# 8. TRANSPORTATION

This chapter provides PFIP information as it pertains to the City transportation system. A summary of the information is as follows: A) Background; B) Facilities and Costs; C) Dwelling Unit Equivalents; D) Fee Methodology; E) Fee Schedule; and F) Construction Responsibilities.

# A. BACKGROUND

The City of Manteca's transportation system provides for the mobility of people and goods, and influences patterns of growth and economic activity. The *Transportation PFIP Plan*, as the implemented document for the City of Manteca's General Plan Transportation Policies, was created to ensure that public facilities are adequate as the City of Manteca grows and develops in accordance with its General Plan. The *PFIP Plan* provides a tool to equitably finance transportation infrastructure (streets, intersections, and interchanges) which is associated with new development growth through the year 2023.

Key objectives of the Transportation PFIP Plan include the following:

- Identify citywide transportation improvements, to be implemented, that serves new growth areas, and is financed by new growth.
- Identify which citywide transportation improvements are to be incorporated into the *PFIP Plan* allowing estimates to be prepared that are quantified, costed, and financed accurately for each segment.
- Identify and convert land use categories into Dwelling Unit Equivalents (DUE's). The DUE calculations are based on a current traffic study and are converted using trip based calculations. DUE's are further refined utilizing DUE factors based on combined trip analysis.
- Identify and establish the funding mechanism for the *PFIP Plan*.
- Execute the PFIP Plan to collect fees and issue reimbursements in accordance with the *PFIP Plan*.

The City of Manteca has prepared a development forecast through the end of the Calendar Year 2023. This development forecast has been updated as part of this document to focus on the specific transportation elements that will be constructed and funded through the impact fee model program. This forecast is presented in Section B and Plate A-1 - A-6 in Appendix A. Six planning zones have been identified to define the capital improvements needed to serve future growth: Zones 1, 2, 3, 4, 5 and 6. For the purposed of this fee model, all of the Zones have been combined into one single zone to balance the anticipated fees throughout the City of Manteca. See Plate E-1.01 in Appendix E for a depiction of the transportation zones.

# **B. FACILITIES AND COSTS**

The transportation facilities included in the *PFIP Plan* include the streets, intersections, and interchanges located within the General Plan area that will facilitate new growth. These

facilities, along with their estimated construction and anticipated right-of-way acquisition costs, are identified in the City of Manteca Supplemental Public Facilities Implement Plan (PFIP) transportation supplemental fee estimate packages, dated October, 2017. Interchange costs are based on preliminary estimates provided by the City of Manteca.

To meet overall transportation goals and to ensure public safety, improvements must be developed along both sides of street segments and along the extents of intersections. In areas were the improvements adjoin groups of small parcels that are not likely to develop, due to the limitations in project size, the right-of-way will be purchased. In the case where improvements for these specified areas were constructed, and the project area is developed after the street improvements were constructed, the Developer will be subject to PFIP fees for the street section that was previously developed, even though the improvements are in place.

The City of Manteca Public Facilities Implementation Plan (PFIP) Transportation Fee Estimates and reference individual Street Segment and Intersection Exhibits are available for review at the City of Manteca Public Works Department.

# 1. Streets

Streets included in the *PFIP Plan* vary between two, four, and six lanes. All streets, and respective cross-section designations, are included in the *PFIP Plan* and are itemized in Plate E-1.03 in Appendix E. In all cases, the *PFIP Plan* will cover the cost for the center 14 feet of each roadway. This includes a 14 foot wide landscaped median with median curbs on each side. Additional interior lanes are included in the *PFIP Plan* for streets with more than two lanes. The reimbursable improvements covered in the *PFIP Plan* for streets are defined as follows:

- 2 Lane Street A 14 foot wide landscaped median on a two lane street. For more information, see Plate E-2.01 in Appendix E.
- 4 Lane Street A 14 foot wide landscaped median and two interior lanes. For more information, see Plate E-2.03 in Appendix E.
- 6 Lane Street A 14 foot wide landscaped median and four interior lanes. For more information, see Plate E-2.06 in Appendix E.
- Airport Way North of Yosemite Avenue A 36 foot wide landscaped median and 2 interior lanes. For more information, see Plate E-2.07 in Appendix E.
- Non-typical street sections are included in the individual street segment improvement exhibits to describe the specific improvements proposed at these locations.
- At specific locations noted in the individual street segment improvement exhibits, a portion of the required right-of-way and/or improvements are already in place as noted on these plans. No additional right-of-way and/or improvements are required in these areas. The proposed improvements should conform to existing improvements, protect existing curb, gutter, sidewalk, and landscaping throughout the course of construction, and repair/replace any damaged improvements.

The developer will only be reimbursed, by monetary or fee credit, for the improvements covered in the *PFIP Plan*.

The *PFIP Plan* does not include the outer landscape strip located between the curb and right-ofway line, the sidewalk located within the landscape strip, the curb and gutter, or the first travel lane adjacent to the curb and gutter. There will be no reimbursement for these improvements.

# 2. Intersections

Intersections included in the *PFIP Plan* vary between two, four and six lanes, and are designated as either Roundabouts, New Signals, Modified Signals, and Re-Striping Only / Loops. All intersections, and the respective designations, are included in the *PFIP Plan* and are itemized in Plate E-1.04 in Appendix E. In all cases the *PFIP Plan* will cover the cost for the center 14 feet of the roadway within the intersection transition area. This 14 foot wide area includes the proposed 12 foot turning lane, with a two foot wide curbed median, for standard intersections or the entire median for roundabouts. Additional lanes are covered for intersection legs with more than two lanes.

The *PFIP Plan* does not include the outer landscape strip located between the curb and right-ofway line, the sidewalk located within the landscape strip, the curb and gutter, and the first travel lane adjacent to the curb and gutter, except in the case where a dedicated right turn lane is encountered (which is included in the *PFIP Plan*), in which case the first thru travel lane toward centerline is the Developers' responsibility.

The improvements for intersections, which are included in the PFIP Plan, are defined as follows:

- 2 Lane Intersection, Single Turn Lane The center 14 feet and the 12 foot dedicated right turn lane. For more information, see Plate E-2.02 and E-3.01 in Appendix E.
- 4 Lane Intersection, Single Turn Lane The center 14 feet plus two interior thru travel lanes, for a total of 36 feet, and the 12 foot dedicated right turn lane. For more information, see Plate E-2.04 and E3.03 in Appendix E.
- 4 Lane Intersection, Double Turn Lane The center 14 feet plus two interior thru travel lanes and an additional 12 foot left turn lane, for a total of 48 feet, and the 12 foot dedicated right turn lane. For more information, see Plate E-2.05 and E3.04 in Appendix E.
- 6 Lane Intersection, Single Turn Lane The center 14 feet plus four interior thru travel lanes, for a total of 58 feet, and the 12 foot dedicated right turn lane. For more information, see Plate E-2.08, E3.05 and E3.06 in Appendix E.
- 6 Lane Intersection, Double Turn Lane The center 14 feet plus four interior thru travel lanes and an additional 12 foot left turn lane, for a total of 70 feet, and the 12 foot dedicated right turn lane. For more information, see Plate E-2.10 and E3.07 in Appendix E.
- 2 to 2 Lane Roundabouts The center 14 feet on each approach to the intersection, including the roundabout footprint within the intersection. For more information, see Plate E3.08 in Appendix E.

• 2 to 4 Lane Roundabouts - The center 14 feet on each two lane road approach to the intersection; the center 14 feet plus two interior travel lanes on each four lane approach to the intersection; the roundabout footprint and the interior lane within the intersection. For more information, see Plate E3.09 in Appendix E.

# 3. Interchanges

Interchanges included in the *PFIP Plan* vary with regard to lanes, ramps, and geometric configurations. All included interchanges are identified in the *PFIP Plan\_*and are itemized in Plate E1.05 in Appendix E. The *PFIP Plan* will cover approximately 30% of the cost for each interchange and the remaining costs will be funded by other sources, mostly Federal and State funding, possibly with some local funding.

Fees are based on cost estimates prepared for each street segment, intersection, and interchange. Each development project will be responsible to construct the designated streets and intersections located along the project, from the newly dedicated right-of-way line, to the PFIP boundary located on the travel lanes opposite the project frontage. The project list is included in Plate E1.02 in Appendix E and the cost estimates are available for review at the City of Manteca Public Works Department.

# C. DWELLING UNIT EQUIVALENTS

All PFIP transportation fees will be assessed based upon the Dwelling Unit Equivalent (DUE). A DUE factor was developed to convert the new trip generation rates, for each General Plan land use, based on a factor that converts commercial, industrial, etc. trips to an equivalent low-density, single-family dwelling unit value. It follows that the fee per unit of development is directly proportional to the DUE associated with each particular use. The Dwelling Unit Equivalent was developed as follows:

- A review of the base year SJCOG / City of Manteca Travel Demand Model was performed to confirm that land use totals within each benefit zone are accurate based on: Census data, GIS land use database, and aerial imagery. Several land use adjustments were made to reflect currently constructed land uses within certain zones.
- A review of the future year SJCOG / City of Manteca Travel Demand Model was performed to confirm land use totals within each benefit zone are consistent with the City of Manteca General Plan and proposed/approved Specific Plans.
- Calculations were performed to determine growth in dwelling units and businesses (classified as retail, service, or other), between base and future year version of the SJCOG / City of Manteca Travel Demand Model, for each of the six (6) benefit districts.
- Growth in land use was converted into DUEs for the following land use designations:
  - Single Family Residential
  - Multi-Family Residential (Apartments)
  - General Office / Business Professional
  - Medical Office Building
  - Community Commercial
  - Regional Commercial

- o Church
- o Clubhouse
- o Hotel
- o Business Industrial Park
- o Industrial Park / R&D
- Distribution / High Cube Warehousing

The 2017 Transportation PFIP Technical Memorandum prepared by Fehr and Peers, and part of this report, provides additional details regarding how the various land uses are derived and how corresponding DUE factors were derived. Table 8-1 provides a summary of the DUE factor by land use type.

### Table 8-1

### **Dwelling Unit Equivalent Factors**

Land Use Category	Unit	Daily Trip Generation Rate	New Trips	DUE
Residential [a]				
Single Family Residential	Dwelling Unit	9.52	N/A	1.00
Multi-Family Residential (Apartments)	Dwelling Unit	6.65	N/A	0.70

Non - Residential [a]				
General Office / Business Professional	1,000 sq.ft.	11.03	68%	0.79
Medical Office Building	1,000 sq.ft.	36.13	68%	2.58
Community Commercial	1,000 sq.ft.	33.18	68%	2.37
Regional Commercial	1,000 sq.ft.	47.72	72%	3.61
Church	1,000 sq.ft.	2.38	50%	0.13
Clubhouse [b]	1,000 sq.ft.	22.88	50%	1.20
Hotel	Rooms	8.17	68%	0.58
Business Industrial Park [c]	-	-	-	-
Industrial Park / R&D	1,000 sq.ft.	6.83	77%	0.55
Distribution / High Cube Warehousing	1,000 sq.ft.	3.56	77%	0.29

[a] If a parking garage is to serve a specific Land Use Category then the PFIP fee would be included in the number of dwelling units or square footage for the project that the parking garage would serve.

[b] If the clubhouse is part of a master planned community, than the PFIP fee would be included in the number of dwelling units and would not be charged separately

[c] Business Industrial Park fee subject to Public Works Review

# **D. FEE METHODOLOGY**

The City has established a fee structure that allocates costs to construct transportation infrastructure related to new development. There are two types of fees assessed, non-PFIP fees which have been adopted by separate City resolutions, and PFIP fees which are adopted in connection with this document. This section describes the non-PFIP and the PFIP fees, and briefly summarizes how project costs are developed. As the non-PFIP fees are adopted by a separate City resolution, policies related to these fees including fee adjustments are identified in other City documents. Descriptions of the non-PFIP fees are provided for informational purposes only.

# 1. Non-PFIP Fees

Federal, State, and local funding opportunities have not been identified at this time and will not be utilized for streets and intersections included in the *PFIP Plan*, but will be utilized to help fund the interchanges. Historically, Federal, State, and non-PFIP local funding sources have funded 70 percent of interchange costs. Based on that assumption, historical funding sources are anticipated to cover 70 percent of the interchange costs in this program.

