

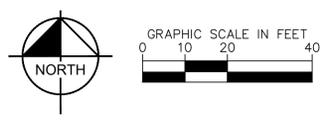
LEGEND

---	PROPERTY LINE
- - - -	EASEMENT
SS-B	MASTER DEVELOPER 8" SANITARY SEWER
12"W	MASTER DEVELOPER 12" WATER MAIN
---	MASTER DEVELOPER STORM SEWER
E	EXISTING ELECTRIC LINE
UC	EXISTING COMMUNICATION LINE
G	PROPOSED GAS LINE
E	PROPOSED ELECTRIC LINE
COM	PROPOSED COMMUNICATION LINE
○	PROPOSED GREASE INTERCEPTOR
□	PROPOSED TRANSFORMER
---	PROPOSED STORM SEWER
S	PROPOSED SANITARY SEWER LINE
W	PROPOSED WATER SERVICE LINE

- NOTES**
1. ALL CONDITIONS SHOWN TO BE "EXISTING" OR "MASTER DEVELOPER PROPOSED" SHALL BE VERIFIED IN THE FIELD BY THE GENERAL CONTRACTOR PRIOR TO START OF CONSTRUCTION INCLUDING BUT NOT LIMITED TO POTHOLING OF EXISTING UTILITY ELEVATIONS AT CROSSINGS AND TIE-IN LOCATIONS. ANY DISCREPANCIES SHALL BE NOTED AND SUBMITTED TO THE OWNER AND THE ENGINEER OF RECORD FOR REVIEW. CHANGES TO THE ORIGINAL DESIGN OF THIS PROJECT DUE TO EXISTING SITE CONDITIONS MUST BE APPROVED BY BOTH THE ENGINEER AND OWNER PRIOR TO MAKING ANY CHANGES.
 2. ALL WATER SERVICE LINES SHALL MAINTAIN A BURY DEPTH OF 5'-6".

CAUTIONARY NOTE

1. CONTRACTOR SHALL MAINTAIN 1.5' OF VERTICAL SEPARATION AT ALL WET UTILITY CROSSING AND 1' OF VERTICAL SEPARATION AT ALL DRY UTILITY CROSSINGS. CONTRACTOR SHALL POTHOLE ALL EXISTING UTILITY CROSSINGS TO VERIFY DEPTH AND COORDINATE WITH ENGINEER OF RECORD.



TITLE	UTILITY PLANS	DATE	7/30/2024
DESCRIPTION	UTILITY PLAN	DATE ISSUED	7/30/2024
SITE ID	51028	PREPARED BY	Kimley»Horn
SITE ADDRESS		8664 FONTAINE BLVD., COLORADO SPRINGS, COLORADO	DATE
DRAWN BY		ALS	DESCRIPTION
STD ISSUE DATE		7/30/2024	REV
REVIEWED BY		JJM	DATE
DATE ISSUED		7/30/2024	BY



FIXTURE INFORMATION:				
NAME	TYPE	FLOW RATE	OTHER	QTY.
3-COMP. SINK	3-COMPARTMENT SINK	GPM (1-MINUTE DRAIN TIME): 46.636 GPM (2-MINUTE DRAIN TIME): 21.818	DFU: 6 CAPACITY: 58.182 GAL.	1
FLOOR SINK/ DRAIN	FLOOR SINK	GPM (1-MINUTE DRAIN TIME): 5 GPM (2-MINUTE DRAIN TIME): 2.5	DFU: 2 CAPACITY: 0 GAL.	11
MOP SINK - MS-1	MOP BASIN	GPM (1-MINUTE DRAIN TIME): 22.442 GPM (2-MINUTE DRAIN TIME): 11.221	DFU: 3 CAPACITY: 29.922 GAL.	2
VEGETABLE PREP SINK	PREP SINK ONE BOWL	GPM (1-MINUTE DRAIN TIME): 4.675 GPM (2-MINUTE DRAIN TIME): 2.338	DFU: 2 CAPACITY: 6.234 GAL.	1
WAREWASHER (ECOLAB QSR TSC)	DOOR TYPE	GPM (1-MINUTE DRAIN TIME): 60 GPM (2-MINUTE DRAIN TIME): 30	DFU: 2 CAPACITY: 60 GAL.	1
TOTALS:		GPM (1-MINUTE DRAIN TIME): 208.19 GPM (2-MINUTE DRAIN TIME): 104.1	DFU: 38 CAPACITY: 184.26 GAL.	

