

REQUEST FOR BID

WP11339

APPOINTMENT OF A PROFESSIONAL SERVICE PROVIDER FOR A FEASIBILITY BRIDGING STUDY FOR BREEDE-BERG (MICHELL'S PASS) WATER TRANSFER SCHEME

ISSUE DATE:

02 OCTOBER 2020

CLOSING DATE AND TIME
3 NOVEMBER 2020 at 11H00

SUBMIT TENDER DOCUMENT

POSTAL ADDRESS: DIRECTOR-GENERAL: WATER AND SANITATION PRIVATE BAG X 313 PRETORIA, 0001 OR

TO BE DEPOSITED IN:
THE TENDER BOX AT THE
ENTRANCE OF ZWAMADAKA
BUILDING 157 FRANCIS BAARD STREET
(FORMERLY SCHOEMAN STREET)
PRETORIA

PART A INVITATION TO BID

YOU ARE HEREBY II	NVIT	ED TO BID FOR	REQUIREMENTS OF TH	E (NAME	OF DE	PARTMENT/PUB	BLIC EN	TITY)	11100
BID NUMBER:	WP	11339	CLOSING DATE:		3 NOV	EMBER 2020		OSING TIME:	11:00
	APF BEF	POINTMENT OF A RG (MICHELL'S P	A PROFESSIONAL SERV PASS) WATER TRANSFE	R SCHE	ME ME	FOR A FEASIBIL	II Y BKII	JGING STUDY	FOR BREEDE-
DESCRIPTION	TIMI	ENTS MAY RE DI	EPOSITED IN THE BID E	OX SITE	JATED /	AT (STREET ADD	RESS)		
TENDER BOX AT	ZW	AMADAKA BU	ILDING, 157 FRANC	IS BAA	RD ST	REET (FORME	RLY S	CHOEMAN :	STREET)
PRETORIA, 0002									
BIDDING PROCEDU	RE E	NQUIRIES MAY I	BE DIRECTED TO	TECH	NICAL E	NQUIRIES MAY I	BE DIRE	CTED TO:	Marie Marie
CONTACT PERSON		Zelda Phiri		CONT	ACT PE	RSON		Mr AJ	
TELEPHONE NUMBE	R	012 336 7954		TELEP	HONE I	NUMBER		082 88	4 5540
FACSIMILE NUMBER	}	N/A		FACSI	MILE N	JMBER		N/A	
E-MAIL ADDRESS		phiriz@dws.gov.	za	E-MAII	L ADDRI	ESS		moore	t@dws.gov.za
SUPPLIER INFORMA	ATIO	N				1 2 2 2 2 2			
NAME OF BIDDER									
POSTAL ADDRESS									
STREET ADDRESS									
TELEPHONE NUMBE	R	CODE			NUMB	ER			
CELLPHONE NUMBE	R								
FACSIMILE NUMBER	}	CODE			NUMB	ER			
E-MAIL ADDRESS									
VAT REGISTRATION	NC					T			
SUPPLIER		TAX COMPLIANCE				CENTRAL SUPPLIER			
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B-BBEE STATUS LEVEL VERIFICATIO	N	TICK AP	PLICABLE BOX	AFFID.		OO LLVLL OWON		[110117.11	
CERTIFICATE		Пу						☐ Yes	□No
		☐ Yes	☐ No						
[A B-BBEE STATU	S LI	EVEL VERIFICA	ATION CERTIFICATE/ NCE POINTS FOR B-B	SWORN REFI	I AFFID	AVIT (FOR EMI	ES & Q	SEs) MUST B	E SUBMITTED IN
ARE YOU THE		OK FALI EKEN	IOL I ONVIOLOR DE						
ACCREDITED				ARE Y	OU A F	OREIGN BASED			
REPRESENTATIVE II SOUTH AFRICA FOR		□Yes	□No	SUPPL	JER FO	R THE GOODS		□Yes	□No
THE GOODS	`	□169		/SERV	ICES /M	ORKS OFFERED)?	<u> </u>	
/SERVICES/WORKS OFFERED?	•	[IF YES ENCLO	SE PROOF]					[IF YES, ANS	WER PART B:3]
QUESTIONNAIRE TO	BIE	DING FOREIGN	SUPPLIERS		9,17		- 11,15		
	_		UBLIC OF SOUTH AFRIC	CA (RSA)?			Y	ES NO
DOES THE ENTITY H				•	,			□ Y	ES NO
			ESTABLISHMENT IN TH	IE RSA?					ES NO
			OF INCOME IN THE RSA					□ Y	ES NO
IS THE ENTITY LIABI	LE IN	THE RSA FOR	ANY FORM OF TAXATIO	N?		==·			ES NO
IE THE ANGWED IS	"NO	" TO ALL OF TH	E ABOVE, THEN IT IS N FRICAN REVENUE SER	IOT A RI	EQUIRE ARS) AN	MENT TO REGIS ID IF NOT REGIS	TER AS	PER 2.3 BELO	W.

PART B TERMS AND CONDITIONS FOR BIDDING

1. BID SUBMISSION:

- 1.1. BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.
- 1.2. ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED-(NOT TO BE RE-TYPED) OR IN THE MANNER PRESCRIBED IN THE BID DOCUMENT.
- 1.3. THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT, 2000 AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2017, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.
- 1.4. THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (SBD7).

2. TAX COMPLIANCE REQUIREMENTS

- 2.1 BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.
- 2.2 BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VERIFY THE TAXPAYER'S PROFILE AND TAX STATUS.
- 2.3 APPLICATION FOR TAX COMPLIANCE STATUS (TCS) PIN MAY BE MADE VIA E-FILING THROUGH THE SARS WEBSITE WWW.SARS.GOV.ZA.
- 2.4 BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.
- 2.5 IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED, EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.
- 2.6 WHERE NO TCS IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.
- 2.7 NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE, COMPANIES WITH DIRECTORS WHO ARE PERSONS IN THE SERVICE OF THE STATE, OR CLOSE CORPORATIONS WITH MEMBERS PERSONS IN THE SERVICE OF THE STATE."

NB: FAILURE TO PROVIDE / OR COMPLY WITH ANY OF THE ABOVE PA	ARTICULARS MAY RENDER THE BID INVALID
SIGNATURE OF BIDDER:	202000000000000000000000000000000000000
CAPACITY UNDER WHICH THIS BID IS SIGNED: (Proof of authority must be submitted e.g. company resolution)	
DATE:	
riannamento granto de la competitación de la c	

PRICING SCHEDULE

APPOINTMENT OF A PROFESSIONAL SERVICE PROVIDER FOR A FEASIBILITY BRIDGING STUDY FOR BREEDE-BERG (MICHELL'S PASS) WATER TRANSFER SCHEME

NAME OF E	BIDE	DER:		PROJECT NO:WP11339
CLOSING T	IME	E: 11:00 AM		CLOSING DATE: 3 NOVEMBER 2020
OFFER TO	BE	VALID FOR 120 DAYS FROM THE	CLOSING DATE OF E	BID.
ITEM DESC	RIF	PTION BID PRICE IN RSA CURREN	CY (ALL APPLICA	BLE TAXES INCLUDED)
	1.	The accompanying information mus Of proposals.	t be used for the formu	ulation
	2.	Bidders are required to indicate a ce Estimated time for completion of all Expenses inclusive of all applicable	phases and including	ne total all
	R			
	3.	PERSONS WHO WILL BE INVOLV RATES APPLICABLE (CERTIFIED RENDERED IN TERMS HEREOF)		AND
	4.	PERSON AND POSITION	HOURLY RATE	DAILY RATE
			R	R
			R	R
			R	R
	5.	PHASES ACCORDING TO WHICH COMPLETED, COST PER PHASE SPENT		
				days
				days
		D		davs

5.1 Travel expenses (specify, for example rate/km and total km, class Of air travel, etc). Only actual costs are recoverable. Proof of the Expenses incurred must accompany certified invoices.

	DESCRIPTION OF EXPENSE TO BE INCURRED AMOUNT	RATE	QUANTITY
		R	
		R	***************************************
		R	
	TOTAL: R		
"all ap ins	oplicable taxes" includes value- added tax, pay as your urance fund contributions and skills development levies.	ou earn, income	tax, unemployment
5	2 Other expenses, for example accommodation (specify, estar hotel, bed and breakfast, telephone cost, reproductivetc.). On basis of these particulars, certified invoices will for correctness. Proof of the expenses must accompany	on cost, I be checked	
	DESCRIPTION OF EXPENSE TO BE INCURRED	RATE	QUANTITY
		R	
***		R	
W.,	±:	R	
	TOTAL: R		
6.	Period required for commencement with project after Acceptance of bid		
7. 	Estimated man-days for completion of project		
	Are the rates quoted firm for the full period of contract? 'ES/NO		
9.	If not firm for the full period, provide details of the basis of Adjustments will be applied for, for ex	on which ample consun	ner price index.
•••			

Any enquiries regarding bidding procedures may be directed to :

Department of Water and Sanitation

Contact Person: Zelda Phiri / Patrick Mabasa

Tel: 012 336 7954 / 012 336 7518

E-mail address: phiriz@dws.gov.za / mabasap@dws.gov.za

Any enquiries regarding technical information may be directed to:

Department of Water and Sanitation

Contact Person: Mr AJ Moore

Tel: 012 336 8528

Cell: 082 884 5540

E-mail address:mooret@dws.gov.za

DECLARATION OF INTEREST

1. Any legal person, including persons employed by the state¹, or persons having a kinship with persons employed by the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid (includes an advertised competitive bid, a limited bid, a proposal or written price quotation). In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons employed by the state, or to persons connected with or related to them, it is required that the bidder or his/her authorised representative declare his/her position in relation to the evaluating/adjudicating authority where-

- the bidder is employed by the state; and/or the legal person on whose behalf the bidding document is signed, has a relationship with persons/a

person who are/is involved in the evaluation and or adjudication of the bid(s), or where it is known that such a relationship exists between the person or persons for or on whose behalf the declarant acts and persons who are involved with the evaluation and or adjudication of the bid.

2.	In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.
2.1	Full Name of bidder or his or her representative:
2.2	Identity Number:
2.3	Position occupied in the Company (director, trustee, shareholder², member):
2.4	Registration number of company, enterprise, close corporation, partnership agreement or trust:
2.5	Tax Reference Number:
2.6	VAT Registration Number:
2.6.1	The names of all directors / trustees / shareholders / members, their individual identity numbers, tax reference numbers and, if applicable, employee / PERSAL numbers must be indicated in paragraph 3
	below.
1"State" m	eans – (a) any national or provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No. 1 of 1999); (b) any municipality or municipal entity; (c) provincial legislature; (d) national Assembly or the national Council of provinces; or (e) Parliament.
²*Shareho	Ider" means a person who owns shares in the company and is actively involved in the management of the enterprise or business and exercises control ove the enterprise.
2.7	Are you or any person connected with the bidder yes / NO presently employed by the state?
2.7.1	If so, furnish the following particulars: Name of person / director / trustee / shareholder/ member: Name of state institution at which you or the person
	Connected to the bidder is employed:
	Position occupied in the state institution:

	ther particulars:	
2.7.2 the ap	If you are presently employed by the state, did you obtain oppropriate authority to undertake remunerative outside employment in the public sector?	YES / NO
2.7.2. Docui	If yes, did you attach proof of such authority to the bid ment?	YES/NO
	: Failure to submit proof of such authority, where able, may result in the disqualification of the bid.	
2.7.2.	2 If no, furnish reasons for non-submission of such proof:	
	Did you or your spouse, or any of the company's directors /	YES / NO
2.0	Trustees / shareholders / members or their spouses conduct Business with the state in the previous twelve months?	
	If so, furnish particulars:	
2.9	Do you, or any person connected with the bidder, have any relationship (family, friend, other) with a person employed by the state and who may be involved with the evaluation and or adjudication of this bid? 2.9.1If so, furnish particulars.	YES / NO
2.10	Are you, or any person connected with the bidder, aware of any relationship (family, friend, other) between any other bidder and any person employed by the state who may be involved with the evaluation and or adjudication of this bid? If so, furnish particulars.	YES/NO
2.11	Do you or any of the directors / trustees / shareholders / members of the company have any interest in any other related companies whether or not they are bidding for this contract?	YES/NO
2.11.	1 If so, furnish particulars:	

Full Name	Identity Number	Personal Income Tax Reference Number	Employee Number / Persal Number

4	DECLARATION	
I, TH	E UNDERSIGNED (NAME)	
CER'		NISHED IN PARAGRAPHS 2 and 3 ABOVE IS CORRECT. I E MAY REJECT THE BID OR ACT AGAINST ME N PROVE TO BE FALSE.
	Signature	Date
	Position	Name of bidder

PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2017

This preference form must form part of all bids invited. It contains general information and serves as a claim form for preference points for Broad-Based Black Economic Empowerment (B-BBEE) Status Level of Contribution

NB: BEFORE COMPLETING THIS FORM, BIDDERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF B-BBEE, AS PRESCRIBED IN THE PREFERENTIAL PROCUREMENTREGULATIONS, 2017.

1. GENERAL CONDITIONS

- 1.1 The following preference point systems are applicable to all bids:
 - the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included)
 - a) The value of this bid is estimated to not exceed R50 000 000 (all applicable taxes included) and therefore the 80/20 preference point system shall be applicable.
- 1.2 Points for this bid shall be awarded for:
 - (a) Price; and
 - (b) B-BBEE Status Level of Contributor.
- 1.3 The maximum points for this bid are allocated as follows:

	POINTS
PRICE	80
B-BBEE STATUS LEVEL OF CONTRIBUTOR	20
Total points for Price and B-BBEE must not exceed	100

- 1.4 Failure on the part of a bidder to submit proof of B-BBEE Status level of contributor together with the bid, will be interpreted to mean that preference points for B-BBEE status level of contribution are not claimed.
- 1.5 The purchaser reserves the right to require of a bidder, either before a bid is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the purchaser.

