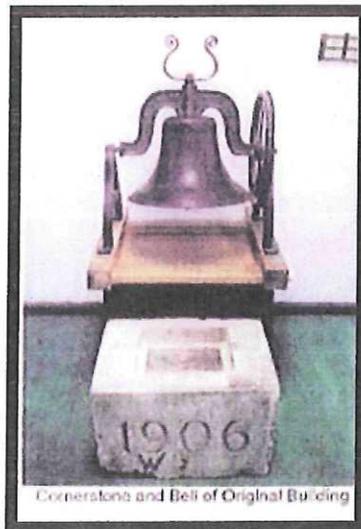
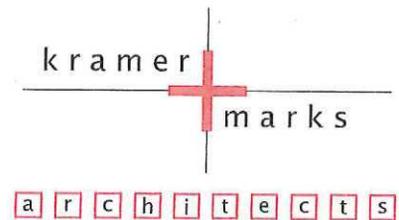


Architectural Feasibility Study 2

UPPER DUBLIN EPI CENTER
For
Department of Recreation
Upper Dublin Township
May 27, 2011



kramer
marks
architects



Summary /Conclusion

The purpose of this study was to review possible options for utilizing the site, part of the existing school, or providing a complete new facility. In this report, we have considered the existing building conditions, defined desired program spaces and developed a schematic design of those spaces and have also considered the code impact on the schematic design. Only outline budgetary costs have been prepared for the proposed schematic designs.

It is our belief that the existing building and its egress components are adaptable for the uses proposed with limitations. Where the existing structure is to remain, it would be treated as tenant fit-out type work. Ballpark costs for these types of projects have ranged from \$75 to \$85 (approximately) per