

APPENDIX H

# **Approach and Milestones to Process the Minor 408 Permits**

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## Approach and Milestones to Process the Minor 408 Permits

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### 1.1 SUMMARY

Due to the current preliminary phase of design development for the Merced to Fresno Section of the California High-Speed Train (HST) and the type of information necessary to support either a Major 408 Permit or Minor 408 Permit (Section 208.10/Encroachment Permit) application and approval, these application processes are premature. Also, the Minor 408 Permit may not be needed at this stage under Section 404, as there is no direct Section 404 requirement for a Minor 408, and such application would be out of sink with design phasing. The regulatory overview below may help clarify this.

Per the Memorandum of Understanding (October 2010) between the Federal Railroad Administration (FRA), California High-Speed Rail Authority (Authority), U.S. Environmental Protection Agency (EPA), and U.S. Army Corps of Engineers (USACE), necessary 408 Permit applications would be submitted with the Checkpoint C submittal. However, through ongoing coordination for the past 2 years with representatives of the Merced to Fresno Section consultant team, the USACE Sacramento District, and the Central Valley Flood Protection Board (CVFPB), the Merced to Fresno Section does not have crossings that would require a 408 Permit under USACE jurisdiction. There are jurisdictional flood control projects, but the project levees are generally not located at the HST alignment, and we anticipate that bridges and other types of crossings can be designed in such a way as to avoid adverse or unacceptable impacts to flood-control project conveyance and stability. This memorandum provides an overview of the regulations that manage crossings over waters of the U.S. with federal-state flood control projects. It also provides a set of milestones under which the Minor 408 (i.e., CVFPB Encroachment Permit satisfying Section 208.10 of Title 33 of the Code of Federal Regulations [33 CFR 208.10]) would be prepared once the project design sufficiently advances to support application and agency review.

### 1.2 BACKGROUND

Section 408 of Title 33 of the United States Code (33 U.S.C. 408) pertains to taking possession of, use of, or injury to harbor or river improvements and was originally codified as Section 10 of the Rivers and Harbors Act of 1899. Section 10 prohibits the unauthorized obstruction or alteration of any navigable water of the United States. The construction of any structure in or over any navigable water or work affecting the course, location, condition, or physical capacity of navigable waters is unlawful unless the work has been recommended by the Chief of Engineers and authorized by the Secretary of the Army. The Secretary's approval authority has since been delegated to the USACE Chief of Engineers. The focus of

Section 408 is *modifications* to harbor and river improvements, and by definition it is administered at the level of the Chief of Engineers (USACE headquarters).

Section 208.10 of Title 33 of the Code of Federal Regulations (33 CFR 208.10) pertains to *maintenance and operation* of federal flood control projects and is therefore complementary to the broader Section 408, specifying requirements of local project sponsors to preserve and protect the authorized project. Section 208.10 was last updated by the Flood Control Act of 1944. The focus of Section 208.10 is minor changes to flood control projects where it can readily be confirmed that the authorized project is not materially modified, but rather that its operation or maintenance are preserved. Section 208.10 is administered and approved by USACE at the district level.

Although passed in 1899, it was not until 2006 that USACE first considered modifications under Section 408. Since then, USACE has issued a series of clarifying and sometimes contradictory guidance and struggled with inconsistent application. As an example of ongoing efforts to clarify the application of Section 408, much of it in the Central Valley of California, see the attached Congressional Briefing Paper (July 22, 2011). This paper uses the terms "Major 408" and "Minor 408." It defines a Minor 408 as previous actions under Section 208.10, as well as more significant project modifications that go beyond operations and maintenance but that are intended to restore "the authorized level of protection or improving the structural integrity of the protection system" without changing "the authorized structural geometry or hydraulic capacity that were previously approved in accordance with Section 208.10." Major 408s are degradations, raisings, realignments, and other alterations/modifications that go beyond a Minor 408.

