

TIN Inspection

New Input forms for TIN Inspections.

General / Comments

The screenshot shows the 'DAMAGE TUNNEL INSPECTION' form. At the top, there are tabs for 'Inspection', 'Postings', 'NTE', 'Images', and 'Review Comments'. The 'Inspection' tab is active. The form includes fields for '(L1) Tunnel Number' (B16-T13-TON-DOT-NB2) and '(L2) Tunnel Name' (THOMAS P. TIP ONEILL JR TUNNEL - 97). Below these are dropdown menus for 'District Tunnel Insp. Eng'r' (D-6 David Kent), 'District Inspection Eng'r' (D-6 Mark Griffin), 'Inspecting Agency' (Mass. Highway Dept.), 'Team Leader' (Thomas S. Prendergast), and 'Project Manager' (No Proj. Mgrs. on file.). To the right, there are buttons for 'Print', 'Preview', 'Delete', 'Cancel', 'Save', and 'Save + Exit'. Below the dropdowns, there are fields for 'Weather' (FAIR), 'Temp.' (-8 F), 'INSPECTION DATE' (02/14/2018), and 'INSPECTION COMPLETE DATE' (02/14/2018). There is also a 'Team Members' section with an 'Edit Team' button. Below these, there are fields for 'DATE OF DAMAGE' (08/09/2014) and 'DAMAGE BY'. A 'SELECT REMARKS SECTION' dropdown is set to 'GENERAL REMARKS'. At the bottom, there is a 'Spell Check' button and a large text area for 'general remarks remarks'. Numbered callouts 1 through 6 point to specific features: 1 points to the 'INSPECTION COMPLETE DATE' field, 2 points to the 'Weather' and 'Temp.' fields, 3 points to the 'DATE OF DAMAGE' and 'DAMAGE BY' fields, 4 points to the 'SELECT REMARKS SECTION' dropdown, 5 points to the 'Inspection' tab, and 6 points to the 'Print' button.

1. New entry to indicate the last day of field visit for this inspection.
2. Entries for the Weather and Temperature.
3. Date of Damage and Damage by are only available for Damage inspections.
4. Drop down to allow entry for various sections of Remarks. See next page for options.
5. Inspection tools. Clicking on the button will bring up an option to verify the completeness of the Inspection report.
6. Brings up this pdf

Available Remarks Sections.

SELECT REMARKS SECTION :

GENERAL REMARKS

TUNNEL ORIENTATION

GENERAL REMARKS

VERTICAL CLEARANCE

TUNNEL RATING

ACCESS NOTES

CAUSE OF DAMAGE

CAUSE OF DAMAGE section is only available for Damage Inspections.

Postings

DAMAGE TUNNEL INSPECTION

Print Preview Delete Cancel Save Save + Exit

(I.1) Tunnel Number : B16-T13-TON-DOT-NB2 (I.2) Tunnel Name : THOMAS P. TIP ONEILL JR TUNNEL - 93NB

Comments Postings NTE Images Review Comments

Clearance Posting

Actual Field Measurement :

Feet : 0 Inches : 0

Posted Clearance :

Feet : 0 Inches : 0

Sign in Tunnel :

At Tunnel : NR Advance : NR

Y
N
NR

Weight Posting

☐ Not Applicable

	H	3	3S2	Single
Actual Posting :	.0	.0	.0	.0
Recommended :	.0	.0	.0	.0

Sign in Place :

At Tunnel	Advance
<input type="checkbox"/>	<input type="checkbox"/>

Y=Yes, N=No, NR=Not Required :

Rating

☐ Rating Report

1. Enter Clearance Posting information. Signs in Tunnel entries can be only Y, N, NR. Clicking or tabbing into one of these two fields will bring up a menu with the appropriate choices.
2. Weight Posting information. The "Signs in Place" fields behave the same as the "Sign in

Tunnel" fields in Clearance Posting. Clicking the "Not Applicable" check box, will clear any data entered and hide all entries.

3. Rating Information. To enter information, click the "Rating Report" checkbox. See next screen shot.

Postings - 2

DAMAGE TUNNEL INSPECTION

Print Preview Delete Cancel Save Save + Exit

(I.1) Tunnel Number : B16-T13-TON-DOT-NB2 (I.2) Tunnel Name : THOMAS P. TIP ONEILL JR TUNNEL - 93NB

Comments Postings NTE Images Review Comments

Clearance Posting

Actual Field Measurement :

Feet : 0 Inches : 0

Posted Clearance :

Feet : 0 Inches : 0

Sign in Tunnel :

At Tunnel : NR Advance : NR

Weight Posting

☒ Not Applicable

Rating

☒ Rating Report

Date of Rating : 00/00/0000

Inspection data for Rating :

Date of Inspection : 00/00/0000

Roof Girder :

Invert Slab :

Invert Girder :

Postings page with Weight Posting Not Applicable checked, and Rating Report checked. For Roof Girder, Invert Slab, Invert Girder , the ratings are from 0-9.

