



ROOF EVALUATIONS

Clarkstown Central
School District

June 2015

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A. INTRODUCTION

Clarkstown Central School District (CCSD) directed CSArch to evaluate existing roof systems at 15 facilities and provide scope and estimate recommendations for roof replacement upgrades.

B. APPROACH

Roof walkthrough visual inspections were conducted at each facility with the purpose of investigating the current condition of the roof systems. The visual inspections supported our assessment of the existing systems and their relationships to roof mounted equipment, surrounding stepped conditions and any building detail potentially impacting future improvements. Concurrent with the walkthroughs, an existing roof study, provided by the CCSD, was referenced to highlight the roof areas, square footage, system type, approximate year installed and a current condition assessment. This information was utilized to prepare this report which details the existing conditions and includes recommendations and proposed scope of work.

C. ROOF SYSTEM RECOMMENDATIONS

Building	Vintage	Estimated Service Life (Years)	Actual Service Life (Years)	Upgrade Recommended / Priority
North High School	1986/2004	20-25	30/11	Yes/ 1
South High School	1986/2007	20-25	29/8	Yes/ 2
Felix Festa Middle School	1984/2004	20-25	31/11	Yes/ 1
Bardonia Elementary School	2005	20-25	10	*No/ 3
Lakewood Elementary School	1985/2000	20-25	30/15	Yes/ 2
Laurel Plains Elementary School	1986/2004	20-25	29/11	Yes/ 1
Link Elementary School	1985/2004	20-25	30/11	Yes/ 2
Little Tor Elementary School	1986	20-25	29	Yes/ 2
New City Elementary School	1984	20-25	31	Yes/ 1
Strawtown Elementary School	1984	20-25	31	Yes/ 1
West Nyack Elementary School	1985/2004	20-25	30/11	Yes/ 2
Woodglen Elementary School	1986/2005	20-25	29/10	Yes/ 3
Birchwood Elementary School	2005	20-25	10	**/ 2
Chestnut Grove School	1982/1997	20-25	33/10	Yes/ 2
Bus Garage	1984	20-25	31	**/ 3

* Full roof system under warranty.

** Additional information is required to accurately assess the building system.

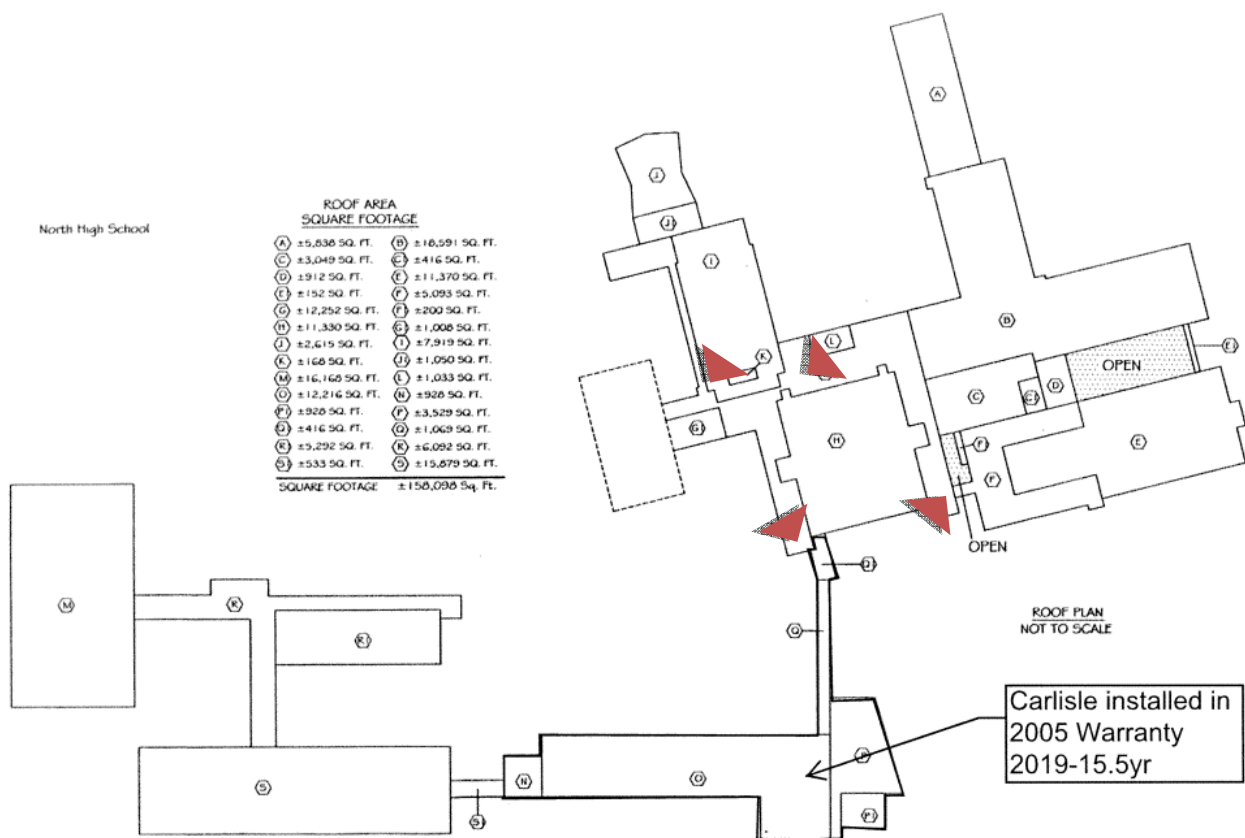
Clarkstown North HS**Description:**

The building has three separate roof systems from different time periods. The original building vintage has multiple sections with gabled roofs covered in slate. While the main addition has sixteen sections with a stone ballasted, loose membrane system commonly referred to as Inverted Roof Membrane Assembly (IRMA) and one section sealed with an adhered membrane system utilizing an EPDM membrane for the field with supporting EPDM flashing details and appropriate metal edge fascia. The annex addition, similar to main, has four sections with a stone ballasted IRMA system. Lastly, the recent classroom addition is covered in an EPDM system.

Observation/comments:

- A. Original Vintage- Poor Condition (≈30 year old system).
- B. Main Addition- Poor Condition (≈30 year old system).
- C. Annex Addition- Fair to Poor Condition (≈30 year old system).
- D. Recent Addition- Good Condition (≈11 year old system).
- E. Multiple stepped conditions above lower roofs.
- F. Existing curb reveal requires additional investigation, newer curb penetrations, within IRMA system are acceptable.





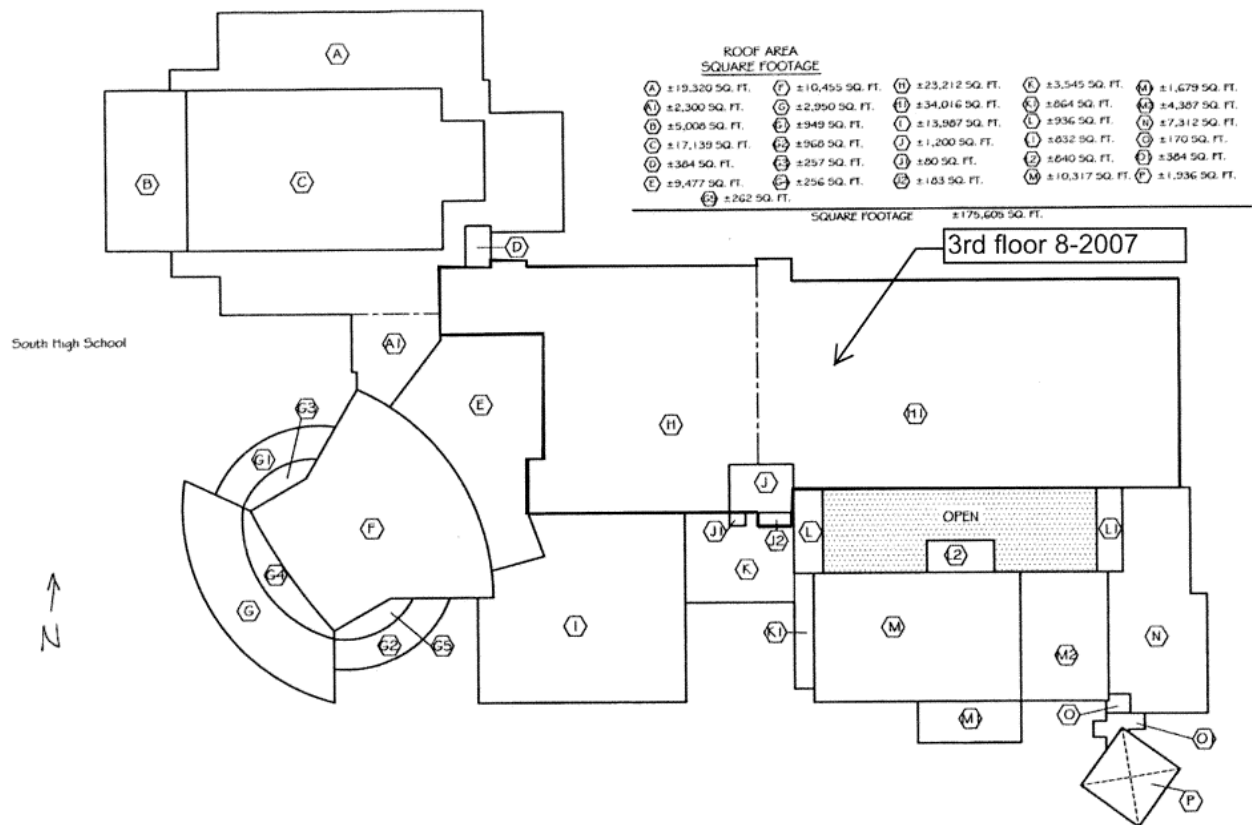
Clarkstown South HS**Description:**

The building has four separate roof systems from different time periods. The majority of the building roofs are sealed with a sprayed foam system utilizing closed cell polyurethane adhered to the deck topped-off by protective coating acting as the exposed wear surface. The main classroom block is covered with an adhered membrane system using an EPDM membrane for the field with supporting EPDM flashing details and appropriate metal edge fascia. While the newer planetarium addition and entry, have a metal roof system and PVC membrane system respectively.

Observation/comments:

- A. Original Vintage- Poor Condition (≈30 year old system).
- B. Main Block- Good Condition (≈8 year old system).
- C. Planetarium Addition- Good Condition (Age Unknown).
- D. Planetarium Entry- Good Condition (Age Unknown).
- E. Multiple stepped conditions above lower roofs.
- F. Existing curb reveal requires additional investigation.





Existing Building Description Felix Festa MS

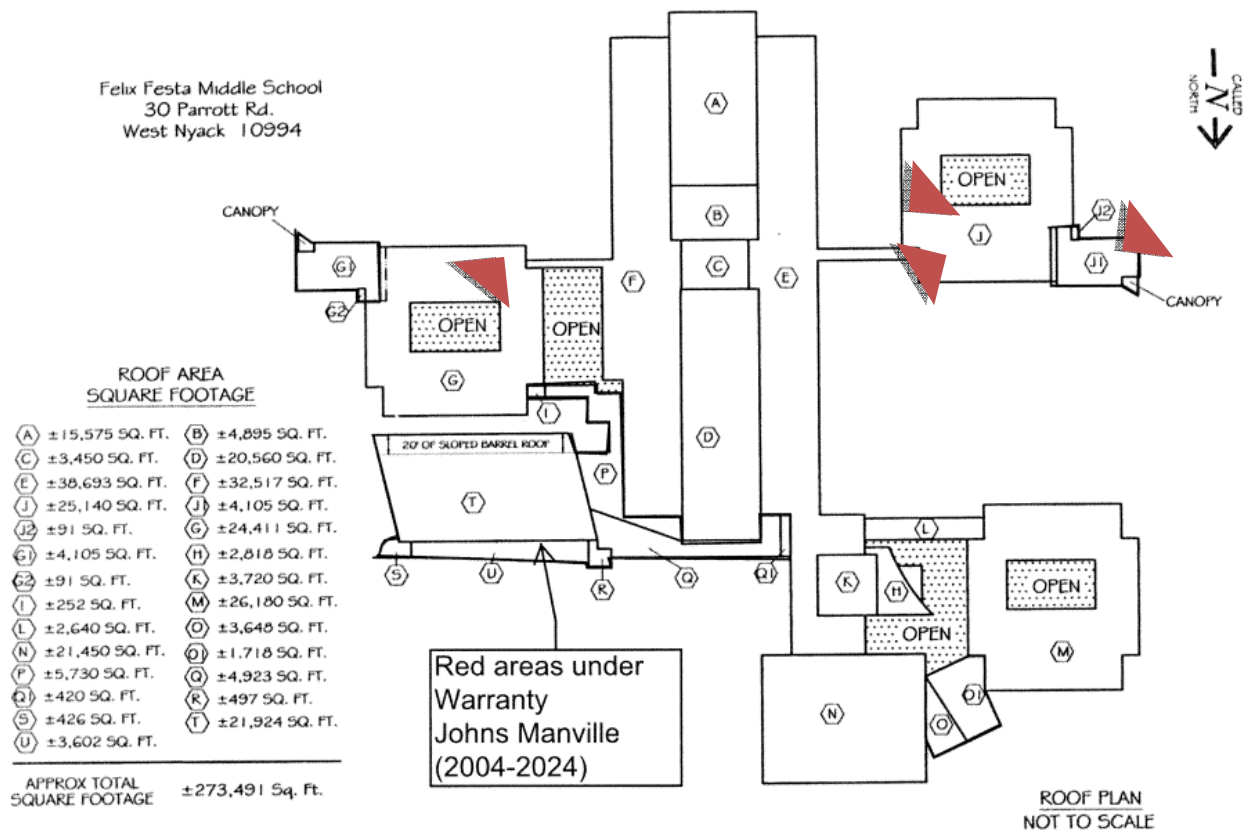
Description:

The building has two separate roof systems from different time periods. The original building vintage has five sections with a stone ballasted, loose membrane system commonly referred to as Inverted Roof Membrane Assembly (IRMA) and one section with an adhered membrane system. Also, recent additions are sealed with an adhered membrane system utilizing an EPDM membrane for the field with supporting EPDM flashing details and appropriate metal edge fascia.

Observation/comments:

- A. Original Vintage- Poor Condition (≈30 year old system).
- B. Additions- Good Condition (≈10 year old system).
- C. Multiple stepped conditions above lower roofs.
- D. Exposed mechanical piping.
- E. Existing curb reveal is insufficient for adequate flashing as directed by current manufacturer's standards.





Bardonia ES**Description:**

The building has one roof system. The original building has eight sections with an asphaltic built-up, multi-ply membrane system under warranty.

