NORTH TEXAS MUNICIPAL WATER DISTRICT
505 E. Brown Street • Wylie, Texas 75098
(972) 442-5405 – Phone • (972) 295-6440 – Fax

TO: BOARD OF DIRECTORS
FROM: JAMES (JIM) M. PARKS, EXECUTIVE DIRECTOR
DATE: JANUARY 16, 2014

SUBJECT: REGULAR MEETING – THURSDAY, JANUARY 23, 2014

I. ANNUAL AUDIT

Enclosed in the Board Packet is a copy of the 2012-2013 Comprehensive Annual Financial Report (the "CAFR ") for your review. For the year ending September 30, 2013, the CAFR indicates that total assets increased 1% from $2,738,286,856 to $2,756,662,837 and that total net position increased 5% from $919,747,737 to $965,529,463.

The CAFR will be submitted to the Government Finance Officers Association for review and consideration for a Certificate of Achievement for Excellence in Financial Reporting. The District has received this certificate each year since 1990.

The Finance /Audit Committee will meet at 2:30 p.m. on Thursday, January 23, 2014, for discussions with staff and auditors and will be prepared to make recommendations regarding the acceptance of the annual audit report, which is included in the CAFR, and the appointment of auditors for 2014 to the Board of Directors at the regular Board meeting.

II. JOINT MEETING OF EXECUTIVE AND POLICY COMMITTEES

A joint meeting of the Executive and Policy Committees will be held prior to the Board meeting on Thursday, January 23, 2014, at 1:00 p.m. Directors not on the Policy Committee are welcome to attend.

III. FINANCE/AUDIT COMMITTEE MEETING

As mentioned above, a Finance/Audit Committee meeting will be held prior to the Board meeting on Thursday, January 23, 2014, at 2:30 p.m. Directors not on the Finance/Audit Committee are welcome to attend.
IV. EMPLOYEE OF THE YEAR RECIPIENTS

The recipients of the annual Carl W. Riehn Employee of the Year Award were announced December 6, 2013. The award went to Jerry Rice of the Solid Waste System. Finalists included Cynthia Ruder, Support Services; Raymond Sirmans, Wastewater System; and Roy Cooke, Water System. These individuals will be introduced at the January 2014 Board meeting. Congratulations to all award recipients.

V. ENCLOSURES

B. CONSENT AGENDA ITEM NO. 14-01-01 – Minutes, Regular Meeting, December 19, 2013
C. CONSENT AGENDA ITEM NO. 14-01-02 – Regional Water System, Chapman Lake Water Access, Task B (Dredging), Project No. 275, Ratification of Execution of Instrument of Assignment
D. CONSENT AGENDA ITEM NO. 14-01-03 – Regional Wastewater System, Rowlett Creek Regional Wastewater Treatment Plant, 2011 Improvements, Project No. 222, Authorization to Make Final Payment
E. CONSENT AGENDA ITEM NO. 14-01-04 – Regional Water System, Water Treatment Plants I and II Sludge Line Improvements, Project No. 284, Change Order No. 2
F. CONSENT AGENDA ITEM NO. 14-01-05 – Upper East Fork Interceptor System, Fugitive Emissions Control Improvements Final Design, Project No. 279, Additional Engineering Services
G. ADMINISTRATIVE MEMORANDUM NO. 4107 – Upper East Fork Interceptor System, Supervisory Control and Data Acquisition Improvements, Preliminary Engineering, Project No. 348, Engineering Services Agreement
H. ADMINISTRATIVE MEMORANDUM NO. 4108 – Upper East Fork Interceptor System, Beck Branch Gravity Sewer, Rowlett Creek Crossing Improvements Condition Assessment and Preliminary Design, Project No. ENG 12-7, Additional Engineering Services
I. ADMINISTRATIVE MEMORANDUM NO. 4109 – Upper East Fork Interceptor System, Upper Rowlett Creek and Upper Cottonwood Creek Lift Stations Improvements Design, Project No. 295, Additional Engineering Services
J. ADMINISTRATIVE MEMORANDUM NO. 4110 – Regional Wastewater System, Wilson Creek Regional Wastewater Treatment Plant, Plant II Odor Control Improvements Final Design, Project No. 349, Engineering Services Agreement
K. ADMINISTRATIVE MEMORANDUM NO. 4111 – Regional Water System, 121 Site Facility Water Transmission Pipeline Relocation at State Highway 121, Project No. 335, Right-of-Way Acquisition Program, Resolution No. 14-1
M. ADMINISTRATIVE MEMORANDUM NO. 4113 – Regional Solid Waste System, Custer Road Transfer Station Tipping Floor Improvements, Project No. 331, Tabulation of Bids and Award of Contract
N. ADMINISTRATIVE MEMORANDUM NO. 4114 – Regional Water System, Water Treatment Plants I, II, III, and IV Ozone, Project No. 153, Change Order No. 23

O. ADMINISTRATIVE MEMORANDUM NO. 4115 – Regional Water System, Water Treatment Plant I, Conversion to Biologically Active Filtration and Improvement of Existing Underdrains, Project No. 259, Change Order No. 4

P. ADMINISTRATIVE MEMORANDUM NO 4116 – Regional Water System, Water Treatment Plant IV, Conversion to Biologically Active Filtration, Project No. 251, Change Order No. 5

Q. ADMINISTRATIVE MEMORANDUM NO. 4117 – Regional Water System, Water Treatment Plant III, Filter Underdrain Improvements and Conversion to Biologically Active Filters, Project No. 277, Change Order No. 3

R. ADMINISTRATIVE MEMORANDUM NO. 4118 – Regional Water System, Bonham Water Treatment Plant Sludge Lagoon Improvements, Project No. 293, Change Order No. 1

S. ADMINISTRATIVE MEMORANDUM NO. 4119 – Regional Solid Waste System, 121 Regional Disposal Facility, Sector 4A Liner Material Purchase/Install, Project No. ENG 13-3B, Tabulation of Bids, Award of Contract, and Authorization for Executive Director to Execute Construction Agreement


U. ADMINISTRATIVE MEMORANDUM NO. 4121 – East Fork Raw Water Supply Project Diversion Pump Station Compromise, Settlement Agreement and Release for Repair of Vertical Turbine Pumps at Station

V. ADMINISTRATIVE MEMORANDUM NO. 4122 – Upper East Fork Interceptor System Fugitive Emissions Control Improvements, Project No. 279, Interlocal Cooperation Agreement between the City of Allen and NTMWD Concerning Reimbursement for Incremental Cost of Upgraded Screening Walls

W. ADMINISTRATIVE MEMORANDUM NO. 4123 – Cooperative Service Agreement between the City of McKinney, North Collin Water Supply Corporation, and NTMWD for Water Service to the Trinity Falls Development

X. ADMINISTRATIVE MEMORANDUM NO. 4124 – Regional Solid Waste System, 121 Regional Disposal Facility Sector 4A Liner and Leachate Collection System Construction, Project No. ENG 13-3A, Tabulation of Bids, Award of Contract, and Authorization for Executive Director to Execute Construction Agreement

Y. WATER CONSUMPTION REPORT – December 2013

Z. WASTEWATER SYSTEM REPORT – December 2013

AA. SOLID WASTE SYSTEM REPORT – December 2013

BB. CONSTRUCTION PROGRESS REPORT – December 31, 2013

CC. NTMWD EMPLOYEES’ RETIREMENT FUND FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2013

DD. NTMWD RETIREE HEALTH INSURANCE FUND FOR THE THREE MONTHS ENDED DECEMBER 31, 2013

EE. NTMWD INVESTMENT SUMMARY FOR THE QUARTER ENDED DECEMBER 31, 2013

FF. 2012-2013 COMPREHENSIVE ANNUAL FINANCIAL REPORT

GG. POLICY COMMITTEE MEETING MINUTES – December 19, 2013

HH. FINANCE/AUDIT COMMITTEE MEETING MINUTES – December 19, 2013
NORTH TEXAS MUNICIPAL WATER DISTRICT  
505 E. Brown Street • Wylie, Texas 75098  
(972) 442-5405 – Phone • (972) 295-6440 – Fax

BOARD OF DIRECTORS
REGULAR MEETING
THURSDAY, JANUARY 23, 2014  
4:00 P.M.

Notice is hereby given pursuant to V.T.C.A., Government Code, Chapter 551, that the Board of Directors of North Texas Municipal Water District will hold a regular meeting, open to the public, on Thursday, January 23, 2014, at 4:00 p.m., at the North Texas Municipal Water District offices, 505 E. Brown Street, Wylie, Texas.

The Board of Directors is authorized by the Texas Open Meetings Act to convene in closed or executive session for certain purposes. These purposes include receiving legal advice from its attorney (Section 551.071); discussing real property matters (Section 551.072); discussing gifts and donations (Section 551.073); discussing personnel matters (Section 551.074); or discussing security personnel or devices (Section 551.076). If the Board of Directors determines to go into executive session on any item on this agenda, the Presiding Officer will announce that an executive session will be held and will identify the item to be discussed and provision of the Open Meetings Act that authorizes the closed or executive session.

AGENDA

I. INVOCATION – DIRECTOR PATRICK NICKLEN

II. ROLL CALL

III. RECOGNITION OF GUESTS

   A. Registered Guests

IV. PUBLIC COMMENTS

   The Board of Directors allows individuals to speak to the Board. Prior to the meeting, speakers must complete and submit a “Public Comment Registration Form.” The time limit is five (5) minutes per speaker, not to exceed a total of thirty (30) minutes for all speakers. The Board may not discuss these items, but may respond with factual or policy information.

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1Persons with disabilities who plan to attend the NTMWD Board of Directors meeting and who may need auxiliary aids or services are requested to contact John Montgomery in the NTMWD Administrative Offices at (972) 442-5405 as soon as possible. All reasonable efforts will be taken to make the appropriate arrangements.
V. CONSENT AGENDA ITEMS

The Consent Agenda allows the Board of Directors to approve all routine, noncontroversial items with a single motion, without the need for discussion by the entire Board. Any item may be removed from consent and considered individually upon request of a Board member.

A. Consider Approval of Board of Directors Meeting Minutes – December 19, 2013
   (Please refer to Consent Agenda Item No. 14-01-02)

B. Consider Authorizing Ratification of Execution of Instrument of Assignment on Project No. 275, Chapman Lake Water Access, Task B (Dregging)
   (Please refer to Consent Agenda Item No. 14-01-02)

C. Consider Authorization to Make Final Payment on Project No. 222, Rowlett Creek Regional Wastewater Treatment Plant 2011 Improvements
   (Please refer to Consent Agenda Item No. 14-01-03)

D. Consider Authorizing Change Order No. 2 on Project No. 284, Water Treatment Plants I and II Sludge Line Improvements
   (Please refer to Consent Agenda Item No. 14-01-04)

E. Consider Authorizing Additional Engineering Services on Project No. 279, Fugitive Emissions Control Improvements
   (Please refer to Consent Agenda Item No. 14-01-05)

VI. AGENDA ITEMS FOR INDIVIDUAL CONSIDERATION

A. Consider Acceptance of 2012-2013 Annual Audit
   (Please refer to Board Memorandum)

B. Consider Appointment of Auditors for Fiscal Year 2013-2014
   (Please refer to Board Memorandum)

C. Consider Authorizing Execution of Engineering Services Agreement on Project No. 348, Supervisory Control and Data Acquisition Improvements
   Preliminary Engineering
   (Please refer to Administrative Memorandum No. 4107)

D. Consider Authorizing Additional Engineering Services on Project No. ENG 12-7, Beck Branch Gravity Sewer, Rowlett Creek Crossing
   Improvements, Condition Assessment and Preliminary Design
   (Please refer to Administrative Memorandum No. 4108)

E. Consider Authorizing Additional Engineering Services on Project No. 295, Upper Rowlett Creek and Upper Cottonwood Creek Lift Stations
   Improvements Design
   (Please refer to Administrative Memorandum No. 4109)
F. Consider Authorizing Execution of Engineering Services Agreement on Project No. 349, Wilson Creek Regional Wastewater Treatment Plant, Plant II Odor Control Improvements Final Design (Please refer to Administrative Memorandum No. 4110)

G. Consider Authorizing Adoption of Resolution No. 14-1 Authorizing the Use of Eminent Domain to Acquire Right-of-Way for the 121 Site Facility Water Transmission Pipeline Relocation at State Highway 121, Project No. 335 (Please refer to Administrative Memorandum No. 4111)

H. Consider Authorizing Adoption of Resolution No. 14-2 Authorizing Additional Funding for Right-of-Way Acquisition Program on North McKinney Pipeline, Phase I and II, Project No. 210 (Please refer to Administrative Memorandum No. 4112)

I. Consider Authorizing Award of Construction Contract on Project No. 331, Custer Road Transfer Station Tipping Floor Improvements (Please refer to Administrative Memorandum No. 4113)

J. Consider Authorizing Change Order No. 23 on Project No. 153, Water Treatment Plants I, II, III, and IV Ozonation (Please refer to Administrative Memorandum No. 4114)

K. Consider Authorizing Change Order No. 4 on Project No. 259, Water Treatment Plant I Conversion to Biologically Active Filtration and Improvement of Existing Underdrains (Please refer to Administrative Memorandum No. 4115)

L. Consider Authorizing Change Order No. 5 on Project No. 251, Water Treatment Plant IV Conversion to Biologically Active Filtration (Please refer to Administrative Memorandum No. 4116)

M. Consider Authorizing Change Order No. 3 on Project No. 277, Water Treatment Plant III, Filter Underdrain Improvements and Conversion to Biologically Active Filters (Please refer to Administrative Memorandum No. 4117)

N. Consider Authorizing Change Order No. 1 on Project No. 293, Bonham Water Treatment Plant Sludge Lagoon Improvements (Please refer to Administrative Memorandum No. 4118)

O. Consider Authorizing Award of Construction Contract and Execution of Construction Agreement for Project No. ENG 13-3B, 121 Regional Disposal Facility, Sector 4A Liner Material Purchase/Install (Please refer to Administrative Memorandum No. 4119)
P. Consider Authorizing Execution of Engineering Services Agreement on Project No. 350, Lavon Lake Raw Water Pump Stations Intake Channel Improvements Final Engineering (Please refer to Administrative Memorandum No. 4120)

Q. Consider Authorizing Execution of Compromise, Settlement Agreement and Release between the North Texas Municipal Water District, Freese and Nichols, Inc., Eagle Contracting, LP, and Smith Pump Company for Repair of Vertical Turbine Pumps at East Fork Raw Water Supply Project Diversion Pump Station (Please refer to Administrative Memorandum No. 4121)

R. Consider Authorizing Execution of Interlocal Cooperation Agreement between the City of Allen and North Texas Municipal Water District Concerning Reimbursement for Incremental Cost of Upgraded Screening Walls for the Upper East Fork Interceptor System Fugitive Emissions Control Improvements, Project No. 279 (Please refer to Administrative Memorandum No. 4122)

S. Consider Authorizing Execution of Cooperative Service Agreement between the City of McKinney, North Collin Water Supply Corporation, and North Texas Municipal Water District for Interim Water Service to the Trinity Falls Development (Please refer to Administrative Memorandum No. 4123)

T. Consider Authorizing Award of Construction Contract and Execution of Construction Agreement on Project No. ENG 13-3A, 121 Regional Disposal Facility Sector 4A Liner and Leachate Collection System Construction (Please refer to Administrative Memorandum No. 4124)

VII. DISCUSSION ITEMS

A. Receive Legal Advice from the District’s Attorney Regarding Environmental Compliance Issues Related to the Wastewater System

VIII. ADJOURNMENT

NEXT REGULAR MEETING OF BOARD, THURSDAY, FEBRUARY 27, 2014, AT 4:00 P.M. IN THE ADMINISTRATIVE OFFICES, WYLIE, TEXAS
NORTH TEXAS MUNICIPAL WATER DISTRICT  
505 E. Brown Street • Wylie, Texas 75098  
(972) 442-5405 – Phone • (972) 295-6440 – Fax

MINUTES OF A REGULAR MEETING OF THE BOARD OF DIRECTORS  
HELD ON THURSDAY, DECEMBER 19, 2013  
IN THE NTMWD ADMINISTRATIVE OFFICES, WYLIE, TEXAS

The North Texas Municipal Water District Board of Directors met in Regular Session on Thursday, December 19, 2013, at 2:00 p.m. in the Administrative Offices, 505 East Brown Street, Wylie, Texas. Notice of the meeting was legally posted in accordance with Government Code, Title 551, Open Meetings.

President Bill Lofland called the meeting to order. President Lofland advised that Director Don Gordon would be abstaining from Agenda Item Nos. VIII. L., and Director Larry Parks would be abstaining from Agenda Item Nos. VIII. E., and M.

I. INVOCATION

Director John Sweeden offered the invocation.

II. ROLL CALL

Secretary Joe Joplin conducted a roll call. Director Gary Downey was absent from the meeting. The following Directors were present for the December 19, 2013, Board meeting:

- Terry Anderson  
- Dcn Cates  
- Joe Farmer  
- Marvin Fuller  
- Don Gordon  
- Darrell Grooms  
- Bill Harrison  
- Joe Joplin  
- James Kerr  
- Bill Lofland  
- Jack May  
- Charles McKissick

- Jim Mellody  
- John Murphy  
- Patrick Nicklen  
- Larry Parks  
- Bobby Robinson  
- Richard Sheehan  
- Lynn Shuyler  
- Shep Stahel  
- John Sweeden  
- Bob Thurmond  
- Darwin Whiteside  
- Jerry Yancey

The following NTMWD consultants attended the meeting:

- Lewis Isaacks – Gay McCall Isaacks Gordon & Roberts  
- David Medanich – First Southwest Company  
- Mark Walsh – Saunders, Walsh & Beard
III. PRESENTATION OF NORTH TEXAS ZEBRA MUSSEL BARRIER ACT OF 2012, HB 6007, TO CONGRESSMAN RALPH HALL

Executive Director Jim Parks presented Congressman Ralph Hall with a framed copy of HB 6007, North Texas Zebra Mussel Barrier Act of 2012.

IV. SPECIAL EXECUTIVE SESSION RELATED TO SELECTION OF EXECUTIVE DIRECTOR

The regular session recessed at 2:03 p.m.

President Bill Lofland declared a need for an Executive Session of the Board of Directors to discuss personnel issues related to selection and compensation of the Executive Director pursuant to Section 551.074 of the Texas Government Code. The Executive Session was called to order by President Bill Lofland at 2:04 p.m.

The Executive Session adjourned at 3:10 p.m.

The Board of Directors reconvened into regular session at 3:11 p.m.

V. RECOGNITION OF GUESTS

A. Registered Guests

Executive Director nominee, Thomas Kula, was present for the meeting.

VI. PUBLIC COMMENTS

There were no public comments.

VII. CONSENT AGENDA ITEMS

Upon a motion by Director Don Cates and a second by Director Don Gordon, the Board of Directors voted unanimously to approve the consent agenda items as follows:

A. Consider Approval of Board of Directors Meeting Minutes – November 21, 2013 (Please refer to Consent Agenda Item No. 13-12-01)

B. Consider Authorizing Additional Engineering Services on Project No. 325, Apollo Delivery Point 5.5 Million Gallon Ground Storage Tank (Please refer to Consent Agenda Item No. 13-12-02)

C. Consider Authorizing Change Order No. 1 and Reduction of Retainage on Project No. 280, Floyd Branch Regional Wastewater Treatment Plant 2012 Odor Control Improvements (Please refer to Consent Agenda Item No. 13-12-03)

D. Consider Authorizing Change Order No. 3 and Reduction of Retainage on Project No. 222, Rowlett Creek Regional Wastewater Treatment Plant 2011 Improvements (Please refer to Consent Agenda Item No. 13-12-04)
E. Consider Authorizing Change Order No. 4 on Project No. 251, Water Treatment Plant IV Conversion to Biologically Active Filtration  
(Please refer to Consent Agenda Item No. 13-12-05)

F. Consider Authorizing Change Order No. 4 and Authorization to Make Final Payment on Project No. 217, Electrical Improvements at Water Treatment Plant II Chemical Building  
(Please refer to Consent Agenda Item No. 13-12-06)

G. Consider Authorizing Additional Engineering Services on Project No. 261, High Service Pump Station 2-2 and 2-3 Mechanical Improvements  
(Please refer to Consent Agenda Item No. 13-12-07)

H. Consider Authorizing Change Order No. 2 and Authorization to Make Final Payment on Project No. 283, 20-Inch and 60-Inch Waterline Relocations Along Country Club Road and FM 2514  
(Please refer to Consent Agenda Item No. 13-12-08)

I. Consider Authorizing Payment to Kaufman County for Building Permit Fee on Project No. 312, Lake Tawakoni Water Treatment Plant Sludge Lagoon Improvements  
(Please refer to Consent Agenda Item No. 13-12-09)

VIII. AGENDA ITEMS FOR INDIVIDUAL CONSIDERATION

A. **Tabled Item**: Consider Authorizing Award of Construction Contract on Project No. 301, NTMWD Administration Building Structural Improvements, Task No. 1  
(Please refer to Administrative Memorandum No. 4090-1)

Upon a motion by Director Shep Stahel and a second by Director Joe Farmer, the Board of Directors voted unanimously to take this item from the table.

Director John Murphy made a motion to authorize award of a construction contract to Mart, Inc., for Project No. 301, NTMWD Administration Building Structural Improvements, Task No. 1, in the amount of $47,000. Director Joe Farmer seconded the motion.

Discussion followed and some Directors expressed concern with rehabilitation of the existing Administration Building and supported construction of a new building.

The motion passed with a majority vote. Directors Darrell Grooms and Joe Joplin voted against the motion.

B. Consider Authorizing Engineering Services Agreement on Project No. 346, Wilson Creek Regional Wastewater Treatment Plant Advanced Treatment and Headworks Improvements Preliminary Engineering  
(Please refer to Administrative Memorandum No. 4094)
Upon a motion by Director Terry Anderson and a second by Director Jerry Yancey, the Board of Directors voted unanimously to authorize the Executive Director to execute an engineering services agreement with CH2M HILL for professional services associated with preliminary engineering for the Wilson Creek Regional Wastewater Treatment Plant Advanced Treatment and Headworks Improvements, Project No. 346, in the not-to-exceed amount of $365,665.

C. Consider Authorizing Execution of First Amendment to Settlement Agreement Between North Texas Municipal Water District and Mr. Byron Stewart (Please refer to Administrative Memorandum No. 4095)

Upon a motion by Director James Kerr and a second by Director Bobby Robinson, the Board of Directors voted unanimously to authorize the Executive Director to execute the First Amendment to Settlement Agreement between North Texas Municipal Water District and Mr. Byron Stewart, including authorization of payment to Mr. Byron Stewart in the amount of $82,500.

D. Consider Authorizing Funding for the Water IQ: Water Awareness Public Education Campaign Public Relations Services Agreement (Please refer to Administrative Memorandum No. 4096)

Upon a motion by Director Larry Parks and a second by Director Patrick Nicklen, the Board of Directors voted unanimously to authorize the Executive Director to enter into an agreement with EnviroMedia Social Marketing to assist in developing and managing the public relations program and associated materials for promoting "Water IQ: Know Your Water," a water awareness public education campaign and the development and printing of the NTMWD's annual report in the not-to-exceed amount of $1,121,500.

E. Consider Authorizing Additional Engineering Services on Project No. 268, Lake Texoma Outfall to Wylie Water Treatment Plant Raw Water Pipeline (Phase 1 and 2) (Please refer to Administrative Memorandum No. 4097)

Upon a motion by Director Lynn Shuyler and a second by Director Jerry Yancey, the Board of Directors voted unanimously to take the following action on Project No. 268, Lake Texoma Outfall to Wylie Water Treatment Plant Raw Water Pipeline (Phase 1 and 2): (1) authorize the reallocation of $207,751.17 of unused funds from Phase 1 special services to Phase II basic services to offset the additional engineering services request made by Freese and Nichols, Inc.; and, (2) authorize an increase in the Phase 2 scope and fee for additional engineering services by Freese and Nichols, Inc., in the additional not-to-exceed amount of $366,952.90 for a revised not-to-exceed total of $17,037,962.90 (Phase 1 and 2) for professional services associated with the project.

F. Consider Authorizing Engineering Services Agreement on Project No. 347, Environmental Services Building Heating, Venting, and Air Conditioning System Repair (Please refer to Administrative Memorandum No. 4098)
Upon a motion by Director Lynn Shuyler and a second by Director Jerry Yancey, the Board of Directors voted unanimously to authorize the Executive Director to execute an engineering services agreement with Huitt-Zollars, Inc., to provide design and construction management services associated with the Environmental Services Building Heating, Venting, and Air Conditioning System Repair, Project No. 347, in the not-to-exceed amount of $76,500.

G. Consider Authorizing Change Order No. 1 and Authorization to Make Final Payment on Project No. ENG 12-12, 121 Regional Disposal Facility Access Road Improvements
(Please refer to Administrative Memorandum No. 4099)

Upon a motion by Director Larry Parks and a second by Director Patrick Nicklen, the Board of Directors voted unanimously to authorize Change Order No. 1 for an increase of $37,194.70, resulting in a revised contract amount of $280,684.85 and final payment to 03 Concrete Contractors, LLC, in the final contract amount of $280,685.85 for the 121 Regional Disposal Facility Access Road Improvements, Project No. ENG 12-12.

H. Consider Authorizing Change Order No. 1 on Project No. 227 (Contract A), Upper White Rock Creek Parallel Force Main
(Please refer to Administrative Memorandum No. 4100)

Upon a motion by Director Joe Farmer and a second by Director Lynn Shuyler, the Board of Directors voted unanimously to authorize Change Order No. 1 for an increase of $142,269.74, resulting in a revised contract amount of $3,241,758.22 and a 25-day contract time extension, resulting in a revised final completion date of March 21, 2014, for the Upper White Rock Creek Parallel Force Main, Project No. 227 (Contract A).

I. Consider Authorizing Engineering Services Agreement on Project No. 297, Water System Maintenance Facilities, South Region, Phase 1
(Please refer to Administrative Memorandum No. 4101)

Upon a motion by Director Bobby Robinson and a second by Director Jerry Yancey, the Board of Directors voted unanimously to execute an engineering services agreement with Huitt-Zollars, Inc., to provide design and construction management services associated with the Water System Maintenance Facilities, South Region, Phase 1, Project No. 297, in the not-to-exceed amount of $135,137.

J. Consider Authorizing Change Order No. 22 on Project No. 153, Water Treatment Plants I, II, III, and IV Ozonation
(Please refer to Administrative Memorandum No. 4102)

Upon a motion by Director Jerry Yancey and a second by Director Terry Anderson, the Board of Directors voted unanimously to authorize Change Order No. 22 for Project No. 153, Water Treatment Plants I, II, III, and IV Ozonation, an increase in the amount of $72,815.57, resulting in a revised contract amount of $110,872,472.06.
K. Consider Authorizing Change Order No. 2 on Project No. 277, Water Treatment Plant III, Filter Underdrain Improvements and Conversion to Biologically Active Filters  
(Please refer to Administrative Memorandum No. 4103)

Upon a motion by Director Lynn Shuyler and a second by Director Don Gordon, the Board of Directors voted unanimously to authorize Change Order No. 2 for the Water Treatment Plant III Filter Underdrain Improvements and Conversion to Biologically Active Filters, Project No. 277, for an increase in the amount of $53,132.85, resulting in a revised contract amount of $6,610,121.56.

L. Consider Authorizing Execution of Interlocal Cooperation Agreement Between The City of Lucas and North Texas Municipal Water District Regarding the North McKinney Pipeline, Phase I and II, Project No. 210  
(Please refer to Administrative Memorandum No. 4104)

Upon a motion by Director Lynn Shuyler and a second by Director Patrick Nicklen, the Board of Directors voted unanimously to authorize the Executive Director to execute an Interlocal Cooperation Agreement between the City of Lucas and North Texas Municipal Water District Regarding the North McKinney Pipeline, Phase I and II, Project No. 210.

M. Consider Authorizing Award of Construction Contract and Change Order No. 1 on Project No. 210, North McKinney Pipeline System, Phases I and II  
(Please refer to Administrative Memorandum No. 4105)

Upon a motion by Director Lynn Shuyler and a second by Director Jerry Yancey, the Board of Directors voted unanimously to award a construction contract to S. J. Louis Construction of Texas, Ltd., in the contract amount of $14,741,741.22 and authorize Change Order No. 1 for the amount of $28,885 for the revised total amount of $14,770,626.22 for the North McKinney Pipeline System, Phases I and II, Project No. 210, contingent upon receipt of funding from the City of Lucas in an amount not less than $475,194.71 for construction of Lucas' 12-inch pipeline.

N. Consider Authorizing Award of Construction Contract on Project No. 312, Lake Tawakoni Water Treatment Plant Sludge Lagoon Improvements  
(Please refer to Administrative Memorandum No. 4106)

Upon a motion by Director Patrick Nicklen and a second by Director Lynn Shuyler, the Board of Directors voted unanimously to authorize award of a construction contract to Crescent Constructors, Inc., for the Lake Tawakoni Water Treatment Plant Sludge Lagoon Improvements, Project No. 312, in the amount of $3,463,000.

O. Receive Report from Finance/Audit Committee Concerning Compensation Offer for Executive Director; Consideration and Possible Action Concerning Compensation Offer
MINUTES – BOARD OF DIRECTORS
DECEMBER 19, 2013
PAGE 7

Upon the recommendation of the Finance/Audit Committee, a motion by Director John Sweeden, and a second by Director Shep Stahel, the Board of Directors voted unanimously to authorize the compensation offer to the Executive Director nominee as recommended.

P. Receive Report from Special Purpose Committee Concerning the Selection of the Executive Director; Consideration and Possible Action Concerning the Selection of the Executive Director

Upon a motion by Director Bill Lofland and a second by Director Shep Stahel, the Board of Directors authorized by majority vote, the selection of Thomas W. Kula as Executive Director. Mr. Kula has submitted a letter of intent to the Board of Directors to accept the position pending completion of his military obligation. Director Jerry Yancey voted against the motion.

IX. DISCUSSION ITEMS

A. Water System Update

Deputy Director Mike Rickman presented a Water System update.

X. ADJOURNMENT

There being no further business, the meeting adjourned at approximately 6:07 p.m. The next regular meeting of the NTMWD Board of Directors will be held Thursday, December 19, 2013, at 4:00 p.m. in the NTMWD Administrative Offices, 505 E. Brown Street, Wylie, Texas.

APPROVED:

______________________________
BILL LOFLAND, President

ATTEST:

______________________________
JOE JOPLIN, Secretary

(Seal)
NORTH TEXAS MUNICIPAL WATER DISTRICT

JANUARY 2014

CONSENT AGENDA ITEM NO. 14-01-02

REGIONAL WATER SYSTEM
CHAPMAN LAKE WATER ACCESS, TASK B (DREDGING)
PROJECT NO. 275

RATIFICATION OF EXECUTION OF
INSTRUMENT OF ASSIGNMENT

This consent agenda item requests that the Board of Directors ratify the action of the Executive Director in executing an Instrument of Assignment for the Chapman Lake Water Access, Task B (Dredging), Project No. 275.

