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WATER SUPPLY AGREEMENT

entered into between:

THE DEPARTMENT OF WATER AND SANITATION
("DWS")

and

THE CITY OF CAPE TOWN METROPOLITAN MUNICIPALITY
("THE USER")

IN RESPECT OF
THE BERG RIVER-VOËLVLEI AUGMENTATION SCHEME
("BRVAS" / "THE PROJECT")

[redacted]

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PART 1: INTRODUCTION

1. DEFINITIONS

In this Agreement and the annexures hereto, unless the context indicates otherwise, the words and expressions set out below shall bear the meanings assigned to them and cognate words and expressions shall have a corresponding meaning:

1.1	"Agreement"	means this agreement duly signed by the Parties and all annexures hereof;
1.2	"Assurance of Supply"	means the probability, expressed as a percentage of years, that water may be available for supply to the User in the long term from the WCWSS, as set out in **Annexure C** hereto;
1.3	"BRVAS" or "Project"	means the Berg River-Voëlvlei Augmentation Scheme;
1.4	"BRVAS Administration Costs"	means the aggregate of all costs of an administrative nature, not forming part of the BRVAS Capital Costs and the BRVAS Funding Costs, reasonably and necessarily incurred or to be incurred for or in connection with the Implementation and Debt management of the BRVAS, being all costs and fees of setting up of loan facilities, the procurement of funding, the obtaining credit ratings and all operational costs of an administrative nature including the costs of any insurances and such other post-completion costs and expenditure incurred by TCTA up to Operational Declaration, by DWS and/or TCTA, in connection with the BRVAS;
1.5	"BRVAS B&R Tariff"	means the betterment and refurbishment tariff applicable to the BRVAS as determined in terms of the Pricing Strategy and paid by each User to DWS, as set out in this Agreement and **Annexure D** hereto;
1.6	"BRVAS Capital Costs"	means the aggregate of all costs of a capital nature not forming part of the BRVAS Funding Costs and BRVAS Administration Costs, reasonably and necessarily incurred or to be incurred to Implement the BRVAS, including all design and construction [redacted]s, land

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		acquisition and related registration costs, and such other post-completion costs and expenditure as may be regarded by TCTA in its reasonable discretion to be costs of a capital nature;
1.7	"BRVAS Capital Unit Charge ("BRVAS-CUC")	means the capital unit charge contemplated for a Project of this nature under the Pricing Strategy, in this instance comprising the aggregate of the Project Costs over the Debt Repayment Period, to represent the relevant Debt of all Users, to be charged by DWS to each User in proportion to its licensed allocation from the BRVAS, as set out in the relevant Water Supply Agreement/s and **Annexure D** hereto;
1.8	"BRVAS Funding Costs"	means the aggregate of all costs of a funding nature, not forming part of the BRVAS Administration Costs and the BRVAS Capital Costs, being all costs relating to interest, expenses, banking charges (including breakage costs where applicable) and the like, reasonably and necessarily incurred or to be incurred in connection with the raising of capital and to maintain such capital in force, to fund the Implementation of the BRVAS;
1.9	"BRVAS O&M Tariff"	means the operations and maintenance tariff applicable to the BRVAS as determined in terms of the Pricing Strategy, to be paid by each User to DWS, as set out in this Agreement and **Annexure D** hereto;
1.10	"BRVAS Project Costs/Debt"	means the aggregate of the BRVAS Capital Costs, the BRVAS Funding Costs and the BRVAS Administration Costs, representing the debt to be repaid by the User/s to DWS in accordance with this Agreement and as set out in **Annexure D** hereto;
1.11	"BRVAS Third Party Charge	means the third party capital unit charge that will be charged by DWS to all other users, other than the Users contemplated under the BRVAS, being the City of Cape Town Metropolitan Municipality, the Bergrivier Local Municipality, the Drakenstein District Municipality, the Saldanha Bay Local Municipality, the Stellenbosch Local

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	Municipality, the Swartland Local Municipality and the Lower Berg Irrigation Board;
1.12 "Bulk Water Supply Agreement/s"	means the bulk water supply agreement/s to be entered into between the User and its customers;
1.13 "Business Day"	means any day other than a Saturday, Sunday or gazetted national public holiday in the RSA;
1.14 "Construction Contracts"	means any contract/s entered into by TCTA in respect of the construction of the BRVAS infrastructure, which contracts shall be based on the terms and conditions contained in the Federation Internationale des Ingenieurs-Conseils ("FIDIC") Model Agreements;
1.15 "CPI"	means the Consumer Price Index (for all urban areas), as published by Statistics South Africa (Statistical Release P0141), or any replacement thereof, from time to time;
1.16 "Debt"	means the aggregate of the BRVAS Capital Costs, the BRVAS Funding Costs and the BRVAS Administration Costs representing the debt to be repaid by the User/s to DWS in accordance with this Agreement and as set out in **Annexure D** hereto;
1.17 "Debt Repayment Period"	means a period of 20 (twenty) years following Operational Declaration or for so long as any portion of the Debt, remains outstanding whichever is the later or, such shorter period if the Debt is repaid within the 20 (twenty) year period;
1.18 "Delegated Authority"	means anyone to whom the Minister delegates a power and/or duty vested in the Minister, pursuant to the Minister's authority to do so in terms of section 63 of the NW Act or otherwise;
1.19 "Directive"	means the directive issued by the Minister on 18 May 2017 to TCTA and, where applicable, read together with all subsequent directives issued by the Minister in respect of the Project;

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1.20 "DWS"	means the Department of Water and Sanitation or any successor in title in the Government;
1.21 "Estimated CPI"	means the forecast statistics of the year-on-year CPI (headline) as published annually by the Bureau of Economic Research attached to the University of Stellenbosch ("BER") or any similar reputable institution, if statistics from BER are not available;
1.22 "Force Majeure"	means any relevant event, occurrence, circumstance or condition, excluding drought, beyond the control of the Parties which could not have been reasonably foreseen when this Agreement was entered into and which, despite the exercise of diligent efforts, could not have been prevented, limited or minimised and which results in either of the Parties not being able to fulfil its duties and obligations in terms of this Agreement;
1.23 "Funders"	means all the funders who will provide the funding for the BRVAS to TCTA;
1.24 "Government"	means the National Government of the RSA;
1.25 "Implement"	means, in relation to the Project or where applicable, any phase thereof, the entire process of planning, designing, land acquisition and registration, contract management, constructing, commissioning, project close-out, supervising and the finalisation of each of these aspects of the aforesaid processes of the BRVAS as a government waterworks in accordance with the provisions of the NW Act, and all other relevant legislation or administrative actions, and the terms "Implemented" and "Implementation" shall have corresponding meanings;
1.26 "Implementation Agreement"	means the implementation agreement to be concluded between DWS and TCTA to regulate the relationship between them in respect of the funding and implementation of the Project;

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1.27 "Licence"	means the section 21(a) licence/s for water use to be granted or already granted in terms of Chapter 4 of the NW Act to each User taking water from a resource within the Project Area and conveyed through the Project;
1.28 "Minister"	means the Minister of Human Settlements, Water and Sanitation, in the Government;
1.29 "NWRS"	means the National Water Resource Strategy, as amended from time to time and published in accordance with sections 5, 6 and 7 of the NW Act;
1.30 "NW Act"	means the National Water Act 36, 1998;
1.31 "Operational Declaration"	the date on which DWS declares in writing the BRVAS to be operational, once the BRVAS is capable of performing the function for which it was designed;
1.32 "Parties"	means DWS and the User, and the term "Party", shall mean either of DWS or the User as the case may be;
1.33 "PFMA"	means the Public Finance Management Act 1, 1999;
1.34 "Pricing Strategy"	means the Pricing Strategy for Raw Water Use Charges within the framework of relevant Government policy, established by the Minister in concurrence with the Minister of Finance and published pursuant to section 56(1) of the NW Act, from time to time;
1.35 "Project" or "BRVAS"	means the Berg River-Voëlvlei Augmentation Scheme;
1.36 "Project Area"	means the project area as set out in **Annexure A** hereto;
1.37 "RSA"	means the Republic of South Africa, comprising the nine provinces identified in section 103 of the Constitution of the Republic of South Africa, 1996;
1.38 "Signature Date"	means the date of signature of this Agreement by the last signing Party hereto;

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1.39 "Statutory Interest Rate"	means a rate determined from time to time by the Minister, with the concurrence of the Minister of Finance, by notice in the Government Gazette under the Prescribed Rate of Interest Act 55, 1975, as provided for in section 59(3)(a) of the NW Act which shall be charged by DWS to a water user for late payment;
1.40 "TCTA"	means the Trans-Caledon Tunnel Authority, established by Notice No. 2631 published in Government Gazette No. 10545 dated 12 December 1986, as amended by Notice No. 277 published in Government Gazette No. 21017 dated 24 March 2000, a major public entity listed in Schedule 2 of the PFMA and a water management institution in terms of the NW Act, operating in the water sector *inter alia*, in the funding and implementing of bulk raw water infrastructure development projects, as directed by the Minister from time to time;
1.41 "User"	means each user authorised to take water from the Project;
1.42 "VAT"	means value-added tax levied at the then prevailing rate in accordance with the Value-Added Tax Act 89, 1991;
1.43 "Water Use Charges"	means all charges relating to the BRVAS levied by DWS in accordance with the Pricing Strategy and/or in terms of statutory requirements, but excluding any charges provided for under the BRVAS-CUC, the BRVAS Third Party Charge, the BRVAS O&M Tariff or the BRVAS B&R Tariff;
1.44 "Water Supply Agreement/s"	means the BRVAS Water Supply Agreement/s to be concluded between DWS and each User, for the supply of bulk raw water on the terms and subject to the conditions contained therein;
1.45 "WCWSS"	means the Western Cape Water Supply System as described in **Annexure A**;

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1.46 "Yield"	means the volume of water that can be abstracted annually at a specific assurance of supply.

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2. INTERPRETATION

In this Agreement:

2.1 any reference to an enactment is to the relevant enactment as at the date of signature hereof, as amended or re-enacted from time to time;

2.2 if any provision in a definition is a substantive provision conferring rights or imposing obligations on any Party, notwithstanding that it is contained in the Definitions clause, effect shall be given to it as if it is a substantive provision in the body of the Agreement;

2.3 when any number of days is prescribed in this Agreement, same shall be reckoned exclusively of the first and inclusively of the last day, unless the last day falls on a Saturday, Sunday or public holiday, in which case the last day shall be the next succeeding day which is not a Saturday, Sunday or public holiday;

2.4 where figures are referred to in numerals and in words, and should there be a conflict between the two, then the words shall prevail;

2.5 words importing any one gender shall include the other gender and the singular shall include the plural and vice versa;

2.6 a reference to natural persons shall include created entities (incorporated and unincorporated) and vice versa;

2.7 expressions defined in the Definitions clause shall bear the same meanings in all annexures to this Agreement which do not themselves contain their own definitions;

2.8 where any term is defined within the context of any particular clause in this Agreement, the term so defined, unless it is clear from the clause in question that the term so defined has limited application to the relevant clause, shall bear the meaning ascribed to it for all purposes in terms of this Agreement, notwithstanding that the term has not been defined in the Definitions clause;

2.9 the headings have been inserted for convenience only and shall not be used for nor assist in nor affect its interpretation;

2.10 where any conflict arises between the provisions of the Agreement and the provisions of any annexure hereto, then the provisions of this Agreement will prevail;

2.11 where any references to any amount is made it shall mean that such amount is exclusive of VAT, unless the amount expressly includes VAT; and

2.12 the rule of construction that an agreement shall be interpreted against the Party responsible for the drafting or the preparation thereof shall not apply.

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3. PREAMBLE

3.1 The WCWSS is an integrated and collectively managed system of dams, pump stations, pipelines and tunnels. In addition to servicing the City of Cape Town, the WCWSS supplies water to towns in the Overberg, West Coast and Cape Winelands District Municipalities as well as providing irrigation water for agriculture. The integrated system helps optimise the use of water resources by allowing water transfers between dams and catchment systems.

3.2 The major dams in the WCWSS, include the Theewaterskloof Dam in the Breede River catchment and the Voëlvlei, Berg River and Wemmershoek Dams in the Berg River catchment, and the Steenbras Upper and Lower Dams in the Steenbras River catchment.

3.3 The smaller dams and weirs in the WCWSS, include DWS's Kogelberg and Rockview Dams which service Eskom's Palmiet Pumped Storage Scheme and the water transfer scheme to the Upper Steenbras Dam and the Kleinplaas Dam in the Eerste River on the delivery route of the Riviersonderend-Berg River Tunnel System and Misverstand Weir on the lower Berg River.

3.4 The Western Cape Reconciliation Strategy Study identified the need for the augmentation of the WCWSS by 2019. In July 2008, DWS appointed the Western Cape Water Consultants Joint Venture to undertake pre-feasibility level investigations into six potential surface water development options. The BRVAS Project was found to be the most favourable surface water intervention option and recommended for implementation. It will involve:

3.4.1 the pumped abstraction of water in winter from the Berg River to increase the yield of the Voëlvlei Dam by approximately 23 (twenty three) million cubic metres per annum;

3.4.2 a low-level weir and pump station located at the Lorelei site on the Berg River; and

3.4.3 a 6.3 km long pipeline to deliver the water into the Voëlvlei Dam. The pipeline will be designed for reverse operation during summer so that releases can be made from the Voëlvlei Dam to the downstream users, including meeting the ecological water requirements of the estuary.

3.5 The BRVAS project is a commercially viable project to be funded and Implemented by TCTA in accordance with the provisions of the Pricing Strategy, which requires that such projects be funded off-budget using private sector funding and be repaid from revenue received from water tariffs to be paid by Users, so that the full financial cost of funding and implementing the BRVAS is recovered from all users thereof.

3.6 The Minister issued a directive to TCTA in May 2017 to fund and implement the BRVAS project on an off-budget basis and to facilitate the establishment of the institutional arrangements and the participation of Users through its governance structures whilst the BRVAS is being Implemented.

3.7 DWS and the User now wish to enter into this Agreement to record and regulate the relationship between them, in respect of the funding, Implementation and water supply arrangements in respect of the BRVAS.

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PART 2: WATER SUPPLY FROM BRVAS

4. COMMENCEMENT AND DURATION

This Agreement shall come into effect on the Signature Date and remain of full force for a period of 20 (twenty) years following the date of Operational Declaration or for as long as the Debt applicable to the User remains outstanding, provided that once the full amount of the Debt has been repaid, the User will cease to be liable for payment of the BRVAS-CUC.

5. ASSURANCE OF SUPPLY

5.1 The Assurance of Supply for the User shall be as set out in its relevant water use license.

5.2 Neither Party shall wilfully nor negligently do anything to negatively influence the Assurance of Supply.

6. RESTRICTIONS TO SUPPLY

6.1 If on reasonable grounds it is believed that a water shortage exists or is imminent, restrictions may be applied on the water supply to the User and other users as may be appropriate at that time, in terms of the NW Act or any other applicable legislation.

6.2 DWS will use all reasonable endeavours to consult the User directly in the event of the likelihood of the imposition of water restrictions.

7. INTERRUPTIONS TO SUPPLY

7.1 DWS shall give the User at least 3 (three) months' written notice of any scheduled interruptions or restrictions on supplies of water from the BRVAS, for purposes of testing, renewing, examining, repairing or maintaining any part of the BRVAS infrastructure.

7.2 Should a Party become aware of any relevant event which has or may have a material adverse impact on the supply of water, then that Party shall immediately inform the other.

7.3 In cases of emergencies or unscheduled interruptions, DWS shall endeavour to give at least 12 (twelve) hours' notice to the User telephonically and/or by means of a telefax or electronic mail, subject to DWS' right in its sole discretion to interrupt water supplies or to lock the point/s of supply where necessary without prior notification. Notwithstanding that there may be circumstances where no prior notification has been given to the User of an interruption in water supply or locking of point/s of supply, DWS shall notify the User of such circumstances and the steps to be taken to restore water supply as soon as possible after such event.

