Town of New Fairfield and Board of Education

## BUS LOT LOCATION STUDY PRESENTATION Conceptual Planning and Estimating for Multiple Sites January 23, 2025

PREPARED BY:

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Benjamin V. Doto, III, P.E., LLC (the firm) is currently in its 26th year providing civil/site design and land use consulting services to a variety of clients for commercial, industrial, institutional, and residential projects in the greater Danbury area.

Services range from preliminary design / due diligence and conceptual plans, to detailed design for construction and land use purposes.

In-house design services include site and drainage design, parking and loading layouts, vehicle turning movement analyses, septic system design, and water and sewer main design.

The firm has well established relationships with other design professionals, used on an as needed basis, to assist with landscape design, traffic studies, wetland studies, structural engineering, and cost estimating.

#### Sample Area Projects List:

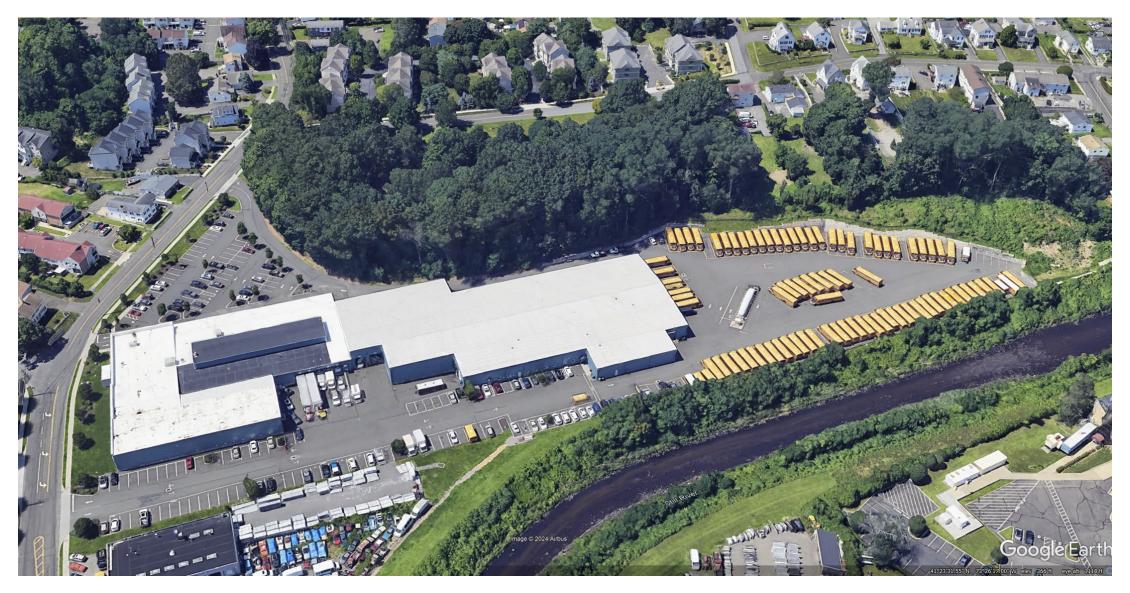
- Colonial Subaru auto dealership and storage lot, Danbury, CT;
- Colonial Mazda auto dealership and storage lot, Danbury, CT;
- Ingersoll Automotive dealership, car wash, maintenance shop and storage lot, Danbury, CT;
- Bruce Bennet Nissan & Infiniti site and building redevelopment and storage lot, Danbury, CT;
- Brewster Subaru site selection feasibility study, Brewster, NY;
- Caraluzzi's Markets and Caraluzzi's Wine & Spirits, Bethel & Danbury, CT;
- School Bus Terminal (S.T.A.), fueling station, maintenance garage and office/break room for school bus lot (105 buses), Triangle Street, Danbury, CT;
- Park Avenue Early Childhood Center/Head Start site development, Danbury, CT;
- ALDI site and loading dock design, Plumtrees Plaza, Danbury CT;
- Plumtrees Plaza State D.O.T. related parking lot and Newtown Rd. driveway redesign, Danbury, CT;
- Berkshire Shopping Center loading dock redesigns for TJ Maxx, HomeGoods, & Goodwill, Danbury, CT;
- Starbucks (2), Berkshire Shopping Center & North St., Danbury, CT;
- Ridgewood Country Club clubhouse improvements, site upgrades, and parking lot redesign, Danbury, CT;
- MIX 40 Strip Center and patio redevelopment, Mill Plain Road, Danbury, CT;
- Dolan Plaza Shopping Center Improvements, Bethel, CT;

