



ARAPAHOE COUNTY  
OPEN SPACES

# 17 Mile House Deceleration Lane and Entrance Project

November 7, 2023, BoCC Study Session

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# 17 Mile House

- Prairie Point Development Overview
- 17 Mile House Park Project
- Construction Cost
- Next Steps



# Prairie Point Development



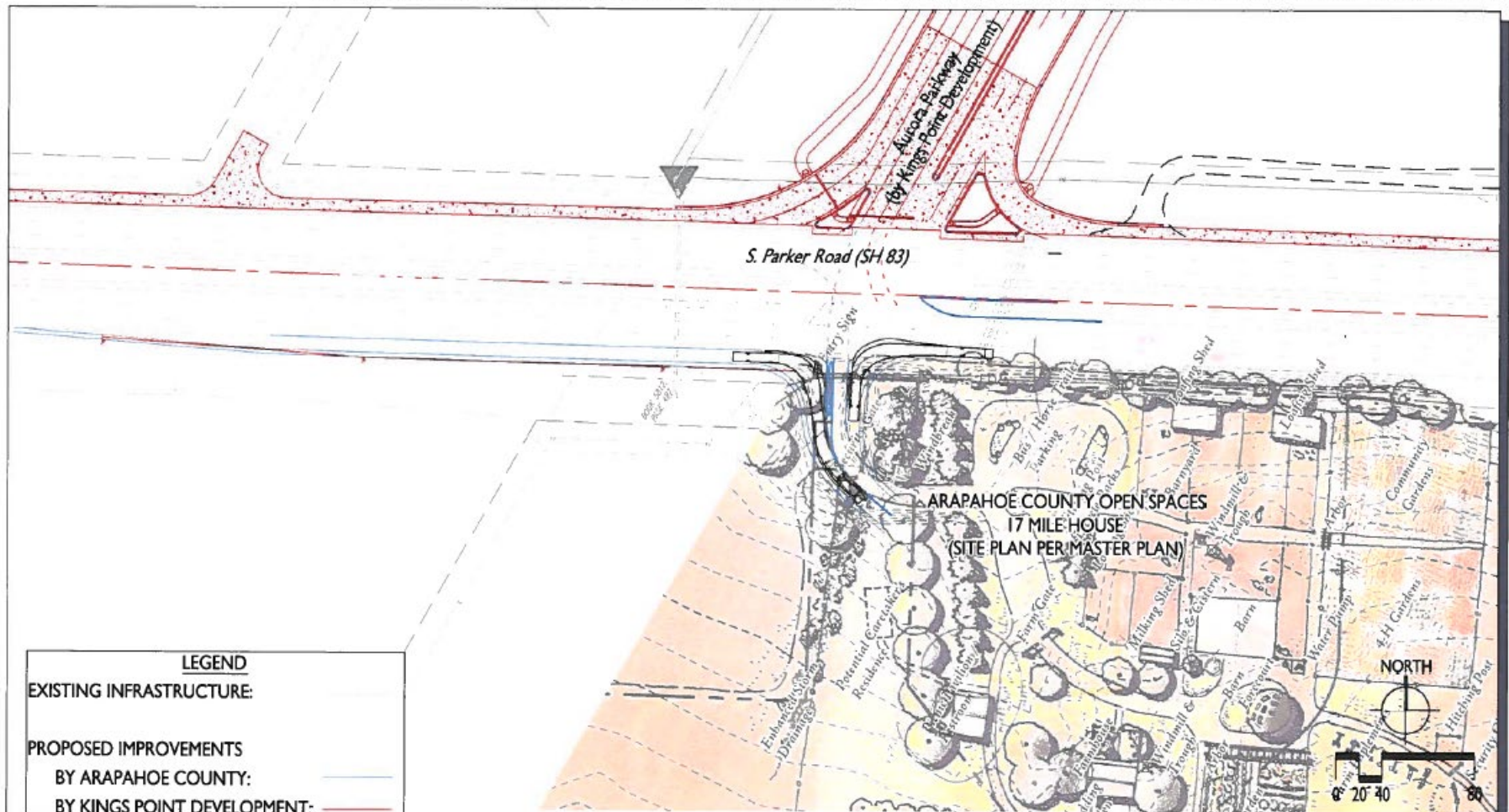
# Aurora Parkway/Parker Road Intersection



