

Ad



## Hoc DPW Building Committee Packet

Thursday February 13 ,2025 4:00 PM

### **TOWN OF TRURO AD HOC BUILDING COMMITTEE- FOR THE FUTURE PUBLIC WORKS FACILITY - COMMITTEE MEETING MINUTES (SELECT BOARD MEETING PRESENTATION) THURSDAY, JANUARY 16, 2025, at 4:30 PM EDT**

Meeting held in person and conducted via <https://us02web.zoom.us/j/87615803557> recorded and available for review at the following link:

<http://trurotv.truro-ma.gov/CablecastPublicSite/show/7143?channel=1>

A quorum of committee members was present:

Co-Chair Bob Higgins Steele, Co-Chair Michael Cohen, Members Anthony Garrett, Anastasia S. Robert Panessiti and Leif Hamnquist.

Other attendees: DPW Director Jarrod Cabral, Town Manager Darrin Tangeman and Select Board Liaison Sue Gerrar-Irwin.

#### **Agenda Item #1 - Note Taker**

- Leif Hamnquist will be taking notes

#### **Agenda Item #2 - Public Comments**

- Sue Girar-Irwin, select board liaison, shared the concerns of the select board in regards to the timing the committee will have a recommendation and hoped for the May town meeting.
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#### **Agenda Item #3– Minutes**

- December 12 Minutes - Bob Higgins Steel moves to approve and Anastasia seconds
- December 21 Minutes - Tony Garrett moves approve and Bob Panessiti seconds

#### **Agenda Item #4 – Staff/Member Updated by DPW Director Jarrod Cabral**

- Mr. Cabral updated on the Phase 2 environmental process and the sub committee meeting with Weston and Sampson and Environmental Partners on the space requirements of the facility. He furthered with the overall scheduling with the consultants and getting as much work as possible completed by end of February.
- Tony Garrett requested the committee get on a more aggressive schedule, Michael Cohen agreed and the committee will discuss
- Dennis O'Brien asked about the cost of capping associated with construction on Town Hall Site, Jarrod Cabral will share the estimate.

## **Agenda Item #5 - Presentation by Anthony Garrett - DPW Study Group**

- Anthony Garrett presented the DPW Study Groups latest findings.
- The DPW Study Group produced two new studies, both campus style plans, and Anthony Garrett started with a very stripped down plan of around 17,675± sq ft(plan A)
- Anthony Garrett brought the attendees through the ideas of Plan A
- Bob Higgins-Steel asked about the wash bay and if Plan A satisfied the full program and Anthony Garrett said wash bay purposefully omitted to possibly be integrated into one of the buildings. Bob Higgins-Steel followed up with questions about the solar canopy shown and Anthony Garrett explained several options.
- Darrin Tangeman questioned a dual use building for the wash bay and questioned why there was no salt shed in the plan and how that effects operational requirements.
- Anthony Garrett presented Plan B that shows slightly modified overall square footage of 19,475± and an additional salt shed of 2000 sq ft.
- The committee discussed the overall required square footage and what are the exact program requirements.
- Michael Cohen stated his concerns on the campus style design from an efficiency and operational point of view.
- Robert Panessiti agreed with Michael Cohen and also finds a DPW study group making a recommendation on any design is not productive and provides confusion to the general public and process of the committee.
- Dennis O'Brien wanted to reiterate the initial cost of the project and that it was not approved at town meeting. He also questioned the size of the building Environmental Partners was using for their last costs. Robert Panessiti responded with his
- Anastasia S. Was concerned with the overall time frame the committees recommendation has taken to come up with and would like to see a 'Kia'(car reference) solution to the facility and that there needs to be trade offs.
- Jarrod Cabral answered what Environmental Partners was referring to at their last appearance at the select board meeting. He responded to the presentations of Plan A and Plan B, he would require a salt shed and would prefer a single large building. He reiterated that the only way to reduce substantial cost would be to drastically slash program/size.
- Anthony Garrett was perturbed about comments stating the designs lacked certain information.
- Bob Weinstein, select board member speaking as a citizen, questioned the overall process of the DPW Study Groups designs and wanted to acknowledge that the Town Hall Site is inappropriate for the DPW facility.
- Bob Higgins-Steel discussed the plans presented and looked at the various ideas in whether or not its a single building, campus style, reusing buildings, etc and have Environmental Partners come up with costs of each scenario for discussion and to move forward.
- Michael Cohen asked for stray poll about monolith (Single Building) or Campus Style design, Bob Higgins-Steel in favor of Monolith, Michael Cohen in favor of Monolith, Robert Panessitti in favor of Monolith, Anastasia S. In favor of Campus Style, Leif Hamnquist in favor of Monolith, Anthony Garrett in favor of Campus Style.
- Darrin Tangeman asked Anthony Garrett to clarify how a campus style would honor the voters and Anthony Garrett believes the campus style will be a lower cost. A discussion ensued about the differences in cost between the DPW Study Groups costs and Weston and Sampson costs.
- Discussion on how to proceed with a recommendation to the select board and best practices.

- Jarod Cabral will get information about exactly where the cap will be located and the building envelope will be.

#### **Agenda Item #6 – Charette Follow-Up Discussion (If Time Permits)**

- No discussion

#### **Agenda Item #7 – Next Meeting Date**

- Next meeting set for 4:30pm January 30th

Leif Hamnquist made a motion to adjourn the public meeting. Bob Higgins-Steel seconded, and the ABC members approved on a roll call. Accordingly, the public meeting adjourned at 6:33 PM EDT.

The foregoing constitutes our records of matters discussed and conclusions reached at the subject meeting. All attendees and recipients are requested to review the minutes in detail and notify the committee of any comments, errors or omissions.

Respectfully submitted,

Leif D. Hamnquist AIA

### **DRAFT**

#### **Meeting Minutes for the Ad Hoc Building Committee (AHBC) Remote Meeting February 5, 2025**

The meeting was called to order at 4:32pm by Co-Chair Michael Cohen.

A quorum of committee members was present:

Co-Chairs Michael Cohen and Bob Higgins-Steele; Members Anthony Garrett, Leif Hamnquist, Anastasia Song. Alternate Bob Panessiti was also present.

Mr. Paul Millett from Environmental Partners (“EP” or “OPM”) and Mr. Jeff Alberti from Westin and Sampson (“W&S”) were present to address committee questions.

#### **Agenda Item #1: Notetaker & Administrative**

Pursuant to previous agreed-upon rotation schedule, it was confirmed that Anastasia Song would take minutes of this meeting.

#### **Agenda Item #2: Co-Chairs Comment**

Co-Chair Bob Higgins-Steele opened by reading sections of the Massachusetts Open Meetings Law vis-à-vis Public Comment, in particular clarifying the protocols surrounding public comment and the authority of committee Chairs to limit or restrict public comment. He also requested today's meeting stay focused on shaping recommendations to the Select Board regarding a new DPW facility on Town Hall Hill. He indicated that public comment would be limited to 3 minutes per speaker. He further addressed a perceived concern around inaccurate information being circulated, and suggested people consult the taped meeting sessions for accurate accounts of discussions that have ensued on the DPW facility design.

Co-Chair Cohen said he had no comment at this point of the meeting and would share comments under Agenda Item #5.

### **Agenda Item #3: Public Comment**

Mr. Cohen recognized Mr. Tim Hickey, homeowner and registered voter in Truro.

