FHWA-MT-EIS-91-01-D

IR 15-4(65)197, INTERSTATE 15 NORTH HELENA VALLEY INTERCHANGE LEWIS AND CLARK COUNTY, MONTANA

DRAFT

ENVIRONMENTAL

IMPACT

STATEMENT

STATE OF MONTANA
DEPARTMENT OF HIGHWAYS

AND

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

FHWA-MT-EIS-91-01-D

Project IR 15-4(65)197, Interstate 15
North Helena Valley Interchange
Lewis and Clark County, Montana

Draft
Environmental Impact Statement

Submitted pursuant to 42 U.S.C. 4332(2)(c) by the

U.S. Department of Transportation
Federal Highway Administration

and

State of Montana
Department of Highways

3-4-91
Date of Approval

Robert R. Lowhouse
for Montana Department of Highways

3-4-91
Date of Approval

D C Lewis
for Federal Highway Administration

The following persons may be contacted for additional information concerning this document:

David S. Johnson
Preconstruction Engineer
Montana Department of Highways
2701 Prospect Avenue
Helena, MT 59620
(406) 444-6242

Dale Paulson
Project Development Engineer
Federal Highway Administration
301 South Park, Drawer 10056
Helena, MT 59626
(406) 449-5310

Comments on this draft EIS are due by 07 May 1991 and should be sent to David S. Johnson at the above address.

This draft environmental impact statement is an examination of the proposed construction of an interchange on Interstate 15, north of Helena, Montana. The proposed project will include a crossing structure with connecting ramps to existing Interstate 15 and a connecting road to the existing North Montana Avenue. This document discusses the purpose and need, the alternatives, the affected environment, the environmental consequences, mitigation measures and comments and coordination. Also included are a list of preparers and the draft EIS circulation list.

2. SUMMARY

This summary includes a brief description of the proposed action, an explanation of the purpose and need for the project, a description of major actions proposed by other governmental agencies, a summary of all reasonable alternatives considered, a summary of major environmental impacts and a list of other Federal actions required for the proposed project.

2.1. BRIEF DESCRIPTION

The proposed project will include a diamond type interchange with a crossing structure (either an existing structure or a new one, depending on the alternative selected), connecting ramps to existing Interstate 15 and a connecting street to existing Montana Avenue. The proposed project will be located north of the existing Cedar Street Interchange and south of the existing Lincoln Road Interchange. The project location is shown on Figure 2-1.

2.2. PURPOSE AND NEED

The proposed project will provide access to I-15 from and to the existing roads, streets, businesses and residences in the North Helena Valley. It will improve traffic safety and convenience by allowing more traffic to use the under-traveled and under-capacity Interstate 15 and, as a consequence, remove traffic from the busy North Montana Avenue.

2.3. RELATED MAJOR ACTIONS

This project will connect Interstate 15 with Montana Avenue (FAU 5809) and other existing roads and highways.

An approximately 3 mile long section of Green Meadow Drive (FAS 231), from Custer Avenue to Sierra Road, is planned for reconstruction beginning in 1991. The project will include reconstruction of the existing two-lane roadway to provide a wider two-lane roadway meeting current standards for design and safety.

There are no other major related actions planned in the project area in the near future.

2.4. ALTERNATIVES

The following alternatives are under consideration:

Alternative A-1 is located at the existing crossing of I-15 over Sierra Road approximately 4 miles north of the existing Cedar Street Interchange. This alternative will use the existing bridge structure. The location of existing bridge piers restricts sight distance which will require that the ramp terminals (the intersection of the ramps with Sierra Road) for this alternative be constructed approximately 290 feet from the centerline of I-15. The existing bridge provides approximately 14 feet of vertical clearance over Sierra Road. Recommended standards require 16 feet.

Alternative A-2 is located at the same location as Alternative A-1. This alternative will include construction of intersections of ramps with Sierra Road as close to the existing Interstate 15 as possible (approximately 175 feet from the centerline of I-15 to the ramps) to avoid impacts on adjacent features. This configuration will require adjusting the location of the existing bridge piers to provide sufficient sight distance

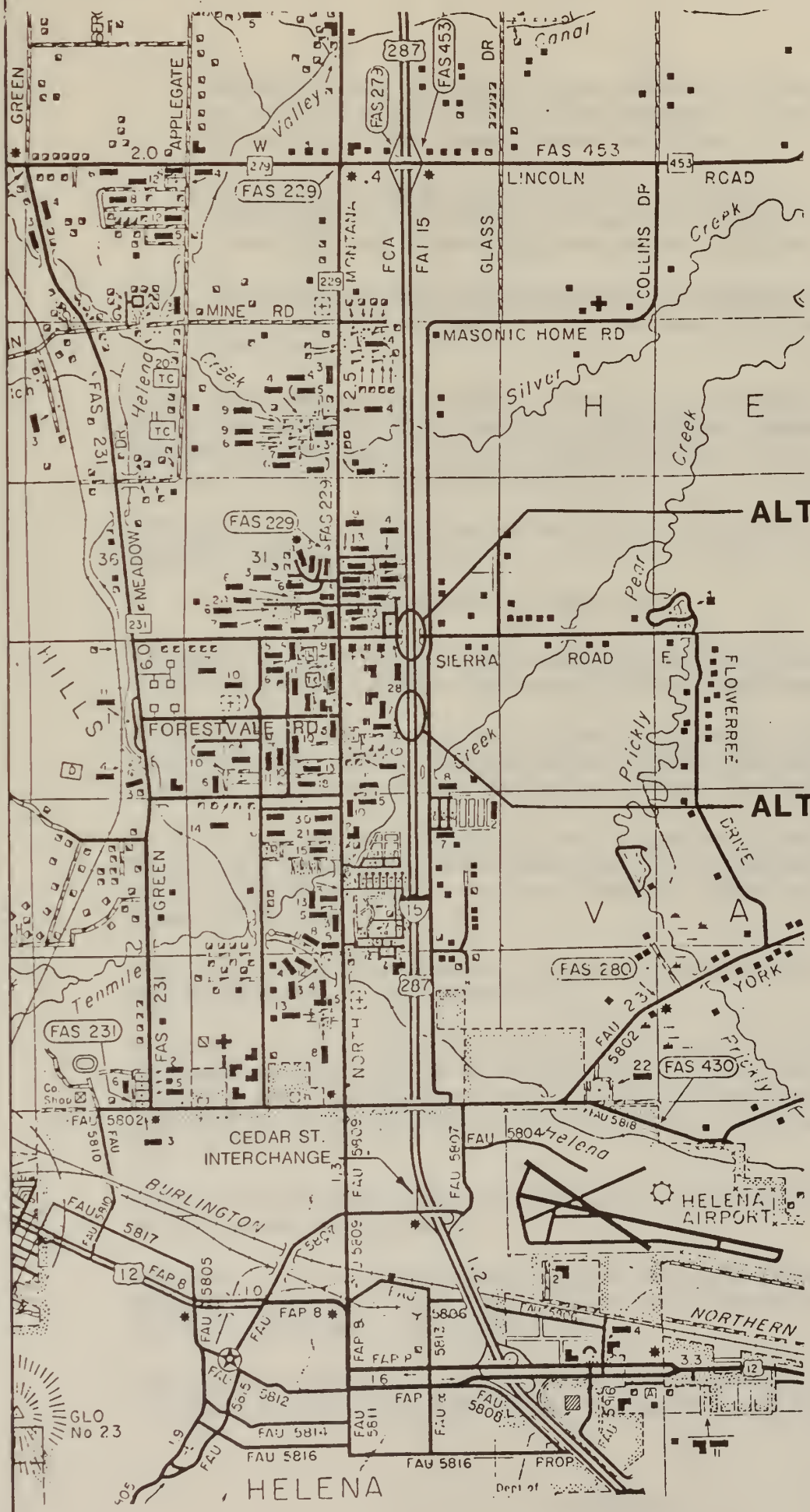

SIERRA ROAD
INTERCHANGE
N
ALTERNATIVE A
ALTERNATIVE B
GREEN
APPLEGATE
Valley
FAS 453
Canal
DR
287
FAS 273
FAS 229
LINCOLN
ROAD
MONTANA
FCA
FAI 15
GLASS
COLLINS DR
Creek
MINE RD
MASONIC HOME RD
Silver
Creek
Helena
FAS 231
MEADOW
Pear
SIERRA
ROAD
FLOWERREE
HILLS
FORESTVALE RD
Prickly
Creek
DRIVE
GREEN
Tenmile
FAS 231
NORTH
FAS 280
YORK
FAU 5802
FAS 430
Prickly
CEDAR ST.
INTERCHANGE
FAU 5804
Helena
HELENA
AIRPORT
BURLINGTON
FAU 5817
FAP 8
FAU 5805
NORTHERN
FAU 5812
FAU 5814
FAU 5816
GLO
No 23
HELENA
FAU 5816
PROP
VICINITY MAP
SCALE: 1" = 1 Mile

FIGURE 2-1

distance and as a result, will require reconstruction of the existing bridge. The elevation of the bridge and I-15 will be increased to meet standard vertical clearance requirements for the crossroad under the bridge.

Alternative B is located approximately 3.5 miles north of the existing Cedar Street Interchange at an extension to the east (from Montana Avenue to I-15) of existing Forestvale Road. A new bridge structure will be constructed.

Though the No-Action Alternative will not satisfy any of the objectives of the proposed action, it is considered in this document and is used as a basis for evaluation of impacts.

Other alternatives have been considered but are not discussed in detail in this document for one or more of the following reasons: 1) they will have greater environmental impacts, 2) they offer no advantages over the alternatives discussed above or 3) they received no significant public support during the scoping process.

Alternative B has been selected as the preferred alternative, subject to approval by the Montana Highway Commission.

2.5. MAJOR ENVIRONMENTAL IMPACTS

Alternative A-1 or A-2 will require the conversion of 9.27 acres or 7.46 acres, respectively, of prime or unique farmland to highway right-of-way. See Section 7.2.

Alternative A-1 or A-2 is expected to cause an increase in traffic volumes on Sierra Road near the Rossiter School. Existing traffic congestion at Rossiter School approaches and hazards for pedestrians and bicyclists will be increased. See Sections 4.2 and 7.3.4.1.

All of the proposed alternatives will cause a substantial increase in traffic volumes on Interstate 15, particularly to the south toward the City of Helena and will cause a substantial decrease in traffic volumes on Montana Avenue, particularly south of Sierra and Forestvale Roads. See Section 4.2.

Alternative A-1 or A-2 will require the conversion of 0.8 acres of the existing Sierra Park to highway right-of-way. See Section 7.3.4.2.

Alternative A-1 or A-2 will be constructed in a significant existing floodplain area. Past history has indicated that the Rossiter School and several residences are very close to the floodplain area. Any highway construction in the floodplain will have the potential for increasing the floodplain levels and thereby affecting the school and residences. See Section 7.7.

Alternative B will affect approximately 4.4 acres of existing wetland, Alternative A-1 or A-2 will affect none. See Section 7.8.

Alternative A-1 or A-2 will impact the Little Red School House, a property listed on the National Register of Historic Places. Alternative B will affect no properties listed on or eligible for the Register. See Section 7.10.

Alternative A-1 will require the relocation of one residence, Alternative A-2 will require no relocations and Alternative B will require the relocation of 5 residences. See Section 7.12.

2.6. PREPARERS

This document has been prepared by the Montana Department of Highways and the Federal Highway Administration with assistance from Morrison-Maierle/CSSA. See Section 8.

2.7. DOCUMENT DISTRIBUTION

This document is being sent to interested government agencies, private organizations and individuals. See Section 9.

2.8. COMMENTS AND COORDINATION

This project has been coordinated with interested agencies and the public. A letter of intent has been distributed and two public scoping meetings have been held. Comments and information received have been considered and, where appropriate, incorporated in the development of the proposed project. See Section 10.

A location and design public hearing is planned to discuss this document and to receive further public comment and information.

TABLE OF CONTENTS

TABLE OF FIGURES

4. PURPOSE OF AND NEED FOR ACTION

4.1. GENERAL

This proposed project will provide an interchange north of Custer Avenue and provide access between the existing Interstate 15, the frontage road, Montana Avenue and, depending on the alternative selected, Sierra Road or Forestvale Road.

A primary purpose of the proposed project will be to improve safety and convenience by reducing traffic demand on the heavily traveled and deficient Montana Avenue by increasing accessibility and traffic demand on the under-traveled Interstate 15.

Existing Montana Avenue, between the proposed project and the City of Helena, is a 24 to 26 feet wide asphalt paved, two-lane roadway passing through mainly residential and small scale farming areas. Numerous private approaches line both sides of the roadway. Various businesses are located along the existing roadway. A significant number of pedestrians and bicyclists travel along the roadway, particularly as it approaches the City of Helena. Generally, there are few passing opportunities due to the high volumes of opposing traffic -- during peak hours, passing of slower vehicles is often not possible. Intersections along Montana Avenue in this area, particularly at the Custer Avenue intersection, are inadequate. This is particularly apparent during periods when the road surface is slick due to snow or ice. During these periods, south bound vehicles, after stopping at Custer Avenue, are slow to re-start and, as a consequence, vehicle queues commonly extend approximately 1 mile to the north during the morning rush hour.

By contrast, Interstate 15 is a four-lane divided highway with adequate shoulders and excellent horizontal and vertical alignments. Existing traffic volumes are low for a facility of this type. The highway operates and will continue to operate, even with the additional traffic which would result from the proposed new interchange, at a high level of service. Travel on this roadway is and will continue to be significantly more safe, efficient and convenient than on Montana Avenue.

This traffic shift, from Montana Avenue to Interstate 15, should improve safety, improve vehicle operating efficiency, improve travel times and decrease the urgency for improvements on North Montana Avenue.

The concept of an Interstate 15 interchange between Helena and Lincoln Road was first officially discussed in the 1970 Helena Transportation Plan. Although this plan concluded that no interchange was warranted at that time, it did recommend future re-evaluation of the need for this project. In 1980, at the request of the Helena Policy Coordinating Committee (now Transportation Coordinating Committee), the Montana Department of Highways contracted a comprehensive study of the entire I-15 corridor from Lincoln Road to Montana City (see Figure 2-1)[1]. The study recommended that:

> "....a package of improvements including one interchange north of Custer Avenue, an interchange at Custer Avenue and an interchange south of U.S. 12 would provide the optimum transportation benefits to the Helena Community."

The proposed North Helena Valley Interchange will provide one component of the above recommendation -- an interchange north of Custer Avenue.

---

1. Henningson, Durham & Richardson, Inc., A Study of the I-15 Corridor in the Vicinity of Helena, Montana, September 1980.

The need for an interchange at Mill Road, Sierra Road or Forestvale Road was again mentioned in the 1981 Helena Transportation Plan Update[2]. The plan recognized that Montana Avenue is one of two major corridors that carry a large portion of the city's traffic and indicates that many of the major intersections along this corridor have capacity problems resulting in difficulty in moving across town in a north-south direction. The plan also indicated that:

> "Housing growth in the valley has exerted a great pressure on North Montana Avenue to carry the increased traffic. The lack of access to the interstate in the valley creates a situation in which the two-lane Montana Avenue facility is approaching capacity while the four-lane interstate through the area carries a relatively light traffic volume. An interchange in the north valley would reduce the volumes on Montana Avenue, shorten overall travel times and minimize road user costs."

An interchange in the North Helena Valley was one of 7 major transportation network improvements recommended in the plan for construction during the period from the present (when the plan was adopted in 1982) to 1990.

In 1985, in response to a solicitation from the Montana Department of Highways, the Helena Transportation Coordinating Committee nominated Sierra Road Interchange as their number one priority for available I-4R funding. In 1987, the Montana Highway Commission approved a new interchange at the Sierra Road location.

The proposed project will provide quicker access and better response times for fire department and other emergency vehicles to and from Interstate 15[3].

4.2. TRAFFIC

The expected shift in traffic patterns is demonstrated on the following table showing projected traffic volumes with and without each of the proposed alternatives:

SUMMARY OF PROJECTED AADT

	1993 NO-BUILD	2013 N0-BUILD	1993 ALT A	2013 ALT A	1993 ALT B	2013 ALT B
MONTANA AVENUE:						
North of Sierra	4172	5619	5510	7458	5236	7052
Between Sierra & Forestvale	4656	6274	3800	5092	5992	8068
South of Forestvale	5106	6814	4050	5442	3680	5010
INTERSTATE 15:						
North of Interchange	4650	6270	5050	6740	5250	7078
South of Interchange	4650	6270	8540	11502	8950	12054

---

2. Robert Peccia & Associates, Helena Urban Transportation Plan, 1981 Update, adopted by the Helena Transportation Coordinating Committee, 03 February 1982.

3. Evans, G. Vern, Secretary, West Helena Valley Fire District Board of Trustees. Letter dated 28 November 1989.

SUMMARY OF PROJECTED AADT (Continued)

	1993 NO-BUILD	2013 N0-BUILD	1993 ALT A	2013 ALT A	1993 ALT B	2013 ALT B
SIERRA ROAD:						
West of Montana	1360	1831	2100	2908	972	1310
Between Montana & I-15	2422	3260	3154	4298	1928	2598
Between I-15 & Frontage	1525	2053	1616	2180	1168	1572
East of Frontage	681	918	934	1256	934	258
FORESTVALE ROAD:						
West of Montana	850	1144	850	1166	2068	2786
Between Montana & I-15	n/a	n/a	n/a	n/a	4088	5504
Between I-15 & Frontage	n/a	n/a	n/a	n/a	2308	3144
FRONTAGE ROAD:						
North of Sierra	397	533	572	770	572	734
Between Sierra & Forestvale	1487	2002	1142	1538	1830	2488
South of Forestvale	n/a	n/a	n/a	n/a	890	1198

The above information is also illustrated on Figures 4-1 through 4-6 on following pages.

As shown on the table and on the figures, the following significant changes in traffic patterns are expected:

- If any one of the proposed alternatives is constructed, 1993 traffic volumes on Montana Avenue south of Forestvale Road will decrease by approximately 24% to 36%. Traffic volumes on this section would not return to their pre-interchange 1993 levels until approximately the year 2013, a 20 year delay.

- If Alternative A-1 or A-2 is constructed, traffic volumes are projected to increase approximately 30% on Sierra Road between Montana Avenue and I-15 (in front of Rossiter School, a significant area of concern for parents and school officials). In contrast, if Alternative B is constructed, traffic volumes are projected to decrease by approximately 26% in the school area.

- If Alternative A-1 or A-2 is constructed, traffic volumes are expected to increase on I-15 north of the interchange by approximately 9% and south of the interchange by 83%. If Alternative B is constructed, traffic volumes are expected to increase on I-15 north of the interchange by 13% and south of the interchange by 92%.

The Summary of Projected AADT, above, also indicates that if Alternative A-1, A-2 or B is constructed, traffic volumes on Montana Avenue north of the interchange crossroad will increase by 26% to 32%. If Alternative B is constructed, traffic volumes on Forestvale Road west of Montana Avenue will more than double. Both roadways have adequate capacity to handle the increased traffic volumes and, as discussed in 7. ENVIRONMENTAL CONSEQUENCES, no significant impacts have been identified.

It is recognized that increased traffic volumes on Interstate 15 as it passes through the City of Helena, will place additional traffic on the existing interchanges at Cedar Street and at Prospect Avenue. A signal is planned at the Prospect Avenue Interchange and other measures to accommodate existing and projected traffic volumes, with or without the pro-

posed project, are being considered, planned and developed by the Montana Department of Highways.

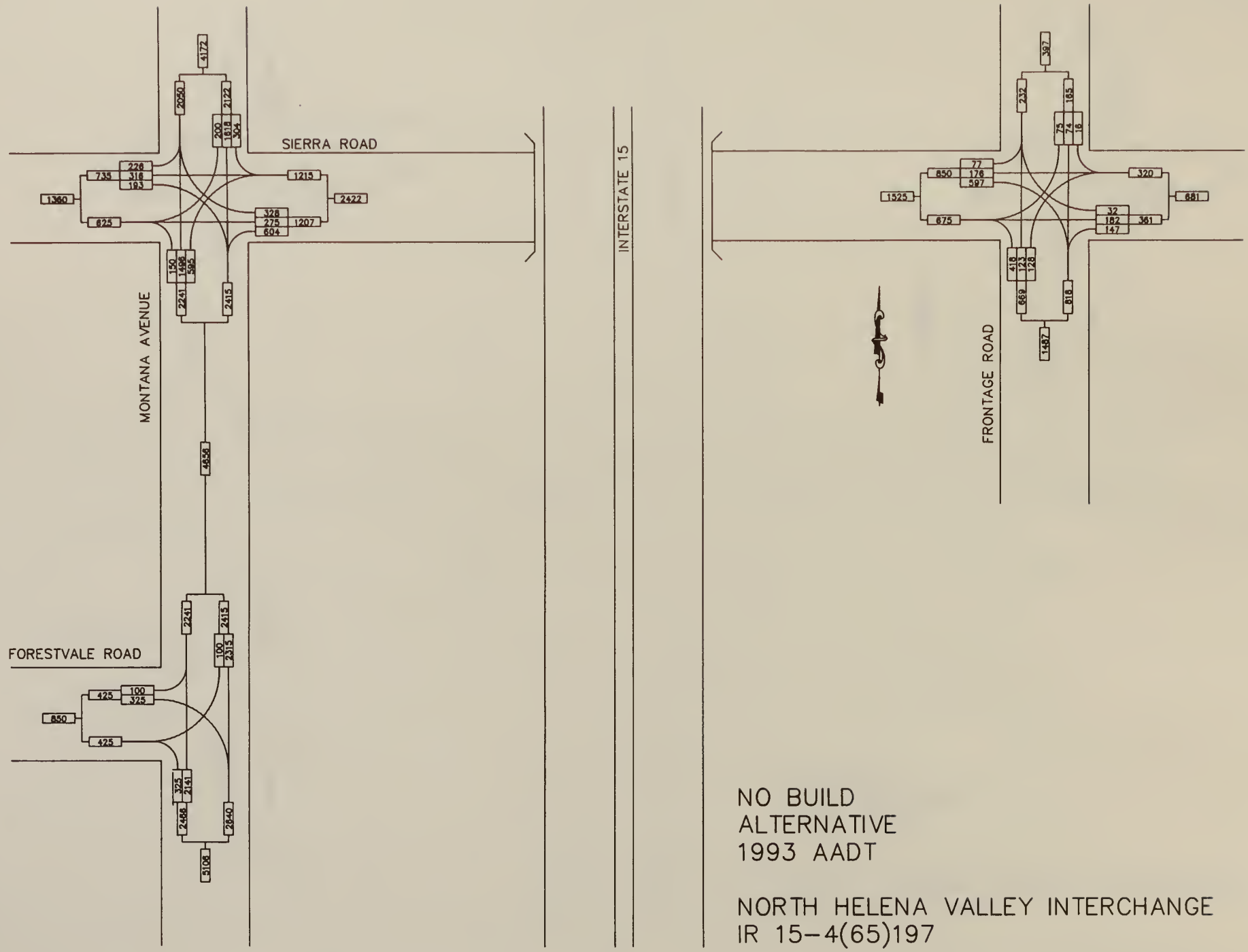
4.3. ACCIDENT RATES

The following is a summary of accident rates for the years 1987, 1988 and 1989 for several sections of Montana Avenue and for Interstate 15:

Roadway Section	Accidents Per Million Vehicle Miles
A. Montana Avenue, Cedar Street to Custer Avenue	8.25
B. Montana Avenue, Custer Avenue to 1/2 Mile North of Sierra Road	3.17
C. Montana Avenue, 1/2 Mile North of Sierra Road to Lincoln Road	2.26
D. Interstate 15, Cedar Street to Lincoln Road	1.04

As indicated above, accident rates are significantly higher on Montana Avenue south of the proposed interchange (Roadway Section B., above) and on Montana Avenue in the northern section of the City of Helena (Roadway Section A., above) than on corresponding sections of Interstate 15.

