SCOPE:

To establish the policy and procedure for maintaining the SiteManager material detail information.

GENERAL:

The Material Detail window is used to add, modify and view materials used in SiteManager. This material information is used for material validations throughout other portions of SiteManager including; approved lists, mix designs, and sampling and testing. There are three folder tabs in Material Detail; Description, Tests, and Gradations.

When a new material needs to be added into SiteManager, or if changes are required to existing material details, users should fill out an electronic SiteManager Support Request Form requesting such information be added or changed. Additions and modifications of materials shall be approved by the Materials Engineer.
### Description Folder Tab

The Description folder tab of the Material Detail window is used to define the basic material information. It contains the following fields:

**Material Code** - This is the material’s unique identifier. In OkDOT, this is a four lower case letter abbreviation for the material type followed by a three-digit sequence number. Example: aggr057.

**Short Name** - This is an abbreviated description of a material. In OkDOT, this is an upper mixed case abbreviation of the material full name. Example: AGGR-HC CONC-57-C. If this is a material to be typically monitored by IA, include (IA) after the Short Name so that is is picked up by the IA Sampling Checklist. Example: AGGR-HC CONC-57-C(IA).

**Full Name** - This is the full description of the material. In OkDOT, if the material is usually a composite part of another material, it will likely begin with the name of that material. This will be followed by the material name, a further description (if necessary) and the size in mixed case format. Example: HC Conc Aggregate No 57, Coarse
**Category** - This is a classification for the material. In OkDOT, there are two primary types of categories that will be used.

Many materials will be assigned a category corresponding with the number and title of the specification section in which the pay item appears, unless the material is a versatile one that appears in more than one pay item category then it will be the 700 (material) section number and title. The format will begin with the three-digit specification section number followed by the abbreviated description of the section title. Examples: 303 Agg Base or 701 PC Concrete

Materials that are required to be sampled and tested by a Board Certified Material Technician, will have a material category with a material name followed by "(Controlled)". Examples: Asphalt (Controlled) or Concrete (Controlled)

**Recycled** - This check box will be used to indicate if the material is recycled.

**English Unit** - This is the usual English unit of measure for sampling and testing the material. This is also referred to as the English testing unit. The unit chosen in this field is automatically populated in three different windows of SiteManager:

- In the Material Unit field on the Material Tab of the Contract Sampling and Testing Requirements, when materials are generated.
- In the unlabeled Material Unit field adjacent to the Represented Quantity field on the Basic Sample Data Tab of a sample record. (For New Samples only)
- In the Matl Unit field on the built in Sampling Checklist Report.

Changes made to the English Unit does not affect the existing Material Unit values previously written to Contract S&T Requirements Windows. Changes made to the English Unit does not affect the unit shown in the unlabeled Material unit field in the Basic Sample Data Tab of existing sample records (authorized or un-authorized).

For documents and materials that have no real field test frequency, an * (asterisk) symbol may be used. For materials where there is no way to define a conversion factor relating material quantity to pay item quantity in the sampling and testing window, "Item Units Covered" will be used.

**Metric Unit** - This is the usual Metric unit of measure for sampling and testing the material. This is also referred to as the Metric testing unit. In OkDOT, since this is a required field, for documents and materials that have no real field test frequency, an * (asterisk) symbol may be used in those cases. For materials where there is no way to define a conversion factor relating material quantity to pay item quantity in the sampling and testing window, "Item Units Covered" will be used. The Metric unit is available in a drop down list as an option to choose in the unlabeled Material Unit field adjacent to the Represented Quantity field on the Basic Sample Data Tab of a sample record.

**Type Code** - This is an optional field for further describing the material. In OkDOT, this will be an additional way to classify the type of material. The format will be a mixed case description with the four lower case letter prefix of the material code included in parenthesis after the description. Example: Aggregates (aggr)

**Size Code** - This is an optional field for further describing the size of material. In OkDOT, this field will not be used at this time.
Brand Name Required - This optional check box is for indicating that a Product name must be supplied when sampling the material. If this box is checked, the Product Name field becomes a required field when documenting a sample of this material in the Basic Sample Data tab of the sample information window. In OkDOT, this indicator will be checked whenever that material is listed in the Approved Materials with any Product Names listed underneath it.

If a sample record is created with a material code that has the Brand Name Required checked, a Product name must be chosen or the sample cannot be saved at all. If no approved product name is available to be chosen, there is no way to save the sample record.

Control Number Required - This optional check box is for indicating that a control number must be supplied when sampling the material. In OkDOT, this indicator will not be used at this time.

