



**DEPARTMENT OF TRANSPORTATION**

***FINAL REPORT***

**DISPOSAL SITE QUALITY TEAM**

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**September 2001**

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## EXECUTIVE SUMMARY

The disposal site quality team was formed in July 2000 to address Caltrans (Department) and Federal Highway Administration (FHWA) policies on disposal, staging, and borrow areas (DSB), including plant sites, contractor yards, and access roads. Team members represented Caltrans headquarters and district offices, and included Legal, Engineering Service Center, Office Engineer, Project Coordination, Planning, Environmental, Design, Construction, Right of Way, and FHWA. A team charter was developed to define the team's objectives and guide their efforts (Attachment A).

In general, the existing DSB policy adopted by Caltrans and FHWA has been that contractors are responsible for all aspects of off-right-of-way disposal, staging, and borrow areas, including environmental compliance (Attachment B and C). However, contractors are increasingly unable to obtain the necessary permits and clearances in time to complete the work as scheduled. There has also been controversy regarding responsibility for compliance with the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA), and other state and federal regulations that may apply to these areas during the project development process and throughout construction.

At issue is whether compliance is the responsibility of contractors, Caltrans, FHWA, or property owners. The Caltrans specification addressing disposal and local borrow material states that the contractor is responsible for obtaining necessary permits, licenses, and environmental clearances when disposing or obtaining material outside the highway right of way. For many reasons, this language has resulted in landowner disputes, contractor claims, and violations of resource agency laws and regulations, such as disposal material being placed on wetlands, archeological sites, or other sensitive areas. As a result, some resource agencies are now requiring identification and environmental compliance/clearance of DSB sites prior to issuance of permits or other agreements, such as biological opinions for sensitive species impacts. This has caused interagency conflicts, project delays, and additional expenditures of time and money.

The team recommends adopting an updated policy that would reflect current environmental regulations and project delivery goals. Based on detailed analyses and conversations with resource agencies, contractors, and other state DOTs, the team developed two recommendations:

### **1. Caltrans identification of designated disposal, staging, and borrow sites**

Caltrans would identify and ensure availability of any DSB sites determined necessary in the project development process, and if needed, pursue appropriate environmental clearance/compliance, including permits. This solution would result in greater Caltrans effort during project development and design, but it would help ensure that all projects are biddable and buildable, satisfy resource agencies, and lead to cost savings in the long term.

## **2. Modification and enhancement of guidance documents and specification language**

Guidance documents and manuals would be modified to establish a standardized process for review of DSB sites as needed during the project development process, which would ensure adequate environmental review and analysis. Specifications would be modified to require a detailed DSB submittal by the contractor, when needed, to ensure compliance with pertinent environmental laws and regulations. These modifications would continue to allow contractors the flexibility to choose more economically feasible sites when advantageous.

Adopting a designated site policy would efficiently provide for action early in the project development process. In addition, the team's recommendation for early action is consistent with the Department's Change Control initiative.

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## 1. PROBLEM STATEMENT

Caltrans construction projects often generate excess pavement or soil excavation materials that must be disposed of, either on or off site. Conversely, borrow material is sometimes needed for construction of embankments and ramps. Areas for staging and storage of materials, supplies, equipment, contractor field offices, and other uses are also needed for most projects. The size, location, and extent of land needed for these uses vary greatly, ranging from an existing narrow strip of state right of way, to larger blocks of land nearby or even some distance from a construction site, depending on site availability and nature of the use.

There has been controversy regarding responsibility for compliance with the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA), Section 106 of the National Historic Preservation Act (Section 106), Section 4(f) of the U.S. Department of Transportation Act of 1966 (4[f]), and other state and federal regulations for disposal sites and staging areas, and at times, borrow sites. At issue is whether compliance is the responsibility of the contractors, Caltrans, FHWA, or property owners.

The standard specifications (Sections 6-2, 7-1.13) state that contractors are required to furnish satisfactory evidence that necessary permits, licenses, and environmental clearances have been obtained. The question of what is adequate documentation has been a topic of debate. Many situations have occurred in which contractors obtained county grading permits and then proceeded with work on the assumption that they did not need any other permits or approvals. CEQA guidance suggests that environmental compliance should be addressed by counties when issuing permits. However, when compliance requirements are not addressed, problems often arise. Some counties have been issuing permits that are questioned by regulatory agencies, while other counties do not require grading permits, further exacerbating the problem.

Significant conflicts have occurred with resource agencies after disposal material was placed in or on wetlands, archaeological sites, or other sensitive areas. As a result, some of these agencies now perceive Caltrans as shunning its responsibilities and have begun requiring identification and environmental compliance of these sites prior to issuance of permits or other agreements, such as biological opinions for sensitive species impacts.

Numerous projects have been affected by this issue throughout the state. Examples include:

### **PA&ED and/or PS&E Delays**

- Knighen Road Extension, District 2, Shasta County. Biological Assessment rejected by USFWS pending identification of staging areas and assessment of impacts.
- Antelope Creek Bridge Replacement Project, District 2, Tehama County. Biological Assessment rejected pending identification of staging and disposal areas and assessment of impacts.
- California Redlegged Frog Programmatic Biological Opinion, District 5, San Luis Obispo County. USFWS required identification of disposal, staging, and borrow sites.

- Humboldt Bay Bridges Project, District 1, Humboldt County. Biological Assessment rejected by USFWS pending identification of disposal and staging areas.
- Adobe Road Project, District 2, Tehama County. FHWA representative rejected Environmental Assessment because it contained an optional borrow site necessary for the project. The project required about 100,000 cubic meters of material in an area where it would be difficult for a contractor to find that amount.
- Soquel Drive Bridge Replacement, District 5, Santa Cruz County. Four-month delay due to re-initiation of consultation with USFWS to address designated critical habitat issues associated with potential borrow/disposal/staging impacts. Bridge was being rebuilt in place in an urban environment with minimal habitat impacts.

### **Construction Delays**

- Hopland Expressway Project, District 1, Mendocino County. Contractor became responsible for 180,000 cubic meters of disposal material. Project delayed pending site acquisition and permits.
- Ashpan Curve, District 2, Shasta County. Contractor unable to find suitable site for disposal of 16,000 cubic meters of material within USFS lands. Material was “lost” in small amounts on private land to avoid county grading permit.
- Highway 96 Rehabilitation, District 2, Siskiyou County. Contractor unable to locate suitable place for batch plant, resulting in long haul and \$1.5 million claim.
- Highway 1 Burns Creek Bridge Replacement, District 5, San Luis Obispo County. Contractor unable to get permits for batch plant along coast. Construction was delayed one year.
- Rock Slope Protection on Highway 166 at Cuyama River, District 5, Santa Barbara County. Two-month delay during construction to resolve USFWS concerns about project-related access, storage, and disposal areas and potential for impacts on California red-legged frog and arroyo toad.
- Various projects in District 11. Contractors in District 11 having trouble locating disposal sites for PCC grinding wastes and clean fill. Commercial dumps often too far away or refuse disposal material. As a consequence, mandatory sites being used and long-term stockpile areas developed for future use.

### **Sensitive Resources Impacted**

- Miller’s Curve Project, District 2, Shasta County. Contractor received county grading permit, then placed 80,000 cubic yards of disposal material on top of wetland without obtaining resource agency permits.
- Ravendale Highway 395 Rehabilitation Project, District 2, Lassen County. Contractor made deal with adjacent landowner to establish staging area on top of sensitive species breeding habitat.
- Highway 88 Rehabilitation Project, Highway 88, District 10, Amador County. Contractor made deal with adjacent landowner for access road and disposal site that impacted a historic site and an archaeological site within a state landmark. County issued a grading permit for the disposal area.

- Cushing Creek Project, District 1, Del Norte County. Contractor filled in wetlands and sensitive plant areas. Del Norte County had given approval.
- Piedras Blancas Realignment Project, District 5, San Luis Obispo County. Contractor developed contractor's yard in riparian corridor and on top of archaeological site, wetlands, and other sensitive resources.
- I-15 Miramar Way, District 11, San Diego County. Disposal site and staging area were established, but contractor expanded their use, impacting resources.
- Highway 76 and Olive Hill, District 11, San Diego County. Contractor made agreement with landowner to dispose of excess material along stream without permits. Resource agencies assessed fines on Caltrans.

### **Litigation**

- Woodruff Butte Decision, Arizona (FHWA). Court issued a preliminary decision that FHWA could defer but not absolve itself of its obligations under Section 106 with regard to possible effects of a contractor-selected commercial materials source on a culturally significant site.
- Furbreeders vs. Caltrans, District 1, Del Norte County. Subcontractor made deal with landowner to place disposal material in coastal zone. Court ruled in Caltrans' favor due to agreement between landowner and subcontractor.
- Miller Creek Slide Repair, Highway 1, District 4, Sonoma County. Contractor used a creek to store excess disposal material. County District Attorney wanted to file criminal charges against Caltrans. (No litigation ensued this time, but the incident cost staff time and potentially strained future relations with the County DA's office.)

One alternative to assigning responsibility to the contractor has been to require contractor use of mandatory sites, in which case, Caltrans and FHWA take responsibility. It is possible to designate mandatory sites if needed, but that alternative requires environmental and economic justification or other public interest findings and concurrence by FHWA (23 CFR 635.407(a)). In practice, this justification process was burdensome, time consuming, and difficult, and was therefore avoided. The general policy of both Caltrans and FHWA has been to avoid specifying mandatory sites, but their position regarding optional sites is unclear. Some districts have been addressing the issue by providing unofficial environmental compliance for optional sites, while others have not been allowed (either internally or by FHWA) to do so.

Inconsistent application of unclear policies and recurring problems as outlined in the above examples warranted an in-depth examination of current policies. The Disposal Site Quality Team was formed to examine the issue and to devise a responsible solution that would be efficient and effective, while also meeting the concerns of the resource agencies (see Attachment A). Such a solution would save time and money, minimize project delays, and reverse the deterioration of our partnerships with regulatory agencies.

## 2. BACKGROUND

### A. History

The issue of DSB responsibility has been around for many years. Memoranda dating back to the 1980s indicate problems with advertising biddable and buildable projects because of DSB issues or components of DSB, e.g., lack of availability of suitable staging or contractor use areas. The 1987 FHWA policy paper (see Attachment B) addressed the legal issue and concluded that certain federal environmental requirements would apply only to DSB sites if such sites were actually or effectively dictated by the project requirements.

The policy's reasoning was that the connection between federal money used to construct the project and contractors' need to purchase related "products," such as steel beams or borrow material, or to establish disposal or staging areas, was so attenuated that there would be no federal responsibility for those actions. Section 106 and 4(f) compliance would therefore not be required. The policy argued that if federal responsibility were attached to every remote project impact, then federal law would extend too far into the national economy. It concluded that responsibility for DSB should normally rest with contractors, who would then be free to get the best possible value for "products" and thus serve the public's best interest.

A year later, in December 1988, other guidance (Attachment D, FHWA Guidance on the Consideration of Historic and Archaeological Resources in the Highway Project Development Process) declared that:

"It is, however, FHWA's responsibility to ensure that the state's procedures for evaluating impacts of borrow areas, storage areas, preparation sites, haul roads, staging areas, disposal areas, etc., are responsive to Section 106 requirements prior to the approval of Federal funds. Potential contractors should be made aware that any impacts on historic and archaeological resources...directly related to the Federal Project are subject to compliance with [NHPA] Sec. 106 .... 'Directly related to the Federal Project' means that the area in question is either designated in the contract or the number of areas available is practically so limited as to require the selection of a historic or archaeological resource."

While the 1987 policy paper and the 1988 FHWA guidance are consistent, the latter appears much more supportive of designation of DSB sites.

In more recent years, delays to Caltrans, and even to locally funded projects, have been increasing because of DSB issues. Resource agencies are increasingly requiring identification of sites prior to taking action, such as before issuing biological opinions that are needed to deliver the project development milestone Project Approval and Environmental Document (PA&ED). Environmental permits and approvals are also being withheld or conditioned with the requirement that sites will be identified and impacts assessed prior to construction. If such permits or approvals are withheld, there can be delays in delivering the milestone Plans, Specifications, and Estimates (PS&E).

The problem of lack of DSB site identification also permeates the construction and post-construction phases. Projects are delayed when contractors cannot build a job because suitable and adequate disposal sites are unavailable, or when they cannot complete environmental compliance requirements within the contract's allotted time. Projects have generated excess material that was illegally placed in or on wetlands, archeological sites,

sensitive species breeding habitat, or sensitive plant populations. Such violations, although caused by contractors and at times permitted by counties, have been directly linked back to Caltrans, resulting in litigation and associated legal costs. In addition, disagreements with resource agencies raise credibility issues, straining our relationship with them and decreasing chances for success on other fronts. Under these conditions, partnering objectives could be more difficult, and streamlining efforts could be affected, unless we make reasonable efforts to improve compliance with environmental regulations as the regulatory agencies perceive them.

