



**ONE
ALBUQUE
ROQUE**

SIMMS PARK ROAD STUDY

MARCH 2023

Prepared for
City of Albuquerque

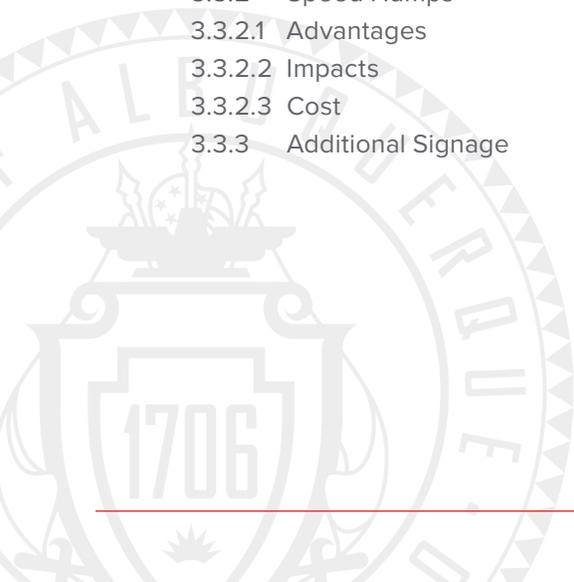
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Parametrix



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1. Introduction

The purpose of this study is to analyze Simms Park Road and develop alternatives to improve bicycle safety along the roadway. Simms Park Road connects the existing multi-use trail along Tramway Boulevard with the Elena Gallegos Open Space area, resulting in use by bicycles and pedestrians. The narrow width of Simms Park Road and current lack of designated bicycle facilities results in conflicts between motor vehicles and bicyclists. This study also discusses features that would improve the intersection of Simms Park Road and Eagle Ridge Road. Data collected for this study includes GIS right-of-way (ROW) information, Bernalillo County contour data, a desktop environmental review, available crash data, drainage patterns, and a site assessment. Figure 1 below shows the location map for the study.

Figure 1. Location Map





2. Existing Conditions

Simms Park Road is a two-way east/west minor collector roadway ranging from 21' to 24' wide located in the Northeast Heights/Foothills area of Albuquerque. The roadway extends 1.4 miles east from Tramway Boulevard to the Elena Gallegos Open Space. The roadway has no curb and gutter within project limits, and the shoulders along either side of the roadway vary from 0 to 3 feet wide. There is an existing path along the southern side of the roadway that is used by both bicyclists and pedestrians. The roadway has one T-intersection at Eagle Ridge Road, a residential north/south street. Simms Park Road primarily serves as an access route for the Sandia Heights neighborhood and for visitors to the Elena Gallegos Open Space. The roadway terminates at the entrance to the Elena Gallegos Open Space.

The roadway steadily rises in grade from Tramway Boulevard to the Elena Gallegos Open Space. Considering the steep existing grades along the road, possible safety concerns between bicyclists and vehicles are an issue. Vehicle and cyclist safety concerns may arise when road cyclists face challenges while climbing uphill, such as staying towards the right side of the lane and maintaining the appropriate pace with vehicles. These challenges may potentially lead to conflicts. Similarly, cyclists' increased speed on the downhill can cause them to outpace vehicles, creating a potential hazard for both cyclists and drivers.

2.1 TRAFFIC

Simms Park Road is used primarily by local motor vehicles and bicyclists. This City of Albuquerque maintained roadway features lanes ranging in width from 10.5 to 12 feet wide. The speed limit throughout the entire roadway is 30 mph. There is existing signage that prohibits on-street parking and indicates the presence of bicycle and pedestrian traffic along the roadway. Bicyclists and pedestrians within the corridor typically use the adjacent unpaved path on the south side of the roadway. Simms Park Road has relatively low traffic volume, but sees a steady flow of vehicles, with higher use on weekends. Approximately 215,000 or more visitors come to the Elena Gallegos Open Space on average every year, excluding hikers, pedestrians, and bicyclists. Although Mid-Region Council of Governments (MRCOG) does not have daily volume data for Simms Park Road, similar minor collectors between Academy Road NE and Paseo Del Norte Boulevard on the east side of Tramway Boulevard NE were averaging approximately 1500 average daily traffic (ADT) in 2021.

2.2 EAGLE RIDGE ROAD INTERSECTION

The intersection of Eagle Ridge Road and Simms Park Road is located about 0.80 miles east of Tramway Blvd. The T-intersection contains one stop sign for vehicles exiting Eagle Ridge Road on to Simms Park Road.

2.2.1 Eagle Ridge Road Intersection Sight Distance

Intersection sight distance (ISD) for Simms Park Road and Eagle Ridge Road was measured in the field and was evaluated based on AASTHO's A Policy on the Geometric Design of Highways and Streets (also known as the "Green Book"), Chapter 9 Case B1 and B2, Left and Right Turn from Stop, respectively. The Green Book states that the typical position of a driver's eye for an individual in a passenger car should be 14.5' from the edge of the major-road traveled way. The sight distance required takes into consideration physical conditions of the roadway as well as vehicular speeds. The speed limit on Simms Park Road is 30 mph, however for this analysis, we used a design speed of 35 mph. The sight distance was evaluated from decision points at both the "at stop" area at the stop line on Eagle Ridge Road and the "at edge of road" area which are shown in Figure 2. Figure 3 and Figure 4 below show the perspective of a vehicles at the stop bar on Eagle Ridge Road. Both photos show an obstructed view for vehicles looking in either direction along Simms Park Road. Figure 5 and Figure 6 below show the perspective of a vehicle at the edge of Eagle Ridge Road.

Figure 2. Decision Point Locations



Figure 3. Looking East from Stop Bar



Figure 4. Looking West from Stop Bar



Figure 5. Looking East from Edge of Road



Figure 6. Looking West from Edge of Road



The intersection sight distance for left and right turns is listed in table 9-6 and 9-8 in the Green Book. Table 1 and Table 2 below summarize the observed and calculated sight distances for vehicles stopped on northbound Eagle Ridge Road.

Table 1. Left Turn Movement at Eagle Ridge Rd.

	DESIGN SPEED (MPH)	STOPPING SIGHT DISTANCE (FT)	REQUIRED DESIGN SIGHT DISTANCE (FT)	OBSERVED SIGHT DISTANCE (FT)
At STOP LINE	35	250	390	144.5
At EDGE	35	250	390	207.33

Table 2. Right Turn Movement at Eagle Ridge Rd.

	DESIGN SPEED (MPH)	STOPPING SIGHT DISTANCE (FT)	REQUIRED DESIGN SIGHT DISTANCE (FT)	OBSERVED SIGHT DISTANCE (FT)
At STOP LINE	35	250	335	95
At EDGE	35	250	335	125

The observed sight distance for both left and right turning movements for vehicles at the stop bar on northbound Eagle Ridge Road does not meet the required sight distance. The only clear sight distance observed is for vehicles creeping to the edge of the roadway to make left hand turn movements. This creates a potential safety hazard for roadway users along Simms Park Road and Eagle Ridge Road. The limited site distance is in part due to the overgrown vegetation at the intersection but may also be because the Simms Park Roadway alignment has a horizontal curve where Eagle Ridge Road intersects.

2.3 PAVEMENT CONDITIONS

The evaluation of pavement conditions was limited to visual observation; a detailed analysis was not performed. The pavement conditions vary throughout, with some sections rated as poor and others as fair. Multiple areas of patchwork are present, indicating a history of repairs and maintenance efforts. However, these repairs have not fully remedied the underlying issues, as the pavement continues to exhibit many cracks and potholes, as shown in Figure 7. When riding on a road with fair to poor pavement conditions, bicyclists may encounter uneven surfaces that include cracks, crack sealings, potholes, and bumps. This can be particularly dangerous when bicyclists are riding at high speeds or in areas with heavy traffic.

Figure 7. Typical Pavement Condition on Simms Park Road



2.4 RIGHT OF WAY

Parametrix used the City of Albuquerque's GIS parcel data for the purposes of this project. Per the GIS linework, the right of way for this roadway varies from 130 to 215 feet in the first 500 feet of the roadway and then from 66 to 77 feet after that. The boundary on the north side of the roadway is particularly narrow, with an average right of way width of 25 feet from the roadway centerline compared to the average right of way width of 42 feet from the roadway centerline on the south side.

2.5 DRAINAGE

Many of the residences along the south side of Simms Park Road drain towards the roadway. A drainage swale along the south side of the roadway captures the offsite flows as well as the flows coming off the roadway. These flows are captured by four existing drop inlets, located on the south side the road, which connect to culverts that convey flows from the south side of Simms Park Road to the north side. The inlets are located approximately 14-20 feet from the edge of the road in the existing drainage swale located adjacent to the roadway. Each inlet connects to a 24" circular reinforced concrete pipe (RCP) that drains north under the roadway to the edge of the right-of-way. See Figure 8 and Figure 9. All the inlets and outlets appear to be in good condition with no evidence of erosion. Some inlet locations are surrounded by heavy vegetation that helps to stabilize the soils in the area and prevent erosion. The existing swale is also in good condition with no evidence of excessive erosion.

Figure 8. Existing Drop Inlet on South Side of Simms Park Road



Figure 9. Existing 24" RCP Outlets on North Side of Simms Park Road



Some options for improving bike facilities along Simms Park Road, detailed later in this report, will increase the impervious area and therefore the drainage runoff to the drop inlets. However, the increase in impervious area in the vicinity of the drop inlets will be negligible and no impact is expected to the capacity of the drop inlets.

2.6 CRASH DATA

MRCOG provided crash data for Simms Park Road and the intersecting major road, Tramway Blvd NE, from 2016 to 2022. From the data, 12 collisions were recorded from 2016 to 2019 and no crashes in 2020, 2021 and 2022. Most crashes occurred on Tramway Boulevard NE near the Simms Park Road entrance. There was one collision involving bicyclists at the intersection of Eagle Ridge Road and Simms Park Road. Overall, collisions do not appear to be a major concern in this area. However, as Albuquerque grows and the number of vehicles and bicyclists on Simms Park Road increases, the likelihood of encounters between them also increases. This can lead to a higher risk of collisions and accidents, especially in areas with limited space or where road conditions are challenging.

2.7 ENVIRONMENTAL CONDITIONS

Existing environmental conditions were identified based on a review of existing data, including the Archaeological Records Management Service (ARMS) database, US Fish and Wildlife Service's Information, Planning and Consultation (IPaC) webservice, National Hydrography Dataset (NHD), National Wetland Inventory (NWI), and New Mexico Environmental Department's OpenEnviroMap.

Organized into cultural resources, natural resources, and hazardous materials, this overview describes some of the existing environmental conditions and constraints to be considered throughout project development.

2.7.1 Cultural Resources

A review of files from the Archaeological Records Management Section (ARMS) in Santa Fe indicated no previously identified archaeological sites within the proposed project area. However, there are small gaps in archaeological survey coverage, and the most recent survey for archaeological resources in the area took place over 10 years ago in 2001.

