



TO: Finance Committee (FC)
FROM: Executive Director's Office (EDO)
RE: Full-Scale Sediment Augmentation Design Summary
DATE: July 19, 2017

FC Request

The EDO requests the FC discuss and approve the attached bid package for Platte River Recovery Implementation Program (PRRIP or Program) full-scale sediment augmentation. The Technical Advisory Committee (TAC) approved moving this bid package on to the FC for discussion and final approval.

Introduction

As a part of full-scale sediment augmentation, the Program developed an augmentation design to be implemented starting in the south channel of the Platte River immediately downstream of the J2 return (Figure 1). The design represents an ongoing effort to address the ongoing sediment deficit in the 90-mile Associated Habitat Reach (AHR). Extensive monitoring and modeling shows the average annual deficit to be on the order of 110,000 tons per year with very high (25,000 - 220,000 tons) annual variability (HDR Engineering, Inc. 2011). This dynamic variability is validated by 2009 - 2014 system-scale monitoring data, illustrating aggradation-degradation trends to be highly dependent on hydrology (Tetra Tech, Inc. 2014). Based on revised HEC-6T modelling (Tetra Tech, Inc. 2015), the reach-scale deficit in the south channel is on the order of 55,000 tons, setting a full-scale augmentation target of 60,000 tons on which the ISAC is in general agreement in terms of volume, location, and direction of augmentation.

Design Purpose

The purpose is to implement and monitor a large grading project which will immediately augment 30,000 tons of sediment to the active channel. An additional 30,000 - 50,000 tons will be graded to be augmented over time through lateral erosion processes. The goals of this project are to augment 60,000 tons of sediment to the J2 channel annually, while minimizing excavation and placement, to stage excavated material to help complete the eroded pivot circle to satisfy a land use agreement, and to monitor the channel response to excavation and augmentation to provide insight for continued augmentation.

Design Approach

The upper J2 return channel has undergone more than 15 feet of incision since the late 1930's and the channel is actively migrating beyond its historical braid belt, eroding adjacent high terraces and crop land. To halt the lateral movement of the active channel, a meander cut-off will be excavated to accommodate the entirety of J2 return flows. Approximately half of the excavation spoils will be augmented downstream of the project and the other half will be transported to the South bank to satisfy the land use agreement with Joe Jeffrey. In exchange for allowing the Program to augment on Jeffrey's land, the Program will transport and stockpile enough sediment to repair an eroded pivot irrigation circle and to the extent possible construct a bank stabilization project using trees and wood from excavation. The excavation of the channel leaves a mid-channel bar which will be excavated to provide material to fill the incised channel to the south and aid in stabilizing the south bank from retreating further. The design is intended to achieve half of the augmentation budget immediately (in terms of volume) and slowly work down the remainder of material as J2 flows are returned to the river.

Monitoring

As stated by the ISAC, it is well understood that it will be difficult to immediately quantify the channel response to augmentation, especially with respect to ground operations (transects, bed gradations, etc.). The EDO installed an upstream stage logger and will install an additional logger at the downstream extent to monitor stage evolution. Additionally, 1-2 stationary cameras will be installed to document and provide



qualitative insight on bank erosion and mass failures in the pilot channel (Figure 2). Volumes of material will be accounted for utilizing consecutive bathymetric enabled LiDAR flights and an as-built survey performed by the selected contractor or the EDO.

Administrative and Implementation Considerations

The reach immediately downstream of the J-2 Return is the ideal sediment augmentation source location as it is immediately adjacent to the clear-water return and benefits would extend downstream throughout the south channel. We estimate that there are approximately 1,000,000 tons of readily-available augmentable sediment in the 1.5-mile reach downstream of the return, enough for at least a decade of augmentation. There are two owners at the augmentation source location. The first is CNPPID, which owns Jeffery Island and accretion thereto and the second is Joe Jeffery who owns the south bank and accretion thereto. There is not a settled property boundary within the south channel. Accordingly, any activity in the south channel requires permission from both landowners.

We approached Joe Jeffery and he was willing to sign an access agreement only if we assisted him in dealing with an erosion issue on his south bank. The terms of the agreement state that we will push up enough sand along the south bank to once again allow one of Joe's center pivots to swing in a complete circle. We expect that work to cost \$30,000 - \$50,000 and it is included in the 2017 augmentation design. The agreement also specifically stipulates that: 1) we will not place topsoil the fill area, and 2) we provide no guarantee that it will not erode again in the future. In return, Joe gave the Program irrevocable access and augmentation rights through 2029. A management agreement was also executed with CNPPID that authorizes access and augmentation at no expense to the Program. CNPPID did retain the right to revoke access if it somehow interferes with the ability to meet mitigation requirements under their FERC license.

Budget

This work would be completed under FY2017 PRRIP Budget Line Item PD-22. The approved budget for that line item is \$221,000. Based on estimates from other similar mobilization and excavation work at other Program sites, the engineer's estimate for this project indicates utilization of the full \$221,000 in approved and available funds for this PRRIP budget line item.

References

- HDR Engineering Inc. in association with Tetra Tech, Inc. and The Flatwater Group, Inc. 2011. 1-D Hydraulic and Sediment Transport Model Final Hydraulic Modeling Technical Memorandum. Prepared for Platte River Recovery Implementation Program.
- Tetra Tech Inc. 2014. Final 2013 Platte River Data Analysis Report Channel Geomorphology and In-Channel Vegetation. Prepared for the Platte River Recovery Implementation Program.
- Tetra Tech Inc. 2015. Draft Model Results, Platte River Sediment-transport Modeling, South Channel at Jeffrey Island. Memorandum to the Platte River Recovery Implementation Program.

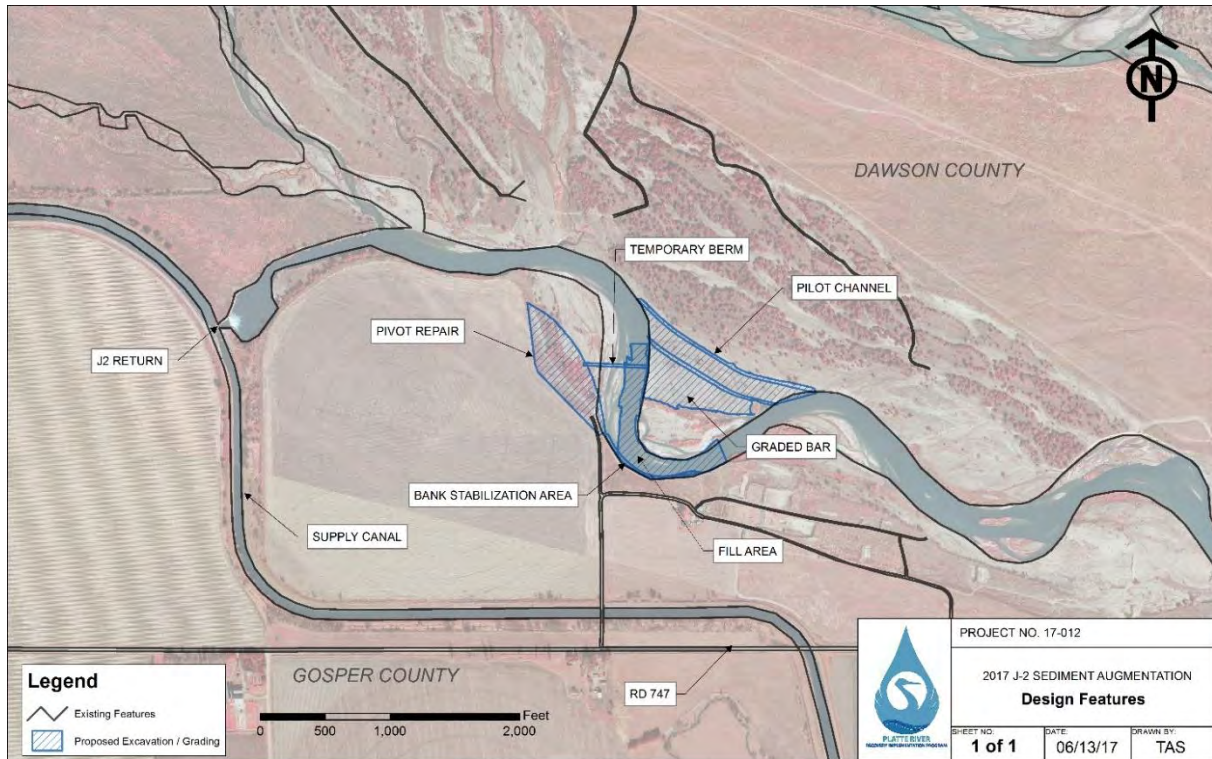


Figure 1. Overview of Sediment Augmentation Design, illustrating J2 return and proposed grading areas.

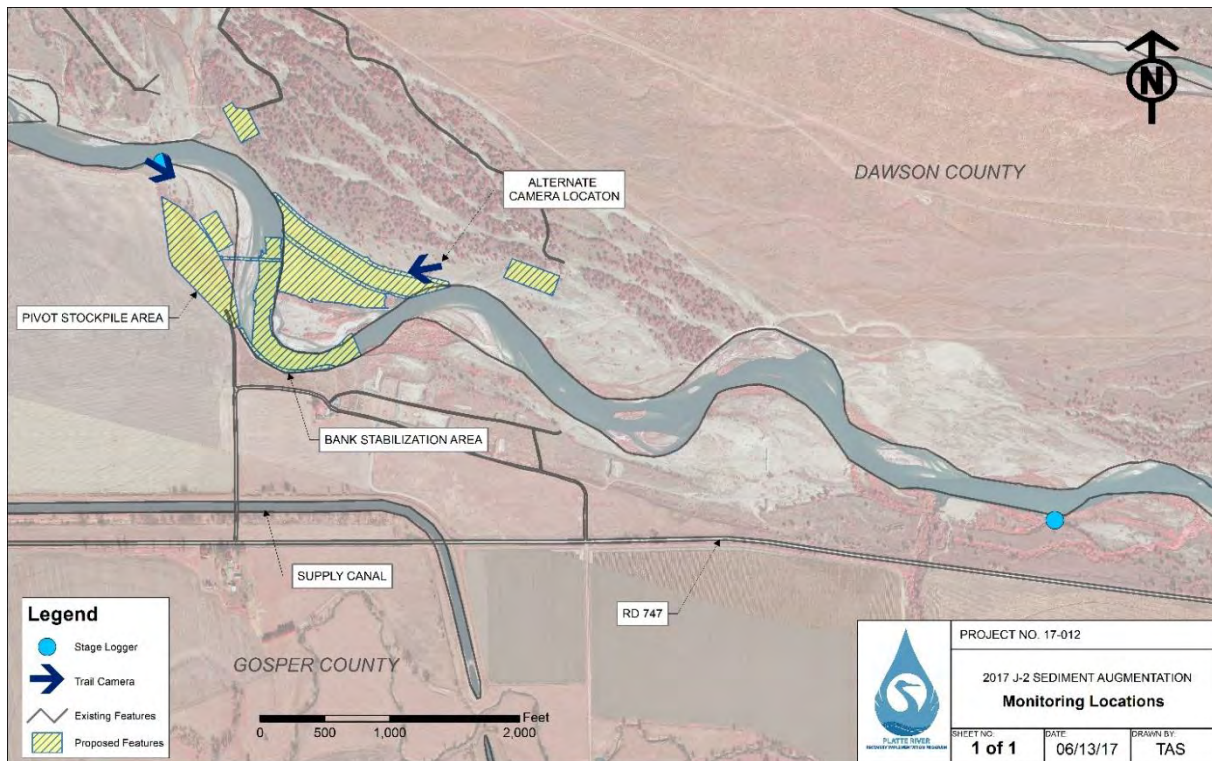
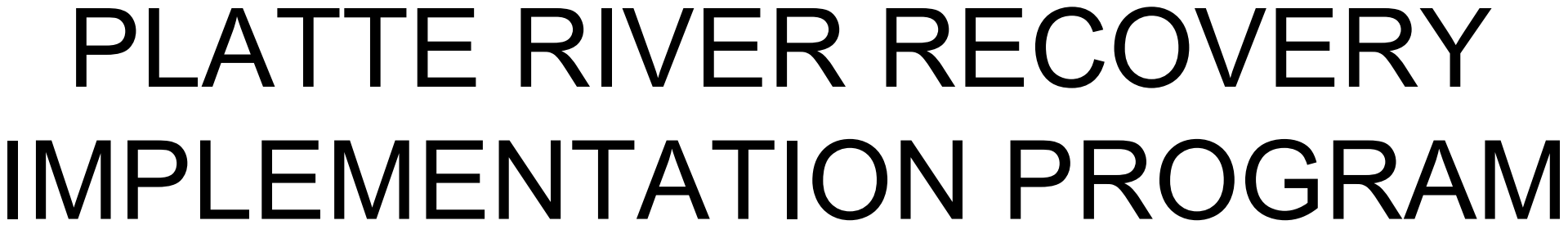
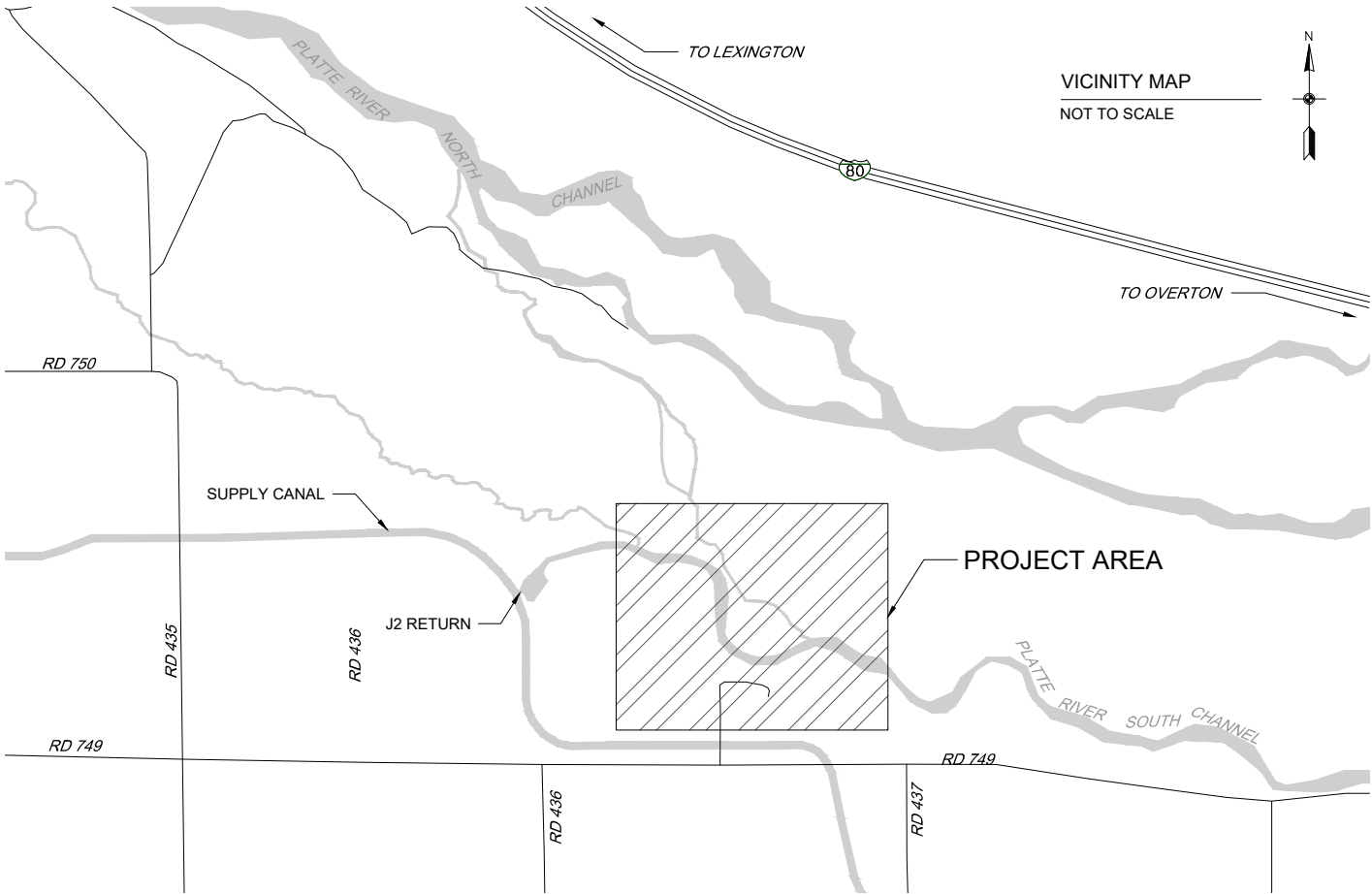


Figure 2. Proposed monitoring locations and areas to be graded.



2017 SEDIMENT AUGMENTATION PROJECT



NOTE: CONTRACTOR IS RESPONSIBLE FOR LOCATING BURIED UTILITIES. CONTACT
DIGGERS HOTLINE (1-800-331-5666) PRIOR TO ANY EXCAVATION.

 <p>Headwaters CORPORATION</p> <p>4111 4th Avenue, Suite 6 Kearney, NE 68845 (P) 308-237-5728 (F) 308-237-4651</p>	TAS DESIGNED	MAY 2017	MARK	DESCRIPTION	DATE
	TAS DRAWN	MAY 2017			
	JB CHECKED	MAY 2017			
	APPROVED	_____			
<p>2017 J2 SEDIMENT AUGMENTATION PROJECT</p> <p>COVER SHEET, PROJECT VICINITY AND LOCATION</p> <p>LEXINGTON, NEBRASKA</p>  <p>PLATTE RIVER RECOVERY AND RESTORATION PROGRAM</p>		<p>PROJECT NO. P17-012</p> <p>SHEET IDENTIFICATION: G-01</p> <p>SHT NO. 01 OF 13</p>			

GENERAL NOTES

1. 1'--CONTOUR FROM GREEN LIDAR AND DIGITAL ORTHOPHOTO BY PRRIP, FALL 2016 AERIAL SURVEY.
2. PARCEL DATA IS UNVERIFIED AND FOR REFERENCE ONLY.
3. ALL MAPPING IS PROJECTED TO NAD 83 STATE PLANE NEBRASKA. UNITS ARE U.S. SURVEY FEET.
4. ELEVATIONS ARE SHOWN IN FEET RELATIVE TO NAVD88, GEOID 2003, ELLIPSOID GRS80.
5. ALL STATIONING REFERS TO CENTERLINE OF CONSTRUCTION AND IS THE MEASURED HORIZONTAL DISTANCE.
6. UNLESS OTHERWISE NOTED, ALL DEMOLISHED MATERIAL SHALL BE REMOVED FROM THE PROJECT SITE AND DISPOSED OF IN A LOCATION APPROVED BY ENGINEER.
7. LOCATIONS OF EXISTING FEATURES AND UTILITIES SHOWN ARE APPROXIMATE AND SHALL BE FIELD--VERIFIED PRIOR TO CONSTRUCTION. NOTIFICATION TO NEBRASKA 811 (800--331--5666) IS REQUIRED 48 HOURS PRIOR TO ANY EARTHWORK OR SUBSURFACE INVESTIGATION.
8. TREES AND LAND AREAS OUTSIDE CONSTRUCTION LIMITS SHALL BE PRESERVED. WITHIN CONSTRUCTION AND PLANTING FOOTPRINT, TREES TO BE PRESERVED SHALL BE MARKED FOR PROTECTION IN THE FIELD. EXERCISE CARE IN AREAS NOT SO MARKED TO AVOID UNNECESSARY DAMAGE TO NATURAL VEGETATION.
9. BMPs SHALL BE IMPLEMENTED TO PREVENT WATER POLLUTION DUE TO CONSTRUCTION MATERIALS, METHODS AND EQUIPMENT. CONTRACTOR SHALL SUBMIT SWPPP FOR APPROVAL BY NDEQ.
10. ALL CONSTRUCTION ACTIVITIES, INCLUDING HAULING, EXCAVATION, STAGING AND STOCKPILING, SHALL BE CONFINED TO AREAS ILLUSTRATED IN THE PLAN SET.

LEGEND

EXISTING FEATURES	PROPOSED FEATURES
<div></div> EXISTING PAVED ROADWAY	<div></div> PROJECT LIMITS
<div></div> EXISTING UNIMPROVED ROADWAY	<div> - - </div> TEMPORARY ACCESS ROAD
<div></div> EXISTING STRUCTURE	<div></div> STORM DRAIN
<div>— E —</div> OVERHEAD POWER	<div><div></div></div> CULVERT
<div></div> MAJOR CONTOUR (5')	<div><div> B B </div></div> GUARDRAIL
<div></div> MINOR CONTOUR (1')	<div></div> MAJOR CONTOUR (5')
<div></div> BORING	<div></div> MINOR CONTOUR (1')
<div>— · · —</div> EDGE OF WATER	<div><div></div></div> GRADE BREAK AND SLOPE DIRECTION
<div></div> PUBLIC PARCEL	<div>— — —</div> EXTENT OF CUT
<div>— · —</div> WETLAND BOUNDARY	<div>— — —</div> EXTENT OF FILL
	<div><div></div></div> RIPRAP
	<div><div></div></div> SAND
	<div><div></div></div> FILL
	<div><div></div></div> EXCAVATE
	<div><div></div></div> EXISTING VEGETATION

ABBREVIATIONS

ADDL	ADDITIONAL	NAD	NORTH AMERICAN DATUM
APPROX	APPROXIMATE	NAVD	NORTH AMERICAN VERTICAL DATUM
AVE	AVENUE	N/A	NOT APPLICABLE
BDY	BOUNDARY	NE	NORTHEAST
BLDG	BUILDING	NDEQ	NEBRASKA DEPT OF ENVIRONMENTAL QUALITY
BM	BENCHMARK	NGVD	NATIONAL GEODETIC VERTICAL DATUM 1929
BMP	BEST MANAGEMENT PRACTICE	NOM	NOMINAL
BOB	BASIS OF BEARING	NTS	NOT TO SCALE
CBC	CONCRETE BOX CULVERT	NW	NORTHWEST
CGC	COMMERCIAL GRADE CONCRETE	OH	OVERHEAD
CHAN	CHANNEL	OHW	ORDINARY HIGH WATER
CL	CENTERLINE, CONTROL LINE	OSMB	OREGON STATE MARINE BOARD
CMP	CORRUGATED METAL PIPE	PCL	PRIMARY CONTROL LINE
CO	COUNTY	PERM	PERMANENT
COE	US ARMY CORPS OF ENGINEERS	PROP	PROPOSED
CONC	CONCRETE	PROT	PROTECT
COR	CONTRACTING OFFICER'S REPRESENTATIVE	PT	POINT
CP	CONTROL POINT	RCP	REINFORCED CONCRETE PIPE
CY	CUBIC YARD	RD	ROAD
DET	DETAIL	REQ	REQUIRED
DBH	DIAMETER AT BREAST HEIGHT	RR	RAILROAD
DIA	DIAMETER	ROW	RIGHT OF WAY
DS	DOWNSTREAM	S	SOUTH
E	EAST	SL	SLOPE
EA	EACH	SS	SIDE SLOPE
EG	EXISTING GRADE/GROUND	SE	SOUTHEAST
EL	ELEVATION	SF	SQUARE FEET
EP	EDGE OF PAVEMENT	ST	STREET
EXC	EXCAVATION	STA	STATION
EXIST	EXISTING	SW	SOUTHWEST
FG	FINISH GRADE	SWPPP	STORMWATER POLLUTION PREVENTION PLAN
GRND	GROUND	TCL	TRAIL CONTROL LINE
HDPE	HIGH DENSITY POLYETHYLENE	TEMP	TEMPORARY
HMAC	HOT MIX ASPHALT CONCRETE	THKN	THICKNESS
HOR	HORIZONTAL	THLWG	THALWEG
INV	INVERT	TOB	TOP OF BANK
LF	LINEAR FEET	TYP	TYPICAL
LN	LANE	USACE	US ARMY CORPS OF ENGINEERS
LWD	LARGE WOODY DEBRIS	US	UPSTREAM
MATL	MATERIAL	VEG	VEGETATION
MAX	MAXIMUM	VERT	VERTICAL
MFR	MANUFACTURER	W	WEST
MIN	MINIMUM	WSE	WATER SURFACE ELEVATION
N	NORTH		

DATE

DESCRIPTION

MARK

MAY 2017

TAS
DESIGNED

MAY 2017

TAS
DRAWN

MAY 2017

JB
CHECKED

APPROVED

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2017 J2 SEDIMENT AUGMENTATION PROJECT

LEGEND, NOTES AND ABBREVIATIONS

LEXINGTON, NEBRASKA

PLATE RIVER

WATER QUALITY PROGRAM

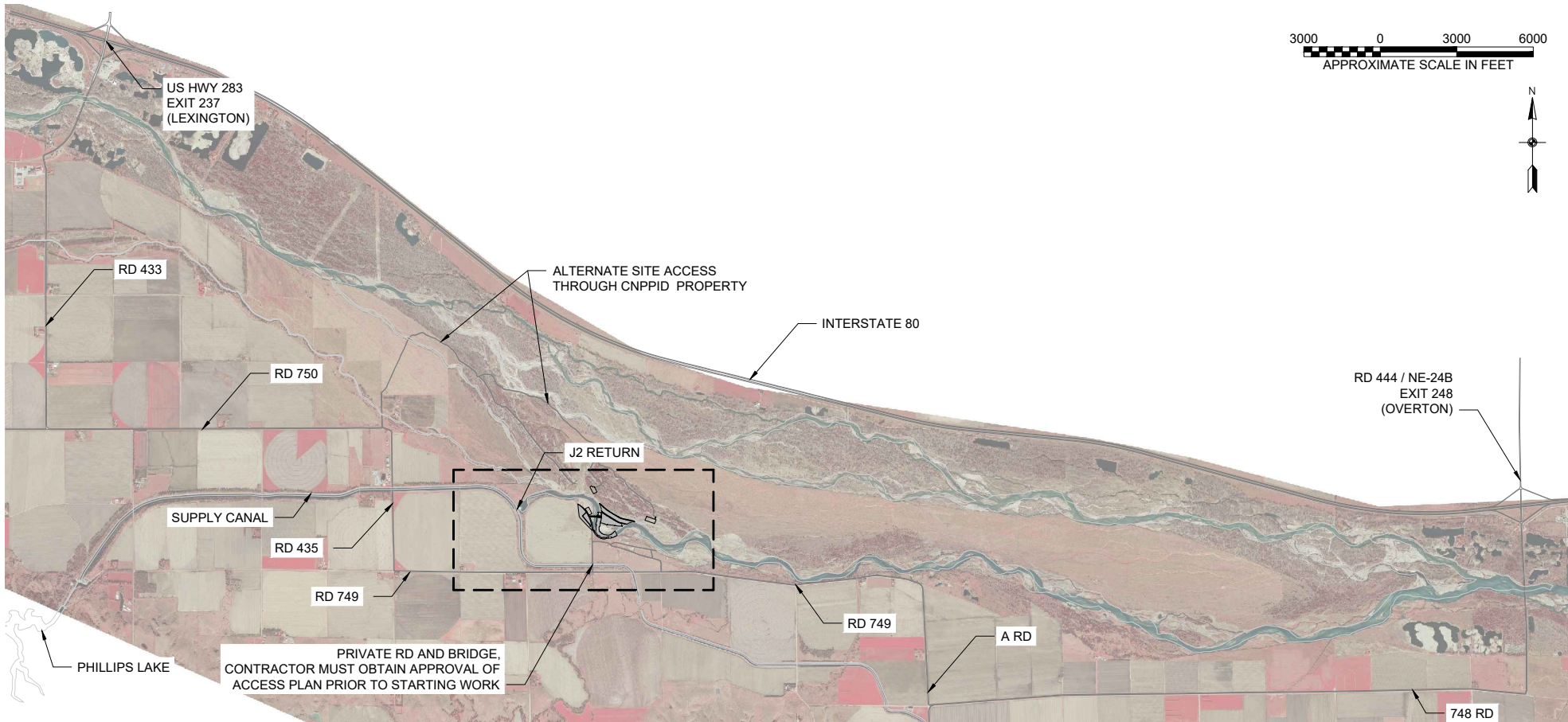
PROJECT NO.
P17-012

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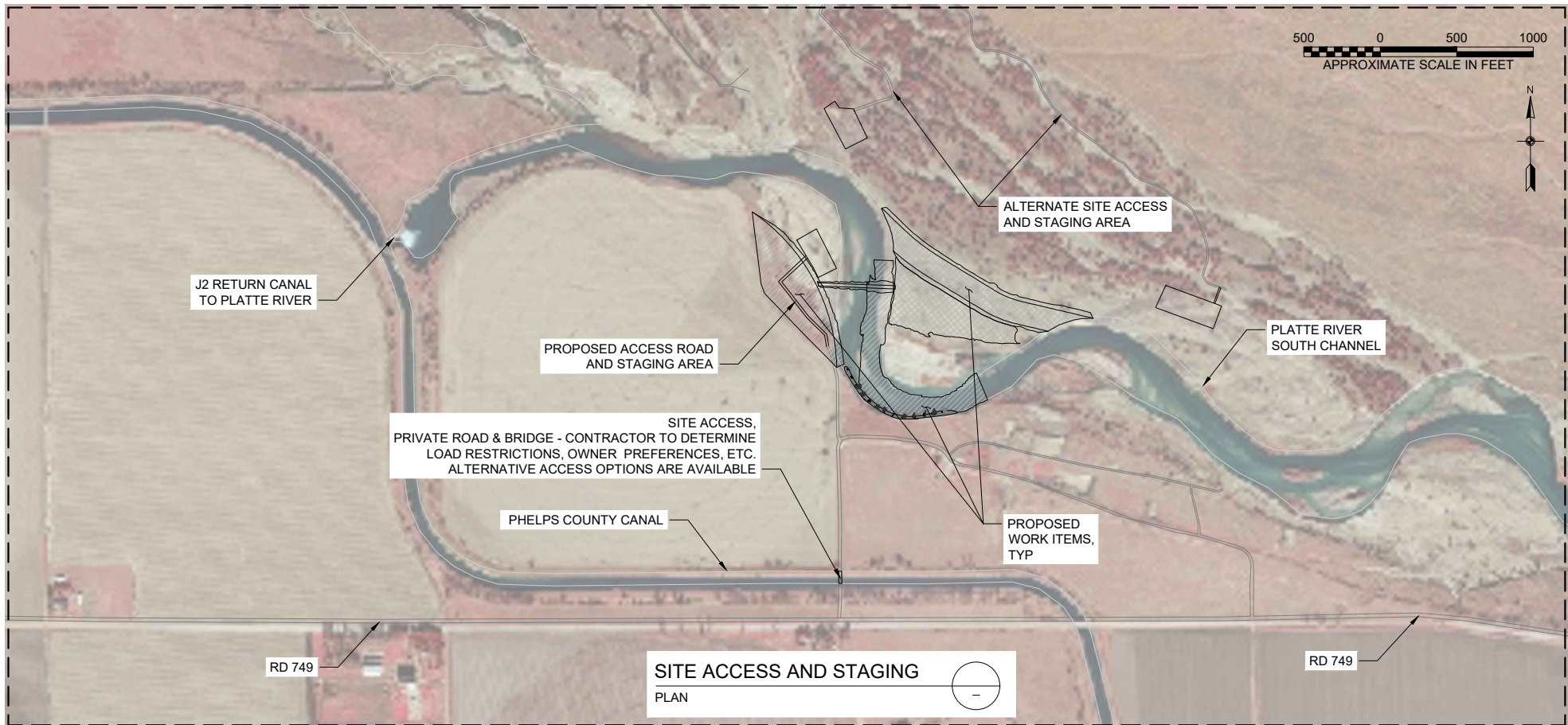
G-02

FINAL DESIGN

SHT
NO. 02 OF 13



SITE ACCESS
PLAN



SITE ACCESS AND STAGING
PLAN

SHEET INDEX

SHEET	PLATE	TITLE
GENERAL		
1	G01	COVER SHEET PROJECT VICINITY AND LOCATION
2	G02	LEGEND, NOTES, AND ABBREVIATIONS
3	G03	SHEET INDEX, CONSTRUCTION ACCESS AND STAGING
4	G04	GENERAL CONSTRUCTION PLAN AND SURVEY CONTROL
CIVIL		
5	C01	PILOT CHANNEL PLAN AND PROFILE
6	C02	PILOT CHANNEL SECTIONS
7	C03	TEMPORARY BERM PLAN AND PROFILE
8	C04	TEMPORARY BERM SECTIONS
9	C05	BAR GRADING PLAN AND PROFILE
10	C06	CHANNEL FILL AND BANK PROTECTION PLAN AND PROFILE
11	C07	CHANNEL FILL AND BANK PROTECTION SECTIONS
12	C08	SAND STOCKPILE PLAN AND PROFILE
13	C09	SITE CLOSURE PLAN

DATE

DESCRIPTION

MARK

MAY 2017

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DESIGNED

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DRAWN

JB
CHECKED

APPROVED

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2017 J2 SEDIMENT AUGMENTATION PROJECT

SHEET INDEX, CONSTRUCTION ACCESS
AND STAGING

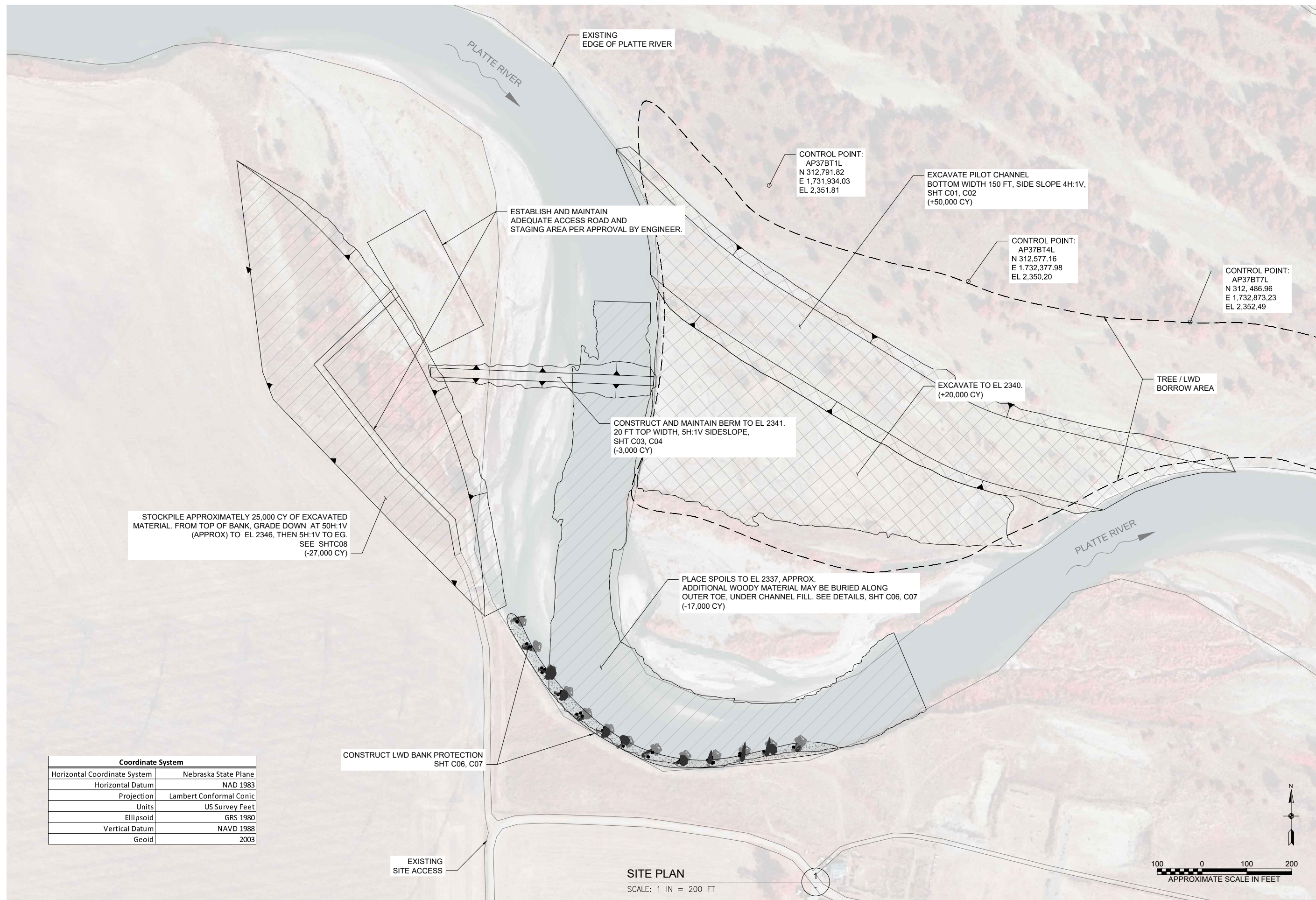
LEXINGTON, NEBRASKA

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P17-012

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G-03

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SHT
NO. 03 OF 13



CONSTRUCT LWD BANK PROTECTION
SHT C06, C07

SITE PLAN

EXISTING
EDGE OF PLATTE RIVER

EXCAVATE PILOT CHANNEL
BOTTOM WIDTH 150 FT, SIDE SLOPE 4H:1V,
SHT C01, C02
(+50,000 CY)

CONTROL POINT:
AP37BT4L
N 312,577.16
E 1,732,377.98
EL 2,350.20

CONTROL POINT:
AP37BT7L
N 312, 486.96
E 1,732,873.23
EL 2,352.49

ESTABLISH AND MAINTAIN
ADEQUATE ACCESS ROAD AND
STAGING AREA PER APPROVAL BY ENGINEER.

