

## Schedule Guidance Document

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# 1. Purpose

The Northeast Ohio Regional Sewer District (District or Owner) is committed to delivering quality, cost-effective infrastructure to its customers in a timely manner. One of the most important tools the District uses to achieve this goal is accurate, current schedules for Capital projects. Accurate and up-to-date schedules allow the District to effectively track and manage projects both in aggregate (at the Program or District-wide level) and project by project.

The District's goal is to take every reasonable step to ensure that projects finish on time and within budget. Project schedules are the fundamental building blocks of planning and executing projects efficiently and on time. These schedules are best prepared by those closest to the work. Because the vast majority of capital project delivery at the District is performed by contractors and consultants, it is critical that Contractors and Consultants prepare schedules as part of performing work for the District.

This Schedule Guidance Document is designed to guide Contractors and Consultants in preparing and submitting acceptable schedules for use by the District.

## 2. Applicability and Basic Requirements

Contractors and Consultants are responsible for preparing schedules as defined herein and as required in their contracts and agreements. Written notice allowing a Contractor or Consultant to prepare a schedule not in accordance with this Schedule Guidance Document may only be granted by the District's Director of Engineering and Construction, Director of Watershed Programs, or designee.

There are three (3) basic elements to schedule submittals.

1. **Baseline Schedule:** Initial schedule submitted before work begins that will serve as the baseline for measuring progress and departures from the schedule.
2. **Monthly Update Schedule:** Monthly submittal of a progress schedule documenting progress on the project and any changes anticipated.
3. **Schedule Narrative:** Concise narrative that highlights changes in the schedule, expected delays, key schedule issues, etc., along with a cash flow graph or summary table.

The **Baseline Schedule** is prepared by the Contractor or Consultant at the beginning of the project and submitted to the District for review and approval.

The **Monthly Update Schedule** is prepared and submitted to the District monthly by the Contractor or Consultant. The Monthly Update Schedule is progressed by applying actuals to the Baseline Schedule.

The **Schedule Narrative** is submitted to the District monthly in conjunction with the Monthly Update Schedule.

Additional schedules may be required by District as needed such as:

- **Look-Ahead Schedule** is submitted as a 30-day look-ahead at each progress meeting.
- **Critical Path Schedule** is submitted at each progress meeting.

- **Cashflow projection** summarizes the past and future projected costs, by month, of delivering the work.

The schedules required herein will be prepared using the following software (or saved in a compatible format) in order to be compatible with the District’s schedule system, unless prior permission to use an alternative is requested and written permission is granted by the District.

- Primavera P6 Professional - All Primavera files uploaded to SharePoint must be in XML format. Other formats including XER and Microsoft Project files require written District approval.
- The District may permit the use of Microsoft Project on certain small projects.
- The District may permit the submission of XER files if the Consultant’s P6 database is not compatible with the export of XML files and the Consultant provides evidence of a reasonable effort to resolve the technical issue.

## 2.1 Schedule Setup Requirements

1. Schedule files must be in XML format. Exceptions require written District approval.
2. Percent (%) Complete Type should be Physical. By default, this is set to Duration.
3. Cost should be loaded as a resource, using two (2) decimal points and split into Labor and Material. Please do not load cost as an expense. Uncheck “Calculate costs from units” and “Auto Compute Actual”
4. Allowances use a custom back-loaded curve. It should put the cost 30%, 30%, 40% planning spend at 90%, 95%, and 100% duration complete, respectively.
5. Failure to provide monthly updates to the schedule will delay processing of the current month’s Invoice/Pay Application.
6. All activities will be logic-driven and have both predecessor and successor activities.

## 3. Baseline Schedule Development

### 3.1. General

The Contractor or Consultant will develop a cost-loaded schedule using the software version required in Section 2 and the Critical Path Method (CPM).

The District will inform the Contractor or Consultant of the Project Number (Oracle Number) for the Project. The file naming convention is demonstrated in the examples below.

The Consultant should submit the Professional Services Baseline Schedule using the **Schedule Review workflow**. Refer to Section 3.4.1 for additional details on Professional Services schedule submittal.