2. **DEFINITIONS**

- (a) "B-BBEE" means broad-based black economic empowerment as defined in section 1 of the Broad-Based Black Economic Empowerment Act;
- (b) "B-BBEE status level of contributor" means the B-BBEE status of an entity in terms of a code of good practice on black economic empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act;
- (c) "bid" means a written offer in a prescribed or stipulated form in response to an invitation by an organ of state for the provision of goods or services, through price quotations, advertised competitive bidding processes or proposals;
- (d) "Broad-Based Black Economic Empowerment Act" means the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);
- (e) "EME" means an Exempted Micro Enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act;
- (f) "Functionality" means the ability of a tenderer to provide goods or services in accordance with specifications as set out in the tender documents.
- (g) "prices" includes all applicable taxes less all unconditional discounts;
- (h) "proof of B-BBEE status level of contributor "means:
 - 1) B-BBEE Status level certificate issued by an authorized body or person;
 - 2) A sworn affidavit as prescribed by the B-BBEE Codes of Good Practice;
 - 3) Any other requirement prescribed in terms of the B-BBEE Act;
- "QSE" means a qualifying small business enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act;
- (j) "rand value" means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;

3. POINTS AWARDED FOR PRICE

3.1 THE 80/20 OR 90/10 PREFERENCE POINT SYSTEMS

A maximum of 80 or 90 points is allocated for price on the following basis: 80/20 or 90/10

$$Ps = 80\left(1 - \frac{Pt - P\min}{P\min}\right)$$
 or $Ps = 90\left(1 - \frac{Pt - P\min}{P\min}\right)$

Where

Ps = Points scored for price of bid under consideration

Pt = Price of bid under consideration

Pmin = Price of lowest acceptable bid

4. POINTS AWARDED FOR B-BBEE STATUS LEVEL OF CONTRIBUTOR

4.1 In terms of Regulation 6 (2) and 7 (2) of the Preferential Procurement Regulations, preference points must be awarded to a bidder for attaining the B-BBEE status level of contribution in accordance with the table below:

B-BBEE Status Level of Contributor	Number of points (90/10 system)	Number of points (80/20 system)
1	10	20
2	9	18
3	6	14
4	5	12
5	4	8
6	3	6
7	2	4
8	1	2
Non-compliant contributor	0	0

5. BID DECLARATION	5.	BID	DECL	ARA1	FION
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5.1 Bidders who claim points in respect of B-BBEE Status Level of Contribution must complete the following:

6.	B-BBEE STATUS LEVEL OF CONTRIBUTOR CLAIMED IN TERMS OF PARAGRAPHS
	1.4 AND 4.1

B-BBEE Status Level of Contributor:	*	=	(maximum of 10 or 20 points)
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(Points claimed in respect of paragraph 7.1 must be in accordance with the table reflected in paragraph 4.1 and must be substantiated by relevant proof of B-BBEE status level of contributor.

7. SUB-CONTRACTING

7.1 Will any portion of the contract be sub-contracted?

(Tick applicable box)

YES	NO	

7.1.1	If yes	1100	LICOTA:
/ / /	11 VES	BILLED	IILaic.
	,	,	

- i) What percentage of the contract will be subcontracted.....%
- ii) The name of the sub-contractor.....
- iii) The B-BBEE status level of the sub-contractor.....
- iv) Whether the sub-contractor is an EME or QSE

(Tick applicable box)
YES NO

v) Specify,by ticking the appropriate box, if subcontracting with an enterprise in terms of Preferential Procurement Regulations, 2017:

Designated Group: An EME or QSE which is at last 51% owned by:	EME	QSE
Black people	`	
Black people who are youth		
Black people who are women		
Black people with disabilities		
Black people living in rural or underdeveloped areas or townships		
Cooperative owned by black people		
Black people who are military veterans		
OR		-
Any EME		
Any QSE		

8.	DECLARATION WITH REGARD TO COMPANY/FIRM
8.1	Name of company/firm:
8.2	VAT registration number:
8.3	Company registration number:
8.4	TYPE OF COMPANY/ FIRM
	Partnership/Joint Venture / Consortium One person business/sole propriety Close corporation Company (Pty) Limited [TICK APPLICABLE BOX]
8.5	DESCRIBE PRINCIPAL BUSINESS ACTIVITIES
8.6	COMPANY CLASSIFICATION
	Manufacturer Supplier Professional service provider Other service providers, e.g. transporter, etc. [TICK APPLICABLE BOX]
8.7	Total number of years the company/firm has been in business:
8.8	I/we, the undersigned, who is / are duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the B-BBE status level of contributor indicated in paragraphs1.4 and 6.1 of the foregoing certificate, qualifies the company/ firm for the preference(s) shown and I / we acknowledge that:
	i) The information furnished is true and correct;
	 The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;

to the satisfaction of the purchaser that the claims are correct;

iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs1.4 and 6.1, the contractor may be required to furnish documentary proof

iv) If the B-BBEE status level of contributor has been claimed or obtained on a fraudulent

basis or any of the conditions of contract have not been fulfilled, the purchaser may, in addition to any other remedy it may have –

- (a) disqualify the person from the bidding process;
- (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
- (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
- (d) recommend that the bidder or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted by the National Treasury from obtaining business from any organ of state for a period not exceeding 10 years, after the audialterampartem (hear the other side) rule has been applied; and
- (e) forward the matter for criminal prosecution.

WITNESSES 1		NATURE(S) OF BIDDERS(S)
2	ADDRESS	
	1,122,1200	

DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES

- 1 This Standard Bidding Document must form part of all bids invited.
- It serves as a declaration to be used by institutions in ensuring that when goods and services are being procured, all reasonable steps are taken to combat the abuse of the supply chain management system.
- The bid of any bidder may be disregarded if that bidder, or any of its directors have-
- a. abused the institution's supply chain management system;
- b. committed fraud or any other improper conduct in relation to such system; or
- c. failed to perform on any previous contract.
- In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.

Item	Ouestion	Yes	No
4.1	Is the bidder or any of its directors listed on the National Treasury's Database of Restricted Suppliers as companies or persons prohibited from doing business with the public sector? (Companies or persons who are listed on this Database were informed 'in writing of this restriction by the Accounting Officer/Authority of the institution that imposed the restriction after the audi alteram partem rule was applied). The Database of Restricted Suppliers now resides on the National Treasury's website(www.treasury.gov.za) and can be accessed by clicking on its link at the bottom of the home page.	+	No
4.1.1	If so, furnish particulars:		
4.2	Is the bidder or any of its directors listed on the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004)? The Register for Tender Defaulters can be accessed on the National Treasury's website (www.treasury.gov.za) by clicking on its link at the bottom of the home page.	Yes	No 🗌
4.2.1	If so, furnish particulars:		
4.3	Was the bidder or any of its directors convicted by a court of law (including a court outside of the Republic of South Africa) for fraud or corruption during the past five years?	Yes	No
4.3.1	If so, furnish particulars:		
4.4	Was any contract between the bidder and any organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	Yes	No
4.4.1	If so, furnish particulars:		

CERTIFICATION

I, THE UNDERSIGNED (FULL NAME) CERTIFY THAT THE INFORMATION FORM IS TRUE AND CORRECT.	N FURNISHED ON THIS DECLARATION
I ACCEPT THAT, IN ADDITION TO CA MAY BE TAKEN AGAINST ME SHOU FALSE.	NCELLATION OF A CONTRACT, ACTION ILD THIS DECLARATION PROVE TO BE
Signature	Date
Position	Name of Bidder

CERTIFICATE OF INDEPENDENT BID DETERMINATION

- 1 This Standard Bidding Document (SBD) must form part of all bids¹ invited.
- Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive bidding (or bid rigging).² Collusive bidding is a *pe* se prohibition meaning that it cannot be justified under any grounds.
- Treasury Regulation 16A9 prescribes that accounting officers and accounting authorities must take all reasonable steps to prevent abuse of the supply chain management system and authorizes accounting officers and accounting authorities to:
- a. disregard the bid of any bidder if that bidder, or any of its directors have abused the institution's supply chain management system and or committed fraud or any other improper conduct in relation to such system.
- cancel a contract awarded to a supplier of goods and services if the supplier committed any corrupt or fraudulent act during the bidding process or the execution of that contract.
- This SBD serves as a certificate of declaration that would be used by institutions to ensure that, when bids are considered, reasonable steps are taken to prevent any form of bid-rigging.
- In order to give effect to the above, the attached Certificate of Bid Determination (SBD 9) must be completed and submitted with the bid:

¹ Includes price quotations, advertised competitive bids, limited bids and proposals.

² Bid rigging (or collusive bidding) occurs when businesses, that would otherwise be expected to compete, secretly conspire to raise prices or lower the quality of goods and / or services for purchasers who wish to acquire goods and / or services through a bidding process. Bid rigging is, therefore, an agreement between competitors not to compete.

CERTIFICATE OF INDEPENDENT BID DETERMINATION

I, the undersigned, in submitting the accompanying bid:
(Bid Number and Description)
in response to the invitation for the bid made by:
(Name of Institution)
do hereby make the following statements that I certify to be true and complete in every respect
I certify, on behalf of:that:
(Name of Bidder)

- 1. I have read and I understand the contents of this Certificate;
- I understand that the accompanying bid will be disqualified if this Certificate is found not to be true and complete in every respect;
- 3. I am authorized by the bidder to sign this Certificate, and to submit the accompanying bid, on behalf of the bidder;
- 4. Each person whose signature appears on the accompanying bid has been authorized by the bidder to determine the terms of, and to sign the bid, on behalf of the bidder;
- 5. For the purposes of this Certificate and the accompanying bid, I understand that the word "competitor" shall include any individual or organization, other than the bidder, whether or not affiliated with the bidder, who:
- (a) has been requested to submit a bid in response to this bid invitation;
- (b) could potentially submit a bid in response to this bid invitation, based on their qualifications, abilities or experience; and
- (c) provides the same goods and services as the bidder and/or is in the same line of business as the bidder
- 6. The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However communication between partners in a joint venture or consortium³ will not be construed as collusive bidding.
- 7. In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
- (a) prices;
- (b) geographical area where product or service will be rendered (market allocation)

- (c) methods, factors or formulas used to calculate prices;
- (d) the intention or decision to submit or not to submit, a bid;
- (e) the submission of a bid which does not meet the specifications and conditions of the bid; or
- (f) bidding with the intention not to win the bid.
- 8. In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this bid invitation relates.
- 9. The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.

10. I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

Signature	Date
Position	Name of Bidder

³ Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.

GOVERNMENT PROCUREMENT GENERAL CONDITIONS OF CONTRACT

NOTES

The purpose of this document is to:	
(i) Draw special attention to certain general conditions applicable to government bids, contracts and orders; and	
(ii) To ensure that clients be familiar with regard to the rights and obligations of all parties involved in doing business with government.	
In this document words in the singular also mean in the plural and vice versa and words in the masculine also mean in the feminine and neuter.	
☐ The General Conditions of Contract will form part of all bid documents and may not be amended.	
Special Conditions of Contract (SCC) relevant to a specific bid, should be compile separate for every bid (if (applicable) and will supplement the General Conditions of Contract. Whenever there is a conflict, the provisions in the SCC shall prevail.	ly

TABLE OF CLAUSES

- 1. Definitions
- 2. Application
- 3. General
- 4. Standards
- 5. Use of contract documents and information; inspection
- 6. Patent rights
- 7. Performance security
- 8. Inspections, tests and analysis
- 9. Packing
- 10. Delivery and documents
- 11. Insurance
- 12. Transportation
- 13. Incidental services
- 14. Spare parts
- 15. Warranty
- 16. Payment
- 17. Prices
- 18. Contract amendments
- 19. Assignment
- 20. Subcontracts
- 21. Delays in the supplier's performance
- 22. Penalties
- 23. Termination for default
- 24. Dumping and countervailing duties
- 25. Force Majeure
- 26. Termination for insolvency
- 27. Settlement of disputes
- 28. Limitation of liability
- 29. Governing language
- 30. Applicable law
- 31. Notices
- 32. Taxes and duties
- 33. National Industrial Participation Programme (NIPP)
- 34. Prohibition of restrictive practices

General Conditions of Contract

- Definitions 1. The following terms shall be interpreted as indicated:
- 1.1 "Closing time" means the date and hour specified in the bidding documents for the receipt of bids.
- 1.2 "Contract" means the written agreement entered into between the purchaser and the supplier, as recorded in the contract form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.
- 1.3 "Contract price" means the price payable to the supplier under the contract for the full and proper performance of his contractual obligations.
- 1.4 "Corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value to influence the action of a public official in the procurement process or in contract execution.
- 1.5 "Countervailing duties" are imposed in cases where an enterprise abroad is subsidized by its government and encouraged to market its products internationally.
- "Country of origin" means the place where the goods were mined, grown or produced or from which the services are supplied. Goods are produced when, through manufacturing, processing or substantial and major assembly of components, a commercially recognized new product results that is substantially different in basic characteristics or in purpose or utility from its components.
- 1.7 "Day" means calendar day.
- 1.8 "Delivery" means delivery in compliance of the conditions of the contract or order.
- 1.9 "Delivery ex stock" means immediate delivery directly from stock actually on hand.
- "Delivery into consignees store or to his site" means delivered and unloaded in the specified store or depot or on the specified site in compliance with the conditions of the contract or order, the supplier bearing all risks and charges involved until the supplies are so delivered and a valid receipt is obtained.
- 1.11 "Dumping" occurs when a private enterprise abroad market its goods on own initiative in the RSA at lower prices than that of the country of origin and which have the potential to harm the local industries in the RSA.
- 1.12 "Force majeure" means an event beyond the control of the supplier and not involving the supplier's fault or negligence and not foreseeable. Such events may include, but is not restricted to, acts of the purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.
- 1.13 "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of any bidder, and includes collusive practice among bidders prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the bidder of the benefits of free and open competition.
- 1.14 "GCC" means the General Conditions of Contract.
- 1.15 "Goods" means all of the equipment, machinery, and/or other materials that the supplier is required to supply to the purchaser under the contract.

- 1.16 "Imported content" means that portion of the bidding price represented by the cost of components, parts or materials which have been or are still to be imported (whether by the supplier or his subcontractors) and which costs are inclusive of the costs abroad, plus freight and other direct importation costs such as landing costs, dock dues, import duty, sales duty or other similar tax or duty at the South African place of entry as well as transportation and handling charges to the factory in the Republic where the supplies covered by the bid will be manufactured.
- 1.17 "Local content" means that portion of the bidding price which is not included in the imported content provided that local manufacture does take place.
- 1.18 "Manufacture" means the production of products in a factory using labour, materials, components and machinery and includes other related value-adding activities.
- 1.19 "Order" means an official written order issued for the supply of goods or works or the rendering of a service.
- 1.20 "Project site," where applicable, means the place indicated in bidding documents.
- 1.21 "Purchaser" means the organization purchasing the goods.
- 1.22 "Republic" means the Republic of South Africa.
- 1.23 "SCC" means the Special Conditions of Contract.
- 1.24 "Services" means those functional services ancillary to the supply of the goods, such as transportation and any other incidental services, such as installation, commissioning, provision of technical assistance, training, catering, gardening, security, maintenance and other such obligations of the supplier covered under the contract.
- 1.25 "Written" or "in writing" means handwritten in ink or any form of electronic or mechanical writing.

2. Application.

- 2.1 These general conditions are applicable to all bids, contracts and orders including bids for functional and professional services, sales, hiring, letting and the granting or acquiring of rights, but excluding immovable property, unless otherwise indicated in the bidding documents.
- 2.2 Where applicable, special conditions of contract are also laid down to cover specific supplies, services or works.
- 2.3 Where such special conditions of contract are in conflict with these general conditions, the special conditions shall apply.

