

**STATE OF VERMONT  
AGENCY OF TRANSPORTATION  
CONSTRUCTION DIVISION**

**2009  
ENGLISH/METRIC  
CONSTRUCTION MANUAL**

***SECTION I*  
GENERAL INFORMATION**

## 1-100 ORGANIZATION

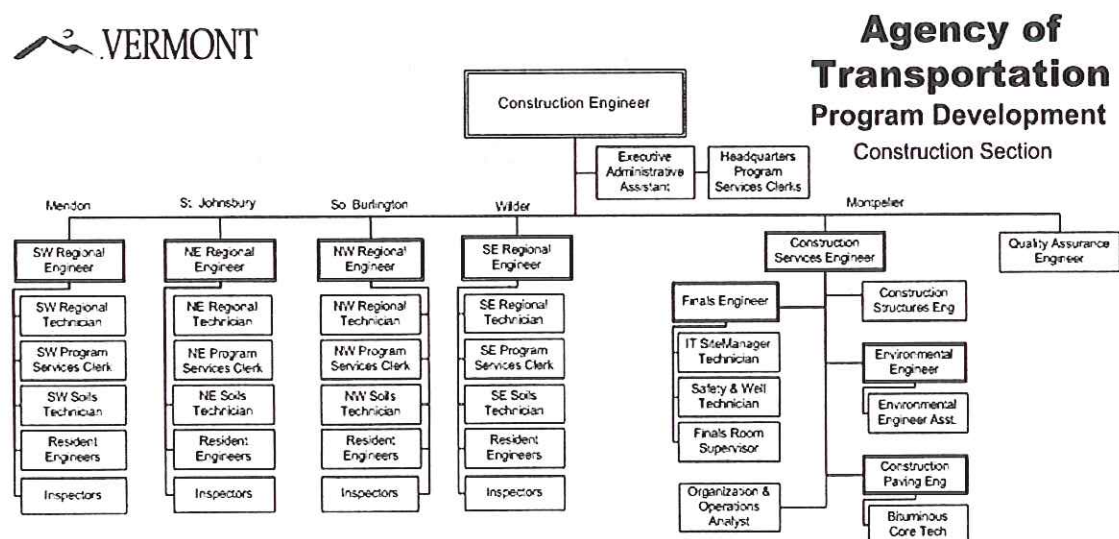
The Vermont Agency of Transportation (hereinafter referred to as VTrans) is organized to plan, design, construct, and maintain the transportation system in the State of Vermont. VTrans also provides technical and financial assistance to the towns, villages, and city road departments. The executive branch of VTrans is composed of the Secretary of Transportation, Deputy Secretary of Transportation, the Assistant Attorney General, and the Division Directors. The executive branch serves at the pleasure of the Governor.

The Transportation Board, consisting of seven members appointed by the Governor, is charged with the general supervision of the highway programs as approved by the Legislature. In general, all other employees of VTrans are classified State employees and fall under the State Personnel System.

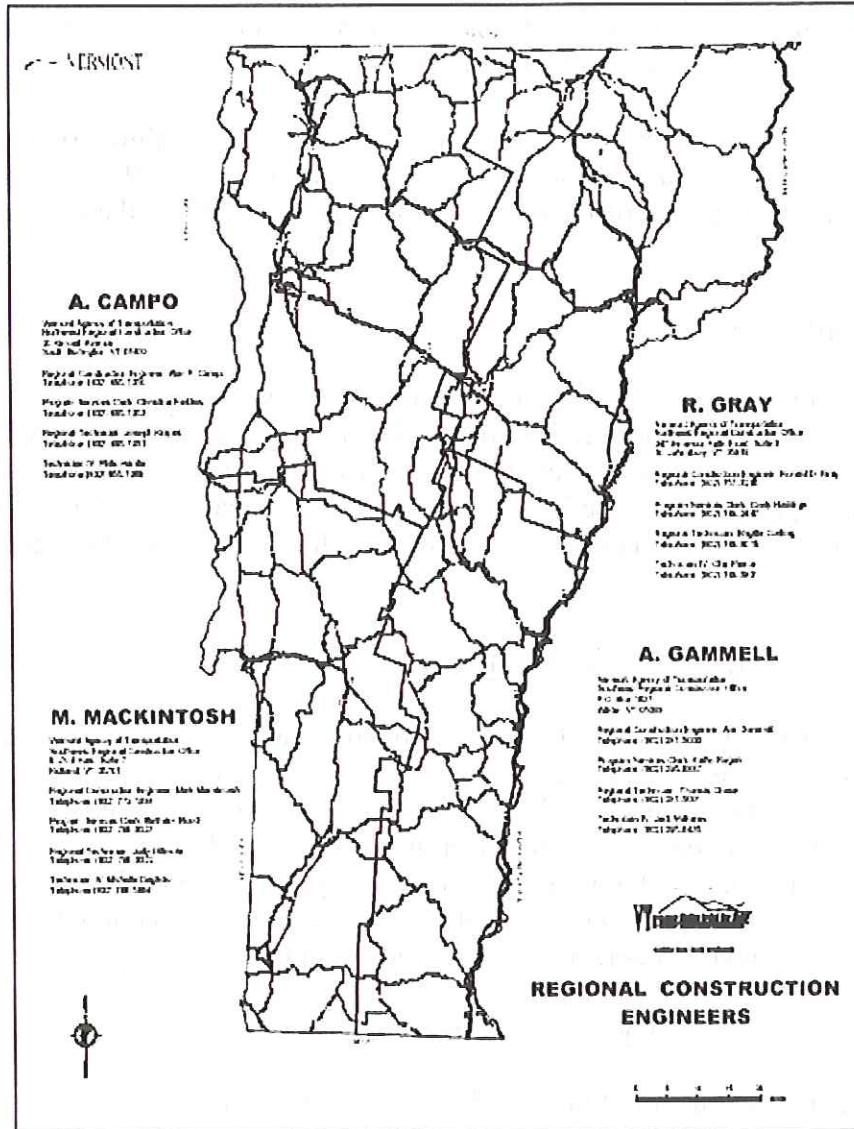
Within VTrans, the Construction Section is part of the Program Development Division (PDD). The Construction Section is responsible for the administration and oversight of road, bridge, paving, railroad, bike, pedestrian path, rest areas, and airport construction contracts. Furthermore, the Section is tasked with advancing technology in construction and seeking new construction methods resulting in cost effective projects.

The Construction Section plays an important role in the development of projects through constructability reviews and providing project managers feedback based on experience. The Section serves the industry at large and participates in meetings with the Associated General Contractors, the Pave Association of Vermont, and with other sections within VTrans such as the Materials and Research Section, the Operations Division and the Federal Highway Administration.