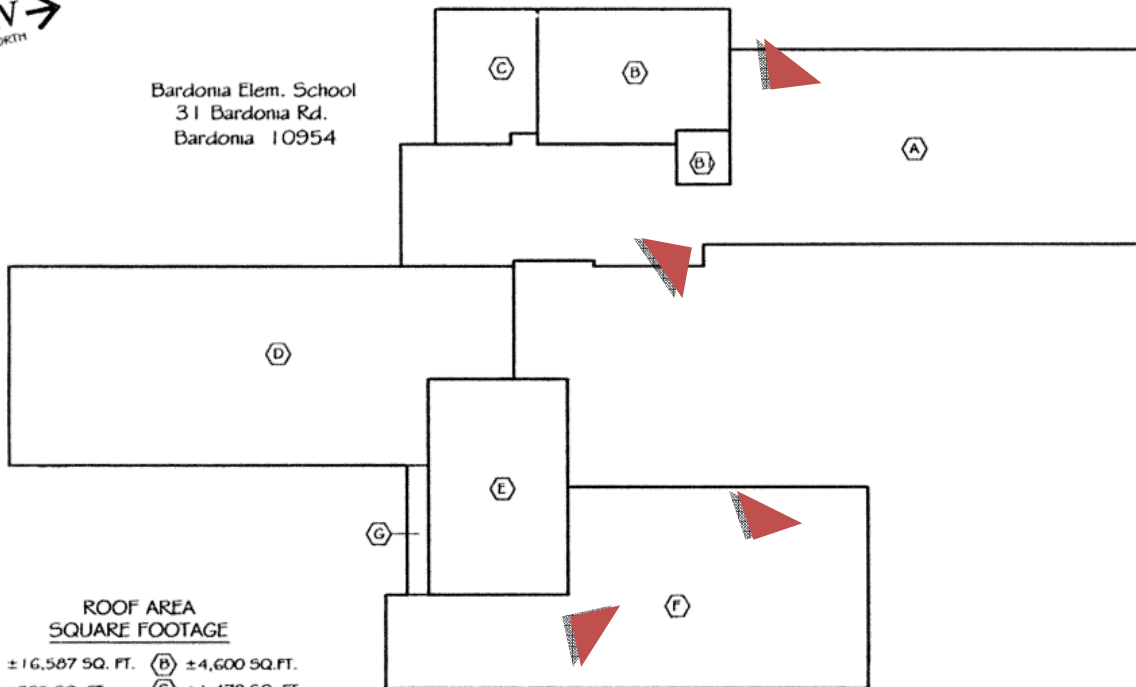
Observation/comments:

- A. Original Vintage- Fair Condition (≈10 year old system under warranty).
- B. (2) Stepped conditions above lower roofs.
- C. Noticeable 'alligatoring' in several locations.
- D. Noticeable 'ponding' stains in several locations.





Bardonia Elem. School
31 Bardonia Rd.
Bardonia 10954



ROOF AREA SQUARE FOOTAGE

(A) ±16,587 SQ. FT.	(B) ±4,600 SQ. FT.
(C) ±395 SQ. FT.	(D) ±1,472 SQ. FT.
(E) ±12,274 SQ. FT.	(F) ±4,212 SQ. FT.
(G) ±11,789 SQ. FT.	(H) ±348 SQ. FT.

APPROX TOTAL
SQUARE FOOTAGE ±51,677 Sq. Ft.

Under Warranty-
GAF (2005-2025)

ROOF PLAN
NOT TO SCALE

Lakewood ES

Description:

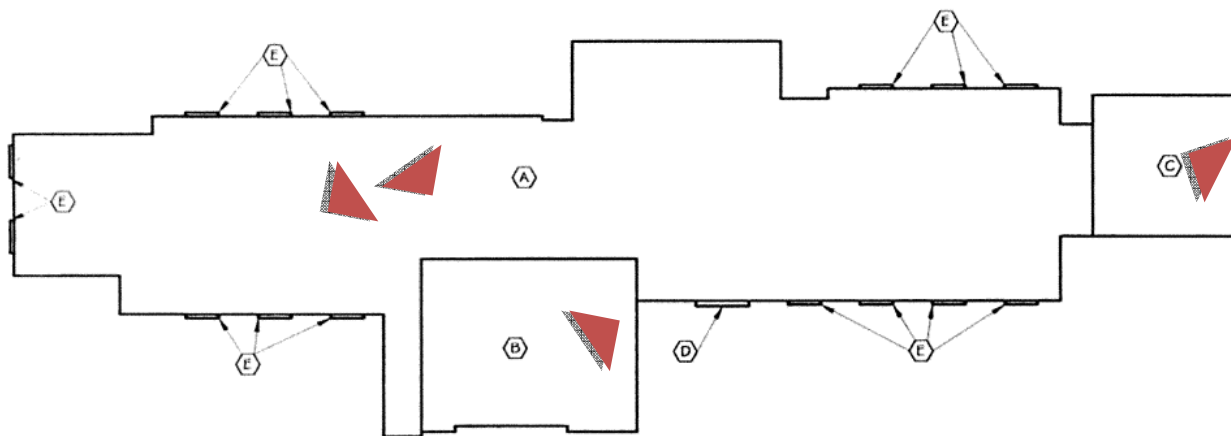
The building has two separate roof systems from different time periods. The original building vintage has two sections with a stone ballasted, loose membrane system commonly referred to as Inverted Roof Membrane Assembly (IRMA). The recent addition is sealed with an adhered membrane system utilizing an EPDM membrane for the field with supporting EPDM flashing details and appropriate metal edge fascia.

Observation/comments:

- A. Original Vintage- Poor Condition (≈30 year old system).
- B. Addition- Good Condition (≈15 year old system).
- C. Small projections covered in EPDM (≈30 year old system).
- D. (1) Stepped condition above lower roof.
- E. Existing curb reveal requires additional investigation, newer curb penetrations are acceptable.



Lakewood Elk School
77 Lakeland Ave.
Congers 10920



ROOF AREA SQUARE FOOTAGE

(A) ±25,930 SQ. FT.	(B) ±4,596 SQ. FT.
(C) ±2,500 SQ. FT.	(D) ±34 SQ. FT.
(E) (TYP. 15) ±15 SQ. FT. = ±225 SQ. FT.	

APPROX TOTAL
SQUARE FOOTAGE ±33,285 Sq. Ft.

ROOF PLAN
NOT TO SCALE

Laurel Plains ES

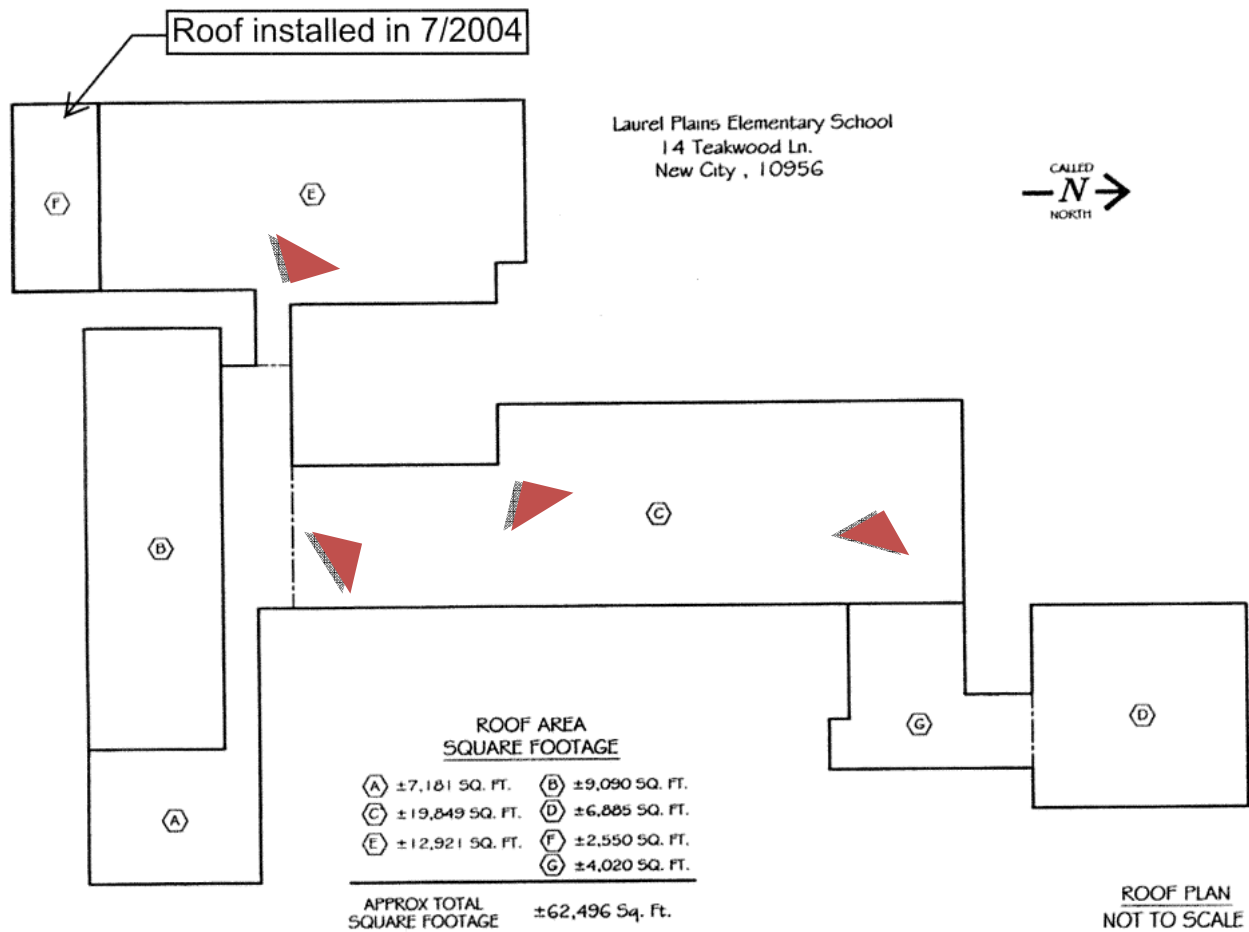
Description:

The building has two separate roof systems from different time periods. The original building vintage has six sections with a stone ballasted, loose membrane system commonly referred to as Inverted Roof Membrane Assembly (IRMA). The recent addition is sealed with an adhered membrane system utilizing an EPDM membrane for the field with supporting EPDM flashing details and appropriate metal edge fascia.

Observation/comments:

- A. Original Vintage- Poor Condition (≈30 year old system).
- B. Addition- Good Condition (≈11 year old system).
- C. Exposed sanitary vent lines
- D. (1) Stepped condition above lower roof.
- E. Existing curb reveal requires additional investigation, newer curb penetrations, are acceptable.





Dina Link ES

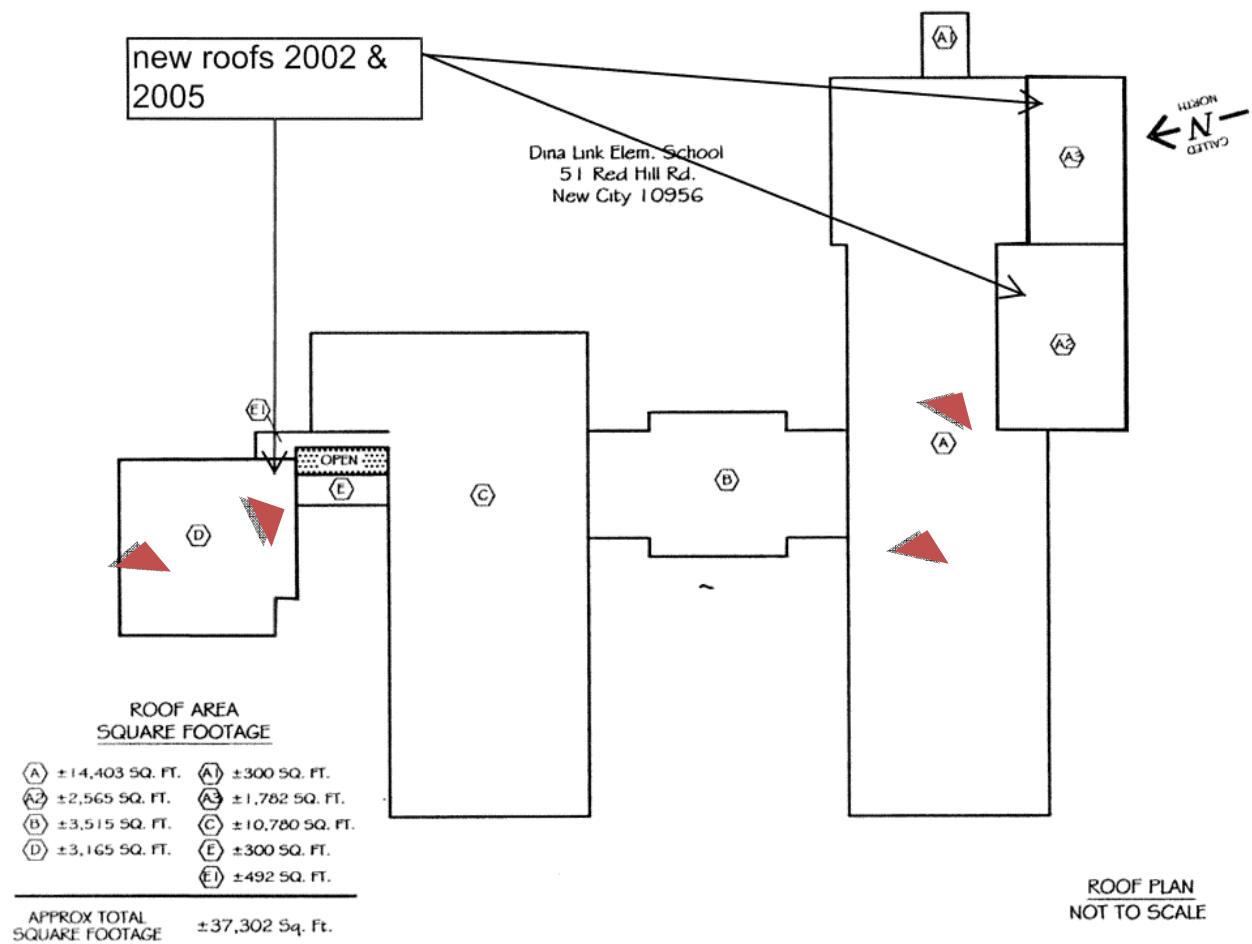
Description:

The building has two separate roof systems from different time periods. The original building vintage has four sections with a stone ballasted, loose membrane system commonly referred to as Inverted Roof Membrane Assembly (IRMA). The recent additions are sealed with an adhered membrane system utilizing an EPDM membrane for the field with supporting EPDM flashing details and appropriate metal edge fascia.

Observation/comments:

- A. Original Vintage- Poor Condition (≈30 year old system).
- B. Additions- Good Condition (≈10 year old system)).
- C. Exposed gas piping.
- D. (1) Stepped condition above lower roof.
- E. Existing curb reveal is insufficient for adequate flashing as directed by current manufacturer's standards.