Mr. Hickey expressed concerns regarding the direction the present Truro DPW facility project was taking. He cited statistics for the 2021 construction of a DPW facility in Middleboro, MA – a 31,000 sq ft facility costing \$13.1 million, housing 36 vehicles, and 28 full-time employees. Town with population of 24,500. Mr. Hickey extrapolated cost estimates to account for inflation, pandemic and other factors and concluded that the facility being contemplated for Truro was too expensive and over-scaled for a town the size of Truro. He requested that his comments be formally reflected in the meeting record, which Mr. Cohen agreed to do.

**[Please insert Mr. Hickey's Comments into the formal Minutes Record.]**

Dennis O'Brien, Truro voter: Expressed concern about perceived absence of documented requirements for a proposed DPW facility. He felt it unwise for AHBC to vote at this meeting on a Campus vs Monolith design; he suggested this is putting cart before the horse. Mr. O'Brien indicated the AHBC should finalize requirements before attempting to advance design. Mr. O'Brien stated that the AHBC should attempt to reach consensus or risk a majority of voters electing to put entire DPW facility process on hold. He commented that the Truro voters "fed up" with what has been a "contorted DPW process" and are losing patience.

Laurie Lee: Referenced the letter she had sent to the AHBC last week. She stated that insufficient analysis has been done regarding the cost of continuing DPW operations during construction. Ms. Lee further noted that certain plans had incorporated the concept of having a DPW facility also accommodate other Town functions; she stated such synergistic aspects should be broken out and evaluated separately. Ms. Lee noted that certain of the W&S designs are showing ~ 24,000 sq ft, greater than the ~20,100 sq ft she believed was cited at the ATM. She suggested that W&S show alternative designs at the lower square footage to bring down price tag.

**[Please insert Ms. Lee's letter into the formal Minutes Record.]**

Mike Forgione, town resident: Expressed concern that previous AHBC meeting discussions addressing potential tax burden of a DPW project had been “oversimplified”. Mr. Forgione cited Massachusetts tax statistics, noting “Truro is no longer a tax-friendly town”. He expressed concerned about the prospect of Truro total Debt Service crossing a prudency 10% threshold; and further that the current list of potential Truro capital projects – including Beach Point wastewater; Walsh Property; Truro Motor Inn; Pond Village Wastewater; and PFOS mitigation at Town Hall Hill among others – already have potential to heavily burden the Truro’s debt structure, even before considering the additional debt burden of a new DPW facility. Mr. Forgione suggested the town needed to conduct a comprehensive 5-10 year capital plan.

Mr. Cohen cautioned Mr. Forgione regarding the 3-minute time limit for public comment raised by Mr. Higgins-Steele at the opening of the meeting. Mr. Forgione concluded his remarks requesting his written comments be included in the official minutes, which the Chairs agreed to.

[Please insert Mr. Forgione’s comments into the formal Minutes Record.]

Mr. Panessiti took issue with implication that he [being the committee member he believed Mr. Forgione referred to in his comments] was over-simplifying the financial discussion surrounding the DPW project. Mr. Panessiti pointed to work conducted by the Truro Finance Committee, Budget Task Force, and the Select Board addressing capital improvement plans and capital forecasts for the town. He further noted that the town had adopted a set of financial prudency policies around the levels of Truro debt including ratio of debt relative to the town budget.

Regan McCarthy: Stated that the AHBC vote slated for this meeting was not a vote on design but rather a vote on whether the Truro community could trust the judgement of the AHBC if it “rushes forward” with incomplete designs. Ms. McCarthy suggested the AHBC credibility was at stake. She commented that the Select Board had expressly cautioned that AHBC to have the “courage” to raise legitimate concerns around the process and not rush the committee deliberation process.

#### **Agenda Item #4: DPW Staff/Member Update by DPW Member Jarrod Cabral**

Mr. Jarrod Cabral: Expressed his view that the AHBC should vote on a single specific schematic design this evening in order to advance the process. He had received questions from the AHBC over the previous week which he delegated to staff, W&S, and the OPM. He then turned floor to Mr. Paul Millett of EP.

Paul Millett: He acknowledged receipt of four proposals prepared by W&S and indicated he had sent them to EP’s cost estimators for evaluation, which would require time to complete. Pending his estimators’ review, Mr. Millett nonetheless expressed the view that the facility price tag would come in within the range of \$26-\$32 million estimates he had previously provided for a ~ 21,000 sq ft building. Mr. Millett indicated he did not have a detailed comparison of the four options but reiterated his view of the price range.

Mr. Millett commented there were several questions from the AHBC regarding the U.S. imposing import trade tariffs and also around projections of construction costs. He noted clear pricing uncertainty around potential tariffs being threatened for Canada, Mexico, and China. Mr. Millett discussed the cost structure of a project he had previously worked on – the Yarmouth DPW Project. He noted that the materials component comprised 45-47% of the project. Assuming 80% of those materials were imported, and a 25% tariff imposed, this implies a 9.4% increase in total project cost.

In terms of broader inflation trends, Mr. Millett commented that his firms' estimators are indicating prices starting to level off; and expect cost inflation this year in the 3-4% range.

Mr. Millett explained that a typical job comprised 3 phases: Schematic Design, Design Development, then Construction Documents. Given current state of design, he is unable to accurately put a price tag on project – suggested AHBC would need to select a specific design to advance to state full Schematic Design Drawings whereupon costing could be accurately undertaken. Typically, a designer undertakes an estimate, then the OPM cross checks the figures in a process referred to as "estimate reconciliation". Mr. Millett indicated he sympathized with the AHBC's desire for more detailed pricing information, but not that would not possible at current stage of design.

Mr. Cohen asked to reiterate point – i.e., that Mr. Millett was suggesting that the committee needed to select a specific design to advance, and Mr. Millett confirmed.

Mr. Anthony Garrett probed the question of whether two schematic designs could be advanced in parallel, and how much that would cost. Given there are two 'divergent' designs on the table now, there may be cost savings that could be uncovered through the exploration of both options.

Mr. Millett: The ball park for advancing a schematic design would be in the range of \$250,000 - \$350,000. Doing two designs would probably not be double the cost due to cost synergies. This could be achieved in a 3 month period assuming W&S has the "horsepower" to undertake the work.

Mr. Jeff Alberti: To undertake two designs in parallel, he would assign two separate teams to work on this, and WS currently has the staffing resources to undertake this effort.

Mr. Panessiti: His recollection was that the committee had gone through a needs assessment, and WS was hired 5 or 6 years ago to do that and issued a "wish list" at 30,000 square feet. Mr. Panessiti asked the engineers to confirm his understanding.

Mr. Millett: The DPW facility needs to house people and equipment. Over the past few months he has reviewed with WS and Mr. Anthony Garrett. Some variation of opinions between want and need with respect to equipment storage inside vs outside. All people and equipment were accounted for.

Mr. Cabral: Reminded committee that request for funding was based on advancing single design.

Ms. Anastasia Song: Commented that she felt pressured at the previous AHBC meeting by being presented engineering numbers right in advance of being expected to vote on same. Reiterated concerns about cost, price inflation, and tariffs. Thanked Mr. Millett for quantification of potential tariff impacts. Given his assessment, it seemed to her that realistic project cost range could be more in the \$30-\$40 million range even before financing contingency. Expressed concern about not having seen sufficient financial analysis of a complex project that's only at very early schematic level of design. Given the existence of at least two viable options (Campus and Monolith) Ms. Song expressed view that AHBC has responsibility to vet both more fully. She requested that vote be deferred pending more extensive analysis of options.

