SECTION 4 INFRASTRUCTURE AND SERVICES

This section of the Rich-Haven Specific Plan discusses the proposed infrastructure and public services that will support Rich-Haven's residential and mixed-use districts. Infrastructure discussed herein includes the construction of master planned facilities. Public services include schools, parks, fire, law enforcement, library, telephone and technology wiring, natural gas, electricity, and solid waste disposal. A discussion of project grading is also provided.

4.1 CIRCULATION PLAN

The Circulation Plan for the Rich-Haven Specific Plan will provide effective movement of automobiles as well as pedestrians, bicyclists, and transit. The Rich-Haven Specific Plan will be served by a system of new and varied parkway, arterial, and collector roadways to be improved per the requirements of the City's adopted roadway classifications as illustrated in the New Model Colony General Plan Amendment and through proposed local backbone streets to be constructed as part of the project site development. Improvements will be constructed for Haven Avenue, Edison Avenue, Milliken Avenue, Chino Avenue, and Mill Creek Avenue, which run through or border the project site. Figure 4-1A, *Master Planned Circulation Plan,* illustrates the regional roadway system and traffic control devises planned.

Within the Specific Plan area, local backbone streets will provide efficient movement of vehicles and pedestrians. Roadways will be designed to meet current and approved design standards. Figure 4-1B, *Conceptual Circulation Plan*, illustrates backbone on-site roadway circulation, access points, potential round-about locations, signalized intersections, and non-signalized access points. Access points are from Milliken Avenue to the east, and Haven Avenue to the west of the project site, as noted in figure 4-1B.The location of final access points and round-about locations will be determined at time of the tentative tract mapping in the residential areas and site plan review in commercial areas. The traffic study will verify the need for additional right-of-way at critical intersections to accommodate left and right turn lanes.

The minimum design speeds to be used for centerline curve radii, superelevation, corner sight distance, vertical and horizontal alignment and sight distance, are listed below:

- Edison Avenue: 50 mph
- Chino Avenue: 40 mph
- Riverside Drive: 45 mph
- Haven Avenue: 45 mph
- Mill Creek Avenue: 40 mph
- Milliken Avenue: 50 mph

4.1.1 STREET NETWORK

The proposed Rich-Haven street network is based on the existing underlying grid system of improved and unimproved streets, adjacent to and within the project site. See Figures 4-2A through 4-2E, *Street Cross Sections*. The developer(s) of the Rich-Haven Specific Plan area will be responsible for all off-site improvements for the entire project frontage or as otherwise indicated. Phasing of the improvements will be implemented as required by the City Engineer and pursuant to the mitigation measures identified in the Environmental Impact Report (EIR) and/or the Conditions of Approval established on the approved tentative maps for the project. Additionally, bus turnouts and shelters, to serve the future residents, shall be provided on arterial and collector roadways prescribed by Omnitrans and approved by the City.

The following is a description of the streets to be improved within the Rich-Haven Specific Plan and NMC L.L.C. associated improvements:

MILLIKEN AVENUE – Bounding the project at the east, Milliken Avenue is designated as a divided arterial Parkway 1A north of Edison Avenue (realignment) with eight lanes and a minimum right-of-way of 140 feet. South of Edison Avenue (realignment), Milliken Avenue is designated a Parkway 1-1, with six travel lanes (3 lanes on each side of the street) and a double row of median trees. Access to Milliken Avenue via driveways from residential units and on-street parking will be prohibited. Milliken Avenue is also designated as a scenic highway by the General Plan Amendment, which requires extensive landscaping and the use of enhanced right of way areas with parkways, sidewalks, and landscaped medians, maximizing visual continuity. The developer shall be responsible for those improvements to Milliken Avenue as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or to the Conditions of Approval established on the approved tentative tract maps for the project. Bus turnouts will be required to the satisfaction of the City of Ontario and Omnitrans. Proposed traffic signals along Milliken Avenue are shown in Figure 4-1B, and road improvements are illustrated on Figure 4-2A, *Street Cross Sections*.

HAVEN AVENUE – Located on the western boundary of the project site, Haven Avenue is classified by the General Plan Amendment as a proposed Parkway 2-2, with four travel lanes and a double row of parkway trees. Haven Avenue, as it passes the project site, is proposed at a minimum right-of-way of 124 feet with a Class 1 multi-purpose trail. Right of way areas with parkways and sidewalks are also proposed. Haven Avenue will connect the project site to Riverside Drive to the north, and City of Ontario lands beyond, and Bellegrave Avenue to the south. Access to this street via driveways from residential units and on-street parking will be prohibited. The developer shall be responsible for those improvements to Haven Avenue as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or to the Conditions of Approval established on the approved tentative tract maps for the project. Bus turnouts will be required to the satisfaction of the City of Ontario and Omnitrans. Proposed traffic signals along Haven Avenue are shown in

Figure 4-1B, and road improvements are illustrated on Figure 4-2D, *Street Cross Sections*.