In the Central Valley of California, USACE has delegated administration of Section 208.10 approvals to CVFPB via its encroachment permits but has retained its approval authority over the technical aspects of each encroachment project. CVFPB reviews encroachment permit applications for completeness and works with the applicant to ensure that all required application content is submitted.<sup>1,2</sup> Once the application is considered complete, CVFPB provides a copy of the application to USACE for concurrent review. In general, USACE focuses on technical engineering requirements, such as hydraulic modeling, geotechnical studies, and performance requirements, to fulfill its obligations under Section 408 and Section 208.10, while CVFPB focuses on environmental compliance and Title 23 standards to ensure compliance under the California Environmental Quality Act (CEQA) and Title 23 of the California Code of Regulations. USACE develops a list of requirements and restrictions (e.g., maximum rise criteria demonstrated through hydraulic modeling), which append the permit. CVFPB may also develop a list of requirements and restrictions for the permit and either issue the permit with requirements and restrictions or deny the permit based on its collaborative review with USACE.

The focus of the encroachment permit application is an environmental questionnaire to demonstrate conformance with CEQA requirements. Title 23 does not spell out technical engineering inputs for an encroachment permit, but they generally include the following, based on feedback from the USACE Sacramento District and CVFPB:

- Establish design hydrology; in some cases a new hydrology study may be needed to update older hydrologic information.
- Obtain field data for the crossing, such as cross-section surveys.
- Conduct a hydraulic analysis to determine the design water surface elevation and demonstrate minimal (generally less than 0.1 foot) incremental rise due to the project.

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<sup>1</sup> Taras, Curt. 2010. Chief of Floodway Encroachment and Enforcement, CVFPB. Personal communication regarding application reviews. April 21, 2010.

<sup>2</sup> Larson, Ryan. 2010. Section 208.10. USACE. Personal communication regarding application review. April 21, 2010.

- Demonstrate that the crossing design meets minimal requirements for setbacks, freeboard, and bridge clearance.
- Demonstrate adequacy with respect to scour and channel stability.

Portions of the above information have been developed for crossings scheduled for early construction, but the bulk of the crossing information needed for encroachment permits will be developed by the design-build contractor later in the project.

Table 1 provides an anticipated set of milestones through which these permits would be developed according to available information in the design phase. The current progress of the project does not provide the level of detail to prepare this permit during the Checkpoint C phase. Dependent on the phasing of the project, one or more crossing would be designed concurrently, following the same procedures.

**Table 1**  
Minor 408 Milestones

#	Task (in general order of work)	Anticipated design phase		
		15% on selected alternative (LEDPA)	30%	60%
1	Establish Design Hydrology (peak design flow rate): <ul style="list-style-type: none"> <li>• Collect, review, and summarize available hydrology</li> <li>• Consult with CVFPB and USACE</li> <li>• Develop original hydrology, if required</li> </ul>	X		
2	Obtain Existing Conditions Field Data (can start concurrent with Task 1): <ul style="list-style-type: none"> <li>• Aerial and field reconnaissance – field plans</li> <li>• Channel cross-section survey and processing</li> <li>• Geotechnical sampling, testing and data report</li> </ul>	X		
3	Establish Existing Conditions Hydraulics (HEC-RAS model) <ul style="list-style-type: none"> <li>• Develop HEC-RAS model for each crossing</li> <li>• Calibrate or validate the model</li> <li>• Consult with CVFPB and USACE</li> </ul>	X		
4	Demonstrate Minimal Hydraulic Impacts from Design (Confirm 208.10 vs. 408). Although some of this can be done on a preliminary basis using 15% design, 30% design will be required to support a Conditional Encroachment Permit application in Step 5. <ul style="list-style-type: none"> <li>• Incremental flood rise</li> <li>• Freeboard</li> <li>• Setbacks and levee clearance</li> <li>• Environmental questionnaire</li> <li>• Establish design water surface elevation and freeboard</li> <li>• Scour and channel stability</li> </ul>	X	X	

