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ENGINEERING SERVICES FOR RURAL ROADS REHABILITATION (ES3R) CONTRACT NO: EDH-I-00-08-00023 YEAR 2, QUARTER 2 PROGRESS REPORT (TO MARCH 2015)

20 April 2015



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YEAR 2, QUARTER 2

PROGRESS REPORT (To March 2015)

Prepared for: USAID/Liberia

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20 April 2015

The views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government. This report was prepared for the U.S. Agency for International Development. It was prepared by CDM International, Engineering Services Rural Roads Rehabilitation (ES3R)

Acronyms

A & E	Architect and Engineer
BoQ	Bills of Quantity
COP	Chief of Party
COR	Contracting Officer Representative
ES3R	Engineering Services for Rural Roads Rehabilitation
ETL	Engineering Team Leader
EVD	Ebola Virus Disease
FED	Food and Enterprise Development
FTF	Feed the Future
FTL	Field Team Leader
F2M	Farm to Market
F2MRR	Farm to Market Road Rehabilitation
GIS	Geographic Information System
GOL	Government of Liberia
IWP	Interim Work Plan
LESSP	Liberia Energy Sector Support Project
LMWP	Liberia Municipal Water Project
LOE	Level of Effort
MCA	Multiple Criteria Analysis
MOF	Ministry of Finance
MPEA	Ministry of Planning and Economic Affairs
MPW	Ministry of Public Works
OCA	Organizational Capacity Assessment
PIRS	Performance Indicator Results Sheet
RE	Resident Engineer
SI	Site Inspector
USAID	United States Agency for International Development

ENGINEERING SERVICES FOR RURAL ROADS REHABILITATION (ES3R)

YEAR 2, QUARTER 2, JANUARY TO MARCH 2015

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1. SUMMARY PROJECT DESCRIPTION

1.1 Introduction

The U. S. Agency for International Development's (USAID) 'Engineering Services for Rural Roads Rehabilitation (ES3R)' was awarded to Camp Dresser McKee International (CDM) under the following USAID contract number: EDH-I-00-08-00023 and task order AID-669-TO-13-00002 which records the period of performance as 8 October 2013 to 20 October 2015.

Liberia's Farm to Market Rural Roads (F2MRR) activity is allied to the objectives of the Feed the Future (FTF) initiative, which is a U.S. government initiative, aiming to address the root causes of global hunger by sustainably increasing agricultural productivity. F2MRR will provide infrastructure investment in the rehabilitation of rural farm-to-market roads to support the following:

- USAID /Liberia FTF program Food and Enterprise Development (FED),
- Capacity development for routine maintenance systems within the Government of Liberia (GOL),
- Capacity development of Ministry of Public Works (MPW) rural roads engineers and local A & E firms,

- Development of alternative low volume road pavement pilot projects, standards and design specifications.

1.2 Objectives

Within F2MRR, ES3R will be an implementing mechanism, which will undertake the following objectives:

Objective 1:

Provide construction oversight for three (3) local contracts for the rehabilitation of a total of 83.5 kilometers farm-to-market roads in Bong, Lofa, and Nimba counties from 2013 to 2015.

Objective 2:

Produce engineering designs and construction documents for the 450 kilometers farm-to-market roads in Bong, Lofa, Nimba, and Grand Bassa counties to be rehabilitated in 2015 to 2018.

Objective 3:

Training and pre-qualification of five (5) local architect-engineer firms capable of providing oversight for road rehabilitation activities by 2015.

2. QUARTERLY OVERVIEW

This is the second quarterly progress report to be presented for Year 2 of the project. The report addresses the completion of Health Assessment #1/2 which allowed the resumption of full operation of all project objectives after the EVD crisis. It was the onslaught of the pandemic which had had given rise to the temporary withdrawal of field teams from field survey and construction oversight to Monrovia office based activities in early August 2014. In January 2015, the field teams had been remobilized to the County capitals as a result of the positive status concluded in Health Assessment 1 as it confirmed no risk of exposure the ES3R staff to EVD. In addition to the EVD issue, this quarterly report details the work plan for execution of remaining project activities for the three components to completion. This revised Work Plan accounts for the mentioned interruption in the second half of the year 2014 with a new approach and strategy to overcome previous delays and face new expected challenges. The request to USAID to amend the contract with its financial implication; includes a change in original scope of work in connection with the addition of 75 kilometers of construction oversight and inclusion of a structural designer for bridges with spans greater than 10 meters.

2.1 Quarter 2 Year 2 Highlights Summary

The table below summarizes key events undertaken (by month) in the operations for the project. Items of importance will be detailed following the table.

JANUARY 2015		
Date	Description	Comment
14 Jan	CDM Approval to return to County Capitals as result of Health Assessment 1 results.	CDM Management to ES3R
18 thru 23 Jan-	ES3R Project leadership transition in Brussels to Francisco Perez, new COP	By CDM Sr. Staff
23 Jan	ES3R COP, Francisco Perez, arrives to Monrovia	New ES3R COP
27 Jan	Meeting with USAID COR	At ES3R office
28 Jan	Meeting with USAID CO 2015	At USAID Office
24 thru 31 Jan	Initiation of Health Assessment #2 Data Collection at Bong and Lofa Counties	Meetings and interviews with ETF teams on site
29 thru 31 Jan	USAID Mission Director and the CO visit constructions sites in Bong and Lofa Counties	USAID/Liberia
FEBRUARY 2015		
Feb 5	Weekly Project Review Meeting	USAID COR
Feb 10	Health Assessment 2 submitted for review	CDM MGMT
Feb 12	Health Assessment 2 approval	CDM MGMT
Feb 12	Weekly Project Review Meeting	USAID COR

Feb 12	Submittal of Draft Monthly Progress Report for January 2015	To USAID/Liberia
Feb 13	Participation of the Y2 Work Plan for USAID FED	USAID FED Project COP
Feb 17	Travel request approval for TRG Capacity Building Expert	From USAID/Liberia
Feb 20	Draft Year 2 Work Plan submitted	To USAID/Liberia
Feb 27	Presentation of Year 2 Work Plan including cost estimates	To USAID/Liberia

MARCH 2015		
Date	Description	Comment
6 March	Meeting with A&E Firms Directors for preparatory discussion for the on-job training	A&E Directors
9 March	Project Review Meeting with attendance of Pretoria Office staff, ETL and COP	USAID COR
12 March	Workshop No. 1 by TRG and ES3R staff	A&E Firms/Eng.
12 March	Submittal of Monthly Report	USAID
13 March	Site visit to Bridge Lee in Nimba County for confirmation of founding levels and bearing capacity on Banh Payee Rd.	21 st Century Contractor
17 March	Workshop No. 2 on Leadership and Management by TRG and ES3R staff for E&E Firm owners	A&E Directors
23 March	Meeting with A&E Firms Directors for mobilization plan for the on-job training	A&E Directors
25 March	Received approval for travel for Frederick Were-Higenyi, FTL	USAID COR
27 March	Submittal of Contract Amendment 4	USAID
29 March	ETL on Leave	ETL- J Clarke

31 March	Travel Request for the Environmental Specialist to offer inputs for the ES3R	USAID COR
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2.2 Quarter 2 Details of Highlights