CONSTRUCT AND MAINTAIN BERM TO EL 2341.
20 FT TOP WIDTH, 5H:1V SIDESLOPE,
SHT C03, C04
(-3,000 CY)

EXCAVATE TO EL 2340.
(+20,000 CY)

— TREE / LWD
BORROW AREA

STOCKPILE APPROXIMATELY 25,000 CY OF EXCAVATED MATERIAL. FROM TOP OF BANK, GRADE DOWN AT 50H:1V (APPROX) TO EL 2346, THEN 5H:1V TO EG.
SEE SHTC08
(-27,000 CY)

PLACE SPOILS TO EL 2337, APPROX.
ADDITIONAL WOODY MATERIAL MAY BE BURIED ALONG
OUTER TOE, UNDER CHANNEL FILL. SEE DETAILS, SHT C
(-17,000 CY)



PLATTE RIVER

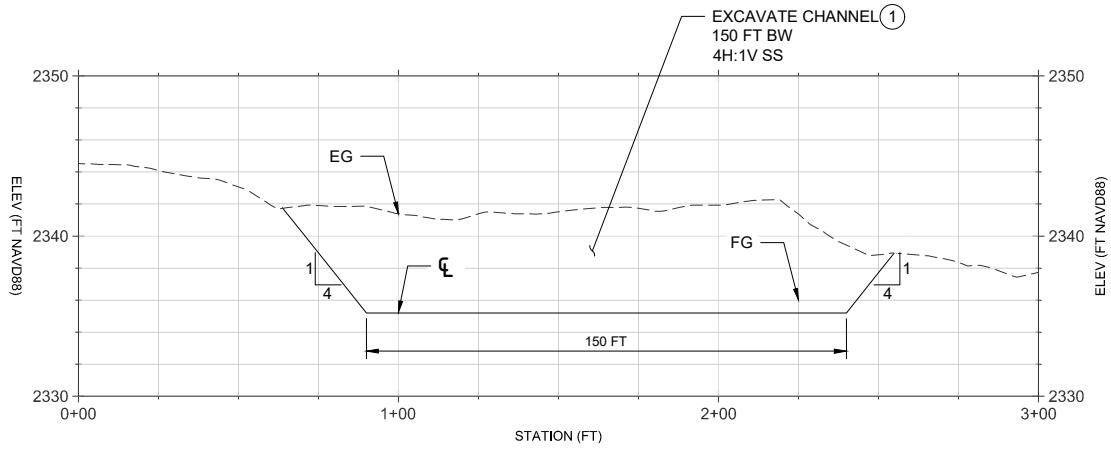
2017 J2 SEDIMENT AUGMENTATION PROJECT

PROJECT NO.
P17-012

GENERAL CONSTRUCTION PLAN AND SURVEY CONTROL

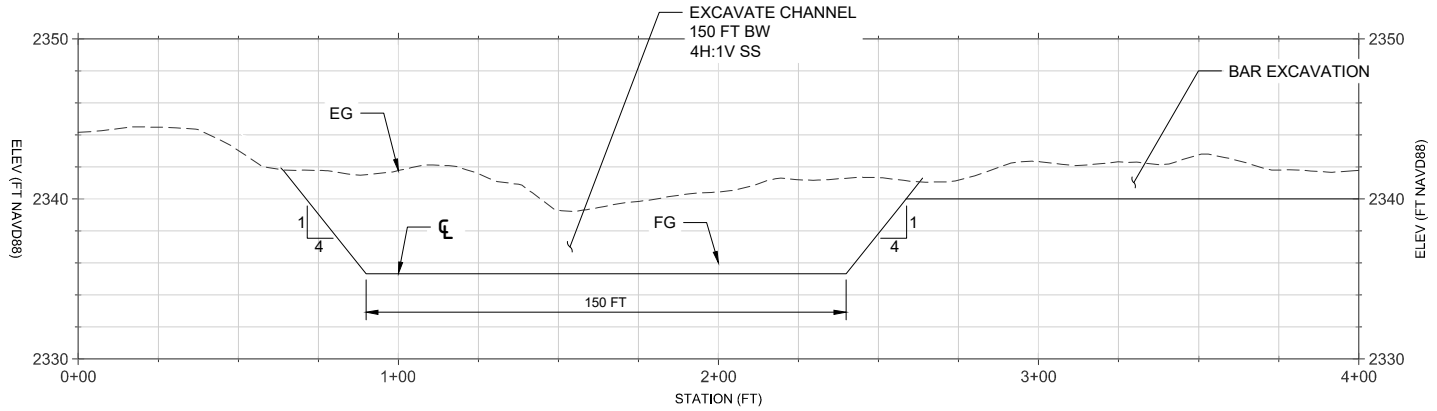
LEXINGTON, NEBRASKA

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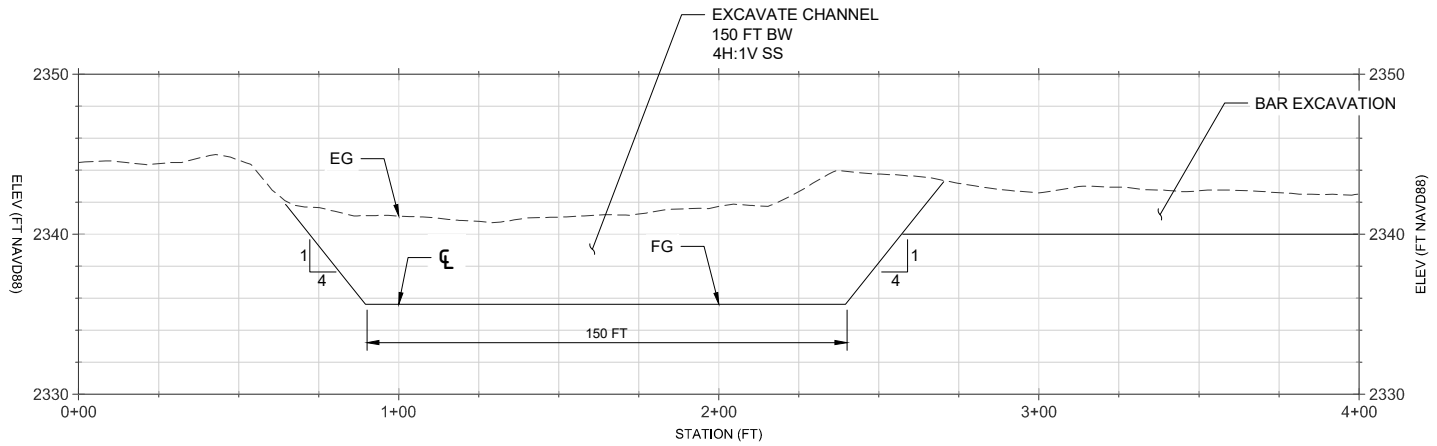
PILOT CHANNEL - CROSS SECTION
H: 1 IN = 60 FT | V: 1 IN = 12 FT

1
C01



PILOT CHANNEL - CROSS SECTION
H: 1 IN = 60 FT | V: 1 IN = 12 FT

2
C01



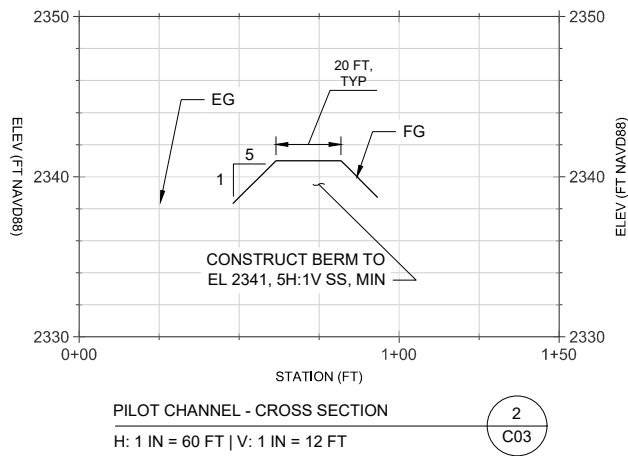
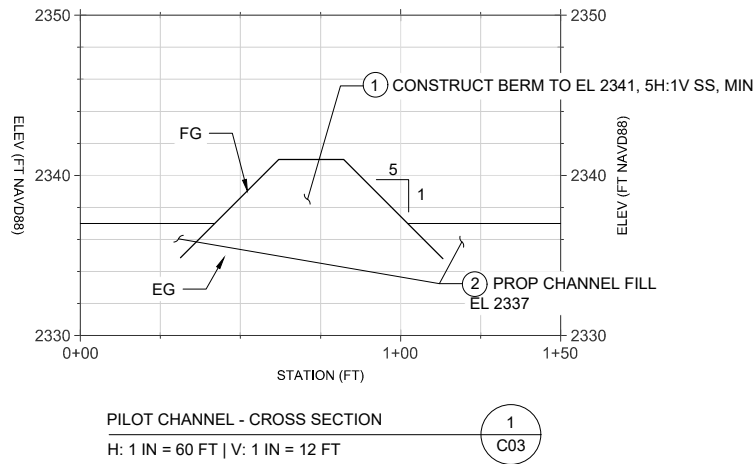
PILOT CHANNEL - CROSS SECTION
H: 1 IN = 60 FT | V: 1 IN = 12 FT

3
C01

CONSTRUCTION NOTES

- ① EXCAVATE CHANNEL WITH A 150 FT BOTTOM-WIDTH AND A MINIMUM OF 4H:1V SIDE-SLOPES. TOTAL CHANNEL EXCAVATION IS APPROXIMATELY 50,000 CY. 20,000 CY WILL BE PUSHED DIRECTLY INTO THE ACTIVE CHANNEL, THE REMAINING MATERIAL WILL BE REDISTRIBUTED ON SITE.

DATE	DESCRIPTION	MARK	TAS DESIGNED	TAS DRAWN	JB CHECKED	APPROVED
			MAY 2017	MAY 2017	MAY 2017	
<div>2017 J2 SEDIMENT AUGMENTATION PROJECT</div> <div>PILOT CHANNEL SECTIONS</div> <div>LEXINGTON, NEBRASKA</div> <div><div>4111 4th Avenue, Suite 6 Kearney, NE 68845 (P) 308-237-5728 (F) 308-237-4651</div></div> <div><div>PROJECT NO. P17-012</div><div>SHEET IDENTIFICATION: C-02</div></div>						
FINAL DESIGN			SHT NO. 06	OF 13		



CONSTRUCTION NOTES

- 1 CONSTRUCT BERM WITH SS OF 5H:1V TO EL 2341 IN 6 IN LIFTS, COMPACT AND LEVEL AS NECESSARY. TOP WIDTH OF 20 FT OR AS NECESSARY TO ACCOMMODATE HEAVY EQUIPMENT.
- 2 FILL CHANNEL WITH REMAINING MAT'L TO EL 2337, APPROX. NO COMPACTION NECESSARY, SEE SHT C06, C07.

2017 J2 SEDIMENT AUGMENTATION PROJECT

TEMPORARY BERM SECTIONS

LEXINGTON, NEBRASKA



PROJECT NO.
P17-012

SHEET IDENTIFICATION:
C-04

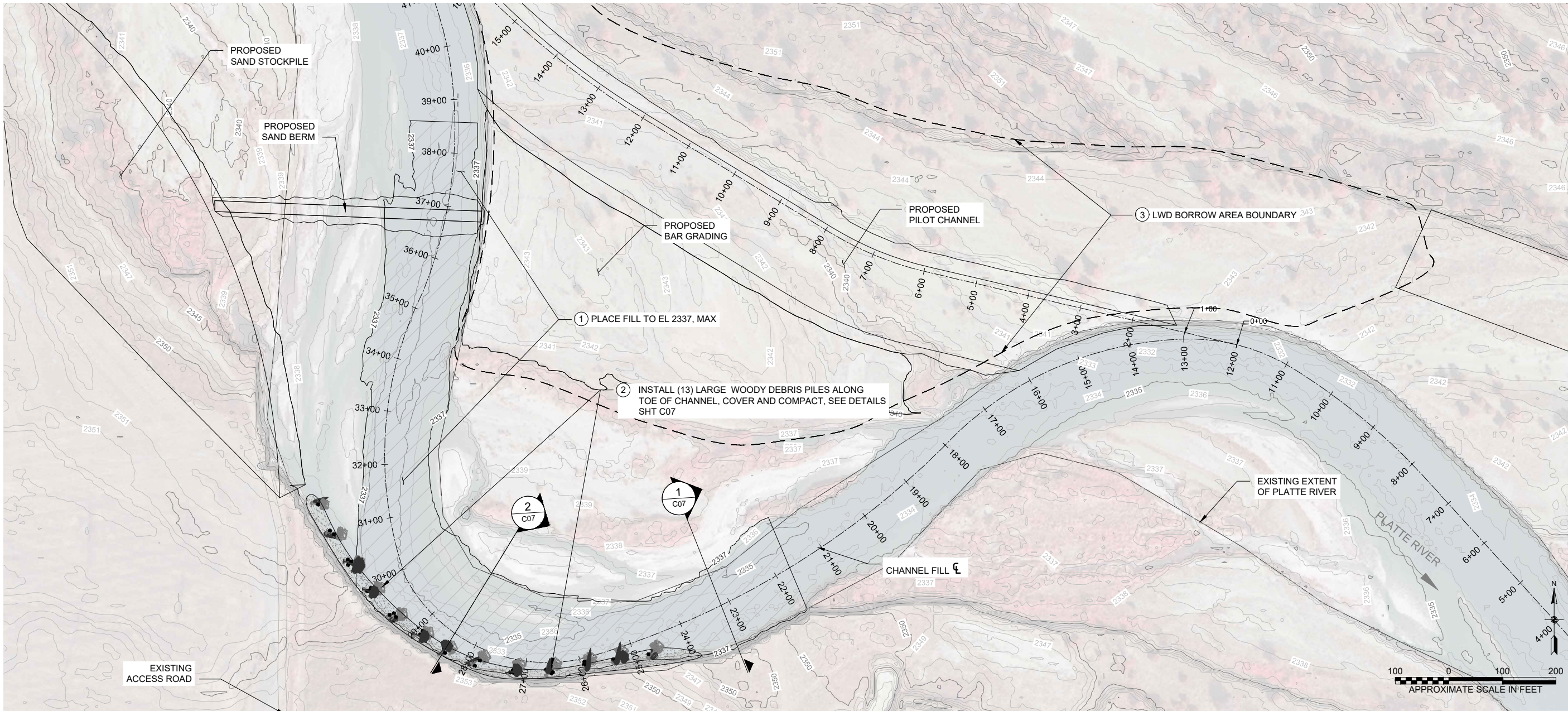
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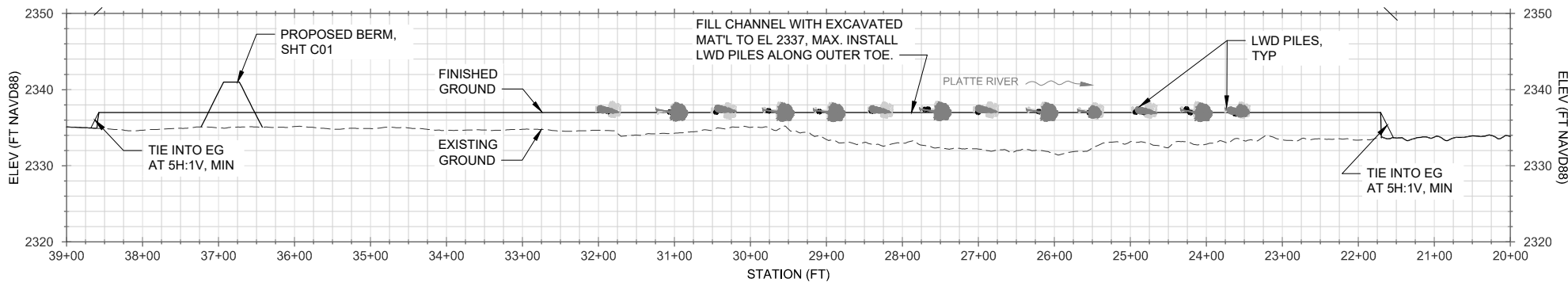
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JB CHECKED			
APPROVED			



CHANNEL FILL - PLAN

1
-



CHANNEL FILL - PROFILE

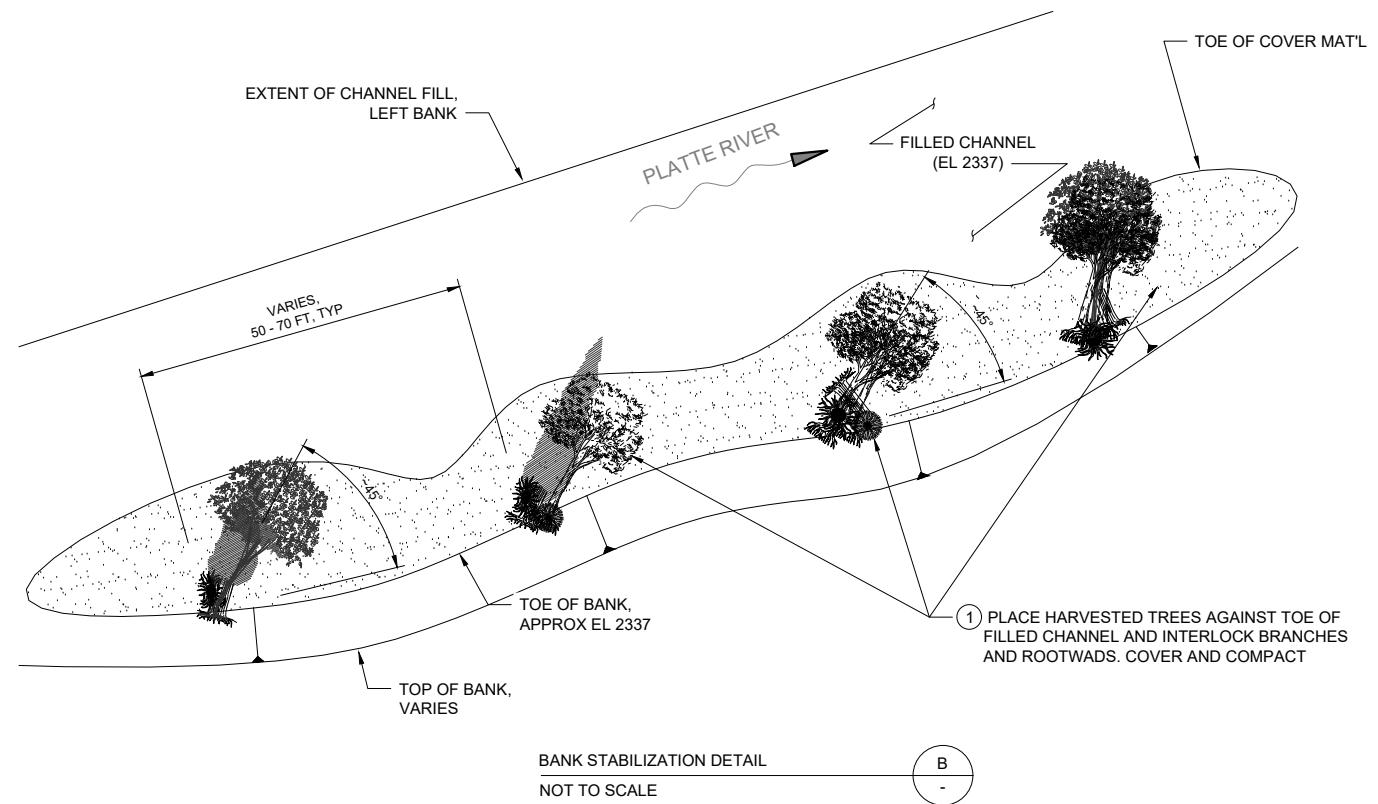
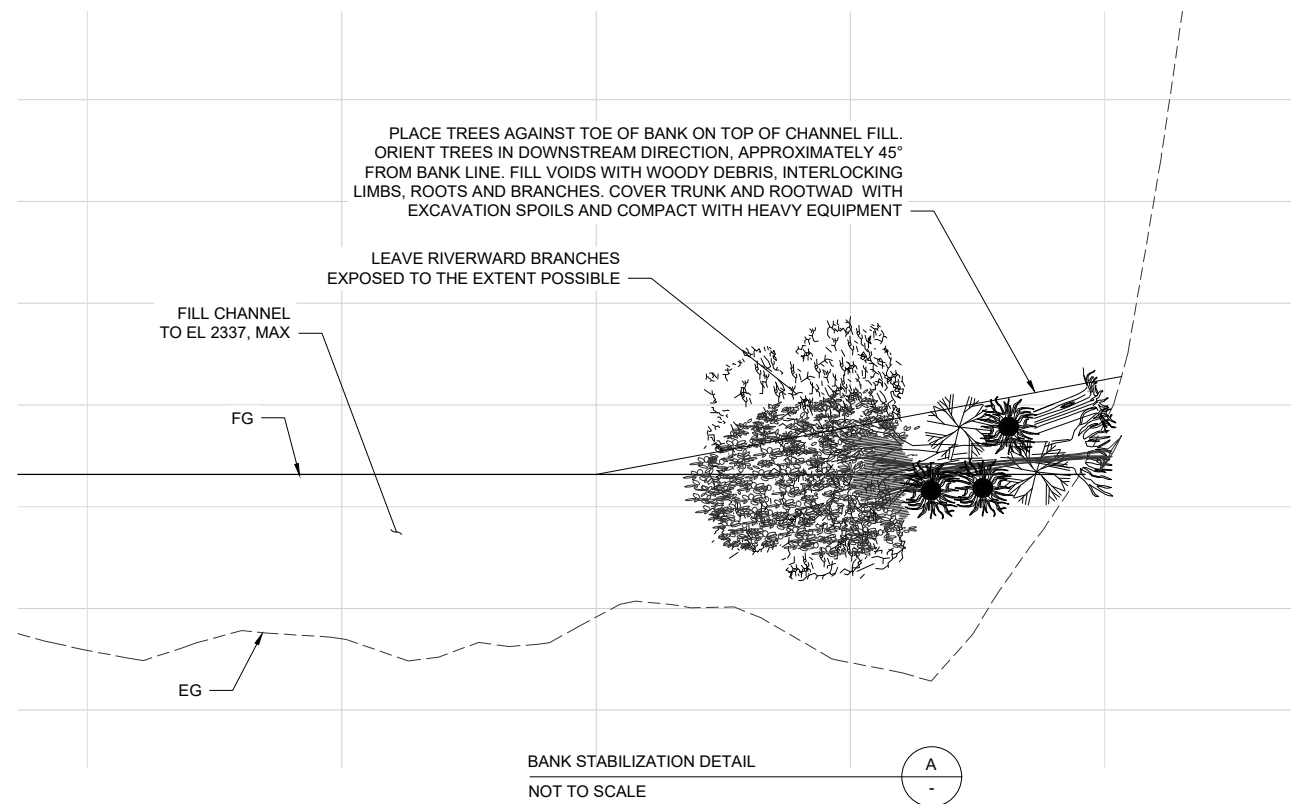
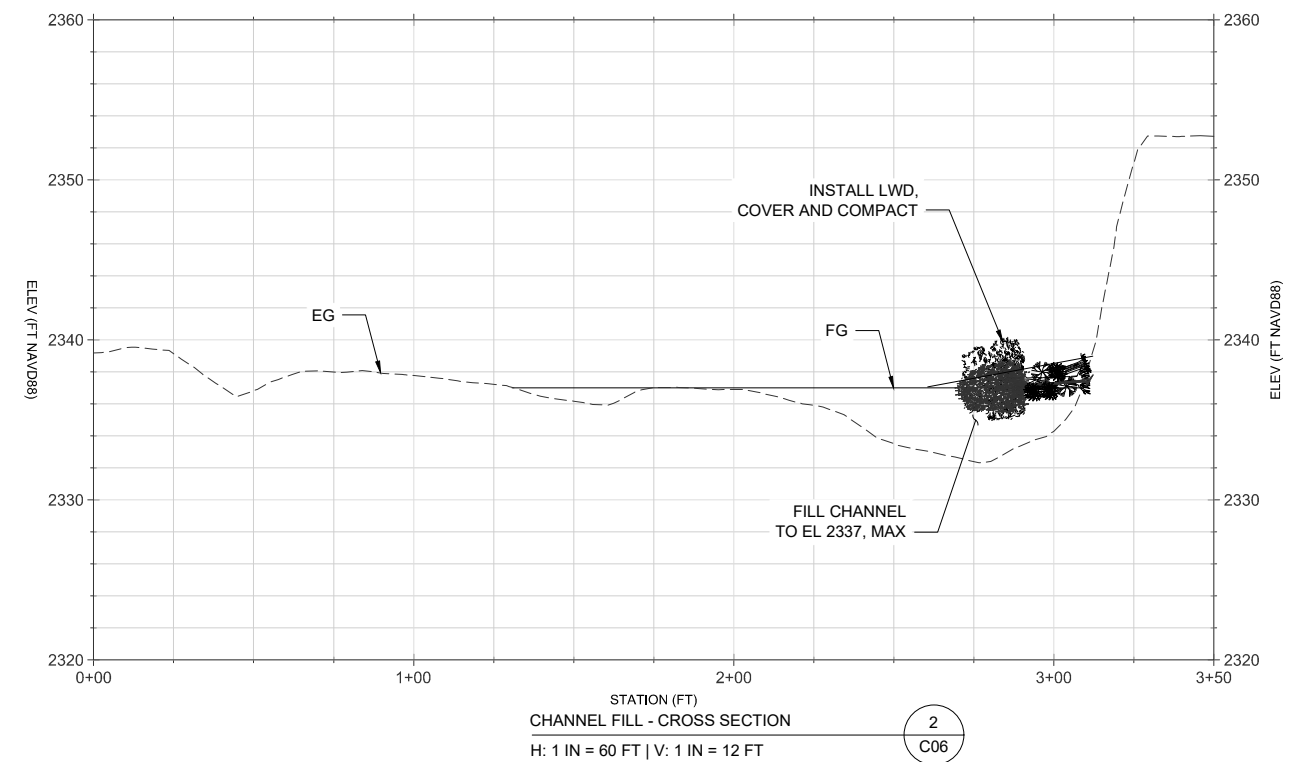
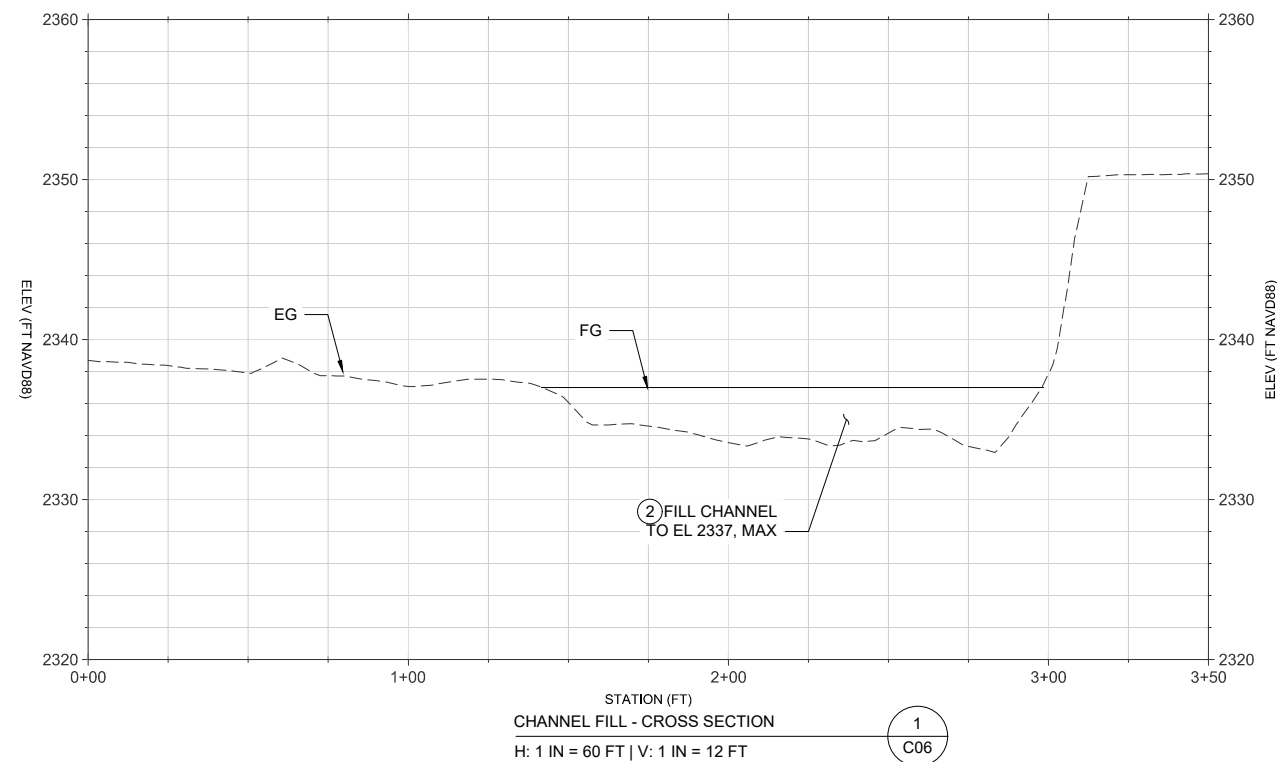
H: 1 IN = 200 FT | V: 1 IN = 20 FT

1
-

CONSTRUCTION NOTES

- 1 PLACE EXCAVATED MATERIAL IN SOUTH CHANNEL TO NO HIGHER THAN EL 2337.
- 2 INSTALL LWD FROM BORROW AREAS WHERE SHOWN, ALONG TOE IN SOUTH CHANNEL. LOGS ARE ORIENTED WITH ROOTWAD FACING THE TOE OF BANK, WITH TRUNK AND LIMBS ORIENTED IN THE DOWNSTREAM DIRECTION, 45° INTO FLOW PATH FROM BANK LINE. COVER AND COMPACT, OVEREXCAVATION NOT NECESSARY. SEE DETAIL, SHT C07.
- 3 TREES USED FOR STABILIZATION SHALL BE LIVE TREES, APPROXIMATELY 30 FT TALL, EXCAVATED WITH ROOT WAD AND LIMBS INTACT AND 8 IN TO 2 FT DBH. PRIORITY SPECIES INCLUDE MULBERRY, ELM AND CEDAR, OTHER SPECIES MAY BE APPROVED BY ENGINEER. CLEARED WOODY DEBRIS UNUSED IN TREE MOUNDS SHALL BE BURIED ALONG TOE COINCIDENT WITH CHANNEL FILL.

DATE	
DESCRIPTION	
MARK	
MAY 2017	
TAS DESIGNED	
TAS DRAWN	
JB CHECKED	
APPROVED	
<div><div><div>4111 4th Avenue, Suite 6 Kearney, NE 68845 (P) 308-237-5728 (F) 308-237-4651</div></div><div>2017 J2 SEDIMENT AUGMENTATION PROJECT</div><div>CHANNEL FILL AND BANK STABILIZATION PLAN AND PROFILE</div><div>LEXINGTON, NEBRASKA</div></div>	
<div><div><div>PROJECT NO. P17-012</div><div>SHEET IDENTIFICATION: C-06</div></div><div>FINAL DESIGN</div><div>SHT NO. 10 OF 13</div></div>	



CONSTRUCTION NOTES

- ① PLACE AND INTERLOCK TWO TO FOUR TREES ALONG TOE OF FILLED CHANNEL. ORIENT TREES WITH ROOTWAD AGAINST BANK, AND TRUNK ORIENTED IN THE DOWNSTREAM DIRECTION, APPROXIMATELY 45° IN RELATION TO BANKLINE/FLOWPATH. COVER WITH EXCAVATED SPOILS AND COMPACT USING HEAVY EQUIPMENT, LEAVING RIVERWARD BRANCHES EXPOSED TO THE EXTENT POSSIBLE.
- ② PLACE EXCAVATED MATERIAL FROM EXCAVATED BAR INTO SOUTHERN PORTION OF CHANNEL FROM STATION 38+50 TO 22+00 TO EL 2337, TIE INTO EXISTING GROUND UPSTREAM/DOWSTREAM AT 5H:1V, APPROX. COMPACTION IS NOT NECESSARY.

