

# **BUSINESS PLAN**



**DHARAM SINGH HANSPAUL &  
SONS LIMITED**

**BUILDING & MECHANICAL CONTRACTORS**

**“CONSTRUCTION CAPACITY EXPANSION PROJECT”**

# Contents

---

- 1.0 INTRODUCTION
  - 1.1 Foreword
  - 1.2 Objectives of the Study
  - 1.3 Project Promoters
  - 1.4 Study Layout
- 2.0 EXECUTIVE SUMMARY
  - 2.1 Introduction
  - 2.2 Pre-engineered Steel Structures
  - 2.3 Market and Marketing Aspects
  - 2.4 Process and Technology
  - 2.5 Location
  - 2.6 Manpower Requirement
  - 2.7 Implementation
  - 2.8 Project Economics
  - 2.9 Recommendations
- 3.0 CONSTRUCTION SECTOR IN TANZANIA
  - 3.1 Growth of the Industrial Sector
  - 3.2 Cost of Production in Industrial Sector
- 4.0 CONSTRUCTION PROCESS AND TECHNOLOGY
  - 4.1 Basic Construction Process
  - 4.2 Quality Control System
  - 4.3 Environment Protection
- 5.0 MACHINERY, EQUIPMENT AND CIVIL WORKS
  - 5.1 Machinery and Equipment
  - 5.2 Plant Location and Civil Works
  - 5.3 Utility Services
- 6.0 CONSTRUCTION INPUT REQUIREMENTS AND AVAILABILITY
  - 6.1 Materials
  - 6.2 Utilities
- 7.0 MANPOWER AND PLANT ORGANIZATION
  - 7.1 Organization
  - 7.2 Responsibilities
  - 7.3 Manpower Requirement
  - 7.4 Source of Manpower and Wage Bill
- 8.0 INVESTMENT AND FINANCING
  - 8.1 Assumptions
  - 8.2 Summary of Capital Costs
  - 8.3 Building and Civil Works
  - 8.4 Plant, Machinery and Equipment Cost
  - 8.5 Motor Vehicles
  - 8.6 Pre-Production Capital Expenditure
  - 8.7 Initial Working Capital
  - 8.8 Financing Pattern
- 9.0 COST OF OPERATIONS
  - 9.1 Utilities
  - 9.2 Vehicle Running Expenses

- 9.3 Salaries and Wages
- 9.4 Administrative Overheads
- 9.5 Depreciation
- 9.6 Interest
- 10.0 FINANCIAL ANALYSIS
  - 10.1 Income and Expenditure
  - 10.2 Net Income Statement Highlights
  - 10.3 Cashflow Highlights
  - 10.4 Balance Sheet
- 11.0 ECONOMIC ANALYSIS
  - 11.1 Assumption and Consideration
  - 11.2 Economic Benefits of the Project
- 12.0 RECOMMENDATIONS

## 1. INTRODUCTION

### 1.1 FOREWORD

Dharam Singh Hanspaul and Sons Limited is establishing a new project of the expansion of its Construction Capacity and Capabilities related to the Designing and Erection of Steel Structures, roofs, cladding, ventilations, windows, doors, translucent Polycarp sheeting as well as post quality control inspections.

The new project involves investing in to the purchasing of state of art construction plant and machinery to increase its capacity of taking on more projects of designing, manufacturing and erecting steel structures in the most efficient manner and to the highest of standards.

The Investment in the purchasing of the construction plant and machinery would include; A New Hyundai Excavator, Scania Tractor Unit, Scania P420 Tipper(8x4), Iveco Cherry Picker, Scania Concrete Mixer, Ace Backhoe Loader, CNC Flame Cutting Machine, A Mitsubishi Fuso, Scania P380 Tipper (8x4), Scania P420 Tipper (8x4) and 2 Units of Concrete Mixer (6x4), these capital assets would increase the company's capacity and capabilities of taking on more projects at a particular time by more than 50% of the current capacity.

The Company's current establishment employs 47 Full time employs, the company's decision to expand its construction capacity would result in the generation of approximately 31 new jobs.

### 1.2 OBJECTIVES OF THE STUDY

The Purpose of this feasibility study is to work out the technical and commercial details together with the financial viability of the project.

### 1.3 PROJECT PROMOTERS

<b>NAMES, ADDRESSES AND DESCRIPTION OF SUBSCRIBERS</b>	<b>% SHARE-HOLDING</b>
KAMALJIT SINGH HANSPAUL P.O. BOX 613 ARUSHA, TANZANIA	49.85%
SATBIR SINGH HANSPAUL P.O. BOX 613 ARUSHA, TANZANIA	49.85%

The current shareholders and directors of the company have a wealth of experience in designing, manufacturing and erection of steel structures and are keen to exploit such experience to make this project a success.

## 1.4 STUDY LAYOUT

This study is presented in one document comprising of the following major chapters.

- Chapter 1 - Introduction
- Chapter 2 - Executive Summary
- Chapter 3 - Construction Sector in Tanzania
- Chapter 4 - Construction Process and Technology
- Chapter 5 - Machinery, Equipment and Civil Works
- Chapter 6 - Construction Inputs Requirement and Availability
- Chapter 7 - Manpower and Plant Organization
- Chapter 8 - Investment and Financing
- Chapter 9 - Costs of Operation
- Chapter 10 - Financial Analysis
- Chapter 11 - Economic Analysis
- Chapter 12 - Recommendations

## 2. EXECUTIVE SUMMARY

### 2.1 INTRODUCTION

The study examines the possibility of expanding the capacity of the construction of pre-engineered steel structures. A Techno-economic evaluation has been carried out to determine the feasibility of this project.

### 2.2 PRE-ENGINEERED STEEL BUILDINGS/STRUCTURES:

A pre-engineered steel building is a modern technology where the complete designing is done at the factory and the building components are brought to the site in CKD (completely knock down condition) and then fixed/jointed at the site and raised with the help of cranes.

