Chapter Thirty-four <u>PROJECT COORDINATION</u> <u>(Safety Design)</u>

Table of Contents

<u>Secti</u>	Section					
34.1	PRECONSTRUCTION PROGRAM					
	34.1.1	Traffic and Safety Bureau		34.1(1)		
		34.1.1.1	Signing Unit			
		34.1.1.2	Electrical Unit			
		34.1.1.3	Geometrics Unit			
		34.1.1.4	Traffic Investigations Unit			
		34.1.1.5	Safety Management Section	34.1(2)		
	34.1.2	Highways Bureau		34.1(3)		
		34.1.2.1	Hydraulics Section	34.1(3)		
		34.1.2.2	Photogrammetry and Survey Section			
	34.1.3	Consultant Design Bureau				
	34.1.4	Environme	ental Services Bureau			
	34.1.5	Right-of-V	Vay Bureau	34.1(8)		
	34.1.6		reau			
	34.1.7	Engineerii	ng Information Management Section			
34.2	CONSTR	34.2(1)				
	34.2.1	Materials	Bureau	34.2(1)		
	34.2.2	Construct	ion Engineering Services Bureau			
	34.2.3	Contract F	Plans Bureau			
34.3	OTHER	34.3(1)				
	34.3.1	Rail, Tran				
	34.3.2		34.3(1)			
	34.3.3		34.3(2)			
	34.3.4		esources Division			
	34.3.5		son			
	34.3.6	Public Inv	olvement Program	34.3(3)		

Table of Contents (Continued)

<u>Secti</u>	<u>on</u>			<u>Page</u>
34.4	EXTERNAL UNITS			34.4(1)
	34.4.1	Federal Agencies		34.4(1)
		34.4.1.1	Federal Highway Administration	
		34.4.1.2	United States Forest Service (USFS)	
		34.4.1.3	United States Postal Service (USPS)	
		34.4.1.4	National Park Service (NPS)	34.4(2)
	34.4.2	State Agencies		
		34.4.2.1	Department of Fish, Wildlife and Parks (FWP)	
		34.4.2.2	Other State Agencies	
	34.4.3	Local Gov	vernments	34.4(2)

Chapter Thirty-four PROJECT COORDINATION (Safety Design)

During the development of a safety design project, the safety designer must coordinate with many units internal and external to the Safety Design Unit. Chapter Thirty-three presents a network which describes the project development sequence for where the Safety Design Unit is involved in the design process. Chapter Thirty-four discusses specific coordination responsibilities between the safety designer and other units. Together, the two chapters will provide an understanding of the necessary interaction among the various units in project development.

Note that the Safety Design Unit always serves as the lead unit for its projects. Typically, it does not provide support services for other MDT units.

34.1 PRECONSTRUCTION PROGRAM

This Section discusses the specific coordination responsibilities between the safety designer and other Preconstruction Program units.

34.1.1 Traffic and Safety Bureau

34.1.1.1 Signing Unit

The Signing Unit is responsible for the selection, design and placement of signs and pavement markings on most MDT projects. For a safety project, the Safety Design Unit determines the design for highway signing and pavement markings. The Signing Unit reviews and comments on the design and, in general, provides technical support to the Safety Design Unit. For signing-lead projects, the Signing Unit may need to coordinate with the Safety Design Unit to determine any potential project overlaps.

34.1.1.2 Electrical Unit

The Electrical Unit is responsible for the selection, design and placement of traffic signals and highway lighting on most MDT projects. For most projects, which have been identified by the Safety Management Section, the Safety Design Unit administers these projects and, if applicable, coordinates with the Electrical Unit on projects with traffic signals, lighting and/or flashers.

34.1.1.3 Geometrics Unit

The Geometrics Unit is responsible for the geometric design of intersections and interchanges, highway capacity analyses and, to a lesser extent, the geometric design of other road design elements. On safety projects, the Geometrics Unit provides its expertise on geometric design to the Safety Design Unit, if needed. For geometric-lead projects, the Geometrics Unit may need to coordinate with the Safety Design Unit to determine any potential project overlaps.

