CITY MANAGER'S REPORT
FEBRUARY 15, 2016 CITY COUNCIL MEETING

ITEM: **4C**

RECOMMENDATION:

APPROVE PLANS AND SPECIFICATIONS FOR A NEW 6 PLACE HANGAR AT BEN NELSON REGIONAL AIRPORT AND SET THE TIME AND DATE TO RECEIVE BIDS AS 2:00 P.M. ON MARCH 15, 2016.

BACKGROUND
The plans and specifications have been approved by both the Nebraska Department of Aeronautics and the Federal Aviation Administration and the City has been given authorization to advertise for bids. As a reminder, this project is funded 95% with a maximum grant amount of $600,000 from the Federal Aviation Administration.

The Engineer's Estimate is $589,355.50 for this project.

FISCAL IMPACT: None.

RECOMMENDATION:

APPROVE PLANS AND SPECIFICATIONS FOR A NEW 6 PLACE HANGAR AT BEN NELSON REGIONAL AIRPORT AND SET THE TIME AND DATE TO RECEIVE BIDS AS 2:00 P.M. ON MARCH 15, 2016.

APPROVALS:

Greg Wolford, W Design Associates — Date: 5 Feb 16

Kyle Potthoff, Public Works Director — Date: 2/11/16

Nate Schneider, City Manager — Date: 2-11-16

NEW HANGAR PROJECT
MCCOOK BEN NELSON REGIONAL AIRPORT
McCook, Nebraska
FAA PROJECT NO. 3-31-0052-14

Index of Drawings

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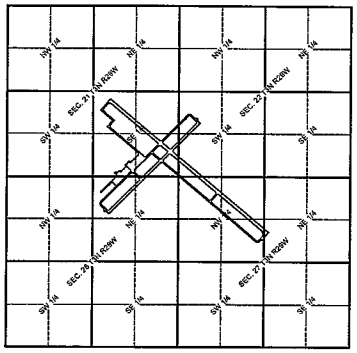
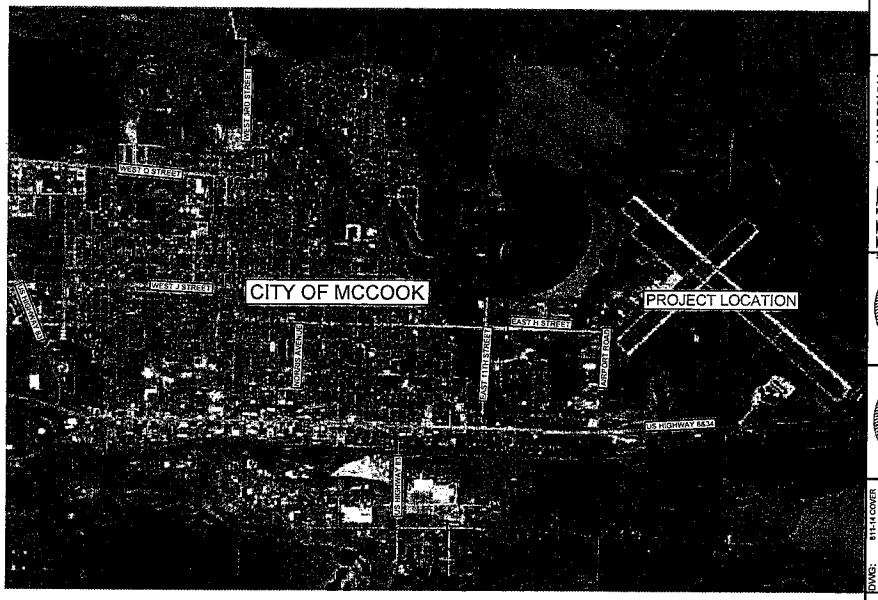
S-1	FOOTING & FOUNDATION PLAN - OPTION 1
E-1	ELECTRICAL PLAN

ESTIMATED QUANTITIES - BASE BID

ITEM	DESCRIPTION	QUANTITY	UNITS
1.	MOBILIZATION	1	LUMP SUM
2.	P-151 CLEARING & GRUBBING	1	LUMP SUM
3.	P-154 SUBBASE COURSE	1206	SQ.YDS.
4.	13650 NEW 6 PLACE HANGAR	1	LUMP SUM
5.	P-501 PORTLAND CEMENT CONCRETE MIX DESIGN	1	LUMP SUM
6.	P-501 6" THICK CONCRETE TAXIWAY EXT.	700	SQ.YDS.
7.	P-501 6" THICK CONCRETE HANGAR APPROACH	506	SQ.YDS.
8.	T-901 SEEDING	24.8	M.SQ.FT.
9.	D-701 12" CPP CULVERT	51	LIN. FEET