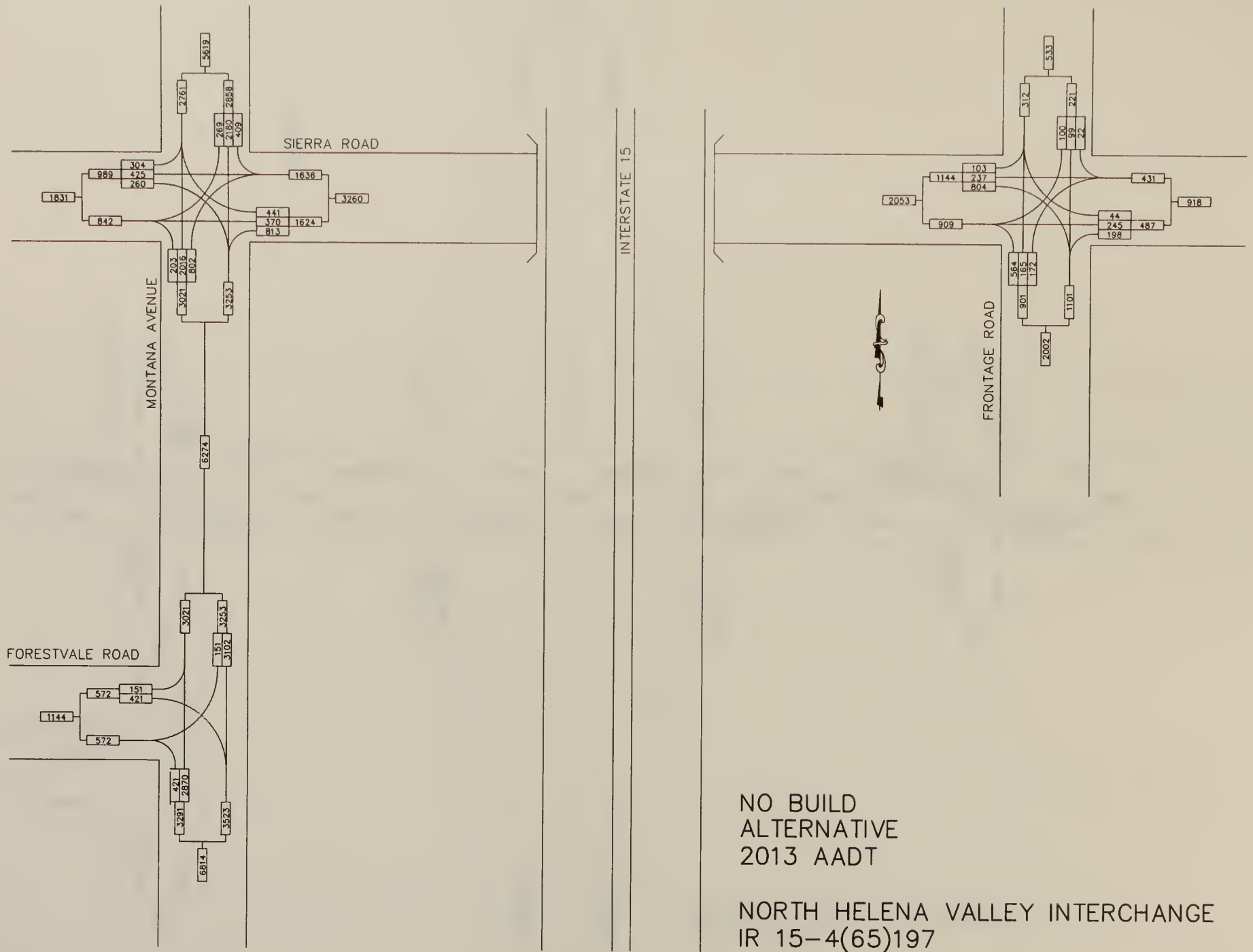
The shift of traffic, resulting from the proposed interchange as described in Section 4.2, from Montana Avenue to I-15, is therefore expected to result in a decrease in accidents.



NO BUILD
ALTERNATIVE
1993 AADT

NORTH HELENA VALLEY INTERCHANGE
IR 15-4(65)197

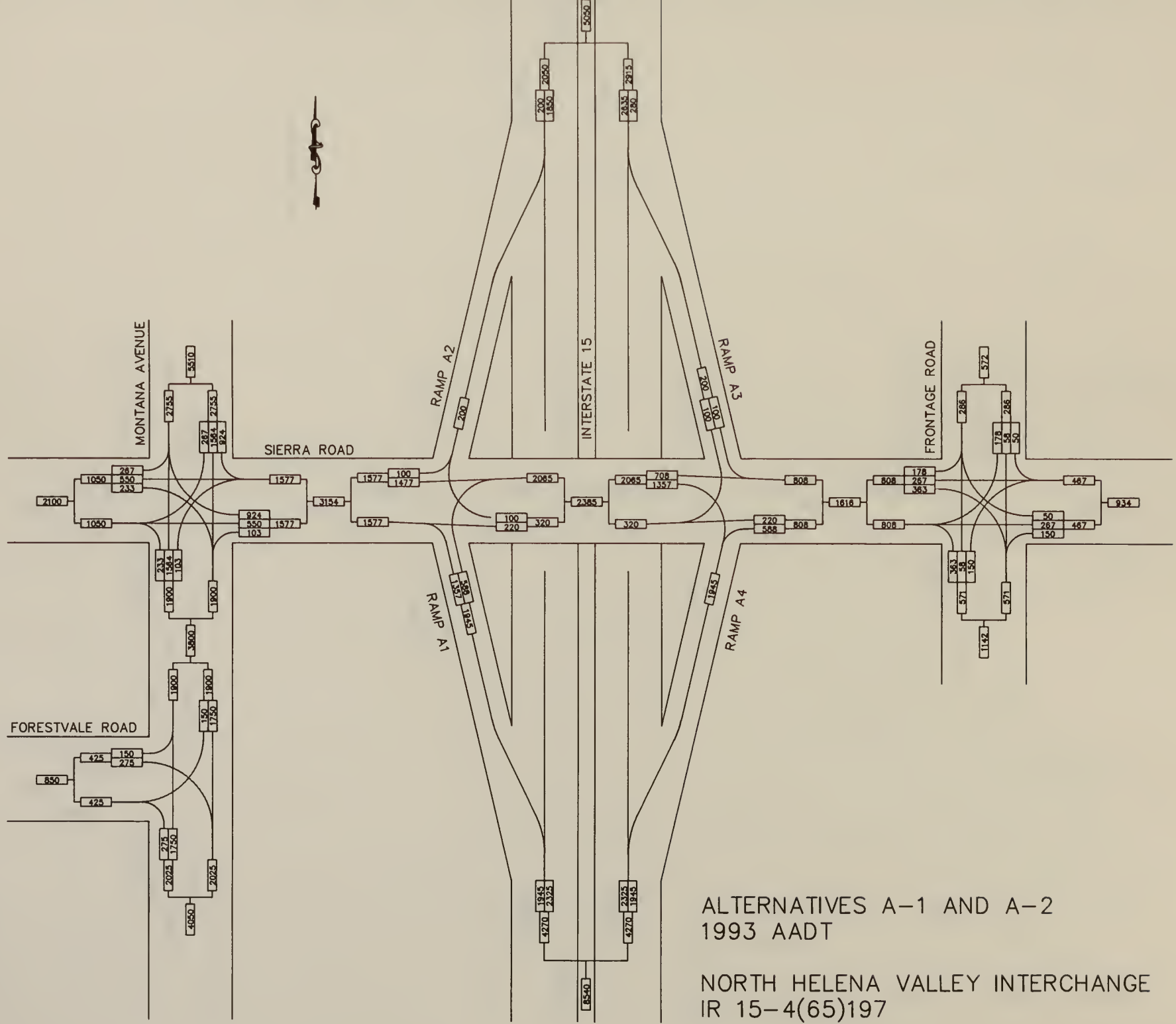
FIGURE 4-1



NO BUILD
ALTERNATIVE
2013 AADT

NORTH HELENA VALLEY INTERCHANGE
IR 15–4(65)197

FIGURE 4–2



ALTERNATIVES A-1 AND A-2
1993 AADT

NORTH HELENA VALLEY INTERCHANGE
IR 15-4(65)197

FIGURE 4-3

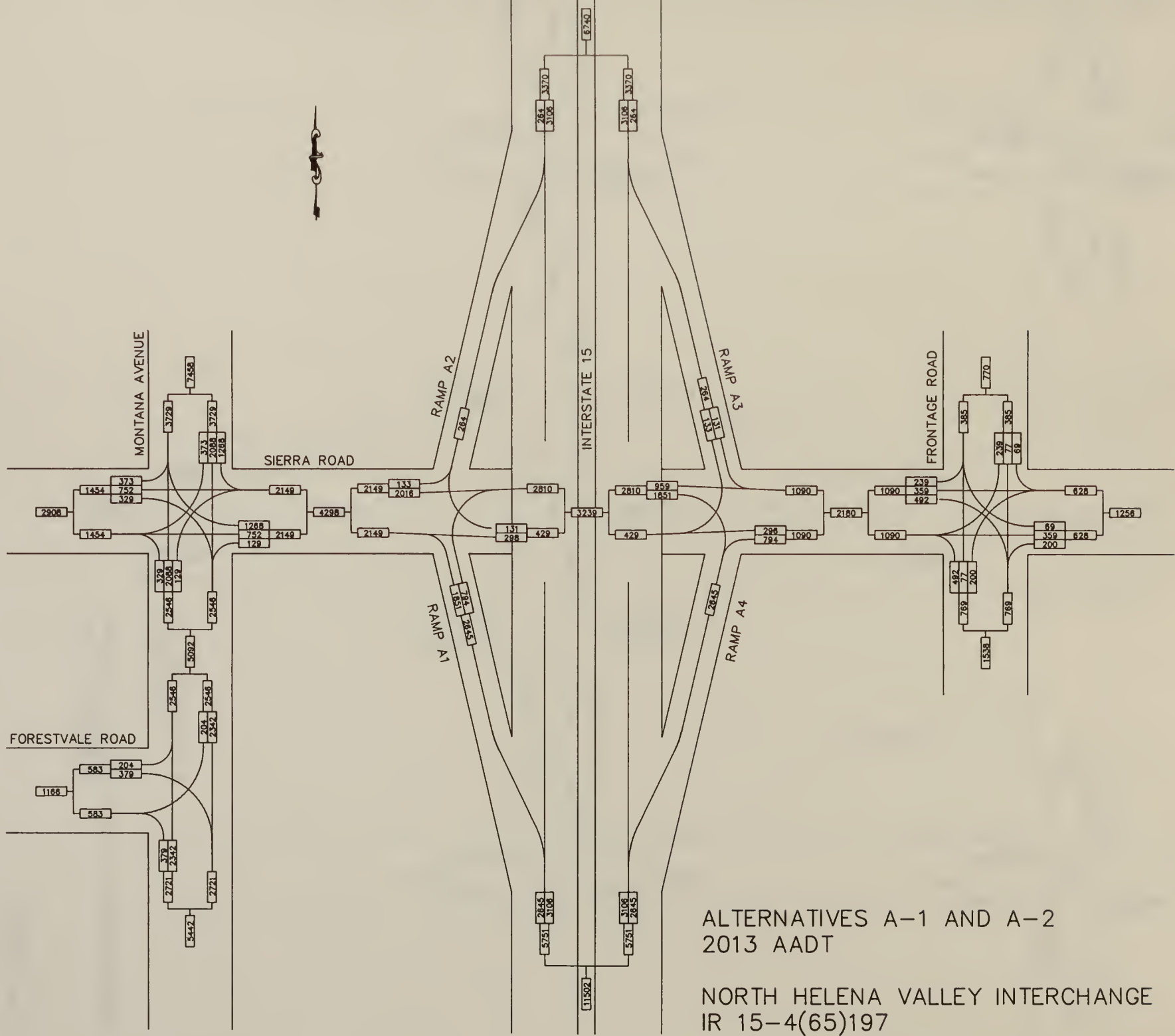
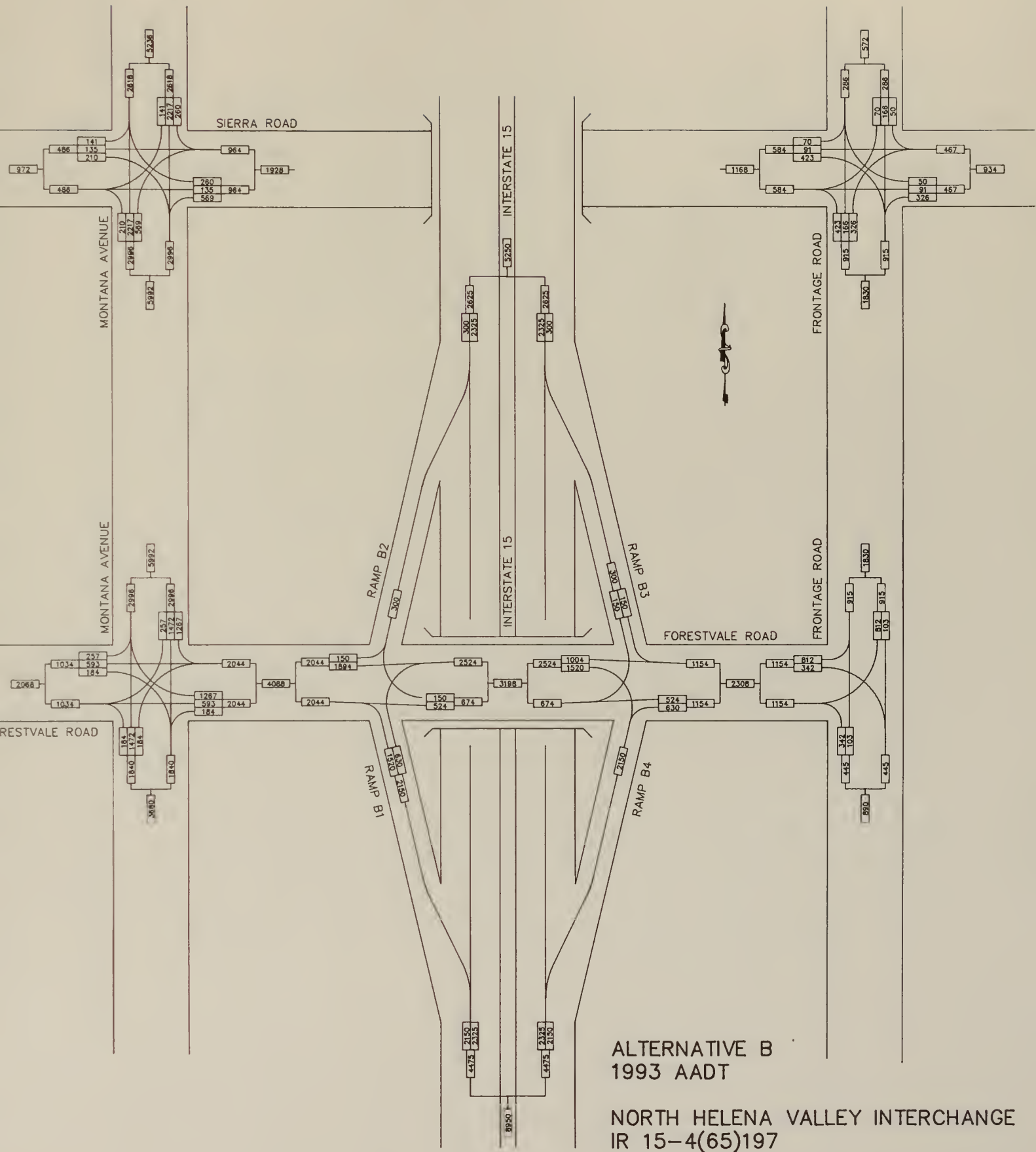


FIGURE 4-4

ALTERNATIVES A-1 AND A-2
2013 AADT

NORTH HELENA VALLEY INTERCHANGE
IR 15-4(65)197



ALTERNATIVE B
1993 AADT

NORTH HELENA VALLEY INTERCHANGE
IR 15–4(65)197

FIGURE 4–5

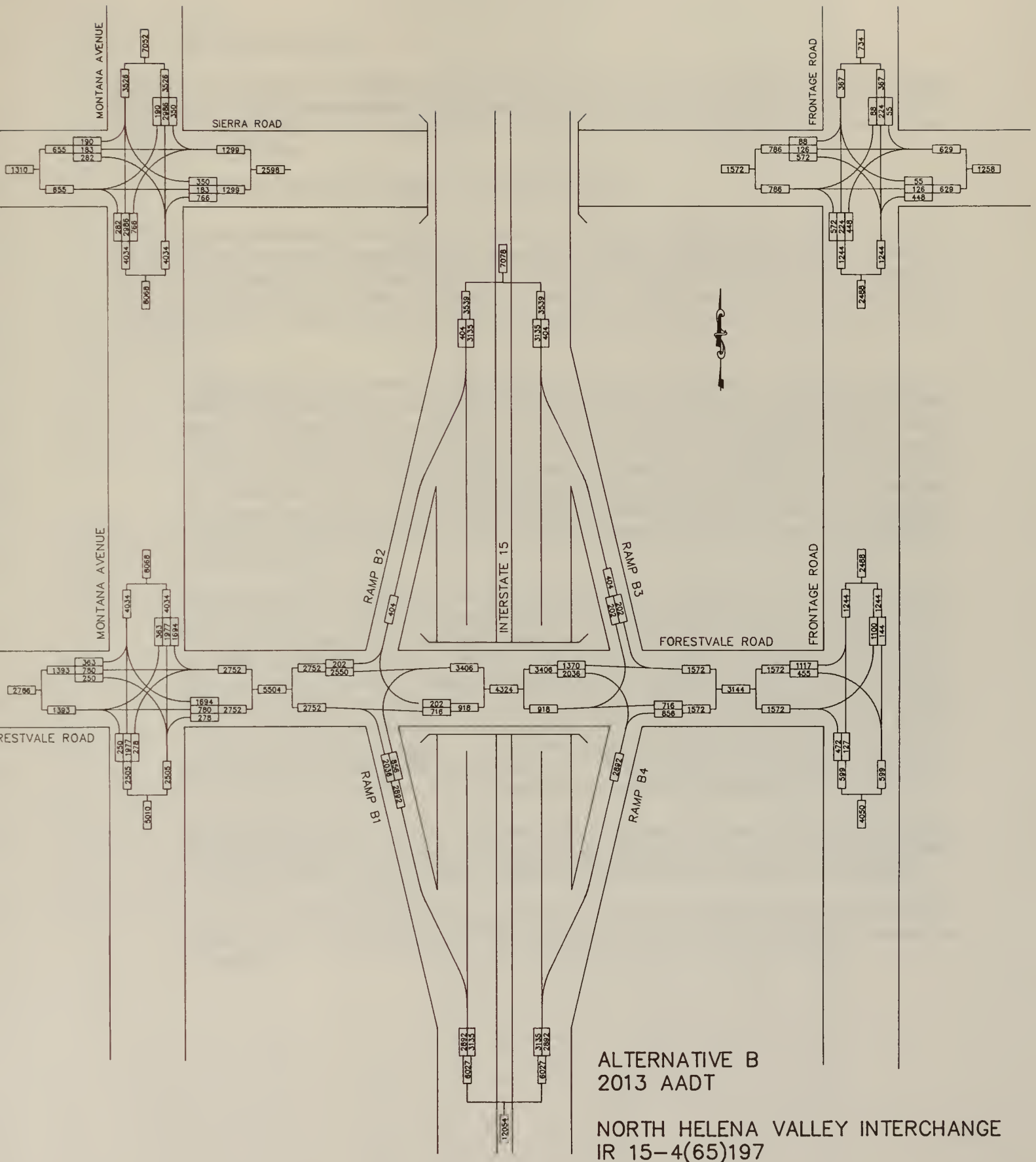

MONTANA AVENUE
SIERRA ROAD
FRONTAGE ROAD
INTERSTATE 15
RAMP B1
RAMP B2
RAMP B3
RAMP B4
FORESTVALE ROAD
ALTERNATIVE B
2013 AADT
NORTH HELENA VALLEY INTERCHANGE
IR 15-4(65)197

FIGURE 4-6

5. ALTERNATIVES

This section discusses the alternatives for the proposed project including all reasonable alternatives under consideration and those other alternatives which were eliminated from detailed study. This section also identifies the preferred alternative and explains the reasons for its selection.

5.1. ALTERNATIVES UNDER CONSIDERATION

The following alternatives for the construction of the proposed project are under consideration and are discussed in detail in this document. Approximate alignments are shown on Figures 5-1 through 5-2. Typical sections for the ramps and crossroads are shown Figure 5-3. Access control is proposed for all alternatives to prohibit vehicular or pedestrian approaches to I-15, to the ramps and to the crossroad within 300 feet of its intersection with the ramps.

Alternative A-1 is located at the existing crossing of I-15 over Sierra Road approximately 4 miles north of the existing Cedar Street Interchange. This alternative will use the existing bridge structure. The location of existing bridge piers restricts sight distance which will require that the ramp terminals (the intersection of the ramps with Sierra Road) for this alternative be constructed approximately 290 feet from the centerline of I-15. The existing bridge provides approximately 14 feet of vertical clearance over Sierra Road. Recommended standards require 16 feet. This alternative will also include improvements to the existing Sierra Road between Montana Avenue and I-15.

Alternative A-2 is located at the same location as Alternative A-1. This alternative will include construction of intersections of ramps with Sierra Road as close to the existing Interstate 15 as possible (approximately 175 feet from the centerline of I-15) to avoid impacts on adjacent features. This configuration will require adjusting the location of the existing bridge piers to provide sufficient sight distance and as a result, will require reconstruction of the existing bridge. The elevation of the bridge and I-15 will be increased to meet standard vertical clearance requirements for the crossroad under the bridge -- this will require complete reconstruction of approximately 1 mile of the existing Interstate 15. This alternative will also include improvements to the existing Sierra Road between Montana Avenue and I-15.

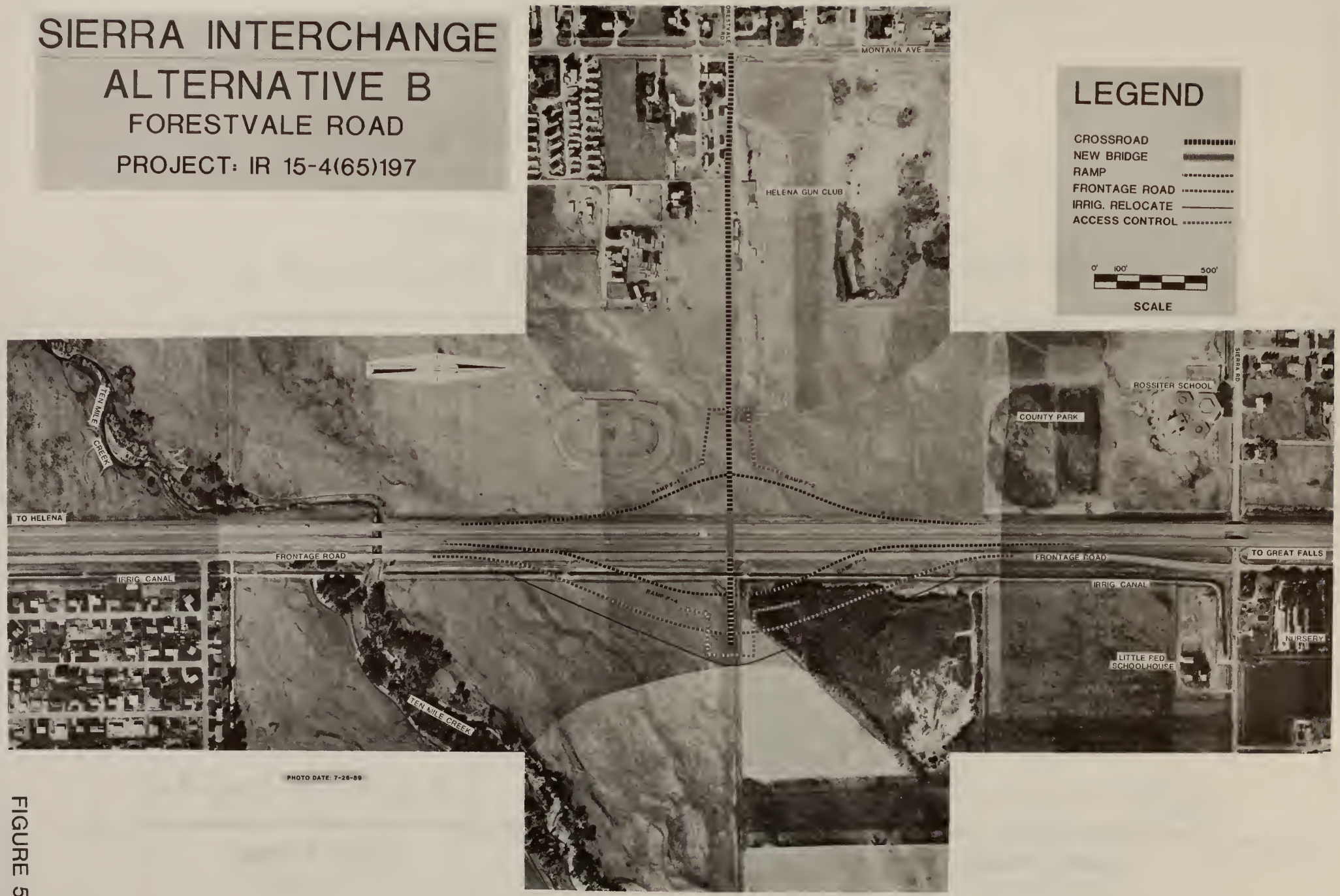
Alternative B is located approximately 3.5 miles north of the existing Cedar Street Interchange at an extension to the east (from Montana Avenue to I-15) of existing Forestvale Road. A new bridge structure over Interstate 15 will be constructed.

Though the No-Action Alternative will not satisfy any of the objectives of the proposed action, it is considered in this document and is used as a basis for evaluation of impacts.

