Request for Legislative Action

Ord. #5743
Sponsor: DaRon McGee
Date: May 9, 2023

Completed by County Counselor's Office			
Action Requested:	Ordinance	Res.Ord No.:	5734
Sponsor(s):	DaRon McGee	Legislature Meeting Date:	5/9/2023

Introduction

Action Items: ['Authorize', 'Appropriate']

Project/Title:

Authorizing the County Executive to amend an existing agreement with JE Dunn + Axiom for a design-build contract for a new Jackson County Detention Center to establish a guaranteed maximum price (GMP) for the project at $301,162,067; authorizing the County Executive a second amendment to the existing agreement with JE Dunn + Axiom for Component #1 in the amount of $31,506,535; authorizing a third amendment to the same agreement for Component #2a in the amount of $67,511,444; establishing Fund No 024 New Detention Center Fund in the financial records of the County; estimating $77,017,979 in bond proceeds for the project; appropriating $22 million from the Undesignated Fund Balance of the General Fund; and appropriating $99,017,979 in the New Detention Center Fund for the first two components of the project; and declares the intent of Jackson County to reimburse itself from bond proceeds.

Request Summary

This ordinance requests the Legislature approve a contract amendment that establishes the guaranteed maximum price of $301,162,067 for the design and construction by JE Dunn + Axiom of a new 1000 bed Jackson County Detention Center to be located on county-owned land at 7000 E US 40 Highway in Kansas City, Missouri. This ordinance further authorizes the County Executive to sign two additional amendments to begin construction of various components of the project. Component #1 details work that pertains to continuation of design documents, site demolition, site development and earthwork that is directly tied to the GMP submission. Component Package #1 totals $31,506,535
With this Component Package, the project will move forward with early earthwork and some site infrastructure items to allow the building pad to become ready for additional scopes of work.

Component Package #2a details work that pertains to engineering, detailing, mockups, and early procurement of long lead material that are directly tied to the GMP submission. Component Package 2A totals $67,511,444 and will allow the project to move forward with additional design and trade partner on-boarding to help mitigate cost escalation moving forward.

This ordinance also appropriates $22 million in available General Fund reserves and anticipates the sale of $77,017,979 in bond proceeds to provide sufficient funds to fully encumber Component #1 and Component #2a that have been authorized for sale by Ordinance #5732. This ordinance also establishes Fund No. 024 Jackson County Detention Center Poject Fund in the financial records of the County, and declares the intent of the County to reimburse itself from future bond proceeds that will be issued pursuant to Ordinance #5732.

Request for Legislative Action

Contact Information			
Department:	County Executive Office	**Submitted Date:**	5/3/2023
Name:	Troy Schulte	**Email:**	TSchulte@jacksongov.org
Title:	County Administrator	**Phone:**	816-881-1079

Budget Information			
Amount authorized by this legislation this fiscal year:			$99,017,979
Amount previously authorized this fiscal year:			$ 0
Total amount authorized after this legislative action:			$99,017,979
Is it transferring fund?			No
Single Source Funding:			
Fund:	Department:	Line Item Account:	Amount:
001 (General Fund)	9999 (*)	32810 (Undesignated Fund Balance)	$22,000,000
001 (General Fund)	9999 (*)	56105 (Operating Transfers Out)	$22,000,000
024 (Justice With Dignity Capital Project Fund)	9999 (*)	47070 (Inter Fund Transfers)	$22,000,000
024 (Justice With Dignity Capital Project Fund)	9999 (*)	48010 (Sale of Bond Proceeds)	$77,017,979
024 (Justice With Dignity Capital Project Fund)	9999 (*)	32810 (Undesignated Fund Balance)	$99,017,979
024 (Justice With Dignity Capital Project Fund)	1214 (Fac. Mgmt. New Detention Center)	58020 (Buildings & Improvements)	$99,017,979

Prior Legislation	
Prior Ordinances	
Ordinance:	Ordinance date:
5732	April 17, 2023
5621	April 25, 2022
Prior Resolution	
Resolution:	Resolution date:

Purchasing

Request for Legislative Action

Does this RLA include the purchase or lease of supplies, materials, equipment or services?	Yes
Chapter 10 Justification:	Formal Bid
Core 4 Tax Clearance Completed:	Yes
Certificate of Foreign Corporation Received:	Yes
Have all required attachments been included in this RLA?	Yes

Compliance		
Certificate of Compliance		
In Compliance		
Minority, Women and Veteran Owned Business Program		
Reviewed for Goals:		
MBE:	17.50%	Vendor committed goal
WBE:	11.00%	Vendor committed goal
VBE:	.50%	Vendor committed goal
Prevailing Wage		
Construction projects over $75000	['Separate bid']	

Fiscal Information

- Funds sufficient for this appropriation and/or transfer are available from the source indicated on the budget information tab.

Request for Legislative Action

History
Submitted by County Executive Office requestor: Troy Schulte on 5/3/2023. Comments: Approved by Department Approver Sylvya Stevenson on 5/3/2023 2:03:01 PM. Comments: Approved by Purchasing Office Approver Barbara J. Casamento on 5/3/2023 2:08:12 PM. Comments: Approved by Compliance Office Approver Jaime Guillen on 5/3/2023 3:16:06 PM. Comments: Approved by Budget Office Approver Mark Lang on 5/3/2023 4:27:57 PM. Comments: Approved by Executive Office Approver Sylvya Stevenson on 5/3/2023 8:50:38 PM. Comments: Approved by Counselor's Office Approver Theresa E. Bullington on 5/4/2023 8:31:32 AM. Comments:

Supplemental Appropriation Request
Jackson County, Missouri

Funds sufficient for this appropriation are available from the source indicated below.

Date: May 3, 2023

Ord # 5743

eRLA ID #: 905

Org Code	Description	Object Code	Description	From	To
001	**General Fund**				
9999	-	32810	Undesignated Fund Balance	$ 22,000,000	$ -
9100	Operating Transfers	56105	Operating Transfers Out	-	22,000,000
				$ 22,000,000	$ 22,000,000
024	**New Detention Center C/P Fund**				
9999	-	47070	Inter Fund Transfers	$ 22,000,000	$ -
9999	-	48010	Bond Proceeds	77,017,979	-
9999	-	32810	Undesignated Fund Balance	-	99,017,979
				$ 99,017,979	$ 99,017,979
9999	-	32810	Undesignated Fund Balance	$ 99,017,979	
1214	Fac Mgmt - New Detention Center	58020	Buildings & Improvements	-	99,017,979
				$ 99,017,979	$ 99,017,979

APPROVED
By Mark Lang at 4:27 pm, May 03, 2023

Budget Office

JE DUNN • AXIOM • DLR GROUP
DESIGN-BUILD TEAM

May 14th, 2023
Mr. Troy Schulte
Jackson County, Missouri
Kansas City, MO 64106

Re: Jackson County Detention Center
Component Package 1

Dear Troy,

Having submitted our Guaranteed Maximum Price (GMP) under separate cover on March 14th, 2023, we are submitting the following for consideration of Component Package 1. This Component Package 1 details work that pertains to continuation of design documents, site demolition, site development and earthwork that is directly tied to our GMP submission. Component Package 1 totals to **$31,506,535 (Thirty-One Million, Five Hundred Six Thousand, Five Hundred Thirty-Five Dollars).**

With this Component Package the project will move forward with early earthwork and some site infrastructure items to allow the building pad to become ready for additional scopes of work. This Component Package does not include a complete foundation package; however, this will be presented in a forthcoming Component Package.

Upon receiving written approval of this Component Package JE Dunn + Axiom will forward the formal contract amendment for execution, obtain insurance, procure payment and performance bonds, begin issuing subcontracts to our trade partners, and begin onsite mobilization.

Sincerely,

Jeffery Jenkins

Jeff Jenkins

Project Director, JE Dunn + Axiom

Cc: Vance McMillan, JE Dunn + Axiom
Daniel Felder, JE Dunn + Axiom
Brian Dietz, JE Dunn + Axiom
Paul Neidlein, JE Dunn + Axiom
Rob Cleavinger, JE Dunn + Axiom
Tom Bartelli, JE Dunn + Axiom
Nick Tuggle, JE Dunn + Axiom
Martin Berglund, DLR Group
Dan Wehmueller, JCDC Partners
Dan Musser, JCDC Partners
Rick Davidson, JCDC Partners
Cameron Glass, JCDC Partners
Babette Macy, JCDC Partners

JE DUNN • AXIOM • DLR GROUP
DESIGN-BUILD TEAM

Jackson County, Missouri

_____ _____

County Executive (*Signature*) **County Counselor** (*Signature*)

_____ _____

(*Printed Name*) (*Printed Name*)

_____

Clerk of the County Legislature (*Signature*)

_____

(*Printed Name*)

Component Package 1 Funding	Escalation Mitigation Strategy	Trade Partner ROM
Kissick Construction	Lump Sum (See attached for additional narrative)	$ 10,118,488
Design Contingency		$ -
Construction Contingency		$ -
Escalation Allowance		$ -
Owner Contingency		$ -
Design		$ 11,081,596
GC's		$ 1,552,419
Permits, Insurance		$ 8,090,899
Fee		$ 663,133
Total		**$ 31,506,535**

***Note - Component Package 1 does not include a complete foundation package. This package will be brought forward and introduced in a future Component Package 2B.**

***Note - Some numbers above are not all-inclusive of the full GMP pricing included in Exhibit 1 of the GMP.**

Component Package 1 Funding	Escalation Mitigation Strategy
Kissick Construction	Kissick Construction (Lump-Sum) is responsible for the Earthwork Scope of Work and their Component Package 1 funding includes the entirety of their scope of work noted below: Erosion Control: **$424,927** Site Demolition: **$1,025,000** Wick Drain Installation: **$4,070,561** Earthwork (Early footings/foundations prep included): **$4,598,000**

Component Package 2A Funding Reference Only Dollars not include in CP1	Escalation Mitigation Strategy
Enterprise Precast	Enterprise Precast (Lump-Sum) contract amount of **$17,674,402** includes the furnishing the architectural and structural precast, hollow-core and solid core roof members for the project. Scope of work includes project management, shop drawings/engineering, BIM coordination, materials (i.e. reinforcing steel, concrete, and conduit). This amount has been included in the funding of Component Package 2A.
Flynn Midwest	Flynn Midwest (Lump-Sum) is responsible for the roofing/sheet metal scope of work. Component package 2A funding includes the cost of **$5,955,715** in materials that would be stored in an insured warehouse in Kansas City. This is to help mitigate approx. $1M in escalation. Materials to be purchased are singly ply TPO membrance, fasteners, accessories, insulation, etc. Excludes labor that will be added in a future component package.
Midland Marble and Granite	Midland Marble and Granite (Lump-Sum) is responsible for the tile scope of work in the amount of **$357,198**. Their scope of work is included with Component Package 2A - Funding to capitalize on their Veteran Owned Business status, which greatly helps achieve the teams goals for VBE participation.
CML Security (DEC)	CML Security's (Lump-Sum) Component Package 2A - Funding amount is appropriated for billings after official award, CML would bill from Notice-to-Proceed until November for preconstruction services, project management, engineering services, and submittal development. CML would prepare to bill for **$2.7MM** on Dec 2023 for detention hollow metal frames and doors as a result of preconstruction efforts that would be needed by Q1 of 2024.
Cornerstone/Axiom Detention (Modular Cells)	The Cornerstone/Axiom Detention, JV (Lump-Sum) is responsible for the pre-fabricated cell module scope of work. Component Package 2A Funding includes the following definable features of work: Shop Drawings/Engineering: **$730,000** Cornerstone General Conditions (Project management/temporary offices): **$565,000** Pre-Fab Site Setup/Equipment Mobilization: **$1,200,000** - Includes making pre-fab site ready for cell module production (i.e. working slabs) Onsite Mockup: **$300,000** - For product quality review/approval Mold fabrication, setup and begin cell module production: **$4,860,000** Interior Fitout/Finish Materials Procurement: **$1,870,000** - Materials include, detention hollow metal doors/frames, detention furniture, security fixtures (lights and plumbing), epoxy paint, etc.
American Fire Protection	American Fire Protection (GMP) is responsible for the Fire Protection scope of work and to lock in pricing and manage escalation American Fire Proteciton plans to procure/issue PO's for the following by the end of 2023 witin the Component Package 2A funding: 14 Wet Systems 1 pre-action system 2 clean agent 3100' of Feed Main piping 500' of Piping into the blocks 6850' of main piping within the cell blocks 2672 heads within the cell/day-use areas. 1851 heads in Hallways, Mechanical, BOH, Support, Court, facility areas 2500' of main piping in Hallways, Mechanical, BOH, Support, Court, facility areas
US Engineering	US Engineering (GMP) is responsible for the Mechanical (HVAC/Plumbing) Scope of Work. Their component package 2A funding includes the following definable features of work: USE General Conditions (Project management/temporary offices): **$548,559** Shop Drawings/Detailing/UG and Precast Module BIM Coordination: **$1,509,029** Fee: **$538,888**, Permit: **$182,000** UG Piping: **$3,501,571** Drains and Piping: **$425,654** Precast Material (Security Bars):**$183,887** Mock-up for Precast Module/Seismic Planning: **$71,162** Temperature Controls (Subcontractor detailing/shop drawings): **$100,000** Long Lead Central Plant Equipment (Chillers, Boilers, Pumps): **$1,225,000** Plumbing Equipment: **$615,000** Security Plumbing Fixtures (non-modular locations): **$1,200,000** Long Lead Smoke Exhaust Fans and Louvers: **$1,900,000**
Mark One Electric	Mark One Electric (GMP) is responsible for the Electrical Scope of Work and their Component Package 2A funding includes **$683,604** of labor per month for 3 months which includes detailing/shop drawings, UG coordination, BIM Coordination/modeling and also procurement of long lead equipment noted below. Early Procurement Quote: **$7,328,626** - Equipment slated for early procurement includes: Switchgear, paralleling gear, lights, lighting controls, emergency generators, UPS, Fire Alarm, wire/conduit, etc.

***Note - some numbers above are not all-inclusive of the full GMP pricing included in Exhibit 1 of the GMP.**

JE DUNN • AXIOM • DLR GROUP
DESIGN-BUILD TEAM

May 14th, 2023
Mr. Troy Schulte
Jackson County, Missouri
Kansas City, MO 64106

Re: Jackson County Detention Center
Component Package 2A

Dear Troy,

Having submitted our Guaranteed Maximum Price (GMP) under separate cover on March 14th, 2023, we are submitting the following for consideration of Component Package 2A. This Component Package 2A details work that pertains to engineering, detailing, mockups, and early procurement of long lead material that are directly tied to our GMP submission. Component Package 2A totals to **$67,511,444 (Sixty-Seven Million, Five Hundred Eleven Thousand, Four Hundred Forty-Four Dollars).**

With this Component Package the project will move forward with additional design and trade partner on boarding to help mitigate escalation moving forward. Subsequently the project schedule and budget are based off Component Package 1 and 2A being approved simultaneous. It this does not occur there will be a schedule and cost impact incurred by the project.

Upon receiving written approval of this Component Package JE Dunn + Axiom will forward the formal contract amendment for execution, obtain insurance, procure payment and performance bonds, begin issuing subcontracts to our trade partners, and begin onsite mobilization.

Sincerely,

Jeffery Jenkins

Jeff Jenkins

Project Director, JE Dunn + Axiom

Cc: Vance McMillan, JE Dunn + Axiom
Daniel Felder, JE Dunn + Axiom
Brian Dietz, JE Dunn + Axiom
Paul Neidlein, JE Dunn + Axiom
Rob Cleavinger, JE Dunn + Axiom
Tom Bartelli, JE Dunn + Axiom
Nick Tuggle, JE Dunn + Axiom
Martin Berglund, DLR Group
Dan Wehmueller, JCDC Partners
Dan Musser, JCDC Partners
Rick Davidson, JCDC Partners
Cameron Glass, JCDC Partners
Babette Macy, JCDC Partners

JE DUNN • AXIOM • DLR GROUP
DESIGN-BUILD TEAM

Jackson County, Missouri

_____ _____

County Executive (*Signature*) **County Counselor** (*Signature*)

_____ _____

(*Printed Name*) (*Printed Name*)

_____

Clerk of the County Legislature (*Signature*)

_____

(*Printed Name*)

Component Package 2A Funding	Escalation Mitigation Strategy	Trade Partner ROM
Enterprise Precast	Lump Sum (See attached for additional narrative)	$ 17,674,402
Flynn Midwest	Lump Sum (See attached for additional narrative)	$ 5,955,715
Midland Marble and Granite	Lump Sum (See attached for additional narrative)	$ 357,198
CML Security (DEC)	Lump Sum (See attached for additional narrative)	$ 2,860,000
Cornerstone/Axiom Detention (Modular Cells)	Lump Sum (See attached for additional narrative)	$ 9,525,000
American Fire Protection	GMP (See attached for additional narrative)	$ 3,097,297
US Engineering	GMP (See attached for additional narrative)	$ 11,514,962
Mark One Electric	GMP (See attached for additional narrative)	$ 9,379,438
Cornerstone Detention (SEC)	Lump Sum (See attached for additional narrative)	$ 2,400,000
Kissick Construction	Lump Sum (See attached for additional narrative)	$ -
Design Contingency		$ -
Construction Contingency		$ -
Escalation Allowance		$ -
Owner Contingency		$ -
Design		$ -
GC's		$ 3,326,486
Permits, Insurance		$ -
Fee		$ 1,420,946
Total		**$ 67,511,444**

***Note - Some numbers above are not all-inclusive of the full GMP pricing included in Exhibit 1 of the GMP.**

***Note - The balance of Component Package 2 shell and core package of the project will be delivered as Component Package 2C.**

Component Package 1 Funding Reference Only Dollars not include in CP2A	Escalation Mitigation Strategy
Kissick Construction	Kissick Construction (Lump-Sum) is responsible for the Earthwork Scope of Work and their Component Package 1 funding includes the entirety of their scope of work noted below: Erosion Control: **$424,927** Site Demolition: **$1,025,000** Wick Drain Installation: **$4,070,561** Earthwork (Early footings/foundations prep included): **$4,598,000**

Component Package 2A Funding	Escalation Mitigation Strategy
Enterprise Precast	Enterprise Precast (Lump-Sum) contract amount of **$17,674,402** includes the furnishing the architectural and structural precast, hollow-core and solid core roof members for the project. Scope of work includes project management, shop drawings/engineering, BIM coordination, materials (i.e. reinforcing steel, concrete, and conduit). This amount has been included in the funding of Component Package 2A.
Flynn Midwest	Flynn Midwest (Lump-Sum) is responsible for the roofing/sheet metal scope of work. Component package 2A funding includes the cost of **$5,955,715** in materials that would be stored in an insured warehouse in Kansas City. This is to help mitigate approx. $1M in escalation. Materials to be purchased are singly ply TPO membrance, fasteners, accessories, insulation, etc. Excludes labor that will be added in a future component package.
Midland Marble and Granite	Midland Marble and Granite (Lump-Sum) is responsible for the tile scope of work in the amount of **$357,198**. Their scope of work is included with Component Package 2A - Funding to capitalize on their Veteran Owned Business status, which greatly helps achieve the teams goals for VBE participation.
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US Engineering	US Engineering (GMP) is responsible for the Mechanical (HVAC/Plumbing) Scope of Work. Their component package 2A funding includes the following definable features of work: USE General Conditions (Project management/temporary offices): **$548,559** Shop Drawings/Detailing/UG and Precast Module BIM Coordination: **$1,509,029** Fee: **$538,888**, Permit: **$182,000** UG Piping: **$3,501,571** Drains and Piping: **$425,654** Precast Material (Security Bars):**$183,887** Mock-up for Precast Module/Seismic Planning: **$71,162** Temperature Controls (Subcontractor detailing/shop drawings): **$100,000** Long Lead Central Plant Equipment (Chillers, Boilers, Pumps): **$1,225,000** Plumbing Equipment: **$615,000** Security Plumbing Fixtures (non-modular locations): **$1,200,000** Long Lead Smoke Exhaust Fans and Louvers: **$1,900,000**
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***Note - some numbers above are not all-inclusive of the full GMP pricing included in Exhibit 1 of the GMP.**

JE DUNN • AXIOM • DLR GROUP
DESIGN-BUILD TEAM

March 14th, 2023

Mr. Troy Schulte
Jackson County, Missouri
415 E 12th Street
Kansas City, MO 64106

Re: Jackson County Detention Center
Guaranteed Maximum Price (GMP)

Dear Troy,

Please see the attached updated GMP proposal, items of note that have been added/changed are Exhibit 3 Item 9 converting housing units into dorms savings amount and Exhibit 7 GMP Clarification items 12-15.

We are pleased to tell Jackson County we have completed Interval 1 - Preconstruction and Interval 2 - Component Package 1 that resulted in Conceptual and Schematic Design documents. This has allowed us to tap the market and subsequently secure approximately 60% of the project GMP. In addition, due to the hard work of Jackson County, JCDC Partners and our team we have completed an exhaustive Value Engineering process that has concluded with a GMP totaling **$301,162,067 (Three Hundred and One Million, One Hundred Sixty-Two Thousand, Sixty-Seven Dollars)** that includes 1,000 beds and the recommended changes included (Option #3). As communicated previously and due to unprecedented times, JE Dunn + Axiom believes it to be necessary to combine portions of the three (3) component packages together and release trade partners early to combat unrealized escalation as defined in section 3.1.6.3 of the Design-Build Agreement. That breakout is included in this GMP deliverable along with other contractual GMP deliverables.

The following supporting documents have been reviewed by JCDC, the Owner's Representative, and are attached for your approval.

- Exhibit 1 - (3.2.2.4.3.2) GMP for Component Packages 1 (12 pages)
- Exhibit 2 – List of Drawings/Contract Documents (8 pages)
- Exhibit 3 – Approved Value Engineering Path (1 page)
- Exhibit 4 - (3.2.2.4.3.1) Master Schedule (5 pages)
- Exhibit 5 – Sequence Map (1 page)
- Exhibit 6 – Logistics Plan (1 page)
- Exhibit 7 - GMP Clarifications (10 pages)
- Exhibit 8 - (3.2.2.4) Includes Deviations from Design Criteria Package – Criteria Modification Log (11 pages)
- Exhibit 9 - (3.2.2.2.4.4) Workforce Plan (1 page)
- Exhibit 10 - (3.2.2.4.6) Contractor Utilization Plan/MWBE Strategy (7 pages)
- Exhibit 11 – JCDC Systems Matrix (5 pages)
- Exhibit 12 - HVAC Lifecycle Analysis (26 pages)

In order to hold trade partner (subcontractor) pricing reflected in this GMP proposal, Jackson County approval is needed no later than April 17th, 2023.

Upon receiving written approval of this GMP proposal JE Dunn + Axiom will forward the formal contract amendment for execution, obtaining insurance, procure payment and performance bonds, begin issuing subcontracts to our trade partners, and begin onsite mobilization.

Sincerely,

Jeffery Jenkin

Jeff Jenkins
Project Director, JE Dunn + Axiom

Cc: Vance McMillan, JE Dunn + Axiom
Daniel Felder, JE Dunn + Axiom
Brian Dietz, JE Dunn + Axiom
Paul Neidlein, JE Dunn + Axiom
Rob Cleavinger, JE Dunn + Axiom
Tom Bartelli, JE Dunn + Axiom
Nick Tuggle, JE Dunn + Axiom
Martin Berglund, DLR Group
Dan Wehmueller, JCDC Partners
Dan Musser, JCDC Partners
Rick Davidson, JCDC Partners
Cameron Glass, JCDC Partners
Babette Macy, JCDC Partners

Jackson County, Missouri

_____
County Executive (*Signature*)

_____
(*Printed Name*)

_____
County Counselor (*Signature*)

_____
(*Printed Name*)

_____
Clerk of the County Legislature (*Signature*)

_____
(*Printed Name*)

Jackson County Detention Center
Kansas City, Missouri
March 3, 2023
SD 12

Construction Cost Summary
Option #3 Incorporated (Total of 1,000 Beds)

Description	Quantity		Cost	Unit Cost
Design	398,619	NSF	19,540,695	49.02
Mass Excavation-Early Site Fill	398,619	NSF	11,253,283	28.23
Sitework	41	Acres +/-	8,480,988	207,528
Jail Building	398,619	SF	251,829,673	631.76
LEED Premium Allowance	398,619	NSF	Excluded	0.00
FF&E Allowance	398,619	NSF	Excluded	0.00
Construction Subtotal	398,619	SF	291,104,639	$730.28
Design Contingency			2,911,046	7.30
Construction Contingency			3,517,372	8.82
Escalation Allowance			2,487,005	6.24
Owner Contingency			1,142,005	2.86
Total Construction Cost	**398,619**	**SF**	**$301,162,067**	**$755.51**

Jackson County Detention Center
Kansas City, Missouri
March 3, 2023
SD 12

Design
398,619 SF

Item	Description	Unit	Quantity	Unit Price	Cost	Cost/SF	Note
01 00 00	General Conditions				1,016,116		
01 15 00	Design	LS	1	17,570,187	17,570,187		
	Subtotal				18,586,303	46.63	
	Permits and Insurance				543,110		
	Fee				411,282		
	Total				**$19,540,695**	**$49.02**	

Jackson County Detention Center
Kansas City, Missouri
March 3, 2023
SD 12

Mass Excavation-Early Site Fill
398,619 SF

Item	Description	Unit	TP	Esc	PH	Quantity	Unit Price	Cost	Cost/SF	Note
01 00 00	General Conditions							585,171		
31 20 00	Subc-Earthwork/Wick Drains	LS	V	E	mex	1	10,118,488	10,118,488		
	Subtotal							10,703,659	26.85	
	Permits and Insurance							312,771		
	Fee							236,853		
	Total							**$11,253,283**	**$28.23**	

Jackson County Detention Center
Kansas City, Missouri
March 3, 2023
SD 12

Sitework

Item	Description	Cost
1	General Conditions	441,011
2	Excavation and Grading	112,340
3	Asphalt Paving	1,690,448
4	Concrete Work	2,113,094
5	Site Structures	0
6	Fencing	452,000
7	Specialty Paving	47,178
8	Signage and Striping	52,427
9	Site Specialties	18,492
10	Site Utilities	2,432,041
11	Storm Drainage Systems	0
12	Fire Protection	0
13	Landscaping and Irrigation	707,734
14	Electrical	0
	Subtotal	8,066,766
	Permits and Insurance	235,719
	Fee	178,503
	Total	**$8,480,988**

Item	Description	Unit	TP	Esc	Ph	Quantity	Price	Amount	QuantF	Note
2	**Excavation and Grading**									
31 20 00	Temporary Erosion Control	AC			fdn	40.87	1,644	67,183		
01 10 00	Temporary Roads and Parking	SF			fdn	27,023	0.72	19,534	6" Thick	
01 10 00	6' Temp Fencing - Sand Bags	LF			fdn	2,400	10.68	25,624	2 EA	Gates
	Total							112,340		
3	**Asphalt Paving**									
32 13 00	Subc Asphalt	LS	B		fin	1	1,690,448	1,690,448		
	Total							1,690,448		
4	**Concrete Work**									
32 13 00	24"Ø CameraPole Bases	EA			fin	6	1,017	6,101		
32 13 00	Subc- Site Concrete	LS	T	E	fin	1	1,962,345	1,962,345		
32 13 00	Misc Site Concrete	LS			fin	1	3,125	3,125		
01 10 00	Site Layout and Misc Cleanup	DA			fin	92	1,543	141,524		
	Total							2,113,094		
5	**Site Structures**									
32 32 00	Subc-Concrete Retaining Walls	SF	T	E	fin	2,681	0.00	0		
	Total							0		
6	**Fencing**									
32 31 00	Subc Fence	LS	B		fin	1	452,000	452,000	Use 10% annually	
	Total							452,000		
7	**Specialty Paving**									
32 14 00	Limestone Pavers, 1"	SF			fin	2,200	21.44	47,178		
	Total							47,178		
8	**Signage and Striping**									
10 10 00	Monument Sign	LS			fin	1	40,000	40,000		
10 14 00	Misc Signage	EA			fin	44	280.22	12,427		
	Total							52,427		
9	**Site Specialties**									
32 33 00	Site Furniture Allowance	LS			fin	1	10,000	10,000		
10 75 00	Flagpoles	EA			fin	2	4,246	8,492		
	Total							18,492		
10	**Site Utilities**									
33 00 00	Auger Monster-Pit	LS			fdn	2	75,000	150,000		
33 00 00	Subc Site Utility	LS	B	A	fdn	1	2,282,041	2,282,041		
	Total							2,432,041		
11	**Storm Drainage Systems**									
	Total							0		

Item	Description	Unit	TP	Esc	Ph	Quantity	Price	Amount	QuantF	Note
12	**Fire Protection**									
	Total							0		
13	**Landscaping and Irrigation**									
32 90 00	Synth Turf-Courtyards	LS	B		fin	1	49,650	49,650		
32 90 00	Maint. Watering	MO	B		fin	3	3,500	10,500		
32 90 00	Subc Landscape	LS	B		fin	1	647,584	647,584		
	Total							707,734		
14	**Electrical**									
	Total							0		

Jackson County Detention Center
Kansas City, Missouri
March 3, 2023
SD 12

Jail Building
398,619 SF

Item	Description	Cost	Cost/SF
1	General Conditions	13,095,143	32.85
2	Demolition	0	0.00
3	Excavation	37,387	0.09
4	Structure	49,537,179	124.27
5	Enclosure	92,500	0.23
6	Rough Carpentry	0	0.00
7	Finish Carpentry	3,684,595	9.24
8	Roofing and Sheet Metal	9,460,033	23.73
9	Moisture Protection	3,753,160	9.42
10	Doors and Hardware	2,810,283	7.05
11	Glass and Glazing	1,635,969	4.10
12	Interior Partitions	15,526,029	38.95
13	Stone and Tile	365,057	0.92
14	Ceilings and Acoustic	0	0.00
15	Flooring	2,410,235	6.05
16	Painting	2,962,801	7.43
17	Specialties	1,274,736	3.20
18	Equipment and Furnishings	21,724,040	54.50
19	Special Construction	18,889,854	47.39
20	Elevators	298,500	0.75
21	Fire Protection	3,097,297	7.77
22	Plumbing	0	0.00
23	HVAC Systems	49,372,434	123.86
24	Electrical	39,502,764	99.10
	Subtotal	239,529,995	600.90
	Permits and Insurance	6,999,298	17.56
	Fee	5,300,380	13.30
	Total	**$251,829,673**	**$631.76**

Skin/Floor Area Ratio	53%	Total Skin Cost, Contact Area	$8.19 /SF
Glass/Skin Area Ratio	4%	Skin Cost, Bldg Area	$4.34 /SF

Item	Description	Unit	TP	Esc	Ph	Quantity	Price	Amount	QuantF	Prod
2	**Demolition**									
	Total							0	**$0.00**	
3	**Excavation**									
31 23 00	Perim First Foundation Drains	LF			fdn	3,442	10.86	37,387		
	Total							37,387	**$0.09**	
4	**Structure**									
05 50 00	Interior Storefront Supports	LF			stru	118	170.41	20,109		
05 45 00	Operable Wall & Fold Part Spts	LF			stru	72	137.15	9,875		
05 50 00	Other Miscellaneous Steel	TN			stru	15	10,987	166,611	0.08 #/SF	
07 95 00	Expansion Joint Covers	LF			stru	2,837	148.62	421,640		
	Fireproofing								$0.79/SF	
07 80 00	Subc Fireproofing	LS	B	E	stru	1	318,000	318,000		
	Light Gauge Structure									
	General Items									
01 10 00	Layout and Cleanup	SF			stru	404,367	0.50	201,736		
03 32 00	Weather Conditions	%			stru	2.00%	14,249,918	284,998		
	Trade Partner Estimates									
03 31 00	Concrete Foundations Estimate	LS	T	E	fdn	1	14,249,918	14,249,918		
03 45 00	PC Matl Sub Est (Enterprise)	LS	V	E	stru	1	17,674,402	17,674,402		
03 41 00	PC Erect Sub Est	LS	T	E	stru	1	6,477,249	6,477,249		
05 12 00	Steel StructSub Estimate	LS	B		stru	1	3,917,686	3,917,686		
05 45 00	Struct Misc Steel	LS	B	E	stru	1	2,230,266	2,230,266		No
05 50 00	Misc Steel Erection and Hoistin	LS	T	E	stru	1	3,564,689	3,564,689		No
	Total							49,537,179	**$122.51**	
5	**Enclosure**									
01 10 00	Building Skin Review	LS			encl	1	10,000	10,000		
01 10 00	Enclosure Mockup w/ Punch W	SF			encl	300	275.00	82,500	20.00' Wide	15.00' Tall
	Total							92,500	**$0.23**	
6	**Rough Carpentry**									
	Total							0	**$0.00**	
7	**Finish Carpentry**									
06 20 00	6" Chair Rail, One Piece	LF			fin	221	15.00	3,315		
06 20 00	Genl Carp Trade Pkg	LS	B	A	fin	1	2,139,575	2,139,575		
06 20 00	Subc Millwork	LS	B	A	fin	1	1,541,705	1,541,705		
	Total							3,684,595	**$9.11**	
8	**Roofing and Sheet Metal**									
07 50 00	Roof Walkway Pads	LF	V	E	encl	7,000	35.00	245,000	15% Roof	Carey Tread
07 60 00	Misc Items	LS			encl	1	15,960	15,960		
07 50 00	Subc Roof (Flynn)	LS	V	E	encl	1	8,564,353	8,564,353	**$27.74**	
07 42 00	Subc Metal Panels	LS	B	E	encl	1	634,720	634,720	**$2.06**	
	Total							9,460,033	**$23.39**	
9	**Moisture Protection**									
07 84 00	Pen./Slab Edge FireStop	LS	B		encl	1	1,876,160	1,876,160		
07 90 00	Subc-Sealants	LS	B	E	encl	1	1,877,000	1,877,000		

Item	Description	Unit	TP	Esc	Ph	Quantity	Price	Amount	QuantF	Prod
	Total							3,753,160	**$9.28**	
10	**Doors and Hardware**									
08 30 00	Access Panels, 24"x24"	EA			fin	30	309.42	9,283		
08 30 00	Coiling Overhead Door	EA			fin	17	4,000	68,000	4.00' Wide	4.00' Tall
08 30 00	Elec Coiling Dr, Shutter or Grill	EA			fin	4	22,800	91,200	10.00' Wide	12.00' Tall
08 30 00	Elec Coiling Dr, Shutter or Grill	EA			fin	2	18,050	36,100	8.00' Wide	10.00' Tall
08 10 00	Subc Door Supply	LS	B	A	fin	1	2,605,700	2,605,700	Furnish Only	
	Total							2,810,283	**$6.95**	
11	**Glass and Glazing**									
08 40 10	Sheet Mirrors	SF			fin	568	15.45	8,776	3.00' Wide	4.00' Tall
08 40 10	Glaze Sidelites	SF	U		fin	3,374	25.00	84,351	14 SF	1/4" Glass
08 40 10	Prem. Fire Rating @ Glaze Sid	SF	U		fin	384	275.63	105,840	49 SF	1/4" Glass
08 40 10	Door Lites and Misc Glazing	EA	U		fin	454	195.00	88,481	75% Doors	2.50 SF
08 40 10	Prem.-Fire Rated Glass Borrov	EA	U		fin	96	180.00	17,325	1	HR Rated
01 10 00	Enclosure Curtainwall Mockup	SF			encl	60	30.00	1,800	6.00' Wide	6.00' Tall
08 40 00	Subc Glass	LS	B	A	encl	1	1,329,396	1,329,396		No
	Total							1,635,969	**$4.05**	
12	**Interior Partitions**									
01 10 00	Layout and Cleanup	SF			fin	404,367	1.30	524,512		
01 10 00	Temp Conditioning Interiors	SF			fin	404,367	0.54	216,842		
04 20 10	Interior Masonry Sub Estimate	LS	T	E	fin	1	9,867,836	9,867,836		
09 20 00	Subc Drywall	LS	B	E	fin	1	4,916,839	4,916,839		
	Total							15,526,029	**$38.40**	
13	**Stone and Tile**									
09 30 00	Break Room Tile	SF			fin	648	12.13	7,859	$4.00 Mat'l	0% Area
09 30 00	Sub Tile-MMG (V)	LS	B		fin	1	357,198	357,198	**No**	
	Total							365,057	**$0.90**	
14	**Ceilings and Acoustic**									
	Total							0	**$0.00**	
15	**Flooring**									
09 67 00	Subc Spec/Res Ctgs	LS	B		fin	1	1,199,160	1,199,160		1% Area
06 20 00	Stain Grade Wood Base	LF			fin	1,285	30.99	39,824	12" High	2% Base
09 60 00	Stainless Steel Base	LF			fin	305	20.96	6,392	4" High	0% Base
09 60 00	Floor Protection	SF			fin	18,213	4.22	76,807		15% Area
09 60 00	Subc Cpt/Vnyl-Moisture Mitigat	SF	B		fin	79,006	6.00	474,036		27% Area
09 60 00	Subc Resinous-Moisture Mitiga	LS	B	E	fin	1	61,756	61,756		22% Area
09 60 00	Subc Flooring	LS	B		fin	1	552,260	552,260		
	Total							2,410,235	**$5.96**	
16	**Painting**									
01 10 00	Punchlist	SF			fin	404,367	0.49	200,147		160 SF/LH
01 74 23	Final Cleanup	LS	B		fin	1	471,194	471,194		80 SF/LH
09 90 00	Painting Sub Estimate	LS	B	A	fin	1	2,291,460	2,291,460		
	Total							2,962,801	**$7.33**	
17	**Specialties**									
10 14 00	Signage and Directories	LS			fin	1	12,000	12,000		
10 14 00	Bldg Ext Sign	EA			fin	1	30,000	30,000		
10 14 00	Door Signs	EA			fin	433	61.28	26,536		

Item	Description	Unit	TP	Esc	Ph	Quantity	Price	Amount	QuantF	Prod
10 14 00	Plaque-County Seal	EA			fin	4	7,500	30,000		
10 21 23	Cubicle Tracks	LF			fin	600	6.00	3,600	20 LF/EA	
10 21 23	Cubicle Curtains	EA			fin	30	100.00	3,000		
10 22 00	Operable Walls	SF	B		fin	792	121.02	95,846	72 LF	11.0' High
10 22 13	Wire Mesh Partitions, 10 Gaug	SF			fin	1,455	38.30	55,726	16.0' High	2x1 Woven W
10 26 00	FRP Handrails	LF			fin	821	36.34	29,836		
10 26 00	FRP Wall Protection	SF			fin	4,105	6.86	28,148	2% Wall	4.0' High
10 26 00	36" SS Corner Guards	EA			fin	500	88.28	44,142		
10 40 00	Detention Fire Extinguishers ar	EA			fin	82	1,155	94,710		
10 51 00	Spa.# 8.125 Lockers, 18"x18"x	EA			fin	32	574.16	18,373	$450 Mat'l	Clinic Staff
10 51 00	Spa.# 1.109 Lockers, 12"x18"x	EA			fin	20	274.16	5,483	$200 Mat'l	Lobby Public L
10 51 00	Spa.# 9.102 Inmate Stor. Cubb	EA			fin	24	274.16	6,580	$200 Mat'l	Laundry/Fd Se
10 51 00	Staff Lockers w/ Bench , 18"W:	EA			fin	204	2,755	562,016	$2,125 Mat'l	
10 21 00	Tlt Partition-Phenolic	EA			fin	17	1,000	17,000	$1,000 Mat'l	
10 21 00	Inmate changing stall	EA			fin	6	1,859	11,152	$1,250 Mat'l	
10 00 00	Subc Specialties/ Toilet Access	LS			fin	1	200,588	200,588		
	Total							1,274,736	**$3.15**	

18 Equipment and Furnishings

11 13 00	Subc Dock	LS	B		fin	1	48,913	48,913		
11 21 73	Subc Laundry	EA	B		fin	1	281,722	281,722		Capacity
11 40 00	Subc Food Equipment	LS	B	E	fin	1	2,440,990	2,440,990		
11 66 00	Basketball Goals, Fixed	EA			fin	18	4,341	78,130		
11 66 00	Rope Climb	EA			fin	18	2,541	45,730		
11 66 00	Chin Up Bar	EA			fin	18	1,941	34,930		
11 66 00	Climbing Pegboard	EA			fin	18	3,141	56,530		
11 66 00	Wall Padding	SF			fin	640	15.86	10,148	20.00' Wide	8.00' Tall
11 98 00	Add Cargo Netting	SF			fin	13395	8.09	108,317		
11 00 00	Four Fold Hyd Det Drs	EA	B	E	fin	2	202,107	404,213		
11 98 00	Detention Subcontractor Estim:	LS	V	E	fin	1	18,057,550	18,057,550		
12 20 00	Manual Meccho Shades	SF	B		fin	8,267	10.71	88,569		
12 60 00	Fixed Jury Chairs	EA			fin	13	1,570	20,413	$1,000 Mat'l	
12 40 00	Entrance Mat & Frames	SF			fin	573	83.57	47,886		
	Total							21,724,040	**$53.72**	

19 Special Construction

13 42 00	Matl-Cell Modules (Cells)	EA	V	E	stru	296	52,506	15,541,883		
13 42 00	Matl-Shwr/Unfin Modules (Cells	EA	V	E	stru	41	52,506	2,152,761		
13 42 10	Install-Cell Modules (Modules)	EA	T	E	stru	273	4,378	1,195,210		
	Total							18,889,854	**$46.71**	

20 Elevators

14 20 00	Subc Elevator	LS	B	E	fin	1	298,500	298,500		
	Total							298,500	**$0.74**	

21 Fire Protection

21 00 00	Fire Prot. Estimate (Amer Fire)	LS	V	E	mep	1	3,097,297	3,097,297	**$7.66**	
	Total							3,097,297	**$7.66**	

22 Plumbing

	Total						w/HVAC	0	**$0.00**	

23 HVAC Systems

23 00 00	HVAC Estimate-USE	LS	V	E	mep	1	49,372,434	49,372,434	**$122.10**	
	Total							49,372,434	**$122.10**	

Item	Description	Unit	TP	Esc	Ph	Quantity	Price	Amount	QuantF	Prod
24	**Electrical**									
01 10 00	Temporary Power Bills	MO	V	E	encl	24	3,360	80,640		/Month
26 00 00	Electrical Estimate	LS	V	E	mep	1	25,656,074	25,656,074	$63.45	/SF
28 00 00	Sec Elect. Estimate	LS	V	E	mep	1	13,766,050	13,766,050	$34.04	/SF
	Total							39,502,764	**$97.69**	

Jackson County Detention Center
Kansas City, Missouri
March 3, 2023
SD 12
Option #3 Incorporated (Total of 1,000 Beds)
Trade Partner Bid/ Pricing Summary

Risk/TP Type	Proj. Phase	Scope of Work	BP#	Teamed Trade Partners	Bids/ Budgets	Qty of Bids	Scope Hold (In Bids)		Contingency		Trade Partner Escalation (Incl)		Escalation Allowance Applied to Non-Escalated Budgets	
		GRs/ GCs			15,137,441	NA					Included			
		Design			17,570,187	NA					Included			
B	fin	Final Cleaning	124A		471,194	2			14,884	3.2%			42,612	9.0%
T	fdn	CIP Concrete			14,249,918	1			150,044	1.1%	223,971	1.6%		
T	stru	Precast Concrete Erection			6,477,249	1			68,202	1.1%	116,170	1.8%		
V	stru	Precast Concrete Materials- Structure	3M	Enterprise Precast	17,674,402	2			186,102	1.1%	514,788	2.9%		
T	fin	CMU Masonry			9,867,836	1			103,903	1.1%	204,361	2.1%		
B	stru	Structural steel	5B		3,917,686	2			123,753	3.2%			281,306	7.2%
B	stru	Misc. Steel- Steel Structure	5B		2,230,266	1			70,450	3.2%	176,930			
T	stru	Misc. Steel- Precast Structure			3,564,689	1			37,534	1.1%	200,935	5.6%		
B	fin	General Carp-Install	6E		2,139,575	4			67,586	3.2%			193,489	9.0%
B	fin	Finished Carpentry Supply	6E		1,541,705	1			48,700	3.2%			139,422	9.0%
V	encl	Membrane Roofing	7G	Flynn Midwest	8,809,353	3			92,758	1.1%	948,977	10.8%		
B	encl	Metal Wall and Roof Panels	7E		634,720	3			20,050	3.2%	18,335	2.9%		
B	encl	Joint Sealants/Rated Sealants	7I		1,877,000	3			59,291	3.2%	139,037	7.4%		
B	encl	Penetration Firestopping	7I		1,876,160	1			59,265	3.2%			205,143	10.9%
B	stru	Spray Applied Fireproofing	07H		318,000	2			10,045	3.2%	Included			
B	fin	Comm. Doors, Frames & Hdwr Supply	8C		2,605,700	3			82,310	3.2%			235,642	9.0%
B	fin	Four-Fold Doors	8F		404,213	2			12,768	3.2%	20,000	4.9%		
B	encl	Glass & Glazing	8G		1,329,396	3			41,993	3.2%			145,359	10.9%
U	fin	Interior Borrowed Light Glazing			295,997	1			10,908	3.7%			26,768	9.0%
B	fin	Tile	9C	Midland Marble and Granite	357,198	2			11,283	3.2%			32,303	9.0%
B	fin	Drywall	9A		4,916,839	3			155,315	3.2%	Included			
B	fin	Flooring	9H		1,026,296	2			32,419	3.2%			92,811	9.0%
B	fin	Resinous/ Special Coatings	9I		1,260,916	3			39,830	3.2%			114,029	9.0%
B	fin	Painting and Floor Sealer	9B		2,291,460	2			72,383	3.2%			207,224	9.0%
B	fin	Operable Partitions			95,846	3			3,028	3.2%			8,668	9.0%
B	fin	Laundry Equipment	11K		281,722	2			8,899	3.2%			25,477	9.0%
V	fin	Detention Equipment	11B	CML Security	18,057,550	2	0		190,136	1.1%	Included			
B	fin	Food Service Equipment	11C		2,440,990	1			77,107	3.2%	Included			
B	fin	Dock Equipment			48,913	1			1,545	3.2%			4,423	9.0%
B	fin	Roller Window Shades	12C		88,569	3			2,798	3.2%			8,010	9.0%
V	stru	Modular Cells Materials	11I	Cornerstone Detention	17,694,644	3			186,315	1.1%	Included			
T	stru	Modular Cells Erection			1,195,210	1			12,585	1.1%	20,885	1.7%		
B	fin	Elevators	14A		298,500	4			9,429	3.2%	Included			
V	mep	Fire Protection		American Fire Protection	3,097,297	4			32,613	1.1%	Included			
V	mep	Plumbing			with/ HVAC	3					Included			
V	mep	HVAC		US Engineering	49,372,434	2	1,000,000	2.0%	519,865	1.1%	Included			
V	encl	Temporary Power			80,640	1			849	1.1%	Included			
V	mep	Electrical		Mark One Electric	25,656,074	4	0		270,144	1.1%	Included			
V	mep	Security Electronics	28A	Cornerstone Detention	13,766,050	4	0		144,949	1.1%	Included			
I	fdn	Misc. Foundations			37,387	NA			1,575	4.2%			1,322	3.5%
I	stru	Misc. Structural Items			1,104,969	NA			46,539	4.2%			79,341	7.2%
I	encl	Misc. Enclosure Items			110,260	NA			4,644	4.2%			12,056	10.9%
I	fin	Misc. Finishes & Arch Specialties			2,870,030	NA			120,879	4.2%			259,547	9.0%
V	mex	Mass Excavation		Kissick Construction	10,118,488	5			106,542	1.1%	Included			
T	fin	Site Concrete			1,962,345	1			20,662	1.1%	137,971	7.0%		
B	fin	Asphalt	32A		1,690,448	4			53,398	3.2%			152,873	9.0%
B	fin	Fence	32H		452,000	2			14,278	3.2%			40,876	9.0%
B	fin	Synthetic Turf			49,650	1			1,568	3.2%			4,490	9.0%
B	fin	Landscape/ Irrigation	32G		658,084	3			20,788	3.2%			59,513	9.0%
B	fdn	Site Utilities	33A		2,282,041	5			72,086	3.2%			80,710	3.5%
I	fdn	Site Strucutres			262,340	NA			11,049	4.2%			9,278	3.5%
I	fin	Site Specialties/ Signage			268,846	NA			11,323	4.2%			24,313	9.0%
		Permits, Bonds, Insurance			**8,090,898**	**NA**					Included			
		Fee			**6,127,019**	**NA**					Included			

			Scope Hold (In Bids)	**Contingency**	**Trade Partner Escalation (Incl)**	**Escalation Allowance Applied to Non-Escalated Budgets**
Legend	**Subtotal**	**291,104,639**	**1,000,000**	**3,517,372**	**2,722,359**	**2,487,005**
T= Budgets Prepared by JE Dunn Self Perform						
V= Teamed-Best Value Trade Partner	Design Contingency	2,911,046				
B=Budget From Trade Partner	Construction Contingency	3,517,372				
U=Unit Price form Trade Partner	Escalation Allowance	2,487,005	Escalation based upon 1.5% /Quarter from today through Start of Work			
I-Internal Estimate	Owner Contingency	1,142,005				

Total Design & Construction Cost $301,162,067

End of Exhibit 1

Exhibit 2

EXHIBIT B GMP 2
Jackson County, Mo – Jackson County Detention Center
J.E. Dunn Project No. 22026200

Contract Documents

1. The contract between Owner and Design/Builder dated May 19th 2022
2. Design/Builder's Front End Documents dated August 17th, 2022.
3. Geotechnical Report prepared by CFS dated September 8th, 2022.
4. Drawings and Specifications prepared by Design/Builder as follows:

Sheet Number and Title	Rev Date	Version
Jackson County Detention Center		
[redacted]		
Special Use Permit		
C-000 – Cover Alt	11.30.2022	Special Use Permit
C-001 – Survey	11.30.2022	Special Use Permit
C-002 – Site Plan Alt	11.30.2022	Special Use Permit
C-003 – Site Grading Plan Alt	11.30.2022	Special Use Permit
C-004 – Site Utility Plan Alt	11.30.2022	Special Use Permit
C-005 – Signage Plan	11.30.2022	Special Use Permit
L-001 – Landscape Plan	11.30.2022	Special Use Permit
L-002 – Enlarged Landscape Plan	11.30.2022	Special Use Permit
L-003 – Enlarged Landscape Plan	11.30.2022	Special Use Permit
L-004 – Enlarged Landscape Plan	11.30.2022	Special Use Permit
A-400 – Elevation	11.30.2022	Special Use Permit
Schematic Design Documents		
Appendix A – Program Validation	02.10.2023	Schematic Design Documents
Appendix C1 – Storm Water Drainage Report	02.03.2023	Schematic Design Documents
Appendix C2 – Private Grading and Site disturbance Plans	02.03.2023	Schematic Design Documents
Schematic Design Narrative	02.03.2023	Schematic Design Documents
0.0 – Schematic Design Drawings Cover Sheet/Index of Drawings	02.10.2023	Schematic Design Documents
0.1 – Site Plan – Overall Building	02.10.2023	Schematic Design Documents
0.2 – Overall Floor Plan – Level 1	02.10.2023	Schematic Design Documents
0.3 – Overall Floor Plan – Level Upper Housing Tier	02.10.2023	Schematic Design Documents
0.4 – Overall Floor Plan – Level 2	02.10.2023	Schematic Design Documents
0.5 – Overall Building Plan – Roof	02.10.2023	Schematic Design Documents
0.6.1 – Overall Building Perspectives	02.10.2023	Schematic Design Documents
0.6.2 – Overall Building Rendering	02.10.2023	Schematic Design Documents
0.6.3 – Overall Building Rendering	02.10.2023	Schematic Design Documents
0.7.0 – Exterior Elevations – Front Building	02.10.2023	Schematic Design Documents
0.7.1 – Overall Building – Exterior Elevations	02.10.2023	Schematic Design Documents
1.0 – Floor Plan, Level 1 & Building Section - 6.100 Orientation, 6.700 Juvenile and 8.500 Special Needs Stage 4 Housing	02.10.2023	Schematic Design Documents
1.1 – Floor Plan, Upper Tier & Building Sections - 6.100 Orientation and 8.500 Special Needs Stage 4 Housing	02.10.2023	Schematic Design Documents
1.2 – Building Section & Interior Perspectives – 6.700 Juvenile Housing	02.10.2023	Schematic Design Documents
2.0 – Floor Plans & Building Sections – 6.200 Maximum Housing - Male	02.10.2023	Schematic Design Documents
2.1 – Interior Perspectives – 6.200 Maximum Housing - Male	02.10.2023	Schematic Design Documents
3.0 – Floor Plans & Building Sections – 6.300 Segregation Housing – Male and 6.500A Med/Min Housing – Male Unit 1 (All ADA Lower Level	02.10.2023	Schematic Design Documents
3.1 – Interior Perspectives – 6.300 Segregation Housing - Male	02.10.2023	Schematic Design Documents
4.0 – Floor Plan, Level 1 & Building Sections – 6.500B Medium & Minimum Housing – Male Units 2,3,4 & 5	02.10.2023	Schematic Design Documents
4.1 – Floor Plan, Upper Tier & Building Sections – 6.500B Medium & Minimum Housing – Male Units 2,3,4 & 5	02.10.2023	Schematic Design Documents
4.2 – Floor Plan, Level 1 & Building Section – 6.500B Med & Min Housing – Male Units 6 & 7 – 6.500C Med & Min Housing – Male Dorms 8 & 9	02.10.2023	Schematic Design Documents
4.3 – Floor Plan, Upper Tier & Building Sections – 6.500B Med & Min Housing – Male Units 6 & 7 – 6.500C Med & Min Housing – Male Dorms 8 & 9	02.10.2023	Schematic Design Documents
4.4 – Interior Perspective – 6.500B Medium and Minimum Housing – Male	02.10.2023	Schematic Design Documents
4.5 – Interior Perspective – 6.500B Medium and Minimum Housing - Male	02.10.2023	Schematic Design Documents
4.6 – Interior Perspective – 6.500B Medium and Minimum Housing - Male	02.10.2023	Schematic Design Documents
4.7 – Interior Perspective – 6.500B Medium and Minimum Housing - Male	02.10.2023	Schematic Design Documents
5.0 – Floor Plan, Level 1 & Building Section – 6.500 Med/Min-Male Unit 10, Female – 6.100 Orient, 6.400 Max/Seg, 6.600 Min/Med & 8.500 SPC Needs STG 4	02.10.2023	Schematic Design Documents
5.1 – Floor Plan, Upper Tier & Bldg Sections – 6.500 Med/Min-Male Unit 10,	02.10.2023	Schematic Design Documents

Female – 6.100 Orient, 6.400 Max/Seg, 6.600 Min/Med & 8.500 SPC Needs STG 4		
5.2 – Interior Perspectives – Female Housing 6.100 Orientation, 6.400 Maximum, and 8.400 Special Needs Stage 4	02.10.2023	Schematic Design Documents
6.1.1 – Floor Plan, Level 1 – 8.100 Central Clinic, 8.200 Infirmary, and 8.300 Medical Housing	02.10.2023	Schematic Design Documents
6.1.2 – Interior Perspectives – 8.300 Medical Housing	02.10.2023	Schematic Design Documents
6.2.1 – Floor Plan, Level 1 & Building Section – 8.400 Special Needs Stage 1-3, 9.300 Central Storage and 9.500 Custodial	02.10.2023	Schematic Design Documents
6.2.2 – Interior Perspectives – 8.400 Special Needs Stage 1-3	02.10.2023	Schematic Design Documents
7.1.1 – Floor Plan, Level 1 – 5.500 Transportation	02.10.2023	Schematic Design Documents
7.1.2 – Interior Perspectives – 5.500 Transportation	02.10.2023	Schematic Design Documents
7.2.1 – Floor Plan, Level 1 – 5.100 Vehicle Sallyport & Armory, 5.200 Intake and 5.500 Transportation	02.10.2023	Schematic Design Documents
7.2.2 – Interior Perspectives – 5.200 Intake	02.10.2023	Schematic Design Documents
7.3.1 – Floor Plan, Level 2 – 5.300 Court	02.10.2023	Schematic Design Documents
7.3.2 – Interior Perspectives – 5.300 Court	02.10.2023	Schematic Design Documents
7.3.3 – Interior Perspective – 5.300 Court	02.10.2023	Schematic Design Documents
8.1 – Floor Plan, Level 1 & Building Section - 2.300 Information Management, 2.600 Community Corrections, and 3.200 Staff Support	02.10.2023	Schematic Design Documents
8.2 – Floor Plan, Level 2 & Bldg Section – 2.100 Facility Admin, 2.500 Safety, Security & Technology, and 3.100 Training/Accreditation/Analyst	02.10.2023	Schematic Design Documents
8.3.1 – Floor Plan, Level 1 – 1.000 Public Lobby. 1.200 Visitation, 4.000 Master Control and 5.600 Release	02.10.2023	Schematic Design Documents
8.3.2 – Interior Perspectives – 1.000 Public Lobby, 2.000 Administration, 3.000 Staff Support	02.10.2023	Schematic Design Documents
9.1.1 – Floor Plan, Level 1 – 2.200 Command, 3.200 Staff Support, 7.100 Programs, 9.100 Food Service, 9.200 Laundry, 9.300 Central Storage	02.10.2023	Schematic Design Documents
9.1.2 – Interior Perspectives – Courtyard, Central Training and Staff Dining	02.10.2023	Schematic Design Documents
9.2 – Floor Plan, Level 1 – 9.300 Receiving, 9.400 Maintenance and 9.600 Central Plant	02.10.2023	Schematic Design Documents
10.1 – Enlarged Plans and Elevations, Precast Modules – 1-Person & 2-Person Housing Cells	02.10.2023	Schematic Design Documents
10.2 – Enlarged Plans and Elevations, Precast Modules – 1-Person & 2-Person Housing Cells	02.10.2023	Schematic Design Documents
10.3 – Enlarged Plans and Elevations, Precast Modules – 4-Person Housing Cells	02.10.2023	Schematic Design Documents
10.4 – Enlarged Plans and Elevations, Precast Modules – Dormitory Sleeping Rooms	02.10.2023	Schematic Design Documents
10.5 – Enlarged Plans and Elevations, Medical and Infirmary Housing Cells	02.10.2023	Schematic Design Documents
10.6 – Enlarged Plans and Elevations, Precast Modules – Special Needs Housing Cells – Stage 1-3	02.10.2023	Schematic Design Documents
11.1.1 – Code Occupancy Type Diagram – Overall Level 1	02.10.2023	Schematic Design Documents
11.1.2 – Code Occupancy Type Diagram – Overall Upper Cell Tier/Level 2	02.10.2023	Schematic Design Documents
11.2.1 – Code Smoke Zone Plan – Overall Level 1	02.10.2023	Schematic Design Documents
11.2.2 – Code Smoke Zone Plan – Overall Upper Cell Tier/Level 2	02.10.2023	Schematic Design Documents
11.3.1 – Code Separations Plan – Overall Level 1	02.10.2023	Schematic Design Documents
11.3.2 – Code Separations Plan – Overall Upper Cell Tier/Level 2	02.10.2023	
C-000 – Overall Site Demolition Plan	02.03.2023	Schematic Design Documents
C-001 – Enlarged Site Demolition Plan 1	02.03.2023	Schematic Design Documents
C-002 – Enlarged Site Demolition Plan 2	02.03.2023	Schematic Design Documents
C-003 – Enlarged Site Demolition Plan 3	02.03.2023	Schematic Design Documents
C-004 – Enlarged Site Demolition Plan 4	02.03.2023	Schematic Design Documents
C-005 – Enlarged Site Demolition Plan 5	02.03.2023	Schematic Design Documents
C-006 – Enlarged Site Demolition Plan 6	02.03.2023	Schematic Design Documents
C-007 – Enlarged Site Demolition Plan 7	02.03.2023	Schematic Design Documents
C-008 – Enlarged Site Demolition Plan 8	02.03.2023	Schematic Design Documents
C-009 – Enlarged Site Demolition Plan 9	02.03.2023	Schematic Design Documents
C-010 – Enlarged Site Demolition Plan 10	02.03.2023	Schematic Design Documents
C-011 – Enlarged Site Demolition Plan 11	02.03.2023	Schematic Design Documents
C-012 – Enlarged Site Demolition Plan 12	02.03.2023	Schematic Design Documents
C-100 – Site Plan	02.03.2023	Schematic Design Documents
C-101 – Site Grading Plan	02.03.2023	Schematic Design Documents
C-102 – Site Utility Plan	02.03.2023	Schematic Design Documents
C-103 – Enlarged Site Utility Plan	02.03.2023	Schematic Design Documents
C-104 – Enlarged Site Utility Plan	02.03.2023	Schematic Design Documents
L-100 – Landscape Plan	02.03.2023	Schematic Design Documents
L-101 – Enlarged Landscape Plan 1	02.03.2023	Schematic Design Documents
L-102 – Enlarged Landscape Plan 2	02.03.2023	Schematic Design Documents
L-103 – Enlarged Landscape Plan 3	02.03.2023	Schematic Design Documents
Specification	**Rev Date**	**Version**
Division 01 -		
01 35 13.16 SPECIAL PROJECT PROCEDURES FOR DETENTION CENTER		DB
Division 02 - EXISTING CONDITIONS		
02 41 16 STRUCTURE DEMOLITION	01.17.2022	DCP
02 41 19 SELECTIVE DEMOLITION	01.17.2022	DCP
Division 03 - CONCRETE		

03 01 30 MAINTENANCE OF CAST-IN-PLACE CONCRETE	01.17.2022	DCP
03 10 00 CONCRETE FORMING AND ACCESSORIES	01.17.2022	DCP
03 12 30 GEOFOAM CONCRETE FORMS	01.26.2023	DB
03 20 00 CONCRETE REINFORCING	01.17.2022	DCP
03 30 00 CAST IN PLACE CONCRETE	01.17.2022	DB
03 33 00 ARCHITECTURAL CONCRETE	01.17.2022	DCP
03 35 43 POLISHED CONCRETE FINISHING	01.26.2023	DB
03 41 00 PRECAST STRUCTURAL CONCRETE	01.26.2023	DB
DIVISION 04 - MASONRY		
04 20 00 UNIT MASONRY	01.26.2023	DB
DIVISION 05 - METALS		
05 12 00 STRUCTURAL STEEL FRAMING	01.26.2023	DB
05 21 00 STEEL JOIST FRAMING	01.26.2023	DB
05 31 00 STEEL DECKING	01.26.2023	DB
05 40 00 COLD-FORMED METAL FRAMING	01.26.2023	DB
05 50 00 METAL FABRICATIONS	01.17.2022	DCP
05 51 13 METAL PAN STAIRS	01.17.2022	DCP
05 52 13 PIPE AND TUBE RAILINGS	01.17.2022	DCP
05 53 13 BAR GRATINGS	01.17.2022	DCP
05 53 16 PLANK GRATINGS	01.17.2022	DCP
05 59 63 DETENTION ENCLOSURES	01.17.2022	DCP
DIVISION 06 - WOOD, PLASTICS, AND COMPOSITES		
06 10 53 MISCELLANEOUS ROUGH CARPENTRY	01.26.2023	DB
06 16 00 SHEATHING	01.26.2023	DB
06 20 23 INTERIOR FINISH CARPENTRY	01.17.2022	DCP
06 64 00 PLASTIC PANELING	01.17.2022	DCP
06 40 23 INTERIOR ARCHITECTURAL WOODWORK	01.26.2023	DB
06 41 16 PLASTIC-LAMINATE-CLAD ARCHITECTURAL CABINETS	01.26.2023	DB
06 42 16 FLUSH WOOD PANELING	01.26.2023	DB
DIVISION 07 - THERMAL AND MOISTURE PROTECTION		
07 11 13 BITUMINOUS DAMPPROOFING	01.17.2022	DCP
07 13 26 SELF-ADHERING SHEET WATERPROOFING	01.26.2023	DB
07 13 53 ELASTOMERIC SHEET WATERPROOFING	01.17.2022	DCP
07 14 16 COLD FLUID-APPLIED WATERPROOFING	01.17.2022	DCP
07 18 00 TRAFFIC COATINGS	01.17.2022	DCP
07 19 00 WATER REPELLENTS	01.17.2022	DCP
07 21 00 THERMAL INSULATION	01.26.2023	DB
07 25 00 WEATHER BARRIERS	01.17.2022	DCP
07 26 00 VAPOR RETARDERS	01.17.2022	DCP
07 41 13.16 STANDING-SEAM METAL ROOF PANELS	01.17.2022	DCP
07 42 13.19 INSULATED METAL WALL PANELS	01.26.2023	DB
07 42 13.23 METAL COMPOSITE MATERIAL WALL PANELS	01.17.2022	DCP
07 42 23.13-FORMED METAL WALL PANELS	01.26.2023	DB
07 42 93 SOFFIT PANELS	01.17.2022	DCP
07 53 23 ETHYLENE-PROPYLENE-DIENE-MONOMER (EPDM) ROOFING	01.26.2023	DB
07 54 23 THERMOPLASTIC POLYOLEFIN TPO ROOFING	01.26.2023	DB
07 62 00 SHEET METAL FLASHING AND TRIM	01.26.2023	DB
07 71 00 ROOF SPECIALTIES	01.26.2023	DB
07 71 29 MANUFACTURED ROOF EXPANSION JOINT	01.26.2023	DB
07 72 00 ROOF ACCESSORIES	01.26.2023	DB
07 72 53 SNOW GUARD	01.17.2022	DCP
07 81 00 APPLIED FIRE PROTECTION	01.26.2023	DB
07 81 23 INTUMESCENT FIRE PROTECTION	01.26.2023	DB
07 84 13 PENETRATION FIRESTOPPING	01.26.2023	DB
07 84 43 JOINT FIRESTOPPING	01.26.2023	DB
07 91 00 PREFORMED JOINT SEALS	01.17.2022	DCP
07 92 00 JOINT SEALANTS	01.26.2023	DB
07 92 00.53 SECURITY JOINT SEALANTS	01.26.2023	DB
07 92 19 ACOUSTICAL JOINT SEALANTS	01.26.2023	DB
07 95 13.13 INTERIOR EXPANSION JOINT COVER ASSEMBLIES	01.26.2023	DB
07 95 13.16 EXTERIOR EXPANSION JOINT COVER ASSEMBLIES	01.17.2022	DCP
DIVISION 08 - OPENINGS		
08 11 13 HOLLOW METAL DOORS AND FRAMES	01.26.2023	DB
08 12 16 ALUMINUM FRAMES	01.17.2022	DCP
08 14 16 FLUSH WOOD DOORS	01.26.2023	DB
08 31 13 ACCESS DOORS AND FRAMES	01.26.2023	DB
08 31 13.53 SECURITY ACCESS DOORS AND FRAMES	09.14.2022	DB
08 33 13 COILING COUNTER DOORS	01.26.2023	DB
08 33 23 OVERHEAD COILING DOORS	01.26.2023	DB
08 33 26 OVERHEAD COILING GRILLES	01.17.2022	DCP
08 33 43 OVERHEAD COILING SMOKE CURTAINS	01.26.2023	DB
08 34 63 DETENTION DOORS AND FRAMES	01.26.2023	DB
08 41 13 ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS	01.26.2023	DB
08 42 29.23 SLIDING AUTOMATIC ENTRANCES	01.17.2022	DCP
08 51 13 ALUMINUM WINDOWS	01.17.2022	DCP
08 62 00 UNIT SKYLIGHTS OPTION A	01.26.2023	DB
08 62 00 UNIT SKYLIGHTS OPTION B	01.26.2023	DB
08 71 11 DOOR HARDWARE	01.26.2023	DB
08 71 13 AUTOMATIC DOOR OPERATORS	01.26.2023	DB
08 71 63 DETENTION DOOR HARDWARE	01.26.2023	DB
08 80 00 GLAZING	01.26.2023	DB

08 84 00 PLASTIC GLAZING	01.26.2023	DB
08 88 13 FIRE-RATED GLAZING	01.26.2023	DB
08 88 53 SECURITY GLAZING	01.26.2023	DB
08 91 19 FIXED LOUVERS	01.17.2022	DCP
DIVISION 09 - FINISHES		
09 05 61.13 MOISTURE VAPOR EMISSION CONTROL	01.26.2023	DB
09 21 16.23 GYPSUM BOARD SHAFT WALL ASSEMBLIES	01.26.2023	DB
09 22 16 NON-STRUCTURAL METAL FRAMING	01.26.2023	DB
09 24 00 CEMENT PLASTERING	01.17.2022	DCP
09 29 00 GYPSUM BOARD	01.26.2023	DB
09 30 13 CERAMIC TILING	01.26.2023	DB
09 51 13 ACOUSTICAL PANEL CEILINGS	01.26.2023	DB
09 51 23 ACOUSTICAL TILE CEILINGS	01.17.2022	DCP
09 65 13 RESILIENT BASE AND ACCESSORIES	01.26.2023	DB
09 65 16 RESILIENT SHEET FLOORING	01.26.2023	DB
09 65 19 RESILIENT TILE FLOORING	01.26.2023	DB
09 65 66 RESILIENT ATHLETIC FLOORING	01.26.2023	DB
09 67 23 RESINOUS FLOORING	01.26.2023	DB
09 68 13 TILE CARPETING	01.26.2023	DB
09 72 00 WALL COVERINGS	01.17.2022	DCP
09 74 36 DECORATIVE WOOD GRD SYSTEMS	01.26.2023	DB
09 77 23 FABRIC-WRAPPED PANELS	01.17.2022	DCP
09 84 33 SOUND ABSORBING WALL UNITS	01.26.2023	DB
09 91 14 EXTERIOR PAINTING	01.26.2023	DB
09 91 24 INTERIOR PAINTING	01.26.2023	DB
09 93 00 STAINING AND TRANSPARENT FINISHING	01.17.2022	DCP
09 96 00 HIGH-PERFORMANCE COATINGS	01.26.2023	DB
09 96 03 SPECIAL COATINGS	01.26.2023	DB
09 96 53 ELASTOMERIC COATINGS	01.17.2022	DCP
09 97 26 CEMENTITIOUS COATINGS	01.17.2022	DCP
09 98 53 RESILIENT PADDING SYSTEMS	01.26.2023	DB
DIVISION 10 - SPECIALTIES		
10 11 00 VISUAL DISPLAY UNITS	01.17.2022	DCP
10 12 00 DISPLAY CASES	01.17.2022	DCP
10 14 16 PLAQUES	01.26.2023	DB
10 14 19 DIMENSIONAL LETTER SIGNAGE	01.26.2023	DB
10 14 23 PANEL SIGNAGE	01.26.2023	DB
10 14 23.16 ROOM-IDENTIFICATION PANEL SIGNAGE	01.17.2022	DCP
10 14 26 POST AND PANEL/PYLON SIGNAGE	01.17.2022	DCP
10 14 73 PAINTED SIGNAGE	01.26.2023	DB
10 17 00 TELEPHONE SPECIALTIES	01.17.2022	DCP
10 21 13.14 STAINLESS-STEEL TOILET COMPARTMENTS	01.17.2022	DCP
10 21 13.17 PHENOLIC-CORE TOILET COMPARTMENTS	01.17.2022	DCP
10 21 13.19 PLASTIC TOILET COMPARTMENTS	01.17.2022	DCP
10 21 16.14 STAINLESS-STEEL SHOWER AND DRESSING COMPARTMENTS	01.17.2022	DCP
10 21 23 CUBICLE CURTAINS AND TRACK	01.26.2023	DB
10 22 13 WIRE MESH PARTITIONS	01.26.2023	DB
10 22 39 FOLDING PANEL PARTITIONS	01.17.2022	DCP
10 26 00 WALL AND DOOR PROTECTION	01.26.2023	DB
10 28 00 TOILET, BATH, AND LAUNDRY ACCESSORIES	01.26.2023	DB
10 28 13.63 DETENTION TOILET ACCESSORIES	01.17.2022	DCP
10 44 13 FIRE PROTECTION CABINETS	01.26.2023	DB
10 44 16 FIRE EXTINGUISHERS	01.26.2023	DB
10 51 13 METAL LOCKERS	01.17.2022	DCP
10 51 16 WOOD LOCKERS	01.26.2023	DB
10 55 00.16 PRIVATE-DELIVERY POSTAL SPECIALTIES	01.17.2022	DCP
10 56 13 METAL STORAGE SHELVING	01.17.2022	DCP
10 75 16 GROUND-SET FLAGPOLES	01.26.2023	DB
10 75 23 WALL-MOOUNTED FLAGPOLES	01.17.2022	DCP
DIVISION 11 - EQUIPMENT		
11 11 00 COMMERCIAL LAUNDRY EQUIPMENT	01.26.2023	DB
11 12 00 PARKING CONTROL EQUIPMENT	01.17.2022	DCP
11 13 13 LOADNG DOCK BUMPERS	01.17.2022	DCP
11 13 19 STATIONARY LOADING DOCK EQUIPMENT	01.17.2022	DCP
11 19 00 DETENTION EQUIPMENT GENERAL REQUIREMENTS	01.17.2022	DCP
11 19 05 DETENTION DOORS AND FRAMES	01.17.2022	DCP
11 19 07 DETENTION ACCESS PANELS	01.17.2022	DCP
11 19 08 DETENTION GROUTING OF HOLLOW METAL FRAMES	01.17.2022	DCP
11 19 10 DETENTION HARDWARE	01.17.2022	DCP
11 19 15 DETENTION WINDOW ASSEMBLIES	01.17.2022	DCP
11 19 16 DETENTION GUN LOCKERS	01.17.2022	DCP
11 19 20 DETENTION SECURITY GLAZING	01.17.2022	DCP
11 19 25 DETENTION OPENING SECURITY GRILLES	01.17.2022	DCP
11 19 26 DETENTION GRILLAGE ASSEMBLIES	01.17.2022	DCP
11 19 30 DETENTION CEILING ASSEMBLIES	01.17.2022	DCP
11 19 35 DETENTION WALL ASSEMBLIES	01.17.2022	DCP
11 19 36 DETENTION MODULAR STEEL CELLS	01.17.2022	DCP
11 19 40 DETENTION FIXED EQUIPMENT & ACCESSORIES	01.17.2022	DCP
11 19 45 DETENTION FUDBISHINGS	01.17.2022	DCP
11 19 50 DETENTION CELL PADDING	01.17.2022	DCP
11 19 71 DETENTION SECURITY SCREENS	01.17.2022	DCP
11 19 80 DETENTION SEALANTS	01.17.2022	DCP
11 19 85 DETENTION SCREWS AND FASTENERS	01.17.2022	DCP
11 19 90 DETENTION WALL AND FLOOR FINISHES	01.17.2022	DCP

11 40 00 FOODSERVICE EQUIPMENT	01.17.2022	DCP
DIVISION 12 - FURNISHINGS		
12 21 13 HORIZONTAL LOUVER BLINDS	01.17.2022	DCP
12 24 13 ROLLER WINDOW SHADES	01.26.2023	DB
12 36 23.13 PLASTIC-LAMINATE-CLAD COUNTERTOPS	01.17.2022	DCP
12 36 61.16 SOLID SURFACING COUNTERTOPS	01.26.2023	DB
12 48 13 ENTRANCE FLOOR MATS AND FRAMES	01.17.2022	DCP
DIVISION 13 SPECIAL CONSTRUCTION		
13 34 23 MODULAR PRECAST CONCRETE CELLS	01.17.2022	DCP
13 34 19 MODULAR BUILDING SYSTEMS	01.17.2022	DCP
DIVISION 21 - FIRE SUPPRESSION		
21 05 13 COMMON MOTOR REQUIREMENTS FOR SUPPRESSION EQUIPMENT	01.17.2022	DCP
21 05 23 GENERAL-DUTY VALVES FOR WATER-BASED FIRE-SUPPRESSION PIPING	01.17.2022	DCP
21 05 33 HEAT TRACING	01.17.2022	DCP
21 05 48.13 VIBRATION CONTROLS FOR FIRE-SUPPRESSION PIPING AND EQUIPMENT	01.17.2022	DCP
21 11 16 FACILITY FIRE HYDRANTS	01.17.2022	DCP
21 11 19 FIRE DEPARTMENT CONNECTIONS	01.17.2022	DCP
21 12 00 FIRE-SUPPRESSION STANDPIPES	01.17.2022	DCP
21 13 13 WET-PIPE SPRINKLER SYSTEMS	01.17.2022	DCP
21 13 16 DRY-PIPE SPRINKLER SYSTEMS	01.17.2022	DCP
DIVISION 22 - PLUMBING		
22 01 00 PLUMBING GENERAL PROVISIONS	01.17.2022	DCP
22 06 13 COMMON MOTOR REQUIREMENTS FOR PLUMBING EQUIPMENT	01.17.2022	DCP
22 05 16 EXPANSION FITTINGS AND LOOPS FOR PLUMBING PIPING	01.17.2022	DCP
22 05 17 SLEEVES AND SLEEVE SEALS FOR PLUMBING PIPING	01.17.2022	DCP
22 05 18 ESCUTCHEONS FOR PLUMBING PIPING	01.17.2022	DCP
22 05 19 METERS AND GAGES FOR PLUMBING PIPING	01.17.2022	DCP
22 05 23.12 BALL VALVES FOR PLUMBING PIPING	01.17.2022	DCP
22 05 23.13 BUTTERFLY VALVES FOR PLUMBING PIPING	01.17.2022	DCP
22 05 23.14 CHECK VALVES FOR PLUMBING PIPING	01.17.2022	DCP
22 05 23.15 GATE VALVES FOR PLUMBING PIPING	01.17.2022	DCP
22 05 29 HANGERS AND SUPPORTS FOR PLUMBING PIPING AND EQUIPMENT	01.17.2022	DCP
22 05 48.13 VIBRATION CONTROLS FOR PLUMBING PIPING AND EQUIPMENT	01.17.2022	DCP
22 05 93 TESTING, ADJUSTING AND BALANCING FOR PLUMBING	01.17.2022	DCP
22 61 13 COMPRESSED-AIR PIPING FOR LABORATORY AND HEALTHCARE FACILITIES	01.17.2022	DCP
22 07 16 PLUMBING EQUIPMENT INSULATION	01.17.2022	DCP
22 07 19 PLUMBING PIPING INSULATION	01.17.2022	DCP
22 09 63 MEDICAL GAS ALARMS	01.17.2022	DCP
22 11 13 FACILITY WATER DISTRIBUTION PIPING	01.17.2022	DCP
22 11 16 DOMESTIC WATER PIPING	01.17.2022	DCP
22 11 19 DOMESTIC WATER PIPING SPECIALTIES	01.17.2022	DCP
22 11 23 DOMESTIC WATER PUMPS	01.17.2022	DCP
22 13 13 FACILITY SANITARY SEWERS	01.17.2022	DCP
22 13 16 SANITARY WASTE AND VENT PIPING	01.17.2022	DCP
22 13 19 SANITARY WASTE PIPING SPECIALTIES	01.17.2022	DCP
22 13 19.13 SANITARY DRAINS	01.17.2022	DCP
22 13 23 SANITARY WASTE INTERCEPTORS	01.17.2022	DCP
22 13 29 SANITARY SEWERAGE PUMPS	01.17.2022	DCP
22 14 23 STORM DRAINAGE PIPING SPECIALTIES	01.17.2022	DCP
22 14 29 SUMP PUMPS	01.17.2022	DCP
22 15 13 GENERAL-SERVICE COMPRESSED-AIR PIPING	01.17.2022	DCP
22 15 19 GENERAL-SERVICE PACKAGED AIR COMPRESSORS AND RECEIVERS	01.17.2022	DCP
22 31 00 DOMESTIC WATER SOFTENERS	01.17.2022	DCP
22 33 00 ELECTRIC, DOMESTIC-WATER HEATERS	01.17.2022	DCP
22 34 00 FUEL-FIRED, DOMESTIC-WATER HEATERS	01.17.2022	DCP
22 42 13.13 COMMERCIAL WATER CLOSETS	01.17.2022	DCP
22 42 13.16 COMMERCIAL URINALS	01.17.2022	DCP
22 42 16.13 COMMERCIAL LAVATORIES	01.17.2022	DCP
22 42 16.16 COMMERCIAL SINKS	01.17.2022	DCP
22 42 23 COMMERCIAL SHOWERS	01.17.2022	DCP
22 42 33 WASH FOUNTAINS	01.17.2022	DCP
22 45 00 EMERGENCY PLUMBING FIXTURES	01.17.2022	DCP
22 46 00 SECURITY PLUMBING FIXTURES	01.17.2022	DCP
22 47 13 DRINKING FOUNTAINS	01.17.2022	DCP
22 61 13 COMPRESSED-AIR PIPING FOR LABORATORY AND HEALTHCARE FACILITIES	01.17.2022	DCP
22 61 19 COMPRESSED-AIR EQUIPMENT FOR LABORATORY AND HEALTHCARE FACILITIES	01.17.2022	DCP
22 62 13 VACUUM PIPING FOR LABORATORY AND HEALTHCARE FACILITIES	01.17.2022	DCP
22 62 19 VACUUM EQUIPMENT FOR LABORATORY AND HEALTHCARE FACILITIES	01.17.2022	DCP
22 63 13 GAS PIPING FOR LABORATORY AND HEALTHCARE FACILITIES	01.17.2022	DCP
DIVISION 23 - HEATING VENTILATION AND AIR CONDITIONING (HVAC)		
23 01 00 MECHANICAL GENERAL PROVISIONS	01.17.2022	DCP
23 05 19 COMMON MOTOR REQUIREMENTS FOR HVAC EQUIPMENT	01.17.2022	DCP
23 05 19 METERS AND GAGES FOR HVAC PIPING	01.17.2022	DCP
23 05 23.12 BALL VALVES FOR HVAC PIPING	01.17.2022	DCP

23 05 23.13 BUTTERFLY VALVES FOR HVAC PIPING	01.17.2022	DCP
23 05 23.14 CHECK VALVES FOR HVAC PIPING	01.17.2022	DCP
23 05 29 HANGERS AND SUPPORTS FOR HVAC PIPING AND EQUIPMENT	01.17.2022	DCP
23 05 48 VIBRATION AND SEISMIC CONTROLS FOR HVAC	01.17.2022	DCP
23 05 53 IDENTIFICATION FOR HVAC PIPING AND EQUIPMENT	01.17.2022	DCP
23 05 66 ANTIMICROBIAL ULTRAVIOLET LAMP SYSTEMS FOR HVAC	01.17.2022	DCP
23 05 93 TESTING, ADJUSTING, AND BALANCING FOR HVAC	01.17.2022	DCP
23 07 13 DUCT INSULATION	01.17.2022	DCP
23 07 16 HVAC EQUIPMENT INSULATION	01.17.2022	DCP
23 07 19 HVAC PIPING INSULATION	01.17.2022	DCP
23 08 00 COMMISSIONING OF HVAC	01.17.2022	DCP
23 09 23 DIRECT DIGITAL CONTROL (DDC) SYSTEM FOR HVAC	01.17.2022	DCP
23 09 23.11 CONTROL VALVES	01.17.2022	DCP
23 09 23.12 CONTROL DAMPERS	01.17.2022	DCP
23 09 23.13 ENERGY METERS	01.17.2022	DCP
23 09 23.14 FLOW INSTRUMENTS	01.17.2022	DCP
23 09 23.16 GAS INSTRUMENTS	01.17.2022	DCP
23 09 23.17 LEVEL INSTRUMENTS	01.17.2022	DCP
23 09 23.18 LEAK DETECTION INSRUMENTS	01.17.2022	DCP
23 09 23.19 MOISTURE INSTRUMENTS	01.17.2022	DCP
23 09 23.22 POSITION INSTRUMENTS	01.17.2022	DCP
23 09 23.23 PRESSURE INSTRUMENTS	01.17.2022	DCP
23 09 23.24 SPEED INSTRUMENTS	01.17.2022	DCP
23 09 23.27 TEMPERATURE INSTRUMENTS	01.17.2022	DCP
23 09 23.33 VIBRATION INSTRUMENTS	01.17.2022	DCP
23 09 23.43 WEATHER STATIONS	01.17.2022	DCP
23 09 93 SEQUENCE OF OPERATIONS FOR HVAC DDC	01.17.2022	DCP
23 11 23 FACILITY NATURAL-GAS PIPING	01.17.2022	DCP
23 21 13 HYDRONIC PIPING	01.17.2022	DCP
23 21 13.13 UNDERGROUND HYDRONIC PIPING	01.17.2022	DCP
23 21 16 HYDRONIC PIPING SPECIALTIES	01.17.2022	DCP
23 21 23 HYDRONIC PUMPS	01.17.2022	DCP
23 23 00 REFRIGERANT PIPING	01.17.2022	DCP
23 25 00 HVAC WATER TREATMENT	01.17.2022	DCP
23 31 13 METAL DUCTS	01.17.2022	DCP
23 33 00 AIR DUCT ACCESSORIES	01.17.2022	DCP
23 33 46 FLEXIBLE DUCTS	01.17.2022	DCP
23 34 13 AXIAL HVAC FANS	01.17.2022	DCP
23 34 16 CENTRIFUGAL HVAC FANS	01.17.2022	DCP
23 34 23 HVAC POWER VENTILATORS	01.17.2022	DCP
23 34 33.16 INDUSTRIAL AIR CURTAINS	01.17.2022	DCP
23 34 39 HIGH-VOLUME, LOW-SPEED FANS	01.17.2022	DCP
23 36 00 AIR TERMINAL UNITS	01.17.2022	DCP
23 37 13.13 AIR DIFFUSERS	01.17.2022	DCP
23 37 13.23 REGISTERS AND GRILLES	01.17.2022	DCP
23 37 13.43 SECURITY REGISTERS AND GRILLES	01.17.2022	DCP
23 37 23 HVAC GRAVITY VENTILATORS	01.17.2022	DCP
23 38 13 KITCHEN HOODS	01.17.2022	DCP
23 41 00 PARTICULATE AIR FILTRATION	01.17.2022	DCP
23 43 00 ELECTRONIC AIR CLEANERS	01.17.2022	DCP
23 51 23 GAS VENTS	01.17.2022	DCP
23 52 16 CONDENSING BOILERS	01.17.2022	DCP
23 53 13 BOILER FEEDWATER PUMPS	01.17.2022	DCP
23 55 23.13 LOW-INTENSITY, GAS-FIRED, RADIANT HEATERS	01.17.2022	DCP
23 55 33.16 GAS-FIRED UNIT HEATERS	01.17.2022	DCP
23 63 13 AIR-COOLED REFRIGERANT CONDENSERS	01.17.2022	DCP
23 64 16 CENTRIFUGAL WATER CHILLERS	01.17.2022	DCP
23 65 13 COOLING TOWERS	01.17.2022	DCP
23 72 13 HEAT WHEEL AIR-TO-AIR ENERGY RECOVERY UNITS	01.17.2022	DCP
23 72 16 HEAT PIPE AIR-TO-AIR ENERGY RECOVERY UNITS	01.17.2022	DCP
23 72 19 FIXED PLATE AIR-TO-AIR ENERGY RECOVERY UNITS	01.17.2022	DCP
23 73 13.19 INDOOR, CUSTOM AIR-HANDLING UNITS	01.17.2022	DCP
23 74 33 DEDICATED, OUTDOOR-AIR UNITS	01.17.2022	DCP
23 81 26 SPLIT-SYSTEM AIR-CONDITIONERS	01.17.2022	DCP
23 82 16.11 HYDRONIC AIR COILS	01.17.2022	DCP
23 82 16.13 REFRIGERANT AIR COILS	01.17.2022	DCP
23 82 16.14 ELECTRIC-RESISTANCE AIR COILS	01.17.2022	DCP
23 82 19 FAN COIL UNITS	01.17.2022	DCP
23 82 36 FINNED-TUBE RADIATION HEATERS	01.17.2022	DCP
23 82 39 UNIT HEATERS	01.17.2022	DCP
23 84 13.29 SELF-CONTAINED STEAM HUMIDIFIERS	01.17.2022	DCP
DIVISION 26 - ELECTRICAL		
26 01 00 BASIC ELECTRICAL REQUIREMENTS	01.17.2022	DCP
26 05 13 MEDIUM-VOLTAGE CABLES	01.17.2022	DCP
26 05 19 LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABES	01.17.2022	DCP
26 05 26 GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS	01.17.2022	DCP
26 05 29 HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS	01.17.2022	DCP
26 05 33 RACEWAYS AND BOXES FOR ELECTRICAL SYSTEMS	01.17.2022	DCP
26 05 43 UNDERGROUND DUCTS AND RACEWAYS FOR ELECTRICAL SYSTEM	01.17.2022	DCP
26 05 44 SLEEVES AND SLEEVE SEALS FOR ELECTRICAL RACEWAYS AND CABLING	01.17.2022	DCP
26 05 53 IDENTIFICATION FOR ELECTRICAL SYSTEMS	01.17.2022	DCP
26 05 73.16 COORDINATION STUDIES	01.17.2022	DCP
26 09 13 ELECTRICAL POWER MONITORING	01.17.2022	DCP
26 09 23 LIGHTING CONTROL DEVICES	01.17.2022	DCP

26 09 43.23 RELAY-BASED LIGHTING CONTROLS	01.17.2022	DCP
26 11 16.11 SECONDARY UNIT SUBSTATIONS WITH SWITCHGEAR SECONDARY	01.17.2022	DCP
26 22 13 LOW-VOLTAGE DISTRIBUTION TRANSFORMERS	01.17.2022	DCP
26 24 13 SWITCHBOARDS	01.17.2022	DCP
26 24 16 PANELBOARDS	01.17.2022	DCP
26 25 00 LOW-VOLTAGE ENCLOSED BUS ASSEMBLIES	01.17.2022	DCP
26 27 26 WIRING DEVICES	01.17.2022	DCP
26 28 13 FUSES	01.17.2022	DCP
26 28 16 ENCLOSED SWITCHES AND CIRCUIT BREAKERS	01.17.2022	DCP
26 29 13.03 MANUAL AND MAGNETIC MOTOR CONTROLLERS	01.17.2022	DCP
26 29 23 VARIABLE FREQUENCY MOTOR CONTROLLERS	01.17.2022	DCP
26 32 13.13 DIESEL-ENGINE-DRIVEN GENERATORS	01.17.2022	DCP
26 33 53 STATIC UNINTERRUPTIBLE POWER SUPPLY	01.17.2022	DCP
26 36 00 TRANSFER SWITCHES	01.17.2022	DCP
26 41 13 LIGHTNING PROTECTION FOR STRUCTURES	01.17.2022	DCP
26 43 13 SURGE PROTECTION FOR LOW-VOLTAGE ELECTRICAL POWER CIRCUITS	01.17.2022	DCP
26 51 19 LED INTERIOR LIGHTING	01.17.2022	DCP
26 52 13 EMERGENCY AND EXIT LIGHTING	01.17.2022	DCP
26 56 19 LED EXTERIOR LIGHTING	01.17.2022	DCP
DIVISION 27 - COMMUNICATIONS		
27 05 26 GROUNDING AND BONDING FOR COMMUNICATION SYSTEMS	01.17.2022	DCP
27 05 36 CABLE TRAYS FOR TELECOMMUNICATIONS	01.17.2022	DCP
27 10 00 FIBER OPTIC CABLE TESTING 09.14.22 DB	09.14.2022	DB
27 11 16 CABINETS, RACKS, FRAMES, AND ENCLOSURES	01.17.2022	DCP
27 13 23 COMMUNICATIONS OPTICAL FIBER BACKBONE CABLING	01.17.2022	DCP
27 15 00 COMMUNICATIONS HORIZONTAL CABLING SYSTEMS	09.14.2022	DB
27 15 13 COMMUNICATIONS COPPER HORIZONTAL CABLING	01.17.2022	DCP
27 15 33 COMMUNICATIONS COAXIAL HORIZONTAL CABLING	01.17.2022	DCP
27 41 13 CABLE TELEVISION SYSTEM	09.14.2022	DB
27 41 16 AUDIO VISUAL SYSTEM	09.14.2022	DB
27 41 33 MASTER ANTENNA TELEVISION SYSTEM	01.17.2022	DCP
27 51 19.11 SOUND MASKING SYSTEM	01.17.2022	DCP
27 51 23 INTERCOM SYSTEM	09.14.2022	DB
27 52 23 NURSE CALL/CODE BLUE SYSTEMS	01.17.2022	DCP
DIVISION 28 - ELECTRONIC SAFETY AND SECURITY		
28 05 00 COMMON WORK RESULTS FOR ELECTRONIC SECURITY	09.14.2022	DB
28 05 00.10 UNINTERRUPTIBLE POWER SOURCE	09.14.2022	DB
28 05 00.20 SECURITY AND COMMUNICATION CONDUIT/RACEWAY	09.14.2022	DB
28 05 10 MAINT, SERVICE, & WARRANTY FOR ELECTRONIC SECURITY	01.17.2022	DCP
28 05 11 BACKBONE SYSTEM CABLING FOR ELECTRONIC SECURITY	01.17.2022	DCP
28 05 12 HORIZONTAL CABLING SYSTEM FOR ELECTRONIC SECURITY	01.17.2022	DCP
28 05 26 GROUNDING, BONDING, SURGE, & UPS FOR ELEC SECURITY	01.17.2022	DCP
28 05 30 TAMPER PROOF FASTENERS FOR ELECTRONIC SECURITY	01.17.2022	DCP
28 11 16 CABINETS AND ENCLOSURES FOR ELECTRONIC SECURITY	01.17.2022	DCP
28 13 00 ACCESS CONTROL SYSTEM	09.14.2022	DB
28 15 00 ACCESS CONTROL HARDWARE DEVICES	01.17.2022	DCP
28 15 25 ELECTRONIC KEY MANAGEMENT SYSTEM	09.14.2022	DB
28 20 00 VIDEO SURVEILLANCE	01.17.2022	DCP
28 23 00 IP VIDEO SURVEILLANCE	09.14.2022	DB
28 31 11 DIGITAL ADDRESSABLE FIRE ALARM SYSTEM	09.14.2022	DB
28 44 00 REFRIGERANT DETECTION AND ALARM	01.17.2022	DCP
28 46 00 TOUCHSCREEN COMPUTER STATION	09.14.2022	DB
28 46 00.20 EVENT RECORDING SYSTEM	09.14.2022	DB
28 46 19 PLC HARDWARE FOR ELECTRONIC SECURITY	09.14.2022	DB
28 46 20 PLC SOFTWARE FOR ELECTRONIC SECURITY	01.17.2022	DCP
28 46 21.11 ADDRESSABLE FIRE-ALARM SYSTEMS	01.17.2022	DCP
28 51 23 INTEGRATED INTERCOM AND PAGING SYSTEM FOR ELECTRONIC SEC	01.17.2022	DCP
28 52 11 DETENTION MONITORING AND CONTROL SYSTEMS	01.17.2022	DCP
DIVISION 31 – EARTHWORK		
31 10 00 SITE CLEARING	08.02.2022	DB
31 20 00 EARTHWORK	08.02.2022	DB
31 60 00 SETTLEMENT MONITORING	08.02.2022	DB
31 70 00 WICK DRAINS	08.02.2022	DB
DIVISION 32 - EXTERIOR IMPROVEMENTS		
32 12 16 ASPHALT PAVING	01.17.2022	DCP
32 13 13 CONCRETE PAVING	01.17.2022	DCP
32 13 73 CONCRETE PAVING JOINT SEALANTS	01.17.2022	DCP
32 14 00 UNIT PAVING	01.17.2022	DCP
32 17 13 PARKING BUMPERS	01.17.2022	DCP
32 17 16 MANUFACTURED TRAFFIC-CALMING DEVICES	01.17.2022	DCP
32 17 23 PAVEMENT MARKINGS	01.17.2022	DCP
32 17 26 TACTILE WARNING SURFACING	01.17.2022	DCP
32 31 13 CHAIN LINK FENCES AND GATES	01.17.2022	DCP
32 31 13.53 HIGH-SECURITY CHAIN LINK FENCES AND GATES	01.17.2022	DCP
32 31 15 HYDRAULIC FOUR FOLD DOORS	01.26.2023	DB
32 91 13 SOIL PREPARATION	01.17.2022	DCP
32 92 00 TURF AND GRASSES	01.17.2022	DCP

** **LEDGEND** DCP=DESIGN CRITIERIA PACKET
DB=DESIGN BUILDER

JED GMP Exhibits

JED.01 – HVAC VAV Zones
JED.02 – Plumbing One-Lines
JED.03 – Chilled Water and Heating Hot Water One-Lines
JED.04 – Electrical One-Line Diagram
JED.05 – Electrical Room Layouts
JED.06 – Skylight Take-Off Plan
JED.07 – Woven Wire Rod and Detention Metal Panel Take-Off Plan
JED.08 – DEC-SEC Plans and Schedules

End of Exhibit 2

Jackson County Detention Center
Kansas City, Missouri
March 14, 2023
JE Dunn/Axiom/DLR GMP Proposal

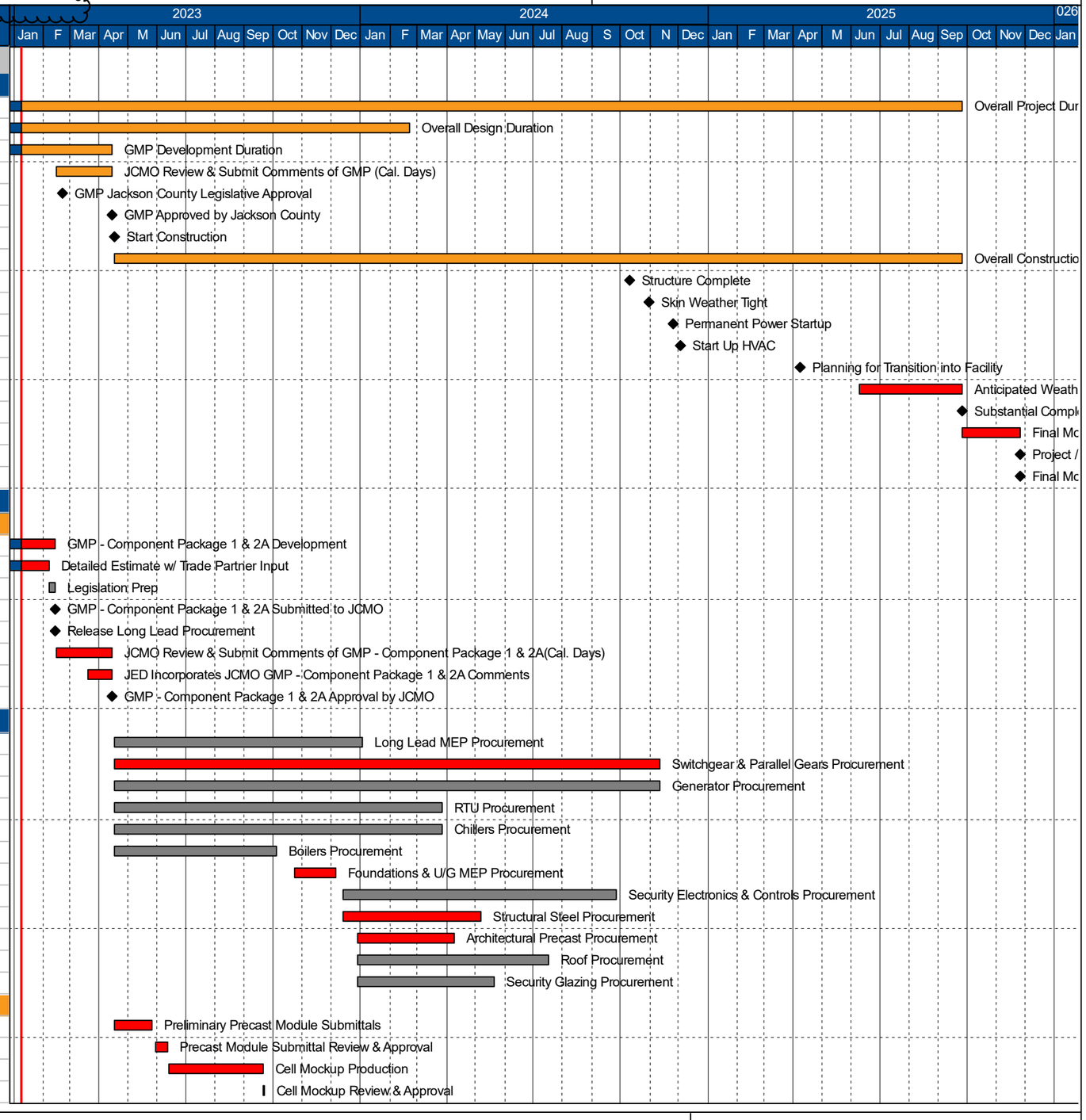
EXHIBIT 3

	Description	JCDC ID #	Current Estimate and ROM Savings Items Below	Recommend Y/N	Alternates or Cost Breakouts
	Bold Number is Full Criteria (1256 Beds) based on January Bids & Budgets		**$333,380,782**		
1	Delete all LEED Requirement, see Design Criteria Modification #014	G2a	-3,129,000	Yes	
2	Delete Integral Color Concrete at Housing Floors, see Design Criteria Modification #015	G12	-337,000	Yes	
3	Eliminate fill North of Facility, shift road to the south toward building	S3	-151,000	Yes	
4	Alternate No. 1 - Alternative funding for the court component.	P1			***-6,180,000***
5	Alternate No. 2 - Eliminate (2) 64 bed housing units, 128 total beds (1256 - 128 = 1128)	H2a			***-9,007,435***
6	Alternate No. 3 - Eliminate and additional (2) 64 bed housing units, 128 total be (1128 - 128 = 1,000)	H2b			***-10,152,080***
7	At (12) housing units reduce quantity of ADA holding cells to (2) per housing unit and reduce size of the remaining holding cells and overall unit, see Design Criteria Modification #001 and #017.	H3	-1,155,000	Yes	
8	Reduce size of the dayroom to meet ACA standards, decreases length not width	H6	-605,000	Yes	
9	Convert 2 male med/min housing units into dorms - 64 beds in each, 128 total beds. See revised floor plans and Design Criteria Modification #050.	H10	-500,000	Yes	
10	Delete cell cameras at Male and Female Med/Min Housing only, see Design Criteria Modification #020	H12	-400,000	Yes	
11	Delete Coax for all holding cell TVs, see Design Criteria Modification #021	H14	-250,000	Yes	
12	Reduce cell ceiling height to 8'-0", in lieu of 9'-0" AFF. We need to increase clear height to 8'-1" at subdayrooms. Male Seg Lower Level Cells have increased to 10' Clear. All Sleeping Alcoves for Dorm shall be 9' clear, See Design Criteria Modification #023.	H21	-697,000	Yes	
13	Reduce generator dB rating to 90 dB. Lower dB rating is acceptable with generators located outside, see Design Criteria Modification #039.	M3e	-86,700	Yes	
14	Reduce Site Lighting below DCP 3 FC, goal is to hit an average 1 FC, see Design Criteria Modification #026.	E1	-246,000	Yes	
15	Delete windborn impact resistant requirement for exterior glazing, see Design Criteria Modification #025	J3	-1,280,000	Yes	
16	Reduce Avg Height of Structure at general cell housing to approximately 22'-4" AFF.	J5	-817,000	Yes	
17	Use PVC for above grade waste piping in areas that are not return air plenums.	J13	-429,000	Yes	
18	Use PVC for above grade storm piping in areas that are not return air plenums.	J14	-111,000	Yes	
19	Provide snowmelt system in the Transportation Yard drive lanes only, see Design Criteria Modification #052.	J22	-98,900	Yes	
20	Use Schedule 40 PVC below grade in lieu of Schedule 80, see Design Criteria Modification #028.	J26	-300,000	Yes	
21	Use Aluminum wire in lieu of copper at all branch feeders, see Design Criteria Modification #029.	J27	-173,000	Yes	
22	Use open cable tray at Administration Building in lieu of EMT for LV wiring, see Design Criteria Modifciation #041.	J39	-250,000	Yes	
23	MC Cabling at Admin. Building in lieu of EMT, see Design Criteria Modification #053.	J41	-62,400	Yes	
24	Provide data jacks in lieu of coax at all AV/TV locations, see Design Criteria Modification #021	J43	-71,200	Yes	
25	Provide a gray roof provided by Flynn Roofing Company in lieu of white, see Design Criteria Modification #030	J45	-1,410,000	Yes	
26	Use new Ewing Entrance Budget to help pay for the new Ewing Road.	J57	-500,000	Yes	
	Total Savings in list above		**($13,059,200)**		***($25,339,515)***
	GMP Options				
	Full Criteria 1256 Beds		***$333,380,782***		
	Option 1: 1256 Beds with recommended changes		***$320,321,582***	**Includes yeses**	
	Option 2: 1128 Beds with recommended changes		***$311,314,147***	***Item #5 above, reduces schedule duration by 1 Month***	
	Option 3: 1000 Beds with recommended changes		***$301,162,067***	***Item#6 above, includes 1 more month of schedule savings***	

JE Dunn's M/W/VBE Goals respectively MBE 17.5%/WBE 11.0%/VBE0.5% = Totals 29%

JE Dunn is on track to beat the Total M/W/VBE Goal stated above by a couple percent on any of the options above

Activity ID	Activity Name	Orig Dur	Start	Finish
Jackson County Detention Center				
Summary (Work Days)				
SUM-1000	Overall Project Duration	727	21-Jun-22 A	25-Sep-25
SUM-1510	Overall Design Duration	345	21-Jun-22 A	21-Feb-24
SUM-2010	GMP Development Duration	90	21-Jun-22 A	14-Apr-23
SUM-2020	JCMO Review & Submit Comments of GMP (Cal. Days)	60	14-Feb-23	14-Apr-23
CON-1370	GMP Jackson County Legislative Approval	0		20-Feb-23
CON-1380	GMP Approved by Jackson County	0		17-Apr-23
JED-0100	Start Construction	0	17-Apr-23	
SUM-2000	Overall Construction Duration	620	17-Apr-23	25-Sep-25
JED-0200	Structure Complete	0		10-Oct-24
JED-0300	Skin Weather Tight	0		31-Oct-24
JED-0400	Permanent Power Startup	0		25-Nov-24
JED-0500	Start Up HVAC	0		02-Dec-24
SUM-1520	Planning for Transition into Facility	0	08-Apr-25	
SUM-1530	Anticipated Weather Days - 0 / 77 Used	77	09-Jun-25	25-Sep-25
JED-0600	Substantial Completion / Contract End Date	0		25-Sep-25*
SUM-1540	Final Move In / Transition	43	26-Sep-25	25-Nov-25
JED-0700	Project / Final Completion	0		25-Nov-25
SUM-1550	Final Move In / Transition Complete	0		25-Nov-25
Preconstruction				
GMP - Component Package 1 & 2A				
OWN-2050	GMP - Component Package 1 & 2A Development	90	21-Jun-22 A	13-Feb-23
OWN-2060	Detailed Estimate w/ Trade Partner Input	20	24-Aug-22 A	06-Feb-23
OWN-2210	Legislation Prep	5	07-Feb-23	13-Feb-23
OWN-2010	GMP - Component Package 1 & 2A Submitted to JCMO	0		13-Feb-23
SUM-2220	Release Long Lead Procurement	0		13-Feb-23
OWN-2020	JCMO Review & Submit Comments of GMP - Component Package 1 & 2A(Cal. Days)	60	14-Feb-23	14-Apr-23
OWN-2040	JED Incorporates JCMO GMP - Component Package 1 & 2A Comments	20	20-Mar-23	14-Apr-23
OWN-2030	GMP - Component Package 1 & 2A Approval by JCMO	0		17-Apr-23
Procurement				
PRO-1000	Long Lead MEP Procurement	180	17-Apr-23	02-Jan-24
PRO-1070	Switchgear & Parallel Gears Procurement	400	17-Apr-23	11-Nov-24
PRO-1080	Generator Procurement	400	17-Apr-23	11-Nov-24
PRO-1090	RTU Procurement	240	17-Apr-23	27-Mar-24
PRO-1100	Chillers Procurement	240	17-Apr-23	27-Mar-24
PRO-1110	Boilers Procurement	120	17-Apr-23	04-Oct-23
PRO-1010	Foundations & U/G MEP Procurement	30	24-Oct-23	06-Dec-23
PRO-1030	Security Electronics & Controls Procurement	200	14-Dec-23	26-Sep-24
PRO-1040	Structural Steel Procurement	100	14-Dec-23	06-May-24
PRO-1020	Architectural Precast Procurement	70	29-Dec-23	08-Apr-24
PRO-1060	Roof Procurement	140	29-Dec-23	17-Jul-24
PRO-1050	Security Glazing Procurement	100	29-Dec-23	20-May-24
Precast Jail Cell Modules				
PRE-1040	Preliminary Precast Module Submittals	30	17-Apr-23	26-May-23
PRE-1041	Precast Module Submittal Review & Approval	10	30-May-23	12-Jun-23
PRE-7450	Cell Mockup Production	70	13-Jun-23	20-Sep-23
PRE-7410	Cell Mockup Review & Approval	1	21-Sep-23	21-Sep-23



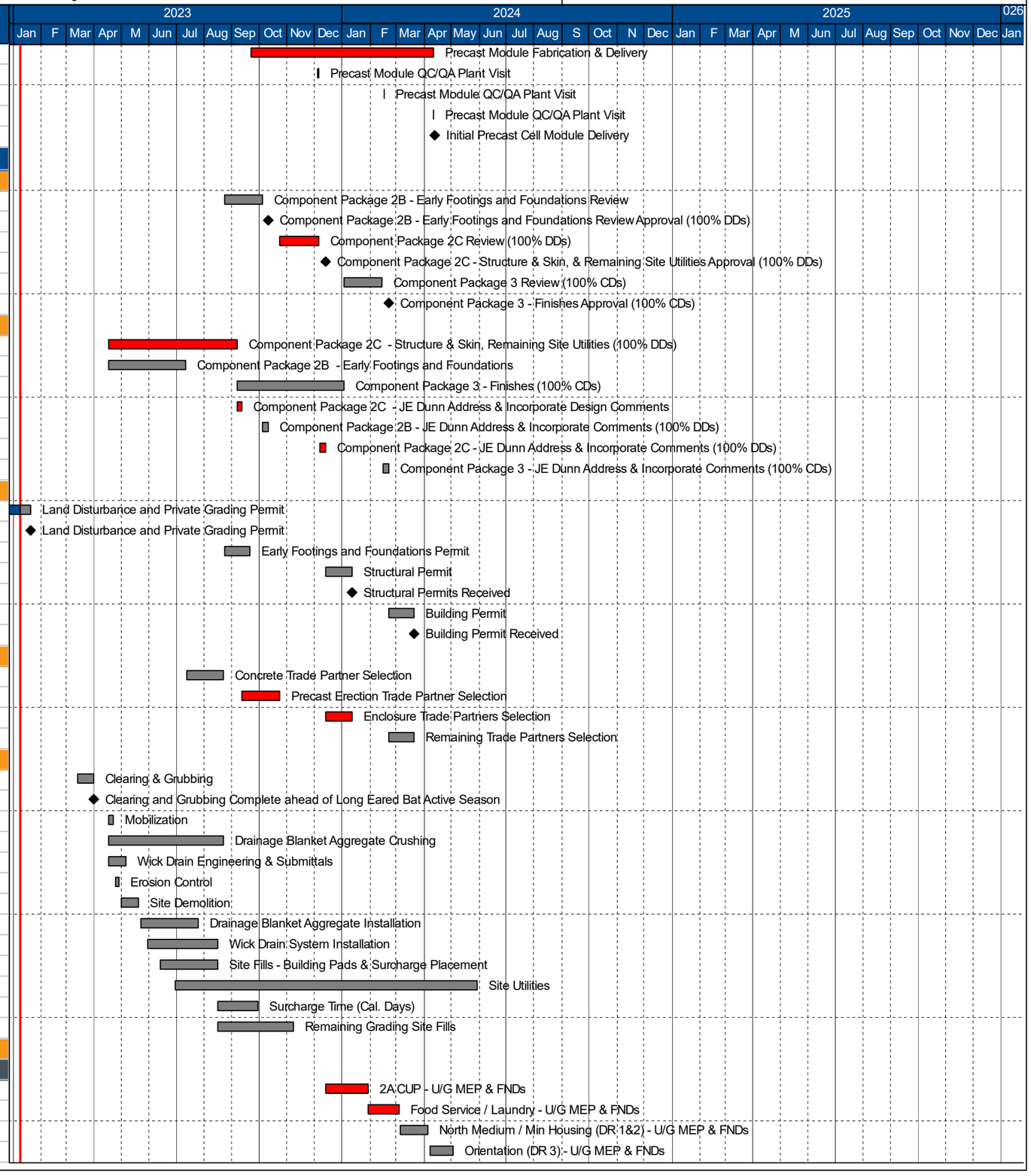
Remaining Level of Effort
Actual Level of Effort
Actual Work
Critical Remaining Work
Remai...
Milesto...

Run Date: 14-Mar-23

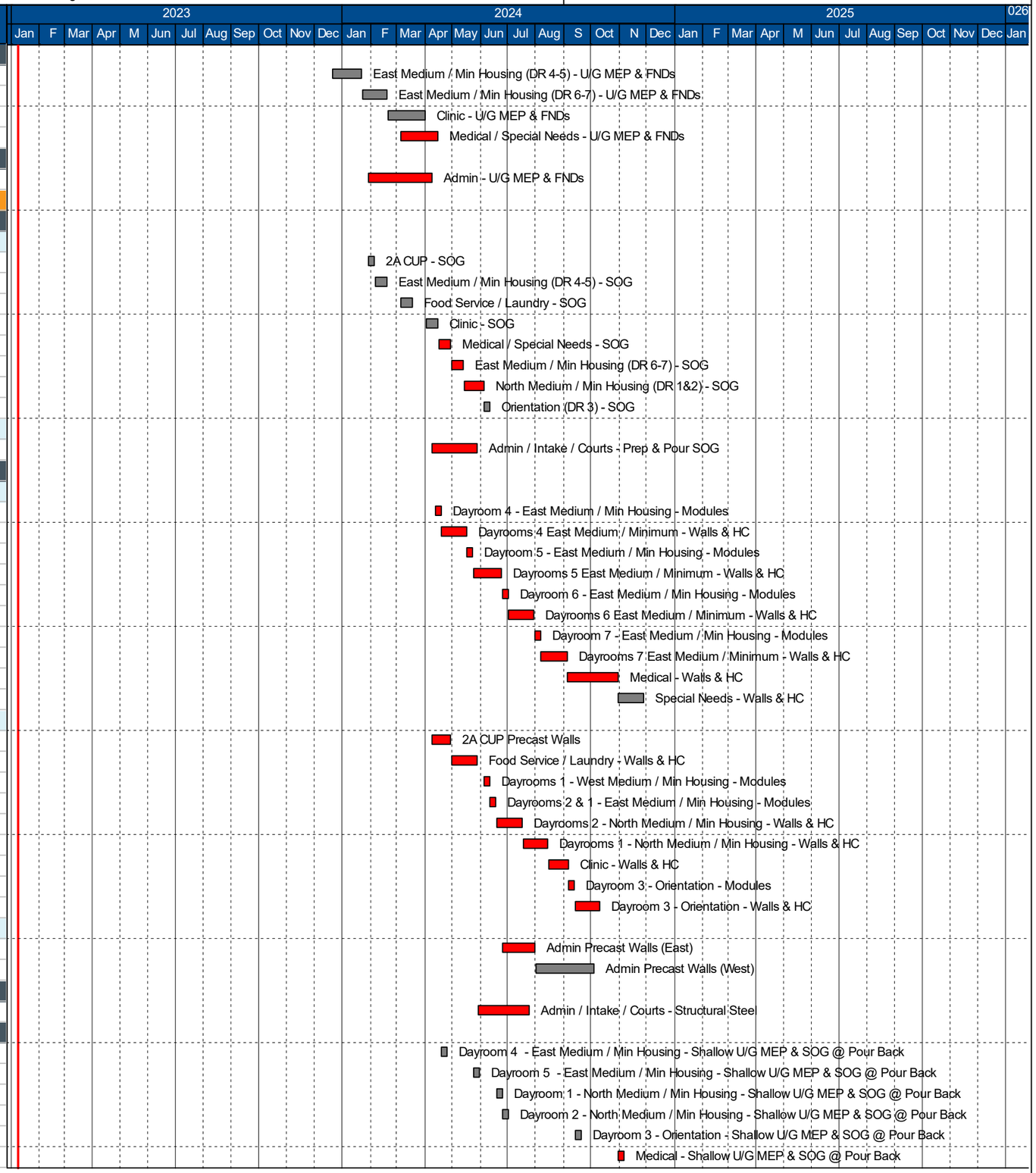
Jackson County Detention Center
JE Dunn Construction Company
March 3rd-2023 GMP Schedule

JE DUNN®

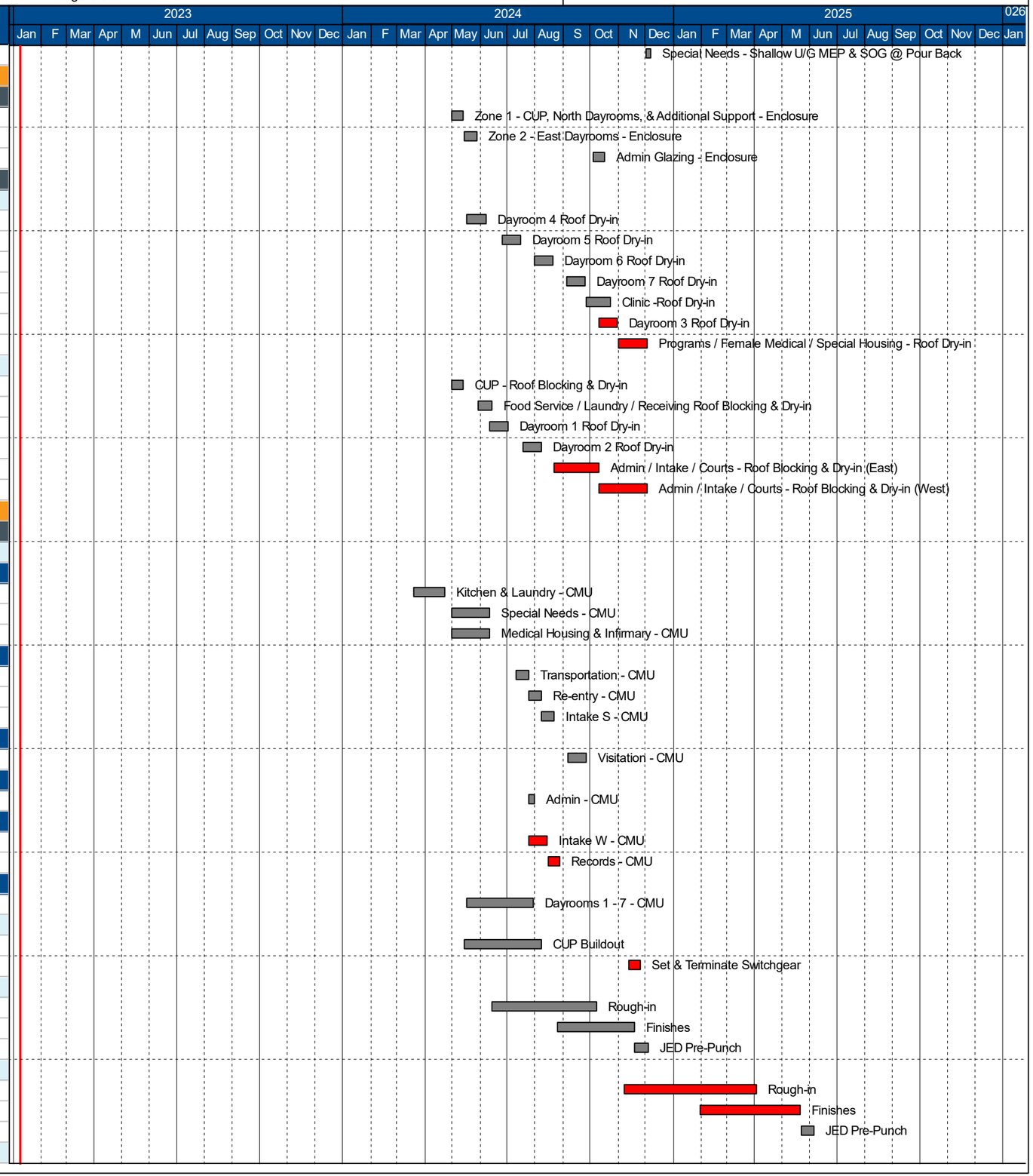
Activity ID	Activity Name	Orig Dur	Start	Finish
PRE-7420	Precast Module Fabrication & Delivery	140	22-Sep-23	11-Apr-24
PRE-7650	Precast Module QC/QA Plant Visit	1	05-Dec-23	05-Dec-23
PRE-7660	Precast Module QC/QA Plant Visit	1	16-Feb-24	16-Feb-24
PRE-7670	Precast Module QC/QA Plant Visit	1	11-Apr-24	11-Apr-24
PRE-7460	Initial Precast Cell Module Delivery	0	12-Apr-24	
Construction				
JCMO Design Approval				
OWN-5180N	Component Package 2B - Early Footings and Foundations Review	30	23-Aug-23	04-Oct-23
CON-5180	Component Package 2B - Early Footings and Foundations Review Approval (100% DDs)	0		11-Oct-23
OWN-1620	Component Package 2C Review (100% DDs)	30	24-Oct-23	06-Dec-23
OWN-1700	Component Package 2C - Structure & Skin, & Remaining Site Utilities Approval (100% DDs)	0		13-Dec-23
OWN-1630	Component Package 3 Review (100% CDs)	30	03-Jan-24	14-Feb-24
OWN-1710	Component Package 3 - Finishes Approval (100% CDs)	0		21-Feb-24
Design				
DSN-1000	Component Package 2C - Structure & Skin, Remaining Site Utilities (100% DDs)	100	17-Apr-23	06-Sep-23
CON-5170N	Component Package 2B - Early Footings and Foundations	60	17-Apr-23	11-Jul-23
DSN-1030	Component Package 3 - Finishes (100% CDs)	80	07-Sep-23	02-Jan-24
DSN-1020	Component Package 2C - JE Dunn Address & Incorporate Design Comments	3	07-Sep-23	11-Sep-23
CON-5170	Component Package 2B - JE Dunn Address & Incorporate Comments (100% DDs)	5	05-Oct-23	11-Oct-23
DSN-1040	Component Package 2C - JE Dunn Address & Incorporate Comments (100% DDs)	5	07-Dec-23	13-Dec-23
DSN-1050	Component Package 3 - JE Dunn Address & Incorporate Comments (100% CDs)	5	15-Feb-24	21-Feb-24
Permits				
PERMIT-1000	Land Disturbance and Private Grading Permit	25	21-Nov-22 A	20-Jan-23
PERMIT-1010	Land Disturbance and Private Grading Permit	0		20-Jan-23
PERMIT-1060	Early Footings and Foundations Permit	20	23-Aug-23	20-Sep-23
PERMIT-1020	Structural Permit	20	14-Dec-23	12-Jan-24
PERMIT-1030	Structural Permits Received	0		12-Jan-24
PERMIT-1040	Building Permit	20	22-Feb-24	20-Mar-24
PERMIT-1050	Building Permit Received	0		20-Mar-24
Trade Partner Buyout				
TPB-11001	Concrete Trade Partner Selection	30	12-Jul-23	22-Aug-23
TPB-5170N	Precast Erection Trade Partner Selection	30	12-Sep-23	23-Oct-23
TPB-1100	Enclosure Trade Partners Selection	20	14-Dec-23	12-Jan-24
TPB-1120	Remaining Trade Partners Selection	20	22-Feb-24	20-Mar-24
Early Sitework				
CON-2900	Clearing & Grubbing	15	13-Mar-23*	31-Mar-23
JED-00100	Clearing and Grubbing Complete ahead of Long Eared Bat Active Season	0		31-Mar-23
CON-2890	Mobilization	5	17-Apr-23	21-Apr-23
CON-5110	Drainage Blanket Aggregate Crushing	90	17-Apr-23	22-Aug-23
CON-5130	Wick Drain Engineering & Submittals	15	17-Apr-23	05-May-23
CON-5120	Erosion Control	5	24-Apr-23	28-Apr-23
CON-2910	Site Demolition	15	01-May-23	19-May-23
CON-2920	Drainage Blanket Aggregate Installation	45	22-May-23	25-Jul-23
CON-2960	Wick Drain System Installation	55	30-May-23	15-Aug-23
CON-2930	Site Fills - Building Pads & Surcharge Placement	45	13-Jun-23	15-Aug-23
CON-4880	Site Utilities	231	30-Jun-23	29-May-24
CON-2940	Surcharge Time (Cal. Days)	45	16-Aug-23	29-Sep-23
CON-2950	Remaining Grading Site Fills	60	16-Aug-23	08-Nov-23
U/G MEP & FNDs				
Crew 1				
CON-4220	2A CUP - U/G MEP & FNDs	30	14-Dec-23	29-Jan-24
CON-4280	Food Service / Laundry - U/G MEP & FNDs	25	30-Jan-24	04-Mar-24
CON-4200	North Medium / Min Housing (DR 1&2) - U/G MEP & FNDs	24	05-Mar-24	05-Apr-24
CON-4210	Orientation (DR 3) - U/G MEP & FNDs	19	08-Apr-24	02-May-24



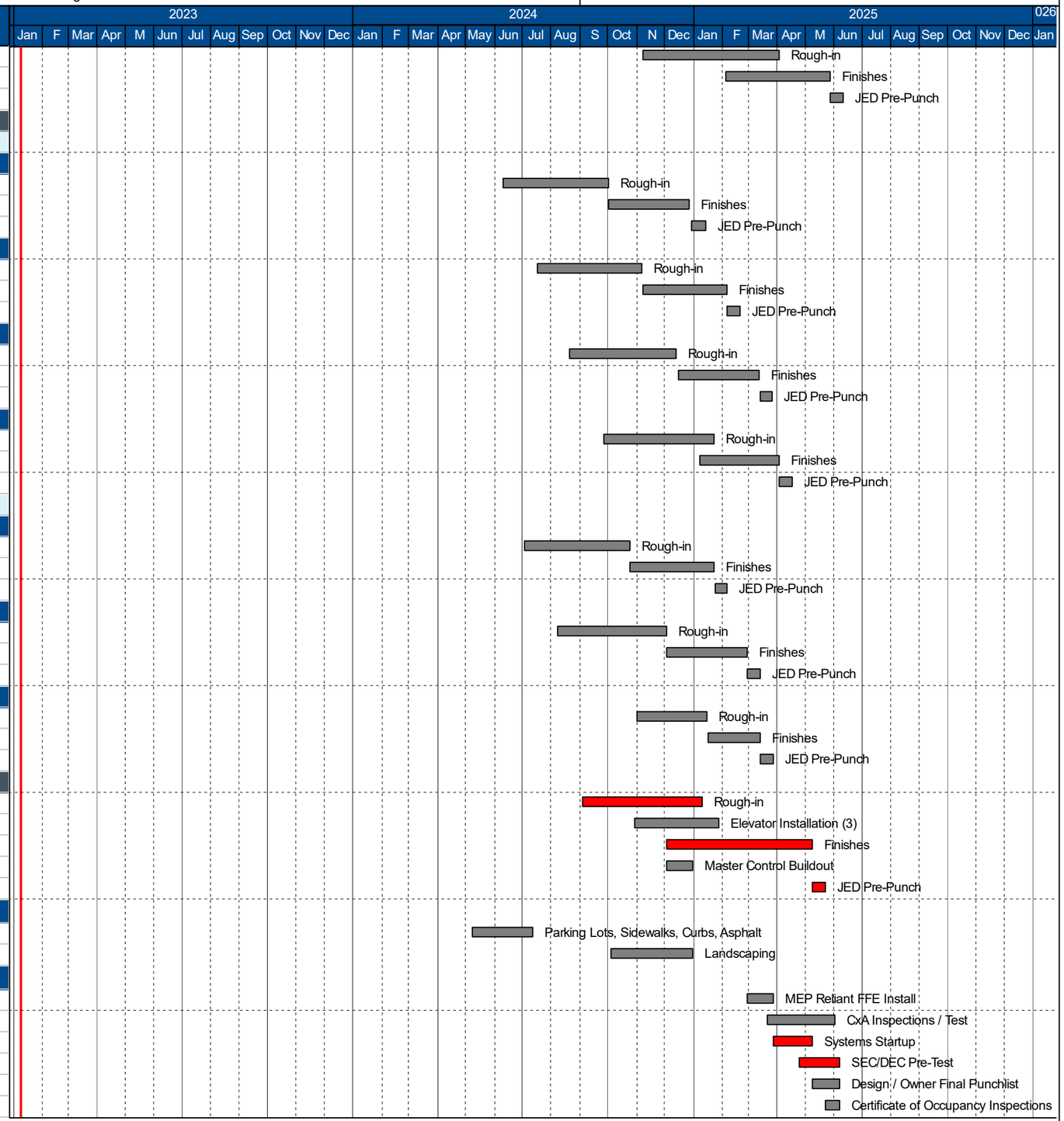
Activity ID	Activity Name	Orig Dur	Start	Finish
	Crew 2			
CON-4190	East Medium / Min Housing (DR 4-5) - U/G MEP & FNDs	20	21-Dec-23	22-Jan-24
CON-4360	East Medium / Min Housing (DR 6-7) - U/G MEP & FNDs	20	23-Jan-24	19-Feb-24
CON-4300	Clinic - U/G MEP & FNDs	30	20-Feb-24	01-Apr-24
CON-4290	Medical / Special Needs - U/G MEP & FNDs	30	05-Mar-24	15-Apr-24
	Crew 3			
CON-4350	Admin - U/G MEP & FNDs	50	30-Jan-24	08-Apr-24
	Structure			
	SOG			
	Crew 1			
CON-4600	2A CUP - SOG	5	30-Jan-24	05-Feb-24
CON-4380	East Medium / Min Housing (DR 4-5) - SOG	10	06-Feb-24	19-Feb-24
CON-4610	Food Service / Laundry - SOG	10	05-Mar-24	18-Mar-24
CON-5140	Clinic - SOG	10	02-Apr-24	15-Apr-24
CON-4620	Medical / Special Needs - SOG	10	16-Apr-24	29-Apr-24
CON-4450	East Medium / Min Housing (DR 6-7) - SOG	10	30-Apr-24	13-May-24
CON-4390	North Medium / Min Housing (DR 1&2) - SOG	15	14-May-24	04-Jun-24
CON-4400	Orientation (DR 3) - SOG	5	05-Jun-24	11-Jun-24
	Crew 2			
CON-3410	Admin / Intake / Courts - Prep & Pour SOG	35	09-Apr-24	28-May-24
	Precast			
	Crew A - Modules & HC			
CON-3950	Dayroom 4 - East Medium / Min Housing - Modules	5	12-Apr-24	18-Apr-24
CON-4470	Dayrooms 4 East Medium / Minimum - Walls & HC	20	19-Apr-24	16-May-24
CON-4630	Dayroom 5 - East Medium / Min Housing - Modules	5	17-May-24	23-May-24
CON-4480	Dayrooms 5 East Medium / Minimum - Walls & HC	21	24-May-24	24-Jun-24
CON-4170	Dayroom 6 - East Medium / Min Housing - Modules	5	25-Jun-24	01-Jul-24
CON-4490	Dayrooms 6 East Medium / Minimum - Walls & HC	20	02-Jul-24	30-Jul-24
CON-4640	Dayroom 7 - East Medium / Min Housing - Modules	5	31-Jul-24	06-Aug-24
CON-4570	Dayrooms 7 East Medium / Minimum - Walls & HC	20	07-Aug-24	04-Sep-24
CON-4070	Medical - Walls & HC	40	05-Sep-24	30-Oct-24
CON-5090	Special Needs - Walls & HC	20	31-Oct-24	27-Nov-24
	Crew B - Walls & HC			
CON-4460	2A CUP Precast Walls	15	09-Apr-24	29-Apr-24
CON-4060	Food Service / Laundry - Walls & HC	20	30-Apr-24	28-May-24
CON-3940	Dayrooms 1 - West Medium / Min Housing - Modules	5	05-Jun-24	11-Jun-24
CON-3960	Dayrooms 2 & 1 - East Medium / Min Housing - Modules	5	12-Jun-24	18-Jun-24
CON-4590	Dayrooms 2 - North Medium / Min Housing - Walls & HC	20	19-Jun-24	17-Jul-24
CON-4510	Dayrooms 1 - North Medium / Min Housing - Walls & HC	20	18-Jul-24	14-Aug-24
CON-4080	Clinic - Walls & HC	15	15-Aug-24	05-Sep-24
CON-3970	Dayroom 3 - Orientation - Modules	5	06-Sep-24	12-Sep-24
CON-4670	Dayroom 3 - Orientation - Walls & HC	20	13-Sep-24	10-Oct-24
	Crew C - Walls & HC			
CON-5060	Admin Precast Walls (East)	25	26-Jun-24	31-Jul-24
CON-4160	Admin Precast Walls (West)	45	01-Aug-24	03-Oct-24
	Steel			
CON-3420	Admin / Intake / Courts - Structural Steel	40	29-May-24	24-Jul-24
	Pour Backs			
CON-4530	Dayroom 4 - East Medium / Min Housing - Shallow U/G MEP & SOG @ Pour Back	5	19-Apr-24	25-Apr-24
CON-4680	Dayroom 5 - East Medium / Min Housing - Shallow U/G MEP & SOG @ Pour Back	5	24-May-24	31-May-24
CON-4550	Dayroom 1 - North Medium / Min Housing - Shallow U/G MEP & SOG @ Pour Back	5	19-Jun-24	25-Jun-24
CON-4700	Dayroom 2 - North Medium / Min Housing - Shallow U/G MEP & SOG @ Pour Back	5	26-Jun-24	02-Jul-24
CON-4560	Dayroom 3 - Orientation - Shallow U/G MEP & SOG @ Pour Back	5	13-Sep-24	19-Sep-24
CON-4710	Medical - Shallow U/G MEP & SOG @ Pour Back	5	31-Oct-24	06-Nov-24



Activity ID	Activity Name	Orig Dur	Start	Finish
CON-5100	Special Needs - Shallow U/G MEP & SOG @ Pour Back	5	02-Dec-24	06-Dec-24
Enclosure				
Skin				
CON-3500	Zone 1 - CUP, North Dayrooms, & Additional Support - Enclosure	10	30-Apr-24	13-May-24
CON-3510	Zone 2 - East Dayrooms - Enclosure	10	14-May-24	28-May-24
CON-5080	Admin Glazing - Enclosure	10	04-Oct-24	17-Oct-24
Roof				
Crew 1				
CON-2700	Dayroom 4 Roof Dry-in	15	17-May-24	07-Jun-24
CON-2710	Dayroom 5 Roof Dry-in	15	25-Jun-24	16-Jul-24
CON-2730	Dayroom 6 Roof Dry-in	15	31-Jul-24	20-Aug-24
CON-2740	Dayroom 7 Roof Dry-in	15	05-Sep-24	25-Sep-24
CON-3450	Clinic -Roof Dry-in	20	26-Sep-24	23-Oct-24
CON-2690	Dayroom 3 Roof Dry-in	15	11-Oct-24	31-Oct-24
CON-3440	Programs / Female Medical / Special Housing - Roof Dry-in	21	01-Nov-24	03-Dec-24
Crew 2				
CON-3480	CUP - Roof Blocking & Dry-in	10	30-Apr-24	13-May-24
CON-3460	Food Service / Laundry / Receiving Roof Blocking & Dry-in	12	29-May-24	13-Jun-24
CON-2660	Dayroom 1 Roof Dry-in	15	12-Jun-24	02-Jul-24
CON-2680	Dayroom 2 Roof Dry-in	15	18-Jul-24	07-Aug-24
CON-3470	Admin / Intake / Courts - Roof Blocking & Dry-in (East)	35	22-Aug-24	10-Oct-24
CON-5070	Admin / Intake / Courts - Roof Blocking & Dry-in (West)	35	11-Oct-24	02-Dec-24
Interior Finishes				
Support				
CMU				
Before Precast Walls				
CON-4840	Kitchen & Laundry - CMU	25	19-Mar-24	22-Apr-24
CON-4860	Special Needs - CMU	30	30-Apr-24	11-Jun-24
CON-4870	Medical Housing & Infirmary - CMU	30	30-Apr-24	11-Jun-24
Crew 1				
CON-4720	Transportation - CMU	10	11-Jul-24	24-Jul-24
CON-4730	Re-entry - CMU	10	25-Jul-24	07-Aug-24
CON-4740	Intake S - CMU	10	08-Aug-24	21-Aug-24
Crew 2				
CON-4750	Visitation - CMU	15	06-Sep-24	26-Sep-24
Crew 3				
CON-4760	Admin - CMU	5	25-Jul-24	31-Jul-24
Crew 4				
CON-4780	Intake W - CMU	15	25-Jul-24	14-Aug-24
CON-4810	Records - CMU	10	15-Aug-24	28-Aug-24
Dayrooms				
CON-4820	Dayrooms 1 - 7 - CMU	50	17-May-24	29-Jul-24
CUP				
CON-3530	CUP Buildout	60	14-May-24	07-Aug-24
CON-5160	Set & Terminate Switchgear	10	12-Nov-24	25-Nov-24
Food Service / Laundry / Receiving				
CON-3720	Rough-in	80	14-Jun-24	07-Oct-24
CON-3730	Finishes	60	26-Aug-24	18-Nov-24
CON-4910	JED Pre-Punch	10	19-Nov-24	04-Dec-24
Programs / Female Medical / Special Housing				
CON-3760	Rough-in	100	07-Nov-24	02-Apr-25
CON-3770	Finishes	80	30-Jan-25	21-May-25
CON-4920	JED Pre-Punch	10	22-May-25	05-Jun-25
Transportation / Clinic / Medical				



Activity ID	Activity Name	Orig Dur	Start	Finish
CON-3740	Rough-in	100	07-Nov-24	02-Apr-25
CON-3750	Finishes	80	04-Feb-25	27-May-25
CON-4930	JED Pre-Punch	10	28-May-25	10-Jun-25
Housing				
Crew 1				
Dayroom 4				
CON-3600	Rough-in	80	10-Jun-24	01-Oct-24
CON-3610	Finishes	60	02-Oct-24	27-Dec-24
CON-4960	JED Pre-Punch	10	30-Dec-24	13-Jan-25
Dayroom 5				
CON-3620	Rough-in	80	17-Jul-24	06-Nov-24
CON-3630	Finishes	60	07-Nov-24	05-Feb-25
CON-4970	JED Pre-Punch	10	06-Feb-25	19-Feb-25
Dayroom 6				
CON-3660	Rough-in	80	21-Aug-24	13-Dec-24
CON-3670	Finishes	60	16-Dec-24	12-Mar-25
CON-4940	JED Pre-Punch	10	13-Mar-25	26-Mar-25
Dayroom 7				
CON-3680	Rough-in	80	26-Sep-24	22-Jan-25
CON-3690	Finishes	60	08-Jan-25	02-Apr-25
CON-4950	JED Pre-Punch	10	03-Apr-25	16-Apr-25
Crew 2				
Dayroom 1				
CON-3540	Rough-in	80	03-Jul-24	24-Oct-24
CON-3550	Finishes	60	25-Oct-24	23-Jan-25
CON-5010	JED Pre-Punch	10	24-Jan-25	06-Feb-25
Dayroom 2				
CON-3560	Rough-in	80	08-Aug-24	02-Dec-24
CON-3570	Finishes	60	03-Dec-24	27-Feb-25
CON-5000	JED Pre-Punch	10	28-Feb-25	13-Mar-25
Dayroom 3				
CON-3580	Rough-in	50	01-Nov-24	15-Jan-25
CON-3590	Finishes	40	16-Jan-25	13-Mar-25
CON-5020	JED Pre-Punch	10	14-Mar-25	27-Mar-25
Admin				
CON-3800	Rough-in	90	03-Sep-24	10-Jan-25
CON-5150	Elevator Installation (3)	60	29-Oct-24	27-Jan-25
CON-3810	Finishes	110	03-Dec-24	08-May-25
CON-4830	Master Control Buildout	20	03-Dec-24	31-Dec-24
CON-5030	JED Pre-Punch	10	09-May-25	22-May-25
Late Sitework				
CON-4890	Parking Lots, Sidewalks, Curbs, Asphalt	45	08-May-24	11-Jul-24
CON-4900	Landscaping	60	04-Oct-24	31-Dec-24
Commissioning				
CLOSE-1000	MEP Reliant FFE Install	20	28-Feb-25	27-Mar-25
CLOSE-1010	CxA Inspections / Test	51	21-Mar-25	02-Jun-25
CLOSE-1005	Systems Startup	30	28-Mar-25	08-May-25
CLOSE-1015	SEC/DEC Pre-Test	30	25-Apr-25	06-Jun-25
CLOSE-1020	Design / Owner Final Punchlist	20	09-May-25	06-Jun-25
CLOSE-1025	Certificate of Occupancy Inspections	10	23-May-25	06-Jun-25



End of Exhibit 4

Exhibit 5 - Sequence

Legend

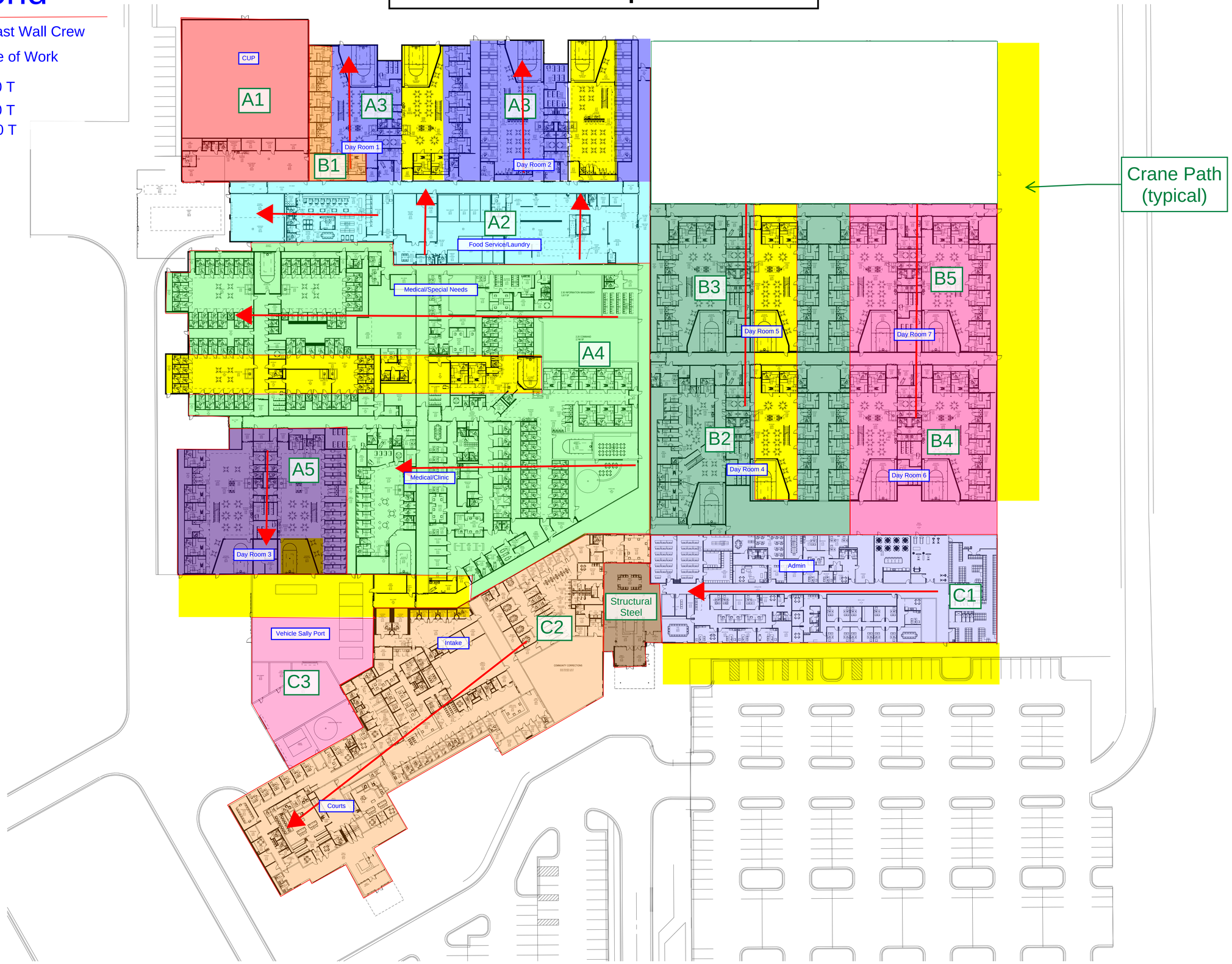
Letter = Precast Wall Crew

= Sequence of Work

A Crew = 300 T

B Crew = 300 T

C Crew = 200 T

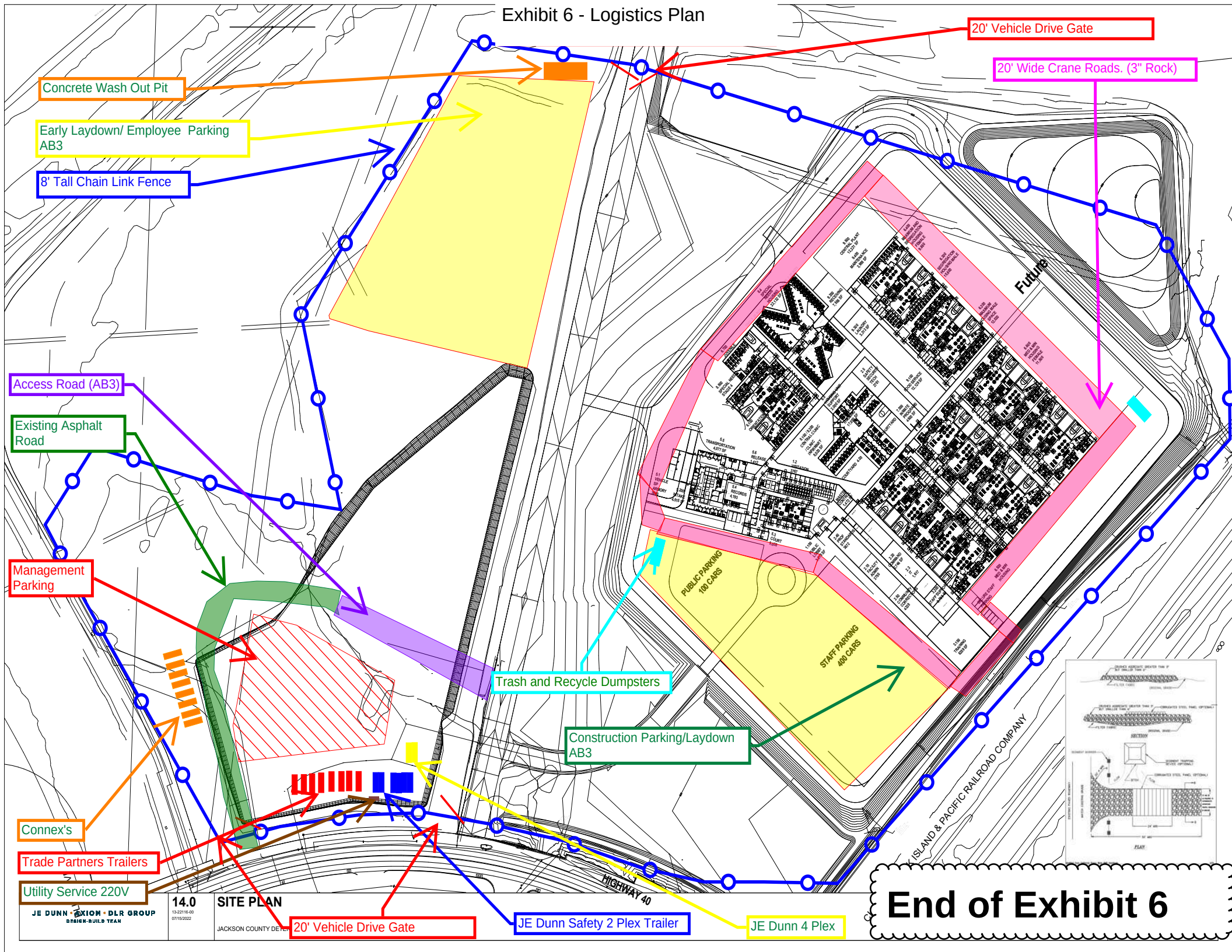


JE DUNN • AXIOM • DLR GROUP DESIGN-BUILD TEAM	**0.2** 13-22116-00 10/31/2022	**OVERALL BUILDING PLAN - LEVEL 1** JACKSON COUNTY DETENTION CENTER

End of Exhibit 5

0 20 40 80
SCALE: 1/32" = 1'-0"

Exhibit 6 - Logistics Plan



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DESIGN-BUILD TEAM

14.0
13-22116-00
07/15/2022

SITE PLAN

JACKSON COUNTY DETEN

End of Exhibit 6

Exhibit 7

Jackson County Detention Center
Exhibit 7 - GMP Clarifications
03/14/2023

General

1. This Guaranteed Maximum Price (GMP) Proposal is based on Schematic Documents dated February 10th, 2023, and supporting documents as outlined in the attached Exhibit B –Contract Documents including listed Drawings and Specifications. The GMP is based on Option #3, which includes 1,000 beds and the recommended VE items.
2. This GMP is based upon the attached Exhibit 8 – Criteria Modification Log that highlights Owner approved criteria modifications.
3. The GMP Proposal is based on the Geotechnical Engineering Report provided by CFS dated September 8th, 2022.
4. The Master Schedule includes a total of Ninety (90) lost weather days, based on NOAA's 10-year average for the Kansas City region. A lost day can occur during the weather event itself, as well as days following the event such as muddy conditions after rain, or snow and ice build-up following a winter storm which impacts critical path activities. Lost weather days exceeding this allowance shall be considered a Force Majeure Event.
5. The Project Site is assumed to be free of any unknown above ground or below ground hazardous materials and/or hazardous conditions, as well as any environmental and/or endangered species, flora, fauna, or wetlands requiring mitigation. The Design/Builder is aware of the two wetlands located on site and the existing long eared bat population that requires the site to be clear of trees prior to March 31st, 2023. This GMP assumes the trees to be removed prior to this date.
6. The GMP is based upon using the following Teamed Trade partners who were selected based on a best value selection process, those trade partners are as follows:
    a. Kissick Construction – Mass Excavation (Lump-Sum)
    b. Cornerstone Detention – Security Electronics (Lump-Sum)
    c. Cornerstone Axiom JV LLC. - Modular Cells Supply (Lump-Sum)
    d. Mark One Electric – Electrical (GMP)
    e. US Engineering – Mechanical (GMP)
    f. American Fire Protection – Fire Protection (GMP)
    g. CML Security – Detention Equipment (Lump-Sum)
    h. Flynn Midwest – Membrane Roofing (Lump-Sum)
    i. Enterprise Precast – Precast Wall Panels/Hollow-Core Supply (Lump-Sum)
    j. Midland Marble and Granite – Tile (Lump-Sum)
7. Per letter received from JCDC on January 24, 2023, titled Jackson County Detention Center -JE Dunn Self Perform, the GMP includes budgets for the concrete, masonry, precast erection, miscellaneous steel, and carpentry from JE Dunn Self-Perform Group/Axiom Construction Group. These scopes of work will be procured after the GMP using the best-value approach as described in our Design-Build agreement.
8. The GMP includes Cornerstone, Axiom JV LLC as a 59%/41% joint venture. Based on past conversations with Jackson County compliance, this JV will be counted as 100% MBE for the precast cell module fabrication Scope of Work.

9. Included in the GMP is a full-size cell mock-up to be reviewed at the cell module plant.
10. Included in the GMP is a functional exterior elevation mock-up that will include precast, curtain wall/glass, and other skin components that can be tested for functionality on site.
11. The final Contractor Utilization Plan will be reconciled with the final submission of Component Package 3.
12. A $90,000 allowance for ~100 LF of 12' tall, galvanized chain link fencing is included at 3 locations. Each location includes a 4'x7' Tymetal 2150 Pedestrian Gates. This allowance is included in the Owner Contingency amount and will be moved to a CSI division once final design of the area is complete and formal documents can be bid.
13. Component Package 1 details work that pertains to continuation of design documents, site demolition, site development and earthwork that is directly tied to this GMP submission. Component Package 1 does not include a complete foundation package. This package will be brought forward an introduced as Component Package 2B.
14. Component Package 2A details work that pertains to engineering, detailing, mockups, and early procurement of long lead material that are directly tied to this GMP submission. The balance of Component Package 2 shell and core package of the project will be delivered as Component Package 2C.
15. If Component Package 1 and 2A are not approved simultaneous there will be a schedule and cost impact incurred by the project.

Program / Design Criteria Package Clarifications

1. Space # 5.511 Beverage Counter is excluded from project. We do not feel it is needed as space #5.410 Beverage Counter is in the same proximity.
2. Several rooms in the Room Data Sheets appear to have cabinet "Material" and "Worksurface" material reversed. In lieu of what is defined in the room data sheet we have assumed the following:

    A 107 Records Window: Wood Cabinet/ Solid Surface Worksurface
    A 113 Mother's Room: Wood Cabinet/ Solid Surface Worksurface
    B 209 Workroom: Plastic Laminate Cabinet/ Solid Surface Worksurface
    B 210 Kitchen: Plastic Laminate Cabinet/ Solid Surface Worksurface
    B 217 Workroom: Plastic Laminate Cabinet/ Solid Surface Worksurface
    B 219 Break & Vending: Plastic Laminate Cabinet/ Solid Surface Worksurface
    B 223 Workroom: Plastic Laminate Cabinet/ Solid Surface Worksurface
    B 227 Break & Vending: Plastic Laminate Cabinet/ Solid Surface Worksurface
    C 301 Lounge: Plastic Laminate Cabinet/ Solid Surface Worksurface
    C 302 Classroom: Plastic Laminate Cabinet/ Solid Surface Worksurface
    C 303 Meeting Room: Plastic Laminate Cabinet/ Solid Surface Worksurface
    C 304 Computer Lab: Plastic Laminate Cabinet/ Solid Surface Worksurface
    C 310 Laundry: Plastic Laminate Cabinet/ Solid Surface Worksurface
    C 316 Break/Dining/Vending: Plastic Laminate Cabinet/ Solid Surface Worksurface
    C 318 Mother's Room: Wood Cabinet/ Solid Surface Worksurface
    D 401 Control Room: Plastic Laminate Cabinet/ Solid Surface Worksurface
    E 502 Main Armory: Plastic Laminate Cabinet/ Solid Surface Worksurface
    E 508 Law Enforcement Paperwork Area: No Base Cabinet/Solid Surface Worksurface
    E 513 Transfer Counter: No Base Cabinet/ Solid Surface Worksurface

E 531 Kitchen: Plastic Laminate Cabinet/ Solid Surface Worksurface
E 539 Release Waiting: No Base Cabinet/Solid Surface Worksurface
E 542 Large Open Workstation: Plastic Laminate Cabinet/ Solid Surface Worksurface
F 622 Beverage Counter (Inmate): Plastic Laminate Cabinet/ Solid Surface Worksurface
F 624 Issue Room: Plastic Laminate Cabinet/ Solid Surface Worksurface
F 633 Break Area: Plastic Laminate Cabinet/ Solid Surface Worksurface
H 802 Exam Room: Plastic Laminate Cabinet/ Solid Surface Worksurface
H 803 Treatment Room: Plastic Laminate Cabinet/ Solid Surface Worksurface
H 804 Lab: Plastic Laminate Cabinet/ Solid Surface Worksurface
H 806 Dental Suite: Plastic Laminate Cabinet/ Solid Surface Worksurface
H 807 Dental Lab & Workroom: Plastic Laminate Cabinet/ Solid Surface Worksurface
H 809 Medication Storage: Plastic Laminate Cabinet/ Solid Surface Worksurface
H 811 Multi-Purpose Room: Plastic Laminate Cabinet/ Solid Surface Worksurface
H 813 Food & Bevg Staging/ Dist.: Plastic Laminate Cabinet/ Solid Surface Worksurface
H 822 Issue Room (Medical): Plastic Laminate Cabinet/ Solid Surface Worksurface
H 834 Work Alcove: Plastic Laminate Cabinet/ Solid Surface Worksurface
H 838 Large Open Workstation: Plastic Laminate Cabinet/ Solid Surface Worksurface
J 937 Mail Room: Plastic Laminate Cabinet/ Solid Surface Worksurface
J 946 Beverage Counter: Plastic Laminate Cabinet/ Solid Surface Worksurface

3. As approved through the VE process, the reduction in dayroom sizes and inclusion of two (2) ADA cell per unit. An inmate toilet was deleted from each dayroom in program spaces Male Max (6.215), Male Seg (6.313), Male Medium/Minimum (6.512) including proposed dorm, Female Medium/Minimum (6.612) and Female Special Housing (6.414).
4. As identified through our workshops, the design of the Intake Vehicle Sallyport (Program space # 5.101) and Transportation Vehicle Sallyport (Program Space # 5.102) have been modified to includes a single shared interior space that can accommodate both functions. The space is designed to include one vehicle entry door and one vehicle exit door. This revised Combined Vehicle Sallyport has been designed to allow for parking of 6 patrol vehicles. It also is designed to accommodate parking for 1 bus. This combined space shall be provided as sized on Schematic Design Drawings included with this proposal. The modifications defined herein shall take precedence over SF requirements, vehicle parking counts, vehicle door requirements and separation requirements defined in the Design Criteria Package.
5. Vol. 1, Section 5.100 indicates that intake sallyport shall have separate entry and exit overhead doors but room data sheet E 500 calls for Tri-Fold Sallyport Doors. Specification section 32 31 15 suggests Four-Fold Doors. We have provided solid four-fold doors at the combined Intake Vehicle Sallyport/ Transportation Vehicle Sallyport in lieu of mesh type as specified.
6. Vol. 1, space program 5.000 Intake/Transportation/Release Vehicle Sallyport indicated that a separate security vestibule for emergency vehicles to access the central clinic and healthcare area. The current proposal assumes that emergency vehicles will park within the transportation vehicle sallyport in one of the designated Bus or Van parking spaces. Entrance from the Transportation vehicle sallyport into the building includes a secure pedestrian sallyport with access to the corridor adjacent to Infirmary Clinic that is sized appropriately for emergency personnel access.

7. Room Data Sheets B 207 Standard Open Workstation, B216 Large Open Workstation, & E 534 Standard Open Workstation do not call for casework, we have excluded casework work surfaces at these locations (assumed to be Owner provided FF&E).
8. Proposal based upon the use of Cornerstone Detention to produce Modular Precast Concrete cells per spec section 13 34 23. Modules will be constructed at a remote job site that will not be PCI or NPCA certified.
9. Proposal is based upon the use of Enterprise Precast for architectural and structural precast panel supply and hollow-core and double-T supply. Enterprise currently has limited PCI certification due to an acquisition of a local Kansas City precast plant. The architectural panel with integral color, form liners, sandblast/acid etch located at the south elevation will be cast in their PCI certified plant in Omaha. Precast Double-T's and hollow-core will be manufactured in PCI certified plants. The remainder of the panels will likely be cast in the new plant with is APA certified. This plant is in the process of obtaining PCI certification and may achieve such prior to production but this cannot be guaranteed.
10. Heated slab at combined Intake Vehicle sallyport and Transportation Vehicle sallyport (Room Data Sheet Numbers E 500 and E 501) is limited to the drive path in from the parking lot access drive to the Combined Sallyport vehicle entry door and the drive path from vehicle exit door of combined vehicle sallyport out to the vehicle gate located in the fence.
11. For Space # 8.125 Staff lockers there is no room data sheet provided. We have included 32 metal lockers 18" wide x 18" Deep x 3' high. Lockers will be arranged in a double-tier configuration.
12. Included in GMP are 125 male lockers 18 x 24 x 6'H and 69 female lockers at 18 x 24 x 6'H with integrated bench and boot storage drawer in the Men's 3.201 and Women's locker rooms 3.201. An additional 3 female and 7 male 18 x 24 x6'H lockers without integrated benches for accessibility are provided for a total of 72 female and 132 male for total of 204 lockers per the DCP.
13. As there is no Room Data Sheet for A 117, we have used the Room Data Sheet for B216 Large Open Workstation as the basis of the GMP.
14. As there is no Room Data Sheet for B 215, we have used the Room Data Sheet B205 Small Office as the basis of the GMP.
15. As there is no Room Data Sheet for J 926, we have provided an eyewash station.
16. As there is no Room Data Sheet for E 505, we have used Room Data Sheet E 543 1-Person Holding Cell as the basis of the GMP.
17. All cells provided with interior height to bottom of ceiling at 8'-0". Bottom of surface mounted ceiling devices/ fixtures will be lower than 8' above finished floor.
18. Average height to bottom of the dayroom roof structures in dayroom housing to be 22-'4" at typical 2 tier housing units.
19. The program calls for 3 each of Space #5.507, 16-Person Group Holding Cells (Room data sheet #E 537). Our proposal only includes 2 of these cells. We have excluded the requirement for automatic drop-down vinyl curtains to cover or block view based upon proposed configuration of these cells.
20. Added approximately 1,500 square foot Virtual Reality training room.

Sitework

1. One entrance off US Highway 40 is included in the design. Two entrances off Ewing Avenue are provided.
2. Finished Floor Elevation is assumed to be at 762.50, which is 1'.5" above the 500-year floodplain.
3. Per the geotechnical report conducted by CFS, alluvial soils are present on site due to the nature of the Blue River. Due to this, there is a long-term settlement concern that will require the use of prefabricated vertical drains (Wick Drains) to be installed under the building footprint and locations at site utilities. The GMP currently includes a wick drain triangular spacing of 4' underneath the building footprint and wick drain 9' triangular spacing under all other hardscapes. Wick Drain spacing correlates with the amount of time the existing fill will need to settle prior to construction activities proceeding.
4. 122 Public and 412 Staff Parking Spaces are provided.
5. The water meter vault has been included in this GMP. The water meter assembly should be procured by Jackson County through the city/local utility company and installed once all fees are paid.

Foundations and Structure

1. Raised slabs have been included for officer workstations within the dayrooms and at the Intake slab in the administration building.
2. Structures consist of cell modules, architectural/structural precast, double-T's, CMU, and hollow core. The administration building will consist of structural steel with a slab on metal deck for the 2nd floor.

Enclosure and Roofing

1. Clerestory windows at Stage 1-3 Housing and Juvenile Housing are provided via rooftop clerestory light wells. Light wells shall be doghouse structures comprised of cold formed metal framing applied on top of precast roof structure. Openings in precast structure shall be provided for light to enter space. Security will be provided via woven wire rod assemblies attached to precast structure.
2. GMP includes an adhered gray Thermoplastic-Polyolefin (TPO) roof that achieves a minimum R-value of 30. This includes a 2.7" base layer of Polyiso with tapered insulation. Our teamed trade partner Flynn, has confirmed a vapor barrier is not required to provide a full warranty with a gray TPO roof on this project.

Partitions and Finishes

1. Where room data sheets call for gypsum board and high impact gypsum board partitions, we have excluded furring and gypsum board at locations where we have provided masonry or precast wall partitions/ building perimeter. Except in spaces accessible to the public, courts and two-story administration building.

2. CMU partitions have been included in various secure areas in lieu of precast. These areas include housing area showers, housing area restrooms, Stage 1-4 Male Special Needs, the medical/clinic area, Kitchen/Laundry, intake, and visitation.

Specialties, Equipment and Furnishings

1. We have included nurse call functionality at locations as indicated through the use of detention intercom system.
2. Laundry equipment space has been sized for a total inmate population of approximately 1,800 and is based on a 5-day week operation, 35 hours, with inmate clothing changes 3 times a week, bed linens 1 change a week, terry goods 3 changes a week, and miscellaneous items 2 changes a week. GMP currently includes 4 – 160 pound, 1 – 105 pound, and 1 – 45 pound washer/extractors and 5 – 170 pound and 1- 45 pound dryers. This is based on the 1256 bed count and additional washer/extractors and dryers would be needed at the time of expansion.
3. The kitchen is designed to prepare breakfast, lunch, and dinner for an initial population of 1,256 plus staff with MEP provisions for future expansion of up to 500 additional inmates. Additional equipment will be needed for expansion beyond the 1,256-bed count. The kitchen will function as a cook to serve with tray make-up using insulated trays delivered in carts.
4. Cooler, Freezers, and dry storage rooms shall be located inside the kitchen in close proximity to receiving doors.
5. A separate area included for special diets will provide separation for Kosher food.

Mechanical, Plumbing and Fire Sprinkler

1. The smoke management system has been designed using an egress time of 20 minutes for an individual housing unit and a fire load of 1,000 KW. resulting in 40,000 CFM or smoke exhaust. Design is based of off the dayroom smoke control analysis questionnaire received from JCDC on January 30th, 2023. Assumptions for the smoke control system are as follows:
    a. This analysis assumes normal fire conditions.
    b. This analysis assumes one normal fire condition at a time in a housing unit.
    c. The GMP includes design for 40,000 total CFM for smoke control in each 2-level dayroom.
2. The 4-pipe water chilled hydronic HVAC System selection was based on utilizing the Federal Energy Management Program (FEMP) Building Life Cycle Cost methodologies and has been followed over a max 40-year study lifecycle with replacement costs applied at year 20. Input has been received from our Mechanical teamed trade partner on initial costs, maintenance costs, and replacement costs.
3. Mechanical Equipment located on the roof is currently screened with taller parapet precast walls. No decorative metal screening has been included in this GMP.

Electrical/Low Voltage/Security Systems

1. The GMP includes utilizing a Milestone video management server with Vicon cameras.

2. Reference the attached Exhibit 11 – JCDC Systems Responsibility Matrix for additional clarity regarding delineation between this proposal and Owner provided work.
3. Only rough-in (conduit) has been included for the distributed antenna system (DAS)- DAS is Owner Provided.
4. We have included a two (2) post rack for contractor provided patch panels and fiber terminations in each IDF room as well as the equivalent of 1.5 KVA UPS capacity at each IDF room for Owner provided equipment. In addition, we have included a 16 KVA UPS at the MDF room to support Owner provided equipment.

Exclusions:

1. Costs associated with delays resulting from adjacent project operations and infrastructure work, which is not a part of, or under control of, this Design/Builder.
2. State, County, and Local Sales or Use Taxes.
3. Financing Costs.
4. Property acquisition costs and fees.
5. Guard services or security services.
6. Demolition of existing buildings and site infrastructure, including existing power poles. This GMP includes site clearing and demolition of existing mobile home pads.
7. Removal of unforeseen structures or obstructions.
8. All utility service line extensions to the project site including domestic water, fire suppression, sanitary sewer, storm sewer, electric, natural gas, and fiber/telecommunications. All utility service company capital costs, development fees, tap/service connection fees, investment fees, inspection fees, or charges of any kind are excluded. Coordination with responsible utility providers is assumed to be by JCDC or Jackson County.
9. Water meter assembly.
10. On-site natural gas main line to the meter and gas meter assembly.
11. Labor to unload or install Owner furnished equipment, and dumpsters for pallets, crating and packaging.
12. Environmental study of any kind.
13. Hazardous material abatement.
14. Commissioning and specialty consultants.
15. Rental of adjacent property or construction staging/parking.
16. Laboratory mockups: Full-size project specific physical assemblies constructed and tested at a testing facility to verify performance characteristics.
17. 08 62 00 Unit Skylights:
    A. 1.3, A Fall Protection (All units have security bars, deemed not required). Not needed as the skylights have security bars incorporated and act as fall protection devices.
18. 07 72 00 Roof Accessories:
    A. A1.2, A.4 Integral Spring-type vibration isolators. Presumed that this this is covered with mechanical specifications.
    B. 1.2, A.5 Wind Restraint Straps
    C. 1.2, B.4 Wind Restraint Straps

19. 1.2, J Roof Walkway: Formed from aluminum sheet. Standard roof walking pads have been included in the roof spec. 08 62 00 Unit Skylights:
    A. 1.3, A Fall Protection (All units have security bars, deemed not required)
20. Clerestory windows at Space #s 5.202 Open seating (Intake), 5.216 Open holding (Intake), 8.307 Dayroom (Medical).
21. Operable windows at dayroom or recreation areas. Recreation areas have access to fresh air via partial woven wire rod ceiling enclosure assembly.
22. Vol. 1, Section 2.5.7 Intake Vehicle Sallyport calls for physical separation between law enforcement vehicles and inmates with the sallyport. The program does not support this requirement. We have excluded this physical separation.
23. We are not including the traffic signal at US HWY 40. Traffic Study suggests the new Detention Center will not need a traffic light. If there is a new facility built (i.e., Sheriff's Office) on the current development the traffic study will have to be reviewed and mostly likely will require a traffic signal.
24. Room Data Sheet J 955 calls for Dedicated HVAC units at Branch Electrical Rooms. We have excluded dedicated HVAC units at these locations and have instead provided cooling from AHU/RTUs serving adjacent spaces.
25. Room Data Sheet E 500 calls for redundant HVAC system. We have excluded this from our proposal. HVAC for the Intake Vehicle Sallyport will be heat and vent only.
26. Space Program 5.101 Intake Vehicle Sallyport Comments calls for a heated slab. Room Data sheet E 500 Calls for in slab snow melt system at Intake Vehicle Sallyport. This is an interior heated space, so we have excluded this from our proposal.
27. Room Data Sheets H814 and H815 call for medical headwall units at Infirmary Cells. Based upon discussions with JCDC Partners we have excluded headwalls and have provided room for bottle storage near the Infirmary.
28. Bullet Resistant Glazing at exterior of building including primary entrance and judge's offices.
29. Area of refuge enclosed fence area. In almost every instance, evacuation required at housing units will be accomplished from one space to an adjacent housing space.
30. Cost of construction for the Gas Utility Service Provider to extend services to the meter location located adjacent to the Central Utility Plant. This includes the cost of the meter itself.
31. Cost of construction for the Electrical Utility Service Provider to extend services to the transformer location. This includes the cost of the transformers itself.
32. Dumbwaiters per Vol. 2 Spec section 14 10 00.
33. Wheelchair Lifts per Spec Section 14 42 00.
34. Vol. 2, Spec Section 13 42 23 requirement that production facility shall be certified by PCI or NPCA.
35. Rooftop mechanical penthouse per Room data sheet J 959. Equipment shall be roof mounted and have enclosures for hydronic piping where required.
36. Room Data Sheet call for stainless steel partitions and doors at coolers and freezers. We exclude stainless steel partitions and doors and have included cooler/ freezer manufacturers standard insulated wall assembly with galvalume face panels.
37. Glazed wall between Space # 3.212 Break/Dining/Vending and adjacent corridor as called for per Room Data Sheet C 316. Room configuration does not support this.
38. Access floor at courtroom well spaces as called for in room data sheets E 526 and E 527.

39. Automatic glass sliding doors at space #1.101 staff and public entry vestibule as called for per Room Data Sheet A 100. We have provided aluminum storefront entrance doors with ADA operators as required.
40. Double doors at Space #s 5.301, 5.302, 5.303 for courtrooms and associated vestibules per Room Data Sheet sheets E 525, E 526 & E 527. We have provided single doors.
41. Cart washing machine as indicated per room data sheet J 921. We have included a cart washing area with hose reel and floor trough.
42. OFOI Fixtures, Furnishings and Equipment including but not limited to the following:

    A. Exterior tables and chairs per RDS C 316 Break/Dining/Vending
    B. Trash Compactor and Dumpsters
    C. Vending Machines
    D. Dental equipment including lab equipment, dental chairs, compressor, vacuum system, x-ray equipment, x-ray viewers and custom radiology dental casework. (We have included rough in of utilities and final connections after installation).
    E. Exam room tables with fixed vital station
    F. Hospital Beds
    G. Automatic chemical dispenser system for laundry equipment. We have included laundry equipment equipped to receive chemicals from the Owner provided system.
    H. Janitor Closet Chemical Dispensers
    I. Lobby Queuing system stanchions
    J. Open detention moveable seating
    K. Wellness room fitness equipment including treadmills, elliptical machines, stationary bikes, stair masters, free weights/bars, and squat racks.
    L. Ozone Sanitation Cabinets
    M. Metal Shelving and Storage Racks
    N. Property Storage Rack, Property Storage Bags, Property storage Shelving, Property Storage Bins and Secure Property Storage Cabinets.
    O. CERT Equipment Lockers and Storage Cabinets
    P. Residential Appliances (Refrigerators, Medical Storage Freezer, Commercial washer/dryer at Inmate Property Storage and Locker Rooms, Microwaves.
    Q. Movable public seating
    R. Tables, chairs, children's chairs, children's tables, movable sofas, lounge chairs, coffee tables, worktables, work benches, Library tables, library chairs, interior courtroom flagpoles and bases.

43. Audio Visual and IT equipment including but not limited to the following:
    A. Telephones and VOIP Phone Devices
    B. Video Visitation Equipment/ Video Visitation Kiosks
    C. Inmate Phone System
    D. Video Conferencing Equipment- includes inmate system and tele-med/psych/courts system
    E. Televisions and AV Flat Panels Displays and associated mounting brackets
    F. Lobby Electronic Information Monitors
    G. Interactive Wayfinding Digital Signage
    H. Courts presentation system, electronic docket system, evidence presentation system, court recording system (JAVS)

I. Ceiling projectors
J. Printers
K. Cash bond (Bonding) Kiosk
L. Visitation Appointment Kiosk
M. Money Deposit-Inmate Accounting Kiosk
N. Magnetometers
O. Metal detectors
P. Body Scanners
Q. X-Ray Machines

44. Nurse Call/ Code Blue System per Spec section 27 52 23. See clarifications for nurse call functionality provided via detention grade intercom system.
45. Volume 1 of the DCP, section 2.5.18 defines requirements for Rear Chase including motion detectors that will notify central control of any movement. We have excluded motion detectors at rear chases because we have included door control to limit movement from inside to outside the secure perimeter at all rear chase locations.
46. Special Inspections. Provided by the Owner
47. Mechanical, electrical, and plumbing equipment decorative metal screening.
48. A centralized UPS system as noted in the Design Criteria Package Section 3.2 – General Design and System Criteria.
49. Engineering, wiring, and devices for the distributed antenna system (DAS).
50. Sizing of generators for future expansion.
51. Sound attenuating enclosures for Emergency Generators.
52. Building FAA Permit
53. Floodplain Development Permit
54. Conditional Letter of Map Revision Permit (CLOMR-F)
55. Drop down vinyl curtain in 16-person Group Holding Cells, Room Data Sheet E537.
56. Harmonic Filtration at individual VAVs.
57. Smoke Control systems at Intake and Transportation.
58. Full-Size courtroom mock-ups.

End of Exhibit 7

Exhibit 8

JACKSON COUNTY
DETENTION CENTER

Request #	Submitted	Request Title	Modification Request	Current Text/Perposed Text	County Signature/Approval
1	07.29.2022	2nd Level ADA Cells	Per Workshop #1 dated 06.21.2022, the Design-Build Team recommends that the requirement for all Medium & Minimum Housing Cells, inorder to be ADA compliant as indicated in the Design Criteria Package under the Room Data sheets be revised to note that only cells located on the 1st level are to be ADA compliant, and all 2nd level cells are non-ADA. ADA compliant cells on an upper level would require ADA circulation access via elevator or wheel chair lift which would add additional square footage, equipment and construction cost to the design. There is additional savings in providing more typical combination plumbing fixtures in lieu of ADA Accessible combo fixtures in the 2nd level cells. Note: Request would also include that all housing cells on an upper level be non-ADA.	**Current Text:**Table 24: 6.503 4-person Occupancy ADA Cell (16 Units) Table 24: 6.603 4 Person Occupancy ADA Cell (14 Units) **Proposed Text:** Table 24: 6.503 4-person Occupancy Cell (16 Units) Comment: wet cell w/ ADA cells on 1st Level only Table 24: 6.603 4 Person Occupancy Cell (14 Units) Comment: wet cell w/ ADA cells on 1st Level only	Signed 08.03.2022
2	07.29.2022	Glazing Clarification	The detention glazing specification lists 14 types of detention glazing (SG-1through SG-14). The room data sheets only reference three types. (SG-1, SG-2, SG-3). The Criteria package and room data sheets define detention levels with SG-1 being ASTM 1915 60-minute glazing, SG-2 being 40-minute detention glazing, and SG-3 being 20-minute detention glazing. The standards imply that SG-1 is used on the exterior detention barrier, SG-2 is used on the dayroom detention barrier, and SG-3 is used on the cell detention barrier. We are requesting the documents list 4 types of detention glazing with the attack ratings being the distinguishing factors. These values (SG-1 through SG-4) will coincide with the room data sheets. Different assemblies for these glazing will be required. For example, SG-3 glazing in a fire rated wall will differ in assembly from SG-3 glazing in an exterior wall, but the attack rating will correspond with the room data sheets and the defined theory.	**Current Text:** SG-1-SG-14 with corresponding test requirements and attack rating. **Proposed Text**: SG-1-SG-4 with corresponding test requirements and attack rating.	Signed 08.16.2022
3	07.29.2022	SEC/IT Room Locations	Telecom rooms are to be located within 295' of the end user devices in lieu of 150' listed in RFP. Cable connecting telecom rooms will be fiber, and not subject to CAT6 cable distance limitations. Fiber does not have the distance or bandwidth limitations that CAT6 copper cabling does. The Division 27 Trade Partner will be installing a fiber backbone between SEC/Telecom rooms to maintain electrical isolation between rooms. Refer to attached page form the BICSI TDMM version 14, Chapter 5 page 17 describing the cable limitations at 295 feet. Honoring the 150 feet requirement would double the amount of equipment rooms. This in turn will lead to unnecessary increases in head end electronic equipment.	**Current Text:** Telecom rooms/closets should be spaced throughout the facility to provide a coverage area of less than 150 feet in any direction to the end user devices, with horizontal cabling between rooms to be less than 300 feet apart **Proposed Text:** Telecom rooms/closets should be spaced throughout the facility to provide coverage areas of less than 295 feet in any direction to the end user devices, with horizontal cabling between rooms to be over fiber optic cable.	Signed 09.01.2022
4	07.29.2022	UPS Back-Up	The UPS requirement for the locking control system is four hours. The locking control system is on emergency power. The UPS units are designed to provide power between the time of outage and the generator activation. Reducing the time to an hour will still provide the facility with time to evacuate if the generator does not start. Limiting the UPS time to an hour requires ¼ of the batteries. This is a cost savings for construction as well as long term maintenance when the batteries need to be replaced every five years. Please note that within the Criteria Documents on JCDC page 42, 4.6 – Uninterruptible Power Supplies (UPS) "UPS to be provided with a manual bypass and sized to allow ride-through power upon loss of power with a minimum 15 minutes of backup". The criteria documents currently have emergency generator power covering the entire facility with the capacity to bring on a 3rd 1.5KW generator for expansion.	**Current Text:** 1.14 DEDICATED UPS A. Description: Single-phase units, rated 120 V, 60-Hz input and output, complying with requirements for UPS-type central battery inverters adequate to supply full connected load for a minimum of four (4) hours. **Proposed Text:** 1.14 SYSTEM UPS A. Description: Single-phase units, rated 120 V, 60-Hz input and output, complying with requirements for UPS-type central battery inverters adequate to supply full connected load for minimum of (15) fifteen minutes.	Signed 09.01.2022

5	07.29.2022	Video System Warranty	The warranty period for the video system is listed as three years. This is longer than the warranty on other systems. Varying the warranty between the locking control system and the video system causes conflicts since the systems are integrated and provided by the same contractor. This also adds additional cost.	**Current Text:** Warranty Period: Three years from date of Substantial Completion. **Proposed Text:** Warranty Period: One year from date of Substantial Completion.	Signed 08.03.2022
6	07.20.2022	LEED v4.0 in lieu of v4.1	The Design Build team requests to be allowed to utilize LEED v4.0 in lieu of LEED v4.1 as specified in the DCP. This approach will provide increased flexibility to achieve the desired LEED Gold rating and also allows to switch to LEED v4.1 at a later time if desired.	**Current Text:** Energy Code: ASHRAE 90.1-2009 LEED Version 4.1 02.2021 **Proposed Text:** Energy Code: ASHRAE 90.1-2009 LEED Version 4.0	Signed 08.03.2022
7	07.29.2022	1 Entrance vs 2 off Highway 40	Per our Preliminary Application meeting on June 30, 2022, the KCMO Planning and Development Department approved the two access points off of Ewing Avenue to service our site. Ewing Avenue is a public street and connects directly to US Highway 40. Therefore, one access point for Ewing Avenue off of US Hwy 40 is acceptable. This will have a positive impact on cost, schedule and provide clear circulation. A traffic study is pending and will provide recommendations on the proposed intersection development of Ewing and US Hwy 40. A secondary entrance off of US Highway 40 can be developed at a future date as the parcel west of Ewing Avenue is further developed and defined, but is not part of the scope of this project at this time.	**Current Text:** Segregated public and staff vehicular entry points shall be from US Highway 40. **Proposed Text:** Two access points shall be provided to the site from Ewing Avenue. Ewing Avenue is public street and connects directly to US Highway 40.	Hold until Master Planning is complete
8	08.04.2022	Female Housing	Per end user direction at OAC meeting dated 07.26.2022, please confirm the design is to deviate from the program criteria document and remove female cells from Unit 1 - Orientation (Co-Ed) Housing and Stage 4 Housing and relocate into revised Female Housing Units.	**Current Text:** Page 22) 2.5.16 Housing Pods | Area – Unit 1-Orientation (Co-ed) (Page 144) Table 20. Orientation Housing Space | 6.104 & 6.107 (Page 168) Table 33. Special Needs Housing Stage 1-3 Space | 8.404 (Page 170) Table 34. Special Needs Housing Stage 4 Space | 8.504 **Proposed Text:** (Page 22) 2.5.16 Housing Pods | Area & Component – Unit 1-Orientation* (Page 144) Table 20. Orientation Housing Space |* (Page 168) Table 33. Special Needs Housing Stage 1-3 Space |* (Page 170) Table 34. Special Needs Housing Stage 4 Space |* *(Relocate Female Occupancy Cells into a revised Female Housing Unit)	Not Approved per current SD
9	08.04.2022	Juvenile Housing - Adjusted Bed Count/Cell Types	Per end user direction at OAC meeting dated 07.26.2022, please confirm the design is to deviate from the program criteria document and remove 2-person occupancy cells from Unit 6 - Juvenile Housing and reduce the total number of beds to 8 vs. 12. Revised Component & # Cells: (1) 1-person Occupancy ADA cell and (7) 1-person Occupancy Cell	**Current Text:** Page 22) 2.5.16 Housing Pods | Area – Unit 6-Juvenile (Page 22) 2.5.16 Housing Pods | Area & Component – Unit 6-Juvenile 12 beds* |6.704 |1-person Occupancy Cell 3 cells | 6.705 | 2-person Occupancy Cell 4 cells* (Page 153) Table 26. Juvenile Housing Space| 6.704| 1-person Occupance Cell 3 units | 6.705 | 2-Person Occupancy 4 units* **Proposed Text:** (Page 22) 2.5.16 Housing Pods | Area & Component – Unit 6-Juvenile 8 beds* |6.704 |1-person Occupancy Cell 7 cells*(Page 153) Table 26. Juvenile Housing Space| 6.704| 1-person Occupancy Cell 7 units*	Signed 09.01.2022

10	08.04.2022	Staff Support - Staff Breakroom Locations	Per end user direction at the OAC meeting dated 07.26.2022, please confirm the design is to include areas for staff dining both outside and inside the secure perimeter.	**Current Text:** • All staff will have access to a Staff Dining Room in an environment that is removed from the feel of an institution. • The staff dining room will consist of both served and self-serve items with a self-serve beverage counter. After-hour meal service with grab-n-go or re therm meals will be provided. **Proposed Text:** All staff will have access to a Staff Dining area outside and inside the secure perimeter of the building. The location of these spaces will be defined in the Schematic Design Documents.	Signed 09.01.2022
11	08.04.2022	Inmate Cells - Underbunk Storage	Per end user direction at OAC meeting dated 07.26.2022, please confirm the design is to include under the bunk storage capabilities at each cell. Inmate property will be held in covered bins place under the bunks.	**Current Text:** (Page 2-24) 2.5.20 Furniture in Cells and Sleeping Rooms All furniture in the cells and sleeping rooms shall be designed with inmate safety as a priority and shall limit ways in which inmates can harm themselves within the sleeping room or cell. To support suicide prevention, beds shall be either a heavy molded plastic or shall be steel-bolted flush to the wall with the frame constructed to prevent its use as an anchoring device. In any of the options described above, the bed shall be approximately 12 to 15 inches above the finished floor. For certain housing classification types with higher security levels open space below the bed shall be enclosed so as to prevent an inmate from barricading themselves under the bed or otherwise accessing that space. Desks shall be attached to the wall with chairs for seating, depending on the housing pod type higher security will have a chair or stool mounted to the floor or wall to prevent throwing. **Proposed Text:** (Page 2-24) 2.5.20 Furniture in Cells and Sleeping Rooms (Add sentence) Provide under the bunk storage capabilities. Inmate property will be held in covered bins place under the bunks. Owner to provide inmate storage bins.	Signed 09.01.2022
12	01.27.2023	Housing Units	Per end user direction at OAC meeting dated 07.26.2022, please confirm the design can include sub-dayrooms in selected housing units to allow for increased out-of-cell time while limiting contact between the inmates.	**Current Text:** (Page 25) 2.5.21 Dayrooms Direct supervision is mandated at all times for the inmate population to be housed at the JCDC. Custody staff shall have a central custody station raised above the floor by 12 to 18 inches to optimize views into inmate-occupied areas. Custody staff are required to move in and around the housing units. Space within the dayroom shall maximize visibility through the space. Columns shall not impede views. Inmate meals shall be eaten within the housing units. Support spaces adjacent to the dayroom, including multipurpose rooms, interview rooms, and private visitation rooms, shall be clearly viewable from the central housing security station. **Proposed Text:** (Page 25) 2.5.21 Dayrooms (Add sentence) Dayrooms may include sub-dayrooms in selected housing units to allow for some classification separation and to increase out-of-cell time while limiting contact between inmates in the same housing unit. (Add sentence to Typical Selected Housing Units Description of Function & Facility Program Enhancements) Dayrooms may include sub-dayrooms in selected housing units to allow for some classification separation and to increase out-of-cell time while limiting contact between inmates in the same housing unit.	Signed 02.08.2023
13	08.04.2022	Intake/Release	Per end user direction at OAC meeting dated 07.26.2022, please confirm that Inmates being released from custody will not go through the Public Lobby as part of the design for the Intake/Release area for discretionary purposes.	**Current Text:** (Pages 15-16) 2.5.11 Release & (Page 137) 5.6000 Release – Description of Function If the individual is being released to the community and there are no other warrants or holds from another jurisdiction, the individual is escorted from housing to the Release area and continues through the release process. If there is a hold or outstanding warrant, the individual remains in custody. **Proposed Text:**(Pages 15-16) 2.5.11 Release & (Page 137) 5.6000 Release – Description of Function (Add sentence to Paragraphs on page 16 & 137) Inmates being released from custody will not go through the Public Lobby.	Signed 09.01.2022
14	01.27.2023	No LEED certification	The Design Build team requests to be allowed to eliminate all LEED requirements as specified in the DCP. This approach will provide increased flexibility to achieve the desired VE efforts that are currently under way to reach a GMP budget. Ref VE G2a	**Current Text:** See section 5.1 Schematic Design LEED Integrative Process Credit Modeling, section 5.2 Design Development and section 7 LEED Narrative. **Proposed Text:**Eliminate above mentioned LEED requirements entirely.	Signed/Received on 02.08.2023

15	01.27.2023	Integral color concrete floor	The Design Build team requests to be allowed to remove integral color concrete flooring in the housing units. This approach will provide increased flexibility on VE options to reach GMP. Ref G12	**Current Text:** (Page 30) 2.5.27 Material Selection **Proposed Text:** (Page 30) 2.5.27 Material Selection eliminate integral color from the material selection	Signed/Received on 02.08.2023
16	01.27.2023	Virtual Reality training room	Per end user direction from Owner, please add a 1500 SF room to be used as a Virtual Reality Training Room. Per P11 on the VE list to get to a GMP.	**Current Text:** Not currently in program **Proposed Text:** Add a 1500 SF room to be used as a Virtual Reality Training Room. This room and new system will also include a treadmill to complete the experience of virtual reality.	Signed/Received on 02.08.2023
17	01.27.2023	2 ADA cells in each med/min housing unit	The Design Build team requests to deviate from the program criteria document and reduce the quantity of ADA cells in housing units 3 and units 7-22. This approach will provide increased flexibility on VE options to reach GMP. Ref H3	***Current Text:*** *(Page 22) 2.5.16 Housing Pods | Area – Unit 3-Max Cells Male | 16* *(Page 22) 2.5.16 Housing Pods | Area – Unit 7-18 -Med-Min Male and Female | 16* *(Page 22) 2.5.16 Housing Pods | Area – Unit 19 -Medical Housing Co-ed | 16 (male) & 8 (female)* *(Page 22) 2.5.16 Housing Pods | Area – Unit 20 -Special Needs Stage 1-3 Male | 40 & 4* *(Page 22) 2.5.16 Housing Pods | Area – Unit 21 -Special Needs Stage 4 Male | 12* *(Page 22) 2.5.16 Housing Pods | Area – Unit 22 -Special Needs Stage Female | 16 & 4* ***Proposed Text:*** *Page 30) 2.5.16 Housing Pods | Area – Unit 3-Max Cells Male | 2* *(Page 30) 2.5.16 Housing Pods | Area – Unit 7-18 -Med-Min Male and Female | 2* *(Page 30) 2.5.16 Housing Pods | Area – Unit 19 -Medical Housing Co-ed | 2 (male) & 2 (female)* *(Page 30) 2.5.16 Housing Pods | Area – Unit 20 -Special Needs Stage 1-3 Male | 2 & 2* *(Page 30) 2.5.16 Housing Pods | Area – Unit 21 -Special Needs Stage 4 Male | 2* *(Page 30) 2.5.16 Housing Pods | Area – Unit 22 -Special Needs Stage Female | 2 & 2*	Signed/Received on 02.08.2023
18	01.27.2023	Reduce Dayrom height	The Design Build team requests to deviate from the program criteria document and reduce the average height of the structure at dayroom housing from 25'-4" to 22'-4", reduce glazing and smoke exhaust fans on the roof. This request is in conjunction with VE item H21 – Reducing the ceiling height in cells from 9'-0" to 8'-0". See Typ. Dayroom Section on page 2. This approach will reduce project material costs and will provide increased flexibility on VE options to reach GMP. Ref J5, H21	***Current Text:*** *Page 340, 347, 352, 363, 388, & 392)* *Room Data Sheets > Ceiling Height: 25'-0"* ***Proposed Text:*** *(Page 340, 347, 352, 363, 388, & 392)* *Room Data Sheets > Ceiling Height: 21'-6"*	Signed 02.08.2023
19	01.27.2023	Canopy at transportation sallyport	The Design Build team requests to deviate from the program criteria document and remove the canopy at the Transportation Vehicle Sallyport. This approach will reduce project material costs and will provide increased flexibility on VE options to reach GMP.	**Current Text:** (Page 125) 5.102 Transportation Vehicle Sallyport Comment: "outdoor area with 2 lanes, partially covered, heated slab, room for bus, parking for 6 vans,…." **Proposed Text:** (Page 125) 5.102 Transportation Vehicle Sallyport Comment: "outdoor area with 2 lanes, heated slab, room for bus, parking for 6 vans,…."	Signed 02.08.2023
20	01.27.2023	Cameras inside Med/Min cells	The Design Build team requests to be allowed to delete cameras at Male and Female Med/Min Cells only.	**Current Text:** 2.5.13 Security: Paragraph 4, Bullet 13: Security cameras shall be used as a deterrent to criminal activity. **Proposed Text:** 2.5.13 Security: Paragraph 4, Bullet 13: Security cameras shall be used as a deterrent to criminal activity (except no cameras in Male and Female Med/Min Cells only)	Signed/Received on 02.08.2023

21	01.27.2023	Eliminate Coax at all cells	The Design Build team requests to eliminate coax for all AV/TV locations cells and instead provide data jacks only.	**Current Text:** RDS: F605: AV/Telecommunications: MATV: COAX RDS: F606: AV/Telecommunications: MATV: COAX RDS: F607: AV/Telecommunications: MATV: COAX RDS: F611: AV/Telecommunications: MATV: COAX RDS: F612: AV/Telecommunications: MATV: COAX RDS: F613: AV/Telecommunications: MATV: COAX RDS: F616: AV/Telecommunications: MATV: COAX RDS: F617: AV/Telecommunications: MATV: COAX RDS: F618: AV/Telecommunications: MATV: COAX RDS: F620: AV/Telecommunications: MATV: COAX RDS: H819: AV/Telecommunications: MATV: COAX RDS: H820: AV/Telecommunications: MATV: COAX **Proposed Text:** Eliminate MATV:COAX in all of the above referenced rooms	Signed 02.08.2023
22	01.27.2023	Reduce Corridor Widths	The Design Build team requests to reduce corridor widths.	**Current Text:** 2.5.15 Circulation Dimensions - Public circulation shall have a clear width of at least 12 feet where there is waiting area seating. In public seating areas, circulation corridors must have a clear width of 10 feet. -Public circulation must have a clear width of 10 feet except where the corridor serves only exit stairs, service spaces, and connection to non-public circulation system… - Inmate corridors must be at least 12 feet wide **Proposed Text:** 2.5.15 Circulation Dimensions - Public circulation shall have a clear width of at least 10 feet where there is waiting area seating. In public seating areas, circulation corridors must have a clear width of 8 feet. -Public circulation must have a clear width of 8 feet except where the corridor serves only exit stairs, service spaces, and connection to non-public circulation system…- Inmate corridors must be at least 10 feet wide.	Signed/Received on 02.08.2023
23	01.27.2023	Reduce cell height	The D/B team requests to be allowed to reduce the cell heights from 9′ to 8′-1″ in all housing cells (less Male Seg). The male Segregation lower units will be 10′ clear and upper units remain at 8′1″.	**Current Text:** 2.5.17 "…The floor-to-ceiling height in inmate cells and multiple occupancy sleeping rooms shall be a minimum clear height of 9 foot…" **Proposed Text:** 2.5.17 "…The floor-to-ceiling height in inmate cells and multiple occupancy sleeping rooms shall be a minimum height of 8′1″ foot in all housing cells except male segregation lower units shall be 10′ clear with the upper units remaining at 8′1″…"	Signed 02.08.2023
24	N/A	N/A	N/A	***Current Text:*** ***Proposed Text:***	**NOT USED**
25	01.27.2023	Windborne-Debris impact resistance of Exterior glazing	The Design Build team requests to eliminate the requirement for Wind Zone 1 rating for glazing – not a code issue.	**Current Text:** 1.4 PERFORMANCE REQUIREMENTS, B. Windborne-Debris-Impact Resistance of Exterior Glazing: Wind Zone 1 **Proposed Text:** ELIMINATE 1.4	Signed/Received on 02.08.2023

26	01.27.2023	Site Lighting levels	The Design Build team requests to deviate from the program criteria document and reduce the site lighting levels from the 3-foot-candle requirement to 1-foot-candle at all occupied areas of the site including parking, walk ways and roads. Pricing is based upon a combination of building wall pack lighting and site pole lighting using 25' tall light poles as needed to comply with code requirements. Proposed pole height was chosen to ensure uniformity of lighting. See lighting plan on page 2 for proposed light fixture layout. This approach will reduce project costs and will provide increased flexibility on VE options to reach GMP. Ref E1	**Current Text:** (Page 6 & page 100) · The type and spacing of outdoor light standards should be selected based on the location of the buildings on the site, surrounding land uses, and environmental conditions. A level of three (3) foot candles should be maintained over the exterior areas of the facility. **Proposed Text:** (Page 6 & page 100) · The type and spacing of outdoor light standards should be selected based on the location of the buildings on the site, surrounding land uses, and environmental conditions. A level of one (1) foot candles should be maintained over the exterior areas of the facility.	Signed/Received on 02.08.2023
27	01.27.2023	Above Grade Sanitary	The Design Build team requests to use PVC for waste piping in above grade non-plenum spaces.	**Current Text:** 1.2 HUBLESS, CAST-IRON SOIL PIPE AND FITTINGS (ABOVE GRADE ONLY) 1.4 PVC PIPE AND FITTINGS (BELOW GRADE ONLY) **Proposed Text:** 1.2 HUBLESS, CAST-IRON SOIL PIPE AND FITTINGS (ABOVE GRADE PLENUM SPACES ONLY) 1.4 PVC PIPE AND FITTINGS (BELOW GRADE AND NON-PLENUM SPACES ONLY)	Signed/Received on 02.08.2023
28	12.05.2022	Below Grade Conduit	The Design Build team requests to use schedule 40 PVC at below grade electrical work in lieu of 80 PVC	**Current Text:** Conduit below grade to be schedule 80 PVC. **Proposed Text:** Conduit below grade to be schedule 40 PVC.	Signed 12.22.2022
29	12.05.2022	Branch feeder wire	The Design Build team requests to use aluminum wire in lieu of copper at all branch feeders.	**Current Text:** Section 26 05 13 Medium-Voltage Cables, 1.2 Cables, C. Conductor: Copper **Proposed Text:** Section 26 05 13 Medium-Voltage Cables, 1.2 Cables, C. Conductor: Aluminum	Signed/Received on 02.08.2023
30	12.05.2022	TPO Roofing	The Design Build team requests to change from white roof to grey roof and eliminate 2-ply vapor barrier.	***Current Text:*** *See section 07 54 23 Thermoplastic-Polyolefin (TPO) Roofing, 1.4 Materials, B. TPO Roofing, 2. Color: White* ***Proposed Text:*** *Section 07 54 23 Thermoplastic-Polyolefin (TPO) Roofing, 1.4 Materials, B. TPO Roofing, 2. Color: Grey*	Signed/Received on 02.08.2023

31	01.27.2023	Heated Slab	Per the program criteria document providing heated slabs at the intake vehicle sallyport is required. Please confirm the D/B can deviate from the program criteria document and remove heated slab from the vehicle sallyports. This approach will provide increased flexibility to achieve the desired VE efforts that are currently under way to reach a GMP budget. Ref VE J47 and J48	***Current Text:*** *(Page 125)* *5.101 Intake Vehicle Sallyport Comment: enclosed area, heated slab, oversized lane, room for van and cars* ***Proposed Text:*** (Page 125) 5.101 Intake Vehicle Sallyport Comment: enclosed area, oversized lane, room for van and cars	Signed 02.08.2023
32	01.27.2023	Operable clerestory windows or clerestory windows in intake and medical	Per the program criteria document having operable clerestory windows at intake, medical and dayrooms are required. Please confirm the Design Build Team can deviate from the program criteria document and remove operable clerestory windows from those areas. This approach will provide increased flexibility to achieve the desired VE efforts that are currently under way to reach a GMP budget. Ref VE J49 and J50	**Current Text:** (Page 340) RDS F 608 | Windows – Notes: Clerestory Windows Operable Windows (out of reach areas) (Page 352) RDS F 621 | Windows – Notes: Operable Windows (out of reach areas) Clerestory Windows (Page 363) RDS F 640 | Windows – Notes: Operable Windows (out of reach areas) Clerestory Windows (Page 388) RDS H 821 | Windows – Notes: Operable Windows (out of reach areas) Clerestory Windows (Page 392) RDS H 827 | Windows – Notes: Operable Windows (out of reach areas) Clerestory Windows **Proposed Text:** (Page 340) RDS F 608 | Windows – Notes: Clerestory Windows (Page 352) RDS F 621 | Windows – Notes: Clerestory Windows (Page 363) RDS F 640 | Windows – Notes: Clerestory Windows (Page 388) RDS H 821 | Windows – Notes: Clerestory Windows (Page 392) RDS H 827 | Windows – Notes: Clerestory Windows	Signed/Received on 02.08.2023
33	01.27.2023	Commerical ceiling fans	Per the program criteria document having commercial and regular ceiling fans in various rooms throughout the facility as a requirement. Please confirm the Design Build team can deviate from the program criteria document and remove all reference of ceiling fans of any kind from those areas. This approach will provide increased flexibility to achieve the desired VE efforts that are currently under way to reach a GMP budget. Ref VE J51	**Current Text:** (Page 271) RDS C 301 | HVAC – Notes: Commercial ceiling fans (Page 281) RDS C 311 | HVAC – Notes: Commercial ceiling fans (Page 286) RDS C 316 | HVAC – Notes: Commercial ceiling fans (Page 340) RDS F 608 | HVAC – Notes: Commercial ceiling fans (Page 347) RDS F 615 | HVAC – Notes: Commercial ceiling fans (Page 352) RDS F 621 | HVAC – Notes: Commercial ceiling fans (Page 363) RDS F 640 | HVAC – Notes: Commercial ceiling fans (Page 388) RDS H 821 | HVAC – Notes: Commercial ceiling fans (Page 392) RDS H 827 | HVAC – Notes: Commercial ceiling fans (Page 425) RDS J 935 | HVAC – Notes: Commercial ceiling fans (Page 431) RDS J 940 | HVAC – Notes: Ceiling fans (Page 441) RDS J 951 | HVAC – Notes: Ceiling fans **Proposed Text:** Eliminate any reference to ceiling fans	Signed/Received on 02.08.2023

34	01.27.2023	Operable clerestory windows	Per the program criteria document having operable clerestory windows in dayrooms recreation areas and some cells are required. Please confirm the D/B can deviate from the program criteria document and remove operable clerestory windows from those areas but add woven wire mesh over the outdoor recreation area. This approach will provide increased flexibility to achieve the desired VE efforts that are currently under way to reach a GMP budget. Ref VE J49 and J50	**Current Text:** RDS F 608 | Windows – Notes: Clerestory Windows Operable Windows (out of reach areas) RDS F 609 | Windows – Notes: Clerestory Windows Operable Windows (out of reach areas) RDS F 614 | Windows – Notes: Clerestory Windows Operable Windows (out of reach areas) RDS F 615 | Windows – Notes: Clerestory Windows RDS F 620 | Windows – Notes: Clerestory Windows RDS F 621 | Windows – Notes: Operable Windows (out of reach areas) Clerestory Windows RDS F 640 | Windows – Notes: Operable Windows (out of reach areas) Clerestory Windows RDS H 821 | Windows – Notes: Operable Windows (out of reach areas) Clerestory Windows RDS H 827 | Windows – Notes: Operable Windows (out of reach areas) Clerestory Windows **Proposed Text:** RDS F 608 | Windows – Notes: Fixed detention grade windows with 40 minute containment glazing. RDS F 609 | Windows – Notes: Fixed detention grade windows with 40 minute containment glazing. RDS F 614 | Windows – Notes: Fixed detention grade windows with 40 minute containment glazing. RDS F 615 | Windows – Notes: Fixed detention grade windows with 40 minute containment glazing. RDS F 620 | Windows – Notes: Fixed detention grade windows with 40 minute containment glazing. RDS F 621 | Windows – Notes: Fixed detention grade windows with 40 minute containment glazing. RDS F 640 | Windows – Notes: Fixed detention grade windows with 40 minute containment glazing. RDS H 821 | Windows – Notes: Fixed detention grade windows with 40 minute containment glazing. RDS H 827 | Windows – Notes: Fixed detention grade windows with 40 minute containment glazing.	Signed 02.08.2023
35	01.27.2023	Remove access floor at courtroom well spaces	The Design Build team requests to remove access floor from the hearing and small jury courtroom. This approach will provide increased flexibility on VE options to reach GMP	***Current Text:*** *RDS E 526, RDS E 527* *Finishes Notes: Raised access floor in well* ***Proposed Text:*** *RDS E 526, RDS E 527* *Finishes Notes:*	Signed/Received on 02.08.2023
36	01.27.2023	Change glass sliding doors at staff and public entry vestibule	The Design Build team requests to eliminate the automatic glass sliding doors at the staff and public entry vestibule. This approach will provide increased flexibility on VE options to reach GMP	**Current Text:** RDS A 100 Doors Notes: Two sets of double auto sliding doors **Proposed Text:** RDS A 100 Doors Notes: Aluminum Storefront entrance doors with ADA operators as required.	Signed/Received on 02.08.2023
37	01.27.2023	No centralized UPS system only dedicated UPS for IT/IDF	The Design Build team requests to be allowed eliminate the centralized UPS system and provide a dedicated system for IT/IDF rooms only. This approach will provide increased flexibility on VE options to reach GMP	**Current Text:** Sections 3.2 General Design and System Critieria Telecom equipment to be connected through a centralized Uninterruptible Power Source (UPS) system. **Proposed Text:** Sections 3.2 General Design and System Critieria Telecom equipment to be connected through a Uninterruptible Power Source (UPS) system.	Signed/Received on 02.08.2023
38	01.27.2023	Double doors at 5.301, 5.302, 5.303 (courts)	The Design Build team requests to change the door types for the above referenced rooms to single doors. This approach will provide increased flexibility on VE options to reach GMP	**Current Text:** RDS E 525 Doors Door Type: Swing double doors RDS E 526 Doors Door Type: Swing double doors RDS E 527 Doors Door Type: Swing double doors **Proposed Text:** RDS E 525 Doors Door Type: Swing single doors RDS E 526 Doors Door Type: Swing single doors RDS E 527 Doors Door Type: Swing single doors	Signed/Received on 02.08.2023

39	01.27.2023	Emergency Generators outside of building at sound rated 90dBs	The Design Build team requests to move the emergency generators to outside the building and to increase the sound rating to 90dBs. This approach will provide flexibility on VE options to reach GMP. Reference G12	**Current Text:** Section 9.600 Central Plant Sub section 9.610 Emergency Generators 2 generators, inside **Proposed Text:** Section 9.600 Central Plant Sub section 9.610 Emergency Generators 2 generators, outside	Signed/Received on 02.08.2023
40	01.27.2023	Elevated workstations for central command	The Design Build team requests to eliminate the elevated workstations in central command. This approach will provide increased flexibility on VE options to reach GMP.	**Current Text:** Section General Notes: Elevated workstation **Proposed Text:** Section General Notes: workstation	Signed/Received on 02.08.2023
41	01.27.2023	Open cable tray is being utilized at the Administration Building (areas east of Release)	The Design Build team requests to use open cable trays in the Administration building. This approach will provide increased flexibility on VE options to reach GMP.	**Current Text:** Each type of service (fiber, copper, coax) to be separate dedicated conduit. **Proposed Text:** Each type of service (fiber, copper, coax) to be set in an open cable tray for the Administration Building in the area east of release.	Signed/Received on 02.08.2023
42	01.27.2023	Requirement for the precast plant to be certified PCI or NPCA	The Design Build team requests to remove PCI and NPCA certified production facility. This approach will provide increased flexibility on VE options to reach GMP	**Current Text**: Section 13 34 23 Modular Precast Concrete Cells B. 5. 5. The production facility must be certified by PCI or NPCA, prior to bid date. **Proposed Text:** Section 13 34 23 Modular Precast Concrete Cells B. 5.	Signed/Received on 02.08.2023
43	01.27.2023	Rooftop Mechanical penthouse	The Design Build team requests to remove the mechanical penthouse to the roof and have enclosures for hydronic piping where required. This approach will provide increased flexibility on VE options to reach GMP	***Current Text:*** *The County preference wherever possible is to have mechanical equipment enclosed indoors such as in mechanical penthouses due to inclement weather in both winter and summer and also due to cottonwood trees and other debris* *that can clog up HVAC system.* ***Proposed Text:*** *The County preference wherever possible is to have mechanical equipment such as in mechanical penthouses rooftop mounted.*	Signed/Received on 02.08.2023
44	01.27.2023	PVC piping to be utilized at above grade waste and storm piping in areas that are not return air plenums.	The Design Build team requests to change any reference to cast-iron storm drainage pipe to PVC. This approach will provide increased flexibility on VE options to reach GMP	**Current Text:** Section 22 14 23 Storm Drainage Piping Specialties Part 1 Products Any reference to cast-iron **Proposed Text:** Section 22 14 23 Storm Drainage Piping Specialties Part 1 Products Any reference to PVC	Signed/Received on 02.08.2023

45	01.27.2023	Sanitary Waste and Vent Piping	The Design Build team requests to change the above grade cast-iron soil pipe and fittings to PVC. This approach will provide increased flexibility on VE options to reach GMP	**Current Text**:Section 22 13 16 Sanitary Waste and Vent Piping Part 1 Products 1.2 Hubless, Cast-Iron Soil Pipe and Fittings (above grade only) **Proposed Text:** Section 22 13 16 Sanitary Waste and Vent Piping Part 1 Products 1.2 Hubless, PVC Soil Pipe and Fittings (above grade only)	Not signed
46	01.27.2023	No drop down vinyl curtain in 16-person cells	The Design Build team requests to eliminate the automatic drop down vinyl curtain from cells. This approach will provide increased flexibility on VE options to reach GMP	**Current Text:** RDS E 537 General Notes: Two automatic drop down vinyl curtains from ceiling to cover or block view doors/windows on either side of shared cell. **Proposed Text:** RDS E 537 General Notes:	Signed/Received on 02.08.2023
47	12.05.2022	Hydronic Piping Proposed Fittings	The Design Build team requests to deviate from the program criteria document and change any reference to fittings in Spec Section 23 21 13 Part 3 section 3.1 to pressed fittings in hot and chilled hydronic piping on joints of 2" or smaller and Grooved or butt weld joints on pipe joints 2-1/2" and larger. This approach will reduce project material costs and will provide increased flexibility on VE options to reach GMP.	***Current Text:*** *A. Hot-water heating piping, shall be any of the following:* *1. Type L (Type B), drawn-temper copper tubing, wrought-copper fittings, and soldered joints.* *2. Schedule 40 steel pipe, wrought-steel fittings and wrought-cast or forged-steel flanges and flange fittings, and welded and flanged joints.* *B. Chilled-water piping, shall be any of the following:* *1. Type L (Type B), drawn-temper copper tubing, wrought-copper fittings, and soldered joints.* *2. Schedule 40 steel pipe, wrought-steel fittings and wrought-cast or forged-steel flanges and flange fittings, and welded and flanged joints.* *3. Schedule 40 steel pipe; grooved, mechanical joint coupling and fittings; and grooved, mechanical joints.* *C. Condenser-water piping, shall be any of] the following:* *1. Schedule 40 steel pipe, wrought-steel fittings and wrought-cast or forged-steel flanges and flange fittings, and welded and flanged joints.* *2. Schedule 40 steel pipe; grooved, mechanical joint coupling and fittings; and grooved, mechanical joints.* ***Proposed Text:*** *A. Hot-water heating piping, shall be any of the following:* *1. Type L (Type B), drawn-temper copper tubing and fittings.* *2. Schedule 40 steel pipe, pressed fittings and grooved or butt weld joints.* *B. Chilled-water piping, shall be any of the following:* *1. Type L (Type B), drawn-temper copper tubing, pressed fittings, and grooved or butt weld joints.* *2. Schedule 40 steel pipe, pressed fittings and wrought-cast or forged-steel flanges and flange fittings, and grooved or butt weld joints.* *3. Schedule 40 steel pipe; grooved, mechanical joint coupling and fittings; and grooved, mechanical joints.* *C. Condenser-water piping, shall be any of the following:* *1. Schedule 40 steel pipe, pressed fittings and wrought-cast or forged-steel flanges and pressed fittings, and grooved or butt weld welded and flanged joints.*	Not Approved per current SD
48	01.27.2023	Sloped Floor	The Design Build team requests to eliminate sloped floors from cells. This approach will provide increased flexibility on VE options to reach GMP.	**Current Text:**2.5.19 Open-Front Cell Floors in the sleeping rooms, cells, and multiple occupancy sleeping rooms shall have a minimal slope toward the dayroom and have a floor drain just outside the sleeping space **Proposed Text:**2.5.19 Open-Front Cells Floors in the sleeping rooms, cells, and multiple occupancy sleeping rooms shall have a no slope toward the dayroom and have a floor drain just outside the sleeping space.	Signed/Received on 02.08.2023
49	12.05.2022	Automatic Receptacles	The Design Build team requests to us adjustable automatic receptacle controls. This approach will provide increased flexibility on VE options to reach GMP.	***Current Text:*** *4. Electrical Narrative* *Energy savings will be addressed with dimming, zone controls, and a watt per square foot basis. Lighting and controls that iares for maintaining the safety and security of personnel will supersede any energy cost-saving measures.* ***Proposed Text:*** *4. Electrical Narrative* *Energy savings will be addressed with dimming, zone controls, and a watt per square foot basis. Lighting and controls that iares for maintaining the safety and security of personnel will supersede any energy cost-saving measures. Allow auto receptacles in private offices, admin spaces only.*	Signed 01.03.2023

50	01.27.2023	Medium/Minimum Housing conversion to Dorm	The Design Build team requests to deviate from the program criteria document and convert (2) Male Medium/Minimum Units into Dormitory Units – 64 beds in each, 128 beds total. This approach will reduce project construction costs and provide increased flexibility on VE options to reach GMP. Ref VE Item H10 per proposed Design Modification Cost List.	***Current Text** : (Page 22)* *2.5.16 Housing Pods | Area – Unit 15-Med/Min Male | 4-person Occupancy ADA Cell |16 Cells | 64 beds* *2.5.16 Housing Pods | Area – Unit 16-Med/Min Male | 4-person Occupancy ADA Cell |16 Cells | 64 beds* ***Proposed Text:** (Page 22)* *2.5.16 Housing Pods | Area – Unit 15-Med/Min Male | 4-person Occupancy Dorm |6 Cells & 5-person Occupancy Dorm |8 Cells | 64 beds* *2.5.16 Housing Pods | Area – Unit 16-Med/Min Male | 4-person Occupancy Dorm |6 Cells & 5-person Occupancy Dorm |8 Cells | 64 beds*	Signed/Received on 02.08.2023
51	01.27.2023	Snowmelt System at Transporation Drive Lanes, not included inside Vehicle Sallyport	The Design Build team requests to deviate from the program criteria document and eliminate in slab heating for snow melt. This approach will reduce project construction costs and provide increased flexibility on VE options to reach GMP.	***Current Text: (Page 294)*** General Area (SF): 5000 Notes: Accessible Ceiling Height: Open To Sky Area to accommodate vans and buses Accoustics (NIC): Heated slab HVAC Heating: -- Emergency Power: --Cooling: -- Notes: --Schedule: -- In-slab heating for Snow Melt ***Proposed Text: (Page 294)*** General Area (SF): 5000 Notes: Accessible Ceiling Height: Open To Sky Area to accommodate vans and buses Accoustics (NIC): HVAC Heating: -- Emergency Power: --Cooling: -- Notes: --Schedule: --	Duplicated see 19 and 31
52	01.27.2023	MC Cabling at Administration Building in lieu of EMT	The Design Build team requests to deviate from the program criteria document and change the EMT conduit out to use MC cabling in the administration building only. This approach will reduce project construction time and provide increased flexibility in cabling runs.	***Current Text:*** Interior conduit to be minimize 3/4 inch in size EMT with minimum #12 conductors. Exposed conduit subject to damage under ten feet to be RMC. MC cable is not allowed. Conduit below grade to be schedule 80 PVC. Non-linear electronic loads to be served with dedicated separate neutrals. ***Proposed Text:*** Interior conduit to be minimize 3/4 inch in size EMT with minimum #12 conductors. Exposed conduit subject to damage under ten feet to be RMC. MC cable is not allowed except in Administration building. Conduit below grade to be schedule 80 PVC. Non-linear electronic loads to be served with dedicated separate neutrals.	Signed/Received on 02.08.2023

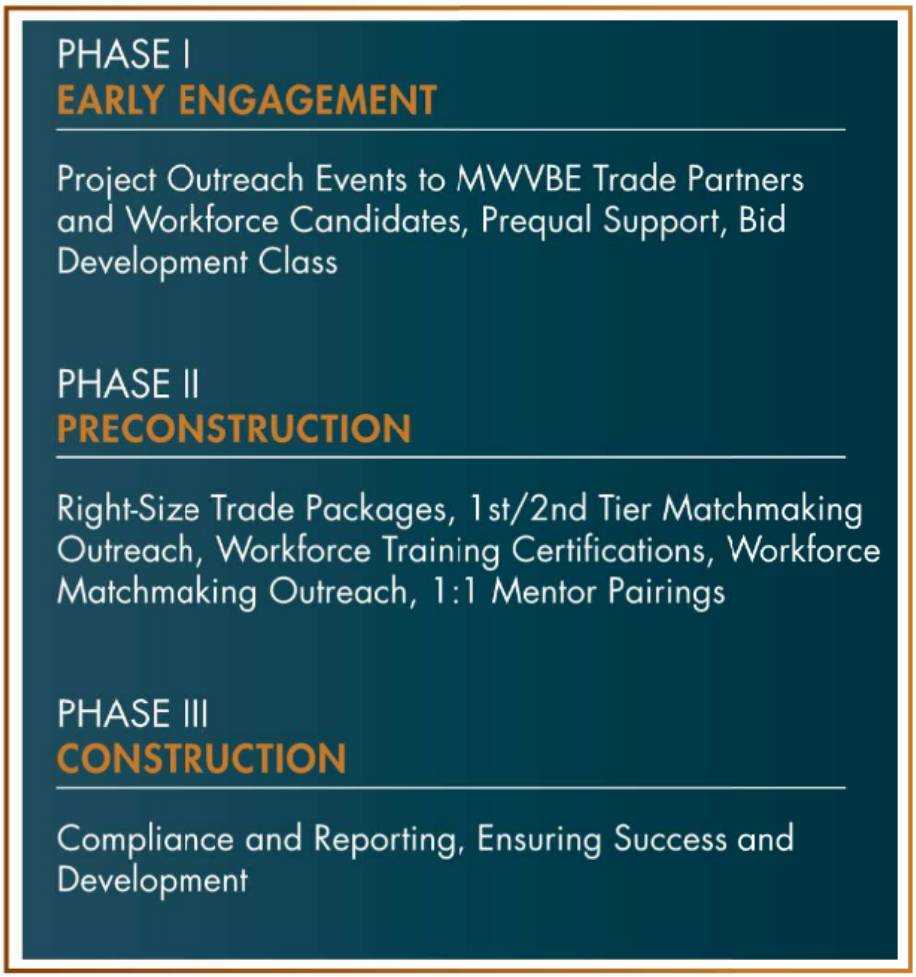
End of Exhibit 8

Exhibit 9

Workforce Plan

JE Dunn | Axiom | DLR Group has had success Building Careers in Construction in Jackson County and beyond for decades. The process comes at **no cost to the project** from recruitment to training. A key element to our past and future success has been the **Unions who will help participants select the right craft.** They also help to mentor workforce candidates to keep them in the construction industry. Additionally, the **Urban League's Project Pathway** program will provide wrap around services and support for the candidates. This winning combination are the key components toward engaging workforce participants for the project.

JE Dunn | Axiom | DLR Group will engage various **outreach forums** to inform the community about employment opportunities. Our partners include not only the Urban League, but also the Full Employment Council, Builder's Association, Second Chance Program, Minority Contractors, Unified Contractors Association, and other community-based organizations.



End of Exhibit 9

Exhibit 10

Attachment G
Contractor Utilization Plan

Bid Number: **7-22**
Bid Title: **Jackson County Detention Center, Design Build Services**
Contracting Department: **Public Works**

Bidder: **JE Dunn Construction | Axiom Construction | DLR Group**

I, **Vance McMillan**, of lawful age and upon my oath state as follows:

1. This Affidavit is made for the purpose of complying with the provisions of the MBE/WBE/VBE submittal requirements on the above Invitation to Bid and the MBE/WBE/VBE Program and is given on behalf of the Bidder listed above. It sets out the Bidder's plan to utilize MBE and/or WBE and/or VBE prime and subcontractors on the Bid.

   The goals set by Jackson County, Missouri are:

   12.3 %MBE **10.7 %WBE**

2. Bidder stipulates that it will utilize a minimum of the following percentages of MBE/WBE participation in the above bid:

   17.5 %MBE **11 %WBE** **0.5 %VBE**

3. The following are the MBE/WBE/VBE Contractors to be utilized on the above-named Bid. **Bidder maintains that it either has a formal contract or a conditional contract contingent upon award.**

Please note:

a. If Bidder is a certified MBE, WBE, or VBE firm, it may list itself in the appropriate area below.

b. No contractor may be listed under multiple categories below regardless of certifications

*****INTERNAL USE ONLY*****

CUP RECEIVED: _____ CUP APPROVED: _____

GFW RECEIVED: _____ GFE APPROVED: _____

CUP REVISED: _____ REVISION APPROVED: _____

APPROVED GOALS: _____ MBE _____ WBE _____ VBE

RES/ORD: _____ AMT AWARDED: _____

NOTES:

***Percentages are based on the GMP Value of $301,162,067**
***Values/companies could be subject to change based on future buyout of Component Packages 2 and 3.**

MBE SUBCONTRACTORS

A.	MBE Firm:	**Cornerstone Axiom JV LLC**	**INTERNAL USE ONLY**
	Address line 1:	**718 Troost Avenue, KC, Mo**	
	Address line 2-including County:	**Jackson County, 64106**	**Certifying Agency:**
	Telephone Number:	**816.442.7865**	**_____ KCMO**
	President/Owner:	**Daniel Felder**	**_____ State of MO**
	Email Address:	**dfelder@axiomcgkc.com**	
	Certifying Agency:	**City of KC**	**Approved: Y N**
	Expiration Date of Certification:		
	Scopes of Work Utilized:	**Cell Modules Concrete**	**Contract Value:**
	Percentage of Contract Awarded:	**5.73%**	**$**

B.	MBE Firm:	**Pro-Insulation (Sub to US Engineering)**	**INTERNAL USE ONLY**
	Address line 1:	**8203 Hickman Mills Drive, KC, Mo**	
	Address line 2-including County:	**Jackson, 64132**	**Certifying Agency:**
	Telephone Number:	**816.523.0321**	**_____ KCMO**
	President/Owner:	**John Olivarez**	**_____ State of MO**
	Email Address:	**jolivarez@prometals.com**	
	Certifying Agency:	**City of KC**	**Approved: Y N**
	Expiration Date of Certification:	**12.31.2023**	
	Scopes of Work Utilized:	**Insulation**	**Contract Value:**
	Percentage of Contract Awarded:	**0.96%**	**$**

C.	MBE Firm:	**Alexander Mechanical (Sub to US Engineering)**	**INTERNAL USE ONLY**
	Address line 1:	**10801 North Pomona Avenue, KC Mo**	
	Address line 2-including County:	**Jackson, 64153**	**Certifying Agency:**
	Telephone Number:	**816.833.0700**	**_____ KCMO**
	President/Owner:	**Bill Alexander**	**_____ State of MO**
	Email Address:	**balexander@alexandermechanical.com**	
	Certifying Agency:		**Approved: Y N**
	Expiration Date of Certification:	**12.16.2023**	
	Scopes of Work Utilized:	**Mechanical**	**Contract Value:**
	Percentage of Contract Awarded:	**1.31%**	**$**

***Percentages are based on the GMP Value of $301,162,067**
***Values/companies could be subject to change based on future buyout of Component Packages 2 and 3.**

MBE SUBCONTRACTORS

A.	MBE Firm:	**Vazquez Comm. Contracting (Sub to US Engineering)**	**INTERNAL USE ONLY**
	Address line 1:	**3303 Gillham Road, KC, Mo**	
	Address line 2-including County:	**Jackson, 64109**	**Certifying Agency:**
	Telephone Number:	**816.569.6869**	**_____ KCMO**
	President/Owner:		**_____ State of MO**
	Email Address:	**info@vazquezCC.com**	
	Certifying Agency:		**Approved: Y N**
	Expiration Date of Certification:		
	Scopes of Work Utilized:	**Mechanical**	**Contract Value:**
	Percentage of Contract Awarded:	**1.31%**	**$**

B.	MBE Firm:	**Alpha Energy and Elec. (Sub to Cornerstone and Mark One)**	**INTERNAL USE ONLY**
	Address line 1:	**1100 East 34th St. KC, MO**	
	Address line 2-including County:	**Jackson, 64109**	**Certifying Agency:**
	Telephone Number:	**816.421.6767**	**_____ KCMO**
	President/Owner:	**Gabriel Okafor**	**_____ State of MO**
	Email Address:	**gabriel.okafor@alphaee.com**	
	Certifying Agency:	**City of KC**	**Approved: Y N**
	Expiration Date of Certification:		
	Scopes of Work Utilized:	**Electric**	**Contract Value:**
	Percentage of Contract Awarded:	**1.63% (Cornerstone) 1.70% (MOE)` 3.33% Total**	**$**

C.	MBE Firm:	**EJ and Sons Trucking (sub to Kissick)**	**INTERNAL USE ONLY**
	Address line 1:	**3910 Norton Ave., KC, Mo**	
	Address line 2-including County:	**Jackson, 64130**	**Certifying Agency:**
	Telephone Number:	**816.326.8429**	**_____ KCMO**
	President/Owner:		**_____ State of MO**
	Email Address:	**ejandsonconstructino@gmail.com**	
	Certifying Agency:	**City of KC**	**Approved: Y N**
	Expiration Date of Certification:		
	Scopes of Work Utilized:	**Trucking**	**Contract Value:**
	Percentage of Contract Awarded:	**0.82%**	**$**

***Percentages are based on the GMP Value of $301,162,067**
***Values/companies could be subject to change based on future buyout of Component Packages 2 and 3.**

MBE SUBCONTRACTORS

A.	MBE Firm:	**Rising Construction (Sub of Kissick)**	**INTERNAL USE ONLY**
	Address line 1:	**1206 NW Baytree Dr. Grain Valley, Mo**	
	Address line 2-including County:	**64029**	**Certifying Agency:**
	Telephone Number:	**816.867.5255**	**_____ KCMO**
	President/Owner:		**_____ State of MO**
	Email Address:	**kristenr@risingconst.com**	
	Certifying Agency:	**City of KC**	**Approved: Y N**
	Expiration Date of Certification:	**05.26.2024**	
	Scopes of Work Utilized:	**traffic control and erosion control**	**Contract Value:**
	Percentage of Contract Awarded:	**0.07%**	**$**

B.	MBE Firm:	**Maher Oil (Sub of Kissick)**	**INTERNAL USE ONLY**
	Address line 1:	**401 N. Prospect, KC, Mo**	
	Address line 2-including County:	**Jackson, 64120**	**Certifying Agency:**
	Telephone Number:	**816.241.2400**	**_____ KCMO**
	President/Owner:		**_____ State of MO**
	Email Address:	**janice@maheroilco.com**	
	Certifying Agency:	**State of Missouri**	**Approved: Y N**
	Expiration Date of Certification:	**08.05.2025**	
	Scopes of Work Utilized:	**fuel supply and delivery**	**Contract Value:**
	Percentage of Contract Awarded:	**0.08%**	**$**

C.	MBE Firm:		**INTERNAL USE ONLY**
	Address line 1:		
	Address line 2-including County:		**Certifying Agency:**
	Telephone Number:		**_____ KCMO**
	President/Owner:		**_____ State of MO**
	Email Address:		
	Certifying Agency:		**Approved: Y N**
	Expiration Date of Certification:		
	Scopes of Work Utilized:		**Contract Value:**
	Percentage of Contract Awarded:		**$**

***Percentages are based on the GMP Value of $301,162,067**
***Values/companies could be subject to change based on future buyout of Component Packages 2 and 3.**

TOTAL MBE VALUE:	**$**

*** Add Additional Pages as Necessary ***

WBE SUBCONTRACTORS

A.	WBE Firm:	**Mark One Electric**	**INTERNAL USE ONLY**
	Address line 1:	**1414 Genessee, KC, Mo**	
	Address line 2-including County:	**Jackson, 64102**	**Certifying Agency:**
	Telephone Number:	**816.842.7023**	**_____ KCMO**
	President/Owner:	**Rosana Privitera Biondo**	**_____ State of MO**
	Email Address:	**Rosana.priviterabiondo@Markone.com**	
	Certifying Agency:	**City of KC**	**Approved: Y N**
	Expiration Date of Certification:		
	Scopes of Work Utilized:	**Electric, Fire Alarm**	**Contract Value:**
	Percentage of Contract Awarded:	**6.77%**	**$**

B.	WBE Firm:	**Blue Chip Roofing (Sub to Flynn)**	**INTERNAL USE ONLY**
	Address line 1:	**5234 Winner Road, KC, Mo**	
	Address line 2-including County:	**Jackson, 64127**	**Certifying Agency:**
	Telephone Number:	**816.216.7176**	**_____ KCMO**
	President/Owner:	**LaTanya Scott**	**_____ State of MO**
	Email Address:	**tanyas@bluechiproofingkc.com**	
	Certifying Agency:	**City of KC**	**Approved: Y N**
	Expiration Date of Certification:		
	Scopes of Work Utilized:	**Roofing**	**Contract Value:**
	Percentage of Contract Awarded:	**0.83%**	**$**

C.	WBE Firm:	**Wilkerson (Sub to US Engineering)**	**INTERNAL USE ONLY**
	Address line 1:	**14101 Gibbs Road, Bonner Springs, KS**	
	Address line 2-including County:	**66012**	**Certifying Agency:**
	Telephone Number:	**913.238.7030**	**_____ KCMO**
	President/Owner:	**Diana Holt**	**_____ State of MO**
	Email Address:	**info@wilkersoncranerental.com**	
	Certifying Agency:	**State of Kansas**	**Approved: Y N**
	Expiration Date of Certification:		
	Scopes of Work Utilized:	**Crane Services**	**Contract Value:**
	Percentage of Contract Awarded:	**0.08%**	**$**

***Percentages are based on the GMP Value of $301,162,067**
***Values/companies could be subject to change based on future buyout of Component Packages 2 and 3.**

TOTAL MBE VALUE:	**$**

*** Add Additional Pages as Necessary ***

WBE SUBCONTRACTORS

A.	WBE Firm:	**CJ Industries (Sub to US Engineering)**	**INTERNAL USE ONLY**
	Address line 1:	**610 S. 78th St. Suite 1, KC, KS**	
	Address line 2-including County:	**Wyandotte, 66111**	**Certifying Agency:**
	Telephone Number:	**913.788.1104**	**_____ KCMO**
	President/Owner:	**Mindy Rocha**	**_____ State of MO**
	Email Address:	**mindy@cjikc.com**	
	Certifying Agency:	**City of KC**	**Approved: Y N**
	Expiration Date of Certification:	**07.19.2024**	
	Scopes of Work Utilized:	**Mechanical**	**Contract Value:**
	Percentage of Contract Awarded:	**0.69%**	**$**

B.	WBE Firm:		**INTERNAL USE ONLY**
	Address line 1:		
	Address line 2-including County:		**Certifying Agency:**
	Telephone Number:		**_____ KCMO**
	President/Owner:		**_____ State of MO**
	Email Address:		
	Certifying Agency:		**Approved: Y N**
	Expiration Date of Certification:		
	Scopes of Work Utilized:		**Contract Value:**
	Percentage of Contract Awarded:		**$**

C.	WBE Firm:		**INTERNAL USE ONLY**
	Address line 1:		
	Address line 2-including County:		**Certifying Agency:**
	Telephone Number:		**_____ KCMO**
	President/Owner:		**_____ State of MO**
	Email Address:		
	Certifying Agency:		**Approved: Y N**
	Expiration Date of Certification:		
	Scopes of Work Utilized:		**Contract Value:**

***Percentages are based on the GMP Value of $301,162,067**
***Values/companies could be subject to change based on future buyout of Component Packages 2 and 3.**

VBE SUBCONTRACTORS

A.	VBE Firm:	**Midland Marble and Granite**	**INTERNAL USE ONLY**
	Address line 1:	**2077 NE Rice Rd., Lee Summit, MO**	
	Address line 2-including County:	**Jackson, 64064**	**Certifying Agency:**
	Telephone Number:	**816.257.2000**	**_____ KCMO**
	President/Owner:		**_____ State of MO**
	Email Address:	**matt.sharp@midlandmarble.com**	
	Certifying Agency:		**Approved: Y N**
	Expiration Date of Certification:		
	Scopes of Work Utilized:	**Tile**	**Contract Value:**
	Percentage of Contract Awarded:	**0.12%**	**$**

B.	VBE Firm:	**Aquila Industries (sub to Cornerstone)**	**INTERNAL USE ONLY**
	Address line 1:	**5897 Raytown Rd. Raytown, Mo**	
	Address line 2-including County:	**Jackson, 64133**	**Certifying Agency:**
	Telephone Number:	**816.595.8600**	**_____ KCMO**
	President/Owner:	**Marquis Cannion**	**_____ State of MO**
	Email Address:	**info@aquilabuilds.us**	
	Certifying Agency:		**Approved: Y N**
	Expiration Date of Certification:		
	Scopes of Work Utilized:		**Contract Value:**
	Percentage of Contract Awarded:	**0.18%**	**$**

C.	VBE Firm:	**M&T Govt. Solutions (Sub to Kissick)**	**INTERNAL USE ONLY**
	Address line 1:	**500 East Walnut St. Suite 102**	
	Address line 2-including County:	**Columbia, Mo. 65201**	**Certifying Agency:**
	Telephone Number:	**573.454.1018**	**_____ KCMO**
	President/Owner:		**_____ State of MO**
	Email Address:	**mtqsllc@gmail.com**	
	Certifying Agency:	**State of Mo**	**Approved: Y N**
	Expiration Date of Certification:	**09.26.2023**	
	Scopes of Work Utilized:	**Trucking/Hauling**	**Contract Value:**
	Percentage of Contract Awarded:	**0.02%**	**$**

***Percentages are based on the GMP Value of $301,162,067**
***Values/companies could be subject to change based on future buyout of Component Packages 2 and 3.**

End of Exhibit 10

Exhibit 11

Jackson County Detention Center Systems Matrix															
2/14/2023															
	Owner Furnish	**Owner Install**	**Electrical Contractor Furnish**	**Electrical Contractor Install**	**Security Electronics Contractor Furnish**	**Security Electronics Contractor Install**	**Plumbing Contractor Furnish**	**Plumbing Contractor Install**	**Module Supplier Furnish**	**Module Supplier Furnish**	**Detention Contractor Furnish**	**Detention Contractor Install**	**Comm. HM Contractor Furnish**	**Comm. HM Contractor Install**	**Rough Carp F&I**
Division 26 Electrical															
120 Volt Power to support Low Voltage Systems			X	X											
120v Power Conduit and Wire			X	X											
Division 27 Tele/Data-Network															
Conduits for communication service providers including innerduct			X	X											
Provide all cabling for systems as identified on systems drawings including fiber optics.			X	X											
Provide Rack mount enclousres and all associated terminations			X	X											
Computer Stations	X	X													
Wireless Access Points (including patch cables)	X	X													
VOIP Telephone head-end	X	X													
Fiber LIU			X	X											
Fiber Patch Cables	X	X													
IDF Rooms															
8' Tall Plywood backer at 3 Walls															X
Vertical and Horizontal Wire Management			X	X											
Equipment Racks - Two post and 4 post 36" server racks			X	X											
Provide cable management hardware and racks as indicated per documents and systems drawings			X	X											
Rack Power Distribution (PDUs)			X	X											
Patch panels inside of racks			X	X											
Patch cables inside of racks'	X	X													
Switches mounted in upper portion of racks	X	X													
Room to Room SFPs	X	X													
General Tele-Data Network Devices															
Data Outlet Jacks including Jack at WAP			X	X											
Wireless Access Points	X	X													
Conduit, junction boxes, & Pull Strings			X	X											
Cabling/ Wire			X	X											
Fiber Optic Cabling			X	X											
Division 27 Cable TV/ CATV System															
CATV Head End Equipment	X	X													
CATV Outlets			X	X											
Category 6 data cable/Jack at each CATV outlet			X	X											
AV cabling required for TVs			X	X											
Conduit, junction boxes, & Pull Strings			X	X											

	Owner Furnish	Owner Install	Electrical Contractor Furnish	Electrical Contractor Install	Security Electronics Contractor Furnish	Security Electronics Contractor Install	Plumbing Contractor Furnish	Plumbing Contractor Install	Module Supplier Furnish	Module Supplier Furnish	Detention Contractor Furnish	Detention Contractor Install	Comm. HM Contractor Furnish	Comm. HM Contractor Install	Rough Carp F&I
281300 Access Control System															
Ethernet based Network Equipment					X	X									
Managed Network Switches/Routers, Processors					X	X									
Low Voltage Conduit & Junction Boxes including pull strings					X	X									
Low Voltage Wire/Cabling					X	X									
Access Control Software					X	X									
Licensing Fees (Controller License)					X	X									
Access Control Computer Workstation					X	X									
Power Supplies for access control					X	X									
Enclosures					X	X									
Identification Cards	X	X													
Card Readers/Badge Readers					X	X									
Electronic Commercial Door Hardware													X	X	
Electronic Door Position Switch-Comm. Doors													X	X	
Electronic Detention Door Hardware											X	X			
Electronic Door Position Switch-Detention Doors											X	X			
282300 Video Management System															
Low Voltage Conduit & Junction Boxes including pull strings					X	X									
Low Voltage Wire/Cabling					X	X									
Network Servers and Switches for VMS					X	X									
System Manager					X	X									
120 Day Network Storage					X	X									
Recording Software					X	X									
Licensing Fees					X	X									
Workstations, Joystick Controllers, Keyboards, Display Monitors					X	X									
Server and Storage Devices					X	X									
Video Management System and Video Recording Manager					X	X									
Edge Ethernet Switches and Core Ethernet Switches					X	X									
Media Converters					X	X									
Power Supplies					X	X									
Fast Ethernet over Coax Transceivers					X	X									
Cameras					X	X									
External Camera Audio					X	X									
Camera Housings/ Mounting Brackets					X	X									
283111 Digital, addressable Fire-Alarm System															
Complete			X	X											

	Owner Furnish	Owner Install	Electrical Contractor Furnish	Electrical Contractor Install	Security Electronics Contractor Furnish	Security Electronics Contractor Install	Plumbing Contractor Furnish	Plumbing Contractor Install	Module Supplier Furnish	Module Supplier Furnish	Detention Contractor Furnish	Detention Contractor Install	Comm. HM Contractor Furnish	Comm. HM Contractor Install	Rough Carp F&I
284619 Electronics Security Control System															
Low Voltage Conduit & Junction Boxes including pull strings					X	X									
Low Voltage Wire/Cabling					X	X									
Ethernet based Network					X	X									
Managed Network Switches (County to specify exact product)					X	X									
PLC and Distributed I/O					X	X									
Programming for System Control and Monitoring Functions					X	X									
Relay Interface					X	X									
Watch Tour System					X	X									
Duress Alarm Stations					X	X									
Enclosures for equipment					X	X									
Power Supplies					X	X									
Data interface required for control of systems furnished by others (Power Controls, Lighting controls, water shutoffs, etc.)					X	X									
Control Conduit, wire and terminations for connection to controlled equipment (Including equipment furnished by others)					X	X									
120V or greater power including conduit, wire and terminations required for controlled equipment (Including equipment furnished by others)			X	X											
Power Control relays			X	X											
Lighting Control Panel/ relay panels			X	X											
Electronic controlled water shutoff valves (Non-Water Management System)							X	X							
Electronic Water Management System Valve Controllers							X	X	X	X					
Electronic Water Management System Computer Control Stations							X	X	X	X					
Electronic Water Management System -Manufacturers Assistance for System startup							X	X	X	X					
Electronic Water Management System -Electronic Plumbing Valves							X	X	X	X					
Electronic Water Management System -Conduit for control wiring			X	X											
Electronic Water Management System -Control wire/cabling			X	X											
284623 Touch Screen Control and Management System															
Low Voltage Conduit & Junction Boxes including pull strings					X	X									
Low Voltage Wire/Cabling					X	X									
Touch Screen CPUs					X	X									
Touchscreen LCD Monitors					X	X									
Administration Station Monitor					X	X									
System Administration Station and File Server					X	X									
Report Printer					X	X									
Software					X	X									
Touchscreen Presentation and Display System					X	X									
Offender Management System Interface					X	X									
Report Generation					X	X									

	Owner Furnish	Owner Install	Electrical Contractor Furnish	Electrical Contractor Install	Security Electronics Contractor Furnish	Security Electronics Contractor Install	Plumbing Contractor Furnish	Plumbing Contractor Install	Module Supplier Furnish	Module Supplier Furnish	Detention Contractor Furnish	Detention Contractor Install	Comm. HM Contractor Furnish	Comm. HM Contractor Install	Rough Carp F&I
285123 Digital Intercom and Paging System															
Low Voltage Conduit & Junction Boxes including pull strings					X	X									
Low Voltage Wire/Cabling					X	X									
Digital Communications Controlers					X	X									
Talkback Expanders					X	X									
VOIP Paging/Talkback Amplifiers					X	X									
VOIP Desktop Intercom Master Stations					X	X									
VOIP Touchscreen Intercom Master Stations					X	X									
4 Wire 25V Intercom stations					X	X									
Software, Discrete I/O Modules, Network Repeaters					X	X									
Call/Door Push Buttons					X	X									
Paging Amplifiers					X	X									
Paging Horns					X	X									
Paging/Intercom Speakers/ Enclosures					X	X									
Visitation Handsets					X	X									
MFM sensor Vehicle detector					X	X									
Exterior Pedistals					X	X									
Power Supplies					X	X									
Paging horns/ Paging speakers					X	X									
Cisco Emergcy Notification															
Head End Equipment	X	X													
Cabling and Speakers			X	X											
263353 Static Uninteruptible Power Supply															
Low Voltage Conduit & Junction Boxes including pull strings					X	X									
Low Voltage Wire/Cabling					X	X									
UPS Equipment including make before break Bypass Switches for the following systems:			X	X											
Electronic Controls System				X	X										
Video Management System (With Data Center Above)			X	X	X										
Touch Screen Control and Management System				X	X										
Digital Intercom and Paging System				X	X										
Radio/DAS Equipment															
Cabinet	X	X													
Antenna Conduit			X	X											
Anennas	X	X													
Repeaters	X	X													
Radio Units	X	X													

	Owner Furnish	Owner Install	Electrical Contractor Furnish	Electrical Contractor Install	Security Electronics Contractor Furnish	Security Electronics Contractor Install	Plumbing Contractor Furnish	Plumbing Contractor Install	Module Supplier Furnish	Module Supplier Furnish	Detention Contractor Furnish	Detention Contractor Install	Comm. HM Contractor Furnish	Comm. HM Contractor Install	Rough Carp F&I
End User Equipment AV															
Telephones including licensing and cabling from wall outlet/jack	X	X													
Computers/Workstations for Non-Building Systems-includes software and cabling from wall outlet/jack	X	X													
Surge Protectors At workstations/equipment	X	X													
TVs	X	X													
TV Mounting Brackets	X	X													
Cables from Wall Outlets/Jacks to Tvs	X	X													
Wbex Room Kit -Including cabling from wall outlet/Jack	X	X													

End of Exhibit 11

BranchPattern

Exhibit 12

MEMO

DATE:	Wednesday, November 2, 2022
PROJECT/JOB#:	760.013 Jackson Co. Detention Center
TO:	JEDUNN
FROM:	Mark Stainbrook, PE Rick Maniktala, PE
SUBJECT:	HVAC System Life-Cycle-Cost Summary for VE alternatives

BranchPattern utilized IESVE modeling software to simulate base-year energy cost by fuel source. BLCC5 software was then utilized to perform the total building life cycle cost analysis for the HVAC system alternatives. BLCC5 utilized the FEMP methodology over a 40-year life. 40-years is the maximum term allowable per the FEMP methodology.

Summary below and input/output summary from life cycle costing analysis is included on the following pages.

40 Year LCCA Summary:

Alternatives	HVAC Initial Cost[a]	Maintenance Cost [b]	Replacement Cost [c]	Energy Cost (simulated) [d]	**Total Life Cycle Cost [e]**	Total LCC Difference
WCCH with N.G. Boiler 4-pipe Plant w/ HRC	+$0, costs included in base	+$163,837	+$5,838,246	+$591,505	**$ 21,697,978**	+$313,263 Over study life
WCCH with N.G. Boiler 4-pipe Plant w/o HRC	Deduct $577k from Base	+$157,466	+$5,373,866	+$620,113	**$ 21,384,715**	Lowest Total Life-Cycle Cost
ACCH with N.G. boiler 4-pipe Plant	Deduct $690k from Base	+$126,786	+$5,058,370	+$702,956	**$ 22,288,821**	+$904,106 Over study life

Notes:

a) Initial Cost information from JE DUNN, US Engineering, and Mark One. $690k is added to each option for BLCC5 analysis. Negative initial costs are not permitted by software.
b) Base-year O&M Service Contract Cost estimate information from US Engineering
c) Replacement Cost information from US Engineering. Replacement costs are applied in year 20 for all alternatives.
d) Base-year Energy Cost simulated by fuel source using IESVE
e) Total LCC output from BLCC5 analysis listed by alternative. See input/output reports on pages that follow.

NIST BLCC 5.3-20: Detailed LCC Analysis

Consistent with Federal Life Cycle Cost Methodology and Procedures, 10 CFR, Part 436, Subpart A

General Information

File Name:	\\meg.local\public\Desktops\mark.s\JCDC BLCC\projects\JCDC No DX.xml
Date of Study:	Wed Nov 02 11:35:41 CDT 2022
Analysis Type:	FEMP Analysis, Energy Project
Project Name:	JCDC
Project Location:	Missouri
Analyst:	
Base Date:	October 1, 2022
Service Date:	October 1, 2023
Study Period:	41 years 0 months (October 1, 2022 through September 30, 2063)
Discount Rate:	3%
Discounting Convention:	End-of-Year

Discount and Escalation Rates are REAL (exclusive of general inflation)

Alternative: Water Cooled w/HR

Initial Cost Data (not Discounted)

Initial Capital Costs

(adjusted for price escalation)

Initial Capital Costs for All Components: $690,000

Component:

Cost-Phasing

Date	Portion	Yearly Cost
October 1, 2022	100%	$690,000
	---	---
Total (for Component)		$690,000

Energy Costs: Electricity

(base-year dollars)

Average	Average	Average	Average

Annual Usage	Price/Unit	Annual Cost	Annual Demand	Annual Rebate
12,141,222.0 MBtu	$0.03596	$436,598	$0	$0

Energy Costs: Natural Gas

(base-year dollars)

Average Annual Usage	Average Price/Unit	Average Annual Cost	Average Annual Demand	Average Annual Rebate
17,961,501.0 MBtu	$0.01060	$190,392	$0	$0

Life-Cycle Cost Analysis

	Present Value	Annual Value
Initial Capital Costs	$690,000	$29,473
Energy Costs		
Energy Consumption Costs	$13,847,973	$591,505
Energy Demand Charges	$0	$0
Energy Utility Rebates	$0	$0
	---	---
Subtotal (for Energy):	$13,847,973	$591,505
Water Usage Costs	$0	$0
Water Disposal Costs	$0	$0
Operating, Maintenance & Repair Costs		
Component:		
Annually Recurring Costs	$4,021,596	$171,779
Non-Annually Recurring Costs	$0	$0
	---	---
Subtotal (for OM&R):	$4,021,596	$171,779
Replacements to Capital Components		
Component:	$3,138,408	$134,055
	---	---
Subtotal (for Replacements):	$3,138,408	$134,055

Residual Value of Original Capital Components		
Component:	$0	$0
	---	---
Subtotal (for Residual Value):	$0	$0
Residual Value of Capital Replacements		
Component:	$0	$0
	---	---
Subtotal (for Residual Value):	$0	$0
Total Life-Cycle Cost	$21,697,978	$926,812

Emissions Summary

Energy Name	Annual	Life-Cycle
Electricity:		
CO2	3,203,879,408.26 kg	128,146,404,586.54 kg
SO2	11,209,228.75 kg	448,338,460.73 kg
NOx	4,880,818.46 kg	195,219,375.47 kg
Natural Gas:		
CO2	948,721,517.76 kg	37,946,263,252.32 kg
SO2	7,656,482.08 kg	306,238,321.09 kg
NOx	795,970.91 kg	31,836,657.14 kg
Total:		
CO2	4,152,600,926.01 kg	166,092,667,838.86 kg
SO2	18,865,710.83 kg	754,576,781.82 kg
NOx	5,676,789.37 kg	227,056,032.62 kg

Alternative: Water Cooled wo/HR

Initial Cost Data (not Discounted)

Initial Capital Costs

(adjusted for price escalation)

Initial Capital Costs for All Components: $113,000

Component:
Cost-Phasing

Date	Portion	Yearly Cost
October 1, 2022	100%	$113,000
	---	---
Total (for Component)		$113,000

Energy Costs: Natural Gas

(base-year dollars)

Average Annual Usage	Average Price/Unit	Average Annual Cost	Average Annual Demand	Average Annual Rebate
17,640,145.0 MBtu	$0.01060	$186,986	$0	$0

Energy Costs: Electricity

(base-year dollars)

Average Annual Usage	Average Price/Unit	Average Annual Cost	Average Annual Demand	Average Annual Rebate
13,170,342.0 MBtu	$0.03596	$473,605	$0	$0

Life-Cycle Cost Analysis

	Present Value	Annual Value
Initial Capital Costs	$113,000	$4,827
Energy Costs		
Energy Consumption Costs	$14,517,727	$620,113
Energy Demand Charges	$0	$0
Energy Utility Rebates	$0	$0
	---	---
Subtotal (for Energy):	$14,517,727	$620,113
Water Usage Costs	$0	$0
Water Disposal Costs	$0	$0
Operating, Maintenance & Repair Costs		
Component:		

Annually Recurring Costs	$3,865,212	$165,099
Non-Annually Recurring Costs	$0	$0
	---	---
Subtotal (for OM&R):	$3,865,212	$165,099
Replacements to Capital Components		
Component:	$2,888,776	$123,392
	---	---
Subtotal (for Replacements):	$2,888,776	$123,392
Residual Value of Original Capital Components		
Component:	$0	$0
	---	---
Subtotal (for Residual Value):	$0	$0
Residual Value of Capital Replacements		
Component:	$0	$0
	---	---
Subtotal (for Residual Value):	$0	$0
Total Life-Cycle Cost	$21,384,715	$913,431

Emissions Summary

Energy Name	Annual	Life-Cycle
Natural Gas:		
CO2	931,747,582.67 kg	37,267,352,320.90 kg
SO2	7,519,497.07 kg	300,759,295.60 kg
NOx	1,098,144.37 kg	43,922,768.42 kg
Electricity:		
CO2	3,475,448,149.58 kg	139,008,410,724.65 kg
SO2	12,159,350.70 kg	486,340,737.33 kg
NOx	5,294,528.70 kg	211,766,652.48 kg
Total:		

CO2	4,407,195,732.25 kg	176,275,763,045.54 kg
SO2	19,678,847.77 kg	787,100,032.93 kg
NOx	6,392,673.08 kg	255,689,420.90 kg

Alternative: Air Cooled

Initial Cost Data (not Discounted)

Initial Capital Costs

(adjusted for price escalation)

Initial Capital Costs for All Components: $0

Component:

Cost-Phasing

Date	Portion	Yearly Cost
October 1, 2022	100%	$0
	---	---
Total (for Component)		$0

Energy Costs: Natural Gas

(base-year dollars)

Average Annual Usage	Price/Unit	Average Annual Cost	Average Annual Demand	Average Annual Rebate
17,638,242.0 MBtu	$0.01060	$186,965	$0	$0

Energy Costs: Electricity

(base-year dollars)

Average Annual Usage	Price/Unit	Average Annual Cost	Average Annual Demand	Average Annual Rebate
15,805,611.0 MBtu	$0.03596	$568,370	$0	$0

Life-Cycle Cost Analysis

	Present Value	Annual Value
Initial Capital Costs	$0	$0
Energy Costs		
Energy Consumption Costs	$16,457,197	$702,956

Energy Demand Charges	$0	$0
Energy Utility Rebates	$0	$0
	---	---
Subtotal (for Energy):	$16,457,197	$702,956
Water Usage Costs	$0	$0
Water Disposal Costs	$0	$0
Operating, Maintenance & Repair Costs		
Component:		
Annually Recurring Costs	$3,112,131	$132,932
Non-Annually Recurring Costs	$0	$0
	---	---
Subtotal (for OM&R):	$3,112,131	$132,932
Replacements to Capital Components		
Component:	$2,719,493	$116,161
	---	---
Subtotal (for Replacements):	$2,719,493	$116,161
Residual Value of Original Capital Components		
Component:	$0	$0
	---	---
Subtotal (for Residual Value):	$0	$0
Residual Value of Capital Replacements		
Component:	$0	$0
	---	---
Subtotal (for Residual Value):	$0	$0
Total Life-Cycle Cost	$22,288,821	$952,049

Emissions Summary

Energy Name	Annual	Life-Cycle
Natural Gas:		

CO2	931,647,066.73 kg	37,263,331,958.74 kg
SO2	7,518,685.88 kg	300,726,850.01 kg
NOx	1,098,025.91 kg	43,918,030.08 kg
Electricity:		
CO2	4,170,854,599.14 kg	166,822,764,787.88 kg
SO2	14,592,329.27 kg	583,653,219.31 kg
NOx	6,353,917.09 kg	254,139,287.49 kg
Total:		
CO2	5,102,501,665.87 kg	204,086,096,746.62 kg
SO2	22,111,015.15 kg	884,380,069.32 kg
NOx	7,451,943.00 kg	298,057,317.57 kg

NIST BLCC 5.3-20: Input Data Listing

Consistent with Federal Life Cycle Cost Methodology and Procedures, 10 CFR, Part 436, Subpart A

General Information

File Name:	\\meg.local\public\Desktops\mark.s\JCDC BLCC\projects\JCDC No DX.xml
Date of Study:	Wed Nov 02 13:37:55 CDT 2022
Analysis Type:	FEMP Analysis, Energy Project
Project Name:	JCDC
Project Location:	Missouri
Analyst:	
Base Date:	October 1, 2022
Service Date:	October 1, 2023
Study Period:	41 years 0 months (October 1, 2022 through September 30, 2063)
Discount Rate:	3%
Discounting Convention:	End-of-Year

Discount and Escalation Rates are REAL (exclusive of general inflation)

Alternative: Water Cooled w/HR

Energy: Electricity

Annual Consumption:	12,141,222.0 MBtu
Price per Unit:	$0.03596
Demand Charge:	$0
Utility Rebate:	$0
Location:	Missouri
Rate Schedule:	Commercial
State:	Missouri

Usage Indices

From Date	Duration	Usage Index
October 1, 2023	Remaining	100%

Escalation Rates

From Date	Duration	Escalation
April 1, 2020	1 year 0 months	-1.62%
April 1, 2021	1 year 0 months	-1%
April 1, 2022	1 year 0 months	-0.9%
April 1, 2023	1 year 0 months	-0.6%
April 1, 2024	1 year 0 months	-0.04%
April 1, 2025	1 year 0 months	-0.11%
April 1, 2026	1 year 0 months	-0.49%
April 1, 2027	1 year 0 months	-0.75%
April 1, 2028	1 year 0 months	-0.75%
April 1, 2029	1 year 0 months	-0.54%
April 1, 2030	1 year 0 months	-0.76%
April 1, 2031	1 year 0 months	-0.55%
April 1, 2032	1 year 0 months	-0.48%
April 1, 2033	1 year 0 months	-0.41%
April 1, 2034	1 year 0 months	-0.63%
April 1, 2035	1 year 0 months	-0.67%
April 1, 2036	1 year 0 months	-0.6%

April 1, 2037	1 year 0 months	-0.53%
April 1, 2038	1 year 0 months	-0.65%
April 1, 2039	1 year 0 months	-0.57%
April 1, 2040	1 year 0 months	-0.54%
April 1, 2041	1 year 0 months	-0.5%
April 1, 2042	1 year 0 months	-0.74%
April 1, 2043	1 year 0 months	-0.59%
April 1, 2044	1 year 0 months	-0.39%
April 1, 2045	1 year 0 months	-0.47%
April 1, 2046	1 year 0 months	-0.32%
April 1, 2047	1 year 0 months	-0.44%
April 1, 2048	1 year 0 months	-0.6%
April 1, 2049	1 year 0 months	-0.68%
April 1, 2050	Remaining	-0.5%

Energy: Natural Gas

Annual Consumption:	17,961,501.0 MBtu
Price per Unit:	$0.01060
Demand Charge:	$0
Utility Rebate:	$0
End-Use:	Commercial Boiler, uncontrolled
Rate Schedule:	Commercial
State:	Missouri

Usage Indices

From Date	Duration	Usage Index
October 1, 2023	Remaining	100%

Escalation Rates

From Date	Duration	Escalation
April 1, 2020	1 year 0 months	0%
April 1, 2021	1 year 0 months	0.16%

April 1, 2022	1 year 0 months	0.31%
April 1, 2023	1 year 0 months	0.62%
April 1, 2024	1 year 0 months	2.01%
April 1, 2025	1 year 0 months	2.88%
April 1, 2026	1 year 0 months	2.36%
April 1, 2027	1 year 0 months	1.58%
April 1, 2028	1 year 0 months	0.85%
April 1, 2029	1 year 0 months	0.14%
April 1, 2030	1 year 0 months	-0.56%
April 1, 2031	1 year 0 months	0.14%
April 1, 2032	1 year 0 months	0.85%
April 1, 2033	1 year 0 months	0.84%
April 1, 2034	1 year 0 months	0.42%
April 1, 2035	1 year 0 months	0%
April 1, 2036	1 year 0 months	0.41%
April 1, 2037	1 year 0 months	0.55%
April 1, 2038	1 year 0 months	0.27%
April 1, 2039	1 year 0 months	0.14%
April 1, 2040	1 year 0 months	0.27%
April 1, 2041	1 year 0 months	0.41%
April 1, 2042	1 year 0 months	0.27%
April 1, 2043	1 year 0 months	0.27%
April 1, 2044	1 year 0 months	0.54%
April 1, 2045	1 year 0 months	0.53%
April 1, 2046	1 year 0 months	0.66%
April 1, 2047	1 year 0 months	0.53%
April 1, 2048	1 year 0 months	0.66%
April 1, 2049	1 year 0 months	0.52%
April 1, 2050	Remaining	0.58%

Component:

Initial Investment

Initial Cost (base-year $):	$690,000
Annual Rate of Increase:	0%
Expected Asset Life:	20 years 0 months
Residual Value Factor:	0%

Cost-Phasing

Cost Adjustment Factor: 0%

Years/Months (from Date)	Date	Portion
0 years 0 months	October 1, 2022	100%

Replacement: Water Cooled w/HR

Years/Months:	20 years 0 months
Amount:	$5,838,246
Annual Rate Of Increase:	0%
Expected Asset Life:	20 years 0 months
Residual Value Factor:	0%

Recurring OM&R: Maintenance

Amount:	$163,837
Annual Rate of Increase:	0.5%

Usage Indices

From Date	Duration	Factor
October 1, 2023	Remaining	100%

Alternative: Water Cooled wo/HR

Energy: Natural Gas

Annual Consumption:	17,640,145.0 MBtu
Price per Unit:	$0.01060
Demand Charge:	$0
Utility Rebate:	$0

End-Use:	Industrial Boiler, uncontrolled
Rate Schedule:	Commercial
State:	Missouri

Usage Indices

From Date	Duration	Usage Index
October 1, 2023	Remaining	100%

Escalation Rates

From Date	Duration	Escalation
April 1, 2020	1 year 0 months	0%
April 1, 2021	1 year 0 months	0.16%
April 1, 2022	1 year 0 months	0.31%
April 1, 2023	1 year 0 months	0.62%
April 1, 2024	1 year 0 months	2.01%
April 1, 2025	1 year 0 months	2.88%
April 1, 2026	1 year 0 months	2.36%
April 1, 2027	1 year 0 months	1.58%
April 1, 2028	1 year 0 months	0.85%
April 1, 2029	1 year 0 months	0.14%
April 1, 2030	1 year 0 months	-0.56%
April 1, 2031	1 year 0 months	0.14%
April 1, 2032	1 year 0 months	0.85%
April 1, 2033	1 year 0 months	0.84%
April 1, 2034	1 year 0 months	0.42%
April 1, 2035	1 year 0 months	0%
April 1, 2036	1 year 0 months	0.41%
April 1, 2037	1 year 0 months	0.55%
April 1, 2038	1 year 0 months	0.27%
April 1, 2039	1 year 0 months	0.14%
April 1, 2040	1 year 0 months	0.27%

April 1, 2041	1 year 0 months	0.41%
April 1, 2042	1 year 0 months	0.27%
April 1, 2043	1 year 0 months	0.27%
April 1, 2044	1 year 0 months	0.54%
April 1, 2045	1 year 0 months	0.53%
April 1, 2046	1 year 0 months	0.66%
April 1, 2047	1 year 0 months	0.53%
April 1, 2048	1 year 0 months	0.66%
April 1, 2049	1 year 0 months	0.52%
April 1, 2050	Remaining	0.58%

Energy: Electricity

Annual Consumption:	13,170,342.0 MBtu
Price per Unit:	$0.03596
Demand Charge:	$0
Utility Rebate:	$0
Location:	Missouri
Rate Schedule:	Commercial
State:	Missouri

Usage Indices

From Date	Duration	Usage Index
October 1, 2023	Remaining	100%

Escalation Rates

From Date	Duration	Escalation
April 1, 2020	1 year 0 months	-1.62%
April 1, 2021	1 year 0 months	-1%
April 1, 2022	1 year 0 months	-0.9%
April 1, 2023	1 year 0 months	-0.6%
April 1, 2024	1 year 0 months	-0.04%
April 1, 2025	1 year 0 months	-0.11%

April 1, 2026	1 year 0 months	-0.49%
April 1, 2027	1 year 0 months	-0.75%
April 1, 2028	1 year 0 months	-0.75%
April 1, 2029	1 year 0 months	-0.54%
April 1, 2030	1 year 0 months	-0.76%
April 1, 2031	1 year 0 months	-0.55%
April 1, 2032	1 year 0 months	-0.48%
April 1, 2033	1 year 0 months	-0.41%
April 1, 2034	1 year 0 months	-0.63%
April 1, 2035	1 year 0 months	-0.67%
April 1, 2036	1 year 0 months	-0.6%
April 1, 2037	1 year 0 months	-0.53%
April 1, 2038	1 year 0 months	-0.65%
April 1, 2039	1 year 0 months	-0.57%
April 1, 2040	1 year 0 months	-0.54%
April 1, 2041	1 year 0 months	-0.5%
April 1, 2042	1 year 0 months	-0.74%
April 1, 2043	1 year 0 months	-0.59%
April 1, 2044	1 year 0 months	-0.39%
April 1, 2045	1 year 0 months	-0.47%
April 1, 2046	1 year 0 months	-0.32%
April 1, 2047	1 year 0 months	-0.44%
April 1, 2048	1 year 0 months	-0.6%
April 1, 2049	1 year 0 months	-0.68%
April 1, 2050	Remaining	-0.5%

Component:

Initial Investment

Initial Cost (base-year $):	$113,000
Annual Rate of Increase:	0%

Expected Asset Life:	20 years 0 months
Residual Value Factor:	0%

Cost-Phasing

Cost Adjustment Factor: 0%

Years/Months (from Date)	Date	Portion
0 years 0 months	October 1, 2022	100%

Replacement: Water Cooled wo/HR

Years/Months:	20 years 0 months
Amount:	$5,373,866
Annual Rate Of Increase:	0%
Expected Asset Life:	20 years 0 months
Residual Value Factor:	0%

Recurring OM&R: Maintenance

Amount:	$157,466
Annual Rate of Increase:	0.5%

Usage Indices

From Date	Duration	Factor
October 1, 2023	Remaining	100%

Alternative: Air Cooled

Energy: Natural Gas

Annual Consumption:	17,638,242.0 MBtu
Price per Unit:	$0.01060
Demand Charge:	$0
Utility Rebate:	$0
End-Use:	Industrial Boiler, uncontrolled
Rate Schedule:	Commercial
State:	Missouri

Usage Indices

From Date	Duration	Usage Index
October 1, 2023	Remaining	100%

Escalation Rates

From Date	Duration	Escalation
April 1, 2020	1 year 0 months	0%
April 1, 2021	1 year 0 months	0.16%
April 1, 2022	1 year 0 months	0.31%
April 1, 2023	1 year 0 months	0.62%
April 1, 2024	1 year 0 months	2.01%
April 1, 2025	1 year 0 months	2.88%
April 1, 2026	1 year 0 months	2.36%
April 1, 2027	1 year 0 months	1.58%
April 1, 2028	1 year 0 months	0.85%
April 1, 2029	1 year 0 months	0.14%
April 1, 2030	1 year 0 months	-0.56%
April 1, 2031	1 year 0 months	0.14%
April 1, 2032	1 year 0 months	0.85%
April 1, 2033	1 year 0 months	0.84%
April 1, 2034	1 year 0 months	0.42%
April 1, 2035	1 year 0 months	0%
April 1, 2036	1 year 0 months	0.41%
April 1, 2037	1 year 0 months	0.55%
April 1, 2038	1 year 0 months	0.27%
April 1, 2039	1 year 0 months	0.14%
April 1, 2040	1 year 0 months	0.27%
April 1, 2041	1 year 0 months	0.41%
April 1, 2042	1 year 0 months	0.27%
April 1, 2043	1 year 0 months	0.27%
April 1, 2044	1 year 0 months	0.54%

April 1, 2045	1 year 0 months	0.53%
April 1, 2046	1 year 0 months	0.66%
April 1, 2047	1 year 0 months	0.53%
April 1, 2048	1 year 0 months	0.66%
April 1, 2049	1 year 0 months	0.52%
April 1, 2050	Remaining	0.58%

Energy: Electricity

Annual Consumption:	15,805,611.0 MBtu
Price per Unit:	$0.03596
Demand Charge:	$0
Utility Rebate:	$0
Location:	Missouri
Rate Schedule:	Commercial
State:	Missouri

Usage Indices

From Date	Duration	Usage Index
October 1, 2023	Remaining	100%

Escalation Rates

From Date	Duration	Escalation
April 1, 2020	1 year 0 months	-1.62%
April 1, 2021	1 year 0 months	-1%
April 1, 2022	1 year 0 months	-0.9%
April 1, 2023	1 year 0 months	-0.6%
April 1, 2024	1 year 0 months	-0.04%
April 1, 2025	1 year 0 months	-0.11%
April 1, 2026	1 year 0 months	-0.49%
April 1, 2027	1 year 0 months	-0.75%
April 1, 2028	1 year 0 months	-0.75%
April 1, 2029	1 year 0 months	-0.54%

April 1, 2030	1 year 0 months	-0.76%
April 1, 2031	1 year 0 months	-0.55%
April 1, 2032	1 year 0 months	-0.48%
April 1, 2033	1 year 0 months	-0.41%
April 1, 2034	1 year 0 months	-0.63%
April 1, 2035	1 year 0 months	-0.67%
April 1, 2036	1 year 0 months	-0.6%
April 1, 2037	1 year 0 months	-0.53%
April 1, 2038	1 year 0 months	-0.65%
April 1, 2039	1 year 0 months	-0.57%
April 1, 2040	1 year 0 months	-0.54%
April 1, 2041	1 year 0 months	-0.5%
April 1, 2042	1 year 0 months	-0.74%
April 1, 2043	1 year 0 months	-0.59%
April 1, 2044	1 year 0 months	-0.39%
April 1, 2045	1 year 0 months	-0.47%
April 1, 2046	1 year 0 months	-0.32%
April 1, 2047	1 year 0 months	-0.44%
April 1, 2048	1 year 0 months	-0.6%
April 1, 2049	1 year 0 months	-0.68%
April 1, 2050	Remaining	-0.5%

Component:

Initial Investment

Initial Cost (base-year $):	$0
Annual Rate of Increase:	0%
Expected Asset Life:	20 years 0 months
Residual Value Factor:	0%

Cost-Phasing

Cost Adjustment Factor: 0%

Years/Months (from Date)	Date	Portion
0 years 0 months	October 1, 2022	100%

Replacement: Air Cooled

Years/Months:	20 years 0 months
Amount:	$5,058,956
Annual Rate Of Increase:	0%
Expected Asset Life:	20 years 0 months
Residual Value Factor:	0%

Recurring OM&R: Maintenance

Amount:	$126,786
Annual Rate of Increase:	0.5%

Usage Indices

From Date	Duration	Factor
October 1, 2023	Remaining	100%

NIST BLCC 5.3-20: Comparative Analysis

Consistent with Federal Life Cycle Cost Methodology and Procedures, 10 CFR, Part 436, Subpart A

Base Case: Water Cooled wo/HR

Alternative: Water Cooled w/HR

General Information

File Name:	\\meg.local\public\Desktops\mark.s\JCDC BLCC\projects\JCDC No DX.xml
Date of Study:	Wed Nov 02 13:39:25 CDT 2022
Project Name:	JCDC
Project Location:	Missouri
Analysis Type:	FEMP Analysis, Energy Project
Analyst:	
Base Date:	October 1, 2022
Service Date:	October 1, 2023
Study Period:	41 years 0 months(October 1, 2022 through September 30, 2063)
Discount Rate:	3%
Discounting Convention:	End-of-Year

Comparison of Present-Value Costs

PV Life-Cycle Cost

	Base Case	Alternative	Savings from Alternative
Initial Investment Costs:			
Capital Requirements as of Base Date	$113,000	$690,000	-$577,000
Future Costs:			
Energy Consumption Costs	$14,517,727	$13,847,973	$669,754
Energy Demand Charges	$0	$0	$0
Energy Utility Rebates	$0	$0	$0
Water Costs	$0	$0	$0
Recurring and Non-Recurring OM&R Costs	$3,865,212	$4,021,596	-$156,385
Capital Replacements	$2,888,776	$3,138,408	-$249,632
Residual Value at End of Study Period	$0	$0	$0

Subtotal (for Future Cost Items)	$21,271,715	$21,007,978	$263,737
Total PV Life-Cycle Cost	$21,384,715	$21,697,978	-$313,263

Net Savings from Alternative Compared with Base Case

PV of Non-Investment Savings	$513,369
- Increased Total Investment	$826,632
Net Savings	-$313,263

Savings-to-Investment Ratio (SIR)

SIR = 0.62

SIR is lower than 1.0; project alternative is not cost effective.

Adjusted Internal Rate of Return

AIRR = 1.81%

AIRR is lower than your discount rate; project alternative is not cost effective.

Payback Period

Estimated Years to Payback (from beginning of Service Period)

Simple Payback never reached during study period.

Discounted Payback never reached during study period.

Energy Savings Summary

Energy Savings Summary (in stated units)

Energy Type	Average Base Case	Annual Alternative	Consumption Savings	Life-Cycle Savings
Electricity	13,170,342.0 MBtu	12,141,222.0 MBtu	1,029,120.0 MBtu	41,161,982.4 MBtu
Natural Gas	17,640,145.0 MBtu	17,961,501.0 MBtu	-321,356.0 MBtu	-12,853,360.2 MBtu

Energy Savings Summary (in MBtu)

Energy Type	Average Base Case	Annual Alternative	Consumption Savings	Life-Cycle Savings
Electricity	13,170,342.0 MBtu	12,141,222.0 MBtu	1,029,120.0 MBtu	41,161,982.4 MBtu

Natural Gas	17,640,145.0 MBtu	17,961,501.0 MBtu	-321,356.0 MBtu	-12,853,360.2 MBtu

Emissions Reduction Summary

Energy Type	-----Average Base Case	Annual Alternative	Emissions----- Reduction	Life-Cycle Reduction
Electricity				
CO2	3,475,448,149.58 kg	3,203,879,408.26 kg	271,568,741.32 kg	10,862,006,138.11 kg
SO2	12,159,350.70 kg	11,209,228.75 kg	950,121.95 kg	38,002,276.60 kg
NOx	5,294,528.70 kg	4,880,818.46 kg	413,710.24 kg	16,547,277.01 kg
Natural Gas				
CO2	931,747,582.67 kg	948,721,517.76 kg	-16,973,935.09 kg	-678,910,931.43 kg
SO2	7,519,497.07 kg	7,656,482.08 kg	-136,985.01 kg	-5,479,025.50 kg
NOx	1,098,144.37 kg	795,970.91 kg	302,173.46 kg	12,086,111.27 kg
Total:				
CO2	4,407,195,732.25 kg	4,152,600,926.01 kg	254,594,806.23 kg	10,183,095,206.68 kg
SO2	19,678,847.77 kg	18,865,710.83 kg	813,136.93 kg	32,523,251.10 kg
NOx	6,392,673.08 kg	5,676,789.37 kg	715,883.71 kg	28,633,388.28 kg

NIST BLCC 5.3-20: Comparative Analysis

Consistent with Federal Life Cycle Cost Methodology and Procedures, 10 CFR, Part 436, Subpart A

Base Case: Water Cooled wo/HR

Alternative: Air Cooled

General Information

File Name:	\\meg.local\public\Desktops\mark.s\JCDC BLCC\projects\JCDC No DX.xml
Date of Study:	Wed Nov 02 13:40:19 CDT 2022
Project Name:	JCDC
Project Location:	Missouri
Analysis Type:	FEMP Analysis, Energy Project
Analyst:	
Base Date:	October 1, 2022

Service Date:	October 1, 2023
Study Period:	41 years 0 months(October 1, 2022 through September 30, 2063)
Discount Rate:	3%
Discounting Convention:	End-of-Year

Comparison of Present-Value Costs

PV Life-Cycle Cost

	Base Case	Alternative	Savings from Alternative
Initial Investment Costs:			
Capital Requirements as of Base Date	$113,000	$0	$113,000
Future Costs:			
Energy Consumption Costs	$14,517,727	$16,457,197	-$1,939,470
Energy Demand Charges	$0	$0	$0
Energy Utility Rebates	$0	$0	$0
Water Costs	$0	$0	$0
Recurring and Non-Recurring OM&R Costs	$3,865,212	$3,112,131	$753,081
Capital Replacements	$2,888,776	$2,719,493	$169,283
Residual Value at End of Study Period	$0	$0	$0
	---	---	---
Subtotal (for Future Cost Items)	$21,271,715	$22,288,821	-$1,017,106
	---	---	---
Total PV Life-Cycle Cost	$21,384,715	$22,288,821	-$904,106

Net Savings from Alternative Compared with Base Case

PV of Non-Investment Savings	-$1,186,389
- Increased Total Investment	-$282,283

Net Savings	-$904,106

NOTE: Meaningful SIR, AIRR and Payback can not be computed unless incremental savings and total savings are both positive.

Energy Savings Summary

Energy Savings Summary (in stated units)

Energy Type	-----Average Base Case	Annual Alternative	Consumption----- Savings	Life-Cycle Savings
Electricity	13,170,342.0 MBtu	15,805,611.0 MBtu	-2,635,269.0 MBtu	-105,403,545.0 MBtu
Natural Gas	17,640,145.0 MBtu	17,638,242.0 MBtu	1,903.0 MBtu	76,114.8 MBtu

Energy Savings Summary (in MBtu)

Energy Type	-----Average Base Case	Annual Alternative	Consumption----- Savings	Life-Cycle Savings
Electricity	13,170,342.0 MBtu	15,805,611.0 MBtu	-2,635,269.0 MBtu	-105,403,545.0 MBtu
Natural Gas	17,640,145.0 MBtu	17,638,242.0 MBtu	1,903.0 MBtu	76,114.8 MBtu

Emissions Reduction Summary

Energy Type	-----Average Base Case	Annual Alternative	Emissions----- Reduction	Life-Cycle Reduction
Electricity				
CO2	3,475,448,149.58 kg	4,170,854,599.14 kg	-695,406,449.56 kg	-27,814,354,063.24 kg
SO2	12,159,350.70 kg	14,592,329.27 kg	-2,432,978.58 kg	-97,312,481.98 kg
NOx	5,294,528.70 kg	6,353,917.09 kg	-1,059,388.39 kg	-42,372,635.01 kg
Natural Gas				
CO2	931,747,582.67 kg	931,647,066.73 kg	100,515.93 kg	4,020,362.16 kg
SO2	7,519,497.07 kg	7,518,685.88 kg	811.20 kg	32,445.59 kg
NOx	1,098,144.37 kg	1,098,025.91 kg	118.47 kg	4,738.34 kg
Total:				
CO2	4,407,195,732.25 kg	5,102,501,665.87 kg	-695,305,933.62 kg	-27,810,333,701.08 kg
SO2	19,678,847.77 kg	22,111,015.15 kg	-2,432,167.38 kg	-97,280,036.39 kg
NOx	6,392,673.08 kg	7,451,943.00 kg	-1,059,269.92 kg	-42,367,896.67 kg

End of Exhibit 12