FELSBURG HOLT & ULLEVIG

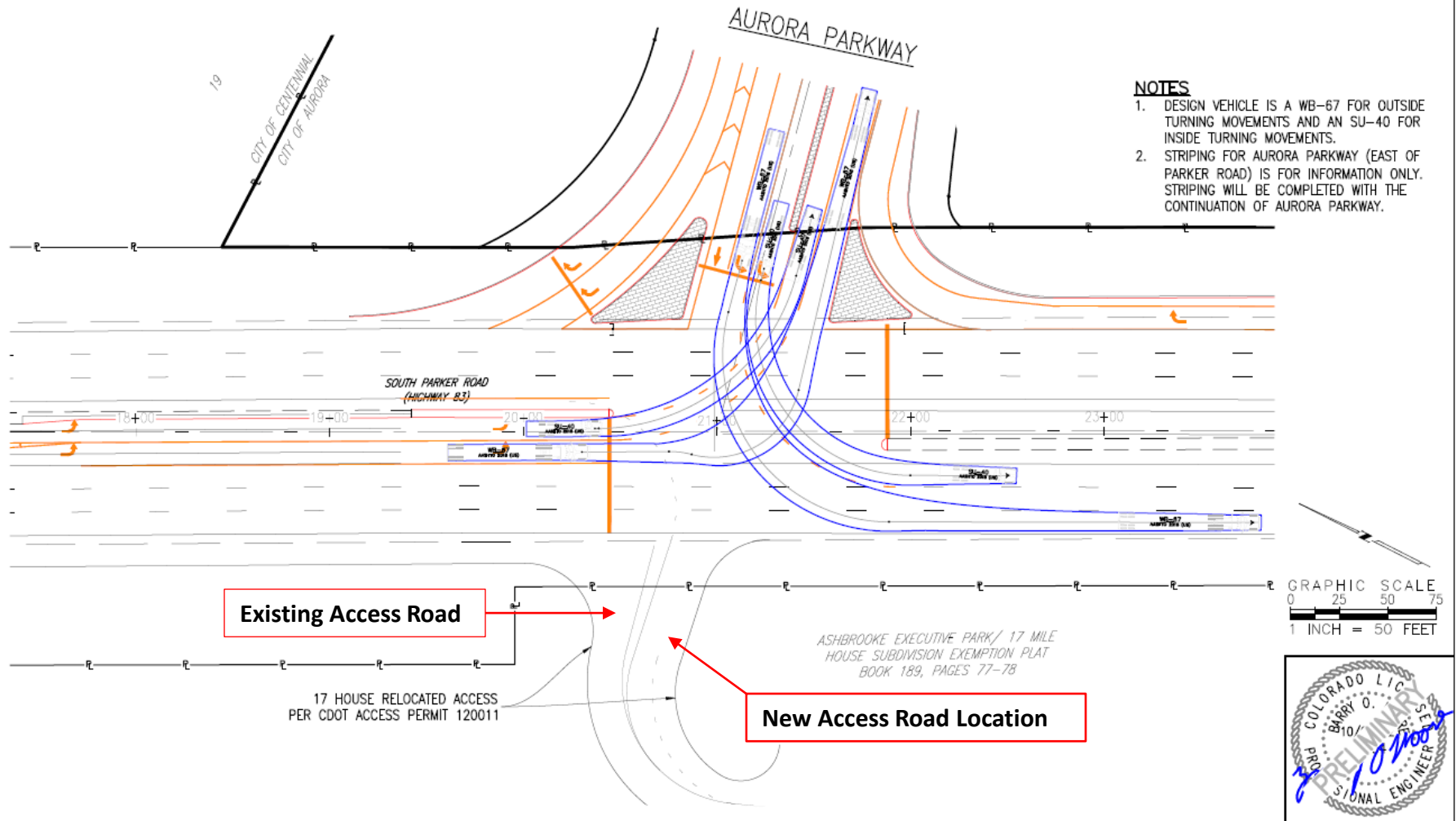
## ARAPAHOE COUNTY - 17 MILE HOUSE RIGHT TURN LANE

CONCEPTUAL LAYOUT COMPATIBLE WITH KINGS POINT DEVELOPMENT PROPOSED AURORA PARKWAY INTERSECTION



December 5, 2018

# Aurora Parkway/Parker Road Intersection Turn Movements



Print Date: 10/4/2022	Sheet Revisions				As Constructed	VEHICLE TURNING TEMPLATE			CDOT ACCESS PERMIT
Horiz. Scale: 1" = 50'	Vert. Scale: N/A	Date:	Comments		No Revisions:	Designer:	Structure Numbers	X-XX-XX	119070
Unit Information	Unit Leader Initials				Revised:	Detailer:		X-XX-XX	EMK JOB NO. 12187.22
					Void:	Sheet Subset:	XXXXXXX	Subset Sheets: XXX of XXX	Sheet 53

EMK CONSULTANTS, INC.  
ENGINEERING SURVEYING  
LAND DEVELOPMENT  
SERVICES AND SOLUTIONS  
7000 SOUTH ALTON WAY, SUITE F  
CENTENNIAL, COLORADO 80112-2019  
(303) 694-1520  
www.EMKinc.com