2.1.1 EVD Crisis in Liberia

During this quarter, the EVD intensity decreased drastically with reporting of low to no casualties and infection cases in Lofa, Bong and Nimba Counties. The improved situation was particularly encouraging towards the end of January when only isolated registered cases of Ebola infection in Montserrado County were reported. In the other counties where ES3R activities are taking place (Bong, Lofa, Nimba) there were zero registered reported cases of infection. The Ebola Task Force teams have been effective in acting quickly focusing on suspected spots, including the bordering villages with Sierra Leon and Guinea. Due to the severe reduction in number of cases and casualties compared to the peak time of the crisis, numerous installations and facilities for Ebola treatment where shuttered and put to other uses besides the treatment of EVD patients. This normalization permitted the ES3R staff to conduct and complete Health Assessment 2 as a precursor to full mobilization and resumption of field based activities (Health Assessment 1 completed in late December 2014 allowed a return to county capitals-please see Quarterly Report 1 Year 2015). Upon submittal and review of the Health Assessment 2, the corporate management team determined that adequate safety measures had been implemented and that appropriate levels of duty of care to project staff were in place. As

such, management gave clearance to ES3R staff to return to the normal field activities.

2.2.2 Progress Meetings with USAID

Upon arrival in Monrovia of the new Chief of Party, an introductory meeting was held in the premises of the Mission with the Contracting Officer and other USAID officers involved in the ES3R project. The COP explained to CO the current activities by CDM Smith for the project, stressing the completion of Health Assessment 2 as a priority in order for the resumption of works. COP briefly explained the Work Plan for Year 2 to completion, which includes the oversight of 83.5 km construction package, design of 375-km under the contract framework of the 30% design level of detail and also the Institutional and Technical Capacity Building by TRG. Per prior coordination with USAID counterparts, the work plan anticipated an increase in oversight of an additional 75-km of construction packages. This new 75km package was a direct result of early completed designs by the ES3R team during confinement in Monrovia during the peak periods of the EVD crisis.

2.2.3 Project Deliverables and Documentation

Table of ES3R Communication Documents and Letters

ES3R COMMUNICATION DOCUMENTS AND LETTERS			
Communication		Date	Detail
From	To		
CDM	USAID CO	21-Feb-15	Draft Request for Contract Mod. Based on Work Plan for Year 2
USAID	CDM	17 Mar-15	Comments from USAID CO on proposed Contract Mod. 4
CDM	USAID CO	27 Mar-15	Request for Contract Modification 4

a

bove 'Table of Communication Documents and Letters' includes in chronological order those communications of particular relevance to the progression of Works on the ES3R project during the reporting Quarter 2.

The ES3R team maintained close liaison with USAID CO and COR, regarding changes in planning and project implementation warranted as a consequence of the health risks of the EVD. The primary emphasis of the coordination centered on the path forward to resumption of full project activities and return of Chief of Party in country.

2.2.4 Field Visits to Counties Sites

The USAID Mission director and Contracting officer visited the construction sites in the week ending 31 January for familiarization with ES3R ongoing construction works. Progress/Update meetings occurred throughout the reporting period with the USAID Contracting Officer Representative on a weekly frequency with few minor exceptions due to travel and other work impediments of the COR. Meetings at the end of January and beginning of February were utilized to discuss the progress made by the ES3R team conducting the Health Assessments and the potential resumption of full field

based activities. The remaining meetings in the quarter were focused on the elaboration of a Work Plan for Year 2 to completion; additional scope of work with the inclusion of 75km of road for construction oversight; and addition of a structural designer LOE in the team for bridges with spans greater than 10 meters.

A separate field trip consisting of USAID CO and COR, ES3R team members and the three contractors (SSF, 21st Century and Westwood) took place to visit the sites of the additional 75-km of roads packages. These additional packages which ES3R will provide oversight for will be tendered to the current contractors executing the ongoing 84.5km packages. The ES3R will provide oversight on these new packages until or around Oct-Dec 2015, at which time a separate program will assume construction oversight. During the site visit, contractors were introduced to the design drawing and tender documents for preparation of RFPs by each of them.

A site progress meeting was also held at the QAC contractor's Ganta office on the March 4th 2015. This was attended by the USAID COR, USAID CO, 21st Century Engineering senior management, and ES3R team.

2.2.5 Design of Road and Bridgeworks

Field works were resumed by the ES3R staff during the second half of February after the completion of Health Assessment 2. This included

resumption of limited field topographic survey works in Lofa, Nimba, and Bong Counties. It is noted that the remaining 375 km for design has been considered in Year Work Plan, keeping in view the contractual 30% of level of detail. The 30% level of detail was discussed and coordinated with USAID CO and COR during frequent meetings in the reporting period in preparation of future design packages from the remaining 375 km. Of the 75km design package, the team continues to complete remaining outstanding box culvert designs. In addition, it has been identified that there are several locations with a span in excess of 10m requiring a full structural design component. This bridge design and the need for a structural designer has been accepted by USAID as a change of scope of work and is proposed in Contract Modification 4 currently under review by USAID. Upon acceptance and modification to the existing contract, a structural design component will be added to the current ES3R team to complete up to 14 potential bridge locations.

2.2.6 Revised Work Plan

A revised work plan was presented to the USAID COR and other officers involved in ES3R project on 26 February 2015, and later resubmitted on 27 March after incorporation of comments by USAID (17 March 2015). The document included a narrative statement with a revised approach and strategy to complete the remaining activities and components. This work plan considers the impact of the EVD crisis, additional 75-km of construction oversight, addition of a structural engineer, as well as incorporation of additional capacity building and training within the Ministry of Public Works.

3. PROJECT OBJECTIVES PROGRESS

3.1 Objective 1 – Construction Oversight

With the return to the site of all field teams, objective one has resumed to assure the construction works' quality being executed by SSF, Westwood and 21st Century contractors. Generally, all 83.5 kilometers of road works, culverts and bridges will be substantially completed in the beginning of the third calendar quarter of 2015. The additional 75km, which are being awarded as extension to the present contracts, may potentially start in the beginning of calendar quarter 2 of 2015. In order to continue providing the services of construction oversight, the addition of up to four Ministry of Public works junior engineers has been incorporated into the work plan. This new scope of work is described in the previously mentioned contract modification 4. In addition to these four junior engineers, five trainee engineers from the A&E firm's capacity building program will also be incorporated into the program.

As of the end of March 2015, the general progress of each of the contracts, is as follows:

Bong:

The rate of progress within the reporting period was higher than in the previous Quarter. Clearing on the Tolomai-Lele road and the construction of the triple-cell and double cell-box culverts along the Tolomai – Leleh road is on-going.

Until the end of this reporting period, Westwood Contractor has

completed clearance in 98%, setting-out 92%, grading and reshaping in 93%; 83% of embankment formation and 75% of gravelling. Furthermore, the 120 pipes culverts are all in progress and nearing completion; box culverts (single, double and triple-cell) progress is done between 77% and 91%. The overall progress estimated by the contractor is of about 69%.

Nimba:

This contract includes three road links for a total length of 21 kilometers.

Until the end of March, Contractor has completed all clearance, setting-out, grading and shaping in the total 21 kilometers, 48% of embankment formation and 43% of gravelling. In addition, the 42 pipe culverts are all done and Lee Bridge achieved progress is 10%.