LOCATION MAP
NO SCALE



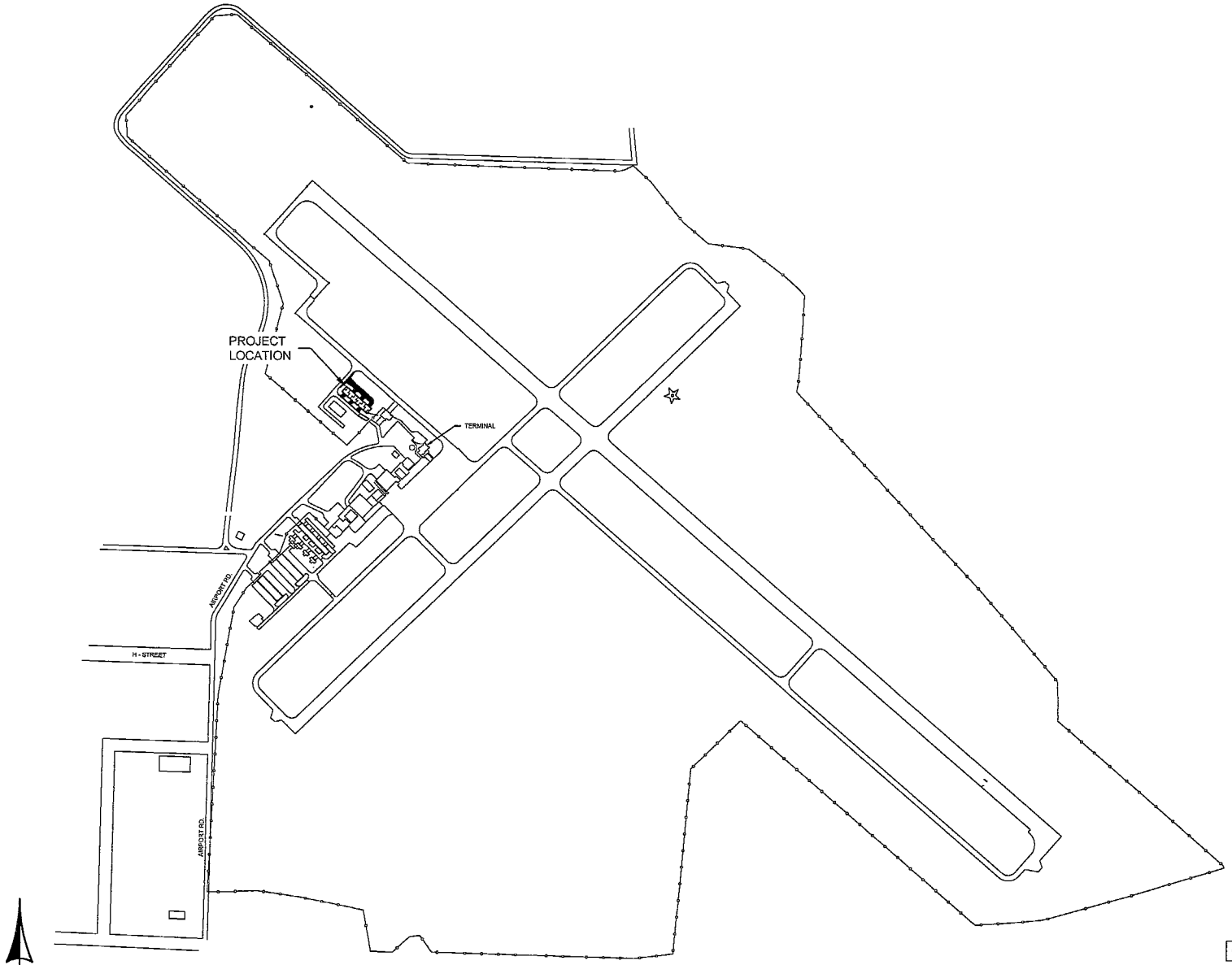
LOCATION MAP

NEW HANGAR PROJECT
BEN NELSON REGIONAL AIRPORT
McCOOK, NEBRASKA

WDA W DESIGN ASSOCIATES
Consulting Engineers and Architects
McCook, Nebraska 69001
Hastings, Nebraska 68901

DWG: 811-14 COVER
DRAWN: A.M.P.
CHECKED:
REVISIONS
REV 1 (1-30-15)

DATE: FEB. 2015



AIRPORT LOCATION MAP

SCALE: 1" = 300'-0"

NEW HANGAR PROJECT

BEN NELSON REGIONAL AIRPORT

McCOOK, NEBRASKA

WDA W DESIGN ASSOCIATES
Consulting Engineers and Architects
McCook, Nebraska 69001
Hastings, Nebraska 68901

Seal of Coordinating Professional:

DWG: 811-14C-01
DRAWN: T.A.S.
CHECKED:
REVISIONS

LM-1

DATE: FEB. 2015

LEGEND

- EXISTING CONTOURS
- NEW CONTOURS
- SILT FENCE
- EXISTING FENCE
- NEW FENCE
- NEW CONCRETE
- EXISTING CONCRETE
- EXISTING BUILDINGS
- EXISTING ASPHALT
- SEEDING

CONSTRUCTION SAFETY AND PHASING PLAN

1. THE AIRPORT SHALL REMAIN OPEN AT ALL TIMES DURING THIS PROJECT. NO WORK IS BEING DONE WITH THE RUNWAY SAFETY AREAS OR THE RUNWAY OBJECT FREE AREAS AND WORKERS AND EQUIPMENT WILL NOT BE ALLOWED IN THOSE AREAS. WORK WILL BE DONE ON AND BESIDE HANGAR TAXIWAYS AND TAXILANES. THESE AREAS WILL BE CLOSED TO AIRPORT TRAFFIC THROUGHOUT THE PROJECT.

2. THERE WILL BE NO SPECIFIC PHASING REQUIRED OF THE CONTRACTOR FOR THIS PROJECT.

3. THE CONTRACTOR SHALL FOLLOW AC 150/5370-2F, OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION THROUGHOUT THIS PROJECT. IN ADDITION, OPERATIONAL SAFETY SHALL BE A STANDING AGENDA ITEM AT ALL CONSTRUCTION MEETINGS.

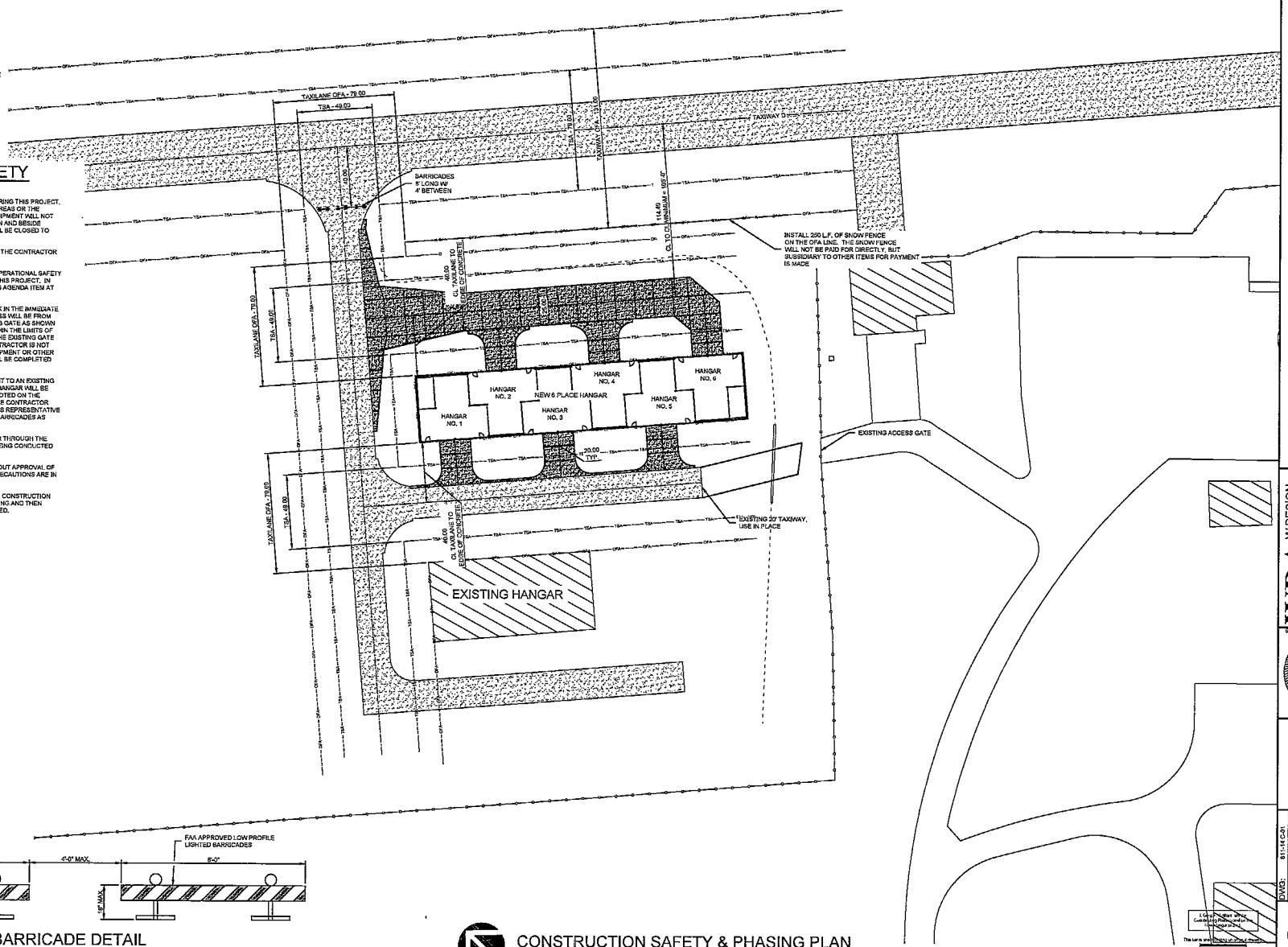
4. THE CONTRACTOR WILL ONLY BE ALLOWED TO WORK IN THE IMMEDIATE ARE OF THE HANGAR BEING CONSTRUCTED. ALL ACCESS WILL BE FROM THE NON-AIR OPERATIONS AREA THROUGH AN EXISTING GATE AS SHOWN ON THE PLANS. ALL MATERIALS SHALL BE STORED WITHIN THE LIMITS OF CONSTRUCTION SHOWN ON THE PLANS, IN ADDITION, THE EXISTING GATE SHALL BE CLOSED AND LOCKED AT ALL TIMES THE CONTRACTOR IS NOT PRESENT, SECURING THE SITE. NO SERVICING OF EQUIPMENT OR OTHER OPERATIONS THAT ENTAIL HAZARDOUS MATERIALS WILL BE COMPLETED WITHIN THE WORK AREA.