REVIEW

Kellan Industries, Inc., (Kellan) was awarded the Chapman Lake Water Access, Task B (Dredging), Project No. 275, at the October 2013 Board meeting, Administrative Memorandum No. 4068. Due to Kellan’s participation in a U.S. Small Business Administration Mentor/Protégé Agreement, it has entered with Young’s General Contracting, Inc., (YGCI), Kellan requested NTMWD execute an Instrument of Assignment assigning the funds from the project to be deposited in a YGCI account. YGCI serves as the mentor to Kellan. Funds will be forwarded to Kellan upon review of work by YGCI. NTMWD legal counsel, Saunders and Walsh, PLLC, has reviewed both the Instrument of Assignment and the Mentor/Protégé Agreement and found no issues with its execution. Physical work in the field has not yet begun, and no payments have been made on the project as of this date. In order to move the project forward, the Executive Director executed the Instrument of Assignment, which allowed Kellan to execute the contract documents. This consent agenda item is to ratify the action of the Executive Director in executing the Instrument of Assignment.

RECOMMENDATION

It is the recommendation of the Executive Director, NTMWD staff, and Saunders and Walsh, PLLC, that the Board of Directors ratify the action of the Executive Director in executing an Instrument of Assignment for the Chapman Lake Water Access, Task B (Dredging), Project No. 275. This will be an item on the consent agenda of the January 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

JANUARY 2014

CONSENT AGENDA ITEM NO. 14-01-03

REGIONAL WASTEWATER SYSTEM
ROWLETT CREEK REGIONAL WASTEWATER TREATMENT PLANT
2011 IMPROVEMENTS
PROJECT NO. 222

AUTHORIZATION TO MAKE FINAL PAYMENT

This consent agenda item is for the Board of Directors consideration of authorization to make final payment to Archer Western Contractors, LLC, contingent on the completion of a few remaining tasks, in the final contract amount of $4,101,217.08 for the Rowlett Creek Regional Wastewater Treatment Plant (RWWTP) 2011 Improvements, Project No. 222.

REVIEW

This project includes the installation of advanced odor control and treatment systems to further reduce the potential for migration of odors from the treatment plant site. This is an additional phase to several odor control improvements that have been implemented in recent years at the Rowlett Creek RWWTP as part of expansion projects, plant rehabilitation, and odor control projects.

Previous Board actions associated with the construction phase of this project are as follows:

<table>
<thead>
<tr>
<th>Month/Year</th>
<th>Ad. Memo./CAI No.</th>
<th>Description</th>
<th>Amount</th>
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<tr>
<td>April 2012</td>
<td>3783</td>
<td>Award of contract to Archer Western Contractors, LLC</td>
<td>$3,980,590.00</td>
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<tr>
<td>November 2012</td>
<td>3893</td>
<td>C.O. No. 1, including 30 calendar days, for PLC programming and HMI integration</td>
<td>$33,099.00</td>
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<td>July 2013</td>
<td>4020</td>
<td>C.O. No. 2, including 26 calendar days for primary clarifier shutdown delay and concrete repair</td>
<td>$66,136.23</td>
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<tr>
<td>December 2013</td>
<td>13-12-04</td>
<td>C.O. No. 3, including 54 calendar days for aeration influent coating, concrete repair, booster pumps, and failure alarm</td>
<td>$21,391.85</td>
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</tbody>
</table>

AUTHORIZATION TO MAKE FINAL PAYMENT

All major work on the project has been completed, and the project was considered substantially complete as of November 21, 2013. The final walkthrough was completed on December 19, 2013. It is anticipated that the contractor will complete all work including cleanup and restoration and will submit final O&M documentation within the
next month. Release of the final payment to the contractor will be contingent upon completion of these items.

RECOMMENDATION

It is the recommendation of the Executive Director, NTMWD staff, and Perkins Engineering Consultants, Inc., that the Board of Directors authorize final payment to Archer Western Contractors, LLC, contingent upon completion of the few remaining tasks, in the final contract amount of $4,101,217.08 for the Rowlett Creek Regional Wastewater Treatment Plant 2011 Improvements, Project No. 222. This will be an item on the consent agenda of the January 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

JANUARY 2014

CONSENT AGENDA ITEM NO. 14-01-04

REGIONAL WATER SYSTEM
WATER TREATMENT PLANTS I AND II
SLUDGE LINE IMPROVEMENTS
PROJECT NO. 284

CHANGE ORDER NO. 2

This consent agenda item is for the Board of Directors consideration of Change Order No. 2 for: 1) an increase of $18,972, resulting in a revised contract amount of $558,564; and, 2) a 30-day contract time extension, resulting in a revised final completion date of March 6, 2014, for Water Treatment Plants (WTP) I and II Sludge Line Improvements, Project No. 284.

REVIEW

In March 2012, the Board approved Administrative Memorandum No. 3779 authorizing an engineering services agreement in the amount of $83,000 with KSA Engineers (KSA) for the design and construction phase services associated with the Wylie WTP I and II Sludge Line Improvements, Project No. 284. Consent Agenda Item No. 13-06-03 approved an additional amount of $8,075 to KSA for additional surveying.

In May 2013, the Board approved Administrative Memorandum No. 3990 for Project No. 284, which presented a tabulation of bids and recommended award of the construction contract to PCL Construction, Inc., (PCL) in the amount of $525,690. This project includes the replacement of approximately 3,900 feet of 12-inch pipeline from the sludge pump station to the sludge lagoons. As authorized by the Board, 16-inch pipe is being installed in lieu of the original 12-inch pipe.

In November 2013, the Board approved Change Order No. 1 (Consent Agenda Item No. 13-11-02) in the amount of $13,902 for changes on the design alignment due to field conditions.

CHANGE ORDER NO. 2

Change Order No. 2 consists of one item on the referenced project for an increase in the contract amount of $18,972. The NTMWD engineering staff and KSA have reviewed this item and recommend the proposed change as necessary and reasonable.
CONSENT AGENDA ITEM NO. 14-01-04

PAGE 2

*Item No. 1 – Change of Installation Method* $18,972

30 Calendar Days

Change Order No. 2 consists of installing a portion of the pipeline by the jack and bore method in lieu of the specified open cut method. During the design phase and just prior to the start of construction, selected locations of the proposed alignment were “pot-holed” to determine areas of potential underground utility conflicts. While excavating onsite, the contractor found direct buried 25 KV electrical cables running parallel to and very near the proposed alignment of the pipeline that were not found during the “potholing” procedure. To reduce the possibility of damage to the 25 KV electrical cables and to reduce the safety concerns of working close to these cables, it is the recommendation of NTMWD staff and KSA that approximately 100 linear feet of pipe be installed by the jack and bore method. The contractor requested 30 days of additional contract time for this work. NTMWD staff and KSA recommend approval of the additional cost and contract time.

**SUMMARY OF ADJUSTMENTS TO CONTRACT**

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<tr>
<th>Description</th>
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<th>Days to Substantial Completion</th>
<th>Days to Final Completion</th>
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<td>150</td>
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<tr>
<td>C.O. No. 1</td>
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<td>30</td>
<td>30</td>
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<tr>
<td>Proposed C.O. No. 2</td>
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<td>30</td>
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<tr>
<td>Revised Contract Amounts</td>
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<td>210</td>
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<tr>
<td>Revised Contract Dates</td>
<td></td>
<td>February 4, 2014</td>
<td>March 6, 2014</td>
</tr>
</tbody>
</table>

**FUNDING**

Funding in the amount of $18,972 for this proposed change is to be made available in the Regional Water System Capital Improvement Fund.

**RECOMMENDATION**

It is the recommendation of the Executive Director, NTMWD staff, and KSA Engineers that the Board of Directors approve Change Order No. 2 for: 1) an increase in the amount of $18,972, resulting in a revised contract amount of $558,564; and, 2) a 30-day contract time extension, resulting in a revised final completion date of March 6, 2014, for the Water Treatment Plants I and II Sludge Line Improvements, Project No. 284. This will be an item on the consent agenda of the January 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

JANUARY 2014

CONSENT AGENDA ITEM NO. 14-01-05

UPPER EAST FORK INTERCEPTOR SYSTEM
FUGITIVE EMISSIONS CONTROL IMPROVEMENTS
FINAL DESIGN
PROJECT NO. 279

ADDITIONAL ENGINEERING SERVICES

This consent agenda item is for the Board of Directors consideration of additional engineering services fee for CH2M HILL Engineers, Inc., (CH2M HILL) in the not-to-exceed amount of $14,503, for the Upper East Fork Interceptor System (UEFIS) Fugitive Emissions Control Improvements, Project No. 279. This would result in a revised total not-to-exceed engineering services fee of $299,838.

REVIEW

In February 2012, the Board of Directors approved Administrative Memorandum No. 3760 authorizing an engineering services agreement with CH2M HILL for the UEFIS Fugitive Emissions Control Improvements Preliminary Engineering. This work focused on four areas of particular concern within the UEFIS that demonstrated a potential for intermittent out-gassing during specific operational conditions. At each location, the hydraulic and operational conditions were reviewed, and the projected magnitude of the out-gassing was assessed by field sampling and modeling to estimate the ventilation requirements and odor control technology to maintain desired operating conditions. CH2M HILL developed recommendations for the most cost-effective and technically feasible options for managing fugitive emissions and presented them in a technical memorandum to serve as the design basis for the next phase of the project.

In September 2012, the Board of Directors approved Administrative Memorandum No. 3862 authorizing an engineering services agreement with CH2M HILL for the final design associated with the fugitive emissions control, based on the recommendations from the preliminary engineering efforts.

DESCRIPTION OF PROJECT

The detailed design developed bidding documents for four distinct emissions control facilities at strategic locations throughout the UEFIS. Three of the facilities are to be located at NTMWD lift station sites: the Preston Road Lift Station, the Plano Spring Creek Lift Station, and the Dublin Road Relift Station. The fourth site is located along the Rowlett-Cottonwood Transfer Sewer (TS) in the City of Allen (City). Each of the locations includes one or more carbon scrubber vessels, a ventilation fan, and air duct piping. Some of the locations also include instrumentation and controls and a variable speed fan drive.
Four fugitive emissions control sites were originally envisioned, distributed along the Rowlett-Cottonwood TS. The four distributed sites would have been comparable in size and complexities to the sites located at the NTMWD lift stations and were anticipated to be addressed with the standard design used for the other sites. Due to limited vehicle access and/or unavailability of power at many points along the Rowlett Cottonwood TS alignment, it was necessary to combine these sites into a single withdrawal and treatment facility sited on Angel Parkway, just north of Main Street, on City-owned property. This combined facility is much larger and complex than the other sites, requiring a more involved and customized approach. This facility also had to consider a concrete driveway, site work, and masonry screening walls as required by City ordinance. Due to these factors, this site also involved a more intense review and response effort, which was not anticipated in the original project scope.

PROPOSED ADDITIONAL SERVICES

Approval for development of the facility on the Rowlett-Cottonwood TS required review by the City’s Technical Review Committee (TRC), comprised of City staff from various departments and outside agencies (AT&T, NTMWD, Atmos, and CoServe). The enlarged scope of this facility and its prominent location on Angel Parkway created the need to respond to many concerns based on zoning and other City ordinance requirements. The additional efforts included:

- Design of masonry screening walls, requiring additional detail drawings
- Depiction of a future planned trail, which triggered additional considerations and technical review under the Texas Architectural Barriers Act
- Additional site plan and grading plan requirements associated with depiction of the future planned trail
- Expanded site plan to show the facility in relation to adjacent development, including parcel ownership information
- Coordination with several City departments

The additional time required by the engineer to develop and fine-tune these additional drawings was substantial, requiring design work beyond the original scope.

SUMMARY OF ENGINEERING FEE

CH2M HILL has calculated that the additional design, regulatory coordination effort, and review fees assessed by local and State reviewers, amounts to $34,259. The original not-to-exceed fee amount for basic services is $245,339 with an additional $39,996 allowance for special services associated with field surveys and easement document preparation. The latter was completed for a cost of $20,240, leaving a balance of $19,756. Therefore, the Executive Director and NTMWD staff request reallocation of the uncommitted balance of $19,756, along with $14,503 of additional fees, to cover the $34,259 of additional engineering costs. These revisions are summarized as follows:
<table>
<thead>
<tr>
<th>Description</th>
<th>Basic Services</th>
<th>Special Services</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Agreement</td>
<td>$245,339</td>
<td>$39,996</td>
<td>$285,335</td>
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<tr>
<td>Proposed Additional Services</td>
<td>$34,259</td>
<td>($19,756)</td>
<td>$14,503</td>
</tr>
<tr>
<td>Revised Total</td>
<td>$279,598</td>
<td>$20,240</td>
<td>$299,838</td>
</tr>
</tbody>
</table>

The NTMWD staff has reviewed the proposed fees submitted by CH2M HILL Engineers, Inc., and recommends them as reasonable and representative of the additional effort and expense required.

**FUNDING**

Additional funding in the amount of $14,503 for the additional engineering services is to be made available in the Upper East Fork Interceptor System 2008 Construction Fund.

**RECOMMENDATION**

It is the recommendation of the Executive Director and NTMWD staff that the Board of Directors authorize an increase to the engineering services agreement with CH2M HILL Engineers, Inc., for the Upper East Fork Interceptor System Fugitive Emissions Control Improvements, Project No. 279, in the not-to-exceed amount of $14,503, resulting in a revised total engineering services fee of $299,838. This will be an item on the consent agenda of the January 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

JANUARY 2014

ADMINISTRATIVE MEMORANDUM NO. 4107

UPPER EAST FORK INTERCEPTOR SYSTEM
SUPERVISORY CONTROL AND DATA ACQUISITION IMPROVEMENTS
PRELIMINARY ENGINEERING
PROJECT NO. 348

ENGINEERING SERVICES AGREEMENT

This administrative memorandum requests the Board of Directors authorize the Executive Director to execute an engineering services agreement with Gupta and Associates, Inc., (GAI) to provide professional services associated with preliminary engineering for the Upper East Fork Interceptor System (UEFIS) Supervisory Control and Data Acquisition (SCADA) System Improvements, Project No. 348. The engineering services agreement would be in accordance with the standard NTMWD agreement with a not-to-exceed amount of $61,081.

REVIEW

The UEFIS was created to build, operate, and maintain facilities to transport raw wastewater from Member Cities and Customers within the Upper East Fork Basin to the NTMWD Rowlett Creek and Wilson Creek Regional Wastewater Treatment Plants (RWWTP). The UEFIS operators have several responsibilities to assure proper collection and transmission of wastewater from the UEFIS to the wastewater treatment plants. These responsibilities include physically checking 20 lift stations on a daily basis to ensure the stations are functioning properly. The operators check pipeline appurtenances such as air release valves, odor control devices and perform routine operation and maintenance functions on the system. In order to monitor the UEFIS and allow for control of critical equipment and systems within the UEFIS, a SCADA system was constructed in the late 1980s.

Due to the expansion of the system, waning repair parts and support, and the technological advances since that time, NTMWD staff recommended this project to upgrade the SCADA equipment for the UEFIS wastewater system.

DESCRIPTION OF PROJECT

Currently the UEFIS SCADA system consists of a network of lift station sites that depend on a radio platform to report wetwell levels and pumping rates to the main control room of the Wilson Creek RWWTP. The type of radio used for this service is being discontinued, and it is necessary to identify a new robust radio platform to replace it. The UEFIS lift station sites also rely on a variety of programmable logic controller (PLC) hardware. Some of these sites have PLC hardware or related instrumentation
and control hardware that are becoming obsolete and will require upgrades concurrently with the radio upgrade.

NTMWD staff requested GAI to submit a scope to evaluate the numerous advances in electronic communications and control that have occurred since the existing radios and PLCs were placed into service. GAI will evaluate prominent communication platforms, provide advantages and disadvantages of each, and include a recommendation of the overall best platform to replace the existing SCADA communication equipment. The various communications platforms that will be evaluated include microwave, digital spread spectrum, and licensed frequency. GAI will also investigate the operational and physical condition of the existing SCADA control equipment and include a recommendation of which sites require new PLCs or related instrumentation and control hardware.

A conditional assessment will be made of the existing UEFIS SCADA system and will conclude with a technical memorandum, which evaluates prominent communication platforms and existing control hardware to assist NTMWD staff with selecting the best options to improve the performance and reliability of the UEFIS SCADA system. The following key factors will be considered:

- **Independence** - There will be no reliance on third-party vendors, such as leased telephone lines or cellular communications.

- **Redundancy** - At this time, all remote site data communications are dependent upon a single radio antenna. NTMWD staff has requested GAI to provide recommendations to improve reliability and eliminate this single point-of-failure.

- **Cyber Security** - The existing radios do not offer data encryption. The new communications platform should include security data encryption.

- **Expandability** - The system should be adaptable to adding new remote sites.

- **Compatibility** - This study will consider compatibility with other communications platforms the NTMWD currently utilizes for remote site access control, security cameras, and the wastewater SCADA system.

The work associated with this project is to be divided into two phases. Phase I would include preliminary engineering to evaluate the existing installations and make recommendations for improvements to the radio communication system and PLC control hardware. Phase II would include detailed design and construction services to implement the upgrades to the UEFIS SCADA System. This administrative memorandum will address Phase I of the project. Phase II will be completed under a future design project that will incorporate the information collected from this initial assessment.
The following tasks will evaluate the existing UEFIS SCADA System and provide recommendations for upgrades:

- **Site Visits and Investigations**: This task will involve a series of site visits and one-on-one discussions with NTMWD staff to review, document, and assess the conditions of the existing UEFIS SCADA System. Each site visit will focus on the major functional levels of the SCADA System including field instruments, PLCs, communications networks, and operational functionality. GAI will document and assess the physical condition of each major component at each site.

- **PLC Evaluation**: This task will assess the operational and physical condition of the PLCs and control hardware at each lift station site.

- **Communication Network Alternatives Evaluation**: This task will investigate and provide recommendations for up to three alternatives for configuring the UEFIS communication network.

- **Technical Memorandum**: This task will involve preparation of a condition assessment Technical Memorandum (TM) of the existing site conditions within the UEFIS along with evaluations of various communication platforms and design approaches. The TM will include site plans with preliminary recommendations of improvements to the UEFIS SCADA System.

This Phase I effort is intended to evaluate current conditions and viable options and to recommend a favored approach for detailed design. Part of that recommendation will be based on relative costs and benefits of alternative approaches. Until that evaluation is performed and a favored approach is developed, it is difficult to present a meaningful estimated construction cost for the eventual solution.

**ENGINEERING SERVICES FEE**

GAI has proposed to perform this preliminary engineering for the not-to-exceed amount of $51,081. GAI has also proposed a not-to-exceed amount of $10,000 for special services to employ a sub-consultant to assist with the evaluation of the radio communication system. The total not-to-exceed amount being requested for this project is $61,081.

NTMWD staff has considered the current system conditions and the vision for system-wide integrated SCADA functionality in development of the scope for this phased approach. These goals were discussed with GAI in development of their scope and fee for this phase of the project. The NTMWD staff recommends the proposed fee as representative of the effort required to perform the needed evaluation of this system and develop recommended alternatives. The services would be performed in accordance with the standard engineering services agreement.
FUNDING

Funding in the amount of $61,081 for this project is to be made available in the Upper East Fork Interceptor System 2012 Construction Fund.

RECOMMENDATION

It is the recommendation of the Executive Director and NTMWD staff that the Board of Directors authorize the Executive Director to execute an engineering services agreement with Gupta and Associates, Inc., to provide professional services associated with the preliminary engineering for the Upper East Fork Interceptor System Supervisory Control and Data Acquisition System Improvements, Project No. 348, in the not-to-exceed amount of $61,081. This will be an item on the regular agenda of the January 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

JANUARY 2014

ADMINISTRATIVE MEMORANDUM NO. 4108

UPPER EAST FORK INTERCEPTOR SYSTEM
BECK BRANCH GRAVITY SEWER
ROWLETT CREEK CROSSING IMPROVEMENTS
CONDITION ASSESSMENT AND PRELIMINARY DESIGN
PROJECT NO. ENG 12-7

ADDITIONAL ENGINEERING SERVICES

This administrative memorandum requests an increase in the scope and fee for engineering services by Michael Baker, Jr., Inc., (Baker) for associated work for the Beck Branch Gravity Sewer Rowlett Creek Crossing Improvements Condition Assessment and Preliminary Design, Project No. ENG 12-7, in the additional amount of $32,848.77. This would result in a revised total not-to-exceed engineering services fee of $223,692.27.

REVIEW

The Beck Branch Gravity Sewer was originally constructed in 1993 to transport wastewater flow collected from far eastern Richardson and the southeast corner of Plano to the Beck Branch Lift Station from where flow is then pumped to the Rowlett Creek Regional Wastewater Treatment Plant (RWWTP). The initial design incorporated an aerial crossing over Rowlett Creek with double 27-inch culverts below the crossing to provide continuous creek flow. The crossing was encased in rock backfill with a concrete slab topping, and the creek banks adjacent to the gravity sewer were stabilized with reinforced concrete slope aprons. Within a short time after construction of the aerial crossing (exact timing is unknown), the bypass culverts below the aerial crossing pipe became blocked with debris and silt, and the stream flow rose to spill over the structure that was protecting the aerial crossing. This resulted in the impounding of water along Rowlett Creek to the north and east of the crossing.

In June 2012, the Board approved Administrative Memorandum No. 3815 authorizing the Executive Director to execute an engineering services agreement with Baker for the Beck Branch Gravity Sewer Rowlett Creek Crossing Improvements Condition Assessment and Preliminary Design project in the not-to-exceed amount of $178,110. The scope of this project is to evaluate the current condition of the aerial crossing and develop preliminary options for any corrective action that may be required.

In May 2013, the Board approved Consent Agenda Item No. 13-05-05 authorizing additional services in the not-to-exceed amount of $12,733.50, resulting in a revised not-to-exceed amount of $190,843.50. The additional services are related to field work, report development, and extensive additional coordination required to complete the mussel survey required by the Texas Parks and Wildlife Department.
PROPOSED ADDITIONAL SERVICES

During the week of July 15, 2013, the initial attempt was made to dewater and inspect the gravity sewer concrete crossing structure. During mobilization there was a slight rain but because the ground was extremely dry due to extended drought conditions, it was not expected to impact the stream flow and the dewatering efforts. During initial bypass pump startup the stream level was reduced as expected, but as un-forecasted rains began to occur in many parts of the extended Rowlett Creek drainage basin the stream flow increased. Because the stream level was so close to the target level for installing the cofferdam, and because all inspection provisions were in place, it was decided in the field to push for completion of the work by bringing in additional dewatering pumps to double the bypass capacity against the unexpected storm runoff. As the additional pumps were brought online, the stream level once again began to fall. Additional un-forecasted storms sprang up across the area, and the resulting runoff exceeded the expanded pump capacity. At this point, four days after the dewatering operations began, the chance of continued storms entered the regional forecast, so the inspection efforts were suspended for a later time.

The additional services account for provision of two additional bypass pumps and two additional days for all personnel and pumps that were beyond the original anticipated scope of services, but were necessary due to unforeseen continuing rain and runoff.

ENGINEERING SERVICES FEE

Baker has presented costs totaling $32,848.77 for the extra subcontractor expenses associated with extra pumps and standby time. NTMWD staff monitored the field efforts closely and recommends the proposed amount as reflecting the extra effort expended in trying to overcome the unforeseen weather conditions.

There will be additional effort required to complete the condition evaluation of the structure. Due to the unforeseen volatility of stream flows that are now evident in this location it is expected that a much higher volume of pump capacity and temporary piping than originally estimated will be required to adequately dewater the stream. It is anticipated that an alternate approach involving specialty divers to perform an underwater inspection may be much more cost-effective than the higher level pump and piping setup. This approach is still being evaluated and will be the subject of a recommendation to the Board in the near future.
### SUMMARY OF ENGINEERING FEE

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### FUNDING

Additional funding in the amount of $32,848.77 is available in the 2014 Upper East Fork Interceptor System 2014 Budget (Account 501-500-53130 – Engineering/Consultant Services).

### RECOMMENDATION

It is the recommendation of the Executive Director and NTMWD staff that the Board of Directors authorize an increase to the engineering services fee with Michael Baker, Jr., Inc., for the Beck Branch Gravity Sewer Rowlett Creek Crossing Improvements Condition Assessment and Preliminary Design, Project No. ENG 12-7, in the amount of $32,848.77, resulting in a revised total not-to-exceed amount of $223,692.27. This will be an item on the regular agenda of the January 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

JANUARY 2014

ADMINISTRATIVE MEMORANDUM NO. 4109

UPPER EAST FORK INTERCEPTOR SYSTEM
UPPER ROWLETT CREEK AND UPPER COTTONWOOD CREEK
LIFT STATIONS IMPROVEMENTS DESIGN
PROJECT NO. 295

ADDITIONAL ENGINEERING SERVICES

This administrative memorandum requests authorization for additional engineering services for CH2M HILL Engineering, Inc., (CH2M HILL) on the Upper Rowlett Creek and Upper Cottonwood Creek Lift Stations Improvements, Project No. 295, in the additional amount of $62,783. This would result in a revised total not-to-exceed engineering services fee of $680,593.

REVIEW

In August 2012, the Board of Directors approved Administrative Memorandum No. 3844 authorizing an engineering services agreement with CH2M HILL for the Upper Rowlett Creek and Upper Cottonwood Creek Lift Stations Improvements, Project No. 295.

The project includes providing additional capacity at both lift stations. The Upper Rowlett Lift Station is a critical station in the Upper East Fork Interceptor System (UEFIS) and is the largest station, in terms of pumping capacity, at projected build-out conditions. As the design has evolved, it has been determined to be most prudent to increase to the ultimate station capacities at both lift stations, rather than proceed with an interim capacity increase. At Upper Rowlett, the larger pump power requirements for the ultimate pump design are more efficiently served with medium voltage equipment. Considering that the existing aged low voltage electrical equipment requires replacement, it is most cost-effective over the long-term to convert to medium voltage at this time. Medium voltage switchgear will also require all of the drives and pump motors be changed. Therefore, the Upper Rowlett improvements include new pumps and motors for the ultimate capacity. At Upper Cottonwood, one existing pump will be retained, and a matching pump is to be relocated into a currently empty pump slot. This added pump combined with replacement of three worn existing smaller pumps will provide ultimate capacity at that station.

The current firm capacities (operation with the largest pump out of service) of Upper Rowlett and Upper Cottonwood are 26 MGD and 13 MGD, respectively. The ultimate station firm capacity demands are 56 MGD at Upper Rowlett and 27 MGD at Upper Cottonwood. Although the timeline for capacity upgrades at Upper Cottonwood is five years after the need at Upper Rowlett, addressing both stations together better
facilitates the relocation of a pump and adjustable speed drives from Upper Rowlett to Upper Cottonwood.

SCOPE OF ADDITIONAL SERVICES

Since the start of design, there have been four significant scope changes for which additional funding is being requested.

Item No. 1 – Electrical Buildings $40,186

Electrical equipment for the existing lift stations is located above the wetwells in a non-isolated space inside the pump room at each lift station. The original scope for the project included enclosing the electrical equipment in a separate room within the lift station to protect the equipment from corrosive hydrogen sulfide gas and to allow air conditioning for new variable frequency drives. This is similar to the approach implemented on the most recent projects at Beck Branch, Preston Road, and Lower Rowlett Creek Lift Stations. As the design was initiated, several factors became apparent that identified the need for constructing separate electrical buildings at both lift stations, similar to the approach used at the McKinney Lift Station.

The project included detailed hydraulic modeling of the lift stations to identify pump sizes to meet projected 2030 capacity needs. Results of the modeling indicated that required total horsepower for the lift stations will increase from 785 HP to about 1,260 HP at Upper Cottonwood Creek Lift Station and from 1,350 HP to about 2,900 HP at Upper Rowlett Creek Lift Station.

As a result of the increase in power requirements, significantly more space will be necessary to house the built-out electrical equipment than is required for the existing equipment. The space required exceeds that available in the areas intended to be used when the original scope was developed. The alternative would be to locate the new switchgear over the existing wetwells similar to the existing switchgear. This creates complications in isolating the air space for the electrical equipment from the wetwell, particularly when access hatches to the well are open for maintenance. Furthermore, the new equipment would need to be added prior to removal of the existing equipment, and there are concerns about the floor loading over the wetwell and the impacts of corrosion on the wetwell side of the floor slab.

Considering all these factors, it was decided at design workshops to build new electrical buildings to house switchgear at both lift stations. The design effort for new buildings is significantly more extensive than isolation within an existing building and the additional scope is summarized as follows:

- Develop site plans for the new electrical building including grading and paving
- Coordination with the City of Plano for building locations
• Coordination with the City of Plano at Upper Rowlett Creek Lift Station regarding floodplain, access, and an additional easement
• Additional duct bank design (electrical building to pump station)
• Design and model new electrical buildings at each lift station; include new building code data, roof plan and building elevations; develop building/wall sections and roof details
• Design building foundation plan and roof framing plan at each site
• Grounding design for each building
• Additional specifications to include masonry veneer, concrete unit masonry, bituminous damp proofing, thermal insulation, below-grade vapor retarders, SBS-modified bituminous membrane roofing, sheet metal flashing and trim, roof specialties and accessories, lighting, and grounding
• Additional submittals will also be required during the construction phase

The additional effort required to add the electrical buildings is $24,112 for Upper Rowlett Creek Lift Station electrical building and $16,074 for the Upper Cottonwood Creek Lift Station electrical building for a combined total of $40,186.

**Item No. 2 - New Meter Vaults at Upper Cottonwood Lift Station**

$8,820

During the design phase, NTMWD staff determined the need for improved metering of flow through the Upper Cottonwood Lift Station. It was requested that flow meters be installed in new concrete meter vaults on the existing discharge line and the new discharge line from this station. This requires additional design effort including structural for the foundations and supports, mechanical design for the equipment layout, site work design, and electrical and instrumentation design to develop the additional plans and specifications. The additional effort required to add the two meter vaults at the Upper Cottonwood Lift Station is $8,820.

**Item No. 3 - Revising Documents for Additive Alternate**

$3,900

The opinion of probable construction costs for improvements at both lift stations at the 90 percent design submittal is $8.7 million. This exceeds NTMWD’s $6.2 million allocated construction budget. While improvements at both lift stations are needed, hydraulic modeling of the UEFIS indicates the additional capacity needs at the Upper Rowlett Creek Lift Station are more critical and need to be online by 2015. Because of the critical function of the Upper Rowlett Creek Lift Station and funding limitations, NTMWD directed the project bidding be revised to break out all work associated with the Upper Cottonwood Creek Lift Station as an additive alternative. The additional effort required to revise the specifications and plans to delineate the additive alternative is $3,900.

**Item No. 4 - New Pump Motor Access Platforms**

$9,877

Many of the proposed pumps with motors at both the lift stations will be considerably larger and taller than the existing units. Currently, neither lift station includes permanent
access platforms for accessing the motors, which are mounted above the pumps. For routine maintenance activities, portable platforms have been used to access motors higher than six feet above the pump room floor. Ladders are used where equipment conflicts do not permit use of portable platforms.

Having permanent stairs and a platform installed at the pump motor level saves time associated with setting up portable platforms and ladders and provides a safer working environment. Therefore, NTMWD staff requested that permanent access platforms be added at each lift station. Additional design for the platforms at each lift station will include four additional sheets, additional specifications, and an additional submittal and review meeting. Additional effort for design of the access platforms is $9,877.