MARK	DESCRIPTION	DATE
TAS DESIGNED	MAY 2017	
TAS DRAWN	MAY 2017	
JB CHECKED	MAY 2017	
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2017 JZ SEDIMENT AUGMENTATION PROJECT

CHANNEL FILL AND BANK PROTECTION DETAIL



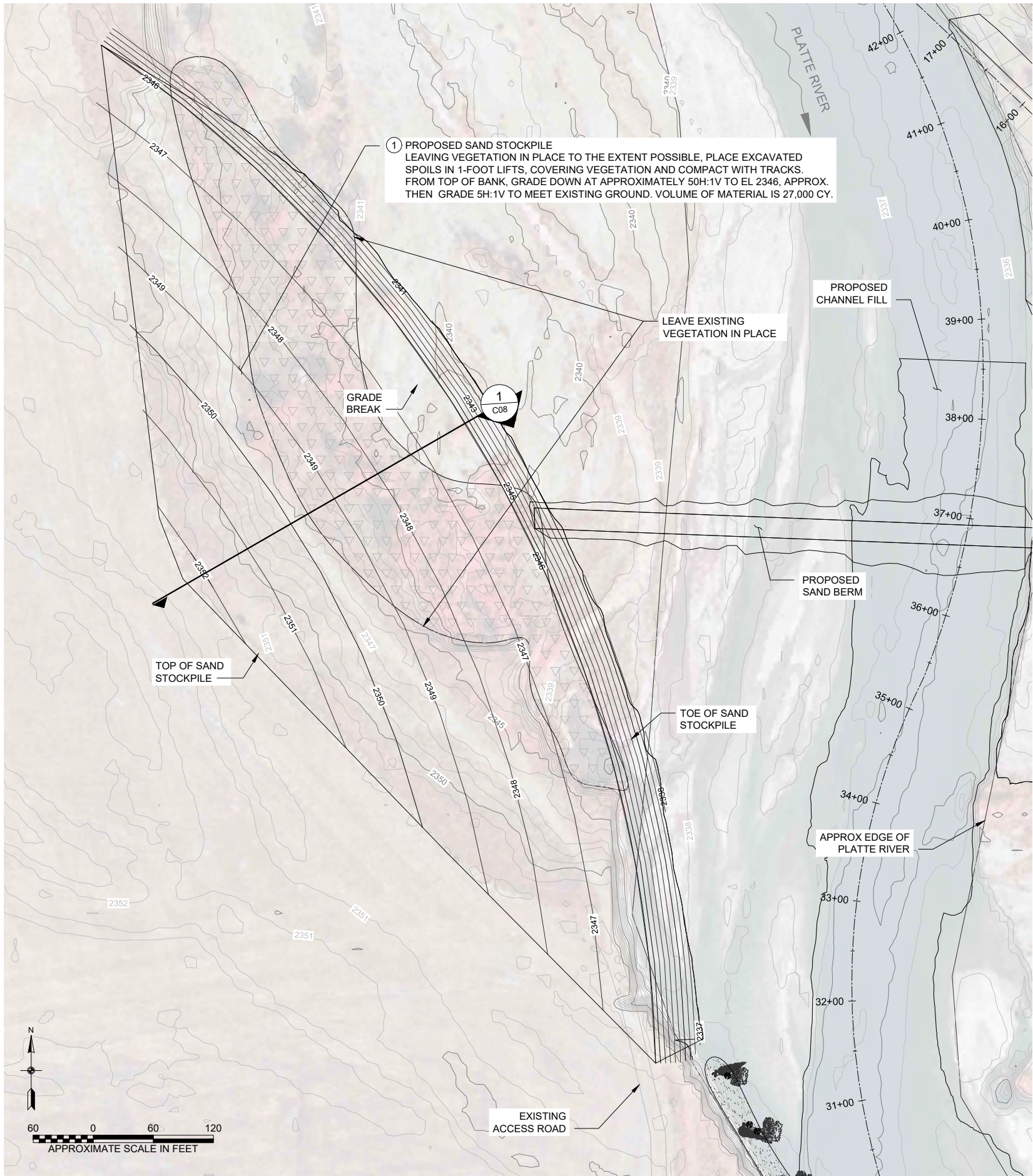
PROJECT NO.
P17-012

SHEET IDENTIFICATION:

C-07

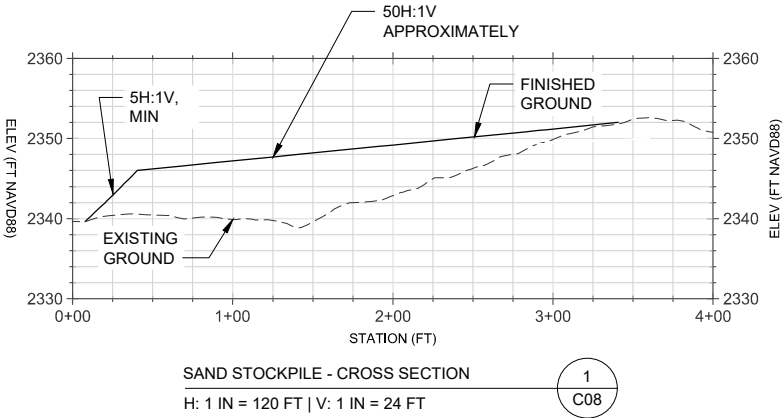
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NO. 11 OF 13



SAND STOCKPILE PLAN

1



CONSTRUCTION NOTES

- 1 PLACE EXCAVATION SPOILS IN 1 FT LIFTS IN FOOTPRINT SHOWN AND COMPACT TO THE EXTENT POSSIBLE, LEAVE VEGETATION IN PLACE FOR BALLAST. FROM TOP OF BANK, GRADE DOWN AT 50H:1V TO EL 2346, THEN GRADE AT 5H:1V TO MEET EXISTING GROUND. MINOR GRADING ADJUSTMENTS MAY BE NECESSARY UPON OWNER INSPECTION.



2017 J2 SEDIMENT AUGMENTATION PROJECT

SAND STOCKPILE
PLAN AND PROFILE

LEXINGTON, NEBRASKA



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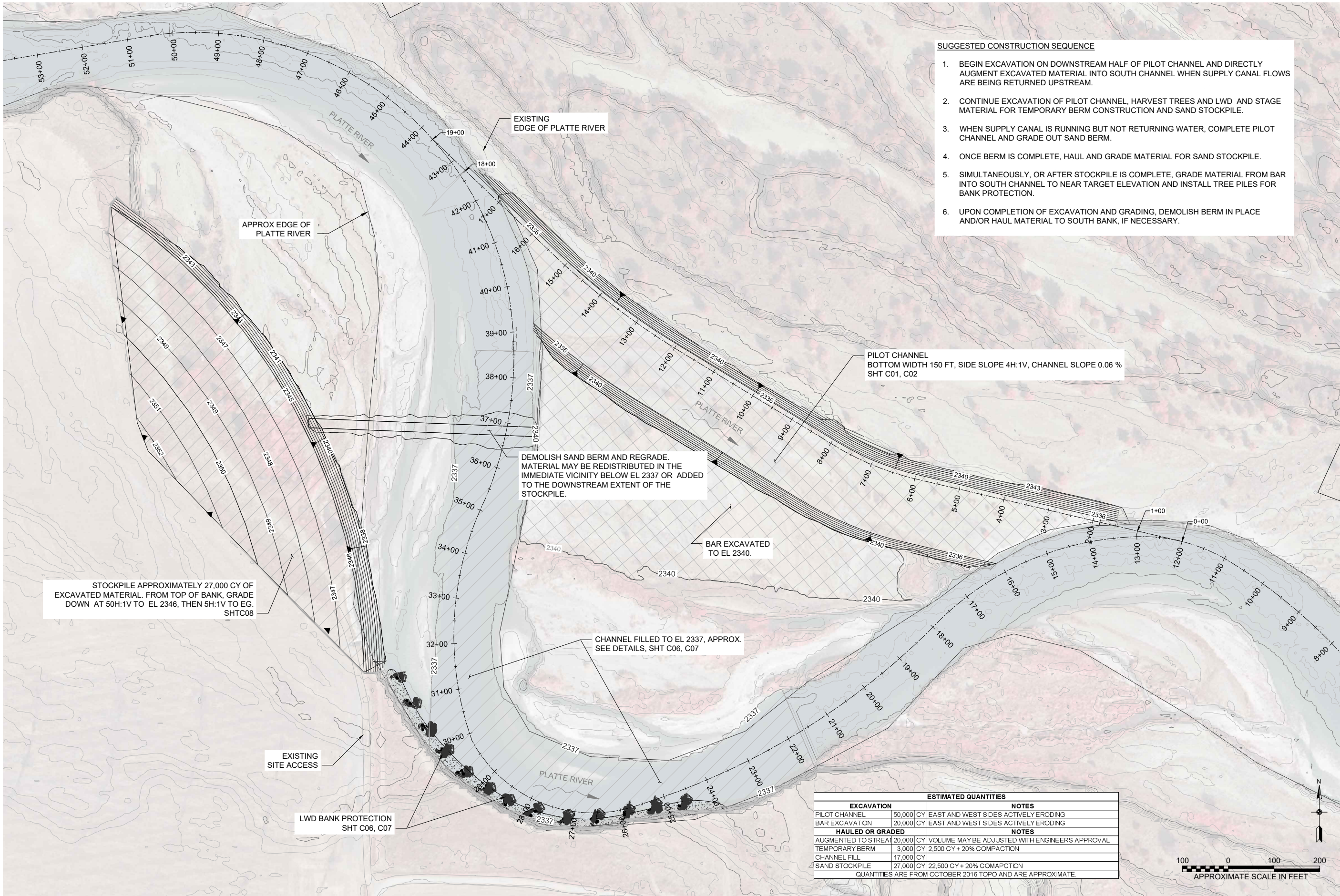
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C-08

FINAL DESIGN

SHT
NO. 12 OF 13

DATE	DESCRIPTION	MARK	TAS DESIGNED	TAS DRAWN	JB CHECKED	APPROVED
			MAY 2017	MAY 2017	MAY 2017	



- SUGGESTED CONSTRUCTION SEQUENCE**
1. BEGIN EXCAVATION ON DOWNSTREAM HALF OF PILOT CHANNEL AND DIRECTLY AUGMENT EXCAVATED MATERIAL INTO SOUTH CHANNEL WHEN SUPPLY CANAL FLOWS ARE BEING RETURNED UPSTREAM.
 2. CONTINUE EXCAVATION OF PILOT CHANNEL, HARVEST TREES AND LWD AND STAGE MATERIAL FOR TEMPORARY BERM CONSTRUCTION AND SAND STOCKPILE.
 3. WHEN SUPPLY CANAL IS RUNNING BUT NOT RETURNING WATER, COMPLETE PILOT CHANNEL AND GRADE OUT SAND BERM.
 4. ONCE BERM IS COMPLETE, HAUL AND GRADE MATERIAL FOR SAND STOCKPILE.
 5. SIMULTANEOUSLY, OR AFTER STOCKPILE IS COMPLETE, GRADE MATERIAL FROM BAR INTO SOUTH CHANNEL TO NEAR TARGET ELEVATION AND INSTALL TREE PILES FOR BANK PROTECTION.
 6. UPON COMPLETION OF EXCAVATION AND GRADING, DEMOLISH BERM IN PLACE AND/OR HAUL MATERIAL TO SOUTH BANK, IF NECESSARY.

ESTIMATED QUANTITIES		
EXCAVATION		NOTES
PILOT CHANNEL	50,000 CY	EAST AND WEST SIDES ACTIVELY ERODING
BAR EXCAVATION	20,000 CY	EAST AND WEST SIDES ACTIVELY ERODING
HAULED OR GRADED		
AUGMENTED TO STREAM	20,000 CY	VOLUME MAY BE ADJUSTED WITH ENGINEERS APPROVAL
TEMPORARY BERM	3,000 CY	2,500 CY + 20% COMPACTION
CHANNEL FILL	17,000 CY	
SAND STOCKPILE	27,000 CY	22,500 CY + 20% COMPACTION
QUANTITIES ARE FROM OCTOBER 2016 TOPO AND ARE APPROXIMATE.		

SITE PLAN
SCALE: 1 IN = 200 FT

DATE	DESCRIPTION	MARK	TAS DESIGNED	TAS DRAWN	JB CHECKED	APPROVED
MAY 2017						
MAY 2017						
MAY 2017						

Headwaters CORPORATION
4111 4th Avenue, Suite 6
Kearney, NE 68845
(P) 308-237-5728
(F) 308-237-4651

2017 J2 SEDIMENT AUGMENTATION PROJECT
SITE CLOSURE PLAN
LEXINGTON, NEBRASKA



PROJECT NO. P17-012	SHT NO. 13 OF 13
SHEET IDENTIFICATION: C-09	

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DIVISION 0

BIDDING AND CONTRACT REQUIREMENTS

ADVERTISEMENT FOR BIDS

The Nebraska Community Foundation, Inc. (Foundation) of Lincoln, Nebraska, representing all signatories to the Platte River Recovery Implementation Program (Program) will receive sealed bids for the 2017 Sediment Augmentation Project near Lexington, Nebraska. These activities are generally described as follows:

Excavation of a 150-ft wide pilot channel and lowering of a 5-acre bar, totaling approximately 70,000 CY. Excavation spoils will be augmented to the active channel, graded into a berm, used for channel fill and stockpiled on the south bank of the south channel. In addition to earthwork, a bank stabilization plan consisting spur-dike oriented logs will be installed on the south bank in coincidence with the channel fill.

Sealed bids will be received at the office of the Platte River Implementation Program located at the following address:

Platte River Recovery Implementation Program
4111 4th Avenue, Suite 6
Kearney, Nebraska 68845

All bids must be mailed, or hand delivered to the Program Office no later than **(TIME)** Central Time on **(DATE)**. The bids will then be opened and read aloud at that time. All bids shall be submitted in accordance with and on the forms included in the Project Manual.

Contract Documents, including proposal bid forms, drawings and Project Manual, have been placed on file and may be examined at the Program Office. Electronic copies of the Contract Documents can be obtained by email from the Point of Contact identified below:

Tom Smrdel
Headwaters Corporation
4111 4th Avenue, Suite
Kearney, Nebraska 68845
smrdelt@headwatercorp.com

A **MANDATORY PRE-BID CONFERENCE** will be held on **(DAY, DATE, TIME)** and will be held **on-site**. **(PROVIDE DIRECTIONS OR DELETE)** Directions to the pre-bid conference location will be provided along with copies of the Contract Documents.

Each bidder must include a bid security with the bid (in the amount of 10% of the total bid price), payable to the Nebraska Community Foundation, in accordance with the Instructions to Bidders. Bid bonds and cashier's checks are acceptable forms of bid security.

No bidder may withdraw its bid after the scheduled time of the bid opening. Bids are to remain open for 60 days after the bid opening.

The Program reserves the right to reject any and all bids or parts thereof, and to waive any irregularities of any bid. The Program also reserves the right to award the contract to such responsible bidders as may be determined by the Program.

END OF SECTION 00010

DIVISION 0 - BIDDING AND CONTRACT DOCUMENTS
SECTION 00100 - INSTRUCTIONS TO BIDDERS

1.0 DEFINED TERMS.

Terms used in these Instructions to Bidders which are defined in the General Conditions of the Construction Contract, have the meanings assigned to them in the General Conditions. The term "BIDDER" means one who submits a Bid directly to the OWNER, as distinct from a sub-BIDDER, who submits a bid to a BIDDER. The term "Successful BIDDER" means the lowest, qualified, responsible and responsive BIDDER to whom the OWNER (on the basis of the OWNER's evaluation as hereinafter provided) makes an award. The term "Bidding Documents" includes the Advertisement for Bids, Instructions to Bidders, the Bid Form, Statement of Qualifications, Anticipated Subcontractors, and the proposed Contract Documents (including all Addenda issued prior to receipt of Bids).

In this section on "Instructions to Bidders", the term BIDDER is used to describe a prospective CONTRACTOR. When the term BIDDER is used, it refers to the company that could become the CONTRACTOR; therefore all requirements of the CONTRACTOR also pertain to the BIDDER, and vice versa.

The OWNER as defined in the General Conditions is the Nebraska Community Foundation, Inc. (FOUNDATION) of Lincoln, Nebraska representing all signatories to the Platte River Recovery Implementation Program (PROGRAM). For this construction contract, the OWNER shall be responsible for the financial aspects; the technical aspects of the construction contract will be the responsibility of the ENGINEER. The ENGINEER for the construction contract is defined as the Office of the Executive Director of the PROGRAM.

2.0 COPIES OF BIDDING DOCUMENTS.

- 2.1 Complete sets of the Bidding Documents may be obtained as stated in the "Advertisement for Bids".
- 2.2 Complete sets of Bidding Documents must be used in preparing Bids. Neither the OWNER nor ENGINEER assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.
- 2.3 OWNER and ENGINEER, in making copies of Bidding Documents available on the above terms, do so only for the purpose of obtaining Bids on the Work, and do not confer a license or grant for any other use.

3.0 QUALIFICATIONS OF BIDDERS.

To demonstrate qualifications to perform the Work, each BIDDER must submit with the Bid (or within 48 hours of the Bid, if allowed by the Project Manual) written evidence, such as financial data, previous experience, record of performance on previous projects, equipment, information on their permanent place of business, and other such data as may be called for on the Statement of Qualifications contained in the Bidding Documents. If a BIDDER has not previously completed and submitted a PROGRAM Contractor Prequalification packet, each BIDDER must do so prior to submittal of a bid. Prequalification packets are available on the PROGRAM's website (www.platteriverprogram.org).

Each BIDDER must be prepared to submit evidence of the BIDDER's qualifications to do business in Nebraska, prior to the Notice of Award.

4.0 LIST OF SUBCONTRACTORS.

Each BIDDER shall submit a list of subcontractors on the form included in the Project Manual with his Bid.

Prior to the award of Contract, the OWNER shall notify the BIDDER if the OWNER, after due investigation, has reasonable objection to any Subcontractor listed and does not accept him. Acceptance of any or all listed Subcontractors by the OWNER does not relieve the CONTRACTOR from any responsibility for its Subcontractors.

5.0 BIDDER INQUIRIES.

All questions regarding the Bid Documents shall be addressed to the ENGINEER in writing. No questions regarding the Bid Documents will be answered by phone. Inquiries shall be directed to:

Tom Smrdel
Headwaters Corporation
4111 4th Ave, Suite 6
Kearney, Nebraska 68845
smrdelt@headwaterscorp.com

All written questions shall be answered in writing and provided to all BIDDERS in possession of a bid package.

6.0 PRE-BID CONFERENCE AND SITE SHOWING.

To assist BIDDERS with the development of a bid price, the ENGINEER will conduct a Site Showing at the location of the construction project. **Attendance at the Site Showing is mandatory for the submission of a bid. Bids received from BIDDERS who did not attend the Site Showing will not be accepted. BIDDERS must be on time for the Site Showing, and must remain until such time that the Site Showing is completed.**

Interested BIDDERS shall meet for the Site Showing at **(TIME, DAY, DATE OF SITE SHOWING)**. BIDDERS shall meet the Program at the Project Site **(directions will be provided along with the construction plans and specifications)**.

7.0 EXAMINATION OF CONTRACT DOCUMENTS AND SITE.

- 7.1 It is the responsibility of each BIDDER, before submitting a Bid, to (a) examine the Contract Documents thoroughly, (b) visit the site to become familiar with local conditions that may affect cost, progress, performance or furnishing of the Work, (c) consider federal, state and local laws and regulations that may affect cost, progress, performance or furnishing of the Work, (d) study and carefully correlate BIDDER's

observations with the Contract Documents, and (e) notify ENGINEER of all conflicts, errors or discrepancies in the Contract Documents.

- 7.2 Information and data reflected in the Contract Documents, with respect to Underground Facilities at or contiguous to the site, is based upon information and data furnished to the ENGINEER by owners of such Underground Facilities or others, and the ENGINEER does not assume responsibility for the accuracy or completeness thereof, unless it is expressly provided otherwise in the Supplementary Conditions.
- 7.3 Provisions concerning responsibilities for the adequacy of data furnished to prospective BIDDERS on subsurface conditions, Underground Facilities and other physical conditions, and possible changes in the Contract Documents, due to differing conditions, appear in the General Conditions and Supplementary Conditions.
- 7.4 The lands upon which the Work is to be performed, rights-of-way and easements for access thereto, and other lands designated for use by the CONTRACTOR in performing the Work, are identified in the Contract Documents. All additional lands, and access thereto required for temporary construction facilities or storage of materials and equipment are to be provided by the CONTRACTOR.
- 7.5 The submission of a Bid will constitute an incontrovertible representation by the BIDDER that the BIDDER has complied with every requirement of this Article 7, and that without exception, the Bid is premised upon performing and furnishing the Work required by the Contract Documents, and such means, methods, techniques, sequences or procedures of construction as may be indicated in or required by the Contract Documents, and that the Contract Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

8.0 INTERPRETATIONS AND ADDENDA.

- 8.1 All questions about the meaning or intent of the Contract Documents are to be directed to the ENGINEER. Interpretations or clarifications considered necessary by the ENGINEER in response to such questions will be issued by Addenda mailed or delivered to all parties recorded by the ENGINEER as having received the Bidding Documents. Questions received within five days prior to the date for opening of Bids will normally not be answered. Only questions answered by formal written Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.
- 8.2 Addenda may also be issued to modify the Bidding Documents, as deemed advisable by the OWNER or ENGINEER.

9.0 BID SECURITY.

- 9.1 Each BIDDER must deposit bid security with the bid, payable to the OWNER, which deposit shall be one of the following:

1. Certified check, cashier's check or draft drawn on a State or National Bank in the amount of ten percent (10%) of the total bid.
 2. Bid Bond must be presented on a standard AIA form or in a manner consistent with the bonding regulations in the State of Nebraska. Bid Bond must be in the amount of ten percent (10%) of the total bid.
- 9.2 The Bid Security of the successful BIDDER will be retained until such BIDDER has executed the Agreement and furnished the required contract security, whereupon the Bid Security will be returned. If the Successful BIDDER fails to execute and deliver the Agreement and furnish the required contract security within ten (10) days after the Notice of Award, OWNER may annul the Notice of Award, and the Bid Security of that BIDDER will be forfeited. The Bid Security of the two other lowest bidders whom the OWNER believes to have a reasonable chance of receiving the award may be retained by the OWNER until the earlier of the seventh day after the effective date of the Agreement, or the sixty-first (61st) day after the Bid Opening, where upon Bid Security furnished by such Bidders will be returned. Bid Security, with Bids which are not competitive, will be returned within seven days after the Bid Opening.

10.0 CONTRACT TIME.

Due to the nature of the work, BIDDERS must be prepared to complete the work within the time frames contained in the Agreement and Special Provisions of the Bid Documents.

11.0 LIQUIDATED DAMAGES.

Provisions for liquidated damages are set forth in the Agreement.

12.0 SUBSTITUTE OR "OR-EQUAL" ITEMS.

The Contract, if awarded, will be on the basis of materials and equipment described in the Drawings or specified in the Specifications. A substitute or "or-equal" item of material or equipment may be furnished or used by the CONTRACTOR, if acceptable to the ENGINEER. Application for such acceptance will not be considered by the ENGINEER until after the effective date of the Agreement. The procedure for submission of any such application by the CONTRACTOR, and consideration by the ENGINEER, is set forth in paragraph 6.05 of the General Conditions, and may be supplemented in the Supplementary Conditions.

13.0 SUBCONTRACTORS, SUPPLIERS, AND OTHERS.

- 13.1 If requested by the ENGINEER, the BIDDER shall provide information on the qualifications, experience and financial or other data of any Subcontractors proposed on this project. If ENGINEER, after due investigation, has reasonable objection to any proposed Subcontractor, Supplier, other person or organization, they may, before the Notice of Award is given, require the apparent Successful BIDDER to submit an acceptable substitute without an increase in Bid price. If apparent Successful BIDDER declines to make any such substitution, OWNER may award the contract to the next lowest BIDDER that proposes to use acceptable Subcontractors, Suppliers and other persons and organizations. The

declining to make requested substitutions will not constitute grounds for sacrificing the Bid security of any BIDDER. Any Subcontractor, Supplier, or other person or organization listed and to whom the OWNER or ENGINEER does not make written objection prior to giving of the Notice of Award will be deemed acceptable to the OWNER and ENGINEER, subject to revocation of such acceptance after the Effective Date of the Agreement as provided in Paragraph 6.06 of the General Conditions.

- 13.2 No CONTRACTOR shall be required to employ any Subcontractor, Supplier, other person or organization against whom CONTRACTOR has reasonable objection.

14.0 BID FORM.

- 14.1 The Bid Form is included with the Bidding Documents; additional copies may be obtained from the ENGINEER. Bids must be submitted on the forms provided.
- 14.2 All blanks on the Bid Form must be completed in ink or by typewriter. The Bidder must include both unit prices and extended prices. In case of a difference between the unit price and the extended price, the unit price shall be used in computing the total amount of the bid. In case of a difference between the total bid price and the sum of the extended prices, the sum of the extended prices shall govern.
- 14.3 Bids by corporations must be executed in the corporate name by the president or vice president (or other corporate officer accompanied by evidence of authority to sign), and the corporate seal must be affixed and attested by the secretary or an assistant secretary. The corporate address and state of incorporation must be shown below the signature.
- 14.4 Bids by partnerships must be executed in the partnership name and signed by a partner, whose title must appear under the signature, and the official address of the partnership must be shown below the signature.
- 14.5 All names must be typed or printed below the signature.
- 14.6 The Bid shall contain an acknowledgement of receipt of all Addenda (the numbers of which must be filled in on the Bid Form).
- 14.7 The address, telephone and fax numbers for communications regarding the Bid must be shown.
- 14.8 Work included in each Bid Item is as covered in the discussion on Measurement and Payment in Section 01150 of Division 1-General Requirements and each applicable section of the Construction Specifications.

15.0 SUBMISSION OF BIDS.

Contractors shall submit sealed proposals to the Platte River Recovery Implementation Program Office located at the following address:

**Platte River Recovery Implementation Program
4111 4th Avenue, Suite 6
Kearney, Nebraska 68845.**

Bids will be placed in a sealed envelope marked “**P017-012, 2017 SEDIMENT AUGMENTATION PROJECT**” and must include the Contractors name, contact person, address and phone number clearly visible on the exterior of the envelope.

All bids must be submitted on the Bid Form provided in this document and accompanied by the Bid Security and other required documents. Bid Forms must include an original signature(s). Unsigned Bid Forms or bids not provided on the Bid Form will be automatically rejected.

All bids must be mailed, or hand delivered to the PROGRAM Office no later than **TIME, DAY, DATE OF BID OPENING**. Faxed bids will not be accepted.

16.0 MODIFICATION AND WITHDRAWAL OF BIDS.

Bids may be modified or withdrawn by an appropriate document duly executed (in the manner that a Bid must be executed), and delivered to the place where Bids are to be submitted at any time prior to the time of opening of Bids, as called for in the Advertisement for Bids. No BIDDER may withdraw his Bid for a period as specified in the Advertisement for Bids after the date and hour set for the opening declared therein.

17.0 OPENING OF BIDS.

Bids will be opened and read aloud publicly. An abstract of the amounts of the Bids will be made available to BIDDERS within one week after the opening of Bids.

18.0 BIDS TO REMAIN SUBJECT TO ACCEPTANCE.

All bids will remain subject to acceptance for sixty days (60) after the day of the Bid Opening, but the OWNER may, in its sole discretion, release any Bid, and return the Bid Security prior to that date.

19.0 AWARD OF CONTRACT.

19.1 The PROGRAM reserves the right to reject any and all Bids, to waive any and all informalities not involving price, time, or changes in the Work, to negotiate contract terms with the successful BIDDER, and to disregard all nonconforming, nonresponsive, unbalanced, or conditional Bids. Also, the PROGRAM reserves the right to reject the Bid of any BIDDER if the PROGRAM believes that it would not be in the best interest of the project to make an award to that BIDDER, whether because the Bid is not responsive or the BIDDER is

unqualified, or of doubtful financial ability, or fails to meet any other pertinent standard or criteria established by the PROGRAM. Discrepancies in the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures, and the correct sum thereof, will be resolved in favor of the correct sum.

- 19.2 In evaluating Bids, the PROGRAM will consider the qualifications of the Bidders, whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices and other data, as may be requested in the Bid Form, or prior to the Notice of Award.
- 19.3 PROGRAM may conduct such investigations as the OWNER deems necessary to assist in the evaluation of any Bid, and to establish the responsibility, qualifications and financial ability of BIDDERS, proposed Subcontractors, Suppliers, and other persons and organizations to perform and furnish the Work in accordance with the Contract Documents to the PROGRAM's satisfaction within the prescribed time. The PROGRAM may also use previous experience with the BIDDER in evaluating qualifications.
- 19.4 If the Contract is to be awarded, it will be awarded to the lowest responsible, responsive BIDDER, whose evaluation by the PROGRAM indicates to PROGRAM that the award will be in the best interests of the Project.

20.0 CONTRACT SECURITY.

The successful BIDDER shall be required to furnish a contract performance bond, and a labor and materials payment bond, each in the amount of one hundred percent (100%) of the contract price as originally bid or subsequently modified. The surety company shall be authorized to do business in the State of Nebraska. The cost of the bonds shall be included in the Contractor's Bid Proposal. When the successful BIDDER delivers the executed Agreement to the OWNER, it must be accompanied by the required Construction Performance Bond and Construction Payment Bond on the standard AIA forms or in a manner consistent with the bonding regulations in the State of Nebraska. No exceptions will be made.

21.0 INSURANCE CERTIFICATES.

The successful BIDDER shall be required to furnish, with the executed Agreement, Insurance Certificates called for in the Supplementary Conditions.

22.0 SIGNING OF AGREEMENT.

When the PROGRAM gives a Notice of Award to the successful BIDDER, it will be accompanied by the required number of unsigned counterparts of the Agreement with all other written Contract Documents attached. Within ten (10) days thereafter, the CONTRACTOR shall sign and deliver the required number of counterparts of the Agreement and attached documents to the PROGRAM with the required Bonds. Within ten days thereafter, the PROGRAM shall deliver one fully signed counterpart to the CONTRACTOR. No contract shall be considered as effective until it has been fully executed by all parties.

If the BIDDER to whom the Notice of Award is given does not properly execute the Agreement within the time allowed, the PROGRAM may withdraw the Notice of Award, and the BIDDER will forfeit his Bid Security.

Following the execution of the Contract by the OWNER and the CONTRACTOR, written Notice to Proceed with the Work shall be given by the PROGRAM to the CONTRACTOR. The Contract Time will commence to run with the Notice to Proceed. A Notice to Proceed may be given at any time within thirty days after the effective date of the Agreement.

23.0 SALES AND USE TAXES.

The CONTRACTOR must pay all State Sales and Use Tax on materials and equipment to be incorporated in the Work.

24.0 RETAINAGE.

Provisions concerning retainage are set forth in the Agreement.

25.0 STATE LAWS AND REGULATIONS.

All applicable laws, ordinances and the rules and regulations of all authorities having jurisdiction over construction of the project shall apply to the contract throughout.

END OF SECTION 00100

DIVISION 0 - BIDDING AND CONTRACT DOCUMENTS
SECTION 00300 - BID FORM

Project Identification: P017-012: 2017 SEDIMENT AUGMENTATION PROJECT.

This Bid is submitted to:

PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM
4111 4th Avenue, Suite 6
KEARNEY, NEBRASKA 68845

1. The undersigned BIDDER proposes and agrees, if this Bid is accepted, to enter into an Agreement with the OWNER, in the form included in the Contract Documents, to perform and furnish all Work as specified or indicated in the Contract Documents for the Contract Price, and within the Contract Time indicated in this Bid, and in accordance with the other terms and conditions of the Contract Documents.
2. The BIDDER accepts all of the terms and conditions of the Advertisement for Bids, and Instructions to Bidders, including without limitation, those dealing with the disposition of Bid Security. This Bid will remain subject to acceptance for sixty (60) days after the day of the Bid Opening. The BIDDER will sign and submit the Agreement with the Construction Performance Bond and Payment Bond, and other documents required by the Bidding Requirements, within ten days after the date of the Notice of Award.
3. In submitting this BID, BIDDER represents, as more fully set forth in the Agreement, that:
 - (a) BIDDER has examined copies of all the Bidding Documents, and of the following Addenda (receipt of all which is hereby acknowledged):

NUMBER

DATE

- (b) BIDDER has familiarized itself with the nature and extent of the Contract Documents, work, work site, locality, and all local conditions, regulations and permits, local laws or ordinances that in any manner may affect cost, progress, performance, or furnishing of the Work.
 - (c) BIDDER has given the ENGINEER written notice of all conflicts, errors, or discrepancies that it has discovered in the Contract Documents, and the written resolution thereof by the ENGINEER is acceptable to the BIDDER.
 - (d) This Bid is genuine and not made in the interest of, or on behalf of, any undisclosed person, firm, or corporation, and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation; the BIDDER has not directly or indirectly induced or solicited

any other BIDDER to submit a false or sham Bid; the BIDDER has not solicited or induced any person, firm or corporation to refrain from bidding; and the BIDDER has not sought, by collusion, to obtain for itself any advantage over any other BIDDER or over the OWNER.

4. The BIDDER agrees to perform all the Work described in the Contract Documents and on the following Bid Schedule. The Method of Measurement and Payment shall be as stated in Section 01150 of Division 1-General Requirements.
5. The BIDDER hereby agrees to accept an award of a contract for the Bid Schedule as determined under Section 00100, paragraph 19.
6. The BIDDER agrees that the unit prices shall govern in checking the bid, and, should a discrepancy exist in the sum of extended prices and Total Amount of Bid after extensions are checked and corrections made, if any, the sum of extended prices shall be used in considering the award of this Contract.
7. The BIDDER will complete the Work for the following unit or lump sum prices(s):

BID SCHEDULE

Item	Work	Est. Quantity	Unit	Unit Price	Bid Price
1	Mobilization and Demobilization	1	LS	_____	_____
2	Excavate and Augment	20,000	CY	_____	_____
3	Excavate and Place	50,000	CY	_____	_____
4	Bank Stabilization	13	EA	_____	_____
Total Amount of Bid \$					_____

8. The BIDDER understands that the OWNER reserves the right to reject any or all bids or to waive any informality or technicality in any proposal in the interest of the OWNER. If an award is made, it will be made to the lowest bidder that is determined qualified and responsible at the sole discretion of the OWNER.
9. BIDDER agrees that the Work, P017-012: 2017 SEDIMENT AUGMENTATION PROJECT will be substantially complete in accordance with paragraph 3.1 of the Agreement. BIDDER accepts the provisions of the Agreement as to liquidated damages in the event of failure to complete the Work on time.

10. The following documents are attached to and made a condition of this bid:
(a) Required Bid Security in the form of _____.

11. Communications concerning this Bid shall be addressed to:

Contractor _____

Address _____

City/State/Zip _____

Phone _____

Fax _____

E-mail _____

12. The terms used in this Bid, which are defined in the General Conditions and Supplementary Conditions of the Construction Contract included as part of the Contract Documents, have the meanings assigned to them in the General Conditions and Supplementary Conditions.

SUBMITTED ON _____, 20____

BY _____
Company Name (Individual, Partnership, Corporation, or Joint Venture)

(State of Residency)

BY _____
(Name of Person Authorized to Sign) (Signature and Printed) (Corporate Seal If Applicable)

(Title)

Attest _____
(If Corporation)

BIDDER Business Address: _____

Phone No.: _____ Fax No.: _____

Contractor's State License No. (If applicable): _____

ANTICIPATED SUBCONTRACTORS

1. Type of Work to be Sublet _____

Approximate Dollar Amount of Subcontract \$ _____
Probable Subcontractor _____
Address _____
2. Type of Work to be Sublet _____

Approximate Dollar Amount of Subcontract \$ _____
Probable Subcontractor _____
Address _____
3. Type of Work to be Sublet _____
Approximate Dollar Amount of Subcontract \$ _____
Probable Subcontractor _____
Address _____

Statement of Qualifications: The CONTRACTOR shall submit a statement of the subcontractor's qualifications and shall obtain written permission from the OWNER prior to the actual subletting or assignment of any portion of the contract as per Section 6.06 of the General Conditions.

PREVIOUS EXPERIENCE OF BIDDER

SIMILAR PROJECTS COMPLETED (List at least three)

1. DATE_____ VALUE_____
- Name of Project, Address, Type of Improvement_____
- _____
- _____
- _____
- Name/Phone of Owner_____
- Name/Phone of Engineer _____

2. DATE _____ VALUE_____
- Name of Project, Address, Type of Improvement _____
- _____
- _____
- _____
- Name/Phone of Owner_____
- Name/Phone of Engineer _____

3. DATE_____ VALUE_____
- Name of Project, Address, Type of Improvement _____
- _____
- _____
- _____
- Name/Phone of Owner_____
- Name/Phone of Engineer _____

SIMILAR PROJECTS UNDER CONTRACT (List at least one)

DATE _____ VALUE _____

Name of Project, Address, Type of Improvement _____

Name/Phone of Owner _____

Name/Phone of Engineer _____

END OF SECTION 00300

DIVISION 0 - BIDDING AND CONTRACT DOCUMENTS
SECTION 00410 - BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned,
_____ as Principal, and _____ as Surety, are
hereby held and firmly bound unto NEBRASKA COMMUNITY FOUNDATION, INC., LINCOLN
NEBRASKA, as OWNER, in the penal sum _____
_____ for payment of which, well and truly to be made, we
hereby jointly and severely bind ourselves, successors and assigns.

