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05/15/2017 09:05 AM R Fee:$253.00
Carly Koppes, Clerk and Recorder, Weld County, CO

FINAL DEVELOPMENT PLAN

MURPHY EXPRESS AT FIRESTONE CITY CENTRE

LOT 2 FIRESTONE CITY CENTRE SUBDIVISION FILING NO.4
TOWN OF FIRESTONE, WELD COUNTY, STATE OF COLORADO
COVER SHEET
SHEET 1 OF 25

FLOOD CERTIFICATION:

THIS PROPERTY IS NOT LOCATED WITHIN ANY PRESENTLY ESTABLISHED 500-YEAR FLOOD PLAIN, AS SHOWN BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, FLOOD INSURANCE RATE MAP PANEL NUMBER 08123C1890E DATED 01/20/2016.

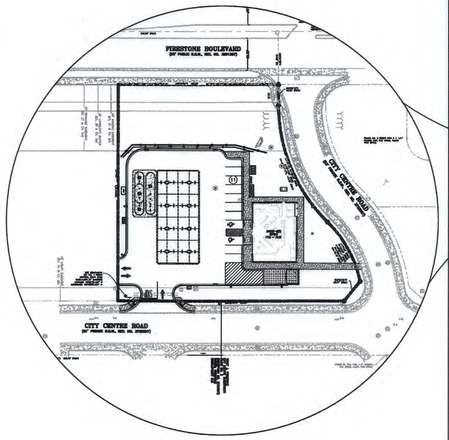
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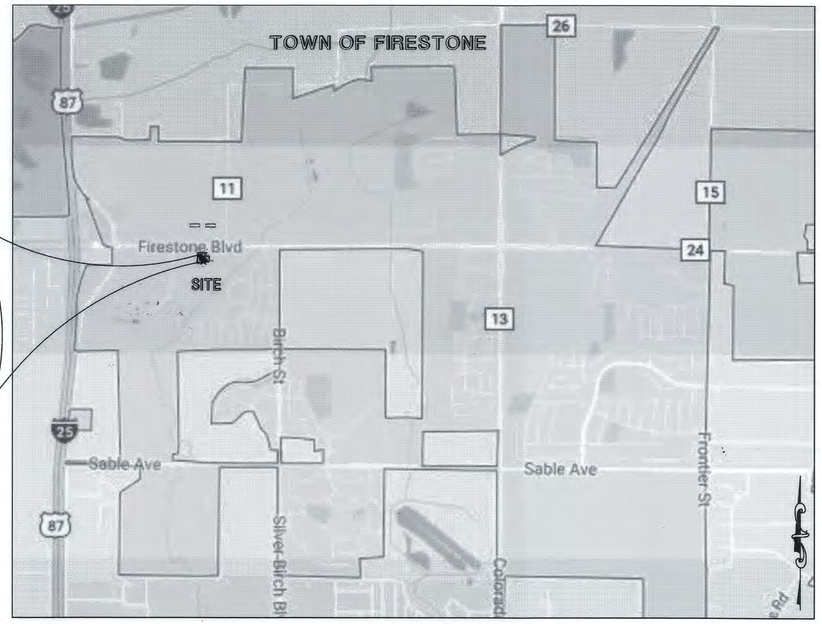
LOT 2 OF FIRESTONE CITY CENTRE SUBDIVISION FILING NO. 4 FINAL PLAT RECORDED ON 02/13/2017 AT RECEPTION NO. 4277731 AT THE OFFICE OF THE WELD COUNTY CLERK AND RECORDER, BEING LOCATED IN THE NE ¼ OF SECTION 11, T2N, R68W OF THE 6TH PM, TOWN OF FIRESTONE, COUNTY OF WELD, STATE OF COLORADO.

CONTAINING AN AREA OF 1.224 ACRES (53,303 SQUARE FEET) MORE OR LESS.

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF COLORADO.

DATE 4/5/2017 REGISTRATION NUMBER 41391





Vicinity Map

SCALE: 1" = 1,200'

PLAN INDEX:

ENGINEER (CIVIL)

FDP-1 COVER SHEET
FDP-2 NARRATIVE SHEET
FDP-3 SITE PLAN
FDP-4 GRADING PLAN
FDP-5 DRAINAGE PLAN
FDP-6 STORM DRAINAGE PLAN
FDP-7 EROSION CONTROL PHASE 2
FDP-8 EROSION CONTROL DETAILS
FDP-9 UTILITY PLAN
FDP-10 LANDSCAPE PLAN
FDP-11 IRRIGATION PLAN
FDP-12 IRRIGATION DETAILS
FDP-13 DETAILS
FDP-14 DETAILS
FDP-15 DETAILS
FDP-16 CIVIL DETAILS
FDP-17 SITE RETAINING WALL
FDP-18 RETAINING WALL DETAIL
FDP-19 PHOTOMETRIC SITE PLAN
FDP-20 PHOTOMETRIC DETAILS
FDP-21 EXTERIOR ELEVATIONS
FDP-22 EXTERIOR ELEVATIONS
FDP-23 EQUIPMENT PLAN
FDP-24 ELEVATIONS
FDP-25 SITE RENDERING

LAND USE TABLE	
PARCEL AREA	53,303 SF (1.224 AC)
BUILDING (SF)	3,445 SF
CANOPY (SF)	4,784 SF
BUILDING & CANOPY COVERAGE (%)	[(3,445 + 4,784) / 53,303]X100 = 15.44%
PAVED AREA (%)	(18,675/53,303)(100) = 35.04%
PARKING AREA	2,354 SF (4.42%)
LANDSCAPE AREA	13,983 SF (26.23%)
WETLAND AREA	10,062 SF (18.87%)

APPROVAL BLOCK:

APPROVED BY THE TOWN BOARD OF TRUSTEES OF THE TOWN OF FIRESTONE, COLORADO THIS 25th DAY OF January 2017 BY RESOLUTION NO. 17-05.

Paul Soran
MAYOR

Lisa Pardley
ATTEST: TOWN CLERK

FIRESTONE TOWN SEAL WELD COUNTY, COLORADO

ACCEPTANCE BLOCK AND NOTARY:

BY SIGNING THIS FDP, THE OWNER ACKNOWLEDGES AND ACCEPTS ALL OF THE REQUIREMENTS AND INTENT SET FORTH HEREIN.

John A Moore
OWNER (MURPHY OIL USA, INC., A DELAWARE CORPORATION)

STATE OF ~~COLORADO~~ Arkansas)
) SS
COUNTY OF ~~WELD~~ Union)

THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME THIS 20th DAY OF April 2017, BY John A. Moore

WITNESS MY HAND AND OFFICIAL SEAL
Tammy Taylor
NOTARY PUBLIC
09/07/2024
MY COMMISSION EXPIRES

TAMMY TAYLOR
UNION COUNTY
NOTARY PUBLIC - ARKANSAS
My Commission Expires September 07, 2024
Commission No. 12400715

DESIGN TEAM CONTACTS:

OWNER / DEVELOPER:
MURPHY OIL USA INC.
A DELAWARE CORPORATION
CONTACT: GAVEN BALLINGER
200 PEACH STREET
EL DORADO, AR 71780
PHONE: (870) 866-7176
EMAIL: GAVEN.BALLINGER@MURPHYUSA.COM

CIVIL ENGINEERING:
GREENBERG FARROW
CONTACT: GRANT DENNIS
1430 WEST PECHTREE ST. STE 200
ATLANTA, GA 30309
PHONE: (404) 601-4000
EMAIL: GDENNIS@GREENBERGFARROW.COM

ARCHITECT:
GREENBERG FARROW
CONTACT: CHRIS CERBO
3 EXECUTIVE DRIVE, SUITE 150
SOMERSET, NJ 08873
PHONE: (908) 4611-8302

LANDSCAPE ARCHITECT:
GREENBERG FARROW
CONTACT: ALEX MADDOX
1430 WEST PECHTREE ST. STE 200
ATLANTA, GA 30309
PHONE: (404) 601-4000

PHOTOMETRIC:
GALLOWAY
PLANNING. ARCHITECTURE. ENGINEERING
6162 S WILLOW DRIVE, SUITE 320
GREENWOOD VILLAGE, CO 80111
PHONE: (303) 770-8884

MURPHY EXPRESS AT FIRESTONE CITY CENTRE	
COVER SHEET	
NAME OF APPLICATION:	MURPHY OIL USA
TYPE OF SUBMITTAL :	FINAL DEVELOPMENT PLAN
FILING NUMBER:	
PHASE NUMBER:	
PREPARATION DATE:	10-20-2016
REVISION DATE:	12-20-2016
REVISION DATE:	02-07-2017
REVISION DATE:	03-15-2017
REVISION DATE:	04-04-2017
REVISION DATE:	
SHEET 1 OF 25	

JOB NO.: 20160074
DATE: 04-04-17
REV-6
SHEET NO.
FDP-1

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05/15/2017 09:05 AM R Fee:$253.00
Carly Koppes Clerk and Recorder, Weld County, CO

FINAL DEVELOPMENT PLAN

MURPHY EXPRESS AT FIRESTONE CITY CENTRE

LOT 2 FIRESTONE CITY CENTRE SUBDIVISION FILING NO.4
TOWN OF FIRESTONE, WELD COUNTY, STATE OF COLORADO
NARRATIVE SHEET
SHEET 2 OF 25

PROJECT CONCEPT:

THIS FINAL DEVELOPMENT PLAN (FDP) IS FOR A MURPHY EXPRESS TO BE LOCATED IN THE FIRESTONE CITY CENTRE DEVELOPMENT, ON LOT 2 OF THE FIRESTONE CITY CENTRE SUBDIVISION FILING NO. 4.

THIS SITE IS PART OF A PREVIOUSLY APPROVED OVERALL FINAL DEVELOPMENT PLAN WHICH INCLUDED THE ROADWAY AND INFRASTRUCTURE IMPROVEMENTS FOR THE FIRESTONE CITY CENTRE DEVELOPMENT AS A WHOLE. THIS FDP PROVIDES PLANS FOR LANDSCAPE, UTILITIES, DRAINAGE AND ARCHITECTURAL THEME. DOCUMENTATION FOR ENGINEERING CONFORMANCE ON TRAFFIC AND DRAINAGE IS ALSO PROVIDED.

THE MURPHY EXPRESS WILL HAVE THOSE ACCESSORY UNITS SHOWN ON THIS FDP, ALL OF WHICH WILL BE SCREENED BY LANDSCAPING.

ENVIRONMENTAL IMPACT MITIGATION:

THERE IS NO EVIDENCE OF RECOGNIZED ENVIRONMENTAL CONDITIONS IN CONNECTION WITH THIS SITE. REFER TO THE PHASE I AND PHASE II ENVIRONMENTAL ASSESSMENT REPORT MURPHY EXPRESS – FIRESTONE, CO SOUTHWEST CORNER OF FIRESTONE BLVD AND HOME DEPOT ENTRY DRIVE. WELD COUNTY FIRESTONE, COLORADO.

PRIVATE MAINTENANCE AND ENFORCEMENT:

THIS SITE WILL BE PRIVATELY MAINTAINED. NECESSARY CROSS-ACCESS AND UTILITY EASEMENTS AS WELL AS AGREEMENTS FOR ANY COMMON ROADWAYS AND/OR ACCESS POINTS ARE PROVIDED AS PART OF THE FIRESTONE CITY CENTRE DEVELOPMENT.

ADA COMPLIANCE:

THIS FDP HAS BEEN DESIGNED TO THE BEST OF THE DESIGNER'S KNOWLEDGE AND ABILITIES TO COMPLY WITH THE AMERICAN'S WITH DISABILITIES ACT.

CONTROLS:

THE DECLARATION AND RECIPROCAL EASEMENTS AND RESTRICTIONS WERE PROVIDED AS PART OF THE FIRESTONE CITY CENTRE DEVELOPMENT.

DRAINAGE:

THIS SITE IS DESIGNED TO CONFORM TO THE APPROVED FINAL DRAINAGE REPORT FOR FIRESTONE CITY CENTRE DATED JULY 11, 2007. WHICH WAS PREPARED BY V3 COMPANIES OF COLORADO, LTD. A SITE SPECIFIC DRAINAGE SUMMARY DATED 10/21/2016 AND REVISED 12/18/2016 CONFIRMS THE SITE IS IN COMPLIANCE WITH THE APPROVED FINAL DRAINAGE REPORT.

WATER DEMAND CALCULATION:

WATER DEDICATION WAS DETERMINED BASED ON INFORMATION PROVIDED BY THE APPLICANT. THE TOTAL AMOUNT OF CBT WATER TO BE DEDICATED TO THE TOWN WAS CALCULATED BASED ON ACRES OF IRRIGATED LANDSCAPING ON THE SITE AND THE TOTAL ESTIMATED DOMESTIC (IN-BUILDING) DEMAND. THE TOWN SHALL AT ALL TIMES HAVE THE RIGHT TO REQUIRE ADDITIONAL WATER DEDICATION IF ACTUAL CONSUMPTION EXCEEDS THIS CALCULATED ESTIMATE. IF THE TOWN DETERMINES THAT ADDITIONAL CBT WATER IS TO BE DEDICATED, THE LOT OWNER SHALL PROVIDE THE WATER WITHIN 30 DAYS WRITTEN NOTICE BY THE TOWN. THE ADDITIONAL DEDICATION SHALL BE BASED ON THE TOWN'S THEN CURRENT WATER DEDICATION POLICIES.

THE TOWN OF FIRESTONE HAS DETERMINED THAT THE REQUIRED CBT DEDICATION TO BE:

IRRIGATION DEMAND = 0.81

DOMESTIC DEMAND = 1.08

A TOTAL OF 2 SHARES SHALL BE TRANSFERRED TO THE TOWN PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY. THE CBT DEDICATION FOR THIS FDP SHALL BE MET BY DEDUCTING 2 SHARES FROM THE 100 SHARE POOL ORIGINALLY CREATED BY THF WITH THE FIRSTONE CITY CENTRE DEVELOPMENT.

WATER METER TABLE

QUANTITY	SIZE	TYPE
1	1.5"	COMMERCIAL

UTILITIES:

NEW UTILITY LINES FOR WATER, SANITARY SEWER, STORM DRAIN, ELECTRIC AND TELEPHONE WILL BE CONSTRUCTED AS PART OF THE APPROVED FDP. UTILITY INFRASTRUCTURE WAS CONSTRUCTED AS PART OF THE OVERALL DEVELOPMENT AND SERVICE CONNECTION FOR THIS LOT WILL BE CONSTRUCTED AS PART OF THIS FDP. ONE 1.5 INCH METER WILL BE PROVIDED WITH A 1-1/4 INCH SERVICE LINE FOR THE BUILDING AND A 1 INCH LINE FOR IRRIGATION. A 4 INCH SANITARY SEWER LINE WILL BE USED TO SERVICE THE BUILDING.

ABOVE GROUND DRY UTILITIES WILL BE SCREENED WITH LANDSCAPING IN ACCORDANCE WITH THE UTILITY PROVIDER'S REQUIREMENTS FOR SETBACK OF PLANTING MATERIALS.

AN EXISTING GAS LINE IS LOCATED ON THE SOUTH SIDE OF THE SITE ADJACENT TO CITY CENTRE ROAD.

PARKING:

A TOTAL OF 9 STANDARD PARKING SPACES AND 2 HANDICAPPED SPACES ARE PROVIDED AS PART OF THIS FDP. THIS CALCULATES OUT 2.5 SPACES PER 1000 SQUARE FEET.

ARCHITECTURE:

THIS BUILDING IS A FREE STANDING ONE STORY BUILDING AND PUMP ISLAND CANOPY. THE DESIGN INCORPORATED THE COLORS, MATERIALS, AND DESIGN FEATURES OF THE SURROUNDING BUILDINGS THAT ARE CONSISTENT WITH THE FIRESTONE CITY CENTRE DESIGN CRITERIA. EIFS, MANUFACTURED STONE, AND METAL AWNING ARE INCORPORATED INTO THE DESIGN OF THE BUILDING. THE BUILDING INCORPORATES COLORS (WHOLE WHEAT, SIERRA TAN AND PROGRAM RED), STONE VENEER (MOSSY MOUNTAIN LEDGE), BRICK VENEER (BARNWOOD), AND ARCHITECTURAL WOOD PANEL.

SIGN PROGRAM:

A SIGN PERMIT SHALL BE OBTAINED FROM THE TOWN OF FIRESTONE PRIOR TO CONSTRUCTION OF ANY SIGN. ALL SIGN PERMIT APPLICATIONS SHALL BE CONSISTENT WITH THE INFORMATION PROVIDED IN THIS FDP. TRAFFIC CONTROL AND ANCILLARY SIGNS WILL BE PROVIDED ON THE SITE. ALL SIGN LOCATIONS SHALL BE APPROVED BY THE TOWN ENGINEER PRIOR TO INSTALLATION.

THE MAXIMUM SQUARE FOOTAGE OF TEMPORARY GRAND OPENING SIGNS ARE 96 SQUARE FEET EACH. ALL TEMPORARY SIGNS SHALL BE PLACED WITHIN THE PROPERTY LINES. TEMPORARY SIGNS MAY BE DISPLAYED IN ACCORDANCE WITH TOWN ORDINANCE AND REGULATIONS AS AMENDED. TWO GRAND OPENING SIGNS SHALL BE PERMITTED FOR THE INITIAL STORE OPENING AND SHALL BE ALLOWED FOR A ONE TIME PERIOD OF NO MORE THAN 45 DAYS.

SETBACK:

PRINCIPAL BUILDING SETBACKS ARE SHOWN ON THE SITE PLAN SHEET INCLUDED WITH THIS FDP. ALL SETBACKS MEET FIRESTONE DEVELOPMENT REGULATIONS AND TOWN CODES.

DEVELOPMENT SCHEDULE:

AFTER PERMITS ARE OBTAINED, IT IS ANTICIPATED CONSTRUCTION WILL START 3 WEEKS LATER. ANTICIPATED CONSTRUCTION TIME FRAME WILL BE MARCH 2017 TO JULY 2017.

CIRCULATION SYSTEM

THERE IS DIRECT ACCESS TO THE PROPOSED MURPHY EXPRESS SITE FROM CITY CENTRE ROAD WHICH IS A PRIVATE ROAD AND HAS BEEN CONSTRUCTED AS PART OF THE OVERALL FIRESTONE CITY CENTRE INFRASTRUCTURE IMPROVEMENTS. CITY CENTRE ROAD HAS CONNECTIONS TO JAKE JABS BLVD. AND TO FIRESTONE BLVD. NO ADDITIONAL RIGHTS-OF-WAY ARE REQUIRED FOR THE MURPHY EXPRESS DEVELOPMENT.

ZONING AND ALLOWED USES

THE FIRESTONE CITY CENTRE SUBDIVISION IS ZONED PLANNED UNIT DEVELOPMENT WITH REGIONAL COMMERCIAL AND EMPLOYMENT CENTER LAND USES, WHICH ALLOWS FOR A GAS STATION/CONCENIENCE STORE USE.

UTILITY SERVICE REQUIREMENTS:

GAS – BLACK HILLS ENERGY
ELECTRIC – UNITED POWER
TELEPHONE – AT&T
WATER – TOWN OF FIRESTONE
SANITARY SEWER – ST. VRAIN SANITATION DISTRICT
POLICE – TOWN OF FIRESTONE
FIRE – FREDERICK – FIRESTONE FIRESTONE FIRE PROTECTION DISTRICT
RECREATION – CARBON VALLEY RECREATION DISTRICT

BUILDING ADDRESS:

4615 CITY CENTRE ROAD
FIRESTONE, CO 80504

SITE OPERATIONS:

STORE HOURS OF OPERATIONS ARE 24 HOURS A DAY, 7 DAYS A WEEK.

MURPHY EXPRESS AT FIRESTONE CITY CENTRE
NARRATIVE SHEET

NAME OF APPLICATION:	MURPHY OIL USA
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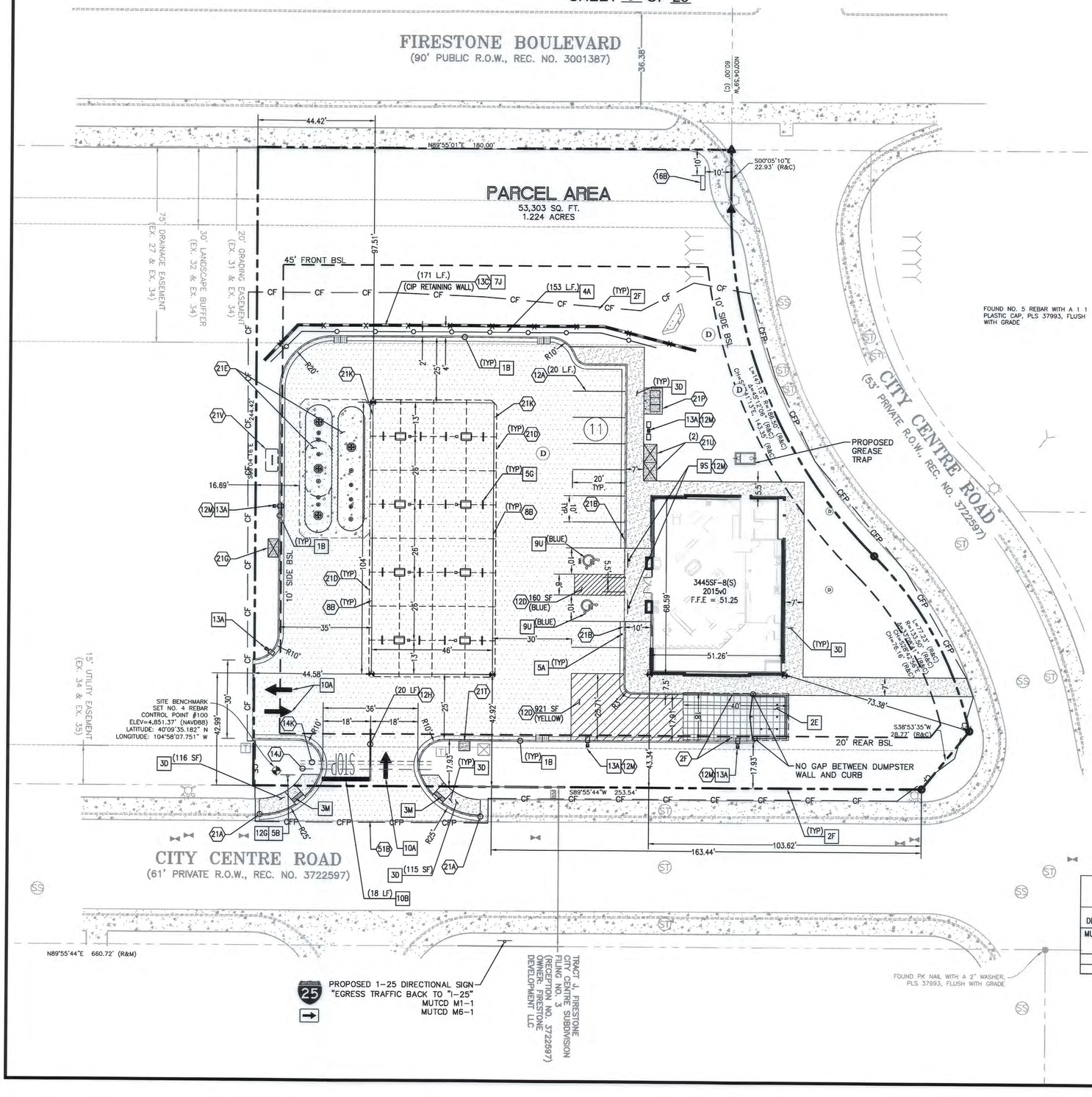
SHEET 2 OF 25

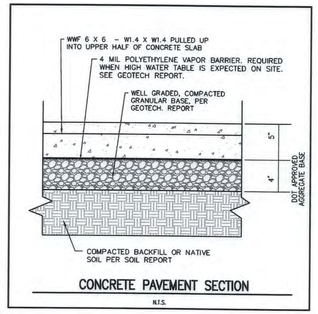
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FINAL DEVELOPMENT PLAN

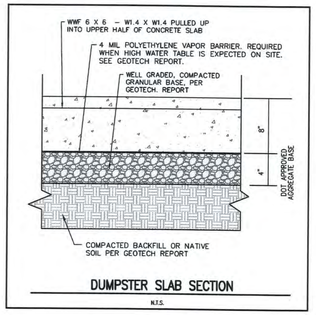
MURPHY EXPRESS AT FIRESTONE CITY CENTRE

LOT 2 FIRESTONE CITY CENTRE SUBDIVISION FILING NO.4
TOWN OF FIRESTONE, WELD COUNTY, STATE OF COLORADO
SITE PLAN
SHEET 3 OF 25





CONCRETE PAVEMENT SECTION
N.T.S.



DUMPSTER SLAB SECTION
N.T.S.



Monument Sign (Not to scale)

SITE DETAILS – SEE DETAIL SHEETS

- 1B TYPE "B" CONCRETE CURB & GUTTER.
- 2E DUMPSTER ENCLOSURE
- 2F CONSTRUCTION SAFETY FENCE
- 3D CONCRETE SIDEWALK
- 3M WHEELCHAIR RAMP IN SIDEWALK
- 4A GUARD RAIL
- 5A GUARD POST (SINGLE)
- 5B TRAFFIC SIGN IN BOLLARD
- 5C U-BUMPER DETAIL
- 7J BLACK DECRATIVE FENCE (ON RETAINING WALL)
- 9S ACCESSIBLE / VAN ACCESSIBLE PARKING SIGN (TYP.)
- 9U ACCESSIBLE PARKING SYMBOL (SEE PAINT COLOR INDICATED AT SYMBOL)
- 10A TRAFFIC FLOW ARROW (TYP.)
- 10B STOP BAR (TYP.)
- 12G "STOP" SIGN
- 13A SITE LIGHT POLE. SEE PHOTOMETRIC PLANS FOR POLE BASE DETAIL, FIXTURE TYPE, AND MOUNTING DETAILS.

PARKING INFORMATION: MURPHY

DESCRIPTION	BUILDING AREA (S.F.)
MURPHY OIL	3445
STALL DIMENSIONS:	
10' X 20'	

PROVIDED:				
RATIO	SPACES			
/1000 S.F.	REGULAR	ACCESSIBLE	VAN ACCESSIBLE	TOTAL
2.5	9	1	1	11

MURPHY EXPRESS AT FIRESTONE CITY CENTRE	
SITE PLAN	
NAME OF APPLICATION:	MURPHY OIL USA
TYPE OF SUBMITTAL :	FINAL DEVELOPMENT PLAN
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PHASE NUMBER:	
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REVISION DATE:	
SHEET 3 OF 25	

N

20 0 10 20
(IN FEET)
1 inch = 20 ft

CALL BEFORE YOU DIG 1-800-922-1987 COLORADO ONE CALL SYSTEM

EXISTING

- FOUND SECTION CORNER AS NOTED
- FOUND PROPERTY CORNER AS NOTED
- SET NO. 5 REBAR WITH A 1 1/4" ALUMINUM CAP, PLS 38390
- SET PK NAIL WITH A 1 1/2" WASHER, PLS 38390
- SITE BENCHMARK
- SANITARY SEWER MANHOLE
- WATER VALVE
- FIRE HYDRANT
- ELECTRIC TRANSFORMER
- LIGHT POLE
- TELEPHONE BOX
- TELEPHONE PEDESTAL
- UNDERGROUND GAS SIGN
- STORM MANHOLE
- CULVERT
- CULVERT
- SIGN
- CONCRETE SURFACE
- ASPHALT SURFACE
- CURB AND GUTTER
- UNDERGROUND ELECTRIC LINE
- UNDERGROUND WATER LINE
- UNDERGROUND GAS LINE
- UNDERGROUND TELEPHONE LINE
- UNDERGROUND SANITARY SEWER
- (M) MEASURED
- (R) RECORD
- (C) CALCULATED

PROPOSED

- BOUNDARY LINE
- CONCRETE INTEGRAL CURB
- CF CONSTRUCTION FENCE (SEE DETAIL SHEETS)
- CFP CONSTRUCTION FENCE ON PAVEMENT (SEE DETAIL SHEETS)
- BUILDING/CANOPY CONTROL POINT
- CONCRETE SIDEWALK
- CONCRETE PAVEMENT

GENERAL SITE NOTES

A. ALL DIMENSIONS SHOWN ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.

B. ALL CURB RETURN RADII SHALL BE 5', AS SHOWN TYPICAL ON THIS PLAN, UNLESS OTHERWISE NOTED.

C. UNLESS OTHERWISE SHOWN, CALLED OUT OR SPECIFIED HEREON:
- ALL CURB ADJACENT TO CONCRETE PAVING SHALL BE INSTALLED PER DETAIL 1A.
- PAVEMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE PAVING PLAN OVER THE ENTIRE PARKING LOT AREA AND ALL APPROACH DRIVES.
- SEE ASSOCIATED PLANS FOR CANOPY, COLUMN, PUMP ISLAND DETAILS AND LAYOUT.

D. CONTRACTOR SHALL BEGIN CONSTRUCTION OF ANY LIGHT POLE BASES FOR RELOCATED LIGHT FIXTURES AND RELOCATION OF ELECTRICAL SYSTEM AS SOON AS DEMOLITION BEGINS. CONTRACTOR SHALL BE AWARE THAT INTERRUPTION OF POWER TO ANY LIGHT POLES OR SIGNS SHALL NOT EXCEED 24 HOURS.

E. THE LOCATION OF THE CONSTRUCTION FENCE ON THE DRAWINGS IS FOR GRAPHICAL REPRESENTATION ONLY. THE CONTRACTOR IS TO ENSURE THAT THE CONSTRUCTION FENCE ENCOMPASSES THE ENTIRE WORK AREA.

F. ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED SMOOTH AND FOUR INCHES OF TOPSOIL APPLIED. IF ADEQUATE TOPSOIL IS NOT AVAILABLE ON SITE, THE CONTRACTOR SHALL PROVIDE TOPSOIL, APPROVED BY THE OWNER, AS NEEDED. THE AREA SHALL THEN BE SEEDED/SODDED, FERTILIZED, MULCHED, WATERED AND MAINTAINED UNTIL HARDY GRASS GROWTH IS ESTABLISHED IN ALL AREAS. ANY AREAS DISTURBED FOR ANY REASON PRIOR TO FINAL ACCEPTANCE OF THE PROJECT SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

G. CONTRACTOR SHALL PURCHASE AND INSTALL A MAILBOX, AND SHALL COORDINATE LOCATION OF MAILBOX WITH MURPHY CONSTRUCTION MANAGER AND/OR ON-SITE REPRESENTATIVE AND LOCAL POSTMASTER.

H. ALL PROPOSED PAVEMENT STRIPING OR MARKINGS SHALL FOLLOW THE SPECIFICATIONS FOR PAINT INCLUDED IN DETAIL 10A.

I. PURSUANT TO SECTION 2 OF THE DECLARATION, THE COMMON AREA FACILITIES SHALL NOT BE USED BY VEHICLES HAVING A NET WEIGHT IN EXCESS OF 14,000 POINDS OR GROSS WEIGHT IN EXCESS OF 30,000 POUNDS (INCLUDING CONSTRUCTION VEHICLES) WITHOUT THE PRIOR WRITTEN CONSENT OF DEVELOPER AND SHALL NOT BE USED FOR ANY PURPOSE WHICH WOULD OBSTRUCT THE FREE FLOW OF TRAFFIC. ENGINEERS TO CONFIRM THAT THE CUSTOMARY MURPHY FUEL AND DELIVERY TRUCKS DO NOT EXCEED THE STATED WEIGHT LIMIT OR COORDINATE WITH DEVELOPER FOR THE NECESSARY APPROVALS.

SITE NOTES

- 2F DRILL (2) 3/4" X 5/8" DIA. HOLES (1) EACH FOR OPEN POSITION & CLOSED POSITION OF GATES. TO BE USED ON BOTH SIDES OF GATE. SEE DUMPSTER DETAIL.
- 8B OVERHEAD CANOPY – (TYP.–PER CANOPY PLANS)
- 12A 4" TRAFFIC YELLOW LANE STRIPE (SEE LENGTH INDICATED AT SYMBOL).
- 12D 4" WIDE PAINTED STRIPES. 2.0' O.C. @ 45° (SEE SIZE COLOR INDICATED AT SYMBOL).
- 12H 4" DOUBLE TRAFFIC YELLOW LANE STRIPE (SEE LENGTH INDICATED AT SYMBOL).
- 12M CONTRACTOR TO ENSURE THAT ANY LIGHT POLES OR HANDICAP PARKING SIGNS ARE AT LEAST 2' FROM BACK OF CURB TO PREVENT THE VEHICLES FROM STRIKING THESE ITEMS.
- 13C LIMITS OF RETAINING WALL
- 14J GC TO INSTALL (1) 4" PVC SLEEVE FOR IRRIGATION LINE. SEE UTILITY PLAN FOR INSTALLATION REQUIREMENTS.
- 14K GC TO INSTALL (2) 4" PVC SLEEVES FOR FUTURE USE. SEE UTILITY PLAN FOR INSTALLATION REQUIREMENTS.
- 16B MURPHY OIL MONUMENT SIGN. PER APPROVED ELEVATION.
- 21A TAPER CURB TO MATCH EXISTING CURB
- 21B TAPER CURB FROM 6" TO 0" OVER 10'
- 21D EDGE OF CONCRETE SLAB. PER TANK/PIPING PLANS.
- 21E UNDERGROUND STORAGE TANKS (1) 25,000 GAL–REGULAR, (1) 8,000 GAL–PREMIUM, (1) 10,000 GAL–DIESEL, (1) 8,000 GAL–E-0.
- 21G AIR VACUUM UNIT WITH 4' x 7' CONCRETE SLAB
- 21K MURPHY EXPRESS ID SIGN. PER APPROVED ELEVATION.
- 21P 7' x 10' CONCRETE PAD FOR PROPANE TANKS.
- 21T MAILBOX (CONTRACTOR TO COORDINATE LOCATION WITH MURPHY AND POSTMASTER PRIOR TO INSTALLATION).
- 21U 5' X 7' CONCRETE SLAB FOR ICE UNIT. SEE NUMBER INDICATED AT SYMBOL.
- 21V CONCRETE PAD FOR VENT RISERS. PER TANK & PIPING PLANS.
- 51B LIMITS OF SAWCUT AND PAVEMENT REMOVAL.

SHEET NO. FDP-3

COLORADO LICENSED 41391 PROFESSIONAL ENGINEER
04/05/17

REV-6	04-04-17	JN	GD	TA	TA
	DATE	PRN	PM	DES	DRW

SITE PLAN
MURPHY EXPRESS
4615 CITY CENTRE ROAD
FIRESTONE COLORADO

GreenbergFarrow
1430 W. PEACHTREE ST. NW SUITE 200
ATLANTA, GA 30309
PHONE: (404) 601 4000
FAX: (404) 601 3970
DWG NAME: FIRESTONECO
JOB NO: 2016007.4

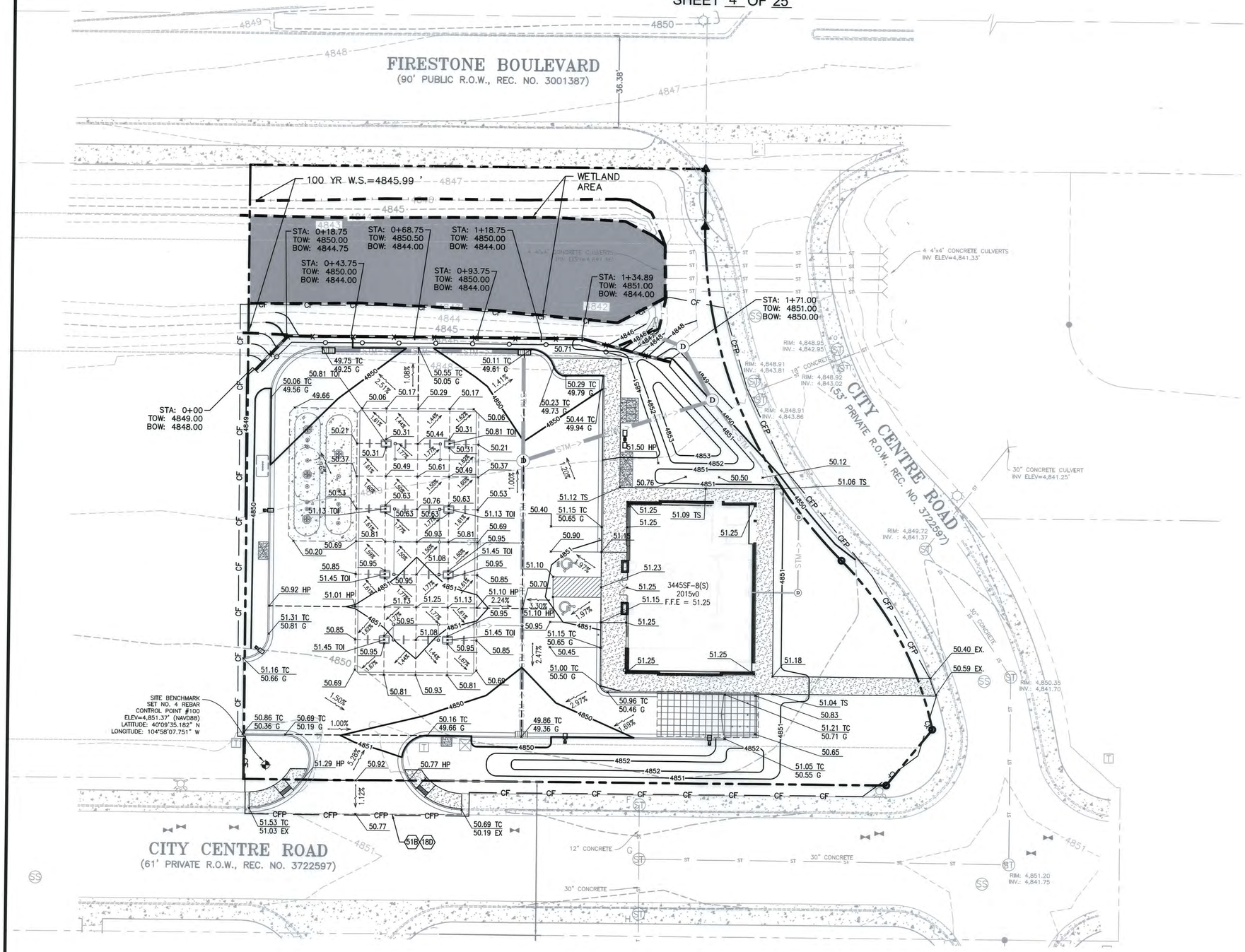
MURPHY OIL USA, INC.
200 PEACH STREET
EL DORADO, AR 71730

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GRADING PLAN
SHEET 4 OF 25



20 0 10 20
(IN FEET)
1 inch = 20 ft

CALL BEFORE YOU DIG 1-800-922-1987 COLORADO ONE CALL SYSTEM

EXISTING

- FOUND SECTION CORNER AS NOTED
- FOUND PROPERTY CORNER AS NOTED
- SET NO. 5 REBAR WITH A 1 1/4" ALUMINUM CAP, PLS 38390
- SET PK NAIL WITH A 1 1/2" WASHER, PLS 38390
- SITE BENCHMARK
- SANITARY SEWER MANHOLE
- WATER VALVE
- FIRE HYDRANT
- ELECTRIC TRANSFORMER
- LIGHT POLE
- TELEPHONE BOX
- TELEPHONE PEDESTAL
- UNDERGROUND GAS SIGN
- STORM MANHOLE
- CULVERT
- SIGN
- CONCRETE SURFACE
- ASPHALT SURFACE
- CURB AND GUTTER
- UNDERGROUND ELECTRIC LINE
- UNDERGROUND WATER LINE
- UNDERGROUND GAS LINE
- UNDERGROUND TELEPHONE LINE
- UNDERGROUND SANITARY SEWER
- (M) MEASURED
- (R) RECORD
- (C) CALCULATED

PROPOSED

- PROPERTY LINE
- PROPOSED INTEGRAL CURB
- XXXX — PROPOSED CONTOUR
- CF — CONSTRUCTION FENCE
- CFP — CONSTRUCTION FENCE ON PAVEMENT (SEE DETAIL SHEETS)
- DRAINAGE SLOPE AND DIRECTION
- SPOT ELEVATIONS:
  - XXXX TC TOP OF CURB
  - XXXX G GUTTER
  - XXXX TOI TOP OF ISLAND
  - XXXX EX. EXISTING ELEVATION
  - XXXX TC TOP OF SIDEWALK
  - XXXX TOW TOP OF WALL
  - XXXX BOW BOTTOM OF WALL

ALL PROPOSED SPOT ELEVATIONS HAVE A BASE ELEVATION OF 1100'

- STM-> PROPOSED STORM SEWER PIPE

GENERAL GRADING NOTES

A. PRIOR TO INSTALLATION OF STORM OR SANITARY SEWER, WATER MAIN OR ANY OTHER UTILITIES, THE CONTRACTOR SHALL EXCAVATE, VERIFY, AND CALCULATE ALL POINTS OF CONNECTION AND ALL UTILITY CROSSINGS AND INFORM THE OWNER AND THE ENGINEER OF ANY CONFLICTS OR REQUIRED DEVIATIONS FROM THE PLAN PRIOR TO CONSTRUCTION. NOTIFICATION SHALL BE MADE A MINIMUM OF 72 HOURS PRIOR TO CONSTRUCTION. THE ENGINEER AND ITS CLIENTS SHALL BE HELD HARMLESS IN THE EVENT THAT THE CONTRACTOR FAILS TO MAKE SUCH NOTIFICATION.

B. ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED SMOOTH AND FOUR INCHES OF TOPSOIL APPLIED. IF ADEQUATE TOPSOIL IS NOT AVAILABLE ON SITE, THE CONTRACTOR SHALL PROVIDE TOPSOIL, APPROVED BY THE OWNER, AS NEEDED. THE AREA SHALL THEN BE SEEDED/SODDED, FERTILIZED, MULCHED, WATERED AND MAINTAINED UNTIL HARDY GRASS GROWTH IS ESTABLISHED IN ALL AREAS. ANY RELOCATED TREES SHALL BE MAINTAINED UNTIL SUCH POINT AS TREE IS RE-ESTABLISHED. ANY AREAS DISTURBED FOR ANY REASON PRIOR TO FINAL ACCEPTANCE OF THE PROJECT SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

C. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES.

D. REFER TO GEOTECHNICAL REPORT FOR SPECIFIC SITE SOIL CONDITIONS AND CONSIDERATIONS.

E. CONTRACTOR SHALL COMPLY COMPLETELY WITH THE LATEST STANDARDS OF OSHA DIRECTIVES OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR SHALL USE SUPPORT SYSTEMS, SLOPING, BENCHING AND OTHER MEANS OF PROTECTION. THIS IS TO INCLUDE, BUT NOT LIMITED FOR ACCESS AND EGRESS FROM ALL EXCAVATION AND TRENCHING. CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH PERFORMANCE CRITERIA AS REQUIRED BY OSHA.

F. ALL HDPE SHALL BE N-12 WT IB (OR EQUIVALENT) WITH SMOOTH INTERIOR AND ANNULAR EXTERIOR CORRUGATIONS. 4"-60" PIPE SHALL MEET ASTM F2648 (OR AASHTO M252 TYPE S) REQUIREMENTS, AND SHALL HAVE A MINIMUM MANNINGS "n" DESIGN VALUE OF 0.012. JOINTS SHALL BE WATERTIGHT ACCORDING TO ASTM D3212 (OR AASHTO M252, M294) REQUIREMENTS. GASKETS SHALL MEET THE REQUIREMENTS OF ASTM F477. JOINT PERFORMANCE, FITTINGS, MATERIAL PROPERTIES, AND INSTALLATION SHALL BE DONE PER THE COMPLETE ADS SPECIFICATION FOR ADS N-12 WT IB PIPE FOUND IN THE ADS, INC. DRAINAGE HANDBOOK, LATEST EDITION.

G. IF USING HDPE PERFORATED PIPE FOR SUBSURFACE DRAINAGE AND DETENTION/RETENTION SYSTEMS, THE PERFORATIONS SHALL MEET THE AASHTO CLASS II STANDARD PERFORATION PATTERN REQUIREMENTS.

H. ALL STORM SEWER LINES 18"-54" DIAMETER ARE TO BE REINFORCED CONCRETE PIPE ACCORDING TO ASTM C-76 TYPE III UNLESS OTHERWISE INDICATED.

GRADING NOTES

18D MATCH EXISTING PAVEMENT ELEVATIONS
51B LIMITS OF SAWCUT AND PAVEMENT REMOVAL.

MURPHY EXPRESS AT FIRESTONE CITY CENTRE	
GRADING PLAN	
NAME OF APPLICATION:	MURPHY OIL USA
TYPE OF SUBMITTAL :	FINAL DEVELOPMENT PLAN
FILING NUMBER:	
PHASE NUMBER:	
PREPARATION DATE:	10-20-2016
REVISION DATE:	12-20-2016
REVISION DATE:	02-07-2017
REVISION DATE:	03-15-2017
REVISION DATE:	04-04-2017
REVISION DATE:	
	SHEET 4 OF 25

SHEET NO. FDP-4

COLORADO LICENSED PROFESSIONAL ENGINEER 41391 04/05/17

REV-6	04-04-17	JN	GD	TA	TA
	DATE	PRN	PM	DES	DRW

GRADING PLAN
MURPHY EXPRESS
4615 CITY CENTRE ROAD
FIRESTONE COLORADO

GreenbergFarrow
1430 W. PEACHTREE ST. NW SUITE 200
ATLANTA, GA 30309
PHONE: (404) 601 4000
FAX: (404) 601 3970
DWG NAME: FDP-4_GRADING.DWG
JOB NO.: 20160074

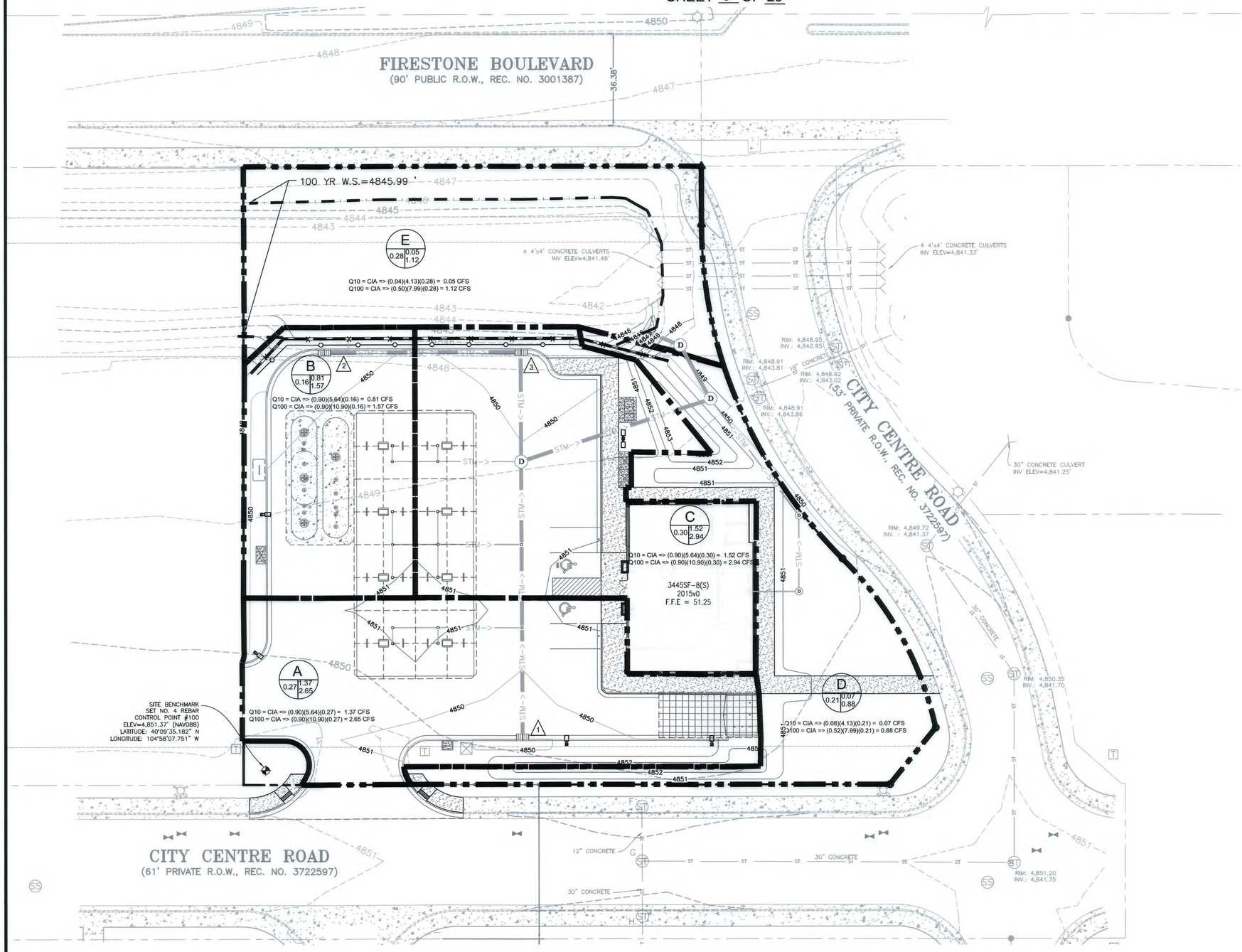
MURPHY OIL USA, INC.
200 PEACH STREET
EL DORADO, AR 71730

4301923 Pages: 5 of 25
05/15/2017 09:05 AM R Fee:$253.00
Carly Koppes, Clerk and Recorder, Weld County, CO

FINAL DEVELOPMENT PLAN

MURPHY EXPRESS AT FIRESTONE CITY CENTRE

LOT 2 FIRESTONE CITY CENTRE SUBDIVISION FILING NO.4
TOWN OF FIRESTONE, WELD COUNTY, STATE OF COLORADO
DRAINAGE PLAN
SHEET 5 OF 25



20 0 10 20
(IN FEET)
1 inch = 20 ft

CALL BEFORE YOU DIG
1-800-922-1987
COLORADO ONE CALL SYSTEM

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- DRAINAGE SLOPE AND DIRECTION
- STM-> PROPOSED STORM SEWER PIPE

DRAINAGE BASIN
AREA (AC) — X — XX Q10 RUNOFF (CFS) / XX Q100 RUNOFF (CFS)

Q10 & Q100 OF THE PAVED AREAS IS BASED ON A 5 MINUTE TIME CONCENTRATION, UNPAVED AREA IS BASED ON A 10 MINUTE TIME OF CONCENTRATION INTENSITY (I) VALUES ARE BASED NOAA RAINFALL ATLAS INFORMATION AS RECOMMENDED IN THE CITY OF FIRESTONE STORMWATER DESIGN REGULATIONS SECTION "3.2.1 RAINFALL INTENSITY".

X STUDY POINT

NOTE:

1. SEE DRAINAGE COMPLIANCE LETTER FOR LOT SPECIFIC INFORMATION ON SUB-BASINS.

MURPHY EXPRESS AT FIRESTONE CITY CENTRE	
DRAINAGE PLAN	
NAME OF APPLICATION:	MURPHY OIL USA
TYPE OF SUBMITTAL :	FINAL DEVELOPMENT PLAN
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PHASE NUMBER:	
PREPARATION DATE:	10-20-2016
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REVISION DATE:	
SHEET 5 OF 25	

SHEET NO. FDP-5

COLORADO LICENSED
JOHN T. HOLMES
41391
04/05/17

REV-6	04-04-17	JN	GD	TA	TA
	DATE	PRN	PM	DES	DRW

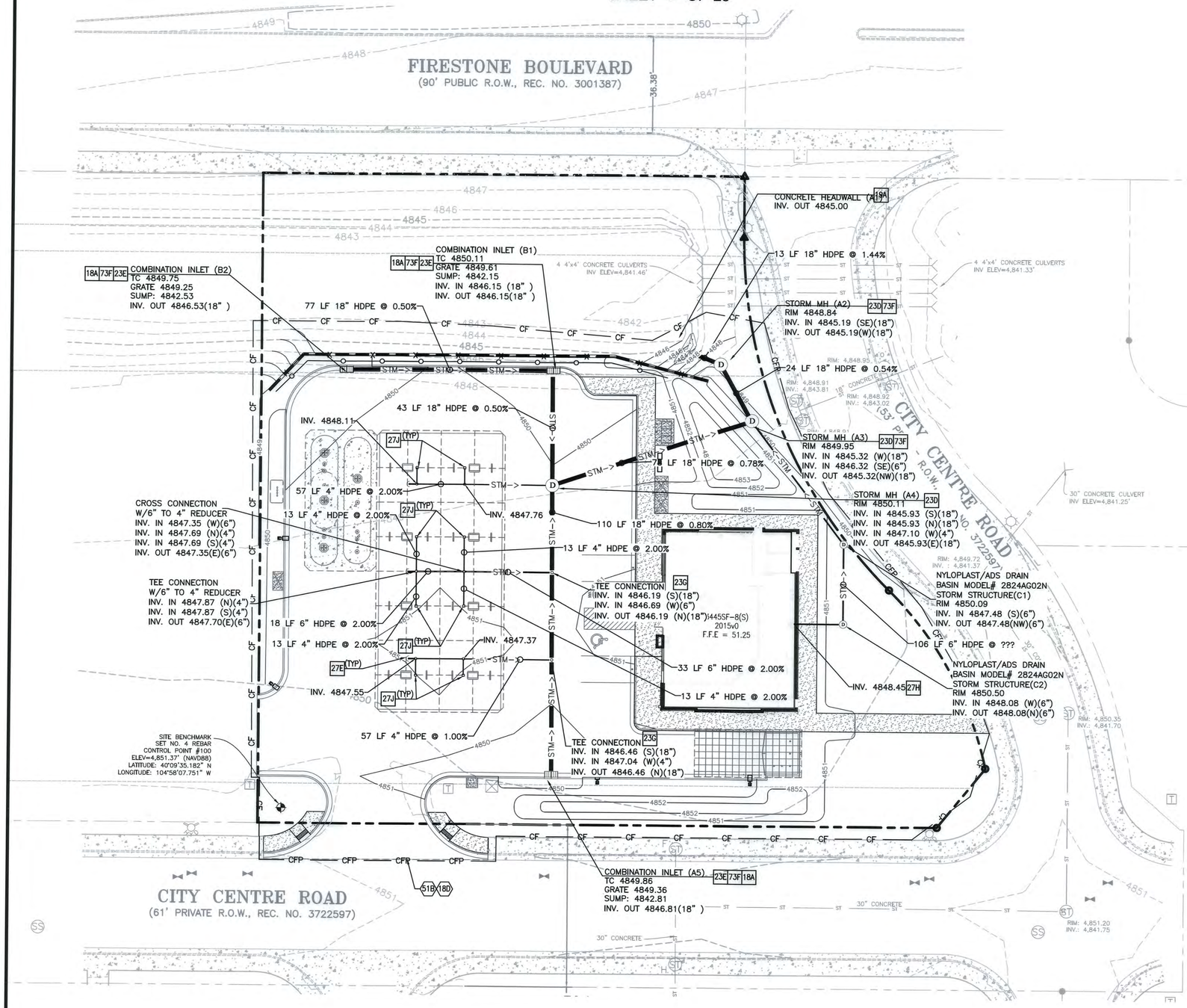
DRAINAGE PLAN
MURPHY EXPRESS
4615 CITY CENTRE ROAD
FIRESTONE COLORADO

GreenbergFarrow
1430 W. PEACHTREE ST. NW SUITE 200
ATLANTA, GA 30309
PHONE: (404) 601 4000
FAX: (404) 601 4070
DWG NAME: FIRESTONE.DWG
JOB NO.: 20160074

MURPHY OIL USA, INC.
200 PEACH STREET
EL DORADO, AR 71730

4301923 Pages: 6 of 25
05/15/2017 09:05 AM R Fee:$253.00
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FINAL DEVELOPMENT PLAN
MURPHY EXPRESS AT FIRESTONE CITY CENTRE
LOT 2 FIRESTONE CITY CENTRE SUBDIVISION FILING NO.4
TOWN OF FIRESTONE, WELD COUNTY, STATE OF COLORADO
STORM DRAINAGE PLAN
SHEET 6 OF 25



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(IN FEET)
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STORM SEWER NOTES

- 9C CONNECT DOWN SPOUTS TO DRAIN PIPE (SEE ARCH. PLANS FOR EXACT NO. AND LOCATION OF DOWN SPOUTS)
- 18C CONNECT TO EXISTING STORM DRAIN MANHOLE OR INLET
- 18D MATCH EXISTING PAVEMENT ELEVATIONS
- 51B LIMITS OF SAWCUT AND PAVEMENT REMOVAL.

STORM DETAILS – SEE DETAIL SHEETS

- 18A BIO-SKIRT STORM STRUCTURE SNOUT
- 19A CONCRETE HEADWALL
- 23D STORM DRAIN MANHOLE
- 23E COMBINATION INLET
- 23G TEE CONNECTION (INSERTA TEE OR EQUIVALENT WATER TIGHT CONNECTION)
- 27E STORM DRAIN CLEAN-OUT.
- 27H ROOF DRAIN DOWNSPOUT CONNECTION.
- 27J CANOPY DRAIN CONNECTION DETAIL.
- 73F WATER STOP STRUCTURE CONNECTION DETAIL

MURPHY EXPRESS AT FIRESTONE CITY CENTRE STORM DRAINAGE PLAN	
NAME OF APPLICATION:	MURPHY OIL USA
TYPE OF SUBMITTAL:	FINAL DEVELOPMENT PLAN
FILING NUMBER:	
PHASE NUMBER:	
PREPARATION DATE:	10-20-2016
REVISION DATE:	12-20-2016
REVISION DATE:	02-07-2017
REVISION DATE:	03-15-2017
REVISION DATE:	04-04-2017
REVISION DATE:	
	SHEET 6 OF 25

SHEET NO. FDP-6

COLORADO LICENSED
41391
04/05/17

REV-6	04-04-17	JN	GD	TA	TA
	DATE	PRN	PM	DES	DRW

STORM DRAINAGE PLAN
MURPHY EXPRESS
4615 CITY CENTRE ROAD
FIRESTONE COLORADO

GreenbergFarrow
1430 W. PEACHTREE ST. NW SUITE 200
ATLANTA, GA 30309
PHONE (404) 601 4000
FAX (404) 601 3970
DWG NAME: FIRESTONECO
JOB NO.: 2016004

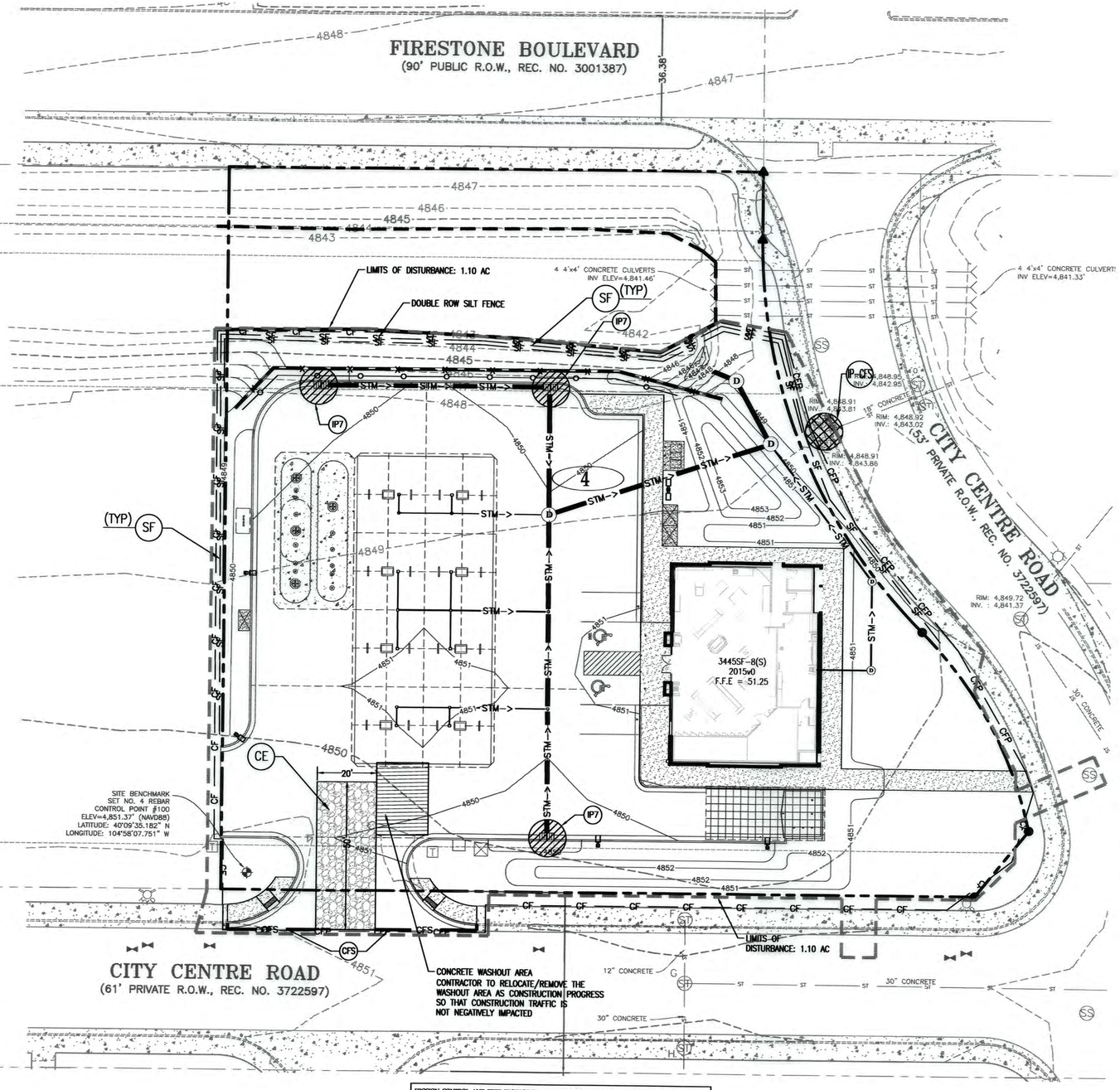
MURPHY OIL USA, INC.
200 PEACH STREET
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4381923 Pages: 7 of 25
05/15/2017 09:05 AM R Fee:$253.00
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FINAL DEVELOPMENT PLAN

MURPHY EXPRESS AT FIRESTONE CITY CENTRE

LOT 2 FIRESTONE CITY CENTRE SUBDIVISION FILING NO.4
TOWN OF FIRESTONE, WELD COUNTY, STATE OF COLORADO
EROSION CONTROL PHASE 2
SHEET 7 OF 25



EROSION CONTROL AND TREE PROTECTION MEASURES SHALL BE INSTALLED PRIOR TO ANY OTHER CONSTRUCTION ACTIVITY AND MAINTAINED UNTIL PERMANENT GROUND COVER IS ESTABLISHED.

"THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH LAND-DISTURBING ACTIVITIES."

"EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE"

24 HR EMERGENCY CONTACT:
JASON LAIRD 870-866-7681

GENERAL EROSION NOTES

A. CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THIS STORM WATER POLLUTION PREVENTION PLAN. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST OF OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.

B. BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER.

C. SITE MAP MUST CLEARLY DELINEATE ALL STATE WATERS. PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATERS OR REGULATED WETLANDS MUST BE MAINTAINED ON SITE AT ALL TIMES.

D. CONTRACTOR TO LIMIT DISTURBANCE OF SITE IN STRICT ACCORDANCE WITH EROSION CONTROL SEQUENCING SHOWN ON THIS PLAN, OR AS REQUIRED BY THE APPLICABLE GENERAL PERMIT. NO UNNECESSARY OR IMPROPERLY SEQUENCED CLEARING AND/OR GRADING SHALL BE PERMITTED.

E. GENERAL CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET FACILITIES. CONTRACTOR SHALL CONSTRUCT TEMPORARY BERM ON DOWNSTREAM SIDES AS NEEDED.

F. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.

G. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS.

H. DUST ON THE SITE SHALL BE MINIMIZED. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.

I. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORMWATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.

J. ALL DENUDED/BARE AREAS THAT WILL BE INACTIVE FOR 14 DAYS OR MORE, MUST BE STABILIZED IMMEDIATELY UPON COMPLETION OF MOST RECENT GRADING ACTIVITY, WITH THE USE OF FAST-GERMINATING ANNUAL GRASS/GRAIN VARIETIES, STRAW/HAY MULCH, WOOD CELLULOSE FIBERS, TACKIFIERS, NETTING OR BLANKETS.

K. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE PERMANENTLY STABILIZED AS SHOWN ON THE PLANS. THESE AREAS SHALL BE SEEDED, SODDED, AND/OR VEGETATED IMMEDIATELY, OR STABILIZED AS SHOWN ON PLANS, NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS. REFER TO THE GRADING PLAN AND/OR LANDSCAPE PLAN.

L. IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO PREVENT TRACKING OF DIRT, DUST OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE. ONLY USE INGRESS/EGRESS LOCATIONS AS PROVIDED.

M. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.

N. CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING SEDIMENT IN THE DETENTION POND AND ANY SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF THE SITE.

O. ON-SITE AND OFFSITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.

P. SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.

Q. DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION AND SEDIMENT CONTROL MEASURES (SILT FENCES, ETC.) TO PREVENT EROSION AND POLLUTANT DISCHARGE.

R. GENERAL CONTRACTOR IS TO DESIGNATE/IDENTIFY AREAS ON THE SITE MAPS, INSIDE OF THE LIMITS OF DISTURBANCE, FOR WASTE DISPOSAL AND DELIVERY AND MATERIAL STORAGE.

SEQUENCE OF CONSTRUCTION

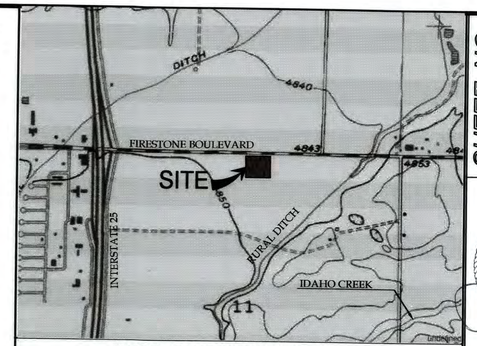
PHASE I
1. INSTALL STABILIZED CONSTRUCTION ENTRANCES.
2. PREPARE TEMPORARY PARKING AND STORAGE AREA.
3. CONSTRUCT THE SILT FENCES ON THE SITE.
4. INSTALL ALL PERIMETER SEDIMENT MEASURES.
5. INSTALL ALL TEMPORARY EROSION & SEDIMENT CONTROLS AS NEEDED.
6. CLEAR AND GRUB THE SITE.
7. BEGIN GRADING THE SITE.

PHASE II
8. START CONSTRUCTION OF BUILDING PAD, STRUCTURES, AND OFF-SITE IMPROVEMENTS.
9. TEMPORARILY SEED DENUDED AREAS.
10. INSTALL UTILITIES, UNDERDRAINS, STORM SEWERS, CURBS AND GUTTERS.
11. INSTALL INLET/FLUME PROTECTION DEVICES.
12. INSTALL RIP RAP AROUND OUTLET STRUCTURES.
13. PREPARE SITE FOR PAVING.
14. PAVE SITE.
15. COMPLETE GRADING AND INSTALL PERMANENT SEEDING AND PLANTING.
16. REMOVE EROSION AND TEMPORARY SEDIMENT CONTROL DEVICES AFTER FINAL STABILIZATION IS ACHIEVED.

BMP MAINTENANCE NOTES

ALL MEASURES STATED ON THIS SITE MAP, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURE SHALL BE CHECKED BY A QUALIFIED PERSON IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR THE APPLICABLE PERMIT, WHICHEVER IS MORE STRINGENT, AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

1. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING OR DETERIORATION.
2. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED, AND RESEEDED AS NEEDED.
3. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE-HALF OF THE SILT FENCE.
4. THE CONSTRUCTION EXITS SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRED PERIODIC TOP DRESSING OF THE CONSTRUCTION EXITS AS CONDITIONS DEMAND.
5. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AREA AS CONDITIONS DEMAND.
6. FILTER TUBES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM TUBES WHEN IT REACHES ½ OF ITS EXPOSED HEIGHT. SEE DETAILS.
7. PRIOR TO LEAVING THE SITE, ALL VEHICLES SHALL BE CLEANED OF DEBRIS. ANY DEBRIS AND/OR SEDIMENT REACHING THE PUBLIC STREET SHALL BE CLEANED IMMEDIATELY BY A METHOD OTHER THAN FLUSHING.



USGS QUADRANGLE MAP
N.T.S.

EXISTING

- FOUND SECTION CORNER AS NOTED
- FOUND PROPERTY CORNER AS NOTED
- SET NO. 5 REBAR WITH A 1 1/4" ALUMINUM CAP, PLS 38390
- SET PK NAIL WITH A 1 1/2" WASHER, PLS 38390
- SITE BENCHMARK
- SANITARY SEWER MANHOLE
- WATER VALVE
- FIRE HYDRANT
- ELECTRIC TRANSFORMER
- LIGHT POLE
- TELEPHONE BOX
- TELEPHONE PEDESTAL
- UNDERGROUND GAS SIGN
- STORM MANHOLE
- CULVERT
- CULVERT
- SIGN
- CONCRETE SURFACE
- ASPHALT SURFACE
- CURB AND GUTTER
- UNDERGROUND ELECTRIC LINE
- UNDERGROUND WATER LINE
- UNDERGROUND GAS LINE
- UNDERGROUND TELEPHONE LINE
- UNDERGROUND SANITARY SEWER
- (M) MEASURED
- (R) RECORD
- (C) CALCULATED

PROPOSED

- CONSTRUCTION FENCE ON PAVEMENT (SEE DETAIL SHEETS)
- BOUNDARY LINE
- CF — CONSTRUCTION FENCE
- CFP — LIMITS OF DISTURBED AREA
- ## SOIL TYPE DESIGNATION

PROJECT INFORMATION

RECEIVING WATER IS UN-NAMED LOCAL DEPRESSION. DEPRESSION EVENTUALLY CONNECTS TO IDAHO CREEK WATERWAY ± 1.5 MILES TO SOUTHEAST CORNER OF PROJECT SITE.

PROPOSED PROJECT SITE IS AN EXISTING COMMERCIAL LOT WHICH IS PART OF A LARGER DEVELOPMENT. STORM RUN-OFF FROM SITE WILL PIPE INTO THE PROPOSED STORM SEWER SYSTEM INSTALLED TO ACCOMMODATE STORM RUN-OFF FOR THE GAS STATION LOT. MASTER DETENTION HAS BEEN PROVIDED FOR THE OVERALL DEVELOPMENT.

PROPOSED PROJECT IS CONSTRUCTING A GAS STATION CONSISTING OF 3,445 S.F. CONVENIENT STORE WITH 8 PUMP ISLANDS AND ASSOCIATED PARKING AREA.

ACREAGE OF SITE IS 1.225 ACRES.

DISTURBED ACREAGE OF SITE (INCLUDING OFF-SITE WORK) IS 1.10 ACRES.

ANTICIPATED CONSTRUCTION START DATE IS JANUARY 2017 AND COMPLETION DATE IS APRIL 2017.

CONTRACTOR TO TAKE APPROPRIATE MEASURES TO KEEP SEDIMENT FROM ESCAPING SITE AND ALL ACCUMULATED SEDIMENT SHALL BE CLEANED OUT AND REMOVED FROM SITE.

DOWNSTREAM CONDITION WILL NOT BE NEGATIVELY AFFECTED BY PROPOSED DEVELOPMENT.

EROSION DETAILS – SEE DETAIL SHEET C-4.2

- CE — STABILIZED CONSTRUCTION ACCESS
- PS — PERMANENT STABILIZATION. SEE LANDSCAPE PLANS
- SF — SEDIMENTATION\SILT FENCE WITH WIRE SUPPORT
- IP-CFS — INLET SEDIMENT TRAP COMPOSITE FILTER SOCK
- IP7 — TEMPORARY GRAVEL COMBINATION INLET SEDIMENT FILTER
- CFS — TEMP. COMPOST FILTER SOCK ANCHORED WITH SAND BAGS

SITE SOILS

#4 AQUOLLS AND AQUEPTS FLOODED 0 TO 3 PERCENT SLOPE; SOIL GROUP D

MURPHY EXPRESS AT FIRESTONE CITY CENTRE	
EROSION CONTROL PHASE 2	
NAME OF APPLICATION:	MURPHY OIL USA
TYPE OF SUBMITTAL :	FINAL DEVELOPMENT PLAN
FILING NUMBER:	
PHASE NUMBER:	
PREPARATION DATE:	10-20-2016
REVISION DATE:	12-20-2016
REVISION DATE:	02-07-2017
REVISION DATE:	03-15-2017
REVISION DATE:	04-04-2017
REVISION DATE:	
	SHEET 7 OF 25

N

20 0 10 20
(IN FEET)
1 inch = 20 ft

CALL BEFORE YOU DIG 1-800-922-1987 COLORADO ONE CALL SYSTEM

SHEET NO. FDP-7

COLORADO LICENSED 41391 PROFESSIONAL ENGINEER

04/05/17

REV-6	04-04-17	JN	GD	TA
DATE	PRN	PM	DES	DRW

EROSION CONTROL PHASE 2
MURPHY EXPRESS
4615 CITY CENTRE ROAD
FIRESTONE COLORADO

Greenberg Farrow
1430 W. PEACHTREE ST. NW SUITE 200
ATLANTA, GA 30309
PHONE: (404) 347-9000
FAX: (404) 347-9020
DWG NAME: FIRESTONE.CO
JOB NO.: 20160074

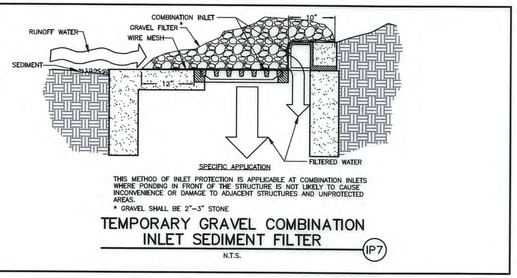
MURPHY OIL USA, INC.
MURPHY USA
200 PEACH STREET
EL DORADO, AR 71730

4301923 Pages: 8 of 25
05/15/2017 09:05 AM R Fee:$253.00
Carly Koppes, Clerk and Recorder, Weld County, CO

FINAL DEVELOPMENT PLAN

MURPHY EXPRESS AT FIRESTONE CITY CENTRE

LOT 2 FIRESTONE CITY CENTRE SUBDIVISION FILING NO.4
TOWN OF FIRESTONE, WELD COUNTY, STATE OF COLORADO
EROSION CONTROL DETAILS
SHEET 8 OF 25

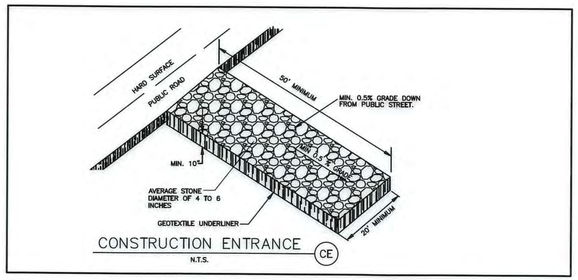


THIS METHOD OF INLET PROTECTION IS APPLICABLE AT COMBINATION INLETS WHERE PONDING IN FRONT OF THE STRUCTURE IS NOT LIKELY TO CAUSE INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURES AND UNPROTECTED AREAS.

* GRAVEL SHALL BE 2"–3" STONE

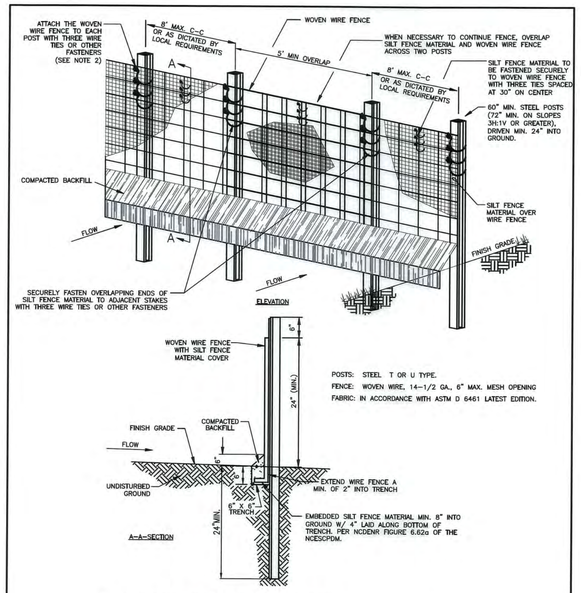
TEMPORARY GRAVEL COMBINATION INLET SEDIMENT FILTER (IP7)

N.T.S.



CONSTRUCTION ENTRANCE (CE)

N.T.S.

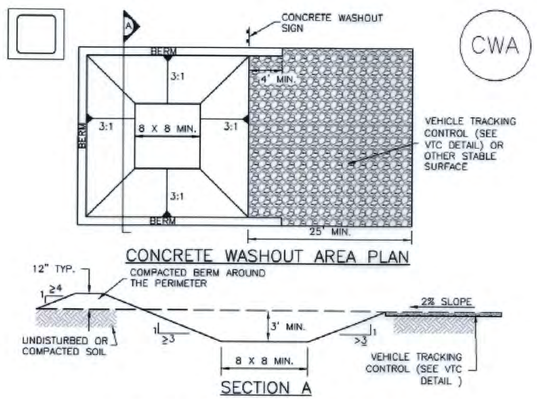


POSTS: STEEL T OR U TYPE.
FENCE: WOVEN WIRE, 14–1/2 GA., 6" MAX. MESH OPENING
FABRIC: IN ACCORDANCE WITH ASTM D 6461 LATEST EDITION.

1. INSTALLATION SHALL COMPLY WITH ASTM D 6462 LATEST EDITION.
2. ATTACH THE WOVEN WIRE FENCE TO EACH POST AND THE GEOTEXTILE TO THE WOVEN WIRE FENCE (SPACED EVERY 30") WITH THREE WIRE TIES OR OTHER FASTENERS, ALL SPACED WITHIN THE TOP 8" OF THE FABRIC. ATTACH EACH TIE DIAGONALLY 45 DEGREES THROUGH THE FABRIC, WITH EACH PUNCTURE AT LEAST 1" VERTICALLY APART. ALSO, EACH TIE PLACED ON A POST SHOULD BE POSITIONED TO HANG ON A POST NIPPLE WHEN TIGHTENED TO PREVENT SAGGING.
3. WHEN TWO SECTIONS OF SILT FENCE MATERIAL ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED A MINIMUM OF 60" ACROSS TWO POSTS, AS SHOWN.
4. MAINTENANCE SHALL BE PERFORMED AS NOTED IN THE SWPPP. DEPTH OF ACCUMULATED SEDIMENTS MAY NOT EXCEED ONE–HALF THE HEIGHT OF THE FENCE. MAINTENANCE CLEANOUT MUST BE CONDUCTED REGULARLY TO PREVENT ACCUMULATED SEDIMENTS FROM REACHING ONE–HALF THE HEIGHT OF THE SILT FENCE MATERIAL ABOVE GRADE.
5. ALL SILT FENCE SHALL INCLUDE WIRE SUPPORT UNLESS THE STATIC SLICING EQUIPMENT IS UTILIZED TO INSTALL THE FENCE PER FIGURE 6.62a OF THE NCESCPDM.
6. WRAP APPROXIMATELY 6" OF FABRIC AROUND THE END POSTS AND SECURE WITH 3 TIES.
7. COMPACT THE SOIL IMMEDIATELY NEXT TO THE SILT FENCE FABRIC WITH THE FRONT WHEEL OF THE TRACTOR, SKID STEER, OR ROLLER EXERTING AT LEAST 60 POUNDS PER SQ. INCH. COMPACT THE UPSTREAM SIDE FIRST. COMPACT EACH SIDE TWICE FOR A TOTAL OF FOUR TRIPS.
8. ADD POST CAPS AS NEEDED BASED ON SITE CONDITIONS AND APPLICABLE AGENCY REQUIREMENTS.

SEDIMENTATION/SILT FENCE WITH WIRE SUPPORT (SF)

N.T.S.



CWA

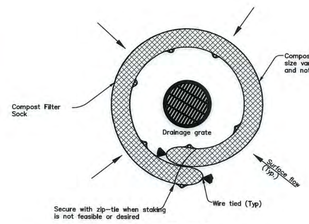
CONCRETE WASHOUT AREA PLAN

SECTION A

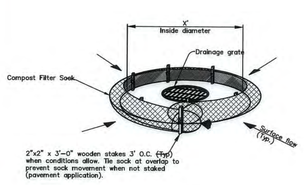
CWA–1. CONCRETE WASHOUT AREA

CWA INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   –CWA INSTALLATION LOCATION.
2. DO NOT LOCATE AN UNLINED CWA WITHIN 400' OF ANY NATURAL DRAINAGE PATHWAY OR WATERBODY. DO NOT LOCATE WITHIN 1,000' OF ANY WELLS OR DRINKING WATER SOURCES. IF SITE CONSTRAINTS MAKE THIS INFEASIBLE, OR IF HIGHLY PERMEABLE SOILS EXIST ON SITE, THE CWA MUST BE INSTALLED WITH AN IMPERMEABLE LINER (16 MIL MIN. THICKNESS) OR SURFACE STORAGE ALTERNATIVES USING PREFABRICATED CONCRETE WASHOUT DEVICES OR A LINED ABOVE GROUND STORAGE ARE SHOULD BE USED.
3. THE CWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.
4. CWA SHALL INCLUDE A FLAT SUBSURFACE PIT THAT IS AT LEAST 8' BY 8' SLOPES LEADING OUT OF THE SUBSURFACE PIT SHALL BE 3:1 OR FLATTER. THE PIT SHALL BE AT LEAST 3' DEEP.
5. BERM SURROUNDING SIDES AND BACK OF THE CWA SHALL HAVE MINIMUM HEIGHT OF 1'.
6. VEHICLE TRACKING PAD SHALL BE SLOPED 2% TOWARDS THE CWA.
7. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CWA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CWA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.
8. USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.



DROP INLET PLAN
N.T.S.



DROP INLET PERSPECTIVE VIEW
N.T.S.

CURB INLET PERSPECTIVE VIEW
N.T.S.

INLET SEDIMENT TRAP - COMPOSITE FILTER SOCK (IP–CFS)

N.T.S.