**SUMMARY OF ADDITIONAL SERVICES**

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Electrical Buildings</td>
<td>$40,186</td>
</tr>
<tr>
<td>2</td>
<td>New Meter Vaults at Upper Cottonwood Lift Station</td>
<td>8,820</td>
</tr>
<tr>
<td>3</td>
<td>Revising Contract Documents for Additive Alternate</td>
<td>3,900</td>
</tr>
<tr>
<td>4</td>
<td>New Pump Motor Access Platforms</td>
<td>9,877</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>$62,783</td>
</tr>
</tbody>
</table>

**ENGINEERING SERVICES FEE**

A summary of the revised engineering services is as follows:

| Original Contract Amount (Ad. Memo. No. 3844) | Basic Services | $569,200 |
|                                               | Special Services | 48,610   |
| Proposed Additional Services                  |                |          |
| Revised Not-to-Exceed Engineering Services Amount |                | 62,783   |
|                                                | Revised Not-to-Exceed Engineering Services Amount | $680,593 |

NTMWD staff has reviewed the change in scope and the associated fees and recommends them as representative of the effort required. The services would be performed in accordance with the standard engineering services agreement.

**FUNDING**

Additional funding in the amount of $62,783 is to be made available in the Upper East ForkInterceptor System 2008 Construction Fund.
RECOMMENDATION

It is the recommendation of the Executive Director and NTMWD staff that the Board of Directors authorize additional engineering services for CH2M HILL Engineers, Inc., associated with design for the Upper Rowlett Creek and Upper Cottonwood Creek Lift Stations Improvements, Project No. 295, in the not-to-exceed amount of $62,783, resulting in a revised engineering services fee amount of $680,593. This will be an item on the regular agenda of the January 2014 Board meeting.
This administrative memorandum requests that the Board of Directors authorize the Executive Director to execute an engineering services agreement with Perkins Engineering Consultants, Inc. (PECI) to provide professional services associated with design and construction for the Wilson Creek Regional Wastewater Treatment Plant (RWWT), Plant II Odor Control Improvements Final Design, Project No. 349. The engineering services agreement would be in accordance with the standard NTMWD agreement in a not-to-exceed amount of $88,500.

TECHNICAL REVIEW

The Wilson Creek RWWT was initially placed into service in 1987 as an eight million gallon per day (MGD) activated sludge treatment facility. The plant has undergone four subsequent major expansions and process upgrades to achieve the current average annual daily flow capacity of 56 MGD; 32 MGD in Plant I and 24 MGD in Plant II.

Plant II, originally built in 2003, has two primary clarifiers that are fully covered and equipped with air ducts and fans to remove the foul air from the air space under the cover. The foul air is currently ducted to the intake for the aeration blowers and is incorporated into the process air for the aeration basins. This approach of using foul air from the primary process to supplement the aeration basin supply air was in general use in 2003 because it is effective in removing significant odorous compounds from the air without the need for supplemental odor treatment.

Over the years, wastewater operations has experienced more frequent maintenance and parts replacement and shorter lifespan for the blowers that handle the foul air than for comparable blowers that do not utilize the foul air. Replacement parts and/or blowers that utilize the foul air also require specialized corrosion resistant coatings that add cost and delivery time to the procurement process. The use of foul air also requires additional electrical design considerations in areas around air piping were leakage is possible. In 2012, NTMWD commissioned a study by Alan Plummer Associates, Inc., to evaluate the issues surrounding the use of foul air for supplemental aeration capacity at NTMWD facilities. The study recommended discontinuing the use of foul air to supplement aeration due to its increasing effect on blower seals and bearings and fouling of diffusers.
NORTH TEXAS MUNICIPAL WATER DISTRICT

JANUARY 2014

ADMINISTRATIVE MEMORANDUM NO. 4111

REGIONAL WATER SYSTEM
121 SITE FACILITY WATER TRANSMISSION PIPELINE
RELOCATION AT STATE HIGHWAY 121
PROJECT NO. 335
RIGHT-OF-WAY ACQUISITION PROGRAM
RESOLUTION NO. 14-1

This administrative memorandum requests that the Board of Directors authorize a right-of-way acquisition program with a budget of $75,000 and adopt Resolution No. 14-1, "A Resolution Authorizing the Use of Eminent Domain to Acquire Right-of-Way for the 121 Site Facility Water Transmission Pipeline Relocation at State Highway 121, Project No. 335, and Delegating the Authority to Initiate Condemnation Proceedings to the NTMWD Executive Director." Authorization to acquire right-of-way for the project is requested at this time.

DESCRIPTION OF RIGHT-OF-WAY

Based upon previous authorization (Administrative Memorandum No. 4022) the design consultant, Chiang, Patel, & Yerby, Inc., (CP&Y) was employed to provide services for the design, contract document preparation, and services during construction, for Project No. 335, 121 Site Facility Water Transmission Pipeline Relocation at SH 121.

The Texas Department of Transportation (TxDOT) is proposing to widen SH 121 from SH 5 to 1.65 miles west of FM 455 in Melissa, Texas. NTMWD owns and operates a 12-inch water transmission pipeline in this area, which was installed in 2003. Portions of the existing pipeline are within the TxDOT right-of-way and portions are within private easement. For those sections of the pipeline within private easement, the costs associated with the design, construction, right-of-way acquisition and inspection are reimbursable under the state program.

The TxDOT preliminary design for the roadway improvements indicates that the existing NTMWD 12-inch waterline will be within TxDOT's proposed ROW for approximately 800 linear feet at SH 121 and the Dallas Area Rapid Transit facility railroad easement. This will require NTMWD to relocate this section of waterline, which includes extending a steel casing within TxDOT ROW and relocating the line into a new easement parallel to SH 121. Please see "Exhibit B."

In order to acquire this type of an easement, the NTMWD must provide the property owners with an offer of compensation acceptable to both parties or it must condemn the easement should negotiations not produce an acceptable result. Resolution No. 14-1 requests that the Board authorize the use of eminent domain in the event negotiations are unsuccessful and requests the Board delegate the authority to initiate eminent domain proceedings to the Executive Director. In determining compensation, the NTMWD bases its offers on an approach that considers the basic fair market value of the right-of-way and the effects of the easement.
ACQUISITION OF RIGHT-OF-WAY

Right-of-way for the project will involve only two tracts owned by various individuals, corporations, trusts, and others as listed in “Exhibit A”. In addition, the general route of the project is depicted on “Exhibit B”. Certain support services are necessary to successfully implement the right-of-way program. The ancillary services include title research, negotiation services, appraisal services, and legal services. On those tracts that cannot be secured by good faith negotiation, the NTMWD must also expend funds for expert witnesses, exhibits, and associated costs, such as payments to the special commissioners and for the proper serving of documents.

It is proposed to utilize Gay, McCall, Isaacks, Gordon & Roberts' (Gay McCall) title company to resolve any ownership questions that might arise concerning ownership of tracts, and utilize an appraiser, as needed. Appraisals will be required on all tracts that may be condemned and those tracts that may have a unique value and/or damage. The assistance of legal counsel will be required to condemn certain properties. Until initial contact has been made, it is difficult to project the number of properties that cannot be obtained through negotiation. In order to expedite the project, it is requested that the Board authorize the employment of Gay McCall as is determined necessary for acquisition of right-of-way and title issues.

The NTMWD will attempt to secure all tracts through good faith offers and negotiation. When, or if, that approach fails, a final offer letter will be issued and if not accepted, the property will be condemned. A minimum level of compensation of $1,500 shall be offered on even the smallest tract in order to provide some reasonable level of compensation for time and trouble. This approach is often of great assistance in dealing with small tracts.

The above services are utilized on an as-needed basis. It is expected the above-referenced package of expenditures, including land or easement cost, would be less than $75,000. Funding in the amount of $75,000 is to be made available from the Regional Water System Capital Improvement Fund. Should the program require expenditures in excess of the referenced amount, it would be presented to the Board of Directors for consideration.

RECOMMENDATION

It is the recommendation of the Executive Director and NTMWD staff that the Board of Directors: 1) authorize a right-of-way acquisition program for the 121 Site Facility Water Transmission Pipeline Relocation at State Highway 121, Project No. 335, with a budget of $75,000; and, 2) adopt Resolution No. 14-1 authorizing the use of eminent domain to acquire property described in “Exhibit A” and shown in “Exhibit B” for the construction, maintenance, and operation of the 121 Site Facility Water Transmission Pipeline Relocation at State Highway 121, Project No. 335. This will be an item on the regular agenda of the January 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

RESOLUTION NO. 14-1

A RESOLUTION AUTHORIZING THE USE OF EMINENT DOMAIN TO ACQUIRE RIGHT-OF-WAY FOR 121 SITE FACILITY WATER TRANSMISSION PIPELINE RELOCATION AT STATE HIGHWAY 121
PROJECT NO. 335
AND DELEGATING THE AUTHORITY TO INITIATE CONDEMNATION PROCEEDINGS TO THE NTMWD EXECUTIVE DIRECTOR

WHEREAS, it is necessary to construct the 121 Site Facility Water Transmission Pipeline Relocation at State Highway 121, in order to deliver water to Member Cities and Customers for the public welfare and convenience of the public and cities served by the NTMWD Regional Water System; and,

WHEREAS, the NTMWD Board of Directors has authorized the engineering design of the above project; and,

WHEREAS, it is necessary to proceed with the acquisition of easements and road crossing permits required for construction of the pipeline; and,

WHEREAS, it may be necessary to acquire the easements required for the project through the use of eminent domain in the event negotiations are unsuccessful; and,

WHEREAS, the general area of the project is at SH 121 and the Dallas Area Rapid Transit facility railroad in Melissa, Texas, across the properties listed on "Exhibit A" attached hereto and shown on "Exhibit B"; and,

WHEREAS, this Resolution applies to all units of property required for this project.

NOW, THEREFORE, THE BOARD OF DIRECTORS IN A REGULAR MEETING DETERMINES AND RESOLVES THAT:

1. There is a public need for and that the public welfare and convenience are to be served by the construction of an NTMWD pipeline and appurtenances associated with the 121 Site Facility Water Transmission Pipeline Relocation at State Highway 121, Project 335.

2. It is in the best interest and is necessary to acquire permanent easements not to exceed 20' width and temporary construction easements, variable in width, as may be required for the construction of the pipeline across various tracts and to acquire permits to cross roads and streets for the construction of the pipeline.

3. The use of eminent domain is hereby authorized to acquire those easements along the route generally described as being at SH 121 and the Dallas Area Rapid Transit
RESOLUTION NO. 14-1
PAGE 2

facility railroad in Melissa, Texas, across the properties listed in “Exhibit A”, and as depicted on “Exhibit B” attached hereto, and incorporated by reference herein, for the construction, installation, and operation of the pipeline described above.

4. The power to initiate eminent domain proceedings is hereby delegated to the Executive Director and he is hereby authorized to take all steps necessary to acquire the easements and road crossing permits necessary for this project including hiring right-of-way agents, appraisers, a title company, and attorneys.

5. The Executive Director is authorized to employ the firm of Gay, McCall, Isaacks, Gordon, & Roberts, PC, as attorneys to represent the NTMWD in these proceedings, including filing of Petitions for Condemnation on all properties when the Executive Director determines the property cannot be secured through negotiations and after issuance of a final offer letter in accordance therewith.

6. A budget of $75,000 is authorized for right-of-way acquisition.

7. The Executive Director is authorized to acquire road crossing permits from TxDOT and to engage such professional services as may be required to serve those permits.

THIS RESOLUTION ADOPTED BY THE NTMWD BOARD OF DIRECTORS IN A REGULAR MEETING ON JANUARY 23, 2014, IN THE ADMINISTRATIVE OFFICES OF THE NTMWD, WYLIE, TEXAS.

JOE JOPLIN, Secretary

BILL LOFLAND, President

(SEAL)
"Exhibit A"

121 Site Facility Water Transmission

Pipeline Relocation at State Highway 121

Project No. 335

Landowner List

<table>
<thead>
<tr>
<th>PROPERTY OWNER</th>
<th>PERMANENT EASEMENT ACREAGE</th>
<th>TEMPORARY EASEMENT ACREAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Randy Miller</td>
<td>0.037</td>
<td>0.122</td>
</tr>
<tr>
<td>KC Melissa Reality, LTD</td>
<td>0.200</td>
<td>0.610</td>
</tr>
</tbody>
</table>
NORTH TEXAS MUNICIPAL WATER DISTRICT

JANUARY 2014

REGIONAL WATER SYSTEM
AUTHORIZATION FOR ADDITIONAL FUNDING FOR RIGHT-OF-WAY
NORTH MCKINNEY PIPELINE, PHASE I AND II, PROJECT NO. 210
RIGHT-OF-WAY ACQUISITION PROGRAM

RESOLUTION NO. 14-2

This administrative memorandum requests that the Board of Directors adopt Resolution No. 14-2, "A Resolution Authorizing Additional Funding for Right-of-Way for the North McKinney Pipeline, Phase I and II, Project No. 210, Right-of-Way Acquisition Program" with an additional funding request of $800,000. The Board of Directors previously authorized Administrative Memorandum No. 3946, and Resolution No. 13-6 for the North McKinney Pipeline, Phase I and II, Project No. 210. These actions authorized the acquisition of right-of-way in the form of an easement across certain properties necessary to allow for the installation and continued operation of a water pipeline and appurtenances from a connection to an existing NTMWD water transmission pipeline within the City of Lucas to the McKinney No. 1 delivery site also known as the Gerrish Street site.

The original authorization for funds was in the not-to-exceed amount of $3,485,000 for property and support services. At this time, easements have been acquired or the final negotiations have been completed at the total amount of approximately $2,380,000, and 17 property owners remain to be acquired. In order to assure adequate funding is available for the remaining easement acquisitions, legal support and that required for tenants, additional funding is being requested at this time. Based on the current funds expended and projection of the remaining easement and associated cost, it is requested the budget be increased by $800,000, resulting in a total authorization of $4,285,000 for right-of-way associated with this project. It is recommended the additional cost be funded from the savings on Project No. 266, 42-Inch and 24-Inch Waterline Relocation Along Stacy Road (FM 2786) from SH 5 (Greenville Drive) to FM 1378 (Country Club Road), which is in close proximity to the North McKinney Pipeline, Phase I and II. (See attached map for relative vicinity of both pipeline projects.) The original approved budget of Project No. 266 was $2,290,000. With easement acquisition on Project No. 266 nearing completion, it is projected that the final cost of those easements will not exceed $1,170,000 and will result in a budget savings of $1,120,000. The right-of-way programs for both projects have been funded from the Regional Water System Capital Improvement Fund.

The acquisition of easements on this project has been difficult due to property owner resistance. In establishing budgets that are brought to the Board for approval for easement acquisition, the NTMWD staff works with legal counsel, utilizing tax roll values in the vicinity of the project to develop the recommended budget. The location of this pipeline is within an area of the cities of Lucas, Fairview, and McKinney, which is currently experiencing development that has resulted in escalation of property values. The escalating property values have been used by owners during negotiations, resulting in higher than anticipated settlements for a number of the required easements.
RECOMMENDATION

It is the recommendation of the Executive Director, NTMWD staff, and Gay, McCall, Isaacks, Gordon & Roberts that the Board of Directors adopt Resolution No. 14-2, "A Resolution Authorizing Additional Funding for Right-of-Way for the North McKinney Pipeline, Phase I and II, Project No. 210, Right-of-Way Acquisition Program" with an additional funding request of $800,000, resulting in a total authorization of $4,285,000 for the right-of-way acquisition program for the North McKinney Pipeline, Phase I and II, Project No. 210, and reduce the currently authorized funding for right-of-way for Project No. 266, 42-Inch and 24-Inch Waterline Relocation along Stacy Road from $2,290,000 to $1,170,000. This will be an item on the regular agenda of the January 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

RESOLUTION NO. 14-2

A RESOLUTION AUTHORIZING ADDITIONAL FUNDING FOR
RIGHT-OF-WAY FOR THE NORTH MCKINNEY PIPELINE, PHASE I AND II,
PROJECT NO. 210
RIGHT-OF-WAY ACQUISITION PROGRAM

WHEREAS, the Board of Directors has found it is necessary to construct a
pipeline to deliver water to Member Cities and Customers for both the welfare and
convenience of the public and cities served by the NTMWD Regional Water System;
and,

WHEREAS, the NTMWD Board of Directors has authorized the engineering
design of the above mentioned project for the North McKinney Pipeline, Phase I and II,
Project No. 210; and,

WHEREAS, by Administrative Memorandum No. 3946 and Resolution No. 13-6,
the NTMWD Board of Directors has authorized the acquisition of right-of-way for the
North McKinney Pipeline, Phase I and II, Project No. 210; and,

WHEREAS, the NTMWD Board of Directors previously authorized funding in the
amount of $3,485,000 for the acquisition of right-of-way for North McKinney Pipeline,
Phase I and II, Project No. 210; and,

WHEREAS, it is necessary to proceed with finalizing the acquisition of
easements and additional funds are required to conclude the project; and,

WHEREAS, additional funds are available for the project from savings on right-
of-way acquisition on the 42-inch and 24-inch Waterline Relocation along Stacy Road,
Project No. 266.

NOW, THEREFORE, THE BOARD OF DIRECTORS IN A REGULAR MEETING
DETERMINES AND RESOLVES THAT:

1. A budget increase of $800,000 is authorized for right-of-way acquisition, resulting
   in a total authorized funding for right-of-way acquisition on this project of
   $4,285,000.

2. The additional funding is available from savings on right-of-way acquisition on the
   42-inch and 24-inch Waterline Relocation along Stacy Road, Project No. 266.

3. That this Resolution shall take effect and be in full force and effect from and after
   the date of its adoption, and it is so resolved; and all resolutions of the Board of
   Directors of the District in conflict herewith are hereby amended or repealed to
   the extent of such a conflict.
RESOLUTION NO. 14-2
PAGE 2

THIS RESOLUTION ADOPTED BY THE NTMWD BOARD OF DIRECTORS IN A REGULAR MEETING ON JANUARY 23, 2014, IN THE ADMINISTRATIVE OFFICES OF THE NTMWD, WYLIE, TEXAS.

______________________________  ________________________________
JOE JOPLIN, Secretary          BILL LOFLAND, President

(SEAL)
NORTH TEXAS MUNICIPAL WATER DISTRICT

JANUARY 2014

ADMINISTRATIVE MEMORANDUM NO. 4113

REGIONAL SOLID WASTE SYSTEM
CUSTER ROAD TRANSFER STATION TIPPING FLOOR IMPROVEMENTS
PROJECT NO. 331

TABULATION OF BIDS AND AWARD OF CONTRACT

This administrative memorandum is for the Board of Directors consideration of the tabulation of bids and recommendation to award a construction contract to North Texas Contracting, Inc., in the contract amount of $526,390 for the Custer Road Transfer Station Tipping Floor Improvements, Project No. 331.

REVIEW

In December 2006, Mitchell Enterprises, Ltd., (Mitchell) and NTMWD entered into a contract for the construction of the Custer Road Transfer Station Expansion project located at 9901 Custer Road in Plano, Texas. In October 2008, shortly after the new facilities were placed into service, the floor of the solid waste receiving area, also called a tipping floor, began to show unusually rapid deterioration, and the NTMWD withheld retainage pending repair of the tipping floor. In April 2009, Administrative Memorandum No. 3340 authorized Gay, McCall, Isaacks, Gordon and Roberts, PC, to defend NTMWD in a lawsuit filed by Mitchell to collect the retainage. It was the position of NTMWD that the premature wear was due to a design flaw, improper construction, or both.

On October 26, 2012, all parties to the litigation reached a tentative agreement pending Board approval. In November 2012, Administrative Memorandum No. 3895 authorized Resolution No. 12-37 granting the Executive Director authority to settle the lawsuit, including the authority to execute any necessary settlement documents in keeping with those general terms. In December 2012, the lawsuit settlement agreement was completed, and the NTMWD obtained the total settlement amount of $667,496.98.

In May 2013, the Board of Directors approved Administrative Memorandum No. 3999, which authorized the Executive Director to execute an engineering services agreement in an amount not to exceed $100,000 with Weaver Boos Consultants, LLC - Southwest (Weaver Boos) to provide professional services associated with design, construction management, and inspection services for the Custer Road Transfer Station Tipping Floor Improvements, Project No. 331.

SCOPE OF WORK

The tipping floor inside the Custer Road Transfer Station has experienced premature wear. In order to restore the structural integrity of the tipping floor, NTMWD staff
requested Weaver Boos submit a scope for design, construction management, inspection, and construction materials testing services for improvements that will replace the Custer Road Transfer Station tipping floor. This project will generally consist of the demolition and removal of an 8-inch to 12-inch thick concrete tipping floor, composite metal decking, and cast iron drainage structures. Once demolition is completed, a new 12-inch thick reinforced concrete tipping floor with steel plating, cast iron floor drains, and drainage pipe will be constructed.

The engineer’s opinion of probable construction cost is:

<table>
<thead>
<tr>
<th>Description</th>
<th>Estimated Cost Opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base Bid</td>
<td>$585,833.75</td>
</tr>
<tr>
<td>Additive Alternative (Emery Top 400)</td>
<td>164,600</td>
</tr>
<tr>
<td>Deductive Alternative (Omit floor replacement within 36 inches of push walls)</td>
<td>(32,500)</td>
</tr>
<tr>
<td>Total Cost Opinion</td>
<td>$717,933.75</td>
</tr>
</tbody>
</table>

**TABULATION OF CONSTRUCTION BIDS**

Sealed bids were received at 2:00 p.m. on Tuesday, January 7, 2014, and are tabulated as follows:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>North Texas Contracting, Inc.</td>
<td>$526,390</td>
<td>$294,889</td>
<td>($1,000)</td>
</tr>
<tr>
<td>Red River Construction</td>
<td>$554,480</td>
<td>$143,150</td>
<td>0</td>
</tr>
<tr>
<td>Rebcon, Inc.</td>
<td>$589,131</td>
<td>$286,300</td>
<td>($2,000)</td>
</tr>
</tbody>
</table>

The base bid was for the removal and replacement of the transfer station tipping floor area. The bid proposal also includes an additive alternative and a deductive alternative bid item as described below:

*Additive Alternative Bid Item* - Installation of a one-inch thick wear resistant “Emery Top 400” top coat over the new tipping floor. The emery aggregate floor topping produces a durable working surface to extend the life of the tipping floor. However, it is the opinion of the NTMWD staff and Weaver Boos that the additive alternate costs proposed by the bidders are excessive for the valve received from the emery top coat. Therefore, it is the recommendation of the Executive Director and NTMWD staff this alternate not be accepted.

*Deductive Alternative Bid Item* - Reduces the amount of tipping floor installation by omitting removal and replacement of the floor area that is within 36 inches of the vertical push walls. This section of floor had much less wear than the main operating floor and will require considerable manual demolition to avoid the structural connections between the push wall and floor beams. The submitted bid amounts do not offer significant cost
savings to omit this section of floor; therefore, NTMWD staff and Weaver Boos do not recommend acceptance of this Deductive Alternative (i.e., floor area shall be removed and replaced all the way to the vertical push wall as required in the base bid).

The Executive Director, NTMWD staff, and Weaver Boos recommend award of the project based on the base bid as follows:

<table>
<thead>
<tr>
<th>Bidder</th>
<th>Total Bid</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Texas Contracting, Inc.</td>
<td>$526,390</td>
</tr>
<tr>
<td>Red River Construction</td>
<td>$554,480</td>
</tr>
<tr>
<td>Rebcon, Inc.</td>
<td>$589,131</td>
</tr>
</tbody>
</table>

The lowest responsive bid was received from North Texas Contracting, Inc., in the total amount of $526,390. Weaver Boos and NTMWD staff reviewed North Texas Contracting, Inc., qualifications and confirmed adequate bonding capacity and insurance to construct the project.

North Texas Contracting, Inc., has satisfactorily completed numerous projects for the NTMWD in the past including the Custer Road Transfer Station Brush Grinding Pad and the 121 RDF Compost Facility Infrastructure Improvements. Based on previous performance for the NTMWD and review conducted of the provided references, it is the recommendation of the Executive Director, NTMWD staff, and Weaver Boos Consultants, LLC-Southwest, that the Board authorize the award of the construction contract to North Texas Contracting, Inc.

FUNDING

Funding in the amount of $526,390 for this project is available in the Regional Solid Waste 2009 Construction Fund.

RECOMMENDATION

It is the recommendation of the Executive Director, NTMWD staff, and Weaver Boos Consultants, LLC-Southwest, that the Board of Directors authorize award of a construction contract to North Texas Contracting, Inc., for the Custer Road Transfer Station Tipping Floor Improvements, Project No. 331, in the amount of $526,390. This will be an item on the regular agenda of the January 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

JANUARY 2014

ADMINISTRATIVE MEMORANDUM NO. 4114

REGIONAL WATER SYSTEM
WATER TREATMENT PLANTS I, II, III, AND IV OZONATION
PROJECT NO. 153

CHANGE ORDER NO. 23

This administrative memorandum is for the Board of Directors consideration of Change Order No. 23 for Project No. 153, Water Treatment Plants (WTPs) I, II, III, and IV Ozonation. The recommended changes will result in an increase of $35,120.49, resulting in a revised contract amount of $110,907,592.55 The interim milestone substantial completion dates and final completion date for this project will remain unchanged.

REVIEW

The use of ozone to supplement the treatment process has been discussed with the Board on several occasions. Ozone is an oxidation process that has several potential advantages including:

- Disinfection
- Disinfection byproduct control (THMs, HAA5, etc.)
- Micro-constituent oxidation
- Micro-flocculation to reduce chemical usage
- Taste and odor control

The preliminary engineering indicated that NTMWD will gain benefit from ozone disinfection. The table below provides the history of this project starting with the engineering services agreement (ESA) for detailed design of this project and concludes with the latest change order approved by the Board:

<table>
<thead>
<tr>
<th>Month/Year</th>
<th>Ad. Memo. No.</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 2009</td>
<td>3346</td>
<td>ESA with Black &amp; Veatch Corporation (B&amp;V)</td>
<td>$10,620,000.00</td>
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<tr>
<td>October 2010</td>
<td>3547-A</td>
<td>Award to McCarthy Building Companies</td>
<td>112,989,000.00</td>
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<tr>
<td>August 2011</td>
<td>3668</td>
<td>C.O. No. 1 for modifications to WTP III sedimentation basins and wiring modifications</td>
<td>87,737.15</td>
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<tr>
<td>September 2011</td>
<td>3699</td>
<td>C.O. No. 2 for improvements to WTP I Clariflocculator No. 2</td>
<td>30,000.00</td>
</tr>
<tr>
<td>October 2011</td>
<td>3713</td>
<td>C.O. No. 3 for deletion of electric handholes and davit crane modifications</td>
<td>(48,178.06)</td>
</tr>
<tr>
<td>Month/Year</td>
<td>Ad. Memo. No.</td>
<td>Description</td>
<td>Amount</td>
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<tr>
<td>December 2011</td>
<td>3740</td>
<td>C.O. No. 4 for changing to two-hour firewalls, demolition for 72-inch pipe, and ozone contactor influent pipes</td>
<td>120,288.62</td>
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<tr>
<td>January 2012</td>
<td>3753</td>
<td>C.O. No. 5 for mechanical insulation credit, 20-inch valve addition, and WTP II Basin 4 undermining</td>
<td>85,531.62</td>
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<tr>
<td>March 2012</td>
<td>3776</td>
<td>C.O. No. 6 for existing construction debris, additional control system programming, and 25kV cables</td>
<td>102,863.15</td>
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<tr>
<td>April 2012</td>
<td>3791</td>
<td>C.O. No. 7 for trap primers, WTP IV concrete pipe encasement, waterline leak, additional undermining at WTP II</td>
<td>252,716.53</td>
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<tr>
<td>May 2012</td>
<td>3807</td>
<td>C.O. No. 8 for electrical relays, increase MCC breaker size, relocation of backflow preventers, and additional chlorine feeders</td>
<td>179,303.48</td>
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<tr>
<td>September 2012</td>
<td>3859</td>
<td>C.O. No. 9 for chlorine diffuser orifice drilling, WTP II sludge valve station piping, WTP III sedimentation basin effluent box repair, and additional thrust restraint</td>
<td>128,065.21</td>
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<tr>
<td>October 2012</td>
<td>3873</td>
<td>C.O. No. 10 for WTP I and II chlorine feed system modifications, chlorine injector panel modifications, large diameter butterfly valve encasement, and WTP IV 84-inch pipe encasement demolition</td>
<td>111,463.32</td>
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<tr>
<td>November 2012</td>
<td>3887</td>
<td>C.O. No. 11 for replacement of a 16-inch tapping valve at North Ozone Operations (NOPS) Building, HVAC wiring modifications, pipe penetrations at precast walls, WTP II Basin No. 3 limit switch relocation, and relocated eight-inch ozone gas pipe</td>
<td>155,596.10</td>
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<tr>
<td>December 2012</td>
<td>3906</td>
<td>C.O. No. 12 for rerouting electrical circuits at WTP II, pour back concrete walls in the WTP III and IV settled water flumes, repair and coat settled water boxes at WTPs III and IV, remove an electrical duct bank in conflict at South Ozone Operations (SOPS) Building, relocate WTP I sample lines, and additional contract time</td>
<td>160,584.35</td>
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<tr>
<td>January 2013</td>
<td>3930</td>
<td>C.O. No. 13 for additional fiber optic cables and fire alarm panel connectivity, WTP III fiber optic cable conflict, revised WTP IV chemical feed, and cable tray extension at NOPS</td>
<td>269,575.51</td>
</tr>
<tr>
<td>Month/Year</td>
<td>Memo. No.</td>
<td>Description</td>
<td>Amount</td>
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<tr>
<td>February 2013</td>
<td>3949</td>
<td>C.O. No. 14 for work changes at NOPS required for NOPS expansion, add'l ozone generator cable testing, and fireman's switches at NOPS and SOPS</td>
<td>76,130.23</td>
</tr>
<tr>
<td>March 2013</td>
<td>3966</td>
<td>C.O. No. 15 for a concrete fillet in WTP II Sedimentation Basin 7, changes to the ozone gas manifolds, quenching chemical light base changes, WTP IV plant water leak repair, chilled water minimum bypass at NOPS and SOPS, and WTP III and IV sedimentation basin underdrain reroute, and adjustment to interim completion dates</td>
<td>54,251.21</td>
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<tr>
<td>April 2013</td>
<td>3986</td>
<td>C.O. No. 16 for WTP III temporary bypass pipe conflict, demister pipe changes at 11 contactors, NOPS and WTP IV contactor fiber optic cabinets, WTP II fire department connection relocation, NOPS and SOPS fence alignment changes, and NOPS and SOPS signal splitters</td>
<td>144,688.77</td>
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<tr>
<td>May 2013</td>
<td>4003</td>
<td>C.O. No. 17 for electrical duct bank replacement, plug valve spool pieces, WTP II north and south contactor sanitary sewer reroute, eight-inch isolation valve at WTP IV, lightning protection credit, and electric valve actuator credit</td>
<td>58,405.59</td>
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<tr>
<td>June 2013</td>
<td>4013</td>
<td>C.O. No. 18 for fiber optic cabinets and switches, settled water turbidity sample pumps, destruct canisters, and fire sprinkler installation delay</td>
<td>475,186.93</td>
</tr>
<tr>
<td>July 2013</td>
<td>4017</td>
<td>C.O. No. 19 for relocation of an air release valve at NOPS, re-feed WTP II Basins 5, 6, 7, and 8 power panels, WTP II Basin 7 overflow pipes, ozone destruct piping, plant waterline encasement, and a credit for the WTP II Basins 3 and 4 sludge collection equipment</td>
<td>(4,756,650.01)</td>
</tr>
<tr>
<td>August 2013</td>
<td>4039</td>
<td>C.O. No. 20 for replacing the plant water pipe on the north side of WTP II Sed. Basin 7, bolt material credit, chiller flow switches, compressed air drip legs, and quenching chemical credit</td>
<td>52,692.05</td>
</tr>
<tr>
<td>October 2013</td>
<td>4076</td>
<td>C.O. No. 21 for modification of WTP II steps and add'l guardrail gates, WTP II Sedimentation Basin 3 rectangular butterfly valve conflict, add'l LOX tank pressure relief valve, add'l pipeline dewatering, and add'l electrical for quenching chemical metering pumps</td>
<td>$70,404.74</td>
</tr>
<tr>
<td>Month/Year</td>
<td>Memo. No.</td>
<td>Description</td>
<td>Amount</td>
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<tr>
<td>-----------</td>
<td>-----------</td>
<td>------------------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>December 2013</td>
<td>4102</td>
<td>C.O. No. 22 for additional weld inspections, 16-inch x 12-inch plant water tap, WTP III 15-inch storm drain replacement, and additional chainwheel valve operators</td>
<td>$72,815.57</td>
</tr>
</tbody>
</table>

The total value of the construction contract with McCarthy including Change Order No. 22 is $110,872,472.06.