# 2. PFIP Fees

Transportation fees are the only reliable source of financing, within the City's control, for funding the *PFIP Plan*. Transportation fees specific to the *PFIP Plan* will be collected to fund the *PFIP Plan* improvements. The PFIP fees are calculated utilizing cost estimates prepared for each street segment, intersection, and interchange included in the *PFIP Plan*. Detailed cost estimates were prepared for the street segments and intersections included in the *PFIP Plan*. Detailed cost estimated costs for the interchanges are based on engineer's estimates from the initial Project Study Report/Project Development Study (PSR/PDS). The *PFIP Plan* is responsible for funding 30 percent of the total interchange costs.

The PFIP fee is approximately equal to the total cost of all improvements divided by the total number of Dwelling Unit Equivalents (DUEs). The construction costs for the anticipated improvements have been combined into one single zone to balance the fees throughout the City of Manteca. Please reference table 8-2 for the appropriate PFIP Fee per land use category. Projects included in the *PFIP Plan* qualify for monetary or fee credit reimbursement.

# E. FEE SCHEDULE

The PFIP fee methodology described in Section D is combined to establish the PFIP Transportation Fee. Table 8-2 summarizes the fees by Dwelling Unit Equivalent and associated land use in accordance with the combined transportation zones. Table E-1 and E-2 in Appendix E and the Supplemental Public Facilities Implement Plan (PFIP) Transportation Fee Estimate package identify the costs and calculations associated with the PFIP fees.

### Table 8-2

### **Transportation PFIP Fee Public Facilities Implementation Program Fees**

Development fee for construction and maintenance of roadways and improvements.

Land Use	Fee	Unit
Residential [a]		
Single Family Residential	\$8,300	per dwelling unit
Multi-Family Residential (Apartments)	\$5,800	per dwelling unit
Non - Residential	[b]	
General Office / Business Professional	\$2,180	per 1000 s.f. bldg
Medical Office Building	\$7,125	per 1000 s.f. bldg
Community Commercial	\$6,550	per 1000 s.f. bldg
Regional Commercial	\$9,950	per 1000 s.f. bldg
Church	\$1,038	per 1000 s.f. bldg
Clubhouse [b]	\$9,974	per 1000 s.f. bldg
Hotel	\$1,495	per room
Business Industrial Park [c]	-	-
Industrial Park / R&D	\$1,495	per 1000 s.f. bldg
Distribution / High Cube Warehousing	\$795	per 1000 s.f. bldg

Note: This information is based on a Citywide DUE fee

Total PFIP cost of \$215,807,783.12

[a] If a parking garage is to serve a specific Land Use Category then the PFIP fee would be included in the number of dwelling units or square footage for the project that the parking garage would serve.

[b] If the clubhouse is part of a master planned community, than the PFIP fee would be included in the number of dwelling units and would not be charged separately

[c] Business Industrial Park fee subject to Public Works Review

# F. CONSTRUCTION RESPONSIBILITIES

The City and Developer have responsibilities for construction of transportation facilities as follows:

# **1.** City Responsibilities

The City will be responsible for obtaining the 70 percent funding for the interchanges included in the *PFIP Plan*, and will also be responsible for plan administration, fee collection, reimbursement, and plan updates.

## 2. Developer Responsibilities

The Developer will be responsible for the design and preparation of construction documents as well as the construction of the transportation PFIP projects located along their project frontage. There may be cases where offsite PFIP improvements are essential, in which case the Developer may be required to construct the additional offsite improvements beyond the proposed project limits.

## **3.** Construction Sequencing

Construction sequencing will be led by development efforts, which generally follow a logical sequence. However, it is anticipated that gaps in improvements may occur as projects develop that may lead to health and safety concerns. In such cases, a Developer may be required to construct additional portions of PFIP projects and apply for reimbursement, if funds are available, or fee credits. If reimbursement funds are not available, the Developer will be added to the list for future reimbursement.

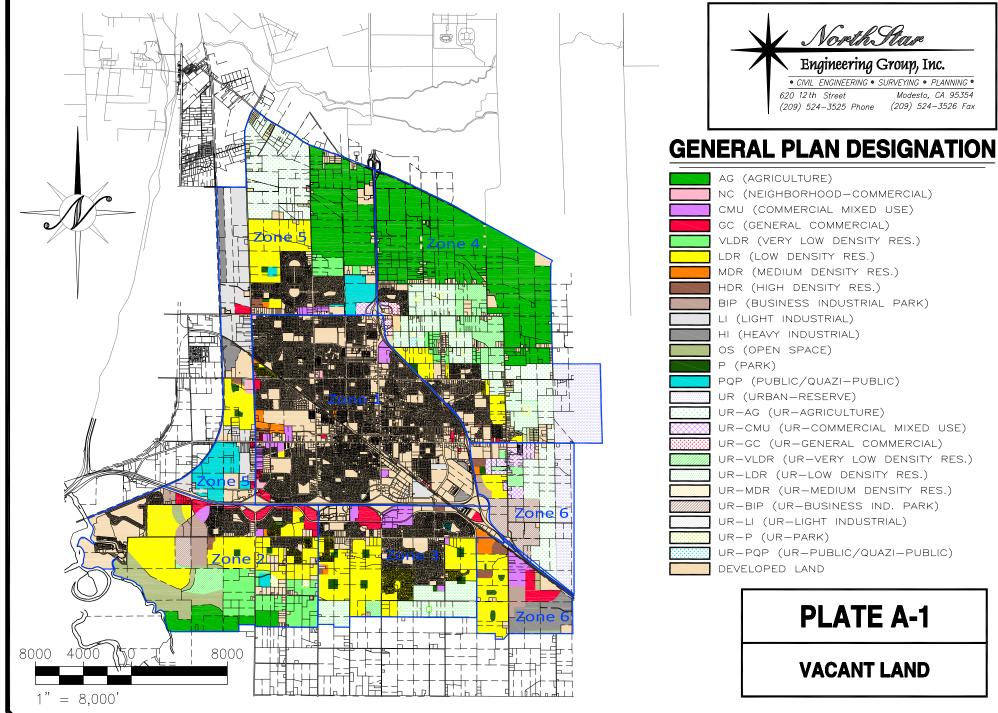
Appendix A\*

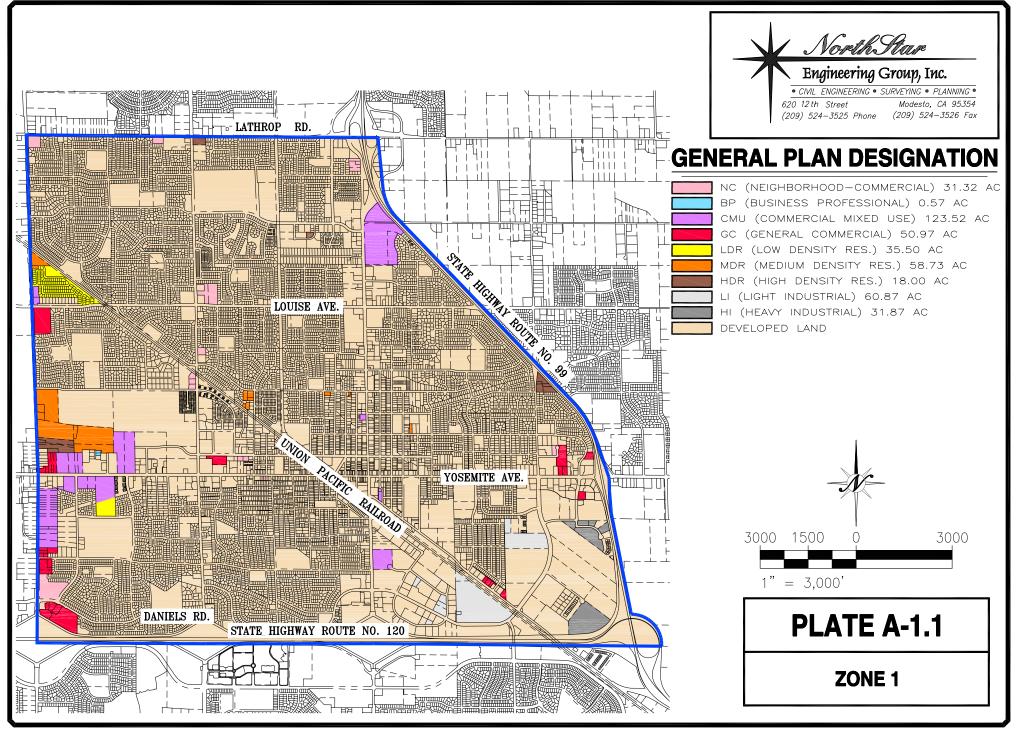
Vacant Land Inventory

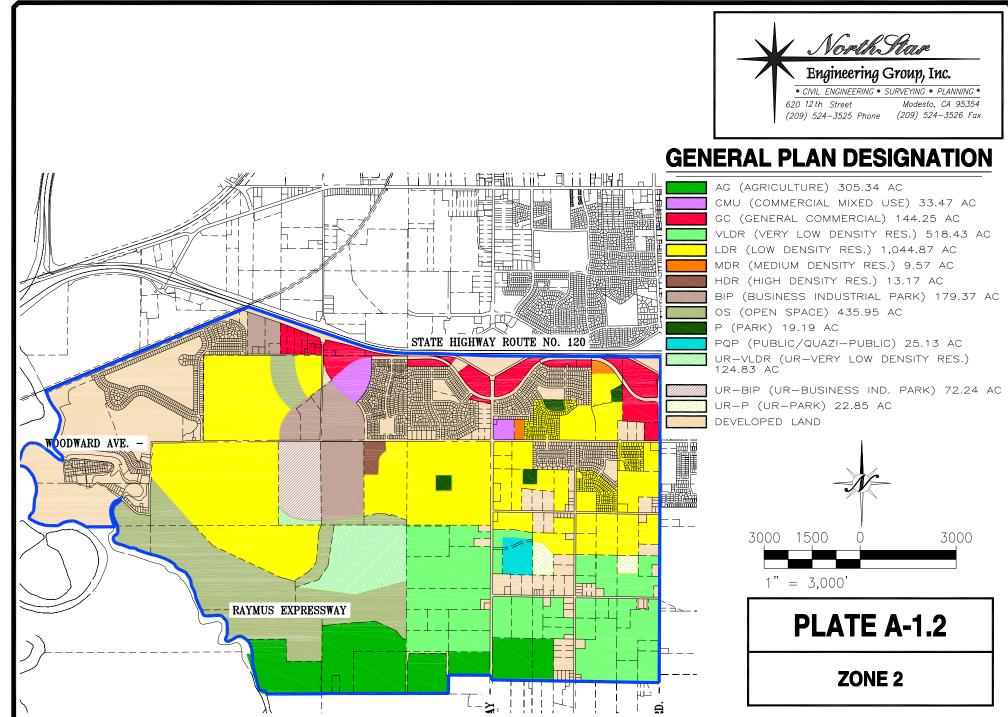
\*These sheets should be referred to in conjunction with the Chapter 8 - Transportation Element Update only, background information for all other Chapters is based on the Appendix A documents in the adopted 2013 Public Facilities Implementation Plan Update

