

MOXY HOTEL CHARLOTTE, NC



CPM Scheduling Consultant: HSE CONTRACTORS INC.

Narrative Report

Item	Date
NTP	Oct/06/2022
Project Final Closeout and Completion	Oct/18/2024

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General Review

After a thorough examination of the document provided by your General Contractor (GC), the following observations and recommendations have been made:

- **Float Issue:** The schedule currently exhibits a -1d float, which is not in accordance with the criteria for an approvable baseline.
- **Duration Problem:** Activity A1030 Site Demo has a duration with decimals, which is not an acceptable practice. This affects all the following activities on the schedule.
- **Predecessor and Successor Issues:** The baseline includes four activities without predecessors and seven activities without successors. These inconsistencies need to be addressed:

Without Predecessors:

- 1) A1040 Approval to Remove Tree
- 2) A3970 NTP
- 3) A3980 GMP
- 4) A4060 Receive Building Permit

Without Successors:

- 1) A3650 Project Final Closeout and Completion
 - 2) A3660 Hotel Opening
 - 3) A3670 Elevator Installation
 - 4) A3900 Structure Topped Out
 - 5) A3910 Temporary Dry In
 - 6) A3920 Building Dry In
 - 7) A3950 BL Harbert Contract Duration
- **Critical Activities:** The baseline contains 77 critical activities out of a total of 238 activities, accounting for 32.5% of the total, which just falls within an acceptable range.
 - **Relationship Issues:** Several relationships between activities include leads and negative lags, which require correction. For example, activity "A1050 Mobilize for Construction" is linked to "A3950 BL Harbert Contract Duration" with a finish-to-finish relationship and a -1day lag, which is not logical.

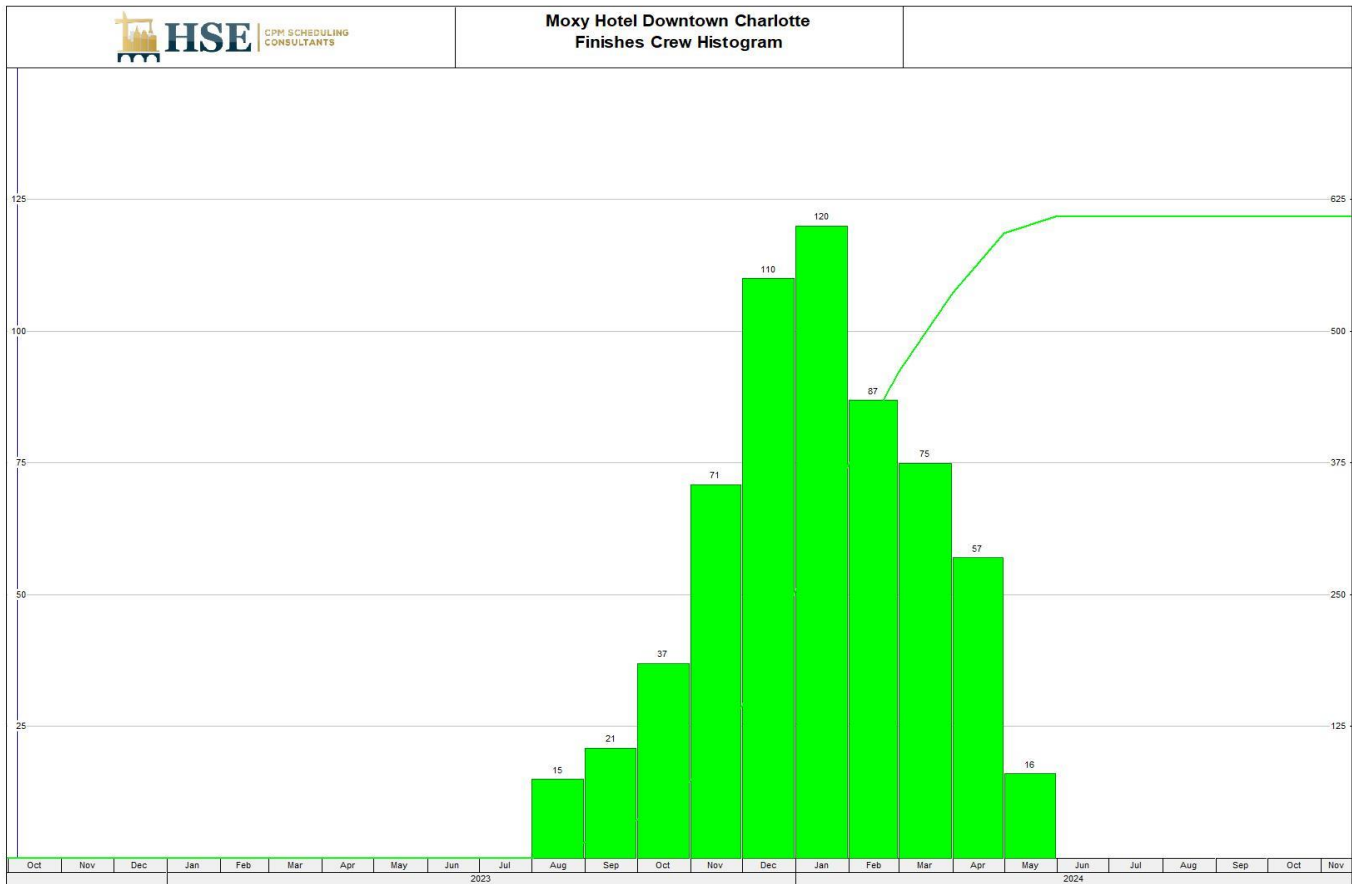
- **Contract Compliance:** The schedule does not align with certain contractual obligations specified in Contract Section 3.10§, "Contractor's Construction and Submittal Schedules." Key points of non-compliance include:

- 1) Failure to incorporate federal or state holidays into the calendar, relying solely on Saturdays and Sundays as weekends, which is not realistic.
- 2) Lack of provision for weather days in the calendar, contradicting the contract terms.
- 3) Lack of time for needed approvals by the Owner, contrary to the contract.
- 4) Omission of the submittal phase for the contractor, in conflict with the contract.
- 5) Non-inclusion of the Procurement phase for the contractor, not in line with the contract.
- 6) Failure to account for the Permits phase for the contractor, which is inconsistent with the contract.