SIERRA INTERCHANGE
ALTERNATIVE A
SIERRA ROAD
PROJECT: IR 15-4(65)197

FIGURE 5-1

SIERRA INTERCHANGE
ALTERNATIVE B
FORESTVALE ROAD
PROJECT: IR 15-4(65)197



LEGEND

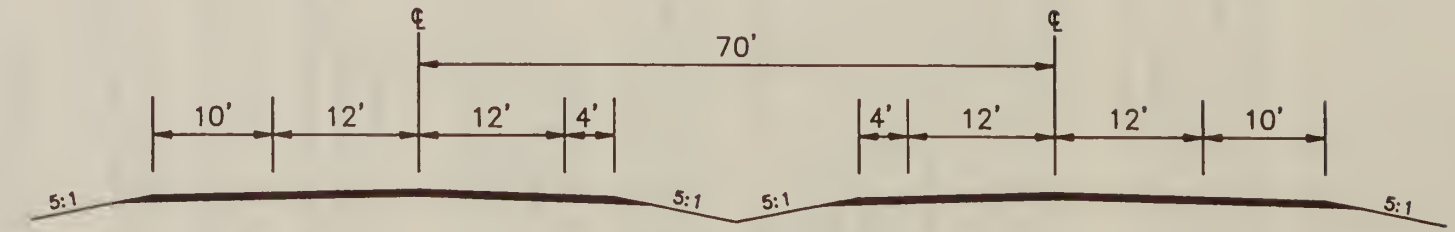
- CROSSROAD
- NEW BRIDGE
- RAMP
- FRONTAGE ROAD
- IRRIG. RELOCATE
- ACCESS CONTROL

0' 100' 500'

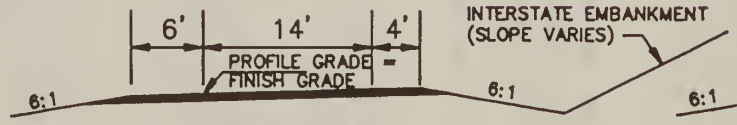
SCALE

FIGURE 5-2

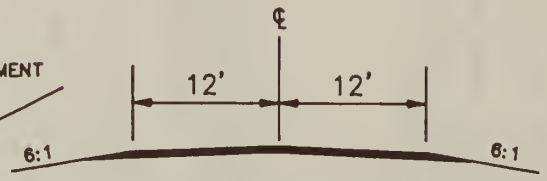
TYPICAL SECTIONS



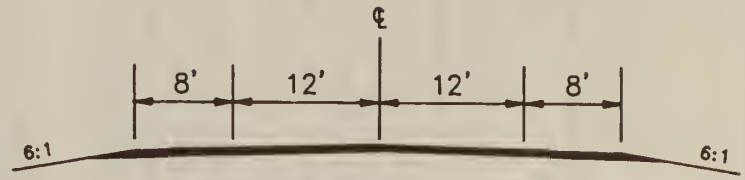
I-15 MAINLINE



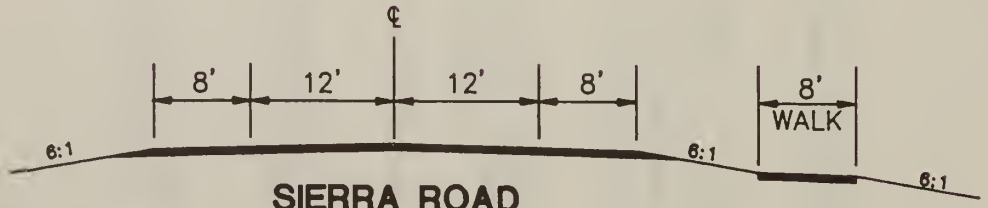
RAMPS



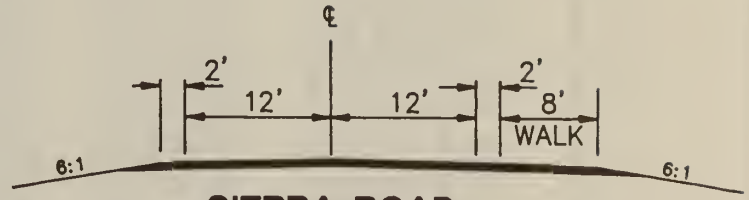
FRONTAGE ROAD



FORESTVALE ROAD



SIERRA ROAD
(WIDE ALT.)



SIERRA ROAD
(NARROW ALT.)

FIGURE 5-3

5.2. OTHER ALTERNATIVES

Other alternatives, including the following, have been considered, but were not selected for complete study and analysis in this document:

Alternative A-3. This alternative would include the construction of only Ramps S-1 and S-2, the south one-half of Alternative A-1 or A-2. This alternative was not considered viable since 1) it would provide no access to or from Interstate 15 north of Sierra Road, 2) it will create most of the same environmental impacts as Alternative A-1 or A-2 and 3) it would provide only minor overall savings in construction and right-of-way costs. This alternative was discussed at the public scoping meeting held 23 July 1990 and received no significant public support.

Alternative C. This alternative would be located at Mill Road, approximately 1/2 mile south of Alternative B above. This alternative is not considered desirable since it would require a large number of relocations and would have a substantial impact on Ten Mile Creek. It has received no significant public support during the public scoping process.

Alternative D. This alternative would be located approximately mid-way between Forestvale Road and Sierra Road. It is not considered desirable since 1) it would cut through the Helena Gun Club property and would place traffic too close to the shooting areas, 2) it would not connect well with any existing east-west streets, 3) it would be too close and would require widening of the existing Sierra Road overpass structure (to accommodate the north interchange ramps) and 4) the north ramp merge and diverge with I-15 would be located on existing vertical curves which do not have adequate sight distance.

5.3. PREFERRED ALTERNATIVE

Subject to the approval of the Montana Highway Commission and based on the data collected, studies completed and public and agency comment received to-date, the preferred alternative is Alternative B, for the following reasons:

- As indicated in Section 4.2, one of the purposes of this project is to decrease future traffic volumes on the heavily traveled North Montana Avenue and place it on the under-utilized Interstate 15. As indicated in Section 4.2, approximately 400 to 500 more vehicles per day will use I-15 with Alternative B than with Alternative A-1 or A-2.

- Alternative A-1 or A-2 will cause an increase in vehicle traffic volumes on Sierra Road near Rossiter School, increasing the related safety hazards. Alternative B should cause a decrease in traffic volumes in this area. See Section 4.2.

- No prime or unique farmland will be converted to highway right-of-way with Alternative B. See Section 7.2.

- Construction of Alternative A-1 or A-2 will require approximately 0.8 acres of land from Sierra Park. Alternative B will require no land from the park. See Section 7.3.4.2.

- Alternative B is preferred by the West Helena Valley Volunteer Fire Department because it will provide quicker access across and to Interstate 15. See Section 7.3.4.3.

- Alternative A-1 or A-2 will require relocation of the Rossiter School sanitary sewage drain field and several other drain fields. Alternative B will not affect any drain fields. See Section 7.3.5.1.

- Alternative A-1 or A-2 will require a significant amount of construction in a designated floodplain area where flood elevations are critical due to the school and residences in the area. Construction of Alternative A-1 or A-2 will require substantial measures to prevent increasing flood elevations and effects of the project in this area will still be uncertain. Alternative B has a much less significant involvement on flood plains and will be constructed in an area with few existing structures and low flood damage potential. See Section 7.7.

- Alternative A-1 or A-2 will negatively impact the Little Red Schoolhouse, a property listed on the National Register of Historic Places. Alternative B will have no impact on this site. See Section 7.10.

- Since Alternative B will encourage the most drivers to use I-15, it is expected to have the most beneficial impact on air quality. See Section 7.13.

- Alternative A-2 will affect Interstate 15 traffic during construction. Reconstruction of the Interstate 15 bridges and reconstruction to increase the elevation of I-15 to match the bridge will require that each side of the 4-lane highway be closed to traffic for approximately one year while traffic is maintained on the other. See Section 7.16.

- The Helena Transportation Coordinating Committee (TCC) has expressed support for Alternative B as the preferred alternative[4]. The TCC includes two Helena City Commissioners, two Lewis and Clark County Commissioners, a representative of the Butte District of the Montana Department of Highways and the Division Administrator of the Federal Highway Administration.

Final selection of an alternative will not be made until the alternatives' impacts and comments on the draft EIS and from the public hearing have been fully evaluated.

---

4. Helena Transportation Coordinating Committee, Minutes of 23 October 1990 Meeting, prepared 14 November 1990.

6. AFFECTED ENVIRONMENT

The following sections provide a description of the existing social, economic and environmental setting for the area affected by alternatives for the proposed project.

6.1. LAND USE

Land use in the area of Alternatives A-1 and A-2 includes the following:

Northwest Quadrant - Residential.

Northeast Quadrant - Tree nursery, residential and farming.

Southeast Quadrant - Little Red School House and farming.

Southwest Quadrant - Rossiter School and Sierra Park.

Sierra Road West of I-15 - Residential, church and a grocery store.

Land use in the area of Alternative B includes the following:

Northwest Quadrant - Gun club.

Northeast Quadrant - Abandoned gravel pit/wetland area and farming.

Southeast Quadrant - Farming.

Southwest Quadrant - Farming.

Forestvale Road Extension from Montana Avenue to I-15 - Gun club, farming and residential.

No land use zoning is currently in effect in the project area.

6.2. FARMLAND

The area east of existing Interstate 15 near Alternatives A-1 and A-2 is generally used for farming and is designated, by the Soil Conservation Service, as prime and unique farmland[5].

The area south of an extension of Forestvale Road (both east and west of I-15) near Alternative B is farmland but, according to the Soil Conservation Service, is not considered prime or unique farmland.

---

5. Kellog, Warren, District Conservationist, Soil Conservation Service, U.S. Department of Agriculture. Letter dated 05 June 1990.

6.3. SOCIAL AND ECONOMIC

6.3.1. Population and Social Characteristics

6.3.1.1. Population Trends

In the 1980s, Lewis and Clark County is estimated to have grown by about 10 percent, compared to 1 percent for the State of Montana as a whole. The county's population grew rapidly in the first half of the decade. In the latter 1980s, population growth was restrained by slow economic growth (see table below).

Population Trends
Lewis and Clark County, Helena, East Helena and Unincorporated Areas

	Lewis and Clark Co.	City of Helena	City of East Helena	Unincorp Areas
1950[6]	24,540	17,581	1,216	5,743
1960	28,006	20,227	1,490	6,289
1970	33,281	22,730	1,651	8,900
1980	43,030	23,938	1,647	17,445
1988[7]	47,000	24,650	2,100	20,250
1990[8]	47,500	25,500	1,600	20,400

The settlement of unincorporated areas around Helena has contributed importantly to the demand for a new interchange in the Helena valley. In the 1970s over 85 percent of the county-wide increase in population occurred in areas outside of Helena and East Helena[9]. In the 1980's an estimated 65 percent of county-wide population growth occurred outside of city boundaries.

The most prominent rural growth area was the Helena valley, which is generally bounded by Lincoln and Custer roads to the north and south and Lake Helena and Green Meadow drives to the east and west. The 1980 census reported the Helena valley population to be 6,277 (see table below).

---

6. Bureau of the Census, U.S. Department of Commerce, Census of Population, 1950, 1960, 1970 and 1980, published 1952, 1962, 1972, 1982.

7. Bureau of the Census, U.S. Department of Commerce, Local Population Estimates, 1989.

8. Estimates developed by Jim Boyer, socioeconomist, in 1990. Residential building permits, new septic tank permits, and changes in postal route customers were used to update the intercensal population estimates of the Bureau of Census.

9. Bureau of the Census, U.S. Department of Commerce, Census of Population, 1980, published 1982.

Helena Valley Population, 1980[10]

Census Enumeration District	Population	General Location
ED 992	1,536	East of I-15, north of Custer Ave., south of Lincoln Rd. and west of Lake Helena Dr.
ED 993	1,689	West of I-15, north of Sierra Rd., south of Lincoln Rd., and east of Green Meadow Dr.
ED 994A	3,052	West of I-15, north of Custer Ave., south of Sierra Rd., and east of Green Meadow Dr.
Total	6,277	

In the 1980s, new residential development continued in the valley on both sides of Interstate 15. The valley's 1990 population is estimated to be about 8,500.

6.3.1.2. Demographic and Social Characteristics

The most recent demographic information for Lewis and Clark County is from the 1980 U.S. Census. The Helena valley is settled by many young families. For this reason, residents of the valley tend to be younger and have larger households than residents of the City of Helena.

As with all of Lewis and Clark County, the Helena valley is racially homogeneous. The 1980 census reported 96.9 percent of valley residents classified themselves as being white. The largest racial minority population residing in the valley is Native American Indians. One hundred seventy Native Americans lived in the valley in 1980, 2.7 percent of its total population.

The 1980, per capita income for valley residents was about $6,570, which was lower than for the City of Helena ($7,755) and county as a whole ($7,724). The valley's lower per capita income also results from the prominence of larger, family-type, households. The City of Helena has more one-person and two income-households. In 1980, 8.2 percent of valley residents had incomes below federal poverty levels[11].

6.3.1.3. Population Projections

No population projections have officially been adopted for the City of Helena or for Lewis and Clark County. The National Planning Association (NPA) develops county population projections based on local economic data (see table below). The NPA projects Lewis Clark County to grow to 52,640 by the year 2000 and to 56,000 by 2010. The projection predicts population increases similar to that which occurred in the 1980s. Much of the new settlement would be expected to occur in the City of Helena and the Helena valley.

---

10. U.S. Department of Commerce, Bureau of the Census, Washington, D.C., Census of Population, 1980, published 1982.

11. Bureau of the Census, U.S. Department of Commerce, Census of Population, 1980, published 1982.

Population Projections
Lewis and Clark County, 1990-2010[12]

1990	47,900
1995	50,450
2000	52,640
2005	54,560
2010	56,000

6.3.2. Economy

6.3.2.1. Labor Force and Employment

In 1989, Lewis and Clark County's labor force averaged 26,059 persons and unemployment averaged 1,208 persons. The average annual unemployment rate was 4.6 percent which was lower than the state's 5.9 percent annual rate. Between 1979 and 1989, the number of employed county residents increased by about 7 percent[13]. In 1989, about 58 percent of the county's population was in the labor force.

The most recent data on employment by economic sector is for 1988. In 1988, the greatest shares of employment in Lewis and Clark County were in service type businesses (27 percent), retail trade (17 percent) and state government (15 percent)[14]. State government is the county's largest single employer. In 1990, the state's work force was about 4,100, causing the Capital Complex area to be a major destination area for commuter trips[15]. The location of employment continues to be centered within the City of Helena. The county has over 40 employers with more than 100 employees. All but three are located in the city. Most of the county's smaller employers are also located inside the city. Over 90 percent of county-wide retail and service business jobs are located in Helena[16].

The preponderance of residential development in the valley and continued concentration of employment in Helena has resulted in increased travel on Interstate 15, North Montana Avenue and other roads connecting valley residences with the city's employment centers.

6.3.2.2. Income Characteristics

In 1988, Lewis and Clark County residents received $667 million in personal income, which was 6 percent of the statewide total. The county's per capita income was $14,195 compared to a state average $12,903.

---

12. National Planning Association Data Services Inc., Washington, D.C., County Population Projections, 1989.

13. Research and Analysis Bureau, Montana department of Labor and Industry, Montana Employment and Labor Force Trends; 1st Quarter 1990.

14. Bureau of Economic Analysis, U.S. Department of Commerce, Regional Economic Information System, Employment by Place of Work, CA-25.MT., 1989.

15. Schenkle, Kathy, Labor Analyst, Montana Department of Labor and Industry. Telephone conversation on 01 June 1990 with Jim Boyer, socioeconomist representing Morrison-Maierle/CSSA.

16. Bureau of the Census, U.S. Department of Commerce, Census of Retail Trade, 1987 and Census of Selected Service Businesses, 1987, published 1989.

Total personal income includes: the occupational earnings (wages and salaries and proprietors' income); investment income (dividends, interest, and rent income); and transfer payments received by county residents. In 1988, earnings were 66 percent, investment income 16 percent, and transfer payments 18 percent of total personal income for county residents[17].

Earnings in service type businesses accounted for the greatest share of occupational earnings for Lewis and Clark County residents. State and federal government employment and earnings in retail trade and utility and communication businesses also accounted for significant portions of resident earnings.

6.3.2.3. Commercial Businesses

The new population settlement in the valley and continued centralization of commercial activity in the city has contributed to increased travel on north-south roads connecting the valley with the city's commercial areas.

Helena serves as a regional trade center for west-central Montana. In 1987, the volume of retail sales in Lewis and Clark County ranked 6th among Montana counties, accounting for 6.6 percent of statewide retail sales. Comparing 1977 and 1987, county retail businesses (with payrolls) increased from 311 to 402[18].

In 1987, service sector receipts for county businesses were $110 million, ranking 5th among Montana counties and accounting for 7.8 percent of statewide receipts. From 1977 to 1987, county service sector businesses (with payrolls) increased from 198 to 463[19].

Most commercial businesses continue to be located within the City of Helena. In 1987, Helena accounted for 85 percent of retail business establishments (with payrolls) and 93 percent of county-wide retail sales. Helena also accounted for 92 percent of service business establishments (with payrolls) and 95 percent of county-wide service business receipts. From 1977 to 1987, 80 percent of the net-increase in retail establishments and 92 of the net-increase in service establishments occurred within the city[20].

6.3.3. Housing Characteristics

The 1980 census reported 17,389 year-round housing units in Lewis and Clark County, of which 16,066 were occupied. Fifty-nine percent of county-wide housing units were located within the City of Helena. Since 1980, an estimated 2,500 housing units have been added to the county-wide housing stock. About 900 of the new units have been developed in the City of Helena.

---

17. Bureau of Economic Analysis, U.S. Department of Commerce, Personal Income by Place of Residence, CA-5.MT., published 1989.

18. Bureau of the Census, U.S. Department of Commerce, Census of Retail Trade, 1987, published 1989.

19. Bureau of the Census, U.S. Department of Commerce, Census of Selected Service Businesses, 1987, published 1989.

20. Bureau of the Census, U.S. Department of Commerce, Census of Retail Trade, 1987 and Census of Selected Service Businesses, 1987, published 1989.

The 1980 census reported 2,129 year-round housing units in the Helena valley, of which 2,029 were occupied. An estimated 750 to 800 additional homes have been located in the valley since the census. The valley's housing stock is primarily single family homes and mobile homes. In 1980, single family detached houses accounted for 57 percent and mobile homes 38 percent of the valley's housing stock. Multifamily housing accounted for only 5 percent of the area's housing units. In 1980, 90 percent of valley housing units were occupied by their owners. The census reported vacancy rate for valley housing was 6 percent, which was lower than for the City of Helena and the county as a whole[21].

6.3.4. Public and Semi-Public Facilities

6.3.4.1. Schools

The most prominent public facilities in the Helena valley are its schools. New settlement and the prevalence of young families in the valley's population have contributed to increases in enrollments at most valley schools.

Of particular interest is the Rossiter Elementary School. Rossiter School is included in Helena School District 1. The school is located on Sierra Road, west of Interstate 15. Its east-side playground area abuts Interstate 15 right-of-way. The playground and highway are separated by a fence. The geographic area served by the school includes areas on both sides of Interstate 15.

The school provides kindergarten through fifth grade. The 1989-1990 enrollment at the school was 533. School enrollment could increase in the 1990s due to further population growth in the valley[22].

6.3.4.2. Parks

The Lewis and Clark County Park Board oversees the administration of county park land. The county's Sierra Park is located behind (south of) Rossiter Elementary School as shown on Figure 6-1. A fence separates the eastern border of the park area from Interstate 15. The park is designated as neighborhood and is designed for both active and passive recreation. The park receives frequent use by school-age children and is used regularly in school activities[18]. The park is only partially developed. Its master plan calls for staged development over a period of years.

This park has received Land and Water Conservation Fund (L&WCF) assistance so it is subject to the provisions of Section 6(f) of the L&WCF Act as amended. Should changes in the use of this land be required (such as conversion of park land to highway right-of-way), approval will be required from the Secretary of the Interior. The substitution of other properties of at least equal fair market value and reasonably equivalent usefulness and location for the recreation lands to be taken will also be required[23].

---

21. Bureau of the Census, U.S. Department of Commerce, Census of Population, 1980, published 1982.

22. Sexton, Karen, Principal, Rossiter School, Helena, Montana. Personal interview, 01 June 1990, with Jim Boyer, socioeconomist representing Morrison-Maierle/CSSA.

23. Strait, Richard A., Associate Regional Director, Planning and Resource Preservation, National Park Service, United States Department of the Interior, letter dated 11 September 1989.

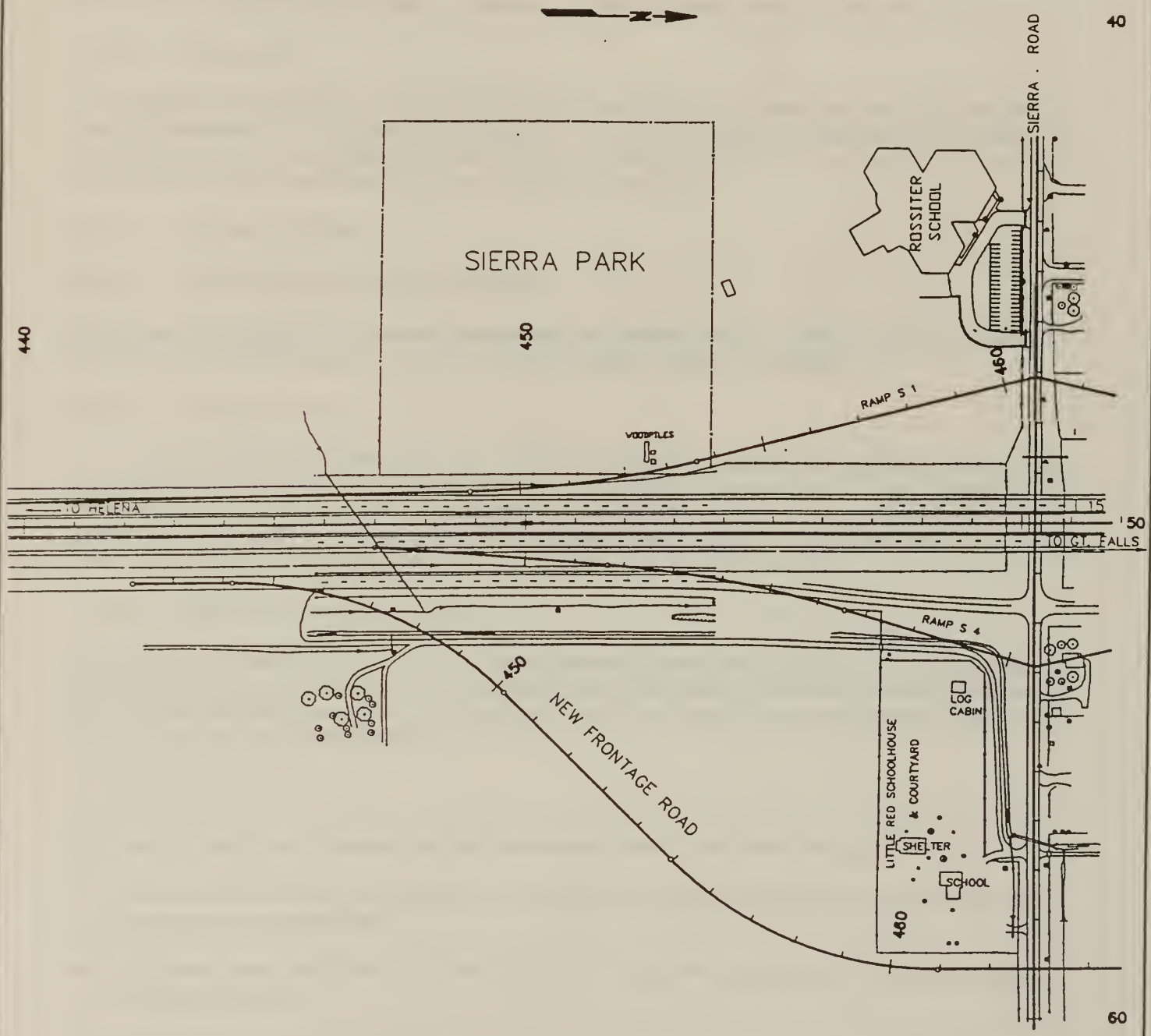
PARK LAND

& CULTURAL RESOURCES

NORTH VALLEY INTERCHANGE

IR 15-4(65)197

ALTERNATIVE A-1



SITE MAP

SCALE: 1" = 300'

FIGURE 6-1

6.3.4.3. Fire Protection

The West Helena Valley Volunteer Fire Department provides fire protection to property on both sides of Interstate 15 and also provides services for some types of highway emergencies. The fire station is located on Montana Avenue south of Forestvale Road. The absence of nearby Interstate 15 access increases response time to the highway and areas east of I-15[24].

6.3.4.4. Churches

The Helena Valley Baptist Church is located on Sierra Road, west of Rossiter School.

6.3.4.5. Museums

As described in Section 6.10, the Little Red School House is located on Sierra Road to the east of Interstate 15. The school operates as a public museum, replicating rural education in Montana in the late 1800s and early 1900s. A small log cabin is also located on the site. The school house is operated by a non-profit corporation.[25].

6.3.5. Private Facilities

6.3.5.1. Drain Fields and Sprinkler Systems

Waste water drain fields of several residences are located in the vicinity of Sierra Road and Interstate 15. Private sprinkler systems also are located near the highway.

6.3.5.2. Valley Nursery

The Valley Nursery, a commercial tree and shrub nursery, operates a growing area on the northeast corner of the Sierra Road and Frontage Road Intersection. Valley Nursery also operates a retail outlet in the City of Helena. Its valley growing area is the source of the merchandise for sale at its city outlet. The Valley Nursery also uses portions of the growing area to conduct long-term research on cold climate trees and shrubs[26].

6.3.5.3. Golden Acres Trailer Court

The Golden Acres Trailer Court is a small mobile home park located on the east side of Montana Avenue and south of Forestvale Road. The park contains eight mobile homes. Four of the mobile home sites are located in close proximity to the proposed Forestvale Road extension for Alternative B[27].

---

24. Evans, G. Vern, Secretary, West Helena Valley Fire District Board of Trustees. Letter Dated 28 November 1989.

25. Peterson, Floy, Board Member, Little Red School House. Telephone conversation, 14 June 1990, with Jim Boyer, socioeconomist representing Morrison-Maierle/CSSA.

26. Berg, Clayton, Owner, Valley Nursery. Telephone conversation, 14 June 1990, with Jim Boyer, socioeconomist representing Morrison-Maierle/CSSA.