2.7.2 Natural Resources

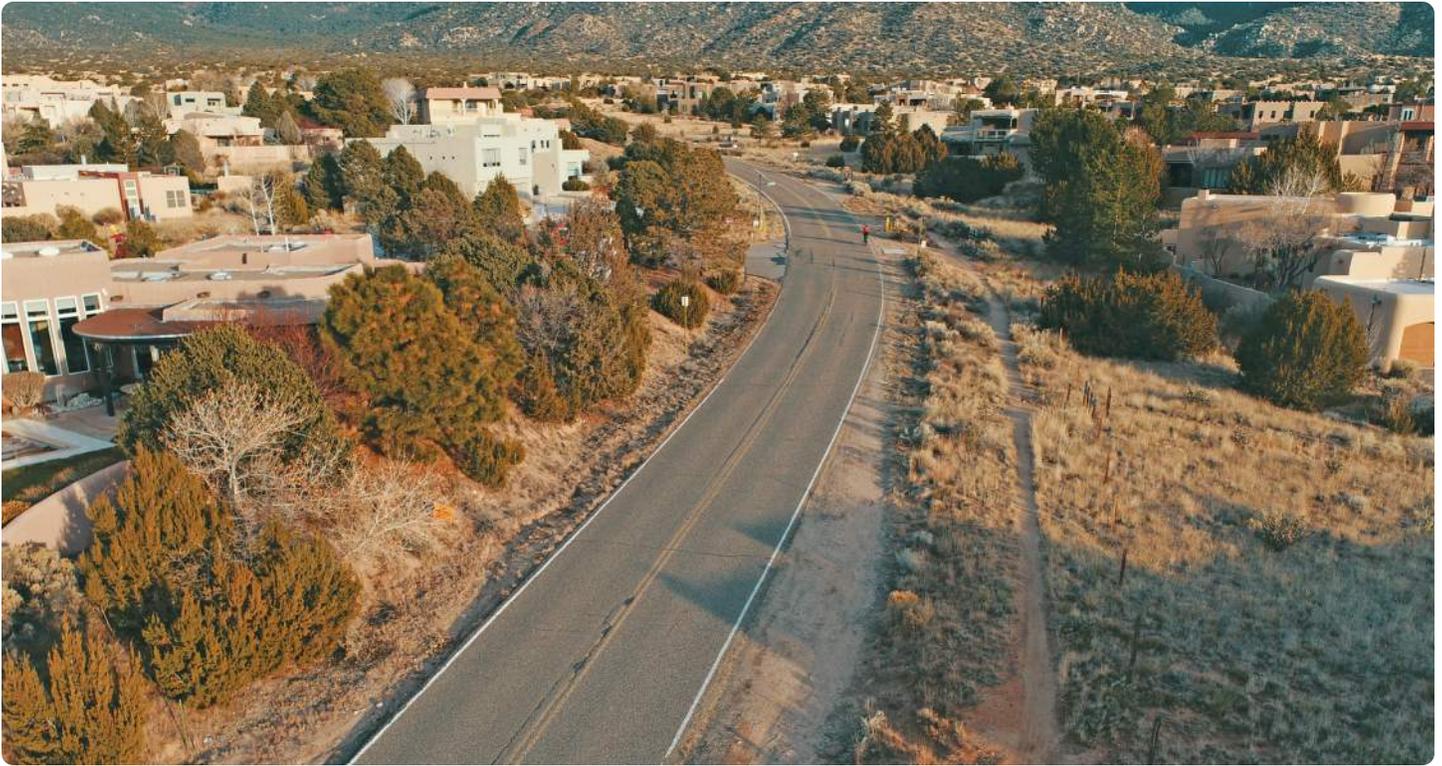
The project is located in the Sandia Mountain Foothills, south of Arroyo del Pino. Much of the area is developed by residential housing units and roadway infrastructure. Despite this, the IPaC list for the area noted six endangered species (New Mexico meadow jumping mouse, Mexican spotted owl, southwestern willow flycatcher, yellow-billed cuckoo, and Rio Grande silvery minnow) and 11 migratory birds of conservation concern that are within Bernalillo County. Migratory birds may be using the area in the spring and summer months. However, the endangered species on the IPaC list have very specific habitats, particularly riparian, forested, or aquatic habitats, that do not exist in the project area. Due to lack of habitat, it is unlikely that any of the endangered species mentioned by IPaC would be using the area. No critical habitats are located within the proposed project.

According to the NWI, no wetlands have been previously identified in the area. The NHD showed that only one ephemeral stream crosses the proposed project area. However, the Arroyo del Pino is also located close to the Elena Gallegos Picnic Area.

2.7.3 Hazardous Materials

The NMED OpenEnviroMap showed no potentially hazardous materials, such as leaking petroleum tanks, or hazardous waste sites, such as Superfund sites, within the project's vicinity.



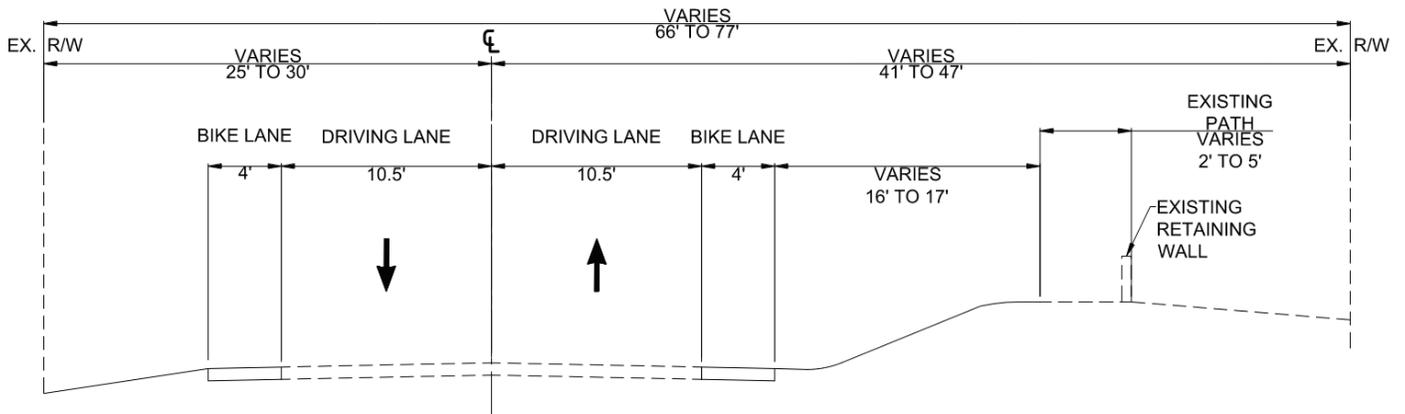


3. Safety Improvement Options

3.1 OPTION 1: BIKE LANES

Option 1 includes constructing 4' bike lanes on each side of the roadway to provide separate lanes for both directions of bicycle traffic. To accomplish this, the existing roadway would be sawcut 1' from the existing pavement edge, the existing vegetation cleared, and the new bike lanes constructed outward from the existing roadway. To ensure consistency in the analysis, it was assumed that there were no shoulders along the roadway, despite the fact that they varied from 0 to 3 feet in width. The required pavement removal would also remove the outer roadway stripe. The existing travel lanes vary from 10.5 to 12 feet and following the construction of the bike lanes, the roadway would be restriped to provide a consistent 10.5' vehicular travel lane and 4' bike lane for both directions of travel. NACTO Urban Bikeway Design Guide recommends a 6' bike lane, however based on space and cost, the minimal 4' bike lane was used for this option. The proposed typical section for this option can be seen in Figure 10. Plan and profiles sheets for this option are show in Appendix A.

Figure 10. Typical Section of Option 1



3.1.1 Advantages

The design and construction of Option 1 provides separated bike lanes to make biking a more attractive option for bicyclists, potentially leading to increased bike usage, reduced traffic congestion, and improved safety for bicyclists. Additionally, wider driving lane widths tend to increase the likelihood of speeding along roadways. Constructing consistent lane widths and narrowing the vehicular travel lanes to 10.5 feet could help to slow drivers along Simms Park Road. This option will not impact the existing dirt walking and biking path and will have minimal impact on the existing terrain. Overall, this will improve the safety of bicyclists by providing them with a designated space on the road.

3.1.2 Impacts

Construction of the bike lanes may pose a few disadvantages along the roadway. If the asphalt is sawcut and the bike lanes are added, the roadway may have an odd appearance with the contrast of new asphalt and old. Resurfacing the entire roadway would eliminate this contrast, however the cost to resurface the roadway would add approximately \$793,000 to the project costs. The conceptual cost estimate for the mill and inlay can be seen in Appendix B. In some locations, the existing guardrails may need to be removed and relocated on the north side of the roadway because there is not adequate space to fit the proposed bike lane adjacent to the roadway with the guardrails in their current locations. Additionally, the culvert inlet locations may be affected by the proposed widening. Option 1 may require relocating the drop inlets out of the new pavement area and adjusting the adjacent drainage swale. The pipe outlet would not be affected by the improvements of this option. Also, when preparing for roadway construction, vegetation in the areas where construction will take place, including vegetation adjacent to the roadway, will need to be cleared to make way for the new infrastructure.

This option will primarily accommodate bicyclists as opposed to pedestrians. Additionally, construction activities would have narrow spaces to work within the existing ROW and may have temporary and short-term impacts to access to the neighborhood and the open space during construction.

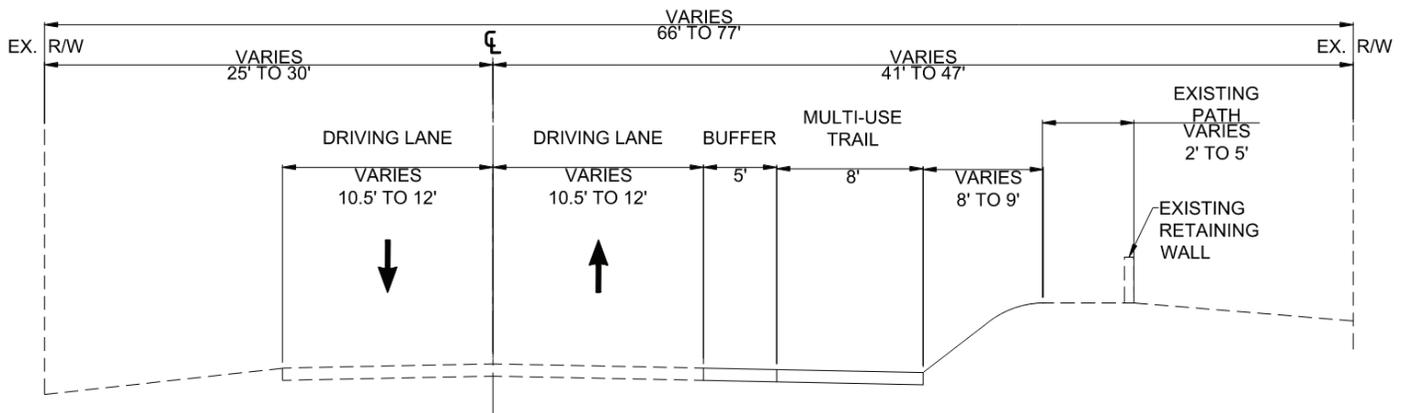
3.1.3 Cost

Option 1 would cost approximately \$925,000. This cost does not take into consideration any of the potential drainage modifications, required earthwork needed, or required guardrail adjustments. However, the cost estimate includes a 35% contingency to account for unforeseen construction additions/changes. The pavement section for the roadway assumes 4" of asphalt over 6" of base course. See Appendix B for conceptual cost estimate. This estimate does not include the additional mill and inlay mentioned above.