Construction logic Review

- 1) To ensure proper monitoring, it is advisable to break down the Elevator Installation activities into more detailed tasks.
- 2) In order to facilitate proper monitoring, it is recommended to provide more detailed breakdowns for both building landscape and building hardscape activities.
- 3) It's essential to note that "Columns and Walls Form and Pour" cannot be carried out in a Finish-to-Finish (FF) relationship with "PT Slab Form and Pour" because columns' reinforcement work for columns begins after pouring. Additionally, it is advisable to break down the "PT Slab Form and Pour" activity into sub-tasks such as reinforcement, formwork, and pouring. Means and method needs to be clear.
- 4) MEP system activities too generic and not broken down properly.
- 5) The "install flooring" activity currently exists only on Level 1; the activity should be extended to other levels as well.
- 6) Waste piping and drainage also missing for building.
- 7) Low current systems also are not clear (CCTV, structure cabling, etc.)
- 8) The inclusion of life safety requirements and the time frame for integrating building systems is not addressed clearly.

- 9) No activity ID Scheme (or activity Coding) for proper monitoring.
- 10) In the context of the interior finishes sequence, it's evident that several levels will have overlapping work. To address this, it's crucial to monitor the contractor's ability to meet the required workforce. The peak workforce requirement is expected to be 120 crews by January 2024



Following these observations, it becomes clear that the current baseline does not accurately reflect, or even come close to, the actual project duration. Furthermore, in the subsequent sections, we will address the fragnets introduced by the contractor in the monthly updates. These fragnets should have been integrated into the baseline schedule with appropriate linking and durations.

Permit Delay Clam:

- According to the contract section § 15.7.7

The Contractor affirms and guarantees that they possess the necessary licenses, permits, or any specific authorizations essential for executing the tasks specified in this Agreement, as mandated by the law. Additionally, they commit to either holding these licenses themselves or operating under the overarching guidance of the individual or entity that possesses such licenses, permits, or special authorizations. The Contractor is also obligated to ensure that all these licenses, permits, and special authorizations remain valid, in good standing, and fully operational throughout the duration of their work under this Agreement.

The above baseline Review are based on the signed contract between the Owner and the Contractor and according to DCMA guidelines 14 points Assessments for schedulers.

Conclusion

The provided Review regarding the construction logic and calendar issues provided regarding the baseline are grounded in both the signed contract between the Owner and the Contractor and the DCMA 14 points Assessment for schedulers and collectively highlight several substantial concerns regarding the project baseline's realism. These concerns raise questions about the feasibility and practicality of the proposed schedule.

Firstly, the omission of federal or state holidays in the calendar, relying solely on weekends, indicates a lack of consideration for potential disruptions that may occur due to holidays. This oversight could lead to delays and hinder progress.

Secondly, the absence of provisions for weather days contradicts the contract terms and fails to account for unforeseen weather-related delays, which are common in construction projects.

Thirdly, the exclusion of time approvals for the Owner and the omission of critical phases such as submittals, procurement, and permits for the contractor suggest that the baseline does not align with the contractual requirements and may lead to disputes and inefficiencies.

Additionally, in the construction logic Review, it is emphasized that certain activities, such as elevator installation and various structural tasks, require more detailed breakdowns for proper monitoring. This implies that the existing baseline lacks the necessary granularity to effectively track progress and manage the project.

Furthermore, the observation that the interior finishes sequence involves overlapping work on multiple levels without a clear plan for adequate workforce allocation raises concerns about the project's practicality and whether it can meet the specified workforce peak requirements.

In conclusion, the combination of calendar issues, contractual deviations, and deficiencies in addressing procurement and long lead items (such as. switch gear, generator & elevator) and lack of construction logic sequence indicates that the project baseline is not realistic and may require substantial revisions to ensure a more accurate representation of the project's timeline and requirements. Failure to address these concerns could lead to delays, disputes, and increased project risks.

Updates Review.

November Update Review.

- The NTP, initially scheduled for October 6, 2022, was actually initiated on November 1, 2022, resulting in a delay of 27 days. This delay occurred without any clear explanation or identifiable fragnet.
- The "Mobilize for Construction" phase, originally set for October 6, 2022, was postponed to October 19, 2022, marking a 16-day delay.
- Similarly, "Receive Building Permit," which was also supposed to commence on October 6, 2022, was pushed back to November 1, 2022, resulting in a 27-day delay. As per contract section § 15.7.7, the responsibility for permits lies with the contractor. Additionally, it is advisable for the contractor to include a contingency plan for permit approval, as obtaining permits on the first day of the project's commencement is an unrealistic expectation from HSE perspective.
- Fragnet 1.1* CDOT Approval of C4.00: This fragnet affects traffic and pedestrian control setup & site utilities. The CDOT approval was from the duties of the contractor to be done for both the traffic and pedestrian control setup as well as the site utilities. Also, the site utilities shouldn't be on the critical path of the project.
- Fragnet 3.1* Cross section utility drawing: This fragnet affects the site utilities. The site utilities shouldn't be on the critical path of the project.
- Fragnet.5.1* Approval to Remove Tree: This fragnet affects approval to remove tree & site demo. The tree removal shouldn't affect the construction logic sequence. The contractor should have started working in other available areas. Also
- Fragnet 2.1 - Underground Tank Removal: This fragnet has an impact on the Mobilization for Micro Piles, Clearing and Grading of the Site, and Site Demolition. The removal of the underground tank should not be a critical path activity, and it doesn't significantly disrupt the construction sequence of work, as the contractor had the option to commence work in other available areas. Moreover, If the contractor was aware of the presence of this underground tank, this activity should have been incorporated into the baseline, as it falls within their scope of work.

