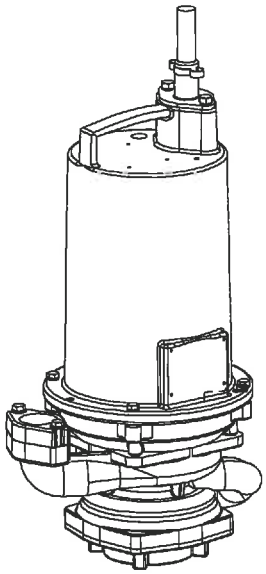
Series OGP
Recessed Vortex

option #2

BARNES®

www.cranepumps.com

Submersible Grinder Pumps



Series: OGP
2HP, 3450RPM, 60Hz

This product may be covered by one or more of the following patents and other patent(s) pending: US Patent 7,357,341

SWPA MEMBER

omni GRIND plus GRINDER PUMPS

CSA 108 - File No. LR16567
UL 778

3 Phase Models are CSA Listed ONLY

Sample Specifications: Section 3 Page 10.

DESCRIPTION:

THE GRINDER PUMP IS DESIGNED TO REDUCE DOMESTIC SEWAGE TO A FINELY GROUND SLURRY.

Specifications:

DISCHARGE .....1¼" NPT, Vertical, Bolt-on Flange
LIQUID TEMPERATURE .....104°F (40°C) Continuous
VOLUTE .....Cast Iron ASTM A-48, Class 30
MOTOR HOUSING .....Cast Iron ASTM A-48, Class 30
SEAL PLATE .....Cast Iron ASTM A-48, Class 30
IMPELLERS: *Design*.....12 Vane,Vortex, With Pump Out Vanes On Back Side. Dynamically Balanced, ISO G6.3.
Material .....85-5-5-5 Bronze
IMPELLER SPACER.....300 Series Stainless Steel
SHREDDING RING .....Hardened 440C Stainless Steel Rockwell® C-55.
CUTTER .....Hardened 440CStainless Steel, Rockwell® C-55.
SHAFT .....416 Stainless Steel
SQUARE RINGS .....Buna-N
HARDWARE .....300 Series Stainless Steel
PAINT .....Air Dry Enamel.
SEAL: *Design* .....Single Mechanical
Material.....Rotating Faces - Silicon-Carbide
Stationary Faces - Silicon-Carbide
Elastomer - Buna-N
Hardware -300 Series Stainless
CORD ENTRY.....30 ft. (9.1 m) Std. Cord. Custom Molded Quick Connect, for Sealing and Strain Relief
CORD *Manual*.....CSA/UL Approved, 12/4 Type SOW
UPPER BEARING:
Design .....Single Row, Angular contact Ball
Lubrication .....Oil
Load .....Radial & Thrust
LOWER BEARING:
Design .....Single Row, Angular contact Ball
Lubrication .....Oil
Load.....Radial & Thrust
MOTOR: *Design* .....NEMA L-Single Phase Torque Curve, Oil-Filled, Squirrel Cage Induction (includes overload protection in the motor), NEMA B three phase torque curve.
Insulation .....Class F
SINGLE PHASE.....Capacitor Start/Capacitor Run.
THREE PHASE.....Tri-Voltage 200/240-480, requires overload protection to be included in control panel.
OPTIONAL EQUIPMENT.....Cord Length, Moveable Fitting