#### Professional Services Baseline Schedule Naming Conventions

Preliminary (ORACLE NUM\_SCH\_VERSION\_YEAR\_MONTH\_00\_FILE TYPE)

Narrative file (Word): XXXX\_SCH\_BL1\_2017\_08\_00\_3NAR

Schedule file (Native P6 or MSP): XXXX\_SCH\_BL1\_2017\_08\_00\_4P6 or 4MPP

Final (ORACLE NUM\_SCH\_BL\_FINAL\_YEAR\_MONTH\_00\_FILE TYPE)  
Narrative file (Word)XXXX\_SCH\_BL\_FINAL\_2017\_08\_00\_3NAR  
Schedule file (Native P6 or MSP): XXXX\_SCH\_BL\_FINAL\_2017\_08\_00\_4P6 or 4MPP

The Contractor should submit the construction schedule using the typical **Construction Submittal workflow**. Refer to Section 3.4.2 for additional details on Construction schedule submittal. The construction Labor/Material split is based on the approved Schedule of Values.

### **Construction Baseline Schedule Naming Conventions**

Oracle Num\_SCH\_Version\_Year\_Month\_00\_File Type  
XXXX\_SCH\_BL1\_2017\_08\_00\_4P6 or 4MPP

The approved Baseline Schedule is a part of the contract or agreement by reference. The Contractor has the sole responsibility to correct any latent defects in its Baseline Schedule and perform to the subsequently revised schedule.

The Contractor will use the Baseline Schedule to coordinate and monitor the work (including the activities of subcontractors, equipment vendors, and suppliers).

The Contractor must keep a copy of the approved Baseline Schedule. The approved Baseline schedule will not be amended except in situations where it has been signed-off via formal Change Order issued by the District.

## **3.2. Baseline Schedule Overview**

The Contractor or Consultant will designate an authorized representative (Project Scheduler) responsible for developing and updating the schedule and preparing reports.

For information regarding minimum Construction Contractor Project Schedule experience and understanding of work processes, reference Specification 01 32 16 Project Schedule.

### **3.2.1. Professional Services Baseline Specifics**

The Professional Services Consultant Project Scheduler would have the following minimum capabilities and experience:

- Experience preparing and maintaining design schedules.
- Understanding of engineering, design, and construction work processes, if applicable, to the extent that a logical schedule that accurately represents the scope of work performed can be developed, maintained, and progressed.

The Contractor or Consultant Baseline Schedule Submittal will NOT contain progress and shall represent the planned work for the duration of the project. For construction schedules, the Baseline Schedule Submittal must comply with the requirements of Specification 01 32 16 Project Schedule. Once approved by the District, this schedule will become the project baseline against which all future variance analysis will be performed, **unless a rebaseline is requested by the District.**

The use of activity external constraint dates and lags on relationships is discouraged in order to prevent artificial (rather than calculated) critical paths, unless specified or with written approval by the District. An example of an external constraint date is “concrete placement will begin no later than January 1.”

The Baseline Schedule will consider delivery lead times, construction and access constraints, and the coordination of Construction with District operations.3.2.1. Professional Service Baseline Specifics

### Activity Durations

Activities that adequately describe the work to be performed should be selected. In selecting activities to complete the schedule, activities generally should be:

- 30 Calendar days in duration or fewer, or as approved by the District
- Per Exhibit C – Compensation Section V. Summary of Time and Materials Fees, or as approved by the District
- A clear example of a Level of Effort (LOE) activity over its duration (e.g., CA support during Construction)
- An intense task of duration greater than 30 days, but fewer than 180 days, that is amenable to accurately estimating Percent Complete monthly (e.g. 30% Design plan preparation – statuses based on percent of 30% plan sheets completed each month).

### 3.2.2. Construction Baseline Specifics

#### Microsoft Project

For designated small Construction projects, the District will accept Microsoft Project instead of Primavera P6 files. Written approval must be granted prior to the submission of the baseline schedule.

The Contractor must use the District-provided Microsoft Project template and follow standard baseline and monthly update processes.

#### Activity ID Number

- Alphanumeric activity numbers are NOT acceptable except for milestone activities.
- Use a five-digit activity number in coordination with the corresponding bid tab (e.g. Bid tab 1, uses 01000 through 01999. Bid tab 2, uses 02000 through 02999).