The Condition of the above obligation is such that whereas the Principal has submitted to OWNER
a certain BID, attached hereto, and hereby made a part hereof, to enter into a Contract in writing,
for the construction of the P17-012: 2017 SEDIMENT AUGMENTATION PROJECT

NOW, THEREFORE,

- (a) If said BID shall be rejected, or
- (b) If said BID shall be accepted, and the Principal shall execute and deliver a Contract in the
Form of Contract attached hereto (properly completed in accordance with said BID), and
shall furnish a BOND for his faithful performance of said Contract, and furnish a BOND for
the payment of all persons performing labor or furnishing materials in connection therewith,
and shall in all other respects perform the agreement created by the acceptance of said
BID,

Then this obligation shall be void, otherwise the same shall remain in force and effect; it being
expressly understood and agreed that the liability of the Surety for any and all claims hereunder
shall, in no event, exceed the penal amount of this obligation as herein stated. The Bond shall be
forfeited as liquidated damages, if the Bidder, upon the award of the Contract to him, fails to enter
into the Contract within 10 (ten) days after it is presented to him for that purpose, or fails to proceed
with the performance of the Contract.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and
its BOND shall be in no way impaired or affected by any extension of the time within which the
OWNER may accept such BID; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers.

Signed and sealed this ____ day of _____, 20 ____.

(Principal) (SEAL)

BY: _____
(Title)

(Witness)

(Surety)

BY: _____
(Attorney-in-Fact)

END OF SECTION 00410

DIVISION 0 - BIDDING AND CONTRACT DOCUMENTS
SECTION 00500 – AGREEMENT

THIS AGREEMENT is dated as of the ##TH day of MONTH in the year 2013, by and between the Nebraska Community Foundation, Inc. (hereinafter called OWNER) representing all signatories to the Platte River Recovery Implementation Program (PROGRAM), and CONTRACTOR NAME (hereinafter called CONTRACTOR). The following persons are authorized to represent the parties through this Agreement: Diane Wilson representing the OWNER, Dr. Jerry Kenny representing the PROGRAM; and _____ representing the CONTRACTOR.

OWNER and CONTRACTOR, in consideration of the mutual covenants hereinafter set forth, agree as follows:

ARTICLE 1. WORK.

CONTRACTOR shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:

Excavation of a 150-ft wide pilot channel and lowering of a 5-acre bar, totaling approximately 70,000 CY. Excavation spoils will be augmented to the active channel, graded into a berm, used for channel fill and stockpiled on the south bank of the south channel. In addition to earthwork, a bank stabilization plan consisting spur-dike oriented logs will be installed on the south bank in coincidence with the channel fill.

ARTICLE 2. ENGINEER.

The Office of the Executive Director of the PROGRAM will serve as the ENGINEER. The ENGINEER may in writing designate a representative(s) who shall carry out the ENGINEER's functions as set forth in the Contract Documents. In all cases as provided for in this Agreement, the powers, authorities, rights and responsibilities of the ENGINEER shall also extend to the ENGINEER's representative(s).

ARTICLE 3. CONTRACT TIME.

- 3.1 Substantial Completion. Substantial Completion of all Work is to be completed as soon as possible following issuance of the Notice to Proceed, and shall be completed no later than MONTH DAY, YEAR. Work will be initiated within 30 days after execution of this Agreement unless otherwise approved by the PROGRAM.
- 3.2 Final Completion. Final Completion is to be reached within 30 days of Substantial Completion.
- 3.3 In determining whether an extension of time will be granted, consideration will be given to unusual weather conditions that may delay the completion of the Work, providing the CONTRACTOR has notified the OWNER, in writing, that an extension of time is needed.

- 3.4 Liquidated Damages. The OWNER and CONTRACTOR recognize that time is of the essence of this Agreement, and that the OWNER will suffer financial loss if the Work is not completed within the times specified in paragraph 3.1 above, plus any extensions thereof allowed, in accordance with Article 12 of the General Conditions. They also recognize the delays, expense, and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by the OWNER if the Work is not completed on time.

Accordingly, instead of requiring any such proof, the OWNER and CONTRACTOR agree that, as liquidated damages for delay, (but not as a penalty), the CONTRACTOR shall pay the OWNER \$500.00 for each calendar day that expires after the time specified in paragraph 3.1 for Substantial Completion, until the Work is substantially complete. After Substantial Completion, if the CONTRACTOR shall neglect, refuse, or fail to complete the remaining Work within the Contract Time or any proper extension thereof granted by the OWNER, the CONTRACTOR shall pay the OWNER \$500.00 for each calendar day that expires after the time specified in paragraph 3.1 for final completion and readiness for final payment of all work.

The provisions in Section 3.3 regarding declaration of weather shutdown and suspension of counting days shall apply to this section.

ARTICLE 4. CONTRACT PRICE.

The OWNER shall pay the CONTRACTOR for completion of the Work, in accordance with the Contract Documents according to the Bid, which is attached as an Exhibit. The total awarded sum is \$ BID AMOUNT. The total price can vary due to the actual quantities of the unit price items installed, or due to Change Orders. Measurement and payment for bid items shall be per information provided in the Division 1-General Requirements.

ARTICLE 5. PAYMENT PROCEDURES.

The CONTRACTOR shall submit Applications for Payment in accordance with Article 14 of the General Conditions. Applications for Payment will be processed by the ENGINEER, as provided in the General Conditions.

- 5.1 A semi-final payment will be made only upon substantial completion of all work. Substantial completion shall have been achieved when, based upon the recommendation of the ENGINEER, all work required in the Contract Documents has been completed with the exception of minor corrections or adjustments.

The amount of the semi-final payment to be provided will be the balance of the amount remaining under the Contract minus two times the value of any items remaining to be corrected or adjusted as well as any amount necessary to satisfy any claims, liens or judgments against the CONTRACTOR which have not been suitably discharged.

Upon satisfactory completion of the corrections and/or adjustments, the PROGRAM shall, upon receipt of a requisition approved by the OWNER, promptly pay these items. The PROGRAM shall retain any funds as may be required to satisfy claims, liens and judgments against the CONTRACTOR arising in connection with of the project and which have not been suitably discharged.

Reduction of the balance of the amount due under the Contract, does not relieve the CONTRACTOR of the responsibility for corrective work or adjustments required during the guarantee period.

Prior to issuance of the semi-final payment, the CONTRACTOR shall furnish to the OWNER (on forms supplied in the Bidding Documents), a sworn statement that all materials, labor, equipment etc. that have been furnished performed or otherwise included under the Contract, have been paid for. In the event all CONTRACTOR costs have not been paid, the CONTRACTOR must provide a statement of the balance due to each and every supplier of labor, materials, equipment, etc.

If required by the OWNER, the CONTRACTOR shall provide similar statements from Subcontractors or suppliers, etc. to the same effect that they have paid for all labor, materials etc. furnished by them and used in connection with the Contract or a statement of any unpaid balances.

- 5.2 Final Payment will be made upon certification issued by the OWNER, in consultation with the ENGINEER, that all work has been completed in accordance with the Contract and upon proof that any claims, liens or judgments have been suitably discharged.

The PROGRAM shall make the final payment promptly upon receipt of a Certification of Final Completion from the ENGINEER, and signed by the CONTRACTOR and OWNER.

ARTICLE 6. CONTRACTOR'S REPRESENTATIVES

In order to induce the OWNER to enter into this Agreement, the CONTRACTOR makes the following representations:

- 6.1 CONTRACTOR has familiarized itself with the nature and extent of the Contract Documents, Work, site, locality, and all local conditions and Laws and Regulations that in any manner may affect cost, progress, performance, or furnishing of the Work.
- 6.2 CONTRACTOR has studied carefully all reports of investigations and tests of latent physical conditions at the site or otherwise affecting cost, progress or performance of the Work which were relied upon by ENGINEER in the preparation of the Drawings and Specifications and which have been identified in the Contract Documents.
- 6.3 CONTRACTOR has made or caused to be made examinations, investigations and tests and studies of such reports and related data in addition to those referred to above as he deems necessary for the performance of the Work at the Contract Price, within the Contract Time, and in accordance with the other terms and conditions of the Contract Documents; and no additional examinations, investigations, tests, reports or similar data are or will be required by CONTRACTOR for such purposes.
- 6.4 CONTRACTOR has correlated the results of all such observations, examinations, investigations, tests, reports and data with the terms and conditions of the Contract Documents.
- 6.5 CONTRACTOR has carefully reviewed and checked all information and data shown or indicated on the Contract Documents, with respect to existing Underground Facilities at or

contiguous to the site, and assumes responsibility for the accurate location of said Underground Facilities.

- 6.6 CONTRACTOR has given ENGINEER written notice of all conflicts, errors, or discrepancies that he has discovered in the Contract Documents, and the written resolution thereof by the ENGINEER is acceptable to the CONTRACTOR.

ARTICLE 7. CONTRACT DOCUMENTS

The Contract Documents, which comprise the entire agreement between the OWNER and the CONTRACTOR concerning the Work, consists of the following:

7.1 This Agreement

7.2 Performance Bond and Labor and Material Payment Bond.

7.3 Notice of Award and Notice to Proceed.

7.4 General Conditions and Supplementary Conditions to the General Conditions.

7.5 General Requirements, Construction Specifications, Material Specifications, and Special Provisions

7.6 Drawings and Details.

- Design Sheet #1: Cover Sheet, Project Vicinity and Location
- Design Sheet #2: Legend, Notes and Abbreviations
- Design Sheet #3 Sheet Index, Construction Access, and Staging
- : Design Sheet #4 General Construction Plan and Survey Control
- Design Sheet #5 Pilot Channel Plan and Profile
- Design Sheet #6 Pilot Channel Sections
- Design Sheet #7 Temporary Berm Plan and Profile
- Design Sheet #8 Temporary Berm Sections
- Design Sheet #9 Bar Grading Plan and Profile
- Design Sheet #10 Channel Fill and Bank Protection Plan and Profile
- Design Sheet #11 Channel Fill and Bank Protection Sections
- Design Sheet #12 Sand Stockpile Plan and Profile
- Design Sheet #13 Site Closure Plan

7.7 Addenda listed on the Bid forms.

LIST ANY ADDENDA

7.8 Supplemental Sheets and Attachments

LIST IF ANY

7.9 CONTRACTOR'S executed Bid forms.

7.10 Any Modification, including Change Orders, duly delivered after execution of Agreement.

There are no Contract Documents, other than those listed above, in this Article 7. The Contract Documents may only be amended, modified, or supplemented, as provided in Article 3 of the General Conditions.

The Contract Documents listed above are intended to be complementary and to describe and provide for a complete work. The CONTRACTOR will not take advantage of an apparent error or omission in the plans and specifications. If the CONTRACTOR discovers such an error or omission, he will immediately notify the ENGINEER. The ENGINEER will then make such corrections and interpretations as may be deemed necessary for fulfilling the intent of the Contract Documents.

ARTICLE 8. MISCELLANEOUS

- 8.1 Terms used in this Agreement which are defined in Article 1 of the General Conditions will have the meanings indicated in the General Conditions.
- 8.2 No assignment by a party hereto of any rights under, or interests in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound; and specifically, but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.
- 8.3 The OWNER and the CONTRACTOR each binds itself, its partners, successors, assigns, and legal representatives to the other party hereto, its partners, successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

ARTICLE 9. OTHER PROVISIONS.

IN WITNESS WHEREOF, OWNER and CONTRACTOR have signed this Agreement in triplicate. One counterpart each has been delivered to OWNER, CONTRACTOR, and ENGINEER. All portions of the Contract Documents have been signed or identified by OWNER and CONTRACTOR or by ENGINEER on their behalf.

This Agreement will be effective on MONTH DAY, 2013.
(Note: Effective Date must precede dates for performance and payment bonds)

OWNER:

CONTRACTOR:

By: _____

By: _____

Title: _____

Title: _____

(CORPORATE SEAL IF APPLICABLE)

Attest: _____

Attest: _____

Address for giving notices:

Address for giving notices:

License No. _____

Agent for service of process:

(If the CONTRACTOR is a corporation, attach evidence of authority to sign).

END OF SECTION 00500

DIVISION 0 - BIDDING AND CONTRACT DOCUMENTS
SECTION 00610 – PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS: that

(Name of Contractor)

(Address of Contractor)

a _____, hereinafter called Principal and
(Corporation, Partnership, or Individual)

(Name of Surety)

(Address of Surety)

hereinafter called Surety, are held and firmly bound unto

NEBRASKA COMMUNITY FOUNDATION, INC.
P.O. BOX 83107
LINCOLN, NE 68501-3107

hereinafter called OWNER, in the penal sum of Full Contract Amount Text
Dollars, (\$ Full Contract Amount Numbers
_____)

In lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered is into a certain contract with the OWNER, dated the _____ day of _____, 2013, a copy of which is hereto attached and made a part hereof for the construction of: P17-012: 2017 Sediment Augmentation Project.

NOW, THEREFORE, if the Principal shall well, truly and faithfully perform its duties, all the undertakings, covenants, terms conditions, and agreements of said contract during the original term thereof, and any extensions thereof which may be granted by the OWNER, with or without notice to the Surety and during the one year guaranty period, and if he shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless the OWNER from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the OWNER all outlay and expense which the OWNER may incur in making good any default, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or the Work to be performed thereunder or the specifications accompanying the same shall in any way affect its obligation on the BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the Work or to the specifications.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge that right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in three (3) counterparts, each one of which shall be deemed an original, this the _____ day of _____ 20 ____ .

ATTEST:

Contractor as Principal

Witness as to Principal

By: _____
(Signed)

(SEAL)

(Address)

(Address)

ATTEST:

Surety

Witness as to Surety

Attorney-in-Fact

(SEAL)

(Address)

(Address)

NOTE: Date of BOND must not be prior to date of Contract. If CONTRACTOR is Partnership, all partners shall execute BOND.

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the PROJECT is located.

END OF SECTION 00610

DIVISION 0 - BIDDING AND CONTRACT DOCUMENTS
SECTION 00620 – LABOR AND MATERIALS PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS: that

(Name of Contractor)

(Address of Contractor)

a _____, hereinafter called Principal and
(Corporation, Partnership, or Individual)

(Name of Surety)

(Address of Surety)

hereinafter called Surety, are held and firmly bound unto

NEBRASKA COMMUNITY FOUNDATION, INC.
P.O. BOX 83107
LINCOLN, NE 68501-3107

hereinafter called OWNER, in the penal sum of Full Contract Amount text

Dollars, (\$ Full Contract Amount Number)

In lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with the OWNER, dated the _____ day of _____, 20____, a copy of which is hereto attached and made a part hereof for the construction of: P17-012: 2017 Sediment Augmentation Project.

NOW, THEREFORE, if the Principal shall well, truly and faithfully perform its duties, all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term thereof, and any extensions thereof which may be granted by the OWNER, with or without notice to the Surety and during the one year guaranty period, and if he shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless the OWNER from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the OWNER all outlay and expense which the OWNER may incur in making good any default, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or the Work to be performed thereunder or the specifications accompanying the same shall in any way affect its obligation on the BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the Work or to the specifications.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge that right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in five (5) counterparts, each one of which shall be deemed an original, this the _____ day of _____ 20 ____ .

ATTEST:

_____	_____
Witness as to Principal	Contractor as Principal
	By: _____
	(Signed)

(SEAL)

_____	_____
(Address)	(Address)
_____	_____

ATTEST:

_____	_____
Witness as to Surety	Surety
	Attorney-in-Fact

(SEAL)

_____	_____
(Address)	(Address)
_____	_____

NOTE: Date of BOND must not be prior to date of Contract. If CONTRACTOR is Partnership, all partners shall execute BOND.

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the PROJECT is located.

END OF SECTION 00620

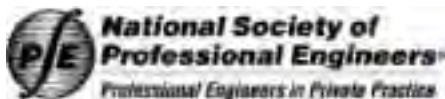
STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

Prepared by **ENGINEERS JOINT CONTRACT DOCUMENTS**

COMMITTEE

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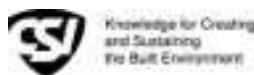
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These General Conditions have been prepared for use with the Suggested Forms of Agreement Between Owner and Contractor Nos. C-520 or C-525 (2002 Editions). Their provisions are interrelated and a change in one may necessitate a change in the other. Comments concerning their usage are contained in the EJCDC Construction Documents, General and Instructions (No. C-001) (2002 Edition). For guidance in the preparation of Supplementary Conditions, see Guide to the Preparation of Supplementary Conditions (No. C-800) (2002 Edition).

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GENERAL CONDITIONS

ARTICLE 1 - DEFINITIONS AND TERMINOLOGY

1.01 *Defined Terms*

A. Wherever used in the Bidding Requirements or Contract Documents and printed with initial capital letters, the terms listed below will have the meanings indicated which are applicable to both the singular and plural thereof. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.

1. *Addenda*--Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.

2. *Agreement*—The written instrument which is evidence of the agreement between Owner and Contractor covering the Work.

3. *Application for Payment*—The form acceptable to Engineer which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.

4. *Asbestos*—Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.

5. *Bid*—The offer or proposal of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

6. *Bidder*--The individual or entity who submits a Bid directly to Owner.

7. *Bidding Documents*—The Bidding Requirements and the proposed Contract Documents (including all Addenda).

8. *Bidding Requirements*—The Advertisement or Invitation to Bid, Instructions to Bidders, bid security of acceptable form, if any, and the Bid Form with any supplements.

9. *Change Order*—A document recommended by Engineer which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, issued on or after the Effective Date of the Agreement.

10. *Claim*—A demand or assertion by Owner or Contractor seeking an adjustment of Contract Price or Contract Times, or both, or other relief with respect to the terms of the Contract. A demand for money or services by a third party is not a Claim.

11. *Contract*—The entire and integrated written agreement between the Owner and Contractor concerning the Work. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral.

12. *Contract Documents*—Those items so designated in the Agreement. Only printed or hard copies of the items listed in the Agreement are Contract Documents. Approved Shop Drawings, other Contractor's submittals, and the reports and drawings of subsurface and physical conditions are not Contract Documents.

13. *Contract Price*—The moneys payable by Owner to Contractor for completion of the Work in accordance with the Contract Documents as stated in the Agreement (subject to the provisions of Paragraph 11.03 in the case of Unit Price Work).

14. *Contract Times*—The number of days or the dates stated in the Agreement to: (i) achieve Milestones, if any, (ii) achieve Substantial Completion; and (iii) complete the Work so that it is ready for final payment as evidenced by Engineer's written recommendation of final payment.

15. *Contractor*—The individual or entity with whom Owner has entered into the Agreement.

16. *Cost of the Work*--See Paragraph 1 LOLA for definition.

17. *Drawings*--That part of the Contract Documents prepared or approved by Engineer which graphically shows the scope, extent, and character of the Work to be performed by Contractor. Shop Drawings and other Contractor submittals are not Drawings as so defined.

18. *Effective Date of the Agreement*—The date indicated in the Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.

19. *Engineer*—The individual or entity named as such in the Agreement.

20. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but which does not involve a change in the Contract Price or the Contract Times.

21. *General Requirements*—Sections of Division 1 of the Specifications. The General Requirements pertain to all sections of the Specifications.

22. *Hazardous Environmental Condition*—The presence at the Site of Asbestos, PCBs, Petroleum, Hazardous Waste, or Radioactive Material in such quantities or circumstances that may present a substantial danger to persons or property exposed thereto in connection with the Work.

23. *Hazardous Waste*--The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time.

24. *Laws and Regulations; Laws or Regulations*--Any and all applicable laws, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.

25. *Liens*—Charges, security interests, or encumbrances upon Project funds, real property, or personal property.

26. *Milestone*—A principal event specified in the Contract Documents relating to an intermediate completion date or time prior to Substantial Completion of all the Work.

27. *Notice of Award*--The written notice by Owner to the Successful Bidder stating that upon timely compliance by the Successful Bidder with the conditions precedent listed therein, Owner will sign and deliver the Agreement.

28. *Notice to Proceed*—A written notice given by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work under the Contract Documents.

29. *Owner*—The individual or entity with whom Contractor has entered into the Agreement and for whom the Work is to be performed.

30. *PCBs*--Polychlorinated biphenyls.

31. *Petroleum*--Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Waste and crude oils.

32. *Progress Schedule*—A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Contractor's plan to accomplish the Work within the Contract Times.

33. *Project*—The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part.

34. *Project Manual*—The bound documentary information prepared for bidding and constructing the Work. A listing of the contents of the Project Manual, which may be bound in one or more volumes, is contained in the table(s) of contents.

35. *Radioactive Material--Source*, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 USC Section 2011 et seq.) as amended from time to time.

36. *Related Entity* — An officer, director, partner, employee, agent, consultant, or subcontractor.

37. *Resident Project Representative*—The authorized representative of Engineer who may be assigned to the Site or any part thereof.

38. *Samples*—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.

39. *Schedule of Submittals*--A schedule, prepared and maintained by Contractor, of required submittals and the time requirements to support scheduled performance of related construction activities.

40. *Schedule of Values*—A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

41. *Shop Drawings*—All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work.

42. *Site*—Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements for access thereto, and such other lands furnished by Owner which are designated for the use of Contractor.

43. *Specifications*—That part of the Contract Documents consisting of written requirements for materials, equipment, systems, standards and workmanship as applied to the Work, and certain

administrative requirements and procedural matters applicable thereto.

44. *Subcontractor*—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work at the Site.

45. *Substantial Completion*--The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion thereof.

46. *Successful Bidder*—The Bidder submitting a responsive Bid to whom Owner makes an award.

47. *Supplementary Conditions*--That part of the Contract Documents which amends or supplements these General Conditions.

48. *Supplier*—K manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or any Subcontractor.

49. *Underground Facilities*—AW underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.

50. *Unit Price Work*--Work to be paid for on the basis of unit prices.

51. *Work*—The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction, and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.

52. *Work Change Directive*—A written statement to Contractor issued on or after the Effective Date of the Agreement and signed by Owner and recommended by Engineer ordering an addition, deletion, or revision in the Work, or responding to differing or unforeseen subsurface or physical conditions under which the Work is to be performed or to emergencies. A Work Change Directive will not change the Contract Price or the Contract Times

but is evidence that the parties expect that the change ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Times.

1.02 Terminology

A. The following words or terms are not defined but, when used in the Bidding Requirements or Contract Documents, have the following meaning.

B. Intent of Certain Terms or Adjectives

1. The Contract Documents include the terms "as allowed," "as approved," "as ordered", "as directed" or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives "reasonable," "suitable," "acceptable," "proper," "satisfactory," or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action or determination will be solely to evaluate, in general, the Work for compliance with the requirements of and information in the Contract Documents and conformance with the design concept of the completed Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of Paragraph 9.09 or any other provision of the Contract Documents.

C. Day

1. The word "day" means a calendar day of 24 hours measured from midnight to the next midnight.

D. Defective

1. The word "defective," when modifying the word "Work," refers to Work that is unsatisfactory, faulty, or deficient in that it:

- a. does not conform to the Contract Documents, or
- b. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents, or
- c. has been damaged prior to Engineer's - recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 14.04 or 14.05).

E. Furnish, Install, Perform, Provide

1. The word "furnish," when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.

2. The word "install," when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.

3. The words "perform" or "provide," when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.

4. When "furnish," "install," "perform," or "provide" is not used in connection with services, materials, or equipment in a context clearly requiring an obligation of Contractor, "provide" is implied.

F. Unless stated otherwise in the Contract Documents, words or phrases which have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2 - PRELIMINARY MATTERS

2.01 *Delivery of Bonds and Evidence of Insurance*

A. When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner such bonds as Contractor may be required to furnish.

B. *Evidence of Insurance:* Before any Work at the Site is started, Contractor and Owner shall each deliver to the other, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance which either of them or any additional insured may reasonably request) which Contractor and Owner respectively are required to purchase and maintain in accordance with Article 5.

2.02 *Copies of Documents*

A. Owner shall furnish to Contractor up to ten printed or hard copies of the Drawings and Project Manual. Additional copies will be furnished upon request at the cost of reproduction.

2.03 *Commencement of Contract Times; Notice to Proceed*

A. The Contract Times will commence to run on the thirtieth day after the Effective Date of the Agreement

or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Agreement. In no event will the Contract Times commence to run later than the sixtieth day after the day of Bid opening or the thirtieth day after the Effective Date of the Agreement, whichever date is earlier.

2.04 *Starting the Work*

A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work shall be done at the Site prior to the date on which the Contract Times commence to run.

2.05 *Before Starting Construction*

A. *Preliminary Schedules:* Within 10 days after the Effective Date of the Agreement (unless otherwise specified in the General Requirements), Contractor shall submit to Engineer for timely review:

1. a preliminary Progress Schedule; indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract Documents;

2. a preliminary Schedule of Submittals; and

3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

2.06 *Preconstruction Conference*

A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to in Paragraph 2.05.A, procedures for handling Shop Drawings and other submittals, processing Applications for Payment, and maintaining required records.

2.07 *Initial Acceptance of Schedules*

A. At least 10 days before submission of the first Application for Payment a conference attended by Contractor, Engineer, and others as appropriate will be held to review for acceptability to Engineer as provided below the schedules submitted in accordance with Paragraph 2.05.A. Contractor shall have an additional 10 days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to Contractor until acceptable schedules are submitted to Engineer.

1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work nor interfere with or relieve Contractor from Contractor's full responsibility therefor.

2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.

3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to component parts of the Work.

ARTICLE 3 - CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

3.01 *Intent*

A. The Contract Documents are complementary; what is required by one is as binding as if required by all.

B. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents. Any labor, documentation, services, materials, or equipment that may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the intended result will be provided whether or not specifically called for at no additional cost to Owner.

C. Clarifications and interpretations of the Contract Documents shall be issued by Engineer as provided in Article 9.

3.02 *Reference Standards*

A. Standards, Specifications, Codes, Laws, and Regulations

1. Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard, specification, manual, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Agreement if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.

2. No provision of any such standard, specification, manual or code, or any instruction of a Supplier shall be effective to change the duties or

responsibilities of Owner, Contractor, or Engineer, or any of their subcontractors, consultants, agents, or employees from those set forth in the Contract Documents. No such provision or instruction shall be effective to assign to Owner, or Engineer, or any of, their Related Entities, any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

3.03 *Reporting and Resolving Discrepancies*

A. Reporting Discrepancies

1. *Contractor's Review of Contract Documents Before Starting Work:* Before undertaking each part of the Work, Contractor shall carefully study and compare the Contract Documents and check and verify pertinent figures therein and all applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy which Contractor may discover and shall obtain a written interpretation or clarification from Engineer before proceeding with any Work affected thereby.

2. *Contractor's Review of Contract Documents During Performance of Work:* If, during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents or between the Contract Documents and any provision of any Law or Regulation applicable to the performance of the Work or of any standard, specification, manual or code, or of any instruction of any Supplier, Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 6.16.A) until an amendment or supplement to the Contract Documents has been issued by one of the methods indicated in Paragraph 3.04.

3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor knew or reasonably should have known thereof.

B. Resolving Discrepancies

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the Contract Documents shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between the provisions of the Contract Documents and:

a. the provisions of any standard, specification, manual, code, or instruction (whether or not specifically incorporated by reference in the Contract Documents); or

b. the provisions of any Laws or Regulations applicable to the performance of the Work

(unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 *Amending and Supplementing Contract Documents*

A. The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work or to modify the terms and conditions thereof by either a Change Order or a Work Change Directive.

B. The requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized, by one or more of the following ways:

A Field Order;

2. Engineer's approval of a Shop Drawing or Sample; (Subject to the provisions of Paragraph 6.17.D.3); or

3. Engineer's written interpretation or clarification.

3.05 *Reuse of Documents*

A. Contractor and any Subcontractor or Supplier or other individual or entity performing or furnishing all of the Work under a direct or indirect contract with Contractor, shall not:

1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or Engineer's consultants, including electronic media editions; or

2. reuse any of such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaption by Engineer.

B. The prohibition of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein shall preclude Contractor from retaining copies of the Contract Documents for record purposes.

3.06 *Electronic Data*

A. Copies of data furnished by Owner or Engineer to Contractor or Contractor to Owner or Engineer that may be relied upon are limited to the printed copies (also known as hard copies). Files in electronic media format of text, data, graphics, or other types are furnished only for the convenience of the receiving party. Any conclusion or information obtained or derived from such electronic files will be at the user's

sole risk. If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.

B. Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within 60 days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any errors detected within the 60-day acceptance period will be corrected by the transferring party..

C. When transferring documents in electronic media format, the transferring party makes no representations as to long term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by the data's creator.

ARTICLE 4 - AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS; REFERENCE POINTS

4.01 *Availability of Lands*

A. Owner shall furnish the Site. Owner shall notify Contractor of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work. Owner will obtain in a timely manner and pay for easements for permanent structures or permanent changes in existing facilities. If Contractor and Owner are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, as a result of any delay in Owner's furnishing the Site or a part thereof, Contractor may make a Claim therefor as provided in Paragraph 10.05.

B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which the Work is to be performed and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.

C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

4.02 *Subsurface and Physical Conditions*

A. Reports and Drawings: The Supplementary Conditions identify:

1. those reports of explorations and tests of subsurface conditions at or contiguous to the Site that Engineer has used in preparing the Contract Documents; and
2. those drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) that Engineer has used in preparing the Contract Documents.

B. Limited Reliance by Contractor on Technical Data Authorized: Contractor may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," Contractor may not rely upon or make any claim against Owner or Engineer, or any of their Related Entities with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto; or
2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
3. any Contractor interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions, or information.

4.03 *Differing Subsurface or Physical Conditions*

A. Notice: If Contractor believes that any subsurface or physical condition at or contiguous to the Site that is uncovered or revealed either:

1. is of such a nature as to establish that any "technical data" on which Contractor is entitled to rely as provided in Paragraph 4.02 is materially inaccurate; or
2. is of such a nature as to require a change in the Contract Documents; or
3. differs materially from that shown or indicated in the Contract Documents; or

4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 6.16. A), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except as aforesaid) until receipt of written order to do so.

B. Engineer's Review: After receipt of written notice as required by Paragraph 4.03.A, Engineer will promptly review the pertinent condition, determine the necessity of Owner's obtaining additional exploration or tests with respect thereto, and advise Owner in writing (with a copy to Contractor) of Engineer's findings and conclusions.

C. Possible Price and Times Adjustments

1. The Contract Price or the Contract Times, or both, will be equitably adjusted to the extent that the existence of such differing subsurface or physical condition causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:

a. such condition must meet any one or more of the categories described in Paragraph 4.03.A; and

b. with respect to Work that is paid for on a Unit Price Basis, any adjustment in Contract Price will be subject to the provisions of Paragraphs 9.07 and 11.03.

2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times if:

a. Contractor knew of the existence of such conditions at the time Contractor made a final commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract; or

b. the existence of such condition could reasonably have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such final commitment; or

c. Contractor failed to give the written notice as required by Paragraph 4.03.A.

3. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, a Claim may be made therefor as provided in Paragraph 10.05. However, Owner and Engineer, and any of their Related Entities shall not be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.

4.04 *Underground Facilities*

A. Shown or Indicated: The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the Site is based on information and data furnished to Owner or Engineer by the owners of such Underground Facilities, including Owner, or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:

1. Owner and Engineer shall not be responsible for the accuracy or completeness of any such information or data; and

2. the cost of all of the following will be included in the Contract Price, and Contractor shall have full responsibility for:

a. reviewing and checking all such information and data,

b. locating all Underground Facilities shown or indicated in the Contract Documents,

c. coordination of the Work with the owners of such Underground Facilities, including Owner, during construction, and

d. the safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work.

B. Not Shown or Indicated

1. If an Underground Facility is uncovered or revealed at or contiguous to the Site which was not shown or indicated, or not shown or indicated with reasonable accuracy in the Contract Documents, Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 6.16. A), identify the owner of such Underground Facility and give written notice to that owner and to Owner and Engineer. Engineer will

promptly review the Underground Facility and determine the extent, if any, to which a change is required in the Contract Documents to reflect and document the consequences of the existence or location of the Underground Facility. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.

2. If Engineer concludes that a change in the Contract Documents is required, a Work Change Directive or a Change Order will be issued to reflect and document such consequences. An equitable adjustment shall be made in the Contract Price or Contract Times, or both, to the extent that they are attributable to the existence or location of any Underground Facility that was not shown or indicated or not shown or indicated with reasonable accuracy in the Contract Documents and that Contractor did not know of and could not reasonably have been expected to be aware of or to have anticipated. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment in Contract Price or Contract Times, Owner or Contractor may make a Claim therefor as provided in Paragraph 10.05.

4.05 *Reference Points*

A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.06 *Hazardous Environmental Condition at Site*

A. Reports and Drawings: Reference is made to the Supplementary Conditions for the identification of those reports and drawings relating to a Hazardous Environmental Condition identified at the Site, if any, that have been utilized by the Engineer in the preparation of the Contract Documents.

B. Limited Reliance by Contractor on Technical Data Authorized: Contractor may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," Contractor may not rely upon or make any claim against Owner or Engineer, or any of their Related Entities with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by Contractor and safety precautions and programs incident thereto; or

2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or

3. any Contractor interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions or information.

C. Contractor shall not be responsible for any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work. Contractor shall be responsible for a Hazardous Environmental Condition created with any materials brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible.

D. If Contractor encounters a Hazardous Environmental Condition or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, Contractor shall immediately: (i) secure or otherwise isolate such condition; (ii) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 6.16.A); and (iii) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any.

E. Contractor shall not be required to resume Work in connection with such condition or in any affected area until after Owner has obtained any required permits related thereto and delivered to Contractor written notice: (i) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work; or (ii) specifying any special conditions under which such Work may be resumed safely. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by Contractor, either party may make a Claim therefor as provided in Paragraph 10.05.

F. If after receipt of such written notice Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work. If Owner and Contractor cannot agree as to

entitlement to or on the amount or extent, if any, of an adjustment in Contract Price or Contract Times as a result of deleting such portion of the Work, then either party may make a Claim therefor as provided in Paragraph 10.05. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 7.

G. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition: (i) was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be included within the scope of the Work, and (ii) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06. G shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

H. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06.H shall obligate Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

I. The provisions of Paragraphs 4.02, 4.03, and 4.04 do not apply to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 5 - BONDS AND INSURANCE

5.01 *Performance, Payment, and Other Bonds*

A. Contractor shall furnish performance and payment bonds, each in an amount at least equal to the Contract Price as security for the faithful performance and payment of all of Contractor's obligations under the Contract Documents. These bonds shall remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified

in Paragraph 13.07, whichever is later, except as provided otherwise by Laws or Regulations or by the Contract Documents. Contractor shall also furnish such other bonds as are required by the Contract Documents.

B. All bonds shall be in the form prescribed by the Contract Documents except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. All bonds signed by an agent must be accompanied by a certified copy of the agent's authority to act.

C. If the surety on any bond furnished by Contractor is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located or it ceases to meet the requirements of Paragraph 5.01.B, Contractor shall promptly notify Owner and Engineer and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which shall comply with the requirements of Paragraphs 5.01.B and 5.02.