#	Task (in general order of work)	Anticipated design phase		
		15% on selected alternative (LEDPA)	30%	60%
5	Apply for Conditional Encroachment Permit: <ul style="list-style-type: none"> <li>• Develop permit application:                             <ul style="list-style-type: none"> <li>– Landowner information</li> <li>– Environmental questionnaire</li> <li>– Design report with modeling appendices</li> </ul> </li> <li>• Manage application process through completion                             <ul style="list-style-type: none"> <li>– CVFPB reviews for completeness</li> <li>– Consultant response to request for completeness</li> <li>– Concurrent CVFPB and USACE review of application</li> <li>– Agency request for additional information or confirmation</li> <li>– Consultant response to request for additional information or confirmation</li> <li>– Issuance of Conditional Encroachment Permit</li> <li>– Issuance of Minor 408 Compliance (no need for full 408 Permit)</li> </ul> </li> </ul>		X	
6	Verify Compliance with Conditional or Final Encroachment Permit (60% Design by Design-Builder)			X

ATTACHMENT

**Congressional Briefing Paper  
Regarding Section 408 Review  
Process**

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**Proposed Framework for Guidance Clarifying the  
U.S. Army Corps of Engineers Section 408 Review Process  
for Locally Funded and Constructed Improvements  
to Federal Flood Control Projects**

**A. Introduction**

33 U.S.C. § 408 (Section 408) provides that any proposed modification to an existing U.S. Army Corps of Engineers (USACE) project must obtain permission from the Secretary of the Army by demonstrating that such proposed alteration or permanent use and occupation of the Federal flood control project is “not injurious to the public interest and will not impair the usefulness of such work.” USACE has historically exercised its review of modifications under 33 C.F.R. § 208.10 (Section 208.10). However, since 2006 USACE has considered some modifications directly under Section 408 and on June 18, 2010 the Director of Civil Works issued a memorandum stating that “from this date forward, [Section 408] will be the sole authority utilized for approvals to modify USACE projects.”

Since first considering modifications under Section 408 in 2006, USACE has provided ambiguous and occasionally contradictory guidance regarding Section 408. In some cases, this has caused substantial delay and increased costs for proposed critical improvements to Federal flood damage reduction projects necessary to reduce flood risk. In response, a coalition of non-Federal partners in California’s Central Valley worked with USACE to establish the Section 408 Task Force. The Task Force included a dialogue about creating a meaningful review process under Section 408 which balanced necessary review against delay and cost. Although that process did result in USACE developing guidance in late 2008 that addressed some concerns, other concerns were not addressed in the 2008 guidance or since. USACE is now updating its guidance for implementing Section 408, creating an opportunity for regulatory reform to address some of these concerns.

**B. Background**

On October 23, 2006, the Director of Civil Works issued a memorandum containing policy and procedural guidance for the approval of modifications and alterations to USACE projects (2006 Memorandum). The guidance provided that activities related to a non-Federal partner’s “responsibilities for operating and maintaining the structural soundness and functionality of projects in order to assure the project meets its authorized purpose” were specifically considered a part of the District Engineer’s responsibilities under Section 208.10. By contrast, proposed changes that exceed the “level of ordinary District O&M responsibilities” were subject to approval from Division and Headquarters (HQ) under Section 408. As noted above, the 408 Task Force worked with USACE in 2007 to define the applicability, scope, and requirements of the Section 408 process. A major outcome was that the Director of Civil Works issued clarification guidance on November 17, 2008 (2008 Clarification).

Despite the 2008 Clarification’s goal of providing “additional clarification” to supplement the 2006 Memorandum, the guidance has made reviews more time consuming and costly and created significant uncertainty within USACE and among non-Federal partners as to what approvals and what process is required to review and approve non-Federal partners’ improvements. For