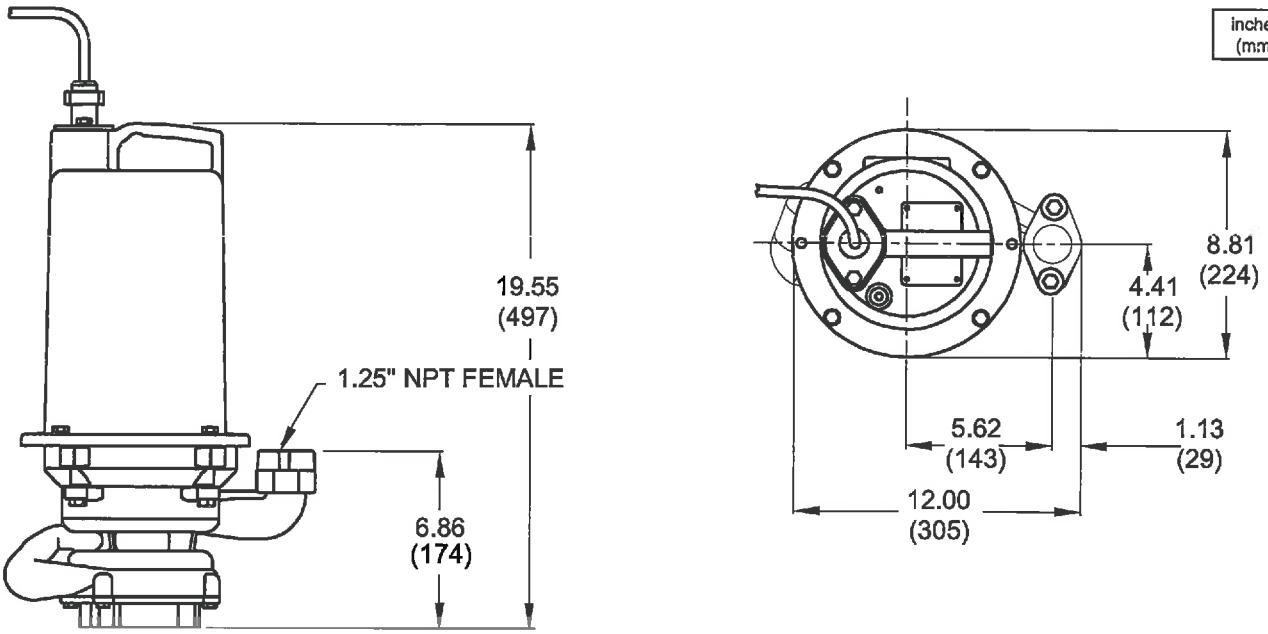
RECOMMENDED:
Accessories .....Break Away Fitting (BAF)
Check Valve
Control Panel
Seal Kit PN 116664
Service Kit PN.....116665

CRANE®
A Crane Co. Company

PUMPS & SYSTEMS

USA: (937) 778-8947 • Canada: (905) 457-6223 • International: (937) 615-3598

Submersible Grinder Pumps



MODEL NO	PART NO	HP	VOLT	PH/Hz	RPM (Nom)	NEMA START CODE	FULL LOAD AMPS	LOCKED ROTOR AMPS	CORD SIZE	CORD TYPE	CORD O.D. ± .02 (.5) in (mm)
OGP2022L	115328	2	240	1 / 60	3450	H	16.5	53.8	12/3	SOW	.61 (15.5)
OGP2062L	134925	2	200	3 / 60	3450	L	10.8	52.7	12/4	SOW	.67 (17.0)
OGP2032L	135034	2	240	3 / 60	3450	L	8.9	43.9	12/4	SOW	.67 (17.0)
OGP2042L	135035	2	480	3 / 60	3450	L	4.5	22.0	12/4	SOW	.67 (17.0)

FOR 3 PHASE MODELS: TEMPERATURE SENSOR CORD IS 14/3 SOW, 0.55 (14MM) ± .02 (.51MM) O.D.

IMPORTANT !

1.) PUMP MAY BE OPERATED "DRY" FOR EXTENDED PERIODS WITHOUT DAMAGE TO MOTOR AND/OR SEALS.
2.) THIS PUMP IS APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION II HAZARDOUS LOCATIONS.
3.) THIS PUMP IS NOT APPROPRIATE FOR THOSE APPLICATIONS SPECIFIED AS CLASS I DIVISION I HAZARDOUS LOCATIONS.
4.) INSTALLATIONS SUCH AS DECORATIVE FOUNTAINS OR WATER FEATURES PROVIDED FOR VISUAL ENJOYMENT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE ANSI/NFPA 70 AND/OR THE AUTHORITY HAVING JURISDICTION. THIS PUMP IS NOT INTENDED FOR USE IN SWIMMING POOLS, RECREATIONAL WATER PARKS, OR INSTALLATIONS IN WHICH HUMAN CONTACT WITH PUMPED MEDIA IS A COMMON OCCURRENCE.