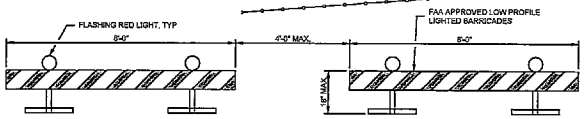
5. THE NEW HANGAR IS BEING CONSTRUCTED ADJACENT TO AN EXISTING AND ACTIVE HANGAR. THE TAXIWAYS SERVICING THIS HANGAR WILL BE CLOSED DURING THE PROJECT WITH BARRICADES AS NOTED ON THE PLANS. BARRICADES SHALL BE INSPECTED DAILY BY THE CONTRACTOR AND THE AIRPORT OPERATOR. THE CONTRACTOR OR HIS REPRESENTATIVE SHALL BE AVAILABLE 24 HOURS PER DAY TO MAINTAIN BARRICADES AS NEEDED.

6. NOTAMS WILL BE ISSUED BY THE PROJECT ENGINEER THROUGH THE AIRPORT MANAGER NOTIFYING PILOTS OF THE WORK BEING CONDUCTED ON THE AIRPORT.

7. NO OPEN FLAME WELDING WILL BE PERMITTED WITHOUT APPROVAL OF THE ENGINEER AND OWNER AND ADEQUATE SAFETY PRECAUTIONS ARE IN PLACE.

8. FAILURE BY THE CONTRACTOR TO COMPLY WITH THE CONSTRUCTION SAFETY AND PHASING PLAN WILL RESULT IN ONE WARNING AND THEN PROJECT SUSPENSION UNTIL THE VIOLATION IS RECTIFIED.





BARRICADE DETAIL

SCALE: 3/8" = 1'-0"

CONSTRUCTION SAFETY & PHASING PLAN

SCALE: 1" = 30'-0"

NEW HANGAR PROJECT

BEN NELSON REGIONAL AIRPORT

McCOOK, NEBRASKA

WDA DESIGN ASSOCIATES
Consulting Engineers and Architects
McCook, Nebraska 69001
Hastings, Nebraska 68901

Seal of Consulting Professional

DWG: 81-14 (C-4)
DRAWN: AMP
CHECKED:
REVISIONS
REV 1 - (1-8-15)
REV 2 - (1-26-15)

CS-1

DATE: FEB. 2015

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LEGEND

- EXISTING CONTOURS
- NEW CONTOURS
- SILT FENCE
- EXISTING FENCE
- NEW FENCE
- NEW CONCRETE
- EXISTING CONCRETE
- EXISTING BUILDINGS
- EXISTING ASPHALT
- SEEDED AREA

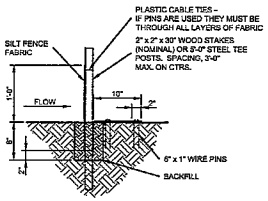
BENCHMARK DATA:

BENCHMARK IS LOCATED ON CENTERLINE AT THE END OF RUNWAY 4. ELEVATION = 2561.64.

NOTE: ENGINEER WILL STAKE OUT CORNERS OF BUILDING AND SET CLOSER BENCHMARK.

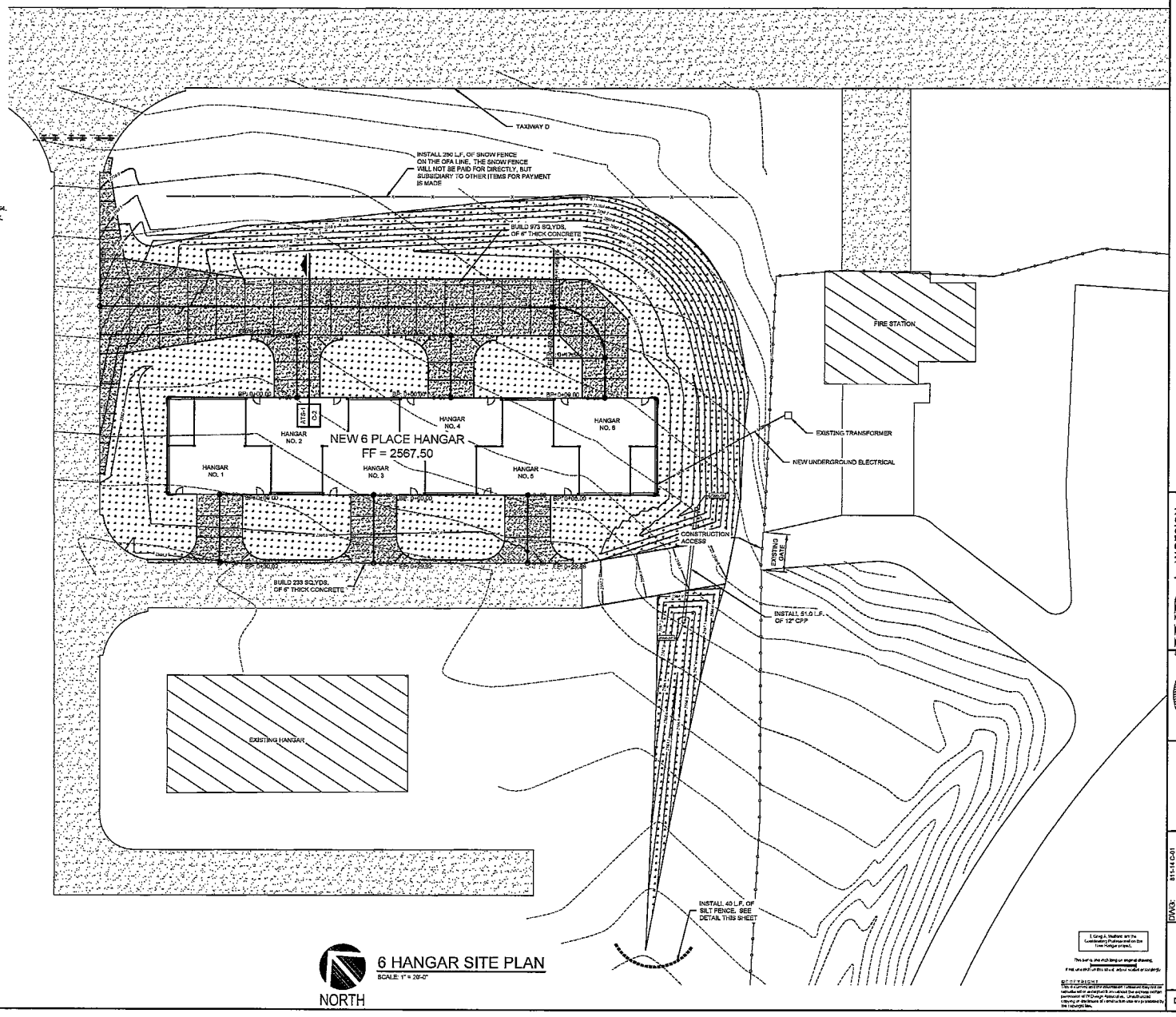
GRADING NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING ALL UNDERGROUND UTILITIES.
2. ALL TOP 6" UNDER THE NEW HANGAR SHALL BE STRIPPED AND WASTED FROM THE SITE. TOPSOIL MAY BE USED AS FILL IN GRASS AREAS OR TOES OF SLOPES OUTSIDE OF STRUCTURAL AREAS. AREAS WHERE CONCRETE WAS ALREADY REMOVED WITH NO TOPSOIL NEED NOT BE STRIPPED.
3. THE TOP 6" UNDER ALL PAVEMENT AND FLOORS SHALL BE COMPACTED TO 95% OF STANDARD PROCTOR DENSITY AT -2% TO +2% FROM OPTIMUM MOISTURE.
4. ALL EMBANKMENT SHALL BE COMPACTED TO 95% OF STANDARD PROCTOR DENSITY AT -2% TO +2% FROM OPTIMUM MOISTURE.
5. ALL EMBANKMENT SHALL BE PLACED IN 6" MAXIMUM LOOSE LIFTS AND COMPACTED PER ABOVE.
6. THE MATERIAL EXCAVATED FROM THE AREA (LESS THE TOP 6") MAY BE REUSED AS BACKFILL AND EMBANKMENT. BORROW MATERIAL SHALL BE SUPPLIED BY THE CONTRACTOR AND SHALL BE A LEAN CLAY/SILT OR GRANULAR MATERIAL.



