

**WELCOME**

**UFGS Project Schedule Reporting  
Requirements**

**[Section 01 32 01.00 10]**

**WED 0245-0400**

**by**

**David Long**

# UFGS Project Schedule Requirements

[Section 01 32 01.00 10]

## *Disclaimer*

The information contained in this presentation and discussion **is not a formal or official Government interpretation or enforcement policy** of the Project Schedule requirements (section 01 32 01.00 10) of the Unified Facilities Guide Specification (UFGS) and **should not be used as justification or defense for your Project Schedule structure, approach, or quality.** Each government Project Delivery Team (PDT) is unique in its make up and project management style, therefore, **will have differing interpretation, enforcement, and implementation of these requirements.** The intent of this presentation and subsequent discussion is to **provide some insight to developing an acceptable project schedule** based on 25+ years of experience with DOD and DOE construction and design/build projects.

# UFGS Project Schedule Requirements

## [Section 01 32 01.00 10]

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USACE / NAVFAC / AFCEC / NASA

UFGS-01 32 01.00 10 (February 2015)

Preparing Activity: USACE

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Superseding  
UFGS-01 32 01.00 10 (August 2008)

UNIFIED FACILITIES GUIDE SPECIFICATIONS

References are in agreement with UMRL dated January 2015

\*\*\*\*\*

SECTION 01 32 01.00 10  
PROJECT SCHEDULE

\*\*\*\*\*

NOTE: This guide specification covers the requirements for the preparation and maintenance of the project schedule for construction projects or design-build construction projects.

# UFGS Project Schedule Requirements

## Submission and Reporting Sections



- **Section 3.4 Project Schedule Submissions (12)**
- **Section 3.5 Submission Requirements (15)**
- **Section 3.6 Periodic Schedule Update (4)**
- **Section 3.7 Weekly Progress Meetings (2)**
- **Section 3.8 Request for Time Extensions (8)**
- **Section 3.9 Failure to Achieve Progress (4)**
- **Section 3.10 Ownership of Float (1)**
- **Section 3.11 Transfer of Schedule Data into RMS/QCS**  
(See Session on “How to Cost Load a schedule for USACE’s QCS/RMS”)
- **Section 3.12 Primavera P6 Mandatory Requirements**(See  
(See Session on “UFGS Scheduling Specifications”)

END

# UFGS Project Schedule Requirements

## 3.4.1 Preliminary Project Schedule Submission



Within **15 calendar days** after the NTP is acknowledged submit the submit the **Preliminary Project Schedule** defining the planned operations detailed for the first **90 calendar days** for approval. The approved Preliminary Project Schedule will be **used for payment purposes** not to exceed 90 calendar days after NTP. ... It must be **early start and late finish constrained and logically tied** as specified. ... Activity code any activities that are summary in nature after the first 90 calendar days with Bid Item (CLIN) code (BIDI), Responsibility Code (RESP) and Feature of Work code (FOW).

*[bolding added]*

- **Performance Baseline and payment SOV for first 90 days (or design phase for design/build).**
- **Logic, Cost Loaded, Activity Coded per specification.**

# UFGS Project Schedule Requirements



## 3.4.1 Preliminary Project Schedule Submission (cont)

... The Preliminary Project Schedule forms the **basis for the Initial Project Schedule** ... must include all of the required Plan and Program preparations, **submissions and approvals identified in the contract** ... as well as design activities, the planned submissions of all early design packages, permitting activities, design review conference activities and other non-construction activities intended to **occur within the first 90 calendar days.** ...

*[bolding added]*

- **Basis of the Initial Project Schedule**
- **Include all required submissions for the first 90 days including but not limited to:**
  - Quality Control Plans (Design/Construction)**
  - Safety Plan**
  - Environmental Protection Plan**
  - Permitting**
  - Design Packages and Reviews Conferences**

# UFGS Project Schedule Requirements



## 3.4.1 Preliminary Project Schedule Submission (cont)

... **Completely cost load** the Preliminary Project Schedule to balance the contract award CLINS shown on the Price Schedule. The Preliminary Project Schedule may be **summary in nature for the remaining performance period**. ... Activity code any activities that are summary in nature after the first 90 calendar days with **Bid Item (CLIN)** code (BIDI), **Responsibility Code (RESP)** and **Feature of Work Code (FOW)**. *[bolding added]*

- **Balance of POP can be scheduled in a summary manner with respect to:**
  - ✓ Trade Level (Responsibility), and
  - ✓ Major Feature of Work.
  
- **Cost Load the Entire Scope and sum up by CLIN.**  
(see Earnings Report section 3.5.3.4)

# UFGS Project Schedule Requirements

## 3.4.2 Initial Project Schedule Submission



Submit the Initial Project Schedule for approval **within 42 calendar days after notice to proceed** is issued. The schedule must demonstrate a reasonable and realistic sequence of activities which represent **all work through the entire contract performance period**. ... No payment will be made for work items not fully detailed in the Project Schedule. *[bolding added]*

- **Performance Baseline and payment SOV for balance of Project Period of Performance (POP).**
- **Logic, Cost Loaded, Activity Coded per specification.**

**NOTE: For Bid-construction projects the preliminary and Initial submission may be combined into a single Baseline Schedule submission.**



# UFGS Project Schedule Requirements

## 3.4.2 Initial Project Schedule Submission (Design/Build)



... Include in the **design-build schedule detailed** design and permitting activities, including but not limited to identification of individual design packages, design submission, reviews and conferences; ... include all construction start and completion milestones, and **detailed construction activities through the dry-in milestone**, including all **activity coding and cost loading**. ... Include the remaining construction, including cost loading, but it may be scheduled summary in nature. *[bolding added]*

- **Detail construction as best as possible through Dry-in Milestone.**
- **Keep construction detail schedule at a summary level until substantially complete design.**
- **Must be Cost Loaded and Activity Coded.**

# UFGS Project Schedule Requirements

## 3.4.2 Initial Project Schedule Submission (Design/Build)



... **Constrain construction activities by Government acceptance** of associated designs. When the design is complete, **incorporate into the then approved schedule** update all **remaining detailed** construction activities that are planned to occur after the dry-in milestone. ... As the design proceeds and design packages are developed, fully detail the remaining construction activities. With each design package submitted to the Government, **submit a fragnet schedule ... which covers the activities associated with that Design Package** including construction, procurement and permitting activities. *[bolding added]*

- **Construction Activities can not start prior to acceptance of respective design package.**
- **Roll out construction level detail schedule along with each design packages.**
- **Must be Cost Loaded and Activity Coded per Specification.**

# UFGS Project Schedule Requirements

## 3.4.3 Periodic Schedule Updates



Update the Project Schedule on a regular basis, **monthly** at a minimum. Provide a draft **Periodic Schedule Update for review** at the schedule update meetings as prescribed in the paragraph PERIODIC SCHEDULE UPDATE MEETINGS. ... The Contracting Officer may require submission of **detailed schedule activities for any distinct construction that is started prior to submission of a final design** submission if such activity is authorized. *[bolding added]*

- **Update schedule weekly internally – formally to the Gov’t monthly (at a minimum).**
- **Include activity detail for any construction task prior to associated final design submission.**
- **Activity progressing subject to acceptance by the Government.**

# UFGS Project Schedule Requirements

## 3.4.3 Periodic Schedule Updates (cont)



a) Update information, including Actual Start Dates (AS), Actual Finish Dates (AF), Remaining Durations (RD), and Percent Complete shall be **subject to the approval of the Government prior to the meeting.** b) AS and AF dates **must match** the date(s) reported on the Contractor's **Quality Control Report** for an activity start or finish. *[bolding added]*

- **AS/AF dates need to be the same as in the Daily Reports.**
- **Update RD and Physical % Complete independently**
- **RD > OD or previous RD OK if:**
  - The Government's PDT agrees that the Current OD or RD is understated.**