example, the St. Louis District has recently indicated to the constituent members of the Southwestern Illinois Flood Prevention District Council that a system-wide Section 408 approval may be required despite the fact that the project merely restores the four locally maintained and operating portions of the levee system to a 100-year level of protection, which is less than the authorized 500-year level of protection. A second example is that in the Fort Worth District USACE has recently required non-Federal partners to complete a programmatic environmental assessment for current and future Section 408 requests without a legal requirement for such review. A further example arises from a June 22, 2011 memorandum from the Director of Civil Works which states that “until the potential cumulative effects of numerous levee alterations and related actions in the [California Central Valley] region are described in a programmatic NEPA document, we will be hesitant to approve additional 408 requests for alterations to Federal flood damage reduction projects.” The uncertainty surrounding these and other requirements for Section 408 approvals, the timelines associated with development of the required products, and – in some unfortunate cases – the timeliness of USACE review, has significantly impacted the time it will take for affected non-Federal partners to implement their locally funded projects designed to reduce flood risk. This delay is devastating not only to public safety, but also to attempts to use public works contracts to improve the economy.

USACE is currently drafting guidance entitled Approval of Alterations to Existing U.S. Army Corps of Engineers Public Works Projects, the January 20, 2011 draft of which was reviewed for this paper (Draft Guidance). Other summary-level proposed guidance was presented at the recent Levee Safety Program Workshop in Denver, Colorado on June 28, 2011 and this is providing an opportunity for USACE to again engage non-Federal partners in a public discussion about the process to approve local modifications to Federal flood damage reduction projects. This openness is commendable and should be expanded to provide meaningful interactive dialogue on Section 408 between USACE and all interested non-Federal partners.

### **C. Discussion**

There is no doubt that USACE review of non-Federal modifications to Federal flood damage reduction projects is a legitimate and proper oversight exercise by USACE; indeed, USACE has historically reviewed levee alterations and modifications at the District level under Section 208.10. But this legitimate oversight must be balanced against a review process which often operates on a case-by-case basis, which adds significant cost and delay to projects, and which rarely results in any substantive change to the project. Each procedure for implementing Section 408, and each additional level of review, must consider this delicate balancing act and the risk that unnecessarily intensive review may actually delay flood damage reduction projects or discourage non-Federal partners from pursuing such projects.

#### **1. Decisions regarding whether a Minor or Major 408 is required should be made by the District in the earliest reasonable stages of project.**

Current guidance states that a Major 408 review requires HQ involvement while a Minor 408 can be approved in the District. The Draft Guidance indicates that a Minor 408 review would typically be expected to take about 30 days, whereas a Major 408 review would typically take 12 to 18 months. Therefore, the label of Minor 408 or Major 408 is very important. The effort by a non-Federal partner to prepare the submittal package for a Major 408 review is also significantly

more lengthy and costly than a Minor 408 package, and USACE practice has required more costly and extended review of Major 408s under the National Environmental Policy Act (NEPA). Because USACE's technical expertise resides in the District, the Draft Guidance appropriately delegates to the District Engineer the initial decision as to whether a project requires Minor or Major 408 review. However, some Districts have indicated that review of whether a project is a Minor or Major 408 will only occur upon completion of 100% project design. This requirement subjects the proposed project to a potentially extensive and expensive review process where non-Federal partners have significant uncertainty until late in the process and minor design changes will delay the start of USACE review.

The District Engineer should make the determination as to whether a Minor or Major 408 review will be required at the earliest reasonable phases of the project. If the project's original scope changes, the District Engineer can revisit the previous determination. As a guiding principal, USACE HQ and Division should be involved in Section 408 review and approval only where necessary to assure consistency in application across Districts and where policy decisions need to be made. The case-by-case basis decision-making currently and proposed to be employed at HQ and Division has caused unnecessary expense and delay and created confusion as to the process required to obtain the proper level of approval.