Mr. Cabral asked the engineers if there were further questions they might answer.

Mr. Alberti discussed the PFOS cap issue; relocation of staff under potential Monolith construction phasing; comprehensive needs analysis having been discussed with DPW staff; the pros and cons and costs of phased approach; size of administrative work area; modular construction; aspects of square footage costs; aesthetic massing of buildings; and so forth.

Mr. Alberti addressed comments made by Mr. Hickey in Public Comment regarding the Middleboro DPW facility – a project with which Mr. Alberti was involved. Mr. Alberti confirmed certain of the statistics cited by Mr. Hickey, but added that the full project cost (in 2019) of the facility was \$15.1 million. He felt that if one escalated the 2019 costs for the various factors (including pandemic, energy code, outer cape etc) that the Middleboro project costs were not out of line with the price ranges WS is citing for the current Truro plan.

Mr. Garrett asked Mr. Alberti to confirm that the program space square footage being discussed for Truro is currently the 20,150 sq ft plus canopy for a total of approximately 24,000 sq ft facility. Mr. Alberti confirmed this.

Mr. Garrett stated he disagreed with Mr. Alberti regarding comparability of civil site costs as between Campus and Single building plan, e.g., a single building would require fill and grading. Mr. Alberti countered that multiple buildings may require a greater paved area and more complicated stormwater systems; and hence carrying similar civil construction costs for both was reasonable. He added that advancing the design work would more accurately flesh out these details.

Mr. Alberti commented that he would be working with AHBC through schematic design and take input and comment from committee, and that design would be shaped through this process.

Mr. Panessiti: Stated the AHBC should defer to professionals who have been hired to analyze this project and not overreach committee scope. He underscored the need to move forward. Mr. Panessiti further commented that consideration needs to be given to synergies and related cost savings that might be obtained by dovetailing functions of a new DPW facility with other town activities (e.g., larger town auditorium meeting space). The new DPW facility could be a multi-purpose facility.

Ms. Song: Quoted Mr. Millett's comments earlier in the meeting where he noted he could use a few additional weeks to more thoroughly evaluate the WS options presented. She noted the town has retained EP as Owners Engineers; the AHBC accordingly should utilize EP and allow EP a few more weeks to provide an independent assessment of the WS proposals.

Mr. Cohen asked that the committee move forward to Item #5.

### **Agenda Item #5: Discussion and Vote on Campus Plan or a Consolidated Building**

Mr. Higgins-Steel opened with comments:

- Stated he initially preferred a Campus Plan at another location, but heard the voters loud and clear that they wanted a new DPW to be located on Town Hall Hill.
- Now is the time to decide a direction - Campus Plan or Single Building.
- In terms of potential reuse/recycling of existing structures at Town Hall Hill, Mr. Higgins-Steele doesn't see any purpose or advantage to retaining the Vehicle maintenance building. If a campus plan were to be selected, the program should scrape the entire site and configure the area from scratch in way that makes the most sense
- He reiterated the importance of DPW staff comments and concerns; and confirmed the minimum required space at 20,150 sq ft.
- He concluded that in summary, a Campus plan does not work for him.

Mr. Leif Hamnquist: the Committee is where it needs to be. It took a lot of time, but necessary steps have been undertaken. Mr. Hamnquist reiterated he had served on the Provincetown Police Building committee, and the Truro process has moved more expeditiously than that project. The current process, when advanced, would still allow for significant and meaningful AHBC input, identification of cost efficiencies, and design modifications. He stated the DPW Study Group efforts should be discounted as having been designed without a program; that effort should be entirely put aside. The current program requirements are a minimum 20,150 sq feet facility, and WS are clear experts in designing and building these types of facilities. Mr. Hamnquist indicated he is comfortable that a single building facility meets the requirements of the program and needs of the DPW staff, and is the better way to go. Her made an appeal to put political considerations aside.

Mr. Higgins-Steele asked Mr. Hamnquist to further elaborate on his work and experience over ten years on the Provincetown Police Building Project. Committee discussion ensued including comments by Mr. Millett who served for some period of time as project manager on the Provincetown Police Building Project. Points were made to the effect that the long delay in project timeline added significant overall cost to that project.

Mr. Hamnquist further commented that until contractor bids are opened, the actual price to the town would not be known. He noted that Truro is an unusual market and



not comparable to (for example) Western Massachusetts or other regions. Cape Cod is “islanded”, and resources such as labor are more constrained.

Mr. Garrett noted that in his current experience, contractors’ project bids are far more competitive than even three years ago. Mr. Hamnquist concurred he is seeing this in the marketplace too. Mr. Garrett added that to the extent possible, pre-fabrication of structures should be done off-Cape, then transported to site as the most cost-effective route.

Mr. Garrett commented that a Campus Style plan offers more flexibility in terms of design. He is uncomfortable locking into a single structure plan.

Mr. Cohen read into the record his prepared written summation. He stated:

- A \$20 million facility price tag is unrealistic
- The OPM provided a facility cost range of \$26 to \$31 million at a December 2024 Select Board meeting
- The OPM is the quarterback hired by the town.
- The process cannot use a phased approach because the “math is flawed”.
- Any Further delay is only postponing the inevitable.
- The days of cheap financing over. There is no point continuing to discuss a missed window of opportunity.
- Mr. Cohen cited numerous statistics regarding the number of hours that have been spent by the AHBC and staff discussing this project.
- Concluded by stating that he supported WS Option #1 - Consolidated Building as his preferred option.

Mr. Garrett – remains concerned that the AHBC cannot not work in a pricing vacuum; the committee runs risk that if price tag too is too high, the town voters will once again reject the proposal.

Mr. Higgins-Steele commented that he too is concerned about price tag, but \$20 million completely unrealistic, if that is expectation than no point for an AHBC or DPW project at all.

Mr. Garrett noted that the DPW Study Group in 2023 determined / demonstrated that Town Hall Hill was a viable site, and he is gratified that this is the site being evaluated. He concurred that committee should be moving forward in Schematic Design. He pledged ongoing commitment to support committee work whichever path was selected.

Mr. Higgins-Steele expressed gratitude to Mr. Garrett for the work and efforts Mr. Garrett has contributed over several years in advancing the DPW project work. He then requested comment from Ms. Song.

Ms. Song: Expressed admiration for the amount of pro-bono work the AHBC has undertaken over several years. She stated that at the end of the day the voters will speak. Whichever path is selected to proceed, she expressed hope that the DPW staff and town will arrive at a good and appropriate facility.

Mr. Higgin-Steele requested a motion.

Discussion ensued regarding wording. Mr. Cohen favored wording expressly “abandoning” any campus style plan. Mr. Hamnquist and Mr. Higgins-Steele didn’t favor using the word “abandon”. Ms. Song requested that any motion permit each committee member to go on record expressly stating their preferred option.

**Mr. Cohen subsequently proposed a revised motion:**

**I’d like to make a motion to approve the Westin and Sampson Option #1 Consolidated Plan.**

The motion was seconded by Mr. Hamnquist.

No further discussion ensued.

Mr. Higgins-Steele called for a roll-call vote:

Ms. Song: No

Mr. Garrett: No

Mr. Higgins-Steele: Yes

Mr. Cohen: Aye.

Mr. Hamnquist: Aye

The motion was carried by a vote of 3:2.

Brief discussion ensued regarding the AHBC meeting scheduled for the next day, Thursday February 6, 2025.