# 17 Mile House Intersection Project

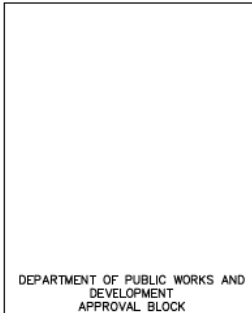
## CERTIFICATION STATEMENT

I HEREBY AFFIRM THAT THESE CONSTRUCTION DRAWINGS FOR 17 MILE HOUSE PARK INTERSECTION WERE PREPARED BY ME (OR UNDER MY DIRECT SUPERVISION) IN ACCORDANCE WITH THE REQUIREMENTS OF THE INFRASTRUCTURE DESIGN AND CONSTRUCTION STANDARDS AND THE STORMWATER MANAGEMENT MANUAL OF ARAPAHOE COUNTY.



KENDRA GABBERT  
LICENSED PROFESSIONAL ENGINEER  
STATE OF COLORADO NO. 45344  
FELSBURG HOLT & ULLEVIG

THE COUNTY'S APPROVAL ONLY APPLIES TO  
THE DRAINAGE DESIGN IN COUNTY'S PROPERTY



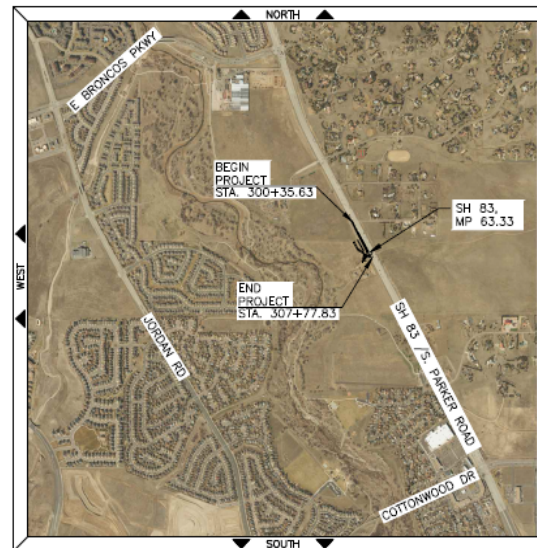
ARAPAHOE COUNTY SIGNATURE

SHANNON CARTER  
OPEN SPACES AND INTERGOVERNMENTAL  
RELATIONS DIRECTOR

DATE

## ARAPAHOE COUNTY OPEN SPACES 17 MILE HOUSE PARK INTERSECTION

CDOT ACCESS PERMIT NUMBER 120011  
LOCATED IN THE S1/2, SW1/4, SEC. 33, T.5S., R.66W., SIXTH P.M.  
COUNTY OF ARAPAHOE, STATE OF COLORADO  
AUGUST 3, 2023



VICINITY MAP  
1" = 2,000'

## INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	STANDARD PLANS LIST
3 to 4	GENERAL NOTES
5	SURVEY TABULATION
6	TYPICAL SECTIONS
7 to 8	SUMMARY OF APPROXIMATE QUANTITIES
9	ROADWAY TABULATIONS
10	GEOMETRY PLAN
11 to 12	REMOVAL PLANS
13 to 14	ROADWAY PLANS
15 to 17	ROADWAY PROFILES
18	TURNING TEMPLATES
19	TABULATION OF STORM SEWER
20 to 24	DRAINAGE DETAILS
25 to 26	DRAINAGE PLANS
27 to 28	DRAINAGE PROFILES
29	SIGNING AND STRIPING PLANS
30	CONSTRUCTION TRAFFIC CONTROL
31 to 35	ROADWAY CROSS SECTIONS



## TABULATION OF LENGTH

STATION	LINEAR FEET	
	ROADWAY	MAJOR STRUCTURE
SH 83		
STA. 63.300+35 BEGIN ROADWAY		
STA. 83.307+77 END ROADWAY	742.20	
TOTALS	742.20	0.00
SUMMARY	LIN. FT.	MILES
ROADWAY	742.20	0.14
MAJOR STRUCTURE	0.00	0.00
GROSS AND NET LENGTH	742.20	0.14

## TABULATION OF DESIGN DATA

	SH 83
DESIGN SPEED (MPH)	60
MIN HORIZ RADIUS (FEET)	1330
MIN STOPPING SIGHT DISTANCE (FEET)	450
MAX GRADE (%)	4.0
CLEAR ZONE DISTANCE (TANGENT) (FEET)	30

THIS DESIGN IS IN FULL COMPLIANCE WITH SECTION 4 OF THE STATE HIGHWAY ACCESS CODE, 2 CCR 601-1 EXCEPT FOR THE FOLLOWING APPROVED DESIGN WAIVERS: (IF ANY)

