

**MODIFICATION NUMBER ONE  
TO CONTRACT 20-03250CG**

This Modification Number One to the Contract Agreement is hereby entered into and made effective as of the date of the last signature below the (“Effective Date”), by and between UTAH TRANSIT AUTHORITY, a public transit district organized under the laws of the State of Utah, (hereinafter “UTA”) and Talrace (hereinafter “Contractor”).

RECITALS

WHEREAS, on March 31, 2020 UTA entered into a contract for the Rewrite of Computer Added Dispatch (CAD)/Automatic Vehicle Location (AVL) Software; and

WHEREAS, during implementation of the System it was determined that additional services for programming to complete this project, identified as Phase 2 is required; and

WHEREAS, the Contractor has agreed to perform these services; and

WHEREAS, UTA and the Contractor now desire to modify the Contract Agreement as set forth herein.

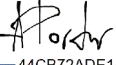
CONTRACT AGREEMENT

NOW, THEREFORE, on the stated Recitals, which are incorporated hereby in reference, and for and in consideration of the mutual covenants and agreements hereafter set forth, the mutual benefits to the parties to be derived here from, and for other valuable consideration, the receipt and sufficiency of which the parties acknowledge, it is hereby agreed as follows:

1. Services to Be Provided: Contractor shall perform all services as set forth in the Scope of Services – Attachment C, attached. Contractor shall provide all labor, materials and incidentals necessary for the work. All work shall be in accordance with the original contract terms and conditions.
2. Period of Performance: Work will commence as of the effective date of this modification and will continue for approximately nine (9) months or an estimated January 15, 2022.
3. Consideration: Contractor shall be reimbursed at the rate of \$30.00 per hour for estimated hours of 5500 for a not to exceed of \$165,000.00, as identified in Attachment D, attached. The total amount of the contract is hereby increased by \$165,000 from \$282,480.00 to a new total estimated amount of \$447,480.00.
4. Other Terms Remain in Effect: All other terms and conditions remain unchanged.

IN WITNESS WHEREOF, the parties hereto have executed and delivered the Agreement as to the date written above.

**TALRACE:**

DocuSigned by:  
  
44CB72ADE14742D...  
Name

\_\_\_\_\_  
Title

3/16/2021

**UTAH TRANSIT AUTHORITY:**

\_\_\_\_\_  
Carolyn M. Gonot  
Executive Director

\_\_\_\_\_  
Alisha Garrett  
Chief Enterprise Strategy Officer

\_\_\_\_\_  
Daniel Harmuth  
IT Director

DocuSigned by:  
  
361F16F838704A9...  
Michael Bell

\_\_\_\_\_  
Assistant Attorney General

**EXHIBIT C  
SCOPE – YTT Phase 2**

**New Features:**

**#1** The Pull-Out and Pull-In moves need to be addressed to allow the business to fully use the 2020 Application Development: These edits do not carry over to the next week so there is an extensive amount of editing to both the Pull-In and Pull-Out’s for each day.

- Based on the first two stations, the program would automatically put in the routing information (we would probably need a set up screen like we do for other items such as limitations and EOL capacity) where we could enter the first two stations then routing instructions, with the program then plugging that information in automatically for all trains that have those two first stations.
- Pull-out times should generally be 5 minutes before the first time point (the times currently pulling into the tool are more than 5 minutes before the first time point). However, it would be good to include an option on the pull-out instruction screens that would allow us to put in how many minutes before the first station are needed.
- For example, in the pull-out information screen, we would probably need something like the following:

First Station	Second Station	Time Needed Before Time Point (at 1 <sup>st</sup> station)	Routing
Central Point	Millcreek	5	Depart Yard EB via Z10 to Central Point SB Platform. Change Ends & Depart SB to Daybreak
Central Point	Ballpark	5	Depart Yard EB Via Z10 NB at CP
Central Point	South Salt Lake	7	Depart Yard EB via Z10 to S-Line

If two pull-out times are the same from the same yard, the program would need to shift one of the times by 1 or 2 minutes. Trains usually pull out exactly when scheduled.

**Pull-In:**

The time should be the exact time of the last time point (the times currently pulling into the tool have later times). In the pull in section, it is OK for several trains to have the same pull in time (that is because they will come from different tracks, and Controllers generally do pull-in on a first come, first served basis, since trains usually vary a little on their schedule as they travel down the line and often don’t arrive at the exact scheduled pull in time).