34.1.1.4 Traffic Investigations Unit

The Traffic Investigations Unit is responsible for performing traffic engineering studies (e.g., speed studies, school crossings) and for the recommendations to establish speed zones and school crossings. On safety-lead projects the coordination between the Safety Design Unit and the Traffic Investigations Unit is to verify established speed zones and school crossings. The Traffic Investigations Unit may also do spot engineering studies for safety-lead projects, when requested.

34.1.1.5 Safety Management Section

The Safety Management Section is responsible for identifying and programming all projects that will use the categorical funds for projects developed under the core Highway Safety Improvement Program. The process used by the Section includes a benefit/cost analysis to determine that the proposed improvement is cost effective. The benefit/cost methodology is primarily based on the estimated crash-reduction potential of the safety countermeasure (e.g., installation of an exclusive left-turn lane) and the estimated construction, operations and maintenance costs of the improvement.

Once a capital improvement project is programmed by the Safety Management Section and is assigned to the Safety Design Unit for the detailed project design, the following describes the coordination between the two units:

- 1. <u>General</u>. The Safety Design Unit implements the preliminary scope made by the Safety Management Section. There is interaction between the two units to identify the initial project scope. The Safety Management Section participates in the Preliminary Field Review.
- 2. <u>Crash Data</u>. The Safety Management Section provides the detailed crash history for the proposed project, including collision diagrams and statistical trends. The Section also provides its evaluation of the crash data (e.g., correlation between crash patterns and roadway features, crash cluster areas).

- 3. <u>Selected Countermeasures</u>. In general, the Safety Design Unit does not conduct an independent evaluation of the countermeasure(s) selected by the Safety Management Section. The Safety Design Unit verifies the project scope and identifies the detailed design elements to achieve the intent of the scope.
- 4. <u>Change in Construction Costs</u>. During the course of project design, the Safety Design Unit may recognize that the scope of the project needs amendments or that the estimated construction costs are escalating significantly beyond that projected in project evaluation. In some cases, the safety recommendation is subject to a traffic engineering investigation and may cause a modification of the scope of work. The Safety Design Unit will contact the Safety Management Section, which will typically recalculate the benefit/cost ratio. This can lead to, revising the scope or withdrawing the project from the Department's program. The Safety Management Engineer evaluates the changes and makes a recommendation. For substantial changes, the Traffic and Safety Engineer reviews the recommendation and make the final decision.

34.1.2 <u>Highways Bureau</u>

34.1.2.1 Hydraulics Section

The Hydraulics Section is responsible for hydrologic and hydraulic analyses for both roadway drainage appurtenances and bridge waterway openings. Where applicable, the following summarizes the coordination between the Safety Design Unit and Hydraulics Section where the Safety Design Unit is the lead:

1. <u>Culverts</u>. Coordination between Hydraulics Section and Safety Design Unit is typically only necessary where existing culverts will be extended. Where this occurs, for all box culverts and all pipe culverts with diameters greater than 24 in (600 mm), the Hydraulics Section will perform all work on the culvert design.

The safety designer is responsible for any work on minimum-sized pipes 24 in (600 mm). These may be judged to be adequate based on input from the District maintenance personnel that an existing 24 in (600 mm) pipe culvert has performed adequately. However, the Hydraulics Section will provide assistance, as required, to support the decision to use a 24 in (600 mm culvert).

2. <u>Storm Drainage Trunk Line</u>. The safety designer will present the proposed roadway design to the Hydraulics Section documenting, for example, pavement widths, cross slopes, longitudinal grades, location of intersecting roads and approaches, etc. Based on this information, the Hydraulics Section is

responsible for all work related to the design of a closed drainage system. This includes:

- a. flow calculations in the system,
- b. pipe size and material (including optional material),
- c. spacing of inlets,
- d. pipe slopes, and
- e. outfall location and design.

The safety designer will determine the exact location of inlets to ensure that the inlets are located at low spots and to avoid conflicts with utilities, curb ramps, etc.

