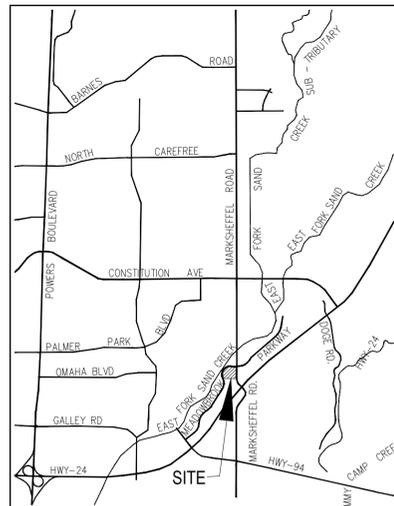


CLAREMONT BUSINESS PARK 2 FILING NO. 2

COUNTY OF EL PASO, STATE OF COLORADO

CONSTRUCTION PLANS

FEBRUARY 2023



VICINITY MAP
N.T.S.

AGENCIES:

- OWNER/DEVELOPER:** DOUBLETREE VENTURES
BRIAN ZUREK, MANAGING PARTNER
106 S. KYRENE RD. #2
CHANDLER, AZ 85226
(480) 313-2724
- CIVIL ENGINEER:** M & S CIVIL CONSULTANTS, INC.
212 N. WAHSATCH, SUITE 305
COLORADO SPRINGS, CO 80903
VIRGIL A. SANCHEZ P.E. (719) 955-5485
- COUNTY ENGINEERING:** EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT
2880 INTERNATIONAL CIRCLE, SUITE 110
COLORADO SPRINGS, CO 80910
(719) 520-6300
- TRAFFIC ENGINEERING:** EL PASO COUNTY DEPARTMENT OF PUBLIC WORKS
3275 AKERS DRIVE
COLORADO SPRINGS, CO 80922
JOSHUA PALMER, P.E. (719) 520-6460
- WATER RESOURCES:** CHEROKEE METROPOLITAN DISTRICT
6250 PALMER PARK BOULEVARD
COLORADO SPRINGS, CO 80915-1721
JEFF MUNGER (719) 597-5080
- FIRE DISTRICT:** CIMARRON HILLS FIRE DEPARTMENT
1835 TUSKEGEE PLACE
COLORADO SPRINGS, CO 80915
(719) 591-0960
- GAS DEPARTMENT:** COLORADO SPRINGS UTILITIES
7710 DURANT DR.
COLORADO SPRINGS, CO 80947
TIM WENDT (719) 688-3556
- ELECTRIC DEPARTMENT:** COLORADO SPRINGS UTILITIES
7710 DURANT DR.
COLORADO SPRINGS, CO 80947
TIM WENDT (719) 688-3556
- COMMUNICATIONS:** QWEST COMMUNICATIONS
(U.N.C.C. LOCATORS) (800) 922-1987
AT&T (LOCATORS) (719) 635-3674

NOTE:

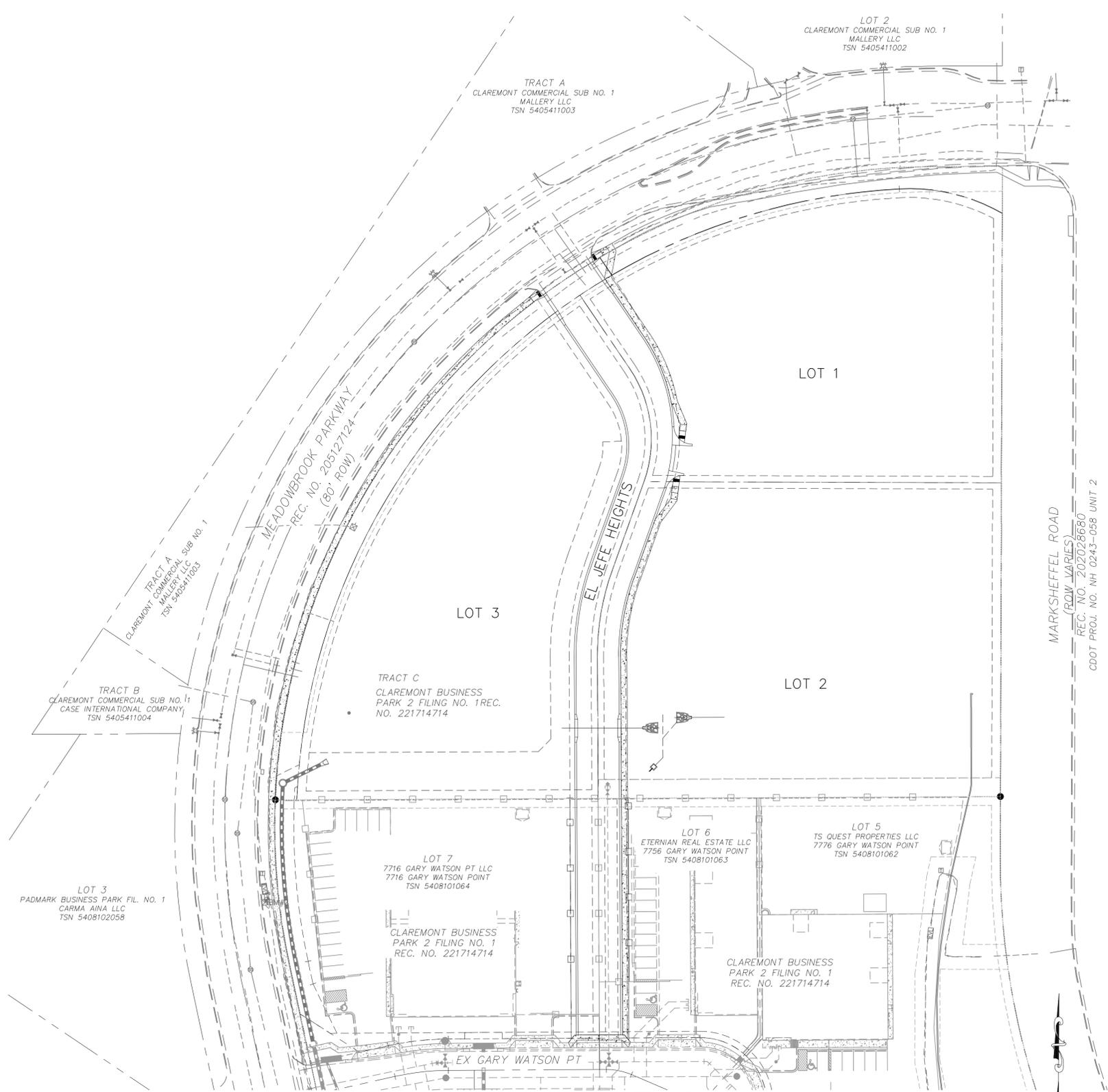
THE CONTRACTOR SHALL FIELD VERIFY THE ELEVATION OF ALL TIE-IN/CONNECTIONS TO EXISTING MANHOLES AND/OR STUBS PRIOR TO CONSTRUCTION. ANY DISCREPANCY TO THE ANTICIPATED/PREVIOUSLY MEASURED ELEVATIONS PROVIDED ON THE PLANS SHALL BE CONVEYED TO THE ENGINEER AND A RESOLVE REACHED PRIOR TO INSTALLATION.

BENCHMARKS:

- BL33 BEING A BERNTSEN TOP SECURITY MONUMENT IN RANGE BOX 5' SOUTH OF SOUTH ROW FENCE OF HWY 24 UNDER CENTERLINE OF TRANSMISSION LINE.
ELEVATION = 6372.26' PLAT AVE.
- CONTROL POINT 1, SET PK NAIL IN NE CORNER OF ELECTRIC TRANSFORMER PAD
ELEVATION = 6372.26'

BASIS OF BEARINGS

THE NORTH LINE OF LOTS 5, 6 AND 7 "CLAREMONT BUSINESS PARK 2 FILING NO. 1" AS RECORDED UNDER RECEPTION NO. 221714714 OF THE RECORDS OF EL PASO COUNTY, COLORADO, MONUMENTED AT THE NORTHEAST CORNER OF LOT 5 WITH A NO. 5 REBAR WITH ORANGE SURVEYOR'S CAP STAMPED "M&S CIVIL PLS 25966", FROM WHICH THE NORTHWEST CORNER OF LOT 7, MONUMENTED WITH A NO. 5 REBAR WITH ORANGE SURVEYOR'S CAP STAMPED M&S CIVIL PLS 25966, BEARS S89°44'12"W, A DISTANCE OF 578.27 U.S. SURVEY FEET.



SITE MAP
N.T.S.

DESIGN ENGINEER'S STATEMENT

THESE DETAILED PLANS AND SPECIFICATIONS WERE PREPARED UNDER MY DIRECTION AND SUPERVISION. SAID PLANS AND SPECIFICATIONS HAVE BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY FOR DETAILED ROADWAY, DRAINAGE, GRADING AND EROSION CONTROL PLANS AND SPECIFICATIONS, AND SAID PLANS AND SPECIFICATIONS ARE IN CONFORMITY WITH APPLICABLE MASTER DRAINAGE PLANS AND MASTER TRANSPORTATION PLANS. SAID PLANS AND SPECIFICATIONS MEET THE PURPOSES FOR WHICH THE PARTICULAR ROADWAY AND DRAINAGE FACILITIES ARE DESIGNED AND ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. I ACCEPT RESPONSIBILITY FOR ANY LIABILITY CAUSED BY ANY NEGLIGENT ACTS, ERRORS OR OMISSIONS ON MY PART IN PREPARATION OF THESE DETAILED PLANS AND SPECIFICATIONS.

VIRGIL A. SANCHEZ, COLORADO P.E. #37160
FOR AND ON BEHALF OF M & S CIVIL CONSULTANTS, INC.

OWNER/DEVELOPER'S STATEMENT:

I, THE DEVELOPER HAVE READ AND WILL COMPLY WITH THE REQUIREMENTS IN THESE DETAILED PLANS AND SPECIFICATIONS.

BRIAN ZUREK, MANAGING PARTNER DATE

DOUBLETREE VENTURES

ADDRESS: 106 S. KYRENE RD, CHANDLER, AZ 85226

EL PASO COUNTY:

COUNTY PLAN REVIEW IS PROVIDED ONLY FOR GENERAL CONFORMANCE WITH COUNTY DESIGN CRITERIA. THE COUNTY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, DIMENSIONS, AND/OR ELEVATIONS WHICH SHALL BE CONFIRMED AT THE JOB SITE. THE COUNTY THROUGH THE APPROVAL OF THIS DOCUMENT ASSUMES NO RESPONSIBILITY FOR COMPLETENESS AND/OR ACCURACY OF THIS DOCUMENT.

FILED IN ACCORDANCE WITH THE REQUIREMENTS OF THE EL PASO COUNTY LAND DEVELOPMENT CODE, DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2, AND ENGINEERING CRITERIA MANUAL AS AMENDED.

IN ACCORDANCE WITH EGM SECTION 1.12, THESE CONSTRUCTION DOCUMENTS WILL BE VALID FOR CONSTRUCTION FOR A PERIOD OF 2 YEARS FROM THE DATE SIGNED BY THE EL PASO COUNTY ENGINEER. IF CONSTRUCTION HAS NOT STARTED WITHIN THOSE 2 YEARS, THE PLANS WILL NEED TO BE RESUBMITTED FOR APPROVAL, INCLUDING PAYMENT OF REVIEW FEES AT THE PLANNING AND COMMUNITY DEVELOPMENT DIRECTORS DISCRETION.

JOSHUA PALMER, P.E. COUNTY ENGINEER / EGM ADMINISTRATOR DATE

SHEET INDEX

- SHEET 1 TITLE SHEET
- SHEET 2 CONSTRUCTION NOTES, LEGEND & DETAILS
- SHEET 3 CONSTRUCTION STANDARD DETAILS
- SHEET 4 STREET IMPROVEMENT PLAN
- SHEET 5 SIDEWALK AND INTERSECTION DETAILS
- SHEET 6 STRIPING AND SIGNAGE PLAN
- SHEET 7 STORM SEWER PLAN AND PROFILE
- SHEET 8 STORM SEWER PLAN AND PROFILE
- SHEET 9 STORM SEWER PLAN AND PROFILE
- SHEET 10 STORM SEWER NOTES
- SHEET 11 STORM SEWER DETAILS
- SHEET 12 STORM SEWER DETAILS
- SHEET 13 OUTLET POND STRUCTURE DETAILS
- SHEET 14 OUTLET POND STRUCTURE DETAILS

UPDATED

The last 3 sheets are pond details, not just the final 2.

ADDED

VR233

EL PASO COUNTY FILE NO. VR233

CLAREMONT BUSINESS PARK 2 FIL. NO. 2

TITLE SHEET

PROJECT NO. 10-020	SCALE: HORIZONTAL: N/A VERTICAL: N/A	DATE: 01/13/23
DESIGNED BY: GW	CLP	SHEET 1 OF 14
DRAWN BY: CUP	VAS	CD01
CHECKED BY: VAS		

212 N. WAHSATCH AVE, STE 305
COLORADO SPRINGS, CO 80903
PHONE: 719.955.5485



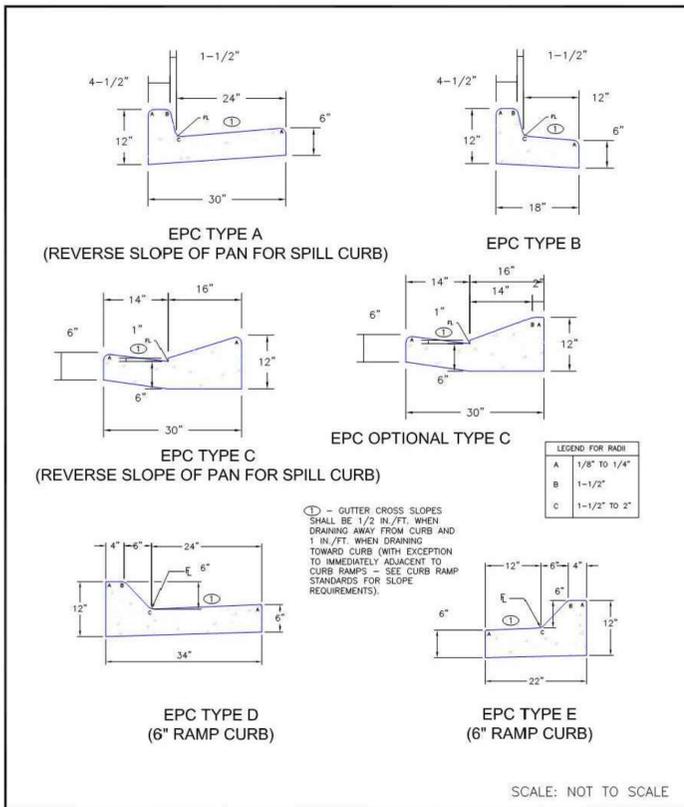
FOR AND ON BEHALF OF M & S CIVIL CONSULTANTS, INC.

VIRGIL A. SANCHEZ, COLORADO P.E. NO. 37160
REC. NO. 202028660
CDDOT PROJ. NO. NH 0243-058 UNIT 2

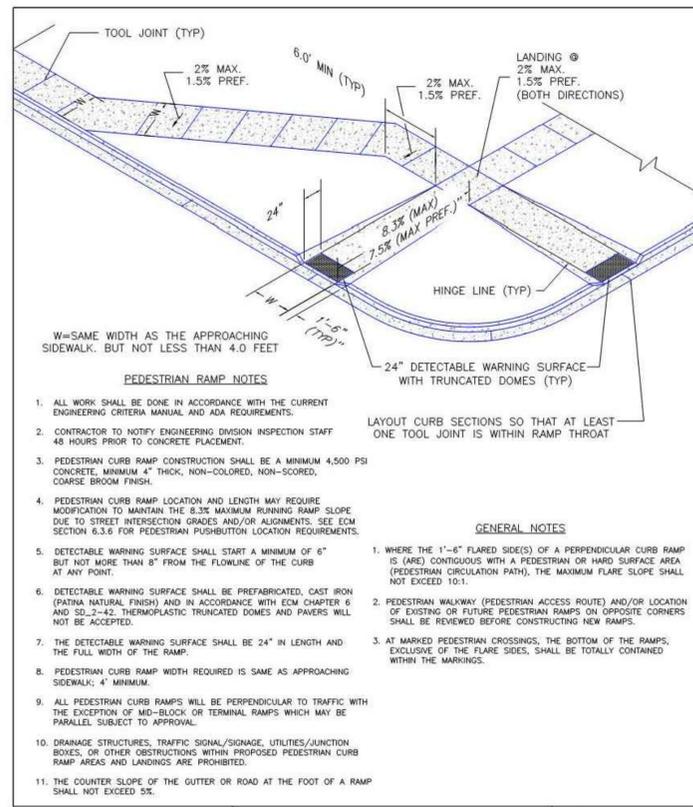
REV. NO.	DATE	BY	DESCRIPTION

THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPAREY OF THESE PLANS.