USAGE NOTES:

1. ANCHORING STAKES SHALL BE SIZED, SPACED, AND BE OF A MATERIAL THAT EFFECTIVELY SECURES THE FILTER SOCK. STAKE SPACING SHALL BE A MAXIMUM OF THREE FEET.
2. OVERLAP ENDS OF SOCK PER MANUFACTURERS RECOMMENDATIONS. (1" MIN. 3' MAX.)
3. USE 8" TO 12" DIA. SOCK ON CURBSIDE IN TRAFFIC AREAS.
4. USE 12" – 18" DIA. SOCK IN NON–TRAFFIC AREAS OR AREAS WHERE SAFETY IS NOT A CONCERN.

DESIGN CRITERIA:

COMPOST FILTER SOCKS ARE DESIGNED TO RETAIN SEDIMENT TRANSPORTED IN SHEET FLOW FROM DISTURBED AREAS. COMPOST FILTER SOCKS PERFORM THE SAME FUNCTION AS SILT FENCE, ALLOW A HIGHER FLOW RATE, AND ARE USUALLY FASTER AND CHEAPER TO INSTALL. WHERE ALL RUNOFF IS TO BE TREATED BY THE COMPOST FILTER SOCK THE MAXIMUM SLOPE LENGTH BEHIND THE COMPOST FILTER SOCK SHALL NOT EXCEED THOSE SHOWN IN TABLE 1. THE DRAINAGE AREA SHALL NOT EXCEED ¼ ACRE FOR EVERY 100 FT OF COMPOST FILTER SOCK.

THE SEDIMENT AND POLLUTANT REMOVAL PROCESS CHARACTERISTIC TO COMPOST FILTER SOCKS COMBINES BOTH FILTERING AND DEPOSITION FROM SETTLING SOLIDS. THIS IS DIFFERENT THAN METHODS THAT RELY ON PONDING FOR DEPOSITION OF SOLIDS FOR SEDIMENT CONTROL, SUCH AS SILT FENCE. PONDING OCCURS WHEN WATER FLOWING TO THE COMPOST FILTER SOCK ACCUMULATES FASTER THAN THE HYDRAULIC FLOW THROUGH RATE OF THE COMPOST FILTER SOCK. HYDRAULIC FLOW–THROUGH RATES FOR COMPOST FILTER SOCKS ARE 50% GREATER THAN SILT FENCE FILTER FABRIC. GREATER HYDRAULIC FLOW–THROUGH RATES REDUCE PONDING. COMPOST FILTER SOCK MESH NETTING SHALL MEET THE NETTING SPECIFICATION IN TABLE 2. COMPOST FILTER SOCKS SHALL MEET THE SPECIFICATIONS IN TABLE 3. COMPOST USED IN COMPOST FILTER SOCKS SHALL MEET THE SPECIFICATION DESCRIBED UNDER COMPOST FILTER MEDIA SPECIFICATIONS.

A 12 INCH DIAMETER COMPOST FILTER SOCK SHALL BE USED ON DEVELOPMENTS WHERE THE LIFE OF THE PROJECT IS GREATER THAN OR EQUAL TO SIX MONTHS. A 12 INCH DIAMETER COMPOST FILTER SOCK MAY ALSO BE USED ON MINOR PROJECTS, SUCH AS RESIDENTIAL HOME SITES OR SMALL COMMERCIAL DEVELOPMENTS.

TABLE 1

Land Slope	Maximum Slope Length Above Compost Filter Sock
Percent	Feet
<2	100
2 to 5	75
5 to 10	50
10 to 20	25
>20*	15

*In areas where the slope is greater than 20%, a flat area length of 10 ft between the toe of the slope to the compost filter sock should be provided.

TABLE 2

Material Type	Multi-Filament Polypropylene	Multi-Filament Polypropylene
Material Characteristic	Photodegradable	Photodegradable
Mesh Opening	3/8 in (10mm)	1/8 in (3mm)
Tensile Strength (ASTM 5035-95)	44 psi (3.09 kg/cm2)	202 psi (14.2 kg/cm2)*
% Original Strength from Ultraviolet Exposure (ASTM G-155)	100% at 1000 hr	100% at 1000 hr

TABLE 3

	12 in (300mm) Diameter
Effective Circumference	38 in (960mm)
Density (when filled)	32 lbs/ft (50 kg/m)
Air Space	20%
Hydraulic Flow Through Rate	11.3 gpm/ft (141 l/min/m)
P Factor (RUSLE)	0.1-0.32

COMPOST FILTER MEDIA SPECIFICATIONS

COMPOST USED FOR COMPOST FILTER SOCK FILLER MATERIAL (FILTER MEDIA) SHALL BE WEED FREE AND DERIVED FROM A WELL–DECOMPOSED SOURCE OF ORGANIC MATTER. THE COMPOST SHALL BE PRODUCED USING AN AEROBIC COMPOSTING PROCESS MEETING CFR 503 REGULATIONS INCLUDING TIME AND TEMPERATURE DATA. THE COMPOST SHALL BE FREE OF ANY REFUSE, CONTAMINANTS OR OTHER MATERIALS TOXIC TO PLANT GROWTH. NON–COMPOSTED PRODUCTS WILL NOT BE ACCEPTED. TEST METHODS FOR THE ITEMS BELOW SHOULD FOLLOW US COMPOSTING COUNCIL TEST METHODS FOR THE EXAMINATION OF COMPOSTING AND COMPOST GUIDELINES FOR LABORATORY PROCEDURES:

A. PH – 5.0–8.0 IN ACCORDANCE WITH TMECC 04.11–A, "ELECTROMETRIC PH DETERMINATIONS FOR COMPOST"

B. PARTICLE SIZE – 99% PASSING A 2 IN (50MM) SIEVE AND A MAXIMUM OF 40% PASSING A 3/8 IN (9.5MM) SIEVE, IN ACCORDANCE WITH TMECC 02.02–B, "SAMPLE SIEVING FOR AGGREGATE SIZE CLASSIFICATION". (NOTE– IN THE FIELD, PRODUCT COMMONLY IS BETWEEN ½ IN [12.5MM] AND 2 IN [50MM] PARTICLE SIZE.)

C. MOISTURE CONTENT OF LESS THAN 60% IN ACCORDANCE WITH STANDARDIZED TEST METHODS FOR MOISTURE DETERMINATION.

D. MATERIAL SHALL BE RELATIVELY FREE (<1% BY DRY WEIGHT) OF INERT OR FOREIGN MAN MADE MATERIALS.

E. A SAMPLE SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO BEING USED AND MUST COMPLY WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.

CONSTRUCTION SPECIFICATIONS

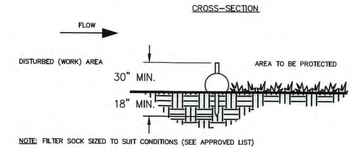
THE COMPOST FILTER SOCK SHALL BE INSTALLED ACCORDING TO THIS SPECIFICATION, AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

1. COMPOST FILTER SOCKS SHOULD BE INSTALLED PARALLEL TO THE BASE OF THE SLOPE OR OTHER DISTURBED AREA. IN EXTREME CONDITIONS (I.E., 2:1 SLOPES), A SECOND COMPOST FILTER SOCK SHALL BE CONSTRUCTED AT THE TOP OF THE SLOPE.
2. STAKES SHALL BE INSTALLED THROUGH THE MIDDLE OF THE COMPOST FILTER SOCK ON 10 FT (3M) CENTERS, USING 2 IN (50MM) BY 2 IN (50MM) BY 3 FT (1M) WOODEN STAKES. IN THE EVENT STAKING IS NOT POSSIBLE, I.E., WHEN COMPOST FILTER SOCKS ARE USED ON PAVEMENT, HEAVY CONCRETE BLOCKS SHALL BE USED BEHIND THE COMPOST FILTER SOCKS TO HELP STABILIZE DURING RAINFALL/RUNOFF EVENTS.
3. STAKING DEPTH FOR SAND AND SILT LOAM SOILS SHALL BE 12 IN (300MM), AND 8 IN (200MM) FOR CLAY SOILS.
4. LOOSE COMPOST MAY BE BACKFILLED ALONG THE UPSLOPE SIDE OF THE COMPOST FILTER SOCK, FILLING THE SEAM BETWEEN THE SOIL SURFACE AND THE DEVICE, IMPROVING FILTRATION AND SEDIMENT RETENTION.
5. IF THE COMPOST FILTER SOCK IS TO BE LEFT AS A PERMANENT FILTER OR PART OF THE NATURAL LANDSCAPE, IT MAY BE SEEDED AT TIME OF INSTALLATION FOR ESTABLISHMENT OF PERMANENT VEGETATION. THE ENGINEER WILL SPECIFY SEED REQUIREMENTS.
6. COMPOST FILTER SOCKS ARE NOT TO BE USED IN PERENNIAL, EPHEMERAL OR INTERMITTENT STREAMS.

MAINTENANCE

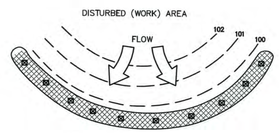
SEDIMENT SHALL BE REMOVED ONCE IT HAS ACCUMULATED TO ONE–HALF THE ORIGINAL HEIGHT OF THE BARRIER. COMPOST FILTER SOCKS SHALL BE REPLACED WHENEVER IT HAS DETERIORATED TO SUCH AN EXTENT THAT THE EFFECTIVENESS OF COMPOST FILTER SOCK IS REDUCED. COMPOST FILTER SOCKS SHALL REMAIN IN PLACE UNTIL DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED. ALL SEDIMENT ACCUMULATION AT THE COMPOST FILTER SOCK SHALL BE REMOVED AND PROPERLY DISPOSED OF BEFORE THE COMPOST FILTER SOCK IS REMOVED.

CROSS–SECTION



NOTE: FILTER SOCK SIZED TO SUIT CONDITIONS (SEE APPROVED LIST)

PLAN



SEDIMENT BARRIER COMPOST FILTER SOCK (CFS)

N.T.S.

MURPHY EXPRESS AT FIRESTONE CITY CENTRE	
EROSION CONTROL DETAILS	
NAME OF APPLICATION:	MURPHY OIL USA
TYPE OF SUBMITTAL:	FINAL DEVELOPMENT PLAN
FILING NUMBER:	
PHASE NUMBER:	
PREPARATION DATE:	10-20-2016
REVISION DATE:	12-20-2016
REVISION DATE:	02-07-2017
REVISION DATE:	03-15-2017
REVISION DATE:	04-04-2017
REVISION DATE:	
	SHEET 8 OF 25

SHEET NO. FDP-8

COLORADO LICENSED JOHN NICHOLAS ALLEN 41391 PROFESSIONAL ENGINEER
04/05/17

REV–6	04–04–17	JN	GD	TA	TA
	DATE	PRN	PM	DES	DRW

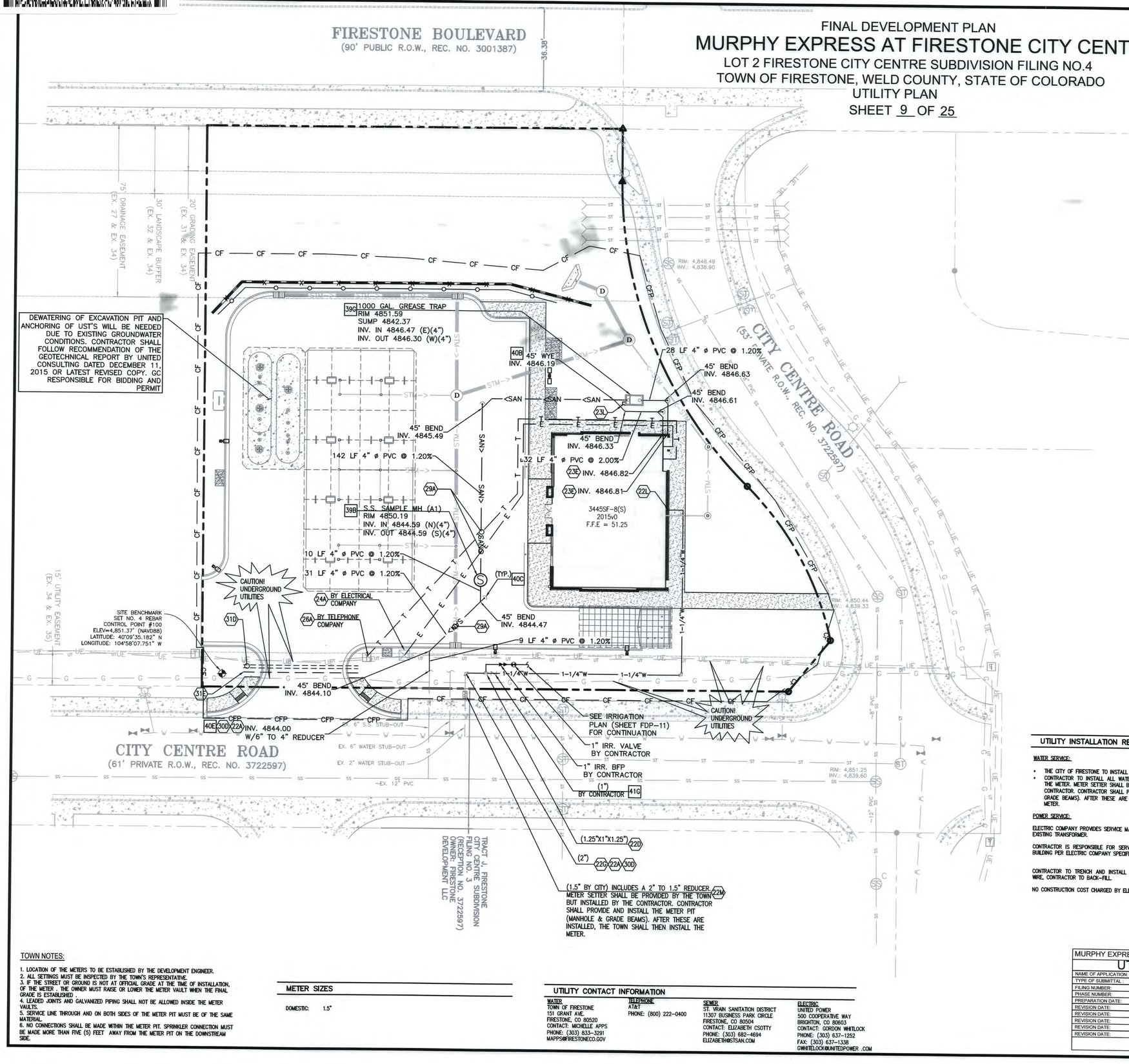
E&S CONTROL DETAILS
MURPHY EXPRESS
4615 CITY CENTRE ROAD
FIRESTONE COLORADO

GreenbergFarrow
1430 W. PEACHTREE ST. NW SUITE 200
ATLANTA, GA 30309
PHONE (404) 601 4000
FAX (404) 601 4070
DWG NAME: FIRESTONE.CO
JOB NO.: 20160074

MURPHY OIL USA, INC.
200 PEACH STREET
EL DORADO, AR 71730

4301923 Pages: 9 of 25
05/15/2017 09:05 AM R Fee:$253.00
Carly Koppes, Clerk and Recorder, Weld County, CO

FINAL DEVELOPMENT PLAN
MURPHY EXPRESS AT FIRESTONE CITY CENTRE
LOT 2 FIRESTONE CITY CENTRE SUBDIVISION FILING NO.4
TOWN OF FIRESTONE, WELD COUNTY, STATE OF COLORADO
UTILITY PLAN
SHEET 9 OF 25



20 0 10 20
(IN FEET)
1 inch = 20 ft

EXISTING

- FOUND SECTION CORNER AS NOTED
- FOUND PROPERTY CORNER AS NOTED
- SET NO. 5 REBAR WITH A 1 1/4" ALUMINUM CAP, PLS 38390
- SET PK NAIL WITH A 1 1/2" WASHER, PLS 38390
- SITE BENCHMARK
- SANITARY SEWER MANHOLE
- WATER VALVE
- FIRE HYDRANT
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- UNDERGROUND TELEPHONE LINE
- UNDERGROUND SANITARY SEWER
- (M) MEASURED
- (R) RECORD
- (C) CALCULATED

PROPOSED LEGEND

- BOUNDARY LINE
- SAN> SANITARY SEWER SERVICE
- E UNDERGROUND ELECTRIC SERVICE
- T UNDERGROUND TELEPHONE SERVICE
- 1-1/4"W WATER SERVICE
- CF CONSTRUCTION FENCE (SEE CIVIL DETAILS)

GENERAL UTILITY NOTES

A. ALL BUILDING WATER LINES FROM METER TOWARDS BUILDING SHALL BE SCHEDULE 40 PVC, MEETING ASTM D1785 & D2665 SPECIFICATIONS, AND SHALL BE RATED FOR USE WITH POTABLE WATER PER NSF STD. 61 & STD.14 , WITH 36" MIN. COVER.

B. ALL SANITARY SEWER LINES SHALL BE SCHEDULE 40 PVC UNLESS OTHERWISE SPECIFIED BY THE UTILITY COMPANY, PROVIDE 36" MINIMUM COVER.

C. CONTRACTOR SHALL COORDINATE ANY DISRUPTIONS TO EXISTING UTILITY SERVICES WITH ADJACENT PROPERTY OWNERS.

D. ALL ELECTRIC AND TELEPHONE EXTENSIONS INCLUDING SERVICE LINES SHALL BE CONSTRUCTED TO THE APPROPRIATE UTILITY COMPANY SPECIFICATIONS. ALL UTILITY DISCONNECTIONS SHALL BE COORDINATED WITH THE DESIGNATED UTILITY COMPANIES.

E. CONSTRUCTION SHALL NOT START ON ANY PUBLIC UTILITY SYSTEM UNTIL WRITTEN APPROVAL HAS BEEN RECEIVED BY THE ENGINEER FROM THE APPROPRIATE GOVERNING AUTHORITY AND CONTRACTOR HAS BEEN NOTIFIED BY THE ENGINEER.

F. PRIOR TO THE CONSTRUCTION OF OR CONNECTION TO ANY STORM DRAIN, SANITARY SEWER, WATER MAIN OR ANY OTHER UTILITIES, THE CONTRACTOR SHALL EXCAVATE, VERIFY AND CALCULATE ALL POINTS OF CONNECTION AND ALL UTILITY CROSSINGS AND INFORM GREENBERGFARROW ENGINEERS AND THE OWNER/DEVELOPER OF ANY CONFLICT OR REQUIRED DEVIATIONS FROM THE PLAN. NOTIFICATION SHALL BE MADE A MINIMUM OF (72) HOURS PRIOR TO CONSTRUCTION. GREENBERGFARROW AND ITS CLIENTS SHALL BE HELD HARMLESS IN THE EVENT THAT THE CONTRACTOR FAILS TO MAKE SUCH NOTIFICATION.

G. CONTRACTOR SHALL COMPLY COMPLETELY WITH THE LATEST STANDARDS OF OSHA DIRECTIVES OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR SHALL USE SUPPORT SYSTEMS, SLOPING, BENCHING AND OTHER MEANS OF PROTECTION. THIS IS TO INCLUDE, BUT NOT LIMITED FOR ACCESS AND EGRESS FROM ALL EXCAVATION AND TRENCHING. CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH PERFORMANCE CRITERIA AS REQUIRED BY OSHA.

UTILITY NOTES

- 22A POINT OF CONNECTION – WATER SERVICE.
- 22D TEE CONNECTION (SEE SIZES THIS SHEET)
- 22G 90° BEND (SEE SIZES THIS SHEET)
- 22L METERED DOMESTIC WATER SERVICE ENTRY PER BLDG PLUMBING PLAN (SEE SIZES THIS SHEET)
- 22M PROPOSED WATER METER (SEE SIZE THIS SHEET)
- 23E SANITARY SEWER SERVICE ENTRY (PER BUILDING MECHANICAL PLANS)
- 23L CONNECT GREASE TRAP VENT TO BUILDING VENT SYSTEM. GREASE TRAP VENT INVERT MUST BE HIGHER THAN INLET INVERT.
- 24A POINT OF CONNECTION FOR UNDERGROUND ELECTRIC SERVICE.
- 26A POINT OF CONNECTION FOR UNDERGROUND TELEPHONE.
- 29A MAINTAIN MIN. 18" VERTICAL SEPARATION.
- 30D VERIFY LOCATION AND DEPTH OF EXISTING UTILITY BEFORE CONSTRUCTING PROPOSED UTILITY
- 31D INSTALL (2) 4" PVC SLEEVES 30" BELOW FINAL GRADE UNDER DRIVEWAY. EXTEND SLEEVES 2 FEET BEYOND BACK OF PROPOSED CURB OR EDGE OF PAVEMENT. STAKE BOTH ENDS OF EACH SLEEVE WITH CAPPED VERTICAL PVC PIPE, 12" ABOVE GRADE. DO NOT ALLOW SOIL OR WATER TO ENTER SLEEVES DURING OR AFTER CONSTRUCTION.
- 31E INSTALL (1) 4" PVC SLEEVE 30" BELOW FINAL GRADE UNDER DRIVEWAY FOR IRRIGATION LINE. EXTEND SLEEVE 2 FEET BEYOND BACK OF PROPOSED CURB OR EDGE OF PAVEMENT. STAKE BOTH ENDS OF SLEEVE WITH CAPPED VERTICAL PVC PIPE, 12" ABOVE GRADE. DO NOT ALLOW SOIL OR WATER TO ENTER SLEEVE DURING OR AFTER CONSTRUCTION.

UTILITY DETAILS – SEE DETAIL SHEETS

- 39B SANITARY MONITORING MANHOLE
- 39G SANITARY SEWER GREASE TRAP
- 40B SANITARY SEWER WYE CONNECTION
- 40C SANITARY SEWER CLEAN-OUT
- 40E SANITARY SEWER SERVICE CONNECTION TO EXISTING STUB OUT.
- 41G REDUCED PRESSURE ZONE BACKFLOW PREVENTER. CONTRACTOR TO VERIFY TYPE (ABOVE/UNDERGROUND) PRIOR TO COMMENCING CONSTRUCTION.

UTILITY INSTALLATION RESPONSIBILITIES

WATER SERVICE:

- THE CITY OF FIRESTONE TO INSTALL DOMESTIC/IRRIGATION METERS.
- CONTRACTOR TO INSTALL ALL WATER LINE APPURTENANCES INCLUDING RPZ's UP TO THE METER. METER SETTER SHALL BE PROVIDED BY THE TOWN BUT INSTALLED BY THE CONTRACTOR. CONTRACTOR SHALL PROVIDE AND INSTALL THE METER PIT (MANHOLE & GRADE BEAMS). AFTER THESE ARE INSTALLED, THE TOWN SHALL THEN INSTALL THE METER.

POWER SERVICE:

ELECTRIC COMPANY PROVIDES SERVICE MATERIALS AND INSTALLS SERVICE LINES UP TO THE EXISTING TRANSFORMER.

CONTRACTOR IS RESPONSIBLE FOR SERVICE CONSTRUCTION FROM TRANSFORMER PAD TO BUILDING PER ELECTRIC COMPANY SPECIFICATIONS.

CONTRACTOR TO TRENCH AND INSTALL CONDUIT, ELECTRIC COMPANY TO PULL PRIMARY WIRE, CONTRACTOR TO BACK-FILL.

NO CONSTRUCTION COST CHARGED BY ELECTRIC COMPANY.

TOWN NOTES:

1. LOCATION OF THE METERS TO BE ESTABLISHED BY THE DEVELOPMENT ENGINEER.
2. ALL SETTINGS MUST BE INSPECTED BY THE TOWN'S REPRESENTATIVE.
3. IF THE STREET OR GROUND IS NOT AT OFFICIAL GRADE AT THE TIME OF INSTALLATION, OF THE METER , THE OWNER MUST RAISE OR LOWER THE METER VAULT WHEN THE FINAL GRADE IS ESTABLISHED
4. LEADED JOINTS AND GALVANIZED PIPING SHALL NOT BE ALLOWED INSIDE THE METER VAULTS.
5. SERVICE LINE THROUGH AND ON BOTH SIDES OF THE METER PIT MUST BE OF THE SAME MATERIAL.
6. NO CONNECTIONS SHALL BE MADE WITHIN THE METER PIT. SPRINKLER CONNECTION MUST BE MADE MORE THAN FIVE (5) FEET AWAY FROM THE METER PIT ON THE DOWNSTREAM SIDE.

METER SIZES

DOMESTIC:	1.5"

UTILITY CONTACT INFORMATION

WATER
TOWN OF FIRESTONE
151 GRANT AVE.
FIRESTONE, CO 80520
CONTACT: MICHELLE APPS
PHONE: (303) 833-3291
MAPPS@FIRESTONECO.GOV

TELEPHONE
AT&T
PHONE: (800) 222-0400

SEWER
ST. VRAIN SANITATION DISTRICT
11307 BUSINESS PARK CIRCLE
FIRESTONE, CO 80504
CONTACT: ELIZABETH CSOTTY
PHONE: (303) 682-4694
ELIZABETH@STSAN.COM

ELECTRIC
UNITED POWER
500 COOPERATIVE WAY
BRIGHTON, CO 80603
CONTACT: GORDON WHITLOCK
PHONE: (303) 637-1252
FAX: (303) 637-1338
GWHITLOCK@UNITEDPOWER.COM

MURPHY EXPRESS AT FIRESTONE CITY CENTRE	
UTILITY PLAN	
NAME OF APPLICATION:	MURPHY OIL USA
TYPE OF SUBMITTAL :	FINAL DEVELOPMENT PLAN
FILING NUMBER:	
PHASE NUMBER:	
PREPARATION DATE:	10-20-2016
REVISION DATE:	12-20-2016
REVISION DATE:	02-07-2017
REVISION DATE:	03-15-2017
REVISION DATE:	04-04-2017
REVISION DATE:	
SHEET 9 OF 25	

SHEET NO. FDP-9

COLORADO LICENSED
JOHN H. NOONAN
41391
PROFESSIONAL ENGINEER
04/05/17

REV-6	04-04-17	JN	GD	TA	TA
	DATE	PRN	PM	DES	DRW

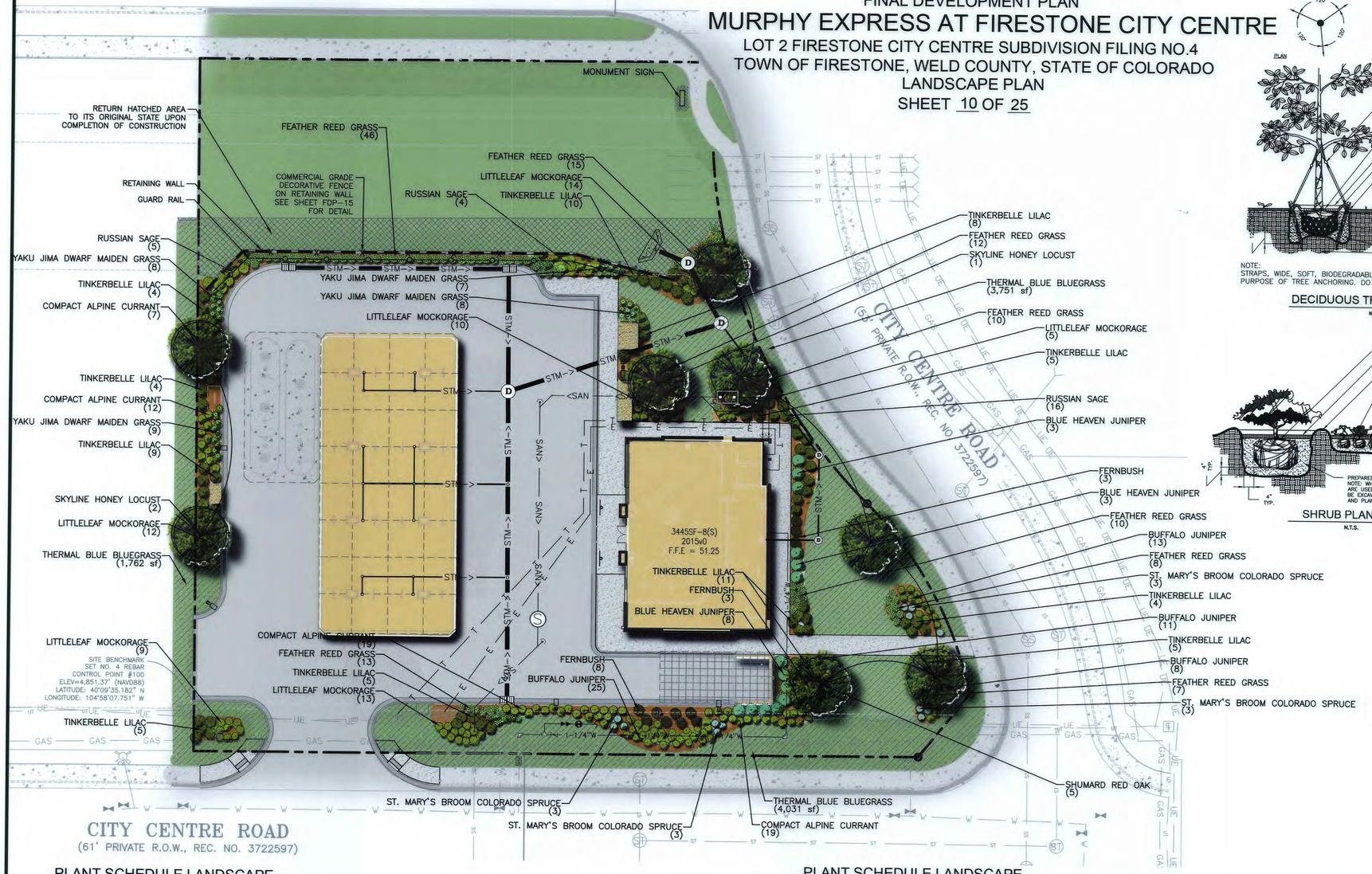
UTILITY PLAN
MURPHY EXPRESS
4615 CITY CENTRE ROAD
FIRESTONE COLORADO

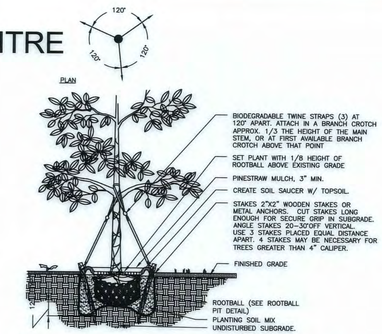
GreenbergFarrow
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PHONE: (404) 601-8000
FAX: (404) 601-3970
DWG NAME: 20160074.DWG
JOB NO.: 20160074

MURPHY OIL USA, INC.
MURPHY USA
200 PEACH STREET
EL DORADO, AR 71730

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05/15/2017 09:05 AM R Fee:$253.00
Carly Koppes, Clerk and Recorder, Weld County, CO

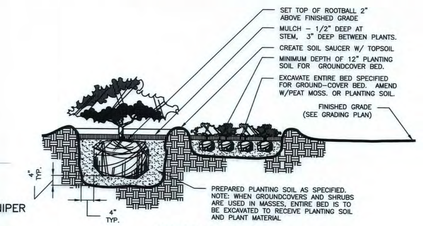
FINAL DEVELOPMENT PLAN
MURPHY EXPRESS AT FIRESTONE CITY CENTRE
LOT 2 FIRESTONE CITY CENTRE SUBDIVISION FILING NO.4
TOWN OF FIRESTONE, WELD COUNTY, STATE OF COLORADO
LANDSCAPE PLAN
SHEET 10 OF 25





NOTE:
STRAPS, WIDE, SOFT, BIODEGRADABLE MATERIAL MANUFACTURED FOR THE PURPOSE OF TREE ANCHORING. DO NOT USE HOSE AND WIRE.

DECIDUOUS TREE PLANTING 50A
N.T.S.



SHRUB PLANTING 50B
N.T.S.



EXISTING

- FOUND SECTION CORNER AS NOTED
- FOUND PROPERTY CORNER AS NOTED
- SET NO. 5 REBAR WITH A 1 1/4" ALUMINUM CAP, PLS 38390
- SET PK NAIL WITH A 1 1/2" WASHER, PLS 38390
- SITE BENCHMARK
- SANITARY SEWER MANHOLE
- WATER VALVE
- FIRE HYDRANT
- ELECTRIC TRANSFORMER
- LIGHT POLE
- TELEPHONE BOX
- TELEPHONE PEDESTAL
- UNDERGROUND GAS SIGN
- STORM MANHOLE
- CULVERT
- CULVERT
- SIGN
- CONCRETE SURFACE
- ASPHALT SURFACE
- CURB AND GUTTER
- UNDERGROUND ELECTRIC LINE
- UNDERGROUND WATER LINE
- UNDERGROUND GAS LINE
- UNDERGROUND TELEPHONE LINE
- UNDERGROUND SANITARY SEWER
- (M) MEASURED
- (R) RECORD
- (C) CALCULATED

PROPOSED

- BOUNDARY LINE
- TYPICAL PLANTING WITH QUANTITY AND KEY (SEE PLANT LIST)
- CONSTRUCTION FENCE (SEE CIVIL DETAILS)

GENERAL LANDSCAPE NOTES

A. LOCATE ALL UTILITIES AND SITE LIGHTING CONDUITS BEFORE LANDSCAPE CONSTRUCTION BEGINS.

B. NOTIFY LANDSCAPE ARCHITECT OR DESIGNATED REPRESENTATIVE OF ANY LAYOUT DISCREPANCIES PRIOR TO ANY PLANTING.

C. ALL LANDSCAPE MATERIALS SHALL BE IN COMPLIANCE WITH THE AMERICAN STANDARD FOR NURSERY STOCK. (ANSI–Z60.1–1986)

D. ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED SMOOTH AND FOUR INCHES OF TOPSOIL APPLIED. IF ADEQUATE TOPSOIL IS NOT AVAILABLE ON SITE, THE CONTRACTOR SHALL PROVIDE TOPSOIL, APPROVED BY THE OWNER, AS NEEDED. THE AREA SHALL THEN BE SEEDED/SODDED, FERTILIZED, MULCHED, WATERED AND MAINTAINED UNTIL HARDY GRASS GROWTH IS ESTABLISHED IN ALL AREAS. ANY RELOCATED TREES SHALL BE MAINTAINED UNTIL SUCH POINT AS TREE IS RE–ESTABLISHED. ANY AREAS DISTURBED SHALL ANY REASON PRIOR TO FINAL ACCEPTANCE OF THE PROJECT SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

E. THE MURPHY STATION WILL NOT DROP MASTER DEVELOPMENT'S GREEN SPACE BELOW CITY'S REQUIREMENTS.

F. CONTRACTOR IS TO VERIFY LOCATION OF MASTER DEVELOPMENT IRRIGATION SYSTEM, VALVE BOXES, CONTROL BOXES, BACKFLOW PREVENTION DEVICES AND OTHER ITEMS WHICH ARE PART OF THE SYSTEM. IF DAMAGED THEY MUST BE REPAIRED AT CONTRACTOR'S COST.

G. CONTRACTOR IS TO PROTECT EXISTING LANDSCAPING/IRRIGATION MATERIALS.

H. ACCEPTANCE OF GRADING AND SEEDING SHALL BE BY LANDSCAPE ARCHITECT AND/OR OWNER. THE CONTRACTOR SHALL ASSUME MAINTENANCE RESPONSIBILITIES FOR A MINIMUM OF ONE (1) YEAR OR UNTIL SECOND CUTTING, WHICHEVER IS LONGER. MAINTENANCE SHALL INCLUDE WATERING, WEEDING, RESEEDING, AND OTHER OPERATIONS NECESSARY TO KEEP ALL LAWN AREAS IN A THRIVING CONDITIONS. UPON FINAL ACCEPTANCE, OWNER SHALL ASSUME ALL MAINTENANCE RESPONSIBILITIES. AFTER LAWN AREA HAVE GERMINATED, AREAS WHICH FAIL TO SHOW A UNIFORM STAND OF GRASS FOR ANY REASON WHATSOEVER SHALL BE RE–SEEDED REPEATEDLY UNTIL ALL AREAS ARE COVERED WITH A SATISFACTORY STAND OF GRASS. MINIMUM ACCEPTANCE OF SEEDED LAWN AREAS MAY INCLUDE SCATTERED BARE SPOTS, NONE OF WHICH ARE LARGER THAN 1 SQUARE FOOT, AND WHEN COMBINED DO NOT EXCEED 2% OF TOTAL SEEDED LAWN AREA.

J. THE LANDSCAPE CONTRACTOR SHALL VERIFY ALL QUANTITIES SHOWN ON THESE PLANS, BEFORE PRICING THE WORK.

K. QUANTITIES ON THE PLANT SCHEDULE ARE PROVIDED FOR CONVENIENCE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HIS/HER OWN QUANTITY CALCULATIONS. IN THE EVENT OF A DISCREPANCY BETWEEN THE LANDSCAPE PLANS AND THE PLANT SCHEDULE, THE LANDSCAPE PLAN WILL TAKE PRECEDENCE. THE CONTRACTOR SHALL INFORM THE LANDSCAPE ARCHITECT IMMEDIATELY UPON DISCOVERING ANY QUANTITY DISCREPANCIES.