3.2 OPTION 2: MULTI-USE TRAIL

Option 2 includes constructing an 8' asphalt multi-use trail on the south side of Simms Park Road adjacent to the roadway. A 5' buffer would be placed between the existing roadway and the new multi-use trail. The trail would be accessible to both pedestrians and bicyclists. The buffer would be striped to discourage vehicles from deviating from their intended path or lane. Raised delineators or other visible markers could be added to separate the vehicular traffic from the multi-use path. The proposed typical section of this option can be seen in Figure 11. Plan and profile sheets for this option are show in Appendix A.

Figure 11. Typical Section of Option 2



3.2.1 Advantages

Option 2 provides a separate paved route for both bicyclists and pedestrians to occupy. Bicyclists could utilize the multi-use trail rather than occupy a shared space on the roadway. This may increase the comfort and safety of some riders. Pedestrians would also have a paved designated area adjacent to the roadway, an option that is not currently provided.

3.2.2 Impacts

Construction of a multi-use trail may pose some negative impacts. The buffer and multiuse trail may be used as a pull off for vehicles or allow off-tracking which can create safety hazards for the multi-use trail users. Some avid bicyclists may not choose to utilize the multi-use trail due to the potential presence of pedestrians or other bikers on the path. These bicyclists would then end up back on the roadway, where some ride today. Providing only an 8' multiuse trail limits the available space for both bicyclists and pedestrians traveling in different directions, which could lead to congestion or conflicts. Additionally, the trail would impact existing drainage patterns, so additional analysis would need to be completed to determine if drainage improvements would need to be implemented. This option, at the very least, would require the relocation of existing inlets on the southside of the roadway. The pipe outlets would not be affected by the improvements of this option. Lastly, when preparing for roadway construction, vegetation in the areas where construction will take place, including vegetation adjacent to the roadway, will need to be cleared to make way for the new infrastructure.

3.2.3 Cost

Option 2 will cost approximately \$1,170,000.00. This cost does not take into consideration any of the potential drainage modifications or required earthwork needed. However, the cost estimate includes a 35% contingency to account for unforeseen construction additions/changes. The pavement section for the roadway assumes 4" of asphalt over 6" of base course. See Appendix B for conceptual cost estimate.

3.3 OPTION 3: TRAFFIC CALMING/SPEED CONTROL

This option involves implementing low impact solutions to improve the safety along Simms Park Road. The following three potential solutions will be discussed:

- 3-way stop at the intersection of Eagle Ridge Road and Simms Park Road.
- Adding speed humps along Simms Park Road.
- Additional Signage

3.3.1 3-Way Stop

Following a site visit with Parametrix staff and coordination with the City of Albuquerque, the intersection with Eagle Ridge Road was noted as a potential cause of concern based on the observed restricted view for those exiting Eagle Ridge Road and the calculated inadequate intersection sight distance. The observed sight distance for both left and right turning movements for vehicles on northbound Eagle Ridge Road do not meet the required sight distance for vehicles located at the stop bar. This creates a potential safety hazard for roadway users along Simms Park Road and Eagle Ridge Road. If the reduction of vegetation at the intersection is not an option or does not improve sight distance, a 3-way stop may improve the safety at the intersection. The implementation of a stop sign would first need to meet the required stop warrant analysis as outlined in The Manual for Uniform Traffic Control Devices (MUTCD) section 2B.05. This section states the following:

Stop signs should be used if engineering judgement indicates that one or more of the following conditions exist:

- *Intersection of a less important road with a main road where application of the normal right-of-way rule would not be expected to provide reasonable compliance with the law*
- *Street entering a through highway or street*
- *Unsignalized intersection in a signalized area*
- *High speeds, restricted view, or crash records indicate a need for control by the STOP sign.*

Additionally, section 2B.06 of the MUTCD has further guidance related to the implementation of stop signs and states the following:

The use of STOP signs on the minor-street approaches should be considered if engineering judgement indicates that a stop is always required because of one or more of the following conditions:

- *The vehicular traffic volumes on the through street or highway exceed 6,000 vehicles per day*
- *A restricted view exists that requires road users to stop in order to adequately observe conflicting traffic on the through street or highway*

The lack of adequate intersection sight distance could make this intersection a good candidate for a 3-way stop. A 3-way stop could also help slow down speeding vehicles along the roadway. Advanced warning signage should be used in conjunction with the stop signs to help warn roadway users of the stop sign ahead.

3.3.1.1 Advantages

The three-way stop can improve safety at the intersection by reducing the speed of vehicles and giving all road users equal opportunities to navigate the intersection safely which is important considering the diverse users including vehicles, pedestrians, and bicyclists. Considering the deficient intersection sight distances at the intersection, it may help reduce the likelihood of collisions, particularly those involving vulnerable road users such as pedestrians and bicyclists.

3.3.1.2 Impacts

The addition of stop signs at an intersection may result in increased congestion due to the requirement of more vehicles to come to a stop. Additionally, advanced signage may be beneficial to implement to inform drivers of the upcoming three-way stop, helping them prepare and navigate the intersection safely.

3.2.1.3 Costs

Adding a minimum of four additional signs (a stop sign and advanced warning sign for both directions) for the three-way stop be approximately \$1,800.

3.3.2 Speed Humps

Following a field visit and discussions with City staff, there are concerns of excessive speeding along Simms Park Road. The addition of speed humps is one application that could help mitigate excessive speeding along the roadway. The Institute of Transportation Engineers (ITE) has published a fact sheet for the application of speed humps. The following guidelines are listed:

- Appropriate for residential local streets and residential/neighborhood collectors
- Not typically used on major roads, bus routes, or primary emergency response routes
- Not appropriate for roads with 85th-percentile speeds of 45 mph or more
- Appropriate for mid-block placement, not at intersections
- Not recommended on grades greater than 8 percent
- Work well in combination with curb extensions
- Can be used on a one-lane one-way or two-lane two-way street

Simms Park roadway meets most of the necessary guidelines. Speed data was not collected as part of this report, so the 85th percentile speeds were not determined. A design speed of 35 mph was used for this report (5 mph faster than the posted speed).

San Rafael Ave NE is a minor collector street located approximately half a mile north of Simms Park Road along Tramway Boulevard in Albuquerque. It shares similar roadway characteristics to Simms Park Road, including its geometry, low speed limits, access to residential areas, and multimodal use. Seen below in Figure 12 shows the speed humps that have been implemented along this roadway.

The City of Albuquerque also has a Neighborhood Traffic Management Program (NTMP) to assess requests for traffic calming measures. If speed humps were to be implemented, the NTMP procedures should be followed prior to design. The traffic calming procedures are as follows:

1. Any City resident can apply on behalf of their street.
2. There must be seven supporting residents, from separate homes on the street, included on the application.
3. Traffic Engineering Division assesses whether the street segment meets the Minimum Guidance Thresholds established in the NTMP Initial Assessment.

Figure 12. Speed Hump on San Rafael Ave NE



3.3.2.1 Advantages

The addition of speed humps is an effective way at reducing vehicle speeds, which can improve safety for pedestrians, bicyclists, and other road users. By encouraging drivers to slow down, the speed humps can help reduce the risk of accidents and make residential neighborhoods more livable. Also, speed humps can be installed relatively quickly and easily, without requiring significant disruption to the surrounding areas. Speed humps are also typically low maintenance, as they do not require power or ongoing upkeep.

3.3.2.2 Impacts

Based on field observations by Parametrix, Simms Park Road is used for cycling training purposes which has the potential for high-speed bicyclists; therefore, the speeds humps may not be well-liked by all bicyclists.

3.3.2.3 Cost

To ensure adequate safety measures on this roadway, a minimum of three speed humps would be considered conservative. The estimated cost for installing these speed humps is approximately \$6,500. However, the total cost may vary depending on the final number of speed humps implemented or condition of existing pavement, which would be determined based on a more in-depth analysis and engineering judgement.

3.3.3 Additional Signage

Cyclists are vulnerable road users and sharing the road with motor vehicles can be dangerous. Some options for signs pertaining to bicyclists on roadways without dedicated bike lanes include:

- “Share the Road” (W16-1P) signs to remind drivers to watch for and share the road with bicyclists.
- “Bike Route” (D11-1) signs to indicate that the roadway is designated as a bike route.
- “Bicycles May Use Full Lane” signs to inform drivers that bicyclists have the right to use the full lane if necessary, for their safety.

Per the MUTCD Chapter 2C. Warning Signs and Object Markers, there is an option mentioned of “In situations where there is a need to warn drivers to watch for other slower forms of transportation traveling along the highway, such as bicycles, golf carts, horse-drawn vehicles, or farm machinery, a SHARE THE ROAD (W16-1P) plaque may be used.” A standard that is attached to the use of this sign states, “A W16-1P plaque shall not be used alone. If a W16-1P plaque is used, it shall be mounted below either a Vehicular Traffic Warning sign or a Non-Vehicular Warning sign. The background color of the W16-1P plaque shall match the background color of the warning sign with which it is displayed.” In this case a bicycle plaque (W11-1) Vehicular Traffic Warning Sign would be used with the Share the Road plaque.

Per the MUTCD Chapter 9B Signs, some guidance for the Bike Route sign (D11-1) includes that “If used, the Bicycle Route or U.S. Bicycle Route signs should be placed at intervals frequent enough to keep bicyclists informed of changes in route direction and to remind motorists of the presence of bicyclists.” Along with some options of “Bicycle Route or U.S. Bicycle Route signs may be installed on shared roadways or on shared-use paths to provide guidance for bicyclists,” and “The Bicycle Route Guide (D11-1) sign may be installed where no unique designation of routes is desired.”

Lastly, per MUTCD Chapter 9B Signs, some options provided for the “Bicycles May Use Full Lane” sign are “The Bicycles May Use Full Lane” (R4-11) sign may be used on roadways where no bicycle lanes or adjacent shoulders usable by bicyclists are present and where travel lanes are too narrow for bicyclists and motor vehicles to operate side by side.” Also, “The Bicycles May Use Full Lane” sign may be used in locations where it is important to inform road users that bicyclists might occupy the travel lane.”

3.3.3.1 Advantages

Adding signage for cyclists on shared roads is an important step in promoting safe and accessible cycling infrastructure and can help create a more welcoming and inclusive environment for cyclists of all skill levels. By providing clear and visible signage, drivers can be made aware of the presence of cyclists and take necessary precautions to avoid accidents.

3.3.3.2 Impacts

Although this implementation will bring more awareness to the bicyclists on the road, it may not provide them with a dedicated space that offers significantly higher levels of safety.

3.3.3.3 Cost

Adding a minimum of three additional signs spaced out in three separate locations along the roadway on both sides would require 18 total signs. The cost of installing these signs and posts would be approximately \$7,500.