It has been recorded and reported by 21st Century Engineering contractor four days of intensive rains (14 hours in total), which prevented him from attaining a higher rate of progress. The equivalent in working time is estimated two days.

Lofa:

Works on the three roads are on-going to the end of this reporting period at a very slow pace. To date, there are construction activities yet to be carried out for Galamai road link: Scour, grouted stone pitching and clearing of debris and unwanted materials from wing walls; for Bitijama road: Scour, grouted stone pitching; and for Barkedu-Jamulor-Moibadu road stretch: Scour, grouted stone pitching, casting of the upper slab of box culvert and, grading and reshaping.



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ES3R Status of Works Contracts			
Description	Bong	Lofa	Nimba
Contract Award	22 Jan 2014	27 Jan 2014	22 Jan 2014
Contract Period, days	730	730+90	730
Time Elapsed (to end March 2015), %	59	52	59
Overall Assessed Completion, % (approx.) (March 2015)	69	74	66
Total Contract Value, USD	1,895,141.86	592,384.35	843,228.25
Payments to end of Feb 2015:	1,138,662.62	441,020.60	556,530.49

3.2 Objective 2 – Design and Contract Documents

The disruption caused by the EVD crisis heavily impacted the design activity within this component. For this reason, in Year 2 Work Plan, the ES3R team has taken on an additional consultant to assist in the rapid and quick completion of the remaining 375 kilometers in need of survey. The team recognizes the extreme urgency of completing the survey prior to the start of the rainy season such that design can begin. It is anticipated to have this new survey component online by early April in order to meet contract deliverable requirements.

Concurrently, the existing field teams have also resumed field works from mid of February 2015 consisting of: topographic survey, interventions, soil investigation and hydraulic investigations. These inputs are to be carried out in a systematic way in order to complete by July this year so as to avoid delays in the design work for road and bridges at the commencement of the rainy season.

The current design delivered links are per the below table.

County	Road Link	Length km	Total km
Lofa	John's Town - Bulor	15.4	15.4
Nimba	Dounpa – Zuaplay – Gogein – Nimba	22.2	28.2
	Gaopah – Garwonpa - Fleedin	6.0	
Bong	Gbondi - Gbarnia	17.5	31.6
	Yaindewoun – Nyan – Molo ta Junction	14.1	
		Total	75.2

For the remaining design work, Year 2 Work Plan's strategy has been divided into various clusters with the aim of facilitating the execution of field works from a logistical point of view and also to ease the contracting packaging.

Replacement of the vacant Field Team Leader position is expected in the beginning of calendar Quarter 2. At such time, field topographic surveys, interventions, geotechnical and hydraulic investigation will be carried under his responsibility in Grand Bassa County. This area represents 5 work clusters for a total of 137km. In Bong County there remains 56 km in 3 clusters which will be completed by a separate team. For each road link/cluster, obtained survey data will be converted into tender documentation to include:

- Strip mapping,
- Improvement plans,
- Bills of quantities (BoQ) according to specification,
- Technical drawings illustrating BoQ items,
- Digital drawings for pipe culverts,
- Digital drawings for revised inlet / outlet structures,
- Technical drawings for single and double cell box culverts,
- Review and revision of MPW Bills of Quantities (5 sections),
- Review and revision of MPW Specifications (5 sections),
- Preparation of standard contractor reporting templates.

The production of design packages will be subject to project quality procedures to include a Technical Review Committee (TRC). This TRC will comprise an independent review by experienced and technically qualified personnel. The review is aimed to assure the adequacy and appropriateness of technical data; pertinent application of existing and new technology, and whether a sound, practical and cost-effective approach has been made. The Technical Review Committee will conduct meetings in three different phases:

- Phase 1: Before submittal of the 0 – 10% design deliverable
- Phase 2: Before submittal of the 30% design deliverable
- Phase 3: Before submittal of the 60% design deliverable

In addition to the TRC reviews, other quality control measures will be in place to verify accurate data usage and overall presentation.

3.3 Objective 3 – Training and Capacity Building

Two workshops were conducted between 12 and 20 March as follows:

Workshop 1 involved introduction and knowledge transfer of: project orientation and skills definitions; mentoring, skill transfer and work planning activities; communication skills; and team building. This workshop was attended by AE firm field Engineers who also become field trainees under the capacity building plan. The meeting had six participants belonging to the various A&E firms.

Workshop 2 was addressed to A&E Managers/Directors and focused on: Roads to Leadership and Management; making decisions and building teams; giving feedback and resolving conflict; developing self, others and your organization. Eight firm Directors participated in the event and the reception was positive by both the AE firms as well as USAID.

At the conclusion of Workshops 1 and 2, a separate meeting was conducted on 23 March with Firm owners for planning purposes of the next stage of capacity building. This included the planning of logistics of the placement of the firm trainees into the field with existing ES3R field teams.

Capacity building has also continued via the mentoring of contractors since the resumption of all field based activities.

ES3R training and mentoring of project staff during the reporting period included:

Resident Engineers:

- Road geometric design calculations,
- Analysis of details from existing road conditions for design purposes,
- Preliminary design for box culverts,
- Calculations in design of structures,
- Preparation of road works bill of quantities,
- Interpretation and use of standard contract documentation
- Compile designs for submission to USAID/Liberia.
- Collection of market costs for plant, equipment and materials,
- Generation of rates for bill of quantities items,
- Culvert hydraulics and discharge,
- Analysis of field survey data
- Enhancement of Auto-cad Skills
- Conversion of topographical data in Auto-cad plan/profile

Site Inspectors:

- Collection and analysis of field data,
- Preparation of site layouts,
- Earthworks design and appraisal methods,
- Plotting of road reduced levels into AutoCAD,
- Erosion protection interventions and design process,
- Checking of strip maps and bill of quantities.
- Plotting of levels for cross sections

- Design of interventions for water crossings
- Developing strip maps

3.4 Performance Management Plan - PIRS

The Performance Indicator Reference Sheets (PIRS) related to the progress of the ES3R project are included in Annex B of this document.

4. PROJECT CHALLENGES

The following items have been encountered during the course of the project and pose challenges to the ES3R team and project:

Challenge / Issue	Mitigation / Resolution
All contractors are struggling with the design / build contract model, thus require much support in preparation of submittals.	QAC has to offer inordinate amount of support to contractors in order that compliance be achieved and progress achieved.
The lack of capability of local contractors required that excessive time spent by FTL's in guidance and mentoring process.	ES3R must strike a balance between formal mentoring of contractors and progression of survey and design works required.
The prevailing lack of availability of diesel fuel in both Lofa and Nimba has had a negative impact on logistics and travel plans.	Despite contingency measures being in place, specific journeys out of county have been required to secure fuel, thus loss of productive vehicle time.
Bridge engineer requirement.	LOE for bridge structure designer is proposed to USAID in Contract Modification 4.
MPW Specification is inconsistent with USAID/Liberia conditions of contract.	A Specification should be totally consistent with conditions of contract; which should be resolved prior to any

	solicitation.
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WORK PLAN FOR NEXT QUARTER

Field teams are in place in the three working counties for construction oversight and design.

Objective 1: Construction Oversight

All field teams will continue oversight and mentoring of the 84-km package construction oversight. In addition, commencement of the new 75km package is anticipated dependent upon completion of existing projects and the rainy season.