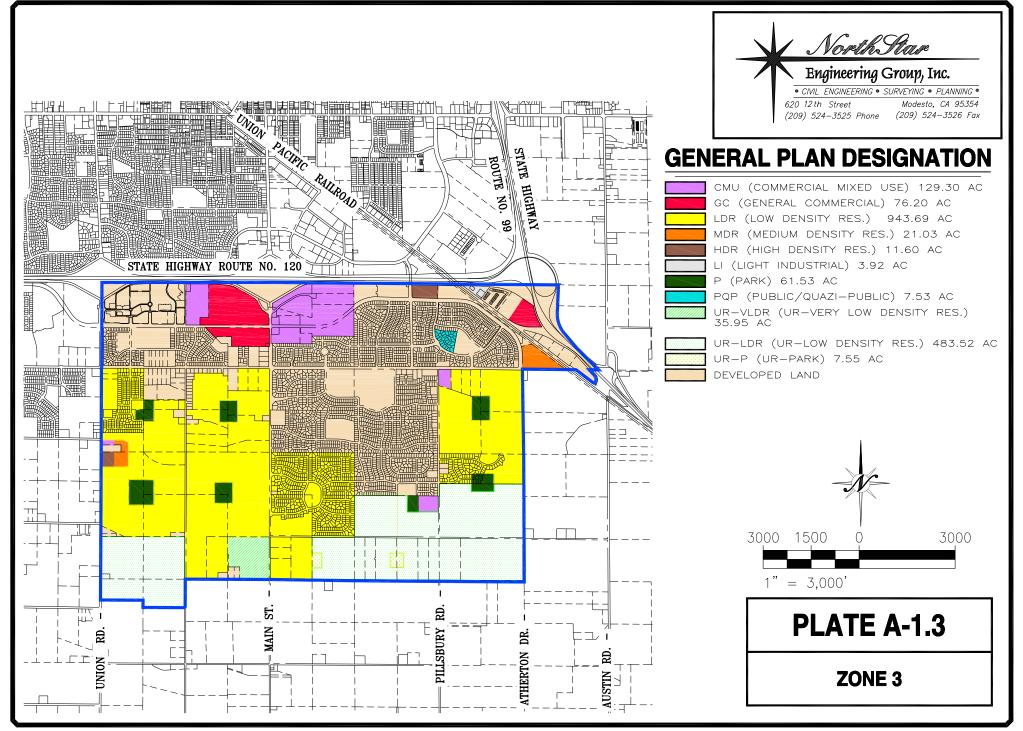








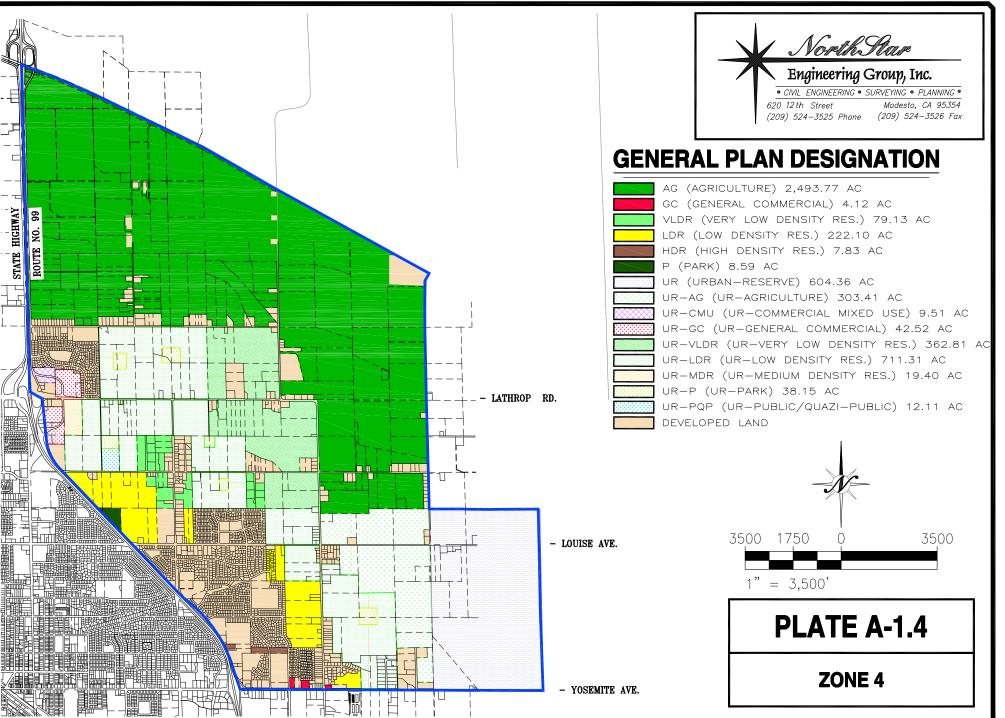


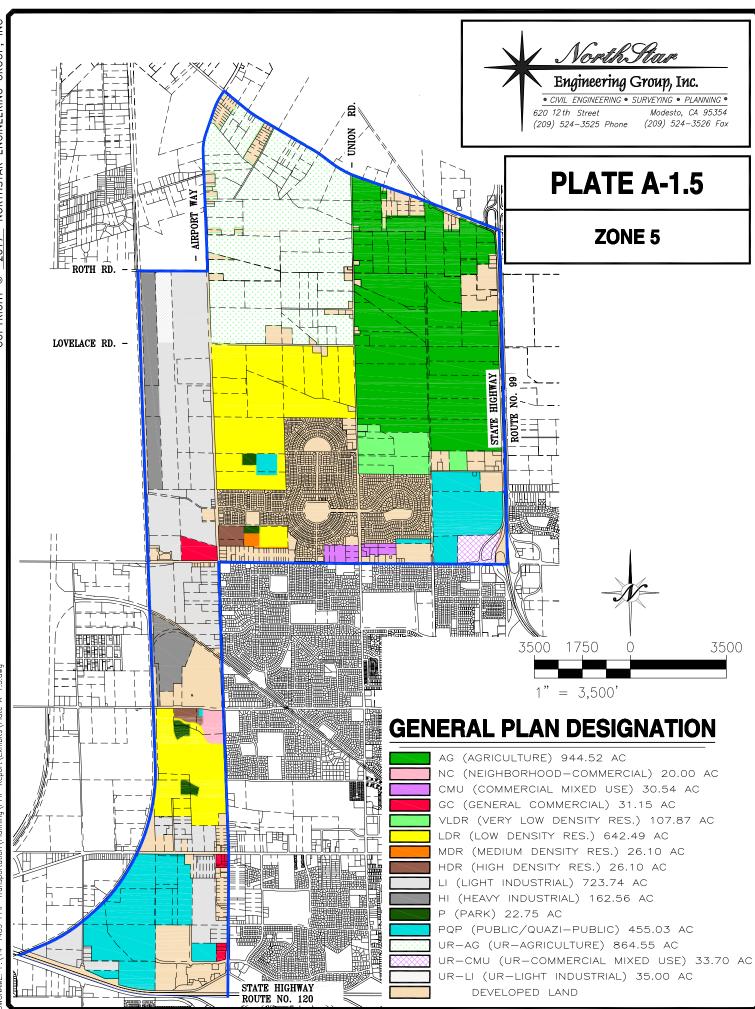


HIGHWAY

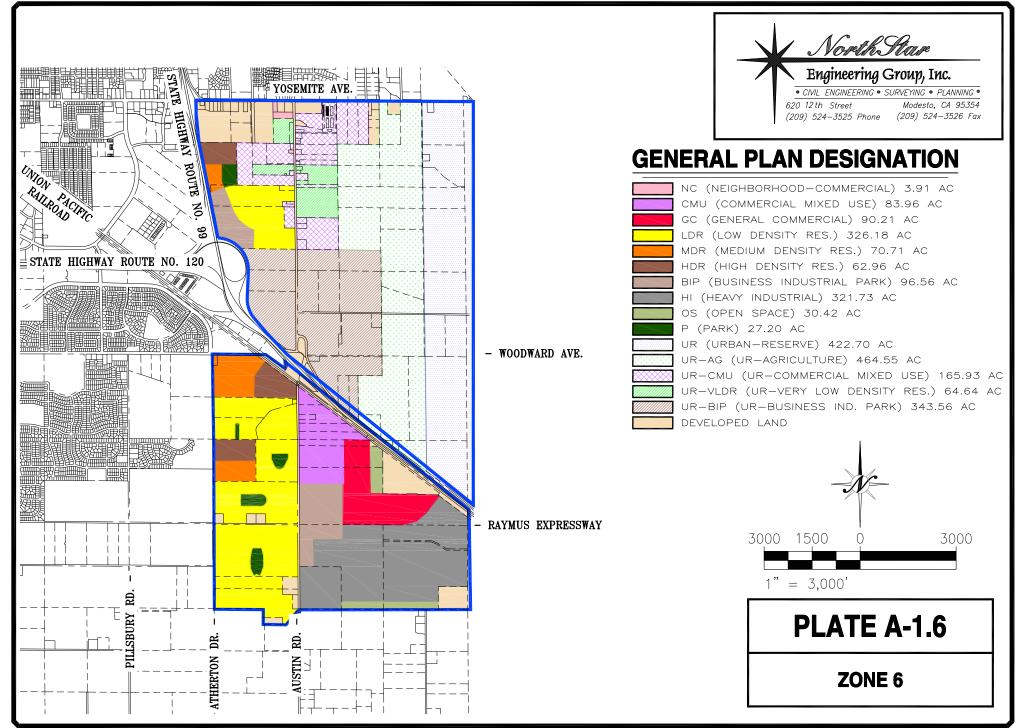
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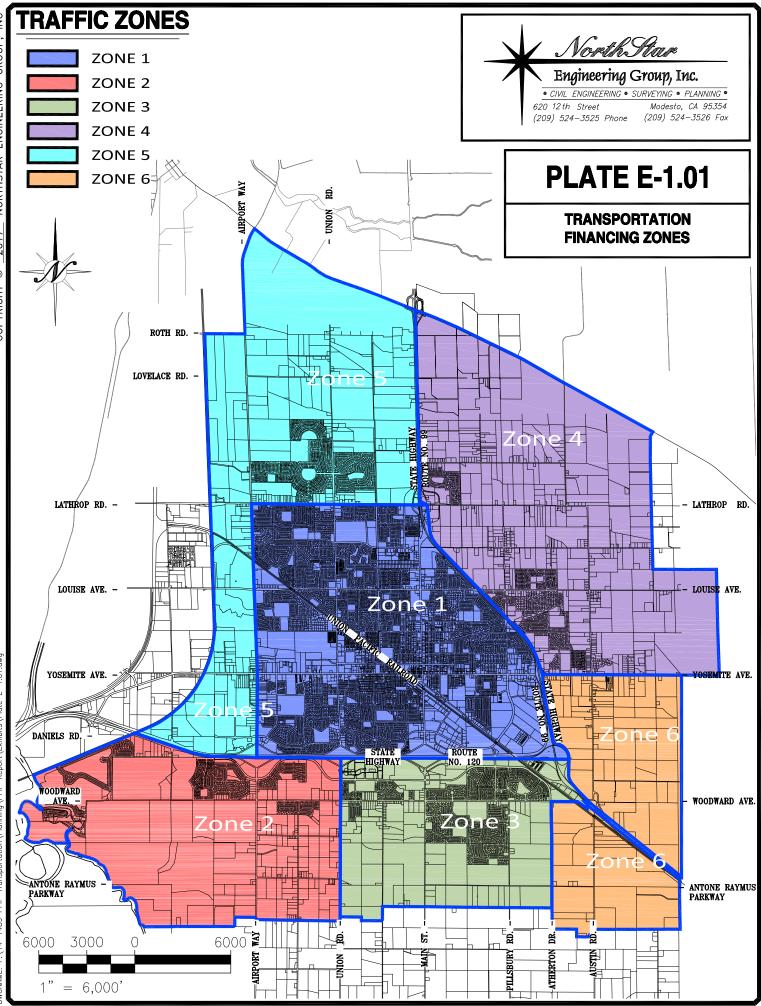




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Appendix E Transportation Data



