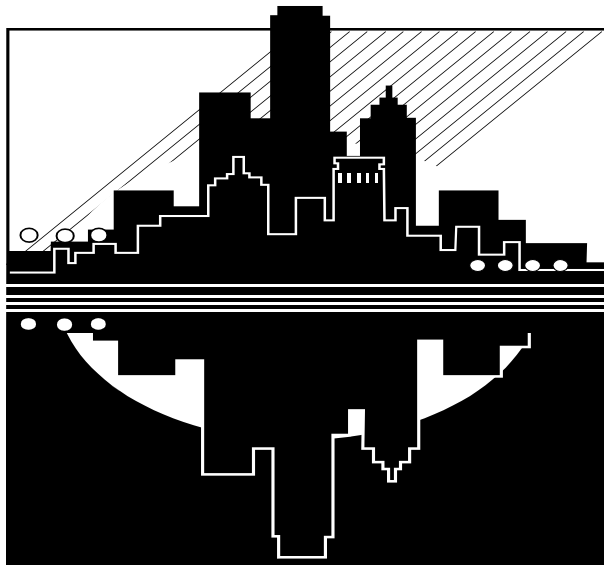
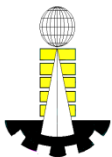


# CONSTRUCTORS PERFORMANCE EVALUATION SYSTEM (CPES)

## Implementing Guidelines For Infrastructure Projects



Amended Guidelines as Approved by NEDA InfraCom  
Pursuant to the IRR of RA 9184  
13 September 2011



Construction Industry Authority of the Philippines  
PHILIPPINE DOMESTIC CONSTRUCTION BOARD

**CONSTRUCTORS PERFORMANCE EVALUATION SYSTEM (CPES)  
Implementing Guidelines for Infrastructure Projects  
as amended on 13 September 2011**

<b>TABLE OF CONTENTS</b>	<b>Page</b>
Foreword .....	iii
Acknowledgment .....	iv
IRR of RA 9184 Provision on Evaluation of Contractors Performance .....	v
NEDA Approval & CIAP Board Resolution .....	vi
Salient Features of the CPES Implementing Guidelines .....	x
<b>CPES Implementing Guidelines</b>	
1. General .....	1
2. Objectives .....	1
3. Scope .....	1
4. Definition of Terms .....	2
5. Functional/Deployment Flowchart .....	4
6. Aspects of Evaluation .....	8
7. Criteria for Evaluation .....	10
8. CPES Implementing Unit .....	13
9. Constructors Performance Evaluator/s (CPE) .....	14
10. Documents Required for Evaluation .....	16
11. CPES Evaluation Forms.....	17
12. Information Utilization and Data Banking .....	22
13. Applicability .....	25
14. Effectivity .....	25
15. List of Acronyms .....	26
16. List of Annexes	
Annex 1 - CPES Functional/Deployment Flowchart .....	1-1
Annex 2 - Checklists for Workmanship	
A. Road and Bridge Projects .....	2A-1
B. Housing and Building Projects .....	2B-1
C. Port and Harbor Projects .....	2C-1
D. Irrigation Projects .....	2D-1

	E. Flood Control Projects .....	2E-1
	F. Power Transmission Line Projects .....	2F-1
	G. Substation Projects .....	2G-1
	H. Diesel Power Plant Projects .....	2H-1
	I. Mooring Facilities for Power Barges Projects .....	2I-1
	J. Site Development Projects .....	2J-1
Annex 3	- Checklist for Materials .....	3-1
Annex 4	- Checklist for Time .....	4-1
Annex 5	- Checklist for Facilities .....	5-1
Annex 6	- Checklist for Environmental, Safety and Health (ESH) .....	6-1
Annex 7	- Checklist for Resources Deployment .....	7-1
Annex 8	- CPES Evaluation Form .....	8-1
Annex 9	- Corrective Action Request (CAR) Form .....	9-1
Annex 10	- Constructors Performance Summary Report .....	10-1
Annex 11	- Schedule of Minimum Test Requirements Governing Items of Work of the DPWH Standard Specifications for Highways, Bridges and Airports, 1995 (Vol. II) .....	11-1
	Schedule of Minimum Test Requirements Governing Items of Work of the DPWH Standard Specifications for Highways, Bridges and Airports Using Test Requirements as Practiced by the National Transmission Corporation (TRANSCO) .....	11B-1
Annex 12	- List of Philippine National Standards (Construction Materials) for Mandatory Implementation .....	12-1

## FOREWORD

The original integrated **Constructors Performance Evaluation System (CPES) Implementing Guidelines covering Roads, Bridges, Housings, Buildings, Ports and Harbors Projects** was approved by National Economic and Development Authority (NEDA) Board's Committee on Infrastructure (INFRACOM) on 30 January 1998. The first and second set of amendments to the same guidelines was approved by the NEDA INFRACOM on 19 May 2005 and 27 August 2008, respectively. To cover all types of construction projects, the title of the guidelines was changed to **CPES Implementing Guidelines for Infrastructure Projects**.

Since 1999 up to present, various government agencies, among others, Department of Public Works and Highways (DPWH); Department of Transportation and Communications (DOTC); Department of Science and Technology (DOST); Department of Health (DOH), Department of Education (DepEd), Philippine Ports Authority (PPA), Philippine Tourism Authority (PTA); National Housing Authority (NHA); National Irrigation Administration (NIA); Pasig River Rehabilitation Commission (PRRC); Bases Conversion Development Authority (BCDA); Department of Trade and Industry (DTI); Government Service Insurance System (GSIS), Development Bank of the Philippines (DBP), Polytechnic University of the Philippines (PUP), University of the Philippines (UP), and Local Government of Guimaras, have been implementing CPES in their infrastructure projects.

To further improve the guidelines, the CPES Inter-Agency Committee (IAC) composed of representatives from the DPWH, DOTC, DOST, DepEd, NHA, NIA, BCDA, DBP, U.P., PUP, and PDCB formulated the 3<sup>rd</sup> set of amendments to the guidelines.

The 3<sup>rd</sup> set of amendments to the CPES Implementing Guidelines was prepared by the CPES-IAC and the PDCB during its 45<sup>th</sup> Regular Meeting held on 22 February 2011 under PDCB Resolution No. 03, Series of 2011, endorsed the same to the CIAP Board.

The CIAP Board, in its 59<sup>th</sup> Regular Board Meeting on 25 March 2011, resolved to endorse the proposed amendments to the CPES Implementing Guidelines under CIAP Board Resolution No. 10, Series of 2011, to the NEDA INFRACOM.

The NEDA-INFRACOM, during its meeting on 13 September 2011, approved the 3<sup>rd</sup> set of amendments to the **CPES Implementing Guidelines for Infrastructure Projects**.

The revised guidelines is intended to contribute in ensuring the quality and timely delivery of infrastructure projects in the country particularly government projects and improve performance of contractors.

September 2011

## **ACKNOWLEDGMENT**

The Philippine Domestic Construction Board (PDCB) of the Construction Industry Authority of the Philippines (CIAP) acknowledges with thanks the heads of the CPES Implementing Units (CPES-IU) of the following government agencies for their invaluable support in the formulation of the 3<sup>rd</sup> Revised CPES Implementing Guidelines for Infrastructure Projects:

Engr. Walter R. Ocampo		Department of Public Works and Highways
Engr. Wilfredo C. Borbor		Department of Transportation & Communications
Engr. Arnaldo C. Reyes		Department of Science and Technology
Atty. Elvira V. Estanislao		Bases Conversion Development Authority
Engr. Ma. Otelia F. Eclavea		National Housing Authority
Engr. Robert C. Suguitan		National Irrigation Administration
Engr. Oliver R. Hernandez		Department of Education
Engr. Clarito A. Magsino		Development Bank of the Philippines
Mr. Ariel S. Betan		University of the Philippines
Dr. Rolando C. Viray		Polytechnic University of the Philippines

CIAP-PDCB also recognizes the patience, diligence and selfless dedication of the following members of the CPES Inter-Agency Committee (IAC) which made this task possible:

<b>Department of Public Works and Highways</b>		
Engr. Melrose I. Pailma		Engr. Medmier G. Malig
Engr. Aristarco M. Doroy		Engr. Mathias L. Malenab
<b>Department of Transportation and Communications</b>		
Engr. Wilfredo C. Borbor		
<b>Department of Science and Technology</b>		
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Engr. Willy F. Evangelista		
<b>Bases Conversion Development Authority</b>		
Engr. Arnel V. Fortunado		
<b>National Housing Authority</b>		
Engr. Ma. Otelia F. Eclavea		
<b>National Irrigation Administration</b>		
Engr. Robert C. Suguitan		Engr. Teresita Pantalla
<b>Department of Education</b>		
Arch. Harold V. Dime		
<b>Development Bank of the Philippines</b>		
Engr. Clarito A. Magsino		
<b>University of the Philippines</b>		
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<b>Polytechnic University of the Philippines</b>		
Engr. Angela L. Israel		
<b>Construction Industry Authority of the Philippines Philippine Domestic Construction Board</b>		
Engr. Sonia T. Valdeavilla		Engr. Leilani d.L. del Prado
Ms. Marita M. Relampagos		Mr. Jose M. Canuto, Jr.
Ms. Nenita F. Jaucian		Engr. Jake M. Velasco

**EVALUATION OF CONTRACTORS PERFORMANCE**  
**Section 12, Annex E of the Revised Implementing Rules and Regulations (IRR)**  
**of Republic Act No. 9184**

**1. SUBJECT AND SCOPE**

All procuring entities implementing government infrastructure projects are mandated to evaluate the performance of their contractors using the NEDA-Approved Constructors Performance Evaluation System (CPES) Guidelines for the type of project being implemented. These guidelines cover all infrastructure projects awarded by the government regardless of contract amount and funding source. CPES evaluation shall be done during construction and upon completion of each government project. To ensure continuous implementation of CPES, all procuring entities concerned are required to include in their Projects' Engineering and Administrative Overhead Cost the budget for the implementation of CPES pursuant to NEDA Board Resolution No. 18 (s. 2002).

**2. EVALUATION GUIDELINES**

For project types which do not have specific CPES Guidelines, the procuring entities concerned may formulate and adopt their own implementing Guidelines specific to their needs provided the NEDA-INFRACOM poses no objections to their adoption, and provided further that said Guidelines are made known to all prospective bidders.

**3. IMPLEMENTATION MECHANISM FOR CPES**

All procuring entities implementing infrastructure projects are required to establish CPES Implementing Units (IUs) in their respective offices/agencies/corporations. The CPES Implementing Units shall be responsible for the implementation of the CPES Implementing guidelines, including, but not limited to, the supervision of Constructors Performance Evaluators (CPEs) to be accredited by the Construction Industry Authority of the Philippines (CIAP). The procuring entity's CPES IU shall be responsible for the following: a) pre-screening of applications of CPEs, b) funding for CPEs accreditation training and seminars; and c) yearly evaluation of CPEs.

**4. SUBMISSION AND DISSEMINATION OF EVALUATION RESULTS**

All procuring entities implementing CPES shall submit the results of their performance evaluation to the CIAP on a monthly basis or as often as necessary. The procuring entity's CPES-IU shall likewise develop and maintain a databank and disseminate the CPES reports to the concerned units/departments within the procuring entity and to other interested users.

**5. UTILIZATION OF EVALUATION RESULTS**

The CIAP shall consolidate all of the CPES evaluation results received and shall disseminate the same to all procuring entities concerned. The CPES rating and other information shall be used by the concerned government agencies for the following purposes: a) pre-qualification/eligibility screening of constructors; b) awarding of contracts; c) project monitoring and control; d) issuance of Certificate of Completion; e) policy formulation/review; f) industry planning; g) granting of Incentives/Awards, and, in adopting measure to further improve performance of contractors in the prosecution of government projects.



Republic of the Philippines  
NATIONAL ECONOMIC AND DEVELOPMENT AUTHORITY

NEDA sa Pasig, 12 Saint Josemaria Escrivà Drive, Ortigas Center, Pasig City 1605  
P.O. Box 419, Greenhills • Tels. 631-0945 to 64  
<http://www.neda.gov.ph>

NEDA BOARD COMMITTEE ON INFRASTRUCTURE (INFRACOM)  
Resolution No. 3, Series of 2011

**A RESOLUTION APPROVING THE PROPOSED AMENDMENTS TO THE  
CONSTRUCTORS PERFORMANCE EVALUATION SYSTEM (CPES) IMPLEMENTING  
GUIDELINES FOR INFRASTRUCTURE PROJECTS**

**WHEREAS**, Section 12 of Annex E of the Revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184, otherwise known as the Government Procurement Reform Act (GPRA), mandates all procuring entities implementing government infrastructure projects to evaluate the performance of their contractors using the NEDA-Approved CPES Guidelines for the type of project being implemented;

**WHEREAS**, The CPES Guidelines cover all infrastructure projects awarded by the government regardless of contract amount and funding source;

**WHEREAS**, In order to ensure continuous implementation of CPES, NEDA Board Resolution No. 18, Series of 2002 (dated 10 December 2002) was issued requiring all procuring entities concerned to include in their Projects' Engineering and Administrative Overhead Cost the budget for the implementation of CPES;

**WHEREAS**, In order to streamline the implementation and to broaden the coverage on the type of infrastructure projects being implemented by procuring entities, the CPES Guidelines were revised on two (2) occasions, 19 May 2005 and 27 August 2008;

**WHEREAS**, There is a need to amend the existing CPES Guidelines to be consistent with the Revised IRR of RA No. 9184, which took effect on 02 September 2009, to include a new checklist and workmanship for *mooring facilities for power barges* and *diesel power plants* developed by the National Power Corporation (NPC), and to further enhance the effectiveness of the CPES in ensuring the quality of infrastructure projects of the government;

**WHEREAS**, The proposed amendments to the CPES Guidelines was formulated by the Philippine Domestic Construction Board (PDCB) and consequently endorsed by the Construction Industry Authority of the Philippines (CIAP) Board per its Resolution No. 10, Series of 2011 (dated 25 March 2011) to the INFRACOM for approval pursuant to Section 12 of Annex E of the Revised IRR of RA No. 9184;

**WHEREAS**, The proposed amendments to the CPES Guidelines were presented by the CIAP and PDCB to the INFRACOM in its Joint Cabinet Committee and Technical Board Meeting on 13 September 2011;

**WHEREAS**, The INFRACOM, during the said meeting, posed no objections to proposed amendments to the CPES Guidelines except on the proposed amendments concerning the issuance of the certificate of completion (Section 12.5) and the blacklisting of constructors (Section 12.7);

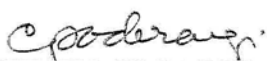
CERTIFIED TRUE COPY

**WHEREAS**, the recommended revisions of the INFRACOM on the above-mentioned Sections have been considered and incorporated accordingly in the amendments hereto attached as Annex "1".


**NOW, THEREFORE**, Be it resolved, as it is hereby resolved, to approve, as the same is being approved, the proposed amendments to the CPES Implementing Guidelines for Infrastructure Projects for adoption by the government which shall take effect fifteen (15) days upon publication by the CIAP in a leading newspaper of nationwide coverage or the Official Gazette and furnishing the University of the Philippines (UP) Law Center a copy thereof.

**UNANIMOUSLY APPROVED**, 13 September 2011.

For the INFRACOM:

  
**CAYETANO W. PADERANGA, JR.**  
Secretary of Socioeconomic Planning  
As Chairman, INFRACOM

Attested by:

  
**LIBRADO F. QUITORIANO**  
Executive Director  
INFRACOM Secretariat





**CIAP BOARD RESOLUTION NO. 10**  
**Series of 2011**

**ENDORISING AMENDMENTS TO THE CPES IMPLEMENTING GUIDELINES TO  
THE NATIONAL ECONOMIC AND DEVELOPMENT AUTHORITY (NEDA)  
BOARD'S COMMITTEE OF INFRASTRUCTURE (INFRACOM) FOR APPROVAL**

**WHEREAS**, Section 12, Annex E of the Revised Implementing Rules and Regulations, (IRR) of RA 9184 or the Government Procurement Reform Act, requires all procuring entities implementing government infrastructure projects to evaluate the performance of their contractors using the NEDA-approved Constructors Performance Evaluation System (CPES) for the type of projects being implemented;

**WHEREAS**, the PDCB Board, during its 32<sup>nd</sup> Regular Board Meeting held on 29 July 2009, instructed the PDCB Secretariat to come up with a plan of actions to improve the implementation of CPES considering the issues and recommendations generated from the survey conducted by PDCB for this purpose;

**WHEREAS**, for this purpose, the CPES Inter-Agency Committee composed of representatives from the Departments of Public Works and Highways (DPWH), Transportation and Communications (DOTC), Science and Technology (DOST), Education (DepEd), the National Irrigation Administration (NIA), Philippine Tourism Authority (PTA), National Housing Authority (NHA), Bases Conversion and Development Authority (BCDA), Development Bank of the Philippines (DBP), University of the Philippines System (UP) and Polytechnic University of the Philippines (PUP) met on September 23 and November 20, 2009 and drafted proposals to amend the CPES Implementing Guidelines;

**WHEREAS**, the PDCB Board during its 45<sup>th</sup> Regular Meeting held on 22 February 2011, passed PDCB Resolution No. 03, Series of 2011, endorsing to the CIAP Board proposed amendments to the implementing Guidelines of CPES;

**NOW, THEREFORE**, the Construction Industry Authority of the Philippines, after due deliberations on its 59<sup>th</sup> Regular Meeting, **RESOLVES**, as it is hereby **RESOLVED**, to endorse to the National Economic and Development Authority (NEDA) Board Committee on Infrastructure (INFRACOM) for approval the proposed amendments to the Implementing Guidelines of the Constructors Performance Evaluation System (CPES) on Corrective Action Request (CAR), Blacklisting of Constructors, Uses of CPES Rating and Time hereto attached as Annex "1" and made an integral part of this Resolution.

**UNANIMOUSLY APPROVED.**

25 March 2011, Makati City

FOR THE CIAP BOARD:

  
ZENAIDA CUISON MAGLAYA  
Undersecretary *scd*

(Representing DTI Secretary and CIAP Chairman Gregory L. Domingo)

Attested by:



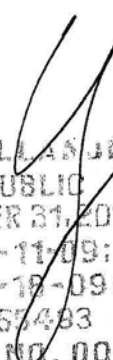
**JESUS L. MOTOOMULL**  
Acting Board Secretary

Republic of the Philippines)  
City of Makati )ss.

**MAY 18 2011**

SUBSCRIBED AND SWORN to before me, this \_\_\_\_ day of \_\_\_\_\_ 2011 affiant Jesus L. Motoomull, acting CIAP Board Secretary exhibiting his Community Tax Certificate No. CCI2010 05996607 issued on February 10, 2011 at Makati City

Doc. No. 347  
Page No. 71  
Book No. V  
Series of 2011.



**YOLANDA Y. VILLANUEVA**  
NOTARY PUBLIC  
UNTIL DECEMBER 31, 2011  
PTR NO. 9658180; 8-11-09; CAVITE  
IBP NO. 783541; 2-18-09; MANILA  
ROLL NO. 57483  
MCLE COMPLIANCE NO. 0003210

## **Salient Features of Constructors Performance Evaluation System (CPES) Implementing Guidelines for Infrastructure Projects**

**Constructors Performance Evaluation System (CPES)** – a system of grading the performance of a constructor for a specific kind of infrastructure projects using a set of criteria.

### **Mandate**

Section 12, Annex E of the **Revised** Implementing Rules and Regulations (IRR) of R.A. 9184 or the Government Procurement Reform Act, requires all procuring entities implementing government infrastructure projects to evaluate the performance of their contractors using the NEDA-approved Constructors Performance Evaluation System (CPES) guidelines for the type of project being implemented. Section 12, likewise, requires all procuring entities to include in their Projects' Engineering and Administrative Overhead Cost, the budget for CPES implementation pursuant to NEDA Board Resolution No. 18 (s.2002); to establish CPES Implementing Units in their respective offices/agencies/corporations; and to use the CPES ratings for the following purposes: a) pre-qualification/eligibility screening; b) awarding of contracts; c) project monitoring & control; d) issuance of Certificate of Completion; e) policy formulation/review; f) industry planning; g) granting of incentives/awards; and in adopting measures to further improve performance of contractors in the prosecution of government projects.

### **Objectives**

The CPES was developed in order to: a) establish a uniform set of criteria for rating the performance of constructors; b) develop a centralized base of information on performance rating of constructors for licensing, pre-qualification, quality improvement, and other purposes of government agencies, project owners and other interested parties; and c) contribute in ensuring that infrastructure projects are conformed with the specified requirements of project owners.

### **Persons Involved in CPES Implementation**

1. CPES Implementing Unit (CPES IU) – refers to the unit of an agency responsible for the implementation of CPES;
2. Constructors Performance Evaluators (CPE) – refers to an individual or group of evaluators accredited by CIAP's PDCB tasked to undertake performance evaluation of a constructor's project using the CPES Guidelines and/or evaluation requirements of the construction industry; and
3. CIAP's PDCB – shall establish the CPES central databank and maintain linkages with concerned agencies to ensure timely and continuous submission of authenticated copies of accomplished CPES Evaluation Form and to facilitate information sharing among users of CPES data.

### **Aspects of Evaluation**

1. **During Construction** (60% for Horizontal Projects such as Road, Bridge, Ports & Harbor, Irrigation and Flood Control, Water Supply and Sewerage, and Mooring Facilities for Power Barges and 70% for Vertical Projects such as

Housing, Building, Power Transmission Line, Substation and Diesel Power Plant) – minimum of two (2) visits with the conduct of first visit when the actual project accomplishment is at least 30% except for projects with a duration of 90 calendar days and below which may be subjected to at least one (1) final visit.

2. **Upon Completion** (40% for Horizontal Projects and 30% for Vertical Projects) – final visit when the Implementing Office reported 100% completion.

### Criteria for Evaluation

1. **During Construction** (60% for Horizontal Projects and 70% for Vertical Projects)

<u>Criteria for Evaluation</u>	<u>Maximum Rating</u>
Workmanship	0.40
Materials	0.30
Time	0.15
Facilities	0.03
Environmental, Safety and Health	0.07
Resources Deployment	0.05
	===
T O T A L	1.00

2. **Upon Completion** (40% for Horizontal Projects and 30% for Vertical Projects)

<u>Criteria for Evaluation</u>	<u>Maximum Rating</u>
Workmanship	0.50
Materials	0.20
Time	0.30
	===
T O T A L	1.00

*Workmanship* – refers to the quality and quantity of on-going and/or completed items of work, which are verifiable, in accordance to approved plans and specifications. In evaluating the constructors workmanship, spots comprising at least 10% for every on-going and/or completed items of work; which are verifiable, shall be randomly predetermined by the CPE prior to actual site inspection.

*Materials* – refers to the quality, quantity and type of construction materials and components supplied by the constructor or by entities other than the constructors as required in the contract.

*Time* – refers to the over-all accomplishment in accordance with the approved PERT/CPM or approved program of work.

*Facilities* – refers to those set-up by the constructor prior to actual project start as indicated in the contract.

*Environmental, Safety and Health* – refers to the constructors’ ability to 1) comply with environmental protection requirements; and 2) observe the safety and health measures as specified in the contract.

*Resources Deployment* – refers to the ability of the constructor to deploy on time, based on the approved PERT/CPM or program of work, the required/pledged resources such as materials, equipment in good running condition and manpower.

### Summary of the 3<sup>rd</sup> Amendments

Section	Features
1. Mandate	Modified “Implementing Rules and Regulations, Part A (IRR-A)” to “Revised Implementing Rules and Regulations (IRR)” to make it consistent with the Revised IRR of RA 9184.
2. Section 1 – General	
3. Section 6.1 – During Construction	Included the new checklists for workmanship for mooring facilities for power barges and diesel power plant projects.
4. Section 6.1 – Upon Completion	
5. Section 7.1.a – Workmanship	
6. Section 7.1.c - Time	Provided a formula for the computation of score for Time – During Construction for contracts with no materials or materials are supplied by the owner.
7. Section 7.2.c - Time	Provided a formula for the computation of score for Time if the project is delayed to harmonize with Section III.a.2.b of the Guidelines on Termination of Contracts, and Section 8, Item 8.4 – Liquidated Damages on Annex E of the IRR of RA 9184.
	Provided a formula for the computation of score for Time – Upon Completion for contracts with no materials or materials are supplied by the owner.
8. Section 11.4 – CPES Checklists	Included the new checklists for workmanship for mooring facilities for power barges and diesel power plant projects.
9. Section 12.2 – Agency Shortlist	Revised the existing Sections to be consistent with the Sections in the Revised IRR of RA 9184.
10. Section 12.3 – Post Qualification	
11. Section 12.5 – Issuance	Provided a provision to ensure that contractor

of Certificate of Completion and/or Acceptance	of and/or	complied with the Corrective Action Requests (CARs) issued by the CPES Evaluators before the agency's Implementing Office issue Certificate of Completion.
12. Section Blacklisting Constructors	12.6 – of	Deleted the word “final” in the CPES final rating and specify Section 4.2f of the GPPB Guidelines for Blacklisting of Constructors.

# **CONSTRUCTORS' PERFORMANCE EVALUATION SYSTEM (CPES) IMPLEMENTING GUIDELINES FOR INFRASTRUCTURE PROJECTS<sup>1</sup>**

## **1. GENERAL**

Section 12, Annex E of the **Revised** Implementing Rules and Regulation (IRR) of R.A. 9184 or the Government Procurement Reform Act, requires all procuring entities implementing government infrastructure projects to evaluate the performance of their contractors using the NEDA-approved Constructors Performance Evaluation System (CPES) guidelines for the type of project being implemented. Section 12, likewise, requires all procuring entities to include in their Projects' Engineering and Administrative Overhead Cost, the budget for CPES implementation pursuant to NEDA Board Resolution No. 18 (s. 2002); to establish CPES Implementing Units in their respective offices/agencies/corporations; and to use the CPES ratings for the following purposes: a) pre-qualification/eligibility screening; b) awarding of contracts; c) project monitoring & control; d) issuance of Certificate of Completion; e) policy formulation/review; f) industry planning; g) granting of incentives/awards; and in adopting measures to further improve performance of contractors in the prosecution of government projects.

## **2. OBJECTIVES**

The CPES was developed in order to:

- 2.1 Establish a uniform set of criteria for rating the performance of constructors;
- 2.2 Develop a centralized base of information on performance rating of constructors for licensing, pre-qualification, quality improvement, and other purposes of government agencies, project owners, financing and insurance companies and other interested parties; and
- 2.3 Contribute in ensuring that infrastructure projects conform with the specified requirements of project owners.

## **3. SCOPE**

The guidelines shall be used in the performance evaluation of constructors undertaking government infrastructure projects as follows:

- 3.1 Local constructors licensed by and registered with the Philippine Contractors Accreditation Board (PCAB);
- 3.2 Foreign constructors licensed by the PCAB; and
- 3.3 Joint ventures and consortia licensed by the PCAB.

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<sup>1</sup> Full text of CPES Implementing Guidelines with amendments (in bold and underlined text) as approved by the NEDA INFRACOM under Resolution No. 03, Series of 2011.

#### 4. DEFINITION OF TERMS

- 4.1 **CIAP** - refers to the Construction Industry Authority of the Philippines, an attached agency of the Department of Trade & Industry created by Presidential Decree (PD) No. 1746 to promote, accelerate, and regulate the growth and development of the construction industry.
- 4.2 **Constructor** - deemed synonymous with the term builder and hence, any entity including joint venture and consortium licensed by PCAB who undertakes or purports to have the capacity to undertake or submits a bid for infrastructure projects.
- 4.3 **Constructors' Performance Evaluation System (CPES)** - a system of grading the performance of a constructor for a specific kind of projects using a set of criteria, approved by the NEDA-INFRACOM.
- 4.4 **Constructors' Performance Evaluator/s (CPE)** - an individual or group of evaluators accredited by CIAP tasked to undertake performance evaluation of a constructor's project using the CPES guidelines and/or evaluation requirements of the construction industry.
- 4.5 **Corrective Action Plan (CAP)** - is a plan of action proposed by the constructor to the concerned agency's implementing office which is aimed to correct the non-conformance findings on the project based on the CAR issued by the CPE(s). The CAP shall include the constructor's specific actions and timetable to immediately correct the findings subject to the approval by the head of the concerned implementing office or his authorized representative.
- 4.6 **Corrective Action Request (CAR)** - a request form wherein the CPE records his/her validated finding(s) including corresponding location(s) which do not conform to any of the checklist indicators requiring immediate actions by the constructor.
- 4.7 **CPES Implementing Unit (IU)** - the unit of an agency responsible for the implementation of CPES.
- 4.8 **Defects Liability Period** - shall be one (1) year from project completion up to final acceptance by the Government.
- 4.9 **During Construction** - reckoned from the time the construction is to start as stated in the Notice to Proceed (NTP) up to substantial completion of the project.
- 4.10 **GPPB** - refers to the Government Procurement Policy Board established under Section 63, Article XX of RA 9184.
- 4.11 **Head of the Procuring Entity** - refers to: (i) the head of the agency or body, or his duly authorized official, for NGAs and the constitutional commissions or offices, and branches of government; (ii) the governing board or its duly authorized official, for GOCCs, GFIs and SUCs; or (iii) the local chief executive, for LGUs: Provided, however, that in an agency, department, or office where the procurement is



decentralized, the Head of each decentralized unit shall be considered as the head of the procuring entity subject to the limitations and authority delegated by the head of the agency, department, or office.

- 4.12 **Implementing Office (IO)** - refer to the unit(s) or department(s) within the agency assigned to supervise the implementation of infrastructure projects.
- 4.13 **INFRACOM** - refers to the NEDA Board Committee on Infrastructure created under Executive Order No. 230, Series of 1987.
- 4.14 **Infrastructure Projects** - refers to construction, improvement or rehabilitation of roads and highways, airports and air navigation facilities, railways, ports, flood control and drainage, water supply and sewerage, irrigation systems, dams, buildings, communication facilities, dredging and reclamation, power generating plants, power transmission and distribution facilities and other related construction projects.
- 4.15 **NEDA** - refers to the National Economic and Development Authority.
- 4.16 **PCAB** - refers to the Philippine Contractors Accreditation Board, one of the implementing Boards of the CIAP which is tasked among others, to issue, deny, suspend, or revoke licenses of construction contractors by virtue of Republic Act 4566, as amended by PD 1746.
- 4.17 **PDCB** - refers to the Philippine Domestic Construction Board, one of the implementing Boards of the CIAP which is tasked to formulate, recommend and implement policies, guidelines, plans and programs for the efficient implementation of public and private construction in the country.
- 4.18 **Percentage Weight** - the weight for a specific item of work, computed by dividing its cost by the total contract amount multiplied by one hundred (100).
- 4.19 **Preventive Action Plan** - is a plan of action proposed by the constructor to the concerned agency's implementing office which is aimed to prevent the recurrence of non-conformance findings on his on-going and/or future projects.
- 4.20 **Rate** - the score for each item of work evaluated, derived using the criteria in evaluating the workmanship and materials aspects.
- 4.21 **Relative Percentage Weight** - refers to the weight of an item of work to be rated computed by dividing the percentage weight of the item of work to be rated by the sum of the percentage weight of all items.
- 4.22 **Relative Rate** - the product of the relative percentage weight and the rate for each item of work.

- 4.23 **Spot** - an area selected from the identified location of on-going and/or completed items of work which will be subject for evaluation/inspection.
- 4.24 **Upon Completion** - refers to 100% completion of the project as reported by the Implementing Office. Completion of project on time includes demobilization and final clean-up.

## 5. FUNCTIONAL/DEPLOYMENT FLOWCHART

The sequential activities to be undertaken by the CPES Implementing Unit (IU), Constructors Performance Evaluators (CPE), Constructor, Implementing Office (IO), and Construction Industry Authority of the Philippines (CIAP) are presented hereunder. The CPES Functional/Deployment Flowchart is illustrated in Annex 1.

### 5.1 Listing of Projects by the CPES-IU

The CPES-IU shall prepare the list of all infrastructure projects of the agency which have been issued Notice to Proceed (NTP) on a monthly basis upon receipt of documents “a” and “b” as listed in Section 10.1 hereof from the Implementing Offices concerned. Thereafter, the CPES-IU shall determine the frequency and tentative date(s) of the evaluation to be undertaken by the CPE for each project based on the following parameters:

- a. During Construction - Except for those projects with a duration of 90 calendar days and below which may be subjected to at least one (1) visit, all projects shall be subjected to a minimum of two (2) evaluations to be performed by the CPE. The number of evaluations beyond the prescribed minimum shall be determined by the CPES-IU based on the size, nature and complexity of the project and shall be subject to approval by the proper authorities within the agency. The first evaluation shall be performed when the project is at least thirty percent (30%) physically complete or as maybe required by the CPES-IU using the S-curve or other appropriate means to determine whether there is substantial work completed for evaluation.
- b. Upon Completion - only one evaluation shall be performed by the CPE right after the Implementing Office (IO) reports one hundred percent (100%) completion of the project.

### 5.2 Consolidation and Review of Documents by the CPES-IU

Prior to the tentative evaluation date(s), the CPES-IU shall require the IO concerned to submit copies of documents “c” to “f” as listed in Section 10.1 hereof and consolidate all of the submitted project documents for subsequent use of the CPE. The punch list listed as document “g” shall form part of the documentary requirement for the “upon completion” evaluation only. Based on the status of the project, the CPES-IU shall determine the most appropriate evaluation date(s)

and fills out the CPES Evaluation Forms to be used for such evaluation.

**5.3 Assignment of CPE and Provision of Documents by the CPES-IU**

The CPES-IU shall coordinate and schedule the most appropriate evaluation date(s) of the CPE. Also, the CPES-IU shall provide the CPE with all the necessary documents for evaluation. The CPE shall be selected by the CPES-IU from the evaluators accredited by CIAP.

**5.4 Review of CPES-IU - Supplied Documents and Pre-determination of Spots for Evaluation by the CPE**

The CPE upon receipt of the documents supplied by the CPES-IU shall review the same and enter pertinent data (e.g. standards and tolerances) in the appropriate spaces provided for in the CPES checklist. The CPE shall also select spots randomly for evaluation prior to site inspection.

**5.5 Finalization of Evaluation Date(s) and Notification of Agency's and Constructor's Project Engineer and/or Authorized Representative**

The CPES-IU shall finalize the date(s) of actual evaluation based on latest project updates provided by the concerned IO and the agreements made with the CPE. The CPES-IU shall, likewise, notify the agency's and constructor's project engineer and/or Authorized Representative before the actual evaluation date(s) within 24 hours for projects located in urban areas where means of communications are readily available and three (3) working days for projects located in remote areas. The presence of constructors and/or its authorized representatives is a requirement during CPES project site evaluation.

**5.6 Notification of CPE, CPE Resource Persons/Witnesses by the CPES-IU.**

The CPES-IU shall inform the CPE and CPE resource persons/witnesses as enumerated in Section 9.3 hereof of the evaluation date(s). The CPES-IU shall request their presence on said date(s) and specified venue. The resource persons/witnesses shall provide necessary information/inputs to the CPE.

**5.7 Consolidation and Submission of Documents by Constructor's Project Engineer and/or Authorized Representative**

The constructor's project engineer shall consolidate documents "a" & "b" as listed in Section 10.2 hereof and present the same during the on-site pre-evaluation meeting to be conducted by the CPE.

**5.8 Conduct of On-site Pre-Evaluation Meeting among CPE, Resource Persons and Witnesses**

Prior to actual evaluation, the CPE and its resource persons/witnesses shall meet to discuss the following: purpose and mechanics of CPES; scope and status of each work item (percentage of accomplishment) to be evaluated; documents supplied by the constructor's project engineer; and other factors affecting the implementation of the project. Based on said discussion, the CPE shall update/validate all of the standards/tolerances on relevant checklists to be used.

#### **5.9 Conduct of Actual Evaluation by CPE**

Based on the pre-determined spots to be evaluated, the CPE and its resource persons/witnesses, shall undertake the necessary evaluation and records findings in relevant checklists. The CPE may list additional indicators in relevant checklists if needed and corresponding findings. The CPE shall also take photos and/or videos to substantiate its findings.

Should there be a need to assess the constructor's performance during the defects liability period, the CPES-IU may request the CPE to undertake such evaluation. The evaluation results shall be submitted by the CPE to the CPES-IU and/or concerned units of the agency.

#### **5.10 Conduct of Post-Evaluation Meeting**

##### **a. Validation of Findings by CPE**

The CPE leader shall convene a meeting to be attended by the CPE members, resource persons and witnesses to deliberate on the findings and validate the causes for such.

##### **b. Finalization of Evaluation Rating and CAR(s) by CPE**

Based on validated findings, the CPE shall meet to finalize its evaluation rating as well as CAR(s), if any, using relevant forms. Each CAR, however, shall be prepared in duplicate copies.

##### **c. Presentation /Issuance of Rating and CAR(s) by CPE**

The CPE leader shall reconvene the meeting with the CPE members, resource persons and witnesses in order for him to present the evaluation rating and issue the duplicate copies of the CAR(s) to the constructor's project engineer.

##### **d. Agreement on Rating and CAR(s) by Constructor's Project Engineer and/or Authorized Representative**

If in agreement with the ratings and CAR(s), the Constructor's project engineer and/or Authorized Representative shall acknowledge the relevant documents. Thereafter, said engineer and/or Authorized Representative shall be given duplicate copies of the CAR(s). But in case of disagreements with the rating or any

of the CAR(s), the CPE leader shall inform said engineer and/or Authorized Representative that these shall be settled by an appropriate adjudicating body to be designated by the agency. In cases where the constructor and/or its representatives are absent during the CPES project evaluation, even after advance and proper notification, the CPES Rating of the constructor will be considered final and binding.

e. **Monitoring of Constructor's Compliance on CAR by CPES-IU**

To ensure and check constructor's compliance on CAR, the CPES-IU shall require the government project engineer to submit a Monitoring Report to the concerned Implementing Office, copy furnished the CPES-IU, to validate compliance with the CAR. Emphasis should be on projects with "Remove and Replace" proposed CAP and taking into consideration the pledged date of corrective action by the constructor. If possible, photos shall be attached to provide evidence on the works undertaken.

**5.11 Submission of CPES Reports to CPES-IU**

Immediately after the completion of the evaluation, the CPE leader shall submit to the CPES-IU the original copies of the accomplished CPES Evaluation Form (cover sheet, rating sheet, checklists and summary sheet), Constructor's Performance Summary Report and CAR(s). The CPE leader shall, likewise, prepare a report indicating the documents to be submitted to the agency's designated adjudicating body, in case when there is appeal made by the constructor.

**5.12 Preparation and Implementation of Corrective Action Plan (CAP) and Preventive Action Plan (PAP) by the Constructor**

Based on the non-conformance findings prepared by CPE, the constructor shall prepare and submit the corresponding CAP to the Head of the IO for his assessment and subsequent approval. If the CAP is approved by the Head of the Procuring Entity, the constructor's Project Engineer (PE) and/or Authorized Representative shall implement the plan which shall be monitored by the Project Owner's PE. The concerned IO shall monitor the constructor's implementation of all the recommendations made by the CPE on the noted non-conformances. This shall be supported by videos or photos before, during and after rectification has been made. After the constructor has satisfactorily completed all the corrections made, the IO shall submit the reports to the CPES-IU. However, if CAP is disapproved, the constructor's PE has to submit another CAP proposal for approval by the Head of the Procuring Entity. The constructor has to submit PAP proposal if similar findings by the CPE occurred twice or more. The process of PAP's approval is similar to CAP's.

**5.13 Review of CPES Rating, Preparation of Reports, and Dissemination of Information by CPES - IU**

The CPES-IU, upon receipt of the CPES Evaluation Report for a particular project shall review the completeness, accuracy and consistency of its contents. Should the contents be in order, the CPES-IU shall submit the reports to the CIAP, concerned IO and other departments/units which need the information.

After the required site visits for each project have been completed, the CPES-IU shall issue a CPES Rating to the constructor upon satisfactory completion of the necessary corrective actions listed in the CAR(s).

The CPES-IU shall submit to CIAP's PDCB an authenticated photocopy of the Constructor's Performance Summary Report within thirty (30) days after evaluation; except for implementing agencies evaluating more than one hundred (100) infrastructure projects which may submit the report within two (2) months after evaluation.

**5.14 Databanking by CPES-IU and CIAP**

All original copies of the CPES rating sheets shall be filed and pertinent data stored in a computer by the CPES-IU for easy access and processing of information in the future. This unit shall serve as the agency's databank for all CPES information and documents pertaining to its projects and constructors.

CIAP's PDCB, on the other hand, shall establish the CPES central data bank and maintain linkages with concerned agencies to ensure timely and continuous submission of authenticated copies of accomplished Constructor's Performance Summary Report and to facilitate information sharing among users of CPES data.

**6. ASPECTS OF EVALUATION**

The performance of the constructor shall be evaluated "during construction" and "upon completion" of a project. The assigned weights and aspects to be evaluated "during construction" and "upon completion" shall vary depending on the kind of project as follows:

**6.1 During Construction** - with a weight of 60% for horizontal projects, such as road, bridge, port and harbor, irrigation and flood control, water supply and sewerage, mooring facilities for power barges, etc., and 70% for vertical projects, such as housing and building, power transmission line, substation, and diesel power plant, etc., the maximum weight for the following criteria shall be:

<u>Criteria</u>	<u>Maximum Rating</u>
Workmanship	0.40
Materials	0.30
Time	0.15

Facilities	0.03
Environmental, Safety and Health (ESH)	0.07
Resources Deployment	<u>0.05</u>
Total	<u>1.00</u>

For contracts which do not involve the supply of construction materials or where the materials are supplied by the owner/agency, the maximum weights shall be:

<u>Criteria</u>	<u>Maximum Rating</u>
Workmanship	0.40
Time	0.20
Facilities	0.05
Environmental, Safety and Health (ESH)	0.10
Resources Deployment	<u>0.25</u>
Total	<u>1.00</u>

For projects which include both horizontal and vertical structures, the weight to be followed shall be that of the higher cost component of the project.

The assigned weight for vertical projects is higher than that for horizontal projects in view of the complexity of the nature of the former projects. In general, the evaluation “during construction” is assigned higher weight to ensure that constructors immediately attain satisfactory performance and maintain it until substantial work has been accomplished.

- 6.2 **Upon Completion** - with a weight of 40% for horizontal projects such as road, bridge, port and harbor, irrigation and flood control, water supply and sewerage, **mooring facilities for power barges**, etc., and 30% for vertical projects such as housing and building, power transmission line, substation, **and diesel power plant**, etc., the maximum weight for the following criteria shall be:

<u>Criteria</u>	<u>Maximum Rating</u>
Workmanship	0.50
Materials	0.20
Time	<u>0.30</u>
Total	<u>1.00</u>

For contracts which do not involve the supply of construction materials or where the materials are supplied by the owner/agency, the maximum weights shall be:

<u>Criteria</u>	<u>Maximum Rating</u>
Workmanship	0.50
Time	<u>0.50</u>
Total	<u>1.00</u>

## 7. CRITERIA FOR EVALUATION

### 7.1 During Construction

#### a. Workmanship [Maximum Rating of 0.40]

Workmanship refers to the quality and quantity of on-going and/or completed items of work, which are verifiable, in accordance to approved plans and specifications. This aspect covers the utilization of the correct methodology needed in producing the desired quantity and quality of work. In rating this aspect, efficiency of methodology shall be considered.

In assessing/evaluating workmanship, the following procedures shall be observed: a) before going to the project site, the CPE shall identify the location of on-going and/or completed items of works based on the approved plan, and b) from the location identified, the CPEs shall select spots randomly for evaluation. The combined area of spots shall not be less than 10% of the on-going and/or completed items of works. Checklists for Workmanship for roads and bridges, housing and building, ports and harbor, irrigation, flood control, power transmission line, substation, mooring facilities for power barges and diesel power plant projects are presented in Annex 2. Refer to Section 11.4a hereof in determining the rating for workmanship.

In case there are on-going or completed additional works or variation orders, which are verifiable, at the time of inspection, these shall be rated if said variations were approved by the Head of the Procuring Entity.

#### b. Materials [Maximum Rating of 0.30]

To impress upon the constructors the importance of materials in producing the desired quality of an item of work, this aspect is viewed separately from workmanship as another factor in assessing performance.

Materials means the quality, quantity and type of construction materials including asphalt and ready-mixed concrete, and components supplied by entities other than the constructors as required in the contract. The constructor gets the full rating of 0.30 for materials in a particular item of work if he complies with all the applicable indicators in the checklist for materials in Annex 3. Refer to Section 11.4b in rating materials.

Alternative construction materials used by the constructor may also be considered by the CPE in rating the materials aspect, provided there are supporting documents consisting of the approval by the owner's authorized personnel and test results. If a work item does not require the use of materials (e.g., demolition of existing structure, excavation, or scraping), the constructor automatically gets 0.30 in this aspect provided he gets the full



rating in the workmanship aspect for such work item. However, if the particular item of work was not done or inadequately complied with, the rating for material shall be 0.00. Furthermore, when a particular item of work was not rated since it is no longer visible and cannot be verified, the material aspect for such item of work shall not be rated.

Materials for on-going or completed additional works, which are verifiable, at the time of inspection shall also be rated provided said variations were approved by the Head of the Procuring Entity.

Unlike the workmanship and materials aspects which are evaluated on a per item of work, the following four (4) aspects shall be appraised during each visit without particular attention to the work items completed/being completed by the constructor.

c. Time [Maximum Rating of 0.15]

This refers to the over-all accomplishment in accordance with the approved PERT/CPM or approved program of work. The constructor gets a full rating of 0.15 if he is on or ahead of schedule but gets a lower score if there is any delay or slippage attributable to his fault. The score shall depend on the percentage of delay as reflected in the checklist for time aspect presented in Annex 4. Refer to Section 11.4c in rating the time aspect.

**For contracts with no materials or materials are supplied by the owner, the computation of score for Time aspect is presented in Annex 4 – For contracts with no materials or materials are supplied by the owner.**

In case there are on-going or completed additional works or variation orders, time would be rated based on the effective PERT CPM and S-Curve approved by the Head of the Procuring Entity. In case it has not yet been approved by the Head of the Procuring Entity, time shall be rated based on the latest approved PERT CPM and S-curve.

d. Facilities [Maximum Rating of 0.03]

The facilities referred to are those set up by the constructor prior to the actual start of the project and maintained during the construction period. This aspect covers the provision of project signboard, sanitary and/or field and on-site office facilities which includes the surveying, transport and communication, testing and other equipment, appliances, utensils and other items as required in the contract. The constructor merits a full rating of 0.03 if he complies with the indicators enumerated in the checklist for facilities presented in Annex 5. Refer to Section 11.4d in rating this aspect.

In case the contract does not indicate any provision for camp facilities, to be checked are the sanitary, field and on-site office

facilities provided by the constructor for its technical staff and workers.

- e. Environmental, Safety and Health (ESH) [Maximum Rating of 0.07]

The constructor must learn to care for his environment and must try his best not to pollute during project prosecution. He must observe safety and health measures as required in the general and/or special contract provisions, and safeguard the lives of his workers and those of the general public. The constructor gets a full rating of 0.07 if he complies with the applicable indicators enumerated in the checklist for ESH presented in Annex 6. Refer to Section 11.4e in rating this aspect.

- f. Resources Deployment [Maximum Rating of 0.05]

In this aspect, to be evaluated is the constructor's ability to deploy on time, based on the approved PERT/CPM or program of work, the required/pledged facilities and resources such as materials, equipment in good running condition and manpower. Refer to Section 11.4f in rating this aspect. Resources deployment checklist is presented in Annex 7.

Should there be on-going additional works or variation orders at the time of inspection not yet covered by approved variation order, the provision on this matter as stated in Section 7.1-c shall likewise be adopted.

## 7.2 Upon Completion

- a. Workmanship [Maximum Rating of 0.50]

Workmanship is one of the three aspects to be evaluated when the project is one hundred percent (100%) complete as reported by the IO.

The punch lists prepared by the inspectorate team may serve as additional reference for project evaluation. The constructor shall merit a full rating of 0.50 for a particular item of work if he satisfies the applicable indicators in the checklist. Spots comprising not less than ten percent (10%) of the entire project shall be the sample size used in evaluating this aspect.

- b. Materials [Maximum Rating of 0.20]

In rating the aspect of material, a full rating of 0.20 shall be given to materials in a particular item of work if he complies with applicable indicators in the checklist for materials in Annex 3.

If a work item does not require the use of materials (e.g. demolition of existing structure, excavation, or scraping), the constructor automatically gets 0.20 in this aspect provided he

gets the full rating in the workmanship aspect for such work item. However, if the particular item of work was not done or inadequately complied with, the rating for material shall be 0.00. Furthermore, when a particular item of work was not rated since it is no longer visible and cannot be verified, the material aspect for such item of work shall not be rated.

c. Time [Maximum Rating of 0.30]

In rating the aspect of time, comparison shall be made between the approved contract completion time including time extensions granted and actual project completion time. Completion of a project on time includes demobilization and final clean-up.

The constructor shall get a full rating of 0.30 if he is on or ahead of schedule but if the project is delayed due to his fault, he gets a lower score. The score shall depend on the percentage of delay as shown in Annex 4 – Upon Completion.

For contracts with no materials or materials are supplied by the owner, the computation of score for Time aspect is presented in Annex 4 – For contracts with no materials or materials are supplied by the owner for Upon Completion phase.

## 8. CPES IMPLEMENTING UNIT

To ensure the effective implementation of CPES, each government agency undertaking infrastructure projects shall either create an independent unit or integrate the CPES functions in an existing unit with similar functions which shall act as the CPES-IU. Ideally, the CPES-IU should be under the office of agency head but it could also be attached to the agency's audit or monitoring group. Its organization and functions are as follows:

### 8.1 Organization

The CPES-IU shall be composed of the following:

- a. Unit supervisor - shall act as the head of the unit;
- b. Technical personnel - shall assist the head in the performance of the unit's technical functions; and
- c. Administrative personnel - shall perform all the administrative and coordinative requirements of the unit.

### 8.2 Functions

The CPES-IU shall have technical and administrative/coordinative functions as follows:

- a. Technical

- a.1 Undertake accreditation processes which consist of: a) pre-screening and endorsement of application of CPE applicants; and b) facilitate conduct of CPES required training and seminars;
- a.2 Undertake yearly performance evaluation of CPEs.
- a.3 Update CPE members on latest developments and other technical functions.
- a.4 Orient resource persons/witnesses.
- a.5 Review and prepare CPES reports and recommend appropriate actions based on the CPES Rating; and
- a.6 Assign its accredited CPE staff member/s to act as individual CPE/s or member/s of the CPE group/team as required.
- b. Administrative/Coordinative
  - b.1 List all projects to be subjected to evaluation using CPES and identify/assign personnel to compose the CPE.
  - b.2 Schedule orientation-seminar on CPES for in-house CPE members and resource persons/witnesses.
  - b.3 Generate latest project status, schedule CPE site visits, coordinate visit with the Head of the Procuring Entity and constructor concerned, and file/safe keep all CPES related documents.
  - b.4 Provide the CPE with CPES documents implementing guidelines and forms, and prepare CPE travel documents as required.
  - b.5 Data banking and dissemination of CPES reports and documents to all concerned users within the agency, CIAP's Philippine Domestic Construction Board (PDCB), and other interested users.

To ensure that constructors understand the mechanics of CPES and how they are rated, their Authorized Managing Officers (AMOs) or their duly authorized Sustaining Technical Employees (STEs) shall be required to undergo a one-time Orientation Seminar on CPES to be conducted by the CIAP-PDCB prior to contract implementation.

## **9. CONSTRUCTOR PERFORMANCE EVALUATOR/S (CPE)**

Each government agency shall have the option of tapping in-house staff, third party evaluators or combination of both either as group/team or individual to compose the CPE. For those agencies whose CPE will be composed of in-house evaluators only or combination of in-house and third party evaluators, such in-house evaluators could either be assigned on a

permanent or ad-hoc basis. It is necessary that all CPE members are not in any way involved with the project to be evaluated in order for them to give an objective and unbiased evaluation of the constructor's performance.

### 9.1 Minimum Qualification of CPES Evaluators

All CPES evaluators shall be accredited by the CIAP based on the minimum qualifications as follows:

- a. Licensed Engineer or Architect.
- b. Must have at least 5 years experience in the actual implementation of project.
- c. In full enjoyment of his/her civil rights, must not have been convicted of a crime involving moral turpitude or of any other crime for which the penalty imposed upon him/her is over six (6) months of imprisonment.
- d. Willing to undergo all screening requirements and accreditation course for CPES evaluators to be conducted by the CIAP's PDCB or any of its accredited training institutions.

Professionals who have substantially complied with the minimum requirements stated in items "a" to "c" above, and who by reason of trainings or experiences in construction, conducted lectures on CPES accreditation courses upon invitation by the CIAP's PDCB are automatically accredited as CPES evaluators.

### 9.2 Procedure and Requirements for Renewal of CPE Accreditation

CPE accreditation shall be valid for a period of three (3) years from the date of accreditation. An application for renewal of CPE accreditation may be filed with the CIAP's PDCB not later than two (2) years from expiry date.

The CPES-IU shall endorse the renewal application based on the performance of the CPE. For renewal of CPE Accreditation, it is required that a CPE:

- a. be endorsed by the CPES Implementing Unit Head; and
- b. must have evaluated at least one (1) infrastructure project.

In cases where the CPEs did not have the chance to evaluate projects due to limited number of infrastructure projects of the agency, the following options may be applied:

#### Option 1

Require CPE to attend Enhancement/Orientation Seminar conducted by the Agency CPES-IU in coordination with PDCB;

#### Option 2

CPE applying for renewal of accreditation must have been involved in various CPES related activities such as but not limited to:

- a. Agency representative tasked to formulate/amend the CPES Guidelines, checklist, etc.;
- b. Resource person during seminars conducted on CPES; and
- c. Served as CPE for other agencies.

**9.3 Composition of CPES Evaluators**

The composition of each CPE, individual or group, who have voting power, shall be:

<b>Options</b>	<b>In-house CPE</b>	<b>Third Party CPE</b>	<b>Combination of In-House and Third Party CPE</b>
Group or Team	One (1) CPE occupying supervisory position who shall act as the CPE leader.  One (1) or more CPE/s as members.	Two (2) or more CPEs from other agencies and not directly involved with the project to be evaluated.	One (1) CPE occupying supervisory position.  One (1) or more CPE/s from other agencies, and not directly involved with the project to be evaluated.
Individual	One (1) CPE not directly involved with the project.	One (1) CPE from other agencies, and not directly involved with the project to be evaluated.	

The resource persons/witnesses, who have no voting power, shall include the following:

<b>RESOURCE PERSONS/WITNESSES</b>	
one (1) or more	- Owner’s and Constructor’s Project Engineer and/or Consultant assigned in the project to act as resource person(s);
one (1)	- (Optional) Representative from any of the CIAP accredited constructors’ associations nearest to the project site, knowledgeable in project implementation to act as witness;
one (1)	- (Optional) Representative from the Local Government Unit (LGU) where the project is located to act as witness;
one (1)	- (Optional) Representative from the end-user (e.g. social, religious, or civic organization).

**10. DOCUMENTS REQUIRED FOR EVALUATION**

The CPE should have the following documents for its review and reference during actual evaluation which shall be supplied by the IO and the constructor’s project engineer:

## 10.1 IO-Supplied Documents

- a. Contract documents: approved contract agreement, contract drawing, general and special/local provisions including plans and specifications, method of construction, safety and health measures
- b. Approved constructor's construction program: CPM work schedule or bar chart, materials/manpower schedule, equipment schedule, organizational chart, financial chart such as S-curve or cash flow
- c. Constructor's statistical reports: physical progress/status, equipment and manpower schedules based on the latest approved PERT/CPM
- d. Materials testing procedures, records of tests and results, materials quality control program
- e. Constructor's operational set-up: general lay-out of facilities, project office and quarters, warehouse, shops for repair/maintenance/carpentry/rebar
- f. List of subcontractors or suppliers
- g. Punch list (for final visit upon completion)
- h. Relevant checklists, CPES evaluation form and cover sheet

## 10.2 Constructor's Project Engineer-Supplied Documents

- a. Project log book
- b. Updated records of tests/results and materials quality control program monitoring reports
- c. Other related reports

## 11. CPES EVALUATION FORMS

The CPES evaluation form and cover sheet to be used by the CPE is contained in Annex 8 and this shall be reproduced by the CPES-IU for distribution to all CPE(s) concerned prior to site visits.

### 11.1 Part 1 - Cover Sheet

Part 1 of the form is the cover sheet, which is to be filled up by the owner's project engineer contains the following general information: name and address of constructor; name and address of owner/authorized managing officer; valid license number; ARC category; nationality of constructor; project name, location; funding source; name of constructor's project manager and materials engineer; name of government construction manager; original and revised contract amount and duration; scheduled date of project start and actual date started; and scheduled date of project completion and actual date completed (number of days advance/delayed are also indicated). Other necessary information pertaining to the project may also be included on this portion.

### 11.2 Part II - Rating Sheet During Construction

The CPE shall use Part II of the form during the "construction phase" first and second visits, respectively. In case the CPE intends to

conduct more than two (2) visits during this phase, Part II of the form may be reproduced to correspond to the additional number of visits it shall make. Part III shall be used for the final visit.

For Part II, the CPE shall list the items of work evaluated during the visit, their corresponding percentage weights and relative percentage weights, and their rates and relative rates for both workmanship and material aspects. As defined in Section 4 hereof, the percentage weight of a particular item of work subjected to evaluation shall be computed by dividing its total cost by the total contract amount while the relative percentage weight of said item of work shall be computed by dividing its percentage weight by the sum of the percentage weight of all evaluated items of work. The relative rate for each item of work for both aspects, which shall be computed by multiplying the rate for each item of work with corresponding relative percentage weight, shall be added and later on reflected in the Summary of Ratings along with ratings for the other aspects covered.

However, in case there are on-going or completed additional works not yet covered by an approved variation order or request for time extension which is not yet approved during the visit, the CPE using a separate form shall fill up all relevant portions such as the Rate column for the workmanship and material aspects, time and resource deployment. The ratings therewith shall be used in updating the appropriate form, either Part II or III, only upon approval of the variation order or time extension.

For Part II, the CPE after completing the Summary of Ratings shall compute the "During Construction" Weighted Rating (A). This can be computed by adding all of the Ratings obtained for each visit during construction phase, dividing the sum of Ratings by the number of visits made, and then multiplying the quotient by sixty (60%) for horizontal projects or seventy (70%) for vertical projects.

### **11.3 Part III - Rating Sheet Upon Completion and Summary Sheet**

For Part III, which will be used for the "upon completion" visit, the CPE shall list the items of work evaluated and their corresponding percentage weights and relative percentage weights, and their rates and relative rates for the workmanship aspect. After adding all of the relative rates, the sum along with the ratings for the time and materials aspects shall be reflected in the Summary of Ratings.

To determine the "upon completion" Weighted Rating (B), the CPE shall multiply the Total Rating by forty percent (40%) for horizontal projects and thirty percent (30%) for vertical projects. The Over-all Rating, on the other hand, shall be computed by adding the "during construction" Weighted Rating (A) and "upon completion" Weighted Rating (B) and multiply the sum by one hundred percent (100%).

The CPE head and members, resource persons/and witnesses present during each visit shall always affix their signature in the spaces provided for in Parts II and III.



After the over-all CPES rating of the constructor has been computed, this shall be reflected in the box marked “Qualitative Description” based on the range of constructor’s CPES rating for the specific project undertaken. Annex 8 shall be revised by the CIAP’s PDCB to indicate the new ranges of CPES ratings and their equivalent qualitative descriptions, as follows:

<u>CPES Qualitative Description</u>	<u>Ranges of CPES Rating</u>
Outstanding	> 96%
Very Satisfactory	> 89% ≤ 96%
Satisfactory	> 82% ≤ 89%
Unsatisfactory	≥ 75% ≤ 82%
Poor	< 75%

#### 11.4 CPES Checklists

The checklists for each indicator are made to aid the accredited CPEs in the objective evaluation of constructors’ performance. These checklists are coded mainly for data banking purposes.

##### a. Checklist for Workmanship

For identification purposes, the checklist for workmanship for Road, Bridge, Housing, Building, Port and Harbor are coded with letters RBWS, HBWS, and PHWS, respectively. The first two letters refer to type, e.g. RB stands for Road and Bridge, and WS refers to workmanship.

The checklists for Workmanship for Road and Bridge, Housing and Building, Port and Harbor, Irrigation, Flood Control, Power Transmission Line, Substation, **Mooring Facilities for Power Barges and Diesel Power Plant** Projects are contained in Annex 2.

The CPE shall select from the checklists those items of work which are applicable for evaluation/assessment. Indicators are set for each items of work but the CPE may add other indicators in the blank spaces provided for. All additional indicators shall be submitted to CIAP for coding purposes.

The checklists for workmanship in Annex 2 shall be revised by the CIAP’s PDCB to reflect, among others, specific indicators for major and minor defects, and additional indicators as needed.

The CPE shall evaluate/assess the pre-determined spots based on the indicators set for each item of work. If there is non-compliance, the CPE shall determine if such is a major or minor defect. If an indicator is not applicable, the CPE should place NA (not applicable) at results box.

Defects are considered major on the following basis:

1. Entail losses to the government;
2. Seriously affect the stability of the structure;
3. Cause severe damage to the aesthetics (depends on the items of work involved).

Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).

Determining Results, Score, Total Score and Rate.

- a.1 Determine the number of non-compliance or full compliance per indicator
- a.2  $\text{Results} = \text{Compliance} / \text{Number of spots}$
- a.3  $\text{Score} = \text{Results} \times 0.40$  (During Construction);  
 $\text{Score} = \text{Results} \times 0.50$  (Upon Completion)
- a.4  $\text{Total Score} = \text{Sum of all the scores}$
- a.5  $\text{Rate of an Item of Work} = \text{Total Score (a)}/\text{No. of Indicator (b)}$

b. Checklist for Materials

The checklist for Materials is contained in Annex 3 and starts with MAT followed by the blank space which is for the corresponding number of the item of work being evaluated. There are five (5) indicators for this aspect and all indicators shall be rated. Compliance to each indicator means full score of one (1) and non-compliance means score of zero (0).

If the constructor complies with indicator number 1 which is compliance to test requirements, then the remaining four (4) indicators need to be evaluated. If the constructor does not comply with indicator number 1, however, the remaining four (4) indicators shall also be evaluated for CAR purposes but the final rating is automatic zero (0).

If a work item does not require the use of materials (e.g. demolition of existing structure, excavation, or scraping), the constructor automatically gets 0.30 during construction and 0.20 upon completion in this aspect provided he gets the full rating in the workmanship aspect for such work item. However, if the particular item of work was not done or inadequately complied with, the rating for materials shall be 0.00. Furthermore, when a particular item of work was not rated since it is no longer visible and cannot be verified, the material aspect for such item of work shall not be rated.

Determining Results, Score, Total Score and Rate.

- a.1  $\text{Results} = \text{If indicator is complied (C)} = 1$  and if not complied (NC) = 0

- a.2 Score = Compliance =  $1 \times 0.30$  (During Construction);  
Score = Compliance =  $1 \times 0.20$  (Upon Completion);  
Score = Non-Compliance =  $0 \times 0.00$
- a.3 Total Score = Sum of all the Score (a)
- a.4 Determine number of indicators = 5 (b)
- a.5 Rate = Total Score (a) / No. of Indicators (b)

c. Checklist for Time

The checklist for Time is contained in Annex 4. Part One is for “During Construction” and Part Two is for “Upon Completion”. The checklist shall be revised by the CIAP’s PDCB to incorporate the new procedure for scoring of Time aspect which is through “calibration” instead of “bracketed” during construction phase.

For Part One – “During Construction” Form

Determining Results, Score and Rate

- a.1 Deduct the corresponding percentage of delay from 15% which is the maximum score for Time. The result is the score.
- a.2 Rate is equal to score (Rate = Score)

For Part Two – Upon Completion Form

The checklist shall be revised by the CIAP’s PDCB to incorporate the amendment during “Upon Completion” phase and delete the provision of incentive when the project is completed ahead of schedule with perfect score for workmanship.

Determining Results, Score and Rate

- a.1 Place check in the results box for the corresponding performance in time aspect.
- a.2 Equivalent score is set for each criteria.
- a.3 Rate is equal to score. (Rate = Score)

d. Checklist for Facilities

The checklist for Facilities is contained in Annex 5. The CPE should verify from the site if the indicators set for facilities are complied (C) or not complied (NC). Compliance means score of one (1) and non-compliance means score of zero (0). The CPE shall select only the indicators which are applicable.

Determining Results, Score, Total Score and Rate

- a.1 Results = If indicator is complied (C) = 1 or not complied (NC) = 0.
- a.2 Score = Compliance =  $1 \times 0.03$ ; Non-compliance =  $0 \times 0.00$
- a.3 Total Score = Sum of all the Scores (a).
- a.4 Determine number of indicators = 5 (b).
- a.5 Rate = Total Score (a) / No. of Indicators (b).

e. Checklist for Environmental, Safety and Health (ESH)

The checklist for ESH is contained in Annex 6. These were lifted from Department Order (DO) No. 13, series of 1998 of the Department of Labor and Employment (DOLE) entitled Guidelines Governing Occupational Safety and Health in the Construction Industry. The CPE should verify if each indicator set for this aspect is being strictly implemented by the constructor. The CPE shall select only the indicators which are applicable.

Determining Results, Score, Total Score and Final Rating

- a.1 Results = If indicator is complied (C) = 1 and if not complied (NC) = 0.
- a.2 Score = Compliance =  $1 \times 0.07$ ; Non-compliance =  $0 \times 0.00$
- a.3 Total Score = Sum of all the Scores (a).
- a.4 Determine number of indicators = 16 (b).
- a.5 Rate = Total Score (a) / No. of indicators (b).

f. Checklist for Resources Deployment

The checklist for Resources Deployment is contained in Annex 7. The CPE should check the actual deployment of resources (materials, manpower and equipment) and verify if the constructor complies or does not comply as per latest approved resources schedule. All indicators shall be rated.

Determining Results, Score, Total Score and Rate

- a.1 Results = If indicator is complied (C) = 1 and if not complied (NC) = 0.
- a.2 Score = Compliance =  $1 \times 0.05$  ; Non-compliance =  $0 \times 0.00$
- a.3 Total score = Sum of all the scores (a)
- a.4 Determine number of indicators = 3 (b)
- a.5 Rate = Total Score (a)/No. of Indicators (b)

**11.5 Corrective Action Request (CAR)**

The CPE shall issue CARs to the constructor for each finding of non-conformance, using the form attached as Annex 9. The IO shall approve and monitor the implementation of the corrective action plan submitted by the constructor.

**11.6 Constructors Performance Summary Report**

The CPEs shall process and summarize all their findings on the project in the Constructor's Performance Summary Report (Annex 10) and submit it to CPES-IU. The CPES-IU shall review and finalize the report prior to submission to the CIAP and other departments within the agency for data banking and other purposes.

**12. INFORMATION UTILIZATION AND DATA BANKING**

The CPES rating and other information contained in the authenticated copies of Constructors Performance Summary Report (Annex 10) to be regularly

provided by government agencies concerned to CIAP's PDCB and centrally maintained by the same shall be made available to all interested users either electronically or in hard copy/diskette.

Pursuant to Section 12 (5), Annex E of the IRR of R.A. 9184, and to provide for a common and uniform application by all heads of agencies and instrumentalities of the national government, including government-owned and/or controlled corporations (GOCCs), government financial institutions (GFIs), state universities and colleges (SUCs), and local government units (LGUs), the CPES rating results shall be used for, but not limited to, the following purposes:

- 12.1 **Eligibility Check of Constructors** - The CPES rating shall form part of the requirements of the Bids and Award Committees (BACs) for eligibility check in the procurement of infrastructure projects pursuant to Item 4, Section 23.11.2 of the IRR of R.A. No. 9184, which provides that the CPES rating and/or certificate of completion and owner's acceptance of the contract must at least be satisfactory.
- 12.2 **Agency Shortlist** - The CPES rating shall be considered in the shortlisting and selection of constructors for Negotiated Procurement under Section 53.1; 53.2; 53.3; 53.4 of the IRR of RA 9184. Constructors with CPES ratings of at least "Satisfactory" may be considered by the BAC in the shortlist of eligible constructors to be invited for negotiation pursuant to Section 54.2 of the IRR of R.A. No. 9184.
- 12.3 **Post-Qualification** - The CPES rating shall be used in the review of the technical capabilities of a constructor-bidder during the post-qualification stage pursuant to Section 34.3.b.ii of the IRR of RA 9184 which requires the agency to "check the performance of the bidder in its on-going government and private contracts." For this purpose, the BACs shall ensure that the following conditions are met:
  - a) The constructor must not have a zero (0) rating for "Time" for on-going projects; and
  - b) The constructor must have a CPES rating of at least "Satisfactory" in all of his on-going projects.
- 12.4 **Awarding of Contracts** - The CPES ratings may be used by the agencies as additional reference to ensure appropriate awarding of contract.
- 12.5 **Issuance of Certificate of Completion for Projects Subjected to CPES Evaluation** - **The CPES Rating shall be used as basis for the issuance of the Certificate of Completion of projects evaluated using the CPES. If applicable, the concerned Implementing Office of each government agency is required to check compliance of constructors to all the Corrective Action Requests (CARs) recommended by the accredited CPES evaluators and issued by the Implementing Agency. The constructors' compliance with all the CARs issued and other**

**requirements of the project owner shall be the basis for the issuance of the Certificate of Completion.**

- 12.6 Project Monitoring and Control** - The CPES rating/information shall be used by agencies as a reference for project monitoring, audit, and quality control in ensuring the following, among others: a) compliance with contract provisions and specifications; b) prompt and effective action on problems encountered; c) compliance with safety and health regulations and d) compliance with environmental regulations.
- 12.7 Blacklisting of Constructors** - A constructor with a CPES rating of "Poor" or "Unsatisfactory" in any of his projects shall be blacklisted from participating in any **government project in accordance with Section 4.2 (f) of the GPPB Guidelines for Blacklisting of Constructors.**
- 12.8 Policy Formulation/Review** - The CPES rating and other related information shall serve as reference materials in the formulation and review of policies and procedures pertaining to, among others, eligibility check, bidding, award and contract implementation.
- 12.9 Industry Planning** - The CPES rating and other information shall serve as additional reference by the agency's Planning Department/Division, and the CIAP and PDCB in the preparation of plans and programs for the development of the construction sector, including measures to improve constructor's performance in government projects.
- 12.10 Granting of Awards & Recognition** - Constructors with CPES ratings of "Outstanding" shall be considered for awards and/or recognition for outstanding performance. For this purpose, the agency's CPES-IU and CIAP's PDCB shall ensure that the following conditions are met:
- a. The nominee must have at least three (3) projects with a consistent CPES final rating of "Outstanding (at least 96%)" within the period of review which is 3 years;
  - b. Projects already included in previous nominations shall no longer be considered;
  - c. No final CPES ratings of "Poor" and/or "Unsatisfactory" for the period under evaluation; and
  - d. The nominee has fully complied with and passed the CPES requirement on environmental, safety, and health concerns which include the submission to, and approval by, the DOLE of the Constructor's Construction Safety and Health Program.

The list of constructors who are awardees and granted recognition shall be posted conspicuously in the bulletin boards of government agencies and the GPPB's website.

CIAP's PDCB shall issue Certificates of Recognition to constructors with consistent CPES final ratings of "Outstanding".

**12.11 PCAB Registration and Classification** - When applicable, the CPES ratings shall form part of the requirements for Registration and Classification of government constructors pursuant to the guidelines to be issued by the PCAB.

### **13. APPLICABILITY**

These guidelines shall be applied to all constructors of all national government agencies, department, bureau, office, or instrumentality of the Government, including government-owned and/or controlled corporations (GOCCs), government financial institution (GFIs), state universities and colleges (SUCs), and local government units (LGUs) undertaking infrastructure projects.

Private entities may also use these guidelines to evaluate their constructors' project performance.

### **14. EFFECTIVITY**

These guidelines shall become effective upon approval by the National Economic and Development Authority (NEDA) Board's Committee on Infrastructure (INFRACOM) and fifteen (15) days after publication by CIAP.