In an effort to better understand the DSB issue, a break-out session was held at the Environmental Managers Conference in San Diego in May 2000 to address the status of DSB issues. FHWA legal and environmental representatives attended, as well as various Caltrans functional area representatives. The awareness and concern developed at the session led to the formation of a quality team to study the issue and make recommendations. The team began meeting in July 2000.

Although the team was called the Disposal Site Quality Team, the team charter was directed at addressing borrow and staging areas as well as disposal sites. This broader objective was recognized in the subsequent development of the term "DSB" to represent disposal sites, staging areas, borrow sites, plant sites, and any other similar use areas.

Staging areas, plant sites, and borrow sites have all caused certain problems at times, but borrow sites are regulated by California's Surface Mining and Reclamation Act (SMARA) and therefore typically create less controversy than other use areas. Most of the controversy has been associated with disposal sites because of the difficulty in getting rid of excessive disposal material during construction and the problems created when material is placed in an environmentally sensitive location. In terms of environmental impact assessment, all of these use areas can be treated the same, as each of them have similar potential for effects on resources and all are considered by agencies to be project-related activities.

It must be noted that not all projects will have a need for DSB sites. The proposed identification and environmental evaluation of disposal sites, staging areas, plant sites, borrow sites, and other use areas will be undertaken only when such sites are needed by a project (Attachment F).

## **B. Identifying goals**

The team started out with the question: "What does Caltrans want or need from a DSB policy?" Everyone agreed that any solution reached by the team should result in timely, efficient project delivery, including construction of projects, while maintaining or improving relationships with outside agencies, and minimizing litigation. The team's mission statement was based on this premise (see Attachment A). With this goal in mind, the team looked at the project development process to determine where the DSB issue should be addressed and where it becomes problematic. Throughout the process, team members solicited feedback from their respective functional areas, and that input was incorporated into the team's analysis. Input from districts statewide was also obtained and incorporated. The project development process was broken down into five functional areas and then analyzed as to how the issues come into play within each unit:

## **1. Planning**

- ◆ Need for staging areas and disposal/borrow sites should be identified early in the process.
- ◆ Balancing the cut/fill on the project or within state right of way (ROW) could eliminate the need for disposal sites.
- ◆ Evaluate disposal needs for successive projects in highway corridors.

## **2. Environmental**

- ◆ Regulatory agencies are regarding offsite DSB sites as indirect impacts of the project that must be addressed as part of the environmental process.
- ◆ Identification and environmental review of offsite DSB sites need to be part of the environmental documentation to address the concerns of the regulatory agencies and receive the necessary approvals and/or permits.

## **3. Design/Right of Way**

- ◆ If sites are not identified, regulatory agencies may not issue permits.
- ◆ Identification and ensuring availability of sites will require additional work.
- ◆ Negotiations need to be undertaken with private property owners regarding sites.
- ◆ Contracts may lack sufficient detail to inform contractors of the need for and extent of excess materials and potential environmental consequences of disposal.

## **4. Construction**

- ◆ Negotiations with private landowners and the design of offsite DSB sites are performed by contractors, yet regulatory agencies are holding Caltrans responsible for the environmental consequences of these actions.
- ◆ Counties are issuing grading permits despite some sites having inadequate environmental compliance.
- ◆ Contractors may not be able to locate feasible DSB sites.
- ◆ Contract time allowed may not be sufficient for contractors to obtain environmental permits and approvals on DSB sites without delaying projects, resulting in substantial liquidated damages.
- ◆ Caltrans' monitoring and inspections of offsite areas are unauthorized (need landowner permission) or insufficient to ensure that contractors are complying with the contracts and the law.

## **5. Post Construction**

- ◆ Regulatory agencies hold Caltrans responsible for contractor and local agency non-compliance, whether the responsibility is real or perceived.
- ◆ Future projects may be affected by criticism from regulatory agencies.
- ◆ Third-party complaints and lawsuits may be filed regarding improper disposal.
- ◆ Contractor construction claims may be filed.
- ◆ Elected government officials are contacted and asked to intervene.

## C. Issues affecting goals

Several team meetings were devoted to discussing the issues that would affect the team's goals as defined by the mission statement. The driving (+) and restraining (-) forces in reaching this goal were identified as follows:

### Driving Forces (+)

- ◆ (+) Both state and federal regulatory agencies contend that offsite disposal is an indirect impact of the project and is the responsibility of the project proponent (i.e., Caltrans).
- ◆ (+) Addressing DSB will help make projects biddable and buildable.
- ◆ (+) Addressing the issue of DSB sites early in the project development process and incorporating it into environmental clearance/compliance will improve or maintain existing relationships with regulatory agencies, our project partners, and the public.
- ◆ (+) Addressing the issue early in the process and incorporating it into environmental clearance/compliance will help avoid third-party lawsuits and regulatory enforcement actions.
- ◆ (+) Contractor and local agency compliance with environmental laws and regulations will be enhanced.
- ◆ (+) Counties will be relieved of pressure to issue expedited grading permits to contractors in order to avoid project delays.

### Restraining Forces (-)

- ◆ (-) FHWA, Caltrans, and the construction industry have traditionally viewed excess material (clean fill) as a commodity and a competitive factor in the bidding process.
- ◆ (-) Standard specifications will need revision because lack of detail in Standard Specification 7-1.13 can result in illegal disposal of material and does not provide assurance to the regulatory agencies that excess material is being properly disposed.
- ◆ (-) Addressing the issue of DSB sites early in the project development process may alter the traditional Caltrans/contractor relationship regarding DSB sites.
- ◆ (-) Right of way procedures will need to be revised to include DSB site agreements with private property owners if necessary.
- ◆ (-) REs will need to be more involved in inspection of offsite areas.
- ◆ (-) Additional training will be needed for PEs, EPs, REs, and other staff affected.

## D. External Input

The entire team agreed that the perceived major restraining force is FHWA's existing policy regarding DSB sites. In order to more fully understand the problem, the team decided to seek input from the regulatory agencies, contractors, and counties. Over a two-day period, the team met with representatives from the California Department of Fish and Game, State Water Resources Control Board, U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, and four private contractors. Teichert Construction, Granite Construction, Ladd

Construction, and Baldwin Construction, large contracting firms conducting work throughout the Western states, presented the contractors' perspective. Representatives of the State Office of Historic Preservation were invited, and although unable to attend the meeting, provided written comments which were distributed to team members.

The regulatory agencies were asked to present their views from a statewide perspective. The position of all the agencies was consistent that DSB sites were part of the project and should be addressed in project environmental documentation. All of the agencies stated that if contractors improperly disposed of excess material, that although contractors and private property owners might be cited, assignment of responsibility or enforcement action would also include Caltrans. They insisted that material from a Caltrans project was still considered a component of that project and under the ownership or control of Caltrans. The State Water Resources Control Board, however, said that once the material was disposed of properly and legally, and ownership changed hands, e.g., material given to a landowner, then maintenance and erosion control became the responsibility of the landowner, notwithstanding other agreements between the landowner and Caltrans. This is consistent with the conditions of the Caltrans NPDES Storm Water Management Plan.

At least one major federal regulation seems to support this position as well. Part 402 of 50 CFR addressing interagency cooperation on endangered species defines action as "all activities or programs of any kind authorized, funded, or carried out, in whole or in part, by federal agencies." This includes "actions that are directly or indirectly causing modifications to the land, water, or air." The "action area means all areas to be affected directly or indirectly by the federal action and not merely to the immediate area involved in the action" (50 CFR Section 402.2). State resource agencies frequently refer to CEQA Guidelines (Sec. 15378) which define a "project" to mean "the whole of an action which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment."

To the surprise of several team members, the contractors were also unanimous in favor of Caltrans identifying and providing environmental clearance/compliance for DSB sites. They preferred not having to deal with finding sites and noted that they generally lacked time to do so within the constraints of the contract. Finding DSB sites has proven time consuming for them and more expensive for the project. Furthermore, the recent tightening of environmental regulations has resulted in contractors' inability to obtain reasonable offsite DSB sites because of the time involved in conducting environmental studies and obtaining permits and approvals. They would prefer projects that were completely ready to go, with DSB sites available and the necessary environmental work already done. They indicated that they would expect to use such sites about 95% of the time, but they would still like the flexibility to use other sites of their choice when the situation warranted (e.g., when they had a suitable, permitted, economical site already in operation nearby). In such cases, they would provide Caltrans with the necessary assurances and documentation confirming that they had complied with environmental regulations for their selected sites.

The Regional Council of Rural Counties (RCRC) was also invited to present their views on the subject. Although initially interested, the RCRC representative cancelled just before the scheduled meeting, indicating that after discussions with some RCRC member counties, they felt there were no significant issues on the subject to warrant their attendance. In a meeting with one of the member counties, however, it was made clear that the county environmental

compliance and permitting process would hamper timely acquisition of needed permits and would require full review pursuant to CEQA.

Contacts were also made with several other state departments of transportation (DOTs). Most of the DOTs contacted have specifications that are more specific and enforceable than California's. Illinois DOT provided the most valuable feedback. Illinois has initiated a pilot program to address DSB sites, consisting of stronger specification language that requires contractors to identify proposed disposal sites in a formal and precisely framed submittal. IDOT environmental staff then visit proposed sites and review submittals for compliance with federal environmental laws; Illinois does not have any state environmental laws that would be equivalent to CEQA.

Illinois DOT has faced substantial pressure from agricultural agencies to avoid impacts to their state's farmland and need more options for dealing with the issue of those impacts. However, while they have been able to avoid DSB issues that Caltrans is currently facing, they felt the same pressures are inevitable. They were therefore very interested in hearing what we come up with and suggested we consider a pilot program to assess any impacts of changing current policy.

### **3. IDENTIFICATION AND ANALYSIS OF SOLUTIONS**

#### **A. Developing solutions**

After reviewing the problem, the project development process, and the driving and restraining forces, the team identified three solution pathways. The first pathway was to remain with the status quo. Contractors would remain totally responsible for all aspects of environmental compliance and permitting for DSB sites. The second pathway was for contractors to retain total responsibility for environmental compliance and permitting, but Caltrans would act as a consultant and provide the studies and documentation for at least one DSB site when sites would be needed. On this pathway, the county or local entity would remain the lead agency for any permits needed by the contractors for offsite DSB sites. On the third pathway, Caltrans would take lead agency status for DSB sites and incorporate needed sites into our projects.

Building upon the solution pathways described above, the team identified seven possible options:

1. Status quo.
2. Status quo modified by providing REs with guidance and directives as to the interpretation and enforcement of Standard Specification 7-1.13.
3. Status quo modified by providing REs with guidance and directives and also revising the language of Standard Specification 7-1.13 to ensure contractor compliance with environmental regulations.
4. Optional site clearance/compliance by Caltrans. As part of each project requiring DSB sites, Caltrans would provide at least one site that could be used by contractors at their option.

5. Optional site documentation without clearance/compliance. Caltrans would perform environmental studies for at least one site, but contractors who chose to use this site would be responsible for environmental compliance and permitting.
6. Mandatory sites.
7. Mandatory sites, with Cost Reduction Incentive Proposal (CRIP).

## **B. Analysis and refinement of options**

In analyzing the seven options, the team focused primarily on disposal sites, which were identified as the most critical DSB issue. Further analysis resulted in eliminating Options 1, 2, 5, and 7 from further consideration after it was determined that those options did little to address the problem, because they did not further Caltrans' need to have timely, efficient project delivery while maintaining or improving relationships with outside agencies and minimizing litigation. The specific reasons for eliminating each of those options were as follows:

- ◆ Option 1 would ignore the existing problem. It would not address the concerns of the regulatory agencies, nor would it address the construction delays caused by contractors trying to obtain permits during the course of construction contracts. Option 1 would also leave resident engineers with contract language that requires contractor compliance with environmental regulations and permits, without clear means to enforce the contract requirements.
- ◆ Option 2 would provide additional guidance for resident engineers, but it would do little to assist them in enforcing the regulations, would not address the concerns of the regulatory agencies, and would not address problems with post-award delays in obtaining permits.
- ◆ Option 5 would require Caltrans to complete additional analysis for optional disposal sites during project development and design, and then provide that information to contractors. Caltrans would act much like a consultant under this option, doing only the footwork and leaving contractors responsible for environmental compliance and permitting. This scenario would result in unclear responsibilities in terms of both the construction contract and the environmental regulatory processes, and it would continue to cause post-award delays in obtaining permits.
- ◆ Option 7 was eliminated because it was no different from Option 6; the CRIP process is always available to contractors.