Objective 2: Design and Contract Documents

It is envisaged that by the beginning of next Quarter, an additional team will be mobilized to Grand Bassa County in order to undertake field survey works for 137 kilometers in 5 (five) road clusters. This team will be under the responsibility of the Field Team Leader that replaces Robert Obetia; who had left Liberia at the inception of the EDV crisis. Two weeks after, another field team will be mobilized to Bong County to carry out similar field works (interventions, geotechnical and hydraulic investigations, etc.) in 2 clusters comprising 56 kilometers. An additional independent survey tea team will conduct survey works for bridges in Lofa and Nimba counties.



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Objective 3: Training and Capacity Building

The formal program which was in place for the training of A&E firms has proposed to conduct on-the job training in all the current capacities where the ES3R team is working, focusing on field surveys, construction oversight, environmental monitoring, etc. This stage of the capacity building is scheduled to take place in calendar Quarter 3. This includes the addition of Ministry of Public Works Engineers who will also support the construction oversight as part of contract modification.

5. FINANCIAL REPORT

ENGINEERING SERVICES FOR RURAL ROAD REHABILITATION			
FINANCIAL REPORT TO END FEBRUARY 2015			
Row Labels	Sum of RAW COST	Indirect Cost	TOTAL Cost
01-Auto - A/P	23,143.77		23,143.77
01-Mileage - expense	16.81		16.81
03-Room - A/P	75,165.49		75,165.49
03-Room - expense	6,795.90		6,795.90
04-Park, Toll, Taxi - A/P	20,968.99		20,968.99
04-Park, Toll, Taxi - expense	136.36		136.36
05-Prints - A/P	195.84		195.84
05-Prints - expense	87.00		87.00
06-Supplies - A/P	187,502.05		187,502.05
06-Supplies - expense	110.00		110.00
07-Miscellaneous - A/P	79,586.70		79,586.70
07-Miscellaneous - expense	714.50		714.50
08-Telephone - A/P	5,060.00		5,060.00
08-Telephone - expense	58.00		58.00
09-Car Rental - A/P	1,875.00		1,875.00
09-Car Rental - expense	350.00		350.00
10-Air Fare - A/P	3,784.18		3,784.18
10-Air Fare - expense	15,675.16		15,675.16
11-Outside Professionals	1,323,352.76		1,323,352.76
12-Computer - A/P	25,575.20		25,575.20
19-Shipping, Postage - A/P	982.00		982.00
24-Field Equipment - A/P	50,750.70		50,750.70
26-Auto - expense	170.00		170.00
28-Overnight Delivery - A/P	29.45		29.45
30-Meals - A/P	12,908.62		12,908.62
30-Meals - expense	4,109.83		4,109.83
Labor	82,974.86	152,673.74	235,648.60
Labor Local	275,200.36	506,368.66	781,569.02
Overseas Differential - ODC	38,385.92		38,385.92
Overtime	60.92		60.92
Grand Total	2,235,726.37		2,894,768.77
		Fee @ 7.5%	217,107.66
		Inception To Date Total	3,111,876.43



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ANNEX A

ES3R NARRATIVE

and

YEAR 2 WORK PLAN

Year 2 Work Plan Narrative

This section of the work plan narrative is composed of 3 sub-sections.

1. Summary of activities undertaken since the submission of the Inception Report
2. Balance of works remaining as of February 2015
3. A strategy for the delivery of project outputs

Each sub-section is further divided into component 1 and component 2.

1. Summary of Activities March 14 – February 2015

This section summarizes activities from the commencement of field works in March 2014 until February 2015.

The illustration below indicates the geographic spread of the ES3R activities for the remainder of the project life.

An inherent characteristic of field-based activities has and will continue to be long journey times and challenging road conditions. Figure 1 illustrates the range of the Project sites.

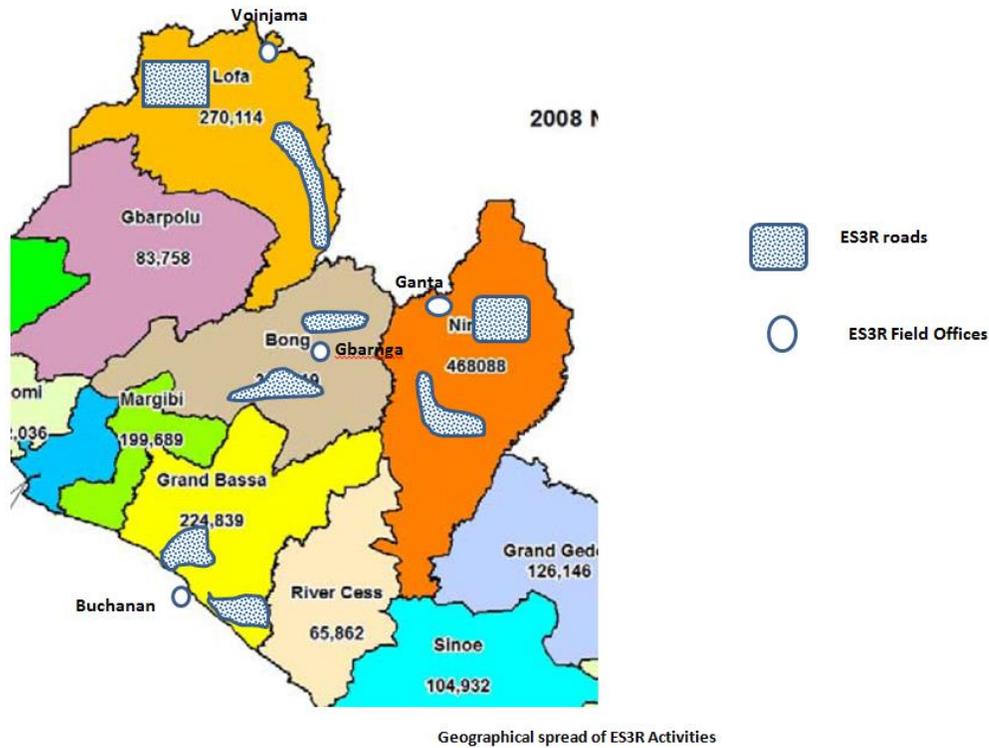


Figure 1. ES3R activities

The ES3R field team structure proposed in the Inception Report is composed of 3 teams. Each team is composed of three engineers, a Field Team Leader (TCN), a Senior Engineer (national), and a Site Inspector, (national).

Field Team Leaders and Senior Engineers were mobilized and orientated by end of March.

1.1 Component 1. Construction Oversight

Quality Assurance Contracting (March – July 2014)

The contracting mechanism by USAID for the initial road improvement contracts was a ‘design and construct’ model.

Contractor’s contracts indicated that ES3R provide ‘full time construction oversight’ and ‘on site mentoring’ to assist Contractor’s project management with its design submission and subsequent construction management.

The ES3R contract states ‘periodic field missions’.

The extra level of effort expended on ‘on site’ mentoring impacted the identification of 450 km of ‘road links for Component 2.

1.2. Component 2 – Road Design

This component can be divided in the 3 distinct activities

1. Identification of 450 km of road links selected for detailed design
2. Field surveys on each of the road links
3. Detailed design of road links based on data collected in the field surveys.