7.4 The User shall provide sufficient piping and storage facilities as may be required by it, at its sole cost, to take water from the relevant point of supply, and store such water, to mitigate the effects of any interruptions in supply.

8. CONDITIONS OF SUPPLY

8.1 DWS shall supply all water in accordance with the terms and conditions of this Agreement and the relevant Licence/s to be issued to the User, and subject to such statutory

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requirements as may be applicable from time to time.

8.2 Save and except for the connecting infrastructure to be installed by the User in terms of the BRVAS Operating Rules, no other water supply system, water services works, pipeline, connection, installation or other equipment shall be connected by the User, or any other party acting on its behalf, to any part of the BRVAS infrastructure, unless expressly authorized in writing by DWS to do so and subject to such terms and/or conditions as DWS may impose.

9. WATER QUALITY

9.1 DWS shall use its reasonable endeavours to monitor the quality of water supplied according to its monitoring programs, it being agreed that DWS does not and will not guarantee the quality of water supplied nor its fitness or suitability for any purpose whatsoever. DWS undertakes to provide such monitoring results to the User as and when requested to do so.

9.2 The User shall be responsible for treating all water supplied to it by DWS, to such standards as may be necessary for any usage requiring treated water.

10. MEASUREMENT OF WATER SUPPLY

10.1 DWS, its Delegated Authority and their authorised officers, employees and agents shall be entitled to unrestricted access to any component of the supply or abstraction control mechanisms, abstraction meters, control meters, point(s) of supply or any other works as may be required in the performance of their duties within the User's property or servitude area, including but not limited to the reading and checking of meters and taking of water quality samples. All such access shall be in accordance with applicable legislation.

10.2 The supply of water to the Users shall be measured by DWS in terms of the metering procedures set out in **Annexure F** hereto and such measurements shall be used by DWS to verify the quantity of water actually drawn by the Users so as to reconcile actual use against the Licenced volume allocated to the User on an annual basis, taking account of water restrictions when enforced under the NW Act.

10.3 The meter readings shall be taken by DWS on the nearest Business Day to the 20th (twentieth) day of each calendar month as provided for in **Annexure F** hereto.

10.4 The User hereby agrees and undertakes to indemnify and hold harmless each of DWS and/or any Delegated Authority against any and all claims, suits, losses, damages, which may be claimed, brought or threatened against either of them in the event of, and to the extent that, either of DWS or a Delegated Authority is unable to meet its Assurance of Supply levels to any other User/s arising as a direct result of the User taking more water, as calculated annually, than it is authorised to take.

11. INTEGRATED WATER SUPPLY PLANNING AND OTHER SYSTEM RELATED ISSUES

The Parties record that system planning or operating issues pertaining to the reduction in the yield of the WCWSS and its over-allocation, the reduced City of Cape Town allocation

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from the Berg Water Project and other compulsory licence discrepancies will be addressed expeditiously.

PART 3: THE BRVAS INFRASTRUCTURE

12. THE BERG RIVER-VOËLVLEI AUGMENTATION SCHEME

The Parties acknowledge and record that:

12.1 the BRVAS involves the Implementation of the Project within the Project Area, as described in **Annexure A** hereto;

12.2 the water infrastructure of the BRVAS shall be developed, operated, utilised and managed with the objective of benefiting, directly or indirectly, all users in the BRVAS project area, in the context the WCWSS;

12.3 the Minister issued the Directive to TCTA directing it to fund and Implement the BRVAS. As part of TCTA's Implementation Program, a Project Implementation Plan and a Project Charter will be compiled after consultation with the relevant Users for approval by TCTA;

12.4 the BRVAS Project Charter will set out inter alia, the mandate, description, governance structure, scope, implementation strategies for funding, public relations, engineering, environmental, health and safety, land acquisition processes, project management, procurement, strategies that support government goals, key risks, resource plans, milestones and budget, including contingency amounts related thereto; and

12.5 the Project Implementation Plan will set out inter alia, timelines for the tender processes for pre-qualification (if required) and appointment of design engineers, approvals of designs (including optimisation measures), tender processes for pre-qualification and appointment of construction contractors, land acquisition processes, appointment of relevant panels of experts for social, business, environmental and engineering matters, commissioning dates, handover dates and water delivery dates.

13. REVIEW OF WATER AVAILABILITY FROM THE BRVAS

In terms of section 49 of the NW Act, the Minister is entitled to undertake periodic reviews of the Total Water Availability and Capacity Allocated, based on information obtained from the WCWSS Model and hydrological studies undertaken from time to time, and where necessary, adjustments to the licensed volume of water to each User may be made in terms of the NW Act, as considered appropriate by the Minister after consultation with the User.

14. ACCESS TO THE BRVAS

Both during and after the Implementation of BRVAS:

14.1 the User and its authorised officers, employees and agents may request DWS or a designated official at a Delegated Authority, for reasonable access to any component of the BRVAS and any works associated with the supply of water from the BRVAS including without being limited to, any relevant documentation; and

14.2 any request to gain access to any documentation, shall be directed by the User to DWS or

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to a designated official at a Delegated Authority in writing, provided that neither DWS nor a Delegated Authority shall be obliged to disclose any document to the User which it is not obliged to disclose in terms of the Promotion of Access to Information Act, 2000.

15. OPERATIONS AND MAINTENANCE

15.1 Notwithstanding that DWS shall be responsible for the operations and maintenance of the Project according to relevant best practice, standards and guidelines in an integrated, cost effective, consultative and efficient manner, taking into consideration all relevant Users, DWS may sub-contract its operations and maintenance obligations to any third party and conclude an appropriate operations and maintenance agreement with it, to record the terms and conditions entailed in such arrangements.

15.2 The BRVAS operations and maintenance costs will be charged by DWS as the BRVAS O&M Tariff as provided for in terms of **Annexure D** and the Pricing Strategy.

16. BETTERMENTS AND REFURBISHMENTS

16.1 DWS shall be responsible for the betterment and refurbishment of the Project infrastructure or any component thereof and shall recover the costs associated with the betterment and refurbishment of the Project infrastructure, in terms of the Pricing Strategy.

16.2 The BRVAS betterment and refurbishment costs will be charged by DWS as the BRVAS B&R Tariff as provided for in terms of **Annexure D** and the Pricing Strategy.

16.3 The betterment and refurbishment costs include, in the case of:

16.3.1 betterments, any costs of any improvement to the Project's infrastructure or any component thereof, which would result in an increase in its capacity and/or functionality beyond its original standard of performance, and costs incurred to increase the yield of the Project or meet safety, statutory and/or best practice requirements; and

16.3.2 refurbishments, any costs incurred to restore the capacity and/or functionality of the Project, and/or to extend the useful economic life of the Project's infrastructure or any component thereof, arising from the potential loss of capacity or assurance of supply and/or functionality arising due to age, wear and tear, decay, inadequacy and obsolescence.

PART 4: OBLIGATIONS AND INSTITUTIONAL ARRANGEMENTS

17. OBLIGATIONS OF DWS

DWS undertakes:

17.1 to assume responsibility for the preparation of all relevant applications for obtaining all necessary environmental authorisations required to Implement the BRVAS;

17.2 to ensure the Implementation of the Project using engineering principles, philosophies, procedures and standards employed by governments and water utilities, in accordance with prevailing international standards under comparable circumstances, from time to time;

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17.3 the Project shall be Implemented by TCTA in a consultative manner with the participation of all relevant stakeholders through the Project Committee as may be reasonably practicable.

17.4 to consider and where appropriate, recommend to the Minister, its approval for the grant of a Licence to the User, with due regard to the requirements of the NW Act;

17.5 to confirm Operational Declaration of the BRVAS within 60 (sixty) days of receipt of the taking-over certificate from TCTA.

18. OBLIGATIONS OF THE USER

The User undertakes:

18.1 to take up its licensed/allocated volume of water from the BRVAS;

18.2 to accept and make payment of the BRVAS-CUC, the BRVAS O&M Tariff and the BRVAS B&R Tariff set out in this Agreement and **Annexure D** hereto, and all Water Use Charges as may be charged from time to time in terms of the Pricing Strategy;

18.3 to take water from any alternative water source (where applicable) identified by the Minister in her sole discretion after consultation with the Users, in terms of the Licence issued to it;

18.4 to provide DWS with a certified copy of the relevant extract of the authorising resolution passed by its council or board of directors or chairman of a water board/water user association approving its entry into this Agreement in specific terms, and authorising the nominated signatory hereof to conclude this Agreement on behalf of the User, to evidence its authority to enter into this Agreement and be bound to the terms and conditions hereof, nothing at all excepted.

19. BRVAS INSTITUTIONAL ARRANGEMENTS

The Parties record that the following agreements will be concluded as part of the institutional and contractual arrangements under the Project:

19.1 an Implementation Agreement between the DWS and TCTA to record and regulate the funding and Implementation of the Project;

19.2 a Water Supply Agreement between DWS and each User, in terms of which DWS will supply bulk raw water from the WCWSS which shall be deemed to be supplied from the BRVAS to the User, which will take such water and pay to DWS, the BRVAS-CUC, all other applicable water tariffs and the Water Use Charges in respect thereof;

19.3 one or more Bulk Water Supply Agreements between the User and its customers; and

19.4 such other agreements as may be necessary to give effect to the Project.

PART 5: BRVAS FUNDING, BRVAS-CUC, WATER USE CHARGES, INVOICING AND PAYMENT

20. BRVAS FUNDING

20.1 DWS shall annually obtain and provide to TCTA the project preparatory funding in line with the Implementation programme determined by TCTA, as required in the Directive.

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20.2 TCTA shall raise the off-budget funding for the Implementation of the BRVAS Project.

21. THE BRVAS-CUC

21.1 This Agreement makes provision for the BRVAS-CUC to be charged by DWS on all the Users taking water from the BRVAS.

21.2 The User will commence paying the BRVAS-CUC applicable to it as provided for in **Annexure D**, on Operational Declaration. Such repayments will continue for as long as any portion of the Debt of the User remains outstanding.

21.3 Adjustments to the BRVAS-CUC from time to time shall be undertaken as provided for in this Agreement, **Annexure D** hereto and the Pricing Strategy.

22. WATER USE CHARGES

22.1 DWS is entitled to levy various Water Use Charges on Users in terms of the Pricing Strategy and such charges will be deemed to include any charges, levies or costs as may be contained in relevant statutory requirements.

22.2 The Water Use Charges will be charged to the Users on a monthly basis (or annually, if and where applicable) separately from the BRVAS-CUC and will be determined in terms of the prevailing Pricing Strategy and/or other statutory requirements in force at the time and will be applicable both during and after the period of repayment of the Debt.

23. INVOICING AND PAYMENT PROCEDURES

23.1 DWS shall at the end of each month in which the meter readings are taken, in accordance with clause 10 above, send a copy tax invoice to the User. Such copy tax invoice will contain details of the date, applicable amount payable under the BRVAS-CUC, applicable amount payable for the Water Use Charges, VAT, VAT registration number, due date for payment, bank account details of DWS and such other details required in terms of applicable legislation.

23.2 DWS shall ensure that the original tax invoice is posted (or otherwise delivered) to the User by not later than the end of the month in which the meter readings are taken to ensure that the User receives the tax invoice by not later than the 15th (fifteenth) calendar day of the month following the month in which such meter readings are taken as set out in sub-clause 10.3 above. The User will make payment of the full amount of each tax invoice by the due date reflected on each tax invoice, provided that such due date shall not be less than 30 (thirty) days after the invoice date reflected on such tax invoice, into a bank account nominated in writing by DWS from time to time.

23.3 Any delay in the rendering of a tax invoice will not relieve the User of its obligation to make payment to DWS for all amounts outstanding. In the event of the User not receiving any tax invoices timeously or at all, the User undertakes to notify DWS thereof in writing by no later than 5 (five) Business Days after the 15th (fifteenth) calendar day referred to in sub-clause 23.2 above. In such event payment will be made within 30 (thirty) days after receipt

[redacted]

of a tax invoice from DWS, provided that where such notification has been given to DWS, it shall not be entitled to charge any interest on such late payment.

23.4 Each User will be invoiced monthly by DWS for:

23.4.1 the BRVAS-CUC calculated on the basis set out in **Annexure D** hereto;

23.4.2 any other BRVAS water tariffs such as BRVAS O&M Tariff and BRVAS B&R Tariff as applicable in terms of the Pricing Strategy; and

23.4.3 any Water Use Charges as payable in terms of the Pricing Strategy.

23.5 The User will make payment of the BRVAS-CUC as invoiced by DWS directly to TCTA as provided for in clause 24 below.

23.6 In the event of the User failing to make payment of the BRVAS-CUC, the BRVAS O&M Tariff, the BRVAS B&R Tariff or Water Use Charges in accordance with this Agreement, then in addition to all other remedies available to it in terms of the NW Act, DWS shall be entitled:

23.6.1 on notice, to suspend or withdraw a water use entitlement, provided that the User has been directed to take specific steps to rectify the failure within a specified period, in terms of section 54(3) of the NW Act and the User has had an opportunity to make representations within a reasonable period in terms of section 54(4) thereof; and/or

23.6.2 on notice, to restrict or suspend the supply of water to the User from this government waterworks until such charges together with interest in respect of the default period have been paid, provided that DWS has given the User an opportunity to make representations within a reasonable period on any proposed restrictions or suspensions in terms of section 59(4) of the NW Act; and/or

23.6.3 to charge interest at the prescribed Statutory Interest Rate on all outstanding amounts, such interest to be calculated from the due date for payment until the date that payment is actually made.

24. ASSIGNMENT OF RIGHTS TO REVENUE BY DWS TO TCTA

In consideration of the Debt to be incurred by TCTA, in the funding and Implementation of the BRVAS, and the revenue to be collected by DWS from the User under the BRVAS-CUC and the BRVAS Third Party Charge (where applicable), the Parties hereby agree as follows:

24.1 DWS will assign to TCTA, its rights to receive payment of the BRVAS-CUC and the BRVAS Third Party Charge directly from the User/s, in terms of the Deed of Assignment attached as **Annexure E** hereto;

24.2 the User hereby consents to the assignment of rights contemplated in sub-clause 24.1 above;

24.3 in consideration of the assignment of rights contemplated in this clause, TCTA shall apply all such revenue received by it from the User under the BRVAS-CUC and the BRVAS Third Party Charge, firstly in reduction of its portion of the BRVAS costs that have been pre-funded by DWS as the Project is intended to be funded on an off-budget basis, and then to

its portion of the Debt applicable to it;

24.4 DWS undertakes to incorporate the assignment of rights contemplated under this clause in all Water Supply Agreements concluded in future with the users under the BRVAS;

24.5 For the avoidance of doubt, DWS shall continue to receive payment of the BRVAS O&M Tariff, the BRVAS B&R Tariff and Water Use Charges as may be applicable, directly from the User;

24.6 the assignment of rights contemplated under this clause does not affect or detract from any of DWS' remaining rights and obligations under the Agreement, all of which continue in full force and effect, nothing at all excepted.

PART 6: LIABILITY AND BREACH

25. LIABILITY

25.1 Neither Party shall be liable nor assume liability under any circumstances whatsoever for any special, indirect or consequential loss or damages of whatsoever nature and howsoever arising whether in contract, delict or otherwise, suffered as a result of any Party's actions or omissions, arising either in terms of this Agreement or being a delictual claim or action, whether foreseen or unforeseen and/or having been reasonably foreseeable, which includes any claim, indirect, extrinsic, special, penal, exemplary or consequential loss or damage pertaining to a loss of profits, a loss of operational time, any loss of information or for claims for losses or damages based on contracts with third parties.

25.2 The liability of each Party to the other in all instances shall be limited to all direct loss or damage as may be sustained or incurred by a Party and which is directly attributable to the wilful or negligent actions and/or omissions of the other Party, its employees and agents.

