HARRIMAN

AGENDA

COA Review
- Staking of the proposed building on 12-20-2017

Cost Estimate reviews
- COA
- DPW

Library test fit

10 Elm Street updates

188 Washington

Fire Department

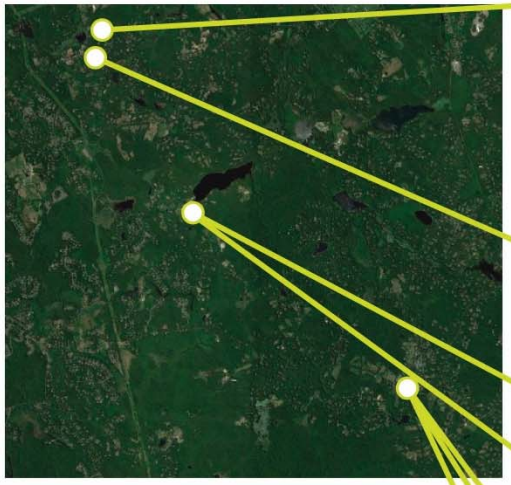
Major Changes required for the Public Forum

TOWN OF BOXFORD

Targeted Facilities Masterplan

17 January 2018

MAP OF BOXFORD, MA



1. 585 Main Street

2. 188 Washington Street

3. 7A Spofford Road

4. 7B Spofford Road

5. 4 Middleton Road

6. 6 Middleton Road

7. 10 Elm Street

COA BUILDING LOCATION

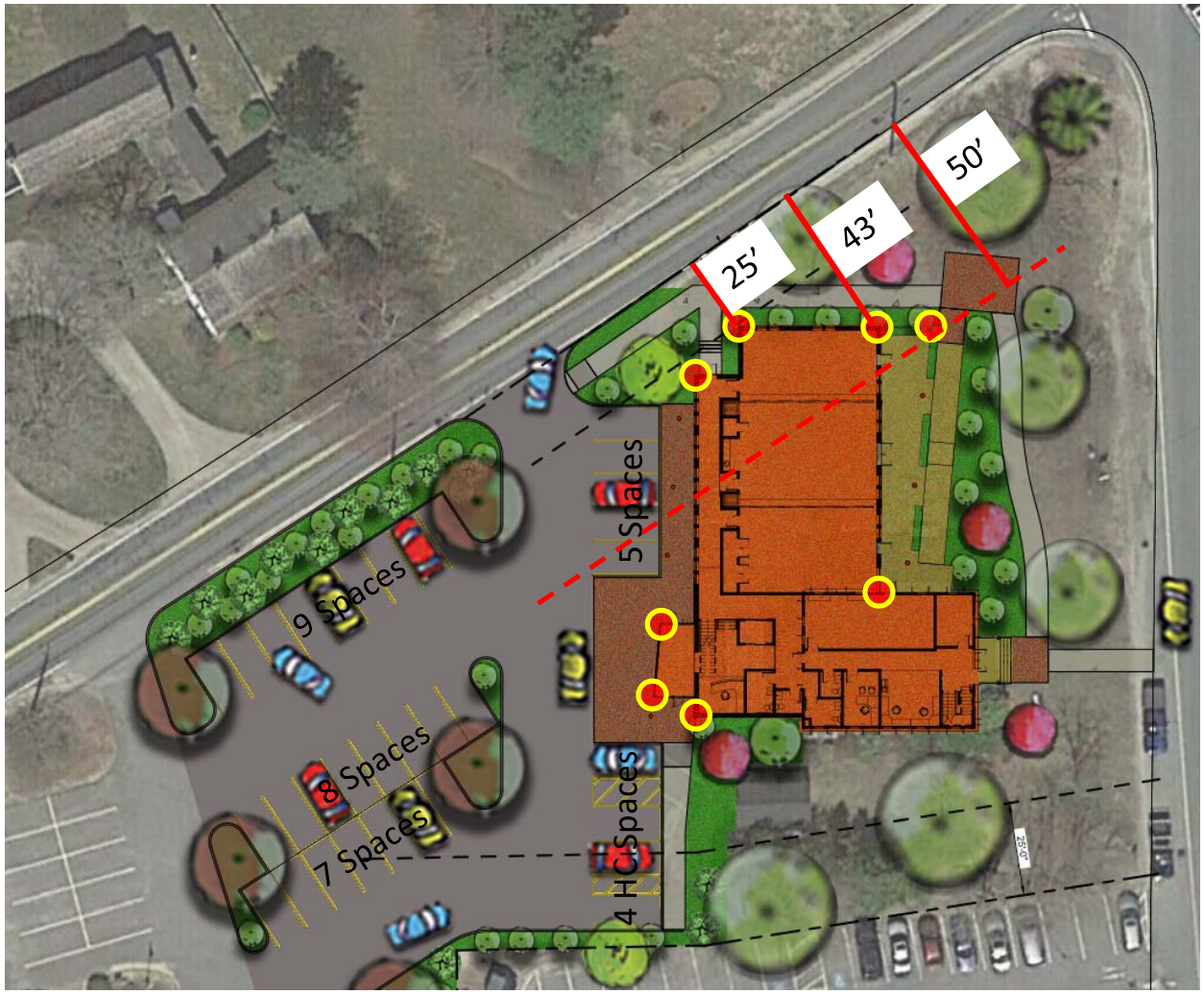
- Stakes were set at lawn locations and are labeled with a black marker.
- Footprint corners at existing parking lot were marked with white paint.
- Stakes with orange painted tops are snowplow markers and do not represent any part of the proposed building. These are not shown in this diagram.