- Fragnet 4.1 - Preferred Parking Shoring and 4.2* CLT E. 4th St. Shoring: This particular fragnets have an impact on the Mobilization of Micro Piles. While Shoring is a crucial activity, it is noticeably absent from the baseline. The contractor is well-informed about the project's scope, which encompasses the construction of underground floors. Consequently, the shoring activity should have been included in the baseline schedule with appropriate linking and a defined duration. Any additional duration and activities within this scope must be incorporated into the overall project duration and timeframe.

Site Demo started on November 03, 2023 was planned to start on November 01, 2023 and finish on 15 of the same months with 10 days duration.

The “Foundation and Ground Floor” WBS shows 23 days delay. From January 17,2023 to May 18,2023 with duration of 87 days

PLANUM	NAME	ESTD	FINISH	DURATION	START	FINISH	STATUS
A3930	Site Utilities	20d	20d	Dec-27-22	Jan-24-23	-23d	A1010: FS, A1060: FS, A1080: FS, A1100: FS
Hotel		365d	365d	Jan-17-23	Jun-21-24	83d	
Structure		205d	205d	Jan-17-23	Nov-03-23	-23d	
Foundation and Ground Floor		87d	87d	Jan-17-23	May-18-23	-23d	
A1490	Mobilize for Micro Piles	5d	5d	Jan-17-23	Jan-24-23	-23d	A1070: FS, A1100: FS, A1090: FS, A1100: FS
A1740	Installation of Micro Piles	45d	45d	Jan-25-23	Mar-28-23	-23d	A1490: FS
A3680	Install Sheet Piling/Shoring for Footing Inst	15d	15d	Feb-15-23	Mar-07-23	-23d	A1740: SS 15d
A3840	Excavate for Concrete Footings	10d	10d	Mar-08-23	Mar-21-23	-23d	A3680: FS
A1500	Concrete Footings	15d	15d	Mar-21-23	Apr-11-23	-23d	A3840: FS, A3680: FS, A1740: FF 10d
A1890	Foundation CMU Installation	15d	15d	Apr-05-23	Apr-25-23	-23d	A1500: SS 10d
A1510	Slab on Grade	10d	10d	Apr-18-23	May-02-23	-23d	A1890: FF 5d, A1500: FS
A1520	Columns and Walls Form and Pour	10d	10d	Apr-27-23	May-11-23	-23d	A1510: FS -3d
A3850	Form and Pour Ramp LVL 1-2	10d	10d	May-05-23	May-18-23	-23d	A1520: FF 5d
Level 2		17d	17d	May-18-23	Jun-13-23	-22d	

UPDATE #1

PLANUM	NAME	ESTD	FINISH	DURATION	START	FINISH	STATUS
A3930	Site Utilities	20d	20d	Nov-17-22	Dec-15-22	-1d	A1020: SS 5d
Hotel		365d	365d	Dec-15-22	May-20-24	105d	
Structure		205d	205d	Dec-15-22	Oct-03-23	-1d	
Foundation and Ground Floor		87d	87d	Dec-15-22	Apr-17-23	-1d	
A1490	Mobilize for Micro Piles	5d	5d	Dec-15-22	Dec-22-22	-1d	A3930: FS, A1020: FS
A1740	Installation of Micro Piles	45d	45d	Dec-23-22	Feb-23-23	-1d	A1490: FS
A3680	Install Sheet Piling/Shoring for Footing Inst	15d	15d	Jan-13-23	Feb-02-23	-1d	A1740: SS 15d
A3840	Excavate for Concrete Footings	10d	10d	Feb-03-23	Feb-16-23	-1d	A3680: FS
A1500	Concrete Footings	15d	15d	Feb-16-23	Mar-09-23	-1d	A3840: FS, A3680: FS, A1740: FF 10d
A1890	Foundation CMU Installation	15d	15d	Mar-03-23	Mar-23-23	-1d	A1500: SS 10d
A1510	Slab on Grade	10d	10d	Mar-16-23	Mar-30-23	-1d	A1890: FF 5d, A1500: FS
A1520	Columns and Walls Form and Pour	10d	10d	Mar-27-23	Apr-10-23	-1d	A1510: FS -3d
A3850	Form and Pour Ramp LVL 1-2	10d	10d	Apr-04-23	Apr-17-23	-1d	A1520: FF 5d
Level 2		18d	18d	Apr-17-23	May-11-23	-1d	

BASELINE

This update shows a delay on the baseline plan by -23 days.

The new finish date is November 20, 2024.

December Update Review.

- Fragnet 1.1, which pertains to CDOT approval of C4.00, was originally scheduled to conclude on December 23, 2022. However, it was completed on January 4, 2023.
- Fragnet 3.1* Cross section utility drawing: this fragnet was planned to finish on December 09, 2022 but it was actually finished on December 13, 2022.
- Fragnet.5.1* Approval to Remove Tree: this fragnet was planned to finish on December 09, 2022 but it was actually finished on December 13, 2022.
- Fragnet 2.1 - Underground Tank Removal: this fragnet was planned to finish on December 20, 2022 but it was actually finished on December 21, 2022.
- Fragnet 4.1 - Preferred Parking Shoring: this fragnet in December Update shows that it will be finished on January 12, 2023
- 4.2* CLT E. 4th St. Shoring: this fragnet in December Update shows that it will be finished on January 18, 2023

The "Foundation and Ground Floor" WBS shows 34 days delay. From February 02, 2023 to June 05, 2023 with duration of 86 days