27. Baumberger, Dick, Manager, Golden Acres Trailer Courte. Telephone conversation, 15 June 1990, with Jim Boyer, socioeconomist representing Morrison-Maierle/CSSA.

6.3.5.4. West Mont Group Home

The West Mont Corporation operates a group home on the corner of Montana Avenue and Forestvale Road. The eight group home residents are developmentally and mentally disabled. Residents are not capable of living independently and require a high level of supervision. Traffic on north Montana Avenue poses a potential safety hazard to the group home residents. The West Mont Corporation is considering a new location for the group home[28].

6.3.5.5. Helena Gun Club

The Helena Gun Club is located on the north side of the proposed Forestvale Road extension for Alternative B, between Montana Avenue and Interstate 15. Facilities include a club house, trap-shooting ranges and travel trailer spaces for out-of-town visitors. The travel trailer spaces are located along the north side of the proposed Forestvale Road extension for Alternative B. Two mobile homes are parked at these facilities on a semi-permanent basis. Use of gun club facilities occurs mainly in the evenings and weekends[29].

6.3.6. Taxation

In 1989-1990, the taxable valuation of Lewis and Clark County was $65.3 million, which ranked 7th among Montana counties. About 55 percent of the county tax base is located within the City of Helena (see table below). The per capita taxable value for the county was about $1,350 which is well below the average for the state and reflects the absence of major industrial facilities or natural resource developments. The residential and commercial land and improvements constitute about 60 percent of the county tax base.

Taxable Values for Selected Taxing Jurisdictions
Lewis and Clark County, Montana, 1989-199

City of Helena	$35,881,228
Helena School Dist. 1 (Elem.)	39,714,847
Helena School Dist. 1 (H.S.)	61,190,143
Lewis and Clark County Total	65,255,739

In 1989-1990, Helena valley property was taxed by the county government's 79.79 mill levy and the Helena School District's 275.01 mill levy[30]. Rural fire districts, lighting districts, the county conservation district, the mosquito control district and other rural service districts also imposed levies or user fees on valley property to finance local services.

6.4. PEDESTRIANS AND BICYCLISTS

As indicated in Section 6.3.4.1, the existing Rossiter School is located adjacent to Alternatives A-1 and A-2. Over 500 students, grades kindergarten through 5, attend Rossiter School. About half of the students walk or ride bicycles to the school. Other students are

---

28. Plaska, Tim, Habilitation Services Supervisor, West Mont Corporation. Telephone conversation, 12 June 1990, with Jim Boyer, socioeconomist representing Morrison-Maierle/CSSA.

29. Husby, Earl, President, Helena Gun Club. Telephone conversation, 14 June 1990, with Jim Boyer, socioeconomist representing Morrison-Maierle/CSSA.

30. Office of the Assessor, Lewis and Clark County, Taxable value and mill levy fact sheets, 1989.

bussed or driven to school by parents. There are no sidewalks on either side of Sierra Road. Students who walk or bike to school travel along the shoulder of the road.[31]

Concern has been expressed by a significant number of parents of school children walking or biking to school with the increasing traffic on the existing Sierra Road. They have indicated that they feel a safety hazard already exists.

There is little or no existing pedestrian or bicyclist use on Forestvale Road or in the area of Alternative B.

6.5. NOISE

Ambient noise measurements were taken at selected locations as described below and as listed in the following table. Most of the locations selected were residences representative of those closest to existing and proposed centerlines. Two measurements were taken at the Rossiter School on Sierra Road and one measurement was taken at the Little Red School House Park. Existing peak hour noise levels are shown on the following table:

ROADWAY/ SITE NO.	LOCATION	EXISTING PEAK HOUR Leq(H)dBA
FORESTVALE RD		
1	Residence, West of Montana Avenue	51
2	Residence, East of Montana Avenue	65
3	Residence, West of I-15	53
4	Residence, East of I-15	54
SIERRA RD		
5	Residence, West of Montana Avenue	53
6	Residence, East of Montana Avenue	50
7	Rossiter School, North Side	56
8	Rossiter School, East Side	56
9	Little Red Schoolhouse, Park	56
10	Residence, East of I-15	58

The Noise Abatement Criteria (NAC) for Category B which includes schools, residences, churches and public meeting facilities is Leq(h) equal to 67 dBA. This is the level at which negative noise impacts begin to occur. As indicated above, noise levels at all monitoring sites are well below the NAC except at Site No. 2 where the noise level is 65 dBA.

Noise monitoring site locations are described in more detail as follows:

- Site 1 is at a residence 55 feet north and over 1200 feet west of the centerlines of Forestvale Road and Montana Avenue.

- Site 2 is located at a residence 60 feet south and 60 feet east of the centerlines of Forestvale Road extension and Montana Avenue.

---

31. Sexton, Karen, Principal, Rossiter School, Helena, Montana. Personal interview, 01 June 1990, with Jim Boyer, socioeconomist representing Morrison-Maierle/CSSA.

- Site 3 is at a residence located 110 feet south of the centerline of Forestvale Road extension, 400 feet east of the centerline of Montana Avenue and 2000 feet west of the centerline of I-15.

- Site 4 is located at a residence 900 feet east of the centerline of I-15 and 300 feet east of the relocated frontage road of Alternative B.

- Site 5 is located at a residence 60 feet north and 1200 feet west of the centerlines of Sierra Road and Montana Avenue.

- Site 6 is located at a residence 90 feet south and 720 feet east of the centerlines of Sierra Road and Montana Avenue.

- Site 7 is located at the north side of the Rossiter School and is 80 feet south of the centerline of Sierra Road, 670 feet west of the centerline of I-15 and 500 feet west of the centerline of the proposed southbound on-ramp for Alternative A-1.

- Site 8 is located at the east side of the Rossiter School and is 280 feet south of the centerline of Sierra Road, 495 feet west of the centerline of I-15 and 260 feet west of the centerline of the proposed southbound on-ramp for Alternative A-1.

- Site 9 is in the Little Red School House Park and is located 145 feet south of the centerline of Sierra Road, 705 feet east of the centerline of I-15 and 406 feet east of the centerline of the northbound off-ramp of Alternative A-1.

- Site 10 is located at a residence 90 feet north of the centerline of Sierra Road, 500 feet east of the centerline of I-15 and 230 feet east of the centerline of the northbound off-ramp of Alternative A-1.

6.6. WATER QUALITY

Ten Mile Creek crosses Interstate 15 just outside the south construction limit of Alternative B.

The U.S. Bureau of Reclamation has irrigation water carriage facilities in the immediate vicinity of all of the proposed alternatives[32].

This reservoir and canal system is operated by Helena Valley Irrigation District. A primary canal in the water delivery system closely parallels the east side of Interstate 15, distributing water to northern sections of the Helena valley. The irrigation project is operated from April through October. Most irrigation in the valley is for hay production[33].

There are no other rivers, streams, lakes, reservoirs or other impoundments of water in the project area.

---

32. Wedeward, J. (Jim) L., Project Manager, Montana Projects Office, Great Plains Region, Bureau of Reclamation, U.S. Department of the Interior. Letter dated 01 November 1989.

33. Olson, Gene, Helena Valley Irrigation District. Telephone conversation, 18 May 1990, with Jim Boyer, socioeconomist representing Morrison-Maierle/CSSA.

Ground water in the area of the proposed project ranges in depth from 2 feet to 20 feet[34]. Residences and businesses in the area rely on the aquifer as a sole source for potable and irrigation water.

6.7. FLOODPLAINS

Both the Sierra Road (Alternatives A-1, A-2 and No-Action) and Forestvale (Alternative B) sites are affected by the Ten Mile Creek floodplain. Lewis and Clark County is participating in the flood insurance program and a Flood Insurance Study (FIS)[35] is available for Lewis and Clark County which includes floodplain mapping covering both sites. The principal floodplain management tool is the 100-year flood delineation and elevations.

The Tenmile Creek floodplain is complex due to the substantial overbank and sheet flooding which occurs in the Helena Valley. The creek above the Helena valley is in a confined floodplain. The Tenmile Creek channel in the Helena Valley lies on an alluvial plain. Upon entering the valley floor, the creek channel capacity is reduced, which results in greater overbank flows. The stream channel is perched, or higher than the surrounding overbank in many areas. This causes the flood waters in the overbanks to flow away from the stream channel and does not allow them to rejoin.

The sheet flooding conditions to the north of the Tenmile Creek channel in the valley is shown on Figures 6-2 and 6-3. The figures show the location of the Tenmile Creek channel and the shallow sheet areas identified as Zone B.

A large portion of the sheet flow travels to the Sierra Road site. During past floods, this water has ponded behind Sierra Road until it overtopped the roadway and entered a drainage channel on the north side of Sierra Road which parallels I-15. This ponding has threatened to flood the Rossiter School building. The flows entering the drainage channel are eventually discharged to Lake Helena by an agricultural drain system. This system is owned and maintained by the Helena Valley Irrigation District and has suffered substantial damage in past flood events.

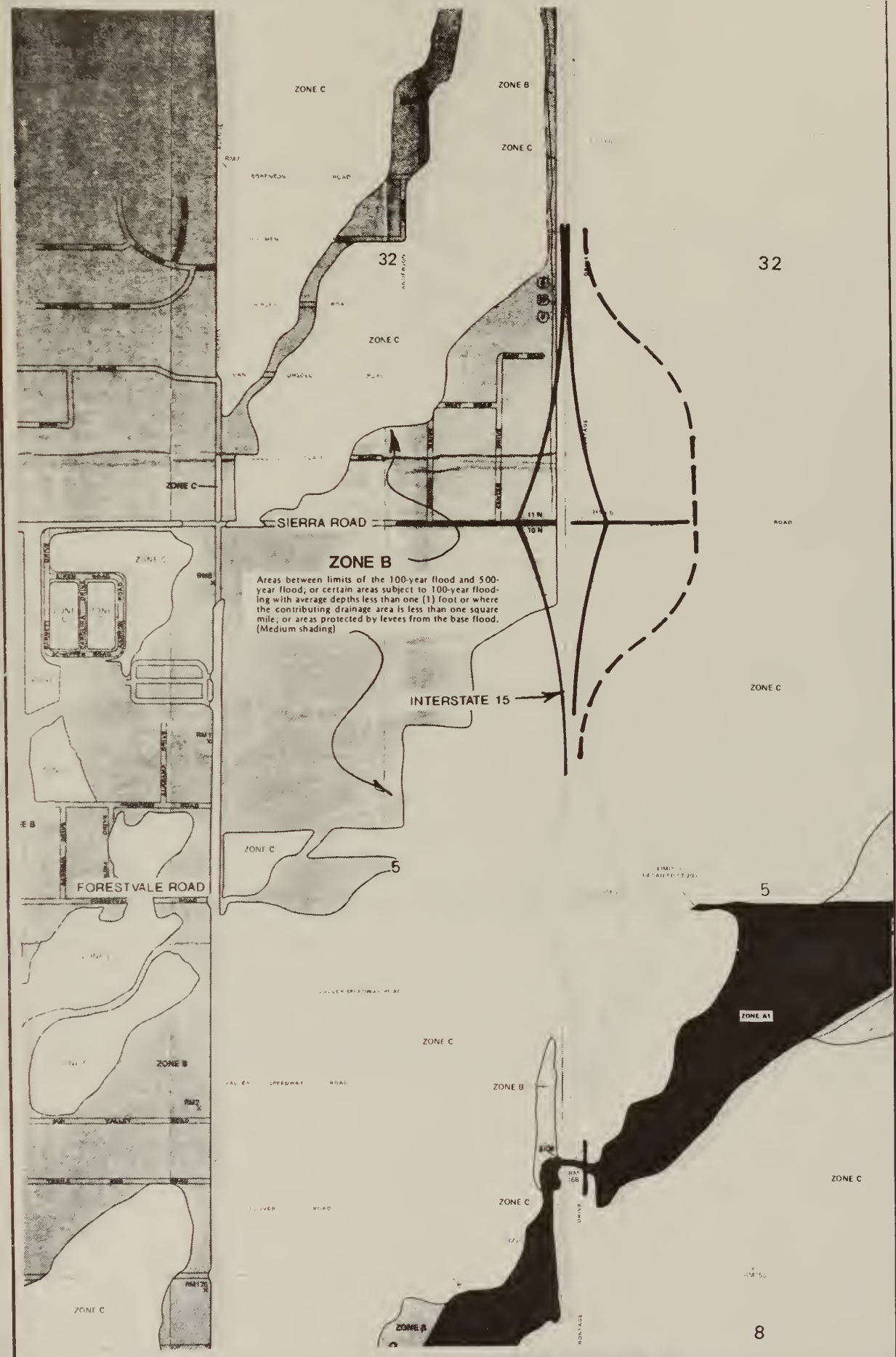
The Flood Insurance Study found that for existing conditions, the 100-year flood flow for Tenmile Creek where it enters the valley equals 3,365 cfs. Between Green Meadow Drive and Interstate 15, flows greater than 800 cfs begin to leave the channel and cause sheet flooding to the north of the channel. These sheet flows do not re-enter the channel. The peak flow at the Interstate 15 bridge during the 1981 flood was measured at 1,200 cfs. This flow is considered the maximum possible flow downstream of I-15 because the north bank elevations upstream of the bridge will be overtopped. Therefore, during a 100-year flood, approximately 2,165 cfs leave the Tenmile Creek channel and cause shallow sheet flooding across the Helena Valley west of I-15. Conditions in this area during the 1981 flood are shown on photographs on Figure 6-4.

The overflow just above the I-15 bridge has not occurred during past flood events, but could occur if upstream conditions were to change. This overflow will flow north along the west side of I-15 and cross both the Forestvale and Sierra Road sites. The location and extent of sheet flooding will change with changing conditions in the valley. For instance, a

---

34. United States Department of the Interior, Geological Survey, Hydrologic Data from Selected Wells in the Helena Valley, Lewis and Clark County, Montana, Open-File Report 79-1676, 1981.

35. Federal Emergency Management Agency, Federal Insurance Administration, Denver, Colorado, Flood Insurance Study, Lewis and Clark County, Montana, 1983.



KEY TO MAP

500 Year Flood Boundary	ZONE B
100 Year Flood Boundary	
Zone Designations	ZONE A1
100 Year Flood Boundary	
500 Year Flood Boundary	ZONE B
Base Flood Elevation Line With Elevation in Feet**	513
Base Flood Elevation in Feet Where Uniform Within Zone**	IEL 987
Elevation Reference Mark	RM7×
Zone D Boundary	
River Mile	×M15

**Referenced to the National Geodetic Vertical Datum of 1929

EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined
AO	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined
A1 A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood (Medium shading)
C	Areas of minimal flooding (No shading)
D	Areas of undetermined, but possible, flood hazards
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined
V1 V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined

NOTES TO USER

Certain areas not in the special flood hazard areas (zones A and V) may be protected by flood control structures.

This map is for flood insurance purposes only; it does not necessarily show all areas subject to flooding in the community or all planimetric features outside special flood hazard areas.

For adjoining map panels, see separately printed Index to Map Panels.

INITIAL IDENTIFICATION
DECEMBER 27, 1974

FLOOD HAZARD BOUNDARY MAP REVISIONS
SEPTEMBER 13, 1977

FLOOD INSURANCE RATE MAP EFFECTIVE
APRIL 1, 1981

FLOOD INSURANCE RATE MAP REVISIONS
Map revised September 4, 1985 to change flood plain boundaries, zone designations, base flood elevations, corporate limits, scale, cultural features, or map format.

To determine if flood insurance is available in this community, contact your insurance agent, or call the National Flood Insurance Program, at (800) 638-6620.

APPROXIMATE SCALE IN FEET
400 0 400

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

LEWIS AND CLARK COUNTY, MONTANA
(UNINCORPORATED AREAS)

PANEL 1529 OF 1725
(SEE MAP INDEX FOR PANELS NOT PRINTED)

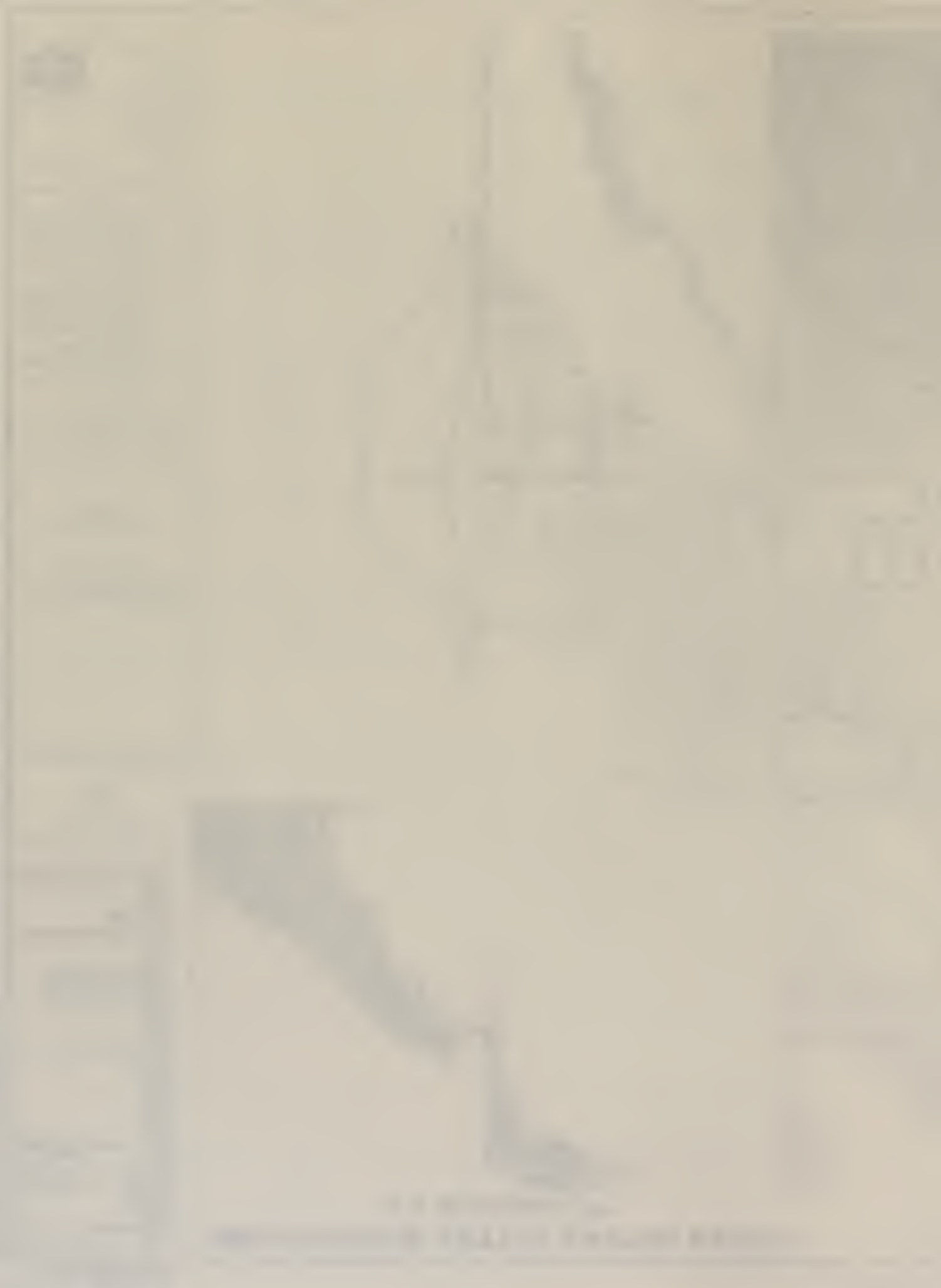
COMMUNITY-PANEL NUMBER
300038 1529 C

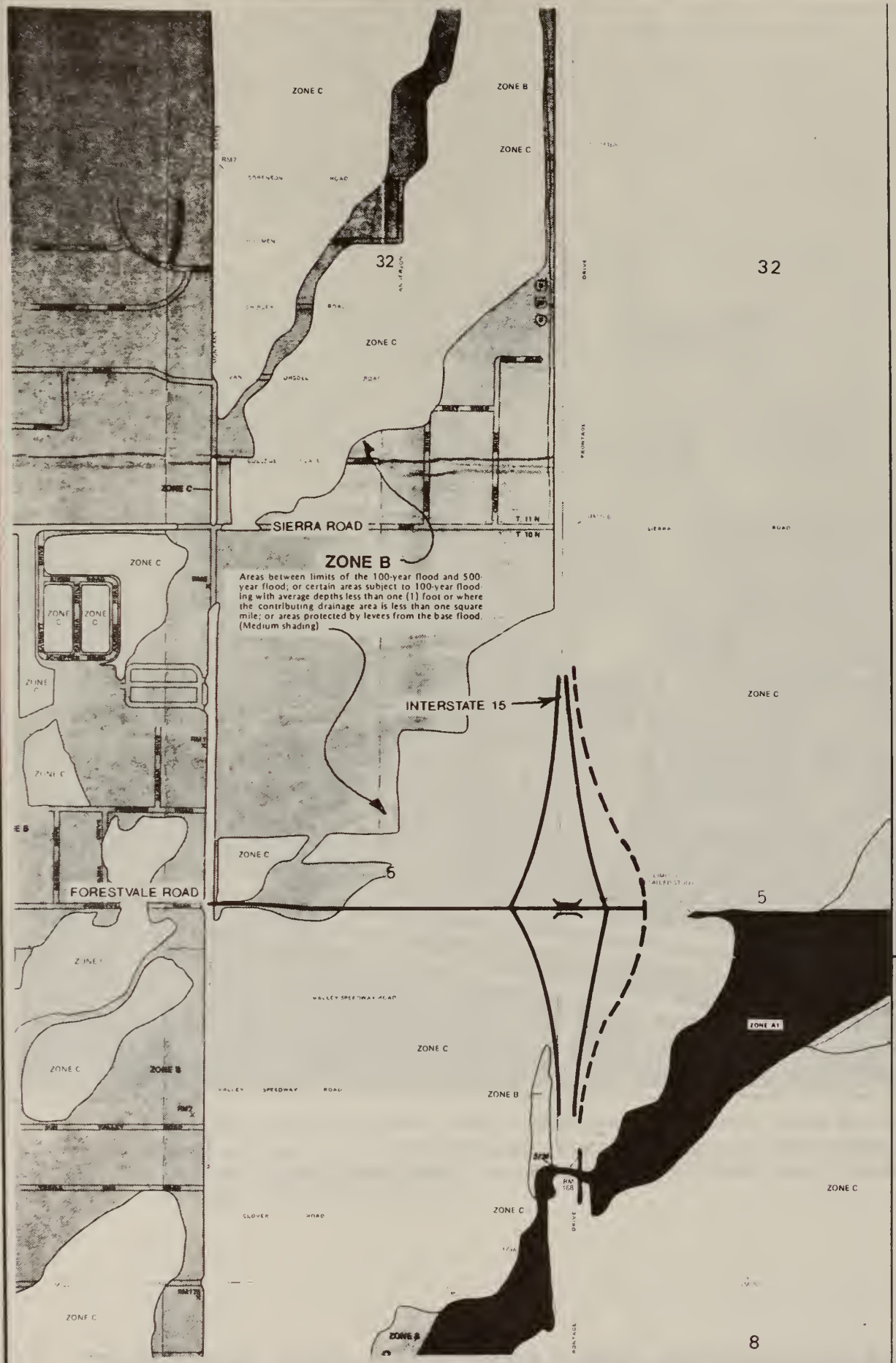
MAP REVISED:
SEPTEMBER 4, 1985

Federal Emergency Management Agency

ALTERNATIVE A1
NORTH HELENA VALLEY INTERCHANGE

FIGURE 6-2





KEY TO MAP

500-Year Flood Boundary	ZONE B
100-Year Flood Boundary	ZONE A1
Zone Designations	
100-Year Flood Boundary	ZONE B
500-Year Flood Boundary	
Base Flood Elevation Line With Elevation In Feet**	513
Base Flood Elevation In Feet Where Uniform Within Zone**	(EL 987)
Elevation Reference Mark	RM7x
Zone D Boundary	
River Mile	•M1.5

**Referenced to the National Geodetic Vertical Datum of 1929

EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined
AO	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood (Medium shading)
C	Areas of minimal flooding (No shading)
D	Areas of undetermined, but possible flood hazards
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined

NOTES TO USER

Certain areas not in the special flood hazard areas (zones A and V1-V30) may be protected by flood control structures.

This map is for flood insurance purposes only; it does not necessarily show all areas subject to flooding in the community or all planimetric features outside special flood hazard areas.

For adjoining map panels, see separately printed Index To Map Panels.

INITIAL IDENTIFICATION
DECEMBER 27, 1974

FLOOD HAZARD BOUNDARY MAP REVISIONS
SEPTEMBER 13, 1977

FLOOD INSURANCE RATE MAP EFFECTIVE
APRIL 1, 1981

FLOOD INSURANCE RATE MAP REVISIONS
Map revised September 4, 1985 to change flood plain boundaries, zone designations, base flood elevations, corporate limits, scale, cultural features, or map format.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program, at (800) 638-6620.

APPROXIMATE SCALE IN FEET
400 0 400

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

LEWIS AND CLARK COUNTY, MONTANA (UNINCORPORATED AREAS)

PANEL 1529 OF 1725
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER 300038 1529 C

MAP REVISED: SEPTEMBER 4, 1985

Federal Emergency Management Agency

ALTERNATIVE B
NORTH HELENA VALLEY INTERCHANGE

FIGURE 6-3

Oblique aerial photo shows Valley flooding north of Tenmile Creek during May 1981 flood, prior to sheet flooding peak reaching I-15. Note beginnings of sheet flooding along Sierra Road (center of photo) which nearly flooded Rossiter School during peak.