Mr. Cohen took an opportunity to express thanks to the AHBC committee members and others including the public who have offered comment throughout the process.

Mr. Garrett queried the purpose of the February 6 meeting, and Mr. Higgins-Steele and Mr. Hamnquist commented that progress could now be made on refining and advancing design with WS on a single project proposal. Mr. Garrett requested that the Feb 6 meeting focus on laying a specific timetable for deliverables expected of the AHBC going forward from here.

### **Agenda Items #6: Adjourn**

Mr. Higgins-Steele called for a motion to adjourn which was seconded and unanimously approved.

The meeting was adjourned at 6:32pm.

Respectfully submitted,

Anastasia Song



PROJECT: Department of Public Works  
 Truro, MA  
 Option 1 - Consolidated Option

GAA: 23,135 SF



Code	Item Description	Quantity	Unit Price	Total
<b>CONCEPT ESTIMATE (OPTION - 1)</b>				\$
<b>New Building Construction</b>		<b>\$14,431,645</b>	<b>\$623.80 /SF</b>	
	Administration Offices/Office Support	1,500 sf	578.00	867,000
	Employee Facilities	1,680 sf	605.00	1,016,400
	Shops	1,680 sf	633.00	1,063,440
	Vehicle Maintenance (not including equipment)	4,200 sf	633.00	2,658,600
	Wash	1,250 sf	688.00	860,000
	Vehicle/Equipment Storage	12,825 sf	358.00	4,591,350
	Ground Improvements (based on 1st floor area)	26,985 sf	33.00	890,505
	Assumed Mezzanines Area	6,235 sf	220.00	1,371,700
	Open Canopy Storage (SF)	3,850 sf	289.00	1,112,650
<b>Industrial Equipment</b>		<b>\$797,500</b>	<b>\$34.47 /SF</b>	
	Manual Wash Equipment	1 ea	115,500.00	115,500
	Automatic Undercarriage Wash	1 ea	88,000.00	88,000
	Heavy Duty Mobile Column Lifts	1 ea	104,500.00	104,500
	Two Post Vehicle Lift (16,000 lb)	1 ea	71,500.00	71,500
	Bridge Crane	1 ea	121,000.00	121,000
	Overhead Fluid Distribution and Waste Fluid Collection System	1 ea	148,500.00	148,500
	Miscellaneous Shop and Support Equipment	0.5 ea	82,500.00	41,250
	Storage Shelving/Benches/Racks - Defer Partial	0.5 ea	60,500.00	30,250
	Exhaust Removal System	2 ea	38,500.00	77,000
<b>Fuel System</b>		<b>\$60,500</b>	<b>\$2.62 /SF</b>	
	Fuel Island Electrical	1 ea	60,500.00	60,500
<b>Site Development</b>		<b>\$3,497,450</b>	<b>\$151.18 /SF</b>	
	Site Development (assumes level site with no contamination, existing structures/utilities, etc.) - see site specific detailed backup	2.2 acres	605,000.00	1,331,000
	Specialty Site Work (fill, retaining walls, demo, stormwater, etc.)	1 ls	1,045,000.00	1,045,000
	Water Line Construction from Snow's Field	1 ls	462,000.00	462,000
	Cistern (20,000 gal tank and piping)	1 ea	138,600.00	138,600
	Fire Pump and Vault	1 ea	80,850.00	80,850
	Salt Shed	1 ea	440,000.00	440,000
	Subtotal	<b>\$812.06 /SF</b>		<b>\$18,787,095</b>

PROJECT: Department of Public Works  
 Truro, MA  
 Option 1 - Consolidated Option

GAA: 23,135 SF



Code	Item Description	Quantity	Unit Price	Total
<b>Escalation &amp; Design Contingency</b>				
Opt-in Energy Code	7% of Building Cost	1 ls	932,330.00	932,330
	Subtotal	<b>\$852.36 /SF</b>		19,719,425
Location Factor	Truro, Cape Cod		10.00%	1,971,943
	Subtotal	<b>\$937.60 /SF</b>		21,691,368
Design Contingency			10.00%	2,169,137
	Subtotal	<b>\$1,031.36 /SF</b>		23,860,505
Escalation to Bid Date	6/1/2026		10.47%	2,498,195
		<b>\$1,139.34 /SF</b>		26,358,700
Escalation to Mid-Point	6/1/2027		3.50%	922,555
	<b>TOTAL COST</b>	<b>\$1,179.22 /SF</b>		<b>\$27,281,255</b>
<b>Owner's Soft Costs</b>				
	<b>\$7,870,773</b>		28.85%	
A&E Fees (design, bid, const.)			8.00%	2,108,696.00
A&E Special Services			1.50%	395,381.00
Owner's Project Manager Fees			4.00%	1,054,348
Furnishings (FFE)	1 ea			200,000.00
Communications/Low Voltage System	1 ea			400,000.00
Temporary Facilities	1 ea			480,000.00
Engineering for Water Line from Snow's Field	1 ea			131,198.00
Phase 2 Environmental Survey	1 ea			35,280.00
Printing Cost - Advertisement	1 ea			20,000.00
Legal Costs	1 ea			50,000.00
Utility Backcharges	1 ea			100,000.00
Commissioning	1 ea			95,000.00
Moving Costs	1 ea			40,000.00
Construction Tests & Inspections	1 ea			125,000.00
Owner's Contingency			5.00%	1,317,935
Construction Contingency			5.00%	1,317,935
	<b>TOTAL PROJECT COST</b>	<b>\$1,519.43 /SF</b>		<b>\$35,152,028</b>

PROJECT: Department of Public Works  
 Truro, MA  
 Option 2 - Campus Buildings

GAA: 20,250 SF



Code	Item Description	Quantity	Unit Price	Total
<b>CONCEPT ESTIMATE (OPTION - 2)</b>				\$
<b>New Building Construction</b>		<b>\$14,314,500</b>	<b>\$706.89 /SF</b>	
	Administration Offices/Office Support	1,450 sf	578.00	838,100
	Employee Facilities	1,500 sf	605.00	907,500
	Shops	1,350 sf	633.00	854,550
	Vehicle Maintenance (not including equipment)	4,200 sf	633.00	2,658,600
	Wash	1,250 sf	688.00	860,000
	Vehicle/Equipment Storage	10,500 sf	358.00	3,759,000
	Ground Improvements (based on 1st floor area)	24,100 sf	33.00	795,300
	Assumed Mezzanines Area	5,350 sf	220.00	1,177,000
	Open Canopy Storage (SF)	3,850 sf	289.00	1,112,650
	Added Cost for Campus Configuration (added siding, OH doors, foundation)	1 ls	1,351,800.00	1,351,800
<b>Industrial Equipment</b>		<b>\$797,500</b>	<b>\$39.38 /SF</b>	
	Manual Wash Equipment	1 ea	115,500.00	115,500
	Automatic Undercarriage Wash	1 ea	88,000.00	88,000
	Heavy Duty Mobile Column Lifts	1 ea	104,500.00	104,500
	Two Post Vehicle Lift (16,000 lb)	1 ea	71,500.00	71,500
	Bridge Crane	1 ea	121,000.00	121,000
	Overhead Fluid Distribution and Waste Fluid Collection System	1 ea	148,500.00	148,500
	Miscellaneous Shop and Support Equipment	0.5 ea	82,500.00	41,250
	Storage Shelving/Benches/Racks - Defer Partial	0.5 ea	60,500.00	30,250
	Exhaust Removal System	2 ea	38,500.00	77,000
<b>Fuel System</b>		<b>\$60,500</b>	<b>\$2.99 /SF</b>	
	Fuel Island Electrical	1 ea	60,500.00	60,500
<b>Site Development</b>		<b>\$3,497,450</b>	<b>\$172.71 /SF</b>	
	Site Development (assumes level site with no contamination, existing structures/utilities, etc.) - see site specific detailed backup	2.2 acres	605,000.00	1,331,000
	Specialty Site Work (fill, retaining walls, demo, stormwater, etc.)	1 ls	1,045,000.00	1,045,000
	Water Line Construction from Snow's Field	1 ls	462,000.00	462,000
	Cistern (20,000 gal tank and piping)	1 ea	138,600.00	138,600
	Fire Pump and Vault	1 ea	80,850.00	80,850
	Salt Shed	1 ea	440,000.00	440,000
Subtotal		<b>\$921.97 /SF</b>		<b>\$18,669,950</b>