SILT FENCE SECTION

SCALE: 1" = 1'-0"



6 HANGAR SITE PLAN

SCALE: 1" = 20'-0"

NEW HANGAR PROJECT

BEN NELSON REGIONAL AIRPORT

McCOOK, NEBRASKA

WDA W DESIGN ASSOCIATES
Consulting Engineers and Architects
McCook, Nebraska 69001
Hastings, Nebraska 68901

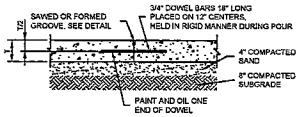
Seal of Coordinating Professional:

PROFESSIONAL CIVIL ENGINEER GREG A. WOLFORD E-8362 STATE OF NEBRASKA

DWG: 811-14 C-01
DRAWN: AMP
CHECKED:
REVISIONS: REV 1 - (1-26-16)

C-1

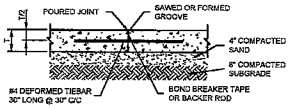
DATE: FEB. 2015



TYPE "E" DOWELED JOINT

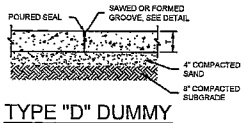
SCALE: 3/4" = 1'-0"

USE WHERE INDICATED AND WHERE PAVING OPERATIONS ARE DELAYED, STOPPED OR WHEN CONNECTING TO NEW CONCRETE.



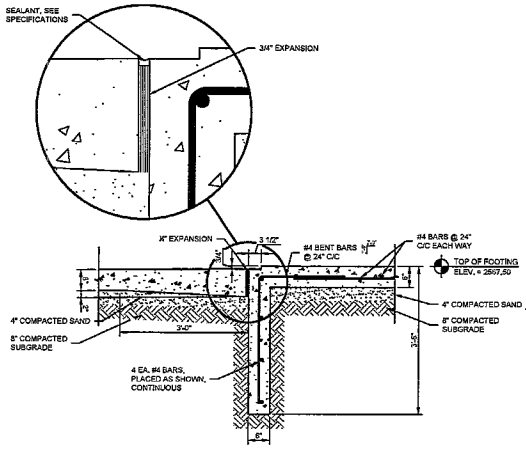
TYPE "B" HINGED

SCALE: 3/4" = 1'-0"



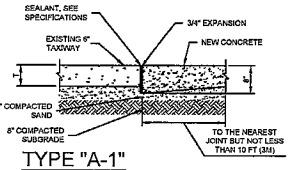
TYPE "D" DUMMY

SCALE: 3/4" = 1'-0"



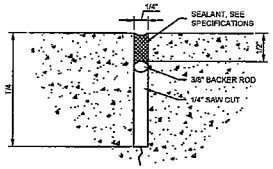
TYPE "A"
HANGAR FLOOR & APPROACH

SCALE: 3/4" = 1'-0"



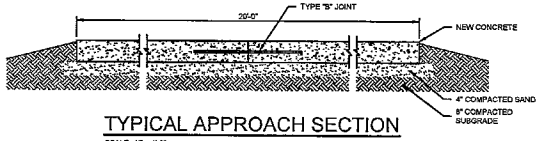
TYPE "A-1"
JOINT - EXISTING CONCRETE

SCALE: 3/4" = 1'-0"



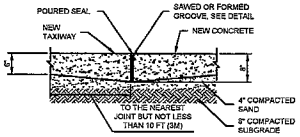
CONTRACTION JOINT DETAIL

NO SCALE



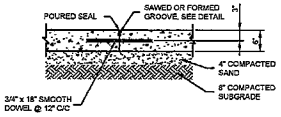
TYPICAL APPROACH SECTION

SCALE: X" = 1'-0"



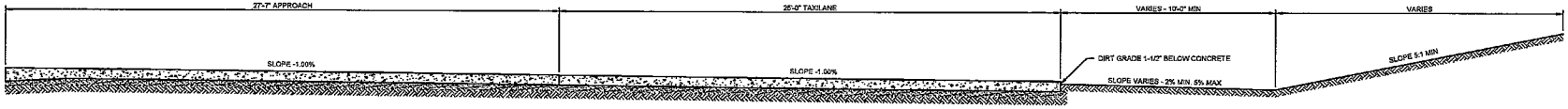
TYPE "A-2"
JOINT - NEW CONCRETE

SCALE: 3/4" = 1'-0"



TYPE "C" DOWELED

SCALE: 3/4" = 1'-0"



ATS-1 APPROACH & TAXILANE SECTION

SCALE: 3/8" = 1'-0"

NEW HANGAR PROJECT
BEN NELSON REGIONAL AIRPORT
McCOOK, NEBRASKA

WDA W DESIGN ASSOCIATES
Consulting Engineers and Architects
McCook, Nebraska 69001
Hastings, Nebraska 68901

Seal of Licensed Professional

DWG: 811-14 C-01
DRAWN: AMP
CHECKED:
REVISIONS
REV 1 - (1-5-15)