- 3. <u>Irrigation/Sprinkler Systems</u>. The Hydraulics Section is responsible for all designs related to an irrigation system (e.g., siphon details) for pipes larger than 18 in (450 mm) in diameter and for the design of sprinkler systems. The safety designer is responsible for relocating minor irrigation lateral ditches outside of the right-of-way. The Hydraulics Section will assist the safety designer as required during the design of these minor irrigation facilities.
- 4. <u>Curb Ramps</u>. To meet the requirements of the <u>American with Disabilities Act</u>, a safety project may require the installation of curb ramps which may, in turn, interfere with an existing curb inlet. In this case, the Safety Design Unit and Hydraulics Section will work together to resolve the conflict.
- 5. <u>FEMA Regulations</u>. The Hydraulics Section is responsible for determining that the project design is consistent with regulations promulgated by the Federal Emergency Management Agency (e.g., development within regulatory floodplains).
- 6. <u>Documentation</u>. The following will apply to roadway drainage appurtenances:
 - a. The Hydraulics Section will submit the necessary information documenting its recommendations for the roadway drainage design.
 - b. The safety designer will incorporate all details into the safety design plans and cross sections.
 - c. The safety designer will calculate all quantities for the roadway drainage appurtenances.

34.1.2.2 Photogrammetry and Survey Section

The Photogrammetry and Survey Section is responsible for conducting aerial and field surveys, in coordination with the District Office, for all Department projects. The following summarizes the coordination with the Safety Design Unit, when the Safety Design Unit is the lead:

- 1. <u>Field Surveys</u>. The decision that a field survey is needed is made at the Preliminary Field Review. The survey is then conducted by the District survey crews. For data collector surveys, the surveyor will provide a 3D MicroStation design file with graphical triangles so that the safety designer can create a Digital Terrain Model and a 2D MicroStation file with the topography information to be used as a base map. For manually conducted surveys, the designer will be responsible for plotting the survey data using the Department's CADD system. In addition to the field notes, the designer should obtain a copy of the as-built plans (if available) for informational purposes. The as-built plans can be obtained at the MDT Central Office in Helena.
- 2. <u>Aerial Surveys</u>. The decision that an aerial survey is needed is made at the Preliminary Field Review. The Photogrammetry and Survey Section plots the necessary flight lines and requests that targets be provided. A District survey crew will conduct the control traverse survey and will provide any needed additional survey information. The Photogrammetry and Survey Section will prepare a strip map and a Digital Terrain Model of the project. The safety designer will strip cross sections from the DTM as needed.
- 3. <u>Control Traverse Diagram</u>. The Photogrammetry and Survey Section checks the control traverse survey data and then plots the control traverse diagram. The safety designer will retrieve the control traverse plot and coordinates table for inclusion in the plans.

34.1.3 Consultant Design Bureau

Occasionally, the Department may use a consultant on safety design projects. When a consultant is used, the Consultant Design Bureau is the primary contact with the consultant. The Safety Design Unit will provide technical support on the project and review the plans prepared by the consultant.

34.1.4 Environmental Services Bureau

The Environmental Services Bureau is responsible for a variety of activities related to environmental impacts and procedures. This includes air, noise and water quality analyses; biological, archeological and historical impacts; preparation of environmental documents for MDT projects; evaluation and mitigation of hazardous waste sites; and the public's involvement with the environmental document. On safety-lead projects, the following summarizes the coordination between the Safety Design Unit and the Environmental Services Bureau:

- 1. <u>NEPA/MEPA Requirements</u>. The Safety Design Unit works with the Environmental Services Office to ensure that the project meets the Department's environmental and public input criteria pursuant to the <u>National Environmental</u> <u>Policy Act</u> and the <u>Montana Environmental Policy Act</u>. This includes project documentation (i.e., categorical exclusion, EA, EIS), water quality impacts, biological impacts, historical impacts, archeological impacts and the need for public hearings. In general, the Environmental Services Bureau makes its determination of impacts based on input from the Safety Design Unit.
- 2. <u>Section 4(f)</u>. A Section 4(f) approval is required if a project will impact publicly owned land (e.g., public park, recreational area, wildlife/waterfowl refuge). An approval will be granted only if there is no feasible and prudent alternative. Where a Section 4(f) approval is required, the safety designer will provide the necessary project information to the Environmental Services Bureau and the Bureau will secure the approval.
- 3. <u>Section 6(f)</u>. Federal law places restrictions on the use of land acquired with funds authorized by the <u>Land and Water Conservation Act</u> of 1965 as administered by the U.S. Department of Interior (Section 6(f) of the LWCF). Where a Section 6(f) approval is required, the safety designer will provide the necessary project information to the Environmental Services Bureau and the Bureau will secure the approval.
- 4. <u>Mitigation Features</u>. The Environmental Services Bureau and Safety Design Unit will work together on the plan for mitigation of environmental impacts.
- 5. <u>Wetland Mitigation</u>. For wetland mitigation sites, the Environmental Services Bureau will determine the location of the site, review the hydrology with the Hydraulics Section to ensure an adequate water supply, and provide a conceptual plan of the site. The safety designer is responsible for the preparation of plans, cross sections and summaries of quantities and for providing any special provisions that apply to construction items.

- 6. <u>Early Coordination</u>. The Environmental Services Bureau determines the need for early coordination on environmental issues with other State, Federal and public entities and makes all direct contacts, with input from the Safety Design Unit.
- 7. <u>Hazardous Wastes</u>. The Environmental Services Bureau identifies all hazardous waste sites and determines any needed mitigation measures. The Environmental Services Bureau will coordinate the mitigation if it will be performed before letting the construction project to contract. They will provide the Safety Design Unit with any necessary provisions. The safety designer is responsible for incorporating these into the construction plans and specifications, if the hazardous waste removal or site mitigation will be accomplished by the Department's contractor.
- 8. <u>Section 106</u>. For all Federally funded projects, MDT must identify archeological and historic sites in the vicinity of the project. The identified sites must be evaluated to determine if they are eligible for the National Register of Historic Places (NRHP). MDT submits recommendations for eligibility to the State Historic Preservation Officer (SHPO) for its concurrence. If a site is considered eligible for the NRHP and if the project will impact the site, the Department is mandated to mitigate the adverse effects. Mitigation is accomplished through written agreements among MDT, the Advisory Council on Historic Preservation and the Montana SHPO. A project cannot proceed unless the MDT's NRHP determination and any necessary mitigation measures are approved by SHPO.
- 9. <u>Erosion Control During Construction</u>. The safety designer is responsible for developing a plan for temporary erosion control during construction. The Environmental Services Bureau will review and comment on the plan, and it will secure approval from the Montana Department of Environmental Quality or Federal EPA.
- 10. <u>Montana Department of Fish, Wildlife and Parks (MDFWP)</u>. The need for coordination with the MDFWP will be determined by the Environmental Services Bureau on a project-by-project basis. If needed, the safety designer will provide a set of plans to the Environmental Services Bureau and the Bureau will apply for a Stream Protection Act 124 permit. The Environmental Services Bureau will coordinate with the MDFWP to secure approval and notify the Safety Design Unit when approval is received.
- 11. <u>Other Permits and Approvals</u>. Through the Environmental Services Bureau, the safety project may require additional permits and approvals such as:
 - a. Section 402, Temporary Erosion Control Permit from the Department of Health and Environmental Quality or the Federal EPA;

- b. Section 404/Section 10 permit(s) from the U.S. Army Corps of Engineers; and/or
- c. 6.124 Stream Preservation Act from the Montana Department of Fish, Wildlife and Parks.

