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CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

	<b>Brought Forward</b>	<b>R</b>	
	<p><b><u>PREAMBLES FOR TRADES</u></b></p> <p>The Model Preambles for Trades (1999 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claim arising from brevity of description of items fully described in the said Model Preambles for Trades will be entertained</p> <p>Supplementary preambles to the Model Preambles covering clauses of a general nature, clauses pertaining to specific materials and amendments to clauses in the Model Preambles are incorporated in these bills of quantities to satisfy the requirements of this project</p> <p>The contractor's prices for all items throughout these bills of quantities must take account of and include for all of the obligations, requirements and specifications given in the Model Preambles and in any supplementary preambles</p> <p><b><u>GENERAL</u></b></p> <p>If Alternative A as set out in clause B10.3 hereinafter is to be used for the adjustment of the preliminaries each item priced is to be allocated to one or more of the three categories "F", "T" or "V" as the case may be below such item, where "F" denotes a fixed amount (amount not to be varied), "T" denotes an amount variable in proportion to time and "V" denotes an amount variable in proportion to value</p> <p><b><u>SECTION A: PRINCIPAL BUILDING AGREEMENT</u></b></p>		
1	<p><b>Definitions (A1)</b></p> <p>Definitions and interpretation (clause 1)</p> <p>Fixed:_____ Value related:_____ Time related:_____</p>	Item	
2	<p><b>Objective and Preparation (A2 to A14)</b></p> <p>Offer acceptance and performance (clause 2)</p> <p>Fixed:_____ Value related:_____ Time related:_____</p>	Item	
	<b>Carried Forward</b>	<b>R</b>	
	<p>Section No. 1 PRELIMINARIES AND GENERALS Bill No. 1 PRELIMINARIES <b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b></p>		

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	Brought Forward	R	
7	Compliance with regulations (clause 7)  Fixed: _____ Value related: _____ Time related: _____	Item	
8	Works risk (clause 8)  Fixed: _____ Value related: _____ Time related: _____	Item	
9	Indemnities (clause 9)  Fixed: _____ Value related: _____ Time related: _____  Works insurances (clause 10)  Fixed: _____ Value related: _____ Time related: _____	Item	
10	Liability insurances (clause 11)  Fixed: _____ Value related: _____ Time related: _____	Item	
11	Effecting insurance (clause 12)  Fixed: _____ Value related: _____ Time related: _____	Item	
12	<b>No clause</b>  Security (clause 14)  Fixed: _____ Value related: _____ Time related: _____	N/A	
	<b><u>Execution (A15-A23)</u></b>		
13	<b>A15.0 PREPARATION FOR AND EXECUTION OF THE WORKS</b>  Clause 15.0  Clause 15.1.1 is amended by replacing it with:  No clause  Clause 15.1.2 is amended by replacing it with:  The <b>security</b> selected in terms of 14.0		
	Carried Forward	R	
	Section No. 1 PRELIMINARIES AND GENERALS Bill No. 1 PRELIMINARIES <b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>		

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	<b>Brought Forward</b>	R	
	Clause 15.1 is amended by the addition of the following clause:		
	15.1.4 An acceptable health and safety plan, required in terms of the Occupational Health and Safety Act, 1993 (Act 85 of 1993), within twenty-one (21) <b>calendar days of commencement date</b>		
	Clause 15.2.1 is amended by replacing it with the following clause:		
	Preparation for and execution of the works (clause 15)		
	Fixed: _____ Value related: _____ Time related: _____	Item	
14	Access to the works (clause 16)		
	Fixed: _____ Value related: _____ Time related: _____	Item	
15	Contract instructions (clause 17)		
	Fixed: _____ Value related: _____ Time related: _____	Item	
16	Setting out of the works (clause 18)		
	Fixed: _____ Value related: _____ Time related: _____	Item	
	The contractor shall notify the principal agent if any encroachments of adjoining foundations, buildings, structures, pavements, boundaries, etc exist in order that the necessary arrangements may be made for the rectification of any such encroachments		
17	Assignment (clause 19)		
	Fixed: _____ Value related: _____ Time related: _____	Item	
	The contractor shall not cede his rights or delegate his obligations in terms of this agreement unless specifically called for by the employer		
18	Nominated subcontractors (clause 20)		
	Fixed: _____ Value related: _____ Time related: _____	Item	
19	Selected subcontractors (clause 21)		
	Fixed: _____ Value related: _____ Time related: _____	Item	
	<b>Carried Forward</b>	R	
	Section No. 1 PRELIMINARIES AND GENERALS Bill No. 1 PRELIMINARIES <b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>		

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	<b>Brought Forward</b>	R	
	Written proof is required from subcontract tenderers at tendering that they can meet the JBCC Selected Subcontract Agreement or other tender agreements and provide security in terms of the agreement. If the above is not provided the tender may not be accepted All amounts allowed under Provisional Amounts are intended to be awarded to Selected Subcontractors		
20	Employer's Direct Contractors (clause 22)		
	Fixed: _____ Value related: _____ Time related: _____	Item	
21	Contractor's Domestic Sub-Contractors (Clause 23)		
	Fixed: _____ Value related: _____ Time related: _____	Item	
	<b><u>Completion (A24-A30)</u></b>		
22	Practical completion (clause 24)		
	Fixed: _____ Value related: _____ Time related: _____	Item	
23	Works completion (clause 25)		
	Fixed: _____ Value related: _____ Time related: _____	Item	
24	Final completion (clause 26)		
	Fixed: _____ Value related: _____ Time related: _____	Item	
25	Latent defects liability period (clause 27)		
	Fixed: _____ Value related: _____ Time related: _____	Item	
26	Sectional completion (clause 28)		
	Fixed: _____ Value related: _____ Time related: _____	Item	
27	Revision of date of practical completion (clause 29)		
	Fixed: _____ Value related: _____ Time related: _____	Item	
	<b>Carried Forward</b>	R	
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	<b>Brought Forward</b>	R	
	<b><u>Substitute Provisions (A41)</u></b>		
37	State clauses (Clause 41)		
	Fixed: _____ Value related: _____ Time related: _____	Item	
	Information necessary for the completion of those clauses contained in the schedule which are necessary for tender purposes is given hereunder		
	<b><u>SCHEDULE</u></b>		
	Information necessary for completion of those clauses contained in the schedule which are necessary for tender purposes is given hereunder		
38	Pre-tender information (clause 42)		
	F:..... V:..... T:.....	Item	
	<b><u>42.1 CONTRACTING AND OTHER PARTIES</u></b>		
	42.1.1 Employer: The Mvula Trust		
	42.1.2 Principal Agent: Nyeleti Consulting (Pty) Ltd		
	42.1.3 Quantity Surveyor: Nyeleti Consulting (Pty) Ltd		
	4.2.4 Civil and Structural Engineers :Nyeleti Consulting (Pty) Ltd		
	<b><u>42.2 CONTRACT DETAILS</u></b>		
	42.2.1 Works Description: Construction of water and sanitation facilities		
	42.2.2 Site Description: David Mutshinyalo Secondary School		
	42.2.3 Work or installations by direct contractors: Prefabricated Steel Tank		
	42.2.4 This agreement is for a government contract where there are specific options that are applicable to a State organ only		
	Yes		
	<b>Carried Forward</b>	R	
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<p style="text-align: right;"><b>Brought Forward</b></p> <p>42.2.5 Date on which possession of the site is intended to be given:</p> <p style="text-align: center;">UNKNOWN</p> <p>42.2.6 Period for the commencement of the works after the contractor takes possession of site.</p> <p>42.2.7 For the works as a whole. Intended date of practical completion and the penalty per calendar day 3 months after contractual commencement date Date Penalty Amount The penalty per calendar day shall be 0.05% of the tenderd amount ( inclusive of value added tax) <b>Carried</b></p> <p>42.2.8 For the works in sections: Intended date of practical completion and the penalty per calendar day Section 1.N/A..... DateR.N/A..... Penalty Amount</p> <p>42.2.9 The law applicable to this agreement shall be that of South Africa (country)</p> <p><b><u>42.3 INSURANCES</u></b></p> <p>42.3.1 Contract works insurance to be effected by:Contractor: For the Sum of R Contract Amount 20.00 % With a deductible of - to be determined by the contractor</p> <p>42.3.2 Supplementary insurance is required No</p> <p>42.3.3 Public liability insurance to be effected by:Contractor: For the Sum of R 2 500 000-00With a deductible of - to be determined by the contractor</p> <p><b><u>42.4 DOCUMENTS</u></b></p> <p>42.4.1 Waivers of contractors lien or right of continuing possession is required Yes</p> <p style="text-align: right;"><b>Carried Forward</b></p> <p>Section No. 1 PRELIMNARIES AND GENERALS Bill No. 1 PRELIMINARIES <b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b></p>	<p style="text-align: center;">R</p> <p style="text-align: center;">R</p>
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	<b>Brought Forward</b>	R	
	<b><u>Samples, Shop Drawings and Manufacturer's Instructions (B5)</u></b>		
62	Samples of materials (B5.1)		
	Fixed: _____ Value related: _____ Time related: _____	Item	
63	Workmanship samples (B5.2)		
	Fixed: _____ Value related: _____ Time related: _____	Item	
64	Shop drawings (B5.3)		
	Fixed: _____ Value related: _____ Time related: _____	Item	
65	Compliance with Manufacturer's Instructions (B5.4)		
	Fixed: _____ Value related: _____ Time related: _____	Item	
	<b><u>Temporary works and plant (B6)</u></b>		
66	Deposits and fees (B6.1)		
	Fixed: _____ Value related: _____ Time related: _____	Item	
67	Enclosure of the works (B6.2)		
	Fixed: _____ Value related: _____ Time related: _____	Item	
68	Advertising (B6.3)		
	Fixed: _____ Value related: _____ Time related: _____	Item	
69	Plant, equipment, sheds and offices (B6.4)		
	Fixed: _____ Value related: _____ Time related: _____	Item	
70	Main notice board (B6.5)		
	Fixed: _____ Value related: _____ Time related: _____	Item	
	<b>Carried Forward</b>	R	
	Section No. 1 PRELIMINARIES AND GENERALS Bill No. 1 PRELIMINARIES <b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>		

		<b>Brought Forward</b>	R	
71	Subcontractors' notice board (B6.6)			
	Not applicable			
			Item	
	<b><u>Temporary services (B7)</u></b>			
72	Location (B7.1)			
	Fixed: _____ Value related: _____ Time related: _____		Item	
73	Water (B7.2) Option [A] shall apply			
	Fixed: _____ Value related: _____ Time related: _____		Item	
74	Electricity (B7.3) Option [A] shall apply			
	Fixed: _____ Value related: _____ Time related: _____		Item	
75	Telecommunication facilities (B7.4)			
	Fixed: _____ Value related: _____ Time related: _____		Item	
76	Ablution facilities (B7.5) Option [A] shall apply			
	Fixed: _____ Value related: _____ Time related: _____		Item	
	<b><u>Prime cost amounts (B8)</u></b>			
77	Responsibility for prime cost amounts (B8.1)			
	Fixed: _____ Value related: _____ Time related: _____		Item	
	<b><u>Attendance on N/S Subcontractors (B9)</u></b>			
78	General attendance (B9.1)			
	Fixed: _____ Value related: _____ Time related: _____		Item	
79	Special attendance (B9.2)			
	Fixed: _____ Value related: _____ Time related: _____		Item	
		<b>Carried Forward</b>	R	
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	Brought Forward	R	
90	Works cleaning and clearing (B11.7) Fixed: _____ Value related: _____ Time related: _____	Item	
91	Vermin (B11.8) Fixed: _____ Value related: _____ Time related: _____	Item	
92	Overhand work (B11.9) Fixed: _____ Value related: _____ Time related: _____	Item	
93	Instruction manuals and guarantees (B11.10) Fixed: _____ Value related: _____ Time related: _____	Item	
94	As built information (B11.11) Fixed: _____ Value related: _____ Time related: _____	Item	
95	Tenant Installations (B11.12) Fixed: _____ Value related: _____ Time related: _____	Item	
	<b><u>Schedule of variables (B12)</u></b>		
96	Pre-tender information (B12.1) Fixed: _____ Value related: _____ Time related: _____	Item	
	12.1.1 Provisional bills of quantities (B2.2) The quantities are provisional: No		
	12.1.2 Availability of construction documentation (B2.3) Construction documentation is not complete No		
	12.1.3 Interest of agents (B2.4)		
	12.1.4 Defined works area (B3.1)		
	12.1.5 Geotechnical investigation (B3.2) N/A		
	12.1.6 Existing premises occupied (B3.4)		
	Carried Forward	R	
	Section No. 1 PRELIMINARIES AND GENERALS Bill No. 1 PRELIMINARIES <b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>		