- Shell Gas Station, 203 Greenwood Avenue, Bethel, CT;
- Transitional Crisis Housing Facility, Rose Hill Ave., Danbury, CT;
- Vespucci Recreational Center Expansion, Christopher Columbus Ave., Danbury, CT;
- Airport Hangars (2 projects), DXR Aviation Center & Wings Airpark, Danbury Airport;
- American Pavement Spec. maintenance facility and equipment storage lot, Danbury, CT;
- Fuel Cell Energy power plant and site development, Triangle St., Danbury, CT;
- Shelter Rock Business Center industrial site expansion, Shelter Rock Lane, Danbury, CT;
- South Street Self Storage & CubeSmart Self Storage, Danbury, CT;
- Diamond Self Storage, Bethel, CT;
- Kellogg Hardwoods Inc. sawmill and site development, Bethel, CT;
- Medical Office and site development, 39-41 Hospital Avenue, Danbury, CT;
- Waterbury Fed. Teachers Credit Union, Federal Road, Danbury, CT;
- Keystone Place Assisted Living, Wooster Heights, Danbury, CT;
- Mayfair Square Townhouses, Saw Mill Road, Danbury, CT;
- Town Line Commons Apartments, South Street, Danbury, CT;
- The Summit at Bethel housing development, Summit Road, Bethel, CT;
- The Grand Apartments, Grand Street, Bethel, CT; and
- Single Family lot developments, drainage design, and septic design (throughout Fairfield County).

# Danbury Bus Lot - before



# Danbury Bus Lot - after



## PARCELS EVALUATED

 Parcel - A: Former Consolidated School Site, 302 Ball Pond Road Parcel - G: Cell Tower/New Consolidated School,
302 Ball Pond Road & 24 Gillotti Road

Parcel - B: High School/Middle School Campus,
 54 Gillotti Road



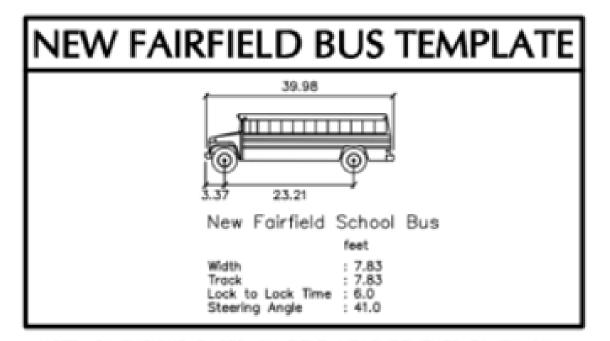
 Parcel - H: Town of New Fairfield Drop off Center, 33 Bigelow Road