An efficiently designed pre-engineered building can be lighter than the conventional steel buildings by up to 30%. Lighter weight equates to less steel and potential price savings in structural framework.

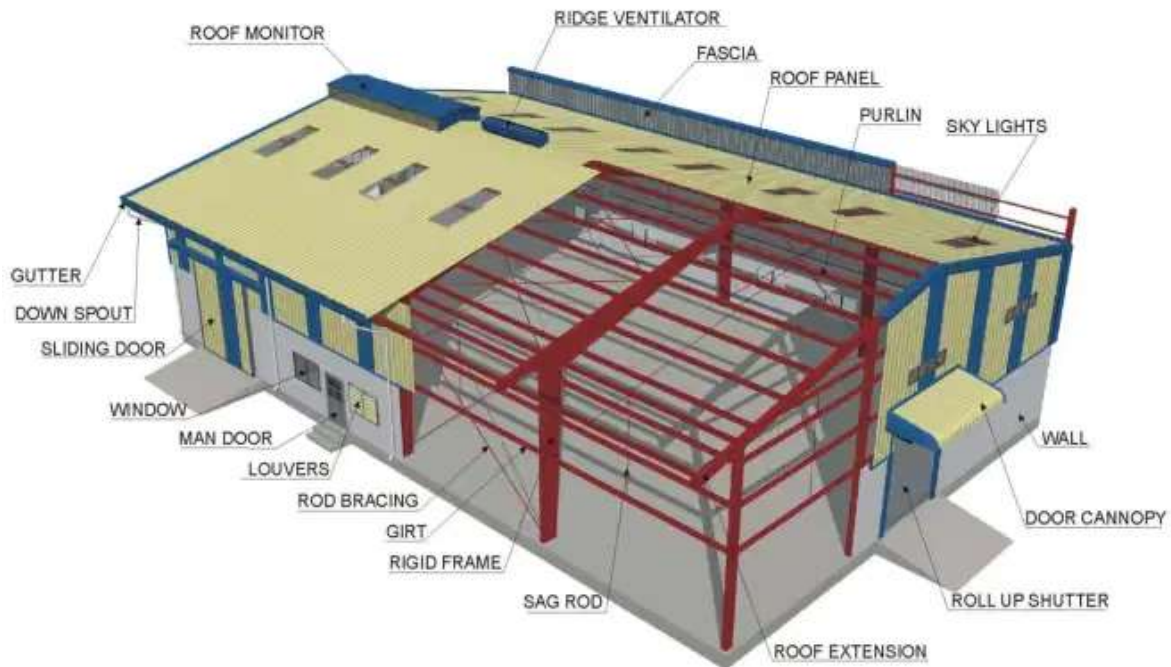
The major components of the PESB are divided into 4 types-

### 1. Primary Components

Primary components of the PESB consists of mainframe, column, and rafters-

#### A. Main Frame

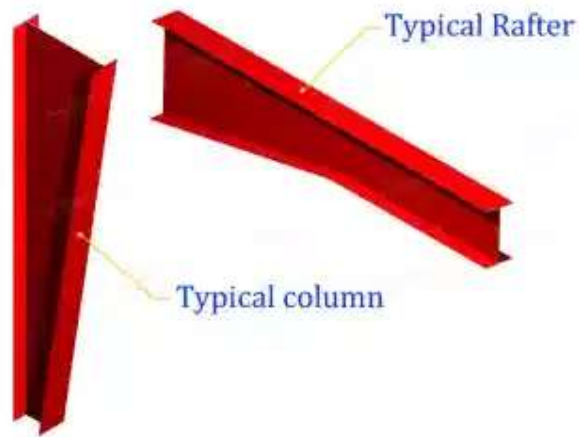
The main framing basically includes the rigid steel frames of the building. The PESB rigid frame comprises of tapered columns and tapered rafters. Flanges shall be connected to webs by means of a continuous fillet weld on one side.



*Components of Pre Engineered Steel Building*

#### B. Columns

The main purpose of the columns is to transfer the vertical loads to the foundations. In pre-engineered buildings, columns are made up of I sections which are most economical than others. The width and breadth will go on increasing from bottom to top of the column.



*Rafter and Column in Pre Engineered Steel Building*

**C. Rafter**

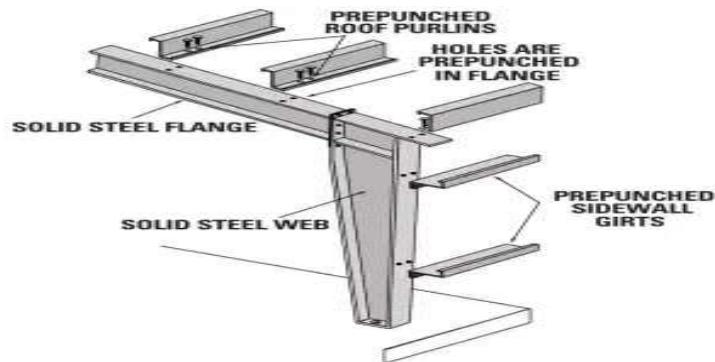
A rafter is one of a series of sloped structural members (beams) that extend from the ridge or hip to the wall-plate, downslope perimeter or eave, and that are designed to support the roof deck and its associated loads.

**2. Secondary Component**

Purlins, Girts and Eave struts are secondary structural members used as support to walls and roof panels.

**A. Purlins and Girts**

Purlins are used on the roof; Girts are used on the walls and Eave struts are used at the intersection of the sidewall and the roof. Purlins and girts shall be cold-formed "Z" sections with stiffened flanges.