Little Tor ES

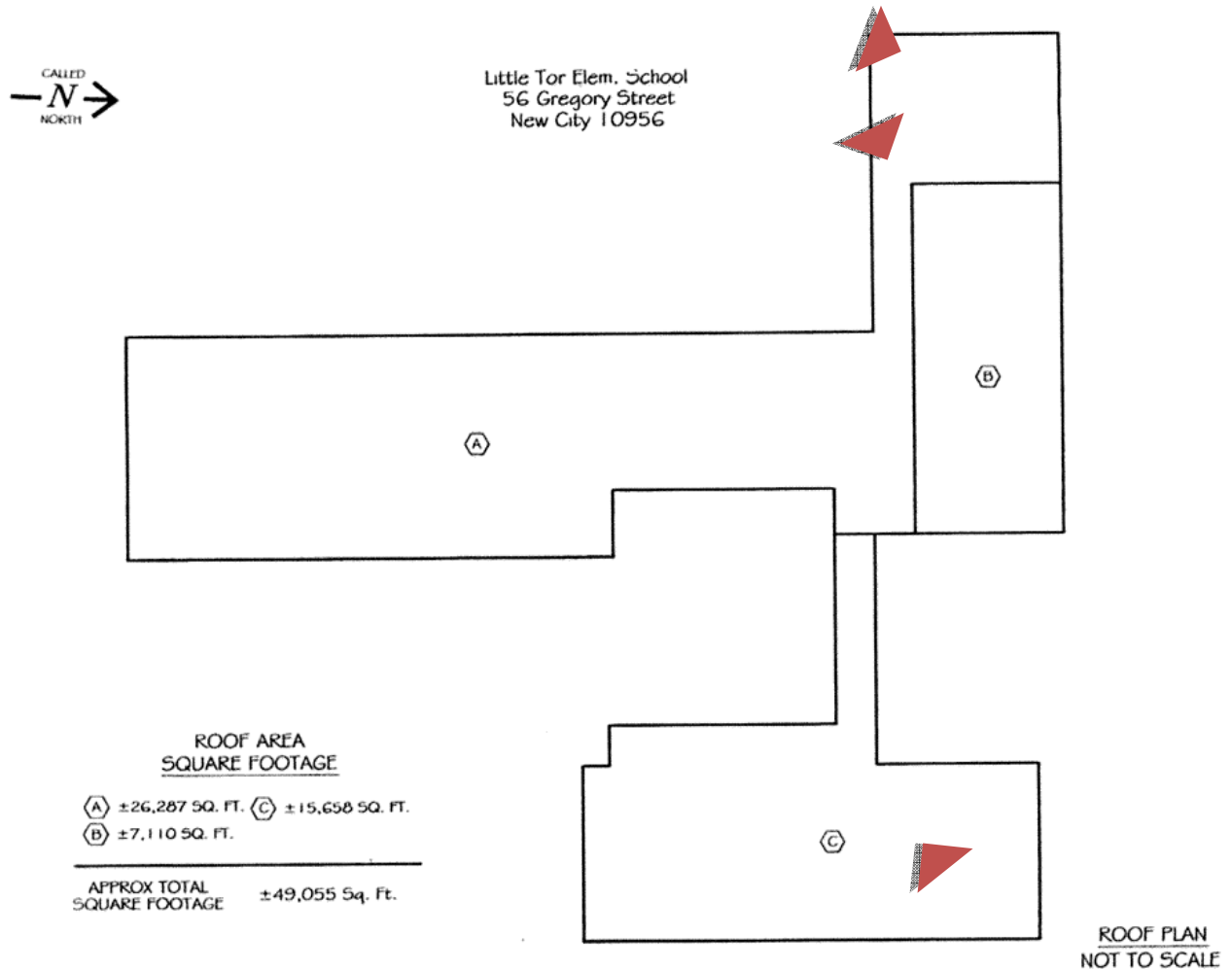
Description:

The building has one roof system. The roof system comprises three sections with a stone ballasted, loose membrane system commonly referred to as Inverted Roof Membrane Assembly (IRMA).

Observation/comments:

- A. Original Vintage- Poor Condition (≈30 year old system).
- B. (1) Stepped condition above lower roof.
- C. Existing curb reveal is insufficient for adequate flashing as directed by current manufacturer's standards.





New City ES

Description:

The building has two separate roof systems from different time periods. The original building vintage has nine sections with a stone ballasted, loose membrane system commonly referred to as Inverted Roof Membrane Assembly (IRMA). The recent addition is sealed with an adhered membrane system utilizing an EPDM membrane for the field with supporting EPDM flashing details and appropriate metal edge fascia.

Observation/comments:

- A. Original Vintage- Poor Condition (≈30 year old system).
- B. Addition- Good Condition (Age Unknown).
- C. (1) Stepped condition above lower roof.
- D. Exposed gas piping.
- E. Existing curb reveal is insufficient for adequate flashing as directed by current manufacturer's standards.





Strawtown ES

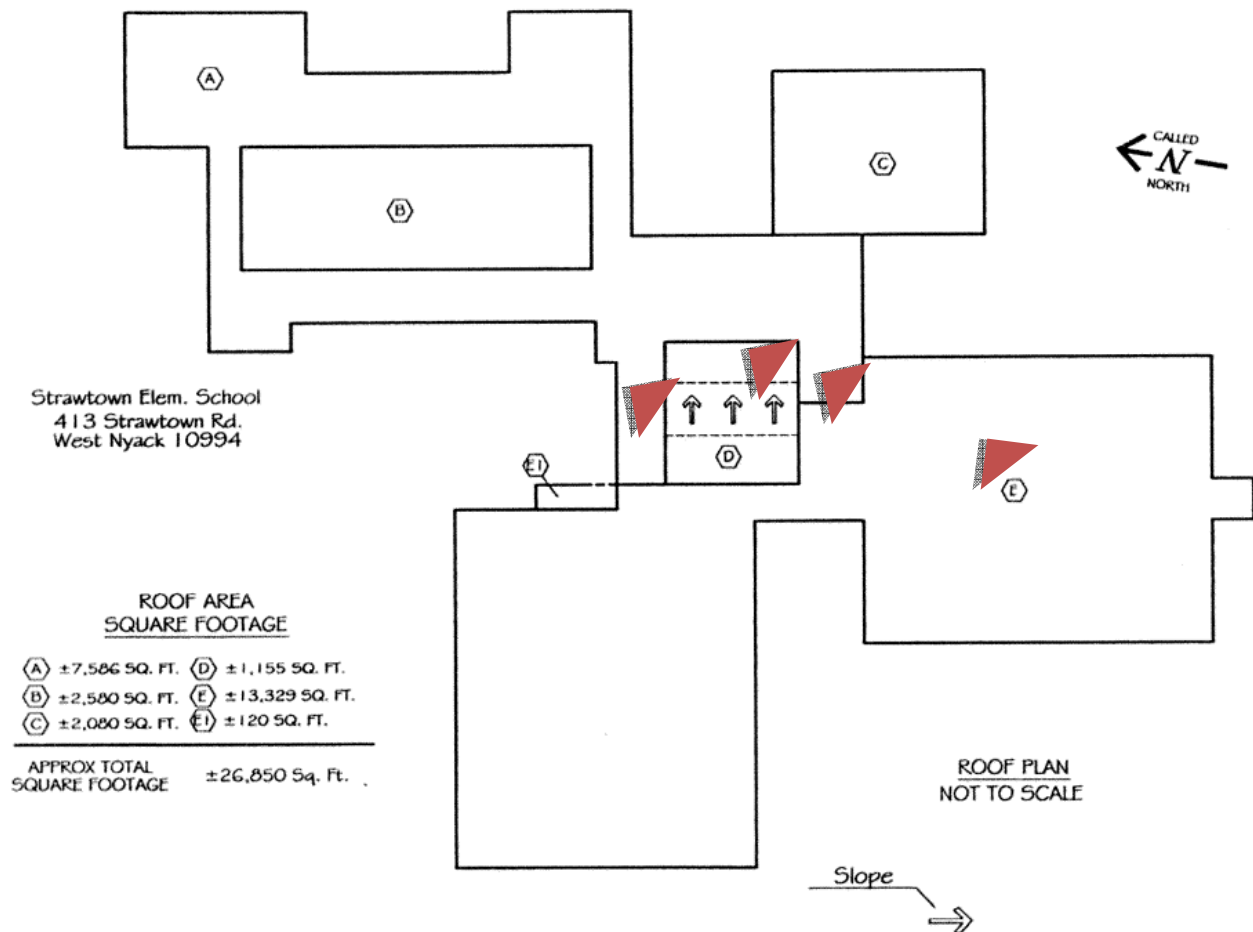
Description:

The building has two separate roof systems from the same time period. The original building vintage has five sections with a stone ballasted, loose membrane system commonly referred to as Inverted Roof Membrane Assembly (IRMA). The library and stair tower roof are sealed with an adhered membrane system utilizing an EPDM membrane for the field with supporting EPDM flashing details and appropriate metal edge fascia.

Observation/comments:

- A. Original Vintage- Poor Condition (≈30 year old system).
- B. Library & Stair Tower- Poor Condition (≈30 year old system).
- C. (2-3) stepped conditions above lower roofs.
- D. Existing curb reveal requires additional investigation, some curbs are borderline concerning current manufacturer's standards.





West Nyack ES

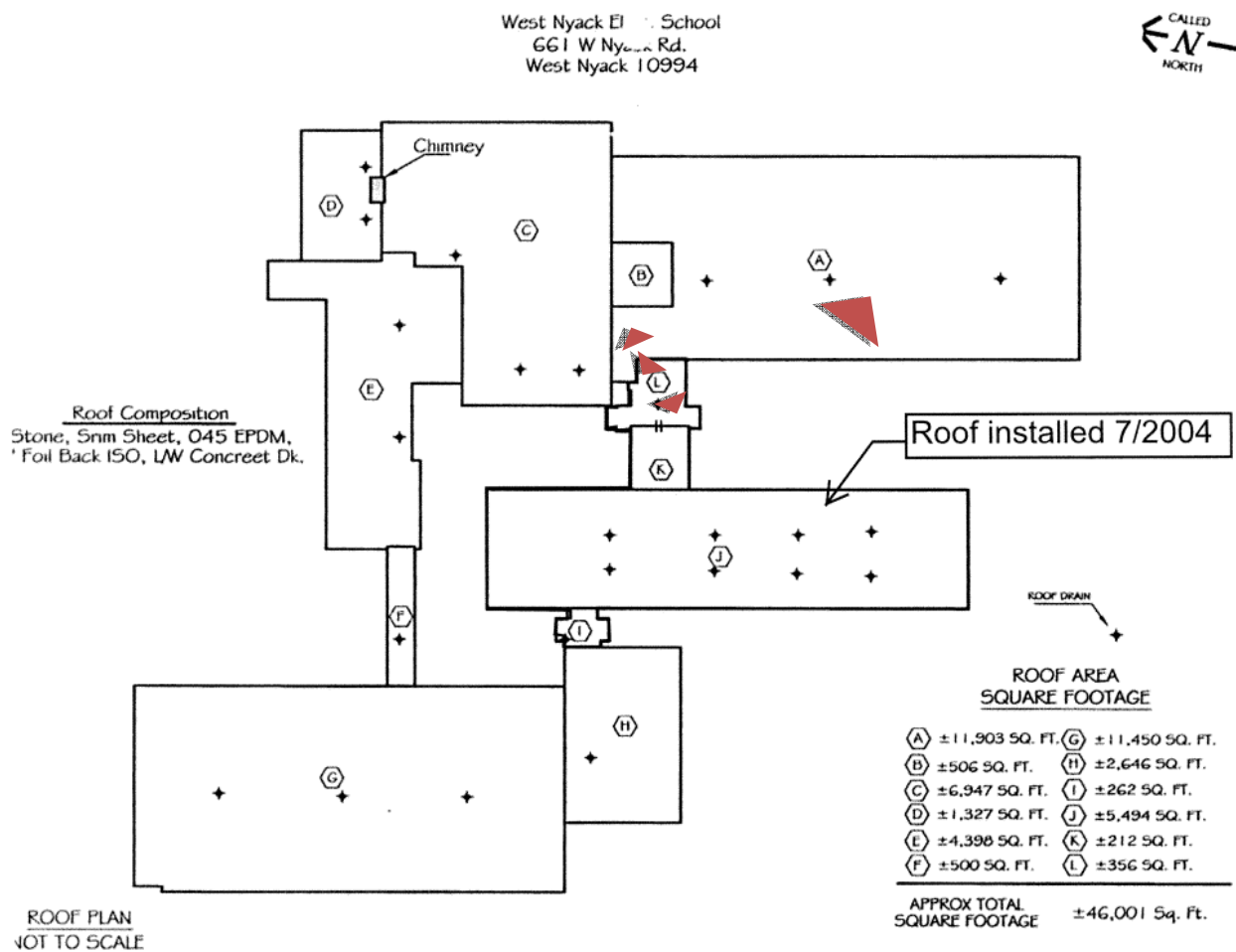
Description:

The building has two separate roof systems from different time periods. The original building vintage has eight sections with a stone ballasted, loose membrane system commonly referred to as Inverted Roof Membrane Assembly (IRMA). The recent addition is sealed with an adhered membrane system utilizing an EPDM membrane for the field with supporting EPDM flashing details and appropriate metal edge fascia.

Observation/comments:

- A. Original Vintage- Poor Condition (≈30 year old system).
- B. Addition- Good Condition (≈11 year old system).
- C. (1) Stepped condition above lower roof.
- D. Exposed gas piping.
- E. Existing curb reveal requires additional investigation, newer curb penetrations, within IRMA system are acceptable.





Woodglen ES

Description:

The building has two separate roof systems from different time periods. The original building vintage has two sections with a stone ballasted, loose membrane system commonly referred to as Inverted Roof Membrane Assembly (IRMA). The elevator addition is sealed with an adhered membrane system utilizing an EPDM membrane for the field with supporting EPDM flashing details and appropriate metal edge fascia.

Observation/comments:

- A. Original Vintage- Poor Condition (≈30 year old system).
- B. Elevator Addition- Good Condition (≈10 year old system).
- C. Small projections covered in EPDM (Age Unknown).
- D. (1) Stepped condition above lower roof.
- E. Existing curb reveal requires additional investigation, newer curb penetrations are acceptable.



Birchwood School

Description:

The building has one roof system. The original building has five sections with an asphaltic built-up, multi-ply membrane system, possibly under warranty.

Observation/comments:

- A. Original Vintage- Fair Condition (≈10 year old system under warranty?).
- B. (1) Stepped condition above lower roof.
- C. Noticeable 'alligatoring' & 'ponding' in several locations.
- D. Noticeably flat in some areas, attributing to the ponding.





