Inspection Form for

Final Inspection of Bridge Construction Works
Of
Long Span Trail Bridge (LSTB)

# Inspection Form Final Inspection of Bridge Construction Works SUMMARY

TYPE OF WORK		CONSTRUCTION PERIO	D
New or Maintenance  LOCATION		Date of Tender Award Date of Completion Date of Actual Completion	
Bridge Number Name of Bridge Bridge Type Bridge Span (to be measured) River Name District/Region  PERSONS IN-CHARGE Contractor's Firm Name Contractor's Site In-charge Accomplished the Works Civil work by		Financed by Total Cost Estimate Amount Contract Amount Total Site Expenditures  ACCEPTANCE  Pridge Asserted	YES NO
Checked and Signed by:	Contractor or Representative	Inspection Engineer	Quality Control Engineer
Name: Signature: Place/Date:	*		

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distribution

### 1. GENERAL

The work completion certificate on hand is a specification paper for acceptance of completed bridge work, new as well as maintenance. It shall be used for the final check, to be carried out by the responsible Inspection Engineer in the presence of the Site-Incharge of the contractor or his representative immediately after work completion.

The work completion certificate provides all necessary data for a proper control of completion and quality of all items specified in the contract document for transportation and construction work of a trail bridge. It will serve both HMG and Helvetas to judge the overall acceptability of the bridges.

### 2. PROCEDURES

A bridge under construction or major maintenance is considered completed only after the Work Completion Certificate with this Inspection Form and the Work Completion Report with Quality Assurance Document of the contractor have been filled in, signed and issued to SBD.

A copy of the work completion certificate has to be forwarded to Helvetas. Then Helvetas will confirm in writing the acceptance of the construction work. SDC/Helvetas will reserve the right of an independent inspection within two months after having received the certificate.

The completed bridge, new construction or maintenance, accepted by SBD and SDC/Helvetas will then be handed over to the DDC to which it has been assigned for routine maintenance.

### 3. HOW TO USE THIS FORM

The Inspection Engineer has, together with the Site In-charge of the contractor or his authorized representative, to inspect each part of the bridge and certify that all has been built according to specifications. For this purpose, all sheets of this Inspection Form have to be filled in and signed by the respective persons.

You will find Inspection Forms with all items to be inspected and checks to be carried out for each main part on the following pages. Separate forms are provided for special maintenance work and for photographs. All explanations concerning the checks are given in a legend next to the Inspection Form.

Consult this legend to get clear about the exact meaning of each check. Then for each item mark with a tick all necessary checks which are underlined in the relevant forms if they are found to be correct. Use general arrangement, measuring tape and calliper for proper checking.

No part of the bridge can be accepted until each and every item has been proven to be correct. Each Inspection Form must be signed by the contractor or his authorized representative, the Inspection Engineer and the responsible Quality Control Engineer once all items have been found to be correct.

If the work has not been executed according to the drawings and specifications and the work cannot be corrected, mention the reasons and details in the "remark" column.

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Name :							
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Place/Date :		9.5					

# 7. INSPECTION OF WALKWAY

# **EXPLANATIONS**

FREE OF DEFECTS

: Check that the item inspected does not have any kind of defect such as dents, wrong bents etc. which are not already specified in the form.

CORRECT NUMBER/ SIZE

: Check that all items are set up and correct in size. For bulldog grips and wire mesh see also page 6.

PROPER FIXATION

: Check that all items of the walkway are properly fixed and the wire mesh tensioned.

**TIGHTNESS** 

: Check that all nuts are tightly fastened and cannot be unscrewed without a wrench. Check that all lock-nuts have been fastened by unscrewing the first nut and screwing the lock-nut in one move, using two wrenches.

STRAIGHT AND VERTICAL

: Check that all suspenders are neither curved nor bent and that they are completely vertical.

**ALIGNMENT** 

Check that the deck of the walkway forms an unbroken line, straight in plane and continuously parabolic in elevation.

