Matrix Design Group, Inc.
2435 Research Parkway, Suite 300
Colorado Springs, CO 80920
O 719.575.0100
F 719.575.0208
matrixdesigngroup.com

July 10, 2020

Mr. Arthur Gonzales
CDOT Access Manager
R2 Permits, Access, Traffic and Safety
5615 Willis Blvd.
Pueblo, CO 81008
Via email: arthur.gonzales@state.co.us

Subject: Sundance at Rock Creek Apartment Development
Access Road off of Pine Oaks Road

Dear Mr. Gonzales,

We are in receipt of the CDOT comment letter dated July 8, 2020 to LCS Transportation Consultants, Inc. regarding the proposed Sundance at Rock Creek project. The project will be located on approximately 14.63 acres in southwest Colorado Springs and is comprised of 240 multi-family residential with supporting infrastructure (private access drives, parking lots, underground stormwater detention facilities and site utilities) and a sanitary lift station with its associated utilities. This letter provides an explanation of why the access location into the proposed development was situated in the location as proposed off of Pine Oaks Road.

BACKGROUND

As shown on the map below, the Sundance at Rock Creek property is bound by Colorado Highway 115 to the east, Pine Oaks Road to the north, Cheyenne Mountain State Park to the west/southwest, and unincorporated El Paso County to the south which is owned by a private property owner. The existing topography for the property slopes from the west to the east and the site is constrained by steep slopes surrounding three sides of the site – the south, west, and east.

Vicinity Map
(Not to Scale)
Sundance at Rock Creek, In the City of Colorado Springs, County of El Paso, State of Colorado

SITE ACCESS FROM SOUTH, EAST, WEST

Access into the site was thoroughly explored from all locations, and the access into the site from the north proved to be the only viable solution. The following sections identify the constraints that make access from the south, west, and east unreasonable:

Access from the south: All along the southern boundary of the property are very steep grades, varying from 4:1 to as steep as 1:1 in some locations. These steep slopes cause the southernmost 5.4 acres of the 14.6-acre lot to be unusable for this development and are therefore slated for open space. In the Geohazard Report for the project, a slope stability analysis was performed for this south sloping hillside and the apartments were placed as far south as possible without creating instability in this area. Placing a road into the site from this south boundary location would be unfeasible and unsafe due to both the slope stability in this area and the inability to meet the City of Colorado Springs road design criteria due to this very steep topography. Additionally, the road would have to traverse through the adjacent property to the south which is owned by a private landowner.

Access from the west: Cheyenne Mountain State Park bounds the site's western boundary and part of the southern boundary. The Park's archery range is directly adjacent to the site on the west side. Again, the site has steep slopes rising up from its property lines on both the south and west sides making road design unpractical from locations to the west. Additionally, permission for an easement or access road through the park was denied by Cheyenne Mountain State Park.

Access from the east: The eastern boundary of the site abuts the existing embankment for the adjacent Colorado State Highway 115. CDOT State Highway Access code requirements for a direct connection to Hwy 115 would not be met and a direct connection is not being requested for this property.

SITE ACCESS POINT ON PINE OAKS ROAD

As presented above, the only viable option for site access to the property is along the north property line with a roadway extending off of Pine Oaks Road. The north property line is about 178' long adjacent to Pine Oaks Road. Situating the entrance on Pine Oaks Road in the location proposed on the Site Plans was studied extensively and discussed in the sections below.

Storm Drainage: The project site is located at a localized low point with steep topography rising up around the site in the east, south, and west. Large areas of off-site area drain into the site, and as a result, there are significant offsite flows from the south and west, along Pine Oaks, and running down the embankment along HWY 115 that currently run onto the property before discharging under HWY 115 through an existing storm pipe. The access point being located where it is allows for the space needed around the perimeter of the property for these large off-site flows to be channeled around the site in a system of swales and storm piping to its existing drainage outfall location.

Utilities:
The property will be home to a proposed 5,100 SF sanitary sewer lift station which will provide sanitary sewer conveyance for both the proposed Sundance at Rock Creek project and adjacent residential communities south of the Sundance at Rock Creek development. In conjunction with this lift station, utility extensions of approximately one mile in length have been designed to run through Cheyenne Mountain State Park bringing municipal water and wastewater connections to this area of the city and unincorporated El Paso County. The Sundance at Rock Creek development will enable the extension of CSU water infrastructure that will provide much needed fire-fighting defense through the extension of fire hydrants to the area of the development, the adjacent State Park Archery Range as well as other residential developments within the immediate area where these resources are currently inadequate or unavailable. As such, there is a large network of utilities that must cross under Pine Oaks Road from the proposed property which required extensive coordination efforts with Colorado Springs Utilities narrowing the window of opportunity for the entryway into the site.