Chestnut Grove Offices

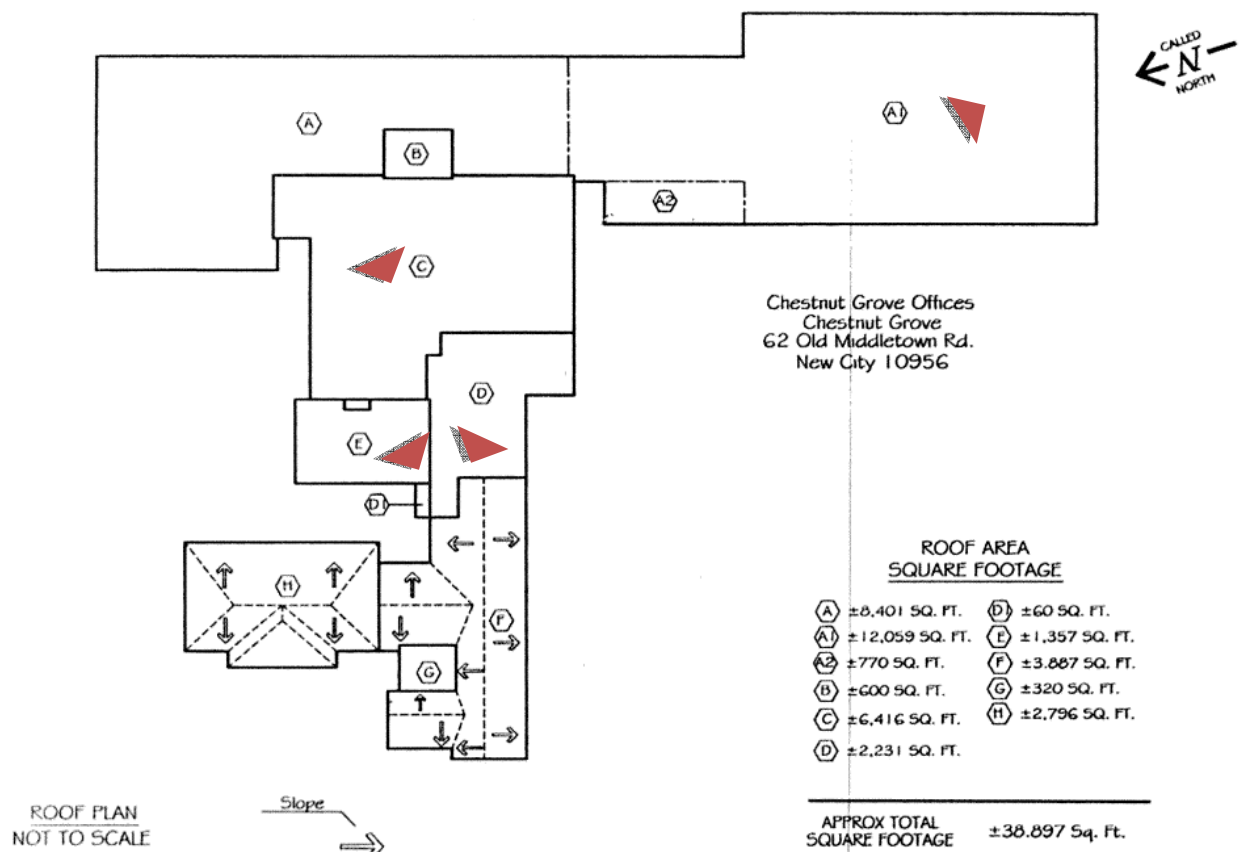
Description:

The building has three separate roof systems from different time periods. The original building vintage has three sections with a gable roof design covered in asphalt shingles. The majority of the classroom/support additions are sealed with a sprayed foam system utilizing closed cell polyurethane adhered to the deck topped-off by protective coating acting as the exposed wear surface. One small area, above the entrance, is covered in a stone ballasted, loose membrane system commonly referred to as Inverted Roof Membrane Assembly (IRMA).

Observation/comments:

- A. Original Vintage- Poor Condition (≈33 year old system).
- B. Additions- Poor Condition (≈18 year old system, recoat?).
- C. Exposed gas piping.
- D. (1) Stepped condition above lower roof.
- E. Existing curb reveal requires additional investigation, judgment difficult with sprayed foam material.





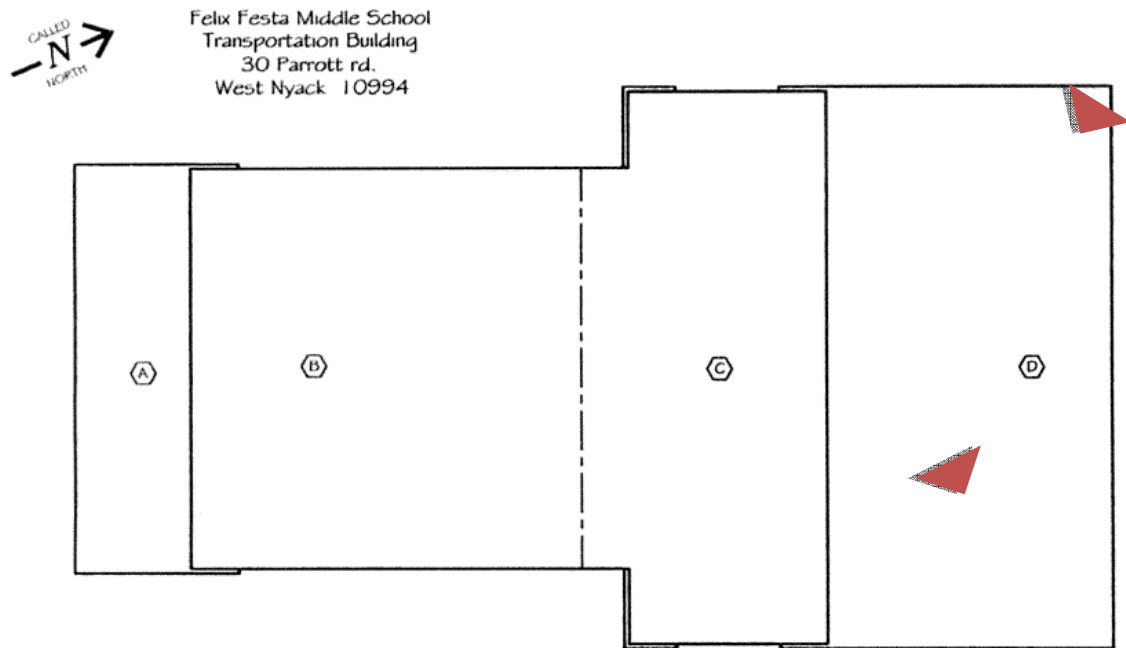
Felix Festa Transportation Garage**Description:**

The building has two separate roof systems documented in the original roof study. The lower roof, along the north, was accessible during the walk-through and an EPDM roof system was observed. The opposite lower and upper roof were not accessible, additional information is required to complete the study for the transportation building.

Observation/comments:

- A. Original Vintage (Partial)-Fair Condition (Age Unknown).
- B. (1) Stepped condition above lower roof.





ROOF AREA SQUARE FOOTAGE			
(A) ±765 SQ. FT.	(B) ±1,760 SQ. FT.		
(C) ±1,430 SQ. FT.	(D) ±2,100 SQ. FT.		
APPROX TOTAL SQUARE FOOTAGE		±6,055 Sq. Ft.	

ROOF PLAN
 NOT TO SCALE

A. ESTIMATES OF PROBABLE COST

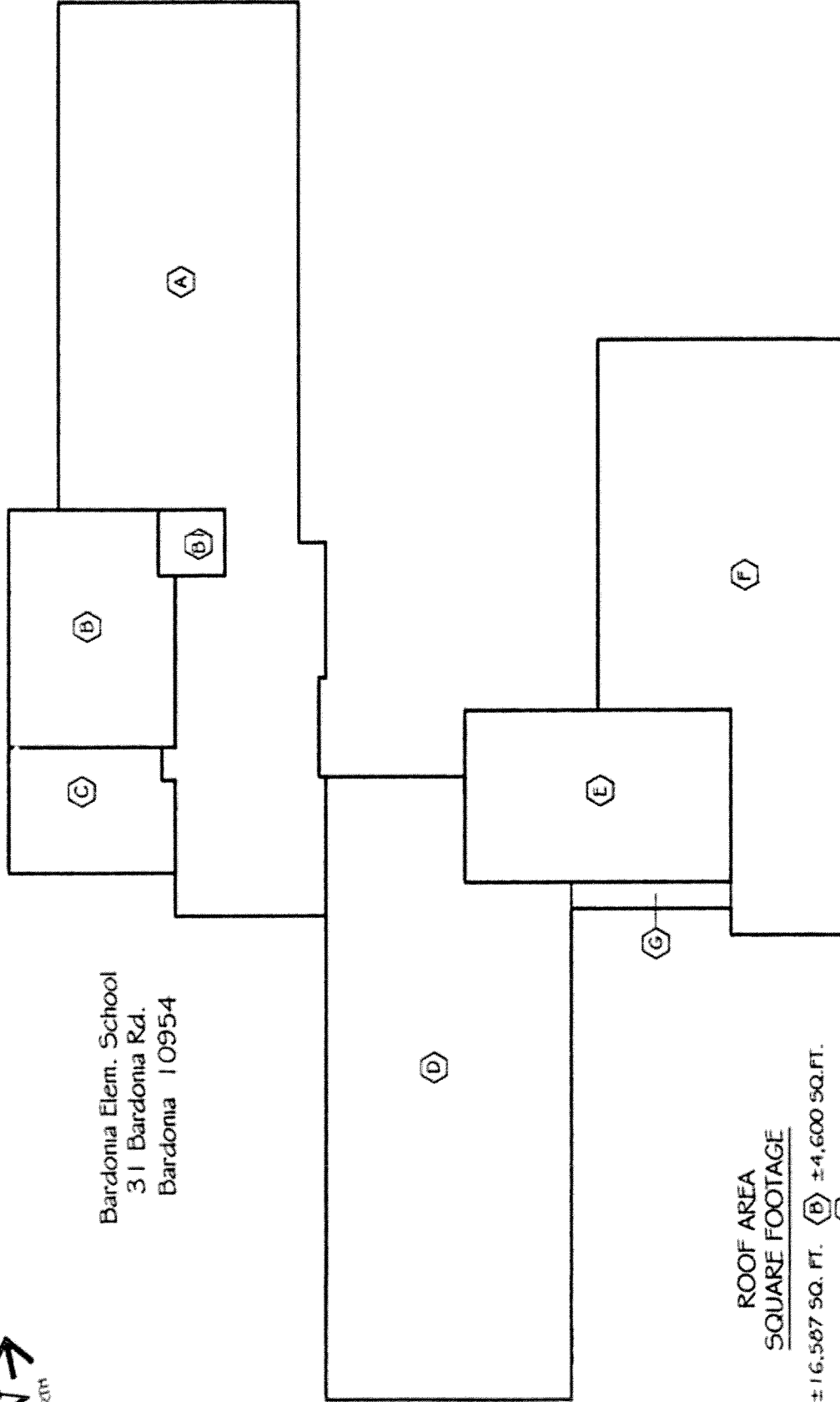
BARDONIA ELEMENTARY SCHOOL

GENERAL ROOF SYSTEM OUTLINE

Roof Area	Square Footage	Membrane System Type	Year Installed	Current Condition
A	16,587	Built-up Roof	2005	Fair to Good
B	2,800	Built-up Roof	2005	Fair to Good
B1	395	Built-up Roof	2005	Fair to Good
C	1,472	Built-up Roof	2005	Fair to Good
D	12,274	Built-up Roof	2005	Fair to Good
E	4,212	Built-up Roof	2005	Fair to Good
F	11,789	Built-up Roof	2005	Fair to Good
G	348	Built-up Roof	2005	Fair to Good
Total	51,677			



Bardonia Elem. School
31 Bardonia Rd.
Bardonia 10954



ROOF AREA
SQUARE FOOTAGE

(A)	±16,587 SQ. FT.	(B)	±4,600 SQ. FT.
(B)	±395 SQ. FT.	(C)	±1,472 SQ. FT.
(D)	±12,274 SQ. FT.	(E)	±4,212 SQ. FT.
(F)	±11,789 SQ. FT.	(G)	±348 SQ. FT.

APPROX TOTAL
SQUARE FOOTAGE ±51,677 Sq. Ft.

Under Warranty-
GAF (2005-2025)

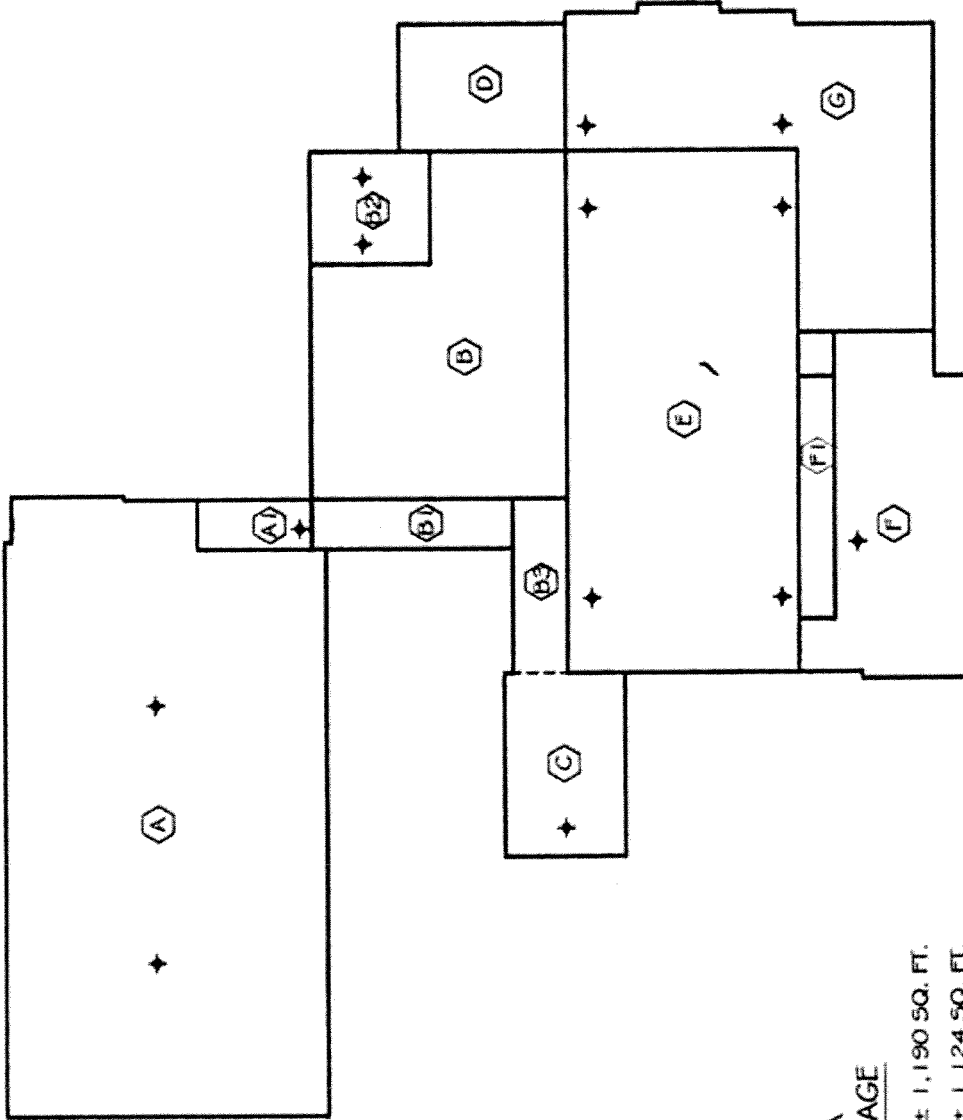
ROOF PLAN
NOT TO SCALE

CONGERS ELEMENTARY SCHOOL

GENERAL ROOF SYSTEM OUTLINE

Roof Area	Square Footage	Membrane System Type	Year Installed	Current Condition
A	4,038	Built-up Roof	2005	Good
B	4,038	Built-up Roof	2005	Good
C	1,190	Built-up Roof	2005	Good
D	1,121	Built-up Roof	2005	Good
E	6,455	Single ply	2005	Good
F	2,510	Built-up Roof	2005	Good
G	4,260	EPDM adhered	2005	Good
Total	32,514			

Congers Elem. School
9 Lake Rd. W
Congers 10920



ROOF AREA
SQUARE FOOTAGE

A	± 10,254 SQ. FT.	C	± 1,190 SQ. FT.
B	± 307 SQ. FT.	D	± 1,124 SQ. FT.
B1	± 4,038 SQ. FT.	E	± 6,455 SQ. FT.
B2	± 545 SQ. FT.	F	± 2,785 SQ. FT.
B3	± 717 SQ. FT.	F1	± 325 SQ. FT.
B4	± 514 SQ. FT.	G	± 4,260 SQ. FT.