Print Date: 8/2/2023 9:54:10 AM		Sheet Revisions			 ARAPAHOE COUNTY OPEN SPACES 6334 S LIMA ST A CENTENNIAL CO 80112 PHONE: (720) 874-6540	As Constructed		17 MILE HOUSE PARK INTERSECTION TITLE SHEET			CDOT Access Permit #	
File Name: 118410-01_GNTS_BH01.DWG		<div><div>R-X</div><div></div><div></div><div></div><div></div></div>	Date	Comments		Initials	No Revisions:				120011	
Horizontal Scale: N/A Vertical Scale: N/A							Revised:	Designer: ESA	Structure Numbers			
 6400 South Fiddler's Green Circle, Suite 1500 Greenwood Village, CO 80111 Phone: 303.721.1440 www.FHULLEVIG.com							Void:	Detailer: BCN		Sheet Subset: GENERAL	Subset Sheets: TL-01 of 1	
											Sheet Number	1

LEGEND

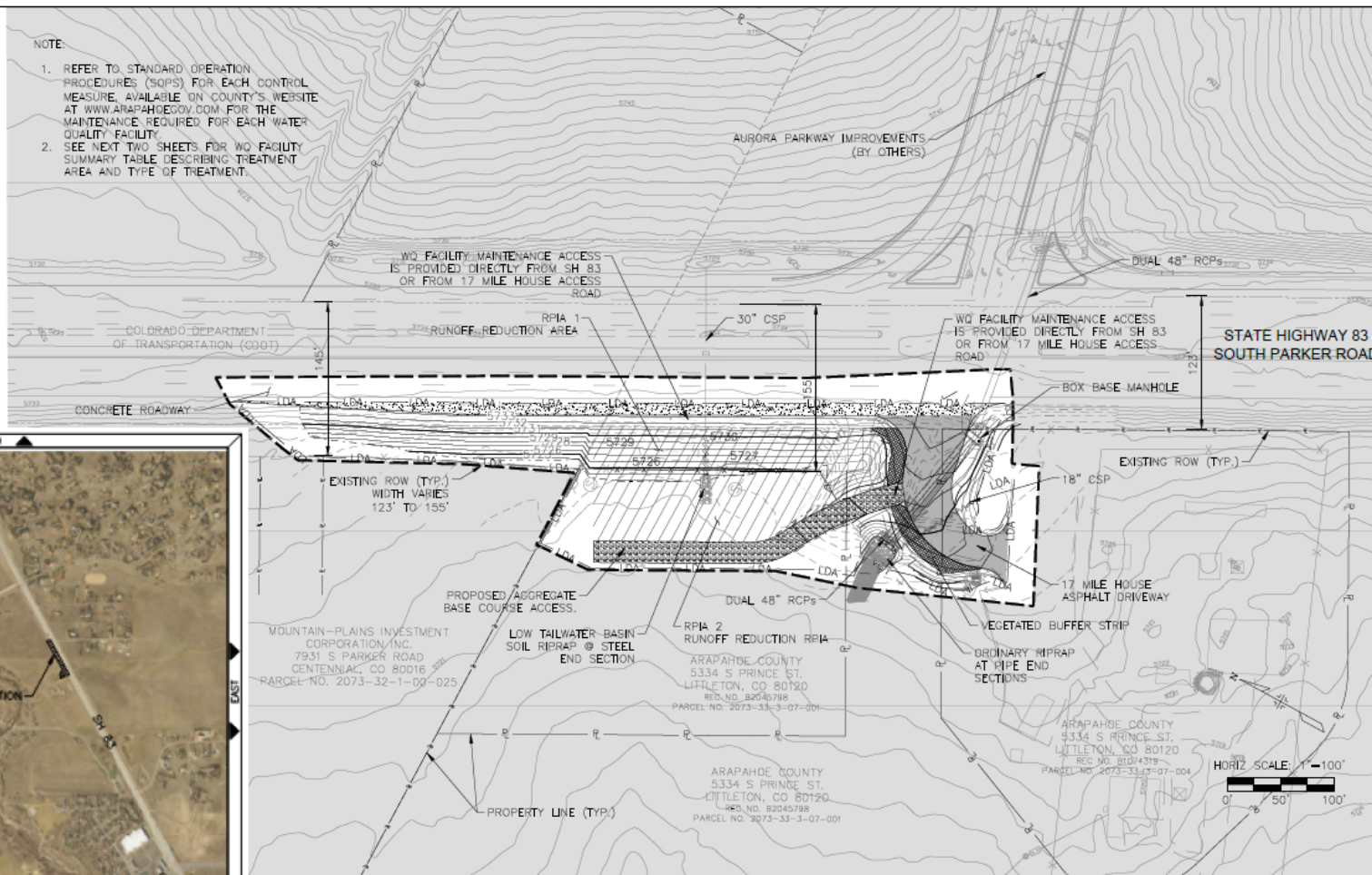
- ASPHALT
- PORTLAND CEMENT CONCRETE PAVEMENT
- EXISTING 1' CONTOUR INTERVALS FROM SURVEY
- EXISTING 1' CONTOUR INTERVALS FROM LIDAR
- PROPOSED 1' CONTOURS
- RECEIVING PERVIOUS INFILTRATION AREAS (RPIAs)
- VEGETATED BUFFER STRIP
- LDA LIMITS OF DISTURBANCE AREA
- LIMITS OF CONSTRUCTION
- FO EXISTING FIBER OPTIC
- G EXISTING GAS
- W EXISTING WATER

