#### TIER 4 CLEAN DIESEL FLEET

Volume Concrete LLC., 4230 SE King Rd. no. 211 Milwaukie, Oregon 97222 Dispatch: 971-219-8604 billing@volumeconcrete.com

Concrete Mix Design:
Rapid Set Concrete ODOT
Highway w/Moderate
Exposure
Strength (f'c): >3,000psi\*

APPROVED BY:	DATE:
PROJECT:	
ADDRESS:	

NOTES: \*90 MINUTES AFTER SET \*\*Rapid Hardening Hydraulic Cement [page 131 ODOT qualified products list product #5220]. \*\*\*Water Source: Volume Concrete municipal well \*\*\*\*BASF MASTERAIR AE90 [page 141 ODOT qualified products list product #1163]
-AIR ENTRAINMENT IS REQUIRED WHERE CONCRETE WILL BE EXPOSED TO FREEZING CONDITIONS

https://volumeconcrete.com/about/policies/

Material / Source / Blend	Abs %	Quantity	Fluid	Weight	Gssd
Type CSA (calcium sulfoaluminate cement)**		658		lbs.	3.15
Water added / Municipal / potable water / ASTM 1602			212.0	lbs.	1.00
1½" - ¾" / Estacada Rock Washed / max nom 1½"	1.8%	1680	30.24	lbs.	2.64
¾" - ¾" / Windsor Washed Natural / Blend	1.8%	0	Θ	lbs.	2.64
¾" Windsor Washed Natural / Pea Gravel Blend	1.8%	Θ	0	lbs.	2.64
ASTM C 33 Concrete Sand / C33 / Estacada Rock	3%	1218	36.54	lbs.	2.58
Air Entrainment 90 / BASF / Master Builders / fluid oz.		32.0	2.2	lbs.	1.01
High Range Water Reducer / MasterPolyheed 980 / fluid oz.		0.0	0.0	lbs.	1.01
Non-Chloride Accelerator / Masterset AC534 / fluid oz.		0.0	0.0	lbs.	1.01
Viscosity Modifier / BASF / Master Builders / fluid oz.		0.0	0.0	lbs.	1.01
Fiber / GCP Strux BT50 2" / lbs. per cu.yd.		5.0		lbs.	
Total Weight ( 1 cubic yard) / lbs.		3842.0			
Total Water Content (including admixtures) / lbs.		281.0			
Water / Cementitious Material Ratio:		0.43			
Concrete Unit Weight, pcf		142.30			
Target Slump, in.		5"			
Air, percent		5.5% ± 0.5			

Source of Concrete: Volume Concrete LLC.,

Compliant with: ASTM C685/C685M-17, ASTM C1602, ASTM C150-21, ASTM 1600

Prepared on: 09/02/2022 3:19pm

Addendum:

Find these Downloads at www.volumeconcrete.com/documents
ASTM C1602 water analysis report
Ashgrove mill spec report type I/II
Volume Concrete Mix Designs
Environmental Product Declaration

Approved for: Highway 99 (Oregon City Sewer Rehab)

Basis of Design: CTS Cement Manufacturing Corp., 12442 Knott Street, Garden Grove, CA 92841 (800-929-3030, <a href="https://www.CTScement.com">www.CTScement.com</a>). Northwestern Rep: Tony Tomasini (360) 607-3553

X UNDERGROUND	X	FLATWORK		BACKFILL	Χ	NOT PUMPABLE
TANK DECOMMISIONING	X	SMOOTH TROWEL FINISH	X	STRUCTURAL		100'
X SEWER DECOMMISIONING	X	BROOM FINISH	X	CURB & GUTTER		200'
X WATER LINE DECOMM.		EXPOSED AGGREGATE		CMU BLOCK FILL		300'
X MANHOLES		ACID WASHED FINISH		FLOWABLE FILL		400'

# Volume Concrete LLC. Products and Services



- · 3,000 (f'c) psi concrete
- 3,500 (f'c) psi concrete
- · 4,000 (f'c) psi concrete
- 5,000 (f'c) psi concrete
- Rapid Set Concrete™
- · exposed aggregate
- · acid etched sand finish
- · grout for CMU block fill (9 sack)
- grout for underground (7 sack)
- · 150 psi CDF (sand & cement)
- · lightweight cellular concrete 35pcf
- · concrete line pumps
- · wet-mix shotcrete

Mix designs can be found at: https://volumeconcrete.com/documents/

### OREGON MADE QUALITY

Volume Concrete uses only domestically produced Type I/II Portland cement, made here in Oregon. The slight increase in cost for domestic cement vs. foreign cement is justified in the QUALITY of the product (ask around). Better finishing characteristics, earlier set, less bleed-water, and higher strengths.

## MIXED ON-SITE

Volume Concrete products are freshly mixed on-site, allowing for easy adjustments (slump, strength, etc.), while cutting down on waste.

# City-County-State Approved

Need a mix design for a municipal project? Volume Concrete has you covered with documented mix designs that meet and exceed the stringent requirements from the local jurisdictions. In fact, many of our clients are government and institutions that have come to rely on our quality products, expedited service, and extensive documentation i.e. mill certifications, sieve reports, and water quality testing.

Grouts, CLSM and CDF for jobs that need to decommission existing infrastructure - eliminating the need for costly excavation.

#### **Cellular Concrete**

Cellular concrete is
lightweight aerated
concrete that is great for
backfill and
decommissioning pipes
on extra-long pushes.
Standard wet cast
weight 35 lbs. per cubic
foot.

#### **Concrete Line Pumps**

Leaders in long distance concrete pumping with a fleet of nine machines available six days a week. Any questions? Please call dispatch:

(971) 219-5358.

#### Bin Blocks for Sale

Also known as ecology blocks or concrete barriers. 2' x 2' x 6' blocks are in stock, with smaller sizes available (made to order).

#### **Quality Local Materials**

Washed river rock, nice and round, no fractured materials, with stock of pea gravel, ¾" and 1½" along with ASTM C 33 concrete sand - all sourced locally.

Open Monday - Saturday 7am - 5pm Concrete: (971) 219 - 8604

Pumps: (971) 219 - 5358

Rapid Set Concrete™ ODOT Highway Mix



#### ADDMIXES AVAILABLE

- Non chloride accelerator
- Water reducer
- Super plasticizer
- Air entrained (for any freeze exposure)
- 2" fibers for added strength
- Hot water (October May)



Shotcrete Machines for Hire