#### Bid Tab

ITEM NO.	ITEM DESCRIPTION (REFERENCE/SPECIFICATION SECTION)	UNIT
<b>PAYMENT ITEMS</b>		
1	ADMINISTRATION	LS
2	MOBILIZATION/SITWORK	LS
3	NEW SANITARY RELIEF SEWER INSTALLATION	LS

Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish	Total Float	Free Float	Budgeted Nonlabor Cost	Budgeted Material Cost	Budgeted Total Cost
<b>NEORS Construction Sample Baseline</b>		236	236	07-Apr-16	02-Mar-17	0	0	\$250,015.00	\$2,045,307.40	\$2,295,322.40
<b>MILESTONES AND CONSTRAINTS</b>		330	330	07-Apr-16	02-Mar-17	0	0	\$0.00	\$0.00	\$0.00
M1	(06-Apr-16) Notice to Proceed	0	0	07-Apr-16*		40	0	\$0.00	\$0.00	\$0.00
M2	(NTP+30d: 06-May-16) Submit Existing Sewer CCTV	0	0		19-Apr-16	127	90	\$0.00	\$0.00	\$0.00
M3	(NTP+210d: 02-Nov-16) Substantial Completion	0	0		02-Nov-16*	0	0	\$0.00	\$0.00	\$0.00
M4	(NTP+330d: 02-Mar-17) Final Completion	0	0		02-Mar-17*	0	0	\$0.00	\$0.00	\$0.00
<b>ADMINISTRATION</b>		147	147	07-Apr-16	02-Nov-16	0	0	\$0.00	\$37,725.00	\$37,725.00
01000	Performance & Pavement Bond	1	1	07-Apr-16	07-Apr-16	28	0	\$0.00	\$22,725.00	\$22,725.00
01010	Photo Documentation	143	143	13-Apr-16	02-Nov-16	0	0	\$0.00	\$15,000.00	\$15,000.00
<b>MOBILIZATION / SITEWORK</b>		235	235	08-Apr-16	02-Mar-17	0	0	\$85,000.00	\$290,000.00	\$375,000.00
02000	Initial Mobilization (70%)	10	10	08-Apr-16	21-Apr-16	28	0	\$0.00	\$56,000.00	\$56,000.00
02010	Preconstruction Video	3	3	08-Apr-16	12-Apr-16	225	225	\$0.00	\$10,000.00	\$10,000.00
02020	Monthly Mobilization (15% Prorated)	136	136	22-Apr-16	02-Nov-16	0	0	\$0.00	\$12,000.00	\$12,000.00
02030	Set Up MOT (75%)	1	1	18-Jul-16*	18-Jul-16	0	0	\$41,250.00	\$45,000.00	\$86,250.00
02040	Erosion Control	1	1	19-Jul-16	19-Jul-16	0	0	\$10,000.00	\$10,000.00	\$20,000.00
02050	Tree Protection	1	1	19-Jul-16	19-Jul-16	0	0	\$10,000.00	\$10,000.00	\$20,000.00
02060	Maintain MOT (10%)	69	69	19-Jul-16	24-Oct-16	6	0	\$5,000.00	\$6,000.00	\$11,500.00
02070	Asphalt Pavement Restoration	3	3	20-Oct-16	24-Oct-16	0	0	\$0.00	\$100,000.00	\$100,000.00
02080	Site Restoration	5	5	25-Oct-16	31-Oct-16	0	0	\$10,000.00	\$20,000.00	\$30,000.00
02090	Remove MOT (15%)	1	1	25-Oct-16	25-Oct-16	6	6	\$8,250.00	\$9,000.00	\$17,250.00
02100	Clean & Demob (5%)	2	2	01-Nov-16	02-Nov-16	0	0	\$0.00	\$4,000.00	\$4,000.00
02110	As-Built Drawings (10%)	120	120	03-Nov-16	02-Mar-17	0	0	\$0.00	\$8,000.00	\$8,000.00
<b>1A MOT</b>		0	0			0	0	\$0.00	\$0.00	\$0.00
<b>NEW SANITARY RELIEF SEWER INSTALLATION</b>		137	137	07-Apr-16	19-Oct-16	10	0	\$165,015.00	\$1,374,619.00	\$1,539,634.00
03000	Submit Sanitary Pre-Cast	9	9	22-Apr-16	04-May-16	28	0	\$0.00	\$0.00	\$0.00
03010	Procurement of Sanitary Pipe 18"	10	10	22-Apr-16	05-May-16	80	80	\$0.00	\$0.00	\$0.00
03020	Procurement of Sanitary Pipe 42"	10	10	22-Apr-16	05-May-16	63	63	\$0.00	\$0.00	\$0.00

## Activity Description

Activity Descriptions should adequately describe the Activity and in some cases, the extent of the Activity. Examples of acceptable descriptions include the following:

- Initial Mobilization and Set up of Temporary Facilities (70%)
- Submission and Acceptance of As-Built Documents (10%)
- Remaining Costs for Mobilization - (20% prorated monthly)
- (Constraint No. 9) Exterior Demolition/Removal
- (Constraint No. 9) Water Service Installation

## Activity Durations

The Activity Duration will be based upon the Physical Percent Complete amount of work that is to be performed for the stated activity and is limited to 30 days. If work is to exceed 30 days, the work must be broken down so it will be completed within a 30-day timeframe. Further explanation is to be provided for Activities that exceed and cannot adhere to this duration limit. (e.g., procurement, fabrication and delivery activities that might require longer lead time).

- Activities should be \$100,000 in value or fewer, or as approved by the District
- 30 calendar days in duration or fewer, or as approved by the District

## Milestones

Examples for Activity description for Milestones:

- NTP (3/8/2017)
- Interim Milestone No. 1 – 4/30/2018
- Interim Milestone No. 2 – 8/31/2018
- Substantial Completion (720 CD) - 2/26/2019
- Milestone No. 5B - Final Completion (840 CD) - 6/26/2019

Milestones include:

- Notice to Proceed (NTP)
- Preparation and submission of shop drawings, submittals, and any required re-submittals (if applicable)
- Fabrication and delivery of equipment and materials (if applicable)
- Any intermediate milestones (called for according to the Contract)
- Substantial Completion
- Final Completion

### Cost and Resource Loading

Assign each Activity a total dollar amount commensurate with its value relative to the associated line item in the Schedule of Values accepted by the District. This should be broken out by Labor and Material.

### Float

Float belongs to the Project and may be used by the District or the Contractor to accommodate changes in the work, or to mitigate the effect of events that delay performance or conformance with the contract duration.

Changes or delays that influence Activities that have float and do not extend the Critical Path are not justification for an extension of the contract duration. Negative total float is not acceptable in the Baseline Schedule. If negative total float is represented on the Monthly Schedule Update, an explanation must be provided in the Schedule Narrative.

### 3.2.3. Design-Build Specifics

The District utilizes the Design-Build contracting model to maximize collaboration with engineers and constructors starting early in the Design process, and to build upon the benefits of the Design-Build delivery model.

The District utilizes two Design-Build delivery models:

- Fixed-Price Design-Build: At Award, the baseline and GMP are incorporated into one Construction baseline. A Baseline Schedule must be provided and updated monthly throughout the project.
- Progressive Design-Build: At Award, a Baseline Schedule must be submitted for Pre-Construction and Design Services and updated monthly. Once GMP negotiation is complete and the Contract Modification is approved by the Board, a second Baseline Schedule must be submitted for Construction and updated monthly through project completion.
  - The second baseline schedule should include the Pre-Construction and Design Services activities, in addition to planned Construction activities.

#### 3.2.4. Recovery Schedule

When updated CPM Schedule indicates that if the ability to comply with the Contract Times falls ten or more days behind schedule, and there is no excusable delay, Change Order, or Work Change Directive to support an extension of the Contract Times, the Contractor shall prepare and submit a CPM Schedule demonstration Contractor's plan to accelerate the Work to achieve compliance with the Contract Times ("recovery schedule") for District acceptance. Refer to General Conditions Article 13.

The recovery schedule will be reviewed and if approved using the District's Construction Change Process, will be implemented on the next schedule update cycle, per Contract Documents.

#### 3.2.5. Safety Requirements

Schedule performance should never take precedence over safety. Project schedules must allow work to be performed in a safe manner.

The Contractor or Consultant cannot reduce safety or worker protection in order to shorten schedules, recover lost time, or accelerate the work.

#### 3.2.6. Inclement Weather

Refer to climatology data for anticipating work that can be affected by inclement weather. Historical rain days can be reviewed from the following web site: <https://www.ncdc.noaa.gov/cdo-web/>

Non-working days must not be planned in the calendar. Non-working days that occur during the project, can be identified in the schedule per the General Conditions.

### 3.3. Schedule Work Breakdown Structure and Activities

#### 3.3.1. Work Breakdown Structure (WBS)

The District's Work Breakdown Structure (WBS) is designed to meet the basic reporting needs for the District's financial and tracking systems. The Consultant or Contractor project specific WBS should work within this basic framework and provide additional detail to efficiently deliver and track the Work.

The schedule WBS will follow the bid form submitted in the contract documents with as many subtasks and activities as desired included underneath the WBS elements.

The General Requirements section following the WBS includes Milestones and Submittal items.

- Submittal items should include submittal date, an Activity containing a procurement/lead-time duration, and a placement duration.
- Milestones should include Notice to Proceed (NTP), Substantial Completion, Final Completion, and any intermediate milestones as per Contract Documents.



### 3.3.2. Activities and Project Elements

Activities are the discrete elements of Work that make up the schedule. They should be organized underneath the umbrella of the WBS.

The following information should be provided for each activity.

#### Activity ID Number

Alphanumeric Activity numbers are NOT acceptable except for milestone activities.

#### Activity Description

Activity Descriptions should adequately describe the activity and in some cases the extent of the activity. Refer to Section 3.2 for Baseline schedule specific details.

#### Activity Duration

Activity Duration will be based upon the physical amount of work that is to be performed for the stated activity. Activity duration vary according to whether they are Contractor or Consultant Schedules. The intent is to ensure that the activities are segmented sufficiently to adequately track progress. Refer to Section 3.2 for Baseline schedule details.

#### Activity Start and Finish Dates

Activity Start and Finish dates will only be accepted if calculated by the software. Project End Date is driven by the Contract Agreement and Specification 01 32 13 Construction and Schedule Constraints. Actual Start and Finish dates may not be assigned in a baseline. However, they must accurately be assigned in the monthly schedule update (see Section 4 Monthly Update Schedule).

#### Activity Dependencies

All activities will be logically tied with a Predecessor and a Successor. The only exception will be for the project Start (NTP) and project Finish (Final Completion) milestones. Negative Lags are discouraged in the Activity relationships and must be justified in the Schedule Narrative when the schedule update is submitted.

#### Percent Complete Type

All Activities will use Physical Percent Complete.

#### Project Calendar

Must comply with the Contract-specified Calendar at the Project level. Refer to Section 3.2 for Baseline schedule details. Standard P6 Global calendars, such as "Standard 5 Day Work Week" may be utilized for Resource planning only. The use of non-Standard calendars requires prior written permission from the District. Do not rename Standard Global calendars.

Global calendars with written permission from the District should be named as follows:

- **XXXX\_Calendar Name** where XXXX is the District assigned project number and the calendar name is descriptive of the calendar's purpose.

Project calendars are encouraged and should be named as follows:

- Professional Services: **XXXX\_D** where XXXX is the District assigned project number and "D" indicates Design.
- Construction: **XXXX\_C** where XXXX is the District assigned project number and "C" indicates Construction.

### Milestone Activities

The following milestone Activities (i.e. important events on a project that mark critical points in time) are of interest to the District and should be reflected in the Project Schedule for all phases of work, as applicable.

Project deliverables and milestones should appear as per Contract Documents.

Milestones include:

- Notice to Proceed (NTP)
- Basis of Design Report Submittal
- 30% Plans and Specification Submittal
- 60% Plans and Specification Submittal
- 90% Plans and Specification Submittal
- Final Design/Design Complete

### Cost and Resource Loading

Pay Items (Work) shall be loaded into the scheduling software using the Labor, Material, and resource types showing the quantity of work to be done along with the corresponding value of the work measured in dollars. It is intended that Earned Value will be calculated as the schedule resources are progressed.

All Activities with cost will have a Labor and Material breakdown. However, Budgeted Material should be removed from the Professional Services Baseline Schedule. Use a project-specific Labor and Material resource name as follows:

Professional Services

- **XXXX\_D\_Labor** where XXXX is the District project number

Construction

- **XXXX\_C\_Labor** where XXXX is the District project number

- **XXXX\_C\_Material** where XXXX is the District project number

#### [Allowances/Level of Effort](#)

All Allowance activities will be Level of Effort (LOE) or as accepted by the District.

Specific/General Allowance – The District may provide a custom curve for allowance spending for the baseline schedule, if the consultant does not have a planned time to utilize the allowance funding. Normally, a backload curve (cost 30%, 30%, 40% planning spend at 90%, 95%, and 100% duration complete, respectively.) is used.

#### [Activity Codes](#)

Project-level Activity codes may be used, if needed. **Global Activity Codes are not permitted.**

#### [Miscellaneous](#)

Cost accounts, User Defined Fields (UDF), and Global Project Codes are not permitted without prior written approval from the District.

### **3.4 Baseline Schedule Submission**

All project schedules must be submitted in XML format. The Schedule Narrative Microsoft Word template must be used for Professional Services. The District will review and accept or reject the baseline schedule. Alternative schedule formats such as XER or MPP require prior written approval from the District.

#### [3.4.1. Professional Service Baseline Specifics](#)

Baseline schedules for Professional Service Agreements shall be uploaded directly to the Project Library (for District, Prime Design Firm Only) on the Project SharePoint site. Draft project baseline schedules must be submitted no later than thirty (30) calendar days after the formal Notice to Proceed (NTP) or as required by the Professional Services Agreement. Final, approved baseline schedules shall be completed within 60 days of the Notice to Proceed.

Complete a Schedule Narrative file (Microsoft Word). Use the Schedule Review workflow to submit for District review and approval.

#### [3.4.2. Construction Contract Baseline Specifics](#)

Baseline schedules for Construction shall be submitted using the Submittal Reviews workflow on the project SharePoint site. Draft project baseline schedules must be submitted within thirty (30) calendar days after the formal Notice to Proceed from the District, and final, approved baseline schedules shall be completed within sixty (60) days of the Notice to Proceed or as specified in the Contract Documents.

Use the Submittal workflow to submit for District review and approval.

### 3.5. Changes to Approved Baseline Schedule

The approved baseline schedule is the basis for measuring progress on the project (see Section 4, Monthly Update Schedule). The Contractor or Consultant should develop the baseline schedule considering the realistic delivery of the work tasks and likely constraints.

Changes to the approved baseline schedule for Professional Services may only be considered under limited circumstances. If warranted, any changes will require prior approval via the Professional Services Agreement Reallocation (PSAR) workflow by the District Project Manager, District Design Manager, and District Director of Engineering and Construction or Deputy Director of Watershed Programs. Project circumstances that could be considered by the District as potentially warranting re-baselining include the following:

- Modifications to the Agreement affecting the scope of the work to be performed and associated schedule
- District-directed significant changes in schedule to meet District needs
- Significant delays, well beyond customary review times and coordination, caused by District or by acts of God

Professional Service Agreements that impact the dates shall follow the rebaseline change process. Budget-only adjustments are covered by the Professional Service Authorization Request (PSAR) workflow.

Construction rebaselines/time extensions shall follow Construction Change Process outlined in the Contract Agreement.

## 4. Monthly Update Schedule Development

The Monthly Update Schedule is a copy of the approved baseline schedule that will be updated monthly and compared to the approved baseline schedule.