Building Stake Location

COA BUILDING LOCATION

Proposed Footprint was staked on 12-20-2017

- Stakes were set at lawn locations and are labeled with a black marker.
- Footprint corners at existing parking lot were marked with white paint.
- Stakes with orange painted tops are snowplow markers and do not represent any part of the proposed building. These are not shown in this diagram.



Building Stake Location

Measured distance (in feet) from face of building to edge of pavement

COA BUILDING LOCATION

Proposed Footprint was staked on 12-20-2017

Measured distance (in feet) from face of building to edge of pavement

COA BUILDING LOCATION

Comparison/Clarification of Holyoke-French House Street Setback

COA CONCEPT BUDGET

COUNCIL ON AGING BOXFORD, MA				CONCEPT ESTIMATE
PREFERRED CONSTRUCTION MANAGEMENT			PROJ. NO:	22-076
			REVISION:	1
NEW	5730 sf		EST DATE:	12/6/2017
RENOVATED	3370 sf		GROSS SF:	9100

DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL COST
GENERAL CONDITIONS	9,100	SF	$ -	$ -
DIVISION 2 - INTERIOR DEMOLITION	9,100	SF	$ 5.79	$ 52,720.00
DIVISION 2 - SITE WORK	9,100	SF	$ 57.16	$ 520,180.68
DIVISION 3 - BUILDING CONCRETE	9,100	SF	$ 15.18	$ 138,174.41
DIVISION 4 - MASONRY	9,100	SF	$ 2.12	$ 19,300.00
DIVISION 5 - STEEL	9,100	SF	$ 1.40	$ 12,700.00
DIVISION 6 - CARPENTRY	9,100	SF	$ 25.52	$ 232,205.80
DIVISION 7 - THERMAL MOISTURE PROTECTION	9,100	SF	$ 28.67	$ 260,851.50
DIVISION 8 - DOORS AND HARDWARE	9,100	SF	$ 17.32	$ 157,625.00
DIVISION 9 - FINISHES	9,100	SF	$ 19.11	$ 173,904.40
DIVISION 10 - SPECIALTIES	9,100	SF	$ 8.93	$ 81,232.50
DIVISION 11 - EQUIPMENT	9,100	SF	$ 10.99	$ 100,000.00
DIVISION 12 - FURNISHINGS	9,100	SF	$ 0.90	$ 8,200.00
DIVISION 12 - CASEWORK AND MILLWORK	9,100	SF	$ 5.65	$ 51,425.00
DIVISION 13 - SPECIAL CONSTRUCTION	9,100	SF	$ -	$ -
DIVISION 14 - CONVEYING	9,100	SF	$ 10.44	$ 95,000.00
DIVISION 21 - SPRINKLER	9,100	SF	$ -	$ -
DIVISION 22 - PLUMBING	9,100	SF	$ 12.58	$ 114,490.00
DIVISION 23 - HVAC	9,100	SF	$ 33.35	$ 303,528.24
DIVISION 26 - ELECTRICAL	9,100	SF	$ 39.48	$ 359,304.00
BLDG. CONSTR. SUBTOTAL	**9,100**	**SF**	**$ 294.60**	**$ 2,680,842**
GENERAL CONDITIONS	12.00	%		$ 321,701
BLDG. CONSTR. SUB TOTAL	**9,100**	**SF**	$ 329.95	**$ 3,002,543**
OVERHEAD AND PROFIT	5.00	%		$ 150,127
BLDG. CONSTR. SUB TOTAL	**9,100**	**SF**	$ 346.45	**$ 3,152,670**
CONTINGENCY	7.00	%		$ 220,687
BLDG. CONSTR. SUB TOTAL	**9,100**	**SF**	$ 370.70	**$ 3,373,357**
BOND AND INSURANCE	2.00	%		$ 67,467
BLDG. CONSTR. SUB TOTAL	**9,100**	**SF**	$ 378.11	**$ 3,440,824**
ESCALATION - *ASSUME SPRING 2019 START*	6.00	%		$ 206,449
BLDG. CONSTR. GRAND TOTAL	**9,100**	**SF**	$ 400.80	**$ 3,647,273**