## **LIST OF ACRONYMS**

1. AMO - Authorized Managing Officer
2. BAC - Bids and Award Committee
3. CAP - Corrective Action Plan
4. CAR - Corrective Action Request
5. CIAP - Construction Industry Authority of the Philippines
6. CPE - Constructors' Performance Evaluator
7. CPES - Constructors' Performance Evaluation System
8. DOLE - Department of Labor and Employment
9. ESH - Environmental, Safety and Health
10. GFIs - Government Financial Institutions
11. GOCCs - Government-Owned and/or Controlled Corporations
12. GPPB - Government Procurement Policy Board
13. INFRACOM - NEDA Board Committee on Infrastructure
14. IO - Implementing Office
15. IU - Implementing Unit
16. LGU - Local Government Unit
17. NEDA - National Economic and Development Authority
18. NGAs - National Government Agencies
19. NTP - Notice to Proceed
20. PAP - Preventive Action Plan
21. PCAB - Philippine Contractors Accreditation Board
22. PDCB - Philippine Domestic Construction Board
23. PE - Project Engineer
24. STE - Sustaining Technical Employee
25. SUCs - State Universities and Colleges



## **List of Annexes**

- Annex 1 - CPES Functional/Deployment Flowchart
- Annex 2 - Checklists for Workmanship
  - A. Road and Bridge Projects
  - B. Housing and Building Projects
  - C. Port and Harbor Projects
  - D. Irrigation Projects
  - E. Flood Control Projects
  - F. Power Transmission Line Projects
  - G. Substation Projects
  - H. Diesel Power Plant Projects
  - I. Mooring Facilities for Power Barges Projects
  - J. Site Development Projects
- Annex 3 - Checklist for Materials
- Annex 4 - Checklist for Time
- Annex 5 - Checklist for Facilities
- Annex 6 - Checklist for Environmental, Safety and Health (ESH)
- Annex 7 - Checklist for Resources Deployment
- Annex 8 - CPES Evaluation Form
- Annex 9 - Corrective Action Request (CAR) Form
- Annex 10 - Constructors Performance Summary Report
- Annex 11 - Schedule of Minimum Test Requirements Governing Items of Work of the DPWH Standard Specifications for Highways, Bridges and Airports, 1995 (Vol. II)  
  
Schedule of Minimum Test Requirements Governing Items of Work of the DPWH Standard Specifications for Highways, Bridges and Airports Using Test Requirements as Practiced by the National Transmission Corporation (TRANSCO) for Power Transmission Line and Substation Projects
- Annex 12 - List of Philippine National Standards (Construction Materials) for Mandatory Implementation

# **A N N E X 1**

## **CPES FUNCTIONAL/DEPLOYMENT FLOWCHART**

# **A N N E X 2**

## **CHECKLISTS FOR WORKMANSHIP**

- A. ROAD AND BRIDGE PROJECTS**
- B. HOUSING AND BUILDING PROJECTS**
- C. PORT AND HARBOR PROJECTS**
- D. IRRIGATION PROJECTS**
- E. FLOOD CONTROL PROJECTS**
- F. POWER TRANSMISSION LINE PROJECTS**
- G. SUBSTATION PROJECTS**
- H. DIESEL POWER PLANT PROJECTS**
- I. MOORING FACILITIES FOR POWER BARGES PROJECTS**
- J. SITE DEVELOPMENT PROJECTS**

## ANNEX 2-A

### CHECKLIST FOR ROAD AND BRIDGE

Item 100	Clearing and Grubbing	2A-1
Item 101	Removal of Structure and Obstruction	2A-1
Item 102	Excavation	2A-1
Item 103	Structure Excavation	2A-1
Item 104	Embankment	2A-1
Item 105	Subgrade Preparation	2A-1
Item 106	Compaction Equipment and Density Control Strips	2A-1
Item 107	Overhaul	2A-1
Item 200	Aggregate Subbase Course	2A-2
Item 201	Aggregate Base Course	2A-2
Item 202	Crushed Aggregate Base Course	2A-2
Item 203	Lime Stabilized Road Mix Base Course	2A-2
Item 204	Portland Cement Stabilized Road Mix Base Course	2A-2
Item 205	Asphalt Stabilized Road Mix Base Course	2A-2
Item 206	Portland Cement Treated Plant Mix Base Course	2A-2
Item 300	Aggregate Surface Course	2A-2
Item 301	Bituminous Prime Coat	2A-3
Item 302	Bituminous Tack Coat	2A-3
Item 303	Bituminous Seal Coat	2A-3
Item 304	Bituminous Surface Treatment	2A-3
Item 305	Bituminous Penetration Macadam Pavement	2A-3
Item 306	Bituminous Road Mix Surface Course	2A-3
Item 307	Bituminous Plant Mix Surface Course – General	2A-3
Item 308	Cold Asphalt Plant Mix	2A-3
Item 309	Bituminous Plant Mix (Stockpile Maintenance Mixture)	2A-3
Item 310	Bituminous Concrete Surface Course, Hot Laid	2A-3
Item 311	Portland Cement Concrete Pavement	2A-4
Item 400	Piling (Timber)	2A-5
Item 400	Piling (Steel)	2A-6
Item 400	Piling (Concrete)	2A-7
Item 401	Railings (Steel, Timber)	2A-8
Item 401	Railings (Masonry, Concrete)	2A-9
Item 402	Trowelled	2A-9
Item 403	Metal Structures	2A-10
Item 500	Pipe Culverts and Storm Drains	2A-11
Item 502	Manhole Inlets and Catch Basins	2A-11
Item 504	Cleaning and Reconditioning of Existing Drainage Structures	2A-11
Item 505	Riprap and Grouted Riprap	2A-12
Item 506	Stone Masonry	2A-12
Item 507	Rubble Concrete	2A-12
Item 508	Hand-laid Rock Embankment	2A-12
Item 509	Sheet Piles (Steel)	2A-13
Item 509	Sheet Piles (Concrete)	2A-14
Item 509	Sheet Piles (Timber)	2A-15
Item 510	Concrete Slope Protection	2A-16
Item 511	Gabion and Mattresses	2A-17
Item 602	Monuments, Markers and Guide Posts	2A-17
Item 603	Guardrail (Steel/Aluminum, Concrete, Timber)	2A-18
Item 603	Guardrail (Masonry)	2A-19
Item 604	Fencing	2A-20
Item 605	Road Signs	2A-20
Item 606	Pavement Markings	2A-20
Item 607	Reflective Pavement Studs	2A-20
Item 608	Topsoil	2A-20
Item 609	Spriggings	2A-20
Item 610	Sodding	2A-20
Item 611	Tree Planting	2A-20
Item 900	Formworks	2A-21
Item 901	Reinforcing Steel Bars	2A-21
Item 902	Concrete Works	2A-22
Item 903	Shotcrete	2A-23

# ANNEX 2-B

## CHECKLIST FOR HOUSING AND BUILDING

Item 100	Clearing and Grubbing	2B-1
Item 101	Excavation	2B-1
Item 102	Fill	2B-1
Item 103	Soil Poisoning	2B-1
Item 300	Structural Steel Works	2B-2
Item 301	Formworks	2B-3
Item 302	Reinforcing Steel Bars	2B-3
Item 303	Concrete Works	2B-4
Item 304	CHB Wall	2B-5
Item 305	Brick Wall	2B-5
Item 400	Floor Finish: Tiled Finish	2B-6
Item 401	Floor Finish: Carpet	2B-6
Item 402	Floor Finish: Wood Parquet	2B-6
Item 403	Floor Finish: Trowelled	2B-7
Item 404	Floor Finish: Pebble Washout	2B-7
Item 405	Floor Finish: Water Proofing	2B-7
Item 500	Wall Finish: Tiled Finish	2B-8
Item 501	Wall Finish: Wall Paper	2B-8
Item 502	Wall Finish: Plaster Finish	2B-8
Item 503	Wall Finish: Cladding	2B-8
Item 504	Wall Finish: Painting	2B-9
Item 600	Ceiling Works: Suspension	2B-10
Item 601	Ceiling Works: Ceiling Board	2B-10
Item 602	Ceiling Works: Moulding	2B-10
Item 603	Ceiling Works: Painting	2B-11
Item 604	Roofing System: Frames	2B-12
Item 605	Roofing System: Sheets	2B-12
Item 606	Roofing System: Tiles	2B-12
Item 607	Roofing System: Painting	2B-13
Item 700	Doors	2B-14
Item 701	Windows	2B-14
Item 702	Railings	2B-14
Item 800	Plumbing	2B-15
Item 801	Sanitary	2B-15
Item 802	Electrical Works	2B-16
Item 900	Generator Set	2B-17
Item 901	Air-conditioning System	2B-17
Item 902	Elevators	2B-17
Item 903	Pipe Culvert and Storm Drain	2B-18
Item 904	Manholes, Inlets and Catch Basin	2B-18
Item 905	Fencing, Gates	2B-18

# ANNEX 2-C

## CHECKLIST FOR PORTS AND HARBOR

Item 100	Breakwater, Bulkhead, Causeway, Jetty, Groin, Shore Protection Works	2C-1
Item 101	Gabions	2C-2
Item 200	Reinforced Concrete Piles	2C-3
Item 201	Timber Piles	2C-4
Item 202	Steel Piles	2C-5
Item 203	Timber Structural Member	2C-6
Item 204	Metal Structural Member	2C-6
Item 300	Rubber Dock Fender, Rubber Fender on RC Pile	2C-7
Item 301	Timber Pile Fender, Rubbing Timber, Timber Waling	2C-7
Item 302	Mooring Fixtures: Cleat, Post, Bitt, Bollard	2C-8
Item 303	Filter Fabric/Reinforcing Mattress	2C-8
Item 304	Stair Landing/Ladder	2C-9
Item 305	Bulkhead Curves and Deflector Wall	2C-9
Item 400	Roll-on/Roll-off	2C-10
Item 500	Lighting System	2C-11
Item 501	Reefer Container Power Terminal	2C-12
Item 502	Fire Alarm System	2C-13
Item 503	Transformers	2C-13
Item 504	Protection System for Outdoor Electrical Works	2C-14
Item 600	Stand-by Generator System	2C-15
Item 601	A.C. System/Cold Storage	2C-15
Item 602	Mechanical Ventilation	2C-16
Item 700	Reclamation Works	2C-17
Item 710	Dredging Works	2C-18
Item 800	Caisson Type Breakwater	2C-19
Item 801	Concrete Blocks/Tetrapods	2C-19
Item 802	Navigational Aids	2C-19
Item 900	Formworks	2C-20
Item 901	Reinforcing Steel Bars	2C-20
Item 902	Concrete Works	2C-21
Item 903	Electrical Works	2C-22
Item 904	CHB Wall	2C-23
Item 905	Doors	2C-23
Item 906	Plaster Finish	2C-24
Item 907	Painting	2C-24
Item 908	Pipe Culvert and Storm Drain	2C-25
Item 909	Manholes, Inlets and Catch Basin	2C-25
Item 910	Sheets	2C-26

# ANNEX 2-D

## CHECKLIST FOR IRRIGATION

Item 002	Clearing and Grubbing	2D-1
Item 003	Diversion and Care of River During Construction and Dewatering of Foundation	2D-2
Item 004	Canal/Channel Excavation	2D-3
Item 006	Structure Excavation	2D-4
Item 007	Drilling and Grouting	2D-5
Item 008	Farm and Drainage Ditch Construction	2D-6
Item 009	Overhaul	2D-7
Item 010	Side Borrow	2D-8
Item 011	Borrow Haul	2D-9
Item 012	Structure Backfill	2D-10
Item 013	Embankment Construction and Compaction	2D-11
Item 014	Roads	2D-12
Item 015	Concrete Works	2D-13
Item 016	Concrete Demolition Works	2D-14
Item 018	Shotcrete	2D-15
Item 019	Rubble Masonry	2D-16
Item 020	Concrete Canal Lining	2D-17
Item 021	Concrete Joints and Joint Materials	2D-18
Item 022	Dowels	2D-19
Item 023	Reinforcing Steel Bars	2D-20
Item 024	Reinforced Concrete Pipes	2D-21
Item 025	Boulder Riprap	2D-22
Item 026	Gabion-type Riprap	2D-22
Item 027	Grouted Riprap	2D-22
Item 028	Gravel Blanket	2D-23
Item 029	Filter Drain	2D-24
Item 030	Plain Concrete Drain Pipe	2D-25
Item 031	Reinforced Concrete Piles	2D-26
Item 032	Steel Sheet Piles	2D-27
Item 033	Steel Gates and Lifting Mechanism	2D-28
Item 034	Steel Pipe Manhole, Blow-off Valve and Manhole Cover	2D-29
Item 035	Miscellaneous Metal Works and Materials	2D-30
Item 036	Painting	2D-31
Item 037	Asphalt Concrete Surfacing – Plant Mix	2D-32
Item 038	Pressure Relief Valve	2D-33
Item 039	Bio-Engineering for Erosion Control and Slope Stabilization	2D-34

## ANNEX 2-E

### CHECKLIST FOR FLOOD CONTROL

Item 1700	Clearing and Grubbing	2E-1
Item 1701	Channel Excavation	2E-1
Item 1702	Structure Excavation	2E-1
Item 1703	Dredging	2E-2
Item 1704	Embankment	2E-2
Item 1707	Aggregate Sub-base Course	2E-3
Item 1708	Aggregate Base Course	2E-3
Item 1709	Crushed Aggregate Base Course	2E-3
Item 1710	Riprap/Grouted Riprap	2E-4
Item 1711	Stone Masonry	2E-4
Item 1713	Rubble Concrete/Sand or Stone Masonry	2E-4
Item 1712	Concrete Slope Protection	2E-5
Item 1714	Gabions and Mattresses	2E-6
Item 1715	Filter Fabric	2E-6
Item 1716	Piling Works (Timber)	2E-7
Item 1716	Piling Works (Steel)	2E-8
Item 1716	Piling Works (Concrete)	2E-9
Item 1717	Sheet Piles (Concrete)	2E-10
Item 1717	Sheet Piles (Steel)	2E-11
Item 1717	Sheet Piles (Timber)	2E-12
Item 1718	Pipe Culvert and Storm Drain	2E-13
Item 1720	Manholes, Inlets, Catch Basins	2E-14
Item 1723	Formworks	2E-15
Item 1724	Reinforcing Steel Bars	2E-15
Item 1725	Concrete Works	2E-16
Item 1726	Electrical Works	2E-17
Item 1727	Generator Set	2E-18
Item 1728	Sodding	2E-19
Item 1729	Bio-Engineering for Erosion Control & Stabilization	2E-20



# ANNEX 2-F

## CHECKLIST FOR POWER TRANSMISSION LINE

### Clearing

Item 100	ROW Clearing	2F-1
Item 101	Slope Cutting	2F-1

### Foundation

Item 200	Excavation	2F-2
Item 201	Stubs Setting	2F-2
Item 202	Anchor Bolts Setting	2F-2
Item 203	Backfilling	2F-3
Item 204	Grounding System	2F-3
Item 205	Formworks	2F-4
Item 206	Reinforcing Steel Bars	2F-4
Item 207	Concrete	2F-5

### Slope Protection

Item 300	Riprap	2F-6
Item 301	Grouted Riprap	2F-6
Item 302	Rockwall	2F-6
Item 303	Gabions	2F-7
Item 304	Fill	2F-7
Item 305	Sodding	2F-7
Item 306	Sprigging	2F-7

### Erection

Item 400	Latticed Structure (Tower)	2F-8
Item 401	Steel Poles	2F-9
Item 402	Wood Poles	2F-9
Item 403	Concrete Poles	2F-9
Item 404	Guy	2F-9

### Dressing

Item 500	Installation of Insulator String Assembly and Ground Wire Set	2F-10
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### Stringing

Item 600	Pay-out of OHGW/ACSR	2F-11
Item 601	Final Sag of Conductors and Overhead Ground Wire	2F-11
Item 602	Installation of Tension Clamps & Hardwares	2F-11
Item 603	Installation of Suspension Clamps & Hardwares	2F-11
Item 604	Installation of Jumper Wires	2F-12
Item 605	Installation of Vibration Dampers	2F-12
Item 606	Installation of Conductor Spacer	2F-12
Item 607	Installation of Joint Box and Other Accessories for OPGW	2F-12
Item 608	Splicing of OPGW	2F-13
Item 609	Splicing of ACSR	2F-13
Item 610	Splicing of OHGW	2F-13
Item 611	Other Accessories	2F-13

### Submarine Cable

Item 700	Trenching Works (Onshore)	2F-14
Item 701	Submarine Cable Laying	2F-14
Item 702	Installation of Accessories	2F-14
Item 703	Backfilling Works (Going to CTS)	2F-14

### Underground Cable

Item 800	Trenching Works (Offshore)	2F-15
Item 801	Grounding Hole	2F-15
Item 802	Underground Cable Laying	2F-15
Item 803	Terminating Cable	2F-16
Item 804	Splice Joint	2F-16
Item 805	Splicing of Cable	2F-16

### Pre-Commissioning

Item 900	Pre-Commissioning	2F-17
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# ANNEX 2-G

## CHECKLIST FOR SUBSTATION

### Site Development

Item 100	Boundary Establishment	2G-1
Item 101	Clearing and Grabbing	2G-1
Item 102	Removal of Structure and Obstruction	2G-1
Item 103	Grading Excavation	2G-1
Item 104	Structure Excavation	2G-1
Item 105	Embankment	2G-2
Item 106	Subgrade Preparation	2G-2
Item 107	Grading Fill	2G-2
Item 108	Backfill	2G-2
Item 109	Selected Fill	2G-2
Item 110	Aggregate Sub-base Course	2G-3
Item 111	Aggregate Base Course	2G-3
Item 112	Portland Cement Concrete Pavement	2G-4
Item 113	Pipe Culvert and Storm Drains	2G-5
Item 114	Manholes, Inlets, and Catch Basins	2G-5
Item 115	Riprap and Grouted Riprap	2G-6
Item 116	Gabion	2G-6
Item 117	Topsoil	2G-7
Item 118	Sprigging	2G-7
Item 119	Sodding	2G-7
Item 120	Ornament Plant/Tree Planting	2G-7
Item 121	Perimeter Fence	2G-7
Item 122	Gate	2G-8
Item 123	Outdoor, Roadway and Perimeter Lighting System	2G-8
Item 124	Deepwell Drilling and Development	2G-9
Item 125	Deepwell Submersible Pump	2G-9
Item 126	Elevated Steel Water Tank	2G-10
Item 127	Domestic Water Supply Piping System	2G-10

### Building

Item 200	Excavation	2G-11
Item 201	Fill and Backfill, Selected Fill	2G-11
Item 202	Soil Poisoning	2G-11
Item 203	CHB Wall	2G-12
Item 204	Brick Wall	2G-12
Item 205	Tiled Finish	2G-13
Item 206	Carpet	2G-13
Item 207	Wood Parquet	2G-13
Item 208	Trowelled Floor Finish	2G-14
Item 209	Pebble Wash-Out	2G-14
Item 210	Waterproofing	2G-14
Item 211	Wall Paper	2G-15
Item 212	Wall Plaster Finish	2G-15
Item 213	Wall Cladding	2G-15
Item 214	Wall Painting	2G-16
Item 215	Ceiling Suspension	2G-16
Item 216	Ceiling Board	2G-17
Item 217	Ceiling Moulding	2G-17
Item 218	Roofing Frames	2G-17
Item 219	Roofing Sheets	2G-18
Item 220	Doors	2G-18
Item 221	Windows	2G-18
Item 222	Railings	2G-18
Item 223	Plumbing	2G-19
Item 224	Sanitary	2G-19
Item 225	Structural Steel Works	2G-20
Item 226	Electrical Works	2G-21
Item 227	Air Conditioning System	2G-22
Item 228	Ventilation System	2G-22

## **Equipment Foundations**

Item 300	Excavation	2G-23
Item 301	Fill and Backfill	2G-23
Item 302	Anchor Bolt Setting	2G-23
Item 303	Cable Trench Cover and Supports	2G-24
Item 304	Gravel Surfacing	2G-24

## **Common Items of Work**

Item 400	Formworks	2G-25
Item 401	Reinforcing Steel Bars (including tendons for Pre/Post-Stressed Concrete)	2G-25
Item 402	Concrete	2G-26

## **S/S Equipment Installation**

Item 500	Gantries, Steel Structures and Supports	2G-27
Item 501	Bus Conductors and Hardwares	2G-27
Item 502	Grounding System	2G-28
Item 503	Power Transformer	2G-29
Item 504	Power Circuit Breaker	2G-29
Item 505	Disconnect/Earthing Switch	2G-30
Item 506	Current Transformer	2G-30
Item 507	Voltage Transformer	2G-30
Item 508	Surge Arrester	2G-31
Item 509	Metal Clad Switch Gear	2G-31
Item 510	Station Service Transformer	2G-31
Item 511	AC and DC Station Auxiliary Switchboard	2G-32
Item 512	Battery Charger	2G-32
Item 513	Storage Battery	2G-33
Item 514	Power/Control Instrumentation Cables	2G-33
Item 515	Uninterruptible Power Supply	2G-34
Item 516	Insulating Oil Treatment Plant	2G-35
Item 517	Emergency Diesel Generator Set	2G-35
Item 518	Lighting System	2G-36
Item 519	Conduits and Cable Tray System	2G-37

## **Telecom System**

Item 600	Microwave Equipment	2G-38
Item 601	Fiber Optic Terminal Equipment	2G-39
Item 602	Power Line Carrier Equipment	2G-39
Item 603	Telephone Equipment	2G-40
Item 604	UHF/VHF Radio Equipment	2G-40
Item 605	Antenna Tower	2G-41
Item 606	Fiber Optic Cable (Linking the Station)	2G-42

## **Control System**

Item 700	Microprocessor Based Control System	2G-43
Item 701	Closed Circuit Television System	2G-43
Item 702	Access Control and Alarm Monitoring System	2G-44

## **Protection System**

Item 800	Line Protection System	2G-45
Item 801	Substation Protection	2G-45
Item 802	Network Disturbance Monitoring System	2G-46
Item 803	Protection Signaling Equipment	2G-46

## **Fire Protection System**

Item 900	Fire Pumping System	2G-47
Item 901	Fire Protection Piping System	2G-47
Item 902	Outdoor Hydrant	2G-48
Item 903	Hydrant for Transformer Area	2G-48
Item 904	Portable Fire Extinguisher	2G-48
Item 905	Portable Foam Equipment with Foam Concentrate	2G-48
Item 906	Transformer Deluge Water Sprinkler System	2G-48
Item 907	Total Gas Flooding Fire Suppression System (For Control Relay Room and Auxiliary Room)	2G-49
Item 908	Fire Detection and Alarm System	2G-49

# ANNEX 2-H

## CHECKLIST FOR DIESEL POWER PLANT

### Site Development

Item 100	Boundary Establishment	2H-1
Item 101	Clearing and Grabbing	2H-1
Item 102	Removal of Structure and Obstruction	2H-1
Item 103	Grading Excavation	2H-1
Item 104	Structure Excavation	2H-1
Item 105	Embankment	2H-2
Item 106	Subgrade Preparation	2H-2
Item 107	Grading Fill	2H-3
Item 108	Selected Fill/Engineered fill	2H-3
Item 109	Aggregate Sub-base Course/Aggregate Base Course	2H-4
Item 110	Portland Cement Concrete Pavement	2H-5
Item 111	Pipe Culvert and Storm Drains	2H-6
Item 112	Manholes, Inlets, and Catch Basins	2H-6
Item 113	Riprap and Grouted Riprap	2H-7
Item 114	Gabion /Mattresses	2H-7
Item 115	Topsoil	2H-8
Item 116	Sprigging/Sodding	2H-8
Item 117	Ornament Plant/Tree Planting	2H-8
Item 118	Perimeter/Seclusion Fence	2H-9
Item 119	Gate / Guardhouse	2H-10
Item 120	Outdoor, Roadway and Perimeter Lighting System	2H-10
Item 121	Deepwell Drilling and Development	2H-10
Item 122	Deepwell Submersible Pump	2H-11
Item 123	Elevated Steel Water Tank	2H-11
Item 124	Domestic Water Supply Piping System	2H-12
Item 125	Gravel Surfacing	2H-12
Item 126	Concrete Drainage Canal	2H-13
Item 127	Oil-Water Separator	2H-13
Item 128	Rockwall/Retaining Wall	2H-13

### Powerhouse Building

Item 200	Fill and Selected Fill	2H-14
Item 201	Soil Poisoning	2H-14
Item 202	CHB Wall	2H-14
Item 203	Brick Wall	2H-15
Item 204	Tiled Finish	2H-15
Item 205	Trowelled Floor Finish	2H-15
Item 206	Pebble Wash-Out	2H-16
Item 207	Waterproofing	2H-16
Item 208	Wall Paper	2H-16
Item 209	Wall Plaster Finish	2H-16
Item 210	Wall Cladding	2H-17
Item 211	Wall/Roof Painting	2H-17
Item 212	Ceiling Suspension	2H-17
Item 213	Ceiling Board	2H-18
Item 214	Ceiling Moulding	2H-18
Item 215	Roofing Frames	2H-18
Item 216	Roofing Sheets	2H-18
Item 217	Doors	2H-19
Item 218	Windows	2H-19
Item 219	Railings	2H-19
Item 220	Plumbing	2H- 20
Item 221	Sanitary	2H- 20
Item 222	Structural Steel Works	2H- 21
Item 223	Electrical Works	2H- 22
Item 224	Air Conditioning System	2H- 23
Item 225	Ventilation System	2H- 23
Item 226	Septic Vaults	2H- 23

**Equipment Foundations**

Item 300	Fill / Sand and Gravel Bedding	2H-24
Item 301	Lean Concrete	2H-24
Item 302	Anchor Bolt Setting	2H-24
Item 303	Epoxy and Non-Cementitious Grouting	2H-24
Item 304	Cable Trench Cover and Supports	2H-25
Item 305	Gravel Surfacing	2H-25

**Common Items of Works**

Item 400	Excavation	2H-26
Item 401	Backfill	2H-26
Item 402	Formworks	2H-26
Item 403	Reinforcing Steel Bars (including tendons for Pre/Post-Stressed Concrete)	2H-27
Item 404	Concrete	2H-28

**Equipment Installation**

Item 500	Diesel Generator Set and its Appurtenances	2H-29
Item 501	Fuel Oil System	2H-29
Item 502	Cooling System	2H-30
Item 503	Cooling Water Supply System	2H-30
Item 504	Lubrication Oil System	2H-31
Item 505	Compressed Air System	2H-31
Item 506	Exhaust System	2H-32
Item 507	Domestic Water Supply System	2H-32
Item 508	Power Transformer	2H-33
Item 509	Power Circuit Breaker	2H-34
Item 510	Station Service Transformer	2H-34
Item 511	Kilowatt Hour Billing Meter	2H-35
Item 512	Current Transformer	2H-35
Item 513	Potential/Voltage Transformer	2H-35
Item 514	Metal Clad Switch Gear	2H-36
Item 515	Disconnect/Earthing Switch	2H-36
Item 516	Power/Control and Protection Panel	2H-37
Item 517	Surge/Lightning Arrester	2H-37
Item 518	Uninterruptible Power Supply	2H-38
Item 519	Storage Battery	2H-38
Item 520	Battery Charger	2H-39
Item 521	Grounding System	2H-40
Item 522	Bus Conductors and Hardwares	2H-41
Item 523	Gantries, Steel Structures and Supports	2H-41
Item 524	Power/Control/ Instrumentation Cables	2H-42
Item 525	Conduits and Cable Tray System	2H-43

## ANNEX 2-1

### CHECKLIST FOR MOORING FACILITIES FOR POWER BARGES

Item 100	Site Development	2I -1
Item 101	Breakwater, Bulkhead, Causeway, Jetty Groin, Shore Protection Works, i.e, Slope Protection (Riprap, Rubble, Stone Masonry)	2I -1
Item 102	Gabions/Mattresses	2I -2
Item 103	Reinforced Concrete Piles	2I -3
Item 104	Timber/Wooden Piles	2I -4
Item 105	Steel Piles	2I -5
Item 106	Breasting and Mooring Dolphins	2I -6
Item 107	Bits/Cleats/Bollards	2I -6
Item 108	Take-Off Structures	2I -7
Item 109	Rubber Fender	2I -7
Item 110	Reclamation Works	2I -8
Item 111	Dredging Works	2I -8
Item 112	Formworks	2I -8
Item 113	Reinforcing Steel Bars (Including Tendons for Pre/Post-stressed Concrete	2I -9
Item 114	Concrete Works	2I -9
Item 115	Catwalk/Stair Landing/Ladder	2I -10
Item 116	Piping Works	2I -10
Item 117	Painting Works	2I -10
Item 118	Electrical Works	2I -11
Item 119	Grounding System	2I -12

# ANNEX 2-J

## CHECKLIST FOR SITE DEVELOPMENT

Item 100	Clearing and Grubbing	2J-1
Item 101	Excavation	2J-1
Item 102	Earthfill	2J-1
Item 103	Planting of Trees and Shrubs	2J-1
Item 200	Formworks	2J-2
Item 201	Reinforcing Steel Bars (Including Tendons for Pre/ Post-stressed Concrete	2J-2
Item 300	Concrete Works	2J-3
Item 301	CHB Wall	2J-4
Item 400	Paver Blocks/Concrete Blocks	2J-5
Item 401	stamped Concrete	2J-5
Item 402	Grass Pavers	2J-5
Item 403	Trowelled Finish/Broomed Finish	2J-6
Item 404	Pebble Wash-out	2J-6
Item 405	Decorative Boulders	2J-6
Item 406	Garden Tile/Stone Finish	2J-7
Item 407	Wall Bricks/Stone Finish	2J-7
Item 408	Plaster Finish	2J-7
Item 409	Cladding	2J-7
Item 500	Painting	2J-8
Item 600	Play Facilities	2J-9
Item 601	Trellis/Gazebo	2J-9
Item 602	Moulding/Moulding Strips	2J-9
Item 603	Entrance Gate	2J-10
Item 604	Park Fence	2J-10
Item 605	Railings	2J-10
Item 700	Plumbing	2J-11
Item 701	Sanitary	2J-11
Item 800	Electrical Works	2J-12
Item 900	Pipe Culvert and Storm Drain	2J-13
Item 901	Manhole, Inlets and Catch Basin	2J-13

# **A N N E X 3**

## **CHECKLIST FOR MATERIALS**



# **A N N E X 4**

## **CHECKLIST FOR TIME**

# **A N N E X 5**

## **CHECKLIST FOR FACILITIES**

# **A N N E X 6**

## **CHECKLIST FOR ENVIRONMENTAL, SAFETY AND HEALTH**

# **A N N E X 7**

## **CHECKLIST FOR RESOURCES DEPLOYMENT**

# **A N N E X 8**

## **CPES EVALUATION FORM**

Part I	General Information Sheet	8-1
Part II	During Construction Rating Sheet	8-2
Part III	Upon Completion Rating Sheet	8-3

# **A N N E X 9**

## **CORRECTIVE ACTION REQUEST (CAR) FORM**

# **A N N E X 10**

## **CONSTRUCTORS PERFORMANCE SUMMARY REPORT**

General Information Sheet	10-1
Non-Compliance Findings	10-2
List of Problems Encountered	10-3
Proposed Corrective Actions	10-3

Note: This summary report shall be submitted by the CPES-IU to CIAP based on the evaluation results.

# ANNEX 11

## SCHEDULE OF MINIMUM TEST REQUIREMENTS GOVERNING ITEMS OF WORK OF THE DPWH STANDARD SPECIFICATIONS FOR HIGHWAYS, BRIDGES AND AIRPORTS

### A. Applicable for Irrigation and Flood Control Projects

Part C	Earthworks (Items 102, 103, 104, 105, 106)	11-1
Part D	Sub-base and Base Course (Items 200, 201, 202, 203, 204, 205, 206, 207)	11-1
Part E	Surface Course (Items 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310)	11-3
Part F	Bridge Construction (Items 311, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411)	11-7
Part G	Drainage and Slope Protection (Items 500, 501, 502, 503, 504, 505, 506, 507, 508, 509)	11-9
Part H	Miscellaneous Structure (Item 600, 601, 602, 604, 605, 606, 607, 608, 609, 610, 611)	11-10
Part I	Materials Details (Items 700, 701, 702, 703, 703A, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714)	11-11



# **A N N E X 11-B**

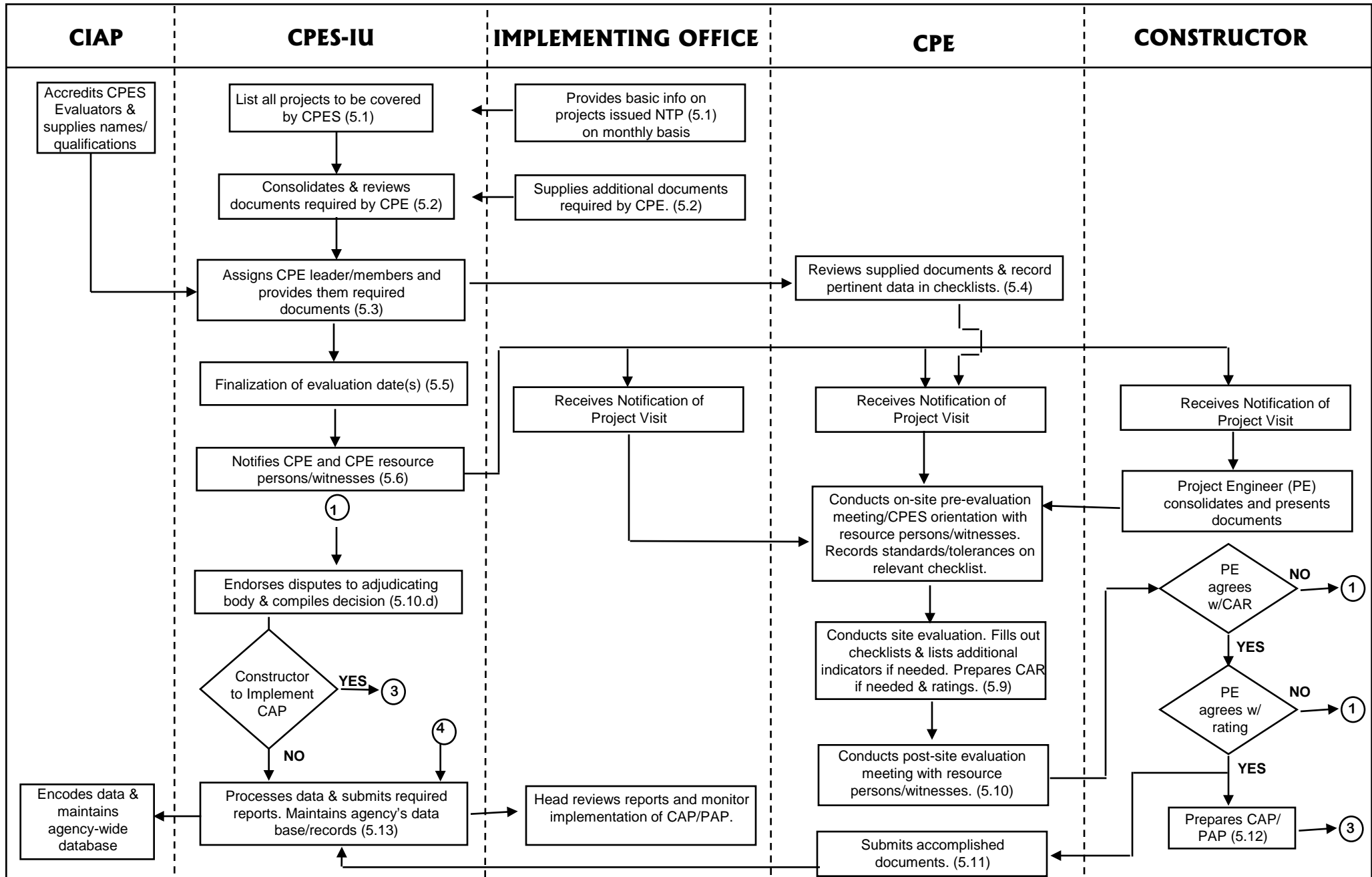
## **SCHEDULE OF MINIMUM TEST REQUIREMENTS GOVERNING ITEMS OF WORK OF THE DPWH STANDARD SPECIFICATIONS FOR HIGHWAYS, BRIDGES AND AIRPORTS AS PRACTICED BY THE NATIONAL TRANSMISSION CORPORATION (TRANSCO)**

Part C	Earthworks (Items 100, 101, 102, 103, 104, 105)	11B-1
Part D	Sub-base and Base Course (Items 200, 201, 202)	11B-1
Part E	Surface Course (Items 311)	11B-2
Part F	Bridge Construction (Items 400, 404, 405, 407)	11B-3
Part G	Drainage and Slope Protection (Items 504, 505, 508)	11B-4
Part H	Miscellaneous Structure (Item 600, 601)	11B-4
Part I	Materials Details (Items 704, 708)	11B-4

# **A N N E X 12**

**PHILIPPINE NATIONAL STANDARDS (CONSTRUCTION  
MATERIALS) FOR MANDATORY IMPLEMENTATION**

# CPES FUNCTIONAL/DEPLOYMENT FLOWCHART



**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Road  
 LOCATION: \_\_\_\_\_

ITEM: Earthworks  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score ____ x factor	Action Monitor
Sub-item Code	Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).			
<b>Item 100 Clearing &amp; Grubbing, Item 101 Removal of Structure and Obstruction</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
RBWS-10_-01	Proper removal of undisputed stumps roots and non-perishable solid objects/structures, vegetation, debris, tree and other obstructions (within carriageway)	/	____ x ____ =	
<b>Minor</b>				
RBWS-10_-01	Proper removal of undisputed stumps roots and non-perishable solid objects/structures, vegetation, debris, tree and other obstructions (outside carriageway)	/	____ x ____ =	
RBWS-10_-02	Conformance to proper disposal	/	____ x ____ =	
		/	____ x ____ =	
<b>Item 102 Excavation, Item 103 Structure Excavation</b>				
<b>Major</b>				
RBWS-10_-01	Conformance with approved/specified tolerances for lines, grades, cross-section, elevation, & dimensions (if no longer correctible, e.g., with in-placed structure)	/	____ x ____ =	
<b>Minor</b>				
RBWS-10_-01	Conformance with approved/specified tolerances for lines, grades, cross-section, elevation, & dimensions (correctible)	/	____ x ____ =	
RBWS-10_-02	Adherence to proper construction methodology	/	____ x ____ =	
RBWS-10_-03	Conformance to proper disposal	/	____ x ____ =	
		/	____ x ____ =	
<b>Item 104 Embankment, Item 105 Subgrade Preparation</b>				
<b>Major</b>				
RBWS-10_-01	Adherence to proper construction methodology (if no longer correctible, e.g., layering, Item 105 not undertaken)	/	____ x ____ =	
RBWS-10_-02	Conformance with approved/specified tolerances for lines, grades, cross-section, elevation, & dimensions (if no longer correctible, e.g., with in-placed structure)	/	____ x ____ =	
RBWS-10_-03	Adherence to compaction procedure and required equipment (if no longer correctible, e.g., done in layers but do not meet required compaction and succeeding layer was laid)	/	____ x ____ =	
<b>Minor</b>				
RBWS-10_-01	Adherence to proper construction methodology	/	____ x ____ =	
RBWS-10_-02	Conformance with approved/specified tolerances for lines, grades, cross-section, elevation, & dimensions (correctible)	/	____ x ____ =	
RBWS-10_-03	Adherence to compaction procedure and required equipment (correctible)	/	____ x ____ =	
		/	____ x ____ =	
<b>Item 106 Compaction Eqpt. &amp; Density Control Strips, Item 107 Overhaul</b>				
<b>Major</b>				
RBWS-10_-01	Hauling distance for excavated materials claimed/considered overhaul beyond freehaul distance	/	____ x ____ =	
		/	____ x ____ =	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____ Date: / /			No. of Indicators (b) =	
			Rate = (a) / (b) =	
			Rate =	

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Road  
 LOCATION: \_\_\_\_\_

ITEM: Base & Sub-Base Course  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS				
Sub-item Code	Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).	Results	Score _____ x factor	Action Monitor
<b>SUB-BASE/BASE COURSE / Item 200, Aggregate Sub-Base Course, Item 201 Agg. Base Course, 202 Crushed Aggregate Base, 203 Lime Stabilized Road Mix Base, 204 Portland Cement Stabilized Road Mix Base, 205 Asphalt Stabilized Road Base, 206 Portland Cement Treated Plant Mix Base, 300 Aggregate Surface Course.</b>				
<b>Major*</b> * Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects				
RBWS-20_-01	Conformance of in-placed materials to plans and specifications	/	= _____ X _____	
RBWS-20_-02	Adherence to proper construction methodology (if no longer correctible, e.g., layering)	/	= _____ X _____	
RBWS-20_-03	Conformance w/ approved/specified tolerances on lines, grades, cross-section, thickness, elevation, dimensions & plans (if no longer correctible, e.g., not extended to shoulder and other succeeding items are already in-placed)	/	= _____ X _____	
RBWS-20_-04	Conformance to the required compaction	/	= _____ X _____	
<b>Minor</b>				
RBWS-20_-01	Conformance of in-placed materials to plans and specifications	/	= _____ X _____	
RBWS-20_-02	Conformance to required layering	/	= _____ X _____	
RBWS-20_-03	Conformance w/ approved/specified tolerances on lines, grades, cross-section, thickness, elevation, dimensions & plans (correctible)	/	= _____ X _____	
RBWS-20_-04	Conformance to the required compaction	/	= _____ X _____	
RBWS-20_-05	Sub-base/Base extended to shoulders	/	= _____ X _____	
RBWS-20_-06	Non-occurrence of subbase settlement/upheaval	/	= _____ X _____	
RBWS-20_-07	Provision of required stakes	/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
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		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____ Date: / /			No. of Indicators (b) =	
			Rate = (a) / (b) =	
			Rate =	

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Road  
 LOCATION: \_\_\_\_\_

ITEM: Surface Course  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score _____ x factor	Action Monitor
Sub-item Code	Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).			
<b>Item 301 Bituminous Prime Coat, Item 302 Bituminous Tack Coat, Item 303 Bituminous Seal Coat</b>				
<b>Major</b>				
RBWS-30_-01	Conformance of in-placed materials to plans and specifications	/	= _____ X _____	
RBWS-30_-02	Observance of the required drying time	/	= _____ X _____	
<b>Minor</b>				
RBWS-30_-03	Conformance to the required rate and method of application	/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
<b>Item 304 Bituminous Surface Treatment, 305 Bit. Penetration Macadam Pavement, 306 Bit. Rd. Mix Surface Course, 307 Bit. Plant Mix Surface Course, 308 Bit. Plant Mix Surface Course, 309 Bit. Plant Mix (Stockpile Maintenance Mixture), 310 Bituminous Concrete Surface Course (Hot Laid)</b>				
<b>Major*</b>		* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects		
RBWS-30_-01	Conformance of in-placed materials to plans and specifications	/	= _____ X _____	
RBWS-30_-02	Monitoring/checking of temperature mix prior to placing/spreading/compaction	/	= _____ X _____	
RBWS-30_-03	Conformance to the temperature requirement	/	= _____ X _____	
RBWS-30_-04	No alligator and longitudinal cracks	/	= _____ X _____	
RBWS-30_-05	Conformance to the approved/specified tolerances for thickness, width, length, slope and cross-section (>10% deficient)	/	= _____ X _____	
RBWS-30_-06	No bleeding on asphalt pavement (> 1 sq. m.)	/	= _____ X _____	
RBWS-30_-07	No upheaval (severe and needs R/R)	/	= _____ X _____	
RBWS-30_-08	No ravelling (severe and needs R/R)	/	= _____ X _____	
<b>Minor</b>				
RBWS-30_-05	Conformance to the approved/specified tolerances for thickness, width, length, slope and cross-section (≤10% deficient)	/	= _____ X _____	
RBWS-30_-06	No bleeding on asphalt pavement (≤1 sq.m)	/	= _____ X _____	
RBWS-30_-07	No upheaval	/	= _____ X _____	
RBWS-30_-08	No ravelling	/	= _____ X _____	
RBWS-30_-09	No temperature cracks	/	= _____ X _____	
RBWS-30_-10	Conformance to the required density	/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: / /

Total Score (a)	CAR Total
=	
No of Indicators (b)	
=	
Rate = (a) / (b)	
=	
Rate	
=	

### CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Road  
 LOCATION: \_\_\_\_\_

ITEM: Surface Course  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score _____ x factor	Action Monitor
<b>Item 311 Portland Cement Concrete Pavement (PCCP)</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
RBWS-311-01	No longitudinal cracks	/	= _____ X _____	
RBWS-311-02	Conformance to vibration requirement	/	= _____ X _____	
RBWS-311-03	Conformance to quality of concrete mix	/	= _____ X _____	
RBWS-311-04	Conformance to requirements of construction joints (outside middle thirds)	/	= _____ X _____	
RBWS-311-05	No through cracks (all types of cracks)	/	= _____ X _____	
RBWS-311-06	No scaling (severe, needs Removal and Replacement)	/	= _____ X _____	
RBWS-311-07	Conformance to the approved/specified tolerances for thickness, width, length, slope and cross-section (>10% deficient)	/	= _____ X _____	
<b>Minor</b>				
RBWS-311-05	No cracks e.g. transverse, diagonal, temperature, corner, restraint	/	= _____ X _____	
RBWS-311-06	No scaling	/	= _____ X _____	
RBWS-311-07	Conformance to the approved/specified tolerances for thickness, width, length, slope and cross-section (≤10% deficient)	/	= _____ X _____	
RBWS-311-08	No honeycomb	/	= _____ X _____	
RBWS-311-09	No spalling	/	= _____ X _____	
RBWS-311-10	No chipped-off edges	/	= _____ X _____	
RBWS-311-11	Conformance to required size, location & spacing of tie bars and dowel bars as per specifications	/	= _____ X _____	
RBWS-311-12	Conformance to proper curing procedures	/	= _____ X _____	
RBWS-311-13	Utilization of templates prior to pouring	/	= _____ X _____	
RBWS-311-14	Conformance to placing requirement which will not result to segregation of aggregates, cold joints, misalignment	/	= _____ X _____	
RBWS-311-15	Conformance to required amount of asphalt sealant on weakened plane joints (insufficient and excessive application)	/	= _____ X _____	
RBWS-311-16	Conformance to requirement of pavement blockings (include depths and widths of weakened plane joints)	/	= _____ X _____	
RBWS-311-17	No hardened/spilled concrete on pavement	/	= _____ X _____	
RBWS-311-18	No pokemarks/tire marks/animal footmarks/skid marks, etc.	/	= _____ X _____	
RBWS-311-19	Conformance to proper finishing of concrete (brooming)	/	= _____ X _____	
RBWS-311-20	Conformance to formworks requirements (wooden, defective steel and not applied with oil/grease)	/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: / /

Total Score (a) =	CAR Total
No. of Indicators (b) =	
Rate = (a) / (b) =	
Rate =	

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Bridge  
 LOCATION: \_\_\_\_\_

ITEM: Piling  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score _____ x factor	Action Monitor
Sub-item Code	Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).			
<b>Item 400 Piling</b>				
<b>400-1 Timber Piles</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
RBWS-400-1-01	Conformance of in-placed materials to plans and specifications	/	_____x_____	
RBWS-400-1-02	Conformance to construction methodology (installation, location and type)	/	_____x_____	
RBWS-400-1-03	Conformance to splicing requirements	/	_____x_____	
RBWS-400-1-04	Conformance to proper installation, e.g. conformance to required slope, embedment, alignment, plumbness (>20 mm / m), elevation, location (>150 mm) & spacing	/	_____x_____	
RBWS-400-1-05	Piles provided with gradation marks (driven)	/	_____x_____	
<b>Minor</b>				
RBWS-400-1-04	Conformance to proper installation, e.g. conformance to required slope, embedment, alignment, plumbness (≤20 mm / m), elevation, location (≤150 mm) & spacing	/	_____x_____	
RBWS-400-1-05	Piles provided with gradation marks (stockpile)	/	_____x_____	
RBWS-400-1-06	Conformance to approved/specified tolerances for length, width, thickness and or diameter	/	_____x_____	
RBWS-400-1-07	No loose knots, decay, splits, worm holes, and warp	/	_____x_____	
RBWS-400-1-08	Non-splintering/brooming of timber pile end beyond specified allowance	/	_____x_____	
RBWS-400-1-09	No cracks	/	_____x_____	
RBWS-400-1-10	Provision of pile cap	/	_____x_____	
		/	_____x_____	
		/	_____x_____	
		/	_____x_____	
		/	_____x_____	
		/	_____x_____	
		/	_____x_____	
		/	_____x_____	
		/	_____x_____	
		/	_____x_____	
		/	_____x_____	
		/	_____x_____	
		/	_____x_____	
		/	_____x_____	
			Total Score (a)	CAR Total
Was subcontractor used? If yes, name of company and owner: _____ & _____			=	
			No. of Indicators (b)	
			=	
Entered by: _____			Rate = (a) / (b)	
			=	
Date: / /			Rate	
			=	



**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Bridge  
 LOCATION: \_\_\_\_\_

ITEM: Piling  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score ____ x factor	Action Monitor
Sub-item Code	Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).			
<b>400-2 Steel Piles</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
RBWS-400-2-01	Conformance of in-placed materials to plans and specifications	/	____ x ____ =	
RBWS-400-2-02	Conformance to construction methodology (installation, location and type)	/	____ x ____ =	
RBWS-400-2-03	Conformance to splicing requirements	/	____ x ____ =	
RBWS-400-2-04	Conformance to the required length, width, thickness, and/or diameter	/	____ x ____ =	
RBWS-400-2-05	Piles provided with gradation marks (driven)	/	____ x ____ =	
RBWS-400-2-06	Conformance to proper installation, e.g. conformance to required slope, embedment, alignment, plumbness (>20 mm / m), elevation, location (>150 mm) & spacing	/	____ x ____ =	
<b>Minor</b>				
RBWS-400-2-05	Piles provided with gradation marks (stockpile)	/	____ x ____ =	
RBWS-400-2-06	Conformance to proper installation, e.g. conformance to required slope, embedment, alignment, plumbness (≤20 mm / m), elevation, location (≤150 mm) & spacing	/	____ x ____ =	
RBWS-400-2-07	No corrosions on steel piles	/	____ x ____ =	
RBWS-400-2-08	No deformation on steel piles	/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____			No. of Indicators (b) =	
Date: / /			Rate = (a) / (b) =	
			Rate =	

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Bridge  
 LOCATION: \_\_\_\_\_

ITEM: Piling  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score _____ x factor	Action Monitor
Sub-item Code	Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).			
<b>400-3 Concrete Pile (see Common Items of Work for checklist for formworks, concrete &amp; RSB)</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
RBWS-400-3-01	Conformance of in-placed materials to plans and specifications	/	_____ X _____ =	
RBWS-400-3-02	Conformance to construction methodology (installation, location and type)	/	_____ X _____ =	
RBWS-400-3-03	Conformance to splicing requirements	/	_____ X _____ =	
RBWS-400-3-04	Conformance to the required length, width, thickness, and/or diameter	/	_____ X _____ =	
RBWS-400-3-05	Provision of pile shoe	/	_____ X _____ =	
RBWS-400-3-06	No through cracks			
RBWS-400-3-07	No honeycomb (exposed rebars/aggregates)	/	_____ X _____ =	
RBWS-400-3-08	Piles provided with gradation marks (driven)	/	_____ X _____ =	
RBWS-400-3-09	Conformance to proper installation, e.g. conformance to required slope, embedment, alignment, plumbness (>20 mm / m), elevation, location (>150 mm) & spacing	/	_____ X _____ =	
<b>Minor</b>				
RBWS-400-3-06	No cracks	/	_____ X _____ =	
RBWS-400-3-07	No honeycomb	/	_____ X _____ =	
RBWS-400-3-08	Piles provided with gradation marks (stockpile)	/	_____ X _____ =	
RBWS-400-3-09	Conformance to proper installation, e.g. conformance to required slope, embedment, alignment, plumbness (≤20 mm / m), elevation, location (≤150 mm), spacing & champering	/	_____ X _____ =	
RBWS-400-3-10	Conformance to specified curing on casted RC piles	/	_____ X _____ =	
RBWS-400-3-11	Conformance to casting length	/	_____ X _____ =	
RBWS-400-3-12	Conformance to required lifting procedure	/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
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		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: / /

Total Score (a) =	CAR Total
No. of Indicators (b) =	
Rate = (a) / (b) =	
Rate =	

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Bridge  
 LOCATION: \_\_\_\_\_

ITEM: Railings  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score _____ x factor	Action Monitor
Sub-item Code	Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).			
<b>Item 401 Railings</b>				
<b>401-1 Steel Railings</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
RBWS-401-1-01	Conformance of in-placed materials to plans & specifications	/	= _____ X _____	
RBWS-401-1-02	Conformance to alignment & jointing requirement	/	= _____ X _____	
RBWS-401-1-03	No corrosion	/	= _____ X _____	
<b>Minor</b>				
RBWS-401-1-03	No rust	/	= _____ X _____	
RBWS-401-1-04	No damage to painting and galvanized coating	/	= _____ X _____	
RBWS-401-1-05	Adequacy of bolts and nuts	/	= _____ X _____	
RBWS-401-1-06	Conformance to finishing requirement	/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
<b>401-2 Timber Railings</b>				
<b>Major</b>				
RBWS-401-2-01	Conformance of in-placed materials to plans & specifications	/	= _____ X _____	
RBWS-401-2-02	Conformance to alignment & jointing requirement	/	= _____ X _____	
<b>Minor</b>				
RBWS-401-2-03	No splitting of timber	/	= _____ X _____	
RBWS-401-2-04	Free from any form of damages	/	= _____ X _____	
RBWS-401-2-05	Provision of wood preservatives e.g. oils, creosote-oil, etc.	/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: / /

Total Score (a) =	CAR Total
No. of Indicators (b) =	
Rate = (a) / (b) =	
Rate =	

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Bridge  
 LOCATION: \_\_\_\_\_

ITEM: Railings  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score _____ x factor	Action Monitor
Sub-item Code	Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).			
<b>401-3 Masonry Railings</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
RBWS-401-3-01	Conformance of in-placed materials to plans & specifications	/	= _____ X _____	
RBWS-401-3-02	Conformance to required alignment	/	= _____ X _____	
RBWS-401-3-03	Conformance to required quality of mortar mix, CHB, stones, aggregates & boulders	/	= _____ X _____	
<b>Minor</b>				
RBWS-401-3-03	No cracks	/	= _____ X _____	
RBWS-401-3-04	Sufficiency of mortar	/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
<b>401-4 Concrete Railings (see Common Items of Work for checklist for Formworks, RSB &amp; Concrete)</b>				
<b>Major</b>				
RBWS-401-4-01	Conformance of in-placed materials to plans & specifications	/	= _____ X _____	
RBWS-401-4-02	Conformance to required alignment	/	= _____ X _____	
RBWS-401-4-03	Conformance to required quality of concrete mix			
<b>Minor</b>				
RBWS-401-4-04	Conformance to finishing requirements	/	= _____ X _____	
RBWS-401-4-05	No cracks	/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
<b>Item 402 Trowelled</b>				
RBWS-402-01	Smooth and even floor finish	/	= _____ X _____	
RBWS-402-02	No temperature cracks	/	= _____ X _____	
RBWS-402-03	No sign of deflection/settlement	/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____			No. of Indicators (b) =	
Date: / /			Rate = (a) / (b) =	
			Rate =	

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Bridge  
 LOCATION: \_\_\_\_\_

ITEM: Metal Structures  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score _____ x factor	Action Monitor
Sub-item Code	Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).			
<b>Item 403 Metal Structures</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
RBWS-403-01	Structural steel conforms to the required size and dimension as per specification	/	_____ X _____ =	
RBWS-403-02	No corrosion (conditon that already affects structural soundness)	/	_____ X _____ =	
RBWS-403-03	No sagging/deflection (beyond 50% of the maximum tolerance)	/	_____ X _____ =	
RBWS-403-04	Conformance to proper installation/assembly	/	_____ X _____ =	
RBWS-403-05	Conformance to the required number of bolts/rivets as per plan	/	_____ X _____ =	
RBWS-403-06	Conformance to the required size and dimension for welding	/	_____ X _____ =	
RBWS-403-07	Fasteners, anchor bolts, base plates, bolts/nuts and washers conforms to specified size and dimension	/	_____ X _____ =	
		/	_____ X _____ =	
<b>Minor</b>				
RBWS-403-02	No rust/corrosion	/	_____ X _____ =	
RBWS-403-03	No sagging/deflection (within 50% of the maximum tolerance)	/	_____ X _____ =	
RBWS-403-08	Provided with appropriate paints (primer and surface coatings) in accordance with the specifications	/	_____ X _____ =	
RBWS-403-09	Structural members are true to line and free from twist, bends and open joints	/	_____ X _____ =	
RBWS-403-10	Pin holes/fastener holes (bolts & rivets) conforms to the required diameter as per specification	/	_____ X _____ =	
RBWS-403-11	Rivets are installed according to proper procedure per specifications	/	_____ X _____ =	
RBWS-403-12	Bolts are tightened to at least the minimum bolt tension, or at a required tension per specification	/	_____ X _____ =	
RBWS-403-13	Conformance to use of appropriate tightening tools	/	_____ X _____ =	
RBWS-403-14	Conformance to proper splicing/jointing	/	_____ X _____ =	
RBWS-403-15	Provision of camber for truss/beams/girder	/	_____ X _____ =	
RBWS-403-16	Complete number of bolts/rivets installed	/	_____ X _____ =	
RBWS-403-17	Painted metal surface are free of loose and bubbled paints, etc.	/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
Was subcontractor used? If yes, name of company and owner: _____ & _____		Total Score (a) =		CAR Total
Entered by: _____		No. of Indicators (b) =		
Date: / /		Rate = (a) / (b) =		
		Rate =		

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_ PROJECT TYPE: Road & Bridge ITEM: Drainage & Slope Protection  
 \_\_\_\_\_ VISIT LOCATION: \_\_\_\_\_ DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score _____ x factor	Action Monitor
Sub-item Code	Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).			
<b>Item 500 Pipe Culverts &amp; Storm Drains</b>				
<b>Major</b>				
RBWS-500-01	Conformance to the required/approved tolerance for slope, alignment, elevation and dimensions	/	= _____ x _____	
<b>Minor</b>				
RBWS-500-02	No cracks, honeycombs, chipping of edges	/	= _____ x _____	
RBWS-500-03	Compliance to joint mortar mixing proportions	/	= _____ x _____	
RBWS-500-04	Sufficient collaring and flushing	/	= _____ x _____	
RBWS-500-05	Compliance to the required thickness, compaction & materials requirement of gravel bedding	/	= _____ x _____	
RBWS-500-06	Compliance to the required thickness & compaction of backfill	/	= _____ x _____	
RBWS-500-07	Conformance to trenching requirements	/	= _____ x _____	
RBWS-500-08	Free from debris, siltation, etc.	/	= _____ x _____	
		/	= _____ x _____	
<b>Item 502 Manhole, Inlets and Catch Basins</b>				
<b>Major</b>				
RBWS-502-01	Conformance to connection requirements between pipes & inlet wall	/	= _____ x _____	
RBWS-502-02	Conformance to approved/specified tolerance for dimensions and elevations	/	= _____ x _____	
<b>Minor</b>				
RBWS-502-03	No damage on manhole, inlets & catch basins	/	= _____ x _____	
RBWS-502-04	No cracks	/	= _____ x _____	
RBWS-502-05	No honeycomb	/	= _____ x _____	
RBWS-502-06	Free from debris, siltation, etc.	/	= _____ x _____	
RBWS-502-07	Covers and gratings are well fitted and can easily be opened during maintenance work	/	= _____ x _____	
		/	= _____ x _____	
<b>Item 504 Cleaning and Recondition of Existing Drainage Structures</b>				
RBWS-504-01	Conformance to the approved/required tolerances for alignment	/	= _____ x _____	
RBWS-504-02	Proper spacing of rebars	/	= _____ x _____	
RBWS-504-03	Compliance to scope of work	/	= _____ x _____	
RBWS-504-04	Conformance to plans and specifications	/	= _____ x _____	
		/	= _____ x _____	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: / /

Total Score (a)	CAR Total
=	
No. of Indicators (b)	
=	
Rate = (a) / (b)	
=	
Rate	
=	

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_ PROJECT TYPE: Road & Bridge ITEM: Drainage & Slope Protection  
 \_\_\_\_\_ VISIT LOCATION: \_\_\_\_\_ DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score _____ x factor	Action Monitor
Sub-item Code	Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).			
<b>Item 505 Riprap and Grouted Riprap, Item 506 Stone Masonry, Item 507 Rubble Concrete</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
RBWS-50_-01	No through cracks	/	= _____ X _____	
RBWS-50_-02	Conformance to specifications (size, type, weight, etc. of boulders)	/	= _____ X _____	
RBWS-50_-03	Sufficient grout/mortar	/	= _____ X _____	
RBWS-50_-04	Observance to proper placing of stones/boulders	/	= _____ X _____	
RBWS-50_-05	Conformance to the approved/required tolerance for slope and thickness	/	= _____ X _____	
RBWS-50_-06	Compliance to the specified compaction and preparation of bedding	/	= _____ X _____	
<b>Minor</b>				
RBWS-50_-01	No cracks	/	= _____ X _____	
RBWS-50_-07	Adequate and proper spacing of weepholes	/	= _____ X _____	
RBWS-50_-08	Compliance to design mix of mortar	/	= _____ X _____	
RBWS-50_-09	Conformance with approved tolerance for lines, grades, cross-sections and elevations	/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
<b>Item 508 Hand-laid Rock Embankment</b>				
<b>Major</b>				
RBWS-508-01	Conformance to the required size of boulders	/	= _____ X _____	
RBWS-508-02	Observance to proper placement of stones/boulders	/	= _____ X _____	
RBWS-508-03	Conformance to the approved/required tolerance for length, slope, and thickness	/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____ Date: / /			No. of Indicators (b) =	
			Rate = (a) / (b) =	
			Rate =	

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_ PROJECT TYPE: Road & Bridge ITEM: Drainage & Slope Protection  
 \_\_\_\_\_ VISIT LOCATION: \_\_\_\_\_ DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS				
Sub-item Code	Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).	Results	Score _____ x factor	Action Monitor
<b>Item 509 Sheet Piles</b>				
<b>509-1 Steel Sheet Pile</b>				
<b>Major*</b>				
* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects				
RBWS-509-1-01	Conformance of in-placed materials to plans & specifications	/	_____ x _____ =	
RBWS-509-1-02	Conformance to proper installation, e.g. conformance to required slope, embedment, alignment, plumbness (>20 mm / m), elevation, location (>150 mm) & spacing	/	_____ x _____ =	
RBWS-509-1-03	Piles provided with gradation marks (driven)	/	_____ x _____ =	
RBWS-509-1-04	Conformance to the approved/required tolerances for length, width, thickness and/or diameter	/	_____ x _____ =	
		/	_____ x _____ =	
<b>Minor</b>				
RBWS-509-1-02	Conformance to proper installation, e.g. conformance to required slope, embedment, alignment, plumbness (≤20 mm / m), elevation, location (≤150 mm) & spacing	/	_____ x _____ =	
RBWS-509-1-03	Piles provided with gradation marks (stockpile)	/	_____ x _____ =	
RBWS-509-1-05	Compliance to the required splicing	/	_____ x _____ =	
RBWS-509-1-06	No corrosion on steel sheet piles	/	_____ x _____ =	
RBWS-509-1-07	Non-use of deformed steel bars	/	_____ x _____ =	
RBWS-509-1-08	Attainment of required number of piles	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
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		/	_____ x _____ =	
		/	_____ x _____ =	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____			No. of Indicators (b) =	
Date: / /			Rate = (a) / (b) =	
			Rate =	



**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_ PROJECT TYPE: Road & Bridge ITEM: Drainage & Slope Protection  
 \_\_\_\_\_ VISIT LOCATION: \_\_\_\_\_ DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score ____ x factor =	Action Monitor
Sub-item Code	Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).			
<b>509-2 Concrete Sheet Pile</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
RBWS-509-2-01	Conformance to proper installation, e.g. conformance to required slope, embedment, alignment, plumbness (>20 mm / m), elevation, location (>150 mm)	/	____ x ____ =	
RBWS-509-2-02	Piles provided with gradation marks (driven)	/	____ x ____ =	
RBWS-509-2-03	Conformance to the required quality of concrete mix	/	____ x ____ =	
RBWS-509-2-04	No cracks	/	____ x ____ =	
RBWS-509-2-05	Conformance to the approved/required tolerances for length, width, thickness and/or diameter	/	____ x ____ =	
		/	____ x ____ =	
<b>Minor</b>				
RBWS-509-2-01	Conformance to proper installation, e.g. conformance to required slope, embedment, alignment, plumbness (≤20 mm / m), elevation, location (≤150 mm)	/	____ x ____ =	
RBWS-509-2-02	Piles provided with gradation marks (stockpile)	/	____ x ____ =	
RBWS-509-2-06	Conformance to the required casting length	/	____ x ____ =	
RBWS-509-2-07	Provision of pile shoe	/	____ x ____ =	
RBWS-509-2-08	Compliance to required curing of casted sheet piles	/	____ x ____ =	
RBWS-509-2-09	Compliance to required splicing	/	____ x ____ =	
RBWS-509-2-10	No honeycomb, stone pockets and bulging	/	____ x ____ =	
RBWS-509-2-11	Conformance to the required centerline and cut-off elevation	/	____ x ____ =	
RBWS-509-2-12	Attainment of required number of piles	/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
Was subcontractor used? If yes, name of company and owner: _____ & _____				Total Score (a) =
Entered by: _____ Date: / /				No. of Indicators (b) =
				Rate = (a) / (b) =
				Rate =

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_ PROJECT TYPE: Road & Bridge ITEM: Drainage & Slope Protection  
 \_\_\_\_\_ VISIT LOCATION: \_\_\_\_\_ DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score _____ x factor	Action Monitor
Sub-item Code	Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).			
<b>509-3 Timber Sheet Piles</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
RBWS-509-3-01	Conformance of in-placed materials to plans & specifications	/	_____ x _____ =	
RBWS-509-3-02	Conformance to construction methodology (installation, location and type)	/	_____ x _____ =	
RBWS-509-3-03	Conformance to splicing requirements	/	_____ x _____ =	
RBWS-509-3-04	Conformance to proper installation, e.g. conformance to required slope, embedment, alignment, plumbness (>20 mm / m), elevation, location (>150 mm) & spacing	/	_____ x _____ =	
RBWS-509-3-05	Piles provided with gradation marks (driven)	/	_____ x _____ =	
RBWS-509-3-06	Conformance to approved/specified tolerances for length, width, thickness and/or diameter	/	_____ x _____ =	
<b>Minor</b>				
RBWS-509-3-04	Conformance to proper installation, e.g. conformance to required slope, embedment, alignment, plumbness (≤20 mm / m), elevation, location (≤150 mm) & spacing	/	_____ x _____ =	
RBWS-509-3-05	Piles provided with gradation marks (stockpile)	/	_____ x _____ =	
RBWS-509-3-07	No worm holes, decays, warps, ring, segregation, splits and loose knots	/	_____ x _____ =	
RBWS-509-3-08	Non-splintering/brooming of timber pile end beyond specified allowance	/	_____ x _____ =	
RBWS-509-3-09	No cracks	/	_____ x _____ =	
RBWS-509-3-10	Provision of pile cap	/	_____ x _____ =	
RBWS-509-3-11	Attainment of required number of piles	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
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		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____ Date: / /			No. of Indicators (b) =	
			Rate = (a) / (b) =	
			Rate =	

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_ PROJECT TYPE: Road & Bridge ITEM: Drainage & Slope Protection  
 \_\_\_\_\_ VISIT LOCATION: \_\_\_\_\_ DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score _____ x factor	Action Monitor
Sub-item Code	<i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>			
<b>Item 510 Concrete Slope Protection</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
RBWS-510-01	No honeycomb (exposed rebars/aggregates)	/	_____ X _____ =	
RBWS-510-02	No through cracks	/	_____ X _____ =	
		/	_____ X _____ =	
<b>Minor</b>				
RBWS-510-01	No honeycomb	/	_____ X _____ =	
RBWS-510-02	No cracks	/	_____ X _____ =	
RBWS-510-03	Conformance to the required curing	/	_____ X _____ =	
RBWS-510-04	Proper vibration	/	_____ X _____ =	
RBWS-510-05	Proper finishes/plastering	/	_____ X _____ =	
RBWS-510-06	No corrosion on steel bars	/	_____ X _____ =	
RBWS-510-07	Forms applied with specified form oil	/	_____ X _____ =	
RBWS-510-08	Conformance to the required splicing and installation of rebars	/	_____ X _____ =	
RBWS-510-09	Adequate and proper spacing of weepholes	/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
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		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____ Date: / /			No. of Indicators (b) =	
			Rate = (a) / (b) =	
			Rate =	

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_ PROJECT TYPE: Road & Bridge ITEM: Drainage & Slope Protection  
 \_\_\_\_\_ VISIT LOCATION: \_\_\_\_\_ DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS				
Sub-item Code	Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).	Results	Score _____ x factor	Action Monitor
<b>Item 511 Gabions &amp; Mattresses</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
RBWS-511-01	Conformance to the required/approved tolerance for lines grades, dimensions and arrangements as shown on the plans and designated location (>10%)	/	_____ x _____ =	
RBWS-511-02	Conformance to specifications (size, type, weight, etc. of boulders)	/	_____ x _____ =	
<b>Minor</b>				
RBWS-511-01	Conformance to the required/approved tolerance for lines grades, dimensions and arrangements as shown on the plans and designated location (≤10%)	/	_____ x _____ =	
RBWS-511-03	Conformance to the required wire mesh cage fabrication requirement	/	_____ x _____ =	
RBWS-511-04	No misalignment, bulging	/	_____ x _____ =	
RBWS-511-05	Conformance to the required lapping requirement	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
<b>Item 602 Monuments, Markers and Guide Posts</b>				
RBWS-602-01	Conformance to required/approved tolerance for lines, grades and dimensions	/	_____ x _____ =	
RBWS-602-02	Conformance to painting requirement	/	_____ x _____ =	
RBWS-602-03	Provision of the required warning reflectors	/	_____ x _____ =	
RBWS-602-04	Conformance to the design and location as shown on the plans	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_ Date: / /

Total Score (a)	CAR Total
=	
No. of Indicators (b)	
=	
Rate = (a) / (b)	
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Rate	
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**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Bridge  
 LOCATION: \_\_\_\_\_

ITEM: Guardrail  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score _____ x factor	Action Monitor
Sub-item Code	Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).			
<b>Item 603 - Guardrail</b>				
<b>603-1 Steel or Aluminum</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
RBWS-603-1-01	Conformance to the required/approved tolerance for lines, grades and dimensions (>6%)	/	_____ x _____ = _____	
<b>Minor</b>				
RBWS-603-1-01	Conformance to the required/approved tolerance for lines, grade, and dimensions (<6%)	/	_____ x _____ = _____	
RBWS-603-1-02	Sufficient paint	/	_____ x _____ = _____	
RBWS-603-1-03	Sufficient galvanizing	/	_____ x _____ = _____	
RBWS-603-1-04	Non-appearance of rust on steel	/	_____ x _____ = _____	
RBWS-603-1-05	Conformance with the design and location as shown on the plans	/	_____ x _____ = _____	
RBWS-603-1-06	Conformance to required installation (lapping, provision of bolts, nuts & washers)	/	_____ x _____ = _____	
		/	_____ x _____ = _____	
		/	_____ x _____ = _____	
		/	_____ x _____ = _____	
<b>603-2 Concrete</b> (see common items of works for checklist on formworks, reinforcing steel bars and concrete)				
		/	_____ x _____ = _____	
<b>603-3 Timber</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
RBWS-603-3-01	Conformance to the required/approved tolerance for lines, grades and dimensions	/	_____ x _____ = _____	
<b>Minor</b>				
RBWS-603-3-01	Conformance to the approved/required tolerance for lines, grades and dimensions	/	_____ x _____ = _____	
RBWS-603-3-02	No splitting of timber	/	_____ x _____ = _____	
RBWS-603-3-03	No insect attack	/	_____ x _____ = _____	
RBWS-603-3-04	No decay of timber especially at the base of the posts and joints between posts and rails	/	_____ x _____ = _____	
RBWS-603-3-05	Conformity with the design and location as shown on the plans	/	_____ x _____ = _____	
RBWS-603-3-06	Proper application of preservatives	/	_____ x _____ = _____	
		/	_____ x _____ = _____	
		/	_____ x _____ = _____	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____			No. of Indicators (b) =	
Date: / /			Rate = (a) / (b) =	
			Rate =	

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Bridge  
 LOCATION: \_\_\_\_\_

ITEM: Guardrail  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS				
Sub-item Code	<i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score _____ x factor	Action Monitor
<b>603-4 Masonry</b>				
<b>Major</b>				
RBWS-603-4-01	Conformance to the required quality of mixture	/	= _____ x _____	
RBWS-603-4-02	Conformance to the required quality of CHB, stones and boulders	/	= _____ x _____	
RBWS-603-4-03	Conformance to the required/approved tolerance for lines grades and dimensions	/	= _____ x _____	
<b>Minor</b>				
RBWS-603-4-03	Conformance to the required/approved tolerance for lines, grades and dimensions	/	= _____ x _____	
RBWS-603-4-04	No cracks	/	= _____ x _____	
RBWS-603-4-05	Conformance to the design and location as shown on the plan	/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
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			Total Score (a)	CAR Total
			= _____	
			No. of Indicators (b)	
			= _____	
			Rate = (a) / (b)	
			= _____	
			Rate	
			= _____	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_ Date: / /

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Road  
 LOCATION: \_\_\_\_\_

ITEM: Miscellaneous Work  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score ____ x factor	Action Monitor
Sub-item Code	Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).			
<b>Item 604 Fencing, Item 605 Road Signs, Item 606 Pavement Markings, Item 607 Reflective Pavement Studs</b>				
<b>Major</b>				
RBWS-60__-01	Conformance to the required materials for road signs pavement markings and reflective pavement studs	/	= ____ x ____	
<b>Minor</b>				
RBWS-60__-02	Proper preparation of pavement surface prior to paint application (Item 606)	/	= ____ x ____	
RBWS-60__-03	Conformance to provisions stipulated in the DPWH Standard Specifications for Public Works & Highways, Vol.II, 1995	/	= ____ x ____	
RBWS-60__-04	Cracking, peeling off of paints	/	= ____ x ____	
		/	= ____ x ____	
		/	= ____ x ____	
		/	= ____ x ____	
		/	= ____ x ____	
		/	= ____ x ____	
		/	= ____ x ____	
		/	= ____ x ____	
		/	= ____ x ____	
<b>Item 608 Topsoil, Item 609 Spriggings, Item 610 Sodding, Item 611 Tree Planting</b>				
RBWS-6__- 01	Conformance to appropriate type, thickness and density of soil	/	= ____ x ____	
RBWS-6__- 02	Conformance to approved slope	/	= ____ x ____	
RBWS-6__- 03	Conformance to the required type of grass/planting materials	/	= ____ x ____	
RBWS-6__- 04	Healthy, dense, well rooted	/	= ____ x ____	
RBWS-6__- 05	Free from weeds or undesirable grasses	/	= ____ x ____	
		/	= ____ x ____	
		/	= ____ x ____	
		/	= ____ x ____	
		/	= ____ x ____	
		/	= ____ x ____	
		/	= ____ x ____	
		/	= ____ x ____	
		/	= ____ x ____	
Was subcontractor used? If yes, name of company and owner: _____ & _____		Total Score (a) =		CAR Total
Entered by: _____		No. of Indicators (b) =		
Date: / /		Rate = (a) / (b) =		
		Rate =		

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Road & Bridge  
 LOCATION: \_\_\_\_\_

ITEM: Common Items of Work  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score ____ x factor	Action Monitor
Sub-item Code	Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).			
<b>Item 900 Formworks</b>				
RBWS-900-01	Conformance to the required type of formworks in accordance with approved shop/working drawings	/	____ x ____ =	
RBWS-900-02	Forms coated with mould oil as required	/	____ x ____ =	
RBWS-900-03	Sufficient bracing/support provided	/	____ x ____ =	
RBWS-900-04	No loose knots, splits, cracks, etc.	/	____ x ____ =	
RBWS-900-05	Provision of required concrete or steel spacer	/	____ x ____ =	
RBWS-900-06	Conformance to dimensions, location, plumbness and alignment	/	____ x ____ =	
RBWS-900-07	Provision of camber during construction stage	/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
<b>Item 901 Reinforcing Steel Bars (including tendons for Pre/Post-Stressed concrete)</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
RBWS-901-01	Conformance of in-placed materials to plans & specifications	/	____ x ____ =	
RBWS-901-02	Non-appearance of corrosion on steel reinforcement	/	____ x ____ =	
<b>Minor</b>				
RBWS-901-02	Non-appearance of rust on steel reinforcement	/	____ x ____ =	
RBWS-901-03	Conformance to approved bar cutting schedule, proper spacing, anchorage, adequate reinforcements	/	____ x ____ =	
RBWS-901-04	No sign of oil, paint and other deleterious materials on reinforcements	/	____ x ____ =	
RBWS-901-05	Conformance to jointing requirement, i.e. splicing, welding, etc.	/	____ x ____ =	
RBWS-901-06	Conformance to the required installation of ducttube e.g. (spacing, location and distance)	/	____ x ____ =	
RBWS-901-07	Conformance to the required steel plate and lock	/	____ x ____ =	
RBWS-901-08	Conformance to the number of bundles of tendons and number of pieces of bundles of tendons	/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
Was subcontractor used? If yes, name of company and owner: _____ & _____		Total Score (a)		CAR Total
Entered by: _____		No. of Indicators (b)		
Date: / /		Rate = (a) / (b)		
		=		
		Rate		
		=		



**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Road & Bridge  
 LOCATION: \_\_\_\_\_

ITEM: Common Items of Work  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score _____ x factor	Action Monitor
Sub-item Code	Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).			
<b>Item 902 Concrete Works</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
RBWS-902-01	No through of cracks	/	= _____ X _____	
RBWS-902-02	No honeycomb or spalling (no exposed rebars/aggregates)	/	= _____ X _____	
RBWS-902-03	No sagging or bulging	/	= _____ X _____	
RBWS-902-04	Conformance to the required quality of concrete mix	/	= _____ X _____	
RBWS-902-05	Provision of camber for RCDG (reinforced concrete for deck girder)	/	= _____ X _____	
<b>Minor</b>				
RBWS-902-01	No cracks	/	= _____ X _____	
RBWS-902-02	No honeycomb or spalling	/	= _____ X _____	
RBWS-902-03	No sagging or bulging	/	= _____ X _____	
RBWS-902-06	No chipping off of concrete cover	/	= _____ X _____	
RBWS-902-07	Proper and adequate vibration	/	= _____ X _____	
RBWS-902-08	Conformance to finishing/plastering requirement	/	= _____ X _____	
RBWS-902-09	Conformance to the required concrete cover for rebars	/	= _____ X _____	
RBWS-902-10	Conformance to the batching, mixing, transporting and discharge time requirements	/	= _____ X _____	
RBWS-902-11	Conformance to placing requirement that will not result segregation of aggregates, cold joints and misalignment	/	= _____ X _____	
RBWS-902-12	Conformance to the jointing requirement	/	= _____ X _____	
RBWS-902-13	Proper curing	/	= _____ X _____	
RBWS-902-14	Conformance to required dimensions, lines, grades/elevation locations and crown (for pier)	/	= _____ X _____	
RBWS-902-15	No water ponding on bearing plates	/	= _____ X _____	
RBWS-902-16	Conformance to elevation of expansion joints	/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: / /

Total Score (a)	CAR Total
No. of Indicators (b)	
Rate = (a) / (b)	
=	
Rate	
=	

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Road & Bridge  
 LOCATION: \_\_\_\_\_