5.02 *Licensed Sureties and Insurers*

A. All bonds and insurance required by the Contract Documents to be purchased and maintained by Owner or Contractor shall be obtained from surety or insurance companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue bonds or insurance policies for the limits and coverages so required. Such surety and insurance companies shall also meet such additional requirements and qualifications as may be provided in the Supplementary Conditions.

5.03 *Certificates of Insurance*

A. Contractor shall deliver to Owner, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by Owner or any other additional insured) which Contractor is required to purchase and maintain.

B. Owner shall deliver to Contractor, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by Contractor or any other additional insured) which Owner is required to purchase and maintain.

5.04 *Contractor's Liability Insurance*

A. Contractor shall purchase and maintain such liability and other insurance as is appropriate for the Work being performed and as will provide protection

from claims set forth below which may arise out of or result from Contractor's performance of the Work and Contractor's other obligations under the Contract Documents, whether it is to be performed by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable:

1. claims under workers' compensation, disability benefits, and other similar employee benefit acts;

2. claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees;

3. claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees;

4. claims for damages insured by reasonably available personal injury liability coverage which are sustained:

a. by any person as a result of an offense directly or indirectly related to the employment of such person by Contractor, or

b. by any other person for any other reason;

5. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom; and

6. claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle.

B. The policies of insurance required by this Paragraph 5.04 shall:

1. with respect to insurance required by Paragraphs 5.04.A.3 through 5.04.A.6 inclusive, include as additional insured (subject to any customary exclusion regarding professional liability) Owner and Engineer, and any other individuals or entities identified in the Supplementary Conditions, all of whom shall be listed as additional insureds, and include coverage for the respective officers, directors, partners, employees, agents, consultants and subcontractors of each and any of all such additional insureds, and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby;

2. include at least the specific coverages and be written for not less than the limits of liability provided in the Supplementary Conditions or required by Laws or Regulations, whichever is greater;

3. include completed operations insurance;

4. include contractual liability insurance covering Contractor's indemnity obligations under Paragraphs 6.11 and 6.20;

5. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed or renewal refused until at least 30 days prior written notice has been given to Owner and Contractor and to each other additional insured identified in the Supplementary Conditions to whom a certificate of insurance has been issued (and the certificates of insurance furnished by the Contractor pursuant to Paragraph 5.03 will so provide);

6. remain in effect at least until final payment and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work in accordance with Paragraph 13.07; and

7. with respect to completed operations insurance, and any insurance coverage written on a claims-made basis, remain in effect for at least two years after final payment.

a. Contractor shall furnish Owner and each other additional insured identified in the Supplementary Conditions, to whom a certificate of insurance has been issued, evidence satisfactory to Owner and any such additional insured of continuation of such insurance at final payment and one year thereafter.

5.05 *Owner's Liability Insurance*

A. In addition to the insurance required to be provided by Contractor under Paragraph 5.04, Owner, at Owner's option, may purchase and maintain at Owner's expense Owner's own liability insurance as will protect Owner against claims which may arise from operations under the Contract Documents.

5.06 *Property Insurance*

A. Unless otherwise provided in the Supplementary Conditions, Owner shall purchase and maintain property insurance upon the Work at the Site in the amount of the full replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:

1. include the interests of Owner, Contractor, Subcontractors, and Engineer, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured;

2. be written on a Builder's Risk "all-risk" or open peril or special causes of loss policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, false work, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire, lightning, extended coverage, theft, vandalism and malicious mischief, earthquake, collapse, debris removal, demolition occasioned by enforcement of Laws and Regulations, water damage, (other than caused by flood) and such other perils or causes of loss as may be specifically required by the Supplementary Conditions;

3. include expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects);

4. cover materials and equipment stored at the Site or at another location that was agreed to in writing by Owner prior to being incorporated in the Work, provided that such materials and equipment have been included in an Application for Payment recommended by Engineer;

5. allow for partial utilization of the Work by Owner;

6. include testing and startup; and

7. be maintained in effect until final payment is made unless otherwise agreed to in writing by Owner, Contractor, and Engineer with 30 days written notice to each other additional insured to whom a certificate of insurance has been issued.

B. Owner shall purchase and maintain such boiler and machinery insurance or additional property insurance as may be required by the Supplementary Conditions or Laws and Regulations which will include the interests of Owner, Contractor, Subcontractors, and Engineer, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured.

C. All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with Paragraph 5.06 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 30 days prior written notice has been given to Owner and Contractor and to each other additional insured to whom a certificate of insurance has been issued and will contain waiver provisions in accordance with Paragraph 5.07.

D. Owner shall not be responsible for purchasing and maintaining any property insurance specified in this Paragraph 5.06 to protect the interests of Contractor, Subcontractors, or others in the Work to the extent of any

deductible amounts that are identified in the Supplementary Conditions. The risk of loss within such identified deductible amount will be borne by Contractor, Subcontractors, or others suffering any such loss, and if any of them wishes property insurance coverage within the limits of such amounts, each may purchase and maintain it at the purchaser's own expense.

E. If Contractor requests in writing that other special insurance be included in the property insurance policies provided under Paragraph 5.06, Owner shall, if possible, include such insurance, and the cost thereof will be charged to Contractor by appropriate Change Order. Prior to commencement of the Work at the Site, Owner shall in writing advise Contractor whether or not such other insurance has been procured by Owner.

5.07 *Waiver of Rights*

A. Owner and Contractor intend that all policies purchased in accordance with Paragraph 5.06 will protect Owner, Contractor, Subcontractors, and Engineer, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them) in such policies and will provide primary coverage for all losses and damages caused by the perils or causes of loss covered thereby. All such policies shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any of the insureds or additional insureds thereunder. Owner and Contractor waive all rights against each other and their respective officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them for all losses and damages caused by, arising out of or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Subcontractors, and Engineer, and all other individuals or entities identified in the Supplementary Conditions to be listed as insured or additional insured (and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them) under such policies for losses and damages so caused. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by Owner as trustee or otherwise payable under any policy so issued.

B. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them for:

1. loss due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other perils whether or not insured by Owner; and

2. loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by Owner during partial utilization pursuant to Paragraph 14.05, after Substantial Completion pursuant to Paragraph 14.04, or after final payment pursuant to Paragraph 14.07.

C. Any insurance policy maintained by Owner covering any loss, damage or consequential loss referred to in Paragraph 5.07.B shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against Contractor, Subcontractors, or Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them.

5.08 *Receipt and Application of Insurance Proceeds*

A. Any insured loss under the policies of insurance required by Paragraph 5.06 will be adjusted with Owner and made payable to Owner as fiduciary for the insureds, as their interests may appear, subject to the requirements of any applicable mortgage clause and of Paragraph 5.08.B. Owner shall deposit in a separate account any money so received and shall distribute it in accordance with such agreement as the parties in interest may reach. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the moneys so received applied on account thereof, and the Work and the cost thereof covered by an appropriate Change Order.

B. Owner as fiduciary shall have power to adjust and settle any loss with the insurers unless one of the parties in interest shall object in writing within 15 days after the occurrence of loss to Owner's exercise of this power. If such objection be made, Owner as fiduciary shall make settlement with the insurers in accordance with such agreement as the parties in interest may reach. If no such agreement among the parties in interest is reached, Owner as fiduciary shall adjust and settle the loss with the insurers and, if required in writing by any party in interest, Owner as fiduciary shall give bond for the proper performance of such duties.

5.09 *Acceptance of Bonds and Insurance; Option to Replace*

A. If either Owner or Contractor has any objection to the coverage afforded by or other provisions of the bonds or insurance required to be purchased and maintained by the other party in accordance with Article 5 on the basis of non-conformance with the Contract

Documents, the objecting party shall so notify the other party in writing within 10 days after receipt of the certificates (or other evidence requested) required by Paragraph 2.01.B. Owner and Contractor shall each provide to the other such additional information in respect of insurance provided as the other may reasonably request. If either party does not purchase or maintain all of the bonds and insurance required of such party by the Contract Documents, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage. Without prejudice to any other right or remedy, the other party may elect to obtain equivalent bonds or insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and a Change Order shall be issued to adjust the Contract Price accordingly.

5.10 *Partial Utilization, Acknowledgment of Property Insurer*

A. If Owner finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in Paragraph 14.05, no such use or occupancy shall commence before the insurers providing the property insurance pursuant to Paragraph 5.06 have acknowledged notice thereof and in writing effected any changes in coverage necessitated thereby. The insurers providing the property insurance shall consent by endorsement on the policy or policies, but the property insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy.

ARTICLE 6 - CONTRACTOR'S RESPONSIBILITIES

6.01 *Supervision and Superintendence*

A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction. Contractor shall not be responsible for the negligence of Owner or Engineer in the design or specification of a specific means, method, technique, sequence, or procedure of construction which is shown or indicated in and expressly required by the Contract Documents.

B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who shall not be replaced without written notice to Owner and Engineer except under extraordinary circumstances. The superintendent will be Contractor's representative at the Site and shall have authority to act on behalf of Contractor. All communications given to or

received from the superintendent shall be binding on Contractor.

6.02 *Labor; Working Hours*

A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall at all times maintain good discipline and order at the Site.

B. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours. Contractor will not permit the performance of Work on a Saturday, Sunday, or any legal holiday without Owner's written consent (which will not be unreasonably withheld) given after prior written notice to Engineer.

6.03 *Services, Materials, and Equipment*

A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start-up, and completion of the Work.

B. All materials and equipment incorporated into the Work shall be as specified or, if not specified, shall be of good quality and new, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications shall expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.

C. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

6.04 *Progress Schedule*

A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.07 as it may be adjusted from time to time as provided below.

1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.07) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times. Such adjustments will comply with any provisions of the General Requirements applicable thereto.

2. Proposed adjustments in the Progress Schedule that will change the Contract Times shall be submitted in accordance with the requirements of Article 12. Adjustments in Contract Times may only be made by a Change Order.

6.05 *Substitutes and "Or-Equals"*

A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the specification or description is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or-equal" item or no substitution is permitted, other items of material or equipment or material or equipment of other Suppliers may be submitted to Engineer for review under the circumstances described below.

1. *"Or-Equal" Items:* If in Engineer's sole discretion an item of material or equipment proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, it may be considered by Engineer as an "or-equal" item, in which case review and approval of the proposed item may, in Engineer's sole discretion, be accomplished without compliance with some or all of the requirements for approval of proposed substitute items. For the purposes of this Paragraph 6.05.A.1, a proposed item of material or equipment will be considered functionally equal to an item so named if:

a. in the exercise of reasonable judgment Engineer determines that:

1) it is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;

2) it will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole,

3) it has a proven record of performance and availability of responsive service; and

b. Contractor certifies that, if approved and incorporated into the Work:

1) there will be no increase in cost to the Owner or increase in Contract Times, and

2) it will conform substantially to the detailed requirements of the item named in the Contract Documents.

2. Substitute Items

a. If in Engineer's sole discretion an item of material or equipment proposed by Contractor does not qualify as an "or-equal" item under Paragraph 6.05.A.1, it will be considered a proposed substitute item.

b. Contractor shall submit sufficient information as provided below to allow Engineer to determine that the item of material or equipment proposed is essentially equivalent to that named and an acceptable substitute therefor. Requests for review of proposed substitute items of material or equipment will not be accepted by Engineer from anyone other than Contractor.

c. The requirements for review by Engineer will be as set forth in Paragraph 6.05.A.2.d, as supplemented in the General Requirements and as Engineer may decide is appropriate under the circumstances.

d. Contractor shall make written application to Engineer for review of a proposed substitute item of material or equipment that Contractor seeks to furnish or use. The application:

1) shall certify that the proposed substitute item will:

a) perform adequately the functions and achieve the results called for by the general design,

b) be similar in substance to that specified, and

c) be suited to the same use as that specified;

2) will state:

a) the extent, if any, to which the use of the proposed substitute item will prejudice Contractor's achievement of Substantial Completion on time;

b) whether or not use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item; and

c) whether or not incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty;

3) will identify:

a) all variations of the proposed substitute item from that specified, and

b) available engineering, sales, maintenance, repair, and replacement services;

4) and shall contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including costs of redesign and claims of other contractors affected by any resulting change,

B. Substitute Construction Methods or Procedures: If a specific means, method, technique, sequence, or procedure of construction is expressly required by the Contract Documents, Contractor may furnish or utilize a substitute means, method, technique, sequence, or procedure of construction approved by Engineer. Contractor shall submit sufficient information to allow Engineer, in Engineer's sole discretion, to determine that the substitute proposed is equivalent to that expressly called for by the Contract Documents. The requirements for review by Engineer will be similar to those provided in Paragraph 6.05. A.2.

C. Engineer's Evaluation: Engineer will be allowed a reasonable time within which to evaluate each proposal or submittal made pursuant to Paragraphs 6.05.A and 6.05.B. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No "or equal" or substitute will be ordered, installed or utilized until Engineer's review is complete, which will be evidenced by either a Change Order for a substitute or an approved Shop Drawing for an "or equal." Engineer will advise Contractor in writing of any negative determination.

D. Special Guarantee: Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.

E. Engineer's Cost Reimbursement: Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor pursuant to Paragraphs 6.05.A.2 and 6.05.B. Whether or not Engineer approves a substitute item so proposed or submitted by Contractor, Contractor shall reimburse Owner for the charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the charges of Engineer for making changes in the Contract

Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.

F. Contractor's Expense: Contractor shall provide all data in support of any proposed substitute or "or-equal" at Contractor's expense.

6.06 Concerning Subcontractors, Suppliers, and Others

A. Contractor shall not employ any Subcontractor, Supplier, or other individual or entity (including those acceptable to Owner as indicated in Paragraph 6.06.B), whether initially or as a replacement, against whom Owner may have reasonable objection. Contractor shall not be required to employ any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against whom Contractor has reasonable objection.

B. If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers, or other individuals or entities to be submitted to Owner in advance for acceptance by Owner by a specified date prior to the Effective Date of the Agreement, and if Contractor has submitted a list thereof in accordance with the Supplementary Conditions, Owner's acceptance (either in writing or by failing to make written objection thereto by the date indicated for acceptance or objection in the Bidding Documents or the Contract Documents) of any such Subcontractor, Supplier, or other individual or entity so identified may be revoked on the basis of reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity, and the Contract Price will be adjusted by the difference in the cost occasioned by such replacement, and an appropriate Change Order will be issued. No acceptance by Owner of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of any right of Owner or Engineer to reject defective Work.

C. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as Contractor is responsible for Contractor's own acts and omissions. Nothing in the Contract Documents:

1. shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between Owner or Engineer and any such Subcontractor, Supplier or other individual or entity, nor

2. shall anything in the Contract Documents create any obligation on the part of Owner or Engineer to pay or to see to the payment of any moneys due any such Subcontractor, Supplier, or other individual

or entity except as may otherwise be required by Laws and Regulations.

D. Contractor shall be solely responsible for scheduling and coordinating the Work of Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work under a direct or indirect contract with Contractor.

E. Contractor shall require all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work to communicate with Engineer through Contractor.

F. The divisions and sections of the Specifications and the identifications of any Drawings shall not control Contractor in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.

G. All Work performed for Contractor by a Subcontractor or Supplier will be pursuant to an appropriate agreement between Contractor and the Subcontractor or Supplier which specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner and Engineer. Whenever any such agreement is with a Subcontractor or Supplier who is listed as an additional insured on the property insurance provided in Paragraph 5.06, the agreement between the Contractor and the Subcontractor or Supplier will contain provisions whereby the Subcontractor or Supplier waives all rights against Owner, Contractor, and Engineer, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them) for all losses and damages caused by, arising out of, relating to, or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work. If the insurers on any such policies require separate waiver forms to be signed by any Subcontractor or Supplier, Contractor will obtain the same.

6.07 *Patent Fees and Royalties*

A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if to the actual knowledge of Owner or Engineer its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by Owner in the Contract Documents.

B. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

6.08 *Permits*

A. Unless otherwise provided in the Supplementary Conditions, Contractor shall obtain and pay for all construction permits and licenses. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of opening of Bids, or, if there are no Bids, on the Effective Date of the Agreement. Owner shall pay all charges of utility owners for connections for providing permanent service to the Work.

6.09 *Laws and Regulations*

A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.

B. If Contractor performs any Work knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work. However, it shall not be Contractor's primary responsibility to make certain that the Specifications and Drawings are in accordance with Laws and Regulations, but this shall not relieve Contractor of Contractor's obligations under Paragraph 3.03.

C. Changes in Laws or Regulations not known at the time of opening of Bids (or, on the Effective Date of the Agreement if there were no Bids) having an effect on the cost or time of performance of the Work shall be the subject of an adjustment in Contract Price or Contract Times. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in Paragraph 10.05.

A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

6.11 *Use of Site and Other Areas*

A. Limitation on Use of Site and Other Areas

1. Contractor shall confine construction equipment, the storage of materials and equipment, and the operations of workers to the Site and other areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and other areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof, or of any adjacent land or areas resulting from the performance of the Work.

2. Should any claim be made by any such owner or occupant because of the performance of the Work, Contractor shall promptly settle with such other party by negotiation or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law.

3. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused by or based upon Contractor's performance of the Work.

B. *Removal of Debris During Performance of the Work:* During the progress of the Work Contractor shall keep the Site and other areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.

C. *Cleaning:* Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.

D. *Loading Structures:* Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent property to stresses or pressures that will endanger it.

6.12 *Record Documents*

A. Contractor shall maintain in a safe place at the Site one record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, and written interpretations and clarifications in good order and annotated to show changes made during construction. These record documents together with all approved Samples and a counterpart of all approved Shop Drawings will be available to Engineer for reference. Upon completion of the Work, these record documents, Samples, and Shop Drawings will be delivered to Engineer for Owner.

6.13 *Safety and Protection*

A. Contractor shall be solely responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:

1. all persons on the Site or who may be affected by the Work;

2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and

3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.

B. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify owners of adjacent property and of Underground Facilities and other utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property.

C. All damage, injury, or loss to any property referred to in Paragraph 6.13.A.2 or 6.13.A.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor (except damage or loss attributable to the fault of Draw-

ings or Specifications or to the acts or omissions of Owner or Engineer or , or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).

D. Contractor's duties and responsibilities for safety and for protection of the Work shall continue until such time as all the Work is completed and Engineer has issued a notice to Owner and Contractor in accordance with Paragraph 14.07.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

6.14 *Safety Representative*

A. Contractor shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

6.15 *Hazard Communication Programs*

A. Contractor shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

6.16 *Emergencies*

A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent threatened damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby or are required as a result thereof. If Engineer determines that a change in the Contract Documents is required because of the action taken by Contractor in response to such an emergency, a Work Change Directive or Change Order will be issued.

6.17 *Shop Drawings and Samples*

A. Contractor shall submit Shop Drawings and Samples to Engineer for review and approval in accordance with the acceptable Schedule of Submittals (as required by Paragraph 2.07). Each submittal will be identified as Engineer may require.

1. Shop Drawings

a. Submit number of copies specified in the General Requirements.

b. Data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide and to enable Engineer to review the information for the limited purposes required by Paragraph 6.17.D.

2. *Samples*: Contractor shall also submit Samples to Engineer for review and approval in accordance with the acceptable schedule of Shop Drawings and Sample submittals.

a. Submit number of Samples specified in the Specifications.

b. Clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the submittal for the limited purposes required by Paragraph 6.17.D.

B. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals , any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.

C. Submittal Procedures

1. Before submitting each Shop Drawing or Sample, Contractor shall have determined and verified:

a. all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;

b. the suitability of all materials with respect to intended use, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work;

c. all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto; and

d. shall also have reviewed and coordinated each Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents.

2. Each submittal shall bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents

with respect to Contractor's review and approval of that submittal.

3. With each submittal, Contractor shall give Engineer specific written notice of any variations, that the Shop Drawing or Sample may have from the requirements of the Contract Documents. This notice shall be both a written communication separate from the Shop Drawing's or Sample Submittal; and, in addition, by a specific notation made on each Shop Drawing or Sample submitted to Engineer for review and approval of each such variation.

D. Engineer's Review

1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the Schedule of Submittals acceptable to Engineer. Engineer's review and approval will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.

2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction (except where a particular means, method, technique, sequence, or procedure of construction is specifically and expressly called for by the Contract Documents) or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.

3. Engineer's review and approval shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 6.17.C.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer's review and approval shall not relieve Contractor from responsibility for complying with the requirements of Paragraph 6.17. C. 1.

E. Resubmittal Procedures

1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous submittals.

6.18 Continuing the Work

A. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or

disagreements with Owner. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, except as permitted by Paragraph 15.04 or as Owner and Contractor may otherwise agree in writing.

6.19 Contractor's General Warranty and Guarantee

A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer and its Related Entities shall be entitled to rely on representation of Contractor's warranty and guarantee.

B. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:

1. abuse, modification, or improper maintenance or operation by persons other than Contractor, Sub contractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or

2. normal wear and tear under normal usage.

C. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of Contractor's obligation to perform the Work in accordance with the Contract Documents:

1. observations by Engineer;

2. recommendation by Engineer or payment by Owner of any progress or final payment;

3. the issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;

4. use or occupancy of the Work or any part thereof by Owner;

5. any review and approval of a Shop Drawing or Sample submittal or the issuance of a notice of acceptability by Engineer;

6. any inspection, test, or approval by others; or

7. any correction of defective Work by Owner.

6.20 Indemnification

A. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or

arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable .

B. In any and all claims against Owner or Engineer or any of their respective consultants, agents, officers, directors, partners, or employees by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 6.20.A shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.

C. The indemnification obligations of Contractor under Paragraph 6.20. A shall not extend to the liability of Engineer and Engineer's officers, directors, partners, employees, agents, consultants and subcontractors arising out of:

1. the preparation or approval of, or the failure to prepare or approve, maps, Drawings, opinions, reports, surveys, Change Orders, designs, or Specifications; or
2. giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage.

6.21 *Delegation of Professional Design Services*

A. Contractor will not be required to provide professional design services unless such services are specifically required by the Contract Documents for a portion of the Work or unless such services are required to carry out Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. Contractor shall not be required to provide professional services in violation of applicable law.

B. If professional design services or certifications by a design professional related to systems, materials or equipment are specifically required of Contractor by the Contract Documents, Owner and Engineer will specify all performance and design criteria that such services must satisfy. Contractor shall cause such services or certifications to be provided by a properly licensed professional, whose signature and seal

shall appear on all drawings, calculations, specifications, certifications, Shop Drawings and other submittals prepared by such professional. Shop Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to Engineer.

C. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications or approvals performed by such design professionals, provided Owner and Engineer have specified to Contractor all performance and design criteria that such services must satisfy.

D. Pursuant to this Paragraph 6.21, Engineer's review and approval of design calculations and design drawings will be only for the limited purpose of checking for conformance with performance and design criteria given and the design concept expressed in the Contract Documents. Engineer's review and approval of Shop Drawings and other submittals (except design calculations and design drawings) will be only for the purpose stated in Paragraph 6.17.D. 1.

E. Contractor shall not be responsible for the adequacy of the performance or design criteria required by the Contract Documents.

ARTICLE 7 - OTHER WORK AT THE SITE

7.01 *Related Work at Site*

A. Owner may perform other work related to the Project at the Site with Owner's employees, or via other direct contracts therefor, or have other work performed by utility owners. If such other work is not noted in the Contract Documents, then:

1. written notice thereof will be given to Contractor prior to starting any such other work; and

2. if Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times that should be allowed as a result of such other work, a Claim may be made therefor as provided in Paragraph 10.05.

B. Contractor shall afford each other contractor who is a party to such a direct contract, each utility owner and Owner, if Owner is performing other work with Owner's employees, proper and safe access to the Site, a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work, and shall properly coordinate the Work with theirs. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and

properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering their work and will only cut or alter their work with the written consent of Engineer and the others whose work will be affected. The duties and responsibilities of Contractor under this Paragraph are for the benefit of such utility owners and other contractors to the extent that there are comparable provisions for the benefit of Contractor in said direct contracts between Owner and such utility owners and other contractors.

C. If the proper execution or results of any part of Contractor's Work depends upon work performed by others under this Article 7, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.

7.02 *Coordination*

A. If Owner intends to contract with others for the performance of other work on the Project at the Site, the following will be set forth in Supplementary Conditions:

1. the individual or entity who will have authority and responsibility for coordination of the activities among the various contractors will be identified;

2. the specific matters to be covered by such authority and responsibility will be itemized; and

3. the extent of such authority and responsibilities will be provided.

B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

7.03 *Legal Relationships*

A. Paragraphs 7.01.A and 7.02 are not applicable for utilities not under the control of Owner.

B. Each other direct contract of Owner under Paragraph 7.01.A shall provide that the other contractor is liable to Owner and Contractor for the reasonable direct delay and disruption costs incurred by Contractor as a result of the other contractor's actions or inactions.

C. Contractor shall be liable to Owner and any other contractor for the reasonable direct delay and disruption costs incurred by such other contractor as a result of Contractor's action or inactions.

ARTICLE 8 - OWNER'S RESPONSIBILITIES

8.01 *Communications to Contractor*

A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.

8.02 *Replacement of Engineer*

A. In case of termination of the employment of Engineer, Owner shall appoint an engineer to whom Contractor makes no reasonable objection, whose status under the Contract Documents shall be that of the former Engineer.

8.03 *Furnish Data*

A. Owner shall promptly furnish the data required of Owner under the Contract Documents.

8.04 *Pay When Due*

A. Owner shall make payments to Contractor when they are due as provided in Paragraphs 14.02.C and 14.07.C.

8.05 *Lands and Easements; Reports and Tests*

A. Owner's duties in respect of providing lands and easements and providing engineering surveys to establish reference points are set forth in Paragraphs 4.01 and 4.05. Paragraph 4.02 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of subsurface conditions and drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site that have been utilized by Engineer in preparing the Contract Documents.

8.06 *Insurance*

A. Owner's responsibilities, if any, in respect to purchasing and maintaining liability and property insurance are set forth in Article 5.

8.07 *Change Orders*

A. Owner is obligated to execute Change Orders as indicated in Paragraph 10.03.

8.08 *Inspections, Tests, and Approvals*

A. Owner's responsibility in respect to certain inspections, tests, and approvals is set forth in Paragraph 13.03.B.

8.09 *Limitations on Owner's Responsibilities*

A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

8.10 *Undisclosed Hazardous Environmental Condition*

A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 4.06.

8.11 *Evidence of Financial Arrangements*

A. If and to the extent Owner has agreed to furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract Documents, Owner's responsibility in respect thereof will be as set forth in the Supplementary Conditions.

ARTICLE 9 - ENGINEER'S STATUS DURING CONSTRUCTION

9.01 *Owner's Representative*

A. Engineer will be Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in the Contract Documents and will not be changed without written consent of Owner and Engineer.

9.02 *Visits to Site*

A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep

Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.

B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 9.09. Particularly, but without limitation, during or as a result of Engineer's visits or observations of Contractor's Work Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

9.03 *Project Representative*

A. If Owner and Engineer agree, Engineer will furnish a Resident Project Representative to assist Engineer in providing more extensive observation of the Work. The authority and responsibilities of any such Resident Project Representative and assistants will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in Paragraph 9.09. If Owner designates another representative or agent to represent Owner at the Site who is not Engineer's consultant, agent or employee, the responsibilities and authority and limitations thereon of such other individual or entity will be as provided in the Supplementary Conditions.

9.04 *Authorized Variations in Work*

A. Engineer may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. These may be accomplished by a Field Order and will be binding on Owner and also on Contractor, who shall perform the Work involved promptly. If Owner or Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, or both, and the parties are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in Paragraph 10.05.

9.05 *Rejecting Defective Work*

A. Engineer will have authority to reject Work which Engineer believes to be defective, or that Engineer believes will not produce a completed Project that conforms to the Contract Documents or that will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Engineer will also have authority to require special inspection or testing of the Work as provided in Paragraph 13.04, whether or not the Work is fabricated, installed, or completed.

9.06 *Shop Drawings, Change Orders and Payments*

A. In connection with Engineer's authority, and limitations thereof, as to Shop Drawings and Samples, see Paragraph 6.17.

B. In connection with Engineer's authority, and limitations thereof, as to design calculations and design drawings submitted in response to a delegation of professional design services, if any, see Paragraph 6.21.

C. In connection with Engineer's authority as to Change Orders, see Articles 10, 11, and 12.

D. In connection with Engineer's authority as to Applications for Payment, see Article 14.

9.07 *Determinations for Unit Price Work*

A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, subject to the provisions of Paragraph 10.05.

9.08 *Decisions on Requirements of Contract Documents and Acceptability of Work*

A. Engineer will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder. All matters in question and other matters between Owner and Contractor arising prior to the date final payment is due relating to the acceptability of the Work, and the interpretation of the requirements of the Contract Documents pertaining to the performance of the Work, will be referred initially to Engineer in writing within 30 days of the event giving rise to the question

B. Engineer will, with reasonable promptness, render a written decision on the issue referred. If Owner or Contractor believe that any such decision entitles them to an adjustment in the Contract Price or Contract Times or both, a Claim may be made under Paragraph 10.05. The date of Engineer's decision shall be the date of the event giving rise to the issues referenced for the purposes of Paragraph 10.05.B.

C. Engineer's written decision on the issue referred will be final and binding on Owner and Contractor, subject to the provisions of Paragraph 10.05.

D. When functioning as interpreter and judge under this Paragraph 9.08, Engineer will not show

partiality to Owner or Contractor and will not be liable in connection with any interpretation or decision rendered in good faith in such capacity.

9.09 *Limitations on Engineer's Authority and Responsibilities*

A. Neither Engineer's authority or responsibility under this Article 9 or under any other provision of the Contract Documents nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.

B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.

D. Engineer's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Paragraph 14.07. A will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals that the results certified indicate compliance with the Contract Documents.

E. The limitations upon authority and responsibility set forth in this Paragraph 9.09 shall also apply to, the Resident Project Representative, if any, and assistants, if any.

ARTICLE 10 - CHANGES IN THE WORK; CLAIMS

10.01 *Authorized Changes in the Work*

A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work by a Change Order, or a Work Change Directive. Upon receipt of any such document, Contractor shall

promptly proceed with the Work involved which will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided).

B. If Owner and Contractor are unable to agree on entitlement to, or on the amount or extent, if any, of an adjustment in the Contract Price or Contract Times, or both, that should be allowed as a result of a Work Change Directive, a Claim may be made therefor as provided in Paragraph 10.05.

10.02 *Unauthorized Changes in the Work*

A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents as amended, modified, or supplemented as provided in Paragraph 3.04, except in the case of an emergency as provided in Paragraph 6.16 or in the case of uncovering Work as provided in Paragraph 13.04.B.

10.03 *Execution of Change Orders*

A. Owner and Contractor shall execute appropriate Change Orders recommended by Engineer covering:

1. changes in the Work which are: (i) ordered by Owner pursuant to Paragraph 10.01.A, (ii) required because of acceptance of defective Work under Paragraph 13.08.A or Owner's correction of defective Work under Paragraph 13.09, or (iii) agreed to by the parties;

2. changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive; and

3. changes in the Contract Price or Contract Times which embody the substance of any written decision rendered by Engineer pursuant to Paragraph 10.05; provided that, in lieu of executing any such Change Order, an appeal may be taken from any such decision in accordance with the provisions of the Contract Documents and applicable Laws and Regulations, but during any such appeal, Contractor shall carry on the Work and adhere to the Progress Schedule as provided in Paragraph 6.18. A.

10.04 *Notification to Surety*

A. If notice of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times) is required by the provisions of any bond to be given to a surety, the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

10.05 *Claims*

A. *Engineer's Decision Required:* All Claims, except those waived pursuant to Paragraph 14.09, shall be referred to the Engineer for decision. A decision by Engineer shall be required as a condition precedent to any exercise by Owner or Contractor of any rights or remedies either may otherwise have under the Contract Documents or by Laws and Regulations in respect of such Claims.

B. *Notice:* Written notice stating the general nature of each Claim, shall be delivered by the claimant to Engineer and the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto. The responsibility to substantiate a Claim shall rest with the party making the Claim. Notice of the amount or extent of the Claim, with supporting data shall be delivered to the Engineer and the other party to the Contract within 60 days after the start of such event (unless Engineer allows additional time for claimant to submit additional or more accurate data in support of such Claim). A Claim for an adjustment in Contract Price shall be prepared in accordance with the provisions of Paragraph 12.01.B. A Claim for an adjustment in Contract Time shall be prepared in accordance with the provisions of Paragraph 12.02.B. Each Claim shall be accompanied by claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant believes it is entitled as a result of said event. The opposing party shall submit any response to Engineer and the claimant within 30 days after receipt of the claimant's last submittal (unless Engineer allows additional time).

C. *Engineer's Action:* Engineer will review each Claim and, within 30 days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any, take one of the following actions in writing:

1. deny the Claim in whole or in part,

2. approve the Claim, or

3. notify the parties that the Engineer is unable to resolve the Claim if, in the Engineer's sole discretion, it would be inappropriate for the Engineer to do so. For purposes of further resolution of the Claim, such notice shall be deemed a denial.

D. In the event that Engineer does not take action on a Claim within said 30 days, the Claim shall be deemed denied.

E. Engineer's written action under Paragraph 10.05.C or denial pursuant to Paragraphs 10.05.C.3 or 10.05.D will be final and binding upon Owner and Contractor, unless Owner or Contractor invoke the dispute resolution procedure set forth in Article 16 within 30 days of such action or denial.

F. No Claim for an adjustment in Contract Price or Contract Times will be valid if not submitted in accordance with this Paragraph 10.05.

ARTICLE 11 - COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

11.01 *Cost of the Work*

A. *Costs Included:* The term Cost of the Work means the sum of all costs, except those excluded in Paragraph 11.01.B, necessarily incurred and paid by Contractor in the proper performance of the Work. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, the costs to be reimbursed to Contractor will be only those additional or incremental costs required because of the change in the Work or because of the event giving rise to the Claim. Except as otherwise may be agreed to in writing by Owner, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall include only the following items, and shall not include any of the costs itemized in Paragraph 11.01.B.

1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor. Such employees shall include, without limitation, superintendents, foremen, and other personnel employed full time at the Site. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by Owner.

2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts shall accrue to Owner. All trade discounts, rebates and refunds and returns from sale of surplus materials and equipment shall accrue to Owner, and Contractor shall make provisions so that they may be obtained.

3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and

Contractor and shall deliver such bids to Owner, who will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 11.01.

4. Costs of special consultants (including but not limited to Engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.

5. Supplemental costs including the following:

a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.

b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.

c. Rentals of all construction equipment and machinery, and the parts thereof whether rented from Contractor or others in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.

d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, imposed by Laws and Regulations.

e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.

f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of property insurance established in accordance with Paragraph 5.06.D), provided such losses and damages have

resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining Contractor's fee.

g. The cost of utilities, fuel, and sanitary facilities at the Site.

h. Minor expenses such as telegrams, long distance telephone calls, telephone service at the Site, expresses, and similar petty cash items in connection with the Work.

i. The costs of premiums for all bonds and insurance Contractor is required by the Contract Documents to purchase and maintain.

B. Costs Excluded: The term Cost of the Work shall not include any of the following items:

1. Payroll costs and other compensation of Contractor's officers, executives, principals (of partnerships and sole proprietorships), general managers, safety managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 11.01.A.1 or specifically covered by Paragraph 11.01.A.4, all of which are to be considered administrative costs covered by the Contractor's fee.

2. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.

3. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.

4. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.

5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraphs 11.01. A and 11.01.B.

C. Contractor's Fee: When all the Work is performed on the basis of cost-plus, Contractor's fee shall

be determined as set forth in the Agreement. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, Contractor's fee shall be determined as set forth in Paragraph 12.01.C.