### 1-100.10 PDD Construction Section Organizational Chart



## 1-100.20 PDD Construction Regional Map



## 1-110 RESPONSIBILITIES OF PERSONNEL

### 1-110.10 General

The primary focus of all personnel in the Construction Section involves the administration and oversight of transportation construction projects under contract. These functions primarily consist of the direct inspection of a Contractor's field operations and the administrative work associated with the execution of the contract. There are many ancillary tasks that support the primary function of the section and development of the staff is one of these. There is a need to maintain a highly skilled work force and this requires training in materials, safety, and environmental regulations.



In addition, some personnel may be temporarily assigned to other sections or divisions during the winter months to aid in road and bridge planning and design, right-of-way acquisition, traffic research, materials and research, and district work. This provides cross training in addition to employee development.

What follows is a brief explanation of the primary responsibilities of positions in the Construction Section. The explanation is not intended to be all encompassing but to provide a general overview of the organization of the section and the responsibility of the staff.

#### **1-110.20 Construction Engineer**

The Construction Engineer is the manager of the Construction Section. This position is responsible for directing the activities of the Section; including the supervision of all staff in accordance with policies and labor contract provisions, administers the section budget, oversees the engineering, inspection, administration, and final payment of all transportation projects under contract. This position reports directly to the Director of Program Development.

#### **1-110.30 Construction Executive Assistant**

Under the general supervision of the Construction Engineer, the Construction Executive Assistant is responsible for providing administrative support to the Construction Staff and specifically the Construction Engineer. The Executive Assistant manages all personnel actions for the section, provides supervision of the clerical staff at Construction Headquarters, manages all out of state travel requests, assists the regional staff with procedural matters and provides technical support for consultant contracts, *Change Orders* (Appendix A-1), and other agreements or memorandums.

#### **1-110.40 Regional Construction Engineers**

The Regional Construction Engineer is directly responsible for all activities in their respective region. The state is divided into four regions with each region supporting a regional office. The Regional Construction Engineer supervises permanent staff assigned to the region as well as Resident Engineers and Inspectors assigned on a seasonal basis to the region to support the project workload.

The Regional Construction Engineer is responsible for ensuring that contracts are administered in accordance with the contract documents, the environmental permits, and all safety regulations. The work must be carried out in conformance with standard operating procedures.

The Regional Construction Engineers are “working managers” and are directly involved with project matters that concern property owners, disputes between the Contractor and VTrans, assisting with claims analysis, and all other procedural matters.

The Regional Construction Engineers report directly to the Construction Engineer and as such are responsible for keeping the Construction Engineer informed of important matters as necessary. The Regional Procedures Manual outlines the specific tasks and processes that the regional staff follows in the execution of their duties.

#### **1-110.50 Regional Program Services Clerk**

The Regional Program Services Clerks (RPSC) are responsible for all of the administrative work at the regional level. The RPSC supports all staff assigned to the region and maintains project records in the regional office, including managing contract correspondence, assisting with the organization of preconstruction conferences, final inspection conferences, tracking *Change Orders* (Appendix A-1), and processing subcontractor approvals. The Regional Program Services Clerks reports directly to the Regional Construction Engineer.

#### **1-110.60 Regional Technician**

The Regional Technician (RT) is responsible for generating reports and processing of progress payments to the Prime Contractor. The RT supports all staff in the region with all matters relating the use of the SiteManager system and other computer related issues, as necessary. Additional responsibilities include technical support in the development of *Change Orders* (Appendix A-1) and their entry into the SiteManager system, evaluates and enters Subcontractor requests into the SiteManager system, and may act as Resident Engineer on select projects. The Regional Technician reports directly to the Regional Construction Engineer.

#### **1-110.70 Regional Materials Technicians**

The Regional Materials Technician (RMT) is responsible for the materials sampling and testing as required by the contract specifications. The RMT performs compaction tests, material gradation tests, air and slump tests of Portland Cement Concrete, and may be required to make concrete cylinders or be involved with the production and testing of Bituminous Concrete to aid the Resident Engineer. The Regional Materials Technician is responsible for ensuring a fully functional regional soils testing facility and reports directly to the Regional Construction Engineer.

#### **1-110.80 Resident Engineer**

The Resident Engineer (RE) is responsible for the administration, engineering, and inspection of a specific project or projects under construction. The RE may be assigned a varying number of Inspectors, either consultant or VTrans personnel to aid in the performance of their duties. The assignment of an Office Engineer and additional Inspectors is dependent upon the size and complexity of the project.



The RE has a tremendous amount of responsibility. He or she must ensure that the project is constructed according to the contract documents and that all materials are in conformance with the specifications. The work must be accomplished in a timely manner and in accordance with all safety and environmental standards.

The RE the single point of contact for all project matters during construction. They must have the ability to solve complicated engineering problems, placate difficult property owners, maintain accountability of the Contractor, supervise several inspectors and maintain impeccable documentation. The job is very difficult and yet can be very rewarding.

Resident Engineers are assigned to any of the four regions in any given year. Their work station is Construction Headquarters in Montpelier and they are required to work anywhere in the State. The RE reports directly to the Regional Construction Engineer position. See Subsection 2-100.30 - Instructions to the Resident Engineer, for further information related to this position.

#### **1-110.90 Quality Assurance Engineer**

The Quality Assurance Engineer (QAP) oversees the Quality Assurance Unit within Construction. The primary responsibility for this unit is to oversee and assist with implementing quality assurance measures within each program area. The goals of this unit are to improve the estimating practices in order to achieve better precision in relation to actual bids, perform constructability reviews of all projects, formalize the procedure for getting feedback to the designers, and ensure projects prepared for construction have been produced in a quality based environment. The Quality Assurance Engineer reports directly to the Construction Engineer.

#### **1-110.100 Inspector**

Under the supervision of the Resident Engineer, the Inspector (I) gives direct inspection to the performance of the work by the Contractor on a project, and aids in the administrative, engineering, and layout work. See Subsection 2-100.60 - Instructions to Inspectors, for further information related to this position.

#### **1-110.110 Construction Services Engineer**

The Construction Services Engineer (CSE) is responsible for the oversight and management of the construction specialist positions and the Finals Unit. This includes the Structures, Paving, and Environmental Engineers and Finals Engineer. The responsibility of the specialist positions will be described later in this section.

The CSE also provides critical support to the section by serving on several key committees including the prequalification and specification committees. The CSE also plays a vital role in the analysis of contractor claims, developing procedures for the section, processing *Change Orders* (Appendix A-1) and *Bi-Weekly Estimates*. The Construction Services Engineer reports directly to the Construction Engineer.

#### **1-110.120 Administrative Services Technician**

The Administrative Services Technician (AST), previously called Organization and Operations Analyst, is responsible for maintaining Construction Section's equipment inventory list, preparing the yearly operating budget and budget reports, is the contact person for ordering supplies and works with the regions to ensure procedures are followed. The Administrative Services Technician position reports directly to the Construction Services Engineer.