NORTH HELENA VALLEY INTERCHANGE

FIGURE 6-4

new bridge at McHugh Lane and channel modifications along any reach could change where and how much flow leaves the channel above the I-15 bridge.

6.8. WETLANDS

A wetland evaluation has been completed for the proposed project[36,37].

Wetlands are non-existent in the area of Alternatives A-1 and A-2.

A wetland exists in the northeast quadrant of the proposed site for Alternative B. This wetland was started when a large gravel pit was excavated in 1962 for the construction of the existing Interstate 15. These excavations, along with a high ground water table and irrigation water seepage and waste, have created enhanced growing conditions and allowed mesic vegetational succession to become established over the past 28 years. The area has become a mosaic of wetland-riparian vegetation ranging from tall cottonwood trees to shrub-grass and cattail marsh types. Figure 6-5 shows the location and boundaries of the gravel pit/wetland area. The total area of the gravel pit/wetland is estimated to be 19 acres.

6.9. THREATENED OR ENDANGERED SPECIES

The Fish and Wildlife Service of the U.S. Department of the Interior has indicated that the bald eagle (Haliaeetus leucocephalus) occurs nearby as a winter resident and seasonal migrant and the peregrine falcon (Falco peregrinus) may occur as a migrant[38].

A biological assessment has been completed for the proposed project. No other threatened or endangered species have been identified in the project area.

6.10. HISTORICAL AND ARCHAEOLOGICAL PRESERVATION

A cultural resource survey has been completed[39]. The survey identified one property, the Silver Creek School, (Little Red School House) 24LC787, located east of Interstate 15 and south of Sierra Road, which has been listed in the National Register of Historic Places. The property is shown on Figure 6-1. No other properties were identified that are on or eligible for the register.

---

36. Chaffee, George B, Resource Consultant, letter dated 22 October 1990.

37. Chaffee, George B., Resource Consultant, Wetland Evaluation and Biological Assessment of North Helena Valley Interchange - Alternative B - Forestvale Road, Project No. IR 15-4(65)197, 22 October 1990.

38. Kemper McMaster, Acting State Supervisor, Montana State Office, Fish and Wildlife Enhancement, Fish and Wildlife Service, U.S. Department of the Interior. Letter dated 05 September 1989.

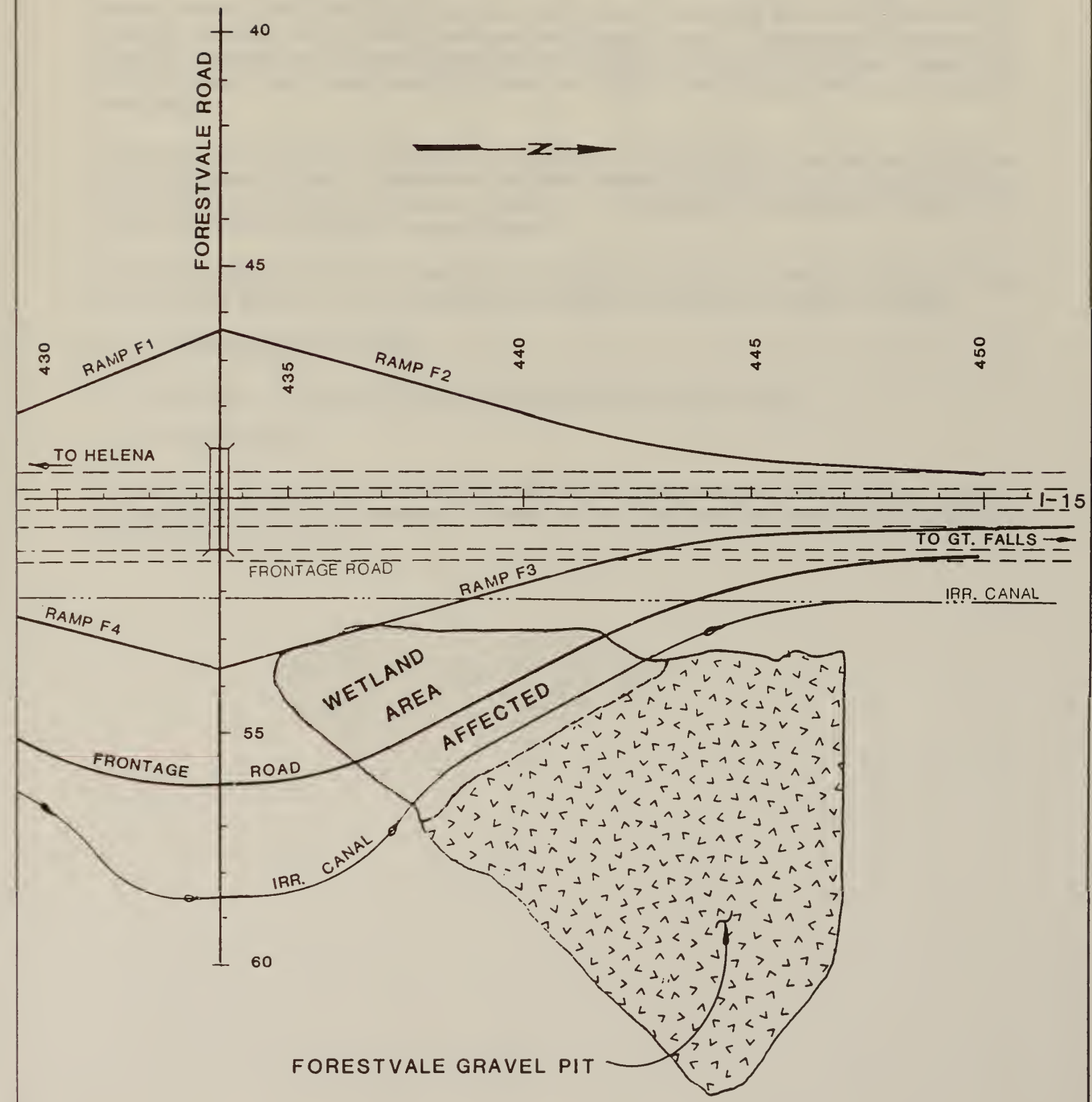
39. Historical Research Associates, Inc., Cultural Resource Survey for the Sierra Road Interchange Alternatives on Interstate 15, 26 March 1990.

WETLAND EVALUATION

NORTH HELENA VALLEY INTERCHANGE

IR 15-4(65)197

ALTERNATIVE B



SITE MAP

SCALE: 1" - 300'

FIGURE 6-5

6.11. VISUAL

The viewshed (The land area which can be seen from the project -- this is identical to the land area from which the project can be seen) for all project alternatives includes most of the Helena Valley and the adjacent mountain ranges. Topographic features include small scale farm and ranch land, the wooded Ten Mile Creek corridor, residences and yards, Rossiter School, the Little Red School House (on the National Historic Register), a tree nursery, several canals and ditches, existing Interstate 15 including the existing Sierra Road overpass structure, other county roads and residential streets. Topographic features seen from the proposed project also include the distant hills and mountain ranges. Landcover includes pastureland, some farming (grain and alfalfa), natural grasses and man-made development.

Those who view the existing I-15 and who will view the completed project include residents of the immediate vicinity; children and teachers attending Rossiter School; visitors to the Little Red School House; and those traveling in or through the area (mostly Helena area residents) on existing county roads and streets.

Those who view the landscape from the existing I-15 and who will view the landscape from the completed project include recreational travelers, commuters and business travelers.

6.12 HAZARDOUS WASTES

There have been no hazardous waste sites identified in the project area.

6.13 AIR QUALITY

The proposed project is in an area where the State Implementation Plan does not contain any transportation control measures. Therefore, the conformity procedures of 23 CFR 770 do not apply to this project.

7. ENVIRONMENTAL CONSEQUENCES

The following sections discuss the probable beneficial and adverse social, economic and environmental affects of alternatives under consideration for the proposed project and describes the measures proposed to mitigate adverse impacts.

7.1. LAND USE

The following is a summary of right-of-way required for construction of the proposed interchange:

Alternative A-1	15.62 Acres
Alternative A-2	12.56 Acres
Alternative B	38.98 Acres

As indicated in Section 7.2, any of the proposed alternatives will convert some existing farmland to highway right-of-way.

As indicated in Section 7.3, if any of the proposed alternatives are constructed, highway oriented and other businesses may be encouraged to develop in the area due to the improved access to I-15 and resulting increase in traffic flow in some areas. This would result in a conversion of farmland and residential properties to business properties.

7.2. FARMLAND

A Farmland Conversion Impact Rating has been completed (Form AD-1006) with the following results:

Total Points:	
Alternative A-1	154
Alternative A-2	154
Alternative B	79

The following is a summary of farmland acreage that will be converted to right-of-way for each alternative:

	Total Converted Farmland Acres	Converted Prime/ Unique Acres
Alternative A-1	9.27	9.27
Alternative A-2	7.46	7.46
Alternative B	18.05	0

The Soil Conservation Service has indicated that Alternative B will have the least impact on farmland and soil productivity[40]. As indicated above, Alternative B affects no prime or unique farmlands.

7.3. SOCIAL AND ECONOMIC

7.3.1. Population and Social Impacts

7.3.1.1. Population Effects

The building of the interchange could cause a small short-term increase in the Helena area population. Even if construction is completed entirely by non-local workers, the Helena area could easily accommodate a maximum short-term population increase of 20 to 40 workers and their families.

Lewis and Clark County's population is projected to increase to 52,600 by 2000 and to 56,000 by 2010[41]. Development of a new interchange north of the City of Helena would have little impact on the area's long-term population growth or demographic trends, but could influence the distribution of new settlement in the urban area. By reducing travel time from the valley to jobs and services located in the City of Helena, the interchange could hasten the development of undeveloped land on both sides of I-15. The objectives of the Lewis and Clark County Comprehensive Plan encourage new settlement on the west side of I-15, but favor continuation of agricultural land uses to the east of the highway[42].

7.3.1.2. Neighborhood Effects

During construction, persons living near the interchange site would be exposed to the noise, dust and traffic associated with the construction activities.

Development of Alternatives A-1 or A-2 would not require the relocation of any families (see Section 7.12). The widening of Sierra Road would require the acquisition of portions of front yard property belonging to homes on this street. The expanded right-of-way area might also effect some existing driveways.

The exit ramps of Alternative A-1 and A-2 could affect the sewage drain fields of residences located on the west side of I-15. Interchange ramps might also increase the risk of flood damage to these properties (see Section 7.7.). Interchange construction could also displace private underground sprinkling systems.

In the long-term, Alternatives A-1 and A-2 would increase in traffic in front of homes on Sierra Road, heightening vehicle noise (see Section 7.5) and the inconveniences associated with entering a busy road from driveways (see Section 4.2). Property owners are also concerned that development of a new interchange at Sierra Road could adversely affect the market values of their residential property.

---

40. Kellog, Warren, District Conservationist, Soil Conservation Service, U.S. Department of Agriculture. Letter dated 05 June 1990.

41. National Planning Association Data Services Inc., Washington, D.C., County Population Projections, 1989.

42. Rasmussen, Bob, Planning Director, Lewis and Clark County. Telephone conversation, 06 June 1990, with JIm Boyer, socioeconomist representing Morrison-Maierle/CSSA.

No residences are located near the Alternative B interchange location. However, associated improvements to Forestvale Road will displace several households as discussed in Section 7.12.

7.3.2. Economic Impacts

7.3.2.1. Short-term Income and Employment Effects

Building of a new interchange in the north Helena valley would directly create jobs and income for highway construction workers and indirectly increase the employment and earnings of persons supplying materials and services to construction contractors. The secondary economic effects also would create jobs and income for Helena area residents.

The total income effects of building the highway project would vary depending on which alternative is built. Estimates of the direct, indirect and secondary income effects for project construction alternatives are shown on the table below. The project could increase county-wide income by 0.1 percent to 0.2 percent during its construction period.

Direct income estimates include the earnings of persons employed in interchange construction and persons working on related county road improvements. The direct earnings from project construction are shown on the table below.

Major material and supply inputs (indirect income) for construction of the interchange project include concrete, reinforcing steel, gravel, bituminous material, fuel, guard rails, signs and paint. Much of the necessary construction materials and supplies could be purchased in the Helena area. Assuming 50 percent of material expenditures are made locally, the additional indirect earnings for local material supplier businesses and their employees are estimated to be as shown in the table below.

The circulation of construction worker and material supplier worker expenditures within the local area economy (secondary income) would also create additional income for Helena area residents.

Estimated Total Income Effects of Project Construction
North Helena Valley Interchange
By Project Alternative
1993-1994

	Total Income	Direct Income	Indirect Income	Secondary Income
Alternative A-1	$633,000	$350,000	$89,000	$194,000
Alternative A-2	$1,451,000	$802,000	$206,000	$445,000
Alternative B	$1,176,000	$650,000	$166,000	$360,000

As with income effects, the local total employment created by interchange construction would vary by project alternative, as shown on the table below. During the project's construction, the county's unemployment rate could be lowered 0.2 to 0.3 percent.

During 1993 and 1994 the on-site work force (direct employment) is estimated to average as shown on the table below. The actual number of on-site workers would vary during the different stages of project development. Persons hired are expected to include carpenters, equipment operators, steel workers, cement finishers, truck drivers, welders and laborers;

plus engineers and other supervisory personnel. Skilled and semi-skilled construction workers are available in the local labor force[43] and area residents could be expected to complete much of the work[44].

Some local material suppliers could increase their work forces to accommodate the increased sales of materials and services to construction contractors (indirect employment).

The secondary income effects of project construction could support, as an average, the number of jobs (secondary employment) shown in the table below in local businesses and government. In some instances, business operators could be expected to extend the hours of their employees and work harder themselves rather than hire new employees.

Estimated Average Employment Created by Project Construction
North Helena Valley Interchange
By Project Alternative
1993-1994

	Total	Direct	Indirect	Secondary
Alternative A-1	28	13	3	11
Alternative A-2	64	31	8	25
Alternative B	51	25	6	20

7.3.2.2. Other Short-term Economic Effects

No retail-type businesses would be displaced by construction activities. Minor changes in business patterns could result from the re-routing of traffic during the construction period. Some businesses located near construction sites could benefit from expenditures made by construction workers.

If construction activities were to interfere with the delivery of irrigation water during the irrigation season, the project could adversely affect farming and ranching activities depending on the canal for their water supplies[45].

7.3.2.3. Long-term Effects on the Helena Area Economy

Development of a new interchange north of the City of Helena would have little long-term effect on overall economic growth occurring in the Helena urban area. However, by influencing the locations of new residential development and the distribution of traffic on area roads, a new interchange could influence the locations of some new business activities.

The proposed interchange could create new locations for businesses oriented to highway travelers. The new businesses would compete with similar businesses located elsewhere in

---

43. Schenkle, Kathy, Labor Analyst, Montana Department of Labor and Industry. Telephone conversation, 01 June 1990, with Jim Boyer, socioeconomist representing Morrison-Maierle/CSSA.

44. Fiechtner, Debbie, Analyst, Montana Contractor's Association. Telephone conversation, 01 June 1990, with Jim Boyer, socioeconomist representing Morrison-Maierle/CSSA.

45. Olson, Gene, Helena Valley Irrigation District. Telephone conversation, 01 June 1990, with Jim Boyer, socioeconomist representing Morrison-Maierle/CSSA.

the Helena area. The new businesses would contribute to net growth in the area economy only to the extent that they would attract expenditures which would otherwise not occur in the urban area.

Alternatives A-1 and A-2 would have the same effect on re-routing traffic from Montana Avenue to Interstate 15. Existing land uses pose constraints to new commercial development, but some new commercial development could still occur near this interchange site. Based on normal policies of the Montana Department of Highways and the Federal Highway Administration, no vehicular or pedestrian access will be provided to I-15, the ramps or to the cross-road within 300 feet of its intersection with the ramps. This will restrict development in the immediate vicinity of the interchange.

Alternatives A-1 and A-2 also could improve the commercial development potential of land located at the intersection of Montana Avenue and Sierra Road.

Development of the Alternative B interchange would improve the commercial potential of adjacent land along Forestvale and the frontage roads. No buildings are located near these locations. Development of Alternative B also could improve the commercial development potential of lands at the intersection of Montana Avenue and Forestvale Road.

The potential for new commercial development near the interchange and at nearby intersections on Montana Avenue could be affected by future city and county land use policies. No zoning is currently in effect in these areas (Bob Rasmussen, Planning Director, 1990).

A new interchange at either location would redistribute commuter and other traffic originating from north of the city. In doing so, the interchange could improve the advantage of certain locations for commercial business activities and limit the potential for business activities in other areas.

Commercial areas expected to benefit from a new interchange include the Capital Hill Mall-Prospect-11th Avenue and the Cedar Street corridors. Businesses in the Helena Central Business District could also experience minor benefits from the improved access from North Valley households. The access to Interstate 15 provided by the proposed North Helena Valley Interchange would reduce traffic along the Montana Avenue corridor. A decline in drive-by traffic could lessen the potential for certain types of businesses to locate along this corridor[46,47].

Even with development of the North Helena Valley Interchange, new businesses are expected to continue to locate along north Montana Avenue (Bob Rasmussen, County Planner 1990). Some business locations along Montana Avenue may benefit from lesser traffic resulting from interchange development. During peak use periods several sections of north Montana Avenue already approach carrying capacities and left turns into business parking areas are obstructed by traffic congestion. Improved vehicle access could counterbalance some of the effects of reduced drive-by traffic (Kathy Macefield, City Planner 1990).

---

46. Rasmussen, Bob, Planning Director, Lewis and Clark County. Telephone conversation, 06 June 1990, with Jim Boyer, socioeconomist representing Morrison-Maierle/CSSA.

47. Macefield, Kathy, Planning Director, City of Helena. Telephone conversation, 06 June 1990, with Jim Boyer, socioeconomist representing Morrison-Maierle/CSSA.

The traffic pattern changes resulting from construction of a new North Valley Helena Interchange would not be expected to create impetus for major new shopping centers (Bob Rasmussen, County Planner 1990) and (Kathy Macefield, City Planner 1990).

Development of any of the alternatives would affect the major north-south water delivery canal operated by the Helena Valley Irrigation District (see Section 7.6).

7.3.3. Housing Impacts

No housing impacts will occur except as discussed in Section 7.12.

7.3.4. Public Service and Facility Impacts

7.3.4.1. Schools

Construction activities at the Sierra Road site would be adjacent to the Rossiter School grounds. During building of the interchange Alternatives A-1 and A-2, the school area would experience increases in noise, dust and heavy vehicle traffic (see Section 7.16).

Some students could be attracted to the construction site, creating a possible safety problem[48].

A long-term effect of Alternative A-1 or A-2 would be increased traffic on Sierra Road (see Section 4.2) heightening safety hazards for students walking and riding bicycles to school. About half of Rossiter School's 533 students walk or ride bicycles to school. No sidewalks or bike paths parallel Sierra Road, so students walk and ride on the shoulders of the roadway. Between 7:30 to 8:30 a.m., peak commuter use of Sierra Road would correspond to the time children would be arriving at school[49] (Karen Sexton, Principal, Rossiter School 1990).

A traffic congestion problem already exists for vehicles entering and exiting school parking lots during student arrival and departure periods. Traffic to and from Interstate 15 on Sierra Road could compound the ingress and egress problems in the school's driveways. School related traffic could interfere with the efficient movement of Interstate 15 associated traffic on Sierra Road (Karen Sexton, Principal 1990).

A portion of the playground area to the east of the school would be displaced by construction of the southbound on-ramp and the expanded Interstate 15 right-of-way. The school would discourage the use of remaining portions of this area, because of its proximity to the highway (Karen Sexton, Principal 1990) (John Campbell Business Manager 1989).

The location of the southbound entrance ramp for Alternatives A-1 or A-2 could require the relocation of the Rossiter School's waste water drain field. The southbound entrance could also affect the school's protection from major floods (see Section 7.7).

---

48. Sexton, Karen, Principal, Rossiter School. Telephone conversation, 12 June 1990, with Jim Boyer, socioeconomist representing Morrison-Maierle/CSSA.

49. Campbell, John, Business Manager, Helena School District 1. Letter dated 02 October 1989 to Montana Department of Highways.

The on and off ramps of the interchange could increase the presence of hitchhikers near the school grounds (Property Owner Comment 1990).

As indicated in Section 5.1, access control is proposed for the crossroad within 300 feet of its intersection with the ramps. Existing approaches to the Rossiter School fall within this zone if Alternative A-1 or A-2 is constructed. Relocation of the approaches or a reduction in desired controlled access area between the approaches and the ramps will be required.

7.3.4.2. Parks

As shown on Figure 6-1, the location of the southbound entrance ramp for Alternative A-1 or A-2 could displace 0.8 acres of Lewis and Clark County's Sierra Park . Therefore, a Section 6(f) evaluation and approval and replacement for the converted park land would be required. Alternative B would require no land from the park.

7.3.4.3. Fire Protection Services

The Helena West Valley Volunteer Fire Department feels a Forestvale Road Interchange would improve its response times to fires on the east side of I-15 by reducing travel distances. They also feel response time will be improved because several firefighters living east of Interstate 15 will have a shorter distance to travel to respond to the fire station located on Montana Avenue. The interchange would also improve response times for emergencies on I-15[50].

7.3.4.4. Churches

The project will have no significant effect on churches in the project area.

7.3.4.5. Museums

The Little Red School House is on the National Register of Historic Places. Impacts of the project on this site are discussed in Section 7.10.

7.3.5. Private Facilities

7.3.5.1. Drain Fields and Sprinkler Systems

The construction of Alternative A-1 or A-2 will require the relocation of or substantial adjustment to the existing sanitary sewer drainfield for the Rossiter School.

7.3.5.2. Valley Nursery Company

The proposed northbound entrance ramp for Alternative A-1 could affect the growing areas operated by the Valley Nursery Company. The potentially affected area is an experimental area containing, according to the owner, rare species of hearty trees and shrubs for cold climates. The owner suggests that some of the rare trees and shrubs might not survive relocation[51].

---

50. Evans, G. Vern, Secretary, West Helena Valley Fire District Board of Trustees. Letter dated 28 November 1989.

51. Berg, Clayton, Owner, Valley Nursery. Telephone conversation, 14 June 1990, with Jim Boyer, socioeconomist representing Morrison-Maierle/CSSA.

7.3.5.3. Golden Acres Trailer Court

Forestvale Road improvements associated with Alternative B will require the relocation of several mobile homes in the Golden Acres Trailer Court as discussed in Section 7.12.

7.3.5.4. West Mont Group Home

Forestvale Road improvements associated with Alternative B will require the relocation of the West Mont Group Home as discussed in Section 7.12.

7.3.5.5. Helena Gun Club

Development of Interchange Alternative B and related improvements to Forestvale Road could affect property belonging to the Helena Gun Club. The Gun Club's recreational vehicle sites could be displaced by extension of Forestvale Road, and by development of ramps serving the west side of the interchange. Two of these RV sites are occupied by mobile homes. The other hookups are used a few weekends each year by out-of-town visitors[52]. Road improvements would not effect the clubhouse or trap shooting areas.

7.3.6. Taxation

Interchange construction would remove small amounts of land from the local tax bases. The reductions in taxable property would have negligible impacts on the overall tax bases of Lewis and Clark County and Helena School District 1. Tax revenue losses could be offset by the property taxes to be paid by the commercial development that could occur near the interchange.

7.4. PEDESTRIANS AND BICYCLISTS

Helena School District No. 1 has indicated that:

> "A major concern of the District is the safety of the children. The construction of a Sierra Road interchange would greatly increase the vehicle travel on Sierra Road. This road serves as the primary route for walking students to the school. It is requested that a walk/bikeway on both sides of the road be included in your construction plans. The walkway should include traffic control lights and crosswalks at the intersection of Sierra Road and Montana Avenue and at the school. It should also include a walkway on the underpass of the interchange."[53]

A significant number of parents have testified in public scoping meetings or written letters to indicate that they feel a safety hazard already exists, and if an interchange is constructed at Sierra Road (Alternatives A-1 or A-2) the hazard for school children pedestrians or bicyclists will increase.

As shown on Figure 5.3, if Alternative A-1 or A-2 is constructed, a walkway/bicycle path will be constructed parallel with and on the south side of Sierra Road.

---

52. Husby, Earl, President, Helena Gun Club. Telephone conversation, 14 June 1990, with Jim Boyer, socioeconomist representing Morrison-Maierle/CSSA.

53. Campbell, John P., Business Manager, Helena School District No. 1, letter dated 02 October 1989.

Pedestrian crosswalks and, where warranted, pedestrian crossing signals will be constructed near the existing Rossiter School.

Based on existing and projected traffic volumes and patterns, a traffic signal at Montana Avenue will not be warranted with or without any of the proposed alternatives.

Since there is little or no existing pedestrian and bicyclist use in the area of Alternative B, no impacts are expected and no additional major mitigation measures are proposed for this alternative.