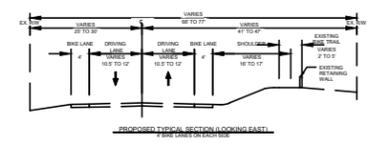


**ONE
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APPENDIX A

PLAN AND PROFILES

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LEGEND

EXISTING PAVEMENT

PROPOSED PAVEMENT

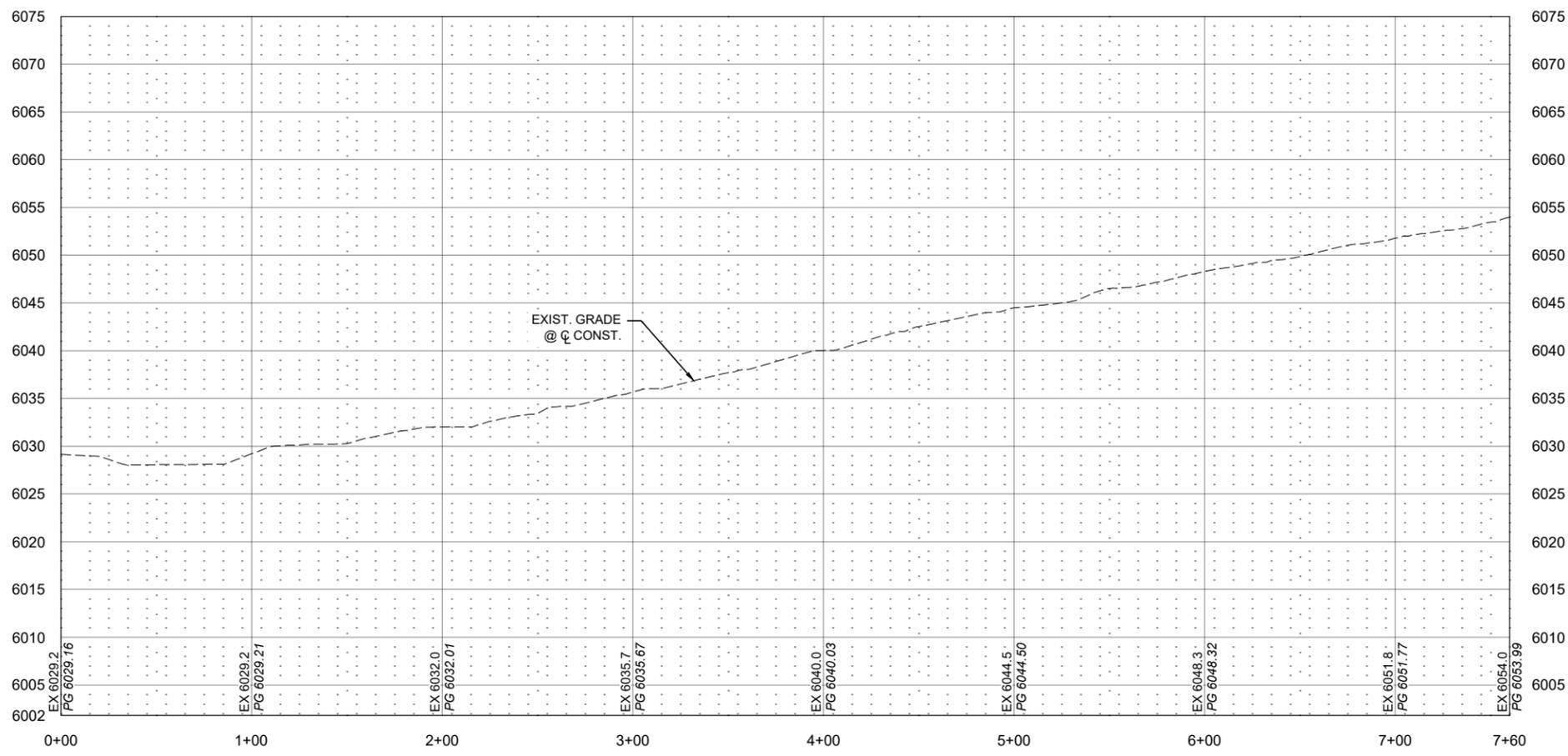
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CONSULTANTS

BENCH MARKS

XXXXXX

SEAL



HORIZONTAL SCALE
 SCALE: 1" = 40' (22"x34" PLOT)
 SCALE: 1" = 80' (11"x17" PLOT)
 VERTICAL SCALE
 SCALE: 1" = 8' (22"x34" PLOT)
 SCALE: 1" = 16' (11"x17" PLOT)



CALL NM ONE-CALL
 SYSTEM SEVEN (7) DAYS
 PRIOR TO ANY EXCAVATION



CITY OF ALBUQUERQUE
 DEPARTMENT OF MUNICIPAL DEVELOPMENT
 ENGINEERING DIVISION

**SIMMS PARK ROAD
 OPTION 1
 PLAN AND PROFILE**

DESIGN REVIEW COMMITTEE

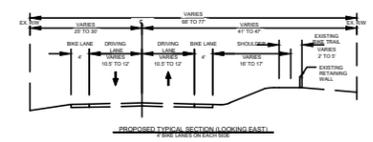
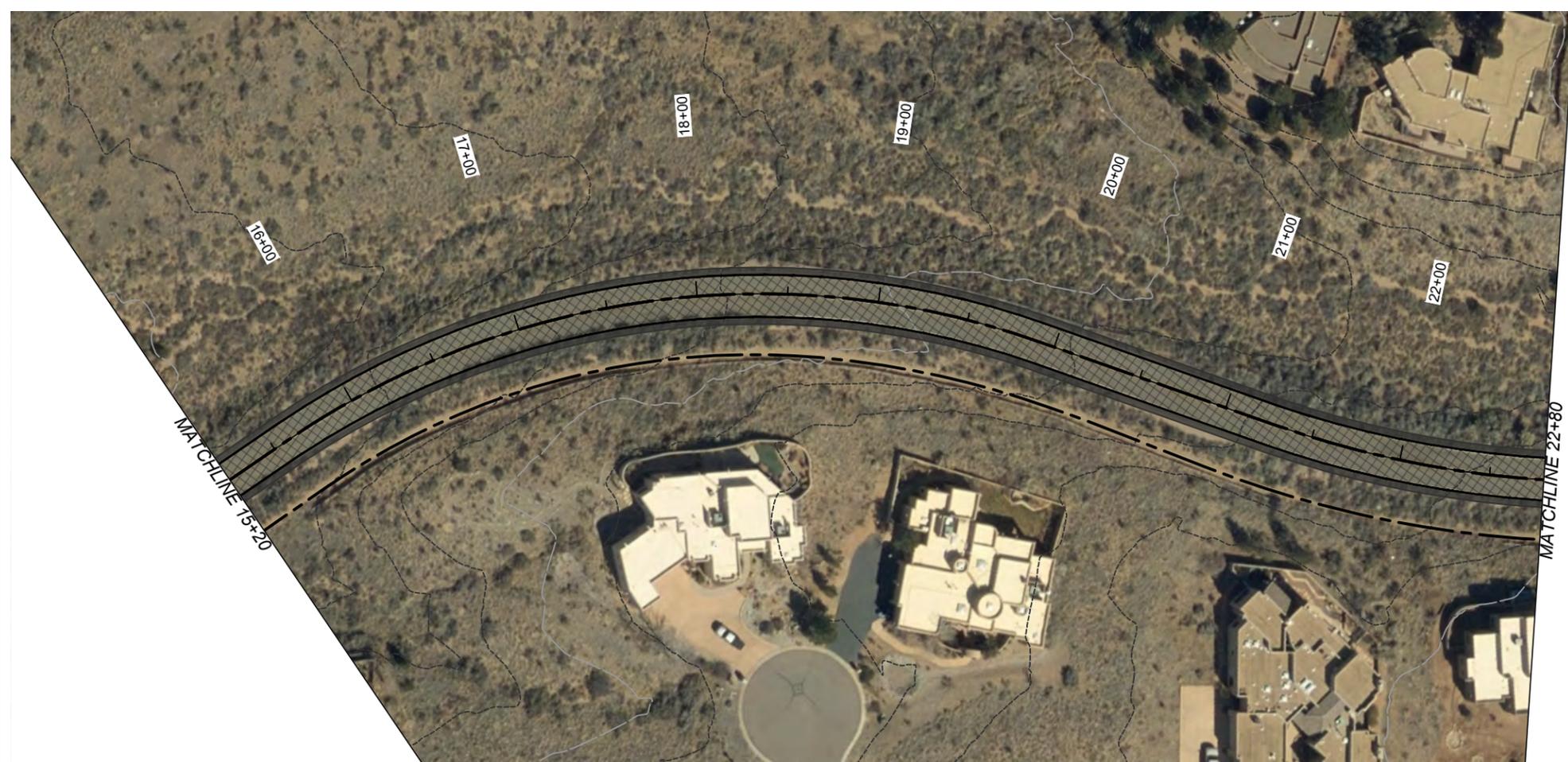
CITY ENGINEER APPROVAL

ZONE MAP NO.
 X-XX-X

CITY PROJECT NO.
 XXXXXX (CN XXXXXX)

SHEET NO. 1

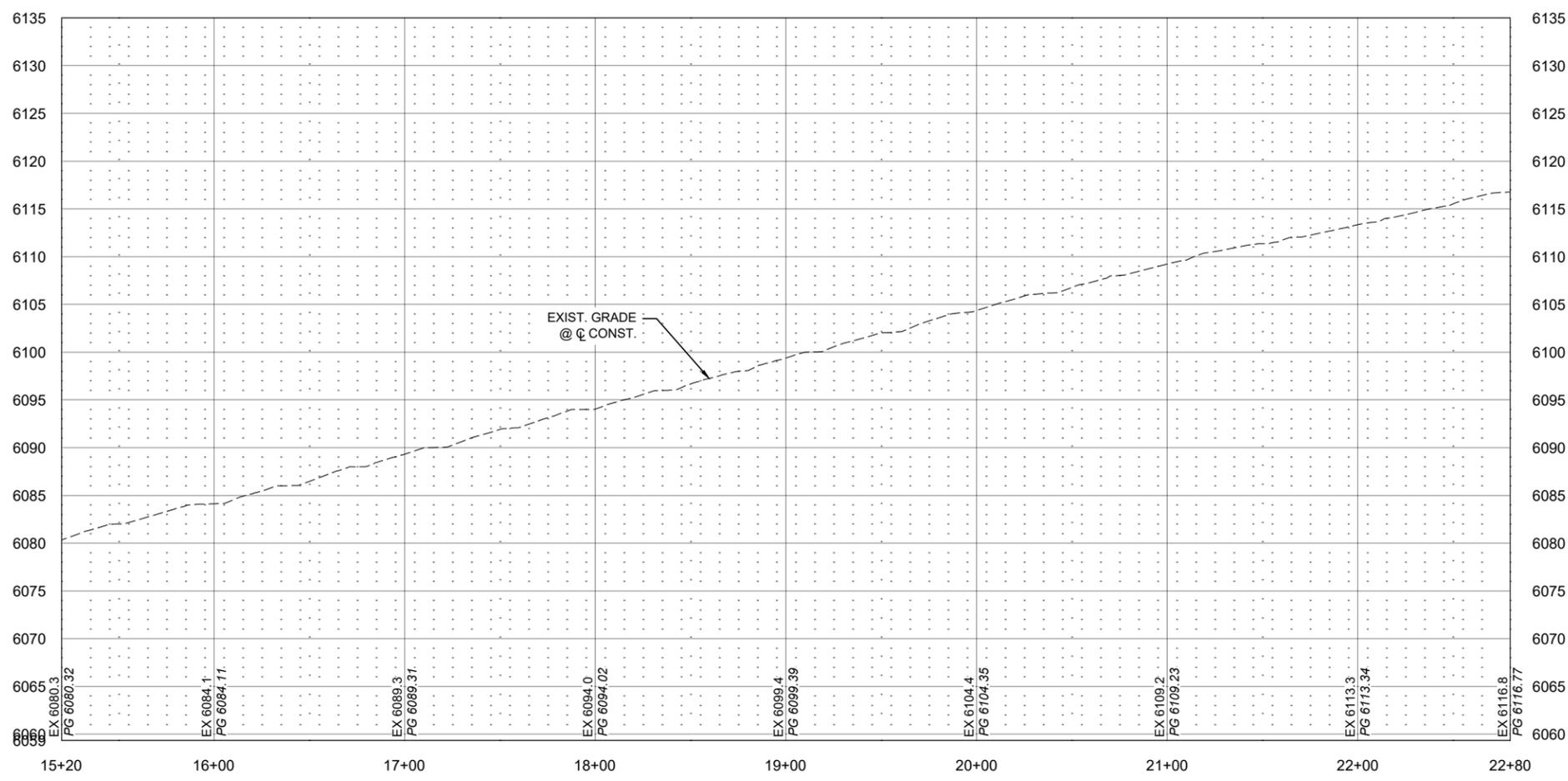
NO.	DATE	DESCRIPTION	BY
AS-BUILT INFORMATION		CONTRACTOR:	
WORK STAKED BY:	DATE:	INSPECTOR'S ACCEPTANCE BY:	DATE:
FIELD VERIFICATION BY:	DATE:	DRAWINGS CORRECTED BY:	DATE:



LEGEND

EXISTING PAVEMENT

PROPOSED PAVEMENT



40 20 0 40 80

HORIZONTAL SCALE
SCALE: 1" = 40' (22"x34" PLOT)
SCALE: 1" = 80' (11"x17" PLOT)

VERTICAL SCALE
SCALE: 1" = 8' (22"x34" PLOT)
SCALE: 1" = 16' (11"x17" PLOT)



CALL NM ONE-CALL
SYSTEM SEVEN (7) DAYS
PRIOR TO ANY EXCAVATION



CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT
ENGINEERING DIVISION

**SIMMS PARK ROAD
OPTION 1
PLAN AND PROFILE**

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	ZONE MAP NO. X-XX-X
		CITY PROJECT NO. XXXXXX (CN XXXXXX)
		SHEET NO. 3

CONSULTANTS



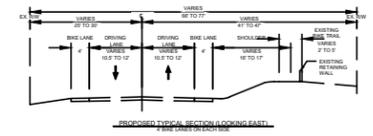
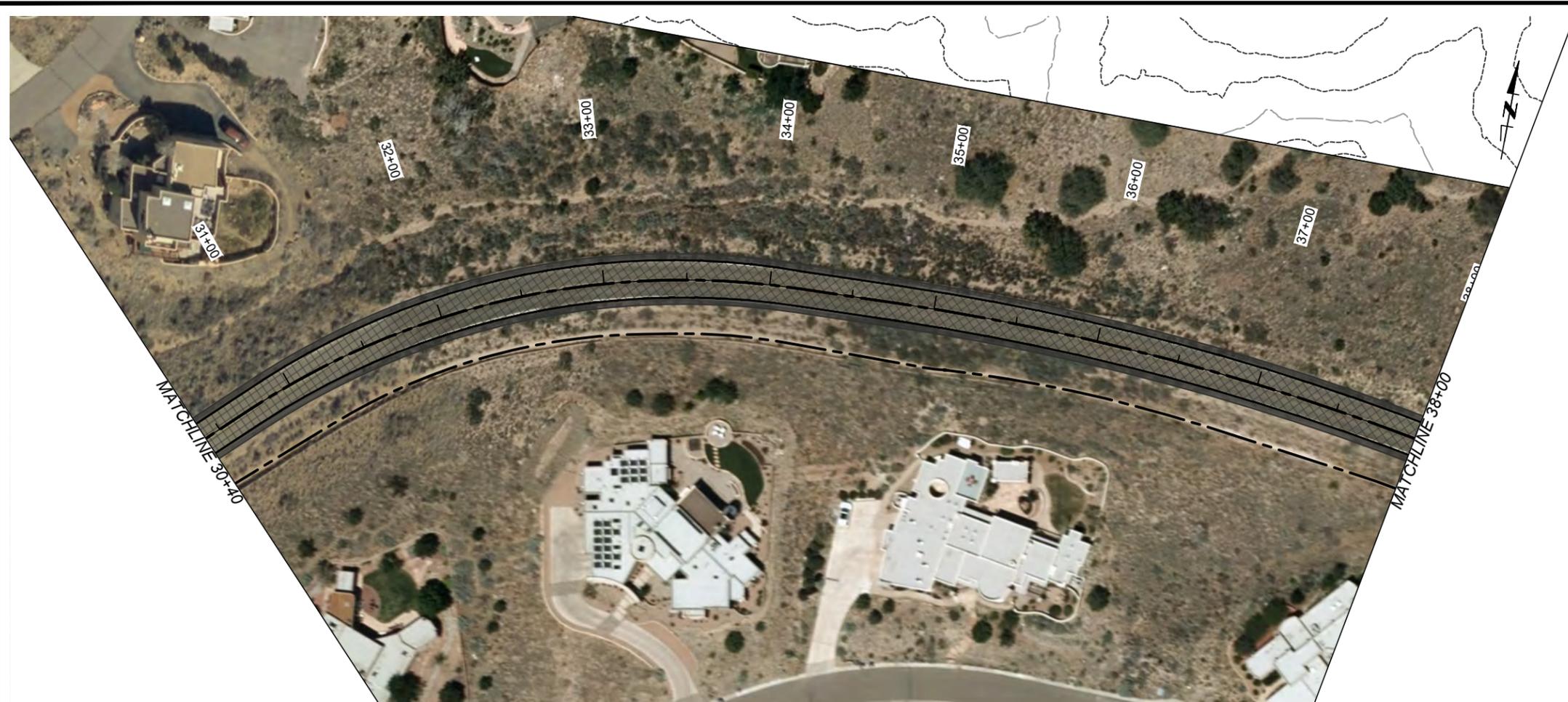
BENCH MARKS

XXXXXX

SEAL

NO.	DATE	DESCRIPTION	BY
		CONTRACTOR	
AS-BUILT INFORMATION		CONTRACTOR	
WORK STAKED BY:		DATE:	
INSPECTOR'S ACCEPTANCE BY:		DATE:	
FIELD VERIFICATION BY:		DATE:	
DRAWINGS CORRECTED BY:		DATE:	

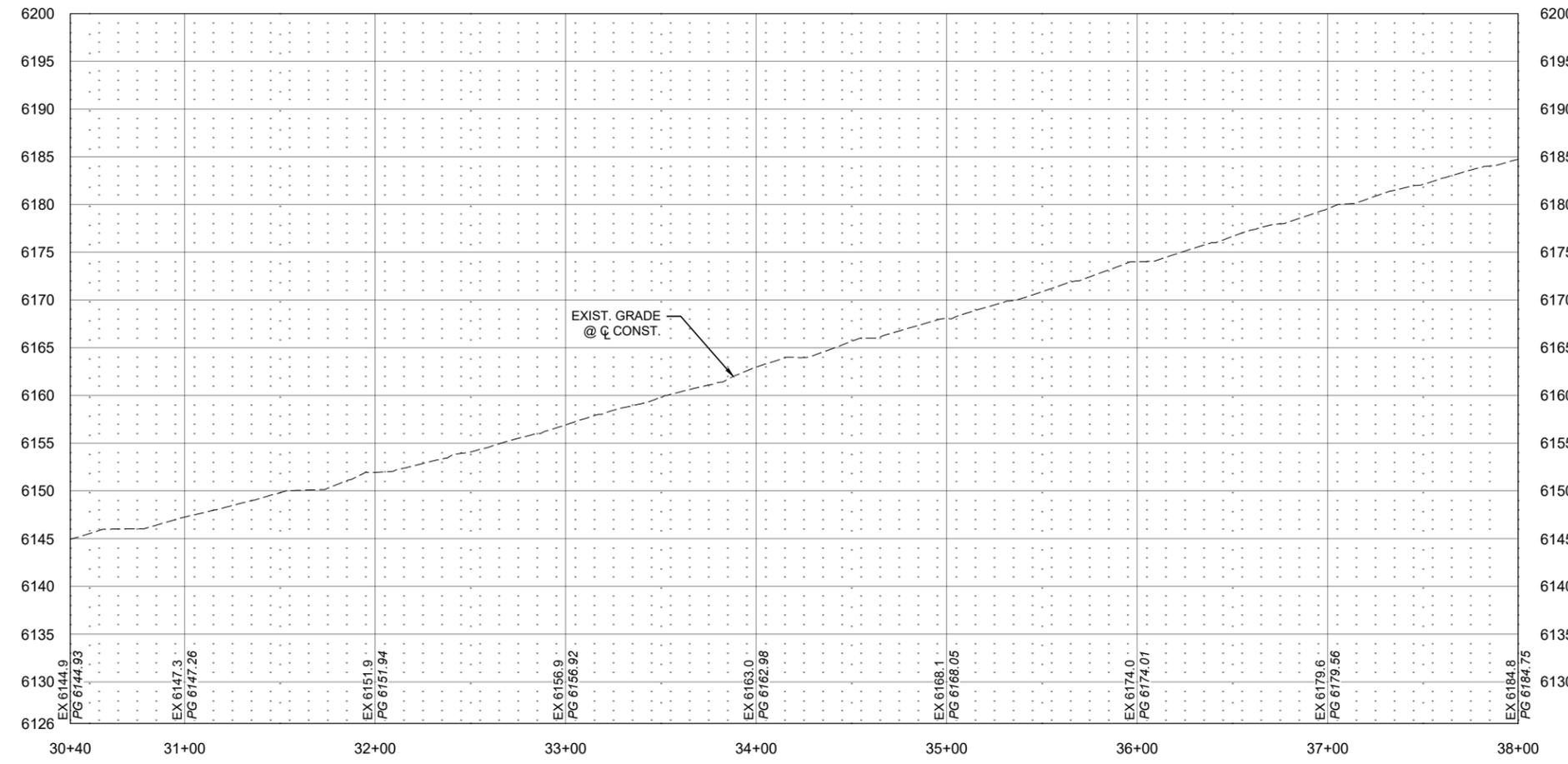
DESIGNED BY:
DRAWN BY:
CHECKED BY:
DATE 11/14/22



LEGEND

EXISTING PAVEMENT

PROPOSED PAVEMENT



40 20 0 40 80

HORIZONTAL SCALE
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CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT
ENGINEERING DIVISION

**SIMMS PARK ROAD
OPTION 1
PLAN AND PROFILE**

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	ZONE MAP NO. X-XX-X
		CITY PROJECT NO. XXXXXX (CN XXXXXX)
		SHEET NO. 5