34.1.5 <u>Right-of-Way Bureau</u>

The Right-of-Way Bureau is responsible for all activities related to the legal right-of-way for the State highway system. This includes appraisals, acquisitions, relocation, property management and agreements with utility companies and railroad companies. The following summarizes the coordination between the Safety Design Unit and Right-of-Way Bureau, when the Safety Design Unit is the lead:

- 1. <u>Coordination</u>. The Safety Design Unit provides the Right-of-Way Bureau with the needed design information to determine the right-of-way, utilities and railroad impacts.
- 2. <u>Plan Preparation</u>. The safety designer provides the Right-of-Way Bureau with a strip map and preliminary construction limits. The Right-of-Way Bureau is responsible for determining the right-of-way design. The Right-of-Way Bureau prepares a separate set of right-of-way plans for each project where right-of-way impacts exist.
- 3. <u>Acquisition</u>. The Right-of-Way Bureau performs all right-of-way work and procures all takings and easements needed for the project. The Right-of-Way Bureau notifies the Safety Design Unit of any design considerations resulting from negotiations with the property owners and will provide copies of signed agreements.
- 4. <u>Utility/Railroad Agreements</u>. The safety designer places all utility topography on the construction plans. After determining there are potential project impacts to utilities and/or railroads, the safety designer initiates the process by providing the Right-of-Way Bureau with a set of plans denoting the utility conflicts and listing them by station and offset from centerline. The two units will work together during the process. The utilities that are potentially in conflict will also be placed on the cross sections by the safety designer. The Right-of-Way Bureau is the lead unit for contacts with utility/railroad companies and negotiates all agreements. The Safety Design Unit ensures that the utility/railroad work is consistent with the project design. The safety designer, as needed, incorporates the utility/railroad information into the project plans.

34.1.6 Bridge Bureau

The Bridge Bureau is responsible for the structural design of all bridges (longer than 20 ft (6.0 m)) and concrete retaining walls on State-maintained highways. The following describes the coordination between the Safety Design Unit and Bridge Bureau, when the Safety Design Unit is lead:

1. <u>Geometrics</u>. The safety designer provides the Bridge Bureau with preliminary horizontal and vertical alignments. The bridge designer determines a preliminary structure length and depth of superstructure, and approximate bridge end elevations. The safety designer modifies the alignment as necessary, based on the preliminary grade recommendations from the bridge designer. The Bridge Bureau reviews and comments on the proposed roadway geometrics.

The Bridge Bureau determines the bridge width according to its criteria in Chapter Thirteen of the <u>Montana Structures Manual</u>; however, the proposed bridge width will not be less than the roadway width shown in the Geometric Design Tables in Chapter Twelve of the <u>MDT Road Design Manual</u>.

- 2. <u>Approach Roadway</u>. Even where only minor roadway work is necessary at, for example, a bridge replacement, the Safety Design Unit is responsible for all roadway work.
- 3. <u>Roadside Safety Appurtenances</u>. The Bridge Bureau will select the type and design of the bridge rail. The safety designer will determine the design of the approaching guardrail transition into the bridge rail.
- 4. <u>Sidewalks</u>. Sidewalk requirements of bridges will be determined jointly by the Bridge Bureau, the Safety Design Unit and the District.
- 5. <u>Traffic Control Plan (TCP)</u>. The safety designer is typically responsible for developing a strategy for the maintenance and protection of traffic during construction across any bridges within the project limits. This may include, for example, providing one lane of traffic across a two-lane, two-way bridge, providing a detour around the bridge, or on a multilane facility, providing a crossover between the two roadways. The Bridge Bureau reviews and comments on the proposed TCP. The Bridge Bureau may prepare a brief TCP, typically only a reference to the MUTCD, to coordinate with the road work. This is prepared in the form of a Special Provision. In addition, both the Construction Engineering Services Bureau and the District Traffic Engineer will review and comment on the overall TCP.

The Bridge Bureau will develop a traffic control plan across the structure when partial-width construction is used or when the removal of an existing structure (and the construction of the new structure) must be performed in a specific sequence.

6. <u>Plan Preparation</u>. The Bridge Bureau prepares all necessary structural design plan sheets and submits these to the Contract Plans Bureau for direct insertion into the final plan assembly.

34.1.7 Engineering Information Management Section

The Engineering Information Management Section monitors and updates the Program and Preconstruction Management System, which is used to schedule projects and develop preconstruction manpower needs.