**CHANGE ORDER NO. 23**

Change Order No. 23 consists of three changes in work scope for this project that will result in an overall increase in the contract amount by $35,120.49. The proposed costs listed in the following paragraphs have been reviewed and determined to be fair and reasonable by the NTMWD staff and B&V for the materials and work involved.

*Item No. 1 – WTP II Basin No. 7 Drain Valve Lowering*  
$11,422.45

The contract drawings require the contractor to leave the existing 24-inch mud valve in place as the sedimentation basin drain valve. The sedimentation basin drain valve serves two purposes. One purpose is to drain the sedimentation basin to allow for cleaning and maintenance. WTP II Sedimentation Basin No. 7 is one of two basins at WTP II that will be retrofitted with inclined plate settling and a hoseless vacuum sludge collection system. In its current elevation, the basin drain valve will drain all but the bottom 12 inches of water from the basin. The basin drain needs to drain the entire basin, which means that the valve needs to be lowered to the new finished floor elevation of the basin. The second purpose of the sedimentation basin drain valve is to serve as the drain for the wash water used to clean the basin. The basin drain cannot be any higher than the finished floor elevation of the basin in order to allow for proper basin cleaning. During original construction of Basin No. 7, the mud valve was installed 12 inches above the finished floor of the basin to allow for the installation of the corner sweeps of the circular sludge collection system.

B&V developed a work change directive for McCarthy to lower the basin drain valve by removing the concrete fillet and floor down to a 90-degree bend below the floor. McCarthy would remove the existing pipe and install a new pipe piece with new gaskets and retainer glands at the proper finished floor elevation. McCarthy submitted a change request in the amount of $11,422.45 to remove the existing concrete floor and lower the mud valve.

*Item No. 2 – Perforated PVC Drain in Liquid Oxygen (LOX) Area*  
$10,667.61

LOX is an oxidizer that vigorously supports combustion. A LOX environment is very susceptible to fires if organic matter, such as grass or weeds, is allowed to come in contact with it. To reduce the likelihood of a fire from organic matter, the LOX area
beneath the LOX tanks and piping is covered in a one-foot thick coarse gravel layer. The purpose of the gravel is to reduce the possibility of any grass or weeds from growing in an area that could be saturated with either LOX or gaseous oxygen.

The LOX area is not graded to drain. Seasonal rains may accumulate in the gravel area and leave the area saturated and inundated until the rainwater evaporates. NTMWD requested that B&V prepare a work change directive that uses perforated PVC pipe in a french drain system to drain the accumulated rainwater from the LOX area. McCarthy has submitted a price of $10,667.61 to remove the existing gravel layer, install the perforated PVC pipe encased in geotextile fabric, ball valves, reinstall the gravel layer, valve box, and connect the perforated drains to two storm drain inlets. The ball valves are used to allow NTMWD to control when the LOX rainwater is drained from the LOX area.

Item No. 3 – WTP II Basin No. 6 Overflow Relocation $13,030.43

This change is needed to eliminate a conflict between existing structural members in Basin No. 6 and proposed overflow pipe improvements. Sedimentation Basin No. 6 effluent launder troughs have to be modified to allow settled water from Basin No. 6 to be diverted into the south ozone contactor for injection of the ozone solution. The contract drawings show the south overflow in Basin No. 6 to be modified by adding pipe and fittings to allow construction of new launder troughs. The south overflow for Basin No. 6 was originally constructed further south than indicated on the record drawings. Construction of the overflow as shown on the ozone project drawings would interfere with some structural concrete components required by the structural plans. B&V revised the overflow pipe design by lowering the proposed overflow below the floor slab of the sedimentation basin, eliminating the conflict with the structural members. McCarthy has submitted a change request in the amount of $13,030.43 to remove the existing concrete floor, remove the concrete pipe encasement of the existing overflow, connect the new overflow to the waste washwater flume, and add new concrete pipe encasement. McCarthy’s cost proposal includes credits for materials that were not installed.

**SUMMARY OF CHANGE ORDER NO. 23**

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Amount</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>WTP II Basin No. 7 Drain Valve Lowering</td>
<td>$11,422.45</td>
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<tr>
<td>2</td>
<td>Perforated PVC Drain in LOX Area</td>
<td>$10,667.61</td>
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<tr>
<td>3</td>
<td>WTP II Basin No. 6 Overflow Relocation</td>
<td>$13,030.43</td>
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<tr>
<td></td>
<td>Proposed Total C.O. Amount</td>
<td>$35,120.49</td>
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### SUMMARY OF ADJUSTMENTS TO CONTRACT

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<thead>
<tr>
<th>Description</th>
<th>Contract Amount</th>
<th>Substantial Completion</th>
<th>Final Completion</th>
</tr>
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<tbody>
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<td>C.O. No. 4</td>
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<tr>
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<td>C.O. No. 12</td>
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<td>C.O. No. 13</td>
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<td>C.O. No. 15</td>
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<td>C.O. No. 16</td>
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<tr>
<td>C.O. No. 18</td>
<td>475,186.93</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C.O. No. 19</td>
<td>(4,756,650.01)</td>
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<tr>
<td>C.O. No. 20</td>
<td>52,692.05</td>
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<tr>
<td>C.O. No. 21</td>
<td>70,404.74</td>
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<tr>
<td>C.O. No. 22</td>
<td>72,815.57</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C.O. No. 23</td>
<td>35,120.49</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In the last 28 months, the NTMWD staff has presented 23 change order requests to the Board for this project totaling approximately $2,918,600, excluding the $4,756,650.01 credit for scope reduction contained in Administrative Memorandum No. 4017 from July 2013. This may appear to be a significant extra cost but relative to the size of the project, it is approximately a 2.6 percent change. The amount of work completed by McCarthy since the start of the project is approximately $103,000,000.

In October 2013, NTMWD Executive Director informed the Board, by Administrative Memorandum No. 4076, that McCarthy did not achieve Milestone No. 2 by the
August 24, 2013, date as extended in Administrative Memorandum No. 4039. Milestone No. 2 consists of one-half of the NOPS Building and WTP IV contactors. McCarthy did achieve Milestone No. 2 on November 18, 2013, approximately 86 days late. During the November 2013 Water Committee Meeting, NTMWD Executive Director and legal counsel informed the Water Committee of McCarthy’s current schedule, as well as a sizable claim for delay submitted by McCarthy. The liquidated damages from McCarthy’s late completion of this project will be part of the claim negotiation. McCarthy is submitting letters to NTMWD purportedly in support of its claim, and NTMWD staff continues to answer each letter from McCarthy in a timely manner responding to McCarthy’s claim for delay. NTMWD staff will keep the Board informed regarding the status of McCarthy’s claim. At this time, NTMWD’s position is that the contract precludes McCarthy from waiting so long to make a claim for delays that occurred in the past, some over two years ago. NTMWD staff is negotiating with McCarthy regarding the portion of McCarthy’s claim for delays that occurred within the last few months.

FUNDING

Additional funding in the amount of $35,120.49 for this change order is to be made available in the Regional Water System 2010A Construction Fund.

RECOMMENDATION

It is the recommendation of the Executive Director, NTMWD staff, and Black & Veatch Corporation that the Board of Directors approve Change Order No. 23 for Project No. 153, Water Treatment Plants I, II, III, and IV Ozonation, an increase in the amount of $35,120.49, resulting in a revised contract amount of $110,907,592.55. This will be an item on the regular agenda of the January 2014 Board meeting.
REGIONAL WATER SYSTEM
WATER TREATMENT PLANT I
CONVERSION TO BIOLOGICALLY ACTIVE FILTRATION AND
IMPROVEMENT OF EXISTING UNDERDRAINS
PROJECT NO. 259

CHANGE ORDER NO. 4

This administrative memorandum is for the Board of Directors consideration of Change Order No. 4 for Project No. 259, Water Treatment Plant (WTP) I Conversion to Biologically Active Filtration and Improvement of Existing Underdrains for an increase of $68,145 resulting in a revised contract amount of $8,040,169.75.

REVIEW

In August 2011, the Board approved Administrative Memorandum No. 3666, which authorized the Executive Director to execute an engineering services agreement with Carollo Engineers (Carollo) for design of this project. Included in this project are the following improvements in WTP I: new filter underdrains, floor slabs and air distribution piping; new precast concrete troughs at a higher elevation than the existing troughs; corrosion protectant coating on all wetted surfaces in each filter; new valves at selected locations; new electric actuators for new and existing valves; new effluent launder weir plates in the four clarifiers; and, associated electrical and instrumentation.

In October 2012, the Board approved Administrative Memorandum No. 3872 for Project No. 259, which presented a tabulation of bids and recommended award of the construction contract to PCL Construction (PCL) in the amount of $7,535,625.

In March 2013, the Board approved Change Order No. 1 (Administrative Memorandum No. 3980) in the amount of $181,105.96 for 12 additional washwater supply valves and for the contractor to install bulkheads enabling them to shut down only one clarifier at a time.

In April 2013, the Board approved Change Order No. 2 (Administrative Memorandum No. 3982) in the amount of $227,024.59 for the additional surface preparation prior to application of the epoxy coating system, central processing unit software license, and the placement of concrete and tile flooring in the voids left by two previous filter control consoles.

In June 2013, the Board approved Change Order No. 3 (Administrative Memorandum No. 4005) in the amount of $28,269.20 for the epoxy injection on filter cells construction joints and urethane injections at the settled water flume construction joints.
CHANGE ORDER NO. 4

Change Order No. 4 consists of one item on the referenced project for a net increase in contract price of $68,145. The NTMWD Engineering staff and Carollo have reviewed this item and recommend it as necessary and reasonable.

Item No. 1 – Removal of Bituminous Material at Center Flume Walls on Four Filters $68,145

As excavation of the existing floor slab on Filter No. 6 was in progress, a bituminous material was found at the interface elevation between the filter floor and the filter center flume. This material was utilized as a sealant during the original construction of Filter Nos. 1 through 6 in 1955. This method of construction was a common technique during the 1950s. The bituminous material has penetrated approximately two inches into the concrete surfaces at the installed locations. It is the recommendation of Carollo Engineers and NTMWD staff that the concrete should be removed in all areas that have been in long-term contact with the bituminous material. Removal of the affected concrete areas will help ensure a leak-free structure when the concrete filter floors are poured. Filter Nos. 2 and 4 did not have an excess of this bituminous material. Filter Nos. 1, 3, and 5 have not been demolished to the point of determining if they have an excess of this bituminous material. Filter Nos. 7 through 12 were constructed in the 1961 timeframe and do not have the bituminous material.

Carollo, with input from NTMWD staff developed a procedure for the removal of the concrete area affected to ensure the proper adherence and functionality of the new retrofit and hydrophilic waterstops. This request is for work on four filters (Filter Nos. 1, 3, 5, and 6) at a cost of $17,036.25 each, and if any of the Filter Nos. 1, 3, and/or 5 do not require the work, it will not be performed.

SUMMARY OF ADJUSTMENTS TO CONTRACT

<table>
<thead>
<tr>
<th>Description</th>
<th>Contract Amount</th>
<th>Days to Substantial Completion</th>
<th>Days to Final Completion</th>
</tr>
</thead>
<tbody>
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<td>Original Contract</td>
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<td>880</td>
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<tr>
<td>C.O. No. 1</td>
<td>181,105.96</td>
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<td>0</td>
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<tr>
<td>C.O. No. 2</td>
<td>227,024.59</td>
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<td>0</td>
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<tr>
<td>C.O. No. 3</td>
<td>28,269.20</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Proposed C.O. No. 4</td>
<td>68,145.00</td>
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<td>Revised Contract Amount</td>
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<td>880</td>
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<tr>
<td>Revised Contract Dates</td>
<td>March 6, 2015</td>
<td></td>
<td>May 5, 2015</td>
</tr>
</tbody>
</table>
FUNDING

Additional funding in the amount of $68,145 for this project is to be made available in the Regional Water System Capital Improvement Fund.

RECOMMENDATION

It is the recommendation of the Executive Director, NTMWD staff, and Carollo Engineers that the Board of Directors approve Change Order No. 4 for the Water Treatment Plant I Conversion to Biologically Active Filtration and Improvement of Existing Underdrains, Project No. 259, for an increase in the amount of $68,145, resulting in a revised contract amount of $8,040,169.75. This will be an item on the regular agenda of the January 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

JANUARY 2014

REGIONAL WATER SYSTEM
WATER TREATMENT PLANT IV
CONVERSION TO BIOLOGICALLY ACTIVE FILTRATION
PROJECT NO. 251

CHANGE ORDER NO. 5

This administrative memorandum is for the Board of Directors consideration of Change Order No. 5 for an increase of $27,317, resulting in a revised contract amount of $5,721,703 for Project No. 251, Water Treatment Plant (WTP) IV Conversion to Biologically Active Filtration. The revised final completion date of April 28, 2014, remains the same.

REVIEW

The use of ozone to supplement the treatment process has been discussed with the Board on several occasions. Ozone is an oxidation process that has several potential advantages including:

- Disinfection
- Disinfection byproduct control (THMs, HAA5, etc.)
- Micro-constituent oxidation
- Micro-flocculation to reduce chemical usage
- Taste and odor control

During the preliminary engineering phase of Project No. 153, Wylie WTPs I, II, III, and IV Ozonation, pilot scale filter studies concluded that there is a need to convert the current conventional filters to biologically active filters (BAF). BAF simply means that biological activity on the filter media will develop and remove organic and inorganic material from the disinfected water.

Ozonation breaks up organic compounds into small pieces. These compounds, if allowed to enter the distribution system, can cause growth of nitrifying bacteria. To prevent this, the water plant filters will be modified to hold microorganisms that consume these compounds before they enter the distribution system. The microorganisms themselves have little chance of entering the distribution system since they exist in the top layer of the filter and cannot penetrate through it. As they grow, the excess amount of biological growth, or biofilm, is removed when the filter is backwashed.

Carollo Engineers (Carollo) has extensive experience with the conversion of conventional filters to BAF, including projects at both City of Arlington WTP, and a pilot scale study for Dallas Water Utilities at their Bachman WTP. Based on Carollo's experience with BAF, Carollo was selected to design improvements necessary to convert NTMWD's conventional filters to BAF.
The table below provides the history of this project starting with the engineering services agreement (ESA) for detailed design of this project and concluding with the latest change order approved by the Board:

<table>
<thead>
<tr>
<th>Month/Year</th>
<th>Ad. Memo. No.</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 2011</td>
<td>3640</td>
<td>ESA with Carollo</td>
<td>$388,055</td>
</tr>
<tr>
<td>February 2012</td>
<td>3759</td>
<td>Award to Archer Western Construction, LLC (Archer Western)</td>
<td>$5,364,550</td>
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<tr>
<td>June 2012</td>
<td>3812</td>
<td>C.O. No. 1 for welding in steel plugs in the filter effluent and influent pipes for nineteen filters</td>
<td>$57,815</td>
</tr>
<tr>
<td>May 2013</td>
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<td>C.O. No. 2 for replacement of underdrain blocks in Filter No. 11</td>
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<tr>
<td>September 2013</td>
<td>4045</td>
<td>C.O. No. 3 for replacement of underdrain blocks and additional filter media in Filter No. 17</td>
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<td>December 2013</td>
<td>CAI 13-12-05</td>
<td>C.O. No. 4 for paving modifications, repair leak in Filter No. 11, and additional contract time.</td>
<td>$21,308</td>
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**CHANGE ORDER NO. 5**

Change Order No. 5 consists of two items on the referenced project for a net increase in contract price of $27,317. The NTMWD Engineering staff and Carollo have reviewed these items and recommend them as necessary and reasonable.

*Item No. 1 – Hydrogen Peroxide Injection Manhole*  
$7,476

The contract documents require the construction of a chemical feed vault for the injection of hydrogen peroxide directly over and into the top of the buried 36-inch washwater supply pipe. During excavation for the hydrogen peroxide tap on the 36-inch washwater supply pipeline, Archer Western excavated the 20-inch filter to waste pipeline as well. The filter to waste pipeline was almost directly over the washwater supply pipe. The plans have been modified to allow the hydrogen peroxide to be injected into the side of the washwater supply pipe. Carollo redesigned the chemical feed injection point to provide a manhole on the side of the washwater supply pipe in lieu of a vault located directly over the washwater supply pipe. Carollo also specified the use of an injection quill where the hydrogen peroxide can be injected into the side of the washwater supply pipe. Archer Western submitted a proposed cost of $7,476 for the redesigned manhole and chemical piping.
This item involves work in an area in which two construction contractors are required to perform separate work tasks. The solution recommended below resolves potential conflicts and timing issues between the two construction contractors while minimizing ancillary contract issues. As with any similar conflict between construction contracts and contractors while the below explanation is involved, it is provided for justification of the recommended approach.

The two construction contracts involved in this change order item are Project No. 153, WTPs I, II, III and IV Ozonation and Project No. 251, WTP IV Conversion to BAF. McCarthy Building Companies (McCarthy), contractor for Project No. 153, is required to install buried large diameter treated water piping, while the work associated with Project No. 251 will ultimately require installation of buried chemical piping above the large diameter treated water piping. The chemical piping, which includes hydrogen peroxide and phosphoric acid piping, is required for proper operation of the BAF and must be installed with heat tracing for freeze protection of these small chemical piping runs. During design of the chemical piping runs in Project No. 251, the timing of installation of this piping and the potential conflict between the two contracts was realized by the design engineer and the NTMWD staff. A decision was made to include a portion of the piping and heat tracing in Project No. 251, with the remaining piping runs and heat tracing completed through a change order to McCarthy on Project No. 153. In this manner, all work in the area would be performed by McCarthy.

Carollo prepared a change order for McCarthy, which included chemical piping runs and heat tracing. McCarthy submitted a price for the work that was approximately twice Carollo's opinion of probable construction cost. McCarthy was behind schedule with the construction of the WTP IV ozone contactor, and the construction of this chemical piping would further add construction time to McCarthy's already late completion date. As the Board has been made aware, McCarthy is now claiming numerous changes to their scope as a basis for a claim for additional costs, and adding this work to McCarthy's scope would exacerbate the situation with McCarthy. Therefore, NTMWD and Carollo reevaluated the approach, and requested AWC to perform a portion of the required work through change order on Project No. 251.

AWC submitted a cost of $19,841, which will include additional circuit breakers, silicon controller rectifiers, and a larger electrical panel to control eight additional heat trace circuits or loops. The additional heat trace circuits will power heat tracing for chemical piping to be included in a future change order. NTMWD staff will bring the cost of the additional chemical piping, insulation, and heat trace to the Board for its consideration at a later date.
SUMMARY OF CHANGE ORDER NO. 5

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Amount</th>
<th>Days to Substantial Completion</th>
<th>Days to Final Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hydrogen Peroxide Injection Manhole</td>
<td>$7,476</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>Additions to Heat Trace Control Panel</td>
<td>19,841</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>$27,317</td>
<td>0</td>
<td>0</td>
</tr>
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</table>

SUMMARY OF ADJUSTMENTS TO CONTRACT

<table>
<thead>
<tr>
<th>Description</th>
<th>Contract Amount</th>
<th>Days to Substantial Completion</th>
<th>Days to Final Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Contract</td>
<td>$5,364,550</td>
<td>550</td>
<td>640</td>
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<td>C.O. No. 1</td>
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<tr>
<td>C.O. No. 2</td>
<td>111,725</td>
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<td>0</td>
</tr>
<tr>
<td>C.O. No. 3</td>
<td>138,988</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>C.O. No. 4</td>
<td>21,308</td>
<td>120</td>
<td>120</td>
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<tr>
<td>Proposed C.O. No. 5</td>
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<td>0</td>
</tr>
<tr>
<td>Revised Contract Amount</td>
<td>$5,721,703</td>
<td>670</td>
<td>760</td>
</tr>
</tbody>
</table>

FUNDING

Additional funding in the amount of $27,317 for Change Order No. 5 is to be made available in the Regional Water System 2009D Construction Fund.

RECOMMENDATION

It is the recommendation of the Executive Director, NTMWD staff, and Carollo Engineers that the Board of Directors approve Change Order No. 5 for an increase of $27,317, resulting in a revised contract amount of $5,721,703 for Project No. 251, Water Treatment Plant IV Conversion to Biologically Active Filtration. The final completion date for this project remains April 28, 2014. This will be an item on the regular agenda of the January 2014 Board meeting.
This administrative memorandum is for the Board of Directors consideration of Change Order No. 3 for Project No. 277, Water Treatment Plant III Filter Underdrain Improvements and Conversion to Biologically Active Filters, for a net increase of $69,072.15, resulting in a revised contract amount of $6,679,193.71.

REVIEW

In January 2012, the Board approved Administrative Memorandum No. 3752, which authorized Carollo Engineers (Carollo) to prepare plans and specifications for this project. This project is the third phase of a three-phased program to repair and replace underdrain blocks in all 40 filters at WTP III. The original scope of this project included improvements to the remaining 20 filters at WTP III.

NTMWD staff later added WTP III Filter No. 26 and WTP II Filter No. 21 improvements to the project scope. WTP III Filter No. 26 and WTP II Filter No. 21 both have structural issues that were evaluated and approved for repair through previous change orders in Project No. 226. However, due to shutdown conflicts with ongoing WTP construction projects, the repairs were unable to be completed in these two filters. Therefore, the revised Project No. 277 scope will repair and replace the underdrain blocks in Filter Nos. 1 through 10, 26, and 31 through 40 at WTP III, and Filter No. 21 at WTP II.

In December 2012, the Board approved Administrative Memorandum No. 3899 for Project No. 277, which presented a tabulation of bids and recommended award of the construction contract to Archer Western Construction, LLC, (Archer Western) in the amount of $6,452,461.

In May 2013, the Board approved Administrative Memorandum No. 3995 for Change Order No. 1 which consisted of one item on the referenced project for a net increase in contract price of $104,527.71 to apply concrete surface to the filter flumes.

In December 2013, the Board approved Administrative Memorandum No. 4103 for Change Order No. 2, which consisted of two items on the referenced project for a net increase in contract price of $53,132.85 to repair the contraction joints in nine filters and to repair the deteriorated concrete around the troughs in the gullet walls.
CHANGE ORDER NO. 3

Change Order No. 3 consists of three items on the referenced project for a net increase in contract price of $69,072.15. The NTMWD Engineering staff and Carollo reviewed these items and recommend them as necessary and reasonable.

Item No. 1 – Dispose of Excess Anthracite  $38,640

During the planning phase of this project, it was planned to retain the used anthracite (filter media removed from the filters prior to performing the improvements) for potential future use. Based on the number of filter rehab projects currently underway and the amount of anthracite currently on site, the NTMWD staff has reevaluated the need for the used filter media. Three issues exist with retaining this material: 1) lack of space for storage; 2) the uniformity coefficient, which is a technical measurement of the size of the individual particles, is affected by prolonged use; and, 3) the uniformity coefficient that is currently specified for anthracite has changed since original installation. Therefore, in order for this material to be used, testing would be required to determine the current uniformity coefficient and its acceptability for use in the filter. The current project scope does not include disposal of this material, which was intended to be stored onsite in large polypropylene storage bags. These bags deteriorate in a relatively short time (approximately 12-18 months) and some have begun to leak, which causes more difficulty in disposal. Space has become limited and there is an excess of this used filter media. It is recommended to dispose of the used filter media offsite. The contractor has provided a cost of $460 per truckload, which includes all work necessary to remove the material. Eighty-four truckloads of excess filter media are anticipated for a total increase in the contract amount of $38,640.

Item No. 2 – Repair Undermined Area Under Filter No. 21  $2,133.54

A structural issue in Filter No. 21 at WTP II is being addressed to eliminate a leaking construction joint in the concrete floor. The leaking joint in the bottom of the filter has created a void under the floor of Filter Nos. 20 and 21. A request for information was submitted to Carollo, and the consulting engineer responded with a directive for the contractor to remove the debris from the void and fill it with flowable fill. The contractor has provided a proposed total cost of $2,133.54 to complete the repair to provide proper support beneath the filter floor.

Item No. 3 – Remove, Repair, and Reinstall Wash Water Valves  $28,298.61

During removal of the filter media in Filter Nos. 1 and 3, the contractor found that the filter would fill with water unexpectedly due to the backwashing of other filters. It was determined that the source of the water was due to a leaking valve in each of these filters. NTMWD Technical Services personnel adjusted the wash water valves; however, this did not stop the water from entering the filter. The contractor removed the valves and installed blind flanges at the request of NTMWD in order to stop the leakage and allow work to continue inside the filters until the valves were repaired and ready for installation. NTMWD's Technical Services personnel inspected both valves and
determined that the valves are not worth repairing. Two 30-inch valves previously reconditioned by Technical Services personnel were provided to the contractor for use at these two filters. The contractor will install these repaired valves in place of the leaking valves for a total cost of $28,298.61. It is anticipated the wash water valves on additional filters may have a similar leakage problem and will cost $14,149.31 per filter. NTMWD is currently investigating to determine if valves are leaking on other filters in order to repair them prior to the demand increase in the spring. If additional valve repairs are needed, a request for additional funding will be presented to the Board at the appropriate time.

**SUMMARY OF CHANGE ORDER NO. 3**

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dispose of Excess Anthracite</td>
<td>$38,640.00</td>
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<tr>
<td>2</td>
<td>Repair Undermined Area Under Filter No. 21</td>
<td>2,133.54</td>
</tr>
<tr>
<td>3</td>
<td>Remove, Repair, and Reinstall Wash Water Valves</td>
<td>28,298.61</td>
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<td></td>
<td>Proposed C.O. Amount</td>
<td>$69,072.15</td>
</tr>
</tbody>
</table>

**SUMMARY OF ADJUSTMENTS TO CONTRACT**

<table>
<thead>
<tr>
<th>Description</th>
<th>Contract Amount</th>
<th>Days to Substantial Completion</th>
<th>Days to Final Completion</th>
</tr>
</thead>
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<tr>
<td>Original Contract</td>
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<td>975</td>
<td>1035</td>
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<tr>
<td>C.O. No. 1</td>
<td>104,527.71</td>
<td>31</td>
<td>31</td>
</tr>
<tr>
<td>C.O. No. 2</td>
<td>53,132.85</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Proposed C.O. No. 3</td>
<td>69,072.15</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Revised Contract Amount</td>
<td>$6,679,193.71</td>
<td>1006</td>
<td>1066</td>
</tr>
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</table>

**FUNDING**

Additional funding in the amount of $69,072.15 for Change Order No. 3 is to be made available in the Regional Water System 2009D Construction Fund.

**RECOMMENDATION**

It is the recommendation of the Executive Director, NTMWD staff, and Carollo Engineers that the Board of Directors approve Change Order No. 3 for the Water Treatment Plant III Filter Underdrain Improvements and Conversion to Biologically Active Filters, Project No. 277, for an increase in the amount of $69,072.15, resulting in a revised contract amount of $6,679,193.71. This will be an item on the regular agenda of the January 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

JANUARY 2014

ADMINISTRATIVE MEMORANDUM NO. 4118

REGIONAL WATER SYSTEM
BONHAM WATER TREATMENT PLANT
SLUDGE LAGOON IMPROVEMENTS
PROJECT NO. 293

CHANGE ORDER NO. 1

This administrative memorandum is for the Board of Directors consideration of Change Order No. 1 for a net increase of $171,098, resulting in a revised contract amount of $2,970,778 for the Bonham Water Treatment Plant (WTP) Sludge Lagoon Improvements, Project No. 293.

REVIEW

Residuals from the treatment process at the Bonham WTP (sludge from the sedimentation basins and filter backwash water) are routed to a sludge lagoon to decant excess water and to dewater the solids. Decanted liquid from this lagoon is returned to the head of the treatment plant. Solids accumulate in the lagoon until it is full, at which time the lagoon will be taken offline, allowed to dry, and the solids removed. When the Bonham WTP was constructed, one sludge lagoon was constructed with the intention of constructing a second sludge lagoon in the future. The purpose of the second lagoon is to provide volume for residuals dewatering while the first lagoon is removed from service for cleaning. The original Bonham WTP had two small lagoons, which were used by the City of Bonham prior to NTMWD constructing and operating the existing treatment plant. As described in July 2006, Administrative Memorandum No. 2904, the two original lagoons including the reclaim water pump station were not adequate for use with the new treatment plant.

In August 2012, the Board approved Administrative Memorandum No. 3837, which authorized the Executive Director to execute an engineering services agreement with Black and Veatch Corporation (B&V) for design of this project in the amount of $164,400. In December 2012, the Board approved Consent Agenda Item No. 12-12-04 for additional engineering services in the amount of $11,515 for surveying and the design of a polymer feed system for the geotube dewatering system.

In July 2013, the Board approved Consent Agenda Item No. 13-07-04 for additional engineering services by B&V in the amount of $23,981 to increase the footprint of the lagoon to maximize the capacity, add a decant valve vault, make modifications to the decant pump station, reroute the 24-inch sludge pipeline, add flexible base ramps to the geotube areas to provide improved access, and add a chemical line to allow feeding sodium hypochlorite directly into the manganese contactor influent.
SCOPE OF PROJECT

This project includes the construction of a new, or second, sludge lagoon with an earthen embankment, which will be located approximately on the same footprint as the two original City of Bonham lagoons. The lagoon layout has been designed to accommodate the use of a geotube for sludge capture and dewatering. Decant water from the lagoon will be returned to the head of the plant. Once the residuals have reached their maximum practical dryness, the geotube will be split open and the dewatered solids removed for disposal. The project includes a decant pump station with the associated electrical and instrumentation devices to pump decant water to the existing manganese contactors.