Selection of Roads - (April – June 2014)

ES3R devised a 'road link' selection tool based on a combination of cost effectiveness and socio- economic benefits. This replaced the Cost – Benefit Analysis suggested in the ES3R contract.

The outputs are indicated in table 1 below. The table is extracted from the Prioritization Report submitted as a part of the October '14 Design Report.

County	Roads Under contract	Rapid assessment survey	Prioritization outputs	Detailed Design of prioritized road links	
				July - Sept '14	Oct '14 - Sept '15
	Jan '14 - Dec '15	April – May '14	June '14	July - Sept '14	Oct '14 - Sept '15
Bong	49	261.6	88.3	31.6	56.7
Nimba	21	302	117.4	27.7	89.2
Lofa	14	199.2	120.7	15.0	105.3
Grand Bassa	0	239.4	136.7	0	136.7
	84 km	1002.2 km	463.1 km	74.3 km	387.9 km

Table 1. Summary of Design outputs as envisaged July 2014

Field surveys of prioritized road links (June – July 2014)

Field surveys commenced as soon as the County prioritization workshop had been completed.

Road Design of 74 km (August – October 2014)

All teams were withdrawn from field activities (components 1 and 2) in early August as a consequence of EVD. Component 3 scheduled to commence in September 2014 was suspended.

A Design Report for 74.3 km was submitted on 25th October 2015.

Table 2 below illustrates the composition of the Design Report.

County	District	Road Link	Road Classification	Length km	Large R.C. drainage structures
Bong	Suokoko	Gbondoi – Gbarla	Feeder	17.5	
	Yealequelleh	Taylorta Marionta – Nyan Yendewound	Secondary	14.1	3
	Total			31.6	
Nimba	Saclepea Mahn	Gaopa Garwompa	Secondary	5.575	
	Tapita	Dounpa – Zuaplay	Feeder	10.8	5

		Gogein Zuaplay	- Feeder	11.4	
	Total			27.7	
Lofa	Voinjama	John's Town Bulor	Feeder	15.0	1
	Total			15.0	
Grand total				74.3	9

Table 2. Breakdown of Design Report Submission Oct 2015

Remodeling MPW standard documentation (August – October 2014)

MPW has a set of Standard Documents, March 2012. These are composed of, standard drawings and technical specifications. These documents were to be used as the basis for all ES3R detailed designs.

However, it became apparent that the standard documents had never been utilized to previous projects so to measure its effective application. The documents possess significant inconsistencies and irregularities, such their usefulness limited.

To rectify this deficiency ES3R undertook:

- a. Lobbying for MPW recognition of the limitations of current package of MPW standard documentation.

- b. Reworking all standard design drawings and construction details
- c. Reworking of Method of Measurement and Bill of Quantities
- d. Reworking and expanding on MPW's Technical Specifications

The 74.3 km design submission has been designed, quantified and presented using the remodeled standard documents.

2. Balance of Work Remaining as of February 2015

2.1 Construction Oversight

Status as of end of January 2015 on in flight contracts is summarized in table 3 below:

ES3R Status of Works Contracts January 2015			
Description	Bong	Lofa	Nimba
Contract Award	22 Jan '14	27 Jan '14	22 Jan '14
Contract Period, days	730	730	730
Time Elapsed (to end January 2015)	50%	39%	50%
Overall Assessed Completion	50%	55%	66%
Total Contract Value,	1,895,141	590,269	843,228

USD			
Payments to end February 2015, (in USD)	1,138,662.62	441,020.60	556,530.49

Summary of Construction Progress, February 2015

2.2 Road Design of the outstanding 387 km

Road Design in Clusters

The prioritization workshops held in each of the four Counties generated a total of 387 km of road links. The road links vary in length from 3 – 25 km. To facilitate ease of packaging the road links into suitable and convenient contract sizes, links have been grouped into clusters in each County.

Lengths and geographical fragmentation of the Clusters varies.

The scope of work in the recommended range of cluster sizes permits large, medium and small road contractors with the opportunity to bid on tendered packages. Clusters can be combined or split as necessary.

Box Culvert Design (35 nr) in 387 km

During the rapid assessment, April May '14, 35 multi-cell box culverts were provisionally identified as required within the 387 km.

Each of these structures must be individually tailored to suit the river/road crossing point. The exact size and configuration of the structures can only be determined after detailed topographic and hydraulic surveys.

Eight box culvert locations were surveyed and outputs assessed during the design of the 74.3 Km. Hydraulic assessments at these crossing points reveal the adjacent river systems to be complex with existing water crossing points determined by the construction of road embankments either side of the crossing point. Very few are natural courses. Analysis of river characteristics required, to ascertain the optimum size, configuration and location of the new structure therefore requires considerable expertise.

Large Bridge Design (14 nr) in 450 km

The rapid assessment identified 14 river crossing points that strongly indicate a bridge with a clear span exceeding 12m as an optimum crossing structure. Such structures lie beyond the current scope of works.

Detailed topographic and hydraulic assessment is needed before selecting a crossing structure.

It is assumed for the purposes of this report that 14 bridges are required.

3. Strategy for Delivering ES3R Project Outputs - March 15 – Feb 2016

ES3R is proposing the following strategic resource allocation as the most efficient and effective means of project output delivery.

The implementation of this plan will be undertaken in collaboration with MPW counterparts at the National and County level.

Suggested Project Team Structure Revision

ES3R is proposing 6 teams to undertake the balance of works between March 2015 and February 2016.

This structure permits maximum specialization through the division of labor. This structure also permits A & E trainees involvement with a team whose activities focus on a specific topic i.e. road design, culvert design and bridge design, and environmental mitigation as the trainees move from team to team.

The proposed structure therefore produces greater productivity and concurrently creates a more coherent and focused training/learning environment.

3.1. Component 1: Construction Oversight Team (March 2015– February 2016) 84 km + 74.3 km

The additional 75km designed during August – October has been prepared using the remodeled documentation.

During the period March to June the ES3R field teams will therefore be overseeing two ‘road clusters’ in their respective Counties, the original 84 km and the proposed 75 km. The additional works in all three Counties are remote from the original road links.

Motorcycles are not considered suitable form of transport due to the long distance between the clusters. Rented vehicles are proposed as site transport until such time as the original 84 km of road links are substantially complete. This is anticipated to be until the end of June 2015.

Contractors are expected to work a 6-day week until rains in July/August become debilitating and severely impede progress. Between March and

June it is proposed to have a 6-day working week and the SIs paid accordingly.

It is expected that A & E firm trainees join the ES3R team during this active period. Field Team Leaders will be required to visit sites once a week to ensure contractual compliance and manage site progress meetings.

SIs will revert to a conventional 5-day working week, once contractors have reduced construction activities due to rains.

USAID anticipate that its FRAMP program will be active between October and December 2015. It is anticipated that component 1 will be handed over during this transitional period.

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3.2. Component 2 Road Design

Teams 2 & 3: Lofa and Nimba 196 km, Bong and Grand Bassa (194 km)

March 2015 – February 2016

March – July 2015 Field Surveys

It is proposed that a single team undertake road designs for Lofa and Nimba. Likewise with the Bong and Grand Bassa Team, two counties covered by one team. Productivity of the field surveys is linked to time

available in dry season 2015. This is assumed to be March – July. Trainees will be assigned to both teams during this period.