#### **1-110.130 Construction Structures Engineer**

The Construction Structures Engineer (CSE) is charged with the role of expert technical resource for the field staff on all structural matters. The Construction Structures Engineer is also a liaison with the Structures Section and works during the development of plans and specifications to ensure a quality project. The CSE is active in the field attending preconstruction conferences, routine site reviews, and assisting with solving complicated structural issues. The Construction Structures Engineer reports directly to the Construction Services Engineer.

#### **1-110.140 Construction Environmental Engineer**

The Construction Environmental Engineer (CEE) provides guidance and technical assistance to Resident Engineers and contractors in order to maintain compliance with environmental regulations. In addition, the CEE directs and supervises the work of the Assistant Construction Environmental Engineer (ACEE). The Construction Environmental Engineer is also a liaison with the Environmental Section and works during the development of plans and specifications to ensure designers have accurate information regarding the Erosion Prevention Sediment Control (EPSC) requirements. The CEE is active in the field attending preconstruction conferences, routine site reviews and assisting with solving EPSC issues in a proactive manner. The Construction Environmental Engineer reports directly to the Construction Services Engineer.

#### **1-110.150 Assistant Construction Environmental Engineer**

The Assistant Construction Environmental Engineer (ACEE) provides guidance and technical assistance to Resident Engineers and contractors in order to maintain compliance with environmental regulations, attends preconstruction conferences, performs regular field visits, and final inspections. The Assistant Construction Environmental Engineer reports directly to the Construction Environmental Engineer.

#### **1-110.160 Construction Paving Engineer**

The Construction Paving Engineer (CPE) is charged with the role of expert technical resource for the field staff on all paving matters. The CPE is also a liaison with the design community and works during the development of plans and specifications to ensure a quality project.



The CPE is active in the field attending preconstruction conferences, routine site reviews and assisting with solving complicated material, placement, or payment issues. The Construction Paving Engineer reports directly to the Construction Services Engineer.

#### **1-110.170 Bituminous Core Technician**

The Bituminous Core Technician (BCT) is responsible for processing all of the bituminous concrete cores sampled from paving activities in order to ascertain the percent compaction and corresponding pay factor. The BCT is also responsible for operating and maintaining the core lab facility. The Bituminous Core Technician reports directly to the Construction Paving Engineer.

#### **1-110.180 Construction Finals Engineer**

The Finals Engineer (FE) directs and supervises the work of the Finals Unit including the Finals Technician, the Safety and Well Specialist, and the IT Support Technician. The Finals Unit is responsible for checking final project quantities; preparing the project records, including record plans for archiving and preparing the final project documentation that terminates the contractual agreement.

The Finals Engineer also serves as a resource for Construction staff in the section with regards to proper documentation practices, and supports staff with the preparation of *Extension of Time* (Appendix B-4) analysis (Refer to Section VI – Finals Unit Procedures), *Written Orders* (Appendix A-2), and *Change Orders* (Appendix A-1). The Safety and Well Specialist and IT Support Technician's responsibilities are described later in this section. The Finals Engineer reports directly to the Construction Services Engineer.

#### **1-110.190 Safety and Well Specialist**

The Safety and Well Specialist (SWS) is responsible for the implementation and management of safety initiatives within the Construction Section and is responsible for the investigation and replacement of water sources that are to be acquired by VTrans or that have been damaged by VTrans as a result of highway construction or maintenance activities. The position also assists the Finals Unit. The Safety and Well Specialist reports directly to the Construction Finals Engineer.

#### **1-110.200 IT Support Technician**

The IT Support Technician (ITST) is responsible for supporting the computer software and hardware needs of the Construction Section as well as supporting the generation of *Bi-Weekly Estimates* for Contractor payment, and the development of ad-hoc queries and reports as requested by section management. The IT Support Technician reports directly to the Construction Finals Engineer.



### **1-110.210 Finals Technician**

The Finals Technician (FT) is responsible for preparing record plans accurately and uniformly, checking field books, cross sections, and final quantities for accuracy, proper documentation, and contract compliance. This position is responsible for keeping a uniform system of filing and archiving project documentation either electronically or manually. The Finals Technician reports directly to the Construction Finals Engineer.

## **1-120 DELEGATION OF AUTHORITY**

### **1-120.10 Channels of Authority and Communication**

Within the Construction Section, the Construction Engineer has the responsibility of administering construction contracts from the time of letting through the payment of the *Final Estimate*. However, it is impossible for the Construction Engineer to personally supervise all construction matters, so certain tasks are delegated to the management team or project staff. Delegation of authority is essential to the effectiveness of authority, communication, and accomplishment of necessary tasks. Employees at all levels in the organization are responsible for their own duties, and also for any duties which they may delegate to subordinates, and it should be noted that although duties and authority can be delegated, responsibility cannot. It should also be noted that whereas duties and authority are delegated only downwards through the channels of the organization, it is very important that communication flows both downwards, upwards, and laterally through the organization so that all people in the organization have the information they need.

### **1-120.20 Authority Vested in the Resident Engineer**

The Regional Construction Engineer assigns a Resident Engineer to be the direct representative for VTrans on each construction project. The Resident Engineer is responsible for the administration of the contract, including construction inspection, required record keeping, and correspondence. To enable the Resident Engineer to carry out these functions, the Construction Engineer delegates them the authority necessary for these responsibilities. The duties and authority of the Resident Engineer are clearly spelled out in Subsection 105.10 - Authority and Duties of the Resident Engineer, of the Standard Specifications for Construction. It cannot be overstressed that within the Construction Section, it is the Resident Engineer who has the direct responsibility, and the authority, for the successful completion of the construction project.

To aide the Construction Engineer, Regional Construction Engineers are assigned to give supervision over a group of projects in a specific region of the State. The Regional Construction Engineers advise the Resident Engineers on matters, assist with resolving problems, and are vital links within the flow of communications, upwards, downwards, and laterally. The Regional Construction Engineers are advisors to both the Resident Engineer and the Construction Engineer.



On most projects, the Resident Engineer will not be able to directly supervise all operations that may occur at one time, as most Resident Engineers will manage multiple projects each season. To assist the Resident Engineer with inspection other VTrans staff and/or consultants will be assigned to assist with the inspection work. The Resident Engineer will delegate tasks to those assigned to him or her based on their skills and experience. When the Resident Engineer delegates a duty to an Inspector, they must also delegate the authority necessary to carry out the duty. In assigning duties to an Inspector, the Resident Engineer must realize, though they can hold the Inspector responsible for the work assigned them, the Resident Engineer is still responsible for the overall administration of the project.