NTE tab

DAMAGE TUNNEL INSPECTION

(L1) Tunnel Number : B16-T13-TON-DOT-NB2 (L2) Tunnel Name : THOMAS P. TIP ONEILL JR TUNNEL - 93NB

Comments | Postings | **NTE** | Images | Review Comments

1

Add Defect Add Prot. Sys. Add Element

El. No.	Description	Units	Tot Q	Q%	State 1	State 2	State 3	State 4	Cond. Rtg
10000	Steel Tunnel Liner	sq feet	8,500.0	Q	7,150.0	500.0		850.0	8
> 1002	Cracking (Steel)	sq feet	500.0	Q		500.0			
> 1004	Distortion (Liners)	sq feet	850.0	Q				850.0	
> 10950	Steel Corrosion Protective...	sq feet	98,000.0	Q	79,700.0	15,100.0		3,200.0	8
> > 1042	Peeling/Bubbling/ Cracking	sq feet	9,200.0	Q		8,500.0		700.0	
> > 1043	Oxide Film Degradation C...	sq feet	9,100.0	Q		6,600.0		2,500.0	
20001	Roof Slab and Wall Concr...	sq feet	85,000.0	Q	85,000.0				9
30001	Air Supply Concrete Liner	sq feet	90,000.0	Q	66,900.0	9,100.0	14,000.0		8
> 1006	Delamination/ Spall/Patch...	sq feet	600.0	Q		600.0			
> 1007	Exposed Rebar	sq feet	8,000.0	Q			8,000.0		
> 1008	Efflorescence/ Rust Staini...	sq feet	14,500.0	Q		8,500.0	6,000.0		
> 10950	Steel Corrosion Protective...	sq feet	80,550.0	Q	43,550.0	14,500.0	14,500.0	8,000.0	7
> > 1041	Chalking	sq feet	6,500.0	Q		6,500.0			
> > 1042	Peeling/Bubbling/ Cracking	sq feet	8,500.0	Q			8,500.0		
> > 1044	Effectiveness (Coating)	sq feet	29,000.0	Q	7,000.0	8,000.0	6,000.0	8,000.0	
> 10951	Concrete Corrosion Prote...	sq feet	5,800.0	Q	5,750.0	50.0			8
> > 1044	Effectiveness (Coating)	sq feet	958.0	Q	958.0				
> > 1045	Wear	sq feet	50.0	Q		50.0			

2

Verify Quantities

The NTE tab is similar to the NBE tab in Bridge Inspections. Yellow lines indicate main Elements, Blue lines are Protective systems, White lines are Defects.

1. The "Add Defect" and "Add Prot, Sys." buttons are enabled depending on the selected element in the list. If a main NTE Element is selected, both Defect and Protective Systems buttons are enabled. If a Protective System is selected, only the "Add Defect" button will be enabled.
2. The "Verify Quantities" tool will check the quantities for the Elements , Protective Systems, and Defects.

Entry form for a main NTE element

ELEMENT No : 30001 ELEMENT 3.2 : STRUCTURAL - LINER - 30001 : Air Supply Concrete Liner

SCALE FACTOR : 1

Condition Rating (0-9) TOTAL QUANTITY sq feet Quantity Percentage

STATE 1 STATE 2 STATE 3 STATE 4

66,900.00 9,100.00 14,000.00 .00

DEFECTS

No	Desc	Units	Total Q	Q/%	State 1	State 2	State 3	State 4
1006	Delamination.../Patched area	sq feet	600.0	Q	0.0	600.0	0.0	0.0
1007	Exposed Rebar	sq feet	8,000.0	Q	0.0	0.0	8,000.0	0.0
1008	Efflorescence/ Rust Staining	sq feet	14,500.0	Q	0.0	8,500.0	6,000.0	0.0

PROTECTIVE SYSTEMS

No	Desc	Units	Total Q	Q/%	State 1	State 2	State 3	State 4
10950	Steel Corrosio...ctive Coating	sq feet	80,550.0	Q	43,550.0	14,500.0	14,500.0	8,000.0
10951	Concrete Corr...ctive Coating	sq feet	5,800.0	Q	5,750.0	50.0	0.0	0.0
10952	Fire Protection Coating	sq feet	8,000.0	Q	8,000.0	0.0	0.0	0.0

Spell Check

The element input forms now contain lists for defects and protective systems. Click the appropriate button to add defects or Protective systems.

Entry form for Defect

The screenshot shows the NTI_TunnelInfo application window. The title bar indicates it is displaying 39 out of 39 records. The interface includes navigation buttons (First, Previous, Next, Last), action buttons (Delete, Cancel, Save & Exit), and a Help button. The main form area displays the following information:

- ELEMENT No : 1003
- SCALE FACTOR : 1
- PARENT ELEMENT No : 10000
- Steel Tunnel Liner
- Tot Q = 8,500
- Q Avail = 7,650

Below this information is a section for entering quantities. It includes a radio button for "Quantity" (selected) and a radio button for "Percentage". The "TOTAL QUANTITY" field is set to 500.00 sq feet. The "STATE 1" field is .00, "STATE 2" is 500.00, "STATE 3" is 0, and "STATE 4" is .00. A "Spell Check" button is located at the bottom right of the form area.

TOTAL QUANTITY	STATE 1	STATE 2	STATE 3	STATE 4
500.00	.00	500.00	0	.00

1. Note that the information for the parent element of the defect has the Total Quantity of the element, and the Quantity available for the current defect which is the Total Quantity of the parent , minus the quantities of any other defects already defined.
2. For defects you enter quantities in the states available for the defect and the system will place the total in the "TOTAL QUANTITY" field.