SIZING DETAILS:

PROJECT INFORMATION
CONSTRUCTIONS TYPE: NEW CONSTRUCTION
ADDITIONAL NOTES: MCDONALD'S 4584 BUILDING - PROTOTYPICAL

LOCATION: OUTDOORS
BURIED: YES
HIGH WATER AREA: NO

FLOW RATE CALCULATION:
FLOW RATE TO INTERCEPTOR = (LESSER OF FLOW RATE BY PIPE SIZE AND FLOW RATE BY FIXTURES)

SIZE OF PIPE CONNECTED TO THE GREASE INTERCEPTOR: 4 IN.

DRAINAGE PERIOD: 2 MINUTES
FLOW RATE BY PIPE SIZE: 75 GPM
FLOW RATE BY FIXTURES, 1-MINUTE DRAINAGE PERIOD: 104.097 GPM
FLOW RATE BY FIXTURES, 2-MINUTE DRAINAGE PERIOD: 52.048 GPM
FLOW RATE USED TO SELECT GREASE INTERCEPTOR: 75 GPM
FIXTURE DFU: 38

GREASE OUTPUT:
MENU TYPE: FAST FOOD - FULL PREP
FRYER IN KITCHEN: YES
FOOD WASTE DISPOSER: YES
NUMBER OF SEATS: 43 SEATS
GREASE PRODUCTION VALUE: 0.035 LBS. PER SERVING (6.02 LBS. PER DAY)

30-DAY GREASE PRODUCTION: 180.6 LBS.
60-DAY GREASE PRODUCTION: 361.2 LBS.
90-DAY GREASE PRODUCTION: 541.8 LBS.

CALCULATION:
GREASE OUTPUT=(NUMBER OF SEATS)X(AVERAGE TURNS PER SEAT PER 24 HOURS)X(GREASE PRODUCTION VALUE)X(DAYS BETWEEN PUMP-OUT).

DETAIL

GREASE INTERCEPTOR
SCALE: NONE

1
P3.0

SPECIFICATIONS

Notes:

- 4" FPT Inlet/outlet with 4" plain end adapters, single inlet and triple outlet.
- Unit weight - w/ cast iron covers: 528 lbs. (For wet weight add 4,254 lbs.)
- Maximum operating temperature: 150°F continuous
- Capacities - Liquid: 510 gal
Grease: 3,048 lbs. (417 gal) @100 GPM
Solids: 126 gal
- Built-in flow control. For series installations, only install flow control on the first unit in the series if necessary.
- For gravity drainage applications only.
- Do not use for pressure applications.
- Cover placement allows full access to tank for proper maintenance.
- A Vent shall be installed downstream of grease interceptor.
- Engineered inlet and outlet diffusers with inspection ports are removable to inspect / clean piping.
- Integral air relief / Anti-siphon / Sampling access.
- Adjustable cover adapters provide up to 4" of additional height.
- Designed for below-grade, above-grade, indoor or outdoor installations.
- Safety Star® access restrictor built into each cover adapter, prevents accidental entry to tanks (450 lb rating).

ENGINEER SPECIFICATION GUIDE
Schier Great Basin™ grease interceptor model # GB-500 shall be lifetime guaranteed and made in USA of seamless, rotationally-molded polyethylene with minimum 7/16" uniform wall thickness. Flow control cartridge shall be PVC. Interceptor shall be furnished for above or below-grade installation with adjustable cover adapter, Safety Star® access restrictor built into each cover adapter, and three outlet options. Interceptor shall be certified to ASME A112.14.3 (Type C) and CSA S481.1. Interceptor flow rate shall be 100 GPM. Interceptor grease capacity shall be 3,048 lbs. Cover shall provide water/gas-tight seal and have minimum 16,000 lbs. load capacity.

CERTIFIED PERFORMANCE
Great Basin™ hydromechanical grease interceptors are third party performance-tested and listed by IAPMO to ASME A112.14.3 and CSA S481.1 grease interceptor standards and greatly exceed requirements for grease separation and storage. They are compliant to the Uniform Plumbing Code and the International Plumbing Code.

TOP VIEW
(COVERS REMOVED FOR CLARITY)

SECTION A-A

END VIEW

ISOMETRIC VIEW

DESCRIPTION: GB-500 GREASE INTERCEPTOR 100 GPM, 4" INLET/OUTLET, H-20 RATED CAST IRON COVERS

MODEL NUMBER: GB-500
PART NUMBER: 4075-001-01

UPC

SCHIER
6455 Woodland Dr
Shawnee, KS 66218
Tel: 913-951-3300
Fax: 913-951-3399
schierproducts.com

DWG BY: C. BUSENITZ **DATE:** 4/14/2022 **REV:** - **ECO:** -

SERVICE TAPS 1-1/2" & 2" TAPPING SADDLE

PLAN

ELEVATION

NOTE:
DIRECT TAPS TO THE WATER MAIN SHALL BE MADE ONLY WHEN APPROVED BY THE DISTRICT. ALL TAPS SHALL USE TAPPING SADDLES. TAPPING SADDLES SHALL HAVE TWO BRASS BANDS AND A BRASS CORPORATION CONNECTION.