CONSULTANTS



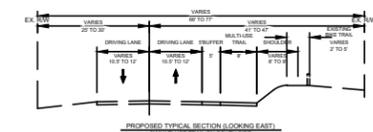
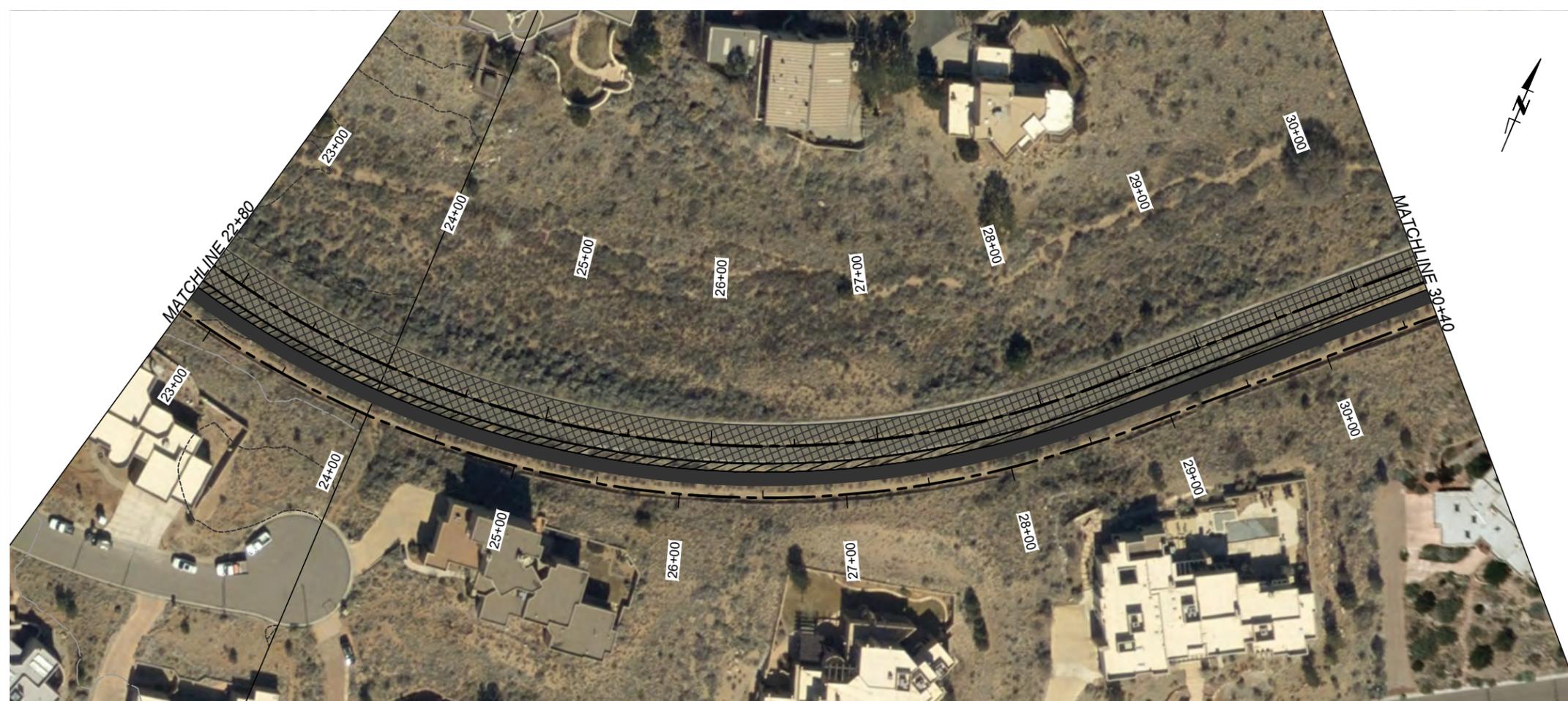
BENCH MARKS

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SEAL

NO.	DATE	DESCRIPTION	BY
		CONTRACTOR:	
		AS-BUILT INFORMATION	
		WORK STAKED BY:	DATE:
		INSPECTOR'S ACCEPTANCE BY:	DATE:
		FIELD VERIFICATION BY:	DATE:
		DRAWINGS CORRECTED BY:	DATE:

DESIGNED BY:
DRAWN BY:
CHECKED BY:
DATE 11/14/22



- LEGEND**
- EXISTING PAVEMENT
 - PROPOSED PAVEMENT BUFFER AREA
 - PROPOSED PAVEMENT MULTI-USE TRAIL

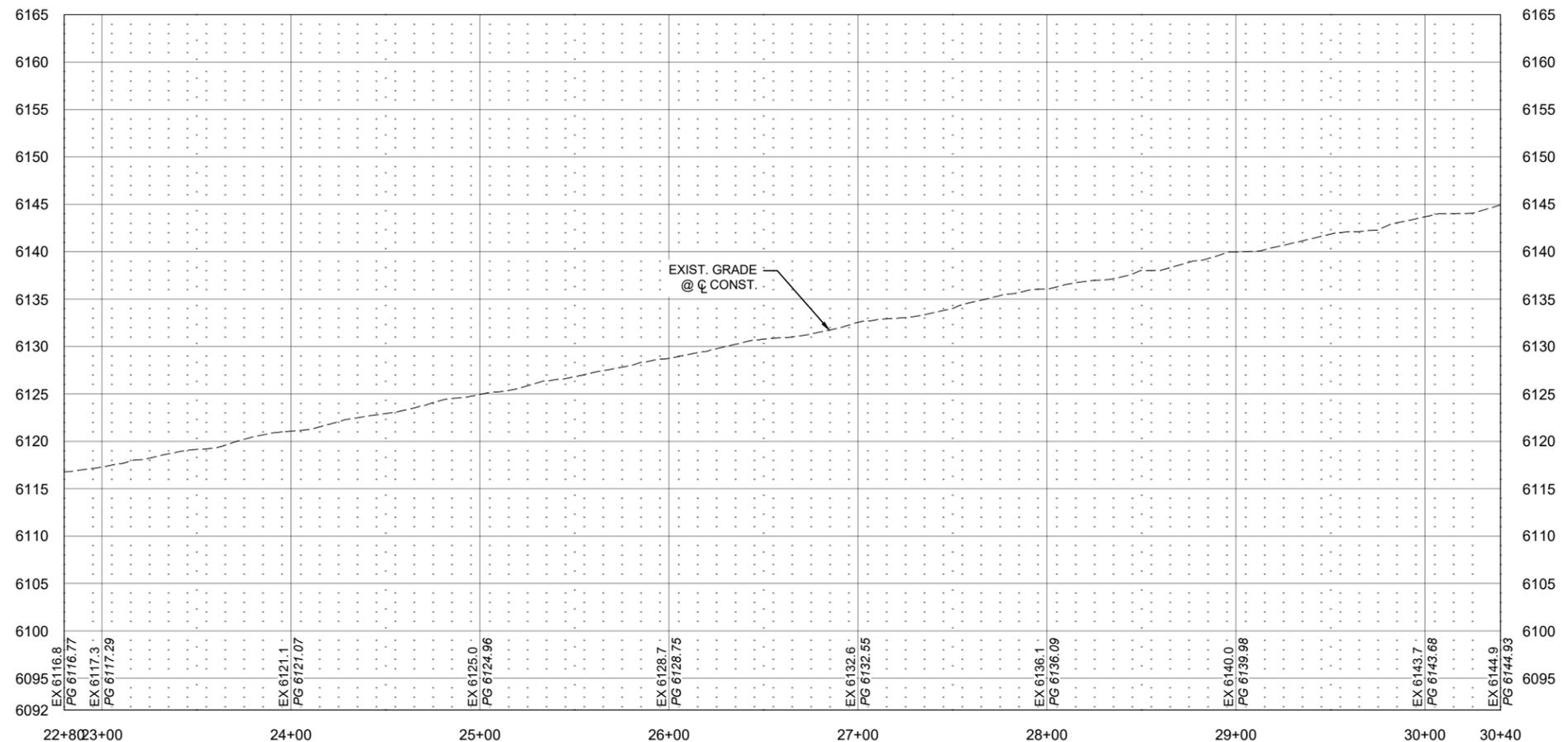
Parametrix
 ENGINEERING, PLANNING, ENVIRONMENTAL SCIENCES
 9600 SAN MATEO BLVD. NE / ALBUQUERQUE, NM 87113
 WWW.PARAMETRIX.COM

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BENCH MARKS

XXXXXX

SEAL



HORIZONTAL SCALE
 SCALE: 1" = 40' (22"x34" PLOT)
 SCALE: 1" = 80' (11"x17" PLOT)
 VERTICAL SCALE
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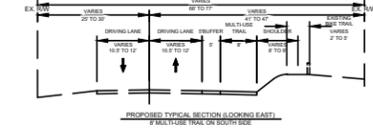


CITY OF ALBUQUERQUE
 DEPARTMENT OF MUNICIPAL DEVELOPMENT
 ENGINEERING DIVISION

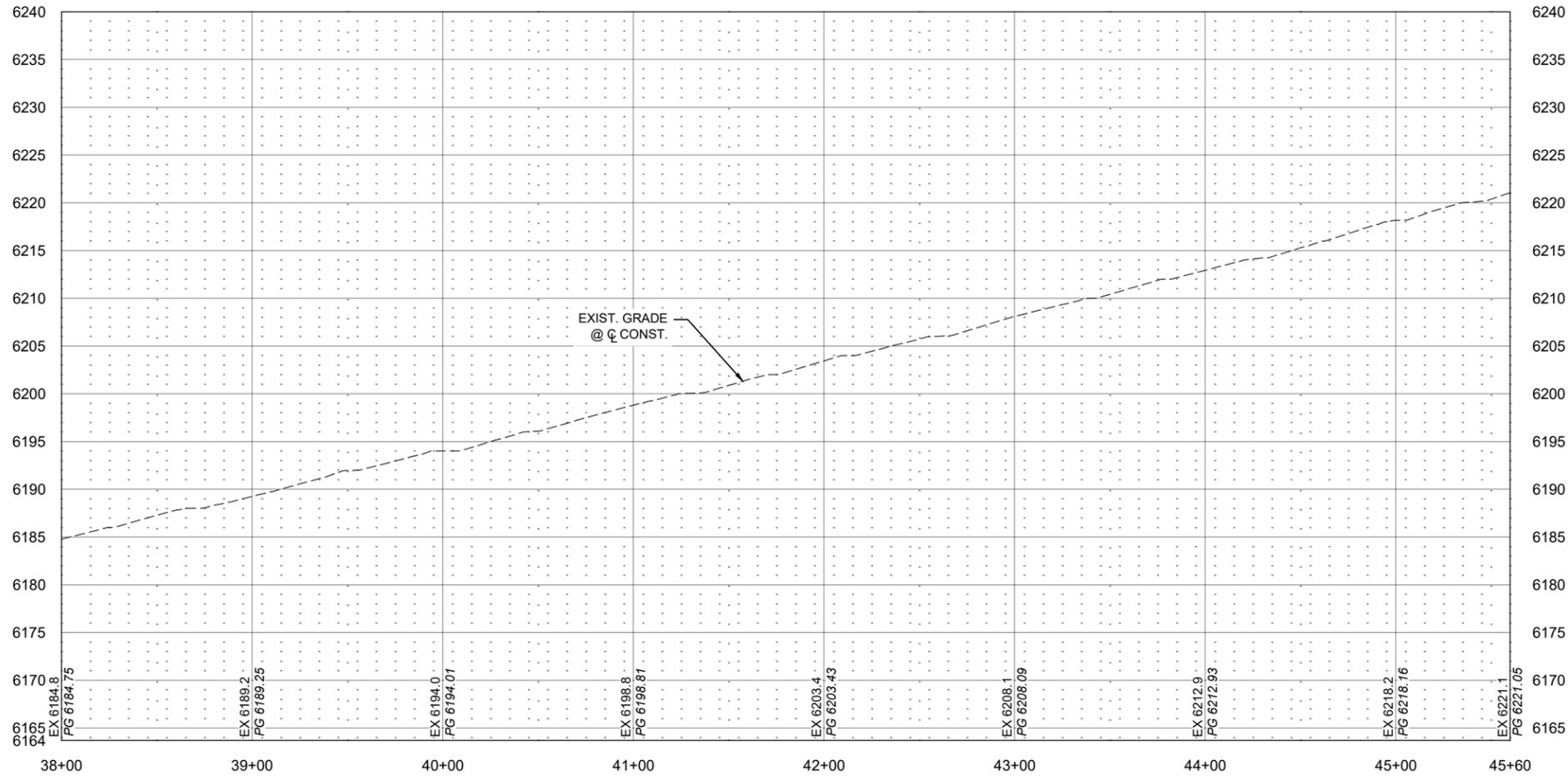
**SIMMS PARK ROAD
 OPTION 2
 PLAN AND PROFILE**