ITEM: Shotcrete  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score ____ x factor	Action Monitor
Sub-item Code	<i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>			
<b>Item 903 Shotcrete</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
RBWS-903-01	Conformance to the required quality of concrete mix as per specification	/	= ____x____	
RBWS-903-02	Conformance to the required thickness of concrete	/	= ____x____	
RBWS-903-03	Anchor bolts delivered/installed in accordance with the required size and dimension as per plan	/	= ____x____	
RBWS-903-04	Steel reinforcement/wire mesh delivered/installed conforms to size and dimension per specification	/	= ____x____	
RBWS-903-05	Compliance to use of appropriate shotcrete machine/equipment	/	= ____x____	
		/	= ____x____	
<b>Minor</b>				
RBWS-903-06	No cracks, honeycomb or spalling	/	= ____x____	
RBWS-903-07	Rockbolt filling materials conforms to the required specification	/	= ____x____	
RBWS-903-08	Conformance to the required concrete cover for rebar/wire mesh	/	= ____x____	
RBWS-903-09	Adequate and proper spacing of weepholes	/	= ____x____	
RBWS-903-10	Conformance to the required size and type of materials for weepholes as per specification	/	= ____x____	
		/	= ____x____	
		/	= ____x____	
		/	= ____x____	
		/	= ____x____	
		/	= ____x____	
		/	= ____x____	
		/	= ____x____	
		/	= ____x____	
		/	= ____x____	
		/	= ____x____	
		/	= ____x____	
		/	= ____x____	
		/	= ____x____	
		/	= ____x____	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a)	CAR Total
Entered by: _____			No. of Indicators (b)	
Date: / /			Rate = (a) / (b)	
			=	
			Rate	
			=	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_ PROJECT TYPE: Building & Housing  
 \_\_\_\_\_ VISIT LOCATION/LOT: \_\_\_\_\_

ITEM: Earthworks  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score _____ x factor	Action Monitor
<b>Item 100 Clearing and Grubbing</b>				
HBWS-100-02	Conformance to the approved/specified tolerance for extent of clearing and grubbing work	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
<b>Item 101 Excavation</b>				
HBWS-101-01	Conformance to the approved/specified tolerances for lines, grades, dimensions, elevations	/	_____ x _____ =	
HBWS-101-02	Conformance to the excavation support systems, e.g. angle of repose, bracing, shoring, sheet piling	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
<b>Item 102 Fill</b>				
HBWS-102-01	Conformance of in-placed materials to plans and specifications	/	_____ x _____ =	
HBWS-102-02	Conformance to the required thickness of fill or backfill per layer	/	_____ x _____ =	
HBWS-102-03	Conformance to the required density or degree of compaction	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
<b>Item 103 Soil Poisoning</b>				
HBWS-103-01	Conformance to the specified concentration of soil poisoning solution	/	_____ x _____ =	
HBWS-103-02	Conformance to the specified rate of application	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: / /

Total Score (a) =	CAR Total
No. of Indicators (b) =	
Rate= (a) / (b) =	
Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Building & Housing  
 LOCATION: \_\_\_\_\_

ITEM: Structural Steel  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score _____ x factor	Action Monitor
<b>Item 300 Structural Steel Works</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
HBWS-300-01	Conformance of in-placed materials to plans & specifications	/	_____ X _____ =	
HBWS-300-02	Conformance to required fasteners, anchor bolts, bolts/nuts and washers (not provided)	/	_____ X _____ =	
HBWS-300-03	Free from corrosion and any other form of damages	/	_____ X _____ =	
<b>Minor</b>				
HBWS-300-03	Free from rust and any other form of damages	/	_____ X _____ =	
HBWS-300-04	Conformance to the specified type of welding	/	_____ X _____ =	
HBWS-300-05	Fasteners, anchor bolts, bolts / nuts & washers conforms to specified size, strength, etc.	/	_____ X _____ =	
HBWS-300-06	Installed according to plans	/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
			Total Score (a)	CAR Total
Was subcontractor used? If yes, name of company and owner: _____ & _____			=	
Entered by: _____			No. of Indicators (b)	
Date: / /			=	
			Rate = (a) / (b)	
			=	
			Rate	
			=	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Housing & Building  
 LOCATION: \_\_\_\_\_

ITEM: Common Items of Work  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score _____ x factor =	Action Monitor
<b>Item 301 Formworks</b>				
HBWS-301-01	Conformance to the required type of formworks in accordance with approved shop/working drawings	/	_____ x _____ =	
HBWS-301-02	Forms coated with mould oil as required	/	_____ x _____ =	
HBWS-301-03	Sufficient bracing/support provided	/	_____ x _____ =	
HBWS-301-04	No loose knots, splits, cracks, etc.	/	_____ x _____ =	
HBWS-301-05	Provision of required concrete or steel spacer	/	_____ x _____ =	
HBWS-301-06	Conformance to dimensions, location, plumbness and alignment	/	_____ x _____ =	
HBWS-301-07	No use of dilapidated/salvage forms (use more than 3x)	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
<b>Item 302 Reinforcing Steel Bars (including tendons for Pre/Post-Stressed concrete)</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
HBWS-302-01	Conformance of in-placed materials to plans & specifications	/	_____ x _____ =	
HBWS-302-02	Non-appearance of corrosion on steel reinforcement	/	_____ x _____ =	
<b>Minor</b>				
HBWS-302-02	Non-appearance of rust on steel reinforcement	/	_____ x _____ =	
HBWS-302-03	Conformance to approved bar cutting schedule, proper spacing, anchorage, adequate reinforcements	/	_____ x _____ =	
HBWS-302-04	No sign of oil, paint and other deleterious materials on reinforcements	/	_____ x _____ =	
HBWS-302-05	Conformance to jointing requirement, i.e. splicing, welding, etc.	/	_____ x _____ =	
HBWS-302-06	Conformance to proper bending of stirrups	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a)	CAR Total
Entered by: _____			No. of Indicators (b)	
Date: / /			Rate = (a) / (b)	
			=	
			Rate	
			=	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Housing & Building  
 LOCATION: \_\_\_\_\_

ITEM: Common Items of Work  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score _____ x factor	Action Monitor
<b>Item 303 Concrete Works</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
HBWS-303-01	No through cracks	/	_____ x _____ =	
HBWS-303-02	No honeycomb (no exposed rebars/aggregates)	/	_____ x _____ =	
HBWS-303-03	No sagging or bulging	/	_____ x _____ =	
HBWS-303-04	Conformance to required quality of concrete mix	/	_____ x _____ =	
<b>Minor</b>				
HBWS-303-01	No cracks	/	_____ x _____ =	
HBWS-303-02	No honeycomb	/	_____ x _____ =	
HBWS-303-03	No sagging or bulging	/	_____ x _____ =	
HBWS-303-05	Proper and adequate vibration	/	_____ x _____ =	
HBWS-303-06	Conformance to finishing/plastering requirement	/	_____ x _____ =	
HBWS-303-07	No chipping off of concrete cover	/	_____ x _____ =	
HBWS-303-08	Conformance to the required concrete cover for rebars	/	_____ x _____ =	
HBWS-303-09	Conformance to the batching, mixing, transporting and discharge time requirements	/	_____ x _____ =	
HBWS-303-10	Conformance to placing requirement that will not result segregation of aggregates, cold joints and misalignment	/	_____ x _____ =	
HBWS-303-11	Conformance to the jointing requirement	/	_____ x _____ =	
HBWS-303-12	Proper curing	/	_____ x _____ =	
HBWS-303-13	Conformance to required dimensions, lines, grades/elevation, and location	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a)	CAR Total
Entered by: _____ Date: / /			No. of Indicators (b)	
			Rate = (a) / (b)	
			=	
			Rate	
			=	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Building & Housing  
 LOCATION: \_\_\_\_\_

ITEM: Masonry Works  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score _____ x factor	Action Monitor
<b>Item 304 CHB Wall</b>				
<b>Major</b>				
HBWS-304-01	Conformance to required quality of CHB	/	_____ X _____ =	
HBWS-304-02	Conformance to required quality of mortar mix	/	_____ X _____ =	
<b>Minor</b>				
HBWS-304-03	Conformance to specified tolerances for dimension, location, plumbness and alignment	/	_____ X _____ =	
HBWS-304-04	Proper spacing of horizontal and vertical bars	/	_____ X _____ =	
HBWS-304-05	Rebars used free from corrosion	/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
<b>Item 305 Brick Wall</b>				
<b>Major</b>				
HBWS-305-01	Conformance to required quality of mortar mix	/	_____ X _____ =	
<b>Minor</b>				
HBWS-305-02	Conformance to specified tolerances for dimension, location, plumbness and alignment	/	_____ X _____ =	
HBWS-305-03	Proper spacing of horizontal and vertical bars	/	_____ X _____ =	
HBWS-305-04	Rebars used free from corrosion	/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____ Date: / /			No. of Indicators (b) =	
			Rate = (a) / (b) =	
			Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Building & Housing  
 LOCATION: \_\_\_\_\_

ITEM: Floor Finishes  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score _____ x factor =	Action Monitor
<b>Item 400 Tiled Finish</b>				
HBWS-400-01	Installed tiles free from chipping, cracks or any form of damages	/	_____ x _____ =	
HBWS-400-02	Mortar/Grout consistency and color conform to specification	/	_____ x _____ =	
HBWS-400-03	Joints are perfectly aligned and consistent with skirting and wall tiles	/	_____ x _____ =	
HBWS-400-04	Tiles are evenly placed/laid	/	_____ x _____ =	
HBWS-400-05	Tiles in wet areas sloped down to drain	/	_____ x _____ =	
HBWS-400-06	Tiles are properly bonded to floor	/	_____ x _____ =	
		/	_____ x _____ =	
<b>Item 401 Carpet</b>				
HBWS-401-01	Evenly stretched and of even surface	/	_____ x _____ =	
HBWS-401-02	Properly anchored at all edges	/	_____ x _____ =	
HBWS-401-03	Provided with underlining	/	_____ x _____ =	
HBWS-401-04	Free from any form of damages	/	_____ x _____ =	
HBWS-401-05	Materials conform to specification as per plan	/	_____ x _____ =	
		/	_____ x _____ =	
<b>Item 402 Wood Parquet</b>				
HBWS-402-01	Conforms to designed layout	/	_____ x _____ =	
HBWS-402-02	Even surfaces	/	_____ x _____ =	
HBWS-402-03	Free from any form of damages	/	_____ x _____ =	
HBWS-402-04	Adhesive conforms to specifications	/	_____ x _____ =	
HBWS-402-05	Parquet properly bonded to floor	/	_____ x _____ =	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____			No. of Indicators (b) =	
Date: / /			Rate = (a) / (b) =	
			Rate =	



## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Building & Housing  
 LOCATION: \_\_\_\_\_

ITEM: Floor Finishes  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score _____ x factor	Action Monitor
<b>Item 403 Trowelled</b>				
HBWS-403-01	Smooth and even floor finish	/	_____ X =	
HBWS-403-02	No temperature cracks	/	_____ X =	
HBWS-403-03	No sign of deflection/settlement	/	_____ X =	
		/	_____ X =	
		/	_____ X =	
<b>Item 404 Pebble Wash-out</b>				
HBWS-404-01	Installed pebbles are evenly distributed	/	_____ X =	
HBWS-404-02	No temperature cracks	/	_____ X =	
HBWS-404-03	Installed pebbles surface are thoroughly clean from cement	/	_____ X =	
		/	_____ X =	
		/	_____ X =	
<b>Item 405 Water Proofing</b>				
HBWS-405-01	Conforms to specified method of application	/	_____ X =	
HBWS-405-02	Conforms to number of coats/layers required	/	_____ X =	
HBWS-405-03	Passed required leak test	/	_____ X =	
HBWS-405-04	Conformance to the required materials specifications as per plan	/	_____ X =	
		/	_____ X =	
		/	_____ X =	
		/	_____ X =	
		/	_____ X =	

Was subcontractor used? If yes, name of company and owner:

\_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: / /

Total Score (a)	CAR Total
=	
No. of Indicators (b)	
=	
Rate = (a) / (b)	
=	
Rate	
=	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Building & Housing  
 LOCATION: \_\_\_\_\_

ITEM: Wall Finishes  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score _____ x factor	Action Monitor
<b>Item 500 Tiled Finish</b>				
HBWS-500-01	Installed tiles free from chipping, cracks or any form of damages	/	_____x_____ =	
HBWS-500-02	Joints are perfectly aligned and consistent with skirting and floor tiles	/	_____x_____ =	
HBWS-500-03	Tiles are evenly placed/layed	/	_____x_____ =	
HBWS-500-04	Installed tiles are true to alignment	/	_____x_____ =	
HBWS-500-05	Mortar/grout/adhesive consistency and color conform to specification	/	_____x_____ =	
HBWS-500-06	Tiles properly bonded to wall	/	_____x_____ =	
<b>Item 501 Wall Paper</b>				
HBWS-501-01	Smooth and evenly pasted	/	_____x_____ =	
HBWS-501-02	Free from scratches, stains, etc.	/	_____x_____ =	
		/	_____x_____ =	
<b>Item 502 Plaster Finish</b>				
HBWS-502-01	Conformance to designed mixture of plastering materials	/	_____x_____ =	
HBWS-502-02	Conformance to specified method of application and thickness of plastering	/	_____x_____ =	
HBWS-502-03	True to alignment	/	_____x_____ =	
HBWS-502-04	Free from any form of damages e.g. cracks, peeled-off plaster finish	/	_____x_____ =	
<b>Item 503 Cladding</b>				
HBWS-503-01	Panels properly anchored	/	_____x_____ =	
HBWS-503-02	True to alignment, plumbness	/	_____x_____ =	
HBWS-503-03	Free from any form of damages	/	_____x_____ =	
HBWS-503-04	Panels conforms to construction procedure	/	_____x_____ =	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____			No. of Indicators (b) =	
Date: / /			Rate = (a) / (b) =	
			Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Building & Housing  
 LOCATION: \_\_\_\_\_

ITEM: Wall Finishes  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score _____ x factor	Action Monitor
<b>Item 504 Painting</b>				
HBWS-504-01	Surface prepared according to specification	/	_____ X _____ =	
HBWS-504-02	Required neutralizers, etc. applied	/	_____ X _____ =	
HBWS-504-03	Applied paint appropriate to the surface	/	_____ X _____ =	
HBWS-504-04	Specified number of coats applied	/	_____ X _____ =	
HBWS-504-05	Surfaces evenly painted, proper opacity	/	_____ X _____ =	
HBWS-504-06	No discoloration and peeling-off of paint	/	_____ X _____ =	
HBWS-504-07	Paints conform to specification/requirements	/	_____ X _____ =	
HBWS-504-08	Surface are properly applied with putty/patching compound	/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
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		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: / /

Total Score (a) =	CAR Total
No. of Indicators (b) =	
Rate = (a) / (b) =	
Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Building & Housing  
 LOCATION: \_\_\_\_\_

ITEM: Ceiling Works  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score _____ x factor =	Action Monitor
<b>Item 600 Suspension</b>				
HBWS-600-01	Conformance to the specified spacing and length of hangers, clips and joists	/	_____ x _____ =	
HBWS-600-02	Installed hangers are properly anchored and firm	/	_____ x _____ =	
HBWS-600-03	True to alignment and elevation in conformance to the approved specified tolerance	/	_____ x _____ =	
HBWS-600-04	Free from any form of damages	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
<b>Item 601 Ceiling Board</b>				
HBWS-601-01	Materials free from any form of damages	/	_____ x _____ =	
HBWS-601-02	Smooth surface and true to elevation and alignment	/	_____ x _____ =	
HBWS-601-03	Location of holes for utilities conforms to plans	/	_____ x _____ =	
HBWS-601-04	Ceiling boards are properly fastened	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
<b>Item 602 Moulding</b>				
HBWS-602-01	True to elevation and alignment	/	_____ x _____ =	
HBWS-602-02	Installed materials are free from any form of damages	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	

Was subcontractor used? If yes, name of company and owner:

\_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: / /

Total Score (a) =	CAR Total
No. of Indicators (b) =	
Rate = (a) / (b) =	
Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Building & Housing  
 LOCATION: \_\_\_\_\_

ITEM: Ceiling Works  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score _____ x factor	Action Monitor
<b>Item 603 Painting</b>				
HBWS-603-01	Surface prepared according to specification	/	_____ X _____ =	
HBWS-603-02	Required neutralizers applied	/	_____ X _____ =	
HBWS-603-03	Applied paint appropriate to the surface	/	_____ X _____ =	
HBWS-603-04	Specified number of coats applied	/	_____ X _____ =	
HBWS-603-05	Surfaces evenly painted, proper opacity	/	_____ X _____ =	
HBWS-603-06	No discoloration and peeling-off of paint	/	_____ X _____ =	
HBWS-603-07	Surface are evenly applied with putty/patching compound	/	_____ X _____ =	
HBWS-603-08	Paint conform to the requirements	/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: / /

Total Score (a) =	CAR Total
No. of Indicators (b) =	
Rate = (a) / (b) =	
Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/ NO.: \_\_\_\_\_ PROJECT TYPE: Building & Housing ITEM: Roofing System  
 \_\_\_\_\_ VISIT LOCATION/LOT: \_\_\_\_\_ DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score _____ x factor	Action Monitor
<b>Item 604 Frames</b>				
HBWS-604-01	Conformance to the required size, spacing, slope, anchorage, etc.	/	_____ x _____ = _____	
HBWS-604-02	Free from any form of damage	/	_____ x _____ = _____	
HBWS-604-03	Cleats are properly provided	/	_____ x _____ = _____	
		/	_____ x _____ = _____	
		/	_____ x _____ = _____	
<b>Item 605 Sheets</b>				
HBWS-605-01	Conformance to the specified gauge, length, etc.	/	_____ x _____ = _____	
HBWS-605-02	Conformance to the specified overlapping, sealing of joints, fastening	/	_____ x _____ = _____	
HBWS-605-03	Installation of flashing, gutters, ridge rolls, downspouts, etc. according to plans	/	_____ x _____ = _____	
HBWS-605-04	Non-occurrence of leaks	/	_____ x _____ = _____	
HBWS-605-05	Free from any form of damage	/	_____ x _____ = _____	
		/	_____ x _____ = _____	
		/	_____ x _____ = _____	
<b>Item 606 Tiles</b>				
HBWS-606-01	Conformance to the specified method of installation	/	_____ x _____ = _____	
HBWS-606-02	Non-occurrence of leaks	/	_____ x _____ = _____	
HBWS-606-03	Free from any form of damage	/	_____ x _____ = _____	
		/	_____ x _____ = _____	
		/	_____ x _____ = _____	
		/	_____ x _____ = _____	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a)	CAR Total
Entered by: _____ Date: / /			No. of Indicators (b) = _____	
			Rate = (a) / (b) = _____	
			Rate = _____	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/ NO.: \_\_\_\_\_ PROJECT TYPE: Building & Housing ITEM: Roofing System  
 \_\_\_\_\_ VISIT LOCATION/LOT: \_\_\_\_\_ DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score _____ x factor	Action Monitor
<b>Item 607 Painting</b>				
HBWS-607-01	Surface prepared according to specifications	/	_____ x _____ = _____	
HBWS-607-02	Specified number of coats applied	/	_____ x _____ = _____	
HBWS-607-03	Evenly painted surfaces	/	_____ x _____ = _____	
HBWS-607-04	No discoloration and peeling of paint	/	_____ x _____ = _____	
HBWS-607-05	Paints conforms to requirements	/	_____ x _____ = _____	
		/	_____ x _____ = _____	
		/	_____ x _____ = _____	
		/	_____ x _____ = _____	
		/	_____ x _____ = _____	
		/	_____ x _____ = _____	
		/	_____ x _____ = _____	
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		/	_____ x _____ = _____	
		/	_____ x _____ = _____	
		/	_____ x _____ = _____	
		/	_____ x _____ = _____	
		/	_____ x _____ = _____	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a)	CAR Total
Entered by: _____ Date: / /			No. of Indicators (b) = _____	
			Rate = (a) / (b) = _____	
			Rate = _____	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Building & Housing  
 LOCATION: \_\_\_\_\_

ITEM: Doors, Windows, Railings  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score _____ x factor =	Action Monitor
<b>Item 700 Doors</b>				
HBWS-700-01	True to alignment, plumbness in conformance to the approved/specified tolerance	/	_____ x _____ =	
HBWS-700-02	Doors are well fitted to the door frames	/	_____ x _____ =	
HBWS-700-03	Door accessories installed according to plans, e.g. locksets, door closers, hinges, door stoppers	/	_____ x _____ =	
HBWS-700-04	Free from any form of damages	/	_____ x _____ =	
HBWS-700-05	Doors conforms to specification requirements e.g. panel door, flush door polyvinyl, steel doors, etc.	/	_____ x _____ =	
		/	_____ x _____ =	
<b>Item 701 Windows</b>				
HBWS-701-01	True to alignment and elevation in conformance to the approved/specified tolerance	/	_____ x _____ =	
HBWS-701-02	Windows are well fitted to the window frames	/	_____ x _____ =	
HBWS-701-03	Window accessories installed according to plans, e.g. handles, seals, glazing for glass window, etc.	/	_____ x _____ =	
HBWS-701-04	Free from any form of damage	/	_____ x _____ =	
HBWS-701-05	Window conforms to specification requirements, e.g. sliding, jalousies (glass & wooden) steel casement windows	/	_____ x _____ =	
		/	_____ x _____ =	
<b>Item 702 Railings</b>				
HBWS-702-01	Installed according to plans	/	_____ x _____ =	
HBWS-702-02	Free from dents, scratches or any form of damage	/	_____ x _____ =	
HBWS-702-03	Bends and curves are smooth	/	_____ x _____ =	
HBWS-702-04	Conforms to approved tolerance size, dimension, height and type e.g. concrete, steel, stainless, aluminum, etc.	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a)	CAR Total
Entered by: _____			No. of Indicators (b) =	
Date: / /			Rate = (a) / (b) =	
			Rate =	



## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_ PROJECT TYPE: Building & Housing ITEM: Basic Services  
 \_\_\_\_\_ VISIT LOCATION: \_\_\_\_\_ DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score _____ x factor	Action Monitor
<b>Item 800 Plumbing</b>				
HBWS-800-01	Pipes installed according to plans, e.g. slope, alignment, location, bracings/supports	/	_____ x _____ = _____	
HBWS-800-02	Conducted and passed the required leak test	/	_____ x _____ = _____	
HBWS-800-03	Pipes not clogged	/	_____ x _____ = _____	
HBWS-800-04	Free from any form of damages	/	_____ x _____ = _____	
HBWS-800-05	Fixtures and accessories installed according to plans, e.g. height, alignment, location	/	_____ x _____ = _____	
HBWS-800-06	Adhesive conform to specification	/	_____ x _____ = _____	
HBWS-800-07	Water closet, lavatory conform to specification	/	_____ x _____ = _____	
		/	_____ x _____ = _____	
		/	_____ x _____ = _____	
<b>Item 801 Sanitary</b>				
HBWS-801-01	Pipes installed according to plans, e.g. slope, alignment, location, bracings/supports	/	_____ x _____ = _____	
HBWS-801-02	Conducted and passed the required pressure/leak test	/	_____ x _____ = _____	
HBWS-801-03	Pipes not clogged	/	_____ x _____ = _____	
HBWS-801-04	Free from any form of damages	/	_____ x _____ = _____	
HBWS-801-05	Fixtures and accessories installed according to plans, e.g. height, alignment, location	/	_____ x _____ = _____	
HBWS-801-06	Adhesive conforms to specification	/	_____ x _____ = _____	
		/	_____ x _____ = _____	
		/	_____ x _____ = _____	
		/	_____ x _____ = _____	
		/	_____ x _____ = _____	
Was subcontractor used? If yes, name of company and owner : _____			Total Score (a) = _____	CAR Total
Entered by: _____			No. of Indicators (b) = _____	
Date: / /			Rate = (a) / (b) = _____	
			Rate = _____	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Building & Housing  
 LOCATION: \_\_\_\_\_

ITEM: Basic Services  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score _____ x factor	Action Monitor
<b>Item 802 Electrical Works</b>				
HBWS-802-01	Pipes installed according to plans and laid out according to approved construction drawings	/	_____ x _____ = _____	
HBWS-802-02	Pipes, hangers, boxes, gutters, cable trays properly installed and painted, sharp edges of pipes removed	/	_____ x _____ = _____	
HBWS-802-03	Pipes properly bended	/	_____ x _____ = _____	
HBWS-802-04	Allowable number of wires in a pipe properly observed	/	_____ x _____ = _____	
HBWS-802-05	Splicing and connection provided with adequate rubber and pvc tapes	/	_____ x _____ = _____	
HBWS-802-06	Adequate length of wire provided for termination and splicing	/	_____ x _____ = _____	
HBWS-802-07	Wire color coding complied and observed	/	_____ x _____ = _____	
HBWS-802-08	Wire insulation not damaged during pulling	/	_____ x _____ = _____	
HBWS-802-09	Adequate number, correct size and gauge of pull boxes installed and properly covered	/	_____ x _____ = _____	
HBWS-802-10	Boxes and enclosures provided according to intended purpose	/	_____ x _____ = _____	
HBWS-802-11	Fittings and accessories provided and properly installed	/	_____ x _____ = _____	
HBWS-802-12	Block-outs and sleeves provided and properly secured	/	_____ x _____ = _____	
HBWS-802-13	Cable ties provided	/	_____ x _____ = _____	
HBWS-802-14	Blank covers provided for outlets and switches that are not utilized	/	_____ x _____ = _____	
HBWS-802-15	Use of tools and equipment properly observed	/	_____ x _____ = _____	
HBWS-802-16	Lighting fixtures, panel boards, circuit breakers, etc. properly installed and free from any form of damages	/	_____ x _____ = _____	
HBWS-802-17	Meager, clamp, phase sequence tests and load test conducted	/	_____ x _____ = _____	
HBWS-802-18	Shop drawings, as-built plan maintained	/	_____ x _____ = _____	
		/	_____ x _____ = _____	
		/	_____ x _____ = _____	
Was subcontractor used? If yes, name of company and owner : _____			Total Score (a) = _____	CAR Total
			No. of Indicators (b) = _____	
Entered by: _____			Rate = (a) / (b) = _____	
Date: / /			Rate = _____	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_ PROJECT TYPE: Building  
 \_\_\_\_\_ VISIT LOCATION: \_\_\_\_\_

ITEM: Mechanical Works  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score _____ x factor	Action Monitor
<b>Item 900 Generator Set</b>				
HBWS-900-01	Installation of auxillary, piping and control panel according to plans	/	_____ x _____ =	
HBWS-900-02	Installed materials free from any form of damages	/	_____ x _____ =	
HBWS-900-03	Pipes sufficiently braced	/	_____ x _____ =	
HBWS-900-04	Passed the required test	/	_____ x _____ =	
		/	_____ x _____ =	
<b>Item 901 Air-conditioning System</b>				
HBWS-901-01	Air-conditioning units, transfer fans, pipes, ducts, condensers, installed according to plans	/	_____ x _____ =	
HBWS-901-02	Jointing of pipes and ducts conform to specified jointing system	/	_____ x _____ =	
HBWS-901-03	Pipes and ducts free from leaks	/	_____ x _____ =	
HBWS-901-04	Pipes and ducts sufficiently braced/supported	/	_____ x _____ =	
HBWS-901-05	Installed materials free from any form of damage	/	_____ x _____ =	
HBWS-901-06	Conducted and passed required tests	/	_____ x _____ =	
		/	_____ x _____ =	
<b>Item 902 Elevators</b>				
HBWS-902-01	Installed according to plans	/	_____ x _____ =	
HBWS-902-02	Installed cables, pulleys, rails, tracks and bearings free from any form of damage	/	_____ x _____ =	
HBWS-902-03	Smooth riding operation	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	

Was subcontractor used? If yes, name of company and owner:

\_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: / /

Total Score (a)	CAR Total
=	
No. of Indicators (b)	
=	
Rate = (a) / (b)	
=	
Rate	
=	

## CPES CHECKLIST FOR WORKMANSHIP

PROJ. ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJ. TYPE: Building  
 LOCATION/LOT: \_\_\_\_\_

ITEM: Sewer & Drainage System  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score _____ x factor =	Action Monitor
<b>Item 903 Pipe Culvert and Storm Drain</b>				
HBWS-903-01	Bedding and backfill materials compacted to the required density	/	_____ x _____ =	
HBWS-903-02	Proper jointing of pipes	/	_____ x _____ =	
HBWS-903-03	Mortar for jointing of reinforced concrete culvert pipes conforms to specified mixture type	/	_____ x _____ =	
HBWS-903-04	Adequate collaring of reinforced concrete culvert pipes	/	_____ x _____ =	
HBWS-903-05	Conformance to the approved/specified tolerance for elevation, slope, and alignment	/	_____ x _____ =	
HBWS-903-06	Cracks, honeycomb, chipping-off within specified tolerances	/	_____ x _____ =	
HBWS-903-07	Sufficient collaring & flushing	/	_____ x _____ =	
HBWS-903-08	Conformance to the approved quality of concrete mix	/	_____ x _____ =	
HBWS-903-09	Spacing and sizes of rebars conform to specification	/	_____ x _____ =	
		/	_____ x _____ =	
<b>Item 904 Manholes, Inlets and Catch Basin</b>				
HBWS-904-01	Conformance to approved/specified tolerances for dimensions, elevations	/	_____ x _____ =	
HBWS-904-02	Covers and gratings well fitted and can easily be opened during maintenance work	/	_____ x _____ =	
HBWS-904-03	Honeycomb, cracks, spalling, etc. within specified tolerance	/	_____ x _____ =	
HBWS-904-04	Conformance to approved quality of concrete mix	/	_____ x _____ =	
HBWS-904-05	Spacing and sizes of rebars conform to specification	/	_____ x _____ =	
		/	_____ x _____ =	
<b>Item 905 Fencing, Gates</b>				
HBWS-905-01	Conformance to the approved/specified tolerance for alignment, dimension and elevation	/	_____ x _____ =	
HBWS-905-02	Installed according to plans and specifications	/	_____ x _____ =	
Was subcontractor(s) used? If yes, name of company(ies) and sub-item: _____			Total Score (a) =	CAR Total
Entered by: _____			No. of Indicators (b) =	
Date: / /			Rate = (a) / (b) =	
			Rate =	

### CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Ports and Harbor  
 LOCATION: \_\_\_\_\_

ITEM: Rockworks  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS				
Sub-item Code	Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).	Results	Score _____ x factor	Action Monitor
<b>Item 100 Breakwater, Bulkhead, Causeway, Jetty Groin, Shore, Protection Works, i.e., slope protection (riprap, rubble, stone masonry)</b>				
<b>Major*</b> * Refer to Section 11.4.a of the CPES Guidelines for definition of Major Defects				
PHWS-100-01	Conformance to the cross-sectional dimensions as per design and specifications	/	= _____ X _____	
PHWS-100-02	Conformance to the design elevations	/	= _____ X _____	
PHWS-100-03	Conformance to the side slopes or berm as per design and specifications	/	= _____ X _____	
PHWS-100-04	Conformance to the location as per design and specifications	/	= _____ X _____	
PHWS-100-05	Conformance to the alignment as per design and specifications	/	= _____ X _____	
PHWS-100-06	Conformance to the rock placement methodology and/or construction methodology	/	= _____ X _____	
PHWS-100-07	Compliance/conformance to the designed foundation, e.g. toe	/	= _____ X _____	
		/	= _____ X _____	
<b>Minor</b>				
PHWS-100-01	Conformance within approved/specified tolerance for cross-section	/	= _____ X _____	
PHWS-100-02	Conformance within approved/specified tolerance for elevation	/	= _____ X _____	
PHWS-100-05	Conformance within approved/specified tolerance for alignment	/	= _____ X _____	
PHWS-100-08	Provision of adequate bedding as required	/	= _____ X _____	
PHWS-100-09	Non-occurrence of displaced/sucked-out rocks	/	= _____ X _____	
PHWS-100-10	Conformance within approved/specified tolerance of in-between gaps for rocks in-place	/	= _____ X _____	
PHWS-100-11	Provision of settlement plates/blocks	/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
			Total Score (a)	CAR Total
Was subcontractor used? If yes, name of company and owner: _____ & _____			=	
Entered by: _____			No. of Indicators (b)	
Date: / /			=	
			Rate = (a) / (b)	
			=	
			Rate	
			=	

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Ports and Harbor  
 LOCATION: \_\_\_\_\_

ITEM: Rockworks  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS				
Sub-item Code	Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).	Results	Score _____ x factor	Action Monitor
<b>Item 101 Gabions</b>				
<b>Major*</b> * Refer to Section 11.4.a of the CPES Guidelines for definition of Major Defects				
PHWS-101-01	Conformance to the cross-sectional dimensions as per design and specifications	/	= _____ X _____	
PHWS-101-02	Conformance to the design elevations	/	= _____ X _____	
PHWS-101-03	Conformance to the location as per design and specifications	/	= _____ X _____	
PHWS-101-04	Conformance to the alignment as per design and specifications	/	= _____ X _____	
PHWS-101-05	Conformance to the wire mesh cage fabrication requirements (alignment, lapping, etc.)	/	= _____ X _____	
PHWS-101-06	Proper construction methodology, e.g., placing of rock fill materials, lapping and twisting of mesh wire	/	= _____ X _____	
PHWS-101-07	Conformance to minimum density requirements (in kg./cu.m.) for filled gabions	/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
<b>Minor</b>				
PHWS-101-01	Conformance within the approved/specified tolerance for cross-sectional dimensions	/	= _____ X _____	
PHWS-101-02	Conformance within the approved/specified tolerance for elevations	/	= _____ X _____	
PHWS-101-04	Conformance within the approved/specified tolerance vs. the actual alignment	/	= _____ X _____	
PHWS-101-08	Provision of adequate bedding as required	/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_ Date: / /

Total Score (a)	CAR Total
=	
No. of Indicators (b)	
=	
Rate = (a) / (b)	
=	
Rate	
=	

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Ports and Harbor  
 LOCATION: \_\_\_\_\_

ITEM: Piers/Wharves/Slipways  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score _____ x factor	Action Monitor
Sub-item Code	Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).			
<b>Item 200 R.C. Piles</b>				
<b>Major*</b>	<b>* Refer to Section 11.4.a of the CPES Guidelines for definition of Major Defects</b>			
PHWS-200-01	Conformance to the cross-sectional dimensions as per design and specifications	/	= _____ X _____	
PHWS-200-02	Conformance to the design length as per design and specifications	/	= _____ X _____	
PHWS-200-03	Conformance to the minimum required embedment of spliced joint	/	= _____ X _____	
PHWS-200-04	Use of metal collar and/or protective caps during driving	/	= _____ X _____	
PHWS-200-05	Attainment of required pile penetration/bearing capacity	/	= _____ X _____	
PHWS-200-06	Pile shoe is provided for each pile	/	= _____ X _____	
PHWS-200-07	Conformance to required number of piles supplied and driven in-place	/	= _____ X _____	
PHWS-200-08	Lifting of each pile is at designed lifting points	/	= _____ X _____	
PHWS-200-09	Vertical piles are driven plumb	/	= _____ X _____	
PHWS-200-10	Batter piles are driven in accordance with the designed slope	/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
<b>Minor</b>				
PHWS-200-01	Conformance within the approved/specified tolerance for dimension	/	= _____ X _____	
PHWS-200-02	Conformance within the approved/specified tolerance for pile length	/	= _____ X _____	
PHWS-200-09	Conformance within the approved/specified tolerance for plumbness/verticality	/	= _____ X _____	
PHWS-200-10	Conformance within the approved/specified tolerance for slope of the batter piles	/	= _____ X _____	
PHWS-200-11	Proper graduation/markings	/	= _____ X _____	
PHWS-200-12	Steel lifting hooks are cut-off and applied with approved type of sealant	/	= _____ X _____	
PHWS-200-13	Alignment of the piles driven in-place are within the approved/specified tolerance	/	= _____ X _____	
PHWS-200-14	Pile cut-off elevations are chipped-off properly. Free from excessive chipping below the cut-off elevations	/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____			No of Indicators (b) =	
Date: / /			Rate = (a) / (b) =	
			Rate =	

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Ports and Harbor  
 LOCATION: \_\_\_\_\_

ITEM:Piers/Wharves/Slipways  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score _____ x factor	Action Monitor
Sub-item Code	<i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>			
<b>Item 201 Timber Piles</b>				
<b>Major</b>	<i>* Refer to Section 11.4.a of the CPES Guidelines for definition of Major Defects</i>			
PHWS-201-01	Conformance to the cross-sectional dimensions as per design and specifications	/	= _____ X _____	
PHWS-201-02	Conformance to the design length as per design and specifications	/	= _____ X _____	
PHWS-201-03	Use of metal collar and/or protective caps during driving	/	= _____ X _____	
PHWS-201-04	Attainment of required pile penetration/bearing capacity	/	= _____ X _____	
PHWS-201-05	Conformance to the required number of piles supplied and driven in-place	/	= _____ X _____	
PHWS-201-06	Lifting is at designated lifting points of each pile	/	= _____ X _____	
PHWS-201-07	Vertical piles are driven plumb	/	= _____ X _____	
PHWS-201-08	Batter piles are driven in accordance with the designed slope	/	= _____ X _____	
PHWS-201-09	No massive splitting is visible perpendicular to the pile length	/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
<b>Minor</b>				
PHWS-201-01	Conformance within the approved/specified tolerance for dimension	/	= _____ X _____	
PHWS-201-02	Conformance within the approved/specified tolerance for pile length	/	= _____ X _____	
PHWS-201-07	Conformance within the approved/specified tolerance for plumbness/verticality	/	= _____ X _____	
PHWS-201-08	Conformance within the approved/specified tolerance for slope of the batter piles	/	= _____ X _____	
PHWS-201-10	Proper graduation/markings	/	= _____ X _____	
PHWS-201-11	Alignment of the piles driven in-place are within the approved/specified tolerance	/	= _____ X _____	
PHWS-201-12	Pile butt is free from brooming	/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____			No. of Indicators (b) =	
Date: / /			Rate = (a) / (b) =	
			Rate =	



**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Ports and Harbor  
 LOCATION: \_\_\_\_\_

ITEM: Piers/Wharves/Slipways  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score _____ x factor	Action Monitor
Sub-item Code	Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).			
<b>Item 202 Steel Piles</b>				
<b>Major*</b>	<b>* Refer to Section 11.4.a of the CPES Guidelines for definition of Major Defects</b>			
PHWS-202-01	Conformance to the cross-sectional dimensions as per design and specifications	/	= _____ X _____	
PHWS-202-02	Conformance to the design length as per design and specifications	/	= _____ X _____	
PHWS-202-03	Use of metal collar and/or protective caps during driving	/	= _____ X _____	
PHWS-202-04	Attainment of required pile penetration/bearing capacity	/	= _____ X _____	
PHWS-202-05	Conformance to the splicing requirements as per design and specifications	/	= _____ X _____	
PHWS-202-06	Conformance to required number of piles supplied and driven in-place	/	= _____ X _____	
PHWS-202-07	Lifting of each pile is at designed lifting points	/	= _____ X _____	
PHWS-202-08	Vertical piles are driven plumb	/	= _____ X _____	
PHWS-202-09	Batter piles are driven in accordance with the specified slope	/	= _____ X _____	
PHWS-202-10	Driven piles are free from massive dents or damages	/	= _____ X _____	
PHWS-202-11	Each pile is properly applied with protective coating as required	/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
<b>Minor</b>				
PHWS-202-01	Conformance within the approved/specified tolerance for dimension	/	= _____ X _____	
PHWS-202-02	Conformance within the approved/specified tolerance for pile length	/	= _____ X _____	
PHWS-202-08	Conformance within the approved/specified tolerance for plumbness/verticality	/	= _____ X _____	
PHWS-202-09	Conformance within the approved/specified tolerance for slope of the batter piles	/	= _____ X _____	
PHWS-202-12	Proper graduation/markings	/	= _____ X _____	
PHWS-202-13	Alignment of the piles driven in-place are within the approved/specified tolerance	/	= _____ X _____	
PHWS-202-14	Pile cut-off are properly cut with appropriate cutting outfits at the established pile cut-off elevations	/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____			No. of Indicators (b) =	
Date: / /			Rate = (a) / (b) =	
			Rate =	

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Ports and Harbor  
 LOCATION: \_\_\_\_\_

ITEM: Piers/Wharves/Slipways  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score _____ x factor	Action Monitor
Sub-item Code	Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).			
<b>Item 203 Timber Structural Member</b>				
<b>Major*</b>	<i>* Refer to Section 11.4.a of the CPES Guidelines for definition of Major Defects</i>			
PHWS-203-01	Non-appearance of decay or insect attack	/	= _____ X _____	
PHWS-203-02	Non-appearance of massive splitting	/	= _____ X _____	
PHWS-203-03	Non-appearance of bends or warping	/	= _____ X _____	
PHWS-203-04	Conformance with the cross-sectional dimensions per design and specifications	/	= _____ X _____	
PHWS-203-05	Conformance to the design length as per design and specifications	/	= _____ X _____	
PHWS-203-06	Splicing/lapping is in accordance with the design and specifications	/	= _____ X _____	
PHWS-203-07	Conformance with the installation fixtures including fittings	/	= _____ X _____	
<b>Minor</b>				
PHWS-203-04	Conformance within the specified tolerance for cross-sectional dimensions	/	= _____ X _____	
PHWS-203-05	Conformance within the specified tolerance for length	/	= _____ X _____	
		/	= _____ X _____	
<b>Item 204 Metal Structural Member</b>				
<b>Major*</b>	<i>* Refer to Section 11.4.a of the CPES Guidelines for definition of Major Defects</i>			
PHWS-204-01	Conformance with the cross-sectional dimensions per design and specifications	/	= _____ X _____	
PHWS-204-02	Conformance to the design length as per design and specifications	/	= _____ X _____	
PHWS-204-03	Connections or joints are welded in accordance with the design and specifications	/	= _____ X _____	
PHWS-204-04	Splicing/lapping is in accordance with the design and specifications	/	= _____ X _____	
PHWS-204-05	Non-occurrence of bending or warping, cracking on metal and fixings	/	= _____ X _____	
PHWS-204-06	Non-occurrence of cracks on metal and fixings	/	= _____ X _____	
PHWS-204-07	Non-occurrence of cracks on metal components and fixtures	/	= _____ X _____	
PHWS-204-08	Non-occurrence of corrosion	/	= _____ X _____	
<b>Minor</b>				
PHWS-204-01	Conformance within the specified tolerance for cross-sectional dimensions	/	= _____ X _____	
PHWS-204-02	Conformance within the specified tolerance for length	/	= _____ X _____	
PHWS-204-08	Non-occurrence of rust	/	= _____ X _____	
PHWS-204-09	Sufficient coating applied for rust protection	/	= _____ X _____	
		/	= _____ X _____	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a)	CAR Total
Entered by: _____			No. of Indicators (b)	
Date: / /			Rate = (a) / (b)	
			Rate	

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Ports and Harbor  
 LOCATION: \_\_\_\_\_

ITEM: Protective Works  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score _____ x factor	Action Monitor
Sub-item Code	<i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>			
<b>Item 300 Rubber Dock Fender, Rubber Fender on RC Pile</b>				
<b>Major*</b>	<b>* Refer to Section 11.4.a of the CPES Guidelines for definition of Major Defects</b>			
PHWS-300-01	Conformance with the cross-sectional dimensions per design and specifications	/	= _____ x _____	
PHWS-300-02	Conformance to the design length as per design and specifications	/	= _____ x _____	
PHWS-300-03	Free from damages such as chipped-off edges, etc. during transport and handling	/	= _____ x _____	
PHWS-300-04	Installation in accordance with the locations as per design and specifications	/	= _____ x _____	
PHWS-300-05	Installation in accordance with the designed elevation	/	= _____ x _____	
PHWS-300-06	Proper alignment of installed fenders	/	= _____ x _____	
PHWS-300-07	Complete installation of fixtures and accessories	/	= _____ x _____	
		/	= _____ x _____	
<b>Minor</b>				
PHWS-300-01	Conformance within the specified tolerance for cross-sectional dimensions	/	= _____ x _____	
PHWS-300-02	Conformance within the specified tolerance for length	/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
<b>Item 301 Timber Pile Fender, Rubbing Timber, Timber Wailing</b>				
<b>Major*</b>	<b>* Refer to Section 11.4.a of the CPES Guidelines for definition of Major Defects</b>			
PHWS-301-01	Non-appearance of decay or insect attack	/	= _____ x _____	
PHWS-301-02	Non-appearance of massive splitting	/	= _____ x _____	
PHWS-301-03	Non-appearance of bends or warping	/	= _____ x _____	
PHWS-301-04	Conformance with the cross-sectional dimensions per design and specifications	/	= _____ x _____	
PHWS-301-05	Conformance to the design length as per design and specifications	/	= _____ x _____	
		/	= _____ x _____	
<b>Minor</b>				
PHWS-301-04	Conformance within the specified tolerance for cross-sectional dimensions	/	= _____ x _____	
PHWS-301-05	Conformance within the specified tolerance for length	/	= _____ x _____	
PHWS-301-06	No chipped-off edges	/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____ Date: / /			No. of Indicators (b) =	
			Rate = (a) / (b) =	
			Rate =	

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Ports and Harbor  
 LOCATION: \_\_\_\_\_

ITEM: Protective Works  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS				
Sub-item Code	Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).	Results	Score _____ x factor	Action Monitor
<b>Item 302 Mooring Fixture: Cleat, Post, Bitt, Bollard</b>				
<b>Major*</b> * Refer to Section 11.4.a of the CPES Guidelines for definition of Major Defects				
PHWS-302-01	Supplied/installed mooring fixtures in accordance with the plans and specifications	/	= _____ x _____	
PHWS-302-02	Conformance to the required number of anchor bolts, nuts and washers in accordance with the plans and specifications	/	= _____ x _____	
PHWS-302-03	Conformance to pedestal/foundation requirements in accordance with the plans and specifications	/	= _____ x _____	
PHWS-302-04	Conformance to the anchoring/embedment requirements of the anchor bolts	/	= _____ x _____	
PHWS-302-05	Conformance to the number of mooring fixtures in accordance with the plans and specifications	/	= _____ x _____	
PHWS-302-06	Conformance to the location of the mooring fixtures in accordance with the plans and specifications	/	= _____ x _____	
PHWS-302-07	Conformance to the type and installation requirements for sealers of anchor bolts and nuts	/	= _____ x _____	
PHWS-302-08	Non-occurrence of corrosion	/	= _____ x _____	
PHWS-302-09	Non-occurrence of damages e.g. breakage, cracks or chipped-off portions on the mooring fixtures including accessories	/	= _____ x _____	
		/	= _____ x _____	
<b>Minor</b>				
PHWS-302-01	Supplied/installed mooring fixtures and accessories within the approved/specified tolerances	/	= _____ x _____	
PHWS-302-03	Conformance to pedestal/foundation within the approved/specified tolerances	/	= _____ x _____	
PHWS-302-08	Non-occurrence of rust	/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
<b>Item 303 Filter Fabric/Reinforcing Mattress</b>				
<b>Minor</b>				
PHWS-303-01	Conformance to the elevation and extent of application as shown on the plan	/	= _____ x _____	
PHWS-303-02	Conformance to the required installation procedure, e.g. lapping requirement, etc.	/	= _____ x _____	
PHWS-303-03	Installed material is free from damage e.g. tears or holes	/	= _____ x _____	
		/	= _____ x _____	
<b>Minor</b>				
PHWS-303-04	Installed material is not exposed to traffic loads	/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: / /

Total Score (a)	CAR Total
=	
No. of Indicators (b)	
=	
Rate = (a) / (b)	
=	
Rate	
=	

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_ PROJECT TYPE: Ports and Harbor ITEM: Protective Works  
 \_\_\_\_\_ VISIT LOCATION: \_\_\_\_\_ DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score _____ x factor	Action Monitor
Sub-item Code	Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).			
<b>Item 304 Stair Landing/Ladder</b>				
<b>Major*</b>	<i>* Refer to Section 11.4.a of the CPES Guidelines for definition of Major Defects</i>			
PHWS-304-01	Conformance to the dimensions as per design and specifications	/	= _____ X _____	
PHWS-304-02	Conformance to the required number of steps, risers	/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
<b>Minor</b>				
PHWS-304-01	Conformance within the approved/specified tolerance for dimensions	/	= _____ X _____	
		/	= _____ X _____	
	<b>For reinforced concrete structure: refer to Common Items of Work - PHWS 900, 901 and 902</b>			
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
<b>Item 305 Bulkhead Curves and Deflector Wall</b>				
<b>Major*</b>	<i>* Refer to Section 11.4.a of the CPES Guidelines for definition of Major Defects</i>			
PHWS-305-01	Conformance to the dimensions as per design and specifications	/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
<b>Minor</b>				
PHWS-305-01	Conformance within the approved/specified tolerance for dimensions	/	= _____ X _____	
		/	= _____ X _____	
	<b>For reinforced concrete structure: refer to Common Items of Work - PHWS 900, 901 and 902</b>			
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
Was subcontractor used? If yes, name of company and owner: _____ & _____		Total Score (a) =		CAR Total
Entered by: _____		No. of Indicators (b) =		
Date: / /		Rate = (a) / (b) =		
		Rate =		

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_ PROJECT TYPE: Ports and Harbor ITEM: Roll-on / Roll-off  
 \_\_\_\_\_ VISIT LOCATION: \_\_\_\_\_ DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS				
Sub-item Code	Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).	Results	Score _____ x factor	Action Monitor
<b>Item 400 Roll-on / Roll-off</b>				
<b>Major*</b>	<b>* Refer to Section 11.4.a of the CPES Guidelines for definition of Major Defects</b>			
PHWS-400-01	Conformance with the ramp dimensions in accordance with the plans and specifications	/	= _____ x _____	
PHWS-400-02	Conformance with the deck inclination in accordance with the plans and specifications	/	= _____ x _____	
PHWS-400-03	Conformance with the ramp location in accordance with the plans and specifications	/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
<b>Minor</b>				
PHWS-400-01	Conformance within the approved/specified tolerance for dimensions	/	= _____ x _____	
PHWS-400-02	Conformance within the approved/specified tolerance for deck inclination	/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
	<b>For reinforced concrete structure: refer to Common Items of Work - PHWS 900, 901 and 902</b>	/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
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		/	= _____ x _____	
		/	= _____ x _____	
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		/	= _____ x _____	
		/	= _____ x _____	
			Total Score (a)	CAR Total
			=	
			No. of Indicators (b)	
			=	
			Rate = (a) / (b)	
			=	
			Rate	
			=	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_ Date: / /

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_ PROJECT TYPE: Ports and Harbor ITEM: Electrical Works  
 \_\_\_\_\_ VISIT LOCATION: \_\_\_\_\_ DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score _____ x factor	Action Monitor
Sub-item Code	Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).			
<b>Item 500 Lighting System (includes lighting tower)</b>				
<b>Major*</b>	<b>* Refer to Section 11.4.a of the CPES Guidelines for definition of Major Defects</b>			
PHWS-500-01	Supplied/installed type of lamps in accordance with the design and specifications	/	= _____ x _____	
PHWS-500-02	Supplied/installed number of lamps in accordance with the design and specifications	/	= _____ x _____	
PHWS-500-03	Conformance to the cross-sectional dimensions of lighting poles in accordance with the design and specifications	/	= _____ x _____	
PHWS-500-04	Conformance to the height/length of lighting poles in accordance with the design and specifications	/	= _____ x _____	
PHWS-500-05	Conformance to the location of lighting poles in accordance with the design and specifications	/	= _____ x _____	
PHWS-500-06	Lighting poles are erected plumb	/	= _____ x _____	
PHWS-500-07	Conformance to the wiring sizes in accordance with the design and specifications	/	= _____ x _____	
PHWS-500-08	Conformance with electrical fixtures (e.g. switches, wire cables, load break switch, power fuse)	/	= _____ x _____	
PHWS-500-09	Electrical wiring installed are fully insulated e.g. insulation are not peeled-off	/	= _____ x _____	
PHWS-500-10	Electrical conduits and pipes conformed with the design and specifications	/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
<b>Minor</b>				
PHWS-500-03	Conformance within the approved/specified tolerance for dimensions of lighting poles	/	= _____ x _____	
PHWS-500-04	Conformance within the approved/specified tolerance for height/length of lighting poles	/	= _____ x _____	
PHWS-500-06	Conformance within the approved/specified tolerance for plumbness of lighting poles	/	= _____ x _____	
PHWS-500-11	Conformance with the illumination distribution or direction of illumination in accordance with the design and specs	/	= _____ x _____	
PHWS-500-12	Lighting poles and cage platforms properly coated against rust in accordance with the plans and specifications	/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
	<b>For r.c. pedestals and foundation of lighting poles, r.c. ductbanks and r.c. handholes: refer to Common Items of Work - PHWS 900, 901 and 902</b>			
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____ Date: / /			No. of Indicators (b) =	
			Rate = (a) / (b) =	
			Rate =	

### CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_ PROJECT TYPE: Ports and Harbor ITEM: Electrical Works  
 \_\_\_\_\_ VISIT LOCATION: \_\_\_\_\_ DATE OF VISIT: / /

Factor : "During Construction" = 0.40; "Upon Completion" = 0.50

Sub-item Code	INDICATORS <i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score _____ x factor	Action Monitor
<b>Item 501 Reefer Container Power Terminal (Receptacle-socket Outlet &amp; Power Panel)</b>				
<b>Major</b>				
PHWS-501-01	Compliance with the quantity of Receptacle-Socket Outlets as required in the design and specifications	/	= _____ X _____	
PHWS-501-02	Compliance with the quality requirements of Receptacle-Socket Outlets as indicated in the design and specifications	/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
	<i>For reinforced concrete structure: refer to Common Items of Work - PHWS 900, 901 and 902</i>			
		/	= _____ X _____	
	<i>For steel racks: refer to PHWS 204</i>			
		/	= _____ X _____	
	<i>For electrical works: refer to PHWS 903</i>			
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
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		/	= _____ X _____	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____ Date: / /			No. of Indicators (b) =	
			Rate = (a) / (b) =	
			Rate =	



**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_ PROJECT TYPE: Ports and Harbor ITEM: Electrical Works  
 \_\_\_\_\_ VISIT LOCATION: \_\_\_\_\_ DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score ____ x factor	Action Monitor
Sub-item Code	Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).			
<b>Item 502 Fire Alarm System (Manual Stations, Fire Alarm Bells, Control Panels, Automatic Detectors, Pre-design Horn, Visual Anusciator, Power Supply)</b>				
PHWS-502-01	Compliance with the number of automatic detectors as required in the design and specifications	/	____ x ____ =	
PHWS-502-02	Compliance with the number of sprinklers as required in the design and specifications	/	____ x ____ =	
PHWS-502-03	Compliance with the number of fire alarms/bells as required in the design and specifications	/	____ x ____ =	
PHWS-502-04	Compliance with the installation for detectors as required in the design and specifications	/	____ x ____ =	
PHWS-502-05	Compliance with the installation for sprinkler system as required in the design and specifications	/	____ x ____ =	
PHWS-502-06	Compliance with the type of power supply for the alarm system as required in the design and specifications	/	____ x ____ =	
PHWS-502-07	Compliance with the installation of water supply system for fire emergencies as required in the design and specifications	/	____ x ____ =	
PHWS-502-08	Compliance with the installation of water piping inlets/outlets for fire emergencies as required in the design and specs	/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
<b>Item 503 Transformer (Voltage, phase, load capacity, types, location fencing)</b>				
<b>Major</b>				
PHWS-503-01	Compliance with the voltage rating input/output as required in the design and specifications	/	____ x ____ =	
PHWS-503-02	Compliance with the number of phase as required in the design and specifications	/	____ x ____ =	
PHWS-503-03	Compliance with the load capacity as required in the design and specifications	/	____ x ____ =	
PHWS-503-04	Compliance with the location and installation as required in the design and specifications	/	____ x ____ =	
PHWS-503-05	Compliance with the circuit safety protection and accessories as required in the design and specifications	/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
	<b>For electrical works: refer to PHWS 903</b>			
		/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____ Date: / /			No. of Indicators (b) =	
			Rate = (a) / (b) =	
			Rate =	

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_ PROJECT TYPE: Ports and Harbor ITEM: Electrical Works  
 \_\_\_\_\_ VISIT LOCATION: \_\_\_\_\_ DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS				
Sub-item Code	<i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score _____ x factor	Action Monitor
<b>Item 504 Protection System for Outdoor Electrical Works (Lightning arrester, Grounding wire/rod, Air Terminal complete with accessories)</b>				
<b>Major</b>				
PHWS-504-01	Conformance to the type/size of lightning arresters installed as required in the design and specifications	/	= _____ X _____	
PHWS-504-02	Conformance to the number of lightning arresters installed as required in the design and specifications	/	= _____ X _____	
PHWS-504-03	Conformance to the type/size of grounding wires as required in the design and specifications	/	= _____ X _____	
PHWS-504-04	Conformance to the type of air terminals including accessories as required in the design and specifications	/	= _____ X _____	
PHWS-504-05	Conformance to the wire splicing requirements as required in the design and specifications	/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
	<b>For electrical works: refer to PHWS 903</b>			
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
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		/	= _____ X _____	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: / /

Total Score (a)	CAR Total
= _____	
No. of Indicators (b)	
= _____	
Rate = (a) / (b)	
= _____	
Rate	
= _____	

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Ports and Harbor  
 LOCATION: \_\_\_\_\_

ITEM: Mechanical Works  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS				
Sub-item Code	Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).	Results	Score _____ x factor	Action Monitor
<b>Item 600 Stand-by Generators System</b>				
<b>Major</b>				
PHWS-600-01	Conformance to the rated capacity of the generator set as required in the design and specifications	/	= _____ x _____	
PHWS-600-02	Conformance to the engine type and engine power requirements as required in the design and specifications	/	= _____ x _____	
PHWS-600-03	Conformance to the exhaust piping system as required in the design and specifications	/	= _____ x _____	
		/	= _____ x _____	
	<b>For foundation and housing requirements of the generator set: refer to PHWS 900, 901, 902, 904, 905, 906, 907, 908 and 909</b>			
		/	= _____ x _____	
	<b>For electrical works: refer to PHWS 903</b>			
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
<b>Item 601 A.C. System / Cold Storage</b>				
<b>Major</b>				
PHWS-601-01	Conformance with the quantity of cooling equipment as required in the design and specifications	/	= _____ x _____	
PHWS-601-02	Conformance with the required type/class of cooling equipment as required in the design and specifications	/	= _____ x _____	
PHWS-601-03	Conformance with the installation location of equipment as required in the design and specifications	/	= _____ x _____	
PHWS-601-04	Dimensions of the ducting are in accordance with the plans	/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
<b>Minor</b>				
PHWS-601-05	Ventilation/air ducting are free from leaks	/	= _____ x _____	
PHWS-601-06	Ducting is provided with insulation as required	/	= _____ x _____	
		/	= _____ x _____	
	<b>For metal sheet ducting: refer to PHWS 910</b>			
		/	= _____ x _____	
	<b>For electrical works: refer to PHWS 903</b>			
		/	= _____ x _____	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: / /

Total Score (a)	CAR Total
=	
No. of Indicators (b)	
=	
Rate = (a) / (b)	
=	
Rate	
=	

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_VISIT

PROJECT TYPE: Ports and Harbor  
 LOCATION: \_\_\_\_\_

ITEM: Mechanical Works  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS				
Sub-item Code	INDICATORS	Results	Score _____ x factor	Action Monitor
<i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>				
<b>Item 602 Mechanical Ventilation (Roof Exhaust Fans, Kitchen Exhaust, Range Hood, Elevator Exhaust Fan)</b>				
<i>Major</i>				
PHWS-602-01	Installed equipment and accessories are free from damage e.g. dents	/	= _____ x _____	
PHWS-602-02	Conformance to the size and shape as required in the design and specifications	/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
	<i>For metal sheet ducting: refer to PHWS 910</i>			
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
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Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: / /

Total Score (a) =	CAR Total
No. of Indicators (b) =	
Rate = (a) / (b) =	
Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

 PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

 PROJECT TYPE: Ports and Harbor  
 LOCATION: \_\_\_\_\_

 ITEM: Reclamation Works  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS	Results	Score _____ x factor	Action Monitor
<b>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</b>				
<b>Item 700 Reclamation Works</b>				
<b>Major</b>				
PHWS-700-01	Excavation/displacement of unsuitable materials to required depth	/	= <u>    </u> X <u>    </u>	
PHWS-700-02	Use of suitable filling materials	/	= <u>    </u> X <u>    </u>	
PHWS-700-03	Unsuitable materials are properly segregated from the other materials to be used for the project	/	= <u>    </u> X <u>    </u>	
PHWS-700-04	Unsuitable materials are properly disposed to the approved disposal site	/	= <u>    </u> X <u>    </u>	
PHWS-700-05	Conformance to lines and grades as per plans and specifications	/	= <u>    </u> X <u>    </u>	
PHWS-700-06	Installed approved surcharge materials, drain materials	/	= <u>    </u> X <u>    </u>	
PHWS-700-07	Provision of drainage for surface run-off	/	= <u>    </u> X <u>    </u>	
PHWS-700-08	Adequate compaction above sea level	/	= <u>    </u> X <u>    </u>	
		/	= <u>    </u> X <u>    </u>	
		/	= <u>    </u> X <u>    </u>	
<b>Minor</b>				
PHWS-700-09	Provision of settlement plate	/	= <u>    </u> X <u>    </u>	
		/	= <u>    </u> X <u>    </u>	
		/	= <u>    </u> X <u>    </u>	
		/	= <u>    </u> X <u>    </u>	
		/	= <u>    </u> X <u>    </u>	
		/	= <u>    </u> X <u>    </u>	
		/	= <u>    </u> X <u>    </u>	
		/	= <u>    </u> X <u>    </u>	
		/	= <u>    </u> X <u>    </u>	
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		/	= <u>    </u> X <u>    </u>	
		/	= <u>    </u> X <u>    </u>	
		/	= <u>    </u> X <u>    </u>	

 Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: / /

Total Score (a) =	CAR Total
No. of Indicators (b) =	
Rate = (a) / (b) =	
Rate =	

### CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Ports and Harbor  
 LOCATION: \_\_\_\_\_

ITEM: Dredging Works  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score _____ x factor	Action Monitor
<b>Item 710 Dredging Works</b>				
<b>Major*</b> * Refer to Section 11.4.a of the CPES Guidelines for definition of Major Defects				
PHWS-710-01	Conformance to the dredging limits or areas to be dredged	/	= _____ x _____	
PHWS-710-02	Conformance to the dredged depth as per plans and specifications	/	= _____ x _____	
PHWS-710-03	Conformance to the appropriate dredging and support equipments as per specifications	/	= _____ x _____	
PHWS-710-04	Proper disposal of dredged materials to the designated disposal area/site	/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
<b>Minor</b>				
PHWS-710-02	Conformance to the allowable or approved tolerance for dredged depth	/	= _____ x _____	
PHWS-710-05	Marking buoys evident on designated areas to be dredged	/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
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		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_ Date: / /

Total Score (a)	CAR Total
No. of Indicators (b)	
Rate = (a) / (b)	
=	
Rate	
=	

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Ports and Harbor  
 LOCATION: \_\_\_\_\_

ITEM: Special Items  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score _____ x factor	Action Monitor
Sub-item Code	<i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>			
<b>Item 800 Caisson Type Breakwater (Formworks, Rebars, Concrete Bedding and Filling Materials - see common items of work for checklists/criteria)</b>				
<b>Major</b>				
PHWS-800-01	Conformance to the approved/specified tolerances for lines, grades and elevation	/	= _____ x _____	
		/	= _____ x _____	
<b>For concrete structure: refer to Common Items of Work - PHWS 900, 901 and 902</b>				
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
<b>Item 801 Concrete Blocks/Tetropods (Dissipators)</b>				
		/	= _____ x _____	
<b>For concrete structure: refer to Common Items of Work - PHWS 900, 901 and 902</b>				
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
<b>Item 802 Navigational Aids (Beacon Poles and Lighting Fixtures, Marking Buoys)</b>				
PHWS-802-01	Conformance to required location of Beacon Poles and Lighting Fixtures and Marking Buoys	/	= _____ x _____	
PHWS-802-02	Conformance to the required cross-section and details	/	= _____ x _____	
PHWS-802-03	Conformance to the required effective intensity of navigational light	/	= _____ x _____	
PHWS-802-04	Conformance to the required luminous range of navigational light	/	= _____ x _____	
PHWS-802-05	Conformance to the required number of flashes/flashing sign and color of navigational light	/	= _____ x _____	
PHWS-802-06	Conformance to the required installation method	/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a)	CAR Total
Entered by: _____			No. of Indicators (b)	
Date: / /			Rate = (a) / (b)	
			=	
			Rate	
			=	

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Ports and Harbor  
 LOCATION: \_\_\_\_\_

ITEM: Common Items of Work  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score ____ x factor	Action Monitor
Sub-item Code	<i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>			
<b>Item 900 Formworks</b>				
PHWS-900-01	Conformance to the required type of formworks in accordance with approved shop/working drawings	/	= ____ X ____	
PHWS-900-02	Forms coated with mould oil as required	/	= ____ X ____	
PHWS-900-03	Sufficient bracing/support provided	/	= ____ X ____	
PHWS-900-04	No loose knots, splits, cracks, etc.	/	= ____ X ____	
PHWS-900-05	Provision of required concrete or steel spacer	/	= ____ X ____	
PHWS-900-06	Conformance to dimensions, location, plumbness and alignment	/	= ____ X ____	
PHWS-900-07	Provision of camber during construction stage	/	= ____ X ____	
		/	= ____ X ____	
		/	= ____ X ____	
		/	= ____ X ____	
<b>Item 901 Reinforcing Steel Bars (including tendons for Pre/Post-stressed concrete)</b>				
<b>Major*</b>	* Refer to Section 11.4.a of the CPES Guidelines for definition of Major Defects			
PHWS-901-01	Conformance of in-placed materials to plans & specifications	/	= ____ X ____	
PHWS-901-02	Non-appearance of corrosion on steel reinforcement	/	= ____ X ____	
<b>Minor</b>				
PHWS-901-02	Non-appearance of rust on steel reinforcement	/	= ____ X ____	
PHWS-901-03	Conformance to approved bar cutting schedule, proper spacing, anchorage, adequate reinforcements	/	= ____ X ____	
PHWS-901-04	No sign of oil, paint and other deleterious materials on reinforcements	/	= ____ X ____	
PHWS-901-05	Conformance to jointing requirement, i.e. splicing, welding, etc.	/	= ____ X ____	
PHWS-901-06	Conformance to the required installation of ducttube e.g. (spacing, location and distance)	/	= ____ X ____	
PHWS-901-07	Conformance to the required steel plate and lock	/	= ____ X ____	
PHWS-901-08	Conformance to the number of bundles of tendons and number of pieces of bundles of tendons	/	= ____ X ____	
		/	= ____ X ____	
		/	= ____ X ____	
		/	= ____ X ____	
		/	= ____ X ____	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a)	CAR Total
Entered by: _____			No. of Indicators (b)	
Date: / /			Rate = (a) / (b)	
			=	
			Rate	
			=	



**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Ports and Harbor  
 LOCATION: \_\_\_\_\_

ITEM: Common Items of Work  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score _____ x factor	Action Monitor
Sub-item Code	<i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>			
<b>Item 902 Concrete Works</b>				
<b>Major*</b>	* Refer to Section 11.4.a of the CPES Guidelines for definition of Major Defects			
PHWS-902-01	No through cracks	/	= _____ X _____	
PHWS-902-02	No honeycomb or spalling (no exposed rebars/aggregates)	/	= _____ X _____	
PHWS-902-03	No chipping off of concrete cover	/	= _____ X _____	
PHWS-902-04	Proper and adequate vibration	/	= _____ X _____	
PHWS-902-05	Conformance to finishing/plastering requirement	/	= _____ X _____	
PHWS-902-06	No sagging or bulging	/	= _____ X _____	
PHWS-902-07	Conformance to the required concrete cover for rebars	/	= _____ X _____	
PHWS-902-08	Conformance to the batching, mixing, transporting and discharge time requirements	/	= _____ X _____	
PHWS-902-09	Conformance to placing requirement that will not result segregation of aggregates, cold joints and misalignment	/	= _____ X _____	
PHWS-902-10	Conformance to the jointing requirement	/	= _____ X _____	
PHWS-902-11	Proper curing	/	= _____ X _____	
PHWS-902-12	Conformance to required dimensions, lines, grades/elevation locations and crown (for pier)	/	= _____ X _____	
PHWS-902-13	Conformance to the required quality of concrete mix	/	= _____ X _____	
PHWS-902-14	Provision of camber for RCDG	/	= _____ X _____	
		/	= _____ X _____	
<b>Minor</b>				
PHWS-902-01	No cracks	/	= _____ X _____	
PHWS-902-02	No honeycomb or spalling	/	= _____ X _____	
PHWS-902-06	No sagging or bulging	/	= _____ X _____	
PHWS-902-15	No water ponding on bearing plates	/	= _____ X _____	
PHWS-902-16	Conformance to elevation of expansion joints	/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
Was subcontractor used? If yes, name of company and owner: _____ & _____		Total Score (a)		CAR Total
Entered by: _____		No. of Indicators (b)		
Date: / /		Rate = (a) / (b)		
		=		
		Rate		
		=		

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Ports and Harbor  
 LOCATION: \_\_\_\_\_

ITEM: Electrical Works  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS				
Sub-item Code	Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).	Results	Score _____ x factor	Action Monitor
<b>Item 903 Electrical Works</b>				
PHWS-903-01	Pipes installed according to plans and laid out according to approved construction drawings	/	= _____ X _____	
PHWS-903-02	Pipes, hangers, boxes, gutters, cable trays properly installed and painted, sharp edges of pipes removed	/	= _____ X _____	
PHWS-903-03	Pipes properly bended	/	= _____ X _____	
PHWS-903-04	Allowable number of wires in a pipe properly observed	/	= _____ X _____	
PHWS-903-05	Splicing and connection provided with adequate rubber and pvc tapes	/	= _____ X _____	
PHWS-903-06	Adequate length of wire provided for termination and splicing	/	= _____ X _____	
PHWS-903-07	Wire color coding complied and observed	/	= _____ X _____	
PHWS-903-08	Wire insulation not damaged during pulling	/	= _____ X _____	
PHWS-903-09	Adequate number, correct size and gauge of pull boxes installed and properly covered	/	= _____ X _____	
PHWS-903-10	Boxes and enclosures provided according to intended purpose	/	= _____ X _____	
PHWS-903-11	Fittings and accessories provided and properly installed	/	= _____ X _____	
PHWS-903-12	Block-outs and sleeves provided and properly secured	/	= _____ X _____	
PHWS-903-13	Cable ties provided	/	= _____ X _____	
PHWS-903-14	Blank covers provided for outlets and switches that are not utilized	/	= _____ X _____	
PHWS-903-15	Use of tools and equipment properly observed	/	= _____ X _____	
PHWS-903-16	Lighting fixtures, panel boards, circuit breakers, etc. properly installed and free from any form of damages	/	= _____ X _____	
PHWS-903-17	Meager, clamp, phase sequence tests and load test conducted	/	= _____ X _____	
PHWS-903-18	Shop drawings, as-built plan maintained	/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: / /

Total Score (a)	CAR Total
No. of Indicators (b)	
Rate = (a) / (b)	
=	
Rate	
=	

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Ports and Harbor  
 LOCATION: \_\_\_\_\_

ITEM: Common Items of Work  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score _____ x factor	Action Monitor
Sub-item Code	<i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>			
<b>Item 904 CHB Wall</b>				
<b>Major</b>				
PHWS-904-01	Conformance to required quality of CHB	/	= _____ x _____	
PHWS-904-02	Conformance to required quality mortar mix	/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
<b>Minor</b>				
PHWS-904-03	Conformance to specified tolerances for dimension, location, plumbness and alignment	/	= _____ x _____	
PHWS-904-04	Proper spacing of horizontal and vertical bars	/	= _____ x _____	
PHWS-904-05	Rebars used free from corrosion	/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
<b>Item 905 Doors</b>				
PHWS-905-01	True to alignment, plumbness in conformance to the approved/specified tolerance	/	= _____ x _____	
PHWS-905-02	Doors are well fitted to the door frames	/	= _____ x _____	
PHWS-905-03	Door accessories installed according to plans, e.g. locksets, door closers, hinges, door stoppers	/	= _____ x _____	
PHWS-905-04	Free from any form of damages	/	= _____ x _____	
PHWS-905-05	Doors conforms to specification requirements e.g. panel door, flush door polyvinyl, steel doors, etc.	/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a)	CAR Total
Entered by: _____			No. of Indicators (b)	
Date: / /			Rate = (a) / (b)	
			=	
			Rate	
			=	

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Ports and Harbor  
 LOCATION: \_\_\_\_\_

ITEM: Wall Finishes  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score _____ x factor	Action Monitor
Sub-item Code	<i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>			
<b>Item 906 Plaster Finish</b>				
PHWS-906-01	Conformance to designed mixture of plastering materials	/	= _____ X _____	
PHWS-906-02	Conformance to specified method of application and thickness of plastering	/	= _____ X _____	
PHWS-906-03	True to alignment	/	= _____ X _____	
PHWS-906-04	Free from any form of damages e.g. cracks, peeled-off plaster finish	/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
<b>Item 907 Painting</b>				
PHWS-907-01	Surface prepared according to specification	/	= _____ X _____	
PHWS-907-02	Required neutralizers, etc. applied	/	= _____ X _____	
PHWS-907-03	Applied paint appropriate to the surface	/	= _____ X _____	
PHWS-907-04	Specified number of coats applied	/	= _____ X _____	
PHWS-907-05	Surfaces evenly painted, proper opacity	/	= _____ X _____	
PHWS-907-06	No discoloration and peeling-off of paint	/	= _____ X _____	
PHWS-907-07	Paints conform to specification/requirements	/	= _____ X _____	
PHWS-907-08	Surface are properly applied with putty/patching compound	/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: / /

Total Score (a)	CAR Total
No. of Indicators (b)	
Rate = (a) / (b)	
=	
Rate	
=	

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Ports and Harbor  
 LOCATION: \_\_\_\_\_

ITEM: Sewer & Drainage System  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score ____ x factor	Action Monitor
Sub-item Code	<i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>			
<b>Item 908 Pipe Culvert and Storm Drain</b>				
PHWS-908-01	Bedding and backfill materials compacted to the required density	/	= <u>    X    </u>	
PHWS-908-02	Proper jointing of pipes	/	= <u>    X    </u>	
PHWS-908-03	Mortar for jointing of reinforced concrete culvert pipes conforms to specified mixture type	/	= <u>    X    </u>	
PHWS-908-04	Adequate collaring of reinforced concrete culvert pipes	/	= <u>    X    </u>	
PHWS-908-05	Conformance to the approved/specified tolerance for elevation, slope, and alignment	/	= <u>    X    </u>	
PHWS-908-06	Cracks, honeycomb, chipping-off within specified tolerances	/	= <u>    X    </u>	
PHWS-908-07	Sufficient collaring & flushing	/	= <u>    X    </u>	
PHWS-908-08	Conformance to the approved quality of concrete mix	/	= <u>    X    </u>	
PHWS-908-09	Spacing and sizes of rebars conform to specification	/	= <u>    X    </u>	
		/	= <u>    X    </u>	
		/	= <u>    X    </u>	
		/	= <u>    X    </u>	
		/	= <u>    X    </u>	
<b>Item 909 Manholes, Inlets and Catch Basin</b>				
PHWS-909-01	Conformance to approved/specified tolerances for dimensions and elevations	/	= <u>    X    </u>	
PHWS-909-02	Covers and gratings well fitted and can easily be opened during maintenance work	/	= <u>    X    </u>	
PHWS-909-03	Honeycomb, cracks, spalling, etc. within specified tolerance	/	= <u>    X    </u>	
PHWS-909-04	Conformance to approved quality of concrete mix	/	= <u>    X    </u>	
PHWS-909-05	Spacing and sizes of rebars conform to specification	/	= <u>    X    </u>	
		/	= <u>    X    </u>	
		/	= <u>    X    </u>	
		/	= <u>    X    </u>	
		/	= <u>    X    </u>	
		/	= <u>    X    </u>	
		/	= <u>    X    </u>	
		/	= <u>    X    </u>	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a)	CAR Total
Entered by: _____			No. of Indicators (b)	
Date: / /			Rate = (a) / (b)	
			=	
			Rate	
			=	

