

FINAL REPORT

CLIENT:	Ministry of Local Government; Couva/Tabaquite Regional Corporation
PROJECT LOCATION:	Thompson Street Extension; GASPARILLO
CONTRACTOR:	Danny's Enterprises Company Limited



**EXISTING ROADWAY PRIOR TO COMMENCEMENT OF
CONSTRUCTION WORKS**



Picture 1: Showing existing condition of roadway



Picture 2: Showing existing condition of roadway

METHODOLOGY OF ROAD WORKS

STEP 1: Scarifying along entire surface area of roadway

STEP 2: Apply; Spread & Compact selected base course material on roadway

STEP 3: Final Rectifying of base course material using grader

STEP 4: Apply bituminous prime coat material along entire surface area of roadway

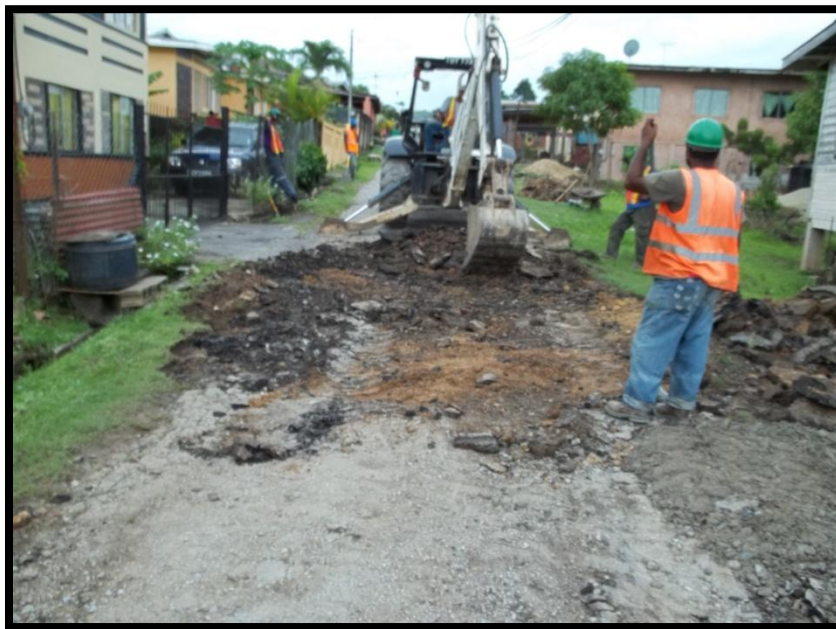
STEP 5: Apply, Spread & Compact asphaltic hot mix asphalt (surface course) 3 ‘ thick on entire roadway

TOTAL AMOUNT OF WORKING DAYS FOR COMPLETION: 3

Step 1 – Scarifying along roadway



Picture 3: Showing scarifying along roadway



Picture 4: Showing scarifying along roadway

Step 2 – Spreading and compacting of base course material



Picture 5: Showing procedure of spreading base course material



Picture 6: Showing use of backhoe to spread base course material



Picture 7: Showing base course material spread along roadway dimensions



Picture 8: Showing compaction of base course material



Picture 9: Showing compaction of base course material



Picture 10: Showing compacted base course surface

Step 3 – Final rectifying of base course material using grader



Picture 11: Showing final rectifying of base course level using grader



Picture 12: Showing final rectifying of base course level using grader



Picture 13: Showing final rectifying of base course level using grader



Picture 14: Showing water truck on site – for dust control

Step 4 – Application of prime coat material prior to paving



Picture 15: Showing application of prime coat bituminous material along surface prior to paving exercise

Step 5 – Spreading and compacting of hot asphaltic mix (final wearing course)

The steps of the paving process include:

- I. Application of bituminous prime coat material for leveling course – shown above in step 4**
- II. Spreading of hot asphaltic mix for asphaltic wearing course – 75 mm thick**
- III. Compaction of asphaltic mix which includes 2 stages of rolling;**
Stage 1: Primary Compaction using Oscillating smooth drum roller
Stage 2: Final Compaction using Pneumatic roller
- IV. Testing of asphaltic surface using pavement quality indicator – for quality control**
Test the density and % compaction of the road pavement asphaltic surface course



Picture 16: Showing methodology of spreading asphaltic hot mix – including offloading, raking and shovelling



Picture 17: Showing spreading asphaltic hot mix



Picture 18: Showing spreading asphaltic hot mix



Picture 19: Showing primary compaction of asphaltic mix using oscillating roller



Picture 20: Showing primary compaction of asphaltic mix using oscillating roller



Picture 21: Showing final compaction of asphaltic hot mix using pneumatic roller



Picture 22: Showing final asphaltic wearing course



Picture 23: Showing final asphaltic wearing course



Picture 24: Showing surveying level – check levels for base course



Picture 25: Showing testing of final asphaltic surface – using pavement quality indicator (PQI)

ON-SITE TESTING RESULTS – PAVEMENT QUALITY INDICATOR

Testing No.	DENSITY kg/cu. m	COMPACTION PERCENTAGE %
1	2284	98.0
2	2396	102.0
3	2321	99.0
4	2280	98.0
5	2250	96.0
6	2288	98.0

Table 1: Showing on-site density and compaction – aggregate base course

Testing No.	DENSITY kg/cu. m	COMPACTION PERCENTAGE %
1	2260	99.0
2	2371	100.3
3	2282	97.1
4	2291	98.0
5	2336	99.4
6	2323	99.0

Table 2: Showing on-site density and compaction – final asphaltic wearing course

LABORATORY TESTING RESULTS – @ Asphalt Plant

<u>SAMPLE NO</u>	<u>MASS (kg)</u>	<u>HEIGHT (m)</u>	<u>STABILITY (kN)</u>	<u>SPECIFICATION VALUE FOR STABILITY (kN)</u>	<u>FLOW (mm) 0.01”</u>	<u>SPEC. VALUE FOR FLOW (mm)</u>	<u>DENSITY (kg/m3)</u>
1.	1.200	0.070	10.09	≥ 8	4.09	2 – 4	2400
2.	1.200	0.070	9.81	≥ 8	3.85	2 – 4	2400
3.	1.200	0.070	9.62	≥ 8	3.68	2 - 4	2400

Table 3: Showing Density, Stability & Flow readings

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