## **DESIGN CRITERIA FOR BUS LOT**

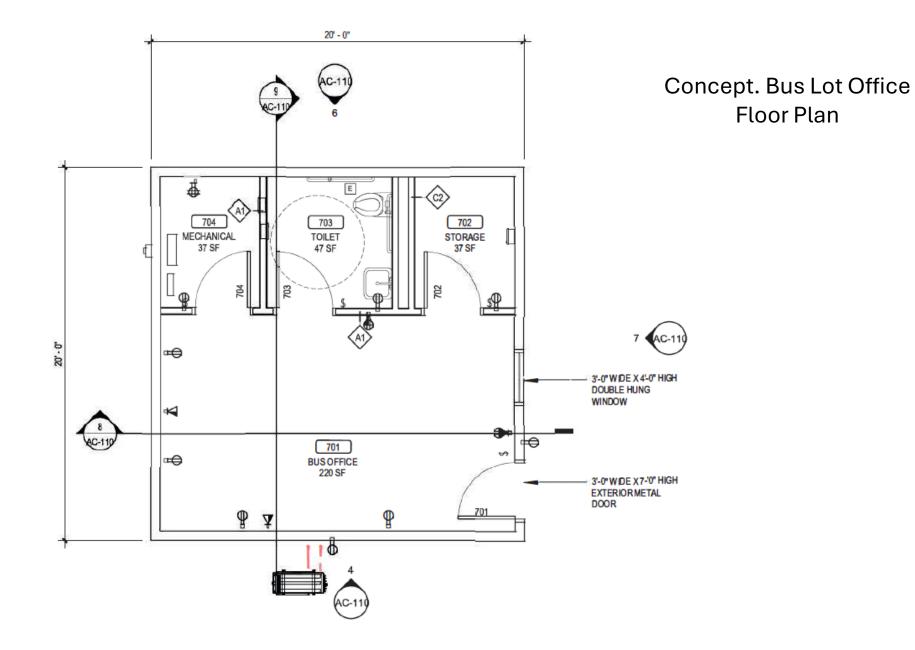
- Lot should hold 26 full size buses and 9 vans;
- Bus lot fenced with an 8' high chain link fence installed to allow for the storage of snow without damaging the fence;
- The bus lot should have a motorized gate;
- The bus lot office is a 400 s.f. permanent building (not a trailer);
- The bus lot should be lighted and include security cameras;
- Bus parking spaces should be sized based on industry standards and the isle width shall be sized to be able to accommodate anticipated bus traffic in the lot and bus maneuvering for parking and dispatching;
- 40 parking spaces should be provided for staff as close to the lot as possible;
- Staff parking should be located outside of the bus lot fenced area to minimize the secured lot area;
- Conceptual plans shall be at minimum 2' contours to determine extent of cuts, fills and required grading;
- Evaluate sight lines at driveway and roadway intersection;
- Determine likely connections for electricity and communications;

- Evaluate water service connection (new well vs. existing connection);
- Evaluate septic system connection (new septic vs. existing connection);
- Evaluate likely stormwater connection or discharge points and locations of potential detention systems;
- Determine permitting requirements;
- Prepare a cut and fill analysis and use to estimate earthwork costs;
- Estimate length of construction;
- Consider minimum landscaping requirements for use in cost estimating;
- Evaluation and resolution of on-site traffic and pedestrian circulation conflicts with bus traffic, best methods to separate and safeguard;
- Evaluate the benefit of relocating existing site amenities to be able to effectively and efficiently develop a bus lot; and
- Address site specific design issues as identified during development of plans.

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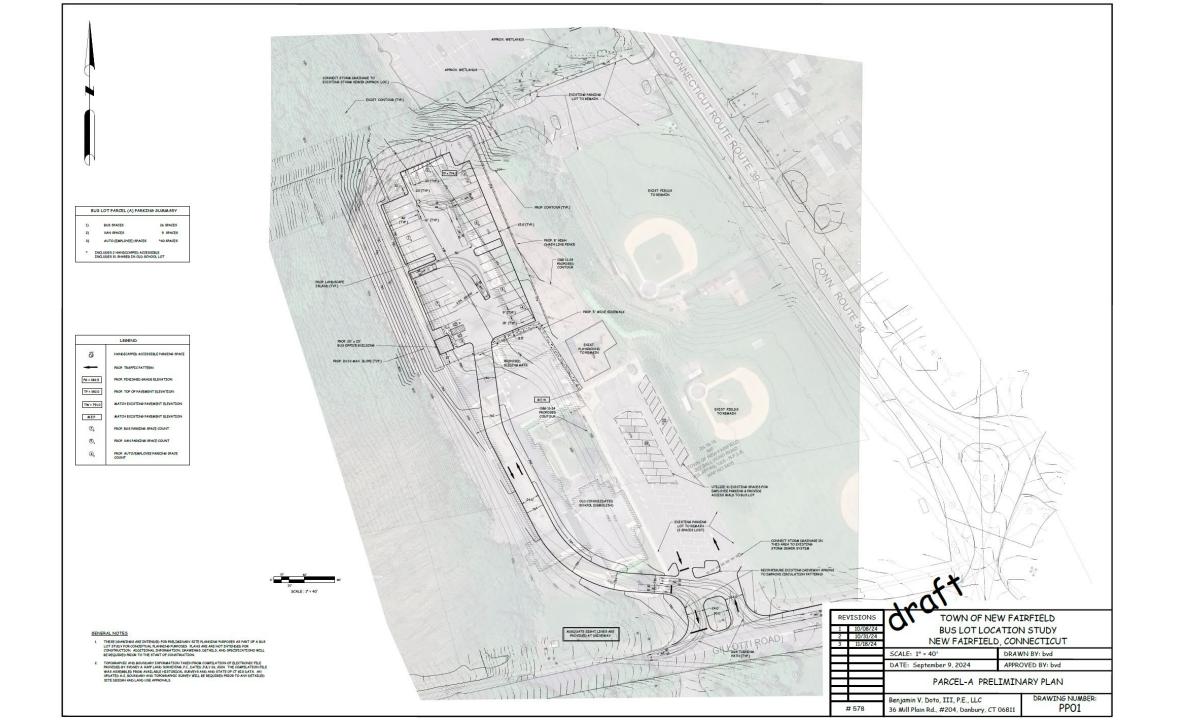
NOTE: DIMENSIONS BASED ON FIELD MEASUREMENTS TAKEN ON 9/1/22 AND INFORMATION PROVIDED BY THOMAS BUILT BUSES