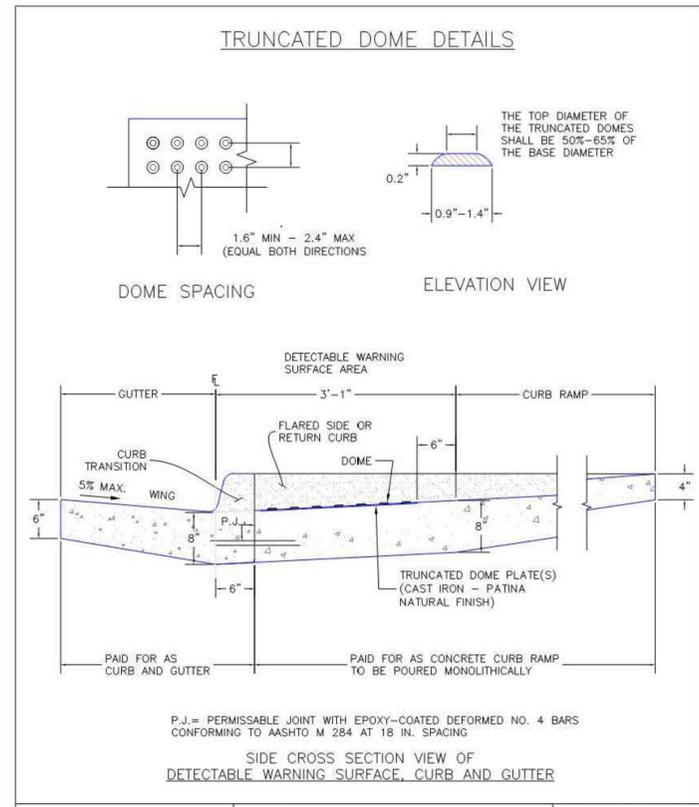
CAUTION



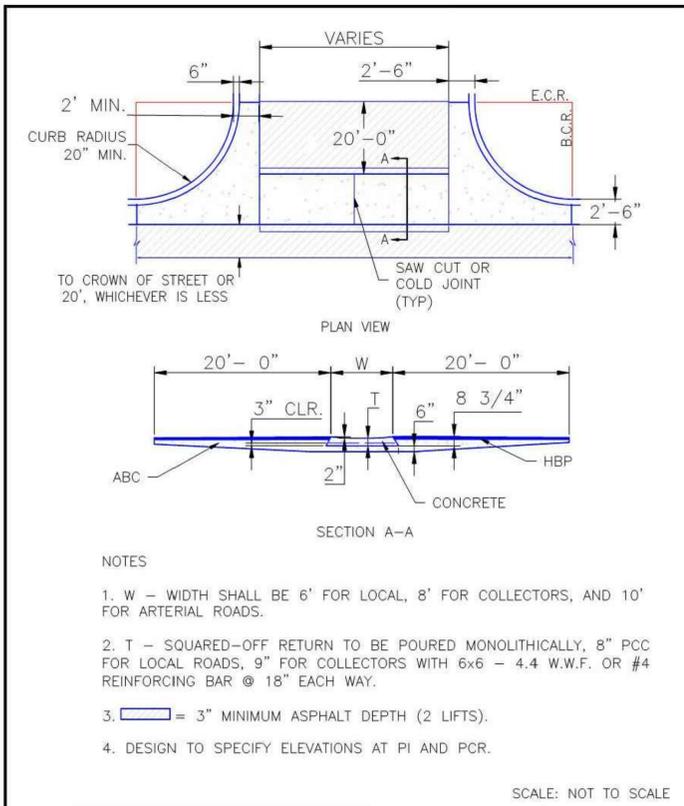
6/23/20	Typical Curb and Gutter Details Standard Drawing		
DATE APPROVED: Jennifer E. Irvine	REVISION DATE: 6/23/20	FILE NAME: SD_2-20	
DEPARTMENT OF PUBLIC WORKS			



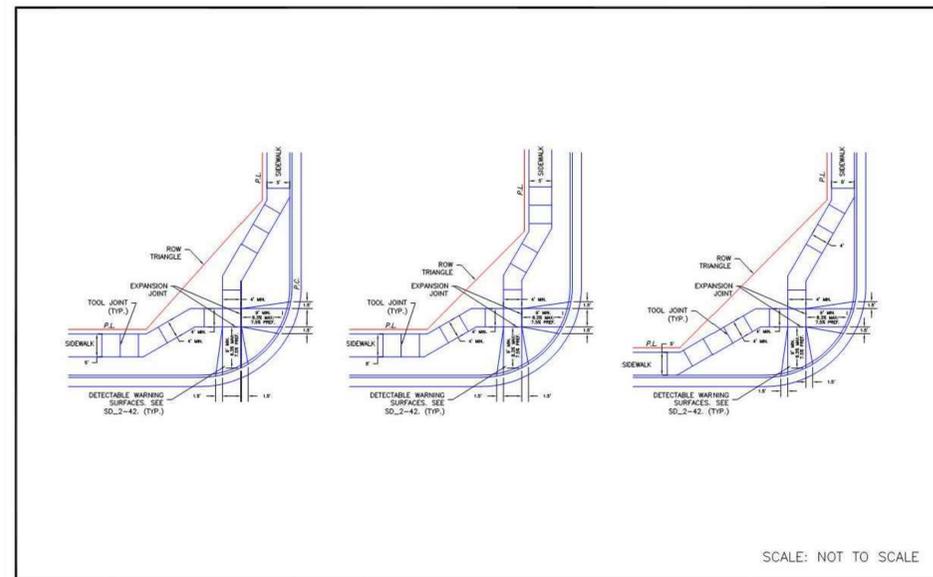
6/23/20	Pedestrian Curb Ramp Detail Standard Drawing		
DATE APPROVED: Jennifer E. Irvine	REVISION DATE: 6/23/20	FILE NAME: SD_2-41	
DEPARTMENT OF PUBLIC WORKS			



6/23/20	Detectable Warning Surface Details Standard Drawing		
DATE APPROVED: Jennifer E. Irvine	REVISION DATE: 6/23/20	FILE NAME: SD_2-42	
DEPARTMENT OF PUBLIC WORKS			



8/11/11	Typical Cross Pan Layout Detail Standard Drawing		
DATE APPROVED: André P. Brackin	REVISION DATE: 12/8/15	FILE NAME: SD_2-26	
DEPARTMENT OF TRANSPORTATION			



6/23/20	Pedestrian Curb Ramp Detail Standard Drawing		
DATE APPROVED: Jennifer E. Irvine	REVISION DATE: 6/23/20	FILE NAME: SD_2-40	
DEPARTMENT OF PUBLIC WORKS			

DETAIL ADDED

Please add El Paso County Standard Detail SD_2-24 Driveway Detail with Attached Sidewalk



CLAREMONT BUSINESS PARK 2 FIL. NO. 2

CONSTRUCTION STANDARD DETAILS

PROJECT NO. 10-020 DATE: 01/13/23

SCALE: HORIZONTAL: N/A VERTICAL: N/A

DESIGNED BY: GW CLP DRAWN BY: VAS CHECKED BY: VAS

212 N. WABATCH AVE., STE 305 COLORADO SPRINGS, CO 80903 PHONE: 719.955.5465

CIVIL CONSULTANTS, INC.

VIRGIL A. SANCHEZ, COLORADO, P.E. NO. 37160

FOR AND ON BEHALF OF WKS CIVIL CONSULTANTS, INC.

NO.	DATE	BY	DESCRIPTION

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CAUTION

THE ACCESS ROADS ARE RETURNS RATHER THAN DRIVEWAYS, THEREFORE THE DESIGN OF THE RAMPS IS PER THE SD-2-40

ramps per SD 2-24. Per ECM Chapter 2 local roadways have attached sidewalks.

A driveway access waiver will be required to be approved by EPC prior to the construction of the driveway access point.

Smallest cross pan per dtl is 6' CROSS PAN CHANGED TO 6' WIDE

Label if a stub cap is proposed for all similar pipe runs.

Label if existing or proposed.

Show & label proposed retaining wall

Label

Reference EPC standard driveway detail

Provide matchlines MATCHLINES ADDED

EX ELEC VAULTS, NOTE ADDED

Please identify and label the concrete structures shown on the aerial view.

FOR LOCATING & MARKING GAS, ELECTRIC, WATER & TELEPHONE LINES
FOR BURIED UTILITY INFORMATION 48 HRS BEFORE YOU DIG CALL 1-800-922-1987

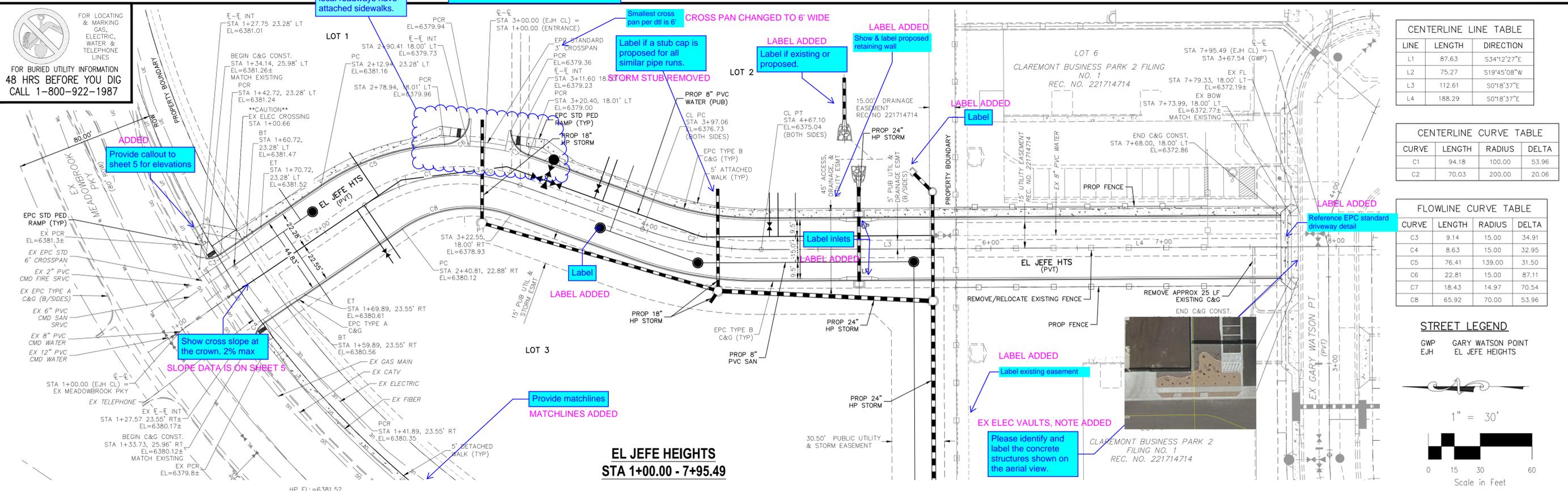
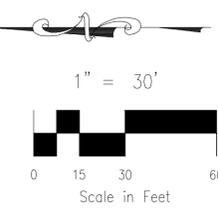
LINE	LENGTH	DIRECTION
L1	87.63	S34°12'27"E
L2	75.27	S19°45'08"W
L3	112.61	S01°8'37"E
L4	188.29	S01°8'37"E

CURVE	LENGTH	RADIUS	DELTA
C1	94.18	100.00	53.96
C2	70.03	200.00	20.06

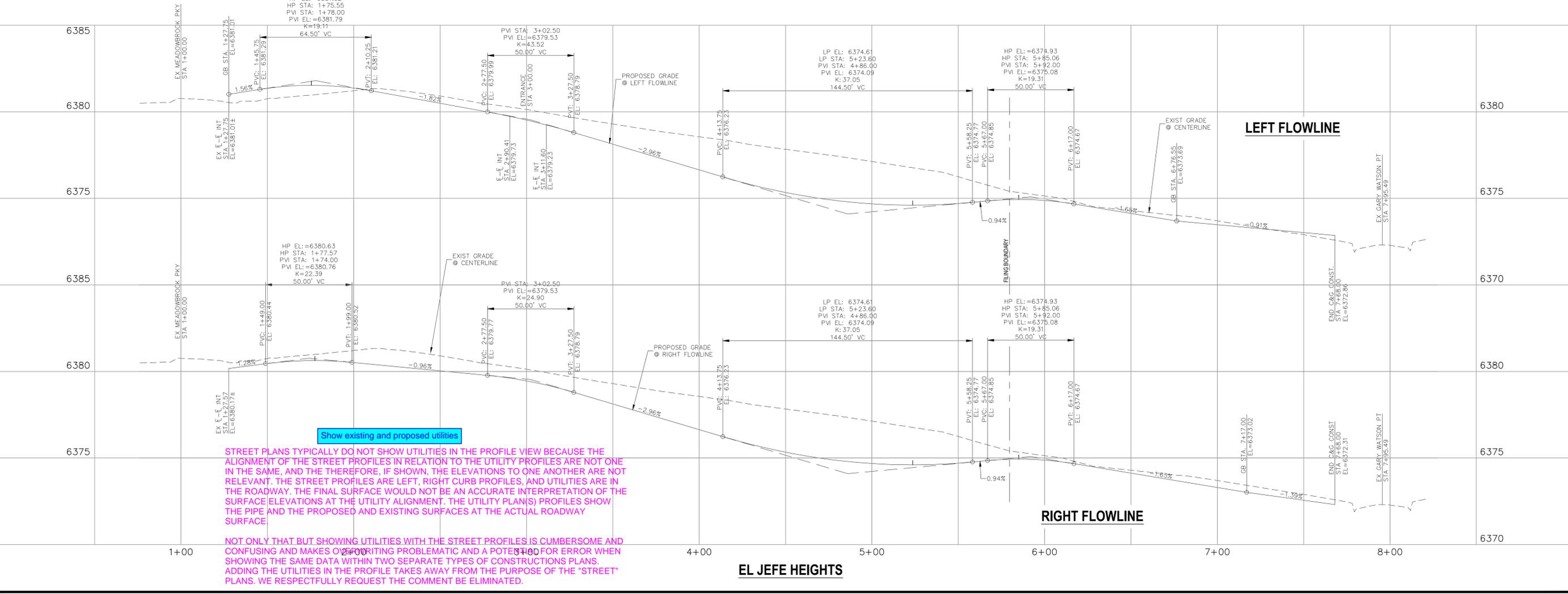
CURVE	LENGTH	RADIUS	DELTA
C3	9.14	15.00	34.91
C4	8.63	15.00	32.95
C5	76.41	139.00	31.50
C6	22.81	15.00	87.11
C7	18.43	14.97	70.54
C8	65.92	70.00	53.96

STREET LEGEND

GWP GARY WATSON POINT
EJH EL JEFE HEIGHTS



**EL JEFE HEIGHTS
STA 1+00.00 - 7+95.49**



Show existing and proposed utilities

STREET PLANS TYPICALLY DO NOT SHOW UTILITIES IN THE PROFILE VIEW BECAUSE THE ALIGNMENT OF THE STREET PROFILES IN RELATION TO THE UTILITY PROFILES ARE NOT ONE IN THE SAME, AND THE THEREFORE, IF SHOWN, THE ELEVATIONS TO ONE ANOTHER ARE NOT RELEVANT. THE STREET PROFILES ARE LEFT, RIGHT CURB PROFILES, AND UTILITIES ARE IN THE ROADWAY. THE FINAL SURFACE WOULD NOT BE AN ACCURATE INTERPRETATION OF THE SURFACE ELEVATIONS AT THE UTILITY ALIGNMENT. THE UTILITY PLAN(S) PROFILES SHOW THE PIPE AND THE PROPOSED AND EXISTING SURFACES AT THE ACTUAL ROADWAY SURFACE

NOT ONLY THAT BUT SHOWING UTILITIES WITH THE STREET PROFILES IS CUMBERSOME AND CONFUSING AND MAKES OBTAINING PROBLEMATIC AND A POTENTIAL FOR ERROR WHEN SHOWING THE SAME DATA WITHIN TWO SEPARATE TYPES OF CONSTRUCTIONS PLANS. ADDING THE UTILITIES IN THE PROFILE TAKES AWAY FROM THE PURPOSE OF THE "STREET" PLANS. WE RESPECTFULLY REQUEST THE COMMENT BE ELIMINATED.

CLAREMONT BUSINESS PARK 2 FIL. NO. 2
STREET IMPROVEMENT PLAN
PROJECT NO. 10-020
SCALE: HORIZONTAL: 1"=30' VERTICAL: 1"=3'
DATE: 01/13/23
DESIGNED BY: GW
DRAWN BY: CLP
CHECKED BY: VAS
SHEET 4 OF 14
SI01

210 N. WABATCH AVE., STE 305
COLORADO SPRINGS, CO 80903
PHONE: 719.955.5465



FOR AND ON BEHALF OF
MKS CIVIL CONSULTANTS, INC.
VIRGIL A. SANCHEZ, COLORADO, P.E. NO. 371160

NO.	DATE	BY	DESCRIPTION

THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARE OF THESE PLANS.

CAUTION

FOR LOCATING & MARKING GAS, ELECTRIC, WATER & TELEPHONE LINES
 FOR BURIED UTILITY INFORMATION
 48 HRS BEFORE YOU DIG
 CALL 1-800-922-1987

CLAREMONT BUSINESS PARK 2 FIL. NO. 2
 SIDEWALK & INTERSECTION DETAILS
 PROJECT NO. 10-020
 SCALE: HORIZONTAL: VARIES VERTICAL: N/A
 DATE: 01/13/23
 SHEET 5 OF 14
 S102

212 N. WABATCH AVE., STE 305
 COLORADO SPRINGS, CO 80903
 PHONE: 719.555.5465

 CIVIL CONSULTANTS, INC.