PROJECT: Department of Public Works  
 Truro, MA  
 Option 2 - Campus Buildings

GAA: 20,250 SF



Code	Item Description	Quantity	Unit Price	Total
<b>Escalation &amp; Design Contingency</b>				
	Opt-in Energy Code	7% of Building Cost	1 ls	848,722.00
				848,722
	Subtotal		<b>\$963.89 /SF</b>	19,518,672
	Location Factor	Truro, Cape Cod	10.00%	1,951,867
	Subtotal		<b>\$1,060.27 /SF</b>	21,470,539
	Design Contingency		10.00%	2,147,054
	Subtotal		<b>\$1,166.30 /SF</b>	23,617,593
	Escalation to Bid Date	6/1/2026	10.47%	2,472,762
			<b>\$1,288.41 /SF</b>	26,090,355
	Escalation to Mid-Point	6/1/2027	3.50%	913,162
	<b>TOTAL COST</b>		<b>\$1,333.51 /SF</b>	<b>\$27,003,517</b>
<b>Owner's Soft Costs</b>				
		<b>\$7,632,711</b>	28.27%	
	A&E Fees (design, bid, const.)		8.00%	2,087,228.00
				2,087,228
	A&E Special Services		1.50%	391,355.00
				391,355
	Owner's Project Manager Fees		4.00%	1,043,614
	Furnishings (FFE)	1 ea		175,000.00
				175,000
	Communications/Low Voltage System	1 ea		350,000.00
				350,000
	Temporary Facilities	1 ea		420,000.00
				420,000
	Engineering for Water Line from Snow's Field	1 ea		131,198.00
				131,198
	Phase 2 Environmental Survey	1 ea		35,280.00
				35,280
	Printing Cost - Advertisement	1 ea		20,000.00
				20,000
	Legal Costs	1 ea		50,000.00
				50,000
	Utility Backcharges	1 ea		88,000.00
				88,000
	Commissioning	1 ea		83,000.00
				83,000
	Moving Costs	1 ea		40,000.00
				40,000
	Construction Tests & Inspections	1 ea		109,000.00
				109,000
	Owner's Contingency		5.00%	1,304,518
	Construction Contingency		5.00%	1,304,518
	<b>TOTAL PROJECT COST</b>		<b>\$1,710.43 /SF</b>	<b>\$34,636,228</b>

PROJECT: Department of Public Works  
 Truro, MA  
 Option 3 - Campus Buildings

GAA: 14,800 SF



Code	Item Description	Quantity	Unit Price	Total
<b>CONCEPT ESTIMATE (OPTION - 3)</b>				\$
<b>New Building Construction</b>		<b>\$10,056,864</b>	<b>\$874.51 /SF</b>	
	Administration Offices/Office Support	2,000 sf	578.00	1,156,000
	Employee Facilities	0 sf	605.00	0
	Shops	0 sf	633.00	0
	Vehicle Maintenance (not including equipment)	3,500 sf	633.00	2,215,500
	Wash	0 sf	688.00	0
	Vehicle/Equipment Storage	6,000 sf	358.00	2,148,000
	Ground Improvements (based on 1st floor area)	15,025 sf	33.00	495,825
	Assumed Mezzanines Area	3,167 sf	220.00	696,740
	Open Canopy Storage (SF)	3,525 sf	289.00	1,018,725
	Added Cost for Campus Configuration (added siding, OH doors, foundation)	1 ls	761,874.00	761,874
<b>Renovation</b>		<b>\$2,009,700</b>	<b>\$609.00 /SF</b>	
	Shops Renovation (clean/h&v/elec/walls)	3,300 sf	474.00	1,564,200
<b>Industrial Equipment</b>		<b>\$594,000</b>	<b>\$40.14 /SF</b>	
	Manual Wash Equipment	0 ea	115,500.00	0
	Automatic Undercarriage Wash	0 ea	88,000.00	0
	Heavy Duty Mobile Column Lifts	1 ea	104,500.00	104,500
	Two Post Vehicle Lift (16,000 lb)	1 ea	71,500.00	71,500
	Bridge Crane	1 ea	121,000.00	121,000
	Overhead Fluid Distribution and Waste Fluid Collection System	1 ea	148,500.00	148,500
	Miscellaneous Shop and Support Equipment	0.5 ea	82,500.00	41,250
	Storage Shelving/Benches/Racks - Defer Partial	0.5 ea	60,500.00	30,250
	Exhaust Removal System	2 ea	38,500.00	77,000
<b>Fuel System</b>		<b>\$60,500</b>	<b>\$4.09 /SF</b>	
	Fuel Island Electrical	1 ea	60,500.00	60,500
<b>Site Development</b>		<b>\$3,497,450</b>	<b>\$236.31 /SF</b>	
	Site Development (assumes level site with no contamination, existing structures/utilities, etc.) - see site specific detailed backup	2.2 acres	605,000.00	1,331,000
	Specialty Site Work (fill, retaining walls, demo, stormwater, etc.)	1 ls	1,045,000.00	1,045,000
	Water Line Construction from Snow's Field	1 ls	462,000.00	462,000
	Cistern (20,000 gal tank and piping)	1 ea	138,600.00	138,600
	Fire Pump and Vault	1 ea	80,850.00	80,850
	Salt Shed	1 ea	440,000.00	440,000
Subtotal		<b>\$960.06 /SF</b>		\$14,208,814



PROJECT: Department of Public Works  
Truro, MA  
Option 3 - Campus Buildings

GAA: 14,800 SF



Code	Item Description	Quantity	Unit Price	Total
<b>Escalation &amp; Design Contingency</b>				
Opt-in Energy Code	7% of Building Cost	1 ls	632,670.00	632,670
	Subtotal	<b>\$1,002.80 /SF</b>		14,841,484
Location Factor	Truro, Cape Cod		10.00%	1,484,148
	Subtotal	<b>\$1,103.08 /SF</b>		16,325,632
Design Contingency			10.00%	1,632,563
	Subtotal	<b>\$1,213.39 /SF</b>		17,958,195
Escalation to Bid Date	6/1/2026		10.47%	1,880,223
		<b>\$1,340.43 /SF</b>		19,838,418
Escalation to Mid-Point	6/1/2027		3.50%	694,345
	<b>TOTAL COST</b>	<b>\$1,387.35 /SF</b>		<b>\$20,532,763</b>
<b>Owner's Soft Costs</b>				
	<b>\$5,834,506</b>		28.42%	
A&E Fees (design, bid, const.)			8.00%	1,587,073.00
A&E Special Services			1.50%	297,576.00
Owner's Project Manager Fees			4.00%	793,537
Furnishings (FFE)	1 ea		128,000.00	128,000
Communications/Low Voltage System	1 ea		256,000.00	256,000
Temporary Facilities	1 ea		307,000.00	307,000
Engineering for Water Line from Snow's Field	1 ea		131,198.00	131,198
Phase 2 Environmental Survey	1 ea		35,280.00	35,280
Printing Cost - Advertisement	1 ea		20,000.00	20,000
Legal Costs	1 ea		50,000.00	50,000
Utility Backcharges	1 ea		64,000.00	64,000
Commissioning	1 ea		61,000.00	61,000
Moving Costs	1 ea		40,000.00	40,000
Construction Tests & Inspections	1 ea		80,000.00	80,000
Owner's Contingency			5.00%	991,921
Construction Contingency			5.00%	991,921
	<b>TOTAL PROJECT COST</b>	<b>\$1,781.57 /SF</b>		<b>\$26,367,269</b>