7.5. NOISE

Projected noise levels at each of the noise monitoring sites (See Section 6.5) for each of the proposed alternatives are listed on the following table:

NOISE LEVELS, NORTH HELENA VALLEY INTERCHANGE
Leq(h)dBA

SITE NO.	LOCATION	1990 EX-ISTING	2013 NO-BUILD	2013 ALT A-1	2013 ALT A-2	2013 ALT B
FORESTVALE RD						
1	Residence, W of Mt Ave	51	52	53	53	57
2	Residence, E of Mt Ave	65	66	66	66	67
3	Residence, W of I-15	53	54	53	53	58
4	Residence, E of I-15	54	56	57	57	58
SIERRA RD						
5	Residence, W of Mt Ave	53	56	56	56	53
6	Residence, E of Mt Ave	50	54	57	57	53
7	Rossiter, N Side	56	58	61	61	58
8	Rossiter, E Side	56	0	62	62	60
9	Little Red School, Park	56	58	58	58	59
10	Residence, E of I-15	58	59	62	62	61

The following is a summary of the projected impacts of each of the proposed alternatives:

No-Build Alternative. Traffic noise levels will increase by from 1 to 4 dBA (depending on the site) over existing peak levels by the year 2013. This is based on projected traffic growth with no change in the existing roadways.

Alternative A-1. Traffic noise levels will increase by from 2 to 7 dBA (depending on the site) along Sierra over existing peak levels by the year 2013. Noise levels at study sites along Forestvale Road will be about the same as the No-Build Alternative.

Alternative A-2. Traffic noise levels will be essentially the same as for Alternative A-1.

Alternative B. Traffic noise levels will increase by from 2 to 6 dBA (depending on the site) along Forestvale Road over existing peak levels by the year 2013. Traffic noise levels at the study sites along Sierra Road will be about the same as with the No-Build Alternative.

FHPM 7-7-3[54] indicates that noise impacts occur either when the noise levels substantially exceed the existing noise levels (10 dBA or greater) or when the Noise Abatement Criteria (NAC) is approached or exceeded. The NAC for Category B, which includes schools, residences, churches and public meeting facilities is Leq(h) = 67 dBA.

The projected noise level increases over existing levels for this project are less than substantial. The Category B NAC will not be exceeded at any of the selected sites and will be equaled only at Site Number 2. Design year noise levels in the vicinity of Rossiter School (Sites 7 and 8) will increase by from 5 to 6 dBA over existing peak hour levels with construction of the proposed interchange at Sierra Road (Alternative A-1 or A-2). This will be a perceivable increase though not substantial and will still be well below the NAC level of Leq(h) = 67 dBA (61 dBA at Site 7 and 62 dBA at site 8). Overall, noise level increases generated as a result of interchange construction are considered minor and acceptable and no mitigation measures are proposed.

7.6. WATER QUALITY

Construction of Alternative B will not directly affect the existing bridge crossing over Ten Mile Creek since construction of on and off ramps doesn't begin until just north of the bridge.

Construction of Alternative A-1, A-2 or Alternative B will require relocation of the Bureau of Reclamation water carriage facilities. The project has been coordinated with the Bureau of Reclamation[55]. The Bureau has indicated an awareness that the construction of any of these alternatives will affect these facilities, has expressed no particular concerns and has indicated no preference of which alternative is selected. The Bureau has indicated that if right-of-way or easement revisions are required, specific formats and procedural requirements should be followed. The Bureau has indicated that a Special Use Permit will be required if any of the facilities are crossed by the project.

The project has been coordinated with the Lewis and Clark County Conservation District[56]. The District has indicated that requirements and recommendations of their Sediment and Erosion Control Ordinance should be followed[57]. The District has expressed support for the proposed project but has expressed no alternative preference[58].

Any relocation, reconstruction or revisions to water carriage facilities or irrigation systems must be completed outside the irrigation season or in such a manner as to not affect the flow, distribution and quality of irrigation water.
Any potential short term construction related water quality impacts will be mitigated by

---

54. Federal Highway Administration, U.S. Department of Transportation, Federal-Aid Highway Program Manual, Vol. 7, Ch. 7, Sec. 3, Procedures for Abatement of Highway Traffic Noise and Construction Noise, 01 June 1979, Draft.

55. Wedeward, J. (Jim) L., Project Manager, Montana Projects Office, Great Plains Region, Bureau of Reclamation, U.S. Department of the Interior. Letter dated 01 November 1989.

56. Olsen, Connie J., Administrative Secretary, Lewis and Clark County Conservation District. Letter Dated 20 September 1989.

57. Lewis and Clark Conservation District, Sediment and Erosion Control Ordinance, Number 77-01 Section 8, Montana Conservation District Law, Section 76-109, R.C.M. 1947.

58. Minutes of the September 19, 1989 Regular Meeting of the Lewis and Clark County Conservation District, Page 6.

conformance to the Montana Department of Highways Standard Specifications[59] and adherence to requirements of the Water Quality Bureau of the Montana Department of Health and Environmental Sciences and local regulations.

There are no other rivers, streams, lakes, reservoirs or other impoundments of water in the project area that might be affected by construction of any of the alternatives.

7.7. FLOODPLAINS

7.7.1. Alternatives A-1, A-2 and No-Action, Sierra Road Site

A large portion of Alternatives A-1 (approximately 4.9 acres) and A-2 (approximately 2.3 acres) will be constructed within the 100 year floodplain so special consideration will be required during design. As indicated in Section 6.7, during past flood events, floodwaters have come very near the entrances to the Rossiter School and other area buildings. Therefore, no increase in the 100 year flood elevation can be tolerated. The conveyance of expected flood flows underneath Sierra Road without raising existing 100 year flood elevations will require approximately five, five foot diameter concrete pipes and a large drop inlet structure. A safety fence will be required around the drop inlet structure to prevent anyone from entering the pipes. These pipes will discharge to the existing drainage channel on the north side of Sierra Road.

7.7.2. Alternative B, Forestvale Site

A small portion of Alternative B (approximately 0.2 acres) will be constructed within the 100 year floodplain. The conveyance of expected flood flows underneath the extended Forestvale Road will require approximately two, five foot diameter concrete pipes. Slight increases in the 100 year flood elevations in this area may be tolerated since there are no existing buildings or other features that would be adversely affected. An improved inlet and outlet channel section will be required to direct flow to and from the culverts. Existing channels in this area are limited to shallow swales and require the use of low dikes and channels to direct the flow to and from the culverts.

7.8. WETLANDS

Alternatives A-1 and A-2 will have no impact on wetlands.

Figure 6-5 shows the location and boundaries of the gravel pit/wetland area and also outlines the area affected by the proposed Alternative B.

---

59. Montana Department of Highways, Standard Specifications for Road and Bridge Construction, 1987 Edition.

The following table is a summary of wetland areas and types affected by the project:

Summary of Affected Wetlands by Type and Area Affected, Alternative B:

Vegetation Type	Area Affected (Acres)
Deciduous Woodland	1.61
Shrub-Woodland	1.13
Shrub	0.21
Shrub-Grass	0.52
Grass/Sedge	0.73
Cattail Marsh	0.20
Total Wetlands Affected	4.40

The mitigation of unavoidable wetlands losses, if Alternative B is constructed, will be accomplished following guidelines outlined in the IWG Memorandum of Understanding: Management of Mitigation of Highway Construction Impacts to Wetlands in the State of Montana. The Memorandum of Understanding indicates the following are acceptable replacement options for unavoidably impacted wetlands listed generally in order of decreasing importance:

1. Restoration and/or enhancement of existing, drained or filled natural wetlands.

2. Construction of impoundments with specific design features to mitigate lost wetland functions.

3. Construction of excavated wetland basins with specific design features to mitigate lost wetland functions.

It is anticipated that the above can be accomplished within the existing gravel pit/wetland area, adjacent to the existing gravel pit/wetland area or in other areas in the vicinity of the proposed project.

The agreement also provides that "A wetlands mitigation summary balance sheet will be maintained by MDOH and MDFWP for all projects. This balance sheet will be reviewed at least annually by the Montana Interagency Wetlands Group. The overall mitigation objective is no net loss of wetlands functions, values and area on an annual basis. However, it is recognized that due to project development constraints and the lack of suitable sites for effective wetland development identifiable by the Technical Subcommittee, negative or positive balances may accrue and be carried forward from year-to-year. Balances carried forward will apply to the succeeding year's mitigation and will be directed toward wetland replacement with a similar biotic region or geographical area, as determined to be appropriate by the Technical Subcommittee."

If Alternative B is selected for construction, a mitigation plan will be developed and presented in the final environmental impact statement.

7.9. THREATENED OR ENDANGERED SPECIES

The Fish and Wildlife Service of the U.S. Department of the Interior has indicated that considering the specific nature, location and extent of the proposed project, no related impacts to fish and wildlife, including threatened or endangered species, are expected.[60]

7.10. HISTORICAL AND ARCHAEOLOGICAL PRESERVATION

Alternative A-1 will require a small amount of right-of-way from the west side of the Little Red School property to construct a ramp and from the east side of the property to construct the new frontage road. The relocation of the "1870 Kirscher Homestead Cabin" near the northwest corner of the property will also be required with Alternative A-1. No other structures or other features will be affected by Alternative A-2.

Alternative A-2 will require a small amount of right-of-way from the east side of the Little Red School House property to construct the new frontage road. No structures or other features will be affected by Alternative A-2.

In addition to the requirement for additional right-of-way and the possible relocation of the cabin, Alternative A-1 or A-2 may:

Cause an increase in traffic volumes past the property on Montana Avenue (see Section 4.2),

Increase noise levels at or near the property (see Section 7.5),

Change the view from the property (see Section 7.11),

Restrict future access points to the property due to planned access control to 300 feet from the interchange ramps,

Create a new roadway (the relocated frontage road) and introduce highway traffic on the south and east sides of the property where not traffic currently does not exist. The property would be surrounded by roads and highways.

Provide quick convenient access to the property from I-15 and as a result, may increase the number of visitors to the site.

Alternative B will not affect the Little Red School House property except that it will provide quick, convenient access to the site from I-15 at the interchange approximately 1/2 mile away and, as a result, may cause an increase in the number of visitors.

The Little Red School House Board of Directors has indicated that it prefers Alternative B[61].

---

60. McMaster, Kemper, Acting State Supervisor, Montana State Office, Fish and Wildlife Enhancement, Fish and Wildlife Service, U.S. Department of the Interior. Letter dated 05 September 1989.

61. Peterson, Floy, Member, Little Red School House Board of Directors, comments at public scoping meeting held 23 July 1990.

7.11. VISUAL

The view of the completed project, if Alternative A-1 is constructed, will include the existing bridge over Sierra Road and the new ramps and reconstructed Sierra Road.

The view of the completed project, if Alternative A-2 is constructed, will include a longer, slighter higher bridge, ramps and crossroad. The change in view will be slightly less than for Alternative A-1 since ramps for this alternative will be constructed closer to existing I-15 and farther from the Rossiter School and the Little Red School House.

If Alternative B is constructed, the view will be of a completely new interchange including a bridge for the crossroad over I-15, ramps and the extension of Forestvale Road from Montana Avenue to the Interchange. This interchange will provide a greater change in view of I-15 than Alternatives A-1 and A-2, but it is also farther from Rossiter School, the Little Red School House and existing homes.

The visual impacts of the completed project will be mitigated by construction of uniform and smooth fill slopes rounded and shaped to, as much as possible, blend well with the existing landscape. All slopes will be seeded with native grasses and other plants. The Montana Department of Highways practice of mowing adjacent to the highway and controlling noxious weeds will also be a mitigating factor.

For Alternatives A-1 and A-2, the view of the landscape from the completed project will not change. The only change in this view will be the new interchange ramps and reconstructed crossroad.

For Alternative B, the view from I-15 and the completed project will include the following changes:

1. The view from I-15 will include the new ramps and the new crossroad connecting to Montana Avenue to the west.

2. The view of the landscape will be obscured as vehicles on I-15 pass the embankments and the bridge structure for the new crossroad and ramps.

The proposed project will be constructed in an area with substantial existing and future man-made developments -- the proposed project will not be extraneous to this area and none of the changes discussed above will constitute a significant visual impact.

7.12. RELOCATION

The following is a summary of expected relocations required for each of the proposed alternatives:

Alternative A-1 will require the relocation of one residence northeast of the interchange, a garage northwest of the interchange and an old log cabin on the Little Red School House property southeast of the interchange.

Alternative A-2 will require no relocations.

Alternative B will require the relocation of a residence south of the extended Forestvale Road near Montana Avenue and the relocation of 4 mobile homes south of the extended Forestvale Road.

Relocations will be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. The Montana Department of Highways has a relocation assistance program whereby supplemental housing payments, moving costs, advisory assistance and other services are offered to individuals displaced by the highway construction project. The payments for relocation are offered in addition to the amount of just compensation for the right-of-way requirements.

There is no shortage of replacement housing in the project area and no special problems with relocation or replacement of housing have been identified.

7.13. AIR QUALITY

The Air Quality Bureau of the Montana Department of Health and Environmental Sciences has indicated that:

> *"In general, any project which will smooth out the traffic flow and reduce stopping and idling time will also reduce the amount of air pollution emissions from transportation sources. From this standpoint the Air Quality Bureau would like to support your efforts to upgrade the Montana highway system. Asphalt plants and gravel crushers are the primary emission sources for highway construction, and they must obtain an air quality permit from our office to operate in the state."*[62]

Alternatives A-1, A-2 and B are expected to have an overall beneficial impact on air quality. Since Alternative B will encourage the most drivers to use I-15, it is expected to have the most beneficial impact.

7.14. PERMITS

The following permits will be required for the proposed project:

Asphalt plants and gravel crushers will require an Air Quality Permit from the Air Quality Bureau of the Montana Department of Health and Environmental Sciences.

Since all alternatives, except the No-Build Alternative, will be constructed at least partially within a delineated flood plain, a Floodplain Permit will be required from Lewis and Clark County and the Montana Department of Natural Resources and Conservation.

Where a roadway crosses a Bureau of Reclamation water carriage facility, Special Use Permit must be acquired[63].

Section 106 Clearance will be required from the Montana State Historic Preservation Office. If either Alternative A-1 or A-2 is selected as the preferred alternative, a Section 4(f) evaluation will be required.

If either Alternative A-1 or A-2 is selected as the preferred alternative, new right-of-way will be required in the existing Sierra Park. This property is subject to the provisions of the

---

62. Norton, Warren, Environmental Specialist, Air Quality Bureau, Montana Department of Health and Environmental Sciences. Letter dated 08 September 1989.

63. Wedeward, J. (Jim) L., Project Manager, Montana Projects Office, Great Plains Region, Bureau of Reclamation, U.S. Department of the Interior. Letter dated 01 November 1989.

Land and Water Conservation Fund Act, as amended, and a Section 6(f) evaluation will be required[64].

7.15. ENERGY

Construction of any of the proposed alternatives will improve traffic operations and efficiency by moving traffic from the heavily traveled and deficient existing Montana Avenue to the 4-lane Interstate 15 which has the capacity to handle a significant amount of additional traffic. Another reason traffic operations will improve is that many vehicles traveling between the east side of Helena and the North Helena Valley will be more likely to use I-15 instead of traveling through the City of Helena. This improvement in traffic operations and efficiency will result in fuel savings and a decrease in vehicle wear. The long-term effect of the project should therefore be a decrease in energy use.

7.16. CONSTRUCTION

The estimated construction costs of each of the proposed alternatives are the following:

RIGHT-OF-WAY AND CONSTRUCTION COST SUMMARY

	ALT A-1	ALT A-2	ALT B
INTERCHANGE CONSTRUCTION	$1,591,400	$3,273,900	$2,555,400
RIGHT-OF-WAY	$217,300	$125,100	$95,800
MDOH/FHWA TOTAL	$1,808,700	$3,399,000	$2,651,200
ROAD CONSTRUCTION	$139,100	$139,100	$53,800
RIGHT-OF-WAY	$71,800	$72,600	$112,600
COUNTY TOTAL	$210,900	$211,700	$166,400
TOTAL PROJECT COST	$2,019,600	$3,610,700	$2,817,600

It is planned that State and Federal (MDOH/FHWA) funding will be used to purchase right-of-way for and construct the interchange, and County funding will be used to purchase right-of-way for and construct the connecting roadway (along Sierra Road or Forestvale Road extension) to Montana Avenue.

Construction related activities will result in some short-term adverse impacts which cannot be avoided. These impacts will be temporary and should last only for the duration of construction activities. Possible impacts include:

- detours and temporary surfacing.
- emissions from asphalt plants and crushers,
- dust from construction equipment activities,
- increased noise levels from construction equipment,
- potential for erosion from fresh cut and fill slopes,
- inconvenience to highway users resulting from delays, detours and temporary surfacing.

---

64. Strait, Richard A., Associate Regional Director, Planning and Resource Preservation, letter dated 21 September 1989.

Impacts will be minimized to the extent practical through proper construction practices. Dust will be controlled by watering or other acceptable methods. Construction related erosion will be controlled and slopes will be revegetated as soon as possible.

Gravel and borrow sources for base and surfacing aggregates have not yet been identified. Borrow material removal and gravel pits will be subject to applicable rules and regulations of the Montana Open Cut Mining Act. A mine reclamation plan will be required.

A traffic control plan will be developed to minimize inconvenience to motorists during construction. Traffic delays during construction will be minimized by planning and scheduling.

The construction of Alternative A-1 will not significantly affect traffic on Interstate 15 during construction. With this alternative, traffic on Sierra Road will be affected during some phases of construction -- traffic and access to the school, homes and businesses will be maintained during construction, but some delays will occur during excavation and placement of base courses and surfacing. Reconstruction of Sierra Road should be scheduled during summer months while school is out to avoid conflict with Rossiter School students and teachers.

Alternative A-2 will affect Interstate 15 traffic during construction. Reconstruction of the Interstate 15 bridges and reconstruction to increase the elevation of Interstate 15 to match the bridge will require that each side of the 4-lane highway will be closed to traffic for approximately one year while traffic is maintained on the other. The effect of construction on traffic on Sierra Road will be similar to Alternative A-1.

Alternative B will create no significant effect on traffic during construction. Interchange ramps and bridge piers will be constructed outside the traffic lanes of Interstate 15. Some short delays may occur during placement of bridge beams and other major bridge structural members, but in general, construction of the bridge crossroad will occur over Interstate 15 while traffic is maintained. Construction of the extension of Forestvale Drive will occur in an area with no current public roadways -- access to the gun club and to several residences in the area will be maintained at all times during construction.

7.17. COMMITMENTS OF RESOURCES

Implementation of the proposed action involves a commitment of a range of natural, physical, human and fiscal resources. Land used in the construction of the proposed facility is considered an irreversible commitment during the time period that the land is used for a highway facility. However, if a greater need arises for use of the land or if the highway facility is no longer needed, the land can be converted to another use. At present, there is no reason to believe such a conversion will ever be necessary or desirable.

Considerable amounts of fossil fuels, labor and highway construction materials such as cement, aggregate and bituminous material are expended. Additionally, large amounts of labor and natural resources are used in the fabrication and preparation of construction materials. These materials are generally not retrievable. However, they are not in short supply and their use will not have an adverse effect upon continued availability of these resources. Any construction will also require a substantial one-time expenditure of both State and Federal funds which are not retrievable.

The commitment of these resources is based on the concept that residents in the immediate area, State and region will benefit by the improved quality of the transportation system. These benefits will consist of improved accessibility and safety, savings in time and greater availability of quality services which are anticipated to outweigh the commitment of these resources.

8. LIST OF PREPARERS

This environmental impact statement has been prepared by the Montana Department of Highways and the Federal Highway Administration with assistance from Morrison-Maierle/CSSA. The primary agencies and individuals involved are the following:

MONTANA DEPARTMENT OF HIGHWAYS

Robert R. Newhouse, Consultant Design Engineer
Kenneth G. Rapp, District Engineer
Edrie L. Vinson, Supervisor, Environmental Section

FEDERAL HIGHWAY ADMINISTRATION

Dale Paulson, Project Development Engineer

MORRISON-MAIERLE/CSSA

Brad Peterson, Project Manager

9. LIST OF THOSE RECEIVING COPIES OF THIS DOCUMENT

The following list identifies entities receiving copies of this document and from which comments are being requested.

MAYOR OF CITY OR TOWN
+ CITY GOVERNING BODY

HONORABLE RUSSELL RITTER
316 North Park Avenue
Helena, MT 59623

CHAMBER OF COMMERCE

Helena Chamber of Commerce
201 East Lyndale
Helena, MT 59601

SCHOOL DISTRICTS

Helena School District #1
P.O. Box 5417
Helena, MT 59604

POST OFFICES

U.S. Post Master
U.S. Post Office
Helena, MT 59601

CITY, COUNTY OR CITY-COUNTY
PLANNING BOARD

Helena City Planning Department
316 North Park
Helena, MT 59622

BOARD OF COUNTY COMMISSIONERS

Lewis & Clark County Commissioners
Lewis & Clark County Courthouse
Helena, MT 59601 (3 copies)

COUNTY EXTENSION AGENT

Lewis & Clark County Extension Office
P.O. Box 855
Helena, MT 59601

LIBRARY
Lewis and Clark Library
120 S. Last Chance Gulch
Helena, MT 59601

COUNTY CONSERVATION DISTRICT
- LOCAL

Lewis & Clark County Conservation District
301 South Park
Helena, MT 59626

STATE

State Soil Conservation Service
10 East Babcock Street, Room 443
Federal Building
Bozeman, MT 59715

UTILITIES

Montana Power Company
P.O. Box 1714
Butte, MT 59707

U.S. West Communications
Manager, Highways
P.O. Box 1716
Helena, MT 59601

LOCAL INTERESTS

Floodplain Administrator
Lewis & Clark County
201 South Last Chance Gulch
Helena, MT 59620

STATE OFFICES

Department of Commerce
Aeronautics Division
Airport Road
Helena, MT 59620

Department of Commerce
Attn: Admin. Trans. Div.
1424 - 9th Avenue
Helena, MT 59620

Department of Fish, Wildlife and Parks
Stream Protection Coordinator
1420 East 6th Avenue
Helena, MT 59620 (2 copies)

Department of Health & Environmental Sciences
Solid & Hazardous Waste Bureau
836 Front Street
Helena, MT 59620

Department of Health & Environmental Sciences
Air Quality Bureau
Cogswell Building
Helena, MT 59620

Department of Health & Environmental Sciences
Water Quality Bureau
Cogswell Building
Helena, MT 59620

Department of Natural Resources & Conservation
Office of the Director
1520 East 6th
Helena, MT 59620

Department of State Lands
Office of the Commissioner
1625 - 11th Avenue
Helena, MT 59620

Environmental Quality Council
Office of the Director
Capitol Post Office
P.O. Box 215
Helena, MT 59620

Montana Department of Education
Montana State Library
1515 East 6th Avenue
Helena, MT 59620

Montana Historical Society
State Historic Preservation Officer
225 North Roberts Street
Helena, MT 59620

Montana State University
Institute of Applied Research
Bozeman, MT 59715

State Clearinghouse
Lieutenant Governor's Office
Capitol Building
Helena, MT 59620

Misty Hammerbacker
Department of Highways
E.E.O.