## **C. Identification and analysis of alternative solutions**

The above analysis resulted in three alternative solutions carried forward for further consideration:

- ◆ Alternative 1. Modification/enhancement of guidance documents and specification language.
- ◆ Alternative 2. Optional DSB sites; environmental compliance and permits obtained by Caltrans.

- ◆ Alternative 3. Mandatory DSB sites; environmental compliance and permits obtained by Caltrans.

Further analysis concentrated on Alternative 2 and Alternative 3. The team quickly recognized that there was very little real difference between the two alternatives. In each case, Caltrans would be responsible for environmental compliance and obtaining permits, thereby ensuring that sites would be available. Furthermore, even when mandatory DSB sites are specified, contractors have the option of using the CRIP process to justify their use of other, or “optional,” sites. The contractors stated that in most cases (estimated at 95% of the time), they would use disposal sites that have been “cleared” by Caltrans; however, they did want the ability to use their own selected sites when advantageous to them, if they could obtain the necessary permits and approvals.

The team therefore determined that Alternative 2, Optional DSB, and Alternative 3, Mandatory DSB, should be combined into a new alternative to be called Designated DSB. Combining the two alternatives would avoid confusion, make the process easier, clarify responsibility, and eliminate the “baggage” associated with the terms mandatory and optional.

As a result of this analysis, the proposed solutions were narrowed down to two:

- ◆ Designated DSB sites; environmental compliance and permits obtained by Caltrans, as necessary.
- ◆ Modification/enhancement of specification language and guidance documents.

## **D. Cost/Benefit Analysis**

One of the primary goals of the state contract bid process is to select contractors who can build projects for the least amount of money. The basic premise behind the existing DSB policies of FHWA and Caltrans has been that the public will obtain the best possible bid price if contractors are able to buy and sell their products (i.e., borrow and excess disposal material) on the open market. The information collected by the team strongly suggests, however, that requiring contractors to obtain their own DSB areas results instead in a net cost to FHWA and Caltrans, and thus to the public.

Quantifying the exact cost of resource agency violations and project delays is challenging. While it is clear that project costs increase when a project is delayed, it is difficult to predict that increase. Quantification involves many factors, including the particular circumstances of each project, inflationary costs of material and labor, conflicts or inefficiencies with resource and personnel allocations, shut-down and start-up costs, and duplication of effort, particularly where environmental impacts need to be restudied or permits renegotiated.

The cost/benefit analysis of this DSB proposal addresses a combination of factors, which all suggest a cost benefit if the proposal were to be implemented:

- ◆ Delay costs, likely the biggest component of overall project cost increases, could easily be due to DSB-related issues as described in this report. Delays could occur during PA&ED or any part of the project delivery process, as well as during construction. A delay in project delivery will also result in delay costs to the traveling public. Such delay costs have been calculated at \$8.16 per hour per vehicle, a figure used in a California federal court (Eastern District) case and also used by transportation planners in many

local, regional, state, and federal planning agencies. It is calculated, in part, using statewide hourly wage averages, trip purpose, and average vehicle occupancy rates. Depending on location, route, project scope, etc., costs could easily range into the tens of millions of dollars.

- ◆ The Construction Cost Index (CCI) is also used to calculate increased costs due to inflationary pressures. Assuming a 4% increase per year in the CCI, a delay of one year in a \$25,000,000 project would increase costs by \$1,000,000.
- ◆ In many cases, the cost of complying with environmental regulations is higher if contractors must obtain their own DSB sites. Consultants are typically hired for compliance work, which takes additional time and money. Contractors have estimated a cost ranging from \$3,000 to \$30,000, and up to a year of time, just to obtain necessary permits. Such delays have the potential for contractor claims to be filed, increasing costs further. Costs would be much reduced if environmental requirements for DSB sites were anticipated during development of the project workplans, built into project delivery schedules, and addressed in conjunction with other environmental studies.
- ◆ Avoidance of post-construction litigation would also reduce costs. Litigation expenses incurred by all parties involved, including contractors, resource agencies, FHWA, Caltrans, and others, could reach \$500,000 per incident. Legal disputes over DSB issues are expensive, even if litigation is successfully avoided.
- ◆ Once an environmental resource is damaged, the cost of repairs, mitigation, and regulatory agency fines can be tremendous, in addition to the costs to the resources themselves in terms of unnecessary environmental impacts and potentially lost resource values. Criminal and civil fines imposed by the ACOE can reach \$250,000, \$25,000 per day, and/or imprisonment up to 15 years. The ACOE provided a recent example of a contractor who had placed disposal material (not related to a Caltrans project) along a river bottom being fined \$250,000 and required to remove the material. Each resource agency has its own regulatory framework for imposing fines and penalties, and multiple agency fines could easily reach into the millions of dollars. Additionally, regulatory agencies may pursue criminal prosecution against individual state employees, including management.
- ◆ There is undoubtedly a cost to agency relations when DSB issues result in litigation or unauthorized impacts to resources. While converting that cost into monetary terms is difficult, it's reasonable to assume that past violations, loss of resources, and resulting tightened agency regulations and positions on DSB-related issues nationwide have had a tangible financial impact. Consideration should also be given to degradation of the more intangible elements of agency relationships, such as our trustworthiness and expected environmental responsibility and stewardship. Poor agency relationships and more restrictive laws are already having an impact on Caltrans project delivery, and that impact is expected to increase unless we change our approach. From the resource agencies' perspective, accepting responsibility for improving our treatment of DSB issues is highly desirable, and it would result in a net positive benefit and potential decreased costs to Caltrans.

## 4. RECOMMENDATION

The team's recommendation was developed in the course of a series of regular meetings that began in July 2000. It represents a solid proposal supported by representatives of major functional disciplines affected by the issue within the Department. Team members were from headquarters and districts, including representatives from Legal, Engineering Service Center, Office Engineer, Project Coordination, Planning, Environmental, Design, Construction, Right of Way, and FHWA. During the course of the meetings, team members sought feedback and support from their respective functional areas within Caltrans, and the team feels they have achieved that goal. To ensure the team was pursuing the desired objective and remained directed at achievable solutions, two meetings were held with the team's sponsors to update them on progress and to seek their guidance, which provided valuable feedback toward ensuring ultimate success.

The team recommends two linked solutions that involve a composite of current practices and newly investigated alternatives. The recommendations provide flexibility to tailor the process to specific district or project needs and circumstances (see Attachment F):

### 1. Caltrans identification of designated disposal, staging, and borrow sites.

Caltrans would identify and ensure availability of any DSB sites determined necessary in the project development process, and if needed, pursue appropriate environmental clearance/compliance, including permits. This solution would result in greater Caltrans effort during project development and design, but it would help ensure that all projects are biddable and buildable, satisfy resource agencies, and lead to cost savings in the long term.

During project development, Caltrans will investigate the availability of any needed DSB sites in much the same manner expected of prospective bidders and contractors during advertisement for bids (Exhibit F). The investigation will include contacts or inquiries with local property owners, governmental agencies, and maintenance personnel regarding the availability of local sites. Commercial dump sites and recycling plants will also be investigated. Recycling of materials should be given high priority in the search for disposal needs. The locations of the most feasible sites will be investigated to determine availability within the planned schedule. The most feasible sites available within the anticipated schedule will be identified as potential designated sites, evaluated during the environmental review process, and if necessary, included in environmental compliance documentation. Right of way agreements will be written and signed to ensure the sites are available for the contractor to use.

The designated site or sites that are selected as a result of this process will be included among any necessary permits obtained during PS&E. Information or documents regarding arrangements made by Caltrans to ensure the availability of designated sites will be made available to prospective bidders or contractors in the Materials Information Handout as provided in Section 111.3 of the Highway Design Manual and Section 1.03 of the Standard Specifications.

Designated sites will not be mandatory unless stated otherwise in the special provisions. If contractors choose alternate sites which they feel would save time or money, a DSB site submittal as described below will be required.

While greater Caltrans effort will be required during project development and design, this early effort will help ensure that all projects are biddable and buildable and will lead to time and cost savings in the long run. Determining the location, capacity, and availability of DSB sites is currently an under-utilized or non-existent practice during project development. Adopting a designated site policy will remedy the procedure by providing for action early in the process. In addition, this recommendation for early action is consistent with the Department's Change Control initiative.

## **2. Modification and enhancement of specification language and guidance documents.**

Guidance documents and manuals would be modified to establish a standardized process for review of DSB sites as needed during the project development process, which would ensure adequate environmental review and analysis. Specifications would be modified to require a detailed DSB submittal by the contractor, when needed, to ensure compliance with pertinent environmental laws and regulations. These modifications would continue to allow contractors the flexibility to choose more economically feasible sites when advantageous.

These changes to current specifications and guidance manuals will be necessary to implement the first recommendation. For example, current contract language under Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," and Section 6-2.01, "Local Materials – General," of the Standard Specifications require contractors to furnish satisfactory evidence that necessary permits, licenses, and environmental clearances have been obtained. This language has proven ineffective in ensuring compliance with all appropriate environmental regulations, and resident engineers are often unable to determine exactly what constitutes "necessary permits, licenses, and environmental clearances."

In order to provide greater assurance that the necessary environmental requirements are met, the Standard Specifications should be changed to require submittal of a detailed DSB plan, which will apply to either a designated site or a contractor-selected site. When the contractor elects to choose a site other than that designated by Caltrans, the contractors will be responsible for preparing the entire submittal, subject to review and approval by Caltrans. All submittals will be reviewed by Caltrans in a manner similar to other required submittals, e.g., falsework, building and mechanical, SWPPP/WPCP, and CPM schedules. Access to designated or contractor-selected sites may be necessary for inspection purposes to ensure compliance with the specifications. Depending on whether addressing a designated site or an alternate site chosen by a contractor, submittals should include but are not limited to the following:

### **For Caltrans-designated sites**

#### **Caltrans will:**

- ◆ Provide a general site plan, including site limits and access roads
- ◆ Obtain temporary property owner agreements as necessary to "reserve" property

- ◆ Prepare CEQA/NEPA environmental documentation
- ◆ Obtain the necessary permits, licenses, and agreements to satisfy regulatory agencies and ensure site availability
- ◆ Review and approve contractor's submittal

**The contractor will:**

- ◆ Determine final grading plan in conformance with Standard Specifications
- ◆ Provide release of liability
- ◆ Provide final property owner agreements
- ◆ Submit Water Pollution Control Plan

**For alternative sites (outside the ROW) selected by the contractor**

**Caltrans will:**

- ◆ Review and approve contractor's submittal

**The contractor will:**

- ◆ Provide a site plan, including site limits and access roads
- ◆ Provide release of liability
- ◆ Provide final property owner agreements
- ◆ Obtain or update, and provide all necessary permits, licenses, and agreements and their supporting environmental documents
- ◆ Determine final grading plan in conformance with Standard Specifications
- ◆ Submit Water Pollution Control Plan

It is also suggested that guidance manuals be revised to reduce or eliminate the current threshold of 7500 m<sup>3</sup> for determination of available disposal sites. Should a threshold be retained, it should be flexible, based on project-specific location, design requirements, environmental concerns, economic factors, and other appropriate considerations, rather than specifying a single arbitrary figure.

In implementing the above recommendation, Caltrans' and FHWA's current policy interpretation regarding mandatory sites need not be changed. On the rare occasions when it might become necessary to identify a mandatory site, the project's designated site could become mandatory. The contract special provision would delete the contractor's option to submit an alternative site plan, and it would identify the designated site as mandatory. In such circumstance, FHWA may need to make a public interest determination (23 CFR 635.407(a)).

Under this recommendation, specification and guidance manual sections that discuss contractor staging or use areas, borrow material sites, disposal sites, and other related issues will be reviewed and may require modification as necessary. Guidance documents include the Design Manual, Project Development Procedures Manual, Environmental manuals and guidance documents, Construction Manual, and others.

A decision tree (Exhibit F) has been developed to guide the thought process in determining whether DSB sites will be needed by a project, allowing any such DSB needs to be quickly

identified and addressed. Projects without a need for DSB sites will fall out of the process early, while those projects that do have a DSB need will be evaluated to completion.

This recommendation will ensure that the Department complies with its legal obligation under the Public Contract Code to prepare full, complete, and accurate plans, specifications, and estimates of cost, enabling any competent mechanic or other builder to carry them out. In other words, the identification of designated DSB sites as described herein will ensure the Department meets its obligation to let contracts that are buildable under the terms of the contract.

## **5. IMPLEMENTATION PLAN**

Implementation of the team's proposed solutions includes both internal and external elements. The external element requires garnering support from FHWA. Internally, the proposal requires becoming part of the Department's standard project development process and staff activities.