# UFGS Project Schedule Requirements

## 3.4.3 Periodic Schedule Updates (cont)



a) Update information, including Actual Start Dates (AS), Actual Finish Dates (AF), Remaining Durations (RD), and Percent Complete shall be **subject to the approval of the Government prior to the meeting.** b) AS and AF dates **must match** the date(s) reported on the Contractor's **Quality Control Report** for an activity start or finish. *[bolding added]*

- **Performance % Complete = Physical % Complete.**
- **Substantially Complete work may be set to 100%**

### **What is Substantially Complete Work?**

- 1. Not restraining successor activities,**
- 2. Remaining Work is minor and included as a punch-list item,**
- 3. Maintain schedule integrity, and**
- 4. You have Cost loaded Government's Pre-final Punch List corrections greater than 1% of contract value.**

# UFGS Project Schedule Requirements



## 3.4.3+ Periodic Schedule Updates (Logic Changes)

Specifically **identify and discuss all logic changes** pertaining to NTP on change orders, change orders to be incorporated into the schedule, Contractor proposed changes in work sequence, corrections to schedule logic for out-of-sequence progress, and other changes that have been made pursuant to contract provisions. *[From previous version - bolding added]*

### DOCUMENT LOGIC / SEQUENCE CHANGES:

- **Potential change orders with a Time Impact Analysis (TIA) (Section 3.8.2)**
- **Actual/Approved change orders**
- **Work sequence changes to:**
  - ✓ **Align with actual and planned field execution.**
  - ✓ **Out-of-Sequence (OoS) corrections.**

# UFGS Project Schedule Requirements



## 3.4.3+ Periodic Schedule Updates (Logic Changes)

(cont)

Other changes required due to **delays in completion of any activity or group of activities include:** 1) delays **beyond the Contractor's control**, such as strikes and unusual weather. 2) delays encountered due to **submittals, Government Activities**, deliveries or work stoppages which make re-planning the work necessary. 3) Changes required to correct a schedule that does not represent the **actual or planned prosecution and progress of the work.**

*[From previous version - bolding added]*

1. **Delays beyond yours (and/or the Government's) control.**
2. **Delays due to submittals and other government activities.**
3. **Reflecting the actual and planned work execution.**

# UFGS Project Schedule Requirements

## 3.4.3+ Periodic Schedule Updates (Logic Changes) (cont)



The Government will only approve logic revisions for the purpose of **keeping the schedule valid in terms of its usefulness** in calculating a **realistic completion date**, correcting **erroneous logic ties**, and **accurately sequencing the work**.

*[From previous version - bolding added]*

*[Note: This is a clear statement of what has been implied and/or stated in multiple other sections.]*

**That is, it is your contractual obligation to provide a timely and accurate progressed schedule reflecting what has actually occurred (left of the Data Date) and to show the current execution plan (right of the Data Date), including corrective actions, impact mitigation, and other changes.**



# UFGS Project Schedule Requirements

## 3.5 Submission Requirements



Submit the following items for the Preliminary Schedule, Initial Schedule, and every Periodic Schedule Update throughout the life of the project:

**3.5.1** Data CD/DVDs (1)

**3.5.2** Narrative Report (1)

**3.5.3** Schedule Reports (6)

**3.5.4** Network Diagram (6)

# UFGS Project Schedule Requirements

## 3.5.1 Data CD/DVDs



Provide ... data CD/DVDs containing the **current project schedule** and all previously submitted schedules **in the format of the scheduling software** (e.g. .xer). Also include on the data CD/DVDs the **Narrative Report** and **all required Schedule Reports**. ... Each schedule must have a unique file name and **use project specific settings**.

*[bolding added]*

- **Current project schedule in native file format using project settings, codes, etc.**
- **Include Narrative and Schedule Reports (see 3.5.2 and 3.5.3)**
- **Formal Submission after reviews. Typically part of the Submittal Process under the QC requirements.**

# UFGS Project Schedule Requirements

## 3.5.2 Narrative Report



Provide a Narrative Report **with each schedule submission**. The Narrative Report is expected to communicate to the Government the **thorough analysis of the schedule output and the plans to compensate for any problems**, either current or potential, which are revealed through that analysis. **Include the following information** as minimum in the Narrative Report:

*[bolding added]*

- a. **Work to be started/finished during next reporting period.**
- b. **Current critical (longest) path & near critical path (TF≤20 wdays).**
- c. **Current/potential delays or impacts & planned mediation plans.**
- d. **Activities that should have started or finished per their late dates.**
- e. **Any new or deleted activities and by Activity changes in relationships, durations, calendars, lag, resources, actual start/finish dates.**
- f. **Identify out-of-sequence work, its impact, and if correction was made or to be made prior to next update.**

# UFGS Project Schedule Requirements

## 3.5.3 Schedule Reports



The format, filtering, organizing and sorting for each schedule report must be **as directed by the Contracting Officer**. Typically, reports shall contain **Activity Numbers, Activity Description, Original Duration, Remaining Duration, Early Start Date, Early Finish Date, Late Start Date, Late Finish Date, Total Float, Actual Start Date, Actual Finish Date, and Percent Complete**. Provide the reports electronically in **.pdf format**. ... The following lists typical reports that will be requested: *[bolding added]*

- **As directed/requested by the Government's Project Delivery Team (PDT) and/or the Contracting Officer (KO).**
- **Submit electronically in pdf format.**
- **Be prepared to provide the following:**
  - **Activity Report (3.5.3.1)**
  - **Logic Report (3.5.3.2)**
  - **Total Float Report (3.5.3.3)**
  - **Earnings Report (3.5.3.4)**
  - **Schedule Log (3.5.3.5)**

**These four reports provide the ability to reconstruct the schedule.**

# UFGS Project Schedule Requirements

## 3.5.3.1 Activity Reports



List of all activities sorted according to **activity number.**

*[bolding added]*

My Backyard Project		myActivityReport					01-Dec-14 17:18			
Activity ID	Activity Name	Orig Dur	Rem Dur	Early/Act Start	Late Start	Early/Act Finish	Late Finish	Total Float	% Complete	
<b>Total</b>		<b>143</b>	<b>51</b>	<b>04-Jun-12 A</b>	<b>13-Sep-12</b>	<b>24-Oct-12</b>	<b>02-Nov-12</b>	<b>9</b>	<b>35.05%</b>	
C0000	Construction Management/Support Staff (GC)	4	0	24-Jul-12 A		18-Oct-12 A			100%	
C1000	Civil and SWS Preparatory	1	0	23-Aug-12 A	13-Sep-12	23-Aug-12 A	13-Sep-12		100%	
C1010	Remove Fencing	1	0	23-Aug-12 A	13-Sep-12	23-Aug-12 A	13-Sep-12		100%	
C1020	Fill/Compact Sinkhole	1	0	28-Aug-12 A	13-Sep-12	29-Aug-12 A	13-Sep-12		100%	
C1030	Site Grading - Drainage	2	0	28-Aug-12 A	13-Sep-12	31-Aug-12 A	13-Sep-12		100%	
C1040	Install Storm Water System	3	3	31-Aug-12 A	13-Sep-12	06-Sep-12	17-Sep-12	7	40%	
C1050	Final Grading/Restore Disturbed Area	1	1	07-Sep-12	18-Sep-12	07-Sep-12	18-Sep-12	7	0%	
C1060	Replace Fencing	1	1	10-Sep-12	02-Nov-12	10-Sep-12	02-Nov-12	38	0%	
C1070	Water/Establish Grass	20	20	10-Sep-12	19-Sep-12	05-Oct-12	17-Oct-12	7	0%	
C1080	Airate and Overseed Grass	1	1	08-Oct-12	18-Oct-12	08-Oct-12	18-Oct-12	7	0%	
C1090	Water/Establish Grass	10	10	09-Oct-12	19-Oct-12	23-Oct-12	01-Nov-12	7	0%	
C1100	Winterize Grass	1	1	24-Oct-12	02-Nov-12	24-Oct-12	02-Nov-12	7	0%	
CEND	Contract End	0	0			24-Oct-12	02-Nov-12	7	0%	
CNTP	Contract NTP	0	0	04-Jun-12 A					100%	
D0000	Design Management/Support Staff (GC)	50	0	05-Jun-12 A		15-Aug-12 A			100%	
D1000	Prep/Submit Concept Design	5	0	05-Jun-12 A	13-Sep-12	08-Jun-12 A	13-Sep-12		100%	

# UFGS Project Schedule Requirements

## 3.5.3.2 Logic Reports



List of detailed predecessor and successor activities for every activity in ascending order by activity number. *[bolding added]*

My Backyard Project		myLogicReport								01-Dec-14 17:30	
Activity ID	Activity Name	Orig Dur	Rem Dur	Early/Act Start	Late Start	Early/Act Finish	Late Finish	Total Float	% Complete	Predecessors	Successors
<b>Total</b>		<b>143</b>	<b>51</b>	<b>04-Jun-12 A</b>	<b>13-Sep-12</b>	<b>24-Oct-12</b>	<b>02-Nov-12</b>	<b>9</b>	<b>35.05%</b>		
C0000	Construction Management/Support Staff (GC)	4	0	24-Jul-12 A		18-Oct-12 A			100%	D1040	CEND
C1000	Civil and SWS Preparatory	1	0	23-Aug-12 A	13-Sep-12	23-Aug-12 A	13-Sep-12		100%	D1080, P1030	C1010
C1010	Remove Fencing	1	0	23-Aug-12 A	13-Sep-12	23-Aug-12 A	13-Sep-12		100%	C1000	C1020, P1040
C1020	Fill/Compact Sinkhole	1	0	28-Aug-12 A	13-Sep-12	29-Aug-12 A	13-Sep-12		100%	C1010	C1030
C1030	Site Grading - Drainage	2	0	28-Aug-12 A	13-Sep-12	31-Aug-12 A	13-Sep-12		100%	C1020	C1040, C1050
C1040	Install Storm Water System	3	3	31-Aug-12 A	13-Sep-12	06-Sep-12	17-Sep-12	7	40%	C1030	C1050
C1050	Final Grading/Restore Disturbed Area	1	1	07-Sep-12	18-Sep-12	07-Sep-12	18-Sep-12	7	0%	C1040, C1030	C1060, C1070
C1060	Replace Fencing	1	1	10-Sep-12	02-Nov-12	10-Sep-12	02-Nov-12	38	0%	C1050, P1040	
C1070	Water/Establish Grass	20	20	10-Sep-12	19-Sep-12	05-Oct-12	17-Oct-12	7	0%	C1050	C1080
C1080	Airate and Overseed Grass	1	1	08-Oct-12	18-Oct-12	08-Oct-12	18-Oct-12	7	0%	C1070	C1090
C1090	Water/Establish Grass	10	10	09-Oct-12	19-Oct-12	23-Oct-12	01-Nov-12	7	0%	C1080	C1100
C1100	Winterize Grass	1	1	24-Oct-12	02-Nov-12	24-Oct-12	02-Nov-12	7	0%	C1090	CEND
CEND	Contract End	0	0			24-Oct-12	02-Nov-12	7	0%	C1100, C0000	
CNTP	Contract NTP	0	0	04-Jun-12 A					100%		D1000
D0000	Design Management/Support Staff (GC)	50	0	05-Jun-12 A		15-Aug-12 A			100%	D1000	D1080
D1000	Prep/Submit Concept Design	5	0	05-Jun-12 A	13-Sep-12	08-Jun-12 A	13-Sep-12		100%	CNTP	D1010, D0000
D1010	Gov't Review Concept Design	5	0	11-Jun-12 A	13-Sep-12	19-Jun-12 A	13-Sep-12		100%	D1000	D1020
D1020	Design Conf. Concept Design	1	0	20-Jun-12 A	13-Sep-12	20-Jun-12 A	13-Sep-12		100%	D1010	D1030
D1030	Prep/Submit 100% Civil Design	20	0	18-Jun-12 A	13-Sep-12	23-Jul-12 A	13-Sep-12		100%	C1000	C1010, C1020, C1030, C1040, C1050, C1060, C1070, C1080, C1090, C1100, CEND

# UFGS Project Schedule Requirements

## 3.5.3.3 Total Float Report



A list of all incomplete activities sorted in ascending order of total float. List activities which have the same amount of **total float in ascending order of Early Start Dates**. Do not show completed activities on this report.

*[bolding added]*

My Backyard Project		myTotalFloatReport						18-Nov-15 13:22	
Activity ID	Activity Name	Orig Dur	Rem Dur	Early/ Act Start	Late Start	Early/ Act Finish	Late Finish	Total Float	% Complete
<b>Total</b>		123	73	05-Jun-12 A	09-Aug-12	28-Nov-12	02-Nov-12	-17	56.09%
RFP01.30	Issue SF-30 - Construct Pres Area / Walkways	20	20	31-Aug-12 A	09-Aug-12	01-Oct-12	06-Sep-12	-17	100%
RFP01.40	Construct Decorative Presentation Area	20	20	02-Oct-12	07-Sep-12	30-Oct-12	04-Oct-12	-17	100%
RFP01.50	Construct Decorative Presentation Area	20	20	31-Oct-12	05-Oct-12	28-Nov-12	02-Nov-12	-17	100%
CEND	Contract End	0	0			28-Nov-12	02-Nov-12	-17	0%
C1040	Install Storm Water System	3	3	31-Aug-12 A	13-Sep-12	06-Sep-12	17-Sep-12	7	40%
C1050	Final Grading/Restore Disturbed Area	1	1	07-Sep-12	18-Sep-12	07-Sep-12	18-Sep-12	7	0%
C1070	Water/Establish Grass	20	20	10-Sep-12	19-Sep-12	05-Oct-12	17-Oct-12	7	0%
C1080	Airte and Overseed Grass	1	1	08-Oct-12	18-Oct-12	08-Oct-12	18-Oct-12	7	0%
C1090	Water/Establish Grass	10	10	09-Oct-12	19-Oct-12	23-Oct-12	01-Nov-12	7	0%
C1100	Winterize Grass	1	1	24-Oct-12	02-Nov-12	24-Oct-12	02-Nov-12	7	0%
RFP01.60	REA01 - Presentation Design Cost	1	1	02-Oct-12	02-Nov-12	02-Oct-12	02-Nov-12	22	100%
RFP01.70	REA02 - Concrete Walkway Design Cost	1	1	02-Oct-12	02-Nov-12	02-Oct-12	02-Nov-12	22	100%
C1060	Rebar for Form	1	1	10-Sep-12	02-Nov-12	10-Sep-12	02-Nov-12	28	0%

# UFGS Project Schedule Requirements

## 3.5.3.4 Earnings Report



A compilation of the Total Earnings on the project from the NTP to the data date. This report must **reflect the earnings of activities** based on the agreements made in the schedule update meeting defined herein. ... Group activities **by CLIN number** and sort by **activity number** ... provide a total CLIN percent earned value, CLIN percent complete, and project percent complete. The printed report must contain the following for each activity: the Activity Number, Activity Description, Original Budgeted Amount, Earnings to Date, Earnings this period, Total Quantity, Quantity to Date, and Percent Complete (based on cost). *[bolding added]*

My Backyard Project		myEarnings Report			01-Dec-14 16:53		
Activity ID	Activity Name	Total Quantity	Qty To Date	Orig Budgeted Cost	% Complete	Earning to Date	
<b>Total</b>		<b>1100.00</b>	<b>744.00</b>	<b>\$55,680.00</b>	<b>35.05%</b>	<b>\$31,960.00</b>	
<b>Design Storm Water System</b>		596.00	596.00	\$11,400.00	100%	\$11,400.00	
<b>Construct Storm Water System</b>		504.00	148.00	\$44,280.00	9.01%	\$20,560.00	
C0000	Construction Management/Support Staff (GC)	0.00	0.00	\$0.00	100%	\$0.00	
C1000	Civil and SWS Preparatory	0.00	0.00	\$0.00	100%	\$0.00	
C1010	Remove Fencing	16.00	16.00	\$560.00	100%	\$560.00	
C1020	Fill/Compact Sinkhole	64.00	64.00	\$9,600.00	100%	\$9,600.00	
C1030	Site Grading - Drainage	24.00	24.00	\$3,600.00	100%	\$3,600.00	
C1040	Install Storm Water System	72.00	24.00	\$12,000.00	40%	\$4,800.00	
C1050	Final Grading/Restore Disturbed Area	20.00	0.00	\$3,000.00	0%	\$0.00	



# UFGS Project Schedule Requirements

## 3.5.3.5 Schedule Log



Provide a **Scheduling/Leveling Report** generated from the current project schedule being submitted. *[bolding added]*

```
Scheduling/Leveling Report - 18-Nov-15 - PM.exe
=====
Default Project.....myProject
Projects:
  myProject.....My Backyard Project
Scheduling/Leveling Settings:
-----
General
-----
Scheduling .....Yes
Leveling .....No
Errors:
-----
Warnings:
-----
Activities without predecessors.....1
  Project:      myProject      Activity:      CNTP      Contract NTP
Activities without successors.....2
  Project:      myProject      Activity:      C1060      Replace Fencing
Scheduling/Leveling Results:
-----
# Projects Scheduling/Leveled.....1
# Activities Scheduling/Leveled.....50
# Relationships with other projects.....0
Data Date.....01-Sep-12
Earliest Early Start Date.....01-Sep-12
Out-of-sequence activities.....0
Activities with Actual Dates > Data Date.....1
  Project:      myProject      Activity:      C0000      Construction Management/Support Staff (GC)
```

***This is a stated requirement and important information. However, it does not add value to the Narrative Report of Section 3.5.2. Provide with the Narrative Report a detail schedule forensic analysis showing all the changes from previous reporting period. Other applications such as Acumen Fuse, Claim Digger, Schedule Analyzer, etc. can provide this type of detail information to support the Narrative Report.***

# UFGS Project Schedule Requirements

## 3.5.4 Network Diagram



The Network Diagram is required for the **Preliminary, Initial and Periodic Updates**. Depict and display the order and **interdependence of activities** and the **sequence** in which the **work is to be accomplished**. The Contracting Officer will use, but is not limited to, the following conditions to review compliance with this paragraph:

*[bolding added]*

### 3.5.4.1 Continuous Flow

### 3.5.4.2 Project Milestone Dates

### 3.5.4.3 Critical Path

### 3.5.4.4 Banding

### 3.5.4.5 Cash Flow / Schedule Variance Control (SVC) Diagram

[RTN](#)

[BACK](#)

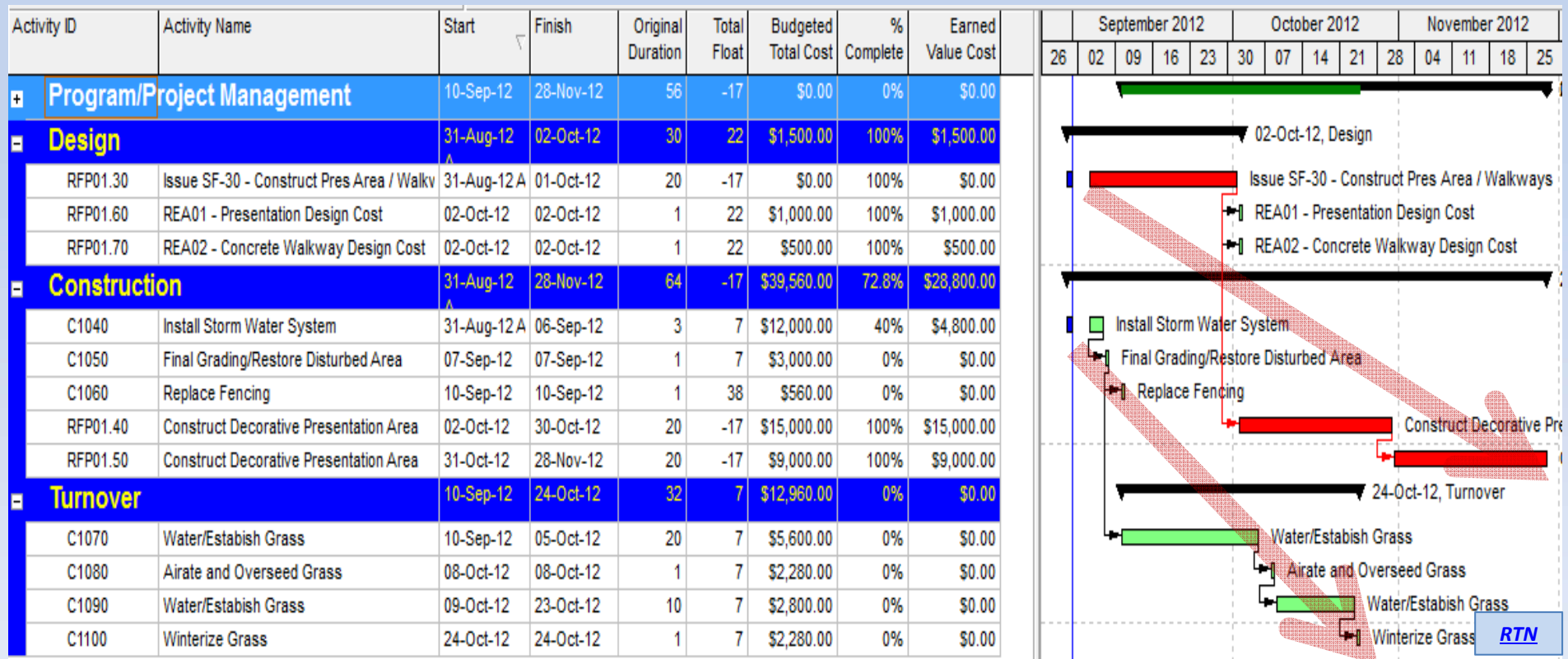
# UFGS Project Schedule Requirements

## 3.5.4.1 Continuous Flow



Show a continuous flow from **left to right with no arrows from right to left**. Show the activity number, description, duration, and estimated earned value on the diagram. *[bolding added]*

**Demonstrate in your layout a logical flow of activities within each phase of the Project. Looking for a good Finish to Start flow.**



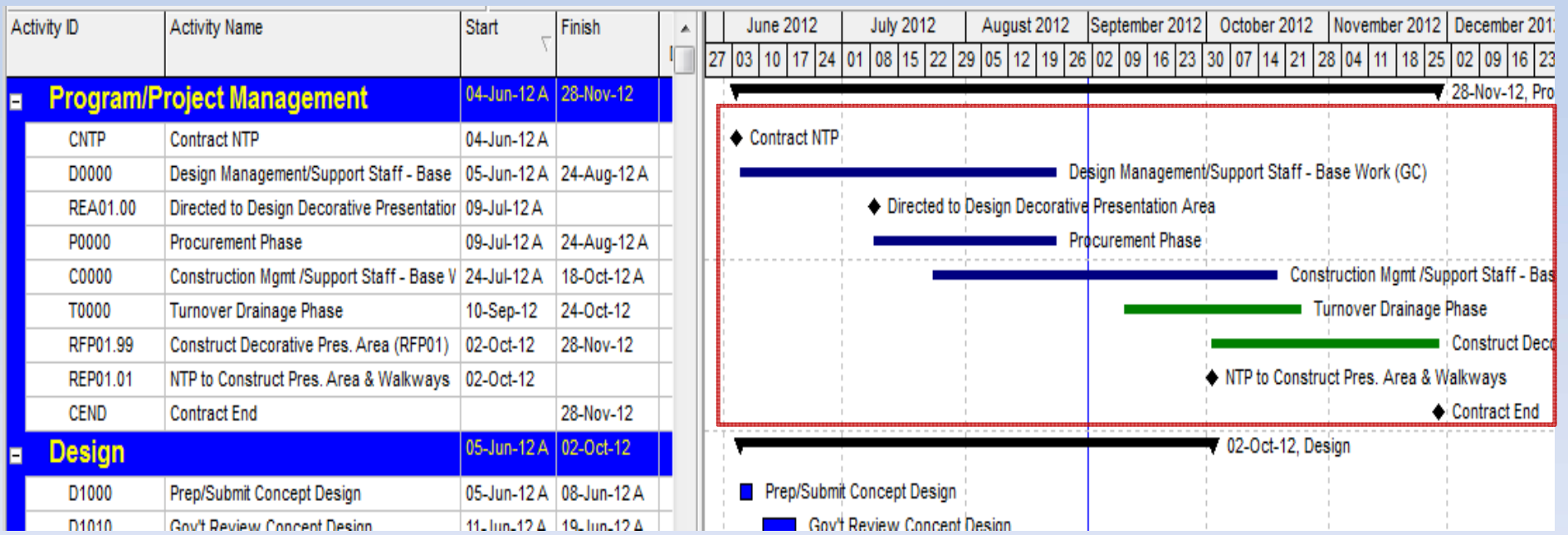
# UFGS Project Schedule Requirements

## 3.5.4.2 Project Milestone Dates



Show dates on the diagram for **start of project**, any contract required **interim completion dates**, and contract **completion dates**. *[bolding added]*

Show a milestone / Key Phasing summary at the top of the schedule.



# UFGS Project Schedule Requirements

## 3.5.4.3 Critical Path



Show all activities on the critical path. The critical path is defined as the **longest path**.  
*[bolding added]*

Activity ID	Activity Name	Start	Finish	Original Duration	Total Float	Budgeted Total Cost	Qtr 3, 2012		Qtr 4, 2012			Qtr 1, 2013	
							Aug	Sep	Oct	Nov	Dec	Jan	Feb
RFP01.30	Issue SF-30 - Construct Pres Area / Walkways	31-Aug-12	01-Oct-12	20	-17	\$0.00		█	█				
RFP01.40	Construct Decorative Presentation Area	02-Oct-12	30-Oct-12	20	-17	\$15,000.00			█	█			
RFP01.50	Construct Concrete Walkways	31-Oct-12	28-Nov-12	20	-17	\$9,000.00				█	█		
CEND	Contract End		28-Nov-12	0	-17	\$0.00							◆

- Show a good Finish to Start flow in the longest path.
- Avoid/minimize the number of overlapping or concurrent activities on the longest path.
- May also need to show a near critical path (see section 3.5.2 item b).

# UFGS Project Schedule Requirements

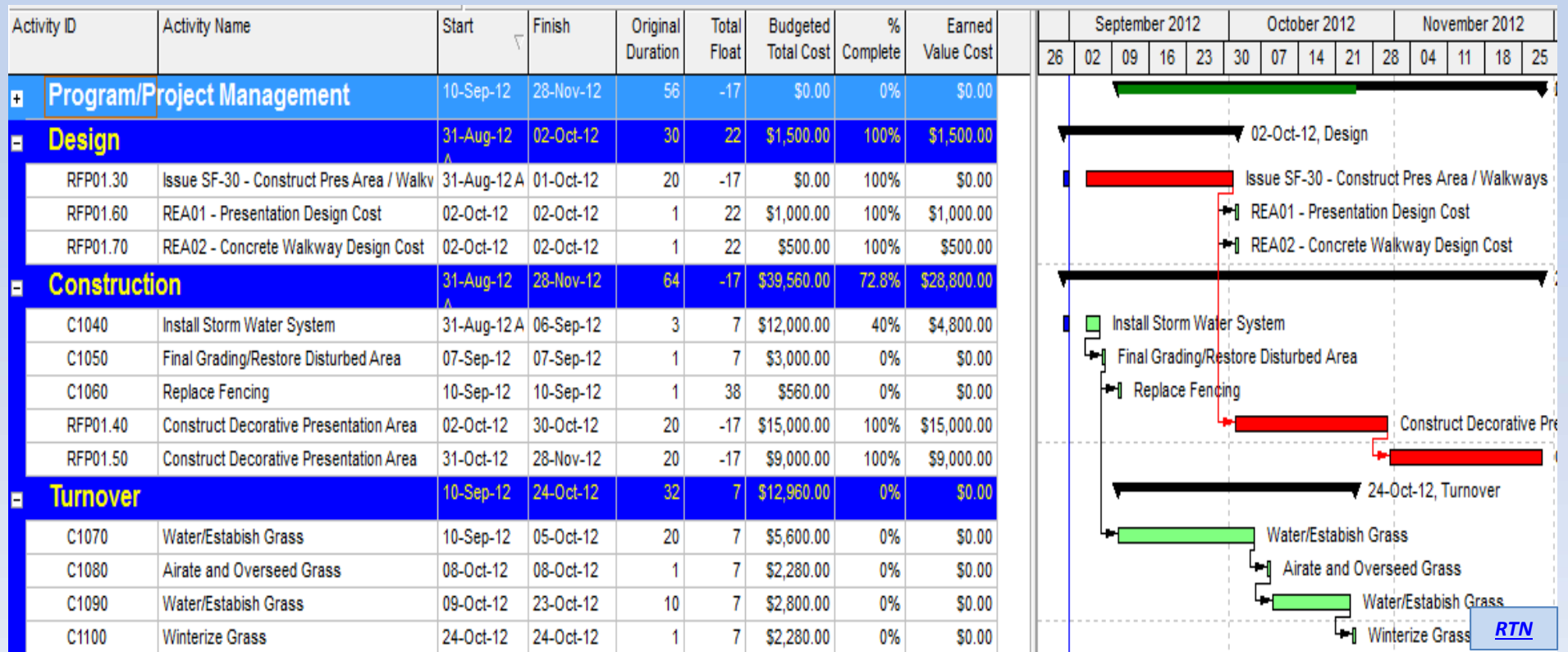
## 3.5.4.4 Banding



Organize activities using the **WBS** or as **otherwise directed** to assist in the understanding of the activity sequence. Typically, this flow will group activities by **major elements of work, category of work, work area and/or responsibility.**

*[bolding added]*

**Group by WBS, Phase, Area, Responsibility  
or any combination of Activity Codes**



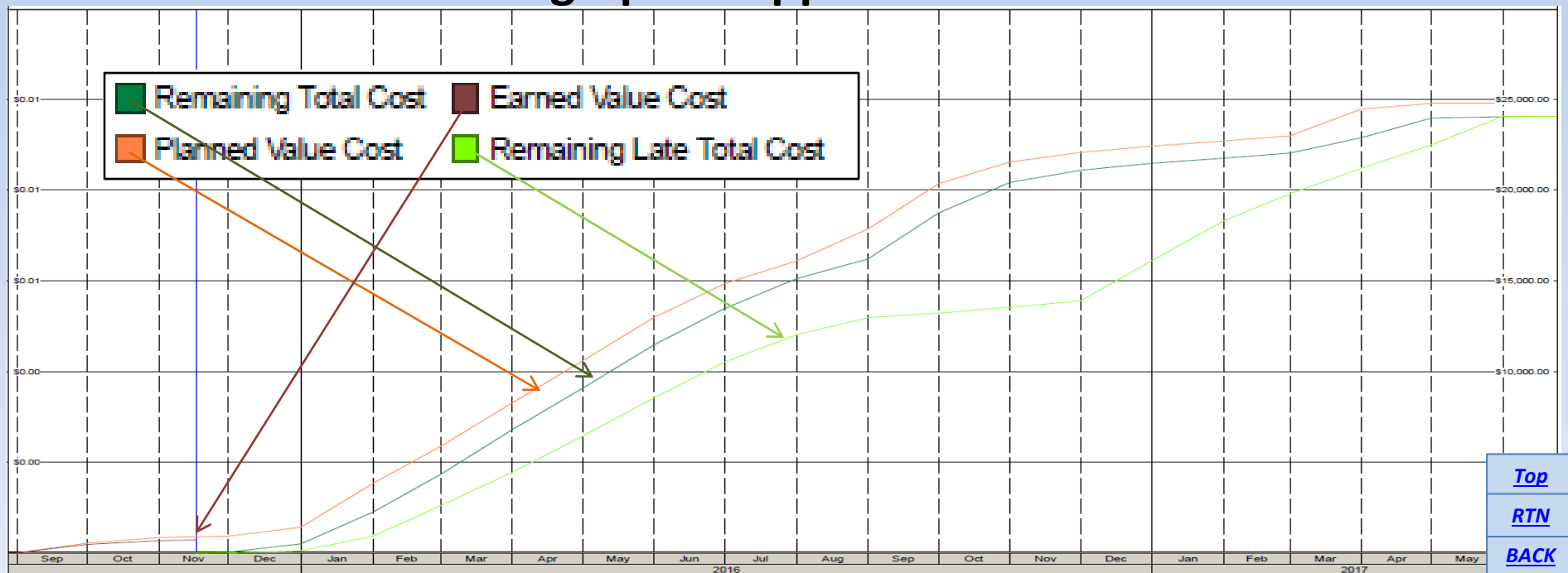
# UFGS Project Schedule Requirements

## 3.5.4.5 Cash Flow / Schedule Variance Control (SVC) Diagram



With each schedule submission, provide a SVC diagram showing 1) **Cash Flow S-Curves** indicating planned project cost based on projected early and late activity finish dates, and 2) Earned Value to-date.

**Better done by exporting P6 data out  
into a graphics application or Excel**



# UFGS Project Schedule Requirements

## 3.6 Periodic Schedule Meeting (cont)



... The meeting will be a **working interactive exchange** which will allow the Government and the Contractor the opportunity to review the updated schedule on a **real time and interactive basis**. The meeting will last no longer than 8 hours. ... Provide a draft of the proposed **narrative report and schedule data file** to the Government a minimum of **two workdays in advance** of the meeting. *[bolding added]*

### Data Date +3 days

**Provide draft progressed schedule and narrative report to the Government's PDT (KO)**

### Data Date +5 days

**This a review is a “real time working interactive exchange” between the Project Manager and the Governments PDT (KO).**



# UFGS Project Schedule Requirements

## 3.6 Periodic Schedule Meeting (cont)



... Conduct meetings **at least monthly within five days of the proposed schedule data date**. ...The Contractor's authorized scheduler must organize, group, sort, filter, **perform schedule revisions as needed** and review functions as requested by the Contractor and/or Government. ... Provide a draft of the **proposed narrative report and schedule data file** to the government a minimum of two workdays in advance of the meeting.

*[bolding added]*

### Data Date +5 days

**Provide updated/progressed schedule with Actual dates, remaining duration, and physical % Complete and proposed Schedule Narrative.**

**?? logic changes ??**

# UFGS Project Schedule Requirements

## 3.6 Periodic Schedule Meeting (cont)



... Contractor's **Project Manager and scheduler must attend the ...** Superintendents, foremen and major subcontractors must attend [as required] to **discuss the project schedule and work.** Following the periodic schedule update meeting, **make corrections** to the draft submission. Include **only those changes approved by the Government** in the submission and invoice for payment. *[bolding added]*

**Data Date +5 days**

**Review schedule with all parties involved in the work.  
Correct draft schedule with approved changes.**

**No your are not done yet**

# UFGS Project Schedule Requirements

## 3.6 Periodic Schedule Meeting (cont)



Submit a complete update of the **project schedule containing all approved progress, revisions, and adjustments**, pursuant to paragraph SUBMISSION REQUIREMENTS not later than **4 working days after the periodic schedule update meeting**.

*[bolding added]*

**Data Date +9 days**

**Submit approved progressed schedule and reports**

**No your are not done yet while you were doing all this you had a weekly update to do and now its time to do another weekly update.**

# UFGS Project Schedule Requirements

## 3.7 Weekly Progress Meetings



**Meet weekly with the Government** (or as otherwise mutually agreed to) between the meetings described in paragraph PERIODIC SCHEDULE UPDATE MEETINGS for the purpose of **jointly** reviewing the actual progress of the project as compared to the as planned progress and to **review planned activities for the upcoming two weeks**. The weekly progress meeting will **address the status of RFI's, RFP's and Submittals**. *[bolding added]*

➤ **PM called weekly meeting with Governments PDT.**

➤ **Jointly review:**

✓ **2 week (typically 3-week) detail look-ahead schedule of planned work.**

*[Note: Look-ahead schedule may also be, if agreed to or requested by the Government, a working (or field) schedule outside of the contract schedule in a spread sheet format (NAVFAC) or other scheduling software (MSP, etc)]*

✓ **Outstanding RFI's, RFP's and Submittals.**

# UFGS Project Schedule Requirements

## 3.7 Weekly Progress Meetings (cont)



The Government and the Contractor shall jointly review the reports. If it appears that activities on **the longest path(s)** which are currently driving the calculated completion date (driving activities), are **not progressing satisfactorily** and therefore could jeopardize timely project completion, **corrective action must be taken immediately.** ...

*[From previous version - bolding added]*

### ...Corrective action may included, but not limited to:

- ✓ increasing the number of work crews;
- ✓ increasing the number of work shifts;
- ✓ increasing the number of hours worked per shift; and
- ✓ determining if Government responsibility coded activities require Government corrective action.

**[Note: Focus on the Longest Path and/or constraining interim milestones and any near critical activities.]**

# UFGS Project Schedule Requirements

## 3.8 Request for Time Extension



Provide a justification of delay **to the Contracting Officer** in accordance with the contract provisions and clauses **for approval within 10 days** of a delay occurring. Also prepare a **time impact analysis** for each Government request for proposal **(RFP) to justify time extensions.** *[bolding added]*

- **Justification for your entitlement of delay (section 3.8.1)**
- **Provide Time Impact Analysis (TIA) in support for a “prospective time extension” (section 3.8.2)**
- **Provide Forensic Schedule Analysis (TIA) in support for a “retrospective time extension” (section 3.8.3)**
- **Provide a Fragmentary Network (Fragnet) (section 3.8.4)**
- **KO must approve the time extension (section 3.8.5)**
- **No contract POP impact → No Extended Overhead (section 3.8.6)**

# UFGS Project Schedule Requirements

## 3.8.1 Justification of Delay



Provide a description of the event(s) that **caused the delay and/or impact** to the work. ... identify **all schedule activities impacted**. Show that the event that caused the delay/impact was the **responsibility of the Government**. Provide a ... impact analysis that demonstrates the effects of the delay or impact on the **project completion date** or interim completion date(s). **Multiple impacts must be evaluated chronologically; each with its own justification of delay**. With multiple impacts consider any **concurrency of delay**. ... *[bolding added]*

### ➤ **Demonstrate:**

- ✓ The cause of delay/impact.
- ✓ The delay/impact was within the control of the Government.
- ✓ That the Longest path was impacted at the time of the delay/impact.
- ✓ That all of the Contractual project float was used first.
- ✓ That efforts have been taken to mitigate the impact.