Structure	205d	205d	Jan-17-23	Nov-03-23	-23d	
Foundation and Ground Floor						
A1490 Mobilize for Micro Piles	5d	5d	Jan-17-23	Jan-24-23	-23d	A1070: FS, A1100: FS, A1090: FS
A1740 Installation of Micro Piles	45d	45d	Jan-25-23	Mar-28-23	-23d	A1490: FS
A3680 Install Sheet Piling/Shorting for Footing Inst	15d	15d	Feb-15-23	Mar-07-23	-23d	A1740: SS 15d
A3840 Excavate for Concrete Footings	10d	10d	Mar-08-23	Mar-21-23	-23d	A3680: FS
A1500 Concrete Footings	15d	15d	Mar-21-23	Apr-11-23	-23d	A3840: FS, A3680: FS, A1740: FF
A1890 Foundation CMU Installation	15d	15d	Apr-05-23	Apr-25-23	-23d	A1500: SS 10d
A1510 Slab on Grade	10d	10d	Apr-18-23	May-02-23	-23d	A1890: FF 5d, A1500: FS
A1520 Columns and Walls Form and Pour	10d	10d	Apr-27-23	May-11-23	-23d	A1510: FS -3d
A3850 Form and Pour Ramp LVL 1-2	10d	10d	May-05-23	May-18-23	-23d	A1520: FF 5d
Level 2	17d	17d	May-18-23	Jun-13-23	-22d	

Structure	206d	206d	Feb-02-23	Nov-22-23	-36d	
Foundation and Ground Floor						
A1490 Mobilize for Micro Piles	5d	5d	Feb-02-23	Feb-09-23	-35d	A1020: FS, A3930: SS 15d, A1090: FS
A1740 Installation of Micro Piles	45d	45d	Feb-10-23	Apr-13-23	-35d	A1490: FS
A3680 Install Sheet Piling/Shorting for Footing Inst	15d	15d	Mar-03-23	Mar-23-23	-35d	A1740: SS 15d
A3840 Excavate for Concrete Footings	10d	10d	Mar-24-23	Apr-06-23	-35d	A3680: FS
A1500 Concrete Footings	15d	15d	Apr-06-23	Apr-27-23	-35d	A1490: FS, A1020: FS, A1740: FF 10d
A1890 Foundation CMU Installation	15d	15d	Apr-21-23	May-11-23	-35d	A1500: SS 10d
A1510 Slab on Grade	10d	10d	May-04-23	May-18-23	-35d	A1500: FS, A1890: FF 5d
A1520 Columns and Walls Form and Pour	10d	10d	May-15-23	May-29-23	-35d	A1510: FS -3d
A3850 Form and Pour Ramp LVL 1-2	10d	10d	May-22-23	Jun-05-23	-34d	A1520: FF 5d
Level 2	18d	18d	Jun-05-23	Jun-29-23	-34d	

This update shows a delay on the baseline plan by -35 days.

The new finish date is November 20, 2024.

January Update Review.

- Fragnet 1.1, which pertains to CDOT approval of C4.00, was originally scheduled to conclude on December 23, 2022. However, it was completed on January 4, 2023.
- Fragnet 3.1* Cross section utility drawing: this fragnet was planned to finish on December 09, 2022 but it was actually finished on December 13, 2022.
- Fragnet.5.1* Approval to Remove Tree: this fragnet was planned to finish on December 09, 2022 but it was actually finished on December 13, 2022.
- Fragnet 2.1 - Underground Tank Removal: this fragnet was planned to finish on December 20, 2022 but it was actually finished on December 21, 2022.
- Fragnet 4.1 - Preferred Parking Shoring: this fragnet in December Update shows that it will be finished on February 09, 2023.
- 4.2* CLT E. 4th St. Shoring: this fragnet in December Update shows that it will be finished on February 09, 2023.
- The “Foundation and Ground Floor” WBS had not started yet in this update and shows 34 days delay. From January 09, 2023(Actual Date) to June 05, 2023 with duration of 81 days

Structure	205d	205d	Jan-17-23	Nov-03-23	-23d
Foundation and Ground Floor	87d	87d	Jan-17-23	May-18-23	-23d
A1490 Mobilize for Micro Piles	5d	5d	Jan-17-23	Jan-24-23	-23d A1070: FS, A1100: FS, A1090: FS,
A1740 Installation of Micro Piles	45d	45d	Jan-25-23	Mar-28-23	-23d A1490: FS
A3680 Install Sheet Piling/Shoring for Footing Inst	15d	15d	Feb-15-23	Mar-07-23	-23d A1740: SS 15d
A3840 Excavate for Concrete Footings	10d	10d	Mar-08-23	Mar-21-23	-23d A3680: FS
A1500 Concrete Footings	15d	15d	Mar-21-23	Apr-11-23	-23d A3840: FS, A3680: FS, A1740: FF
A1890 Foundation CMU Installation	15d	15d	Apr-05-23	Apr-25-23	-23d A1500: SS 10d
A1510 Slab on Grade	10d	10d	Apr-18-23	May-02-23	-23d A1890: FF 5d, A1500: FS
A1520 Columns and Walls Form and Pour	10d	10d	Apr-27-23	May-11-23	-23d A1510: FS -3d
A3850 Form and Pour Ramp LVL 1-2	10d	10d	May-05-23	May-18-23	-23d A1520: FF 5d
Level 2	17d	17d	May-18-23	Jun-13-23	-22d

Structure	206d	206d	Feb-02-23	Nov-22-23	-36d
Foundation and Ground Floor	86d	86d	Feb-02-23	Jun-05-23	-34d
A1490 Mobilize for Micro Piles	5d	5d	Feb-02-23	Feb-09-23	-35d A1020: FS, A3930: SS 15d, A1090: FS
A1740 Installation of Micro Piles	45d	45d	Feb-10-23	Apr-13-23	-35d A1490: FS
A3680 Install Sheet Piling/Shoring for Footing Inst	15d	15d	Mar-03-23	Mar-23-23	-35d A1740: SS 15d
A3840 Excavate for Concrete Footings	10d	10d	Mar-24-23	Apr-06-23	-35d A3680: FS
A1500 Concrete Footings	15d	15d	Apr-06-23	Apr-27-23	-35d A1490: FS, A1020: FS, A1740: FF 10d
A1890 Foundation CMU Installation	15d	15d	Apr-21-23	May-11-23	-35d A1500: SS 10d
A1510 Slab on Grade	10d	10d	May-04-23	May-18-23	-35d A1500: FS, A1890: FF 5d
A1520 Columns and Walls Form and Pour	10d	10d	May-15-23	May-29-23	-35d A1510: FS -3d
A3850 Form and Pour Ramp LVL 1-2	10d	10d	May-22-23	Jun-05-23	-34d A1520: FF 5d
Level 2	18d	18d	Jun-05-23	Jun-29-23	-34d