APPROX TOTAL
SQUARE FOOTAGE ± 32,514 Sq. Ft.

Under Warranty-
GAF (2005-2025)

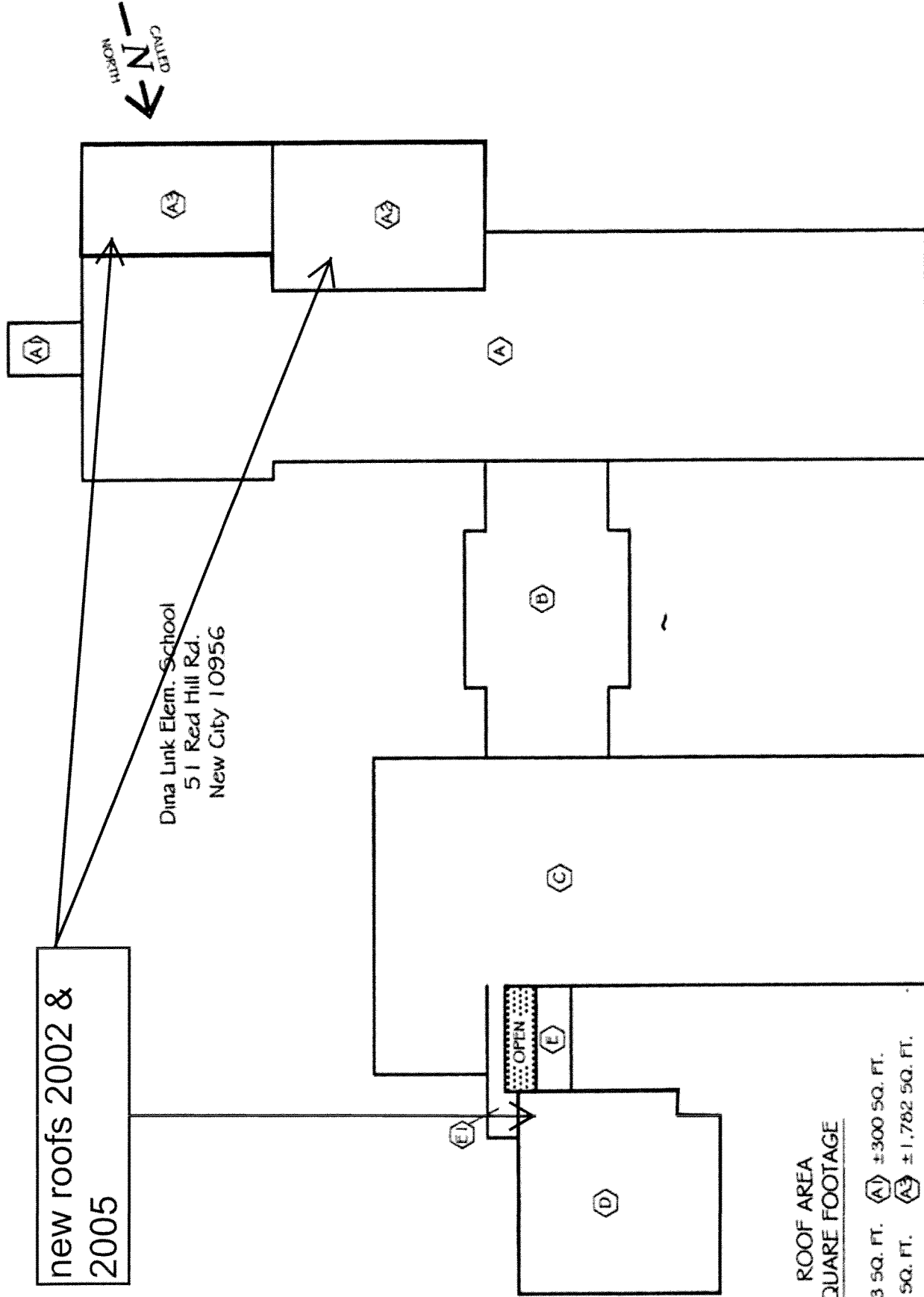
Exp. Joint - ----
ROOF DRAIN

ROOF PLAN
NOT TO SCALE

DINA LINK ELEMENTARY SCHOOL

GENERAL ROOF SYSTEM OUTLINE

Roof Area	Square Footage	Membrane System Type	Year Installed	Current Condition
A	14,403	EPDM IRMA	1985	Poor
A1	300	EPDM adhered	2005	Good
A2	2,565	EPDM IRMA	1985	Poor
A3	1,782	EPDM adhered	2005	Good
B	3,515	EPDM IRMA	1985	Poor
C	11,272	EPDM IRMA	1985	Poor
D	3,165	EPDM adhered	2004	Good
E	300	EPDM adhered	2004	Good
Total	37,302			



ROOF AREA
SQUARE FOOTAGE

(A)	±14,403 SQ. FT.	(A1)	±300 SQ. FT.
(A2)	±2,565 SQ. FT.	(A3)	±1,782 SQ. FT.
(B)	±3,515 SQ. FT.	(C)	±10,780 SQ. FT.
(D)	±3,165 SQ. FT.	(E)	±300 SQ. FT.
		(E1)	±492 SQ. FT.

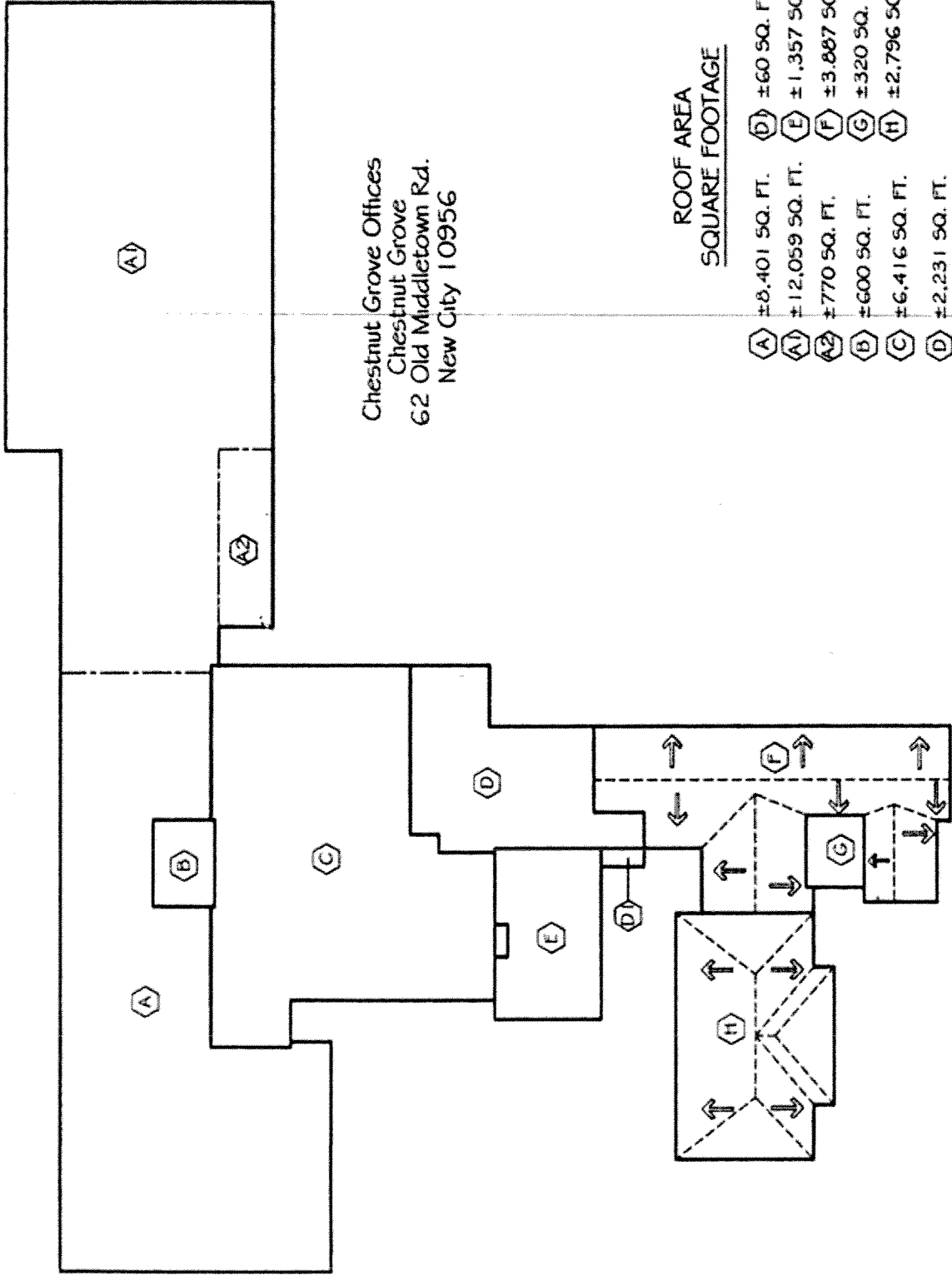
APPROX TOTAL
SQUARE FOOTAGE ±37,302 Sq. Ft.

ROOF PLAN
NOT TO SCALE

CHESTNUT GROVE OFFICES

GENERAL ROOF SYSTEM OUTLINE

Roof Area	Square Footage	Membrane System Type	Year Installed	Current Condition
A	8,401	Sprayed Foam	1971 / 1997	Poor
A1	12,049	Sprayed Foam	1971 / 1997	Poor
A2	770	Sprayed Foam	1971 / 1997	Poor
A3	600	Sprayed Foam	1971 / 1997	Poor
C	6,416	Sprayed Foam	1971 / 1997	Poor
A4	12,419	Sprayed Foam	1971 / 1997	Poor
D1	60	Sprayed Foam	1971 / 1997	Fair to Poor
E	1,857	Sprayed Foam	1971 / 1997	Poor
F	2,887	Asphalt Shingle	1982	Poor
G	320	Asphalt Shingle	1987	Poor
H	2,796	Asphalt Shingle	1982	Poor
Total	37,897			



Chestnut Grove Offices
 Chestnut Grove
 62 Old Middletown Rd.
 New City 10956

ROOF AREA
SQUARE FOOTAGE

A	±8,401 SQ. FT.	D	±60 SQ. FT.
A1	±12,059 SQ. FT.	E	±1,357 SQ. FT.
A2	±770 SQ. FT.	F	±3,887 SQ. FT.
B	±600 SQ. FT.	G	±320 SQ. FT.
C	±6,416 SQ. FT.	H	±2,796 SQ. FT.
D	±2,231 SQ. FT.		

ROOF PLAN
 NOT TO SCALE

Slope →

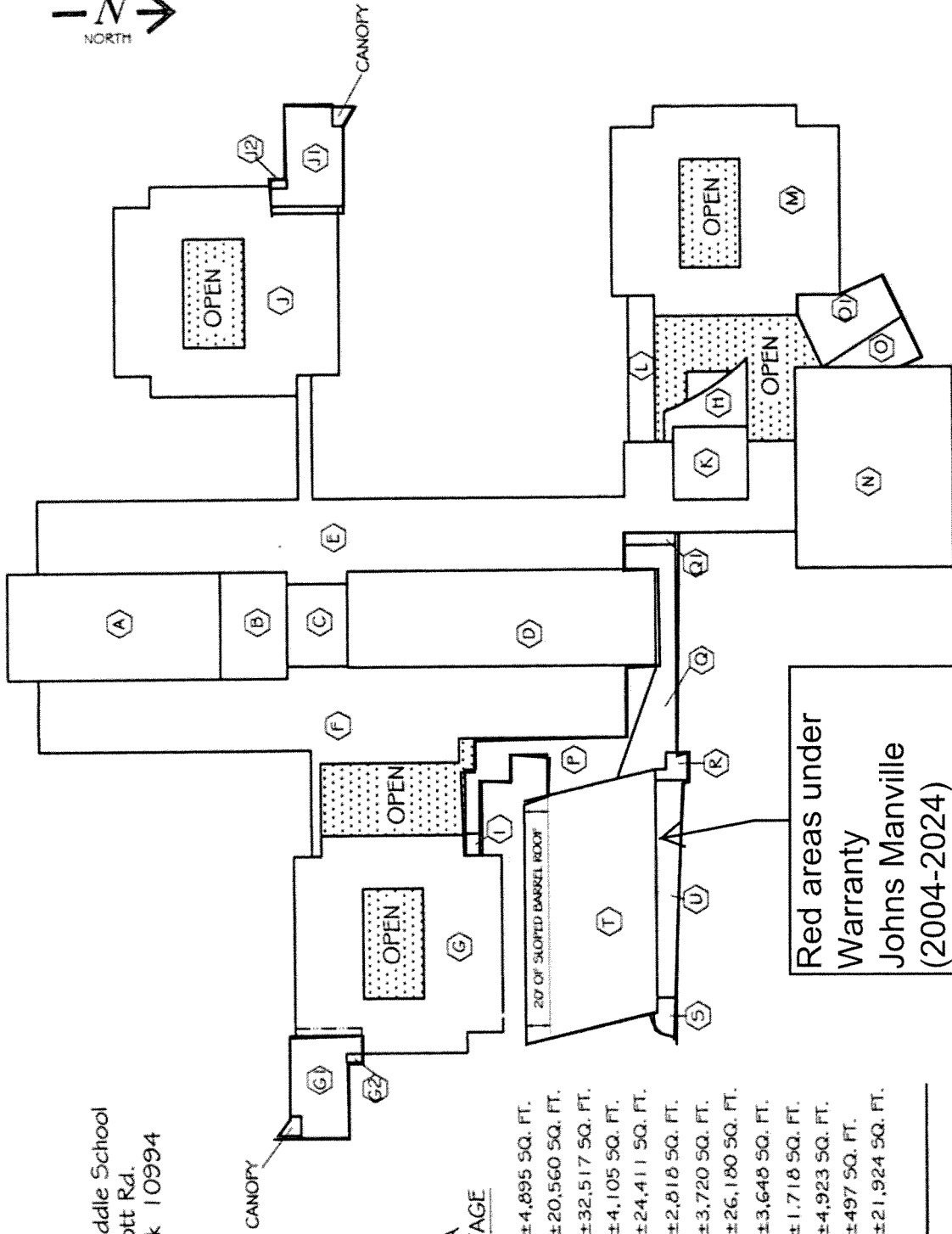
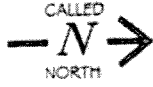
APPROX TOTAL
 SQUARE FOOTAGE ±38,897 Sq. Ft.