After the Preliminary Field Review Report has been transmitted for comment, the Engineering Information Management Section distributes a standardized list of activities and anticipated man-hours that must be performed before the submittal of the final plan package to the Contract Plans Bureau. The safety designer modifies the list and the required man-hours as dictated by the proposed scope of the project. The Engineering Information Management Section incorporates the project into the Program and Preconstruction Management System and provides completion dates for the project activities.

The Safety Design Unit is responsible for:

- 1. notifying the Engineering Information Management Section when activities are completed and if additional activities must be added due to a change in project scope; and
- 2. providing updates to the Engineering Information Management Section on construction costs (e.g., Preliminary Field Review Reports, Scope of Work Reports).

34.2 CONSTRUCTION PROGRAM

34.2.1 <u>Materials Bureau</u>

The Materials Bureau is responsible for testing and certifying all materials used on Department projects. This includes geotechnical analyses and materials for pavements and structures. Normally, the District Materials personnel perform the field sampling. The following summarizes the coordination between the Safety Design Unit and Materials Bureau:

- 1. <u>Geotechnical</u>. The Geotechnical Section prepares a Geotechnical Report for safety projects when deemed necessary. The Report presents the soil and rock types, bearing capacities, slope stability, rock cut recommendations, muck excavation, subdrainage needs, erosion control strategies, etc. The Safety Design Unit comments on the Geotechnical Report and works with the Geotechnical Section to resolve any conflicts. The safety designer incorporates the geotechnical recommendations into the project plans.
- 2. <u>Pavement Design</u>. The Materials Bureau recommends alternative pavement types (concrete or bituminous) and surfacing treatments (e.g., recycling, crack and seat) and designs the pavement structure. The safety designer incorporates the pavement design into the project plans.
- 3. <u>Walls</u>. Where needed, the Geotechnical Section is responsible for preparing the design of retaining walls, reinforced earth walls, bin walls and gabions. The safety designer incorporates this information into the project plans.
- 4. <u>New Materials/Experimental Items</u>. The Materials Bureau determines the need for any new materials and/or experimental items in the project, and develops the specifications and special provisions for the items. The safety designer incorporates this information into the final contract document.

34.2.2 <u>Construction Engineering Services Bureau</u>

The Construction Engineering Services Bureau in the Central Office, in coordination with the District Offices, is responsible for all construction activities on all Stateadministered projects. This includes construction specifications, supplemental specifications, construction inspections, construction staffing and approval of construction change orders.

The Construction Engineering Services Bureau receives copies of the Preliminary Field Review Report, Scope of Work Report and the Plan-in-Hand Inspection Report. In addition, they receive the final plans, which are distributed for the Plan-In-Hand Inspection Review and the Final Plan Review. The Construction Engineering Services Bureau will review the plans and provide recommendations for changes to the Safety Design Unit.

The safety designer is responsible for developing the initial proposal for the temporary traffic control through the construction zone, including the sequence of construction operations and the need for any detours. The Construction Engineering Services Bureau, District construction personnel and the District Traffic Engineer will review and revise the safety designer's proposed strategy, and the Bureau is responsible for placing the necessary information into the final contract document.

34.2.3 <u>Contract Plans Bureau</u>

The Safety Design Unit and Contract Plans Bureau coordinate on the following:

- 1. <u>Safety Design Plans</u>. After the safety design plans have been finalized, the safety designer submits the plans to the Contract Plans Bureau. The Contract Plans Bureau circulates the plans to interested parties for comment. The safety designer will revise the plans as needed to reflect the comments.
- 2. <u>Special Provisions</u>. The safety designer is responsible for the development of any necessary special provisions relating to design items for the project. The Contract Plans Bureau ensures that these are included within the final contract document.