FOR AND ON BEHALF OF
 W&S CIVIL CONSULTANTS, INC.

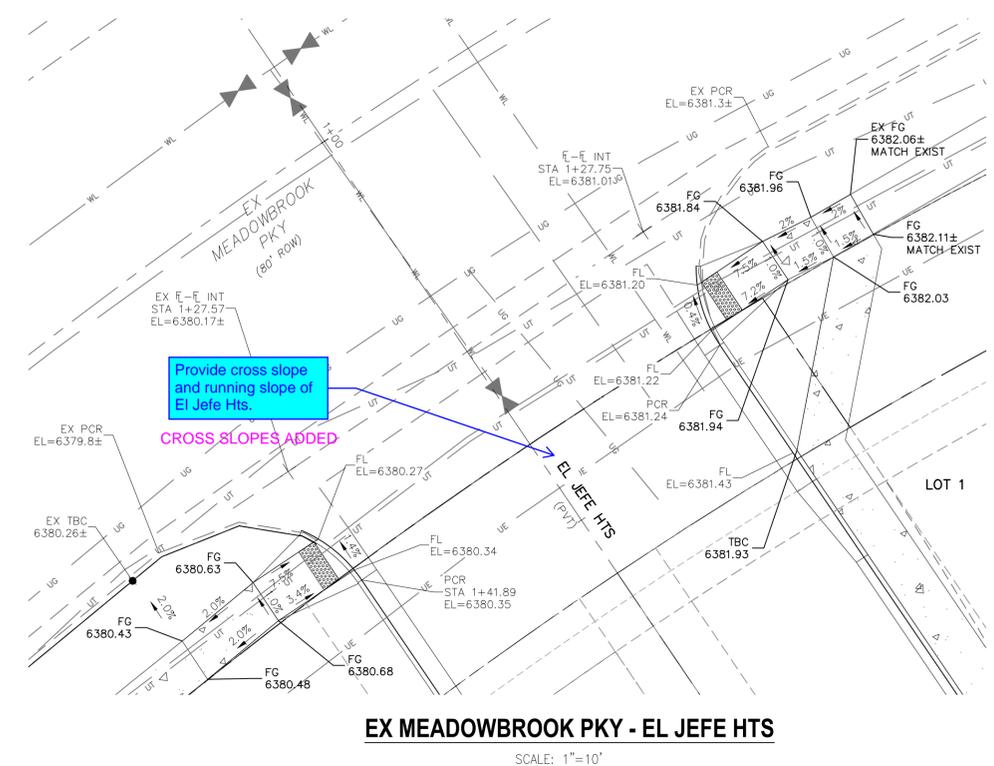
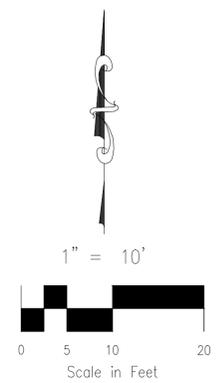
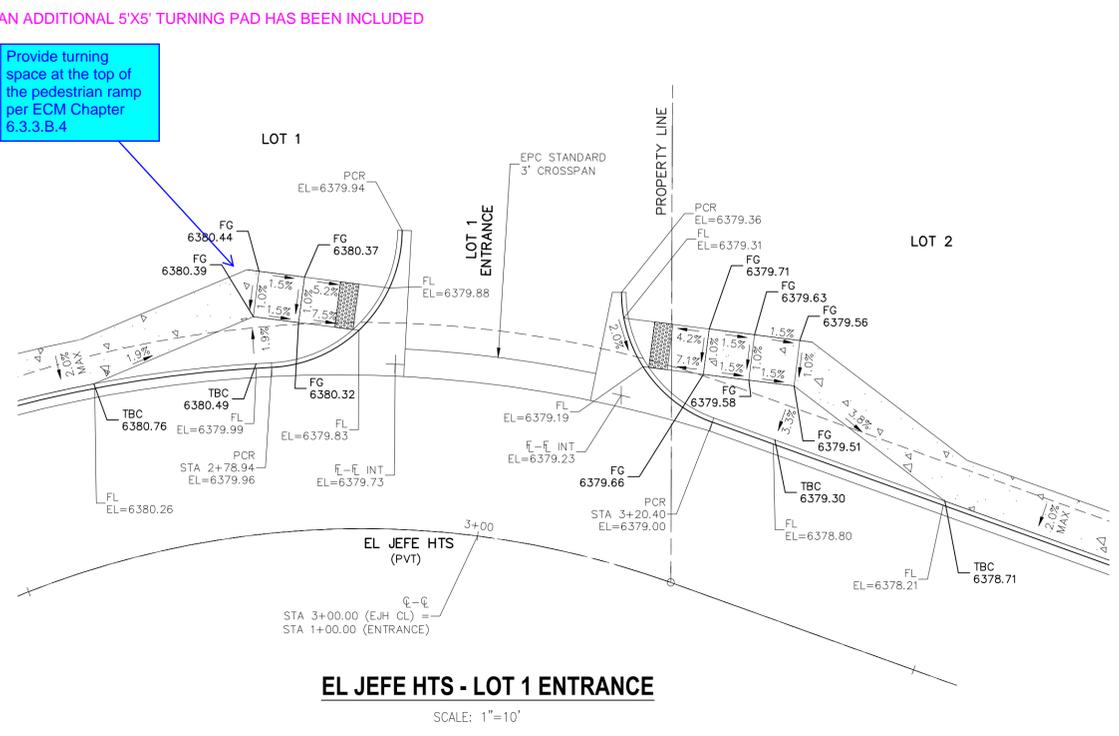
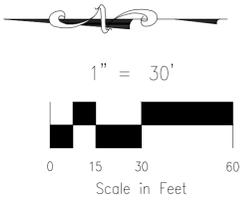
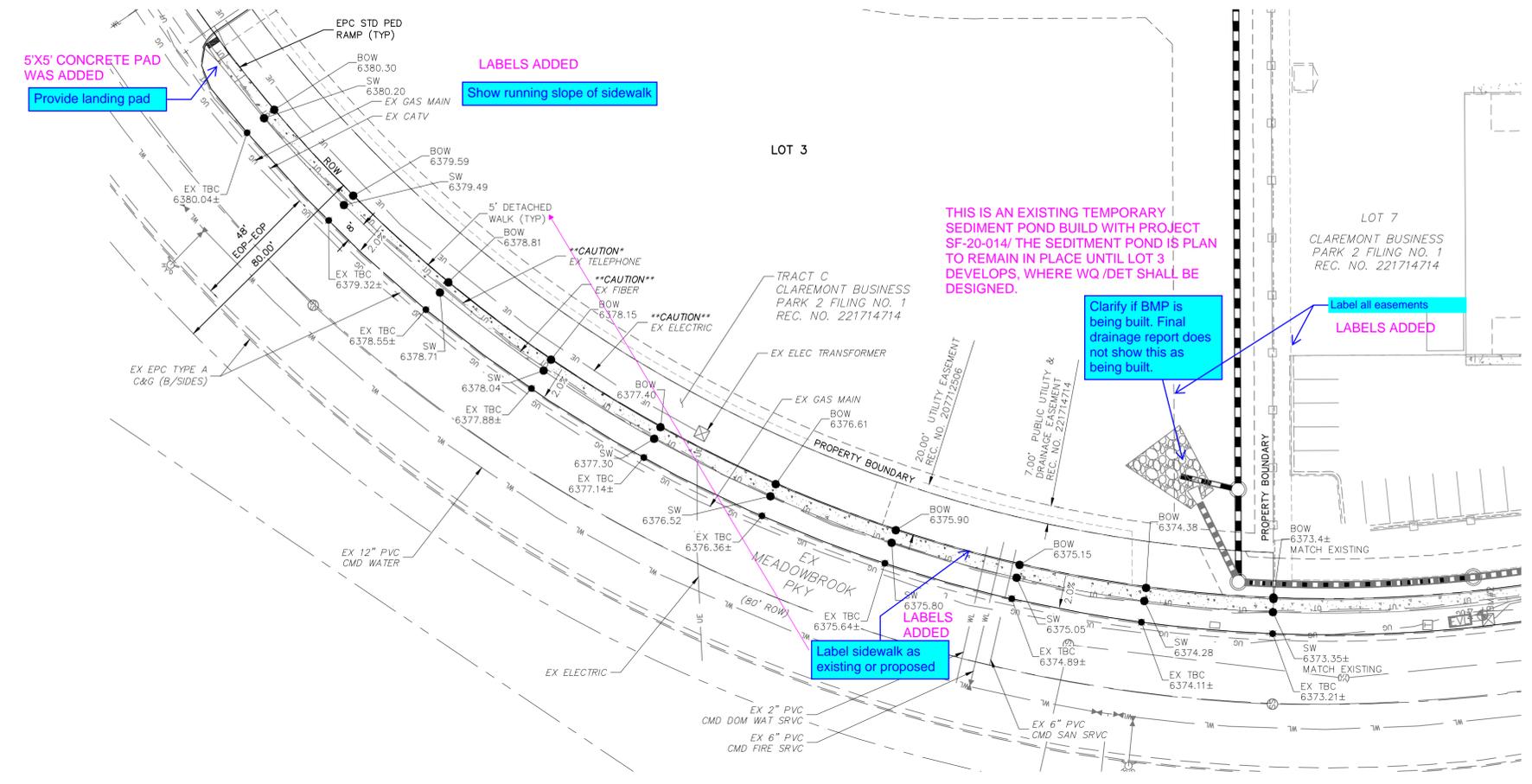
REVISIONS:

NO.	DATE	BY	DESCRIPTION

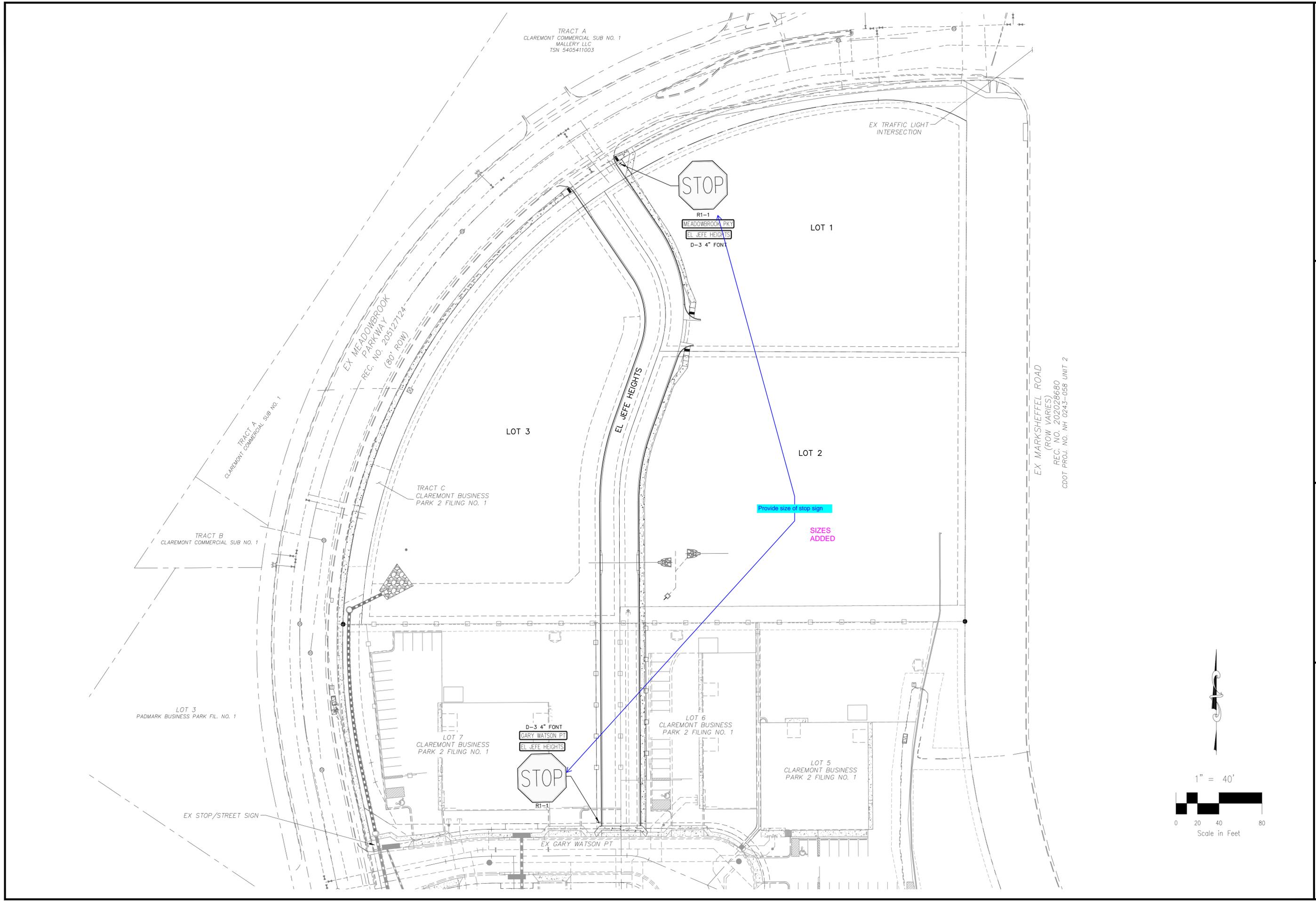
APPROVED BY: _____ DATE: _____

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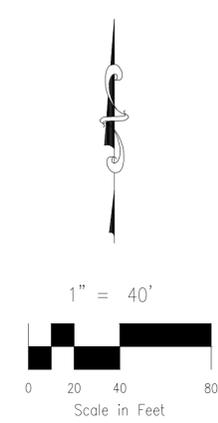
CAUTION



File: 0:\10020A-CBP-Dunkin Donuts\Drawings\Street\10020A.dwg Plotstamp: 2/27/2023 1:13 PM



EX MARKSHEFFEL ROAD
(ROW VARIES)
REC. NO. 202028680
CDDT PROJ. NO. NH 0243-058 UNIT 2



CLAREMONT BUSINESS PARK 2 FIL. NO. 2		SIGNAGE AND STRIPING PLAN	
PROJECT NO. 10-020	SCALE:	DATE:	01/13/23
DESIGNED BY: GW	HORIZONTAL: 1"=40'	CHECKED BY: VAS	SHEET 6 OF 14
DRAWN BY: CLP	VERTICAL: N/A		S103
CHECKED BY: VAS			

212 N. WABATCH AVE., STE 305
COLORADO SPRINGS, CO 80903
PHONE: 719.955.5465

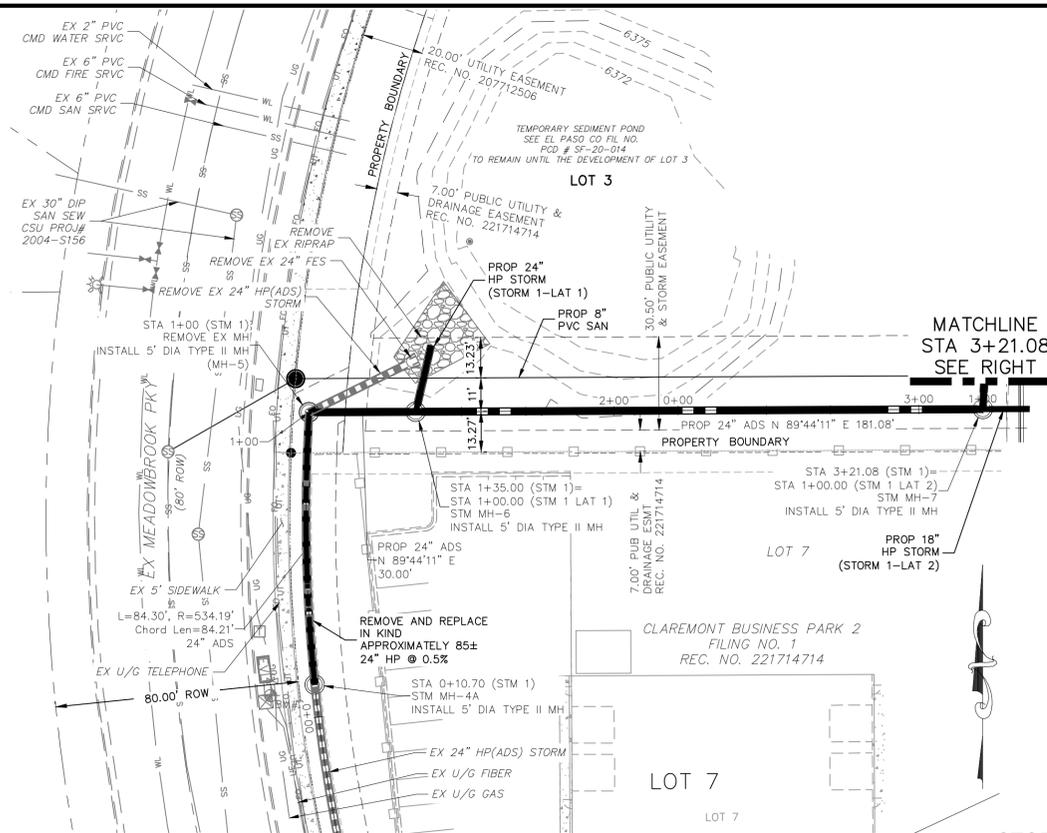
CIVIL CONSULTANTS, INC.