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ROADW	/AY SEGMENTS
AP1.1	S AIRPORT WY - FRENCH CAMP RD TO E ROTH RD S AIRPORT WY - FRENCH CAMP RD TO E ROTH RD
AP1.2	S AIRPORT WY - FRENCH CAMP RD TO E ROTH RD S AIRPORT WY - E ROTH RD TO LOVELACE RD
AP2 AP3.1	S AIRPORT WY - E ROTH RD TO LOVELACE RD S AIRPORT WY - E LOVELACE RD TO DAISYWOOD DR
AP3.2	S AIRPORT WY - E LOVELACE RD TO DAISYWOOD DR
AP4 AP5	S AIRPORT WY – DAISYWOOD DR TO LATHROP RD S AIRPORT WY – LATHROP RD TO NORTHGATE DR
AP5 AP6	S AIRPORT WY - NORTHGATE DR TO UPRR CROSSING
AP7	S AIRPORT WY - UPRR CROSSING TO LOUISE AVE
AP8 AP9	S AIRPORT WY - LOUISE AVE TO CROM ST S AIRPORT WY - CROM ST TO W YOSEMITE AVE
AP10	S AIRPORT WY - W YOSEMITE AVE TO WAWONA ST
AP14.1 AP14.2	S AIRPORT WY - W WOODWARD AVE TO ANTONE RAYMUS PKWY S AIRPORT WY - W WOODWARD AVE TO ANTONE RAYMUS PKWY
AF14.2 AT1	E ATHERTON DR - W WOODWARD AVE TO ANTONE RATINGS FRWI
AT3	E ATHERTON DR – MCKINLEY AVE TO 825' E OF HEARTHSONG DR
AT4.1	E ATHERTON DR - 750' W OF OLEANER DR TO S UNION RD
AT4.2 AT5.1	E ATHERTON DR - 750' W OF OLEANER DR TO S UNION RD
AT5.2	W ATHERTON DR – E WOODWARD AVE TO ANTONE RAYMUS PKWY W ATHERTON DR – E WOODWARD AVE TO ANTONE RAYMUS PKWY
AU1a	AUSTIN RD – E YOSEMITE AVE TO 2650' S OF E YOSEMITE AVE
AU1b.1 AU1b.2	AUSTIN RD – 2650'S OF E YOSEMITE AVE TO GRAVES RD AUSTIN RD – 2650'S OF E YOSEMITE AVE TO GRAVES RD
AUTD.2 AU2	AUSTIN RD – GRAVES DR TO UPRR CROSSING
AU4	AUSTIN RD - UPRR CROSSING TO ANTONE RAYMUS PKWY DANIELS ST - MCKINLEY AVE TO EX DANIELS ST
DAN1 LA1	DANIELS ST - MCKINLEY AVE TO EX DANIELS ST
LA1	W LATHROP RD - 1800' W OF S AIRPORT WY TO AIRPORT WY E LATHROP RD - AIRPORT WY TO LONDON AVE
LA3	E LATHROP RD – ARROWSMITH DR TO CRESTWOOD AVE
LA4.1 LA4.2	E LATHROP RD – S FRONTAGE RD TO COTTAGE AVE E LATHROP RD – S FRONTAGE RD TO COTTAGE AVE
LO1	W LOUISE AVE - LIPPR CROSSING TO S AIRPORT WY
L02	W LOUISE AVE - 600° E OF MAIN ST TO GARDEN GATE DR W LOUISE AVE - 600° E OF MAIN ST TO GARDEN GATE DR W LOUISE AVE - HWY 99 TO FELICE WY
LO3 LO4	W LOUISE AVE - HWT 99 TO FELICE WT W LOUISE AVE - 700' E OF PESTANA AVE TO AUSTIN RD
LOV1.1	E LOVELACE RD - S AIRPORT WY TO S UNION RD
LOV1.2 LOV2.1	E LOVELACE RD - S AIRPORT WY TO S UNION RD
LOV2.1	E LOVELACE RD - S AIRPORT WY TO S UNION RD E LOVELACE RD - S UNION RD TO HWY 99 E LOVELACE RD - S UNION RD TO HWY 99 E LOVELACE RD - S UNION RD TO HWY 99 S MAIN ST - E WOODWARD AVE TO ANTONE RAYMUS PKWY S MAIN ST - E WOODWARD AVE TO ANTONE RAYMUS PKWY MCKINLEY AVE - UPRR CROSSING TO SR 120
L0V2.3	E LOVELACE RD - S UNION RD TO HWY 99
MA2.1 MA2.2	S MAIN ST — E WOODWARD AVE TO ANTONE RAYMUS PKWY S MAIN ST — E WOODWARD AVE TO ANTONE RAYMUS PKWY
MC1	MCKINLEY AVE - UPRR CROSSING TO SR 120 MCKINLEY AVE - W ATHERTON DR TO W WOODWARD AVE MCKINLEY AVE - W WOODWARD AVE TO ANTONE RAYMUS PKWY
MC3 MC4	MCKINLEY AVE - W AIHERION DR IO W WOODWARD AVE MCKINLEY AVE - W WOODWARD AVE TO ANTONE RAYMUS PKWY
MO1	MOFFAT BOULEVARD - LAURENWOOD RD TO SR 120 EXIT RAMP
RE1.1 RE1.2	ANTONE RAYMUS PKWY - W WOODWARD AVE TO S AIRPORT WY
RE2.1	ANTONE RAYMUS PKWY - W WOODWARD AVE TO S AIRPORT WY ANTONE RAYMUS PKWY - W WOODWARD AVE TO S AIRPORT WY ANTONE RAYMUS PKWY - S AIRPORT WY TO S UNION RD ANTONE RAYMUS PKWY - S AIRPORT WY TO S UNION RD
RE2.2	ANTONE RAYMUS PKWY - S AIRPORT WY TO S UNION RD
RE3a RE3b	ANTONE RAYMUS PKWY - S UNION RD TO 900' E OF TINNIN RD
RE4.1	ANTONE RAYMUS PKWY - S MAIN ST TO E ATHERTON DR
RE4.2	ANTONE RAYMUS PKWY - S MAIN ST TO E ATHERTON DR
RE4.3 RE5	ANTONE RAYMUS PKWY – 900°E OF TINNIN RD TO SO MAIN ST ANTONE RAYMUS PKWY – S MAIN ST TO E ATHERTON DR ANTONE RAYMUS PKWY – S MAIN ST TO E ATHERTON DR ANTONE RAYMUS PKWY – S MAIN ST TO E ATHERTON DR ANTONE RAYMUS PKWY – S MAIN ST TO E ATHERTON DR ANTONE RAYMUS PKWY – AUSTIN RD TO HWY 99 ANTONE RAYMUS PKWY – AUSTIN RD TO HWY 99
RE6.1	ANTONE RAYMUS PKWY - AUSTIN RD TO HWY 99
RE6.2 RE7	ANTONE RAYMUS PKWY – AUSTIN RD TO HWY 99 ANTONE RAYMUS PKWY – HWY 99 TO UNKNOWN RD
R01	E ROTH RD - CITY LIMITS TO S AIRPORT WY
UN1.1 UN1.2	S UNION RD - FRENCH CAMP RD TO E LOVELACE RD S UNION RD - FRENCH CAMP RD TO E LOVELACE RD
UN2	S UNION RD – LOVELACE RD TO SHADY PINES ST
UN3.1	S UNION RD - W WOODWARD AVE TO ANTONE RAYMUS PKWY
UN3.2 WO1.1	S UNION RD - W WOODWARD AVE TO ANTONE RAYMUS PKWY W WOODWARD AVE - APLICELLA CT TO W ATHERTON DR
W01.2	W WOODWARD AVE - APLICELLA CT TO W ATHERTON DR
WO2 WO3.1	W WOODWARD AVE - MCKINLEY AVE TO S AIRPORT WY W WOODWARD AVE - S AIRPORT WY TO S UNION RD
W03.2	W WOODWARD AVE - S AIRPORT WY TO S UNION RD
WO4	W WOODWARD AVE - S UNION RD TO 400' E OF PAGOLA AVE
W05	W WOODWARD AVE - 400' E OF PAGOLA AVE TO TINNIN RD W WOODWARD AVE - TINNIN RD TO 1300' E OF TINNIN RD
W06 W07	W WOODWARD AVE - TINNIN RD TO TSUU E OF TINNIN RD W WOODWARD AVE - 1300' E OF TINNIN RD TO S MAIN ST
W08	E WOODWARD AVE DULCDURY RD TO E ATLIEDTON AVE
WO9.1 WO9.2	E WOODWARD AVE - E ATHERTON AVE TO AUSTIN RD
W09.2 W010	W WOODWARD AVE - W ATHERTON AVE TO MOSTIN RU
Y01	E WOODWARD AVE - FILLSBORT RU TU E ATHERTON AVE E WOODWARD AVE - E ATHERTON AVE TO AUSTIN RD E WOODWARD AVE - E ATHERTON AVE TO AUSTIN RD W WOODWARD AVE - W ATHERTON AVE TO MCKINLEY AVE E YOSEMITE AVE - HWY 99 TO AUSTIN RD E YOSEMITE AVE - AUSTIN RD TO COMCONEX RD E YOSEMITE AVE - AUSTIN RD TO COMCONEX RD
Y02.1 Y02.2	E YOSEMITE AVE - AUSTIN RU TU CUMCUNEX RU E YOSEMITE AVE - AUSTIN RD TO COMCONEX RD

INTERS	ECTIONS
INT1	S AIRPORT WY & E ROTH RD
INT2	S AIRPORT WY & E FISK RD
INT3	S AIRPORT WY & E LOVELACE RD
INT4	S AIRPORT WY & DAISYWOOD DR
INT5	S AIRPORT WY & LATHROP RD
INT6	S AIRPORT WY & LOUISE AVE
INT7	S AIRPORT WY & CROM ST
INT8	S AIRPORT WY & W YOSEMITE AVE
INT9	S AIRPORT WY & WAWONA ST
INT10	S AIRPORT WY & DANIELS ST
INT11	S AIRPORT WY & W WOODWARD AVE
INT12	MCKINLEY AVE & W ATHERTON RD
INT13	E WOODWARD AVE & E ATHERTON DR
INT14A	W ATHERTON DR & S UNION RD
INT14B	W ATHERTON DR & S UNION RD
INT15	ATHERTON DR & S MAIN ST
INT16	W WOODWARD AVE & W ATHERTON DR
INT17	AUSTIN RD & E GRAVES RD
INT18	S MAIN ST & MISSION/INDUSTRIAL DR
INT19	AUSTIN RD & ANTONE RAYMUS PKWY
INT20	W LATHROP RD & COTTAGE AVE
INT21	W LOUISE AVE & GARDEN GATE DR
INT22	W LOUISE AVE & SOUZA BLVD
INT23	W LOUISE AVE & FELICE WAY
INT24	E WOODWARD AVE & S MAIN ST
INT25	W WOODWARD AVE & MCKINLEY AVE
INT26	S AIRPORT WY & ANTONE RAYMUS PKWY
INT27	S UNION RD & ANTONE RAYMUS PKWY
INT28	S MAIN ST & ANTONE RAYMUS PKWY
INT29	S MAIN ST & SPRINGFIELD RD
INT30 INT31	E ATHERTON DR & ANTONE RAYMUS PKWY S UNION RD & E LOVELACE RD
INT32	S AIRPORT WY & GENEVA WY
INT33	W WOODWARD AVE & S UNION RD
INT34	E ATHERTON DR & VAN RYN AVE
INT35	E WOODWARD AVE & PILLSBURY AVE
INT36	MOFFAT DR & LAURENWOOD RD
INT37	INDUSTRIAL PARK DR & VAN RYN AVE
INT38	MCKINELY AVE & DANIELS ST
IINT40	AUSTIN RD & E YOSEMITE AVE
INT41	S AIRPORT WY & W ATHERTON DR
INT42	E WOODWARD AVE & LAURENWOOD RD
INT43	E WOODWARD AVE & AUSTIN RD
INT44	W YOSEMITE AVE & MILO CANDINI DR
INT45	S AIRPORT WY & W CENTER ST
INT46	W YOSEMITE AVE & FISHBACK RD
INT47	W YOSEMITE AVE & ST. DOMINICS DR
INT48 INT49	W YOSEMITE AVE & WINTERS DR E LATHROP RD & S. FRONTAGE DR
INT49 INT50	E LATHROP RD & S. FRONTAGE DR E LATHROP RD & PUEBLO DR
INT51	E WOODWARD AVE & BUENA VISTA DR
INT52	E WOODWARD AVE & VAN RYN AVE
INT54	W WOODWARD AVE & UNKNOWN ST
INT55	S AIRPORT WAY & E PEACH RD
INT56	S UNION RD & E PEACH RD
INT57	ANTONE RAYMUS PKWY & E PEACH RD
INT58	ANTONE RAYMUS PKWY & TINNIN RD
INT59	S MAIN ST & TANNEHILL DR
INT60	ANTONE RAYMUS PKWY & PILLSBURY RD