To facilitate and guide implementation of the recommendations, it is proposed that a DSB Advisory Team (DSBAT) be formed, to consist of members from the Quality Team and to include the major functional areas as represented on the team. DSBAT members will be able to provide insight and direction based on knowledge and background obtained over the past year's effort, which will assist in successful implementation, and they will add consistency to the process. It is proposed that the DSBAT meet quarterly to ensure timely implementation of the plan. The team will prepare status reports summarizing the progress of the implementation efforts, which will be submitted to the team's sponsors or as otherwise directed.

### **A. Implementation with FHWA**

FHWA support of the team's proposal is essential to complete implementation of this proposal, as FHWA plays a crucial role in the funding and the environmental compliance aspects of the Department's capital program. Although major components of the team's proposal could still be implemented without our federal partner's support, FHWA's participation will determine the overall success of implementation.

It is the team's view that this proposal is not inconsistent with FHWA policy as reflected in the 1987 policy and 1988 guidance. In order to ensure that this is the case, discussions with FHWA must be initiated at the California Division level. FHWA Legal representatives who were initially involved with the team and are somewhat familiar with the team's work are interested in resolving any issues creating roadblocks in the project development process. Further discussions with FHWA Legal are in progress now that the team has developed proposed solutions.

FHWA representatives participated on the team and helped develop the team's proposal. They briefed their mid- and upper-level management during the time the team was meeting. No negative feedback was received, indicating some level of concurrence by FHWA. The next step will be for Caltrans management to meet with the Division Administrator and seek agreement on the issue.

This implementation plan does not suggest the need for a change in FHWA policy. Any policy issues would be more appropriately discussed in focused meetings between Caltrans and FHWA management. The ultimate goal should be to either ensure that current FHWA flexibility on this issue is more clearly spelled out to other state DOTs, or if more flexibility is needed, to seek changes that could be implemented nationwide.

## **B. Implementation within Caltrans**

A summary of the analysis and recommendations contained in this report was presented to the Caltrans Director, Deputy Directors, and District Directors on May 22, 2001. The report was favorably received and direction was given to proceed with implementation of the plan. Written comments were solicited from the group over a three-week period. Comments received have been incorporated into this final report.

Implementation within the Department will occur only if the proposal becomes part of the project delivery process and is fully embraced and implemented by project delivery staff. The team believes the advance planning project engineer (at project initiation), the design project engineer (during environmental and design phases of the project), and the resident engineer (during construction) are the key project delivery personnel responsible for ensuring that designated DSB sites are identified when needed and become part of their projects.

The tools these key players and other project team members will need to ensure implementation include: (1) district management support for the team's proposal; (2) strong direction in our project delivery processes; (3) comprehensive, timely training of existing and new staff; (4) district staff focal points for designated sites; and (5) additional project delivery resources to meet the proposal needs.

### **1. District management support**

The project delivery changes will occur only if district management is supportive of the DSB proposal. Given the strong support from the Director's office and the positive feedback from the District Directors at the May meeting, it appears this goal may be achieved. Additional presentations to district staff may still be necessary to educate and help promote the concept.

### **2. Project delivery process changes**

Implementation will include changes from the very beginning of the Department's project delivery process, through to the construction phase. These changes will start with a policy memo from the Deputy Director for Project Delivery summarizing and authorizing the changes. The team also identified several other key tools used by project delivery staff that will require change:

- ◆ **Project Development Procedures Manual (PDPM):** The PDPM is the primary process document providing key project delivery personnel with direction in initiating and delivering projects to construction. The team recommends that a chapter be added that details the process for designated DSB sites. In addition, the team recommends that guidelines for ALL project initiation and project approval documents be updated to specifically require discussion of designated sites.

- ◆ **Highway Design Manual (HDM):** Topic 111 of the HDM covers policy related to Material and Disposal Sites. This section will need complete revision to incorporate the team's recommendation.
- ◆ **Environmental Manual:** Environmental guidance documents, such as the Environmental Handbook or environmental manuals, will need to be supplemented to include guidelines on the environmental compliance process for designated sites.
- ◆ **Construction Manual:** The construction manual will need to be supplemented to incorporate necessary changes.
- ◆ **Permits Manual:** DSB sites outside Caltrans right of way, as the result of encroachment permit work within the right of way, would be subject to the same environmental review. The permits manual should be changed accordingly.
- ◆ **Standard Specifications:** The Standard Specifications and special provisions will need to be expanded. The team has already initiated this effort and begun drafting proposed language to be used in the specifications, although additional work is needed.

### 3. Staff development

This step will be one of the most critical to the success of the proposal. Incorporating change into the day-to-day activities of project development staff must include training on the need for and implementation of the new process. This should include an initial training program for current staff, subsequent reinforcement, and training for new employees.

- ◆ **Initial program:** The team recommends that the Division of Design be charged with implementing staff development. It is proposed that this effort should include a policy memo from the deputy director summarizing the proposal and providing implementation expectations. In addition, the design coordinators should hold workshops with project engineers and project managers on the issue.
- ◆ **Follow-up training:** Appropriate academies (Project Engineer, Resident Engineer, and Environmental Planner) should include updated modules and other training classes that explain the need for designated sites and promote the project delivery processes that will ensure successful implementation.

### 4. Designated site focal point

The team recommends that each district identify a designated site coordinator who will aid maintenance, planning, and project delivery staff in implementing the proposal. This position's role will be to develop, manage and maintain a district-wide DSB site plan for maintenance and project delivery needs. It should be noted that the team views this position as support only, with the project engineers responsible for ensuring sites are identified when needed, environmental compliance obtained, and necessary sites included in projects.

### 5. Resources

Resources will be incorporated in the project development workplans for identifying designated sites, providing environmental compliance, and including sites in the different

project delivery products. It is unlikely, however, that current capital project workplans include the resources to identify DSB sites. Project managers and project teams should be provided direction on how to update pertinent workplans to include this proposed effort.

The team recognizes that due to existing resource limitations, time constraints, and other commitments, implementation may be problematic on some currently programmed projects. It should be emphasized that successful implementation will require that ALL projects be included in a process whereby informed management decisions are made that address compliance with the above recommendations.

**ATTACHMENT A**

**TEAM CHARTER**

# TEAM CHARTER

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**TEAM NAME:**      **Disposal Site Quality Team**

## **MISSION STATEMENT**

To effect project delivery process changes which allow use of borrow, disposal, and staging areas during construction in a manner that facilitates permitting, and environmental compliance, is cost effective, and avoids project delays.

## **BACKGROUND**

There has been controversy regarding responsibility for the CEQA and NEPA compliance for disposal and staging areas, and at times, borrow sites. At issue is whether compliance is the responsibility of the contractor, Caltrans, FHWA, or the property owner. The standard specifications state the contractor is required to furnish satisfactory evidence that the necessary permits, licenses, and environmental clearances have been obtained. The question of what is adequate documentation has been a topic of debate. Some counties issue permits that are being questioned by regulatory agencies.

Significant conflicts have occurred with agencies after disposal material was placed into wetlands or other sensitive areas. As a result, some resource agencies perceive Caltrans as shunning it's responsibilities and are now requiring identification and environmental clearance of these sites prior to issuance of permits or other agreements.

The general policy of Caltrans is to avoid specifying mandatory sites. However, Caltrans may designate mandatory sites if needed, which requires environmental and economic justification or other public interest findings, and concurrence by FHWA.

While some Districts have been successful at addressing this issue, others have had difficulty, resulting in project delays. The Quality Team was formed to devise a responsible solution that is efficient and effective, and one that strives to meet the concerns of the resource agencies. Team members include Right of Way, Construction, Design, Environmental, Office Engineer, Legal, Project Management, and FHWA. Both HQ and Districts are represented.

## **DESIRED OUTPUT**

The team will develop and implement a solution that effectively addresses project delivery and resource agency needs to the extent possible. The solution may involve specifications, policies, manuals, and/or reference guides.

## **TEAM AUTHORITY**

The team has the authority to devise and implement changes within Caltrans necessary to satisfy the mission statement. The team will use its authority to the extent possible and strive to implement such pertinent changes within the FHWA as necessary to ensure consistent and effective results.

## **RESOURCES**

Team members will be allocated time and resources necessary to complete the project.

## **TIMEFRAME**

The team will schedule meetings every 2-3 weeks. No more than one meeting will be cancelled at a time for conducting research for the team. The team anticipates the commitment of approximately 80 hours of time to complete the project. As the team's workload evolves and becomes better defined, initial estimates will require refinement. The team will complete its mission no later than February 1, 2001.

## **TEAM MEMBERS**

Team Leader:	Jonathan Oldham, District 2 Environmental Management
Team Facilitator:	Richard Hill
Team Members:	Bob Bachtold, HQ ROW
	Zouheir Barazi, HQ Design and Local Programs
	Gary Ruggerone, District 5 Environmental Management
	Roger Cook, HQ Construction
	Dorene Clement, HQ Cultural Studies
	Brian Crane, District 2 Division Chief, Planning
	Micki Ferguson, HQ Legal
	Leo Martinez, HQ Office Engineer
	Gary Pursell, District 2 Construction
	Dave Quong, HQ Office Engineer
	Stephanie Stoermer, FHWA
	Rich Weaver, HQ Environmental

## **TEAM SPONSORS**

Jody Lonergan, Director (Acting), District 3  
Karla Sutliff, Chief (Acting), Division of Design

**ATTACHMENT B**

**FHWA POLICY PAPER**





U.S. Department  
of Transportation

**Federal Highway  
Administration**

# Memorandum

Subject: **The Applicability of § 4(f) and § 106  
to Borrow and Disposal Sites**

Date: **DEC 28 1987**

From: **Assistant Chief Counsel  
Right-of-Way & Environmental Law**

Reply to  
Attn. of:

**HCC-40**

To: **Ali F. Sevin, Director  
Office of Environmental Policy (HEV-1)**

You have asked us to reexamine our memorandum of law dated September 16, 1977, which concluded that § 106 of the National Historic Preservation Act, 16 U.S.C. § 470f (1982) (NHPA), applies to borrow sites, in light of the fact that not all borrow activities of a Federal-aid contractor are within the control of the Federal Highway Administration (FHWA). We conclude that FHWA may limit the application of §§ 106 and 4(f) (§ 4(f) of the Department of Transportation Act, now codified at 49 U.S.C.A. § 303 (West Supp. 1987) and 23 U.S.C. § 138 (1982)) to contractor activities which are required by the contract or are otherwise subject to FHWA approval. Thus, §§ 106 and 4(f) would apply where the borrow site is specified or effectively specified because suitable material is economically available at only a very limited number of locations. However, if suitable material is readily available and no site is specified, §§ 106 and 4(f) need not be applied. Nevertheless, if a State wishes to more broadly assert control to contractor activities only indirectly within its control, it need not be prevented from doing so. We understand that many States now extend §§ 106 and 4(f) reviews to any borrow or fill site used by the contractor and that such provisions are incorporated into those States' standard specifications and agreements with State Historic Preservation Officers.

A careful review of the law and the specific facts relating to contractor activities leads us to believe that the applicability of §§ 106 and 4(f) to borrow sites depends upon the degree of Federal control of those activities, and the degree to which the suitability of the borrow material is related to a particular borrow site. The reasoning in this memorandum would also apply generally to disposal sites, staging areas, haul roads, and job site field offices.

Section 106 provides that a "Federal agency . . . shall, prior to the approval of the expenditure of any Federal funds on the undertaking . . . take into account the effect of the undertaking

on any [historic resource] that is included in or eligible for inclusion in the National Register." The question which arises is, how far does the Federal agency go in tracing the effects of its "undertaking" for purposes of § 106? There is little doubt that borrow or disposal sites which are designated in contract plans or specifications approved by the Federal agency would be encompassed by the broad language of § 106. However, a § 106 undertaking has never been so broadly defined as to include the manufacture of steel beams or earthmoving equipment, even though the manufacture of such items might be directly traceable to the Federally assisted undertaking. Such a relationship, however direct, is too attenuated.

When borrow materials of the appropriate quality are readily available from many sources, as steel beams, equipment, and other items are, no Federal involvement in its acquisition is necessary and it may be regarded as a product like steel beams and is not associated with any particular site. FHWA's regulations treat borrow as a product rather than a site specific resource whenever possible. See 23 CFR part 635, subpart D. They specifically provide that a contractor be permitted to select the sources from which material are to be obtained except when a specific finding of public interest has been made, in accordance with general procurement contracting principles. The provisions relating to borrow in contract documents approved by FHWA usually relate to the quality and suitability of borrow material, not its point of origin. Similarly, when sites for disposal, field offices, etc. are plentiful enough that their selection may be left up to the contractor, and the undertaking approved by the Federal agency does not dictate the use of any particular site, the relationship between the Federal assisted undertaking and the contractor's selection is attenuated enough that it may be considered a private action. If Federal responsibility attached to every impact of a project, however remote, then Federal law and Federal liability would extend very deeply into the national economy.