NO.	DATE	BY	DESCRIPTION	APPR'D. BY	DATE

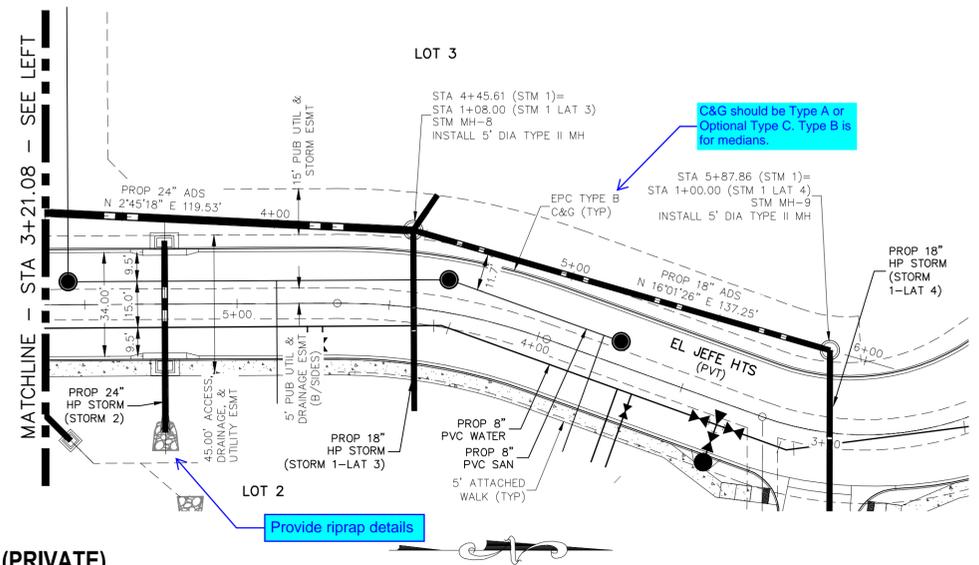
FOR AND ON BEHALF OF
WAS CIVIL CONSULTANTS, INC.

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CAUTION



STORM 1 (PRIVATE)
STA 0+10.70 TO STA 5+87.86

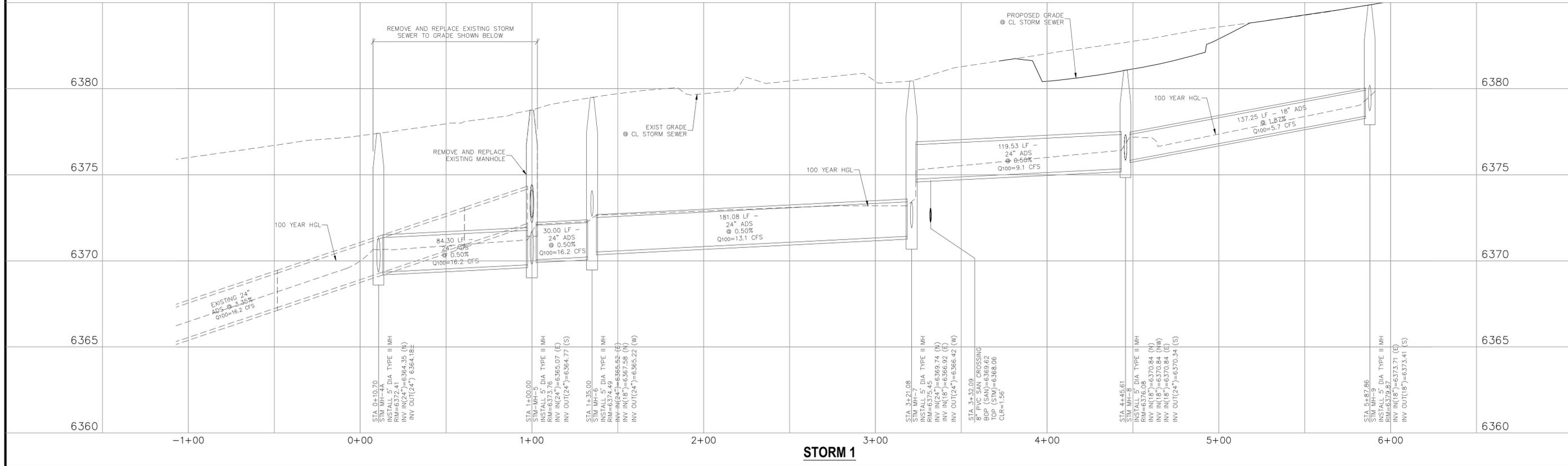
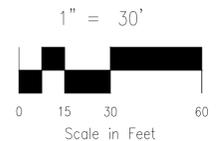


NOTE:

- ALL STORM SEWER CONSTRUCTED WITH THESE PLANS SHALL BE CONSIDERED PRIVATE.
- GAS LINE NOT LOCATED, LOCATION TO BE DETERMINED BY CONTRACTOR

ABBREVIATION LEGEND

C&G	CURB AND GUTTER
CL	CENTERLINE
CONST	CONSTRUCTION
EL	ELEVATION
EX	EXISTING
LT	LEFT
N	NORTH
NTS	NOT TO SCALE
PUB	PUBLIC
PVT	PRIVATE
PROP	PROPOSED
RT	RIGHT
S	SOUTH
SAN	SANITARY SEWER
SLV	SLEEVE
SRV	SERVICE
STA	STATION
STM	STORM SEWER
W	WEST
WTR	WATER



STORM 1

FOR LOCATING & MARKING GAS, ELECTRIC, WATER & TELEPHONE LINES

FOR BURIED UTILITY INFORMATION 48 HRS BEFORE YOU DIG CALL 1-800-922-1987

CLAREMONT BUSINESS PARK 2 FIL. NO. 2

STORM SEWER PLAN & PROFILE

PROJECT NO. 10-020 DATE: 01/13/23

DESIGNED BY: GW SCALE: HORIZONTAL: 1"=30'

DRAWN BY: CLP VERTICAL: 1"=3'

CHECKED BY: VAS

212 N. WABATCH AVE., STE 305
COLORADO SPRINGS, CO 80903
PHONE: 719.555.5465

CIVIL CONSULTANTS, INC.

VIRGIL A. SANCHEZ, COLORADO, P.E. NO. 37160

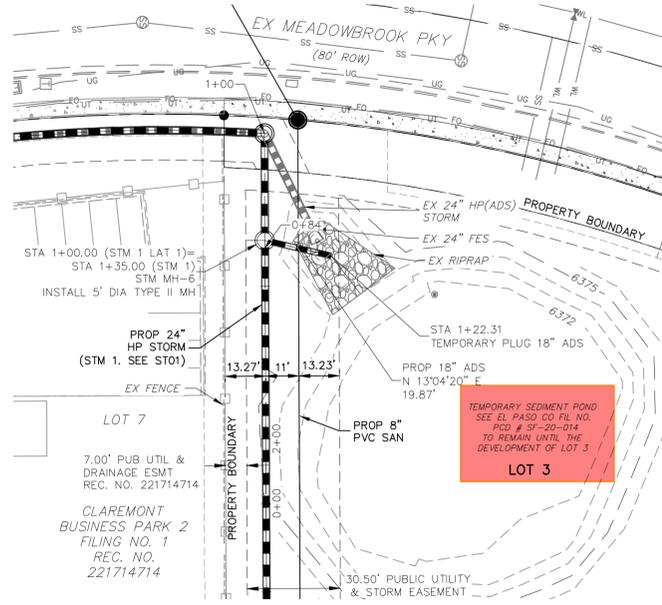
FOR AND ON BEHALF OF M&S CIVIL CONSULTANTS, INC.

REVISIONS:

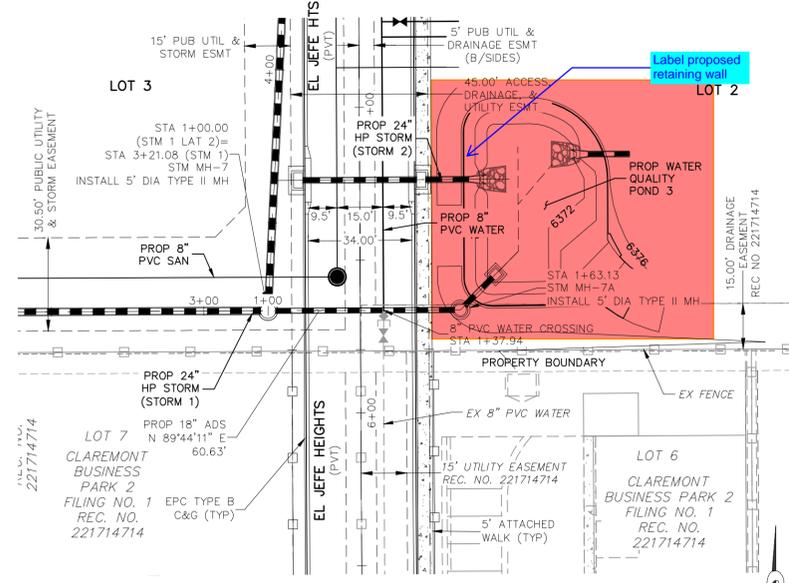
NO.	DATE	BY	DESCRIPTION	APPROV'D. BY	DATE

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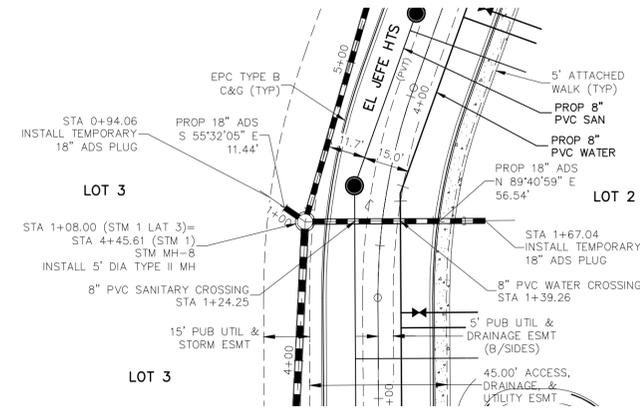
CAUTION



**STORM 1 LAT-1 (PRIVATE)
STA 1+00.00 TO STA 1+22.31**



**STORM 1 LAT-2 (PRIVATE)
STA 1+00.00 TO STA 1+79.51**



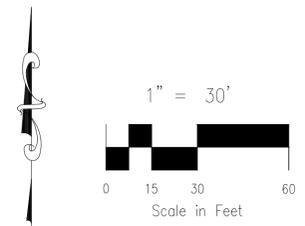
**STORM 1 LAT-3 (PRIVATE)
STA 0+94.06 TO STA 1+67.04**

NOTE:

- ALL STORM SEWER CONSTRUCTED WITH THESE PLANS SHALL BE CONSIDERED PRIVATE.
- GAS LINE NOT LOCATED, LOCATION TO BE DETERMINED BY CONTRACTOR

ABBREVIATION LEGEND

C&G	CURB AND GUTTER
CL	CENTERLINE
CONST	CONSTRUCTION
EL	ELEVATION
EX	EXISTING
LT	LEFT
N	NORTH
NTS	NOT TO SCALE
PUB	PUBLIC
PVT	PRIVATE
PROP	PROPOSED
RT	RIGHT
S	SOUTH
SLV	SANITARY SEWER
SRV	SLEEVE
STA	STATION
STM	STORM SEWER
W	WEST
WTR	WATER



Station	Storm 1 LAT-1	Storm 1 LAT-2	Storm 1 LAT-3
6380	EXIST GRADE @ CL STORM SEWER	PROPOSED GRADE @ CL STORM SEWER	EXIST GRADE @ CL STORM SEWER
6375	100 YEAR HGL	100 YEAR HGL	100 YEAR HGL
6370	TEMPORARY SEDIMENT POND SEE EL PASO CO FIL NO. PCD # SF-20-014 TO REMAIN UNTIL THE DEVELOPMENT OF LOT 3	14.89 LF - 18" RCP @ 0.50% Q100=4.0 CFS	11.44 LF - 18" ADS @ 0.50% Q100=1.0 CFS
6365	19.87 LF - 18" ADS @ 1.00% Q100=3.0 CFS	60.63 LF - 18" ADS @ 0.50% Q100=4.0 CFS	56.54 LF - 18" ADS @ 0.50% Q100=2.4 CFS
	STA 1+00.00 INSTALL 5' DIA TYPE II MH RIM=6374.49 INV IN(24")=6365.52 (E) INV IN(18")=6367.58 (N) INV OUT(24")=6365.22 (W)	STA 1+00.00 INSTALL 5' DIA TYPE II MH RIM=6375.45 INV IN(24")=6366.92 (E) INV OUT(24")=6366.42 (W)	STA 0+94.06 INSTALL 18" ADS PLUG INV=6370.90
	STA 1+22.31 INSTALL 18" ADS PLUG INV=6367.78	STA 1+37.94 8" PVC WATER CROSSING BOP (STM)=6370.11 TOP (WAT)=6368.21 CLR=1.90'	STA 1+08.00 STM MH-5 DIA TYPE II MH RIM=6376.08 INV IN(18")=6370.84 (N) INV IN(18")=6370.84 (NW) INV IN(18")=6370.84 (E) INV OUT(24")=6370.34 (S)
		STA 1+79.51 POND 3 OUTLET STRUCTURE POND 3 - MOD. SPIE C-INLET RIM=6371.49 INV OUT(18")=6367.60 (SW)	STA 1+24.25 8" PVC SAN CROSSING BOP (STM)=6371.29 TOP (SAN)=6369.79 CLR=1.30'
			STA 1+39.26 GROSSING BOP (STM)=6371.36 TOP (WAT)=6369.43 CLR=1.93'
			STA 1+67.04 INSTALL 18" ADS PLUG INV=6371.12

Show and label wall (To show if pipe does or doesn't need to go through wall)

FOR LOCATING & MARKING GAS, ELECTRIC, WATER & TELEPHONE LINES

FOR BURIED UTILITY INFORMATION 48 HRS BEFORE YOU DIG CALL 1-800-922-1987

CIVIL CONSULTANTS, INC.

212 N. WASHCATCH AVE., STE 305
COLORADO SPRINGS, CO 80903
PHONE: 719.955.5465

CLAREMONT BUSINESS PARK 2 FIL. NO. 2

STORM SEWER PLAN & PROFILE

PROJECT NO. 10-020
DATE: 01/13/23
SCALE: HORIZONTAL: 1"=30' VERTICAL: 1"=3'

DESIGNED BY: GW
DRAWN BY: CLP
CHECKED BY: VAS

SHEET 8 OF 14
ST02

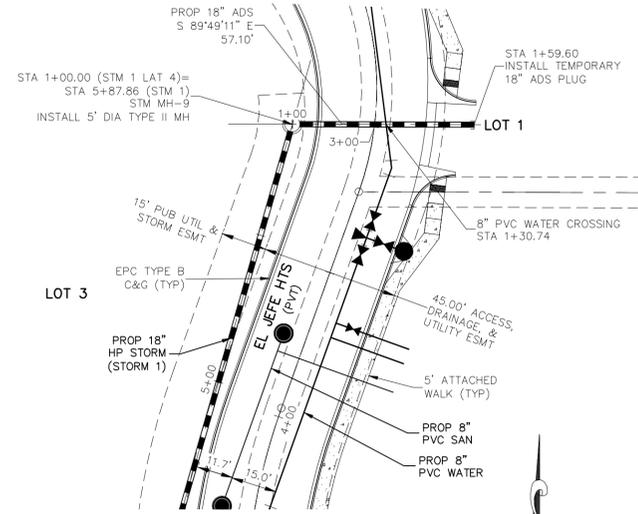
VIRGIL A. SANCHEZ, COLORADO P.E. NO. 37160

FOR AND ON BEHALF OF M&S CIVIL CONSULTANTS, INC.