FELIX FESTA MIDDLE SCHOOL

GENERAL ROOF SYSTEM OUTLINE

Roof Area	Square Footage	Membrane System Type	Year Installed	Current Condition
A	15,575	EPDM adhered	1984	Poor
B	4895	EPDM adhered	1984	Fair
C	3,450	Reinforced EPDM	1984	Fair to Poor
D	20,560	EPDM IRMA	1984	Poor
E	38,693	EPDM IRMA	1984	Poor
F	32,517	EPDM IRMA	1984	Poor
G	24,411	Built-up IRMA	1984	Fair
G1	4,105	EPDM adhered	2005	Good
H	2,818	EPDM adhered	Unknown	Good
I	252	EPDM adhered	2004	Good
J	25,140	Built-up IRMA	1984	Poor
J1	4,106	EPDM adhered	2004	Good
J2	91	EPDM adhered	2004	Good
K	3,720	EPDM adhered	Unknown	Poor
L	2,640	EPDM IRMA	Unknown	Fair
M	26,180	EPDM IRMA	1984	Poor
N	21,450	EPDM IRMA	1984	Poor
O	3,648	EPDM adhered	Unknown	Good
O1	1,718	EPDM adhered	2004	Good
P	5,730	EPDM adhered	2004	Good
Q	4,923	EPDM adhered	2005	Good
Q1	420	EPDM adhered	2005	Good
R	497	EPDM adhered	2005	Good
S	426	EPDM adhered	2005	Good
T	21,924	EPDM adhered	2005	Good
U	3,602	EPDM adhered	2005	Good
Total	273,491			

Felix Festa Middle School
30 Parrott Rd.
West Nyack 10994



ROOF AREA
SQUARE FOOTAGE

(A)	± 15,575 SQ. FT.	(B)	± 4,895 SQ. FT.
(C)	± 3,450 SQ. FT.	(D)	± 20,560 SQ. FT.
(E)	± 30,693 SQ. FT.	(F)	± 32,517 SQ. FT.
(J)	± 25,140 SQ. FT.	(J)	± 4,105 SQ. FT.
(J2)	± 91 SQ. FT.	(G)	± 24,411 SQ. FT.
(G1)	± 4,105 SQ. FT.	(H)	± 2,818 SQ. FT.
(G2)	± 91 SQ. FT.	(K)	± 3,720 SQ. FT.
(I)	± 252 SQ. FT.	(M)	± 26,180 SQ. FT.
(L)	± 2,640 SQ. FT.	(O)	± 3,648 SQ. FT.
(N)	± 21,450 SQ. FT.	(Q)	± 1,718 SQ. FT.
(P)	± 5,730 SQ. FT.	(Q)	± 4,923 SQ. FT.
(Q)	± 420 SQ. FT.	(R)	± 497 SQ. FT.
(S)	± 426 SQ. FT.	(T)	± 21,924 SQ. FT.
(U)	± 3,602 SQ. FT.		

APPROX TOTAL
SQUARE FOOTAGE ± 273,491 Sq. Ft.

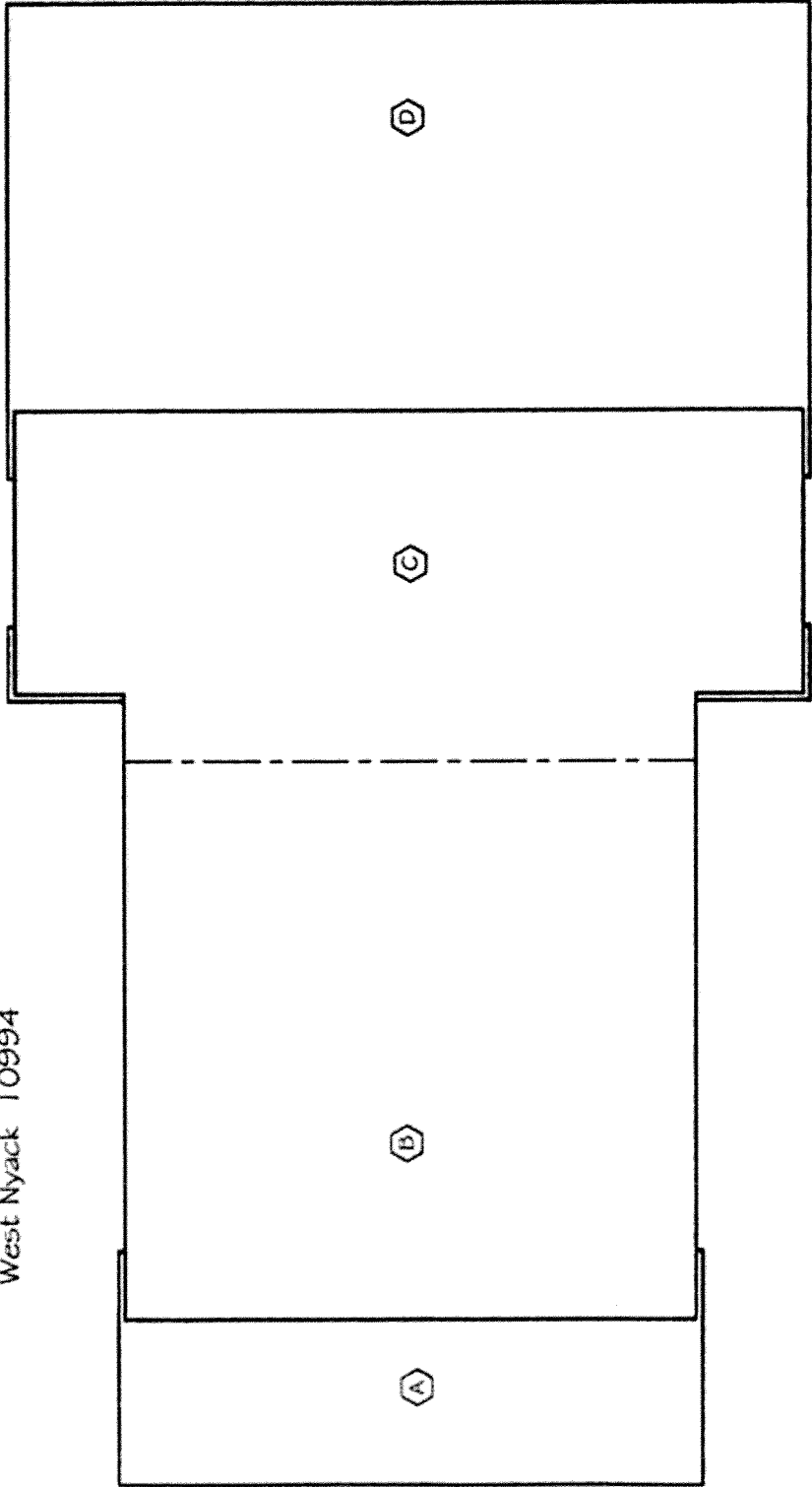
ROOF PLAN
NOT TO SCALE

FELIX FESTA - TRANSPORTATION BUILDING

GENERAL ROOF SYSTEM OUTLINE

Roof Area	Square Footage	Membrane System Type	Year Installed	Current Condition
A	766	EPDM IRMA	1984	Fair
B	1,260	EPDM IRMA	1984	Fair
C	1,430	EPDM adhered	Unknown	Fair
D	2,100	EPDM adhered	Unknown	Fair
Total	6,056			

Felix Festa Middle School
Transportation Building
30 Parrott rd.
West Nyack 10994



ROOF AREA
SQUARE FOOTAGE

(A) ±765 SQ. FT.	(B) ±1,760 SQ. FT.
(C) ±1,430 SQ. FT.	(D) ±2,100 SQ. FT.

APPROX TOTAL
SQUARE FOOTAGE ±6,055 Sq. Ft.

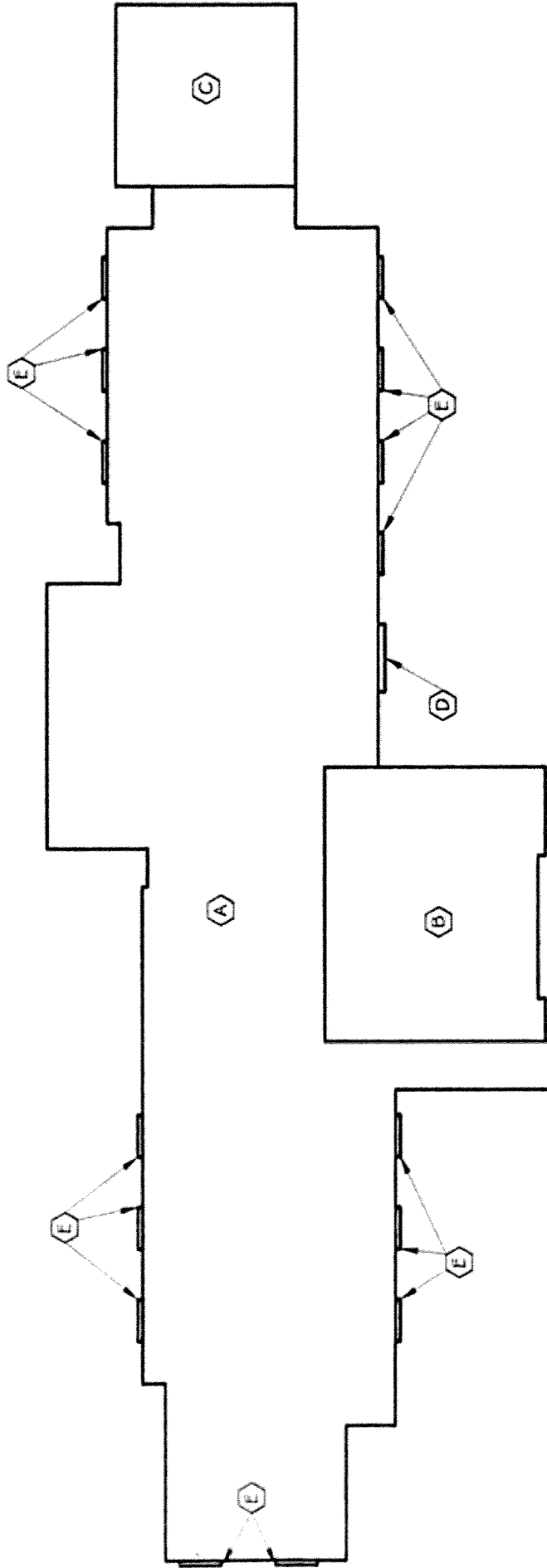
ROOF PLAN
NOT TO SCALE

LAKESWOOD ELEMENTARY SCHOOL

GENERAL ROOF SYSTEM OUTLINE

Roof Area	Square Footage	Membrane System Type	Year Installed	Current Condition
A	25,930	EPDM IRMA	1985	Fair to poor
B	4,596	EPDM IRMA	1985	Fair to poor
C	2,500	EPDM adhered	2000	Good
D	34	EPDM adhered	1985	Fair to poor
E	225	EPDM adhered	1985	Fair to poor
Total	33,285			

Lakewood Elk School
77 Lakeland Ave.
Congers 10920



**ROOF AREA
SQUARE FOOTAGE**

(A)	±25,930 SQ. FT.	(B)	±4,596 SQ. FT.
(C)	±2,500 SQ. FT.	(D)	± 34 SQ. FT.
(E)	(TYP. 15) ±15 SQ. FT. = ±225 SQ. FT.		

APPROX TOTAL
SQUARE FOOTAGE ±33,285 Sq. Ft.

**ROOF PLAN
NOT TO SCALE**

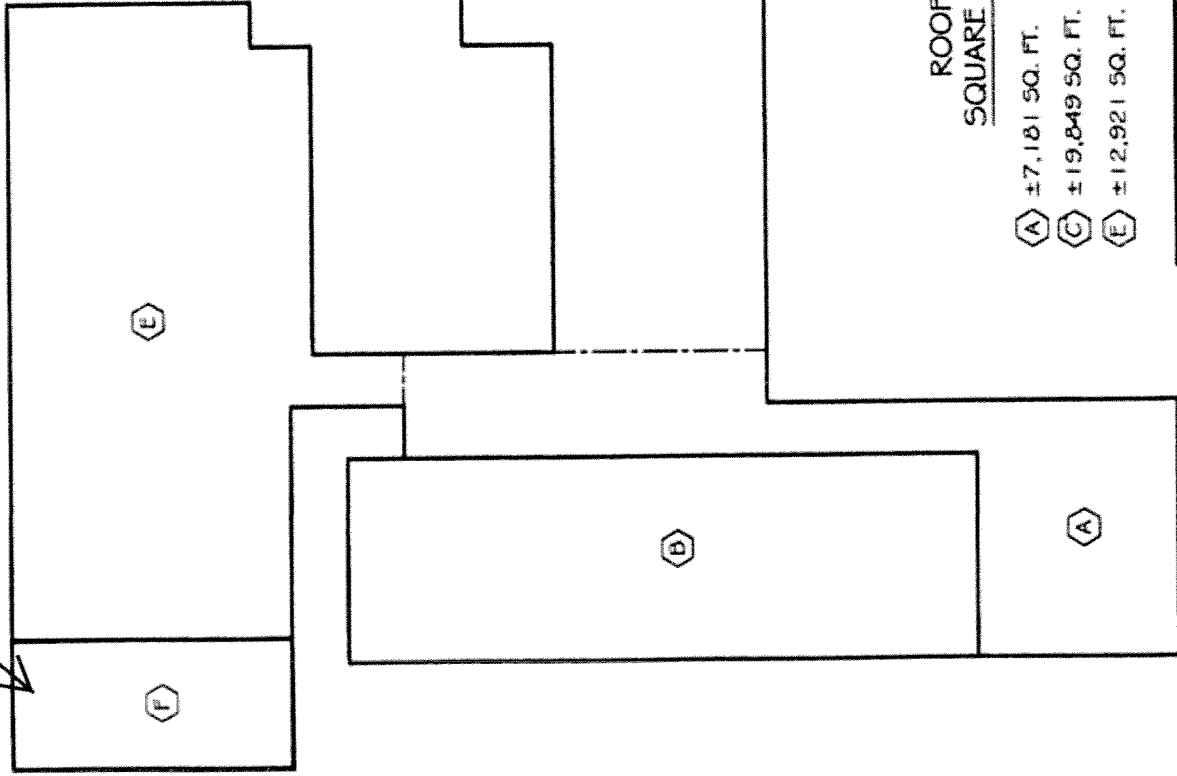
LAUREL PLAINS ELEMENTARY SCHOOL

GENERAL ROOF SYSTEM OUTLINE

Roof Area	Square Footage	Membrane System Type	Year Installed	Current Condition
A	7,181	EPDM IRMA	1986	Poor
B	9,090	EPDM IRMA	1986	Poor
C	19,849	EPDM IRMA	1986	Poor
D	6,885	EPDM IRMA	1986	Poor
E	12,921	EPDM IRMA	1986	Poor
F	2,550	EPDM adhered	Unknown	Good
G	4,020	EPDM IRMA	1986	Poor
Total	62,496			

N-2,550

Roof installed in 7/2004



Laurel Plains Elementary School
14 Teakwood Ln.
New City, 10956



ROOF AREA
SQUARE FOOTAGE

(A)	± 7,181 SQ. FT.	(B)	± 9,090 SQ. FT.
(C)	± 19,849 SQ. FT.	(D)	± 6,885 SQ. FT.
(E)	± 12,921 SQ. FT.	(F)	± 2,550 SQ. FT.
		(G)	± 4,020 SQ. FT.