As indicated, we believe that §§ 106 and 4(f) would apply where the government is directly involved in designating a borrow site or effectively does so by the way in which the borrow material is specified. Defining a point in the factual continuum at which an action is more properly characterized a private constructor action than a governmental one for purposes of the applicability of a Federal law is consistent with the interpretation of other statutes relating to the Federal aid highway program. For example, the common rule for the implementation of the Uniform Relocation Assistance and Real Property Acquisition Policies Act

of 1970 (Uniform Act), which applies to all Federal agencies, addresses similar issues in determining the applicability of its real property acquisition policies. The Uniform Act provides that the acquisition policies are applicable to all Federal or Federally assisted programs or projects. The common rule provides that such policies do not apply when;

- (1) No specific site or property needs to be acquired, although the Agency may limit its search for alternative sites to a general geographic area.
- (2) The property to be acquired is not part of an intended, planned, or a designated project area where all or substantially all of the property within the area is eventually to be acquired.
- (3) The Agency will not acquire the property in the event the negotiations fail to result in an amicable agreement, and the owner is so informed. [51 Fed. Reg. 7036 (1986.)]

These regulations indicate that the coverage of the Uniform Act's acquisition policies has been limited to those types of acquisitions which are governmental rather than private in character. The Act's acquisition policies do not apply to acquisitions which, although part of a Federal or Federally assisted program or project, are not specifically required or dictated by the undertaking, are not part of the project area, and are as voluntary as a private transaction. These limitations prevent an all-pervasive Federal responsibility and liability.

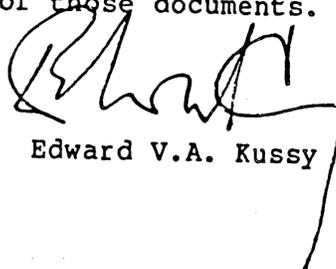
We believe that an approach so limiting the application of § 106 is consistent with the guidance of the Advisory Council on Historic Preservation on this issue, as described in its publication, "Section 106, Step-by-Step" (October, 1986). That publication describes the "area of potential effects" of a Federal or Federally assisted undertaking to include "locations from which borrowed material might be obtained (page 15)." As long as FHWA interprets § 106 to cover the situations in which an actual location is dictated by the project requirements (whether directly or indirectly) there would appear to be no conflict. The guidance does not address itself to situations in which the market for borrowed material is such that it is a product like any other material.

A policy based on the above interpretation will have to address a number of administrative problems. For example, where there are fairly specific requirements for the suitability of material for borrow purposes, and where from an economic point of view, the material must be located fairly near the project, the borrow site

may be effectively directed by the contract. This may also be the case where, in preparing plans, specifications, and estimates, the sources of borrow are specifically considered. If these considerations have the effective result of dictating the borrow site or severely limiting the available borrow sites, we believe § 106 would apply.

The applicability of § 106 is closely related to the applicability of the Uniform Act. Both are concerned with affects resulting from a federal project and both would require a determination of a point in the factual continuum at which the federal control ceases. Section 4(f) on the other hand, imposes substantive limitations upon projects "requiring the use" of certain resources and is activated by FHWA approval. Clearly, when FHWA approves a project where the grantee designates borrow from a § 4(f) site, or the program or project dictates the use of such a site for borrow or disposal purposes, § 4(f) will apply. However, in those instances in which the project is planned and designed in such a way that § 4(f) uses are not dictated by the project, and borrow activities are private actions of the contractor which FHWA neither approves nor is involved with, there is a reasonable basis to find that § 4(f) does not apply.

We do not believe that current guidance documents need be altered, as the views taken in this memorandum would be consistent with a change in the interpretation of those documents.



Edward V.A. Kussy

**ATTACHMENT C**

**FHWA POLICY GUIDE**

FEDERAL-AID POLICY GUIDE  
October 5, 1995, Transmittal 14

23 CFR 633B

## NON-REGULATORY SUPPLEMENT

OPI: HNG-22

1. USE OF MATERIAL MADE AVAILABLE BY A PUBLIC AGENCY (23 CFR 635.407)
  - a. It is expected that in most instances a disposal site for surplus material will be at the contractor's option. This would not preclude the State highway agency from showing a possible disposal site in the contract provisions.
  - b. Where mandatory borrow or waste sites will be permitted based on environmental considerations and which were discussed in the Environmental Impact Statements, such considerations may be used as the basis for subsequent PS&E public interest findings.
2. NATIONWIDE WAIVER OF BUY AMERICA FOR FERRYBOAT EQUIPMENT AND MACHINERY (23 CFR 635.410)
  - a. On February 9, 1994, the FHWA published, in the Federal Register (59 FR 6080), a nationwide waiver of the Buy America requirements for certain steel items used in the construction of ferryboats. The effective date of the waiver is February 9, 1994. The waiver permits the use of specifically identified steel equipment and machinery manufactured outside of the United States in Federal-aid highway construction projects for ferryboats.
  - b. Because the construction of ferryboats is increasingly difficult within the requirements of Buy America, a nationwide waiver of these requirements was granted for certain ferryboat equipment and machinery items. The items included in the waiver are marine diesel engines, electrical switchboards and switchgear, electric motors, pumps, ventilation fans, boilers, electrical controls, and electronic equipment. Items not included in the waiver are products which are readily available in the United States such as steel and stainless steel plate and shapes, sheet steel and stainless steel, steel and stainless steel pipe and tubing, and galvanized steel products. Items not specifically included in the waiver remain subject to the Buy America requirements.
  - c. The basis for the nationwide waiver is that the equipment and machinery identified in paragraph b are not manufactured in the United States, using exclusively United States steel and iron, in sufficient and reasonably available quantities to avoid an enormous administrative burden on the State, contractor, and suppliers. Therefore, imposing Buy America requirements in this limited instance is not in the public interest.
3. WARRANTY CLAUSES(23 CFR 635.413)
  - a. The 1991 ISTEA permitted a State to exempt itself from FHWA oversight of projects located off the National Highway System (NHS). Therefore, a State highway agency (SHA) may use warranty clauses on non-NHS construction contracts in accordance with its own procedures.
  - b. On April 19, 1996, the FHWA adopted as its Final Rule (61 FR 17234) the Interim Final Rule (60 FR 44271) expanding the use of warranty clauses on Federal-aid highway construction projects. Within prescribed limits and with the advanced approval of the FHWA Division Administrator, a SHA may choose to include warranty clauses in Federal-aid highway construction contracts for projects located on the NHS. This regulation became effective on August 25, 1995.



- mandatory use of either may be based on environmental consideration where the environment will be substantially enhanced without excessive additional cost, and

- where the use is based on environmental considerations, the discussion in the environmental document may be used as the basis for the public interest finding.

Factors to justify a public interest finding should include such items as cost effectiveness, system integrity, and local shortages of material.



FEDERAL-AID POLICY GUIDE  
May 25, 2000, Transmittal 29

23 CFR 635D

OPI: HIBT

## SUBCHAPTER G - ENGINEERING AND TRAFFIC OPERATIONS

### PART 635 - CONSTRUCTION AND MAINTENANCE

#### Subpart D - General Material Requirements

Sec.

635.401 Purpose.

635.403 Definitions.

635.405 Applicability.

→ 635.407 Use of materials made available by a public agency.

635.409 Restrictions upon materials.

635.410 Buy America requirements.

635.411 Material or product selection.

635.413 Warranty clauses.

635.417 Convict produced materials.

Appendix A - Summary of Acceptable Criteria for Specifying Types of Culvert Pipes

Authority: 23 U.S.C. 101 (note), 109, 112, 113, 114, 116, 119, 128, and 315; 31 U.S.C. 6505; 42 U.S.C. 3334, 4601 et seq.; sec. 1041 (a), Pub. L. 102-240, 105 Stat. 1914; 23 CFR 1.32; 49 CFR 1.48(b).

Source: 41 FR 36204, August 27, 1976, and 64 FR 71284, December 21, 1999, unless otherwise noted.

#### Sec. 635.401 Purpose.

The purpose of this subpart is to prescribe requirements and procedures relating to product and material selection and use on Federal-aid highway projects.

#### Sec. 635.403 Definitions.

As used in this subpart, the following terms have the meanings indicated:

(a) **"FHWA Division Administrator"** means the chief Federal Highway Administration (FHWA) official assigned to conduct business in a particular State;

(b) **"Material"** means any tangible substance incorporated into a Federal-aid highway project;

(c) **"PS&E"** means plans, specifications, and estimates;

(d) **"Special provisions"** means additions and revisions to the standard and supplemental specifications applicable to an individual project;

(e) **"Standard specifications"** means a compilation in book form of specifications approved for general application and repetitive use;

(f) **"State"** has the meaning set forth in 23 U.S.C. 101;

(g) **"State highway agency"** means that department, commission, board, or official of any State charged by its laws with the responsibility for highway construction;

(h) **"Supplemental specifications"** means approved additions and revisions to the standard specifications.

#### Sec. 635.405 Applicability.

The requirements and procedures prescribed in this subpart apply to all contracts relating to Federal-aid highway projects, except those constructed under a Certification Acceptance Plan.

↓ Sec. 635.407 Use of materials made available by a public agency.

(a) Contracts for highway projects shall require the contractor to furnish all materials to be incorporated in the work and shall permit the contractor to select the sources from which the materials are to be obtained. Exception to this requirement may be made when there is a definite finding by the State highway agency and concurred in by the FHWA Division Administrator, that it is in the public interest to require the contractor to use material furnished by the State highway agency or from sources designated by the State highway agency. In cases such as this, the FHWA does not expect mutual sharing of costs unless the State highway agency receives a related credit from another agency or political subdivision of the State. Where such a credit does accrue to the State highway agency, it shall be applied to the Federal-aid project involved. The designation of a mandatory material source may be permitted based on environmental considerations, provided the environment would be substantially enhanced without excessive cost. Otherwise, if a State highway agency proposal to designate a material source for mandatory use would result in higher project costs, Federal-aid funds shall not participate in the increase even if the designation would conserve other public funds.

(b) The provisions of paragraph (a) of this section will not preclude the designation in the plans and specifications of sources of local natural materials, such as borrow aggregates, that have been investigated by the State highway agency and found to contain materials meeting specification requirements. The use of materials from such designated sources shall not be mandatory unless there is a finding of public interest as stated in paragraph (a) of this section.

(c) Federal funds may participate in the cost of specifications materials made available by a public agency when they have been actually incorporated in accepted items of work, or in the cost of such materials meeting the criteria and stockpiled at the locations specified in Sec. 635.114 of this chapter.

(d) To be eligible for Federal participation in its cost, any material, other than local natural materials, to be purchased by the State highway agency and furnished to the contractor for mandatory use in the project, must have been acquired on the basis of competitive bidding, except when there is a finding of public interest justifying the use of another method of acquisition. The location and unit price at which such material will be available to the contractor must be stated in the special provisions for the benefit of all prospective bidders. The unit cost eligible for Federal participation will be limited to the unit cost of such material to the State highway agency.

(e) When the State highway agency or another public agency owns or has control over the source of a local natural material the unit price at which such material will be made available to the contractor must be stated in the plans or special provisions. Federal participation will be limited to (1) the cost of the material to the State highway agency or other public agency; or (2) the fair and reasonable value of the material, whichever is less. Special cases may arise that will justify Federal participation on a basis other than that set forth above. Such cases should be fully documented and receive advance approval by the FHWA Division Administrator.

(f) Costs incurred by the State highway agency or other public agency for acquiring a designated source or the right to take materials from it will not be eligible for Federal participation if the source is not used by the contractor.

(g) The contract provisions for one or a combination of Federal-aid projects shall not specify a mandatory site for the disposal of surplus excavated materials unless there is a finding by the State highway agency with the concurrence of the FHWA Division Administrator that such placement is the most economical except that the designation of a mandatory site may be permitted based on environmental considerations, provided the environment would be substantially enhanced without excessive cost.

#### **Sec. 635.409 Restrictions upon materials.**

No requirement shall be imposed and no procedure shall be enforced by any State highway agency in connection with a project which may operate:

(a) To require the use of or provide a price differential in favor of articles or materials produced within the State, or otherwise to prohibit, restrict or discriminate against the use of articles or materials shipped from or prepared, made or produced in any State, territory or possession of the United States; or

(b) To prohibit, restrict or otherwise discriminate against the use of articles or materials of foreign origin to any greater extent than is permissible under policies of the Department of Transportation as evidenced by requirements and procedures prescribed by the FHWA Administrator to carry out such policies.