NOTE:

1. REFER TO STANDARD OPERATION PROCEDURES (SOPS) FOR EACH CONTROL MEASURE, AVAILABLE ON COUNTY'S WEBSITE AT [WWW.ARAPAHOECOV.COM](http://WWW.ARAPAHOECOV.COM) FOR THE MAINTENANCE REQUIRED FOR EACH WATER QUALITY FACILITY.
2. SEE NEXT TWO SHEETS FOR WQ FACILITY SUMMARY TABLE DESCRIBING TREATMENT AREA AND TYPE OF TREATMENT.



VICINITY MAP  
1" = 2,000'



Print Date: 4/29/2022 12:18:56 PM

File Name: 118410-01\_HYDPL\_O&M\_D1.DWG

Horizontal Scale: 1" = 40' Vertical Scale: N/A



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R-X

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Sheet Revisions

Date	Comments	Initials



ARAPAHOE COUNTY  
COLORADO'S FIRST

ARAPAHOE COUNTY  
OPEN SPACES

6334 S LIMA ST A  
CENTENNIAL CO 80112  
PHONE: (720) 874-6540

As Constructed

No Revisions:

Revised:

Void:

17 MILE HOUSE PARK INTERSECTION  
OPERATION & MAINTENANCE SITE MAP

Designer:	CDT	Structure	X
Detailer:	SMT	Numbers	X
Sheet Subset:	O&M	Subset Sheets:	OM-1 OF 3

CDOT Access Permit #

120011

Sheet Number

April 6, 2020

# 17 Mile House Entrance



New what's below.  
Call before you dig.



Arapahoe County  
VALUED ONLY - IF PART PAVED IS ROLLED  
AUG 11 2022

REVIEW AND ACCEPTANCE OF CONSTRUCTION  
PLAN AND SPECIFICATIONS

## LEGEND

- ASPHALT
- PORTLAND CEMENT CONCRETE PAVEMENT
- AGGREGATE BASE COURSE (CLASS 6)
- RECEIVING PERVIOUS INFILTRATION AREA (RPIA) (SEE DRAINAGE DETAILS)
- VEGETATED BUFFER STRIP (SEE DRAINAGE DETAILS)

## NOTES

- SEE DRAINAGE PLANS FOR STORM SEWER DETAILS.
- SHOWN UTILITIES ARE SUE QUALITY LEVEL D.

HORIZ SCALE: 1"=40'  
0' 20' 40'

ARAPAHOE COUNTY  
5334 S PRINCE ST.  
LITTLETON, CO 80120  
REC NO. B1074319  
PARCEL NO.  
2073-33-3-07-004



POINT	STATION	OFFSET	DESCRIPTION
P-01	100+11.68	31.90' LT	PC/EDGE OF ASPHALT/BEGINNING OF ACCESS ROAD
P-02	100+14.91	42.53' RT	PC/EDGE OF ASPHALT/BEGINNING OF ACCESS ROAD
P-03	100+35.94	18.18' LT	PRC/EDGE OF ASPHALT
P-04	100+46.02	13.40' RT	PCC/EDGE OF ASPHALT
P-05	101+42.28	18.98' LT	PRC/EDGE OF ASPHALT
P-06	101+45.41	27.54' RT	PT/EDGE OF ASPHALT
P-07	101+66.75	29.76' RT	PC/EDGE OF ASPHALT
P-08	306+31.41	11.04' RT	PT/EDGE OF ASPHALT/END OF ACCESS ROAD
P-09	101+91.84	0.00'	END OF ACCESS ROAD/END OF ASPHALT
P-10	307+57.83	0.00' RT	PT/EDGE OF ASPHALT/END OF ACCESS ROAD
P-11	401+47.49	0.00'	PC/EDGE OF GRAVEL MAINTENANCE PATH
P-12	401+47.49	20.00' RT	PC/EDGE OF GRAVEL MAINTENANCE PATH
P-13	401+77.35	0.00'	PRC/EDGE OF GRAVEL MAINTENANCE PATH
P-14	401+77.35	20.00' RT	PT/EDGE OF GRAVEL MAINTENANCE PATH
P-15	402+80.25	0.00'	PT/EDGE OF GRAVEL MAINTENANCE PATH
P-16	402+80.25	20.00' RT	PT/EDGE OF GRAVEL MAINTENANCE PATH
P-17	402+94.20	0.00'	PC/EDGE OF GRAVEL MAINTENANCE PATH
P-18	403+03.56	6.47' LT	PT/EDGE OF GRAVEL MAINTENANCE PATH
P-19	402+94.20	20.00' RT	PC/EDGE OF GRAVEL MAINTENANCE PATH
P-20	402+98.69	29.12' RT	PT/EDGE OF GRAVEL MAINTENANCE PATH