C-2

DATE: FEB. 2015

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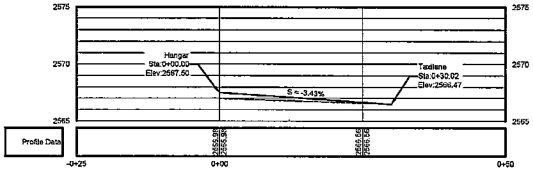
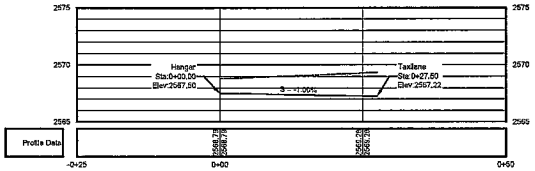
HANGAR 1 APPROACH PROFILE

HORIZONTAL SCALE: 1" = 10'-0"
VERTICAL SCALE: 1" = 5'-0"



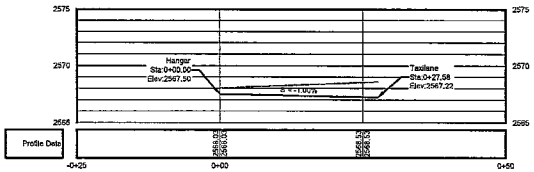
HANGAR 4 APPROACH PROFILE

HORIZONTAL SCALE: 1" = 10'-0"
VERTICAL SCALE: 1" = 5'-0"



HANGAR 2 APPROACH PROFILE

HORIZONTAL SCALE: 1" = 10'-0"
VERTICAL SCALE: 1" = 5'-0"



HANGAR 5 APPROACH PROFILE

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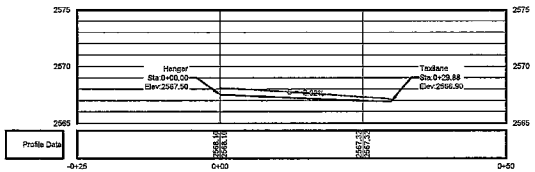
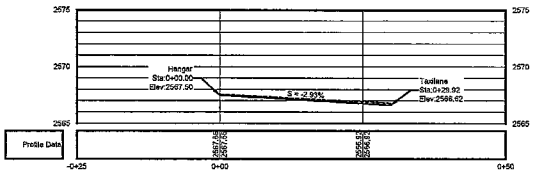
VERTICAL SCALE: 1" = 5'-0"



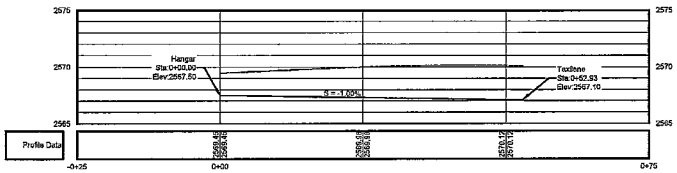
HANGAR 3 APPROACH PROFILE

HORIZONTAL SCALE: 1" = 10'-0"
VERTICAL SCALE: 1" = 5'-0"



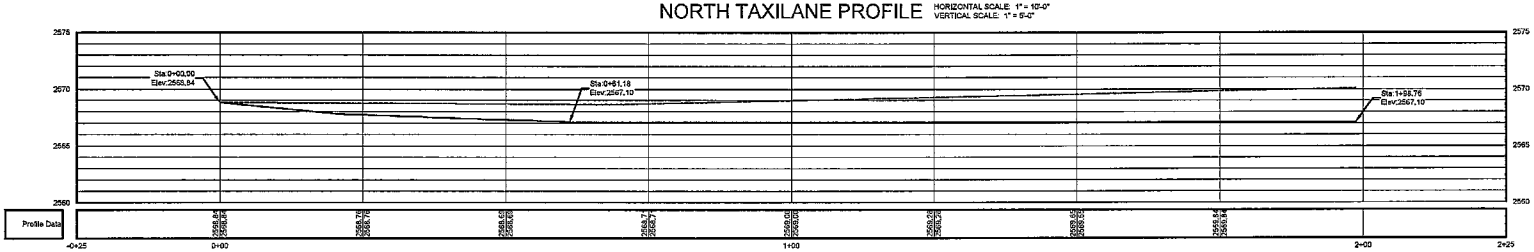
HANGAR APPROACH 6 PROFILE

HORIZONTAL SCALE: 1" = 10'-0"
VERTICAL SCALE: 1" = 5'-0"



NORTH TAXILANE PROFILE

HORIZONTAL SCALE: 1" = 10'-0"
VERTICAL SCALE: 1" = 5'-0"



I, Greg A. Wolford, am the Contributing Professional on the Time Change of Jack.

This set is one inching on original drawing. If not, use only other inches value as scale.

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NEW HANGAR PROJECT

BEN NELSON REGIONAL AIRPORT

McCOOK, NEBRASKA

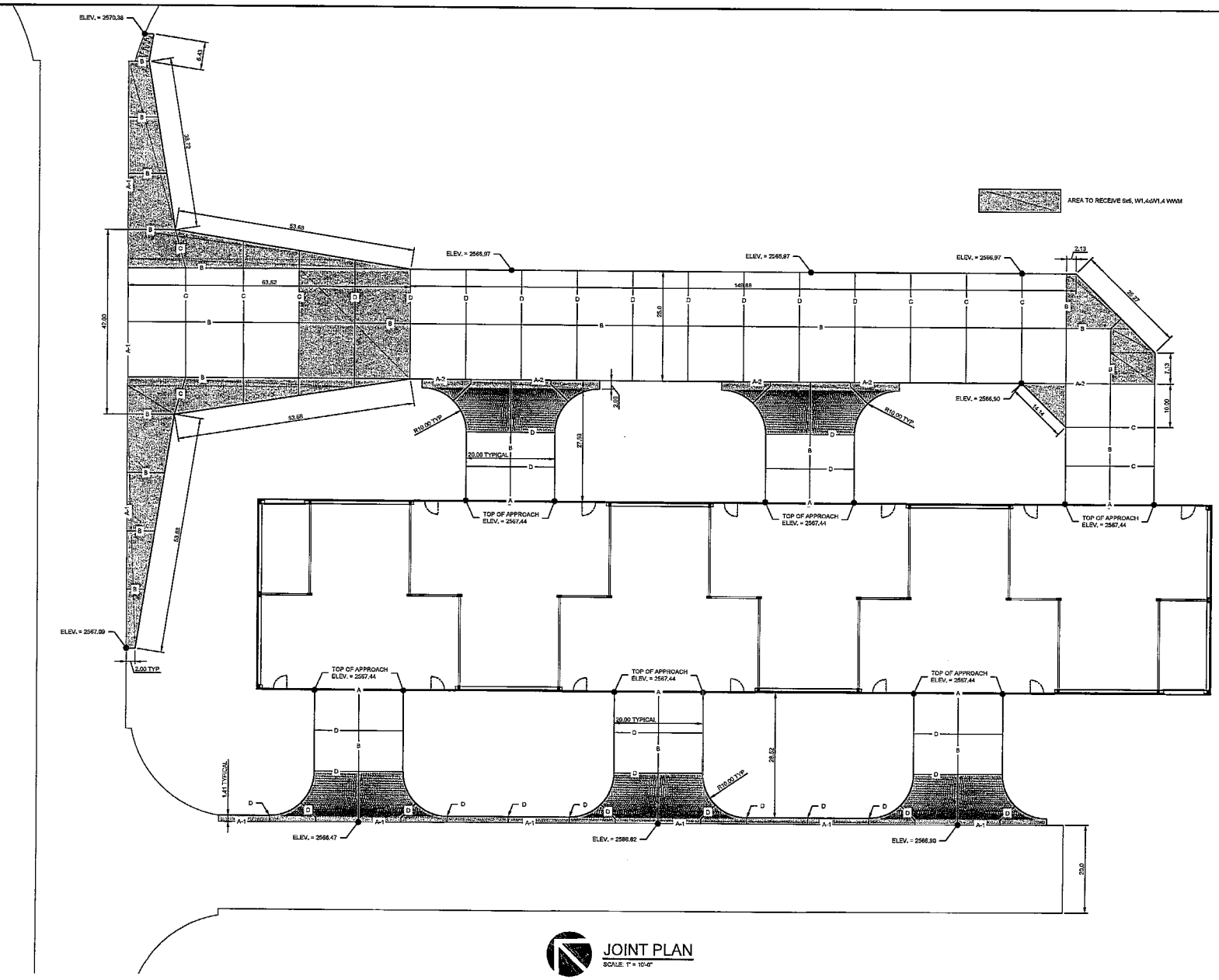
WDA W DESIGN ASSOCIATES
Consulting Engineers and Architects
McCook, Nebraska 69001
Hastings, Nebraska 68901