25.3 DWS shall under no circumstances whatsoever be liable nor assume liability:

25.3.1 for any loss or damage of whatsoever nature and howsoever arising, suffered or claimed, to any property or injury to any person whomsoever resulting either directly or indirectly, consequentially or otherwise from any emergencies or unscheduled interruptions, including variations or deficiencies in the water supply;

25.3.2 for any loss or damage to the User arising out of any water supply system or water services works or connection or installation connected with or made to any waterworks of DWS by the User;

25.3.3 for any loss or damage of whatsoever nature and howsoever arising, suffered or claimed, to any property or injury to any person whomsoever or for the loss of production or the loss of income or profit resulting either directly or indirectly, consequentially or otherwise, from the quality of water supplied.

26. BREACH

26.1 In the event of any breach of any of the terms or conditions of this Agreement by either Party hereto, including any failure to comply with any of the material terms and/or conditions of this Agreement and/or the drawing of water by the User in excess of the Licenced annual

volumes which it is authorised to take, but excluding those material breaches specifically identified in sub-clause 26.3 below, then the aggrieved Party may either claim specific performance or cancel the Agreement, provided that:

26.2 time has been made of the essence by the aggrieved Party to the defaulting Party by the giving of written notice detailing the nature of the alleged breach by the defaulting Party and demanding that such breach be remedied within a period of 14 (fourteen) Business Days of date of such initial written notice to the defaulting Party;

26.2.1 if the defaulting Party fails to remedy such breach within the 14 (fourteen) day notice period, then the aggrieved Party shall determine a date, after expiry of such notice period, for purposes of a meeting to be held between the aggrieved Party and the defaulting Party and shall give written notice of the date and place of such meeting to be held. The purpose of such meeting shall be for the Parties to meet in good faith and discuss ways and means to remedy such breach and/or to mitigate the extent of the loss and/or damage suffered or to be suffered by the aggrieved Party and/or to identify an acceptable solution in the best interests of the Parties, without having to resort to cancellation;

26.2.2 if within 7 (seven) Business Days of the holding of the meeting, either the defaulting Party fails to remedy the breach or within such time as may be agreed during the said meeting, or if no agreement is reached between the defaulting Party and the aggrieved Party during the meeting referred to in sub-clause 26.2.1 above on the remedying of such breach, then the aggrieved Party shall give a final written notice to the defaulting Party, demanding that the breach be remedied within a further period of 14 (fourteen) Business Days of date of such written notice, failing which the aggrieved Party shall be entitled at its election, to either:

26.2.2.1 claim specific performance from the defaulting Party, with or without a claim for damages as set out in clause 25 above; or

26.2.2.2 cancel the Agreement forthwith by giving written notice to that effect to the defaulting Party, provided that where the aggrieved Party is DWS, it will not have the right to cancel the Agreement where there is a dispute pending between the Parties and the User has paid and continues to pay all charges or other amounts due and payable under this Agreement to DWS.

26.3 The following events of default shall be regarded as material breaches of contract on the part of the User and in the event of any such breach, DWS shall be entitled to cancel this Agreement by giving written notice to that effect to the User on:

26.3.1 the failure of the User to pay any amount due under the BRVAS-CUC and/or the Water Use Charges on due date and such failure is not remedied by payment of the amount due within 14 (fourteen) Business Days after date of a written notice from DWS demanding payment thereof from the User;

26.3.2 the winding up or placing under liquidation (whether provisionally or finally), or the

[redacted]

placing under judicial management or under administration, of the User;

26.3.3 any attempt by the User to compromise or enter into a scheme of compromise, composition or arrangement with any of its creditors.

26.4 Any cancellation of this Agreement shall be without prejudice to any right of the aggrieved Party to recover, *inter alia*, any direct loss or damage suffered, subject to clause 25 above.

27. CONSEQUENCES OF CANCELLATION

Upon cancellation of this Agreement due to a breach by the User, prior to full repayment of the BRVAS Project Costs, the User shall be obliged to:

27.1 make payment to DWS of the full amount outstanding in respect of the Debt applicable to it arising under the BRVAS-CUC, calculated as set out in **Annexure D** hereto;

27.2 make payment to DWS of all amounts outstanding in respect of the Water Use Charges applicable to it, calculated up to the date on which it ceased to take water from the BRVAS;

27.3 forthwith cease taking water from the BRVAS, until and unless all outstanding amounts have been paid in full to DWS in terms of sub-clause 27.1 and sub-clause 27.2 above (for the avoidance of doubt such water will thereafter be taken in terms of the Users' Licence); and

27.4 at its sole cost forthwith disconnect all connections, installations or other equipment owned by it and which has been connected to the BRVAS infrastructure, until and unless it has complied with sub-clauses 27.1, 27.2 and 27.3 above and the Agreement has been reinstated.

28. RISK AND INSURANCE

The Parties record that:

28.1 no Party will bear any risks which have been allocated to the other Party in terms of this Agreement and each of them shall be entitled to take out and maintain in force such insurance policies as it may deem appropriate to cover any risks to be borne by it under this Agreement;

28.2 DWS will assume the risk of loss or damage to the Project as a government waterworks, with effect from Operational Declaration, and may elect to bear such risk itself on a self-insurance basis or insure against such risk with insurers appointed by it;

28.3 the costs of any insurance policies taken out by DWS and/or TCTA before Operational Declaration will form part of the BRVAS Project Costs and the costs of any insurance policies taken out after Operational Declaration by DWS and/or TCTA will form part of the operations and maintenance costs;

28.4 the proceeds of claims made under the relevant insurance policy will be applied to repair the damage to the BRVAS infrastructure;

28.5 subject to the institutional framework applicable to the Parties from time to time, they may agree on such additional insurance requirements as may be required from time to time.

29. DISPUTE RESOLUTION

[redacted]

29.1 During the Implementation phase, the dispute resolution provisions set out in **Annexure B** hereto will be applicable, except for disputes relating to the interpretation of this Agreement which will be dealt with in terms of this clause. With effect from Operational Declaration, all disputes will be dealt with in terms of this clause.

29.2 The Parties shall endeavour to resolve any dispute arising out of this Agreement amicably through good faith negotiations to be held between them by senior representatives of the Parties.

29.3 In the event that the Parties are unable to resolve such dispute or difference as provided for in 29.2 above, then either Party shall be free to utilise the mechanisms set out in the Intergovernmental Relations Framework Act 13 of 2005 to facilitate settlement of the dispute and matters connected therewith, in accordance with the procedures set out thereunder.

29.4 In the event that the Parties are unable to resolve the dispute between them within 6 (six) months of a referral in terms of the Intergovernmental Relations Framework Act 13 of 2005, then either of the Parties shall be free to refer the matter to arbitration in accordance with the Rules of the Arbitration Foundation of Southern Africa ("AFSA").

29.5 The arbitration shall be conducted subject to the following provisions:

29.5.1 the arbitration shall be held in a summary manner before a single arbitrator with a view to it being completed as soon as possible;

29.5.2 the decision of the arbitrator shall be final and binding on the Parties and of immediate effect;

29.5.3 either Party shall be entitled to apply to the High Court of South Africa to make such decision an order of court;

29.5.4 the cost of the arbitration proceedings shall be borne by the Parties as determined by the arbitrator, provided that where the arbitrator's decision is silent as to costs, the Parties shall each bear their own costs;

29.5.5 nothing contained in this clause shall preclude any Party from applying to any court of competent jurisdiction for a temporary interdict or other relief of an urgent nature, pending the award of the arbitrator; and

29.5.6 throughout the period between the declaration of a dispute and the making of a final ruling by the arbitrator, none of the obligations of the Parties shall be suspended and all obligations shall continue to be discharged in accordance with their tenor, as if such arbitration proceedings had not been initiated.

29.6 Notwithstanding the termination or cancellation of this Agreement for whatsoever reason, this dispute resolution provision will survive such termination or cancellation and may be invoked by either of the Parties.

PART 7: GENERAL PROVISIONS

30. CONFIDENTIALITY

30.1 Each Party shall keep confidential and not disclose any trade secrets, confidential documentation, proprietary information, technical know-how and data, systems, methods

[redacted]

commercial, financial and technical information which may be disclosed to it by the other Party to this Agreement, to any other party, other than to persons employed by them and/or authorised by them and who are required to have such information for purposes of fulfilling their respective obligations under this Agreement.

30.2 Each Party hereby acknowledges that the confidential documentation and/or information is of substantial value and each Party undertakes not to disclose any confidential information to any other party, except for the purposes contemplated under this Agreement.

30.3 The confidentiality obligations will not apply to information which:

30.3.1 is public knowledge, or becomes public knowledge at any time through no fault of the Party receiving such confidential information; or

30.3.2 is disclosed to any of the Parties by a third party with the lawful right to make such disclosure and which did not obtain such information directly or indirectly from the disclosing Party; or

30.3.3 was known to the receiving Party prior to the date of disclosure by the disclosing Party as it is able to prove through documentary material in its possession; or

30.3.4 is disclosed by the receiving Party with the consent of the disclosing Party; or

30.3.5 is required to be disclosed in terms of an order of court, law, regulation or any forum or regulatory authority (including without limitation, a stock exchange body).

30.4 The Parties record that the confidentiality obligations set out herein shall remain in force indefinitely notwithstanding termination of this Agreement.

31. DOMICILIUM CITANDI ET EXECUTANDI

31.1 The Parties choose as their *domicilia citandi et executandi* for all purposes under this Agreement, whether in respect of court process, notices or other documents or communications of whatsoever nature, the following addresses:

31.1.1 DWS: Sedibeng Building
185 Francis Baard Street
Pretoria
0002
e-mail:
Attention: The Director-General: The Department of Water and Sanitation

31.1.2 The User: The City of Cape Town Metropolitan Municipality

e-mail:
Attention: The Municipal Manager

31.2 Any notice or communication required or permitted to be given in terms of this Agreement shall be valid and effective if reduced to writing and sent to the other Party.

31.3 Any notice to a Party:

31.3.1 sent by pre-paid registered post in a correctly addressed envelope to it at its domicilium address shall be deemed to have been received on the 5th (fifth)

[redacted]

Business Day after posting;

31.3.2 delivered by hand to a responsible person during ordinary business hours at its domicilium address shall be deemed to have been received on the day of delivery; or

31.3.3 sent by email as stipulated above, during normal business hours, shall be deemed to have been received on the date of dispatch.

31.4 Notwithstanding anything to the contrary herein contained, a written notice or communication actually received by a Party shall be adequate written notice or communication to it, notwithstanding that it was not sent to or delivered at its chosen *domicilium citandi et executandi*.

32. GENERAL

32.1 This agreement constitutes the whole of the Agreement between the Parties relating to the matters dealt with herein.

32.2 No prior representations, warranties, undertakings or other terms and conditions of whatever nature shall be valid and binding unless recorded herein and signed by the Parties.

32.3 No amendment or addition to, deletion from or consensual cancellation of this Agreement or any provision hereof or of any other Agreement shall be valid and binding unless recorded in writing and signed by the Parties.

32.4 Any extension of time or waiver or relaxation of any of the terms or conditions of this Agreement which either Party may grant to the other shall not prejudice such Party in respect of its rights under this Agreement nor preclude such Party thereafter from exercising its rights strictly in accordance with this Agreement. Any such extension, waiver or relaxation so given shall be construed as relating strictly to the matter for which it was given.

32.5 Nothing in this Agreement shall fetter, or be deemed to fetter, the Minister's discretion as provided for in the NW Act or any other applicable legislation, including but not limited to the grant of Licences to any parties wishing to take water from the BRVAS.

32.6 Where it is specified in this Agreement that certain matters are to be agreed between the Parties, any failure to reach agreement in respect of such matter will not affect the validity and enforceability of the remaining provisions of this Agreement.

32.7 Any provision in this Agreement which is or may become illegal, invalid or unenforceable in any jurisdiction affected by this Agreement shall, as to such jurisdiction, be ineffective to the extent of such prohibition or un-enforceability and shall be treated as *pro non scripto* and severed from this Agreement, without invalidating the remaining provisions of this Agreement which will remain of full force and effect. In such cases, the Parties undertake to negotiate with each other in good faith and shall use all reasonable endeavours to redraft the void provisions to render such provisions enforceable.

32.8 This Agreement shall be binding on any successor in title of DWS and any successor in title of the User.

[redacted]

32.9 Should any functions relevant to this Agreement be assigned by DWS to a water management institution in terms of the NW Act, DWS undertakes to incorporate the relevant provisions of this Agreement in any such assignment so as to bind such institution as a successor in title.

32.10 This Agreement will at all times be governed by, interpreted and construed in accordance with the laws of the Republic of South Africa.

32.11 Each Party shall be liable for its own costs in respect of the preparation, drafting, negotiation and settling of this Agreement.

[redacted]

THE SIGNATORIES HEREUNDER WARRANT THEIR AUTHORITY TO SO SIGN:

THUS DONE AND SIGNED AT Pta **ON THIS** 9 **DAY OF** June **2023**

AS WITNESSES:

1. [redacted]

2. [redacted]

FOR AND ON BEHALF OF:
THE DEPARTMENT OF WATER AND SANITATION
NAME: DR. SEAN PHILLIPS
CAPACITY: DIRECTOR-GENERAL

THUS DONE AND SIGNED AT CT **ON THIS** 29th **DAY OF** November **2022**

AS WITNESSES:

1 [redacted]

2

[redacted] Michael John Webster

FOR AND ON BEHALF OF:
THE CITY OF CAPE TOWN METROPOLITAN MUNICIPALITY
NAME: Michael John Webster
CAPACITY: EO: WATER & SANITATION

[redacted]

ANNEXURE A

PROJECT DESCRIPTION

A1. THE WESTERN CAPE WATER SUPPLY SYSTEM

A1.1 The Western Cape Water Supply System supplies the City of Cape Town (CCT), other local authorities and irrigators in the catchments of the Riviersonderend, Berg and Eerste Rivers.

A1.2 The main dams in Western Cape Water Supply System include the Kogelberg, Rockview, Upper Steenbras, Lower Steenbras, Wemmershoek, Voëlvlei and Theewaterskloof Dams. These dams are the main components of the City of Cape Town's Steenbras and Wemmershoek Schemes and of the Palmiet, Voëlvlei and Riviersonderend Berg Government Water Schemes.

A1.3 The Western Cape Water Supply System has a yield of 440.5 million m^3/annum, excluding compensation and exchange releases.

A1.4 The layout of the schemes comprising the Western Cape Water Supply System is shown on **Figure A1** below.