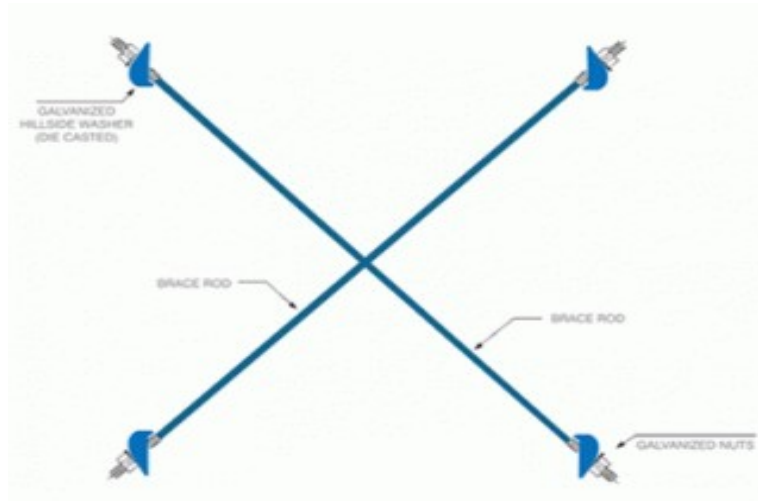


**B. Eave Struts**

Eave struts shall be unequal flange cold-formed "C" sections. Eave struts are 200 mm deep with a 104 mm wide top flange, a 118 mm wide bottom flange, both are formed parallel to the roof slope. Each flange has a 24 mm stiffener lip.

**C. Bracings**

Cable bracing is a primary member that ensures the stability of the building against forces in the longitudinal direction such as wind, cranes, and earthquakes. Diagonal bracing in the roof and side walls shall be used.



### 3. Sheeting or Cladding

The sheets used in the construction of pre-engineered buildings are Base metal of either Galvalume coated steel conforming to ASTM A 792 M grade 345B or aluminum conforming to ASTM B 209M which is cold-rolled steel, high tensile 550 MPA yield stress, with hot dip metallic coating of Galvalume sheet.

### 4. Accessories

Non-structural parts of the buildings such as bolts, turbo ventilators, skylights, lovers, doors and windows, roof curbs and fasteners make the accessories components of the pre-engineered steel building.

## 2.3 MARKET AND MARKETING ASPECTS

The market survey carried out reveals that there is a huge demand for pre-engineered steel buildings due the outweighing benefits of pre-engineered steel buildings/structures over the conventional steel/concrete buildings. There is a wide gap between supply and demand and therefore there is an opportunity to exploit this gap by increasing construction and manufacturing capacities and capabilities.

With Increased local construction and manufacturing facilities, our country will save on both direct and indirect taxes lost on the importation of such pre-engineered steel structures from the neighboring countries such as Kenya.

According to a research carried out by a global business analytics and consulting company (Adroit Market Research) The global pre-engineered buildings market is growing at a CAGR of >12.0% during the forecast period from 2021 to 2028. The demand is being driven by rising understanding of new off-site building structures and methods, as well as rapid industrialization in both developing and developed economies. The demand for industrial storage spaces and warehouses has risen as e-commerce and distribution stores have become more prevalent in the retail market.

## 2.4 PROCESS AND TECHNOLOGY

The design and construction of pre-engineered steel structures require a variety of construction equipment and machinery from as simple as a grinding machine to a flame cutting machine, from a wheel barrow to a scania tipper, from a shovel to and a Hyundai excavator. All these equipment and machineries form a very important part in the designing to the erection of all steel structures.

## 2.5 LOCATION

The construction expansion project would be a part of our current establishment which is on plot no. 523, block C, Njiro Industrial Area, Arusha, Tanzania.

## 2.6 MANPOWER REQUIREMENTS

The expansion project will require an additional of 30+ permanent employees with the expertise spread over different fields i.e Quantity Surveyors, Mechanical and Civil Engineers, Site Managers, Human Resource Managers and construction workers. Maximum Employment would be given to the local work force.

## 2.7 IMPLEMENTATION

The project is planned to undergo two phases:

Phase I : Major activities involved include registration of the expansion project and approvals by the Tanzania Investment Centre (TIC) and mobilization of funds from sponsors. Other activities include identification of appropriate technology, sourcing of the construction equipment and machinery and the recruitment/training of core personnel.

Phase II : Will Involve the commencement of taking on projects after expansion.

## 2.8 PROJECT ECONOMICS

### 2.8.1 Capital Investments requirements

<b>COST STRUCTURE</b>	
<b>PARTICULARS</b>	<b>AMOUNT (\$)</b>
Land and Buildings	-
Construction Equipment and Machinery	\$232,420.00
Machinery, Tools and Construction Vehicles	\$464,909.00
Furniture and Fixtures	-
Pre Expenses	-
Others	\$27,000
Working Capital	-
<b>TOTAL</b>	<b>\$724,329.00</b>

### 2.9.2 Expenditure on basic materials and profitability

The major expenditure item is the purchase various materials used in the designing and manufacturing of the steel structures mainly steel. Project Revenue will accrue construction revenue obtained from the design, manufacture and erection of the steel buildings. Based on projected revenue at sustainable levels of production the project is quite profitable.

## 2.9 RECOMMENDATIONS

The study shows the proposed expansion is both technically and financially a feasible undertaking. Furthermore, it will create local employment for the national benefit. In view of the findings, the project is recommended for implementation.

### 3.0 PRE-ENGINEERED STEEL BUILDINGS IN TANZANIA

3.1 The number of steel structure manufacturers is increasing day by day. This is due to the high demand for quality pre-engineered steel structures. The steel structure manufacturers play a vital role in the steel industry.

The pre-engineered steel building is used to build for office buildings, showrooms, supermarkets, workshops, factories, halls, warehouses, and residential buildings. It is also preferred by many since it is sustainable, durable, and environmentally friendly.