The Business would prepare that the routing automatically pull-in based on the last two stations (which would also require a background data set up screen).

Last Station	Prior Station	Routing
Central Point	Millcreek	Return to yard via U8/U12/Z6
Central Point	Ballpark	Return to yard via U6/Z6
Central Point	South Salt Lake	Return to yard via SH2/Z6

**#2 Monthly Summary Page Print-Out** Option for the Event Calendar (11 x 17)

**#3 Add functionality that will allow additional routes added through Trapeze to be managed through YTT.**

**#4 Automation of Cuts and Adds:**

This is the most challenging component of this project; the goal is that the program will

- Develop the code that recognizes how many cars are (always) available at each Yard and Tail Track.
- Code should recognize when a Tail Track is full, and then sift cuts to other tail track or EOL, as well as know which Tail Track cars can be added from.
- Code will include logic to account for when there are not enough cars and be able to determine which trains have priority.

Because this is the most challenging component of the project, the items listed above are the goal with the realization that some modification may be necessary, and the result may vary from what is listed above.

**#5 Rewrite of OPUS:**

OPUS is a program that TRAX Controllers use to see where the trains should be and if they are running on schedule. The person that initially wrote this program was not a developer and is no longer at UTA, because there is not the ability to support OPUS, one component of this project is to rewrite this application in a way that useful to the business, is secure and supportable by the I.T. Department.

**EXHIBIT D  
PRICING**

Cost estimation:

Field Activity	Hours	Resources	Hourly Rate	Total Cost
Analysis of architecture, preparation of workflow for new functionality	200	Tech Project Manager, Team Lead, Software Engineers, QA, Designer	\$30.00	\$6000.00
Create design mockups	200	Designer; Tech Project Manager	\$30.00	\$6000.00
1776 As a user, I want to be able to change the YTT Moves/Am/PM/Pull-out/Pull-in/Comments for a single day without it affecting future days.	400	Tech Project Manager, Team Lead, Software Engineers	\$30.00	\$12000.00
1942 As a user, I want the changes I make on the pull-out page to copy to future weeks.	600	Tech Project Manager, Team Lead, Software Engineers	\$30.00	\$18000.00
1943 As a user, I want the changes I make on the pull-in page to copy to future weeks.	80	Tech Project Manager, Software Engineers	\$30.00	\$2400.00
1944 As a user, I want to be able to manually add trains to the AM/PM Moves sections.	400	Tech Project Manager, Software Engineers	\$30.00	\$12000.00
1945 As a user, I want the manually added trains in the AM/PM Moves section to copy to future weeks.	400	Tech Project Manager, Team Lead, Software Engineers	\$30.00	\$12000.00
1992 As a user, I want to be able to duplicate an event and not have the word "copy" added to the copied event.	20	Tech Project Manager, Software Engineers	\$30.00	\$600.00
1993 As a user, I want the end time of an event to default to 2 hours after the start time that I set.	40	Tech Project Manager, Software Engineers	\$30.00	\$1200.00
1994 As a user, I need the ability to print a monthly summary of the calendar events.	400	Tech Project Manager, Software Engineers	\$30.00	\$12000.00
1995 As a user, I need the ability to add a route to the tool that isn't in Trapeze.	400	Tech Project Manager, Team Lead, Software Engineers	\$30.00	\$12000.00
1996 As a user, I want the system to automatically add the routing information and pull-out time to the pull-out pages.	600	Tech Project Manager, Team Lead, Software Engineers	\$30.00	\$18000.00
1997 As a user, I want the system to automatically add the routing information to the pull-in tab.	80	Tech Project Manager, Software Engineers	\$30.00	\$2400.00
Creation of the workflow documentation	200	Tech Project Manager, QA, Software Engineers	\$30.00	\$6000.00

Update DevOps environments	180	DevOps Engineer, Team Lead	\$30.00	\$5400.00
Quality assurance	800	Tech Project Manager, QA	\$30.00	\$24000.00
Meetings, standups, communication, status reports	500	Tech Project Manager, Team Lead, Software Engineers, QA, Designer	\$30.00	\$15000.00
	5500			\$165000.00