square foot. The exterior work would include new windows, roofing, masonry repairs, painting, etc. of the existing walls to remain (all as additional cost). The assumption made on the existing structure is complete replacement of electrical, mechanical, and plumbing systems.

New construction can provide an overall usable facility but at increased cost. However, the space provided will be more suitable and flexible to the program needs of the community. The exterior will require careful treatment to meet the approval of the neighbors.

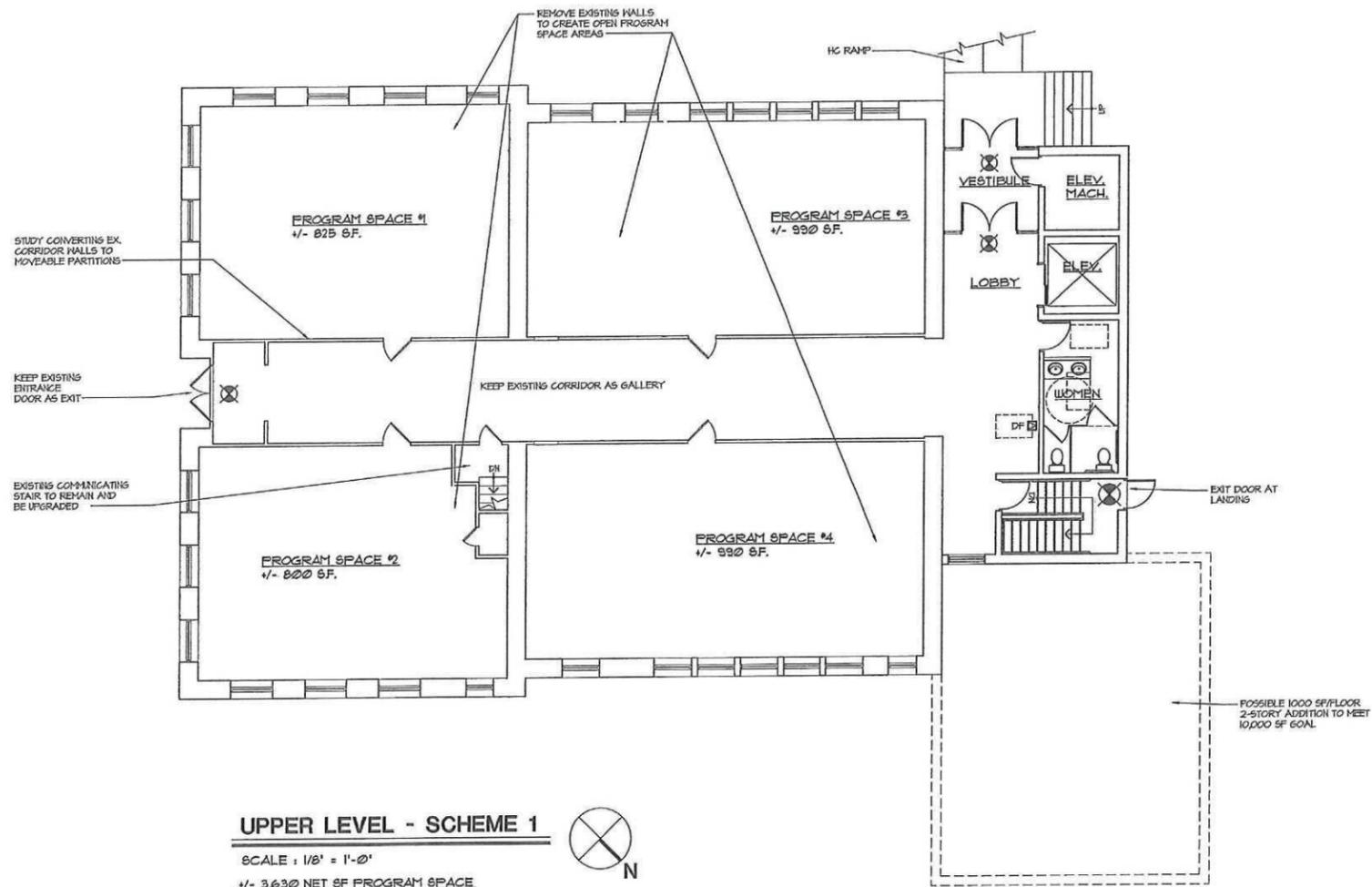
As in any study, this report is based on assumptions and general parameters that would need to be refined in a more thorough architectural design, structural analysis, mechanical, plumbing and electrical investigations, and cost estimates. We would be happy to answer any questions and concerns you may have.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read 'W. Kramer', is written over a large, light blue circular scribble.