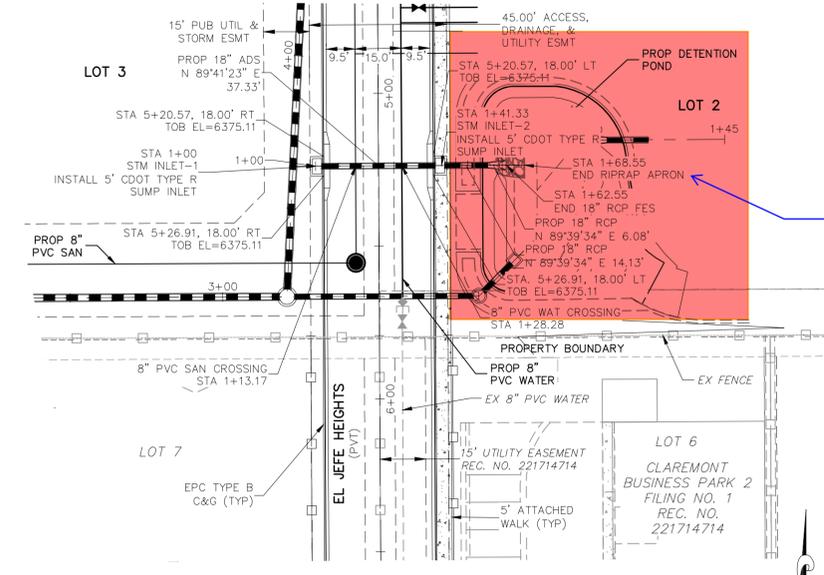
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CAUTION

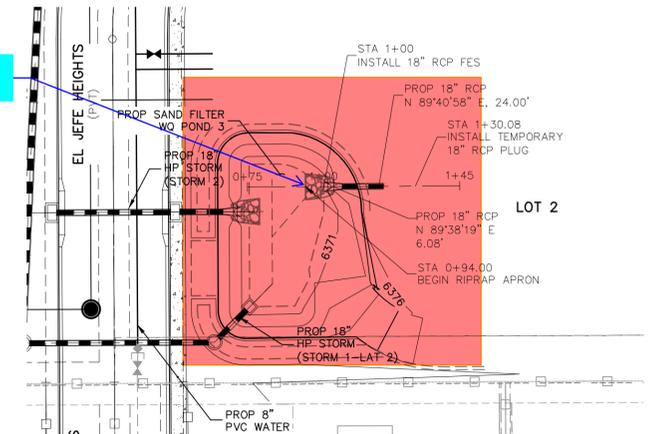
File: 0:\100204-CBP-Dunkin Donuts\Drawings\Storm\ST03.dwg Plotstamp: 2/27/2023 12:43 PM



STORM 1 LAT-4 (PRIVATE)
STA 1+00.00 TO STA 1+59.60



STORM 2 (PRIVATE)
STA 1+00.00 TO STA 1+68.54



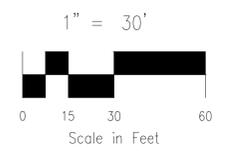
STORM 3 (PRIVATE)
STA 0+94.00 TO STA 1+30.08

NOTE:

1. ALL STORM SEWER CONSTRUCTED WITH THESE PLANS SHALL BE CONSIDERED PRIVATE.
2. GAS LINE NOT LOCATED, LOCATION TO BE DETERMINED BY CONTRACTOR.
3. STATIONING AT CORNER OF INLETS (TOB) REFERS TO CENTERLINE STATIONING.

ABBREVIATION LEGEND

C&G	CURB AND GUTTER
CL	CENTERLINE
CONST	CONSTRUCTION
EL	ELEVATION
EX	EXISTING
LT	LEFT
N	NORTH
NTS	NOT TO SCALE
PUB	PUBLIC
PVT	PRIVATE
PROP	PROPOSED
RT	RIGHT
S	SOUTH
SAN	SANITARY SEWER
SLV	SLEEVE
SRV	SERVICE
STA	STATION
STM	STORM SEWER
W	WEST
WTR	WATER
TOB	TOP OF BOX AT CORNER OF INLET



Reference sheet for apron detail

6380		6380	6380	6380	6380	6380					
6375		6375	6375	6375	6375	6375					
6370		6370	6370	6370	6370	6370					
6365		6365	6365	6365	6365	6365					
1+00	STORM 1 LAT-4		2+00	1+00	STORM 2		2+00	1+00	STORM 3		2+00

FOR LOCATING & MARKING GAS, ELECTRIC, WATER & TELEPHONE LINES

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CLAREMONT BUSINESS PARK 2 FIL. NO. 2

STORM SEWER PLAN & PROFILE

PROJECT NO. 10-020 DATE: 01/13/23

DESIGNED BY: GW SCALE: HORIZONTAL: 1"=30' VERTICAL: 1"=3'

DRAWN BY: CLP SHEET 9 OF 14

CHECKED BY: VAS

212 N. WASHCATCH AVE., STE 305
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CIVIL CONSULTANTS, INC.

VIRGIL A. SANCHEZ, COLORADO, P.E. NO. 37160

FOR AND ON BEHALF OF
M&S CIVIL CONSULTANTS, INC.

REVISIONS:

NO.	DATE	BY	DESCRIPTION	APPROV'D. BY	DATE

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CAUTION

STANDARD CONSTRUCTION NOTES:

- ALL DRAINAGE AND ROADWAY CONSTRUCTION SHALL MEET THE STANDARDS AND SPECIFICATIONS OF THE CITY OF COLORADO SPRINGS/EL PASO COUNTY DRAINAGE CRITERIA MANUAL VOLUMES 1 AND 2, AND THE EL PASO COUNTY ENGINEERING CRITERIA MANUAL.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE NOTIFICATION AND FIELD LOCATION OF ALL EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, BEFORE BEGINNING CONSTRUCTION. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CALL 811 TO CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO (UNCC).
- CONTRACTOR SHALL KEEP A COPY OF THESE APPROVED PLANS, THE GRADING AND EROSION CONTROL PLAN (SWMP), THE STORMWATER MANAGEMENT PLAN (SWMP), THE SOILS AND GEOTECHNICAL REPORT AND THE APPROPRIATE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS AT THE JOB SITE AT ALL TIME INCLUDING THE FOLLOWING:
 - EL PASO COUNTY ENGINEERING CRITERIA MANUAL (ECM)
 - CITY OF COLORADO SPRINGS/EL PASO COUNTY ENGINEERING CRITERIA MANUAL VOLUMES 1 AND 2.
 - COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) STANDARDS SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION.
 - CDOT M&S STANDARDS.
- IT IS THE DESIGN ENGINEERS RESPONSIBILITY TO ACCURACY SHOW EXISTING CONDITION BOTH ONSITE AND OFFSITE ON THE CONSTRUCTION PLANS. ANY MODIFICATION NECESSARY DUE TO CONFLICT OMISSIONS OR CHANGED CONDITIONS WILL BE ENTIRELY THE DEVELOPERS RESPONSIBILITY TO RECTIFY.
- IT IS THE CONTRACTORS RESPONSIBILITY TO UNDERSTAND THE REQUIREMENTS OF ALL JURISDICTIONAL AGENCIES AND TO OBTAIN ALL REQUIRED PERMITS, INCLUDING BUT NOT LIMITED TO EL PASO COUNTY EROSION AND STORM WATER QUALITY CONTROL PERMIT (ESQCP), REGIONAL BUILDING FLOODPLAIN DEVELOPMENT PERMIT, US ARMY CORPS OF ENGINEER ISSUED 401 AND/OR 404 PERMITS AND COUNTY AND STATE FUGITIVE DUST PERMITS.
- ANY TEMPORARY SIGNAGE AND STRIPING SHALL COMPLY WITH EL PASO COUNTY DOW AND MUTCD CRITERIA.
- CONTRACTOR SHALL OBTAIN ANY PERMITS REQUIRED BY EL PASO COUNTY DOT INCLUDING WORK WITHIN THE RIGHT-OF-WAY AND SPECIAL TRANSPORT PERMITS.
- THE LIMITS OF CONSTRUCTION SHALL REMAIN WITHIN THE PROPERTY LINE UNLESS OTHERWISE NOTED. THE OWNER/DEVELOPER SHALL OBTAIN WRITTEN PERMISSION AND EASEMENTS, WHERE REQUIRED, FROM ADJOINING PROPERTY OWNER(S) PRIOR TO ANY OFFSITE DISTURBANCE GRADING, OR CONSTRUCTION.

STORM SEWER GENERAL NOTES

- ALL STATIONING IS ALONG STORM SEWER CENTERLINE UNLESS OTHERWISE INDICATED. ALL ELEVATIONS ARE INVERT UNLESS OTHERWISE INDICATED.
- ALL STORM SEWER BENDS AND WYES SHOWN ON THE PLAN SHALL BE PREFABRICATED.
- JOINTS SHALL BE IN ACCORDANCE WITH ASTM C443 "STANDARD SPECIFICATIONS FOR JOINTS FOR CIRCULAR CONCRETE SEWER AND CULVERT PIPE USING RUBBER GASKET." IN NO CASE SHALL THE MAXIMUM JOINT OPENING FOR STRAIGHT ALIGNMENT EXCEED 1 INCH OR ONE AND ONE-HALF INCH ON CURVED ALIGNMENT.
- INLET DIMENSIONS SHOWN ON PLANS REFER TO DISTANCES FROM INSIDE FACES OF BOX BETWEEN THE WIDTHS AND LENGTHS.
- ALL REINFORCED CONCRETE PIPE STORM SEWER SHALL BE A MINIMUM OF CLASS III. ALL POLYPROPYLENE PIPE SHALL BE ADS N-12 DUAL WALL PIPE OR APPROVED EQUAL. SPECIFIC SEGMENTS OF STORM SEWER SHALL BE REQUIRED TO BE CONSTRUCTED OF A MINIMUM OF 5000 PSI CONCRETE DUE TO EXCESSIVE VELOCITIES. REFER TO ADDITIONAL NOTES WITHIN CONSTRUCTION PLANS.
- SINCE ALL PIPE ENTRIES INTO THE BASE ARE VARIABLE, THE DIMENSIONS SHOWN ARE TYPICAL. ACTUAL DIMENSIONS AND QUANTITIES FOR CONCRETE AND REINFORCEMENT SHALL BE AS REQUIRED IN THE WORK.
- THE MH RING (FRAME) SHALL BE SET IN A BED OF GROUT. THE FRAME SHALL BE SURROUNDED WITH A GROUT IN UNPAVED AREA, OR A CONCRETE COLLAR IN PAVED AREA.
- PRECAST MANHOLES AND REINFORCEMENT SHALL CONFORM TO ASTM C 478 (AASHTO M 199).
- CAST IN PLACE MANHOLES SHALL BE CLASS B CONCRETE.
- STEPS SHALL BE REQUIRED WHEN THE MANHOLE DEPTH EXCEEDS 3'-6" AND SHALL BE IN ACCORDANCE WITH AASHTO M 199.
- ALL REINFORCING STEEL SHALL HAVE A MINIMUM YIELD STRENGTH OF 60,000 PSI. VERTICAL STEEL SHALL BE PLACED AT 1/4 OF WALL. ALL BARS SHALL HAVE A 2" MINIMUM CLEARANCE.
- FLOW CHANNELS AND INVERTS SHALL BE FORMED BY SHAPING WITH CLASS B CONCRETE OR APPROVED GROUT.
- STUB-OUTS SHALL EXTEND 4 FT MINIMUM BEYOND OUTSIDE WALL SURFACE OF MANHOLE AND BE SATISFACTORILY PLUGGED.
- CHECK WITH THE LOCAL GOVERNMENT AUTHORITY FOR ANY ADDITIONAL STORM SEWER SPECIFICATIONS, DETAILS, OR REGULATIONS.
- THE SLOPE OF THE MANHOLE COVER SHALL MATCH THE ROADWAY PROFILE AND CROSS SLOPE.
- THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS OF ALL PREFABRICATED STRUCTURES TO THE ENGINEER FOR REVIEW PRIOR TO INSTALLATION.

RIPRAP NOTES:

- RIPRAP USED SHALL BE THE TYPE DESIGNATED ON THE DRAWINGS AND SHALL CONFIRM TO TABLE 1.
- THE RIPRAP DESIGNATION AND TOTAL THICKNESS OF RIPRAP SHALL BE AS SHOWN THE DRAWINGS. THE MAXIMUM STONE SIZE SHALL NOT BE LARGER THAN THE THICKNESS OF THE RIPRAP.
- NEITHER WIDTH NOR THICKNESS OF A SINGLE STONE OF RIPRAP SHALL BE LESS THAN ONE-THIRD (1/3) OF ITS LENGTH
- THE SPECIFIC GRAVITY OF THE RIPRAP SHALL BE TWO AND ONE HALF (2.5) OR GREATER.
- RIPRAP SPECIFIC GRAVITY SHALL BE ACCORDING TO THE BULK-SATURATED, SURFACE-DRY BASIS, IN ACCORDANCE WITH AASHTO T85.
- THE BULK DENSITY FROM THE RIPRAP SHALL BE 1.3 TON/CY OR GREATER.
- THE RIPRAP SHALL HAVE A PERCENTAGE LOSS OF NOT MORE THAN FORTY PERCENT (40%) AFTER FIVE HUNDRED (500) REVOLUTIONS WHEN TESTED IN ACCORDANCE WITH AASHTO T96.
- THE RIPRAP SHALL HAVE A PERCENTAGE LOSS OF NOT MORE THAN TEN PERCENT (10%) AFTER FIVE (5) CYCLES WHEN TESTED IN ACCORDANCE WITH AASHTO T104 FOR LEDGE ROCK USING SODIUM SULFATE.
- THE RIPRAP SHALL HAVE A PERCENTAGE LOSS OF NOT MORE THAN TEN PERCENT (10%) AFTER TWELVE (12) CYCLES OF FREEZING AND THAWING WHEN TESTED IN ACCORDANCE WITH AASHTO T103 FOR LEDGE ROCK PROCEDURE A.
- ROCK SHALL BE FREE OF CALCITE INTRUSIONS.
- ROUND RIPRAP (RIVER ROCK) IS NOT ACCEPTABLE, UNLESS SPECIFICALLY DESIGNATE ON THE DRAWINGS.

STRUCTURAL CONCRETE NOTES:

- ALL CONSTRUCTION INVOLVING THE PLACEMENT OF STRUCTURAL CONCRETE SHALL BE COMPLETED IN ACCORDANCE WITH STANDARD SPECIFICATIONS, AND AS SUPPLEMENTED BY THE COLORADO DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADWAY AND BRIDGE CONSTRUCTION.
- STEEL REINFORCING SHALL BE GRADE 60 FOR ALL REINFORCING STEEL GREATER THAN #4. SPlicing, LAP SPlicing SHALL BE MINIMUM IN THE FOLLOWING TABLE UNLESS OTHERWISE SPECIFIED:

BAR SIZE	#4	#5	#6	#7	#8
SPLICE LENGTH	1'-9"	2'-2"	2'-7"	3'-4"	4'-3"

 ALL REINFORCING SHALL HAVE A 2-INCH MINIMUM COVER UNLESS OTHERWISE SPECIFIED. ALL REINFORCED STEEL TO BE EPOXY COATED.
- CAST-IN-PLACE CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH (fc) OF 4,000 PSI AT 28 DAYS. ALL CONCRETE PLACED AGAINST SOIL SHALL BE TYPE II PORTLAND CEMENT. ALL EXPOSED CORNERS SHALL BE FORMED WITH A 3/4" CHAMFER UNLESS OTHERWISE SPECIFIED.
- EXPANSION JOINT MATERIAL SHALL MEET AASHTO SPECIFICATION M-213.
- BACKFILL AGAINST STRUCTURES SHALL NOT COMMENCE UNTIL ALL SUPPORTING DIAPHRAGMS ARE IN PLACE AND CONCRETE HAS OBTAINED ITS FULL SEVEN DAY STRENGTH. BACKFILL SHALL BE PLACED EQUALLY ON EACH SIDE OF RETAINING WALL STRUCTURES AND CUTOFF WALLS UNTIL THE FINAL GRADE IS REACHED.
- FOOTING EXCAVATIONS SHALL BE EXAMINED BY THE GEOTECHNICAL ENGINEER WITH A 24-HOUR MINIMUM NOTIFICATION FOR SOIL AND/OR CONCRETE TESTING. PLACEMENT OF CONCRETE IN THE ABSENCE OF TESTING SHALL BE COMPLETED AT THE SOLE RISK OF THE CONTRACTOR.
- PRIOR TO THE PLACEMENT OF CONCRETE IN AREAS WHERE SOIL IS PRESENT, THE SOIL SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6-INCHES. THE MOISTURE CONTENT SHALL BE ADJUSTED TO WITHIN PLUS OR MINUS 2 PERCENT OF THE OPTIMUM MOISTURE CONTENT AND RECOMPACTED TO AT LEAST 95 PERCENT RELATIVE COMPACTION (AASHTO-T-180).

ABBREVIATIONS

EC --- EPOXY COATED O.F. --- OUTSIDE FACE E.F. --- EACH FACE E.W. --- EACH WAY I.F. --- INSIDE FACE N.F. --- NEAR FACE
 T.O.C. --- TOP OF CONCRETE B.O.C. --- BOTTOM OF CONCRETE CONT. --- CONTINUOUS

ADS, Inc. Drainage Handbook Specifications • 1-22

ADS N-12® HP 12" - 60" PIPE SPECIFICATION

Scope
 This specification describes 12- through 60-inch (300 to 1500 mm) ADS N-12 HP pipe for use in gravity-flow storm drainage applications.

Pipe Requirements
 • 12- through 30-inch (300 to 750 mm) pipe shall have a smooth interior and annular exterior corrugations and meet or exceed ASTM F2736 and AASHTO MP-21-11
 • 36- through 60-inch (900 to 1500 mm) pipe shall have a smooth interior and annular exterior corrugations and meet or exceed ASTM F2881 and AASHTO MP-21-11
 • Manning's "n" value for use in design shall be 0.012

Joint Performance
 Pipe shall be joined with a gasketed integral bell & spigot joint meeting the requirements of ASTM F2736 and F2881, for the respective diameters.

12- through 60-inch (300 to 1500 mm) shall be watertight according to the requirements of ASTM D3212. Spigots shall have gaskets meeting the requirements of ASTM F477. Gasket shall be installed by the pipe manufacturer and covered with a removable, protective wrap to ensure the gasket is free from debris. A joint lubricant available from the manufacturer shall be used on the gasket and bell during assembly.