3. General

- 3.1 Unless otherwise indicated in the bidding documents, the purchaser shall not be liable for any expense incurred in the preparation and submission of a bid. Where applicable a non-refundable fee for documents may be charged.
- 3.2 With certain exceptions, invitations to bid are only published in the Government Tender Bulletin. The Government Tender Bulletin may be obtained directly from the Government Printer, Private Bag X85, Pretoria 0001, or accessed electronically from www.treasury.gov.za

4. Standards

4.1 The goods supplied shall conform to the standards mentioned in the bidding documents and specifications.

5. Use of contract documents and information; inspection.

- 5.1 The supplier shall not, without the purchaser's prior written consent, disclose the contract, or any provision thereof, or any specification, plan, drawing, pattern, sample, or information furnished by or on behalf of the purchaser in connection therewith, to any person other than a person employed by the supplier in the performance of the contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for purposes of such performance.
- 5.2 The supplier shall not, without the purchaser's prior written consent, make use of any document or information mentioned in GCC clause 5.1 except for purposes of performing the contract.
- Any document, other than the contract itself mentioned in GCC clause 5.1 shall remain the property of the purchaser and shall be returned (all copies) to the purchaser on completion of the supplier's performance under the contract if so required by the purchaser.
- 5.4 The supplier shall permit the purchaser to inspect the supplier's records relating to the performance of the supplier and to have them audited by auditors appointed by the purchaser, if so required by the purchaser.

6. Patent rights.

6.1 The supplier shall indemnify the purchaser against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the goods or any part thereof by the purchaser.

7. Performance security

- 7.1 Within thirty (30) days of receipt of the notification of contract award, the successful bidder shall furnish to the purchaser the performance security of the amount specified in SCC.
- 7.2 The proceeds of the performance security shall be payable to the purchaser as compensation for any loss resulting from the supplier's failure to complete his obligations under the contract.
- 7.3 The performance security shall be denominated in the currency of the contract or in a freely convertible currency acceptable to the purchaser and shall be in one of the following forms:
- (a) A bank guarantee or an irrevocable letter of credit issued by a reputable bank located in the purchaser's country or abroad, acceptable to the purchaser, in the form provided in the bidding documents or another form acceptable to the purchaser; or
- (b) A cashier's or certified cheque
- 7.4 The performance security will be discharged by the purchaser and returned to the supplier not later than thirty (30) days following the date of completion of the supplier's performance obligations under the contract, including any warranty obligations, unless otherwise specified in SCC.

8. Inspections, tests and analyses

- 8.1 All pre-bidding testing will be for the account of the bidder 8.2 If it is a bid condition that supplies to be produced or services to be rendered should at any stage during production or execution or on completion be subject to inspection, the premises of the bidder or contractor shall be open, at all reasonable hours, for inspection by a representative of the Department or organization acting on behalf of the Department.
- 8.2 If it is a bid condition that supplies to be produced or services to be rendered should at any stage during production or execution or on completion be subject to inspection, the premises of the bidder or contractor shall be open, at all reasonable hours, for inspection by a representative of the Department or an organization acting on behalf of the Department
- 8.3 If there are no inspection requirements indicated in the bidding documents and no mention is made in the contract, but during the contract period it is decided that inspections shall be carried out, the purchaser shall itself make the necessary arrangements, including payment arrangements with the testing authority concerned.
- 8.4 If the inspections, tests and analyses referred to in clauses 8.2 and 8.3 show the supplies to be in accordance with the contract requirements, the cost of the inspections, tests and analyses shall be defrayed by the purchaser.
- Where the supplies or services referred to in clauses 8.2 and 8.3 do not comply with the contract requirements, irrespective of whether such supplies or services are accepted or not, the cost in connection with these inspections, tests or analyses shall be defrayed by the supplier.
- 8.6 Supplies and services which are referred to in clauses 8.2 and 8.3 and which do not comply with the contract requirements may be rejected.
- 8.7 Any contract supplies may on or after delivery be inspected, tested or 8 analyzed and may be rejected if found not to comply with the requirements of the contract. Such rejected supplies shall be held at the cost and risk of the supplier who shall, when called upon, remove them immediately at his own cost and forthwith substitute them with supplies which do comply with the requirements of the contract .Failing such removal the rejected supplies shall be returned at the suppliers cost and risk. Should the supplier fail to provide the substitute supplies forthwith, the purchaser may, without giving the supplier further opportunity to substitute the rejected supplies, purchase such supplies as may be necessary at the expense of the supplier.
- 8.8 The provisions of clauses 8.4 to 8.7 shall not prejudice the right of the purchaser to cancel the contract on account of a breach of the conditions thereof, or to act in terms of Clause 23 of GCC.

9. Packing

- 9.1 The supplier shall provide such packing of the goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packing, case size and weights shall take into consideration, where appropriate, the remoteness of the goods' final destination and the absence of heavy handling facilities at all points in transit.
- 9.2 The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the contract,

including additional requirements, if any, specified in SCC, and in any subsequent instructions ordered by the purchaser.

10. Delivery and documents

- 10.1 Delivery of the goods shall be made by the supplier in accordance with the terms specified in the contract. The details of shipping and/or other documents to be furnished by the supplier are specified in SCC.
- 10.2 Documents to be submitted by the supplier are specified in SCC.

11. Insurance

11.1 The goods supplied under the contract shall be fully insured in a freely convertible currency against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the manner specified in the SCC.

12. Transportation

12.1 Should a price other than an all-inclusive delivered price be required, this shall be specified in the SCC.

13. Incidental services

- 13.1 The supplier may be required to provide any or all of the following services, including additional services, if any, specified in SCC:
- (a) Performance or supervision of on-site assembly and/or commissioning of the supplied goods;
- (b) Furnishing of tools required for assembly and/or maintenance of the supplied goods;
- (c) Furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied goods;
- (d) Performance or supervision or maintenance and/or repair of the supplied goods, for a period of time agreed by the parties, provided that this service shall not relieve the supplier of any warranty obligations under this contract; and
- (e) Training of the purchaser's personnel, at the supplier's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied goods.
- 13.2 Prices charged by the supplier for incidental services, if not included in the contract price for the goods, shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the supplier for similar services.

14. Spare parts

- 14.1 As specified in SCC, the supplier may be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the supplier:
- (a) Such spare parts as the purchaser may elect to purchase from the supplier, provided that this election shall not relieve the supplier of any warranty obligations under the contract; and
- (b) In the event of termination of production of the spare parts:

- (i) Advance notification to the purchaser of the pending termination, in sufficient time to permit the purchaser to procure needed requirements; and
- (ii) Following such termination, furnishing at no cost to the purchaser, the blueprints, drawings, and specifications of the spare parts, if requested.

15. Warranty

- The supplier warrants that the goods supplied under the contract are new, unused, of the most recent or current models, and that they incorporate all recent improvements in design and materials unless provided otherwise in the contract. The supplier further warrants that all goods supplied under this contract shall have no defect, arising from design, materials, or workmanship (except when the design and/or material is required by the purchaser's specifications) or from any act or omission of the supplier, that may develop under normal use of the supplied goods in the conditions prevailing in the country of final destination.
- This warranty shall remain valid for twelve (12) months after the goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the contract, or for eighteen (18) months after the date of shipment from the port or place of loading in the source country, whichever period concludes earlier, unless specified otherwise in SCC.
- 15.3 The purchaser shall promptly notify the supplier in writing of any claims arising under this warranty.
- 15.4 Upon receipt of such notice, the supplier shall, within the period specified in SCC and with all reasonable speed, repair or replace the defective goods or parts thereof, without costs to the purchaser.
- 15.5 If the supplier, having been notified, fails to remedy the defect(s) within the period specified in SCC, the purchaser may proceed to take such remedial action as may be necessary, at the supplier's risk and expense and without prejudice to any other rights which the purchaser may have against the supplier under the contract.

16. Payment

- 16.1 The method and conditions of payment to be made to the supplier under this contract shall be specified in SCC.
- 16.2 The supplier shall furnish the purchaser with an invoice accompanied by a copy of the delivery note and upon fulfilment of other obligations stipulated in the contract.
- 16.3 Payments shall be made promptly by the purchaser, but in no case later than thirty (30) days after submission of an invoice or claim by the supplier.
- 16.4 Payment will be made in Rand unless otherwise stipulated in SCC.

17. Prices

17.1 Prices charged by the supplier for goods delivered and services performed under the contract shall not vary from the prices quoted by the supplier in his bid, with the exception of any price adjustments authorized in SCC or in the purchaser's request for bid validity extension, as the case may be.

18. Contract amendments

18.1 No variation in or modification of the terms of the contract shall be made except by written amendment signed by the parties concerned.

19. Assignment

19.1 The supplier shall not assign, in whole or in part, its obligations to perform under the contract, except with the purchaser's prior written consent.

20. Subcontracts

20.1 The supplier shall notify the purchaser in writing of all subcontracts awarded under this contracts if not already specified in the bid. Such notification, in the original bid or later, shall not relieve the supplier from any liability or obligation under the contract.

21. Delays in the supplier's performance

- 21.1 Delivery of the goods and performance of services shall be made by the supplier in accordance with the time schedule prescribed by the purchaser in the contract.
- 21.2 If at any time during performance of the contract, the supplier or its subcontractor(s) should encounter conditions impeding timely delivery of the goods and performance of services, the supplier shall promptly notify the purchaser in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the supplier's notice, the purchaser shall evaluate the situation and may at his discretion extend the supplier's time for performance, with or without the imposition of penalties, in which case the extension shall be ratified by the parties by amendment of contract.
- 21.3 No provision in a contract shall be deemed to prohibit the obtaining of supplies or services from a national department, provincial department, or a local authority.
- 21.4 The right is reserved to procure outside of the contract small quantities or to have minor essential services executed if an emergency arises, the supplier's point of supply is not situated at or near the place where the supplies are required, or the supplier's services are not readily available.
- 21.5 Except as provided under GCC Clause 25, a delay by the supplier in the performance of its delivery obligations shall render the supplier liable to the imposition of penalties, pursuant to GCC Clause 22, unless an extension of time is agreed upon pursuant to GCC Clause 21.2 without the application of penalties.
- Upon any delay beyond the delivery period in the case of a supplies contract, the purchaser shall, without cancelling the contract, be entitled to purchase supplies of a similar quality and up to the same quantity in substitution of the goods not supplied in conformity with the contract and to return any goods delivered later at the supplier's expense and risk, or to cancel the contract and buy such goods as may be required to complete the contract and without prejudice to his other rights, be entitled to claim damages from the supplier.

22. Penalties

22.1 Subject to GCC Clause 25, if the supplier fails to deliver any or all of the goods or to perform the services within the period(s) specified in the contract, the purchaser shall, without prejudice to its other remedies under the contract, deduct from the contract price, as a penalty, a sum calculated on the delivered price of the delayed goods or unperformed

services using the current prime interest rate calculated for each day of the delay until actual delivery or performance. The purchaser may also consider termination of the contract pursuant to GCC Clause 23.

23. Termination for default

- 23.1 The purchaser, without prejudice to any other remedy for breach of contract, by written notice of default sent to the supplier, may terminate this contract in whole or in part:
- (a) If the supplier fails to deliver any or all of the goods within the period(s) specified in the contract, or within any extension thereof granted by the purchaser pursuant to GCC Clause 21.2;
- (b) If the Supplier fails to perform any other obligation(s) under the contract; or
- (c) If the supplier, in the judgment of the purchaser, has engaged in corrupt or fraudulent practices in competing for or in executing the contract.
- 23.2 In the event the purchaser terminates the contract in whole or in part, the purchaser may procure, upon such terms deems appropriate, goods, works or services similar to those undelivered, and the supplier shall be liable to the purchaser for any excess costs for such similar goods, works or services. However, the supplier shall continue performance of the contract to the extent not terminated.
- 23.3 Where the purchaser terminates the contract in whole or in part, the purchaser may decide to impose a restriction penalty on the supplier by prohibiting such supplier from doing business with the public sector for a period not exceeding 10 years.
- 23.4 If a purchaser intends imposing a restriction on a supplier or any person associated with the supplier, the supplier will be allowed a time period of not more than fourteen (14) days to provide reasons why the envisaged restriction should not be imposed. Should the supplier fail to respond within the stipulated fourteen (14) days the purchaser may regard the intended penalty as not objected against and may impose it on the supplier.
- 23.5 Any restriction imposed on any person by the Accounting Officer / Authority will, at the discretion of the Accounting Officer / Authority, also be applicable to any other enterprise or any partner, manager, director or other person who wholly or partly exercises or exercised or may exercise control over the enterprise of the first-mentioned person, and with which enterprise or person the first-mentioned person, is or was in the opinion of the Accounting Officer / Authority actively associated.
- 23.6 If a restriction is imposed, the purchaser must, within five (5) working days of such imposition, furnish the National Treasury, with the following information:
 - (i) The name and address of the supplier and / or person restricted by the purchaser;
 - (ii) The date of commencement of the restriction
 - (iii) The period of restriction; and
 - (iv) The reasons for the restriction.

These details will be loaded in the National Treasury's central database of suppliers or persons prohibited from doing business with the public sector.

23.7 If a court of law convicts a person of an offence as contemplated in sections 12 or 13 of the Prevention and Combating of Corrupt Activities Act, No. 12 of 2004, the court may also rule that such person's name be endorsed on the Register for Tender Defaulters. When a person's name has been endorsed on the Register, the person will be prohibited from doing business with the public sector for a period not less than five years and not more than 10 years. The National Treasury is empowered to determine the period of restriction and each

case will be dealt with on its own merits. According to section 32 of the Act the Register must be open to the public. The Register can be perused on the National Treasury website.

24. Anti-dumping and countervailing duties and rights

When, after the date of bid, provisional payments are required, or antidumping or countervailing duties are imposed, or the amount of a provisional payment or anti-dumping or countervailing right is increased in respect of any dumped or subsidized import, the State is not liable for any amount so required or imposed, or for the amount of any such increase. When, after the said date, such a provisional payment is no longer required or any such anti-dumping or countervailing right is abolished, or where the amount of such provisional payment or any such right is reduced, any such favourable difference shall on demand be paid forthwith by the contractor to the State or the State may deduct such amounts from moneys (if any) which may otherwise be due to the contractor in regard to supplies or services which he delivered or rendered, or is to deliver or render in terms of the contract or any other contract or any other amount which may be due to him.

25. Force Majeure

- 25.1 Notwithstanding the provisions of GCC Clauses 22 and 23, the supplier shall not be liable for forfeiture of its performance security, damages, or termination for default if and to the extent that his delay in performance or other failure to perform his obligations under the contract is the result of an event of force majeure.
- 25.2 If a force majeure situation arises, the supplier shall promptly notify the purchaser in writing of such condition and the cause thereof. Unless otherwise directed by the purchaser in writing, the supplier shall continue to perform its obligations under the contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the force majeure event.

26. Termination for insolvency

26.1 The purchaser may at any time terminate the contract by giving written notice to the supplier if the supplier becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the supplier, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the purchaser.