FEDERAL OFFICES

Department of the Army
Omaha District Corps of Engineers
Attn: Mr. Richard D. Gorton, Chief
Environmental Analysis Branch
215 North 17th Street
Omaha, NE 68102

U.S. Department of Agriculture
U.S. Forest Service, Region 1
Attn: Regional Forester
P.O. Box 7669
Missoula, MT 59801

U.S. EPA Montana Office
Attn: EIA Review
301 South Park, Drawer 10096
Helena, MT 59626

Federal Emergency Management Agency
Region VIII
Denver Federal Center
Building 710
Denver, CO 80225

Federal Housing Administration
Office of the Director
Housing and Urban Development
Federal Office Building
301 South Park, Drawer 10095
Helena, MT 59626

U.S. Department of the Interior
Bureau of Land Management
222 North 32nd Street
P.O. Box 36800
Billings, MT 59107

U.S. Department of the Interior
Director, Office of Environmental Affairs
1849 C Street N.W.
Washington, DC 20240

Bureau of Reclamation
Project Manager
Montana Projects Office
P.O. Box 30137
Billings, MT 59107-0137

U.S. Department of the Interior
Chief, Environmental Impact Assessment Program
U.S. Geological Survey, MS-760
423 National Center
Reston, VA 22092

U.S. Department of the Interior
Chief, Western Field Operation Center
Bureau of Mines
East 360 Third Avenue
Spokane, WA 99202

U.S. Department of Energy
A.R. Morrell, Environmental Manager
Bonneville Power Administration
P.O. Box 3621 - SJ
Portland, OR 97208

U.S. Department of the Interior
National Park Service
Branch of Compliance, RMRD-PC
Denver Federal Center
P.O. Box 25287
Denver, CO 80225

U.S. Department of the Interior
Office of Environmental
Building 56, Room 1018
P.O. Box 25007 (D-108)
Denver, CO 80225-0007

U.S. Department of the Interior
U.S. Geological Survey
Water Resources Division
Room 428, Federal Building
301 South Park, Drawer 10076
Helena, MT 59626

U.S. Department of Transportation
Federal Aviation Administration
Airport District Office
FAA Building, Room 2
Helena, MT 59601

U.S. Department of Transportation
Federal Highway Administration
301 South Park, Drawer 10056
Helena, MT 59626

U.S. Department of Transportation
United States Coast Guard
Commander (OAN)
13th Coast Guard District
915 Second Avenue
Seattle, WA 98174

U.S. Fish and Wildlife
Montana Office
Enhancement Division

Mr. Kemper McMaster, Field Supervisor
Federal Building, 301 South Park
Helena, MT 59626

U.S. Fish & Wildlife Service (ES)
1501 - 14th Street West
Suite 230
Billings, MT 59102

ENVIRONMENTAL & SPECIAL INTERESTS

American Wilderness Alliance
C.R. Merritt, Executive Director
746 Sawyer Lane
Hamilton, MT 59840

Montana Automobile Association
P.O. Box 4129
Helena, MT 59604

Montana Motor Carriers Association
P.O. Box 1714
Helena, MT 59624

Sierra Club
Billings - Yellowstone Basin Group
c/o Sally Hammond
2935 Rimview Road
Billings, MT 59102

Montana Wildlife Federation
P.O. Box 6537
Bozeman, MT 59715

PERSONS OF CONCERN

Bernard L. Adams
5645 Empire Court
Helena, MT 59601

Bonnie Baker
440 Frontage Road
Helena, MT 59601

Earl R. & Betty Baker
6225 North Montana
Helena, MT 59601

Del Barnekoff
5480 North Montana
Helena, MT 59601

Thomas S. Barthelmeh
1372 Sierra Road East
Helena, MT 59601

J. R. Baumberger
5495 N. Montana Avenue
Helena, MT 59601

Clayton V. Berg
P.O. Box 4845
Helena, MT 59601

Bruce & Sue Brayman
1242 Bighorn
Helena, MT 59601

Sister Anne Marie Burke
1502 Shirley Road
Helena, MT 59601

John P. Campbell
P.O. Box 5417
Helena, MT 59601

Beverly J. Cook
1317 Sierra Road East
Helena, MT 59601

Orison C. Cook
1290 Sierra Road East
Helena, MT 59601

Lemeul W. & Madeline M. Deskin
6175 Center Drive
Helena, MT 59601
Gary & Marcia M. Drosten
1539 Easy Road
Helena, MT 59601

Jim Dundas
1206 Hilmen Road
Helena, MT 59601

Robert A. & Anita Ellis
1735 Sierra Road East
Helena, MT 59601

Vern Evans
705 Motsiff Road
Helena, MT 59601

Mervin H. Finstad
1150 Vallejo
Helena, MT 59601

Art Galloway
558 Mill Road
Helena, MT 59601

Joe Glass
1114 Breckenridge
Helena, MT 59601

Robert Goetsch
1540 Easy Road
Helena, MT 59601

Representative Ed Grady
Star Route
Canyon Creek, MT 59633

Alice T. Grubb
10103 Tanglewood Drive
Boise, ID 83709

Frank & Bonnie Gruber
4930 Highway 12 East
Helena, MT 59601

Mr. Earl Halliday
7880 North Montana
Helena, MT 59601

Representative Hal Harper
#9 Cornstock Road
Helena, MT 59601

Helena Gun Club
P.O. Box 4158
Helena, MT 59601

Helena Valley Baptist Church
c/o Rev. Luny B. Hill
1315 Sierra Road East
Helena, MT 59601

David Hemion
(see Chamber of Commerce)

Michael & Rita Hermance
3860 Kim Drive
Helena, MT 59601

Harold A. Hoffman
1622 Sierra Road East
Helena, MT 59601

Richard Jensen
1628 Kelly Road
Helena, MT 59601

Larry & Jeanne Johns
1346 Sierra Road East
Helena, MT 59601

Steve Johnston
1004 Cheyenne Road
Helena, MT 59601

Evelyn Kearns
P.O. Box 4012
Helena, MT 59604

Kenneth M. Larson
5215 Kerr Drive
Helena, MT 59601

Larry P. Lovelace
1520 Sierra Road East
Helena, MT 59601

Fred Lode
1406 Valley Speedway
Helena, MT 59601

Kathy Macefield
(see City Planning)

Elver Madsen
6170 Center Drive
Helena, MT 59601

Floyd P. Martin
6150 North Montana
Helena, MT 59601

Greg E. Martin
1276 Sierra Road East
Helena, MT 59601

Martin's IGA Market
6025 North Montana Avenue
Helena, MT 59601

Dan McGowan
City of Helena Trans. Director
316 North Park
Helena, MT 59624

Bob McInerney
750 Maynard Road
Helena, MT 59601

Leo B. Meyer
5910 North Montana Avenue
Helena, MT 59601

David Monsen
New Life Lutheran Church
5980 North Montana
Helena, MT 59601

Tim & Colleen Morgan
2120 Sierra Road East
Helena, MT 59601

David R. Munger
71-884 Magnesia Falls
Rancho Mirage, CA 92270

Jack Neiman
1265 Sierra Road East
Helena, MT 59601

New Life Lutheran Church
5980 North Montana Avenue
Helena, MT 59601

Evelyn Newberg
6080 Goodwin Drive
Helena, MT 59601

Laverne Newberg
6080 Goodwin Drive
Helena, MT 59601

David F. Pepin
1090 Vallejo Road
Helena, MT 59601

Doug & Floy Peterson
Little Red School House
1635 Sierra Road East
Helena, MT 59601

Leon & Gene Peterson
1316 Sierra Road East
Helena, MT 59601

Charles Pierce
5609 Alabama Drive
Helena, MT 59601

Bob Race
1612 Sierra Road East
Helena, MT 59601

Robert Rasmussen
(see County Planning)

Senator Tom Rasmussen
550 North Montana
Helena, MT 59601

William Rauch
1672 Sierra Road East
Helena, MT 59601

Jim Rice
1525 Williamsburg Road
Helena, MT 59601

Roman Catholic Bishop of Helena
P.O. Box 1729
Helena, MT 59601

Myrl Rose
5320 North Montana
Helena, MT 59601

F.C. Rude
1035 Sun Valley Road
Helena, MT 59601

Michael L. Schoebel
1280 Sierra Road East
Helena, MT 59601

Thomas R. & Karen M. Schuster
1515 Easy Road
Helena, MT 59601

Karen Sexton
8220 Douglas Creek
Helena, MT 59601

Donald & Rosali Shoquist
1685 Sierra Road East
Helena, MT 59601

Jerry & Katie Sorenson
3815 Kiki Drive
Helena, MT 59601

Donald R. Spaulding
6133 Goodwin Drive
Helena, MT 59601

Bill Squires
3840 Kismet Drive
Helena, MT 59604

Louise Stoner
1350 Ponderosa Road
Helena, MT 59601

Sheldon Stoner
6330 Blackfoot Drive
Helena, MT 59601

Edward A. Swetish
6130 Center Drive
Helena, MT 59601

Donald A. Talseth
6090 North Montana Avenue
Helena, MT 59601

Joseph A. Terrio, Jr.
6073 Goodwin Drive
Helena, MT 59601

Mrs. Anne M. Tomlinson
6122 Center Drive
Helena, MT 59601

Mignon Waterman
530 Hazelgreen
Helena, MT 59601

West Valley Fire Department
Attn: Chief Tom Leonard
775 Middlemas Road
Helena, MT 59601

WestMont
Attn: Tim Plaska
2525 colonial Drive
Helena, MT 59601

James Widerholt
1322 Sierra Road East
Helena, MT 59601

Chuck Wirth
1355 Mill Road
Helena, MT 59601

Blake Wordal
(see City Commission)

Delores E. Wuerl
6130 Goodwin Drive
Helena, MT 59601

9. COMMENTS AND COORDINATION

The following paragraphs summarize 1) the early coordination process, 2) meetings with community groups and 3)key issues and pertinent information received from the public and government agencies through these efforts.

On 05 September 1989, a notice of intent was prepared and mailed to interested public and private agencies and to individuals[65]. The letter explained the scope and purpose of the project, described the alternatives to be studied and requested written comment. Written comments received are included in the appendix of this document.

A meeting was held on 06 November 1989 with the Transportation Committee of the Helena Chamber of Commerce at 4:00 p.m. in the board room of the Montana Automobile Association Offices in Helena. The meeting was organized by and was held at the request Larry Tobiason of the Transportation Committee. Information contained in the above mentioned notice of intent was discussed. The environmental review process required for this project was discuss along with the tentative schedule for project development. Comments were received and recorded from those in attendance.

To encourage and provide an opportunity for early public comment on the proposed project, an organized scoping process has been conducted including the following meetings:

> A public scoping meeting was held 27 November 1989 in the Rossiter School at 7:30 p.m. to discuss significant issues and to discuss alternatives to be considered. The meeting was recorded and a transcript has been prepared[66]. Comments at the meeting and written comments received later were mostly in favor of the construction of Alternative B over the other alternatives.
>
> A second public meeting was held 23 July 1990 in the West Helena Valley Volunteer Fire Department Station at 5322 North Montana Avenue, Helena, Montana, to discuss the findings of environmental studies. The meeting was recorded and a written summary has been prepared[67].

At the above public scoping meetings, a 1"=100' aerial photograph was displayed showing the approximate location and alignments of the proposed alternatives.

This proposed project has been coordinated regularly with the Helena Transportation Coordinating Committee.

A draft memorandum of understanding (MOU) was prepared and circulated for comment in 1988. However, this MOU, which dealt only with the Sierra Road location (Alternatives A-1 and A-2), was never signed by all parties. A new MOU will be prepared after an alternative is selected. The MOU will outline responsibilities for the Department and the County for developing and completing the proposed project.

---

65. Kologi, Stephen C., Chief, Preconstruction Bureau, Montana Department of Highways, IR 15-4(65)197, Sierra Road Interchange Letter dated 05 September.

66. Morrison-Maierle/CSSA, IR 15-4(65)197, Sierra Road Interchange, Technical Memorandum #1, 05 December 1989.

67. Morrison-Maierle/CSSA, IR 15-4(65)197, North Helena Valley Interchange, Technical Memorandum 3, Findings of Studies, 14 August 1990.

A location and design public hearing is planned to discuss this document and to receive additional public comment for the proposed project.

10. INDEX

11. APPENDICES - COMMENTS RECEIVED

SCOPING MEETING

CONSTRUCTION OF AN INTERCHANGE
NEAR THE SIERRA ROAD OVERPASS
IN LEWIS AND CLARK COUNTY, MONTANA
IR 15-4(65) 197
November 27, 1989

Please write your comments below concerning the issues that are significant considerations for this proposed action. Your comments will help determine which issues are analyzed in depth in the EIS and reasonable alternatives for this proposed action. Comments may be left at the meeting or this form can be mailed to:

David S. Johnson, P.E., Chief
Preconstruction Bureau
Montana Department of Highways
2701 Prospect Avenue
Helena, Montana 59620

We would appreciate receiving your comments by December 18, 1989.

Issues that are significant are: *Use of 1981 Valley Flooding data should be used for hydraulic design. Locating this interchange at or near Forestvale Rd. would disrupt the valley population the least: No school to deal with, no "Little Red Schoolhouse", no "Valley Nursery." Very little irrigated land and only slight involvement with moving canal, (irrig.).*

Issues that are not significant are: *Signal lights on Mont. Av.*

Please indicate your name, address, and affiliation (if any) below. Thank you for your interest in this project.

NAME & ADDRESS: (Optional)
Sheldon Stoner & Alene Stoner
6330 Blackfoot Dr.
Helena, Mt. 59601

we favor Alt. B

sent to Consultant
12-1-89
Bob Hutchinson

Madeline Deskin
6175 Center Drive
Helena, Mt.

Dear Sirs:

I am writing in regard to the proposed construction of an interchange on Sierra Road

Our property is very much involved. It lays between Cary Road and Sierra Road.

There are many concerns, the loss of our drain fields, a portion of the under-ground sprinkling system, 20 year old fir trees, pasture, etc. We built a nice home here, 25 yrs. ago where there was nothing but weeds and dead trees.

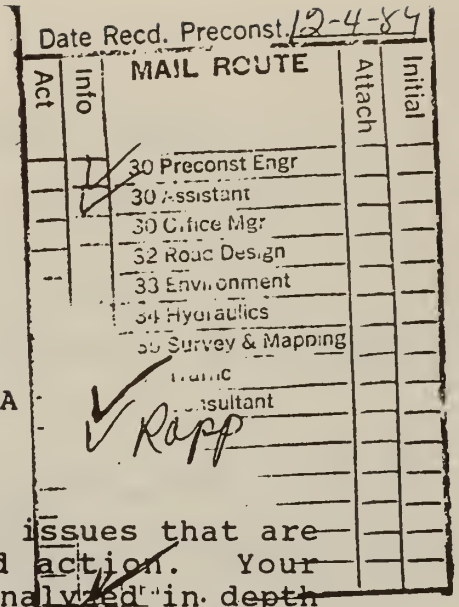
Another real worry, and should be for every property owner in the valley, is the fate of the large ditch between the interstate and our boundaries. This ditch took the brunt of the floods & spring run offs. Our land had 2 very enormous washouts. It took the Highway Crews 185 yards (37 loads) of fill dirt and gravel to fill these, even after we spent $200 on fill dirt ourselves.

Last but not least, a realtor informs us that property values will take a serious drop. And in the middle of all this planning is the problems arising with Rossiter School.

Hopefully, you will give our concerns a rightful place in your plans and studies.

Respectfully,

Madeline Deskin



SCOPING MEETING

CONSTRUCTION OF AN INTERCHANGE
NEAR THE SIERRA ROAD OVERPASS
IN LEWIS AND CLARK COUNTY, MONTANA
IR 15-4(65) 197
November 27, 1989

Please write your comments below concerning the issues that are significant considerations for this proposed action. Your comments will help determine which issues are analyzed in depth in the EIS and reasonable alternatives for this proposed action. Comments may be left at the meeting or this form can be mailed to:

David S. Johnson, P.E., Chief
Preconstruction Bureau
Montana Department of Highways
2701 Prospect Avenue
Helena, Montana 59620

We would appreciate receiving your comments by December 18, 1989.

Issues that are significant are:

½ Traffic on Mont Ave

Issues that are not significant are:

Please indicate your name, address, and affiliation (if any) below. Thank you for your interest in this project.

NAME & ADDRESS:
(Optional)

C. J. WIRTH
1355 MILL RD.
HELENA, MT. 59601

OVER

It seems to me the Hiway Dept should rethink this project into a broader scope. one that would take in to Consideration besides The traffic on N. Mont Ave, the traffic problems on Mont Ave within the City limits.

You might Construct alter. B or A and still be forced to 4 lane Mont Ave. If you take Care of MT Ave now (admittedly more costly) you Could put off building either interchange another 23 years. Right now many of the approaches to MT Ave are rough + pot holed. Reconstruction will reduce maintainence, improve safety, be more Convenient whereas building ~~an~~ interchange will do none of these.

Please spend my money where it will do the most good

Yours truly
C Wirth

SCOPING MEETING

CONSTRUCTION OF AN INTERCHANGE
NEAR THE SIERRA ROAD OVERPASS
IN LEWIS AND CLARK COUNTY, MONTANA
IR 15-4(65) 197
November 27, 1989

Please write your comments below concerning the issues that are significant considerations for this proposed action. Your comments will help determine which issues are analyzed in depth in the EIS and reasonable alternatives for this proposed action. Comments may be left at the meeting or this form can be mailed to:

David S. Johnson, P.E., Chief
Preconstruction Bureau
Montana Department of Highways
2701 Prospect Avenue
Helena, Montana 59620

We would appreciate receiving your comments by December 18, 1989.

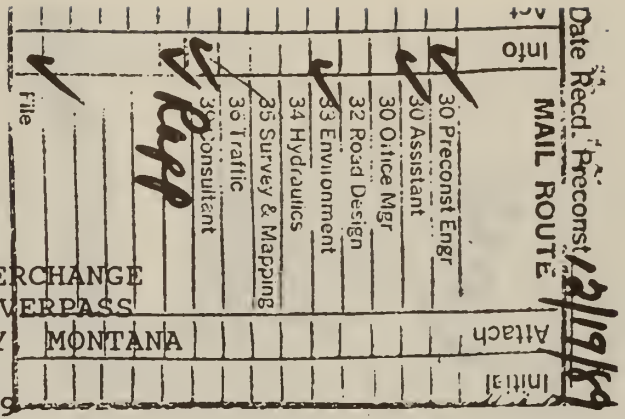
Issues that are significant are: 1. Safety of School Children at the school site. 2. Safety of auto's + pedestrians at intersection of Sierra + Montana. I am a property owner right off of Alter. A. I have lost three sales because of the indecision of the interchange. I'm getting fed up with the procrastinating politicians & bureaucrats.

Issues that are not significant are: Forrestvale may clutter up Montana more than help it. —

Please indicate your name, address, and affiliation (if any) below. Thank you for your interest in this project.

NAME & ADDRESS: (Optional)
Delores E. Wuerl
6130 Goodwin Dr. 12 to 89
Helena Mt 59601

I acquired photos of the flood of 1981 - when viewing the water pathway - I hope the highway considers very large culverts under & around Sierra + I-15. Without them, the school & homes on West Sierra will be in jeopardy.



SCOPING MEETING

CONSTRUCTION OF AN INTERCHANGE
NEAR THE SIERRA ROAD OVERPASS
IN LEWIS AND CLARK COUNTY, MONTANA
IR 15-4(65) 197
November 27, 1989

Please write your comments below concerning the issues that are significant considerations for this proposed action. Your comments will help determine which issues are analyzed in depth in the EIS and reasonable alternatives for this proposed action. Comments may be left at the meeting or this form can be mailed to:

David S. Johnson, P.E., Chief
Preconstruction Bureau
Montana Department of Highways
2701 Prospect Avenue
Helena, Montana 59620

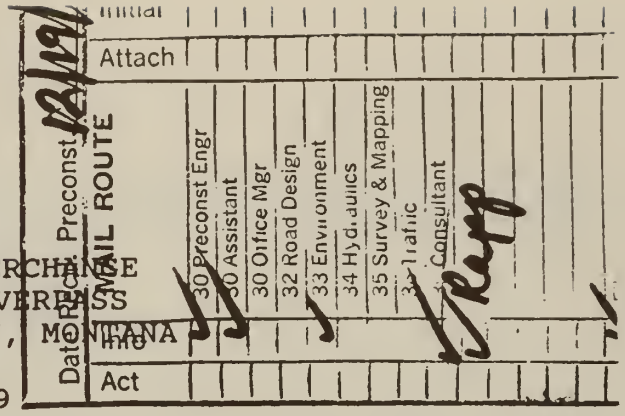
We would appreciate receiving your comments by December 18, 1989.

Issues that are significant are: We request that Alternative A not be used due to the fact that there is an Elem. school and a park at Rossiter School. Alternative B should be used due to the fact that there is less land to be used in our area where land is not developed,

Issues that are not significant are: All Interchange Issues are significant.

Please indicate your name, address, and affiliation (if any) below. Thank you for your interest in this project.

NAME & ADDRESS: (Optional)
Gary & Marcia Drosten (Finch)
1539 EASY Rd.
Helena, MT 59601



SCOPING MEETING

CONSTRUCTION OF AN INTERCHANGE
NEAR THE SIERRA ROAD OVERPASS
IN LEWIS AND CLARK COUNTY, MONTANA
IR 15-4(65) 197
November 27, 1989

Please write your comments below concerning the issues that are significant considerations for this proposed action. Your comments will help determine which issues are analyzed in depth in the EIS and reasonable alternatives for this proposed action. Comments may be left at the meeting or this form can be mailed to:

David S. Johnson, P.E., Chief
Preconstruction Bureau
Montana Department of Highways
2701 Prospect Avenue
Helena, Montana 59620

We would appreciate receiving your comments by December 18, 1989.

Issues that are significant are: My first objection involves alternative A as my property is involved drastically. The off-ramp will cut through my drain fields, underground sprinklers and wipe out all the trees. Reduce my property value because of noise & easy target of hitch hikers.

Issues that are ~~not~~ significant are: The over-flow of traffic off Montana could be reduced now by utilizing the frontage road. Most don't use it. Alternative B would cause less haste

Please indicate your name, address, and affiliation (if any) below. Thank you for your interest in this project.

NAME & ADDRESS: (Optional)
Madeleine M. Deskin
6175 Center Drive
Helena, Mt. 59601

The confusion and congestion at Rossiter School should truly be the determining factor in the choice of Alternative B.

SCOPING MEETING

CONSTRUCTION OF AN INTERCHANGE
NEAR THE SIERRA ROAD OVERPASS
IN LEWIS AND CLARK COUNTY, MONTANA
IR 15-4(65) 197
November 27, 1989

Please write your comments below concerning the issues that are significant considerations for this proposed action. Your comments will help determine which issues are analyzed in depth in the EIS and reasonable alternatives for this proposed action. Comments may be left at the meeting or this form can be mailed to:

David S. Johnson, P.E., Chief
Preconstruction Bureau
Montana Department of Highways
2701 Prospect Avenue
Helena, Montana 59620

We would appreciate receiving your comments by December 18, 1989.

Issues that are significant are: We are opposed to the Alternative A project. We bought our property on Sierra Rd, because the kids could walk and have a good access to school. I but we would loss this and it's to our property if the Alternative A.

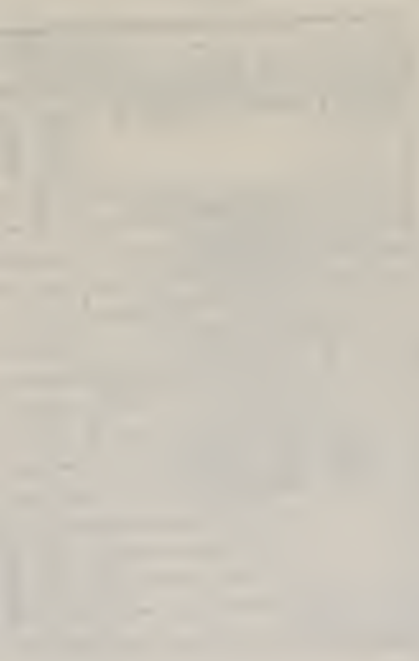
Issues that are not significant are: _____

Please indicate your name, address, and affiliation below. Thank you for your interest in this project.

NAME & ADDRESS: (Optional)
Thomas R & Karen Schuster
1515 Sierra Rd
Helena Mt 59601

Date Recd. Preconst. 12/22/89

Act	Info	MAIL ROUTE	Attach	Initial
	✓	30 Preconst Engr		
	✓	30 Assistant		
		30 Office Mgr		
		32 Road Design		
	✓	33 Environment		
		34 Hydraulics		
		35 Survey & Mapping		
		35 Traffic		
	✓	39 Consultant		
	✓	Rapp		
	✓	File		



RECEIVED
JUN 29 1989
FWCSSA, INC.

THE VALLEY NURSERY

HOME OF CHINOOK COUNTY HARDY PLANTS

BOX 4845 • HELENA, MONTANA 59604 • PHONE (406) 442-8460

MESSAGE

TO Mayerson Maierle
c/o Michael Wagner
~~BX 6147~~
Helena MT 59604

DATE 6/27/89

Dear Sir:

Re your Certified letter #P 687 914 272
of 6/26/9 pickup:

Do not set foot on my property
at Frontage Rd + Sierra
Dr. (The Valley Growing Area) until
I can be there around 7/10/89
to supervise. Many valuable plants
are coming in there and we do not
want strangers wandering among them.
I will supervise your activities there
on due time on appointment. In the

INSTRUCTIONS TO SENDER:

REPLY

DATE meantime restorsaved
we want to give up no expensor
property and valuable plants
which are not replaceable
or moveable to any hwy-
construction.

(1) Build Hwy ramps on
what you have for land (all you need.
(2) Or build them E of
Forestvale Lane.

Sincerely,

Clayton Berg pres.,
cc Harold + Kathleen Hoffman

SIGNED

INSTRUCTIONS TO RECEIVER:

DETACH STUB. KEEP PINK COPY. RETURN WHITE COPY TO SENDER.

UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
Fish and Wildlife Enhancement
Federal Building, U.S. Courthouse
301 South Park
P.O. Drawer 10023
Helena, Montana 59626

IN REPLY REFER TO:
FWE-61130-BILLINGS

September 5, 1989

RE: I-15 Interchange
(Sierra Road or Forestvale Road)
(ER 89/667)

Mr. Stephen Kologi
Montana Department of Highways
Public Hearing Office
2701 Prospect Avenue
Helena, Montana 59620

Dear Mr. Kologi:

We have reviewed an August 2, 1989 Federal Register Notice concerning your intention to develop a new Interchange at the crossing of Interstate 15 and either Sierra Road or Forestvale Road, at Helena, Montana.

The bald eagle (Haliaeetus leucocephalus) occurs nearby as a winter resident and seasonal migrant and the peregrine falcon (Falco peregrinus) may occur as a migrant. However, considering the specific nature, location and extent of the proposed project, we do not expect any related impacts to fish and wildlife, including endangered species.