12- through 60-inch (300 to 1500 mm) diameters shall have a reinforced bell with a polymer composite band installed by the manufacturer.

Fittings
 Fittings shall conform to ASTM F2736, ASTM F2881 and AASHTO MP-21-11, for the respective diameters. Bell & spigot connections meeting ASTM F477. Bell & spigot fittings joint shall meet the watertight joint performance requirements of ASTM D3212. Coupled couplings shall be split collar, engaging at least 2 full corrugations.

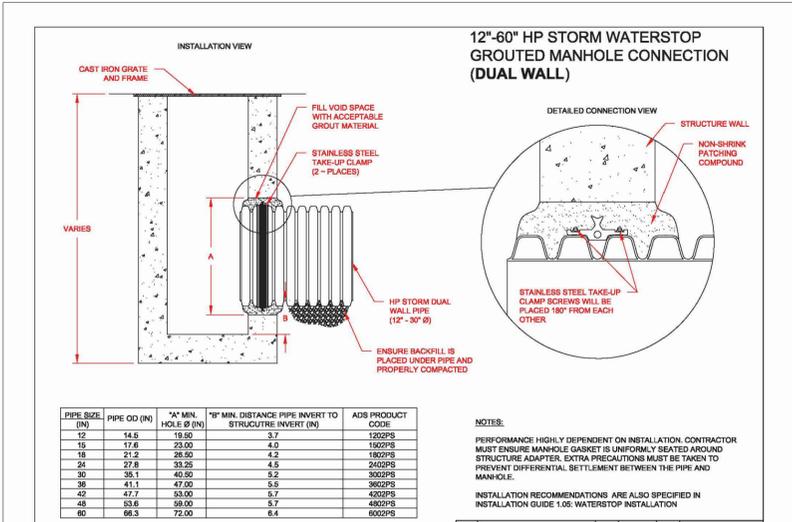
Field Pipe and Joint Performance
 To assure watertightness, field performance verification may be accomplished by testing in accordance with ASTM F2487. Appropriate safety precautions must be used when field-testing any pipe material. Contact the manufacturer for recommended leakage rates.

Material Properties
 Polypropylene compound for pipe and fitting production shall be impact modified copolymer meeting the material requirements of ASTM F2736, Section 4, ASTM F2881, Section 5 and AASHTO MP-21-11, Section 6.1, for the respective diameters.

Installation
 Installation shall be in accordance with ASTM D2321 and ADS recommended installation guidelines, with the exception that minimum cover in traffic areas for 12- through 48-inch (300 to 1200 mm) diameters shall be one foot (0.3 m) and for 60-inch (1500 mm) diameters, the minimum cover shall be 2 ft (0.6 m) in single run applications. Backfill for minimum cover situations shall consist of Class 1, Class 2 (minimum 90% STD) or Class 3 (minimum 95% material). Maximum fill heights depend on embedment material and compaction level; please refer to Technical Note 2.04. Contact your local ADS representative or visit our website at www.ads-inc.com for a copy of the latest installation guidelines.

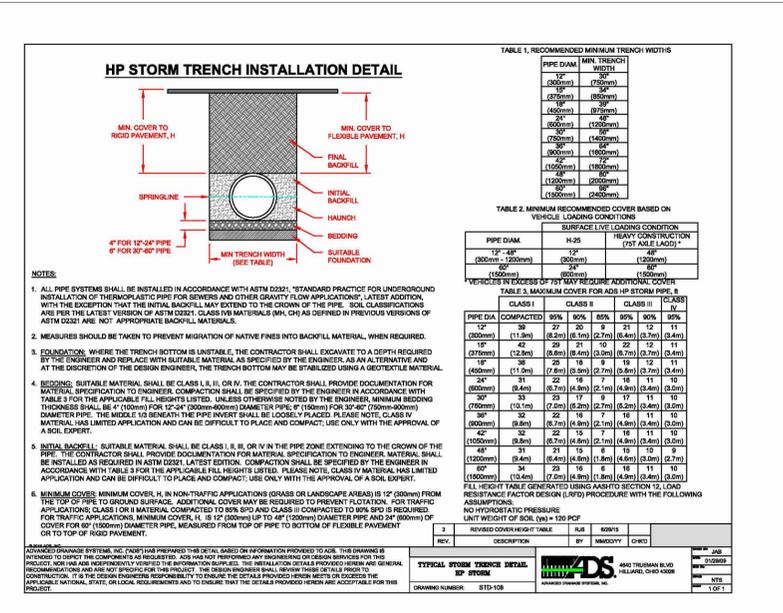
Minimum Pipe ID	12	15	18	24	30	36	42	48	60
in	12.00	15.00	18.00	24.00	30.00	36.00	42.00	48.00	60.00
mm	305	381	457	609.6	762	914.4	1066.8	1219.2	1524
Minimum Pipe OD	12.75	15.75	18.75	24.75	30.75	36.75	42.75	48.75	60.75
in	12.75	15.75	18.75	24.75	30.75	36.75	42.75	48.75	60.75
mm	323.85	400.05	476.25	624.75	783.25	941.75	1100.25	1258.75	1550.25
Minimum Pipe Stiffness*	15	20	25	30	35	40	45	50	55
ksi-in. (kN/m)	15	20	25	30	35	40	45	50	55

*Minimum pipe stiffness values listed; contact a representative for maximum values



PIPE SIZE (IN)	PIPE OD (IN)	1/4" MIN. HOLE Ø (IN)	1/8" MIN. DISTANCE PIPE INVERT TO STRUCTURE INVERT (IN)	ADS PRODUCT CODE
12	14.6	19.60	3.7	1202PS
15	17.6	23.00	4.0	1502PS
18	21.2	26.50	4.2	1802PS
24	27.8	33.25	4.5	2402PS
30	35.1	40.90	5.2	3002PS
36	41.1	47.00	5.5	3602PS
42	47.7	53.00	5.7	4202PS
48	53.6	59.00	5.7	4802PS
60	66.3	72.00	6.4	6002PS

REV.	DESCRIPTION	TITLE	DATE	BY	CHECKED
1	UPDATED TO HP STORM	ADS			



PIPE DIA. (IN)	CLASS I	CLASS II	CLASS III	CLASS IV
12"	36"	27"	30"	9"
15"	42"	33"	36"	11"
18"	48"	39"	42"	13"
24"	54"	45"	48"	15"
30"	60"	51"	54"	17"
36"	66"	57"	60"	19"
42"	72"	63"	66"	21"
48"	78"	69"	72"	23"
60"	96"	84"	84"	28"

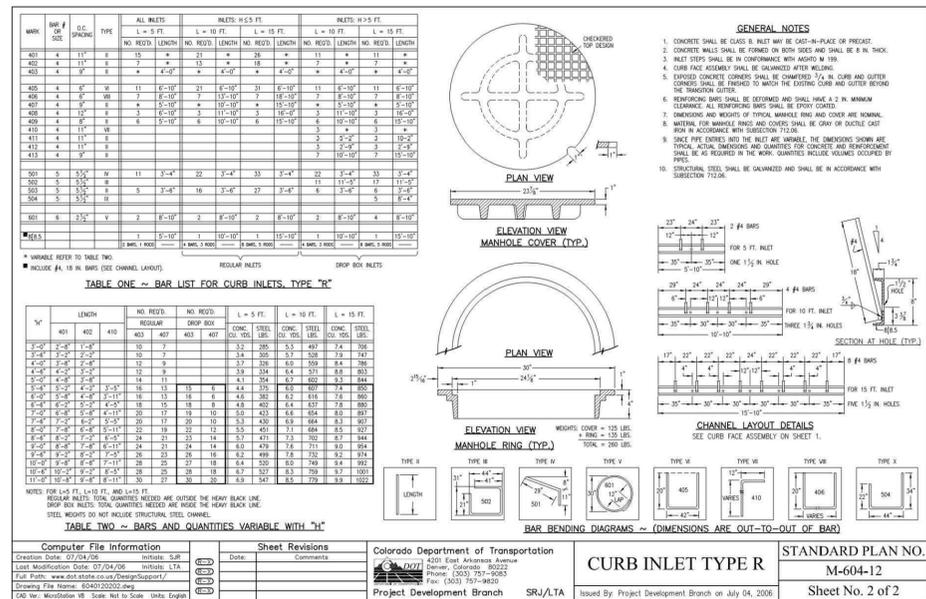
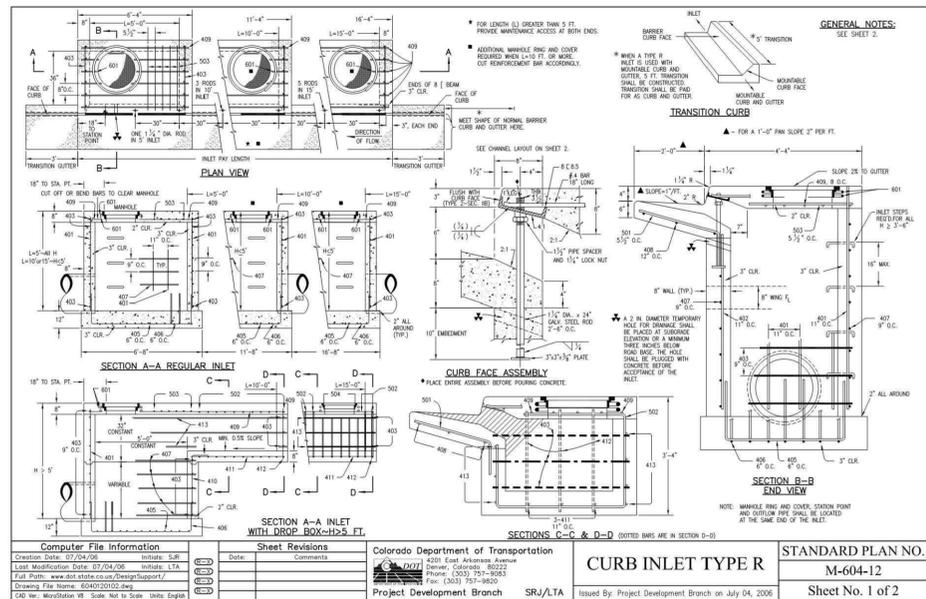
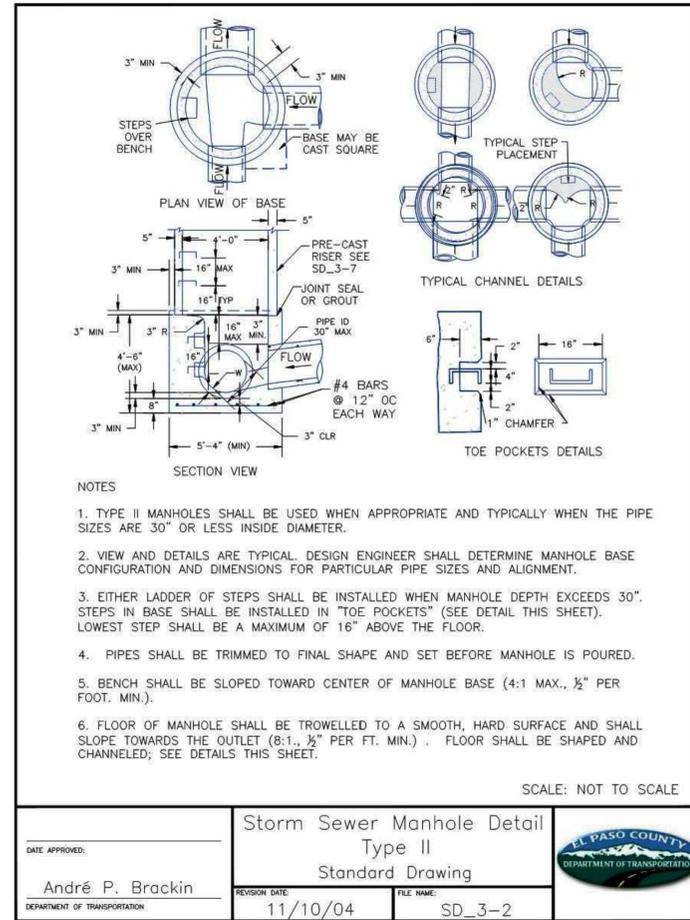
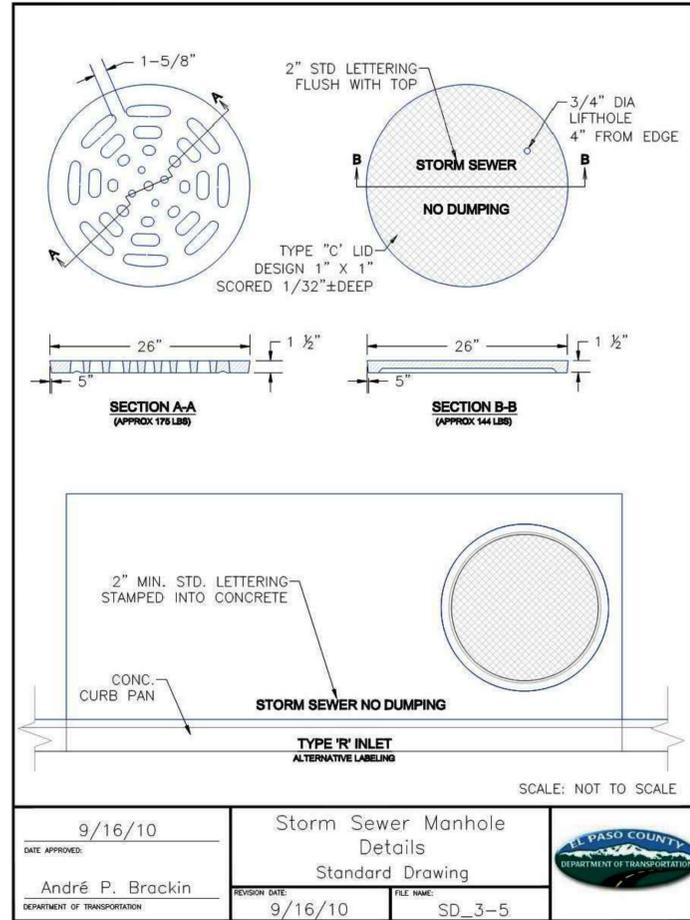
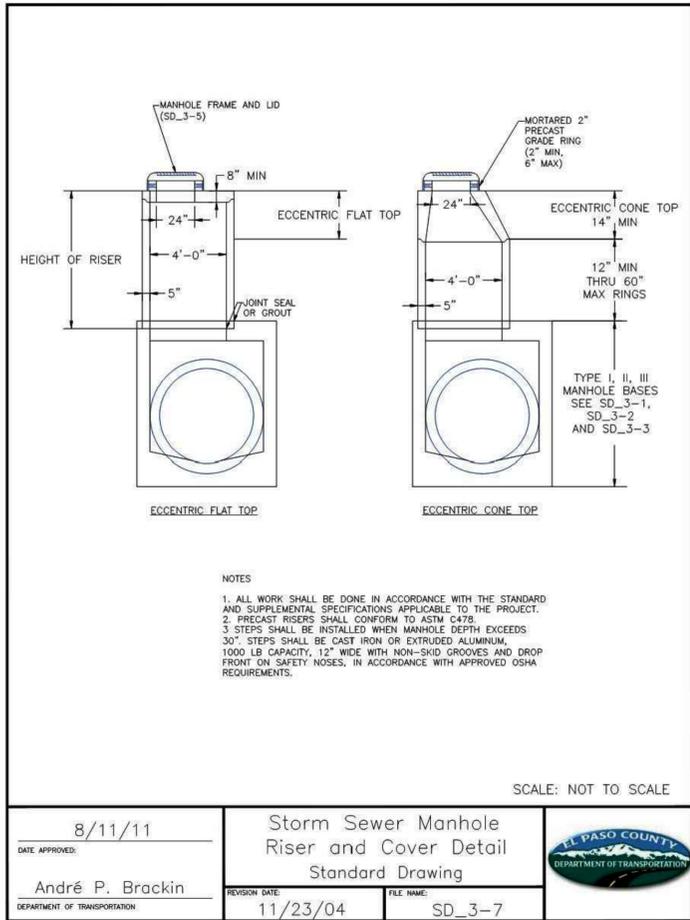
CLAREMONT BUSINESS PARK 2 FIL. NO. 2
STORM SEWER NOTES
 PROJECT NO. 10-020
 SCALE: HORIZONTAL: N/A VERTICAL: N/A
 DATE: 01/13/23
 DESIGNED BY: GW
 DRAWN BY: CLP
 CHECKED BY: VAS
 SHEET 10 OF 14
ST04

212 N. WABASH AVE., STE 305
 COLORADO SPRINGS, CO 80903
 PHONE: 719.655.5465

CIVIL CONSULTANTS, INC.