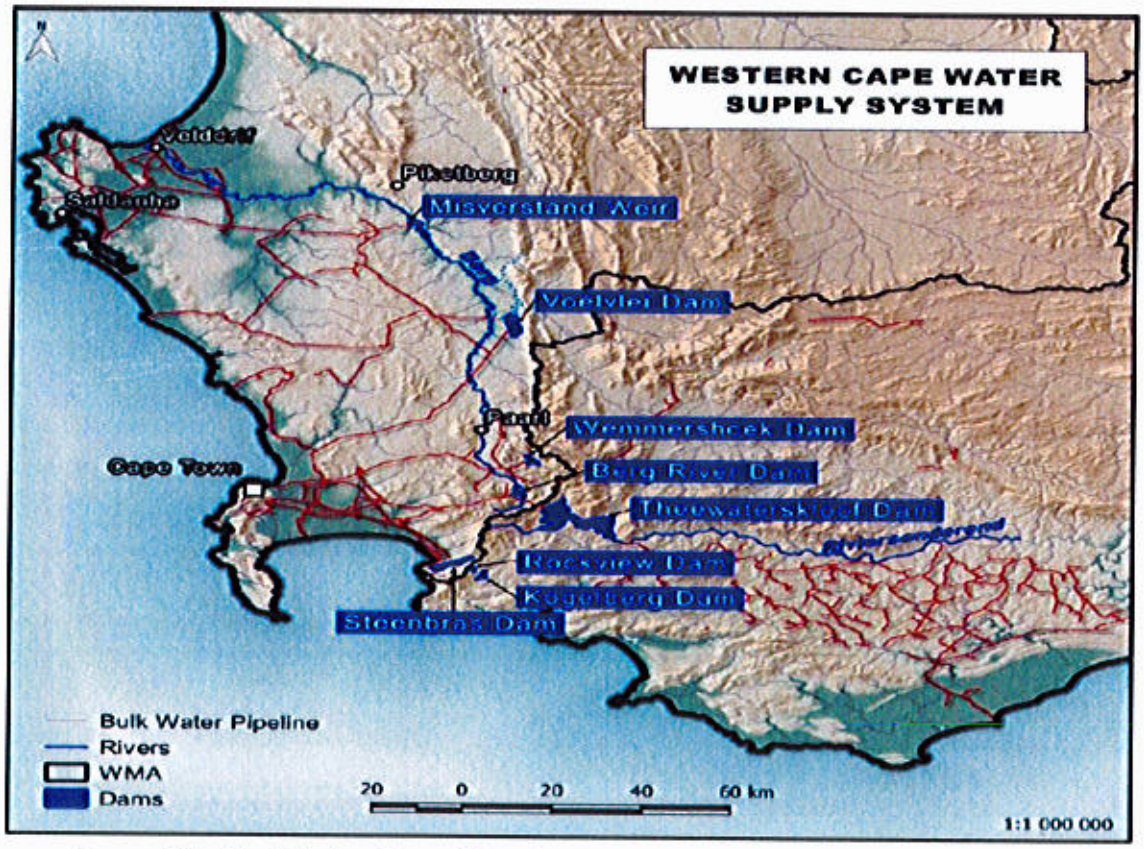

Figure A1: The Western Cape Water System layout

[redacted]

A2. THE BRVAS PROJECT

A2.1 The Berg River-Voëlvlei Augmentation Scheme (BRVAS) involves the abstraction of surplus winter water from a proposed low level diversion weir across the Berg River and the pumped delivery of that water into Voëlvlei Dam.

A2.2 The scheme operation is based on winter abstraction from the river after the provision for the Environmental Water Requirements (EWRs) and downstream users the downstream users for the river and the estuary in both summer and winter.

A2.3 The water will be abstracted from the weir and pumped at a rate of 4-6 m3/s through a 1.5m diameter and 6.3 km long pipeline to Voelvlei Dam. This will augment the yield of the Western Cape Water Supply System by 23 million m^3 per annum.

A3. PROJECT LOCALITY

A3.1 The BRVAS is located in the Drakenstein Local Municipality in the Western Cape Province. The project's locality is shown in **Figure A2** below.

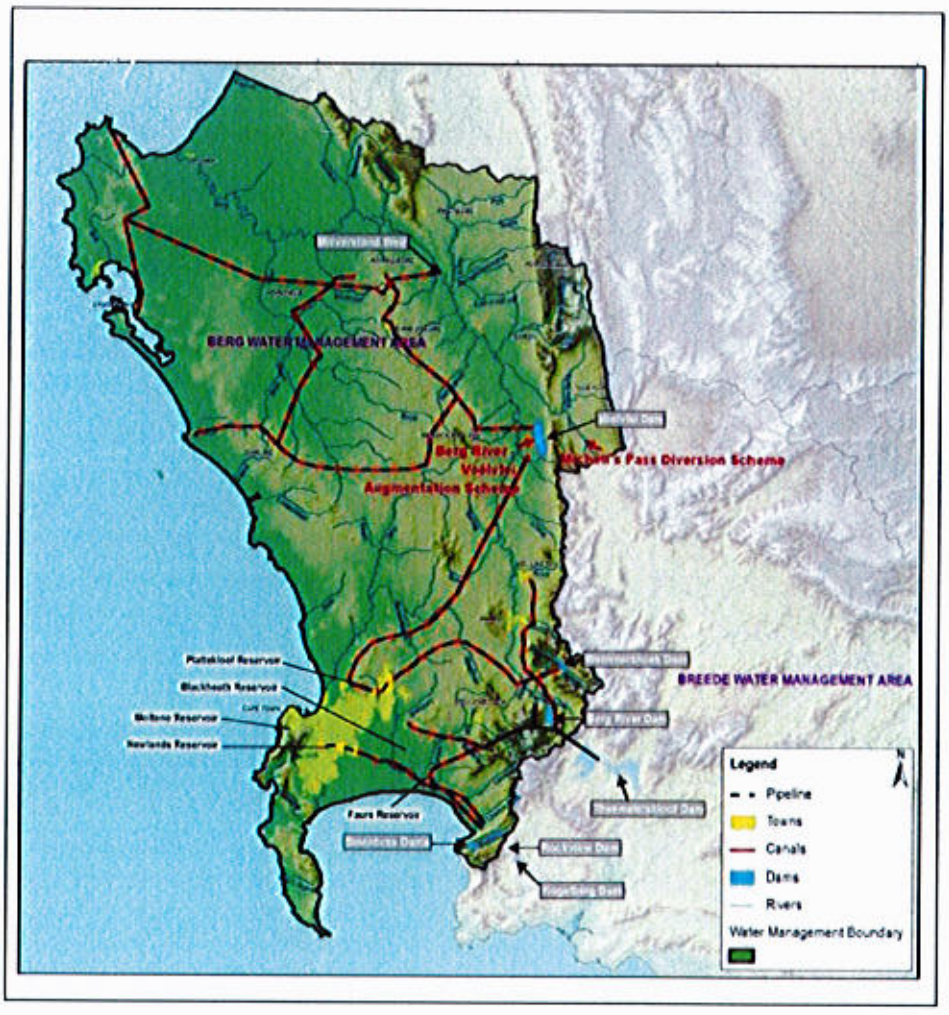

Figure A2: Project Locality

[redacted]

A4. DESCRIPTION OF THE BRVAS INFRASTRUCTURE

A4.1 The BRVAS infrastructure is envisaged to comprise the components listed below, as illustrated in the project conceptual layout plan in **Figure A3** below, which may be subject to change during the detail design stage.

A4.1.1 a new abstraction works (diversion weir and associated water abstraction works, including canoe chute and fishway) at the Lorelei site on the Berg River;

A4.1.2 a water transfer system, consisting of 1.5m diameter, 6.3 km long rising main pipeline, a 5 MW, 4.5m^3/s pump station and an outlet works at Voëlvlei Dam); and

A4.1.3 appurtenant works which include access roads and electricity supply installations.

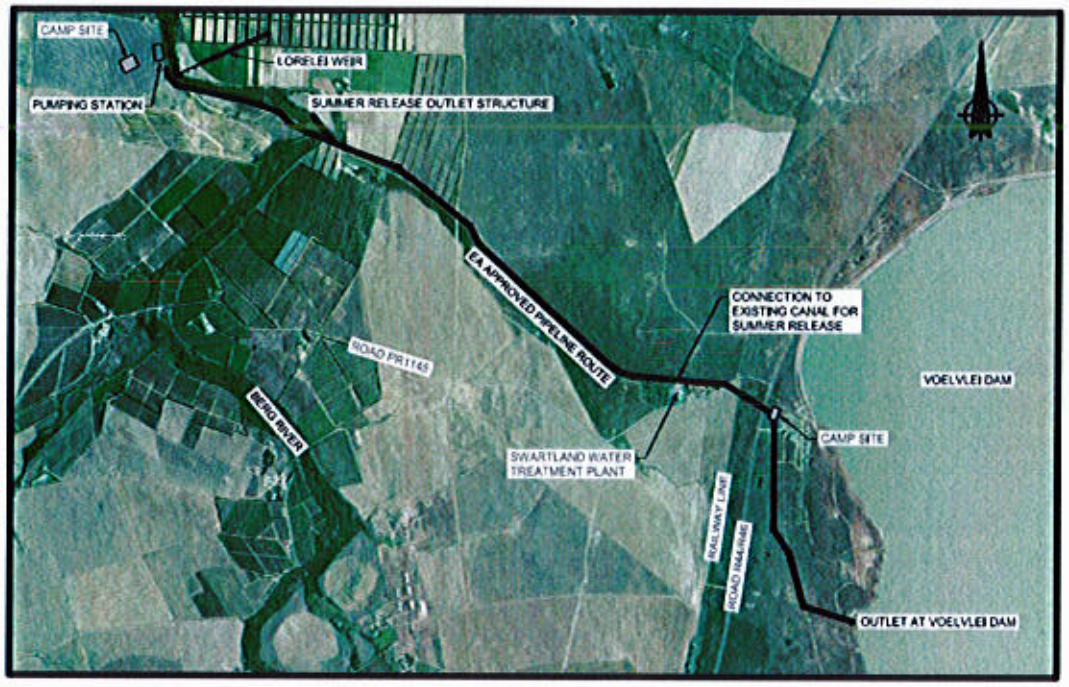

Figure A3: BRVAS conceptual layout

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[redacted]

ANNEXURE B

BRVAS PROJECT COMMITTEE ("BRVAS PC") - TERMS OF REFERENCE

B1. INTRODUCTION

B1.1 The Parties have agreed to Implement the BRVAS in a consultative manner. The TCTA will establish the BRVAS PC with the terms of reference as set out herein.

B1.2 **Figure B1** below graphically depicts the governance structure for the BRVAS PC.

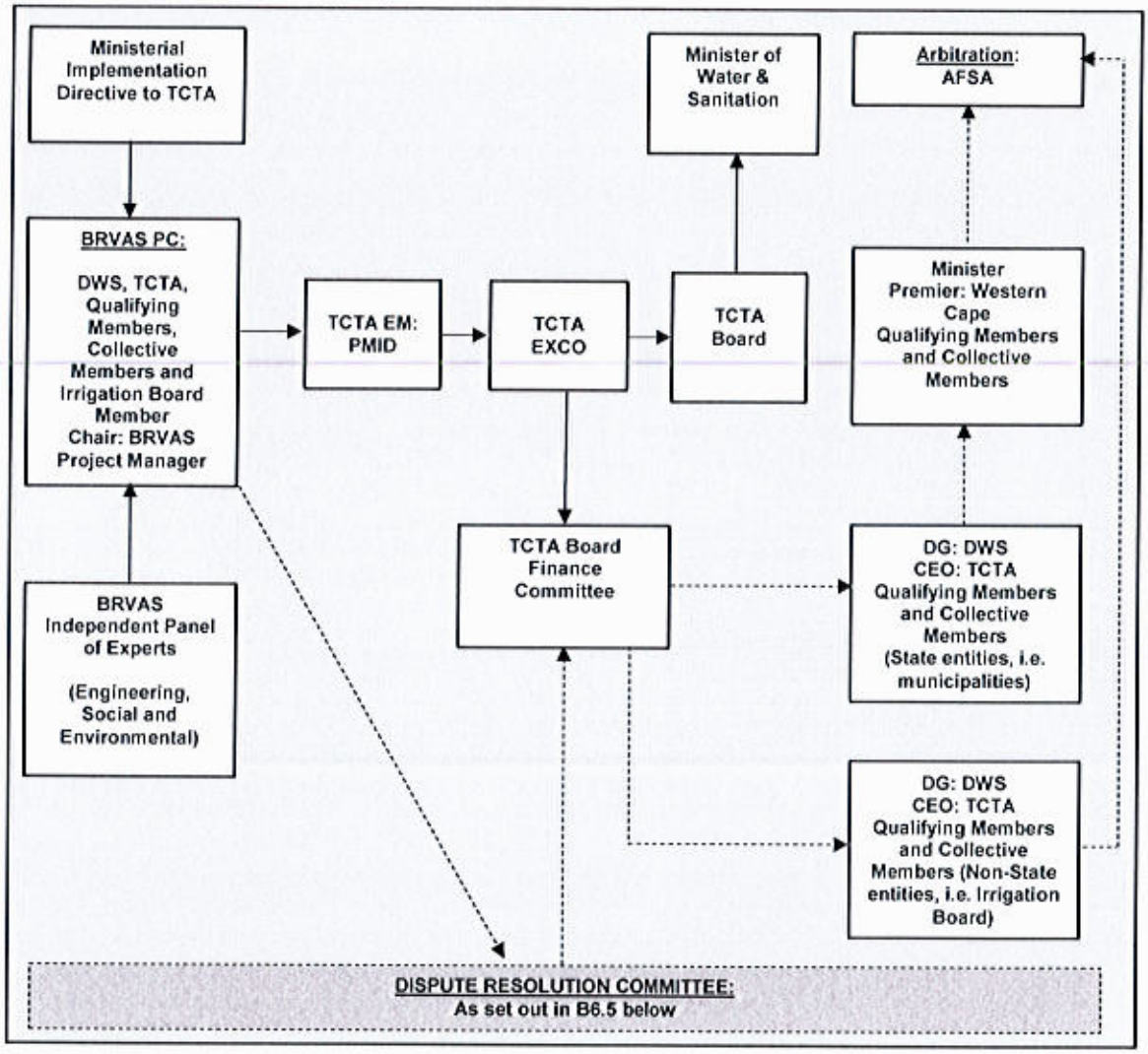


Figure B1: BRVAS Project Committee and Governance Structure

Legend and Abbreviations:

___ Reporting line

----- Dispute resolution mechanism

"AFSA" means the Arbitration Foundation of Southern Africa.

"CEO TCTA" means Chief Executive Officer of TCTA.

"DG" means the Director General

"EXCO" means the executive committee of TCTA.

"EM" means Executive Manager

"PMID" means Project Management and Imple[redacted]

B2. OBJECTIVES OF THE BRVAS PC

B2.1 The Minister has issued a Directive to TCTA to undertake the Implementation of the Project in a consultative manner considering the interests of DWS, TCTA and the Users. To provide for such consultation, the Parties hereby agree that TCTA establish the BRVAS PC with the terms of reference as set out in this **Annexure B**.

B2.2 The main objectives of the BRVAS PC are the following:

B2.2.1 to act as a consultative forum using the collaborative efforts of the members as set out in **B3.2** below to reach consensus on any strategic and operational matter of the BRVAS, including but not limited to any technical, environmental, social, financial or any business matter relating to the Implementation of the BRVAS, and where required, to make recommendations on such matters to the TCTA Executive Committee or the Finance Committee, as the case may be, for consideration and approval as may be necessary; and

B2.2.2 to focus on and monitor the Implementation of the BRVAS, for as long as it would be required to conclude all relevant matters related to the Implementation of the BRVAS by the members of the BRVAS PC as set out in **B3.2** below, and agree that all relevant Implementation matters are complete.

B3. CONSTITUTION

B3.1 Establishment

The BRVAS PC will be created in terms of the above governance framework and established by the Chief Executive Officer of TCTA, which will take effect on the Signature Date.

B3.2 Membership

B3.2.1 The BRVAS PC will be constituted as a committee with the following membership:

B3.2.1.1 1 (one) main member being nominated by and representing TCTA;

B3.2.1.2 1 (one) main member being nominated by and representing DWS;

B3.2.1.3 1 (one) main member being nominated by and representing each Qualifying Member as set out in **B3.2.2** below;

B3.2.1.4 1 (one) main member being nominated by and representing all the Collective Members as set out in **B3.2.3** below; and

B3.2.1.5 1 (one) main member being nominated by and representing the Irrigation Board.

B3.2.2 User representation on the BRVAS PC will require a minimum of 20.0% (twenty percent) of the total Capacity Allocated. Such member/s will be regarded as the "Qualifying Member/s" of the BRVAS PC.

B3.2.3 To ensure transparency and efficiency of the BRVAS PC, Users with less than 20.0% (twenty percent) of the total Capacity Allocated will collectively be allowed to appoint 1 (one) representative for their aggregated representation in the BRVAS PC and the said representative shall represent all such Users collectively. These members will be

[redacted]

collectively regarded as "Collective Members" of the BRVAS PC. The Collective Members will be responsible to manage their affairs jointly.