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Ports and Harbor  
 LOCATION: \_\_\_\_\_

ITEM: Roofing System  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS				
Sub-item Code	<i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score _____ x factor	Action Monitor
<b>Item 910 Sheets</b>				
PHWS-910-01	Conformance to the specified gauge, length, etc.	/	= _____ x _____	
PHWS-910-02	Conformance to the specified overlapping, sealing of joints, fastening	/	= _____ x _____	
PHWS-910-03	Installation of flashing, gutters, ridge rolls, downspouts, etc. according to plans	/	= _____ x _____	
PHWS-910-04	Non-occurrence of leaks	/	= _____ x _____	
PHWS-910-05	Free from any form of damage	/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
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		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
			Total Score (a)	CAR Total
Was subcontractor used? If yes, name of company and owner: _____ & _____			No. of Indicators (b)	
Entered by: _____			Rate = (a) / (b) = _____	
Date: / /			Rate = _____	

### CPES CHECKLIST FOR WORKMANSHIP

Contract No.: \_\_\_\_\_  
 \_\_\_\_\_ Visit \_\_\_\_\_  
 Date of Visit: \_\_\_\_\_

Project Type : IRRIGATION  
 Location : \_\_\_\_\_  
 Factor : \_\_\_\_\_

**FACTOR: "During Construction" = 0.40; "Upon Completion" = 0.50**

SUB-ITEM CODE	INDICATORS <i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	RESULTS	SCORE Result x factor	ACTION/ MONITOR
<b>Item 002 Clearing and Grubbing</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
IRWS-002-01	Existing adjacent facilities, properties and utilities are protected from damages	/	x =	
<b>Minor</b>				
IRWS-002-01	Existing adjacent facilities, properties and utilities are protected from damages	/	x =	
IRWS-002-02	The entire right of way for irrigation structures borrow and stockfile area cleared of all vegetation, trees except those to be preserved	/	x =	
IRWS-002-03	Swampy and/or second growth forested areas suitably dried prior to clearing	/	x =	
IRWS-002-04	Proper disposal of combustible materials	/	x =	
IRWS-002-05	Unsuitable materials completely removed up to specified/ designed depth	/	x =	
		/	x =	
		/	x =	
			Total Score (a)	Total CAR
Was subcontractor used? If yes, name of company and owner  _____ and _____			No. of Indicators (b)	
Entered by: _____ Date: _____			(a)/(b)=	

### CPES CHECKLIST FOR WORKMANSHIP

Contract No.: \_\_\_\_\_  
 \_\_\_\_\_ Visit \_\_\_\_\_  
 Date of Visit: \_\_\_\_\_

Project Type : IRRIGATION  
 Location : \_\_\_\_\_  
 Factor : \_\_\_\_\_

**FACTOR: "During Construction" = 0.40; "Upon Completion" = 0.50**

SUB-ITEM CODE	INDICATORS <i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	RESULTS	SCORE Result x factor	ACTION/ MONITOR
<b>Item 003 Diversion and Care of River During Construction and Dewatering of Foundation</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
IRWS-003-01	Conformance to agency approved plan on the types, location, arrangement of river diversion	/	x =	
<b>Minor</b>				
IRWS-003-01	Conformance to agency approved plan on the types, location, arrangement of river diversion	/	x =	
IRWS-003-02	Construction operations performed in the dry	/	x =	
		/	x =	
		/	x =	
			Total Score (a)	Total CAR
Was subcontractor used? If yes, name of company and owner  _____ and _____			No. of Indicators (b)	
Entered by: _____ Date: _____			(a)/(b)=	



### CPES CHECKLIST FOR WORKMANSHIP

Contract No.: \_\_\_\_\_  
 \_\_\_\_\_ Visit \_\_\_\_\_  
 Date of Visit: \_\_\_\_\_

Project Type : IRRIGATION  
 Location : \_\_\_\_\_  
 Factor : \_\_\_\_\_

**FACTOR: "During Construction" = 0.40; "Upon Completion" = 0.50**

SUB-ITEM CODE	INDICATORS <i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	RESULTS	SCORE Result x factor	ACTION/ MONITOR
<b>Item 004 Canal/Channel Excavation</b>				
<b>Major</b>				
IRWS-004-01	No damages on adjoining structures, no unduly large excavation and no destabilization of grounds occurred after blasting	/	x =	
IRWS-004-02	Slope protection from land sliding in deep cut excavation provided	/	x =	
<b>Minor</b>				
IRWS-004-03	Horizontal and vertical controls are complete and properly established	/	x =	
IRWS-004-04	Excavation true to lines, slopes and profiles as shown on the drawings	/	x =	
IRWS-004-05	Drilling and blasting operation approved by the agency	/	x =	
IRWS-004-06	Work area cleaned and cleared, foreign materials properly disposed	/	x =	
		/	x =	
		/	x =	
			Total Score (a)	Total CAR
Was subcontractor used? If yes, name of company and owner  _____ and _____			No.of Indicators (b)	
Entered by: _____ Date: _____			(a)/(b)=	

### CPES CHECKLIST FOR WORKMANSHIP

Contract No.: \_\_\_\_\_  
 \_\_\_\_\_ Visit \_\_\_\_\_  
 Date of Visit: \_\_\_\_\_

Project Type : IRRIGATION  
 Location : \_\_\_\_\_  
 Factor : \_\_\_\_\_

**FACTOR: "During Construction" = 0.40; "Upon Completion" = 0.50**

SUB-ITEM CODE	INDICATORS <i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	RESULTS	SCORE Result x factor	ACTION/ MONITOR
<b>Item 006 Structure Excavation</b>				
<b>Major</b>				
IRWS-006-01	No damages to adjoining structures due to improper blasting	/	x =	
IRWS-006-02	Slope protection from land sliding in deep cut excavation provided	/	x =	
<b>Minor</b>				
IRWS-006-03	Excavation and compaction of foundation true to lines and grades	/	x =	
IRWS-006-04	Conformance to concrete backfilling or embankment and compaction for over excavated materials	/	x =	
IRWS-006-05	Provision of side & bottom weepholes on rock excavation	/	x =	
IRWS-006-06	Surface where concrete will be placed trimmed and cleaned thoroughly	/	x =	
		/	x =	
		/	x =	
			Total Score (a)	Total CAR
Was subcontractor used? If yes, name of company and owner  _____ and _____			No. of Indicators (b)	
Entered by: _____ Date: _____			(a)/(b)=	

### CPES CHECKLIST FOR WORKMANSHIP

Contract No.: \_\_\_\_\_  
 \_\_\_\_\_ Visit  
 Date of Visit: \_\_\_\_\_

Project Type : IRRIGATION  
 Location : \_\_\_\_\_  
 Factor : \_\_\_\_\_

**FACTOR: "During Construction" = 0.40; "Upon Completion" = 0.50**

SUB-ITEM CODE	INDICATORS <i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	RESULTS	SCORE Result x factor	ACTION/ MONITOR
<b>Item 007 Drilling and Grouting</b>				
<b>Major</b>				
IRWS-007-01	Holes drilled in proper location, direction and depth as shown on the drawings	/	x =	
IRWS-007-02	Drilling and blasting of holes done in accordance to specification and construction methodology	/	x =	
<b>Minor</b>				
IRWS-007-03	Surfaces affected by drilling and grouting operations cleaned and restored	/	x =	
IRWS-007-04	Steel pipes installed according to plans and specifications	/	x =	
IRWS-007-05	Accurate geological logs of all exploratory holes drilled provided	/	x =	
IRWS-007-06	Records of all exploratory holes and grouting operations submitted in accordance with agreed form of drawings and reports	/	x =	
		/	x =	
		/	x =	
			Total Score (a)	Total CAR
Was subcontractor used? If yes, name of company and owner  _____ and _____			No. of Indicators (b)	
Entered by: _____ Date: _____			(a)/(b)=	

### CPES CHECKLIST FOR WORKMANSHIP

Contract No.: \_\_\_\_\_  
 \_\_\_\_\_ Visit \_\_\_\_\_  
 Date of Visit: \_\_\_\_\_

Project Type : IRRIGATION  
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**FACTOR: "During Construction" = 0.40; "Upon Completion" = 0.50**

SUB-ITEM CODE	INDICATORS <i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	RESULTS	SCORE Result x factor	ACTION/ MONITOR
<b>Item 008 Farm and Drainage Ditch Construction</b>				
<b>Major</b>				
IRWS-008-01	Location and alignment conforms to plan and maps	/	x =	
<b>Minor</b>				
IRWS-008-02	Excavation conforms to the section and dimension as shown on the drawings	/	x =	
IRWS-008-03	Areas saturated before excavation	/	x =	
IRWS-008-04	Conformance to required density or degree of compaction of filling materials	/	x =	
IRWS-008-05	Compacted embankment constructed true to lines, grades dimensions and prepared foundation	/	x =	
		/	x =	
		/	x =	
			Total Score (a)	Total CAR
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<b>Item 009 Overhaul</b>				
<b>Major</b>				
IRWS-009-01	Source and location of overhaul materials acceptable as to quality and quantity approved by the Engineer	/	x =	
<b>Minor</b>				
IRWS-009-02	Overhaul materials for embankment or structure backfill free from organic materials	/	x =	
IRWS-009-03	Waste materials properly placed in waste disposal areas, leveled and slope to drain	/	x =	
		/	x =	
		/	x =	
			Total Score (a)	Total CAR
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<b>Item 010 Side Borrow</b>				
<b>Major</b>				
IRWS-010-01	Conformance to compaction methodology	/	x =	
IRWS-010-02	Borrow area leveled, destroyed paddies restored	/	x =	
<b>Minor</b>				
IRWS-010-03	Top soil material on side borrow areas properly cleared and grubbed	/	x =	
IRWS-010-04	Conformance to lines, grades and depth of excavation	/	x =	
		/	x =	
		/	x =	
			Total Score (a)	Total CAR
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<b>Item 011 Borrow Haul</b>				
<b>Major</b>				
IRWS-011-01	Source and location of borrow haul materials acceptable as to quality and quantity approved by the Engineer	/	x =	
<b>Minor</b>				
IRWS-011-02	Borrow haul pits properly staked, cleared, grubbed, stripped of all unsuitable materials	/	x =	
IRWS-011-03	Right of way properly acquired and accessed	/	x =	
IRWS-011-04	Haul roads constructed and properly maintained	/	x =	
IRWS-011-05	Borrow pits properly drained	/	x =	
IRWS-011-06	Stripped top soil returned to smooth and even surface	/	x =	
		/	x =	
		/	x =	
			Total Score (a)	Total CAR
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<b>Item 012 Structure Backfill</b>				
<b>Major</b>				
IRWS-012-01	Compliance to proper construction methodology (compacted layers as specified)	/	x =	
<b>Minor</b>				
IRWS-012-02	Proper removal of rubbish, mud, loose materials	/	x =	
IRWS-012-03	Dewatering of excavation pit conducted	/	x =	
IRWS-012-04	Conformance to required degree of compaction	/	x =	
		/	x =	
		/	x =	
			Total Score (a)	Total CAR
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<b>Item 013 Embankment Construction and Compaction</b>				
<b>Major</b>				
IRWS-013-01	Constructed in horizontal layers, thickness of layers not exceeding 15 cm. after compaction	/	x =	
IRWS-013-02	Conformance to required equipment	/	x =	
IRWS-013-03	Conformance to required degree of compaction	/	x =	
<b>Minor</b>				
IRWS-013-04	Compacted embankment constructed true to lines, grades, dimensions and prepared foundations	/	x =	
IRWS-013-05	Ground surface scarified to the desired depth	/	x =	
IRWS-013-06	Unsuitable materials removed and replaced with suitable materials	/	x =	
IRWS-013-07	Top soil of the foundation area for swampy ground stripped	/	x =	
IRWS-013-08	Slope of hillside horizontally cut when embankment are made on hillside (parallel, abutting, crossing over)	/	x =	
IRWS-013-09	Slope of hillside recompacted along with new embankment materials	/	x =	
IRWS-013-10	Proper surface drainage provided	/	x =	
		/	x =	
		/	x =	
			Total Score (a)	Total CAR
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<b>Item 014 Roads</b>				
<b>Major</b>				
IRWS-014-01	In-placed materials conforms with plans and specifications	/	x =	
IRWS-014-02	Conformance to required degree of compaction	/	x =	
<b>Minor</b>				
IRWS-014-03	Conformance to proper construction methodology	/	x =	
IRWS-014-04	Road surfacing materials and shoulder materials did not mix during spreading	/	x =	
IRWS-014-05	Conformance to the lines, grades and dimensions as indicated in the plans and specifications	/	x =	
IRWS-014-06	Non-occurrence of irregular surface/depression	/	x =	
IRWS-014-07	Blending filler for top coarse materials conforms to specifications	/	x =	
		/	x =	
		/	x =	
			Total Score (a)	Total CAR
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<b>Item 015 Concrete Works</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
IRWS-015-01	No through cracks	/	x =	
IRWS-015-02	No honeycomb or spalling (no exposed rebars/aggregates)	/	x =	
IRWS-015-03	No sagging or bulging	/	x =	
IRWS-015-04	Conformance to the required quality of concrete mix	/	x =	
IRWS-015-05	Provision of camber for RCDG	/	x =	
<b>Minor</b>				
IRWS-015-01	No cracks	/	x =	
IRWS-015-02	No honeycomb or spalling	/	x =	
IRWS-015-03	No sagging or bulging	/	x =	
IRWS-015-06	No chipping off of concrete cover	/	x =	
IRWS-015-07	Proper and adequate vibration	/	x =	
IRWS-015-08	Conformance to finishing/plastering requirement	/	x =	
IRWS-015-09	Conformance to the required concrete cover for rebars	/	x =	
IRWS-015-10	Conformance to the batching, mixing, transporting and discharge time requirements	/	x =	
IRWS-015-11	Conformance to placing requirements that will not result to segregation of aggregates, cold joints and misalignment	/	x =	
IRWS-015-12	Conformance to the jointing requirement	/	x =	
IRWS-015-13	Proper curing	/	x =	
IRWS-015-14	Conformance to the required dimensions, lines, grades/elevation, locations and crown (for pier)	/	x =	
IRWS-015-15	No water ponding on bearing plates	/	x =	
IRWS-015-16	Conformance to elevation of expansion joints	/	x =	
			Total Score (a)	Total CAR
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<b>Item 016 Concrete Demolition Works</b>				
IRWS-016-01	Undertaken according to plans, operations (drilling, blasting)	/	x =	
IRWS-016-02	Proper removal/disposal of demolished structure	/	x =	
IRWS-016-03	Non-occurrence of damages to the entire/adjacent structure	/	x =	
			Total Score (a)	Total CAR
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<b>Item 018 Shotcrete</b>				
<b>Major</b>				
IRWS-018-01	Adherence to proper construction methodology	/	x =	
IRWS-018-02	Class of shotcrete conforms to specs	/	x =	
<b>Minor</b>				
IRWS-018-03	Surfaces to be in contact with shotcrete prepared/cleaned	/	x =	
IRWS-018-04	Proper curing applied	/	x =	
IRWS-018-05	Drainage holes penetrated into the rock according to plans and specifications	/	x =	
IRWS-018-06	Welded wire/chain-link fabric free from intensive rust, mud, grease, wax, foreign materials	/	x =	
IRWS-018-07	Welded wire/chain-link fabric installed according to plans and specifications	/	x =	
IRWS-018-08	Rebounded concrete not used again as spray materials	/	x =	
			Total Score (a)	Total CAR
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<b>Item 019 Rubble Masonry</b>				
<b>Major</b>				
IRWS-019-01	Conformance to proper construction methodology	/	x =	
IRWS-019-02	Conformance to specified size	/	x =	
<b>Minor</b>				
IRWS-019-03	Rubble stones installed are clean, sound, durable, resistant to action of water	/	x =	
IRWS-019-04	Stones thoroughly wet and properly covered with concrete binder	/	x =	
IRWS-019-05	Conformance to lines, grades and dimensions	/	x =	
IRWS-019-06	Non-occurrence of voids	/	x =	

Was subcontractor used? If yes, name of company and owner

\_\_\_\_\_ and \_\_\_\_\_

Entered by: \_\_\_\_\_

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<b>Item 020 Concrete Canal Lining</b>				
<b>Major</b>				
IRWS-020-01	Non displacement of in-placed concrete lining panels	/	x =	
IRWS-020-02	Flap valve weeps installed in accordance to the drawings	/	x =	
IRWS-020-03	Conformance to proper construction methodology	/	x =	
<b>Minor</b>				
IRWS-020-04	Trimming according to lines, grades, elevations, dimensions, and cross-sections	/	x =	
IRWS-020-05	Impregnated building paper installed prior to concrete pouring	/	x =	
IRWS-020-06	Conformance to the locations of construction joints as shown in the drawings	/	x =	
IRWS-020-07	Surface of the lining finished as specified	/	x =	
IRWS-020-08	Cold joints are in horizontal and vertical lines	/	x =	
IRWS-020-09	Conformance to jointing requirements	/	x =	
			Total Score (a)	Total CAR
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<b>Item 021 Concrete Joints and Joint Materials</b>				
<b>Major</b>				
IRWS-021-01	Conformance to plans and specifications	/	x =	
IRWS-021-02	Contraction and expansion joints constructed at locations indicated in the drawings	/	x =	
<b>Minor</b>				
IRWS-021-03	Non-occurrence of feather edges	/	x =	
IRWS-021-04	No chipped-off edges or corners	/	x =	
IRWS-021-05	Provision of required amount of sealant	/	x =	
IRWS-021-06	Provision of waterstops	/	x =	
		/	x =	
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<b>Item 022 Dowels</b>				
<b>Major</b>				
IRWS-022-01	In-placed materials conform with plans and specifications	/	x =	
<b>Minor</b>				
IRWS-022-02	Provision of square nut threaded into the end of dowel bar	/	x =	
IRWS-022-03	Properly secured or held in place with cement grout as specified on the drawings	/	x =	
IRWS-022-04	Drilled dowel holes in accordance with the approved drawings	/	x =	
		/	x =	
		/	x =	

	Total Score (a)	
Was subcontractor used? If yes, name of company and owner _____ and _____	No. of Indicators (b)	
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<b>Item 023 Reinforcing Steel Bars</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
IRWS-023-01	Conformance of in-placed materials to plans and specifications	/	x =	
IRWS-023-02	Non-appearance of corrosion on steel reinforcement	/	x =	
<b>Minor</b>				
IRWS-023-02	Non-appearance of rust on steel reinforcement	/	x =	
IRWS-023-03	Conformance to approved bar cutting schedule, proper spacing, anchorage, adequate reinforcements	/	x =	
IRWS-023-04	No sign of oil, paint and other deleterious materials on reinforcements	/	x =	
IRWS-023-05	Conformance to jointing requirements, i.e., splicing, welding, etc.	/	x =	
IRWS-023-06	Conformance to the required installation of ducttube (e.g. spacing, location and distance)	/	x =	
IRWS-023-07	Conformance to the required steel plate and lock	/	x =	
IRWS-023-08	Conformance to the number of bundles of tendons and number of pieces of bundles of tendons	/	x =	
		/	x =	
		/	x =	
			Total Score (a)	Total CAR
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<b>Item 024 Reinforced Concrete Pipes</b>				
<b>Major</b>				
IRWS-024-01	Conformance to the required/approved tolerance for slope, alignment, elevation and dimensions	/	x =	
IRWS-024-02	Conformance to in-placed materials	/	x =	
<b>Minor</b>				
IRWS-024-03	No cracks, honeycombs, chipping of edges	/	x =	
IRWS-024-04	Compliance to joint mortar mixing proportion	/	x =	
IRWS-024-05	Sufficient collaring and flushing	/	x =	
IRWS-024-06	Compliance to the required thickness, compaction and materials requirement of gravel bedding	/	x =	
IRWS-024-07	Compliance to the required thickness and compaction of backfill	/	x =	
IRWS-024-08	Conformance to trenching requirements	/	x =	
IRWS-024-09	Free from debris, siltation, etc.	/	x =	
		/	x =	
		/	x =	
			Total Score (a)	Total CAR
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<b>Item 025 Boulder Riprap, Item 026 Gabion-type Riprap, Item 027 Grouted Riprap</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
IRWS-02_-01	No through cracks	/	x =	
IRWS-02_-02	Conformance to specifications (size, type, weight, etc. of boulders)	/	x =	
IRWS-02_-03	Sufficient grout/mortar	/	x =	
IRWS-02_-04	Observance to proper placing of stones/boulders	/	x =	
IRWS-02_-05	Conformance to the approved/required tolerance for slope, alignment and thickness (exceeding allowable tolerance)	/	x =	
IRWS-02_-06	Compliance to the specified compaction and preparation of bedding (gravel blanket and subgrade)	/	x =	
IRWS-02_-07	Compliance to design mix of mortar	/	x =	
IRWS-02_-08	Provision of weep holes	/	x =	
<b>Minor</b>				
IRWS-02_-01	No cracks	/	x =	
IRWS-02_-04	Observance to proper placing of stones/boulders	/	x =	
IRWS-02_-05	Conformance to the approved/required tolerance for slope, alignment and thickness (not exceeding the allowable tolerance)	/	x =	
IRWS-02_-08	Provision of weep holes	/	x =	
IRWS-02_-09	Sufficient stone/spall fillers	/	x =	
IRWS-02_-10	Conformance to the required lapping requirement	/	x =	
IRWS-02_-11	Conformance to specified curing of structure	/	x =	
		/	x =	
			Total Score (a)	Total CAR
Was subcontractor used? If yes, name of company and owner  _____ and _____			No. of Indicators (b)	
Entered by: _____ Date: _____			(a)/(b)=	

### CPES CHECKLIST FOR WORKMANSHIP

Contract No.: \_\_\_\_\_  
 \_\_\_\_\_ Visit  
 Date of Visit: \_\_\_\_\_

Project Type : IRRIGATION  
 Location : \_\_\_\_\_  
 Factor : \_\_\_\_\_

**FACTOR: "During Construction" = 0.40; "Upon Completion" = 0.50**

SUB-ITEM CODE	INDICATORS <i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	RESULTS	SCORE Result x factor	ACTION/ MONITOR
<b>Item 028 Gravel Blanket</b>				
IRWS-028-01	Conformance to lines, thickness as shown on the drawings	/	x =	
IRWS-028-02	Conformance of in-placed materials	/	x =	
IRWS-028-03	Provision of filter fabric, as required	/	x =	
		/	x =	
			Total Score (a)	Total CAR
Was subcontractor used? If yes, name of company and owner  _____ and _____			No. of Indicators (b)	
Entered by: _____ Date: _____			(a)/(b)=	

### CPES CHECKLIST FOR WORKMANSHIP

Contract No.: \_\_\_\_\_  
 \_\_\_\_\_ Visit \_\_\_\_\_  
 Date of Visit: \_\_\_\_\_

Project Type : IRRIGATION  
 Location : \_\_\_\_\_  
 Factor : \_\_\_\_\_

**FACTOR: "During Construction" = 0.40; "Upon Completion" = 0.50**

SUB-ITEM CODE	INDICATORS <i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	RESULTS	SCORE Result x factor	ACTION/ MONITOR
<b>Item 029 Filter Drain</b>				
<b>Major</b>				
IRWS-029-01	Conformance to lines, grades, thickness as shown on the drawings	/	x =	
IRWS-029-02	Compliance to specified construction methodology	/	x =	
<b>Minor</b>				
IRWS-029-03	Compliance to specified compaction	/	x =	
IRWS-029-04	Provision of weepholes as per plans/specification	/	x =	
IRWS-029-05	Provision of filter and flap gate	/	x =	
		/	x =	
			Total Score (a)	Total CAR
Was subcontractor used? If yes, name of company and owner  _____ and _____			No. of Indicators (b)	
Entered by: _____ Date: _____			(a)/(b)=	

### CPES CHECKLIST FOR WORKMANSHIP

Contract No.: \_\_\_\_\_  
 \_\_\_\_\_ Visit \_\_\_\_\_  
 Date of Visit: \_\_\_\_\_

Project Type : IRRIGATION  
 Location : \_\_\_\_\_  
 Factor : \_\_\_\_\_

**FACTOR: "During Construction" = 0.40; "Upon Completion" = 0.50**

SUB-ITEM CODE	INDICATORS <i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	RESULTS	SCORE Result x factor	ACTION/ MONITOR
<b>Item 030 Plain Concrete Drain Pipe</b>				
<b>Major</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
IRWS-030-01	No through cracks	/	x =	
IRWS-030-02	Conformance to the required/approved tolerance for slope, alignment and elevation	/	x =	
<b>Minor</b>				
IRWS-030-01	No cracks	/	x =	
IRWS-030-03	Compliance to joint mortar mixing proportions	/	x =	
IRWS-030-04	Sufficient collaring and flushing	/	x =	
IRWS-030-05	Compliance to the required compaction of backfill and gravel bedding	/	x =	
		/	x =	
			Total Score (a)	Total CAR
Was subcontractor used? If yes, name of company and owner  _____ and _____			No. of Indicators (b)	
Entered by: _____ Date: _____			(a)/(b)=	

### CPES CHECKLIST FOR WORKMANSHIP

Contract No.: \_\_\_\_\_  
 \_\_\_\_\_ Visit  
 Date of Visit: \_\_\_\_\_

Project Type : IRRIGATION  
 Location : \_\_\_\_\_  
 Factor : \_\_\_\_\_

**FACTOR: "During Construction" = 0.40; "Upon Completion" = 0.50**

SUB-ITEM CODE	INDICATORS <i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	RESULTS	SCORE Result x factor	ACTION/ MONITOR
<b>Item 031 Reinforced Concrete Piles</b>				
<b>Major</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
IRWS-031-01	Conformance of in-placed materials to plans and specifications	/	x =	
IRWS-031-02	Conformance to construction methodology (installation, location and type)	/	x =	
IRWS-031-03	Conformance to splicing requirements	/	x =	
IRWS-031-04	Conformance to the required length, width, thickness, and/or diameter	/	x =	
IRWS-031-05	Provision of pile shoe	/	x =	
IRWS-031-06	No cracks, honeycomb	/	x =	
IRWS-031-07	Piles provided with gradation marks (driven or stockpile)	/	x =	
IRWS-031-08	Conformance to proper installation, e.g. conformance to required slope, embedment, alignment, plumbness (>20 mm/m), elevation, location (>150mm) & spacing	/	x =	
<b>Minor</b>				
IRWS-031-08	Conformance to proper installation, e.g. conformance to required slope, embedment, alignment, plumbness (<20 mm/m), elevation, location (<150mm) & spacing	/	x =	
IRWS-031-09	Conformance to specified curing on casted RC piles	/	x =	
IRWS-031-10	Conformance to casting length	/	x =	
IRWS-031-11	Conformance to required lifting procedures	/	x =	
		/	x =	
			Total Score (a)	Total CAR
Was subcontractor used? If yes, name of company and owner  _____ and _____			No. of Indicators (b)	
Entered by: _____ Date: _____			(a)/(b)=	



### CPES CHECKLIST FOR WORKMANSHIP

Contract No.: \_\_\_\_\_  
 \_\_\_\_\_ Visit \_\_\_\_\_  
 Date of Visit: \_\_\_\_\_

Project Type : IRRIGATION  
 Location : \_\_\_\_\_  
 Factor : \_\_\_\_\_

**FACTOR: "During Construction" = 0.40; "Upon Completion" = 0.50**

SUB-ITEM CODE	INDICATORS <i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	RESULTS	SCORE Result x factor	ACTION/ MONITOR
<b>Item 032 Steel Sheet Piles</b>				
<b>Major</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
IRWS-032-01	Conformance of in-placed materials to plans & specs	/	x =	
IRWS-032-02	Conformance to proper installation, e.g. conformance to required slope, embedment, alignment, plumbness (>20 mm/m), elevation, location (>150 mm)	/	x =	
IRWS-032-03	Piles provided with gradation marks (driven or stockpile)	/	x =	
IRWS-032-04	Conformance to the approved tolerances for dimension	/	x =	
IRWS-032-05	No corrosion on steel sheet piles	/	x =	
IRWS-032-06	Compliance to the required number of piles	/	x =	
<b>Minor</b>				
IRWS-032-02	Conformance to proper installation, e.g. conformance to required slope, embedment, alignment, plumbness ( $\leq 20$ mm/m), elevation, location ( $\leq 150$ mm)	/	x =	
IRWS-032-05	No presence of rust on steel sheet piles	/	x =	
IRWS-032-07	Compliance to the required splicing	/	x =	
		/	x =	
			Total Score (a)	Total CAR
Was subcontractor used? If yes, name of company and owner _____ and _____			No. of Indicators (b)	
Entered by: _____ Date: _____			(a)/(b)=	

### CPES CHECKLIST FOR WORKMANSHIP

Contract No.: \_\_\_\_\_  
 Visit \_\_\_\_\_  
 Date of Visit: \_\_\_\_\_

Project Type : IRRIGATION  
 Location : \_\_\_\_\_  
 Factor : \_\_\_\_\_

**FACTOR: "During Construction" = 0.40; "Upon Completion" = 0.50**

SUB-ITEM CODE	INDICATORS <i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	RESULTS	SCORE Result x factor	ACTION/ MONITOR
<b>Item 033 Steel Gates and Lifting Mechanism (steel gates, stoplog, lifting mechanism, embedded parts)</b>				
<b>Major</b>				
IRWS-033-01	Mounting and bearing surfaces accurately machined	/	x =	
IRWS-033-02	Installed equipment conformed accurately to the designed dimensions, free from defects in workmanship and materials according to the specified type and model	/	x =	
IRWS-033-03	Gates and lifting mechanism assembly installed in accordance to plans and specifications	/	x =	
<b>Minor</b>				
IRWS-033-04	Conformance to specified jointing/welding methods	/	x =	
IRWS-033-05	Drain holes provided on all locations where entrapment of water can occur	/	x =	
IRWS-033-06	Conformance to the specified painting for submerged steel, steel exposed to atmosphere and embedded steel	/	x =	
IRWS-033-07	Non-occurrence of leakage	/	x =	
IRWS-033-08	Operation and maintenance manual provided	/	x =	
IRWS-033-09	Surfaces clean and smooth, welded joints properly grinded	/	x =	
		/	x =	
			Total Score (a)	Total CAR
Was subcontractor used? If yes, name of company and owner _____ and _____			No. of Indicators (b)	
Entered by: _____ Date: _____			(a)/(b)=	

### CPES CHECKLIST FOR WORKMANSHIP

Contract No.: \_\_\_\_\_  
 \_\_\_\_\_ Visit \_\_\_\_\_  
 Date of Visit: \_\_\_\_\_

Project Type : IRRIGATION  
 Location : \_\_\_\_\_  
 Factor : \_\_\_\_\_

**FACTOR: "During Construction" = 0.40; "Upon Completion" = 0.50**

SUB-ITEM CODE	INDICATORS <i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	RESULTS	SCORE Result x factor	ACTION/ MONITOR
<b>Item 034 Steel Pipe Manhole, Blow-off Valve and Manhole Cover</b>				
<b>Major</b>				
IRWS-034-01	Installation drawings, operating and maintenance instructions, illustrations and repair procedures submitted	/	x =	
IRWS-034-02	Pipe fittings, manholes and cover, valve and accessories installed as shown on the drawings	/	x =	
<b>Minor</b>				
IRWS-034-03	Anchor bolts set accurately to the grade and alignment as shown on the drawings	/	x =	
IRWS-034-04	Extraneous foreign matter removed from the pipes	/	x =	
IRWS-034-05	Conformance to the specified kind and method of painting	/	x =	
		/	x =	
		/	x =	
			Total Score (a)	Total CAR
Was subcontractor used? If yes, name of company and owner  _____ and _____			No. of Indicators (b)	
Entered by: _____ Date: _____			(a)/(b)=	

### CPES CHECKLIST FOR WORKMANSHIP

Contract No.: \_\_\_\_\_  
 \_\_\_\_\_ Visit \_\_\_\_\_  
 Date of Visit: \_\_\_\_\_

Project Type : IRRIGATION  
 Location : \_\_\_\_\_  
 Factor : \_\_\_\_\_

**FACTOR: "During Construction" = 0.40; "Upon Completion" = 0.50**

SUB-ITEM CODE	INDICATORS <i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	RESULTS	SCORE Result x factor	ACTION/ MONITOR
<b>Item 035 Miscellaneous Metal Works and Materials</b>				
<b>Major</b>				
IRWS-035-01	Provision of block outs for installation of metal works	/	x =	
IRWS-035-02	Metal works and materials installed in accordance to the details shown in the drawings (alignment, position)	/	x =	
<b>Minor</b>				
IRWS-035-03	Block outs were grouted after installation of metal works	/	x =	
		/	x =	
		/	x =	

Was subcontractor used? If yes, name of company and owner

\_\_\_\_\_ and \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: \_\_\_\_\_

Total Score (a)	Total CAR
No. of Indicators (b)	
(a)/(b)=	

### CPES CHECKLIST FOR WORKMANSHIP

Contract No.: \_\_\_\_\_  
 Visit \_\_\_\_\_  
 Date of Visit: \_\_\_\_\_

Project Type : IRRIGATION  
 Location : \_\_\_\_\_  
 Factor : \_\_\_\_\_

**FACTOR: "During Construction" = 0.40; "Upon Completion" = 0.50**

SUB-ITEM CODE	INDICATORS <i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	RESULTS	SCORE Result x factor	ACTION/ MONITOR
<b>Item 036 Painting</b>				
IRWS-036-01	Surface prepared according to specifications	/	x =	
IRWS-036-02	Required neutralizers, etc. applied	/	x =	
IRWS-036-03	Applied paint appropriate to the surface	/	x =	
IRWS-036-04	Specified number of coats applied	/	x =	
IRWS-036-05	Surfaces evenly painted, proper opacity	/	x =	
IRWS-036-06	No discoloration and peeling off of paint	/	x =	
IRWS-036-07	Paints conform to specification/requirements	/	x =	
IRWS-036-08	Surface are properly applied with putty/patching compound	/	x =	
		/	x =	
		/	x =	
			Total Score (a)	Total CAR
Was subcontractor used? If yes, name of company and owner  _____ and _____			No. of Indicators (b)	
Entered by: _____ Date: _____			(a)/(b)=	

### CPES CHECKLIST FOR WORKMANSHIP

Contract No.: \_\_\_\_\_  
 Visit \_\_\_\_\_  
 Date of Visit: \_\_\_\_\_

Project Type : IRRIGATION  
 Location : \_\_\_\_\_  
 Factor : \_\_\_\_\_

**FACTOR: "During Construction" = 0.40; "Upon Completion" = 0.50**

SUB-ITEM CODE	INDICATORS <i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	RESULTS	SCORE Result x factor	ACTION/ MONITOR
<b>Item 037 Asphalt Concrete Surfacing - Plant Mix</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
IRWS-037-01	Conformance of in-placed materials to plans & specs	/	x =	
IRWS-037-02	Monitoring/checking of temperature mix prior to placing/spreading/compaction	/	x =	
IRWS-037-03	Conformance to the temperature requirement	/	x =	
IRWS-037-04	No alligator and longitudinal cracks	/	x =	
IRWS-037-05	Conformance to the approved/specified tolerance for thickness, width, length, slope and cross section (>10% deficient)	/	x =	
IRWS-037-06	No bleeding on asphalt pavement (> 1 sq.m.)	/	x =	
IRWS-037-07	No upheaval (severe and needs R/R)	/	x =	
IRWS-037-08	No ravelling (severe and needs R/R)	/	x =	
<b>Minor</b>				
IRWS-037-04	No temperature cracks	/	x =	
IRWS-037-05	Conformance to the approved/specified tolerance for thickness, width, length, slope and cross section (≤10% deficient)	/	x =	
IRWS-037-06	No bleeding on asphalt pavement (≤ 1 sq.m.)	/	x =	
IRWS-037-07	No upheaval	/	x =	
IRWS-037-08	No ravelling	/	x =	
IRWS-037-09	Conformance to the required density	/	x =	
		/	x =	
			Total Score (a)	Total CAR
Was subcontractor used? If yes, name of company and owner  _____ and _____			No. of Indicators (b)	
Entered by: _____ Date: _____			(a)/(b)=	

### CPES CHECKLIST FOR WORKMANSHIP

Contract No.: \_\_\_\_\_  
 \_\_\_\_\_ Visit \_\_\_\_\_  
 Date of Visit: \_\_\_\_\_

Project Type : IRRIGATION  
 Location : \_\_\_\_\_  
 Factor : \_\_\_\_\_

**FACTOR: "During Construction" = 0.40; "Upon Completion" = 0.50**

SUB-ITEM CODE	INDICATORS <i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	RESULTS	SCORE Result x factor	ACTION/ MONITOR
<b>Item 038 Pressure Relief Valve</b>				
<b>Major</b>				
IRWS-038-01	Installation of valves including accessories true to lines, grades and places as indicated on the drawings	/	x =	
<b>Minor</b>				
IRWS-038-02	Ball mechanism inserted into a designed size of pipe and installed at intervals as shown on the drawings	/	x =	
IRWS-038-03	Special locking device provided	/	x =	
		/	x =	
		/	x =	
			Total Score (a)	Total CAR
Was subcontractor used? If yes, name of company and owner  _____ and _____			No. of Indicators (b)	
Entered by: _____ Date: _____			(a)/(b)=	

### CPES CHECKLIST FOR WORKMANSHIP

Contract No.: \_\_\_\_\_  
 \_\_\_\_\_ Visit  
 Date of Visit: \_\_\_\_\_

Project Type : IRRIGATION  
 Location : \_\_\_\_\_  
 Factor : \_\_\_\_\_

**FACTOR: "During Construction" = 0.40; "Upon Completion" = 0.50**

SUB-ITEM CODE	INDICATORS <i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	RESULTS	SCORE Result x factor	ACTION/ MONITOR
<b>Item 039 Bio-Engineering for Erosion Control and Slope Stabilization</b>				
IRWS-039-01	Conformance to the required slope, line and grade as per plans and specifications	/	x =	
IRWS-039-02	Conformance to proper methodology for surface preparation	/	x =	
IRWS-039-03	Plant, shrub, grass and tree species used to reinforce soil and stabilize slopes conforms to the approved variety/kind as per approved specifications	/	x =	
IRWS-039-04	Method of propagation/planting of plant, shrub, grass and tree species conforms to specifications	/	x =	
IRWS-039-05	Inert materials (biotextiles, biomats) used as temporary solutions for superficial lining and erosion protection during vegetation growth conforms to specifications	/	x =	
IRWS-039-06	Inert materials {geomats(with fibers, continuous fibers, grids), geocells, gabions, reno mattresses, hexagonal IRWSe mesh} used for erosion protection caused by impact of raindrops and rills or the flood action of rivers and channels conforms to specifications	/	x =	
IRWS-039-07	Inert materials {gabions, geogrids (extruded, woven, bonded), hexagonal IRWSe mesh, geotextiles (woven, nonwoven)} used for soil reinforcement/soil retaining conforms to specifications	/	x =	
IRWS-039-08	Inert materials {gabions, geomats (continuous fibers, grids), geotextiles (woven, nonwoven)} used for drainage conforms to specifications	/	x =	
IRWS-039-09	Inert materials (double twist IRWSemesh) used for rockfall protection conforms to specifications	/	x =	
		/	x =	
		/	x =	
			Total Score (a)	Total CAR
Was subcontractor used? If yes, name of company and owner  _____ and _____			No. of Indicators (b)	
Entered by: _____ Date: _____			(a)/(b)=	



**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Flood Control  
 LOCATION: \_\_\_\_\_

ITEM: Earthworks  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS				
Sub-item Code	Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).	Results	Score _____ x factor	Action Monitor
<b>Item 1700 Clearing and Grubbing</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
FCWS-1700-01	Proper removal of undisputed stumps roots and non-perishable solid objects/structures, vegetation, debris, tree and other obstructions	/	_____ x _____ =	
<b>Minor</b>				
FCWS-1700-01	Proper removal of undisputed stumps roots and non-perishable solid objects/structures, vegetation, debris, tree and other obstructions	/	_____ x _____ =	
FCWS-1700-02	Conformance to proper disposal	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
<b>Item 1701 Channel Excavation, 1702 Structure Excavation</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
FCWS-170_01	Conformance with approved/specified tolerance for lines, grades, cross-section, elevation and dimension (if no longer correctible)	/	_____ x _____ =	
		/	_____ x _____ =	
<b>Minor</b>				
FCWS-170_01	Conformance with approved/specified tolerance for lines, grades, cross-section, elevation and dimension (correctible)	/	_____ x _____ =	
FCWS-170_02	Adherence to proper construction methodology	/	_____ x _____ =	
FCWS-170_03	Conformance to proper disposal	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
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		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
Was subcontractor used? If yes, name of company and owner:		Total Score (a)		CAR Total
_____ & _____		=		
Entered by: _____		No. of Indicators (b)		
Date: / /		=		
		Rate = (a) / (b)		
		=		
		Rate		
		=		

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Flood Control  
 LOCATION: \_\_\_\_\_

ITEM: Earthworks  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score _____ x factor	Action Monitor
Sub-item Code	Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).			
<b>Item 1703 Dredging</b>				
FCWS-1703-01	Unsuitable soil layers removed from river beds, bottom of creeks, and other bodies of water	/	_____ X _____ =	
FCWS-1703-02	Removed unsuitable soil layers properly disposed	/	_____ X _____ =	
<b>FCWS-1703-03</b>	<b>Adherence to proper dredging methodology</b>	/	_____ X _____ =	
<b>FCWS-1703-04</b>	<b>Conformance with specified silt screens or isolation materials for prevention against the diffusing of contaminated toxic materials during dredging.</b>	/	_____ X _____ =	
<b>FCWS-1703-05</b>	<b>Conformance with approved/specified lines, grades/depth, volume and containment/sealing of disposed dredged materials</b>	/	_____ X _____ =	
		/	_____ X _____ =	
<b>Item 1704 Embankment</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
FCWS-1704-01	Adherence to proper construction methodology (if no longer correctible)	/	_____ X _____ =	
FCWS-1704-02	Conformance with approved/specified tolerances for lines, grades, cross-section, elevation, & dimensions (if no longer correctible, e.g., with in-placed structure)	/	_____ X _____ =	
FCWS-1704-03	Adherence to compaction procedure and required equipment (if no longer correctible)	/	_____ X _____ =	
<b>Minor</b>				
FCWS-1704-01	Adherence to proper construction methodology	/	_____ X _____ =	
FCWS-1704-02	Conformance with approved/specified tolerances for lines, grades, cross-section, elevation, & dimensions (correctible)	/	_____ X _____ =	
FCWS-1704-03	Adherence to compaction procedure and required equipment (correctible)	/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
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		/	_____ X _____ =	
		/	_____ X _____ =	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____			No. of Indicators (b) =	
Date: / /			Rate = (a) / (b) =	
			Rate =	



### CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Flood Control  
 LOCATION: \_\_\_\_\_

ITEM: Bank & Slope Protection  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score _____ x factor	Action Monitor
<b>Item 1710 Riprap/Grouted Riprap, 1711 Stone Masonry, 1713 Rubble Concrete/Sand Masonry</b>				
<b>Major*</b> * Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects				
FCWS-171_-01	No through cracks	/	= <u>      </u> X <u>      </u>	
FCWS-171_-02	Conformance to specifications (size, type, weight, etc. of boulders)	/	= <u>      </u> X <u>      </u>	
FCWS-171_-03	Conformance to the approved/required tolerances for slope and thickness	/	= <u>      </u> X <u>      </u>	
FCWS-171_-04	Observance to proper placing of stones/boulders	/	= <u>      </u> X <u>      </u>	
FCWS-171_-05	Sufficient grout/mortar	/	= <u>      </u> X <u>      </u>	
		/	= <u>      </u> X <u>      </u>	
<b>Minor</b>				
FCWS-171_-01	No cracks	/	= <u>      </u> X <u>      </u>	
FCWS-171_-06	Adequate and proper spacing of weepholes	/	= <u>      </u> X <u>      </u>	
FCWS-171_-07	Conformance with the approved tolerances for lines, grades, cross-sections, and elevations	/	= <u>      </u> X <u>      </u>	
FCWS-171_-08	Compliance to design mix of mortar	/	= <u>      </u> X <u>      </u>	
		/	= <u>      </u> X <u>      </u>	
		/	= <u>      </u> X <u>      </u>	
		/	= <u>      </u> X <u>      </u>	
		/	= <u>      </u> X <u>      </u>	
		/	= <u>      </u> X <u>      </u>	
		/	= <u>      </u> X <u>      </u>	
		/	= <u>      </u> X <u>      </u>	
		/	= <u>      </u> X <u>      </u>	
		/	= <u>      </u> X <u>      </u>	
		/	= <u>      </u> X <u>      </u>	
		/	= <u>      </u> X <u>      </u>	
		/	= <u>      </u> X <u>      </u>	
		/	= <u>      </u> X <u>      </u>	
		/	= <u>      </u> X <u>      </u>	
		/	= <u>      </u> X <u>      </u>	
		/	= <u>      </u> X <u>      </u>	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: / /

Total Score (a) =	CAR Total
No of Indicators (b) =	
Rate = (a) / (b) =	
Rate =	

### CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Flood Control  
 LOCATION: \_\_\_\_\_

ITEM: Bank & Slope Protection  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score _____ x factor	Action Monitor
<b>Item 1712 Concrete Slope Protection</b>				
<b>Major*</b>	<b>* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects</b>			
FCWS-1712-01	No honeycomb (exposed rebars/aggregates)	/	= _____ X _____	
FCWS-1712-02	No through cracks	/	= _____ X _____	
		/	= _____ X _____	
<b>Minor</b>				
FCWS-1712-01	No honeycomb	/	= _____ X _____	
FCWS-1712-02	No cracks	/	= _____ X _____	
FCWS-1712-03	Conformance to the required curing	/	= _____ X _____	
FCWS-1712-04	Proper vibration	/	= _____ X _____	
FCWS-1712-05	Proper finishes/plastering	/	= _____ X _____	
FCWS-1712-06	No corrosion on steel bars	/	= _____ X _____	
FCWS-1712-07	Forms applied with specified form oil	/	= _____ X _____	
FCWS-1712-08	Conformance to the required splicing and installation of rebars	/	= _____ X _____	
FCWS-1712-09	Adequate and proper spacing of weepholes	/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
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		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____ Date: / /			No. of Indicators (b) =	
			Rate = (a) / (b) =	
			Rate =	

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Flood Control  
 LOCATION: \_\_\_\_\_

ITEM: Bank & Slope Protection  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score _____ x factor	Action Monitor
Sub-item Code	Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).			
<b>Item 1714 Gabions and Mattresses</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
FCWS-1714-01	Conformance to the required/approved tolerance for lines, grades, dimensions and arrangements as shown on the plans and designated location (>10%)	/	_____ x _____ =	
FCWS-1714-02	Conformance to specifications (size, type, weight, etc. of boulders)	/	_____ x _____ =	
<b>Minor</b>				
FCWS-1714-01	Conformance to the required/approved tolerance for lines, grades, dimensions and arrangements as shown on the plans and designated location (≤10%)	/	_____ x _____ =	
FCWS-1714-03	Conformance to the required wire mesh cage fabrication requirement	/	_____ x _____ =	
FCWS-1714-04	No misalignment, bulging	/	_____ x _____ =	
FCWS-1714-05	Conformance to the required lapping requirement	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
<b>Item 1715 Filter Fabric</b>				
FCWS-1715-01	Conformance to the elevation and extent of application as shown on the plan	/	_____ x _____ =	
FCWS-1715-02	Conformance to the required installation procedure, e.g. lapping requirements, etc.	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
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		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____			No. of Indicators (b) =	
Date: / /			Rate = (a) / (b) =	
			Rate =	

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Flood Control  
 LOCATION: \_\_\_\_\_

ITEM: Bank & Slope Protection  
 DATE OF VISIT: / /

Factor : "During Construction" = 0.40; "Upon Completion" = 0.50

Sub-item Code	INDICATORS	Results	Score _____ x factor	Action Monitor
<i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>				
<b>Item 1716 Piling</b>				
<b>1716-1 Timber Piles</b>				
<b>Major*</b>		<i>* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects</i>		
FCWS-1716-1-01	Conformance of in-placed materials to plans and specifications	/	= _____ X _____	
FCWS-1716-1-02	Conformance to construction methodology (installation, location and type)	/	= _____ X _____	
FCWS-1716-1-03	Conformance to splicing requirements	/	= _____ X _____	
FCWS-1716-1-04	Conformance to proper installation, e.g. conformance to required slope, embedment, alignment, plumbness (>20 mm / m), elevation, location (>150 mm) & spacing	/	= _____ X _____	
FCWS-1716-1-05	Piles provided with gradation marks (driven)	/	= _____ X _____	
<b>Minor</b>				
FCWS-1716-1-04	Conformance to proper installation, e.g. conformance to required slope, embedment, alignment, plumbness (≤20 mm / m), elevation, location (<150 mm) & spacing	/	= _____ X _____	
FCWS-1716-1-05	Piles provided with gradation marks (stockpile)	/	= _____ X _____	
FCWS-1716-1-06	Conformance to approved/specified tolerances for length, width, thickness and/or diameter	/	= _____ X _____	
FCWS-1716-1-07	No loose knots, decay, splits, worm holes, and warps	/	= _____ X _____	
FCWS-1716-1-08	Non-splintering/brooming of timber pile end beyond specified allowance	/	= _____ X _____	
FCWS-1716-1-09	No cracks	/	= _____ X _____	
FCWS-1716-1-10	Provision of pile cap	/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
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		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
			Total Score (a) =	CAR Total
			No. of Indicators (b) =	
			Rate = (a) / (b) =	
			Rate =	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: / /

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Flood Control  
 LOCATION: \_\_\_\_\_

ITEM: Bank & Slope Protection  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score _____ x factor	Action Monitor
Sub-item Code	<i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>			
<b>Item 1716-2 Steel Piles</b>				
<b>Major*</b>	<i>* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects</i>			
FCWS-1716-2-01	Conformance of in-placed materials to plans and specifications	/	= <u>    X    </u>	
FCWS-1716-2-02	Conformance to construction methodology (installation, location and type)	/	= <u>    X    </u>	
FCWS-1716-2-03	Conformance to splicing requirements	/	= <u>    X    </u>	
FCWS-1716-2-04	Conformance to the required length, width, thickness, and/or diameter	/	= <u>    X    </u>	
FCWS-1716-2-05	Piles provided with gradation marks (driven)	/	= <u>    X    </u>	
FCWS-1716-2-06	Conformance to proper installation, e.g. conformance to required slope, embedment, alignment, plumbness (>20 mm / m), elevation, location (>150 mm) & spacing	/	= <u>    X    </u>	
<b>Minor</b>				
FCWS-1716-2-05	Piles provided with gradation marks (stockpile)	/	= <u>    X    </u>	
FCWS-1716-2-06	Conformance to proper installation, e.g. conformance to required slope, embedment, alignment, plumbness (≤20 mm / m), elevation, location (≤150 mm) & spacing	/	= <u>    X    </u>	
FCWS-1716-2-07	No corrosions on steel piles	/	= <u>    X    </u>	
FCWS-1716-2-08	No deformation on steel piles	/	= <u>    X    </u>	
		/	= <u>    X    </u>	
		/	= <u>    X    </u>	
		/	= <u>    X    </u>	
		/	= <u>    X    </u>	
		/	= <u>    X    </u>	
		/	= <u>    X    </u>	
		/	= <u>    X    </u>	
		/	= <u>    X    </u>	
		/	= <u>    X    </u>	
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		/	= <u>    X    </u>	
		/	= <u>    X    </u>	
		/	= <u>    X    </u>	
		/	= <u>    X    </u>	
		/	= <u>    X    </u>	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____ Date: / /			No. of Indicators (b) =	
			Rate = (a) / (b) =	
			Rate =	



**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_  
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PROJECT TYPE: Flood Control  
 LOCATION: \_\_\_\_\_

ITEM: Bank & Slope Protection  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score ____ x factor	Action Monitor
Sub-item Code	Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).			
<b>Item 1716-3 Concrete Piles (see Common Items of Work for checklist for formworks, concrete works &amp; RSB)</b>				
<b>Major*</b> * Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects				
FCWS-1716-3-01	Conformance of in-placed materials to plans and specifications	/	= <u>    </u> X <u>    </u>	
FCWS-1716-3-02	Conformance to construction methodology (installation, location and type)	/	= <u>    </u> X <u>    </u>	
FCWS-1716-3-03	Conformance to splicing requirements	/	= <u>    </u> X <u>    </u>	
FCWS-1716-3-04	Conformance to the required length, width, thickness, and/or diameter	/	= <u>    </u> X <u>    </u>	
FCWS-1716-3-05	Provision of pile shoe	/	= <u>    </u> X <u>    </u>	
FCWS-1716-3-06	No through cracks	/	= <u>    </u> X <u>    </u>	
FCWS-1716-3-07	No honeycomb (exposed rebars/aggregates)			
FCWS-1716-3-08	Piles provided with gradation marks (driven)	/	= <u>    </u> X <u>    </u>	
FCWS-1716-3-09	Conformance to proper installation, e.g. conformance to required slope, embedment, alignment, plumbness (>20 mm / m), elevation, location (>150 mm) & spacing	/	= <u>    </u> X <u>    </u>	
<b>Minor</b>				
FCWS-1716-3-06	No cracks	/	= <u>    </u> X <u>    </u>	
FCWS-1716-3-07	No honeycomb	/	= <u>    </u> X <u>    </u>	
FCWS-17163--08	Piles provided with gradation marks (stockpile)	/	= <u>    </u> X <u>    </u>	
FCWS-1716-3-09	Conformance to proper installation, e.g. conformance to required slope, embedment, alignment, plumbness (≤20 mm / m), elevation, location (≤150 mm), spacing & champering	/	= <u>    </u> X <u>    </u>	
FCWS-1716-3-10	Conformance to specified curing on casted RC piles	/	= <u>    </u> X <u>    </u>	
FCWS-1716-3-11	Conformance to casting length	/	= <u>    </u> X <u>    </u>	
FCWS-1716-3-12	Conformance to required lifting procedure	/	= <u>    </u> X <u>    </u>	
		/	= <u>    </u> X <u>    </u>	
		/	= <u>    </u> X <u>    </u>	
		/	= <u>    </u> X <u>    </u>	
		/	= <u>    </u> X <u>    </u>	
		/	= <u>    </u> X <u>    </u>	
		/	= <u>    </u> X <u>    </u>	
		/	= <u>    </u> X <u>    </u>	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: / /

Total Score (a)	CAR Total
=	
No. of Indicators (b)	
=	
Rate = (a) / (b)	
=	
Rate	
=	

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ITEM: Bank & Slope Protection  
DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score _____ x factor	Action Monitor
<b>Item 1717 Sheet Piles</b>				
<b>1717-1 Concrete Sheet Pile</b>				
<b>Major*</b> * Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects				
FCWS-1717-1-01	Conformance to proper installation, e.g. conformance to required slope, embedment, alignment, plumbness (>20 mm / m), elevation, location (>150 mm) & spacing	/	= _____ x _____	
FCWS-1717-1-02	Piles provided with gradation marks (driven)	/	= _____ x _____	
FCWS-1717-1-03	Conformance to the required quality of concrete mix	/	= _____ x _____	
FCWS-1717-1-04	No cracks	/	= _____ x _____	
FCWS-1717-1-05	Conformance to the approved/required tolerances for length, width, thickness, and/or diameter	/	= _____ x _____	
<b>Minor</b>				
FCWS-1717-1-01	Conformance to proper installation, e.g. conformance to required slope, embedment, alignment, plumbness ( $\leq 20$ mm / m), elevation, location ( $\leq 150$ mm) & spacing	/	= _____ x _____	
FCWS-1717-1-02	Piles provided with gradation marks (stockpile)	/	= _____ x _____	
FCWS-1717-1-06	Conformance to the required casting length	/	= _____ x _____	
FCWS-1717-1-07	Provision of pile shoe	/	= _____ x _____	
FCWS-1717-1-08	Compliance to required curing of casted sheet piles	/	= _____ x _____	
FCWS-1717-1-09	Compliance to required splicing	/	= _____ x _____	
FCWS-1717-1-10	No honeycomb, stone pockets and bulging	/	= _____ x _____	
FCWS-1717-1-11	Conformance to the required centerline and cut-off elevation	/	= _____ x _____	
FCWS-1717-1-12	Attainment of required number of piles	/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
				Total Score (a) =
Was subcontractor used? If yes, name of company and owner: _____ & _____				CAR Total
				No. of Indicators (b) =
Entered by: _____ Date: / /				Rate = (a) / (b) =
				Rate =

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PROJECT ID/NO.: \_\_\_\_\_  
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PROJECT TYPE: Flood Control  
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ITEM: Bank & Slope Protection  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score ____ x factor	Action Monitor
<b>Item 1717-2 Steel Sheet Pile</b>				
<b>Major*</b>	<b>* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects</b>			
FCWS-1717-2-01	Conformance of in-placed materials to plans & specifications	/	= <u>    </u> x <u>    </u>	
FCWS-1717-2-02	Conformance to proper installation, e.g. conformance to required slope, embedment, alignment, plumbness (>20 mm / m), elevation, location (>150 mm) & spacing	/	= <u>    </u> x <u>    </u>	
FCWS-1717-2-03	Piles provided with gradation marks (driven)			
FCWS-1717-2-04	Conformance to the approved/required tolerances for length, width, thickness, and/or diameter	/	= <u>    </u> x <u>    </u>	
<b>Minor</b>				
FCWS-1717-2-02	Conformance to proper installation, e.g. conformance to required slope, embedment, alignment, plumbness (≤20 mm / m), elevation, location (≤150 mm) & spacing	/	= <u>    </u> x <u>    </u>	
FCWS-1717-2-03	Piles provided with gradation marks (stockpile)	/	= <u>    </u> x <u>    </u>	
FCWS-1717-2-05	Compliance to the required splicing	/	= <u>    </u> x <u>    </u>	
FCWS-1717-2-06	No corrosion on steel sheet piles	/	= <u>    </u> x <u>    </u>	
FCWS-1717-2-07	Non-use of deformed steel bars	/	= <u>    </u> x <u>    </u>	
FCWS-1717-2-08	Attainment of required number of piles	/	= <u>    </u> x <u>    </u>	
		/	= <u>    </u> x <u>    </u>	
		/	= <u>    </u> x <u>    </u>	
		/	= <u>    </u> x <u>    </u>	
		/	= <u>    </u> x <u>    </u>	
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		/	= <u>    </u> x <u>    </u>	
		/	= <u>    </u> x <u>    </u>	
			Total Score (a)	CAR Total
Was subcontractor used? If yes, name of company and owner: _____ & _____			=	
			No. of Indicators (b)	
			=	
Entered by: _____			Rate = (a) / (b)	
			=	
			Rate	
			=	
			=	
			=	

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Flood Control  
 LOCATION: \_\_\_\_\_

ITEM: Bank & Slope Protection  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score _____ x factor	Action Monitor
Sub-item Code	Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).			
<b>Item 1717-3 Timber Sheet Pile</b>				
<b>Major*</b>		* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects		
FCWS-1717-3-01	Conformance of in-placed materials to plans and specifications	/	= _____ x _____	
FCWS-1717-3-02	Conformance to construction methodology (installation, location and type)	/	= _____ x _____	
FCWS-1717-3-03	Conformance to splicing requirements	/	= _____ x _____	
FCWS-1717-3-04	Conformance to proper installation, e.g. conformance to required slope, embedment, alignment, plumbness (>20 mm / m), elevation, location (>150 mm) & spacing	/	= _____ x _____	
FCWS-1717-3-05	Piles provided with gradation marks (driven)	/	= _____ x _____	
FCWS-1717-3-06	Conformance to approved/specified tolerances for length, width, thickness and/or diameter	/	= _____ x _____	
<b>Minor</b>				
FCWS-1717-3-04	Conformance to proper installation, e.g. conformance to required slope, embedment, alignment, plumbness (≤20 mm / m), elevation, location (≤150 mm) & spacing	/	= _____ x _____	
FCWS-1717-3-05	Piles provided with gradation marks (stockpile)	/	= _____ x _____	
FCWS-1717-3-07	No worm holes, decays, warps, ring, segregation, splits, and loose knots	/	= _____ x _____	
FCWS-1717-3-08	Non-splintering/brooming of timber pile end beyond specified allowance	/	= _____ x _____	
FCWS-1717-3-09	No cracks	/	= _____ x _____	
FCWS-1717-3-10	Provision of pile cap	/	= _____ x _____	
FCWS-1717-3-11	Attainment of required number of piles	/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
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		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____			No. of Indicators (b) =	
Date: / /			Rate = (a) / (b) =	
			Rate =	

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_  
\_\_\_\_\_ VISIT

PROJECT TYPE: Flood Control  
LOCATION: \_\_\_\_\_

ITEM: Drainage Works  
DATE OF VISIT: / /

Factor : "During Construction" = 0.40; "Upon Completion" = 0.50

Sub-item Code	INDICATORS <i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score ____ x factor	Action Monitor
<b>Item 1718 Pipe Culvert and Storm Drain</b>				
<b>Major</b>				
FCWS-1718-01	Conformance to the required/approved tolerance for slope, alignment, elevation and dimensions	/	= _____ x _____	
<b>Minor</b>				
FCWS-1718-02	No cracks, honeycomb, chipping of edges	/	= _____ x _____	
FCWS-1718-03	Compliance to joint mortar mixing proportions	/	= _____ x _____	
FCWS-1718-04	Sufficient collaring and flushing	/	= _____ x _____	
FCWS-1718-05	Compliance to the required thickness, compaction & materials requirement of gravel bedding	/	= _____ x _____	
FCWS-1718-06	Compliance to the required thickness and compaction of backfill	/	= _____ x _____	
FCWS-1718-07	Conformance to trenching requirements	/	= _____ x _____	
FCWS-1718-08	Free from debris, siltation, etc.	/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
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		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	

Was subcontractor used? If yes, name of company and owner:  
\_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: / /

Total Score (a)	CAR Total
= _____	
No. of Indicators (b)	
= _____	
Rate = (a) / (b)	
= _____	
Rate	
= _____	

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Flood Control  
 LOCATION: \_\_\_\_\_

ITEM: Drainage Works  
 DATE OF VISIT: / /

Factor : "During Construction" = 0.40; "Upon Completion" = 0.50

INDICATORS				
Sub-item Code	Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).	Results	Score _____ x factor	Action Monitor
<b>Item 1720 Manholes, Inlets and Catch Basins</b>				
<b>Major</b>				
FCWS-1720-01	Conformance to connection requirements between pipes and inlet wall	/	_____ x _____ =	
FCWS-1720-02	Conformance to approved/specified tolerance for dimensions and elevations	/	_____ x _____ =	
<b>Minor</b>				
FCWS-1720-03	No damage on manhole, inlets and catch basins	/	_____ x _____ =	
FCWS-1720-04	No cracks	/	_____ x _____ =	
FCWS-1720-05	No honeycomb	/	_____ x _____ =	
FCWS-1720-06	Free from debris, siltation, etc.	/	_____ x _____ =	
FCWS-1720-07	Covers and gratings are well fitted and can easily be opened during maintenance work	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
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		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
Total Score (a)			=	CAR Total
No. of Indicators (b)			=	
Rate = (a) / (b)			=	
Rate			=	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: / /

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Flood Control  
 LOCATION: \_\_\_\_\_

ITEM: Common Items of Work  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score _____ x factor	Action Monitor
Sub-item Code	Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).			
<b>Item 1723 Formworks</b>				
FCWS-1723-01	Conformance to the required type of formworks in accordance with approved shop/working drawings	/	_____ x _____ =	
FCWS-1723-02	Forms coated with mould oil as required	/	_____ x _____ =	
FCWS-1723-03	Sufficient bracing/support provided	/	_____ x _____ =	
FCWS-1723-04	No loose knots, splits, cracks, etc.	/	_____ x _____ =	
FCWS-1723-05	Provision of required concrete or steel spacers	/	_____ x _____ =	
FCWS-1723-06	Conformance to dimensions, location, plumbness and alignment	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
<b>Item 1724 Reinforcing Steel Bars (including tendons for Pre/Post-Stressed concrete)</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
FCWS-1724-01	Conformance of in-placed materials to plans & specifications	/	_____ x _____ =	
FCWS-1724-02	Non-appearance of corrosion on steel reinforcement	/	_____ x _____ =	
<b>Minor</b>				
FCWS-1724-02	Non-appearance of rust on steel reinforcement	/	_____ x _____ =	
FCWS-1724-03	Conformance to approved bar cutting schedule, proper spacing, anchorage, adequate reinforcements	/	_____ x _____ =	
FCWS-1724-04	No sign of oil, paint and other deleterious materials on reinforcements	/	_____ x _____ =	
FCWS-1724-05	Conformance to jointing requirements, i.e. splicing, welding, etc.	/	_____ x _____ =	
FCWS-1724-06	Conformance to the required installation of ducttube (e.g. spacing, location and distance)	/	_____ x _____ =	
FCWS-1724-07	Conformance to the required steel plate and lock	/	_____ x _____ =	
FCWS-1724-08	Conformance to the number of bundles of tendons and number of pieces of bundles of tendons	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____			No. of Indicators (b) =	
Date: / /			Rate = (a) / (b) =	
			Rate =	

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Flood Control  
 LOCATION: \_\_\_\_\_

ITEM: Common Items of Work  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score _____ x factor	Action Monitor
Sub-item Code	Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).			
<b>Item 1725 Concrete Works</b>				
<b>Major</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
FCWS-1725-01	No through of cracks	/	= _____ X _____	
FCWS-1725-02	No honeycomb or spalling (no exposed rebars/aggregates)	/	= _____ X _____	
FCWS-1725-03	No sagging or bulging	/	= _____ X _____	
FCWS-1725-04	Conformance to the required quality of concrete mix	/	= _____ X _____	
<b>Minor</b>				
FCWS-1725-01	No cracks	/	= _____ X _____	
FCWS-1725-02	No honeycomb or spalling	/	= _____ X _____	
FCWS-1725-03	No sagging or bulging	/	= _____ X _____	
FCWS-1725-05	No chipping off of concrete cover	/	= _____ X _____	
FCWS-1725-06	Proper and adequate vibration	/	= _____ X _____	
FCWS-1725-07	Conformance to finishing/plastering requirement	/	= _____ X _____	
FCWS-1725-08	Conformance to the required concrete cover for rebars	/	= _____ X _____	
FCWS-1725-09	Conformance to the batching, mixing, transporting and discharge time requirements	/	= _____ X _____	
FCWS-1725-10	Conformance to placing requirement that will not result segregation of aggregates, cold joints and misalignment	/	= _____ X _____	
FCWS-1725-11	Conformance to the jointing requirement	/	= _____ X _____	
FCWS-1725-12	Proper curing	/	= _____ X _____	
FCWS-1725-13	Conformance to required dimensions, lines, grades/elevation locations and crown (for pier)	/	= _____ X _____	
FCWS-1725-14	No water ponding on bearing plates	/	= _____ X _____	
FCWS-1725-15	Conformance to elevation of expansion joints	/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____ Date: / /			No. of Indicators (b) =	
			Rate = (a) / (b) =	
			Rate =	



**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Flood Control  
 LOCATION: \_\_\_\_\_

ITEM: Miscellaneous Works  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score ____ x factor	Action Monitor
Sub-item Code	<i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>			
<b>Item 1726 Electrical Works</b>				
FCWS-1726-01	Pipes installed according to plans and laid out according to approved construction drawings	/	____ x ____ =	
FCWS-1726-02	Pipes, hangers, boxes, gutters, cable trays properly installed and painted, sharp edges of pipes removed	/	____ x ____ =	
FCWS-1726-03	Pipes properly bended	/	____ x ____ =	
FCWS-1726-04	Allowable number of wires in a pipe properly observed	/	____ x ____ =	
FCWS-1726-05	Splicing and connection provided with adequate rubber and pvc tapes	/	____ x ____ =	
FCWS-1726-06	Adequate length of wire provided for termination and splicing	/	____ x ____ =	
FCWS-1726-07	Wire color coding complied and observed	/	____ x ____ =	
FCWS-1726-08	Wire insulation not damaged during pulling	/	____ x ____ =	
FCWS-1726-09	Adequate number, correct size and gauge of pull boxes installed and properly covered	/	____ x ____ =	
FCWS-1726-10	Boxes and enclosures provided according to intended purpose	/	____ x ____ =	
FCWS-1726-11	Fittings and accessories provided and properly installed	/	____ x ____ =	
FCWS-1726-12	Block-outs and sleeves provided and properly secured	/	____ x ____ =	
FCWS-1726-13	Cable ties provided	/	____ x ____ =	
FCWS-1726-14	Blank covers provided for outlets and switches that are not utilized	/	____ x ____ =	
FCWS-1726-15	Use of tools and equipment properly observed	/	____ x ____ =	
FCWS-1726-16	Lighting fixtures, panel boards, circuit breakers, etc. properly installed and free from any form of damages	/	____ x ____ =	
FCWS-1726-17	Meager, clamp, phase sequence tests and load test conducted	/	____ x ____ =	
FCWS-1726-18	Shop drawings, as-built plan maintained	/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: / /

Total Score (a) =	CAR Total
No. of Indicators (b) =	
Rate = (a) / (b) =	
Rate =	

### CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Flood Control  
 LOCATION: \_\_\_\_\_

ITEM: Miscellaneous Works  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score ____ x factor	Action Monitor
<b>Item 1727 Generator Set</b>				
FCWS-1727-01	Installation of auxilliary, piping and control panel according to plans and specifications	/	= _____ x _____	
FCWS-1727-02	Installed materials free from any form of damages	/	= _____ x _____	
FCWS-1727-03	Pipes are sufficiently braced	/	= _____ x _____	
FCWS-1727-04	Passed the required test	/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
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Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: / /

Total Score (a) =	CAR Total
No. of Indicators (b) =	
Rate = (a) / (b) =	
Rate =	

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Flood Control  
 LOCATION: \_\_\_\_\_

ITEM: Miscellaneous Works  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score ____ x factor	Action Monitor
Sub-item Code	Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).			
<b>Item 1728 Sodding</b>				
FCWS-1728-01	Conformance to appropriate type, thickness and density of soil	/	____ x ____ =	
FCWS-1728-02	Conformance to approved slope	/	____ x ____ =	
FCWS-1728-03	Conformance to the required type of grass/planting materials	/	____ x ____ =	
FCWS-1728-04	Healthy, dense, well rooted	/	____ x ____ =	
FCWS-1728-05	Free from weeds or undesirable grasses	/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
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Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: / /

Total Score (a)	CAR Total
No. of Indicators (b)	
Rate = (a) / (b)	
=	
Rate	
=	

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Flood Control  
 LOCATION: \_\_\_\_\_

ITEM: Bio-Engineering  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score ____ x factor	Action Monitor
Sub-item Code	<i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>			
<b>Item 1729 Bio-Engineering for Erosion Control and Slope Stabilization</b>				
FCWS-1729-01	Conformance to the required slope, line and grade as per plans and specifications	/	____ x ____ =	
FCWS-1729-02	Conformance to proper methodology for surface preparation	/	____ x ____ =	
FCWS-1729-03	Plant, shrub, grass and tree species used to reinforce soil and stabilize slopes conforms to the approved variety/kind as per approved specifications	/	____ x ____ =	
FCWS-1729-04	Method of propagation/planting of plant, shrub, grass and tree species conforms to specifications	/	____ x ____ =	
FCWS-1729-05	Inert materials (biotextiles, biomats) used as temporary solutions for superficial lining and erosion protection during the vegetation growth conforms to specifications	/	____ x ____ =	
FCWS-1729-06	Inert materials {geomats (with fibers, continuous fibers, grids), geocells, gabions, reno mattresses, hexagonal wire mesh} used for erosion protection caused by impact of raindrops and rills or the flood action of rivers and channels conforms to specifications	/	____ x ____ =	
FCWS-1729-07	Inert materials {gabions, georids (extruded, woven, bonded), hexagonal wire mesh, geotextiles (woven, nonwoven)} used for soil reinforcement/soil retaining conforms to specifications	/	____ x ____ =	
FCWS-1729-08	Inert materials {gabions, geomats (continuous fibers, grids), geotextiles (woven, nonwoven)} used for drainage conforms to specifications	/	____ x ____ =	
FCWS-1729-09	Inert materials (double twist wire mesh) used for rockfall protection conforms to specifications	/	____ x ____ =	
FCWS-1729-10	Inert materials installed according to plans and specifications (e.g., size, extent, procedure, lapping, alignment, etc.)	/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
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		/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a)	CAR Total
Entered by: _____			No. of Indicators (b)	
Date: / /			Rate = (a) / (b)	
			=	
			Rate	
			=	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Transmission Line  
 LOCATION: \_\_\_\_\_

ITEM: Clearing  
 DATE OF VISIT:  / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small><i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i></small>	Results	Score x factor	Action / Monitor
<b>Item 100 ROW Clearing</b>				
<b>Major*</b>	<b>* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects</b>			
TRLWS-100-01	Survey area is clearly staked to the required ROW width	/	= ___x___	
<b>Minor</b>				
TRLWS-100-02	Proper removal of undisputed stumps roots and non-perishable solid objects/structures, vegetation, debris, trees and other obstruction.	/	= ___x___	
TRLWS-100-03	Conformance to proper disposal	/	= ___x___	
		/	= ___x___	
		/	= ___x___	
		/	= ___x___	
		/	= ___x___	
		/	= ___x___	
		/	= ___x___	
<b>Item 101 Slope Cutting</b>				
<b>Minor</b>				
TRLWS-101-01	Conformance to the approved / specified clearance	/	= ___x___	
TRLWS-101-02	Proper disposal of cut materials	/	= ___x___	
		/	= ___x___	
		/	= ___x___	
		/	= ___x___	
		/	= ___x___	
		/	= ___x___	
		/	= ___x___	
		/	= ___x___	
			Total Score (a) =	CAR Total
Was subcontractor used? If yes, name of company and owner: _____ & _____			No. of Indicators (b) =	
Entered by: _____			Rate = (a) / (b) =	
Date: <u> / /</u>			Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_ PROJECT TYPE: Transmission Line  
 \_\_\_\_\_ VISIT LOCATION: \_\_\_\_\_

ITEM: Foundation  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small><i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i></small>	Results	Score ____x factor	Action / Monitor
<b>Item 200 Excavation</b>				
<b>Major*</b>	<small>* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects</small>			
TRLWS-200-01	Conformance to the approved foundation plans for lines, grades, dimensions, elevations.	/	= ____x____	
TRLWS-200-02	Adherence to proper construction methodology.	/	= ____x____	
<b>Minor</b>				
TRLWS-200-02	Adherence to proper construction methodology.	/	= ____x____	
TRLWS-200-03	Conformance to the excavation support system. (i.e. shoring, bracing, sheet piling)	/	= ____x____	
TRLWS-200-04	Proper disposal of excavated materials.	/	= ____x____	
		/	= ____x____	
		/	= ____x____	
		/	= ____x____	
		/	= ____x____	
		/	= ____x____	
<b>Item 201 Stubs Setting / 202 Anchor Bolts Setting</b>				
<b>Major*</b>				
TRLWS-20_-01	Conformance to the setting dimensions in accordance to plans and specifications.	/	= ____x____	
TRLWS-20_-02	Conformance to the required template setting.	/	= ____x____	
TRLWS-20_-03	Stub/Anchor bolt and template fixed with support.	/	= ____x____	
		/	= ____x____	
		/	= ____x____	
		/	= ____x____	
		/	= ____x____	
		/	= ____x____	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_ Date: \_\_\_ / \_\_\_ / \_\_\_

Total Score (a) =	CAR Total
No. of Indicators (b) =	
Rate = (a) / (b) =	
Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Transmission Line  
 LOCATION: \_\_\_\_\_