APPROX TOTAL
SQUARE FOOTAGE

± 62,496 Sq. Ft.

ROOF PLAN
NOT TO SCALE

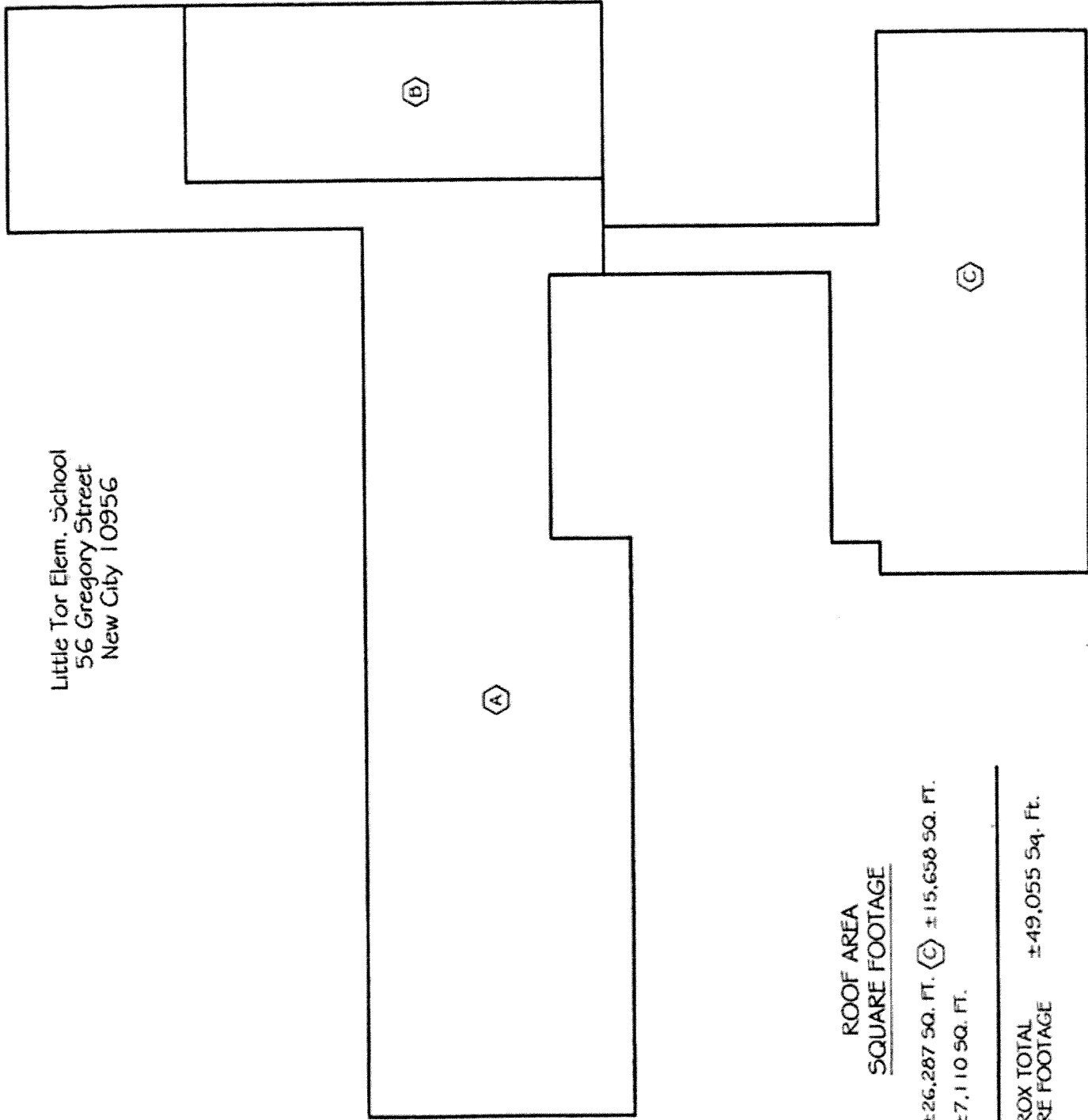
LITTLE TOR ELEMENTARY SCHOOL

GENERAL ROOF SYSTEM OUTLINE

Roof Area	Square Footage	Membrane System Type	Year Installed	Current Condition
A	26,287	EPDM IRMA	1986	Poor
B	7,110	EPDM IRMA	1986	Poor
C	15,658	EPDM IRMA	1986	Poor
Total	49,055			



Little Tor Elem. School
56 Gregory Street
New City 10956



ROOF AREA
SQUARE FOOTAGE

- (A) ±26,287 SQ. FT. (C) ±15,658 SQ. FT.
- (B) ±7,110 SQ. FT.

APPROX TOTAL ±49,055 Sq. Ft.
SQUARE FOOTAGE

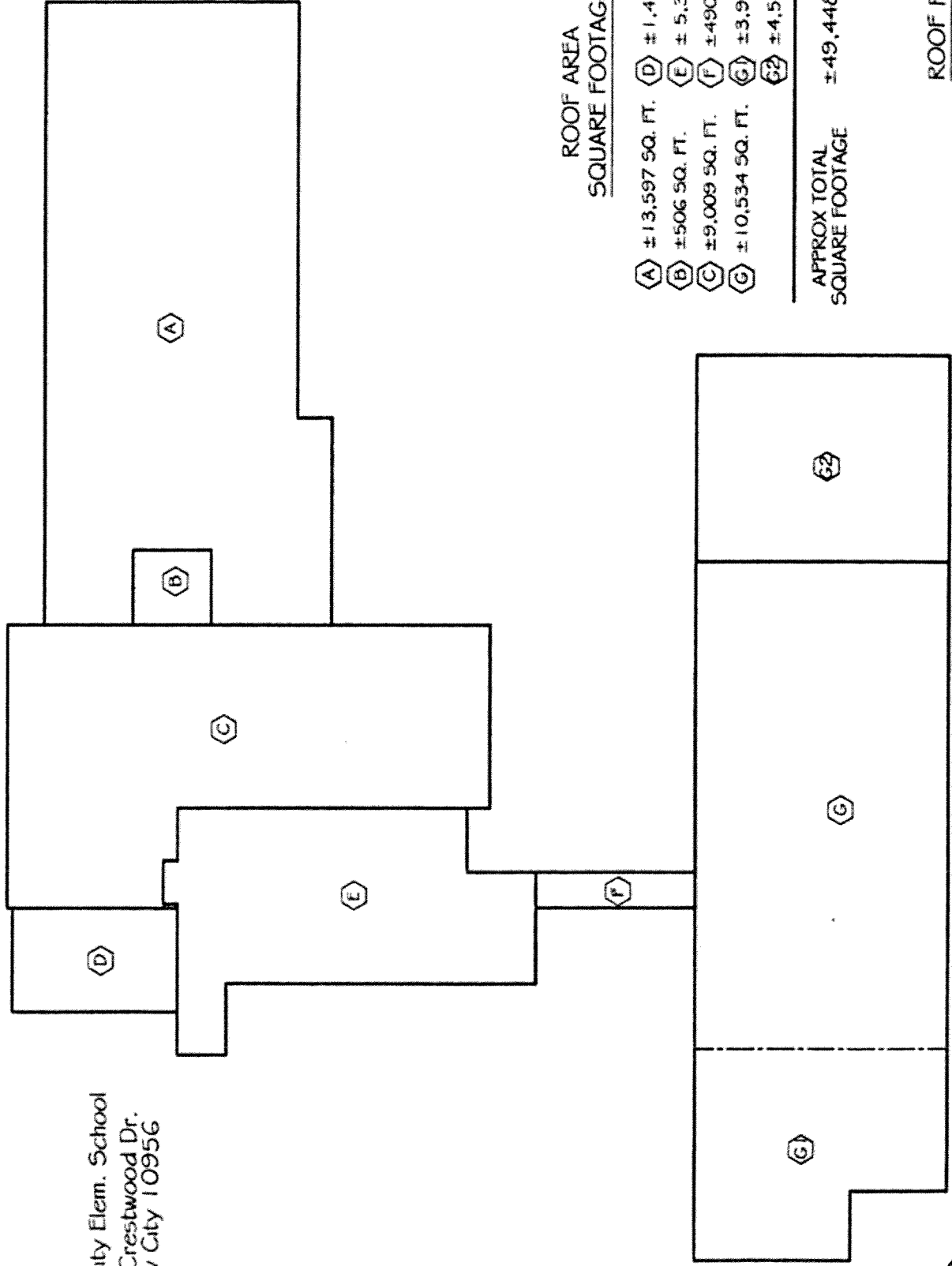
ROOF PLAN
NOT TO SCALE

NEW CITY ELEMENTARY SCHOOL

GENERAL ROOF SYSTEM OUTLINE

Roof Area	Square Footage	Membrane System Type	Year Installed	Current Condition
A	13,597	EPDM IRMA	1984	Poor
B	506	EPDM IRMA	1984	Poor
C	9,009	EPDM IRMA	1984	Poor
D	1,456	EPDM IRMA	1984	Poor
E	5,390	EPDM IRMA	1984	Poor
F	490	EPDM IRMA	1984	Poor
G	10,534	EPDM IRMA	1984	Poor
G1	3,952	EPDM IRMA	1984	Poor
G2	4,514	EPDM IRMA	1984	Poor
Total	49,448			

New City Elem. School
 60 Crestwood Dr.
 New City 10956



ROOF AREA
 SQUARE FOOTAGE

(A)	± 13,597 SQ. FT.	(D)	± 1,456 SQ. FT.
(B)	± 506 SQ. FT.	(E)	± 5,390 SQ. FT.
(C)	± 9,009 SQ. FT.	(F)	± 490 SQ. FT.
(G)	± 10,534 SQ. FT.	(G)	± 3,952 SQ. FT.
		(G)	± 4,514 SQ. FT.

APPROX TOTAL
 SQUARE FOOTAGE ± 49,448 Sq. Ft.



ROOF PLAN
 NOT TO SCALE

Exp. Joint - _____

NORTH HIGH SCHOOL

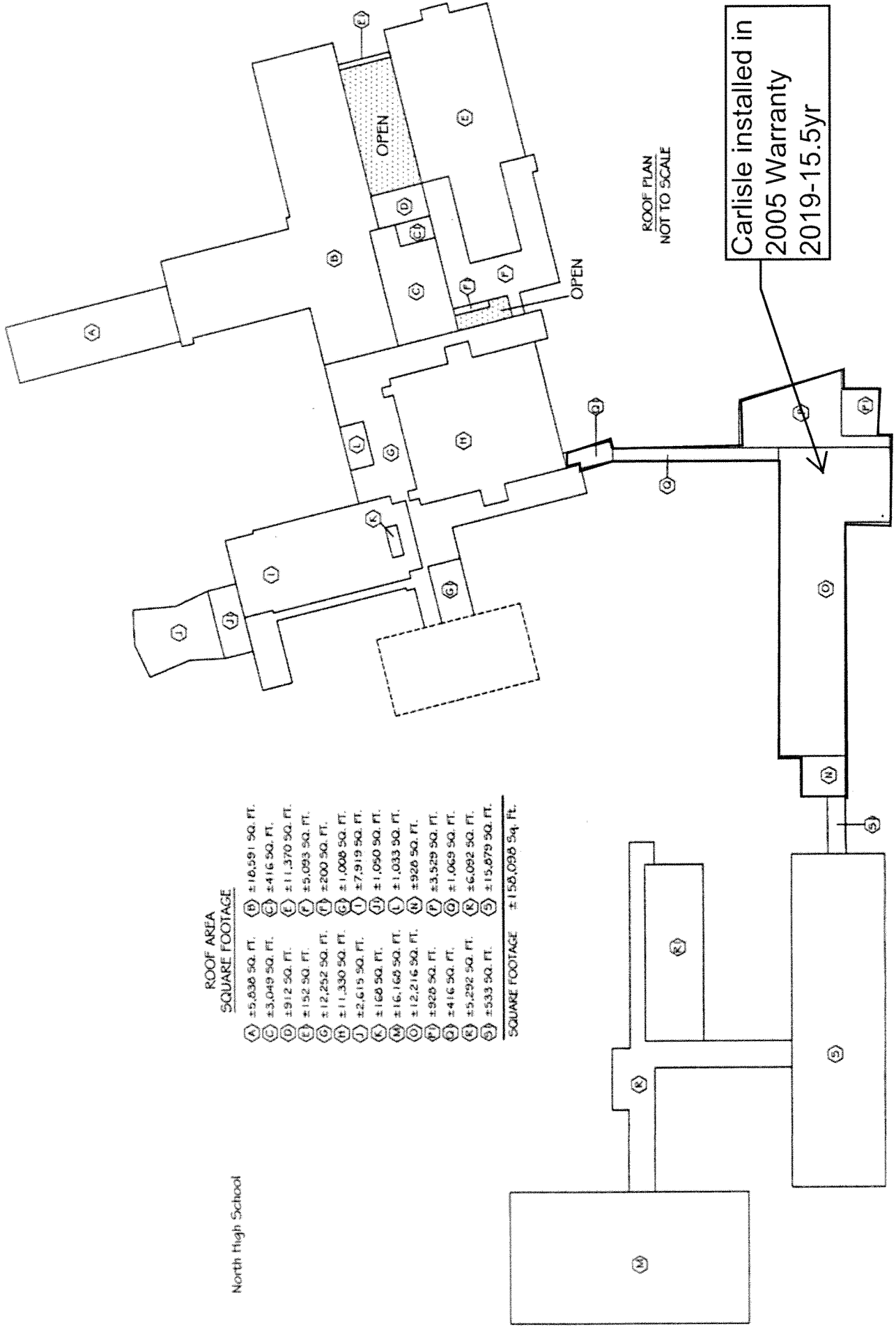
GENERAL ROOF SYSTEM OUTLINE

Roof Area	Square Footage	Membrane System Type	Year Installed	Current Condition
A	5,838	EPDM IRMA	1986	Fair
B	18,591	EPDM IRMA	1986	Fair
C	3,049	EPDM IRMA	1986	Fair
C1	416	EPDM IRMA	1986	Fair
D	912	EPDM IRMA	1986	Fair
E	11,370	EPDM IRMA	1986	Fair
E1	152	EPDM IRMA	1986	Fair
F	5,093	EPDM IRMA	1986	Fair
F1	200	EPDM IRMA	1986	Fair
G	12,252	EPDM IRMA	1986	Poor
G1	1,008	Slate	1986	Poor
H	11,250	Single-ply adhered	1986	Fair
I	7,919	EPDM IRMA	1986	Poor
J	2,615	EPDM IRMA	1986	Fair
J1	1,050	EPDM IRMA	1986	Poor
K	168	EPDM IRMA	1986	Poor
L	1,033	EPDM IRMA	1986	Poor
M	16,168	EPDM IRMA	1986	Good
N	928	EPDM adhered	2004	Good
O	12,216	EPDM adhered	2004	Good
P	3,529	EPDM adhered	2004	Good
P1	928	EPDM adhered	2004	Good
Q	1,069	EPDM adhered	2004	Good
Q1	416	EPDM adhered	2004	Good
R	6,092	EPDM IRMA	1986	Good
R1	5,292	EPDM IRMA	1986	Good
S	15,879	EPDM IRMA	1986	Good
S1	533	EPDM adhered	2004	Good
Total	145,966			

North High School

ROOF AREA SQUARE FOOTAGE

A	±5,838 SQ. FT.	B	±16,591 SQ. FT.
C	±3,049 SQ. FT.	D	±416 SQ. FT.
E	±912 SQ. FT.	F	±11,370 SQ. FT.
G	±152 SQ. FT.	H	±5,093 SQ. FT.
I	±12,252 SQ. FT.	J	±200 SQ. FT.
K	±11,330 SQ. FT.	L	±1,008 SQ. FT.
M	±2,615 SQ. FT.	N	±7,919 SQ. FT.
O	±168 SQ. FT.	P	±1,090 SQ. FT.
Q	±16,168 SQ. FT.	R	±1,033 SQ. FT.
S	±12,216 SQ. FT.	T	±928 SQ. FT.
U	±928 SQ. FT.	V	±3,529 SQ. FT.
W	±416 SQ. FT.	X	±1,069 SQ. FT.
Y	±5,292 SQ. FT.	Z	±6,092 SQ. FT.
AA	±533 SQ. FT.	AB	±15,879 SQ. FT.
TOTAL		±158,098 SQ. FT.	