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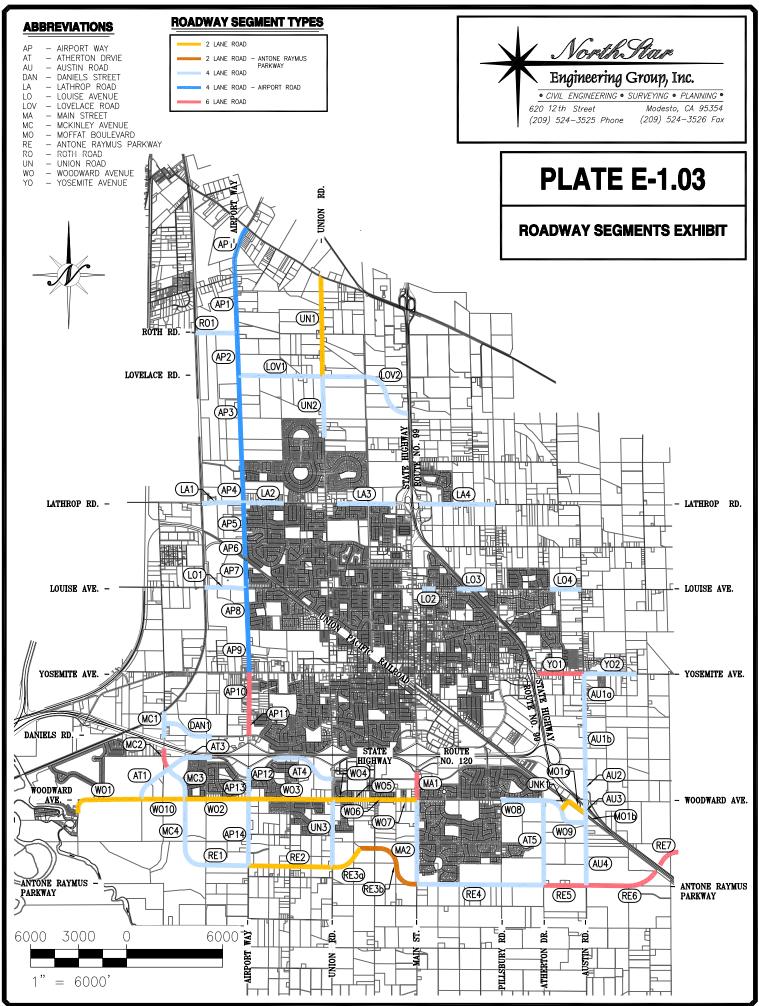


### INTERCHANGES

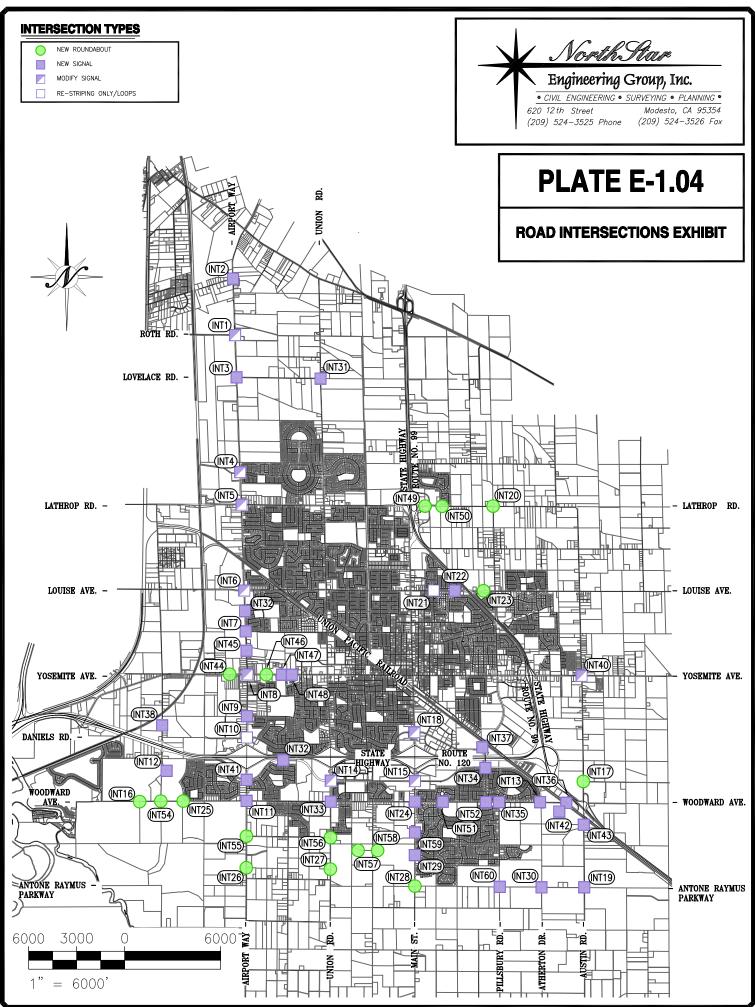
XCHG-1	MCKINLEY AVE & SR 120
XCHG-2	AIRPORT WAY & SR 120
XCHG-3	UNION RD & SR 120
XCHG-4	MAIN ST & SR 120
XCHG-5	LOUISE AVE & SR 120 OVERCROSSING
XCHG-6	COTTAGE AVE & SR 120 OVERCROSSING

# **PLATE E-1.02**

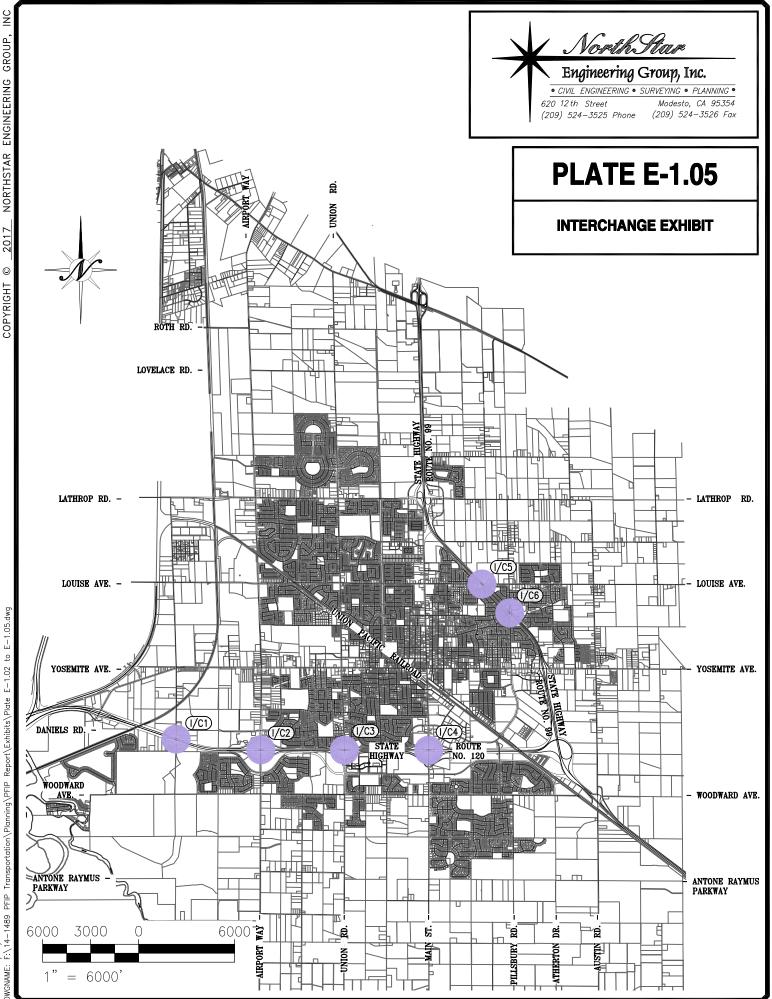
**PROJECT LIST** 



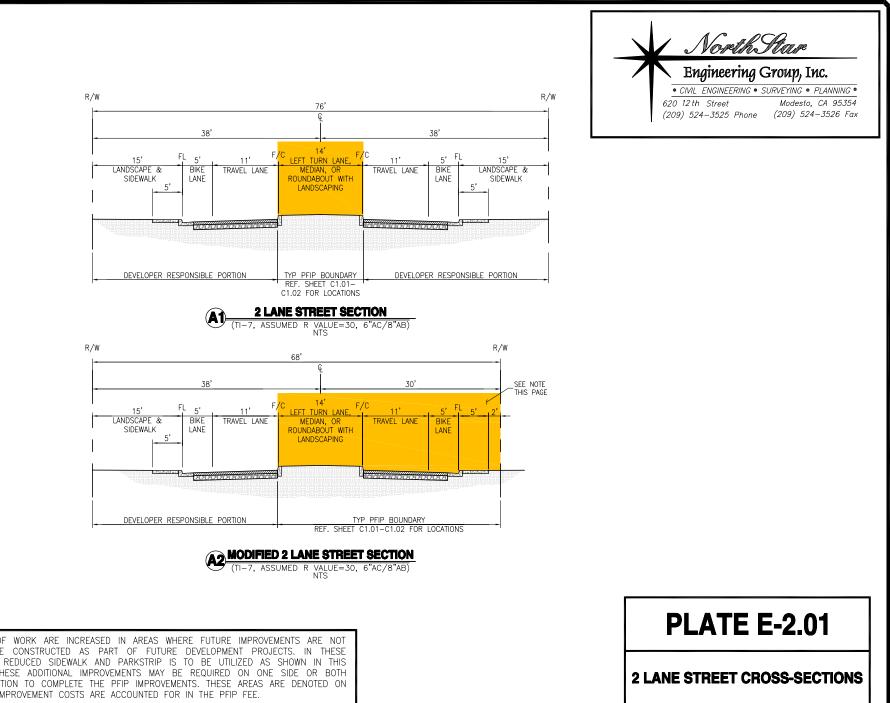
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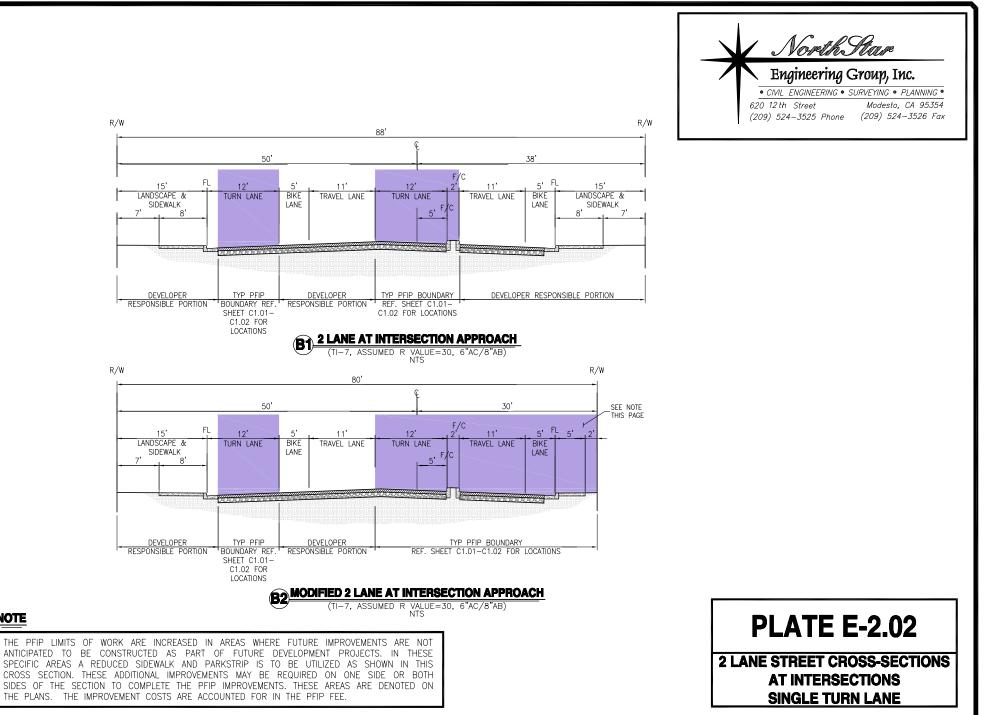
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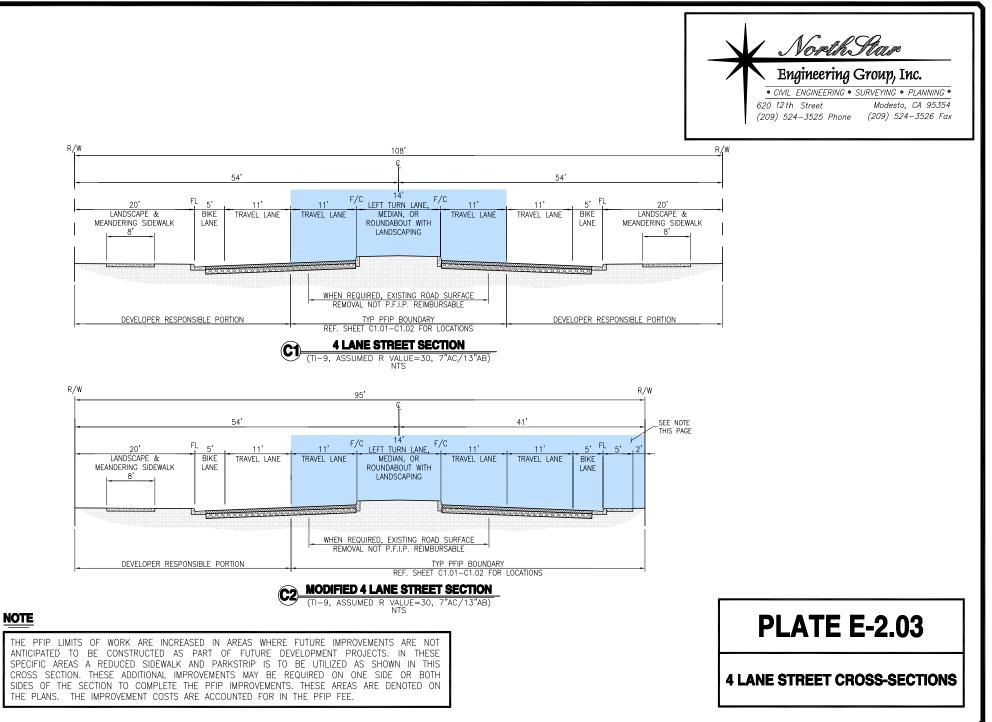
### NOTE