ALTERNATE 1 - SPRINKLER SYSTEM INCLUDING HOLDING TANK	9,100	SF	$ 9.33	$ 84,875.00
BLDG. CONSTR. SUBTOTAL	**9,100**	**SF**	$ 9.33	**$ 84,875**
GENERAL CONDITIONS	12.00	%		$ 10,185
BLDG. CONSTR. SUB TOTAL	**9,100**	**SF**	$ 10.45	**$ 95,060**
OVERHEAD AND PROFIT	5.00	%		$ 4,753
BLDG. CONSTR. SUB TOTAL	**9,100**	**SF**	$ 10.97	**$ 99,813**
CONTINGENCY	7.00	%		$ 6,987
BLDG. CONSTR. SUB TOTAL	**9,100**	**SF**	$ 11.74	**$ 106,800**
BOND AND INSURANCE	2.00	%		$ 2,136
BLDG. CONSTR. SUB TOTAL	**9,100**	**SF**	$ 11.97	**$ 108,936**
ESCALATION - ASSUME SPRING 2019 START	6.00	%		$ 6,536
ALTERNATE 1 - SPRINKLER SYSTEM INCLUDING HOLDING TANK	**9,100**	**SF**	$ 12.69	**$ 115,472**

ALTERNATE 2 - EMERGENCY GENERATOR	9,100	SF	$ 8.79	$ 80,000.00
BLDG. CONSTR. SUBTOTAL	**9,100**	**SF**	$ 8.79	**$ 80,000**
GENERAL CONDITIONS	12.00	%		$ 9,600
BLDG. CONSTR. SUB TOTAL	**9,100**	**SF**	$ 9.85	**$ 89,600**
OVERHEAD AND PROFIT	5.00	%		$ 4,480
BLDG. CONSTR. SUB TOTAL	**9,100**	**SF**	$ 10.34	**$ 94,080**
CONTINGENCY	7.00	%		$ 6,586
BLDG. CONSTR. SUB TOTAL	**9,100**	**SF**	$ 11.06	**$ 100,666**
BOND AND INSURANCE	2.00	%		$ 2,013
BLDG. CONSTR. SUB TOTAL	**9,100**	**SF**	$ 11.28	**$ 102,679**
ESCALATION - ASSUME SPRING 2019 START	6.00	%		$ 6,161
ALTERNATE 2 - EMERGENCY GENERATOR	**9,100**	**SF**	$ 11.96	**$ 108,840**

COA CONCEPT BUDGET

Detailed Construction Cost Breakdown: 12-06-2017

Town of Boxford **HARRIMAN**

Council on Aging - Conceptual Project Budget 8 December 2017

I. Construction			
Total Construction Costs			3,647,273
Alternate 1: Sprinkler including holding tank			115,472
Alternate 2: Emergency Generator			108,840
TOTAL			**$3,871,585**
II. Administrative Cost & Reserve			
Land			0
FF&E (budget)			75,000
Infrastructure Technology (budget)			50,000
Advertising/Printing			5,000
Insurance/Legal			5,000
Bid Contingency (7.5%)			290,369
Construction Contingency (7.5%)			290,369
TOTAL			**$715,738**
III. Fees & Services			
Architect/Engineer			
Basic A/E Services			
Schematic Design	12%	51,442	
Design Development	20%	85,736	
Construction Documents	40%	171,472	
Bidding and Negotiation	2%	8,574	
Construction Administration	24%	102,883	
Project Close Out	2%	8,574	
Total Basic Services Architect/Engineer	100%	428,681	428,681
Additional Services Fees (based on const cont)			29,908
FF&E Fee			12,000
TEL / Data Design			10,000
Fee for HDC and Planning Board Permitting (budget)			30,000
A/E Reimbursable			12,860
Survey/Soils/Borings			20,000
Construction Clerk / Observation (budget)			25,000
Special Inspections			15,000
Commissioning			20,000
Misc Fees and Expenses			25,000
Testing and Balancing			20,000
TOTAL			**$648,450**
Project Cost			**$5,235,772**