D. Documentation: Whenever the Cost of the Work for any purpose is to be determined pursuant to Paragraphs 1 LOLA and 11.01.B, Contractor will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to Engineer an itemized cost breakdown together with supporting data.

11.02 Allowances

A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.

B. Cash Allowances

1. Contractor agrees that:

a. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and

b. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.

C. Contingency Allowance

1. Contractor agrees that a contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.

D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

11.03 Unit Price Work

A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.

B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Determinations of the actual quantities and classifications of Unit Price Work performed by Contractor will be made by Engineer subject to the provisions of Paragraph 9.07.

C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.

D. Owner or Contractor may make a Claim for an adjustment in the Contract Price in accordance with Paragraph 10.05 if:

1. the quantity of any item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement; and

2. there is no corresponding adjustment with respect any other item of Work; and

3. Contractor believes that Contractor is entitled to an increase in Contract Price as a result of having incurred additional expense or Owner believes that Owner is entitled to a decrease in Contract Price and the parties are unable to agree as to the amount of any such increase or decrease.

ARTICLE 12 - CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES

12.01 *Change of Contract Price*

A. The Contract Price may only be changed by a Change Order. Any Claim for an adjustment in the Contract Price shall be based on written notice submitted by the party making the Claim to the Engineer and the other party to the Contract in accordance with the provisions of Paragraph 10.05.

B. The value of any Work covered by a Change Order or of any Claim for an adjustment in the Contract Price will be determined as follows:

1. where the Work involved is covered by unit prices contained in the Contract Documents, by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 11.03); or

2. where the Work involved is not covered by unit prices contained in the Contract Documents, by a mutually agreed lump sum (which may include an

allowance for overhead and profit not necessarily in accordance with Paragraph 12.01.C.2); or

3. where the Work involved is not covered by unit prices contained in the Contract Documents and agreement to a lump sum is not reached under Paragraph 12.01.B.2, on the basis of the Cost of the Work (determined as provided in Paragraph 11.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 12.01.C).

C. *Contractor's Fee:* The Contractor's fee for overhead and profit shall be determined as follows:

1. a mutually acceptable fixed fee; or

2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:

a. for costs incurred under Paragraphs 11.01.A.1 and 11.01.A.2, the Contractor's fee shall be 15 percent;

b. for costs incurred under Paragraph 11.01.A.3, the Contractor's fee shall be five percent;

c. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraph 12.01.C.2.a is that the Subcontractor who actually performs the Work, at whatever tier, will be paid a fee of 15 percent of the costs incurred by such Subcontractor under Paragraphs 11.01.A.1 and 11.01.A.2 and that any higher tier Subcontractor and Contractor will each be paid a fee of five percent of the amount paid to the next lower tier Subcontractor;

d. no fee shall be payable on the basis of costs itemized under Paragraphs 11.01.A.4, 11.01.A.5, and 11.01.B;

e. the amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in Contractor's fee by an amount equal to five percent of such net decrease; and

f. when both additions and credits are involved in any one change, the adjustment in Contractor's fee shall be computed on the basis of the net change in accordance with Paragraphs 12.01.C.2.a through 12.01.C.2.e, inclusive.

12.02 *Change of Contract Times*

A. The Contract Times may only be changed by a Change Order. Any Claim for an adjustment in the Contract Times shall be based on written notice submitted

by the party making the Claim to the Engineer and the other party to the Contract in accordance with the provisions of Paragraph 10.05.

B. Any adjustment of the Contract Times covered by a Change Order or any Claim for an adjustment in the Contract Times will be determined in accordance with the provisions of this Article 12.

12.03 *Delays*

A. Where Contractor is prevented from completing any part of the Work within the Contract Times due to delay beyond the control of Contractor, the Contract Times will be extended in an amount equal to the time lost due to such delay if a Claim is made therefor as provided in Paragraph 12.02.A. Delays beyond the control of Contractor shall include, but not be limited to, acts or neglect by Owner, acts or neglect of utility owners or other contractors performing other work as contemplated by Article 7, fires, floods, epidemics, abnormal weather conditions, or acts of God.

B. If Owner, Engineer, or other contractors or utility owners performing other work for Owner as contemplated by Article 7, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times, or both. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.

C. If Contractor is delayed in the performance or progress of the Work by fire, flood, epidemic, abnormal weather conditions, acts of God, acts or failures to act of utility owners not under the control of Owner, or other causes not the fault of and beyond control of Owner and Contractor, then Contractor shall be entitled to an equitable adjustment in Contract Times, if such adjustment is essential to Contractor's ability to complete the Work within the Contract Times. Such an adjustment shall be Contractor's sole and exclusive remedy for the delays described in this Paragraph 12.03.C.

D. Owner, Engineer and the Related Entities of each of them shall not be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of Engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.

E. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delays within the control of Contractor. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of Contractor.

ARTICLE 13 - TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

13.01 *Notice of Defects*

A. Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor. All defective Work may be rejected, corrected, or accepted as provided in this Article 13.

13.02 *Access to Work*

A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and governmental agencies with jurisdictional interests will have access to the Site and the Work at reasonable times for their observation, inspecting, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's Site safety procedures and programs so that they may comply therewith as applicable.

13.03 *Tests and Inspections*

A. Contractor shall give Engineer timely notice of readiness of the Work for all required inspections, tests, or approvals and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.

B. Owner shall employ and pay for the services of an independent testing laboratory to perform all inspections, tests, or approvals required by the Contract Documents except:

1. for inspections, tests, or approvals covered by Paragraphs 13.03.C and 13.03.D below;

2. that costs incurred in connection with tests or inspections conducted pursuant to Paragraph 13.04.B shall be paid as provided in said Paragraph 13.04.C; and

3. as otherwise specifically provided in the Contract Documents.

C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.

D. Contractor shall be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests, or approvals required for Owner's and Engineer's acceptance of materials or equipment to

be incorporated in the Work; or acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work. Such inspections, tests, or approvals shall be performed by organizations acceptable to Owner and Engineer.

E. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, it must, if requested by Engineer, be uncovered for observation.

F. Uncovering Work as provided in Paragraph 13.03.E shall be at Contractor's expense unless Contractor has given Engineer timely notice of Contractor's intention to cover the same and Engineer has not acted with reasonable promptness in response to such notice.

13.04 *Uncovering Work*

A. If any Work is covered contrary to the written request of Engineer, it must, if requested by Engineer, be uncovered for Engineer's observation and replaced at Contractor's expense.

B. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, furnishing all necessary labor, material, and equipment.

C. If it is found that the uncovered Work is defective, Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and Owner shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount thereof, Owner may make a Claim therefor as provided in Paragraph 10.05.

D. If, the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, Contractor may make a Claim therefor as provided in Paragraph 10.05.

13.05 *Owner May Stop the Work*

A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work shall not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

13.06 *Correction or Removal of Defective Work*

A. Promptly after receipt of notice, Contractor shall correct all defective Work, whether or not fabricated, installed, or completed, or, if the Work has been rejected by Engineer, remove it from the Project and replace it with Work that is not defective. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or removal (including but not limited to all costs of repair or replacement of work of others).

B. When correcting defective Work under the terms of this Paragraph 13.06 or Paragraph 13.07, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.

13.07 *Correction Period*

A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the terms of any applicable special guarantee required by the Contract Documents) or by any specific provision of the Contract Documents, any Work is found to be defective, or if the repair of any damages to the land or areas made available for Contractor's use by Owner or permitted by Laws and Regulations as contemplated in Paragraph 6.1 1.A is found to be defective, Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:

1. repair such defective land or areas; or
2. correct such defective Work; or
3. if the defective Work has been rejected by Owner, remove it from the Project and replace it with Work that is not defective, and
4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others or other land or areas resulting therefrom.

B. If Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others) will be paid by Contractor.

C. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications .

D. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this Paragraph 13.07, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

E. Contractor's obligations under this Paragraph 13.07 are in addition to any other obligation or warranty. The provisions of this Paragraph 13.07 shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitation or repose.

13.08 *Acceptance of Defective Work*

A. If, instead of requiring correction or removal and replacement of defective Work, Owner (and, prior to Engineer's recommendation of final payment, Engineer) prefers to accept it, Owner may do so. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness) and the diminished value of the Work to the extent not otherwise paid by Contractor pursuant to this sentence. If any such acceptance occurs prior to Engineer's recommendation of final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work, and Owner shall be entitled to an appropriate decrease in the Contract Price, reflecting the diminished value of Work so accepted. If the parties are unable to agree as to the amount thereof, Owner may make a Claim therefor as provided in Paragraph 10.05. If the acceptance occurs after such recommendation, an appropriate amount will be paid by Contractor to Owner.

13.09 *Owner May Correct Defective Work*

A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work or to remove and replace rejected Work as required by Engineer in accordance with Paragraph 13.06.A, or if Contractor fails to perform the Work in accordance with the Contract Documents, or if Contractor fails to comply with any other provision of the Contract Documents, Owner may, after seven days written notice to Contractor, correct or remedy any such deficiency.

B. In exercising the rights and remedies under this Paragraph 13.09, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, take possession of Contractor's tools, appliances, construction equipment and machinery at the Site, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this Paragraph.

C. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 13.09 will be charged against Contractor, and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and Owner shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount of the adjustment, Owner may make a Claim therefor as provided in Paragraph 10.05. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.

D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 13.09.

ARTICLE 14 - PAYMENTS TO CONTRACTOR AND COMPLETION

14.01 *Schedule of Values*

A. The Schedule of Values established as provided in Paragraph 2.07.A will serve as the basis for progress

payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments on account of Unit Price Work will be based on the number of units completed.

14.02 *Progress Payments*

A. Applications for Payments

1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that Owner has received the materials and equipment free and clear of all Liens and evidence that the materials and equipment are covered by appropriate property insurance or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.

2. Beginning with the second Application for Payment, each Application shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied on account to discharge Contractor's legitimate obligations associated with prior Applications for Payment.

3. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

B. Review of Applications

1. Engineer will, within 10 days after receipt of each Application for Payment, either indicate in writing a recommendation of payment and present the Application to Owner or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.

2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations on the Site of the executed Work as an experienced and qualified design professional and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:

a. the Work has progressed to the point indicated;

b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents, to a final determination of quantities and classifications for Unit Price Work under Paragraph 9.07, and to any other qualifications stated in the recommendation); and

c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.

3. By recommending any such payment Engineer will not thereby be deemed to have represented that:

a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract Documents; or

b. that there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.

4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:

a. to supervise, direct, or control the Work, or

b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or

c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work, or

d. to make any examination to ascertain how or for what purposes Contractor has used the moneys paid on account of the Contract Price, or

e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.

5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 14.02.B.2. Engineer may also refuse to recommend any such payment or, because of subsequently discovered evidence or the results of subsequent

inspections or tests, revise or revoke any such payment recommendation previously made, to such extent as may be necessary in Engineer's opinion to protect Owner from loss because:

- a. the Work is defective, or completed Work has been damaged, requiring correction or replacement;
- b. the Contract Price has been reduced by Change Orders;
- c. Owner has been required to correct defective Work or complete Work in accordance with Paragraph 13.09; or
- d. Engineer has actual knowledge of the occurrence of any of the events enumerated in Paragraph 15.02.A.

C. Payment Becomes Due

1. Ten days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended will (subject to the provisions of Paragraph 14.02.D) become due, and when due will be paid by Owner to Contractor.

D. Reduction in Payment

1. Owner may refuse to make payment of the full amount recommended by Engineer because:

- a. claims have been made against Owner on account of Contractor's performance or furnishing of the Work;
- b. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens;
- c. there are other items entitling Owner to a set-off against the amount recommended; or
- d. Owner has actual knowledge of the occurrence of any of the events enumerated in Paragraphs 14.02.B.5.a through 14.02.B.5.c or Paragraph 15.02.A.

2. If Owner refuses to make payment of the full amount recommended by Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and promptly pay Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, when Contractor corrects to Owner's satisfaction the reasons for such action.

3. If it is subsequently determined that Owner's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by Paragraph 14.02.C.1.

14.03 Contractor's Warranty of Title

A. Contractor warrants and guarantees that title to all Work, materials, and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to Owner no later than the time of payment free and clear of all Liens.

14.04 Substantial Completion

A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete (except for items specifically listed by Contractor as incomplete) and request that Engineer issue a certificate of Substantial Completion.

B. Promptly after Contractor's notification, , Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.

C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a tentative certificate of Substantial Completion which shall fix the date of Substantial Completion. There shall be attached to the certificate a tentative list of items to be completed or corrected before final payment. Owner shall have seven days after receipt of the tentative certificate during which to make written objection to Engineer as to any provisions of the certificate or attached list. If, after considering such objections, Engineer concludes that the Work is not substantially complete, Engineer will within 14 days after submission of the tentative certificate to Owner notify Contractor in writing, stating the reasons therefor. If, after consideration of Owner's objections, Engineer considers the Work substantially complete, Engineer will within said 14 days execute and deliver to Owner and Contractor a definitive certificate of Substantial Completion (with a revised tentative list of items to be completed or corrected) reflecting such changes from the tentative certificate as Engineer believes justified after consideration of any objections from Owner.

D. At the time of delivery of the tentative certificate of Substantial Completion, Engineer will deliver to Owner and Contractor a written recommendation as to division of responsibilities pending final payment between Owner and Contractor with respect to security, operation, safety, and protection of the Work, maintenance, heat, utilities, insurance, and warranties and guarantees. Unless Owner and Contractor agree otherwise in writing and so inform Engineer in writing prior to Engineer's issuing the definitive certificate of Substantial

Completion, Engineer's aforesaid recommendation will be binding on Owner and Contractor until final payment.

E. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to complete or correct items on the tentative list.

14.05 *Partial Utilization*

A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions.

1. Owner at any time may request Contractor in writing to permit Owner to use or occupy any such part of the Work which Owner believes to be ready for its intended use and substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor will certify to Owner and Engineer that such part of the Work is substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.

2. Contractor at any time may notify Owner and Engineer in writing that Contractor considers any such part of the Work ready for its intended use and substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.

3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 14.04 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.

4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 5.10 regarding property insurance.

14.06 *Final Inspection*

A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals

that the Work is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

14.07 *Final Payment*

A. *Application for Payment*

1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance certificates of inspection, marked-up record documents (as provided in Paragraph 6.12), and other documents, Contractor may make application for final payment following the procedure for progress payments.

2. The final Application for Payment shall be accompanied (except as previously delivered) by:

- a. all documentation called for in the Contract Documents, including but not limited to the evidence of insurance required by Paragraph 5.04.B.7;
- b. consent of the surety, if any, to final payment;
- c. a list of all Claims against Owner that Contractor believes are unsettled; and
- d. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of or Liens filed in connection with the Work.

3. In lieu of the releases or waivers of Liens specified in Paragraph 14.07.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (i) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (ii) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner or Owner's property might in any way be responsible have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien.

B. *Engineer's Review of Application and Acceptance*

1. If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations

under the Contract Documents have been fulfilled, Engineer will, within ten days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of payment and present the Application for Payment to Owner for payment. At the same time Engineer will also give written notice to Owner and Contractor that the Work is acceptable subject to the provisions of Paragraph 14.09. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.

C. Payment Becomes Due

1. Thirty days after the presentation to Owner of the Application for Payment and accompanying documentation, the amount recommended by Engineer, less any sum Owner is entitled to set off against Engineer's recommendation, including but not limited to liquidated damages, will become due and , will be paid by Owner to Contractor.

14.08 *Final Completion Delayed*

A. If, through no fault of Contractor, final completion of the Work is significantly delayed, and if Engineer so confirms, Owner shall, upon receipt of Contractor's final Application for Payment (for Work fully completed and accepted) and recommendation of Engineer, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by Owner for Work not fully completed or corrected is less than the retainage stipulated in the Agreement, and if bonds have been furnished as required in Paragraph 5.01, the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by Contractor to Engineer with the Application for such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

14.09 *Waiver of Claims*

A. The making and acceptance of final payment will constitute:

1. a waiver of all Claims by Owner against Contractor, except Claims arising from unsettled Liens, from defective Work appearing after final inspection pursuant to Paragraph 14.06, from failure to comply with the Contract Documents or the terms of any special guarantees specified therein, or from Contractor's continuing obligations under the Contract Documents; and

2. a waiver of all Claims by Contractor against Owner other than those previously made in accordance

with the requirements herein and expressly acknowledged by Owner in writing as still unsettled.

ARTICLE 15 - SUSPENSION OF WORK AND TERMINATION

15.01 *Owner May Suspend Work*

A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by notice in writing to Contractor and Engineer which will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be granted an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension if Contractor makes a Claim therefor as provided in Paragraph 10.05.

15.02 *Owner May Terminate for Cause*

A. The occurrence of any one or more of the following events will justify termination for cause:

1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the Progress Schedule established under Paragraph 2.07 as adjusted from time to time pursuant to Paragraph 6.04);

2. Contractor's disregard of Laws or Regulations of any public body having jurisdiction;

3. Contractor's disregard of the authority of Engineer; or

4. Contractor's violation in any substantial way of any provisions of the Contract Documents.

B. If one or more of the events identified in Paragraph 15.02.A occur, Owner may, after giving Contractor (and surety) seven days written notice of its intent to terminate the services of Contractor:

1. exclude Contractor from the Site, and take possession of the Work and of all Contractor's tools, appliances, construction equipment, and machinery at the Site, and use the same to the full extent they could be used by Contractor (without liability to Contractor for trespass or conversion),

2. incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and

3. complete the Work as Owner may deem expedient.

C. If Owner proceeds as provided in Paragraph 15.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Owner arising out of or relating to completing the Work, such excess will be paid to Contractor. If such claims, costs, losses, and damages exceed such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this Paragraph Owner shall not be required to obtain the lowest price for the Work performed.

D. Notwithstanding Paragraphs 15.02.B and 15.02.C, Contractor's services will not be terminated if Contractor begins within seven days of receipt of notice of intent to terminate to correct its failure to perform and proceeds diligently to cure such failure within no more than 30 days of receipt of said notice.

E. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue. Any retention or payment of moneys due Contractor by Owner will not release Contractor from liability.

F. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 5.01. A, the termination procedures of that bond shall supersede the provisions of Paragraphs 15.02.B, and 15.02.C.

15.03 *Owner May Terminate For Convenience*

A. Upon seven days written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):

1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;

2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses;

3. all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred in settlement of terminated contracts with Subcontractors, Suppliers, and others; and

4. reasonable expenses directly attributable to termination.

B. Contractor shall not be paid on account of loss of anticipated profits or revenue or other economic loss arising out of or resulting from such termination.

15.04 *Contractor May Stop Work or Terminate*

A. If, through no act or fault of Contractor, (i) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (ii) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (iii) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon seven days written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the Contract and recover from Owner payment on the same terms as provided in Paragraph 15.03.

B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, seven days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this Paragraph 15.04 are not intended to preclude Contractor from making a Claim under Paragraph 10.05 for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this Paragraph.

ARTICLE 16 - DISPUTE RESOLUTION

16.01 *Methods and Procedures*

A. Either Owner or Contractor may request mediation of any Claim submitted to Engineer for a decision under Paragraph 10.05 before such decision becomes final and binding. The mediation will be

governed by the Construction Industry Mediation Rules of the American Arbitration Association in effect as of the Effective Date of the Agreement. The request for mediation shall be submitted in writing to the American Arbitration Association and the other party to the Contract. Timely submission of the request shall stay the effect of Paragraph 10.05.E.

B. Owner and Contractor shall participate in the mediation process in good faith. The process shall be concluded within 60 days of filing of the request. The date of termination of the mediation shall be determined by application of the mediation rules referenced above.

C. If the Claim is not resolved by mediation, Engineer's action under Paragraph 10.05.C or a denial pursuant to Paragraphs 10.05.C.3 or 10.05.D shall become final and binding 30 days after termination of the mediation unless, within that time period, Owner or Contractor:

1. elects in writing to invoke any dispute resolution process provided for in the Supplementary Conditions, or

2. agrees with the other party to submit the Claim to another dispute resolution process, or

3. gives written notice to the other party of their intent to submit the Claim to a court of competent jurisdiction.

ARTICLE 17 - MISCELLANEOUS

17.01 *Giving Notice*

A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if:

1. delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or

2. delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

17.02 *Computation of Times*

A. When any period of time is referred to in the Contract Documents by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

17.03 *Cumulative Remedies*

A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract Documents. The provisions of this Paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

17.04 *Survival of Obligations*

A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the Contract Documents, will survive final payment, completion, and acceptance of the Work or termination or completion of the Contract or termination of the services of Contractor.

17.05 *Controlling Law*

A. This Contract is to be governed by the law of the state in which the Project is located.

17.06 *Headings*

A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

DIVISION 0 - BIDDING AND CONTRACT DOCUMENTS
SECTION 00810 - SUPPLEMENTARY CONDITIONS TO THE GENERAL CONDITIONS

These Supplementary Conditions amend or supplement the 2002 Edition of the Standard General Conditions of the Construction Contract Documents (Section 00700) as indicated below. All provisions, which are not so amended or supplemented, remain in full force and effect.

SC-1.01 Definitions

The terms used in these Supplementary Conditions are defined in the Standard General Conditions.

Add the following language at the end of the definition of "Agreement":

The definition of the word "Contract" is synonymous with the word "Agreement" and is used interchangeably in the Contract Documents.

Add the following language at the end of the definition of "Drawings":

The definition of the word "plans" is synonymous with the word "drawings" and is used interchangeably in the Contract Documents.

SC-2.01B Bonds and Insurance

Delete paragraph 2.01 B in its entirety.

SC-2.02 Copies of Documents

Amend the first sentence of paragraph 2.02 to read as follows:

OWNER shall furnish to CONTRACTOR up to five copies of the Contract Documents as are reasonably necessary for the execution of the Work. Additional copies will be furnished, upon request, at the cost of reproduction.

SC-2.06 Preconstruction Conference

Add two new paragraphs immediately after paragraph 2.06 which read as follows:

A list of supervisory and responsible-in-charge personnel working on the project shall be provided by the CONTRACTOR for the Preconstruction Conference.

The CONTRACTOR shall also submit at least one name who will be the CONTRACTOR's representative to respond to emergency conditions. CONTRACTOR shall provide the ENGINEER with the representative's telephone number prior to commencement of construction.

SC-2.07 Initial Acceptance of Schedules

Delete the first sentence of 2.07A in its entirety and insert the following in its place:

Prior to the first application for payment, all schedules and documents identified in paragraph 2.05 shall be finalized and acceptable to the ENGINEER and OWNER. No progress payment shall be made to CONTRACTOR until the schedules are submitted to and acceptable to ENGINEER and OWNER.

SC-3.01 Contract Documents Intent:

Add the additional paragraphs to 3.01A:

The CONTRACTOR shall not take advantage of an apparent error or omission in the Contract Documents. If a discrepancy is discovered, the CONTRACTOR is to notify the ENGINEER for an interpretation and correction. The following will be the governing order for conflicts discrepancies:

1. Plans (Details over other plans)
2. Specifications (Divisions in order)

Any Work that may reasonably be inferred from the Specifications or Drawings as being required to produce the intended result shall be supplied whether or not it is specifically called for. Work, materials, or equipment described in words which so applied have a well-known technical or trade meaning shall be deemed to refer to such recognized standards.

SC-4.01A Availability of Lands

Delete paragraph 4.01A in its entirety and insert the following in its place:

The CONTRACTOR shall confine his construction operations to the immediate vicinity of the location shown on the drawings, and shall use due care in placing construction tools, equipment, excavated materials, and materials to be installed, and supplies, so as to cause the least possible damage to property and interference with traffic and property, and to stay within the OWNER's property or easements obtained for the project.

If it is necessary or desirable that the CONTRACTOR use land outside of the OWNER's easement, the CONTRACTOR shall obtain consent from the OWNER and tenant of the land. The CONTRACTOR shall not enter for materials delivery or occupy for any other purpose with men, tools, equipment, construction materials, or with materials excavated from the site, any private property outside the designated construction easement boundaries without written permission from the landowner.

SC-4.01B Availability of Lands

Delete paragraph 4.01B in its entirety.

SC-4.06 Hazardous Environmental Condition on Site

Delete Section 4.06 in its entirety.

SC-5.03A Certificates of Insurance

Certificates of insurance shall be conveyed to the OWNER.

SC-5.03B Certificates of Insurance

Delete paragraph 5.03B in its entirety.

SC-5.04 Contractor's Insurance

Amend the insurance requirements of Paragraph 5.04 by adding the following:

The limits of liability for the insurance required by Paragraph 5.04 of the General Conditions shall provide coverage for not less than the following amounts or greater where required by law or regulations:

1. Workers' Compensation under 5.04.A.1 and 5.04.A.2:
 - A. State Statutory
 - B. Applicable Federal (e.g. Longshoreman's) Statutory
 - C. Employer's Liability \$1,000,000
 - D. Workers Compensation Insurance shall include an "All States" endorsement.
2. Commercial General Liability under 5.04.A.3 - 5.04.A.5:
 - A. GENERAL AGGREGATE \$2,000,000
 - B. Products - Completed Operations (Aggregate) \$2,000,000
 - C. Bodily Injury and Property Damage
\$1,000,000 Each Occurrence
\$2,000,000 Annual Aggregate
 - D. Coverage will Include:
 1. Premises - Operations
 2. Operations of Independent Contractors
 3. Products and Completed Operations
 4. Contractual
 5. Personal Injury
 6. Broad Form Property Damage will include explosion, collapse and underground coverages where applicable.
 - E. Commercial General Liability Insurance may be satisfied by primary insurance or a combination of primary and excess or "umbrella" insurance. Primary occurrence limit cannot be less than \$2,000,000.
 - F. Include umbrella liability coverage for \$1,000,000 (may include with E above, if umbrella policy is used there).
3. Commercial Automobile Liability under 5.04.A.6 (include "all owned", "hired" and "non-owned"):

Bodily Injury:	
<u>\$1,000,000</u>	Each Person
<u>\$1,000,000</u>	Each Occurrence

Property Damage:

\$1,000,000

Each Occurrence

or a combined single limit of

\$1,000,000.

4. Add a new paragraph at the end of Paragraph 5.04B.1 as follows:

The CONTRACTOR'S insurance coverage shall name the OWNER and ENGINEER as additional insured under Commercial General Liability, Automobile Liability, Excess or Umbrella policies.

5. The Contractual Liability coverage required by 5.04.B.4 of the General Conditions shall provide for not less than the following limits:

\$1,000,000

Each Occurrence

\$2,000,000

Annual Aggregate

SC-5.04B.5 Cancellation Notice:

Amend paragraph 5.04B5 by deleting the words "thirty days" and replacing them with the words "45 days" and as so amended paragraph 5.04B5 remains in effect.

SC-5.04B Qualifications of Insurance Company

Add a new paragraph immediately after paragraph 5.04B7 which reads as follows:

5.04B.8. Without limiting any of the other obligations or liabilities of the CONTRACTOR, CONTRACTOR shall secure and maintain such insurance from an insurance company (or companies) licensed to write insurance in Nebraska, with minimum "A. M. Best Rating" of B+, VI, as will protect himself, his subcontractors, the OWNER and the ENGINEER and their respective agents and employees and ENGINEER'S Consultants from claims for bodily injury, death or property damage which may arise from operations and completed operations under this Agreement. Such coverage shall be written for claims arising out of all premises/operations, subcontracted operations, products/completed operations, and all liability assumed by the CONTRACTOR under any contract or agreement. CONTRACTOR shall not commence work until required insurance has been obtained and certificate of insurance, with binders or certified copies of insurance policies have been filed with the OWNER, ENGINEER and named Additional Insureds.

SC-5.05 Owner's Liability Insurance

Delete paragraph 5.05 in its entirety and insert the following in its place:

The CONTRACTOR shall obtain and pay the entire premium for Owners Protective Liability Coverage to protect the OWNER and ENGINEER for their liability against claims that may arise from operations under this Agreement.

SC-5.06 Property Insurance

Delete Paragraph 5.06A in its entirety and insert the following in its place:

1. CONTRACTOR shall purchase and maintain property insurance upon the work at the site in the amount of the full replacement cost thereof (subject to such deductible amounts as may be provided in these Supplementary Conditions or required by Laws and Regulations). This insurance shall:
 - A. include the interests of OWNER, CONTRACTOR, Subcontractors, ENGINEER, ENGINEER's Consultants, and any other persons or entities identified in the Supplementary Conditions, each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured;
 - B. be written on a Builder's Risk "all-risk" or open peril or special causes of loss policy form that shall at least include insurance for physical loss and damage to the Work, temporary buildings, falsework, materials and equipment, and Work in transit and shall insure against at least the following perils: fire, lightning, extended coverage, theft, vandalism and malicious mischief, earthquake, collapse, debris removal, demolition occasioned by enforcement of Laws and Regulations, water damage, and other perils as may be specifically required by the Supplementary Conditions;
 - C. include expenses incurred in the repair or replacement of any insured property (including but not limited to the fees and charges of engineers and architects);
 - D. cover materials and equipment in transit for incorporation in the Work or stored at the site or at another location prior to being incorporated in the Work, provided that such materials and equipment have been included in an Application for Payment recommended by ENGINEER; and
 - E. be endorsed to allow occupancy and partial utilization of the Work by OWNER;
 - F. include testing and start-up; and
 - G. be maintained in effect throughout the life of the Agreement unless otherwise agreed to in writing by OWNER, CONTRACTOR, and ENGINEER with 45-days written notice to each other additional insured to whom a certificate of insurance has been issued.
2. CONTRACTOR shall be responsible for any deductible or self-insured retention.
3. The policies of insurance required to be purchased and maintained by CONTRACTOR in accordance with this paragraph 5.06A shall comply with the requirements of 5.06C. The qualifications of the insurance company shall comply with the requirements of 5.02A.

SC-5.06B&E Property Insurance

Delete paragraphs 5.06B and E in their entirety.

SC-5.07 Waiver of Rights

Delete Section 5.07 in its entirety.

SC-5.08 Receipt and Application of Insurance Proceeds

Delete Section 5.08 in its entirety.

SC-5.09 Acceptance of Insurance

Add the following paragraph at the end of Section 5.09:

Failure of the OWNER to object to the coverage of CONTRACTOR'S insurance within the time provided, shall not relieve CONTRACTOR from his obligation to provide insurance that complies with the contract documents.

SC-5.10 Partial Utilization

Delete Paragraph 5.10 in its entirety.

SC-6.04A Progress Schedule

Add the following Paragraph 3 to 6.04A:

3. CONTRACTOR shall submit to ENGINEER with each application for payment an updated progress schedule reflecting the amount of work completed and adjustments to future work. Such adjustments will be acceptable to ENGINEER as providing an orderly progression of the Work to completion within any specified milestones and the Contract Time. No progress payment will be made to CONTRACTOR until the updated schedules are submitted to and acceptable to ENGINEER and OWNER. Review and acceptance of progress schedules by the ENGINEER will neither impose on ENGINEER responsibility for the sequencing, scheduling or progress of the Work, nor interfere with or relieve CONTRACTOR from CONTRACTOR'S full responsibility therefore. If the CONTRACTOR is behind schedule, he shall submit a plan for getting back on schedule.

SC-6.06B Subcontractors

Add the following paragraph at the end of Section 6.06B.

The Bidder to whom the Contract may be awarded shall submit to OWNER and ENGINEER a list of all proposed subcontractors, manufacturers and suppliers of principal items of equipment and materials, as detailed herein, within 5 days after the day of the Bid Opening, if requested by the ENGINEER. The list shall identify all proposed Subcontractors and which items of work, or components of the project, on which that Subcontractor will work. CONTRACTOR shall submit to OWNER, upon request, a copy of all appropriate agreements between CONTRACTOR and its

Subcontractors. Said agreements are to be provided to OWNER, who assumes no responsibility for the form and content of subcontract agreements.

Add a new paragraph H at the end of Section 6.06 which reads as follows:

Any subcontractor or material man entitled to the protection of a bond or other form of guarantee approved by the OWNER shall give notice of his right to that protection to the prime CONTRACTOR. Failure to give notice to a prime CONTRACTOR who has complied with subsections (e) and (f) of this article waives the subcontractor or material man's protection under the bond or guarantee and waives any right to a lien for materials or services provided.

- (a) The notice shall be given no later than sixty (60) days after the date on which services or materials are first furnished.
- (b) The notice shall be sent to the prime CONTRACTOR by certified mail or delivered to and receipted by the prime CONTRACTOR or his agent. Notice by certified mail is effective on the date the notice is mailed.
- (c) The notice shall be in writing and shall state that it is a notice of a right to protection under the bond or guarantee. The notice shall be signed by the subcontractor or material man and shall include the following information.
 - (i) The subcontractor or material man's name, address and phone number and the name of a contact person;
 - (ii) The name and address of the subcontractor's or material man's vendor; and
 - (iii) The type or description of the materials or services provided.
- (d) This section shall only apply where the prime CONTRACTOR's contract is for fifty thousand dollars (\$50,000) or more.
- (e) The OWNER or his agent shall provide written notice of the information required by this section in the project specifications.

Add a new paragraph I at the end of Section 6.06 which reads as follows:

By submitting a bid or proposal to the Contractor, every prospective subcontractor and materialman acknowledges that their sole claim for non-payment for Work performed on the Project shall be to assert a claim against the Labor and Materials Payment Bond in accordance with the terms of the Contract Documents and that all other claims against the Owner, the real property upon which the Project is located, or the owner of such property are expressly waived. This provision shall be effective notwithstanding the use of the term "lien" or other related terms within the Contract Documents or any other papers or forms utilized in connection with the Project.

Add a new paragraph J at the end of Section 6.06 which reads as follows:

Contractor shall take measures reasonably necessary to (1) inform all prospective subcontractors and materialmen of the provisions of Section 6.06 and obtain their consent thereto prior to the submission of any bid or proposal to the Contractor and (2) incorporate the terms and conditions of Section 6.06 into any agreement with such subcontractor or materialman.

SC-6.13 Safety and Protection

Add new paragraphs to the end of Section 6.13 as follows:

It is expressly understood by the parties to this Agreement that the CONTRACTOR is solely responsible for initiating, maintaining, and supervising safety precautions and programs in connection with the Work. The right of the OWNER and ENGINEER to observe or otherwise review the Work and operations shall not relieve the CONTRACTOR from any of his covenants and obligations hereunder. CONTRACTOR shall incorporate all safety requirements into his construction progress and work schedules including preconstruction and scheduled safety meetings, posted safety rules, tailgate meetings, and site inspections by safety and other inspectors employed by the CONTRACTOR.

The CONTRACTOR shall be responsible for and shall take necessary precautions and provide all material and equipment to protect, shore, brace, support and maintain all underground pipes, conduits, drains, sewers, water mains, gas mains, cables, etc., and other underground construction uncovered in the proximity, or otherwise affected by the construction work performed by him. All pavement, surfacing, driveways, curbs, walks, buildings, grass areas, trees, utility poles or guy wires damaged by the CONTRACTOR's operations in the performance of this work shall be repaired and/or replaced to the satisfaction of the OWNER, ENGINEER, and effected property owner at the CONTRACTOR's expense. The CONTRACTOR shall also be responsible for all damage to streets, roads, highways, shoulders, ditches, embankments, culverts, bridges, or other public or private property or facility, regardless of location or character, which may be caused by moving, hauling, or otherwise transporting equipment, materials, or men to and from the work or any part of site thereof; whether by him or his subcontractors. The CONTRACTOR shall make satisfactory and acceptable arrangements with owner of, or the agency or authority having jurisdiction over, the damaged property or facility concerning its repair or replacement or payment of costs incurred in connection with said damage.