## **Parcel - A: Former Consolidated School Site**

## <u>Pros</u>

- Central location;
- Proximity to fueling;
- Historical bus use of site (former school);
- Limited earthwork;
- Minimal tree clearing;
- Existing parking lots in place;
- Reuse of water and storm drainage connections available; and
- Cost (lowest of all 4 sites).

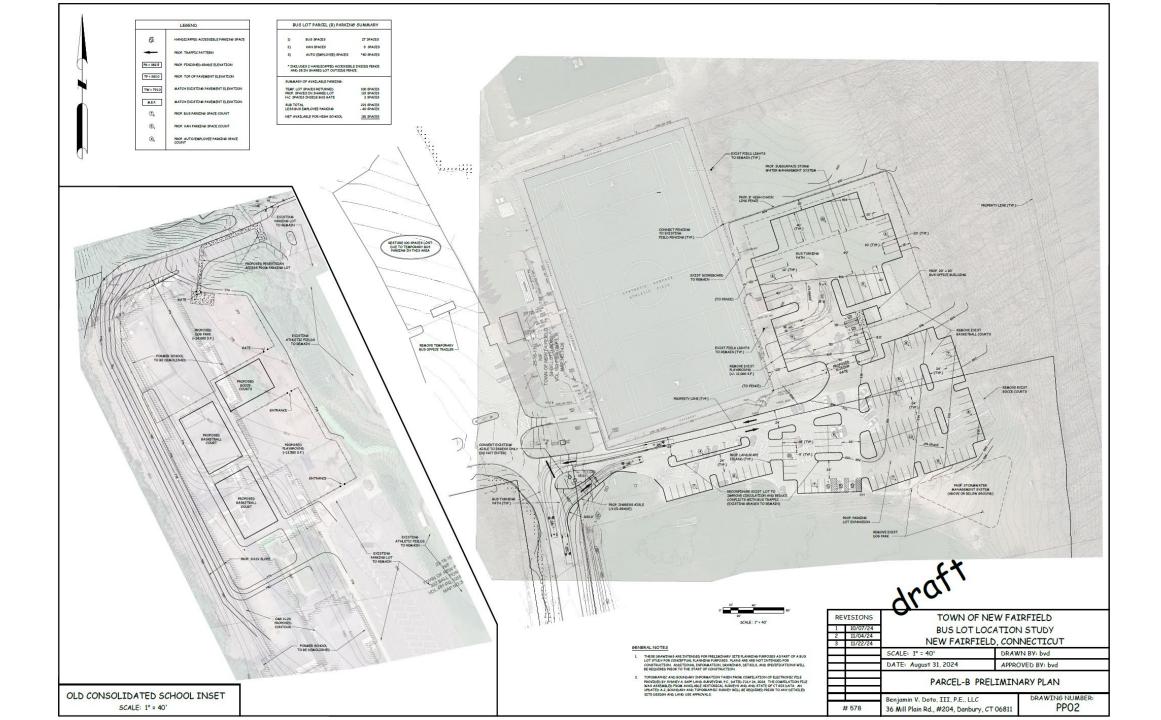
#### <u>Cons</u>

- Likely neighborhood and public opposition;
- Potentially long & difficult approval process;
- Restricts future recreational expansions on-site; and
- Aesthetic concerns in "center" of Town.