In March 2013, the Board approved Administrative Memorandum No. 3956 awarding the construction contract in the amount of $2,799,680 to Harrison, Walker & Harper, LP, We Build Division (HW&H), for services associated with the Bonham WTP Sludge Lagoon Improvements, Project No. 293. As stated above, the primary purpose of the second lagoon is to provide volume for residuals dewatering while the first lagoon is removed from service for cleaning. An additional benefit of this installation is to provide for reduction of manganese levels, which concentrate in the sludge lagoons, prior to return of this flow to the head of the plant. The project includes improvements to the backwashing capabilities of the existing manganese contactors. Also included is the cleaning of the two original City of Bonham sludge lagoons prior to construction of the new lagoon.

CHANGE ORDER NO. 1

Change Order No. 1 consists of two items on the referenced project for a net increase in contract price of $171,098. The NTMWD Engineering staff and B&V reviewed these items and recommend them as necessary and reasonable.

Item No. 1 – Additional Volume of Sludge Removed from Original Lagoons

$158,829

As stated above, the project includes removal and offsite disposal of sludge from the two original City of Bonham sludge lagoons. An estimated volume of 36,000 cubic yards of sludge was used in the contract documents. This quantity was based on pre-construction survey information and the record drawings of the original lagoons. Based on this quantity of 36,000 cubic yards, the contractor prepared a schedule of values using $33 per cubic yard for a total removal and disposal cost of $1,188,000.

The total volume of sludge actually removed for disposal was determined to be 40,813 cubic yards. B&V and NTMWD staff determined the volume of sludge actually removed from the lagoons based on: 1) the difference between pre-construction survey and post removal survey of the lagoon bottom elevation; and, 2) the number of trips made by the sludge hauling trucks. The contractor is in agreement with the final total volume proposed herein for approval.
In order to completely remove all sludge from each existing lagoon, additional excavation was required beyond the elevations shown on the original record drawings. The difference between the lagoon bottom elevation as shown on the record drawings and the final excavated lagoon bottom elevation is shown in the table below:

<table>
<thead>
<tr>
<th>Lagoon Number</th>
<th>Lagoon Bottom Elevation as shown on the Record Drawings</th>
<th>Lagoon Bottom Elevation as determined by Survey after Sludge Removal</th>
<th>Difference in Elevation</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. 1</td>
<td>581.00 ft.</td>
<td>578.58 ft.</td>
<td>2.42 ft.</td>
</tr>
<tr>
<td>No. 2</td>
<td>567.50 ft.</td>
<td>565.62 ft.</td>
<td>1.88 ft.</td>
</tr>
</tbody>
</table>

The difference between the contract estimated quantity of sludge to be removed (36,000 cubic yards) and the actual quantity of sludge removed (40,813 cubic yards) is 4,813 cubic yards. Using the unit cost per cubic yard of sludge removal ($33 per cubic yard) times the additional quantity removed (4,813 cubic yards) results in an additional cost of $158,829. It is the recommendation of NTMWD staff and B&V that this additional cost should be approved. The contractor has not asked for any additional contract time.

**Item No. 2 - Change Elevation of Six-Inch Drain Pipe**

$12,269

As the contractor was excavating the existing 24-inch sludge pipeline in the location of the connection for the new 24-inch sludge pipeline, an elevation discrepancy was discovered as compared to the record drawings. This resulted in a conflict between the proposed new 24-inch sludge pipeline and an existing six-inch drain pipe. An evaluation by B&V and NTMWD staff concluded that the most efficient and cost-effective solution was to raise a section of the existing six-inch drain pipe including the two six-inch penetrations into a nearby manhole. The additional work includes: 1) removing approximately 90 feet of six-inch drain pipe and relaying the pipe at a higher elevation; 2) installing new pipe embedment materials; 3) providing and installing four six-inch elbows to affect the revised elevation; 4) coring an existing manhole in two locations at the revised flow line elevation of the six-inch drain pipe; and, 5) filling the manhole with flowable fill concrete to the revised flow line elevation.

**SUMMARY OF CHANGE ORDER NO. 1**

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Cost</th>
<th>Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Additional Volume of Sludge Removed from Original Lagoons</td>
<td>$158,829</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>Change Elevation of 6-in Drain Pipe</td>
<td>12,269</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>$171,098</td>
<td>0</td>
</tr>
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</table>
SUMMARY OF ADJUSTMENTS TO CONTRACT

<table>
<thead>
<tr>
<th>Description</th>
<th>Contract Amount</th>
<th>Days to Substantial Completion</th>
<th>Days to Final Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Contract</td>
<td>$2,799,680</td>
<td>300</td>
<td>330</td>
</tr>
<tr>
<td>Proposed C.O. No. 1</td>
<td>$171,098</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Revised Contract Amount</td>
<td>$2,970,778</td>
<td>300</td>
<td>330</td>
</tr>
</tbody>
</table>

FUNDING

Additional funding in the amount of $171,098 for Change Order No. 1 is to be made available in the Regional Water System Capital Improvement Fund.

RECOMMENDATION

It is the recommendation of the Executive Director, NTMWD staff, and Black & Veatch Corporation that the Board of Directors approve Change Order No. 1 for a net increase in the amount of $171,098, resulting in a revised contract amount of $2,970,778 for the Bonham Water Treatment Plant Sludge Lagoon Improvements, Project No. 293. This will be an item on the regular agenda of the January 2014 Board meeting.
This administrative memorandum is for the Board of Directors consideration of a tabulation of bids and recommendation to award a construction contract to Great Basin Environmental, Inc., (Great Basin) in the amount of $298,907.78 for the 121 Regional Disposal Facility (121 RDF) Sector 4A Liner Material Purchase/Install, Project No. ENG 13-3B. Given this project was budgeted in the fiscal year 2013-2014 operation budget, the recommended award amount is less than the budgeted amount, and the time sensitive nature of the project, this administrative memorandum is additionally requesting the Executive Director be authorized to execute the construction agreement once all acceptable documents are provided to the North Texas Municipal Water District.

REVIEW

The 121 RDF permit requires the installation of a liner system to collect liquids and rainfall that percolate through the waste mass (leachate) to prevent any impact to subsurface water. The 121 RDF liner system consists of a minimum two-foot thick recomposted clay layer overlain by a high density polyethylene (HDPE) geomembrane, overlain by a HDPE drainage geocomposite that conveys collected leachate to the leachate collection system. The geocomposite is overlain by a minimum two-foot thick soil protective cover layer designed to protect the geocomposite and geomembrane from damage due to waste placed above it. The leachate collection system conveys leachate via a system of pipes surrounded by a stone envelope (referred to as a "chimney") to a centralized collection point where it is either evaporated or recirculated onto the working face.

In July 2013, the Executive Director executed an engineering services agreement with Biggs and Mathews Consulting Engineers (Biggs and Mathews) for the design of 121 RDF Sector 4A Liner Material Purchase/Install, Project No. ENG 13-3B. Biggs and Mathews completed the design and the project was advertised for bid in December 2013.

SCOPE OF WORK

This project includes the supply and installation of approximately 7.9 acres of HDPE geomembrane overlain by a HDPE drainage geocomposite over the prepared clay layer covering the entire floor of the 121 RDF, Sector 4A. NTMWD staff will present a
recommendation to award the installation of the remaining components of the liner system under a separate contract at the January 2014 Board of Directors meeting. The liner installation is scheduled to begin in March 2014 after Board approval.

TABULATION OF BIDS

Sealed bids were received at 10:30 a.m. on Tuesday, January 7, 2014, and are tabulated as follows:

<table>
<thead>
<tr>
<th>Contractor</th>
<th>Bid Amount</th>
<th>Time to Complete (Work Days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Great Basin Environmental, Inc.</td>
<td>$298,907.78</td>
<td>15</td>
</tr>
<tr>
<td>Lone Star Lining Company</td>
<td>$305,560.45</td>
<td>27</td>
</tr>
<tr>
<td>Environmental Specialties International, Inc.</td>
<td>$307,600.00</td>
<td>9</td>
</tr>
<tr>
<td>International Lining Technologies</td>
<td>$311,796.00</td>
<td>7</td>
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<tr>
<td>Texas Environmental Plastics</td>
<td>$316,140.63</td>
<td>8</td>
</tr>
<tr>
<td>Clean Air &amp; Water Systems</td>
<td>$316,776.00</td>
<td>21</td>
</tr>
<tr>
<td>Falcon Environmental Lining Company</td>
<td>$327,491.25</td>
<td>12</td>
</tr>
<tr>
<td>Comanco Environmental Corporation</td>
<td>$339,000.00</td>
<td>60</td>
</tr>
</tbody>
</table>

The engineer's estimate of probable construction cost was $327,860. Biggs and Mathews reviewed the bids for completeness and conformance with the specifications. The lowest bid was submitted by Great Basin in the amount of $298,907.78.

Great Basin was founded in 2003 as a geosynthetic liner installation company specializing in municipal landfill applications. Great Basin employs approximately 20 liner installation crews from their main offices located in Hemiston, Oregon, and installs an average of 462 acres of geomembrane liner material annually. Based on the information provided and reports by the supplied references, it is the opinion of the Executive Director, NTMWD staff, and Biggs and Mathews that Great Basin Environmental, Inc., has the capability to successfully complete the project.

FUNDING

Funding in the amount of $298,907.78 for this project is available in the Regional Solid Waste System 2013-14 Operating Budget Account 401-5523-54151 Landfill Development Cost-Contract.
RECOMMENDATION

It is the recommendation of the Executive Director, NTMWD staff, and Biggs and Mathews Consulting Engineers that the Board of Directors authorize award of a construction contract to Great Basin Environmental, Inc., in the amount of $298,907.78 for the 121 Regional Disposal Facility Sector 4A Liner Material Purchase/Install, Project No. ENG 13-3B, and authorize the Executive Director to execute the construction agreement with Great Basin Environmental, Inc., once the contractor provides all necessary documents to facilitate the execution of the agreement. This will be an item on the regular agenda of the January 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

JANUARY 2014

ADMINISTRATIVE MEMORANDUM NO. 4120

REGIONAL WATER SYSTEM
LAVON LAKE RAW WATER PUMP STATIONS
INTAKE CHANNEL IMPROVEMENTS
FINAL ENGINEERING
PROJECT NO. 350

ENGINEERING SERVICES AGREEMENT

This administrative memorandum requests that the Board of Directors authorize the Executive Director to execute an engineering services agreement with Freese and Nichols, Inc., (FNI) to provide professional services associated with design and construction management services for the Lavon Lake Raw Water Pump Stations (RWPSs) Intake Channel Improvements, Final Engineering, Project No. 350. The engineering services agreement would be in accordance with the standard NTMWD agreement with a not-to-exceed amount of $388,000.

BACKGROUND

The purpose of this administrative memorandum is to describe the condition of intake channels feeding the RWPSs in Lavon Lake and recommend preliminary engineering services to further assess the condition and develop recommendations for consideration of dredging of the intake channels feeding RWPS Nos. 2 and 3.

The attached drawing shows three RWPSs located on Lavon Lake that feed raw water into the four water treatment plants at the Wylie site. The following table provides additional information on each of the RWPSs:

<table>
<thead>
<tr>
<th>RWPS</th>
<th>Existing Firm Capacity (MGD)</th>
<th>Initial Construction Date</th>
<th>Minimum Lake Level * Req'd for Pump Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>70</td>
<td>1956</td>
<td>453</td>
</tr>
<tr>
<td>2</td>
<td>260</td>
<td>1971</td>
<td>453</td>
</tr>
<tr>
<td>3</td>
<td>535</td>
<td>1995</td>
<td>465</td>
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</tbody>
</table>

* The level provided is the lowest elevation of the lake at which the respective pump stations will operate. For example, for RWPS Nos. 1 and 2, the pumps will operate down to a lake elevation of 453 mean sea level (MSL), at which point the pumps can no longer operate hydraulically. (All elevations provided in this administrative memorandum are expressed in MSL.)

Each of the RWPSs was constructed with an intake channel that feeds an intake structure for each respective pump station. Provided the intake channel is in its original condition, the raw water pump stations are capable of accessing the available raw water
in Lavon Lake down to the minimum lake levels required for pump operation, as noted above. However, over time, silt can build up in the channel and cut off access to water otherwise available for use by NTMWD.

In 2006, a survey by NTMWD staff showed a depth of silt in the intake channel from RWPS No. 2 ranging from approximately five feet deep at the end of the intake channel to 20 feet deep near the pump station. The survey indicated the siltation in RWPS No. 3 is similar. The silt had built up to an elevation of approximately 469 feet to 470 feet, which is significantly higher than the minimum lake level required for pump operation shown above and could prevent water from reaching the RWPSs, thereby, limiting the use of RWPS No. 2 and RWPS No. 3 if the lake dropped to those levels. The elevation of Lavon Lake as of mid-January 2014 is approximately 479.75, just over twelve (12) feet below normal conservation pool level of 492.

The inability to utilize these two pump stations below approximate elevation 470 feet prevents access to approximately 86,000 acre-feet of water from those pump stations, which equates to approximately 20% of NTMWD’s storage volume. Although silt is not limiting access to water feeding RWPS No.1, that station has the lowest capacity of the three pump stations and does not have the ability to meet even the minimum day demand of the system of 130 MGD to 150 MGD. Therefore, access to water between the elevation of 453 feet and 470 feet at RWPS No. 2 and between the elevation of 465 feet and 470 feet at RWPS No. 3 would be critical in the event the lake level dropped into this operating range.

REVIEW

In June 2013, by Administrative Memorandum No. 4024, the Board authorized the Executive Director to execute an engineering services agreement with FNI for preliminary engineering services for the Lavon Lake RWPS Intake Channel Improvements. The purpose of the preliminary engineering services was to conduct a feasibility analysis and prepare a final report that included an evaluation of dredging and the volume of additional water that could be obtained by implementing a maintenance dredging project. Maintenance dredging consists of removing silt accumulation that has deposited in the previously excavated intake channel but not cutting into previously undisturbed earth. A report summarizing the preliminary engineering effort is nearing completion that recommends an immediate benefit will be gained from dredging of the intake channels for RWPS Nos. 2 and 3. Due to the current low water levels within Lavon Lake, there is a need to proceed from the feasibility analysis to final engineering services.

SCOPE OF SERVICES

NTMWD requested FNI submit a proposal to provide the following scope of services for the Lavon Lake RWPS Intake Channel Improvements, Final Engineering.
ADMINISTRATIVE MEMORANDUM NO. 4120
PAGE 3

The services will include three major tasks:

1. Provide services for the preparation and submittal of environmental permitting documents including a United States Army Corp of Engineers (USACE) Section 404 Letter of Permission (LOP) permit application and information necessary to obtain a temporary construction license.

2. Prepare construction contract documents for maintenance dredging of the intakes at RWPS No. 2 and RWPS No. 3.

3. Provide bid and construction phase services for the project.

PROPOSED SCOPE OF PROJECT

The proposed construction phase of this project will include dredging of the intake channels of RWPS No. 2 and RWPS No. 3 and will include maintenance dredging only (removal of sediments accumulated since the initial construction of the two intakes). The length of intake channel dredging will be approximately 1,500 linear feet for RWPS No. 2 and 2,500 linear feet for RWPS No. 3. The dredged material will be pumped to a nearby disposal site. The disposal site location has not been selected at this time. It is recommended that disposal will occur on property controlled by the NTMWD. This may be property currently owned by the NTMWD or new properties that may be leased or purchased for this project. When the preferred site is selected, the NTMWD staff will present a recommendation to the Board of Directors for consideration.

A pipeline will be constructed to transport the dredged materials to the disposal site. A return water pipeline will also be constructed to discharge water back into Lavon Lake. The return water pipeline may parallel the dredge pipeline for much of the route. Both of these pipelines are considered temporary and will generally be constructed on top of the ground except for road crossings. A single dredge launch and removal location will be identified and developed for environmental permitting and inclusion in the construction documents. The launch location is assumed to be either the dry lake bed adjacent to RWPS No. 3 or boat ramp(s) at the USACE East Fork Park. Selection of the preferred launch site will require further coordination between the Consulting Engineer, NTMWD, and USACE. The improvements for the launch site may be temporary or permanent depending on the site.

The engineer’s opinion of probable construction cost for this project is $2,007,700. This does not include any property costs, which will be presented to the Board in the future for consideration.

ENGINEERING SERVICES FEE

FN1 has submitted a cost proposal based on the scope of services described above for basic services in the not-to-exceed amount of $316,000. Included in the basic services are: 1) final design, bid phase, and construction phase services in the amount of
$182,000; 2) environmental permitting services in the amount of $80,000; and, 3) construction progress payment surveying (monthly underwater survey of the work area to verify actual dredged quantities) in the amount of $54,000. FNI has submitted a proposal for special services in the not-to-exceed amount of $72,000. Included in the special services are surveying services and preparation of temporary easements for up to 15 properties in the amount of $60,000. Also included in the special services is the cost of a commercial diving firm to perform an underwater investigation of the RWPS No. 2 intake structure and surrounding area in the amount of $12,000. The cost to perform an underwater investigation of the RWPS No. 3 intake structure has been previously authorized by the Board by Administrative Memorandum No. 3947 as part of Project No. 321, Expansion of RWPS No. 3 to 620 MGD.

The total proposed not-to-exceed amount being requested for final engineering services is $388,000. The NTMWD staff has reviewed the engineering fees submitted by FNI and believes them to be fair and reasonable for the work associated with this project. These fees are within the guidelines of the Consulting Engineer’s Council for this type of work. The services will be performed in accordance with the standard engineering services agreement.

**FUNDING**

Funding in the amount of $388,000 for this project is to be made available from the Regional Water System Contingency Fund. This fund currently has a balance of $23.2 million.

**RECOMMENDATION**

It is the recommendation of the Executive Director and NTMWD staff that the Board of Directors authorize the Executive Director to execute an engineering services agreement with Freese and Nichols, Inc., for professional services associated with design and construction management for the Lavon Lake Raw Water Pump Stations Intake Channel Improvements Final Engineering, Project No. 350, in the not-to-exceed amount of $388,000. This will be an item on the regular agenda of the January 2014 Board meeting.
NORTH TEXAS MUNICIPAL WATER DISTRICT

JANUARY 2014

ADMINISTRATIVE MEMORANDUM NO. 4121

EAST FORK RAW WATER SUPPLY PROJECT DIVERSION PUMP STATION
COMPROMISE, SETTLEMENT AGREEMENT AND RELEASE
FOR REPAIR OF VERTICAL TURBINE PUMPS AT STATION

This administrative memorandum is to request the Board of Directors authorize the Executive Director to execute a Compromise, Settlement Agreement and Release between the NTMWD, Freese and Nichols, Inc. (FNI), Eagle Contracting, L.P. (Eagle), and Smith Pump Company (Smith Pump) for repair of the four vertical turbine pumps at the East Fork Raw Water Supply Project (Wetland) Diversion Pump Station. The agreement will provide funding from Smith Pump and FNI in the amount of $522,075 for repairs to the pumps within 30 days of the execution of this agreement.

BACKGROUND

In July 2004, Administrative Memorandum No. 2657 requested the Board authorize the Wetland to provide additional raw water supply and authorize the execution of an engineering agreement with Alan Plummer Associates, Inc. (APAI) in the amount of $15,214,000. The project consisted of constructing a facility to divert water from the East Fork Trinity River into the Wetland for treatment. The Wetland would consist of approximately 2,000 acres of land. The effluent from the Wetland treatment system would convey through a pipeline approximately 41 miles in length to Lake Lavon. Two pump stations were included in this project. The Diversion Pump Station would take water from the East Fork and pump into the Wetland. The second station was the Conveyance Pump Station that would take water from the Wetland and pump to Lake Lavon. The two pump stations on this project were designed by FNI as a subcontractor to APAI.

A contract was issued to Eagle in 2006 in the amount of $11,971,913 for the Diversion Pump Station. Four vertical turbine pumps were installed as part of this project to transfer the water from the East Fork of the Trinity River. Two of the pumps were 24 MGD adjustable frequency drive speed pumps and the other two were 48 MGD constant speed pumps. The pump station was complete in January 2009.

In August of 2009, the NTMWD began to notice that the pumps were experiencing excessive vibration. Pump No. 1 (DP-1) was taken out of service and was removed by Smith Pump with assistance from the NTMWD and transported to their shop for analysis of the vibration. In November of 2009, Pump No. 4 (DP-4) was taken out of service and transported to Smith Pump also for excessive vibration. With both pumps experiencing similar problems, it was believed that the other two pumps would experience the same problems.
On April 13, 2010, a meeting was held at the NTMWD administrative offices to discuss causes for the failures. An agreement was reached with Smith Pump that they would immediately commence with the repair of DP-1 and DP-4. Smith Pump would be responsible for the cost to repair these two pumps. Upon completion of repairs to Pump DP-1 and DP-4 and the two pumps placed back in service, then DP-3 and DP-2 would be removed for repair. The NTMWD agreed that the cost associated with the repair of DP-3 and DP-2, up to a total of $94,597, would be paid for by the NTMWD.

Upon tear down and examination of the four pumps, the failure was due to the column line shafts experiencing one-sided wear. Smith Pump proposed that to correct this problem, two modifications needed to be made to the pumps. First, the existing bearing would be replaced with a bronze-backed rubber bearing, which is more tolerant of abrasion and grit than the pump may experience during wet weather events. Second, to prevent premature bearing wear, a pre-lube system would be installed by the NTMWD to lubricate the column bearings before the startup of each pump. The timeline to repair the pumps was approximately six weeks after the pumps were in the Smith Pump shop, which is located in Waco, Texas. All pumps were back in service by May 2010.

In February 2012, the Diversion Pump Station again had to be taken off line. At the intake structure, there are four large screens that prevent debris from the river being pulled in by the pump suctions, which could damage the pumps. These screens are large, 15 ft. by 15 ft., but are in two equal sections. Water flows from the river through a 72-inch diameter pipeline that is approximately 550 feet long before entering the pump station. During a wet weather event and the river at a high level, one of the screens was dislodged from the structure. Debris entered the pipeline and flowed to the pumps causing DP-1 to trip off line due to excessive vibration.

Before the station could be placed back in service, the missing intake screen had to be reinstalled, the 72-inch pipeline cleaned and each pump removed, and the pump cans cleaned of all debris. This project involved the NTMWD personnel, as well as other contractors, to assist in the repair. The NTMWD employed Archer Western Contractors to assist in pulling the four pumps. Upon examination of the pumps it was observed that each of the pumps was again experiencing the one-side line shaft wear that was observed in 2009. DP-1 was transported to Wylie to determine the cause of the wear. The other three pumps showed less wear and were returned to service to allow the NTMWD to capture the available water per our water rights permit.

In March 2012, the NTMWD contacted Smith Pump to notify them of the pump failure and that DP-1 was out of service and had been transported to the Wylie Water Plant with the same one-sided line shaft wear. Smith Pump representatives met on site at the Wylie Water Plant to view DP-1. Smith Pump representatives recommended additional testing to be performed at the pump station on the remaining three pumps to determine if the line shafts were not aligned correctly, thus, causing the one-sided line shaft wear. The testing procedure was inconclusive in the cause of the failure. Based on this testing, Smith Pump did not have a known cause of the failure or recommend a repair
method, which would provide the NTMWD the service life on the pumps that was expected.

Over the course of the next few months, the NTMWD contacted several pump repair shops and FNI, the design engineer, to examine the pump and provide a cause of the failure. The NTMWD requested that the manufacturer of the pumps, Fairbanks Morse, visit Wylie to provide a recommendation. Each company that visited the site had their opinion on the probable cause but would not guarantee a repair method that the NTMWD staff felt would provide a minimum 10 to 15-year service life. The costs for the recommended repairs were in the $125,000 range for each pump with no more than the standard one-year warranty.

With Smith Pump being unresponsive to providing the NTMWD with a solution to repairing the pumps, the NTMWD hired the firm of Saunders and Walsh to provide legal representation. A recommendation was made by Mark Walsh to hire a consultant to provide an independent analysis of the pump. David Hullender, Ph.D., P.E. was hired to determine the cause of the failure. In his report dates January 28, 2013, he states, “However, this location of the wear tends to indicate that there is a lateral imbalance on that side of the shaft forcing the shaft against the bearing or there is a non-uniform bending stiffness associated this method of coupling that allows more flexure associated with that direction.”

Based on the findings from the independent report, a meeting was held with and representatives from Smith Pump and their legal counsel, FNI and their counsel, NTMWD, and Mark Walsh to discuss the issue and provide a solution for the repair of the pumps.

In March 2013, a letter was sent by Mark Walsh requesting the immediate payment of compensation for the 2010 repairs and the immediate replacement of all four (4) pump shafts and all bearings destroyed by the defective pump shafts at no cost to NTMWD.

On May 14, 2013, a meeting was held with all parties to discuss their response to the March 2013 letter. It was a general discussion with all parties, but it was apparent from Smith Pump representatives that they believed they were not responsible for any damages per their standard warranty, which covers defective workmanship or materials. The NTMWD's legal counsel stated that per the design specification that the NTMWD should have been provided, a product that was capable of pumping river water with a service life of greater than the current two years the NTMWD was experiencing from the existing pumps.

After months of reviewing the proposed repair options, NTMWD staff believes that by inclosing the line shaft, lubricating the bearings with food grade oil, and doubling the number of bearings on the line shafts that a reasonable service life will be experienced. However, the NTMWD staff proposes before the end of the two-year warranty period that one pump be pulled and examined for excessive wear. The NTMWD will bear the total cost for pulling the pumps.
Attached is a settlement agreement that was agreed upon by all parties. The primary issue that had to be negotiated was the repair cost and the warranty the NTMWD would receive. The NTMWD staff and legal counsel believed that the NTMWD should be totally compensated for the total cost for the pump repairs. The other item was rather than a standard one-year warranty that a two-year warranty be provided for the one-sided line shaft wear. These two items were nonnegotiable as far as the NTMWD staff was concerned.

On December 5, 2013, the final agreement was provided for approval by all parties. The repair work will be done by the pump manufacturer, Fairbanks Morse, with assistance from their local pump shop rather than Smith Pump. Funding for the repair will be provided by Smith Pump and FNI. The NTMWD will receive $522,075 for repairs to the pumps within 30 days of the execution of this agreement. Payment to Fairbanks Morse will be made as each pump is repaired and returned to service.

RECOMMENDATION

It is the recommendation of the Executive Director and NTMWD staff that the Board of Directors authorize the Executive Director to execute the Compromise, Settlement Agreement and Release in the amount of $522,075 for repairs to the four vertical turbine pumps at the Diversion Pump Station. This will be an item on the regular agenda of the January 2014 Board meeting.
This Compromise, Settlement Agreement and Release (the Agreement) is hereby entered into by and between the North Texas Municipal Water District (hereinafter referred to as NTMWD), Freese and Nichols, Inc. (hereinafter referred to as FNI), Eagle Contracting, LP (hereinafter referred to as Eagle) and Smith Pump Company, Inc. (hereinafter referred to as Smith Pump), (with NTMWD, FNI, Eagle, and Smith Pump hereinafter referred to as the Parties).

WHEREAS, FNI, an engineering firm entered into an engineering design services contract with NTMWD which, in part included providing engineering design services for a diversion pump station which included four vertical turbine pumping units for the NTMWD East Fork Raw Water Supply project. This pump station was placed into service on or about January of 2008 and the four pumps are identified as DP-1 through DP-4.

WHEREAS, Eagle entered into a construction contract with NTMWD for, among other things the acquisition and installation of the diversion pump station, including the four vertical turbine motor/pump systems DP-1 through DP-4.

WHEREAS, Eagle subcontracted with Smith to acquire, construct, as well as assist in the installation and start-up of the four vertical turbine motor/pump systems DP-1 through DP-4.

WHEREAS, beginning in July of 2009, DP-1 shut down allegedly due to excessive vibration and there allegedly was excessive wear on the pump shafts such that the bearings were no longer preventing the shaft from vibrating. Subsequently, DP-4 experienced the same problems and was removed from service, and DP-2 and DP-3 were also removed from service and were examined.
WHEREAS, on or about November 2010, the four units were repaired and the bearings changed to rubber bearings with a pre-lube system. In regards to subsequent repairs, both NTMWD, as well as Smith incurred costs and expenses in an amount between $95,000 and $100,000 each.

WHEREAS, in 2012, at least one pump began to experience vibration allegedly due to excessive wear on the pump shaft.

NOW, THEREFORE, in consideration of the recitals set forth herein, the promises and covenants set forth in this Compromise, Settlement Agreement and Release, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, each of the Parties named in this Compromise, Settlement Agreement and Release and their respective predecessors, successors, assigns, heirs, executors, registered professional engineers, consultants, administrators, insurers and legal representatives agree and shall be bound by the following:

1. FNI agrees to pay NTMWD the amount of $391,556.25 as consideration for this Compromise, Settlement Agreement and Release and the full release contained herein. FNI will make such payment to NTMWD within thirty (30) days of the execution of this Agreement.

2. Smith Pump agrees to pay NTMWD the amount of $130,518.75 as consideration for this Compromise, Settlement Agreement and Release and the full release contained herein. Smith Pump will make such payments to NTMWD within thirty (30) days of the execution of this Agreement.

3. Upon the execution of the Agreement by all Parties and payment by FNI and Smith, this Agreement shall constitute a full and final release, such that each party releases and forever discharges the other Parties to this Agreement and the Parties predecessors, successors and assigns and, as applicable, their respective current, former and successive heirs, registered professional engineers, consultants, officers, employees, managers, partners, members, agents, attorneys, successors, assigns, representatives, trustees, directors, shareholders, owners, servants, administrators, insurers and legal representatives, parents, subsidiaries, affiliates, related corporations, firms, associations, partnerships and successor entities from any and all claims in any way arising out of, relating to or having to do with (1) the four vertical
turbine motor/pump systems (DP-1 through DP-4), (2) any vibration (whether excessive or otherwise) or wear (whether excessive or otherwise) on or of the pump shafts of DP-1 through DP-4, (3) the repair of vertical turbine motor/pump systems DP-1 through DP-4 in 2010 or thereafter (including any repair funded by the proceeds of this settlement) as well as (4) any other cause of action, potential cause of action, claim, demand, loss, expense or cost arising out or relating to the four vertical turbine motor/pump systems, DP-1 through DP-4. The provisions of this Compromise, Settlement Agreement and Release will become effective upon payment by FNI and Smith Pump to NTMWD as set forth above and will constitute a mutual release by and between all parties. This release includes any claim of NTMWD for payment or reimbursement of any costs incurred by NTMWD in relation to the work performed in or around 2010 on DP-1 through DP-4, as well as any claim by Smith Pump for reimbursement for any thrust testing or costs associated to such thrust testing.

4. Each party hereto acknowledges that it has read and understood the effect of this mutual release and settlement. Each party states that it executes this agreement of its own free will and accord, for the purposes and considerations set forth in this agreement, and that the person executing this agreement on behalf of each of the Parties has the authority and right to execute same on behalf of such party.

5. Each party agrees to pay all of its own attorney’s fees and costs, expert witness fees, and other expenses arising from the claim described above.