### **1-130 EMPLOYEE INTEGRITY**

Integrity can be defined as the strict adherence to a code of moral values. VTrans is organized to administer the planning, design, construction, and maintenance of transportation facilities paid for by Federal, State, City, and Town funds derived from tax money. The objective of VTrans is to construct the highest quality transportation facilities possible in the most economical way. It is, therefore, the responsibility of all employees to conscientiously perform their duties to assure the best use of public tax dollars.

It is expected that VTrans employees will act appropriately when dealing with the public, Contractors, other VTrans representatives, as well as all other entities. When opportunities present themselves, where an employee could use their position for personal gain, the opportunities must be rejected. Most positions in the Construction Section are relatively independent, so it is up to each employee to do what is right and act accordingly. The employee must be honest with VTrans and the State of Vermont. This means that they will record their time and expenses accurately according to established procedures and the labor contract. The employee will faithfully perform their duties with a fiduciary responsibility related to the expenditure of public funds. Employees must insist that Contractors comply with the plans and specifications for the individual project or that any changes allowed are for the good of the project and are well documented. If the employee is responsible for the payment to Contractors for work performed or materials furnished, they must be accurate in the measurement of the quantities, and pay the Contractors only what they are due under the terms of the contract.

VTrans employees must avoid becoming indebted to a Contractor in any way. VTrans employees shall not accept funds in any form, for any reason; nor shall they accept materials or personal gifts from a Contractor. All Contractors and suppliers are asked to refrain from offering gifts in any form. If gifts are offered, the employee will tactfully decline. Any gift or favor, however small, and even though given and received in good faith, may compromise public trust in the employee as well as VTrans.

There are certain functions and gatherings of a social or professional nature to which the employee may be invited as a guest of a Contractor. In many cases it is felt that attendance at these functions is in the best interest of VTrans. Attendance at these functions must be authorized by the Secretary of Transportation or the Director of Program Development. Integrity is established by employees who act appropriately. Always consult your supervisor for guidance in these matters.



## **1-140 RELATIONS**

The Resident Engineer, even though skilled in engineering and having proper authority and sense of responsibility, still must follow certain policies and principles in dealing with people in order to maintain effective control of the project. Usually more can be accomplished by positive persuasion than by the use of the full authority given to the Resident Engineer. People that the Resident Engineer may come in contact with fall into seven groups as follows:

1. Other VTrans Personnel
2. Contract Employees (consultants)
3. The Contractor and their representatives
4. Subcontractors
5. The traveling public
6. Various Municipalities and Utilities
7. Federal Highway Administration (FHWA) personnel

### **1-140.10 Relations with Other State Personnel**

The Resident Engineer is responsible for the project, and therefore, is responsible for making the best use of the staff assigned to them. The Resident Engineer must assign to the Inspectors the duties that will provide the best support for managing the project and delegate the authority necessary to carry out these duties. The Resident Engineer is responsible for mentoring and training of those under their supervision. An effective method to exert influence is for the Resident Engineer to set the proper example in relationships with all parties involved with the project.

The Resident Engineer is a role model and new employees will tend to pattern themselves by the example the Resident Engineer displays. It is important that the Resident Engineer brief all the staff under their supervision. This briefing should include the technical aspects of the job and the procedure that are to be followed. Clearly setting expectations in advance will lead to a more productive working environment. The Resident Engineer should be familiar with each employee's background in order to make assignments within their capabilities and follow up routinely to ensure the work is accomplished according to the expectations or provide guidance as necessary.

The Resident Engineer should provide support to their Inspectors when disputes arise with the Contractor, provided the Inspector has a sound basis for their decision. There are instances when the Resident Engineer must overrule the Inspector's decision based on their judgment and understanding of the contract. In these situations the Resident Engineer must use extreme tact, carefully pointing out their reasoning for deciding in favor of the Contractor, and at the same time giving the Inspector credit for taking the initiative to make the best decision they determined appropriate at the time.

At times the Resident Engineer will not agree with the directives or decisions of their supervisor. It is critical the Resident Engineer expresses their position clearly to the supervisor but also acknowledge the final decision and move on. Where disagreements exist, it is important to discuss any differences in a professional and non-threatening way and move forward with the decision on record.

#### **1-140.20 Relations with the Contractor**

The Resident Engineer's relationship with the Contractor and their employees is often the key to a successful project. This relationship should be cordial and businesslike, and should be based on paying the full and fair price in return for quality work actually performed. The Resident Engineer must preserve the ability to make difficult decisions and not allow the relationship to influence the decision. They must also be able to see the Contractor's position on issues to make certain they base their decision on all the information available.

The Resident Engineer is looking for a quality end result, and the methods used to accomplish the work, within the specification's requirements, are normally up to the Contractor. The Resident Engineer should refrain from trying to specify the methods to be used; and from trying to act as a foreperson for the Contractor; but if through experience the Resident Engineer thinks they can improve the Contractor's operation, they should feel free to present their ideas to the Contractor for consideration. We are in a period of rapidly changing construction equipment and methods, and the Resident Engineer should not condemn a new and unfamiliar technique until they have given the Contractor a chance to demonstrate the methods and the results. They may, however, warn the Contractor that a new method will be acceptable only if the end results are as described by the specifications. This will make the Contractor use caution in expending time and money on an untried piece of equipment or technique, and could prevent future problems.

Prompt and rapid stake-out and the furnishing of grades are necessary to maintain the contractor's progress schedule. Waiting for engineering services that are the responsibility of the Resident Engineer results in lost time on equipment and labor for the Contractor. It is the Contractor's responsibility to keep the Resident Engineer informed of their work schedule, then the Resident Engineer can plan their work to always stay ahead of the Contractor's needs. The Resident Engineer must also try to give prompt but accurate decisions as questions arise. Untimely responses can also mean lost time for the Contractor.

The Contractor is in business to make a profit on their investment. The Resident Engineer must be thoroughly familiar with the plans and specifications to know what work is included under the bid items. If the need arises to perform work that is not covered by the contract items or specifications, a *Change Order* (Appendix A-1) should be initiated to establish a method and reason for payment. Contractors expect that they will be fairly paid for their work.



The Resident Engineer must make it clear that within the prescribed policies of VTrans, the Resident Engineer is the State's authorized representative and is in charge of their particular project. The Contractor realizes that the Resident Engineer receives supervision from others in the Construction Section, so the Resident Engineer must support management in conversation with the Contractor. The Resident Engineer is responsible for the actions of their Inspectors, and they must set the tone on project on how to deal with the Contractor's representatives. The project will run smoothly only if all matters relating to the Contractor are handled in a fair and professional manner.