William E. Kramer, AIA

WEK/pap



UPPER LEVEL - SCHEME 1

SCALE : 1/8" = 1'-0"

1/- 3,630 NET SF PROGRAM SPACE

1/- 5,224 GROSS SF OF EXISTING TO REMAIN

1/- 894 GROSS SF OF NEW CORE

1/- 6,118 GROSS SF. TOTAL

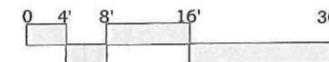
TOTAL NET SF PROGRAM SPACE = 3,130 SF

TOTAL GROSS SF BLDG AREA = 12,236 SF

BLDG EFFICIENCY = 74.5 %



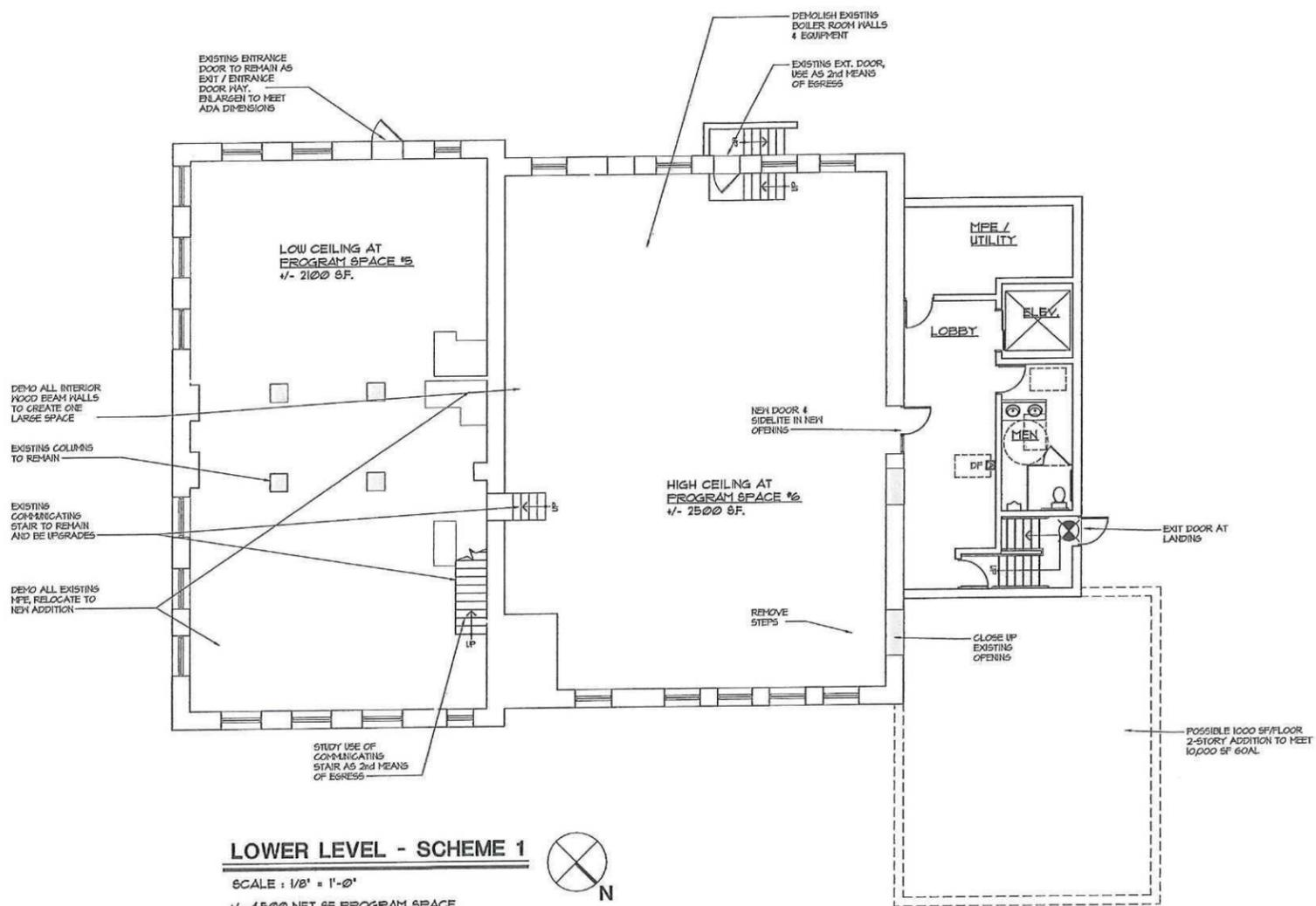
SCHEME 1 - UPPER LEVEL - EXISTING W/ NEW CORE
 DEMOLISH 1950 WING AND KEEP OLDER SECTIONS
UPPER DUBLIN TOWNSHIP - EPI CENTER UPPER DUBLIN, PA



kramer + marks

architecture interior design planning

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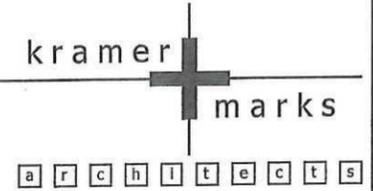
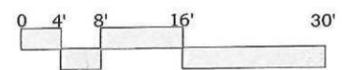