34.3 OTHER MDT SECTIONS

34.3.1 <u>Rail, Transit and Planning Division</u>

The Rail, Transit and Planning Division is responsible for all MDT planning functions including developing the Department's program of projects, performing initial planning studies and coordinating with the Metropolitan Planning Organizations (e.g., on the Transportation Improvement Program). The following describes the coordination between the Safety Design Unit and the Rail, Transit and Planning Division:

- 1. <u>Force Account Projects</u>. On safety projects which will be constructed by force account, the Safety Design Unit notifies the Rail, Transit and Planning Division that it should apply for construction program approval (PR-1240) from FHWA.
- 2. <u>Traffic Data</u>. The safety designer requests traffic data for projects. The Rail, Transit and Planning Division obtains the data, which includes average annual daily traffic, design hourly volume, percentage of trucks and the daily equivalent single-axle loads (ESAL). The data should also include any major changes in traffic volumes within the project limits. The Division also provides the traffic volumes of the various directional movements at intersections as required.
- 3. <u>Programming</u>. The Rail, Transit and Planning Division provides the Safety Design Unit with the necessary programming papers to initiate the safety design project. The Safety Design Unit submits the Preliminary Field Review Report and Project Scope of Work Report to the Rail, Transit and Planning Division.

34.3.2 MDT District Offices

The Department's five District Offices (Missoula, Butte, Great Falls, Glendive and Billings) provide the field services needed within each geographic area. Their responsibilities include maintenance of the State highway system, construction inspection services, contacts with county and city governments, and traffic-related activities (e.g., approach permits). Specifically for safety-project activities, the following summarizes the coordination between the Safety Design Unit and District Offices:

- 1. <u>Coordination</u>. In general, the Safety Design Unit will maintain a steady contact with the District Office. The District Traffic Engineer, for example, will be invited to all field reviews and will receive all project-related correspondence.
- 2. <u>Aerial Survey</u>. When an aerial survey is conducted, the District Office is responsible for the control traverse and "pick-up" field survey to locate items that may be missed by the aerial survey (e.g., underground utilities). The District conveys this information to the Safety Design Unit for plotting.

- 3. The District Office is responsible for all soils surveys. Soils. Its report is submitted to the Materials Services Section in the Central Office. The District Office will also provide recommendations for shrink/swell factors for project soils.
- 4. Informal Public Meetings. The District Office, in coordination with the Safety Design Unit, is responsible for scheduling and conducting informal public meetings.
- 5. Construction Cost Estimate. The District Office will provide the Safety Design Unit with unit prices to assist in the preparation of the construction cost estimate.
- 6. Temporary Traffic Control. On a safety project, the District Traffic Engineer will review the proposed temporary traffic control plan and modify it as necessary. The District also provides a quantity estimate for traffic control units required for the project.

34.3.3 Legal Services Unit

The Legal Services Unit is responsible for providing all legal counsel required by MDT (e.g., interpretation of State laws on highway work). In its administration of safety projects, the Safety Design Unit is responsible for preparing and processing, where applicable, agreements with local governments (e.g., WAAP Agreement). Once prepared, the Legal Services Unit reviews, comments on and approves the proposed agreement.

34.3.4 Human Resources Division

The Safety Design Unit coordinates with Human Resources, Civil Rights Bureau, to ensure compliance with the Americans with Disabilities Act. The Bureau will, for example, provide interpretations on the intent and application of the Act.

34.3.5 Tribal Liaison

When a safety-lead project is on tribal land, the Safety Design Unit coordinates with the Tribal Liaison for the establishment of an MOU (Memorandum of Understanding) or PSA (Project Specific Agreement) or a TERO (Tribal and Intergovernmental Relations Agreement). The Tribal Liaison is the primary contact between MDT and any tribal government. For example, the safety designer will submit a copy of the Preliminary Field Review Report and the Scope of Work Report to the Tribal Liaison for distribution to the tribal government.

34.3.6 Public Involvement Program

The Public Involvement Program is the primary focal point for all contact with the general public. This includes preparing news releases of upcoming MDT work and coordinating the presentation of public hearings and informal public meetings. On safety projects, the Safety Design Unit coordinates with the Public Involvement Program on any public contacts.