Structural steel does enhance construction productivity as a result of its shop fabrication while at the same time, being able to maintain tight construction tolerances.

### 4.0 CONSTRUCTION AND ERECTION PROCESS AND TECHNOLOGY

#### 4.1 BASIC PROCESS

The design, manufacture and erection of pre-engineered steel buildings goes through a number of steps starting from the preparation of the concrete foundation upon which the steel building is erected. The foundation is dug using construction machinery such as the **EXCAVATORS, BACKHOE LOADERS** and **TRACTORS** after which the material is transported to and from the sites/borrow pits using **TIPPERS**, the concrete used in the construction of the foundation is mixed in the **BATCHING PLANT** and **CONCRETE MIXERS**. After the foundation is ready the steel beams and other components which have been cut, hole punched, Assembled, welded, cleaned and painted, these processes involve machines such as the **CNC FLAME CUTTING MACHINE** etc. The steel beams and all the other components are then transported by **LOW BED TRUCKS** from the factory to the sites. The structure is then erected accordingly by the engineers responsible.

#### 4.2 QUALITY CONTROL SYSTEM

Required quality control measures will be pursued to ensure that durable and high quality steel structures are produced and erected to cater for the needs of the local market. The company will consider exploitation of market existing in the neighboring countries.

#### 4.3 ENVIRONMENT PROTECTION

Our aim is to make this project environment friendly. Appropriate action will be taken to ensure that the construction process causes no harm to the environment. By taking such measures, we can protect the country's environment in particular and global environment in general.

## **5. CONSTRUCTION EQUIPMENT AND MACHINERY**

### **5.1 MACHINERY AND EQUIPMENT**

The Company will acquire various Construction machineries and vehicles to ease the process of the preparation of the foundation, steel components and their transportations from the factory to the sites.

### **5.2 LOCATION**

All the equipment and machineries acquired would primarily be located at the head office of the company on Plot No.523 Engutoto, Njiro Industrial area in Arusha, Tanzania.

### **5.3 UTILITY SERVICES**

#### **i. Water**

The current water connection and bore hole at the premises is adequate to support this expansion project.

#### **ii. Electricity**

The Tanzania Electric Supply Company Limited (TANESCO) provides adequate amount of Electricity and hence enough electricity is available to support this expansion project.

## **6.0 PRODUCTION INPUT REQUIREMENTS AND AVAILABILITY**

### **6.1 INPUTS**

As explained earlier, the major expenditure item will be the purchase of steel and other various material for the design and manufacture of the steel structures.

### **6.2 UTILITIES**

#### **i. Water**

As explained earlier that the water supply from the Arusha Urban Water Supply and Sanitation Authority is adequate to support the expansion project as well as a bore hole being present the company's premises.

#### **ii. Power**

The source of energy that would be used will be electricity and as mentioned earlier the current power supply from TANESCO is adequate to support this expansion as well as the company possesses a stand by generator in case of any power cuts by TANESCO.

## 7.0 MANPOWER AND PLANT ORGANIZATION

The proposed expansion project would add to the current existing independent departments namely:

1. Finance and Accounts
2. Human Resources
3. Procurement
4. Project
5. Engineering
6. Marketing

### 7.1 ORGANIZATION

The board of directors of Dharam Singh Hanspaul and Sons Limited shall manage the project at policy level. The top most person in the day to day running of the company will be the Managing Director. Under the Managing Directors office are the departments mentioned above. Each Department will be headed by a manager.

Each of the departments are manned by a number of personnel with varying education levels and work experience.

The management team of Dharam Singh Hanspaul and Sons Limited consists of The Managing Directors, The Finance Manager, Procurement Manager, Project Engineer, Chief Engineer and The Marketing Manager.

### 7.2 RESPONSIBILITIES

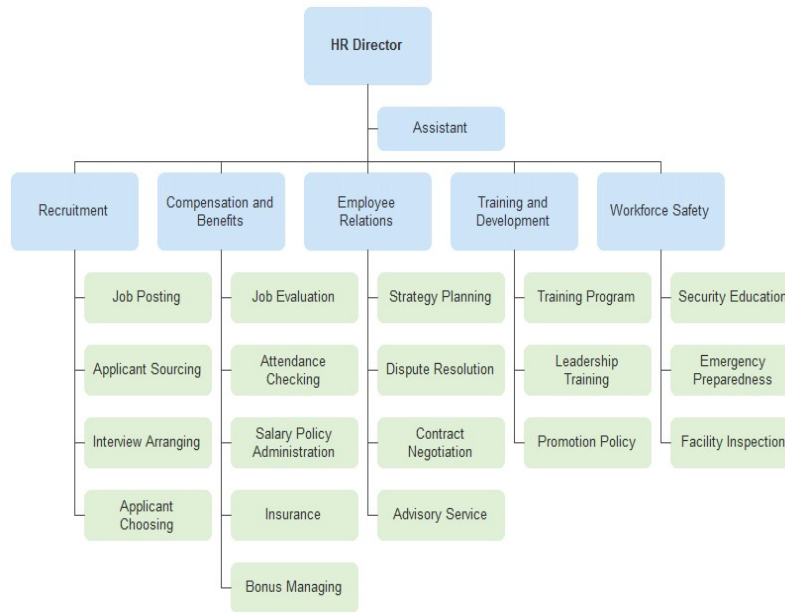
- i. The Finance and Accounts Department

This department is headed by the Finance Manager. The department is responsible for the management of the company's cash flow and ensuring there are sufficient funds available to meet the day to day payments.



ii. The Human Resources Department

This Department is responsible for staff recruitment and training, record keeping, compensation and benefits, insurance and employee relations.



iii. The Procurement Department

The main role of the Procurement Department is to purchase or to procure supplies and materials used in the projects and company's daily needs. They need to compare among different suppliers and finding the items with correct prices and qualities.