### INSPECTION OF WALKWAY **STEELPARTS** Straight/ Align-Free of Correct Proper Tight-Items to be Inspected REMARKS defects no./size fixation vertical ment Suspenders Connection of suppenders on upper cables Connection of handrail cables on suspenders Connection of spanning or main cables on crossbeams Connection of fixation cables on crossbeams Nuts, locknuts, washers & bolts Threads Crossbeams Bracings Steeldeck Wiremesh Quality Control Engineer Contractor's Representative Inspection Engineer Checked and Signed by: Name: Signature: Place/Date:

# 8. INSPECTION OF TOWERS

## **EXPLANATIONS**

REMOVED : Check that all erection wedges used at the tower base to prevent tower

movement during erection have been removed.

VERTICAL : Check that the tower is absolutely vertical using a plumb-line on all sides of the

tower to ensure that it does not present any deviation. This check has to be done

without any load on the bridge.

FREE OF CONTORTIONS: Check that the tower does not show any contortion or twist on both horizontal

and vertical axis.

NO MISSING PARTS : Check that all steel parts, nuts, bolts and washers have been set up when building

the tower.

FREE OF DEFECTS: Check that no parts of the towers have any kind of defect such as dents, wrong

bents etc. which are not already specified in the form.

TIGHTNESS: Check that all nuts are tightly fastened and cannot be unscrewed without a

wrench. Check that all lock-nuts have been fastened by unscrewing the first nut

and screwing the lock-nut in one move, using two wrenches.

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### INSPECTION OF GABIONS 10.

# **EXPLANATIONS**

**CONFORMITY OF** LAYOUT WITH DESIGN

Check that the gabion structure or individual boxes inspected have been built at

the right place according to the drawings.

**DIMENSIONS** 

Measure all dimensions of the items inspected and check if they are the same as

indicated in the drawings.

**BACKFILLING** 

Check that all necessary backfillings have been properly carried out and properly

compacted.

**SAFETY AGAINST** INSTABILITY

Check, as far as possible, that the item inspected is safe from the danger of

instability of the soil on which it rests, or danger from potential landslides, or

erosion.

**BUILT ACCORDING TO NORMS** 

Check that the gabion walls and their crates have been built properly. Check that

all necessary diaphragms are assembled.

PROPERLY CONNECTED

Check that all gabion boxes are tied up together with binding wire.

PROPERLY WOVEN

Check that all gabion boxes are properly built using the right wires and mesh

sizes

(see page 6).

**CORRECT SIZE** 

Check that the items inspected are of correct size as prescribed in the drawings.

See that the mesh size is as indicated on page 6 and make sure that the stones are

neither too big nor too small.

	Confor. of layout with design	Dimen-	Back-	Safety	Built				TEMS		
	ucsign	sion	filling	against stabi- lity	accord- ing to norms	Properly connected	Properly woven	Correct size	Neatly piled up		REMARKS
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RIGHT BANK Gabion wall Boxes meshes Diaphragm Stones											
Checked and Signed by:	Contractor's Representative								Inspection	on Engineer	Quality Control Engineer

				II	NSPE	CTIC	O NC	F OTE	HER WORK	
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Items to be Inspected	Confor. of layout with design	Dimen- sions	Cleanli- ness	Back- filling	Safety against instabi- lity	Quality of concrete/ masonry	Quality of plaster/ mortar	Protec- tion of outlet	REMARKS	
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Drainage channels 1)										
						ABILI	ZATI	ON, AP	PPROACH TRAIL	•
Items to be Inspected	Confor. of layou with design	Dimen- sions	Preven- tion of slope erosion	Preven- tion of gully erosion	Protec- tion against rockfall				REMARKS	
LEFT BANK Slopes Approach trail			-							
RIGHT BANK Slopes	- ·									
Approach trail							_			
Checked and Signed by:		Contractor's Representative							nspection Engineer Quality Control En	gineer
Name :		- 1								
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