### **1-140.30 Public Relations**

The programs of VTrans are developed to benefit the general public but at times will inconvenience and disrupt the lives of the traveling public and residents adjacent to the project. When the Resident Engineer arrives on the project, they may find that local residents will hold them accountable for everything related to the project. It is important to gain the respect and confidence of the property owners and local residents if possible. This can be done by explaining the project to interested parties, and by listening sympathetically to individual problems. In some cases, work can be done to ease the concerns but the Resident Engineer must be careful not to promise work that is not covered in the contract. In some cases, the Resident Engineer must forward the complaints or problems to higher authority for consideration and possible action. No individual or business located in the vicinity of the construction project will be treated unfairly and any form of discrimination will not be tolerated.

Maintenance of the portion of the construction site over which the public must travel is another phase of the work that requires constant attention if good public relations are to be maintained. This means that the Resident Engineer must review with the Contractor the project through the eyes of the public and must make sure that the road is kept in a safe condition. Care must also be taken to see that traffic control measures are in accordance with the Manual on Uniform Traffic Control Devices (MUTCD) and are clearly understood. The project must be reviewed at night to ensure safety and convenience to the traveling public. Drives to commercial establishments and private homes must be kept open, but if it does become necessary to temporarily block or cut off a drive, the property owner should be notified well in advance.

The Resident Engineer will occasionally be contacted by the local press for a story on the progress of the project. The Resident Engineer's comments should be factual, and they should refrain from giving a personal opinion regarding any controversial matter pertaining to the project. Detrimental comments should never be made regarding the Contractor, the Contractor's operations, local officials, or the Resident Engineer's subordinates or supervisors. All information must be given so concisely that it cannot possibly be misinterpreted. The Resident Engineer should summarize the interview in an e-mail message to their respective Regional Engineer, the Construction Engineer and the Public Relations contact.



### **1-140.40 Relations with the Federal Highway Administration**

The Stewardship Agreement between the Federal Highway Administration (FHWA) and VTrans is the guiding legal arrangement between the two agencies. FHWA maintains full oversight on select projects. This requirement directly places FHWA in the approval chain for all contract documents. All modification to the Contract must be approved by FHWA. It is important for the Resident Engineer to establish effective and professional working relationships with the FHWA representative for the project.

### **1-140.50 Personal Conduct**

The personal conduct and appearance of VTrans personnel, both on and off the project, is of great importance because this is often the basis on which the public forms its impression of VTrans. Also, to some extent, the Contractor and their personnel will have more respect for a Resident Engineer or Inspector who presents a neat, professional appearance and attitude. When employees are required to stay overnight at the expense of the State, they are reminded to use discretion regarding their conduct after normal working hours.

## **1-150 PERSONNEL POLICIES AND RULES**

### **1-150.10 General**

All personnel of the Construction Section are known as classified employees, and are employed subject to the Rules and Regulations for Personnel Administration as set forth by the Department of Human Resources of the Department of Administration. A complete copy of these rules and regulations and the bargaining agreement are available for reference at Construction Headquarters. This information can also be found online at the Vermont Department of Human Resources website: <http://www.vermontpersonnel.org/>.

## **1-160 SALARY PAYMENT**

### **1-160.10 General**

At the end of each bi-weekly pay period, every employee must submit a *Time Report* (Appendix A-3). This form serves two purposes; it tracks salaries of employees so the correct project can be charged, and it serves as documentation of the work performed by the employee.

### **1-160.20 Submittal Date**

The original *Time Report* (Appendix A-3), with a signature, must be mailed to Construction Headquarters so that it is received no later than Monday of payroll week. It is suggested that an employee working on more than one project during the pay period keep the form up-to-date by completing the entry for the day at the end of each day's work.



#### 1-160.30 Directions for Completing A Time Report for Permanent Employees

Following are general instructions for *Time Reports* (Appendix A-3). More detailed instructions will be provided by your Regional Construction Engineer or Headquarters:

1. Submit an original only.
2. Leave must be pre-approved and must be reported on the *Time Reports*.
3. Charges for another Division/Section must be covered by a prior request, which should indicate the proper account number and activity code, before entering charges for this on your *Time Report*.
4. The supervisor is responsible to instruct an employee on the use of this form and the correct charges. In case of an employee's illness and it's the end of a pay period, the supervisor must make out this report.
5. It is extremely important that a time report be submitted each pay period, as this is your invoice for services rendered. Without this *Time Report*, there will be no pay check and loss of insurance benefits.

#### 1-160.35 Transportation Resident Engineer Allowance Pay

Personnel assigned as a Resident Engineer, or as an Acting Resident Engineer in the Resident Engineer's absence, may be eligible for Transportation Resident Engineer Allowance Pay as per Article 75 of the Vermont State Employee Association's Contract. Eligibility criteria is as follows:

1. Assigned as the Resident Engineer
2. Contractor is actively working on project
3. More than 50% of the base 80 hours are spent on project while the Contractor is working
4. RBA allowed for 15 pay periods per calendar year
5. RBA will be tracked in a spreadsheet by the Construction Executive Assistant. The Regional Engineers and Construction Engineer will be kept apprised of the RBA pay and notified when the Resident Engineer attains 10 payments. The Resident Engineer will also be notified within three (3) pay periods prior to reaching their 15 allowed pay periods and each pay period after that until they reach the 15<sup>th</sup> pay period. If employee goes over the 15<sup>th</sup> pay period without approval by the Secretary of Transportation (in "unusual circumstances") then employee will repay the State any overpayment received.

#### 1-160.40 Time Reports for Temporary Employees

1. Submit an original only.
2. The supervisor is responsible to instruct a temporary employee on the use of this form and the correct charges. In case of an employee's illness and it's the end of a pay period, the supervisor must make out this report.
3. It is extremely important that a time report be submitted each pay period, as this is your invoice for services rendered. Without this *Time Report*, there will be no pay check.
4. Temporary employees do not get paid for holidays; therefore, they should not make any entry for these days.



## **1-170 AUTHORIZATION FOR OVERTIME WORK**

An employee will not work an hour or day classified as overtime unless authorized to do so by the Resident Engineer on the project, or the Regional Construction Engineer. Overtime hours will begin after eight (8) hours of work, regardless of time when work started for the day. Overtime days include Saturday, Sunday, and Holidays. See the latest Vermont State Employees Association (VSEA) contract for a discussion of overtime work and compensation.

It is the directive of the Construction Engineer that employees will not work more than 12 hours in a 24 hour period and no more than six days in a week. If there are extenuating circumstances where an employee must be on project in excess of 12 hours in a 24 hour period then they must obtain in advance, written permission from their Regional Construction Engineer. The written request must include an explanation as to why they must be on project in excess of 12 hours. No time over a 14 hour work day (including travel time) will be allowed. The Regional Construction Engineer will ensure that proper staffing is in place so that the limits established above are not exceeded.

Regional Construction Engineer: Sign *Request for Overtime* (Appendix A-4) and forward to Headquarters. (Once per job, per season.)