THE PFIP LIMITS OF WORK ARE INCREASED IN AREAS WHERE FUTURE IMPROVEMENTS ARE NOT ANTICIPATED TO BE CONSTRUCTED AS PART OF FUTURE DEVELOPMENT PROJECTS. IN THESE SPECIFIC AREAS A REDUCED SIDEWALK AND PARKSTRIP IS TO BE UTILIZED AS SHOWN IN THIS CROSS SECTION. THESE ADDITIONAL IMPROVEMENTS MAY BE REQUIRED ON ONE SIDE OR BOTH SIDES OF THE SECTION TO COMPLETE THE PFIP IMPROVEMENTS. THESE AREAS ARE DENOTED ON THE PLANS. THE IMPROVEMENT COSTS ARE ACCOUNTED FOR IN THE PFIP FEE.

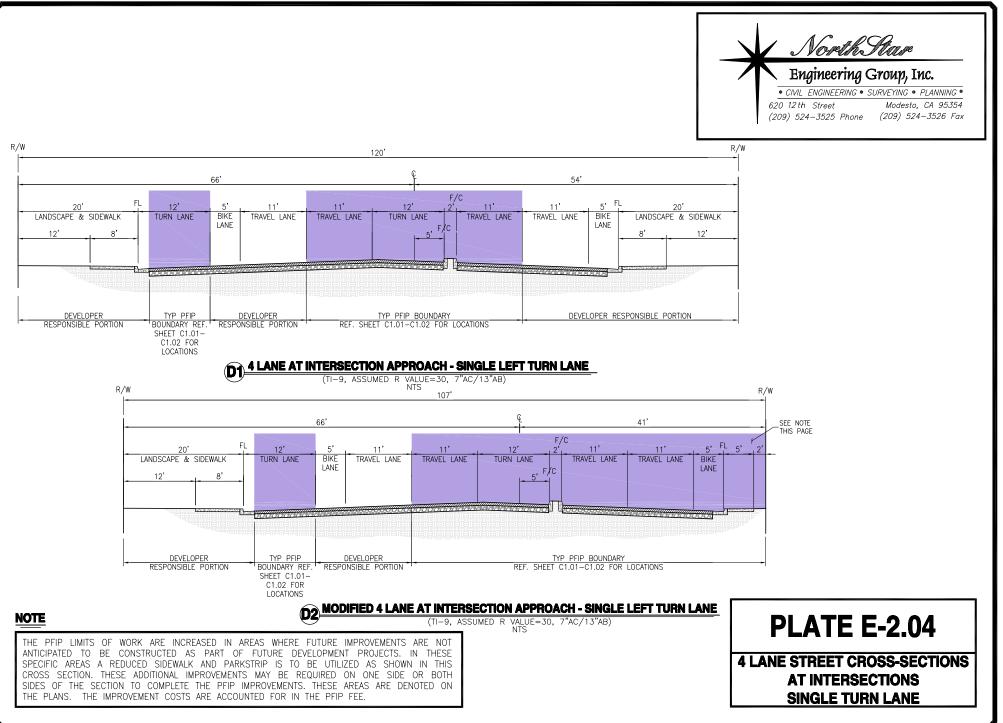
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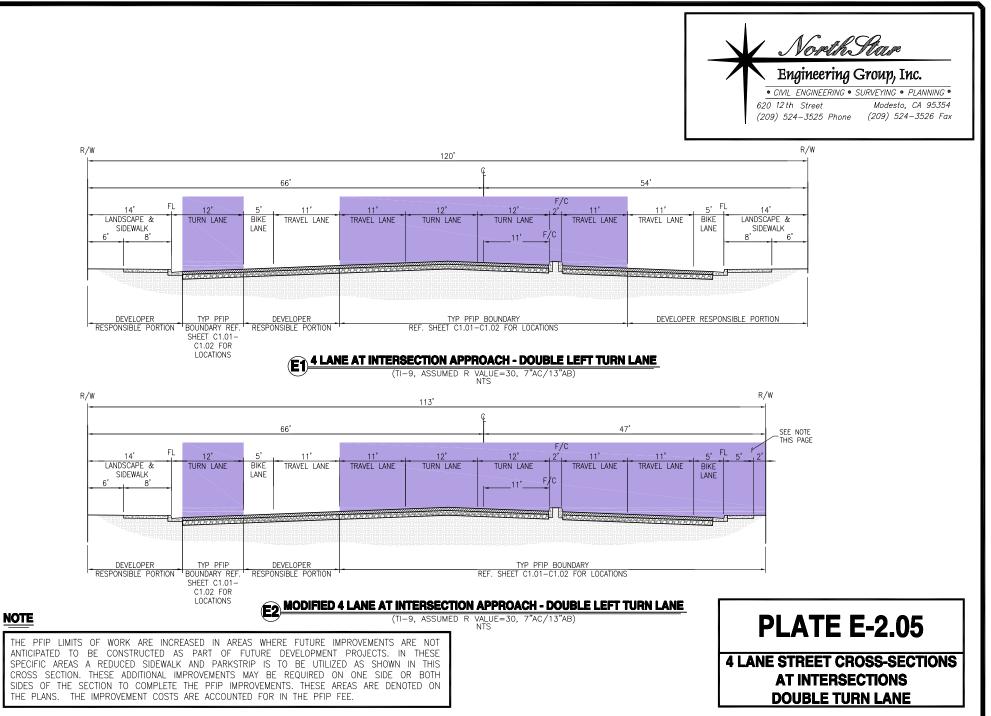
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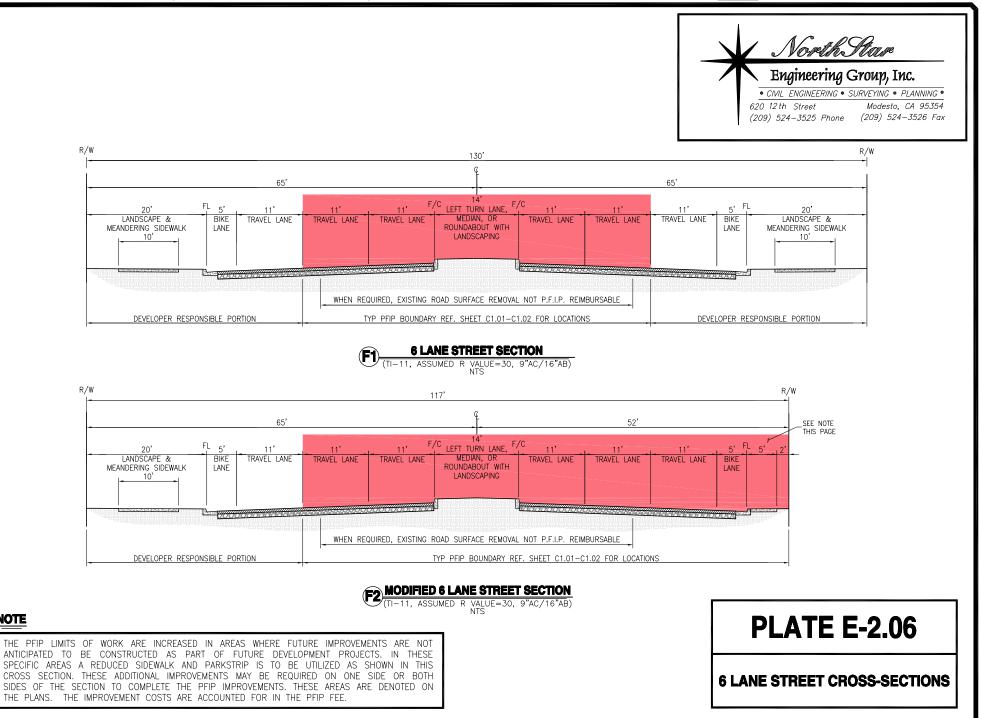