27. Settlement of Disputes

- 27.1 If any dispute or difference of any kind whatsoever arises between the purchaser and the supplier in connection with or arising out of the contract, the parties shall make every effort to resolve amicably such dispute or difference by mutual consultation.
- 27.2 If, after thirty (30) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the purchaser or the supplier may give notice to the other party of his intention to commence with mediation. No mediation in respect of this matter may be commenced unless such notice is given to the other party.
- 27.3 Should it not be possible to settle a dispute by means of mediation, it may be settled in a South African court of law.
- 27.4 Mediation proceedings shall be conducted in accordance with the rules of procedure specified in the SCC.

- 27.5 Notwithstanding any reference to mediation and/or court proceedings herein,
- (a) The parties shall continue to perform their respective obligations under the contract unless they otherwise agree; and
- (b) The purchaser shall pay the supplier any monies due the supplier.

28. Limitation of liability

- 28.1 Except in cases of criminal negligence or wilful misconduct, and in the case of infringement pursuant to Clause 6;
- (a) The supplier shall not be liable to the purchaser, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the supplier to pay penalties and/or damages to the purchaser; and
- (b) The aggregate liability of the supplier to the purchaser, whether under the contract, in tort or otherwise, shall not exceed the total contract price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment.

29. Governing language

29.1 The contract shall be written in English. All correspondence and other documents pertaining to the contract that exchanged by the parties shall also be written in English.

30. Applicable law

30.1 The contract shall be interpreted in accordance with South African laws, unless otherwise specified in SCC.

31. Notices

- 31.1 Every written acceptance of a bid shall be posted to the supplier concerned by registered or certified mail and any other notice to him shall be posted by ordinary mail to the address furnished in his bid or to the address notified later by him in writing and such posting shall be deemed to be proper service of such notice.
- 31.2 The time mentioned in the contract documents for performing any act after such aforesaid notice has been given, shall be reckoned from the date of posting of such notice.

32. Taxes and duties

- 32.1 A foreign supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside the purchaser's country.
- 32.2 A local supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted goods to the purchaser.
- 32.3 No contract shall be concluded with any bidder whose tax matters are not in order. Prior to the award of a bid the Department must be in possession of a tax clearance certificate, submitted by the bidder. This certificate must be an original issued by the South African Revenue Services.

33. National Industrial Participation (NIP) Programme

33.1 The NIP Programme administered by the Department of Trade and Industry shall be applicable to all contracts that are subject to the NIP obligation

34. Prohibition of Restrictive practices

- In terms of section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, an agreement between, or concerted practice by, firms, or a decision by an association of firms, is prohibited if it is between parties in a horizontal relationship and if a bidder (s) is / are or a contractor(s) was / were involved in collusive bidding (or bid rigging).
- 34.2 If a bidder(s) or contractor(s), based on reasonable grounds or evidence obtained by the purchaser, has / have engaged in the restrictive practice referred to above, the purchaser may refer the matter to the Competition Commission for investigation and possible imposition of administrative penalties as contemplated in the Competition Act No. 89 of 1998.
- 34.3 If a bidder(s) or contractor(s), has / have been found guilty by the Competition Commission of the restrictive practice referred to above, the purchaser may, in addition and without prejudice to any other remedy provided for, invalidate the bid(s) for such item(s) offered, and / or terminate the contract in whole or part, and / or restrict the bidder(s) or contractor(s) from conducting business with the public sector for a period not exceeding ten (10) years and / or claim damages from the bidder(s) or contractor(s) concerned.

 Js GCC (revised July 2010)

35. SPECIAL CONDITIONS OF CONTRACT

- 35.1 The State reserves the right to verify and authenticate all the information supplied in this document by the bidder.
- 35.2 The Bid must be strictly in accordance with the conditions and specifications contained herein.
- 35.3 If it is found that any information has been tampered with during the evaluation process and/or after the Bid/Contract has been awarded that any false information has been provided, the State reserves the right to take the necessary action as it deems fit, including but not limited to the institution of criminal proceedings.
- Failure to sign all relevant places shall invalidate your bid (SBD1, SBD 3.1, SBD 4, SBD 6.1 or 6.2, SBD 8, SBD 9 and SCC)
- 35.5 All queries should be sent to the relevant person via email state above. No query will be responded to if sent 3 days before the closing date.
- 35.6 If you are not a registered supplier with the Department of Water and Sanitation, please complete the supplier registration forms and banking details, supplier registration forms are available at Departmental website, www.dwa.gov.za
- 35.7 Bidders/ Individuals that are directors or members in more than one company bidding for this tender and do not openly declare their interests will be disqualified
- 35.8 The DWS reserves the right to not make an award on any of the responses to this Bid.
- 35.9 The DWS reserves the right to award only parts of this bid and re-bid for other parts.
- 35.10 All bid documents should be hand delivered and deposited in to the Tender Box, if sent via post,
 Envelope or package, the envelope must be clearly marked to avoid your submission been mixed with normal letters sent to the Department.

35.11 Only signed, original documents will be accepted.

36. ACCEPTANCE OF TERMS AND SPECIAL CONDITIONS

The above terms of the bid and all Annexure have been read, understood and accepted.					
For and on behalf of the Bidder:					
		20.00			
Signature of Bidder:	Date:				
Bidder's Name & Surname:	Designation				
Witness Name & Surname:	Date				
Signature:	Address (Physical):				



This template must be completed by the bidder

	Ta .
OF EXISTANCE	
% OWNERSHIP	TOTAL NUMBER
IMPLEMENTATION TOTAL NUMBER	LEVEL OF PARTICIPATION (eg Pro
	Management, Technical, Administrat
	IMPLEMENTATION



DIRECTORATE: OPTIONS ANALYSIS

TERMS OF REFERENCE

for the

POST FEASIBILITY BRIDGING STUDY FOR BREEDE-BERG (MICHELL'S PASS) WATER TRANSFER SCHEME

AUGUST 2020

CONTENTS

CC	NTENTS		2
1.	INTRODUC	CTION	5
2.	BACKGRO	UND	7
	2.1.	DESCRIPTION OF THE PROPOSED BBTS	8
	2.2.	DESCRIPTION OF THE EXISTING SCHEME	9
	2.3.	FEASIBILITY STUDY OF PROPOSED BBTS	9
3.	SCOPE OF	SERVICES REQUIRED	12
	3.1.	INTRODUCTION	12
	3.2.	INCEPTION REPORT	12
	3.3.	PROJECT MANAGEMENT	12
	3.4.	ASSESSMENT OF WATER RESOURCES	15
	1)	Stream flow hydrology	15
	2)	Existing and future water requirements	18
	3)	Yield analyses with WRYM	18
	4)	Water Resources Planning Model (WRPM)	19
	3.5.	INVESTIGATION OF INFRASTRUCTURE COMPONENTS	20
	1)	Introduction	20
	2)	Review of BBTS Components	21
	3)	Geotechnical and Materials Investigation	21
	4)	Topographical Surveys	22
	5)	Diversion Weir at Michell's Pass	23
	6)	Transfer Pipeline to Klein Berg River	23
	7)	Boontjies River Balancing Dam	23
	8)	Flood Determination and Backwater Calculations	24
	9)	Climate Change Prediction and Impact on Yield	25
	10)	Papenkuils Pump Station Upgrade	25
	11)	Raising of Voëlvlei Dam	25
	12)	Other affected infrastructure	26
	13)	Scheme Operation	27
	14)	Cost Estimate and Economic analysis	27
	15)	Socio-Economic Impact Analysis	27
	3.6.	PUBLIC PARTICIPATION PROCESS	27
	1)	Objective of public participation	28
	2)	Stakeholder engagement in Upper Breede River catchment	28
	3)	Stakeholder engagement in the Klein Berg River catchment	29
	3.7.	ENVIRONMENTAL SCREENING AND ASSESSMENT	30
	3.8.	CAPACITY BUILDING AND TRAINING	31
	3.9.	IMPLEMENTATION PROGRAMME	31
	3.10.	BRIDGING STUDY REPORTS	32
	3.11.	INSTITUTIONAL, FINANCING & OPERATIONAL ARRANGE	EMENTS 33
4.	DELIVERA	BLES	34
5.	TECHNICA	AL AND FINANCIAL PROPOSAL (BID)	36
	5.1.	THE TECHNICAL PROPOSAL	36
	5.2.	THE FINANCIAL PROPOSAL	38
	1)	Requirements for Financial Proposal	38
	2)	Cost of Deliverables	38

3) 5.3. 1) 2) 3) 4) 5) 6. GENERAL a) b) c) d)	Provision for specialist sub-contractors and sub-consultants EVALUATION SYSTEM	39 40 40 43 44 45 45 45
LIST OF FIG Figure 2-1: The Figure 2-2: Lay	GURES Western Cape Water Supply System and Proposed BBTS out of alternatives for the Breede-Berg (Michell's Pass) Transfer Scheme.	7 11
LIST OF TA Table 1: Study I Table 2: Estima	BLES Meetings and Site Visitsted Timeframe for Proposed BBTS Implementation	13 32

LIST OF ACRONYMS AND ABBREVIATIONS

BBTS Breede-Berg (Michell's Pass) Transfer Scheme

DEFF Department of Environment, Forestry and Fisheries (National)

DEA&DP Department of Environmental Affairs and Developmental Planning (Provincial)

DM District Municipality

DWA Department of Water Affairs (now DWS)

DWAF Department of Water Affairs and Forestry (now DWS)

DWS Department of Water and Sanitation

EA Environmental Authorisation

EAP Environmental Assessment Practitioner
EIA Environmental Impact Assessment
EMP Environmental Management Plan
EWR Environmental Water Requirements

FSL Full Supply Level

HFY Historic firm yield

LM Local Municipality

LSY Long-term stochastic yield

MAP Mean Annual Precipitation
MAR Mean Annual Runoff
masl metres above sea level
million m³ Million cubic metres

NOC Non-overspill crest NPV Net present value

PSC Project Steering Committee
PSP Professional Services Provider

RL Reduced level (in metres above sea level)

SEF Safety Evaluation Flood

SMC Study Management Committee

ToR Terms of Reference

URV Unit Reference Value

WCWSS Western Cape Water Supply System

WMA Water Management Area

WRPM Water Resources Planning Model
WRSM Water Resources Simulation Model
WRYM Water Resources Yield Model

WTW Water treatment works

1. INTRODUCTION

The Western Cape Water Supply System (WCWSS) serves the City of Cape Town (CCT), surrounding urban centres and irrigators. It consists of infrastructure components owned and operated by both CCT and the Department of Water and Sanitation (DWS). The Western Cape Reconciliation Strategy Study (WCRSS) has investigated a range of bulk water supply schemes that could serve towards meeting the growing water requirements that will need to be supplied from the WCWSS. These include options such as desalination, effluent treatment for re-use, groundwater development and possible surface water augmentation options.

In 2008, DWS appointed consultants for pre-feasibility level investigations into the potential development of six surface water options, from which two schemes were further investigated to feasibility level, namely:

- The Breede-Berg (Michell's Pass) Transfer Scheme (BBTS), which is the subject of this
 proposed Bridging Study to prepare this scheme for implementation; and
- The Berg River-Voëlvlei Augmentation scheme (BRVAS), which is currently being implemented by the Trans-Caledon Tunnel Authority (TCTA).

The objective of this Bridging Study is to:

- a) Review and update the hydrology (water availability) and water requirements of the Upper Breede River catchment, as far downstream as the abstraction point for Brandvlei Dam (Worcester);
- b) Determine the stochastic yield of the Upper Breede River and the amount of water available for transfer to the Berg River, after providing for the environmental water requirements (EWR) in the Breede River;
- Undertake a public participation process to engage with water users in the Upper Breede River regarding the BBTS (the transfer will not affect their allocation).
- d) The public participation process must also include other stakeholders, such as environmentalists (provision will be made for the EWR in the Breede River) and water users in the Klein Berg River; and
- e) Review and update the layout, design and cost estimate of components required for the BBTS to feasibility level of detail, including provision for EWR in the Breede River and an increased abstraction rate for Brandvlei Dam.

The envisaged tasks for this Bridging Study are set out in Chapter 3 Scope of Services Required.

The professional service provider (PSP) must provide the diverse skills and expertise required to undertake this Bridging Study within the time constraints provided. The study team must have a Study Leader (Professional Engineer), experienced in coordinating and managing a study of this nature. The Study Leader will also form the main link between DWS and the study team.

The PSP will be appointed by DWS to carry out all the necessary work as described in the Scope of Services (Chapter 3) to facilitate the successful conclusion of this Bridging Study. The Scope of Services will be the minimum requirements that DWS will accept.

It is estimated that the duration of the Bridging Study will be **30 months**. This estimated duration includes all components of the study, namely updating of the catchment hydrology and water requirements, feasibility level investigations, the public participation process and completion of reports.

2. BACKGROUND

The study area is effectively that of the Berg Water Management Area (WMA) and the upper catchment of the Breede WMA. The proposed Michell's Pass inter-basin transfer would supply water from the upper Breede River to Voëlvlei Dam to augment the WCWSS. The layout of the WCWSS and BBTS are shown on **Figure 2-1**.

The Breede-Overberg Catchment Management Agency has set clear goals and objectives in its Catchment Management Strategy towards protection of water resources of the Breede River and limiting further development thereof.

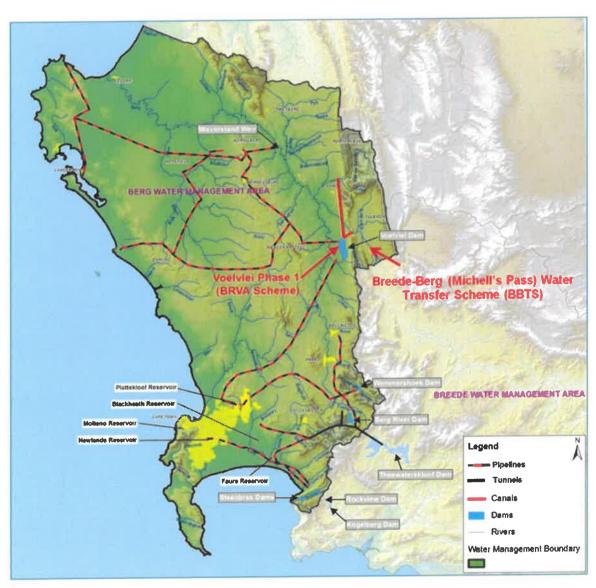


Figure 2-1: The Western Cape Water Supply System and Proposed BBTS

2.1. DESCRIPTION OF THE PROPOSED BBTS

The BBTS is described in detail in the report entitled; *Pre-Feasibility and Feasibility Studies for Augmentation of the Western Cape Water Supply System by means of Further Surface Water Developments*, Report No 3; Volume 2: *Breede-Berg (Michell's Pass) Water Transfer Scheme*, December 2012.