B3.2.4 In addition to the main members as set out in **B3.2.1** above, alternate members shall be nominated and appointed for each main member and such alternate members shall be entitled to attend meetings together with the main member for continuity purposes but shall only have observer status whilst the main member is present.

B3.2.5 The Chairperson of the BRVAS PC will be TCTA's Project Manager who shall be in addition to TCTA's member referred to in **B3.2.1.1** above.

B3.2.6 In the event of a main member as set out in **B3.2.1** above not being able to attend a meeting of the BRVAS PC, it shall be the responsibility of such main member to inform the secretary of the BRVAS PC in advance and arrange for the alternate member to be present during the meeting fully prepared and updated on all current issues.

B3.2.7 Members of the BRVAS PC as set out in **B3.2.1** above will serve for the duration of the BRVAS's Implementation as set out in **B3.2.2** above unless other members are appointed in their place and stead by the relevant party.

B3.2.8 Members of the BRVAS PC as set out in **B3.2.1** above may propose the attendance of an expert/s to attend a meeting/s of the BRVAS PC, always subject to the prior written approval from the Chairperson, as and when required to provide an independent expert opinion/s with respect to the Implementation of the BRVAS. Notwithstanding the preceding provision, expert opinion may be obtained from the approved Panel of Experts on the request of the Chairperson from time to time.

B4. MEETINGS

B4.1 Frequency

Meetings will be held monthly or at such other intervals determined by the BRVAS PC as may be appropriate, at times and places determined by the Chairperson. Where necessary, the Chairperson may request comments from members by electronic mail and/or through teleconference call between the members, to avoid undue delays in the Implementation of the BRVAS.

B4.2 Procedure

The Chairperson of the BRVAS PC shall determine the procedures during meetings in line with relevant good practice.

B4.3 Quorum

The quorum for a meeting either face-to-face, or via video-, or teleconferencing shall be the Chairperson plus **3 (three)** members as set out in **B3.2.1** above, one of which must be a User.

B4.4 Decision Making

The recommendations of the BRVAS PC will be carried on the consensus reached between the members as may be reasonable under the circumstances, considering TCTA's funding and Implementation responsibilities in respect of the BRVAS. Should any member of the

[redacted]

BRVAS PC as set out in **B3.2.1** above (present or absent from the meeting or consultation) not be in agreement with any recommendation made, such members may exercise their rights in terms of **B6** below. For the avoidance of doubt, a recommendation formulated during an BRVAS PC meeting where a main member or alternate member is not present, may also be referred in terms of **B6** below following the subsequent BRVAS PC meeting during which the minutes of the previous BRVAS PC meeting are approved as set out in **B4.5.3**.

B4.5 Agenda, Minutes and Reporting of the BRVAS PC

B4.5.1 A formal agenda, accompanied by the necessary supporting documentation and minutes of the previous meeting, shall be distributed to the members and invitees at least 7 (seven) calendar days prior to each BRVAS PC meeting.

B4.5.2 Formal minutes will be kept of the proceedings of the meetings by the TCTA and circulated to the members as set out in **B4.5.1** above.

B4.5.3 The minutes as set out in **B4.5.2** above will be approved by the subsequent BRVAS PC and signed by the Chairperson of the BRVAS PC. TCTA shall be responsible to keep a complete record of such approved minutes for auditing purposes.

B4.5.4 The members of BRVAS PC will have the necessary mandates or delegation of authority to execute the duties and responsibilities of the BRVAS PC. Recommendations by the BRVAS PC will be formally submitted and presented by the Chairperson of the BRVAS PC to the TCTA Executive Committee and/or Finance Committee, as the case may be, for approval.

B5. DUTIES AND RESPONSIBILITIES

The duties and responsibilities of the BRVAS PC are the following:

B5.1 consult with the members as set out in **B3.2.1** above and make recommendations in a consultative manner;

B5.2 review and consider the requirements of the project implementation plan where necessary;

B5.3 review and consider the requirements of the project charter where necessary;

B5.4 consult with members on activities of mutual interest in relation to the BRVAS;

B5.5 consult with members on contracting strategies to enable informed decision making by TCTA;

B5.6 act as a coordination forum with members in respect of BRVAS related matters;

B5.7 communicate the achievement of significant milestones and progress on BRVAS related matters to members;

B5.8 review and consider the BRVAS implementation progress;

B5.9 review and recommend the BRVAS budget;

B5.10 review and consider the BRVAS Implementation strategy;

B5.11 review and provide input into the TCTA's procurement strategy of the major BRVAS related contracts;

B5.12 review and recommend BRVAS related actions required based on reports from the independent panel of experts;

[redacted]

B5.13 review and consider key BRVAS risks, exceptions, and exposures as well as mitigation measures thereto;

B5.14 always act in the best interests of the BRVAS in accordance with the Directive;

B5.15 review and consider alignment of the BRVAS design criteria memorandum with DWS specified guideline for technical implementation ("GTI") and recommend changes to DWS of the GTI as and when required; and

B5.16 any other relevant matter that the BRVAS PC may agree to progress the Implementation.

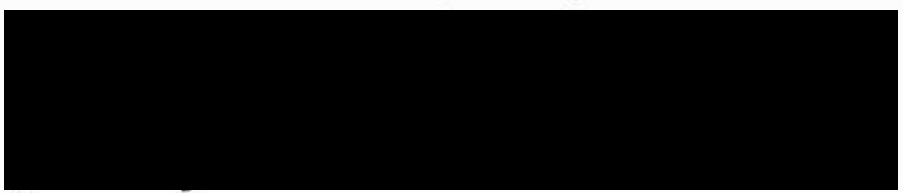
B6. DISPUTE RESOLUTION

B6.1 In the event that there is a dispute amongst the members as set out in **B3.2.1** above of BRVAS PC relating to Implementation activities of the BRVAS, the dispute resolution process set out in this **Annexure B** shall be applicable.

B6.2 In the event that consensus is not reached or any recommendation of the BRVAS PC is not supported amongst the members as set out in **B3.2.1** above of the BRVAS PC on any matter within its mandate, such members of the BRVAS PC shall be obliged to meet within 14 (fourteen) calendar days from the date on which such consensus was not reached and endeavour to resolve such dispute through good faith negotiations between them.

B6.3 In the event that consensus is not reached amongst the members of the BRVAS PC as set out in **B3.2.1** above during the meeting as per **B6.2** above or if the meeting envisaged in **B6.2** is not held within the relevant time period, then the Chairperson shall exercise his right within 7 (seven) calendar days thereafter to issue a decision in writing to the aforementioned members which shall be binding on the members until such time as the decision is possibly set aside in terms of **B6.5** below. Any member disagreeing with such decision taken by the Project Manager, and wishing to take the matter further, shall formally declare a dispute in writing and date such declaration ("Dispute Declaration Date"), and address it to the Project Manager setting out full details of the nature of the dispute and the good faith endeavours made by that member to resolve the dispute. The Chairperson shall be responsible to, within 7 (seven) calendar days of the Dispute Declaration Date, copy particulars relating to the dispute to the remaining members as set out in **B3.2.1** above. In addition, the Project Manager is obliged to refer the dispute within 7 (seven) calendar days of the Dispute Declaration Date to the Executive Manager: Project Management and Implementation of TCTA to initiate the establishment of the Dispute Resolution Committee as set out in **B6.5** below.

B6.4 The remaining member/s as set out in **B6.3** above shall have a maximum period of 14 (fourteen) calendar days from the Dispute Declaration Date referred to in **B6.3** above within which to prepare a written response thereto and submit such response to the Dispute Resolution Committee referred to in **B6.5** below for resolution, provided that in all instances the Implementation activities shall not cease whilst such dispute is under consideration. The aforesaid responses and documents shall be forwarded to the Project Manager who in turn is obliged to submit such to the Executive Manager: Project Management and



Implementation of TCTA for consideration by the Dispute Resolution Committee.

B6.5 The Dispute Resolution Committee:

B6.5.1 shall within 21 (twenty-one) calendar days of the Dispute Declaration Date issue a formal agenda, accompanied by the necessary supporting documentation, to be distributed to all persons entitled to attend the Dispute Resolution Committee meeting as set out in **B6.5.3** below;

B6.5.2 shall meet within 7 (seven) calendar days after issuing a formal agenda in terms of **B6.5.1** above to deal with the dispute in question;

B6.5.3 shall comprise the Chief Executive Officer of the TCTA, the Executive Manager: Project Management and Implementation of TCTA, acting as the chairperson of the Dispute Resolution Committee, and senior representatives of the members referred to in **B3.2.1** above, who may not be the serving members on the BRVAS PC of DWS, TCTA, the Qualifying Members and Collective Members(state & non-state entities), and will use its best endeavours to resolve the dispute through good faith negotiations;

B6.5.4 may invite a member/s of the independent panel of experts, or other specialist advisers as it deems appropriate, to assist in resolving the dispute including the provision of an expert report/s where necessary; and

B6.5.5 shall, subject to **B6.6** below, issue decisions that are binding on the members referred to in **B3.2.1** above, until set aside as provided for in the Agreement. In the event that the Dispute Resolution Committee fails to reach consensus within 14 (fourteen) calendar days after meeting in terms of **B6.5.2** above, such dispute shall be referred by the chairperson of the Dispute Resolution Committee to the TCTA Board's Finance Committee for resolution and the relevant members referred to in **B3.2.1** above shall submit written representations for consideration within 14 (fourteen) calendar days after the dispute has been referred to the TCTA Board's Finance Committee;

B6.6 Should the TCTA Board's Finance Committee be unable to resolve the dispute within 14 (fourteen) calendar days, or should no meeting of the TCTA Board's Finance Committee have taken place then:

B6.6.1 where such dispute is declared by a Qualifying Member and/or a Collective Member representing a state entity on a matter of mutual interest and the TCTA Board's Finance Committee has been unable to resolve such dispute, then, it shall be escalated to the Director-General of DWS, the Chief Executive Officer of TCTA, the Accounting Officer of each Qualifying Member / Collective Member, or the nominated senior representatives of each of them who were not part of the previous processes, for good faith negotiations to be held between them to resolve the dispute. Failing resolution within 21 (twenty-one) calendar days of their meeting, such dispute shall be escalated to the Minister, the Premier of the Western Cape Province, the Accounting Officer for each of the Qualifying Member / Collective Member for resolution between them within 30 (thirty) calendar days of referral

of such dispute. Failing resolution, any member may require such disputes to be settled by arbitration, after giving 30 (thirty) calendar days' written notice to the other members. The members shall agree on a single arbitrator to undertake the arbitration and failing agreement between them, on the application of any party, such arbitrator will be nominated by the Chairperson for the time being, of the Arbitration Foundation of Southern Africa ("AFSA") and will be:

B6.6.1.1 an independent professional engineer of not less than 15 (fifteen) years' appropriate experience in the event of the dispute relating to an engineering matter;

B6.6.1.2 from the ranks of retired judges or senior advocates, in the event of the dispute relating to a legal matter; and

B6.6.1.3 a registered independent chartered accountant of not less than 15 (fifteen) appropriate experience, in the event of the dispute relating to a financial matter.

B6.6.2 where such dispute is declared by a Qualifying Member and/or a Collective Member for a non-state entity / Irrigation Board, it shall be escalated to the Director-General of DWS, the Chief Executive Officer of TCTA and the Chief Executive Officer of the applicable User/s, or the nominated senior representatives of each of them who were not part of the previous processes, for good faith negotiations to be held between them to resolve the dispute and if the dispute is still not resolved within 30 (thirty) calendar days from referring a dispute or such shorter period as may be agreed between the members, any member may require such dispute to be settled by arbitration, after giving 30 (thirty) calendar days' written notice to the other members. The members shall, within 30 (thirty) calendar days, agree on a single arbitrator to undertake the arbitration and failing agreement between them, on the application of any party, such arbitrator will be nominated by the Chairperson for the time being, of the Arbitration Foundation of Southern Africa ("AFSA") and will be:

B6.6.2.1 an independent professional engineer of not less than 15 (fifteen) years' appropriate experience in the event of the dispute relating to an engineering matter;

B6.6.2.2 from the ranks of retired judges or a senior advocate, in the event of the dispute relating to a legal matter; and

B6.6.2.3 a registered independent chartered accountant of not less than 15 (fifteen) appropriate experience, in the event of the dispute relating to a financial matter.

B6.7 In all respects the arbitration shall be conducted in accordance with the Rules of AFSA prevailing from time to time and shall be held at a venue within Pretoria in accordance with the formalities and procedures determined by the arbitrator. Unless the members agree on terms of reference and procedures for the arbitration, as soon as the arbitrator is appointed, a meeting shall forthwith be convened by the arbitrator with the members to:

B6.7.1 determine the terms of reference for the arbitration;

B6.7.2 determine the procedures for the dispute arbitration; and

B6.7.3 determine any other matters as may be necessary.

[redacted]

B6.8 The decision of the arbitrator/s shall be final and binding on the members and of immediate effect.

B6.9 Notwithstanding the process set out in **B6** above any member shall at all times have the right to approach any court having jurisdiction for urgent relief.

B7. CONFLICTS OF INTERESTS

B7.1 Members as set out in **B3.2.1** above may not act in any way inconsistent with the responsibilities assigned to them, the provisions of the notice of establishment of the TCTA, the PFMA (where applicable) or other applicable legislation or use the position or privileges of confidential information obtained for personal gain or to improperly benefit another person. Members must disclose direct or indirect personal or private business interests that they, or their spouses, partners, or close family members, may have in any matter before the BRVAS PC.

B7.2 A register of declarations of interest must be kept and be tabled during each meeting. New declarations of interests must be circulated to members during the first meeting of the BRVAS PC that takes place after receipt of the declaration. If there is any conflict of interests, a member must withdraw from the proceedings of the BRVAS PC when the matter is considered.

B8. ETHICAL CONDUCT

All members of the BRVAS PC undertake to exercise the utmost good faith in their dealings with one another and to abide by ethical business practices in accordance with norms and standards accepted in the RSA.

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[redacted]

ANNEXURE C

OPERATING RULES

This Annexure describes the operation of the main components of the Western Cape Water System that have already been described in Annexure A.

C.1. OPERATION OF THE INTEGRATED SYSTEM

The main storage dams are the Theewaterskloof and Voëlvlei Government Water Scheme Dams; the Wemmershoek, Upper Steenbras and Lower Steenbras Dams owned by the City of Cape Town; and the Berg River Dam (see Annexure A). These will be operated in an integrated manner to maximize the stored water available for essential uses during droughts and other disasters. The effects of droughts are mitigated by minimizing spillage and wastage during the wetter years and restricting the supply to less essential uses during droughts. Various other measures have been introduced to mitigate the impact of other disasters, such as the closure of the tunnel from Theewaterskloof Dam towards Cape Town.

The Western Cape Water System is situated in a winter rainfall area which is characterised by wet winters and dry summers. The dams are filled during the wet winter months (April to September) when about 90% of the annual runoff occurs and water demands comprise only about 30% of the annual demand.

During the dry summer months (October to March) inflows to the dams are small and irrigation demands and garden watering demands in the urban areas are large. Approximately half of the storage in the dams is required to store water during the winter in order to meet the high water demands during the summer. The other half of the dam storage is required to provide long-term carry over storage for drought.