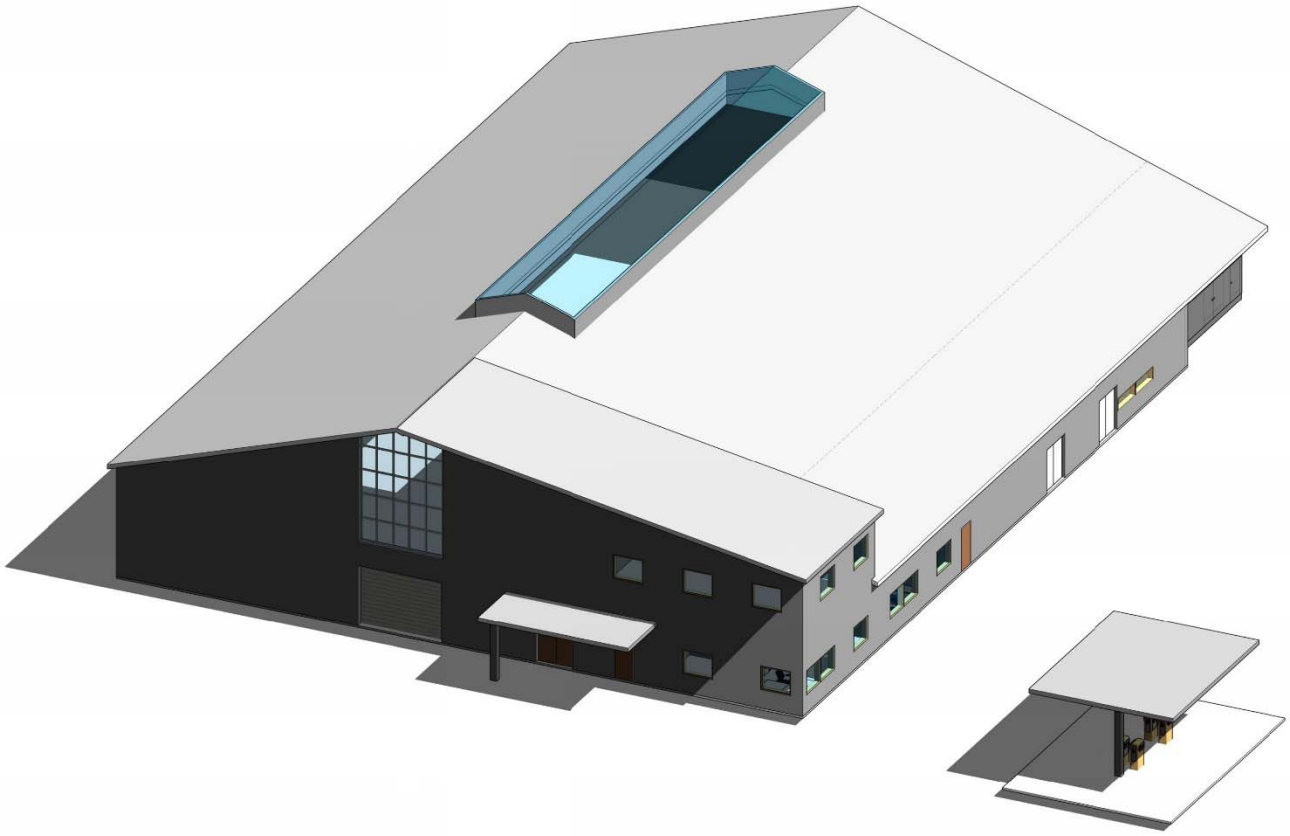
COA CONCEPT BUDGET

Total Project Cost Summary: 12-08-2017

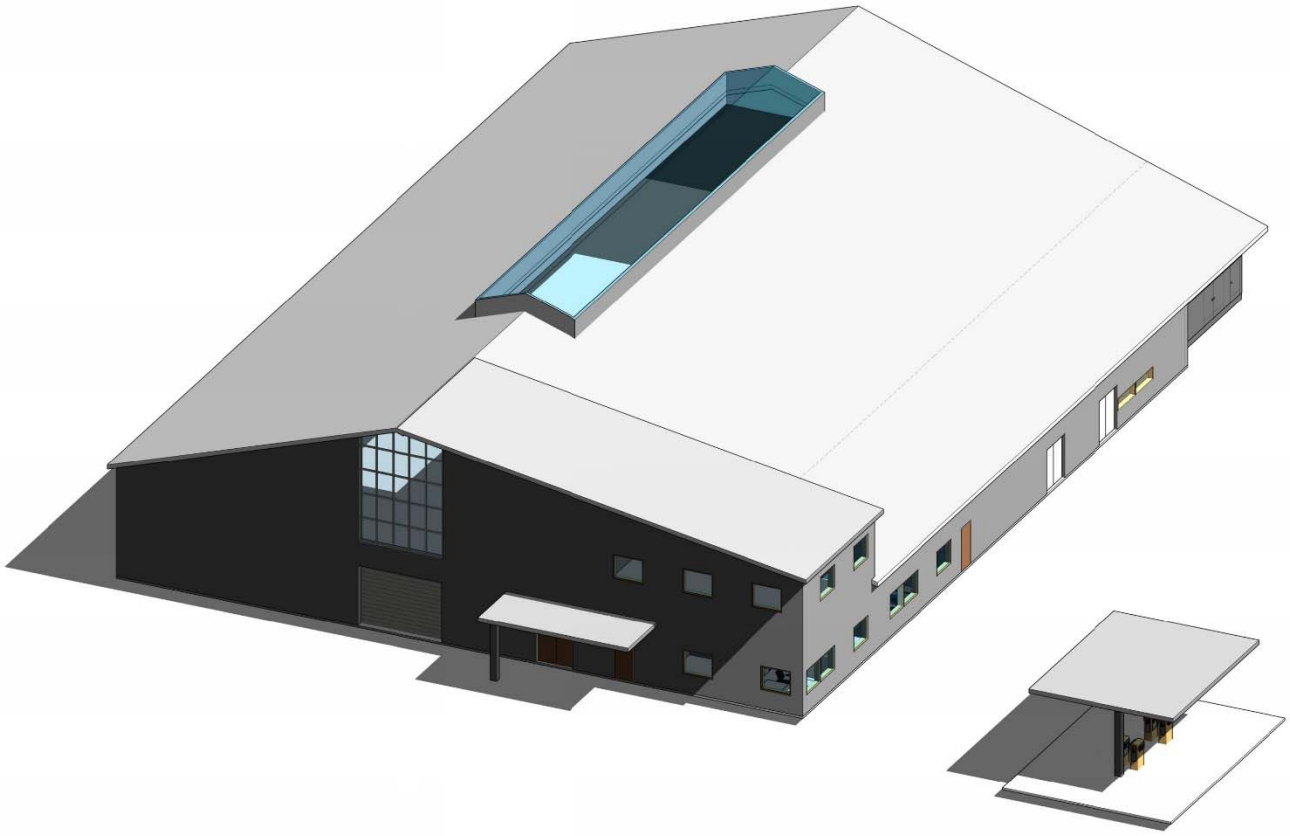
▪ **2009 Cost Estimate: Total Project:**	**$3,200,000**	
▪ 2010 + Year Escalation (6%):	$3,392,000	
▪ 2011 + Year Escalation (6%):	$3,595,520	(2011 Budget update: +/- $3,660,000)
▪ 2012 + Year Escalation (6%):	$3,811,251	
▪ 2013 + Year Escalation (6%):	$4,039,926	
▪ 2014 + Year Escalation (6%):	$4,282,322	
▪ 2015 + Year Escalation (6%):	$4,539,261	
▪ 2016 + Year Escalation (6%):	$4,811,617	
▪ 2017 + Year Escalation (6%):	$5,100,314	
▪ 2018 + Year Escalation (6%):	$5,406,333	
▪ 2019 + Year Escalation (6%):	$5,730,713	
▪ **2019 Current Concept Design:**	**$5,235,772**	(Within 9% of previous design cost when accounting for inflation/cost escalation)