LOWER LEVEL - SCHEME 1

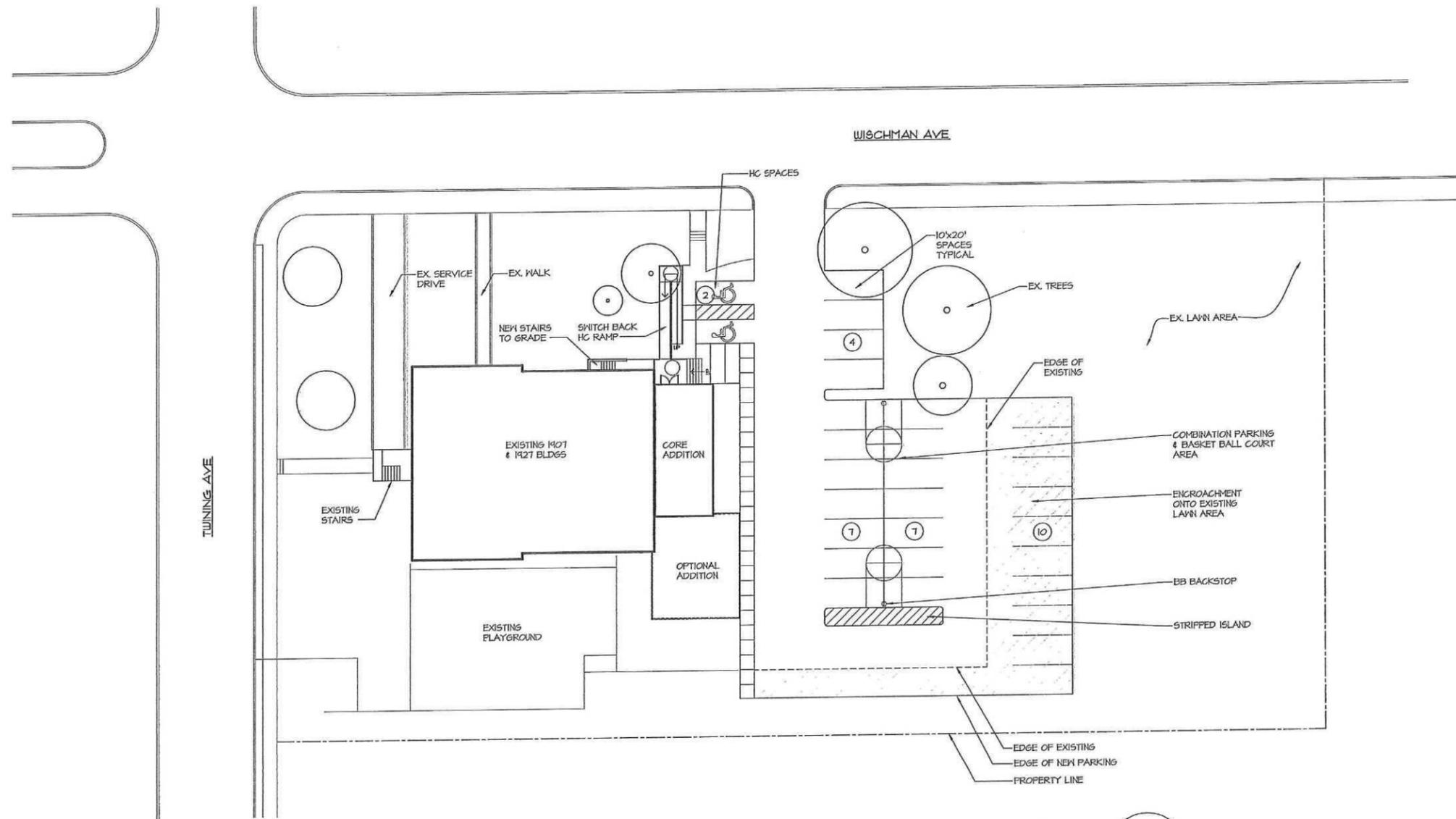
- SCALE : 1/8" = 1'-0"
- 4- 4500 NET SF PROGRAM SPACE
 - 4- 5,224 GROSS SF OF EXISTING TO REMAIN
 - 4- 834 GROSS SF OF NEW CORE
 - 4- 6118 GROSS SF. TOTAL

SCHEME 1 - LOWER LEVEL - EXISTING W/ NEW CORE
 DEMOLISH 1950 WING AND KEEP OLDER SECTIONS
UPPER DUBLIN TOWNSHIP - EPI CENTER UPPER DUBLIN, PA

date: 5.31.2011
 scale: 1/8" = 1'-0"



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SITE PLAN - SCHEME 1 + 1A

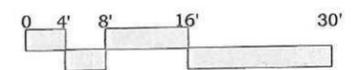
SCALE : 1" = 20'-0"