**2. Requests for crediting should be delinked from "Major" 408 review.**

The 2008 Clarification and the Draft Guidance both provide that only work approved as a Major 408 is creditable toward a future Federal project. Both sets of guidance inappropriately link all construction activities approved under a Minor 408 and Section 208.10 to operations and maintenance ("O&M"). In certain cases, this linkage is appropriate as credit should not be provided for O&M. But, for example, construction of seepage berms might be done to address defects in the original design and construction of a levee so as to restore "the authorized level of protection or [improve] the structural integrity of the protection system" and not as O&M. Such work may be creditable absent the Corp's guidance indicating otherwise. As a result, the current guidance is forcing non-Federal partners to go through the Major 408 approval process for work that would otherwise be approvable as a Minor 408 just to preserve the potential for work-in-kind credit. This perverse rule is an inefficient allocation of both local and Federal resources by requiring Division and HQ review. More importantly, it significantly delays flood damage reduction projects that would otherwise improve public safety and contribute to the economy.

**3. USACE should adopt clearer guidance on what is a Major v. Minor 408 review.**

The current guidance has created significant doubt at the District level as to what is a "Major" versus "Minor" 408 project. The 2008 Clarification provides the following guidance:

- Minor 408s are (i) O&M activities that were previously approved in accordance with Section 208.10 or (ii) restoring the authorized level of protection or improving the structural integrity of the protection system that do not change the authorized structural geometry or hydraulic capacity that were previously approved in accordance with Section 208.10.

- Major 408s are degradations, raisings, and realignments and other alteration/modifications not approvable as a Minor 408.
- If it is unclear if a proposed change is within the authority of the District Engineer under Section 208.10, there must be an “engineering analysis” conducted with consideration of the full range of loading conditions to determine the impact of the proposed change on the systems performance. If the engineering analysis indicates system performance is adversely impacted then Major 408 review applies.

The confusion at the District level in applying these standards to specific projects has unnecessarily delayed project approvals. The Draft Guidance attempts to simplify the distinction between a Major and Minor 408 as follows:

A request for alteration to a public works project that consists of a significant change to the authorized project scope, project purpose, or functionality is defined as Major 408 and shall require approval by the USAC Director of Civil Works. . . .

But this does not adequately indicate what specific modifications would be considered a “significant change to the authorized project scope, project purpose, or functionality” and District Engineers must continue to rely on the inadequate 2008 Clarification to determine the scope of Section 408 review. In the absence of clearer guidance, many unnecessary reviews will be provided to Division and HQ, further delaying projects. Instead, USACE should clearly state that only levee raisings, extensions, realignments, and permanent degradations to the levee system should be subject to the Major 408 review process and that all other non-Federal partners’ projects (including proposed projects which restore the authorized level of protection without undertaking a raising, extension, realignment, or permanent degradation) should be reviewed at the District level, regardless of cost or credit requests. This is consistent with the USACE policy of requiring a higher level of review for projects that change the hydraulic performance of the flood protection system, as such projects may involve risk transfer.

In a related issue, the St. Louis District has taken the approach that despite significant project reaches being reviewable as a Minor 408, a Major 408 would be required for the entire levee system in the event any project reach met the criteria for such review. If the District requires consolidation of multiple projects under a single review, critical improvements that would otherwise be more quickly processed will be unnecessarily delayed. Well-crafted guidance would reduce uncertainty and only trigger a Major 408 where there is a compelling public interest for such scrutiny and additional levels of review and allow more easily approvable portions of the project to move forward quickly.

**4. USACE must ensure that proposed projects meet all necessary USACE design standards, but must limit that requirement to the limited area affected by the project.**

The Draft Guidance would require that USACE standards be met for any non-Federal partner’s project. While this may be a reasonable requirement for the geotechnical and structural evaluations of the proposed work, USACE may use this requirement to compel non-Federal partners to do additional work to meet USACE standards that are outside the scope and purpose

of the proposed work. For example, the communities protected by the Southwestern Illinois Flood Protection District intend to improve their levee systems so that they are not below the 100-year insurance standard set by the Federal Emergency Management Agency. However, USACE has been reviewing the design and plans in accordance with its ultimate goal of rehabilitating the levee system to a 500-year level of protection. This review is unnecessarily delaying the levee improvements and might eventually be used to compel non-Federal partners to comply with USACE plans, procedures, and policies that are unrelated to the priority work being submitted for approval and which would make the non-Federal partner's work significantly more expensive.