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Horizontal Scale: 1"=40' Vertical Scale: N/A



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## Sheet Revisions

Date	Comments	Initials



## ARAPAHOE COUNTY OPEN SPACES

6334 S LIMA ST A  
CENTENNIAL CO 80112  
PHONE: (720) 874-6540

## As Constructed

No Revisions:

Revised:

Void:

## 17 MILE HOUSE PARK INTERSECTION ROADWAY PLANS SH 83 STA 305+00 TO STA 308+00

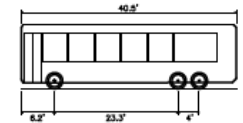
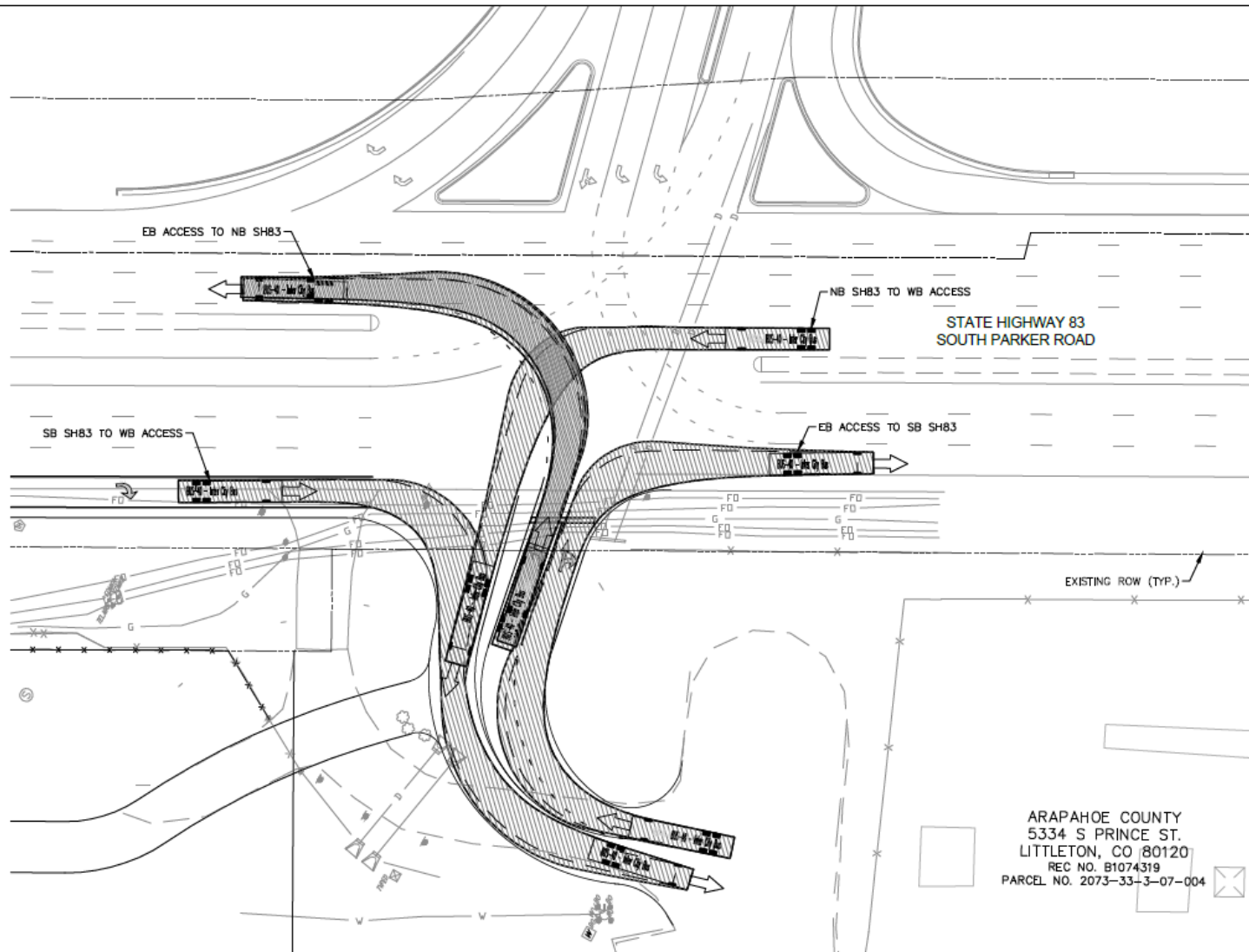
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Detailer: BCN  
Sheet Subset: ROADWAY  
Subset Sheets: PL-02 OF 2