SOUTH HIGH SCHOOL

GENERAL ROOF SYSTEM OUTLINE

Roof Area	Square Footage	Membrane System Type	Year Installed	Current Condition
A	19,320	Sprayed Foam	1971 / 1997	Poor
A1	2,300	Sprayed Foam	1971 / 1997	Poor
B	5,008	Sprayed Foam	1971 / 1997	Poor
C	17,139	Sprayed Foam	1971 / 1997	Poor
D	384	Sprayed Foam	1971 / 1997	Fair
E	9,477	Sprayed Foam	1971 / 1997	Fair to Poor
F	10,455	Sprayed Foam	1971 / 1997	Fair to Poor
G	2,950	Sprayed Foam	1971 / 1997	Fair to Poor
G1	949	Sprayed Foam	1971 / 1997	Fair to Poor
G2	968	Sprayed Foam	1971 / 1997	Fair to Poor
G3	257	Sprayed Foam	1971 / 1997	Fair to Poor
G4	256	Sprayed Foam	1971 / 1997	Fair to Poor
G5	262	Sprayed Foam	1971 / 1997	Fair to Poor
H *	23,212	N/A	N/A	N/A
H1 *	34,016	N/A	N/A	N/A
I	13,987	Sprayed Foam	1971 / 1997	Poor
J *	1,200	N/A	N/A	N/A
J1 *	80	N/A	N/A	N/A
J2 *	183	N/A	N/A	N/A
K	3,545	Sprayed Foam	1971 / 1997	Fair to Poor
K1	864	Sprayed Foam	1971 / 1997	Fair to Poor
L	936	Sprayed Foam	1971 / 1997	Fair to Poor
L1	832	Sprayed Foam	1971 / 1997	Fair to Poor
L2	840	Sprayed Foam	1971 / 1997	Fair
M	10,317	Sprayed Foam	1971 / 1997	Fair to Poor
M1	1,679	Sprayed Foam	1971 / 1997	Fair to Poor
M2	4,387	Sprayed Foam	1971 / 1997	Fair to Poor
N	7,312	Sprayed Foam	1971 / 1997	Poor
O	170	Sarnafil PVC	Unknown	Good
O1	384	Sarnafil PVC	Unknown	Fair
P	1,936	Metal	Unknown	Good
Total	175,605			

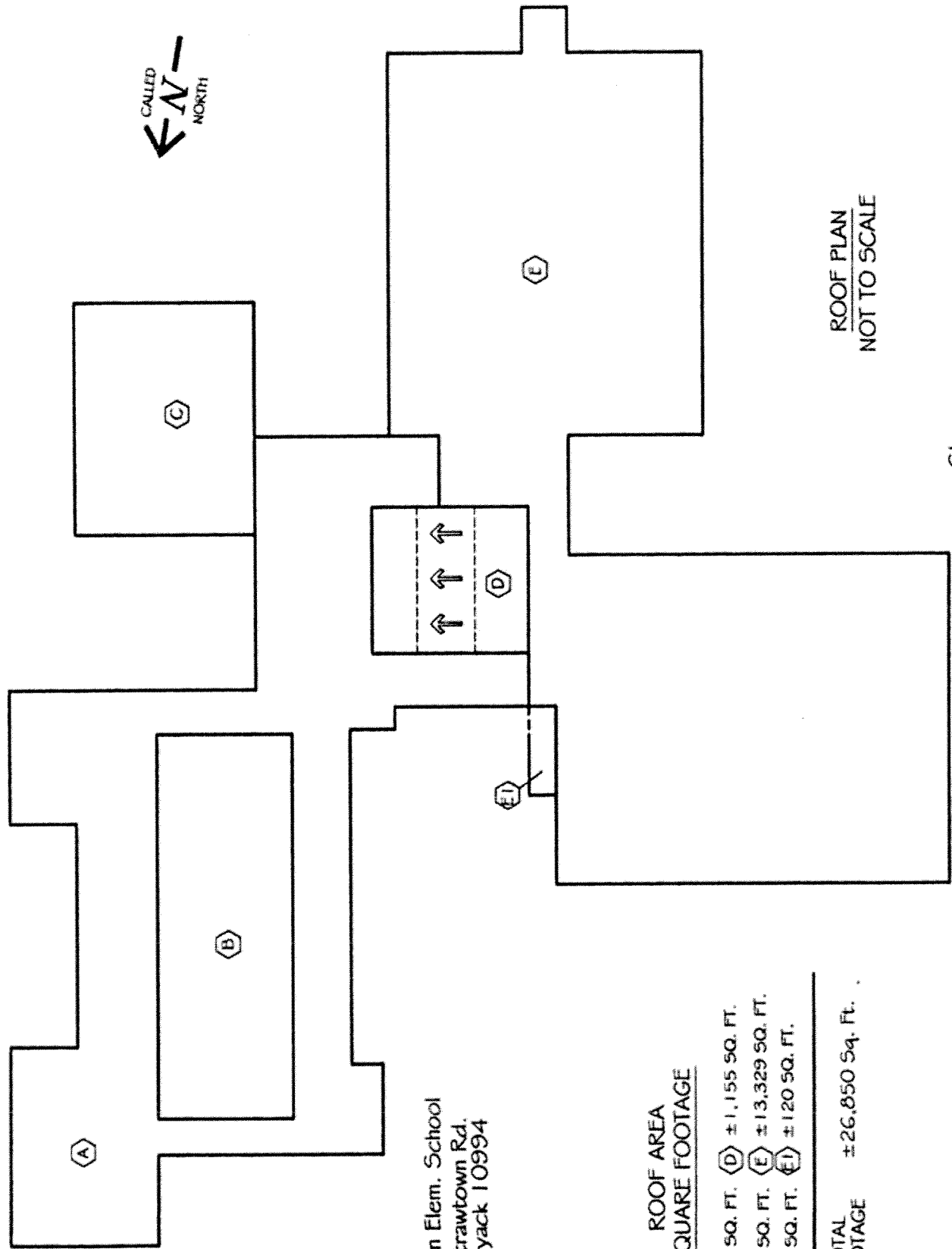
* These roofs are scheduled to be redone in Summer 2007.



STRAWTOWN ELEMENTARY SCHOOL

GENERAL ROOF SYSTEM OUTLINE

Roof Area	Square Footage	Membrane System Type	Year Installed	Current Condition
A	7,586	EPDM IRMA	1984	Poor
B	2,580	EPDM IRMA	1984	Poor
C	2,080	EPDM IRMA	1984	Poor
D	1,155	EPDM adhered	1984	Poor
E	13,329	EPDM IRMA	1984	Poor
E1	120	EPDM IRMA	1984	Poor
Total	26,850			



Strawtown Elem. School
 413 Strawtown Rd.
 West Nyack 10994

ROOF AREA
SQUARE FOOTAGE

(A)	±7,586 SQ. FT.	(D)	±1,155 SQ. FT.
(B)	±2,580 SQ. FT.	(E)	±13,329 SQ. FT.
(C)	±2,080 SQ. FT.	(E)	±120 SQ. FT.

APPROX TOTAL
 SQUARE FOOTAGE ±26,850 Sq. Ft.

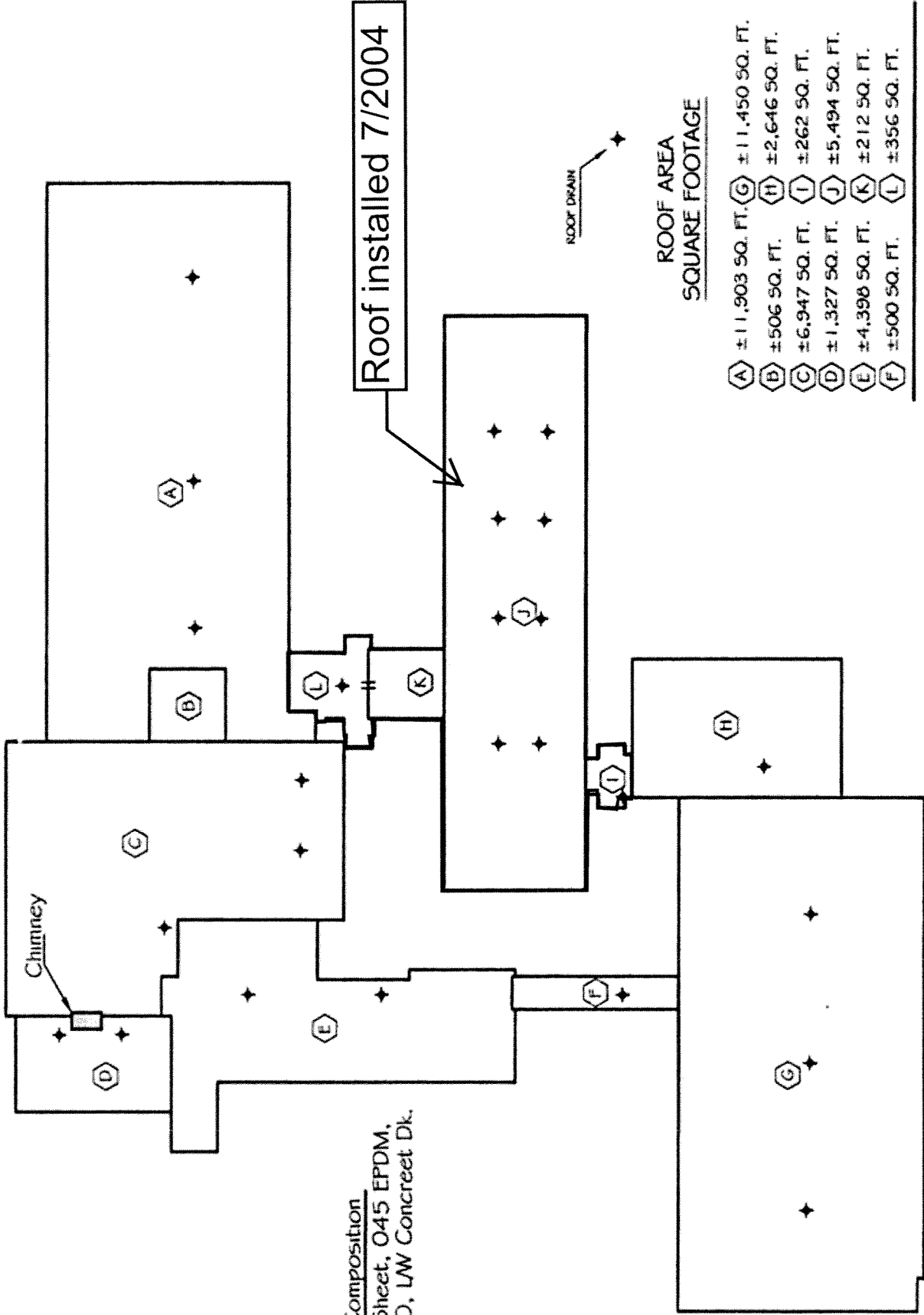
ROOF PLAN
 NOT TO SCALE

WEST NYACK ELEMENTARY SCHOOL

GENERAL ROOF SYSTEM OUTLINE

Roof Area	Square Footage	Membrane System Type	Year Installed	Current Condition
A	12,740	EPDM IRMA	1985	Poor
B	400	EPDM IRMA	1985	Poor
C	6,785	EPDM IRMA	1985	Poor
D	1,950	EPDM IRMA	1985	Degraded
E	5,285	EPDM IRMA	1985	Degraded
F	900	EPDM IRMA	1985	Poor
G	11,200	EPDM IRMA	1985	Poor
H	2,700	EPDM IRMA	1985	Poor
I	262	EPDM adhered	2004	Good
J	5,494	EPDM adhered	2004	Good
K	212	EPDM adhered	2004	Good
L	356	EPDM adhered	2004	Good
Total	48,284			

West Nyack El. School
 661 W Nyack Rd.
 West Nyack 10994



Roof Composition
 Stone, Srim Sheet, 045 EPDM,
 *Foil Back ISO, LW Concrete Dk.

ROOF AREA
SQUARE FOOTAGE

(A)	±11,903 SQ. FT.	(G)	±11,450 SQ. FT.
(B)	±506 SQ. FT.	(H)	±2,646 SQ. FT.
(C)	±6,947 SQ. FT.	(I)	±262 SQ. FT.
(D)	±1,327 SQ. FT.	(J)	±5,494 SQ. FT.
(E)	±4,398 SQ. FT.	(K)	±212 SQ. FT.
(F)	±500 SQ. FT.	(L)	±356 SQ. FT.

APPROX TOTAL
 SQUARE FOOTAGE ±46,001 Sq. Ft.

ROOF PLAN
 NOT TO SCALE

WOODGLEN ELEMENTARY SCHOOL

GENERAL ROOF SYSTEM OUTLINE

Roof Area	Square Footage	Membrane System Type	Year Installed	Current Condition
A	33,162	EPDM IRMA	1986	Fair to Poor
A1	100	EPDM adhered	2005	Good
B	4,972	EPDM IRMA	1986	Fair to Poor
C	240	EPDM adhered	Unknown	Fair to Poor
Total	38,474			

Woodglen Elem. School
 121 Philips Hill Rd.
 New City 10956



C TYPICAL AT 16 LOCATIONS

(C)

(A)

(B)

(A)

ROOF AREA
SQUARE FOOTAGE

(A) ±34,064 SQ. FT. (B) ±4,972 SQ. FT.
 (A) ±100 SQ. FT. (C) ±240 SQ. FT.

APPROX TOTAL
 SQUARE FOOTAGE ±39,036 Sq. Ft.

ROOF PLAN
 NOT TO SCALE