The reports for augmentation of the WCWSS can be accessed on the DWS website using the link: http://www6.dwa.gov.za/WC/

The layout of the WCWSS and proposed BBTS is shown in Figure 2-1.

The above-mentioned BBTS report (Dec 2012) is supported by the following sub-reports (available on the DWS website):

- Appendix 5: Scheme Operation and Yield Analyses with Ecological Flow Requirements for the Breede-Berg (Michell's Pass) Water Transfer Scheme;
- Appendix 6: Preliminary Design of Papenkuils Pump Station Upgrade and Pre-Feasibility
 Design of the Boontjies Dam, for the Breede-Berg (Michell's Pass) Water Transfer Scheme;
- Appendix 7: Ecological Water Requirements Assessment Summary for the Berg River-Voëlvlei Augmentation Scheme, and the Breede Berg (Michell's Pass) Water Transfer Scheme;
- Appendix 8: Geotechnical Investigations for the Berg River-Voëlvlei Augmentation Scheme, and the Breede-Berg (Michell's Pass) Water Transfer Scheme;
- Appendix 9: LiDAR Aerial Survey, for the Berg River-Voëlvlei Augmentation Scheme, and the Breede-Berg (Michell's Pass) Water Transfer Scheme;
- Appendix 10: Conveyance Infrastructure Design Report, for the Berg River-Voëlvlei Augmentation Scheme, and the Breede-Berg (Michell's Pass) Water Transfer Scheme;
- Appendix 11: Diversion Weirs Design for the Berg River-Voëlvlei Augmentation Scheme, and the Breede-Berg (Michell's Pass) Water Transfer Scheme; and
- Appendix 12: Cost Estimates for the Berg River-Voëlvlei Augmentation Scheme, and the Breede-Berg (Michell's Pass) Water Transfer Scheme.

2.2. DESCRIPTION OF THE EXISTING SCHEME

The existing Voëlvlei Government Water Scheme and Artois Canal Diversion Scheme at Michell's Pass are described in the *Breede-Berg (Michell's Pass) Water Transfer Scheme* (December 2012) report. This information has been summarised in a *Background Information Document* (September 2018), which is available from DWS Options Analysis.

Water transferred from the proposed BBTS would feed into the existing Voëlvlei Government Water Supply Scheme via the existing diversion weir on the Klein Berg River. The canal from the diversion weir diverts water into Voëlvlei Dam, which is located in a natural depression between the Voëlvlei Mountain range and the Berg River, near Gouda.

Currently diversion at Witbrug into the Artois Canal, which was constructed in about 1950, diverts an average 19 million m³/a. About 15 million m³/a is utilised by the Artois irrigators and Wolseley town. The remaining 4 million m³/a flows into the Klein Berg River. This water transfer occurs year-round from the manually controlled gated canal intake structure at the DWS flow gauging station H1H006, into the canal and across the catchment divide (from the Breede WMA into the Berg WMA).

2.3. FEASIBILITY STUDY OF PROPOSED BBTS

The proposed Breede-Berg (Michell's Pass) Transfer Scheme (BBTS) is described in the *Breede-Berg* (*Michell's Pass*) Water Transfer Scheme (December 2012) report. This information is also summarised in a *Background Information Document* (September 2018), which is available from DWS Options Analysis.

The proposed BBTS involves the diversion of winter water from the upper Breede River at the same site as that of the current Artois canal diversion. The scheme comprises a new diversion weir and a 10.76 km long gravity pipeline, with a diameter of 2 000 mm, to convey the diverted water into the adjacent Berg WMA catchment. The scheme would also supply the summer and winter irrigation requirements of the existing users of the Artois Canal.

The preliminary determination of the Ecological Reserve assessment of the Breede River determined that the present ecological status (PES) of the Breede at the weir location is Class D. It has been assumed that if the BBTS is constructed, future abstractions should comply with both the summer and winter Reserve of the upper Breede River.

Any transfer of water out of the Breede River Basin will impact on downstream water users. In this case the yield of Brandvlei Dam would be reduced unless the capacity of the infrastructure to pump water into the Dam is increased. Therefore the various BBTS options investigated include an allowance for maintaining the yield of Brandvlei Dam through an upgrade of the pump station at Papenkuils.

The founding conditions at the proposed weir site are typical loose alluvial sediments and boulders. The geotechnical conditions along the proposed pipeline route vary from coarse to sandy alluvium towards Wolseley, and finer alluvium with sandy clay towards the proposed discharge location.

The proposed general layout of the BBTS, including the route of the pipeline, is shown in **Figure 2-2**. Two alternative schemes were considered to transfer water while also supplying the EWR in the Breede River:

Alternative A involves the diversion of surplus winter water via the proposed weir on the Upper Breede River at Michell's Pass into a new gravity pipeline. The pipeline will transfer water into the Blousloot stream, which is a tributary of the Klein Berg River. Summer Reserve releases need to be supplied from Koekedouw Dam at Ceres.

Alternative B is similar to Alternative A, but makes provision for a new storage dam, which allows for the storage of water for the summer Reserve flows. This possibility was only identified fairly late during the BBTS study, which resulted in the potential dam site being excluded from the geotechnical investigation and topographical survey.

The concept of the dam on the Boontjies River is as follows:

- Provide a discharge facility for winter water diverted from the Breede River.
- Enable spills and provide releases to the downstream Klein Berg River from where the diversion into Voëlvlei Dam will take place.
- Provide summer releases to current irrigators who are supplied from the Boontjies River.
- Pump water from the dam to the current upstream Artois irrigators in summer.
- Enable the current diversions to the Artois canal in summer to be stopped and allow this water to continue flowing in the Breede River to provide summer Reserve flows.
- Supplement, when necessary, the summer Reserve flows in the Breede River from the stored water in the Boontjies Dam, via pumping.

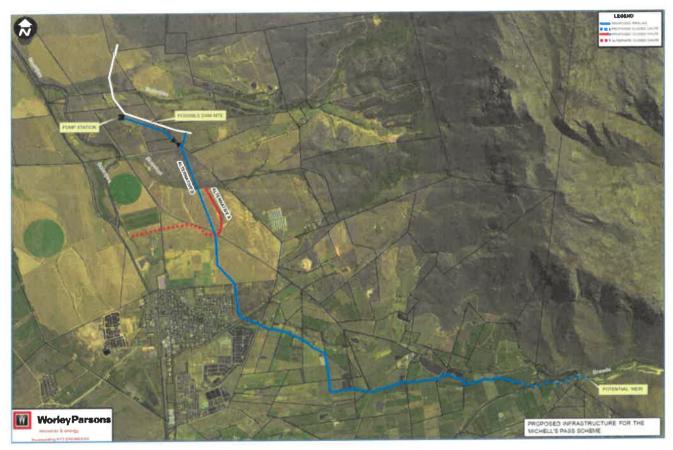


Figure 2-2: Layout of alternatives for the Breede-Berg (Michell's Pass) Transfer Scheme

3. SCOPE OF SERVICES REQUIRED

3.1. INTRODUCTION

The Scope of Services for this Bridging Study describes the various tasks required to meet the objectives outlined in Chapter 1 of this Terms of Reference (ToR).

3.2. INCEPTION REPORT

The appointed PSP shall compile an Inception Report that will consist of a detailed description of tasks and methodology, a study programme, human resource schedule, budget and cash flow.

The Inception Report will list all tasks and deliverables required, the cost per deliverable (including disbursements), the team members, revised study programme, etc. New team members required during the Study, who were not part of the accepted Proposal, need to be approved before they can be utilised on the Study. Similarly, approved team members who leave the study team, for whatever reason, must be reported promptly to the Department and necessary arrangements put in place to replace them with similarly skilled personnel.

The Inception Report should be finalised (co-signed by DWS and PSP) within *three (3) months* of commencement of the Bridging Study. A familiarisation tour of the proposed project site must be arranged during this period to ensure the Inception Report is based on reasonable knowledge of the area and associated issues.

3.3. PROJECT MANAGEMENT

Project management and coordination of the Bridging Study will be the responsibility of the appointed PSP with guidance from the DWS Project Manager. This will involve various meetings and site visits, for which the PSP must make provision in the Financial Proposal, as specified in **Table 1**.

Table 1: Study Meetings and Site Visits

Meeting type	Number	Place	PSP obligations
Inception meetings	One meeting	Pretoria	a) Arrangements for meetings b) Attendance of meetings
	One site visit	Study area	c) Minute taking and distribution
Meetings with authorities	Total = 8	Cape Town = 3 Pretoria = 5	a) Arrangements for meetingsb) Attendance of meetingsc) Power Point presentationd) Minute taking and distribution
Presentation to DWS Management	Total = 2	DWS Pretoria	High quality Power Point presentations by one or two team members
Study Management Committee (SMC), meetings	Once every two months	Assume SMC and PSC meetings coincide and venue	
	Total = 15	is Cape Town	
Project Steering Committee (PSC) meetings with role	Once every two months	Assume venue is Cape Town for all meetings	a) Arrangements for meetingsb) Attendance of meetingsc) Power Point presentation of study
players	Total = 15		progress
Public meetings with stakeholders	Total = 6	Wolseley, Ceres and Worcester	d) Minute taking and distribution
Ad hoc meetings with stakeholders	As required	Project area	
and role players	Total = 10		

The appointed PSP will be responsible for subsistence and travel costs of study team members attending meetings and site visits with DWS. The PSP will provide secretarial services at all meetings and workshops.

a) Meetings with Authorities

The appointed PSP will be required to arrange and attend meetings with various authorities to present and discuss various aspects of the Study. The DWS Project Manager will also attend these meetings. The authorities include National Treasury and various Government departments, such as DWS, DEFF and DMRE.

b) Project Steering Committee Meetings

DWS will provide the appointed PSP with the names and contact details of DWS officials and other officials that will be nominated to the Project Steering Committee (PSC). The coordination, arrangement and cost of PSC and public meetings will be the responsibility of the appointed PSP.

c) Liaison with Role Players and Stakeholders

The appointed PSP will be responsible to arrange ad hoc meetings with role players and stakeholders, as required, which may or may not be attended by the DWS Project Manager. Role players and stakeholders include:

- DWS Western Cape Regional Office;
- Western Cape Department of Agriculture;
- City of Cape Town;
- Water Users Associations and farmers;
- · District municipalities;
- · Local municipalities;
- · Cape Nature;
- Local environmental organisations; and
- Other government departments and institutions.

d) Coordination and Management of Study Team

The Study Leader will be responsible to ensure that all team members and tasks are activated and completed at the required times. The appointed PSP will be responsible to provide project progress at PSC meetings, in addition to monthly quarterly progress reports.

e) Quality Control of Study reports

The Study Leader will be responsible to review all reports (draft or final) before submission to DWS. The Study Leader shall ensure that all reports are produced in the format required by DWS and conform to the template that will be provided at the start of the Study.

Quality control of reports includes ensuring that language use and grammar are of a high standard, and reports contain all information required to take the project to the implementation stage. Any reports that display a lack of review and scrutiny by the Study Leader will be sent back before the DWS Project Manager can review them.

Although not a requirement for appointment, it is highly recommended that the PSP has a language specialist on their team or at least a senior engineer with extensive report writing experience in the water resources sector.

f) Financial Management

The Study Leader shall ensure that DWS will be invoiced as required and that invoices will be supported by all the necessary documentation. It is the responsibility of the appointed PSP to ascertain

DWS requirements at the onset of the Study. It is required that a progress report is submitted that covers the invoice period. This progress report is in addition to the one that has to be prepared for PSC meetings, which covers the period between two successive PSC meetings.

3.4. ASSESSMENT OF WATER RESOURCES

The assessment of the water resources (availability and requirements) for the Upper Breede River catchment is required. This entails updating of information on hydrology (rainfall-runoff model) for the catchment up to the abstraction point for Brandvlei Dam, which supplies water to the town of Worcester.

This assessment must determine the yield of the Upper Breede River catchment to supply the various water users and the EWR. A water balance for the catchment will then indicate the volume of water available for transfer to the Berg River catchment (Voëlvlei Dam). The anticipated tasks associated with this water resource assessment are briefly described in the following sub-sections.

1) Stream flow hydrology

The objective of this task is to undertake a comprehensive hydrological analysis of the Upper Breede River catchment in order to update the existing hydrological dataset for the catchment to the most recent hydrological year. This will require the preparation of a reliable hydrological database on land use, rainfall, evaporation and stream flow in order to configure and calibrate the rainfall-runoff model and the naturalisation of stream flow data. The envisaged sub-tasks are described as follows:

a) Updating of rainfall data

The purpose of this sub-task is to update the rainfall records of the catchment until the most recent hydrological year in order to update and improve the reliability of the catchment hydrology. This information is required as input for the water resources simulation model (WRSM). This sub-task will, amongst other things, include the following activities:

- Screening of rainfall gauges for use in the Bridging Study;
- Visual screening of the rainfall data of each rainfall gauge, including identification of 'outlier' values;
- Analytical screening of rainfall data, including data plotting and testing for stationarity;
- In-filling ('patching') of discontinuous rainfall records of each rainfall gauge, where applicable. Rainfall records requiring extensive 'patching' shall not be used to generate stream flow data;

- Continuous non-patched and acceptably patched rainfall data shall be used to generate catchment rainfall and point rainfall time series files; and
- The mean annual precipitation (MAP) shall be estimated for the catchment and subcatchments.

b) Updating of evaporation data

The purpose of this sub-task is to update the evaporation records of the catchment until the end of the most recent hydrological year. This information is required as input for:

- The WRSM (Pitman model) to calculate runoff; and
- The assessment of evaporation losses from water bodies in the catchment.

c) Updating of land use data

The purpose of this sub-task is to confirm and quantify changes in land use that have occurred in the catchment since the last update of the hydrology. It is necessary to apply updated land use in the current Bridging Study.

d) Updating of stream flow data

Observed stream flow data for the Upper Breede River is available from the DWS website, under the icon 'Our dams', which opens the Hydrological Services page. Data for the flow gauging stations in Drainage Region H can then be accessed.

This sub-task will, amongst others, require the following:

- Collating existing stream flow and return flow data for the catchment;
- Extension of stream flow records until the most recent hydrological year;
- Examination and rectification of stream flow data;
- In-filling ('patching') of stream flow records using acceptable simulation techniques;
- Checking of 'patched' values using acceptable methods; and
- Evaluation of the reliability of the stream flow data in order to select appropriate stream flow gauges that can be used in the calibration and naturalisation processes.

e) Groundwater resources

This sub-task is focused on determining the groundwater resources of the catchment, its current use and its interaction with the surface water of the catchment, in order to correctly model the hydrology of the catchment. Although this sub-task is limited to a desktop investigation, every effort shall be made to ensure that the most up-to-date information is used as this component needs to be included in the hydrology of the catchment model.