ITEM: Foundation  
 DATE OF VISIT:  / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score ____x factor	Action / Monitor
<b>Item 203 Backfilling</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
TRLWS-203-01	Conformance of in-placed materials to plans and specifications.	/	= ____x____	
TRLWS-203-02	Conformance to the required density or degree of compaction	/	= ____x____	
<b>Minor</b>				
TRLWS-203-03	Conformance to the required elevation of fill or backfill	/	= ____x____	
TRLWS-203-04	Conformance to ground level restoration	/	= ____x____	
TRLWS-203-05	Provision of rain water outlet.	/	= ____x____	
		/	= ____x____	
		/	= ____x____	
		/	= ____x____	
		/	= ____x____	
		/	= ____x____	
<b>Item 204 Grounding System</b>				
<b>Minor</b>				
TRLWS-204-01	Conformance to the required grounding resistance.	/	= ____x____	
TRLWS-204-02	Proper installation of grounding / counterpoise.	/	= ____x____	
		/	= ____x____	
		/	= ____x____	
		/	= ____x____	
		/	= ____x____	
		/	= ____x____	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____			No. of Indicators (b) =	
Date: <u> / /</u>			Rate = (a) / (b) =	
			Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Transmission Line  
 LOCATION/LOT: \_\_\_\_\_

ITEM: Foundation  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small><i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i></small>	Results	Score ____ x factor	Action / Monitor
<b>Item 205 Formworks</b>				
<b>Minor</b>				
TRLWS-205-01	Conformance to the required type of formworks in accordance with approved shop/working drawings.	/	____ x ____ =	
TRLWS-205-02	Forms coated with mould oil as required.	/	____ x ____ =	
TRLWS-205-03	Sufficient bracing / support.	/	____ x ____ =	
TRLWS-205-04	No loose knots, splits, cracks, etc.	/	____ x ____ =	
TRLWS-205-05	Provision of required concrete or steel spacer.	/	____ x ____ =	
TRLWS-205-06	Conformance to specified tolerances for dimensions, locations, plumbness and alignment.	/	____ x ____ =	
TRLWS-205-07	No use of dilapidated/salvage forms (use more than 3x)	/	____ x ____ =	
		/	____ x ____ =	
<b>Item 206 Reinforcing Steel Bars (including tendons for Pre/Post-Stressed Concrete)</b>				
<b>Major*</b>	<b>* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects</b>			
TRLWS-206-01	Conformance of in-placed materials to plans and specifications.	/	____ x ____ =	
TRLWS-206-02	Non-appearance of corrosion on steel reinforcement.	/	____ x ____ =	
<b>Minor</b>				
TRLWS-206-02	Non-appearance of rust on steel reinforcement.	/	____ x ____ =	
TRLWS-206-03	Conformance to approved bar cutting schedule, proper spacing, anchorage and adequate reinforcements.	/	____ x ____ =	
TRLWS-206-04	No sign of oil, paint and other deleterious materials on reinforcements.	/	____ x ____ =	
TRLWS-206-05	Conformance to jointing requirement, i.e. splicing, welding, etc.	/	____ x ____ =	
TRLWS-206-06	Conformance to proper bending of stirrups	/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: \_\_\_ / \_\_\_ / \_\_\_

Total Score (a) =	CAR Total
No. of Indicators (b) =	
Rate= (a) / (b) =	
Rate =	



## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_ PROJECT TYPE: Transmission Line  
 \_\_\_\_\_ VISIT LOCATION/LOT: \_\_\_\_\_

ITEM: Foundation  
 DATE OF VISIT:  / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score ____x factor	Action / Monitor
<b>Item 207 Concrete</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
TRLWS-207-01	No through cracks.	/	= _____x_____	
TRLWS-207-02	No honeycomb (exposed rebars/aggregates).	/	= _____x_____	
TRLWS-207-03	No sagging or bulging.	/	= _____x_____	
TRLWS-207-04	Conformance to required quality of concrete mix	/	= _____x_____	
TRLWS-207-05	Conformance to the required concrete cover for rebars.	/	= _____x_____	
TRLWS-207-06	Conformance to the jointing requirement.	/	= _____x_____	
TRLWS-207-07	Conformance to placing requirement that will not result segregation of aggregates, cold joints and misalignment.	/	= _____x_____	
<b>Minor</b>				
TRLWS-207-01	No cracks.	/	= _____x_____	
TRLWS-207-02	No honeycomb.	/	= _____x_____	
TRLWS-207-03	No sagging or bulging.	/	= _____x_____	
TRLWS-207-05	Conformance to the required concrete cover for rebars.	/	= _____x_____	
TRLWS-207-06	Conformance to the jointing requirement.	/	= _____x_____	
TRLWS-207-07	Conformance to placing requirement that will not result segregation of aggregates, cold joints and misalignment.	/	= _____x_____	
TRLWS-207-08	Proper and adequate vibration.	/	= _____x_____	
TRLWS-207-09	Conformance to finishing/plastering requirement.	/	= _____x_____	
TRLWS-207-10	No chipping off of concrete cover.	/	= _____x_____	
TRLWS-207-11	Conformance to the batching, mixing, transporting and discharge time requirements.	/	= _____x_____	
TRLWS-207-12	Proper curing.	/	= _____x_____	
TRLWS-207-13	Conformance to required dimensions, lines. grades/ elevation, location.	/	= _____x_____	
		/	= _____x_____	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_ Date:  / /

Total Score (a) =	CAR Total
No. of Indicators (b) =	
Rate= (a) / (b) =	
Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Transmission Line  
 LOCATION: \_\_\_\_\_

ITEM: Slope Protection  
 DATE OF VISIT:  / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score _____ x factor	Action / Monitor
<b>Item 300 Riprap / 301 Grouted Riprap</b>				
<b>Major*</b>	<b>* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects</b>			
TRLWS-30_-01	Conformance to plans and specifications (size, type, weight, etc. of boulders.)	/	= _____ X _____	
TRLWS-30_-02	Sufficient grout/mortar.	/	= _____ X _____	
TRLWS-30_-03	Observance to proper placing of stones/boulders.	/	= _____ X _____	
TRLWS-30_-04	Conformance to the approved/required tolerance for slope and thickness.	/	= _____ X _____	
TRLWS-30_-05	Compliance to the specified compaction and preparation of bedding.	/	= _____ X _____	
TRLWS-30_-06	Compliance to design mix of mortar.	/	= _____ X _____	
TRLWS-30_-07	No through cracks	/	= _____ X _____	
TRLWS-30_-08	Provision of weepholes.	/	= _____ X _____	
<b>Minor</b>				
TRLWS-30_-07	No cracks.	/	= _____ X _____	
TRLWS-30_-08	Adequate and proper spacing of weepholes.	/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
<b>Item 302 Rockwall</b>				
<b>Major*</b>				
TRLWS-302-01	Conformance to the required size of boulders.	/	= _____ X _____	
TRLWS-302-02	Observance to proper placement of stones/boulders.	/	= _____ X _____	
TRLWS-302-03	Conformance to the approved/required tolerance for length, slope and thickness.	/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_ Date:  / /

Total Score (a)	CAR Total
=	
No. of Indicators (b)	
=	
Rate = (a) / (b)	
=	
Rate	
=	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Transmission Line  
 LOCATION: \_\_\_\_\_

ITEM: Slope Protection  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score ____ x factor	Action / Monitor
<b>Item 303 Gabions</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
TRLWS-303-01	Conformance to the required/approved tolerances for lines, grades, dimensions and arrangements as shown on the plans and designated locations.	/	____ x ____ =	
TRLWS-303-02	Observance to proper placing of stones/boulders.	/	____ x ____ =	
TRLWS-303-03	Conformance to specifications (size, type, weight, etc. of boulders, rocks).	/	____ x ____ =	
<b>Minor</b>				
TRLWS-303-04	No misalignment, bulging.	/	____ x ____ =	
TRLWS-303-05	Conformance to the required wire mesh cage fabrication requirement.	/	____ x ____ =	
		/	____ x ____ =	
<b>Item 304 Fill</b>				
<b>Major*</b>				
TRLWS-304-01	Conformance of in-placed materials to plans and specifications.	/	____ x ____ =	
TRLWS-304-02	Conformance to the required density or degree of compaction	/	____ x ____ =	
<b>Minor</b>				
TRLWS-304-03	Conformance to the required thickness of fill or backfill per layer.	/	____ x ____ =	
		/	____ x ____ =	
<b>Item 305 Sodding / 306 Sprigging</b>				
<b>Minor</b>				
TRLWS-30_01	Conformance to the required scope of work.	/	____ x ____ =	
TRLWS-30_02	Healthy, dense and well rooted.	/	____ x ____ =	
TRLWS-30_03	Free from weeds or undesirable grasses.	/	____ x ____ =	
		/	____ x ____ =	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: \_\_\_ / \_\_\_ / \_\_\_

Total Score (a)	CAR Total
=	
No. of Indicators (b)	
=	
Rate = (a) / (b)	
=	
Rate	
=	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Transmission Line  
 LOCATION: \_\_\_\_\_

ITEM: Erection  
 DATE OF VISIT:  / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score x factor	Action / Monitor
<b>Item 400 Latticed Structure (Tower)</b>				
<b>Major*</b>	<b>* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects</b>			
TRLWS-400-01	Tower parts and accessories are free from damages (i.e, structural steel works, anchor materials, bolts and nuts, washers, guy, etc.).	/	____ X ____ =	
TRLWS-400-02	Connectors of tower members are secured by bolts and nuts and washers.	/	____ X ____ =	
TRLWS-400-03	Conformance to foundation requirements (i.e, correct orientation, finished elevations, embedded items).	/	____ X ____ =	
TRLWS-400-04	Conformance to approved erection drawings.	/	____ X ____ =	
TRLWS-400-05	Tower parts completely installed.	/	____ X ____ =	
<b>Minor</b>				
TRLWS-400-01	Tower parts and accessories are free from damages (i.e, structural steel works, anchor materials, bolts and nuts, washers, guy, etc.).	/	____ X ____ =	
TRLWS-400-02	Connectors of tower members are secured by bolts and nuts and washers.	/	____ X ____ =	
TRLWS-400-06	Non-appearance of white rust on all galvanized members and accessories	/	____ X ____ =	
TRLWS-400-07	Bolts, nuts and washers conformed to the required number, number, sizes and strength.	/	____ X ____ =	
TRLWS-400-08	Galvanized bolts and nuts are assembled with finger fit pressure only and interchangeable without shakes.	/	____ X ____ =	
TRLWS-400-09	Conformance to bolt positions and insertion requirements.	/	____ X ____ =	
TRLWS-400-10	Bolts fastened with specified torque.	/	____ X ____ =	
TRLWS-400-11	Tower members are completely installed.	/	____ X ____ =	
		/	____ X ____ =	
		/	____ X ____ =	
		/	____ X ____ =	
		/	____ X ____ =	
		/	____ X ____ =	
		/	____ X ____ =	
		/	____ X ____ =	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____			No. of Indicators (b) =	
Date: <u> / /</u>			Rate = (a) / (b) =	
			Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Transmission Line  
 LOCATION: \_\_\_\_\_

ITEM: Erection  
 DATE OF VISIT:  / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small><i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i></small>	Results	Score x factor	Action / Monitor
<b>Item 401 Steel Poles / 402 Woodpoles / 403 Concrete Poles</b>				
<b>Major*</b>	<b>* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects</b>			
TRLWS-40_-01	Conformance to approved erection drawings.	/	= ___X___	
TRLWS-40_-02	Conformance to the required road right-of-way clearance.	/	= ___X___	
TRLWS-40_-03	Conformance to required pole embedment.	/	= ___X___	
TRLWS-40_-04	Provision of extension arms, brackets, braces, bolts, pole caps and other accessories.	/	= ___X___	
<b>Minor</b>				
TRLWS-40_-05	Conformance to required backfilling.	/	= ___X___	
TRLWS-40_-06	Conformance to approved staking distances.	/	= ___X___	
TRLWS-40_-07	Provision of pole identification and tag.	/	= ___X___	
TRLWS-40_-08	Provision of required anti-climbing device.	/	= ___X___	
		/	= ___X___	
<b>Item 404 Guy</b>				
<b>Major*</b>				
TRLWS-404-01	Conformance to plans and specifications.	/	= ___X___	
TRLWS-404-02	Conformance with the required proper anchorage.	/	= ___X___	
TRLWS-404-03	Proper connection of upper and lower guys.	/	= ___X___	
<b>Minor</b>				
TRLWS-404-03	Proper connection of upper and lower guys.	/	= ___X___	
TRLWS-404-04	Provision of guy guard.	/	= ___X___	
TRLWS-404-05	Conformance with the required mounting angle.	/	= ___X___	
TRLWS-404-06	Provision of porcelain insulator.	/	= ___X___	
TRLWS-404-07	Provision of winding grip/turnbuckle.	/	= ___X___	
		/	= ___X___	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____			No. of Indicators (b) =	
Date: <u> / /</u>			Rate = (a) / (b) =	
			Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Transmission Line  
 LOCATION: \_\_\_\_\_

ITEM: Dressing  
 DATE OF VISIT:  / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score x factor	Action / Monitor
<b>Item 500 Installation of Insulator String Assembly and Ground Wire Set</b>				
<b>Major*</b>	<b>* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects</b>			
TRLWS-500-01	Conformance to the specified insulator string assembly and ground wire set.	/	= ___ X ___	
TRLWS-500-02	Free from any form of damage.	/	= ___ X ___	
<b>Minor</b>				
TRLWS-500-02	Free from any form of damage.	/	= ___ X ___	
TRLWS-500-03	Conformance to required gap and alignment of arcing horns.	/	= ___ X ___	
		/	= ___ X ___	
		/	= ___ X ___	
		/	= ___ X ___	
		/	= ___ X ___	
		/	= ___ X ___	
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		/	= ___ X ___	
		/	= ___ X ___	
		/	= ___ X ___	
				Total Score (a)
Was subcontractor used? If yes, name of company and owner: _____ & _____				=
				No. of Indicators (b)
				=
Entered by: _____				Rate = (a) / (b)
				=
Date: <u> / /</u>				Rate
				=

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Transmission Line  
 LOCATION: \_\_\_\_\_

ITEM: Stringing  
 DATE OF VISIT:  / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score x factor	Action / Monitor
<b>Item 600 Pay-out of OHGW / ACSR</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
TRLWS-600-01	Proper installation of rollers.	/	= ___X___	
TRLWS-600-02	Provision of back guys at each end of stringing section.	/	= ___X___	
TRLWS-600-03	Proper installation of anchors on engine puller and tensioner.	/	= ___X___	
TRLWS-600-04	Proper installation of scaffoldings on crossings.	/	= ___X___	
TRLWS-600-05	Provision of conductor protection to avoid contact to the ground and prevent damage.	/	= ___X___	
<b>Item 601 Final Sag of Conductors and Overhead Ground Wire</b>				
<b>Major*</b>				
TRLWS-601-01	Conformance to the required clearance between conductors and crossings (i.e. roads, railroads, existing lines, etc.).	/	= ___X___	
TRLWS-601-02	No damaged conductors (i.e., cut strands, bird's cage, kinks, etc.).	/	= ___X___	
TRLWS-601-03	Conformance to the required sag of conductors.	/	= ___X___	
<b>Minor</b>				
TRLWS-601-03	Conformance to the required sag of conductors.	/	= ___X___	
TRLWS-601-04	Conformance to the required location of joint / repair sleeves.	/	= ___X___	
		/	= ___X___	
<b>Item 602 Installation of Tension Clamps &amp; Hardware / 603 Suspension Clamps &amp; Hardware</b>				
<b>Major*</b>				
TRLWS-60_-01	Conformance to plans and specifications.	/	= ___X___	
TRLWS-60_-02	Free from any form of damage.	/	= ___X___	
<b>Minor</b>				
TRLWS-60_-02	Free from any form of damage.	/	= ___X___	
TRLWS-60_-03	Proper installation and correct number of armour rods.	/	= ___X___	
TRLWS-60_-04	Proper installation of clamps, hardware, and accessories.	/	= ___X___	
		/	= ___X___	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_ Date:  / /

Total Score (a)	CAR Total
=	
No. of Indicators (b)	
=	
Rate = (a) / (b)	
=	
Rate	
=	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Transmission Line  
 LOCATION: \_\_\_\_\_

ITEM: Stringing  
 DATE OF VISIT:  / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score x factor	Action / Monitor
<b>Item 604 Installation of Jumper Wires</b>				
<b>Minor</b>				
TRLWS-604-01	Conformance to the required distance between jumper wires and cross arms.	/	= ___X___	
TRLWS-604-02	Conformance to jointing / splicing of wires.	/	= ___X___	
TRLWS-604-03	Free from any form of damage.	/	= ___X___	
		/	= ___X___	
<b>Item 605 Vibration Dampers</b>				
<b>Minor</b>				
TRLWS-605-01	Installation conforms to plans and specifications.	/	= ___X___	
TRLWS-605-02	Free from any form of damage.	/	= ___X___	
TRLWS-605-03	Bolts fastened with specified torque.	/	= ___X___	
		/	= ___X___	
<b>Item 606 Conductor Spacers</b>				
<b>Minor</b>				
TRLWS-606-01	Installation conforms to plans and specifications.	/	= ___X___	
TRLWS-606-02	Free from any form of damage.	/	= ___X___	
TRLWS-606-03	Bolts fastened with specified torque.	/	= ___X___	
		/	= ___X___	
<b>Item 607 Joint Box and other Accessories for OPGW</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
TRLWS-607-01	Installation conforms to plans and specifications.	/	= ___X___	
TRLWS-607-02	Free from any form of damage.	/	= ___X___	
		/	= ___X___	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____			No. of Indicators (b) =	
Date: <u> / /</u>			Rate = (a) / (b) =	
			Rate =	



## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Transmission Line  
 LOCATION: \_\_\_\_\_

ITEM: Stringing  
 DATE OF VISIT:  / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score ____x factor	Action / Monitor
<b>Item 608 Splicing of OPGW</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
TRLWS-608-01	Conformance to plans and specifications.	/	= ____x ____	
TRLWS-608-02	Splicing done with proper equipment/tools.	/	= ____x ____	
TRLWS-608-03	Enclosure properly sealed and water tight.	/	= ____x ____	
TRLWS-608-04	Conformance with the required bonding and grounding.	/	= ____x ____	
<b>Minor</b>				
TRLWS-608-03	Enclosure properly sealed and water tight.	/	= ____x ____	
TRLWS-608-04	Conformance with the required bonding and grounding.	/	= ____x ____	
TRLWS-608-05	Provision of protective device.	/	= ____x ____	
		/	= ____x ____	
<b>Item 609 Splicing of ACSR / 610 OHGW</b>				
<b>Major*</b>				
TRLWS-60_-01	Conformance to plans and specifications.	/	= ____x ____	
TRLWS-60_-02	Splicing done with proper equipment/tools.	/	= ____x ____	
		/	= ____x ____	
<b>Item 611 Other Accessories</b>				
<b>Minor</b>				
TRLWS-611-01	Installation of step bolts / step ladder.	/	= ____x ____	
TRLWS-611-02	Installation of anti-climbing device.	/	= ____x ____	
TRLWS-611-03	Installation of warning / danger plate (i.e. conformance to the size and dimension, orientation).	/	= ____x ____	
TRLWS-611-04	Installation and correct location of patrol numbers (i.e. conformance to the size and dimension, orientation).	/	= ____x ____	
TRLWS-611-05	Installation and correct location of seclusion fence (i.e. conformance to the size and dimension).	/	= ____x ____	
		/	= ____x ____	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____			No. of Indicators (b) =	
Date: <u> / /</u>			Rate = (a) / (b) =	
			Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Transmission Line  
 LOCATION: \_\_\_\_\_

ITEM: Submarine Cable  
 DATE OF VISIT:  / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score ____x factor	Action / Monitor
<b>Item 700 Trenching Works (Onshore)</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
TRLWS-700-01	Conformance to the depth and width requirement.	/	____x____ =	
		/	____x____ =	
		/	____x____ =	
<b>Item 701 Submarine Cable Laying</b>				
<b>Major*</b>				
TRLWS-701-01	Conformance to the required cable protection.	/	____x____ =	
TRLWS-701-02	Free from any form of damage.	/	____x____ =	
<b>Minor</b>				
TRLWS-701-03	Conformance to the required methodology of laying.	/	____x____ =	
		/	____x____ =	
		/	____x____ =	
<b>Item 702 Installation of Accessories</b>				
<b>Minor</b>				
TRLWS-702-01	Installation of buoy markers (i.e. number, distances, type/kind, etc.).	/	____x____ =	
TRLWS-702-02	Installation of cable tablets (i.e. dimensions, number, distances, type/kind, etc.).	/	____x____ =	
		/	____x____ =	
		/	____x____ =	
<b>Item 703 Backfilling Works (Going to CTS)</b>				
<b>Major*</b>				
TRLWS-703-01	Conformance to the required density or degree of compaction.	/	____x____ =	
<b>Minor</b>				
TRLWS-703-02	Conformance to the required elevation of backfill.	/	____x____ =	
TRLWS-703-03	Ground level / Pavement restoration .	/	____x____ =	
		/	____x____ =	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date:  / /

Total Score (a)	CAR Total
=	
No. of Indicators (b)	
=	
Rate = (a) / (b)	
=	
Rate	
=	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Transmission Line  
 LOCATION: \_\_\_\_\_

ITEM: Underground Cable  
 DATE OF VISIT:  / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small><i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i></small>	Results	Score ____x factor	Action / Monitor
<b>Item 800 Trenching Works / 801 Grounding Hole</b>				
<b>Major*</b>	<b>* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects</b>			
TRLWS-80_-01	Conformance to the required depth and width of trench.	/	= ____X ____	
<b>Minor</b>				
TRLWS-80_-02	Provision of protective cover.	/	= ____X ____	
		/	= ____X ____	
		/	= ____X ____	
		/	= ____X ____	
		/	= ____X ____	
<b>Item 802 Underground Cable Laying</b>				
<b>Major*</b>				
TRLWS-802-01	Conformance to the required methodology.	/	= ____X ____	
TRLWS-802-02	Free from any form of damage.	/	= ____X ____	
<b>Minor</b>				
TRLWS-802-03	Conformance to the required cable protection.	/	= ____X ____	
TRLWS-802-04	Provision of warning tape and concrete plate.	/	= ____X ____	
TRLWS-802-05	Installation of marking post at specified distance.	/	= ____X ____	
TRLWS-802-06	Provision of applicable cable spacer.	/	= ____X ____	
TRLWS-802-07	Conformance to bedding and backfilling requirements.	/	= ____X ____	
		/	= ____X ____	
		/	= ____X ____	
		/	= ____X ____	
		/	= ____X ____	
			Total Score (a) =	CAR Total
Was subcontractor used? If yes, name of company and owner: _____ & _____			No. of Indicators (b) =	
Entered by: _____			Rate = (a) / (b) =	
Date: <u> / /</u>			Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Transmission Line  
 LOCATION: \_\_\_\_\_

ITEM: Underground Cable  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score ____x factor	Action / Monitor
<b>Item 803 Cable Termination</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
TRLWS-803-01	Conformance to plans and specifications.	/	= ____x ____	
<b>Minor</b>				
TRLWS-803-02	Provision of grounding and bonding.	/	= ____x ____	
TRLWS-803-03	Identification of cable pair on terminal blocks.	/	= ____x ____	
TRLWS-803-04	Provision of cable rack hooks including bolts, plates and cable supporters.	/	= ____x ____	
		/	= ____x ____	
<b>Item 804 Splice Joint</b>				
<b>Major*</b>				
TRLWS-804-01	Conformance to plans and specifications.	/	= ____x ____	
<b>Minor</b>				
TRLWS-804-02	Provision of grounding and bonding.	/	= ____x ____	
		/	= ____x ____	
<b>Item 805 Splicing of Cable</b>				
<b>Major*</b>				
TRLWS-805-01	Conformance with the required position.	/	= ____x ____	
TRLWS-805-02	Enclosure properly sealed and water tight.	/	= ____x ____	
TRLWS-805-03	Splicing done with proper equipment/tools.	/	= ____x ____	
<b>Minor</b>				
TRLWS-805-03	Splicing done with proper equipment/tools.	/	= ____x ____	
TRLWS-805-04	Conformance with the required bonding and grounding.	/	= ____x ____	
TRLWS-805-05	Provision of protective device.	/	= ____x ____	
		/	= ____x ____	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: \_\_\_ / \_\_\_ / \_\_\_

Total Score (a) =	CAR Total
No. of Indicators (b) =	
Rate = (a) / (b) =	
Rate =	

### CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Transmission Line  
 LOCATION: \_\_\_\_\_

ITEM: Pre-Commissioning  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score _____x factor	Action / Monitor
<b>Item 900 Pre-Commissioning</b>				
<b>Minor</b>				
TRLWS-900-01	Conformance to the required line clearances.	/	= _____x _____	
TRLWS-900-02	No tripping of line during testing.	/	= _____x _____	
		/	= _____x _____	
		/	= _____x _____	
		/	= _____x _____	
		/	= _____x _____	
		/	= _____x _____	
		/	= _____x _____	
		/	= _____x _____	
		/	= _____x _____	
		/	= _____x _____	
		/	= _____x _____	
		/	= _____x _____	
		/	= _____x _____	
		/	= _____x _____	
		/	= _____x _____	
		/	= _____x _____	
		/	= _____x _____	
		/	= _____x _____	
		/	= _____x _____	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: \_\_\_ / \_\_\_ / \_\_\_

Total Score (a) =	CAR Total
No. of Indicators (b) =	
Rate = (a) / (b) =	
Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Substation  
 LOCATION: \_\_\_\_\_

ITEM: Site Development  
 DATE OF VISIT:    /    /   

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score ____x factor	Action / Monitor
<b>Item 100 Boundary Establishment</b>				
SSWS-100-01	Boundary of site/area for development accurately established.	/	= ____x ____	
		/	= ____x ____	
		/	= ____x ____	
<b>101 Clearing and Grubbing / 102 Removal of Structure and Obstruction</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
SSWS-10_-01	Proper removal of undisputed stumps roots and non-perishable solid objects/structures, vegetation, debris, trees and other obstruction.	/	= ____x ____	
<b>Minor</b>				
SSWS-10_-02	Conformance to proper disposal.	/	= ____x ____	
		/	= ____x ____	
		/	= ____x ____	
<b>Item 103 Grading Excavation / 104 Structure Excavation</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
SSWS-10_-01	Adherence to proper construction methodology.	/	= ____x ____	
SSWS-10_-02	Conformance with approved/specified tolerances for lines, grades, cross-section, elevation, & dimensions. (if no longer correctible, e.g., with in-placed structure).	/	= ____x ____	
<b>Minor</b>				
SSWS-10_-01	Adherence to proper construction methodology.	/	= ____x ____	
SSWS-10_-02	Conformance with approved/specified tolerances for lines, grades, cross-section, elevation, & dimensions. (correctible)	/	= ____x ____	
SSWS-10_-03	Conformance to proper disposal.	/	= ____x ____	
		/	= ____x ____	
		/	= ____x ____	
			Total Score (a)	CAR Total
Was subcontractor used? If yes, name of company and owner: _____ & _____			=	
			No. of Indicators (b)	
			=	
Entered by: _____			Rate = (a) / (b)	
			=	
Date: <u>  </u> / <u>  </u> / <u>  </u>			Rate	
			=	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Substation  
 LOCATION: \_\_\_\_\_

ITEM: Site Development  
 DATE OF VISIT:  / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score ____x factor	Action / Monitor
<b>Item 105 Embankment / 106 Subgrade Preparation</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
SSWS-10_-01	Adherence to proper construction methodology (if no longer correctible, e.g., layering, Item 105 not undertaken).	/	____x____ =	
SSWS-10_-02	Conformance with approved/specified tolerances for lines, grades, cross-section, elevation, & dimensions. (if no longer correctible, e.g., with in-placed structure).	/	____x____ =	
SSWS-10_-03	Adherence to compaction procedure and required equipment (if no longer correctible, e.g., done in layers but do not meet required compaction and succeeding layer was laid).	/	____x____ =	
<b>Minor</b>				
SSWS-10_-01	Adherence to proper construction methodology.	/	____x____ =	
SSWS-10_-02	Conformance with approved/specified tolerances for lines, grades, cross-section, elevation, & dimensions. (correctible)	/	____x____ =	
SSWS-10_-03	Adherence to compaction procedure and required equipment (correctible).	/	____x____ =	
		/	____x____ =	
		/	____x____ =	
		/	____x____ =	
<b>Item 107 Grading Fill / 108 Backfill / 109 Selected Fill</b>				
<b>Major</b>				
SSWS-10_-01	Conformance of in-placed materials to plans and specifications.	/	____x____ =	
SSWS-10_-02	Conformance to the required density or degree of compaction.	/	____x____ =	
<b>Minor</b>				
SSWS-10_-03	Conformance to the required thickness of fill or backfill per layer.	/	____x____ =	
		/	____x____ =	
		/	____x____ =	
		/	____x____ =	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: / /

Total Score (a) =	CAR Total
No. of Indicators (b) =	
Rate = (a) / (b) =	
Rate =	

### CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Substation  
 LOCATION: \_\_\_\_\_

ITEM: Site Development  
 DATE OF VISIT:  / /

Factor : "During Construction" = 0.40; "Upon Completion" = 0.50

Sub-item Code	INDICATORS <i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score ____x factor	Action / Monitor
<b>Item 110 Aggregate Sub-Base Course / 111 Aggregate Base Course</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
SSWS-11_-01	Conformance of in-placed materials to plans and specifications.	/	= ____x____	
SSWS-11_-02	Adherence to proper construction methodology. (if no longer correctible, e.g., layer)	/	= ____x____	
SSWS-11_-03	Conformance w/ approved/specified tolerances on lines, grades, cross-section, thickness, elevation, dimensions & plans. (if no longer correctible, e.g., not extended to shoulder and other succeeding items are already in-placed).	/	= ____x____	
SSWS-11_-04	Conformance to the required compaction.	/	= ____x____	
<b>Minor</b>				
SSWS-11_-01	Conformance of in-placed materials to plans and specifications.	/	= ____x____	
SSWS-11_-02	Adherence to proper construction methodology. (correctible)	/	= ____x____	
SSWS-11_-03	Conformance w/ approved/specified tolerances on lines, grades, cross-section, thickness, elevation, dimensions & plans. (correctible)	/	= ____x____	
SSWS-11_-04	Conformance to the required compaction.	/	= ____x____	
SSWS-11_-05	Sub-base/Base extended to shoulders.	/	= ____x____	
SSWS-11_-06	Non-occurrence of subbase settlement/upheaval.	/	= ____x____	
SSWS-11_-07	Provision of required stakes.	/	= ____x____	
		/	= ____x____	
		/	= ____x____	
		/	= ____x____	
		/	= ____x____	
		/	= ____x____	
		/	= ____x____	
		/	= ____x____	
		/	= ____x____	
		/	= ____x____	
			Total Score (a)	CAR Total
Was subcontractor used? If yes, name of company and owner: _____ & _____			=	
			No. of Indicators (b)	
			=	
Entered by: _____			Rate = (a) / (b)	
			=	
Date: <u> / /</u>			Rate	
			=	



## CPES CHECKLIST FOR WORKMANSHIP

PROJ. ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Substation  
 LOCATION/LOT: \_\_\_\_\_

ITEM: Site Development  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score ____ x factor	Action / Monitor
<b>Item 113 Pipe Culvert and Storm Drains</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
SSWS-113-01	Conformance to the required/approved tolerance for slope, alignment, elevation and dimensions.	/	= _____ x _____	
<b>Minor</b>				
SSWS-113-02	No cracks, honeycombs, chipping of edges.	/	= _____ x _____	
SSWS-113-03	Compliance to joint mortar mixing proportions.	/	= _____ x _____	
SSWS-113-04	Sufficient collaring and flushing.	/	= _____ x _____	
SSWS-113-05	Compliance to the required thickness, compaction & materials requirement of gravel bedding.	/	= _____ x _____	
SSWS-113-06	Compliance to the required thickness & compaction of backfill.	/	= _____ x _____	
SSWS-113-07	Conformance to trenching requirements.	/	= _____ x _____	
SSWS-113-08	Free from debris, siltation, etc.	/	= _____ x _____	
		/	= _____ x _____	
<b>Item 114 Manholes, Inlets, and Catch Basins</b>				
<b>Major</b>				
SSWS-114-01	Conformance to connection requirements between pipes & inlet wall.	/	= _____ x _____	
SSWS-114-02	Conformance with plans and design specifications.	/	= _____ x _____	
<b>Minor</b>				
SSWS-114-03	No damage on manhole, inlets & catch basins.	/	= _____ x _____	
SSWS-114-04	No cracks.	/	= _____ x _____	
SSWS-114-05	No honeycomb.	/	= _____ x _____	
SSWS-114-06	Free from debris, siltation, etc.	/	= _____ x _____	
SSWS-114-07	Covers and gratings are well fitted and can easily be opened during maintenance work.	/	= _____ x _____	
		/	= _____ x _____	

Was subcontractor(s) used? If yes, name of company(ies) and sub-item:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: \_\_\_ / \_\_\_ / \_\_\_

Total Score (a)	CAR Total
No. of Indicators (b)	
Rate = (a) / (b)	
Rate	

## CPES CHECKLIST FOR WORKMANSHIP

PROJ. ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Substation  
 LOCATION/LOT: \_\_\_\_\_

ITEM: Site Development  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small><i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i></small>	Results	Score ____ x factor	Action / Monitor
<b>Item 112 Portland Cement Concrete Pavement</b>				
<b>Major*</b>	<b>* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects</b>			
SSWS-112-01	No longitudinal cracks.	/	= _____ X _____	
SSWS-112-02	Conformance to vibration requirement.	/	= _____ X _____	
SSWS-112-03	Conformance to quality of concrete mix.	/	= _____ X _____	
SSWS-112-04	Conformance to requirements of construction joints (outside middle thirds).	/	= _____ X _____	
SSWS-112-05	No through cracks (all types of cracks).	/	= _____ X _____	
SSWS-112-06	No scaling (severe, needs Removal and Replacement).	/	= _____ X _____	
SSWS-112-07	Conformance to the approved/specified tolerances for thickness, width, length, slope and cross-section. (>10% deficient)	/	= _____ X _____	
<b>Minor</b>				
SSWS-112-05	No cracks e.g. transverse, diagonal, temperature, corner, restraint.	/	= _____ X _____	
SSWS-112-06	No scaling.	/	= _____ X _____	
SSWS-112-07	Conformance to the approved/specified tolerances for thickness, width, length, slope and cross-section (<10% deficient).	/	= _____ X _____	
SSWS-112-08	No honeycomb.	/	= _____ X _____	
SSWS-112-09	No spalling.	/	= _____ X _____	
SSWS-112-10	No chipped-off edges.	/	= _____ X _____	
SSWS-112-11	Conformance to required size, location & spacing of tie bars and dowel bars as per specifications.	/	= _____ X _____	
SSWS-112-12	Conformance to proper curing procedures.	/	= _____ X _____	
SSWS-112-13	Utilization of templates prior to pouring.	/	= _____ X _____	
SSWS-112-14	Conformance to placing requirement which will not result to segregation of aggregates, cold joints, misalignment.	/	= _____ X _____	
SSWS-112-15	Conformance to required amount of asphalt sealant on weakened plane joints. (insufficient and excessive application)	/	= _____ X _____	
SSWS-112-16	Conformance to requirement of pavement blockings (include depths and widths of weakened plane joints)	/	= _____ X _____	
SSWS-112-17	No hardened/spilled concrete on pavement.	/	= _____ X _____	
SSWS-112-18	No pokemarks/tire marks/animal foot marks/skid marks, etc.	/	= _____ X _____	
SSWS-112-19	Conformance to proper finishing of concrete (brooming)	/	= _____ X _____	
SSWS-112-20	Conformance to formwork requirements (wooden, defective steel and not applied with oil/grease)	/	= _____ X _____	
Was subcontractor(s) used? If yes, name of company(ies) and sub-item: _____ & _____  Entered by: _____ Date: ___ / ___ / ___			Total Score (a)	CAR Total
			No. of Indicators (b)	
			Rate = (a) / (b)	
			Rate	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Substation  
 LOCATION: \_\_\_\_\_

ITEM: Site Development  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score ____x____ =	Action / Monitor
<b>Item 117 Topsoil / 118 Sprigging / 119 Sodding / 120 Ornament Plant/Tree Planting</b>				
SSWS-1__-01	Conformance to appropriate type, thickness and density of soil.	/	____x____ =	
SSWS-1__-02	Conformance to approved slope.	/	____x____ =	
SSWS-1__-03	Conformance to the required type of grass/planting materials.	/	____x____ =	
SSWS-1__-04	Healthy, dense and well rooted.	/	____x____ =	
SSWS-1__-05	Free from weeds or undesirable grasses.	/	____x____ =	
		/	____x____ =	
		/	____x____ =	
<b>Item 121 Perimeter Fence</b>				
<b>Major*</b>	<b>* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects</b>			
SSWS-121-01	Conformance to the approved/specified tolerance for alignment, dimension, plumbness and elevation.	/	____x____ =	
SSWS-121-02	Conformance to required quality of CHB	/	____x____ =	
SSWS-121-03	Conformance to required quality of mortar mix	/	____x____ =	
<b>Minor</b>				
SSWS-121-04	Proper spacing of horizontal and vertical bars.	/	____x____ =	
SSWS-121-05	Rebars used free from corrosion.	/	____x____ =	
SSWS-121-06	Installed according to plans and specifications.	/	____x____ =	
SSWS-121-07	Conformance to the specified/designed depth of fence footings.	/	____x____ =	
SSWS-121-08	Conformance to the specified/designed length of fence per bay.	/	____x____ =	
		/	____x____ =	
		/	____x____ =	
		/	____x____ =	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_ Date: \_\_\_ / \_\_\_ / \_\_\_

Total Score (a) =	CAR Total
No. of Indicators (b) =	
Rate = (a) / (b) =	
Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Substation  
 LOCATION: \_\_\_\_\_

ITEM: Site Development  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item	INDICATORS	Results	Score ____ x factor	Action / Monitor
Code	<i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>			
<b>Item 115 Riprap and Grouted Riprap</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
SSWS-115-01	No through cracks.	/	= _____ x _____	
SSWS-115-02	Conformance to specifications (size, type, weight, etc. of boulders).	/	= _____ x _____	
SSWS-115-03	Sufficient grout/mortar.	/	= _____ x _____	
SSWS-115-04	Observance to proper placing of stones/boulders.	/	= _____ x _____	
SSWS-115-05	Conformance to the approved/required tolerance for slope and thickness.	/	= _____ x _____	
SSWS-115-06	Compliance to the specified compaction and preparation of bedding.	/	= _____ x _____	
SSWS-115-07	Compliance to design mix of mortar.	/	= _____ x _____	
SSWS-115-08	Provision of weepholes.	/	= _____ x _____	
<b>Minor</b>				
SSWS-115-01	No cracks.	/	= _____ x _____	
SSWS-115-08	Adequate and proper spacing of weepholes.	/	= _____ x _____	
		/	= _____ x _____	
<b>Item 116 Gabion</b>				
<b>Major</b>				
SSWS-116-01	Conformance to the required/approved tolerances for lines, grades, dimensions and arrangements as shown on the plans and designated locations.	/	= _____ x _____	
SSWS-116-02	Observance to proper placing of stones/boulders.	/	= _____ x _____	
SSWS-116-03	Conformance to specifications (size, type, weight, etc. of boulders, rocks).	/	= _____ x _____	
<b>Minor</b>				
SSWS-116-04	No misalignment, bulging.	/	= _____ x _____	
SSWS-116-05	Conformance to the required wire mesh cage fabrication requirement.	/	= _____ x _____	
		/	= _____ x _____	
			Total Score (a)	CAR Total
Was subcontractor used? If yes, name of company and owner: _____ & _____			=	
			No. of Indicators (b)	
			=	
Entered by: _____			Rate = (a) / (b)	
			=	
			Rate	
			=	

Date: / /

### CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Substation  
 LOCATION: \_\_\_\_\_

ITEM: Site Development  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score ____x factor	Action / Monitor
<b>Item 122 Gate</b>				
SSWS-122-01	Conformance to the approved/specified tolerance for alignment, dimension, and plumbness	/	= ____x ____	
SSWS-122-02	Installed according to plans and specifications.	/	= ____x ____	
		/	= ____x ____	
		/	= ____x ____	
		/	= ____x ____	
		/	= ____x ____	
		/	= ____x ____	
<b>Item 123 Outdoor, Roadway and Perimeter Lighting System</b>				
SSWS-123-01	Conformance of in-placed materials to plans and specifications.	/	= ____x ____	
SSWS-123-02	Provision of waterproofed structure implement for outdoor illumination.	/	= ____x ____	
SSWS-123-03	Conformance to the required dimension of lighting poles (height, diameter)	/	= ____x ____	
SSWS-123-04	Proper installation of lighting poles and fixtures (bulbs, switches, wires, cables, load break switch, power fuse, lightning arrester).	/	= ____x ____	
SSWS-123-05	Proper installation of electrical wiring resulting to non-peeling-off of insulation.	/	= ____x ____	
SSWS-123-06	Proper installation of conduit pipes.	/	= ____x ____	
SSWS-123-07	Provision of concrete encasement for pipes and conduits.	/	= ____x ____	
		/	= ____x ____	
		/	= ____x ____	
		/	= ____x ____	
		/	= ____x ____	
		/	= ____x ____	
		/	= ____x ____	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_ Date: \_\_\_ / \_\_\_ / \_\_\_

Total Score (a) =	CAR Total
No. of Indicators (b) =	
Rate = (a) / (b) =	
Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_ PROJECT TYPE: Substation ITEM: Site Development  
 \_\_\_\_\_ VISIT LOCATION: \_\_\_\_\_ DATE OF VISIT:  / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score ____x factor	Action / Monitor
<b>Item 124 Deepwell Drilling and Development</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
SSWS-124-01	Drilled and developed according to plans and specifications.	/	= ____x ____	
SSWS-124-02	Complied and passed draw down tests.	/	= ____x ____	
SSWS-124-03	Water quality complied and passed test requirements.	/	= ____x ____	
<b>Minor</b>				
SSWS-124-04	Drilling method suited to condition of deep well site to be drilled.	/	= ____x ____	
SSWS-125-05	Method of placing the formation stabilizer/gravel pack in the annulus are done in such a way that separation of gravel and bridging are avoided.	/	= ____x ____	
SSWS-124-06	Well is cleaned in accordance with the specified method.	/	= ____x ____	
		/	= ____x ____	
		/	= ____x ____	
		/	= ____x ____	
<b>Item 125 Deepwell Submersible Pump</b>				
<b>Major</b>				
SSWS-125-01	Complied and passed required test.	/	= ____x ____	
<b>Minor</b>				
SSWS-125-02	Installed according to plans and specifications complete with controls and accessories.	/	= ____x ____	
SSWS-125-03	Provision of steel guard on power cable along the well casing.	/	= ____x ____	
SSWS-125-04	Pump is operated in conjunction with the level controller installed at the water tank.	/	= ____x ____	
SSWS-125-05	Provision of uPVC conduits for underground power cables.	/	= ____x ____	
		/	= ____x ____	
		/	= ____x ____	
		/	= ____x ____	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____ Date: <u> / /</u>			No. of Indicators (b) =	
			Rate = (a) / (b) =	
			Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_ PROJECT TYPE: Substation ITEM: Site Development  
 \_\_\_\_\_ VISIT LOCATION: \_\_\_\_\_ DATE OF VISIT:  / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score ____x factor	Action / Monitor
<b>Item 126 Elevated Steel Water Tank</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
SSWS-126-01	Elevated water storage tank and support structure are installed in accordance with plans and specifications.	/	= ____x ____	
SSWS-126-02	Complied and passed required leak tests.	/	= ____x ____	
SSWS-126-03	Free from corrosion and any form of damages.	/	= ____x ____	
<b>Minor</b>				
SSWS-126-03	Free from rust and any form of damages.	/	= ____x ____	
SSWS-126-04	Installed according to plan complete with control and accessories (i.e., balcony with handrail, access caged ladder, air vent, water level indicator, overflow pipe, inlet-outlet piping, drain valves and fittings, level switch attachment, access hatch, beacon red warning light).	/	= ____x ____	
SSWS-126-05	Structural members free of twist, bends and deformations.	/	= ____x ____	
		/	= ____x ____	
		/	= ____x ____	
<b>Item 127 Domestic Water Supply Piping System</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
SSWS-127-01	Installed pipes, fittings and valves conformed to plans and specifications.	/	= ____x ____	
SSWS-127-02	Water line laid not less than 1.0 meter from sewer lines.	/	= ____x ____	
SSWS-127-03	Complied and passed hydraulic and leak tests.	/	= ____x ____	
<b>Minor</b>				
SSWS-127-04	Pipes laid free from dirt or other foreign materials.	/	= ____x ____	
SSWS-127-05	Provision of pipe sleeves for pipes crossing roadways.	/	= ____x ____	
SSWS-127-06	Provision of temporary pipe blind flange/caps at both ends during installation.	/	= ____x ____	
SSWS-127-07	Potable water lines are disinfected prior to use.	/	= ____x ____	
		/	= ____x ____	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_ Date:  / /

Total Score (a) =	CAR Total
No. of Indicators (b) =	
Rate = (a) / (b) =	
Rate =	

### CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Substation  
 LOCATION: \_\_\_\_\_

ITEM: Building  
 DATE OF VISIT:  / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score ____x factor	Action / Monitor
<b>Item 200 Excavation</b>				
SSWS-200-01	Conformance to the approved/specified tolerances for extent for lines, grades, dimensions, elevations	/	= ____x ____	
SSWS-200-02	Conformance to the excavation support system, e.g. angle of repose, bracing, shoring, sheet piling)	/	= ____x ____	
		/	= ____x ____	
		/	= ____x ____	
		/	= ____x ____	
		/	= ____x ____	
<b>Item 201 Fill and Backfill, Selected Fill</b>				
SSWS-201-01	Conformance of in-placed materials to plans and specifications.	/	= ____x ____	
SSWS-201-02	Conformance to the required thickness of fill or backfill per layer.	/	= ____x ____	
SSWS-201-03	Conformance to the required density or degree of compaction	/	= ____x ____	
		/	= ____x ____	
		/	= ____x ____	
		/	= ____x ____	
		/	= ____x ____	
<b>Item 202 Soil Poisoning</b>				
SSWS-202-01	Conformance to the specified concentration of soil poisoning solution.	/	= ____x ____	
SSWS-202-02	Conformance to the specified rate of application.	/	= ____x ____	
		/	= ____x ____	
		/	= ____x ____	
		/	= ____x ____	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____			No. of Indicators (b) =	
Date: <u> / /</u>			Rate = (a) / (b) =	
			Rate =	



## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Substation  
 LOCATION: \_\_\_\_\_

ITEM: Building  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item	INDICATORS	Results	Score ____x factor	Action / Monitor
Code	<i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>			
<b>Item 203 CHB Wall</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
SSWS-203-01	Conformance to required quality of CHB.	/	= ____x ____	
SSWS-203-02	Conformance to required quality of mortar mix. (i.e. shoring, bracing, sheet piling)	/	= ____x ____	
<b>Minor</b>				
SSWS-203-03	Conformance to specified tolerances for dimension, location, plumbness and alignment.	/	= ____x ____	
SSWS-203-04	Proper spacing of horizontal and vertical bars.	/	= ____x ____	
SSWS-203-05	Rebars used free from corrosion.	/	= ____x ____	
		/	= ____x ____	
		/	= ____x ____	
		/	= ____x ____	
		/	= ____x ____	
<b>Item 204 Brick Wall</b>				
<b>Major</b>				
SSWS-204-01	Conformance to required quality of mortar mix.	/	= ____x ____	
<b>Minor</b>				
SSWS-204-02	Conformance to specified tolerances for dimension, location, plumbness and alignment.	/	= ____x ____	
SSWS-204-03	Proper spacing of horizontal and vertical bars.	/	= ____x ____	
SSWS-204-04	Rebars used free from corrosion.	/	= ____x ____	
		/	= ____x ____	
		/	= ____x ____	
		/	= ____x ____	
		/	= ____x ____	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: \_\_\_ / \_\_\_ / \_\_\_

Total Score (a) =	CAR Total
No. of Indicators (b) =	
Rate = (a) / (b) =	
Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Substation  
 LOCATION: \_\_\_\_\_

ITEM: Building  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score ____ x factor	Action / Monitor
<b>Item 205 Tiled Finish</b>				
SSWS-205-01	Installed tiles free from chipping, cracks or any form of damages.	/	____ x ____ =	
SSWS-205-02	Mortar/Grout consistency and color conform to specification.	/	____ x ____ =	
SSWS-205-03	Joints are perfectly aligned and consistent with skirting and wall tiles.	/	____ x ____ =	
SSWS-205-04	Tiles are evenly placed/laid.	/	____ x ____ =	
SSWS-205-05	Tiles in wet areas sloped down to drain.	/	____ x ____ =	
SSWS-205-06	Tiles are properly bonded to floor.	/	____ x ____ =	
		/	____ x ____ =	
<b>Item 206 Carpet</b>				
SSWS-206-01	Evenly stretched and of even surface.	/	____ x ____ =	
SSWS-206-02	Properly anchored at all edges.	/	____ x ____ =	
SSWS-206-03	Provided with underlining.	/	____ x ____ =	
SSWS-206-04	Free from any form of damages.	/	____ x ____ =	
SSWS-206-05	Materials conform to specification as per plan.	/	____ x ____ =	
		/	____ x ____ =	
<b>Item 207 Wood Parquet</b>				
SSWS-207-01	Conforms to designed layout.	/	____ x ____ =	
SSWS-207-02	Even surfaces.	/	____ x ____ =	
SSWS-207-03	Free from any form of damage.	/	____ x ____ =	
SSWS-207-04	Adhesive conforms to specifications.	/	____ x ____ =	
SSWS-207-05	Parquet properly bonded to floor.	/	____ x ____ =	
		/	____ x ____ =	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: \_\_\_ / \_\_\_ / \_\_\_

Total Score (a) =	CAR Total
No. of Indicators (b) =	
Rate = (a) / (b) =	
Rate =	



## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Substation  
 LOCATION: \_\_\_\_\_

ITEM: Building  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score ____ x factor	Action / Monitor
<b>Item 208 Trowelled Floor Finish</b>				
SSWS-208-01	Smooth and even floor finish.	/	____ x ____ =	
SSWS-208-02	No temperature cracks.	/	____ x ____ =	
SSWS-208-03	No sign of deflection/settlement.	/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
<b>Item 209 Pebble Washout</b>				
SSWS-209-01	Installed pebbles are evenly distributed.	/	____ x ____ =	
SSWS-209-02	No temperature cracks.	/	____ x ____ =	
SSWS-209-03	Installed pebbles surface are thoroughly clean from cement.	/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
<b>Item 210 Waterproofing</b>				
SSWS-210-01	Conforms to specified method of application.	/	____ x ____ =	
SSWS-210-02	Conforms to number of coats/layers required.	/	____ x ____ =	
SSWS-210-03	Passed required leak test.	/	____ x ____ =	
SSWS-210-04	Conformance to the required materials specifications as per plan.	/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: \_\_\_ / \_\_\_ / \_\_\_

Total Score (a) =	CAR Total
No. of Indicators (b) =	
Rate = (a) / (b) =	
Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Substation  
 LOCATION: \_\_\_\_\_

ITEM: Building  
 DATE OF VISIT:  / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score _____ x factor	Action / Monitor
<b>Item 211 Wall Paper</b>				
SSWS-211-01	Smooth and evenly pasted.	/	_____ x _____ =	
SSWS-211-02	Free from scratches, stains, etc.	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
<b>Item 212 Wall Plaster Finish</b>				
SSWS-212-01	Conformance to designed mixture of plastering materials.	/	_____ x _____ =	
SSWS-212-02	Conformance to specified method of application and thickness of plastering.	/	_____ x _____ =	
SSWS-212-03	True to alignment.	/	_____ x _____ =	
SSWS-212-04	Free from any form of damages, e.g. cracks, peeled-off plaster finish	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
<b>Item 213 Wall Cladding</b>				
SSWS-213-01	Panels properly anchored.	/	_____ x _____ =	
SSWS-213-02	True to alignment, plumbness.	/	_____ x _____ =	
SSWS-213-03	Free from any form of damages.	/	_____ x _____ =	
SSWS-213-04	Panels conform to construction procedure.	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date:  / /

Total Score (a)	CAR Total
=	
No. of Indicators (b)	
=	
Rate = (a) / (b)	
=	
Rate	
=	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Substation  
 LOCATION: \_\_\_\_\_

ITEM: Building  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score _____ x factor	Action / Monitor
<b>Item 214 Wall Painting</b>				
SSWS-214-01	Surface prepared according to specification.	/	_____ x _____ =	
SSWS-214-02	Required neutralizers, etc. applied.	/	_____ x _____ =	
SSWS-214-03	Applied paint appropriate to the surface.	/	_____ x _____ =	
SSWS-214-04	Specified number of coats applied.	/	_____ x _____ =	
SSWS-214-05	Surfaces evenly painted, proper opacity.	/	_____ x _____ =	
SSWS-214-06	No discoloration and peeling-off of paint.	/	_____ x _____ =	
SSWS-214-07	Paints conform to specification/requirements.	/	_____ x _____ =	
SSWS-214-08	Surfaces are properly applied with putty/patching compound.	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
<b>Item 215 Ceiling Suspension</b>				
SSWS-215-01	Conformance to the specified spacing and length of hangers, clips and joists.	/	_____ x _____ =	
SSWS-215-02	Installed hangers are properly anchored and firm.	/	_____ x _____ =	
SSWS-215-03	True to alignment and elevation in conformance to the approved specified tolerance.	/	_____ x _____ =	
SSWS-215-04	Free from any form of damage.	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: \_\_\_ / \_\_\_ / \_\_\_

Total Score (a) =	CAR Total
No. of Indicators (b) =	
Rate = (a) / (b) =	
Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Substation  
 LOCATION: \_\_\_\_\_

ITEM: Building  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score _____x factor	Action / Monitor
<b>Item 216 Ceiling Board</b>				
SSWS-216-01	Materials free from any form of damage.	/	= _____x_____	
SSWS-216-02	Smooth surface and true to elevation and alignment.	/	= _____x_____	
SSWS-216-03	Location of holes for utilities conforms to plans.	/	= _____x_____	
SSWS-216-04	Ceiling boards are properly fastened.	/	= _____x_____	
		/	= _____x_____	
<b>Item 217 Ceiling Moulding</b>				
SSWS-217-01	True to elevation and alignment.	/	= _____x_____	
SSWS-217-02	Installed materials are free from any form of damages.	/	= _____x_____	
		/	= _____x_____	
<b>Item 218 Roofing Frames</b>				
SSWS-218-01	Conformance to the required size, spacing, slope, anchorage, etc.	/	= _____x_____	
SSWS-218-02	Free from any form of damage.	/	= _____x_____	
SSWS-218-03	Cleats are properly provided.	/	= _____x_____	
SSWS-218-04	Application of paint primer prior to installation	/	= _____x_____	
		/	= _____x_____	
<b>Item 219 Roofing Sheets</b>				
SSWS-219-01	Conformance to the specified gauge, length, etc.	/	= _____x_____	
SSWS-219-02	Conformance to the specified overlapping, sealing of joints, fastening.	/	= _____x_____	
SSWS-219-03	Installation of flashing, gutters, ridge rolls, downspouts, etc., according to plans.	/	= _____x_____	
SSWS-219-04	Non-occurrence of leaks.	/	= _____x_____	
SSWS-219-05	Free from any form of damage.	/	= _____x_____	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: \_\_\_ / \_\_\_ / \_\_\_

Total Score (a)	CAR Total
No. of Indicators (b)	
Rate = (a) / (b)	
=	
Rate	
=	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Substation  
 LOCATION: \_\_\_\_\_

ITEM: Building  
 DATE OF VISIT: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score ____ x factor	Action / Monitor
<b>Item 220 Doors</b>				
SSWS-220-01	True to alignment, plumbness in conformance to the approved/specified tolerance.	/	____ x ____ =	
SSWS-220-02	Doors are well fitted to the door frames.	/	____ x ____ =	
SSWS-220-03	Door accessories installed according to plans, e.g. locksets, door closers, hinges, door stoppers.	/	____ x ____ =	
SSWS-220-04	Free from any form of damage.	/	____ x ____ =	
SSWS-220-05	Doors conform to specification requirements, e.g. panel door, flush door polyvinyl, steel doors, etc.	/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
<b>Item 221 Windows</b>				
SSWS-221-01	True to alignment and elevation in conformance to the approved/specified tolerance.	/	____ x ____ =	
SSWS-221-02	Windows are well fitted to the window frames.	/	____ x ____ =	
SSWS-221-03	Window accessories installed according to plans, e.g. handles, seals, glazing for glass window, etc.	/	____ x ____ =	
SSWS-221-04	Free from any form of damage.	/	____ x ____ =	
SSWS-221-05	Windows conform to specification requirements, e.g. sliding, jalousies (glass and wooden) steel casement windows.	/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
<b>Item 222 Railings</b>				
SSWS-222-01	Installed according to plans.	/	____ x ____ =	
SSWS-222-02	Free from dents, scratches or any form of damage.	/	____ x ____ =	
SSWS-222-03	Bends and curves are smooth.	/	____ x ____ =	
SSWS-222-04	Conforms to approved tolerance size, dimension, height and type, e.g. concrete, steel, stainless, aluminum, etc.	/	____ x ____ =	
		/	____ x ____ =	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a)	CAR Total
Entered by: _____ Date: ____ / ____ / ____			No. of Indicators (b)	
			Rate = (a) / (b)	
			=	
			Rate	
			=	



### CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_ PROJECT TYPE: Substation ITEM: Building  
 \_\_\_\_\_ VISIT LOCATION: \_\_\_\_\_ DATE OF VISIT:  / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score ____x factor	Action / Monitor
<b>Item 225 Structural Steel Works</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
SSWS-225-01	Conformance of in-placed materials to plans and specifications.	/	= ____x ____	
SSWS-225-02	Conformance to required fasteners, anchor bolts, bolts/nuts and washers (not provided).	/	= ____x ____	
SSWS-225-03	Free from corrosion and any other form of damages.	/	= ____x ____	
SSWS-225-04	Conformance to splicing requirements.	/	= ____x ____	
<b>Minor</b>				
SSWS-225-03	Free from rust and any other form of damages.	/	= ____x ____	
SSWS-225-05	Conformance to the specified type of welding.	/	= ____x ____	
SSWS-225-06	Fasteners, anchor bolts, bolts/nuts & washers conforms to specified size, strength, etc.	/	= ____x ____	
SSWS-225-07	Installed according to plans.	/	= ____x ____	
		/	= ____x ____	
		/	= ____x ____	
		/	= ____x ____	
		/	= ____x ____	
		/	= ____x ____	
		/	= ____x ____	
		/	= ____x ____	
		/	= ____x ____	
		/	= ____x ____	
		/	= ____x ____	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_ Date:  / /

Total Score (a) =	CAR Total
No. of Indicators (b) =	
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## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Substation

ITEM: Building

LOCATION: \_\_\_\_\_ DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score _____ x factor	Action / Monitor
<b>Item 223 Plumbing</b>				
SSWS-223-01	Pipes installed according to plans, e.g. slope, alignment, location, bracings/supports.	/	_____ x _____ =	
SSWS-223-02	Conducted and passed the required leak test.	/	_____ x _____ =	
SSWS-223-03	Pipes not clogged.	/	_____ x _____ =	
SSWS-223-04	Free from any form of damages.	/	_____ x _____ =	
SSWS-223-05	Fixtures and accessories installed according to plans, e.g. height, alignment, location.	/	_____ x _____ =	
SSWS-223-06	Adhesive conform to specification.	/	_____ x _____ =	
SSWS-223-07	Water closet, lavatory conform to specification.	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
<b>Item 224 Sanitary</b>				
SSWS-224-01	Pipes installed according to plans, e.g. slope, alignment, location, bracings/supports.	/	_____ x _____ =	
SSWS-224-02	Conducted and passed the required pressure/leak test.	/	_____ x _____ =	
SSWS-224-03	Pipes not clogged.	/	_____ x _____ =	
SSWS-224-04	Free from any form of damages.	/	_____ x _____ =	
SSWS-224-05	Fixtures and accessories installed according to plans, e.g. height, alignment, location.	/	_____ x _____ =	
SSWS-224-06	Adhesives conform to specifications.	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
			Total Score (a)	CAR Total
Was subcontractor used? If yes, name of company and owner : _____ & _____			No. of Indicators (b)	
Entered by: _____			=	
Date: ___ / ___ / ___			Rate = (a) / (b)	
			=	
			Rate	
			=	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Substation  
 LOCATION: \_\_\_\_\_

ITEM: Building  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score x factor	Action / Monitor
<b>Item 226 Electrical Works</b>				
SSWS-226-01	Pipes installed according to plans and laid out according to approved construction drawings.	/	= _____ X _____	
SSWS-226-02	Pipes, hangers, boxes, gutters, cable trays properly installed and painted, sharp edges of pipes removed.	/	= _____ X _____	
SSWS-226-03	Pipes properly bended.	/	= _____ X _____	
SSWS-226-04	Allowable number of wires in a pipe properly observed.	/	= _____ X _____	
SSWS-226-05	Splicing and connection provided with adequate rubber and pvc tapes.	/	= _____ X _____	
SSWS-226-06	Adequate length of wire provided for termination and splicing.	/	= _____ X _____	
SSWS-226-07	Wire color coding complied and observed.	/	= _____ X _____	
SSWS-226-08	Wire insulation not damaged during pulling.	/	= _____ X _____	
SSWS-226-09	Adequate number, correct size and gauge of pull boxes installed and properly covered.	/	= _____ X _____	
SSWS-226-10	Boxes and enclosures provided according to intended purpose.	/	= _____ X _____	
SSWS-226-11	Fittings and accessories provided and properly installed.	/	= _____ X _____	
SSWS-226-12	Block-outs and sleeves provided and properly secured.	/	= _____ X _____	
SSWS-226-13	Cable ties provided.	/	= _____ X _____	
SSWS-226-14	Blank covers provided for outlets and switches that are not utilized.	/	= _____ X _____	
SSWS-226-15	Use of tools and equipment properly observed.	/	= _____ X _____	
SSWS-226-16	Lighting fixtures, panel boards, circuit breakers, etc. properly installed and free from any form of damages.	/	= _____ X _____	
SSWS-226-17	Meager, clamp, phase sequence tests and load test conducted.	/	= _____ X _____	
SSWS-226-18	Shop drawings, as-built plan maintained.	/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: \_\_\_ / \_\_\_ / \_\_\_

Total Score (a)	CAR Total
No. of Indicators (b)	
Rate = (a) / (b)	
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Rate	
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## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Substation  
 LOCATION: \_\_\_\_\_

ITEM: Building  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small><i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i></small>	Results	Score ____x factor	Action / Monitor
<b>Item 227 Air Conditioning System</b>				
SSWS-227-01	Air-conditioning units, transfer fans, pipes, ducts, condensers are installed according to plans.	/	____x____ =	
SSWS-227-02	Jointing of pipes and ducts conform to specified jointing system.	/	____x____ =	
SSWS-227-03	Pipes and ducts free from leaks.	/	____x____ =	
SSWS-227-04	Pipes and ducts sufficiently braced/supported.	/	____x____ =	
SSWS-227-05	Installed materials free from any form of damage.	/	____x____ =	
SSWS-227-06	Conducted and passed the required tests.	/	____x____ =	
		/	____x____ =	
		/	____x____ =	
		/	____x____ =	
		/	____x____ =	
		/	____x____ =	
<b>Item 228 Ventilation System</b>				
SSWS-228-01	Conformance to the design specifications / drawings.	/	____x____ =	
SSWS-228-02	Casing free from dent.	/	____x____ =	
SSWS-228-03	Conducted and passed the required tests.	/	____x____ =	
		/	____x____ =	
		/	____x____ =	
		/	____x____ =	
		/	____x____ =	
		/	____x____ =	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____ Date: ___ / ___ / ___			No. of Indicators (b) =	
			Rate = (a) / (b) =	
			Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_ PROJECT TYPE: Substation ITEM: Equipment Foundations  
 \_\_\_\_\_ VISIT LOCATION: \_\_\_\_\_ DATE OF VISIT:  / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small><i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i></small>	Results	Score ____x ____	Action / Monitor
<b>Item 300 Excavation</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
SSWS-300-01	Conformance to the approved foundation plans for lines, grades, dimensions, elevations	/	= ____x ____	
SSWS-300-02	Conformance to the excavation support system (i.e. shoring, bracing, sheet piling)	/	= ____x ____	
SSWS-300-03	Adherence to proper construction methodology.	/	= ____x ____	
<b>Minor</b>				
SSWS-300-01	Conformance to the approved foundation plans for lines, grades, dimensions, elevations	/	= ____x ____	
SSWS-300-03	Adherence to proper construction methodology.	/	= ____x ____	
SSWS-300-04	Conformance to proper disposal of excavated materials.	/	= ____x ____	
		/	= ____x ____	
<b>Item 301 Fill and Backfill</b>				
<b>Major</b>				
SSWS-301-01	Conformance of in-placed materials to plans and specifications.	/	= ____x ____	
SSWS-301-02	Conformance to the required thickness of fill or backfill per layer	/	= ____x ____	
SSWS-301-03	Conformance to the required density or degree of compaction	/	= ____x ____	
<b>Minor</b>				
SSWS-301-04	Conformance to ground level restoration.	/	= ____x ____	
		/	= ____x ____	
<b>Item 302 Anchor Bolt Setting</b>				
<b>Major</b>				
SSWS-302-01	Conformance to the anchor bolt setting dimensions.	/	= ____x ____	
SSWS-302-02	Precise setting of template.	/	= ____x ____	
<b>Minor</b>				
SSWS-302-03	Anchor bolts and templates fix with supporter.	/	= ____x ____	
		/	= ____x ____	

Was subcontractor used? If yes, name of company and owner:

\_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date:  / /

Total Score (a) =	CAR Total
No. of Indicators (b) =	
Rate = (a) / (b) =	
Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_ PROJECT TYPE: Substation ITEM: Equipment Foundations  
 \_\_\_\_\_ VISIT LOCATION: \_\_\_\_\_ DATE OF VISIT:  / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small><i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i></small>	Results	Score x factor	Action / Monitor
<b>Item 303 Cable Trench Cover and Supports</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
SSWS-303-01	Provision of block-outs for installation of metal works.	/	= ___x___	
SSWS-303-02	Metal works and materials installed in accordance to the details shown in the drawing (alignment, position).	/	= ___x___	
SSWS-303-03	Block-outs were grouted after installation of metal works.	/	= ___x___	
		/	= ___x___	
		/	= ___x___	
		/	= ___x___	
		/	= ___x___	
		/	= ___x___	
		/	= ___x___	
<b>Item 304 Gravel Surfacing</b>				
<b>Major</b>				
SSWS-304-01	Conformance to required lines, grades and thickness.	/	= ___x___	
<b>Minor</b>				
SSWS-304-02	Compliance to the specified construction methodology.	/	= ___x___	
SSWS-304-03	No oversize/undersize of in-placed materials.	/	= ___x___	
		/	= ___x___	
		/	= ___x___	
		/	= ___x___	
		/	= ___x___	
		/	= ___x___	
			Total Score (a) =	CAR Total
Was subcontractor used? If yes, name of company and owner: _____ & _____			No. of Indicators (b) =	
Entered by: _____			Rate = (a) / (b) =	
Date: <u> / /</u>			Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_ PROJECT TYPE: Substation ITEM: Common Items of Work  
 \_\_\_\_\_ VISIT LOCATION/LOT: \_\_\_\_\_ DATE OF VISIT:  / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small><i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i></small>	Results	Score _____ x factor	Action / Monitor
<b>Item 400 Formworks</b>				
<b>Minor</b>				
SSWS-400-01	Conformance to the required type of formworks in accordance with approved shop/working drawings.	/	_____ x _____ =	
SSWS-400-02	Forms coated with mould oil as required.	/	_____ x _____ =	
SSWS-400-03	Sufficient bracing / support.	/	_____ x _____ =	
SSWS-400-04	No loose knots, splits, cracks, etc.	/	_____ x _____ =	
SSWS-400-05	Provision of required concrete or steel spacer.	/	_____ x _____ =	
SSWS-400-06	Conformance to specified tolerances for dimensions, locations, plumbness and alignment.	/	_____ x _____ =	
SSWS-400-07	No use of dilapidated/salvage forms (use more than 3x)	/	_____ x _____ =	
		/	_____ x _____ =	
<b>Item 401 Reinforcing Steel Bars (including tendons for Pre/Post-Stressed Concrete)</b>				
<b>Major*</b> <small>* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects</small>				
SSWS-401-01	Conformance of in-placed materials to plans and specifications.	/	_____ x _____ =	
SSWS-401-02	Non-appearance of corrosion on steel reinforcement.	/	_____ x _____ =	
<b>Minor</b>				
SSWS-401-02	Non-appearance of rust on steel reinforcement.	/	_____ x _____ =	
SSWS-401-03	Conformance to approved bar cutting schedule, proper spacing, anchorage and adequate reinforcements.	/	_____ x _____ =	
SSWS-401-04	No sign of oil, paint and other deleterious materials on reinforcements.	/	_____ x _____ =	
SSWS-401-05	Conformance to jointing requirement, i.e. splicing, welding, etc.	/	_____ x _____ =	
SSWS-401-06	Conformance to proper bending of stirrups	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____ Date: <u> / /</u>			No. of Indicators (b) =	
			Rate= (a) / (b) =	
			Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_ PROJECT TYPE: Substation ITEM: Common Items of Work  
 \_\_\_\_\_ VISIT LOCATION/LOT: \_\_\_\_\_ DATE OF VISIT:  / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score ____x factor	Action / Monitor
<b>Item 402 Concrete</b>				
<b>Major*</b>	<b>* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects</b>			
SSWS-402-01	No through cracks.	/	____x____ =	
SSWS-402-02	No honeycomb (no exposed rebars/aggregates).	/	____x____ =	
SSWS-402-03	No sagging or bulging.	/	____x____ =	
SSWS-402-04	Conformance to required quality of concrete mix	/	____x____ =	
SSWS-402-05	Conformance to the required concrete cover for rebars.	/	____x____ =	
SSWS-402-06	Conformance to the jointing requirement.	/	____x____ =	
SSWS-402-07	Conformance to placing requirement that will not result segregation of aggregates, cold joints and misalignment.	/	____x____ =	
<b>Minor</b>				
SSWS-402-01	No cracks.	/	____x____ =	
SSWS-402-02	No honeycomb.	/	____x____ =	
SSWS-402-03	No sagging or bulging.	/	____x____ =	
SSWS-402-05	Conformance to the required concrete cover for rebars.	/	____x____ =	
SSWS-402-06	Conformance to the jointing requirement.	/	____x____ =	
SSWS-402-07	Conformance to placing requirement that will not result segregation of aggregates, cold joints and misalignment.	/	____x____ =	
SSWS-402-08	Proper and adequate vibration.	/	____x____ =	
SSWS-402-09	Conformance to finishing/plastering requirement.	/	____x____ =	
SSWS-402-10	No chipping off of concrete cover.	/	____x____ =	
SSWS-402-11	Conformance to the batching, mixing, transporting and discharge time requirements.	/	____x____ =	
SSWS-402-12	Proper curing.	/	____x____ =	
SSWS-402-13	Conformance to required dimensions, lines, grades/ elevation, location.	/	____x____ =	
		/	____x____ =	

Was subcontractor used? If yes, name of company and owner:

\_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date:  / /

Total Score (a) =	CAR Total
No. of Indicators (b) =	
Rate= (a) / (b) =	
Rate =	



## CPES CHECKLIST FOR WORKMANSHIP

PROJECT NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Substation  
 LOCATION: \_\_\_\_\_

ITEM: S/S Equipment Installation  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score x factor	Action / Monitor
<b>Item 500 Gantries, Steel Structures and Supports</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
SSWS-500-01	Conformance with the approved Erection Drawings and installation methodologies.	/	= _____ x _____	
SSWS-500-02	Templates are used for setting anchor bolt system.	/	= _____ x _____	
<b>Minor</b>				
SSWS-500-03	Connections are properly secured by bolts, nuts, locknuts and washers.	/	= _____ x _____	
SSWS-500-04	Stitch bolts are used in connecting double angle members.	/	= _____ x _____	
SSWS-500-05	Correct direction and bolt position of bolt insertion.	/	= _____ x _____	
SSWS-500-06	Conformance with specified tolerances for plumbness and alignment.	/	= _____ x _____	
SSWS-500-07	No damage/defective structural members.	/	= _____ x _____	
		/	= _____ x _____	
<b>Item 501 Bus Conductors and Hardwares</b>				
<b>Major</b>				
SSWS-501-01	Installed according to approved plans and specifications.	/	= _____ x _____	
SSWS-501-02	Conducted and passed the required tests.	/	= _____ x _____	
<b>Minor</b>				
SSWS-501-03	Conductors are free from copper dust and particles.	/	= _____ x _____	
SSWS-501-04	No damage/defective members.	/	= _____ x _____	
SSWS-501-05	Connectors/Terminal pad are equipped with approved type of bolts, nuts, flat washer and bevelled washers.	/	= _____ x _____	
SSWS-501-06	Terminal connectors are free from burrs, edges, fillet, damage and cracks.	/	= _____ x _____	
SSWS-501-07	Approved as-built drawings maintained.	/	= _____ x _____	
		/	= _____ x _____	
Was subcontractor used? If yes, name of company and owner: _____ & _____  Entered by: _____ Date: ___ / ___ / ___			Total Score (a)	CAR Total
			No. of Indicators (b)	
			Rate = (a) / (b)	
			Rate	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Substation  
 LOCATION: \_\_\_\_\_

ITEM: S/S Equipment Installation  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score _____ x factor	Action / Monitor
<b>Item 502 Grounding System</b>				
<b>Major*</b>	<b>* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects</b>			
SSWS-502-01	Installed according to approved plans and specifications.	/	= _____ x _____	
SSWS-502-02	Grounding connections are properly welded through exothermic process.	/	= _____ x _____	
SSWS-502-03	Overhead ground wire are properly strung according to specified tension and sag.	/	= _____ x _____	
SSWS-502-04	Conducted and passed all required ground resistance tests.	/	= _____ x _____	
<b>Minor</b>				
SSWS-502-03	Overhead ground wire are properly strung according to specified tension and sag.	/	= _____ x _____	
SSWS-502-04	Conducted and passed all required ground resistance tests.	/	= _____ x _____	
SSWS-502-05	Ground rods installed according to approved plans.	/	= _____ x _____	
SSWS-502-06	Grounding trenches are excavated according to specified depth and width.	/	= _____ x _____	
SSWS-502-07	Provision of bedding materials for ground wire.	/	= _____ x _____	
SSWS-502-08	Ground leads are properly supported by clamps at specified intervals.	/	= _____ x _____	
SSWS-502-09	Shield wires and accessories are protected by specified corrosion inhibitor.	/	= _____ x _____	
SSWS-502-10	Steel structures with insulators or apparatus are properly connected to the ground mat.	/	= _____ x _____	
SSWS-502-11	Structures with more than one leg are properly connected to the ground mat with risers at minimum of 2 different points.	/	= _____ x _____	
SSWS-502-12	Substation equipment are properly grounded to two different points of the ground mat.	/	= _____ x _____	
SSWS-502-13	Lighting poles and other metal structures are properly connected to ground mat.	/	= _____ x _____	
SSWS-502-14	Cable trays, ladder, fence and gates are properly connected to ground mat.	/	= _____ x _____	
SSWS-502-15	Approved as-built drawings maintained.	/	= _____ x _____	
		/	= _____ x _____	
Was subcontractor used? If yes, name of company and owner : _____			Total Score (a)	CAR Total
Entered by: _____			No. of Indicators (b)	
Date: ___ / ___ / ___			Rate = (a) / (b)	
			=	
			Rate	
			=	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Substation  
 LOCATION: \_\_\_\_\_