6. All Parties warrant and agree that no claim released by this Agreement has been assigned or transferred, by contract, operation of law, or otherwise, to any person or entity not a party to this Agreement.

7. All monies paid or other consideration given herein is without admission of liability.

8. The terms and conditions of this Compromise Settlement Agreement and Release shall bind and shall inure to the benefit of all Parties and their respective beneficiaries, receivers, heirs, legal representatives, trustees, successors and assigns, directors, officers, agents, servants, consultants, employees and attorneys, and shall include and run in favor of all parties and their respective heirs, legal representatives, successors and assigns, directors, officers, agents, servants, consultants, employees and attorneys, past and forever.

9. All Parties acknowledge that the persons signing below on their behalf are expressly authorized to sign this Agreement.

10. This Agreement may be executed in one or more counterparts, each of which shall be an original, and this Agreement is effective upon execution of at least one counterpart
by each party to this Agreement. Copies of original signatures sent by facsimile transmission or by e-mail shall have the same force and effect as original signatures.

11. As part of the consideration of the execution of this Compromise, Settlement Agreement and Release, it is expressly agreed and understood that this Agreement is being executed as part of a settlement of a disputed claim and that no party admits any negligence, liability or responsibility for the consequences of said occurrence and the execution of this instrument and the agreement by the parties above-named are not to be taken or treated as a confession of liability, which liability is expressly denied. The execution of this Agreement does not constitute an admission of the lack of merit on the claims or defenses asserted by any party to this Agreement, but is strictly and solely to be treated in the nature of the Agreement.

IN WITNESS WHEREOF, an original and copies of this instrument have been executed on the dates shown and in the counties noted below,
ACKNOWLEDGED:

NORTH TEXAS MUNICIPAL WATER DISTRICT

BY: ____________________________

TITLE: __________________________

STATE OF TEXAS

COUNTY OF ______________________

BEFORE ME, the undersigned authority, a Notary Public, on this day personally appeared __________________________, a duly authorized representative of NORTH TEXAS MUNICIPAL WATER DISTRICT known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same for the purpose and consideration therein expressed and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the ___ day of ___________________ 2014.

________________________________________

NOTARY PUBLIC IN AND FOR

THE STATE OF TEXAS
ACKNOWLEDGED:

FREESE AND NICHOLS, INC.

BY: ____________________________

TITLE: __________________________

STATE OF TEXAS

CITY

COUNTY OF ________________________

BEFORE ME, the undersigned authority, a Notary Public, on this day personally appeared

__________________________, a duly authorized representative of FREESE AND NICHOLS, INC.

known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same for the purpose and consideration therein expressed and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the ___ day of _______________ 2014.

__________________________________________________________________________________________

NOTARY PUBLIC IN AND FOR
THE STATE OF TEXAS
ACKNOWLEDGED:

**EAGLE CONTRACTING, LP**

By: 

Charles Howard, President

State of Texas

County of Tarrant

Before me, the undersigned authority, a Notary Public, on this day personally appeared Charles Howard, a duly authorized representative of **EAGLE CONTRACTING, LP**, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same for the purpose and consideration therein expressed and in the capacity therein stated.

Given under My Hand and Seal of Office this the ___ day of ________________ 2014.

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Notary Public in and for The State of Texas

Compromise, Settlement Agreement and Release - Page 7
ACKNOWLEDGED:

SMITH PUMP COMPANY, INC.

BY: ____________________________

TITLE: __________________________

STATE OF TEXAS

COUNTY OF ______________________

BEFORE ME, the undersigned authority, a Notary Public, on this day personally appeared ____________________________, a duly authorized representative of SMITH PUMP COMPANY, INC. known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he/she executed the same for the purpose and consideration therein expressed and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the ___ day of _______________ 2014.

____________________________________
NOTARY PUBLIC IN AND FOR
THE STATE OF TEXAS
NORTH TEXAS MUNICIPAL WATER DISTRICT

JANUARY 2014

ADMINISTRATIVE MEMORANDUM NO. 4122

UPPER EAST FORK INTERCEPTOR SYSTEM
FUGITIVE EMISSIONS CONTROL IMPROVEMENTS
PROJECT NO. 279

INTERLOCAL COOPERATION AGREEMENT BETWEEN
THE CITY OF ALLEN AND
NORTH TEXAS MUNICIPAL WATER DISTRICT
CONCERNING REIMBURSEMENT FOR INCREMENTAL COST OF UPGRADED
SCREENING WALLS

The purpose of this administrative memorandum is for the Board of Directors consideration to authorize the Executive Director to execute an Interlocal Cooperation Agreement between the City of Allen and North Texas Municipal Water District Concerning Reimbursement for Incremental Cost of Upgraded Screening Walls (Agreement) for the Upper East ForkInterceptor System (UEFIS) Fugitive Emissions Control Improvements, Project No. 279.

REVIEW

In February 2012, the Board of Directors approved Administrative Memorandum No. 3760 authorizing an engineering services agreement with CH2M HILL for the UEFIS Fugitive Emissions Control Improvements Preliminary Engineering. This work was undertaken to address the potential for intermittent out-gassing during specific operational conditions at four locations throughout the UEFIS; one of those locations being adjacent to Angel Parkway, north of Main Street East, in the City of Allen (Allen). NTMWD and Allen collaborated on the proposed design of the facilities, which resulted in Allen providing comments directing NTMWD to enclose the new facilities at the Angel Parkway site by masonry screening walls similar in construction and appearance to subdivision screening walls in the area. Enclosures typically provided for NTMWD projects, to meet NTMWD and Texas Commission on Environmental Quality (TCEQ) standards for intruder protection, are chain link fencing with three-strand barbed wire topper.

NTMWD Policy No. 30, approved in November 2004 and reviewed October 2007, provides that in the event a city should desire a different style fencing the NTMWD will pay for the cost of the standard TCEQ-required fencing plus 25% of the difference between the TCEQ-required fencing and the fencing selected by the city. It has been determined through review of recent project pricing data and breakdown of actual bid prices that the comparative cost for the selected masonry screening walls and foundations is $86,000 higher than the cost for TCEQ-required fencing. In accordance with NTMWD policy this equates to a monetary participation by Allen for upgraded fencing in the amount of $64,500, which is 75% of the premium cost for the upgraded fencing.
INTERLOCAL COOPERATION AGREEMENT

The Agreement will provide for the reimbursement to NTMWD by Allen for 75% of the premium cost for upgraded fencing in the amount of $64,500 contingent on approval of this Agreement by the Board and Allen City Council. This issue is tentatively scheduled to be on Allen City Council’s consent agenda for January 28, 2014.

RECOMMENDATION

It is the recommendation of the Executive Director, NTMWD staff, and Gay, McCall, Isaacks, Gordon & Roberts, PC, that the Board of Directors authorize the Executive Director to execute an Interlocal Cooperation Agreement between the City of Allen and North Texas Municipal Water District Concerning Reimbursement for Incremental Cost of Upgraded Screening Walls for the UEFIS Fugitive Emissions Control Improvements, Project No. 279, contingent upon approval by the Allen City Council. This will be an item on the regular agenda of the January 2014 Board meeting.
INTERLOCAL COOPERATION AGREEMENT
BETWEEN CITY OF ALLEN AND
NORTH TEXAS MUNICIPAL WATER DISTRICT
CONCERNING REIMBURSEMENT FOR INCREMENTAL COST OF
UPGRADED SCREENING WALLS

THIS INTERLOCAL COOPERATION AGREEMENT (AGREEMENT) is
made between the CITY OF ALLEN, TEXAS, a home-rule municipal corporation
(Allen), and the NORTH TEXAS MUNICIPAL WATER DISTRICT (NTMWD),
acting by and through their City Manager and Executive Director, respectively, or
their duly authorized representatives.(Allen and NTMWD collectively hereafter
being called “Parties” and individually as the “Party”).

WHEREAS, Allen and NTMWD have previously entered into a contract
along with other regional partners for NTMWD to provide wastewater
transportation services through the design, acquisition, construction, improvement, operation, and maintenance of the Upper East Fork Interceptor
System, such contract dated July 26, 1984 (the Contract); and

WHEREAS, NTMWD has initiated the Upper East Fork Interceptor
System Fugitive Emissions Improvements Project (the Project) to address the
potential for intermittent out-gassing during specific operational conditions at four
locations throughout the Upper East Fork Interceptor System; one of those
locations being adjacent to Angel Parkway, north of Main Street East, in the City
of Allen (the Facilities); and

WHEREAS, NTMWD and Allen collaborated on the proposed design of
the Facilities, and

WHEREAS, Allen provided comments on the proposed design by
directing NTMWD to enclose the Facilities at the Angel Parkway site by masonry
screening walls similar in construction and appearance to subdivision screening
walls in the area; and

WHEREAS, enclosures typically provided for NTMWD projects, to meet
NTMWD and Texas Commission on Environmental Quality (TCEQ) standards
for intruder protection, are chain link fencing with three-strand barbed wire
topper; and

WHEREAS, NTMWD Policy No. 30, approved in November 2004 and
reviewed October 2007, provides that in the event a city should desire a different
style fencing the NTMWD will pay for the cost of the standard TCEQ required
fencing, plus 25% of the difference between the TCEQ required fencing and the
fencing selected by the city; and
WHEREAS, it has been determined through review of recent project pricing data and breakdown of actual bid prices that the comparative cost for the selected masonry screening walls and foundations is $86,000 higher than the cost for TCEQ required fencing; and

WHEREAS, in accordance with NTMWD policy this equates to a monetary participation by Allen for upgraded fencing in the amount of $64,500, which is 75% of the premium cost for the upgraded fencing; and

WHEREAS, the Interlocal Cooperation Act (Texas Government Code Chapter 791) authorizes any local government to contract with one or more local governments to perform governmental functions and services under the terms of the Act; and

WHEREAS, the Parties will have current funds available to satisfy their obligations at the time those obligations become due.

NOW, THEREFORE, this Agreement is made and entered into by and between Allen and NTMWD for the mutual consideration stated herein.

ARTICLE ONE
Screening Wall Construction

1.01 NTMWD and its selected construction contractor shall construct the screening walls associated with the Facilities at the Angel Parkway site in accordance with plans, specifications, and drawings bearing the Allen approval stamp signed by Bo Bass and dated August 6, 2013, which approval shall not be unreasonably withheld, delayed or denied. The screening walls shall match the materials, colors, and construction details of nearby existing screening walls as near as possible.

ARTICLE TWO
Monetary Participation for Upgraded Fencing

2.01 Allen shall reimburse NTMWD an amount not to exceed $64,500, but in no case greater than 75% of the difference in NTMWD’s actual cost between the upgraded fence requested by Allen and the TCEQ required fence, in accordance with NTMWD Policy No. 30. Allen’s payment required by this Section 2.01 shall be made not later than thirty (30) days after receipt of invoice from NTMWD, which shall in no case be delivered prior to completion of the screening wall in accordance with the plans, specifications, and drawings approved by Allen.
ARTICLE THREE
Funding

The Parties agree that the Party paying for the performance of governmental functions or services shall make those payments only from current revenues legally available to the paying Party at the time the payment becomes due.

ARTICLE FOUR
Term

This Agreement shall be effective upon approval by the Allen City Council and NTMWD Board of Directors and subsequent execution by the Allen City Manager and NTMWD Executive Director. The effective date will be the latter of the dates this Agreement is executed by the Parties authorized representatives. This Agreement shall continue in effect until all obligations hereunder are completed and each Party has given final acceptance of the Project, in writing, to the other Party.

ARTICLE FIVE
Hold Harmless

5.01 Each Party does hereby agree to waive all claims against, release, and hold harmless the other Party and its respective officials, officers, agents, employees, in both their public and private capacities, from any and all liability, claims, suits, demands, losses, damages, attorney’s fees, including all expenses of litigation or settlement, or cause of action which may arise by reason of injury to or death of any person or for loss of, damage to, or loss of use of any property arising out of or in connection with this Agreement.

5.02 In the event of joint or concurrent negligence of the Parties, responsibility, if any, shall be apportioned comparatively in accordance with the laws of the State of Texas without, however, waiving any governmental immunity or defense available to any party individually under Texas law. Allen shall be responsible for its sole negligence. NTMWD shall be responsible for its sole negligence. The provisions of this paragraph are solely for the benefit of the Parties and are not intended to create or grant any rights, contractual or otherwise, to any other person or entity.

ARTICLE SIX
Immunity

It is expressly understood and agreed that, in the execution of this agreement, neither Party waives, nor shall be deemed hereby to have waived any immunity or defense that would otherwise be available to it against claims arising in the exercise of governmental powers and functions. By entering into
this Agreement, the Parties do not create any obligations, expressed or implied, other than those set forth herein, and this Agreement shall not create any rights in parties not signatories hereto.

ARTICLE SEVEN
Notices

All notices required under the provisions of this Agreement must be in writing, hand-delivered or sent by registered or certified mail to the addresses below:

Allen: City of Allen, Texas
Attention: Peter H. Vargas, City Manager
3rd Floor, Allen City hall
305 Century Parkway
Allen, TX 75013-8042

With copy to: Peter G. Smith
Nichols, Jackson, Dillard, Hager & Smith, LLP
500 N. Akard, Suite 1800
Dallas, Texas 75201

NTMWD: James M. Parks
Executive Director
P.O. Box 2408
Wylie, TX 75098

The name and address for notification may be changed by notice to the other parties.

ARTICLE EIGHT
Severability

The provisions of this Agreement are severable. If any paragraph, section, subdivision, sentence, clause or phrase of this Agreement is for any reason held by a court of competent jurisdiction to be contrary to law or contrary to any rule or regulation having the force and effect of the law, the remaining portions of the Agreement shall be enforced as if the invalid provision had never been included.

ARTICLE NINE
Successors and Assigns
This Agreement shall be binding upon the Parties hereto, their successors and assigns. Neither Party will assign or transfer an interest in this Agreement without the written consent of the other Party.

ARTICLE TEN
Venue

The laws of the State of Texas shall govern the interpretation, validity, performance and enforcement of this Agreement. The Parties agree that this Agreement is performable in Collin County, Texas, and that exclusive venue shall lie in a state court in Collin County, Texas.

ARTICLE ELEVEN
Interpretation

This is a negotiated document and should any part of this Agreement be in dispute, the Parties agree that the Agreement shall not be construed more favorably for either Party.

ARTICLE TWELVE
Remedies, Non-Waiver

No right or remedy granted herein or reserved to the parties is exclusive of any right or remedy granted by law or equity, but each shall be cumulative of every right or remedy given hereunder. No covenant or condition of this Agreement may be waived without the express written consent of the Parties. It is further agreed that one or more instances of forbearance by either Party in the exercise of its respective rights under this Agreement shall in no way constitute a waiver thereof.
ARTICLE THIRTEEN
Entire Agreement

This Agreement embodies the entire agreement between the Parties and
may only be modified in writing executed by both Parties.

ATTEST:                             CITY OF ALLEN, TEXAS

By:                                  By:
Name:  Shelley B. George             Name:  Peter H. Vargas
Title:  City Secretary               Title:  City Manager
Date:                                  Date:

Executed on behalf of the City of Allen
pursuant to City Council Resolution
No.________________________

APPROVED AS TO FORM:

By:                                  By:
Name:  Peter G. Smith                Name:  ________________________
Title:  City Attorney                 Title:  ________________________
Date:  ______________________________

ATTEST:                             NORTH TEXAS MUNICIPAL WATER

By:                                  DISTRICT
Name:  Melisa Fuller                 By:
Date:  ______________________________ Name:  James M. Parks
                                           Title:  Executive Director
                                           Date:  ________________________
ACKNOWLEDGMENTS

STATE OF TEXAS §

COUNTY OF COLLIN §

This instrument was acknowledged before me on the _____ day of ________, 2014, by PETER H. VARGAS, City Manager of the CITY OF ALLEN, TEXAS, a home-rule municipal corporation, on behalf of said Municipal Corporation.

____________________________
Notary Public, State of Texas

STATE OF TEXAS §

COUNTY OF COLLIN §

This instrument was acknowledged before me on the _____ day of ________, 2014, by JAMES M. PARKS, Executive Director of NORTH TEXAS MUNICIPAL WATER DISTRICT.

____________________________
Notary Public, State of Texas
NORTH TEXAS MUNICIPAL WATER DISTRICT

JANUARY 2014

ADMINISTRATIVE MEMORANDUM NO. 4123

COOPERATIVE SERVICE AGREEMENT BETWEEN
THE CITY OF MCKINNEY, NORTH COLLIN WATER SUPPLY CORPORATION,
AND NORTH TEXAS MUNICIPAL WATER DISTRICT
FOR WATER SERVICE TO THE TRINITY FALLS DEVELOPMENT

The purpose of this administrative memorandum is for the Board of Directors approval of an agreement between the City of McKinney, North Collin Water Supply Corporation (North Collin), and NTMWD to supply water on an interim basis to Trinity Falls Development, a new subdivision in the City of McKinney (McKinney), until such time as permanent service can be established within the McKinney water distribution system.

SUMMARY

Trinity Falls Development is a large subdivision being built in the McKinney ETJ. Initial water service to the area has presented a challenge to McKinney in that upon ultimate build-out of the subdivision, a three-mile long 24-inch diameter pipeline will be necessary to supply water to the area. However, until substantial development has occurred, such a large line would necessitate flushing an estimated 250,000 GPD to assure fresh water. Such flushing would not be in compliance with established conservation protocols, particularly in a drought such as the NTMWD and its member cities/customers are experiencing. Accordingly, the City of McKinney negotiated an agreement with North Collin, one of the NTMWD’s wholesale customers, to supply water to the development until such time as construction and use of the large pipeline is justified.

North Collin has agreed to supply the requested water under the condition that they would not suffer a higher annual minimum. Negotiations were conducted between McKinney, North Collin, and the NTMWD for an agreement in which North Collin will supply the requested water. Under this agreement, water to Trinity Falls will be deducted from the North Collin consumption and applied to McKinney’s consumption, resulting in no change in North Collin’s annual minimum.

It is estimated that the requested interim water service to the Trinity Falls Development may be needed for a period of five years, or perhaps longer, depending upon the rate of growth of the subdivision. The agreement between the parties sets an initial five-year period with the provision for an extension for another five years as needed. The proposed agreement establishes a starting date during NTMWD’s 2013-14 Fiscal Year, related to initial use of construction water for project. A copy of the proposed agreement, without the exhibits, is attached.
RECOMMENDATION

It is the recommendation of the Executive Director and NTMWD staff that the Board of Directors authorize the execution of a Cooperative Service Agreement between the City of McKinney, North Collin Water Supply Cooperation, and North Texas Municipal Water District for interim water service to the Trinity Falls Development. This will be an item on the regular agenda of the January 2014 Board Meeting.
COOPERATIVE SERVICE AGREEMENT
NORTH TEXAS MUNICIPAL WATER DISTRICT
NORTH COLLIN WATER SUPPLY CORPORATION
CITY OF MCKINNEY

THE STATE OF TEXAS §

THE COUNTY OF COLLIN §

THIS CONTRACT (the “Contract”) made and entered into as of this the _____ day of ______________, 2014 (the “Effective Date”), by and between the North Texas Municipal Water District, hereinafter called “NTMWD,” a conservation and reclamation district created under Article 16, Section 59, of the Texas Constitution, the North Collin Water Supply Corporation (“North Collin”), a nonprofit water supply corporation in the State of Texas, and the City of McKinney (“McKinney”), a home-rule municipality and political subdivision of the State of Texas, also all each referred to as a “Party,” or collectively, the “Parties.”

WITNESSETH:

WHEREAS, NTMWD, North Collin, and McKinney are authorized to enter into this Contract pursuant to Chapter 62, Acts of the 52nd Legislature, 1951 (Article 8280-141, Vernon's Texas Civil Statutes) and other applicable laws;


WHEREAS, McKinney is a member city of NTMWD and purchases treated water from NTMWD pursuant to the NTMWD Regional Water Supply Facilities Amended Contract dated August 1, 1988 (“Regional Contract”);

WHEREAS, a new development, Trinity Falls, is proposed within the retail water service area of both McKinney and North Collin, as identified in Exhibit A and described by metes and bounds in Exhibits B-1, B-2, B-3, and B-4 (collectively, “Trinity Falls”);

WHEREAS, McKinney intends to provide retail water service to Trinity Falls on a long-term basis, but the initial water demands of Trinity Falls make it infeasible for McKinney to initially provide retail water service;

WHEREAS, McKinney has requested that North Collin provide retail water service on a temporary basis until Trinity Falls has sufficient water demands for McKinney’s infrastructure to provide retail water service to Trinity Falls;

WHEREAS, in order to accommodate the Trinity Falls developer, North Collin is currently providing water to one or more contractors performing construction work at Trinity Falls through construction meters;

WHEREAS, North Collin agrees to continue to provide temporary retail water service for the construction of the Trinity Falls development and to subsequently provide water service to Trinity Falls as
long as providing this quantity of water on a temporary basis does not permanently increase North Collin’s annual minimum quantity of water under its Customer Contract;

NOW, THEREFORE, in consideration of the mutual covenants and agreements herein contained, the sufficiency of which are hereby conclusively acknowledged, and subject to the terms and conditions hereinafter set forth, NTMWD, McKinney, and North Collin mutually undertake, promise, and agree as follows:

AGREEMENT

Section 1. TEMPORARY SERVICE FOR TRINITY FALLS. During the term of this Contract, North Collin agrees to continue to provide retail water service for the construction of the Trinity Falls development and to Trinity Falls until such time that Trinity Falls has an adequate water demand (“Water Demand”) sufficient to support the construction of a new twenty-four inch (24") pipeline (the “Pipeline”) through which McKinney will provide retail water service to Trinity Falls. Once Water Demand is sufficient to support construction of the Pipeline, and upon completion of construction of such Pipeline, North Collin will cease providing retail water service to Trinity Falls and McKinney shall become the sole provider of retail water service to Trinity Falls.

Section 2. TRINITY FALLS DELIVERY POINT AND METER. North Collin will deliver water to Trinity Falls via a pipeline to a delivery point and metering station owned and operated by McKinney (the “Trinity Falls Delivery Point and Meter”). North Collin will continue to allow contractors that are performing construction work at Trinity Falls to take water from North Collin’s water system by way of construction meters dedicated to that construction project (the “Construction Delivery Point and Meter”). Exhibit C attached hereto identifies the location of the Construction Delivery Point and Meter and the Trinity Falls Delivery Point and Meter. At such time as the Trinity Falls Delivery Point and Meter is established, the contractors performing construction work at Trinity Falls will take water from the Trinity Falls side of the Trinity Falls Delivery Point and Meter, will cease taking water from the Construction Delivery Point and Meter, and the Construction Delivery Point and Meter shall no longer be used for the delivery of water. McKinney agrees to read the Trinity Falls meter on a monthly basis and promptly provide NTMWD with the monthly readings of the quantity of water provided to contractors for the construction of the Trinity Falls development or to Trinity Falls ("Trinity Falls Quantity"). In addition to the foregoing, the Trinity Falls Quantity will include all water delivered through the Construction Delivery Point and Meter by North Collin to the contractor(s) constructing the Trinity Falls project including but not limited to water delivered through the Construction Delivery Point and Meter prior to the Effective Date of this Contract. North Collin will provide satisfactory evidence to McKinney and the NTMWD of the quantity of such water.

Section 3. TRINITY FALLS QUANTITY. Beginning in NTMWD’s Fiscal Year 2013/2014, NTMWD will deduct the Trinity Falls Quantity from North Collin’s monthly quantity of water supplied by NTMWD to North Collin pursuant to the Customer Contract and then add the Trinity Falls Quantity to McKinney’s monthly quantity of water supplied by NTMWD to McKinney pursuant to the Regional Contract. The parties agree that North Collin’s annual minimum as discussed in Section 8 of the Customer Contract shall not be increased by the Trinity Falls Quantity and that such quantity shall only increase McKinney’s annual minimum as provided in Section 9 of the Regional Contract.

Section 4. TERM OF CONTRACT. This Contract shall commence on the Effective Date and shall terminate upon the earlier of following: (i) five (5) years following the Effective Date; or (ii) McKinney’s commencement of retail water service to Trinity Falls. Upon the mutual agreement of the Parties, this Contract may be renewed for one (1) additional term of five (5) years.
Section 5. MODIFICATION. This Contract may be changed or modified only by written agreement of the Parties and only after having obtained approval from the governing bodies of all the Parties.

Section 6. FORCE MAJEURE. If by reason of force majeure any Party hereto shall be rendered unable wholly or in part to carry out its obligations under this Contract, other than the obligations of McKinney and North Collin to make the payments required under the Regional Contract and Customer Contract, then if such Party shall give notice and full particulars of such force majeure in writing to the other Party within a reasonable time after occurrence of the event or cause relied on, the obligation of the Party giving such notice, so far as it is affected by such force majeure, shall be suspended during the continuance of the inability then claimed, but for no longer period, and any such Party shall endeavor to remove or overcome such inability with all reasonable dispatch. The term “force majeure” as employed herein shall mean acts of God, strikes, lockouts, or other industrial disturbances, acts of public enemy, orders of any kind of the Government of the United States or the State of Texas, or any civil or military authority, insurrection, riots, epidemics, landslides, lightning, earthquake, fires, hurricanes, storms, floods, washouts, droughts, arrests, restraint of government and people, civil disturbances, explosions, breakage or accidents to machinery, pipelines or canals, partial or entire failure of water supply, or on account of any other causes not reasonably within the control of the Party claiming such inability.

Section 7. REGULATORY BODIES AND LAWS. This Contract is subject to all applicable Federal and State Laws and any applicable permits, ordinances, rules, orders, and regulations of any local, state or federal governmental authority having or asserting jurisdiction, but nothing contained herein shall be construed as a waiver of any right to question or contest any such law, ordinance, order, rule, or regulation in any forum, having jurisdiction.

Section 8. NOTICES. Unless otherwise provided herein, any notice, communication, request, reply, or advice (herein severally and collectively, for convenience, called “Notice”) herein provided or permitted to be given, made, or accepted by any Party to any other Party must be in writing and may be given or be served by depositing the same in the United States mail postpaid and registered or certified and addressed to the Party to be notified, with return receipt requested, or by delivering the same to an officer of such Party, or by prepaid telegram when appropriate, addressed to the Party to be notified. Notice deposited in the mail in the manner hereinabove described shall be conclusively deemed to be effective, unless otherwise stated herein, from and after the expiration of three (3) days after it is so deposited. Notice given in any other manner shall be effective only if and when received by the Party to be notified. For the purposes of Notice, the addresses of the Parties shall, until changed as hereinafter provided, be as follows:

If to NTMWD, to:

North Texas Municipal Water District
Attn: Executive Director/General Manager
P.O. Box 2408
Wylie, Texas 75098

If to McKinney, to:

City of McKinney, Texas
Attn: City Manager
P.O. Box 512
McKinney, Texas 75069
If to North Collin, to:

North Collin Water Supply Corporation
Attn: System Administrator
P.O. Box 343
2333 Sam Rayburn Hwy.
Melissa, Texas 75454-0343

Copy to: John Rapier, Attorney
Rapier, Wilson & Wendland, P.C.
1333 W. McDermott, Suite 100
Allen, Texas 75213
E-mail: rapier@rapierwilson.com
Fax: (972) 727-9904

The Parties hereto shall have the right from time to time and at any time to change their respective addresses and each shall have the right to specify as its address any other address by at least fifteen (15) days written notice to the other Parties hereto.

Section 9. SEVERABILITY. The Parties hereto specifically agree that in case any one or more of the sections, subsections, provisions, clauses, or words of this Contract or the application of such sections, subsections, provisions, clauses, or words to any situation or circumstance should be, or should be held to be, for any reason, invalid or unconstitutional, under the laws or constitutions of the State of Texas or the United States of America, or in contravention of any such laws or constitutions, such invalidity, unconstitutionality, or contravention shall not affect any other sections, subsections, provisions, clauses, or words of this Contract or the application of such sections, subsections, provisions, clauses, or words to any other situation or circumstance, and it is intended that this Contract shall be severable and shall be construed and applied as if any such invalid or unconstitutional section, subsection, provision, clause, or word had not been included herein, and the rights and obligations of the Parties hereto shall be construed and remain in force accordingly.

Section 10. VENUE. All amounts due under this Contract including, but not limited to, payments due under this Contract or damages for the breach of this Contract, shall be paid and be due in Collin County, Texas, which is the County in which the principal administrative offices of NTMWD are located. It is specifically agreed among the Parties to this Contract that Collin County, Texas, is a principal place of performance of this Contract.

Section 11. SOLE AGREEMENT. This Contract constitutes the sole and only agreement of NTMWD, McKinney, and North Collin and supersedes any prior understanding or oral or written agreements between NTMWD, McKinney, and North Collin with respect to the subject matter of this Contract.
Section 12. NO THIRD PARTY BENEFICIARIES. This Contract shall inure only to the benefit of the Parties hereto and third persons not privy hereto shall not, in any form or manner, be considered a third-party beneficiary of this Contract. Each Party hereto shall be solely responsible for the fulfillment of its customer contracts or commitments, and NTMWD shall not be construed to be responsible for McKinney’s or North Collin’s contracts or commitments by virtue of this Contract or any provision contained herein.

Section 13. SUCCESSION AND ASSIGNMENT. This Contract is binding upon and shall inure to the benefit of the Parties, their heirs, successors and assigns. This Contract may not be assigned by any Party hereto without the prior written notice to, and prior written approval by, the other Parties, which consent may be withheld without cause.

Section 14. RECITALS AND EXHIBITS INCORPORATED. The recitals contained in the preamble hereof and the exhibits hereto are hereby found to be true, and such recitals and exhibits are hereby made a part of this Contract for all purposes.

Section 15. AUTHORITY TO EXECUTE. Each person signing on behalf of the Parties hereby confirms that they have the authority to execute this Contract on behalf of the Party indicated by their signature.

IN WITNESS WHEREOF, the Parties hereto acting under authority of their respective governing bodies have caused this Contract to be duly executed in several counterparts, each of which shall constitute an original, all as of the day and year first above written, which is the Effective Date of this Contract.

(Signatures on following pages)
NORTH COLLIN WATER SUPPLY CORPORATION

By: ___________________________ ___________________________
    Duke Monson, President                        Date

ATTEST:

__________________________
__________________________

STATE OF TEXAS §
    §
COUNTY OF COLLIN §

This instrument was acknowledged before me on this _____ day of ____________, 2014, by Duke Monson, President of North Collin Water Supply Corporation, a nonprofit water supply corporation in the State of Texas, on behalf of said nonprofit water supply corporation.

__________________________
Notary Public, State of Texas
Printed Name of Notary:

__________________________
My Commission Expires: __________________
CITY OF MCKINNEY

By: ___________________________ ___________________________
    Jason Gray, City Manager                     Date

ATTEST:

______________________________
Sandy Hart, City Secretary

STATE OF TEXAS §

§

COUNTY OF COLLIN §

This instrument was acknowledged before me on this _____ day of ____________, 2014, by Jason Gray, City Manager of the City of McKinney, a home-rule municipality and political subdivision of the State of Texas, on behalf of said municipality.