### ➤ **Multiple / Concurrent impacts should be:**

- ✓ Justified and analyzed as a single events.
- ✓ Concurrent delays shall only be driven by one of the impacts.
- ✓ Concurrent delay outside the Govt's control are not cause for the extension.

# UFGS Project Schedule Requirements



## 3.8.2 Time Impact (Prospective) Analysis (TIA)

Prepare a time impact analysis for **approval by the Contracting Officer** based on industry **standard AACE 52R-06**. Utilize a copy of the **last approved schedule prior to the first day of the impact** or delay for the time impact analysis. If Contracting Officer determines the time frame between the last approved schedule and the first day of impact is too great, prepare an **interim updated schedule** to perform the time impact analysis. Unless approved by the Contracting Officer, **no other changes will be incorporated into the schedule being used to justify the time impact.**

*[bolding added]*

- **Prospective Analysis – “this change *will cause* the requested delay”**
- **Requires KO Approval before it becomes part of the schedule.**
- **Per AACE 52R-06 is a recommended practice not a standard**  

“This Recommended Practice for Time Impact Analysis is intended to provide a guideline [for the scheduler], not to establish a standard.” *(Purpose statement for 52R-06)*
- **Last reported progressed schedule forms the basis for the TIA.**
- **Any added activities or interim update only on KO’s approval.**



# UFGS Project Schedule Requirements

## 3.8.3 Forensic (Retrospective) Schedule Analysis



Prepare an analysis for approval by the Contracting Officer based on industry **standard AACE 29R-03.** *[bolding added]*

- **Retrospective Analysis – “this change *caused* the requested delay”**
- **Requires KO Approval before it becomes part of the schedule.**
- **Per AACE 29R-03 is a recommended practice not a standard**

This “Recommended Practice is to provide a ... [guideline] for the application of critical path method (CPM) scheduling in forensic schedule analysis. ... [it] is not intended to establish a standard of practice, nor is it intended to be a prescriptive document applied without exception. Therefore, a departure from the recommended protocols should not be automatically treated as an error or a deficiency as long as such departure is based on a conscious and sound application of schedule analysis principles. ... *(Introduction and Scope for 29R-03)*

- **Observational – Static Logic – Periodic analysis of longest path:**
  - ✓ **Observational – review of the schedule by itself or in comparison with another.**
  - ✓ **Static Logic – compares the planned vs. the as-built.**
  - ✓ **Periodic – breaks the project into one or more specific windows of impact.**
  - ✓ **Primary Focus on impact to Longest Path activities at the time of delay.**

# UFGS Project Schedule Requirements

## Sample TIA / Forensic Schedule Analysis



My Backyard Project		myTIA								2012																					
Activity ID	Activity Name	Orig Dur	Rem Dur	Early/Act Start	Late Start	Early/Act Finish	Late Finish	Total Float	% Complete	Gantt Chart																					
										July			August			September			October			November									
										09	16	23	30	06	13	20	27	03	10	17	24	01	08	15	22	29	05	12	19	26	03
<b>Total</b>		143	86	09-Jul-12 A	09-Aug-12	28-Nov-12	02-Nov-12	-36	0%	28-N																					
<b>REA01-Design Decorative Presentation...</b>		58	0	09-Jul-12 A	09-Aug-12	21-Aug-12 A	09-Aug-12		0%	21-Aug-12 A, REA01-Design Decorative Presentation Area																					
REA01.00	Directed to Design Decorative Presentation ...	0	0	09-Jul-12 A	09-Aug-12				100%	Directed to Design Decorative Presentation Area																					
REA01.10	Prep/Submit - 65% Design-Decoative Pres ...	10	0	09-Jul-12 A	09-Aug-12	19-Jul-12 A	09-Aug-12		100%	Prep/Submit - 65% Design-Decoative Pres Area																					
REA01.20	Gov't Revw - 65% Design-Decorative Pres ...	10	0	20-Jul-12 A	09-Aug-12	31-Jul-12 A	09-Aug-12		100%	Gov't Revw - 65% Design-Decorative Pres Area																					
REA01.30	Revw Conf - 65% Design-Decorative Pres A...	1	0	31-Jul-12 A	09-Aug-12	31-Jul-12 A	09-Aug-12		100%	Revw Conf - 65% Design-Decorative Pres Area																					
REA01.40	Prep/Sub - 100% Design-Decorative Pres A...	10	0	01-Aug-12 A	09-Aug-12	13-Aug-12 A	09-Aug-12		100%	Prep/Sub - 100% Design-Decorative Pres Area																					
REA01.50	Gov't Revw - 100% Design-Decorative Pres ...	5	0	13-Aug-12 A	09-Aug-12	21-Aug-12 A	09-Aug-12		100%	Gov't Revw - 100% Design-Decorative Pres Area																					
REA01.60	Revw Conf - 100% Design-Decorative Pres ...	1	0	21-Aug-12 A	09-Aug-12	21-Aug-12 A	09-Aug-12		100%	Revw Conf - 100% Design-Decorative Pres Area																					
<b>RFI01-Walkway Requirements</b>		8	0	31-Jul-12 A	09-Aug-12	07-Aug-12 A	09-Aug-12		0%	07-Aug-12 A, RFI01-Walkway Requirements																					
RFI01.00	Clarification on Walkways	0	0	31-Jul-12 A	09-Aug-12				100%	Clarification on Walkways																					
RFI01.10	Gov't Repose - Walkways	5	0	01-Aug-12 A	09-Aug-12	07-Aug-12 A	09-Aug-12		100%	Gov't Repose - Walkways																					
<b>REA02-Design Concrete Walkways</b>		15	0	08-Aug-12 A	09-Aug-12	21-Aug-12 A	09-Aug-12		0%	21-Aug-12 A, REA02-Design Concrete Walkways																					
REA02.00	Directed to Design Concrete Walkways	0	0	08-Aug-12 A	09-Aug-12				100%	Directed to Design Concrete Walkways																					
REA02.10	Prep/Submit - 100% Design-Concrete Walk...	10	0	08-Aug-12 A	09-Aug-12	15-Aug-12 A	09-Aug-12		100%	Prep/Submit - 100% Design-Concrete Walkways																					
REA02.20	Gov't Revw - 100% Design-Concrete Walk...	5	0	16-Aug-12 A	09-Aug-12	21-Aug-12 A	09-Aug-12		100%	Gov't Revw - 100% Design-Concrete Walkways																					
REA02.30	Revw Conf - 100% Design-Concrete Walk...	1	0	21-Aug-12 A	09-Aug-12	21-Aug-12 A	09-Aug-12		100%	Revw Conf - 100% Design-Concrete Walkways																					
<b>RFP001-Construct Presentation Area/W...</b>		15	0	21-Aug-12 A	09-Aug-12	31-Aug-12 A	09-Aug-12		0%	31-Aug-12 A, RFP001-Construct Presentation Area/Walkways																					
RFP01.00	RFP01 Issued - Construct Pres Area / Walk...	0	0	21-Aug-12 A	09-Aug-12				100%	RFP01 Issued - Construct Pres Area / Walkways																					
RFP01.10	Prep/Submit - CP-Constr. Pres Area / Walk...	5	0	21-Aug-12 A	09-Aug-12	28-Aug-12 A	09-Aug-12		100%	Prep/Submit - CP-Constr. Pres Area / Walkways																					
RFP01.20	Gov't Revw - CP-Constr. Pres Area / Walk...	5	0	31-Aug-12 A	09-Aug-12	31-Aug-12 A	09-Aug-12		100%	Gov't Revw - CP-Constr. Pres Area / Walkways																					
<b>M00001-Construct Presentation Area/W...</b>		100	86	31-Aug-12 A	09-Aug-12	28-Nov-12	02-Nov-12	-26	0%	28-N																					
RFP01.30	Issue SF-30 - Construct Pres Area / Walkways	20	20	31-Aug-12 A	09-Aug-12	01-Oct-12	06-Sep-12	-17	100%	Issue SF-30 - Construct Pres Area / Walkways																					
RFP01.40	Construct Decorative Presentation Area	20	20	02-Oct-12	07-Sep-12	30-Oct-12	04-Oct-12	-17	100%	Construct Decorative Presentation Area																					
RFP01.60	READ1 - Presentation Design Cost	1	1	02-Oct-12	02-Nov-12	02-Oct-12	02-Nov-12	22	100%	READ1 - Presentation Design Cost																					
RFP01.70	READ2 - Concrete Walkway Design Cost	1	1	02-Oct-12	02-Nov-12	02-Oct-12	02-Nov-12	22	100%	READ2 - Concrete Walkway Design Cost																					
RFP01.50	Construct Decorative Presentation Area	20	20	31-Oct-12	05-Oct-12	28-Nov-12	02-Nov-12	-17	100%	Construct Decorative Presentation Area																					