ITEM: S/S Equipment Installation  
 DATE OF VISIT:    /    /   

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small><i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i></small>	Results	Score x factor	Action / Monitor
<b>Item 503 Power Transformer</b>				
<b>Major*</b>	<b>* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects</b>			
SSWS-503-01	Installed according to approved plans and specifications.	/	= <u>    </u> X <u>    </u>	
SSWS-503-02	Conducted and passed the required tests.	/	= <u>    </u> X <u>    </u>	
<b>Minor</b>				
SSWS-503-03	Properly aligned and leveled.	/	= <u>    </u> X <u>    </u>	
SSWS-503-04	Appurtenants are clean and free from damages.	/	= <u>    </u> X <u>    </u>	
SSWS-503-05	Tanks, conservator, radiators coolers and fittings are free from oil leaks.	/	= <u>    </u> X <u>    </u>	
SSWS-503-06	Approved as-built drawings maintained.	/	= <u>    </u> X <u>    </u>	
		/	= <u>    </u> X <u>    </u>	
		/	= <u>    </u> X <u>    </u>	
		/	= <u>    </u> X <u>    </u>	
<b>Item 504 Power Circuit Breaker</b>				
<b>Major</b>				
SSWS-504-01	Installed according to approved plans and specifications.	/	= <u>    </u> X <u>    </u>	
SSWS-504-02	Conducted and passed the required tests.	/	= <u>    </u> X <u>    </u>	
<b>Minor</b>				
SSWS-504-03	Mounting bases are properly aligned and leveled.	/	= <u>    </u> X <u>    </u>	
SSWS-504-04	Installed materials are free from damages.	/	= <u>    </u> X <u>    </u>	
SSWS-504-05	Approved as-built drawings maintained.	/	= <u>    </u> X <u>    </u>	
		/	= <u>    </u> X <u>    </u>	
		/	= <u>    </u> X <u>    </u>	
		/	= <u>    </u> X <u>    </u>	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____			No. of Indicators (b) =	
Date: <u>  </u> / <u>  </u> / <u>  </u>			Rate = (a) / (b) =	
			Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Substation  
 LOCATION: \_\_\_\_\_

ITEM: S/S Equipment Installation  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score _____ x factor	Action / Monitor
<b>Item 505 Disconnect / Earthing Switch</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
SSWS-505-01	Installed according to approved plans and specifications.	/	= _____ X _____	
SSWS-505-02	Conducted and passed the required tests.	/	= _____ X _____	
<b>Minor</b>				
SSWS-505-03	Moving parts are properly aligned and leveled.	/	= _____ X _____	
SSWS-505-04	Installed materials are free from damages.	/	= _____ X _____	
SSWS-505-05	Approved as-built drawings maintained.	/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
<b>Item 506 Current Transformer / 507 Voltage Transformer</b>				
<b>Major</b>				
SSWS-50_01	Installed according to approved plans and specifications.	/	= _____ X _____	
SSWS-50_02	Conducted and passed the required tests.	/	= _____ X _____	
<b>Minor</b>				
SSWS-50_03	Installed materials are free from damages.	/	= _____ X _____	
SSWS-50_04	Approved as-built drawings maintained.	/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____ Date: ___ / ___ / ___			No. of Indicators (b) =	
			Rate = (a) / (b) =	
			Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Substation  
 LOCATION: \_\_\_\_\_

ITEM: S/S Equipment Installation  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score ____ x factor	Action / Monitor
<b>Item 508 Surge Arrester</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
SSWS-508-01	Installed according to approved plans and specifications.	/	____ x ____ =	
SSWS-508-02	Conducted and passed the required tests.	/	____ x ____ =	
<b>Minor</b>				
SSWS-508-03	Installed materials are free from damage.	/	____ x ____ =	
SSWS-508-04	Discharge counter and cable are properly braced and connected to ground mat.	/	____ x ____ =	
SSWS-508-05	Approved as-built drawings maintained.	/	____ x ____ =	
<b>Item 509 Metal Clad Switchgear</b>				
<b>Major</b>				
SSWS-509-01	Installed according to approved plans and specifications.	/	____ x ____ =	
SSWS-509-02	Conducted and passed the required tests.	/	____ x ____ =	
<b>Minor</b>				
SSWS-509-03	Stationary and moving assembly are properly aligned.	/	____ x ____ =	
SSWS-509-04	Installed materials are free from damage.	/	____ x ____ =	
SSWS-509-05	Approved as-built drawings maintained.	/	____ x ____ =	
<b>Item 510 Station Service Transformer</b>				
<b>Major</b>				
SSWS-510-01	Installed according to approved plans and specifications.	/	____ x ____ =	
SSWS-510-02	Conducted and passed the required tests.	/	____ x ____ =	
<b>Minor</b>				
SSWS-510-03	Provision of proper ventilaton from the base of the finish ground level for cooling purposes.	/	____ x ____ =	
SSWS-510-04	Properly aligned and leveled.	/	____ x ____ =	
SSWS-510-05	Radiators and coolers are free from oil leaks.	/	____ x ____ =	
SSWS-510-06	Approved as-built drawings maintained.	/	____ x ____ =	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: \_\_\_ / \_\_\_ / \_\_\_

Total Score (a) =	CAR Total
No. of Indicators (b) =	
Rate = (a) / (b) =	
Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_ PROJECT TYPE: Substation ITEM: S/S Equipment Installation  
 \_\_\_\_\_ VISIT LOCATION: \_\_\_\_\_ DATE OF VISIT:  / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score _____ x factor	Action / Monitor
<b>Item 511 AC and DC Station Auxillary Switchboard</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
SSWS-511-01	Installed according to approved plans and specifications.	/	_____ X _____ =	
SSWS-511-02	Conducted and passed the required tests.	/	_____ X _____ =	
<b>Minor</b>				
SSWS-511-03	Terminal lugs are grip insulated.	/	_____ X _____ =	
SSWS-511-04	Conformance to proper wirings, markings, tags and ties.	/	_____ X _____ =	
SSWS-511-05	Installed materials are free from damage.	/	_____ X _____ =	
SSWS-511-06	Approved as-built drawings maintained.	/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
<b>Item 512 Battery Charger</b>				
<b>Major</b>				
SSWS-512-01	Installed according to approved plans and specifications.	/	_____ X _____ =	
SSWS-512-02	Conducted and passed the required tests.	/	_____ X _____ =	
<b>Minor</b>				
SSWS-512-03	Conformance of wiring to required bending radius.	/	_____ X _____ =	
SSWS-512-04	Cable clamps are uniformly spaced.	/	_____ X _____ =	
SSWS-512-05	Terminal lugs are grip insulated.	/	_____ X _____ =	
SSWS-512-06	Installed materials are free from damage.	/	_____ X _____ =	
SSWS-512-07	Approved as-built drawings maintained.	/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_ Date:  / /

Total Score (a)	CAR Total
No. of Indicators (b)	
Rate = (a) / (b)	
=	
Rate	
=	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_ PROJECT TYPE: Substation ITEM: S/S Equipment Installation  
 \_\_\_\_\_ VISIT LOCATION: \_\_\_\_\_ DATE OF VISIT:  / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score _____ x factor	Action / Monitor
<b>Item 513 Storage Battery</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
SSWS-513-01	Installed according to approved plans and specifications.	/	= _____ X _____	
SSWS-513-02	Conducted and passed the required tests.	/	= _____ X _____	
<b>Minor</b>				
SSWS-513-03	Battery racks are free from rust/corrosion.	/	= _____ X _____	
SSWS-513-04	Current carrying parts are properly insulated.	/	= _____ X _____	
SSWS-513-05	No damage/defect in any material.	/	= _____ X _____	
SSWS-513-06	Battery rooms are properly ventilated with exhaust fan and sealed to prevent entry of dust.	/	= _____ X _____	
SSWS-513-07	Approved as-built drawings maintained.	/	= _____ X _____	
		/	= _____ X _____	
<b>Item 514 Power / Control / Instrumentation Cables</b>				
<b>Major</b>				
SSWS-514-01	Installed according to approved cable schedule.	/	= _____ X _____	
SSWS-514-02	Conducted and passed required tests.	/	= _____ X _____	
<b>Minor</b>				
SSWS-514-03	Cables are properly installed and placed in conduits, cable trays and trenches.	/	= _____ X _____	
SSWS-514-04	Cables not yet terminated are properly sealed to prevent moisture into the cable.	/	= _____ X _____	
SSWS-514-05	Conformance to proper wirings, markings, tags and ties.	/	= _____ X _____	
SSWS-514-06	No splicing along trays and trench.	/	= _____ X _____	
SSWS-514-07	Termination of conductors to terminal blocks are provided with terminal lugs, insulated and gripped.	/	= _____ X _____	
SSWS-514-08	Approved as-built drawings maintained.	/	= _____ X _____	
		/	= _____ X _____	

Was subcontractor used? If yes, name of company and owner:

\_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date:  / /

Total Score (a)	CAR Total
No. of Indicators (b)	
Rate = (a) / (b)	
=	
Rate	
=	

### CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_ PROJECT TYPE: Substation ITEM: S/S Equipment Installation  
 \_\_\_\_\_ VISIT LOCATION: \_\_\_\_\_ DATE OF VISIT:      /      /     

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score _____ x factor	Action / Monitor
<b>Item 515 Uninterruptible Power Supply</b>				
<b>Major*</b>	<b>* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects</b>			
SSWS-515-01	Installed according to approved plans and specifications.	/	_____ x _____ =	
SSWS-515-02	Conducted and passed the required tests.	/	_____ x _____ =	
<b>Minor</b>				
SSWS-515-03	Seismic anchor and clamping device are fixed to foundation.	/	_____ x _____ =	
SSWS-515-04	Termination of conductors to terminal blocks are provided with terminal lugs, insulated and gripped.	/	_____ x _____ =	
SSWS-514-05	Conformance to proper wirings, markings, tags and ties.	/	_____ x _____ =	
SSWS-515-06	No splicing of wires.	/	_____ x _____ =	
SSWS-515-07	Maximum of two lines are connected to one terminal block point.	/	_____ x _____ =	
SSWS-515-08	Approved as-built drawings maintained.	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a)	CAR Total
Entered by: _____ Date: <u>  </u> / <u>  </u> / <u>  </u>			No. of Indicators (b)	
			Rate = (a) / (b) =	
			Rate =	



## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_ PROJECT TYPE: Substation ITEM: S/S Equipment Installation  
 \_\_\_\_\_ VISIT LOCATION: \_\_\_\_\_ DATE OF VISIT:  / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score x factor	Action / Monitor
<b>Item 516 Insulating Oil Treatment Plant</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
SSWS-516-01	Installed according to approved plans and specifications.	/	= <u>    X    </u>	
SSWS-516-02	Conducted and passed required tests.	/	= <u>    X    </u>	
<b>Minor</b>				
SSWS-516-03	Installed plant and accessories are free from any form of damage.	/	= <u>    X    </u>	
		/	= <u>    X    </u>	
		/	= <u>    X    </u>	
		/	= <u>    X    </u>	
		/	= <u>    X    </u>	
<b>Item 517 Emergency Diesel Generator Set</b>				
<b>Major</b>				
SSWS-516-01	Installed according to approved plans and specifications.	/	= <u>    X    </u>	
SSWS-517-02	Conducted and passed the required tests.	/	= <u>    X    </u>	
<b>Minor</b>				
SSWS-517-03	Exhaust system is properly fastened, supported with expansion materials, and insulated.	/	= <u>    X    </u>	
SSWS-517-04	Fuel tanks and piping system are leak-free.	/	= <u>    X    </u>	
SSWS-517-05	Generator set and accessories are free from damages.	/	= <u>    X    </u>	
		/	= <u>    X    </u>	
		/	= <u>    X    </u>	
		/	= <u>    X    </u>	
		/	= <u>    X    </u>	
			Total Score (a)	CAR Total
Was subcontractor used? If yes, name of company and owner: _____ & _____			No. of Indicators (b)	
Entered by: _____			Rate = (a) / (b)	
			=	
			Rate	
			=	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_ PROJECT TYPE: Substation ITEM: S/S Equipment Installation  
 \_\_\_\_\_ VISIT LOCATION: \_\_\_\_\_ DATE OF VISIT:  / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score _____x factor	Action / Monitor
<b>Item 518 Lighting System</b>				
<b>Major*</b>	<b>* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects</b>			
SSWS-518-01	Installed according to approved plans and specifications.	/	= _____x_____	
SSWS-518-02	Conducted and passed required tests.	/	= _____x_____	
<b>Minor</b>				
SSWS-518-03	Pull boxes are properly installed and covered.	/	= _____x_____	
SSWS-518-04	Outlet boxes are firmly anchored in-placed with fixture supports.	/	= _____x_____	
SSWS-518-05	No exposed pulling boxes in areas normally occupied by working personnel.	/	= _____x_____	
SSWS-518-06	Lighting panels are surface/recess-mounted with proper identifications/labeling on all branch circuits.	/	= _____x_____	
SSWS-518-07	Conformance to allowable number of wires in conduit pipe.	/	= _____x_____	
SSWS-518-08	Adequate rubber and PVC tapes are provided in splicing and connections.	/	= _____x_____	
SSWS-518-09	Boxes and enclosures are provided according to intended purpose.	/	= _____x_____	
SSWS-518-10	Wire insulation not damaged during pulling.	/	= _____x_____	
SSWS-518-11	Provision of covers for blank utility boxes.	/	= _____x_____	
SSWS-518-12	Conformance to proper wirings, markings, tags and ties.	/	= _____x_____	
SSWS-518-13	Lighting fixtures are free of warps, dents, and other damages.	/	= _____x_____	
SSWS-518-14	Hanger cable supports, channels, frames and brackets are provided in the lighting fixtures (as necessary).	/	= _____x_____	
SSWS-518-15	Flood lights, perimeter lighting, structure mounted luminous are installed with appropriate supports and brackets.	/	= _____x_____	
SSWS-518-16	Outdoor lighting fixtures are provided with sealing gaskets.	/	= _____x_____	
SSWS-518-17	Approved as-built drawings maintained.	/	= _____x_____	
		/	= _____x_____	
		/	= _____x_____	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_ Date:  / /

Total Score (a)	CAR Total
No. of Indicators (b)	
Rate = (a) / (b)	
=	
Rate	
=	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_ PROJECT TYPE: Substation ITEM: S/S Equipment Installation  
 \_\_\_\_\_ VISIT LOCATION: \_\_\_\_\_ DATE OF VISIT:  / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item	INDICATORS	Results	Score _____ x factor	Action / Monitor
Code	<i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>			
<b>Item 519 Conduits and Cable Tray System</b>				
<b>Major*</b>	<b>* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects</b>			
SSWS-519-01	Installed according to approved plans and specifications.	/	= _____ x _____	
SSWS-519-02	Conducted and passed the required tests.	/	= _____ x _____	
<b>Minor</b>				
SSWS-519-03	Conduit ends are reamed and smoothed before jointing.	/	= _____ x _____	
SSWS-519-04	Provision of plug and fillers.	/	= _____ x _____	
SSWS-519-05	Provision of coupling and bends.	/	= _____ x _____	
SSWS-519-06	Provision of spacers, inserts and ties for conduits.	/	= _____ x _____	
SSWS-519-07	Provision of stow enamel coating inside conduits.	/	= _____ x _____	
SSWS-519-08	Provision of rigid metal expansion joints where required.	/	= _____ x _____	
SSWS-519-09	Cable trays, accessories and fittings are smooth, free from defects and sharp edges.	/	= _____ x _____	
SSWS-519-10	Trays are properly installed and supported as per plan.	/	= _____ x _____	
SSWS-519-11	Provision of adequate support on vertical cable runs.	/	= _____ x _____	
SSWS-519-12	Multi core cables are clamped to the racks.	/	= _____ x _____	
SSWS-519-13	Conformance to required leveling and alignment of all installed materials	/	= _____ x _____	
SSWS-519-14	Conformance to grounding connections.	/	= _____ x _____	
SSWS-519-15	Cables are adequately supported by racks and clamps, if it is not feasible to support cables by means of tray.	/	= _____ x _____	
SSWS-519-16	Approved as-built drawings maintained.	/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	

Was subcontractor used? If yes, name of company and owner:

\_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date:  / /

Total Score (a)	CAR Total
No. of Indicators (b)	
Rate = (a) / (b)	
=	
Rate	
=	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Substation  
 LOCATION: \_\_\_\_\_

ITEM: Telecom System  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score _____ x factor	Action / Monitor
<b>Item 600 Microwave Equipment</b>				
<b>Major*</b>	<b>* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects</b>			
SSWS-600-01	Completeness of installation according to approved plans and specifications.	/	_____ x _____ =	
SSWS-600-02	Cable trays, racks and conduit system installed according to approved plans and specifications.	/	_____ x _____ =	
SSWS-600-03	Link terminal; i.e transmitters and receiver installed at specified room conditions and temperature.	/	_____ x _____ =	
SSWS-600-04	Antenna rigidly mounted in accordance with approved plans and specifications.	/	_____ x _____ =	
SSWS-600-05	Conformance to specified antenna directions.	/	_____ x _____ =	
SSWS-600-06	Grounding rods and arresters installed and connected according to approved plans and specifications.	/	_____ x _____ =	
SSWS-600-07	Conducted and passed the required tests.	/	_____ x _____ =	
SSWS-600-08	Equipment is free from any damage.	/	_____ x _____ =	
<b>Minor</b>				
SSWS-600-02	Cable trays, racks and conduit system installed according to approved plans and specifications.	/	_____ x _____ =	
SSWS-600-08	Equipment is free from any damage.	/	_____ x _____ =	
SSWS-600-09	Antenna coarse and fine adjustments provided.	/	_____ x _____ =	
SSWS-600-10	Complied with the minimum bending radius for wave guide.	/	_____ x _____ =	
SSWS-600-11	Order wire circuit contained in rack mounted not integrated within the other units of the radio equipment rack conformed with specified height.	/	_____ x _____ =	
SSWS-600-12	Wave guide installed complete with mounting hardwares wall fed through, grounding straps, connectors and pressurizing equipment.	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_ Date: \_\_\_ / \_\_\_ / \_\_\_

Total Score (a)	CAR Total
No. of Indicators (b)	
Rate = (a) / (b)	
=	
Rate	
=	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_ PROJECT TYPE: Substation ITEM: Telecom System  
 \_\_\_\_\_ VISIT LOCATION: \_\_\_\_\_ DATE OF VISIT:  / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score ____x factor	Action / Monitor
<b>Item 601 Fiber Optic Terminal Equipment</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
SSWS-601-01	Completeness of installation according to approved plans and specifications.	/	= ____x____	
SSWS-601-02	Free from any form of damage.	/	= ____x____	
SSWS-601-03	Clean from inside and outside.	/	= ____x____	
SSWS-601-04	Proper identifications/markings are provided on the cable.	/	= ____x____	
SSWS-601-05	Fiber optic cables are terminated in connectors accessible through jumper cables (pigtails).	/	= ____x____	
SSWS-601-06	Ends of the fiber optic cable are provided with caps to prevent moisture ingress into the cables.	/	= ____x____	
SSWS-601-07	Each end of the cables are securely fastened to the reel to prevent the cable from becoming loose during placing operations.	/	= ____x____	
SSWS-601-08	Conducted and passed the required tests.	/	= ____x____	
<b>Minor</b>				
SSWS-601-02	Free from any form of damage.	/	= ____x____	
SSWS-601-03	Clean from inside and outside.	/	= ____x____	
SSWS-601-07	Each end of the cables are securely fastened to the reel to prevent the cable from becoming loose during placing operations.	/	= ____x____	
<b>Item 602 Power Line Carrier Equipment</b>				
<b>Major</b>				
SSWS-602-01	Completeness of installation according to approved plans and specifications.	/	= ____x____	
SSWS-602-02	Appurtenants of PLC equipment are free from damages (i.e, PLC cubicles, transmitter/reciever sets, line tuners, line traps, protection signalling equipment, etc.)	/	= ____x____	
SSWS-602-03	Conformance to the ambient temperature in which the cubicles are located.	/	= ____x____	
SSWS-602-04	Conducted and passed the required tests.	/	= ____x____	
<b>Minor</b>				
SSWS-602-02	Appurtenants of PLC equipment are free from damages (i.e, PLC cubicles, transmitter/reciever sets, line tuners, line traps, protection signalling equipment, etc.)	/	= ____x____	
SSWS-602-05	Co-axial cables are properly laid with cable support and cable ties.	/	= ____x____	
Was subcontractor used? If yes, name of company and owner: _____ & _____  Entered by: _____ Date: <u> / /</u>			Total Score (a)	CAR Total
			No. of Indicators (b)	
			Rate = (a) / (b)	
			=	
			Rate	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Substation  
 LOCATION: \_\_\_\_\_

ITEM: Telecom System  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score ____ x factor =	Action / Monitor
<b>Item 603 Telephone Equipment</b>				
<b>Major*</b>	<b>* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects</b>			
SSWS-603-01	Completeness of installation according to approved plans and specifications.	/	____ x ____ =	
SSWS-603-02	Circuit boards and components are sealed / treated to provide protection against moisture.	/	____ x ____ =	
SSWS-603-03	Main Distribution Panel/frame is equipped with earthing accessories for connection to station ground mat.	/	____ x ____ =	
SSWS-603-04	Conducted and passed the required tests.	/	____ x ____ =	
<b>Minor</b>				
SSWS-603-02	Circuit boards and components are sealed / treated to provide protection against moisture.	/	____ x ____ =	
SSWS-603-05	Lines are plugged-in type to the Distribution Frame. No soldering.	/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
<b>Item 604 UHF / VHF Radio Equipment</b>				
<b>Major</b>				
SSWS-604-01	Completeness of installation according to approved plans and specifications.	/	____ x ____ =	
SSWS-604-02	UHF / VHF Radio Equipment are free from damages (i.e, base station, repeater sets, portable sets, mobile radio sets, co-axial cables, antenna system, etc.).	/	____ x ____ =	
SSWS-604-03	Conducted and passed the required tests.	/	____ x ____ =	
<b>Minor</b>				
SSWS-604-02	UHF / VHF Radio Equipment are free from damages (i.e, base station, repeater sets, portable sets, mobile radio sets, co-axial cables, antenna system, etc.).	/	____ x ____ =	
SSWS-604-04	Co-axial cables are laid with mounting hardwares or roof fed through to avoid sag. Provisions for grounding as required.	/	____ x ____ =	
SSWS-604-05	Base antenna are installed / mounted rigidly on its support structure with lightning protection.	/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	

Was subcontractor used? If yes, name of company and owner:

\_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: \_\_\_ / \_\_\_ / \_\_\_

Total Score (a) =	CAR Total
No. of Indicators (b) =	
Rate = (a) / (b) =	
Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Substation  
 LOCATION: \_\_\_\_\_

ITEM: Telecom System  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score ____ x factor	Action / Monitor
<b>Item 605 Antenna Tower</b>				
<b>Major*</b>	<b>* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects</b>			
SSWS-605-01	Conformance to foundation requirements (i.e, correct orientation, finished elevations, embedded items).	/	____ x ____ =	
SSWS-605-02	Conformance to approved erection drawings.	/	____ x ____ =	
SSWS-605-03	Tower parts and accessories are free from damages (i.e, structural steel works, anchor materials, bolts and nuts, washers, guy, etc.).	/	____ x ____ =	
SSWS-605-04	Connectors of tower members are secured by bolts and nuts and washers.	/	____ x ____ =	
SSWS-605-05	Tower parts completely installed.	/	____ x ____ =	
SSWS-605-06	Lightning rod completely installed as per plans and specifications.	/	____ x ____ =	
<b>Minor</b>				
SSWS-605-03	Tower parts and accessories are free from damages (i.e, structural steel works, anchor materials, bolts and nuts, washers, guy, etc.).	/	____ x ____ =	
SSWS-605-04	Connectors of tower members are secured by bolts and nuts and washers.	/	____ x ____ =	
SSWS-605-07	Provision of setting templates for setting anchor bolts or stub angles for each type of tower.	/	____ x ____ =	
SSWS-605-08	No appearance of white rust on all galvanized members and accessories	/	____ x ____ =	
SSWS-605-09	Bolts, nuts and washers conformed to the required number, sizes and strength.	/	____ x ____ =	
SSWS-605-10	Galvanized bolts and nuts are assembled with finger fit pressure only and interchangeable without shakes.	/	____ x ____ =	
SSWS-605-11	Conformance to bolt positions and insertion requirements.	/	____ x ____ =	
SSWS-605-12	Bolts fastened with specified torque.	/	____ x ____ =	
SSWS-605-13	Approved as-built drawings maintained.	/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	

Was subcontractor used? If yes, name of company and owner:

\_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: \_\_\_ / \_\_\_ / \_\_\_

Total Score (a)	CAR Total
=	
No. of Indicators (b)	
=	
Rate = (a) / (b)	
=	
Rate	
=	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Substation  
 LOCATION: \_\_\_\_\_

ITEM: Telecom System  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score _____ x factor	Action / Monitor
<b>Item 606 Fiber Optic Cable (Linking the Substation)</b>				
<b>Major*</b>	<b>* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects</b>			
SSWS-606-01	Cable pulling in boxes conforms with plans and specifications.	/	= _____ x _____	
SSWS-606-02	Proper backfilling and compaction prior to cable pipe laying.	/	= _____ x _____	
SSWS-606-03	Trench slopes conform to plans and specifications.	/	= _____ x _____	
SSWS-606-04	Conformance to laying/pulling operation procedure.	/	= _____ x _____	
SSWS-606-05	Conducted and passed the required tests.	/	= _____ x _____	
<b>Minor</b>				
SSWS-606-01	Cable pulling in boxes conforms with plans and specifications.	/	= _____ x _____	
SSWS-606-02	Proper backfilling and compaction prior to cable pipe laying.	/	= _____ x _____	
SSWS-606-03	Trench slopes conform to plans and specifications.	/	= _____ x _____	
SSWS-606-06	Required markings are provided.	/	= _____ x _____	
SSWS-606-07	Backfilling of trenches conform to plans and specifications.	/	= _____ x _____	
SSWS-606-08	Equipment arrangement and accessories (i.e, pulling ropes, hooks, rollers, etc. for the pipe and cable pulling operations) conform to approved procedure	/	= _____ x _____	
SSWS-606-09	Conformance to repair preparedness procedure.	/	= _____ x _____	
SSWS-606-10	Approved as-built drawings maintained.	/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	
		/	= _____ x _____	

Was subcontractor used? If yes, name of company and owner :  
 \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: \_\_\_ / \_\_\_ / \_\_\_

Total Score (a)	CAR Total
No. of Indicators (b)	
Rate = (a) / (b)	
=	
Rate	
=	



## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Substation  
 LOCATION: \_\_\_\_\_

ITEM: Control System  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score ____ x factor	Action / Monitor
<b>Item 700 Microprocessor Based Control System (MBSC)</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
SSWS-700-01	Installation and arrangement conforms to approved plans and specifications.	/	= ____ X ____	
SSWS-700-02	Installed materials are free from damages.	/	= ____ X ____	
SSWS-700-03	Conducted and passed required tests (i.e., routine and quality conformance tests).	/	= ____ X ____	
<b>Minor</b>				
SSWS-700-02	Installed materials are free from damages.	/	= ____ X ____	
SSWS-700-04	Power supplies system are properly arranged.	/	= ____ X ____	
SSWS-700-05	Earthing terminal are provided for grounding connection.	/	= ____ X ____	
SSWS-700-06	Cabling layout conforms to plan.	/	= ____ X ____	
SSWS-700-07	Provision of raceways for wiring connection of MBSC to various equipment.	/	= ____ X ____	
SSWS-700-08	Approved as-built drawings maintained.	/	= ____ X ____	
<b>Item 701 Closed Circuit Television System</b>				
<b>Major</b>				
SSWS-701-01	Installed according to approved plans complete with required furnitures.	/	= ____ X ____	
SSWS-701-02	Installation of foundation, pole, junction boxes, tamper switch, sun shade and screen wiper in accordance to approved plans.	/	= ____ X ____	
SSWS-701-03	Cabling layout conforms to plan.	/	= ____ X ____	
SSWS-701-04	Conducted and passed required tests.	/	= ____ X ____	
<b>Minor</b>				
SSWS-701-05	Provision for equipment grounding to ground mat.	/	= ____ X ____	
SSWS-701-06	Wirings/video cable passed through approved and properly supported raceways.	/	= ____ X ____	
SSWS-701-07	Approved as-built drawings maintained.	/	= ____ X ____	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: \_\_\_ / \_\_\_ / \_\_\_

Total Score (a) =	CAR Total
No. of Indicators (b) =	
Rate = (a) / (b) =	
Rate	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Substation  
 LOCATION: \_\_\_\_\_

ITEM: S/S Control  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score _____x factor	Action / Monitor
<b>Item 702 Access Control and Alarm Monitoring System</b>				
<b>Major*</b>	<b>* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects</b>			
SSWS-702-01	Installed according to approved equipment arrangement and layout.	/	= _____x_____	
SSWS-702-02	Cable layout conforms to plans.	/	= _____x_____	
SSWS-702-03	Conducted and passed the required tests.	/	= _____x_____	
<b>Minor</b>				
SSWS-702-02	Cable layout conforms to plans.	/	= _____x_____	
SSWS-702-04	Accessories for signal transmission are properly installed (i.e., mounting hardwares, connectors, etc.).	/	= _____x_____	
SSWS-702-05	Installation of field wirings in conduit is in accordance with applicable codes and standards.	/	= _____x_____	
SSWS-702-06	Conformance to required sizes of conduits and conductors in the drawings.	/	= _____x_____	
SSWS-702-07	Provision for grounding connection to ground mat.	/	= _____x_____	
SSWS-702-08	Approved as-built drawings maintained.	/	= _____x_____	
		/	= _____x_____	
		/	= _____x_____	
		/	= _____x_____	
		/	= _____x_____	
		/	= _____x_____	
		/	= _____x_____	
		/	= _____x_____	
		/	= _____x_____	
		/	= _____x_____	
		/	= _____x_____	
		/	= _____x_____	
		/	= _____x_____	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_ Date: \_\_\_ / \_\_\_ / \_\_\_

Total Score (a) =	CAR Total
No. of Indicators (b) =	
Rate = (a) / (b) =	
Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Substation  
 LOCATION: \_\_\_\_\_

ITEM: Protection System  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score ____ x factor	Action / Monitor
<b>Item 800 Line Protection System</b>				
<b>Major*</b>	<b>* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects</b>			
SSWS-800-01	Completeness of installation according to approved plans and specifications.	/	= ____ X ____	
SSWS-800-02	Installed materials are free from any form of damage.	/	= ____ X ____	
SSWS-800-03	Conducted and passed the required tests.	/	= ____ X ____	
<b>Minor</b>				
SSWS-800-02	Installed materials are free from any form of damage.	/	= ____ X ____	
SSWS-800-04	Relay panels are complete with grounding connections.	/	= ____ X ____	
SSWS-800-05	Conformance of control and power cable entrance openings to plans and specs.	/	= ____ X ____	
SSWS-800-06	Approved as-built drawings maintained.	/	= ____ X ____	
		/	= ____ X ____	
<b>Item 801 Substation Protection</b>				
<b>Major</b>				
SSWS-801-01	Completeness of installation according to approved plans and specifications.	/	= ____ X ____	
SSWS-801-02	Conformance of control and power cable entrance openings to plans and specs.	/	= ____ X ____	
SSWS-801-03	Cables entering the relay cubicle are properly installed and placed.	/	= ____ X ____	
SSWS-801-04	Grounding terminal pads are provided for connection to ground mat.	/	= ____ X ____	
SSWS-801-05	Conducted and passed the required tests.	/	= ____ X ____	
SSWS-801-06	Installed materials are free from any form of damage.	/	= ____ X ____	
<b>Minor</b>				
SSWS-801-06	Installed materials are free from any form of damage.	/	= ____ X ____	
SSWS-801-07	Wirings are properly identified with markings.	/	= ____ X ____	
SSWS-801-08	Cable rack hooks and supports are provided.	/	= ____ X ____	
SSWS-801-09	Approved as-built drawings maintained.	/	= ____ X ____	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_ Date: \_\_\_ / \_\_\_ / \_\_\_

Total Score (a) =	CAR Total
No. of Indicators (b) =	
Rate = (a) / (b) =	
Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Substation  
 LOCATION: \_\_\_\_\_

ITEM: Protection System  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small><i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i></small>	Results	Score _____ x factor =	Action / Monitor
<b>Item 802 Network Disturbance Monitoring System</b>				
<b>Major*</b>	<b>* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects</b>			
SSWS-802-01	Completeness of installation according to approved plans and specifications.	/	_____ x _____ =	
SSWS-802-02	Conducted and passed the required tests.	/	_____ x _____ =	
SSWS-802-03	Installed materials are free from any form of damage.	/	_____ x _____ =	
<b>Minor</b>				
SSWS-802-03	Installed materials are free from any form of damage.	/	_____ x _____ =	
SSWS-802-04	Approved as-built drawings maintained.	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
<b>Item 803 Protection Signalling Equipment</b>				
<b>Major</b>				
SSWS-803-01	Completeness of installation according to approved plans and specifications.	/	_____ x _____ =	
SSWS-803-02	Parts are free from damages.	/	_____ x _____ =	
SSWS-803-03	Conducted and passed functional and other required tests.	/	_____ x _____ =	
<b>Minor</b>				
SSWS-803-02	Parts are free from damages.	/	_____ x _____ =	
SSWS-803-04	Provision of terminal pad for grounding connections.	/	_____ x _____ =	
SSWS-803-05	Conformance to proper arrangements of terminal blocks inside the panel.	/	_____ x _____ =	
SSWS-803-06	Approved as-built drawings maintained.	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____			No. of Indicators (b) =	
Date: ___ / ___ / ___			Rate = (a) / (b) =	
			Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_ PROJECT TYPE: Substation ITEM: Fire Protection System  
 \_\_\_\_\_ VISIT LOCATION: \_\_\_\_\_ DATE OF VISIT:  / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score ____x factor	Action / Monitor
<b>Item 900 Fire Pumping System</b>				
<b>Major*</b>	<b>* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects</b>			
SSWS-900-01	Installed pumps, accessories and appurtenances conformed to the required capacity and approved plans and specifications.	/	= _____ X _____	
SSWS-900-02	Piping connections sufficiently braced/supported and free from leaks.	/	= _____ X _____	
SSWS-900-03	Installed system free from any form of damage.	/	= _____ X _____	
SSWS-900-04	Conducted and passed the required tests.	/	= _____ X _____	
<b>Minor</b>				
SSWS-900-02	Piping connections sufficiently braced/supported and free from leaks.	/	= _____ X _____	
SSWS-900-03	Installed system free from any form of damage.	/	= _____ X _____	
SSWS-900-05	Conformance to foundation, anchorage, housing/casing requirements.	/	= _____ X _____	
SSWS-900-06	Conformance to pipings and control panel technical specifications.	/	= _____ X _____	
SSWS-900-07	Conformance to alignment, balancing and vibration limitations.	/	= _____ X _____	
SSWS-900-08	Approved as-built drawings maintained.	/	= _____ X _____	
<b>Item 901 Fire Protection Piping System</b>				
<b>Major</b>				
SSWS-901-01	Installed pipes conform to plans, e.g. slope, alignment, location, bracings, supports.	/	= _____ X _____	
SSWS-901-02	Pipes not clogged.	/	= _____ X _____	
SSWS-901-03	Installed materials are free from any form of damage.	/	= _____ X _____	
SSWS-901-04	Conducted and passed the required tests.	/	= _____ X _____	
<b>Minor</b>				
SSWS-901-03	Installed materials are free from any form of damage.	/	= _____ X _____	
SSWS-901-05	Installed fixtures and accessories conform to plans, e.g. height, alignment, location.	/	= _____ X _____	
SSWS-901-06	Approved as-built drawings maintained.	/	= _____ X _____	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_ Date:  / /

Total Score (a)	CAR Total
=	
No. of Indicators (b)	
=	
Rate = (a) / (b)	
=	
Rate	
=	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Substation  
 LOCATION: \_\_\_\_\_

ITEM: Fire Protection System  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score _____ x factor =	Action / Monitor
<b>Item 902 Outdoor Hydrant / 903 Hydrant for Transformer Area / 904 Portable Fire Extinguisher / 905 Portable Foam Equipment with Foam Concentrate</b>				
SSWS-90_-01	Conformance to the design specifications, drawings and applicable codes.	/	_____ x _____ =	
SSWS-90_-02	Conducted and passed the required tests.	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
<b>Item 906 Transformer Deluge Water Sprinkler System</b>				
<b>Major</b>				
SSWS-906-01	Completeness of installation according to approved plans and specifications.	/	_____ x _____ =	
SSWS-906-02	Conducted and passed the required tests.	/	_____ x _____ =	
SSWS-906-03	Installed materials are free from any form of damage.	/	_____ x _____ =	
<b>Minor</b>				
SSWS-906-03	Installed materials are free from any form of damage.	/	_____ x _____ =	
SSWS-906-04	Installed complete with appurtenances and its control, e.g. fixed piping and supports, spray nozzles, deluge valve system, detection and signaling equipment.	/	_____ x _____ =	
SSWS-906-05	Provision of strainers in the supply lines of fixed water pipe spray system.	/	_____ x _____ =	
SSWS-906-06	Detection equipment requiring weather protection are provided with canopy, hood or other suitable features.	/	_____ x _____ =	
SSWS-906-07	System pipings are adequately supported.	/	_____ x _____ =	
SSWS-906-08	Approved as-built drawings maintained.	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: \_\_\_ / \_\_\_ / \_\_\_

Total Score (a) =	CAR Total
No. of Indicators (b) =	
Rate = (a) / (b) =	
Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_ PROJECT TYPE: Substation ITEM: Fire Protection System  
 \_\_\_\_\_ VISIT LOCATION: \_\_\_\_\_ DATE OF VISIT:  / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score ____ x factor =	Action / Monitor
<b>Item 907 Total Gas Flooding Fire Suppression System (For Control Room, Relay Room, and Auxillary Room)</b>				
<b>Major</b>				
SSWS-907-01	Conformance to the design specifications, drawings and applicable codes.	/	____ x ____ =	
SSWS-907-02	Conducted and passed the required tests.	/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	
<b>Item 908 Fire Detection and Alarm System</b>				
<b>Major*</b> <small>* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects</small>				
SSWS-908-01	Installed according to approved plans and specifications.	/	____ x ____ =	
SSWS-908-02	Wirings are in accordance with the requirements of the applicable codes.	/	____ x ____ =	
SSWS-908-03	No T-wiring or pigtail connections.	/	____ x ____ =	
SSWS-908-04	Conducted and passed the required tests.	/	____ x ____ =	
SSWS-908-05	Installed materials are free from any form of damage.	/	____ x ____ =	
<b>Minor</b>				
SSWS-908-05	Installed materials are free from any form of damage.	/	____ x ____ =	
SSWS-908-06	Wirings are color coded in conduit or electrical metallic tubing.	/	____ x ____ =	
SSWS-908-07	Circuit conductors are identified within each enclosure where a tap, splice or termination is made.	/	____ x ____ =	
SSWS-908-08	Markers properly in-placed.	/	____ x ____ =	
SSWS-908-09	Control circuit terminations are properly identified.	/	____ x ____ =	
SSWS-908-10	Terminals requiring grounding connectors are properly connected to grounding system.	/	____ x ____ =	
SSWS-908-11	Approved as-built drawings maintained.	/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_ Date:  / /

Total Score (a)	CAR Total
No. of Indicators (b)	
Rate = (a) / (b) =	
Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: **DIESEL POWER PLANT**  
 LOCATION: \_\_\_\_\_

ITEM: **Site Development**  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score ____x factor =	Action / Monitor
<b>Item 100 Boundary Establishment</b>				
DPWS-100-01	Boundary of site/area for development accurately established.	/	____x____ =	
<b>101 Clearing and Grubbing</b>				
DPWS-101-01	Proper removal of undisputed stumps roots and non- perishable solid objects/structures, vegetation, debris, trees and other obstruction.	/	____x____ =	
DPWS-101-02	Conformance to proper disposal.	/	____x____ =	
<b>102 Removal of Structure and Obstruction</b>				
DPWS-102-01	Proper removal of undisputed stumps roots and non- perishable solid objects/structures, vegetation, debris, trees and other obstruction.	/	____x____ =	
DPWS-102-02	Conformance to proper disposal.	/	____x____ =	
<b>Item 103 Grading Excavation</b>				
<b>Major*</b>	<b>* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects</b>			
DPWS-103-01	Adherence to proper construction methodology.	/	____x____ =	
DPWS-103-02	Conformance with approved/specified tolerances for lines, grades, cross-section, elevation, & dimensions. (if no longer correctible, e.g., with in-placed structure).	/	____x____ =	
<b>Minor</b>				
DPWS-103-03	Conformance to proper disposal.	/	____x____ =	
<b>104 Structure Excavation</b>				
<b>Major*</b>	<b>* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects</b>			
DPWS-104-01	Adherence to proper construction methodology.			
DPWS-104-02	Conformance with approved/specified tolerances for lines, grades, cross-section, elevation, & dimensions. (if no longer correctible, e.g., with in-placed structure).	/	____x____ =	
<b>Minor</b>				
DPWS-104-02	Conformance with approved/specified tolerances for lines, grades, cross-section, elevation, & dimensions. (correctible)	/	____x____ =	
DPWS-104-03	Conformance to proper disposal.	/	____x____ =	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____ Date: ___ / ___ / ___			No. of Indicators (b) =	
			Rate = (a) / (b) =	
			Rate =	



## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: **DIESEL POWER PLANT**  
 LOCATION: \_\_\_\_\_

ITEM: **Site Development**  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score ____ x factor =	Action / Monitor
<b>Item 105 Embankment</b>				
<b>Major*</b>	<b>* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects</b>			
DPWS-105-01	Adherence to proper construction methodology (if no longer correctible, e.g., layering, Item 106 not undertaken).	/	____ x ____ =	
DPWS-105-02	Conformance with approved/specified tolerances for lines, grades, cross-section, elevation, & dimensions. (if no longer correctible, e.g., with in-placed structure).	/	____ x ____ =	
DPWS-105-03	Adherence to compaction procedure and the required equipment (if no longer correctible, e.g., done in layers but do not meet required compaction and succeeding layer was laid).	/	____ x ____ =	
<b>Minor</b>				
DPWS-105-01	Adherence to proper construction methodology.	/	____ x ____ =	
DPWS-105-02	Conformance with approved/specified tolerances for lines, grades, cross-section, elevation, & dimensions. (correctible)	/	____ x ____ =	
DPWS-105-03	Adherence to compaction procedure and the required equipment(correctible).	/	____ x ____ =	
<b>106 Subgrade Preparation</b>				
<b>Major*</b>				
<b>* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects</b>				
DPWS-106-01	Adherence to proper construction methodology (if no longer correctible, e.g., layering, Item 105 not undertaken).	/	____ x ____ =	
DPWS-106-02	Conformance with approved/specified tolerances for lines, grades, cross-section, elevation, & dimensions. (if no longer correctible, e.g., with in-placed structure).	/	____ x ____ =	
DPWS-106-03	Adherence to compaction procedure and the required equipment (if no longer correctible, e.g., done in layers but do not meet required compaction and succeeding layer was laid).	/	____ x ____ =	
<b>Minor</b>				
DPWS-106-01	Adherence to proper construction methodology.			
DPWS-106-02	Conformance with approved/specified tolerances for lines, grades, cross-section, elevation, & dimensions. (correctible)	/	____ x ____ =	
DPWS-106-03	Adherence to compaction procedure and the required equipment(correctible).	/	____ x ____ =	
		/	____ x ____ =	

Was subcontractor used? If yes, name of company and owner:

\_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: \_\_\_ / \_\_\_ / \_\_\_

Total Score (a) =	CAR Total
No. of Indicators (b) =	
Rate = (a) / (b) =	
Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: **DIESEL POWER PLANT**  
 LOCATION: \_\_\_\_\_

ITEM: **Site Development**  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score ____ x factor	Action / Monitor
<b>Item 107 Grading Fill</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
DPWS-107-01	Conformance of in-placed materials to plans and specifications.	/	____ x ____ =	
DPWS-107-02	Conformance to the required density or degree of compaction.	/	____ x ____ =	
<b>Minor</b>				
DPWS-107-03	Conformance to the proper placement and to the required thickness per layer of fill/backfill	/	____ x ____ =	
DPWS-107-04	Conformance with approved/specified tolerances for lines, grades, cross-section, elevation, & dimensions. (correctible)	/	____ x ____ =	
DPWS-107-05	Adherence to compaction procedure and the required equipment(correctible).	/	____ x ____ =	
<b>Item 108 Selected Fill/ Engineered Fill</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
DPWS-108-01	Conformance of in-placed materials to plans and specifications.	/	____ x ____ =	
DPWS-108-02	Conformance to the required density or degree of compaction.	/	____ x ____ =	
<b>Minor</b>				
DPWS-108-03	Adherence to proper construction methodology	/	____ x ____ =	
DPWS-108-04	Conformance with approved/specified tolerances for lines, grades, cross-section, elevation, & dimensions. (correctible)	/	____ x ____ =	
DPWS-108-05	Adherence to compaction procedure and the required equipment(correctible).	/	____ x ____ =	
		/	____ x ____ =	
		/	____ x ____ =	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: \_\_\_ / \_\_\_ / \_\_\_

Total Score (a) =	CAR Total
No. of Indicators (b) =	
Rate = (a) / (b) =	
Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: **DIESEL POWER PLANT**  
 LOCATION: \_\_\_\_\_

ITEM: **Site Development**  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score ____ x factor	Action / Monitor
<b>Item 109 Aggregate Sub-Base Course / Aggregate Base Course</b>				
<b>Major*</b>	<b>* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects</b>			
DPWS-109-01	Conformance of in-placed materials according to plans and specifications.	/	= ____ x ____	
DPWS-109-02	Adherence to proper construction methodology. (if no longer correctible, e.g., layer)	/	= ____ x ____	
DPWS-109-03	Conformance w/ approved/specified lines, grades, cross-section, thickness, elevation as per plans and specifications.	/	= ____ x ____	
DPWS-109-04	Conformance to the required compaction.	/	= ____ x ____	
<b>Minor</b>				
DPWS-109-01	Conformance of in-placed materials according to plans and specifications.	/	= ____ x ____	
DPWS-109-02	Adherence to proper construction methodology. (correctible)	/	= ____ x ____	
DPWS-109-03	Conformance w/ approved/specified tolerances on lines, grades, cross-section, thickness, elevation, & plans. (correctible) dimensions	/	= ____ x ____	
DPWS-109-04	Conformance to the required compaction.	/	= ____ x ____	
DPWS-109-05	Sub-base/Base extended to shoulders.	/	= ____ x ____	
DPWS-109-06	Non-occurrence of subbase settlement/upheaval.	/	= ____ x ____	
DPWS-109-07	Provision of required stakes.	/	= ____ x ____	
		/	= ____ x ____	
		/	= ____ x ____	
		/	= ____ x ____	
		/	= ____ x ____	
		/	= ____ x ____	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: \_\_\_ / \_\_\_ / \_\_\_

Total Score (a) =	CAR Total
No. of Indicators (b) =	
Rate = (a) / (b) =	
Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: **DIESEL POWER PLANT**  
 LOCATION: \_\_\_\_\_

ITEM: **Site Development**  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score ____x factor	Action / Monitor
<b>Item 110 Portland Cement Concrete Pavement</b>				
<b>Major*</b>	<b>* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects</b>			
DPWS-110-01	No longitudinal cracks.	/	= _____X_____	
DPWS-110-02	Conformance to vibration requirement.	/	= _____X_____	
DPWS-110-03	Conformance to quality of concrete mix.	/	= _____X_____	
DPWS-110-04	Conformance to requirements of construction joints (outside middle thirds).	/	= _____X_____	
DPWS-110-05	No through cracks (all types of cracks).	/	= _____X_____	
DPWS-110-06	No scaling (severe, needs Removal and Replacement).	/	= _____X_____	
DPWS-110-07	Conformance to the approved/specified tolerances for thickness, width, length, slope and cross-section. (>10% deficient)	/	= _____X_____	
<b>Minor</b>				
DPWS-110-05	No cracks e.g. transverse, diagonal, temperature, corner, restraint.	/	= _____X_____	
DPWS-110-06	No scaling.	/	= _____X_____	
DPWS-110-07	Conformance to the approved/specified tolerances for thickness, width, length, slope and cross-section (<10% deficient).	/	= _____X_____	
DPWS-110-08	No honeycomb.	/	= _____X_____	
DPWS-110-09	No spalling.	/	= _____X_____	
DPWS-110-10	No chipped-off edges.	/	= _____X_____	
DPWS-110-11	Conformance to required size, location & spacing of tie bars and dowel bars as per specifications.	/	= _____X_____	
DPWS-110-12	Conformance to proper curing procedures.	/	= _____X_____	
DPWS-110-13	Utilization of templates prior to pouring.	/	= _____X_____	
DPWS-110-14	Conformance to placing requirement which will not result to segregation of aggregates, cold joints, misalignment.	/	= _____X_____	
DPWS-110-15	Conformance to required amount of asphalt sealant on weakened plane joints. (insufficient and excessive application)	/	= _____X_____	
DPWS-110-16	Conformance to requirement of pavement blockings (include depths and widths of weakened plane joints)	/	= _____X_____	
DPWS-110-17	No hardened/spilled concrete on pavement.	/	= _____X_____	
DPWS-110-18	No pokemarks/tire marks/animal foot marks/skid marks, etc.	/	= _____X_____	
DPWS-110-19	Conformance to proper finishing of concrete (brooming)	/	= _____X_____	
DPWS-110-20	Conformance to formwork requirements (wooden, defective steel and not applied with oil/grease)	/	= _____X_____	
Was subcontractor(s) used? If yes, name of company(ies) and sub-item: _____ & _____			Total Score (a)	CAR Total
			No. of Indicators (b)	=
			Rate	=

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
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PROJECT TYPE: **DIESEL POWER PLANT**  
 LOCATION: \_\_\_\_\_

ITEM: **Site Development**  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item	INDICATORS	Results	Score _____x factor	Action / Monitor
Code	<i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>			
<b>Item 111 Pipe Culvert and Storm Drains</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
DPWS-111-01	Conformance to the required/approved tolerance for slope, alignment, elevation and dimensions.	/	_____x_____	
<b>Minor</b>				
DPWS-111-02	No cracks, honeycombs, chipping of edges.	/	_____x_____	
DPWS-111-03	Compliance to joint mortar mixing proportions.	/	_____x_____	
DPWS-111-04	Sufficient collaring and flushing.	/	_____x_____	
DPWS-111-05	Compliance to the required thickness, compaction & materials requirement of gravel bedding.	/	_____x_____	
DPWS-111-06	Compliance to the required thickness & compaction of backfill.	/	_____x_____	
DPWS-111-07	Conformance to trenching requirements.	/	_____x_____	
DPWS-111-08	Free from debris, siltation, etc.	/	_____x_____	
		/	_____x_____	
<b>Item 112 Manholes, Inlets, and Catch Basins</b>				
<b>Major</b>				
DPWS-112-01	Conformance to connection requirements between pipes & inlet wall.	/	_____x_____	
DPWS-112-02	Conformance with plans and design specifications.	/	_____x_____	
<b>Minor</b>				
DPWS-112-03	No damage on manhole, inlets & catch basins.	/		
DPWS-112-04	No cracks.	/	_____x_____	
DPWS-112-05	No honeycomb.	/	_____x_____	
DPWS-112-06	Free from debris, siltation, etc.	/	_____x_____	
		/	_____x_____	
Was subcontractor(s) used? If yes, name of company(ies) and sub-item: _____ & _____			Total Score (a)	CAR Total
Entered by: _____			No. of Indicators (b)	
Date: ___ / ___ / ___			Rate = (a) / (b)	
			Rate	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
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PROJECT TYPE: **DIESEL POWER PLANT**  
 LOCATION: \_\_\_\_\_

ITEM: **Site Development**  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item	INDICATORS	Results	Score _____x factor	Action / Monitor
Code	<i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>			
<b>Item 113 Riprap and Grouted Riprap</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
DPWS-113-01	No through cracks	/	= _____x_____	
DPWS-113-02	Conformance to specifications (size, type, weight, etc. of boulders).	/	= _____x_____	
DPWS-113-03	Sufficient grout/mortar.	/	= _____x_____	
DPWS-113-04	Observance to proper placing of stones/boulders.	/	= _____x_____	
DPWS-113-05	Conformance to the approved/required tolerance for slope and thickness.	/	= _____x_____	
DPWS-113-06	Compliance to the specified compaction and preparation of bedding.	/	= _____x_____	
DPWS-113-07	Compliance to design mix of mortar.	/	= _____x_____	
DPWS-113-08	Provision of weepholes.	/	= _____x_____	
<b>Minor</b>				
DPWS-113-01	No cracks.	/	= _____x_____	
DPWS-113-08	Adequate and proper spacing of weepholes.	/	= _____x_____	
		/	= _____x_____	
<b>Item 114 Gabion/Mattresses</b>				
<b>Major</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
DPWS-114-01	Conformance to the required/approved tolerances for lines, grades, dimensions and arrangements as shown on the plans and designated locations	/	= _____x_____	
DPWS-114-02	Observance to proper placing of stones/boulders.	/	= _____x_____	
DPWS-114-03	Conformance to specifications (size, type, weight, etc. of boulders, rocks).	/	= _____x_____	
<b>Minor</b>				
DPWS-114-04	No misalignment, bulging	/	= _____x_____	
DPWS-114-05	Conformance to the required wire mesh cage fabrication requirement	/	= _____x_____	
		/	= _____x_____	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____			No. of Indicators (b) =	
Date: / /			Rate = (a) / (b) =	
			Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
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PROJECT TYPE: **DIESEL POWER PLANT**  
 LOCATION: \_\_\_\_\_

ITEM: **Site Development**  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small><i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i></small>	Results	Score x factor	Action / Monitor
<b>Item 115 Topsoil</b>				
DPWS-115-01	Conformance to the scope of work.	/	= _____x_____	
DPWS-115-02	Properly tilled.	/	= _____x_____	
DPWS-115-03	Free from weeds or undesirable grasses.	/	= _____x_____	
		/	= _____x_____	
<b>Item 116 Sprigging / Sodding</b>				
DPWS-116-01	Conformance to the scope of work.	/	= _____x_____	
DPWS-116-02	Healthy, dense and well rooted.	/	= _____x_____	
DPWS-116-03	Free from weeds or undesirable grasses.	/	= _____x_____	
		/	= _____x_____	
<b>Item 117 Ornament Plant/Tree Planting</b>				
DPWS-117-01	Conformance to the scope of work.	/	= _____x_____	
DPWS-117-02	Healthy, dense and well rooted.	/	= _____x_____	
DPWS-117-03	Free from weeds or undesirable grasses.	/	= _____x_____	
		/	= _____x_____	
		/	= _____x_____	
		/	= _____x_____	
		/	= _____x_____	

Was subcontractor used? If yes, name of company and owner:

\_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

Total Score (a)	CAR Total
=	
No. of Indicators (b)	
=	
Rate = (a) / (b)	
=	
Rate	
=	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
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PROJECT TYPE: **DIESEL POWER PLANT**  
 LOCATION: \_\_\_\_\_

ITEM: **Site Development**  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score x factor	Action / Monitor
<b>Item 118 Perimeter /Seclusion Fence</b>				
<b>Major*</b>	<b>* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects</b>			
DPWS-118-01	Conformance to the approved/specified tolerance for alignment, dimension, plumbness and elevation.	/	= _____x_____	
DPWS-118-02	Conformance to required quality of CHB	/	= _____x_____	
DPWS-118-03	Conformance to required quality of mortar mix	/	= _____x_____	
<b>Minor</b>				
DPWS-118-04	Proper spacing of horizontal and vertical bars.	/	= _____x_____	
DPWS-118-05	Rebars used free from corrosion.	/	= _____x_____	
DPWS-118-06	Installed according to plans and specifications.	/	= _____x_____	
DPWS-118-07	Conformance to the specified/designed depth of fence footings.	/	= _____x_____	
DPWS-118-08	Conformance to the specified/designed length of fence per bay.	/	= _____x_____	
		/	= _____x_____	
		/	= _____x_____	
		/	= _____x_____	
		/	= _____x_____	
		/	= _____x_____	
		/	= _____x_____	
		/	= _____x_____	
		/	= _____x_____	
		/	= _____x_____	
		/	= _____x_____	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_ Date: \_\_ / \_\_ / \_\_

Total Score (a) =	CAR Total
No. of Indicators (b) =	
Rate = (a) / (b) =	
Rate =	



## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
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PROJECT TYPE: **DIESEL POWER PLANT**  
 LOCATION: \_\_\_\_\_

ITEM: Site Development  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score ____x factor	Action / Monitor
<b>Item 119 Gate/GuardHouse</b>				
DPWS-119-01	Conformance to the approved/specified tolerance for alignment, dimension, and plumbness	/	= ____x ____	
DPWS-119-02	Installed according to plans and specifications.	/	= ____x ____	
<b>Item 120 Outdoor, Roadway and Perimeter Lighting System</b>				
DPWS-120-01	Conformance of in-placed materials to plans and specifications.	/	= ____x ____	
DPWS-120-02	Provision of waterproofed structure implement for outdoor illumination.	/	= ____x ____	
DPWS-120-03	Conformance to the required dimension of lighting poles (height, diameter)	/	= ____x ____	
DPWS-120-04	Proper installation of lighting poles and fixtures (bulbs, switches, wires, cables, load break switch, power fuse, lightning arrester).	/	= ____x ____	
DPWS-120-05	Proper installation of electrical wiring resulting to non-peeling-off of insulation.	/	= ____x ____	
DPWS-120-06	Proper installation of conduit pipes.	/	= ____x ____	
DPWS-120-07	Provision of concrete encasement for pipes and conduits.	/	= ____x ____	
		/	= ____x ____	
<b>Item 121 Deepwell Drilling and Development</b>				
<b>Major</b>				
DPWS-121-01	Drilled and developed according to plans and specifications.	/	= ____x ____	
DPWS-121-02	Complied and passed draw down tests.	/	= ____x ____	
DPWS-121-03	Water quality complied and passed test requirements.	/	= ____x ____	
<b>Minor</b>				
DPWS-121-04	Drilling method suited to condition of deep well site to be drilled.	/	= ____x ____	
DPWS-121-05	Method of placing the formation stabilizer/gravel pack in the annulus are done in such a way that separation of gravel and bridging are avoided.	/	= ____x ____	
DPWS-121-06	Well is cleaned in accordance with the specified method.	/	= ____x ____	
		/	= ____x ____	

Was subcontractor used? If yes, name of company and owner:

\_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: \_\_ / \_\_ / \_\_

Total Score (a) =	CAR Total
No. of Indicators (b) =	
Rate = (a) / (b) =	
Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
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PROJECT TYPE: **DIESEL POWER PLANT**  
 LOCATION: \_\_\_\_\_

ITEM: **Site Development**  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score ____x factor	Action / Monitor
<b>Item 122 Deepwell Submersible Pump</b>				
<b>Major*</b>	<b>* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects</b>			
DPWS-122-01	Complied and passed required test.	/	= ____x ____	
		/	= ____x ____	
<b>Minor</b>				
DPWS-122-02	Installed according to plans and specifications complete with controls and accessories.	/	= ____x ____	
DPWS-122-03	Provision of steel guard on power cable along the well casing.	/	= ____x ____	
DPWS-122-04	Pump is operated in conjunction with the level controller installed at the water tank.	/	= ____x ____	
DPWS-122-05	Provision of uPVC conduits for underground power cables.	/	= ____x ____	
		/	= ____x ____	
		/	= ____x ____	
<b>Item 123 Elevated Steel Water Tank</b>				
<b>Major</b>				
DPWS-123-01	Tank parts and support structure are installed in accordance with plans and specifications.	/	= ____x ____	
DPWS-123-02	Complied and passed required leak tests.	/	= ____x ____	
DPWS-123-03	Free from corrosion and any form of damages.	/	= ____x ____	
		/	= ____x ____	
<b>Minor</b>				
DPWS-123-03	Free from rust and any form of damages.	/	= ____x ____	
DPWS-123-04	Installed according to plan complete with control and accessories (i.e., balcony with handrail, access caged ladder, air vent, water level indicator, overflow pipe, inlet-outlet piping, drain valves and fittings, level switch attachment, access hatch, beacon red warning light).	/	= ____x ____	
DPWS-123-05	Structural members free of twist, bends and deformations.	/	= ____x ____	
		/	= ____x ____	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: \_\_ / \_\_ / \_\_

Total Score (a)	CAR Total
=	
No. of Indicators (b)	
=	
Rate = (a) / (b)	
=	
Rate	
=	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
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PROJECT TYPE: **DIESEL POWER PLANT**  
 LOCATION: \_\_\_\_\_

ITEM: **Site Development**  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score ____x factor	Action / Monitor
<b>Item 124 Domestic Water Supply Piping System</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
DPWS-124-01	Installed pipes, fittings and valves conformed to plans and specifications.	/	____x____ =	
DPWS-124-02	Water line laid not less than 1.0 meter from sewer lines.	/	____x____ =	
DPWS-124-03	Complied and passed hydraulic and leak tests.	/	____x____ =	
<b>Minor</b>				
DPWS-124-04	Pipes laid free from dirt or other foreign materials.	/	____x____ =	
DPWS-124-05	Provision of pipe sleeves for pipes crossing roadways.	/	____x____ =	
DPWS-124-06	Provision of temporary pipe blind flange/caps at both ends during installation.	/	____x____ =	
DPWS-124-07	Potable water lines are disinfected prior to use.	/	____x____ =	
		/	____x____ =	
<b>Item 125 Gravel Surfacing</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
DPWS-125-01	Complied to the required thickness of gravel surfacing as indicated in the drawings and specifications.	/	____x____ =	
DPWS-125-02	Complied to the appropriate placement workmanship in placing, spreading, compacting of gravel as specified in the drawings or specifications	/	____x____ =	
		/	____x____ =	
		/	____x____ =	
		/	____x____ =	
		/	____x____ =	
		/	____x____ =	
			Total Score (a) =	CAR Total
Was subcontractor used? If yes, name of company and owner: _____ & _____			No. of Indicators (b) =	
Entered by: _____			Rate = (a) / (b) =	
Date: ____ / ____ / ____			Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

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PROJECT TYPE: **DIESEL POWER PLANT**  
 LOCATION: \_\_\_\_\_

ITEM: **Site Development**  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item	INDICATORS	Results	Score ____x factor	Action / Monitor
Code	<i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>			
<b>Item 126 Concrete Drainage Canals</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
DPWS-126-01	Adherence to proper construction methodology.	/	= ____x ____	
DPWS-126-02	Conformance with approved/specified tolerances for lines, grades, cross-sections, elevations & dimensions as specified in the drawings and specifications.	/	= ____x ____	
DPWS-126-03	Non-displacement of in-placed concrete canal linings	/	= ____x ____	
<b>Minor</b>				
DPWS-126-04	Conformance to the location of construction joints as shown in the drawing or indicated in the specifications	/	= ____x ____	
DPWS-126-05	Conformance to the jointing requirements.	/	= ____x ____	
		/	= ____x ____	
<b>Item 127 Oil-Water Separator</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
DPWS-127-01	Adherence to proper construction methodology.	/	= ____x ____	
DPWS-127-02	Conformance with approved/specified cross-sections, elevations & dimensions as indicated in the drawings and specifications.	/	= ____x ____	
DPWS-127-03	Adherence to proper connection of the outlet pipe to main sewer system	/	= ____x ____	
DPWS-127-04	Compliance to the environmental requirement	/	= ____x ____	
		/	= ____x ____	
<b>Item 128 Rockwall/Retaining Wall</b>				
DPWS-128-01	Conformance with approved/required tolerances for slopes, thickness, alignment, elevations and dimensions as indicated in the drawings and specifications.	/	= ____x ____	
DPWS-128-02	Conformance to the required size, type, weight and quality of rock and boulder materials to be used as indicated in plans and specifications.	/	= ____x ____	
DPWS-128-03	Observance to the proper placing and laying of stones and boulders.	/	= ____x ____	
DPWS-128-04	Conformance with the provision of weepholes and the required spacing.	/	= ____x ____	
DPWS-128-05	Compliance to the design mix of mortar and the sufficiency of grout.	/	= ____x ____	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____ Date: ____ / ____ / ____			No. of Indicators (b) =	
			Rate = (a) / (b) =	
			Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: **DIESEL POWER PLANT**  
 LOCATION: \_\_\_\_\_

ITEM: **Powerhouse**  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score ____x factor	Action / Monitor
<b>Item 200 Fill and Selected Fill</b>				
DPWS-200-01	Conformance of in-placed materials according to plans and specifications	/	= ____x ____	
DPWS-200-02	Conformance to the required thickness of fill or backfill per layer.	/	= ____x ____	
DPWS-200-03	Conformance to the required density or degree of compaction	/	= ____x ____	
		/	= ____x ____	
<b>Item 201 Soil Poisoning</b>				
DPWS-201-01	Conformance to the specified concentration of soil poisoning solution.	/	= ____x ____	
DPWS-201-02	Conformance to the specified rate of application.	/	= ____x ____	
		/	= ____x ____	
<b>Item 202 CHB Wall</b>				
<b>Major*</b>	<i>* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects</i>			
DPWS-202-01	Conformance to required dimensions, location, plumbness and alignment.	/	= ____x ____	
DPWS-202-02	Conformance to required quality of CHB as stipulated in the specifications	/	= ____x ____	
DPWS-202-03	Conformance to required quality of mortar mix.	/	= ____x ____	
		/	= ____x ____	
<b>Minor</b>				
DPWS-202-01	Conformance to specified tolerances for dimension, location, plumbness and alignment.	/	= ____x ____	
DPWS-202-04	Proper spacing of horizontal and vertical bars.	/	= ____x ____	
DPWS-202-05	Rebars used free from corrosion.	/	= ____x ____	
		/	= ____x ____	
		/	= ____x ____	
		/	= ____x ____	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_ Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

Total Score (a) =	CAR Total
No. of Indicators (b) =	
Rate = (a) / (b) =	
Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
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PROJECT TYPE: **DIESEL POWER PLANT**  
 LOCATION: \_\_\_\_\_

ITEM: **Powerhouse**  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item	INDICATORS	Results	Score ____x factor	Action / Monitor
Code	<i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>			
<b>Item 203 Brick Wall</b>				
<b>Major*</b>	<b>* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects</b>			
DPWS-203-01	Conformance to required dimensions, location, plumbness and alignment.	/	= ____x ____	
DPWS-203-02	Conformance to required quality of bricks as stipulated in the specifications	/	= ____x ____	
DPWS-203-03	Conformance to required quality of mortar mix.	/	= ____x ____	
<b>Minor</b>				
DPWS-203-01	Conformance to specified tolerances for dimension, location, plumbness and alignment.	/	= ____x ____	
DPWS-203-04	Proper spacing of horizontal and vertical bars.	/	= ____x ____	
DPWS-203-05	Rebars used free from corrosion.	/	= ____x ____	
		/	= ____x ____	
<b>Item 204 Tiled Finish</b>				
DPWS-204-01	Installed tiles free from chipping, cracks or any form of damage	/	= ____x ____	
DPWS-204-02	Mortar/Grout consistency and color conformed to specification	/	= ____x ____	
DPWS-204-03	Tiles are evenly placed or laid on.	/	= ____x ____	
DPWS-204-04	Tiles in wet areas are sloped toward the drain.	/	= ____x ____	
DPWS-204-05	Tiles are properly bonded to the floor or walls.	/	= ____x ____	
		/	= ____x ____	
<b>Item 205 Trowelled Floor Finish</b>				
DPWS-205-01	Smooth and even floor finish.	/	= ____x ____	
DPWS-205-02	No temperature cracks.	/	= ____x ____	
DPWS-205-03	No sign of deflection/settlement.	/	= ____x ____	
		/	= ____x ____	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

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Total Score (a)	CAR Total
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No. of Indicators (b)	
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<b>Item 206 Pebble Washout</b>				
DPWS-206-01	Installed pebbles are evenly distributed.	/	_____ X _____ =	
DPWS-206-02	No temperature cracks.	/	_____ X _____ =	
DPWS-206-03	Installed pebbles surface are thoroughly clean from cement.	/	_____ X _____ =	
		/	_____ X _____ =	
<b>Item 207 Waterproofing</b>				
DPWS-207-01	Conforms to specified method of application.	/	_____ X _____ =	
DPWS-207-02	Conforms to number of coats/layers required.	/	_____ X _____ =	
DPWS-207-03	Passed required leak test.	/	_____ X _____ =	
DPWS-207-04	Conformance to the required materials specifications as per plan.	/	_____ X _____ =	
		/	_____ X _____ =	
<b>Item 208 Wall Paper</b>				
DPWS-208-01	Smooth and evenly pasted.	/	_____ X _____ =	
DPWS-208-02	Free from scratches, stains, etc.	/	_____ X _____ =	
		/	_____ X _____ =	
<b>Item 209 Wall Plaster Finish</b>				
DPWS-209-01	Conformance to designed mixture of plastering materials.	/	_____ X _____ =	
DPWS-209-02	Conformance to specified method of application and thickness of plastering.	/	_____ X _____ =	
DPWS-209-03	True to alignment.	/	_____ X _____ =	
DPWS-209-04	Free from any form of damages, e.g. cracks, peeled-off plaster finish	/	_____ X _____ =	
		/	_____ X _____ =	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
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<b>Item 210 Wall Cladding</b>				
DPWS-210-01	Panels properly anchored.	/	_____ x _____ =	
DPWS-210-02	True to alignment, plumbness.	/	_____ x _____ =	
DPWS-210-03	Free from any form of damages.	/	_____ x _____ =	
DPWS-210-04	Panels conform to construction procedure.	/	_____ x _____ =	
		/	_____ x _____ =	
<b>Item 211 Wall/Roof Painting</b>				
DPWS-211-01	Surface prepared according to specification.	/	_____ x _____ =	
DPWS-211-02	Required neutralizers, etc. applied.	/	_____ x _____ =	
DPWS-211-03	Applied paint appropriate to the surface.	/	_____ x _____ =	
DPWS-211-04	Specified number of coats applied.	/	_____ x _____ =	
DPWS-211-05	Surfaces evenly painted, proper opacity.	/	_____ x _____ =	
DPWS-211-06	No discoloration and peeling-off of paint.	/	_____ x _____ =	
DPWS-211-07	Paints conform to specification/requirements.	/	_____ x _____ =	
DPWS-211-08	Surfaces are properly applied with putty/patching compound.	/	_____ x _____ =	
		/	_____ x _____ =	
<b>Item 212 Ceiling Suspension</b>				
DPWS-212-01	Conformance to the specified spacing and length of hangers, clips and joists.	/	_____ x _____ =	
DPWS-212-02	Installed hangers are properly anchored and firm.	/	_____ x _____ =	
DPWS-212-03	True to alignment and elevation in conformance to the approved specified tolerance.	/	_____ x _____ =	
DPWS-212-04	Free from any form of damage.	/	_____ x _____ =	
		/	_____ x _____ =	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

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<b>Item 213 Ceiling Board</b>				
DPWS-213-01	Materials free from any form of damage.	/	= _____X_____	
DPWS-213-02	Smooth surface and true to elevation and alignment.	/	= _____X_____	
DPWS-213-03	Location of holes for utilities conforms to plans.	/	= _____X_____	
DPWS-213-04	Ceiling boards are properly fastened.	/	= _____X_____	
		/	= _____X_____	
<b>Item 214 Ceiling Moulding</b>				
DPWS-214-01	True to elevation and alignment.	/	= _____X_____	
DPWS-214-02	Installed materials are free from any form of damages.	/	= _____X_____	
		/	= _____X_____	
<b>Item 215 Roofing Frames</b>				
DPWS-215-01	Conformance to the required size, spacing, slope, anchorage, etc.	/	= _____X_____	
DPWS-215-02	Free from any form of damage.	/	= _____X_____	
DPWS-215-03	Cleats are properly provided.	/	= _____X_____	
DPWS-215-04	Application of paint primer prior to installation	/	= _____X_____	
		/	= _____X_____	
<b>Item 216 Roofing Sheets</b>				
DPWS-216-01	Conformance to the specified gauge, length, etc.	/	= _____X_____	
DPWS-216-02	Conformance to the specified overlapping, sealing of joints, fastening.	/	= _____X_____	
DPWS-216-03	Installation of flashing, gutters, ridge rolls, downspouts, etc., according to plans.	/	= _____X_____	
DPWS-216-04	Non-occurrence of leaks.	/	= _____X_____	
DPWS-216-05	Free from any form of damage.	/	= _____X_____	

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<b>Item 217 Doors</b>				
DPWS-217-01	True to alignment, plumbness in conformance to the approved/specified tolerance.	/	= ____x ____	
DPWS-217-02	Doors are well fitted to the door frames.	/	= ____x ____	
DPWS-217-03	Door accessories installed according to plans, e.g. locksets, door closers, hinges, door stoppers.	/	= ____x ____	
DPWS-217-04	Free from any form of damage.	/	= ____x ____	
DPWS-217-05	Doors conform to specification requirements, e.g. panel door, flush door polyvinyl, steel doors, etc.	/	= ____x ____	
		/	= ____x ____	
		/	= ____x ____	
<b>Item 218 Windows</b>				
DPWS-218-01	True to alignment and elevation in conformance to the approved/specified tolerance.	/	= ____x ____	
DPWS-218-02	Windows are well fitted to the window frames.	/	= ____x ____	
DPWS-218-03	Window accessories installed according to plans, e.g. handles, seals, glazing for glass window, etc.	/	= ____x ____	
DPWS-218-04	Free from any form of damage.	/	= ____x ____	
DPWS-218-05	Windows conform to specification requirements, e.g. sliding, jalousies (glass and wooden) steel casement windows	/	= ____x ____	
		/	= ____x ____	
		/	= ____x ____	
<b>Item 219 Railings</b>				
DPWS-219-01	Installed according to plans.	/	= ____x ____	
DPWS-219-02	Free from dents, scratches or any form of damage.	/	= ____x ____	
DPWS-219-03	Bends and curves are smooth.	/	= ____x ____	
DPWS-219-04	Conforms to approved tolerance size, dimension, height and type, e.g. concrete, steel, stainless, aluminum, etc.	/	= ____x ____	
		/	= ____x ____	

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 \_\_\_\_\_ & \_\_\_\_\_

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<b>Item 220 Plumbing</b>				
DPWS-220-01	Pipes installed according to plans, e.g. slope, alignment, location, bracings/supports.	/	= _____ X _____	
DPWS-220-02	Conducted and passed the required leak test.	/	= _____ X _____	
DPWS-220-03	Pipes not clogged.	/	= _____ X _____	
DPWS-220-04	Free from any form of damages.	/	= _____ X _____	
DPWS-220-05	Fixtures and accessories installed according to plans, e.g. height, alignment, location.	/	= _____ X _____	
DPWS-220-06	Adhesive conform to specification.	/	= _____ X _____	
DPWS-220-07	Water closet, lavatory conform to specification.	/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
<b>Item 221 Sanitary</b>				
DPWS-221-01	Pipes installed according to plans, e.g. slope, alignment, location, bracings/supports.	/	= _____ X _____	
DPWS-221-02	Conducted and passed the required pressure/leak test.	/	= _____ X _____	
DPWS-221-03	Pipes not clogged.	/	= _____ X _____	
DPWS-221-04	Free from any form of damages.	/	= _____ X _____	
DPWS-221-05	Fixtures and accessories installed according to plans, e.g. height, alignment, location.	/	= _____ X _____	
DPWS-221-06	Adhesives conform to specifications.	/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
Was subcontractor used? If yes, name of company and owner : _____ & _____			Total Score (a)	CAR Total
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<b>Item 222 Structural Steel Works</b>				
<b>Major*</b>	<b>* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects</b>			
DPWS-222-01	Conformance of in-placed materials to plans and specifications.	/	= ___x___	
DPWS-222-02	Conformance to required fasteners, anchor bolts, bolts/nuts and washers (not provided).	/	= ___x___	
DPWS-222-03	Free from corrosion and any other form of damages.	/	= ___x___	
DPWS-222-04	Conformance to splicing requirements.	/	= ___x___	
<b>Minor</b>				
DPWS-222-03	Free from rust and any other form of damages.	/	= ___x___	
DPWS-222-06	Conformance to the specified type of welding.	/	= ___x___	
DPWS-222-07	Fasteners, anchor bolts, bolts/nuts & washers conforms to specified size, strength, etc.	/	= ___x___	
DPWS-222-08	Installed according to plans.	/	= ___x___	
		/	= ___x___	
		/	= ___x___	
		/	= ___x___	
		/	= ___x___	
		/	= ___x___	
		/	= ___x___	
		/	= ___x___	
		/	= ___x___	
		/	= ___x___	
		/	= ___x___	
		/	= ___x___	
		/	= ___x___	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