30 PARKING SPACES
(SCHEME 1A SIMILAR)



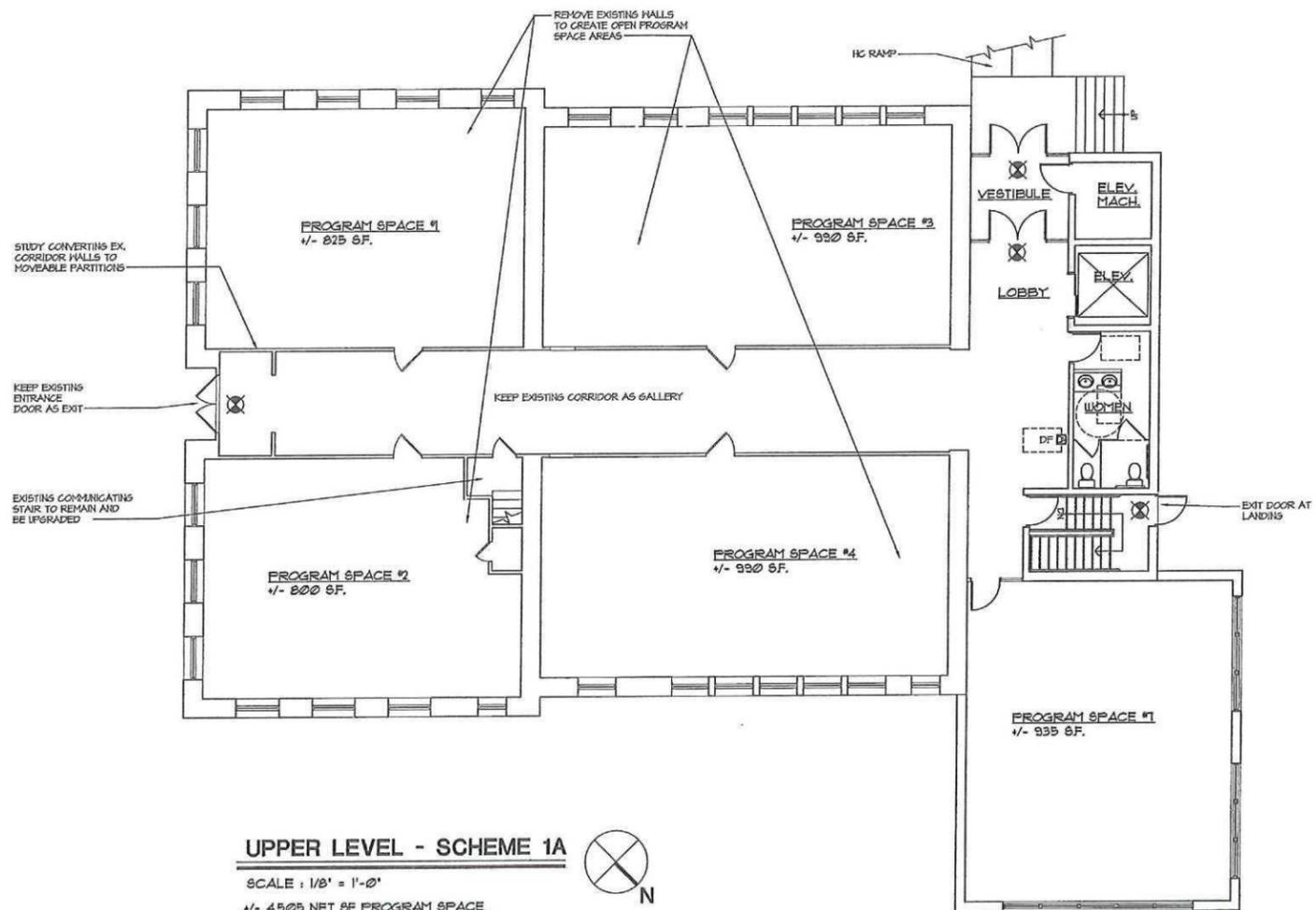
SCHEME 1 - SITE PLAN - EXISTING W/ NEW CORE
 DEMOLISH 1950 WING AND KEEP OLDER SECTIONS
UPPER DUBLIN TOWNSHIP - EPI CENTER UPPER DUBLIN, PA

date: 5.31.2011
 scale: 1/8" = 1'-0"



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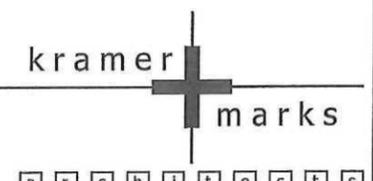
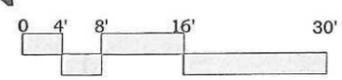