**5. USACE must adopt a fair “risk transfer” standard for 408 review which allows public safety projects to go forward.**

USACE has stated that projects that transfer significant risk (i.e., hydraulic impacts) to others, typically downstream flood protection systems, will not be approved under Section 408. This is a reasonable requirement. However, in order for this requirement to be applied fairly, the risk transfer standard applicable to a non-Federal partner's proposed work must be the same as that which USACE imposes on itself in its planning process. The standard that USACE applies to its own projects has historically considered impacts to property values and uses. Unfortunately, in implementing Section 408, USACE appears poised to hold non-Federal partners to a more rigorous standard than it applies to itself.

**6. USACE policy should allow the use of NEPA Categorical Exclusions; programmatic documents should not be required except where proposed by applicants or required by law.**

Non-Federal partners recognize that any proposed modifications to a Federal flood control work must be accomplished in compliance with NEPA and other applicable Federal and state environmental laws. The Draft Guidance recognizes this and provides that “[c]ompliance with NEPA and other applicable environmental laws and conducting of associated public/agency review is required for all Major Section 408 decisions.” USACE policy regarding NEPA compliance, however, should also include allowing the use of Categorical Exclusions for actions which do not individually or cumulatively have a significant impact on the human environment and which have been found to have no such effect. The Draft Guidance does not call for the District to evaluate particular projects with respect to applicable Categorical Exclusions which would save the non-Federal partner a significant amount of time and cost in going through the NEPA process. In particular, USACE should consider the application of the Categorical Exclusion it previously adopted in 33 C.F.R. § 230.9(b).

USACE has recently taken the position in California's Central Valley as well as in the Dallas-Forth Worth area that programmatic analysis are likely required prior to approving projects under Section 408, regardless of whether the projects can be approved as a Minor 408. Neither the law, existing guidance, nor the Draft Guidance requires a programmatic NEPA review. Importantly, USACE does not perform such a review for its own projects. While it is important to evaluate the environmental impacts of proposed modifications to Federal flood damage reduction projects, such an evaluation should be based on the needs of the individual project.

**7. USACE has the authority under Section 408 to approve levee raisings and extensions.**

USACE staff has stated it is considering whether proposed projects that would go beyond the currently authorized Federal project, such as levee raises and levee extensions, should be approved under Section 408, or should be deferred to Congress after further USACE study. This requirement of further study and deferring the decision to Congress would devastate local communities that otherwise have the funds and wherewithal to improve their levees. Such a limitation would also be inconsistent with USACE's past practice. This is especially troubling because several communities have been notified that river flow frequencies have changed and that flood protection systems will require significant modifications, such as raising and extensions, in order to be certified as meeting FEMA's 100-year flood insurance standard. The Draft Guidance should clarify that projects that are not injurious to the public interest and will not impair the usefulness of the Federal facilities are approvable under Section 408, including projects that exceed the scope of the authorized Federal project.

**D. Requested Actions**

Section 408 is a legitimate exercise of USACE's duty to ensure that modifications to its civil works projects are not injurious to the public interest and will not impair the usefulness of the Federal facilities. Given the current budgetary environment, it is unlikely that USACE will be able to undertake all necessary critical improvements to systems around the country in the near future. Therefore, non-Federal partners must take it upon themselves to fund reconstruction and improvements to reduce the current risk to public safety. Section 408 must not frustrate these efforts through layers of dilatory and inefficient review and rather must be a process used to ensure that the Federal flood damage reduction works will not be adversely impacted and the project will not injure the public.

Non-Federal partners seek to work with USACE to develop a sensible national policy on Section 408 approvals. USACE should engage these partners in an open and public discussion on the Draft Guidance and craft a principled approach which maximizes the number of projects classified as Minor 408, which allows projects which meet the criteria for a Minor 408 to receive speedy approval by the District Engineer, and which streamlines the review process for Major 408 projects to avoid delay to critical improvements necessary to reduce risk to flood-prone communities.

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