## CDOT Access Permit #

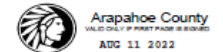
120011

Sheet Number 13

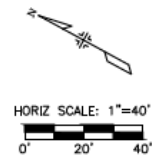
# 17 Mile House Turn Movements



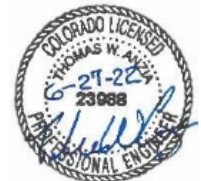
BUS-40 - Inter City Bus  
Overall Length 40.5 ft  
Overall Width 8.5 ft  
Overall Body Height 12.0 ft  
Min Body Ground Clearance 1.158 ft  
Track Width 8.5 ft  
Lock-to-lock time 5.0 sec  
Max Steering Angle (Virtual) 41.90'



REVIEW AND ACCEPTANCE OF CONSTRUCTION  
PLAN AND SPECIFICATIONS



ARAPAHOE COUNTY  
5334 S PRINCE ST.  
LITTLETON, CO 80120  
REC NO. B1074319  
PARCEL NO. 2073-33-3-07-004



Print Date: 1/17/2022 1:22:09 PM

File Name: 118410-01\_RD-TRUCK\_SH01.DWG

Horizontal Scale: 1"=40' Vertical Scale: N/A



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## Sheet Revisions

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## ARAPAHOE COUNTY OPEN SPACES

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CENTENNIAL CO 80112  
PHONE: (720) 874-6540

## As Constructed

No Revisions:

Revised:

Void:

## 17 MILE HOUSE PARK INTERSECTION TURNING TEMPLATES DESIGN VEHICLE - 40 FOOT SCHOOL BUS

Designer:	ESA	Structure:	
Detailer:	BCN	Numbers:	
Sheet Subset:	ROADWAY	Subset Sheets:	TT-01 OF 1