#### **Sec. 635.410 Buy America requirements.**

(a) The provisions of this section shall prevail and be given precedence over any requirements of this subpart which are contrary to this section. However, nothing in this section shall be construed to be contrary to the requirements of Sec. 635.409(a) of this subpart.

(b) No Federal-aid highway construction project is to be authorized for advertisement or otherwise authorized to proceed unless at least one of the following requirements is met:

(1) The project either: (i) Includes no permanently incorporated steel or iron materials, or (ii) if steel or iron

materials are to be used, all manufacturing processes, including application of a coating, for these materials must occur in the United States. Coating includes all processes which protect or enhance the value of the material to which the coating is applied.

(2) The State has standard contract provisions that require the use of domestic materials and products, including steel and iron materials, to the same or greater extent as the provisions set forth in this section.

(3) The State elects to include alternate bid provisions for foreign and domestic steel and iron materials which comply with the following requirements. Any procedure for obtaining alternate bids based on furnishing foreign steel and iron materials which is acceptable to the Division Administrator may be used. The contract provisions must (i) require all bidders to submit a bid based on furnishing domestic steel and iron materials, and (ii) clearly state that the contract will be awarded to the bidder who submits the lowest total bid based on furnishing domestic steel and iron materials unless such total bid exceeds the lowest total bid based on furnishing foreign steel and iron materials by more than 25 percent.

(4) When steel and iron materials are used in a project, the requirements of this section do not prevent a minimal use of foreign steel and iron materials, if the cost of such materials used does not exceed one-tenth of one percent (0.1 percent) of the total contract cost or \$2,500, whichever is greater. For purposes of this paragraph, the cost is that shown to be the value of the steel and iron products as they are delivered to the project.

(c)(1) A State may request a waiver of the provisions of this section if;

(i) The application of those provisions would be inconsistent with the public interest; or

(ii) Steel and iron materials/products are not produced in the United States in sufficient and reasonably available quantities which are of a satisfactory quality.

(2) A request for waiver, accompanied by supporting information, must be submitted in writing to the Regional Federal Highway Administrator (RFHWA) through the FHWA Division Administrator. A request must be submitted sufficiently in advance of the need for the waiver in order to allow time for proper review and action on the request. The RFHWA will have approval authority on the request.

(3) Requests for waivers may be made for specific projects, or for certain materials or products in specific geographic areas, or for combinations of both, depending on the circumstances.

(4) The denial of the request by the RFHWA may be appealed by the State to the Federal Highway Administrator (Administrator), whose action on the request shall be considered administratively final.

(5) A request for a waiver which involves nationwide public interest or availability issues or more than one FHWA region may be submitted by the RFHWA to the Administrator for action.

(6) A request for waiver and an appeal from a denial of a request must include facts and justification to support the granting of the waiver. The FHWA response to a request or appeal will be in writing and made available to the public upon request. Any request for a nationwide waiver and FHWA's action on such a request may be published in the Federal Register for public comment.

(7) In determining whether the waivers described in paragraph (c)(1) of this section will be granted, the FHWA will consider all appropriate factors including, but not limited to, cost, administrative burden, and delay that would be imposed if the provision were not waived.

(d) Standard State and Federal-aid contract procedures may be used to assure compliance with the requirements of this section.

(23 U.S.C. 315, sec. 10 of Pub. L. 98-229, 98 Stat. 55, sec. 165 of Pub. L. 97-424, 96 Stat. 2136 and 49 CFR 1.48(b))

[48 FR 53104, Nov. 25, 1983, as amended at 49 FR 18821, May 3, 1984; 58 FR 38973, July 21, 1993]

#### **Sec. 635.411 Material or product selection.**

(a) Federal funds shall not participate, directly or indirectly, in payment for any premium or royalty on any patented or proprietary material, specification, or process specifically set forth in the plans and specifications for a project, unless:

(1) Such patented or proprietary item is purchased or obtained through competitive bidding with equally suitable unpatented items; or

(2) The State highway agency certifies either that such patented or proprietary item is essential for synchronization with existing highway facilities, or that no equally suitable alternate exists; or

materials are to be used, all manufacturing processes, including application of a coating, for these materials must occur in the United States. Coating includes all processes which protect or enhance the value of the material to which the coating is applied.

(2) The State has standard contract provisions that require the use of domestic materials and products, including steel and iron materials, to the same or greater extent as the provisions set forth in this section.

(3) The State elects to include alternate bid provisions for foreign and domestic steel and iron materials which comply with the following requirements. Any procedure for obtaining alternate bids based on furnishing foreign steel and iron materials which is acceptable to the Division Administrator may be used. The contract provisions must (i) require all bidders to submit a bid based on furnishing domestic steel and iron materials, and (ii) clearly state that the contract will be awarded to the bidder who submits the lowest total bid based on furnishing domestic steel and iron materials unless such total bid exceeds the lowest total bid based on furnishing foreign steel and iron materials by more than 25 percent.

(4) When steel and iron materials are used in a project, the requirements of this section do not prevent a minimal use of foreign steel and iron materials, if the cost of such materials used does not exceed one-tenth of one percent (0.1 percent) of the total contract cost or \$2,500, whichever is greater. For purposes of this paragraph, the cost is that shown to be the value of the steel and iron products as they are delivered to the project.

(c)(1) A State may request a waiver of the provisions of this section if;

(i) The application of those provisions would be inconsistent with the public interest; or

(ii) Steel and iron materials/products are not produced in the United States in sufficient and reasonably available quantities which are of a satisfactory quality.

(2) A request for waiver, accompanied by supporting information, must be submitted in writing to the Regional Federal Highway Administrator (RFHWA) through the FHWA Division Administrator. A request must be submitted sufficiently in advance of the need for the waiver in order to allow time for proper review and action on the request. The RFHWA will have approval authority on the request.

(3) Requests for waivers may be made for specific projects, or for certain materials or products in specific geographic areas, or for combinations of both, depending on the circumstances.

(4) The denial of the request by the RFHWA may be appealed by the State to the Federal Highway Administrator (Administrator), whose action on the request shall be considered administratively final.

(5) A request for a waiver which involves nationwide public interest or availability issues or more than one FHWA region may be submitted by the RFHWA to the Administrator for action.

(6) A request for waiver and an appeal from a denial of a request must include facts and justification to support the granting of the waiver. The FHWA response to a request or appeal will be in writing and made available to the public upon request. Any request for a nationwide waiver and FHWA's action on such a request may be published in the Federal Register for public comment.

(7) In determining whether the waivers described in paragraph (c)(1) of this section will be granted, the FHWA will consider all appropriate factors including, but not limited to, cost, administrative burden, and delay that would be imposed if the provision were not waived.

(d) Standard State and Federal-aid contract procedures may be used to assure compliance with the requirements of this section.

(23 U.S.C. 315, sec. 10 of Pub. L. 98-229, 98 Stat. 55, sec. 165 of Pub. L. 97-424, 96 Stat. 2136 and 49 CFR 1.48(b))

[48 FR 53104, Nov. 25, 1983, as amended at 49 FR 18821, May 3, 1984; 58 FR 38973, July 21, 1993]

#### **Sec. 635.411 Material or product selection.**

(a) Federal funds shall not participate, directly or indirectly, in payment for any premium or royalty on any patented or proprietary material, specification, or process specifically set forth in the plans and specifications for a project, unless:

(1) Such patented or proprietary item is purchased or obtained through competitive bidding with equally suitable unpatented items; or

(2) The State highway agency certifies either that such patented or proprietary item is essential for synchronization with existing highway facilities, or that no equally suitable alternate exists; or

(3) Such patented or proprietary item is used for research or for a distinctive type of construction on relatively short sections of road for experimental purposes.

(b) When there is available for purchase more than one nonpatented, nonproprietary material, semifinished or finished article or product that will fulfill the requirements for an item of work of a project and these available materials or products are judged to be of satisfactory quality and equally acceptable on the basis of engineering analysis and the anticipated prices for the related item(s) of work are estimated to be approximately the same, the PS&E for the project shall either contain or include by reference the specifications for each such material or product that is considered acceptable for incorporation in the work. If the State highway agency wishes to substitute some other acceptable material or product for the material or product designated by the successful bidder or bid as the lowest alternate, and such substitution results in an increase in costs, there will not be Federal-aid participation in any increase in costs.

(c) A State highway agency may require a specific material or product when there are other acceptable materials and products, when such specific choice is approved by the Division Administrator as being in the public interest. When the Division Administrator's approval is not obtained, the item will be nonparticipating unless bidding procedures are used that establish the unit price of each acceptable alternative. In this case Federal-aid participation will be based on the lowest price so established.

(d) Appendix A sets forth the FHWA requirements regarding (1) the specification of alternative types of culvert pipes, and (2) the number and types of such alternatives which must be set forth in the specifications for various types of drainage installations.

(e) Reference in specifications and on plans to single trade name materials will not be approved on Federal-aid contracts.

#### **Sec. 635.413 Warranty clauses.**

The SHA may include warranty provisions in National Highway System (NHS) construction contracts in accordance with the following;

(a) Warranty provisions shall be for a specific construction product or feature. Items of maintenance not eligible for Federal participation shall not be covered.

(b) All warranty requirements and subsequent revisions shall be submitted to the Division Administrator for advance approval.

(c) No warranty requirement shall be approved which, in the judgment of the Division Administrator, may place an undue obligation on the contractor for items over which the contractor has no control.

(d) A SHA may follow its own procedures regarding the inclusion of warranty provisions in non-NHS Federal-aid contracts.

[53 FR 1923, Jan. 25, 1988, as amended at 58 FR 38973, July 21, 1993, 60 FR 44271, August 25, 1995]

#### **Sec. 635.417 Convict produced materials.**

(a) Materials produced after July 1, 1991, by convict labor may only be incorporated in a Federal-aid highway construction project if such materials have been:

(1) Produced by convicts who are on parole, supervised release, or probation from a prison or

(2) Produced in a qualified prison facility and the cumulative annual production amount of such materials for use in Federal-aid highway construction does not exceed the amount of such materials produced in such facility for use in Federal-aid highway construction during the 12-month period ending July 1, 1987.

(b) **Qualified prison facility** means any prison facility in which convicts, during the 12-month period ending July 1, 1987, produced materials for use in Federal-aid highway construction projects.

#### **Appendix A - Summary of Acceptable Criteria for Specifying Types of Culvert Pipes**

Please see 23 CFR for this appendix.

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[FHWA Home](#) | [Directives](#) | [23 CFR TOC](#) | [Feedback](#)



United States Department of Transportation - Federal Highway Administration

**ATTACHMENT D**

**FHWA GUIDANCE ON THE CONSIDERATION OF HISTORIC AND ARCHAEOLOGICAL  
RESOURCES**

MEMORANDUM

Subject: Federal Highway Administration Guidance on the  
Consideration of Historic and Archeological  
Resources in the Highway Project Development  
Process

From: Director, Office of Environmental Policy  
Washington, D.C. 20590

To: Regional Federal Highway Administrators  
Direct Federal Program Administrator (HDF-1)

Date: December 23, 1988

Reply to  
Attn. of: HEV-20

Attached is an updated guidance package addressing the consideration of historic and archeological resources in the project development process. The guidance updates and supersedes the material distributed on December 30 1986, which is found in the Environmental Guidebook (Tab 3). Another copy will be included in the annual update scheduled for distribution early in 1989.

Revisions to the guidance were based upon comments of FHWA field offices and the States. A number of requests for additional guidance were also received. These issues are being investigated and, if appropriate, additional questions and discussions will be provided at a later date. Please direct any questions to Mr. Bruce Eberle at 366-2060.

/ Original signed by /

Ali F. Sevin

Attachment

GUIDANCE ON THE CONSIDERATION  
OF  
HISTORIC AND ARCHEOLOGICAL RESOURCES  
IN THE HIGHWAY PROJECT  
DEVELOPMENT PROCESS

This guidance is intended to fill the gap between the Advisory Council on Historic Preservation and National Park Service publications and to interpret their regulations to the FHWA program and provide maximum flexibility to State highway agencies' programs.

