

Approved Materials List

2020 Edition



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Notes:

- The use of alternative equipment and/or materials that are of equal quality and of the required characteristics for the purpose intended may be permitted in accordance with Section 18 of the *Standard Specifications for Design and Construction*.
- Phone number and websites are provided as a courtesy only.

Division 03 - Concrete

Reference: Section 03 30 00, Cast-in-Place Concrete
Section 03 34 13, Controlled Low-Strength Material (CLSM)
Section 03 40 00, Precast Concrete

READY-MIX DESIGNS

Description: Cast-in-place, ready-mix concrete

Manufacturer	Phone Number	Mix Designation	Mix Design #
Central Concrete Supply	(408) 404-1030	Controlled Low Strength Material	F35138AA
		Cast-in-place Concrete	1EF115Q1
			163115C1
Cemex	(650) 333-5357	Controlled Low Strength Material	4212893
		Cast-in-place Concrete	4212798

CONCRETE CURING MATERIALS

Description: Curing compounds shall be white pigmented and resin based.

Note: Sodium silicate compounds shall not be used.

Manufacturer	Compound
Master Builders	MB-429
Burke Company	Spartan Cote Cure-Seal Hardener
Euclid Chemical Company	Super Rez Seal

PRECAST PRODUCTS

Description: Precast Products such as Manhole Bases, Barrels, Cones, Grade Rings, Paving Rings, Adjustment Rings, Gaskets, Top Slabs, Grease Interceptors, Sampling Boxes and Sand-Oil Interceptors can be obtained from the following approved manufacturers.

Manufacturer	Phone Number
Central Precast (US Concrete Precast Group)	(925) 960-8740
Jensen Precast	(707) 429-5500
Cook Concrete Products	(530) 243-2562

REINFORCED CONCRETE UTILITY BOXES

Description: Utility boxes for traffic and non-traffic areas

Location	Item Description	Product
Traffic Area	10-3/8" I.D. x 12" Valve Box	Christy® or Jensen® G5 Traffic Valve
Non-Traffic Area	8" I.D. x 12" Valve Box	Christy® or Jensen® F8 Box
	8-1/2" I.D. x 11-3/4" Drain Box	Christy® V1 Drain Box
	Cast Iron Grate 3/4" Max Spacing and Max 1/4" wide slots	Christy® V1-71C Grate

			
Christy® G5 Box	Christy® F8 Box	Christy® K-6004 Grate (special order)	Christy® V1-71C Grate

Division 05 - Metals

Reference: Section 05 50 00, Miscellaneous Metal Work




CAST METAL PRODUCTS

Description: Cast Metal Products such as Manhole Frames, Covers, Rodding Inlets and Adjustment Rings can be obtained from but are not limited to the following approved manufacturers:

Manufacturer	Phone
D&L Foundry and Supply	(707) 557-4525
South Bay Foundry	(209) 367-1940

ANCHORS

Description	Manufacturer	Product
Anchors: epoxy adhesive	Sika	FI System with Sikadur® Injection Gel Epoxy
	Hilti	HIT HY150 Adhesive Anchors
	BASF	Concresive® 1420 Gel Epoxy Adhesive
	BASF	Concresive® Paste LPL
Anchors: expanding type	ITW	Red Head®, Trubolt Wedge Anchor
	Hilti	Kwik-Bolt 3 Expansion Anchor
Anchors: Glass Capsule Polyester Resin Adhesive Anchors	Hilti	HVU Adhesive Capsule

 <p>Trubolt Wedge Anchor</p>	 <p>HVU Adhesive Capsule</p>	 <p>HIT HY150 Adhesive Anchor</p>
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Division 31 - Earthwork

Reference: Section 31 23 16, Excavation, Bedding and Backfill
Section 31 05 19, Geosynthetics for Earthwork

BEDDING AND BACKFILL MATERIALS

Type	Material Description
CLSM	<ul style="list-style-type: none"> Controlled Low Strength Material
Coarse	<ul style="list-style-type: none"> Drain or Foundation Rock Crushed stone or gravel (not mined alluvial material) Minimum of 95% crushed particles Durability Index of 40
Type 1	<ul style="list-style-type: none"> Class 2 Aggregate Base Newly quarried or recycled material (not mined alluvial material) $\frac{3}{4}$" maximum grading
Type 3	<ul style="list-style-type: none"> Native material from trench excavation Free of vegetable matter, debris and refuse, concrete, stones or clods larger than 4"
Type 3 Select	<ul style="list-style-type: none"> Native Material from trench excavation Particles must not exceed $\frac{3}{4}$" in diameter Free of vegetable matter, debris and refuse, concrete, stones or clods larger than 4"