- Site Demo started on November 03, 2023 was planned to start on November 01, 2023 and finish on 15 of the same months with 10 days duration. However, January update shows that the site demo finished on January 06, 2023 with 47 working days.
- The installation of Micro Piles was planned to take place on December 23, 2022 rather than starting on January 12, 2023.
- Traffic and Pedestrian Control Set Up was planned to occur on October 28 and November’s first 2022. However, it was actually occurred on January 09, 2023 with -50 days delay.
- This update shows a delay on the baseline plan by -35 days.
- The new finish date is November 20, 2024.

February Update Review.

- *Fragnet.4.2* "CLT E. 4th St. Shoring..." Was removed from the updates starting with February Update. We need more clarification on why it was removed.
- Fragnet.6.1* Transformer Vault Redesign.

This fragnet has started on February 13, 2023 and was supposed to end on March 03, 2023. Based on the relations it's affecting fragnet 6.3 Express permit review, which isn't related to it. It's also affecting Fragnet 6.2 Micro piles and pile cap redesign, which isn't a correct logical sequence that must be adjusted.

- Fragnet.6.2* Micro piles and Pile Cap Redesign

This fragnet has started on February 16, 2023 and was supposed to end on March 03, 2023. This fragnet should have been taken into consideration in the baseline as the pile cap and micro piles should be taken into account in the baseline (we need more information if this redesign was necessary or it's on the contractor). Also, this redesign should be approved by the owner. This fragnet is affecting fragnet 6.3 Express permit review, which isn't related to it.

- Fragnet.7.1* Underground Fuel Tank Removal

This fragnet has started on February 23, 2023 and was supposed to end on March 03, 2023. This fragnet should have been taken into account from the beginning in the baseline as the underground fuel tank removal is essential if there is any construction work to be done in that area (Same as the water tank removal-also we need more info from the owner), especially if there is an excavation scope. This fragnet is affecting the tower crane excavation which is affected by the removal of the tank (only if these scopes are in different areas).

- Fragnet.7.2* Crane Erection Lead Time

This fragnet has started on February 23, 2023 and was supposed to end on May 12, 2023. This fragnet should have been taken into consideration in the baseline as it's a long lead item. It's affecting the tower crane erection.

- Fragnet.6.8* Available Concrete Footings

This fragnet has started on February 24, 2023 and was supposed to end on March 28, 2023. This fragnet is affecting the Columns and Walls Form and Pour. To gain a better understanding, we require additional information regarding the reasons behind the delayed initiation of the foundation work by the contractor, which only began in late February 2023.

- Fragnet.6.3* Express Permit Review

This fragnet was supposed to start on March 06, 2023 and was supposed to end on March 08, 2023. This fragnet is affecting fragnet 6.4 PCO submission & Review. Which isn't related.

- Fragnet.6.4* PCO Submission & Review

This fragnet was supposed to start on March 09, 2023 and was supposed to end on March 24, 2023. This fragnet is affecting Fragnet.6.5* AIA CO Issuance & Signature. This PCO should have been approved by the owner. (More info is needed)

- Fragnet.6.5* AIA CO Issuance & Signature

This fragnet was supposed to start on March 27, 2023 and was supposed to end on March 29, 2023. This fragnet is affecting Fragnet.6.6* Micro piles Procurement & Redesign.

- Fragnet.6.6* Micro piles Procurement & Redesign.

This fragnet was supposed to start on March 27, 2023 and was supposed to end on March 29, 2023. This fragnet is affecting Fragnet.6.7* Added Vault Micro piles. The procurement of the micro piles should have been taken into consideration in the baseline.

- Fragnet.6.7* Added Vault Micro piles

This fragnet was supposed to start on April 20, 2023 and was supposed to end on May 17, 2023. This fragnet is affecting Concrete Footings & the excavation for concrete footings. The vault micro piles should have been taken into consideration in the baseline.

- For this Update the Whole Project is on the critical path or on the near critical path except for Activity A3490 - Balcony/Outdoor Space LVL 13 as it has no successor.
- The “Foundation and Ground Floor” WBS had not started yet in this update and shows 34 days delay. From January 09, 2023 (Actual Date) to August 08, 2023 with duration of 126 days.

Structure		243d	228d	Jan-09-23 A	Jan-25-24	-78d
Foundation and Ground Floor		126d	111d	Jan-09-23 A	Aug-08-23	-79d
A1490	Mobilize for Micro Piles	5d	0d	Jan-09-23 A	Jan-11-23 A	
A1740	Installation of Micro Piles	45d	0d	Jan-12-23 A	Feb-20-23 A	
A1970	*Fragnet.6.1* Transformer Vault Redesign	15d	1d	Feb-13-23 A	Mar-03-23	-79d
A2100	*Fragnet.6.2* Micropile and Pile Cap Red	12d	1d	Feb-16-23 A	Mar-03-23	-79d
A2440	*Fragnet.7.1* Underground Fuel Tank Re	6d	1d	Feb-23-23 A	Mar-03-23	-6d
A1800	Tower Crane Foundation Excavation	2d	2d	Feb-23-23 A	Mar-07-23	-6d
A2540	*Fragnet.7.2* Crane Erection Lead Time	57d	51d	Feb-23-23 A	May-12-23	-36d
A2390	*Fragnet.6.8* Available Concrete Footing	20d	15d	Feb-24-23 A	Mar-28-23	9d
A2110	*Fragnet.6.3* Express Permit Review (O	3d	3d	Mar-06-23	Mar-08-23	-79d
A1950	Tower Crane Foundation F/R/P	15d	15d	Mar-08-23	Mar-28-23	-6d
A2120	*Fragnet.6.4* PCO Submission & Review	12d	12d	Mar-09-23	Mar-24-23	-79d
A2190	*Fragnet.6.5* AIA CO Issuance & Signat	3d	3d	Mar-27-23	Mar-29-23	-79d
A2240	*Fragnet.6.6* Micropile Procurement & R	15d	15d	Mar-30-23	Apr-19-23	-79d
A2290	*Fragnet.6.7* Added Vault Micropiles	20d	20d	Apr-20-23	May-17-23	-79d
A1960	Tower Crane Erection	2d	2d	May-15-23	May-16-23	-36d
A3840	Excavate for Concrete Footings	15d	15d	May-18-23	Jun-08-23	-79d
A1500	Concrete Footings	15d	15d	Jun-08-23	Jun-29-23	-80d