Brought Forward			R
12.1.7	Previous work - dimensional accuracy (B3.4)		
12.1.8	Previous work - defects (B3.5)		
12.1.9	Services - known (B3.7)		
12.1.10	Protection of trees (B3.9) All trees should be protected and only on instruction of the Principal Agent may any trees be removed		
12.1.11	Inspection of adjoining properties (B3.11)		
12.1.12	Enclosure of the works (B6.2)		
12.1.13	Offices (B6.4.3) An office for the clerck of works should be provided		
12.1.14	Main notice board (B6.5) YES		
12.1.15	Subcontractors notice board (B6.6) A notice board is required No		
12.1.16	Water (B7.2) Alternative Selected: A		
12.1.17	Electricity (B7.3) Alternative selected: A		
12.1.18	Telecommunications (B7.4)		
12.1.19	Ablution facilities (B7.5) Alternative selected: A		
12.1.20	Protection of existing/sectionally occupied works (B11.2)		
12.1.21	Special attendance (B9.2) Subcontractor (1) details: N/A		
12.1.22	Protection of the works (B11.1) N/A		
12.1.23	Disturbance (B11.5) N/A		
12.1.24	Environmental Disturbance (B11.6) N/A		
Carried Forward			R
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	<b>Brought Forward</b>	<b>R</b>	
	<b><u>Post tender information (B12.2)</u></b>		
	12.2.1 Payment of preliminaries      Alternative selected: B		
	12.2.2 Adjustment of preliminaries      Alternative selected: A		
	12.2.3 Additional agreed preliminaries items      N/A		
	<b><u>SECTION C: SPECIFIC PRELIMINARIES</u></b>		
	Any special items to meet the particular circumstances of a specific project are embodied in this section. Where required for an aspect of the works to be executed according to a design by a consulting engineer, a recital of the headings to the individual clauses of the JBCC Engineering General Conditions are included		
97	Site instructions issued on site are to be recorded in triplicate in a site instruction book which is to be maintained on site by the contractor		
	Fixed: _____ Value related: _____ Time related: _____	Item	
98	Black economic empowerment and training		
	Fixed: _____ Value related: _____ Time related: _____	Item	
99	Proprietary branded products		
	Fixed: _____ Value related: _____ Time related: _____	Item	
100	Testing of flat roof waterproofing for water tightness Flat roof waterproof areas shall be prepared with small sand dykes around them of a size and enclosing an area approved by the principal agent, flooded with water and kept "ponded" for at least 36 hours as a test to ensure the water tightness of the waterproofing and before any further construction work is carried out above the waterproofing		
	Fixed: _____ Value related: _____ Time related: _____	Item	
	The contractor shall take delivery of, handle, store, use, apply and/or fix all proprietary branded products in strict accordance with the manufacturers' instructions after consultation with the manufacturer's authorised representative		
	<b>Carried Forward</b>	<b>R</b>	
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		<b>Brought Forward</b>	R	
	Where guarantees are called for, the contractor shall obtain a written guarantee, addressed to the employer, from the firm supplying the materials and/or doing the work and shall deliver same to the principal agent on the certified completion of the contract. The guarantee shall state that workmanship, materials and installation are guaranteed for a specified period from the date of certified completion of the contract, and that any defects that may arise during the specified period shall be made good at the expense of the firm supplying the materials and/or doing the work, upon written notice from the principal agent to do so. This guarantee will not be enforced if the work is damaged by defects in the construction of the building in which case the responsibility for replacement shall rest entirely with the contractor. The principal agent shall be the sole judge of the cause responsible for defects in the work and his decision shall be final and binding in terms of clause 40.2 of the agreement			
105	Overtime			
	Fixed: _____ Value related: _____ Time related: _____		Item	
	Should overtime be required to be worked for any reason whatsoever, the costs of such overtime are to be borne by the contractor unless the principal agent has specifically authorised, in writing, prior to execution thereof, that costs for such overtime are to be borne by the employer			
106	Co-operation of contractor for cost management			
	Fixed: _____ Value related: _____ Time related: _____		Item	
	It is specifically agreed that the contractor accepts the obligation of assisting the professional consultants in implementing proper cost management. The contractor will be advised by the principal agent of all cost management procedures which will be implemented to ensure that the final building cost does not exceed the budget. The quantity surveyor undertakes to make available to the contractor all budgetary allowances and cost assessments/reports to enable the proper procedures to be implemented and the contractor will attend all cost plan review and cost management meetings. The contractor undertakes to extend these procedures in regard to all subcontractors			
107	Occupational Health and Safety Specification			
	Fixed: _____ Value related: _____ Time related: _____		Item	
		<b>Carried Forward</b>	R	
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<p style="text-align: right;"><b>Brought Forward</b></p> <p>Any Principal Contractor entering into a contract with The Developer must achieve an acceptable level of Occupational Health and Safety performance. Refer to "Project Specification" and "Safety, Health and Environmental Evaluation Questionnaire" The contractor to comply with all provisions of the above and to be enforced on all selected and or other sub-contractors, as no claim afterwards will be entertained</p> <p><b><u>SUMMARY OF CATEGORIES</u></b></p> <p>Category : Fixed .....</p> <p>Category : Value .....</p> <p>Category : Time .....</p> <p><b><u>BUILDING AGREEMENT AND PRELIMINARIES</u></b></p> <p>The JBCC Series 2000 Edition 4.1 Code 2101 March 2005 2005 edition prepared by the Joint Building Contracts Committee, shall be the agreement, amended as hereinafter described</p> <p>The Preliminaries for use with the JBCC Series 2000 Principal Building Agreement (May 2005 edition) prepared by the Joint Building Contracts Committee, shall be deemed to be incorporated in these bills of quantities</p> <p>Contractors are referred to the above-mentioned documents for the full intent and meaning of each clause thereof</p> <p>These clauses are hereinafter referred to by clause number and heading only. Where standard clauses or alternatives are not entirely applicable to this contract such modifications, corrections or supplements as will apply are given under each relevant clause heading and such modifications, corrections or supplements shall take precedence notwithstanding anything contrary contained in the above-mentioned documents</p> <p>Where any item is not relevant to this specific contract such item is marked N/A, signifying "not applicable"</p>	<p style="text-align: center;"><b>R</b></p>	
<p style="text-align: right;"><b>Carried Forward</b></p> <p>Section No. 1 PRELIMINARIES AND GENERALS Bill No. 1 PRELIMINARIES <b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b></p>	<p style="text-align: center;"><b>R</b></p>	

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		<b>Brought Forward</b>	R	
	<p>Notwithstanding anything to the contrary contained in any of the contract documents including the Principal Building Agreement and the Preliminaries, the provision of the "Preliminaries" as hereinafter set forth shall prevail and shall take precedence</p> <p><b><u>PREAMBLES FOR TRADES</u></b></p> <p>The Model Preambles for Trades (1999 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claim arising from brevity of description of items fully described in the said Model Preambles for Trades will be entertained</p> <p>Supplementary preambles to the Model Preambles covering clauses of a general nature, clauses pertaining to specific materials and amendments to clauses in the Model Preambles are incorporated in these bills of quantities to satisfy the requirements of this project</p> <p>The contractor's prices for all items throughout these bills of quantities must take account of and include for all of the obligations, requirements and specifications given in the Model Preambles and in any supplementary preambles</p> <p><b><u>GENERAL</u></b></p> <p>If Alternative A as set out in clause B10.3 hereinafter is to be used for the adjustment of the preliminaries each item priced is to be allocated to one or more of the three categories "F", "T" or "V" as the case may be below such item, where "F" denotes a fixed amount (amount not to be varied), "T" denotes an amount variable in proportion to time and "V" denotes an amount variable in proportion to value</p> <p><b><u>SECTION A: PRINCIPAL BUILDING AGREEMENT</u></b></p>			
108	<b>Definitions (A1)</b>			
	<p>Definitions and interpretation (clause 1)</p> <p>Fixed: _____ Value related: _____ Time related: _____</p>			Item
109	<b>Objective and Preparation (A2 to A14)</b>			
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	<b>Brought Forward</b>	<b>R</b>	
	Offer acceptance and performance (clause 2)		
	Fixed: _____ Value related: _____ Time related: _____	Item	
110	Documents (clause3)		
	Fixed: _____ Value related: _____ Time related: _____	Item	
111	Design responsibility (clause 4)		
	Fixed: _____ Value related: _____ Time related: _____	Item	
112	Employer's agents (clause 5)		
	Fixed: _____ Value related: _____ Time related: _____	Item	
	<p>The principal agent shall:- monitor and control progress and scheduling- monitor all contract conditions, and- coordinate the efforts of the employer's agents, the contractor and subcontractorsThe powers conferred on the principal agent in terms of this clause and/or the exercising of these powers shall not be construed as removing or diminishing any of the obligations of the Contractor in terms of the Principal Building Agreement, whether financial, contractual or otherwise, nor shall the exercising of these powers create any privity of contract as between the Employer or his agents on the one part and the Contractor or subcontractors or suppliers on the other part</p> <p>The principal agent reserves the right to attend and participate in all contractor/subcontractor's meetings, to invite other employer's agents to attend such meetings at his discretion and to converse and chair any such meetings if the contractor is derelict in his duty in arranging such meetings to the degree of frequency and comprehensiveness dictated in the opinion of the project manager by the circumstances and exigencies of the construction process</p> <p>The Model Preambles for Trades (1999 edition) as published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these bills of quantities and no claim arising from brevity of description of items fully described in the said Model Preambles for Trades will be entertained</p>		
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	<b><u>Execution (A15-A23)</u></b>		
120	<b>A15.0 PREPARATION FOR AND EXECUTION OF THE WORKS</b>  Clause 15.0  Clause 15.1.1 is amended by replacing it with:  No clause  Clause 15.1.2 is amended by replacing it with:  The <b>security</b> selected in terms of 14.0  Clause 15.1 is amended by the addition of the following clause:  15.1.4 An acceptable health and safety plan, required in terms of the Occupational Health and Safety Act, 1993 (Act 85 of 1993), within twenty-one (21) <b>calendar days of commencement date</b>  Clause 15.2.1 is amended by replacing it with the following clause:  Preparation for and execution of the works (clause 15)  Fixed:_____ Value related:_____ Time related:_____		
121	Access to the works (clause 16)  Fixed:_____ Value related:_____ Time related:_____	Item	
122	Contract instructions (clause 17)  Fixed:_____ Value related:_____ Time related:_____	Item	
123	Setting out of the works (clause 18)  Fixed:_____ Value related:_____ Time related:_____	Item	
	The contractor shall notify the principal agent if any encroachments of adjoining foundations, buildings, structures, pavements, boundaries, etc exist in order that the necessary arrangements may be made for the rectification of any such encroachments		
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124	<p>Assignment (clause 19)</p> <p>Fixed: _____ Value related: _____ Time related: _____</p> <p>The contractor shall not cede his rights or delegate his obligations in terms of this agreement unless specifically called for by the employer</p>	Item	
125	<p>Nominated subcontractors (clause 20)</p> <p>Fixed: _____ Value related: _____ Time related: _____</p>	Item	
126	<p>Selected subcontractors (clause 21)</p> <p>Fixed: _____ Value related: _____ Time related: _____</p> <p>Written proof is required from subcontract tenderers at tendering that they can meet the JBCC Selected Subcontract Agreement or other tender agreements and provide security in terms of the agreement. If the above is not provided the tender may not be accepted All amounts allowed under Provisional Amounts are intended to be awarded to Selected Subcontractors</p>	Item	
127	<p>Employer's Direct Contractors (clause 22)</p> <p>Fixed: _____ Value related: _____ Time related: _____</p>	Item	
128	<p>Contractor's Domestic Sub-Contractors (Clause 23)</p> <p>Fixed: _____ Value related: _____ Time related: _____</p> <p><b><u>Completion (A24-A30)</u></b></p>	Item	
129	<p>Practical completion (clause 24)</p> <p>Fixed: _____ Value related: _____ Time related: _____</p>	Item	
130	<p>Works completion (clause 25)</p> <p>Fixed: _____ Value related: _____ Time related: _____</p>	Item	
	Carried Forward	R	
	<p>Section No. 1 PRELIMINARIES AND GENERALS Bill No. 1 PRELIMINARIES <b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b></p>		

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	<b>Brought Forward</b>	R	
42.1.5 Civil and Structural Engineers: Nyeleti Consulting (Pty) Ltd			
42.1.6 Quantity Surveyor: Nyeleti Consulting (Pty) Ltd			
<b><u>42.2 CONTRACT DETAILS</u></b>			
42.2.1 Works Description: Construction of sanitation facilities			
42.2.2 Site Description: David Mutshinyalo Secondary School			
42.2.3 Work or installations by direct contractors: Prefabricated Steel Tank			
42.2.4 This agreement is for a government contract where there are specific options that are applicable to a State organ only	Yes		
42.2.5 Date on which possession of the site is intended to be given:			
UNKNOWN			
42.2.6 Period for the commencement of the works after the contractor takes posse			
42.2.7 For the works as a whole. Intended date of practical completion and the penalty per calendar day 3 months after contractual commencement date Date Penalty Amount The penalty per calendar day shall be 0.05% of the tenderd amount ( inclusive of value added tax) <b>Carried</b>			
42.2.8 For the works in sections: Intended date of practical completion and the penalty per calendar day Section 1.N/A..... DateR.N/A..... Penalty Amount			
	<b>Carried Forward</b>	R	
Section No. 1 PRELIMNARIES AND GENERALS Bill No. 1 PRELIMINARIES <b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>			

<p>42.2.9 The law applicable to this agreement shall be that of South Africa (country)</p> <p><b><u>42.3 INSURANCES</u></b></p> <p>42.3.1 Contract works insurance to be effected by:Contractor: For the Sum of R Contract Amount 20.00 % With a deductible of - to be determined by the contractor</p> <p>42.3.2 Supplementary insurance is required No</p> <p>42.3.3 Public liability insurance to be effected by:Contractor: For the Sum of R 2 500 000-00With a deductible of - to be determined by the contractor</p> <p><b><u>42.4 DOCUMENTS</u></b></p> <p>42.4.1 Waivers of contractors lien or right of continuing possession is required Yes</p> <p>42.4.2 Number of construction document copies to be supplied to the contractor free of charge: 3 Number of</p> <p>42.4.3 Bills of Quantities/Lump sum document schedule of rates drawn up in accordance with: â€œStandard System of Measuring Buildersâ€™ Workâ€•</p> <p>42.4.4 On acceptance of the tender the bills of quantities/lump sum document is to be submitted within working days The priced bills of quantities must be handed in with the tender</p> <p>42.4.5 JBCC Engineering General Conditions are to be included in the contract documents: No</p> <p>42.4.6 The contract value is to be adjusted using escalation adjustment indices Yes Where JBCC CPAP is to be used Base Month July 2010</p> <p>42.4.7 Details of changes made to the provision of JBCC standard documentation:</p> <p><b><u>SECTION B: PRELIMINARIES</u></b></p>	<p style="text-align: center;"><b>Brought Forward</b></p> <p style="text-align: center;">R</p>	
<p style="text-align: right;"><b>Carried Forward</b></p> <p>Section No. 1 PRELIMINARIES AND GENERALS Bill No. 1 PRELIMINARIES <b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b></p>	<p style="text-align: center;">R</p>	



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		Brought Forward	R	
	<b><u>The site (B3)</u></b>			
154	Geotechnical investigation (B3.2)			
	Fixed: _____ Value related: _____ Time related: _____		Item	
155	Inspection of the site (B3.3)			
	Fixed: _____ Value related: _____ Time related: _____		Item	
156	Existing premises occupied (B3.4)			
	Fixed: _____ Value related: _____ Time related: _____		Item	
157	Previous work - dimensional accuracy (B3.5)			
	Fixed: _____ Value related: _____ Time related: _____		Item	
158	Previous work - defects (B3.6)			
	Fixed: _____ Value related: _____ Time related: _____		Item	
159	Services - known (B3.7)			
	Fixed: _____ Value related: _____ Time related: _____		Item	
160	Services - unknown (B3.8)			
	Fixed: _____ Value related: _____ Time related: _____		Item	
161	Protection of trees etc (B3.9)			
	Fixed: _____ Value related: _____ Time related: _____		Item	
162	Articles of value (B3.10)			
	Fixed: _____ Value related: _____ Time related: _____		Item	
	<b><u>Management of contract (B4)</u></b>			
163	Inspection of adjoining properties etc (B3.11)			
	Fixed: _____ Value related: _____ Time related: _____		Item	
		Carried Forward	R	
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		<b>Brought Forward</b>	R	
	<b><u>Temporary works and plant (B6)</u></b>			
173	Deposits and fees (B6.1)			
	Fixed: _____ Value related: _____ Time related: _____		Item	
174	Enclosure of the works (B6.2)			
	Fixed: _____ Value related: _____ Time related: _____		Item	
175	Advertising (B6.3)			
	Fixed: _____ Value related: _____ Time related: _____		Item	
176	Plant, equipment, sheds and offices (B6.4)			
	Fixed: _____ Value related: _____ Time related: _____		Item	
177	Main notice board (B6.5)			
	Fixed: _____ Value related: _____ Time related: _____		Item	
178	Subcontractors' notice board (B6.6)			
	Not applicable			
			Item	
	<b><u>Temporary services (B7)</u></b>			
179	Location (B7.1)			
	Fixed: _____ Value related: _____ Time related: _____		Item	
180	Water (B7.2) Option [A] shall apply			
	Fixed: _____ Value related: _____ Time related: _____		Item	
181	Electricity (B7.3) Option [A] shall apply			
	Fixed: _____ Value related: _____ Time related: _____		Item	
		<b>Carried Forward</b>	R	
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		<b>Brought Forward</b>	R	
182	Telecommunication facilities (B7.4)			
	Fixed: _____ Value related: _____ Time related: _____		Item	
183	Ablution facilities (B7.5) Option [A] shall apply			
	Fixed: _____ Value related: _____ Time related: _____		Item	
	<b><u>Prime cost amounts (B8)</u></b>			
184	Responsibility for prime cost amounts (B8.1)			
	Fixed: _____ Value related: _____ Time related: _____		Item	
	<b><u>Attendance on N/S Subcontractors (B9)</u></b>			
185	General attendance (B9.1)			
	Fixed: _____ Value related: _____ Time related: _____		Item	
186	Special attendance (B9.2)			
	Fixed: _____ Value related: _____ Time related: _____		Item	
187	Commissioning - Fuel, water and power (B9.3)			
	Fixed: _____ Value related: _____ Time related: _____		Item	
	<b><u>Financial aspects (B10)</u></b>			
188	Statutory taxes, duties and levies (B10.1)			
	Fixed: _____ Value related: _____ Time related: _____		Item	
189	Payment of preliminaries (B10.2) Option [B] shall apply			
	Fixed: _____ Value related: _____ Time related: _____		Item	
190	Adjustment of preliminaries (B10.3) Option [A] shall apply			
	Fixed: _____ Value related: _____ Time related: _____		Item	
		<b>Carried Forward</b>	R	
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CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