Useful sources for groundwater data are the National Groundwater Database and the Groundwater Resource Information Program (GRIP) Database which are both available from DWS.

f) The Water Resources Simulation Model

The latest version of the water resources simulation model (WRSM) must be configured to simulate historical stream flow sequences and to generate natural stream flow sequences. Modelling must be based on a monthly time step and at a quaternary catchment level. However, where major dams and abstraction works occur within a quaternary catchment, the latter shall be subdivided to model the sub-catchments of these works.

Extensive testing of the model must be undertaken to ensure that the model has indeed been correctly configured.

Compilation of the WRSM schematic diagram representing the system network must be included as part of the deliverables.

g) Runoff generated by the WRSM

The objective of this sub-task is the calibration of the runoff generation module of the WRSM. This is a standard process whereby adjustments are made to the model parameters until the simulated data is similar to the recorded stream flow data. Special care shall be taken during the calibration process, especially when the simulated data is used to in-fill ('patch') the observed record.

h) Naturalised stream flow records

Naturalised stream flow records are required for sub-catchments in order to generate stochastic stream flow sequences and derive system yield estimates. This sub-task typically involves the following:

- Naturalise 'patched' recorded stream flow data by means of the standard methods that consider the effect of historical water abstractions and return flows that have occurred in the catchment during the period of historical data;
- Generate natural synthetic flow data with the calibrated WRSM in cases where recorded stream flow data in sub-catchments is not available for certain periods of the study period; and
- Use the synthetic flow data to extend the naturalised flow data to obtain a single natural flow record that covers the full study period.

i) Stochastic hydrology

The objective of this sub-task is the generation of stochastic stream flow sequences from naturalised stream flow records that will be used for the long and short term yield analyses, as well

as the planning analyses, of the Bridging Study. The Monthly Multi-Site Stochastic Stream flow Model, developed by the Water Research Commission, shall be used for this task.

The stochastic stream flow sequences generated need to be subjected to various tests to ensure that the generated sequences are realistic and properly correlated between the various subcatchments. This will typically include testing of the following:

- · Monthly and annual means;
- Monthly and annual standard deviations;
- Minimum sum runs;
- Maximum deficits and deficit durations;
- The longest depletion durations; and
- Yield-capacity relationship.

2) Existing and future water requirements

The objective of this task is to confirm/determine all current and projected future water requirements for all water use sectors within the Upper Breede River catchment. This information will be compared to the water availability in the catchment to determine the water balance and availability of water for transfer to the Berg River system. Typical user sectors shall include the following:

- Urban domestic: All towns and formal settlements supplied from the Upper Breede River catchment's water resources.
- Rural domestic: All informal settlements and dwellings that rely on the Upper Breede River catchment's water resources for their water supply.
- Irrigation: All irrigation allocations in the Upper Breede River.
- Industrial: All current and future industrial abstractors along the Upper Breede River and its tributaries.

The Reserve for the Breede River and Estuary must also be included as a water requirement for the system. The DWS Directorate: Reserve Requirements must be consulted regarding the adequacy of previous Reserve studies and to obtain additional guidance, as required.

3) Yield analyses with WRYM

The objective of this task is to perform various yield analyses with the water resources yield model (WRYM) to:

- Determine the water resource potential in the catchment and the allocation of these resources;
- Evaluate operating rules; and

Assess the system behaviour.

The main sub-tasks are discussed below, but further tasks may be identified at tender stage or during the course of this Bridging Study.

a. Network diagram for the WRYM

The network diagram for the WRYM must be configured/reviewed and updated to represent the Upper Breede River catchment at an acceptable level. All existing and future points of abstraction, return flows and storage within the catchment should be incorporated in the network diagram. The updated WRYM schematic diagram is part of the deliverables.

Extensive testing must be undertaken to ensure that the model has been configured correctly and appropriately represents the system.

b. User priority classification table

A user priority classification table for all water users of the Upper Breede River's water resources must be compiled through a process of stakeholder involvement. The table shall reflect all types of users categorised into different user sectors.

c. System operating rules

A review of current operating rules for the catchment must be undertaken in consultation with DWS Western Cape Regional office, the catchment management agency, water services authority, water user associations and other role players. The aim of this review is to select the most appropriate operating rules that can be used in the WRYM analysis to model the existing system and future scenarios.

d. Historical firm yield

After the WRYM has been set up, it can be used to simulate flow sequences to calibrate the model and determine the historic firm yield of the catchment.

e. Long-term stochastic yields

Long-term stochastic yield analyses must be undertaken to determine the long term water supply in the Upper Breede River catchment and the volume of water available for transfer to Voëlvlei Dam. The analysis shall make provision for the associated assurance of supply for the various water users.

4) Water Resources Planning Model (WRPM)

The WRPM must be configured, tested and applied in order to:

- · Derive final system operating rules;
- · Derive drought curtailment rules, and
- Determine the volume of water that can be transferred to Voëlvlei Dam.

The envisaged sub-tasks are as follows:

a) Configuration and testing of the WRPM

The network diagram must be reviewed and updated, and be included as part of the deliverable of this sub-task.

Before proceeding with any analyses, the WRPM configuration must be thoroughly tested to ensure that all aspects are functioning correctly and that the intended system operation is indeed simulated correctly.

The deliverable for this sub-task includes an electronic copy of the final WRPM for the Upper Breede River catchment, supported by the associated report.

b) Development of scenarios

After the WRPM has been updated, the various scenarios to be analysed need to be developed and defined in consultation with DWS and other major water users.

The results of the analysis must be in the form of box plots, where the format and types will be agreed with DWS prior to their production. Results of the initial scenarios will be presented and discussed with DWS during the execution of the task, and if needed, these scenarios may either be adjusted or completely new scenarios developed.

3.5. INVESTIGATION OF INFRASTRUCTURE COMPONENTS

1) Introduction

The feasibility investigation of the main components of the proposed BBTS has been undertaken and is described in the report *Breede-Berg (Michell's Pass) Water Transfer Scheme*, December 2012 (refer to **Chapter 2.3** of this Terms of Reference). The work that needs to be undertaken as part of this Bridging Study includes the following:

- Review and confirm the layout, sizing, detail, etc. of all the components required for the proposed BBTS, and update where necessary;
- Determine the volume of water that can be transferred from the Upper Breede River (refer to Section 3.4 of this ToR);

- Investigate the two alternative (EWR) schemes to determine the recommended option; Alternative A, supplying the summer EWR from Ceres Dam or Alternative B, supplying the EWR from the proposed Boontjies River Dam;
- If the proposed Boontjies River Dam is the recommended option, the site needs to be confirmed, a topographical survey and geotechnical investigation is required, and a feasibility design must be undertaken;
- Bills of Quantity and a detailed cost estimate of all components of the proposed BBTS must be prepared;
- Determine and facilitate, where necessary, institutional and funding arrangements for implementation of the BBTS; and
- Draft and finalise reports (and sub-reports) for the various tasks, including the Maun Report and Record of Implementation Decisions report.

2) Review of BBTS Components

The layout and operation of the BBTS needs to be reviewed to confirm optimum layout and sizing of components. The current layout comprises a diversion weir in the Breede River at Michell's Pass with a transfer pipeline to a tributary of the Klein Berg River and a discharge structure.

The provision for summer EWR releases in the Breede River will either be from Ceres Dam (Alternative A) or via the proposed balancing dam in the Boontjies River (Alternative B). The provision for summer EWR releases needs to be investigated further to determine the discharge point for the scheme, before the detail of these components can be confirmed.

The report(s) on the review of the feasibility design shall include confirmation of the relevant detail of the scheme components, as well as the necessary drawings required to facilitate the detailed design and implementation.

3) Geotechnical and Materials Investigation

The feasibility level geotechnical investigations, which were conducted in 2011, comprised the excavation of trial pits along the proposed transfer pipeline route. The results are recorded in the report; Breede-Berg (Michell's Pass) Water Transfer Scheme; Appendix 8: Geotechnical Investigations for the Berg River-Voëlvlei Augmentation Scheme, and the Breede-Berg (Michell's Pass) Water Transfer Scheme, December 2012.

Due to the alluvial nature of the geology at the proposed weir site, no core drilling was considered necessary. Thirteen trial pits were excavated at designated positions along the proposed BBTS gravity pipeline route at spacing of about 500 m. Samples were taken from representative soil layers in the trial pits and foundation indicator tests and grading analyses were undertaken.

Detailed geotechnical and materials investigation of the proposed Boontjies River dam site is required, if this dam is the alternative to be implemented. These investigations should provide sufficient detail for feasibility design, and to verify the extent and suitability of available construction material.

A provisional sum will be included in the Bridging Study budget for geotechnical and materials investigation of the preferred dam site, and other investigations that may be required (refer to **Section 5.2 (3)** for more information).

4) Topographical Surveys

A LiDAR survey and aerial photography of the study area was undertaken during the feasibility study. The survey is described in a report entitled; *Breede-Berg (Michell's Pass) Water Transfer Scheme*; Appendix 9: *LiDAR Aerial Survey, for the Berg River-Voëlvlei Augmentation Scheme, and the Breede-Berg (Michell's Pass) Water Transfer Scheme*, December 2012.

The results of the LiDAR survey at the site are such that they are adequate to determine river cross-sections and therefore no further topographical survey of the river section is necessary.

The potential Boontjies Dam site was not included in the aerial survey. The proposed dam has been investigated at a pre-feasibility level using existing 1:10 000 maps (5 m contours). A topographical survey of this site is needed to enable the dam to be investigated at feasibility level, if this option is considered for implementation.

A provisional sum will be included in the Bridging Study budget for a topographical survey of the preferred dam site, and other surveys that may be required (refer to **Section 5.2 (3)** for more information).

5) Diversion Weir at Michell's Pass

The feasibility design of the proposed diversion weir is described in the report; *Breede-Berg (Michell's Pass) Water Transfer Scheme*; Appendix 11: *Diversion Weir Design for the Berg River-Voëlvlei Augmentation Scheme*, and the Breede-Berg (Michell's Pass) Water Transfer Scheme, December 2012.

The feasibility design of the proposed diversion weir needs to be reviewed. Aspects that require particular attention are founding depth and stability of the structure, as well as the layout of the inlet to the pipeline, and screening of the inlet for transported rocks and sediment.

6) Transfer Pipeline to Klein Berg River

The feasibility design of the transfer pipeline is described in the report; *Breede-Berg (Michell's Pass)* Water Transfer Scheme; Appendix 10: Conveyance Infrastructure Design Report, for the Berg River-Voëlvlei Augmentation Scheme, and the Breede-Berg (Michell's Pass) Water Transfer Scheme, December 2012.

The feasibility design of the proposed transfer pipeline, from the diversion weir to the discharge structure, needs to be reviewed and optimised to ensure that the design is efficient and cost effective. This includes the pipeline route, pipe diameter, pipe material, air valves, scour valves, stream and road crossings, off-takes to farms and hydraulic gradient.

The need for the Boontjies River balancing dam (Alternative B) must be determined before the pipeline can be optimised, as the discharge point and length of pipeline differ:

- Alternative A: Discharge point in Blousloot tributary, which has a pipeline length of 7 600 m; and
- Alternative B: Discharge point at proposed Boontjies River Dam, which has a pipeline length of 10 600 m.

The discharge structure for Alternative A (Blousloot) needs to be reviewed and optimised if necessary. If Alternative B (Boontjies River) is the recommended option, the discharge into the dam will be part of the feasibility design of the dam.

7) Boontjies River Balancing Dam

The pre-feasibility design of the proposed Boontjies River Balancing Dam is described in the report; Breede-Berg (Michell's Pass) Water Transfer Scheme; Appendix 6: Preliminary Design of Papenkuils Pump Station Upgrade and Pre-Feasibility Design of the Boontjies Dam, for the Breede-Berg (Michell's Pass) Water Transfer Scheme, December 2012.

The active storage volume required in the proposed Boontjies River Balancing Dam would be about 7.5 million m³, and the total storage volume would be about 8 million m³, based on a 5 m³/s diversion capacity for the scheme.

If this balancing dam is the recommended option (Alternative B), the current pre-feasibility design needs to be upgraded to feasibility level. This would include topographical survey and geotechnical investigation of the site, confirmation of the layout and dam type, and feasibility design of the dam wall, spillway and outlet works. The feasibility design needs to be properly documented in a report, including any supporting documentation, sketches and drawings.

8) Flood Determination and Backwater Calculations

The determination/review of flood magnitudes at the proposed Boontjies River Dam site and diversion weir site is required for the various return periods needed for feasibility design purposes, namely:

- Diversion works: The 1:5, 1:10, 1:20 and 1:50 year flood for design of the structure and temporary works;
- High flood line: The 1:100 year flood at the diversion weir and balancing dam;
- Spillway design and freeboard: The 1:200 year flood; and
- Safety Evaluation Flood (SEF): Required for the dam site.

Backwater calculations are required during the feasibility investigations for the dam and weir in order to determine the high flood levels (HFL). The impacts of 50 years of sediment accumulation on the HFL must be included in these calculations. The flood routing calculations should assume that the dam would be at FSL when the high flood occurs.

The dam boundary line, relocation of infrastructure and compensation must be based on the 1:100 backwater level and buffer zone, according to DWS standards. The buffer zone is an additional 1.5 m, measured vertically from the HFL in steep areas, or 15 m, measured horizontally in flat areas of a basin. This principle is applied to obtain a series of straight lines that define the area to be acquired for the dam basin, and upstream of the weir.

9) Climate Change Prediction and Impact on Yield

The possible climate change impacts on the proposed Boontjies River Balancing Dam and BBTS need to be assessed at a desktop level, based on available stream flow scenarios and results from previous studies. This Investigation must have the following two separate components:

- Assessment of the flood design capacities (spillway capacities and freeboard) of the proposed Dam to accommodate future increased flood peaks; and
- Assessment of the possible climate change impact on the water supply potential (yields) of the proposed BBTS.

10) Papenkuils Pump Station Upgrade

The preliminary design of the Papenkuils pump station upgrade is described in the report; *Breede-Berg* (*Michell's Pass*) Water Transfer Scheme; Appendix 6: Preliminary Design of Papenkuils Pump Station Upgrade and Pre-Feasibility Design of the Boontjies Dam, for the Breede-Berg (Michell's Pass) Water Transfer Scheme, December 2012.

If the BBTS is implemented, the capacity of the Papenkuils pump station needs to be increased to between 15 m³/s and 26 m³/s to maintain the yield of Brandvlei Dam. The required optimal pumping capacity needs to be confirmed as part of this Bridging Study. The existing pumps have a nominal 5 m³/s capacity. The existing pump station makes provision for upgrading to 20 m³/s capacity by including space for two more pump stations of the same size. There is a 350 m tunnel with a 3.5 m diameter, which passes through the hill to the dam (capacity 40 m³/s).

The preliminary design of the pump station upgrade needs to be reviewed and brought to feasibility level where necessary. The feasibility design needs to be properly documented in a report, including any supporting documentation, sketches and drawings.