ENVIRONMENTAL ANALYSIS DIVISION  
OFFICE OF ENVIRONMENTAL POLICY  
FEDERAL HIGHWAY ADMINISTRATION

December, 1988

A. **HISTORIC AND ARCHEOLOGICAL RESOURCE CONSIDERATIONS IN ENVIRONMENTAL DOCUMENTATION**

1. **Background**

Consideration for the protection of historic and archeological resources must be included as a factor in the decision-making process of transportation projects. Legislative and Executive mandates on the need to preserve and enhance cultural resources (which include historic and archeological resources) have been expressed in the Department of Transportation (DOT) Act of 1966, the Federal-aid Highway Act of 1968, the National Environmental Policy Act of 1969, the National Historic Preservation Act of 1966, Executive Order 11593 of 1971, the Archeological and Historic Preservation Act of 1974, the American Indian Religious Freedom Act of 1978, the Archeological Resource Protection Act of 1979 and the Surface Transportation and Uniform Relocation Assistance Act of 1987. In addition, regulations by the Council on Environmental Quality (40 CFR, Part 1500-1508) and the Advisory Council on Historic Preservation (ACHP) (36 CFR, Part 800) have been promulgated to assure that effects on historic and archeological resources are considered in the development of Federal undertakings.

Part 800.4(b) of the ACHP regulation states, "In consultation with the State Historic Preservation Officer, the Agency Official shall make a reasonable and good faith effort to identify historic properties that may be effected by the undertaking and gather sufficient information to evaluate the eligibility of these properties for the National Register." Part 800.14 of the regulation encourages that consideration of historic and archeological resources coincide with environmental reviews to provide the public as well as the decision-maker with the fullest and most complete information available on how various project alternatives will affect historic and archeological resources.

To accomplish the intent of legislation and regulations, it is necessary that the project's area(s) of potential effect be established and that certain levels of investigation of historic and archeological resources be accomplished during the transportation project development process. A discussion of these effects must be included in the environmental documentation. The investigation and discussion should be commensurate with the importance of the historic and archeological resources as well as the magnitude of the project's impacts on the resources. Throughout the development process, the decision-maker must have sufficient information for each resource which may be impacted either directly or indirectly by the proposed Federal undertaking to make well-informed decisions relating to the proposed undertaking.

2. **Draft Environmental Documentation Stage**

The Federal Highway Division Administrator should ensure that steps are taken to identify resources potentially eligible for the National Register of Historic Places, provide for early and continuing coordination with the State Historic Preservation Officer (SHPO), and properly consider and evaluate the potential effects on these resources.

The draft environmental document should discuss those historic and archeological

resources which were identified within the area of the potential effect of each of the alternatives under consideration. The evidence of coordination with and comments by the SHPO should be included in the environmental document.

To obtain adequate information to evaluate and compare alternatives for impact on historic and archeological resources and to subsequently consider appropriate mitigation activities, the following steps should be performed:

**Background Research** - Locate and evaluate existing records and inventories of historic and archeological resources.

The State Historic Preservation Plan if it exists, should be checked to identify the preservation and research concerns and priorities in the particular region. Coordination with knowledgeable groups or individuals is also appropriate. The background work should provide the context and association within which to identify and evaluate resources. The work should be performed under the supervision of a qualified investigator with experience in that region and should reference all sources consulted.

**Field Investigation - Reconnaissance** - Each alternative under consideration in preparation of the draft environmental document should be investigated in the field unless reliable investigations have already been performed and are considered adequate.

Field reconnaissance should be performed on the basis of a well defined plan of investigation developed after the background research by trained and experienced Investigators familiar with the region. The field reconnaissance should consist of a visual inspection to identify or confirm potential resources based on the expectations that were identified by background research.

Since inspection of the ground surface or facade alone may not reveal a resource it may be necessary to perform limited subsurface or interior investigation when there is reasonable cause to expect that a significant resource is present. It is intended that this investigation be limited in scale and be confined to those resources where inspection of the ground surface or facade is not sufficient to define the types, extent, magnitude, and significance of the resources.

Based on the information gained at this stages it should be possible for the Division Administrator in consultation with the State Historic Preservation Officer to reach a decision on eligibility of the resources for the National Register and the applicability of Section 4(f) to the resource. If applicable the draft environmental document should include a Draft Section 4(f) evaluation.

### **3. Final Environmental Documentation Stage (Including Categorical Exclusions)**

The discussion of historic and archeological resources for the preferred alternative should consider: (a) the type and extent of the resource, (b) its eligibility for the National Register, (c) the importance of the resource in terms of the State Historic Preservation Plan, (d) the effect of the project on the resource, and (e) the measures to avoid or minimize harm for all resources

determined to be eligible and affected by this alternative. Coordination with the SHPO and the ACHP should be documented for all resources on or eligible for the National Register. The documentation prepared to complete Section 106 procedures (ACHP comments, an approved Memorandum of Agreement, a finding of "No Adverse Effect," or a finding of "No Effect") should be included or summarized in the final environmental document.

To obtain the information necessary to develop, evaluate, and agree upon a reasonable resource-specific mitigation plan, additional background research and/or field investigation may be needed.

Additional Background Research - Consult with the SHPO, other knowledgeable groups or individuals, and other sources (documents) as much as possible in this research. (Reference should be made to all sources consulted.)

Field Investigation - Testing - Tailor the testing program so that it obtains the specific information needed with a minimum amount of disruption and damage to the resource. The program should consist of detailed and controlled examination, collection, and subsurface testing to sufficiently understand the type, extent, depth, and complexity of the resource so that eligibility of the resources for the National Register can be assessed and recommendations regarding the scope and costs of appropriate mitigation activities can be developed.

When the Division Office consults with the ACHP during the Section 106 consultation process on projects having a Section 4(f) involvement its correspondence to the ACHP should indicate that, a preliminary conclusion has been reached, subject to the Region's Section 4(f) approval action, that there are no feasible and prudent alternatives to the use of the resource. The letter should clearly reflect that the preliminary conclusion is based on the information available to the Division at that time. The Section 106 documentation is used to complete the Section 4(f) evaluation.

The final environmental document shall summarize the historic and archeological resources identified for each alternative that was under consideration at the draft environmental document stage.

#### 4. Access to Property

Every effort should be made to initiate the identification and evaluation of historic and archeological resources in the early planning stages so that compliance with Section 106 of the National Historic Preservation Act (implemented by 36 CFR, Part 800) and, as appropriate, Section 4(f) of the DOT Act is accomplished at the final environmental document stage in accordance with the FHWA Technical Advisory (T 6640.8A). Most states have right-of-entry statutes that allow access to private property in unusual situations. Where access to property for identification and evaluation of historic and archeological resources cannot be gained or is considered to not be prudent or is determined to be non-essential, the environmental document should clearly justify the decisions including consultation with the SHPO, and must provide reasonable assurance that the Section 106 or Section 4(f) requirements will be met when access is obtained.

offered guidance in a booklet entitled "Treatment of Archeological Properties: A Handbook" (1980). The DOI has also issued nonregulatory material entitled "Archeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines" (1983). The Advisory Council and the National Park Service have jointly issued a publication entitled "Identification of Historic Properties: A Decisionmaking Guide for Managers" (1988).

Sources of general guidance, including investigation methods for historical resources, include "Guidelines for Local Surveys: A Basis for Preservation Planning" (1977), and "Historic and Archeological Preservation: Secretary of the Interior's Standards and Guidelines" (1983). Both of these documents were developed by the U.S. Department of the Interior. The most appropriate source of information on Investigation of historic bridges is the Transportation Research Board publication entitled "Historic Bridges: Criteria for Decision Making" (1983).

11. **QUESTION:** Can Predictive Techniques Be Utilized For Survey And Evaluation Of Highway Alternatives?

**DISCUSSION:** Predictive techniques are used to estimate the probability of archeological resources present in a particular landform or environmental zone based on the background research or the surface indications. Predictive techniques can be cost effective when applied to large regions; such as states, river valleys, or mountain ranges. Predictive techniques can also be useful to help determine the most appropriate level and type of study needed. However, concentrating all survey work in areas identified by predictive techniques as having the highest probability for archeological resources would not be justified. Areas of low probability still need to be examined but usually at a lower level of effort to ensure that initial assumptions or background data are acceptable. For this reason, predictive techniques are not often cost effective for transportation projects.

While predictive techniques normally provide information on the expectation of the presence or absence of resources, they often fail to provide meaningful data; such as the boundary of the resources the vertical extent of the resources the Importance of the resources for interpretation or scientific study, and the likelihood of the resources being eligible for the National Register. Many of these concerns need to be examined individually to adequately evaluate the impact of the various highway alternatives under consideration upon archeological resources. For these reasons, predictive techniques should be used only with extreme caution.

12. **QUESTION:** How Should FHWA Deal With Borrow Areas, Haul Roads, Preparation Sites, And Other Areas Selected By Contractors?

**DISCUSSION:** The locations of contractor-selected storage areas, borrow areas, preparation sites, haul roads, staging areas, disposal areas\* etc.p are not known until after the contracts have been awarded. This situation causes FHWA difficulty in ensuring its responsibility to consider the impact of Federal projects on historic and archeological resources.

The procedures that are developed to fulfill this Federal responsibility vary from state to

state. It is, however, FHWA's responsibility to ensure that the state's procedures for evaluating impacts of borrow areas storage areas, preparation sites, haul roads, staging areas, disposal areas, etc., are responsive to Section 106 requirements prior to the approval of Federal funds.

Potential contractors should be made aware that any impacts on historic and archeological resources on or eligible for the National Register of Historic Places directly related to the Federal project are subject to compliance with the National Historic Preservation Act (Section 106) and @16 CFR 300.

"Directly related to the Federal Project" means that the area(s) in question is either designated in the contract or the number of areas available is practically so limited as to require the selection of a historic or archeological resource. For example, if the contract specifies a particular material only available at a site within a historic or archeological resource, then use of that site is "directly related" even if it is not specified. Similarly,, if a project is located so that all borrow areas which are economically feasible to use are located in historic or archeological areas, then use of the area is directly related. On the other hand, if borrow material is available from many places, and the contractor happens to select a source entirely at the contractor's option which is in an historic or archeological resource, the use of the site is not "directly related" to the Federal project.

Even where contractor operations in borrow areas, etc., are not directly related to a project, it is FHWA's policy to provide leadership in the preservation of the prehistoric and historic resources of the United States.

1. During the environmental process archeological surveys are made to identify archaeological resources that may be present. Avoidance of these resources is one consideration in selection for the final highway alignment. Contractors should coordinate with the SHA prior to making commitments on the selection of borrow, disposal or other use areas so that known archeological resources may be avoided.
2. When unanticipated archeological resources are uncovered in a contractor furnished site, the contractor should notify the SHA and the SHPO and avoid the resource if possible. If it is possible to avoid the resource, a professional archaeologist should survey the resource and assist in determining the appropriate action to pursue regarding the resource.

The above procedure should be reflected in all contracts, agreements, etc., concerning the State, contractors, and property owners. Any additional costs incurred by the contractor should be negotiated between the State and the contractor.

13. **QUESTION:** When A Resource Is Disturbed Or Modified Can It Still Be "Significant"?

**DISCUSSION:** Yes, for example, a resource that has been plowed, built upon, and subsequently destroyed by fire may still produce archeological information that has never been known to exist in that specific area before. Such a resource would probably be "significant#" even though it has been disturbed. The presence of artifacts alone, however, is not sufficient reason to make a resource "significant."

**ATTACHMENT E**

**CALTRANS 1988 INTERIM POLICY MEMORANDUM**

Business, Transportation and Housing Agency

**Memorandum**

Attn: Gary Pursell

To: ALL DISTRICT DIRECTORS

Date: March 11, 1988

File:

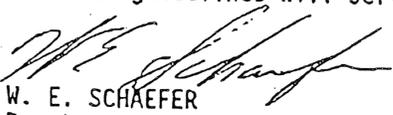
From: DEPARTMENT OF TRANSPORTATION  
DIRECTOR'S OFFICE

Subject: Contractor's Yard and Plant Sites

The overwhelming majority of highway projects requires the contractor to locate and set up a yard for storage of equipment and materials and, on many projects, a plant for production of aggregate, asphalt concrete or portland cement concrete. Recent events have underscored the need to clearly provide in the bid documents, or to specifically indicate the failure to provide, sufficient space for these facilities. An area large enough to accommodate a contractor's yard is usually more difficult to find in the urban areas, while the need to provide for plant sites is more common in the rural areas where commercial materials sources are not readily available. Time and money saved by the contractor in locating environmentally clear property suitable for these facilities is reflected in his bid prices.

Problems, if any, seem to arise when it is fairly obvious to bidders that sufficient area within the project right of way is not available, but it appears that operating right of way, property held for future construction, or excess land within a reasonable distance from the project limits would be suitable if it could be made available in time for their use.

Caltrans procedures for allowing its property to be used, and for handling necessary leases, clearances, and permits are not well known or easily located in procedures manuals. A study is under way in the Office of Project Planning and Design to collect the various statements of policy and to issue a coordinated set of instructions. Until that effort is completed, the attached guidelines will serve as Caltrans policy.



