

**State of New Mexico
City of Rio Communities
Resolution 2022 - xx
NMDOT Cooperative Agreement Program**

Whereas, the governing body in and for the City of Rio Communities, State of New Mexico, requests participation in the Municipal Arterial Project (MAP); has approved the location, scope preliminary cost estimate of the work in the attached document, and;

Whereas, the scope of work contained herein has been reviewed by the City Council as being vital to the public good and their convenience, and;

Whereas, The City of Rio Communities is responding to an invitation from the New Mexico Department of Transportation Department, POD State Grant Managers, Albuquerque, New Mexico, to participate in the 2022-2023 Cooperative application for Municipal Arterial Project (MAP) Funding Program by submitting the following project proposal, and;

Whereas, The City of Rio Communities has agreed to provide matching funds at a rate of twenty-five percent (25%) of the total cost of the project.

NOW THEREFORE, BE IT HEREBY RESOLVED that the Governing Body of the City of Rio Communities, State of New Mexico, hereby authorizes the submission of an application to the New Mexico Department of Transportation Department and does hereby commit to the funding of such projects as specified in the application.

PASSED, APPROVED AND ADOPTED THIS 14th DAY OF MARCH 2022 BY THE GOVERNING BODY OF THE CITY OF RIO COMMUNITIES, NEW MEXICO.

Joshua Ramsell, Mayor

Margaret R. Gutjahr, Mayor Pro-tem

Arthur Apodaca, Councilor

Lawrence R. Gordon, Councilor

Jimmie Winters, Councilor

ATTEST:

Elizabeth F. Adair, Municipal Clerk



New Mexico Department of Transportation Municipal Arterial Program (MAP) Application

Horner/Hillandale Reconstruction Project

Fiscal Year 2022-2023

**City of Rio Communities
360 Rio Communities Blvd.
Rio Communities, NM 87002
505-861-6803**

Table of Contents

Cover Letter	2
Project Limits	3
Traffic Volumes	4
Pavement Design	5
Typical Section	6
Major Intersection and Traffic Signal Analysis	7
Drainage Reports	7
Preliminary Cost Estimate	9
Local Government Resolution of Support for the Project	10
Project Data Sheet	11



City of Rio Communities

360 Rio Communities Blvd.
Rio Communities, NM 87002
505-861-6803
www.riocommunities.net

March 15, 2022

Clarissa Martinez
POD State Grant Managers
New Mexico Department of Transportation
PO Box 1149
Santa Fe, NM 87504

Re: 2022-2023 Application for Municipal Arterial Project (MAP) funding

Dear Ms. Martinez,

The City of Rio Communities respectfully submits this application for Municipal Arterial Project (MAP) funding for the Project Development of the Horner Street and Hillandale Avenue Reconstruction Project. This project fulfills the general criteria as major local streets that provide access to state routes NM 47 and NM 309. This request is for the engineering and design of the specified route.

The request package includes the following:

1. Map of Project Limits
2. Current and 20-year projected traffic volumes
3. Pavement Design Criteria
4. Typical Section
5. Major Intersection and Traffic Signal Analysis
6. Drainage Reports
7. Preliminary Cost Estimate

Thank you in advance for your time and consideration. Please feel free to contact me at 505-861-6803 should you have any questions or require additional information.