COA CONCEPT BUDGET

Total Project Cost Comparison to 2009 & 2011 Estimates



DPW CONCEPT BUDGET: COST SAVING ALTERNATIVES



DPW CONCEPT BUDGET: COST SAVING ALTERNATIVES

DPW CONCEPT BUDGET: COST SAVING ALTERNATIVES

BASELINE COST ESTIMATE: SITE 1

- Concept Budget Presented 01-03-2018:
  - Construction cost: $5,926,081
    - Building size: 18,500 GSF
      - 4,225 SF Office, Meeting, Locker Spaces
      - 1,729 SF Maintenance, Support Spaces
      - 12,546 SF Vehicle Storage Spaces
      - New Fuel Island & Salt Barn
  - Total project cost: $7,387,925

- Preliminary Ideas to Reduce Budget to a target $5,000,000 Total Project Cost
  - Redesign facility to reduce overall size and reduce interior construction
  - Relocate facility to reduce road construction cost
  - Relocate facility to reduce environmental impact costs
  - Remove program elements such as salt barn and fuel island and leave in current location

COST REDUCTION OPTION: SITE 1

- Concept Budget Presented 01-03-2018:
  - Construction cost: $5,926,081
    - Building size: 18,500 GSF
      - 4,225 SF Office, Meeting, Locker Spaces
      - 1,729 SF Maintenance, Support Spaces
      - 12,546 SF Vehicle Storage Spaces
      - New Fuel Island & Salt Barn
  - Total project cost: $7,387,925

- Redesign facility to reduce overall size and reduce interior construction:
  - 8,000 SF Office, Meeting, Locker, Maintenance, Support, Vehicle Storage Spaces
    - 3,900 SF Office, Meeting, Locker Spaces
    - 1,700 SF Maintenance, Support Spaces
    - 2,400 SF Vehicle Storage Spaces
  - 8,000 SF '3 Sided' Vehicle Storage Spaces
  - New Fuel Island & Salt Barn
  - Construction Cost Assumption: $4,195,053
  - Total Project Cost: $5,434,890
  - Meet All Program Needs for DPW: Could Locate on Either Site

COST REDUCTION OPTION: RECYCLING AREA

- Concept Budget Presented 01-03-2018:
  - Construction cost: $5,926,081
    - Building size: 18,500 GSF
      - 4,225 SF Office, Meeting, Locker Spaces
      - 1,729 SF Maintenance, Support Spaces
      - 12,546 SF Vehicle Storage Spaces
      - New Fuel Island & Salt Barn
  - Total project cost: $7,387,925

- Redesign facility on Recycling Area Site to reduce access cost and reuse salt barn and fuel island
  - 10,000 SF Office, Meeting, Locker, Maintenance, Support, Vehicle Storage Spaces
  - 8,000 SF '3 Sided' Vehicle Storage Spaces
  - Construction Cost Assumption: $3,975,650
  - Total Project Cost: $5,163,927

- Redesign facility on Recycling Area Site to reduce access cost and reuse salt barn and fuel island
  - 10,000 SF Office, Meeting, Locker, Maintenance, Support, Vehicle Storage Spaces
  - 8,000 SF '3 Sided' Vehicle Storage Spaces
  - Construction Cost Assumption: $3,800,650
  - Total Project Cost: $4,947,802

