



SUBJECT Evaluating Compensatory Mitigation Site Locations And Site Restoration To Minimize Conflicts With Highway Operations And Maintenance	FINAL NUMBER GE11-01(B)	EFFECTIVE DATE 07/18/2011	VALIDATION DATE 05/12/2012	SUPERSEDES or RESCINDS
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PURPOSE

To provide guidelines for evaluating compensatory mitigation site locations and developing site restoration designs which minimize interference with highway operations, routine maintenance, and anticipated future highway improvement projects. This document describes roadside locations which, in relation to highway maintenance, functions, and long-term plans, have been determined to be:

- areas typically unsuitable for compensatory mitigation siting,
- areas that may provide opportunities for successful compensatory mitigation, and,
- areas where planting plans for both compensatory mitigation and site restoration warrant evaluation and coordination between maintenance and environmental services.

GUIDANCE

Due to conflicts with highway maintenance, operations, management of certain highway safety features, and conflicts with future infrastructure expansion of the roadway, utilizing highway operating ROW is typically not suitable as the location for compensatory mitigation sites. The primary consideration for ODOT highway maintenance is the ongoing safety of users and effectiveness of the highway. A primary consideration for compensatory mitigation sites (as required by state and federal wetland regulatory programs) is the construction of low-maintenance sites that are reasonably sustainable in the long-term. If compensatory mitigation sites are situated within the area deemed critical for highway safety, routine maintenance activities can undermine the success of the site.

When presented with the need to provide compensatory mitigation, ODOT Region technical staff and project development teams should work with stakeholders to find an appropriate compensatory mitigation site that is free of such conflict. Typically, this results in locating sites outside of operating ROW. ODOT technical staff should educate regulatory agencies on the purpose of maintaining the operating ROW and the constraints associated with these areas.

DEFINITIONS

Clear Zone: A roadside area, cleared of obstruction, designed to allow for vehicular recovery. Width varies with highway designation, speed limit, average daily traffic, topography, line of sight and adjacent land use.

Compensatory Mitigation: The restoration (re-establishment or rehabilitation), establishment (creation), enhancement, and/or in certain circumstances preservation of aquatic resources for the purposes of offsetting unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved.

Non-operating Property: Property that was purchased for the purpose of supporting ODOT operations and functions but is no longer needed.

Non-operating Right of Way: Property that was purchased as highway right of way that is now either “excess” to the needs of the Department or has been declared “surplus” to current and anticipated needs.

Operating ODOT Property: Property that was purchased for and is actively used for the support of ODOT operations and its functions. (e.g., stockpile or quarry sites).

Operating Right of Way: This designation generally includes all properties located within the bounds of the highway right of way (property lines) that is actively being used and maintained to support transportation uses.

Operational Roadway: The area that maintenance has identified as critical for maintaining the integrity of the highway and the safety of the public.

Site Restoration: Post construction planting plans designed to restore/replace vegetation and other pre-construction site attributes impacted by construction project.

BACKGROUND/REFERENCE

ODOT is required under the state Removal Fill Law and federal Clean Water Act to replace wetlands and other natural resources that are impacted as a result of highway development and maintenance projects. The intent of compensatory mitigation is to replace impacted resources in a location and manner that is sustainable through time. In some instances physical protection (e.g., fencing), legal protection (e.g., deed restriction or conservation easement), and/or administrative protection (e.g. adopted management plan, maintenance operations plan) may be either required by permit condition, or requested if warranted.

Wetlands are defined by the presence of three parameters: hydrology, soils, and vegetation. It is generally the hydrology and vegetation components that can be in conflict with highway maintenance operations. Wetland vegetation can consist of trees

(forested), shrubs, or herbaceous species or a mixture of these. The successful replacement of wetland functions is often measured in terms of vegetative success. If impacted at the project site, shrubs and trees are typically required to be a component of the compensatory mitigation site. If in conflict with routine roadside maintenance, sites are not likely to meet vegetation success criteria, leading to a failed compensatory mitigation site.

Locating compensatory mitigation sites within ODOT operating or other right of way may provide the benefit of expedient project delivery by eliminating the need to purchase additional right of way. While facilitating project development, this practice may in fact be in conflict with long term operations and development of the infrastructure, and therefore detrimental to the success of the compensatory mitigation site. Additionally, recent regulatory changes discourage small, on-site developments, now encouraging larger, off-site “banked” compensatory mitigation efforts.

ODOT invests significant time and money in designing, constructing, maintaining, monitoring, and correcting compensatory mitigation sites. Therefore, project technical staff should ensure that these sites are compatible with highway maintenance, management, operation, and future Agency actions. It is critical that adequate and effective communication between appropriate departments occur when determining site location and design of compensatory mitigation sites. It is also critical that highway operations and maintenance interests are adequately represented to regulatory agencies in providing rationale for compensatory mitigation site selection.

EXPLANATION

1. Proposing Compensatory Mitigation

The identification of jurisdictional wetlands and waterways under Section 404 of the Clean Water Act and the state Removal-Fill Law occurs early in project development during project scoping. When a project may require compensatory mitigation, the technical scoping report, kickoff meeting notes, or baseline report, whichever identifies the need for compensatory mitigation, should be sent to the District Maintenance Manager with those sections that pertain to compensatory mitigation highlighted.