iv. The Project Department

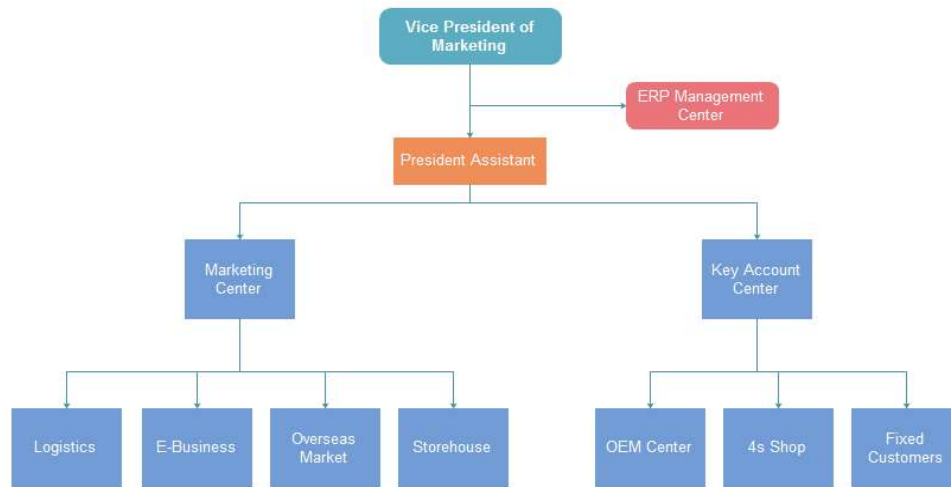
Project department is responsible for scheduling and managing for each project. The project manager needs to decide the budget, assign employees and their duties to complete the job, oversee the safety of workers. They need to make sure the construction work can be well completed according to the contract.

v. The Engineering Department

In general, the engineering department is responsible for the planning of the construction project. This includes conducting surveys, engaging in research, analyzing results, planning the construction and supporting all technical issues during the project.

vi. The Marketing Department

The marketing department is responsible for market research, marketing strategy, sales, advertising, promotion, pricing, product development, and public relations activities.



### 7.3 MANPOWER REQUIREMENT

The permanent manpower requirement need to support the expansion project is around 78. Several other casual workers will be contracted on a temporary basis.

### 7.4 SOURCE OF MANPOWER

Manpower for the proposed expansion project will be employed from local sources, except for a few expatriates who would basically be engaged in the training of local staff. The workers will be given on the job training to familiarize them with the proposed machinery and equipment.

After the initial 2 years, depending on the results of the training, local counter parts will replace the expatriates.

## 8.0 INVESTMENT AND FINANCING

### 8.1 ASSUMPTIONS

The financial projections to determine the viability of the project by M/s Hanspaul Industries Limited are based on the following key assumptions:

- The Expansion Project will start immediately. Thereafter finding and taking on more on bigger projects will commence.
- The company market will be local as well as an export market will be hunted for.
- Financial calculations are based on current market prices and costs are assumed constant throughout the operating period under review on the assumption that if operation costs change, selling prices will change proportionally to preserve the profit margins.
- The project has adopted the currency exchange rate of United States Dollar 1 = Tanzanian Shillings 2299.21 as prevailing.

## 8.2 SUMMARY OF CAPITAL COSTS

On completion of the expansion project the total investment will reach \$ 0.724 million as shown in attached schedules.

## 8.3 PLANT MACHINERY AND EQUIPMENT COSTS

The project involves investing in to purchasing state-of-art plant and machinery to construct and manufacture steel structures of very high quality in the most efficient manner; construction machines would include an excavator, tractor units, backhoe loaders and cnc flame cutting machines.

The total investment on plant and machinery is based on quotations received from major suppliers and amount to \$289,689/- approximately.

## 8.4 MOTOR VEHICLES

In order to transport of materials from the factory to the construction sites, the company would also require to increase its transportation muscle. This includes purchasing of several construction trucks. The promoters intend to procure various vehicles at a total cost of \$407,640/-.

## 8.5 PRE-PRODUCTION CAPITAL EXPENDITURES

These include project development cost for feasibility study and start-up expenses. A budget of \$15,000/- is considered adequate for this item.

## 8.6 OTHER EXPENSES

This is mainly for contingencies whose value cannot be estimated with certainty at the moment. The amount budgeted for this item stands at \$12,000/-.

The following is the breakdown of the proposed costs to expand the construction capacity

### A. PLANT MACHINERY AND EQUIPMENT

ITEM	QUANTITY	COST PER UNIT	TOTAL COST IN \$	RATE	TOTAL COST IN TSHS
NEW HYUNDAI EXCAVATOR	2	\$ 75,500.00	\$ 151,000.00	2299.21	TSh 347,180,710.00
SCANIA TRACTOR UNIT	2	\$ 17,500.00	\$ 35,000.00	2299.21	TSh 80,472,350.00
ACE BACKHOE LOADER	2	\$ 40,710.00	\$ 81,420.00	2299.21	TSh 187,201,678.20
CNC FLAM CUTTING MACHINE	3	\$ 7,423.00	\$ 22,269.00	2299.21	TSh 51,201,107.49
<b>TOTAL</b>			<b>\$ 289,689.00</b>		<b>TSh 666,055,845.69</b>