GEOTEXTILES

Description	Manufacturer	Product
Geotextile for Wrapping Foundation Rock	Mirafi	600X
	US Fabrics	US 315
	Webtec	HD
	Carthdage Mills	FX-66
	Amoco	2006
	Propex	300 ST
	SKAP	W315
	Thrace/Linq	GTF 300
Geotextile for Paving	Mirafi	Mirapave 400
	US Fabrics	US 90P
	Webtec	OL
	Carthdage Mills	FX-38 OL
	Amoco	4599 Petromat
	Propex	381
	SKAP	GC 130
	Thrace/Linq	130 EX

Division 33 - Utilities

Reference: Part II, Section 4
 Part II, Section 5
 Part III, Section 8
 Part IV, Section 13
 Section 33 05 16, Cast Iron Pipe (CIP)
 Section 33 05 19, Ductile Iron Pipe (DIP)
 Section 33 05 31.11, Polyvinyl Chloride (PVC) Gravity Pipe
 Section 33 05 31.33, Acrylonitrile Butadiene Styrene (ABS) Pipe
 Section 33 05 33.13, High Density Polyethylene (HDPE) Gravity Pipe
 Section 33 05 41, Vitrified Clay Pipe (VCP)
 Section 33 31 00, Sanitary Sewerage Piping
 Section 33 31 16, Sanitary Sewer Gravity Service Laterals
 Section 33 31 26 - Multiple-User Low Pressure Sewer Systems (MULPSS)
 Section 33 32 26 - Individual Lot Pumping Systems

HOUSE SEWERS: 4" AND 6"

Description: Pipe material for house sewers 4" and 6" in diameter.

Description	Joints
ABS Solid Wall Schedule 40	<ul style="list-style-type: none"> • solvent welded joints
CIP Class SV¹	<ul style="list-style-type: none"> • bell & spigot joints • no-hub (repairs only)
DIP Class 52- epoxy lined and bituminous coating	<ul style="list-style-type: none"> • bell & spigot joints
HDPE SDR-17 Gray (Ductile Iron Pipe O.D.)²	<ul style="list-style-type: none"> • butt thermal fused joints, de-beaded • pipe bursting or directional drilling only or at inspector's discretion
PVC Solid Wall SDR-26	<ul style="list-style-type: none"> • solvent welded joints • bell & spigot joints
PVC Solid Wall C900 DR-14, DR-18, DR-25	<ul style="list-style-type: none"> • bell & spigot joints

Notes:

1. CIP is approved for spot repairs to match existing material. CIP will not be approved for installation of new side sewers or replacement of existing side sewers.
2. HDPE SDR-17 shall be purchased in longest length practicable in order to achieve the minimum amount of pipe joints during construction. A maximum of 10 joints per 100-foot length of laid pipe shall be achieved, unless all joints are de-beaded.

HOUSE SEWERS: PRESSURIZED

Description: Pipe material for pressurized sewer laterals

Description	Joints
HDPE SDR-11 Gray (Ductile Iron Pipe O.D.)	<ul style="list-style-type: none"> butt thermal fused joints, de-beaded
PVC	<ul style="list-style-type: none"> restrained joint

OVERFLOW PROTECTION DEVICES (OPD)

Description: Overflow protection devices prevent sewage from entering homes and businesses and reroute the spill outside the building.

Type	Manufacturer	Product Name
Extendable Backwater Valve	Mainline Backflow Products	Adapt-a-valve Inspection Chamber with Test-Eze Gate Feature
	Rector Seal	Clean Check Backwater Valve
"Mushroom"	Genplex	Kelly Backwater Device (No-Hub & IPS)
Sewer Popper™	Stephens Corp	Sewer Popper™ Model S62-304
Relief Cap (6" Cleanouts Only)	Unlimited Home Solutions LLC (www.unlimitedhomesolutions.com)	Sewer Relief Cap
Relief Cap/Popper (avail for 6" cleanouts)	K&S Enterprises (www.kandsreps.com)	Product #62306

			
ABS Extendable Backwater Valve	PVC Extendable Backwater Valve	"Mushroom" OPD	Sewer Popper™ OPD
			
Sewer Relief Cap (6" Clean Outs Only)	K&S Sewer Relief Cap/Popper		

MAIN SEWERS: LESS THAN 18"

Description: Pipe material for sewers less than 18" in diameter.

Note: Material shall be purchased in longest length practicable in order to achieve the minimum number of pipe joints.