The CONTRACTOR shall conduct his work so as to interfere as little as possible with public travel, whether vehicular or pedestrian. Whenever it is necessary to cross, obstruct, or close roads, driveways, and walks, whether public or private, the CONTRACTOR shall obtain approval from the governing party and shall, at his own expense, provide and maintain suitable and safe bridges, detours, and other temporary expedients for the accommodation of public and private drives before interfering with them. The provisions for temporary expedients will not be required when the CONTRACTOR has obtained permission from the owner and tenant of the private property, or from the authority having jurisdiction over public property involved, to obstruct traffic at the designated point.

Safety provisions must be entirely adequate and meet with County or State and Federal regulations to protect the public on these streets and roads.

SC-6.18A Continuing the Work

Add the following to the end of this paragraph:

The provisions of this paragraph do not limit the right of the OWNER to order additions, deletions or revisions in the Work per the General Conditions including additions, deletions or revisions to the Work affected by the disputes or disagreements.

SC-6.20 Indemnification

Add a new paragraph immediately after paragraph 6.20A which reads as follows:

It is expressly understood and agreed that, while OWNER and ENGINEER may have the right under this Contract to observe or otherwise review the work, progress and operations of the CONTRACTOR, it is expressly understood and agreed that such observation shall not relieve the CONTRACTOR from any of its covenants and obligations hereunder. The CONTRACTOR shall be solely responsible and save the OWNER and ENGINEER and their consultants, agents and employees harmless from all suits, actions or claims of any character brought on account of any injuries or damages sustained by any person or property in consequence of any neglect in safeguarding the work, observing safety standards or regulations, or otherwise. This indemnification would include the use of unsafe or unacceptable materials in the construction or completion of the project, or the CONTRACTOR's failure to comply with any law, ordinance, or regulation, even though such act, omission, or work was done under the direct or indirect review of, or was observed by the OWNER or ENGINEER.

Add the following language at the end of paragraph 6.20B:

Nor shall the CONTRACTOR'S obligations under Section 6.20 be in any way limited by any insurance coverage which the CONTRACTOR may have or which may insure to his benefit.

Add the following language at the end of paragraph 6.20C:

If legal action shall be commenced to enforce the terms and provisions of this Agreement, the prevailing party shall be entitled to reasonable costs incurred as allowed by Nebraska law.

SC-7.02 Coordination

Delete Section 7.02 in its entirety.

SC-8.02 Replacement of Engineer

Add the following sentence to the end of Section 8.02:

Work shall stop and will not be resumed until the new ENGINEER is on site.

SC-9.03 Project Representative

Add a new paragraph after paragraph 9.03.A as follows:

B. The Resident Project Representative (RPR) is the Engineer's Agent at the site, and will act as directed by and under the supervision of the Engineer. RPR's dealings in matters pertaining to the CONTRACTOR's work in progress shall in general be with ENGINEER and CONTRACTOR, keeping the OWNER informed as necessary. RPR's dealings with subcontractors shall be through or with the full knowledge and approval of the CONTRACTOR.

RPR shall not:

1. Authorize any deviation from the Contract Documents or substitution of materials or equipment (including "or-equal" items).
2. Exceed limitations of Engineer's authority as set forth in the General Conditions.
3. Undertake any of the responsibilities of CONTRACTOR, subcontractors, suppliers, or CONTRACTOR's superintendent.
4. Advise on, issue directions relative to or assume control over any aspect of the means, methods, techniques, sequences or procedures of CONTRACTOR's Work unless such advice or directions are specifically required by the Contract Documents.
5. Advise on, issue directions regarding or assume control over safety precautions and programs in connection with the activities or operations of OWNER or CONTRACTOR.
6. Participate in specialized field or laboratory tests or inspections conducted off-site by others except as specifically authorized by ENGINEER.
7. Accept Shop Drawings or Samples submittals from anyone other than the CONTRACTOR.
8. Authorize OWNER to occupy the Project in whole or part.

RPR may do the following:

1. Schedules. Review the progress schedule, schedule of Shop Drawing submittals and schedule of values prepared by the CONTRACTOR and consult with the ENGINEER concerning acceptability.
2. Conferences and Meetings. Attend meetings with the CONTRACTOR, such as Pre-Construction Conference, progress meetings, job conferences, and other project-related meetings, and prepare and circulate copies of minutes thereof.
3. Liaison. Serve as the ENGINEER'S liaison with the CONTRACTOR, working principally through the CONTRACTOR's superintendent, and assist in understanding the intent of the Contract Documents; and assist the ENGINEER in serving as the OWNER's liaison with the CONTRACTOR when the CONTRACTOR's operations affect the OWNER's on-site operations. assist in obtaining, from the OWNER, additional details or information, when required, for proper execution of the Work.
4. Shop Drawings. Receive and keep record of Shop Drawings, submittals and samples. Advise ENGINEER and CONTRACTOR of Work that may be commencing that does not have approved submittals.
5. Review of Work, Rejection of Defective Work, Inspections and Tests.

- a. Conduct on-site observations of the Work in progress to assist the ENGINEER in determining if the Work is, in general, proceeding in accordance with the Contract Documents.
 - b. Report to the ENGINEER whenever the RPR believes that any Work is unsatisfactory, faulty, or defective, or does not conform to the Contract Documents, or has been damaged, or does not meet the requirements of any inspection, test or approval required to be made; and advise the ENGINEER of Work that the RPR believes should be corrected or rejected or should be uncovered for observation, or requires special testing, inspection, or approval.
 - c. Verify that tests, equipment and systems start-up and operating and maintenance training are conducted in the presence of appropriate personnel, and that the CONTRACTOR maintains adequate records thereof, and observe, record and report to the ENGINEER appropriate details relative to the test procedures and start-ups.
 - d. Accompany visiting inspectors representing public or other agencies having jurisdiction over the Project, record the results of these inspections and report to the ENGINEER.
6. Interpretation of Contract Documents. Report to ENGINEER when clarifications and interpretations of the Contract Documents are needed, and transmit, to the CONTRACTOR, clarifications and interpretations as issued by the ENGINEER.
7. Modifications. Consider and evaluate the CONTRACTOR's suggestions for modifications in Drawings or Specifications, and report with RPR's recommendations to the ENGINEER. Transmit to the CONTRACTOR decisions issued by the ENGINEER.
8. Records.
- a. Maintain orderly files for correspondence, reports of job conferences, Shop Drawings and samples, re-productions of original Contract Documents, including all Work Directive Changes, Addenda, Change Orders, Field Orders, additional Drawings issued subsequent to the execution of the Contract, the ENGINEER's clarifications and interpretations of the Contract Documents, progress reports, and other Project related documents.
 - b. Keep a diary or log book, recording the CONTRACTOR hours on the job site, weather conditions, data relative to questions of Work Directive Changes, Change Orders or changed conditions, list of job site visitors, daily activities, decisions, observations in general, and specific observations in more detail, as in the case of observing test procedures; and send copies to the ENGINEER.
9. Reports.
- a. Furnish the ENGINEER periodic reports, as required, on progress of the Work and of the CONTRACTOR's compliance with the progress schedule and schedule of Shop Drawing and sample submittals.
 - b. Consult with the ENGINEER, in advance of scheduled major tests, inspections or start of important phases of the Work.
 - c. Draft proposed Change Orders and Work Directive Changes, obtaining backup material from the CONTRACTOR and recommend to the

ENGINEER Change Orders, Work Directive Changes, and Field Orders.

- d. Report immediately to the ENGINEER and OWNER, upon the occurrence of any accident.

10. Payment Requests. Review applications for payment with the CONTRACTOR for compliance with the established procedure for their submission, and forward with recommendations to the ENGINEER, noting particularly the relationship of the payment requested to the schedule of values, Work completed, and materials and equipment delivered at the site, but not incorporated in the Work.

11. Certificates, Maintenance and Operation Manuals: During the course of the Work, verify that certificates, maintenance and operating manuals, and other data required to be assembled and furnished by the CONTRACTOR are applicable to the items actually installed and in accordance with the Contract Documents, and have this material delivered to the ENGINEER for review and forwarded to the OWNER prior to final payment for the Work.

12. Completion:

- a. Before the ENGINEER issues a Certificate of Substantial Completion, submit to the CONTRACTOR a list of observed items requiring completion or correction.
- b. Conduct final inspection in the company of the ENGINEER, OWNER, and CONTRACTOR, and prepare a final list of items to be completed or corrected.
- c. Observe that all items on a final list have been completed or corrected, and make recommendations to the ENGINEER concerning acceptance.

SC-10.01A Changes in Work

Add the following paragraph at the end of Section 10.01A which reads as follows:

A Change Order or Written Amendment when executed, constitutes a modification to the Agreement and all provisions of the Agreement, except as modified by Written Amendment or Change Order, shall apply to said documents. The CONTRACTOR accepts a Written Amendment or Change Order as full compensation, both time and cost, for the additional work and any delays caused thereby.

SC-10.05 Claims

Add new paragraphs at the end of Section 10.05 which read as follows:

10.05.G. The CONTRACTOR agrees to make no claim for damages for delay in the performance of this contract caused by any act or failure act of the OWNER, ENGINEER or designated agents or representatives, whether such delays are avoidable or unavoidable that the CONTRACTOR agrees that such delays shall solely and fully be compensated for by an extension of time to complete performance of the work as provided herein. This includes any delays attributable to actions or lack of action by utility owners to locate or move their utilities.

10.05.H. Any claim for an increase or decrease in the Contract Price originated by a Subcontractor shall be evaluated by the CONTRACTOR. The CONTRACTOR shall

determine the validity of said claim, and if the CONTRACTOR determines that said claim is valid, the CONTRACTOR shall so state in writing to the OWNER in accordance with all the requirements of the General Conditions.

SC-11.01 Cost of the Work

Delete paragraph 11.01 .A.5.c in its entirety and insert the following in its place:

11.01.A.5.c The cost for the use of all construction equipment and machinery and parts thereof whether owned by the CONTRACTOR or rented from others. The cost shall be calculated as follows and will include the costs of transportation, loading, unloading, assembly, dismantling and removal thereof for equipment involved only in the changed portion of the work covered under the cost of the Work method. Transportation, loading and assembly costs will not be included for equipment already on the site which is being used for other portions of the Work. The cost of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work. Hourly equipment and machinery rates shall be calculated from the latest edition of the Rental Rate Blue Book for Construction Equipment, and the Equipment List submitted according to GC-2.05 and GC-2.07, and as follows:

1. For working equipment, the hourly rate shall be the monthly rental rate divided by 176 hours per month plus the hourly operating cost.
2. For equipment on standby, the hourly rate shall be 50% of the monthly rental rate divided by 176 hours per month, and the hourly operating cost shall not be applied.
3. For specialized equipment rented for a short duration used for change order work or additional work not part of the scope of work bid, the equipment rental rates will be negotiated prior to the work being performed.
4. Equipment and machinery rates shall be provided and approved prior to commencing work. Blue Book rates shall apply without CONTRACTOR fee, per the General Conditions.

SC-11.01A5 Cost of Work

Add a new paragraph immediately after paragraph 11.01.A.5 which reads as follows:

11.01.A.5.j. For Force Account work (if any), if requested to be performed on a time and materials basis by the ENGINEER, shall be done using the approved rates for labor and equipment.

SC-11.03D Unit Price Work

Delete paragraph 11.03.D.1 and 2 in their entirety and insert the following in its place:

1. The quantity of a particular item of Unit Price Work performed by CONTRACTOR differs by more than 25% from the estimated quantity of such item indicated in the Agreement, and
2. the total cost of the particular individual item of Unit Price Work amounts to 10% or more of the Contract Price which is the total sum of all schedules (if any), and

SC-12.02 Contract Time Extension

Add the following language at the end of paragraph 12.02:

The CONTRACTOR shall schedule the work to be completed within the Contract Time stipulated in the Agreement including an allowance for time lost due to rain, snow, cold weather or other natural phenomenon. A natural phenomenon is defined as a weather event that prohibits work from progressing in a satisfactory manner. Such events will not constitute justification for an extension of the contract time unless agreed upon by the ENGINEER during the event, and the total of time lost to such events exceeds 5% of the contract time.

SC-12.04 Liquidated Damages

Add the following paragraph as item 12.04:

Provisions for liquidated damages are set forth in the Agreement. The liquidated damages identified therein include among the other costs to the OWNER, an amount for maintaining the necessary engineering forces engaged beyond the time identified in the Agreement for Substantial Completion. The liquidated damages will be deducted from the CONTRACTOR's progress estimates and/or final payment and the engineering fees shall be paid by the OWNER to the ENGINEER from the monies withheld.

SC-13.07 Correction Period

Add the following as paragraph 13.07.F.

All costs incurred by the OWNER for the inspection and documentation of warranty repairs shall be the responsibility of the CONTRACTOR. Such costs shall include, but are not limited to all fees and charges of inspectors, testing and testing personnel, engineers, and other professionals as determined by the ENGINEER. The costs incurred shall be deducted from monies due the CONTRACTOR.

Prior to commencing warranty repair work, the CONTRACTOR shall provide submittals to the ENGINEER detailing repair procedures for each separate type of repair, if requested by the ENGINEER.

SC-14.02 Application for Progress Payment

Add the following language at the end of paragraph 14.02.A as new items 4, 5 and 6:

4. Each application for progress payment shall be accompanied by the CONTRACTOR's updated Progress Schedule in accordance with Articles GC 6.04 and SC 6.04. The OWNER reserves the right to require submission of monthly certified payrolls from the CONTRACTOR.
5. The CONTRACTOR shall make his books and records relating to the items used for the determination of billings available for review by the Legislative Auditor and OWNER or his representatives. After resolution of any billing dispute where OWNER is due a refund, such refund shall be made to OWNER including interest. Interest shall be compounded monthly.
6. If the CONTRACTOR desires to receive payment for materials in storage for any assembly or lump sum bid item the CONTRACTOR shall provide a breakout of all materials and their

actual costs for that item. This breakout shall be in spreadsheet or database form showing "period" and "to date" totals of materials in storage and materials incorporated into work. The CONTRACTOR shall attach invoices relating to the breakout to verify all materials being requested for payment under that item.

SC-14.02.A Applications for Payments

Add the following language at the end of paragraph 14.02.A.1:

Payments for materials in storage shall be based only upon the actual cost of the materials and equipment to CONTRACTOR and shall not include any overhead or profit. Bill of Sale, invoice or other document warranting clear title for materials in storage will be waived for the material in storage included in the first progress payment application. However, proof of payment and clear title must be submitted with Application No. 2 for all material included in Application No. 1. Without such documentation, amounts paid for materials in storage will be deducted from subsequent payments. Beginning with the second application, all requests for payment for materials in storage shall be accompanied by Bill of Sale, invoice or other document warranting clear title as required above.

SC-14.03 Contractor's Warranty of Title

Add the following at the end of paragraph 14.03:

Neither recommendation of any progress payment by ENGINEER nor payment by the OWNER to CONTRACTOR, nor any use or occupancy of the Work or any part thereof will release the CONTRACTOR from complying with the Contract Documents. Specifically the CONTRACTOR shall maintain in accordance with Article 5, property insurance on all Work, materials, and equipment whether incorporated in the project or not and whether included in an application for payment or not, for the full insurable value thereof. Passing title to OWNER for materials and equipment included in an application for payment does not relieve the CONTRACTOR of the CONTRACTOR's obligation to provide insurance (including property insurance), as required in Article 5 of the General Conditions and these Supplementary Conditions. All insurance shall remain in effect as provided in Article 5.

SC-14.07 Final Payment

Delete 14.07.C and insert the following in its place:

If no claims or liens have been filed within a forty (40) day period after advertisement for completion and acceptance of the project, the retained percentage will be paid (final estimate) within sixty (60) days of the expiration thereof, provided contract closeout requirements have been completed. Should any liens or claims be filed, retainage equal to the amount of the lien or claim will be held until a satisfactory agreement is reached between the OWNER, CONTRACTOR, and CONTRACTOR'S surety.

SC-14.09 Waiver of Claims

Delete Section 14.09 in its entirety.

SC-15.03 Owner May Terminate

Add new paragraphs immediately after paragraph 15.03.B which read as follows:

15.03C. Termination for Acts of God or OWNER's Convenience.

1. Should an act of God result in substantial damage to all or a portion of the Work, or should the OWNER'S convenience necessitate termination, the OWNER shall have the option of terminating the Agreement. If the OWNER exercises the option to terminate, a Notice to Terminate so providing will be issued. Such Notice to Terminate may provide for the CONTRACTOR to perform any work deemed by the OWNER as necessary to put the project in satisfactory condition for the termination of all work. The CONTRACTOR shall be relieved of further responsibilities for damage to the

Work (excluding materials not already incorporated into the Work) which responsibilities are specified in the General Conditions, and will not be required to perform any further Work on the project other than that specified in the Notice of Termination.
2. When the ENGINEER determines that the Work specified in the Notice of Termination has been completed, the ENGINEER shall accept the project, and immediately upon such acceptance, the CONTRACTOR will not be required to perform any further Work thereon, and shall be relieved of his responsibility for injuries to persons or property.
3. After acceptance of the Work pursuant to the General Conditions, the CONTRACTOR will be paid for the Work done prior to termination. The OWNER will determine the value of the partially completed Work as follows: The CONTRACTOR will be paid for all Work to the date of the Notice of Termination in accordance with the General Conditions. This amount shall be computed by determining the percentage of the total contract Work completed prior to termination and multiplying that percentage against the total contract amount. The amount to be paid shall not exceed the amounts previously paid or due the CONTRACTOR from the amounts retained. The CONTRACTOR shall not be entitled to his anticipated profits for the Work, which would have been performed, but for termination.
4. If the CONTRACTOR has placed an order, prior to such termination, for materials specially manufactured for the project, which materials are not suitable for use in other projects of the OWNER or sale to others in the ordinary course of the vendors' business, the CONTRACTOR will be paid the actual cost to the CONTRACTOR or the cancellation charges, if any, assessed by the vendor. The determination of whether the order shall be completed or canceled shall be made by the OWNER. Any material paid for shall become the property of the OWNER and the actual cost of the any further handling will be paid for by the OWNER.
5. No payment will be made to vendor for materials which have been damaged and are not acceptable for incorporation in the work in accordance with the requirements of the Agreement. The CONTRACTOR shall reimburse the OWNER for any amounts previously paid by the OWNER for such unacceptable material, and agrees that the OWNER may deduct the amount of such previous payments made by the OWNER from any monies due or which may become due the CONTRACTOR. If the OWNER has paid for acceptable materials not incorporated into the Work under the General Conditions, the OWNER will have the option of taking title to all or any portion of such

materials or of receiving reimbursement from the CONTRACTOR for any amounts previously paid to the CONTRACTOR. The CONTRACTOR agrees to pay to the OWNER upon demand any amounts previously paid for such materials, and agrees that the OWNER may deduct the amount of such previous payments from any monies due or which become due the CONTRACTOR.

15.03D. CONTRACTOR's Responsibility on Receipt of Notice of Termination.

On receipt of a notice of termination from the OWNER, whether for default or convenience of the OWNER, the CONTRACTOR shall:

1. Stop all Work under the Agreement on the date of and to the extent specified in the Notice of Termination;
2. Place no further orders or subcontracts for materials, equipment or services except as may be necessary for completion of such portions of the work expressly excluded under the Notice of Termination;
3. Cancel or terminate all orders of subcontracts to the extent that they relate to the performance of Work covered by the Notice of Termination; and,
4. Comply with all other requirements of the OWNER as may be specified in the Notice of Termination.

15.03E. Subcontract Provision.

The CONTRACTOR shall insert in all subcontracts a provision that the Subcontractor shall stop all work on the date of or to the extent specified in a Notice of Termination from the OWNER and shall require the Subcontractors to insert the same provision in their subcontracts.

15.03F. Duty To Notify Subcontractors.

The CONTRACTOR shall immediately, upon receipt, communicate any Notice of Termination issued by the OWNER to the affected Subcontractors and Sub-subcontractors.

SC-16 Dispute Resolution

Delete section in its entirety.

END OF SECTION 00810

AFFIDAVIT ON BEHALF OF CONTRACTOR

STATE OF _____

COUNTY _____

CITY _____

DATE _____

I CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT ALL WORK HAS BEEN performed and materials supplied in strict accordance with the terms and conditions of the corresponding Contract Documents between NEBRASKA COMMUNITY FOUNDATION, INC., the OWNER, AND CONTRACTOR NAME THE CONTRACTOR, DATED DATE for the P17-012: 2017 Sediment Augmentation Project

And further declare that all bills, for materials, supplies, utilities and for all other things furnished or caused to be furnished by the above named CONTRACTOR and used in the execution of the above contract have been fully paid, and that there are no unpaid claims or demands of State Agencies, sub-contractors, material men, mechanics, laborers or any other resulting from or arising out of any work done or ordered to be done by said CONTRACTOR under the above identified contract.

In consideration of the prior and final payments made and all payments made for authorized changes, the CONTRACTOR releases and forever discharges the OWNER from any and all obligations and liabilities arising by virtue of said contract and authorized changes between the parties hereto, either verbal or in writing, and any and all claims and demands of every kind and character whatsoever against the OWNER, arising out of or in any way relating to said contract and authorized changes.

This statement is made for the purpose of inducing the OWNER to make FINAL PAYMENT under the terms of the Contract, relying on the truth and statement contained therein.

CONTRACTOR: _____ DATE: _____

ADDRESS _____ CITY _____ STATE _____ ZIP CODE _____

SIGNATURE AND PRINTED NAME _____

TITLE: _____

SUBSCRIBED AND SWORN TO BEFORE ME THIS ____ DAY OF _____, 20__.

NOTARY PUBLIC _____

My Commission Expires:

CERTIFICATE OF FINAL COMPLETION

Project: P17-012: 2017 Sediment Augmentation Project

CONTRACTOR: CONTRACTOR NAME

ENGINEER: Justin Brei

Contract Date: EFFECTIVE DATE

This Certificate of Final Completion applies to all Work under the Contract Documents, or to the following specified parts thereof:

To: Nebraska Community Foundation, Inc. (Owner)

And To CONTRACTOR NAME (Contractor)

The Work to which this Certificate applies has been inspected by authorized representatives of the OWNER, CONTRACTOR, and ENGINEER, and that Work is hereby declared to be complete in accordance with the Contract Documents on:

(Date of Final Completion)

The Affidavit on Behalf of Contractor is attached to and made a part of this Certificate.

Executed by ENGINEER on _____, 20__

(Engineer)

By: _____
(Authorized Signature)

CONTRACTOR accepts this Certificate of Final Completion on _____, 20__

(Contractor)

By: _____

OWNER accepts this Certificate of Final Completion on _____, 20__

(Nebraska Community Foundation, Inc.)

By: _____

CERTIFICATE OF FINAL COMPLETION

Project: P17-012: Sediment Augmentation Project

CONTRACTOR: CONTRACTOR NAME ENGINEER: Justin Brei

Contract Date: EFFECTIVE DATE

This Certificate of Final Completion applies to all Work under the Contract Documents, or to the following specified parts thereof:

To: Nebraska Community Foundation, Inc. (Owner)

And To CONTRACTOR NAME (Contractor)

The Work to which this Certificate applies has been inspected by authorized representatives of the OWNER, CONTRACTOR, and ENGINEER, and that Work is hereby declared to be complete in accordance with the Contract Documents on:

(Date of Final Completion)

The Affidavit on Behalf of Contractor is attached to and made a part of this Certificate.

Executed by ENGINEER on _____, 20__

(Engineer)

By: _____
(Authorized Signature)

CONTRACTOR accepts this Certificate of Final Completion on _____, 20__

(Contractor)

By: _____

OWNER accepts this Certificate of Final Completion on _____, 20__

(Nebraska Community Foundation, Inc.)

By: _____

FINAL WAIVER OF LIEN (for subcontractors or material suppliers)

To All Whom It May Concern:

WHEREAS, the undersigned has been employed by _____ (Contractor) to furnish labor and/or materials for work, under a contract **DATED** _____ for the P17-012: 2017 Sediment Augmentatin Project (Project) in Dawson and Gosper Counties, **STATE OF** Nebraska of which the Nebraska Community Foundation, Inc. is the Owner.

NOW, THEREFORE, this _____ day of _____, 20____, for and in consideration of the sum of _____

Dollars paid simultaneously herewith (if any payment is due at this time), the receipt whereof is hereby acknowledged by the undersigned, the undersigned does hereby waive and release any lien rights to, or claim of lien with respect to and on said above described premises, and the improvements thereon, and on the monies or other considerations due to become due from the OWNER, on account of labor, services, material, fixtures, apparatus or machinery heretofore or which may hereafter be furnished by the undersigned to or for the above described premises by virtue of said contract.

Affix Corporate
Seal here

_____(SEAL)
(Name of Sole Ownership, Corporation
Partnership)

_____(SEAL)
(Signature of Authorized Representative)

Printed Name

Title

NOTICE OF AWARD

Dated Month Day, Year

TO: CONTRACTOR NAME
(BIDDER)

ADDRESS: CONTRACTOR ADDRESS

PROJECT: P17-012: 2017 Sediment Augmentation Project

You are notified that your Bid dated BID DATE for the above Contract has been considered. You are the apparent successful bidder and have been awarded a contract for the full project to include:

Excavation of a 150-ft wide pilot channel and lowering of a 5-acre bar, totaling approximately 70,000 CY. Excavation spoils will be augmented to the active channel, graded into a berm, used for channel fill and stockpiled on the south bank of the south channel. In addition to earthwork, a bank stabilization plan consisting spur-dike oriented logs will be installed on the south bank in coincidence with the channel fill.

The Amount of your Contract is CONTRACT AMOUNT TEXT dollars (**\$CONTRACT AMT NUMBERS**)

Three copies of each of the proposed Contract Documents accompany this Notice of Award. Also included are three copies of the Contract Agreement.

You must comply with the following within ten days of the date of this Notice of Award:

1. Deliver to the ENGINEER three fully executed counterparts of the Agreement.
2. Deliver the required Insurance Certificates and Performance and Payment Bonds as specified in the Contract Documents.
3. (List other conditions) _____

Failure to comply with these conditions within the time specified will entitle OWNER to consider your bid abandoned, to annul this Notice of Award and to declare your Bid Security forfeited.

Within ten days after you comply with those conditions, OWNER will return to you one fully signed counterpart of the Agreement with the Contract Documents attached.

Please acknowledge your receipt of this notice in the space provided below and return a copy along with any and all future project correspondence to Headwaters Corporation, 4111 4th Avenue, Suite 6,
Kearney, Nebraska 68845

Receipt Acknowledged:

(Owner's Authorized Representative)

By: _____
(Contractor Representative)

Title

Title

Date

NOTICE TO PROCEED

TO: CONTRACTOR NAME DATED: NTP DATE
(CONTRACTOR)

ADDRESS: CONTRACTOR ADDRESS

PROJECT NAME: P17-012: Sediment Augmentation Project

You are notified that the Contract Time under the above contract will commence to run on MONTH DAY, 2013. By that date, you are to start performing your obligations under the Contract Documents. In accordance with Article 3 of the Agreement, the dates of Substantial Completion and readiness for final payment are DATE OF SUBSTANTIAL COMPLETION. Completion dates may be subject to need for weather shutdown.

Before you may start any Work at the site, you must (add requirements):

N/A

By: _____
(Owner's Authorized Representative)

Title

DIVISION 1

GENERAL REQUIREMENTS

PART 1 - GENERAL

1.01 WORK COVERED BY CONTRACT DOCUMENTS:

The intent of the contract is to provide for the construction and completion in every detail of the work described. The CONTRACTOR shall furnish all labor, materials, equipment, tools, transportation and supplies required to complete work in accordance with the plans, specifications, and terms of the contract and provide a complete and satisfactorily operating system.

1.02 CONTRACTOR USE OF PREMISES:

The CONTRACTOR shall confine his operations to the site of the proposed Work or within the right-of-way or construction easements provided and shown on the drawings.

It shall be understood that the responsibility for protection and safekeeping of equipment and materials on or near the site will be entirely that of the CONTRACTOR and that no claim shall be made against the OWNER by reason of any act of an employee or trespasser. It shall be further understood that should any occasion arise necessitating access by the OWNER to the sites occupied by these stored materials and equipment, the CONTRACTOR owning or responsible for the stored materials or equipment shall immediately remove same. No materials or equipment may be placed upon the property of the OWNER until the OWNER has agreed to the location contemplated by the CONTRACTOR to be used for storage.

The CONTRACTOR shall be solely responsible for obtaining and shall pay all costs in connection with any additional work area, storage sites, access to the site, or temporary right-of-way which may be required for proper completion of the Work.

The OWNER, ENGINEER, representatives of funding agencies, and other designated by the OWNER shall have access to work sites.

CONTRACTOR's use of premises shall comply with all applicable local, state and federal laws.

1.03 PROTECTION OF EXISTING UTILITIES:

Existing underground installations such as water mains, gas mains, sewers, telephone lines, power lines, and buried structures in the vicinity of the Work to be done hereunder are indicated on the drawings only to the extent such information has been made available to or discovered by the ENGINEER in preparing the drawings. There is no guarantee as to the accuracy or completeness of such information, and all responsibility for the accuracy and completeness thereof is expressly disclaimed. The CONTRACTOR is required to comply with the terms of the Nebraska Statute Sections 76-2301 through 76-2330, "The Once-Call Notification System Act." This includes calling "Diggers Hotline of Nebraska" (1-800-331-5666).

Whenever buried utilities or other obstacles are expected to be encountered, the CONTRACTOR shall excavate ahead to determine the location of the obstacle. Appropriate design modifications, as approved by the ENGINEER, shall be made to avoid the utility or obstacle.

1.04 PROTECTION OF EXISTING STRUCTURES:

Where excavation will be required adjacent to existing structures, the CONTRACTOR shall be solely responsible to maintain the structural integrity of the existing structures. The CONTRACTOR shall take whatever means necessary to insure that the existing structure is not damaged. The CONTRACTOR shall repair all damage to the existing structures at his own expense. Any foundations, walls, fences, trees, road surfacing, drainage ways, landscaping, or the like destroyed or damaged during construction shall be repaired to the satisfaction of the property owner. Any delay, additional work, or extra cost to the CONTRACTOR caused by existing structures shall not constitute a claim for extra work, additional payment or damages.

1.05 FIELD CHECK OF EXISTING STRUCTURES:

The dimensions and elevations of existing structures and locations of existing fences, pipelines, conduits, cables, roads, buildings, and equipment shown on the drawings were taken from available records and survey data and are not guaranteed for accuracy. It shall be the responsibility of the CONTRACTOR to check all dimensions and elevations of existing structures, pipelines, conduits, cables, equipment, or other existing items, both above and below ground, affected by or affecting the Work under this contract, prior to the start of construction or ordering materials and equipment affected thereby.

The CONTRACTOR is required to visit the site of the Work to familiarize himself with the arrangement and condition of existing construction that is to be connected to or that is to remain in place prior to submitting their bid.

1.09 SURFACE DRAINAGE:

Water from such sources as surface runoff, dewatering and flushing of water lines or other project components during project construction shall not be allowed to enter into drainage ways or open areas that will cause flooding of existing structures or violate State Water Quality Regulations.

1.11 WORK SEQUENCE:

The CONTRACTOR shall schedule the work to minimize inconvenience to the OWNER or adjacent landowners. This shall include minimizing obstructions to local traffic.

A proposed project schedule is to be provided and updated as required by Section 00810.

PART 1 - GENERAL

1.01 GENERAL:

The CONTRACTOR shall familiarize himself with all items of the Project requiring coordination and plan the Work to ensure orderly progress and completion within the Contract Time. The CONTRACTOR shall coordinate the work of all subcontractors.

1.02 NOISE IMPACT:

To minimize construction noise impacts on the local residents, no construction activities will be allowed between the hours of 8 p.m. and 7 a.m. unless explicitly allowed by the ENGINEER.

1.03 WORKING HOURS:

The time provided for construction completion of this project assumes the CONTRACTOR working 5 days a week, 10 hours per day. Should the CONTRACTOR or his subcontractors desire to work more than 5 days per week or 10 hours per day or on designated off days, approval must be requested from the ENGINEER and the OWNER. The designated off days shall be all weekends and holidays.

Night work will be allowed only with written approval of OWNER. Emergency work may be done without prior permission. Work shifts of the prime contractor and subcontractors shall coincide with each other to prevent extending the total hours of work in a single day.

1.04 SCHEDULING REQUIREMENTS:

The sequence of Work will be submitted by CONTRACTOR and updated as required.

1.05 SURFACE RESTORATION:

All roads utilized by the CONTRACTOR are to be maintained and restored according to Section 01560 Article 3.06. Clean-up of construction areas shall be kept within 21 days of the construction activities.

1.06 LOCAL PHONES

The CONTRACTOR shall maintain a local cell phone and fax number.

END OF SECTION 01040

PART 1 - GENERAL

The CONTRACTOR shall be responsible for obtaining all permits and licenses, except as noted below, necessary for the completion of this Work. This refers to all permits that are required as of the date of the bid opening. Any costs associated with these permits shall be included as part of the Contract Price. No separate payment shall be made for compliance with permits.

Permits to be obtained by OWNER:

Section 404

CNPPID Land Use Permit

Joe Jeffrey Land Use Permit

The CONTRACTOR is to abide by all permit conditions of OWNER-obtained permits, as well as his own permits. The OWNER will provide the CONTRACTOR copies of permits he obtains. The CONTRACTOR shall provide the ENGINEER copies of all permits he obtains.

END OF SECTION 01060

PART 1 - GENERAL

1.01 COORDINATION OF CONTRACT DOCUMENTS:

- A. The various portions of the Contract Documents, of which these specifications are a part, are essential parts of the Agreement, and a requirement occurring in any portion or part is as binding as though occurring in all. All portions are intended to be complementary and to describe and provide for a complete work. In case of discrepancy, the following hierarchy shall be observed:
1. Special Provisions will govern over
 2. Supplementary Specifications, which will govern over
 3. Project Drawings, which will govern over
 4. These specifications and Standard Drawings.
- B. CONTRACTOR shall not take advantage of any apparent error or omission in the Contract Documents. If CONTRACTOR discovers an error or omission, CONTRACTOR shall immediately notify ENGINEER. ENGINEER will pursue such corrections and interpretations as may be necessary for fulfilling the intent of the Contract Documents. He shall not proceed with the work until the correction is made.

1.02 DEFINITIONS:

- A. These specifications use "Article 1 - Definitions" of the Standard General Conditions of the Construction Contract, Form No. 1910-8, prepared and issued by the Engineers Joint Contract Documents Committee (EJCDC), as the basis for the definition of terms herein. Changes in these definitions shall be made either by substitution for that article or as Supplementary Conditions.
- B. Additional definitions and clarification of terms:
1. Provide: Furnish and install, complete with all necessary ancillary items, ready for intended use. Pay for all related costs.
 2. Approved: Acceptance of an item submitted for approval. Not a limitation or release for compliance with the Contract Documents or any regulatory requirements. Refer to limitations of "Approved" in the EJCDC General Conditions, Paragraph 3.4, if used.
 3. Match Existing: Construct new work to conform to the existing lines and grades of the site and facilities as acceptable to OWNER.

4. Supplementary Specifications: Permanent additions to and revisions of these specifications, covering conditions which are not unique to any one project. Supplementary Specifications will govern over these specifications, including the Standard Drawings, when in conflict therewith.
5. Special Provisions: Additional and revisions to these specifications covering special conditions on an individual project. Special Provisions will govern over Project Drawings and supplementary documents, Supplementary Specifications, Standard Drawings, and these specifications when in conflict therewith.

END OF SECTION 01090

DIVISION 1 - GENERAL REQUIREMENTS

SECTION 01150 - METHOD OF MEASUREMENT AND BASIS OF PAYMENT

PART 1 - GENERAL

1.01 SCOPE:

The Method of Measurement and Basis of Payment is described in Article 1.04 of this section.