FOR AND ON BEHALF OF
 M&S CIVIL CONSULTANTS, INC.
 VIRGIL A. SANCHEZ, COLORADO, P.E. NO. 37160

REVISIONS: NO. DATE: BY: DESCRIPTION:
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CAUTION



CLAREMONT BUSINESS PARK 2 FIL. NO. 2

STORM SEWER DETAILS

PROJECT NO. 10-020
 SCALE: HORIZONTAL: N/A VERTICAL: N/A
 DATE: 01/13/13

DESIGNED BY: GW
 DRAWN BY: CLP
 CHECKED BY: VAS

210 N. WABATCH AVE. STE 305
 COLORADO SPRINGS CO 80903
 PHONE: 719.555.5485

SHEET 11 OF 14
 ST05

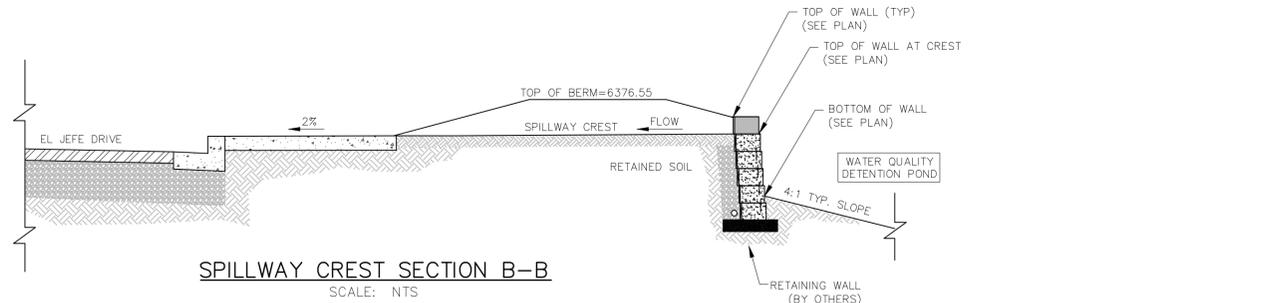
FOR AND ON BEHALF OF
 M&K CIVIL CONSULTANTS, INC.

VIRGIL A. SANCHEZ, COLORADO P.E. NO. 37160

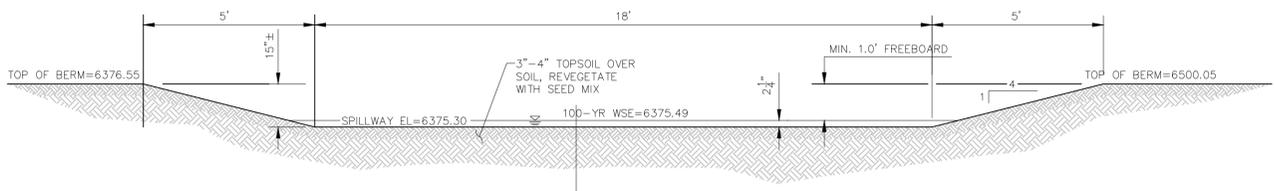
REVISIONS:
 NO. DATE BY DESCRIPTION

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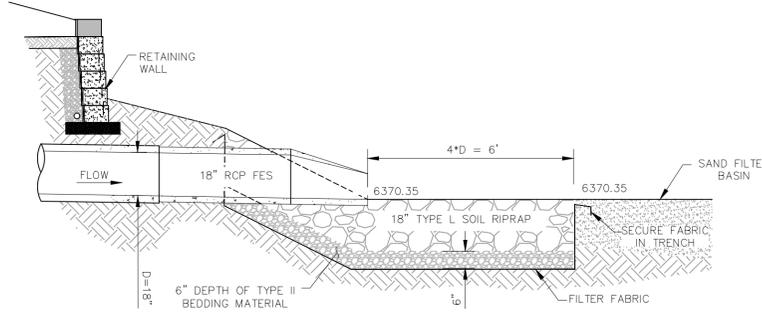
CAUTION



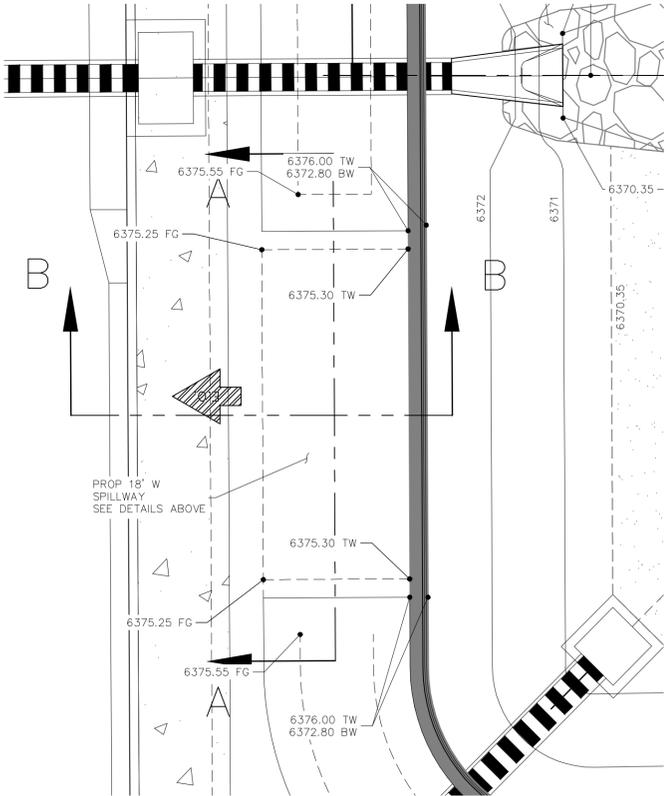
SPILLWAY CREST SECTION B-B
SCALE: NTS



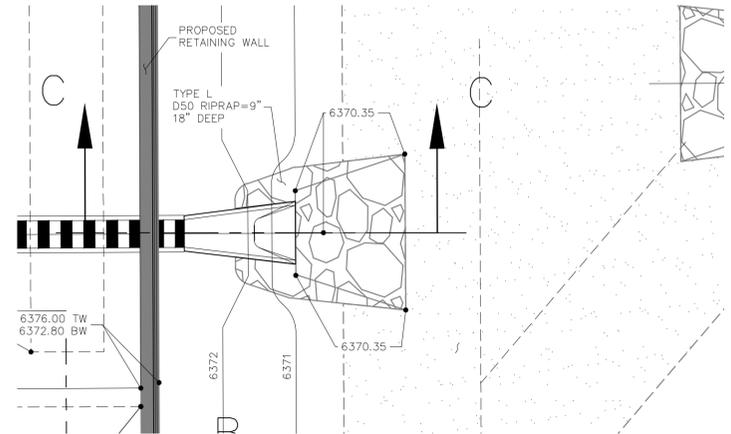
SPILLWAY CREST SECTION A-A
SCALE: NTS



18" RCP RIPRAP APRON SECTION C-C
SCALE: NTS



LOT 2 - SAND FILTER POND 3 SPILLWAY PLAN
SCALE 1"=10'



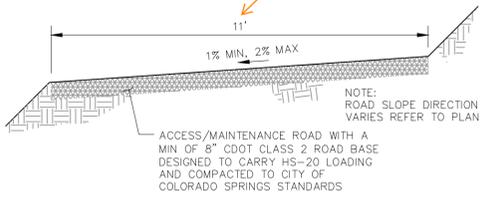
LOT 2 - SAND FILTER POND 3 RIPRAP APRON (TYPICAL)
SCALE 1"=10'

TABLE 1

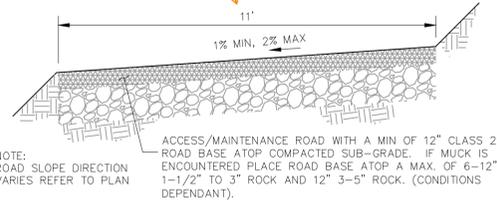
RIPRAP DESIGNATION	% SMALLER THAN GIVEN SIZE BY WEIGHT	INTERMEDIATE ROCK DIMENSION (INCHES)	D ₅₀ (INCHES)
TYPE VL	70-100	12	6
	50-70	9	
	35-50	6	
	2-10	2	
TYPE L	70-100	15	9
	50-70	12	
	35-50	9	
	2-10	3	
TYPE M	70-100	21	12
	50-70	18	
	35-50	12	
	2-10	4	
TYPE H	70-100	30	18
	50-70	24	
	35-50	18	
	2-10	6	
TYPE VH	70-100	41	24
	50-70	33	
	35-50	24	
	2-10	9	

*D₅₀ = MEAN PARTICLE SIZE
REFER TO SECTION 506 RIPRAP OF CDOT SPECIFICATIONS

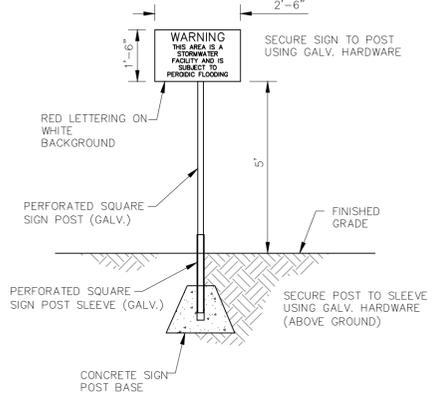
Plan dwg on next page show width of access road at ~30ft. Revise to remove discrepancy.
Stabilized access ramp shall be a minimum of 15ft wide and no greater than 12% slope, in accordance with DCMv1, Chap 11.2.2. As I think you know, it may be acceptable to design the access road with a thinner width if the anticipated maintenance vehicles and equipment can still safely access the pond and reach structures. Properly document this in the Pond O&M manual.



MAINTENANCE & ACCESS ROAD ABOVE EURV TYPICAL SECTION
NOT TO SCALE



MAINTENANCE & ACCESS ROAD BELOW EURV TYPICAL SECTION
NOT TO SCALE



POND WARNING SIGN (3)
SCALE: 3/8" = 1'

Out of order? Move to after BMP01?

Pond 3

CLAREMONT BUSINESS PARK 2 FIL. NO. 2
OUTLET STRUCTURE POND 1 DETAILS
PROJECT NO. 10-020 DATE: 01/13/23
SCALE: HORIZONTAL: N/A VERTICAL: N/A
DESIGNED BY: GW CLP
DRAWN BY: VAS
CHECKED BY: VAS

2120 N. WABATCH AVE. STE 305
COLORADO SPRINGS CO 80903
PHONE: 719.955.5465

CIVIL CONSULTANTS, INC.

VIRGIL A. SANCHEZ, COLORADO, P.E. NO. 371160

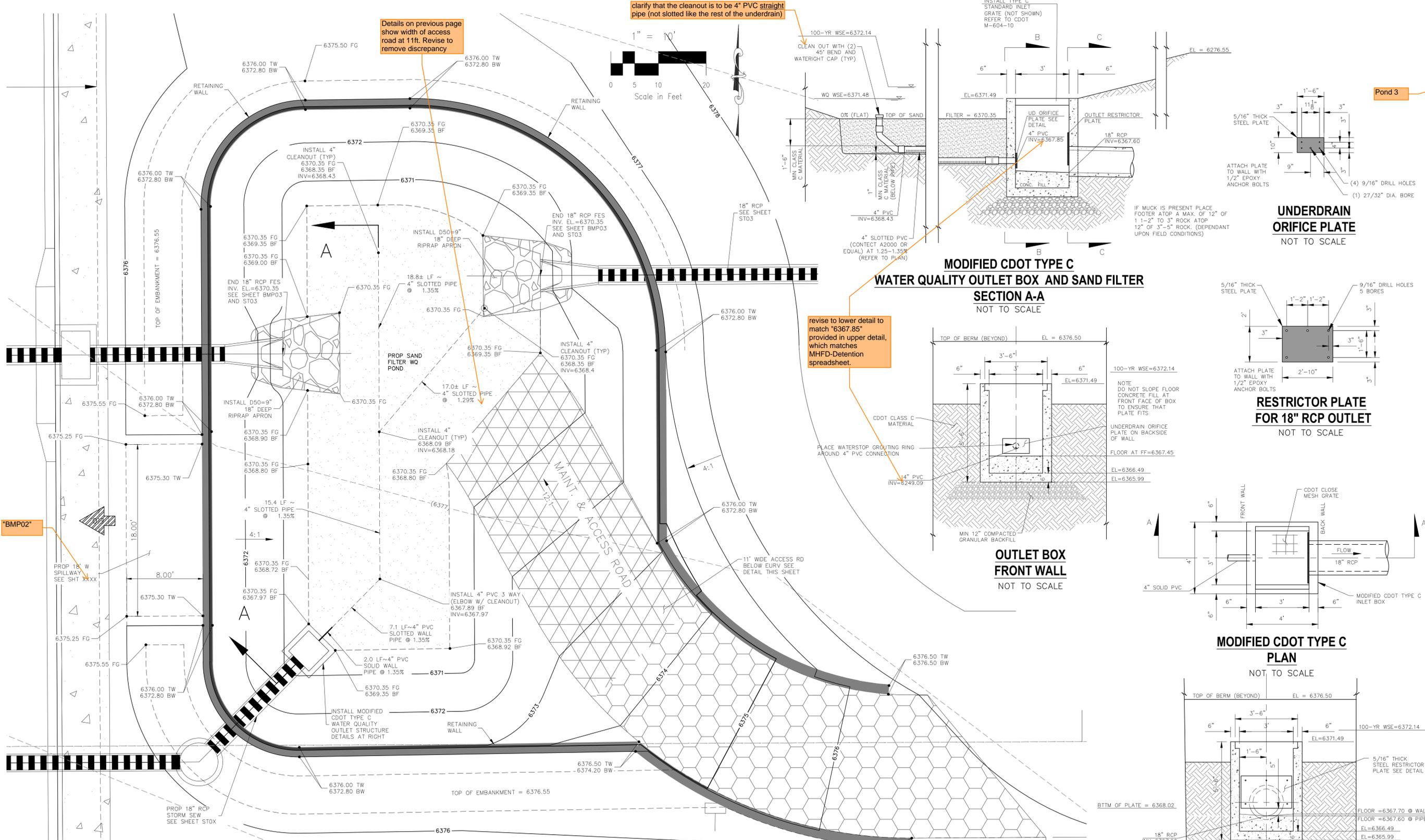
FOR AND ON BEHALF OF CIVIL CONSULTANTS, INC.

NO. DATE: BY: DESCRIPTION: APPROV. BY: DATE:

THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARE OF THESE PLANS.

CAUTION

File: 0:\100204-CBP-Dunkin Donuts\Donuts\Const\Draw\BMP\BMP01.dwg Plotstamp: 2/27/2023 12:46 PM



POND 3 SAND FILTER DETENTION BASIN DATA	
WQ WATER SURFACE EL =	6371.48
WQ VOLUME=	0.032 AC-FT
100-YR WATER SURFACE EL=	6372.14
100-YR VOLUME=	0.06 AC-FT
SPILLWAY CREST EL=	6375.30
TOP OF EMBANKMENT EL=	6376.55
RATIONAL 100-YR INFLOW=	9.6 CFS
MHFD 100-YR INFLOW =	4.9 CFS
MHFD 100-YR RELEASE =	4.0 CFS

LOT 2 - SAND FILTER POND 3
SITE PLAN
 SCALE 1"=10'

LEGEND:

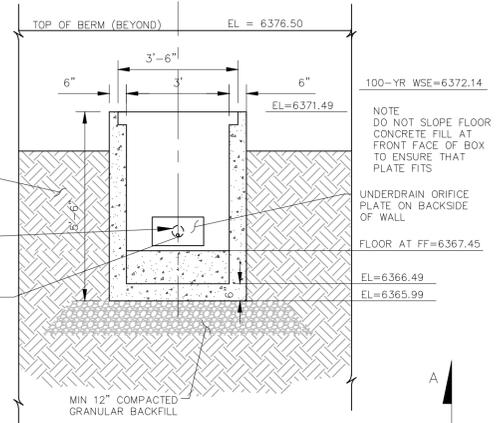
- EMERGENCY OVERFLOW
- PROPOSED RIPRAP
- MAINTENANCE/ACCESS ROAD ABOVE EURV
- MAINTENANCE/ACCESS ROAD BELOW EURV
- LOT NUMBER OR TRACT
- 100 YR WATER SURFACE
- PROP MAJ CONT
- PROP MIN CONT
- EXIST MAJ CONT
- EXIST MIN CONT
- RIPRAP TYP.
- CDOT CLASS C MATERIAL
- PROP STORM SEWER PIPE
- WARNING SIGN

NOTE: EMERGENCY SPILLWAY
 FLOW DEPTH 0.19'
 VELOCITY

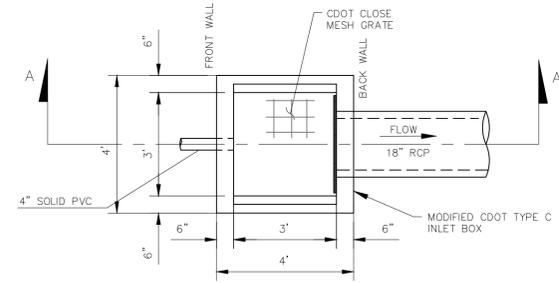
clarify that the cleanout is to be 4" PVC straight pipe (not slotted like the rest of the underdrain)

revise to lower detail to match "6367.85" provided in upper detail, which matches MHFD-Detention spreadsheet.