March Update Review.

- Fragnet.6.1* Transformer Vault Redesign.

This fragnet has started on February 13, 2023 and finished March 21, 2023. which is 13 working days delay based on the duration the contractor assumed. Based on the relations t's affecting fragnet 6.3 Express permit review, which isn't related to it. It's also affecting Fragnet 6.2 Micro piles and pile cap redesign, which isn't a correct logical sequence that must be adjusted.

- Fragnet.6.2* Micro piles and Pile Cap Redesign

This fragnet has started on February 16, 2023 and finished on March 17, 2023. This fragnet should have been taken into consideration in the baseline as the pile cap and micro piles should be taken into account in the baseline (we need more Information if this redesign was necessary or it's on the contractor). Also, this redesign should be approved by the owner. This fragnet is affecting fragnet 6.3 Express permit review, which isn't related to it.

- Fragnet.7.1* Underground Fuel Tank Removal

This fragnet has started on February 23, 2023 and finished on March 03, 2023. This fragnet should have been taken into account from the beginning in the baseline as the underground fuel tank removal is essential If there is any construction work to be done in that area (Same as the water tank removal-also we need more info from the owner), especially if there is an excavation scope. This fragnet is affecting the tower crane excavation which is affected by the removal of the tank (only if this these scopes are in different areas).

- Fragnet.7.2* Crane Erection Lead Time

This fragnet has started on February 23, 2023 and was supposed to end on May 12, 2023 (actually ended on June 15, 2023). This fragnet should have been taken into consideration in the baseline as it's a long lead item. It's affecting the tower crane erection.

- Fragnet.6.8* Available Concrete Footings

This fragnet has started on February 24, 2023 and was supposed to end on March 28, 2023. This fragnet is affecting the Columns and Walls Form and Pour. to gain a better understanding, we require additional information regarding the reasons behind the delayed initiation of the foundation work by the contractor, which only began in late February 2023.

- Fragnet.8.1* Remediate Crane Foundation.

Additional details are required for this particular event that occurred from March 6 to March 16, 2023. It took 9 working days. However, it was planned to be 3 working days.

- *Fragnet.9.1* Resolve Duct Bank at Tower Crane

This fragnet has started on March 17, 2023 and was supposed to end on April 13, 2023. It is linked to Tower Crane Foundation F/R/P which is okay. However, we need more information about the duct bank and what happened on site.

- Fragnet.6.3* Express Permit Review

This fragnet was pushed in this update and it actually started on March 17, 2023 rather than March 06, 2023 and was supposed to end on March 08, 2023 but in march update the finish date is April 13, 2023. This fragnet is affecting fragnet 6.4 PCO submission & Review. Which isn't related.

- Fragnet.6.4* PCO Submission & Review

This fragnet was supposed to start on March 09, 2023 but it actually started on March 22, 2023. Expected to be finished on April 06, 2023. This fragnet is affecting Fragnet.6.5* AIA CO Issuance & Signature. This PCO should have been approved by the owner. (More info is needed)

- Fragnet.6.5* AIA CO Issuance & Signature

This fragnet was supposed to start on March 27, 2023 and was supposed to end on March 29, 2023. However, it was pushed on this update to expected start and finish April 07, 2023 and April 11, 2023 respectively. This fragnet is affecting Fragnet.6.6* Micro piles Procurement & Redesign.

- Fragnet.6.6* Micro piles Procurement & Redesign.

This fragnet was supposed to start on March 27, 2023 and was supposed to end on March 29, 2023. However, it was pushed on this update to expected start and finish April 12, 2023 and May 02, 2023 respectively. This fragnet is affecting Fragnet.6.7* Added Vault Micro piles. The procurement of the micro piles should have been taken into consideration in the baseline.

- Fragnet.6.7* Added Vault Micro piles

This fragnet in this update was supposed to start on May 03, 2023 and was supposed to end on May 31, 2023. This fragnet is affecting Concrete Footings & the excavation for concrete footings. The vault micro piles should have been taken into consideration in the baseline.

- Regarding the approval of the rebar and post-tensioning (PT) resubmittal and procurement we require confirmation from the owner, along with an explanation of what was lacking in the initial submittal.
- For this Update the Whole Project is on the critical path or on the near critical path except for Activity A3490 - Balcony/Outdoor Space LVL 13 as it has no successor.
- After 5 months the project is delayed by -89 days.

April Update Review.

- Fragnet.7.2* Crane Erection Lead Time

This fragnet has started on February 23, 2023 and was supposed to end on May 12, 2023 (same date as the previous update). This fragnet should have been taken into consideration in the baseline as it's a long lead item. It's affecting the tower crane erection.

- Fragnet.6.8* Available Concrete Footings

This fragnet has started on February 24, 2023 and was supposed to end on March 28, 2023. However, this update shows finish date on May 11, 2023. This fragnet is affecting the Columns and Walls Form and Pour. To gain a better understanding, we require additional information regarding the reasons behind the delayed initiation of the foundation work by the contractor, which only began in late February 2023.