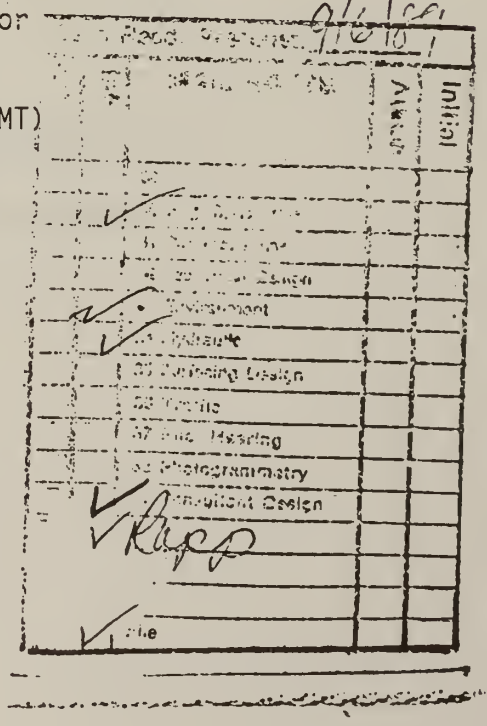
Sincerely,

FOR Kemper McMaster
Acting State Supervisor
Montana State Office

cc: Jeff Ryan, Montana Department of Highways (Helena, MT)
BFA/ERT (Arlington, VA)
Suboffice Coordinator, USFWS (Billings, MT)

JGW/dc

"Take Pride in America"



DEPARTMENT OF
HEALTH AND ENVIRONMENTAL SCIENCES
AIR QUALITY BUREAU

STAN STEPHENS, GOVERNOR

COGSWELL BUILDING

STATE OF MONTANA

FAX # (406) 444-2606

HELENA, MONTANA 59620

(406) 444-3454

September 8, 1989

Mr. Stephen Kologi, Chief
Preconstruction Bureau
Montana Department of Highways
Capitol Station
Helena, MT 59620

Dear Mr. Kologi:

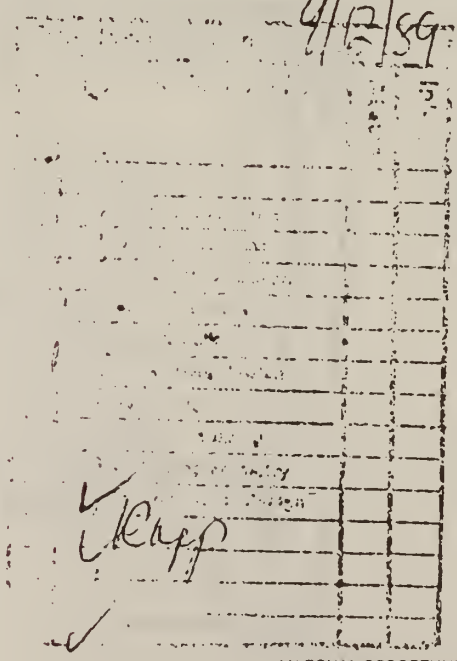
This is in response to your letter of notification regarding the highway improvement project designated as IR 15-4(65)197, proposed Sierra Road Interchange.

In general, any project which will smooth out the traffic flow, and reduce stopping and idling time will also reduce the amount of air pollution emissions from transportation sources. From this standpoint the Air Quality Bureau would like to support your efforts to upgrade the Montana highway system. Asphalt plants and gravel crushers are the primary emission sources for highway construction, and they must obtain an air quality permit from our office to operate in the state.

Sincerely,

Warren Norton
Environmental Specialist

WN:kh



OFFICE OF THE GOVERNOR
BUDGET AND PROGRAM PLANNING

STAN STEPHENS, GOVERNOR

STATE CAPITOL

STATE OF MONTANA

(406) 444-3616

HELENA, MONTANA 59620

September 11, 1989

Mr. Stephen C. Kologi, Chief
Preconstruction Bureau
Montana Dept. of Highways
2701 Prospect Avenue
Helena, Montana 59620

RE: Federal Aid Highway Project - Proposed Sierra Road Interchange
Montana State IGR Clearinghouse SAI No. MT890911-129-X

Dear Mr. Kologi:

The above-captioned has been received. In order to provide notification to parties that may be interested in review and/or comment, it will be listed in the next Intergovernmental Review Bulletin issued from this office.

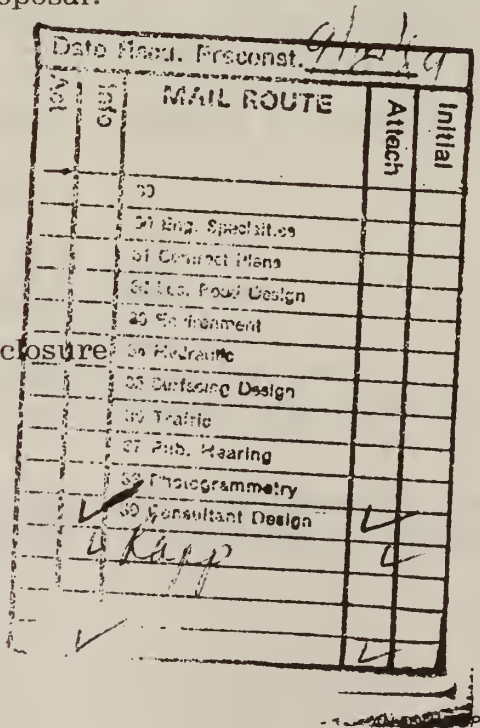
Any inquiries or comments regarding the report will be directed to you. Please provide copies of any comments received to the Clearinghouse for our files.

The Clearinghouse intends to take no further action on this proposal.

Sincerely,

DEBBIE DAVIS
Clearinghouse Manager

Enclosure



United States Department of the Interior
NATIONAL PARK SERVICE
ROCKY MOUNTAIN REGIONAL OFFICE
12795 W. Alameda Parkway
P.O. Box 25287
Denver, Colorado 80225-0287

TAKE PRIDE IN AMERICA

IN REPLY REFER TO: L7619 (RMR-PP)

SEP 21 1989

Mr. Stephen C. Kologi, P.E.
Chief, Preconstruction Bureau
Montana Department of Highways
2701 Prospect
Helena, Montana 59620

Dear Mr. Kologi:

This is in response to your letter of September 5, 1989, informing us of the intentions of the Montana Department of Highways to develop a Federal Aid highway project on Interstate Highway 15 (1-15) for construction of an interchange to provide a new point of access onto I-15 north of Helena, Montana.

One of the locations being studied for the interchange, Alternative A, is at the crossing of I-15 over Sierra Road and it appears that construction there could impact an area known as Rossiter School Park. This area has received Land and Water Conservation Fund (L&WCF) assistance, which makes the property subject to the provisions of Section 6(f) of the L&WCF Act as amended. The provisions of the Act stipulate that changes from outdoor recreation use be approved by the Secretary of the Interior and require the substitution of other properties of at least equal fair market value and reasonably equivalent usefulness and location for the recreation lands to be taken.

With the information that we have, we cannot definitely determine if the proposed project will impact the Rossiter School Park. Please discuss the project with the State Liaison Officer. In Montana, the contact is Mr. Donald Hyppa, Administrator, Parks Division, Montana Department of Fish, Wildlife and Parks, 1420 East 6th Avenue, Helena, Montana 59601. He can determine whether the proposal will involve a taking as described in Section 6(f) and can inform you as to the proper procedures for compliance with that section of the Act.

Thank you for keeping us informed of proposed construction.

Sincerely,

Robert J. Atkins

for Richard A. Strait
Associate Regional Director
Planning and Resource Preservation

cc:
Mr. Donald Hyppa, Administrator, Parks Division, Montana Department of Fish, Wildlife and Parks, Helena, Montana

Date Recd. Preconst. 9/22/89

Act	Info	MAIL ROUTE	Attach	Initial
		30 [illegible]		
	✓	30 Eng. Specialties		
		31 Contract Plans		
		32 Loc. Road Design		
	✓	33 Environment		
	✓	34 Hydraulic		
		35 Surfacing Design		
		36 Traffic		
		37 Public Hearings		
		38 Photogrammetry		
		39 Consultant Design		
	✓	Lapp		
	✓	File		

GHS
MAW
BGP
File

LEWIS AND CLARK COUNTY CONSERVATION DISTRICT
FOB DRAWER 10022, 301 SOUTH PARK AVENUE
HELENA, MONTANA 59626-0022
PHONE: 449-5278

~ ~

September 20, 1989

Stephen C. Kologi
Montana Dept. of Highways
Preconstruction Bureau
2701 Prospect Ave
Helena, MT 59620

Dear Mr. Kologi:

I presented your letter in regard to the proposed Sierra Road Interchange to the Board of Supervisors at their regular meeting which was held on September 19, 1989.

As you can see in the minutes I have enclosed, they requested that I send you a copy of the Sediment and Erosion Control Ordinance #77-01 for Lewis and Clark County. You may want to take this into consideration during the planning process.

If we can be of any further assistance, please feel free to contact our office. Thank you.

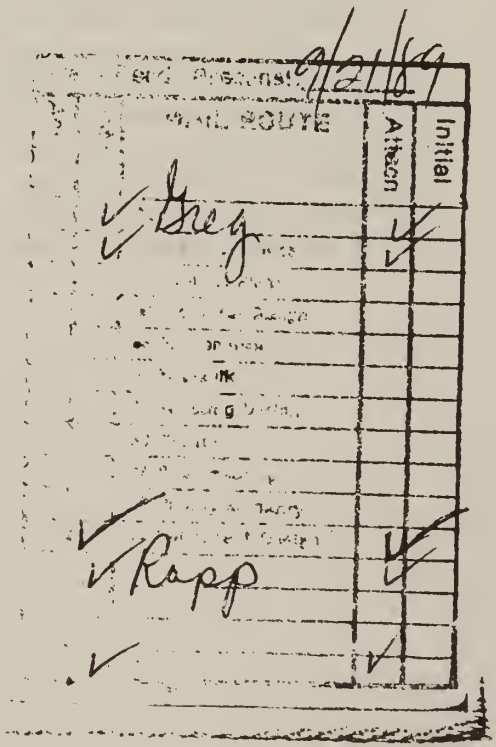
Sincerely,

Connie

Connie J. Olsen
Administrative Secretary

CJO/cjo
enclosure

c: L & C Co Commissioners
L & C Co Weed District



Helena School District No. 1 •

P.O. Box 5417
Helena, MT 59604 • 442-2451

October 2, 1989

Mr. Stephen C. Kologi, P.E.
Chief of Preconstruction Bureau
Department of Highways
2701 Prospect Ave.
Helena, MT 59620

Dear Mr. Kologi:

We have received your September 5, 1989 letter relative to a proposed Interstate 15 interchange in the Helena Valley. The School District certainly recognizes the need for a mid-valley interchange on the Interstate for the service of the valley residents and the relief of the heavy traffic on North Montana Avenue. However, placing the interchange on Sierra Road will generate several problems for the Helena School District with its close proximity to the Rossiter School.

A major concern of the District is the safety of the children. The construction of a Sierra Road interchange would greatly increase the vehicle travel on Sierra Road. This road serves as the primary route for walking students to the school. It is requested that a walk/bikeway on both sides of the road be included in your construction plans. The walkway should include traffic control lights and crosswalks at the intersection of Sierra Road and Montana Avenue and at the school. It should also include a walkway on the underpass of the interchange.

The interchange construction will require confiscation of the Northeast portion of the Rossiter School site. This would place the entrance ramp very close to the school and for the safety of the children we request that you include a 12 foot cyclone fence on this common boundary in your plans and a guard rail on the road.

This entrance ramp would also cause other problems. The Northeast section of the site where the ramp is to go serves as the school's sewage drainage field and replacement drain field. Please include in your plans a suitable method of replacing these drainage fields.

The Rossiter School is in the Helena Valley flood plain and in the 1981 flood of the valley the Rossiter School was nearly inundated (it was lapping at the doors). The area to be used for the ramp served as a major catch basin for the floodwater. The construction of a ramp in this area would provide a dike and contain the water on the Rossiter School site and in the school. Please include a drainage system in your plans to resolve this situation.

The southern portion of the school site is being developed by Lewis and Clark County as a neighborhood park for the valley residents. The interchange would consume a portion of this park and it is requested that the acquisition of replacement property be included in your budget for this project.

These are the several reasons and conditions why we do not acquiesce to the construction of an interchange on the Interstate 15 at Sierra Road. However, we wish to reiterate our concern with the need for a mid-valley interchange, but in a location different from the Sierra Road.

Sincerely,

John P. Campbell

John P. Campbell
Business Manager

bjs

cc: Jim Turner, Superintendent
Terry Pipinich, Director Bldgs. & Grounds
Karen Sexton, Principal Rossiter School
Brad Morris, Principal Central School
School Board of Trustees

United States Department of the Interior
BUREAU OF RECLAMATION
Great Plains Region
Montana Projects Office
P.O. Box 30137
Billings, Montana 59107-0137

TAKE PRIDE IN AMERICA

IN REPLY
REFER TO:

MT-422

NOV 0 1 1989

Date Recd. Preconst.
MAIL ROUTE 11-2-89
Act | Info | Attach | Initial
30 Preconst Engr
30 Assistant
30 Office Mgr
Design
Environment
Geotechnics
Survey & Mapping
Public
Consultant
Rapp

Mr. Stephen C. Kologi, P.E., Chief
Preconstruction Bureau
Montana Department of Highways
2701 Prospect Avenue
Helena MT 59620

Subject: Proposed Sierra Road Interchange on Interstate I-15 at Helena, Montana (Roads)

Dear Mr. Kologi:

This letter responds to your September 5, 1989, request for input concerning the Sierra Road Interchange. The Bureau of Reclamation (Reclamation) has water carriage facilities in the immediate vicinity of both these of the proposed interchange locations. The extent and location of these facilities are shown on the attached drawing. Lateral 20.7 runs north and south parallel to I-15 on the east side.

The interchange proposed in Alternative A will, in all likelihood, intersect Lateral 20.7. In addition, Lateral 20.7-2.7 which departs from Lateral 20.7 near the proposed interchange and runs on the north side of Sierra Road will also be intersected. Any road construction must, therefore, address these laterals in such a fashion that the operation and maintenance of these structures by the Helena Valley Irrigation District (HVID) is not affected.

The interchange proposed in Alternative B will also intersect Lateral 20.7. Also, lateral 20.7-2.1 which departs from lateral 20.7 at the proposed interchange will probably be effected. Again, the effects of the interchange on the operation and maintenance of these laterals should be kept to a minimum.

Should relocation of any of these laterals be necessary and additional right-of-ways (ROW) easements be required, they should be in the name of the United States. There are specific formats and procedural requirements for obtaining such easements. Please contact Auzie Blevins of this office at 657-6254 for further information on this matter, if additional ROW easements are required. Otherwise, Pete Schendel of our Canyon Ferry Project Office at 449-5217 will be the Reclamation contact for this project.

At this time Reclamation and the Helena Valley Irrigation District have no preference with either of the proposed locations. Please submit pertinent drawings and design information to this office for our review.

Unless you have a master agreement with the United States which allows Interstate Crossing of Federal irrigation facilities on the project, you will need to obtain a Special Use Permit from Reclamation. We assume you would want a 50 year term, in which case it would be done by this office. In any case, we will need to have you provide specifics about each crossing as well as a copy of documents indicating compliance with the National Environmental Policy Act (NEPA) and Section 106 of the National Historic Preservation Act (NHPA).

Sincerely,

J. L. Wedeward

J. (Jim) L. Wedeward
Project Manager

Sent to Consultants
11-2-89

Montana Department of Fish, Wildlife & Parks

Date Recd. Preconst 11/28

Act	Info	MAIL ROUTE	Attach	Initial
	✓	30 Preconst Engr		
	✓	30 Assistant		
		30 Office Mgr		
		32 Road Design		
		33 Environment		
		34 Hydraulics		
		35 Survey & Mapping		
	✓	36 Traffic		
	✓	33 Consultant		
		Rapp		
		File		

Helena, Montana
November 24, 1989

David S. Johnson, P.E.
Chief, Preconstruction Bureau
Montana Dept. of Highways
2701 Prospect
Helena, MT 59601

Dear Dave,

Re: Crossing of I-15 over Sierra Road-North of Helena

We have received a copy of the letter National Park Service wrote to you regarding the proposed project on Interstate Highway 15 (I-15) for construction of an interchange to provide a new point of access onto I-15 north of Helena. One of the locations being studied for the interchange, alternative A, is the crossing of I-15 over Sierra Road. As indicated by National Park Service, the construction of this proposed project could impact the park called Sierra Park located south of Rossiter School.

This park was developed with the assistance of federal money through the Land and Water Conservation Fund. If any part of the park will be affected by your construction project, we will have to work with the federal government to mitigate any impacts. The property is subject to the provisions of Section 6(f) of the L&WCF Act as amended. The provisions of the Act stipulate that changes from outdoor recreation use be approved by the Secretary of Interior and require the substitution of other properties of at least equal fair market value and reasonably equivalent usefulness and location for the recreational lands to be taken.

If you feel that there may be a potential impact, please contact me and I will provide you with any additional information you may require.

Sincerely,

MARY ELLEN POOLE
Administration Officer I
Operations Bureau
Parks Division

MEP/th
cc: Region 8 Supervisor
Dick Mayer
Gretchen Olheiser
Jim Turner, Rossiter School
P.O. Box 5417
Helena, MT 59604
John Andrew, Lewis & Clark Co. Park Board
316 N. Park
Helena, MT 59625

Sent To Consultant
11-28-89
Bob Nesbitt

West Helena Valley Volunteer Fire Dept.

P.O. Box 4024
HELENA, MONTANA 59604

Nov. 28, 1989

David S. Johnson, P.E., Chief
Preconstruction Bureau
Montana Dept. of Highways
2701 Prospect Ave.
Helena, MT 59620

Re: Interchange Construction
Near Sierra Rd. Overpass
in Lewis and Clark County

Dear Mr. Johnson

As a representative of the West Helena Valley Fire District, I would like to present the position of the Fire Dept. regarding this Interchange. This issue has been discussed with all the Firefighters in the District and with the Board of Trustee's. It is our opinion that we would best be served if Alternate B were selected (Foresvale Rd. Extension) because of quicker access to I-15 and much quicker access to I-15 South of the New Interchange. We are called to respond to incidents on this Highway. We also have Firefighters residing in the Pleasant Valley Subdivision and a overpass at Forestvale provides a shorter distance for them to reach the Fire Hall. And of course a shorter distance for the Fire Dept. to travel when responding to a Fire in the Pleasant Valley Subdivision.

When deciding which location to place the New Interchange, please take our comments into consideration.

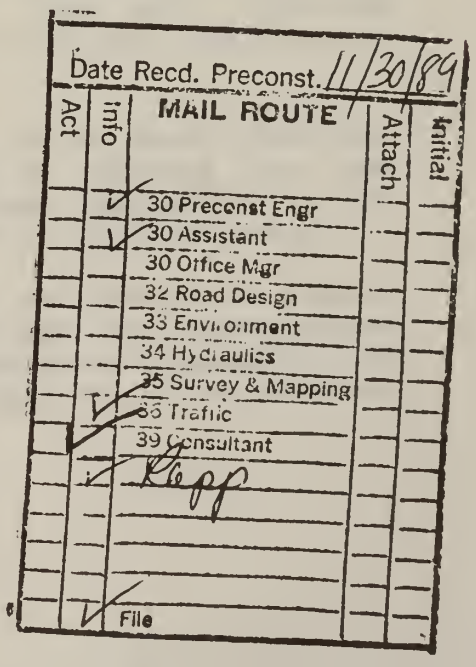
Thank You.

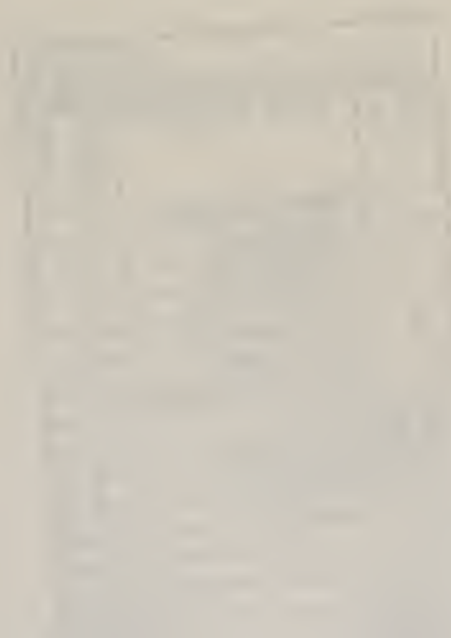
Sincerely Yours,

G. Vern Evans

G. Vern Evans, Secretary of West Helena Valley Fire District Board of Trustees

Sent To Consultant
12-1-89
Bob Skinner

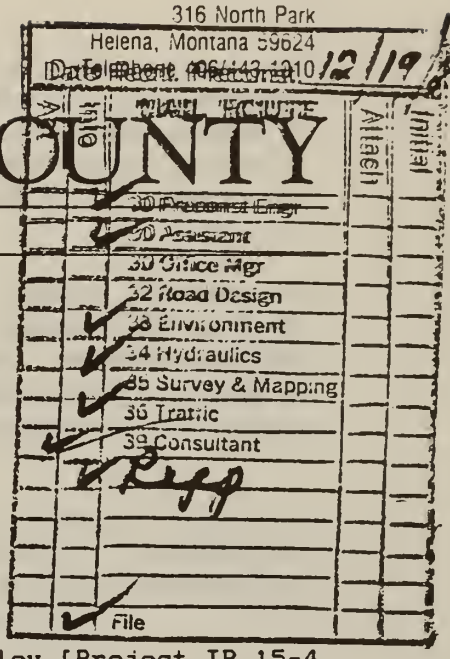




City County Building
P.O. Box 1724
316 North Park
Helena, Montana 59624
Telephone 406/443-1910

LEWIS AND CLARK COUNTY

Board of County Commissioners



DATE: December 13, 1989
FILE: 1508 DJohnson.Ltr

Mr. David S. Johnson
Preconstruction Bureau
Montana Department of Highways
2701 Prospect Avenue
Helena, MT 59620

SUBJECT: Comments on I-15 Interchange for the Helena Valley [Project IR 15-4 (65) 197]

Dear Mr. Johnson:

Pursuant to the scoping meeting of November 27, 1989, the Board of County Commissioners of Lewis and Clark County wishes to make several comments regarding alternative locations for an I-15 interchange.

1. Under any alternative site evaluation, please consider the possibility of constructing only the south half of the diamond. This would provide use of I-15 for commuter traffic, the largest contributor of traffic on North Montana Avenue. The north half of the diamond could be constructed at a later date when demand warranted. Please address the feasibility of such a phased approach from the aspect of design and cost.

2. FEMA Floodplain Maps (1985) identify areas of flooding in the vicinity of the proposed interchange. The design and costs of an interchange may be affected by floodplain designations. The area, type, and frequency of flooding should be addressed in the evaluation of alternative sites.

3. The EIS should address the effects on land use of each alternative site. This should include the effects on existing land use (agriculture, school, park, shooting range, and residences) and the anticipated effects on future land use (commercial services, etc.).

4. The proposal of another alternative site was made at the scoping meeting; this was located between the Forestvale and Sierra sites. This location should be examined for functional feasibility. If acceptable as an alternative location, the site should be evaluated along with the other alternatives.

5. The analyses of user benefits of each alternative should take into account other improvements in the transportation network. Improvements to be considered should include the reconstruction of Green Meadow Drive (Custer - Sierra, 1991), the signalization at Prospect and I-15, and the possible signalization at Northgate Shopping Center and North Montana Avenue.

6. The cost analysis of each alternative considered should include the costs of the interchange itself (Federal and State funds) and also the costs of related improvements such as access roads, pedestrian ways, signalization, etc. (local government funds). These costs should be itemized and also totalled for a clear understanding of all costs anticipated.

7. Each alternative location should be assessed for its effectiveness in reducing the volume of traffic on North Montana Avenue. In addition, the need for signalization on North Montana Avenue at the intersection of the alternative access roads should also be examined.

8. A cost analysis of widening North Montana Avenue to three or four lanes where appropriate should be conducted. This alternative can then be evaluated in relation to the interchange alternatives.

Thank you for the opportunity to comment on this matter.

Sincerely,

LEWIS AND CLARK COUNTY
BOARD OF COUNTY COMMISSIONERS

David E. Fuller, Chairman

Linda Stoll-Anderson

Jim Campbell

United States
Department of
Agriculture

Soil
Conservation
Service

FOB Drawer 10022, 301 S Park
Helena, MT 59626-0022
449-5278

June 05, 1990

Brad Peterson
Morrison-Maierle/CSSA
PO Box 6147
Helena, MT 59604

Dear Mr. Peterson:

Enclosed is the Farmland Conversion Impact Rating (AD-1006) you requested for the alternative sites for the Sierra Interchange. From a farmland and soil productivity stand point, site C would have the least impact.

If you have any questions, please feel free to give me a call.

Sincerely,

Warren Kellogg
District Conservationist

WGK/cjo
enclosure

The Big Sky Country

MONTANA HOUSE OF REPRESENTATIVES

REPRESENTATIVE JIM RICE
HOUSE DISTRICT 43
HOME ADDRESS:
1525 WILLIAMSBURG ROAD
HELENA, MONTANA 59601
PHONE: (406) 443-2869

COMMITTEES:
Date Recd. Preconst. 4/26/90

Act	Info	MAIL ROUTE	Attach	Initial
	✓	30 Preconst Engr		
	✓	30 Assistant		
		30 Office Mgr		
		32 Road Design		
		33 Environment		
		34 Hydraulics		
		35 Survey & Mapping		
	✓	36 Traffic		
		39 Consultant		
	✓	Kapp		
	✓	File		

April 24, 1990

Mr. David S. Johnson, P.E., Chief
Preconstruction Bureau
Montana Department of Highways
2701 Prospect Avenue
Helena, MT 59620

Re: IR 15-4(65)197
Sierra Road Interchange

Dear Mr. Johnson:

Within the last two weeks, there has been two serious multi-vehicle accidents on North Montana Avenue. These accidents occurred between one and two miles north of the intersection of Montana and Custer Avenues.

The amount of traffic on Montana Avenue, upon which I drive every day, is ever increasing. The two accidents I have mentioned both occurred during times of heavy traffic. While driver error was involved in each of these accidents, the heavy traffic was also a contributing factor.

It is becoming more and more apparent that an interchange in the valley to shift traffic to I15 is critical. I applaude your efforts on the above-mentioned project and appreciate your request for public input, as evidenced by your public meeting on November 27, 1989, at Rossiter School. I would ask that your office would make every effort to move this project to completion, as Montana Avenue is becoming increasingly dangerous. If there is anything I can do to assist your efforts, please let me know. I would appreciate being kept apprised of any progress made on this project.

Thank you for your assistance.

Sincerely yours,

Jim Rice

JR/ch