Seal of Contributing Professional

DWG: 81-14C-01
DRAWN: T.A.S.
CHECKED:
REVISIONS

C-3

DATE: FEB. 2015



JOINT PLAN
SCALE: 1" = 10'-0"

NEW HANGAR PROJECT
BEN NELSON REGIONAL AIRPORT
McCOOK, NEBRASKA

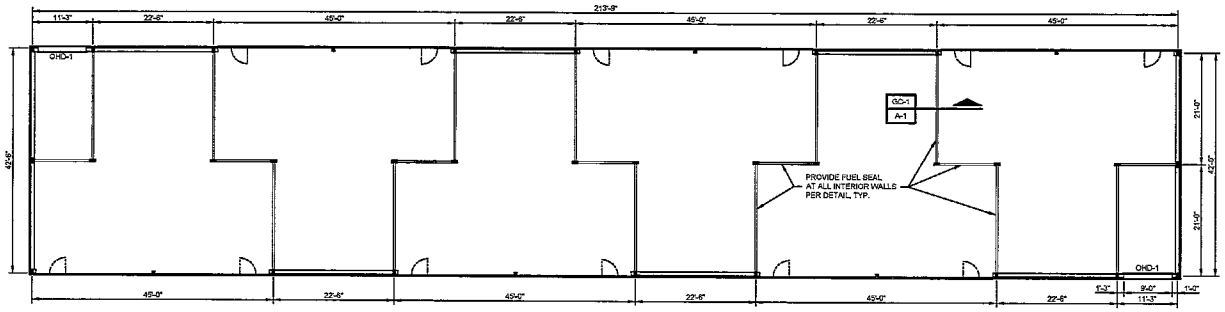
WDA W DESIGN ASSOCIATES
Consulting Engineers and Architects
McCook, Nebraska 69001
Hastings, Nebraska 68901

Seal of Geoprofessional Professional

DWG: 811-14C-01
DRAWN: T.A.S.
CHECKED:
REVISIONS
REV 1 - (1-8-16)
REV 2 - (1-26-16)

C-4

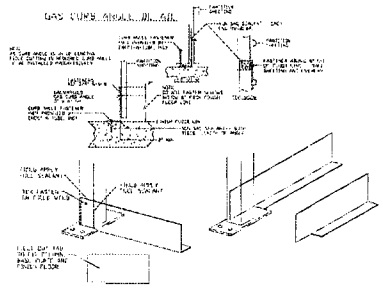
DATE: FEB. 2015



NORTH

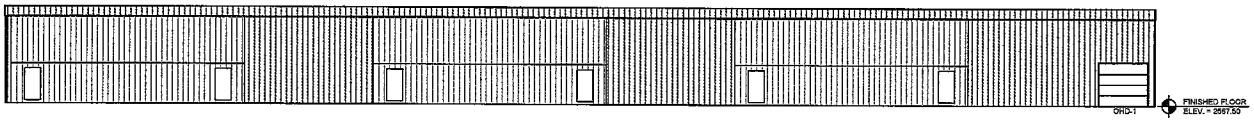
FLOOR PLAN - 6 PLACE HANGAR

SCALE: 3/32" = 1'-0"



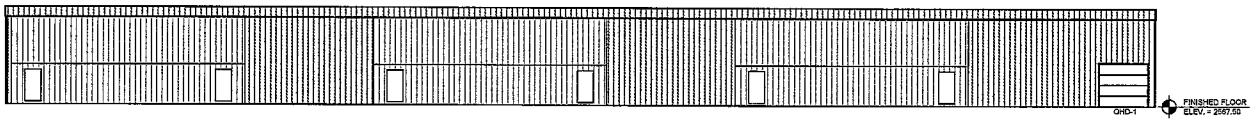
GC-1 GAS CURB DETAIL

NO SCALE



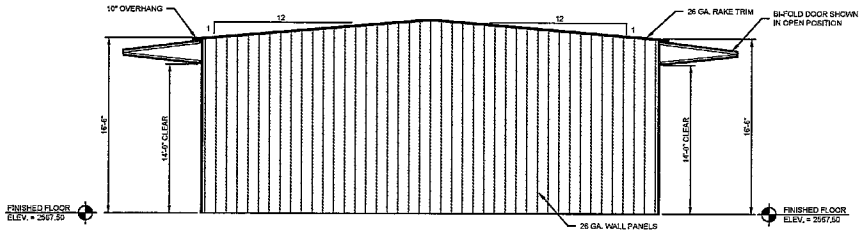
NORTH ELEVATION - 6 PLACE HANGAR

SCALE: 3/32" = 1'-0"



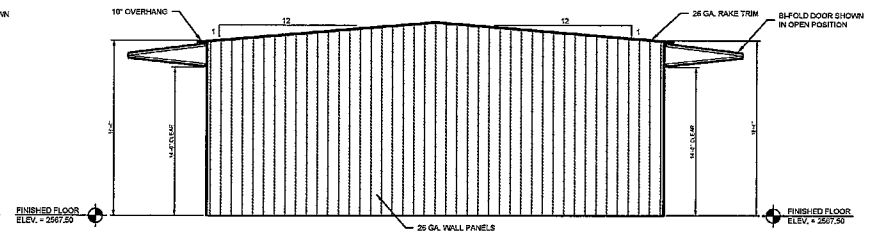
SOUTH ELEVATION - 6 PLACE HANGAR

SCALE: 3/32" = 1'-0"



EAST & WEST ELEVATION - 6 PLACE HANGAR

SCALE: 3/16" = 1'-0"



EAST & WEST ELEVATION - 6 PLACE HANGAR

SCALE: 3/16" = 1'-0"

I, Doug A. Wallace, am the Contributing Professional on the Form Design project.

This set is one in kind or original drawing.