Town of Boxford **HARRIMAN**

Department of Public Works - Conceptual Project Budget 03 January 2018

I. Construction			
Total Construction Costs			5,876,898
Alternate 1: Segment C driveway paving			49,183
Alternate 2:			0
TOTAL			**$5,926,081**
II. Administrative Cost & Reserve			
Land			0
FF&E (budget)			75,000
Infrastructure Technology (budget)			50,000
Advertising/Printing			5,000
Insurance/Legal			5,000
Bid Contingency (5%)			296,304
Construction Contingency (5%)			296,304
TOTAL			**$727,608**
III. Fees & Services			
Architect/Engineer			
Basic A/E Services			
Schematic Design	12%	56,001	
Design Development	20%	93,336	
Construction Documents	40%	186,672	
Bidding and Negotiation	2%	9,334	
Construction Administration	24%	112,003	
Project Close Out	2%	9,334	
Total Basic Services Architect/Engineer	100%	466,679	466,679
Additional Services Fees (based on const cont)			22,223
FF&E Fee			2,000
TEL / Data Design			10,000
Fee for Planning Board Permitting (budget)			30,000
A/E Reimbursable			23,334
Survey/Soils/Borings			50,000
Construction Clerk / Observation (budget)			25,000
Special Inspections			30,000
Commissioning			20,000
Misc Fees and Expenses			35,000
Testing and Balancing			20,000
TOTAL			**$734,236**
Project Cost			**$7,387,925**

DPW CONCEPT BUDGET

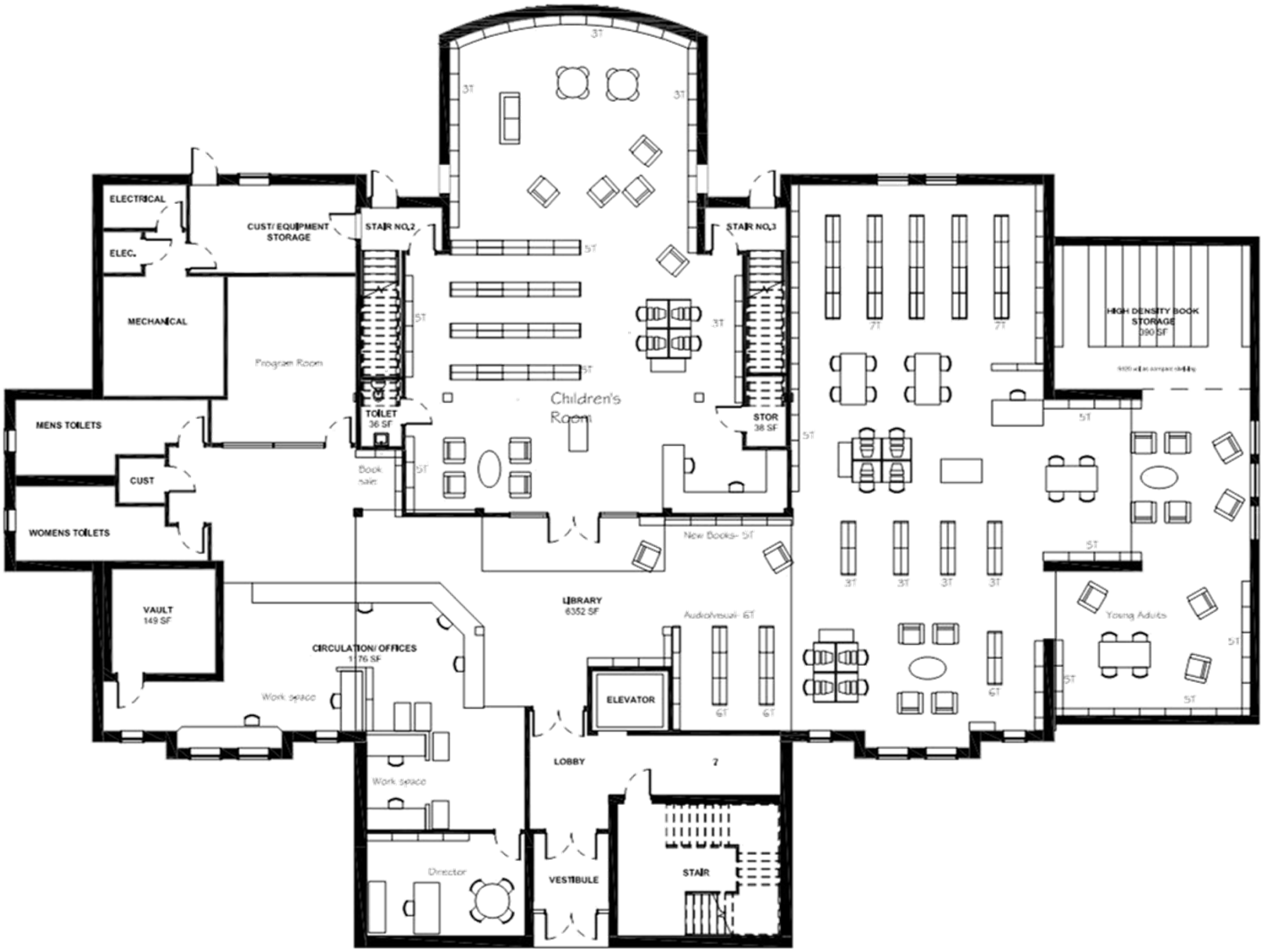
Total Project Cost Summary: 01-03-2018

Town of Boxford	HARRIMAN
Department of Public Works - Road Cost vs. Building Cost	03 January 2018