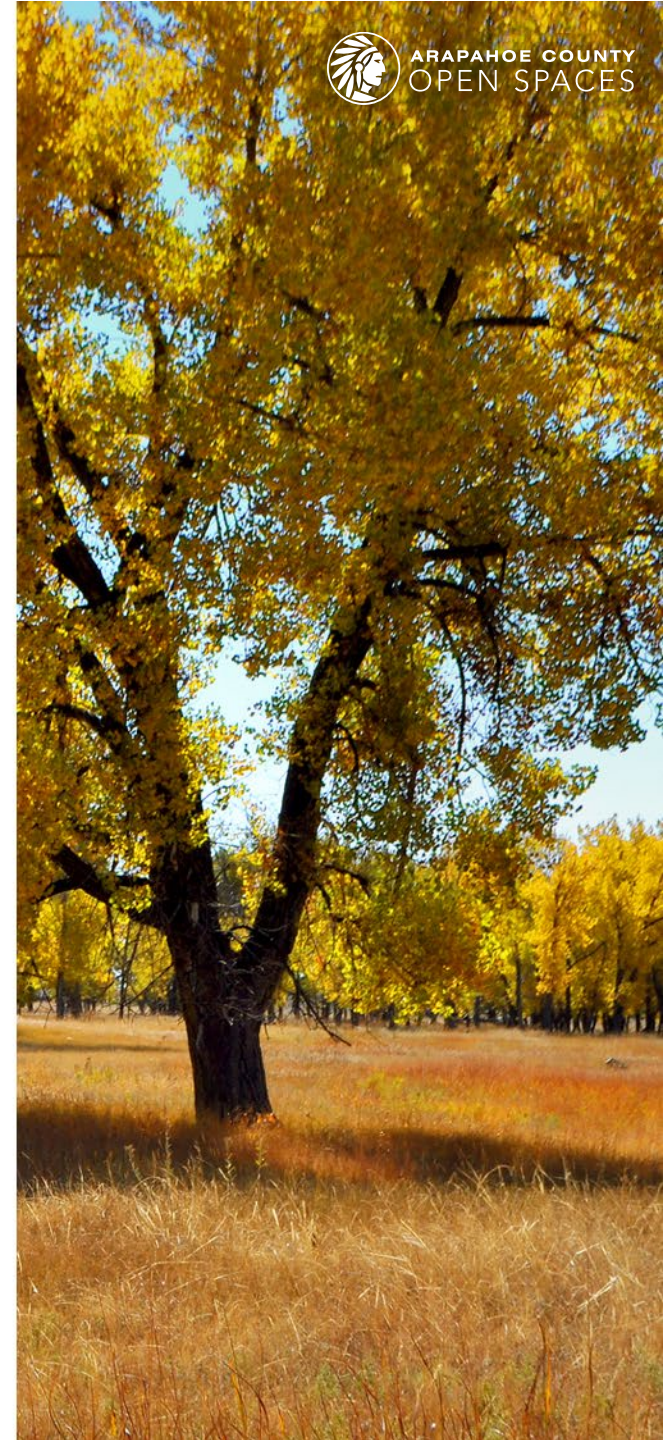
## CDOT Access Permit #

120011

Sheet Number 17

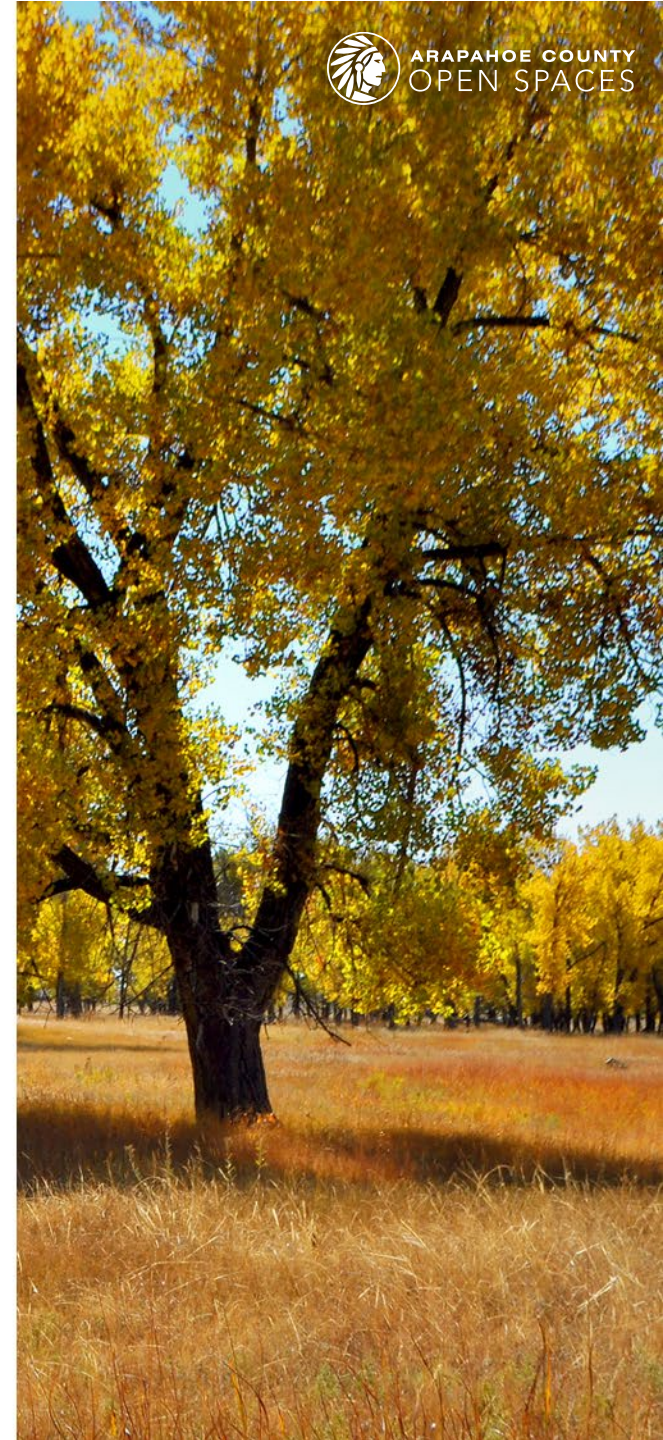
# Construction Cost

Task	Cost
17 MH Entrance	\$921,700 (2022)
Traffic Signal (35% of total cost)	\$210,000 (2022)
Project Management Fee (4%)	\$45,270
Contingency (25%)	\$294,242.50
<b>Total</b>	<b>\$1,471,212.50</b>



## Next Steps

Task	Completion Time
Reissue CDOT Access Permit	Dec 2023
Finalize NTP	Dec 2023
Construction	TBD





ARAPAHOE COUNTY  
OPEN SPACES

THANK YOU

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