C.1.1 Minimize spillage

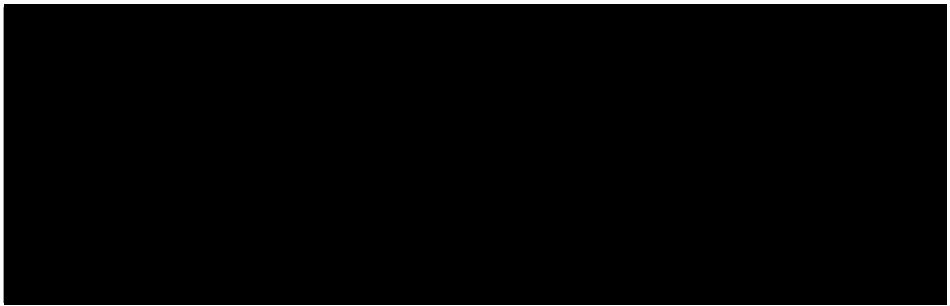
During the winter filling of the dams, the demands of the City of Cape Town (CCT) are shifted onto those dams that appear more likely to spill. This avoids the situation where one dam spills while there is storage available in another dam. A spreadsheet is currently used to adjust the demands on the system and to estimate the probability of the system spilling.

The City of Cape Town has co-operated to help minimize spillage by:

- Introducing additional capacity in its water treatment works and bulk water pipelines to enable flexibility in the allocation of the demands on the different dams and to provide interconnectivity between the various sources.

- Reducing the demands on their own dams (Wemmershoek and Steenbras) although it might be more beneficial for them to use water from their own dams preferentially and only use the other dams as backup during drier periods. However, this would increase spills and reduce the system yield.

If it seems probable that the system will spill even without the contributions from the existing Palmiet River transfer and from the transfer from the Berg River Supplement Scheme at Bien Donne to the Berg River Dam, then these transfers may be stopped to reduce unnecessary pumping costs.



C.1.2 Minimize wastage

Water demand management measures have been adopted by the Municipalities and are being used to reduce wastage and to conserve more water for drier periods. The target is to reduce the projected demand.

In the agricultural sector it is proposed that Water User Associations and Irrigation Boards ensure that accurate meters are installed on all their members' pumping schemes and that these are calibrated every five years. Savings are encouraged if water is charged per m^3 consumed, though an additional availability charge may be necessary to ensure that irrigation rights are taken up or sold. All consumers must pay water resource management charges on their total registered use, while those consumers that receive releases from storage or who abstract stored water during summer (October to March) must pay additional scheme related charges in accordance with the Department of Water and Sanitation's Raw Water Pricing Strategy.

The Municipalities monitors urban consumption on a monthly basis and agricultural consumption should be monitored by DWS and compared with the allocated demands to identify excessive demands, which may not be sustainable for the entire season.

C.1.3 Restrict demand

One of the main principles for optimising the operation of the WCWS is that supplies to users should be progressively restricted during periods when supplies are reduced by droughts or when the demands outgrow the supplies before additional source of supply is commissioned.

The water storage in the system is evaluated towards the end of the wet season (September to November), to assess whether supplies must be restricted to ensure that sufficient water remains during droughts for the more essential uses such as basic human needs and industry.

The Water Resources Planning Model (WRPM) of the Western Cape Water System is normally run annually on the 1st November, but sometimes earlier using the current system storage and the latest demand projections to determine if restrictions will be necessary in the coming year. The model also forecasts a set of storage trajectories for the coming year under different inflow scenarios (median and above / below average inflow conditions) and indicates the different levels of restrictions that should be imposed. If restrictions seem likely the matter is discussed at a meeting of the Western Cape Planning Model Committee, comprising DWS and all the major urban and agricultural stakeholders.

If the Committee agrees that it is necessary to impose water restrictions, the Minister will decide and impose the restrictions. DWS is responsible for informing all users what their allocations will be from the various Government Water Schemes and for ensuring that all users comply with the restricted allocations imposed on them. Such restrictions will apply until the Committee deems that they can be lifted, whereafter the Minister will decide and announce the lifting of restrictions. This decision will be conveyed to the users by DWS.

The levels of restrictions to be imposed on the various users will depend on the allocations and assurances of supply i.e., 97% for domestic and industrial users (100% for 90% of the time and 70% for 10% of the time) and 91% for irrigation (100% for 70% of the time and 70% for 30% of the time). The progressive curtailment of demands during droughts as modelled in the WRPM in order to correspond with these average levels of assurance of supply is then implemented.

[redacted]

The drought operating rules for the WCWSS are based on the principle that light restrictions should be applied more frequently and more severe restrictions less frequently. The curtailments originally determined for the Western Cape Water System for application in the WRPM are shown in Table C1.

Table C1: Original Curtailments Adopted for the Western Cape Water System.

User Category	Approximate % of total demand	Percentage of normal demand supplied at different recurrence intervals			
		1 in 10 years	1 in 20 years	1 in 100 years	1 in 200 years
Domestic	53	100	90	70	50
Industrial	19	100	100	90	60
Agricultural	28	100	75	50	20
Total	100	100	88	69	44

These curtailments levels were revised due to the difficulty in achieving these restriction levels in practice. The revised levels are shown in Table C2. (These curtailments are typical for urban and industrial supplies but provide a higher-level assurance than normal for irrigation on account of the formal agreement between the CCT and DWS which states that the irrigators will receive the same assurance of supply as the CCT until such time as the irrigators make full use of their water allocations.) The principle of applying increasingly more severe restrictions enables the abstractions from the system to be maximised while ensuring that the dams will never be emptied. In order to be able to implement restrictions successfully, it is necessary to determine the demands of each user and to be certain that each user can successfully implement restrictions, which will ensure that demands are reduced as required.

Table C2: Current restriction levels for the WCWSS.

Demand Category	Approximate % of total demand	Percentage of normal demand supplied at different recurrence intervals			
		1 in 10 years	1 in 20 years	1 in 100 years	1 in 200 years
Urban reliability components					
Urban: Domestic	47	100	88	76	57
Urban: Industrial	32	100	97	89	71
Urban: UAW	21	100	100	100	100
Urban: Overall	100		93	85	71
Agriculture reliability components					
Agricultural		100	90	70	50

Although DWS understands that the Theewaterskloof, Voëlvlei and Misverstand Dams are also used for recreational purposes, there is no formal agreement limiting the drawdown of these dams, especially during times of drought. If the dams are drawn down below 10% storage, then the effect on the fish population is discussed with the Western Cape Provincial Department of Environmental Affairs and Tourism.

C.1.4 Disaster Management

Disaster Management Plans endeavour to implement cost effective measures that reduce, to acceptable levels, the risk of potential impacts due to the disruption of the supply of water.

Once the potential impacts have been identified (e.g., sabotage, earthquake, plant malfunction) the following classes of measures can be adopted:

- Infrastructure to reduce impact (eg. provide alternative sources of supply)
- Measures to reduce probability (eg. increase security to reduce probability of sabotage and a regular maintenance program to reduce probability of a plant malfunction)

[redacted]

- Monitoring to reduce impact (eg. inspections and telemetry to monitor water volumes and presence of poisons)
- Contingency measures once problem is identified. (Eg If Theewaterskloof tunnel fails then impose restrictions and switch to alternative sources of supply)

The Western Cape Water System is heavily reliant on the water supplied via the Riviersonderend Berg River Tunnel from the Theewaterskloof Dam.

At present the CCT supplies about 900-1100 Mℓ/day of treated water during summer and 600-800 Mℓ/day during winter, so that the tunnel cannot be closed for routine maintenance during summer.

Routine closure of the tunnel during winter must be carefully planned by DWS consulting all affected parties:

i) Eerste River, Stellenbosch and Helderberg Irrigators and the Stellenbosch Municipality. To meet their needs no portion of the tunnel can currently be closed in summer.

ii) Berg River Irrigators. To meet their needs the Franschhoekberg portion of the tunnel cannot be closed during summer.

iii) City of Cape Town. Ideally the City requires notice during the preceding winter that the tunnel is going to be closed in the following winter. The city must adjust the demands on the dams to ensure that there is adequate storage in those dams supplying water while the water in Theewaterskloof Dam is unavailable. The City must also schedule the routine closure of WTW for maintenance around the tunnel closure to ensure that there is sufficient water treatment capacity.

The Berg Water Project provided an opportunity to improve the resilience of the system by:

- Increasing the storage on the Cape Town side of the tunnel. To be accessible even if the Jonkershoek and Stellenboschberg components of the tunnels failed (as opposed to the Franschhoekberg component) then this storage would have to be linked directly to the existing Wemmershoek WTW or a new WTW, as planned. The Berg River Irrigators can be supplied directly from the Berg River Dam so that if there is sufficient water in storage, they will be unaffected by the tunnel closure.

- The Berg River Dam will however not help the Eerste River, Stellenbosch and Helderberg Irrigators, if the Jonkershoekberg or Stellenboschberg portions of the tunnel fail.

C.2. OPERATION OF INDIVIDUAL DAMS

Within the broad operating framework of the integrated system, it is still necessary to take the operating requirements of the individual dams into account.

C.2.1 Voëlvlei Dam (Annexure A Figure A4)

C.2.1.1 Inflows

The Voëlvlei Dam is an off-channel dam supplied during the winter months (April to September) by diversions from the Klein Berg River into the Klein Berg Canal and from both the Twenty-Four Rivers and the Leeu River into the Twenty-Four Rivers Canal.

[redacted]

During the summer months, releases are made from Voëlvlei Dam to supply consumers along the Lower Berg River, however during winter these consumers mainly abstract water from the unregulated flow in the Berg River.

At the start of the winter the quality of the water from the Klein Berg River is poor and may contribute to the algal blooms in Voëlvlei Dam. The reasons for these algal blooms are being investigated, as is the proposal that the early winter flows should not be diverted into Voëlvlei Dam.

Voëlvlei Dam is an off-channel dam which has a full supply capacity of 172 million m^3. It is owned by DWS and provides water to the CCT and the West Coast District Municipality which distributes water to local authorities and other consumers in the area of from Malmesbury to St Helena Bay. The dam`s natural catchment is only 31 km^2 in extent and provides relatively little runoff.

Misverstand Dam has a storage of 7 million m^3. The main purpose of Misverstand Dam is to divert water to the West Coast District Municipality`s pump station which delivers water to the 72 Ml/day Withoogte Water Treatment Works and hence to the Vredenburg/Saldanha area. The dam also provides very limited regulation of the summer release from Voëlvlei Dam which are released at Misverstand to downstream irrigators.

During winter, the weirs on the Twenty-Four Rivers and on the Leeu River divert up to 34 m^3/s into Voelvlei Dam. Similarly, a weir on the Klein Berg River, a short distance downstream of flow gauge G1H008, diverts up to 20 m^3/s of water into Voëlvlei Dam.

Water is released from Voëlvlei Dam into a canal which discharges into the Berg River downstream of Sonqwasdrift to supply irrigators during the summer months and to supply the West Coast District Municipality`s Withoogte Water Treatment Works, which abstracts water at Misverstand Dam.

Water is conveyed from the CCT`s high lift pumpstation at the Voëlvlei Water Treatment Works, which has a capacity of 273 Ml/d, to the Plattekloof Reservoir on the outskirt od Cape Town through a 80 km long, 1 525mm diameter pre-stressed concrete pipeline. A few small users abstract water from this pipeline.

Water is also released from the outlet of Voëlvlei Dam to the 30 Ml/day Swartland Water Treatment Works of the West Coast District Municipality. From there the water is distributed to various towns.

C.2.1.2 Consumers

Voëlvlei supplies some consumers directly from the dam while others are supplied via releases made into the Berg River. The Misverstand Dam, located downstream of Voëlvlei Dam, helps to regulate abstractions from the Berg River.

Direct Supply: The following consumers are supplied from Voëlvlei Dam:

- West Coast District Municipality (Allocation 4.2 million m^3/a via Swartland Water Treatment Works)
- City of Cape Town (Allocation of 70,4 million m^3/a via their own Water Treatment Works.
- Vogelvlei Yacht Club (Allocation 600 m^3/a)

In-Direct Supply: The following consumers are supplied from Voëlvlei Dam with Berg River Dam allocation:

[redacted]

- West Coast District Municipality (Swartland Municipality (Allocation 4.0 million m^3/a via Swartland Water Treatment Works))

Supply via Berg River: The following consumers abstract releases made into the Berg River:

- West Coast District Municipality (Allocation 17.44 million m^3/a via abstractions at Misverstand Dam to the Withoogte Water Treatment Works)
- Berg River Municipality (Allocation 704 075 m^3/a)
- PPC (Allocation 835 850 m^3/a)
- Lime Sales (Allocation 73 000 m^3/a)
- Serdyn (Allocation 36 000 m^3/a)
- Lower Berg River Irrigators (Allocation 18.1 million m^3/a via releases from Voelvlei Dam and Misverstand Dam)

In-Direct Supply: The following consumers are supplied from Misverstand Dam with Berg River Dam allocation:

- West Coast District Municipality (Saldanha Bay Municipality (Allocation 6.0 million m^3/a via Withoogte Water Treatment Works))

- Berg River Estuary. In future additional environmental releases may be required to meet the reserve requirements of the Berg River Estuary.

The inlet works of the Withoogte Water Treatment Works have been modified to eliminate cavitation of the pumps when Misverstand Dam is below FSL. Misverstand can now be maintained at about 300 mm below FSL and farmers downstream of Misverstand now receive releases rather than uncontrolled spills. The releases from Misverstand will need to be measured to differentiate between the supply to irrigation and to the environment. Plans are in place to construct a low flow gauging weir below the Dam and to improve the outlet works.

Supply to Irrigators from Twenty-Four Rivers Canal: The 24 Rivers Canal also supplies approximately 20 million m^3/a to irrigators.

The releases at the Berg River Irrigation Release Works are adjusted in response to the demands of irrigators to maintain a minimum summer flow of about 0,5 m^3/s at Sonquasdrift.

C.2.2Proposed Berg River- Voëlvlei Augmentation Scheme (BRVAS) (Annexure A Figure 1)

C.2.2.1 Inflow

The proposed Berg River-Voëlvlei Augmentation Scheme BRVAS) involves the transfer of 20-23 million m^3/a water from the Berg River to the existing Voëlvlei Dam in winter. The BRVAS will entail the abstraction the abstraction of surplus winter water (after provision for the Environmental Water Requirements (EWRs and downstream users) from a proposed low level diversion weir (less than 5 m high) across the Berg River and the pumping of the water via a 1.7 m diameter x 6.3 km long rising main into Voëlvlei Dam.

The components of BRVAS include:

Construction of a diversion weir and abstraction works in the Berg River including a crump weir, a soil embankment on the right bank, a canoe chute or portage facility and a pump station.

[redacted]

Construction of the water transfer system at a discharge rate of 4 m^3/s (i.e. pump station and 1.7 m diameter 6.3 km long pipeline). The system must allow for releases from the Voëlvlei Dam to the Berg River and downstream users, including West Coast District Municipality Water Treatment Works.

C.2.2.2 Consumers

As the additional water generated by the BRVAS will be delivered into, and operated within, the Western Cape Water Supply System on an integrated supply basis in order to maximise the yield of the system, water users will not necessarily draw their BRVAS allocation from the BRVAS itself.

For purposes of levying water use charges, the yield of the Government Water Schemes within the Western Cape Water Supply System will be allocated to users by DWS on an annual basis according to existing lawful water use or any future licencing allocations and such annual yield allocations will be communicated to the Users in writing.

If DWS implements further water resource developments which are funded off-budget, in addition to the BRVAS, DWS will enter into a written agreement with the Users for the levying of capital charges in respect of any such Government Water Scheme, provided that such agreements shall accommodate the User's obligation to pay the BRVAS Capital Charge.

The proposed BRVAS will supply according to the allocations list.

- Berg River Municipality = 0.06 million m^3/a.
- City of Cape Town = 15.00 million m^3/a.
- Drakenstein Municipality = 1.64 million m^3/a.
- Saldanha Municipality = 1.00 million m^3/a.
- Stellenbosch Municipality = 1.64 million m^3/a.
- Swartland Municipality = 1.66 million m^3/a.
- Lower Berg River Irrigators = 2.00 million m^3/a.