PROJECT: Department of Public Works  
 Truro, MA  
 Option 4 - Drive Thru Campus Buildings

GAA: 16,600 SF



Code	Item Description	Quantity	Unit Price	Total
<b>CONCEPT ESTIMATE (OPTION - 4)</b>				\$
<b>New Building Construction</b>		<b>\$10,859,487</b>	<b>\$816.50 /SF</b>	
	Administration Offices/Office Support	2,000 sf	578.00	1,156,000
	Employee Facilities	0 sf	605.00	0
	Shops	0 sf	633.00	0
	Vehicle Maintenance (not including equipment)	3,500 sf	633.00	2,215,500
	Wash	0 sf	688.00	0
	Vehicle/Equipment Storage	7,800 sf	358.00	2,792,400
	Ground Improvements (based on 1st floor area)	16,450 sf	33.00	542,850
	Assumed Mezzanines Area	3,767 sf	220.00	828,740
	Open Canopy Storage (SF)	3,150 sf	289.00	910,350
	Added Cost for Campus Configuration (added siding, OH doors, foundation)	1 ls	849,447.00	849,447
<b>Renovation</b>		<b>\$2,009,700</b>	<b>\$609.00 /SF</b>	
	Shops Renovation (clean/h&v/elec/walls)	3,300 sf	474.00	1,564,200
<b>Industrial Equipment</b>		<b>\$594,000</b>	<b>\$35.78 /SF</b>	
	Manual Wash Equipment	0 ea	115,500.00	0
	Automatic Undercarriage Wash	0 ea	88,000.00	0
	Heavy Duty Mobile Column Lifts	1 ea	104,500.00	104,500
	Two Post Vehicle Lift (16,000 lb)	1 ea	71,500.00	71,500
	Bridge Crane	1 ea	121,000.00	121,000
	Overhead Fluid Distribution and Waste Fluid Collection System	1 ea	148,500.00	148,500
	Miscellaneous Shop and Support Equipment	0.5 ea	82,500.00	41,250
	Storage Shelving/Benches/Racks - Defer Partial	0.5 ea	60,500.00	30,250
	Exhaust Removal System	2 ea	38,500.00	77,000
<b>Fuel System</b>		<b>\$60,500</b>	<b>\$3.64 /SF</b>	
	Fuel Island Electrical	1 ea	60,500.00	60,500
<b>Site Development</b>		<b>\$3,497,450</b>	<b>\$210.69 /SF</b>	
	Site Development (assumes level site with no contamination, existing structures/utilities, etc.) - see site specific detailed backup	2.2 acres	605,000.00	1,331,000
	Specialty Site Work (fill, retaining walls, demo, stormwater, etc.)	1 ls	1,045,000.00	1,045,000
	Water Line Construction from Snow's Field	1 ls	462,000.00	462,000
	Cistern (20,000 gal tank and piping)	1 ea	138,600.00	138,600
	Fire Pump and Vault	1 ea	80,850.00	80,850
	Salt Shed	1 ea	440,000.00	440,000
Subtotal		<b>\$904.30 /SF</b>		\$15,011,437

PROJECT: Department of Public Works  
Truro, MA  
Option 4 - Drive Thru Campus Buildings

GAA: 16,600 SF



Code	Item Description	Quantity	Unit Price	Total
<b>Escalation &amp; Design Contingency</b>				
	Opt-in Energy Code	7% of Building Cost	1 ls	696,440.00
				696,440
	Subtotal		<b>\$946.26 /SF</b>	15,707,877
	Location Factor	Truro, Cape Cod	10.00%	1,570,788
	Subtotal		<b>\$1,040.88 /SF</b>	17,278,665
	Design Contingency		10.00%	1,727,867
	Subtotal		<b>\$1,144.97 /SF</b>	19,006,532
	Escalation to Bid Date	6/1/2026	10.47%	1,989,984
			<b>\$1,264.85 /SF</b>	20,996,516
	Escalation to Mid-Point	6/1/2027	3.50%	734,878
	<b>TOTAL COST</b>		<b>\$1,309.12 /SF</b>	<b>\$21,731,394</b>
	<b>Owner's Soft Costs</b>		<b>\$6,215,660</b>	28.60%
	A&E Fees (design, bid, const.)		8.00%	1,679,721.00
				1,679,721
	A&E Special Services		1.50%	314,948.00
				314,948
	Owner's Project Manager Fees		4.00%	
				839,861
	Furnishings (FFE)	1 ea		144,000.00
				144,000
	Communications/Low Voltage System	1 ea		287,000.00
				287,000
	Temporary Facilities	1 ea		344,000.00
				344,000
	Engineering for Water Line from Snow's Field	1 ea		131,198.00
				131,198
	Phase 2 Environmental Survey	1 ea		35,280.00
				35,280
	Printing Cost - Advertisement	1 ea		20,000.00
				20,000
	Legal Costs	1 ea		50,000.00
				50,000
	Utility Backcharges	1 ea		72,000.00
				72,000
	Commissioning	1 ea		68,000.00
				68,000
	Moving Costs	1 ea		40,000.00
				40,000
	Construction Tests & Inspections	1 ea		90,000.00
				90,000
	Owner's Contingency		5.00%	1,049,826
	Construction Contingency		5.00%	1,049,826
	<b>TOTAL PROJECT COST</b>		<b>\$1,683.56 /SF</b>	<b>\$27,947,054</b>

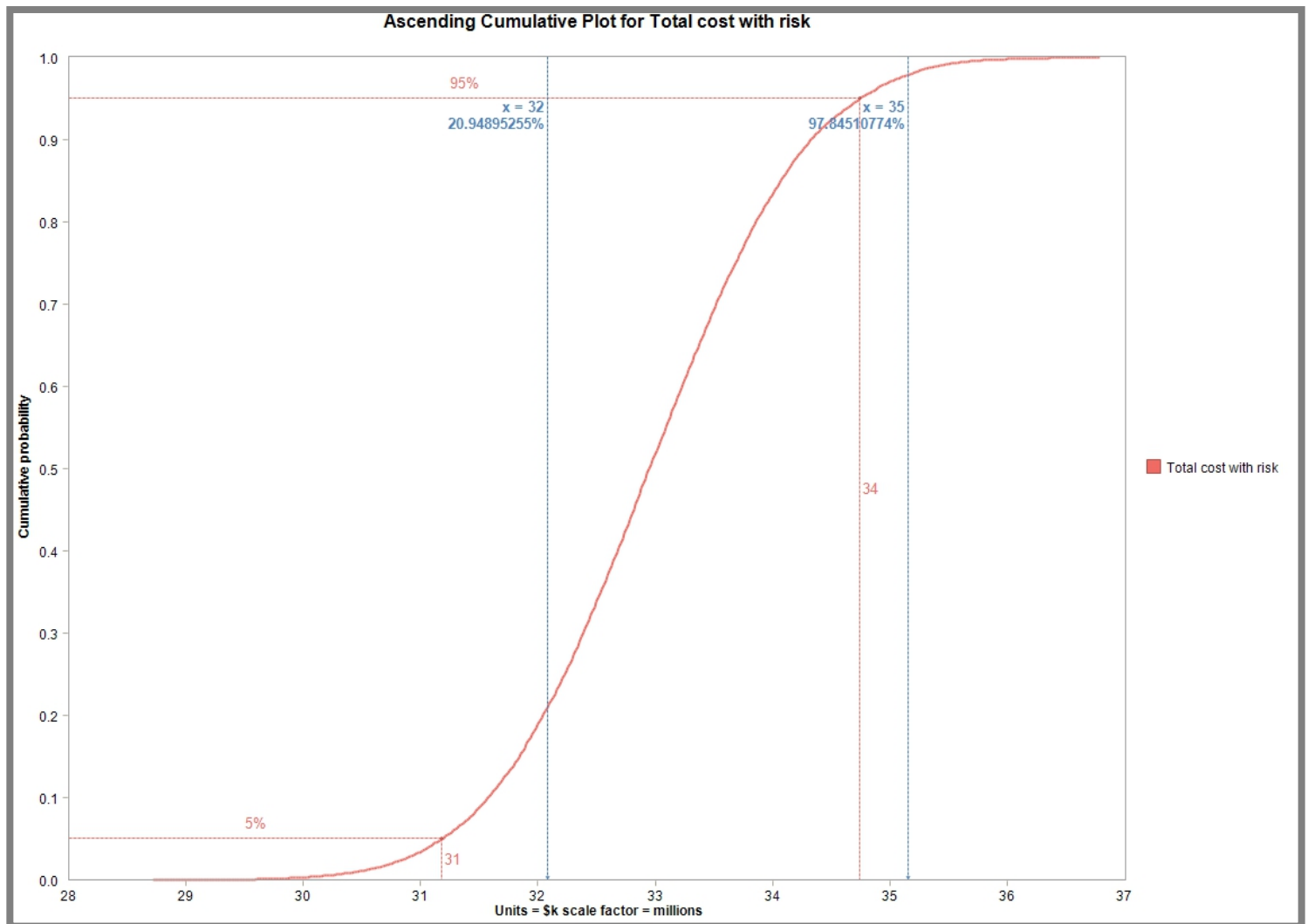
# Simulation Report

## Summary

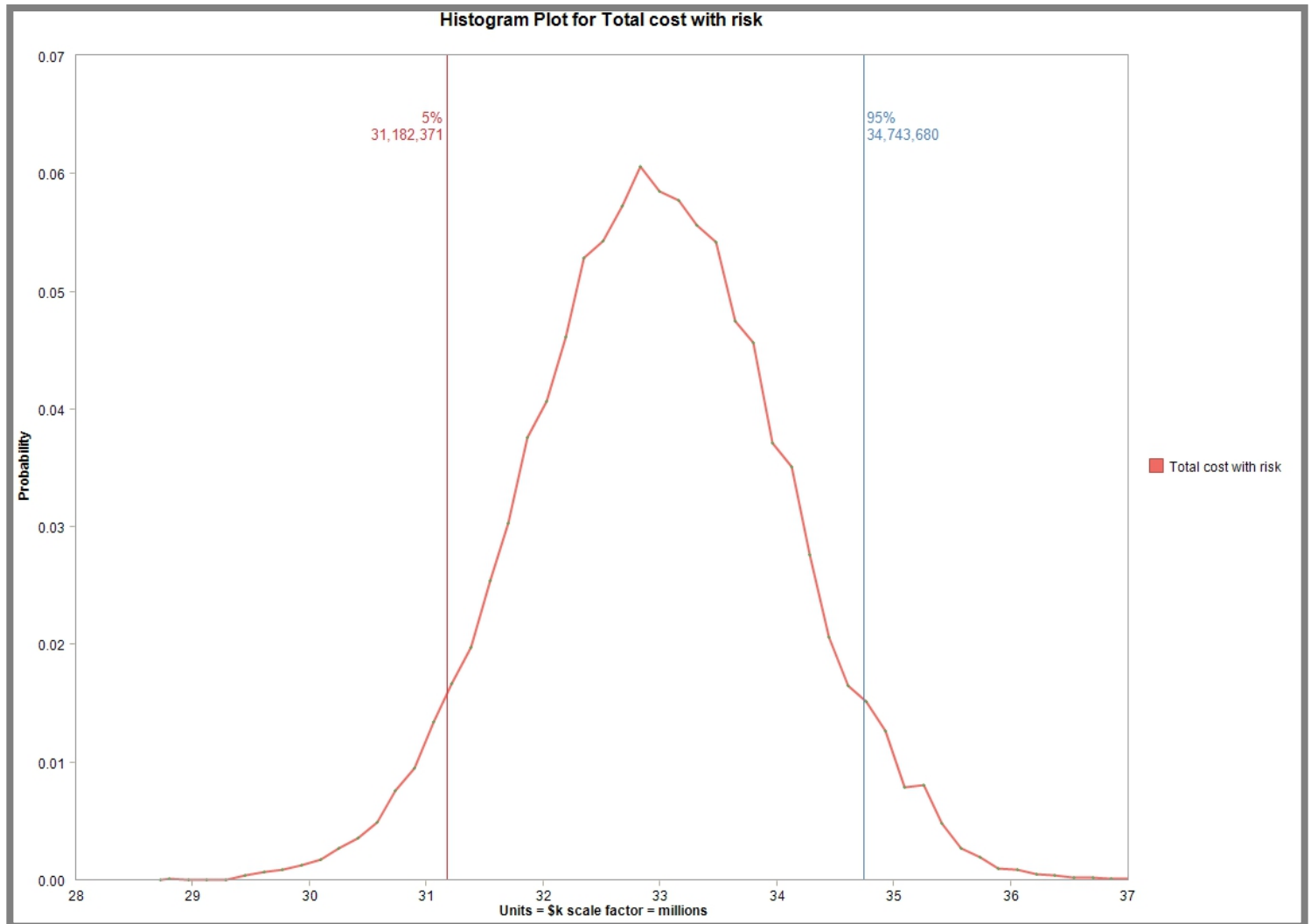
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Date last modified	2/10/2025
Author	Chris Caligari
# of simulations	1
# of sheets in the report	6
Number of Inputs	27
Number of Outputs	1
Simulations Start Time	2/10/2025 6:19:50 PM
Simulations End Time	2/10/2025 6:20:28 PM