I. Road Related Costs	
Parking and Access Road (1,832 linear feet)	539,148
Storm Water Mitigation System	224,899
Add-alternate: Segment 'C' Construction Subtotal	36,151
TOTAL	**$800,198**

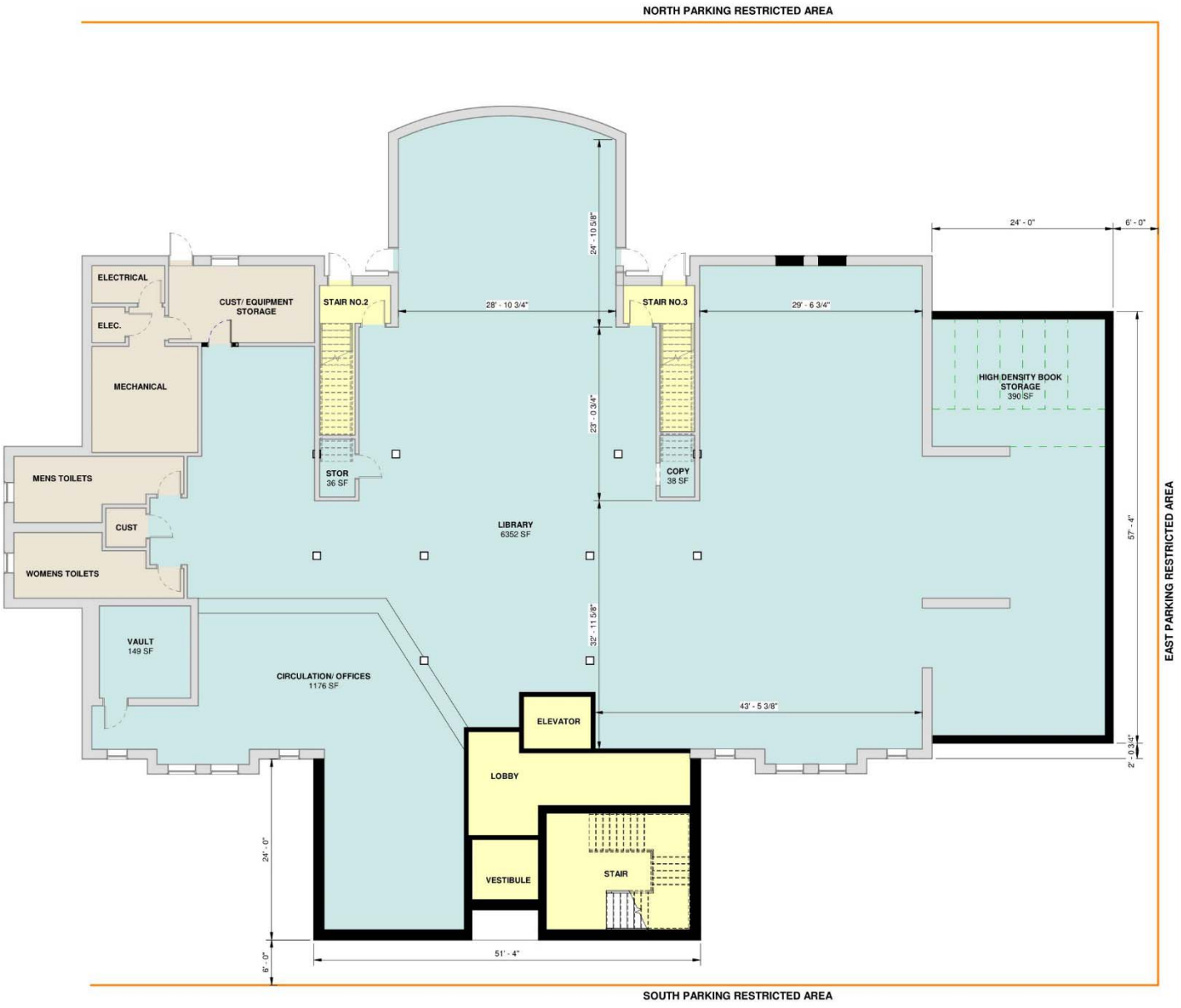
II. Building Related Costs	
Construction Subtotal	4,361,374
Minus Road Related Costs	800,198
TOTAL	**$3,561,176**
Percentage of Road Cost to Building Cost	18%

- In general terms, the road represents roughly 20% of the construction budget
- Previous order of magnitude estimate for site access was $870,000



TOWN HALL & LIBRARY CONCEPT BUDGET

TOWN HALL & LIBRARY CONCEPT BUDGET



Department Legend

- CIRCULATION
- LIBRARY
- TOWN HALL
- SHARED
- FACILITY SUPPORT

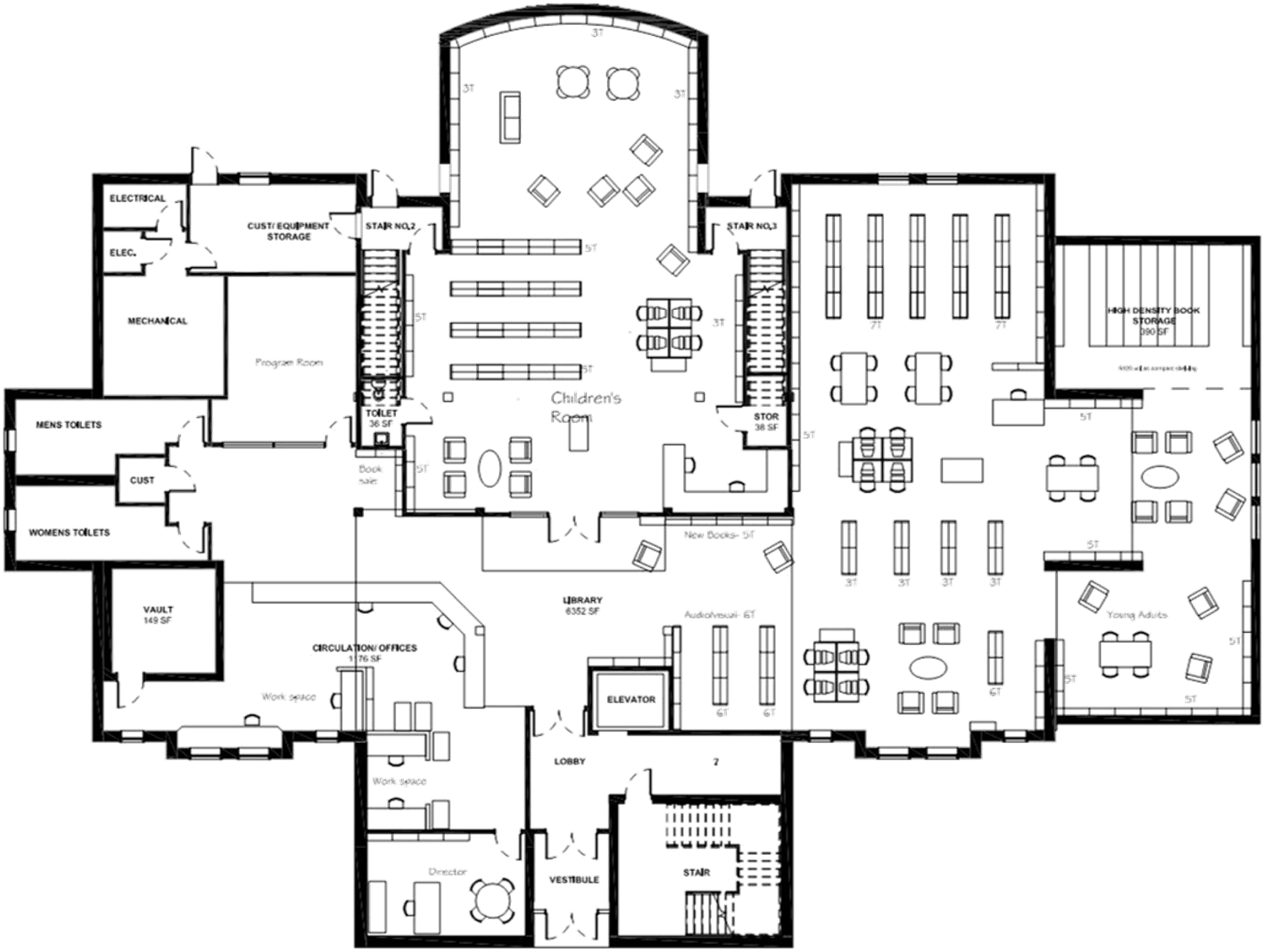
NET / ASSIGNABLE SQUARE FOOTAGE

LIBRARY	
• CIRC/OFFICE =	1,176 SF
• PROGRAM AREA =	6,352 SF
• HD STORAGE =	464 SF
SHARED / MEETING	
• FIRST FLOOR =	TBD
• B.O.S. ROOM =	1,129 SF
• MEETING ROOMS =	960 SF
TOTAL AVAIL. LIBRARY =	10,081 SF
TOWN OFFICES =	4,540 SF
TOTAL =	**14,621 SF**

GROSS SQUARE FOOTAGE

TOTAL BUILDING = (*1.37)	**20,055 SF**

TOWN HALL & LIBRARY BLOCKING DIAGRAM UPDATE



TOWN HALL & LIBRARY CONCEPT

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- LIBRARY
- TOWN HALL
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GROSS SQUARE FOOTAGE

TOTAL BUILDING = (*1.37)	**20,055 SF**

TOWN HALL & LIBRARY BLOCKING DIAGRAM UPDATE

OTHER TOPICS TO DISCUSS AT COMMUNITY FORUM

- **10 Elm / Cummings House**
- **188 Washington Street**
- **Fire Department**
- **Phasing Plan**
- **Financial Impact**

COMMUNITY FORUM AGENDA

PUBLIC FORUM

CONFIRM DESIGN AND SITING

COA:

- Meeting w/ Police Department to review traffic safety

DPW: Define next steps including some or all as needed:

- DPW Manager
- Conservation Commission
- School Committee & Administration
- Board of Health

FIRE DEPARTMENT:

- Blocking diagram of space needs area on current and potential sites

PRIORITIZATION OF PROJECTS

FINANCIAL IMPACT

COMMUNITY FORUM IN MID-JANUARY