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<b>Item 223 Electrical Works</b>				
DPWS-223-01	Pipes installed according to plans and laid out according to approved construction drawings.	/	= <u>    X    </u>	
DPWS-223-02	Pipes, hangers, boxes, gutters, cable trays properly installed and painted, sharp edges of pipes removed.	/	= <u>    X    </u>	
DPWS-223-03	Pipes properly bended.	/	= <u>    X    </u>	
DPWS-223-04	Allowable number of wires in a pipe properly observed.	/	= <u>    X    </u>	
DPWS-223-05	Splicing and connection provided with adequate rubber and pvc tapes.	/	= <u>    X    </u>	
DPWS-223-06	Adequate length of wire provided for termination and splicing.	/	= <u>    X    </u>	
DPWS-223-07	Wire color coding complied and observed.	/	= <u>    X    </u>	
DPWS-223-08	Wire insulation not damaged during pulling.	/	= <u>    X    </u>	
DPWS-223-09	Adequate number, correct size and gauge of pull boxes installed and properly covered.	/	= <u>    X    </u>	
DPWS-223-10	Boxes and enclosures provided according to intended purpose.	/	= <u>    X    </u>	
DPWS-223-11	Fittings and accessories provided and properly installed.	/	= <u>    X    </u>	
DPWS-223-12	Block-outs and sleeves provided and properly secured.	/	= <u>    X    </u>	
DPWS-223-13	Cable ties provided.	/	= <u>    X    </u>	
DPWS-223-14	Blank covers provided for outlets and switches that are not utilized.	/	= <u>    X    </u>	
DPWS-223-15	Use of tools and equipment properly observed.	/	= <u>    X    </u>	
DPWS-223-16	Lighting fixtures, panel boards, circuit breakers, etc. properly installed and free from any form of damages.	/	= <u>    X    </u>	
DPWS-223-17	Meager, clamp, phase sequence tests and load test conducted.	/	= <u>    X    </u>	
DPWS-223-18	Shop drawings, as-built plan maintained.	/	= <u>    X    </u>	
		/	= <u>    X    </u>	
		/	= <u>    X    </u>	
			Total Score (a)	CAR Total
Was subcontractor used? If yes, name of company and owner: _____ & _____			No. of Indicators (b)	
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<b>Item 224 Air Conditioning System</b>				
DPWS-224-01	Air-conditioning units, transfer fans, pipes, ducts, condensers are installed according to plans.	/	_____ X _____ =	
DPWS-224-02	Jointing of pipes and ducts conform to specified jointing system.	/	_____ X _____ =	
DPWS-224-03	Pipes and ducts free from leaks.	/	_____ X _____ =	
DPWS-224-04	Pipes and ducts sufficiently braced/supported.	/	_____ X _____ =	
DPWS-224-05	Installed materials free from any form of damage.	/	_____ X _____ =	
DPWS-224-06	Conducted and passed the required tests.	/	_____ X _____ =	
		/	_____ X _____ =	
<b>Item 225 Ventilation System</b>				
DPWS-225-01	Conformance to the design specifications and drawings.	/	_____ X _____ =	
DPWS-225-02	Casing free from dent.	/	_____ X _____ =	
DPWS-225-03	Conducted and passed the required tests.	/	_____ X _____ =	
		/	_____ X _____ =	
<b>Item 226 Septic Vaults</b>				
DPWS-226-01	Adherence to proper construction methodology	/	_____ X _____ =	
DPWS-226-02	Conformance with approved/specified for lines, grades, cross-section, elevation, & dimensions as indicated in drawing.	/	_____ X _____ =	
DPWS-226-03	Adherence to proper connection of the outlet pipe to main sewer.	/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

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Rate	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: **DIESEL POWER PLANT**  
 LOCATION: \_\_\_\_\_

ITEM: **Equipment Foundations**

DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS	Results	Score ____x factor	Action / Monitor
<b>Item 300 Fill / Sand and Gravel Bedding</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
DPWS-300-01	Conformance of in-placed materials to plans and specifications.	/	____x____ =	
DPWS-300-02	Conformance to the required thickness of bedding and of fill per layer	/	____x____ =	
DPWS-300-03	Conformance to the required density or degree of compaction	/	____x____ =	
<b>Minor</b>				
DPWS-300-04	Conformance to ground level restoration.	/	____x____ =	
		/	____x____ =	
<b>Item 301 Lean Concrete</b>				
DPWS-301-01	Adherence to proper construction methodology.	/	____x____ =	
DPWS-301-02	Conformance to the required thickness and strength	/	____x____ =	
		/	____x____ =	
<b>Item 302 Anchor Bolt Setting</b>				
<b>Major</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
DPWS-302-01	Conformance to the anchor bolt setting dimensions.	/	____x____ =	
DPWS-302-02	Precise setting of template.	/	____x____ =	
<b>Minor</b>				
DPWS-302-03	Anchor bolts and templates fix with supporter.	/	____x____ =	
		/	____x____ =	
<b>Item 303 Epoxy and Non-cementitious Grouting</b>				
DPWS-303-01	Conformance to the required workmanship in mixing, placing, spreading, compacting, curing and surface finishing as showing on drawing or indicated in the specifications.	/	____x____ =	
		/	____x____ =	
		/	____x____ =	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

Total Score (a) =	CAR Total
No. of Indicators (b) =	
Rate = (a) / (b) =	
Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: **DIESEL POWER PLANT**  
 LOCATION: \_\_\_\_\_

ITEM: **Equipment**  
**Foundations**  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small><i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i></small>	Results	Score x factor	Action / Monitor
<b>Item 304 Cable Trench Cover and Supports</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
DPWS-304-01	Provision of block-outs for installation of metal works.	/	= ___x___	
DPWS-304-02	Metal works and materials installed in accordance to the details shown in the drawing (alignment, position).	/	= ___x___	
DPWS-304-03	Block-outs were grouted after installation of metal works.	/	= ___x___	
		/	= ___x___	
<b>Item 305 Gravel Surfacing</b>				
<b>Major</b>				
DPWS-305-01	Conformance to required lines, grades and thickness.	/	= ___x___	
<b>Minor</b>				
DPWS-305-02	Compliance to the specified construction methodology.	/	= ___x___	
DPWS-305-03	No oversize/undersize of in-placed materials.	/	= ___x___	
		/	= ___x___	
		/	= ___x___	
		/	= ___x___	
		/	= ___x___	
		/	= ___x___	
		/	= ___x___	
		/	= ___x___	
		/	= ___x___	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: \_\_\_ / \_\_\_ / \_\_\_

Total Score (a) =	CAR Total
No. of Indicators (b) =	
Rate = (a) / (b) =	
Rate =	



## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: **DIESEL POWER PLANT**  
 LOCATION: \_\_\_\_\_

ITEM: **Common Items  
 of Works**

DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score _____ x factor =	Action / Monitor
<b>Item 400 Excavation</b>				
DPWS-400-01	Conformance to the approved/specified tolerance for lines, grades, dimensions and elevations.	/	_____ x _____ =	
DPWS-400-02	Conformance to the excavation support system, (e.g. angle of repose, bracing, shoring, sheet piling)	/	_____ x _____ =	
		/	_____ x _____ =	
<b>Item 401 Backfill</b>				
DPWS-401-01	Conformance of in-placed materials to plans and specifications.	/	_____ x _____ =	
DPWS-401-02	Conformance to the required thickness of backfill per layer	/	_____ x _____ =	
DPWS-401-03	Conformance to the required density or degree of compaction	/	_____ x _____ =	
		/	_____ x _____ =	
<b>Item 402 Formworks</b>				
DPWS-402-01	Conformance to the required type of formworks in accordance with approved shop/working drawings	/	_____ x _____ =	
DPWS-402-02	Forms coated with mould oil as required	/	_____ x _____ =	
DPWS-402-03	Sufficient bracing/support provided	/	_____ x _____ =	
DPWS-402-04	No loose knots, splits, cracks, etc.	/	_____ x _____ =	
DPWS-402-05	Provision of required concrete or steel spacer	/	_____ x _____ =	
DPWS-402-06	Conformance to dimensions, location, plumbness and alignment	/	_____ x _____ =	
DPWS-402-07	No use of dilapidated/salvage forms (use more than 3x)	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: \_\_\_ / \_\_\_ / \_\_\_

Total Score (a) =	CAR Total
No. of Indicators (b) =	
Rate= (a) / (b) =	
Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: **DIESEL POWER PLANT**  
 LOCATION: \_\_\_\_\_

ITEM: **Common Items**  
**of Works**

DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score _____x factor	Action / Monitor
<b>Item 403 Reinforcing Steel Bars (including tendons for Pre/Post-Stressed Concrete)</b>				
<b>Major*</b>	<b>* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects</b>			
DPWS-403-01	Conformance of in-placed materials to plans and specifications.	/	_____X_____ =	
DPWS-403-02	No appearance of corrosion on steel reinforcement.	/	_____X_____ =	
<b>Minor</b>				
DPWS-403-02	No appearance of corrosion on steel reinforcement.	/	_____X_____ =	
DPWS-403-03	Conformance to approved bar cutting schedule, proper spacing, anchorage and adequate reinforcements.	/	_____X_____ =	
DPWS-403-04	No sign of oil, paint and other deleterious materials on reinforcements.	/	_____X_____ =	
DPWS-403-05	Conformance to jointing requirement, i.e. splicing, welding, etc.	/	_____X_____ =	
DPWS-403-06	Conformance to proper bending of stirrups	/	_____X_____ =	
		/	_____X_____ =	
		/	_____X_____ =	
		/	_____X_____ =	
		/	_____X_____ =	
		/	_____X_____ =	
		/	_____X_____ =	
		/	_____X_____ =	
		/	_____X_____ =	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: / /

Total Score (a) =	CAR Total
No. of Indicators (b) =	
Rate= (a) / (b) =	
Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: **DIESEL POWER PLANT**  
 LOCATION: \_\_\_\_\_

ITEM: **Common Items  
 of Works**

DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score ____x factor	Action / Monitor
<b>Item 404 Concrete</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
DPWS-404-01	No through cracks.	/	= _____X_____	
DPWS-404-02	No honeycomb (no exposed rebars/aggregates)	/	= _____X_____	
DPWS-404-03	No evidence of sagging or bulging.	/	= _____X_____	
DPWS-404-04	Conformance to required quality of concrete mix	/	= _____X_____	
DPWS-404-05	Conformance to the required concrete cover for rebars.	/	= _____X_____	
DPWS-404-06	Conformance to the jointing requirement.	/	= _____X_____	
DPWS-404-07	Conformance to placing requirement that will not result segregation of aggregates, cold joints and misalignment.	/	= _____X_____	
<b>Minor</b>				
DPWS-404-01	No cracks.	/	= _____X_____	
DPWS-404-02	No honeycomb.	/	= _____X_____	
DPWS-404-03	No sagging or bulging.	/	= _____X_____	
DPWS-404-05	Conformance to the required concrete cover for rebars.	/	= _____X_____	
DPWS-404-06	Conformance to the jointing requirement.	/	= _____X_____	
DPWS-404-07	Conformance to placing requirement that will not result segregation of aggregates, cold joints and misalignment.	/	= _____X_____	
DPWS-404-08	Proper and adequate vibration.	/	= _____X_____	
DPWS-404-09	Conformance to finishing/plastering requirement.	/	= _____X_____	
DPWS-404-10	No chipping off of concrete cover.	/	= _____X_____	
DPWS-404-11	Conformance to the batching, mixing, transporting and discharge time requirements.	/	= _____X_____	
DPWS-404-12	Proper curing.	/	= _____X_____	
DPWS-404-13	Conformance to required dimensions, lines, grades/elevation, location.	/	= _____X_____	
		/	= _____X_____	
			Total Score (a)	CAR Total

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: **Diesel Power Plant**  
 LOCATION: \_\_\_\_\_

ITEM: **Equipment Installation**  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score x factor	Action / Monitor
<b>Item 500 Diesel Generator Set and its appurtenances</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
DPWS-500-01	Installed according to approved plans and specifications.	/	= _____ X _____	
DPWS-500-02	Conducted and passed all required pre commissioning and commissioning tests.	/	= _____ X _____	
		/	= _____ X _____	
<b>Minor</b>				
DPWS-500-03	Connections are properly secured by bolts, nuts, locknuts and washers.	/	= _____ X _____	
DPWS-500-04	Conformance with specified tolerances for plumbness and alignment.	/	= _____ X _____	
DPWS-500-05	No damage/defective component parts.	/	= _____ X _____	
		/	= _____ X _____	
<b>Item 501 Fuel Oil System</b>				
<b>Major</b>				
DPWS-501-01	Fuel Oil Storage Tanks, Pumps, piping and other equipment and components are installed according to approved plans and specifications.	/	= _____ X _____	
SSWS-501-02	Conducted and passed the required tests.	/	= _____ X _____	
		/	= _____ X _____	
<b>Minor</b>				
DPWS-501-03	Connections are properly secured by bolts, nuts, locknuts and washers.	/	= _____ X _____	
DPWS-501-04	Conformance with specified tolerances for plumbness and alignment.	/	= _____ X _____	
DPWS-501-05	No damage/defective component parts.	/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
		/	= _____ X _____	
			Total Score (a)	CAR Total
Was subcontractor used? If yes, name of company and owner: _____ & _____			No. of Indicators (b)	
Entered by: _____			Rate = (a) / (b)	
			=	
			Rate	
			=	

Date: \_\_\_ / \_\_\_ / \_\_\_

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: **Diesel Power Plant**  
 LOCATION: \_\_\_\_\_

ITEM: **Equipment Installation**  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score _____x factor	Action / Monitor
<b>Item 502 Cooling System</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
DPWS-502-01	Cooling Water Storage Tanks, Pumps, piping and other equipment and components are installed according to approved plans and specifications.	/	_____X_____ =	
DPWS-502-02	Conducted and passed the required tests.	/	_____X_____ =	
		/	_____X_____ =	
		/	_____X_____ =	
<b>Minor</b>				
DPWS-502-03	Connections are properly secured by bolts, nuts, locknuts and washers.	/	_____X_____ =	
DPWS-502-04	Conformance with specified tolerances for plumbness and alignment.	/	_____X_____ =	
DPWS-502-05	No damage/defective parts and materials.	/	_____X_____ =	
		/	_____X_____ =	
<b>Item 503 Cooling Water Supply System</b>				
<b>Major</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
DPWS-503-01	Water Storage Tanks, Pumps, piping and other equipment and components are installed according to approved plans and specifications.	/	_____X_____ =	
DPWS-503-02	Conducted and passed the required tests.	/	_____X_____ =	
		/	_____X_____ =	
<b>Minor</b>				
DPWS-503-03	Connections are properly secured by bolts, nuts, locknuts and washers.	/	_____X_____ =	
DPWS-503-04	Conformance with specified tolerances for plumbness and alignment.	/	_____X_____ =	
DPWS-503-05	No damage/defective component parts.	/	_____X_____ =	
		/	_____X_____ =	
		/	_____X_____ =	
Was subcontractor used? If yes, name of company and owner : _____			Total Score (a)	CAR Total
Entered by: _____			No. of Indicators (b)	
Date: ___ / ___ / ___			Rate = (a) / (b)	
			=	
			Rate	
			=	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: **Diesel Power Plant**  
 LOCATION: \_\_\_\_\_

ITEM: **Equipment Installation**  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score x factor	Action / Monitor
<b>Item 504 Lubrication Oil System</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
DPWS-504-01	Lube Oil Tanks, Pumps, Filtering equipment and piping and other equipment and components are installed according to approved plans and specifications.	/	____ X ____ =	
DPWS-504-02	Conducted and passed the required tests.	/	____ X ____ =	
		/	____ X ____ =	
<b>Minor</b>				
DPWS-504-03	Connections are properly secured by bolts, nuts, locknuts and washers.	/	____ X ____ =	
DPWS-504-04	Conformance with specified tolerances for plumbness and alignment.	/	____ X ____ =	
DPWS-504-05	No damage/defective component parts.	/	____ X ____ =	
		/	____ X ____ =	
<b>Item 505 Compressed Air System</b>				
<b>Major</b>				
DPWS-505-01	Air Compressors, Receivers and piping and other equipment and components are installed according to approved plans and specifications.	/	____ X ____ =	
DPWS-505-02	Conducted and passed the required tests.	/	____ X ____ =	
		/	____ X ____ =	
<b>Minor</b>				
DPWS-505-03	Connections are properly secured by bolts, nuts, locknuts and washers.	/	____ X ____ =	
DPWS-505-04	Conformance with specified tolerances for plumbness and alignment.	/	____ X ____ =	
DPWS-505-05	No damage/defective component parts.	/	____ X ____ =	
		/	____ X ____ =	
		/	____ X ____ =	
		/	____ X ____ =	
			Total Score (a) =	CAR Total
Was subcontractor used? If yes, name of company and owner: _____ & _____			No. of Indicators (b) =	
Entered by: _____			Rate = (a) / (b) =	
Date: ___ / ___ / ___			Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: **Diesel Power Plant**  
 LOCATION: \_\_\_\_\_

ITEM: **Equipment Installation**  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score ____ x factor	Action / Monitor
<b>Item 506 Exhaust System</b>				
<b>Major*</b>	<b>* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects</b>			
DPWS-506-01	Exhaust Pipe and its support assembly are installed according to approved plans and specifications.	/	____ X ____ =	
		/	____ X ____ =	
<b>Minor</b>				
DPWS-506-02	Connections are properly secured by bolts, nuts, locknuts and washers.	/	____ X ____ =	
DPWS-506-03	Conformance with specified tolerances for plumbness and alignment.	/	____ X ____ =	
DPWS-506-04	No damage/defective parts and materials.	/	____ X ____ =	
		/	____ X ____ =	
<b>Item 507 Domestic Water Supply System</b>				
<b>Major</b>				
DPWS-507-01	Water Storage Tanks, Pumps, piping and other equipment and components are installed according to approved plans and specifications.	/	____ X ____ =	
DPWS-507-02	Conducted and passed the required tests.	/	____ X ____ =	
		/	____ X ____ =	
<b>Minor</b>				
DPWS-507-03	Connections are properly secured by bolts, nuts, locknuts and washers.	/	____ X ____ =	
DPWS-507-04	Conformance with specified tolerances for plumbness and alignment.	/	____ X ____ =	
DPWS-507-05	No damage/defective component parts.	/	____ X ____ =	
		/	____ X ____ =	
		/	____ X ____ =	
		/	____ X ____ =	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: \_\_\_ / \_\_\_ / \_\_\_

Total Score (a) =	CAR Total
No. of Indicators (b) =	
Rate = (a) / (b) =	
Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: **Diesel Power Plant**  
 LOCATION: \_\_\_\_\_

ITEM: **Equipment Installation**  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score _____ x factor	Action / Monitor
<b>Item 508 Power Transformer</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
DPWS-508-01	Installed according to approved plans and specifications.	/	= _____ X _____	
DPWS-508-02	Conducted and passed the required tests.	/	= _____ X _____	
<b>Minor</b>				
DPWS-508-03	Properly aligned and leveled.	/	= _____ X _____	
DPWS-508-04	Appurtenants are clean and free from damages.	/	= _____ X _____	
DPWS-508-05	Tanks, conservator, radiators coolers and fittings are free from oil leaks.	/	= _____ X _____	
DPWS-508-06	Approved as-built drawings maintained.	/	= _____ X _____	
		/	= _____ X _____	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a)	CAR Total
Entered by: _____ Date: ___ / ___ / ___			No. of Indicators (b)	
			Rate = (a) / (b)	
			=	
			Rate	
			=	



## CPES CHECKLIST FOR WORKMANSHIP

PROJECT NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: **Diesel Power Plant**  
 LOCATION: \_\_\_\_\_

ITEM: **Equipment Installation**  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score _____ x factor	Action / Monitor
<b>Item 509 Power Circuit Breaker</b>				
<b>Major</b>				
DPWS-509-01	Installed according to approved plans and specifications.	/	= _____ X _____	
DPWS-509-02	Conducted and passed the required tests.	/	= _____ X _____	
<b>Minor</b>				
DPWS-509-03	Mounting bases are properly aligned and leveled.	/	= _____ X _____	
DPWS-509-04	Installed materials are free from damages.	/	= _____ X _____	
DPWS-509-05	Approved as-built drawings maintained.	/	= _____ X _____	
		/	= _____ X _____	
<b>Item 510 Station Service Transformer</b>				
<b>Major</b>				
DPWS-510-01	Installed according to approved plans and specifications.	/	= _____ X _____	
DPWS-510-02	Conducted and passed the required tests.	/	= _____ X _____	
<b>Minor</b>				
DPWS-510-03	Provision of proper ventilaton from the base of the finish ground level for cooling purposes.	/	= _____ X _____	
DPWS-510-04	Properly aligned and leveled.	/	= _____ X _____	
DPWS-510-05	Radiators and coolers are free from oil leaks.	/	= _____ X _____	
DPWS-510-06	Approved as-built drawings maintained.	/	= _____ X _____	
		/	= _____ X _____	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: \_\_\_ / \_\_\_ / \_\_\_

Total Score (a)	CAR Total
No. of Indicators (b)	
Rate = (a) / (b)	
=	
Rate	
=	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: **Diesel Power Plant**  
 LOCATION: \_\_\_\_\_

ITEM: **Equipment Installation**  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small><i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i></small>	Results	Score _____ x factor	Action / Monitor
<b>Item 511 Kilowatt Hour Billing Meter</b>				
<b>Major</b>				
DPWS-511-01	Installed according to approved plans and specifications.	/	= _____ X _____	
DPWS-511-02	Properly calibrated prior to installation.	/	= _____ X _____	
DPWS-511-03	Conducted and passed the required tests.	/	= _____ X _____	
<b>Minor</b>				
DPWS-511-04	Installed materials are free from damages.	/	= _____ X _____	
DPWS-511-05	Approved as-built drawings maintained.	/	= _____ X _____	
<b>Item 512 Current Transformer</b>				
<b>Major</b>				
DPWS-512-01	Installed according to approved plans and specifications.	/	= _____ X _____	
DPWS-512-02	Conducted and passed the required tests.	/	= _____ X _____	
<b>Minor</b>				
DPWS-512-03	Installed materials are free from damages.	/	= _____ X _____	
DPWS-512-04	Approved as-built drawings maintained.	/	= _____ X _____	
		/	= _____ X _____	
<b>Item 513 Potential/Voltage Transformer</b>				
<b>Major</b>				
DPWS-513-01	Installed according to approved plans and specifications.	/	= _____ X _____	
DPWS-513-02	Conducted and passed the required tests.	/	= _____ X _____	
<b>Minor</b>				
DPWS-513-03	Installed materials are free from damages.	/	= _____ X _____	
DPWS-513-04	Approved as-built drawings maintained.	/	= _____ X _____	
		/	= _____ X _____	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: \_\_\_ / \_\_\_ / \_\_\_

Total Score (a)	CAR Total
No. of Indicators (b)	
Rate = (a) / (b)	
=	
Rate	
=	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: **Diesel Power Plant**  
 LOCATION: \_\_\_\_\_

ITEM: **Equipment Installation**  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score ____ x factor	Action / Monitor
<b>Item 514 Metal Clad Switchgear</b>				
<b>Major</b>				
DPWS-514-01	Installed according to approved plans and specifications.	/	____ X ____ =	
DPWS-514-02	Conducted and passed the required tests.	/	____ X ____ =	
<b>Minor</b>				
DPWS-514-02	Stationary and moving assembly are properly aligned.	/	____ X ____ =	
DPWS-514-03	Installed materials are free from damage.	/	____ X ____ =	
DPWS-514-04	Approved as-built drawings maintained.	/	____ X ____ =	
		/	____ X ____ =	
<b>Item 515 Disconnect / Earthing Switch</b>				
<b>Major*</b> * Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects				
DPWS-515-01	Installed according to approved plans and specifications.	/	____ X ____ =	
DPWS-515-02	Conducted and passed the required tests.	/	____ X ____ =	
<b>Minor</b>				
DPWS-515-03	Moving parts are properly aligned and leveled.	/	____ X ____ =	
DPWS-515-04	Installed materials are free from damages.	/	____ X ____ =	
DPWS-515-05	Approved as-built drawings maintained.	/	____ X ____ =	
		/	____ X ____ =	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a)	CAR Total
Entered by: _____			No. of Indicators (b)	
Date: ___ / ___ / ___			Rate = (a) / (b)	
			=	
			Rate	
			=	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: **Diesel Power Plant**  
 LOCATION: \_\_\_\_\_

ITEM: **Equipment Installation**  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score ____ x factor	Action / Monitor
<b>Item 516 Power, Control &amp; Protection Panel</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
DPWS-516-01	Installed according to approved plans and specifications.	/	= _____ X _____	
DPWS-516-02	Conducted and passed the required tests.	/	= _____ X _____	
<b>Minor</b>				
DPWS-516-03	Terminal lugs are grip insulated.	/	= _____ X _____	
DPWS-516-04	Conformance to proper wirings, markings, tags and ties.	/	= _____ X _____	
DPWS-516-05	Installed materials are free from damage.	/	= _____ X _____	
DPWS-516-06	Approved as-built drawings maintained.	/	= _____ X _____	
		/	= _____ X _____	
<b>Item 517 Surge/Lightning Arrester</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
DPWS-517-01	Installed according to approved plans and specifications.	/	= _____ X _____	
DPWS-517-02	Conducted and passed the required tests.	/	= _____ X _____	
<b>Minor</b>				
DPWS-517-03	Installed materials are free from damage.	/	= _____ X _____	
DPWS-517-04	Discharge counter and cable are properly braced and connected to ground mat.	/	= _____ X _____	
DPWS-517-05	Approved as-built drawings maintained.	/	= _____ X _____	
		/	= _____ X _____	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a)	CAR Total
Entered by: _____			No. of Indicators (b)	
Date: ___ / ___ / ___			Rate = (a) / (b)	
			=	
			Rate	
			=	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: **Diesel Power Plant**  
 LOCATION: \_\_\_\_\_

ITEM: **Equipment Installation**  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score ____ x factor	Action / Monitor
<b>Item 518 Uninterruptible Power Supply</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
DPWS-518-01	Installed according to approved plans and specifications.	/	____ X ____ =	
DPWS-518-02	Conducted and passed the required tests.	/	____ X ____ =	
<b>Minor</b>				
DPWS-518-03	Seismic anchor and clamping device are fixed to foundation.	/	____ X ____ =	
DPWS-518-04	Termination of conductors to terminal blocks are provided with terminal lugs, insulated and gripped.	/	____ X ____ =	
DPWS-518-05	Conformance to proper wirings, markings, tags and ties.	/	____ X ____ =	
DPWS-518-06	No splicing of wires.	/	____ X ____ =	
DPWS-518-07	Maximum of two lines are connected to one terminal block point.	/	____ X ____ =	
DPWS-518-08	Approved as-built drawings maintained.	/	____ X ____ =	
<b>Item 519 Storage Battery</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
DPWS-519-01	Installed according to approved plans and specifications.	/	____ X ____ =	
DPWS-519-02	Conducted and passed the required tests.	/	____ X ____ =	
<b>Minor</b>				
DPWS-519-03	Battery racks are free from rust/corrosion.	/	____ X ____ =	
DPWS-519-04	Current carrying parts are properly insulated.	/	____ X ____ =	
DPWS-519-05	No damage/defect in any material.	/	____ X ____ =	
DPWS-519-06	Battery rooms are properly ventilated with exhaust fan and sealed to prevent entry of dust.	/	____ X ____ =	
DPWS-519-07	Approved as-built drawings maintained.	/	____ X ____ =	
		/	____ X ____ =	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_ Date: \_\_\_ / \_\_\_ / \_\_\_

Total Score (a)	CAR Total
No. of Indicators (b)	
Rate = (a) / (b)	
=	
Rate	
=	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: **Diesel Power Plant**  
 LOCATION: \_\_\_\_\_

ITEM: **Equipment Installation**  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small><i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i></small>	Results	Score _____ x factor	Action / Monitor
<b>Item 520 Battery Charger</b>				
<b>Major</b>				
DPWS-520-01	Installed according to approved plans and specifications.	/	= _____ X _____	
DPWS-520-02	Conducted and passed the required tests.	/	= _____ X _____	
<b>Minor</b>				
DPWS-520-03	Conformance of wiring to required bending radius.	/	= _____ X _____	
DPWS-520-04	Cable clamps are uniformly spaced.	/	= _____ X _____	
DPWS-520-05	Terminal lugs are grip insulated.	/	= _____ X _____	
DPWS-520-06	Installed materials are free from damage.	/	= _____ X _____	
DPWS-520-07	Approved as-built drawings maintained.	/	= _____ X _____	
		/	= _____ X _____	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a)	CAR Total
Entered by: _____			No. of Indicators (b)	
Date: ___ / ___ / ___			Rate = (a) / (b)	
			=	
			Rate	
			=	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: **Diesel Power Plant**  
 LOCATION: \_\_\_\_\_

ITEM: **Equipment Installation**  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score ____ x factor	Action / Monitor
<b>Item 521 Grounding System</b>				
<b>Major*</b>	<b>* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects</b>			
DPWS-521-01	Installed according to approved plans and specifications.	/	____ X ____ =	
DPWS-521-02	Grounding connections are properly welded through exothermic process.	/	____ X ____ =	
DPWS-521-03	Overhead ground wire are properly strung according to specified tension and sag.	/	____ X ____ =	
DPWS-521-04	Conducted and passed all required ground resistance tests.	/	____ X ____ =	
<b>Minor</b>				
DPWS-521-03	Overhead ground wire are properly strung according to specified tension and sag.	/	____ X ____ =	
DPWS-521-04	Conducted and passed all required ground resistance tests.	/	____ X ____ =	
DPWS-521-05	Ground rods installed according to approved plans.	/	____ X ____ =	
DPWS-521-06	Grounding trenches are excavated according to specified depth and width.	/	____ X ____ =	
DPWS-521-07	Provision of bedding materials for ground wire.	/	____ X ____ =	
DPWS-521-08	Ground leads are properly supported by clamps at specified intervals.	/	____ X ____ =	
DPWS-521-09	Shield wires and accessories are protected by specified corrosion inhibitor.	/	____ X ____ =	
DPWS-521-10	Steel structures with insulators or apparatus are properly connected to the ground mat.	/	____ X ____ =	
DPWS-521-11	Structures with more than one leg are properly connected to the ground mat with risers at minimum of 2 different points.	/	____ X ____ =	
DPWS-521-12	Switchyard equipment are properly grounded to two different points of the ground mat.	/	____ X ____ =	
DPWS-521-13	Lighting poles and other metal structures are properly connected to ground mat.	/	____ X ____ =	
DPWS-521-14	Cable trays, ladder, fence and gates are properly connected to ground mat.	/	____ X ____ =	
DPWS-521-15	Test boxes are installed properly and connected to ground mat.	/	____ X ____ =	
DPWS-521-16	Approved as-built drawings maintained.	/	____ X ____ =	
		/	____ X ____ =	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_ Date: \_\_\_ / \_\_\_ / \_\_\_

Total Score (a)	CAR Total
No. of Indicators (b)	
Rate = (a) / (b)	
=	
Rate	
=	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: **Diesel Power Plant**  
 LOCATION: \_\_\_\_\_

ITEM: **Equipment Installation**  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small><i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i></small>	Results	Score ____ x factor	Action / Monitor
<b>Item 522 Bus Conductors and Hardwares</b>				
<b>Major</b>				
DPWS-522-01	Installed according to approved plans and specifications.	/	____ X ____ =	
DPWS-522-02	Conducted and passed the required tests.	/	____ X ____ =	
<b>Minor</b>				
DPWS-522-03	Conductors are free from copper dust and particles.	/	____ X ____ =	
DPWS-522-04	No damage/defective members.	/	____ X ____ =	
DPWS-522-05	Connectors/Terminal pad are equipped with approved type of bolts, nuts, flat washer and bevelled washers.	/	____ X ____ =	
DPWS-522-06	Terminal connectors are free from burrs, edges, fillet, damage and cracks.	/	____ X ____ =	
DPWS-522-07	Approved as-built drawings maintained.	/	____ X ____ =	
		/	____ X ____ =	
<b>Item 523 Gantries, Steel Structures and Supports</b>				
<b>Major*</b> <small>* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects</small>				
DPWS-523-01	Conformance with the approved Erection Drawings and installation methodologies.	/	____ X ____ =	
DPWS-523-02	Templates are used for setting anchor bolt system.	/	____ X ____ =	
<b>Minor</b>				
DPWS-523-03	Connections are properly secured by bolts, nuts, locknuts and washers.	/	____ X ____ =	
DPWS-523-04	Stitch bolts are used in connecting double angle members.	/	____ X ____ =	
DPWS-523-05	Correct direction and bolt position of bolt insertion.	/	____ X ____ =	
DPWS-523-06	Conformance with specified tolerances for plumbness and alignment.	/	____ X ____ =	
DPWS-523-07	No damage/defective structural members.	/	____ X ____ =	
		/	____ X ____ =	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a)	CAR Total
Entered by: _____			No. of Indicators (b)	
Date: ___ / ___ / ___			Rate = (a) / (b)	
			=	
			Rate	
			=	



### CPES CHECKLIST FOR WORKMANSHIP

PROJECT NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: **Diesel Power Plant**  
 LOCATION: \_\_\_\_\_

ITEM: **Equipment Installation**  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score _____ x factor	Action / Monitor
<b>Item 524 Power / Control / Instrumentation Cables</b>				
<b>Major</b>				
DPWS-524-01	Installed according to approved cable schedule.	/	= _____ X _____	
DPWS-524-02	Conducted and passed required tests.	/	= _____ X _____	
<b>Minor</b>				
DPWS-524-03	Cables are properly installed and placed in conduits, cable trays and trenches.	/	= _____ X _____	
DPWS-524-04	Cables not yet terminated are properly sealed to prevent moisture entering into the cable.	/	= _____ X _____	
DPWS-524-05	Conformance to proper wirings, markings, tags and ties.	/	= _____ X _____	
DPWS-524-06	No splicing along trays and trench.	/	= _____ X _____	
DPWS-524-07	Termination of conductors to terminal blocks are provided with terminal lugs, insulated and gripped.	/	= _____ X _____	
DPWS-524-08	Approved as-built drawings maintained.	/	= _____ X _____	
		/	= _____ X _____	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_ Date: \_\_\_ / \_\_\_ / \_\_\_

Total Score (a)	CAR Total
No. of Indicators (b)	
Rate = (a) / (b)	
=	
Rate	
=	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: **Diesel Power Plant**  
 LOCATION: \_\_\_\_\_

ITEM: **Equipment Installation**  
 DATE OF VISIT: \_\_\_ / \_\_\_ / \_\_\_

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>*Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score _____ x factor	Action / Monitor
<b>Item 525 Conduits and Cable Tray System</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
DPWS-525-01	Installed according to approved plans and specifications.	/	_____X_____ =	
DPWS-525-02	Conducted and passed the required tests.	/	_____X_____ =	
<b>Minor</b>				
DPWS-525-03	Conduit ends are reamed and smoothed before jointing.	/	_____X_____ =	
DPWS-525-04	Provision of plug and fillers.	/	_____X_____ =	
DPWS-525-05	Provision of coupling and bends.	/	_____X_____ =	
DPWS-525-06	Provision of spacers, inserts and ties for conduits.	/	_____X_____ =	
DPWS-525-07	Provision of stow enamel coating inside conduits.	/	_____X_____ =	
DPWS-525-08	Provision of rigid metal expansion joints where required.	/	_____X_____ =	
DPWS-525-09	Cable trays, accessories and fittings are smooth, free from defects and sharp edges.	/	_____X_____ =	
DPWS-525-10	Trays are properly installed and supported as per plan.	/	_____X_____ =	
DPWS-525-11	Provision of adequate support on vertical cable runs.	/	_____X_____ =	
DPWS-525-12	Multi core cables are clamped to the racks.	/	_____X_____ =	
DPWS-525-13	Conformance to required leveling and alignment of all installed materials	/	_____X_____ =	
DPWS-525-14	Conformance to grounding connections.	/	_____X_____ =	
DPWS-525-15	Cables are adequately supported by racks and clamps, if it is not feasible to support cables by means of tray.	/	_____X_____ =	
DPWS-525-16	Approved as-built drawings maintained.	/	_____X_____ =	
		/	_____X_____ =	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_ Date: \_\_\_ / \_\_\_ / \_\_\_

Total Score (a)	CAR Total
No. of Indicators (b)	
Rate = (a) / (b)	
Rate	

### CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_

PROJECT TYPE: **Mooring Facilities  
for Power Barges**

ITEM: **Site Development and  
Rockworks**

\_\_\_\_\_ VISIT

LOCATION: \_\_\_\_\_

DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score _____ x factor	Action Monitor
<b>Item 100 Site Development</b>				
<b>Major*</b>	<i>* Refer to Section 11.4.a of the CPES Guidelines for definition of Major Defects</i>			
MFWS-100-01	Accurate establishment of Boundary of Site and Area of Development	/	_____ x _____ =	
MFWS-100-02	Precise establishment of benchmark and geodetic controls	/	_____ x _____ =	
MFWS-100-03	Conformance to the exact location of required mooring structures as shown in the drawings.	/	_____ x _____ =	
MFWS-100-04	Proper removal of structures, rocks, boulders, non-perisable solid objects and other obstructions.(If there are any.)	/	_____ x _____ =	
<b>Item 101 Breakwater, Bulkhead, Causeway, Jetty Groin, Shore, Protection Works, i.e., slope protection (riprap, rubble, stone masonry)</b>				
<b>Major*</b>	<i>* Refer to Section 11.4.a of the CPES Guidelines for definition of Major Defects</i>			
MFWS-101-01	Conformance to the cross-sectional dimensions as per design and specifications	/	_____ x _____ =	
MFWS-101-02	Conformance to the design elevations	/	_____ x _____ =	
MFWS-101-03	Conformance to the side slopes or berm as per design and specifications	/	_____ x _____ =	
MFWS-101-04	Conformance to the location as per design and specifications	/	_____ x _____ =	
MFWS-101-05	Conformance to the alignment as per design and specifications	/	_____ x _____ =	
MFWS-101-06	Conformance to the rock placement methodology and/or construction methodology	/	_____ x _____ =	
MFWS-101-07	Compliance/conformance to the designed foundation, e.g. toe	/	_____ x _____ =	
<b>Minor</b>				
MFWS-101-01	Conformance within approved/specified tolerance for cross-section	/	_____ x _____ =	
MFWS-101-02	Conformance within approved/specified tolerance for elevation	/	_____ x _____ =	
MFWS-101-08	Conformance within approved/specified tolerance for alignment	/	_____ x _____ =	
MFWS-101-09	Provision of adequate bedding as required	/	_____ x _____ =	
MFWS-101-10	Non-occurrence of displaced/sucked-out rocks	/	_____ x _____ =	
MFWS-101-11	Conformance within approved/specified tolerance of in-between gaps for rocks in-place	/	_____ x _____ =	
MFWS-101-12	Provision of settlement plates/blocks	/	_____ x _____ =	
		/	_____ x _____ =	

Was subcontractor used? If yes, name of company and owner:

\_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: / /

Total Score (a)	CAR Total
=	
No. of Indicators (b)	
=	
Rate = (a) / (b)	
=	
Rate	
=	

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_ PROJECT TYPE: **Mooring Facilities** ITEM: **Gabion/Rockworks**  
**for Power Barges**  
 \_\_\_\_\_ VISIT LOCATION: \_\_\_\_\_ DATE OF VISIT: / /

Factor : "During Construction" = 0.40; "Upon Completion" = 0.50  
 \_\_\_\_\_ VISIT LOCATION: \_\_\_\_\_ DATE OF VISIT: / /

Factor : "During Construction" = 0.40; "Upon Completion" = 0.50

INDICATORS		Results	Score _____ x factor	Action Monitor
Sub-item Code	Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).			
<b>Item 102 Gabions/Mattresses</b>				
<b>Major*</b>	<i>* Refer to Section 11.4.a of the CPES Guidelines for definition of Major Defects</i>			
MFWS-102-01	Conformance to the cross-sectional dimensions as per design and specifications	/	_____ X _____ =	
MFWS-102-02	Conformance to the design elevations	/	_____ X _____ =	
MFWS-102-03	Conformance to the location as per design and specifications	/	_____ X _____ =	
MFWS-102-04	Conformance to the alignment as per design and specifications	/	_____ X _____ =	
MFWS-102-05	Conformance to the wire mesh cage fabrication requirements (alignment, lapping, etc.)	/	_____ X _____ =	
MFWS-102-06	Proper construction methodology, e.g., placing of rock fill materials, lapping and twisting of mesh wire	/	_____ X _____ =	
MFWS-102-07	Conformance to minimum density requirements (in kg./cu.m.) for filled gabions	/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
<b>Minor</b>				
MFWS-102-01	Conformance within the approved/specified tolerance for cross-sectional dimensions	/	_____ X _____ =	
MFWS-102-02	Conformance within the approved/specified tolerance for elevations	/	_____ X _____ =	
MFWS-102-04	Conformance within the approved/specified tolerance vs. the actual alignment	/	_____ X _____ =	
MFWS-102-08	Provision of adequate bedding as required	/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____ Date: / /			No. of Indicators (b) =	
			Rate = (a) / (b) =	
			Rate =	

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_

PROJECT TYPE: **Mooring Facilities  
for Power Barges**

ITEM: **Concrete Pileworks**

\_\_\_\_\_ VISIT

LOCATION: \_\_\_\_\_

DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score _____ x factor	Action Monitor
Sub-item Code	<i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>			
<b>Item 103 Reinforced Concrete Piles</b>				
<b>Major*</b>	<i>* Refer to Section 11.4.a of the CPES Guidelines for definition of Major Defects</i>			
MFWS-103-01	Conformance to the cross-sectional dimensions as per design and specifications	/	_____ X _____ =	
MFWS-103-02	Conformance to the design length as per design and specifications	/	_____ X _____ =	
MFWS-103-03	Conformance to the minimum required embedment of spliced joint	/	_____ X _____ =	
MFWS-103-04	Use of metal collar and/or protective caps during driving	/	_____ X _____ =	
MFWS-103-05	Attainment of required pile penetration/bearing capacity	/	_____ X _____ =	
MFWS-103-06	Pile shoe is provided for each pile	/	_____ X _____ =	
MFWS-103-07	Conformance to required number of piles supplied and driven in-place	/	_____ X _____ =	
MFWS-103-08	Lifting of each pile is at designed lifting points	/	_____ X _____ =	
MFWS-103-09	Vertical piles are driven plumb	/	_____ X _____ =	
MFWS-103-10	Batter piles are driven in accordance with the designed slope	/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
<b>Minor</b>				
MFWS-103-01	Conformance within the approved/specified tolerance for dimension	/	_____ X _____ =	
MFWS-103-02	Conformance within the approved/specified tolerance for pile length	/	_____ X _____ =	
MFWS-103-09	Conformance within the approved/specified tolerance for plumbness/verticality	/	_____ X _____ =	
MFWS-103-10	Conformance within the approved/specified tolerance for slope of the batter piles	/	_____ X _____ =	
MFWS-103-11	Proper graduation/markings	/	_____ X _____ =	
MFWS-103-12	Steel lifting hooks are cut-off and applied with approved type of sealant	/	_____ X _____ =	
MFWS-103-13	Alignment of the piles driven in-place are within the approved/specified tolerance	/	_____ X _____ =	
MFWS-103-14	Pile cut-off elevations are chipped-off properly. Free from excessive chipping below the cut-off elevations	/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	

Was subcontractor used? If yes, name of company and owner:

\_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: / /

Total Score (a)	CAR Total
=	
No of Indicators (b)	
=	
Rate = (a) / (b)	
=	
Rate	
=	

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_

PROJECT TYPE: **Mooring Facilities  
for Power Barges**

ITEM: **Timber Pileworks**

\_\_\_\_\_ VISIT

LOCATION: \_\_\_\_\_

DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score _____ x factor	Action Monitor
Sub-item Code	Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).			
<b>Item 104 Timber/Wooden Piles</b>				
<b>Major</b>	<i>* Refer to Section 11.4.a of the CPES Guidelines for definition of Major Defects</i>			
MFWS-104-01	Conformance to the cross-sectional dimensions as per design and specifications	/	_____ X _____ =	
MFWS-104-02	Conformance to the design length as per design and specifications	/	_____ X _____ =	
MFWS-104-03	Use of metal collar and/or protective caps during driving	/	_____ X _____ =	
MFWS-104-04	Attainment of required pile penetration/bearing capacity	/	_____ X _____ =	
MFWS-104-05	Conformance to the required number of piles supplied and driven in-place	/	_____ X _____ =	
MFWS-104-06	Lifting is at designated lifting points of each pile	/	_____ X _____ =	
MFWS-104-07	Vertical piles are driven plumb	/	_____ X _____ =	
MFWS-104-08	Batter piles are driven in accordance with the designed slope	/	_____ X _____ =	
MFWS-104-09	No massive splitting is visible perpendicular to the pile length	/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
<b>Minor</b>				
MFWS-104-01	Conformance within the approved/specified tolerance for dimension	/	_____ X _____ =	
MFWS-104-02	Conformance within the approved/specified tolerance for pile length	/	_____ X _____ =	
MFWS-104-07	Conformance within the approved/specified tolerance for plumbness/verticality	/	_____ X _____ =	
MFWS-104-08	Conformance within the approved/specified tolerance for slope of the batter piles	/	_____ X _____ =	
MFWS-104-10	Proper graduation/markings	/	_____ X _____ =	
MFWS-104-11	Alignment of the piles driven in-place are within the approved/specified tolerance	/	_____ X _____ =	
MFWS-104-12	Pile butt is free from brooming	/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	

Was subcontractor used? If yes, name of company and owner:

\_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: / /

Total Score (a) =	CAR Total
No. of Indicators (b) =	
Rate = (a) / (b) =	
Rate =	

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_

PROJECT TYPE: **Mooring Facilities  
for Power Barges**

ITEM: **Steel Pileworks**

\_\_\_\_\_ VISIT

LOCATION: \_\_\_\_\_

DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score _____ x factor	Action Monitor
Sub-item Code	Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).			
<b>Item 105 Steel Piles</b>				
<b>Major*</b>	<i>* Refer to Section 11.4.a of the CPES Guidelines for definition of Major Defects</i>			
MFWS-105-01	Conformance to the cross-sectional dimensions as per design and specifications	/	_____ X _____ =	
MFWS-105-02	Conformance to the design length as per design and specifications	/	_____ X _____ =	
MFWS-105-03	Use of metal collar and/or protective caps during driving	/	_____ X _____ =	
MFWS-105-04	Attainment of required pile penetration/bearing capacity	/	_____ X _____ =	
MFWS-105-05	Conformance to the splicing requirements as per design and specifications	/	_____ X _____ =	
MFWS-105-06	Conformance to required number of piles supplied and driven in-place	/	_____ X _____ =	
MFWS-105-07	Lifting of each pile is at designed lifting points	/	_____ X _____ =	
MFWS-105-08	Vertical piles are driven plumb	/	_____ X _____ =	
MFWS-105-09	Batter piles are driven in accordance with the specified slope	/	_____ X _____ =	
MFWS-105-10	Driven piles are free from massive dents or damages	/	_____ X _____ =	
MFWS-105-11	Each pile is properly applied with protective coating as required	/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
<b>Minor</b>				
MFWS-105-01	Conformance within the approved/specified tolerance for dimension	/	_____ X _____ =	
MFWS-105-02	Conformance within the approved/specified tolerance for pile length	/	_____ X _____ =	
MFWS-105-08	Conformance within the approved/specified tolerance for plumbness/verticality	/	_____ X _____ =	
MFWS-105-09	Conformance within the approved/specified tolerance for slope of the batter piles	/	_____ X _____ =	
MFWS-105-12	Proper graduation/markings	/	_____ X _____ =	
MFWS-105-13	Alignment of the piles driven in-place are within the approved/specified tolerance	/	_____ X _____ =	
MFWS-105-14	Pile cut-off are properly cut with appropriate cutting outfits at the established pile cut-off elevations	/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	

Was subcontractor used? If yes, name of company and owner:

\_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: / /

Total Score (a)	CAR Total
=	
No. of Indicators (b)	
=	
Rate = (a) / (b)	
=	
Rate	
=	

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_

PROJECT TYPE: **Mooring Facilities  
for Power Barges**

ITEM: **Dolphins and Bitts/  
Bollards**

\_\_\_\_\_ VISIT

LOCATION: \_\_\_\_\_

DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score _____ x factor	Action Monitor
Sub-item Code	Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).			
<b>Item 106 Breasting and Mooring Dolphins</b>				
<b>Major</b>	<i>* Refer to Section 11.4.a of the CPES Guidelines for definition of Major Defects</i>			
MFWS-106-01	Adherence to proper construction methodology.	/	_____ X _____ =	
MFWS-106-02	Conformance to exact location and relative position with reference to the power barge as shown in the site development plan.	/	_____ X _____ =	
MFWS-106-03	Conformance to the required size and number of piles driven.	/	_____ X _____ =	
MFWS-106-04	Conformance to the correct section, dimensions and elevation of pile caps.	/	_____ X _____ =	
		/	_____ X _____ =	
<b>Minor</b>				
MFWS-106-05	Conformance within the approved/specified tolerance for dimension	/	_____ X _____ =	
MFWS-106-06	Conformance within the approved/specified tolerance for plumbness/verticality	/	_____ X _____ =	
MFWS-106-07	Conformance within the approved/specified tolerance for slope of the batter piles	/	_____ X _____ =	
		/	_____ X _____ =	
<b>Item 107 Bitts/Cleats/Bollards</b>				
<b>Major</b>	<i>* Refer to Section 11.4.a of the CPES Guidelines for definition of Major Defects</i>			
MFWS-107-01	Conformance to the required supply and installation of bitts, cleats and bollards as per plans and specifications	/	_____ X _____ =	
MFWS-107-02	Conformance to the required number of anchor bolts, nuts and washers in accordance with the plans and specifications	/	_____ X _____ =	
MFWS-107-03	Conformance to pedestal/foundation requirements in accordance with the plans and specifications	/	_____ X _____ =	
MFWS-107-04	Conformance to the anchoring/embedment requirements of the anchor bolts	/	_____ X _____ =	
MFWS-107-05	Conformance to the required number and location of bitts, cleats and bollards as per plans and specifications	/	_____ X _____ =	
MFWS-107-06	Conformance to the type and installation requirements for sealers of anchor bolts and nuts	/	_____ X _____ =	
MFWS-107-07	Non-occurrence of corrosion	/	_____ X _____ =	
		/	_____ X _____ =	
<b>Minor</b>				
MFWS-107-03	Conformance to pedestal/foundation within the approved/specified tolerances	/	_____ X _____ =	
MFWS-107-07	Non-occurrence of rust	/	_____ X _____ =	
MFWS-107-08	Supplied/installed mooring fixtures and accessories within the approved/specified tolerances	/	_____ X _____ =	
		/	_____ X _____ =	

Was subcontractor used? If yes, name of company and owner:

\_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: / /

Total Score (a)	CAR Total
=	
No. of Indicators (b)	
=	
Rate = (a) / (b)	
=	
Rate	
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**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_

PROJECT TYPE: **Mooring Facilities  
for Power Barges**

ITEM: **Take- Off Structures  
and Fenders**

\_\_\_\_\_ VISIT

LOCATION: \_\_\_\_\_

DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score _____ x factor	Action Monitor
Sub-item Code	Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).			
<b>Item 108 Take-off Structures</b>				
<b>Major</b>	<i>* Refer to Section 11.4.a of the CPES Guidelines for definition of Major Defects</i>			
MFWS-108-01	Conformance to the design configuration dimensions and elevations of the structures.	/	_____ x _____ =	
MFWS-108-02	Conformance to the correct section, dimensions and elevation of pile caps.	/	_____ x _____ =	
MFWS-108-03	Conformance to the design plumbness and inclination (batter) of the driven piles shown in the drawings.	/	_____ x _____ =	
		/	_____ x _____ =	
<b>Minor</b>				
MFWS-108-04	Conformance within the approved/specified tolerance for dimension	/	_____ x _____ =	
MFWS-108-05	Conformance within the approved/specified tolerance for plumbness/verticality	/	_____ x _____ =	
MFWS-108-06	Conformance within the approved/specified tolerance for slope and batter.	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
<b>Item 109 Rubber Fender</b>				
<b>Major*</b>	<i>* Refer to Section 11.4.a of the CPES Guidelines for definition of Major Defects</i>			
MFWS-109-01	Conformance with the cross-sectional dimensions per design and specifications	/	_____ x _____ =	
MFWS-109-02	Conformance to the required diameter/ length as per design and specifications	/	_____ x _____ =	
MFWS-109-03	Free from damages such as chipped-off edges, etc. during transport and handling	/	_____ x _____ =	
MFWS-109-04	Installation in accordance with the locations as per design and specifications	/	_____ x _____ =	
MFWS-109-05	Installation in accordance with the designed elevation	/	_____ x _____ =	
MFWS-109-06	Proper alignment of installed fenders	/	_____ x _____ =	
MFWS-109-07	Complete installation of fixtures and accessories	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____			No. of Indicators (b) =	
Date: / /			Rate = (a) / (b) =	
			Rate =	

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_

PROJECT TYPE: **Mooring Facilities  
for Power Barges**

ITEM: **Reclamation/Dredging  
/Form Works**

\_\_\_\_\_ VISIT

LOCATION: \_\_\_\_\_

DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score _____ x factor	Action Monitor
Sub-item Code	<i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>			
<b>Item 110 Reclamation Works</b>				
Major*	* Refer to Section 11.4.a of the CPES Guidelines for definition of Major Defects			
MFWS-110-01	Excavation/displacement of unsuitable materials to required depth	/	_____ x _____ =	
MFWS-110-02	Conformance to lines and grades as per plans and specifications	/	_____ x _____ =	
MFWS-110-03	Use of suitable filling materials	/	_____ x _____ =	
MFWS-110-04	Conformance to the required compaction as per specifications	/	_____ x _____ =	
MFWS-110-05	Unsuitable materials are properly disposed to the approved disposal sites	/	_____ x _____ =	
MFWS-110-06	Installed approved surcharge materials, drain materials	/	_____ x _____ =	
MFWS-110-07	Provision of drainage for surface run-off	/	_____ x _____ =	
		/	_____ x _____ =	
<b>Item 111 Dredging Works</b>				
Major*	* Refer to Section 11.4.a of the CPES Guidelines for definition of Major Defects			
MFWS-111-01	Conformance to the dredging limits or areas to be dredged	/	_____ x _____ =	
MFWS-111-02	Conformance to the dredged depth as per plans and specifications	/	_____ x _____ =	
MFWS-111-03	Conformance to the appropriate dredging and support equipments as per specifications	/	_____ x _____ =	
MFWS-111-04	Proper disposal of dredged materials to the designated disposal area/site	/	_____ x _____ =	
Minor				
MFWS-111-02	Conformance to the allowable or approved tolerance for dredged depth	/	_____ x _____ =	
MFWS-111-05	Marking buoys evident on designated areas to be dredged	/	_____ x _____ =	
<b>Item 112 Form Works</b>				
Major*	* Refer to Section 11.4.a of the CPES Guidelines for definition of Major Defects			
MFWS-112-01	Conformance to the required type of formworks in accordance with approved shop/working drawings	/	_____ x _____ =	
MFWS-112-02	Forms coated with mould oil as required	/	_____ x _____ =	
MFWS-112-03	Sufficient bracing/support provided	/	_____ x _____ =	
MFWS-112-04	No loose knots, splits, cracks, etc.	/	_____ x _____ =	
MFWS-112-05	Provision of required concrete or steel spacer	/	_____ x _____ =	
MFWS-112-06	Conformance to dimensions, location, plumbness and alignment	/	_____ x _____ =	
MFWS-112-07	Provision of camber during construction stage	/	_____ x _____ =	
		/	_____ x _____ =	

Was subcontractor used? If yes, name of company and owner:

\_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: / /

Total Score (a)	CAR Total
=	
No. of Indicators (b)	
=	
Rate = (a) / (b)	
=	
Rate	
=	

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_

PROJECT TYPE: **Mooring Facilities  
for Power Barges**

ITEM: **Reinforcing Bars and  
Concrete Works**

\_\_\_\_\_ VISIT

LOCATION: \_\_\_\_\_

DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

<b>Item 113 Reinforcing Steel Bars (including tendons for Pre/Post-stressed concrete)</b>				
<b>Major*</b>	* Refer to Section 11.4.a of the CPES Guidelines for definition of Major Defects			
MFWS-113-01	Conformance of in-placed materials according to plans & specifications	/	= <u>    X    </u>	
MFWS-113-02	Non-appearance of corrosion on steel reinforcement	/	= <u>    X    </u>	
<b>Minor</b>				
MFWS-113-02	Non-appearance of rust on steel reinforcement	/	= <u>    X    </u>	
MFWS-113-03	Conformance to approved bar cutting schedule, proper spacing, anchorage, adequate reinforcements	/	= <u>    X    </u>	
MFWS-113-04	No sign of oil, paint and other deleterious materials on reinforcements	/	= <u>    X    </u>	
MFWS-113-05	Conformance to jointing requirement, i.e. splicing, welding, etc.	/	= <u>    X    </u>	
MFWS-113-06	Conformance to the required installation of ducttube e.g. (spacing, location and distance)	/	= <u>    X    </u>	
MFWS-113-07	Conformance to the required steel plate and lock	/	= <u>    X    </u>	
MFWS-113-08	Conformance to the number of bundles of tendons and number of pieces of bundles of tendons	/	= <u>    X    </u>	
		/	= <u>    X    </u>	
<b>Item 114 Concrete Works</b>				
<b>Major*</b>	* Refer to Section 11.4.a of the CPES Guidelines for definition of Major Defects			
MFWS-114-01	No through cracks	/	= <u>    X    </u>	
MFWS-114-02	No honeycomb or spalling (no exposed rebars/aggregates)	/	= <u>    X    </u>	
MFWS-114-03	No chipping off of concrete cover	/	= <u>    X    </u>	
MFWS-114-04	Proper and adequate vibration	/	= <u>    X    </u>	
MFWS-114-05	Conformance to finishing/plastering requirement	/	= <u>    X    </u>	
MFWS-114-06	Conformance to the required concrete cover for rebars	/	= <u>    X    </u>	
MFWS-114-07	Conformance to the batching, mixing, transporting and discharge time requirements	/	= <u>    X    </u>	
MFWS-114-08	Conformance to placing requirement that will not result segregation of aggregates, cold joints and misalignment	/	= <u>    X    </u>	
MFWS-114-09	Conformance to the jointing requirement	/	= <u>    X    </u>	
MFWS-114-10	Proper curing	/	= <u>    X    </u>	
MFWS-114-11	Conformance to required dimensions, lines, grades/elevation locations and crown (for pier)	/	= <u>    X    </u>	
MFWS-114-12	Conformance to the required quality of concrete mix	/	= <u>    X    </u>	
<b>Minor</b>				
MFWS-114-02	No honeycomb or spalling	/	= <u>    X    </u>	
MFWS-114-13	No sagging or bulging	/	= <u>    X    </u>	
MFWS-114-14	No water ponding on bearing plates	/	= <u>    X    </u>	
MFWS-114-15	Conformance to elevation of expansion joints	/	= <u>    X    </u>	

Was subcontractor used? If yes, name of company and owner:  
\_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: / /

Total Score (a)	CAR Total
No. of Indicators (b)	
Rate = (a) / (b)	
=	
Rate	
=	

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_

PROJECT TYPE: **Mooring Facilities  
for Power Barges**

ITEM: **Catwalk/Piping/  
Painting Works**

\_\_\_\_\_ VISIT

LOCATION: \_\_\_\_\_

DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS				
Sub-item Code	Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).	Results	Score _____ x factor	Action Monitor
<b>Item 115 Catwalk/Stair Landing/Ladder</b>				
<b>Major*</b>	<i>* Refer to Section 11.4.a of the CPES Guidelines for definition of Major Defects</i>			
MFWS-115-01	Conformance to the correct dimensions as per design and specifications	/	_____ X _____ =	
MFWS-115-02	Conformance to the required number of steps and risers	/	_____ X _____ =	
MFWS-115-03	Conformance as to the correct opening of wire mesh and the size of wire and GI Pipe handrails as shown in the drawings and in the specification.	/	_____ X _____ =	
<b>Minor</b>				
MFWS-115-01	Conformance within the approved/specified tolerance for dimensions	/	_____ X _____ =	
	<b>For reinforced concrete structure: refer to Common Items of Work - MFWS 112, 113 and 114</b>	/	_____ X _____ =	
		/	_____ X _____ =	
<b>Item 116 Piping Works</b>				
<b>Major*</b>	<i>* Refer to Section 11.4.a of the CPES Guidelines for definition of Major Defects</i>			
MFWS-116-01	Conformance to the correct alignment, position, location and elevation.	/	_____ X _____ =	
MFWS-116-02	Conformance to the required height and dimensions as indicated in the drawings and specifications.	/	_____ X _____ =	
MFWS-116-03	Conformance to the pedestal requirements in accordance with the plans and specifications	/	_____ X _____ =	
MFWS-116-04	Conformance to the required number of anchor bolts and their embedment length as indicated in the drawings and specifications.	/	_____ X _____ =	
MFWS-116-05	Conformance to jointing and welding requirements in accordance with the plans and specifications	/	_____ X _____ =	
<b>Minor</b>				
MFWS-116-01	Conformance within the approved/specified tolerance for alignment and locations	/	_____ X _____ =	
		/	_____ X _____ =	
<b>Item 117 Painting Works</b>				
<b>Major*</b>	<i>* Refer to Section 11.4.a of the CPES Guidelines for definition of Major Defects</i>			
MFWS-117-01	Surface prepared according to specifications	/	_____ X _____ =	
MFWS-117-02	Required neutralizers, etc. applied	/	_____ X _____ =	
MFWS-117-03	Applied paint appropriate to the surface	/	_____ X _____ =	
MFWS-117-04	Specified number of coats applied	/	_____ X _____ =	
MFWS-117-05	Surfaces evenly painted, proper opacity	/	_____ X _____ =	
MFWS-117-06	No discoloration and peeling-off of paint	/	_____ X _____ =	
MFWS-117-07	Paints conform to specification/requirements	/	_____ X _____ =	
MFWS-117-08	Surface properly applied with putty/patching compound	/	_____ X _____ =	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____			No. of Indicators (b) =	
Date: / /			Rate = (a) / (b) =	
			Rate =	

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_

PROJECT TYPE: **Mooring Facilities  
for Power Barges**

ITEM: **Electrical Works**

\_\_\_\_\_ VISIT

LOCATION: \_\_\_\_\_

DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score _____ x factor	Action Monitor
Sub-item Code	<i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>			
<b>Item 118 Electrical Works</b>				
<b>Major*</b>	* Refer to Section 11.4.a of the CPES Guidelines for definition of Major Defects			
MFWS-118-01	Conduits installed according to plans and laid out according to approved construction drawings	/	_____ X _____ =	
MFWS-118-02	Pipes, hangers, boxes, gutters, cable trays properly installed and painted, sharp edges of pipes removed	/	_____ X _____ =	
MFWS-118-03	Pipes properly bended	/	_____ X _____ =	
MFWS-118-04	Allowable number of wires in a pipe properly observed	/	_____ X _____ =	
MFWS-118-05	Splicing and connection provided with adequate rubber and pvc tapes	/	_____ X _____ =	
MFWS-118-06	Adequate length of wire provided for termination and splicing	/	_____ X _____ =	
MFWS-118-07	Wire color coding complied and observed	/	_____ X _____ =	
MFWS-118-08	Wire insulation not damaged during pulling	/	_____ X _____ =	
MFWS-118-09	Adequate number, correct size and gauge of pull boxes installed and properly covered	/	_____ X _____ =	
MFWS-118-10	Boxes and enclosures provided according to intended purpose	/	_____ X _____ =	
MFWS-118-11	Fittings and accessories provided and properly installed	/	_____ X _____ =	
MFWS-118-12	Block-outs and sleeves provided and properly secured	/	_____ X _____ =	
MFWS-118-13	Cable ties provided	/	_____ X _____ =	
MFWS-118-14	Blank covers provided for outlets and switches that are not utilized	/	_____ X _____ =	
MFWS-118-15	Use of tools and equipment properly observed	/	_____ X _____ =	
MFWS-118-16	Lighting fixtures, panel boards, circuit breakers, etc. properly installed and free from any form of damages	/	_____ X _____ =	
MFWS-118-17	Meager, clamp, phase sequence tests and load test conducted	/	_____ X _____ =	
MFWS-118-18	Shop drawings, as-built plan maintained	/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	

Was subcontractor used? If yes, name of company and owner:

\_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: / /

Total Score (a)	CAR Total
No. of Indicators (b)	
Rate = (a) / (b)	
=	
Rate	
=	

**CPES CHECKLIST FOR WORKMANSHIP**

PROJECT ID/NO.: \_\_\_\_\_

PROJECT TYPE: **Mooring Facilities  
for Power Barges**

ITEM: **Grounding System**

\_\_\_\_\_ VISIT

LOCATION: \_\_\_\_\_

DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score _____ x factor	Action Monitor
Sub-item Code	<i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>			
<b>Item 119 Grounding System</b>				
<b>Major*</b>	* Refer to Section 11.4.a of the CPES Guidelines for definition of Major Defects			
MFWS-119-01	Installed according to approved plans and specifications	/	_____ X _____ =	
MFWS-119-02	Grounding connections are properly welded/bolted	/	_____ X _____ =	
MFWS-119-03	Conducted and passed all required ground resistance tests.	/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	
		/	_____ X _____ =	

Was subcontractor used? If yes, name of company and owner:  
\_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: / /

Total Score (a)	CAR Total
No. of Indicators (b)	
Rate = (a) / (b)	
=	
Rate	
=	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_ PROJECT TYPE: Site Development  
 \_\_\_\_\_ VISIT LOCATION/LOT: \_\_\_\_\_

ITEM:  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score _____ x factor	Action Monitor
<b>Item 100 Clearing and Grubbing</b>				
SDWS-100-02	Conformance to the approved/specified tolerance for extent of clearing and grubbing work.	/	_____ x _____ =	
		/	_____ x _____ =	
<b>Item 101 Excavation</b>				
SDWS-101-01	Conformance to the approved/specified tolerances for lines, grades, dimensions, elevations	/	_____ x _____ =	
SDWS-101-02	Conformance to the excavation support systems, e.g. angle of repose, bracing, shoring, sheet piling	/	_____ x _____ =	
<b>Item 102 Earthfill</b>				
SDWS-102-01	Conformance of in-placed materials to plans and specifications	/	_____ x _____ =	
SDWS-102-02	Conformance to the required thickness of fill or backfill per layer	/	_____ x _____ =	
SDWS-102-03	Conformance to the required density or degree of compaction	/	_____ x _____ =	
<b>Item 103 Planting of Trees and Shrubs</b>				
SDWS-103-01	Conformance to the specified plant specie, variety and culture.	/	_____ x _____ =	
SDWS-103-02	Conformance to the specified topsoil/ garden soil and other soil mixtures and fertilizers.	/	_____ x _____ =	
SDWS-103-03	Conformance to the required/ specified supports (e.g. stakes, guy wires, temporary fence, etc.)	/	_____ x _____ =	
SDWS-103-04	Conformance to the specified quantity, spacings and minimum size (during delivery and nursery stage).	/	_____ x _____ =	
SDWS-103-05	Conformance to the specified planting methodology and handling.	/	_____ x _____ =	
SDWS-103-06	Plants are free of damages, disease, insect pests and dying branches, leaves and branch tips).	/	_____ x _____ =	
		/	_____ x _____ =	

Was subcontractor used? If yes, name of company and owner:

\_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: / /

Total Score (a) =	CAR Total
No. of Indicators (b) =	
Rate= (a) / (b) =	
Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Site Development  
 LOCATION: \_\_\_\_\_

ITEM: Common Items of Work  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score _____ x factor =	Action Monitor
<b>Item 200 Formworks</b>				
SDWS-200-01	Conformance to the required type of formworks in accordance with approved shop/working drawings	/	_____ x _____ =	
SDWS-200-02	Forms coated with mould oil as required	/	_____ x _____ =	
SDWS-200-03	Sufficient bracing/support provided	/	_____ x _____ =	
SDWS-200-04	No loose knots, splits, cracks, etc.	/	_____ x _____ =	
SDWS-200-05	Provision of required concrete or steel spacer	/	_____ x _____ =	
SDWS-200-06	Conformance to dimensions, location, plumbness and alignment	/	_____ x _____ =	
SDWS-200-07	No use of dilapidated/salvage forms (use more than 3x)	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
<b>Item 201 Reinforcing Steel Bars (including tendons for Pre/Post-Stressed concrete)</b>				
Major*	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
SDWS-201-01	Conformance of in-placed materials to plans & specifications	/	_____ x _____ =	
SDWS-201-02	Non-appearance of corrosion on steel reinforcement	/	_____ x _____ =	
Minor				
SDWS-201-02	Non-appearance of rust on steel reinforcement	/	_____ x _____ =	
SDWS-201-03	Conformance to approved bar cutting schedule, proper spacing, anchorage, adequate reinforcements	/	_____ x _____ =	
SDWS-201-04	No sign of oil, paint and other deleterious materials on reinforcements	/	_____ x _____ =	
SDWS-201-05	Conformance to jointing requirement, i.e. splicing, welding, etc.	/	_____ x _____ =	
SDWS-201-06	Conformance to proper bending of stirrups	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a)	CAR Total
Entered by: _____ Date: / /			No. of Indicators (b)	
			Rate = (a) / (b) =	
			Rate =	



## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Site Development  
 LOCATION: \_\_\_\_\_

ITEM: Common Items of Work  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score _____ x factor	Action Monitor
<b>Item 300 Concrete Works</b>				
<b>Major*</b>	* Refer to Section 11.4a of the CPES Guidelines for definition of Major Defects			
SDWS-300-01	No through cracks	/	_____ x _____ =	
SDWS-300-02	No honeycomb (no exposed rebars/aggregates)	/	_____ x _____ =	
SDWS-300-03	No sagging or bulging (if tolerance exceeded)	/	_____ x _____ =	
SDWS-300-04	Conformance to required quality of concrete mix	/	_____ x _____ =	
<b>Minor</b>				
SDWS-300-01	No cracks	/	_____ x _____ =	
SDWS-300-02	No honeycomb	/	_____ x _____ =	
SDWS-300-03	No sagging or bulging	/	_____ x _____ =	
SDWS-300-05	Proper and adequate vibration	/	_____ x _____ =	
SDWS-300-06	Conformance to finishing/plastering requirement	/	_____ x _____ =	
SDWS-300-07	No chipping off of concrete cover	/	_____ x _____ =	
SDWS-300-08	Conformance to the required concrete cover for rebars	/	_____ x _____ =	
SDWS-300-09	Conformance to the batching, mixing, transporting and discharge time requirements	/	_____ x _____ =	
SDWS-300-10	Conformance to placing requirement that will not result segregation of aggregates, cold joints and misalignment	/	_____ x _____ =	
SDWS-300-11	Conformance to the jointing requirement	/	_____ x _____ =	
SDWS-300-12	Proper curing	/	_____ x _____ =	
SDWS-300-13	Conformance to required dimensions, lines, grades/elevation, and location	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a)	CAR Total
Entered by: _____ Date: / /			No. of Indicators (b)	
			Rate = (a) / (b)	
			=	
			Rate	
			=	



## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Site Development  
 LOCATION: \_\_\_\_\_

ITEM:  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score _____ x factor =	Action Monitor
<b>Item 400 Paver Blocks/ Concrete Blocks</b>				
SDWS-400-01	Installed blocks free from chipping, cracks or any form of damages and discoloration.	/	_____ x _____ =	
SDWS-400-02	Conformance to specified sand bedding or compacted soil or base course.	/	_____ x _____ =	
SDWS-400-03	Joints are perfectly aligned and consistent	/	_____ x _____ =	
SDWS-400-04	Blocks are evenly levelled to a tolerable extent	/	_____ x _____ =	
SDWS-400-05	Conformance to specified perforation and water absorption method.	/	_____ x _____ =	
SDWS-400-06	Block color are consistent with each other.	/	_____ x _____ =	
		/	_____ x _____ =	
<b>Item 401 Stamped Concrete</b>				
SDWS-401-01	Adherence to the methodology and preparation.	/	_____ x _____ =	
SDWS-401-02	Conformance with the design layout, pattern and color scheme.	/	_____ x _____ =	
SDWS-401-03	Conformance with the specified compaction and base course.	/	_____ x _____ =	
SDWS-401-04	Free from any form of damages	/	_____ x _____ =	
SDWS-401-05	Concrete material conform to specification and mixture/ proportion as per plan.	/	_____ x _____ =	
		/	_____ x _____ =	
<b>Item 402 Grass Pavers</b>				
SDWS-402-01	Installed pavers free from chipping, cracks or any form of damages and discoloration.	/	_____ x _____ =	
SDWS-402-02	Conformance to specified sand bedding or compacted soil or base course.	/	_____ x _____ =	
SDWS-402-03	Joints are perfectly aligned and consistent	/	_____ x _____ =	
SDWS-402-04	Pavers are evenly levelled to a tollerable extent	/	_____ x _____ =	
SDWS-402-05	Pavers color are consistent with each other	/	_____ x _____ =	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____			No. of Indicators (b) =	
Date: / /			Rate = (a) / (b) =	
			Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Site Development  
 LOCATION: \_\_\_\_\_

ITEM:  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score _____ x factor	Action Monitor
<b>Item 403 Trowelled Finish/ Broomed Finish</b>				
SDWS-403-01	Aherence to the desired roughness and consistency specified design pattern.	/	_____ x _____ =	
SDWS-403-02	No cracks, discoloration and any form of damages.	/	_____ x _____ =	
SDWS-403-03	No sign of deflection/settlement/ water ponding.	/	_____ x _____ =	
SDWS-403-04	Adherence to the specified/ approved sand/ gravel base or sub-base course.	/	_____ x _____ =	
		/	_____ x _____ =	
<b>Item 404 Pebble Wash-out</b>				
SDWS-404-01	Installed pebbles are evenly distributed and selected according to size and color.	/	_____ x _____ =	
SDWS-404-02	No cracks, discoloration and any form of damages.	/	_____ x _____ =	
SDWS-404-03	Installed pebbles surface are thoroughly clean from cement or grout stains.	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
<b>Item 405 Decorative Boulders</b>				
SDWS-405-01	Conforms to approved/specified size, shape and color/ shade according to plan.	/	_____ x _____ =	
SDWS-405-02	Conforms to the approved design scheme/layout/pattern.	/	_____ x _____ =	
SDWS-405-03	No cracks, chipping-off or any form of damages.	/	_____ x _____ =	
SDWS-405-04	Correctly installed and put in place with stability, free of any movement.	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____ Date: / /			No. of Indicators (b) =	
			Rate = (a) / (b) =	
			Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Site Development  
 LOCATION: \_\_\_\_\_

ITEM:  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

INDICATORS		Results	Score _____ x factor	Action Monitor
Sub-item Code	<i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>			
<b>Item 406 Garden Tile/ Stone Finish</b>				
SDWS-406-01	Installed tiles free from chipping, cracks or any form of damages	/	_____ X _____ =	
SDWS-406-02	Joints are perfectly aligned and consistent with skirting tiles.	/	_____ X _____ =	
SDWS-406-03	Tiles are evenly placed/layed according to specified design pattern and color scheme.	/	_____ X _____ =	
SDWS-406-04	Installed tiles are true to alignment and properly levelled.	/	_____ X _____ =	
SDWS-406-05	Adherence to the specified/ approved sand/ gravel base or sub-base course.	/	_____ X _____ =	
		/	_____ X _____ =	
<b>Item 407 Wall Bricks/ Stone Finish</b>				
SDWS-407-01	Smooth and evenly bonded to wall.	/	_____ X _____ =	
SDWS-407-02	Free from cracks, chips, stains, discoloration and any form of damages.	/	_____ X _____ =	
SDWS-407-03	Installed according to specified size, shape, color/ shade type and design pattern.	/	_____ X _____ =	
<b>Item 408 Plaster Finish</b>				
SDWS-408-01	Conformance to designed mixture of plastering materials.	/	_____ X _____ =	
SDWS-408-02	Conformance to specified method of application and thickness.	/	_____ X _____ =	
SDWS-408-03	True to alignment, plumbness and smoothness.	/	_____ X _____ =	
SDWS-408-04	Free from any form of damages e.g. cracks, peeled-off plaster finish	/	_____ X _____ =	
<b>Item 409 Cladding</b>				
SDWS-409-01	Panels properly anchored/ bonded to wall.	/	_____ X _____ =	
SDWS-409-02	True to alignment, plumbness and smoothness.	/	_____ X _____ =	
SDWS-409-03	Free from any form of damages	/	_____ X _____ =	
SDWS-409-04	Panels conforms to construction procedure/ methodology.	/	_____ X _____ =	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____ Date: / /			No. of Indicators (b) =	
			Rate = (a) / (b) =	
			Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Site Development  
 LOCATION: \_\_\_\_\_