Resident Engineer: Scheduled overtime which can be predicted based on more than eight (8) hour days or working Saturdays must be approved before working. Unscheduled overtime must be requested immediately. Submit *Request for Overtime* form promptly.

Enter the names and pay scale of everyone who might work and check their choice of receiving pay or compensatory time off. The minimum number of people should be used in an overtime status to adequately inspect the Contractor's work.

Enter the specific reason why overtime authorization is being requested.

An eligibility roster should be maintained to ensure everyone has equal opportunity to work overtime. Retain this roster with your project files.

### **1-170.05 Call-in Pay**

It is the directive of the Construction Engineer that an employee cannot self approve the use of call-in pay.

Reasons for call-in pay shall be limited to those circumstances during an unplanned non-working hours event that require an employee to go to the project site to take action and/or address issues that are deemed necessary to protect the state's interest. The Resident Engineer must first consult with section management to determine if the situation on site requires their presence before departing to the site. Approval by the Regional Construction Engineer will be executed through an e-mail message to the Resident Engineer (with a copy to the Construction Engineer). In the case of an emergency it is recognized that it may not be possible for the Resident Engineer to get an immediate response from management, however, it is expected that the Resident Engineer would send to management an e-mail or



leave a voice mail message stating what has occurred and their intention to visit the site. As time permits the Resident Engineer would then follow-up with the Regional Construction Engineer. Reasons that may dictate a call-in situation are those which generally originate from the State Police, Operations, or Local officials summoning the Resident Engineer to the project. The concerns may range from the safety of the traveling public, the potential for an environmental incident, concerns for the structural integrity of a structure, theft, and vandalism. The purpose of visiting the site would be to confirm the existence of an issue and if necessary oversee the operations of the contractor in addressing the concern.

Example: State police call the Resident Engineer on a Sunday morning stating there is a need for dust control on project. The expected response in this instance is the RE would contact the Contractors emergency contact person and direct them to respond. There is no need for the RE to be on site. If, however, the incident on project included a severe accident and/or the accident caused extensive damage to elements of the project where the traveling public could be at risk, then the employee, in consultation with the Regional Construction Engineer may determine it is in the state's best interest to report to the project site, assess the damage, and direct the contractor as necessary to ensure public safety. In this case the provisions of call-in pay would then apply as set forth in the State/VSEA contract.

Activities that are planned in advance such as checking concrete cures, moving cylinders, checking environmental control features, or ensuring traffic control measures are not eligible for call-in pay.

#### **1-170.10 Compensatory Time**

In addition to the 56 hours of Compensatory Time Hours allotted by the VSEA Contract, personnel can request additional accrual of compensatory hours by filling out a *Compensatory Time Request Form* (Appendix A-7) and submitting for approval by their Supervisor and the Construction Engineer. As per Field Memorandum to All Construction Personnel dated September 12, 1997, the maximum limiting amount of Compensatory Time Construction Personnel can accrue and have on the books at any one time is 120 hours. That directive will stay in effect until rescinded by the Construction Engineer.

## 1-180 TRAVEL EXPENSES

### 1-180.10 General

All employees are authorized to be reimbursed for their expenses for travel when they are required to work away from Construction Headquarters and away from their home. The policy for reimbursement of these expenses is established by the Finance Division of the Department of Administration. Reimbursable expenses are generally those actually paid by the employee and include travel expense, meals, lodging, postage, telephone, miscellaneous incidentals, and supplies.

It is expected that all employees will submit for reimbursement only those expenses which they have actually incurred. Furthermore, all expenses incurred are actually necessary and reasonable, and are made with the interest of the taxpayers of the State of Vermont in mind. The current policies relating to travel expenses are given in the following section.

### 1-180.20 Transportation Expenses

Seat belts must be used by all occupants in State owned vehicles and in private vehicles for which reimbursement is being claimed. The use of the private automobiles is reimbursed at the rate established by the GSA for miles necessarily traveled while performing duties. Mileage is allowed from the employee's home to the project, regardless of their relationship to Construction Headquarters. An employee is not allowed mileage for commuting from their home to their base work station. If possible, several employees going to the same project will travel together in the same vehicle. In this case, only the owner of the vehicle used is eligible for mileage allowance. This will be the normal policy for all staff performing survey, whether preliminary, construction, or final.

If driving over 2,000 reimbursable miles per year, the individual must take the Defensive Driving course and State owned or leased vehicles will be used when available. Mileage on the project, as well as to and from the place of lodging while subsisting on or near the project, is allowable.

While subsisting away from home and from Construction Headquarters, travel time from the employee's home to the project and return will normally be allowed only once a week, usually Monday morning and Friday or Saturday night. However, if a holiday falls in the week, or if the employee takes leave during the week, they will be paid travel time to their home and return on the day preceding and the day following the holiday. If an employee subsisting away from home desires to return to home one night during the week, they may do so and receive the mileage allowance for up to a total of 160 miles round trip. If they receive this allowance, they will not receive reimbursement for the evening or breakfast meal, or for the night's lodging. The employee will not allow this mid-week trip to interfere with their normal duties.



An employee called to Construction Headquarters from the project for a conference during the week will be allowed mileage from the project to Construction Headquarters and the return trip to the project.

An employee receiving special subsistence in lieu of expenses, see Section 1-180.50 Special Subsistence in Lieu of Expenses, will be allowed a total of 20 miles to commute from their temporary residence to the project and return each day.

Employees who are required to travel to a project, but do not own a vehicle and who cannot obtain a ride with another employee, are authorized to travel by commercial means, such as rail or bus. A cancelled ticket stub or other receipt must be submitted as a voucher for reimbursement.

An employee who is required to travel to a project, but who does not own a vehicle and is unable to arrange a ride with another employee, may be allowed the mileage allowance if he/she is delivered to the project by a parent, relative, or acquaintance; when approved by the Construction Engineer. No allowance shall be made for transportation by hitchhiking.

Employees are expected to commute to work when the distance from their residence to the project site is 50 miles or less. Employees are expected to stay overnight when the distance from residence to project is more than 80 miles. Between 50 and 80 miles a decision will be made by the Regional Construction Engineer. Exceptions to this provision are a case-by-case basis and must have approval of the Regional Construction Engineer.

#### **1-180.30 Meals**

Meals are reimbursed based on the rates published in the latest version of the VSEA Bargaining Agreement, which can be found at the following website: <http://www.vermontpersonnel.org/>

#### **1-180.40 Lodging**

Lodging may be at hotels, motels, or tourist homes, and will be reimbursed at actual cost. As a guide, it is expected that employees will avail themselves of the government rate available for a room with bath. Two or more employees may occupy a room. They will each pay and receive reimbursement for only their pro-rated share of the room costs.