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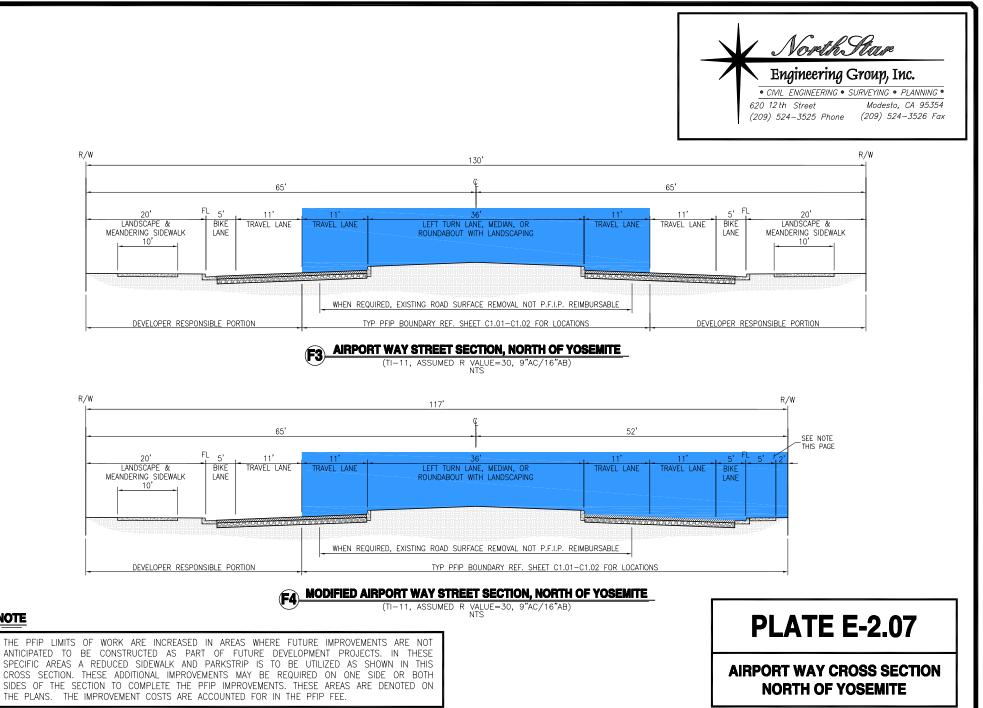
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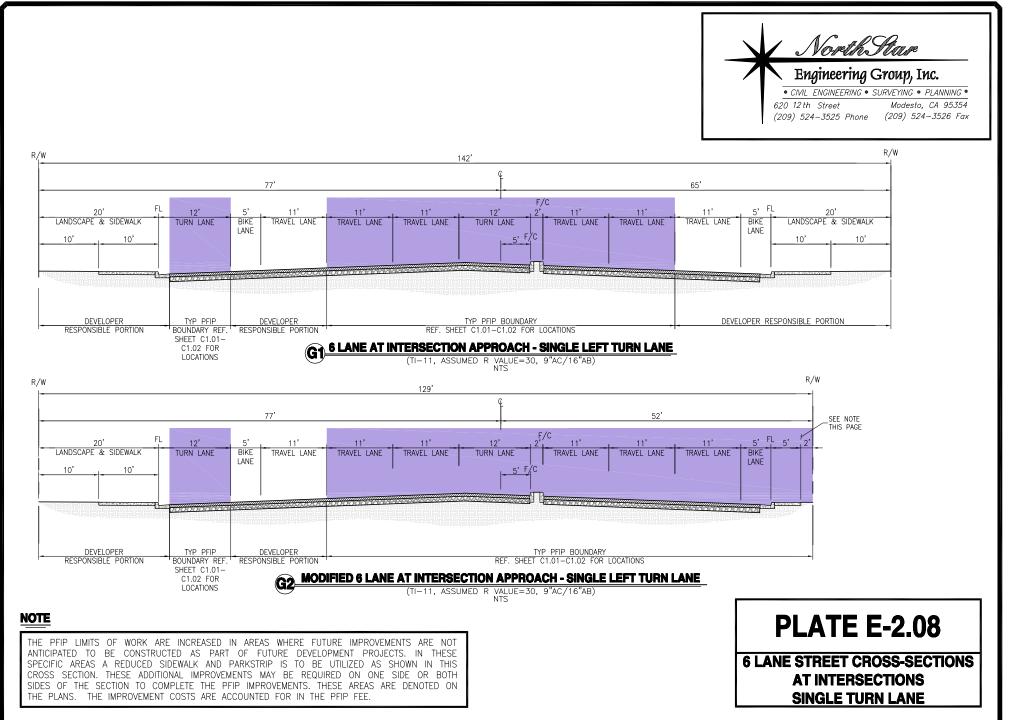


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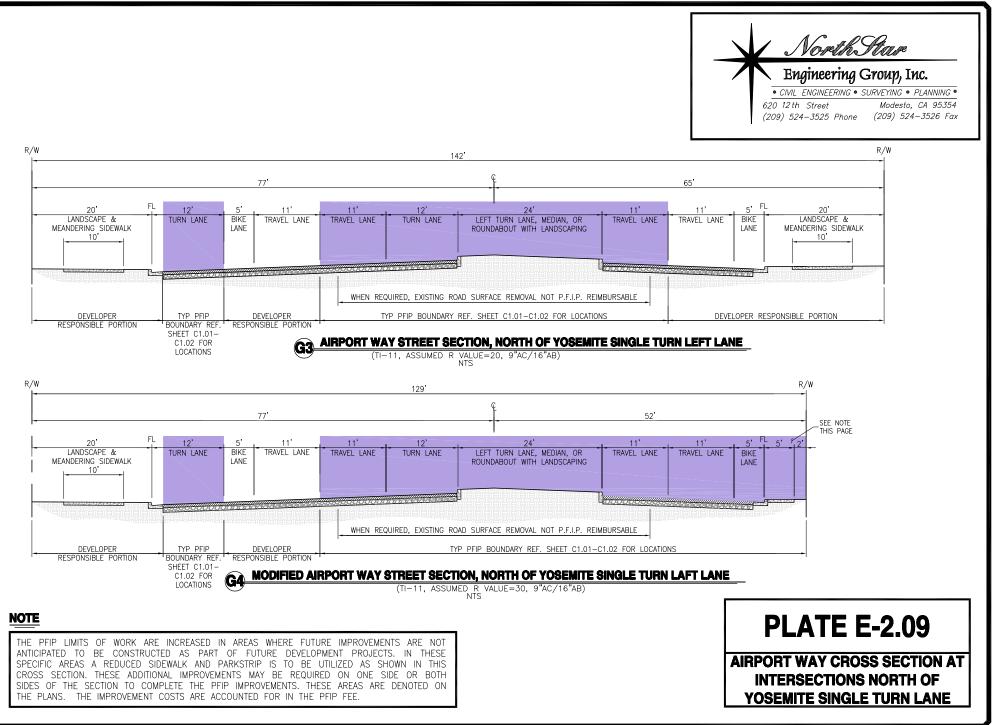
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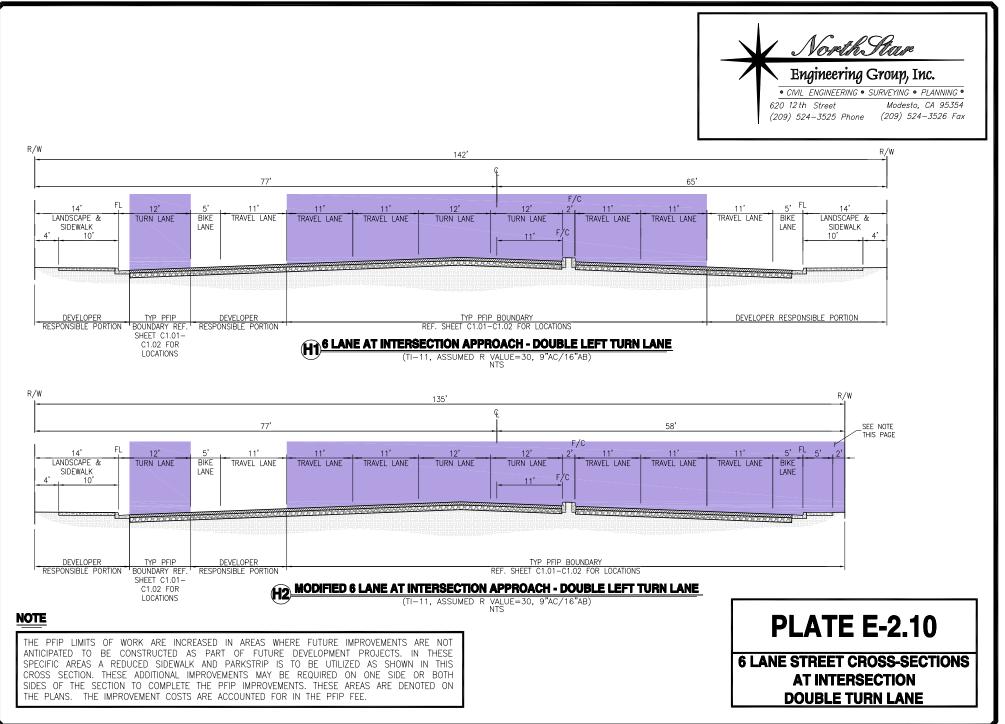
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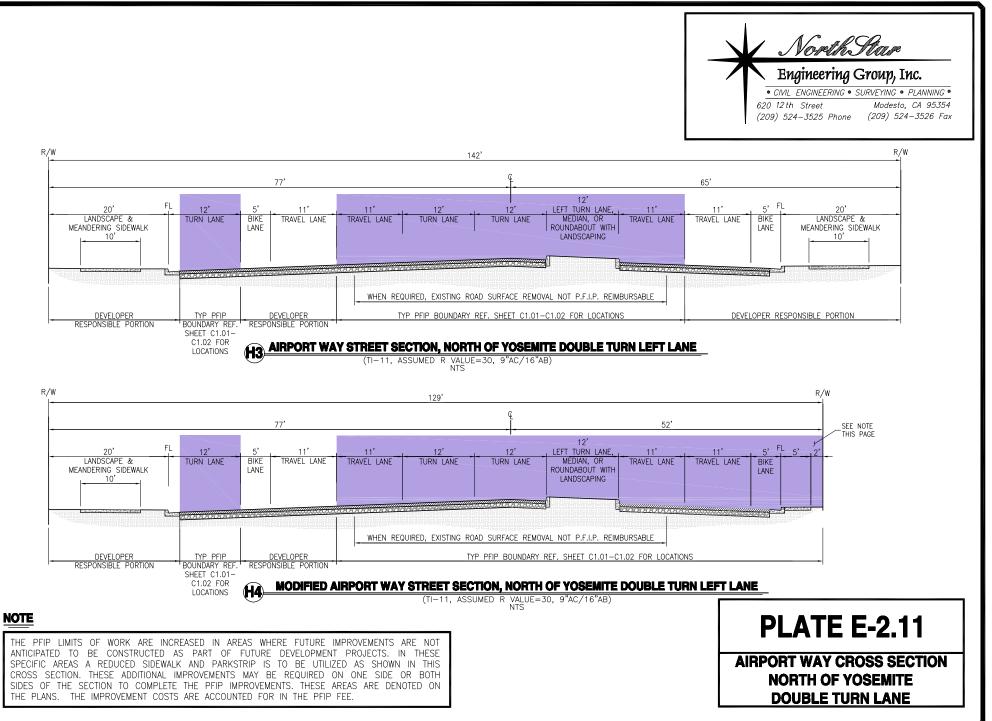
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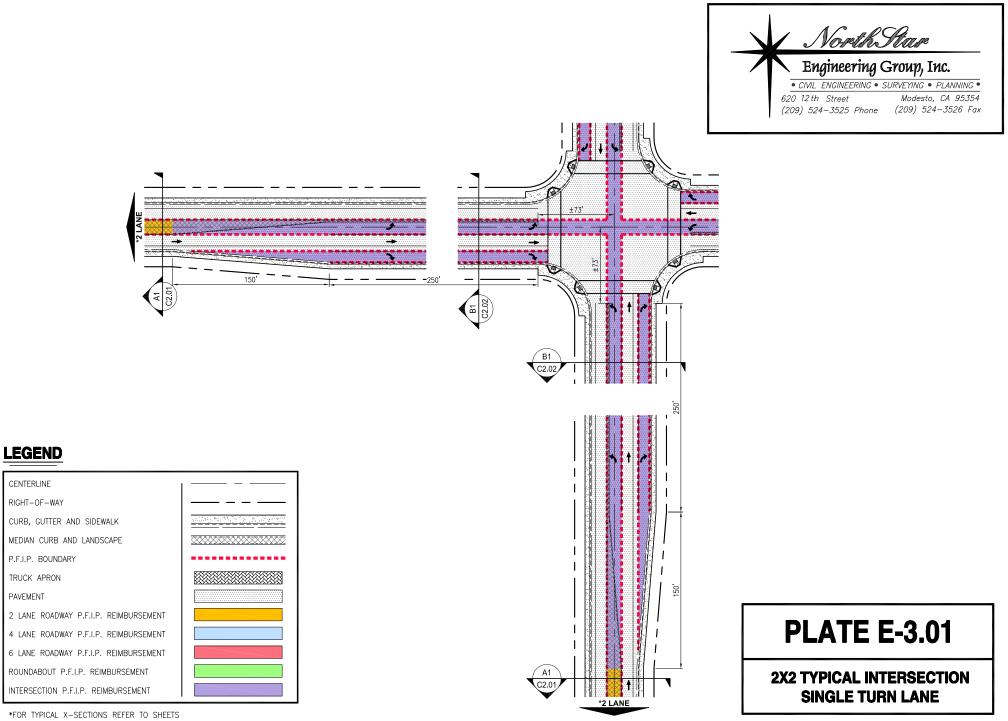