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	ZONE MAP NO. X-XX-X
		CITY PROJECT NO. XXXXXX (CN XXXXXX)
		SHEET NO. 4

NO.	DATE	DESCRIPTION	BY
		AS-BUILT INFORMATION	CONTRACTOR
		WORK STAKED BY:	DATE:
		INSPECTOR'S ACCEPTANCE BY:	DATE:
		FIELD VERIFICATION BY:	DATE:
		DRAWINGS CORRECTED BY:	DATE:



- LEGEND**
- EXISTING PAVEMENT
 - PROPOSED PAVEMENT BUFFER AREA
 - PROPOSED PAVEMENT MULTI-USE TRAIL



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CITY OF ALBUQUERQUE
 DEPARTMENT OF MUNICIPAL DEVELOPMENT
 ENGINEERING DIVISION

**SIMMS PARK ROAD
 OPTION 2
 PLAN AND PROFILE**

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	ZONE MAP NO. X-XX-X
		CITY PROJECT NO. XXXXXX (CN XXXXXX)
		SHEET NO. 6

CONSULTANTS



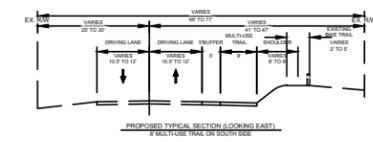
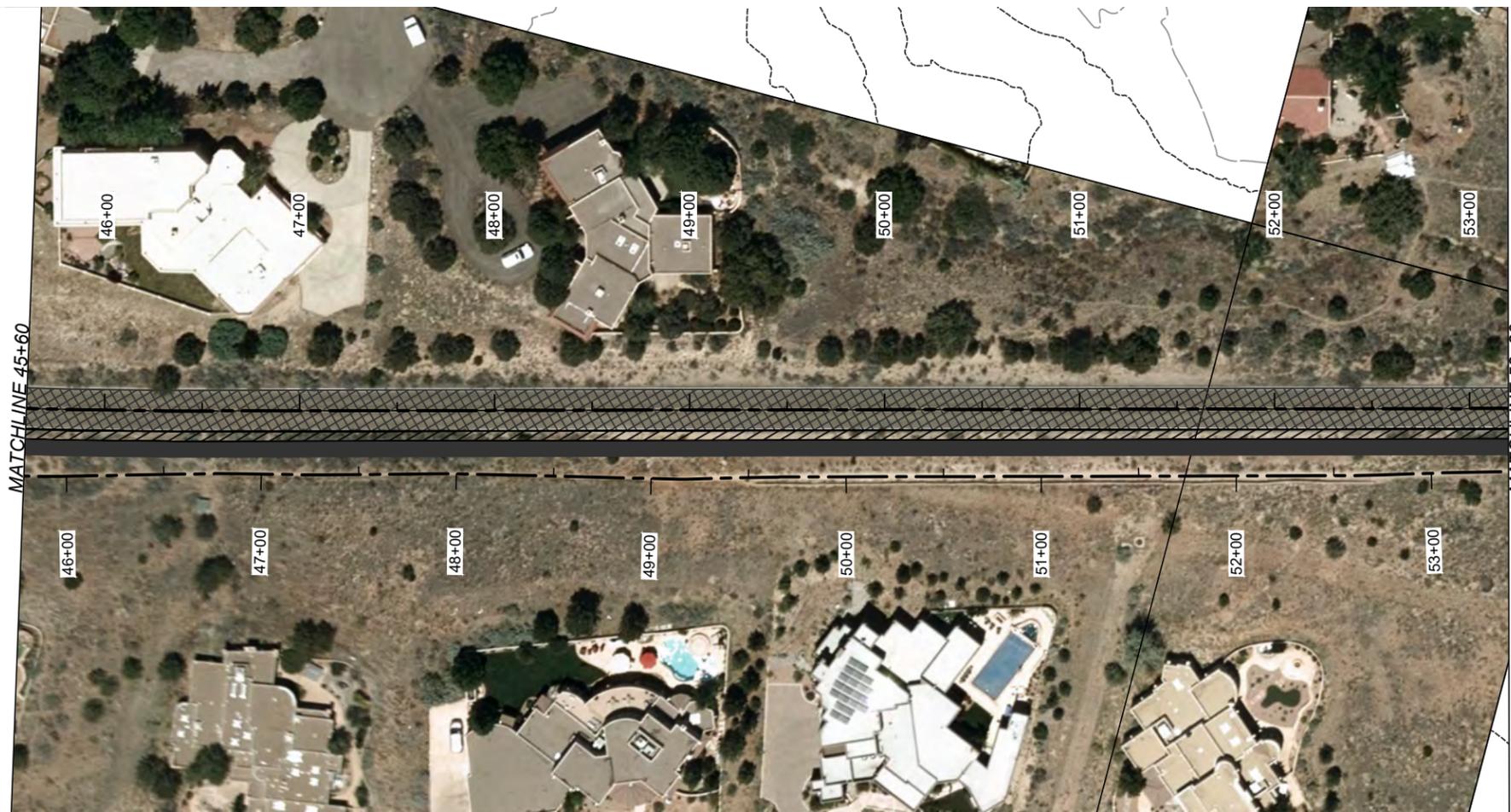
BENCH MARKS

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SEAL

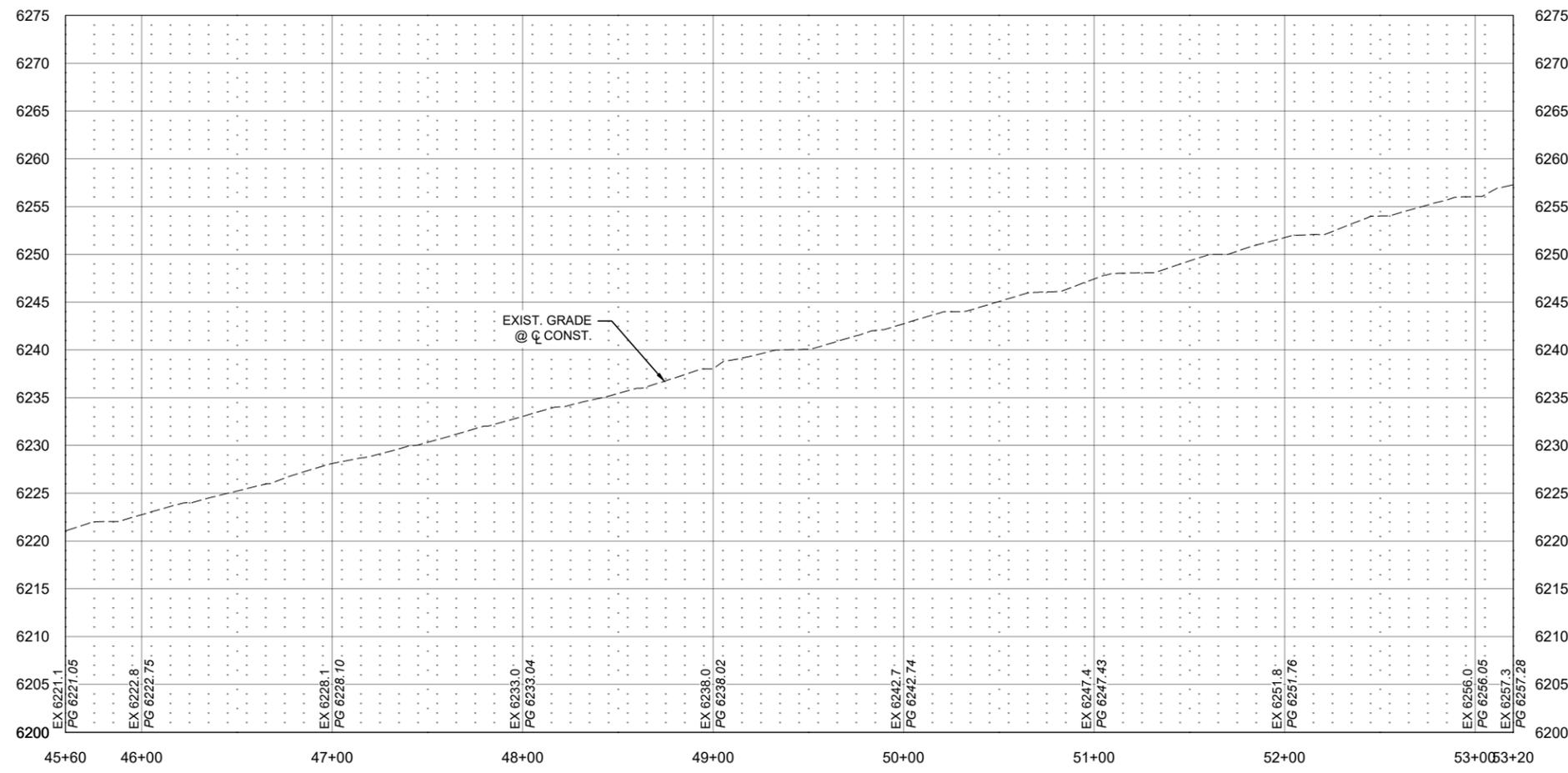
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		CONTRACTOR:	
		AS-BUILT INFORMATION	
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		INSPECTOR'S ACCEPTANCE BY:	DATE:
		FIELD VERIFICATION BY:	DATE:
		DRAWINGS CORRECTED BY:	DATE:

DESIGNED BY:
 DRAWN BY:
 CHECKED BY:
 DATE 11/14/22



LEGEND

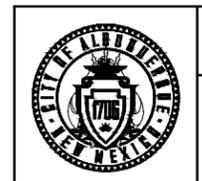
- EXISTING PAVEMENT
- PROPOSED PAVEMENT BUFFER AREA
- PROPOSED PAVEMENT MULTI-USE TRAIL



HORIZONTAL SCALE
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CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT
ENGINEERING DIVISION

**SIMMS PARK ROAD
OPTION 2
PLAN AND PROFILE**

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	ZONE MAP NO. X-XX-X
		CITY PROJECT NO. XXXXXX (CN XXXXXX)
		SHEET NO. 7