# UFGS Project Schedule Requirements

## 3.8.4 Fragmentary Network (Fragnet)



[along with an impact analysis provide a] **proposed fragnet [sub-network]** must consist of a **sequence of new activities** ... to be added to the project schedule to **demonstrate the influence of the delay or impact to the project's contractual dates.** ... the proposed fragnet is to be **tied into the project schedule** including all predecessors and successors to the fragnet activities. The proposed fragnet must be **approved by the Contracting Officer** prior to incorporation into the project schedule. *[bolding added]*

- **The sub-network shall include, as a minimum:**
  - a. **Affected existing as well a new activities.**
  - b. **Showing an overall impact of the proposed project complete date.**
- **Assign all affected activities and new activities with an appropriate assigned Activity Code.**
- **Must be approved by the KO prior to incorporating into the Schedule.**

Note: In a Retrospective Change it is good practice to show the impacting activities in the current schedule, just cannot add to the baseline or a cost without KO approval (issued modification).

# UFGS Project Schedule Requirements

## 3.8.5 Time Extension



... No time extension will be granted unless the delay **consumes all available Project Float** and extends the projected finish date ("End Project" milestone) **beyond the Contract Completion Date**. The time extension will be in calendar days. Actual delays that are found to be caused by the **Contractor's own actions**, which result in a calculated schedule delay will **not be a cause for an extension** to the performance period, completion date, or any interim milestone date. *[bolding added]*

- **Cause of delay must affect the project end date and use up all project Float (see section 3.10).**
- **Contractor's caused delay are not cause for extension to either baseline project complete or POP end date.**

Note: The baseline project complete date and the POP end date may not be the same. This can become a benefit or a detriment to the Contractor. Understand what date the LD's are tied to: Contractors Early Complete Date or POP End Date or CLIN Delivery Date. [see section 3.8.6 & 3.10]

# UFGS Project Schedule Requirements

## 3.8.6 Impact to Early Completion Schedule

**No extended overhead will be paid** for delay prior to the original Contract Completion Date for an Early Completion IPS unless the **Contractor actually performed work in accordance with that Early Completion Schedule**. The Contractor must show that an **early completion was achievable had it not been for the impact**. *[bolding added]*

- **Must demonstrate that the baseline early completion date was achievable had it not been for the impact.**
- **Contractor's must have performed to the baseline early completion date.**
- **See Section 3.10 Owner of Float**

# UFGS Project Schedule Requirements

## 3.9 Failure to achieve Progress



Should the **progress fall behind the approved project schedule** for reasons other than those that are excusable within the terms of the contract, the Contracting Officer **may require provision of a written recovery plan for approval**. The plan must detail how progress will be made-up to include which activities will be accelerated by adding additional crews, longer work hours, extra work days, etc. *[bolding added]*

**In short – the KO via the PDT can request anything at any time to support or clarify your corrective action plan to the current Project Delay. This may include but not limited to:**

- ✓ **an update of the current schedule with revised activity and relationship (see directed change below)**
- ✓ **a “recovery (accelerated) schedule” or “completion schedule”**
- ✓ **an independent detail working schedule that supports the contractual schedule (an option you can suggest)**

# UFGS Project Schedule Requirements

## 3.9.1 Artificially Improving Progress



**Artificially improving progress** by means such as, ... revising the schedule logic, modifying or adding constraints, shortening activity durations, or changing calendars ... **is prohibited**. Indicate assumptions made and the basis for any logic, constraint, duration and calendar **changes used in the creation of the recovery plan**. Any additional resources, manpower, or daily and weekly work hour changes proposed in the recovery plan **must be** evident at the work site and **documented in the daily report along with the Schedule Narrative Report**. *[bolding added]*

**In short – however you propose to improve progress must be documented in the corrective action plan and reported as part of your Daily Reports and Schedule Narrative Report.**

**That is, you cannot simply modify the schedule to make it look good without the KO approval (see section 3.4.3 Periodic Schedule Updates).**

# UFGS Project Schedule Requirements

## 3.9.2 Failure to Perform



**Failure to perform** work and maintain progress in accordance **with the supplemental recovery plan** may result in an interim and final **unsatisfactory performance rating** and/or may **result in corrective action directed by the Contracting Officer** pursuant to FAR 52.236-15 Schedules for Construction Contracts, FAR 52.249-10 Default (Fixed-Price Construction), and other contract provisions. *[bolding added]*

**In short – Perform to your corrective action plan or else!**

**BTW – they can withhold payment and/or impose a Retainage on your invoice.**

**In addition the KO can:**

- ✓ Provide you changes to make to the schedule,
- ✓ You have 2 weeks to propose alternate changes, otherwise
- ✓ The KO's changes become part of your schedule.

**NOTE: if it has gotten to this point, there may be little room for negotiations**



# UFGS Project Schedule Requirements

## 3.9.3 Recovery Schedule



Should the Contracting Officer find it necessary, **submit a recovery schedule** pursuant to FAR 52.236-15 Schedules for Construction Contracts. *[bolding added]*

**Provide a schedule that reflects your corrective action plan and actions.**

# UFGS Project Schedule Requirements

## 3.10 Ownership of Float



Float available in the schedule, at any time, **shall not be considered for the exclusive use of either the Government or the Contractor including activity and/or project float.** Activity float is the number of work days that an activity can be delayed without causing a delay to the "End Project" finish milestone. Project float (if applicable) is the number of work days between the projected early finish and the contract completion date milestone. *[bolding added]*

**Available activity or project float belongs to the Project and is available for use by both the Contractor and the Government.**

**That is, until all float is use there cannot be any request for a time extension.**

**[Therefore do not want to show any float in the Proposed Schedule or until it is real and formally agreed to by you and the KO]**

Note: The baseline project complete date and the POP end date may not be the same. This can become a benefit or a detriment to the Contractor. Need to understand what date the LD's tied to: Contractors Early Complete Date or POP End Date or CLIN Delivery Date. [see section 3.8.5 & 3.8.6]

# UFGS Project Schedule Requirements

## Section 3.11 Transfer of Schedule Data into RMS/QCS

**Session TUE 1110 - 1225**

**How to Cost Load a schedule  
for USACE's QCS/RMS**

**OR**

**Understanding the SDEF**

**UFGS Project Schedule Requirements**  
**Section 3.12 Primavera P6 Mandatory Requirements**



**Session WED 0115 - 0230**

**UFGS Project Schedule Requirements**  
**[Section 01 32 01.00 10]**

Construction

***Thank-you***

**Q & A**

Conference™