NOTES:

- USE ROMAC 202BS TAP SADDLE OR EQUIVALENT.
- ALL TAPS WILL BE MADE ABOVE CENTERLINE OF PIPE AND UPWARD AT A 45° ANGLE.
- TAPS 1 1/2" OR LARGER MAY HAVE LOCATION AND ANGLE ADJUSTED AT THE DISCRETION OF THE INSPECTOR.

TAPPING DETAIL - 3/4" THROUGH 2"

Drawn: GJM
Date: SEPT 2014
Scale: N.T.S.
Revised: _____
Revised: _____
Revised: _____

Widefield Water and Sanitation District W-32

1-1/2" & 2" INDOOR METER INSTALLATION

HORIZONTAL SET

METER SIZE	METER LENGTH	MIN. R
1-1/2" METER	12-5/8"	30"
2" METER	15-1/4"	48"

* CHECK METER LENGTH BEFORE INSTALLATION

NOTES:

- IN THE INTEREST OF SPACE CONSERVATION IT IS PERMISSIBLE TO INSTALL PIPING VERTICALLY DOWNSTREAM OF THE METER INCLUDING THE CHECK VALVE. THE PRESSURE REGULATOR ON THE INLET SIDE OF THE METER MAY BE INSTALLED IN A HORIZONTAL OR VERTICAL POSITION.
- A SECOND PRESSURE REGULATOR MAY BE INSTALLED ON THE DEMAND SIDE OF THE METER DOWNSTREAM FROM A BRANCH SUPPLYING AN IRRIGATION SYSTEM IF REQUIRED. THE IRRIGATION SYSTEM BRANCH MUST BE DOWNSTREAM OF THE METER, CHECK VALVE AND BALL VALVE.
- ONLY MINIMAL SEPARATION IS ALLOWED BETWEEN FITTINGS UPSTREAM OF THE METER TO ALLOW PROPER INSTALLATION OF THE REQUIRED FITTINGS AS SPECIFIED IN THESE DRAWINGS AND SPECIFICATIONS. IN NO CASE SHALL SEPARATION BE GREATER THAN NECESSARY WHICH COULD ALLOW A BRANCH, TEE, OR OTHER FITTING UPSTREAM OF THE METER THAN WHAT IS SPECIFIED AND SPECIFIED HEREIN.
- AN APPROVED TRANSITION FITTING FROM HOPE TO COPPER INSIDE THE STRUCTURE CAN BE USED ONCE THE HOPE SERVICE LINE ENTERS THE STRUCTURE.
- THE METER PIPE MUST BE SECURED BEFORE AND AFTER THE INLET AND OUTLET VALVES TO A SOLID SUPPORT SUCH AS THE UNDRIBUT OR 1/2" ALL-THREAD (OR MOUNTED BI-LATERALLY) AND ANCHORED TO THE FLOOR AND CLAMPED TO THE HORIZONTAL PIPING.
- BANDING OR GROUND STRAPS MUST BE INSTALLED AROUND METER LOOP ON COPPER LINES (COPPER TO COPPER).
- THE LOCATION OF THE HOPE PENETRATION SHALL BE A MINIMUM OF 12" FROM ANY WALL OR FOUNDATION. A 30" CLEAR SPACE SHALL BE PROVIDED IN FRONT OF METER FOR ACCESS AND MAINTENANCE.
- THE HOPE SERVICE LINE SHALL BE CONTINUOUS FROM THE CURB STOP THROUGH THE FLOOR WITH NO JOINTS.
- THE DIAGRAM SHOWS A THREADED METER CONNECTION. A BALL-BEAT EJECTING FLANGE METER CAN ALSO BE ORDERED. A THREADED UNION MUST BE INSTALLED AT LEAST ON ONE SIDE OF THE METER AT EITHER THE DOWNSTREAM BALL VALVE OR UPSTREAM REGULATOR IF A FLANGE METER IS USED.

1-1/2" & 2" INDOOR METER INSTALLATION

Drawn: GJM
Date: JULY 2011
Scale: N.T.S.
Revised: _____
Revised: _____
Revised: _____

Widefield Water and Sanitation District W-40

TITLE	DATE	REV	DESCRIPTION	BY
UTILITY PLANS				
DETAILS				
SITE ID	51028			
SITE ADDRESS	8664 FONTAINE BLVD., COLORADO SPRINGS, COLORADO			