CONSULTANTS



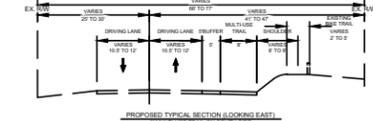
BENCH MARKS

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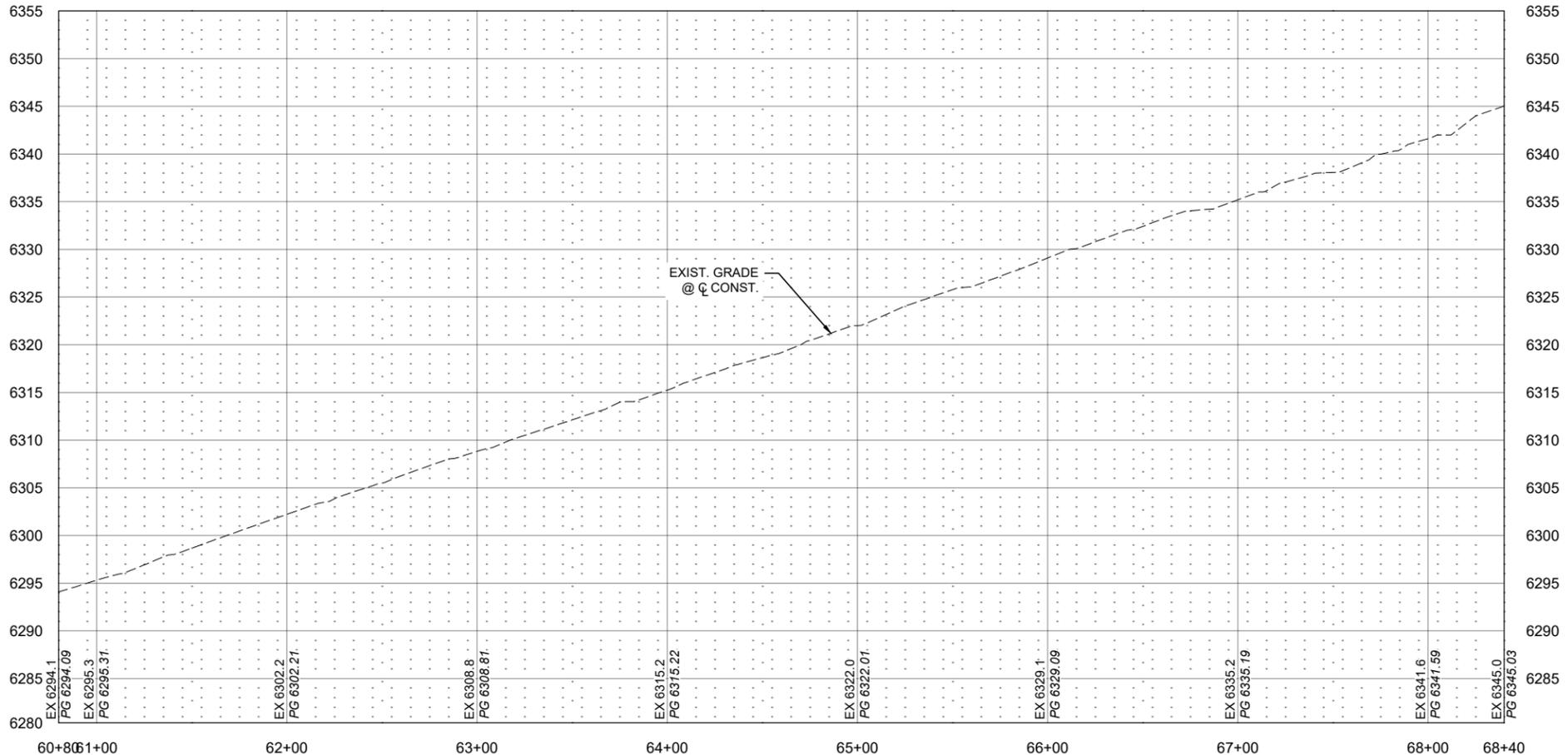
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NO.	DATE	DESCRIPTION	BY
		CONTRACTOR:	
		AS-BUILT INFORMATION	
		WORK STAKED BY:	DATE:
		INSPECTOR'S ACCEPTANCE BY:	DATE:
		FIELD VERIFICATION BY:	DATE:
		DRAWINGS CORRECTED BY:	DATE:

DESIGNED BY:
DRAWN BY:
CHECKED BY:
DATE 11/14/22



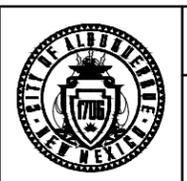
- LEGEND**
- EXISTING PAVEMENT
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 - PROPOSED PAVEMENT MULTI-USE TRAIL



HORIZONTAL SCALE
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CALL NM ONE-CALL
 SYSTEM SEVEN (7) DAYS
 PRIOR TO ANY EXCAVATION



CITY OF ALBUQUERQUE
 DEPARTMENT OF MUNICIPAL DEVELOPMENT
 ENGINEERING DIVISION
**SIMMS PARK ROAD
 OPTION 2
 PLAN AND PROFILE**

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	ZONE MAP NO. X-XX-X
		CITY PROJECT NO. XXXXXX (CN XXXXXX)
		SHEET NO. 9

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BENCH MARKS

XXXXXX

SEAL

NO.	DATE	DESCRIPTION	BY
		AS-BUILT INFORMATION	CONTRACTOR
		WORK STAKED BY:	DATE:
		INSPECTOR'S ACCEPTANCE BY:	DATE:
		FIELD VERIFICATION BY:	DATE:
		DRAWINGS CORRECTED BY:	DATE:

DESIGNED BY:
 DRAWN BY:
 CHECKED BY:
 DATE 11/14/22



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APPENDIX B

CONCEPTUAL
COST ESTIMATES

Parametrix

Simms Park Road

1/31/2023

**Mill & Inlay
Conceptual Construction Estimate**

ITEM NO.	DESCRIPTION	UNIT	ESTIMATED QUANTITY	FINAL QUANTITY	UNIT COST	ESTIMATE
JOB OVERHEAD						
4.01	Construction Staking, Complete	LS	1		2%	\$ 8,911.20
4.02	Construction Surveying, compl.	LS	1		3%	\$ 13,366.80
6.01	Construction Project Sign, per Contract special provisions	EA	2		\$ 796.16	\$ 796.16
6.05	Construction Mobilization, compl.	LS	1		5%	\$ 22,278.00
19.010	Construction Traffic Control & Barricading, compl.	LS	1		10%	\$ 44,556.00
30.01	Flood Protection, compl.	LS	1		1%	\$ 4,455.60
30.02	NPDES Permitting, compl.	LS	1		1%	\$ 4,455.60
SUBTOTAL JOB OVERHEAD						\$ 98,819.36
300 PAVING						
336.022	Asphalt Concrete, 2 inch thick, superpave	SY	18,800		\$ 19.20	\$ 360,960.00
336.12	Tack Coat, cationic emulsified asphalt, cip.	SY	18,800		\$ 1.00	\$ 18,800.00
344.04	Cold Milling, Asphalt Concrete Pavement, 2" thickness, incl. disposal of millings, compl.	SY	18,800		\$ 3.50	\$ 65,800.00
SUBTOTAL STREET & RELATED WORK						\$ 445,560.00
CONSTRUCTION ESTIMATE - OVERALL						\$ 544,379.36
CONTINGENCY 35%						\$ 190,532.78
SUBTOTAL						\$ 734,912.14
NMGRT (7.875%)						\$ 57,874.33
TOTAL						\$ 792,786.47

Simms Park Road

1/31/2023

**Option 1
Conceptual Construction Estimate**

ITEM NO.	DESCRIPTION	UNIT	ESTIMATED QUANTITY	FINAL QUANTITY	UNIT COST	ESTIMATE	
<u>JOB OVERHEAD</u>							
4.01	Construction Staking, Complete	LS	1		2%	\$ 10,382.40	
4.02	Construction Surveying, compl.	LS	1		3%	\$ 15,573.60	
6.01	Construction Project Sign, per Contract special provisions	EA	2		\$ 796.16	\$ 796.16	
6.05	Construction Mobilization, compl.	LS	1		5%	\$ 25,956.00	
19.010	Construction Traffic Control & Barricading, compl.	LS	1		10%	\$ 51,912.00	
30.01	Flood Protection, compl.	LS	1		1%	\$ 5,191.20	
30.02	NPDES Permitting, compl.	LS	1		1%	\$ 5,191.20	
					SUBTOTAL JOB OVERHEAD	\$ 115,002.56	
<u>300 PAVING</u>							
301.02	Subgrade Prep., 12" at 95% compaction, cip	SY	8,200		\$ 3.50	\$ 28,700.00	
302.01	Aggregate Base Course, crushed, 6" at 95% compaction, cip. SD 2408	SY	8,200		\$ 15.00	\$ 123,000.00	
336.01	Prime Coat, emulsified asphalt, cip.	SY	8,200		\$ 0.70	\$ 5,740.00	
336.022	Asphalt Concrete 2" Thick, Superpave	SY	16,400		\$ 19.20	\$ 314,880.00	
336.12	Tack Coat, cationic emulsified asphalt, cip.	SY	8,200		\$ 1.00	\$ 8,200.00	
343.02	Existing Pavement, Asphalt Concrete, up to 4" thick, sawcut, remove & dispose, compl.	SY	1,640		\$ 10.00	\$ 16,400.00	
					SUBTOTAL STREET & RELATED WORK	\$ 496,920.00	
<u>400 TRAFFIC CONTROL AND LIGHTING</u>							
441.002	Reflectorized Plastic Pavement Markings, 6" width, cip.	LF	14,800		\$ 1.50	\$ 22,200.00	
					SUBTOTAL TRAFFIC CONTROL	\$ 22,200.00	
						CONSTRUCTION ESTIMATE - OVERALL	\$ 634,122.56
						CONTINGENCY 35%	\$ 221,942.90
						SUBTOTAL	\$ 856,065.46
						NMGRT (7.875%)	\$ 67,415.15
						TOTAL	\$ 923,480.61

Simms Park Road

1/31/2023

**Option 2
Conceptual Construction Estimate**

ITEM NO.	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	ESTIMATE
<u>JOB OVERHEAD</u>					
4.01	Construction Staking, Complete	LS	1	2%	\$ 13,150.40
4.02	Construction Surveying, compl.	LS	1	3%	\$ 19,725.60
6.01	Construction Project Sign, per Contract special provisions	EA	2	\$ 796.16	\$ 796.16
6.05	Construction Mobilization, compl.	LS	1	5%	\$ 32,876.00
19.010	Construction Traffic Control & Barricading, compl.	LS	1	10%	\$ 65,752.00
30.01	Flood Protection, compl.	LS	1	1%	\$ 6,575.20
30.02	NPDES Permitting, compl.	LS	1	1%	\$ 6,575.20
SUBTOTAL JOB OVERHEAD					\$ 145,450.56
<u>300 PAVING</u>					
301.02	Subgrade Prep., 12" at 95% compaction, cip	SY	10,700	\$ 3.50	\$ 37,450.00
302.01	Aggregate Base Course, crushed, 6" at 95% compaction, cip. SD 2408	SY	10,700	\$ 15.00	\$ 160,500.00
336.01	Prime Coat, emulsified asphalt, cip.	SY	10,700	\$ 0.70	\$ 7,490.00
336.022	Asphalt Concrete 2" Thick, Superpave	SY	21,400	\$ 19.20	\$ 410,880.00
336.12	Tack Coat, cationic emulsified asphalt, cip.	SY	10,700	\$ 1.00	\$ 10,700.00
343.02	Existing Pavement, Asphalt Concrete, up to 4" thick, sawcut, remove & dispose, compl.	SY	830	\$ 10.00	\$ 8,300.00
SUBTOTAL STREET & RELATED WORK					\$ 635,320.00
<u>400 TRAFFIC CONTROL AND LIGHTING</u>					
441.002	Reflectorized Plastic Pavement Markings, 6" width, cip.	LF	14,800	\$ 1.50	\$ 22,200.00
SUBTOTAL TRAFFIC CONTROL					\$ 22,200.00
					CONSTRUCTION ESTIMATE - OVERALL
					\$ 802,970.56
					CONTINGENCY 35%
					\$ 281,039.70
					SUBTOTAL
					\$ 1,084,010.26
					NMGRT (7.875%)
					\$ 85,365.81
					TOTAL
					\$ 1,169,376.06



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SIMMS PARK ROAD STUDY

MARCH 2023



Parametrix