11) Raising of Voëlvlei Dam

The additional storage capacity required in Voëlvlei Dam, to store the water transferred from the BBTS, needs to be confirmed, as well as the associated height of raising required. The feasibility design of the raising and associated works needs to be undertaken. This task includes optimisation of the means of raising, sourcing of materials required, drawings and quantities, and details of any associated works.

12) Other affected infrastructure

There is certain existing infrastructure and other aspects that require attention to ensure that the proposed BBTS can be implemented effectively, which include the following:

a) Existing conveyance infrastructure

The capacity of the existing canal, from the weir in the Klein Berg River to Voëlvlei Dam, needs to be checked, together with the capacity of the inlet and outlet works. The abstraction capacity needs to cater for the water transferred via the BBTS, in addition to the flow currently diverted from the Klein Berg River. Betterments need to be proposed, if required, and the feasibility design of such betterments needs to be undertaken.

b) Access roads

The routes of access roads to the various components of the BBTS (diversion weir, pipeline and balancing dam) need to be determined. A feasibility level cost estimate for the construction of these roads is part of this Bridging Study. This includes the width and standard of access roads, stream crossings and any other structures required.

c) Power supply

The source of power supply to the proposed Boontjies River Balancing Dam pump station and length of transmission line, if Alternative B is recommended, need to be determined. The provision of the required power supply must be included in the cost estimate for the BBTS.

d) Land acquisition and servitudes

The acquisition of land and servitudes required for the construction and operation of the BBTS components needs to be determined. This includes the registration of rights for structures on State land, servitude for pipelines, servitude of water transfer in the Klein Berg River, and the Boontjies River Balancing Dam (Alternative B).

e) Advance construction infrastructure

Advance infrastructure for construction of the BBTS components needs to be quantified. This includes access roads, power for construction, construction camp layout, as well as operator's housing and facilities, if required. The level of information required must be adequate to meet the requirements for environmental authorisation of the project.

13) Scheme Operation

The operating rules of the proposed BBTS need to be determined in consultation with the various role players, such as DWS, CCT, environmental authorities and Artois canal irrigators. A chapter to describe the proposed operation of the BBTS is required in the RID, and other relevant reports.

14) Cost Estimate and Economic analysis

The cost of the BBTS shall be estimated by a cost engineer or other suitably qualified person who has both a proven record and experience in estimating construction costs and is still employed in this field. The design engineers need to assist in identifying the billing items that should be included in the cost estimates.

A separate Bill of Quantities (BoQ) shall be prepared for each component of the BBTS. The BoQ shall include all costs required to implement that component. Unit rates should be verified with the latest water infrastructure projects completed in South Africa, and shall exclude contingencies and VAT. A summary of the total cost of the various components comprising the proposed BBTS shall be included in the relevant reports. Contingencies and VAT shall be added to the total of this summary.

15) Socio-Economic Impact Analysis

An analysis is required to determine the regional and national socio-economic impact of the proposed BBTS. This analysis should determine the impact of this proposed augmentation scheme on sustaining existing development, new developments, job creation, etc.

The appointed PSP must consult with National Treasury in order to determine their requirements for funding approval, which need to be included in the socio-economic impact analysis. This requires the appointed PSP to present the proposed assessment methodology to National Treasury for comment.

3.6. PUBLIC PARTICIPATION PROCESS

Public participation is critical for the successful implementation of the proposed BBTS. This process needs to start during the Bridging Study and continue during the Environmental Impact Assessment (EIA) study.

1) Objective of public participation

The objective of the public participation process is to engage with water users in the Breede River, and other stakeholders, regarding the BBTS. Other stakeholders include environmental organisations, and water users in the Klein Berg River and along the Artois canal.

The water users in the Upper Breede River (Ceres to Worcester) need to be engaged regarding the results of the yield analysis. They need to be in a position to accept that the water transferred to the Berg River will not affect their current water allocations in future. It is equally important that environmental organisations and activists are engaged regarding compliance with the environmental water requirements of the Breede River.

Water users in the Klein Berg River and along the Artois canal need to be engaged and made aware that the water transferred from the Upper Breede River is not intended to increase their current allocation.

2) Stakeholder engagement in Upper Breede River catchment

A database of stakeholders for the Upper Breede River (Ceres to Worcester) needs to be compiled to facilitate the public participation process. Important stakeholders include:

- City of Cape Town
- Municipalities receiving water from the WCWSS
- Witzenberg Municipality (Ceres and Wolseley)
- Breede Valley Municipality (Worcester)
- Koekedouw Irrigation Board (Ceres)
- Western Cape Department of Agriculture
- Local farmers and communities
- Department of Environmental Affairs and Development Planning (Provincial)
- Cape Nature
- Local environmental organisations
- DWS Western Cape Regional office

The main concern of stakeholders is that transferring water to the Berg River will impact negatively on the water users in the Breede River catchment. There is also concern that the transfer will mean insufficient water for the EWR. The appointed PSP will be required to facilitate meetings with the relevant stakeholders to address these concerns.

Provision for public meetings and liaison with stakeholders has been made in **Table 3.1**. The appointed PSP is required to have a team member with experience in public participation, who can lead these meetings, present information clearly and deal with difficult situations.

A further requirement for this task is to facilitate negotiations with the Witzenberg Municipality and Koekedouw Irrigation Board regarding summer releases from Ceres Dam to provide the EWR downstream of the proposed BBTS diversion weir. Flood releases for the environment are currently not being made from the dam, and as such, this portion of water should be available to make Reserve releases.

Engagement and consultation with environmental authorities and organisations is also critical for the successful implementation of the BBTS. It is essential to show that provision for the EWR will be made in addition to the transfer of water to the Berg River catchment. Currently most or all of the summer flow in the Breede River is transferred to the Artois canal.

3) Stakeholder engagement in the Klein Berg River catchment

The stakeholder database (list of interested and affected parties) needs to be extended to include farmers and other parties in the Klein berg River catchment, as well as those receiving water from the Artois canal.

It is important to engage with these farmers regarding the layout and operation of the proposed BBTS. They also need to be informed that the additional transfer water is intended to augment the WCWSS and not to increase their allocation.

Opposition to the proposed BBTS needs to be dealt with as far as possible during the Bridging Study. This should reduce resistance during the EIA study and also reduce possible appeals against environmental authorisation of the scheme.

3.7. ENVIRONMENTAL SCREENING AND ASSESSMENT

Bidders must make provision in their Technical and Financial Proposal for environmental aspects associated with the BBTS (screening of scheme components, EWR, etc.). Provision must also be made for technical support to the EIA study (PSP to be appointed by DWS).

a) Environmental Screening

An environmental specialist is required for the Bridging Study to manage the environmental screening task and the Reserve requirements. It will be necessary to review the environmental screening of the preferred options, which was undertaken during the feasibility study, and address any aspects that require further investigation.

The Environmental Screening Report, to be drafted by the appointed PSP, must also describe the general EIA process and contain a chapter dealing with the most important requirements of NEMA and related EIA Regulations.

b) Environmental Impact Assessment

The appointed PSP must consult with the Environmental Authorities (DEFF and DEA&DP), Cape Nature and other authorities regarding their specific information requirements, so that this information is made available during the Bridging Study. The aim is to avoid situations where conditions are imposed for environmental authorisation that cannot be met due to a lack of information.

An environmental impact assessment of the recommended option for implementation will be required, and will be undertaken under a separate contract. A PSP for this assignment will be appointed by DWS at an appropriate time after the Bridging Study has started, so that the two studies can proceed concurrently. The appointed PSP is however required to prepare a detailed scope of work for the EIA Study, which must be done in good time to allow the procurement of the EIA services before expiry of the Bridging Study Contract. The Bridging Study also includes technical support for the EIA study.

c) Environmental Water Requirements

The appointed PSP must source available water resource classification and reserve information during the Inception Phase. The appointed PSP must also consult with the Directorate: Reserve Requirements about the adequacy of the previous reserve study and establish if there are any additional studies required.

A provisional sum will be included in the Bridging Study budget for any additional work required on the Reserve, as directed by the Directorate: Reserve Requirements (refer to **Section 5.2 (3)** for more information).

3.8. CAPACITY BUILDING AND TRAINING

Bidders must make provision for capacity building and training of DWS officials or interns in project management and/or technical aspects to be undertaken as part of this Bridging Study. The content of the capacity building programme will need to be approved by DWS.

The interns could be seconded to the PSP for certain portions of the study to gain practical experience. In this case the cost to the PSP would be time to mentor the interns and the provision of office space. Provision should also be made for the presentation of one-day workshops to present certain technical aspects of the study to DWS officials. This includes preparation of training material, travelling and presentation in Pretoria, and accreditation of the training workshop by professional organisations.

Bidders shall make provision in their Financial Proposal for three (3) interns to be seconded for a period of six (6) months each, as well as the preparation and presentation of two (2) one-day workshops.

3.9. IMPLEMENTATION PROGRAMME

This task entails determining the required implementation programme, in MS Project format, for the recommended BBTS, including the following main programme components:

- Approvals, authorisations, directives, funding and institutional arrangements;
- Appointment of a project management team;
- Detailed geotechnical and material investigations, and topographical surveys (Alternative B);
- Tender design of the recommended components;
- Compliance with conditions of the Environmental Authorisation;
- Appointment of an Environmental Control Officer and heritage specialist;
- Detail design (will follow on tender design and carry on during construction);
- Land acquisition and servitude;
- Letting of tenders;
- · Adjudication and award of contract, and
- Actual construction.

The envisaged project programme is shown in **Table 2**. The timing of design and construction phases will be reviewed once the project planning has been completed.

Table 2: Estimated Timeframe for Proposed BBTS Implementation

Project stage	Duration	Start	Finish
Bridging Study	30 months	January 2021	July 2023
EIA Study	24 months	November 2021	December 2023
Project initiation	11 months	April 2024	March 2025
Detail design	24 months	April 2025	March 2027
Construction	30 months	April 2027	October 2029

3.10. BRIDGING STUDY REPORTS

The appointed PSP will be responsible for compiling a suite of study reports to record and describe the investigations under taken during the Bridging Study, as well as provide all relevant information on the technical feasibility study undertaken for the BBTS. A comprehensive list of proposed reports needs to be provided in the Inception Report. Typical reports and sub-reports for this study include, but are not limited to, the following:

- An inception report
- Review of BBTS Components
- Geotechnical and Materials Investigation
- Topographical Surveys
- Diversion Weir at Michell's Pass
- Transfer Pipeline to Klein Berg River
- Boontjies River Balancing Dam
- Flood Determination and Backwater Calculations
- Climate Change Prediction and Impact on Yield
- Papenkuils Pump Station Upgrade
- Raising of Voëlvlei Dam
- Other affected infrastructure
- Scheme Operation
- Cost Estimate and Economic analysis
- Socio-Economic Impact Analysis

- Environmental screening
- Public participation
- Capacity building and Training
- Implementation programme
- Institutional and Financing Arrangements
- Record of Implementation Decisions
- Main Report

The Record of Implementation Decisions (RID) is a document that describes to the implementing agent what needs to be implemented. A template for the format of the RID will be provided by DWS and agreed with the appointed PSP, before it is drafted. The RID includes the following aspects:

- o The scope of the BBTS;
- A summary of the feasibility investigation and design;
- The specific configuration of the scheme to be implemented;
- A brief description of scheme components and other relevant information;
- The estimated implementation time lines;
- A summary of the public participation process;
- A brief description of aspects requiring attention during implementation;
- The finalisation of required institutional arrangements;
- The required environmental mitigation measures, as described in the Environmental Impact Report; and
- The environmental authorisation and conditions prescribed by DEFF.

3.11. INSTITUTIONAL, FINANCING & OPERATIONAL ARRANGEMENTS

Institutional aspects that require attention during the Bridging Study include:

- a) Implementation arrangements: The scheme will most likely be proclaimed as a Government Waterworks, but could be implanted by an institution such as TCTA, and not necessarily DWS;
- Funding arrangements: The scheme, or a portion thereof, could be funded by National Treasury and/or by another institution such as TCTA or CCT; and
- c) Operational aspects: The scheme could be operated by DWS, CCT or other institution.

The above and any other relevant institutional aspect of the proposed BBTS must be investigated during the Bridging Study and recommendations made in the Main Report.

4. DELIVERABLES

Deliverables such as reports, presentations, analyses, letters and databases must be provided in Microsoft applications and in PDF-format (where applicable). Text for all documents shall be Arial 11 point font at 1.5 spacing, unless otherwise stated or agreed.

Provision must also be made to supply deliverables, such as reports and letters, in hard copy format. The standard and format of reports must be confirmed with DWS before drafting and submitting the required reports for this Bridging Study. Reports are typically submitted as first Draft, Draft Final and Final.

Table 6-1 provides a guideline of typical deliverables required for this Bridging Study. Bidders should scrutinise the list and submit an updated comprehensive list of expected deliverables in their Technical Proposal. These deliverables should be chosen to be achievable on a regular basis in order to ensure a steady (monthly) income for the PSP over the duration of this Bridging Study.

Tabl	Table 6-1: Guideline of deliverables for this Study		
No.	Description		
а	A Work Plan setting out the various tasks that must be undertaken, with a detailed description of		
	each task / sub-task / work package, and showing the expected technical deliverables		
b	Study status reports to summarise information and progress to date on the various tasks, and		
	provide other relevant information		
С	A Study Gantt chart showing the various tasks, sub-tasks and work packages with delivery		
	dates		
d	Quarterly and monthly progress reports, including information on expenditure		
е	Minutes of project steering committee, study management committee, and other meetings		
f	A decision register with processes to record substantial decisions		
g	A record of liaison with role players and stakeholders		
h	Applications in the required form and supported by appropriate documentation for all permits,		
	licences and authorisations required for the Project to proceed to the implementation phase		
i	Executive reports on the findings and recommendations of the Study		
j	A typical feasibility study has the following reports as deliverables:		
	Inception report		
	Hydrological assessment of the catchment		

- Water resources assessment
- Water requirements and return flows
- Water quality assessment
- · Geotechnical investigations
- Topographical surveys
- Review and assessment of proposed scheme components
- Environmental aspects
- Engineering feasibility design
- Project cost estimates
- Land acquisition and servitudes
- Economic analysis and Socio-economic impact
- Legal, Institutional and financing arrangements
- Main report
- Book of maps
- Summary report

5. TECHNICAL AND FINANCIAL PROPOSAL (BID)

Bidders are required to submit, at their own cost, a Proposal (Bid), which consists of the following documents:

- Standard Bidding Documents, as described under Section 5.3;
- A Technical Proposal, to show the ability of the PSP to perform all aspects of the Bridging Study described in this Terms of Reference; and
- A Financial Proposal, to provide the cost to undertake this Bridging Study (sealed in a separate envelope).

Bidders should submit comprehensive Technical and Financial Proposals, as this Bridging Study will be managed to avoid variation orders as far as possible. Bidders who submit bids that show that they do not understand the Scope of Services, and who do not supply comprehensive proposals will be evaluated accordingly.