B. MOTOR VEHICLES

ITEM	QUANTITY	COST PER UNIT	TOTAL COST IN \$	RATE	TOTAL COST IN TSHS
SCANIA P420 TIPPER (8X4)	4	\$ 26,600.00	\$ 106,400.00	2299.21	TSh 244,635,944.00
SCANIA P380 TIPPER (8X4)	4	\$ 26,600.00	\$ 106,400.00	2299.21	TSh 244,635,944.00
IVECO CHERRY PICKER	2	\$ 8,400.00	\$ 16,800.00	2299.21	TSh 38,626,728.00
SCANIA CONCRETE MIXER	2	\$ 30,520.00	\$ 61,040.00	2299.21	TSh 140,343,778.40
USED MITSUBISHI FUSO	3	\$ 19,000.00	\$ 57,000.00	2299.21	TSh 131,054,970.00
LOW BED TRUCK	2	\$ 30,000.00	\$ 60,000.00	2299.21	TSh 137,952,600.00
<b>TOTAL</b>			<b>\$ 407,640.00</b>		<b>TSh 937,249,964.40</b>

C. PRE-EXPENSES – MARKET SURVERY, FEASIBILITY STUDY, TRAVELLING ETC

ITEM	QUANTITY	TOTAL COST IN \$	RATE	TOTAL COST IN TSHS
TRIP TO INDIA AND UK FOR MACHINERY ORDERING AND INSPECTION	2	\$ 15,000.00	2299.21	TSh 34,488,150.00
<b>TOTAL</b>		<b>\$ 15,000.00</b>		<b>TSh 34,488,150.00</b>

D. OTHERS/CONTINGENCIES

ITEM	QUANTITY	TOTAL COST IN \$	RATE	TOTAL COST IN TSHS
MISCELLANEOUS EXPENSES	MISCELLANEOUS	\$ 12,000.00	2299.21	TSh 27,590,520.00
<b>TOTAL</b>		<b>\$ 12,000.00</b>	<b>TOTAL</b>	<b>TSh 27,590,520.00</b>

E. WORKING CAPITAL

ITEM	QUANTITY	TOTAL COST IN \$	RATE	TOTAL COST IN TSHS
WORKING CAPITAL OVER DRAFT FACILITY OF UPTO TZS 1,500,000,000/- @ 14% P.A.	UPTO TSHS 1,500,000,000/-	N/A	N/A	N/A
<b>TOTAL</b>		<b>\$ -</b>	<b>TOTAL</b>	<b>TSh -</b>

F. GRAND TOTAL

ITEM	QUANTITY	TOTAL COST IN \$	RATE	TOTAL COST IN TSHS
GRAND TOTAL OF PROJECT	TOTAL	\$ 724,329.00	2299.21	TSh 1,665,384,480.09
	<b>TOTAL</b>	<b>\$ 724,329.00</b>	<b>TOTAL</b>	<b>TSh 1,665,384,480.09</b>

G. FINANCING PATTERN

The Financing of the project will be from the shareholders equity as well as bank loan and Overdraft facilities.

The financing of the expansion project will take the following form

	EQUITY	LOAN	OVERDRAFT	TOTAL
<b>FOREIGN</b>	\$ -	\$ -	\$ -	\$ -
<b>LOCAL</b>	\$ 174,329.00	\$ 250,000.00	\$ 300,000.00	\$ 724,329.00

9. COST OF OPERATIONS

The anticipated costs for operating the project are detailed in the following sections and summarized in attached schedules. The summarized costs are based on the fifth year of operation.

9.1 UTILITIES

A total cost of utilities \$ 18,200 will be required per annum for the purchase of electric power at sustainable production level.

9.2 MACHINERY AND VEHICLE RUNNING EXPENSES

Machinery and Vehicle running expenses include fuel and lubricants, spare parts, servicing, road licenses etc. The cost has been estimated at \$ 56,000

9.3 SALARIES AND WAGES

The number of employees, along with their incomes is shown in attached schedules. The total annual wage package is estimated at \$128,750 including fringe benefits and related taxes.

9.4 ADMINISTRATIVE OVERHEADS

The administrative costs are estimated at \$16,920 per annum as per attached schedules.

## 9.5 DEPRECIATION

The following is depreciation schedule for major assets to be employed in the construction capacity expansion project.

DEPRECIATION	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
	\$	\$	\$	\$	\$
Construction and Earth moving equipment	121,648.89	76,030.56	47,519.10	29,699.44	18,562.15
Machinery, Tools and construction Vehicles	161,587.23	121,190.42	90,892.82	68,169.61	51,127.21
Furniture and Fixtures	7,505.52	6,567.33	5,746.41	5,028.11	4,399.60
Land and buildings	42,887.24	42,887.24	42,887.24	42,887.24	42,887.24
Intangible Assets	399.28	-	-	-	-
<b>ANNUAL DEPRECIATION</b>	<b>334,028.16</b>	<b>246,675.55</b>	<b>187,045.57</b>	<b>145,784.40</b>	<b>116,976.19</b>

## 9.6 INTEREST

A total of \$ 16,580 will be required as interest expense as detailed in the attached financial statements.

## 10. FINANCIAL ANALYSIS

### 10.1 INCOME AND EXPENDITURE

#### 10.1.1 INCOME

The proposed project by Dharam Singh Hanspaul and Sons Limited expects to earn its income through revenue generated from the construction and erection of steel structures/buildings. The total sales are expected to stand at \$ 3,965,600 in the fifth year of operation.

#### 10.1.2 EXPENDITURE

Some project costs have been discussed in chapter 9 and are summarized in detail in attached schedule.

### 10.2 NET INCOME STATEMENT HIGHLIGHTS

The projects annual after tax net income during the fifth year of operation is estimated to reach \$ 68,085 as presented in the income statement of the financial statements appendix.

### 10.3 CASH FLOW HIGHLIGHTS

This is shown in the financial statements. The project has a positive end of year cash flow from year 1 of operation to the 5<sup>th</sup> year as shown hereunder.