Field verify all site work without notice in advance.

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NEW HANGAR PROJECT

BEN NELSON REGIONAL AIRPORT

McCOOK, NEBRASKA

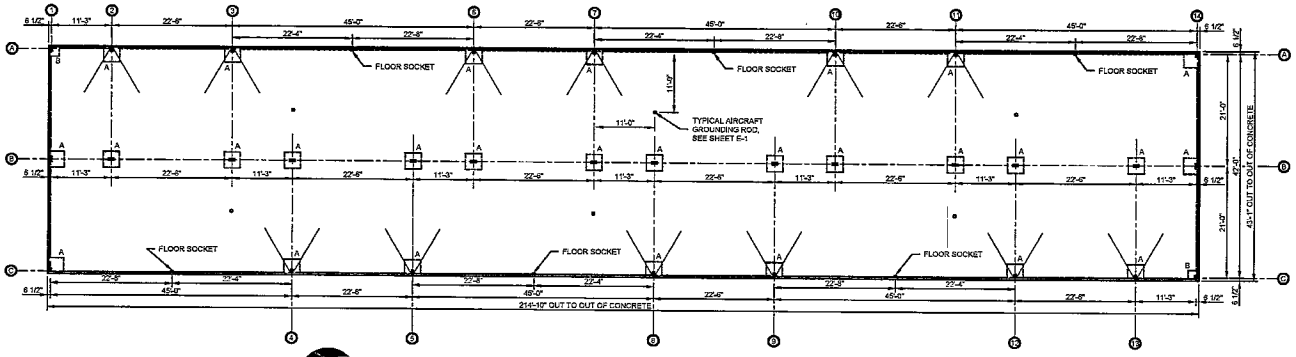
WDA W DESIGN ASSOCIATES
Consulting Engineers and Architects
McCook, Nebraska 69001
Hastings, Nebraska 68901

Seal of Contributing Professional

DWG#310-016 HANGARS
DRAWN: AMP
CHECKED:
REVISIONS

A-1

DATE: FEB. 2015



NORTH

FOOTING & FOUNDATION PLAN - 6 PLACE HANGAR

SCALE: 3/32" = 1'-0"

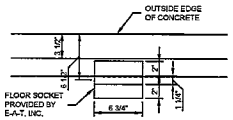
FOOTING SCHEDULE

MARK	SIZE	REINFORCING	CAGE	HAIRPIN
A	3'-0" x 3'-0" x 3'-6"	4 - #5 BARS EACH WAY	4 - #5 BARS W/#3 TIES	#4 BAR 20'-0" LONG
B	3'-0" x 2'-0" x 3'-6"	2 - #4 BARS EACH WAY	4 - #4 BARS W/#3 TIES	N/A

CONCRETE NOTES

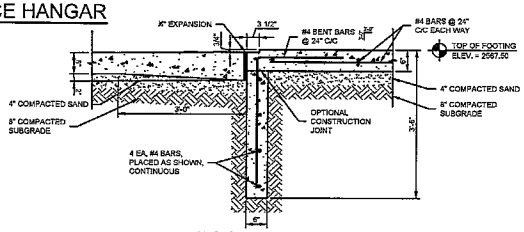
1. ALL CONCRETE FOR THE HANGAR SHALL BE 6" THICK, P-610 (4ffc-3500) CONCRETE WITH #4 BARS @ 24" C/C EACH WAY.
2. ALL CONCRETE FOR THE FOOTINGS SHALL BE P-610 (4ffc-3500) REINFORCED AS SHOWN.
3. ALL CONCRETE FOR THE EXTERIOR APPROACH PADS & TAXIWAYS SHALL BE P-501.
4. ALL INTERIOR FLOORS SHALL HAVE A POWER TROWEL FINISH. TOP OF FOOTINGS SHALL BE HAND TROWEL. ALL EXTERIOR APPROACHES SHALL HAVE A BROOM FINISH.
5. ALL CONCRETE TO HAVE 4" COMPACTED SAND CUSHION.
6. THE TOP 8" OF ALL SUBGRADE UNDER CONCRETE SHALL BE COMPACTED TO 95% OF STANDARD PROCTOR DENSITY AT ±2% FROM OPTIMUM MOISTURE.
7. JOINT SEALER SHALL BE A P-605 PER THE SPECIFICATIONS.
8. CONTRACTOR TO LAYOUT AND CUT CONTROL JOINTS AS SHOWN.
9. MINIMUM COVER OVER REINFORCEMENT SHALL BE 3" AGAINST EARTH AND 2" WHERE EXPOSED TO AIR.
10. MINIMUM LAP SPLICE SHALL BE AS FOLLOWS:
    #4 BARS = 18"
    #5 BARS = 24"
    #6 BARS = 30"
11. REBAR SHALL BE SET ON CONCRETE BLOCKS OR CHAIRS. DO NOT SET ANY REBAR IN THE GROUND.

NOTE: THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER THE BUILDING REACTIONS FOR THE ACTUAL BUILDING BID. THE ENGINEER SHALL REVISE THE FOOTING AND FOUNDATION PLAN ACCORDINGLY. A CHANGE ORDER SHALL BE ISSUED FOR THE MATERIAL COST INCREASE OR DECREASE (REINFORCING STEEL AND CONCRETE) BASED ON THE FINAL PLAN. NO ADJUSTMENT SHALL BE MADE FOR LABOR OR FOOTING EXCAVATION.



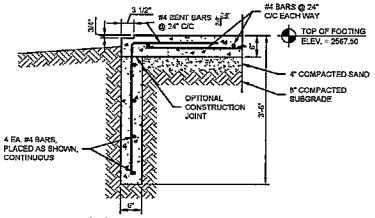
FLOOR SOCKET DETAIL

SCALE: 1-1/2" = 1'-0"



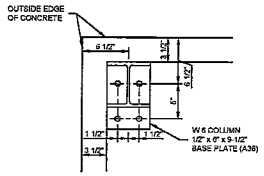
FS-1 FOOTING SECTION

SCALE: 3/4" = 1'-0"



FS-2 FOOTING SECTION

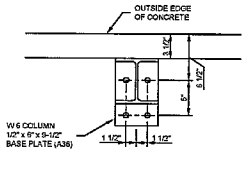
SCALE: 3/4" = 1'-0"



ANCHOR BOLT DETAIL

SCALE: 1-1/2" = 1'-0"

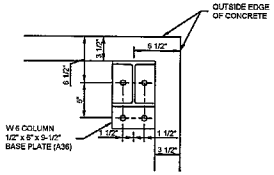
A-1



ANCHOR BOLT DETAIL

SCALE: 1-1/2" = 1'-0"

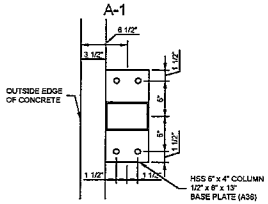
A-2,3,6,7,10,11



ANCHOR BOLT DETAIL

SCALE: 1-1/2" = 1'-0"

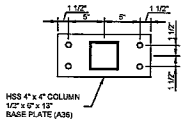
A-14



ANCHOR BOLT DETAIL

SCALE: 1-1/2" = 1'-0"