5.1. THE TECHNICAL PROPOSAL

a) Introduction

An introductory section (no more than one (1) A4 page) should provide a brief overview of the bidding organization with particular emphasis on available capacity to perform this Bridging Study.

b) Past experience

Bidders are required to provide information on recent (past 10 years) relevant assignments undertaken by the bidding organisation. Specific details must be given to indicate the extent to which these studies relate to the Scope of Services. The responsibility of the proposed Study Leader and the other key team members (Task Leaders and Specialists) for these past assignments must be specified. The Client organisation, indicative professional fees and duration of the work programme must also be specified for each assignment. This section should not be longer than three (3) A4 pages.

c) Approach and methodology

The Scope of Services indicates that this assignment should be undertaken in a modular manner, structured around clearly defined and related tasks.

Bidders are expected to provide a brief description of the approach, methodology and comments on the ToR, illustrating their understanding of the challenges of the Bridging Study, time frames, and proposed method to complete the project on programme. The Bidder is expected to provide a brief outline of the

work to be undertaken, placing emphasis on the important or critical aspects of each task. Particular attention must be given to compliance with standing legislation.

Where the Scope of Services is silent on particular issues, bidders must be clear in stating which issues can be expected to arise during the study and which additional tasks may be necessary. These assumptions / additional tasks must be clearly indicated in the Technical Proposal.

Bidders are expected to propose their own programme of work, in a Gantt chart (MS Projects), illustrating their understanding of the best way to organise the assignment. This representation should show phases of the assignment, tasks within phases and, where necessary, sub-tasks. The work programme must also indicate the dates at which critical milestones can be reached and the critical path.

The proposed Methodology should be documented in no more than 10 A4 pages, excluding diagrams and graphic illustrations.

d) Project team capability and availability

Bidders are required to provide a team of professionals with the necessary knowledge, experience and expertise to undertake and complete all the tasks contained in this Terms of Reference. A project team organogram must be provided indicating key positions such as Study Leader, Task leaders and Specialists. Persons proposed for these positions must be identified and supported by their CV's of one to two A4 pages each, which is to be included in an Appendix. Brief capability statements must be given for each designated team member, emphasising recent experience relevant to the task envisaged.

The availability of each designated team member for the expected duration of the assignment must be indicated by reference to limitations that may be placed by other known commitments. Information must also be given on the key support staff envisaged for the assignment, supported by brief CV's, also included in an Appendix.

This section of the proposal should be limited to five (5) A4 pages with CV's included in an Appendix. Company profiles, etc. can be provided in a separate Appendix, but will not be used for the evaluation of bids.

5.2. THE FINANCIAL PROPOSAL

1) Requirements for Financial Proposal

The Financial Proposal is a stand-alone document that should provide comprehensive information on the cost of undertaking the Bridging Study.

Bidders shall make provision in their Financial Proposal for all costs and expenses to undertake and complete the tasks described in the Scope of Services.

The Financial Proposal shall include the following:

- A breakdown of deliverables and associated costs, based on the allocation of resources to the various tasks, sub-tasks and other activities described in the Scope of Services (refer to 5.2 (2) below);
- Value Added Tax (VAT) at 15% on the total estimated cost;
- Provision for escalation of professional fees and disbursements (included in deliverables) over the contract period;
- A cash flow for the contract period based on the work programme; and
- A breakdown of study team members showing the fees to be earned by Historically Disadvantaged Individuals (HDI).

2) Cost of Deliverables

This Bridging Study will be managed on the basis of deliverables and not on the number of hours worked. The breakdown of deliverables must therefore be defined in the Financial Proposal such that there will be a satisfactory cash flow to sustain the appointed PSP. A Guideline of Deliverables is discussed in **Chapter 4**.

The cost of a deliverable shall include all resources (professional and other staff costs), as well as disbursements and other costs required to produce that particular deliverable. This cost will include any sub-consultants and other resources required.

3) Provision for specialist sub-contractors and sub-consultants

Specialist sub-contractors and sub-consultants will need to be appointed during the Bridging Study to undertake some or all of the following specialised tasks, which are described in the Scope of Services:

- a) Geotechnical and materials investigation for feasibility design of the proposed Boontjies River Dam or for further information on other components of the proposed project (refer to **Section 3.5 (3)** above);
- b) Topographical surveys for feasibility design of the proposed Boontjies River Dam or for further information on other components of the proposed project (refer to **Section 3.5 (4)** above); and
- c) Any additional work required on the Reserve as directed by the Directorate: Reserve Requirements (refer to **Section 3.7 (c)** above).

The appointed PSP shall, when required during the Study, obtain the necessary quotations from reputable sub-contractors and sub-consultants for the tasks specified above. The quotations, with a recommendation from the PSP, shall then be submitted to DWS for approval before the sub-contractor / sub-consultant is appointed. The relevant Government procurement regulations shall apply to this appointment process.

Provision will be made by DWS for payment of the above specialist tasks by including a Provisional Sum in the Study Budget to cover all costs associated with these tasks. This provision shall include the following:

- Payment of sub-contractors and sub-consultants by the appointed PSP through the Bridging Study contract;
- The administrative costs incurred by the appointed PSP for the appointment, management and payment of the above specialist sub-contractors and sub-consultants, on behalf of DWS, shall be covered by an administrative handling fee of 10%.
- The professional costs incurred by the appointed PSP's professional team members for the appointment, supervision and reporting on the above specialist tasks (where applicable) shall be estimated by the appointed PSP for approval by DWS, prior to commencement of the task. Actual professional time and disbursement costs will then be claimed and paid from the professional sum.

5.3. EVALUATION SYSTEM

The Department of Water and Sanitation will evaluate all proposals (bids) in terms of the Preferential Procurement Regulations 2017. A copy of the Preferential Procurement Regulations 2017 can be downloaded from www.treasury.gov.za. In accordance with the Preferential Procurement Regulations 2011, submissions will be adjudicated on the 80/20 points system and the specified evaluation criteria.

A four phase evaluation system will be applied in evaluating the bid. On receipt of the proposals, the evaluation criteria shown below will be used for the selection of the most suitable bidder to undertake the assignment.

- Phase 1: Pre-qualification Criteria;
- Phase 2: Administrative Compliance
- Phase 3: Functional / Technical Evaluation; and
- Phase 4: Points awarded for Price and B-BBEE Status Level of Contribution (80/20 Preferential System).

1) Phase 1: Pre-qualification Criteria

The following prequalification criteria will be applied:

- Bidders will be pre-qualified on the basis of attaining B-BBEE Status level 1 or 2 to be eligible for further evaluation. Bidders with B-BBEE Status Level other than 1 or 2 will not be eligible for further evaluation.
- Bidders who are Exempted Micro Enterprise (EME) or Qualifying Small Enterprise (QSE) will be considered for this bid. Bidders who are not EME or QSE will not be eligible for further evaluation.

2) Phase 2: Administrative Compliance

Bidders are required to comply with the requirements listed below.

No	Criteria	Yes	No
1	Companies must be registered with National Treasury's Central Supplier Database (CSD). Provide proof of print out from CSD.		
2	Tax compliant with SARS (to be verified through CSD and SARS).		
3	Complete, sign, submit SBD 1, SBD 3.2, SBD 4, SBD 6.1, SBD 8 and SBD 9		

3) Phase 3: Functional / Technical Evaluation

Bidders must score at least 65% for functionality to qualify for Phase 3 of adjudication. A bidder that scores less than 65% will be regarded as submitting a bid that is technically unacceptable (non-responsive bid) and will be disqualified. Bidders who fail to obtain a minimum score for each criterion will be disqualified.

The weight that will be allocated to each functionality criterion is as follows:

Definition of values: 1= Very Poor 2 = Poor 3 = Average 4 = Good 5 = Excellent

	Functionality Evaluation Criteria	Points value	Weighting Points Awarded
Past	Experience:		
a) TI	his criterion relates to the experience of the bidding company in		25
W	rater resource assessment and engineering aspects of Technical		
F	easibility (or similar) studies over the past 10 years.		
b) It	is essential that the bidding company (including joint ventures, etc.)		
ha	as the required experience and expertise in both water resource		
as	ssessment and engineering design of water projects.		
-	oints will be awarded for past experience in these two fields on a 0-50 basis.		
	the case of a joint venture (JV) or sub-consultant the relevant		
•	xperience of all companies should be provided. Points will then be		
	warded on a pro rata basis according to the JV agreement (50:50 or		
	5:25, etc.).		
	Past experience of 10 years or more in required fields	5	
	7 to 9 years	4	
	5 to 6 years	3	
	4 years	2	
	3 years	1	
	1 to 2 years	0	
Meth	odology:		35
The n	methodology provided by bidders will be evaluated according to the		
follow	ving criteria:		
a) D	etailed method statement for each task in the study.		
	he critical aspects of tasks are emphasised.		
,	he expected challenges associated with tasks are highlighted.		
,	detailed work programme for the study is provided.		
Α	Il 4 criteria are adequately addressed in Technical Proposal	5	
	3 criteria are adequately addressed in Technical Proposal	4	
	2 criteria are adequately addressed in Technical Proposal	3	
	Only 1 criteria is adequately addressed in Technical Proposal	2	
	No criteria are adequately addressed in Technical Proposal	1	

Team Capability: Study Leader		10
The Study Leader needs to comply with the following criteria:		
a) He/she should have relevant technical and project management		
experience, knowledge and expertise of at least 10 years.		
b) He/she should have the ability to manage the technical, financial a	nd	
personnel aspects of this study, as well as ensure that the study		
programme is achieved.		
c) He/she should have been a study leader of one or more large stud	ies	
or projects.		
10 years or more of relevant experience, required ability and previous study leader experience	is 5	
8 to 9 years	4	
7 years	3	
6 years	2	
5 years	1	
Less than 5 years	0	
Team Capability: Team members		20
a) Task leaders and specialists should have the relevant experience,		
knowledge and expertise required to ensure that their respective		
tasks can be successfully undertaken.		
b) Team members should have the necessary qualification, knowledge	ie	
and experience for their respective tasks.		
c) A balanced team for the required tasks should be provided.		
d) An organogram of the project team showing their position and role	in	
the study should be provided.		
Balanced team with task leaders/ specialists with 10 years or more of	of 5	
relevant experience		
8 to 9 years	4	
6 to 7 years	3	
4 to 5 years	2	
1 to 3 years	1	
Task leaders/ specialists have no relevant experience	0	
Capacity building and training:		- 10
Provide clear proposals on capacity building and training, which include	des	
secondment of DWS officials and presentation of training		
workshops. Topics for workshops should also be provided.		
Adequate provision is made for 3 DWS officials and 2 workshops	5	
Provision is made for 2 DWS officials and 1 or 2 workshops	4	

Provision is made for one DWS official and 1 or 2 workshops	3	
Provision is made for secondment of DWS officials only	2	
Provision is made for presentation of workshops only	1	
No provision is made for training and capacity building	0	
TOTAL		100

4) Phase 4: Price & B-BBEE status level of contribution (80/20 system)

Price

A maximum of 80 points are allocated for price on the following basis:

$$Ps = 80 \left(1 - \frac{Pt - P\min}{P\min} \right)$$

Where:

Ps = Points scored for comparative price of bid under consideration

Pt = Comparative price of bid under consideration

Pmin = Comparative price of lowest acceptable bid

Preference (B-BBEE Status Level of Contribution)

In terms of Regulation 5(2) and 6(2) of the Preferential Procurement Regulations, preference points must be awarded to a bidder for attaining the B-BBEE status level of contribution in accordance with the table below.

B-BBEE Status Level of Contributor	Number of points (80/20 system)
1	20
2	18
3	14
4	12
5	8
6	6
7	4
8	2
Non-compliant contributor	0

Bidders must submit their original and valid **B-BBEE status level verification certificate** or a certified copy thereof, substantiating their B-BBEE rating issued by a Registered Auditor approved by IRBA or a Verification Agency accredited by SANAS.

Scores obtained for Price and B-BBEE Status Level are combined to obtain an overall score for each bid. The Functionality score is not factored in the final score, it is only used for screening bids that qualify from those that do not qualify to enter the last stage of evaluation.

5) Specific Conditions

Bidders must pay attention to the following specific conditions:

- Bidders must submit one (1) original Proposal plus five (5) copies, marked appropriately;
- Proposals must be submitted in sealed envelopes;
- Joint ventures are required to submit a formal agreement between the parties involved in the joint venture. The percentage involvement of each firm in the joint venture must be clearly stated; and
- DWS is under no obligation to accept any bid, for whatever reasons it may consider appropriate, and reserves the right not to proceed with the appointment of any firm that responded to the invitation to tender. If a decision is made not to proceed with appointment, official notification will be given to all bidders who attended the compulsory briefing session.

6. FORMAL BRIEFING SESSION

- 6.1. Due to the COVID-19 restrictions on gatherings and to allow for maximum participation of the prospective service providers, the department will not be holding any formal briefing session.
- 6.2. In order to attend to any specific questions to this Terms of References, service providers are required to submit their formal enquiries directly to the Project Manager(s) and the SCM office.
- 6.3. Service Providers will have two weeks after advertisement to submit their questions and the department will respond to such questions and also upload all questions and answers on the departmental website www.dwa.gov.za
- 6.4. The contacts listed under paragraph 7 below will be attending to all questions.

7. GENERAL INFORMATION

Bidders must take note of the following general information that is applicable to this Bridging Study:

a) Client and Study Name

The Department of Water and Sanitation (DWS) will act as the Client for the proposed assignment. The assignment shall be referred to as: Post Feasibility Bridging Study for Breede-Berg (Michell's Pass) Water Transfer Scheme.

b) Intellectual Property Ownership

The ownership of all Intellectual Property derived from this EIA Study shall vest with DWS. This stipulation will be included in the contract between the appointed PSP and DWS.

c) Invoices

The Financial Proposal, and hence invoices submitted for payment, must be set up in such a way that it will be possible for payments to be linked to deliverables. DWS needs to be in a position to track the contract progress by checking deliverables achieved. Payments will be made after DWS has received satisfactory proof of deliverables. Examples of deliverables are discussed in **Section 4**. The invoice format needs to be agreed with DWS at the commencement of the contract. It should also be noted that only one invoice per month can be submitted to DWS, but an invoice does not need to be submitted for each month.

d) Contact Person

This Terms of Reference and invitation to bid are administered by the Directorate: Options Analysis. The details of the contact persons for enquiries about this Bridging Study are given in the table below.

	Address	
Technical Matters	Bid and SCM Related Matters	Department of Water &
Mr A J (Tony) Moore	Mr Patrick Mabasa	Sanitation Sedibeng Building Room 840
Tel: 012 336 8528	Tel: 012 336 7518	
Cell: 082 884 5540	Cell:063 2519486	Private Bag X 313 PRETORIA
E-mail: MooreT@dws.gov.za	E-mail: MabasaP@dwa.gov.za	0001