PLANT SCHEDULE LANDSCAPE

TREES	QTY	BOTANICAL NAME / COMMON NAME	CONT	CAL	SIZE	REMARKS
	3	Gleditsia triacanthos 'Skyline' / Skyline Honey Locust	B & B	2"Cal	10'–12' HT	Matching, Straight Trunk
	5	Quercus shumardii / Shumard Red Oak	B & B	2"Cal	10'–12' HT	Well Branched, Dense, Straight trunk

PLANT SCHEDULE LANDSCAPE

SHRUBS	QTY	BOTANICAL NAME / COMMON NAME	SIZE	HEIGHT	REMARKS
	121	Calamagrostis x acutiflora 'Karl Foerster' / Feather Reed Grass	5 gal		Full Well Rooted
	14	Chamaebatiaria millefolium 'Fernbush' / Fernbush	5 gal		
	57	Juniperus sabina 'Buffalo' / Buffalo Juniper	5 gal		
	14	Juniperus scopulorum 'Blue Heaven' / Blue Heaven Juniper	B & B	6' HT	Full to Ground, Well Rooted
	32	Miscanthus sinensis 'Yaku Jima' / Yaku Jima Dwarf Maiden Grass	5 gal		
	25	Perovskia atriplicifolia 'Blue Spires' / Russian Sage	5 gal		
	63	Philadelphus microphyllus 'Littleleaf' / Littleleaf Mockorage	5 gal		
	12	Picea pungens 'St. Mary's Broom' / St. Mary's Broom Colorado Spruce	5 gal		
	57	Ribes alpinum 'Compacta' / Compact Alpine Currant	5 gal		
	70	Syringa patula 'Tinkerbelle' / Tinkerbelle Lilac	5 gal		

GROUND COVERS	QTY	BOTANICAL NAME / COMMON NAME	CONT	PTS. EA.	REMARKS
	9,544 sf	Poa pratensis 'Thermal Blue' / Thermal Blue Bluegrass	sod		Certified Weed Free

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LANDSCAPE PLAN	
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SHEET 10 OF 25	

SHEET NO. FDP-10

COLORADO LICENSED LANDSCAPE ARCHITECT JOHN W. NORRIS 41391 — 04/05/17

REV–6	04–04–17	JN	GD	TA	TA
	DATE	PRN	PM	DES	DRW

LANDSCAPE PLAN
MURPHY EXPRESS
4615 CITY CENTRE ROAD
FIRESTONE COLORADO

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1430 W. PEACHTREE ST. NW, SUITE 200
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PHONE: (404) 601 4000
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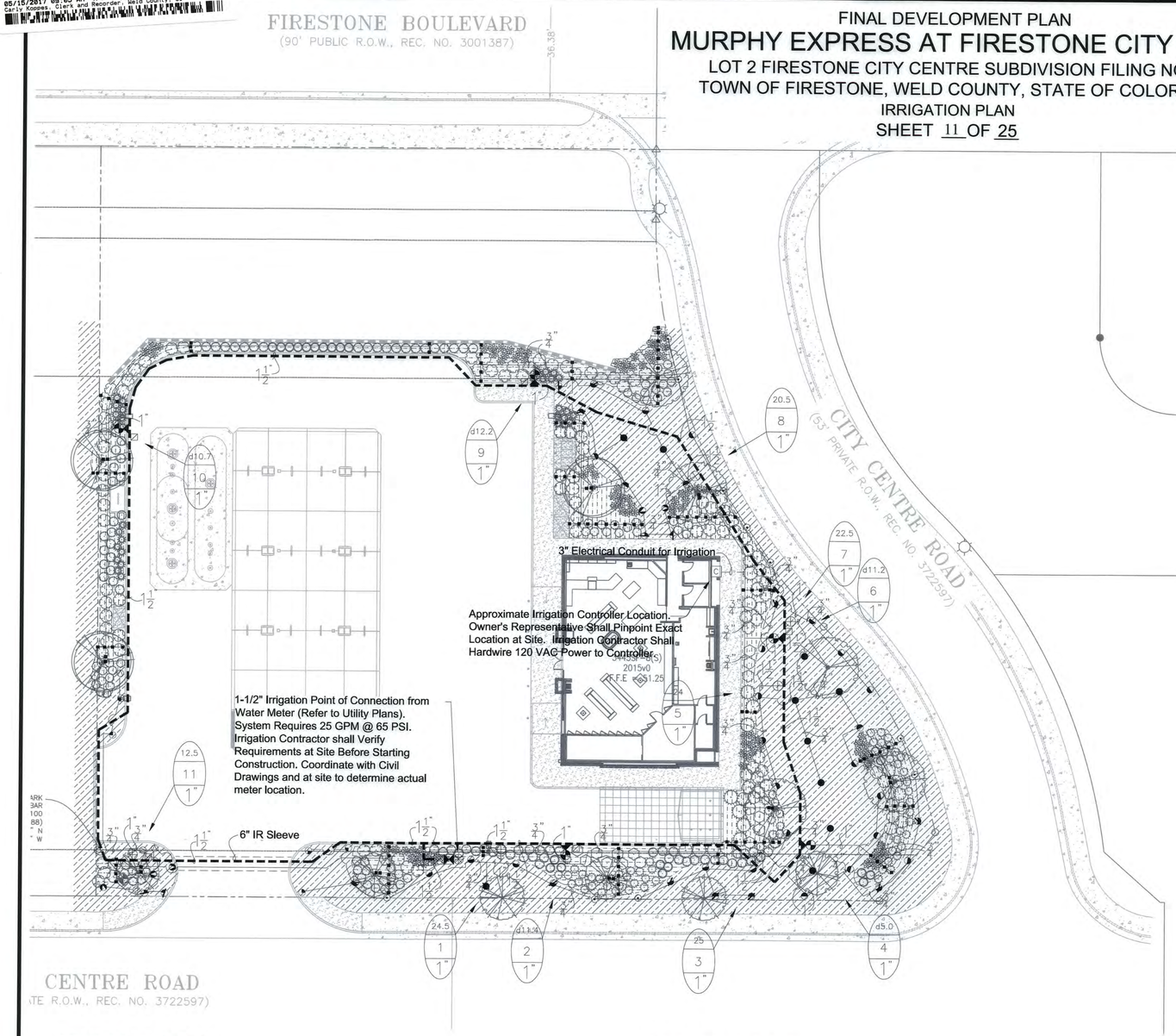
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200 PEACH STREET
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05/15/2017 09:05 AM R Fee:$253.00
Carly Koppes, Clerk and Recorder, Weld County, CO

FINAL DEVELOPMENT PLAN

MURPHY EXPRESS AT FIRESTONE CITY CENTRE

LOT 2 FIRESTONE CITY CENTRE SUBDIVISION FILING NO.4
TOWN OF FIRESTONE, WELD COUNTY, STATE OF COLORADO
IRRIGATION PLAN
SHEET 11 OF 25



IRRIGATION LEGEND

- 1-1/2" IRRIGATION POINT OF CONNECTION FROM WATER METER (REFER TO UTILITY PLANS), SYSTEM REQUIRES 25 GPM @ 65 PSI. IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THE SYSTEM REQUIREMENTS AT SITE BEFORE STARTING CONSTRUCTION.
- MANUAL DRAIN VALVE. SCH 80 PVC TRUE UNION BALL VALVE. DETAIL-E.
- WATTS #909-M1-QT-1-1/2", 1-1/2" REDUCED PRESSURE ASSEMBLY BACKFLOW PREVENTER. DETAIL-F.
- WINTERIZATION ASSEMBLY. DETAIL-D.
- RAIN BIRD ESP-16-LXME CONTROLLER: 16 STATION, MODULAR CONTROLLER, FOUR PROGRAMS, WALL MOUNTED. DETAIL-J IRRIGATION CONTRACTOR SHALL ALSO INSTALL A WIRELESS MINII CLIK II RAIN SENSOR AND A FREEZE-CLIK DEVICE.
- RAIN BIRD 100-PEB PLASTIC ELECTRIC REMOTE CONTROL VALVE, 1" SIZE, MOUNTED WITH SCH 80 PVC TRUE UNION BALL VALVE, DETAIL-A.
- RAIN BIRD 1806-SAM, 6" POP-UP LAWN SPRAY SPRINKLER, 12' RADIUS, FULL-2.0 GPM, HALF-1.0 GPM, QUARTER-0.5 GPM, 30 PSI. DETAIL-C.
- RAIN BIRD 1806-SAM, 6" POP-UP LAWN SPRAY SPRINKLER, 15' RADIUS, FULL-4.0 GPM, HALF-2.0 GPM, QUARTER-1.0 GPM, 30 PSI. DETAIL-C.
- RAIN BIRD 1806-SAM, 6" LAWN POP-UP SIDE STRIP SPRAY SPRINKLER, 9' X 18' RADIUS, 1.5 GPM, 30 PSI. DETAIL-C.
- RAIN BIRD 1806-SAM, 6" LAWN SIDE STRIP SPRAY SPRINKLER, 4' X 30' RADIUS, 1.5 GPM, 30 PSI. DETAIL-C.
- RAIN BIRD 1806-SAM, 6" LAWN END STRIP SPRAY SPRINKLER, 4' X 15' RADIUS, 1.0 GPM, 30 PSI. DETAIL-C.
- RAIN BIRD #5 QUICK COUPLING VALVE 1" SIZE. CONTRACTOR TO SUPPLY TWO QCV KEYS AND MATCHING HOSE SWIVELS. DETAIL-B.
- SCH 80 PVC TRUE UNION BALL VALVE, SIZED SAME AS MAINLINE, MOUNTED IN CARSON VALVE BOX, DETAIL-R.
- RAIN BIRD DRIP ZONE ASSEMBLY KIT, MODEL #XCZ-100-PRB-COM . 1" SIZE DETAIL-L.
- POINT OF CONNECTION - DRIP LINE TUBING TO PVC PIPE, DETAIL-M,N.
- DRIP TUBING: RAIN BIRD XFS DRIPLINE DRIP TUBING, .6 GPH, 12" CENTERS, STAKED EVERY TURN OR EVERY 4', INSTALL NETAFIM AIR RELIEF VALVE KIT IN 10" CIRCULAR VALVE BOX AT HIGH POINT OF EACH ZONE AND INSTALL NETAFIM DRIP DRAIN VALVE(S) IN 10" CIRCULAR VALVE BOX AT LOW POINT(S) OF EACH ZONE. DETAIL-M,N,O,P,Q.

  NOTE:
  CONTRACTOR SHALL INSTALL RAIN BIRD DRIP OPERATION INDICATOR KIT AT ENDS OF EACH DRIP ZONE AREA.
- MAINLINE PIPE: 1-1/2" SIZE IF NOT NOTED. CLASS 200 PVC SOLVENT WELD PIPE UTILIZING SCH 40 PVC SOLVENT WELD FITTINGS.
- IRRIGATION SLEEVE: CLASS 200 PVC, SIZE NOTED ON PLAN. DETAIL-H.
- LATERAL LINE PIPE: CLASS 200 PVC SOLVENT WELD PIPE UTILIZING SCH 40 PVC SOLVENT WELD FITTINGS, SIZE NOTED.
- 3" ELECTRICAL CONDUIT SLEEVE.

NOTES:

1. ALL SPRINKLERS WILL BE MOUNTED ON (3) MARLEX STREET ELLS WITH A SCHED. 80 NIPPLE SIZE OF SPRINKLER INLET.
2. CONTRACTOR TO UTILIZE A AUTOMATIC DRAIN CHECK VALVE DEVICE WHERE LOW HEAD DRAINAGE MAY OCCUR.
3. ALL WIRE WILL BE COLOR CODED DIRECT BURIAL UL/UF WIRE: COMMON (WHITE) #12-1, CONTROL (RED) #14-1.
4. ALL PIPING AND WIRING UNDER HARDTOPS WILL BE IN CLASS 200 PVC PIPE SLEEVE.

N

20 0 10 20
(IN FEET)
1 inch = 20 ft

TYPICAL VALVE INDICATOR

28.5 — GALLONS PER MIN.
10 — STATION NUMBER
1 1/2" — VALVE SIZE

GENERAL NOTES

1. ALL MAINLINES TO HAVE A MINIMUM OF 18" OF COVER. (CLASS 200 PVC PIPE).
2. ALL LATERAL AND SUB-MAIN PIPE TO HAVE A MINIMUM OF 12" OF COVER. (CLASS 200 PVC PIPE).
3. NO ROCKS, BOULDER, OR OTHER EXTRANEOUS MATERIALS TO BE USED IN BACKFILLING OF TRENCH.
4. ALL PIPE TO BE INSTALLED AS PER MANUFACTURERS' SPECIFICATIONS.
5. ALL THREADED JOINTS TO BE COATED WITH TEFLON TAPE OR LIQUID TEFLON.
6. ALL LINES TO BE THOROUGHLY FLUSHED BEFORE INSTALLATION OF SPRINKLER HEADS.
7. SPRINKLER AND RELATED EQUIPMENT TO BE INSTALLED AS PER DETAILS.
8. ALL ELECTRICAL JOINTS TO BE MADE USING WATERPROOF CONNECTIONS AS SHOWN ON DETAILS.
9. ALL EQUIPMENT NOT SPECIFIED IN THE LEGEND SHALL BE DETERMINED AND FURNISHED BY THE CONTRACTOR.
10. NO ELECTRICAL CONNECTIONS SHALL BE MADE IN THE FIELD EXCEPT AT A VALVE CONTROL BOX OR ANOTHER VALVE BOX SPECIFICALLY FOR CONNECTIONS.
11. ANY DISCREPANCY BETWEEN THIS SHEET AND OTHERS IN THIS SET MUST BE REFERRED TO THE IRRIGATION CONSULTANT BY THE CONTRACTOR FOR CLARIFICATION BEFORE PRECEEDING WITH THE WORK.
12. ALL 24 VOLT WIRE SHALL BE #12 UF/UL FOR COMMON WIRE, AND #14 UF/UL FOR CONTROL WIRES, DIRECT BURIAL, SOLID COPPER.
13. CONTRACTOR TO BE RESPONSIBLE FOR PROPER COVERAGE OF AREAS TO BE WATERED. I.E. ADJUST HEADS WITH INSUFFICIENT COVERAGE DUE TO BLOCKAGE BY EXISTING OR PROPOSED SITE FEATURES.
14. CONTRACTOR TO REFER TO LANDSCAPE PLAN TO KEEP SPRINKLER EQUIPMENT AND ACCESSORY MATERIAL FROM INTERFERING WITH PROPER PLANTING, i.e. VERIFY ROOT BALL SIZE FOR PLANTING.
15. CONTRACTOR SHALL PROVIDE EXPANSION COILS AT EACH WIRE CONNECTION IN VALVE BOX (WRAP AROUND 3/4" PIPE 12 TIMES).
16. CONTRACTOR TO UTILIZE APPROPRIATE AUTOMATIC DRAIN DEVICE WHERE LOW HEAD DRAINAGE MAY OCCUR.
17. ALL SPRINKLERS TO BE MOUNTED ON SWING JOINTS - REFER TO DETAILS.
18. CONTRACTOR SHALL UTILIZE VALVE I.D. TAGS ON ALL REMOTE CONTROL VALVES.
19. 24 VOLT WIRE SHALL BE COLOR CODED; COMMON-WHITE, CONTROL-RED.
20. CONTRACTOR SHALL INSTALL MANUFACTURERS' RECOMMENDED GROUNDING EQUIPMENT FOR POWER SUPPLY AND VALVE OUTPUT WITH (2) 5/8" COPPER CLAD GROUND RODS.
21. CONTRACTOR SHALL INSTALL MANUFACTURERS' RECOMMENDATION ON FAULT GROUND AND LIGHTNING PROTECTION.
22. CONTROLLER GROUNDING MUST BE AS PER ASIC REQUIREMENTS

GENERAL NOTES

23. ALL MATERIAL TO BE SUPPLIED BY CONTRACTOR TO OWNER:
    A. TWO WRENCHES FOR DISASSEMBLING AND ADJUSTING EACH TYPE OF SPRINKLER HEADS AND VALVE SUPPLIED.
    B. TWO KEYS FOR EACH OF THE AUTOMATIC CONTROLLERS.
    C. TWO QUICK COUPLER KEYS WITH MATCHING HOSE SWIVELS.
24. SYSTEM IS DIAGRAMMATIC TO IMPROVE CLARITY. ALL MAINLINE PIPING ELECTRIC VALVES AND WIRING ARE TO BE INSTALLED IN LANDSCAPE AREAS AND WITHIN PROPERTY BOUNDARIES. CONTRACTOR SHALL REFERENCE THE LANDSCAPE PLAN PRIOR TO THE INSTALLATION OF PIPING TO AVOID CONTACT WITH PLANT MATERIALS EXISTING OR NEW.
25. CONTRACTOR TO ADD EXTENSION RISER TO POP-UP HEADS WHEN NEEDED FOR PROPER COVERAGE.
26. CONTRACTOR SHALL INSTALL SPRINKLER EQUIPMENT 12" FROM FOUNDATIONS. ALSO INSTALL SPRINKLERS 4" FROM CURB OR WALKS.
27. PRIOR TO BID IRRIGATION CONTRACTOR SHALL VERIFY RIGHT-OF-WAY AND BACKFLOW REQUIREMENTS. NO LATER THAN FIVE DAYS BEFORE BID SUBMITTALS CONTRACTOR SHALL NOTIFY CONSULTANT OF ANY CHANGES FROM PLANS AND SPECIFICATIONS.
28. IRRIGATION CONTRACTOR SHALL PROVIDE THE OWNER AND LANDSCAPE ARCHITECT WITH A REPRODUCIBLE CROSS MEASURED AS-BUILT DRAWING OF THE INSTALLED IRRIGATION SYSTEM IN AUTOCAD 2010 FORMAT BEFORE FINAL ACCEPTANCE.
29. A 1-YEAR WARRANTY PERIOD SHALL BE PROVIDED FOR SYSTEM AFTER SUBSTANTIAL COMPLETION IS ACCEPTED. START UP AND ADJUSTING OF SYSTEM IN SPRING TIME SHALL BE INCLUDED IN WARRANTY.
30. PRIOR TO BID, CONTRACTOR SHALL VERIFY THAT ALL MATERIALS, INSTALLATION PARAMETERS AND OPERATIONS CONFORM TO ALL APPLICABLE CODES AND ORDINANCES. NO LATER THAN FIVE DAYS BEFORE BID SUBMITTALS CONTRACTOR SHALL NOTIFY IRRIGATION CONSULTANT/DESIGNER OF ANY CHANGES REQUIRED DUE TO CURRENT CODE OR ORDINANCE DISCREPANCIES. IF CONTRACTOR DOES NOT COMPLY TO THIS NOTIFICATION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NECESSARY INSTALLATION CHANGE AND REDESIGN COSTS FOR NON-COMPLIANCE.
31. UNLESS OTHERWISE NOTED, THE CONTRACTOR MUST COMPLETE 2 PRESSURE TESTS OF THE IRRIGATION SYSTEM MAINLINE (BOTH TO SHOW NO DROP IN PRESSURE DURING DURATION OF TEST.
    A. 2-HOUR PRESSURE TEST AT 1.5 TIMES THE SYSTEM STATIC PRESSURE
    B. 24-HOUR PRESSURE TEST AT THE SYSTEM STATIC PRESSURE
32. IRRIGATION INSTALLATION CONTRACTOR SHALL PROVIDE OWNER WITH A COLOR-CODED ZONES DIAGRAM PLAN, 8-1/2"X11" LAMINATED SHEET(S), TO IDENTIFY CONTROLLER STATION TO THE CONTROL VALVE NUMBER FOR EACH CONTROLLER. TO BE LOCATED IN ADHESIVE POUCH ATTACHED INSIDE OF CONTROLLER(S).

MURPHY EXPRESS AT FIRESTONE CITY CENTRE	
IRRIGATION PLAN	
NAME OF APPLICATION:	MURPHY OIL USA
TYPE OF SUBMITTAL :	FINAL DEVELOPMENT PLAN
FILING NUMBER:	
PHASE NUMBER:	
PREPARATION DATE:	10-20-2016
REVISION DATE:	12-20-2016
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	SHEET 11 OF 25

SHEET NO. C-11

COLORADO LICENSED 41391 PROFESSIONAL ENGINEER
04/05/17

REV-6	04-04-17	JN	GD	ICS	ICS
	DATE	PRN	PM	DES	DRW

IRRIGATION PLAN
MURPHY EXPRESS
FIRESTONE BLVD. & ENTRANCE DRIVE
FIRESTONE COLORADO

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DWG NAME: FIRESTONE.CO
JOB NO.: 20160074

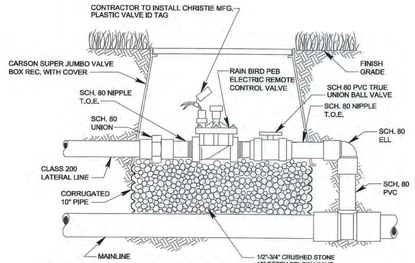
MURPHY OIL USA, INC.
422 NORTH WASHINGTON
EL DORADO, AR 71730

4301923 Pages: 12 of 25
05/15/2017 09:05 AM R Fee:$253.00
Carly Koppes, Clerk and Recorder, Weld County, CO

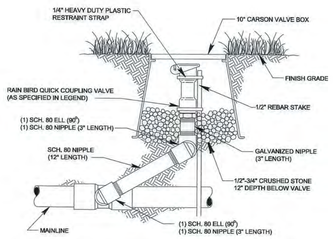
FINAL DEVELOPMENT PLAN

MURPHY EXPRESS AT FIRESTONE CITY CENTRE

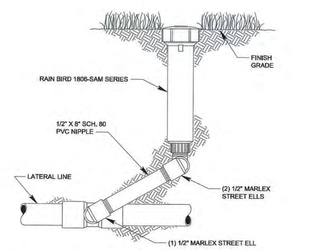
LOT 2 FIRESTONE CITY CENTRE SUBDIVISION FILING NO.4
TOWN OF FIRESTONE, WELD COUNTY, STATE OF COLORADO
IRRIGATION DETAILS
SHEET 12 OF 25



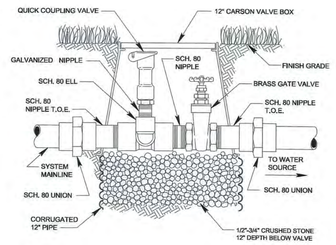
A CONTROL VALVE
NTS



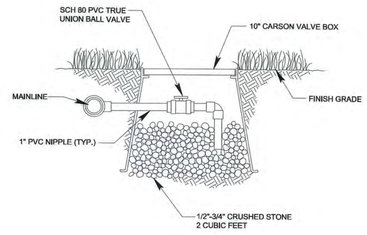
B QUICK COUPLING VALVE
NTS



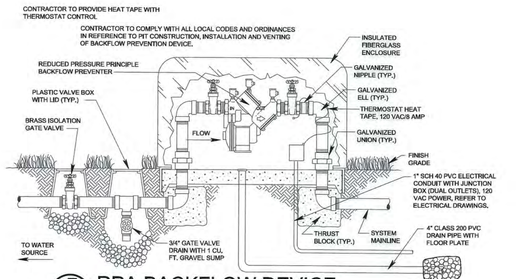
C LAWN SPRAY
NTS



D WINTERIZATION ASSEMBLY
NTS

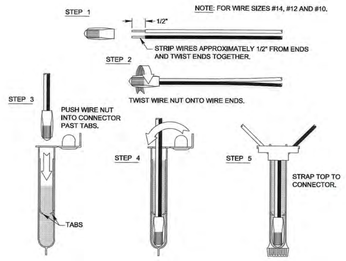


E MANUAL DRAIN VALVE
NTS

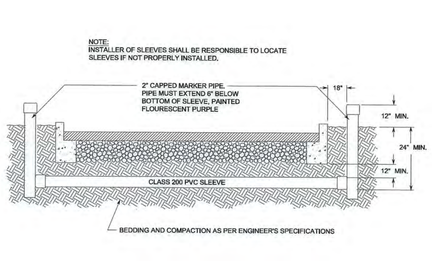


F RPA BACKFLOW DEVICE
NTS

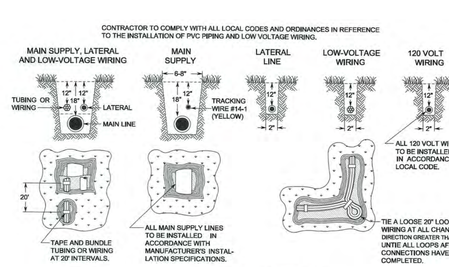
✳ IRRIGATION CONTACTOR SHALL SUBMIT BACKFLOW DETAIL TO LOCAL AUTHORITIES FOR APPROVAL BEFORE STARTING CONSTRUCTION.



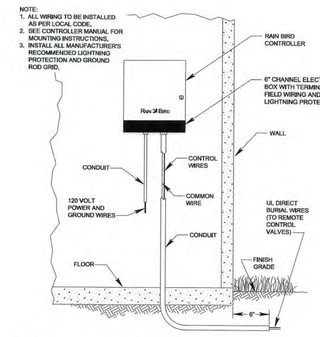
G WIRE CONNECTION
NTS
3M-DBR/Y-6



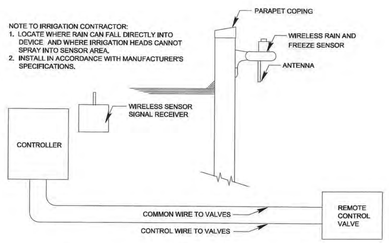
H SLEEVING
NTS



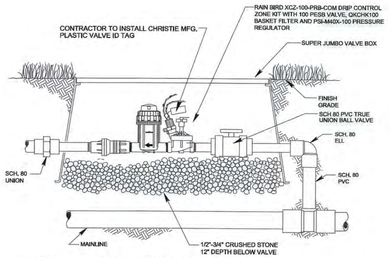
I TRENCHING
NTS



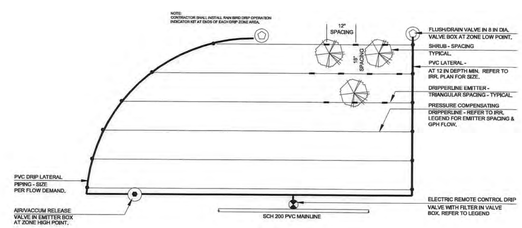
J CONTROLLER
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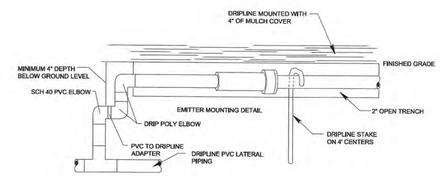
K RAIN SENSOR
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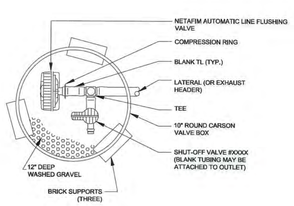
L DRIP ASSEMBLY
NTS



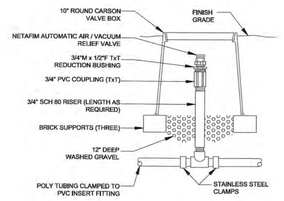
M IRRIGATION DRIPLINE
NTS



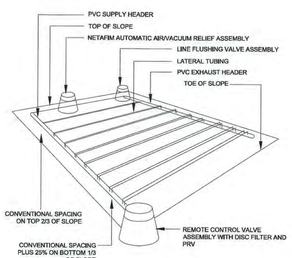
N DRIP EMITTER
NTS



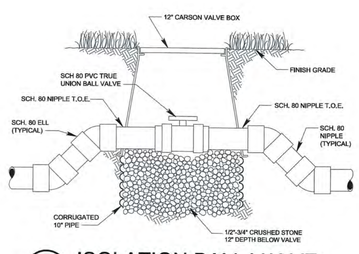
O LINE FLUSHING VALVE
NTS



P AIR/VACUUM RELIEF
NTS



Q DRIP TUBING SLOPED FEED LAYOUT
NTS



R ISOLATION BALL VALVE
NTS

MURPHY EXPRESS AT FIRESTONE CITY CENTRE	
IRRIGATION DETAILS	
NAME OF APPLICATION:	MURPHY OIL USA
TYPE OF SUBMITTAL:	FINAL DEVELOPMENT PLAN
FILING NUMBER:	
PHASE NUMBER:	
PREPARATION DATE:	10-20-2016
REVISION DATE:	12-20-2016
REVISION DATE:	03-15-2017
REVISION DATE:	04-04-2017
REVISION DATE:	
REVISION DATE:	
	SHEET 12 OF 25

SHEET NO. FDP-12

COLORADO LICENSED PROFESSIONAL ENGINEER 41391
04/05/17

REV-6	04-04-17	JN	GD	ICS	ICS
	DATE	PRN	PM	DES	DRW

IRRIGATION DETAILS
MURPHY EXPRESS
FIRESTONE BLVD. & ENTRANCE DRIVE
FIRESTONE COLORADO

GreenbergFarrow
1430 W. PEACHTREE ST. NW SUITE 200
ATLANTA, GA 30309
PHONE: (404) 601 4000
FAX: (404) 601 5970
DWG NAME: FDP-12.DWG
JOB NO.: 20160074

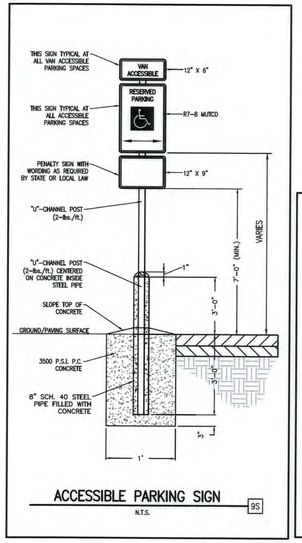
MURPHY OIL USA, INC.
422 NORTH WASHINGTON
EL DORADO, AR 71730

4391923 Pages: 13 of 25
05/15/2017 09:05 AM R Fee:$253.00
Carly Koppes, Clerk and Recorder, Weld County, CO

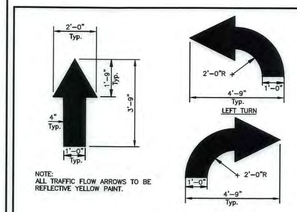
FINAL DEVELOPMENT PLAN

MURPHY EXPRESS AT FIRESTONE CITY CENTRE

LOT 2 FIRESTONE CITY CENTRE SUBDIVISION FILING NO.4
TOWN OF FIRESTONE, WELD COUNTY, STATE OF COLORADO
DETAIL SHEET
SHEET 13 OF 25



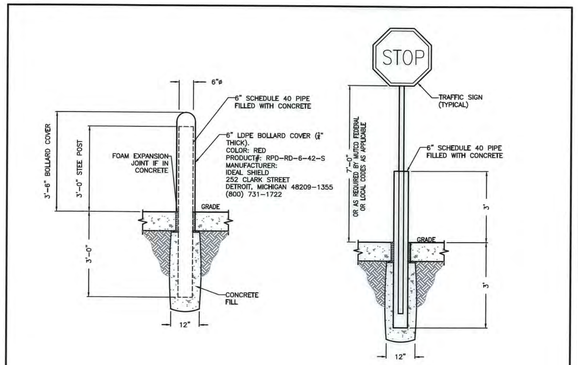
ACCESSIBLE PARKING SIGN 9S
N.T.S.



TRAFFIC FLOW ARROW 10A
N.T.S.

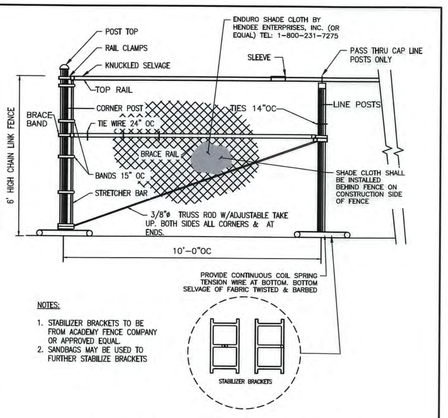
MINIMUM REQUIREMENTS:

1. USE TRAINED AND EXPERIENCED PERSONNEL IN APPLYING THE PRODUCTS AND OPERATING THE EQUIPMENT REQUIRED FOR PROPERLY PERFORMED WORK.
2. PAINT SHALL BE WATERBORNE OR SOLVENT BORNE, COLOR SHALL BE REFLECTIVE YELLOW UNLESS OTHERWISE SPECIFIED. PAVEMENT MARKING PAINTS SHALL COMPLY WITH APPLICABLE STATE AND LOCAL LAWS ENACTED TO ENSURE COMPLIANCE WITH FEDERAL CLEAN AIR STANDARDS. PAINT MATERIALS SHALL CONFORM TO THE RESTRICTIONS OF THE LOCAL AIR POLLUTION CONTROL DISTRICT.
3. WATERBORNE PAINT: PAINTS SHALL CONFORM TO FEDERAL SPECIFICATION TT-P-1952 (LATEST REVISION) AND ALL APPLICABLE ASTM STANDARDS WITHIN THIS SPECIFICATION.
4. SOLVENT BORNE PAINT: PAINT SHALL CONFORM TO FEDERAL SPECIFICATION A-A-2886 OR AASHTO M248. PAINT SHALL BE NON-BLEEDING, QUICK-DRYING, AND ALKYD PETROLEUM BASE PAINT SUITABLE FOR TRAFFIC-BEARING SURFACE AND BE MIXED IN ACCORDANCE WITH MANUFACTURE'S INSTRUCTIONS BEFORE APPLICATION FOR COLOR YELLOW (UNLESS OTHER COLOR IS OTHERWISE SPECIFIED).
5. GLASS BEADS: AASHTO M 247, TYPE 1 OR FS TT-B-1325, TYPE 1, GRADATION A
6. APPLY TWO COATS OF PAINT, AT MANUFACTURER'S RECOMMENDED RATE, WITHOUT ADDITION OF THINNER, WITH MAXIMUM OF 100 SQUARE FEET PER GALLON OR AS REQUIRED TO PROVIDE A MINIMUM WET FILM THICKNESS OF 15 MILS AND DRY FILM THICKNESS OF 7 ½ MILS PER COAT. PAINT SHALL BE APPLIED FOR A TOTAL DRY FILM THICKNESS OF 15 MILS. APPLY WITH MECHANICAL EQUIPMENT TO PRODUCE UNIFORM STRAIGHT EDGES.
7. APPLY GLASS BEADS AT PEDESTRIAN CROSSWALK STRIPING AND AT LANE STRIPING AND ARROWS. BROADCAST GLASS BEADS UNIFORMALY INTO WET MARKINGS AT A RATE OF 6 LB/GAL.



STEEL BOLLARD 5A
N.T.S.

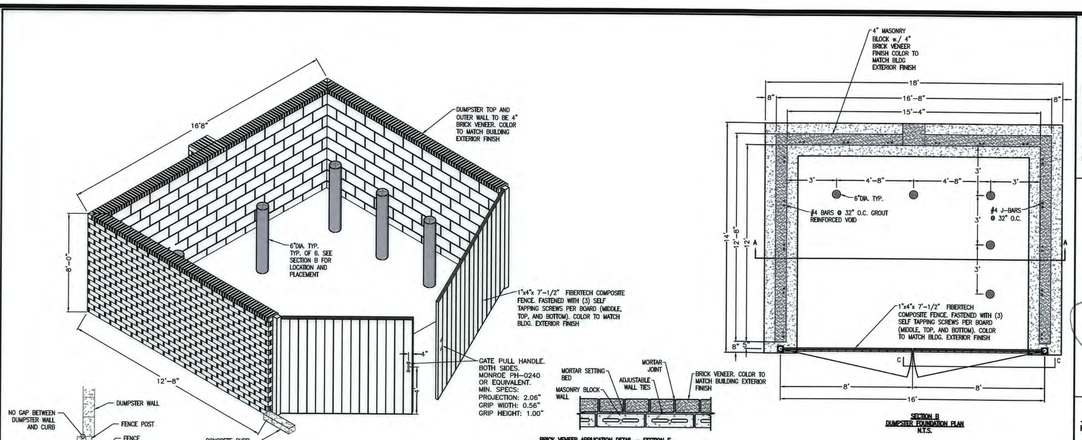
TRAFFIC SIGN IN BOLLARD 5B
N.T.S.



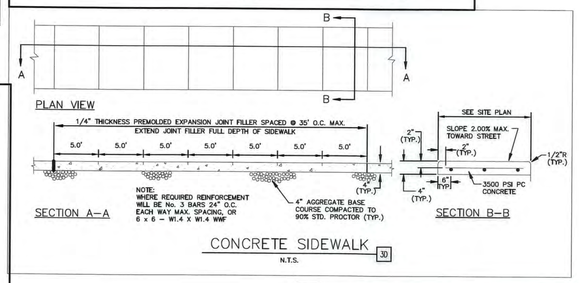
NOTES:

1. STABILIZER BRACKETS TO BE FROM ACADEMY FENCE COMPANY OR APPROVED EQUAL.
2. SANDBAGS MAY BE USED TO FURTHER STABILIZE BRACKETS

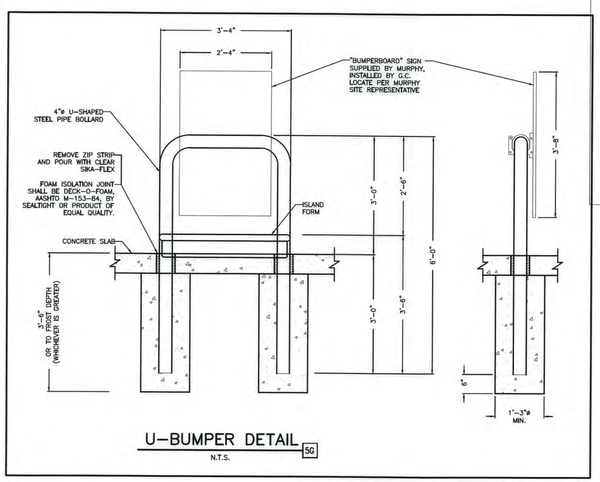
CONSTRUCTION SAFETY FENCE 2F
N.T.S.



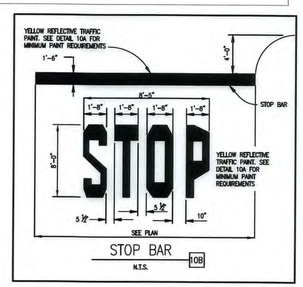
DUMPSTER ENCLOSURE DE
N.T.S.



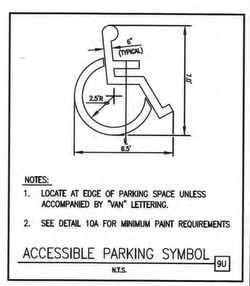
CONCRETE SIDEWALK 3D
N.T.S.



U-BUMPER DETAIL 5G
N.T.S.



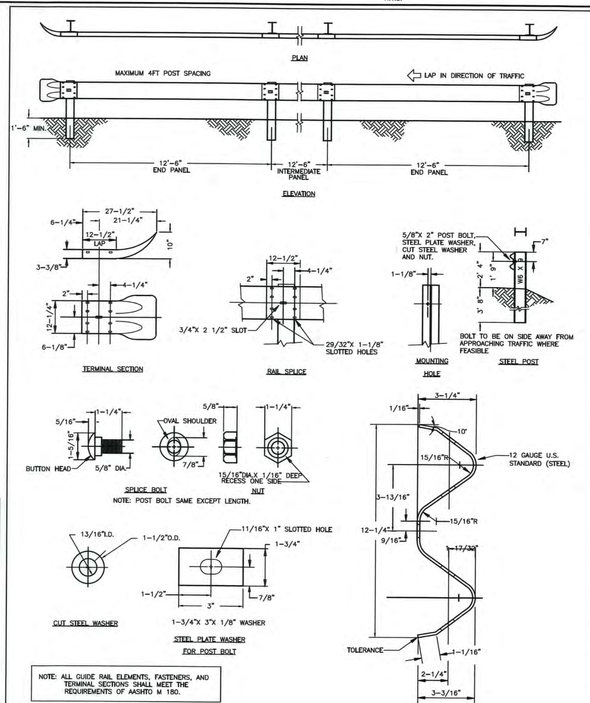
STOP BAR 10B
N.T.S.



NOTES:

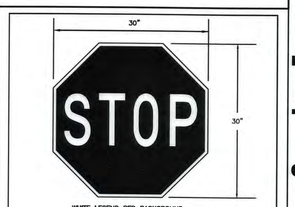
1. LOCATE AT EDGE OF PARKING SPACE UNLESS ACCOMPANIED BY "VAN" LETTERING.
2. SEE DETAIL 10A FOR MINIMUM PAINT REQUIREMENTS

ACCESSIBLE PARKING SYMBOL 9U
N.T.S.

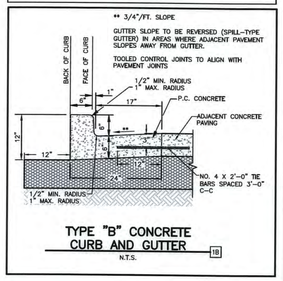


NOTE: ALL GUIDE RAIL ELEMENTS, FASTENERS, AND TERMINAL SECTIONS SHALL MEET THE REQUIREMENTS OF AASHTO M 180.

GUARD RAIL 4A
N.T.S.



WHITE LEGEND RED BACKGROUND
R1-1
"STOP" SIGN 12G
N.T.S.



TYPE "B" CONCRETE CURB AND GUTTER 1B
N.T.S.

MURPHY EXPRESS AT FIRESTONE CITY CENTRE	
DETAIL SHEET	
NAME OF APPLICATION:	MURPHY OIL USA
TYPE OF SUBMITTAL:	FINAL DEVELOPMENT PLAN
FILING NUMBER:	
PHASE NUMBER:	
PREPARATION DATE:	10-20-2016
REVISION DATE:	12-20-2016
REVISION DATE:	02-07-2017
REVISION DATE:	03-15-2017
REVISION DATE:	04-04-2017
REVISION DATE:	
SHEET 13 OF 25	

SHEET NO. FDP-13

COLORADO LICENSED JOHN A. MURPHY 41391
04/05/17

REV-6	04-04-17	JN	GD	TA	TA
	DATE	PRN	PM	DES	DRW

DETAILS
MURPHY EXPRESS
4615 CITY CENTRE ROAD
FIRESTONE COLORADO

GreenbergFarrow
1430 W. PEACHTREE ST. NW SUITE 200
ATLANTA, GA 30309
PHONE: (404) 601 4000
FAX: (404) 601 4020
DWG NAME: FIRESTONE.CO
JOB NO.: 2016#074

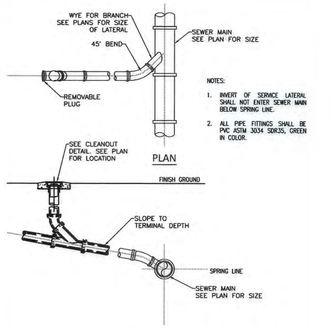
MURPHY OIL USA, INC.
200 PEACH STREET
EL DORADO, AR 71730

4301923 Pages: 14 of 25
05/15/2017 09:05 AM R Fee:$253.00
Carly Koppes, Clerk and Recorder, Weld County, CO

FINAL DEVELOPMENT PLAN

MURPHY EXPRESS AT FIRESTONE CITY CENTRE

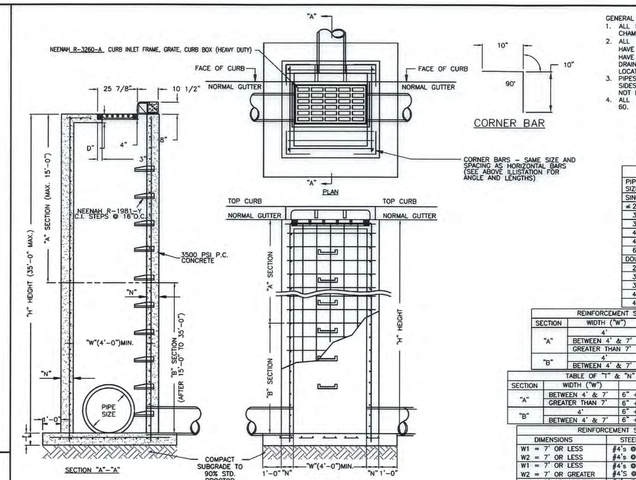
LOT 2 FIRESTONE CITY CENTRE SUBDIVISION FILING NO.4
TOWN OF FIRESTONE, WELD COUNTY, STATE OF COLORADO
DETAIL SHEET
SHEET 14 OF 25



NOTES:
1. INVERT OF SERVICE LATERAL SHALL NOT ENTER SEWER MAIN BELOW SPRING LINE.
2. ALL PIPE FITTINGS SHALL BE PVC ASTM 3034 SDR35, GREEN IN COLOR.

SANITARY SEWER WYE CONNECTION WITH CLEAN–OUT

N.T.S. 40B



COMBINATION INLET

N.T.S. 23E

GENERAL NOTES:
1. ALL EXPOSED CORNERS TO HAVE 3/4" CHAMFER
2. ALL #4 & #5 REINFORCING BARS TO HAVE 1–1/2" COVER, LARGER SIZES TO HAVE 2" COVER. 3. SEE GRADING AND DRAINAGE PLAN FOR PIPE SIZES, LOCATIONS, AND FLOW LINES.
3. PIPES SHALL CONNECT TO THE ENDS OR SIDES OF THE INLET. CONNECTION SHALL NOT BE MADE AT CORNERS OF INLET.
4. ALL REINFORCING BARS TO BE GRADE 60.

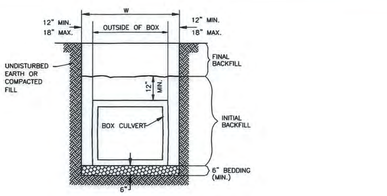
REINFORCEMENT SCHEDULE, BASE	
SECTION	
"A"	#4's @ 6" E.W.
"B"	#5's @ 6" E.W.