Simplex

*Easy*ELECTRIC™ Factory Prewired Basin Package
Stainless Rail with Stealth™ Panel & UltraCAP2™

PS-023

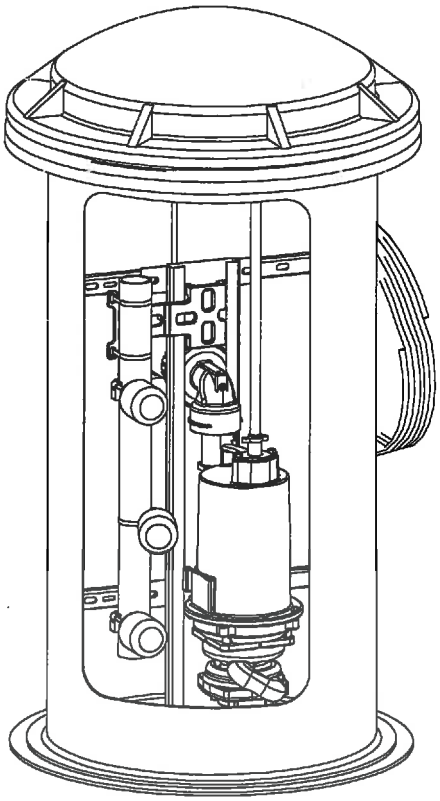
Basin Assemblies

Specifications:

inches (mm)

BASIN ..... Fiberglass w/ 3" (76) Ballast Support Flange
DISCHARGE ..... Stainless Steel.
Size ..... 1¼" NPT, Female
INLET ..... 4" (102) Flexible Inlet Flange, (For Field Installation)
COVER: *Polyethylene* ... *Ultra*CAP2 with Integrated Control Panel, Green, 24" (610) Dia. Basins shown
CONTROL PANEL ..... STEALTH Series Control Panel
DIRECT BURIAL CABLE .... 12/5 Type TC, THHN, THWN Round U.L. Listed. 50ft. (15m) STD,
RAIL SYSTEM ..... 300 Series Stainless Steel "C" Channel
STATIONARY DISCHARGE FITTING:
Stationary ..... Powder Coated Cast Iron
Diaphragm ..... Fiber Reinforced Neoprene
BALL VALVE:
Design ..... Full Port True Union
Material ..... PVC
Size ..... 1¼" NPT
EXTENSION HANDLE. ..... 3/8" Dia. (9.5) Stainless Steel
LIFTING ROPE ..... 1/2" Dia. (13) Polypropylene with Knots in 12" (305) increments. Breaking Strength of 3750 lbs. (1701kg)
HARDWARE ..... 300 Series Stainless Steel
DISCHARGE PIPING ..... 300 Series Stainless Steel
LEVEL CONTROLS:
*Float*TREE ..... Quantity of Three Mercury Level Controls Potted together and terminating into one 5 conductor color coded cord, mounted on PVC pole
ESPS ..... Environmentally sealed pressure switch with CPVC housing, Buna diaphragm, Custom molded quick connect for sealing and strain relief
MOVABLE SUB-ASSEMBLY:
(Ordered with Pump)

FLAPPER/ANTI-SIPHON CHECK VALVE:
Housing ..... Cast Iron, powder coated with integrated anti-siphon
Flapper ..... Fiber reinforce Nitrile
PUMP BRACKETS ..... 300 Series Stainless Steel
DISCHARGE PIPING ..... Stainless Steel, Supplied with 1.25" NPT Female PVC Redundant Flap Check Valve.
OPTIONS ..... 4" (102) Sch 40 or SDR35, Flexible Inlet Flange or Cast Iron Inlet Hubs, Stainless Steel Flexible Discharge Connector, Basin Depths, Direct Burial Cable Length.