Monthly Update Naming Convention:

Project Num\_SCH\_Year\_Month\_Inv./Pay Estimate #\_File Type  
XXXX\_SCH\_2014\_xx\_xx\_NAR or P6 or PDF

Examples:

- 1255\_SCH\_2014\_08\_05\_NAR.doc
- 1255\_SCH\_2014\_08\_05\_P6.xml
- 1255\_SCH\_2014\_08\_05\_PDF.pdf

### 4.1. General

All monthly schedule updates shall be submitted using the Schedule Reviews workflow on the project SharePoint site and shall be provided each month for the duration of the contract. Updates shall include

XML file containing the schedule, PDF of the schedule update, and Schedule Narrative MS Word file.  
**Failure to provide timely monthly schedule updates will stop or delay approval and payment of submitted invoices.**

The Contractor or Consultant should show the following on the monthly update schedule:

- The actual dates that activities start
- The actual dates that activities finish
- Adjust active activities Finish date to reflect the new estimated completion date
- The Remaining Duration of activities in progress
- The Physical Percent Complete of all activities on the schedule (0% to 100% complete).
  - Construction: Physical Percent Complete and Actual Total Cost should match with the associated values of the Pay Application.
  - Professional Services: Physical Percent Complete at the task level should match with the associated values of the Invoice.

## **4.2. Schedule Narrative**

The monthly update schedule will be accompanied monthly by a concise Schedule Narrative that explains the submitted schedule. The purpose of the Schedule Narrative is to:

- Give a brief summary of project status
- Explain variances from baseline on critical path activities
- Explain logic changes and potential schedule conflicts related to dependencies
- Concisely summarize the projected cash flow for the project

If the project is on schedule and no significant issues related to schedule exist, then the schedule narrative is extremely brief. On the other hand, if the project is falling behind and there are significant conflicts or obstacles to meeting the baseline schedule, then the Schedule Narrative should describe the issues and the steps that will be necessary for the project to recover. Sharing this information ensures that the entire project team will be aware of the issues and have an opportunity to assist where applicable.

## **4.3. Monthly Schedule Update**

Submit a Primavera P6 XML file schedule update.

### **4.3.1. Professional Service Update Specifics**

Professional Service Consultants are required to submit the monthly updated schedule no later than the last Friday of the month. Monthly updates must include actualized progress and projections for all activities through the end of the current month (Data Date). Subsequent monthly invoices shall be based on the same data date to establish the projects current earned value and submitted no later than the last Friday of the month.

Professional Services schedule updates use the last day of the month as the Data Date.

#### 4.3.2. Construction Contracts Update Specifics

Construction Contractors are required to submit monthly updated schedule no later than the than 20<sup>th</sup> day of each month (or as required by the Contract). Monthly updates must include actualized progress for all activities capturing from the 21<sup>st</sup> of the prior month to the 20<sup>th</sup> of the current month in which the update is submitted. The Data Date on Construction Schedule updates must be the 20<sup>th</sup> of the month in which the schedule is submitted.

Examples:

- Schedule Update 01 includes progress from October 21<sup>st</sup> through November 20<sup>th</sup>.
- Schedule Update 02 includes progress from November 21<sup>st</sup> through December 20<sup>th</sup>

As requested by the District, the Contractor or Consultant may need to submit a six-week look-ahead and a cashflow report.

## **5. Exhibits**

### **5.1. Professional Service Baseline Examples**

5.1.1. Standard Design-Bid-Build

5.1.2. Study

5.1.3. General Engineering Services Task Oriented

### **5.2. Construction Baseline Examples**

5.2.1. Standard Construction

5.2.2. Design-Build (Fixed-Price)

5.2.3. Design-Build (Progressive)

### **5.3. Microsoft Project Baseline Examples**

5.3.1. Microsoft Project Baseline

**Remove Change Log in PDF version**

<b>Change Log</b>				
<b>Revision Date</b>	<b>Page</b>	<b>Section</b>	<b>Revision Description</b>	<b>Revised By</b>
N/A	All	All	Original publishing	Project Controls
2/19/2020	All	All	P6 Upgrade project revision, changes included: - XML format instead of XER throughout and specified XER requires written District permission - Wording revisions for clarity throughout - Updated Resource naming conventions and rules regarding upload of Global Resources - Updated rules for the use of Global Calendars	S. Savinell & J. Huang
04/15/20	Change Log	Change Log	Updated Change Log to reflect specific details. Resaved PDF so revision dates match. Updated footer date.	S. Savinell
5/10/2021	6	3.2.2; Activity Duration	Changed max schedule of value from \$50,000 to \$100,000 to sync with schedule of values spec.	J. Huang