TABLE OF "W" DIMENSIONS			
PIPE SIZE	SKEW OF CROSS DRAIN		
SINGLE	STRAIGHT	30°	45°
ø 24"	4'–0"	4'–0"	4'–10"
30"	4'–0"	4'–7"	5'–8"
36"	4'–0"	5'–3"	6'–5"
42"	5'–3"	5'–11"	7'–3"
48"	5'–10"	6'–7"	8'–0"
60"	7'–0"	7'–10"	9'–8"
DOUBLE	FOR "A" SECTION ONLY		
24"	7'–0"	7'–10"	9'–5"
30"	8'–2"	9'–2"	11'–0"
36"	9'–4"	10'–6"	12'–6"
42"	10'–6"	11'–10"	14'–0"
48"	11'–8"	13'–2"	15'–10"

REINFORCEMENT SCHEDULE, WALLS			
SECTION	WIDTH ("W")	HOR.	VERT.
"A"	4"	#4's @ 3"	#4's @ 10"
	BETWEEN 4' & 7'	#5's @ 9"	#4's @ 10"
	GREATER THAN 7'	#5's @ 4 1/2"	#4's @ 10"
"B"	4"	#4's @ 6"	#4's @ 10"
	BETWEEN 4' & 7'	#5's @ 6"	#4's @ 10"

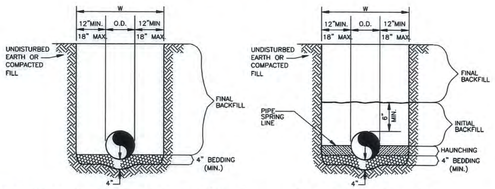
TABLE OF "T" & "H" DIMENSIONS				
SECTION	WIDTH ("W")	"T"	"H"	"D"
"A"	BETWEEN 4' & 7'	6" + PIPE THICKNESS	8"	6"
	GREATER THAN 7'	6" + PIPE THICKNESS	8"	8"
"B"	4'	6" + PIPE THICKNESS	8"	8"
	BETWEEN 4' & 7'	6" + PIPE THICKNESS	10"	8"

REINFORCEMENT SCHEDULE, TOP		
DIMENSIONS	STEEL	SPECIAL PATTERN
W1 = 7' OR LESS	#4's @ 8" E.W.	DIAGONAL @ COVER
W2 = 7' OR LESS	#4's @ 6" E.W.	DIAGONAL @ COVER
W1 = 7' OR GREATER	#4's @ 6" E.W.	DIAGONAL @ COVER
W2 = 7' OR GREATER	#4's @ 6" E.W.	DIAGONAL @ COVER
W1 = 7' OR GREATER	#4's @ 6" E.W.	DIAGONAL @ COVER
W2 = 7' OR GREATER	#4's @ 6" E.W.	DIAGONAL @ COVER



CONCRETE BOX CULVERT

N.T.S.



REINFORCED CONCRETE PIPE (RCP) AND SPIRAL RIB PIPE SMALLER THAN 60"ø

N.T.S.

ALL OTHER PIPES INCLUDING SPIRAL RIB PIPE 60"ø AND LARGER

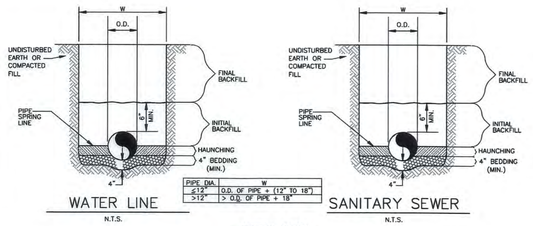
N.T.S.

GENERAL NOTES

1. BEDDING SHALL BE CLASS I–A WORKED BY HAND. IF GROUNDWATER IS ANTICIPATED, THEN BEDDING SHALL BE CLASS I–B COMPACTED TO 85% STANDARD PROCTOR.
2. HAUNCHING SHALL BE WORKED AROUND THE PIPE BY HAND TO ELIMINATE VOIDS AND SHALL BE CLASS I–A OR CLASS I–B OR CLASS II COMPACTED TO 85% PROCTOR.
3. INITIAL BACKFILL SHALL BE CLASS I–A WORKED BY HAND, OR CLASS I–B OR CLASS II COMPACTED TO 85% STANDARD PROCTOR.
4. INITIAL BACKFILL NOT UNDER PAVED AREAS CAN BE CLASS III COMPACTED TO 90% STANDARD PROCTOR.
5. FINAL BACKFILL SHALL BE CLASS I, II, OR III COMPACTED AS NOTED IN NOTES 3. AND 4.
6. FINAL BACKFILL NOT UNDER PAVED AREAS CAN BE CLASS IV–A COMPACTED TO 85% STANDARD PROCTOR.
7. ALL MATERIALS ARE CLASSIFIED IN ACCORDANCE WITH ASTM D 2321–LATEST EDITION.
8. ALL MATERIALS SHALL BE INSTALLED IN MAXIMUM 8" LOOSE LIFTS IN ACCORDANCE WITH ASTM D 698. CLASS III AND IV–A MATERIALS SHALL BE COMPACTED NEAR OPTIMUM MOISTURE CONTENT.
9. FILL SALVAGED FROM EXCAVATION SHALL BE FREE OF DEBRIS, ORGANICS AND ROCKS LARGER THAN 3".
10. ALL TRENCH EXCAVATIONS SHALL BE SLOPED, SHORED, SHEETED, BRACED, OR OTHERWISE SUPPORTED IN COMPLIANCE WITH OSHA REGULATIONS AND LOCAL ORDINANCES. (SEE SPECIFICATIONS)

STORM SEWER TRENCH AND BEDDING

N.T.S. 28A



PIPE DIA.	W
≤ 12"	O.D. OF PIPE + (12" TO 18")
>12"	> O.D. OF PIPE + 18"

WATER LINE

N.T.S.

SANITARY SEWER

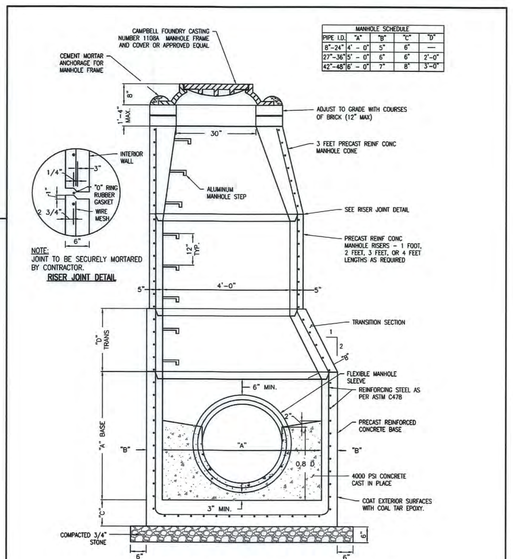
N.T.S.

GENERAL NOTES

1. ALL MATERIALS ARE CLASSIFIED IN ACCORDANCE WITH ASTM D 2321 LATEST EDITION.
2. BEDDING SHALL BE CLASS I–A WORKED BY HAND. IF GROUNDWATER IS ANTICIPATED, THEN BEDDING SHALL BE CLASS I–B COMPACTED TO 85% STANDARD PROCTOR.
3. HAUNCHING SHALL BE WORKED AROUND THE PIPE BY HAND TO ELIMINATE VOIDS AND SHALL BE CLASS I–A OR CLASS I–B OR CLASS II COMPACTED TO 85% PROCTOR.
4. INITIAL BACKFILL SHALL BE CLASS I–A WORKED BY HAND, OR CLASS I–B OR CLASS II COMPACTED TO 85% STANDARD PROCTOR.
5. INITIAL BACKFILL NOT UNDER PAVED AREAS CAN BE CLASS III COMPACTED TO 90% STANDARD PROCTOR.
6. FINAL BACKFILL SHALL BE CLASS I, II, OR III COMPACTED AS NOTED IN NOTES 3. AND 4.
7. FINAL BACKFILL NOT UNDER PAVED AREAS CAN BE CLASS IV–A COMPACTED TO 95% STANDARD PROCTOR.
8. ALL MATERIALS SHALL BE INSTALLED IN MAXIMUM 8" LOOSE LIFTS IN ACCORDANCE WITH ASTM D 698. CLASS III AND IV–A MATERIALS SHALL BE COMPACTED NEAR OPTIMUM MOISTURE CONTENT.
9. FILL SALVAGED FROM EXCAVATION SHALL BE FREE OF DEBRIS, ORGANICS AND ROCKS LARGER THAN 3".
10. ALL TRENCH EXCAVATIONS SHALL BE SLOPED, SHORED, SHEETED, BRACED, OR OTHERWISE SUPPORTED IN COMPLIANCE WITH OSHA REGULATIONS AND LOCAL ORDINANCES. (SEE SPECIFICATIONS)

UTILITY TRENCH AND BEDDING

N.T.S.

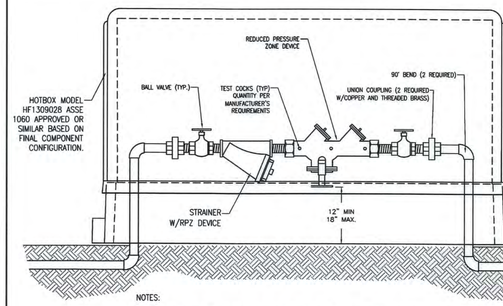


MANHOLE SCHEDULE			
PIPE I.D.	"A"	"B"	"C"
8"–24"	4'–0"	5"	6"
27"–36"	5'–0"	6"	6"
42"–60"	6'–0"	7"	8"

NOTE: JOINT TO BE SECURELY MORTARED BY CONTRACTOR.
RISER JOINT DETAIL

PRECAST STORM DRAIN MANHOLE

N.T.S. 23D

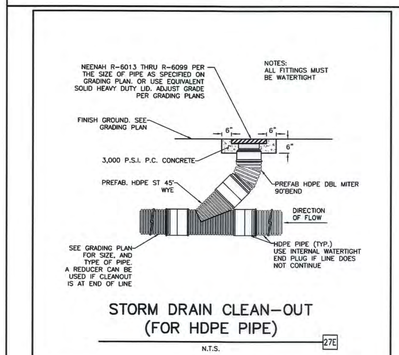


HOTBOX MODEL HF1309028 ASSE 1060 APPROVED OR SIMILAR BASED ON FINAL COMPONENT CONFIGURATION.

NOTES:
1. ALL DEVICES 2" TO 2 1/2" WILL BE INSTALLED WITH TYKE K COPPER, SCHEDULE 80 PVC, THREADED BRASS PIPE, OR AS SPECIFIED IN PLANS.
2. THIS PLAN REPRESENTS AN ACCEPTABLE METHOD FOR PLACEMENT OF A BACKFLOW PREVENTER & VAULT, HOWEVER, ALL LOCAL CODES VARY AND MUST BE ADHERED TO FOR VALVE/METER ASSEMBLY.

ABOVE GROUND REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER – 2 1/2" AND SMALLER

N.T.S. 41G



STORM DRAIN CLEAN–OUT (FOR HDPE PIPE)

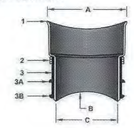
N.T.S. 27E

CORRUGATED HDPE/PP BELL GRAVITY APPLICATIONS

A. BELL END ACCEPTS CORRUGATED HDPE/PP DUAL WALL PIPE–ADS/HANCOR INC. SPECIFICATIONS IN 4", 6", 8", 10", 12", 15", 18", 21", 24", AND 30" SIZES.

B. CURVATURE VARIES WITH MAINLINE DIAMETERS.

C. SPIGOT END PVC SDR 35, ASTM D3034 DIAMETERS: 4", 6", 8", 10", 12", 15", 18", 21", 24" AND 30"



PART	PART NAME
1	HUB ADAPTOR
2	SECURING CLAMP*
3	RUBBER SLEEVE(AVAILABLE IN NITRILE AND EPDM BY SPECIAL ORDER)
3A	UPPER SEGMENT**
3B	LOWER SEGMENT*** (NOT SHOWN) ADS/HANCOR INC. SUPPLIES VALLEY GASKET

MATERIALS
PVC SDR 26 ASTM D3034
BAND SS #301
SCREW SS #305
HOUSING SS #301
ASTM F477

* OPTIONAL: #316 STAINLESS STEEL BAND, SCREW AND HOUSING
** DISTANCE BETWEEN 4A AND 4B WILL VARY BY PRODUCT TYPE
*** WILL NOT APPEAR ON RUBBER SLEEVES FOR CONCRETE OR CLAY PIPE

INSERTA TEE SIZE		HOLE DIAMETER	
4"	(100 mm)	4 3/8"	(114 mm)
6"	(150 mm)	6 3/8"	(165 mm)
8"	(200 mm)	8 3/4"	(222 mm)
10"	(250 mm)	10 7/8"	(276 mm)
12"	(300 mm)	12 7/8"	(327 mm)
15"	(375 mm)	15 7/8"	(402 mm)
18"	(450 mm)	19 3/4"	(503 mm)
21"	(525 mm)	22 3/4"	(573 mm)
24"	(600 mm)	25 3/4"	(643 mm)
30"	(750 mm)	32 7/8"	(826 mm)

NOTE: RECOMMENDED METHOD OF CUTTING HOLE IS WITH HOLE SAW FOR PVC AND OTHER PLASTICS, AND DIAMOND BIT FOR CONCRETES: CLAY, FRP AND D.I. (SEE INSTALLATION INSTRUCTIONS. HOLE SAWS ARE AVAILABLE FOR PURCHASE OR RENT.)

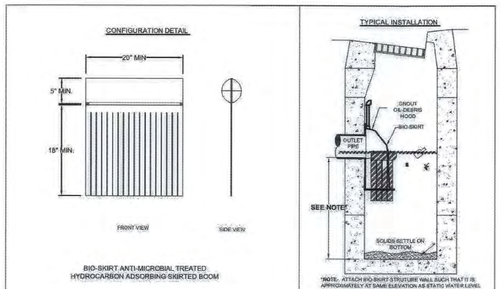
INSERTA TEE | PO BOX 714 CORNELIUS, OR 97113 PH:(503) 357-2110 FAX:(503) 359-5417 SALES@INSERTATEE.COM

CORRUGATED HDPE/PP BELL GRAVITY APPLICATION SPECIFICATIONS

SCALE: NTS
DATE: 5/12/2013
DRAWN BY: KLJ

THIS PRINT TO BE USED AS A GUIDE ONLY WITH DATA IN WRITTEN SPECIFICATIONS TAKING PRECEDENCE. THE INFORMATION CONTAINED HEREIN IS THE PROPERTY OF INSERTA TEE AND IS NOT TO BE USED FOR THE DESIGN OR TESTING OF ANY SYSTEM WITHOUT EXPRESSED AUTHORIZATION FROM INSERTA TEE. ANY REPRODUCTION OF THIS DRAWING WITHOUT PERMISSION IS PROHIBITED AND ANY UNAUTHORIZED USE OF SUCH REPRODUCED COPY OF THIS DRAWING IS EXPRESSLY PROHIBITED EXCEPT BY SPECIFIC WRITTEN PERMISSION FROM INSERTA TEE.

© 2013 INSERTA TEE



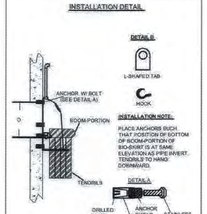
NOTES:
1. All new inlet or existing catch basins or water quality structures shall be outfitted with the Bio-Skirt(R) Anti-microbial treated Hydrocarbon adsorbing skirted boom as manufactured by:
BEST MANAGEMENT PRODUCTS, INC.
53 MT. ARCHER RD.
LYME, CT 06371
(860) 434-0277 (860) 434-3195 FAX
TOLL FREE: (800) 504-8004 OR (888) 434-0277
WEB SITE: www.bmpinc.com
or pre-approved equal
2. The skirted boom shall be composed of an upper boom portion that is an adsorbent fabric covered floating foam of 5" minimum diameter with an integral lower skirt portion comprised of fabric baffle of an 18" minimum length that hang beneath the foam.
3. All booms shall be made from geo-textile quality needle-woven filtration fabric manufactured from 100% recycled oil filters with a .125" minimum thickness.
4. All fabric shall be treated with a conventional surface bonded non-leaching antimicrobial agent and booms shall display a tag indicating "Antimicrobial".
5. The Bio-Skirt shall be positioned in front of the exit pipe and SNOUT® Oil-Debris Separator if so equipped and preferred application of the Bio-Skirt is to be deployed with the SNOUT).
6. The skirted booms shall be securely attached to the structure wall on each side of the exit pipe with 3/8" stainless steel bolts, stainless steel tabs, plastic-composite hooks and elastomeric cord as found in manufacturer supplied in installation kit.
7. For applications where multiple Bio-Skirts are deployed together for larger SNOUT's (e.g. on 24" and larger SNOUTs per schedule below"), connect skirts grommet to grommet with hooks and cord as supplied in the installation kit.

Typical Deployment Schedule:
12-18" SNOUT- One Bio-Skirt
24-30" SNOUT- Two Bio-Skirts
36-62" SNOUT- Three Bio-Skirts
72" and up, Call 800-504-8004 for guidance

SNOUT US Patent # 6126817

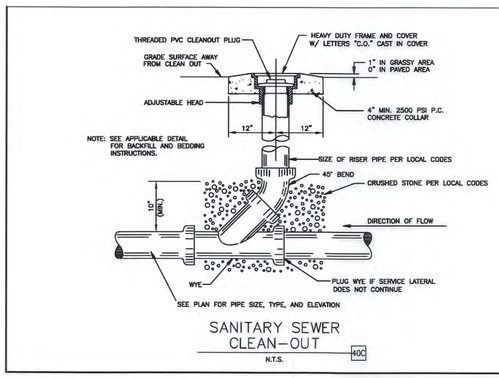
18A

INSTALLATION DETAIL



ANTI-MICROBIAL TREATED OIL ADSORBENT SPECIFICATION FOR CATCH BASINS AND WATER QUALITY STRUCTURES

DESCRIPTION	DATE	SCALE
BIO-SKIRT (TM) SPECIFICATION AND INSTALLATION (TYPICAL)	10/29/14	NONE
	DRAWING NUMBER	SP-BIO



SANITARY SEWER CLEAN–OUT

N.T.S. 40C

MURPHY EXPRESS AT FIRESTONE CITY CENTRE	
DETAIL SHEET	
NAME OF APPLICATION:	MURPHY OIL USA
TYPE OF SUBMITTAL :	FINAL DEVELOPMENT PLAN
FILING NUMBER:	
PHASE NUMBER:	
PREPARATION DATE:	10-20-2016
REVISION DATE:	12-20-2016
REVISION DATE:	02-07-2017
REVISION DATE:	03-15-2017
REVISION DATE:	04-04-2017
REVISION DATE:	
SHEET 14 OF 25	

SHEET NO. FDP-14

COLORADO LICENSED
41391
04/05/17

REV–6	04–04–17	JN	TA	TA
	DATE	PRN	DES	DRW
		CD	PM	

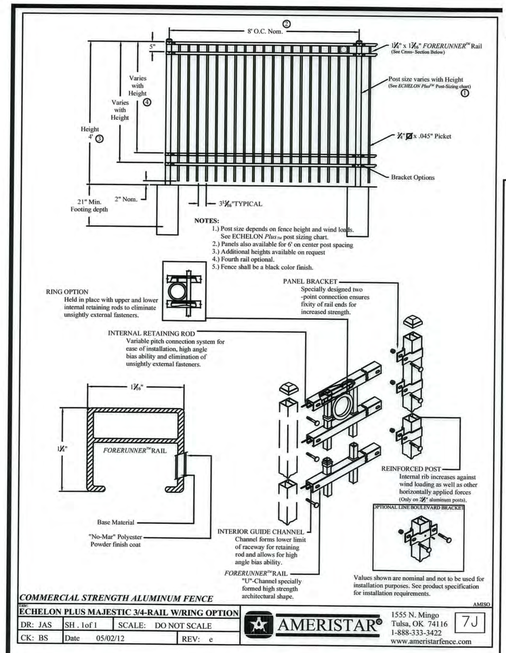
DETAILS
MURPHY EXPRESS
4615 CITY CENTRE ROAD
FIRESTONE COLORADO

GreenbergFarrow
1430 W. PEACHTREE ST. NW SUITE 200
ATLANTA, GA 30309
PHONE: (404) 601 4000
FAX: (404) 601 3970
DWG NAME: FIRESTONE.CO
JOB NO.: 2016074

MURPHY OIL USA, INC.
200 PEACH STREET
EL DORADO, AR 71730

4301923 Pages: 15 of 25
05/15/2017 09:05 AM R Fee:$253.00
Carly Koppas, Clerk and Recorder, Weld County, CO

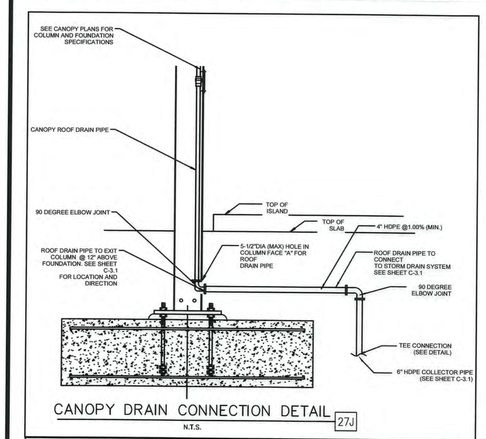
FINAL DEVELOPMENT PLAN
MURPHY EXPRESS AT FIRESTONE CITY CENTRE
LOT 2 FIRESTONE CITY CENTRE SUBDIVISION FILING NO.4
TOWN OF FIRESTONE, WELD COUNTY, STATE OF COLORADO
DETAIL SHEET
SHEET 15 OF 25



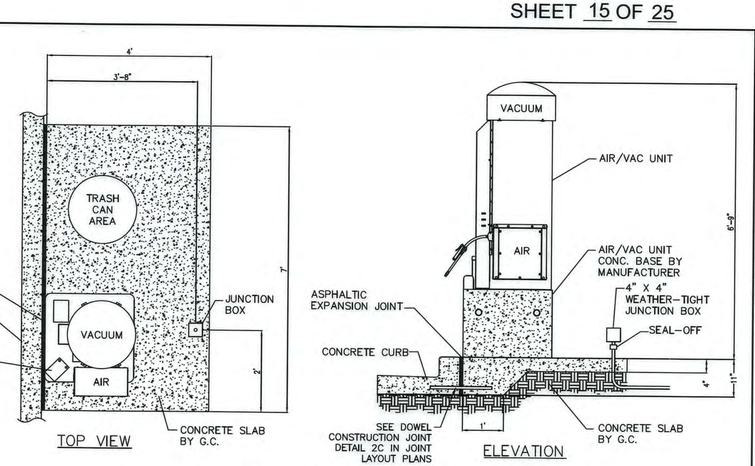
COMMERCIAL STRENGTH ALUMINUM FENCE

ECHELON PLUS MAJESTIC 3/4-RAIL W/RING OPTION			
DR: JAS	SH. 1of 1	SCALE: DO NOT SCALE	7J
CK: BS	Date 05/02/12	REV: e	

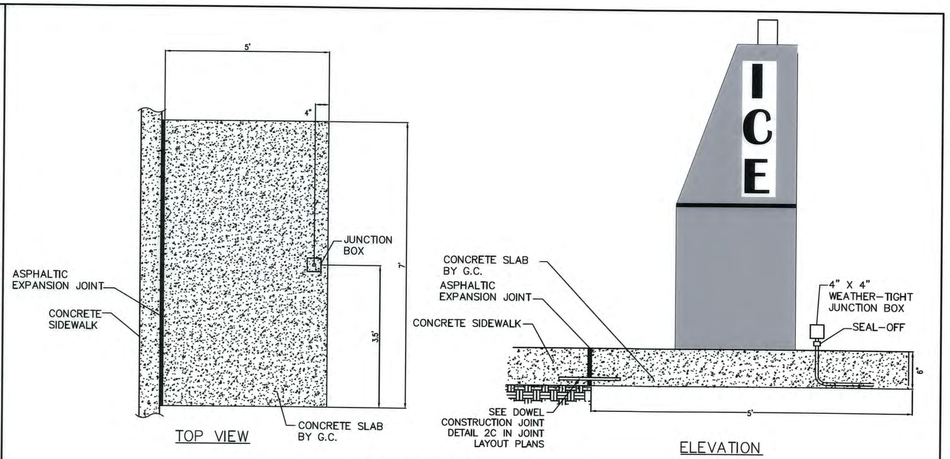
AMERISTAR® 1555 N. Mingo Tulsa, OK 74116 1-888-333-3422 www.ameristarfence.com



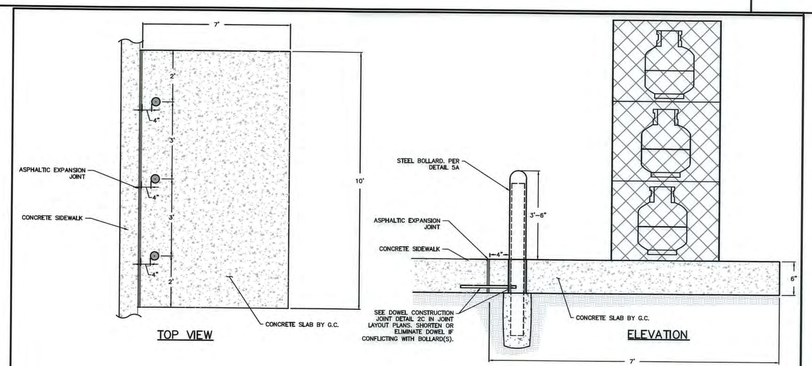
CANOPY DRAIN CONNECTION DETAIL 27J
N.T.S.



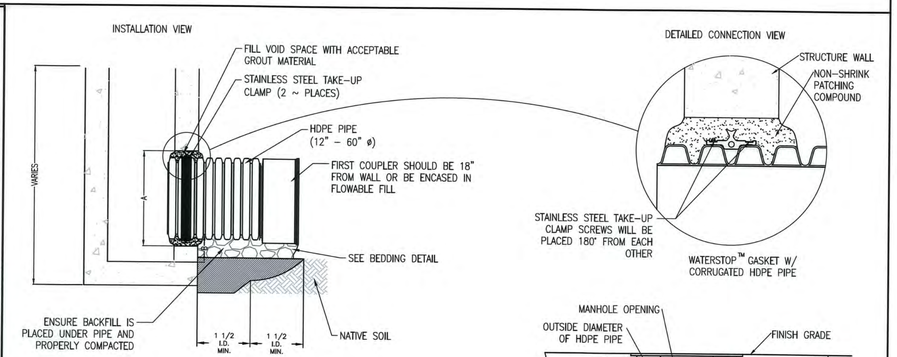
AIR/VAC MOUNTING SLAB DETAIL 3A
SCALE: N.T.S.



ICE MACHINE SLAB DETAIL 5B
SCALE: N.T.S.

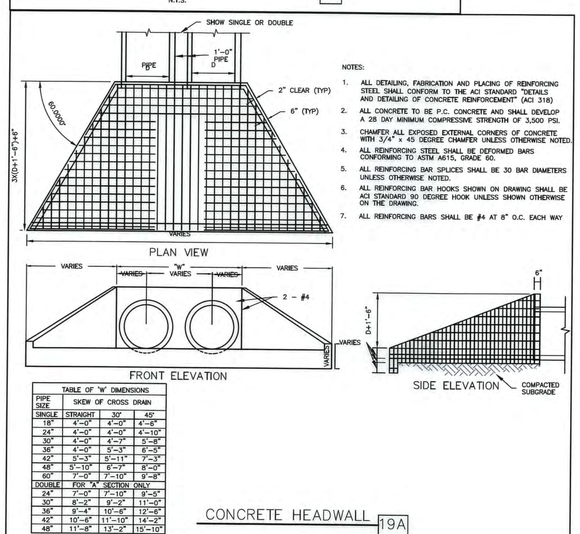


PROPANE SLAB DETAIL 5C
N.T.S.



PIPE SIZE (IN)	PIPE OD (IN) WT	"A" MIN. HOLE ø (IN)	"B" MIN. DISTANCE PIPE INVERT TO STRUCTURE INVERT (IN)
6	6.9	11.90	4.0
8	9.1	13.10	4.0
10	11.4	16.40	4.0
12	14.5	19.50	4.0
15	18.0	23.00	4.0
18	22.0	27.00	4.2
24	28.0	33.00	4.5
30	36.0	41.00	5.2
36	42.0	47.00	5.5
42	48.0	53.00	5.7
48	54.0	59.00	5.7
60	67.0	72.00	6.4

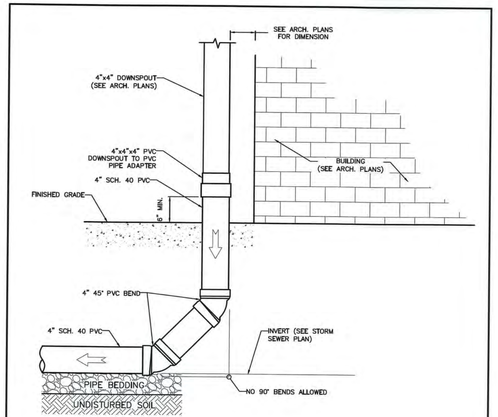
WATERSTOP STRUCTURE CONNECTION FOR HDPE PIPE CONNECTION TO CONCRETE STRUCTURE 7JF
N.T.S.



NOTES:
1. ALL DETAILING, FABRICATION AND PLACING OF REINFORCING STEEL SHALL CONFORM TO THE ACI STANDARD "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT" (ACI 318)
2. ALL CONCRETE TO BE P.C. CONCRETE AND SHALL DEVELOP A 28 DAY MINIMUM COMPRESSIVE STRENGTH OF 3,500 PSI.
3. CHAMFER ALL EXPOSED EXTERNAL CORNERS OF CONCRETE WITH 3/4" x 45 DEGREE CHAMFER UNLESS OTHERWISE NOTED.
4. ALL REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM A615, GRADE 60.
5. ALL REINFORCING BAR SPLICES SHALL BE 30 BAR DIAMETERS UNLESS OTHERWISE NOTED.
6. ALL REINFORCING BAR HOOKS SHOWN ON DRAWING SHALL BE ACI STANDARD 90 DEGREE HOOK UNLESS SHOWN OTHERWISE ON THE DRAWING.
7. ALL REINFORCING BARS SHALL BE #4 AT 8" O.C. EACH WAY

TABLE OF "H" DIMENSIONS			
PIPE SIZE	SKEW OF CROSS DRAIN		
SINGLE	STRAIGHT	30°	45°
18"	4'-0"	4'-0"	4'-5"
24"	4'-0"	4'-0"	4'-10"
30"	4'-0"	4'-2"	5'-8"
36"	4'-0"	5'-3"	6'-5"
42"	5'-3"	5'-11"	7'-3"
48"	5'-10"	6'-7"	8'-0"
60"	7'-0"	7'-10"	9'-8"
DOUBLE	FOR "A" SECTION ONLY		
24"	7'-0"	7'-10"	9'-5"
30"	8'-2"	9'-2"	11'-0"
36"	9'-4"	10'-6"	12'-8"
42"	10'-6"	11'-10"	14'-2"
48"	11'-8"	13'-2"	15'-10"

CONCRETE HEADWALL 19A



NOTES:
1. SEE CANOPY DRAINAGE SHEET FOR CONTINUATION
2. CONTRACTOR TO VERIFY THERE ARE NO CONFLICTS WITH OTHER UTILITY CONDUITS WHEN INSTALLING UNDERGROUND DRAINAGE PIPES.

ROOF DRAIN DOWNSPOUT CONNECTION 27H
N.T.S.

MURPHY EXPRESS AT FIRESTONE CITY CENTRE	
DETAIL SHEET	
NAME OF APPLICATION:	MURPHY OIL USA
TYPE OF SUBMITTAL:	FINAL DEVELOPMENT PLAN
FILING NUMBER:	
PHASE NUMBER:	
PREPARATION DATE:	10-20-2016
REVISION DATE:	12-20-2016
REVISION DATE:	02-07-2017
REVISION DATE:	03-15-2017
REVISION DATE:	04-04-2017
REVISION DATE:	
SHEET 15 OF 25	

SHEET NO. FDP-15

COLORADO LICENSED 41391 ENGINEER 04/05/17

REV-6	04-04-17 DATE	JN PRN	GD PM	TA DES	TA DRW

DETAILS
MURPHY EXPRESS
4615 CITY CENTRE ROAD
FIRESTONE COLORADO

GreenbergFarrow
1430 W. PEACHTREE ST. NW SUITE 200
ATLANTA, GA 30309
PHONE: (404) 601 4000
FAX: (404) 601 4020
DWG NAME: FIRESTONE.DWG
JOB NO.: 20160074

MURPHY OIL USA, INC.
200 PEACH STREET
EL DORADO, AR 71730

4301923 Pages: 16 of 25
05/15/2017 09:05 AM R Fee:$253.00
Carly Koppes, Clerk and Recorder, Weld County, CO

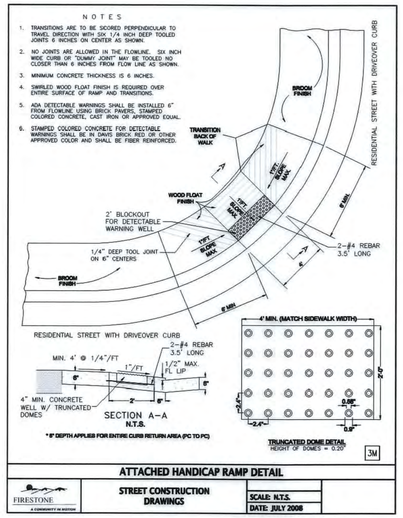
FINAL DEVELOPMENT PLAN

MURPHY EXPRESS AT FIRESTONE CITY CENTRE

LOT 2 FIRESTONE CITY CENTRE SUBDIVISION FILING NO.4
TOWN OF FIRESTONE, WELD COUNTY, STATE OF COLORADO
CIVIL DETAILS
SHEET 16 OF 25

NOTES

1. TRANSITIONS ARE TO BE SCORED PERPENDICULAR TO TRAVEL DIRECTION WITH A ¼ INCH DEEP TOOLED JOINTS 6 INCHES ON CENTER AS SHOWN.
2. NO JOINTS ARE ALLOWED IN THE FLOWLINE. SIX INCH WIDE CURB OR "GUTTER JOINT" MAY BE TOOLED NO CLOSER THAN 6 INCHES FROM FLOW LINE AS SHOWN.
3. MINIMUM CONCRETE THICKNESS IS 6 INCHES.
4. SWIRLED WOOD FLOAT FINISH IS REQUIRED OVER ENTIRE SURFACE OF RAMP AND TRANSITIONS.
5. ADA DETECTABLE WARNINGS SHALL BE INSTALLED 6" FROM FLOWLINE USING BRICK PAVERS, STAMPED COLORED CONCRETE, CAST IRON OR APPROVED EQUAL.
6. STAMPED COLORED CONCRETE FOR DETECTABLE WARNINGS SHALL BE IN DAVIS BRICK RED OR OTHER APPROVED COLOR AND SHALL BE FIBER REINFORCED.



ATTACHED HANDICAP RAMP DETAIL

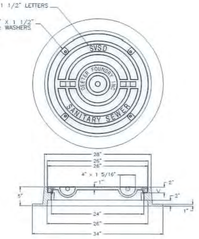
FIRESTONE	STREET CONSTRUCTION DRAWINGS	SCALE: N.T.S.	DATE: JULY 2008

3M

ST. VRAIN SANITATION DISTRICT APPENDIX B GENERAL CONSTRUCTION NOTES REVISED 2015

1. District shall refer to the St. Vrain Sanitation District in these notes.
2. District's acceptance of these plans is valid for one year.
3. All materials and construction shall conform to the District standards.
4. Contractor to verify locations and elevations of existing utilities prior to commencing any construction.
5. The contractor shall notify the District a minimum of 48 hours and a maximum of 96 hours prior to starting consnstruction or prior to resuming construction after a break.
6. Sanitary sewer shall be polyvinyl chloride (PVC) pipe, ASTM D3034-SDR35 or as indicated on the plans.
7. All concrete shall be minimum 4000 psi at 28 day strength.
8. Maintain a minimum of 10 feet horizontal separation outside diameter to outside diameter between water lines and all sewer lines and manholes.
9. All sewer mains crossing water mains with less than 18 inches of separation shall be encased in concrete.
10. Rim elevations shown are approximate and should not be taken as final. All manholes shall be final adjusted after paving such that the rim is ¼ to ½ inch below finished asphalt. Manholes in unpaved areas shall be set so that the rim is 0.5' above finished grade.
11. Invert data shall be collected by a licensed surveyor on each pipe invert in a manhole. Center of manhole surveying is not acceptable for slope calculations. Record drawings (asbuilts) must demostrate conformance to District standards.
12. The contractor shall have a set of approved plans on site at all times. The contractor shall be responsible for recording actual record drawing dimensions and distances as well as service locations on these plans and submitting them to the engineer for preparation of record drawings. These drawings shall be kept current at all times.
13. Before any construction commences, a plug shall be installed to prevent drainage through the new sewer line from entering the existing sewer line. This plug will be installed in the manhole, which connects new work with the existing and not be removed until initial acceptance.
14. Underdrains, if installed, are the responsibility of the developer. District assumes no liability for any portion of or any damage caused by underdrains. Absolutely no part of an underdrain system, including clean outs, will be allowed inside of sanitary sewer manholes. All underdrains shall be installed below the sanitary sewer and offset to the side. Pipe material shall be different color than sanitary sewer.
15. No service laterals smaller than 8 inch in diameter shall enter manholes.
16. Service crossings of curb shall be marked with a cut "S" in curb face. Paint is not acceptable. Service shall be extended into the lot a minimum of 10 feet.
17. Contractor shall mark the end of all sewer services with a 2" x 4" board with minimum of four (4) feet above grade, painted green.
18. All pipes shall have squeegie (CDOT #6 bedding) unless otherwise shown or the District may approve an alternate bedding in special cases.
19. Cut off walls will be installed 10' down stream of each manhole where the Subdivision line connects to the existing sanitary sewer main line.
20. The warranty bond shall be in the amount of $5,000.00 or 15% of the total cost of the sewer, whichever is greater.
21. Prior to approval, all sanitary sewer pipes shall be pressure-tested per ASTM C924. All manholes shall be vacuum-tested per UNI-B-98.
22. Prior to removal of plugs at manholes, pipe shall be jet-cleaned and vacuumed to remove debris and videoed. Notice shall be given to the District Inspector one (1) week prior to cleaning. Inspector must be present during the operation. Once approval has been given by Inspector, plugs may only be removed after initial acceptance by the District.
23. The final recorded plat and recorded address plat shall be provided to the District for initial acceptance.
24. Twenty (20) months after construction and prior to the expiration of warranty, the developer shall camera/video the sanitary sewer lines and provide a DVD to the District for review.

ST. VRAIN SANITATION DISTRICT BOLT-DOWN MANHOLE RING AND COVER

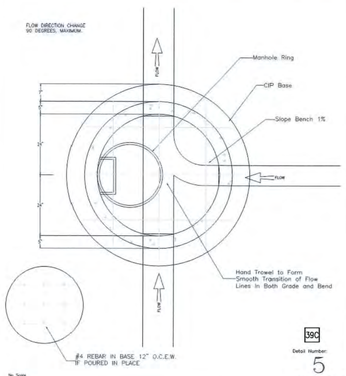


NOTES:

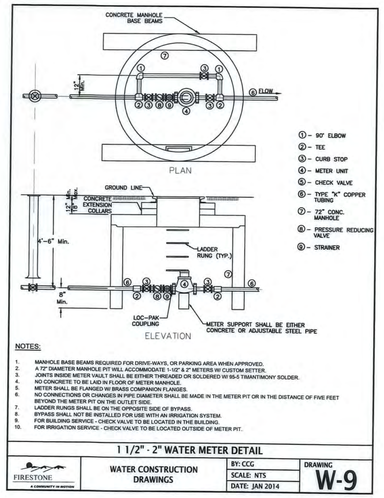
1. RING AND COVER SHALL BE IRON (AS MANUFACTURED FOR CURRENT AWWA STANDARD)
2. SANITARY SEWER MANHOLE COVERS SHALL BE NONPERFORATED WITH "SVSD SANITARY SEWER" FORGED ON THE TOP OF THE LID AS SHOWN ABOVE.
3. COVER SHALL BE BOLTED, WATER-RESISTANT IF LOCATED IN 100 YEAR FLOOD PLAIN, BACK YARDS, OPEN SPACE AND/OR DITCHES.
4. ALL MANHOLES SHALL BE EQUIVALENT TO DEETER MODEL NUMBER 1156 OR D & L FOUNDRY MODEL A-1480.
5. MANHOLE LID AND RING SHALL BE FURNISHED WITH MACHINED HORIZONTAL BEARING SURFACES.
6. COVER IS BOLTED TO FRAME.
7. MANHOLE LID AND RING SHALL BE FURNISHED WITH GASKET.