W. E. SCHAEFER  
Deputy Director  
Project Development

Attachment

*COPY to all R.E.'s*

March 1988

INTERIM GUIDELINES  
FOR  
CONTRACTOR'S YARD AND PLANT SITES

References

Highway Design Manual.....	Topic 112
Right of Way Manual.....	Sections 710.013, 710.014, 802.002, 1002.006 F and G
Maintenance Manual.....	Section 25.02.12
Encroachment Permit Manual.....	Section 7
Standard Specifications.....	Section 7-1.19
Construction Manual.....	Section 2-07-10
Standard Special Provisfons.....	Under development as SSP Gen-24, contact Don Mayer (ATSS 485-4041).

Procedures

## 1. General

The Project Engineer shall, during the design phase of a project, consider the need and availability of sites for contractor's yards and materials plants. This is particularly important in areas where dust, noise, and access problems could limit the contractor in obtaining his own sites in a timely manner. Asphalt concrete recycling projects pose special problems of material storage, access, and plant location. As a general rule, the use of all sites designated in the Special Provisions should be optional on the part of the contractor with a requirement of notice being given to the Resident Engineer within a designated time period after approval of the contract. (30 days would be a minimum, but not more than 60 days except in unusual situations.) Environmental clearances and local permits must be obtained prior to submittal of PS&E. Right of Way, Permits, and Environmental units must be informed early in the process. The contractor will be allowed to use these sites only for work on the designated projects.

## 2. Locating a Site

The Project Engineer should consult with District Right of Way concerning appropriately sized parcels currently being held in the Airspace Inventory, nearby property held by the Department for future construction, or as Excess Land. If such space is available in the vicinity of the project, the District Environmental unit should be consulted regarding the parcel's environmental clearance for this intended use. If sufficient space does not appear to be available for yard or plant, the Project Engineer will see that the appropriate wording is placed in the contract Special Provisions.

### 3. Procedures: Site Described in Special Provisions

- o Project Engineer notifies District Right of Way of proposed use and target date of advertising the construction contract.
- o If excess land, a Category 2B or 2C hold is required. (See Right of Way Manual, Sections 710.013, 710.014, and 1002.006 F or G.) Right of Way Excess Lands Branch will process the hold.
- o If airspace, see Right of Way Manual Section 802.002. Analysis must be approved by the District Airspace Review Committee. An encroachment permit will be required.
- o If property held for future construction, see Right of Way Manual Section 710.014.
- o Project Engineer will be responsible for ensuring that local and environmental approvals are obtained.
- o Project Engineer will ensure that appropriate language is placed in the Special Provisions for the contract.
- o Project Engineer will inform District Encroachment Permits unit that the Contractor will be applying for an encroachment permit. No permit is required if the site is within the contract limits.
- o Resident Engineer will ensure Contractor properly protects, maintains, and leaves property in a satisfactory condition at the end of the use as required by the Special Provisions.

### 4. Procedures: Use of Non-Designated State Property Outside of Project Limits Requested By Contractor

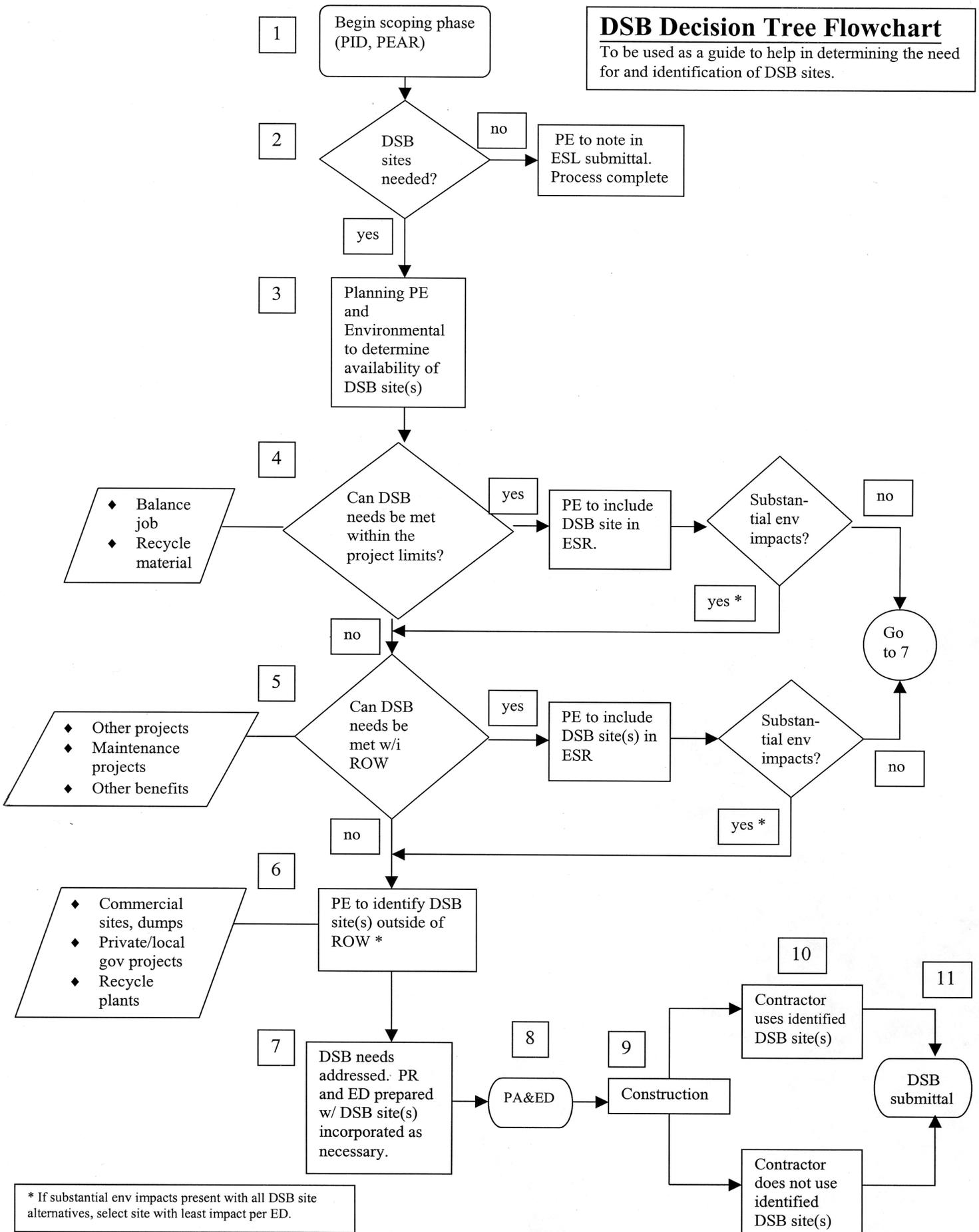
- o Resident Engineer, upon receipt of a Contractor's request to use State property outside of the contract limits and not designated in the Special Provisions, will direct Contractor to appropriate District Right of Way unit (Airspace, Property Management, or Excess Land).
- o Excess land rentals, see Right of Way Manual Sections 710.013 and 710.014. A Category 2B or 2C hold is required per Right of Way Manual Section 1002.006 F or G. Analysis must be approved by the Excess Lands Branch.
- o Rental of property held for future construction, see Right of Way Manual, Section 710.014.
- o Payment for use will be based on Fair Market Value.
- o District Right of Way will assist Contractor as needed in securing local approvals and environmental clearance.
- o An encroachment permit will be required. District R/W will coordinate its activities with District Permits to see that appropriate wording is contained in the encroachment permit.

**ATTACHMENT F**

**DSB DECISION TREE FLOWCHART**

# DSB Decision Tree Flowchart

To be used as a guide to help in determining the need for and identification of DSB sites.



\* If substantial env impacts present with all DSB site alternatives, select site with least impact per ED.

**ATTACHMENT G**

**ACRONYM LIST**

## ACRONYMS

ACOE	Army Corps of Engineers
Cat Ex	Categorical Exclusion
CCI	Construction Cost Index
CE	Categorical Exemption
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CPM	Critical Path Method
CRIP	Cost Reduction Incentive Proposal
DOT	Department of Transportation
DSB	Disposal, Staging, or Borrow areas
DSBAT	DSB Advisory Team
ED	Environmental Document (includes CE/Cat Ex)
EP	Environmental Planner
ESL	Environmental Study Limits
ESR	Environmental Study Request
FHWA	Federal Highway Administration
HDM	Highway Design Manual
SMARA	Surface Mining and Reclamation Act
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
PA&ED	Project Approval and Environmental Document
PCC	Portland Concrete Cement
PDPM	Project Development Procedures Manual
PE	Project Engineer
PEAR	Preliminary Environmental Analysis Report
PID	Project Initiation Document
PR	Project Report
PS&E	Plans, Specifications, and Estimates
RCRC	Regional Council of Rural Counties
RE	Resident Engineer
ROW	Right of Way

SHPO	State Historic Preservation Officer
SWPPP	Storm Water Pollution Prevention Plan
USFWS	United States Fish and Wildlife Service
WPCP	Water Pollution Control Plan
4(f)	Laws and associated regulations regarding impacts to public parks, recreation areas, and historic sites, for projects requiring FHWA approval.
Sec 106	Section of the NHPA addressing federal project impacts to historic sites



U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION  
CALIFORNIA DIVISION  
980 Ninth Street, Suite 400  
Sacramento, CA. 95814-2724  
November 21, 2001

IN REPLY REFER TO  
HDA-CA  
Document #: S37326

Mr. Jeff Morales, Director  
California Department of Transportation  
1120 N Street  
Sacramento, California 95814

Attention: Federal Resources Branch, Room 3500  
For Brent Felker, Chief Engineer

Dear Mr. Morales:

**SUBJECT: DISPOSAL SITE QUALITY TEAM FINAL REPORT CONCURRENCE**

We have reviewed the Disposal Site Quality Team Final Report and your November 5, 2001, letter requesting The Federal Highway Administration's (FHWA) concurrence with the Disposal Site Quality Team Final Report. We concur with the findings of the report and are enclosing the original transmittal letter signed by the FHWA California Division Administrator for your files.

We have noted that Section 5A of the Final Report, "Implementation with FHWA," does not reflect the most current information available. The FHWA's legal counsel has now completed its review and has determined that the recommendations in the report do not violate existing FHWA policy. Also, the FHWA California Division Administrator and Assistant Division Administrator have met with California Department of Transportation management regarding the acceptance and implementation of the proposal, and are in agreement on its implementation.

Rather than revising the report to reflect this current information, we recommend that this letter be included as an addendum to the Disposal Site Quality Team Final Report. Please include copies of this letter with the reports when they are distributed.

If you have any questions or comments, or if you need further assistance, please call David Nicol, Assistant Division Administrator, at (916) 498-5015 or e-mail "David.Nicol@fhwa.dot.gov."

Sincerely,

Michael G. Ritchie  
Division Administrator

**DEPARTMENT OF TRANSPORTATION**

OFFICE OF THE DIRECTOR

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SACRAMENTO, CA 94273-0001

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*Flex your power!  
Be energy efficient!*

November 5, 2001

Mr. Michael Ritchie  
Division Administrator  
Federal Highway Administration – California Division  
980 9<sup>th</sup> Street, Suite 400  
Sacramento, CA 95814-2724

Dear Mr. Ritchie:

Subject: Disposal Site Quality Team Final Report

I am pleased to present you with the final report of the Disposal Site Quality Team. The Disposal Site Quality Team was formed to identify and resolve the issues and concerns associated with identification and use of disposal, borrow, and staging areas used for Caltrans construction projects. The mission statement for the team was:

*"To effect project delivery process changes which allow use of borrow, disposal, and staging areas during construction in a manner that facilitates permitting and environmental compliance, is cost effective, and avoids project delays."*

The Team, which included the Federal Highway Administration (FHWA), dedicated many hours of work over the past year. This report represents a sound solution to a complex issue. Implementation of the recommendations will enhance resource agency relations, decrease costs, and improve delivery of FHWA funded projects.

Successful implementation of the Team's recommendations is highly dependent on your concurrence. To that end, the report incorporates comments from your staff, including the California Division, Chief Legal Counsel. With your concurrence below, we will move forward with implementation of the plan.

*"Caltrans improves mobility across California"*

Mr. Michael Ritchie  
November 5, 2001  
Page 2

I want to thank you and your staff for supporting and participating in such a tremendous effort. We look forward to the cost savings and resulting improvements in our project delivery process.

Sincerely,



**BRENT FELKER**  
Chief Engineer

Concurrence

  
**MICHAEL RITCHIE**  
Division Administrator  
Federal Highway Administration - California Division

11/21/01  
Date

*"Caltrans improves mobility across California"*