Series: SSRS, 1¼" NPT Discharge

For use with OGP, OGVF, OGVH, SGVF, SGVH pumps

Submersible Wastewater Pump Association SWPA MEMBER

UL **File No. LR151564**

Simplex

*Easy*ELECTRIC™ Factory Prewired Basin Package
Stainless Rail with Stealth™ Panel & UltraCAP2™

BARNES PRESSURE SYSTEMS
www.cranepumps.com

Basin Assemblies

PS-024

1. Diameter 24" (.6m) 30" (.8m) Reduced

2. Depth
48" (1.2m) 60" (1.5m)
72" (1.8m) 84" (2.1m)
90" (92.3m) 96" (2.4m)
108" (2.7m) 120" (3m)
132" (3.4m) 144" (3.7m)

3. Level Control
FloatTREE ESPS-100

4. Pump Type
2 HP OGP
2 HP OGVF 2 HP OGVH
2 HP SGVF 2 HP SGVH

5. Pump Voltage and Phase
(**Voltage & Phase Restrictions** - OGV & OGP are **ONLY** available in 240 Volt / 1 Phase)
200 Volt / 1 Phase
240 Volt / 1 Phase

6. Sensor Options:
(**Sensor Restrictions** - OGV & OGP Cannot Use Moisture Sensors.)
Temperature Only
Moisture and Temperature

7. Inlet Type
4" SDR 35 Flexible Fitting
4" Schedule 40 Flexible Fitting
4" Cast Iron Caulking Hub

8. Lifting Device
Polypropylene Rope
Stainless Steel Cable
Stainless Steel Chain

9. Lock Options
None Panel Only
Cover and Panel

10. Direct Burial Cable Length
50 Feet 100 Feet
150 Feet

(Continued next column)

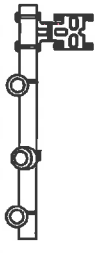
11. Panel Options
Alarm Light / Horn
Moisture Sensors (See Sensor Options)
Generator Receptacle

NOTES!

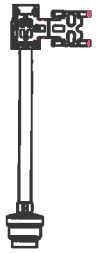
1. C-Channel guide rail is designed to support Grinder pumps approximately 4" (102mm) from bottom of basin.
2. Movable portion of "BAF", piping, check valve and pump brackets will be shipped on pump.
3. System **DOES NOT** include pump. MUST be ordered separately
4. Other depths and options available, consult factory.
5. Basins for 2 HP Pumps will have a 1-1/4" Female NPT discharge Connection.

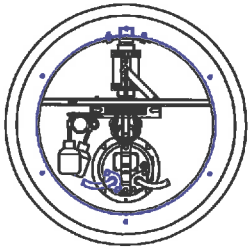
LEVEL CONTROL OPTION:

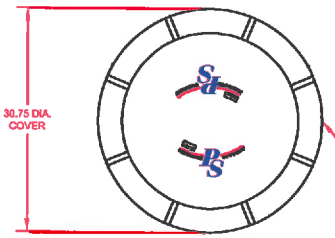
☐ UNIVERSAL FloatTREE

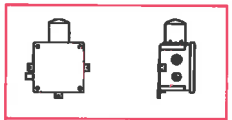


☐ ESPS-100





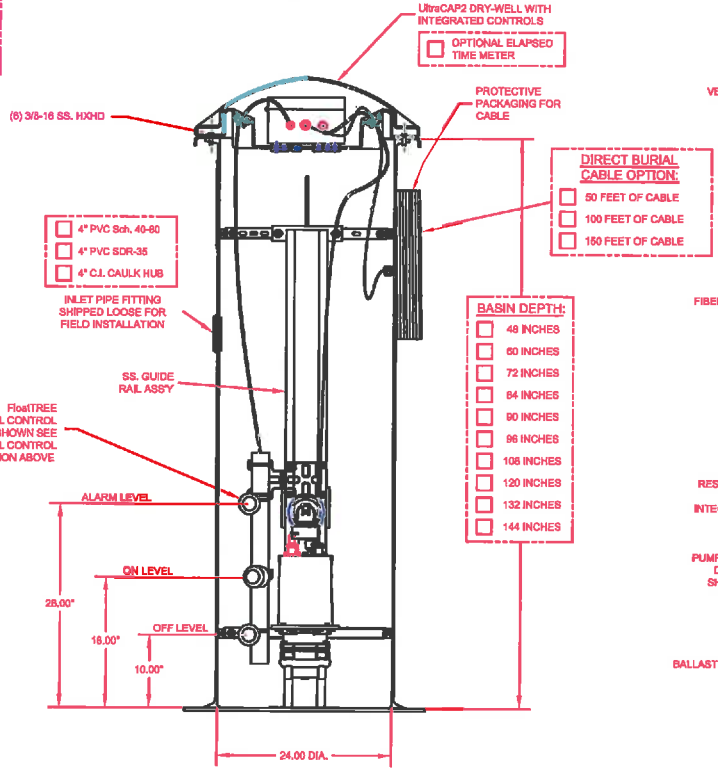


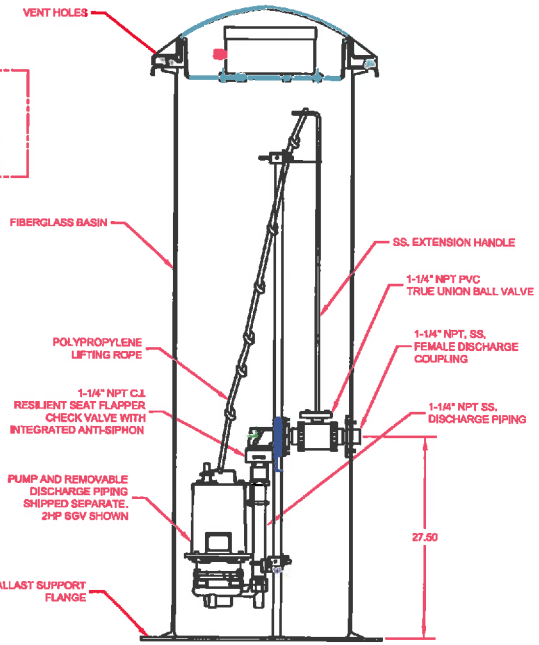


REMOTE ALARM BOX

☐ LIGHT/HORN

☐ LIGHT/HORN WITH GEN. REC.

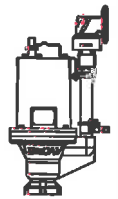




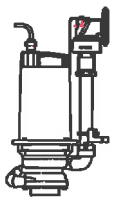
NOTES:

1) ALL DIMENSIONS TO BE ± 1/4" UNLESS OTHERWISE SPECIFIED.
2) INTERMEDIATE SUPPORT SUPPLIED FOR DEPTHS 12 FT. AND DEEPER.
3) CONSULT FACTORY FOR OTHER DEPTHS

PUMP OPTION:

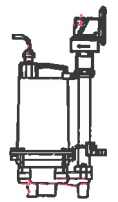


☐ SGPC 1HP



☐ OGP 2HP

☐ OGV 2HP



☐ SGV 2HP

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SHEET 1 OF 1

TITLE: SIMPLEX, 24" BASIN PW-UltraCAP2, SGV, OGV, OGP, SGPC

CAGE NO: 96046

DWG NO: CD116900

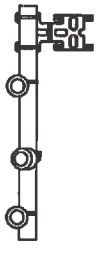
REV: P1

CRANE PUMPS & SYSTEMS

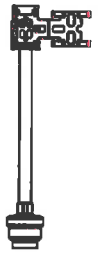
BARNES PRESSURE SYSTEMS

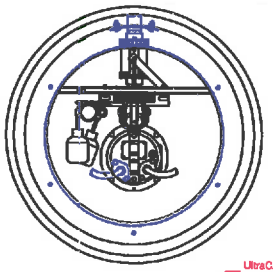
LEVEL CONTROL OPTION:

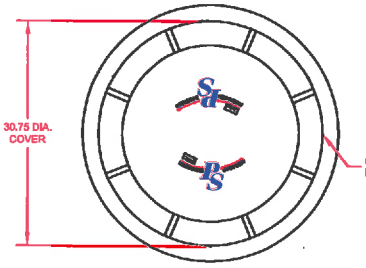
☐ UNIVERSAL FloatTREE

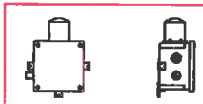


☐ ESPS-100





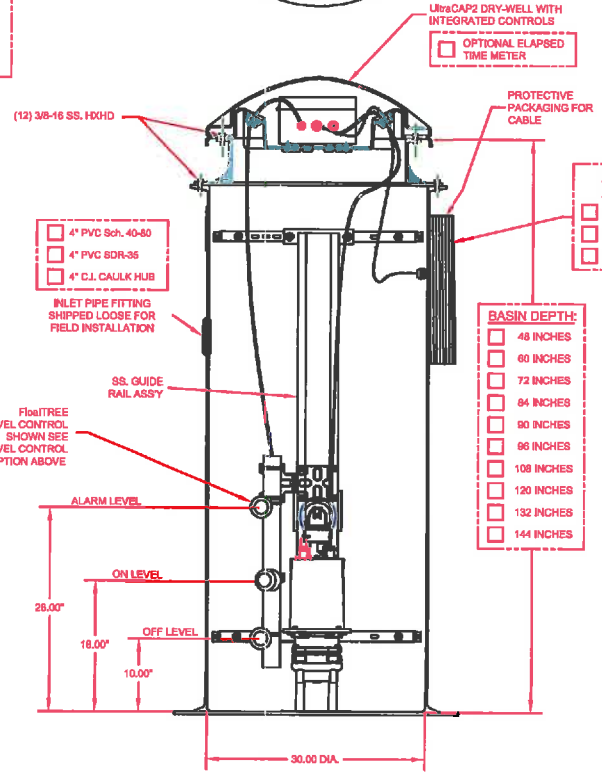




REMOTE ALARM BOX

☐ LIGHT/HORN

☐ LIGHT/HORN WITH GEN. REC.



DIRECT BURIAL CABLE OPTION:

☐ 50 FEET OF CABLE

☐ 100 FEET OF CABLE

☐ 150 FEET OF CABLE

BASIN DEPTH:

☐ 48 INCHES

☐ 60 INCHES

☐ 72 INCHES

☐ 84 INCHES

☐ 90 INCHES

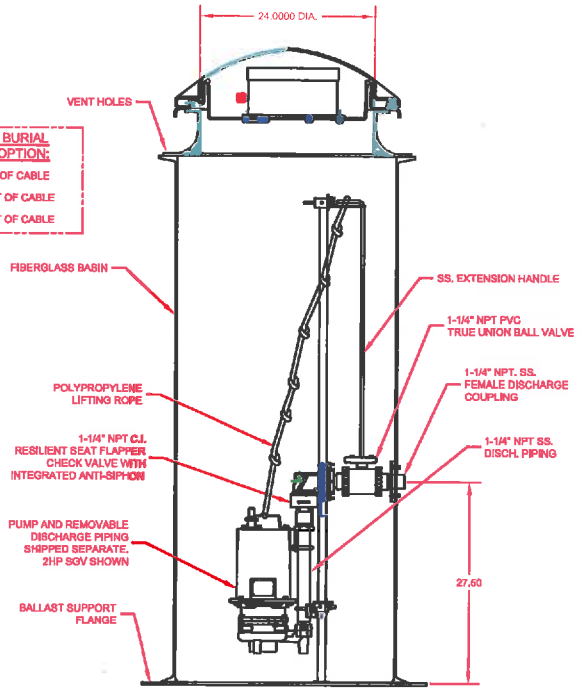
☐ 96 INCHES

☐ 108 INCHES

☐ 120 INCHES

☐ 132 INCHES

☐ 144 INCHES



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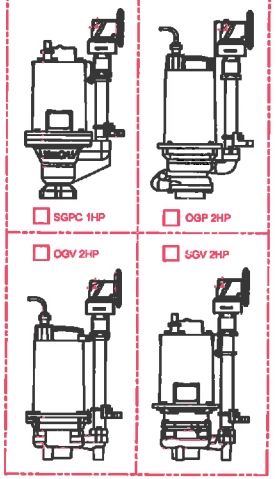

☐ SGPC 1HP ☐ OGP 2HP

☐ OGV 2HP ☐ SGV 2HP

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