Detail Number 3
REVISED: 3/2015

ST. VRAIN SANITATION DISTRICT MANHOLE BASE USED FOR TIE-IN SITUATIONS



39C
Detail Number 5
REVISED: 3/2015



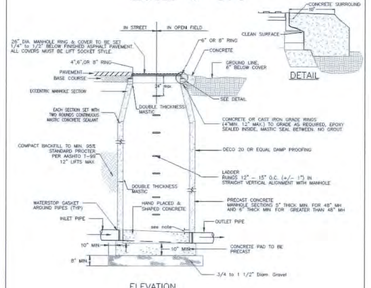
NOTES:

1. MANHOLE BASE BEAMS REQUIRED FOR DRIVE-WAYS, OR PARKING AREA WHEN APPROVED.
2. A 72" DIAMETER MANHOLE PIT WILL ACCOMMODATE 1 1/2" & 2" METERS W/ CUSTOM SETTER.
3. JOINTS INSIDE METER VAULT SHALL BE EITHER THREADED OR SOLDERED W/ 95-5 TIN/ANTIMONY SOLDER.
4. NO CONCRETE TO BE LAID IN FLOOR OF METER MANHOLE.
5. METER SHALL BE FLANGED W/ BRASS COMPANION FLANGES.
6. NO CONNECTIONS OR CHANGES IN PIPE DIAMETER SHALL BE MADE IN THE METER PIT OR IN THE DISTANCE OF FIVE FEET BEYOND THE METER PIT ON THE OUTLET SIDE.
7. LADDER RUNGS SHALL BE ON THE OPPOSITE SIDE OF BYPASS.
8. BYPASS SHALL NOT BE INSTALLED FOR USE WITH AN IRRIGATION SYSTEM.
9. FOR BUILDING SERVICE - CHECK VALVE TO BE LOCATED IN THE BUILDING.
10. FOR IRRIGATION SERVICE - CHECK VALVE TO BE LOCATED OUTSIDE OF METER PIT.

1 1/2" - 2" WATER METER DETAIL

FIRESTONE	WATER CONSTRUCTION DRAWINGS	BY: CCG	SCALE: NTS	DATE: JAN 2014	DRAWING W-9

ST. VRAIN SANITATION DISTRICT MONITORING MANHOLE ASTM C-478



NOTE:

1. MANHOLES SHALL BE SEALED WATERTIGHT. NO GROUT ALLOWED EXCEPT AT PIPE PENETRATIONS. MANHOLE EXTERIORS SHALL BE DAMP-PROOFED.
2. DROP THROUGH MANHOLE TO BE EQUAL TO SLOPE OF SURROUNDING PIPE. FOR FLUME INSTALLATIONS, FLUME MUST BE SET LEVEL.
3. MONITORING MANHOLE TO BE LOCATED OUTSIDE OF PUBLIC RIGHT-OF-WAY, ON DISCHARGER'S PROPERTY. THE MANHOLE MUST BE SAFELY AND INDEPENDENTLY ACCESSIBLE FOR DISTRICT USE AT ALL TIMES.
4. FOR MANHOLE DEPTHS LESS THAN FOUR (4) FEET FROM that TO TOP OF BENCH, VERTICAL MANHOLE BARRELS OR MINIMUM 30-INCH BY 30-INCH PRECAST BOX WITH PRECAST FLAT TOP SECTIONS ARE REQUIRED.
5. DESIGN AND LOCATION OF MONITORING MANHOLE SUBJECT TO DISTRICT APPROVAL.

39B
Detail Number 15
REVISED: 3/2015

ST. VRAIN SANITATION DISTRICT MONITORING MANHOLE DETAIL TOP VIEW DIAGRAMS

CORRECT INSTALLATION
NO SCALE/PICTORIAL ONLY

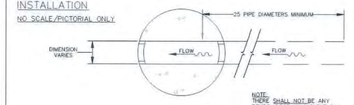
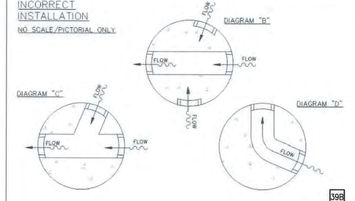


DIAGRAM "A"

NOTE: THERE SHALL NOT BE ANY BENDS, DROP MANHOLE FLOW JUNCTIONS, CHANGES IN PIPE DIAMETER, ETC., WITHIN 25 PIPE DIAMETERS UPSTREAM OR DOWNSTREAM OF THE MANHOLE

INCORRECT INSTALLATION
NO SCALE/PICTORIAL ONLY

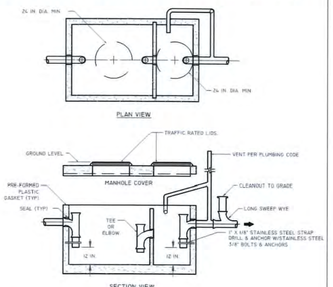


NOTES:
DIAGRAM "A" IS COMPATIBLE FOR THE INSTALLATION OF A FLOWMETER OR FLUME IN THE INVERT.

DIAGRAMS "B", "C", "D" ARE NOT SUITABLE FOR THE INSTALLATION OF A FLOW MEASURING DEVICE DUE TO THE LOCATION OF THE SIDE SEWERS OR A BEND IN THE INVERT CHANNEL.

39B
Detail Number 16
REVISED: 3/2015

ST. VRAIN SANITATION DISTRICT TYPICAL GREASE INTERCEPTOR



NOTES:

1. SECONDARY OUTLET COMPARTMENT HAS VOLUME EQUAL TO 1/3 OF TOTAL CAPACITY
2. CHECK WITH SUPPLIER FOR EXACT DIMENSIONS
3. INTERCEPTORS TO BE SIZED BY DESIGN ENGINEER, SUBJECT TO DISTRICT APPROVAL
4. GREASE INTERCEPTORS SHALL BE LOCATED ON PRIVATE PROPERTY AND SHALL BE EASILY ACCESSIBLE AT ALL TIMES FOR MAINTENANCE AND INSPECTION.
5. INLET AND OUTLET SHALL HAVE SANITARY TEES. CENTER BAFFLE MAY HAVE TEE OR ELBOW.
6. INTERIOR PIPING TO BE SCHEDULE 40 PVC WITH STAINLESS STRAP. ANCHORING STRAP TO PIPE & TO WALL

39C
Detail Number 22
REVISED: 3/2015

GENERAL METER NOTES

1. LOCATION OF THE METER TO BE ESTABLISHED BY THE DEVELOPMENT ENGINEER.
2. ALL SETTINGS MUST BE INSPECTED BY THE RESIDENT PROJECT REPRESENTATIVE.
3. IF THE STREET OR GROUND IS NOT TO OFFICIAL GRADE AT THE TIME OF INSTALLATION OF THE METER, THE OWNER MUST RAISE OR LOWER THE METER VAULT WHEN THE FINAL GRADE IS ESTABLISHED.
4. LEADED JOINTS AND GALVANIZED PIPING SHALL NOT BE ALLOWED INSIDE THE METER VAULTS.
5. A BYPASS IS TO BE INSTALLED ON 1-1/2" AND LARGER METERS UNLESS OTHERWISE SPECIFIED.
6. THE SERVICE LINE THROUGH AND ON BOTH SIDES OF THE METER PIT MUST BE OF THE SAME MATERIAL.
7. NO CONNECTIONS SHALL BE MADE IN THE METER PIT. SPRINKLER CONNECTIONS MUST BE MADE MORE THAN FIVE (5) FEET FROM THE METER PIT ON THE DOWNSTREAM SIDE.
8. GATE VALVES:
   A. ALL GATE VALVES UNDER 3" FOR USE W/COPPER PIPE SHALL BE ALL BRONZE, W/ NON-RISING STEMS AND SOLID WEDGE DISC, MANUFACTURED IN ACCORDANCE WITH A.S.T.M. SPEC. B62 AND FEDERAL SPEC. W.W.-V-54 CLASS A, 125PSI W.S.P., 200PSI W.O.G. OR CURB STOPS IN ACCORDANCE WITH AWWA C800 AND MS-23 OF THE MATERIAL SPECIFICATIONS.
   B. ALL GATE VALVES 3" AND LARGER SHALL CONFORM WITH THE TOWN OF FIRESTONE'S STANDARD SPECIFICATIONS.
9. ALL DRESSER (OR APPROVED EQUAL) COUPLINGS SHALL HAVE THE PIPE STOP REMOVED.

WATERMETER NOTES

FIRESTONE	WATER CONSTRUCTION DRAWINGS	BY: CCG	SCALE: NTS	DATE: JAN 2014	DRAWING W-10

MURPHY EXPRESS AT FIRESTONE CITY CENTRE	
CIVIL DETAILS	
NAME OF APPLICATION:	MURPHY OIL USA
TYPE OF SUBMITTAL :	FINAL DEVELOPMENT PLAN
FILING NUMBER:	
PHASE NUMBER:	
PREPARATION DATE:	10-20-2016
REVISION DATE:	12-20-2016
REVISION DATE:	02-07-2017
REVISION DATE:	03-15-2017
REVISION DATE:	04-04-2017
REVISION DATE:	

SHEET 16 OF 25

SHEET NO. FDP-16

COLORADO LICENSED
TIMOTHY M. NOONAN
41391
04/05/17

REV-6	04-04-17	JN	GD	TA	TA
	DATE	PRN	PM	DES	DRW

CIVIL DETAILS
MURPHY EXPRESS
4615 CITY CENTRE ROAD
FIRESTONE COLORADO

GreenbergFarrow
1430 W. PEACHTREE ST. NW, SUITE 200
ATLANTA, GA 30309
PHONE: (404) 601 4000
FAX: (404) 601 3970
DWG NAME: FIRESTONE.CO
JOB NO.: 20160074

MURPHY OIL USA, INC.
200 PEACH STREET
EL DORADO, AR 71730

4301923 Pages: 17 of 25
05/15/2017 09:05 AM R Fee:$253.00
Carly Koppes, Clerk and Recorder, Weld County, CO

GENERAL NOTES

DESIGN AND CODE INFORMATION

1. THE STRUCTURE HAS BEEN DESIGNED ACCORDING TO THE FOLLOWING BUILDING CODES: INTERNATIONAL BUILDING CODE–2012 EDITION. IN CONJUNCTION WITH ASCE 7–10 AND STATE OF COLORADO AMENDMENTS.
2. ALL CONSTRUCTION SHALL CONFORM TO THE APPLICABLE BUILDING CODE AND LOCAL AMMENDMENTS/REQUIREMENTS.
3. VERIFY EXISTING CONDITIONS AND DIMENSIONS AND NOTIFY ENGINEER OF ANY CONDITIONS WHICH DO NOT COMPLY WITH PLANS. STRUCTURAL DRAWINGS MUST BE COORDINATED WITH CIVIL DRAWINGS BY THE CONTRACTOR.
4. IT IS THE CONTRACTOR'S SOLE REPONSIBILTY TO FOLLOW ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION.
5. WHERE A DETAIL, TYPICAL DETAIL, SECTION, TYPICAL SECTION OR A NOTE IS SHOWN FOR ONE CONDITION, IT SHALL APPLY FOR ALL LIKE OR SIMILAR CONDITIONS UNLESS OTHERWISE NOTED.
6. UNLESS NOTED, ELEVATIONS SHOWN ARE FROM TOP OF FOUNDATIONS TO TOP OF WALL.
7. ALL REQUIRED TESTING REPORTS SHALL BE AVAILABLE AT THE JOB SITE.

FOUNDATION NOTES

1. THE FOUNDATION DESIGN CRITERIA ARE BASED ON PROJECT NO. 2016.5727.01 TITLED "REPORT OF GEOTECHNICAL EXPLORATION" PREPARED BY UNITED CONSULTING DATED SEPTEMBER 12, 2016

2. RETAINING WALLS
   - A. RETAINING WALL DESIGN SOIL PARAMETERS
     - A.1. UNIT WEIGHT OF BACKFILL (SOIL DENSITY) = 115 PCF
     - A.2. ACTIVE EARTH PRESSURE = 40 PSF
     - A.3. AT–REST EARTH PRESSURE = 60 PSF
     - A.4. PASSIVE EARTH PRESSURE = 360 PSF
     - A.5. COEFFICIENT OF BASE SLIDING (CONC. ON SOIL)= 0.36
     - A.6. ALLOWABLE BEARING PRESSURE UNDER TOE OF THE RETAINING WALL FOOTING = 3000 PSF ALL DESIGN PARAMETERS & TOTAL GLOBAL STABILITY OF THE RETAINING WALL SHALL BE VERIFIED BY A QUALIFIED GEOTECHNICAL ENGINEER. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REPORT ADVERSE CONDITIONS
   - B. THE SITE SHALL BE PREPARED IN ACCORDANCE WITH CIVIL DRAWINGS.
   - C. WHERE FILL IS REQUIRED IT SHALL BE PLACED IN ACCORDANCE WITH THE CRITERIA LISTED IN 3.8 AND UNDER THE SUPERVISION OF A QUALIFIED GEOTECHNICAL ENGINEER.
   - D. ALL EXCAVATION SHALL BE INSPECTED BY A QUALIFIED GEOTECHNICAL ENGINEER TO VERIFY THE DESIGN CRITERIA AND REPORT ADVERSE CONDITIONS. (GEOTECHNICAL ENGINEER TO BE HIRED AND PAID BY CONTRACTOR) IN CASE OF CONFLICT BETWEEN THE GEOTECHNICAL REPORT, SPECIFICATIONS AND DRAWINGS, THE MORE STRINGENT REQUIREMENT SHALL APPLY.
   - E. FOUNDATION ELEVATIONS GIVEN ARE FOR PURPOSE OF CONTRACT AND SHALL BE ADJUSTED (LOWERED) AT TIME OF EXCAVATION TO MEET SOIL CONDITIONS. ENGINEER SHOULD BE CONSULTED.
   - F. THE CONTRACTOR SHALL BRING TO THE ATTENTION OF THE ENGINEER THE LOCATION OF EXISTING AND FUTURE UTILITIES AND PROCEED WITH THE WORK ONLY AFTER WRITTEN APPROVAL FROM THE ENGINEER.
   - G. SITE PREPARATION SHALL BE CONSISTENT WITH THESE RECOMMENDATIONS:

     IF, AFTER EXCAVATION, THE CONDITION OF SOIL INDICATES A SAFE BEARING CAPACITY OF LESS THAN 3000 PSF, THE STRUCTURAL ENGINEER OF RECORD SHALL BE NOTIFIED AND THE FOOTINGS REVISED IF NECESSARY.

     THE BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE 3'–0" MINIMUM BELOW FINISHED GRADE.

     BACKFILL PLACED AGAINST THE WALL SHALL BE GRANULAR FREE FLOWING FILL PLACED AT 1 SF/FT VOLUME.

     DESIGN ASSUMES THAT A FUNCTIONAL DRAINAGE SYSTEM WILL BE INSTALLED TO PREVENT THE ACCIDENTAL BUILDUP OF HYDROSTATIC PRESSURE AND LATERAL STRESSES IN EXCESS.

REINFORCED CONCRETE

1. ALL CONCRETE WORK SHALL CONFORM TO THE "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE", (ACI 318–11). UNLESS NOTED, CONCRETE SHALL BE NORMAL WEIGHT, 4000 PSI @ 28 DAYS WITH MAXIMUM WATER– CEMENTITIOUS MATERIALS RATIO OF 0.45.
2. LAP SPLICES FOR REINFORCING BARS SHALL BE CLASS B IN ACCORDANCE WITH ACI 318–11, UNLESS NOTED OTHERWISE.
3. CLEAR CONCRETE COVER FOR REINFORCING STEEL:
   - CONCRETE WALLS: 2" (U.N.O.)
   - FOOTINGS: 2" FORMED EDGES
     3" CAST AGAINST GROUND
4. THE LONGITUDINAL REINFORCING STEEL IN WALLS AND FOOTINGS SHALL BE CONTINUOUS AROUND CORNERS. SEE TYPICAL DETAILS.
5. MECHANICAL VIBRATORS SHALL BE USED TO VIBRATE ALL CONCRETE.
6. RESULTS OF CONCRETE CYLINDER TESTS SHALL BE AVAILABLE ON SITE FOR REVIEW BY INSPECTOR, AS REQUIRED BY LOCAL JURISTICTION.
7. THE CONTRACTOR SHALL BRING TO THE ATTENTION OF THE ENGINEER THE LOCATION OF EXISTING AND FUTURE UTILITIES AND PROCEED WITH THE WORK ONLY AFTER WRITTEN APPROVAL FROM THE ENGINEER.

REINFORCING STEEL:

1. REINFORCING STEEL SHALL CONFORM TO ASTM A–615, GRADE 60 (U.N.) AND GRADE 40 FOR #3 AND SMALLER BARS. MINIMUM LAP 60–DIAMETER (U.N.). GRADE 60 REINFORCING MAY NOT BE RE–BENT OR FIELD BENT WITHOUT APPROVAL OF THE STRUCTURAL ENGINEER
2. SPLICES IN REINFORCING BARS SHALL BE NOT LESS THAN 48 BAR DIAMETER AND REINFORCEMENT SHALL BE CONTINUOUS AROUND ALL CORNERS AND CHANGES IN DIRECTION. CONTINUITY SHALL BE PROVIDED AT CORNERS OF CHANGES IN DIRECTION BY BENDING THE LONGITUDINAL STEEL AROUND THE CORNER 48 BAR DIAMETERS OR BY ADDING MATCHING REINFORCING STEEL, WHICH SHALL EXTEND 48 BAR DIAMETERS FROM EACH CORNER OR CHANGE IN DIRECTION. WHEN THREE OR MORE BARS ARE REQUIRED, THE BARS SHALL BE HELD IN PLACE AND ALIGNED BY TRANSVERSE BARS SPACED NOT MORE THAN 4 FEET APART.
3. MINIMUM LAP SPLICE AND TENSION DEVELOPMENT DIMENSION TABLE 3000 PSI NORMAL WEIGHT CONCRETE, Fy = GRADE 60, NON–COATED BARS, LAP CLASS B, CASE 2

	TOP BARS			OTHER BARS	
BAR	SPLICE	DEVELOPMENT	BAR	SPLICE	DEVELOPMENT
#3	42"	32"	#3	32"	25"
#4	56"	43"	#4	43"	33"
#5	70"	54"	#5	54"	41"
#6	84"	64"	#6	64"	50"
#7	122"	94"	#7	94"	72"
#8	139"	107"	#8	107"	82"
#9	157"	121"	#9	121"	93"
#10	177"	136"	#10	136"	105"

MISCELLANEOUS:

1. THESE GENERAL NOTES SUPPLEMENT THE PROJECT SPECIFICATIONS. REFER TO PROJECT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
2. STRUCTURAL DRAWINGS ARE INTENDED TO BE USED WITH CIVIL DRAWINGS. CONTRACTOR IS RESPONSIBLE FOR COORDINATING SUCH REQUIREMENTS INTO THEIR SHOP DRAWINGS AND CONSTRUCTION.
3. NO OPENINGS SHALL BE MADE IN ANY STRUCTURAL MEMBER WITHOUT THE WRITTEN APPROVAL OF THE PROFESSIONAL OF RECORD.
4. NO CHANGE IN SIZE, MATERIAL OR DIMENSION OF STRUCTURAL MEMBERS SHALL BE MADE WITHOUT THE WRITTEN APPROVAL OF THE PROFESSIONAL OF RECORD.
5. THE STRUCTURE SHOWN ON THESE DRAWINGS IS STRUCTURALLY SOUND ONLY IN ITS COMPLETED FORM. THE CONTRACTOR IS RESPONSIBLE FOR FURNISHING ALL TEMPORARY BRACING AND/OR SUPPORT THAT MAY BE REQUIRED AS THE RESULT OF THE CONTRACTOR'S CONSTRUCTION METHODS AND/OR SEQUENCES. THE CONTRACTOR SHALL HIRE AND PAY A PROFESSIONAL STRUCTURAL ENGINEER REGISTERED IN THE STATE OF VIRGINIA TO DESIGN AND INSPECT ALL TEMPORARY SHORING AND BRACING IF REQUIRED.
6. DO NOT SCALE THESE DRAWINGS, USE DIMENSIONS.
7. CONTRACTOR'S CONSTRUCTION AND/OR ERECTION SEQUENCES SHALL RECOGNIZE AND CONSIDER THE EFFECTS OF THERMAL MOVEMENTS OF STRUCTURAL ELEMENTS DURING THE CONSTRUCTION PERIOD.
8. THE CONTRACTOR SHALL INFORM THE PROFESSIONAL OF RECORD IN WRITING OF ANY DEVIATION FROM THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL NOT BE RELIEVED OF THE RESPONSIBILITY OF SUCH DEVIATION BY THE PROFESSIONAL OF RECORD REVIEW OF SHOP DRAWINGS, PRODUCT DATA, ETC., UNLESS THE CONTRACTOR HAS SPECIFICALLY INFORMED THE PROFESSIONAL OF RECORD OF SUCH DEVIATION AT THE TIME OF SUBMISSION, AND THE PROFESSIONAL OF RECORD HAS GIVEN WRITTEN APPROVAL TO THE SPECIFIC DEVIATION.
9. CONNECTIONS OF ALL ITEMS SUPPORTED BY THE STRUCTURE ARE THE RESPONSIBILITY OF THE DISCIPLINES WHO ARE MAKING THESE ATTACHMENTS. THESE ATTACHMENTS SHALL BE DESIGNED TO RESIST ALL GRAVITY, WIND, WIND UPLIFT, THERMAL LOADS, ETC.
10. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS

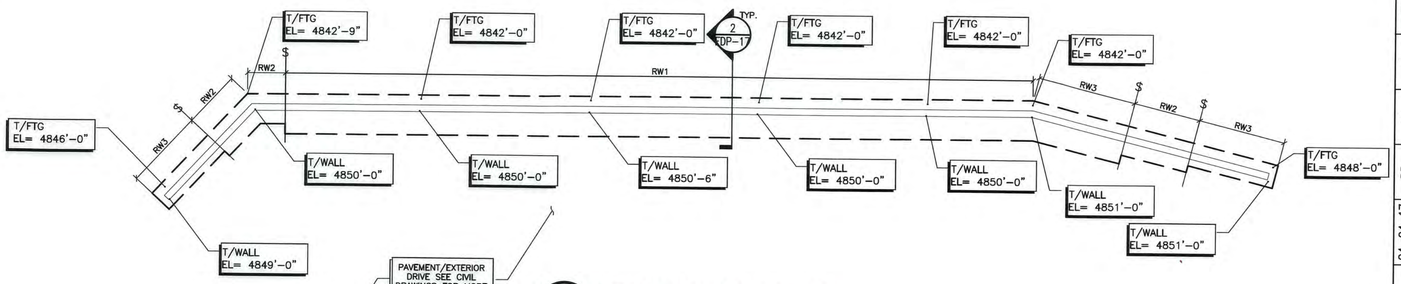
SPECIAL INSPECTIONS

- A. SPECIAL INSPECTOR (SI) SHALL BE RETAINED AND PAID BY THE OWNER AND PROVIDE INSPECTIONS DURING CONSTRUCTION ON THE TYPES OF WORK LISTED UNDER SECTION 1704 OF THE CODE.
- B. THE SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE, TO THE SATISFACTION OF THE BUILDING OFFICIAL, FOR INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION.
- C. THE DUTIES OF THE SPECIAL INSPECTOR SHALL INCLUDE, BUT ARE NOT LIMITED TO, VERIFICATION OF CONSTRUCTION QUALITY CONTROL, TESTING, COMPLIANCE WITH THE CONSTRUCTION DOCUMENTS, BUILDING CODE REQUIREMENTS, AND LOCAL BUILDING DEPARTMENT REQUIREMENTS.
- D. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE PROPER NOTIFICATION TO THE SPECIAL INSPECTOR AND PROCEED WITH THE CONSTRUCTION ONLY AFTER THE SPECIAL INSPECTOR'S APPROVAL.
- E. DUTIES AND RESPONSIBILITIES OF THE SPECIAL INSPECTOR:
  1. THE SPECIAL INSPECTOR SHALL OBSERVE THE WORK ASSIGNED FOR CONFORMANCE WITH THE APPROVED DESIGN DRAWINGS AND SPECIFICATIONS. THE INSPECTOR MAY NOT ALTER, MODIFY, ENLARGE OR WAIVE ANY OF THE REQUIREMENTS OF THE DOCUMENTS.
  2. SPECIAL INSPECTORS SHALL KEEP RECORDS OF INSPECTIONS. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE CONSTRUCTION OFFICIAL, AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE, THE CONTRACTOR AND THE OWNER. REPORTS SHALL INDICATE THAT WORK INSPECTED WAS DONE IN CONFORMANCE TO APPROVED CONSTRUCTION DOCUMENTS. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR AND THE OWNER FOR CORRECTION, IF THE DISCREPANCIES ARE NOT CORRECTED, THE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE BUILDING OFFICIAL AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE AND THE OWNER PRIOR TO THE COMPLETION OF THAT PHASE OF THE WORK.
  3. A FINAL REPORT OF INSPECTIONS DOCUMENTING REQUIRED SPECIAL INSPECTIONS AND CORRECTION OF ANY DISCREPANCIES NOTED IN THE INSPECTIONS SHALL BE SUBMITTED PERIODICALLY AT A FREQUENCY AGREED UPON BY THE PERMIT APPLICANT AND THE BUILDING OFFICIAL PRIOR TO THE START OF WORK.
- F. WHERE SPECIAL INSPECTION REQUIREMENTS DUPLICATE THE REQUIREMENTS OF SPECIFIED QUALITY ASSURANCE TESTING, DUPLICATE INSPECTIONS SHALL NOT BE REQUIRED.

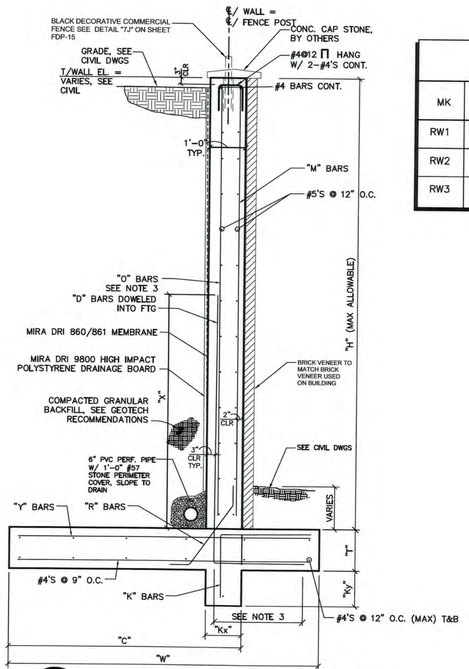
FINAL DEVELOPMENT PLAN

MURPHY EXPRESS AT FIRESTONE CITY CENTRE

LOT 2 FIRESTONE CITY CENTRE SUBDIVISION FILING NO.4
TOWN OF FIRESTONE, WELD COUNTY, STATE OF COLORADO
SITE RETAINING WALL
SHEET 17 OF 25



1 FDP–17 **RETAINING WALL PLAN** SCALE: 3/32" = 1'–0"

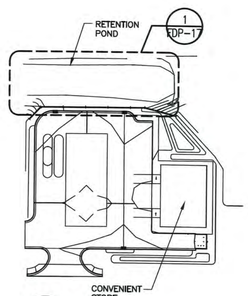


2 FDP–17 **SITE RETAINING WALL (H<7')** SCALE: 1/2" = 1'–0"

WALL SCHEDULE													
MK	H	T	C	W	"D" DOWELS	X	"O" BARS	"M" BARS	"Y" BARS	"R" BARS	Ky	Kx	"K" BARS
RW1	10 FT	1'–0"	4'–6"	6'–0"	#6 @ 9	4'–6"	#6 @ 18	#4 @ 18	#5 @ 9	#6 @ 9	1'–0"	1'–0"	#5 @ 12
RW2	7 FT	1'–0"	3'–6"	4'–6"	#5 @ 12	3'–6"	#5 @ 18	#4 @ 18	#5 @ 12	#5 @ 12	0'–6"	1'–0"	#5 @ 12
RW3	5 FT	1'–0"	2'–6"	3'–6"	#5 @ 12	2'–6"	#5 @ 18	#4 @ 18	#4 @ 12	#4 @ 12	0'–0"	0'–0"	N/A

3 FDP–17 **SITE RETAINING WALL SCHED.** SCALE: 1/2" = 1'–0"

NOTES
1. FOR WALL LOCATION SEE CIVIL & ARCHITECTURAL DRAWINGS.
2. RETAINING WALL FOUNDATION DESIGNED FOR ALLOWABLE SOIL BEARING PRESSURE 3000 PSF (GROSS–TO BE VERIFIED BY CONTRACTOR). GEOTECHNICAL ENGINEER SHALL VERIFY ALLOWABLE SOIL BEARING PRESSURE PRIOR TO CONSTRUCTION.
3. CONTRACTOR SHALL COORDINATE TOP OF FOOTING ELEVATIONS WITH GRADING PLAN PRIOR TO BEGINNING CONSTRUCTION.
4. REFER TO 4/FDP–18 FOR TYPICAL BAR BEND GUIDELINES.
5. "O" DOWELS TO BE BENT @ 90 DEGREES INTO THE FTG AND TO EXTEND MAX ALLOWABLE DISTANCE INTO FTG WHILE MAINTAINING MINIMUM COVER REQUIREMENTS. "O" BARS SHOULD BEGIN AT THE BOTTOM OF STEM & EXTEND FULL HEIGHT OF THE RETAINING WALL. THEY SHOULD BE LAPPED WITH "D" DOWELS AS SPACING PERMITS.
6. MAXIMUM SPACING OF WALL CONTROL JOINTS: 25'–0", SEE DETAIL 4/FDP–18
7. MAXIMUM SPACING OF WALL EXPANSION JOINTS: 50'–0", SEE DETAIL 2/FDP–18
8. FOR FOOTING WALL STEP SEE 3/FDP–18
9. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS SHOWING THE FOLLOWING
   - 9.1. PLAN SHOWING THE WALL LOCATION, HEIGHT, STEPS, CONTROL & EXPANSION JOINTS
   - 9.2. ALL REINFORCING



KEY PLAN SCALE: N.T.S

MURPHY EXPRESS AT FIRESTONE CITY CENTRE	
SITE RETAINING WALL	
NAME OF APPLICATION:	MURPHY OIL USA
TYPE OF SUBMITTAL :	FINAL DEVELOPMENT PLAN
FILING NUMBER:	
PHASE NUMBER:	
PREPARATION DATE:	10-20-2016
REVISION DATE:	12-20-2016
REVISION DATE:	02-07-2017
REVISION DATE:	03-15-2017
REVISION DATE:	04-04-2017
REVISION DATE:	
	SHEET 17 OF 25

SHEET NO. FDP-17

COLORADO LICENSED PROFESSIONAL ENGINEER 52055 JOHN M. JOHNSTON

REV–6	04–04–17	BB	LC	JM	LC
	DATE	PRN	PM	DES	DRW

SITE RETAINING WALL
MURPHY EXPRESS
FIRESTONE BLVD. & CITY CENTRE ROAD
FIRESTONE COLORADO

GreenbergFarrow
1430 W. PEACHTREE ST. NW SUITE 200
ATLANTA, GA 30309
PHONE: (404) 601 4000
FAX: (404) 601 3970
DWG MANAGER: STEVE.SIMS@GFARROW.CO
JOB NO.: 20160074

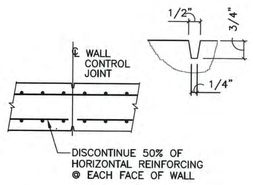
MURPHY OIL USA, INC.
200 PEACH STREET
EL DORADO, AR 71730

4301923 Pages: 18 of 25
05/15/2017 09:05 AM R Fee:$253.00
Carly Koppes, Clerk and Recorder, Weld County, CO

FINAL DEVELOPMENT PLAN

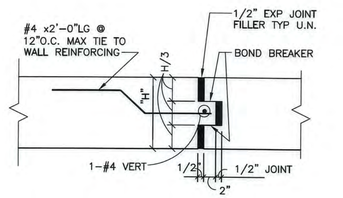
MURPHY EXPRESS AT FIRESTONE CITY CENTRE

LOT 2 FIRESTONE CITY CENTRE SUBDIVISION FILING NO.4
TOWN OF FIRESTONE, WELD COUNTY, STATE OF COLORADO
RETAINING WALL DETAILS
SHEET 18 OF 25



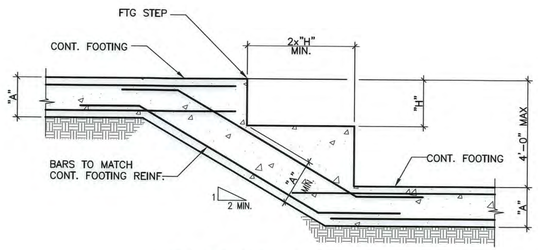
NOTES:
1. MAXIMUM JOINT SPACING = 25'-0".
2. DO NOT LAP HORIZONTAL BARS AT WALL CONTROL JOINT.

1 FDP-18 **TYP CONCRETE WALL CONTROL JOINT DETAIL**
SCALE: NONE



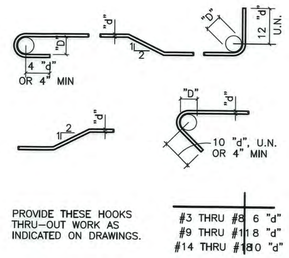
1. MAXIMUM SPACING OF EXPANSION JOINTS = 100'-0"
2. EXPANSION JOINT FILLER SHALL BE PREMOLDED ASPHALT MATERIAL MEETING ASTM D1751 & GLUED TO FIRST POUR.

2 FDP-18 **TYP CONCRETE WALLS EXPANSION JOINT**
SCALE: NONE



NOTE: STEP LOCATIONS PER SHEET RW1

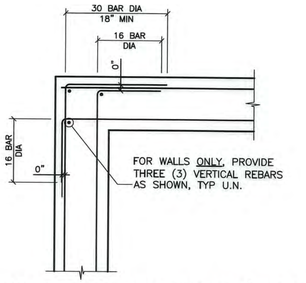
3 FDP-18 **TYPICAL STEPPED FOOTING**
SCALE: NONE



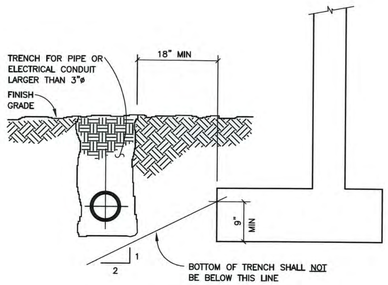
PROVIDE THESE HOOKS THRU-OUT WORK AS INDICATED ON DRAWINGS.

#3 THRU #8	6 "d"
#9 THRU #11	8 "d"
#14 THRU #18	10 "d"

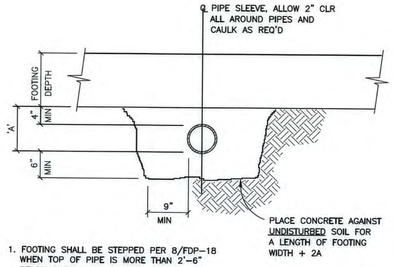
4 FDP-18 **TYPICAL REINFORCING BAR ENDS DETAIL**
SCALE: NONE



5 FDP-18 **CORNER/CONC WALLS/FTGS W/ REINF @ EACH FACE**
SCALE: NONE



6 FDP-18 **TYP SECTION W/PIPES PARALLEL TO FOOTING**
SCALE: 3/4" = 1'-0"



1. FOOTING SHALL BE STEPPED PER 8/FDP-18 WHEN TOP OF PIPE IS MORE THAN 2'-6" BELOW BOTTOM OF FOOTING.
2. WHERE PIPE PENETRATES THE FOOTING VERTICALLY, ALLOW 2" CLEARANCE ALL AROUND AND CAULK AS REQ'D.

7 FDP-18 **TYP SECTION W/PIPES PERPENDICULAR TO FTG**
SCALE: 3/4" = 1'-0"

MURPHY EXPRESS AT FIRESTONE CITY CENTRE	
RETAINING WALL DETAILS	
NAME OF APPLICATION:	MURPHY OIL USA
TYPE OF SUBMITTAL :	FINAL DEVELOPMENT PLAN
FILING NUMBER:	
PHASE NUMBER:	
PREPARATION DATE:	10-20-2016
REVISION DATE:	12-20-2016
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REVISION DATE:	03-15-2017
REVISION DATE:	04-04-2017
REVISION DATE:	
SHEET 18 OF 25	

SHEET NO. FDP-18

COLORADO LICENSED PROFESSIONAL ENGINEER 52055 STEVEN B. WITUN

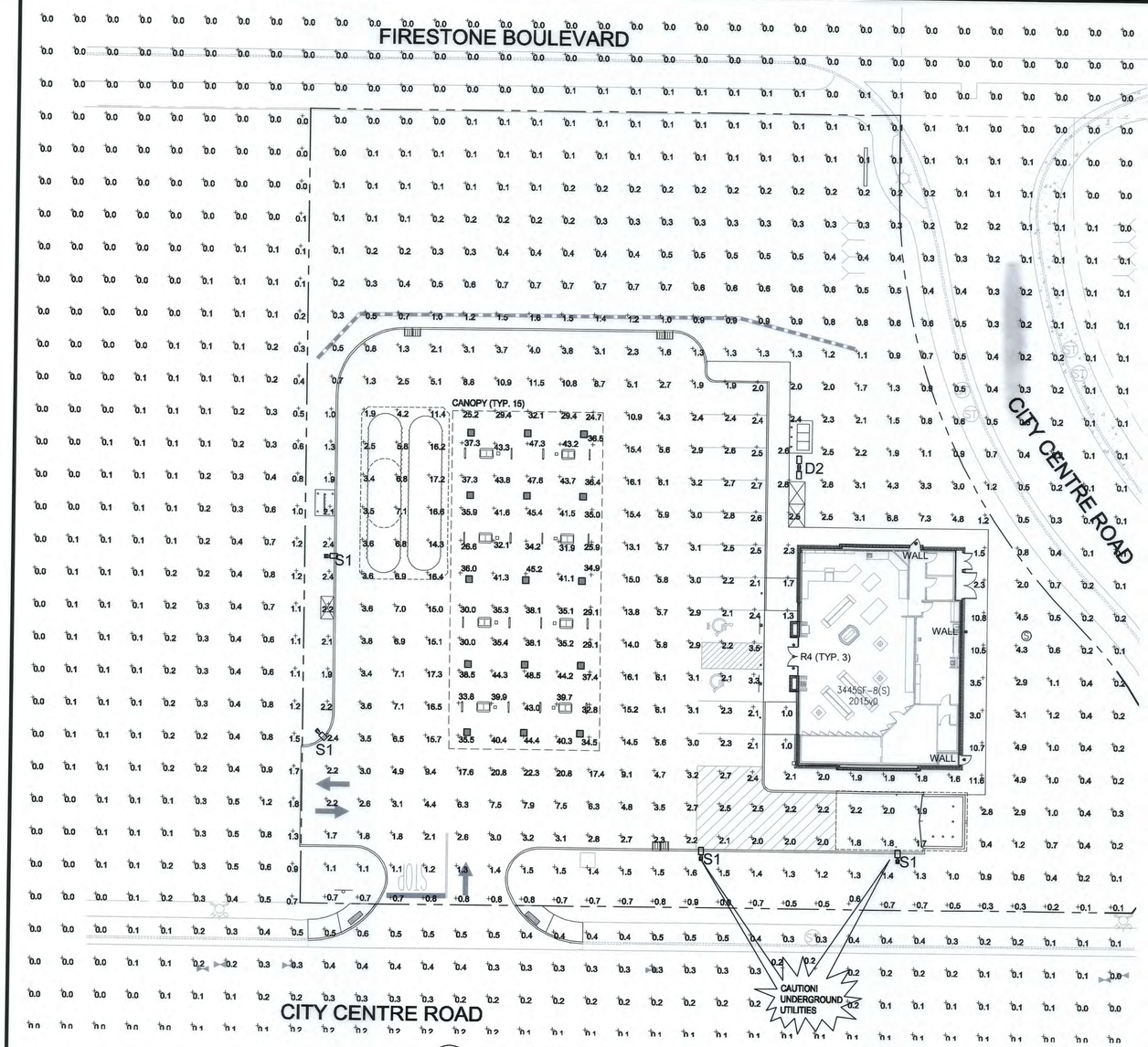
REV-6	04-04-17	BB	LC	JM	LC
	DATE	PRN	PM	DES	DRW

RETAINING WALL DETAILS
MURPHY EXPRESS
FIRESTONE BLVD. & CITY CENTRE ROAD
FIRESTONE COLORADO

GreenbergFarrow
1430 W. PEACHTREE ST. NW SUITE 200
ATLANTA, GA 30309
PHONE: (404) 601 4000
FAX: (404) 601 3570
DWG NAME: FIRESTONE-SECO
JOB NO.: 20160074

MURPHY OIL USA, INC.
200 PEACH STREET
EL DORADO, AR 71730
MURPHY USA

4301923 Pages: 19 of 25
05/15/2017 09:05 AM R Fee:$253.00
Carly Koppes, Clerk and Recorder, Weld County, CO



1 PHOTOMETRIC SITE PLAN
SCALE: 1"=20'-0"

FINAL DEVELOPMENT PLAN

MURPHY EXPRESS AT FIRESTONE CITY CENTRE

LOT 2 FIRESTONE CITY CENTRE SUBDIVISION FILING NO.4
TOWN OF FIRESTONE, WELD COUNTY, STATE OF COLORADO

PHOTOMETRIC SITE PLAN
SHEET 19 OF 25

CALCULATION SUMMARY

LABEL	UNITS	AVG	MAX	MIN
CANOPY	FC	37.06	48.5	24.7
PROPERTY LINE	FC	6.57	48.5	0.0

NOTES:

PLAN WAS BASED ON THE INFORMATION PROVIDED. ALL DIMENSIONS, LUMINAIRE LOCATIONS SHOWN REPRESENT RECOMMENDED POSITIONS. THE ENGINEER AND/OR ARCHITECT MUST DETERMINE APPLICABILITY OF THE LAYOUT TO EXISTING OR FUTURE FIELD CONDITIONS.