Sincerely,

Joshua Ramsell,
Mayor of Rio Communities

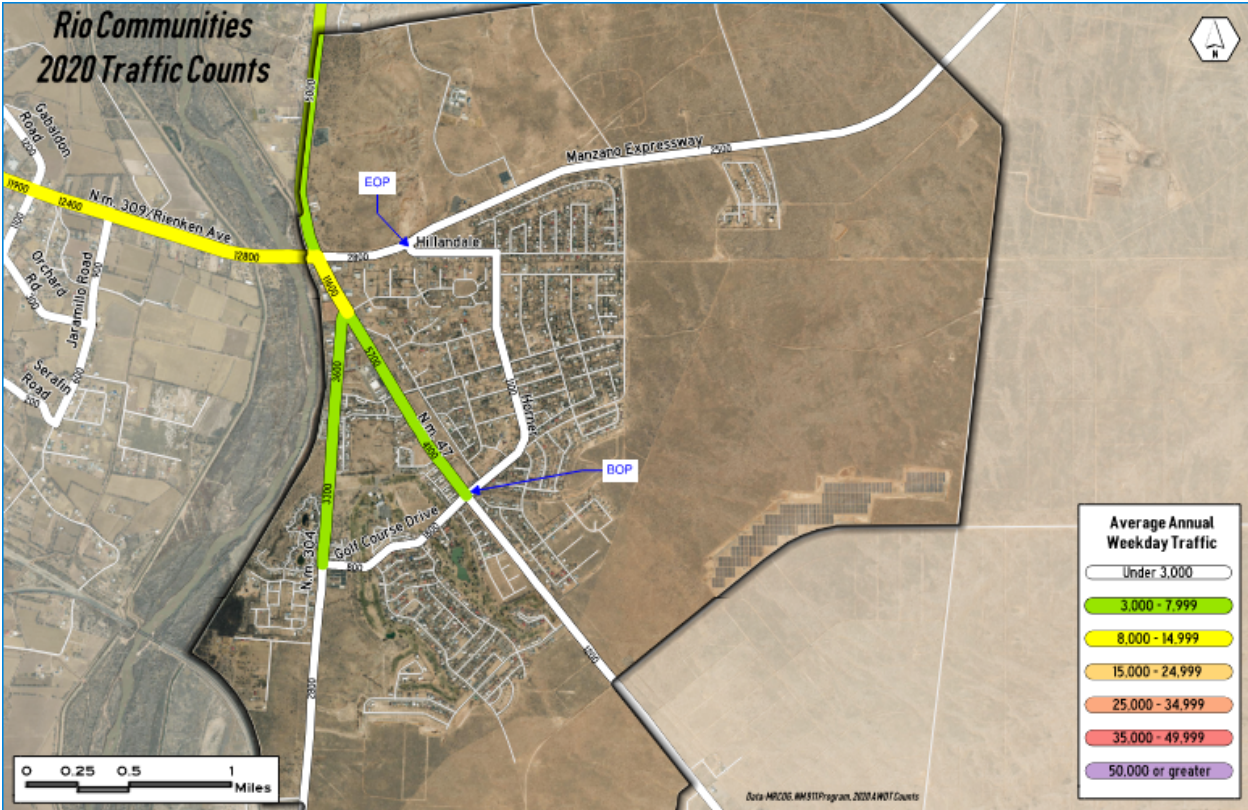
Project Limits



The project limits begin at the intersection of NM 47 and Horner Street at the south termini, and end at the intersection of NM 309/Manzano Expressway and Hillandale Avenue at the north termini.

Traffic Volumes

The 2020 traffic volumes are shown in the map below. Since the area around Horner Street/Hillandale Avenue project limits is fully built out little to no traffic volume increase is expected, but this will be discussed and verified during the project development process.



Pavement Design

A geotechnical investigation will be conducted for this roadway project to determine existing pavement thicknesses. A site review will also be performed to assess the severity and extent of material and structural distress in the existing pavement. Based on visual survey of the pavement, the city expects the pavement to require reconstruction, but this will be confirmed with data from the geotechnical investigation and detailed field survey so that appropriate and cost-effective pavement design recommendations can be provided.





Typical Section

The roadway typical sections for this project will be evaluated based on traffic capacity, safety concerns, ADA requirements, right-of-way requirements and construction costs. The typical section is expected to retain the same lane widths, and existing concrete curb and gutter will remain in place unless localized repairs are required to facilitate proper drainage. Replacement of bituminous curb and gutter may be more extensive since it has more environmental and structural damage as compared to the concrete curb and gutter.

Major Intersection and Traffic Signal Analysis

The level of effort and detail for Major Intersection and Traffic Signal Analyses will be scoped in coordination with the NMDOT District 3 Traffic Engineer. Based on this coordination, a recommended level of study will be developed for the intersections of NM 47/Horner Street and NM 309 (Manzano Expressway)/Hillandale Avenue which are the BOP and EOP.

Intersections along Horner Street and Hillandale Avenue are stop-controlled and will not be further analyzed for signal warrants.

Goodman Avenue, Damon Street and Avenida del Fuego are other entry points into the subdivision area and may be reviewed to determine if any traffic volume redistribution to Horner Street/Hillandale will occur with the proposed improvements.

Drainage Reports

In existing conditions stormwater primarily sheet flows off the pavement and is dispersed into roadside ditches or swales. The exceptions include areas where there is 3-in embankment curb and ribbon curb which collects roadway runoff and disperses it to downstream outfalls. Offsite flows are generally allowed to pass through the alignment either as shallow overland flow or through at grade crossings. Near the BOP and EOP of the project limits there are existing culverts which convey additional offsite flow beneath the alignment. The flow rate at these two crossings will be as identified in the previous ADMP developed by HDR. No additional offsite analysis will be conducted for these features. It is anticipated that drainage for the improvements will maintain these characteristics and conditions. The proposed roadway improvements are not expected to alter the existing drainage patterns and it is assumed no additional curb and gutter will be included in the proposed improvements.

Drainage for the roadway alignment improvements will primarily be conveyed in parallel drainage ditches along the edges of the road along with similar segments of conveyance features such as the noted 3-in embankment curb and ribbon curb as documented in the existing conditions assessment and ADMP. It is recommended that all drainage structures crossing Horner Street or Hillandale Avenue be inspected during the project design and development process to determine if any appropriate treatments or replacement (in kind) is recommended. The installation of any new structures should not disturb historic drainage patterns. Hydrology and runoff calculations will be completed in accordance with NMDOT drainage criteria. In addition, the Rio Communities Drainage Master Plan will be reviewed to see if opportunities exist to design and construct any recommended improvements.

The following reference documents will be used to prepare the Drainage Report.

NMDOT Drainage Manual, July 2018.

Drainage Design Criteria for NMDOT Projects, fourth Revision, June 2007.



Preliminary Cost Estimate

Horner / Hillandale Reconstruction	
ENGINEERING SERVICES	\$274,636.01
Contingency (25%)	\$68,659.00
TOTAL PROPOSED COST NOT TO EXCEED (Excluding NMGR Tax)	\$343,295.01
NMGR Tax (7.875%)	\$27,034.48
TOTAL PROPOSED COST NOT TO EXCEED (Including NMGR Tax)	\$370,329.49

Resolution

Project Data Sheet

Street(s): Horner St./Hillandale Ave.
 From: NM 47
 To: NM 309/Manzano Expressway
 Length: 1.5 miles

Project Data		
	Existing	Proposed
Number of Lanes	2	2
Lane Width	12-14 feet	14 feet
Median Width	N/A	N/A
Total Width (Edge of pavement to edge of pavement)	24-28 feet	28 feet
Curbing	LIMITED LOCATIONS	TO BE DETERMINED
Surfacing	PMBP	PMBP
Right-of-Way (ROW)	VARIES	VARIES
Drainage System	SURFACE	SURFACE

FUNDING		
Source	MAP Request	MAP %
Grant	\$277,747.12	75%
Local Match	\$92,582.37	25%