USAID has requested that MPW second 4 Feeder Road Engineers to ES3R for the balance of the project life. The engineers will supplement the road design teams. It is envisaged that the MPW engineers be exposed to ES3R's feeder road design methodology during field surveying April – July.

The engineers will be allocated to each of the four ES3R teams: road and culvert survey x2, box culvert survey and the environmental/community team.

Efforts are now underway identify, interview and sensitize selected candidates.

With the benefit of a recent Component 3 workshop 12 – 14 March 2015, specifically focused on the role, relationships and responsibilities of mentors and mentees, ES3R is now more able to accurately predict and quantify time required for effective skill enhancement for the junior engineers from both MPW and private sector.

The project will have 9 such engineers as from April 2015.

To permit the anticipated LOE expended on skill transfer during the critical field survey period, April – July, ES3R proposes to mobilize a specialized survey firm.

The survey firm will focus on topographic surveys needed for Grand Bassa, to a lesser extent Bong and proposed bridge sites.

While every effort will be made to substantially complete field surveying before the onset of the rainy season (the mobilization of the survey firm is intended to do just this), this cannot be guaranteed. The onset of early rains, road and bridge conditions and other unforeseen circumstances will ultimately determine survey outputs.

However, it should be noted that while any delay will impact the design delivery schedule, it will not have any impact on the proposed F2MRR procurement program of road improvement contracts. It should be further noted that surveys for road links that are unavoidably postponed until after rainy season will benefit by capturing deterioration of the road link caused by the rainy season.

Target outputs for field survey are 10 km/week/team.

August 2015 – March 2016 – Detailed Design

The teams move to Monrovia for the detailed design stage. Using Monrovia as the detailed design center offers MPW engineers the opportunity engage the design activities. A & E firm trainees will be exposed to the design process from data entry to contract packaging.

Target outputs for detailed design are set at 8 km/week/team.

The level of detail of the 387 km designs is not anticipated being equal to the level included in the 74.3 km presented in the Design Report, October 25, 2014, but still within the contractual frame.

However; any omitted detail in the conceived contractual design may be easily generated/supplemented by Contractors with the support of an adequately qualified supervision team.

In order to maintain the expected competence of the designs it is proposed that the teams continue to be managed by TCNs.

Team 4: Box Culvert Design Team -

Eight box culverts were designed for the 74.3-km submission.

A further 35 similar structures are anticipated.

<i>Engineering Field Survey Teams (teams 2, 3 & 4)</i>	<i>Construction Oversight (team 1)</i>
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- ES3R's 6 teams offer 5 different feeder road
- Contract documentation
- Compliance testing and

related subjects,

- Topographic surveying,
- Tacheometric surveying
- Hydraulic surveying
- Hydraulic assessment
- Carriageway defect assessment
- Engineering materials sampling and classifying

inspection

- Quality control techniques
- Site communications
- Construction Site reporting
- Monthly reporting
- Monthly measurement activities
- Stakeholder engagement at construction phase

Environmental Management and Community Engagement (team 6)

- Developing an environmental management plan
- Monitoring the plan
- Managing the plan
- Stakeholder engagement at the planning level

Detailed Design (teams 2, 3, 4 and 6)

- Intervention selection
- Preparation of strip maps
- Quantification of interventions
- Preparation of detailed drawings
- Preparation of Bills of Quantities
- Unit Rate Analysis

It is anticipated that by the end of each trainee's exposure's time to both field and office based activities each will have a fundamental comprehension of all aspects of the feeder road design process and construction oversight.

Institutional Training

Institutional Capacity Building is considered here as one of the main types of Capacity Building efforts, along with human Capacity Building; both are closely inter-related and complement each other.

Institutional Capacity Building addresses the Capacity beyond the provision of education and training of professionals. It aims to enhance the capacity of governments, business, non-governmental groups and communities to plan and manage the coast efficiently and effectively.

There are several dimensions regarding institutional development according to the desired level, such as for executives of the E & A Firms.

TRG Workshops No. 1&2 were focused on field engineering strategies and on Institutional training held in the third week of March by TRG expert assisted by the ES3R team.

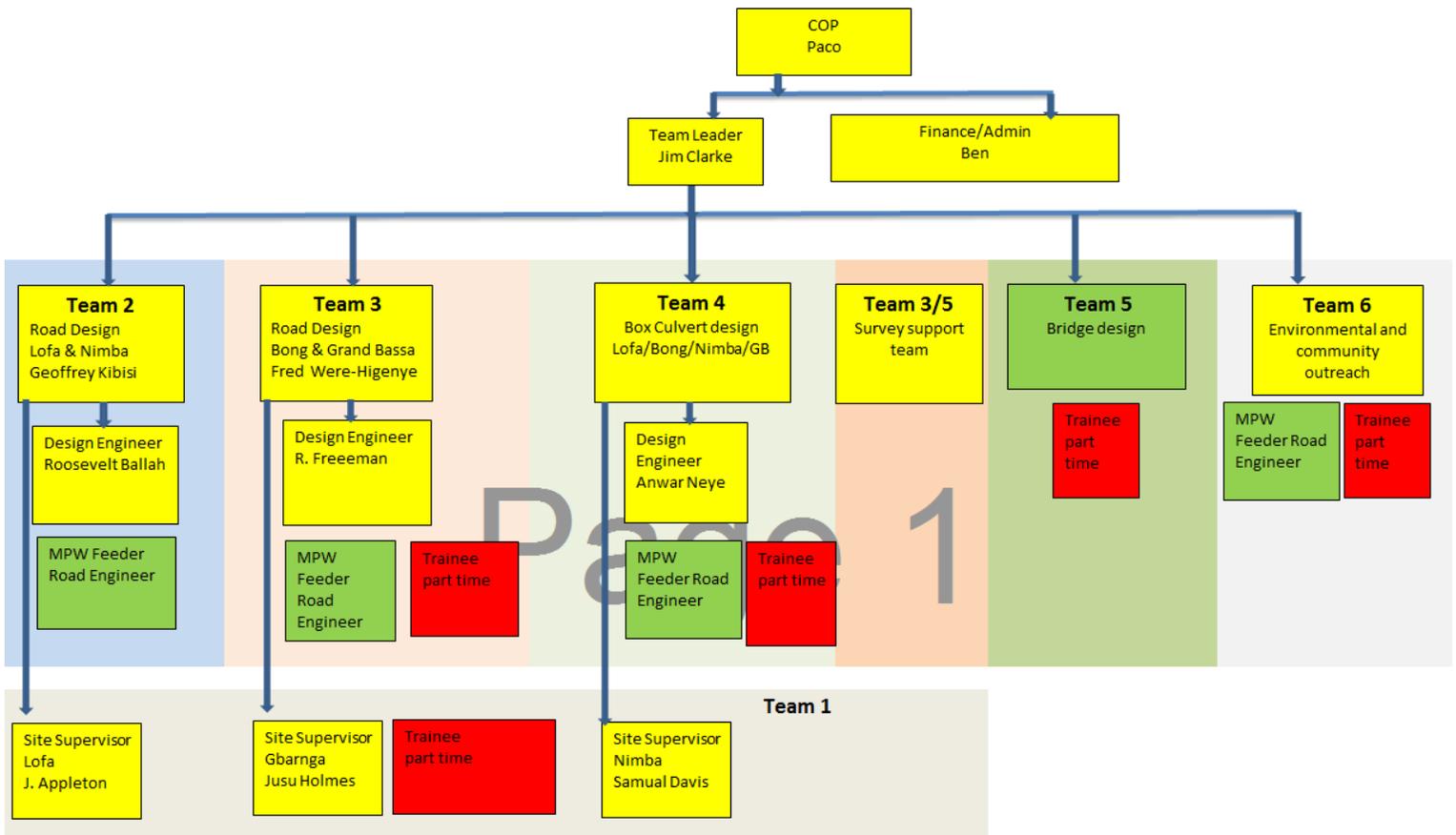
The attendees to these Workshops with a duration of 3&4 days respectively, were addressed to junior engineers belonging to the E&E firms; and the second workshop, to owners/managers to whom were shown the different tools for identification of technical and administrative staff that in the near future may be able to prepare technical and financial proposals,