Description	Joints
PVC Solid Wall SDR-26	<ul style="list-style-type: none"> • bell & spigot joints
DIP Class 52- epoxy lined and bituminous coating	<ul style="list-style-type: none"> • bell & spigot joints
PVC Solid Wall C900 or C905	<ul style="list-style-type: none"> • bell & spigot joints
HDPE SDR-17 Gray (Ductile Iron Pipe O.D.)	<ul style="list-style-type: none"> • butt thermal fused joints, de-beaded
VCP	<ul style="list-style-type: none"> • bell & spigot joints

JOINT RESTRAINT SYSTEMS

Material	Manufacturer	Joint Restraint System
DIP	American Ductile Iron Pipe	"Lok-Fast" Restrained Joint
	U.S. Pipe	"TR FLEX" Restrained Joint
		"Field-Lok 350 Gaskets"
PVC	BullDog Restraint System	BullDog PVC Pressure Pipe Integrated Joint Restraint System
	Certain Teed	Certa-Lok restrained joint system

PIPE FITTINGS FOR SEWERS LESS THAN 18"

Description: Pipe fittings for pipelines that are less than 18" in diameter.

Pipe Material	Fitting
DIP	Wye, Tee, 11 ¼ ° Fitting, Mechanical Fittings
PVC Solid	Wye, Tee, Closure Coupling
	Saddle Tee, 3° Fitting, 11 ¼ ° Fitting
	90° Sweep Elbow
VCP	Wye, Tee

Manufacturer	Flexible Fitting	Maximum Allowable Fitting Deflection
Plastic Trends	SDR-26 Gasketed Sewer Fitting	4°
CertainTeed	Cast Iron O.D.	5°
	Iron Pipe Size O.D.	5°

 <p>90° Sweep Elbow for pressure side sewers</p>	 <p>Saddle Tee Fitting</p>	 <p>Wye, Tee Fitting</p>	 <p>SDR-26 Heavy Wall Gasketed Sewer Fitting</p>
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CAST IRON FITTINGS

Description: Cast iron fittings

Note: Other fittings may be accepted under special use approval. Contact the District Inspector for such circumstances. All fittings to be 4" or larger.

		
Combination Wye and 1/8 Bend	1/8 Ben	Long Sweep Quarter Bend
		
P-trap	Reducer	Reducing Combination
		
San Tee	1/16 Bend	Two-Way Combination (Clean-Out Only)
		
Wye	Twin Cleanout	

COUPLINGS


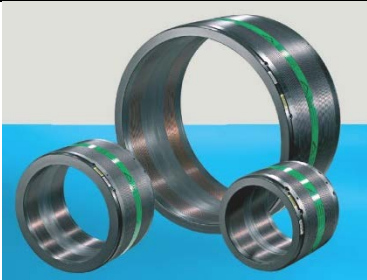
Description: Banded Rubber Couplings for repairs, alterations and house sewers with connections of dissimilar materials. Banded rubber couplings shall have 4 clamps and metal shear bands.

Manufacturer: Manufacturers included but are not limited to:

- Fernco®
- Mission®
- Husky®

Note: Check with Inspector prior to purchase of material to insure proper coupling is selected for the different pipe types encountered.

Not Approved		
		
Mission® Band Seal	Joints® Calder Coupling	Fernco® Proflex Coupling
Approved		
		
Husky® 4 Clamp Coupling (80 in-lb)	Fernco® Stainless Steel Shear Rings (60 in-lb)	Fernco® Strong Back RC Couplings (60 in-lb)
		
Fernco® 5000 Series RC Couplings (60 in-lb)	Fernco® No-Hub Coupling Silver Yellow & Green (80 in-lb)	Mission® Adjustable Repair Coupling

 <p>Anaco No Hub (60 in-lb)</p>	<p>Indiana Seal Shear Ring</p>	 <p>Friatec® Frialen Electrofusion Coupling</p>
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TAPS

Description: Tap materials for the corresponding type of main line sewer.

Note: PVC taps may be done by A, C-34, or C-42 contractors registered and approved with Central San.

Pipe Material	Mainline Tap
ABS	<ul style="list-style-type: none"> Sealtite Type "S" Saddle with 4-band coupling ABS Saddle with solvent weld and 2 stainless steel straps
ACP	<ul style="list-style-type: none"> Fowler Saddle
CIP, DIP	<ul style="list-style-type: none"> Fowler Saddle Sealtite Type "S" Saddle with 4-band coupling
HDPE	<ul style="list-style-type: none"> Thermal-Fused Saddle
Insituform Liner	<ul style="list-style-type: none"> PVC Saddle with Rubber Gasket and 2 stainless steel straps
PVC	<ul style="list-style-type: none"> Sealtite Type "S" Saddle with 4-band coupling PVC Saddle with Rubber Gasket and 2 stainless steel straps PVC Saddle with solvent weld and 2 stainless steel straps
VCP	<ul style="list-style-type: none"> Fowler Saddle Sealtite Type "S" Saddle with 4-band coupling