______________________________
Notary Public, State of Texas
Printed Name of Notary:

My Commission Expires: ________________________
NORTH TEXAS MUNICIPAL WATER DISTRICT

By: ___________________________________________ __________________________
    Bill Lofland, President                        Date

ATTEST:

______________________________________________
    Joe Joplin, Secretary

STATE OF TEXAS §
    §
    §
COUNTY OF COLLIN §

This instrument was acknowledged before me on this _____ day of __________, 2014, by Bill Lofland, President of North Texas Municipal Water District, a conservation and reclamation district and political subdivision of the State of Texas, on behalf of said conservation and reclamation district.

______________________________________________
Notary Public, State of Texas
Printed Name of Notary:

______________________________________________
My Commission Expires: __________________________
This administrative memorandum is for the Board of Directors consideration of the tabulation of bids and recommendation to award a construction contract to Hammett Excavation Inc., (Hammett), in the contract amount of $349,981.15 for the 121 Regional Disposal Facility (121 RDF) Sector 4A Liner and Leachate Collection System Construction, Project No. ENG 13-3A. Given this project was budgeted in the fiscal year 2013-2014 operating budget, the recommended award amount is less than the budgeted amount, and the time sensitive nature of the project, this administrative memorandum is additionally requesting the Executive Director be authorized to execute the construction agreement once all acceptable documents are provided to the North Texas Municipal Water District.

REVIEW

The 121 RDF permit requires the installation of a liner system to collect liquids and rainfall that percolate through the waste mass (leachate) to prevent any impact to subsurface water. The 121 RDF liner system consists of a minimum two-foot thick recompacted clay layer overlain by a high density polyethylene (HDPE) geomembrane, overlain by a HDPE drainage geocomposite that conveys collected leachate to the leachate collection system. The geocomposite is overlain by a minimum two-foot thick soil protective cover layer designed to protect the geocomposite and geomembrane from damage due to waste placed above it. The leachate collection system conveys leachate via a system of pipes surrounded by a stone envelope (referred to as a “chimney”) to a centralized collection point where it is either evaporated or recirculated onto the working face.

In July 2013, the Executive Director executed an engineering services agreement with Biggs and Mathews Consulting Engineers, (Biggs and Mathews) for the design of the 121 RDF Sector 4A Liner and Leachate Collection System project. Biggs and Mathews completed the design and the project was advertised for bid in December 2013.
SCOPE OF WORK

This project includes excavation to design subgrade, cleaning and preparation of subgrade, construction of the minimum two-foot thick recompacted clay layer, construction of the minimum two-foot thick soil protective cover layer and construction of leachate collection chimneys and trenches for the 7.9 acre Sector 4A site at the NTMWD 121 RDF. NTMWD staff will present a recommendation to award the installation of the HDPE geomembrane and drainage geocomposite under a separate administrative memorandum at the January 2014 Board of Directors meeting.

TABULATION OF BIDS

Sealed bids were received at 10:00 a.m. on Tuesday, January 7, 2014, and are tabulated as follows:

<table>
<thead>
<tr>
<th>Contractor</th>
<th>Bid Amount</th>
<th>Time to Complete (Work Days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hammett Excavation, Inc.</td>
<td>$349,981.15</td>
<td>65</td>
</tr>
<tr>
<td>L.D. Kemp Excavating, Inc.</td>
<td>$452,093.00</td>
<td>90</td>
</tr>
<tr>
<td>4X Construction, Inc.</td>
<td>$634,396.90</td>
<td>65</td>
</tr>
<tr>
<td>SFC Contract Services, Inc.</td>
<td>$671,427.00</td>
<td>55</td>
</tr>
<tr>
<td>Mario Sinacola and Sons Excavating, Inc.</td>
<td>$869,665.00</td>
<td>80</td>
</tr>
</tbody>
</table>

The engineer's opinion of probable construction cost was $503,115. Biggs and Mathews reviewed the bids for completeness and conformance with the specifications. The lowest bid was submitted by Hammett Excavation, Inc. (Hammett), in the amount of $349,981.15.

In March 2013, Hammett successfully completed the 121 RDF Sector 1 and 2 Interim Drainage Improvements, Project No. 178, in the amount of $536,452.50. Based on Hammett's performance on Project No. 178, review of their experience and reports by the supplied references, it is the opinion of the Executive Director, the NTMWD staff, and Biggs and Mathews Consulting Engineers that Hammett has the capability to successfully complete the project.

FUNDING

Funding in the amount of $349,981.15 for this project is to be made available in the Regional Solid Waste System 2013-14 Operating Budget (Account 401-5523-5415 Landfill Development Cost-Contract).
RECOMMENDATION

It is the recommendation of the Executive Director, NTMWD staff, and Biggs and Mathews Consulting Engineers that the Board of Directors authorize award of a construction contract to Hammett Excavation, Inc., in the amount of $349,981.15 for the 121 Regional Disposal Facility Sector 4A Liner and Leachate Collection System Construction, Project No. ENG 13-3A, and authorize the Executive Director to execute the construction agreement with Hammett Excavation, Inc., once the contractor provides all necessary documents to facilitate the execution of the agreement. This will be an item on the regular agenda of the January 2014 Board meeting.
# NORTH TEXAS MUNICIPAL WATER DISTRICT
## WATER CONSUMPTION REPORT
### December 2013

<table>
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<tr>
<th>Member Cities</th>
<th>Water Used Dec 13 1000 Gallons</th>
<th>Daily Avg Dec 13 31 Days</th>
<th>Total 13-14 Aug - Dec 1000 Gallons</th>
<th>13-14% of Annual Maximum</th>
<th>Water Used Dec 12 1000 Gallons</th>
<th>Daily Avg Dec 12 30 Days</th>
<th>Total 12-13 Aug - Dec 1000 Gallons</th>
<th>12-13% of Annual Maximum</th>
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<tbody>
<tr>
<td>Allen</td>
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<td>8,690,613</td>
<td>2,154,168</td>
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<td>351,112</td>
<td>11,703,733</td>
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<td>Farmersville</td>
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<td>357,871</td>
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<td>13,297</td>
<td>443,233</td>
<td>97,623</td>
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<td>Forney</td>
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<td>2,861,567</td>
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<td>15,016,129</td>
<td>3,916,400</td>
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<td>573,911</td>
<td>19,130,367</td>
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<tr>
<td>Garland</td>
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<td>22,526,871</td>
<td>4,770,767</td>
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<td>716,852</td>
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<td>5,324,064</td>
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<td>McKinney</td>
<td>582,826</td>
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<td>Plano</td>
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<td>1,298,310</td>
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**Lake Elevation**

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<th>December Average</th>
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**Precipitation**

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<td>29,562,353</td>
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# NORTH TEXAS MUNICIPAL WATER DISTRICT

## REGIONAL WASTEWATER SYSTEM FLOW REPORT

## DECEMBER 2013

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<table>
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<th>Total Flow Dec-13 (1000 GAL)</th>
<th>Flow %</th>
<th>Total 13-14 Oct-Dec (1000 GAL)</th>
<th>Flow %</th>
<th>Total Flow Dec-12 (1000 GAL)</th>
<th>Flow %</th>
<th>Total 12-13 Oct-Dec (1000 GAL)</th>
<th>Flow %</th>
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<td>562,793</td>
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<td>163,271</td>
<td>7.88</td>
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## UPPER EAST FORK INTERCEPTOR SYSTEM

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<th>Total Flow Dec-13 (1000 GAL)</th>
<th>Flow %</th>
<th>Total 13-14 Oct-Dec (1000 GAL)</th>
<th>Flow %</th>
<th>Total Flow Dec-12 (1000 GAL)</th>
<th>Flow %</th>
<th>Total 12-13 Oct-Dec (1000 GAL)</th>
<th>Flow %</th>
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<tr>
<td>Allen</td>
<td>207,211</td>
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<td>562,793</td>
<td>11.25</td>
<td>163,271</td>
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<td>Frisco</td>
<td>96,770</td>
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<td>81,323</td>
<td>5.16</td>
<td>232,665</td>
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<tr>
<td>McKinney</td>
<td>449,805</td>
<td>25.19</td>
<td>1,240,011</td>
<td>24.79</td>
<td>385,761</td>
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* Report does not include nonmember city flows.
# NORTH TEXAS MUNICIPAL WATER DISTRICT

## REGIONAL WASTEWATER SYSTEM FLOW REPORT

### DECEMBER 2013

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<th></th>
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## NORTH TEXAS MUNICIPAL WATER DISTRICT
### SEWER SYSTEM FLOW REPORT
#### DECEMBER 2013

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<td>0.000</td>
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<td>Sabine Creek</td>
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<td>35.720</td>
<td>1.152</td>
<td>101.608</td>
<td>27.435</td>
<td>0.885</td>
<td>77.500</td>
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<td>Seis Lagos</td>
<td>0.250</td>
<td>5.149</td>
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<td>26.225</td>
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<tr>
<td>Stewart Creek West</td>
<td>5.000</td>
<td>109.988</td>
<td>3.548</td>
<td>301.429</td>
<td>77.385</td>
<td>2.496</td>
<td>249.291</td>
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<tr>
<td>Wylie</td>
<td>2.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
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<td><strong>TOTAL</strong></td>
<td><strong>34.005</strong></td>
<td><strong>581.696</strong></td>
<td><strong>18.764</strong></td>
<td><strong>1,645.698</strong></td>
<td><strong>501.426</strong></td>
<td><strong>16.175</strong></td>
<td><strong>1,481.849</strong></td>
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# NORTH TEXAS MUNICIPAL WATER DISTRICT
## WASTEWATER QUALITY REPORT
### DECEMBER 2013

<table>
<thead>
<tr>
<th>CARB. BIOCHEMICAL OXYGEN DEMAND</th>
<th>TOTAL SUSPENDED SOLIDS</th>
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<tr>
<td><strong>RAW</strong></td>
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<tr>
<td><strong>INFLUENT</strong></td>
<td><strong>EFFLUENT</strong></td>
</tr>
<tr>
<td>(mg/L)</td>
<td>(mg/L)</td>
</tr>
<tr>
<td><strong>REGIONAL SYSTEM</strong></td>
<td></td>
</tr>
<tr>
<td>FLOYD BRANCH</td>
<td>218.0</td>
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<tr>
<td>ROWLETT CREEK</td>
<td>157.4</td>
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<tr>
<td>SOUTH MESQUITE</td>
<td>227.8</td>
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<tr>
<td>WILSON CREEK</td>
<td>168.4</td>
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<td><strong>SEWER SYSTEM</strong></td>
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<tr>
<td>BEAR CREEK</td>
<td>149.2</td>
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<tr>
<td>BUFFALO CREEK</td>
<td>169.9</td>
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<tr>
<td>COTTONWOOD CREEK</td>
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<td>SABINE CREEK</td>
<td>107.7</td>
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<td>SEIS LAGOS</td>
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<td>SQUABBLE CREEK</td>
<td>197.2</td>
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<tr>
<td>STEWART CREEK WEST</td>
<td>159.1</td>
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<tr>
<td>WYLIE</td>
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*Final Effluent Reported as BOD5.*

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<tr>
<th>AMMONIA-NITROGEN</th>
<th>TOTAL PHOSPHORUS</th>
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<tbody>
<tr>
<td><strong>RAW</strong></td>
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<tr>
<td><strong>INFLUENT</strong></td>
<td><strong>EFFLUENT</strong></td>
</tr>
<tr>
<td>(mg/L)</td>
<td>(mg/L)</td>
</tr>
<tr>
<td>BEAR CREEK</td>
<td>44.4</td>
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<tr>
<td>BUFFALO CREEK</td>
<td>27.5</td>
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<tr>
<td>FARMERSVILLE NO. 1</td>
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<td>FARMERSVILLE NO. 2</td>
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<tr>
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<tr>
<td>ROYSE CITY</td>
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<td>SABINE CREEK</td>
<td>12.7</td>
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<tr>
<td>SEIS LAGOS</td>
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<td>SQUABBLE CREEK</td>
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<tr>
<td>WYLIE</td>
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NORTH TEXAS MUNICIPAL WATER DISTRICT
REGIONAL SOLID WASTE SYSTEM
TONNAGE REPORT

December 2013

<table>
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<tr>
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<td><strong>TOTAL</strong></td>
<td><strong>64,261.84</strong></td>
<td><strong>191,446.35</strong></td>
<td><strong>78,487.84</strong></td>
<td><strong>204,691.99</strong></td>
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**SOURCE**

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<tr>
<td>ALLEN</td>
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<td>RICHARDSON</td>
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<td>OTHERS</td>
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<td>46,972.45</td>
<td>32,804.43</td>
<td>66,345.14</td>
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<td><strong>TOTAL</strong></td>
<td><strong>64,261.84</strong></td>
<td><strong>191,446.35</strong></td>
<td><strong>78,487.84</strong></td>
<td><strong>204,691.99</strong></td>
</tr>
</tbody>
</table>
CONSTRUCTION PROGRESS REPORT
FOR PROJECTS UNDERWAY
DECEMBER 31, 2013

WATER SYSTEM

PROJECT: NO. WCF 07-4
LAKE TAWAKONI WATER TREATMENT PLANT

CONTRACTOR: BAR CONSTRUCTORS, INC.

BID AMOUNT: $61,316,420.00

CHANGE ORDERS:
1 - ($88,876.76)
2 - $83,334.34
3 - $24,913.52
4 - $35,890.05
   Time Ext.-100 Days
5 - $532,166.58
   Time Ext.-401 Days
6 - $262,271.96
7 - $55,586.52
8 - $50,285.76
   Time Ext.-56 Days
9 - $82,527.19
   Time Ext.-98 Days
10 - $16,211.07
   Time Ext.-237 Days
11 - $24,693.03
   Time Ext.-37 Days

CURRENT CONTRACT AMOUNT: $62,395,543.26

AMOUNT EARNED TO DATE: $62,385,543.26

% CONTRACT AMOUNT EARNED: 99%

REMARKS: The contractor has completed all major components of construction. The plant was placed into service in early November 2011 using chlorine disinfection. The contractor completed functional and operational testing of the ozone system in early 2013 and the ozone system was placed into service in March 2013. Ozone performance testing was completed in November 2013.

PROJECT NO. 128
LAKE TEXOMA PUMP STATION MODIFICATIONS

CONTRACTOR: ARCHER WESTERN CONTRACTORS, LLC

BID AMOUNT: $6,479,702.00

CHANGE ORDERS:
1 - $37,046.13
2 - $82,116.00

CURRENT CONTRACT AMOUNT: $6,598,864.13

AMOUNT EARNED TO DATE: $6,215,995.88

% CONTRACT AMOUNT EARNED: 95%

REMARKS: Since the two new vertical pumps were stored onsite for an extended period, the option to undertake a factory inspection prior to installation was recommended to the Board at the July 2013 meeting. The Board approved Change Order No. 2 in the amount of $82,116 to have the pumps returned to the pump manufacturer for inspection prior to installation. In December, the pumps were returned for inspection.
PROJECT NO. 153
WATER TREATMENT PLANTS I, II, III AND IV OZONATION

CONTRACTOR: MCCARTHY BUILDING COMPANIES, INC.

BID AMOUNT: $112,989,000.00

CHANGE ORDERS:
1 - $87,737.15
2 - $30,000.00
3 - ($48,178.06)
4 - $120,288.62
5 - $85,531.62
6 - $102,863.15
7 - $252,716.53
8 - $179,303.48
9 - $128,065.21
10 - $111,463.32
11 - $155,596.10
12 - $160,584.35
13 - $269,575.51
14 - $76,130.23
15 - $54,251.21
16 - $144,688.77
17 - $58,405.59
18 - ($475,188.93)
19 - ($4,756,850.01)
20 - $52,692.05
21 - $70,404.74
22 - $72,815.57

CURRENT CONTRACT AMOUNT: $110,872,472.06

AMOUNT EARNED TO DATE: $103,525,483.57

% CONTRACT AMOUNT EARNED: 93%

REMARKS: WTP II Basin No. 7 remains out of service for the installation of the plate settlers and the south ozone contactor. The plate settlers have been started up and are ready for operation. The rectangular butterfly valves in the south contactor also have been started up by the manufacturer and are ready for operation. The south contactor is ready for water even though there is still equipment being installed in the WTP II south contactor ozone gallery. The electrical subcontractor continues with the installation of conduit and wire from the WTP II south electrical room to various pieces of equipment in the contactor gallery. Owner’s witness testing of the ozone equipment at NOPs and WTP II north and south contactors is complete. The witness testing of the miscellaneous instrumentation is in progress. Fuji supplied ozone to the WTP III contactors. The electrical subcontractor continues to install conduit and wire in the WTP I contactor gallery.

---

PROJECT NO. 188
EXPAND HIGH SERVICE PUMP STATION 3-1 TO 350 MGD

CONTRACTOR: BAR CONSTRUCTORS, INC.

BID AMOUNT: $7,720,578.00

CHANGE ORDERS: NONE

CURRENT CONTRACT AMOUNT: $7,720,578.00

AMOUNT EARNED TO DATE: $7,463,639.54

% CONTRACT AMOUNT EARNED: 97%

REMARKS: The contractor installed packing and drain lines; motor cooling feed with pressure regulating valve and return line; and pipe supports on pump control valve spool pieces on Pump Nos. 6 and 7. BAR also installed 4-inch vent piping on air release valve on the exterior of header and poured 2 X 2 foot splash pad. Installed conduits from electrical chase to motor for RTDs, vibration switches, heaters, j-box for emergency stops, and control conduits from electrical chase to control panel locations. The contractor
is beginning to pull cable from soft starters 6 and 7 out to the electrical chase for RTDs and vibration switches.

<table>
<thead>
<tr>
<th>PROJECT NO. 200</th>
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</tr>
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<tbody>
<tr>
<td>INSTALL SECOND 50 MGD PUMP AND</td>
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</tr>
<tr>
<td>IMPROVEMENTS AT APOLLO PUMP STATION</td>
<td></td>
</tr>
<tr>
<td>CONTRACTOR: LEGACY CONTRACTING, LP</td>
<td></td>
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<tr>
<td>CONTRACT DATE: NOVEMBER 21, 2011</td>
<td></td>
</tr>
<tr>
<td>NOTICE TO PROCEED DATE: DECEMBER 21, 2011</td>
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<tr>
<td>ORIGINAL COMPLETION DATE: APRIL 14, 2013</td>
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<tr>
<td>REVISED COMPLETION DATE: JANUARY 21, 2014</td>
<td></td>
</tr>
<tr>
<td>TIME Lapsed: 96%</td>
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</tr>
<tr>
<td><strong>REMARKS:</strong> During the month of December, the contractor completed the construction of the discharge and suction header in preparation for testing of Pump No. 5. Pump No. 5 was placed into service and the project has been accepted as substantially complete.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PROJECT NO. 201</th>
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<td>ELECTRICAL IMPROVEMENTS AT RAW WATER PUMP STATION NO. 2</td>
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<tr>
<td>CONTRACTOR: CRESCENT CONSTRUCTORS INC.</td>
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<td>CONTRACT DATE: SEPTEMBER 27, 2012</td>
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<td>NOTICE TO PROCEED DATE: OCTOBER 11, 2012</td>
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<td>ORIGINAL COMPLETION DATE: OCTOBER 11, 2013</td>
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<td>REVISED COMPLETION DATE: OCTOBER 25, 2013</td>
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<tr>
<td>TIME Lapsed: 116%</td>
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<tr>
<td><strong>REMARKS:</strong> The project is complete. Awaiting final O&amp;M manuals.</td>
<td></td>
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<thead>
<tr>
<th>PROJECT NO. 202</th>
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<tbody>
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<td>ELECTRICAL IMPROVEMENTS AT HIGH SERVICE PUMP STATION NO. 1-1</td>
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<td>CONTRACT DATE: OCTOBER 17, 2013</td>
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<td>NOTICE TO PROCEED DATE: NOVEMBER 6, 2013</td>
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<tr>
<td>COMPLETION DATE: FEBRUARY 14, 2015</td>
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<tr>
<td>TIME Lapsed: 11%</td>
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<tr>
<td><strong>REMARKS:</strong> The contractor has mobilized and begun the submittal process.</td>
<td></td>
</tr>
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</table>
PROJECT NO. 205
SUPERVISORY CONTROL AND DATA ACQUISITION
SYSTEM UPGRADES AND OPERATIONS

CONTRACTOR: PRIME CONTROLS, LP

CONTRACT DATE: DECEMBER 28, 2012

NOTICE TO PROCEED DATE: JANUARY 29, 2013

ORIGINAL COMPLETION DATE: JANUARY 29, 2014

REVISED COMPLETION DATE: APRIL 29, 2014

TIME LAPSED: 73%

REMARKS: Plant III PLC installation and network components are more than 90% complete. Installation of layer three network switches and rack-mounted patch panels in the administration and operations buildings are 90% complete. Installation and documentation of the fiber optics system for the SCADA network is 90% complete. Installation of server rack is finished and installation/startup of work stations is 33% complete. Approximately 5% of the programming is complete.

BID AMOUNT: $2,714,732.000

CHANGE ORDERS: 1 - $21,083.16
Time Ext.-90 Days

CURRENT CONTRACT AMOUNT: $2,735,815.16

AMOUNT EARNED TO DATE: $2,167,479.91

CONTRACT AMOUNT EARNED: 79%

---

PROJECT NO. 206
INSTALL PIPING MODIFICATIONS AT
HAILEY PUMP STATION

CONTRACTOR: LEGACY CONTRACTING, LP

CONTRACT DATE: NOVEMBER 21, 2011

NOTICE TO PROCEED DATE: DECEMBER 21, 2011

COMPLETION DATE: APRIL 14, 2013

TIME LAPSED: 125%

REMARKS: As of May 2013, the contractor has completed all work associated with this project. Closeout is planned to be concurrent with Project No. 200.

BID AMOUNT: $410,584.44

CHANGE ORDERS: NONE

CURRENT CONTRACT AMOUNT: $410,584.44

AMOUNT EARNED TO DATE: $410,584.44

CONTRACT AMOUNT EARNED: 100%

---

PROJECT NO. 207
EXPAND FRISCO/MCKINNEY
PUMP STATION TO 130 MGD

CONTRACTOR: ARCHER WESTERN CONTRACTORS, LLC

CONTRACT DATE: JANUARY 27, 2011

NOTICE TO PROCEED DATE: FEBRUARY 9, 2011

ORIGINAL COMPLETION DATE: JULY 28, 2013

REVISED COMPLETION DATE: SEPTEMBER 6, 2013

TIME LAPSED: 117%

REMARKS: Construction of this project is complete. However, it will remain open until the contractor has submitted all remaining O&M manuals and cost projection required for the electrical study.

BID AMOUNT: $6,441,225.00

CHANGE ORDERS: 1 - $75,540.00
2 - $75,926.64
Time Ext.-40 Days

CURRENT CONTRACT AMOUNT: $6,592,691.64

AMOUNT EARNED TO DATE: $6,520,067.52

% CONTRACT AMOUNT EARNED: 99%
PROJECT NO. 217
ELECTRICAL IMPROVEMENTS AT WATER TREATMENT PLANT II CHEMICAL BUILDING

CONTRACTOR: FACILITY SOLUTIONS GROUP

CONTRACT DATE: AUGUST 25, 2011

NOTICE TO PROCEED DATE: SEPTEMBER 7, 2011

ORIGINAL COMPLETION DATE: NOVEMBER 5, 2012

REVISED COMPLETION DATE: NOVEMBER 11, 2013

TIME LAPPED: 140%

REMARRKS: The contractor has completed all major construction. Awaiting submittal of final O&M manuals.

BID AMOUNT: $1,317,000.00

CHANGE ORDERS: 1 - $78,376.50
2 - $40,710.82
3 - $41,927.53
4 - $19,548.73

CURRENT CONTRACT AMOUNT: $1,497,563.58

AMOUNT EARNED TO DATE: $1,473,014.85

% CONTRACT AMOUNT EARNED: 99%

---

PROJECT NO. 229
WYLIE WATER TREATMENT PLANT SECURITY URENEMENTS, PHASE 2

CONTRACTOR: FACILITIES SOLUTION GROUP

CONTRACT DATE: JULY 26, 2012

NOTICE TO PROCEED DATE: AUGUST 22, 2012

COMPLETION DATE: AUGUST 30, 2013

REVISED COMPLETION DATE: NOVEMBER 15, 2013

TIME LAPPED: 109%

REMARRKS: The contractor has completed all major construction. Awaiting submittal of final O&M manuals.

BID AMOUNT: $2,102,324.00

CHANGE ORDERS: 1 - $6,801.94

CURRENT CONTRACT AMOUNT: $2,109,125.94

AMOUNT EARNED TO DATE: $2,106,125.94

% CONTRACT AMOUNT EARNED: 99%

---

PROJECT NO. 251
WATER TREATMENT PLANT IV CONVERSION TO BIOLOGICALLY ACTIVE FILTRATION

CONTRACTOR: ARCHER WESTERN CONTRACTORS, LLC

CONTRACT DATE: MARCH 22, 2012

NOTICE TO PROCEED DATE: MARCH 29, 2012

COMPLETION DATE: DECEMBER 29, 2013

REVISED COMPLETION DATE: APRIL 28, 2014

TIME LAPPED: 84%

REMARRKS: This project includes work in all 20 filters at WTP IV. Filter Nos. 1-10 and 12-17 are complete with the exception of automatic operation of the leveling gates. These filters have been placed back into service. Filter Nos. 18, 19, and 20 have been removed from service. Existing filter media has been removed from both filters, and the troughs have been raised. The coating in Filter No. 19 is complete. The coating of Filter No. 20 is underway. The electrical subcontractor is installing wire and

BID AMOUNT: $5,364,550.00

CHANGE ORDERS: 1 - $57,815.00
2 - $111,725.00
3 - $138,988.00
4 - $21,308.00

CURRENT CONTRACT AMOUNT: $5,694,386.00

AMOUNT EARNED TO DATE: $5,396,703.31

CONTRACT AMOUNT EARNED: 95%
conduit to the metering pumps and leveling gate operators. Chemical feed piping installation is in progress.

**PROJECT NO. 259**
WATER TREATMENT PLANT I CONVERSION TO BAF AND IMPROVEMENTS OF EXISTING UNDERDRAINS

**CONTRACTOR:** PCL CONSTRUCTION, INC.

**BID AMOUNT:** $7,535,625.00

**CHANGE ORDERS:**
1 - $181,105.96
2 - $227,024.59
3 - $28,269.20

**CURRENT CONTRACT AMOUNT:** $7,972,024.75

**NOTICE TO PROCEED DATE:** DECEMBER 6, 2012

**AMOUNT EARNED TO DATE:** $5,289,418.45

**COMPLETION DATE:** MAY 5, 2015

**% CONTRACT AMOUNT EARNED:** 79%

**TIME LAPSED:** 43%

**REMARKS:** This project includes work in all 12 filters and 4 clarifiers at WTP I. WTP I is currently completely shut down since October 13, 2013, and will be put back into operation in February 2014. Contractor completed installing media in Filter Nos. 2, 4, 8, 10, and 12. Backwash cycles and media testing are complete. Demolition of troughs and slab on Filter No. 6 is complete. All new valves/actuators and magmeter are installed. Media removal of odd-numbered filters was completed and demolition work is in progress.

**PROJECT NO. 268**
LAKE TEXOMA OUTFALL TO WYLIE WATER TREATMENT PLANT RAW WATER PIPELINE

**CONTRACTOR:** (CMAR): GARNEY CONSTRUCTION

**AUTHORIZED TOTAL AMOUNT TO DATE:** $282,323,495.00

**AUTHORIZED EXPENDITURE TO DATE:** $278,701,907.80

**CMAR NOTICE TO PROCEED DATE:** JUNE 29, 2012

**AMOUNT EARNED TO DATE:** $261,653,894.72

**CONTRACT DATE:** JANUARY 26, 2012

**COMPLETION DATE:** MARCH 15, 2014

**TIME LAPSED:** 87%

**REMARKS:** In January 2013, through approval of Administrative Memorandum No. 3931, the Board approved an adjustment to the allowance for Garney Companies, Inc., (the CMAR) for additional funding for bonds, insurance, contingency, and construction in the amount of $20,075,609. This requested additional funding also set the guaranteed maximum price at $282,323,495 based on the current scope for the project.

**BIDS RECEIVED & AWARDED**
During December, Plant Work Bid Package No. 6 evaluations were delayed while Garney waited for clarification on specific bid item questions. This bid package is for the mobile filtration components.