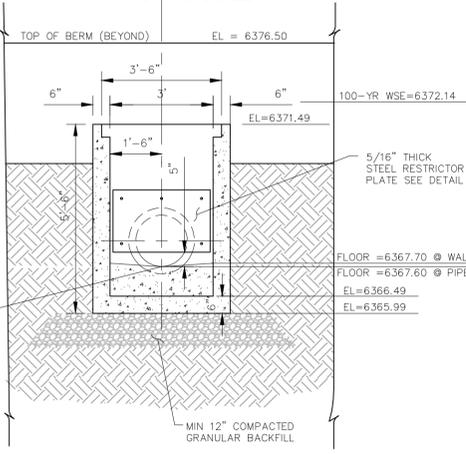
MODIFIED CDOT TYPE C WATER QUALITY OUTLET BOX AND SAND FILTER
SECTION A-A
 NOT TO SCALE



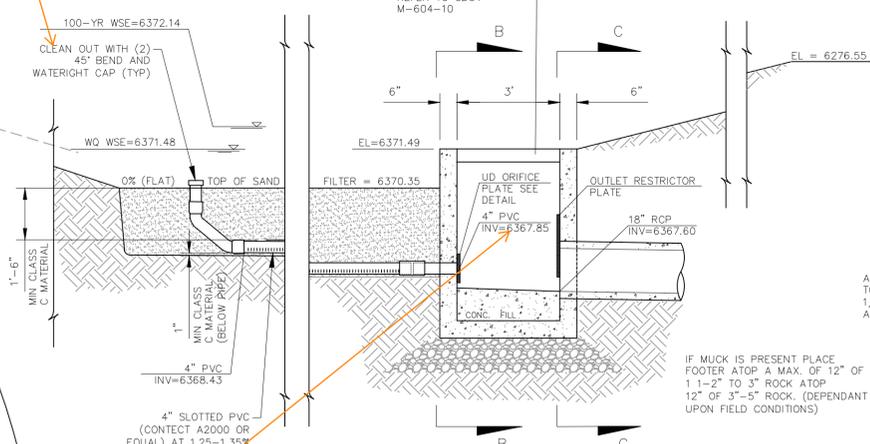
OUTLET BOX FRONT WALL
 NOT TO SCALE



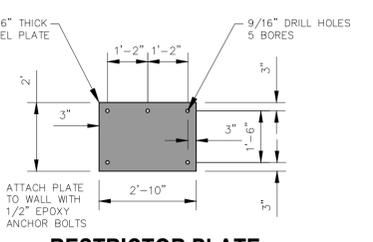
MODIFIED CDOT TYPE C PLAN
 NOT TO SCALE



OUTLET BOX REAR WALL
 NOT TO SCALE



UNDERDRAIN ORIFICE PLATE
 NOT TO SCALE



RESTRICTOR PLATE FOR 18" RCP OUTLET
 NOT TO SCALE

Pond 3

FOR LOCATING & MARKING GAS, ELECTRIC, WATER & TELEPHONE LINES

FOR BURIED UTILITY INFORMATION 48 HRS BEFORE YOU DIG CALL 1-800-922-1987

CLAREMONT BUSINESS PARK 2 FIL. NO. 2
OUTLET STRUCTURE POND 3 DETAILS

PROJECT NO. 10-020 DATE: 01/13/23

SCALE: HORIZONTAL: 1"=10' VERTICAL: N/A

DESIGNED BY: GW CLP DRAWN BY: N/A CHECKED BY: VAS

212 N. WASHCATCH AVE., STE 305
 COLORADO SPRINGS, CO 80903
 PHONE: 719.555.5865

CIVIL CONSULTANTS, INC.

FOR AND ON BEHALF OF M&S CIVIL CONSULTANTS, INC.

VIRGIL A. SANCHEZ, COLORADO P.E. NO. 371160

REVISIONS:

NO.	DATE	BY	DESCRIPTION

THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.

CAUTION

V1_CDs Redlines.pdf Markup Summary

Glenn Reese - EPC Stormwater (15)

SHEET 3 CONSTRUCTION STANDARD DETAILS
SHEET 4 STREET IMPROVEMENT PLAN
SHEET 5 DETAIL AND INFORMATION DETAILS
SHEET 6 DETAIL AND INFORMATION DETAILS
SHEET 7 STORM SEWER PLAN AND PROFILE
SHEET 8 STORM SEWER PLAN AND PROFILE
SHEET 9 STORM SEWER PLAN AND PROFILE
SHEET 10 STORM SEWER PLAN AND PROFILE
SHEET 11 STORM SEWER PLAN AND PROFILE
SHEET 12 STORM SEWER PLAN AND PROFILE
SHEET 13 STORM SEWER PLAN AND PROFILE
SHEET 14 GULLEY POND STRUCTURE DETAILS

Subject: SW - Rectangle
Page Label: [1] CD01
Author: Glenn Reese - EPC Stormwater
Date: 3/28/2023 5:10:21 PM
Length: 0
Area: 0
Volume: 0

DETAILS
1
FILE
OF
FILE
DETAILS
1
FILE
OF
FILE

The last 3 sheets are pond details, not just the final 2.

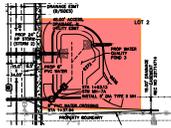
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Page Label: [1] CD01
Author: Glenn Reese - EPC Stormwater
Date: 3/28/2023 5:10:38 PM
Length: 0
Area: 0
Volume: 0

The last 3 sheets are pond details, not just the final 2.

18" ADS
04'20" E

TEMPORARY SEDIMENT POND
SEE 22. PADD CD FILE NO.
PCD # SF-20-014
TO BE MAINTAINED UNTIL THE
DEVELOPMENT OF LOT 3
LOT 3

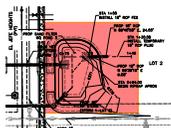
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Page Label: [1] ST02
Author: Glenn Reese - EPC Stormwater
Date: 3/28/2023 2:37:40 PM
Length: 0
Area: 0
Volume: 0



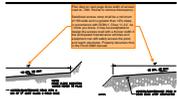
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Page Label: [1] ST02
Author: Glenn Reese - EPC Stormwater
Date: 3/28/2023 2:37:48 PM
Length: 0
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Volume: 0



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Page Label: [1] ST03
Author: Glenn Reese - EPC Stormwater
Date: 3/28/2023 2:37:59 PM
Length: 0
Area: 0
Volume: 0



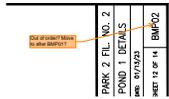
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Author: Glenn Reese - EPC Stormwater
Date: 3/28/2023 2:38:04 PM
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Page Label: [1] BM02
Author: Glenn Reese - EPC Stormwater
Date: 3/28/2023 5:03:51 PM
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Area: 0
Volume: 0

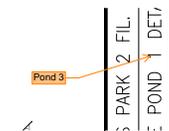
Plan dwg on next page show width of access road at ~30ft. Revise to remove discrepancy.

Stabilized access ramp shall be a minimum of 15ft wide and no greater than 12% slope, in accordance with DCMv1, Chap 11.2.2. As I think you know, it may be acceptable to design the access road with a thinner width if the anticipated maintenance vehicles and equipment can still safely access the pond and reach structures. Properly document this in the Pond O&M manual.



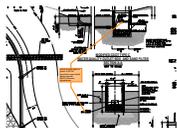
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Page Label: [1] BM02
Author: Glenn Reese - EPC Stormwater
Date: 3/28/2023 5:09:36 PM
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Volume: 0

Out of order? Move to after BMP01?



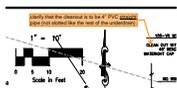
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Page Label: [1] BM02
Author: Glenn Reese - EPC Stormwater
Date: 3/28/2023 5:09:58 PM
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Area: 0
Volume: 0

Pond 3



Subject: SW - Textbox with Arrow
Page Label: [1] BMP01
Author: Glenn Reese - EPC Stormwater
Date: 3/28/2023 4:52:59 PM
Length: 0
Area: 0
Volume: 0

revise to lower detail to match "6367.85" provided in upper detail, which matches MHFD-Detention spreadsheet.



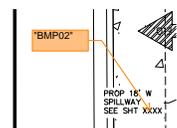
Subject: SW - Textbox with Arrow
Page Label: [1] BMP01
Author: Glenn Reese - EPC Stormwater
Date: 3/28/2023 4:56:25 PM
Length: 0
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Volume: 0

clarify that the cleanout is to be 4" PVC straight pipe (not slotted like the rest of the underdrain)



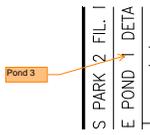
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Page Label: [1] BMP01
Author: Glenn Reese - EPC Stormwater
Date: 3/28/2023 5:02:05 PM
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Volume: 0

Details on previous page show width of access road at 11ft. Revise to remove discrepancy



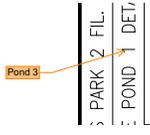
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Page Label: [1] BMP01
Author: Glenn Reese - EPC Stormwater
Date: 3/29/2023 7:56:01 AM
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Volume: 0

"BMP02"



Subject: SW - Textbox with Arrow
Page Label: [1] BMP01
Author: Glenn Reese - EPC Stormwater
Date: 3/29/2023 7:56:08 AM
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Volume: 0

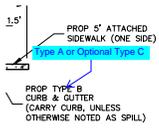
Pond 3



Subject: SW - Textbox with Arrow
Page Label: [1] BMP03
Author: Glenn Reese - EPC Stormwater
Date: 3/28/2023 5:10:03 PM
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Area: 0
Volume: 0

Pond 3

CDurham (12)



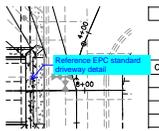
Subject: Callout
Page Label: [1] CD02
Author: CDurham
Date: 3/30/2023 1:01:01 PM
Length: 0
Area: 0
Volume: 0

Type A or Optional Type C



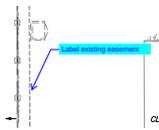
Subject: Callout
Page Label: [1] SI01
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Date: 3/30/2023 3:50:19 PM
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Volume: 0

Smallest cross pan per dtl is 6'



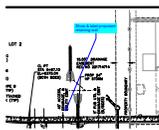
Subject: Callout
Page Label: [1] SI01
Author: CDurham
Date: 3/30/2023 3:55:02 PM
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Area: 0
Volume: 0

Reference EPC standard driveway detail



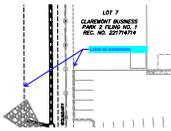
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Date: 3/30/2023 3:55:49 PM
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Label existing easement



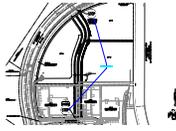
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Page Label: [1] SI01
Author: CDurham
Date: 3/30/2023 4:59:04 PM
Length: 0
Area: 0
Volume: 0

Show & label proposed retaining wall



Subject: Callout
Page Label: [1] SI02
Author: CDurham
Date: 3/30/2023 4:02:40 PM
Length: 0
Area: 0
Volume: 0

Label all easements



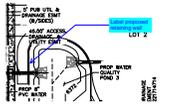
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Author: CDurham
Date: 3/30/2023 4:04:27 PM
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Area: 0
Volume: 0

Provide size of stop sign



Subject: Callout
Page Label: [1] ST01
Author: CDurham
Date: 3/30/2023 4:14:40 PM
Length: 0
Area: 0
Volume: 0

C&G should be Type A or Optional Type C. Type B is for medians.



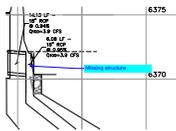
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Author: CDurham
Date: 3/30/2023 5:00:39 PM
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Label proposed retaining wall



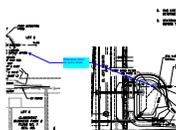
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Page Label: [1] ST02
Author: CDurham
Date: 3/30/2023 5:01:59 PM
Length: 0
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Volume: 0

Show and label wall (To show if pipe does or doesn't need to go through wall)



Subject: Callout
Page Label: [1] ST03
Author: CDurham
Date: 3/30/2023 4:33:35 PM
Length: 0
Area: 0
Volume: 0

Missing structure



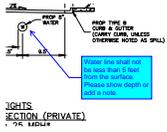
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Date: 3/30/2023 4:55:58 PM
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Reference sheet for apron detail

VR233

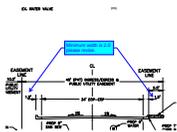
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Page Label: [1] CD01
Author: Carlos
Date: 3/28/2023 3:06:35 PM
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Volume: 0

VR233



Subject: Callout
Page Label: [1] CD02
Author: Carlos
Date: 3/29/2023 8:11:57 AM
Length: 0
Area: 0
Volume: 0

Water line shall not be less than 5 feet from the surface. Please show depth or add a note.



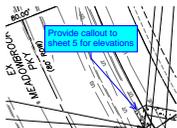
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Author: Carlos
Date: 3/30/2023 7:53:49 AM
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Volume: 0

Minimum width is 2.5' please revise.



Subject: Text Box
Page Label: [1] CD03
Author: Carlos
Date: 3/28/2023 3:36:48 PM
Length: 0
Area: 0
Volume: 0

Please add El Paso County Standard Detail SD_2-24 Driveway Detail with Attached Sidewalk



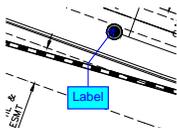
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Date: 3/28/2023 3:56:36 PM
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Provide callout to sheet 5 for elevations



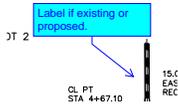
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Page Label: [1] SI01
Author: Carlos
Date: 3/29/2023 8:14:53 AM
Length: 0
Area: 0
Volume: 0

Please revise sidewalk and ped ramps per SD_2-24. Per ECM Chapter 2 local roadways have attached sidewalks.



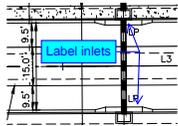
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Page Label: [1] SI01
Author: Carlos
Date: 3/28/2023 3:38:53 PM
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Label



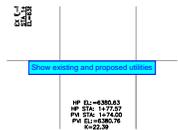
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Author: Carlos
Date: 3/29/2023 8:15:23 AM
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Volume: 0

Label if existing or proposed.



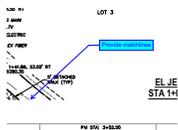
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Page Label: [1] SI01
Author: Carlos
Date: 3/28/2023 3:41:41 PM
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Label inlets



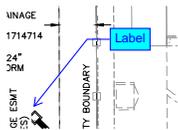
Subject: Text Box
Page Label: [1] SI01
Author: Carlos
Date: 3/28/2023 3:43:37 PM
Length: 0
Area: 0
Volume: 0

Show existing and proposed utilities



Subject: Callout
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Author: Carlos
Date: 3/28/2023 3:44:01 PM
Length: 0
Area: 0
Volume: 0

Provide matchlines



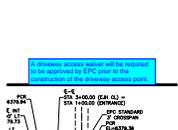
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Label



Subject: Callout
Page Label: [1] SI01
Author: Carlos
Date: 3/29/2023 8:13:11 AM
Length: 0
Area: 0
Volume: 0

Show cross slope at the crown. 2% max



Subject: Text Box
Page Label: [1] SI01
Author: Carlos
Date: 3/29/2023 8:15:02 AM
Length: 0
Area: 0
Volume: 0

A driveway access waiver will be required to be approved by EPC prior to the construction of the driveway access point.



Subject: Callout
Page Label: [1] SI01
Author: Carlos
Date: 3/29/2023 8:16:13 AM
Length: 0
Area: 0
Volume: 0

Label if a stub cap is proposed for all similar pipe runs.

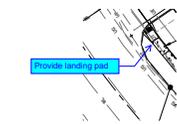


Subject: Callout
Page Label: [1] SI01
Author: Carlos
Date: 3/29/2023 8:23:25 AM
Length: 0
Area: 0
Volume: 0

Please identify and label the concrete structures shown on the aerial view.

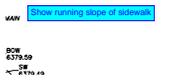


Subject: Image
Page Label: [1] SI01
Author: Carlos
Date: 3/29/2023 8:21:06 AM
Length: 0
Area: 0
Volume: 0



Subject: Callout
Page Label: [1] SI02
Author: Carlos
Date: 3/28/2023 3:51:26 PM
Length: 0
Area: 0
Volume: 0

Provide landing pad



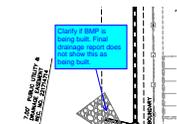
Subject: Text Box
Page Label: [1] SI02
Author: Carlos
Date: 3/28/2023 3:52:19 PM
Length: 0
Area: 0
Volume: 0

Show running slope of sidewalk



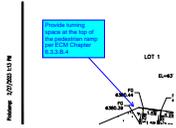
Subject: Callout
Page Label: [1] SI02
Author: Carlos
Date: 3/28/2023 3:53:13 PM
Length: 0
Area: 0
Volume: 0

Label sidewalk as existing or proposed



Subject: Callout
Page Label: [1] SI02
Author: Carlos
Date: 3/28/2023 3:54:33 PM
Length: 0
Area: 0
Volume: 0

Clarify if BMP is being built. Final drainage report does not show this as being built.



Subject: Callout
Page Label: [1] SI02
Author: Carlos
Date: 3/28/2023 4:45:30 PM
Length: 0
Area: 0
Volume: 0

Provide turning space at the top of the pedestrian ramp per ECM Chapter 6.3.3.B.4



Subject: Callout
Page Label: [1] SI02
Author: Carlos
Date: 3/28/2023 4:48:03 PM
Length: 0
Area: 0
Volume: 0

Provide cross slope and running slope of El Jefe Hts.



Subject: Callout
Page Label: [1] ST01
Author: Carlos
Date: 3/28/2023 4:50:08 PM
Length: 0
Area: 0
Volume: 0

Provide riprap details