2. Evaluating Alternatives

Federal and state law requires that compensatory mitigation be the final consideration after resource avoidance and minimization efforts have been applied to projects. When unavoidable impacts to regulated resources do occur, ODOT must comply with regulations that address replacement (compensatory mitigation) of such resources, preferably in a manner that is feasible and practicable to ODOT. ODOT-responsible compensatory mitigation plans require intensive short-term commitments and long-term site management.

The ODOT-preferred compensatory mitigation alternative hierarchy is:

1. Utilize a compensatory mitigation bank
2. Corps approved In Lieu fee site.
3. Permittee (i.e., ODOT) - responsible compensatory mitigation outside ODOT operating right of way.

4. Permittee-responsible compensatory mitigation outside operational roadway.

General considerations for ODOT-responsible compensatory mitigation:

- Take into account the likelihood of long term success
- Reduce long term maintenance or management needs.

More specific location and design considerations are described below.

Site Location Considerations

- A) Locations that are to be avoided for compensatory mitigation are:
 1. Operational roadway
 2. Areas less than 20 feet from highway features such as culverts, bridges, signs, delineators, and guard rail, and without allowance for adequate maintenance access to and from these features.
- B) Locations that should be **avoided**, but **could be acceptable** depending on design features, other circumstances, and pending discussion and agreement with the District Manager, include:
 1. Operating ODOT Property
 2. Operating ODOT right of way
 3. Protected resource areas
 4. Areas that will attract, and / or will be considered a public nuisance due to, transient populations
 5. Steep slopes, toes of slopes and other areas with a history of slope failure and hazard tree removal.
- C) ODOT owned locations that may be more appropriate, depending on discussion with the District Manager include:
 1. Non-operating ODOT property or right of way
 2. Landscaped areas
 3. Rest Areas
- D) When evaluating compensatory mitigation location suitability against routine roadside maintenance requirements, consider the short and long-term issues or potential conflicts such as (but not limited to):
 1. Will the compensatory mitigation sites interfere with typical highway maintenance requirements?
 2. To what extent can we be sure the compensatory mitigation site won't conflict with anticipated highway expansions, management or operations?
 3. If regulatory agencies require physical protection (e.g. fencing), will fencing prevent necessary access or otherwise inhibit maintenance/management, or present a safety risk?
 4. If fencing is necessary to protect the site from routine maintenance, would fencing decrease the intended compensatory mitigation site functions or values?
 5. Will the compensatory mitigation site conflict with public safety and other laws such as local burn requirements, ODA Noxious Weed Policy?
 6. Is there adequate access to the compensatory mitigation site to allow it to be maintained as necessary?

7. Will stormwater management needs continue to operate effectively, and will runoff be fully treated prior to entering the compensatory mitigation site?

3. Conceptual Planting Plan Design Plan Development

When evaluating planting plans for site restoration and compensatory mitigation the following guidelines should be considered:

Plantings in General

- A) No woody vegetation should be planted within four feet of edge of pavement (EOP) or guard rails.
- B) Herbaceous vegetation or shrubs that can be mowed or treated with herbicides as part of regular highway maintenance may be planted within the clear zone, in roadside ditches, under a bridge, behind guard rail, under utility lines.
- C) No trees should be planted within the clear zone, roadside ditches, or within 20 feet on either side of or under a bridge.

Species of Maintenance Concern for Operating ROW

The following species are *either* brittle (resulting in fallen limbs, branches, and trees on highways), clog cross drains (due to heavy leaf litter), or have shallow root systems (leaving them vulnerable to windthrow). The following should not be planted within the Operating ROW:

- Red alder (*Alnus rubra*),
- Black cottonwood (*Populus balsamifera ssp. trichocarpa*),
- Bigleaf maple (*Acer macrophyllum*),
- Western Hemlock (*Tsuga herophylla*)

4. Long-term Maintenance of Compensatory Mitigation Sites

Upon project completion and release to Maintenance, compensatory mitigation sites will be maintained in accordance with the ODOT Routine Road Maintenance (blue book) practices or as outlined in the district IVM plan (mowing, brushing, or herbicide applications). Compensatory mitigation sites that require different practices should have an associated Maintenance and Operations Plan (or equivalent). If the site is located within operational right of way it should be marked with an appropriately labeled sign, upon approval by the District Manager that indicates the alternative management methods. All ODOT compensatory mitigation sites are mapped and stored in a GIS corporate database and tracked under the asset management program.

RESPONSIBILITIES

Region Technical Center Staff, Consultant Project Managers and Local Agency Liaisons

- Coordinate with Maintenance directly and purposefully during project development when projects require compensatory mitigation on ODOT operating property or ROW.

- Evaluate compensatory mitigation site location and design considerations based on this document.
- Obtain written agreement from DM regarding permittee-responsible compensatory mitigation site location and planting plans.
- Obtain written agreement from Region Wetlands Specialists regarding permittee responsible compensatory mitigation plans.

The District Manager

Review and comment to Region Technical Staff on compensatory mitigation site location(s) to determine whether the location would conflict with highway safety or routine maintenance actions.

Geo-Environmental, Natural Resource Unit Manager will maintain database of compensatory mitigation site information.

SPECIAL INSTRUCTIONS

This guidance references and supports GE08-01(A), Deed Restrictions and Compensatory Mitigation within ODOT Operating Right of Way

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