**CONSTRUCTION**
In December, contractors completed work on tunnels in the plant. All pipeline sections (A, B, C, D, and E) are complete, and the pipeline was filled for the hydrostatic test. Sections B-E successfully completed hydrostatic testing in November, and Section A passed in December. Pipeline contractors continued work on easement restoration and fiber optic conduit installation. The balancing reservoir contractor achieved substantial completion on both cells in November and continued work on miscellaneous electrical/SCADA work items. The surge tank, blend tank III, and blend tank IV are substantially complete. The blend tanks subcontractor completed wire winding on blend I and II tanks. Work continued in the north and south electrical buildings at Raw Water Pump Station No. 3 as well as the
reclaim electrical buildings. Work continued on the mixing boxes, various meter vaults, flow meter installations, and plant piping. The electrical contractor continued work on miscellaneous items including setting equipment, panels, and various duct banks throughout the plant site.
<table>
<thead>
<tr>
<th>Amendment</th>
<th>Date Bid</th>
<th>Date Authorized</th>
<th>Item Description</th>
<th>Budget</th>
<th>Actual Bid</th>
<th>Difference</th>
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<tbody>
<tr>
<td>1</td>
<td>N/A</td>
<td>06/29/12</td>
<td>Procurement Service</td>
<td>$350,540</td>
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<td>1</td>
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<td>1</td>
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<td>Bonds and Insurance</td>
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<td>2</td>
<td>06/06/12</td>
<td>06/29/12</td>
<td>Pipe Material</td>
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<td>3</td>
<td>07/11/12</td>
<td>08/16/12</td>
<td>CMAR Provided Materials &amp; Services for Pipeline</td>
<td>$10,142,738</td>
<td>$10,337,599</td>
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<td>3</td>
<td>07/11/12</td>
<td>08/16/12</td>
<td>CMAR Selected Materials &amp; Services for Pipeline</td>
<td>$10,196,843</td>
<td>$9,267,129</td>
<td>-$929,714</td>
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<td>3</td>
<td>07/11/12</td>
<td>08/16/12</td>
<td>CMAR Provided Materials &amp; Services for Connections &amp; Blending</td>
<td>$2,614,830</td>
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<td>3a</td>
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<td>10/31/12</td>
<td>Credit for CMAR Selected Materials that were incorporated into Amendment No. 5</td>
<td>-$9,267,129</td>
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<td>4</td>
<td>08/01/12</td>
<td>08/16/12</td>
<td>CMAR Provided Services for Sludge Removal at WTP Site</td>
<td>$2,049,507</td>
<td>$1,867,888</td>
<td>-$181,619</td>
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<td>5</td>
<td>10/03/12</td>
<td>10/31/12</td>
<td>Pipeline Installation (John D. Stevens Sections A&amp;B, BAR Constructors Section C, Garney Construction Section D, and Oscar Renda Contracting Section E)</td>
<td>$63,185,094</td>
<td>$55,453,176</td>
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<td>10/03/12</td>
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<td>ASI Constructors constructs Balancing Reservoir</td>
<td>$20,872,668</td>
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<td>07/11/12</td>
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<td>Construction Staking</td>
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<td>Gate Valves</td>
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<td>$342,408</td>
<td>$88,408</td>
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<td>09/12/12</td>
<td>12/07/12</td>
<td>Flow Control Ball Valve</td>
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<td>$429,970</td>
<td>-$65,030</td>
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<td>09/12/12</td>
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<td>Sleeve Valves</td>
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<td>Flow Meters</td>
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<td>12/07/12</td>
<td>MV Switchgear RWPS3</td>
<td>$389,000</td>
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<td>MV VFD RWPS3</td>
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<td>N/A</td>
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<td>Allowance for Bonds and Insurance</td>
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<td>7</td>
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<td>Allowance for Utility Conflicts</td>
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<td>$150,000</td>
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<td>8</td>
<td>12/12/12</td>
<td>01/21/13</td>
<td>Plant I &amp; II Furnish and Install</td>
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<td>$8,550,835</td>
<td>-$2,862,262</td>
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<td>8</td>
<td>12/12/12</td>
<td>01/21/13</td>
<td>Plant III &amp; IV Furnish and Install</td>
<td>$10,913,404</td>
<td>$9,107,940</td>
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<td>8</td>
<td>12/12/12</td>
<td>01/21/13</td>
<td>60&quot; &amp; 78&quot; Yard Pipe and Connections</td>
<td>$7,524,695</td>
<td>$5,368,890</td>
<td>-$2,155,805</td>
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<td>8</td>
<td>12/12/12</td>
<td>01/21/13</td>
<td>Existing Plant Chemical Feed, meters, and vaults</td>
<td>$1,694,290</td>
<td>$3,512,000</td>
<td>-$1,817,710</td>
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<td>8</td>
<td>12/12/12</td>
<td>01/21/13</td>
<td>Submittals in support of Texoma Surge Tank</td>
<td>$250,000</td>
<td>$250,000</td>
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<td>8</td>
<td>12/12/12</td>
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<td>Sherman Bypass</td>
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<td>9</td>
<td>12/19/12</td>
<td>02/08/13</td>
<td>Electrical &amp; Instrumentation/ SCADA</td>
<td>$11,537,350</td>
<td>$12,541,700</td>
<td>$1,004,350</td>
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<td>9</td>
<td>12/12/12</td>
<td>02/08/13</td>
<td>Concrete Raw Water Storage - Lake Texoma Surge Tank</td>
<td>$3,827,500</td>
<td>$2,797,653</td>
<td>-$1,029,847</td>
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<td>9</td>
<td>12/12/12</td>
<td>02/08/13</td>
<td>Credit for Submittals in support of Texoma Surge Tank</td>
<td>-$250,000</td>
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<td>$0</td>
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<td>9</td>
<td>12/12/12</td>
<td>02/08/13</td>
<td>Concrete Raw Water Storage - Blend Tanks I &amp; II</td>
<td>$4,500,000</td>
<td>$4,381,897</td>
<td>-$118,103</td>
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<td>9</td>
<td>12/12/12</td>
<td>02/08/13</td>
<td>Concrete Raw Water Storage - Blend Tanks III &amp; IV</td>
<td>$5,000,000</td>
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<td>$525,689</td>
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<td>10</td>
<td>N/A</td>
<td>02/08/13</td>
<td>Allowance for Bonds, Insurance, and Contingency</td>
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<td>11</td>
<td>03/06/13</td>
<td>06/17/13</td>
<td>Cathodic Protection System and implementation</td>
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<td>11</td>
<td>03/06/13</td>
<td>06/17/13</td>
<td>Fiber Optic Cable Install</td>
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<td>$499,852</td>
<td>$57,239</td>
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<td>11</td>
<td>04/05/13</td>
<td>06/17/13</td>
<td>Pump Vibration Monitoring and Correction</td>
<td>$250,000</td>
<td>$293,000</td>
<td>$43,000</td>
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<td><strong>Current Total</strong></td>
<td><strong>297,732,083</strong></td>
<td><strong>278,358,532</strong></td>
<td><strong>-$19,373,551</strong></td>
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</table>
PROJECT NO. 276
Wylie Water Treatment Plant Finished Water Reservoir & Flow Metering Improvements

Contractor: Bar Constructors, Inc.

Contract Date: August 22, 2013

Notice to Proceed Date: October 1, 2013

Completion Date: July 23, 2015

Time Lapsed: 14%

Remarks: Submittals are currently under review. Pipelines have been located in areas where meter vaults are to be constructed.

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PROJECT NO. 277
Water Treatment Plant III Filter Underdrain Improvements and Conversion to BAF

Contractor: Archer Western Contractors, LLC

Contract Date: January 24, 2013

Notice to Proceed Date: February 7, 2013

Original Completion Date: December 9, 2015

Revised Completion Date: January 9, 2016

Time Lapsed: 31%

Remarks: This project includes work in all 40 filters at WTP III and Filter No. 21 at WTP II. The contractor completed work on Filter Nos. 36 and 37 this month. Filters completed to-date are Nos. 36-40. Filter No. 23 is out of service pending approval of a change order to replace the underdrain blocks. Filter No. 26, which requires extensive repairs, is out of service until next winter when a large portion of the plant can be out of service for the period of time required to complete the repairs. Filter Nos. 1, 2, and 3 are currently out of service undergoing repairs. Mortar repairs are underway in Filter No. 2 and the underdrain blocks have been removed from Filter No. 3. The washwater valves were removed from Filter Nos. 1 and 3 due to extensive leakage. NTMWD Technical Services Department is rebuilding two 30-inch valves to install in place of these leaking valves. Testing is underway to find more filters with leaking washwater valves in order to repair them before demand increases, at which point the washwater system cannot be taken out of service.
PROJECT NO. 282
24-INCH REPLACEMENT LINE FOR THE PRINCETON NO. 1 AND MCKINNEY-PRINCETON-FARMERSVILLE PIPELINES CROSSING US HIGHWAY 380

CONTRACTOR: WRIGHT CONSTRUCTION CO., INC.

CONTRACT DATE: JUNE 27, 2013

NOTICE TO PROCEED DATE: JULY 3, 2013

COMPLETION DATE: JANUARY 9, 2014

TIME LAPSED: 95%

REMARKS: The contractor has installed the bored casing under U.S. Highway 380 and 24-inch carrier pipe inside the casing. The new 24-inch waterline has been installed up to the two tie-in locations. A tie-in is scheduled for early January 2014.

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PROJECT NO. 283
FM 1378 20-INCH AND 60 INCH WATERLINE RELOCATIONS

CONTRACTOR: MOUNTAIN CASCADE OF TEXAS, LLC

CONTRACT DATE: DECEMBER 20, 2012

NOTICE TO PROCEED DATE: JANUARY 4, 2013

ORIGINAL COMPLETION DATE: JUNE 3, 2013

REVISED COMPLETION DATE: DECEMBER 30, 2013

TIME LAPSED: 100%

REMARKS: The new 20-inch waterline passed the pressure and bacteriological testing during the week of November 11, 2013. On November 19, tie-ins to the existing system were made. Final payment will be made in January 2014 as authorized by the Board.

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PROJECT NO. 284
WYLIE WTPs I AND II SLUDGE LINE IMPROVEMENTS

CONTRACTOR: PCL CONSTRUCTION, INC.

CONTRACT DATE: JUNE 27, 2013

NOTICE TO PROCEED DATE: AUGUST 12, 2013

ORIGINAL COMPLETION DATE: JANUARY 9, 2014

REVISED COMPLETION DATE: FEBRUARY 4, 2014

TIME LAPSED: 77%

REMARKS: Approximately 96% of the pipeline is installed. Contractor encountered direct-buried 25KV electrical cables not shown on record drawings parallel and along the pipeline alignment. A recommendation to perform this installation by jack-and-bore will be presented for consideration at the January Board meeting. Currently waiting for final approval for contractor to install the final 100 LF (approximately). Shutdown to connect new pipeline to existing sludge system will be requested and scheduled after pipe installation.
### PROJECT NO. 293
BONHAM WATER TREATMENT PLANT
SLUDGE LAGOON IMPROVEMENTS

**Contractor:** HARRISON WALKER & HARPER, LP  
**Contract Date:** APRIL 25, 2013  
**Notice to Proceed Date:** MAY 8, 2013  
**Completion Date:** APRIL 3, 2014  
**Time Lapsed:** 70%

**Remarks:** Sludge removal from original Lagoons 1 and 2 has been completed. Lagoons were cleaned to original elevation. Contractor continues work on embankments. The two 24-inch plug valves to be relocated have been removed, and installation at the revised location will be scheduled in January 2014. Contractor continues work on decant and manganese pipelines.

### PROJECT NO. 296
WYLIE WATER TREATMENT PLANT IMPROVEMENTS  
FOR LAGOONS 1, 2, AND 3

**Contractor:** PCL CONSTRUCTION, INC.  
**Contract Date:** SEPTEMBER 19, 2013  
**Notice to Proceed Date:** OCTOBER 7, 2013  
**Completion Date:** MAY 5, 2014  
**Time Lapsed:** 27%

**Remarks:** The contractor is providing submittals for review. Construction is to begin upon substantial completion of Project No. 284, which PCL is also constructing. This construction sequencing is due to the close proximity of the two projects.

### PROJECT NO. 299
LAKE TAWAKONI WATER TREATMENT PLANT  
CHLORINE DIOXIDE SYSTEM

**Contractor:** RED RIVER CONSTRUCTION  
**Contract Date:** JANUARY 24, 2013  
**Notice to Proceed Date:** MARCH 1, 2013  
**Original Completion Date:** SEPTEMBER 7, 2013  
**Revised Completion Date:** JANUARY 19, 2014  
**Time Lapsed:** 97%

**BID Amount:** $2,388,146.00  
**Change Orders:** 1 - ($16,334.38)  
2 - $34,984.00  
Time Ext.-134 Days  
**Current Contract Amount:** $2,406,795.62  
**Amount Earned to Date:** $2,390,665.62  
**% Contract Amount Earned:** 99%

**Remarks:** Plumbing in the generator room and at the chemical containment area is complete as well as insulation of pipes. The PLC cabinet has been installed and wiring is complete. Testing will resume at the end of December and early January. Leak testing of chemical tanks is complete and chemicals have been delivered. A short training session has been held and more extensive training on the system has been scheduled for January 7, 2014.
<table>
<thead>
<tr>
<th>PROJECT NO. 310</th>
<th>BID AMOUNT: $127,262.00</th>
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<tbody>
<tr>
<td>WYLIE-MCKINNEY 20-INCH WATERLINE RELOCATION AT STINSON ROAD</td>
<td>CHANGE ORDERS: NONE</td>
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<tr>
<td>CONTRACTOR: DOWAGER UTILITY CONSTRUCTION, LTD.</td>
<td>CURRENT CONTRACT AMOUNT: $127,262.00</td>
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<tr>
<td>CONTRACT DATE: JULY 25, 2013</td>
<td>AMOUNT EARNED TO DATE: $125,032.00</td>
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<td>NOTICE TO PROCEED DATE: AUGUST 1, 2013</td>
<td>CONTRACT AMOUNT EARNED: 98%</td>
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<td>COMPLETION DATE: FEBRUARY 27, 2014</td>
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<tr>
<td>TIME LAPSED: 70%</td>
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</tr>
<tr>
<td>REMARKS: The contractor has installed the casing and carrier pipe, passed pressure and bacteriological testing. The tie-in has been completed and the contractor is finishing the manholes for the blowoff and air release valves. Project completion is expected in mid-January.</td>
<td></td>
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<table>
<thead>
<tr>
<th>PROJECT NO. 313</th>
<th>BID AMOUNT: $165,000.00</th>
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<tbody>
<tr>
<td>UNION PACIFIC RAILROAD CROSSING PROTECTION OF EXISTING 72-INCH TEXOMA PIPELINE</td>
<td>CHANGE ORDERS: NONE</td>
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<tr>
<td>CONTRACTOR: LEWIS CONTRACTORS, INC.</td>
<td>CURRENT CONTRACT AMOUNT: $165,000.00</td>
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<tr>
<td>CONTRACT DATE: NOVEMBER 21, 2013</td>
<td>AMOUNT EARNED TO DATE: $0.00</td>
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<td>NOTICE TO PROCEED DATE: DECEMBER 12, 2013</td>
<td>% CONTRACT AMOUNT EARNED: 0%</td>
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<td>COMPLETION DATE: MARCH 12, 2014</td>
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<td>TIME LAPSED: 16%</td>
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<td>REMARKS: A preconstruction meeting was held in December 2013. Submittals are currently under review. A planned shutdown of the Texoma Pipeline is scheduled for January 13-27, 2014. This work is to be completed by the end of the pipeline shutdown.</td>
<td></td>
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<th>PROJECT NO. 318</th>
<th>BID AMOUNT: $250,000</th>
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<tr>
<td>WYLIE NO. 3 DELIVERY POINT METERING STATION UPGRADE</td>
<td>CHANGE ORDERS: NONE</td>
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<tr>
<td>CONTRACTOR: CRESCENT CONSTRUCTORS, INC.</td>
<td>CURRENT CONTRACT AMOUNT: $250,000.00</td>
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<tr>
<td>CONTRACT DATE: NOVEMBER 21, 2013</td>
<td>AMOUNT EARNED TO DATE: $5,095.00</td>
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<td>NOTICE TO PROCEED DATE: DECEMBER 12, 2013</td>
<td>CONTRACT AMOUNT EARNED: 2%</td>
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<tr>
<td>COMPLETION DATE: JULY 10, 2014</td>
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<tr>
<td>TIME LAPSED: 6%</td>
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</tr>
<tr>
<td>REMARKS: The contractor is in the process of submitting technical data on items to be installed on this project. Delivery time is expected to be up to 16 weeks.</td>
<td></td>
</tr>
</tbody>
</table>
PROJECT NO. 320
WYLIE WATER TREATMENT PLANT II
IMPROVEMENTS FOR BASINS 3 AND 4

CONTRACTOR: BAR CONSTRUCTORS, INC.

CONTRACT DATE: OCTOBER 17, 2013

NOTICE TO PROCEED DATE: NOVEMBER 4, 2013

ORIGINAL COMPLETION DATE: JANUARY 22, 2015

TIME LAPSED: 9%

REMARKS: Demolition is near completion on the wall separating the north and south halves of Basin No. 4. The effluent troughs in Basin No. 4 have been removed and the 8-inch thick concrete pad with six inches of flex-base has been installed for the contractor's crane.

PROJECT NO. 222
ROWLETT CREEK RWWTP
2011 IMPROVEMENTS

CONTRACTOR: ARCHER WESTERN CONSTRUCTION, LLC

NOTICE TO PROCEED DATE: MAY 29, 2012

ORIGINAL COMPLETION DATE: AUGUST 22, 2013

REVISED COMPLETION DATE: DECEMBER 10, 2013

TIME LAPSED: 103%

REMARKS: During December 2013, Archer Western and Acme, the electrical subcontractor, completed all preliminary punchlist items. The final walkthrough was also completed. Archer Western will complete the minor tasks remaining and submit final O&M manuals and record drawings.

PROJECT NO. 223
PRAIRIE CREEK RELIEF SEWER CONTROL STRUCTURE
FLOW METERING IMPROVEMENTS

CONTRACTOR: LEGACY CONTRACTING, LP

CONTRACT DATE: SEPTEMBER 19, 2013

NOTICE TO PROCEED DATE: NOVEMBER 12, 2013

COMPLETION DATE: JULY 10, 2014

TIME LAPSED: 20%

REMARKS: Contractor has secured the necessary building permits from the City of Plano and is working on submittals.
PROJECT NO. 227A
UPPER WHITE ROCK CREEK PARALLEL FORCE MAIN

CONTRACTOR: S.J. LOUIS CONSTRUCTION OF TX, LTD

CONTRACT DATE: FEBRUARY 28, 2013

NOTICE TO PROCEED DATE: MARCH 21, 2013

ORIGINAL COMPLETION DATE: FEBRUARY 24, 2014

REVISED COMPLETION DATE: MARCH 21, 2014

TIME LAPSED: 78%

REMARKS: During the month of December, S.J. Louis installed two plug valves, pressure tested the force main, and tied the new force main into the lift station at the end of the north end.

BID AMOUNT: $3,099,488.48

CHANGE ORDERS: 1 - $142,269.74
Time Ext.-25 Days

CURRENT CONTRACT AMOUNT: $3,241,758.22

AMOUNT EARNED TO DATE: $2,868,897.71

% CONTRACT AMOUNT EARNED: 88%

---

PROJECT NO. 227B
UPPER WHITE ROCK CREEK LIFT STATION IMPROVEMENTS

CONTRACTOR: ARCHER WESTERN CONSTRUCTION, LLC

CONTRACT DATE: MARCH 28, 2013

NOTICE TO PROCEED DATE: MAY 1, 2013

ORIGINAL COMPLETION DATE: MAY 26, 2014

REVISED COMPLETION DATE: SEPTEMBER 1, 2014

TIME LAPSED: 50%

REMARKS: Archer Western continues the submittal process.

BID AMOUNT: $2,060,950.00

CHANGE ORDERS: 1 - ($219,000.00)
2 - $178,041.56
Time Ext.-88 Days

CURRENT CONTRACT AMOUNT: $2,017,991.56

AMOUNT EARNED TO DATE: $46,350.00

% CONTRACT AMOUNT EARNED: 2%

---

PROJECT NO. 228
COTTONWOOD CREEK OUTFALL SEWER IMPROVEMENTS

CONTRACTOR: INSITUFORM TECHNOLOGIES, LLC

CONTRACT DATE: NOVEMBER 15, 2012

NOTICE TO PROCEED DATE: DECEMBER 12, 2012

COMPLETION DATE: DECEMBER 17, 2013

TIME LAPSED: 104%

REMARKS: Insituform performed rehabilitation on five manholes and installed two flat top manholes. Bank stabilization at the aerial crossings has started.

BID AMOUNT: $2,686,876.00

CHANGE ORDERS: 1 - $24,896.50

CURRENT CONTRACT AMOUNT: $2,711,772.50

AMOUNT EARNED TO DATE: $1,962,369.75

% CONTRACT AMOUNT EARNED: 72%
PROJECT NO. 234
ASAP GRAVITY INTERCEPTOR IMPROVEMENTS, SECTION 1

CONTRACTOR: REPIPE CONSTRUCTION, LLC

CONTRACT DATE: JUNE 28, 2012

NOTICE TO PROCEED DATE: AUGUST 20, 2012

ORIGINAL COMPLETION DATE: FEBRUARY 16, 2013

REVISED COMPLETION DATE: MAY 31, 2013

TIME LAPSED: 175%

REMARKS: All major work is complete. Final payment is being withheld pending resolution of bond claim by supplier.

PROJECT NO. 245
UPPER ROWLETT CREEK LIFT STATION
FLOW METERING IMPROVEMENTS

CONTRACTOR: ARCHER WESTERN CONSTRUCTION, LLC

CONTRACT DATE: SEPTEMBER 19, 2013

NOTICE TO PROCEED DATE: OCTOBER 22, 2013

COMPLETION DATE: SEPTEMBER 17, 2014

TIME LAPSED: 21%

REMARKS: Contractor has begun the excavation for the vault and is continuing with the submittal process.

PROJECT NO. 254
SOUTH MESQUITE RWWTP
ELECTRICAL IMPROVEMENTS

CONTRACTOR: ACME ELECTRIC COMPANY

CONTRACT DATE: JANUARY 24, 2013

NOTICE TO PROCEED DATE: JANUARY 29, 2013

COMPLETION DATE: FEBRUARY 28, 2014

TIME LAPSED: 84%

REMARKS: The generator and switchgear pad have been completed. All rebar is in place and the remaining small equipment pads are 90% complete.
PROJECT NO. 255E
FORNEY MUSTANG CREEK INTERCEPTOR SYSTEM
FORNEY PARALLEL INTERCEPTOR

CONTRACTOR: S.J. LOUIS CONSTRUCTION OF TEXAS, LTD.

CONTRACT DATE: APRIL 25, 2013
NOTICE TO PROCEED: MAY 6, 2013
COMPLETION DATE: MARCH 8, 2014
TIME LAPSED: 78%

REMARKS: NTMWD has met with the City of Forney regarding the installation of this pipeline and the engineer is working on the design for eliminating an aerial creek crossing on a connecting lateral, which will be installed and tied-in by S.J. Louis.

PROJECT NO. 255F
FORNEY MUSTANG CREEK INTERCEPTOR SYSTEM
FORNEY LIFT STATION IMPROVEMENTS

CONTRACTOR: ARCHER WESTERN CONSTRUCTION

CONTRACT DATE: AUGUST 22, 2013
NOTICE TO PROCEED: SEPTEMBER 9, 2013
COMPLETION DATE: AUGUST 5, 2014
TIME LAPSED: 34%

REMARKS: Archer Western formed and poured the electrical building slab. The electrical subcontractor installed the grounding grid for the electrical building.

PROJECT NO. 270
SOUTH MESQUITE CREEK REGIONAL WASTEWATER TREATMENT PLANT AERATION SYSTEM IMPROVEMENTS, PHASE 1

CONTRACTOR: GRACON CONSTRUCTION

CONTRACT DATE: SEPTEMBER 19, 2013
NOTICE TO PROCEED: OCTOBER 15, 2013
COMPLETION DATE: FEBRUARY 7, 2015
TIME LAPSED: 16%

REMARKS: Gracon Construction setup the contractor’s and inspector’s construction trailers and is working on getting submittals approved.
PROJECT NO. 278
WILSON CREEK GRAVITY INTERCEPTOR IMPROVEMENTS
PHASE 1

CONTRACTOR: INSITUFORM TECHNOLOGIES, LLC

CONTRACT DATE: AUGUST 22, 2013

NOTICE TO PROCEED DATE: SEPTEMBER 11, 2013

COMPLETION DATE: JUNE 8, 2014

TIME LAPSED: 41%

REMARKS: Insituform continues the submittal process.

BID AMOUNT: $3,043,905.10
CHANGE ORDERS: NONE
CURRENT CONTRACT AMOUNT: $3,043,905.10
AMOUNT EARNED TO DATE: $0.00
% CONTRACT AMOUNT EARNED: 0%

PROJECT NO. 279
UPPER EAST FORK INTERCEPTOR SYSTEM
FUGITIVE EMISSIONS CONTROL

CONTRACTOR: ARCHER WESTERN CONSTRUCTION, LLC

CONTRACT DATE: DECEMBER 19, 2013

NOTICE TO PROCEED DATE: TBD

COMPLETION DATE: TBD

TIME LAPSED: 0%

REMARKS: The contract documents were executed at the December 19, 2013, Board meeting and the preconstruction conference and notice to proceed will occur in January 2014. Contractor is working on submittals.

BID AMOUNT: $1,684,000.00
CHANGE ORDERS: NONE
CURRENT CONTRACT AMOUNT: $1,684,000.00
AMOUNT EARNED TO DATE: $0.00
% CONTRACT AMOUNT EARNED: 0%

PROJECT NO. 280
FLOYD BRANCH RWWTP
ODOR CONTROL IMPROVEMENTS

CONTRACTOR: CRESCENT CONSTRUCTORS, INC.

CONTRACT DATE: JANUARY 24, 2013

NOTICE TO PROCEED DATE: FEBRUARY 6, 2013

ORIGINAL COMPLETION DATE: MARCH 13, 2014

REVISED COMPLETION DATE: APRIL 2, 2014

TIME LAPSED: 77%

REMARKS: During the month of December, Crescent completed electrical work and addressed punchlist items. Crescent demobilized from site while awaiting delivery of the modified hand rails for the primary clarifier.

BID AMOUNT: $817,000.00
CHANGE ORDERS: 1 - $18,223.00
Time Ext.-20 Days
CURRENT CONTRACT AMOUNT: $835,223.00
AMOUNT EARNED TO DATE: $826,912.00
% CONTRACT AMOUNT EARNED: 99%
PROJECT NO. 288
SOUTH MESQUITE CREEK RWTP SOLIDS
BUILDING ODOR CONTROL IMPROVEMENTS

CONTRACTOR: ASSOCIATED CONSTRUCTION PARTNERS

CONTRACT DATE: MAY 23, 2013

NOTICE TO PROCEED: JUNE 19, 2012

COMPLETION DATE: JUNE 14, 2014

TIME LAPSED: 54%

REMARKS: Associated Construction Partners did the soil boring for determining the depth of the piers for the scrubber foundation.

PROJECT NO. 300
ASAP GRAVITY INTERCEPTOR IMPROVEMENTS,
SECTION 2 and 3

CONTRACTOR: INSIQUIT FORM TECHNOLOGIES, LLC

CONTRACT DATE: OCTOBER 17, 2013

NOTICE TO PROCEED DATE: NOVEMBER 19, 2013

COMPLETION DATE: JULY 17, 2014

TIME LAPSED: 18%

REMARKS: Insituform continues the submittal process.

TOTAL VALUE - ALL PROJECTS $583,084,113.52

TOTAL EARNED - ALL PROJECTS $498,204,995.31

85%
NORTH TEXAS MUNICIPAL WATER DISTRICT

MINUTES – POLICY COMMITTEE MEETING
HELD DECEMBER 19, 2013, AT 11:30 A.M.
IN THE ADMINISTRATIVE OFFICES, WYLIE, TEXAS

Chairman Bill Lofland called the meeting of the NTMWD Policy Committee to order at approximately 11:50 a.m. on Thursday, December 19, 2013, at the Administrative Offices in Wylie, Texas.

Members present included Chairman Bill Lofland, Directors Terry Anderson, Marvin Fuller, James Kerr, Larry Parks, John Sweeden, Patrick Nicklen, and Joe Farmer. Vice President Darwin Whiteside, Secretary Joe Joplin, and past President Charles McKissick also attended. Directors Shep Stahel and Bob Thurmond also attended. NTMWD staff members present included Jim Parks, Joe Stankiewicz, Mike Rickman, and Melissa Fuller. Shannon Kackly of Gay McCall Isaacks Gordon & Roberts, PC, was also in attendance.

I. ACTION ITEMS

A. Consider Approval of Minutes – June 27, 2013

Upon a motion by Director James Kerr and a second by Larry Parks, the Policy Committee voted unanimously to approve the minutes of the Policy Committee meeting on June 27, 2013.

II. DISCUSSION ITEMS

A. Consider Recommendation on Authorizing Award of Construction Contract on Project No. 301, NTMWD Administration Building Structural Improvements, Task No. 1
(Please refer to Administrative Memorandum No. 4090-1)

Joe Stankiewicz reviewed Project No. 301, NTMWD Administration Building Structural Improvements. Mr. Stankiewicz reviewed the causes of settlement to the concrete slabs poured on grade, which included tree roots robbing the moisture from subgrade, the subgrade shrinking leaving void spaces, which has resulted in slab settlement and interior wall cracking. Mr. Stankiewicz reported that there are no structural issues at perimeter walls/interior grade beams.

Mr. Stankiewicz presented a comparison of Project No. 301 to an alternate approach to build a stand-alone building including office space, projected costs, and costs spent to date. The cost to date on Project No. 301 is $220,000, the current projected cost of Project No. 301 is $5,400,000, and the projected cost of the alternate to build a stand-alone building is $7,200,000.

Mr. Stankiewicz reviewed the advantages and disadvantages of the two different approaches. Advantages to renovation of the current building reviewed included utilization of existing building, $2,000,000 less cost than alternative, and the project could be completed sooner. The disadvantages reviewed were that the existing structure may require future maintenance and be less energy efficient.
Mr. Stankiewicz reviewed the advantages and disadvantages of a new building. Advantages to a new building reviewed were the construction of all new facilities and increased energy efficiency. Disadvantages discussed including parking and demolition will require detailed sequencing, additional engineering and construction cost, and the lease for off-site offices will need to be extended.

Mr. Stankiewicz reviewed the current schedule as well as the alternate schedule. Joe advised that currently $3.3 million is budgeted for the building repair and or replacement, which leaves a deficit of $1.5 million for Project No. 301 and $3.5 million for the alternate.

The NTMWD staff recommended authorizing the award of a construction contract to Mart, Inc., in the amount of $47,000 for Project No. 301, NTMWD Administration Building Structural Improvements, Task 1.

Committee discussion followed including:

- Terry Anderson discussed the future projected growth in the District's service area as well as within the District staff and his reasoning for recommending further evaluation of this project and alternates.

- Joe Joplin discussed concern over an addition to a structure that may not be sound and the risk analysis for the project.

Director Joe Farmer made a motion to recommend to the Board of Directors approval of the award of a construction contract to Mart, Inc., in the amount of $47,000 for Project No. 301, NTMWD Administration Building Structural Improvements, Task 1. Director Larry Parks seconded the motion, which was approved by a majority vote. Director Marvin Fuller voted against the motion.

III. ADJOURNMENT

The meeting adjourned at approximately 12:51 p.m. The Chairman will call the next meeting with proper notification to all members.

BILL LOFLAND
Chairman
NORTH TEXAS MUNICIPAL WATER DISTRICT

MINUTES OF FINANCE/AUDIT COMMITTEE MEETING
HELD ON THURSDAY, DECEMBER 19, 2013, AT 1:00 P.M.
IN THE NTMWD ADMINISTRATIVE OFFICES, WYLIE, TEXAS

I. CALL TO ORDER

Chairman John Sweeden called the meeting of the Finance/Audit Committee to order at approximately 1:00 p.m. on Thursday, December 19, 2013, in the Administrative Offices in Wylie, Texas.

Finance/Audit Committee members in attendance included Chairman John Sweeden, Directors Joe Farmer, Don Cates, Terry Anderson, Shep Stahel, Don Gordon, and Marvin Fuller. NTMWD President Bill Lofland, Vice President Darwin Whiteside, Secretary Joe Joplin, Past President Charles McKissick, Directors James Kerr, Jack May, Patrick Nicklen, and Bob Thurmond also attended. NTMWD staff in attendance included Jim Parks and Melisa Fuller.

II. SPECIAL EXECUTIVE SESSION RELATED TO SELECTION OF EXECUTIVE DIRECTOR

The regular session recessed at 1:05 p.m.

Chairman John Sweeden declared a need for an Executive Session of the Finance/Audit Committee to discuss personnel issues pursuant to Section 551.074 of the Texas Government Code. The Executive Session was called to order by Chairman John Sweeden at 1:06 p.m.

The Executive Session adjourned at 1:45 p.m.

The Finance/Audit Committee reconvened into regular session at 1:46 p.m.

III. ACTION ITEMS

A. Consider Approval of Minutes – August 22, 2013

Upon a motion by Director Joe Farmer and a second by Director Shep Stahel, the Finance/Audit Committee voted unanimously to approve the minutes of the meeting held on August 22, 2013.

B. Consideration and Possible Action on Recommendation for Executive Director Nominee Compensation Package

On a motion by Director Terry Anderson and a second by Director Shep Stahel, the Finance/Audit Committee voted unanimously to recommend approval to the Board of Directors the compensation package as presented for the Executive Director nominee.

IV. ADJOURNMENT

There being no further business, the meeting adjourned at 1:50 p.m. The next meeting of the Finance/Audit Committee will be called by the Chairman with proper notification to all members.

JOHN SWEEDE
Chairman