THE STUDY IS BASED ON REQUESTED ILLUMINATION LEVELS, LUMINAIRE LOCATIONS, OR ADDITIONAL CRITERIA BY THE AUTHORITIES HAVING JURISDICTION.

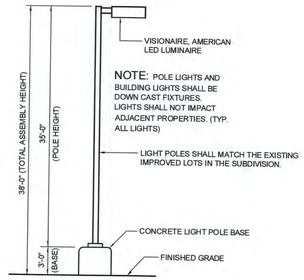
THE CALCULATED PHOTOMETRIC LEVELS MAY OR MAY NOT MEET CERTAIN STANDARDS OR RECOMMENDED PRACTICES OF IESNA.

THE PHOTOMETRIC PLAN REPRESENTS ILLUMINATION LEVELS CALCULATED FROM LABORATORY DATA TAKEN UNDER CONTROLLED CONDITIONS UTILIZING CURRENT INDUSTRY STANDARD LAMP RATINGS IN ACCORDANCE WITH ILLUMINATING ENGINEERING SOCIETY (IES) APPROVED METHODS. LABORATORY TESTS ARE MADE UNDER OPTIMUM CONDITION, WITH LAMP OUTPUT AT RATED VALUE, AND IN ACCORDANCE WITH ILLUMINATING ENGINEERING SOCIETY APPROVED METHODS.

ACTUAL ILLUMINANCE LEVELS MAY DIFFER DUE TO VARIABLE FIELD CONDITIONS SUCH AS (BUT NOT LIMITED TO): VARIANCE IN LAMP LUMEN OUTPUT; LAMP TILT FACTOR; BALLAST WATTAGE OUTPUT; LINE VOLTAGE AT BALLAST; REFLECTOR SPECULARITY; LAMP LUMEN DEPRECIATION; AND LUMINAIRE DIRT DEPRECIATION.

THE 38'-0" MOUNTING HEIGHT IS THE ACTUAL ASSEMBLY (POLE, BASE, AND FIXTURE) AND MAY DIFFER FROM THE FROM THE LUMINAIRE'S LUMINOUS APERTURE.

THIS PLAN IS FOR RELATIVE LAYOUT AND SCOPE OF WORK PURPOSES ONLY. REFER TO SITE PLAN PREPARED BY LOCAL CONSULTANT FOR RELATIONSHIP OF THESE LUMINAIRES AND THEIR LOCATIONS TO EXISTING STRUCTURES AND REFERENCE.



2 AREA LIGHT DETAIL
SCALE: NOT TO SCALE

POLE SCHEDULE

MOUNTING CONFIG	SYMBOL	QTY	POLE HEIGHT	MODEL NUMBER	DESCRIPTION
S		4	18'-0"	RTSP-35-11-BK	VISIONAIRE LIGHTING, ROUND TAPERED STEEL POLE, BOLT-ON ARM MOUNT, BLACK
D2		1	18'-0"	RTSP-35-11-BK	VISIONAIRE LIGHTING, ROUND TAPERED STEEL POLE, BOLT-ON ARM MOUNT, BLACK

NOTES: ALL LIGHT POLES SHALL MATCH THE EXISTING IMPROVED LOTS IN THE SUBDIVISION IN COLOR AND TYPE

CONTRACTOR TO ENSURE THE LIGHT POLE AND HANDICAP PARKING SIGN ARE AT LEAST 2' FROM THE BACK OF CURB TO PREVENT VEHICLES FROM STRIKING THE LIGHT POLE OR HANDICAP PARKING SIGN. ENGINEER TO VERIFY PROPOSED LOCATIONS FOR ANY CONFLICTS OR MISPLACEMENTS. REPORT TO LIGHTING DESIGNER ANY DISCREPANCIES OR CONFLICTS

LUMINAIRE SCHEDULE

MOUNTING CONFIG	SYMBOL	QTY	ASSEMBLY HEIGHT	POLE HEIGHT	LUMENS (PER HEAD)	TOTAL WATTS	MODEL NUMBER	DESCRIPTION
S1		4	20'-0"	18'-0"	9740	120	AME-2-L-T4-72LC-5-VOLT-4K-BOA6-BK	VISIONAIRE LIGHTING, AMERICAN SERIES LED LUMINAIRE, TYPE IV DISTRIBUTION, 530 mA DRIVER, 4000K, SINGLE HEAD FLAT LENS FIXTURE, WITH 6" BOLT-ON ARM
D2		1	20'-0"	18'-0"	19480	240	AME-2-L-T4-72LC-5-VOLT-4K-BOA6-BK	VISIONAIRE LIGHTING, AMERICAN SERIES LED LUMINAIRE, TYPE IV DISTRIBUTION, 530 mA DRIVER, 4000K, DOUBLE HEAD FLAT LENS FIXTURE, WITH 6" BOLT-ON ARM
CANOPY		15	15'-0"	N/A	18633	140	CRU-SC-LED-HO-50-UE	LSI LIGHTING, LEGACY SERIES, FLAT LENS CANOPY FIXTURE
WALL*		3	8'-0"	N/A	6159	72	XPWS3-FT-LED-48-450-CW-UE-BRZ	LSI LIGHTING, PATRIOT WALL LED SCONCE, 48 DIODE, 450 mA DRIVER, COOL WHITE BRONZE, WITH BATTERY BACK-UP
R4*		3	15'-0"	N/A	2692	44	RA6LNC-630K12D2-CST6322L2-WHT	INDY-JUNO LIGHTING, 6" SOFFIT LED LIGHT, 3000K

NOTES: G.C. TO VERIFY COLOR OF POLES AND FIXTURES, ANY VOLTAGE, AND POLE TYPE (ROUND VS. STRAIGHT) BEFORE ORDERING ANY EQUIPMENT
ALL ANCHOR BOLTS TO BE ORIENTED IN THE SAME DIRECTION (SQUARE) AT INSTALLATION PER MANUFACTURER'S SPECIFICATIONS.
ALL FIXTURES ARE FULL CUT-OFF FIXTURES
* PART OF BUILDING LUMINAIRE PACKAGE. REFER TO SHEET E104 FOR MORE INFORMATION

REFER TO SHEET L1.1 FOR MANUFACTURER SPECIFICATION SHEETS

MURPHY EXPRESS AT FIRESTONE CITY CENTRE	
PHOTOMETRIC SITE PLAN	
NAME OF APPLICATION:	MURPHY OIL USA
TYPE OF SUBMITTAL :	FINAL DEVELOPMENT PLAN
FILING NUMBER:	
PHASE NUMBER:	
PREPARATION DATE:	10-20-2016
REVISION DATE:	12-20-2016
REVISION DATE:	02-07-2017
REVISION DATE:	03-15-2017
REVISION DATE:	04-04-2017
REVISION DATE:	
	SHEET 19 OF 25

No.	REVISION	DES. BY	DRAWN BY	DATE
1	REVISE PER COMMENTS	JMG	JMG	12/21/2016

Galloway
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MURPHY EXPRESS

MURPHY EXPRESS
FIRESTONE, COLORADO

Project No:	MOC9538
Sheet Scale:	1"=20'-0"
Designed By:	JMG
Drawn By:	JMG
Date:	October, 2016
Disk File:	C:\01 Photometric Site Plan-Firestone, CO

PHOTOMETRIC SITE PLAN

FDP-19

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05/15/2017 09:05 AM R Fee:$253.00
Carly Koppes, Clerk and Recorder, Weld County, CO

FINAL DEVELOPMENT PLAN

MURPHY EXPRESS AT FIRESTONE CITY CENTRE

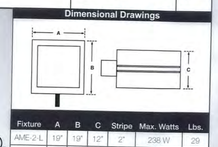
LOT 2 FIRESTONE CITY CENTRE SUBDIVISION FILING NO.4
TOWN OF FIRESTONE, WELD COUNTY, STATE OF COLORADO
PHOTOMETRIC DETAIL
SHEET 20 OF 25

American LED

Project Name: | Catalog Number: | Type:

Dimensional Drawings





Fixture	A	B	C	Stripe	Max. Watts	Lbs.
AME-2-L	19"	19"	12"	2"	238 W	29
AME-4-L	23"	23"	15"	2"	373 W	66

AREA

The new American LED Luminaire from Visionaire combines contemporary design with new LED technology; while maintaining a traditional fixture image. The LEDs Performance and Life are maximized by the unique integral aluminum heat sink built into the door frame. Maintenance of the drivers is simplified by making them easily accessible and provided with quick wiring connections.

72, 144 or 224 LEDs are available in 350 or 530 mA rating providing up to 33,000 lumens. Six optical distribution patterns are available and feature a unique Type T-4A automotive pattern for the front row of auto dealerships. Choose between 4000 or 5000 Kelvin temperature of the LEDs.

A durable Polyester powder coat finish is guaranteed for five years; and is available in standard or custom colors.

The American LED series is an exceptional choice for auto dealerships, shopping centers, commercial parking lots and general parking area lighting.

Model	Optics	Source	Current	Kelvin	Voltage	Mounting	Finish	Options
AME-2-L	Type II (T2)	# of LEDs: 72 (72LC)	mA: 350 (3)	4000K *Standard (4K)	120-277 *Universal Voltage (UNIV)	Bolt-On Arm 6" (BOA6)	Bronze (BZ)	Photocell & Receptacle *Specify voltage (PCR120) (PCR208) (PCR240) (PCR277)
	Type III (T3)			500K *Cool white (5K)		Bolt-On Arm 10" (BOA10)	Black (BK)	Photo Receptacle (PER) *With mounting nut
	Type IV (T4)	144 (144LC)	530 (5)			Knuckle Mount (KM)	Smooth Black (SBK)	Button Type Photocell *Specify voltage (PC120) (PC208) (PC277)
	Type IV-A (T4A)					Wall Mount *Use internal supplied hardware (WM)	White (WH)	
AME-4-L	Type V (T5)	224 (224LC)				Spider Mount Fits 2 3/8" O.D. (SM)	Smooth White (SWH)	House Side Light Shield (LS)
	Type V-W (T5W)					Round Pole Plate Adaptor For 4"OD Pole (RPA) For 5"OD Pole (RPP5)	Graphite (GP)	0-10v Dimming Driver *Not available with (DIM)
							Grey (GY)	Motion Sensor (MS) *Pole Mount Only
							Silver Metallic (SL)	Wireless Controls Simplicity *Factory (WS)
							Custom Color (CC)	

For more detailed information on mounting, wiring or installation instructions, please consult factory. If poles are not ordered with fixtures, please specify mounting requirements. This document contains proprietary information of Visionaire Lighting, LLC. We will not release information required for further approval of Visionaire Lighting, LLC. In keeping with our 75/5 policy of continuous improvement, Visionaire reserves the right to change any specifications contained herein without prior notice.

VISIONAIRE LIGHTING — Performance for A Whole New Light™

10

American LED

Housing
- All housings are manufactured using advanced computerized numerical control (CNC) machinery. Precision sheared and formed from one-piece, corrosion-resistant aluminum, with footed external reveal.
- The computerized CNC machinery enables all American housings to be constructed quickly, efficiently and adhering to exacting ISO 9002 standards. All external hardware is stainless steel.

Door Assembly
- Removable hinged door assembly is CNC precision, sheared and formed from one-piece, corrosion-resistant aluminum with captive stainless steel fastener The LEDs and drivers are mounted to an aluminum heat sink that is attached to the door frame.

Optical System
- The LED light assemblies come with up to 224 LEDs. Six IES distribution patterns are offered as standard; with a unique Type 4 Automotive optic available for Dealerships. The optical system qualifies as IES full cutoff; to restrict light trespass, glare, and light pollution.

Quali-Guard® Finish
- The finish is Quali-Guard® textured, chemically pretreated through a multiple-stage washer, electrostatically applied, thermoset polyester powder coat finish, with a minimum of 3-5 millimeter thickness. Finish is oven-baked at 400°F to promote maximum adherence and finish hardness. All finishes are available in standard and custom colors

Mounting
- A rounded extruded aluminum, Bolt-On Arm (BOA), with an in-pole nut plate, securing (2) ½ inch zinc running bolts with stainless steel hardware is standard. A Round Pole Plate Adaptor (RPP) is required for mounting to 3" - 5" round poles.

Electrical Assembly
- The American LED Series is supplied with a choice of 350 or 530 mA high-performance LED drivers that accept 120 v thru 480v, 50 Hz to 60 Hz, input. Power factor of 90%. Rated for -40°C operations.
- 10 kV surge protector supplied as standard.

Warranty
- Five (5) year Limited Warranty on entire system, including finish. For full warranty information, visit www.visionairelighting.com

Options
- Photocell & Receptacle
- Photo receptacle
- Button type photocell
- House side light shield
- Round pole plate adaptor
- Dimming Driver
- Motion Sensor
- Wireless Controls

Please consult factory for custom options.

Listings
- American is ETL listed, suitable for wet locations
- IP65 Rated
- LM79 and LM80.
- EISA compliant.
- RoHS compliant
- Powder Coated Tough.™

IP65 LISTED — lighting facts

*rating/Life Collection (LLC) qualified Product. Some configurations of the product family may not be Designed to Collection (DLC) Only values refer to the DLC qualified configurations. Visit www.designlights.org

American LED LUMEN DATA

# of LEDs	Kelvin	mA	Type 2	B	U	G	Type 3	B	U	G	Type 4A	B	U	G	Type 5W	B	U	G	Watts
72	5000	350	9,410	2	0	2	7,495	2	0	2	8,401	2	0	2	8,069	3	0	1	80
		530	11,863	3	0	3	10,507	3	0	2	11,786	2	0	2	11,321	3	0	1	120
144	5000	350	18,453	3	0	3	14,513	3	0	3	16,283	3	0	3	15,656	2	0	1	160
		530	21,913	3	0	3	19,966	3	0	3	21,724	3	0	3	20,870	2	0	2	235
224	5000	350	24,134	3	0	3	22443	3	0	3	24480	3	0	3	24322	2	0	2	265
		530	30862	4	0	4	29083	3	0	3	33486	3	0	3	33652	2	0	2	377

Visit www.visionairelighting.com for up-to-the-minute chart information, including fuse and ballast data. *For 4000K multiply values by 0.90

EPA Data

Fixture with Arm							
AME-2	2.2	4.0	4.4	6.0	5.1	7.1	2.6
AME-4	3.4	6.2	6.8	9.2	7.8	10.9	3.9

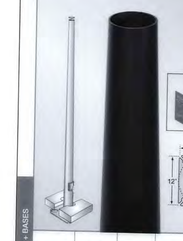
Visionaire Lighting, LLC 19640 Rancho Vista Place Diamond Bar, CA 91765 Tel: (213) 612-6480 Fax: (213) 612-6480 www.visionairelighting.com

11

MANUFACTURER SPECIFICATION SHEET FOR SITE FIXTURES 'S1' & 'D2'

RTSP

Project Name: | Catalog Number: | Type:



Specifications

Round Tapered Steel Pole

Pole Shaft
- Fabricated from coil stock, weldable grade, hot rolled commercial quality structural steel tube which has a wall thickness of 11 gauge or 7 gauge. Shaft conforms to ASTM specifications. Meets or exceeds minimum yield strength of 55,000 PSI. Shaft is furnished with ground lug inside pole, opposite hand hole opening.

Base Plate
- Fabricated from structural quality hot rolled steel. Meets or exceeds minimum yield strength of 36,000 PSI. Base is circumferentially welded to pole shaft. Bolt holes slotted to provide 1" flexibility on either side of bolt circle. Consult factory for pole base templates.
- Base templates provided with order. Do not pre-pour.

Base Cover
- Standard base cover is square and fabricated from heavy gauge quality aluminum. Two piece cover for easy installation.

Pole Cap
- Color-impregnated polymer snap-to-close pole cap provided in black.

Finish
- All poles are lightly shot-blasted prior to painting. A Quali-Guard® textured thermoset polyester powder coat is then applied to a minimum of 3 millimeters and then oven-baked at a temperature of 400 °F to promote exceptional adherence and finish hardness. Pole finish is warranted for a full two (2) years.

Anchor Bolts
- Poles are provided with hot-dip galvanized anchor bolts, with a "J" bend on one end and two flat hex bolts end and two flat washers per bolt. Anchor bolts meet or exceed a minimum of 36,000 PSI. Anchor bolts conform to ASTM F1554 grade 36 and are provided.

Model	Height	Gauge	Base	Anchorage	Mounting	Finish	Options
RTSP	20'	11 (11)	12" Base *Min. 8in (12BC)	1" × 36" (136)	Bolt-On Arm Single (S1)	Bronze (BZ)	GFI Receptacle *Standard duplex, in hand hole (GFI)
	25'	7 (7)			D180 Double (D2)	Black (BK)	
	30'		Custom Base *Contact factory (CB)		D90 Double (D9)	White (WH)	Coupling *Specify size and finish (CUP)
	35'				Tennis T90 Single (T)	Tennis Green (GN)	Custom Bolt Circle *Contact factory (CBC)
	39'				T120 Single (T1)	Forest Green (FG)	Round Base Cover (RBC)
					Quad (QD)	Grey (GY)	Rust-Inhibiting Internal Coating & Primer (HCR)
					Tenon Options 2⅜" (T238R) 3" (T3R) 3½" (T3.5R) 4" (T4R) 4½" (T4.5R)	Silver Metallic (SL)	Single Banner Arm (SBA)
						Custom Color (CC)	Double Banner Arms (DBA)
						Galvanized *No paint (GAL)	
						Powder Over Galvanized (XK+GAL)	

For more detailed information on mounting, wiring or installation instructions, please consult factory. If poles are not ordered with fixtures, please specify mounting requirements. This document contains proprietary information of Visionaire Lighting, LLC. We will not release information required for further approval of Visionaire Lighting, LLC. In keeping with our 75/5 policy of continuous improvement, Visionaire reserves the right to change any specifications contained herein without prior notice.

VISIONAIRE LIGHTING — Performance for A Whole New Light™

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POLES + BASES

RTSP

Pole EPA for Round Tapered Steel Poles

Maximum Allowable EPA (ft²) with 1.3 gust factor

Pole Height	90 mph	100 mph	110 mph	120 mph	130 mph	140 mph	150 mph	160 mph	170 mph	Base Diameter	Pole Gauge	Bolt Circle	Anchor Bolt Size	Pole Weight
20'	33.6	15.8	14.5	13.7	13.3	11.0	9.1	7.6	6.3	6½"	11	12½"	1" × 36"	144
25'	32.2	25.2	23.2	26.0	20.9	17.7	14.8	12.7	10.8	6½"	7	12½"	1" × 36"	192
25'	29.3	15.3	13.9	14.4	11.0	8.9	7.1	5.6	4.3	7½"	11	12½"	1" × 36"	209
25'	32.7	25.3	23.2	23.4	18.6	15.2	12.7	10.5	8.7	7½"	7	12½"	1" × 36"	284
30'	16.3	11.7	10.4	11.9	8.8	6.7	5.0	3.6	2.4	7½"	11	12½"	1" × 36"	295
30'	31.3	23.9	21.6	20.5	16.0	12.8	10.3	8.3	6.8	7½"	7	12½"	1" × 36"	374
35'	14.8	10.2	8.9	10.0	6.9	4.7	3.0	1.7	N/A	8½"	11	12½"	1" × 36"	315
35'	30.6	22.5	20.4	18.5	14.3	11.2	8.7	6.9	4.6	8½"	7	12½"	1" × 36"	420
39'	15.5	10.4	9.0	8.7	5.7	3.6	1.8	N/A	N/A	9½"	11	12½"	1" × 36"	359
39'	32.2	24.0	21.7	17.5	13.2	10.0	7.4	5.2	3.4	9½"	7	12½"	1" × 36"	510

2 × 4 BOA Drill Pattern



*Radiused Pole Plate (RPP) Adaptor required for mounting for round poles.

2 × 6 BOA Drill Pattern



*Radiused Pole Plate (RPP) Adaptor required for mounting for round poles.

19640 Rancho Vista Place Diamond Bar, CA 91765 Tel: (213) 612-6480 Fax: (213) 612-6480 www.visionairelighting.com

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MANUFACTURER SPECIFICATION SHEET FOR SITE POLES 'S1' & 'D2'

LED CANOPY LIGHT - LEGACY™ (CRUS)

SS & SW1 - patents pending.



AC distribution utilizes a reflector which alters the look from a standard S distribution

DOE LIGHTING FACTS
Department of Energy has verified representative product test data and results in accordance with its Lighting Facts Program. Visit www.lightingfacts.com for specific catalog strings.

HOUSING - Low profile, durable die-cast, aluminum construction, providing a reliable weather-tight seal.

LEDS - Features an array of select, mid-power, high brightness, high efficiency LED chips; 5000K color temperature, 70 CRI (nominal).

DRIVE CURRENT - Choice of Very Low Wattage (VLW), Low Wattage (LW), Super Saver (SS), High Output (HO) or Very High Output (VHO).

OPTICS / DISTRIBUTION - Choice of Symmetrical or Asymmetrical, which directs light through a clear tempered glass lens, to provide a uniform distribution of light to vertical and horizontal surfaces.

OPTICAL UNIT - Features an ultra-slim 7/8" profile die-cast housing, with a flat glass lens. Unit is water-resistant, sealed to an IP67 rating. Integral designed heat sink does not trap dirt and grime, ensuring cool running performance over the life of the fixture.

PRESSURE SEALING VENT - Luminaire assembly incorporates a pressure stabilizing vent breather to prevent seal fatigue and failure.

HAZARDOUS LOCATION - Designed for lighter than air applications. Product is suitable for Class 1 Division 2 only when properly installed per LSI installation instructions (consult factory).

DRIVER - State-of-the-art driver technology superior energy efficiency and optimum light output. Driver components are fully encased in potting for moisture resistance. Complies with IEC and FCC standards. 0-10 V dimming supplied standard with all drive currents.

DRIVER HOUSING - Die-cast aluminum, wet location rated driver/electrical enclosure is elevated above canopy deck to prevent water entry; provide easy "knock-out" connection of primary wiring and contributes to attaining the lowest operating temperatures available. Seals to optical housing via one-piece molded silicone gasket.

OPERATING TEMPERATURE – -40°C to 50°C (-40°F to +122°F)

ELECTRICAL - Universal voltage power supply, 109-277 VAC, 50/60 HZ input. Drivers feature two-stage surge protection (including separate surge protection built into electronic driver) meets IEEE C62.41.2-2002, Scenario 1, Location Category C.

FINISH - Standard color is white and is finished with LSI's DuraGrip® polyester powder coat process. DuraGrip withstands extreme weather changes without cracking or peeling.

INSTALLATION - One person installation. No additional sealant required. Installs in a 12" or 16" deck pan. Deck penetration consists of a 4" hole, simplifying installation and water sealing. Unit is designed to quickly retrofit into existing Scottsdale (4") hole as well as openings for Encore and Encore Top Access and to reconnect wiring for the SQUECTA without having to relocate the conduit. Retro panels are available for existing Encores (see back page) as well as kits for recessed and 2x2 installations (see separate spec sheets). Support brackets are provided standard, to prevent sagging of deck.

SHIPPING WEIGHT - 27 pounds (single pack), 48 pounds (double pack).

EXPECTED LIFE - Minimum 60,000 to 100,000 hours depending upon the ambient temperature of the installation location. See LSI web site for specific guidance.

WARRANTY - Limited 5-year warranty.

LISTING - UL and ETL listed to UL 1598, UL 8750 and other U.S. and International safety standards. Suitable for wet locations.

PHOTOMETRICS - Please visit our web site at **www.lsi-industries.com** for detailed photometric data.

Consult Factory

Class 1, Division 2 – Standard on SS & LW.

T5 Temperature Classification – The surface temperature of this product will not rise above 100°C., within a 40°C ambient.

Gas Groups A,B,C, and D – Group A: Acetylene / Group B: Hydrogen / Group C: Propane and Ethylene / Group D: Benzene, Butane, Methane & Propane.

This product, or selected versions of this product, meet the standards listed below. Please consult factory for your specific requirements.

RoHS COMPLIANT — cULus Listed wet location — IP67 — CE — cULus Listed wet location — DLC

Project Name _____ Fixture Type _____ 04/29/16
Catalog # _____ © 2016 LSI INDUSTRIES INC.

LED CANOPY LIGHT - LEGACY™ (CRUS)

LUMINAIRE ORDERING INFORMATION

TYPICAL ORDER EXAMPLE: **CRUS SC LED HO 50 UE WHT**

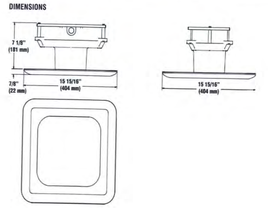
Prefix	Distribution[1]	Light Source	Drive Current	Color Temperature	Input Voltage	Finish	Options
CRUS	SC - Standard Symmetric AC - Asymmetric	LED	VLW - Very Low Watt LW - Low Watt SS - Super Saver HO - High Output VHO - Very High Output	50 - 5000K	UE - Universal Voltage (120-277V) 347 - 480V	WHT - White BRZ - Bronze BLK - Black	None

FOOTNOTES:
1- AC distribution utilizes a reflector which alters the look from a standard S distribution

ACCESSORY ORDERING INFORMATION (Accessories are field installed)

Description	Order Number	Description	Order Number
Retrofit Panels - EC / ECTA / SCF for CRU, for 16" Deck Panel	529484	Kit - Hole Plugs and Silicone (enough for 25 retrofits)*	1328540
Retrofit Panels - ECTA / SCF for CRU, for 12" Deck Panel	530291	*- Consists of (25) 7/8" hole plugs and (1) 10.3 oz tube of RTV	
Retrofit 2x2 Cover Plate (no holes)	357987		
Retrofit RC Cover Panel Blank (no holes)	354797		

DIMENSIONS



LIGHT OUTPUT - CRUS

		Lumens		Watts		LPW	
		SC	AC	SC	AC	SC	AC
Cool White	VLW - Very Low Watt	6842	-	79		112	
	LW - Low Watt	10671	8746	88	83	124	105
	SS - Super Saver	13554	11518	114	111	119	104
	HO - High Output	18633	-	132	-	141	-
	VHO - Very High Output	22418	17262	159	157	141	110

Project Name _____ Fixture Type _____ 04/29/16
Catalog # _____ © 2016 LSI INDUSTRIES INC.

MANUFACTURER SPECIFICATION SHEET FOR CANOPY FIXTURE

LED PATRIOT® WALL SCONCE (XPWS3)



US patent 7820456, 8082420 and CAN 2726757 & 2726757 and MX patent 296321 and ISRL 49679 and AUS 2008315668 and US & Int'l. patents pending

SMARTTEC™ +LSI drivers feature integral sensor which reduces drive current, when ambient temperatures exceed rated temperature

ENERGY SAVING CONTROL OPTIONS – DIM- 0-10 volt dimming enabled with controls by others.

OPTIONAL INTEGRAL MOTION SENSOR - Passive infrared motion sensor activates switching of luminaire light levels. High level light is activated when passersby enter target zone and increased to full bright in 1-2 seconds. Low light level (30% of maximum drive current) is activated when target zone is absent of motion activity for 5 minutes and is gradually ramped down (10 seconds) to low level. Sensor detection range 110° horizontal x 93° vertical x 10 meters maximum distance.

EXPECTED LIFE - Minimum 60,000 hours to 100,000 hours depending upon the ambient temperature of the installation location. See LSI web site for specific guidance.

LEDS - Available with 28 or 48 select high-brightness LEDs in Cool White (5000K) or Neutral White (4000K) color temperature, 70 CRI.

OPTICS/DISTRIBUTIONS - Ultra-high efficiency reflectors provide three distributions. Choose from Wide Throw (WT), Forward Throw (FT) or Wall Wash (WW).

HOUSING - One-piece die-cast aluminum housing is smoothly contoured rectangular shape. Mounting hardware is stainless steel or electro-zinc plated steel. Housing and optical unit are sealed with extruded silicone gasket; supply conductors with molded EPDM bushing.

OPTICAL UNIT - Clear tempered optical-grade flat glass lens sealed to the aluminum optic housing creates an IP65 rated unit. Pressure stabilizing breather silicone super-tight protection while preventing cycling from building up internal pressures and vacuums that can stress optical unit seals.

WALL MOUNTING - Galvanized-steel universal wall mounting plate easily mounts directly to 4" octagonal or square junction box. EPDM gasket is supplied to be installed between mounting plate and junction box, sealing junction box from entrance of water. Universal plate permits fixture to be mounted in uplighting (indoor only) or downlighting position.

POLE MOUNTING - XPMA (for square) or XPMAR (for round) allows mounting to poles in single and D180 configurations. Use with 3" reduced drilling pattern.

ELECTRICAL - Two-stage surge protection (including separate surge protection built into electronic driver) meets IEEE C62.41.2-2002. Location Category C. Available with universal voltage power supply 120-277VAC (50/60Hz input) or 347-480VAC.

DRIVER - Available in 350mA and 450mA drive currents (Drive currents are factory programmed). Components are fully encased in potting material for IP65 moisture resistance. Driver complies with IEC and FCC standards. Driver can be easily accessed.

EMERGENCY OPTIONS - Optional integral emergency battery-back-up options are available. BB option operates in 0°C to 60°C ambient temperature and DWBB operates in -20°C to 60°C ambient temperature. When primary AC power failure occurs, both options operate 10 LEDs for minimum of 90 minutes.

OPERATING TEMPERATURE - -40°C to +50°C (-40°F to +122°F)

FINISH - Fixtures are finished with LSI's DuraGrip® polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling.

WARRANTY - LSI LED fixtures carry a limited 5-year warranty.

PHOTOMETRICS – Please visit our web site at www.lsi-industries.com for detailed photometric data.

SHIPPING WEIGHT (in carton) - 30 lbs./13.6Kg

LISTING - ETL listed to ANSI/UL1598, UL8750 and other U.S. and international safety standards. Suitable for wet locations in downlight position. Optional Class 1 Division 2 (groups A, B, C &D) hazardous location rating is available (Select HL option). For a list of the specific products in this series that are DLC listed, please consult the LED Lighting section of our website or the Design Lights website at www.designlights.org.

DOE LIGHTING FACTS
Department of Energy has verified representative product test data and results in accordance with its Lighting Facts Program. Visit www.lightingfacts.com for specific catalog strings.

LIGHT OUTPUT - XPWS3

		Distributions/Lumens (Nominal)			
	Wattages # of LEDs	Type FT	Type WT	Type WW	Watts
Cool White (5000K) 350 mA	28	3100	3000	3200	34
	48	5100	5100	5200	55
450 mA	28	3700	3600	3900	44
	48	6200	6100	6300	72
Neutral White (4000K) 350 mA	28	2900	2900	3100	34
	48	4900	4900	4900	55
450 mA	28	3500	3500	3700	44
	48	5800	5700	5800	72

LED Chips are frequently updated therefore values may increase.

Also available in traditional light sources

This product, or selected versions of this product, meet the standards listed below. Please consult factory for your specific requirements.

RoHS COMPLIANT — cULus Listed wet location — CE — IP65 — DLC — ARRA Funding Compliant

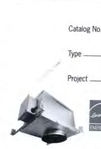
Project Name _____ Fixture Type _____ 07/28/16
Catalog # _____ © 2016 LSI INDUSTRIES INC.

MANUFACTURER SPECIFICATION SHEET FOR BUILDING FIXTURE 'WALL'

CONTECH LIGHTING RA6LIC

6" LED Recessed Downlight Insulated Ceiling Housing

Catalog No. _____
Type _____
Project _____





Ceiling Opening: 6⅝"
Ceiling Thickness: 1/2" - 2"

Specifications/Features

Housing/Mounting
Specification grade 6" housing. 6" aperture. 6⅝" Ceiling Opening; works in ceiling thicknesses from 1/2" – 2".
16 Gauge galvanized steel housing with die-cast aluminum heat sink. Thermally protected for use in applications with direct contact with insulation materials.
Dual-nailer hanger bars are adjustable for 16" and 24" center joists (14-1/4" to 24-1/2"). Nailer bars enable easy installation; may be extended to rest on T-bar ceilings. Optional clip-on T-bar hanger bars also available.
Quick-connect LED light engine enables easy installation and removal.
LED Drivers are fully accessible from below the ceiling and can be easily removed.

Electrical
1000 Series
Driver Specifications: Input Wattage 16W; Output Current 350mA
TRIAC Dimming (120V only): Input Voltage: 90-135VAC, 47-63Hz
0-10V Dimming (120,277V): Input Voltage: 90-305 VAC, 47-63Hz
Lutron Hi-lume® Dimming (120V only): Input Voltage: 120 VAC, 50/60Hz
2000 Series
Driver Specifications: Input Wattage 29W; Output Current 700mA
Lutron Hi-lume® Dimming (120V only): Input Voltage: 120 VAC, 50/60Hz
Output over-voltage, over-current and short circuit protection.
Max. @# 12AWG (4m/4out). Wiring should be rated for at least 90°C.
Pre-wired junction box with convenient screwdriver pry-outs. (8) 1/2" concentric knockouts.

Lamp
Light engine consists of a single, high output multi-chip LED array enabling precise optical control. Excellent fixture-to-fixture color consistency with a 3-step MacAdam Ellipse tolerance.
Available in the following color temperatures: 2700K, 3000K, 3500K, and 4000K; CRI: 80 min., 83 typical
System designed and rated for 50,000 hours at 70% lumen maintenance.

Dimming
All RA6L downlights are available for non-dimming and dimming applications. Options include:
TRIAC dimming (1000 series only), and dimming range down to 10%
0-10V Dimming, dimming range down to 15%
Lutron Hi-lume dimming, dimming range down to 1%

For non-dimming applications, use driver option D2.
Consult factory for Lutron EcoSystem® dimming option.

Trims
Specification Grade trims are available in several different styles and finishes for your space. Featuring a high quality Acrak™ finish; optically designed for reduced glare while maintaining maximum lumen output. See attached trim spec sheet for information and details.

Warranty
This complete fixture is covered by ContTech's full five (5) year replacement guarantee after date of purchase.

Labels/Usage
cCSAus Certified to UL Standards. Suitable for damp locations.
Conforms to Washington State Energy Code (WSEC) for low air infiltration.
Tested in accordance with ASTM E283 (2.0 CFM or less).
Energy Star approved when used with CST6322L2.CLR and CST6322L2.PL trims. Not approved for 4000K options.

Ordering Information

Example Order: RA6LIC – 630K12D2 CST6322L2-CLR

Housing	LED Module/Color Temp	Electrical/Dimming	Trim Type
RA6LIC	530K	12D2	

RA6LIC

1000 Series/1000Lm
427K 16W/2700K
430K 16W/3000K
435K 16W/3500K
440K 16W/4000K
2000 Series/2000Lm
527K 29W/2700K
530K 29W/3000K
535K 29W/3500K
540K 29W/4000K
Consult factory for high CRI options

Electrical/Dimming Compatibility	1000 Series	2000 Series
120V Triac Dimming (12D1)	X	X
120V Non-Dimming/0-10V Dimming (12D2)	X	X
120V Lutron HiLume® Dimming (12D3)	X	X
277V Non-Dimming/0-10V Dimming (27D2)	X	X
Emergency Battery Back-Up (EBL)		

12D1 - 120V Triac Dimming
12D2 - 120V Non-Dimming/0-10V Dimming
12D3 - Lutron HiLume 1% 2-Wire LED Driver (120V Forward Phase Only)
27D2 - 277V Non-Dimming/0-10V Dimming

Options
RL-KIT - Commercial Mounting Brackets
HB-24 - 27" Flat Hanger Bars for RL-KIT
HBC-24 - 25" C-Channel Hanger Bars for RL-KIT in Grid Ceiling Construction
HB-30 - 1-Bar Hanger Set

*Trims
See "6" LED Recessed Trims" sheet for trim information and details.

1-847-559-5500 www.contechlighting.com Please Recycle

© 2015 Driver option is available on the 1000 Series LED Module only.
All specifications subject to change without notice.

MANUFACTURER SPECIFICATION SHEET FOR BUILDING SOFFITT FIXTURE 'R4'

MURPHY EXPRESS AT FIRESTONE CITY CENTRE	
PHOTOMETRIC DETAIL	
NAME OF APPLICATION:	MURPHY OIL USA
TYPE OF SUBMITTAL :	FINAL DEVELOPMENT PLAN
FILING NUMBER:	
PHASE NUMBER:	
PREPARATION DATE:	10-20-2016
REVISION DATE:	12-20-2016
REVISION DATE:	02-07-2017
REVISION DATE:	03-15-2017
REVISION DATE:	04-04-2017
REVISION DATE:	
	SHEET 20 OF 25

No.	REVISION	DES. BY	DRAWN BY	DATE
1	REVISE PER COMMENTS	JMG	JMG	12/21/2016

Galloway
Planning, Architecture, Engineering.
6162 S. Willow Drive, Suite 320
Greenwood Village, CO 80111
303.770.8884 O
303.770.3636 F
www.gallowayus.com
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MURPHY EXPRESS

MURPHY EXPRESS
FIRESTONE, COLORADO

Project No:	M0C9536
Sheet Scale:	1"=20'-0"
Designed By:	JMG
Drawn By:	JMG
Date:	October, 2016
Disk File:	C:\01 Photometric Site Plan-Firestone, CO

PHOTOMETRIC DETAILS

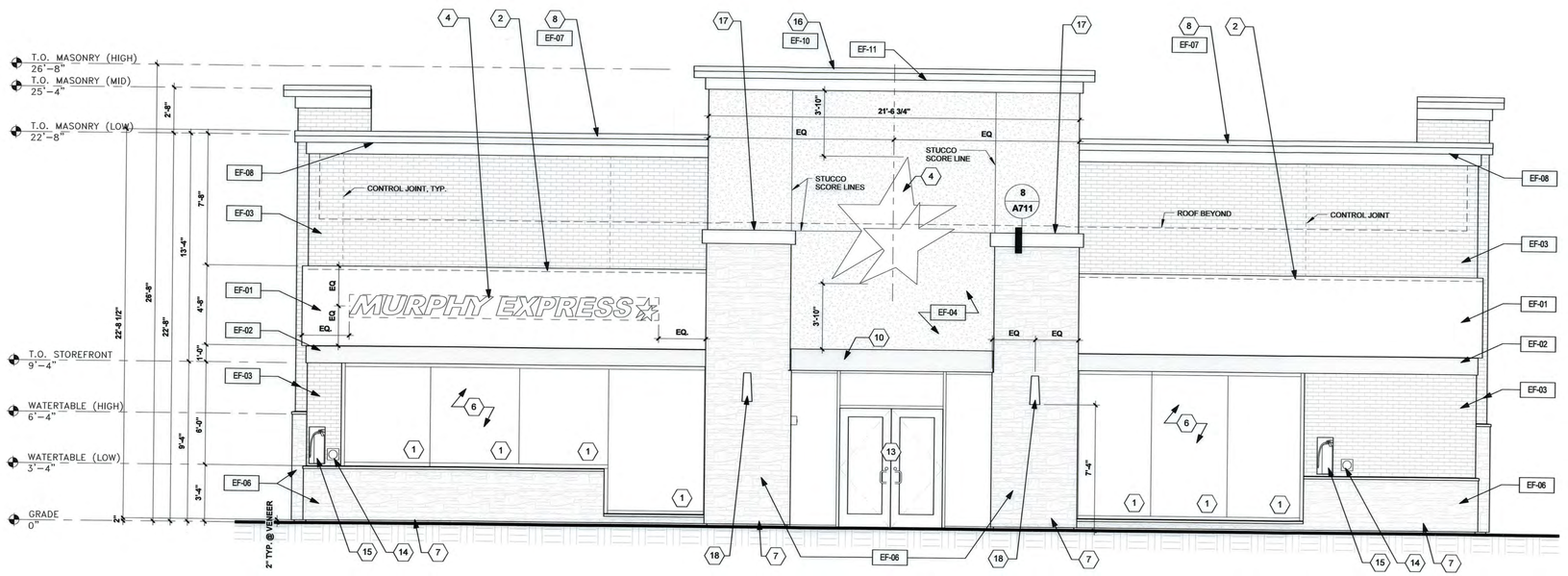
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4301923 Pages: 21 of 25
05/15/2017 09:05 AM R Fee:$253.00
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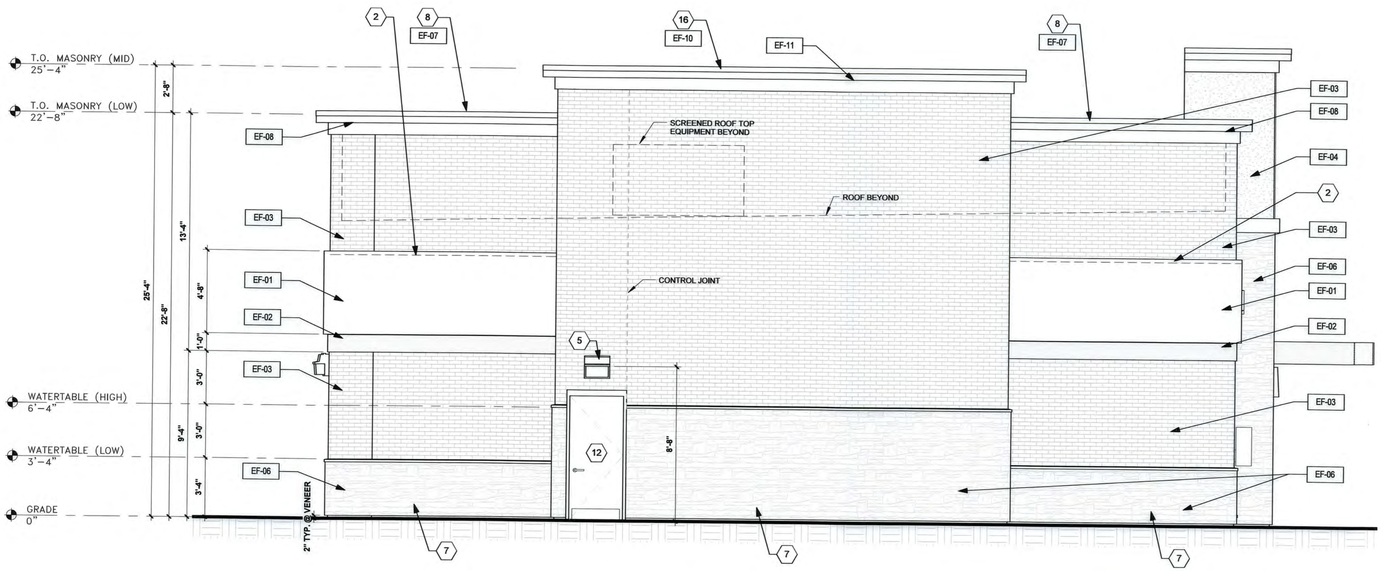
FINAL DEVELOPMENT PLAN

MURPHY EXPRESS AT FIRESTONE CITY CENTRE

LOT 2 FIRESTONE CITY CENTRE SUBDIVISION FILING NO.4
TOWN OF FIRESTONE, WELD COUNTY, STATE OF COLORADO
EXTERIOR ELEVATIONS
SHEET 21 OF 25



1 **FRONT ELEVATION**
1/4" = 1'-0"



2 **LEFT ELEVATION**
1/4" = 1'-0"

GENERAL NOTES:

A. HOLLOW METAL DOORS AND FRAMES TO BE PREFINISHED TO MATCH MASONRY.

B. ALL EXTERIOR DOOR HARDWARE TO MATCH CLEAR ANODIZED.

C. ANY PRODUCTS PROPOSED FOR SUBSTITUTION ARE TO BE SELECTED BASED UPON AVAILABILITY AND ARE REQUIRED TO MATCH APPROVED MATERIALS IN COLOR, FINISH AND QUALITY. CONSULT OWNER'S REPRESENTATIVE AND SUBMIT SAMPLES FOR ANY AND ALL SUBSTITUTIONS. OWNER'S REP. WILL CONSULT WITH CITY AUTHORITIES FOR ACCEPTANCE OF SUBSTITUTIONS AND ADVISE SUPPLYING CONTRACTOR PRIOR TO INSTALLATION OF ANY WORK.