- *Fragnet.9.1* Resolve Duct Bank at Tower Crane

This fragnet has started on March 17, 2023 and finished on April 21, 2023. It is linked to Tower Crane Foundation F/R/P which is okay. However, we need more information about the duct bank and what happened on site.

- Fragnet.6.4* PCO Submission & Review

This fragnet was supposed to start on March 09, 2023 but it actually started on March 22, 2023. Expected to be finished on April 28, 2023. This fragnet is affecting Fragnet.6.5* AIA CO Issuance & Signature. This PCO should have been approved by the owner. (More info is needed)

- Fragnet.6.6* Micro piles Procurement & Redesign.

This fragnet was supposed to start on March 27, 2023 and was supposed to end on March 29, 2023. However, it was pushed on this update to expected start and finish April 12, 2023 and May 02, 2023 respectively. This fragnet is affecting Fragnet.6.7* Added Vault Micro piles. The procurement of the micro piles should have been taken into consideration in the baseline.

- Fragnet.6.7* Added Vault Micro piles

This fragnet in this update was supposed to start on May 03, 2023 and was supposed to end on May 31, 2023. This fragnet is affecting Concrete Footings & the excavation for concrete footings. The vault micro piles should have been taken into consideration in the baseline.

- Regarding the approval of the rebar and post-tensioning (PT) resubmittal and procurement we require confirmation from the owner, along with an explanation of what was lacking in the initial submittal.
- For this Update the Whole Project is on the critical path or on the near critical path except for Activity A3490 - Balcony/Outdoor Space LVL 13 as it has no successor.
- After 5 months the project is delayed by -110 days.

May Update Review.

- Fragnet.7.2* Crane Erection Lead Time

This fragnet has started on February 23, 2023 and was supposed to end on May 12, 2023 (same date as the previous update). This fragnet should have been taken into consideration in the baseline as it's a long lead item. It's affecting the tower crane erection.

- Fragnet.6.8* Available Concrete Footings

This fragnet has started on February 24, 2023 and was supposed to end on March 28, 2023. However, this update shows finish date on May 11, 2023. This fragnet is affecting the Columns and Walls Form and Pour. To gain a better understanding, we require additional information regarding the reasons behind the delayed initiation of the foundation work by the contractor, which only began in late February 2023.

- *Fragnet.9.1* Resolve Duct Bank at Tower Crane

This fragnet has started on March 17, 2023 and finished on April 21, 2023. It is linked to Tower Crane Foundation F/R/P which is okay. However, we need more information about the duct bank and what happened on site.

- Fragnet.6.4* PCO Submission & Review

This fragnet was supposed to start on March 09, 2023 but it actually started on March 22, 2023. finished on April 28, 2023. This fragnet is affecting Fragnet.6.5* AIA CO Issuance & Signature. This PCO should have been approved by the owner. (More info is needed)

- Fragnet.6.6* Micro piles Procurement & Redesign.

This fragnet was supposed to start on March 27, 2023 and was supposed to end on March 29, 2023. However, it was pushed on this update to expected start and finish April 12, 2023 and May 02, 2023 respectively. This fragnet is affecting Fragnet.6.7* Added Vault Micro piles. The procurement of the micro piles should have been taken into consideration in the baseline.

- Fragnet.6.7* Added Vault Micro piles

This fragnet in this update was supposed to start on May 03, 2023 and was supposed to end on May 31, 2023. This fragnet is affecting Concrete Footings & the excavation for concrete footings. The vault micro piles should have been taken into consideration in the baseline.

- *Fragnet.10.1* PCO 009 Concrete Submittal

We need confirmation from the client on this fragnet dates. Start date May 03, 2023 finish date May 19, 2023. Also, we need to clarify why the concrete submittal started on May.

- Regarding the approval of the rebar and post-tensioning (PT) resubmittal and procurement we require confirmation from the owner, along with an explanation of what was lacking in the initial submittal.

- For this Update the Whole Project is on the critical path or on the near critical path except for Activity A3490 - Balcony/Outdoor Space LVL 13 as it has no successor.
- After 5 months the project is delayed by -110 days.

June Update Review.

- Fragnet.7.2* Crane Erection Lead Time

This fragnet has started on February 23, 2023 and was supposed to end on May 12, 2023 (same date as the previous update) However, the lead time for the crane actually finished on June 15, 2023 with total duration of 112 days. This fragnet should have been taken into consideration in the baseline as it's a long lead item. It's affecting the tower crane erection.

- Fragnet.6.8* Available Concrete Footings

This fragnet has started on February 24, 2023 and was supposed to end on March 28, 2023. However, this update shows the actual finish date on May 10, 2023. This fragnet is affecting the Columns and Walls Form and Pour. To gain a better understanding, we require additional information regarding the reasons behind the delayed initiation of the foundation work by the contractor, which only began in late February 2023.

- Fragnet.6.6* Micro piles Procurement & Redesign.

This fragnet was supposed to start on March 27, 2023 and was supposed to end on March 29, 2023. However, it was pushed on this update to actual start and finish May 01, 2023 and May 23, 2023 respectively. This fragnet is affecting Fragnet.6.7* Added Vault Micro piles. The procurement of the micro piles should have been taken into consideration in the baseline.

- Fragnet.6.7* Added Vault Micro piles

This fragnet in this update was supposed to start on May 03, 2023 and was supposed to end on May 31, 2023. Actually started on May 16, 2023 and the expected finish on June 27, 2023. This fragnet is affecting Concrete Footings & the excavation for concrete footings. The vault micro piles should have been taken into consideration in the baseline.

- *Fragnet.10.1* PCO 009 Concrete Submittal

We need confirmation from the client on this fragnet dates. Start date May 03, 2023 finish date May 19, 2023. Also, we need to clarify why the concrete submittal started on May.

