

Southern Highway Mile 14 to Jalacte Junction Road Upgrading Project

Progress Report

For the Period Ending February 2014

Project Owner and Employer: Government of Belize, Ministry of Works

Contract Supervision: Beca International Consulting Limited

Construction Contractor: Cisco Construction Limited

Current Expected Completion: June 2014

Funding: Kuwait Fund for Arab Economic Development

OPEC Fund for International Development

Central American Bank for Integration

Government of Belize

Introduction

Better weather and drying site conditions saw an increase in productivity on site during February. Bulk earthworks were ongoing with the focus on cut and fill works between Ch 28100 & 29500m and borrow to fill works between Ch 23900& 24900

Pavement construction work was undertaken with approximately 560 lineal meters of sub base placed and 160 lineal meters of base being laid. In addition 425 lineal meters of first coat and 620 lineal meters of second coat chip sealing were completed.

The production of aggregate continued at Pueblo Viejo quarry with two crushers in construction. Bridges structure work continued at Rio Blanco with diaphragms and stem walls being cast. The deck was formed and the fixing of steel is almost complete which will see an early march cast date for the deck.

With improved weather and increase in productivity it is expected in the month of March to May. It is acknowledged that pavement work will now extend into the 2014 wet season.

1.0 Package B- Progress for the month of February 2014.

Description	Benchmark Quality		Quality Complete	% Complete
Clearing	32800	Lm	32800	100.0%
Stripping	51000	m	48750	93.8%
Gross Cut (exclusive of Stripping)	489138	m3	460,000	94.0%
Gross Fill (inclusive of cut & borrow to fill)	599400	m3	507,000	84.6%
Waste	195000	m3	209,380	91.0%
Cross Road Culverts	114	No	96	84.2%
Kerb, Channel and Under Drain	7000	m	4750	67.9%
Catch Pits	56	No	37	66.1%
Subgrade Completion*	32800	Lm	23970	73.0%
Sub-base Layer Completion*	32800	Lm	23160	70.1%
Base Layers Completion*	32800	Lm	22420	68.4%
First Coat Seal Completion	32800	Lm	21060	64.2%
Second Coat Seal Completion	32800	Lm	16600	50.6%
Line marking	32800	Lm	9000	27.4%

1.1 Property Issues:

The Contractor is continuing to liaise with individual landowners and local village representatives with respect to obtaining access and permission to dump waste material.

The Ministry of Works (MoW) liaises with landowners and Village representatives when required regarding:

- Location of farm roads
- Provision of temporary and permanent access ways
- Removal of crops and advice regarding risk associated with crop planting.
- Removal or relocation of structures.

1.2 Material:

Summary of the origin of materials and the issues associated with incorporating them into the Works:

A) Borrow Materials

- **Columbia Quarry** – Quarried limestone rock. Borrow material used for capping.
- **Ch12500m Slip Site** – Interbedded silt and sandstone (weathered). Bulk borrow material.
- **Ch20200m and 20460m Cutting** - Interbedded silt and sandstone (weathered). Bulks borrow material.
- **Ch22720m (cutting)** – Interbedded slit and sandstone (weathered). Bulk borrow material.
- **Ch27600m-** Borrow pit on the access road to Peblo Vejo Quarry. Siltry gravel. Bulk borrow material
- **Ch32160m (cutting)** – Interbedded silt and sandstone (weathered). Bulk borrow material.

B) Cut to Fill:

Earthworks are currently concentrated between Ch24000m - 27000m, 28300m- 29400m and Ch29900– 32350m.

C) Pavement Aggregates:

Aggregate production was ongoing during February at the pueblo Viejo Quarry.

1.3 Utilities:

It was established early on that watermain relocation works were required in San Antonio and Santa Cruz Villages, as existing watermains were built from poor quality materials not constructed to best practice and conflicted with the road construction works.