 <p>ABS Saddle</p>	 <p>Fowler Saddle</p>	 <p>HDPE Saddle</p>	 <p>PVC Saddle</p>
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PUMP SYSTEMS

Description: Pre-Approved Pump Systems, Pipe

Vendor	System	Pipe Material
E-One	D-Series, W-Series, I-Series and G-Series	HDPE (SDR-11) or PVC (Sch 40 or 80)
Liberty	2448- Series, Pro370 Series, Pro380 Series	HDPE (SDR-11) or PVC (Sch 40 or 80)
Aqua Pro Pump Systems	E-Series, EDP Series, ESP-Series, SG-Series, DG-Series	HDPE (SDR-11) or PVC (Sch 40 or 80)

Systems commonly approved for single-family home applications:

Application	Vendor/Model
Sinks only	<ul style="list-style-type: none"> Liberty P380 (pump & tank system)
Accessory Dwelling Unit (ADU)	<ul style="list-style-type: none"> Liberty LE 40 or 50 pump / P370 tank with ARC 18 riser E-One Grinder / D Series (pump & tank system) Liberty LSG 200 pump / 24XX or 36 XX Series with 60" high tank
Single-Family Residence (SFR)	<ul style="list-style-type: none"> E-One Grinder / D Series (pump & tank system) Liberty LSG 200 pump / 24XX or 36 XX Series with 60" high tank
Low/No Head (less than 10 feet lift)	<ul style="list-style-type: none"> Liberty LE 40 pump / no preference for tank Little Giant pump / no preference for tank

Note: Do not order pumps/tanks listed below until Central San approves the pump & tank submittal application.

Complete packages are required for pre-approved pump systems. This includes a pump, alarm panel, isolation and check valves, sump and sump extensions (as required). Individual parts of pump system are not pre-approved by Central San.

 <p>E-One® Model D-H071 Grinder</p>	 <p>Liberty® 2448 Series</p>	 <p>E-One® Model Gator</p>
 <p>Liberty® Pro370-Series (2" discharge system, Required Access Riser)</p>	 <p>Liberty® Pro380 Series (2" discharge system, Required Access Riser)</p>	 <p>Aqua Pro SG-1182-2</p>



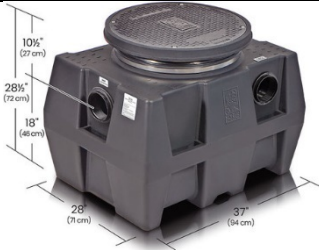

GREASE TRAPS & INTERCEPTORS

Description: Grease Traps (Referred to in the UPC as Hydromechanical Grease Interceptors) for trash enclosures with a 4" connector.

Reference: Part II, Section 5

Manufacturers:

Manufacturer	Website	Product
Canplas	Canplas.com/endura	Endura Series
Jay R. Smith Manufacturing Company	Jrsmith.com/grease-interceptors	8000-8100 Series
Schier	Schierproducts.com	Great Basin (GB Series)
Zurn	Zurngreasetraps.net	Z1165, Z1170, Z1172, GT2700 Grease Interceptors

 <p>Canplas Endura Series</p>	 <p>Jay R. Smith 8000-8100 Series</p>	 <p>Schier Great Basin Series</p>
 <p>Zurn Z1170</p>		

Notes: Models without a standard 4" connector shall be upgraded to 4". No field modifications to the inlet pipe size or location will be allowed, except by the manufacturer. If installed outside of enclosure, traffic rated lid is required. Polyethylene is an allowable material for the grease trap.

Miscellaneous

Reference: Section 03 40 00, Precast Concrete
Section 05 50 00, Miscellaneous Metal Work

Product	Manufacturer	Product
D.E. Separation Tanks	Hayward Pool Products	Model # C9002 SEP
	Pentair	Separation Tank 100
Galvanizing Field Repairs	Carboline®	Galvanox
Manhole Sealing Tapes	HubSett™	Rector Seal®
	J-K Polysource®	External Joint Wrap M-860
	Henry®	Rubr-Nek External Joint Wrap
	ConSeal®	CS-75 CS-101 Butyl Sealant for Precast Structures
Transition Cements	Weld-On®	ABS to PVC Transition Cement
	Oatey®	ABS to PVC Transition Green Solvent Cement
Waterstops	Newby	Rubber Water Stop Ring



Waterstop Rings



HubSett™



Oatey® ABS-PVC



Weld-On® ABS-PVC