34.4 EXTERNAL UNITS

This Section discusses the specific coordination activities between the Safety Design Unit and units external to MDT.

34.4.1 Federal Agencies

34.4.1.1 Federal Highway Administration

The Federal Highway Administration (FHWA) administers the Federal-aid program which funds eligible highway improvements nationwide. Their basic responsibility is to ensure that the State DOTs comply with all applicable Federal laws in their expenditure of Federal funds and to ensure that the State DOTs meet the applicable engineering requirements for their proposed highway projects. FHWA maintains a Division Office within each State, and this is the primary point of contact for a State DOT.

The following statements summarize the coordination between the Safety Design Unit and the FHWA Montana Division Office:

- 1. <u>Federal Surface Transportation Legislation</u>. Chapter Twenty-four describes the FHWA involvement for Federal-aid projects which have resulted from Federal Surface Transportation Legislation. The Chapter presents a table that identifies the FHWA Montana Office involvement for different project activities (e.g., design exception) and for different project types (e.g., new construction project on the National Highway System).
- Safety Projects on the National Highway System (NHS). In general, the FHWA is invited to all field reviews and receives copies of all major reports (e.g., Scope of Work Report) on National Highway System safety projects. The FHWA has regular involvement with all NHS projects. The FHWA must approve the Scope of Work and all design exceptions for these projects.
- 3. <u>Statewide Practices</u>. The Traffic Engineering Section seeks FHWA input into projects with Federal funding, design policies, practices and criteria that will have a widespread application.

34.4.1.2 United States Forest Service (USFS)

The USFS is responsible for the management of all national forests. The USFS and the MDT currently have a Memorandum of Understanding (MOU) and approved procedures that describe the coordination between the two agencies for the planning and the development of projects having USFS involvement. If a proposed safety project will

impact a national forest, the Safety Design Unit must coordinate the project development with the USFS. The USFS will, for example, be invited to any field reviews and receive copies of major project reports (e.g., Scope of Work Report). In some cases, project actions will require USFS approval (e.g., right-of-way acquisition).

34.4.1.3 United States Postal Service (USPS)

Coordination with the USPS may be necessary to determine the location of mail delivery points and mailbox turnouts and to ensure that crash-tested mailboxes are installed on the project. The District will contact the USPS for all projects designed by MDT.

34.4.1.4 National Park Service (NPS)

Coordination with the NPS will be necessary where safety projects are in the vicinity of land under the jurisdiction of the NPS. Although the Department has no formal agreement with the NPS, the level of involvement on projects will be similar to that between the MDT and the USFS.

34.4.2 State Agencies

34.4.2.1 Department of Fish, Wildlife and Parks (FWP)

Coordination with the FWP will be necessary where a proposed project is in the vicinity of land under the jurisdiction of the FWP. Although the Department has no formal agreement with the FWP, the level of involvement on safety projects will be similar to that between the MDT and the USFS.

34.4.2.2 Other State Agencies

The Safety Design Unit coordinates with other State agencies on an as-needed basis.

34.4.3 Local Governments

The following describes the coordination between the Safety Design Unit and local governments:

1. <u>Design</u>. The Safety Design Unit solicits input from the local government on safety design projects in that locality and, in general, keeps the local governments up-to-date on any current or planned activities. For example,

larger municipalities may have their own design criteria, which must be considered during the design process.

- 2. <u>Coordination</u>. The Safety Design Unit typically invites the local government to any field reviews and provides the local government with copies of major project reports (e.g., Scope of Work Report).
- 3. <u>Assistance</u>. The Safety Design Unit provides technical assistance to the city and county governments, upon request. The Unit responds to any verbal or written inquiries from local governments on safety design issues.
- 4. <u>Information from Locals</u>. Where applicable, the Safety Design Unit will need to obtain information from local governments.
- 5. <u>Agreements</u>. In some cases, MDT determines that a safety project can be constructed by the local government more economically than through the normal construction contract process. In these cases, the Safety Design Unit works with the local government to develop a WAAP Agreement for performing the work. See Chapter Thirty-seven for more information.