- **San Antonio Village** -substantially complete.
- **Santa Cruz Village** – substantially complete.
- **Santa Elena Village** - Future proofing duct installations complete.
- **Pueblo Viejo Village** - has a piped watermain reticulation which is located far from the road. Road crossing have been located by pot holding Discussion have been held with village Reps re providing some future proofing duct crossing.

1.4 Drainage:

A review of the drainage design in all Villages other than Pueblo Viejo has been completed. All cross road culverts between Ch 0m -20660m and Ch21130 m - 24828m have been completed and 16 of the 28 culverts between 24828m and 32800m have been completed.

1.5 Earthwork and Pavement Construction

A) Cut to Fill

All cut sites between 60m and 22820 - 100% complete.

- Ch 28320m to 28460m is approximately 80% complete
- Ch 28680m to 28880m is approximately 100% complete.
- Ch29080m to 29200m is approximately 40% complete.
- Ch 29960m to 30080m is approximately 80% complete.
- Ch 31140m to 31240m is approximately 80% complete.
- Ch 31400m to 31520m is approximately 80% complete.
- Ch32120 to 32200m is approximately 40% complete.

B) Subgrade Completion:

Subgrade is substantially complete between:

- Ch 80m to 20200m.
- Ch 21000m to approx 23600m.
- Ch28500m to 28700m.
- Ch28920m to 29070m.

1.6 Pavement Construction:

A) Subbase:

Some sub-base construction was undertaken during the month. At the end of February sub-base construction progress was substantially complete between:

- Ch 100m to 20180m.
- Ch 21040m to 23560m
- Ch 28500m to 28600m

B) Base:

Base was laid over the month. The following areas are substantially complete:

- Ch 80m to 20160m.
- Ch 21120m to 22840m.

C) First and Second Coat Seal:

First coat chip seal (425 lineal meters) was completed during the month. The following lengths of road have first coat chip surfacing completed:

- Ch 80m to 20140m.
- Ch 21425m to 22770m.

Second coat chip seal was completed during the month (620 lineal meters). The following lengths of road have second coat chip surfacing completed:

- Ch 80m to 10331m.
- Ch 11540m to 12160m
- Ch 12440m to 17320m.
- Ch 18190m to 19980m.

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A copy of the EIA Mitigation Plan and the measures being undertaken by the project to meet the intent of this plan is appended in Appendix 5.

1.8 Structure:

Three cross road culverts were completed during the month- 99 completed. Two set of headwalls was completed during the month- 96 completed. Seven access culverts were completed. Bridge 100% completed.

Bridge construction work is progressing as follows:

- San Antonio 3 – Approach railings completed. 100% completed.
- Santa Cruz – complete with exception of approach railings.
- Rio Blanco Bridge- Diaphragms formed and cast. End wall relocated and formed.
- Santa Elena – complete with exception of approach railings and riparian works.
- Pueblo Viejo – Structure complete. Back filling on east side is complete. Riparian works and approach barriers to be completed.
- Jalacte 1 – Bridge railing installed. Awaiting backfill of approaches, installation of approach railings and completion of riparian works.
- Jalacte 2 – Settlement slabs, backfilling, riparian works and barriers to be completed.

1.9 Road Furniture:

Guardrail railing works were completed at San Antonio 3 bridge and were started at another site. No rumble strip or speed humps were completed. Two pedestrian ramps were installed. Sign fabrication is ongoing. No sign were installed. Additional edge line marking was completed between 12600m and 13700m (approx).

Photographs: Progress performed for Package B for the month of February 2014.

Photo 1: Culvert being installed at chainage 28350m



Photo 2: Undercutting wet subgrade -approx chainage 24180m – pueblo Viejo Village.



Photo 3: Subgrade preparation at approx Ch24400m



Photo 4: San Antonio Village- 1st coat seal and concrete footpaths.



Photo 5: Extention of 1st coat seal into Santa Elena Village.



Photo 6: -Rio Blanco Bridge - placing deck steel.