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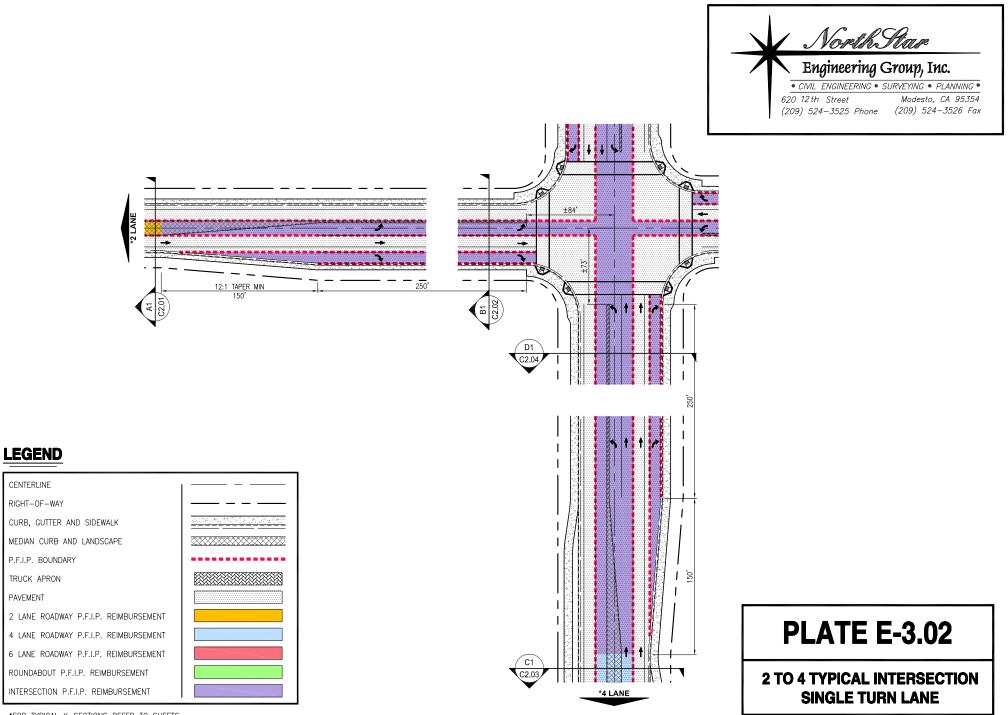


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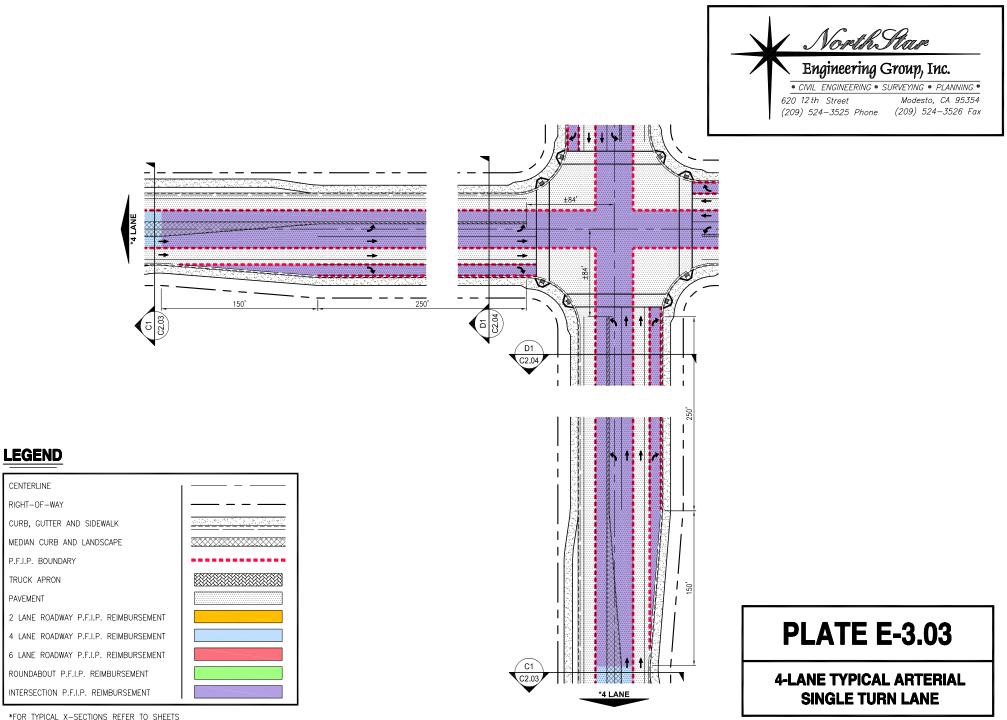


C2.01-C2.11 FOR ADDITIONAL INFORMATION



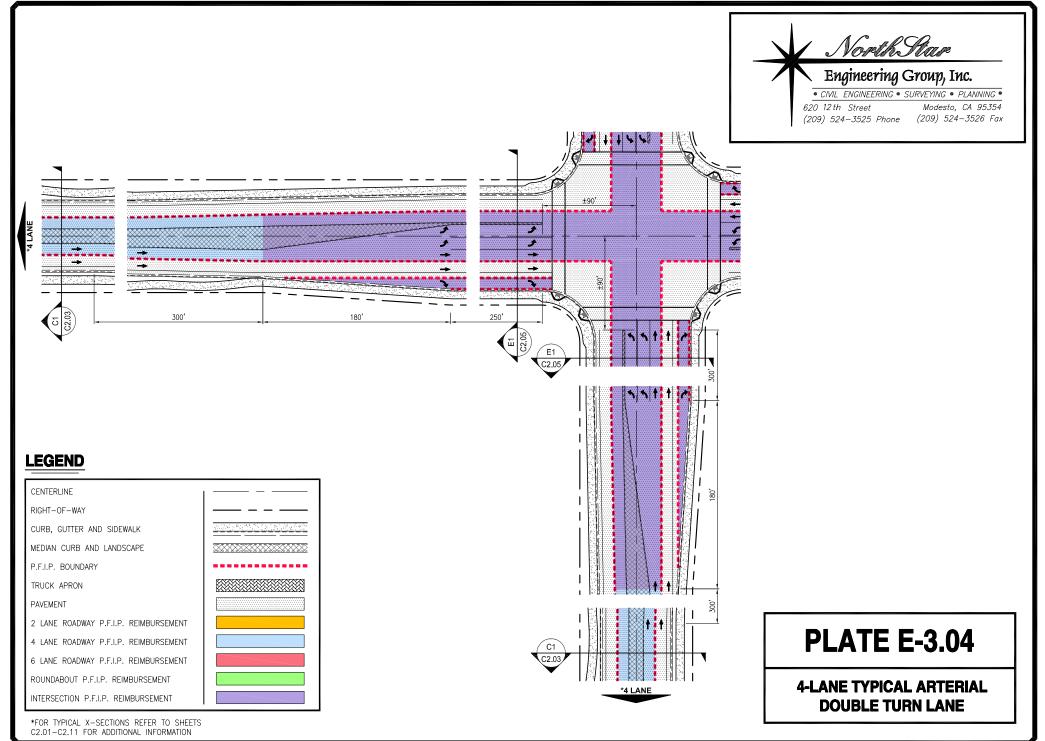
\*FOR TYPICAL X-SECTIONS REFER TO SHEETS C2.01-C2.11 FOR ADDITIONAL INFORMATION

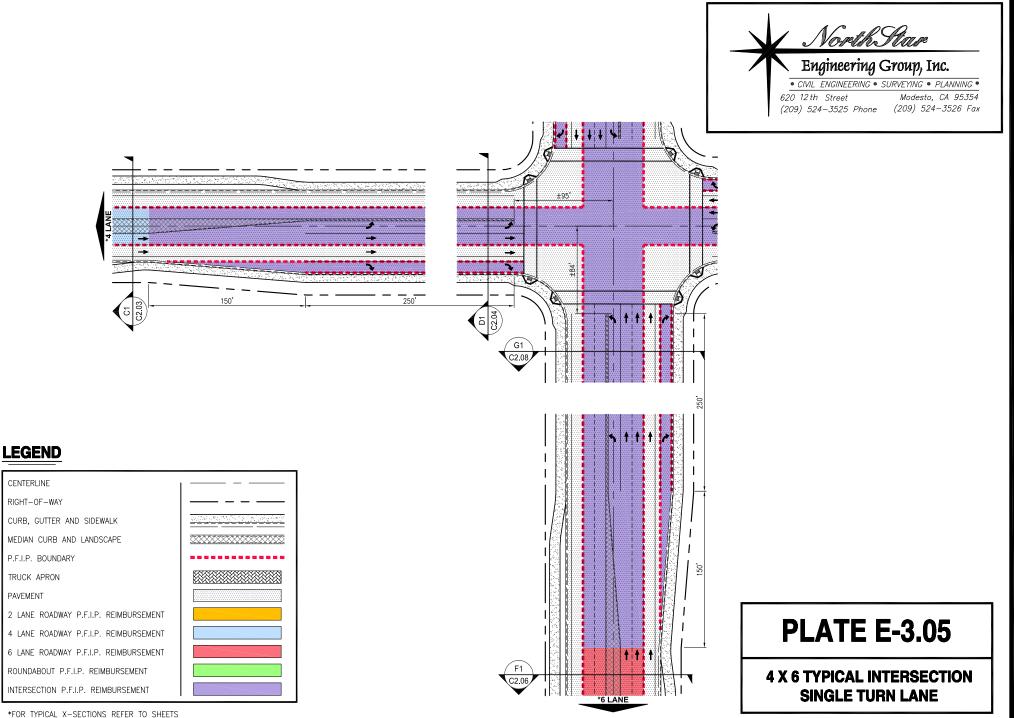
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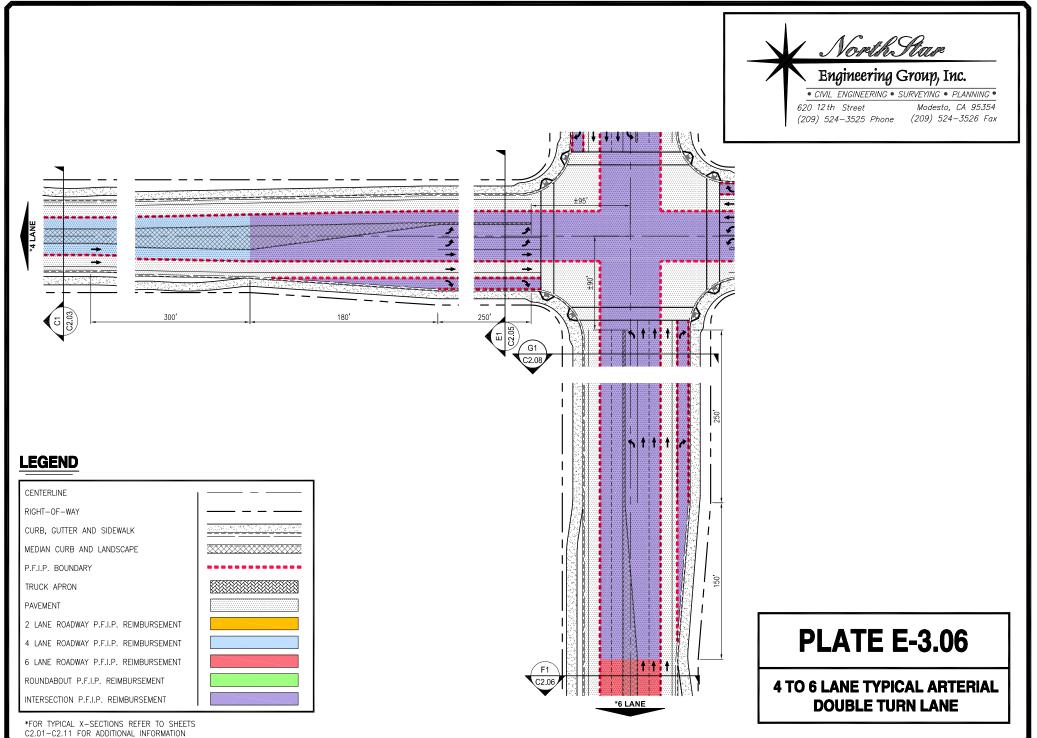
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