# Exhibit 2 (from RFP) Parcel - B





#### Parcel - B: High School / Middle School Campus

#### <u>Pros</u>

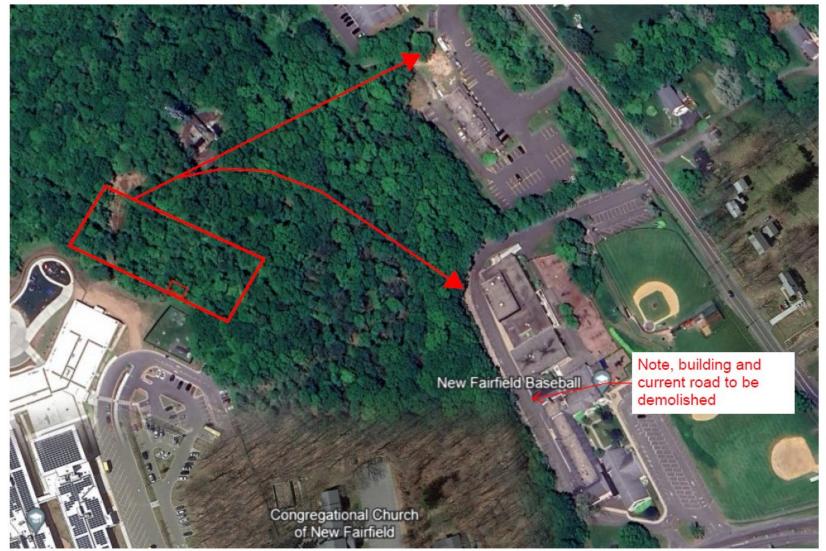
- Existing bus lot site (temporary);
- Central location;
- Proximity to fueling;
- Moderate earthwork;
- Minimal tree clearing;
- Gain of 45 parking spaces when bus lot closed;
- Permanent removal of non-school recreational activities from campus (basketball courts, bocce courts, playground, and dog park;
- Wetlands approval not required; and
- Excellent (and safest) driveway entrance/exit.

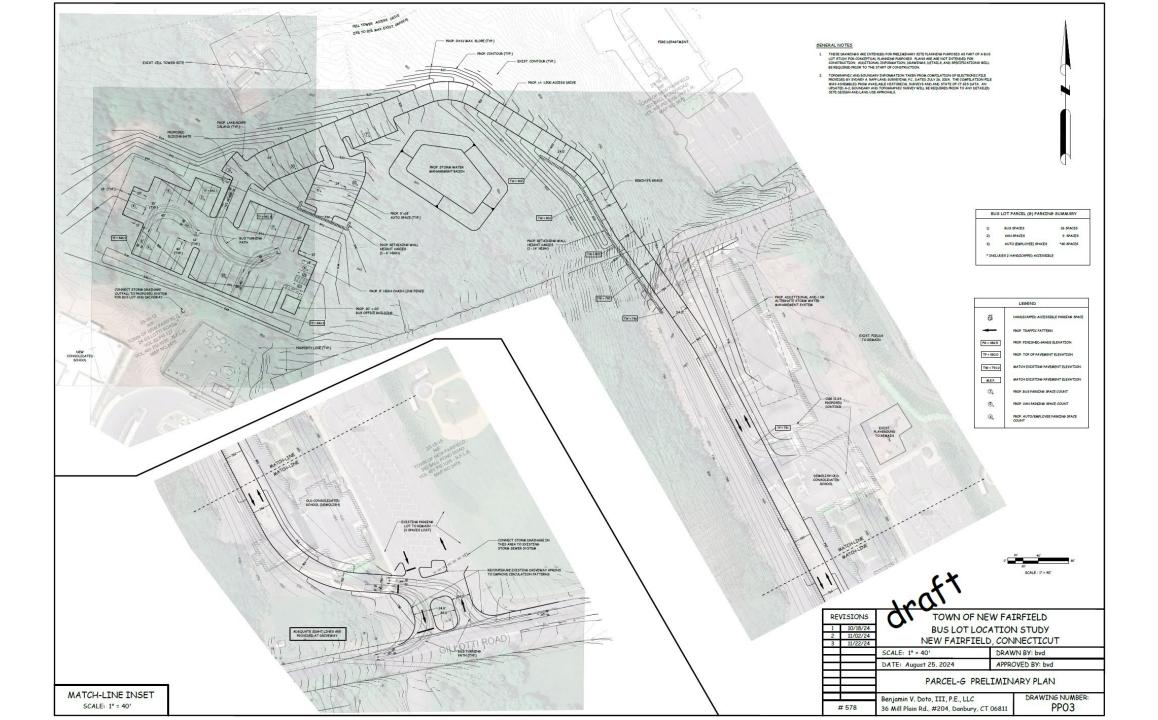
#### <u>Cons</u>

- Costs to remove and relocate basketball courts, bocce courts, playground, and dog park. These relocations, if implemented, make this site the highest cost of all 4 sites.
- Potential for public opposition removing and/or relocating basketball courts, bocce courts, playground, and dog park.



# Exhibit 3 from (RFP) Parcel - G





## **Parcel - G: Cell Tower / New Consolidated School**

### <u>Pros</u>

- Concealed and private setting;
- Access to water and sewer;
- Central location;
- Proximity to fueling; and
- Ability to adapt driveway to serve cell tower in future.

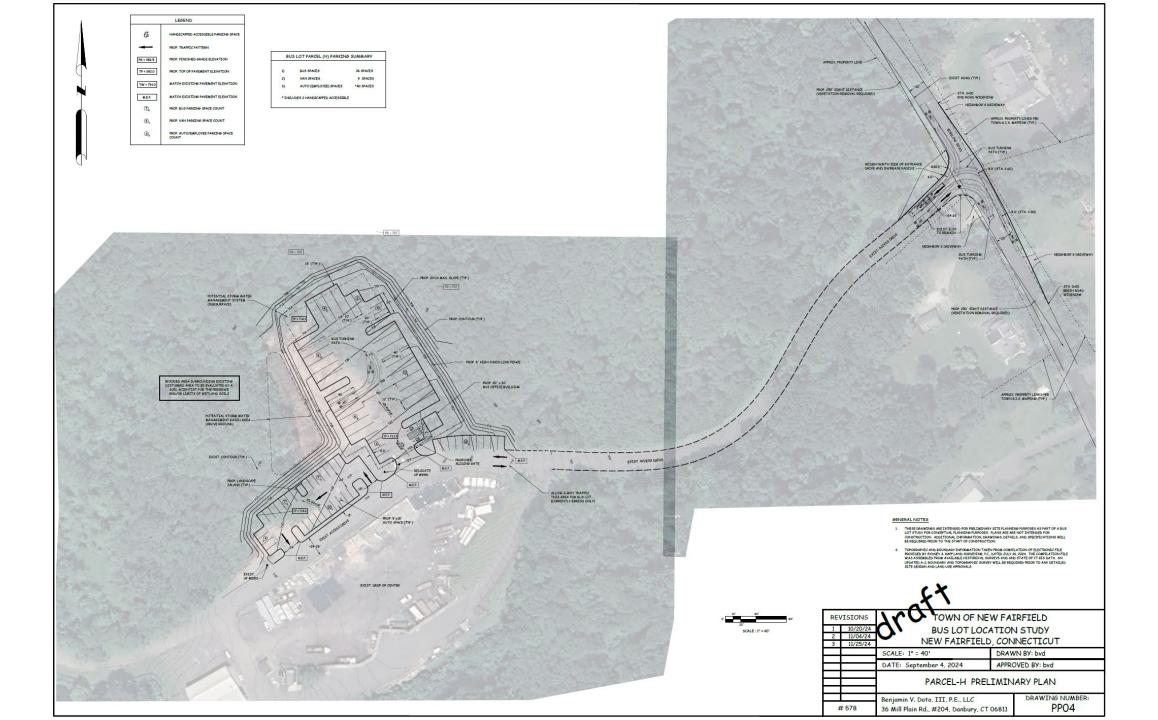


#### <u>Cons</u>

- Long access drive & significant paved surfaces;
- Topography;
- Need for retaining walls;
- Significant tree clearing;
- Large storm drainage system required;
- Extensive earthwork;
- Potential for public and neighborhood opposition due to driveway access on Gillotti Road / former Consolidated School site;
- Restricts future recreational expansion at former Consolidated School; and
- Cost (2<sup>nd</sup> highest of all 4 sites)

Exhibit 4 from (RFP) Parcel - H





### Parcel - H: Town of New Fairfield Drop off Center

#### <u>Pros</u>

- Concealed and private setting;
- No disruptions to existing school or recreational sites; and
- Cost (2<sup>nd</sup> lowest of all 4 sites).