1.02 GENERAL:

The total bid price for each item of the Contract shall cover all work shown on the Contract drawings and required by the specifications and other Contract Documents. All costs in connection with the Work, including furnishing all materials, equipment, supplies and appurtenances; providing all construction plant, equipment, and tools; and performing all necessary labor and supervision to fully complete the Work, shall be included in the unit and lump sum prices bid. No item that is required by the Contract Documents for the proper and successful completion of the Work will be paid for outside of or in addition to the prices submitted in the bid. All work not specifically set forth as a pay item in the Bid Form shall be considered a subsidiary obligation of the CONTRACTOR, and all costs in connection therewith shall be included in the prices bid.

All work completed under the Contract will be measured by the ENGINEER according to the United States Standard Measure. The method of measurement and computations to be used in determination of quantities of material furnished and of work performed under the Contract will be those methods generally recognized as conforming to good engineering practice.

In computing volumes of excavation, the average end area method will be used, unless indicated otherwise.

Materials to be measured by volume in the hauling vehicle shall be hauled in approved vehicles and accepted as to quantity at the point of delivery. Vehicles for this purpose may be of any size or type acceptable to the ENGINEER, provided that the body is of such shape that the actual contents may be readily and accurately determined. All vehicles shall be loaded to at least their truck capacity.

At the request of the CONTRACTOR and with written approval of the ENGINEER, material specified to be measured by the cubic yard may be weighed, and such weights converted to cubic yards for payment purposes.

Materials specified to be measured by weight may, with written approval of the ENGINEER, be measured by volume and such volumes will be converted to weight for payment purposes. The factor for conversion from weight measurement to volume measurement will be determined by the ENGINEER and shall be agreed to by the CONTRACTOR before such method of measurement of pay quantities is used.

The term lump sum, when used as an item of payment, will mean payment for the complete work described in the Contract. No adjustment, other than approved changes, will be made in the lump sum payment for items designated to be paid by lump sum, even though the actual quantities may deviate from the estimated quantities shown on the plans. Except as indicated otherwise in the specifications, any adjustment in a lump sum payment, due to approved changes that result in a significant change in the quantity of a lump sum item, will be based on agreed prices that are representative of the increased or decreased cost of the lump sum item.

When a complete structure or structural unit (in effect, "lump sum" work) is specified as the unit of measurement, the unit will include all necessary fittings and accessories for a satisfactorily operable unit.

1.03 ESTIMATED QUANTITIES:

All estimated quantities stipulated in the Bid Form or other Contract Documents are approximate and are to be used only (a) as a basis for estimating the probable cost of the Work and (b) for the purpose of comparing the bids submitted for the Work. The actual amounts of work done and materials furnished under unit price items may differ from the estimated quantities. The basis of payment for work and materials will be the actual amount of work done and materials furnished. The CONTRACTOR agrees that he will make no claim for damages, anticipated profits, or otherwise on account of any difference between the amount of work actually performed and materials actually furnished and the estimated amounts herein except as follows. Either the OWNER or the CONTRACTOR may demand in writing that a supplemental agreement or Change Order be prepared to authorize an adjustment in the unit price of any contract item if the quantity of said contract item increases or decreases by more than 25 percent from that shown in the Contract Documents, if the extended price for that contract item represented at least 10% of the total price for that particular schedule.

1.04 DEFINITION OF BID ITEMS:

- A. The intent of this section is to explain, in general, what is and what is not included in a bid item, and the limits or cut-off points where one bid item ends and another begins. If no bid item exists for a portion of the work, include the costs in a related bid item.
- B. Bid Item No. 1 - Mobilization and Demobilization

No measurement for payment shall be made of any of the work, materials, and equipment required for mobilization and demobilization. The lump sum bid price shall include all of the Contractor's costs of whatever nature including labor, material, and any incidental work and equipment necessary for mobilization of personnel, equipment and supplies to the project site.

Payment shall be made as the work proceeds, after presentation of invoices by the Contractor showing specific mobilization and demobilization costs, and evidence of the charges of suppliers, subcontractors and others.

If the total sum of such payments is less than the lump sum contract price, the unpaid balance will be included in the final contract payment. Payments for mobilization will not exceed 60% of the lump sum contract price. A minimum of 40% of the contract price will be retained until such time that demobilization is complete. Prior to signing of the contract, the Contractor shall provide the PROGRAM with a detailed Payment Schedule for costs associated with mobilization & demobilization.

Payment of the lump sum contract price for mobilization and demobilization will constitute full compensation for the completion of the work.

Payment will not be made under this item for the purchase costs of materials having

a residual value, the purchase costs of materials to be incorporated in the project, or the purchase costs of operating supplies.

<u>Pay Item</u>	<u>Pay Unit</u>
Mobilization & Demobilization	LS

C. Bid Item No. 2 – Excavate and Augment

No measurement for payment shall be made of any of the work, materials, and equipment required for excavation and augmentation of spoils. The lump sum bid price shall include all of the Contractor's costs of whatever nature including labor, material, and any incidental work and equipment necessary to prepare, implement, and conduct the excavation and augmentation, in accordance with the Drawings and Specifications

<u>Pay Item</u>	<u>Pay Unit</u>
Clearing and Grubbing	CY

D. Bid Item No. 3 – Excavate and Place

No measurement for payment shall be made of any of the work, materials, and equipment required for excavation and placement of spoils. The lump sum bid price shall include all of the Contractor's costs of whatever nature including labor, material, and any incidental work and equipment necessary to excavate and place spoils according to the Drawings and Specifications.

<u>Pay Item</u>	<u>Pay Unit</u>
Tree Pile Burn and Bury	CY

E. Bid Item No. 4 – Bank Stabilization

No measurement for payment shall be made of any of the work, materials, and equipment required for bank stabilization construction. The lump sum bid price shall include all of the Contractor's costs of whatever nature including labor, material, and any incidental work and equipment necessary to fell, move and install trees and LWD according to the Drawings and Specifications.

<u>Pay Item</u>	<u>Pay Unit</u>
Tree Pile Burn and Bury	EA

END OF SECTION 01150

PART 1 - GENERAL

1.01 DESCRIPTION: The following specification includes the procedures for submitting "Shop Drawings" as is required in these specifications. Items which need to be reviewed by the ENGINEER are included with this section.

1.02 DEFINITIONS:

A. Shop Drawings: The term "shop drawings" includes drawings, diagrams, layouts, schematics, descriptive literature, illustrations, schedules, performance and test data, and similar materials requested by the ENGINEER to be furnished by the CONTRACTOR to explain in detail specific portions of the Work required by the Contract.

B. CONTRACTOR's Review and Approval: The CONTRACTOR shall coordinate all submittals and review them for accuracy, completeness, and compliance with contract requirements and shall indicate his approval thereon as evidence of such coordination and review. All submittals shall be attached to the "Transmittal of Shop Drawing" Form that is included in this Section. The form shall be filled out, signed and approved by the CONTRACTOR. Items submitted to ENGINEER without this form or CONTRACTOR'S approval will be returned for resubmission. By attaching this form to the submittal, the CONTRACTOR is representing that he has reviewed the entire submittal, that the submittal is in compliance with the Contract Documents, except as noted, and that the cover form applies to all documents that are attached to the form.

1.03 EFFECT OF REVIEW OF CONTRACTOR'S SUBMITTAL:

Review of contract drawings, methods of work, or information regarding materials or equipment the CONTRACTOR proposes to provide, shall not relieve the CONTRACTOR of his responsibility for errors therein and shall not be regarded as an assumption of risks or liability by the ENGINEER or the OWNER, or by the officer or employee thereof, and the CONTRACTOR shall have no claim under the contract on account of the failure, or partial failure, of the method of work, material, or equipment so reviewed. A mark of "NO EXCEPTIONS TAKEN" or "MAKE CORRECTIONS NOTED" shall mean that the OWNER has no objection to the CONTRACTOR, upon his own responsibility, using the plan or method of work proposed, or providing the materials or equipment proposed.

1.04 REPETITIVE REVIEW

Shop drawings and O&M manuals submitted for each item will be reviewed no more than twice at the OWNER'S expense. All subsequent reviews will be performed at times convenient to the ENGINEER and at the CONTRACTOR'S expense, based on the ENGINEER'S prevailing rates. The CONTRACTOR shall reimburse the OWNER for all such fees invoiced to the OWNER by the ENGINEER.

Any need for more than one resubmission, or any other delay in obtaining ENGINEER'S review of submittals, will not entitle CONTRACTOR to an extension of the Contract Time.

PART 2 - PRODUCTS None

PART 3 - EXECUTION

3.01 SUBMITTAL PROCEDURE:

Shop Drawings shall be submitted as follows:

A. Date and Number: CONTRACTOR shall forward to ENGINEER all items required by the individual sections of the specifications at least 30 days prior to the need of approval. All submittals shall be returned to CONTRACTOR within 21 days of their initial receipt. If follow-up reviews are required by the ENGINEER, they shall be completed within 14 days. Unless a different number is called for in the individual sections, submit six copies of each shop drawing, six copies of all operation and maintenance instructions, and four specimens of each sample requested, of which all but two copies will be retained by ENGINEER. The other copies shall be returned to the CONTRACTOR along with the ENGINEER's comments. If the CONTRACTOR wants more than two copies sent to him, he shall submit whatever additional copies he desires.

B. Cover Letter: All submittals shall be forwarded with the cover letter included in this Section from the CONTRACTOR, identifying the project and the portion of the project to which it applies. Submittals that are related to or affect each other shall be forwarded simultaneously as a package to facilitate a coordinated review. Uncoordinated submittals will be rejected.

C. Modifications: Any modifications to the design proposed by the CONTRACTOR shall be fully explained in the submittal. All necessary calculations and supporting documentation shall be included. If requested by the ENGINEER, the CONTRACTOR shall provide design drawings of the modification stamped by a professional engineer licensed to practice in the State of Nebraska.

3.02 ENGINEER'S APPROVAL:

The ENGINEER will indicate his approval or disapproval of each submittal and, if he does not approve the submittal as submitted, will indicate his reasons therefore. Any work done prior to approval shall be at the CONTRACTOR's own risk. Neither approvals nor lack of reviews or approval shall relieve the CONTRACTOR from responsibility for supplying materials and performing all work in accordance with the requirements of these Contract Documents. If submittals show variations from the Contract requirements, the CONTRACTOR shall describe such variations in writing, on the previously-mentioned form at the time of submission. Approval of such variation(s) shall be accompanied with a Contract Change Order. Minor variations not involving a change in price or time of performance will not be issued a modification.

3.03 REQUIRED SUBMITTALS:

A. Permits: Submit to the ENGINEER at the Preconstruction Conference a copy of all permits required by the governing authorities, for which the CONTRACTOR is responsible.

B. Subcontractors and Suppliers: At or before the Preconstruction Conference, the CONTRACTOR shall supply a complete list of all suppliers and subcontractors to be used on the project. The ENGINEER reserves the right to approve any proposed changes from those listed at the time of bidding.

C. Certificates: For those items called for in individual sections, furnish certificates from manufacturers, suppliers, or others certifying that materials or equipment being furnished under the Contract comply with the requirements of these specifications.

D. Shop Drawings: Required for all materials supplied on the project. See the individual sections for specific requirements. If an alternate is proposed, explain fully and, if approved, make all necessary adjustments needed to accommodate any differences in the product.

E. Progress Schedule, Sequence of Work Schedule, Progress Payment Schedule: The CONTRACTOR shall submit to the OWNER, with the completed Agreement, a Progress Schedule, Sequence of Work Schedule, and an estimated Progress Payment Schedule. The Sequence of Work Schedule shall show the order in which work shall be undertaken by the CONTRACTOR and shall show which item of Work shall be going on simultaneously. The progress schedule shall be in bar chart or CPM form and show estimated starting and completion dates for each part of the Work. The CONTRACTOR's schedule shall show the Critical Path for the work. The Progress Payment Schedule shall show the monthly progress payment requests that are estimated to be made through the duration of the Contract. Both the Progress Schedule and Progress Payment Schedule shall be revised monthly to show project progress and revisions to the schedules. The revised schedules shall be submitted with the monthly progress payment request. No monthly progress payment request shall be accepted from the CONTRACTOR and processed for payment unless accompanied by a current schedule.

If the CONTRACTOR is behind schedule, he shall also submit a plan as to how he will get back on schedule.

F. Operation and Maintenance Instructions: Manufacturer's printed instructions shall include complete installation instructions, operating instructions, maintenance literature, lubrication requirements, and parts lists. Operation and maintenance instructions shall be provided on all pertinent materials and systems installed, or if requested by the ENGINEER.

G. Weekly Schedule: At the weekly construction meetings (if held), the CONTRACTOR shall update the ENGINEER on construction plans for that week.

J. Labor and Equipment Rates: At or prior to the pre-construction conference, the CONTRACTOR shall submit a list of labor rates and equipment rates that comply with the Contract Documents. Rates for equipment and machinery shall be hourly rates as contained in the latest edition of the Blue Book, Tables one and two, per the Supplemental Conditions. These hourly rates will be used for any additional work performed on a time and materials basis. Only hours actually worked shall be counted. The ENGINEER shall determine the number of hours counted for the task. Labor rates are to be calculated per General Condition 11.01A1 and the Supplemental Conditions. The ENGINEER shall approve all rates prior to the CONTRACTOR commencing work.

K. Closeout Submittals: CONTRACTOR to provide all required closeout submittals per Section 01700.

END OF SECTION 01300

TRANSMITTAL OF SHOP DRAWINGS		DATE:			NEW SUBMITTAL			RESUBMITTAL	
TO:		FROM:							
		PROJECT:							
ITEM NO.	DESCRIPTION OF ITEM SUBMITTED (Type, size, model number, etc.)	MANUFACTURER OR SUPPLIER	NO. OF COPIES	SPECIFICATION PARAGRAPH & PAGE NO.	SPECIFICATION REQUIREMENTS		BID ITEM NO.		
					Meets	Does Not Meet			
1									
2									
3									
4									
5									
6									
7									
8									
LIST ALL VARIANCES FROM CONTRACT DOCUMENT REQUIREMENTS									
I hereby certify that all Contractor's responsibilities under the Contract Documents with respect to review and submission of the above shop drawings have been satisfied and that each shop drawing has been stamped and/or marked to indicate Contractor's compliance with the Shop Drawing review requirements.									
SIGNED _____ NAME (printed) & TITLE _____									

PART 1 - GENERAL

1.01 QUALITY CONTROL:

The OWNER will provide quality control sampling and testing to check compaction densities, aggregate gradation or quality, Atterberg limits, and quality of Portland cement concrete. These tests will be done at no cost to the CONTRACTOR. Any tests which do not meet the specifications and require re-testing shall be re-tested and charged to the CONTRACTOR.

Any retests will be deducted by the OWNER from the CONTRACTOR'S monthly progress payments according to invoicing submitted by the Testing Laboratory or as determined by the ENGINEER. CONTRACTOR will be notified prior to a retest and will be provided copies of the invoice with locations of the retests.

END OF SECTION 01400

PART 1 - GENERAL

1.01 SUMMARY:

A. Furnish temporary services and utilities, including use fees and operation costs:

1. Potable and non-potable water
2. Material storage

B. Furnish construction facilities, including utility costs:

1. Construction equipment
2. Dewatering and pumping

C. Furnish security and protection requirements:

1. Fire extinguishers
2. Site enclosure fence, barricades, warning signs, and lights

D. Furnish personnel support facilities:

1. Sanitary Facilities
2. Drinking water
3. First aid facilities
4. Coordinate emergency medical services
5. Trash removal

END OF SECTION 01505

PART 1 - GENERAL

1.01 CONTRACTOR RESPONSIBILITY:

CONTRACTOR shall be responsible for the security of all materials, equipment, tools, etc. used on the job. This includes all materials already included in a Progress Payment, whether as materials-in-storage or installed. All materials which can be easily removed shall be stored in a locked building provided by the CONTRACTOR. CONTRACTOR shall be responsible for the security of OWNER'S existing facilities which are accessed or otherwise exposed as a result of the commencement of this contract.

END OF SECTION 01540

PART 1 - GENERAL

1.01 DESCRIPTION:

The following specification includes certain features which require special consideration during construction. Among these items are safety related features, air and water pollution control, and general construction items not covered within other sections.

PART 3 - EXECUTION

3.01 PRESERVATION OF EXISTING FEATURES:

CONTRACTOR shall confine all operations to within the work limits of the project. CONTRACTOR shall exercise special care to maintain all existing surroundings, that is, buildings, trees, etc., undamaged unless noted to be removed on the drawings. CONTRACTOR shall not use the existing features as anchors to fasten ropes, chains, or guys without prior written approval. All damages to existing features shall be restored as nearly as possible to the original condition and to satisfaction of the OWNER, ENGINEER and affected property owner at no additional expense to the OWNER.

3.02 CONSTRUCTION:

A. Trenches: Open trenches during non-working periods shall be minimized. Not more than one hundred feet of trench shall be open at one time. At end of shift, the remaining trench must be backfilled to finished grade or suitably protected.

CONTRACTOR shall be responsible for strict compliance with all current Federal and State trenching requirements and laws as defined by Standards of the OSHA.

B. Damage to Existing Property: The CONTRACTOR will be held strictly responsible for all damages to persons or property that occur as a result of his fault or negligence. The CONTRACTOR shall promptly notify the ENGINEER and the property owner of any damage which is his responsibility. In order to adequately protect the OWNER against claims, demands, or liabilities arising out of the CONTRACTOR's construction operations under this contract, the ENGINEER may withhold such sums as he may deem appropriate from progress payments due the CONTRACTOR until the matter is settled. The OWNER may withhold final payment until the CONTRACTOR presents evidence which is satisfactory to the OWNER that all proper claims which are the responsibility of the CONTRACTOR have been settled. All damage to existing property shall be repaired to the satisfaction of the ENGINEER, at no cost to the OWNER.

3.03 HOUSEKEEPING:

A. Rubbish: Keep Project neat, orderly, and in a safe condition at all times. Immediately remove all hazardous rubbish. Do not allow rubbish to accumulate. Provide on-site containers for collection of rubbish and dispose of it at frequent intervals during progress of Work.

B. Dust Control: Wet down dry materials and rubbish to prevent blowing dust. All roads being used by the CONTRACTOR (including detours or roads being used that are not under construction), or the public because of construction activities must have dust control.

C. Volatile Wastes: Keep volatile wastes in covered containers.

D. Equipment and Refueling Areas: Comply with all applicable local, state, and federal laws, including those for water pollution.

E. Tracking of Soil or Mud: Tracked soil or mud onto existing roads is to be cleaned by the CONTRACTOR to the satisfaction of the ENGINEER.

F. Road Conditions: Roads impacted by construction shall be maintained so they are readily drivable with 2-wheel drive vehicles and emergency vehicles. Temporary gravel surfacing shall be placed as determined by the ENGINEER, at no cost to the OWNER.

3.04 AIR AND WATER POLLUTION CONTROL:

A. Prevention Procedures: CONTRACTOR shall take all necessary reasonable measures to reduce air and water pollution by any material or equipment used during construction as well as pollution from the construction sites and equipment storage and service areas. Measures to be used include providing dust abatement measures for construction activity.

CONTRACTOR shall comply with all applicable water pollution control regulations that are in effect at the time of the Bid Opening. Required measures include the filing of a Notice of Intent with the State Department of Environmental Quality, and the preparation and submittal to DEQ of a Pollution Prevention Plan, if required to comply with storm water runoff regulations.

Disturbance of existing vegetation is to be minimized by construction activity. Reclamation of disturbed surfaces is to comply with specifications.

B. Burning of Debris: No burning of debris will be permitted without permission of the ENGINEER. Burning is only allowed with proper permits.

C. Volatile Material: CONTRACTOR shall not dispose of volatile wastes on the project site, nor allow such materials to reach natural waters. Do not allow waste materials to be washed into the bed of a stream.

D. Excess Material: When excavations are made, CONTRACTOR shall immediately utilize resultant loose earth by backfilling and compacting in place, or dispose of it off the site.

3.05 FIRE PREVENTION AND PROTECTION:

A. Hazard Control: CONTRACTOR shall take all necessary precautions to prevent fire during construction. Provide adequate ventilation during use of volatile or noxious substances.

B. Spark Arresters: CONTRACTOR shall equip all gasoline or diesel powered equipment used in potential fire locations with spark arresters.

C. Building Safety: Smoking within buildings or temporary storage sheds is prohibited. No welding or cutting by torch shall be performed unless adequate fire protection is provided and maintained for the duration of the Work in the area of operations.

D. Protection Equipment Required: Provide and maintain suitable fire protection equipment. Furnish a minimum of one UL Class 2A, 2-1/2 gallon water type, pressure extinguisher, and one UL Class 10, Type I, 15-pound B:C carbon dioxide extinguisher.

3.06 ROAD MAINTENANCE DURING SHUTDOWNS:

The CONTRACTOR shall be responsible to maintain all roads, and other areas disturbed by construction activities. This includes control of dust due to construction activities, or due to final surfacing not yet being in place. This includes trench maintenance during shutdown periods such as inclement weather, weekends, or shutdowns for any other reasons. All disturbed areas located within roads located on private property (owners of lands upon which the project site is located) shall be maintained in such a manner that there are no ruts, pot holes, loose gravel, or any other disturbances which impede traveling on the road. All costs associated with road maintenance during construction are to be included in the Contract price. The CONTRACTOR shall provide the name and telephone number of a person that can be contacted at all times regarding road or traffic issues.

See Special Provisions for additional requirements with respect to these Temporary Controls.

END OF SECTION 01560

DIVISION 1 - GENERAL REQUIREMENTS
SECTION 01590 - FIELD OFFICES AND SHEDS

PART 1 - GENERAL

1.01 CONTRACTOR'S OFFICE AND STORAGE SHEDS:

The CONTRACTOR shall be responsible for supplying his own office and any storage sheds required for storage of material and equipment. The CONTRACTOR is responsible for making arrangements for the location of the sheds and storage space, and also for necessary site security.

CONTRACTOR shall maintain a local mailing address and phone number at which he can be reached. CONTRACTOR shall provide the name and phone number of an individual who may be contacted after hours in case of emergencies.

CONTRACTOR shall provide sanitary facilities for the work. Facilities must comply with all applicable state and local regulations.

END OF SECTION 01590

DIVISION 1 - GENERAL REQUIREMENTS
SECTION 01600 - MATERIAL AND EQUIPMENT

PART 1 - GENERAL

1.01 COMPLETION OF WORK:

It is understood that, except as otherwise specifically stated in the Contract Documents, the CONTRACTOR shall provide and pay for all materials, labor, tools, equipment, water, light, power, transportation, supervision, temporary construction of any nature, and all other services and facilities of any nature whatsoever necessary to execute, complete, and satisfactorily deliver the Work within the specified time.

1.02 CONTRACTOR RESPONSIBILITY:

Materials and equipment shall be so stored as to insure the preservation of their quality and fitness for the Work. Stored materials and equipment to be incorporated in the Work shall be located so as to facilitate prompt inspection. The CONTRACTOR shall be responsible for the condition of all materials which he has furnished, and shall replace at his own expense all such material found to be defective or which has been damaged. This includes the replacement of material which is found to be defective at any time prior to expiration of the warrantee period.

Storage areas for all material and equipment shall be furnished on the job, and all CONTRACTOR'S equipment, including refueling and service areas, are to comply with all applicable local, state and federal regulations, including those relating to water pollution. No volatiles or oils are to reach a surface water or leave the CONTRACTOR'S work site.

1.03 MANUFACTURER'S RECOMMENDATIONS:

Manufactured articles, materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned as directed by the manufacturer.

All suppliers of material and equipment shall review the design drawings and specifications regarding the use of the proposed material or equipment. If the supplier believes the material or equipment is not being used correctly or believes additional considerations are required for its use, they shall notify the ENGINEER in writing of such concerns. If no concerns are raised, it is assumed the supplier agrees with the proposed use.

The CONTRACTOR shall make arrangements whenever required, to have manufacturer's representatives on-site to assure proper installation, operation and start-up of all components.

1.04 SAMPLES:

Materials, supplies and equipment shall be in accordance with samples submitted by the CONTRACTOR and approved by the ENGINEER.

END OF SECTION 01600

PART 1 - GENERAL

1.01 DESCRIPTION:

The following specifications include all work involved in final closeout of this Project. Included are items such as post-construction inspection, acceptance of the Work, closeout records, and cleaning.

1.02 RELATED WORK:

- A. Section 01300 - Submittals
- B. Section 00700 - General Conditions
- C. Section 00810 - Supplementary Conditions

1.03 SUBMITTALS:

All required closeout submittals shall be received, reviewed, and found to be acceptable by the ENGINEER prior to final payment. Items to be submitted are:

- A. Guarantees and Bonds: Provide guarantees and bonds as required herein and as provided by manufacturers of all products and equipment.
- B. Operation and Maintenance Manuals: Furnish in triplicate, complete manufacturer's literature, operating instructions, installation instructions, maintenance instructions, parts lists, and technical data on all items furnished and installed on this project, or required by the ENGINEER.
- C. Post Construction Maintenance Personnel: CONTRACTOR shall submit plans for maintenance of the system during the one-year correction period and shall name the individual who will have the power and responsibility to act for the CONTRACTOR in this regard.
- D. Contractors Certification of Completion: Certifying completion of construction, compliance with the Contract Documents, and waiver of any claims.
- E. Insurance Certificate: Certificate to indicate which insurance coverages required by Sections 00700 and 00810 that are to remain in effect after project is completed.
- F. Lien Releases: Affidavit of Release Liens, and lien releases from all subcontractors, suppliers, or others that may have provided labor, materials or services for the project. Also, provide a lien release from the CONTRACTOR.
- G. Other Certificates: Certificate of Substantial Completion, Certificate of Final Completion and Warranty Certificate.

PART 2 - PRODUCTS

2.01 CLEANING PRODUCTS:

Use cleaning materials recommended by the manufacturer of the surface to be cleaned. Follow the instructions on the container.

PART 3 - EXECUTION

3.01 CLEANING:

Clean, sweep or rake all areas used by the CONTRACTOR during the course of construction. The cleaning and reclamation of these areas shall be to the satisfaction of the OWNER.

3.02 SUBSTANTIAL COMPLETION AND FINAL INSPECTION:

Submit written certification that the project, or designated portion of Project, is substantially complete and request, in writing, a final inspection. The ENGINEER, OWNER, and representatives of funding agencies will make an inspection within 10 days of receipt of request. Should the ENGINEER determine the Work is substantially complete, a punch list of deficiencies that need to be corrected before final acceptance will be prepared, a Notice of Substantial Completion with the deficiencies noted will be issued.

Should the ENGINEER determine the Work is not substantially complete, ENGINEER will immediately notify the CONTRACTOR, in writing, stating reasons. After the CONTRACTOR completes the Work, CONTRACTOR shall submit certification and request a second inspection.

3.03 ACCEPTANCE OF THE WORK:

After all deficiencies have been corrected, a Letter of Final Acceptance will be issued. If only designated portions of the project have been inspected, a Letter of Partial Acceptance will be issued for that portion corrected.

Acceptance may be given prior to correction of deficiencies which do not preclude operation and use of the facility; however, final payment will be withheld until all deficiencies are corrected. Until receipt of the Letter of Final Acceptance, the CONTRACTOR shall be responsible for the Work completed under this Contract.

3.04 POST-CONSTRUCTION INSPECTION:

Prior to expiration of one year from date of final acceptance, the ENGINEER and OWNER will inspect the project to determine whether corrective work is required. The CONTRACTOR will be notified in writing of all deficiencies. Notices of deficiencies can be presented to the CONTRACTOR any time during the warranty period, as necessary. Corrective work must start on noted deficiencies within 10 days of receipt of notification to CONTRACTOR.

In the event that a separate Warranty is issued for both Substantial Completion and Final Completion due to a winter shutdown, a separate inspection will be performed for each warranty period.

END OF SECTION 01700

DIVISION 2

CONSTRUCTION SPECIFICATIONS



CONSTRUCTION SPECIFICATION CS-01

MOBILIZATION AND DEMOBILIZATION

1. Description.

The work shall consist of the mobilization and demobilization of the Contractor's forces and the equipment necessary for performing the work required under the Contract. Mobilization will not be considered as work in fulfilling the contract requirement for commencement of work.

2. Equipment & Materials.

2.1 Mobilization shall include all activities and costs for transportation of personnel, equipment and supplies/materials to the site, establishment of offices, buildings and other necessary facilities for the Contractor's operations at the site.

2.2 Demobilization shall include all activities and costs for transportation of personnel, equipment and supplies/materials not used in the Contract, including the disassembly, removal and site cleanup of any offices, buildings or other facilities assembled on the site for the Contract.

2.3 This work includes mobilization and demobilization required by the Contract at the time of award. If additional mobilization/demobilization is required during the performance of the Contract due to changed, deleted or added items of work, for which the Contractor is entitled to an adjustment in the Contract price, compensation for such costs will be included in the price adjustment for the item or items of work changed or added.

2.3 The Contractor shall be responsible for all required permits for transportation of the Contractor's equipment. All equipment and materials shall be mobilized and demobilized in accordance with all local, state and federal laws related to transportation and safety.

2.4 Upon completion of the work, the Contractor shall restore all access areas to the same condition as prior to the start of the work.

2.5 The Contractor is responsible for security of the Contractor's equipment while on site.



CONSTRUCTION SPECIFICATION CS-02

CLEARING AND GRUBBING

1. Description.

The work under this specification includes providing all labor, materials, tools and equipment necessary for clearing, grubbing and disposing of all vegetation and debris (including earthen materials incidentally removed with vegetation and debris), and removing structures and obstructions located within the limits shown on the Drawings or designated by the Project Engineer, except such objects as are designated to remain in place or are to be removed in accordance with sections of these specifications. The works shall also include the preservation from injury or defacement of all vegetation and objects designated to remain.

2. Protection of Existing Vegetation.

Trees, shrubs, sod and other vegetation designated to remain undisturbed shall be protected from damage throughout the construction period. The Contractor shall be responsible for the repair or replacement of vegetation damaged by the Contractor's operations.

2.1 Earth fill, stockpiling of materials or vehicle parking shall not be allowed within the area of the drip line of the protected vegetation. Vegetation damaged due to disturbances under the drip line shall be replaced by the Contractor. Replacement vegetation must be of the same species, size and condition unless a substitution is approved by the Contracting Officer.

2.2 Any superficial damage such as cuts, skins, scrapes or bruises to the bark of protected vegetation shall be carefully trimmed and treated using locally acceptable procedures.

2.3 Limbs or branches, one half (½ ") inches or greater, which are broken or otherwise severed during construction, shall be cut flush at the base of the limb/branch.

2.4 Roots, one inch (1") or greater, which are broken or otherwise severed during construction, shall have their ends cut smoothly and perpendicular to the root.

2.5 Roots exposed during excavation or other operations shall be covered with moist soil as soon as possible to prevent the roots from drying out.



3. Delineation of Protected Vegetation

The limits of the areas to be cleared will be marked by flags, stakes, tree markings or other suitable method. Trees and other vegetation not to be removed will be designated by a different color flag, ribbon or stake.

4. Clearing and Grubbing

All trees not marked for preservation and all snags, logs, brush, stumps, shrubs, rubbish, and similar materials shall be cleared from within the limits of the designated borrow area. Unless otherwise specified, all stumps, roots, and root clusters that have a diameter of 1 inch or larger shall be grubbed out to the depth of excavation. Materials shall be disposed of in accordance with Section 7 of this specification.

5. Above-Ground Clearing

All trees not marked for preservation and all snags, logs, brush, stumps, shrubs, rubbish, and similar materials shall be cleared from within the limits of the designated areas. All woody vegetation will be removed flush with or slightly below the ground. Materials shall be disposed of in accordance with Section 7 of this specification.

6. Disposal

Materials removed during the clearing and grubbing operations, unused for bank protection will be disposed of by burying. The Contractor is responsible for complying with all applicable local, state or federal regulations when disposing of the materials.

7.1 Burying shall be conducted under the constant care of competent employees. Burning shall be performed in a manner such that anything designated to remain will not be jeopardized. Burning shall be done in accordance with all applicable laws and ordinances.

7.2 Merchantable timber within the clearing limits will be become the property of the Contractor, unless otherwise specified.

7. Special Conditions:

7.1 Any garbage, rubbish, trash or similar items found during clearing, shall be set aside by the contractor and disposed of in an approved solid waste facility. The PROGRAM has not identified any significant presence of such materials at the project location.



7.2 Removed trees and brush will be stacked into piles located inside of the limits work areas. The number of staged piles should be kept to a minimum, as much as is reasonable based upon density of trees, location of trees, topography, etc.

7.3 All standing and downed dead woody vegetation within limits of clearing and grubbing and above-ground tree clearing will be buried along with cleared woody vegetation.



CONSTRUCTION SPECIFICATION CS-02

EXCAVATION

1. Description

Excavation includes cut and fill placement activities to achieve the finished grade as specified in the Drawings and Specifications.

2. Materials

Excavation will be completed using cuts and fills from project site.

2.1 Fill material will be placed on site in areas identified on the drawings and specifications.

3. Construction

Finish grade shall be as shown on the Project Construction Drawings. Construction shall be as shown in the plan view, cross sections and profile drawings (as necessary).

3.1 Unless otherwise stated, the existing elevations and contours shown on the Construction Drawings were derived from Light Detection and Ranging (LiDAR) data flown in October of 2016. Vertical accuracy of the LiDAR is +/- six (6) inches.

3.2 In areas where fill is required, the Contractor shall place the required fill in a manner so as to provide adequate compaction of the material. No fill will be placed in lifts to exceed two feet (2') and each soil lift shall be adequately compacted with heavy equipment before placement of succeeding lifts.

3.3 The Contractor shall finish grade areas such that the finish appears smooth and ridges, vehicle tracks etc. do not exceed three (3) inches in height.

3.4 The Contractor, shall at all times, conduct their work in full compliance with all OSHA regulations and any other applicable local, state or federal regulations.

4. Special Conditions

4.1 Prior to commencement of any work, the Contractor shall review with the Contracting Officer the sequence and methods of construction the Contractor will use to complete the work. The Contractor shall review with the Project Engineer the sequence



and methods for cutting, filling and grading of existing materials. Such discussions shall include the order of work and equipment to be used. The Contracting Officer retains the right to make a final determination on the Contractors proposed work plan.



CONSTRUCTION SPECIFICATION CS-04

BANK STABILIZATION

1. Description.

Bank Stabilization includes the selection, harvest and placement of trees and large woody debris in the vicinity of the south bank in accordance to the design plans.

2. Construction

2.1 Trees used for stabilization shall be live trees, approximately 30 ft in height (not including root mass), with relatively straight trunks, 8 in to 2 ft DBH.

2.2 Priority tree species include mulberry, elm and other hardwoods and cedar/juniper. Cottonwood and sycamore may be used if there is insufficient supply AND with ENGINEERS approval.

2.3 Harvest trees with rootwad and limbs in-tact to the extent possible.

2.4 Be cautious as to not disturb existing bank when placing trees as it is currently unstable. As a result, over excavation is not necessary. Place 2-4 trees per pile on top of the channel fill, with the rootwads against the bank. The densest trees should be placed on top of the pile to provide ballast. Orient trees in a downstream direction, approximately 45 degrees away from bank and into the perceived flow path. Interlocking roots and limbs to the extent possible

2.5 Fill voids and interstices with LWD, interlocking roots and branches to the extent possible, cover with fill material and compact using excavation equipment.

2.6 Unused trees and LWD will be buried in coincidence with channel fill in the vicinity of the channel toe.