C.2.2.3 Environmental Water Requirements (EWRs)

The scheme operation has been planned based on winter abstraction from the river whilst still being able to meet the downstream EWRs for the river and the estuary in both summer and winter. A 4.0 m^3/s stepped pumping rule and a 6.0 m^3/s abstraction by means of variable speed drive pumps were considered.

The proposed weir site would be located on a bend in the Berg River which would be advantageous from a sedimentation management perspective, as well as being the only reach within this area where rock outcrops are visually evident. This is beneficial both from a weir foundation perspective as well as for the construction of the proposed pump station.

[redacted]

ANNEXURE D

BRVAS RAW WATER TARIFF CALCULATIONS BASED ON THE BRVAS SCHEME BASIS

D1. INTRODUCTION

D1.1 The objective of this Annexure is to set out the principles for determining, reviewing and calculating the BRVAS Capital Unit Charge ("BRVAS-CUC") to be charged on all Users taking water from the BRVAS scheme, in order to recover the full costs of funding and implementing BRVAS.

D1.2 Each User will pay the BRVAS-CUC calculated on the basis set out in this **Annexure D** and invoiced by DWS to the User in accordance with the Agreement and paid directly to TCTA in terms of the Deed of Assignment as set out in **Annexure E**.

D1.3 Any third party users taking water from the BRVAS will pay the BRVAS Third Party Charge calculated on the basis set out in this **Annexure D** and invoiced by DWS to the User in accordance with the Agreement, and paid directly to TCTA in terms of the Deed of Assignment.

D1.4 Apart from the BRVAS-CUC, the Users will pay to DWS all other applicable tariffs in terms of the Raw Water Pricing Strategy, *inter alia*, the O&M and B&R tariffs and all Water Use Charges.

D2. BASE FINANCIAL, ECONOMIC AND PROJECT COSTS INFORMATION USED FOR BRVAS CUC CALCULATION

D2.1 The base date for the financial information and BRVAS Project Costs used in this Annexure:

D2.1.1 will be at or near commercial close date, or the end of the financial year preceding the commercial close date;

D2.1.2 is used to calculate the indicative BRVAS-CUC; and

D2.1.3 will be reviewed and adjusted annually in accordance with the provisions of the Agreement and this **Annexure D**.

D2.2 Although the base financial, economic and BRVAS Project Costs information used to calculate the BRVAS-CUC is indicative, the BRVAS-CUC for each financial year during the Debt Repayment Period shall be based on the actual BRVAS Project Costs owing as at the end of TCTA's preceding financial year as at 31 March, and forecasts of future Project Costs for the remainder of the Debt Repayment Period.

D2.3 Financial and Economic Information

D2.3.1 The CPI and real interest rates are based on forecasts supplied to TCTA by BER. TCTA annually commissions an update on the report containing a long-term forecast of inflation and interest rates over the next 25 (twenty-five) years.

D2.3.2 The calculation of BRVAS Project Costs uses projected inflation and real interest rates based on the BER's forecast and TCTA's estimate of credit and

[redacted]

liquidity margins as set out in **Table D1** below.

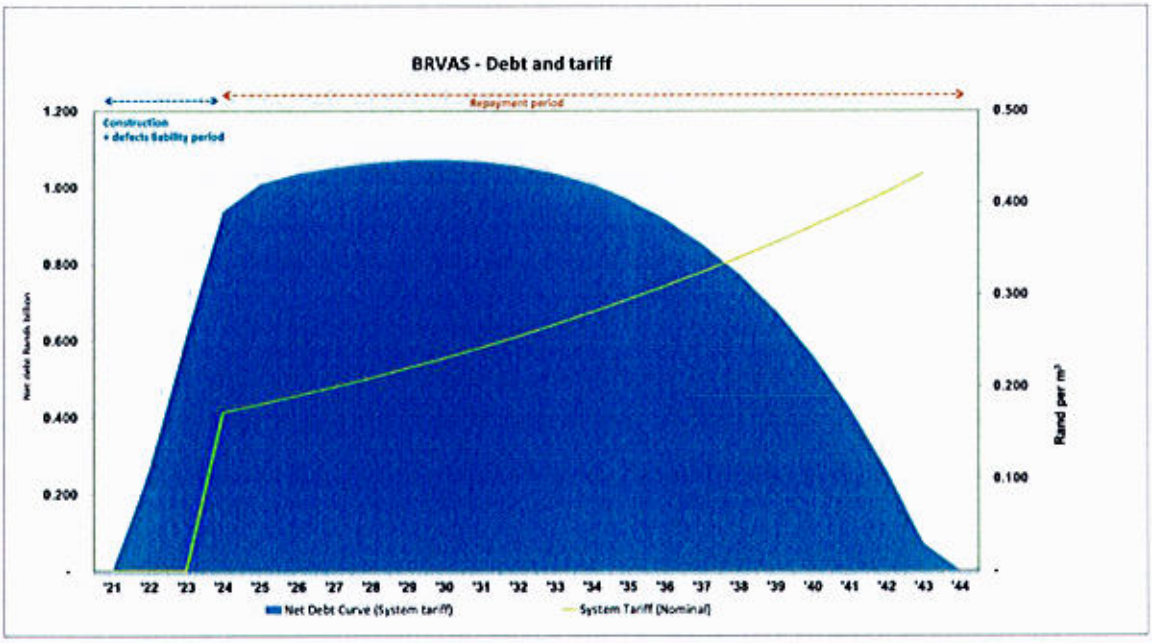
TABLE D1: Financial Assumptions

PERIOD	MARCH YEAR-ON-YEAR CPI IN %	REAL INTEREST RATE IN %	CREDIT + LIQUIDITY MARGIN IN %	ALL-IN COST OF FUNDING IN %
	Source: BER 2019	*Source: BER 2019*	*Source: TCTA estimate*	*Summation of the components*
2019-2023	4,90	4,93	3,50	13,33
2024-2028	5,00	3,80	3,50	12,30
2029-2033	5,00	3,70	3,50	12,20
2034-2038	4,90	3,60	3,50	12,00
2036-2040	4,90	3,50	3,50	11,90
2041-2045	4,90	3,50	3,50	11,90

D2.5 BRVAS Project Costs

D2.5.1 The BRVAS Project Costs including all costs incurred prior to the Agreement coming into effect shall be recovered from all the Users taking water from the BRVAS.

D2.5.3 The BRVAS Project Costs will vary depending on the actual BRVAS Funding Costs incurred, and according to TCTA's base case financial model, are anticipated to peak below R1.07 billion in 2030 and be repaid in full by 30 June 2043. An indicative cumulative debt curve is shown below:



D2.5.4 The BRVAS Project Costs will be recovered from the Users in proportion to each User's actual licenced volume for water from the BRVAS.

D2.6 Estimated BRVAS Capital Costs

The estimated BRVAS Capital Costs as at the base date and the timing thereof are set out in **Table D2,** below.

[redacted]

TABLE D2: Estimated annual BRVAS Capital Costs, in nominal terms in million Rand per financial year, excluding VAT

Financial year	Estimated Annual Capital Cost
2020/21	62
2021/22	248
2022/23	280
2023/24	282
2024/25	52
2025/26	9
Total	**933**

D2.7 Estimated BRVAS Funding Costs

D2.7.1 The Users will bear the BRVAS Funding Costs which will be recovered through the BRVAS-CUC and the BRVAS Third Party Charge, where applicable.

D2.7.2 Interest associated with the Debt raised by TCTA to implement the Project will be capitalised during the construction period.

D2.7.3 No capitalisation of interest will be allowed after the construction period.

D2.7.4 The Debt shall be amortised from Operational Declaration, or any extended grace period that may be granted by lenders, until the end of the Debt Repayment Period and shall be managed within TCTA's approved borrowing limits.

D2.7.5 The BRVAS-CUC will therefore be set at a level sufficient to repay the BRVAS Project Costs over the Debt Repayment Period.

D2.8 Estimated BRVAS Administration Costs

D2.8.1 The BRVAS Administration Costs during the Implementation phase will be capitalised and included in the estimated BRVAS Project Costs with effect from Operational Declaration.

D2.8.2 The BRVAS Administration Costs relating to the debt management phase will be determined, annually and applied to the outstanding amount of BRVAS-CUC until the Debt is fully repaid.

D2.8.3 TCTA will update the tariffs annually to take into account the actual BRVAS Administration Costs incurred during the Implementation of the Project. The Administration Costs during debt management phase will be apportioned amongst all TCTA's projects, including this Project.

D2.9 Debt Repayment Period

The repayment of the BRVAS Project Costs raised by TCTA to implement the Project shall be recovered from the all the Users over the Debt Repayment Period, through the BRVAS-CUC calculated in terms of this **Annexure D** and invoiced by DWS in accordance with the Agreement.

D3. REPAYMENT OF THE BRVAS PROJECT COSTS THROUGH THE BRVAS-CUC AND BRVAS THIRD PARTY CHARGE

D3.1 The BRVAS Project Costs will be recovered from all Users taking water from the BRVAS,

[redacted]

through the BRVAS-CUC CUC and the BRVAS Third Party Charge, where applicable, applied to licenced volume or metered water use.

D3.2 The Debt incurred by TCTA in funding the BRVAS will be serviced by it from income derived from the BRVAS-CUC and the BRVAS Third Party Charge, where applicable, i.e. the amounts owed by TCTA to its lenders will be paid through the BRVAS-CUC the BRVAS Third Party Charge to be applied by DWS on the volumes of water taken from the BRVAS as licenced to the Users, and payable by the Users to DWS who will in turn pay it to TCTA, provided that TCTA may elect to receive such payment directly from the Users in terms of the Deed of Assignment set out in **Annexure E**.

D3.3 The amounts received by TCTA from DWS or the User, as the case may be, under the BRVAS-CUC will be applied by TCTA firstly in reduction of the relevant portion of the BRVAS costs that have been pre-funded by DWS as the BRVAS is intended to be funded on an off-budget basis and then to the remaining portion of the Debt applicable to it.

D3.4 The BRVAS-CUC and NBRVAS Third Party Charge will cease to apply to the User only when the Project Costs have been repaid in full, nothing at all excepted.

D4. THE BRVAS CUC

D4.1 The BRVAS-CUC:

D4.1.1 represents the capital unit charge which shall form part of raw water tariffs to be levied by DWS on all Users taking water from the BRVAS in order to recover the costs of funding and implementing the BRVAS;

D4.1.2 shall be levied by DWS on the Users from the earlier of Operational Declaration or 1 July 2023;

D4.1.3 will be recovered from the Users on a monthly basis using this **Annexure D** and the provisions of the Agreement as the basis;

D4.1.4 will be invoiced as set out in this Agreement;

D4.1.5 will be calculated so as to recover all Debt over the Debt Repayment Period;

D4.1.6 shall be determined annually for each successive financial year and charged on Users to ensure the full repayment of Debt within the Debt Repayment Period, based on:

D4.1.6.1 the actual Project Costs incurred or to be incurred while any portion of the Debt is outstanding;

D4.1.6.2 the BRVAS financial model developed and updated from time to time by TCTA such that the aggregate of outstanding debt at the end of TCTA's previous financial year and the net present value of estimated Debt over the remainder of the Debt Repayment Period is equal to the net present value of forecast income in the form of payments to be made by User/s under the BRVAS-CUC over such period. Such determination of the BRVAS-CUC will take into account any under- or over-recovery of the Project Costs at that time, so that under all circumstances the outstanding Debt is repaid in full within the Debt Repayment Period.

D4.1.7 will be based on the licenced volume applicable to the User from the BRVAS from the points

[redacted]

of abstraction.

D5. BRVAS O&M TARIFF

All Users from the Project will pay the same BRVAS O&M Tariff, regardless of the Point of Supply, and will be calculated in terms of the then prevailing Pricing Strategy.

D6. BRVAS B&R TARIFF

All Users from the Project will pay the same BRVAS B&R Tariff, regardless of the Point of Supply, and will be calculated in terms of the then prevailing Pricing Strategy.

D7. GENERAL

D7.1 An independent external firm will audit the BRVAS tariff model annually to provide assurance to stakeholders that the tariffs that they are required to pay have been determined according to this Annexure D and the prevailing input assumptions, and have been accurately determined to repay the cost of the infrastructure over the debt repayment period. The costs of such auditors will form part of the BRVAS Administration Costs. Copies of such report may be made available to the Users subject to the terms and conditions contained in the Agreement between such independent external audit firm and TCTA. DWS will use its reasonable endeavours to ensure that such documents may be made available to Users on request.

D7.2 During annual tariff consultations, updated input assumptions that were included in the tariff calculation will be shared with the Users.

D7.3 DWS will be responsible for recovering all outstanding amounts due from all Users, such amounts to be applied in reduction of the BRVAS Project Costs.

[redacted]

ANNEXURE D1

BRVAS SCHEME TARIFF CALCULATION

D1. BRVAS-CUC Calculation

The BRVAS-CUC:

D1.1 shall be constant, in real terms for a period of, for example 20 (twenty) years from Operational Declaration, assuming annual adjustments in line with CPI for a financial year.

$$BRVAS\ CUC = \frac{D_{n-1}}{\sum_{t=n}^{T}(1+\eta)^t V_t} + \frac{\sum_{t=n}^{T} PC_t}{\sum_{t=n}^{T}(1+\eta)^t V_t}$$

where:

BRVAS CUC is the indicative capital unit charge in year *n*, growing annually at the rate η, required to amortise the nett outstanding debt at the beginning of the current financial year and projected future Project Costs over the remaining Debt Repayment Period,

D_{n-1} represents the sum of accruals and nett outstanding debt at the beginning of the *n*-th year (cumulative sum of all debt disbursements and capitalised interest less the cumulative sum of debt repayments, less investment and cash balances),

PC_t represents the net present value (NPV) of projected Project Costs expected to be incurred in year *t*, calculated at the project's weighted average cost of capital;

η is the expected average rate of inflation over the remaining debt repayment period,

T is the Final Debt Repayment Date, and

V_t represents the present value of the Licenced Volume from the BRVAS project in year *t*, calculated at the project's weighted average cost of capital.

D1.2 In this example, all payments due within the 20-year period need to be repaid by the water sales in the same period, so the tariff calculated will equate the cumulative present value of payments to the cumulative present value of income, therefore having a net present value (NPV) of zero.

D1.3 The BRVAS is estimated to have an incremental yield of 23 (twenty-three) million cubic metres per annum once Implemented and declared operational.

D1.4 The BRVAS-CUC payment for an individual User will thus be determined as follows:

BRVAS-CUC payment: $_{User\ x}$ ***= BRVAS-CUC * User Licenced Volume from BRVAS*** $_{User\ x.}$

D2. BRVAS-CUC REVIEW TRIGGERS

Automatic adjustments of the BRVAS-CUC and BRVAS Third Party Charge will take place in the following events:

D2.1 any changes in financial, economic and Project Costs projections from the base information described in this annexure or from previous projections of such information;

[redacted]

D2.2 any additional legislative requirements on charges to be levied or changes in the Pricing Strategy to be applied by DWS;

D2.3 any changes in compulsory licensing;

D2.4 the timing and cost of future schemes;

D2.5 any changes in the yield of the BRVAS project which necessitates an adjustment to such tariffs; and

D2.6 any material changes in circumstances affecting the ability to recover the Project Costs in full within the Debt Repayment Period.

D3. The estimated indicative initial BRVAS-CUC commencing on 1 July 2023, based on the base financial, economic and Project Costs information contained in this Annexure, is **R4.2690 per m³** in June 2023 terms, excluding VAT. It will be adjusted annually thereafter as provided for in this Annexure.

D4. The BRVAS-CUC will remain in full force and effect for so long as any portion of the Debt remains outstanding, so as to enable the discharge of all of TCTA's obligations under the relevant financing agreements.