A receipt is required for lodging expenses. Many hotels and motels offer special government rates which should be inquired about when checking in. Also some hotels and motels will direct bill the Construction Section. In such a case, please sign the invoice and add your project name and number. On your expense claim, state "Lodging direct billed to the State."

1. In the selection of lodging, consideration will be given to choosing the location requiring a minimum of travel to obtain meals and to get to the project.
2. An employee whose home is at least 80 miles from the project, and whose presence is essential on the project by 7:00 a.m. on Monday will be allowed to travel to the project on Sunday night and receive reimbursement for the lodging.
3. It is anticipated that these will be isolated cases and must be coordinated with, and the need substantiated by the employee's Supervisor prior to incurring the expense.

#### **1-180.50 Special Subsistence in Lieu of Expenses**

With the recommendation of the Construction Engineer and the approval of the Director of Program Development and the Secretary of Transportation, an employee may be authorized to receive a subsistence allowance in lieu of the meals and lodging allowance. The main purpose of the subsistence allowance is to permit the married employee who will be stationed away from their home for a relatively long period of time to take their family with them to the project area. The allowance will be used for the rental of suitable living quarters such as a house, camp, apartment, or trailer.

An employee taking annual leave while on special subsistence will deduct 1/5 of the weekly allowance for each day of annual leave taken. No deduction will be necessary for Saturdays, Sundays, Holidays, or time taken as sick leave. Mileage on the project and reasonable mileage between the temporary residence and the project will be allowed.

Mileage from the employee's home to the temporary residence and return will be allowed only one time, upon going onto and coming off the subsistence allowance method of reimbursement. A receipt is not required for the subsistence allowance.

Subsistence is not normally allowed for living in tents, private vehicles, or other sub-standard housing. Subsistence may occasionally be granted for the employee desiring to camp with his family in a State or National Park, when it can be shown that the cost to the State will be less than the cost for maintaining the employee on the meals and lodging basis, but this provision will not be considered for an extended period of time.

When lodging and restaurant facilities are not readily available in an area, an individual or group of individuals may be granted the subsistence allowance in order to maintain themselves in a rented trailer or apartment. It must be shown that it is in the best interest of the State to make this arrangement. All of the above provisions relating to subsistence will apply.

To obtain the subsistence allowance, a request in writing must be presented to the Construction Engineer. This request will state the reason for desiring the subsistence, and must specify the arrangements that have been made or will be made for lodging. Once granted, the Construction Engineer may retract permission for subsistence allowance at any time if he/she deems it in the best interest of the State to do so.



### **1-180.60 Miscellaneous Purchases**

All purchases must be cleared through Construction Headquarters. A receipt must accompany expense reimbursement for postage and emergency supplies. For telephone call reimbursement, a copy of the monthly bill with business calls highlighted and an explanation of who was called should be provided.

### **1-180.70 Expense Account Forms**

Only seven items of reimbursable expense will appear on the expense account. These are: mileage, meals, lodging, special subsistence allowance, postage, telephone calls, and miscellaneous expense.

An out-of-state travel request number is required for such things as crossing into a neighboring state to work or inspect a materials production plant supplying a project in Vermont. For extended out-of-state travel, consult Construction Headquarters. Receipts for lodging, postage, and miscellaneous expenses are to be attached to the front of Form APER-10.

Use of Form APER-10, *Request for Reimbursement of Expenses* (Appendix A-5, available electronically on CD or from the Regional Office or Headquarters): Form APER-10 is used by all employees to submit claims for reimbursement for travel and other expenses, at the same time distributing the costs involved in accounts or projects worked on based upon work assignments. When an out-of-state travel request is used, a copy of the travel request must accompany the expense account.

Number of copies: Form APER-10 shall be prepared in black or blue ball point pen or may be typewritten and must always be prepared in duplicate. The use of ditto marks, the word "ditto", or the word "same" will not be used. Necessary receipts, authorizations, etc., should be stapled to the top of the first sheet.

Instruction for Form APER-10: This form is required by the Department of Finance and the Agency of Financial Services Division and must be utilized by VTrans employees to request reimbursement for expenses on the Finance Payroll System. Detailed instructions may be obtained from your Regional Construction Engineer, Regional Program Services Clerk, or Construction Headquarters.

Submitting *Requests for Reimbursement of Expenses*: Submittals will be for a two-week period beginning with Sunday and ending with Saturday. Due date for submitting requests for reimbursement of expenses is the Friday following the *Time Report* (Appendix A-3) submittal deadline. However, it is easier to submit them at the same time you submit a time sheet.

## **1-190 UTILITIES BILLS (REGIONAL SOILS TRAILERS)**

### **1-190.10 Bills**

The address for all fuel, telephone and electricity bills is as follows:

Vermont Agency of Transportation  
Construction Section  
1 National Life Drive – 2<sup>nd</sup> Floor  
Montpelier, Vermont 05633-5001

## **1-200 EQUIPMENT AND SUPPLIES**

### **1-200.10 General**

All the equipment other than drafting equipment that is required by Construction Section is supplied by VTrans through Construction Headquarters. Equipment and supplies fall into two categories:

1. Survey, staking, field equipment
2. Administrative office supplies

Construction Headquarters maintains an inventory database of all equipment assigned to the Construction Section. The database allows for a quick search of the equipment, in the event that an employee is in need of a specific piece of equipment. The database is maintained by the Construction Administrative Services Technician.

### **1-200.20 Procurement**

Survey equipment: total stations, data collectors, transits, and automatic levels are issued only upon authorization by the Construction Engineer. Other nonexpendable items such as tapes, level rods, and hammers are issued as requested. Expendable items such as marking crayons, nails, and red cloth are issued as needed. Grade stakes, hubs, and flats are available at the soils trailer within each region.

Office supplies, including the various personnel forms are obtained in Construction Headquarters, as needed. Other office equipment such as pencils, pencil sharpeners, loose leaf binders, and field books are obtained from the Regional Office or Construction Headquarters. All supplies will be ordered through Construction Headquarters and distributed to the Regional Offices upon request.



### **1-200.30 Transfer of Equipment**

Often during the summer construction season, it is necessary to transfer non-expendable equipment such as total stations, transits, data collectors, or torque wrenches from one employee to another. It is the responsibility of the individual in current possession of the equipment to notify the Construction Administrative Services Technician in Headquarters to whom the equipment will be transferred. The Construction Administrative Services Technician is responsible for maintaining the Construction Section's equipment database so that management will know what is available for equipment at any given time.

### **1-200.40 Care of Equipment**

Equipment will be properly cared for and safeguarded while in the possession of the employee. The Construction Section has implemented a yearly maintenance program for the equipment, therefore, equipment should be sent to Headquarters every winter for cleaning and calibration. Employees shall take any necessary precautions against the loss or theft of equipment in their possession, as they may be held accountable for any equipment assigned to him/her which they cannot produce.