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Simulation Name	Number of samples	Seed
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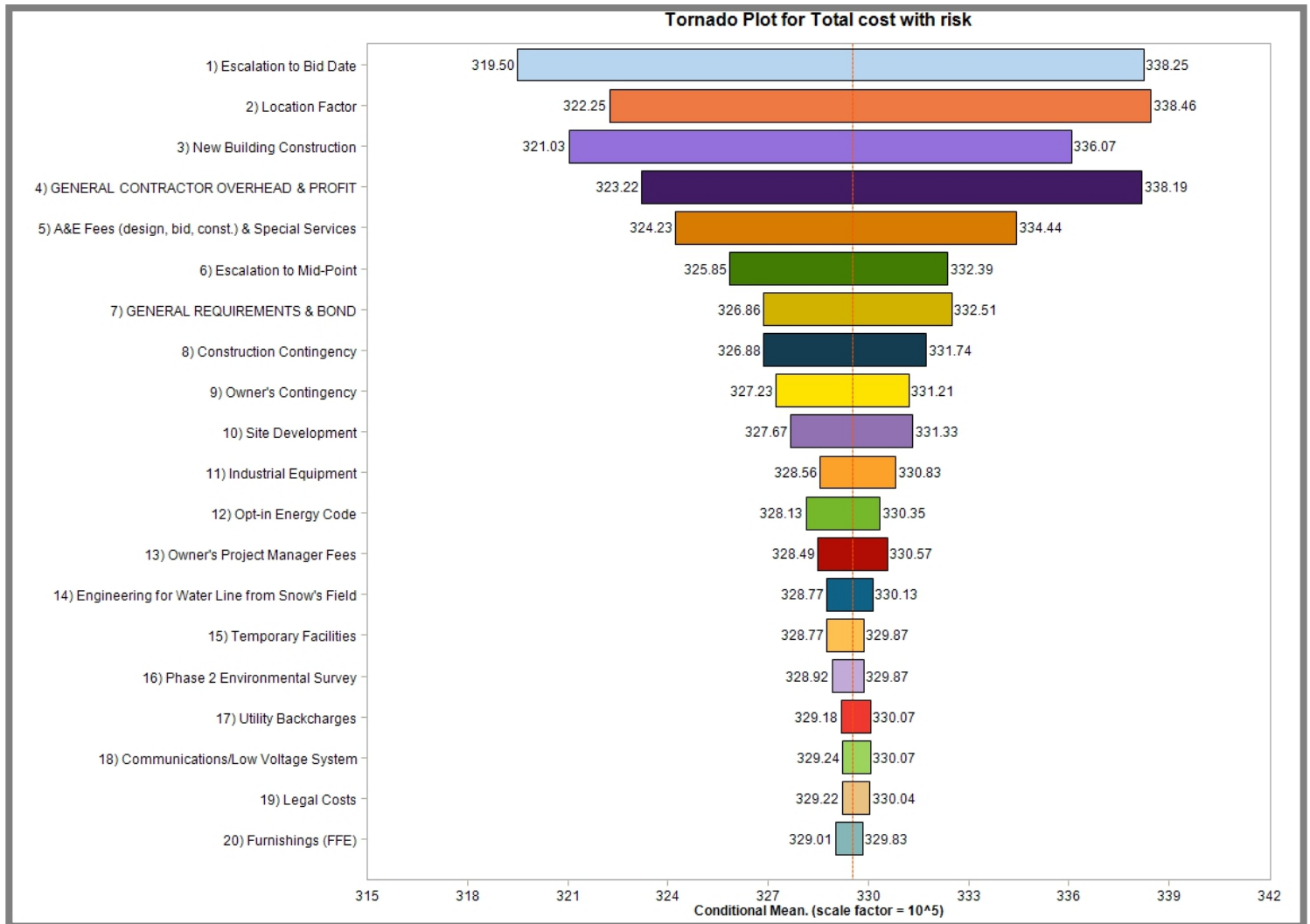
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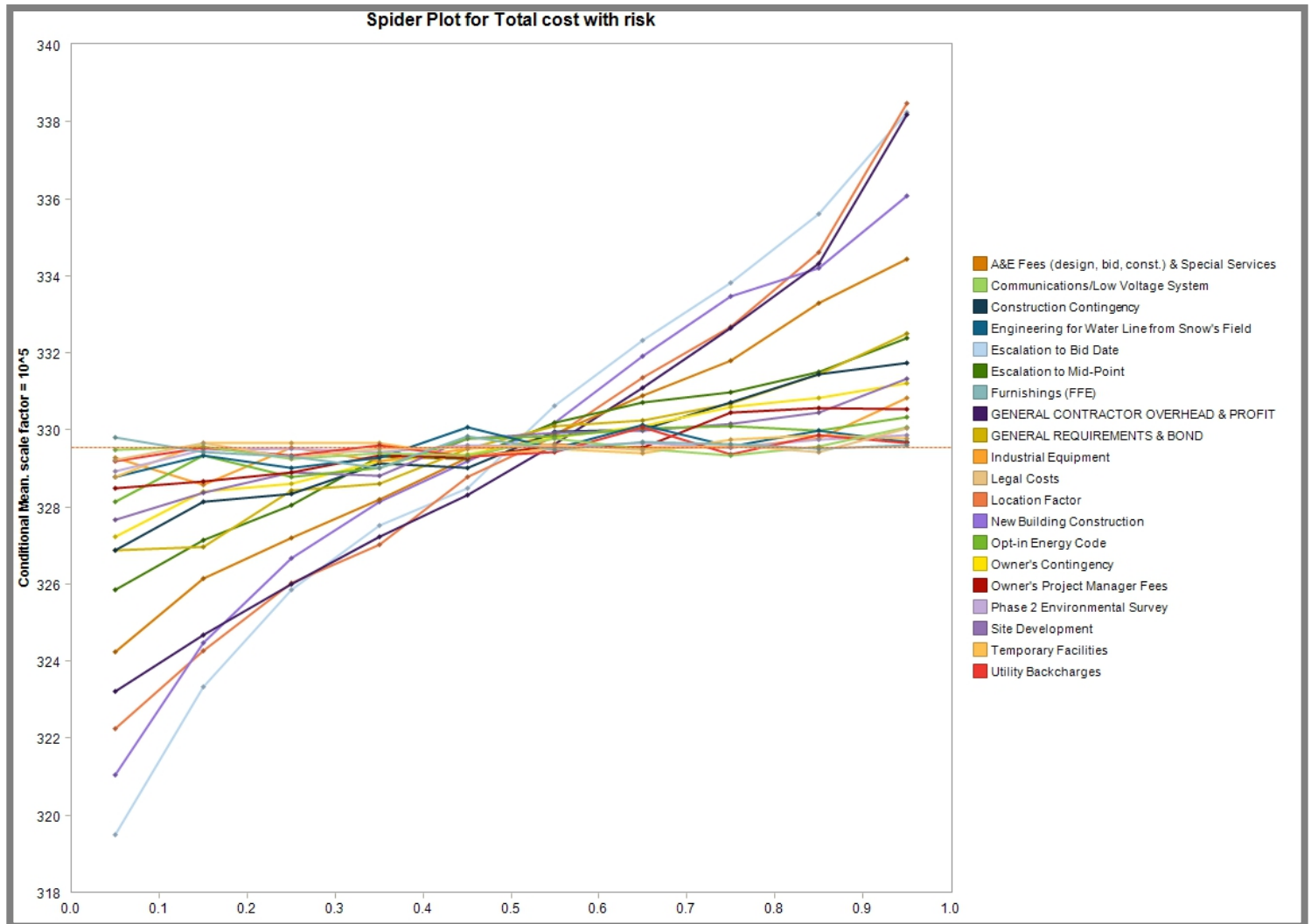
# Histogram



# Tornado



# Spider





## List

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