EDISON AVENUE (REALIGNMENT) – Bounding and crossing the site to the south, Edison Avenue (realignment) is classified by the General Plan Amendment as a Parkway 1A, with eight travel lanes at build-out, and a minimum right-of-way of 160 feet west of Mill Creek Avenue, and 165 feet to the east. The right of way area is proposed with landscaped buffers/parkways and sidewalks within the Rich-Haven Specific Plan. Access to this street via driveways from residential units and on-street parking will be prohibited. Edison Avenue (realignment) connects the project site to Milliken Avenue to the east, the rest of the New Model Colony to the west and the City of Chino further to the west. To the east of the project, Riverside County and CALTRANS are coordinating the design and implementation of the Cantu-Galeano Ranch Road/I-15 Interchange. The proposed interchange is estimated to be completed by 2007/2008. The developer shall be responsible for those improvements to Edison Avenue as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or to the Conditions of Approval established on the approved tentative tract maps for the project. Bus turnouts will be required to the satisfaction of the City of Ontario and Omnitrans. Proposed traffic signals along Edison Avenue are shown in Figure 4-1B and road improvements are illustrated on Figure 4-2B, *Street Cross Sections*.

Edison Avenue (realignment) is also both a designated truck route and a scenic highway. New Model Colony's designated truck routes will direct truck traffic along arterial roadways and out of residential areas, while scenic highways require extensive landscaping.

RIVERSIDE DRIVE – Bounding the site on the north, Riverside Drive is designated as an arterial with a 108-foot right-of-way with a landscape buffer along its neighborhood edge. A sidewalk and parking area is also proposed within the right of way area. Access to this street via driveways from residential units and on-street parking will be prohibited. The developer shall be responsible for those improvements to Riverside Drive as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or to the Conditions of Approval established on the approved tentative tract maps for the project. Bus turnouts will be required to the satisfaction of the City of Ontario and Omnitrans. Proposed traffic signals along Riverside Drive are shown in Figure 4-1B, and road improvements are illustrated on Figure 4-2D, *Street Cross Sections*.

CHINO AVENUE – Crossing the site from east to west, Chino Avenue is identified as a collector in the General Plan Amendment, to be improved to two travel lanes in each direction with a minimum 88-foot right-of-way, which includes a parkway and sidewalk. Access to this street via driveways from residential units and on-street parking will be prohibited. The developer shall be responsible for those improvements to Chino Avenue as determined by the City Engineer and pursuant to the mitigation

measures identified in the EIR and/or to the Conditions of Approval established on the approved tentative tract maps for the project. Bus turnouts will be required to the satisfaction of the City of Ontario and Omnitrans. Proposed traffic Signals along Chino Avenue are shown in Figure 4-1B, and road improvements are illustrated on Figure 4-2C, *Street Cross Sections*.

MILL CREEK AVENUE – Crossing the site from north to south, Mill Creek Avenue is identified as a collector in the General Plan Amendment, to be improved to two lanes in each direction, with a minimum 88-foot right-of-way. For the portion of Mill Creek Avenue between Edison Avenue and Chino Avenue, proposed minimum right of way is 83-feet. Right of way areas are also proposed that consist of a sidewalk and an adjacent parkway. Access to this street via driveways from residential units and on-street parking will be prohibited. The roadway will be realigned to the west starting approximately 50 feet south of the existing high school and continuing south beyond the project area. The ultimate alignment of Mill Creek Avenue will be determined as part of the Master Infrastructure Improvements to be determined by the City and NMC, LLC. The developer shall be responsible for those improvements to Mill Creek Avenue as determined by the City Engineer and pursuant to the mitigation measures identified in the EIR and/or to the Conditions of Approval established on the approved tentative tract maps for the project. Bus turnouts will be required to the satisfaction of the City of Ontario and Omnitrans. Proposed traffic signals for Mill Creek Avenue are shown in Figure 4-1B and road improvements are illustrated on Figure 4-2C, *Street Cross Sections*.

LOCAL BACKBONE STREETS – Connecting the above regional backbone roadways, the project's local backbone streets will connect the project's various components and provide for safe and efficient vehicular circulation. Internal project access points will be taken from Haven Avenue on the west side of the project, Mill Creek Avenue and Milliken Avenue on the east side, while another access point will occur along Milliken Avenue. The internal streets within the Regional Commercial/Mixed-Use District will form a central loop off of Edison Avenue (realignment). Improvements are illustrated on Figure 4-2E, *Street Cross Sections*.

- **LOCAL NEIGHBORHOOD/PRIVATE STREETS** – Local Neighborhood/Private Streets that carry neighborhood related traffic will be constructed with a 60-foot right-of-way, which includes a minimum 12-foot landscaped parkway with sidewalk. Themed Streets will have an additional 5-foot theme street edge.