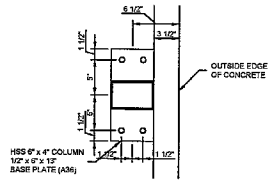
B-1



ANCHOR BOLT DETAIL

SCALE: 1-1/2" = 1'-0"

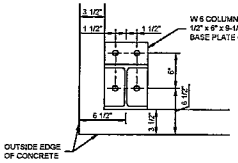
B-2 THRU B-13



ANCHOR BOLT DETAIL

SCALE: 1-1/2" = 1'-0"

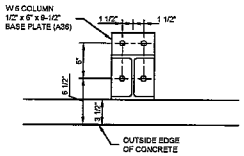
B-14



ANCHOR BOLT DETAIL

SCALE: 1-1/2" = 1'-0"

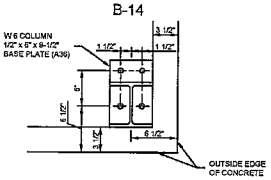
C-1



ANCHOR BOLT DETAIL

SCALE: 1-1/2" = 1'-0"

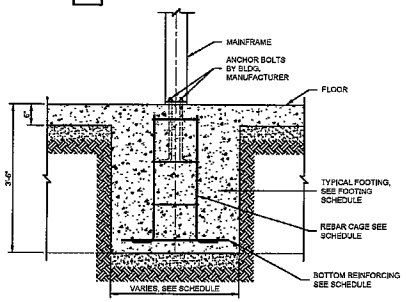
C-4,5,8,9,12,13



ANCHOR BOLT DETAIL

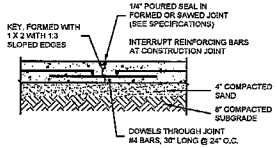
SCALE: 1-1/2" = 1'-0"

C-14



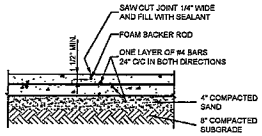
TYPICAL MAINFRAME/COLUMN FOOTING DETAIL

SCALE: 3/4" = 1'-0"



CONSTRUCTION JOINT

NOT TO SCALE



FLOOR CONTROL JOINT

NOT TO SCALE

NEW HANGAR PROJECT
BEN NELSON REGIONAL AIRPORT
McCOOK, NEBRASKA

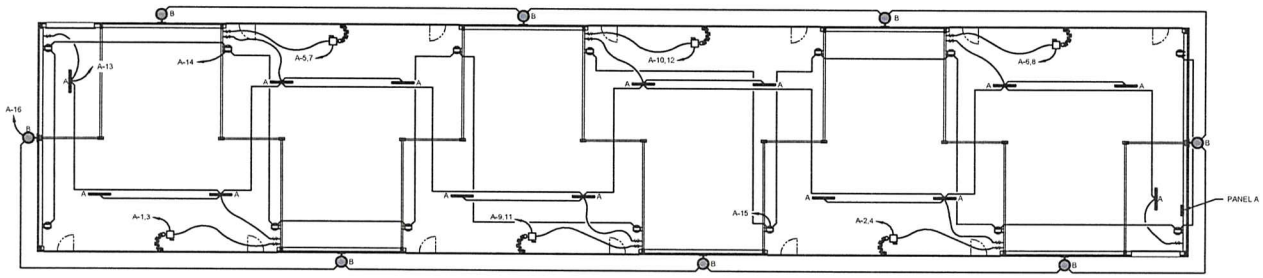
WDA W DESIGN ASSOCIATES
Consulting Engineers and Architects
McCook, Nebraska 69001
Hastings, Nebraska 68901

Seal of Contributing Professional

DWG:811-145-010 HANGAR
DRAWN: AMP
CHECKED:
REVISIONS

S-1

DATE: FEB. 2015



NOTE: ALL OUTLETS SHALL BE G.F.I. PROTECTED

NORTH

ELECTRICAL PLAN - 6 PLACE HANGAR

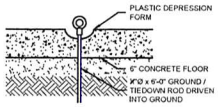
SCALE: 3/32" = 1'-0"

ELECTRICAL FIXTURE SCHEDULE

A SHALL BE A COMMERCIAL LED STRIP LIGHT 2 7/8 " x 48", LED LAMP TYPE, 5600 LED LUMENS OUTPUT, 120 VOLTAGE, CCT 3500K, NON-DIMMING DRIVER, AND ONE DRIVER. PROVIDE WITH 36" CHAIN HANGER.
WARRANTY:
FIVE YEAR WARRANTY.

B SHALL BE A WALL MOUNTED LUMINARE WITH REFRACTIVE LENS, 4,553 DELIVERED LUMENS, 50 WATTS, LED KELVIN COLOR: 5000 K, HOUSING COLOR: CARBON BRONZE, AND PROVIDE WITH PHOTOCONTROL.
CONSTRUCTION: LOW-PROFILE LED DESIGN.
WARRANTY
FIVE YEAR WARRANTY.

NOTE: INSTALL ONE GROUND ROD PER HANGAR. SEE "S" SHEETS FOR LOCATION.



AIRCRAFT GROUNDING ROD DETAIL

NO SCALE

PANEL A

NEW IN STORAGE ROOM

SERVICE: 120/230 V. 1P. 3W
PANEL: 100 AMP MAIN BREAKER
TCL: 13,142

CIR. NO.	LOAD V A	LTS	REC	LOAD DESCRIPTION	AMP SIZE	PH	AMP SIZE	LOAD DESCRIPTION	REC	LTS	LOAD V A	CIR. NO.
1	1587			Bi-Fold Door Operator	15	1	15	Bi-Fold Door Operator			1587	2
3						2						4
5	1587			Bi-Fold Door Operator	15	1	15	Bi-Fold Door Operator			1587	6
7						2						8
9	1587			Bi-Fold Door Operator	15	1	15	Bi-Fold Door Operator			1587	10
11						2						12
13	700	14		Hangar Lights - Inside	20	1	20	Hangar Outlets	7		1260	14
15	1260		7	Hangar Outlets	20	2	20	Hangar Lights - Outside		8	400	16
17						1						18
19						2						20
21						1						22
23						2						24
25						1						26
27						2						28
29						1						30
31						2						32
								TOTAL PANEL LOAD			13142	
								Amps			57	

ELECTRICAL SYMBOL LEGEND

- FLUORESCENT LIGHT FIXTURE
- INCANDESCENT LIGHT FIXTURE - BRACKET UNIT
- DUPLEX CONVENIENCE OUTLET
- CONNECT TO EQUIPMENT
- 1,3 — INDICATES HOME RUN TO CIRCUITS 1 AND 3
- SINGLE POLE SWITCH
- DISCONNECT SWITCH, SIZED TO LOAD

I, Greg A. Wolford, am the Construction Professional on the New Hangar project.

This bar is one inch long on original drawing.
If not one inch on this sheet, adjust scales accordingly.

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NEW HANGAR PROJECT

BEN NELSON REGIONAL AIRPORT

McCOOK, NEBRASKA

WDA W DESIGN ASSOCIATES
Consulting Engineers and Architects
McCook, Nebraska 69001
Hastings, Nebraska 68901

Seal of Construction Professional

DWG: B11-14E-01
DRAWN: T.A.S.
CHECKED
REVISIONS
REV 1 - (1-6-16)

E-1

DATE: FEB. 2015