1 <sup>st</sup> Year	\$68,298.28
2 <sup>nd</sup> Year	\$269,335.28
3 <sup>rd</sup> Year	\$421,535.28
4 <sup>th</sup> Year	\$544,645.28
5 <sup>th</sup> Year	\$729,707.28

### 10.4 BALANCE SHEET

The projected balance sheet of the project is shown in the financial statements under the same heading. Net worth of the project increases from \$ 214,022.05 in the first year of operation to \$ 364,471.16 in the 5<sup>th</sup> year.

1 <sup>st</sup> Year	\$214,022.05
2 <sup>nd</sup> Year	\$240,408.17
3 <sup>rd</sup> Year	\$274,349.37
4 <sup>th</sup> Year	\$316,811.10
5 <sup>th</sup> Year	\$364,471.16

## 11. ECONOMIC ANALYSIS

### 11.1 ASSUMPTIONS AND CONSIDERATIONS

The basic assumptions underlying economic benefits and costs are:

11.1.1 Taxes on capital costs have not been considered.

11.1.2 Construction factors have been used to determine economic costs and benefits.

11.1.3 Economic life of the project is assumed to be 5 years.

## 11.2 ECONOMIC BENEFITS OF THE PROJECT

The successful operation of the project will contribute to significant economic benefits to Tanzania. In summary the benefits which will be realized are as follows.

- This project will boost investment in the construction sector which is important for the economy, contributing to research and other skills development. It will provide vital support to the construction sector.
- Employment opportunities for at least 50 permanent and several casual laborer's when the project is fully operational.
- The direct income for the workers, combined with other social benefits that the Management of Dharam Singh Hanspaul and Sons Limited will provide, will help in overall efforts of alleviation of poverty in the region.
- Provision of a market for pre-engineered steel structure buildings demanded by expanded tax base to the Treasury and Local Government authorities and generation of substantial income to the Government.

## 12. RECOMMENDATIONS

The project is technically feasible, financially and economically viable as well as being environmentally friendly. A fast implementation of the project is highly recommended to avoid cost overruns and for the project to be able to realize the benefits outlined above; especially at this juncture when the Government is making effort to boost investment in various sectors in the economy.

In view of the above it is further strongly recommended that the project be approved by Tanzania Investment Centre and be granted the TIC certificate of incentives with its associated privileges and benefits as provided for under Tanzania Investment Act 1997 to facilitate smooth implementation.

## DHARAM SINGH HANSPAUL AND SONS LIMITED

### PROJECTED INCOME & EXPENDITURE STATEMENT

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
	\$	\$	\$	\$	\$
Sales Revenue	\$3,674,754.58	\$ 3,764,200.00	\$ 3,869,800.00	\$ 3,925,680.00	\$3,965,600.00
Cost of Sales	\$3,050,046.30	\$ 3,199,570.00	\$ 3,347,377.00	\$ 3,434,970.00	\$3,489,728.00
<b>Gross Profit</b>	<b>\$ 624,708.28</b>	<b>\$ 564,630.00</b>	<b>\$ 522,423.00</b>	<b>\$ 490,710.00</b>	<b>\$ 475,872.00</b>
Operating Expenses					
Administrative Overhead Costs	\$ 15,200.00	\$ 16,100.00	\$ 16,260.00	\$ 16,826.00	\$ 16,920.00
Motor Vehicle Running Expenses	\$ 15,500.00	\$ 33,400.00	\$ 34,560.00	\$ 35,680.00	\$ 36,400.00
Salaries and Wages	\$ 123,600.00	\$ 124,600.00	\$ 125,200.00	\$ 126,300.00	\$ 128,750.00
Depreciation	\$ 334,028.16	\$ 246,675.55	\$ 187,045.57	\$ 145,784.40	\$ 116,976.19
Marketing Expense	\$ 8,600.00	\$ 8,650.00	\$ 8,720.00	\$ 8,760.00	\$ 8,780.00
Utility Costs	\$ 13,500.00	\$ 15,250.00	\$ 16,350.00	\$ 17,100.00	\$ 18,200.00
Insurance	\$ 32,000.00	\$ 32,500.00	\$ 33,400.00	\$ 34,650.00	\$ 35,780.00
Professional Fees	\$ 25,600.00	\$ 26,200.00	\$ 27,800.00	\$ 28,950.00	\$ 29,400.00
Interest Expense	\$ 22,500.00	\$ 23,560.00	\$ 24,600.00	\$ 16,000.00	\$ 16,580.00
<b>Total Operating Expenses</b>	<b>\$ 590,528.16</b>	<b>\$ 526,935.55</b>	<b>\$ 473,935.57</b>	<b>\$ 430,050.40</b>	<b>\$ 407,786.19</b>
<b>Profit before Tax</b>	<b>\$ 34,180.11</b>	<b>\$ 37,694.45</b>	<b>\$ 48,487.43</b>	<b>\$ 60,659.60</b>	<b>\$ 68,085.81</b>
Tax (30%)	\$ 10,254.03	\$ 11,308.34	\$ 14,546.23	\$ 18,197.88	\$ 20,425.74
<b>Profit After Tax</b>	<b>\$ 23,926.08</b>	<b>\$ 26,386.12</b>	<b>\$ 33,941.20</b>	<b>\$ 42,461.72</b>	<b>\$ 47,660.06</b>