D. ALL SIGNAGE DEPICTED ON ELEVATIONS ARE TO BE PERMITTED UNDER A SEPARATE SUBMITTAL AND PERMIT

KEY NOTES:

1. CUSTOM CONTINUOUS GRAPHICS PROVIDED AND INSTALLED BY CHUTE GERDEMAN.
2. CUSTOM CONTINUOUS EXTERIOR LED COVE LIGHT/WALL WASHER FIXTURE [SL-2]. REFER TO LIGHTING SCHEDULE
3. NOT USED
4. MURPHY'S EXTERIOR MOUNTED DIMENSION SIGNAGE - REFER TO GRAPHIC DESIGN INTENT SET. PROVIDED AND INSTALLED BY SIGN CONTRACTOR.
5. WALL MOUNTED EXTERIOR SCONCE LIGHTING AT 8'-8" A.F.F. TO TOP OF FIXTURE SEE ELECTRICAL DRAWINGS FOR SCONCE LIGHTING SPECIFICATIONS.
6. CURTAIN WALL SYSTEM W/ BUTT JOINTED 1" INSUL. TEMPERED GLASS. ALL COMPONENTS AND DOORS TO BE CLEAR ANODIZED FINISH. PROVIDED AND INSTALLED BY G.C.
7. STONE
8. CAP FLASHING OVER STUCCO CORNICE
9. ANODIZED BREAK METAL SILL
10. METAL AWNING STRUCTURE FASCIA TO BE COVERED WITH ACM [EF-02]
11. HOSE BIB, 18" A.F.F.
12. HOLLOW METAL DOOR, PAINT TO MATCH EF-05
13. STOREFRONT SYSTEM W/ 1" INSUL. TEMPERED GLASS. ALL COMPONENTS AND DOORS TO BE CLEAR ANODIZED FINISH. PROVIDED AND INSTALLED BY G.C.
14. FUEL EMERGENCY STOP BUTTON AND SIGN
15. WALL HUNG FIRE EXTINGUISHER, ANSUL C20 #429017
16. CAP FLASHING OVER STUCCO CORNICE
17. STUCCO LINTEL
18. EXTERIOR WALL SCONCE - SEE ELEC. FOR MORE INFORMATION

MATERIALS SCHEDULE:

SYMBOL	DESCRIPTION
EF-01	PREFINISHED METAL PANELS, ALCOA,TO MATCH "WHOLE WHEAT" BY DRYVIT. SUPPLIED AND INSTALLED BY FREYMOSS.
EF-02	PREFINISHED METAL PANELS, 3A COMPOSITES, ALUCOBOND PE PMS 485C RED, MATTE. SUPPLIED AND INSTALLED BY FREYMOSS.
EF-03	ATLAS BRICK- TO MATCH 'BARNWOOD' BY GENERAL SHALE
EF-04	STUCCO- COLOR TO MATCH ALUCOBOND PE PMS 485C RED
EF-05	DORMER BROWN SW 7521
EF-06	LEDGESTONE- TO MATCH 'MOSSY MOUNTAIN LEDGE' BY HALQUIST STONE
EF-07	BERRIDGE "SIERRA TAN"
EF-08	STUCCO, 'SPECTRUM BROWN'
EF-09	NOT USED
EF-10	BERRIDGE "ALMOND"
EF-11	STUCCO, "PEARL"

MURPHY EXPRESS AT FIRESTONE CITY CENTRE	
EXTERIOR ELEVATIONS	
NAME OF APPLICATION:	MURPHY OIL USA
TYPE OF SUBMITTAL :	FINAL DEVELOPMENT PLAN
FILING NUMBER:	
PHASE NUMBER:	
PREPARATION DATE:	10-20-2016
REVISION DATE:	12-20-2016
REVISION DATE:	03-15-2017
REVISION DATE:	04-04-2017
REVISION DATE:	
REVISION DATE:	
	SHEET 21 OF 25

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21 South Evergreen Avenue
Suite 200
Arlington Heights, Illinois 60005
t: 847.788.9200

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ISSUE RECORD

DATE	REV.	DESCRIPTION
10/27/2016		ENTITLEMENT PACKAGE
02/10/2017	1	OUT TO BID SET, RESPONSES TO AHJ COMMENTS

PROFESSIONAL SEAL 4.5.17
STATE OF COLORADO
FRANK M. GRIECO
400378
LICENSED ARCHITECT

PROFESSIONAL IN CHARGE
FRANK GRIECO

PROJECT MANAGER
CHRIS CERBO

QUALITY CONTROL
MUGDHA CHAWATHE

DRAWN BY
Mugdha

PROJECT NAME
MURPHY USA
MURPHY OIL CONVENIENCE STORE
FIRESTONE BOULEVARD & CITY CENTRE ROAD
FIRESTONE, CO 80504

PROJECT NUMBER
20160074.0

SHEET TITLE
EXTERIOR ELEVATIONS

SHEET NUMBER
FDP- 21

E:\Revit_cmd Files 20\20160074 Murphy CO 2016 4-3-17_V 2.0_mgc_cmd.rvt

4301923 Pages: 22 of 25
05/15/2017 09:05 AM R Fee:$253.00
Carly Koppes, Clerk and Recorder, Weld County, CO

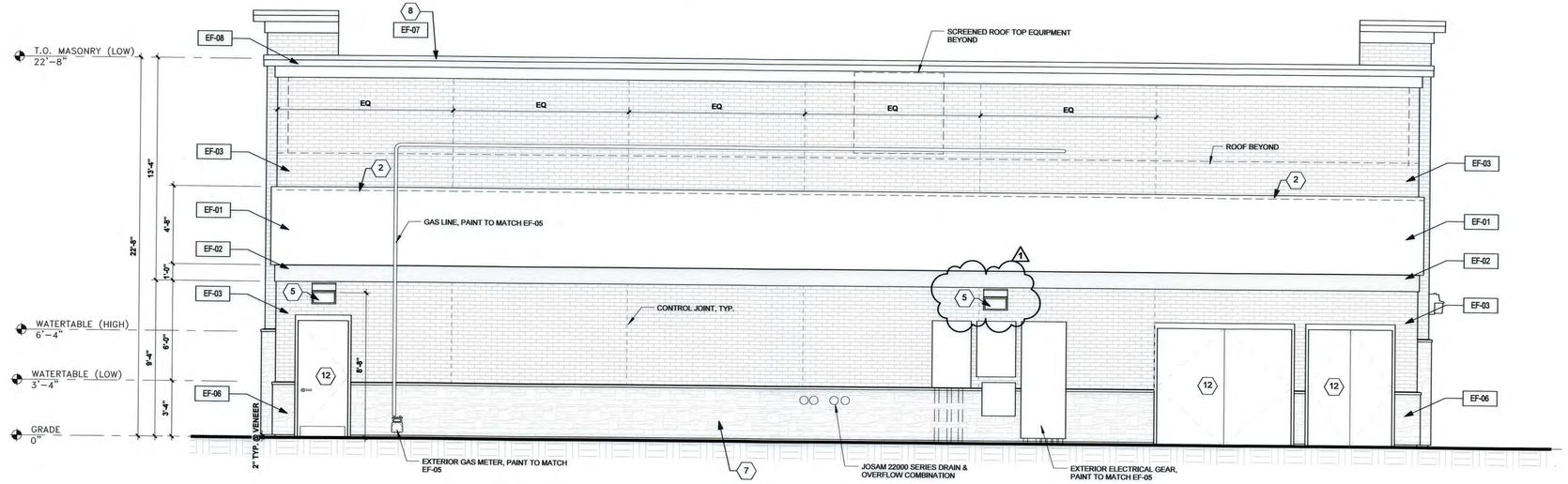
FINAL DEVELOPMENT PLAN

MURPHY EXPRESS AT FIRESTONE CITY CENTRE

LOT 2 FIRESTONE CITY CENTRE SUBDIVISION FILING NO.4
TOWN OF FIRESTONE, WELD COUNTY, STATE OF COLORADO

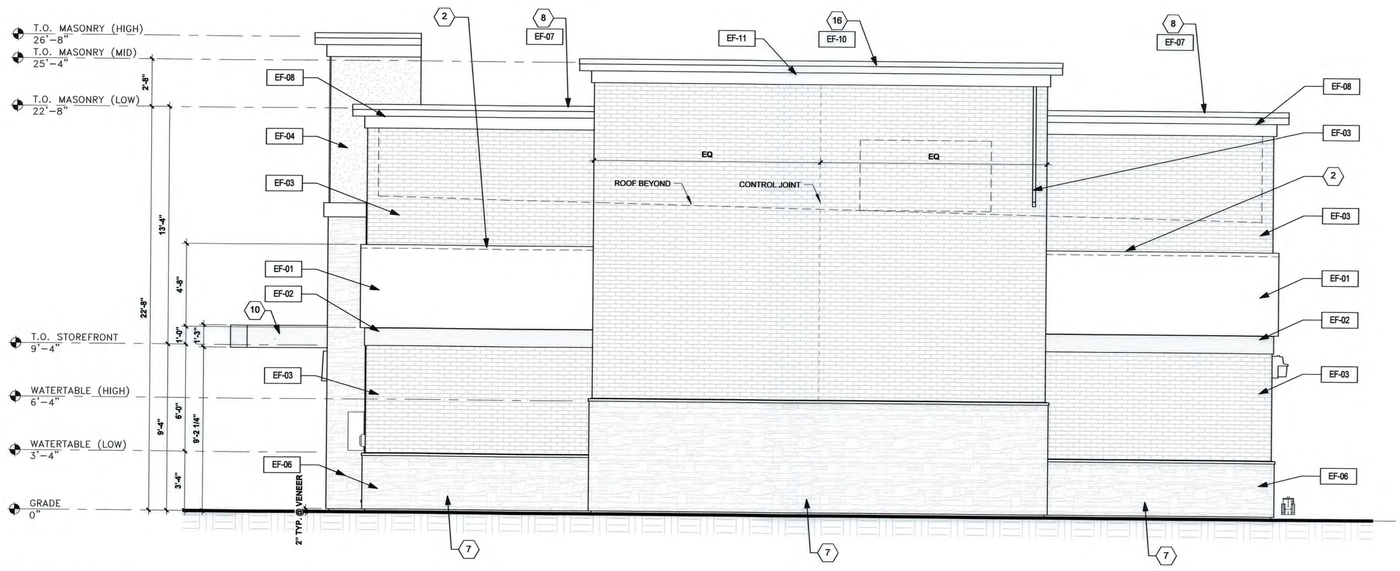
EXTERIOR ELEVATIONS

SHEET 22 OF 25



1 REAR ELEVATION

1/4" = 1'-0"



2 RIGHT ELEVATION

1/4" = 1'-0"

GENERAL NOTES:

A. HOLLOW METAL DOORS AND FRAMES TO BE PREFINISHED TO MATCH MASONRY.

B. ALL EXTERIOR DOOR HARDWARE TO MATCH CLEAR ANODIZED.

C. ANY PRODUCTS PROPOSED FOR SUBSTITUTION ARE TO BE SELECTED BASED UPON AVAILABILITY AND ARE REQUIRED TO MATCH APPROVED MATERIALS IN COLOR, FINISH AND QUALITY. CONSULT OWNER'S REPRESENTATIVE AND SUBMIT SAMPLES FOR ANY AND ALL SUBSTITUTIONS. OWNER'S REP. WILL CONSULT WITH CITY AUTHORITIES FOR ACCEPTANCE OF SUBSTITUTIONS AND ADVISE SUPPLYING CONTRACTOR PRIOR TO INSTALLATION OF ANY WORK.

D. ALL SIGNAGE DEPICTED ON ELEVATIONS ARE TO BE PERMITTED UNDER A SEPARATE SUBMITTAL

KEY NOTES:

1. CUSTOM CONTINUOUS GRAPHICS PROVIDED AND INSTALLED BY CHUTE GERDEMAN.
2. CUSTOM CONTINUOUS EXTERIOR LED COVE LIGHT/WALL WASHER FIXTURE [SL-2]. REFER TO LIGHTING SCHEDULE
3. NOT USED
4. MURPHY'S EXTERIOR MOUNTED DIMENSION SIGNAGE - REFER TO GRAPHIC DESIGN INTENT SET. PROVIDED AND INSTALLED BY SIGN CONTRACTOR.
5. WALL MOUNTED EXTERIOR SCONCE LIGHTING AT 8'-8" A.F.F. TO TOP OF FIXTURE SEE ELECTRICAL DRAWINGS FOR SCONCE LIGHTING SPECIFICATIONS.
6. CURTAIN WALL SYSTEM W/ BUTT JOINTED 1" INSUL. TEMPERED GLASS. ALL COMPONENTS AND DOORS TO BE CLEAR ANODIZED FINISH. PROVIDED AND INSTALLED BY G.C.
7. STONE
8. CAP FLASHING OVER STUCCO CORNICE
9. ANODIZED BREAK METAL SILL
10. METAL AWNING STRUCTURE FASCIA TO BE COVERED WITH ACM [EF-02]
11. HOSE BIB, 18" A.F.F.
12. HOLLOW METAL DOOR, PAINT TO MATCH EF-05
13. STOREFRONT SYSTEM W/ 1" INSUL. TEMPERED GLASS. ALL COMPONENTS AND DOORS TO BE CLEAR ANODIZED FINISH. PROVIDED AND INSTALLED BY G.C.
14. FUEL EMERGENCY STOP BUTTON AND SIGN
15. WALL HUNG FIRE EXTINGUISHER, ANSUL C20 #429017
16. CAP FLASHING OVER STUCCO CORNICE
17. STUCCO LINTEL
18. EXTERIOR WALL SCONCE - SEE ELEC. FOR MORE INFORMATION

MATERIALS SCHEDULE:

SYMBOL	DESCRIPTION
EF-01	PREFINISHED METAL PANELS, ALCOA,TO MATCH "WHOLE WHEAT" BY DRYVIT. SUPPLIED AND INSTALLED BY FREYMOSS.
EF-02	PREFINISHED METAL PANELS, 3A COMPOSITES, ALUCOBOND PE PMS 485C RED, MATTE. SUPPLIED AND INSTALLED BY FREYMOSS.
EF-03	ATLAS BRICK- TO MATCH 'BARNWOOD' BY GENERAL SHALE
EF-04	STUCCO- COLOR TO MATCH ALUCOBOND PE PMS 485C RED
EF-05	DORMER BROWN SW 7521
EF-06	LEDGESTONE- TO MATCH 'MOSSY MOUNTAIN LEDGE' BY HALQUIST STONE
EF-07	BERRIDGE "SIERRA TAN"
EF-08	STUCCO, 'SPECTRUM BROWN'
EF-09	NOT USED
EF-10	BERRIDGE "ALMOND"
EF-11	STUCCO, "PEARL"

MURPHY EXPRESS AT FIRESTONE CITY CENTRE EXTERIOR ELEVATIONS	
NAME OF APPLICATION:	MURPHY OIL USA
TYPE OF SUBMITTAL :	FINAL DEVELOPMENT PLAN
FILING NUMBER:	
PHASE NUMBER:	
PREPARATION DATE:	10-20-2016
REVISION DATE:	12-20-2016
REVISION DATE:	03-15-2017
REVISION DATE:	04-04-2017
REVISION DATE:	
REVISION DATE:	
	SHEET 22 OF 25

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Suite 200
Arlington Heights, Illinois 60005
t: 847.788.9200

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MURPHY USA

MURPHY OIL CONVENIENCE STORE
FIRESTONE BOULEVARD & CITY CENTRE ROAD
FIRESTONE, CO 80504

PROJECT NUMBER
20160074.0

SHEET TITLE

EXTERIOR ELEVATIONS

SHEET NUMBER

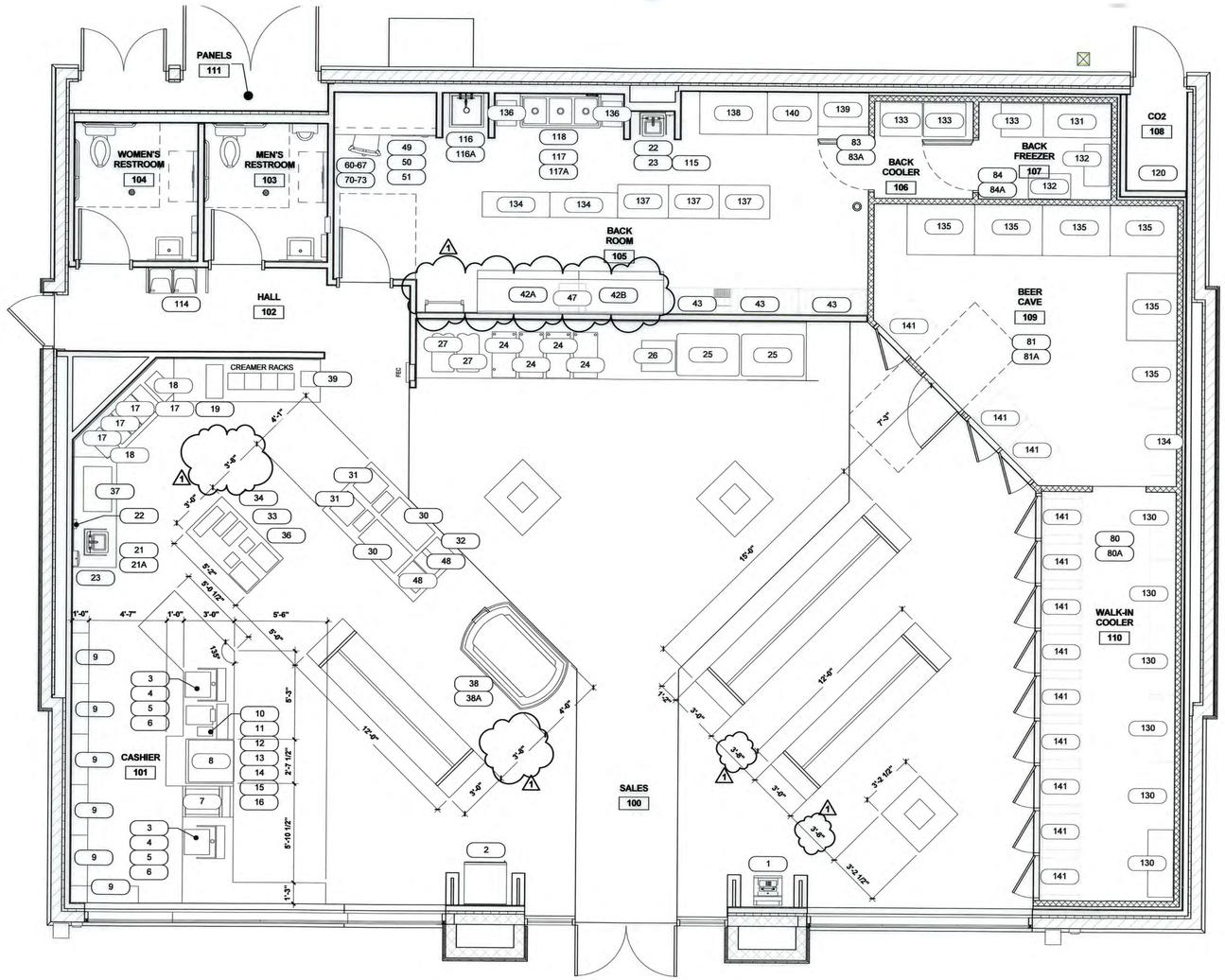
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FINAL DEVELOPMENT PLAN

MURPHY EXPRESS AT FIRESTONE CITY CENTRE

LOT 2 FIRESTONE CITY CENTRE SUBDIVISION FILING NO.4
TOWN OF FIRESTONE, WELD COUNTY, STATE OF COLORADO
EQUIPMENT PLAN
SHEET 23 OF 25



1 **EQUIPMENT PLAN**
1/4" = 1'-0"

MURPHY EXPRESS AT FIRESTONE CITY CENTRE	
EQUIPMENT PLAN	
NAME OF APPLICATION:	MURPHY OIL USA
TYPE OF SUBMITTAL :	FINAL DEVELOPMENT PLAN
FILING NUMBER:	
PHASE NUMBER:	
PREPARATION DATE:	10-20-2016
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REVISION DATE:	
REVISION DATE:	
SHEET 23 OF 25	

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QUALITY CONTROL
MUGDHA CHAWATHE

DRAWN BY
Mugdha

PROJECT NAME

MURPHY USA

MURPHY OIL CONVENIENCE STORE
FIRESTONE BOULEVARD & CITY CENTRE ROAD
FIRESTONE, CO 80504

PROJECT NUMBER
20160074.0

SHEET TITLE

EQUIPMENT PLAN

SHEET NUMBER

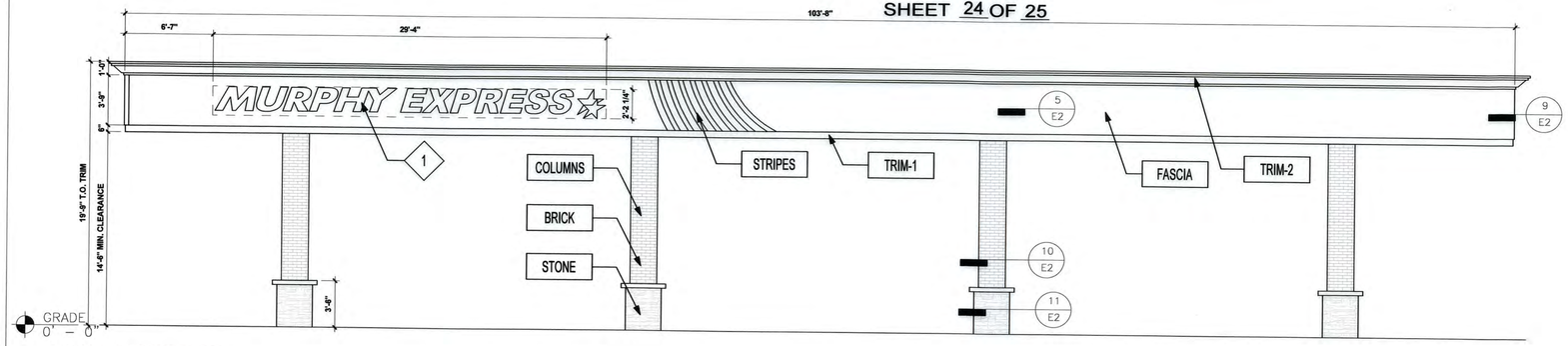
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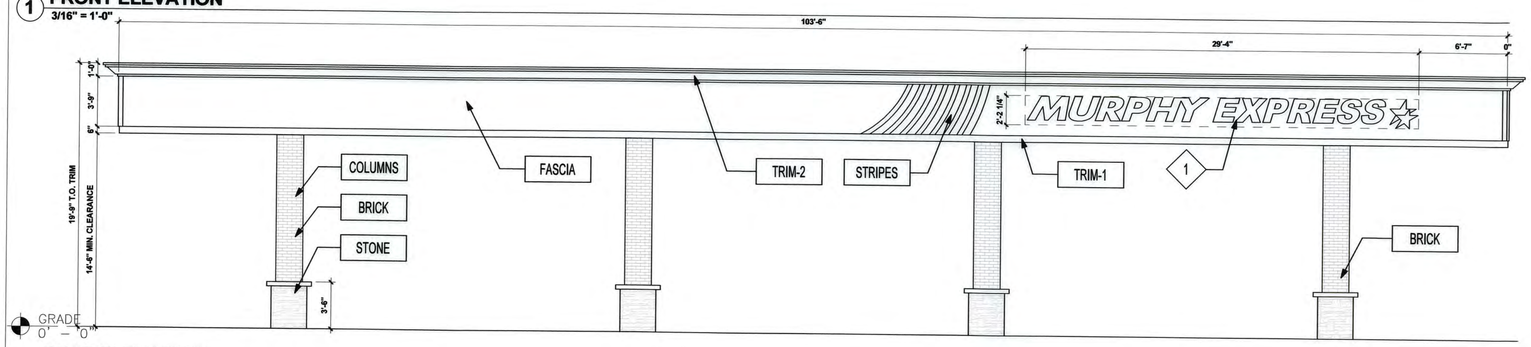
FINAL DEVELOPMENT PLAN

MURPHY EXPRESS AT FIRESTONE CITY CENTRE

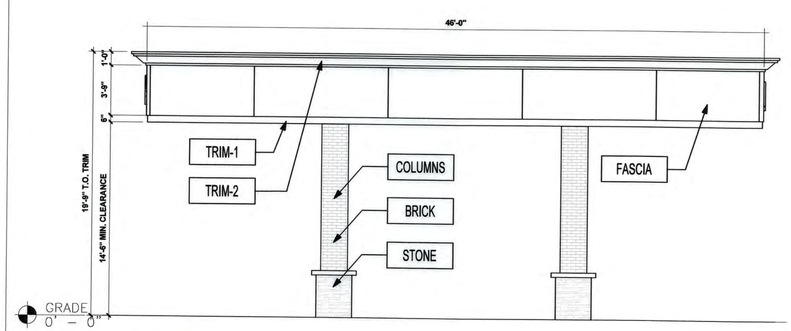
LOT 2 FIRESTONE CITY CENTRE SUBDIVISION FILING NO.4
TOWN OF FIRESTONE, WELD COUNTY, STATE OF COLORADO
ELEVATIONS
SHEET 24 OF 25



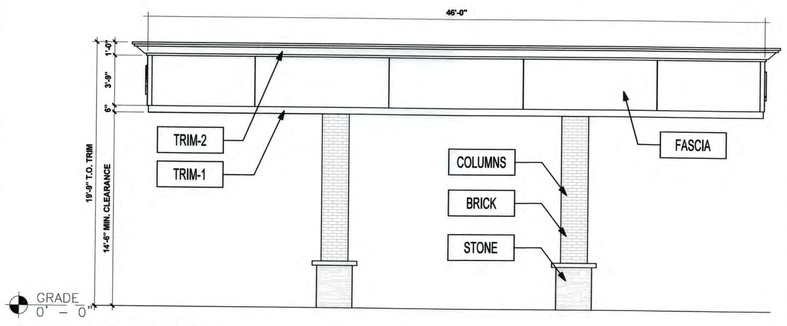
1 FRONT ELEVATION
3/16" = 1'-0"



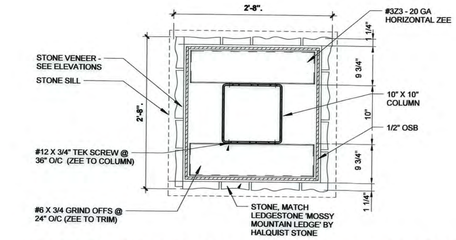
2 REAR ELEVATION
3/16" = 1'-0"



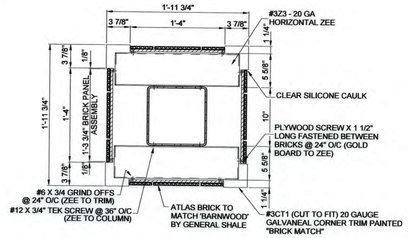
3 LEFT ELEVATION
3/16" = 1'-0"



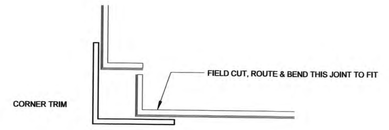
4 RIGHT ELEVATION
3/16" = 1'-0"



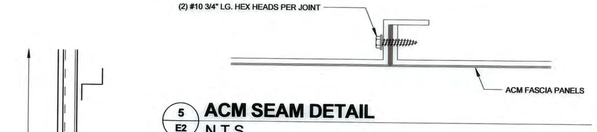
11 / E2 COLUMN ENCLOSURE DETAIL-STONE BASE
N.T.S.



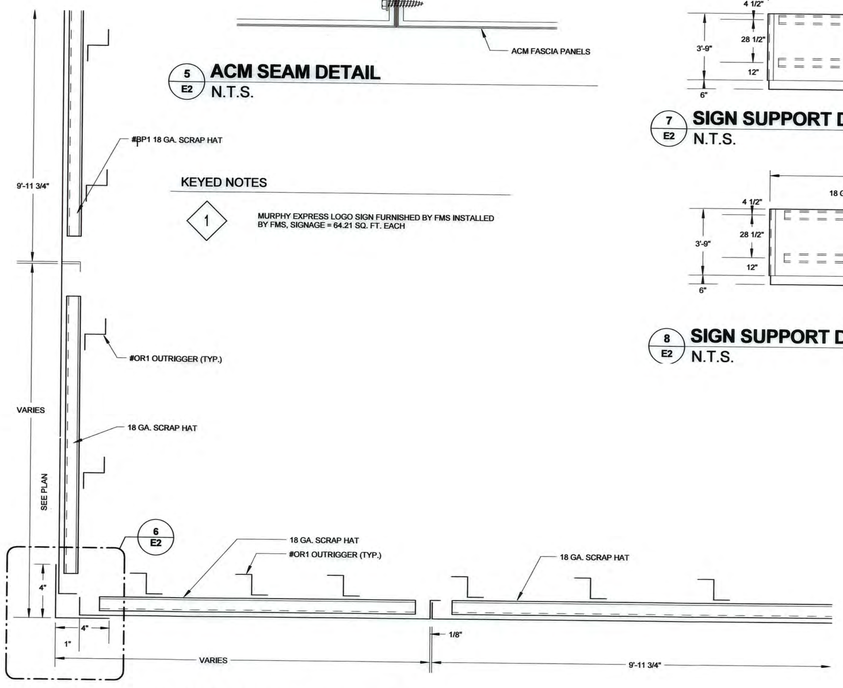
10 / E2 COLUMN ENCLOSURE DETAIL-BRICK
N.T.S.



6 / E2 CORNER TRIM DETAIL
N.T.S.

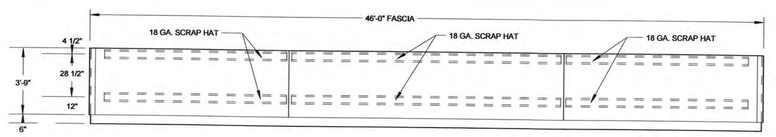


5 / E2 ACM SEAM DETAIL
N.T.S.



9 SECTION 'E' - CORNER FASCIA DETAIL (TYP.)
1/4" = 1'-0"

7 / E2 SIGN SUPPORT DETAIL - ELEVATIONS 1 & 2
N.T.S.



NOTE: ACTUAL SIGN LOCATIONS ARE SITE SPECIFIC AND SUBJECT TO CHANGE, SIGN SUPPORTS ARE PROVIDED AT EACH CORNER

8 / E2 SIGN SUPPORT DETAIL - ELEVATIONS 3 & 4
N.T.S.

MURPHY EXPRESS AT FIRESTONE CITY CENTRE	
ELEVATIONS	
NAME OF APPLICATION:	MURPHY OIL USA
TYPE OF SUBMITTAL:	FINAL DEVELOPMENT PLAN
FILING NUMBER:	
PHASE NUMBER:	
PREPARATION DATE:	10-20-2016
REVISION DATE:	12-20-2016
REVISION DATE:	03-15-2017
REVISION DATE:	04-04-2017
REVISION DATE:	
REVISION DATE:	
	SHEET 24 OF 25

FINISH SCHEDULE

FASCIA	ACM (ALUMINUM COMPOSITE MATERIAL)	ACM FASCIA TO MATCH "WHOLE WHEAT" BY DRYVIT	FURNISHED & INSTALLED BY FMS
STRIPES	ACM (ALUMINUM COMPOSITE MATERIAL)	ACM FASCIA "PROGRAM RED" BY ALCOA	FURNISHED & INSTALLED BY FMS
TRIM-1	20 GA. SHEET METAL	6" HT PRE-FINISHED METAL ACCENT BAND "PROGRAM RED" BY ALCOA	FURNISHED & INSTALLED BY FMS
COLUMNS	SEE STRUCTURAL DRAWINGS	—	FURNISHED & INSTALLED BY FMS
BRICK	SEE DETAIL 10/E2	BRICK, MATCH 'BARNWOOD' BY GENERAL SHALE	FURNISHED & INSTALLED BY FMS
STONE	SEE DETAIL 11/E2	STONE, MATCH LEDGESTONE 'MOSSY MOUNTAIN LEDGE' BY HALQUIST STONE	FURNISHED & INSTALLED BY FMS
TRIM-2	DECORATIVE CORNICE	"PROGRAM RED" BY ALCOA	FURNISHED & INSTALLED BY FMS

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QUALITY CONTROL
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DRAWN BY
Mugdha

PROJECT NAME
MURPHY EXPRESS
MURPHY OIL FUEL FACILITY CANOPY
FIRESTONE BOULEVARD & CITY CENTRE ROAD
FIRESTONE, CO 80504

PROJECT NUMBER
20160074.0

SHEET TITLE
ELEVATIONS

SHEET NUMBER
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PROTO V2.0 05/20/2016

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05/15/2017 09:05 AM R Fee:$253.00
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FINAL DEVELOPMENT PLAN

MURPHY EXPRESS AT FIRESTONE CITY CENTRE

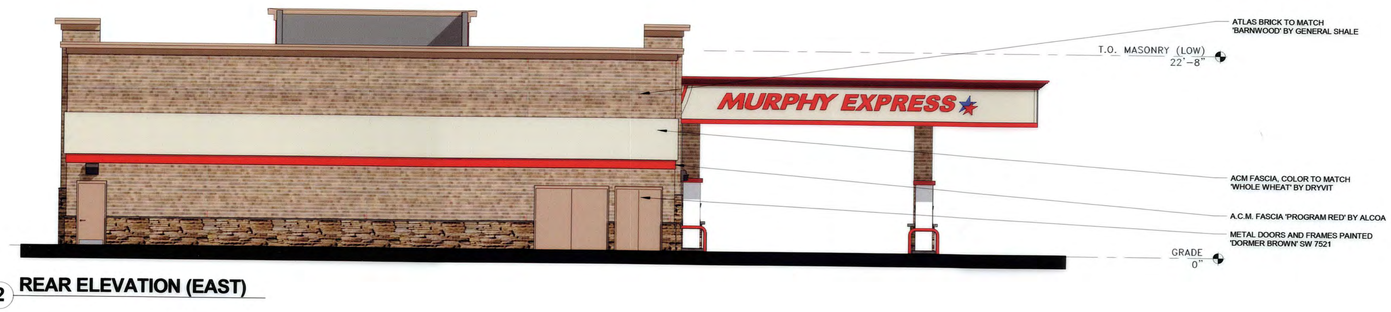
LOT 2 FIRESTONE CITY CENTRE SUBDIVISION FILING NO.4
TOWN OF FIRESTONE, WELD COUNTY, STATE OF COLORADO
SITE RENDERING
SHEET 25 OF 25



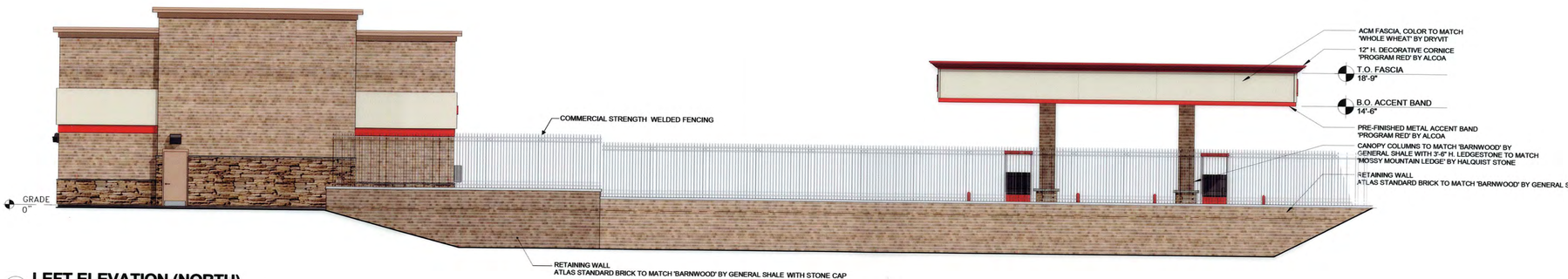
1 FRONT ELEVATION (WEST)



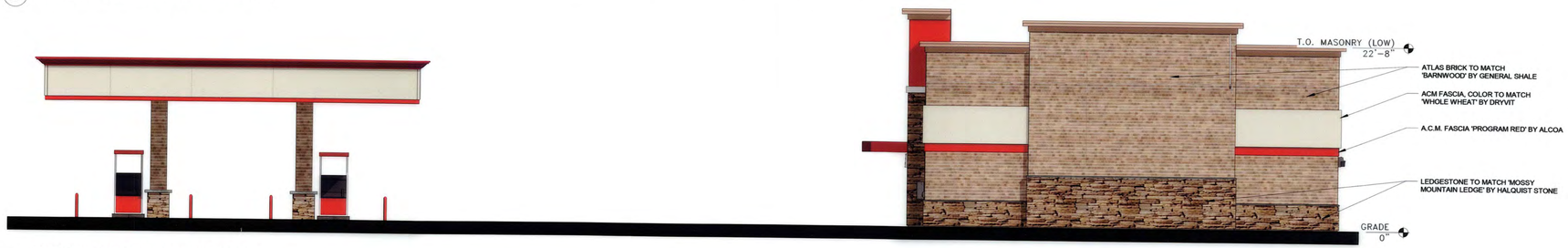
5 FRONT ELEVATION (WEST/ NO CANOPY)



2 REAR ELEVATION (EAST)

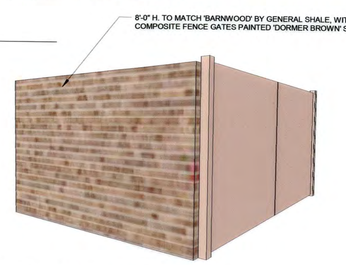


3 LEFT ELEVATION (NORTH)



4 RIGHT ELEVATION (SOUTH)

6 BUILDING



7 TRASH ENCLOSURE



8 MONUMENT SIGN

SIGN	QTY.	HEIGHT	WIDTH	AREA	TOTAL S.F.
MURPHY EXPRESS CANOPY LOGO SIGN	2	GRAPHIC AREA		64.21	128.42
MURPHY EXPRESS BUILDING SIGN	1	15.25"	204.00"	21.60	21.60
MURPHY EXPRESS STARS	1	81.50"	82.63"	46.77	46.77
MONUMENT SIGN	1	61.00"	56.50"	23.93	23.93
				TOTAL BUILDING SIGNAGE:	220.72

MURPHY EXPRESS AT FIRESTONE CITY CENTRE	
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SHEET 25 OF 25	

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MURPHY EXPRESS