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management of resources human and materials for design and construction supervision of engineering works, stressing on the communication area.

The trainees were also aided with the different management techniques to execute in a sound engineering way the management in consultancy contracts.



August 2015- March 2016 – Detailed Design

Detailed design will take place in Monrovia project Office.

Team 5: Bridges in Lofa, Nimba, Bong and Grand Bassa (March - December 2015)

ES3R propose to engage the services of an experienced bridge design team.

The key persons in the team are: qualified Bridge Engineer and an experienced auto-CAD Technician.

The Bridge Design Team will undertake:

- Hydraulic assessment,

- Materials investigation
- Hydraulic design
- Foundation design
- Structural design of sub and super structure
- Preparation of Bills of Quantities and cost estimates for each structure

It is anticipated that 13 days are required for each structure, 5 days for field assessments and 8 for the design and quantification.

The field works are scheduled to complete by end of the current dry season, with the assumed 6-day working weeks.

Detailed design will take place in Monrovia. This arrangement offers similar advantages for A & E firm trainees to teams 2, 3 & 4.

Team 6: Environmental Issues and Community Engagement

The ES3R environmental specialist is programmed to visit the Project in April 2015. She will assist the Project in identifying a suitable candidate for a full time position as Environmental/Community outreach Officer who will be properly trained and instructed to continue the environmental mitigation measures as part of the project.

The environmental Specialist will prepare a scope of work for the proposed new position and introduce and orientate the person regarding the



Programmatic Environmental Assessment Report and Environmental Monitoring and Mitigation Plans as it pertains to the Project.

The role of the Environmental/Community Consultation Officer is twofold:

- Environmental Impact mitigation
- Community Outreach

The officer will support the field survey assessments, ensuring that design interventions are environmentally friendly, that potentially impacted eco systems adjacent to the road links are recorded and EMMPs formulated accordingly.

The officer will ensure that roadside communities are sensitized regarding both road design surveys and future road improvement contracts.

The environmental/community outreach officer will engage with traditional and administrative leaders ensuring that all beneficiary stakeholders are informed of and agree to roles and responsibilities of all implementing agencies.

It is envisaged that trainees will be introduced to issues and mitigation measures as they relate to environmental impact and community engagement on road improvement activities.

3.3 Component 3, Capacity Building

The 5 A & E firms selected in February 2014 have been contacted. All five have expressed their interest in continuing with the program.

Technical Training

After completion of Workshops mentioned in previous section, outputs were orientation, training agreements and a 'on the job' training schedule.. ES3R field staff and A & E firm site engineers now have a competent understanding of the mentor/mentee relationship and the dedication required to realize meaningful and lasting skill development.

Each A & E firm is allocated approximately 8 months; 4 months in all in-field activities (survey, road and culverts' construction oversight, etc.) and, four of which months will be field based and the balance 4 months in the Monrovia design office.

ENGINEERING SERVICES FOR RURAL ROADS REHABILITATION (ES3R)

ANNEX B

PERFORMANCE INDICATOR

REFERENCE SHEETS

Updated to the year 2015

PERFORMANCE INDICATOR REFERENCE SHEET

ENGINEERING SERVICES FOR RURAL ROADS REHABILITATION PROJECT									
PERFORMANCE INDICATORS VALUES									
TARGETS FOR ROAD SURVEY									
	PROVISIONAL				ACTUAL				NOTES
	Bong	Lofa	Nimba	Grand Bassa	Bong	Lofa	Nimba	Grand Bassa	
2013	0	0	0	0	0	0	0	0	Base Year
2014	150				31.6	15.4	28.2	0	Sub-total: 75.2
2015	300				17	10	0	0	Total for 4 Counties

Performance Indicator Reference Sheet
Name of Development Objective: Ease of Access to Markets Facilitated
Name of Intermediate Result: Construction oversight provided for Local Contracts

Name of Indicator: Length of road that has construction contract for rehabilitation awarded and in place			
Geographic Focus: Bong, Lofa and Nimba			
Is this an Annual Report indicator? No ___ Yes _Yes___, for Reporting Year(s) ___2013/2015___			
DESCRIPTION			
Precise Definition(s):			
Unit of Measure: Kilometer			
Method of Calculation: Measure of length of roads			
Disaggregated by: None			
Justification & Management Utility: Usefulness of Indicators			
PLAN FOR DATA ACQUISITION BY USAID			
Data collection method: Driving along the roads			
Data Source: Project sites			
Method of data acquisition by USAID: Reporting			
Frequency and timing of data acquisition by USAID: Annual			
Estimated cost of data acquisition: Included in project cost			
Individual responsible at USAID: David Wounuah			
Individual responsible for providing data to USAID: Howard Shelmerdine			
Location of Data Storage: PIDS			
DATA QUALITY ISSUES			
Date of Initial Data Quality Assessment: N/A			
Known Data Limitations and Significance (if any): N/A			
Actions Taken or Planned to Address Data Limitations: N/A			
Date of Future Data Quality Assessments: N/A			
Procedures for Future Data Quality Assessments: N/A			
PLAN FOR DATA ANALYSIS, REVIEW, & REPORTING			
Data Analysis: Manual			
Presentation of Data: Tabulated			
Review of Data: Regular Check			
Reporting of Data: Quarterly and Annual Report			
OTHER NOTES			
Notes on Baselines/Targets: Stipulated			
Other Notes: None			
PERFORMANCE INDICATOR VALUES			
Year	Target	Actual	Notes
2013	0	0	
2014	83.5	83.5	Contracts awarded January 2014
2015	150	75.0	Extension to existing Contracts are awarded
THIS SHEET LAST UPDATED ON: March 2015			

Performance Indicator Reference Sheet			
Name of Development Objective: Ease of Access to Markets Facilitated			
Name of Intermediate Result: Survey for design completed			
Name of Indicator: Length of survey (windshield and instrument) conducted			
Geographic Focus: Bong, Lofa ,Nimba and Grand Bassa			
Is this an Annual Report indicator? No ___ Yes _Yes___, for Reporting Year(s) ___2013/2015___			