[redacted]

ANNEXURE E

DEED OF ASSIGNMENT

ENTERED INTO BETWEEN:

THE DEPARTMENT OF WATER AND SANITATION
("DWS")

AND

THE CITY OF CAPE TOWN METROPOLITAN MUNICIPALITY
("THE USER")

AND

TRANS-CALEDON TUNNEL AUTHORITY
("TCTA")

IN RESPECT OF:
THE BERG RIVER-VOËLVLEI AUGMENTATION SCHEME
("BRVAS" / "THE PROJECT")

1. INTRODUCTION

1.1 DWS and the User have completed the negotiations in respect of the proposed water supply arrangements under the BRVAS and have either entered into a Water Supply Agreement or contemplate entering into a Water Supply Agreement, in terms of which *inter alia*, the User will take water from the BRVAS in terms of a Licence and pay *inter alia*, the BRVAS-CUC in respect of same.

1.2 DWS, the User and TCTA have agreed that in consideration of TCTA borrowing funds on an off-budget basis to fund and Implement the BRVAS, that DWS will assign its rights to receive payment of the BRVAS-CUC and the BRVAS Third Party Charge where applicable, from the User, to TCTA, and the User will accordingly make payment of the BRVAS-CUC, directly to TCTA to enable it to service the Debt.

1.3 DWS, the User and TCTA wish to record the terms and conditions of their agreement in writing as contemplated in this Deed of Assignment to regulate the relationship between them.

2. ASSIGNMENT OF RIGHTS TO REVENUE BY DWS TO TCTA

In consideration of the Debt to be incurred by TCTA, in the funding and Implementation of the BRVAS, and the revenue to be collected by DWS from the Users under the BRVAS-CUC and the BRVAS Third Party Charge where applicable, the Parties hereby agree as follows:

2.1 DWS hereby assigns to TCTA, its right to receive payment of the BRVAS-CUC and the BRVAS Third Party Charge where applicable, directly from the User, in terms of this Deed of Assignment;

2.2 The User hereby consents to the assignment of rights by DWS as contemplated in 2.1 above;

2.3 TCTA hereby accepts the assignment of rights in its favour and undertakes to apply all such revenue received by it from the User under the BRVAS-CUC and the BRVAS Third Party Charge where applicable, firstly in reduction of the relevant portion of the BRVAS costs that have been pre-funded by DWS as the BRVAS is intended to be funded on an off-budget basis, and then in reduction of the Debt applicable to the User.

3. GENERAL

3.1 DWS undertakes to incorporate the assignment of rights contemplated herein, in all Water Supply Agreements concluded in future with the Users under the BRVAS.

3.2 For the avoidance of doubt, DWS shall continue to receive payment of the Water Use Charges, the BRVAS O&M Tariff and the BRVAS B&R Tariff, as may be applicable, directly from all Users.

3.3 It is expressly recorded that the assignment of rights contemplated herein does not affect or detract from any of DWS's remaining rights and obligations under the Agreement and the Implementation Agreement, all of which continue in full force and effect, nothing at all excepted.

THE SIGNATORIES HEREUNDER WARRANT THEIR AUTHORITY TO SO SIGN:

THUS DONE AND SIGNED AT Pta **ON THIS** 9 **DAY OF** June **20**23

AS WITNESSES:

1. [redacted]
2. [redacted]

[redacted]

FOR AND ON BEHALF OF:
THE DEPARTMENT OF WATER AND SANITATION
NAME: DR. SEAN PHILLIPS
CAPACITY:

THUS DONE AND SIGNED AT_____ **ON THIS**____ **DAY OF** _____ **20**____

AS WITNESSES:

1. [redacted]
2. [redacted]

Michael John Webster

FOR AND ON BEHALF OF:
THE CITY OF CAPE TOWN METROPOLITAN MUNICIPALITY
NAME:
CAPACITY:

THUS DONE AND SIGNED AT CENTURION **ON THIS** 29 **DAY OF** JUNE **20**23

AS WITNESSES:

1. _____
2. _____

[redacted]

FOR AND ON BEHALF OF:
TRANS-CALEDON TUNNEL AUTHORITY
NAME: PERCIVAL SECHEMANE
CAPACITY: CHIEF EXECUTIVE OFFICER

[redacted]

ANNEXURE F

CONDITIONS FOR THE SUPPLY OF RAW WATER TO USERS

GENERAL

F-1 Certain of the conditions contained in this annexure also appear in the main body of the agreement, but are re-stated here for ease of implementation, with the intention that these conditions of supply could be read without reference to the main body of the agreement.

F-2 These conditions of supply should be read in conjunction with, and are subject to, all applicable laws, including the National Water Act,1998, the Water Services Act, 1997 and any regulations promulgated under the relevant acts.

QUANTITY OF WATER TO BE PROVIDED

F-3 DWS will, endeavour to ensure that the Municipalities, in terms of its existing lawful water use allocation or water use license, is supplied with no less than the estimated volume of water needed for the Municipalities to provide basic water supply, as defined in the Water Services Act, to the population to whom the Municipalities supplies water services.

F-4 The maximum quantity of water supplied by DWS to users shall be the ALLOCATABLE YIELD of the DWS owned portion of the WCWS considering the level of assurance required by the different users. Each user will be entitled to abstract a certain amount of water from the Western Cape Water System (WCWS) based on the allocations made in terms of existing lawful water use or any licenses issued which replace such existing lawful water use.

F-5 The acceptable level of assurance for municipal supply is 98% assurance, or such other amount as may be agreed between DWS and CCT, and DWS will endeavor to supply the CCT at such level of assurance of supply making use of the Western Cape Water Systems model.

F-6 Water is supplied to the CCT from a system of interconnected water infrastructure, in accordance with the operating rules of the WCWS Annexure "C". DWS, CCT and other users shall meet at least once a year, and when necessary, to consider the operation of the WCWS and will jointly decide, within the framework of the operating rules, from which sources CCT's water allocations will be drawn.

F-7 DWS may after consultation with the CCT and other users, and in accordance with the WCWS Operating Rules, Annexure "C", and applicable disaster management legislation, restrict and or limit the quantity of water supplied in terms of this agreement in the event of droughts, floods, or other such disasters.

F-8 DWS shall take all reasonable measures, after consultation with all users of the WCWS timeously inform the Users of a restriction and/or limitation of supply from its water infrastructure due to a shortage of water.

F-9 DWS shall consult all Users if it proposes to reduce the Users' water allocation.

F-10 The Users will be given access to the results of the Western Cape Systems Model and all calculations and optimisation techniques on which decisions relating to the source of supply from interconnected DWS water infrastructure or restrictions has been based.

QUALITY OF WATER TO BE PROVIDED

F-11 DWS will not be responsible for treating water from the WCWS

[redacted]

F-12 DWS, while acting as the responsible authority, will have, as part of overall water resource management, to ensure that the levels of water consumption, use, and pollution, as well as the associated infrastructure to impound, supply, treat and dispose of the water, do not cause either unacceptable or irreversible impacts on the population or ecosystems including water resources.

F-13 DWS shall take all reasonable measures to monitor the quality of the resource, and to inform the Users should the quality of water at any time not comply with any pre-agreed standards or benchmarks or should any hazardous or toxic substances enter the raw water resource.

F-14 DWS shall take active steps to prevent pollution of water in the WCWS, including the measures contained in Chapter 3, Part 4 of the NWA.

F-15 DWS in collaboration with the Users shall have the right to monitor at its own cost, the water quality in all dams, pipelines, reservoirs, and other transport facilities used in the transport of water supplied by DWS to the Users. The Users will have access to this information.

F-16 The Users in collaboration with DWS shall have the right to monitor at its own cost the water quality of the resource and DWS will have access to such information.

CONTINUITY OF SUPPLY AND SUPPLY PRESSURES

F-17 DWS shall, after first consulting and informing the CCT, have the right to interrupt the supply to the CCT from any of DWS's infrastructure for the purpose of renewing, testing, examining, repairing, or maintaining any water infrastructure. For major planned maintenance shutdowns at least 6 months written notice will be given and 14 days written notice for minor interruptions so that it can be scheduled in the CCT's maintenance programme.

F-18 In emergency situations DWS shall inform the Bulk Water Department of the City telephonically and by means of an e-mail of an interruption of supply of water CCT shall be responsible for informing its consumers of such an interruption when required.

F-19 The probability of filling the dams in the WCWS will be modelled and optimized before a final joint decision is made on the closure of the Theewaterskloof Tunnel for long periods.

F-20 On at least yearly basis, or as and when required, the WCWS will be modeled and optimized and joint decisions regarding the operation thereof made.

F-21 DWS shall not be responsible or liable for any loss of or damage to property or injury to persons or for loss of production or for loss of income or profit resulting from an interruption, variation or deficiency in the water supply or water quality or from excess or lack of pressure in DWS's WCWS, unless such loss or damage is due to the negligence of DWS.

SUPPLY POINTS

F-22.1 The point(s) at which a water supply is to be provided to the CCT shall be determined by DWS in consultation with the CCT and the current supply points are as follows:

- Rockview Dam Outlet
- Stellenbosch Berg Portal
- Upper Berg River Siphon (pipeline to Wemmershoek Dam)
- Voëlvlei Dam (at CCT low lift pump station)

F-22.2 The point(s) at which a water supply is to be provided to the Municipalities from the distribution infrastructure shall be determined by DWS in consultation with the Municipalities and the current supply points are as follows:

- Stellenbosch Municipality (Stellenbosch Berg Portal)
- Swartland Municipality (Voëlvlei Dam canal to Berg River)

[redacted]

- West Coast District Municipality and Saldanha Municipality (pump station to Withoogte Water Treatment Works)

F-22.1 The point(s) at which a water supply is to be provided to the run of river users shall be determined by DWS in consultation with the users and the current supply points are as follows:
- Berg River Municipality (River abstraction point)
- Drakenstein Municipality (River abstraction point)
- Lower Berg Irrigation Board (River releases from Voëlvlei Dam and Misverstand Dam)

WATER MEASUREMENT DEVICES (METERS AND GAUGING WEIRS)

F-23 Where the Municipality obtains water from a DWS source there will be two measuring devices, one owned and maintained by DWS and the other owned and maintained by the Municipality.

F-24 Both measuring devices are read, and if the readings are within 10 % of each other, the readings are averaged, and the averaged reading is the one that is the billed by DWS. If either party's records show that the discrepancy is attributable to one meter only, the reading of the other meter shall be taken, and in the absence of manifest error be deemed to be the applicable reading.

F-25 If the discrepancy is due to the inaccuracy of both meters a reasonable estimate shall be made by DWS, in consultation with the Municipality of the correct quantity. Such meters shall as soon as practically possible be tested and the account adjusted after the inaccuracy has been ascertained. Any inaccurate meter should be rectified as soon as possible.

F-26 The quantity of water registered at the supply point(s) shall be deemed to be the quantity provided, unless it can be demonstrated that the water measurement device reading(s) was incorrectly recorded or that the water measurement device(s) was not registering accurately at the time of such reading.

F-27 The chambers provided by DWS for the housing of the metering equipment shall be locked and the equipment therein shall be under the control of DWS.

F-28 DWS shall allow the Municipality to accompany DWS during meter readings or by some acceptable arrangement. Failure of the Municipality to accompany DWS during meter readings will not in any way affect the validity of that meter reading and vice-versa.

F-29 The Municipality shall in no way interfere with any equipment in DWS's water measurement device installations and vice-versa.

F-30 DWS's employees shall be always given unimpeded access to its metering installations on the municipality's property for the purpose of reading the meters, effecting alterations, and carrying out maintenance and repairs and vice-versa.

F-31 No person shall obstruct or interfere in any way with any duly authorised employee of DWS engaged in the performance of his or her duties, provided they display such authorisation and vice-versa.

F-32 The cost of all equipment that DWS may deem necessary to install for the proper operation of the water measurement device, the cost of testing water measurement device(s) and the cost of replacing a water measurement device shall be recovered from the Municipality through a water use charge.

F-33 DWS may, at its discretion, test its own water measurement device through which water is supplied to the Municipality; but the water measurement device must be tested and calibrated if DWS is requested to do so by the Municipality.

[redacted]

F-34 Where the water measurement device is a water meter, then the meters tested shall be subjected to a standard industry test to establish its accuracy. Where the water measurement device is a device other than a meter then the Parties shall agree on a suitable testing methodology.

F-35 The municipality shall be entitled to be present at the test. A test carried out on a water measurement device, either at DWS's discretion or at the Municipality's request, shall in no way be invalidated by the latter declining to be present at the test or by it being absent there from and the result of the test shall be binding on the Municipality and DWS.

F-36 A water measurement device shall be considered registering accurately if no error of more than five (5) percent over or under registration is found at the rate of normal flow. Normal flow shall mean two thirds of the maximum flow capacity of the meter.

G-37 The quantity of water registered as having been consumed and the tariff charged during a period that a water measurement fault persisted shall be adjusted in accordance with the degree of error found. The period that the fault persisted will be assumed to be 30 days if the actual period is not known or cannot be agreed between DWS and the Municipality.

F-38 Where any water measurement device is found to have ceased to register or is found to be faulty in any other respect, DWS or the Municipality shall repair or replace such meter within thirty (30) days or as soon as practically possible.

F-39 The quantity of water consumed, during a period within which both water measurement devices ceased to register or was found to be faulty, will be, calculated by DWS based on one of the following agreed upon means, the choice of which to use must be agreed upon between the parties: -

- the average monthly consumption of water during the three months prior to the last registration; or
- the corresponding period's water consumption in the previous year; or
- the average monthly water consumption over a period of three months after repair or replacement of the meters has been affected.

INFORMATION MANAGEMENT AND MONITORING

F-40 DWS will be responsible for the compilation and maintenance of a database containing the data required for operational management of the WCWS monitoring of abstractions from, river flow in, and releases into the WCWS

F-41 DWS will implement control measures to ensure that abstractions do not exceed water allocations (or in future licence authorisations), evaluate the flow and abstraction monitoring network and/or implement a telemetry system within the WCWS to improve the overall management of the WCWS.

F-42 DWS will make all water quantity and quality monitoring information in relation to the WCWS available to the Municipality and vice-versa.

F-43 DWS and the Municipality will make available to each other any relevant information pertaining to the planning and implementation of their respective water resource functions required for implementation of these supply conditions and when requested to do so.

WATER SUPPLY CONNECTED TO DWS WATER INFRASTRUCTURE

F-44 No other water supply, water services work, connection or installation shall relate to or made to any DWS water infrastructure unless authorized by DWS and subject to any conditions that DWS may impose.

[redacted]

F-45 Any existing water supply, water services work, connections or installations connected with or made to DWS water infrastructure, and not authorised by DWS, may be removed, or altered by DWS, or DWS may at any time impose such conditions as it may deem fit in respect of such a connection or installation.

F-46 DWS shall not be liable for any loss or damage caused by or resulting from the use of the water supply of the Western Cape Water Supply System or water services works or installations or connections of the municipality connected with or made to any DWS water infrastructure.

F-47 Where it is necessary for the Municipality to pump water to higher elevations than is supplied to by DWS, any pump installed for this purpose shall not be connected directly to DWS's water infrastructure without prior approval of the specifications thereof by DWS.

WATER RESOURCE DEVELOPMENT AND WATER DEMAND MANAGEMENT

F-48 The growth of water demand will have an impact on the total water demand from the WCWS and will affect the timing and implementation of additional water supply schemes if the level of supply were to remain at 98% level of assurance.

F-49 The parties shall engage in joint long-term planning to ensure that water resources are developed timeously and responsibly to ensure that the Users receives a 98% level of assurance of supply, or such other level of assurance which may be agreed by the parties from time to time.

F-50 The Municipality shall ensure that the water demand management measures contained in its Water Services Development Plan and any other water demand policies adopted from time to time, including the Water Demand Policy and Strategy, are implemented.

F-51 DWS is entitled to monitor the Municipality's compliance with its Water Services Development Plan. The municipality must actively promote the efficient use of water amongst its consumers.

F-52 DWS may restrict or suspend water supply to the Municipality in terms of clause 11.3.4 of the Agreement with the Municipality.

[redacted]