Road Design Criteria:
The accessway as currently designed meets the City of Colorado Springs requirements for site distance and turning radii. Locating the roadway further to the west off of Pine Oaks Road and bringing the road around the clubhouse would not meet City design guidelines for turning radii and would make the entryway unsafe. Furthermore, the existing low volumes of traffic on Pine Oaks Road would not lead to large stacking distances around that intersection, as shown in the traffic study which was approved with no further comments from the City.

CONCLUSION

The site is encumbered by the many constraints outlined above, namely adjacent property owner restrictions and the steep topography surrounding the site, the need to channelize off-site drainage flows around the site, proposed utility alignment constraints, and entryway design criteria. These limitations influence the proposed site layout and location of the site's entrance as it is situated on Pine Oaks Road. The entrance location as shown in Exhibit A represents the optimal layout given this tough parcel with its numerous challenges.

Sincerely,
Matrix Design Group, Inc.

Colleen Monahan, PE
Associate, Development Services

Attachments: Exhibit A

GRAPHIC SCALE
40' 0' 40' 80'
(IN FEET)
1 inch = 40 ft.

N

EXISTING DRIVEWAY CUT
TEMPORARY EASEMENT RECEPTION NO. 211024815
PERMANENT EASEMENT RECEPTION NO. 211024815
EDGE OF ASPHALT
STATE OF COLORADO R.O.W. OWNERSHIP
CDOT R.O.W. OWNERSHIP
PROPOSED PROPERTY ACCESS
PUBLIC UTILITY EASEMENT RECEPTION NO. 211024815
EXISTING 8" WATER MAIN
EXISTING 12" WATER MAIN
EXISTING 4" SANITARY FORCE MAINS
OFFSITE STORM FLOWS DISCHARGE SITE USING EXISTING STORM PIPE
PINE OAKS RD.
128.67'
UNPLATTED LAND COLORADO DEPARTMENT OF TRANSPORTATION RECEPTION NO. 211028364
CDOT LEASE TO DIV. OF PARKS AND WILDLIFE RECEPTION NO. 2124060051 (HATCHED AREA)
DEPT. OF HIGHWAYS BOOK 1941 PAGE 797 (SHADED AREA)

UNPLATTED LAND
CITY OF COLORADO SPRINGS
RECEPTION NO. 200063515
CHEYENNE MOUNTAIN STATE PARK
AREA OF STEEP SLOPE
PROPERTY LINE
DOG PARK
GRAVEL ACCESS PATH
GARAGE (TYP.)
ADA GARAGE
CONCRETE DRAINAGE SWALE FOR OFFSITE STORM FLOWS
SUNDANCE VALLEY VIEW (PRIVATE ROAD)
UNPLATTED LAND
STATE OF COLORADO
DEPARTMENT OF NATURAL RESOURCES
RECEPTION NO. 200063513
UNPLATTED LAND
(EL PASO COUNTY)
PRIVATE OWNER
OPEN SPACE
CARRIAGE HOUSE (TYP.)
EL PASO COUNTY LINE
BUILDING 1
BUILDING 2
BUILDING 3
BUILDING 4
BUILDING 5
BUILDING 6
BUILDING 7
UNDERGROUND DETENTION FACILITY 18,000 SF
KNIGHTS PEAK POINT (PRIVATE ROAD)
BIG CHIEF HEIGHTS (PRIVATE ROAD)
POOL
CLUBHOUSE
PUBLIC LIFT STATION
EXISTING DRIVEWAY CUT
20' RIGHT-OF-WAY BOOK 2746 PAGE 704
EXISTING GRAVEL (APPROX. LOCATION AND BNDY)
ACCESS RIGHTS BOOK 1941 PAGE 797
DEPT. OF HIGHWAYS BOOK 1941 PAGE 797
HIGHWAY 115 (PUBLIC CDOT VARIABLE R.O.W)
EDGE OF ASPHALT

GRAPHIC SCALE
80' 0' 80' 160'
(IN FEET)
1 inch = 80 ft.

FILE LOCATION:

CONSULTANTS:

PLANNER/ LANDSCAPE ARCHITECT/ CIVIL ENGINEER:

Matrix

2435 RESEARCH PARKWAY, SUITE 300
COLORADO SPRINGS, CO 80920
PHONE: (719) 575-0100
FAX : (719) 575-0208

OWNER/DEVELOPER:

SUNDANCE
AT ROCK CREEK

SUNDANCE AT ROCK CREEK LLC.

90 S. CASCADE AVE. STE. 1500,
COLORADO SPRINGS, CO 80903
PHONE: (719) 448-4034

PROJECT:

SUNDANCE AT ROCK CREEK
FILING NO. 1
CDOT EXHIBIT
COLORADO SPRINGS, CO
7/14/2020

SHEET TITLE:

EXHIBIT "A"

CITY FILE NO.: