



Task Order Request #26-005 - 26-005 Training Yard Construction

Origin

Task Order Request #26-005 - 26-005 Training Yard Construction

Status

Draft

Assignees

Dean Hansen

Created Date

Nov 20, 2025

Issued Date

Task Order Request

#26-005 26-005 Training Yard Construction

TASK ORDER IDENTIFICATION

Contract No

24-03814

Contractor Name ("Contractor")

ROCKY MOUNTAIN SYSTEMS SERVICES

Contract Start Date

01/15/26

Account Code(s)

\$1,719,064.75 -Yard and Yard Track - 40-3271.63000.3005

\$384,962.09 -Construction Admin and Management 40-3271.68000.8003

\$144,385.00 -Engineering 40-3271.68000.8002

1.0 SCOPE OF SERVICES

The contractor's scope letter and price estimate is hereby attached and incorporated into this Task Order

26-005 Training Yard Construction_Proposal.pdf, 26-005 Training Yard Construction_Scope.pdf

2.0 SCHEDULE

The Substantial Completion Date for this Task is

09/14/26

The Final Acceptance Date for this Task is

12/13/26

3.0 PRICING

The pricing agreement for this item is one of the following:

Lump Sum

Invoices will be billed on a monthly basis for completed work to date. The price for this item is in the amount of

\$2,248,411.84

Provisional Sum Amount (if applicable). Note: Any unused amount of this provisional sum amount will be deducted from the contract upon closeout of the task order.

Independent Cost Estimate (ICE) link, if applicable

26-005 Training Yard Construction ICE.pdf

4.0 APPLICABILITY OF FEDERAL CLAUSES

Does this Task Order or Change

No

If federal assistance funds are

N/A

Order include federal assistance funds which requires the application of the Federal Clauses appended as Exhibit D to the Contract?

anticipated, the UTA Civil Rights group has set a Disadvantaged Business Enterprises (DBE) participation goal for this Task Order of

UTAH TRANSIT AUTHORITY:

Required Signatures Explanation

Project Manager \$0 - 24,999
Legal Review \$10k or greater
Dir. of Capital Projects \$25k - 74,999
Chief Service Dev. Ofcr. \$75k - 199,999
Executive Director \$200,000+
Procurement/Contracts (for all)

Signature (Legal)

DocuSigned by:



70E33A415BA44F6...

Name: MIKE BELL

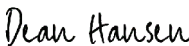
Date: 11/21/2025

PM Approval

The costs associated with this item have been measured against the standard schedule of rates and the agreed contract pricing, (where applicable) and have been deemed consistent and appropriate for the proposed scope of work.

Signature (Project Manager)

Signed by:



25AB79CEE8F4497...

Name: DEAN HANSEN

Date: 11/20/2025

Director Approval

I have evaluated the content of this task order and the scope of work described in the task ordering agreement and have made the determination that this Task Order is within the scope of work contemplated and described by the contracting parties when they executed the original task ordering agreement.

Signature (Director)

Signed by:



91ABD751A0BD4BE...

Name: JARED SCARBROUGH

Date: 11/20/2025

Signature (Procurement)

By: _____
Name: _____
Date: _____

Signature (Chief Service Development Officer)

By: _____
Name: _____
Date: _____

Signature (Executive Director)

By: _____
Jay Fox, Executive Director
Date: _____

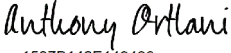
COMPANY:

COMPANY: ROCKY MOUNTAIN SYSTEMS SERVICES

RMSS Required
Signature
Explanation

- <\$500K – Josh Lafleur (jlafleur@modrailsystems.com)
- \$500K - \$5M – Anthony Ortolani (aortolani@modrailsystems.com)
- >\$5M - Shon Tulik (stulik@modrailsystems.com)

Signature
(Contractor)

Signed by:

1587B142E149430...
Name: Anthony Ortolani
Date: 11/21/2025



November 14th, 2025

RMSS-52720-013

Mr. Dean Hansen
Manager of Systems Engineering
2264 South 900 West
Salt Lake City, UT 84119

Reference: Utah Transit Authority – Systems On-Call Services

Subject: PTO 013 - MOW Training Facility – Signal Procurement & Construction

Dean,

Rocky Mountain Systems Services (RMSS) is pleased to submit this proposal for construction, installation, testing, and commissioning of the signal, communications, and electrical systems for the UTA MOW Rail Training Yard

Our lump sum price for this proposal is **\$2,248,411.84**

As designed under TO#022-037 (MOW Training Facility Design), RMSS will procure, install, test, and commission the complete signal, communications, and electrical systems in accordance with approved UTA design. The training yard includes one signal bungalow supporting a control point and grade crossing, one TRAX double crossover, one FrontRunner mainline track, one switch training pad (two power-operated and two hand-throw switches), and one TDX station for C&I integration.

Design Summary

RMSS will provide design services across Hardware, Software, Communications, and TDX Head-End engineering teams:

- **Hardware Engineering:** Update AIS plans, circuit designs, and wiring diagrams.
- **Software Engineering:** Develop and verify VHLC, ElectroLogIXS, and GCP logic updates.
- **Communications Engineering:** Produce fiber layouts, FAT tables, and network configuration files.
- **TDX Head-End Engineering:** Update TDX software, databases, and configuration files with full QA/QC review.

Procurement Summary

RMSS will procure materials provided in the attached MOW Training Facility - RMSS and UTA Provided Parts dated November 14th 2025, which have been based upon and identified in approved design documents and the UTA-provided procurement list. Materials that are to be provided by UTA are specifically identified as "UTA-provided" and are included in the attached detailed line-item "MOW Training Facility - RMSS and UTA Provided Parts".

Key procurement categories include:



- **Signal System:** Signal house (14'x30'), coupler cases, power-operated switch machines w/heaters, LED signal heads, VHLC/IXS processors, grade crossing equipment (GCP), local control panels, network switches, backup power, cabling, and in-house components.
- **TDX Station:** Workstation hardware, TDX software, licensing.
- **Electrical / Utility:** Lighting, foundations, conduit, cable, distribution panels, transformers, service disconnects, surge protection, grounding, and labeling.
- **Communications / Fiber:** Pullbox, conduit, MD7 and micro-duct, terminations, rack enclosures, high-density patch panels, adapter plates, splice trays, and SC/ST patch cords.

Installation – Signal System

RMSS will install and test all signal and communications components required for the TRAX and FrontRunner integration. Work includes the following:

- Install TRAX interlocking with the following POSMs:
 - Nortrak CSV-24
 - Alstom 5F
 - Two (2) Hitachi M23A (1-LH, 1-RH)
- Install POSMs on the Electric Lock Switch Pad:
 - H&K HWE-61
 - T-21 w/ SL-21A E/L
 - Model 10A
 - CTS-2 (if available from UTA as the unit no longer procurable).
- Install and wire four (4) LED signal heads for TRAX aspects.
- Install grade crossing equipment including gates, predictors, EGMS, and GCP-4000.
- Install spare conduit from signal house to switch pad for future gate mechanism.
- Install switch heaters (gas-fired blower and cal-rods) per design.
- Wire and equip the signal house including ElectroLogIXS/VHLC processors, cabling, circuits, utilities, and network equipment.
- Install one (1) Siemens Phase Shift Overlay (PSO) on the embedded straight track.
- Install cab generator and track interface equipment on FrontRunner section per design.
- Install managed RuggedComm switches in the house, fully cabled, configured, and tested per the approved network topology drawings.

Communications (Fiber)

- Intercept conduit going to WV2 Substation and install new pullbox.
- Route MD7 to TRAX Comm Box 219+63 to PB43 and install micro-duct (~1,650 ft).
- Pull/blow UTA-provided 144-strand fiber (~2,000 ft total) to TTEC Building and Yard Signal House.
- Tie into designated buffer tubes (Yellow, Rose, Violet, Aqua).
- Complete all splicing, routing, and terminations per UTA standard.
- Provide tagged/labeled slack loops at each termination point per UTA fiber standard.
- Perform OTDR and continuity testing and furnish results in UTA-approved reporting format.
- Update UTA fiber spreadsheets to reflect final routing and tube assignments.



Electrical Utility

- Procure and install electrical systems from meter to distribution pad.
- Install and wire signal house lighting, distribution panels, transformers, service disconnects, and protective devices.
- Perform bonding, grounding, and circuit labeling.
- Perform insulation resistance and continuity testing.
- Provide as-built documentation.

TDX Configuration

RMSS will configure a local TDX workstation in the signal house with the following enabled:

- Analog Values
- E-ATC (MD/TSR)
- Forms-Based Dispatch (including Crossing Repair Form)
- Provide user screens reflecting the Training Facility layout with all point mappings.
- Provide C&I reporting to both LCP and the TDX workstation.
- Status points include at minimum:
 - Crossing enable/disable
 - Crossing health
 - EGMS loop detector
 - Communications link
 - Gate status (GDR/GPR/XR)
 - Faults
 - MD / TSR
 - AC/DC power loss
 - Track occupancy
 - Switch heater status
 - POSM control and indication

Testing & Commissioning

RMSS will perform full testing, validation, and commissioning required to place the system into revenue-capable service, including the following:

- Test and validate AFTAC circuits, PSO, and GCP predictors including calibration and scenario testing.
- Pre-test all vital application software packages.
- Test and validate all vital controllers (ElectroLogIXS, VHLC, predictors, cab signal, gate logic).
- Verify track circuits, switch logic/indication, EGMS functionality, fiber terminations, and AC/DC power.
- Test TDX station command paths and local/remote indications.
- Perform continuity, functionality, performance, and burn-in testing on all systems.
- Coordinate energization with UTA and applicable utilities.
- Document all test results and QC verifications.

Deliverables

RMSS will provide UTA with a simplified system-level familiarization plan (route & aspects, control lines, single line diagrams, and crossing approach plans) for training purposes. RMSS will also provide the following project closeout deliverables:

- Product submittal packages.



- As-built drawings and AIS plan sets (hard copy & digital).
- VHLC, ElectroLogIXS, and GCP AIS logic files.
- GCP and EGMS configuration files.
- Fiber layout plans and FAT tables.
- TDX software and configuration files.
- Network switch and RuggedComm configuration files.
- Final test reports (hard copy & digital).
- Asset inventory list (PN, SN, equipment type, manufacturer).

Clarifications

1. UTA will provide utility power to the meter.
2. UTA is providing the 144-strand SMF lateral fiber.
3. UTA will need to provide one (1) CTS-2 switch machine if available (unit no longer commercially procurable).
4. UTA will need to provide one (1) SWCC U-5 SCC if available (unit no longer commercially procurable).
5. UTA will provide one (1) H&K HWE-61 switch machine from MOW.
6. UTA will furnish gate mechanisms from PTO-42: Siemens S-80, WCH 3593-E, and WCH 3597-FC-301.
7. UTA will furnish select VHLC components from PTO-48 due to difficulty procuring and significant lead times.
8. Any materials sourced from other task orders may impact the project schedule if they are not available when required
9. RMSS is responsible for verification of all wiring, conduit, and fiber runs.
10. RMSS will utilize all new duct banks, conduits, and pullboxes installed by others (unless otherwise noted).
11. RMSS will utilize key personnel testers to perform all required testing.
12. RMSS will return any UTA-provided parts that are found to be non-functional, incompatible, or not suitable for use.
13. The switch pad and switch layouts remain unclear due to the reuse of existing track, RMSS reserves the right to revise this proposal if there are changes to the switch layout design.
14. This proposal does not include any material escalation or additional charges due to tariffs. Furthermore, all vendor pricing is assumed to be expired at the time of task order execution. RMSS reserves the right to seek recovery for changes in material pricing.

Assumptions

1. UTA-provided materials are assumed to be in good working condition and to have the required features.
2. RMSS has made reasonable efforts to confirm compatibility; however, RMSS cannot guarantee full functionality, interoperability, or compatibility of UTA-provided equipment until installation and field testing occurs.
3. All pricing in this proposal is based upon the provided owner scope documentation, as well as the following owner provided drawings:
 - a. "UTA Estimate – UTA Training Facility BOM (cleaned up 20230814) (1)" dated January 4, 2024
 - b. "MOW Training Yard Conduit_Duct Bank Layout" dated October 9, 2023



- c. "MOW Electrical 100% Review Set_02-03-25_comments" dated February 21, 2025
- d. "MOW Training Yard Conduit schedule" dated April 16, 2025
- e. "Power Feed Responsibility Mark-Up" dated May 13, 2025
- f. "UTA-MOW 100% Electrical Design_Final" dated April 24, 2025
- g. "EC102_ LEVEL 2 – TELECOM Rev.1 markup" dated September 9, 2025
- h. "AE132_ LEVEL 2 DIMENSION PLAN Rev.0 markup" dated September 9, 2025

Exclusions

- 1. Any equipment or furniture not listed in UTA procurement documents.
- 2. Future expansion items not installed under this scope:
 - a. Additional Gate Mech (future)
 - b. TPSS integration (future)
 - c. OCS integration (future)
- 3. No spare parts will be included in this proposal.
- 4. Although RMSS's scope originally included sawcutting concrete and installing a 2-inch conduit for fiber from the pull box to the TTEC communications room (as shown on the duct bank drawing), with one 2-inch spare conduit, this work has already been completed by another contractor and will therefore be excluded from RMSS's scope of work.

This proposal is valid for 60 days, unless extended in writing by RMSS.

If you need any additional information, please don't hesitate to contact us.

Sincerely,

Skylar Baxter
Field Engineer
Rocky Mountain Systems Services

cc:

Marshall Wilson – RMSS
Anthony Ortolani – RMSS
Josh LaFleur – RMSS

Our pricing is in U.S. Dollars, F.O.B. Salt Lake City UT, and excludes all allowances, taxes, tariffs, licenses, and permits

UPDATED: 11/14/25		MOW Training Facility - RMSS and UTA Provided Parts							
		BLACK - RMSS TO ORDER	RED - UTA PROVIDED	RED/YELLOW - DISCONTINUED		BLUE - SIEMENS GIFTED TO UTA			
MANUFACTURER	PART NUMBER#	PART/DESCRIPTION	UNIT	QTY.	UTA PROVIDED PARTS	RMSS QTY TO ORDER	LEAD TIME	NOTES:	
ALSTOM	013986-000	NUT INSULATED HARMON	EA	140		140	17 Weeks		
ALSTOM	122272-002	Bar for relay mounting 19" GRS W/GRY PNT	EA	16		16	18 Weeks		
ALSTOM	122325-001	PLATE GROUND 12POS	EA	2		2	12 Weeks		
ALSTOM	123160-003	Tie bar 19" W/GRY PNT.	EA	10		10	18 Weeks		
ALSTOM	123729-003	PNL B2 BSA-4/BSA-6 MTG GRY	EA	3		3			
ALSTOM	124422-000	DIN RAIL 35X7.5 FOR 19	EA	15		15	16 Weeks		
ALSTOM	132167-001	STRAP BUSS 1" HOLE CTR 35.7"LG	EA	15		15	15 Weeks		
ALSTOM	202080-102	ASSY 19" RACK 7"-0" DBLTAP RL GRAY	EA	7		7	8 Weeks		
ALSTOM	202216-001	Air Gap Arrester AGA-1	EA	150		150	7 Weeks		
ALSTOM	202217-000	Air Gap Equalizer AGE-1	EA	38	38	0	0		
ALSTOM	203032-000	Terminal Block 4 Post	EA	270		270	7 Weeks		
ALSTOM	250094-300	2x6 12 post AAR Term Block w/HDWR	EA	36		36	10 Weeks		
ALSTOM	250581-000	Cab Signal Coupler ASSY CSC-100 W/PAR TRAP 300HZ	EA	1		1	49 Weeks		
ALSTOM	250756-000	Assy Switch Control Rectifier 120VDC B2 Mount	EA	3		3	28 Weeks		
ALSTOM	300601-1320	Switch Controller Dual 110V DC	EA	3	1	2	62 Weeks	UTA provided 1, RMSS to order 2	
ALSTOM	800-086010-000	FINAL ASSY CAB 101 CSG 100 HZ	EA	1	1	0	0		
ALSTOM	225756-000A	AFTAC Chassis	EA	2	2	0	0		
ALSTOM	226354-020B	IST - 8.3KHz TX no Coupler	EA	1	1	0	0		
ALSTOM	226354-072B	IST - 4.0KHz TX no Coupler	EA	1		1	61 Weeks		
ALSTOM	227049-212	ISR - 4.0KHz RX w/ Coupler	EA	1	1	0	0		
ALSTOM	227049-220	ISR - 8.3KHz RX w/ Coupler	EA	1	1	0	0		
ALSTOM	227118-006	STC - 45Hz	EA	1		1	58 Weeks		
ALSTOM	227118-009	STC - 73Hz	EA	1	1	0	0		
ALSTOM	250029-012	RAIL to LINE COUPLER 1190B-1 4.0KHz	EA	1	1	0	0		
ALSTOM	250029-020	RAIL to LINE COUPLER 1190B-1 8.3KHz	EA	1	0	1	59 Weeks		
ALSTOM	250597-000	BSA-4 (Battery Surge Arrester)	EA	1		1	7 Weeks		
ALSTOM	250597-100	BSA-6 (Battery Surge Arrester)	EA	4	3	1	7 Weeks	UTA provided 3, RMSS to order 1	
ALSTOM	300752-000	Electrologixs 9-Slot Chassis	EA	3		3	7 Weeks		
ALSTOM	227539-000	ELX Personality Module VLD-R16S	EA	1		1	7 Weeks		
ALSTOM	251381-000	ELX I/O Module VLD-R16S	EA	1		1	7 Weeks		
ALSTOM	227442-000	ELX Personality Module VTI-2S	EA	3	1	2	7 Weeks	UTA provided 1, RMSS to order 2	
ALSTOM	251123-000	ELX I/O Module VTI-2S	EA	3	3	0	0		
ALSTOM	227537-000	ELX VIO-86S Personality Module	EA	6	4	2	7 Weeks	UTA provided 4, RMSS to order 2	
ALSTOM	251380-000	ELX I/O Module VIO-86S	EA	6	4	2	7 Weeks	UTA provided 4, RMSS to order 2	
ALSTOM	251456-000	ELX System Module CPS-3	EA	3	3	0	0	UTA provided	
ALSTOM	251432-100	ELX Module VPM-3	EA	3	3	0	0	UTA provided	
ALSTOM	251333-000	ELX Module GFD-1	EA	1		1	7 Weeks		
ALSTOM	251329-100	ELX System Module CIO-CLA	EA	1	1	0	0	UTA provided	
ALSTOM	251330-000	ELX System Module CIO-2A	EA	3	3	0	0	UTA provided	
ALSTOM	251124-100	ELX Module CDU-2	EA	3	3	0	0	UTA provided	
ALSTOM	251495-000	ELX Module UCI-3	EA	3	3	0	0	UTA provided	
ALSTOM	032773-107	CONN 7FEM .2CN CBLMT HC LUB - VTI Connector	EA	2		2	16 Weeks		
ALSTOM	075113-010	ASSY CABLE CIO-CLA CARD to LCP 10FT	EA	1		1	13 Weeks		
ALSTOM	201876-010	LCP 6ft Cable	EA	1		1	26 Weeks		
ALSTOM	226607-XXX	VHLC Chassis	EA	1	1	0	0	UTA provided	
ALSTOM	226610-700	ASSY VHLC VLP ALT5 FPVP (4-Term w/DB9 port)	EA	1	1	0	0	UTA provided (Parts will be pulled from PTO-48)	
ALSTOM	226611-300A	ACP-3	EA	1	1	0	0	UTA provided	
ALSTOM	226612-003	SSM	EA	1	1	0	0	UTA provided	
ALSTOM	226955-000	12 VDC Power Supply 40 W (+5 V)	EA	1	1	0	0	UTA provided (Parts will be pulled from PTO-48)	
ALSTOM	226650-000	RS-232 Interface Module	EA	2	2	0	0	UTA provided	
ALSTOM	226859-000	VHLC Current Loop Adapter (for LCP)	EA	1	1	0	0	UTA provided (Parts will be pulled from PTO-48)	
ALSTOM	226802-001	CCI (Coded Circuit Interface Module)	EA	1	1	0	0	UTA provided	
ALSTOM	200123-001	Cable CCI with 1 ECTCI	EA	1	1	0	0	UTA provided (Parts will be pulled from PTO-48)	
ALSTOM	227209-012	VGPIO	EA	3	3	0	0	UTA provided	
ALSTOM	200124-210	CABLE VGPIO #16AWG	EA	3	3	0	0	UTA provided (Parts will be pulled from PTO-48)	
ALSTOM	226614-100A	NVI 32	EA	1	1	0	0	UTA provided	
ALSTOM	200660-210	Cable NVI32 #16 AWG	EA	1	1	0	0	UTA provided (Parts will be pulled from PTO-48)	
ALSTOM	800-088031-001	E2 Chassis	EA	2	2	0	0	UTA provided	
ALSTOM	810-088031-017	600 Receiver Module (4-Terminal)	EA	2	1	1	57 Weeks	UTA provided 1, RMSS to order 1	
ALSTOM	810-088031-019	610 Amplifier	EA	2	2	0	0	UTA provided	
ALSTOM	810-088031-022	620 Coupler Module	EA	2	2	0	0	UTA provided	
ALSTOM	810-088031-025	630 Band Pass Filter	EA	2	2	0	0	UTA provided	
ALSTOM	812-085007-206	ECTCI Chassis	EA	1	1	0	0	UTA provided	
ALSTOM	810-002000-051	7K Receiver	EA	1	1	0	0	UTA provided	
ALSTOM	810-083004-017	214 Track Filter	EA	1	1	0	0	UTA provided	
ALSTOM	810-083900-001	2R Track Converter	EA	1	1	0	0	UTA provided	
ALSTOM	800-096000-011	Track Interface Panel (TIP-2)	EA	1		1	7 Weeks		
ALSTOM	814-096000-017	Track Interface Panel Cable, 8'	EA	1		1	7 Weeks		
ALSTOM	54529-015-17	5F LH Switch Machine (110VDC, LH, Left Point Normally Closed)	EA	1	1	0	0	UTA provided	
ALSTOM	N/A	CTS-2	EA	1	1	0	0	Discontinued. Does not matter if LH or RH since will be on pad. (UTA to provide if available)	
US&S		SWCC U5 Switch Circuit Controller	EA	1	1	0	0	Discontinued. UTA to provide if available (6-7 in UTA stock)	
ALSTOM (G&B Wabtec)	58800-006-02	Model 10A Electric Switch Lock	EA	1		1	12 Weeks		
Cembre	2834015	AR60D COMPLETE FIXING KIT	EA	8		8	TBD		
Cembre	2508480	2A60-M12 COPPER TERMINAL (500-MCM)	EA	20		20	TBD		
Cembre	8500162	CCQ 3/4-7/8 CARBIDE TIPPED CUTTER	EA	1		1	TBD		
FS	FHD-1UFCE#70361	1U Rack Mount Enclosure Unloaded, Sliding Drawer	EA	3		3	0		
FS	FHD-4UFCE	High Density 4U Rack Mount Enclosure Unloaded	EA	1		1	0		
FS	FHD-FAP6SCDXSMF	Fiber Adapter Panel, 12 Fibers OS2 Single Mode, 6 x SC UPC Duplex (Blue) Adapter	EA	4		4	0		
FS	FHD-FAP12LCDXSMF	Fiber Adapter Panel, 24 Fibers OS2 Single Mode, 12 x LC UPC Duplex (Blue) Adapter	EA	4		4	0		
FS	FHD-FAPB#193007	Blanking Fiber Adapter Panel (5pcs/Pack)	EA	2		2	0		
FS	FHD-FOSMF-24F#64246	24 Fibers Optical Splice Tray for FHD Fiber Enclosure	EA	6		6	0		
FS	SMSCDX#40234	1m (3ft) SC UPC to SC UPC Duplex OS2 Single Mode PVC (OFNR) 2.0mm Tight-Buffered Fiber Optic Patch Cable	EA	6		6	0		
FS	SMSCSTDx#40408	1m (3ft) SC UPC to ST UPC Duplex OS2 Single Mode PVC (OFNR) 2.0mm Tight-Buffered Fiber Optic Patch Cable	EA	6		6	0		
Grainger	FAZ-C30/1-NA-SP	Eaton - 30 A Amps, 48V DC, 10kA at 277/480V AC	EA	2		2	10 Days		
Grainger	5PZV1	Ethernet cables (RJ45 Cable) 3 Foot	EA	4		4	10 Days		
Grainger	5VYZ5	Ethernet cables (RJ45 Cable) 10 Foot	EA	4		4	10 Days		
Grainger	5VZG5 (5VZF6)	Ethernet cables (RJ45 Cable) 75 Foot	EA	2		2	10 Days		
Grainger	QO120	Square D - Breaker 20A 1 Pole DIN/Flush mount	EA	1		1	10 Days	Hotel Amenity for Signal House	
Grainger	SDSA-1175	Square D - Breaker Box Surge Protector	EA	2		2	10 Days	Hotel Amenity for Signal House	
Hammond	PH50PG	Hammond Mfg - Transformer 110/120VAC to 12V (used for PO XFMR)	EA	1		1	5 Weeks		
Hanning & Kahl	HWE61	H&K Hand Throw	EA	1	1	0	0	UTA provided	
Hitachi	N4511601211	M-23A Switch Machine (110VDC LH, Left Point Normally Closed)	EA	1		1			
Hitachi	N4511601212	M-23A Switch Machine (110VDC RH, Right Point Normally Closed)	EA	1		1			
Hitachi	SL-21A E/L	T-21 Hand Operated Switch Machine (AnsaldoSTS)	EA	1		1			
Home Depot	N/A	Wood Panel 6"x 20"	EA	1		1	0		
L&W	9A1110-10D	10 Ohm Adjustable Resistor	EA	1		1	6 Weeks		
L&W	9A1110-4	2.88 Ohm Adjustable Resistor	EA	1		1	1 Week		
Major Custom Cable	N/A	Comms cables (RS-232 DB25(F) to DB9(M) Serial Cable) - 10ft	EA	2		2	0		
Major Custom Cable	N/A	Comms cables (RS-232 DB25(M) to DB9(F) Serial Cable) - 20ft	EA	1		1	0		
Major Custom Cable	N/A	Comms cables (RS-232 DB25(M) to Pigtail Serial Cable) - 20ft	EA	2		2	0		
MOXA	NPORT5150A-T	Serial to Ethernet Media Converter (Office Comms)	EA	1	1	0	0	UTA provided	
MOXA	TCF-142-S-SC-T	Serial to Fiber Media Converter (Vital Remote Comms)	EA	2		2	2 Weeks		
NASS	Custom	3B LATCH RESET PANEL W/PB 2.5 X 9.375, Black Powder Coat, Engraved, Red 16mm Pushbutton (no wiring)	EA	1		1	N/A		
National Railway Supply	012-04-02DAX1100	Battery Charger 20A 12/40 HF-MAX (12V, 4 slot chassis, 2 IPM (40A), Display for voltage/current, AAR terminals, 10Ft temp probe, 10Ft remote voltage cable)	EA	6		6	13 Weeks		
National Railway Supply	DDR 50-09	PowerSafe Battery 200AH DDR 50-09	EA	14		14	13 Weeks		
National Railway Supply	DDR 50-17	PowerSafe Battery 400AH DDR 50-17	EA	24		24	13 Weeks		
Nortrack	115RE LH NC	CSV-24 (Left Point Normally Closed 110VAC)	EA	1		1	24 Weeks		
POTTER&BRUMFIELD	20C176	HOLD DOWN SPRING, F/TYPE POTTER & BRUMFIELD KRP& KRPA RELAYS							

SIEMENS	400520	Relay Vital 500 ohm 2F-2B (EHD) A62-0429/400520	EA	2		2	7 Weeks	
SIEMENS	NYK:6000627750790	Narrowband Shunt 790HZ	EA	1		1	4 Weeks	
SIEMENS	9000911700001	Lighting Surge Panel - Safetran 91170-1	EA	2	2	0	0	UTA provided
SIEMENS	010806-3AX	Safetran SP19-2A (Surge Protection)	EA	1		1	4 Weeks	
SIEMENS	023839-2	1 inch strap	EA	176		176	4 Weeks	
SIEMENS	024620-19X	Test Link	EA	402		402	7 Weeks	
SIEMENS	4000-44811-5AX	Safetran SP24-2A	EA	1		1	4 Weeks	
SIEMENS	420000-75X	Relay Plugboard	EA	24		24	4 Weeks	
SIEMENS	7000-7A377-2630	PSO 4000: 7A377 Line to Rail Coupler 2630 Hz	EA	1		1	4 Weeks	
SIEMENS	7000-7A388-0001	PSO 4000: 7A388 Line to Receiver Coupler 2630 Hz	EA	1		1	4 Weeks	
SIEMENS	7000-7A475-0001	PSO 4000: Transceiver	EA	1	1	0	0	UTA provided
SIEMENS	A80440	GCP: Basic Crossing Chassis	EA	1		1	5 Weeks	
SIEMENS	A80403	GCP: CPU Module	EA	1	1	0	0	UTA provided
SIEMENS	A80418	GCP: Track Module	EA	1	1	0	0	UTA provided
SIEMENS	A80405	GCP: SSCC III Module	EA	2	2	0	0	UTA provided
SIEMENS	NYK:8000804100001	GCP: SEAR III Module (A80410)	EA	1		1	7 Weeks	
SIEMENS	NYK:8000804850001	GCP: Display Module (A80407-03)	EA	1		1	7 Weeks	
SIEMENS	NYK:8K008K0040001	GCP: Ferrite Bead Kit	EA	2		2	4 Weeks	
SIEMENS	A53457	GCP: Wayside Access Gateway (WAG)	EA	1	1	0	0	UTA provided
SIEMENS	A80078	GCP: Echelon Termination Unit	EA	2		2	10 Weeks	
SIEMENS	NYK:004-101-0001X	EGMS Chassis (We have the WAGO's, Loop panel, and connectors)	EA	1	1	0	0	UTA provided
SIEMENS	E-1400S (4)	A44102: E-1400S - Inductive Loop Processor Module (4 Channels)	EA	1		1	4 Weeks	
SIEMENS	NYK:010-101-0006	A44104: Isolated Power Supply	EA	1	1	0	0	UTA provided
SIEMENS	NYK:010-101-0002	A44107: Display Module	EA	1	1	0	0	UTA provided
SIEMENS	NYK:010-101-0003	A44108: CPU Module	EA	1	1	0	0	UTA provided
SIEMENS	NYK:010-101-0004	A44105: Vital Input Module	EA	1	1	0	0	UTA provided
SIEMENS	NYK:010-101-0009	A44106: Vital Input/Output Module	EA	1	1	0	0	UTA provided
SIEMENS	NYK:010-101-0008	A44103: System Communications Module	EA	1	1	0	0	UTA provided
SIEMENS	NYK:PLC-24-50	EGMS Detector Loop Cable 24' long x 50' wide	EA	2		2	TBD	
SIEMENS COMMS	6GK6000-8FE60-0AA0	SFP1131-1FX10A Ruggedcomm 10/100 SFP	EA	3		3	0	Siemens Gifted to UTA
SIEMENS COMMS	6GK6000-8FG52-0AA0	SFP1132-1LX10 Ruggedcomm 1G SFP	EA	2		2	0	Siemens Gifted to UTA
SIEMENS COMMS	6GK6015-0CM23-.DC0-Z A01+B36+C26+D01+E01	RX1524-L3-RM-7-3-.L3SEL3HW-FG50-6FX50-6TX01-6TX01-XX-...-	EA	2		2	16 Days	
SIEMENS COMMS	6GK6040-0AT21-0DA0-Z A12+B02+C00	RS400-24-R-T2T2-3D-XX-XX-	EA	4		4	0	Siemens Gifted to UTA
SIEMENS COMMS	6GK6090-0GS21-0BA0-Z A01	RS900G-24-D-2SFP-XX-	EA	2		2	0	Siemens Gifted to UTA
SIEMENS COMMS	RS400-24-R-T2T2-3D	Ethernet Switch, 4 - Port RS232, 19in Rack Mount	EA	2		2	26 Days	
TWINCO	N/A	Impedance Bonds	EA	2		2	0	
WAGO	249-117	TERMACC END STP GRY 249-117	EA	22		22	2 Weeks	
WAGO	281-326	TERMACC END PLT FOR 281 ORANGE	EA	15		15	2 Weeks	
WAGO	281-402	WAGO Jumper Adjacent 281 Terminals	EA	75		75	2 Weeks	
WAGO	281-681	WAGO Terminal 3-Conductor 28-12 AWG Grey	EA	300		300	2 Weeks	
WAGO	282-325	TERMACC END PLT FOR 282 GRAY	EA	31		31	2 Weeks	
WAGO	282-402	WAGO Jumper Adjacent 282 Terminals	EA	155		155	2 Weeks	
WAGO	282-901	WAGO Terminal 2-Conductor 24-10 AWG Grey	EA	225		225	2 Weeks	
WAGO	793-4507	TERMACC MRKR #51-100 HORZ (2 per sleeve, 5 sleeves)	EA	4		4	2 Weeks	
WAGO	793-5566	TERMACC MRKR #1-50 HORZ (2 sets of 1-50 per sleeve)	EA	4		4	2 Weeks	
Western Cullen Hayes	WCH 3597-FC-301	Gate Flasher Assemblies (Unassembled) WO/ Galv. Foundations	EA	1	1	0	0	UTA provided (Parts will be pulled from PTO-42)
Western Cullen Hayes	WCH 3593-E	Gate Flasher Assemblies (Unassembled) WO/ Galv. Foundations	EA	1	1	0	0	UTA provided (Parts will be pulled from PTO-42)
WILMORE	1675-12-24-8	B24 Power supply/Converter	EA	1		1	4-6 Weeks	
WILMORE	1675-12-48-4	12 VDC- 48 VDC voltage converter 1675-12-48-4	EA	1		1	4-6 Weeks	
TDX Station	TDX Station	Software	EA	1		1		
TDX Station	TDX Station	Server License - For any Server(DB, APP, FEP,etc)	EA	1		1		
TDX Station	TDX Station	Work Station License - For controller style workstations only	EA	1		1		
TDX Station	TDX Station	Train Tracking - Identification, Color based on Route or Destination, ability to assign route codes, consist info, driver info all which are reportable.	EA	1		1		
TDX Station	TDX Station	Playback - Enterprise for the network	EA	1		1		
TDX Station	TDX Station	Playback Workstation - Per workstation when a workstation is used for playback.	EA	1		1		
TDX Station	TDX Station	Reporting tool	EA	1		1		
BEST BUY	UN55U8000FFXZA	55" TV (Signal House)	EA	1		1	0	
BEST BUY	BE-MLFM	Wall Mount for TV (Signal House)	EA	1		1	0	
Misc	Misc	House materials, wire, labels, panduit, etc.	EA	1		1		

Electrical Utility								
Oak Hollow	37SSD16	37.5 kVA, Dry-type, 480Δ-120/240V Wye, 150°C, 1.5% Impedance, K=1, NEMA 3R	EA	2		2		
Oak Hollow	Main Switchboard	277/480V 3Ø 4W, 1000A main breaker, 65kA AIC, Electronic LSIG trip, NEMA 3R	EA	1		1		
Oak Hollow	Panel Board (MDP-MOW)	480Y/277V 3Ø 4W, 400A MCB, 400A Bus, NEMA 3R	EA	1		1		
Oak Hollow	1P1	240/120V, 1-phase, 3-wire, 200A MCB, NEMA 3R, Recessed Mount, Copper Bus, 10kA AIC, Bolt-On CBs	EA	1		1		
Oak Hollow	1P2	240/120V, 1-phase, 3-wire, 200A MCB, NEMA 3R, Recessed Mount, Copper Bus, 10kA AIC, Bolt-On CBs	EA	1		1		
Oak Hollow	3/4X10	¾" x 10' copper-clad rods	EA	30		30		
Oak Hollow	BARE6DSOLBULK	500' #6 CU Bare	FT	500		500		
Oak Hollow	GALV3	3" Sch. 40 Galv. Pipe uprights 3x11'	EA			0		
Oak Hollow	DPSLOTPG	1-3/4" Galv. Unistrut, SS hardware 4x14'	EA			0		
Oak Hollow	CP34	¾" Bronze Ground Rod Clamp	EA	46		46		
Oak Hollow	25-75732-1	30' Steel Pole, Lithonia DSX2 LED, 20,670 lm, 120/277V, Type T5W (A15)	EA	6		6		
Oak Hollow	25-75732-1	20' Steel Pole, Lithonia DSX1 LED, 5,524 lm, 120/277V, Type BLC3 (A12)	EA	2		2		
Oak Hollow		Light Pole Foundations	EA	8		8		
Oak Hollow	11524	1C. #8 (19X), PVC/SIMPULL THHN-THWN-2, BLACK	FT	6136		6136		
Oak Hollow	12165	1C. #8 (19X), PVC/SIMPULL THHN-THWN-2, GREEN	FT	3832		3832		
Oak Hollow	10879	1C. #4 (19X), PVC/SIMPULL THHN-THWN-2, BLACK	FT	178		178		
Oak Hollow	10030	1C. #2 (19X), PVC/SIMPULL THHN-THWN 2, BLACK	FT	1870		1870		
Oak Hollow	12711	1C. #1 (19X), PVC/SIMPULL THHN-THWN-2, BLACK	FT	183		183		
Oak Hollow	10714	1C. 3/0 (19X), PVC/SIMPULL THHN-2, BLACK	FT	239		239		
Oak Hollow	12180	1C. 3/0 (19X), PVC/SIMPULL THHN-2, GREEN	FT	1825		1825		
Oak Hollow	10717	500 KCMIL (37X), PVC/SIMPULL THHN-2, BLACK	FT	7300		7300		

All Material provided by Oak Hollow

Communications (Fiber)								
CommScope	TBD	Fiber Strand (48-strand) (WV Line to TTEC Building)	FT	1500		1500		UTA provided
CommScope	TBD	Fiber Strand (24-strand) (TTEC Building to Signal House)	FT	500		500		UTA provided
ROCKY MOUNTAIN FIBER	Line #1	MOBILIZATION	EA	1		1		
ROCKY MOUNTAIN FIBER	Line #2	PROVIDE MD7 IN JOINT TRENCH	EA	85		85		
ROCKY MOUNTAIN FIBER	Line #3	PROVIDE VAULT FOR CONDUIT INTERCEPTION POINT	EA	1		1		
ROCKY MOUNTAIN FIBER	Line #4	PROVIDE AND PLACE MICRODUCT WITH TRACER WIRE INSIDE NEW CONDUIT	EA	1500		1500		
ROCKY MOUNTAIN FIBER	Line #5	PROVIDE AND INSTALL FIBER DISTRIBUTION UNITS, PIGTAILS WITH SPLICE CASETTES, HEAT SHRINKS	EA	1		1		
ROCKY MOUNTAIN FIBER	Line #6	PROVIDE AND PLACE 1 TYCO D ENCLOSURE AND TRAY	EA	1		1		
ROCKY MOUNTAIN FIBER	Line #7	FUSION SPLICE FIBER	EA	240		240		
ROCKY MOUNTAIN FIBER	Line #8	TESTING AND DOCUMENTATION	EA	216		216		

Signal Cable								
Okonite Cable	TBD	3-TWPR #14	FT	4300		4300		
Okonite Cable	TBD	2C#6TW	FT	4800		4800		
Okonite Cable	TBD	7C#6	FT	5600		5600		
Okonite Cable	TBD	12C#14	FT	2600		2600		
Okonite Cable	TBD	1C#6 THWN	FT	1700		1700		
Okonite Cable	TBD	7C#14	FT	1400		1400		
Okonite Cable	TBD	4C#14 TWPR	FT	1000		1000		
Impedance Bond Cable	TBD	500 KCMIL (37X), PVC/SIMPULL THHN-2, BLACK	FT	220		220		

Switch Machine Layouts								
G&B	N/A	Hitachi M-23 Layout with JB	EA	2		2		
G&B	N/A	Alstom 5F layout with JB	EA	1		1		
G&B	N/A	Junction Box	EA	4		4		
	N/A	Switch Pad Materials	EA	1		1		

Updated 2/10/25	UTA PARTS IN RMSS INVENTORY					
Part#	Vendor	Description	UTA Transfer	RMSS Inventory	REV Version	Comments/Compatibility
251123-000	ALSTOM	VTI-2S	3	3		
227442-000	ALSTOM	VTI-2S Personality Module	3	1	REV B00	Will also need connectors - Missing 2 or never got - Connectors come with.
251432-100	ALSTOM	VPM3	3	3		P/N for Blank VPM3 with no app/exec software loaded - We can load them
251495-000	ALSTOM	UCI-3	3	3		
251329-100	ALSTOM	CIO-CLA	1	1		
251330-000	ALSTOM	CIO-2A	3	3	REV B01	To be determined with network design
251456-000	ALSTOM	CPS-3	3	4	REV B	Do we need a CPS 1, 2 or 3. (Reference page 1-29 Elogix Vol. 1)
251380-000	ALSTOM	VIO-86S	4	4		
227537-000	ALSTOM	VIO-86S Personality Module	5	4	REV AA3	Will also need connectors - Missing 1 or never got - Connectors come with
251381-000	ALSTOM	VLD-R16S	2	0		
227539-000	ALSTOM	VLD-R16S Personality Module	2	0		Will also need connectors - Connectors come with
251124-000	ALSTOM	CDU-1	3	3		We have CDU1's - These will work
226607-XXX	ALSTOM	VHLC Chassis	1	1		
226610-XXX	ALSTOM	VLP	1	1	REV VB0	Needs to be an updated version with DB9 port - The one we have has no DBP port
226611-300	ALSTOM	ACP-3	1	1	REV CA7	
226612-003	ALSTOM	SSM	1	1		
226802-001	ALSTOM	CCI	1	1	REV BB0	
227209-012	ALSTOM	VGPIO	3	3	REV CA3,CA8,CA7	For the EGMS
226614-100A	ALSTOM	NVI 32	1	1	REV AA0	For the EGMS
226650-000	ALSTOM	RS-232 Interface Module	2	2		
800-088031-001	ALSTOM	E2 Chassis	2	2		This part number might cover all components. E2 Chassis 800-088031-001 comes with the 600,610,620 & 630 Modules
810-088031-017	ALSTOM	600 Receiver Module	2	1	1-REV C, 4-REV B (3 TERMINAL)	This module needs to have 4 terminals - We have 1 REV C with 4 Terminals
810-088031-019	ALSTOM	610 Amplifier	2	2	1-REV A, 1-REV B, 2-REV A	
810-088031-022	ALSTOM	620 Coupler Module	2	2	4-REV A	
810-088031-025	ALSTOM	630 Band Pass Filter	2	2	4-REV 0	
812-085007-206	ALSTOM	ECTCI Chassis	1	1		
810-002000-051	ALSTOM	7K Receiver	1	1	REV JQ8	
810-083004-017	ALSTOM	214 Track Filter	1	1	REV F00	
810-083900-001	ALSTOM	2R Track Converter	1	1	REV K00	
60981-B 225756-000A	ALSTOM	AFTAC Chassis	2	2		
227049-212	ALSTOM	ISR - 4.0KHz RX w/ Coupler	1	1	REV BB1	Frequency (5.4 KHZ & 7.1 KHz)
227118-009	ALSTOM	STC - 73Hz	1	1	REV C1	Frequency (5.4 KHZ & 7.1 KHz)
226354-020B	ALSTOM	IST - 8.3KHz TX no Coupler	1	1	REV BA3	
227049-220	ALSTOM	ISR - 8.3KHz RX w/ Coupler	1	1	REV BA3	
227118-006	ALSTOM	STC - 45Hz	1	0		Missing or never got
250029-012	ALSTOM	RAIL to LINE COUPLER 1190B-1 4.0KHz	1	1	REV BA0	
250029-020	ALSTOM	RAIL to LINE COUPLER 1190B-1 8.3KHz	1	0		Missing or never got
300601-1320	ALSTOM	110V, 3 wire, Dual Switch Controller	1	1		For M23A and 5F & CTS-2 (110VDC SC) - Plans/BOM show using DUAL switch controllers for each one
300601-1310	ALSTOM	110V, 3 wire, Single Switch Controller	1	2		For 5F - Plans/BOM show using DUAL switch controllers for each one
	ALSTOM	5F Switch Machine	1	N/A		Interlocking - Outside of JRSC
800-086010-000	ALSTOM	Cab 101	1	2		
250597-100	ALSTOM	BSA-6	3	3		Type and quantity to be determined by final design - Design is showing BSA-6
202217-000	ALSTOM	Air Gap Equalizer AGE-1	38	38		
	Hitachi	M-23A	2	N/A		For the Interlocking - Never got
5150A-T	Moxa	Moxa Nport Serial Device Terminal Server	2	2		
HF Max 12/40-D	National Railway Supply	Battery Charger 40A 12/40 HF-MAX	5	5		Need to return to UTA, unable to get parts for
KRPA-11DN-12	Potter Brumfeld	Relay Non Vital 12VDC	4	3		Missing 1
KRPA-11AN-120	Potter Brumfeld	Relay Non Vital 120VAC	4	3		Missing 1 *1 Used at 9800S*
A80403	SIEMENS	CPU Module	1	1		Add various crossing relays as needed to BOM. - Seems they are all accounted for in the design
A80418	SIEMENS	Track Module	1	1		
A80405	SIEMENS	SSCC III Module	2	2		3 gates - Do we need another for the 3rd gate? - NO
9000911700001	SIEMENS	Lighting Surge Panel - Safetran 91170-1	1	2	PN# 91181-1	We have a different PN#, confirm this will work? - Yes, we have 2 in stock but don't know if UTA gave us 1-2
A53457	SIEMENS	Wayside Access Gateway (WAG)	1	1		
NYK:525-0202-01	SIEMENS	EGMS Chassis	1	1		4 Loop Assembly - With communications Module (Need 4 loop assembly and Comms module. We have the chassis and power supply)
A44103	SIEMENS	Systems Comm Module	1	1		NYK: 010-101-0008 - See comment above^ is there another Comms module besides this? We have 1 Comms module
A44104	SIEMENS	Isolated Power Supply	1	2		NYK: 010-101-0006
A44105	SIEMENS	Input Module	1	2		NYK: 017-101-0004
A44106	SIEMENS	Input/Output Module	1	1		NYK: 010-101-0009
A44107	SIEMENS	Graphics Touch-Screen (Display Module)	1	1		NYK: 010-101-0002
A44108	SIEMENS	CPU (Main Processor Module)	1	1		NYK: 010-101-0003
7000-7A475-0001	SIEMENS	PSO 4000 Transceiver	1	1		
RS400-24-R-T2T2-2	SIEMENS	RS400	2	0		Missing 2 - *Extras used for Fiber Project*
400023	SIEMENS	Relay Vital B 500 ohm Neutral 6FB HD A62-0580/400023	2	2		
400023	SIEMENS or Alstom equiv	Relay Vital B 500 ohm Neutral 6FB HD A62-0580/400023	1	1		
400020	SIEMENS	Relay B1 500Ohm 4FB-2F-1B A62-0310/400020	2	2		
400020	SIEMENS or Alstom equiv	Relay B1 500Ohm 4FB-2F-1B A62-0310/400020	2	1		HD switch control relay - Missing 1
400000	SIEMENS or Alstom equiv	Relay Vital 500 ohm 6FB A62-0125/400000	12	12		

UTA - On Call
PTO 013- MOW Training Yard
Task Order Estimate Summary



11/14/2025

Subcontractors	\$	332,714.00
Materials	\$	1,043,914.75
Administrative	\$	108,517.00
Design/Engineering	\$	140,385.00
Construction/Testing	\$	327,436.00
Travel & Perdiem	\$	4,000.00
Other Costs and Fee	\$	291,445.09
Total:	\$	2,248,411.84