#### **Cons**

- Remote location (1.5 miles from Gillotti Road);
- Distance to fueling;
- Removal of leaf/brush drop-off area;
- 300' of road widening at entrance is necessary;
- Bigelow Road is narrow and winding;
- Additional daily bus and employee trips added to Bigelow and Ball Pond Roads;
- Daily travel distance increased for busses and employees;
- Significant earthwork required;
- Potential for direct wetland impacts (further investigation recommended); and
- Potential for public and neighborhood opposition due to additional bus and employee vehicle trips being added to Bigelow Road and Ball Pond Road.



#### New Fairfield Bus Lot Estimating Worksheet

Date: 1/18/2025 with Escalation to Summer 2026	DRAFT			bvd
20111101 2020	Parcel - A Consolidated	Parcel - B HS Site By	Parcel - G Cell Tower	Parcel - H Drop Off
Clearing - Grubbing - Strip Topsoil	\$22,138	\$51,843	\$109,936	\$42,634
Demolition	\$0	\$45,600	\$0	\$(
Excavation - Cuts to Fills	\$20,340	\$8,292	\$52,404	\$420
Export Fill	\$0	\$76,428	\$0	\$(
Import Fill	\$51,504	\$0	\$161,640	\$152,376
Retaining Walls	\$0	\$0	\$145,800	\$(
Sediment and Erosion Control	\$9,532	\$3,702	\$15,126	\$4,224
Pvmt./Base/Curbing/Walks/Striping	\$377,029	\$598,954	\$607,485	\$306,072
Storm Water Management	\$228,367	\$219,287	\$366,106	\$185,766
Fencing and Gates	\$101,304	\$84,288	\$101,712	\$93,950
Lawns and Grasses	\$40,531	\$26,578	\$76,411	\$22,923
Landscaping	\$9,600	\$32,640	\$20,160	\$19,200
Signage	\$10,800	\$10,800	\$10,800	\$10,800
Site Lighting	\$125,928	\$93,720	\$93,192	\$84,612
Security	\$12,000	\$12,000	\$12,000	\$12,000
Power and Distribution	\$27,600	\$30,840	\$23,820	\$22,860
Water Distribution / Well	\$9,600	\$18,720	\$8,880	\$23,400
Septic / Septic Connection	\$21,600	\$19,200	\$20,880	\$20,400
Subtotal Hard Costs	\$1,067,873	<mark>\$1,332,892</mark>	<mark>\$1,826,352</mark>	\$1,001,63
SOFT COSTS				
Utility Fees	\$5,000	\$5,000	\$5,000	\$5,000
Permitting	\$20,000	\$20,000	\$20,000	\$20,000
Design Fees	\$70,000	\$70,000	\$82,000	\$70,000
Management Fees	\$60,000	\$70,000	\$70,000	\$70,000
Contingency	\$150,000	\$150,000	\$150,000	\$150,000
Subtotal Soft Costs	\$305,000	\$315,000	\$327,000	\$315,000
NON-ELIGIBLE COSTS				
Bus Offic Bldg.	\$200,000	\$200,000	\$200,000	\$200,000
Relocated Recreational Items	\$0	\$838,607	\$0	\$(
Road Widening	\$0	\$0	\$0	\$100,873
Work in R.O.W. (aprons, etc.)	\$25,000	\$0	\$25,000	\$(
Subtotal Non-Elig. Costs	\$225,000	\$1,038,607	\$225,000	\$300,873
TOTAL	\$1,597,873	\$2,686,499	\$2,378,352	\$1,617,510
ESCALATION - (7% per year)				
Summer of 2026 (1.5 years = 10.5%)	\$167,777	\$282,082	\$249,727	\$169,839
GRAND TOTAL	<u>\$1,765,650</u>	<u>\$2,968,581</u>	<u>\$2,628,079</u>	<u>\$1,787,349</u>