### **1-200.50 Private Use of State-Owned Equipment**

VTrans employees will not use State owned equipment, such as survey equipment, to engage in private work either on a paid or non-paid basis. The main reason for this is the complaint by incorporated engineering companies that work done by an individual who does not have to purchase their own equipment is done at an unfair competitive advantage over the person or company that does have to supply its own equipment. An employee owning their own equipment may perform outside work on his/her own time, if it in no way interferes with their VTrans employment.

## **1-210 CARE AND USE OF STATE OWNED MOTOR VEHICLES**

### **1-210.10 General**

The uniform policy governing the use and care of State-owned vehicles is issued by the Secretary of the Administration's office. State-owned vehicles are provided for official use only, and only State officials and/or State employees are permitted to operate and ride in these vehicles unless this requirement is waived in writing by the Secretary of Administration. This requirement has been waived for Town officials, officials of the Federal Highway Administration, officials of other Federal agencies, and visiting officials from other states.

### **1-210.20 Operation and Servicing**

The vehicle operator is responsible for the care and maintenance of the assigned vehicle. Any major repairs resulting from the operator's neglect of maintenance could result in dismissal according to personnel rules and regulations. Vehicles shall be maintained according to the *Central Garage Preventative Maintenance* program and the Guidelines issued by the Vermont Department of Buildings and General Services' Fleet Management Division, a copy of which should be found with the vehicle being operated. Maintenance of a vehicle is a continuous job requiring actions before operation, during operation, and after operation. Items normally checked by the driver are gas, oil, water, antifreeze, air, and necessary reports. Gasoline and oil should be obtained through the use of credit cards issued with each vehicle. Necessary repairs to VTrans vehicles will be done by the Central Garage. Required maintenance of Fleet Management vehicles will be done by approved garages. Gasoline will be purchased using the Fleet Management's credit card. Oil changes, tire replacements, and any other vehicle maintenance charges will be billed directly to Fleet Management's office in Waterbury or may be covered with the credit card if preapproved by Fleet Management.

### **1-210.30 Reports**

Reports necessary with VTrans owned vehicles are forms TA-160 and TA-25 Rev. which are submitted weekly and are self explanatory. These forms are available at the Central Garage in Berlin. Records of Fleet Management vehicles maintenance work and their monthly logs will be sent to Construction's Headquarters in Montpelier.

## **1-220 PERFORMANCE EVALUATIONS**

### **1-220.10 Purpose**

Under the *1967 Vermont Compensation Plan*, the performance of each employee in the classified service shall be rated annually. In addition, employee ratings are required upon scheduled completion of a trainee, probationary, or warning period; upon separation from VTrans and at such other times as are necessary or desirable.

### **1-220.20 Supervisors Responsibility in Performance Evaluations**

It is important to consider the essential factors (see Section VIII – Performance Evaluations) if the performance evaluation report is to reflect an accurate evaluation of the employee's performance on the job. No hard and fast rules can be developed which will ultimately produce a perfect evaluation, mainly because of the human element involved in the rating procedures, with the quality of the supervisor's judgment the major factor in determining the quality of the final evaluation. The rater should evaluate the performance for the period being covered and should not be influenced by evaluations for prior periods. In this respect, requests for previous service ratings for purpose of comparison will be denied by the Human Resource Section.



The four possible performance evaluation ratings are as follows:

1. Unsatisfactory
2. Satisfactory
3. Excellent
4. Outstanding

Ratings should be based primarily upon the relationship of the employee's work performance to the standards of performance applicable to the position and department. Performance evaluation reports for previous rating periods, length of time in state service, and comparisons with co-workers are not rating factors.

### **1-220.30 Instructions for Performance Evaluations (FORM AA-PER-6C)**

Unless you are rating an employee who has worked for you the major portion of the year, you should collaborate with the other supervisors of this employee. Attachments may be made by others. The following numbered instructions refer to the corresponding numbers on form AA-PER-6C, *Performance Evaluation Report* (Appendix A-6).

1. Heading: All identifying information, type of report, and period of report will be completed by Construction Section's Headquarters, or Regional Office depending upon the employee's assignment for the rating period.
2. Evaluation dates: Include the dates of the review period. The rating has to be returned within 45 days from end of rating period date. However, for an original probation involving a pay raise, the rating is due upon the next to last day of the 6 month probation. Later, write in the date of actual interview.
3. Overall Performance: Check the appropriate rating.
4. Signature Section: On the left hand side include the name and title of the supervisor, reviewer, and appointed authority. The right hand side is for a written name and date.
5. Page 2: Major Job Duties with Performance Expectations: This sheet is prepared by the supervisors and revised as necessary and is attached to the evaluation.
6. Page 3: Performance Comments: This is the supervisor's comments based on the Major Job Duties list.
7. Page 4: Performance Expectations for Next Rating Period: This section should be prepared by the supervisor.
8. Reviewer Comments: Comments are made by next immediate supervisor; i.e., Construction Engineer.
9. Appointing Authority Comments: Comments are made by the Construction Engineer or the Director of Program Development.
10. Employee Comments: Section to be used for the employee to comment on the evaluation.

Attachments to the evaluation may be made if a person worked four (4) or more weeks with others, whether it be another Resident Engineer or other section heads.

The primary purpose of a Performance Evaluation interview is to assist the employees to know their job and attain a fully satisfactory level of performance. A Performance Evaluation interview should be constructive and benefit both the employees and section. Through discussion between supervisor and employees a greater understanding of the relationship between individual position duties and section objectives can be developed. Performance standards applicable to the position should be reviewed with the employees. They should be complimented on those aspects of their performance which presently meet the section's requirements and advised of specific ways in which performance below such standards may be improved.

At the conclusion of the Performance Evaluation interview, all copies of the report should be signed and dated by the rated employee to indicate that they have received a copy and the report has been discussed with them; the employee's signature does not denote that they agree with the evaluation or the rating. The original should then be returned to the Construction Executive Assistant to be forwarded on to the Division's Personnel Coordinator.

An employee's request for review of any item contained in the evaluation should be submitted in accordance with the procedures contained in *Rules and Regulations for Personnel Administration*.

#### **1-220.40 Outstanding Performance (Merit Award)**

Upon recommendation of the appointing authority and approval of the Chief of Human Resources unless \$1500 or more, an employee may receive a salary adjustment for Outstanding Performance, on a special project, at or between annual ratings. Such an adjustment may be in the form of a non-recurring bonus, or in the case of an employee not at the maximum step, an increase in base pay.

#### **1-220.50 Employee Recognition Program**

The John T. Gray Manager of the Year is selected by the Secretary of Transportation from nominations submitted by Agency Directors. The selected employee is recognized at a VTrans function and receives a plaque and bonus.