DESCRIPTION			
Precise Definition(s):			
Unit of Measure: Kilometer			
Method of Calculation: Measure of length of roads			
Disaggregated by: None			
Justification & Management Utility: Usefulness of Indicators			
PLAN FOR DATA ACQUISITION BY USAID			
Data collection method: Driving along the roads			
Data Source: Project sites			
Method of data acquisition by USAID: Reporting			
Frequency and timing of data acquisition by USAID: Annual			
Estimated cost of data acquisition: Included in project cost			
Individual responsible at USAID: David Wounuah			
Individual responsible for providing data to USAID: Howard Shelmerdine			
Location of Data Storage: PIDS			
DATA QUALITY ISSUES			
Date of Initial Data Quality Assessment: N/A			
Known Data Limitations and Significance (if any): N/A			
Actions Taken or Planned to Address Data Limitations: N/A			
Date of Future Data Quality Assessments: N/A			
Procedures for Future Data Quality Assessments: N/A			
PLAN FOR DATA ANALYSIS, REVIEW, & REPORTING			
Data Analysis: Manual			
Presentation of Data: Tabulated			
Review of Data: Regular Check			
Reporting of Data: Quarterly and Annual Report			
OTHER NOTES			
Notes on Baselines/Targets: Stipulated			
Other Notes: None			
PERFORMANCE INDICATOR VALUES			
Year	Target	Actual	Notes
2013	0	0	
2014	150	75.2	Detailed design survey completed – preliminary survey for balance to 450km
2015	300	27	Field teams have been remobilized and have re-imitated survey
THIS SHEET LAST UPDATED ON: March 15			

Performance Indicator Reference Sheet
Name of Development Objective: Ease of Access to Markets Facilitated
Name of Intermediate Result: Target roads determined
Name of Indicator: Prioritized target roads for further design development based upon stakeholders needs and requirements
Geographic Focus: Bong, Lofa ,Nimba and Grand Bassa
Is this an Annual Report indicator? No ___ Yes _Yes___, for Reporting Year(s) ___2013/2015___

DESCRIPTION			
Precise Definition(s):			
Unit of Measure: Kilometer			
Method of Calculation: Measure of length of roads			
Disaggregated by: None			
Justification & Management Utility: Usefulness of Indicators			
PLAN FOR DATA ACQUISITION BY USAID			
Data collection method: Driving along the roads			
Data Source: Project sites			
Method of data acquisition by USAID: Reporting			
Frequency and timing of data acquisition by USAID: Annual			
Estimated cost of data acquisition: Included in project cost			
Individual responsible at USAID: David Wounuah			
Individual responsible for providing data to USAID: Howard Shelmerdine			
Location of Data Storage: PIDS			
DATA QUALITY ISSUES			
Date of Initial Data Quality Assessment: N/A			
Known Data Limitations and Significance (if any): N/A			
Actions Taken or Planned to Address Data Limitations: N/A			
Date of Future Data Quality Assessments: N/A			
Procedures for Future Data Quality Assessments: N/A			
PLAN FOR DATA ANALYSIS, REVIEW, & REPORTING			
Data Analysis: Manual			
Presentation of Data: Tabulated			
Review of Data: Regular Check			
Reporting of Data: Quarterly and Annual Report			
OTHER NOTES			
Notes on Baselines/Targets: Stipulated			
Other Notes: None			
PERFORMANCE INDICATOR VALUES			
Year	Target	Actual	
2013	0		
2014	150	450	Prioritized roads selected for total project in Y1
2015	300	completed	Prioritized roads selected for total project in Y1
THIS SHEET LAST UPDATED ON: March 15			
Performance Indicator Reference Sheet			
Name of Development Objective: Ease of Access to Markets Facilitated			
Name of Intermediate Result: Prequalification document submitted			
Name of Indicator: Develop evaluation criteria and conduct full assessment of available engineering sources.			
Geographic Focus: Bong, Lofa, Nimba, Grand Bassa and Monrovia			
Is this an Annual Report indicator? No ___ Yes _Yes___, for Reporting Year(s) ___2013/2015___			
DESCRIPTION			
Precise Definition(s):			
Unit of Measure: Number			
Method of Calculation: Training logs/Attendance registers			

Disaggregated by: Sex			
Justification & Management Utility: Usefulness of Indicators			
PLAN FOR DATA ACQUISITION BY USAID			
Data collection method: Assessment			
Data Source: Project trainer			
Method of data acquisition by USAID: Reporting			
Frequency and timing of data acquisition by USAID: Annual			
Estimated cost of data acquisition: Included in project cost			
Individual responsible at USAID: David Wounuah			
Individual responsible for providing data to USAID: Howard Shelmerdine			
Location of Data Storage: PIDS			
DATA QUALITY ISSUES			
Date of Initial Data Quality Assessment: N/A			
Known Data Limitations and Significance (if any): N/A			
Actions Taken or Planned to Address Data Limitations: N/A			
Date of Future Data Quality Assessments: N/A			
Procedures for Future Data Quality Assessments: N/A			
PLAN FOR DATA ANALYSIS, REVIEW, & REPORTING			
Data Analysis: Manual			
Presentation of Data: Tabulated			
Review of Data: End of training period			
Reporting of Data: Quarterly and Annual Report			
OTHER NOTES			
Notes on Baselines/Targets: Stipulated			
Other Notes: None			
PERFORMANCE INDICATOR VALUES			
Year	Target	Actual	Notes
2013	0	0	
2014	5	5	Five A & E firms selected for participation in ES3R project
2015			
THIS SHEET LAST UPDATED ON: March 15			

Performance Indicator Reference Sheet
Name of Development Objective: Ease of Access to Markets Facilitated
Name of Intermediate Result: Local A&E firms identified
Name of Indicator: Expression of interest evaluation completed for number of A&E firms
Geographic Focus: Bong, Lofa, Nimba, Grand Bassa and Monrovia
Is this an Annual Report indicator? No ___ Yes _Yes___, for Reporting Year(s) ___2013/2015___
DESCRIPTION
Precise Definition(s):
Unit of Measure: Number
Method of Calculation: Training logs/Attendance registers
Disaggregated by: Sex
Justification & Management Utility: Usefulness of Indicators
PLAN FOR DATA ACQUISITION BY USAID

Data collection method: Evaluation			
Data Source: Project trainer			
Method of data acquisition by USAID: Reporting			
Frequency and timing of data acquisition by USAID: Annual			
Estimated cost of data acquisition: Included in project cost			
Individual responsible at USAID: David Wounuah			
Individual responsible for providing data to USAID: Howard Shelmerdine			
Location of Data Storage: PIDS			
DATA QUALITY ISSUES			
Date of Initial Data Quality Assessment: N/A			
Known Data Limitations and Significance (if any): N/A			
Actions Taken or Planned to Address Data Limitations: N/A			
Date of Future Data Quality Assessments: N/A			
Procedures for Future Data Quality Assessments: N/A			
PLAN FOR DATA ANALYSIS, REVIEW, & REPORTING			
Data Analysis: Manual			
Presentation of Data: Tabulated			
Review of Data: End of training period			
Reporting of Data: Quarterly and Annual Report			
OTHER NOTES			
Notes on Baselines/Targets: Stipulated			
Other Notes: None			
PERFORMANCE INDICATOR VALUES			
Year	Target	Actual	Notes
2013	0	0	
2014	8	8	Number of firms interviewed and assessed
2015			
THIS SHEET LAST UPDATED ON: March 15			