		<b>Brought Forward</b>	R	
201	As built information (B11.11)			
	Fixed: _____ Value related: _____ Time related: _____		Item	
202	Tenant Installations (B11.12)			
	Fixed: _____ Value related: _____ Time related: _____		Item	
	<b><u>Schedule of variables (B12)</u></b>			
203	Pre-tender information (B12.1)			
	Fixed: _____ Value related: _____ Time related: _____		Item	
	12.1.1 Provisional bills of quantities (B2.2) The quantities are provisional: No			
	12.1.2 Availability of construction documentation (B2.3) Construction documentation is not complete	No		
	12.1.3 Interest of agents (B2.4)			
	12.1.4 Defined works area (B3.1)			
	12.1.5 Geotechnical investigation (B3.2) N/A			
	12.1.6 Existing premises occupied (B3.4)			
	12.1.7 Previous work - dimensional accuracy (B3.4)			
	12.1.8 Previous work - defects (B3.5)			
	12.1.9 Services - known (B3.7)			
	12.1.10 Protection of trees (B3.9) All trees should be protected and only on instruction of the Principal Agent may any trees be removed			
	12.1.11 Inspection of adjoining properties (B3.11)			
	12.1.12 Enclosure of the works (B6.2)			
		<b>Carried Forward</b>	R	
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**CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL**

	<b>Brought Forward</b>	<b>R</b>	
204	Site instructions issued on site are to be recorded in triplicate in a site instruction book which is to be maintained on site by the contractor  Fixed: _____ Value related: _____ Time related: _____	Item	
205	Black economic empowerment and training  Fixed: _____ Value related: _____ Time related: _____	Item	
206	Proprietary branded products  Fixed: _____ Value related: _____ Time related: _____	Item	
207	Testing of flat roof waterproofing for water tightness Flat roof waterproof areas shall be prepared with small sand dykes around them of a size and enclosing an area approved by the principal agent, flooded with water and kept "ponded" for at least 36 hours as a test to ensure the water tightness of the waterproofing and before any further construction work is carried out above the waterproofing  Fixed: _____ Value related: _____ Time related: _____  The contractor shall take delivery of, handle, store, use, apply and/or fix all proprietary branded products in strict accordance with the manufacturers' instructions after consultation with the manufacturer's authorised representative	Item	
208	Contract instructions  Fixed: _____ Value related: _____ Time related: _____  Contract instructions issued on site are to be recorded in triplicate in a contract instruction book which is to be supplied and maintained on site by the contractor	Item	
209	Labour record  Fixed: _____ Value related: _____ Time related: _____	Item	
	<b>Carried Forward</b>	<b>R</b>	
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**CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL**

		<b>Brought Forward</b>	R	
	At the end of each week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number and descriptions of tradesmen and labourers employed by him and all subcontractors on the works each day of that week			
210	Plant record			
	Fixed: _____ Value related: _____ Time related: _____		Item	
	At the end of each week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number, type and capacity of all plant, excluding hand tools used on the works each day of that week			
211	Guarantees			
	Fixed: _____ Value related: _____ Time related: _____		Item	
	Where guarantees are called for, the contractor shall obtain a written guarantee, addressed to the employer, from the firm supplying the materials and/or doing the work and shall deliver same to the principal agent on the certified completion of the contract. The guarantee shall state that workmanship, materials and installation are guaranteed for a specified period from the date of certified completion of the contract, and that any defects that may arise during the specified period shall be made good at the expense of the firm supplying the materials and/or doing the work, upon written notice from the principal agent to do so. This guarantee will not be enforced if the work is damaged by defects in the construction of the building in which case the responsibility for replacement shall rest entirely with the contractor. The principal agent shall be the sole judge of the cause responsible for defects in the work and his decision shall be final and binding in terms of clause 40.2 of the agreement			
212	Overtime			
	Fixed: _____ Value related: _____ Time related: _____		Item	
	Should overtime be required to be worked for any reason whatsoever, the costs of such overtime are to be borne by the contractor unless the principal agent has specifically authorised, in writing, prior to execution thereof, that costs for such overtime are to be borne by the employer			
		<b>Carried Forward</b>	R	
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CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Brought Forward			R
<u>Breaking down and removing brickwork etc</u>			
6	Half brick walls in beamfilling	m2	2
7	One brick walls in beamfilling	m2	2
8	One brick walls in pit	m2	5
9	Half brick wall in corbling	m	43
10	100mm High step urinal size 1000mm x 500mm Wide.	No	2
<u>Taking out and removing doors, windows, etc including threshold, sills, etc (building up openings elsewhere)</u>			
11	Single leaf timber door size 813 x 2032 mm high including lockset	No	12
<u>Taking down and removing roofs, gutters</u>			
12	Fibre-cement fascia boards size overall 250 x 15 mm thick	No	15
13	Single pitched roof size 5020mm Long x 5090mm Wide overall, of timber trusses and purlins, corrugated sheet steel.	No	2
<u>Hacking up/off and removing plaster finish, etc</u>			
14	Internal plaster in pits	m2	77
<u>PREPARATORY WORK TO EXISTING SURFACES</u>			
15	Cleaning and scrubbing down existing face brick with mild detergent till clean	m2	25
<u>EXCAVATION TO REDUCE LEVELS</u>			
<u>Excavate in pickable material not exceeding 2m deep reduced ground level</u>			
16	Reduced levels around building	m3	11
Carried Forward			R
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CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Brought Forward			R
<b><u>FOUNDATIONS</u></b>			
<b><u>Brickwork of NFX bricks (14 MPa nominal compressive strength) in class 1 mortar</u></b>			
32	One brick walls in pit	m2	5
33	Half brick corbelling in pit	m	43
<b><u>SUPERSTRUCTURE</u></b>			
<b><u>Brickwork of NFP bricks in class II mortar</u></b>			
34	Half brick walls in beamfilling.	m2	2
35	One brick walls in beamfilling	m2	1
<b><u>FACE BRICKWORK</u></b>			
<b><u>Facebricks (Prime cost of R 5 500.00 per thousand excluding VAT delivered to the site) pointed with square recessed horizontal and vertical joints</u></b>			
36	One brick walls in beamfilling	m2	1
37	Extra over brickwork for face brickwork pointed on all exposed surfaces	m2	1
<b><u>Ventilation Bricks</u></b>			
38	Break down face brick wall, create opening and install set of two 22 x 155mm high terra cotta clay vermin proof air bricks and make good face bricks around new air bricks.	No	12
<b><u>PROFILED METAL SHEETING AND ACCESSORIES</u></b>			
Carried Forward			R
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CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
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Brought Forward			R
47	50 x 76mm Purlins	m	50
<b><u>Sundries</u></b>			
48	Two coats creosote on sawn timbers	m2	31
49	Hurricane Clips	No	98
<b><u>EAVES, VERGES, ETC</u></b>			
<b><u>Pressed fibre-cement</u></b>			
50	15 x 230mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	41
<b><u>DOORS ETC</u></b>			
51	44mm Framed batten door 813 x 2032mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding and including weatherboard	No	4
52	44mm Framed batten door 813 x 2032mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side (door raised by 120mm from bottom)	No	8
<b><u>CATCHES, CABIN HOOKS, ETC</u></b>			
<b><u>"Approved"</u></b>			
53	150mm chrome cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged.	No	4
<b><u>LOCKS</u></b>			
Carried Forward			R
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CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Brought Forward			R
<b><u>Sundries</u></b>			
61	Brushed stainless steel body, rust resistant, she bin, approximately 330 x 280 x 180mm etc.	No	4
62	Steel cage supplied with pad lock bolted to walls to accommodate and secure 15 Litre SHE-Bin.	No	4
<b><u>WELDED SCREENS, GATES ETC</u></b>			
<b><u>Steel gates and frames</u></b>			
63	Purpose made square hallow section mild security gate, size 813 x 2032mm high	No	4
<b><u>PLASTERING</u></b>			
<b><u>INTERNAL PLASTER</u></b>			
<u>Cement plaster on brickwork</u>			
64	On walls	m2	92
65	On pits walls	m2	77
66	On narrow width	m2	2
<b><u>EXTERNAL PLASTER</u></b>			
<u>Cement plaster on brickwork</u>			
67	On walls	m2	54
68	On narrow width	m2	2
<b><u>FLOOR AND WALL SEALERS</u></b>			
Carried Forward			R
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Brought Forward			R
<b><u>Minimum two coats approved epoxy coat</u></b>			
69	On screed	m2	25
70	On floors and walls in pit	m2	89
<b><u>PLUMBING</u></b>			
<b><u>SANITARY FITTINGS</u></b>			
<u>Inspect and replace damaged or missing components, accessories, etc according to supplier's instruction and audit reports.</u>			
71	Remove and replace standard ceramic bowl and make good floor finishes.	No	8
72	Supply and install standard toilet seat, lid and sticker.	No	8
73	Supply and install wall sign	No	8
74	Supply and fit large Inspection Cover (No hinge)	No	4
75	Remove and replace single flat retrofit drying plate including drill round holes for inlets.	No	8
76	Remove and replace current round inlets	No	16
77	Supply and install oval vent pipe adaptor to round (Oval to round)	No	4
78	Remove and replace oval and round vent pipe with 2800mm Vent Pipe	No	8
79	Supply and fit vent pipe brackets	No	8
80	Remove and replace 230mm Galvanised windmaster	No	8
81	Securing screws complete	No	48
Carried Forward			R
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CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
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	Brought Forward			R
	<u>uPVC pipes</u>			
91	50mm Pipe	m	10	
92	110mm Pipes to soakaway	m	5	
	<u>Extra over uPVC pipes for fittings</u>			
93	50mm Bend	No	8	
94	50mm Junction	No	4	
95	50mm Access bend	No	4	
96	110mm Bend	No	4	
97	110mm Junction	No	2	
98	110mm Reducing Junction	No	2	
	<b><u>WATER SUPPLIES</u></b>			
	<u>Class 12 HDPE pressure pipes with solvent welded joints</u>			
99	32mm Pipes laid in and including trenches not exceeding 1m deep	m	15	
	<u>Extra over class 12 HDPE pressure pipes for fittings with solvent welded joints</u>			
100	32mm Bend	No	2	
101	32mm Reducer	No	2	
102	32mm Tee	No	2	
103	50mm Bend	No	2	
	<u>Class 1 copper pipes with capillary couplings:</u>			
104	15mm Pipe fixed to walls, in chases, etc	m	10	
105	Ditto, but 22mm diameter	m	8	
	<b>Carried Forward</b>			R
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Brought Forward			R
	<u>Extra over Class 1 copper pipes for capillary fittings:</u>		
106	15mm Fittings	No	4
107	22mm Fittings	No	3
	<b><u>Brass</u></b>		
108	22mm Fullway gate valve	No	2
	<b><u>GLAZING TO STEEL WITH PUTTY</u></b>		
	<b><u>6.38 mm Obscure safety glass:</u></b>		
109	Panes not exceeding 0,1m2	m2	8
	<b><u>PAINTWORK</u></b>		
	<b><u>NEW WORK</u></b>		
	<b><u>ON FLOATED PLASTER</u></b>		
	<u>Plascon Wall &amp; All Suede Sheen Finish to interior new cement plaster. Surface to be dry, sound and clean and cured for a minimum of 14 days, with a moisture content measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat of Plascon Plaster Primer with an overcoating time of 16 hours and finish with two coats of Plascon Wall &amp; All Suede Sheen Finish with 1 hour drying time between coats, for a maintenance cycle of 5 years in a C1 - inland environment.</u>		
110	On internal walls	m2	94
	<b>Carried Forward</b>		
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			R



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	Brought Forward			R
	<u>Plascon Wall &amp; All Suede Sheen Finish to exterior new cement plaster. Surface to be dry, sound and clean and cured for a minimum of 14 days, with a moisture content measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat of Plascon Plaster Primer with an overcoating time of 16 hours and finish with two coats of Plascon Wall &amp; All Suede Sheen Finish with 1 hour drying time between coats, for a maintenance cycle of 5 years in a C1 - inland environment.</u>			
111	On external walls	m2	56	
	<b><u>ON FIBRE-CEMENT</u></b>			
	<b><u>One coat alkali resistant primer and two coats superior quality acrylic emulsion paint for interior and exterior use, on:</u></b>			
112	On fascias and barge boards.	m2	10	
	<b><u>ON METAL</u></b>			
	<b><u>Spot priming defects in prime surface with zinc chromate primer, one universal undercoat and two golden brown gloss enamel on steel</u></b>			
113	On gates (measured over the full flat area both sides)	m2	13	
114	On gutters and down pipes	m	24	
	<b><u>ON WOOD</u></b>			
	<u>Three coats matt varnish</u>			
115	On doors (Internal and External)	m2	42	
	<b><u>PAINT TO PREVIOUSLY PAINTED SURFACES</u></b>			
	<b><u>ON METAL</u></b>			
	Carried Forward			R
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CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
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Brought Forward			R
<b><u>Compaction of surfaces</u></b>			
6	Compaction of ground surface to around buildings including aprons etc including removing and re-compact materials done by previous contractor for a depth of 150mm layers adding suitable material where necessary and compacting to 95% Mod AASHTO density	m2	36
<b><u>Prescribed density tests on filling</u></b>			
7	"Modified AASHTO Density" test	No	5
<b><u>SOIL POISONING</u></b>			
<b><u>Soil insecticide in accordance with SANS 5859:</u></b>			
8	Soil insecticide (protection against termites) applied as specified under aprons, etc including forming and poisoning shallow furrows against foundation walls, etc filling in furrows and ramming	m2	36
<b>Carried Forward to Summary of Section No. 3</b>			R
Section No. 3			
Type SM3+3UR			
Bill No. 1			
Earthworks			
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CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Item No		Quantity	Rate	Amount
	<b><u>SECTION No.3</u></b>			
	<b><u>BILL NO.2</u></b>			
	<b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	For preambles see "Specifications of materials and methods to used - PW 371"			
	<b><u>UNREINFORCED CONCRETE,ETC</u></b>			
	<b><u>25MPa/19mm concrete</u></b>			
1	Aprons cast in panels	m3	5	
2	Thickening down apron on edge 110mm deep x 200mm wide.	m	30	
	<b><u>CONCRETE SUNDRIES</u></b>			
	<b><u>Finishing top surfaces of concrete smooth with a wood float</u></b>			
3	Aprons and pavings to falls.	m2	36	
	<b><u>TEST BLOCKS</u></b>			
4	Allow for preparing a set of three test cubes each size 150 x 150 x 150mm, sending them to an approved testing laboratory for testing and paying all charges in connection therewith.	No	1	
	<b><u>FORMWORK</u></b>			
	<b><u>Rough formwork to sides</u></b>			
5	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	61	
	<b>Carried Forward</b>			
	Section No. 3 Type SM3+3UR Bill No. 2 Concrete, Formwork and Reinforcement <b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>		R	

CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Brought Forward			R
<b><u>MOVEMENT JOINTS ETC</u></b>			
<u>Expansion joints with 10mm softboard between vertical concrete and brick surfaces:</u>			
6	Not exceeding 300mm high to edges of surface beds	m	30
<u>Saw cut joints</u>			
7	Saw cut joints in top of concrete (Provisional)	m	30
<b><u>REINFORCEMENT</u></b>			
<b><u>Fabric reinforcement:</u></b>			
8	Mesh ref type 193 fabric reinforcement fixed horizontal in aprons.	m2	36
<b>Carried Forward to Summary of Section No. 3</b>			R
Section No. 3			
Type SM3+3UR			
Bill No. 2			
Concrete, Formwork and Reinforcement			
<b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>			

CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 3</u></b>			
	<b><u>BUILDER'S WORK</u></b>			
	<b><u>BILL NO. 3</u></b>			
	<b><u>MASONRY</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	For preambles see "Specifications of materials and methods to used - PW 371"			
	<b><u>BRICKWORK</u></b>			
	<b><u>Sizes in descriptions</u></b>			
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
	<b><u>Hollow walls etc</u></b>			
	Descriptions of hollow walls shall be deemed to include leaving fifth perpend of the bottom course of the external skin open as a weep hole.			
	Walls in two skins described as "bagged and sealed" shall be deemed to include having the outer face of the inner skin bagged with 1:6 cement and sand mixture and sealed with two coats "Brixal" bitumen emulsion waterproofing coating.			
	User note: The above preamble generally applies for works in ho and humid coastal areas			
	<b><u>Face Bricks</u></b>			
	Bricks shall be ordered timeously to obtain uniformity in size and colour			
	<b>Carried Forward</b>		R	
	Section No. 3 Type SM3+3UR Bill No. 3 Masonry <b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>			

CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Brought Forward			R
<b><u>Pointing</u></b>			
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
<b><u>SAMPLES</u></b>			
Samples of all masonry building units, except those for walls described as "load bearing", shall consist of a minimum of 6 units. Samples of building units to be used in walls described as "load bearing" shall consist of 30 units from every 30 000 units delivered to site			
<b><u>SUPERSTRUCTURE</u></b>			
<b><u>FACE BRICKWORK</u></b>			
<u>Brick-on-edge header course copings, sills, etc using Corobrick Letaba Satin" or similar approved face bricks available on site pointed with polished recessed joints on all exposed faces (Provisional)</u>			
1	150mm Wide sills set sloping and slightly projecting.	m	2
2	110mm Wide sills set flat	m	6
3	Coping on top of half brick wall	m	8
<b><u>Ventilation bricks</u></b>			
4	Break down face brick wall, create opening and install set of two 22 x 155mm high terra cotta clay vermin proof air bricks and make good face bricks around new air bricks.	No	8
<b>Carried Forward to Summary of Section No. 3</b>			R
Section No. 3			
Type SM3+3UR			
Bill No. 3			
Masonry			
<b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>			



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CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Brought Forward				R
<b><u>Remove existing sisalation and replace with new "Sisalation 405" or similar approved residential grade aluminium foil based insulation:</u></b>				
3	Insulation sheeting laid taut over purlins at approximately 1000mm centres and fixed concurrent with roof covering with minimum 150mm stapled laps, including galvanised steel straining wires at not exceeding 400mm centres and double-sided tape at edges where required	m2	21	
<b><u>RAINWATER DISPOSAL</u></b>				
<b><u>Aluzink seamless metal gutters:</u></b>				
4	100 x 100 x 0.6mm standard rainwater gutters	m	7	
5	Extra over eaves gutter for closed ends	No	2	
6	75 x 100 x 0.6mm Thick galvanised rainwater downpipes	m	5	
7	Extra over rainwater pipe for eaves offset.	No	2	
8	Ditto,for shoe.	No	2	
<b>Carried Forward to Summary of Section No. 3</b>				R
Section No. 3				
Type SM3+3UR				
Bill No. 4				
Roof Coverings				
<b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>				

CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 3</u></b>			
	<b><u>BILL NO. 5</u></b>			
	<b><u>CARPENTRY AND JOINERY</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	For preambles see "Specifications of materials and methods to used - PW 371"			
	<u>Allow for the preparation and submission of the following documents in respect of building.</u>			
1	Erection of roof guarantee certificate after the whole completed roof truss structure including completion of work carried out by previous contractor have been inspected, all defective work have been carried out and make good to the full satisfaction of the principal agent.	Item		
	<b><u>REMEDIAL WORKS</u></b>			
	<b><u>Carefully remove and set aside for re-use sawn softwood grade 5:</u></b>			
2	50 x 76mm Purlins	m	49	
	<b><u>ROOFS, ETC</u></b>			
	<b><u>Sawn softwood grade 5:</u></b>			
3	Supply and install 50 x 76mm Purlins fixed on existing roof timbers (rafters).	m	49	
4	Labour to fix 50 x 76mm Purlins previously set-aside fixed on brickwork between roof timbers (top eaves and verges both sides).	m	21	
	<b><u>Sundries</u></b>			
5	Two coats creosote on sawn timbers	m2	26	
	<b>Carried Forward</b>		R	
	Section No. 3 Type SM3+3UR Bill No. 5 Carpentry and Joinery <b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>			

CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

	Brought Forward			R
6	Hurricane Clips	No	32	
	<b><u>EAVES, VERGES, ETC</u></b>			
	<u>Medium density plain fibre-cement fascias and barge boards:</u>			
7	19 x 235mm Fascias and barge boards, including aluminium H-profile jointing strips	m	24	
	<b><u>DOORS ETC</u></b>			
	<u>Wrought meranti doors hung to steel frames:</u>			
8	44mm Framed batten door 813 x 2032mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding including 150mm undercut	No	3	
9	44mm Framed batten door 813 x 2032mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding and including weatherboard	No	1	
<b>Carried Forward to Summary of Section No. 3</b>				R
Section No. 3				
Type SM3+3UR				
Bill No. 5				
Carpentry and Joinery				
<b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>				

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 3</u></b>			
	<b><u>BILL NO. 6</u></b>			
	<b><u>IRONMONGERY</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	For preambles see "Specifications of materials and methods to used - PW 371"			
	<b><u>CATCHES, CABIN HOOKS, ETC</u></b>			
	<b><u>"Approved"</u></b>			
1	150mm chrome cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged.	No	1	
	<b><u>LOCKS</u></b>			
	<b><u>"Union Assa Abloy" or similar approved:</u></b>			
2	50mm Brass padlock	No	1	
3	Four lever lockset	No	1	
4	"Ref. CZ80941SC" Indicator bolt	No	3	
	<b><u>LETTERS, NAMEPLATES, ETC</u></b>			
	<b><u>"Dorma" or similar approved</u></b>			
5	DSS-130 Engraved "Male" information sign	No	1	
	<b><u>SUNDRIES</u></b>			
6	25mm Diameter wall mounted door stop plugged on walls and floors.	No	5	
	<b>Carried Forward</b>		R	
	Section No. 3 Type SM3+3UR Bill No. 6 Ironmongery <b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>			

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CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Item No			Quantity	Rate	Amount
	<b><u>SECTION NO. 3</u></b>				
	<b><u>BILL NO. 8</u></b>				
	<b><u>PLASTERING</u></b>				
	For preambles see "Specifications of materials and methods to used - PW 371"				
	<b><u>FLOOR AND WALL SEALERS</u></b>				
	<b><u>Minimum two coats approved epoxy coat</u></b>				
1	On screed	m2	18		
	<b>Carried Forward to Summary of Section No. 3</b>				
	Section No. 3				
	Type SM3+3UR				
	Bill No. 8				
	Plastering				
	<b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>				
				R	



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CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

	Brought Forward			R
	<u>"Marley"</u>			
5	40mm Flexi butyl rubber trap with reseal "P" trap	No	2	
	<u>Chromium plated</u>			
6	32 x 40mm Bottle trap	No	5	
	<u>TAPS, VALVES, ETC</u>			
	<u>"Cobra Watertech"</u>			
7	19mm chrome plated push button tap	No	2	
8	15mm Code 232/350 FCP angle regulating valve and flexible connection pipe	No	5	
9	15mm 128 CP Star underwall pattern stopcock.	No	2	
	<u>SANITARY PLUMBING</u>			
	<u>uPVC pipes</u>			
10	50mm Pipe	m	7	
11	110mm Pipes	m	15	
12	50mm Pipes laid in and including trenches not exceeding 1m deep	m	6	
13	Ditto, but 110mm diameter	m	2	
	<u>Extra over uPVC pipes for fittings</u>			
14	50mm Bend	No	5	
15	50mm Junction	No	5	
16	50mm Junction with cleaning eye and lid	No	5	
17	110mm Straight pan connector	No	3	
	Carried Forward			R
	Section No. 3 Type SM3+3UR Bill No. 9 Plumbing and Drainage (Provisional) <b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>			

CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

	Brought Forward			R
18	50mm "GI Two-way" vent valve	No	3	
19	110mm Bend	No	3	
20	110mm Junction	No	3	
21	110mm Reducing Junction	No	2	
22	110mm uPVC rodding eye cover in end of pipe	No	1	
23	110mm Access bend	No	3	
24	110mm Double Junction	No	1	
25	110mm "GI Two-way" vent valve	No	3	
	<b><u>Sundries</u></b>			
26	Precast concrete inspection eye marker slab set in ground	No	1	
	<b><u>Sundries</u></b>			
27	Testing waste pipe system		Item	
	<b><u>WATER SUPPLIES</u></b>			
	<u>Class 1 copper pipes with capillary couplings:</u>			
28	15mm Pipe fixed to walls, in chases, etc	m	40	
29	Ditto, but 22mm diameter	m	20	
	<u>Extra over Class 1 copper pipes for capillary fittings:</u>			
30	15mm Fittings	No	10	
31	22mm Fittings	No	5	
	<b><u>Brass</u></b>			
32	22mm Fullway gate valve	No	5	
	<b>Carried Forward</b>			R
	Section No. 3			
	Type SM3+3UR			
	Bill No. 9			
	Plumbing and Drainage (Provisional)			
	<b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>			

CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Brought Forward		R
<u>Sundries</u>		
33	Testing water pipe system	Item
Carried Forward to Summary of Section No. 3		R
Section No. 3		
Type SM3+3UR		
Bill No. 9		
Plumbing and Drainage (Provisional)		
PREPARED BY: NYELETI CONSULTING (PTY) LTD		

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CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Brought Forward			R
<b><u>Compaction of surfaces</u></b>			
6	Compaction of ground surface to around buildings including aprons etc including removing and re-compact materials done by previous contractor for a depth of 150mm layers adding suitable material where necessary and compacting to 95% Mod AASHTO density	m2	36
<b><u>Prescribed density tests on filling</u></b>			
7	"Modified AASHTO Density" test	No	5
<b><u>SOIL POISONING</u></b>			
<b><u>Soil insecticide in accordance with SANS 5859:</u></b>			
8	Soil insecticide (protection against termites) applied as specified under aprons, etc including forming and poisoning shallow furrows against foundation walls, etc filling in furrows and ramming	m2	36
<b>Carried Forward to Summary of Section No. 4</b>			R
Section No. 4			
Type SFD4			
Bill No. 1			
Earthworks			
<b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>			

CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO.4</u></b>			
	<b><u>BILL NO.2</u></b>			
	<b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	For preambles see "Specifications of materials and methods to used - PW 371"			
	<b><u>UNREINFORCED CONCRETE,ETC</u></b>			
	<b><u>25MPa/19mm concrete</u></b>			
1	Aprons cast in panels	m3	5	
2	Thickening down apron on edge 110mm deep x 200mm wide.	m	30	
	<b><u>CONCRETE SUNDRIES</u></b>			
	<b><u>Finishing top surfaces of concrete smooth with a wood float</u></b>			
3	Aprons and pavings to falls.	m2	36	
	<b><u>TEST BLOCKS</u></b>			
4	Allow for preparing a set of three test cubes each size 150 x 150 x 150mm, sending them to an approved testing laboratory for testing and paying all charges in connection therewith.	No	1	
	<b><u>FORMWORK</u></b>			
	<b><u>Rough formwork to sides</u></b>			
5	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	61	
	<b>Carried Forward</b>			
	Section No. 4 Type SFD4 Bill No. 2 Concrete, Formwork and Reinforcement <b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>		R	

CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Brought Forward			R
<b><u>MOVEMENT JOINTS ETC</u></b>			
<u>Expansion joints with 10mm softboard between vertical concrete and brick surfaces:</u>			
6	Not exceeding 300mm high to edges of surface beds	m	30
<u>Saw cut joints</u>			
7	Saw cut joints in top of concrete (Provisional)	m	30
<b><u>REINFORCEMENT</u></b>			
<b><u>Fabric reinforcement:</u></b>			
8	Mesh ref type 193 fabric reinforcement fixed horizontal in aprons.	m2	36
<b>Carried Forward to Summary of Section No. 4</b>			R
Section No. 4			
Type SFD4			
Bill No. 2			
Concrete, Formwork and Reinforcement			
<b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>			

CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 4</u></b>			
	<b><u>BUILDER'S WORK</u></b>			
	<b><u>BILL NO. 3</u></b>			
	<b><u>MASONRY</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	For preambles see "Specifications of materials and methods to used - PW 371"			
	<b><u>BRICKWORK</u></b>			
	<b><u>Sizes in descriptions</u></b>			
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
	<b><u>Hollow walls etc</u></b>			
	Descriptions of hollow walls shall be deemed to include leaving fifth perpend of the bottom course of the external skin open as a weep hole.			
	Walls in two skins described as "bagged and sealed" shall be deemed to include having the outer face of the inner skin bagged with 1:6 cement and sand mixture and sealed with two coats "Brixal" bitumen emulsion waterproofing coating.			
	User note: The above preamble generally applies for works in ho and humid coastal areas			
	<b><u>Face Bricks</u></b>			
	Bricks shall be ordered timeously to obtain uniformity in size and colour			
	<b>Carried Forward</b>		R	
	Section No. 4 Type SFD4 Bill No. 3 Masonry <b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>			

CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Brought Forward				R
<b><u>Pointing</u></b>				
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc				
<b><u>SAMPLES</u></b>				
Samples of all masonry building units, except those for walls described as "load bearing", shall consist of a minimum of 6 units. Samples of building units to be used in walls described as "load bearing" shall consist of 30 units from every 30 000 units delivered to site				
<b><u>SUPERSTRUCTURE</u></b>				
<b><u>FACE BRICKWORK</u></b>				
<u>Brick-on-edge header course copings, sills, etc using Corobrick Letaba Satin" or similar approved face bricks available on site pointed with polished recessed joints on all exposed faces (Provisional)</u>				
1	Construct 150mm Wide sills set sloping and slightly projecting.	m	2	
2	Construct 110mm Wide sills set flat	m	6	
3	Coping on top of half brick wall	m	9	
<b><u>Ventilation bricks</u></b>				
4	Break down face brick wall, create opening and install set of two 22 x 155mm high terra cotta clay vermin proof air bricks and make good face bricks around new air bricks.	No	8	
<b>Carried Forward to Summary of Section No. 4</b>				R
Section No. 4				
Type SFD4				
Bill No. 3				
Masonry				
<b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>				