## DHARAM SINGH HANSPAUL AND SONS LIMITED

### PROJECTED BALANCE SHEET

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
	\$	\$	\$	\$	\$
<b>ASSETS</b>					
<b>Non-Current Assets</b>					
Long Term Assets	\$ 1,191,574.83	\$ 857,546.67	\$ 610,871.12	\$ 423,825.55	\$ 278,041.15
Depreciation	\$ 334,028.16	\$ 246,675.55	\$ 187,045.57	\$ 145,784.40	\$ 116,976.19
<b>Total Long Term Assets</b>	<b>\$ 857,546.67</b>	<b>\$ 610,871.12</b>	<b>\$ 423,825.55</b>	<b>\$ 278,041.15</b>	<b>\$ 161,064.96</b>
<b>Current Assets</b>					
Inventory	\$ 120,000.00	\$ 136,200.00	\$ 146,800.00	\$ 158,200.00	\$ 169,950.00
Debtors	\$ 500,000.00	\$ 586,500.00	\$ 625,400.00	\$ 720,500.00	\$ 832,050.00
Bank and Cash	\$ 112,000.00	\$ 156,000.00	\$ 168,000.00	\$ 172,500.00	\$ 188,200.00
	<b>\$ 732,000.00</b>	<b>\$ 878,700.00</b>	<b>\$ 940,200.00</b>	<b>\$ 1,051,200.00</b>	<b>\$ 1,190,200.00</b>
<b>Total Assets</b>	<b>\$ 1,589,546.67</b>	<b>\$ 1,489,571.12</b>	<b>\$ 1,364,025.55</b>	<b>\$ 1,329,241.15</b>	<b>\$ 1,351,264.96</b>
<b>EQUITY AND LIABILITIES</b>					
<b>Equity</b>					
Share Capital	\$ 4,349.51	\$ 4,349.51	\$ 4,349.51	\$ 4,349.51	\$ 4,349.51
Retained Earnings	\$ 209,672.55	\$ 236,058.66	\$ 269,999.87	\$ 312,461.59	\$ 360,121.65
<b>Total Equity</b>	<b>\$ 214,022.05</b>	<b>\$ 240,408.17</b>	<b>\$ 274,349.37</b>	<b>\$ 316,811.10</b>	<b>\$ 364,471.16</b>
<b>LIABILITIES</b>					
<b>Current Liabilities</b>					
Payables	\$ 473,098.24	\$ 480,069.90	\$ 409,916.46	\$ 418,503.68	\$ 396,867.43
Bank Overdraft	\$ 652,426.37	\$ 602,426.37	\$ 596,426.37	\$ 593,926.37	\$ 589,926.37
<b>Total Current Liabilities</b>	<b>\$ 1,125,524.61</b>	<b>\$ 1,082,496.28</b>	<b>\$ 1,006,342.84</b>	<b>\$ 1,012,430.06</b>	<b>\$ 986,793.80</b>
<b>Non Current Liabilities</b>					
Loan	\$ 250,000.00	\$ 166,666.67	\$ 83,333.34	\$ -	\$ -
<b>Total Non Current Liabilities</b>	<b>\$ 250,000.00</b>	<b>\$ 166,666.67</b>	<b>\$ 83,333.34</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Liabilities</b>	<b>\$ 1,375,524.61</b>	<b>\$ 1,249,162.95</b>	<b>\$ 1,089,676.18</b>	<b>\$ 1,012,430.06</b>	<b>\$ 986,793.80</b>
<b>Net Assets</b>	<b>\$ 214,022.05</b>	<b>\$ 240,408.17</b>	<b>\$ 274,349.37</b>	<b>\$ 316,811.10</b>	<b>\$ 364,471.16</b>
<b>Total Equity and Liabilities</b>	<b>\$ 1,589,546.67</b>	<b>\$ 1,489,571.12</b>	<b>\$ 1,364,025.55</b>	<b>\$ 1,329,241.15</b>	<b>\$ 1,351,264.96</b>

## DHARAM SINGH HANSPAUL AND SONS LIMITED

### PROJECTED CASHFLOW

	YEAR 1	YEAR 2	YEAR 2	YEAR 4	YEAR 5
	\$	\$	\$	\$	\$
<b>CASHFLOW FROM OPERATIONS</b>					
Receipts from Customers	\$ 4,336,210.40	\$ 4,441,756.00	\$ 4,566,364.00	\$ 4,632,302.40	\$ 4,679,408.00
<b>Expenditures from Operations:</b>					
Payment to Suppliers	\$ 3,875,174.64	\$ 4,078,398.60	\$ 4,259,407.06	\$ 4,369,818.48	\$ 4,441,470.44
VAT Payment	\$ 70,327.49	\$ 55,427.40	\$ 46,823.94	\$ 40,039.92	\$ 36,295.56
Interest	\$ 22,500.00	\$ 23,560.00	\$ 24,600.00	\$ 16,000.00	\$ 16,580.00
<b>Net Cashflow from Operations</b>	<b>\$ 368,208.28</b>	<b>\$ 284,370.00</b>	<b>\$ 235,533.00</b>	<b>\$ 206,444.00</b>	<b>\$ 185,062.00</b>
<b>CASHFLOW FROM INVESTMENTS</b>					
Acquisition of Assets	\$ -697,329.00	\$ -	\$ -	\$ -	\$ -
Pre-expenses	\$ -26,910.00	\$ -	\$ -	\$ -	\$ -
<b>Net Cashflow from Investments</b>	<b>\$ -724,239.00</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>CASHFLOW FROM FINANCING</b>					
Bank Loan	\$ 250,000.00	\$ -83,333.00	\$ -83,333.00	\$ -83,334.00	\$ -
Owners Equity Contribution	\$ 174,329.00				
<b>Net Cashflow from financing</b>	<b>\$ 424,329.00</b>	<b>\$ -83,333.00</b>	<b>\$ -83,333.00</b>	<b>\$ -83,334.00</b>	<b>\$ -</b>
<b>CASHFLOW AT START OF YEAR</b>	<b>\$ -</b>	<b>\$ 68,298.28</b>	<b>\$ 269,335.28</b>	<b>\$ 421,535.28</b>	<b>\$ 544,645.28</b>
<b>CASH FLOW AT THE END OF YEAR</b>	<b>\$ 68,298.28</b>	<b>\$ 269,335.28</b>	<b>\$ 421,535.28</b>	<b>\$ 544,645.28</b>	<b>\$ 729,707.28</b>