- *Fragnet.4.3* Light Pole Relocation

Additional details are required for this particular event that occurred from March 6 to March 16, 2023. It's impacting "Concrete Footing" which should not be affected by the light Pole Relocation

- Regarding the approval of the rebar and post-tensioning (PT) resubmittal and procurement we require confirmation from the owner, along with an explanation of what was lacking in the initial submittal.
- For this Update the Whole Project is on the critical path or on the near critical path except for Activity A3490 - Balcony/Outdoor Space LVL 13 as it has no successor.
- After 5 months the project is delayed by -124 days.

Update Comments.

1. The contractor is required to provide a revised or recovery schedule in order to address and mitigate the delays as for the contract. Based on our assumption using "Activity A3950 - BL Harbert Contract Duration," we initially set the contractual finish date as May 18, 2023. However, as of the June update, this activity's finish date has shifted to November 11, 2024, indicating a delay of 178 calendar days, which accounts for 31% of the project's total duration.
2. The fragnets are sometimes not accurately connected to their actual successors within the construction sequence. We kindly ask the contractor to make the necessary adjustments to ensure that the connections align logically with the construction process.
3. Regarding *Fragnet 4.1*, which pertains to Preferred Parking Shoring, it's important to note that this activity should have been part of the project's baseline due to the inclusion of underground floors as indicated in the drawings. Shoring is a critical aspect of our project in this context. Furthermore, the initial plan allocated 15 working days for this activity, commencing on November 30, 2023. However, as anticipated, the expected completion date in the June update is now July 18, 2024, which is 232 days, this additional duration needs to be incorporated into the project's original timeline.
4. The contractor is kindly requested to provide a narrative update report with each update explaining the changes made on the update.
5. The change orders need more review to clarify the situation of each change order.

Moxy Hotel Updates Variance

- Baseline

Data Date	Aug-17-22
NTP	Oct-06-22
Substantial Completion	May-17-24

- November Update

Data Date	Dec-05-22
NTP	Nov-01-22 A
Substantial Completion	Jun-20-24

- Variance between Baseline Vs November Update

NTP Variance	-26 Calendar days
Substantial Completion Variance	-34 Calendar days

- December Update

Data Date	Jan-05-23
NTP	Nov-01-22 A
Substantial Completion	July-09-24

- Variance between Baseline Vs. December Update

NTP Variance	-26 Calendar days
Substantial Completion Variance	- 53 Calendar days

- Variance between November and December Updates.

NTP Variance	0 Calendar days
Substantial Completion Variance	-19 Calendar days

- January Update.

Data Date	Feb-03-23
NTP	Nov-01-22 A
Substantial Completion	July-09-24

- Variance between Baseline Vs. January Update.

NTP Variance	-26 Calendar days
Substantial Completion Variance	- 53 Calendar days

- Variance between December and January Update.

NTP Variance	0 Calendar days
Substantial Completion Variance	0 Calendar days

- February Update.

Data Date	Mar-03-23
NTP	Nov-01-22 A
Substantial Completion	Sep-09-24

- Variance between Baseline and February Update.

NTP Variance	-26 Calendar days
Substantial Completion Variance	- 115 Calendar days

- Variance between January and February Update.

NTP Variance	0 Calendar days
Substantial Completion Variance	-62 Calendar days

- March Update

Data Date	Mar-31-23
NTP	Nov-01-22 A
Substantial Completion	Sep-23-24

- Variance between Baseline and March Update

NTP Variance	-26 Calendar days
Substantial Completion Variance	- 129 Calendar days

- Variance between February and March Update

NTP Variance	0 Calendar days
Substantial Completion Variance	-14 Calendar days

- April Update

Data Date	Apr-28-23
NTP	Nov-01-22 A
Substantial Completion	Oct-22-24

- Variance between Baseline and April Update

NTP Variance	-26 Calendar days
Substantial Completion Variance	- 158 Calendar days

- Variance between March and April Update

NTP Variance	0 Calendar days
Substantial Completion Variance	-29 Calendar days

- May Update.

Data Date	June-05-23
NTP	Nov-01-22 A
Substantial Completion	Oct-22-24

- Variance between Baseline Vs. May

NTP Variance	-26 Calendar days
Substantial Completion Variance	- 158 Calendar days

- Variance between April and May Update

NTP Variance	0 Calendar days
Substantial Completion Variance	0 Calendar days

- June Update

Data Date	July-03-23
NTP	Nov-01-22 A
Substantial Completion	Nov-11-24

- Variance between Baseline and June Update

NTP Variance	-26 Calendar days
Substantial Completion Variance	- 178 Calendar days

- Variance between May and June Update

NTP Variance	0 Calendar days
Substantial Completion Variance	-20 Calendar days

Variances Summary Table:

Update	Data Date	NTP	Substantial Completion	NTP Variance (Baseline vs. Update)	Substantial Completion Variance (Baseline vs. Update)	Substantial Completion Variance (Update vs. Previous Update)
Baseline	Aug-17-2022	Oct-06-2022	May-17-2024	---	---	---
Update #1	Dec-05-2022	Nov-01-22 A	Jun-20-2024	-26 Calendar days	-34 Calendar days	---
Update #2	Jan-05-2023	Nov-01-22 A	Jul-09-2024	-26 Calendar days	-53 Calendar days	-19 Calendar days
Update #3	Feb-03-2023	Nov-01-22 A	Jul-09-2024	-26 Calendar days	-53 Calendar days	0 Calendar days
Update #4	Mar-03-2023	Nov-01-22 A	Sep-09-2024	-26 Calendar days	-115 Calendar days	-62 Calendar days
Update #5	Mar-31-2023	Nov-01-22 A	Sep-23-2024	-26 Calendar days	-129 Calendar days	-14 Calendar days
Update #6	Apr-28-2023	Nov-01-22 A	Oct-22-2024	-26 Calendar days	-158 Calendar days	-29 Calendar days
Update #7	Jun-05-2023	Nov-01-22 A	Oct-22-2024	-26 Calendar days	-158 Calendar days	0 Calendar days
Update #8	Jul-03-2023	Nov-01-22 A	Nov-11-2024	-26 Calendar days	-178 Calendar days	-20 Calendar days