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CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Brought Forward				R
<b><u>Remove existing sisalation and replace with new "Sisalation 405" or similar approved residential grade aluminium foil based insulation:</u></b>				
3	Insulation sheeting laid taut over purlins at approximately 1000mm centres and fixed concurrent with roof covering with minimum 150mm stapled laps, including galvanised steel straining wires at not exceeding 400mm centres and double-sided tape at edges where required	m2	24	
<b><u>RAINWATER DISPOSAL</u></b>				
<b><u>Aluzink seamless metal gutters:</u></b>				
4	100 x 100 x 0.6mm standard rainwater gutters	m	7	
5	Extra over eaves gutter for closed ends	No	2	
6	75 x 100 x 0.6mm Thick galvanised rainwater downpipes	m	3	
7	Extra over rainwater pipe for eaves offset.	No	2	
8	Ditto,for shoe.	No	2	
<b>Carried Forward to Summary of Section No. 4</b>				R
Section No. 4				
Type SFD4				
Bill No. 4				
Roof Coverings				
<b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>				



CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 4</u></b>			
	<b><u>BILL NO. 5</u></b>			
	<b><u>CARPENTRY AND JOINERY</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	For preambles see "Specifications of materials and methods to used - PW 371"			
	<u>Allow for the preparation and submission of the following documents in respect of building.</u>			
1	<u>Erection</u> of roof guarantee certificate after the whole completed roof truss structure including completion of work carried out by previous contractor have been inspected, all defective work have been carried out and make good to the full satisfaction of the principal agent.	Item		
	<b><u>REMEDIAL WORKS</u></b>			
	<b><u>Carefully remove and set aside for re-use sawn softwood grade 5:</u></b>			
2	50 x 76mm Purlins	m	50	
	<b><u>ROOFS, ETC</u></b>			
	<b><u>Sawn softwood grade 5:</u></b>			
3	Supply and install 50 x 76mm Purlins fixed on existing roof timbers (rafters).	m	50	
4	Labour to fix 50 x 76mm Purlins previously set-aside fixed on brickwork between roof timbers (top eaves and verges both sides).	m	21	
	<b><u>Sundries</u></b>			
5	Two coats creosote on sawn timbers	m2	26	
	<b>Carried Forward</b>		R	
	Section No. 4 Type SFD4 Bill No. 5 Carpentry and Joinery <b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>			

CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

	Brought Forward			R
6	Hurricane Clips	No	32	
	<b><u>EAVES, VERGES, ETC</u></b>			
	<u>Medium density plain fibre-cement fascias and barge boards:</u>			
7	19 x 235mm Fascias and barge boards, including aluminium H-profile jointing strips	m	24	
	<b><u>DOORS ETC</u></b>			
	<u>Wrought meranti doors hung to steel frames:</u>			
8	44mm Framed batten door 813 x 2032mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding including 150mm undercut	No	4	
9	44mm Framed batten door 813 x 2032mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding and including weatherboard	No	1	
10	44mm Framed batten door 914 x 2032mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding and including weatherboard.	No	1	
<b>Carried Forward to Summary of Section No. 4</b>				R
Section No. 4				
Type SFD4				
Bill No. 5				
Carpentry and Joinery				
<b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>				

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 4</u></b>			
	<b><u>BILL NO. 6</u></b>			
	<b><u>IRONMONGERY</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	For preambles see "Specifications of materials and methods to used - PW 371"			
	<b><u>CATCHES, CABIN HOOKS, ETC</u></b>			
	<b><u>"Approved"</u></b>			
1	150mm chrome cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged.	No	2	
	<b><u>LOCKS</u></b>			
	<b><u>"Union Assa Abloy" or similar approved:</u></b>			
2	50mm Brass padlock	No	2	
3	Four lever lockset	No	2	
4	"Ref. CZ80941SC" Indicator bolt	No	4	
	<b><u>HANDLES</u></b>			
	<b><u>"Union Assa Abloy" or similar approved:</u></b>			
5	ASSA ABLOY Anodised Silver straight pull handle (Code: AL5515-300BBAS) with 300mm fixing centres	Pairs	1.0	
	<b><u>BOLTS, DOOR CLOSER, FLOOR SPRING, ETC.</u></b>			
6	"Dorma" TS73N/EN3-4 parallel arm door closer delayed closing-push side fitting.	No	1	
	<b>Carried Forward</b>		R	
	Section No. 4 Type SFD4 Bill No. 6 Ironmongery <b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>			

Brought Forward			R
<b><u>PUSH PLATES AND KICK PLATES</u></b>			
<b><u>"Union Assa Abloy" or similar approved</u></b>			
<b><u>1.2mm Thick satin finished "Union" stainless steel plates countersunk screwed along edges at not exceeding 200mm centre</u></b>			
7	200 x 900mm Type "SS5089-200W" kicking plate	No	1
<b><u>LETTERS, NAMEPLATES, ETC</u></b>			
<b><u>"Dorma" or similar approved</u></b>			
8	DSS-130 Engraved "Female" information sign	No	1
9	DSS-131 Engraved "Disabled" information sign	No	1
<b><u>SUNDRIES</u></b>			
10	25mm Diameter wall mounted door stop plugged	No	7
<b><u>BATHROOM FITTINGS</u></b>			
<b><u>"Vaal Paragon" or similar approved</u></b>			
11	32mm Type 9 back grab rail 800mm long plugged	No	1
12	32mm Type 8 side grab rail 900mm girth plugged	No	1
<b><u>Kimberley-Clark or Similar:</u></b>			
13	Kimberly-Clark SQ2 code 405607B white lockable toilet roll holder	No	5
<b><u>Sundries</u></b>			
14	Brushed stainless steel body, rust resistant, shoe bin, approximately 330 x 280 x 180mm etc.	No	5
Carried Forward			R
Section No. 4 Type SFD4 Bill No. 6 Ironmongery <b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>			

	Brought Forward			R
15	Steel cage supplied with pad lock bolted to walls to accommodate and secure 15 Litre SHE-Bin.	No	5	
Carried Forward to Summary of Section No. 4				R
Section No. 4				
Type SFD4				
Bill No. 6				
Ironmongery				
PREPARED BY: NYELETI CONSULTING (PTY) LTD				

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Item No			Quantity	Rate	Amount
	<b><u>SECTION NO. 4</u></b>				
	<b><u>BILL NO. 8</u></b>				
	<b><u>PLASTERING</u></b>				
	For preambles see "Specifications of materials and methods to used - PW 371"				
	<b><u>FLOOR AND WALL SEALERS</u></b>				
	<b><u>Minimum two coats approved epoxy coat</u></b>				
1	On screed	m2	13		
	<b>Carried Forward to Summary of Section No. 4</b>				
	Section No. 4				
	Type SFD4				
	Bill No. 8				
	Plastering				
	<b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>				
				R	

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CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

	Brought Forward			R
	<u>"Marley"</u>			
5	40mm Flexi butyl rubber trap with reseal "P" trap	No	4	
	<u>Chromium plated</u>			
6	32 x 40mm Bottle trap	No	9	
	<u>TAPS, VALVES, ETC</u>			
	<u>"Cobra Watertech"</u>			
7	19mm chrome plated push button tap	No	4	
8	15mm Code 232/350 FCP angle regulating valve and flexible connection pipe	No	9	
9	Cobra Watertech 15mm chrome plated hi-waste elbow action pillartap with blue indicator for cold water (Code: 504-21B), manufactured in accordance with SANS 226:2004 Type 2 (BS 5412).	No	1	
	<u>SANITARY PLUMBING</u>			
	<u>uPVC pipes</u>			
10	50mm Pipe	m	18	
11	110mm Pipes	m	22	
12	50mm Pipes laid in and including trenches not exceeding 1m deep	m	5	
13	Ditto, but 110mm diameter	m	3	
	<u>Extra over uPVC pipes for fittings</u>			
14	50mm Bend	No	9	
15	50mm Junction	No	9	
16	50mm Junction with cleaning eye and lid	No	5	
	<b>Carried Forward</b>			R
	Section No. 4 Type SFD4 Bill No. 9 Plumbing and Drainage (Provisional) <b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>			

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CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Brought Forward				R
<b><u>Compaction of surfaces</u></b>				
6	Compaction of ground surface to around buildings including aprons etc including removing and re-compact materials done by previous contractor for a depth of 150mm layers adding suitable material where necessary and compacting to 95% Mod AASHTO density	m2	50	
<b><u>Prescribed density tests on filling</u></b>				
7	"Modified AASHTO Density" test	No	7	
<b><u>SOIL POISONING</u></b>				
<b><u>Soil insecticide in accordance with SANS 5859:</u></b>				
8	Soil insecticide (protection against termites) applied as specified under aprons, etc including forming and poisoning shallow furrows against foundation walls, etc filling in furrows and ramming	m2	31	
<b>Carried Forward to Summary of Section No. 5</b>				R
Section No. 5				
Type M4+8UR				
Bill No. 1				
Earthworks				
<b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>				

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CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

	<b>Brought Forward</b>			<b>R</b>
	<b><u>Rough formwork to sides</u></b>			
5	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	33	
	<b><u>MOVEMENT JOINTS ETC</u></b>			
	<u>Expansion joints with 10mm softboard between vertical concrete and brick surfaces:</u>			
6	Not exceeding 300mm high to edges of surface beds	m	23	
	<u>Saw cut joints</u>			
7	Saw cut joints in top of concrete (Provisional)	m	33	
	<b><u>REINFORCEMENT</u></b>			
	<b><u>Fabric reinforcement:</u></b>			
8	Mesh ref type 193 fabric reinforcement fixed horizontal in aprons.	m2	40	
<b>Carried Forward to Summary of Section No. 5</b>				<b>R</b>
Section No. 5				
Type M4+8UR				
Bill No. 2				
Concrete, Formwork and Reinforcement				
<b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>				

CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 5</u></b>			
	<b><u>BUILDER'S WORK</u></b>			
	<b><u>BILL NO. 3</u></b>			
	<b><u>MASONRY</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	For preambles see "Specifications of materials and methods to used - PW 371"			
	<b><u>BRICKWORK</u></b>			
	<b><u>Sizes in descriptions</u></b>			
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
	<b><u>Hollow walls etc</u></b>			
	Descriptions of hollow walls shall be deemed to include leaving fifth perpend of the bottom course of the external skin open as a weep hole.			
	Walls in two skins described as "bagged and sealed" shall be deemed to include having the outer face of the inner skin bagged with 1:6 cement and sand mixture and sealed with two coats "Brixal" bitumen emulsion waterproofing coating.			
	User note: The above preamble generally applies for works in ho and humid coastal areas			
	<b><u>Face Bricks</u></b>			
	Bricks shall be ordered timeously to obtain uniformity in size and colour			
	<b>Carried Forward</b>		R	
	Section No. 5 Type M4+8UR Bill No. 3 Masonry <b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>			

CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Brought Forward			R
<b><u>Pointing</u></b>			
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
<b><u>SAMPLES</u></b>			
Samples of all masonry building units, except those for walls described as "load bearing", shall consist of a minimum of 6 units. Samples of building units to be used in walls described as "load bearing" shall consist of 30 units from every 30 000 units delivered to site			
<b><u>SUPERSTRUCTURE</u></b>			
<b><u>FACE BRICKWORK</u></b>			
<u>Brick-on-edge header course copings, sills, etc using Corobrick Letaba Satin" or similar approved face bricks available on site pointed with polished recessed joints on all exposed faces (Provisional)</u>			
1	150mm Wide sills set sloping and slightly projecting.	m	6
2	110mm Wide sills set flat	m	6
3	Coping on top of half brick wall	m	11
<b><u>Ventilation bricks</u></b>			
4	Break down face brick wall, create opening and install set of two 22 x 155mm high terra cotta clay vermin proof air bricks and make good face bricks around new air bricks.	No	9
<b>Carried Forward to Summary of Section No. 5</b>			R
Section No. 5			
Type M4+8UR			
Bill No. 3			
Masonry			
<b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>			

CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 5</u></b>			
	<b><u>BILL NO. 4</u></b>			
	<b><u>ROOF COVERINGS ETC</u></b>			
	For preambles see "Specifications of materials and methods to used - PW 371"			
	<b><u>PROFILED METAL SHEETING AND ACCESSORIES</u></b>			
	<b><u>0,58mm "Klip-Tite" profile Z275 ( roof sheeting materials available on site) spelter galvanised steel light industrial troughed interlocking roof sheeting in single lengths and accessories, with "Chromodek" and Traffic Green finish to one side, fixed to timber purlins:</u></b>			
1	Labour to install roof coverings using existing roof sheeting including supply of new clips where necessary with single pitch not exceeding 25 degrees	m2	35	
	<b><u>ROOF AND WALL INSULATION</u></b>			
	<b><u>"Sisalation 405" or similar approved residential grade aluminium foil based insulation:</u></b>			
2	Insulation sheeting laid taut over purlins at approximately 1000mm centres and fixed concurrent with roof covering with minimum 150mm stapled laps, including galvanised steel straining wires at not exceeding 400mm centres and double-sided tape at edges where required	m2	21	
	<b><u>RAINWATER DISPOSAL</u></b>			
	<b><u>Aluzink seamless metal gutters:</u></b>			
3	100 x 100 x 0.6mm standard rainwater gutters	m	7	
	<b>Carried Forward</b>			
	Section No. 5 Type M4+8UR Bill No. 4 Roof Coverings <b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>		R	

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CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 5</u></b>			
	<b><u>BILL NO. 5</u></b>			
	<b><u>CARPENTRY AND JOINERY</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	For preambles see "Specifications of materials and methods to used - PW 371"			
	<u>Allow for the preparation and submission of the following documents in respect of building.</u>			
1	<u>Erection</u> of roof guarantee certificate after the whole completed roof truss structure including completion of work carried out by previous contractor have been inspected, all defective work have been carried out and make good to the full satisfaction of the principal agent.	Item		
	<b><u>REMEDIAL WORKS</u></b>			
	<b><u>Carefully remove and set aside for re-use sawn softwood grade 5:</u></b>			
2	50 x 76mm Purlins	m	49	
	<b><u>ROOFS, ETC</u></b>			
	<b><u>Sawn softwood grade 5:</u></b>			
3	Supply and install 50 x 76mm Purlins fixed on existing roof timbers (rafters).	m	49	
4	Labour to fix 50 x 76mm Purlins previously set-aside fixed on brickwork between roof timbers (top eaves and verges both sides).	m	21	
	<b><u>Sundries</u></b>			
5	Two coats creosote on sawn timbers	m2	26	
	<b>Carried Forward</b>		R	
	Section No. 5 Type M4+8UR Bill No. 5 Carpentry and Joinery <b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>			



CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

	Brought Forward			R
6	Hurricane Clips	No	63	
	<b><u>EAVES, VERGES, ETC</u></b>			
	<u>Medium density plain fibre-cement fascias and barge boards:</u>			
7	19 x 235mm Fascias and barge boards, including aluminium H-profile jointing strips	m	24	
	<b><u>DOORS ETC</u></b>			
	<u>Wrought meranti doors hung to steel frames:</u>			
8	44mm Framed batten door 813 x 2032mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding including 150mm undercut.	No	4	
9	44mm Framed batten door 813 x 2032mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding and including weatherboard.	No	1	
<b>Carried Forward to Summary of Section No. 5</b>				R
Section No. 5				
Type M4+8UR				
Bill No. 5				
Carpentry and Joinery				
<b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>				

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CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 5</u></b>			
	<b><u>BILL NO. 9</u></b>			
	<b><u>PLUMBING AND DRAINAGE (PROVISIONAL)</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	For preambles see "Specifications of materials and methods to used - PW 371"			
	<b><u>REMEDIAL WORK</u></b>			
	<b><u>CLEAN AND DESLUDGING OF WASTE</u></b>			
1	Carefully clean and desludging waste (some pits) to municipal waste disposal site. Service provider to submit relevant and valid permit of disposal from Municipality to Principal Agent.	No	4	
	<b><u>SANITARY FITTINGS</u></b>			
	<u>Inspect existing enviroloo components, replace damaged or missing components, accessories, etc (second fix) and Install "components, accessories, etc" or similar approved</u>			
2	Install inlet pipes with brackets, vent extraction unit, place drying bag, toilet bowl and seat, top hinged inspection cover and all complete strictly in accordance with manufacturers instruction etc and make good for final inspection (Inspection elsewhere). Note: Materials are available on site.	No	4	
	<b>Carried Forward</b>		R	
	Section No. 5 Type M4+8UR Bill No. 9 Plumbing and Drainage (Provisional) <b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>			

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CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Brought Forward			R
<u>INSPECTION BY " ENVIRO LOO"/SUPPLIER</u>			
13	Allow an amount of R 4000.00 ( Four Thousand Rand Only) for the one site visit to be made by the "Enviro Loo" suppliers to assist / support the contractor in the final inspection to be ascertain the enviro loo has been installed correctly at which time a certificate of compliance should be issued by Enviro Loo Option.	Item	
14	Profit and attendance for the above	Item	
<b><u>TAPS, VALVES, ETC</u></b>			
<u>"Cobra Watertech"</u>			
15	19mm chrome plated push button taps to wash trough	No	2
<b>Carried Forward to Summary of Section No. 5</b>			
Section No. 5			
Type M4+8UR			
Bill No. 9			
Plumbing and Drainage (Provisional)			
<b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>			



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CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Brought Forward				R
<b><u>Compaction of surfaces</u></b>				
6	Compaction of ground surface to around buildings including aprons etc including removing and re-compact materials done by previous contractor for a depth of 150mm layers adding suitable material where necessary and compacting to 95% Mod AASHTO density	m2	101	
<b><u>Prescribed density tests on filling</u></b>				
7	"Modified AASHTO Density" test	No	14	
<b><u>SOIL POISONING</u></b>				
<b><u>Soil insecticide in accordance with SANS 5859:</u></b>				
8	Soil insecticide (protection against termites) applied as specified under aprons, etc including forming and poisoning shallow furrows against foundation walls, etc filling in furrows and ramming	m2	64	
<b>Carried Forward to Summary of Section No. 6</b>				R
Section No. 6				
Type F8 and FD4				
Bill No. 1				
Earthworks				
<b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>				

CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO.6</u></b>			
	<b><u>BILL NO.2</u></b>			
	<b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	For preambles see "Specifications of materials and methods to used - PW 371"			
	<b><u>UNREINFORCED CONCRETE,ETC</u></b>			
	<b><u>25MPa/19mm concrete</u></b>			
1	Aprons cast in panels	m3	7	
2	Thickening down apron on edge 110mm deep x 200mm wide.	m	58	
	<b><u>CONCRETE SUNDRIES</u></b>			
	<b><u>Finishing top surfaces of concrete smooth with a wood float</u></b>			
3	Aprons and pavings to falls.	m2	64	
	<b><u>TEST BLOCKS</u></b>			
4	Allow for preparing a set of three test cubes each size 150 x 150 x 150mm, sending them to an approved testing laboratory for testing and paying all charges in connection therewith.	No	4	
	<b><u>FORMWORK</u></b>			
	<b><u>Rough formwork to sides</u></b>			
5	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	60	
	<b>Carried Forward</b>			
	Section No. 6 Type F8 and FD4 Bill No. 2 Concrete, Formwork and Reinforcement <b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>		R	

CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Brought Forward			R
<b><u>MOVEMENT JOINTS ETC</u></b>			
<u>Expansion joints with 10mm softboard between vertical concrete and brick surfaces:</u>			
6	Not exceeding 300mm high to edges of surface beds	m	20
<u>Saw cut joints</u>			
7	Saw cut joints in top of concrete (Provisional)	m	20
<b><u>REINFORCEMENT</u></b>			
<b><u>Fabric reinforcement:</u></b>			
8	Mesh ref type 193 fabric reinforcement fixed horizontal in aprons.	m2	64
<b>Carried Forward to Summary of Section No. 6</b>			R
Section No. 6			
Type F8 and FD4			
Bill No. 2			
Concrete, Formwork and Reinforcement			
<b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>			



CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 6</u></b>			
	<b><u>BUILDER'S WORK</u></b>			
	<b><u>BILL NO. 3</u></b>			
	<b><u>MASONRY</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	For preambles see "Specifications of materials and methods to used - PW 371"			
	<b><u>BRICKWORK</u></b>			
	<b><u>Sizes in descriptions</u></b>			
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
	<b><u>Hollow walls etc</u></b>			
	Descriptions of hollow walls shall be deemed to include leaving fifth perpend of the bottom course of the external skin open as a weep hole.			
	Walls in two skins described as "bagged and sealed" shall be deemed to include having the outer face of the inner skin bagged with 1:6 cement and sand mixture and sealed with two coats "Brixeal" bitumen emulsion waterproofing coating.			
	User note: The above preamble generally applies for works in ho and humid coastal areas			
	<b><u>Face Bricks</u></b>			
	Bricks shall be ordered timeously to obtain uniformity in size and colour			
	<b>Carried Forward</b>		R	
	Section No. 6 Type F8 and FD4 Bill No. 3 Masonry <b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>			

CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Brought Forward			R
<b><u>Pointing</u></b>			
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
<b><u>SAMPLES</u></b>			
Samples of all masonry building units, except those for walls described as "load bearing", shall consist of a minimum of 6 units. Samples of building units to be used in walls described as "load bearing" shall consist of 30 units from every 30 000 units delivered to site			
<b><u>SUPERSTRUCTURE</u></b>			
<b><u>FACE BRICKWORK</u></b>			
<u>Brick-on-edge header course copings, sills, etc using Corobrick Letaba Satin" or similar approved face bricks available on site pointed with polished recessed joints on all exposed faces (Provisional)</u>			
1	150mm Wide sills set sloping and slightly projecting.	m	14
2	110mm Wide sills set flat	m	14
3	Coping on top of half brick wall	m	30
<b><u>Ventilation bricks</u></b>			
4	Break down face brick wall, create opening and install set of two 22 x 155mm high terra cotta clay vermin proof air bricks and make good face bricks around new air bricks.	No	20
<b>Carried Forward to Summary of Section No. 6</b>			R
Section No. 6			
Type F8 and FD4			
Bill No. 3			
Masonry			
<b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>			

CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 6</u></b>			
	<b><u>BILL NO. 4</u></b>			
	<b><u>ROOF COVERINGS ETC</u></b>			
	For preambles see "Specifications of materials and methods to used - PW 371"			
	<b><u>REMEDIAL WORKS</u></b>			
	<b><u>Carefully remove existing 0,58mm "Klip-Tite" profile Z275 spelter galvanised steel light industrial troughed interlocking roof sheeting including clips and set aside for re-use.</u></b>			
1	Roof coverings with pitch not exceeding 25 degrees	m2	32	
	<b><u>PROFILED METAL SHEETING AND ACCESSORIES</u></b>			
	<b><u>0,6mm "Klip-Lok" roof sheeting with "Chromadek" finish one side, fixed to timber purlins (eslewhere)</u></b>			
2	Labour to install roof coverings using existing set aside and available roof sheeting including supply of new clips where necessary with single pitch not exceeding 25 degrees	m2	73	
	<b><u>ROOF AND WALL INSULATION</u></b>			
	<b><u>Remove existing sisalation and replace with "Sisalation 405" or similar approved residential grade aluminium foil based insulation:</u></b>			
3	Insulation sheeting laid taut over purlins at approximately 1000mm centres and fixed concurrent with roof covering with minimum 150mm stapled laps, including galvanised steel straining wires at not exceeding 400mm centres and double-sided tape at edges where required	m2	21	
	<b>Carried Forward</b>		R	
	Section No. 6 Type F8 and FD4 Bill No. 4 Roof Coverings <b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>			

CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Brought Forward			R
<b><u>"Sisalation 405" or similar approved residential grade aluminium foil based insulation:</u></b>			
4	Insulation sheeting laid taut over purlins at approximately 1000mm centres and fixed concurrent with roof covering with minimum 150mm stapled laps, including galvanised steel straining wires at not exceeding 400mm centres and double-sided tape at edges where required	m2	35
<b><u>RAINWATER DISPOSAL</u></b>			
<b><u>Aluzink seamless metal gutters:</u></b>			
5	100 x 100 x 0.6mm standard rainwater gutters	m	15
6	Extra over eaves gutter for closed ends	No	4
7	75 x 100 x 0.6mm Thick galvanised rainwater downpipes	m	8
8	Extra over rainwater pipe for eaves offset.	No	4
9	Ditto,for shoe.	No	4
<b>Carried Forward to Summary of Section No. 6</b>			R
Section No. 6			
Type F8 and FD4			
Bill No. 4			
Roof Coverings			
<b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>			

CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 6</u></b>			
	<b><u>BILL NO. 5</u></b>			
	<b><u>CARPENTRY AND JOINERY</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<u>Allow for the preparation and submission of the following documents in respect of building.</u>			
1	<u>Erection</u> of roof guarantee certificate after the whole completed roof truss structure including completion of work carried out by previous contractor have been inspected, all defective work have been carried out and make good to the full satisfaction of the principal agent.	Item		
	<b><u>REMEDIAL WORKS</u></b>			
	<b><u>Carefully remove and set aside for re-use sawn softwood grade 5:</u></b>			
2	50 x 76mm Purlins	m	101	
	<b><u>ROOFS, ETC</u></b>			
	<b><u>Sawn softwood grade 5:</u></b>			
3	Supply and install 50 x 76mm Purlins fixed on existing roof timbers (rafters).	m	101	
4	Labour to fix 50 x 76mm Purlins previously set-aside fixed on brickwork between roof timbers (top eaves and verges both sides).	m	50	
	<b><u>Sundries</u></b>			
5	Two coats creosote on sawn timbers	m2	53	
6	Hurricane Clips	No	70	
	<b>Carried Forward</b>		R	
	Section No. 6 Type F8 and FD4 Bill No. 5 Carpentry and Joinery <b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>			

CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Brought Forward				R
<b><u>EAVES, VERGES, ETC</u></b>				
<u>Pressed fibre-cement</u>				
7	15 x 230mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	45	
<b><u>DOORS ETC</u></b>				
8	44mm Framed batten door 813 x 2032mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding and including weatherboard	No	3	
9	44mm Framed batten door 813 x 2032mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side (door raised by 120mm from bottom) (D2)	No	12	
10	44mm Framed batten door 914 x 2032mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding and including weatherboard.	No	1	
<b>Carried Forward to Summary of Section No. 6</b>				R
Section No. 6				
Type F8 and FD4				
Bill No. 5				
Carpentry and Joinery				
<b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>				

CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 6</u></b>			
	<b><u>BILL NO. 6</u></b>			
	<b><u>IRONMONGERY</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	For preambles see "Specifications of materials and methods to used - PW 371"			
	<b><u>CATCHES, CABIN HOOKS, ETC</u></b>			
	<b><u>"Approved"</u></b>			
1	150mm chrome cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged.	No	4	
	<b><u>LOCKS</u></b>			
	<b><u>Approved</u></b>			
2	50mm Brass padlock	No	4	
3	Four lever mortice lockset	No	4	
4	Indicator lockset	No	16	
	<b><u>HANDLES</u></b>			
	<b><u>"Union Assa Abloy" or Similar approved:</u></b>			
5	ASSA ABLOY anodised silver straight pull handle (code AL5515 300BBAS) with 300mm fixing centres	Pairs	4.0	
	<b>Carried Forward</b>		R	
	Section No. 6 Type F8 and FD4 Bill No. 6 Ironmongery <b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>			

CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Brought Forward			R
<b><u>DOORSTOPS</u></b>			
<b><u>Approved</u></b>			
6	25mm Diameter rubber door stop plugged	No	20
<b><u>BOLTS, DOOR CLOSER, FLOOR SPRING, ETC.</u></b>			
7	"Dorma" TS73N/EN3-4 parallel arm door closer delayed closing-push side fitting.	No	1
<b><u>PUSH PLATES AND KICK PLATES</u></b>			
<b><u>"Union Assa Abloy" or similar approved</u></b>			
<b><u>1.2mm Thick satin finished "Union" stainless steel plates countersunk screwed along edges at not exceeding 200mm centre</u></b>			
8	200 x 900mm Type "SS5089-200W" kicking plate	No	1
<b><u>LETTERS, NAMEPLATES, ETC</u></b>			
<b><u>"Dorma" or similar approved</u></b>			
9	DSS-130 Engraved "Female" information sign	No	2
10	DSS-131 Engraved "Disabled" information sign	No	1
<b><u>BATHROOM FITTINGS</u></b>			
<b><u>"Vaal Paragon" or similar approved</u></b>			
11	32mm Type 9 back grab rail 800mm long plugged	No	1
Carried Forward			R
Section No. 6 Type F8 and FD4 Bill No. 6 Ironmongery <b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>			



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CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 6</u></b>			
	<b><u>BILL NO. 9</u></b>			
	<b><u>PLUMBING AND DRAINAGE (PROVISIONAL)</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	For preambles see "Specifications of materials and methods to used - PW 371"			
	<b><u>REMEDIAL WORK</u></b>			
	<b><u>CLEAN AND DESLUDGING OF WASTE</u></b>			
1	Carefully clean and desludging waste (some pits) to municipal waste disposal site. Service provider to submit relevant and valid permit of disposal from Municipality to Principal Agent.	No	5	
	<b><u>SANITARY FITTINGS</u></b>			
	<u>Inspect existing enviroloo components, replace damaged or missing components, accessories, etc (second fix) and Install "components, accessories, etc" or similar approved</u>			
2	Install inlet pipes with brackets, vent extraction unit, place drying bag, toilet bowl and seat, top hinged inspection cover and all complete strictly in accordance with manufacturers instruction etc and make good for final inspection (Inspection elsewhere). Note: Materials are available on site.	No	13	
	<b>Carried Forward</b>		R	
	Section No. 6 Type F8 and FD4 Bill No. 9 Plumbing and Drainage (Provisional) <b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>			

CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Brought Forward			R
<u>Supply and Install Precast concrete wash trough:</u>			
3	Standard SABS approved Pre-Cast Concrete Double Wash Trough, 1080 x 650 x 850mm high with support legs fitted with standard 3/4 Brass Garden Taps, including all necessary pipework including soak away approximately 10 meters away from the wash trough, sized at 1000 x 1000 x 1000mm covered with "bidim" complete et	No	4
<u>Supply and deliver only enviro loo components, accessories, etc (Installation elsewhere):</u>			
4	Vent wall bracket PL.7 (Provisional)	No	1
5	Ventilation extraction Unit PL.6 (Provisional)	No	1
6	Outlet ventilation Pipe PL.5 (Provisional)	No	1
7	Inspection Cover (Provisional)	No	1
8	Bag mounting screws and organic starter, enzyme and toilet cleaner (Provisional)	No	1
9	Toilet Bowl, Seat and Lid PL.4 (Provisional)	No	1
10	Drying Bag (Provisional)	No	1
11	Urinal support anchor (Provisional)	No	1
<b><u>BUDGETARY ALLOWANCES</u></b>			
<u>INSPECTION BY " ENVIRO LOO"/SUPPLIER</u>			
12	Allow an amount of R 4000.00 ( Four Thousand Rand Only) for the one site visit to be made by the "Enviro Loo" suppliers to assist / support the contractor in the final inspection to be ascertain the enviro loo has been installed correctly at which time a certificate of compliance should be issued by Enviro Loo Option.	Item	
13	Profit and attendance for the above	Item	
<b><u>SANITARY FITTINGS</u></b>			
<b>Carried Forward</b>			R
Section No. 6 Type F8 and FD4 Bill No. 9 Plumbing and Drainage (Provisional) <b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>			

CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Brought Forward			R
<u>"Vaal"</u>			
14	Vaal Sanitaryware 510 x 405mm Hibiscus White vitreous china lavatory basin (Code : 7023) with two tapholes including integrated overflow and chainstay hole, bolted to wall with two 10mm bolts (product code 8448Z0).	No	1
<b><u>TAPS, VALVES, ETC</u></b>			
<u>"Cobra Watertech"</u>			
15	19mm chrome plated push button tap	No	8
16	Cobra Watertech 15mm chrome plated hi-waste elbow action pillartap with blue indicator for cold water (Code: 504-21B), manufactured in accordance with SANS 226:2004 Type 2 (BS 5412).	No	1
17	15mm 128 CP Star underwall pattern stopcock.	No	1
<b><u>SANITARY PLUMBING</u></b>			
<u>uPVC pipes</u>			
18	50mm Pipe	m	8
19	110mm Pipes	m	8
<u>Extra over uPVC pipes for fittings</u>			
20	50mm Bend	No	2
21	50mm Junction	No	2
22	50mm Junction with cleaning eye and lid	No	2
23	50mm "GI Two-way" vent valve	No	1
24	110mm Bend	No	1
25	110mm Junction	No	1
Carried Forward			R
Section No. 6 Type F8 and FD4 Bill No. 9 Plumbing and Drainage (Provisional) <b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>			

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CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Item No		Quantity	Rate	Amount
	<b><u>SECTION No.7</u></b>			
	<b><u>BILL No.1</u></b>			
	<b><u>EARTHWORKS</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	For preambles see "Specifications of materials and methods to used - PW 371"			
	<b><u>SITE CLEARANCE, ETC.</u></b>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc.	m2	330	
	<b><u>REMOVAL OF TREES, ETC</u></b>			
2	Tree stump exceeding 200mm and not exceeding 500mm girth	No	3	
	<b><u>PAVINGS, ETC</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<b><u>Testing of material and filling:</u></b>			
	<b><u>Descriptions of earth filling, compaction, etc shall be deemed to include for all necessary testing required in accordance with the SABS 1200 series</u></b>			
	<b><u>EARTHWORKS</u></b>			
	<b><u>Excavation in earth not exceeding 2m deep:</u></b>			
3	Over site between buildings, retaining walls, etc to reduce levels and dispose in prescribed stock piles on site	m3	396	
	<b>Carried Forward</b>		R	
	Section No. 7 EXTERNALWORKS Bill No. 1 Walkway <b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>			

CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Brought Forward			R
<b><u>Compaction of surfaces</u></b>			
4	Rip and re-compact in-situ materials to a depth of 150mm, breaking down over size material and reconsolidate to 93% modified AASHTO density	m2	330
<b><u>Extra over all excavations for carting away</u></b>			
5	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	396
<b><u>Keeping excavations free of water</u></b>			
6	Keeping excavations free of all water other than subterranean water	Item	
<b><u>C4 filling supplied and carted on by the Contractor, stabilised with 2.5% OPC cement compacted in layers not exceeding 150mm to 97% Mod. AASHTO density</u></b>			
7	Subbase under roads	m3	50
<b><u>Earth filling from commercial sources supplied by the Contractor under parking areas, roadways, etc:</u></b>			
8	Sub-base course of G7 material compacted to 93% Mod AASHTO density	m3	297
9	Base course stabilised G7 material with CEM II 32.5 BV compacted to 97% Mod AASHTO density	m3	50
<b><u>Weedkiller (active ingredients metalaclor 102,8 g/l, terbitilasien 248,6 g/l and atrisien 248,6 g/l) mixed in the proportion of 100 ml weedkiller to 100 l water and applied at a rate of 10 l/m2:</u></b>			
10	Under paving, etc	m2	330
<b><u>Pavers</u></b>			
<b><u>INTERLOCKING CONCRETE PAVING</u></b>			
Carried Forward			R
Section No. 7 EXTERNALWORKS Bill No. 1 Walkway <b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>			

CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Brought Forward			R
<u>Paving of 200 x 100 x 60mm "Type S-A" precast concrete paving bricks with butt joints, on 20mm thick river sand bed with sand-and-cement mixture swept into joints and hosed down, including preparation of ground or filling:</u>			
11	Paving in herringbone bond pattern to falls	m2	330
<u>Precast concrete finished smooth on exposed surfaces, including bedding, jointing and pointing:</u>			
12	150 x 280mm High kerbs (SANS 927 fig 7) with 150 x 150 x 300mm unreinforced concrete haunching at back of each joint, including excavation, backfilling, etc	m	440
Carried Forward to Summary of Section No. 7			R
Section No. 7			
EXTERNALWORKS			
Bill No. 1			
Walkway			
PREPARED BY: NYELETI CONSULTING (PTY) LTD			

CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Item No		Quantity	Rate	Amount
	<b><u>SECTION No.7</u></b>			
	<b><u>BILL No.2</u></b>			
	<b><u>RAMPS</u></b>			
	<b><u>EARTHWORKS</u></b>			
	<b><u>Excavation in earth not exceeding 2m deep:</u></b>			
1	Reduced levels under floors	m3	12	
	<b><u>Extra over all excavations for carting away</u></b>			
2	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	12	
	<b><u>Keeping excavations free of water</u></b>			
3	Keeping excavations free of all water other than subterranean water	Item		
	<b><u>G7 filling material supplied by the contractor, compacted to 95% Mod AASHTO density:</u></b>			
4	Under floors, steps, pavings, et	m3	16	
	<b><u>Compaction of surfaces</u></b>			
5	Compaction of ground surface under floors, etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 98% Mod AASHTO densit	m2	10	
	<b><u>Prescribed density tests on filling</u></b>			
6	"Modified AASHTO Density" test	No	3	
	<b><u>Soil insecticide in accordance with SANS 5859:</u></b>			
7	Soil insecticide (protection against termites) applied as specified to floors poisoning shallow furrows against foundation walls, etc filling in furrows and ramming	m2	10	
	<b>Carried Forward</b>		R	
	Section No. 7			
	EXTERNALWORKS			
	Bill No. 2			
	Ramps			
	<b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>			

CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Brought Forward			R
<b><u>CONCRETE WORK</u></b>			
<b><u>25MPa/19mm Unreinforced concrete:</u></b>			
8	Ramps	m3	1
<b><u>CONCRETE SUNDRIES</u></b>			
<b><u>Finishing top surfaces of concrete smooth with a wood float</u></b>			
9	Surface beds, slabs, etc to falls	m2	10
<b><u>TEST BLOCKS</u></b>			
10	Allow for preparing a set of three test cubes each size 150 x 150 x 150mm, sending them to an approved testing laboratory for testing and paying all charges in connection therewith.	No	1
<b><u>FORMWORK</u></b>			
<b><u>Rough formwork to sides</u></b>			
11	Sloping outer edges of ramps approximately 450mm high extreme	m	7
<b><u>REINFORCEMENT</u></b>			
<b><u>Mild steel reinforcement to structural concrete work:</u></b>			
<b><u>Fabric reinforcement:</u></b>			
12	Mesh ref type 395 fabric reinforcement fixed horizontal in surface beds.	m2	10
<b><u>BRICKWORK</u></b>			
<b><u>Brickwork of NFX bricks in class II mortar</u></b>			
13	One brick walls	m2	12
<b><u>FACE BRICKWORK</u></b>			
Carried Forward			R
Section No. 7 EXTERNALWORKS Bill No. 2 Ramps PREPARED BY: NYELETI CONSULTING (PTY) LTD			

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CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Brought Forward			R
<u>Steel palisade fencing, gates, etc including one priming coat and two coats high gloss enamel</u> <u>Traffic Green paint on metal stays, framing, et</u>			
3	1800mm High palisade fencing comprising 40 x 40 x 2mm x 1750mm angle pales bolted at 175mm centres using M8 anti vanda nuts and round headed bolts onto 50 x 50 x 3mm angle iron crossbars bolted onto 76 x 76 x 1.6mm square tube posts 2400mm long by means of 40 x 5.00mm flatbar fishplate and M12 antivandal nuts and bolts and posts set and cast into and including 300 x 300 x 600mm deep concrete bases at 3000mm centres	m	28
4	1500mm Wide x 1800mm High Swing gate comprising of 40 x40 x 2mm angle iron palings welded to a 50 x 25 x 1.6mm rectangular tubing bearer frame, palings are to be placed 133mm apart each other centre to centre and 2 No x 75mm x 75mm x 2mm steel square tubing posts at each side of the gate opening with closing pyramid caps on top and planted into concrete footing 450 x 450 x 600mm deep including excavations, backfilling and locking mechanism.	No	1
Carried Forward to Summary of Section No. 7			R
Section No. 7			
EXTERNALWORKS			
Bill No. 3			
Fencing			
PREPARED BY: NYELETI CONSULTING (PTY) LTD			

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CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Brought Forward			R
<b><u>SITE CLEARANCE, ETC.</u></b>			
5	Remove topsoil to nominal depth 150mm, stockpile and maintain	m2	25
<b><u>BULK EXCAVATION - TANK BASESITE CLEARANCE, ETC.</u></b>			
<b><u>b) Extra-over for</u></b>			
6	<b><u>Intermediate excavation</u></b>	m3	3
7	Hard rock excavation	m3	5
<b><u>RESTRICTED EXCAVATIONS</u></b>			
8	Excavate for restricted foundations, footings and trenches in all materials and use for backfill or embankment or dispose	m3	25
<b><u>EARTHWORKS (ROADS, SUBGRADE)</u></b>			
9	Rip and re-compact insitu to 90% MOD AASHTO	m3	1
10	Geotechnical grid (Traix TX170)	m2	1
11	Backfill 500mm with course insitu material in 150mm layers	m3	5
<b><u>CONCRETE</u></b>			
<b><u>Finishing top surfaces of concrete smooth with a steel trowel</u></b>			
12	Binding layer in 15MPa concrete (50mm thick)	m3	1
13	Strength of concrete grade 30/19	m3	23
14	Shutter rough	m2	25
<b><u>SCHEDULED REINFORCEMENT</u></b>			
15	Steel bars (8 to 40mm diameter bars)	t	3.00
Carried Forward			R
Section No. 7 EXTERNALWORKS Bill No. 4 Water Reticulation <b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>			

CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Brought Forward			R
<b><u>UNFORMED SURFACE FINISHES</u></b>			
16	Steel float	m2	25
17	M20 Bolts cast in concrete with washer plate and nuts, all galvanised	No	16
<b><u>SPECIALS AND FITTINGS</u></b>			
<b><u>Extra-over 8.2.1 for supplying, laying, bedding, jointing and testing of the following fittings for use on Steel pipes</u></b>			
<b><u>90 degree bend</u></b>			
18	75mm	No	4
19	90mm	No	8
<b><u>Equal Tee</u></b>			
20	100mm x 100mm	No	2
<b><u>Extra-over 8.2.1 for supplying, laying, bedding, jointing and testing of the following fittings for use on uPVC pipes</u></b>			
<b><u>90 degree bend</u></b>			
21	75mm	No	1
22	90mm	No	1
<b><u>25 degree Bends</u></b>			
23	75mm	No	1
24	90mm	No	1
<b><u>22.5 degree Bends</u></b>			
25	75mm	No	1
26	90mm	No	1
Carried Forward			R
Section No. 7 EXTERNALWORKS Bill No. 4 Water Reticulation <b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>			

CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Brought Forward				R
<b><u>45 degree Bends</u></b>				
27	75mm	No	1	
28	90mm	No	1	
<b><u>Flange adaptors</u></b>				
29	110mm	No	4	
<b><u>Extra over Item 8.2.1 for supplying, fixing and bedding of valves; Class 16:</u></b>				
<b><u>Viking Johnson/Klamflex flanged adaptors PN 16</u></b>				
30	100mm	No	2	
31	ND100 AVK Dismantling joint PN16 or similar approved	No	4	
32	ND100 flanged cosmos Meinecke WPD bulk meter with digital output or similar approved; Class 16	No	1	
33	ND100 flanged Bermad 70F Y-Pattern strainer or similar approved; Class 16	No	2	
34	ND100 flanged ball valve; Class 16	No	1	
35	Steel Plinths	No	4	
36	DN25 automatic air release valve, Vent O Mat or similar approved brand as per inlet chamber detail; Class 25	No	2	
37	ND25 brass fullway gate valve to sabs 776 Class 10	No	2	
38	ND25 galvanised barrel nipple PN16	No	2	
39	ND100 In line tee with outlet diameter as specified in the nodal descriptions and reduced to 25bsp female end connection PN16	No	2	
40	ND100 mm, 150mm long double flanged pipe, PN 16 to SANS standard	No	2	
Carried Forward				R
Section No. 7 EXTERNALWORKS Bill No. 4 Water Reticulation <b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>				

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CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Brought Forward			R
<b><u>CHAMBERS</u></b>			
52	Construct concrete inlet and outlet chamber Type 1 complete with step irons, and frames as per detailed drawings, up to 2.0m depth.	No	1
53	Construct scour valve chamber Type 4, complete with stepirons, frames and and scour wing wall structure as per detailed drawings up to 2.5m depth.	No	1
<b><u>SUNDRIES</u></b>			
54	Thrust blocks and pedestals class 25Mpa/19 concrete	m3	5
Carried Forward to Summary of Section No. 7			R
Section No. 7			
EXTERNALWORKS			
Bill No. 4			
Water Reticulation			
<b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>			



CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Item No		Quantity	Rate	Amount
	<b><u>SECTION No.7</u></b>			
	<b><u>BILL No.5</u></b>			
	<b><u>RAIN WATER HAVERST</u></b>			
	<b><u>EARTHWORKS</u></b>			
	<b><u>Excavation in earth not exceeding 2m deep:</u></b>			
1	Trenches	m3	11	
	<b><u>Extra over all excavations for carting away</u></b>			
2	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	6	
	<b><u>Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density</u></b>			
3	Backfilling to trenches, holes, etc	m3	3	
4	Under floors, steps, pavings, et	m3	2	
	<b><u>Compaction of surfaces</u></b>			
5	Compaction of ground surface under floors, etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 98% Mod AASHTO densit	m2	11	
	<b><u>Prescribed density tests on filling</u></b>			
6	"Modified AASHTO Density" test	No	2	
	<b><u>Soil insecticide in accordance with SANS 5859:</u></b>			
7	Soil insecticide (protection against termites) applied as specified to floors poisoning shallow furrows against foundation walls, etc filling in furrows and ramming	m2	11	
	<b><u>CONCRETE WORK</u></b>			
	<b>Carried Forward</b>		R	
	Section No. 7			
	EXTERNALWORKS			
	Bill No. 5			
	Rainwater Harvest			
	<b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>			

CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Brought Forward			R
<b><u>25MPa/19mm Unreinforced concrete:</u></b>			
8	Strip Footing	m3	5
9	Tank Stand Plinth	m3	1
<b><u>CONCRETE SUNDRIES</u></b>			
<b><u>Finishing top surfaces of concrete smooth with a steel trowel</u></b>			
10	Surface beds, slabs, etc	m2	11
<b><u>TEST BLOCKS</u></b>			
11	Allow for preparing a set of three test cubes each size 150 x 150 x 150mm, sending them to an approved testing laboratory for testing and paying all charges in connection therewith.	No	2
<b><u>REINFORCEMENT</u></b>			
<b><u>Mild steel reinforcement to structural concrete work:</u></b>			
<b><u>Fabric reinforcement:</u></b>			
12	Mesh ref type 395 fabric reinforcement fixed horizontal in surface beds.	m2	11
<b><u>BRICKWORK</u></b>			
<b><u>Brickwork of NFX bricks in class II mortar</u></b>			
13	One brick walls	m2	23
<b><u>FACE BRICKWORK</u></b>			
<b><u>Face bricks (purchase price of R 5 500.00/ 1000 delivered to site excluding VAT) pointed with recessed horizontal and vertical joints:</u></b>			
14	Extra over brickwork for face brickwork in tank stand plinth	m2	23
Carried Forward			R
Section No. 7 EXTERNALWORKS Bill No. 5 Rainwater Harvest <b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>			

CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Brought Forward				R
<b><u>BRICK SUNDRIES</u></b>				
<u>2,5mm Brickwork reinforcement</u>				
15	150mm Wide reinforcement built in horizontally	m	207	
<b><u>RAIN WATER TANK</u></b>				
16	5000 Litre plastic JoJo tank complete with fixing lugs and lid, fitted with and including 15mm brass bibtap with handle suitable for padlocking and setting in position on concrete plinth (elsewhere measured) and tying down with 4mm diameter wire wapped twice around centre of tank and secured to each corner of tank with double strand of 4mm diameter galvanised wire embedded into concrete.	No	5	
<b>Carried Forward to Summary of Section No. 7</b>				R
Section No. 7				
EXTERNALWORKS				
Bill No. 5				
Rainwater Harvest				
<b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>				

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CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Brought Forward				R
<b><u>Rough formwork to sides</u></b>				
6	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	21	
<b><u>GARDEN TAP</u></b>				
7	19mm Chrome plated or Plastic Push Button tap including 20mm Galvanized stand pipe not exceeding 1.5m high casted with 25Mpa concrete into 110mm diameter uPVC / HDPE pipe around stand pipe including 300mm concrete plinth below ground, good finish top concrete around pipe diameter. (water supply pipes, etc measured elsewhere).	No	3	
<b><u>SOAKAWAY</u></b>				
<b><u>Soakaway build at the edge or end of concrete fountain pad:</u></b>				
8	Soak away approximately size 1000 x 1000 x 1000mm covered with rocks not exceeding 150mm and "bidim" complete etc.	No	3	
<b>Carried Forward to Summary of Section No. 7</b>				R
Section No. 7				
EXTERNALWORKS				
Bill No. 6				
Drinking Fountains				
<b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>				

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CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Item No		Quantity	Rate	Amount
	<b><u>SECTION No.7</u></b>			
	<b><u>BILL No.8</u></b>			
	<b><u>SEWER RETICULATION</u></b>			
	<b><u>PIPES</u></b>			
1	110mm uPVC Pipes laid in and including trenches not exceeding 1m deep	m	35	
2	110mm uPVC Pipes laid in and including trenches exceeding 1m and not exceeding 2m deep	m	25	
3	160mm uPVC Pipes laid in and including trenches exceeding 1m and not exceeding 2m deep	m	201	
4	Extra over uPVC piping for 110mm bend	No	5	
5	Extra over uPVC piping for 110mm junction	No	20	
6	Extra over uPVC piping for 110mm stop end	No	10	
7	110mm uPVC cleaning eye fixed to 110mm uPVC drain pipe, including 350 x 350 x 75mm thick in-situ 15 MPa/19mm mass concrete surround, the whole finished smooth on all exposed faces with exposed angles rounded, including all necessary excavations, formwork, backfilling, etc	No	2	
	<b><u>SEPTIC TANK:</u></b>			
	<b><u>REMEDIAL WORK:</u></b>			
	<b><u>Remove filling</u></b>			
8	Septic Tank	m3	36	
	<b><u>Trimming excavation pit</u></b>			
9	Vertical sides of pit exceeding 3m but not exceeding 4m deep.	m	40	
	<b>Carried Forward</b>			
	Section No. 7 EXTERNALWORKS Bill No. 8 Sewer Reticulation <b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>		R	

CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Brought Forward			R
<b><u>Extra over all excavations for carting away</u></b>			
10	Surplus material from excavations and/or stock piles (including excavated materials by previous contractor) on site to a dumping site to be located by the contractor	m3	161
<b><u>NEW WORK</u></b>			
<b><u>Risk of collapse of excavations</u></b>			
11	Sides of trench and hole excavations exceeding 3m but not exceeding 4m deep.	m2	80
<b><u>Keeping excavations free of water</u></b>			
12	Keeping excavations free of all water other than subterranean water		Item
<b><u>Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density</u></b>			
13	Backfilling to trenches, holes, etc	m3	15
<b><u>Approved G5 filling supplied and carted by the contractor and compacted in layers not exceeding 150mm to 95% Mod AASHTO density</u></b>			
14	Under pit (Excavations carried out by previous contractor).	m3	40
<b><u>Compaction of surfaces</u></b>			
15	Compaction of ground surface to pits etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	80
<b><u>Prescribed density tests on filling</u></b>			
16	"Modified AASHTO Density" test	No	5
<b><u>SOIL POISONING</u></b>			
<b>Carried Forward</b>			R
Section No. 7 EXTERNALWORKS Bill No. 8 Sewer Reticulation <b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>			



CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Brought Forward			R
<b><u>Soil insecticide in accordance with SANS 5859:</u></b>			
17	To bottoms and sides of pit etc	m2	80
<b><u>CONCRETE WORKS ,ETC</u></b>			
<b><u>15MPa/19mm concrete</u></b>			
18	Surface blinding under footings and bases	m3	15
<b><u>25MPa/19mm reinforced concrete:</u></b>			
19	Mass concrete to bottoms	m3	20
20	Slabs	m3	15
<b><u>TEST BLOCKS</u></b>			
21	Allow for preparing a set of three test cubes each size 150 x 150 x 150mm, sending them to an approved testing laboratory for testing and paying all charges in connection therewith.	No	4
<b><u>FORMWORK</u></b>			
<b><u>Rough formwork to sides</u></b>			
22	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	25
<b><u>REINFORCEMENT</u></b>			
<b><u>Mild and High Tensile steel reinforcement to structural concrete work:</u></b>			
23	All Diameter bar	t	3.00
<b><u>BRICKWORK</u></b>			
<b><u>Brickwork of NFX bricks in class II mortar</u></b>			
24	One brick walls	m2	70
25	Half brick walls	m2	17
Carried Forward			R
Section No. 7 EXTERNALWORKS Bill No. 8 Sewer Reticulation <b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>			

CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Brought Forward			R
<b><u>BRICK SUNDRIES</u></b>			
<u>2,5mm Brickwork reinforcement</u>			
26	75mm Wide reinforcement built in horizontally	m	44
27	150mm Wide reinforcement built in horizontally	m	206
<b><u>Bagging of 1:3 cement and sand mixture</u></b>			
28	Outer face of external brick wall	m2	350
<b><u>One layer 250 micron green polyethylene waterproof sheeting (SANS 952-1985 type C) sealed at laps with PVC self-adhesive tape:</u></b>			
29	Under surface beds	m2	50
<b><u>INTERNAL PLASTER</u></b>			
<b><u>Cement plaster on brickwork:</u></b>			
30	On walls	m2	88
<b><u>SPECIAL FLOOR COATING</u></b>			
<b><u>Minimum two coats approved epoxy coat</u></b>			
31	On screed	m2	50
32	On walls in pit	m2	88
<b><u>SOAKAWAY</u></b>			
<b><u>REMEDIAL WORK:</u></b>			
<b><u>EARTHWORKS</u></b>			
<b><u>Trimming excavation pit</u></b>			
33	Vertical sides of pit not exceeding 2m deep.	m	10
Carried Forward			R
Section No. 7 EXTERNALWORKS Bill No. 8 Sewer Reticulation <b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>			

CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Brought Forward			R
<b><u>Extra over all excavations for carting away</u></b>			
34	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	6
<b><u>NEW WORK</u></b>			
<b><u>Risk of collapse of excavations</u></b>			
35	Sides of trench and hole excavations exceeding 1.5m but not exceeding 3m deep.	m2	20
<b><u>Keeping excavations free of water</u></b>			
36	Keeping excavations free of all water other than subterranean water	Item	
<b><u>Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density</u></b>			
37	Backfilling to soakaway	m3	5
<b><u>Approved unselected stones size 50-200mm laid in:</u></b>			
38	Soakaway	m3	7
<b><u>Geofabric filter bedim blanket membrane wrapped around stone with 150mm side and 30mm end laps including stitching:</u></b>			
39	Soakaway	m2	6
<b><u>Compaction of surfaces</u></b>			
40	Compaction of ground surface to pits etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	6
<b><u>Prescribed density tests on filling</u></b>			
41	"Modified AASHTO Density" test	No	1
<b>Carried Forward</b>			R
Section No. 7 EXTERNALWORKS Bill No. 8 Sewer Reticulation <b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>			

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CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Item No		Quantity	Rate	Amount
	<b><u>SECTION No.7</u></b>			
	<b><u>BILL No.9</u></b>			
	<b><u>STORMWATER MANAGEMENT</u></b>			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	For preambles see "Specifications of materials and methods to used - PW 371"			
	<b><u>EARTHWORKS</u></b>			
	<b><u>Excavation in earth not exceeding 2m deep:</u></b>			
1	Stormwater	m3	35	
	<b><u>Extra over trench and hole excavations in earth for excavation:</u></b>			
2	Soft rock	m3	4	
3	Hard rock	m3	2	
	<b><u>Extra over all excavations for carting away</u></b>			
4	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	35	
	<b><u>Keeping excavations free of water</u></b>			
5	Keeping excavations free of all water other than subterranean water		Item	
	<b><u>Compaction of surfaces</u></b>			
6	Compaction of ground surface under stormwater, etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 98% Mod AASHTO densit	m2	116	
	<b>Carried Forward</b>		R	
	Section No. 7 EXTERNALWORKS Bill No. 9 Stormwater Management <b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>			

CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Brought Forward			R
<b><u>Prescribed density tests on filling</u></b>			
7	"Modified AASHTO Density" test	No	1
<b><u>Soil insecticide in accordance with SANS 5859:</u></b>			
8	Soil insecticide (protection against termites) applied as specified to bottoms and sides of trenches, etc including forming and poisoning shallow furrows against foundation walls, etc filling in furrows and ramming	m2	248
<b><u>CONCRETE WORK</u></b>			
9	25Mpa/19mm Mass concrete in V-shaped channel 700mm wide x 75mm thick cast in 2 000mm intervals with rounded salient edges and finished on exposed surfaces with 2:1 cement mortar, with and including one layer of ref.193 mesh reinforcement, laid to falls in panels not exceeding 2,0m long with 12mm bitumen impregnated soft board movement joints with exposed edges raked out for a depth of 10mm and filled with bituminous compound including all necessary excavations, form work, backfilling, clearing, levelling and etc	m	165
10	Extra for fair open end	No	5
11	Extra for fair stopped end	No	5
12	Extra for angle intersection	No	5
<b><u>TEST BLOCKS</u></b>			
13	Allow for preparing a set of three test cubes each size 150 x 150 x 150mm, sending them to an approved testing laboratory for testing and paying all charges in connection therewith.	No	8
<b><u>CONCRETE SUNDRIES</u></b>			
<b><u>Finishing top surfaces of concrete rough with a wood float</u></b>			
14	Stormwater channels to falls	m2	116
<b>Carried Forward to Summary of Section No. 7</b>			R
Section No. 7			
EXTERNALWORKS			
Bill No. 9			
Stormwater Management			
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CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 8</u></b>			
	<b><u>PROVISIONAL SUMS</u></b>			
	All provisional sums cover the supply and installation of materials, equipment, plant, etc, including the commissioning thereof, where applicable.			
	Provisional sums are net and do not include builders discount but the tenderer may allow under profit items any profit he/she considers necessary.			
	The tenderer is referred to Clause 87.1 and 87.2 in the Preliminaries section for the definition and adjustment of general attendance.			
	<b><u>NB ALL PROVISIONAL WORKS ARE SUBJECT TO BE RE-MEASUREMENTS. THE PROVISIONAL WORK SHALL BE PAID AS PER WORK DONE</u></b>			
	<b><u>PREFABRICATED STEEL TANK</u></b>			
	The following work to be carried out by the specialist through Direct Contract appointed by the Client.			
1	Allow the Provisional Amount of R 460 700.00 (Four Hundred and Sixty Thousand and Seven Hundred Rand) for supply and installation of prefabricated steel tank by Specialist appointed by Client through Direct Contract.	Item		
2	Allow for giving every facility to Specialist as described above at maximum of 2.5% ( Two and Half Percent).	Item		
	<b><u>REIMBURSEMENT OF OUTSTANDING WAGES, RENTALS, STORAGE AND ETC</u></b>			
	The following reimbursement of outstanding wages, rentals, storages and etc from terminated contractor.			
	<b>Carried Forward</b>		R	
	Section No. 8 PROVISIONAL SUMS Bill No. 1 PROVISIONAL SUMS <b>PREPARED BY: NYELETI CONSULTING (PTY) LTD</b>			



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CONSTRUCTION OF WATER AND SANITATION INFRASTRUCTURE  
COMPLETION OF DAVID MUTSHINYALO SECONDARY SCHOOL

Section No	FINAL SUMMARY	Page No	Amount
1	PRELIMNARIES AND GENERALS	43	
2	RENOVATIONS	58	
3	Type SM3+3UR	80	
4	Type SFD4	103	
5	Type M4+8UR	124	
6	Type F8 and FD4	146	
7	EXTERNALWORKS	175	
8	PROVISIONAL SUMS	177	
SUB-TOTAL (A)			R
Allow the sum of 10% (ten percent) of the above sub-total for Contingencies to be spent as the Principal Agent may direct and to be deducted in whole or in part if not required.			R
SUB-TOTAL (B)			R
Add: Value added Tax @ 15%			R
SUB-TOTAL INCLUDING VAT			R
			R
Carried to Form of Tender			
PREPARED BY: NYELETI CONSULTING (PTY) LTD			