ITEM:  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score _____ x factor	Action Monitor
<b>Item 500 Painting</b>				
SDWS-500-01	Surface prepared according to paint specification.	/	_____X_____	
SDWS-500-02	Required neutralizers, and paint preparation materials applied.	/	_____X_____	
SDWS-500-03	Surface are properly applied with putty/patching compound.	/	_____X_____	
SDWS-500-04	Applied paint appropriate to the surface.	/	_____X_____	
SDWS-500-05	Specified number of coats applied.	/	_____X_____	
SDWS-500-06	Surfaces evenly painted, proper opacity.	/	_____X_____	
SDWS-500-07	No discoloration and peeling-off of paint.	/	_____X_____	
SDWS-500-08	Paints conform to specification as to type and color.	/	_____X_____	
		/	_____X_____	
		/	_____X_____	
		/	_____X_____	
		/	_____X_____	
		/	_____X_____	
		/	_____X_____	
		/	_____X_____	
		/	_____X_____	
		/	_____X_____	
		/	_____X_____	
		/	_____X_____	
		/	_____X_____	
		/	_____X_____	
		/	_____X_____	

Was subcontractor used? If yes, name of company and owner:  
 \_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_ Date: / /

Total Score (a) =	CAR Total
No. of Indicators (b) =	
Rate = (a) / (b) =	
Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Site Development  
 LOCATION: \_\_\_\_\_

ITEM:  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score _____ x factor =	Action Monitor
<b>Item 600 Play Facilities</b>				
SDWS-600-01	Conformance to the specified type, dimensions, quantities, color, etc. according to plans.	/	_____ x _____ =	
SDWS-600-02	Installed/ fixed in place according to plan.	/	_____ x _____ =	
SDWS-600-03	Free from any form of unsafe and dangerous connections, installations, etc.	/	_____ x _____ =	
SDWS-600-04	Free from any form of damages.	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
<b>Item 601 Trellis/ Gazebo</b>				
SDWS-601-01	Conformance to the specified type, dimensions, quantities, color, etc. according to plans.	/	_____ x _____ =	
SDWS-601-02	Installed/ fixed in place according to plan.	/	_____ x _____ =	
SDWS-601-03	Free from any form of unsafe and dangerous connections, installations, etc.	/	_____ x _____ =	
SDWS-601-04	Free from any form of damages.	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
<b>Item 602 Moulding/ Moulding Strips</b>				
SDWS-602-01	True to size, design profile, color, texture, material, elevation and alignment.	/	_____ x _____ =	
SDWS-602-02	Installed materials are free from any form of damages	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Total Score (a) =	CAR Total
Entered by: _____			No. of Indicators (b) =	
Date: / /			Rate = (a) / (b) =	
			Rate =	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Site Development  
 LOCATION: \_\_\_\_\_

ITEM:  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <i>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</i>	Results	Score _____ x factor =	Action Monitor
<b>Item 603 Entrance Gate</b>				
SDWS-603-01	True to alignment, plumbness in conformance to the approved/specified tolerance	/	_____ x _____ =	
SDWS-603-02	Gates are properly fixed to wall or posts and are welded or fastened accordingly.	/	_____ x _____ =	
SDWS-603-03	Gate accessories installed according to plans, e.g. locksets, hinges	/	_____ x _____ =	
SDWS-603-04	Free from any form of damages	/	_____ x _____ =	
SDWS-603-05	Gate conforms to specification requirements as to material, dimensions and design motiff according to plans.	/	_____ x _____ =	
		/	_____ x _____ =	
<b>Item 604 Park Fence</b>				
SDWS-604-01	True to alignment, plumbness in conformance to the approved/specified tolerance	/	_____ x _____ =	
SDWS-604-02	Fences are properly fixed to wall or posts and are welded or fastened accordingly.	/	_____ x _____ =	
SDWS-604-03	Fence accessories installed according to plans.	/	_____ x _____ =	
SDWS-604-04	Free from any form of damage	/	_____ x _____ =	
SDWS-604-05	Fence conforms to specification requirements as to material, dimensions and design motiff according to plans.	/	_____ x _____ =	
		/	_____ x _____ =	
<b>Item 605 Railings</b>				
SDWS-605-01	Installed according to plans	/	_____ x _____ =	
SDWS-605-02	Free from dents, scratches or any form of damage	/	_____ x _____ =	
SDWS-605-03	Bends and curves are smooth	/	_____ x _____ =	
SDWS-605-04	Conforms to approved tolerance size, dimension, height and type e.g. concrete, steel, stainless, aluminum, etc.	/	_____ x _____ =	
SDWS-605-05	Safely and rigidly fixed to walls, post or floors.	/	_____ x _____ =	
		/	_____ x _____ =	

Was subcontractor used? If yes, name of company and owner:

\_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: / /

Total Score (a)	CAR Total
No. of Indicators (b)	
=	
Rate = (a) / (b)	
=	
Rate	
=	



## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_ PROJECT TYPE: Site Development  
 \_\_\_\_\_ VISIT LOCATION: \_\_\_\_\_

ITEM: Basic Services  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score _____ x factor	Action Monitor
<b>Item 700 Plumbing</b>				
SDWS-700-01	Pipes installed according to plans, e.g. slope, alignment, location, bracings/supports	/	_____ x _____ = _____	
SDWS-700-02	Conducted and passed the required leak test	/	_____ x _____ = _____	
SDWS-700-03	Pipes not clogged	/	_____ x _____ = _____	
SDWS-700-04	Free from any form of damages	/	_____ x _____ = _____	
SDWS-700-05	Fixtures and accessories installed according to plans, e.g. height, alignment, location	/	_____ x _____ = _____	
SDWS-700-06	Adhesive conform to specification	/	_____ x _____ = _____	
SDWS-700-07	Water closet, lavatory conform to specification	/	_____ x _____ = _____	
		/	_____ x _____ = _____	
		/	_____ x _____ = _____	
<b>Item 701 Sanitary</b>				
SDWS-701-01	Pipes installed according to plans, e.g. slope, alignment, location, bracings/supports	/	_____ x _____ = _____	
SDWS-701-02	Conducted and passed the required pressure/leak test	/	_____ x _____ = _____	
SDWS-701-03	Pipes not clogged	/	_____ x _____ = _____	
SDWS-701-04	Free from any form of damages	/	_____ x _____ = _____	
SDWS-701-05	Fixtures and accessories installed according to plans, e.g. height, alignment, location	/	_____ x _____ = _____	
SDWS-701-06	Adhesive conforms to specification	/	_____ x _____ = _____	
		/	_____ x _____ = _____	
		/	_____ x _____ = _____	
		/	_____ x _____ = _____	
		/	_____ x _____ = _____	
Was subcontractor used? If yes, name of company and owner : _____			Total Score (a) = _____	CAR Total
Entered by: _____			No. of Indicators (b) = _____	
Date: / /			Rate = (a) / (b) = _____	
			Rate = _____	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Site Development  
 LOCATION: \_\_\_\_\_

ITEM: Electrical  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score _____ x factor = _____	Action Monitor
<b>Item 800 Electrical Works</b>				
SDWS-800-01	Pipes installed according to plans and laid out according to approved construction drawings	/	_____ x _____ = _____	
SDWS-800-02	Pipes, hangers, boxes, gutters, cable trays properly installed and painted, sharp edges of pipes removed	/	_____ x _____ = _____	
SDWS-800-03	Pipes properly bended	/	_____ x _____ = _____	
SDWS-800-04	Allowable number of wires in a pipe properly observed	/	_____ x _____ = _____	
SDWS-800-05	Splicing and connection provided with adequate rubber and pvc tapes	/	_____ x _____ = _____	
SDWS-800-06	Adequate length of wire provided for termination and splicing	/	_____ x _____ = _____	
SDWS-800-07	Wire color coding complied and observed	/	_____ x _____ = _____	
SDWS-800-08	Wire insulation not damaged during pulling	/	_____ x _____ = _____	
SDWS-800-09	Adequate number, correct size and gauge of pull boxes installed and properly covered	/	_____ x _____ = _____	
SDWS-800-10	Boxes and enclosures provided according to intended purpose	/	_____ x _____ = _____	
SDWS-800-11	Fittings and accessories provided and properly installed	/	_____ x _____ = _____	
SDWS-800-12	Block-outs and sleeves provided and properly secured	/	_____ x _____ = _____	
SDWS-800-13	Cable ties provided	/	_____ x _____ = _____	
SDWS-800-14	Blank covers provided for outlets and switches that are not utilized	/	_____ x _____ = _____	
SDWS-800-15	Use of tools and equipment properly observed	/	_____ x _____ = _____	
SDWS-800-16	Lighting fixtures, panel boards, circuit breakers, etc. properly installed and free from any form of damages	/	_____ x _____ = _____	
SDWS-800-17	Meager, clamp, phase sequence tests and load test conducted	/	_____ x _____ = _____	
SDWS-800-18	Shop drawings, as-built plan maintained	/	_____ x _____ = _____	
		/	_____ x _____ = _____	
		/	_____ x _____ = _____	
Was subcontractor used? If yes, name of company and owner : _____			Total Score (a) = _____	CAR Total
			No. of Indicators (b) = _____	
Entered by: _____			Rate = (a) / (b) = _____	
Date: / /			Rate = _____	

## CPES CHECKLIST FOR WORKMANSHIP

PROJECT ID/NO.: \_\_\_\_\_  
 \_\_\_\_\_ VISIT

PROJECT TYPE: Site Development  
 LOCATION: \_\_\_\_\_

ITEM: Sewer & Drainage System  
 DATE OF VISIT: / /

**Factor : "During Construction" = 0.40; "Upon Completion" = 0.50**

Sub-item Code	INDICATORS <small>Note: Spots with a single major defect shall forfeit all points for the rest of the indicators in the said spot. Further, if the number of complying spots is less than fifty percent (50%) of the total number of spots, the rating for that specific item of work is zero (0).</small>	Results	Score _____ x factor =	Action Monitor
<b>Item 900 Pipe Culvert and Storm Drain</b>				
SDWS-900-01	Bedding and backfill materials compacted to the required density	/	_____ x _____ =	
SDWS-900-02	Proper jointing of pipes	/	_____ x _____ =	
SDWS-900-03	Mortar for jointing of reinforced concrete culvert pipes conforms to specified mixture type	/	_____ x _____ =	
SDWS-900-04	Adequate collaring of reinforced concrete culvert pipes	/	_____ x _____ =	
SDWS-900-05	Conformance to the approved/specified tolerance for elevation, slope, and alignment	/	_____ x _____ =	
SDWS-900-06	Cracks, honeycomb, chipping-off within specified tolerances	/	_____ x _____ =	
SDWS-900-07	Sufficient collaring & flushing	/	_____ x _____ =	
SDWS-900-08	Conformance to the approved quality of concrete mix	/	_____ x _____ =	
SDWS-900-09	Spacing and sizes of rebars conform to specification	/	_____ x _____ =	
		/	_____ x _____ =	
<b>Item 901 Manholes, Inlets and Catch Basin</b>				
SDWS-901-01	Conformance to approved/specified tolerances for dimensions, elevations	/	_____ x _____ =	
SDWS-901-02	Covers and gratings well fitted and can easily be opened during maintenance work	/	_____ x _____ =	
SDWS-901-03	Honeycomb, cracks, spalling, etc. within specified tolerance	/	_____ x _____ =	
SDWS-901-04	Conformance to approved quality of concrete mix	/	_____ x _____ =	
SDWS-901-05	Spacing and sizes of rebars conform to specification	/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
		/	_____ x _____ =	
Was subcontractor(s) used? If yes, name of company(ies) and sub-item: _____			Total Score (a) =	CAR Total
Entered by: _____			No. of Indicators (b) =	
Date: / /			Rate = (a) / (b) =	
			Rate =	

## CONSTRUCTORS PERFORMANCE EVALUATION SYSTEM CHECKLIST FOR MATERIALS

PROJECT ID/NO.: \_\_\_\_\_  
\_\_\_\_\_ Visit

PROJECT TYPE: \_\_\_\_\_  
DATE OF VISIT:    /    /

ITEM: \_\_\_\_\_

**Factor : "During Construction" = 0.30; "Upon Completion" = 0.20**

Sub-item Code	INDICATORS	Results	Score	Action Monitor
	Note: If constructor complied with indicator #1, all indicators should be rated			
MAT-____-01	Materials complied and passed test requirements with Philippine National Standard (PNS)/Import Commodity Certificate (ICC) and/or specified type/class/brand	1 or 0	x	
			=	
MAT-____-02	Materials are correctly stored and handled to prevent damage, deterioration and theft	1 or 0	x	
			=	
MAT-____-03	Non-conforming materials are identified and segregated against inadvertent use	1 or 0	x	
			=	
MAT-____-04	Evidence is supplied to verify that specified materials were used in the project	1 or 0	x	
			=	
MAT-____-05	Materials records are clearly legible, complete, traceable to project and readily available	1 or 0	x	
			=	
			x	
			=	
			x	
			=	
			x	
			=	
			x	
			=	
			x	
			=	
			Total Score (a)	
Was subcontractor used? If yes, name of company and owner: _____ & _____			No. of Indicators (b)	
Entered by: _____			(a) / (b) =	
Date:    /    /			Rate =	

NOTE: 1. If constructor does not comply with Indicator #1, the remaining four (4) indicators shall also be evaluated for CAR/PAR purposes but the final rating is automatically zero (0).  
2. Please fill-up the blank spaces in the code corresponding to the item number of work being evaluated.

## CONSTRUCTORS PERFORMANCE EVALUATION SYSTEM CHECKLIST FOR TIME *(During Construction)*

PROJECT ID/NO.: \_\_\_\_\_  
\_\_\_\_\_ VISIT

PROJECT TYPE: \_\_\_\_\_  
DATE OF VISIT:    /    /

Sub-item Code	INDICATORS	Results	Score	Action Monitor
TME-I-01	On or ahead of schedule per approved Bar chart & S-curve		0.15	
TME-I-02	With less than 15% negative slippage Formula: Score = 15% - Slippage = _____%			
TME-I-03	With negative slippage of 15% or more		0.00	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Rate =	

Entered by: \_\_\_\_\_

Date:    /    /

DELAY FAULT OF:    \_\_\_\_\_ Constructor    \_\_\_\_\_ Project Owner    \_\_\_\_\_ Others

CAUSES OF DELAY (Please indicate codes as listed below): \_\_\_\_\_

#### Constructor-related Problems

- C-WO1            Insufficient manpower deployed in project site
- C-EO1            Breakdown of equipment/equipment not operational
- C-EO2            Lack/Insufficient/Inadequate equipment deployed in project site
- C-MO1            Lack/Inadequate/Insufficient supply of construction materials
- C-RO1            Lack of financial resources

#### Agency-related Problems

- A-VO1            Delays in the approval of variation orders
- A-TO1            Delays in the approval of contract time extension
- A-SO1            Delays in the approval of suspension order
- A-DO1            Changes in construction designs
- A-FO1            Delays in the releases of funds
- A-RO1            Right-of-Way (ROW) acquisition problem (squatter relocation problems, relocation of utilities, i.e. PLDT, MERALCO posts and other similar cases)
- A-PO1            Delays in acquisition of necessary permits

#### Other-related Problems

- O-WO1            Unfavorable weather condition (occurrence of natural calamities; occurrence of flooding/siltation on site; unworkable ground condition)
- O-PO1            Insurgence or peace and order problems/civil disturbances
- O-TO1            Third party intervention

**Note: In rating time, only delays that are attributable to the constructor should be reflected in the rating**

## CONSTRUCTORS PERFORMANCE EVALUATION SYSTEM CHECKLIST FOR TIME (*Upon Completion*)

PROJECT ID/NO.: \_\_\_\_\_  
FINAL VISIT

PROJECT TYPE: \_\_\_\_\_  
DATE OF VISIT: / /

Sub-item Code	INDICATORS	Results	Score	Action Monitor
TME-F-01	On or ahead of schedule per approved Bar Chart & S-Curve		0.30	
TME-F-02	<b>With less than 10% negative slippage</b> <b>Formula: Score = [(10% - Slippage) x 0.30]/10</b>			
TME-F-03	<b>With negative slippage of 10% or more</b>		0.00	
			Rate =	
Was subcontractor used? If yes, name of company and owner: _____ & _____				

Entered by: \_\_\_\_\_

Date: / /

DELAY FAULT OF:    \_\_\_ Constructor    \_\_\_ Project Owner    \_\_\_ Others

CAUSES OF DELAY (Please indicate codes as listed below): \_\_\_\_\_

**Constructor-related Problems**

- C-WO1            Insufficient manpower deployed in project site
- C-EO1            Breakdown of equipment/equipment not operational
- C-EO2            Lack/Insufficient/Inadequate equipment deployed in project site
- C-MO1            Lack/Inadequate/Insufficient supply of construction materials
- C-RO1            Lack of financial resources

**Agency-related Problems**

- A-VO1            Delays in the approval of variation orders
- A-TO1            Delays in the approval of contract time extension
- A-SO1            Delays in the approval of suspension order
- A-DO1            Changes in construction designs
- A-FO1            Delays in the releases of funds
- A-RO1            Right-of-Way (ROW) acquisition problem (squatter relocation problems, relocation of utilities, i.e. PLDT, MERALCO posts and other similar cases)
- A-PO1            Delays in acquisition of necessary permits

**Other-related Problems**

- O-WO1            Unfavorable weather condition (occurrence of natural calamities; occurrence of flooding/siltation on site; unworkable ground condition)
- O-PO1            Insurgence or peace and order problems/civil disturbances
- O-TO1            Third party intervention

**Note: In rating time, only delays that are attributable to the constructor should be reflected in the rating**

**CONSTRUCTORS PERFORMANCE EVALUATION SYSTEM CHECKLIST  
FOR TIME (During Construction - for contracts with no materials  
or materials are supplied by the owner)**

PROJECT ID/NO.: \_\_\_\_\_  
\_\_\_\_\_ VISIT

PROJECT TYPE: \_\_\_\_\_  
DATE OF VISIT: / /

Sub-item Code	INDICATORS	Results	Score	Action Monitor
TME-I-01	On or ahead of schedule per approved Bar chart & S-Curve		0.20	
TME-I-02	With less than 15% negative slippage Formula: Score = [(15% - Slippage) x 0.20]/15			
TME-I-03	With negative slippage of 15% or more		0.00	
Was subcontractor used? If yes, name of company and owner: _____ & _____			Rate =	

Entered by: \_\_\_\_\_

Date: / /

DELAY FAULT OF: \_\_\_\_\_ Constructor \_\_\_\_\_ Project Owner \_\_\_\_\_ Others

CAUSES OF DELAY (Please indicate codes as listed below): \_\_\_\_\_

Constructor-related Problems

- C-WO1 Insufficient manpower deployed in project site
- C-EO1 Breakdown of equipment/equipment not operational
- C-EO2 Lack/Insufficient/Inadequate equipment deployed in project site
- C-MO1 Lack/Inadequate/Insufficient supply of construction materials
- C-RO1 Lack of financial resources

Agency-related Problems

- A-VO1 Delays in the approval of variation orders
- A-TO1 Delays in the approval of contract time extension
- A-SO1 Delays in the approval of suspension order
- A-DO1 Changes in construction designs
- A-FO1 Delays in the releases of funds
- A-RO1 Right-of-Way (ROW) acquisition problem (squatter relocation problems, relocation of utilities, i.e. PLDT, MERALCO posts and other similar cases)
- A-PO1 Delays in acquisition of necessary permits

Other-related Problems

- O-WO1 Unfavorable weather condition (occurrence of natural calamities; occurrence of flooding/siltation on site; unworkable ground condition)
- O-PO1 Insurgence or peace and order problems/civil disturbances
- O-TO1 Third party intervention

**Note: In rating time, only delays that are attributable to the constructor should be reflected in the rating**

**CONSTRUCTORS PERFORMANCE EVALUATION SYSTEM CHECKLIST  
FOR TIME (Upon Completion - for contracts with no materials  
or materials are supplied by the owner)**

PROJECT ID/NO.: \_\_\_\_\_  
FINAL VISIT

PROJECT TYPE: \_\_\_\_\_  
DATE OF VISIT: / /

Sub-item Code	INDICATORS	Results	Score	Action Monitor
TME-F-01	On or ahead of schedule per approved Bar Chart & S-Curve		0.50	
TME-F-02	With less than 10% negative slippage Formula: Score = [(10% - Slippage) x 0.50]/10			
TME-F-03	With negative slippage of 10% or more		0.00	
			Rate =	
Was subcontractor used? If yes, name of company and owner: _____ & _____				

Entered by: \_\_\_\_\_

Date: / /

DELAY FAULT OF: \_\_\_\_\_ Constructor \_\_\_\_\_ Project Owner \_\_\_\_\_ Others

CAUSES OF DELAY (Please indicate codes as listed below): \_\_\_\_\_

Constructor-related Problems

- C-WO1 Insufficient manpower deployed in project site
- C-EO1 Breakdown of equipment/equipment not operational
- C-EO2 Lack/Insufficient/Inadequate equipment deployed in project site
- C-MO1 Lack/Inadequate/Insufficient supply of construction materials
- C-RO1 Lack of financial resources

Agency-related Problems

- A-VO1 Delays in the approval of variation orders
- A-TO1 Delays in the approval of contract time extension
- A-SO1 Delays in the approval of suspension order
- A-DO1 Changes in construction designs
- A-FO1 Delays in the releases of funds
- A-RO1 Right-of-Way (ROW) acquisition problem (squatter relocation problems, relocation of utilities, i.e. PLDT, MERALCO posts and other similar cases)
- A-PO1 Delays in acquisition of necessary permits

Other-related Problems

- O-WO1 Unfavorable weather condition (occurrence of natural calamities; occurrence of flooding/siltation on site; unworkable ground condition)
- O-PO1 Insurgence or peace and order problems/civil disturbances
- O-TO1 Third party intervention

**Note: In rating time, only delays that are attributable to the constructor should be reflected in the rating**





## CONSTRUCTORS PERFORMANCE EVALUATION SYSTEM CHECKLIST FOR ENVIRONMENTAL, SAFETY AND HEALTH

PROJECT ID/NO.: \_\_\_\_\_  
\_\_\_\_\_ VISIT

PROJECT TYPE: \_\_\_\_\_  
DATE OF VISIT: / /

Sub-item Code	INDICATORS*	Results	Score	Action Monitor
<b>Environmental</b>				
ESH-100-01	Waste materials are collected, stored and transported to approved dumps/disposal area.	1 or 0	x 0.07	
ESH-100-02	Construction activities are carried out in specific time of the day as approved by local officials..	1 or 0	x 0.07	
ESH-100-03	Compliance to Environmental Clearance Certificate requirements.	1 or 0	x 0.07	
<b>Safety and Health</b>				
ESH-200-01	Safety and Health program approved by DOLE/Implementing Office (IO).	1 or 0	x 0.07	
ESH-200-02	Safety and Health committee established and maintained in accordance with Rule 1410 of Occupational Safety and Health Standards.	1 or 0	x 0.07	
ESH-200-03	Certified/Qualified Safety and Health personnel employed and detailed at site.	1 or 0	x 0.07	
ESH-200-04	Appropriate personal protective equipment (e.g. helmets, safety shoes, safety belt/lifeline, eye protection, ear plug, dust mask, etc.) provided and worn by all workers/staff.	1 or 0	x 0.07	
ESH-200-05	Heavy equipment operated by certified/qualified operators only.	1 or 0	x 0.07	
ESH-200-06	Critical construction work done by certified/qualified skilled workers only.	1 or 0	x 0.07	
ESH-200-07	Heavy equipment are tested and certified to be in good running condition.	1 or 0	x 0.07	
ESH-200-08	Safety practices and procedures in general construction observed and implemented at construction site (electrical, fire protection, lighting, construction of safe walkways, protection from falling materials, shoring, scaffolding, etc.).	1 or 0	x 0.07	
ESH-200-09	First aid cabinets are fully equipped and readily available for treatment of sicknesses and injuries.	1 or 0	x 0.07	
ESH-200-10	ESH signs are clearly visible to construction staff, workers and public	1 or 0	x 0.07	
ESH-200-11	Conduct of regular safety meeting.	1 or 0	x 0.07	
ESH-200-12	Monthly construction safety and health report submitted to DOLE.	1 or 0	x 0.07	

Was subcontractor used? If yes, name of company and owner:  
\_\_\_\_\_ & \_\_\_\_\_

Entered by: \_\_\_\_\_

Date: / /

Total Score(a)	
No. of Indicators (b)	
(a) / (b) =	
Rate =	



## CPES EVALUATION FORM

- Road     Bridge     Housing     Building     Irrigation     Flood Control  
 Port and Harbor     Power Transmission Line     Substation     Diesel Power Plant  
 Mooring Facilities for Power Barges     Site Development     Others \_\_\_\_\_

Project Owner	:	
Project Implementing Office	:	

### PART I. GENERAL INFORMATION

Name of Constructor/s
% Share of each Firm (if Joint Venture)
Name of AMO
Address
Valid License Number & Category/ARC-C
Nationality (Local/Foreign)

Date of Evaluation	:	
Project Type	:	
Project Name	:	
Project Location/Region	:	
Funding Source	:	
Scope of Work	:	
Status	:	

Name of Constructor/Gov't Proj Manager	:	
Name of Constructor/Gov't Proj Engineer	:	
Name of Constructor/Gov't Mat'ls Engineer	:	
Name of Constructor Cost Engineer	:	
Consultant/Consulting Firm	:	

Contract Cost, Original	:	P		Revised	:		as of	
Contract Duration, Original	:			Revised	:		as of	
Scheduled Start Date	:			Revised	:		as of	
Actual Date Started	:				:			
Scheduled Completion Date	:			Revised	:		as of	

% Planned Physical Accomplishment for the Month	:	
% Actual Physical Accomplishment for the Month	:	
Slippage for the Month	:	
Variation Order (Php, M)	:	
Time Extension	:	

**PART II. DURING CONSTRUCTION RATING SHEET**

Date of \_\_\_ Visit / / / /

Items of Work/Description	% Weight	Relative % Weight	Workmanship [Max 0.40]		Materials [Max. 0.30]	
			Rate	Relative Rate	Rate	Relative Rate
<b>Total</b>						

**Summary of Ratings**

Workmanship [Max. 0.40] .....  
 Materials [Max. 0.30].....  
 Time [Max. 0.15] .....  
 Facilities [Max. 0.03] .....  
 Environmental, Safety & Health [Max. 0.07] .....  
 Resource Deployment [Max. 0.05] .....

**RATING** .....

Sum of Ratings “During Construction” (a) .....  
 Average Rating “During Construction” (b) .....  
 Appropriate Weight for Kind of Project (c) .....

**(A) WEIGHTED RATING FOR “DURING CONSTRUCTION” (b x c) .....**

<u>CPE Head/Individual</u>	<u>Designation, Office</u>	<u>Signature</u>
<u>CPE Members</u>	<u>Designation, Office</u>	<u>Signature</u>
<u>Resource Persons/Witnesses</u>	<u>Designation, Office</u>	<u>Signature</u>

(Note: This form maybe reproduced depending on the number of visits)

**PART III. UPON COMPLETION RATING SHEET**

Date of \_\_\_ Visit / / / /

Item of Work/Description	% Weight	Relative % Weight	Workmanship [Max 0.50]		Materials [Max. 0.20]	
			Rate	Relative Rate	Rate	Relative Rate
<b>Total</b>						

**Summary of Ratings**

Workmanship [Max. 0.50] .....

Materials [Max. 0.20].....

Time [Max. 0.30] .....

**RATING (a)** .....

Appropriate Weight for Kind of Project (b) .....

**(B) WEIGHTED RATING FOR "UPON COMPLETION" ( a x b )** .....

**OVER-ALL CPES RATING (A of Part II + B of Part III) x 100%**

= ( \_\_\_\_\_ + \_\_\_\_\_ ) x 100% = \_\_\_\_\_ %

**QUALITATIVE DESCRIPTION**

- |   |   |
|---|---|
| <input type="checkbox"/> Outstanding >96%             | <input type="checkbox"/> Unsatisfactory ≥ 75% ≤ 82% |
| <input type="checkbox"/> Very Satisfactory >89% ≤ 96% | <input type="checkbox"/> Poor < 75%                 |
| <input type="checkbox"/> Satisfactory >82% ≤ 89%      |   |

CPE Head/Individual

Designation, Office

Signature

CPE Members

Designation, Office

Signature

Resource Persons/Witnesses

Designation, Office

Signature



**CORRECTIVE ACTION PLAN (CAP) & PREVENTIVE ACTION PLAN (PAP)**  
(To be Submitted by Constructor)

**Project Data**

Project Owner : \_\_\_\_\_  
Project Implementing Office : \_\_\_\_\_  
Project Type : \_\_\_\_\_  
Project Name : \_\_\_\_\_  
Project Location : \_\_\_\_\_  
Constructors Name : \_\_\_\_\_  
Date of Evaluation : \_\_\_\_\_

**Proposed Corrective Action Plan (CAP)**

Remove & Replace     Repair     Variation

Sub-Item Code: Location/Detail

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**Proposed Preventive Action Plan (PAP)**

Sub-Item Code: Location/Detail

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\_\_\_\_\_  
Position                          Printed Name                          Signature                          \_\_\_\_/\_\_\_\_/\_\_\_\_  
Date



**ASSESSMENT OF CORRECTIVE ACTION PLAN**

**Project Data**

Project Owner : \_\_\_\_\_  
Project Implementing Office : \_\_\_\_\_  
Project Type : \_\_\_\_\_  
Project Name : \_\_\_\_\_  
Project Location : \_\_\_\_\_  
Constructors Name : \_\_\_\_\_  
Date of Evaluation : \_\_\_\_\_

Assessment by the Head of the Implementing Office:

Sub-Item Code: Location/Detail

\_\_\_\_\_  
\_\_\_\_\_

Approved                       Not Approved

Reasons \_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ / \_\_\_\_ / \_\_\_\_ /  
Position                      Printed Name                      Signature                      Date

**Verification:** (Verified by Owner's Project Engineers)

Implemented Corrected Action

Unsatisfactory

\_\_\_\_\_  
\_\_\_\_\_ / \_\_\_\_ / \_\_\_\_ /  
Signature                      Date

Ongoing

\_\_\_\_\_  
\_\_\_\_\_ / \_\_\_\_ / \_\_\_\_ /  
Signature                      Date

Satisfactorily Completed

\_\_\_\_\_  
\_\_\_\_\_ / \_\_\_\_ / \_\_\_\_ /  
Signature                      Date

# CONSTRUCTORS PERFORMANCE SUMMARY REPORT

Project Owner	:	
Project Implementing Office	:	

**General Information**

Name of Constructor/s	:	
% Share of each Firm (if JV)	:	
Name of AMO	:	
Address	:	
Valid License Number	:	
PCAB/ARC Category	:	
Contractors Association	:	
Nationality (Local/Foreign)	:	

**Project Data**

Date of Evaluation	:	
Project Type	:	
Project Name	:	
Project Location	:	
Funding Source	:	
Scope of Work	:	
Status	:	
Name of Constructor/Gov't Proj Manager	:	
Name of Constructor/Gov't Proj Engineer	:	
Name of Constructor/Gov't Mat'ls Engineer	:	
Name of Constructor Cost Engineer	:	
Consultant/Consulting Firm	:	

Contract Cost, Original	:	P		Revised	:		as of		
Contract Duration, Original	:			Revised	:		as of		
Scheduled Start Date	:			Revised	:		as of		
Actual Date Started	:				:				
Scheduled Completion Date	:			Revised	:		as of		
% Planned Physical Accomplishment for the Month								:	
% Actual Physical Accomplishment for the Month								:	
Slippage for the Month								:	
Variation Order (Php, M)								:	
Time Extension (C. D.)								:	

**Summary of Ratings**

No. of Visit		.....	:	
Workmanship	(0.40/0.50)	.....	:	
Materials	(0.30/0.20)	.....	:	
Time	(0.15/0.30)	.....	:	
Facilities	(0.03)	.....	:	
Environment, Safety & Health	(0.07)	.....	:	
Resources Deployment	(0.05)	.....	:	
VISIT RATING				

<b>FINAL RATING</b>	:		
<b>QUALITATIVE DESCRIPTION</b>	:		

**CPE FINDINGS**

**A. Non-Compliance Findings Based on CPES Checklist**

Notes: The list of non-compliance findings on the different aspects covered must be based on its requirement for Corrective Action Request (CAR)

**Workmanship**

Item-Code	Description	*R
	<u><b>Constructors Challenges Encountered</b></u>	

\* Results, R = Compliance/Number of spots

**Materials**

Item-Code	Description
	<u><b>Constructors Challenges Encountered</b></u>

**Time**

Item-Code	Description
	<u><b>Challenges Encountered</b></u>
	<i>(Please indicate codes as listed below)</i>

**CONSTRUCTOR-RELATED PROBLEMS**

- C-W01 Insufficient manpower deployed in projects site
- C-E01 Breakdown of equipment/equipment not operational
- C-E02 Lack/Insufficient/Inadequate equipment deployed in project site
- C-M01 Lack/Inadequate/Insufficient supply of construction materials
- C-R01 Lack of financial resources

**AGENCY-RELATED PROBLEMS**

- A-V01 Delays in the approval of variation orders
- A-T01 Delays in the approval of contract time extension
- A-S01 Delays in the approval of suspension order
- A-D01 Changes in construction designs
- A-F01 Delays in the releases of funds
- A-R01 Right-of-Way (ROW) acquisition problem (squatter relocation problems, relocation of utilities, i.e. PLDT, MERALCO posts and other similar cases)
- A-P01 Delays in acquisition of necessary permits

**OTHER-RELATED PROBLEMS**

- O-W01 Unfavorable weather condition (occurrence of natural calamities, flooding/siltation on site; unworkable ground condition)
- O-P01 Insurgence or peace and order problems/civil disturbances
- O-T01 Third party intervention
- O-C01 Additional Commission on Audit (COA) requirements

**Facilities**

Item-Code	Description
	<u><i>Constructors Challenges Encountered</i></u>

**Environmental, Safety and Health**

Item-Code	Description
	<u><i>Constructors Challenges Encountered</i></u>

**Resources Deployment**

Item-Code	Description
	<u><i>Constructors Challenges Encountered</i></u>

***B. List of Challenges Encountered by Agency and Other Related Challenges Encountered***

CHALLENGES ENCOUNTERED			
AGENCY		OTHER RELATED	
Code	Description	Code	Description

***C. Proposed Corrective Action Plan by the Contractor***

Item-Code	Corrective Action

**D. Narrative Reports**

- Please highlight major positive and negative performances of constructor in summary form.
- Non-compliance of Corrective Action Request (CAR) of (no. Visit)
- Others/Remarks:

**CPES EVALUATORS:**

	<b>Name</b>	<b>Signature</b>
Team Leader	_____	_____
Members	_____	_____
	_____	_____
	_____	_____

Noted by:

\_\_\_\_\_  
Head, CPES-IU

**SCHEDULE OF MINIMUM TEST REQUIREMENTS GOVERNING ITEMS OF WORK OF THE DPWH STANDARD SPECIFICATIONS FOR HIGHWAYS, BRIDGES AND AIRPORTS, 1998, (VOLUME II)**

**PART C - EARTHWORK**

ITEMS OF WORK	MINIMUM TEST REQUIREMENTS
Item 100 - Clearing & Grubbing	None
Item 101 - Removal of Structures & Obstruction	None
Item 102 - Excavation	Same tests as for Items 103, 104 and 105, whichever is applicable.
Item 103 - Structure Excavation If excavated materials are wasted, the volume involved shall be reported so that Quality Control requirements may be adjusted accordingly. Submit Project Engineer Certificate of Waste	If excavated materials are incorporated into the work: For every 1500 cu.m. or fraction thereof: 1-G, Grading Test 1-P, Plasticity Test (LL, PL, PI) 1-C, Laboratory Compaction Test For every 150 mm layer in uncompacted depth: 1-D, Field Density
Item 104 - Embankment	For every 1500 cu.m. or fraction thereof: 1-G, Grading Test 1-P, Plasticity Test (LL, PL, PI) 1-C, Laboratory Compaction Test For each 500 sq. m. of each layer of compacted fill or fraction thereof at least one group of three in-situ density tests. The layers shall be placed not exceeding 200 mm in loose measurement or based on the result of compaction trials.
Item 105 - Sub-grade Preparation	Same tests as for Item 104
Item 106 - Compaction Equipment and Density Control Strips	Same tests as for Items 104, 105, 200, 201, 202, 203, 204, 205, 206 and 300.
Item 107 - Overhaul	None

**PART D - SUBBASE AND BASE COURSE**

ITEMS OF WORK	MINIMUM TEST REQUIREMENTS
Item 200 - Aggregate Subbase Course	For every 300 cu.m. or fraction thereof: 1-G, Grading Test 1-P, Plasticity Test (LL, PL, PI) For every 1500 cu.m. or fraction thereof: 1-C, Laboratory Compaction Test For every 2500 cu.m. or fraction thereof: 1-CBR, California Bearing Ratio Test For every layer of 150 mm of compacted depth/ based on the results of compaction trials: At least one group of three in-situ density tests for each 500 sq.m. or fraction thereof.
Item 201 - Aggregate Base Course	For every 300 cu.m. or fraction thereof: 1-G, Grading Test 1-P, Plasticity Test (LL, PL, PI) For every 1500 cu.m. or fraction thereof: 1-Q, Quality Test for : (Grading, Plasticity and Abrasion) 1-C, Laboratory Compaction Test For every layer of 150 mm of compacted depth/ based on the results of compaction trials: At least one group of three in-situ density tests for each 500 sq.m. or fraction thereof.

**PART D - SUBBASE AND BASE COURSE**

ITEMS OF WORK	MINIMUM TEST REQUIREMENTS
Item 202 - Crush Aggregate Base Course	Same tests as for Item 201 For every 1500 cu.m. or fraction thereof: 1-F, Fractured Face
Item 203 - Lime Stabilized Road Mix Base Course Amount of Lime to be added: 3 to 12 mass percent of dry aggregate	<p>A. <u>Soil Aggregate</u> For every 300 cu.m. or fraction thereof: 1-G, Grading Test 1-P, Plasticity Test (LL, PL, PI) For every 1500 cu.m. or fraction thereof: 1-Q, Quality Test for : (Grading, Plasticity and Abrasion)</p> <p>B. <u>Mix</u> For every 300 cu.m. or fraction thereof: 1-C, Laboratory Compaction Test 1-UC, Unconfined Compression Test 1-CBR, California Bearing Ratio Test</p> <p>C. <u>Compacted Base Course</u> For every layer of 150 mm of compacted depth: 1-D, Field Density Test for every 150m or fraction thereof</p> <p>D. <u>Hydrated Lime</u> For every 100 t or fraction thereof: 1-Q, Quality Test</p>
Item 204 - Portland Cement Stabilized Road Mix Base Course Amount of Cement to be added: 6 to 10 mass % of dry soil aggregate	<p>A. <u>Soil Aggregate</u> Same tests as for Item 203</p> <p>B. <u>Cement</u> 1-Q Quality Test for every 2000 bags of fraction thereof</p> <p>C. <u>Water</u> 1-Q, Quality Test/Project Engineer's Certificate</p> <p>D. <u>Mix</u> For every 300 cu.m. or fraction thereof: 1-C, Laboratory Compaction Test 1-UC, Unconfined Compression Test 1-CBR, California Bearing Ratio Test</p> <p>E. <u>Compacted Base Course</u> For every layer of 150 mm compacted depth 1-D, Field density Test for every 150m or fraction thereof 1-T, thickness determination for every 150 m or fraction thereof</p>
Item 205 - Asphalt Stabilized Road Mix Base Course Amount of Asphalt to be added: 6 to 10 mass % of dry soil aggregate.	<p>A. <u>Soil Aggregate</u> Same tests as for Item 203</p> <p>B. <u>Emulsified Asphalt</u> 1-Q, Quality Test for every 40 to 200 drums or fraction thereof</p> <p>C. <u>Mix</u> Same tests as for Item 203</p> <p>D. <u>Compacted Base Course</u> Same tests as for Item 203</p>
Item 206 - Portland Cement Treated Plant Mix Base course Amount of Asphalt to be added: 6 to 10 mass % of dry soil aggregate	<p>A. <u>Soil Aggregate</u> Same tests as for Item 203</p> <p>B. <u>Portland Cement</u> For every 2000 bags of fraction thereof: 1-Q, Quality Test</p> <p>C. <u>Water</u> 1-Q, Quality Test/Project Engr's Certificate</p>

**PART D - SUBBASE AND BASE COURSE**

ITEMS OF WORK	MINIMUM TEST REQUIREMENTS
	D. <u>Same tests as for Item 204</u> E. <u>Compacted Base Course</u> For every layer of 150 mm compacted depth 1-D, Field Density Test for every 150 m or fraction thereof 1-T, Thickness determination for every 150m or fraction thereof
Item 207 - Aggregate Stockpile	Same tests as specified in Item No. of the Specs.

**PART E - SURFACE COURSE**

ITEMS OF WORK	MINIMUM TEST REQUIREMENTS
Item 300 - Aggregate Surface Course	For every 300 cu. m. or fraction thereof: 1-G, Grading Test 1-P, Plasticity Test (PI, LL, PI) For every 1500 cu.m. or fraction thereof: 1-C, compaction Test for: (Grading, plasticity and Abrasion) For every layer of 150 mm of compacted depth/based on the results of compaction trials. At least on group of three in-situ density tests for each 500 sq. m. or fraction thereof. For crushed Gravel or Crushed Stone, 1500 cu.m. or fraction thereof: 1-F, Fractured face
Item 301 - Bituminous Prime Coat	Quantity: 1 to 2 L/sq.m. 1-Q, quality Test for every 40 t or 200 drums
Item 302 - Bituminous Tack Coat	Quantity: 0.2 to 0.7 L/sq.m. 1-Q, Quality test for every 40 t or 200 drums
Item 303 - Bituminous Seal Coat	A. <u>Bituminous Materials</u> Quantity: 0.2 to 1.5 L/sq.m. 1-Q, Quality Test for every 40t or 200 drums B. <u>Cover Aggregates</u> Quantity: From 5 to 14 kg/s.q. m. For every 75 cu.m./200 kg. or fraction thereof : 1-G, grading Test
Item 304 - Bituminous Surface Treatment	A. <u>Aggregates</u> Quantity: Using Cut-Back Asphalt or Asphalt Cement – 13.6 to 38.0 kg/sq.m. Using Emulsified Asphalt - 13.6 to 19.04 Kg/sq.m. For every 75 cu.m./200 kg. or fraction thereof: 1- G, grading Test 1- P, Plasticity Test (PL, LL, PI) For every 1500 cu.m. or fraction thereof: 1- Q, Quality Test for: (Grading, Plasticity, Abrasion, Stripping and Bulk specific Gravity) 1-F, Fractured Face B. <u>Bituminous Materials</u> Quantity: Using Cut-back Asphalt or Asphalt Cement - 1.58 to 2.04 L/sq.m. Using Emulsified asphalt - 1.58 to 2.04 L/sq.m. Same test as for Item 301



**PART E - SURFACE COURSE**

ITEMS OF WORK	MINIMUM TEST REQUIREMENTS
Item 305 - Bituminous Penetration Macadam Pavement	<p>A. <u>Aggregates</u>  Quantity:  1. Using Asphalt Cement or Rapid Curing Course (Crushed) -----90 Kg/sq.m.  Key (Crushed) ---(13 &amp; 11) -----24 kg/sq.m.  Cover Crushed &amp; Screened) -----8 kg/sq.m.  2. Using Emulsified Asphalt  Course (Crushed) -----90 kg/sq.m.  Choker (Crushed) -----10 kg/sq.m.  Key (Crushed) -----18 kg/sq.m.  Cover (Crushed or Screened) ----- 8 kg/sq.m.  Same test as for Item 304</p> <p>B. <u>Bituminous Materials</u>  Quantity: 7.2 to 11 L/sq.m.  Same tests as for for Item 301</p>
Item 306 - Bituminous Road Mix Surface Course	<p>A. <u>Aggregates</u>  Same tests as for Item 304</p> <p>B. <u>Bituminous Materials</u>  Quantity:  1. Using Cut-Back Asphalt - 4.5 to 7.0 mass % of total dry aggregate  2. Using Emulsified Asphalt - 6.0 to 10.0 mass % of total dry aggregate  Same test as for Item 301</p> <p>C. <u>Mix</u>  Tests: For every 75 cu.m./130 t or fraction thereof:  1-G, grading Test  1-Ext., Extraction  1-Sty., Stability  1-C, Laboratory Compaction</p> <p>D. <u>Hydrate Lime</u>  For every 100 t or fraction thereof:  Tests: 1-Q, quality Test</p> <p>E. <u>Compacted pavement</u>  For each full day's operation:  Tests: D &amp; T (Density and Thickness Test) - at least one (1) but not more than (3) samples shall be taken.</p>
Item 307 - Bituminous Plant-Mix Surface Course General	<p>A. <u>Aggregates</u>  For every 75 cu.m./200 t or fraction thereof:  1-G &amp; P, Grading and Plasticity Tests for every 1500 cu.m. of fraction thereof:  1-Q, quality Test for: (Grading, Plasticity, Abrasion, Stripping and Bulk Specific Gavity)  1-F, Fractured Face</p> <p>B. <u>Bituminous Materials</u>  Quantity: 5.0 to 8.0 mass % of total dry aggregate  Tests: 1-Q, Quality Test for each 40 t of fraction thereof</p> <p>C. <u>Mix</u>  For every 75 cu.m. /130 t of fraction thereof:  1-G, Grading Test  1-Ext., Extraction  1-Sty., Stability  1-C, Laboratory Compaction</p>

**PART E - SURFACE COURSE**

ITEMS OF WORK	MINIMUM TEST REQUIREMENTS
	<p>D. <u>Hydrated Lime</u> For every 100 t or fraction thereof</p> <p>E. <u>Mineral filler</u> For every 75 cu.m. or fraction thereof: 1-G &amp; P, grading and Plasticity Tests (LL, PL, PI) For each full day's operation: D &amp; T (Density and Thickness Tests) - at least one (1) but not more than three (3) samples shall be taken.</p>
<p>Item 308 - Bituminous Plant Mix, Surface Course, Cold laid</p>	<p>A. <u>Aggregate</u> Same tests as for Item 307</p> <p>B. <u>Bituminous Material</u> Quantity: Using Cut-Back Asphalt - 4.5 to 7.0 mass % of total dry aggregate Using Emulsified Asphalt - 6.0 to 10.0 mass % of total dry aggregate Tests: 1-Q, Quality Test for every 40t or 200 drums</p> <p>C. <u>Mix</u> Same tests as for Item 307</p> <p>D. <u>Hydrated Lime</u> Same tests as for Item 307</p> <p>E. <u>Mineral Filler</u> For every 75 cu.m. or fraction thereof: 1-G &amp; P, Grading and Plasticity Tests ( LL, PL, PI)</p> <p>F. <u>Compacted Pavement</u> Same tests as for Item 307</p>
<p>Item 309 - Bituminous Plant Mix (Stockpile Maintenance Mixture)</p>	<p>A. <u>Aggregate</u> Same tests as for Item 307</p> <p>B. <u>Bituminous Materials</u> Quantity: 4 to 10 Mass % of total mix Tsts: 1-Q, Quality Test for every 40t or 200 drums</p> <p>C. <u>Mix</u> Same tests as for Item 307</p> <p>D. <u>Hydrated Lime</u> Same tests as for Item 307</p> <p>E. <u>Mineral Filler</u> Same tests as for Item 307</p> <p>F. <u>Compacted Pavement</u> Same tests as for Item 307</p>
<p>Item 310 - Bituminous Concrete Surface Course, Hot-Laid</p>	<p>A. <u>Aggregate</u> Same tests as for Item 307</p> <p>B. <u>Bituminous Materials</u> Quantity: 5 to 8 Mass % of total dry aggregates</p> <p>C. <u>Mix</u> Same tests as for Item 307</p> <p>D. <u>Hydrated Lime</u> Same tests as for Item 307</p> <p>E. <u>Mineral Filler</u> Same tests as for Item 307</p> <p>F. <u>Compacted Pavement</u> Same tests as for Item 307</p>

**PART E - SURFACE COURSE**

ITEMS OF WORK	MINIMUM TEST REQUIREMENTS
<p>Item 311 - Portland Cement Concrete Pavement</p>	<p>A. <u>Cement</u> Quality: 9.00 bags cu.m. (40Kg/bag) Tests: For every 2000 bags or fraction thereof 1-Q, Quality Test</p> <p>B. <u>Fine Aggregate</u> Quantity: 1 0.05 cu.m./cu.m. concrete (if rounded coarse aggregate is used) 2. 0.54 cu.m./cu.m. concrete (if angular coarse aggregate is used) Tests: For every 1500 cu.m. or fraction thereof: a. For a coarse not yet tested, or failed in previous quality test: 1-Q, Quality Test For: Grading, Elutriation (Wash), Bulk Specific Gravity, Absorption Mortar Strength, Soundness, Organic Impurities, Unit Weight, % Clay Lumps and Shale. b. For a source previously tested and passed Quality Test: 1-Q, Quality Test for: Grading, Elutriation (Wash), Bulk Specific Gravity, Absorption Mortar Strength. For every 75 cu.m. or fraction thereof 1-G, Grading Test</p> <p>C. <u>Course Aggregate</u> Quantity: 1. 0.77 cu.m/cu.m concrete (if rounded coarse aggregate is used) 2. 0.68 cu.m/cu.m concrete (if angular coarse aggregate is used) Tests: For every 1500 cu.m or fraction Thereof a. For a source previously tested and passed quality tests: 1-Q, Quality Test for: Grading, Bulk Specific Gravity, Absorption and Abrasion For every 75 cu. m or fraction thereof: 1-G Grading Test</p> <p>D. <u>Water</u> Tests: 1-Certificate from Project Engineer or 1-Q, Quality Test, if source is questionable</p> <p>E. <u>Joint Filler</u> 1. Poured Joint Filler 1-Q, Quality Test on each type of ingredient for each shipment 2. Premolded Joint Filler 1-Q, Quality Test on each thickness of filler for each shipment</p> <p>F. <u>Special Curing Agents</u> 1-Q, Quality Test for each shipment</p> <p>G. <u>Steel Bars</u> For every 10,000 kg. or fraction thereof for each size 1-Q, Quality Test for Bending, Tension and Chemical Analysis</p>

**PART E - SURFACE COURSE**

ITEMS OF WORK	MINIMUM TEST REQUIREMENTS
	<p>H. <u>Concrete</u>            Flexural Strength Test on Concrete Beam Sample            1-set consisting of 3 beam samples shall represent a 330 sq. m of pavement, 230 mm depth or fraction thereof placed each day. Volume of concrete not more than 75 cu.m.</p> <p>I. <u>Completed Pavement</u>            Thickness determination by concrete core drilling on a lot basis            Five (5) holes per km per lane or five (5) holes per 500 m when 2 lanes are poured concurrently.</p>

**PART F - BRIDGE CONSTRUCTION**

ITEMS OF WORK	MINIMUM TEST REQUIREMENTS
Item 400 - Piling	<p>A. <u>Timber Piles</u>            1-Inspection Report for each size and shipment of timber</p> <p>B. <u>Concrete Piles</u>            a. Concrete            Same tests as for Item 405            b. Reinforcing Steel            Same tests as for Item 404</p> <p>C. <u>Structural Piles</u>            1-Q, Quality Test/Mill Test Certificate            1-IR, Inspection Report</p>
Item 401 - Railings	<p>A. <u>Concrete</u>            Same tests as for Item 405, Class C</p> <p>B. <u>Reinforcing Steel</u>            Same tests as for Item 404</p>
Item 402 - Timber Structures	<p>1-Q, Quality Test on Manufacturer's Certificate for each type of materials used            1-Inspection Report for each type and shipment of timber</p>
Item 403 - Metal Structures	<p>1-Q, Quality Test or Mill Test Certificate for each type of materials used            1-Inspection Report for each type and shipment of metal used</p>
Item 404 - Reinforcing Steel	<p>A. <u>Bar Reinforcement for Concrete</u> for every 10,000 kg or fraction thereof for each size:            1-Q, Quality Test for Bending, Tension and Chemical Analysis</p> <p>B. <u>Wire and Wire Mesh</u>            1-Q, Quality Test</p>
Item 405 - Structural Concrete	<p>A. <u>Cement</u>            Quantity: (40 kg/bag)            Class A ----- 9.0 bags/cu.m. of concrete            Class B ----- 8.0 bags/cu.m. of concrete            Class C ----- 9.5 bags/cu.m. of concrete            Class P ----- 11.0 bags/cu.m. of concrete            Tests: For every 2000 bags or fraction thereof            1-Q, Quality Test</p>

**PART F - BRIDGE CONSTRUCTION**

ITEMS OF WORK	MINIMUM TEST REQUIREMENTS
	<p>B. <u>Fine Aggregate</u>            Quantity: cu.m./cu.m. of concrete                              <u>For Rounded</u>      <u>For Angular</u>            Class A ----- 0.50 ----- 0.54            Class B ----- 0.45 ----- 0.52            Class C ----- 0.53 ----- 0.59            Class P ----- 0.44 ----- 0.47            Tests: For every 1500 cu.m or fraction thereof            a. For a source not yet tested or failed in previous quality test            1-Q, Quality Test for: Grading, Elutriation (Wash), Bulk Specific Gravity, Absorption, Mortar Strength, Soundness, Organic Impurities, Unit Weight, % Clay Lumps and Shale            b. For a source previously tested and passed quality test:            1-Q, Quality Test for: Grading, Elutriation (Wash), Bulk Specific Gravity, Absorption, and</p> <p>Mortar Strength            For every 75 cu.m. or fraction thereof:            1-G, Grading Test</p> <p>C. <u>Coarse Aggregates</u>            Quantity: cu.m./cu.m. of concrete                              <u>For Rounded</u>      <u>For Angular</u>            Class A ----- 0.77 ----- 0.68            Class B ----- 0.82 ----- 0.73            Class C ----- 0.70 ----- 0.68            Class P ----- 0.68 ----- 0.65            Tests: For every 1500 cu.m or fraction thereof            a. For a source not yet tested or failed in previous quality tests:            1-Q, Quality Test for: Grading, Bulk Specific Gravity, Absorption, Abrasion, Soundness and Unit Weight            b. For a source previously tested and passed quality test:            1-Q, Quality Test for Grading, Absorption, Bulk Specific Gravity and Abrasion            For every 75 cu.m. or fraction thereof:            1-G, Grading Test</p> <p>D. <u>Water</u>            1-Certificate from Project Engineer            1-Q, Quality Test, if source is questionable</p> <p>E. <u>Premolded Filler for expansion joints</u>            1-Q, Quality Test on each thickness of filler for each shipment</p> <p>F. <u>Steel Reinforcement</u>            1-Q, Quality Test for every 10,000 kg or fraction thereof for each size</p> <p>G. <u>Concrete</u>            Compressive strength test on concrete cylinder samples. 1 set consisting of 3 concrete cylinder samples shall be taken from each day's pouring and to represent not more than 75 cu.m of concrete or fraction thereof</p>

**PART F - BRIDGE CONSTRUCTION**

ITEMS OF WORK	MINIMUM TEST REQUIREMENTS
Item 406 - Prestressed Concrete Structures	<p>A. <u>Concrete</u> Same tests as for Item 405, Class P</p> <p>B. <u>Steel Reinforcement</u> Same tests as for Item 404</p> <p>C. <u>Wire Strand</u> 1-Q, for every 20 t or fraction thereof</p>
Item 407 - Concrete Structures	Same tests as for Items 403, 404, 405 and 411. Elastomeric Bearing Pad will be tested to determine its quality
Item 408 - Steel Bridges	<p>Same tests as for Items 403 and 411</p> <p>Painting: 1-Q, One 20-L can for every 100 cans or fraction thereof or 1-Q, One 4-L can for every 100 cans or fraction thereof</p>
Item 409 - Welded Structural Steel	Same tests as for Item 403 and Inspection Report
Item 410 - Treated or Untreated Timber	<p>Inspection Report for Timber</p> <p>1-Q, Quality Test for preservatives</p>
Item 411 - Paint	<p>1-Q, One 20-L can for every 100 cans or fraction thereof or 1-Q, one 4-L can for every 100 cans or fraction thereof</p>

**PART G - DRAINAGE AND SLOPE PROTECTION**

ITEMS OF WORK	MINIMUM TEST REQUIREMENTS
Item 500 - Pipe Culverts and Storm Drains	<p>A. <u>Pipes</u> Pipe for every 50 pieces: Strength, Absorption and Dimension Alternative Requirements: 1-set consisting of 3 concrete cylinder samples for not more than 25 pipes cast in the field, and 1- Inspection Report for each size for not more than 25 pipes cast in the field</p> <p>B. <u>Mortar for Joint</u> Cement, Fine Aggregates and Water - Same tests as for Item 405</p>
Item 501 - Underdrains	<p>A. <u>Concrete Pipe (Non-Reinforced)</u> 0.5% of the number of pipes of each size but not less than 2, for strength, absorption and dimension Alternative Requirements: 1-set consisting of 3 concrete cylinder samples for not more than 25 pipes cast in the field, and 1- Inspection Report for each size for not more than 25 pipes cast in the field.</p> <p>B. <u>Clay Pipe</u> 1-Pipe for every 200 pieces each size, with a minimum of 2 specimens for strength, absorption and dimension.</p>
Item 502 - Manholes, inlets and Catch Basins	<p>A. <u>Concrete</u> Same tests as for Item 405, Class A</p> <p>B. <u>Lids, Cast Iron Frames and Grating</u> Inspection Report</p>

**PART G - DRAINAGE AND SLOPE PROTECTION**

ITEMS OF WORK	MINIMUM TEST REQUIREMENTS
Item 503 - Cleaning and Reconditioning Existing Drainage Structures	Inspection Report
Item 504 - Riprap and Grouted Riprap	Same tests as for Item 505
Item 505 - Stone Masonry	A. <u>Cement</u> Quantity: 2 bags/cu.m. of concrete Tests: For every 2,000 bags or fraction thereof: 1-Q, Quality Tests B. <u>Fine Aggregate</u> Quantity: 0.17 cu.m./cu.m. of concrete Tests: for every 2,000 bags or fraction thereof 1-Q, quality Test for: (Same as for Item 405) For every 75 cu.m. or fraction thereof: C. <u>Stone</u> Inspection Report D. <u>Water</u> 1-Certificate from Project Engineer or 1-Q, quality Test, if source is questionable
Item 506 - Hand-Laid Embankment	Inspection Report
Item 507 - Sheet Piles	A. <u>Timber Sheet Piles</u> Inspection Report B. <u>Concrete Sheet Piles</u> Same tests as for Item 400 C. <u>Steel Sheet Piles</u> Same tests as for Item 403
Item 508 - Concrete Slope Protection	A. <u>Bed Course</u> Same tests as for Item 200 B. <u>Steel Reinforcement</u> Same tests as for Item 404 C. <u>Concrete</u> Same tests as for Item 405
Item 509 - Gabions	1-Q, Quality Test for each shipment

**PART H - MISCELLANEOUS STRUCTURE**

ITEMS OF WORK	MINIMUM TEST REQUIREMENTS
Item 600 - Curb and/or Gutter	A. <u>Concrete</u> Quantity: 0.078 cu.m./m (Curb only) 0.092 cu.m./m (Curb and Gutter, type A) 0.149 cu.m./m (Curb and Gutter Type B) 0.074 cu.m./m (Curb and Gutter Type C) Same tests as for Item 405 B. <u>Joint Filler</u> Same tests as for Item 311
Item 601 - Sidewalk	A. <u>Concrete</u> Same tests as for Item 405, Class A B. <u>Premolded Expansion Joint Filler</u> Same tests as item 311
Item 602 - Monuments, Markers and Guide Posts	A. <u>Concrete</u> Same as for Item 405 B. <u>Reinforcing Steel</u> Same tests as for Item 404 C. <u>Timber</u> Same tests as for Item 410 D. <u>Paint</u> Same tests as for Item 411

**PART H - MISCELLANEOUS STRUCTURE**

ITEMS OF WORK	MINIMUM TEST REQUIREMENTS
Item 604 - Fencing	A. <u>Barbed Wire, Chain Link Fabric</u> 1-Q, Quality Test B. <u>Concrete Post</u> Same tests as for Item 405 Steel Reinforcement: Same test as for Item 404
Item 605 - Road Sign	Inspection Report
Item 606 - Pavement Markings	Same tests as for Item 411
Item 607 - Reflective Pavement Studs	Inspection Report
Item 608 - Topsoil	Inspection Report
Item 609 - Sprigging	Inspection Report
Item 610 - Sodding	Inspection Report
Item 611 - Tree Planting	Inspection Report

**PART I - MATERIALS DETAILS**

ITEMS OF WORK	MINIMUM TEST REQUIREMENTS
Item 700 - Hydraulic Cement	Same tests as for Item 405
Item 701 - Construction Lime (Hydrated)	1-Q, Quality test for every 100 t or fraction thereof
Item 702 - Bituminous Materials	Same tests as for Items 301, 302, 303, 306, 307, 308, 309 and 310
Item 703 - Aggregates	Same tests as for Item of Work specified in the Bill of Quantities
Item 703A - Mineral filler	Same tests as for Item 307
Item 704 - Masonry Units	1-Q, Quality Test for every 10,000 units or fraction thereof
Item 705 - Joint Materials	Same tests as for Item 311 and 500
Item 706 - Concrete, Clay, Plastic and Fiber Pipes	A. <u>Concrete Pipes</u> Same tests as for Item 500 B. <u>Clay and other types of pipes</u> Refer to the applicable requirements of AASHTO Test and Specification
Item 707 - Metal Pipe	Same tests as for Item 400
Item 708 - Concrete Curing Materials & Admixtures	1-Q, Quality Test for each shipment
Item 709 - Paints	Same tests as for Item 411
Item 710 - Reinforcing Steel and Wire Rope	A. <u>Reinforcing Steel</u> Same tests as for Item 404 B. <u>Wire Rope</u> Same tests as for item 406
Item 711 - Fence and Guardrail	A. <u>Fence</u> Same tests as for Item 604 B. <u>Guardrail</u> Same tests as for Item 603
Item 712 - Structural Metal	Same tests as for Items 403 and 409
Item 713 - Treated and Untreated Timber	Same tests as for Item 410
Item 714 - Water	1-Certificate from Project Engineer or 1-Q, Quality Test, if source is questionable



**SCHEDULE OF MINIMUM TEST REQUIREMENTS GOVERNING ITEMS OF WORK OF THE DPWH  
STANDARD SPECIFICATIONS FOR HIGHWAYS, BRIDGES AND AIRPORTS USING TEST REQUIREMENTS  
AS PRACTICED BY THE NATIONAL TRANSMISSION CORPORATION (TRANSCO) FOR POWER  
TRANSMISSION LINE AND SUBSTATION PROJECTS**

<b>PART C - EARTHWORK</b>	
<b>ITEMS OF WORK</b>	<b>MINIMUM TEST REQUIREMENTS</b>
Item 100 - Clearing & Grubbing	None
Item 101 - Removal of Structures & Obstruction	None
Item 102 - Excavation	Same tests as for Items 103, 104 and 105, whichever is applicable. (same as per DPWH Standard)
Item 103 - Structure Excavation If excavated materials are wasted, the volume involved shall be reported so that quality control requirements may be adjusted accordingly. Submit Project Engineer Certificate of Waste.	If excavated materials are incorporated into the work: For every 1500 cu.m. or fraction thereof: 1- Specific Gravity 1- Grading Test 1- Plasticity Test (LL, PL, PI) 1- Laboratory Compaction Test
Item 104 - Embankment/Backfill	For every 1500 cu.m. or fraction thereof per source:  1- Specific Gravity 1- Grading Test 1- Plasticity Test (LL, PL, PI) 1- Laboratory Compaction Test A. Substations A.1 Grading Fill * 1 - Field Density Test for each 200 sq. m. of each layer of compacted fill A.2 Roadways * 1 - Field Density Test for each 50 sq. m. of each layer of compacted fill * The layers shall be placed not exceeding 200 mm in loose measurement and compacted with approved vibro-roller weighing not less than 10 tons. B. Transmission Lines B.1 Backfill 1- Field Density Test for each tower
Item 105 - Sub-grade Preparation	Same tests as for Item 104 above
<b>PART D - SUBBASE AND BASE COURSE</b>	
<b>ITEMS OF WORK</b>	<b>MINIMUM TEST REQUIREMENTS</b>
Item 200 - Aggregate Subbase Course	For every 300 cu.m. or fraction thereof per source:  1- Grading Test 1- Abrasion Test 1- Plasticity Test (LL, PL, PI) 1- Laboratory Compaction Test For every 50 sq.m. per layer of 150 mm of compacted depth: 1- Field Density Test
Item 201 - Aggregate Base Course	Same tests as for Item 200 above
Item 202 - Crushed Aggregate Base Course	Same tests as for Item 200 above

**PART E - SURFACE COURSE**

ITEMS OF WORK	MINIMUM TEST REQUIREMENTS
Item 311 - Portland Cement Concrete Pavement	<p>A. <u>Cement</u> Splg.: For every 1,000 bags/brand or fraction thereof per brand: 1 - bag (40 kg/bag) Tests: 1 - Time of Setting using Vicat Apparatus 1 - Mortar Strength Test</p> <p>B. <u>Fine Aggregate</u> Tests: a. For each new source (no previous tests) 1- Gradation Test 1- Decantation Test 1- Bulk Specific Gravity &amp; Absorption 1- Unit Weight Determination b. For each approved source (with previous acceptable test results) 1- Gradation Test 1- Decantation Test 1- Unit Weight Determination</p> <p>C. <u>Coarse Aggregate</u> Tests: a. For each new source (no previous tests) 1- Gradation Test 1- Bulk Specific Gravity &amp; Absorption 1- Unit Weight Determination 1- Abrasion Test b. For each approved source (with previous acceptable test results) 1- Gradation Test 1- Unit Weight Determination</p> <p>D. <u>Water</u> Tests: Certificate from Project Engineer</p> <p>E. <u>Joint Filler</u> None</p> <p>F. <u>Special Curing Agents</u> None</p> <p>G. <u>Steel Bars</u> Per 10,000 kg or fraction thereof of steel bars/delivery/ per size Tests: 1 - Mill Certificate 1 - Quality Test for Bending, Tension and Unit Weight Determination in every size.</p> <p>H. <u>Concrete</u> Mix Prop.: As determined by Transco thru Trial Mix conducted Tests: Per 25 m<sup>3</sup> or fraction thereof per pouring schedule 1 - set of 3 concrete cylinder samples for Compressive Strength Test.</p> <p>I. <u>Completed Pavement</u> None</p>

**PART F - BRIDGE CONSTRUCTION/TOWER FOOTINGS, EQUIPMENT FOUNDATIONS, AND OTHER STRUCTURES.**

ITEMS OF WORK	MINIMUM TEST REQUIREMENTS
Item 400 - Piling	<p>B. <u>Concrete Piles</u></p> <p>a. Concrete Same tests as for Item 405 below</p> <p>b. Reinforcing Steel Same tests as for Item 404 below</p> <p>C. <u>Structural Piles</u> 1 - Mill Test Certificate</p>
Item 404 - Reinforcing Steel	<p>A. <u>Bar Reinforcement for Concrete</u> Per 10,000 kg or fraction thereof of steel bars Tests: 1 - Mill Certificate 1 - Quality Test for Bending, Tension and Unit Weight determination in every size.</p> <p>B. <u>Wire and Wire Mesh - None</u></p>
Item 405 - Structural Concrete	<p>A. <u>Cement</u> Splg.: For every 1,000 bags/brand: 1 - bag (40kg/bag) Tests: 1 - Time of Setting using Vicat Apparatus 1 - Mortar Strength Test</p> <p>B. <u>Fine Aggregates</u> Tests: a. For each new source (no previous test) 1 - Gradation Test 1 - Decantation Test 1 - Bulk Specific Gravity and Absorption 1 - Unit Weight Determination b. For each approved source (with previous acceptable test results) 1 - Gradation Test 1 - Decantation Test 1 - Unit Weight</p> <p>C. <u>Coarse Aggregates</u> Tests: a. For each new source (no previous test) 1 - Gradation Test 1 - Bulk Specific Gravity and Absorption 1 - Unit Weight Determination 1 - Abrasion Test b. For each approved source (with previous acceptable test results) 1 - Gradation Test 1 - Unit Weight Determination</p> <p>D. <u>Water</u> Tests: Certificate from Project Engineer</p> <p>E. <u>Premolded Filler for expansion joints</u> None</p>

**PART F - BRIDGE CONSTRUCTION/TOWER FOOTINGS, EQUIPMENT FOUNDATIONS, AND OTHER STRUCTURES.**

ITEMS OF WORK	MINIMUM TEST REQUIREMENTS
	F. <u>Concrete</u> Mix Prop.: As determined by Transco thru Trial Mix conducted Tests: 1 - set of 3 conc. cylinder samples for: a. Every leg of transmission tower b. Every equipment foundation/cluster of related foundations c. Every 25 m <sup>3</sup> or fraction thereof per pouring schedule.
Item 407 - Other Concrete Structures	Same tests as for Item 405 above

**PART G - DRAINAGE AND SLOPE PROTECTION**

ITEMS OF WORK	MINIMUM TEST REQUIREMENTS
Item 504 - Riprap and Grouted Riprap	Same tests as for Item 505 below
Item 505 - Stone Masonry	A. <u>Cement</u> Mix Prop.: 1:3 of cement to clean fine aggregates Tests: Same tests as for Items 405 - A above B. <u>Fine Aggregate</u> Tests: Same tests as for Items 405 - B above C. <u>Boulder</u> Tests: Unit weight, specific gravity, Weight
Item 508 - Concrete Slope Protection	A. <u>Bed Course</u> Same tests as for Item 200 DPWH Standard B. <u>Steel Reinforcement</u> Same tests as for Item 404 DPWH Standard C. <u>Concrete</u> Same tests as for Item 405 above

**PART H - MISCELLANEOUS STRUCTURE**

ITEMS OF WORK	MINIMUM TEST REQUIREMENTS
Item 600 - Curb and/or Gutter	A. <u>Concrete</u> Same tests as for Item 405 above B. <u>Joint Filler</u> None
Item 601 - Sidewalk	A. <u>Concrete</u> Same tests as for Items 311 DPWH Standard and 405 above B. <u>Premolded Expansion Joint Filler</u> None

**PART I - MATERIALS DETAILS**

ITEMS OF WORK	MINIMUM TEST REQUIREMENTS
Item 704 - Masonry Units	1 - Compressive strength test every specimen taken at random representing 500 units delivered at site or fraction thereof.
Item 708 - Concrete Curing Materials & Admixtures	1-Quality Tests for each shipment 1-Specific Gravity

**LIST OF PHILIPPINE NATIONAL STANDARDS (CONSTRUCTION MATERIALS)  
FOR MANDATORY IMPLEMENTATION**

CLASSIFICATION/NAME OF MATERIALS	BPS DESIGNATION NO.
<b><i>Cement and Lime</i></b>	
Portland cement – Specification	PNS 7:2005
Pozzolan cement – Specification	PNS 63:2006
<b><i>Ceramic and Ceramic Products</i></b>	
Sanitary wares- Specification	PNS 156:1992
<b><i>Electric Wires and Cables</i></b>	
Unplasticized polyvinyl chloride (uPVC) electrical conduit- Specification	PNS 14:1983
Thermoplastic Electric Wires and Cables	PNS 35:1990
Electrical products- Polyvinyl chloride insulated flexible cords- Specification	PNS 163: 1994
<b><i>Lamps and Related Equipment</i></b>	
Ballast for tubular fluorescent lamps – General and safety requirements	PNS 12-1:1997
Ballast for tubular fluorescent lamps – Performance requirements	PNS 12-2:1997
Ballast for high pressure mercury vapor lamps – Specification	PNS 105:1986
AC supplied electronic ballasts for tubular fluorescent lamps Part 1: General and safety requirements	PNS 135-1:1997
AC supplied electronic ballasts for tubular fluorescent lamps Part 2: Performance requirements	PNS 135-2:1997
Circuit breakers, Moulded case – Specification	PNS 519:1997
Low voltage switchgear and controlgear Part 2: Circuit Breaker	PNS 1573:1997
Unplasticized polyvinyl chloride (uPVC) electrical conduit – Specification	PNS 14:1987
Double-capped fluorescent lamps- Performance specifications	PNS IEC 60081: 2001
Lamps- Self ballasted lamps for general lighting services- Part 1: Safety requirements	PNS 603-1:1993
Lamps- Self ballasted lamps for general lighting services- Part 2: Performance requirements	PNS 603-2:1993
Lamps and related equipment- Electromagnetic ballast- Energy standards and labeling requirements	PNS 12-3:2000
Single-capped fluorescent lamps- Performance specification Section 1: General	PNS 1261:1995
Class H Fuses – Specification	PNS 13:1999
Fuseholders – Specification	PNS 56:1996
Edison screw lampholders – Specification	PNS 80:1997
Safety specifications for incandescent lamps- Part 1: Tungsten filament lamps for domestic and similar general lighting purposes	PNS 38-1:1995
Tungsten filament lamps for domestic and similar general lighting purposes- Part 2: Performance requirements	PNS 38-2:1995
Lampholders for tubular fluorescent lamps and starterholders – Specification	PNS 42:1997
Liquid tight flexible steel conduit – Specification	PNS 164:1988
Plugs and socket-outlets for household and similar purposes Part 1: General requirements	PNS 1486-1:1996
Plugs and socket-outlets for domestic and general use standards	PNS 1572-1:1997
Electrical products- Boxes for rigid metal conduits	PNS 1829:1999
Pressure sensitive PVC tapes for electrical insulation – Specification	PNS 79:1992
Glow-starters for fluorescent lamps	PNS 45:1997

CLASSIFICATION/NAME OF MATERIALS	BPS DESIGNATION NO.
Knife switches – Specification Snap switches for general use – Specification Switches for household and similar fixed-electrical installations Part 1: General requirements Pressure sensitive adhesive polyvinyl chloride (PVC) tapes- PVC electrical tapes	PNS 118:1992 PNS 57:1996 PNS 1485-1:1996 PNS 79:1992
<b><i>Lumber and Wood Products</i></b>	
Plywood – Specification	PNS 196:2000
<b><i>Pipes and Fittings</i></b>	
High density polyethylene (PE) pipes for potable water supply – Specification Polybutylene (PB) pipes for potable water supply – Specification Unplasticized polyvinyl chloride (uPVC) pipes for potable water supply – specification Grey iron pipes for pressure water lines- Specification	PNS 55:1986 PNS 152:1987 PNS 65:1993 PNS 1991:2002
<b><i>Steel</i></b>	
Steel- Black & hot-dipped zinc-coated (galvanized) longitudinally welded steel pipes for ordinary use – Specification Re-rolled steel bars for concrete reinforcement – Specification Steel bars for concrete reinforcement – Specification Galvanized steel sheets and coils – Specification Galvanized steel sheets & coils, pre-painted – Specification Cold-reduced carbon steel sheet of commercial and drawing qualities: Specification Hot-dip zinc-coated carbon steel sheets Continuous hot-dip aluminum zinc-coated steel sheets Continuous hot-dip zinc /5% aluminum alloy coated steel sheets Steel wire nails – Specification	PNS 26:1992 PNS 211:2000 PNS 49:2000 PNS 67:2000 PNS 201:1990 PNS 127:2004 PNS 1990:2004 PNS 1993:2004 PNS 2003:2004 PNS 136:2000



CONSTRUCTION INDUSTRY AUTHORITY OF THE PHILIPPINES (CIAP)

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