Dimensional Data (inches and [ mm ]) are Subject to Manufacturing Tolerances and Change Without Notice
SPECIFYING ENGINEER IS
RESPONSIBLE FOR CONCRETE ENCASEMENT AND REINFORCING BASED UPON APPLICATION AND LOCAL CODES.


ENGINEERING SPECIFICATION: Zurn ZF812-HDS-SW
Channels shall be 120 [3048] long, 12 [305] wide reveal and have a $9-1 / 4$ [235] throat. Modular channel sections shall be made of Fiber Reinforced Polymer (FRP). Shall have a positive mechanical connection between channel sections that will not separate during the installation. Channels shall weigh less than 5.05 lbs.[2.29kg] per linear foot, have a smooth, 3 [76] radiused self cleaning bottom with a Manning's coefficient of .009 and $1.04 \%$ or neutral $0 \%$ built in slope. Channels shall have FRP side walls provided for an additional 11-1/4 [286] added to the standard channel invert for additional flow capability shown in chart below. Shall be provided with standard RFS grates that lock down to frame. Zurn 12 [305] wide reveal Stainless Steel Reinforced Slotted Grate conforming to ASTM specification A351 Grade CF8 (Type 304). Fabricated grate is rated class B per the DIN EN 1433 top load classifications. Supplied in 24 [608] nominal lengths with $3 / 8$ [10] wide slots, and 1-1/2 [38] bearing depth. Grate has an open area of 25.61 sq . in per ft. [ $54,194 \mathrm{sq}$. mm per meter]. The \#7 gage thick Heavy-Duty Stainless Steel Frame Assembly conforms to ASTM specification A-240 (Type 304). Frames shall mechanically lock into the concrete surround at a maximum spacing of every 21 [533] with 14 anchors per 120 [3048]. Frames shall have rebar attachment brackets as standard to secure trench to its final location. Grate lockdown bars are to be integral to the frame. All welds must be performed by a certified welder per ASTM standard AWS D1.6. Frames and Channels shall be produced in the U.S.A.

## PREFIX OPTIONS (Check/specify appropriate options) <br> __ ZF Ten-foot Fiber Reinforced Polymer (FRP) *

| Trench No. | 'A'Shallow Inv. | 'B' <br> Deep Inv. | Flow |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | (cfs) | (gpm) | (lps) |
| 2002-SW | 19.18 [487] | 20.43 [519] | 8.197 | 3679 | 232 |
| 2002N-SW | 20.43 [519] | 20.43 [519] |  |  |  |
| 2003-SW | 20.43 [519] | 21.68 [551] | 8.897 | 3993 | 252 |
| 2004-SW | 21.68 [551] | 22.93 [582] | 9.599 | 4308 | 272 |
| 2004N-SW | 22.93 [582] | 22.93 [582] |  |  |  |
| 2005-SW | 22.93 [582] | 24.18 [614] | 10.303 | 4624 | 292 |
| 2006-SW | 24.18 [614] | 25.43 [646] | 11.008 | 4940 | 312 |
| 2007-SW | 25.43 [646] | 26.68 [678] | 11.714 | 5257 | 332 |
| 2008-SW | 26.68 [678] | 27.93 [709] | 12.421 | 5575 | 352 |
| 2008N-SW | 27.93 [709] | 27.93 [709] |  | - |  |
| 2009-SW | 27.93 [709] | 29.18 [741] | 13.129 | 5892 | 372 |
| 2010-SW | 29.18 [741] | 30.43 [746] | 13.837 | 6210 | 392 |

## SUFFIX OPTIONS (Check/specify appropriate options)

Outlet Adapters Add/Each

| -E1 | Closed End Cap |
| :--- | :--- |
| -E4 | $4[102]$ No-Hub End Outlet |
| -_E6 | $6[152]$ No-Hub End Outlet |
| -_E8 | $8[203]$ No-Hub End Outlet |

Note:
The maximum fluid temperature through the system must not exceed $150^{\circ} \mathrm{F}\left[66^{\circ} \mathrm{C}\right]$ and the range (Max. Temp. to Min. Temp.) must not exceed $100^{\circ} \mathrm{F}\left[38^{\circ} \mathrm{C}\right]$.

MADE in the U.S.A.

| -ADA-USA | Meets Americans with Disabilities Act |
| :---: | :---: |
|  | Requirements-Class C |
| -DGC-USA | Ductile Iron Slotted Grate - Class C |
| -DGE-USA | Ductile Iron Slotted Grate - Class E |
| -FS | Fabricated Stainless Steel Slotted Grate - Class A |
| -PS | Perforated Stainless Steel Grate - Class A |
| -RFS | Reinforced Stainless Steel Slotted Grate - Class B |
| -RPS | Reinforced Stainless Steel Perforated Grate Class B |
| -SBG-L | Stainless Steel Bar Grate - Class B |

*REGULARLYFURNISHEDUNLESSOTHERWISESPECIFIED
Miscellaneous Options

| - -DB | Bottom Dome Strainer |
| :--- | :--- |
| - | $-J C$ |$\quad$ Joint Connector

- 

REV.
DATE: 11/21/11
C.N. NO. 122388

DWG. NO. 308138