Specification Reference - This is the material's OkDOT Standard Specification or Special Provision reference number. Due to the length of the field being limited to 10 characters, this will be as informative as possible.

Status Ind - This indicates if the material is active or inactive. Inactive indicates that the material is no longer in use. Selecting Inactive has certain functionality in that once inactivated, the material is no longer available on the pick list when making a new sample information record defined in 1109.1 Sample Information.

Status Date - This is the system captured date when the status was last changed.

Test Folder Tab

The Tests folder tab of the Material Detail window is used to associate SiteManager tests that can be performed on a material. SiteManager tests are referred to as Material Test Templates. To add a test method (Material Test Template) to a material, click the new icon and a list of standard and custom Material Test Templates will display on a pick list. New custom material test templates must be created (in the Material test template area of System Administration) before they will show up in the pick list as available templates. Tests listed in this window become available in the Sampling and Testing Requirements window, the Contract Sampling and Testing window, and the Test folder tab of the Sample Information window for the selected material. The Tests folder tab contains the following fields:

Material Code - This field displays the material’s unique identifier.

Test Method - This field displays the unique code identifier of a Material Test Template.

Test Number - This field displays a system number used internally by SiteManager.

Test Description - This field displays the description of the test.

Material Test Specifications Services Function

The Material Test Specification window is accessed by selecting a test method (z-template) on the Tests folder tab of Material Information, then selecting the Material Specifications option from the Services menu. A special type of Material Test Template, called a z-template, is the only type of template, material specifications will be defined for using this function. See 205.1 System Administration, Material Test Templates, for further explanation of z-templates. The specifications may be either numeric or alphanumeric. Material test specifications in this window may be used to compare with test data entered in a Material Test Template. A material may have one set of test specifications per effective date. A Material
Test Template can access multiple z-templates for the purpose of bringing in several specification values. Not all z-templates associated with a Material Test Template have to be associated to a Material Code. Each of the z-templates associated to a Material Test template must share the same effective date. If one of the specification values used in a z-template change, a new specification value with a new effective date is created. All of the other z-templates associated with that Material Test template must also have a new specification value created using that same new effective date. Certain built-in test methods have unique test specification windows for additional data. The Material Test Specifications window minimally contains the following fields:

**Material Code** - This field displays the material’s unique identifier.

**Test Method** - This field displays the unique code identifier of a specification test template (z-template).

**Test Description** - This field displays the description of the specification/test template.

**Effective Date** - This is used to indicate the date the test specification became effective. A drop-down list of effective dates will appear on test templates for users to select the desired test specification. Population of this field will be as follows:

- 1999 Standard Specification test specifications (1 option only): 01/01/99
- 1999 Standard Specification test specifications (more than 1 option): 01/01/99, 01/02/99, 01/03/99 etc.
- Special Provision test specifications: Date on the Special Provision

**Status** - This indicates if the test specification is active or inactive.

**Minimum** - This is the minimum value for the test specification limit.

**Maximum** - This is the maximum value for the test specification limit.

**Gradations folder tab**

The Gradations folder tab of the Material Detail window is used to identify the gradation limits of passing percentages for a material through a sieve. The gradation data will be displayed on test templates for the T27 Sieve Analysis test. A material may have more than one set of active gradation specifications. The status of a gradation may be changed to inactive to indicate that the gradation is not being used. The Gradation folder tab contains the following fields:

**Material Code** - This field displays the material’s unique identifier.

**Effective Date** - This is used to indicate the date the gradation became effective. A drop-down list of effective dates will appear on test templates for users to select the desired gradation. Population of this field will be as follows:

- 1999 Standard Specification gradations (1 option only): 01/01/99
- 1999 Standard Specification gradations (more than 1 option): 01/01/99, 01/02/99, 01/03/99 etc.
- Special Provision gradations: Date on the Special Provision

**Status** - This field indicates if the gradation is active or inactive.
**Sieve Size** - This field indicates the sieve size to which the gradation limits are applied. In OkDOT, sieve sizes will be the English or Standard size followed by the Metric equivalent. Examples: 3/4 in (19mm) and #100 (.150 mm)

**Minimum Range** - This is the minimum value for the gradation limit.

**Maximum Range** - This is the maximum value for the gradation limit.

### Generic Fields -

**Summary of Revisions:**

7/10/2006: Substantial revisions made to incorporate the changes made in SiteManager from ver3.4 to 3.7b: Generic fields, brand name required.

5/17/2007: Added clarification to the English and Metric Unit fields and how they work in conjunction with other windows.

3/18/2010: Revised information in Short Name to include a preceding (IA) for materials that are to be monitored by IA.