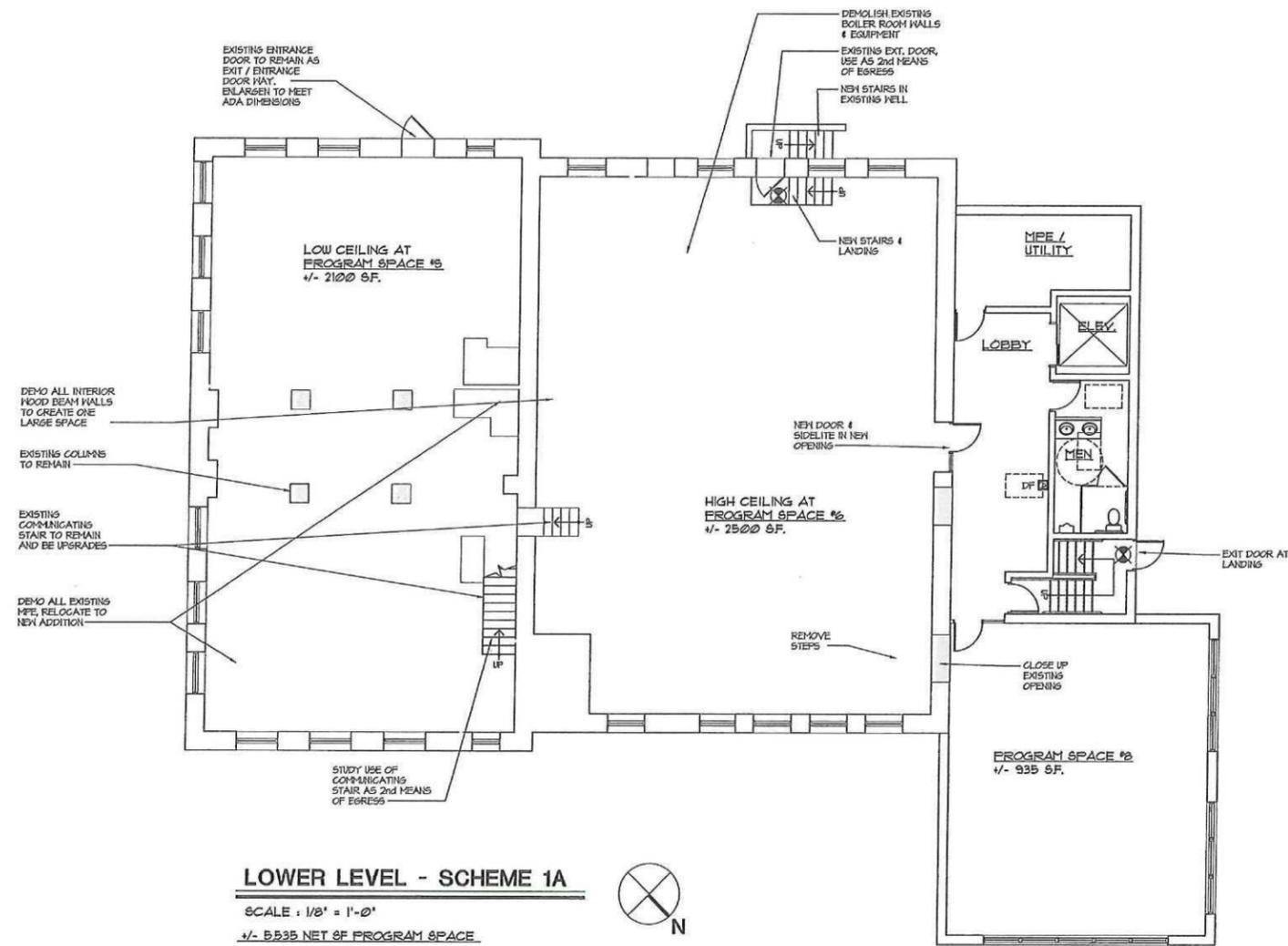
UPPER LEVEL - SCHEME 1A



SCALE : 1/8" = 1'-0"
 +/- 4505 NET SF PROGRAM SPACE
 +/- 5224 GROSS SF OF EXISTING TO REMAIN
 +/- 894 GROSS SF OF NEW CORE
 +/- 1,029 GROSS SF OF NEW ADDITION
 +/- 7,147 GROSS SF TOTAL
 TOTAL NET SF PROGRAM SPACE = 10,000 SF
 TOTAL GROSS SF BLDG AREA = 14,234 SF

SCHEME 1A- UPPER LEVEL - EXISTING W/ NEW CORE + ADDITION
 DEMOLISH 1950 WING AND BUILD NEW WING
UPPER DUBLIN TOWNSHIP - EPI CENTER UPPER DUBLIN, PA





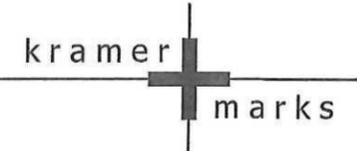
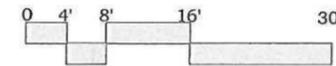
LOWER LEVEL - SCHEME 1A

- SCALE : 1/8" = 1'-0"
- +/- 5535 NET SF PROGRAM SPACE
- +/- 5224 GROSS SF OF EXISTING TO REMAIN
- +/- 894 GROSS SF OF NEW CORE
- +/- 1029 GROSS SF OF NEW ADDITION
- +/- 7147 GROSS SF: EXISTING + NEW CORE



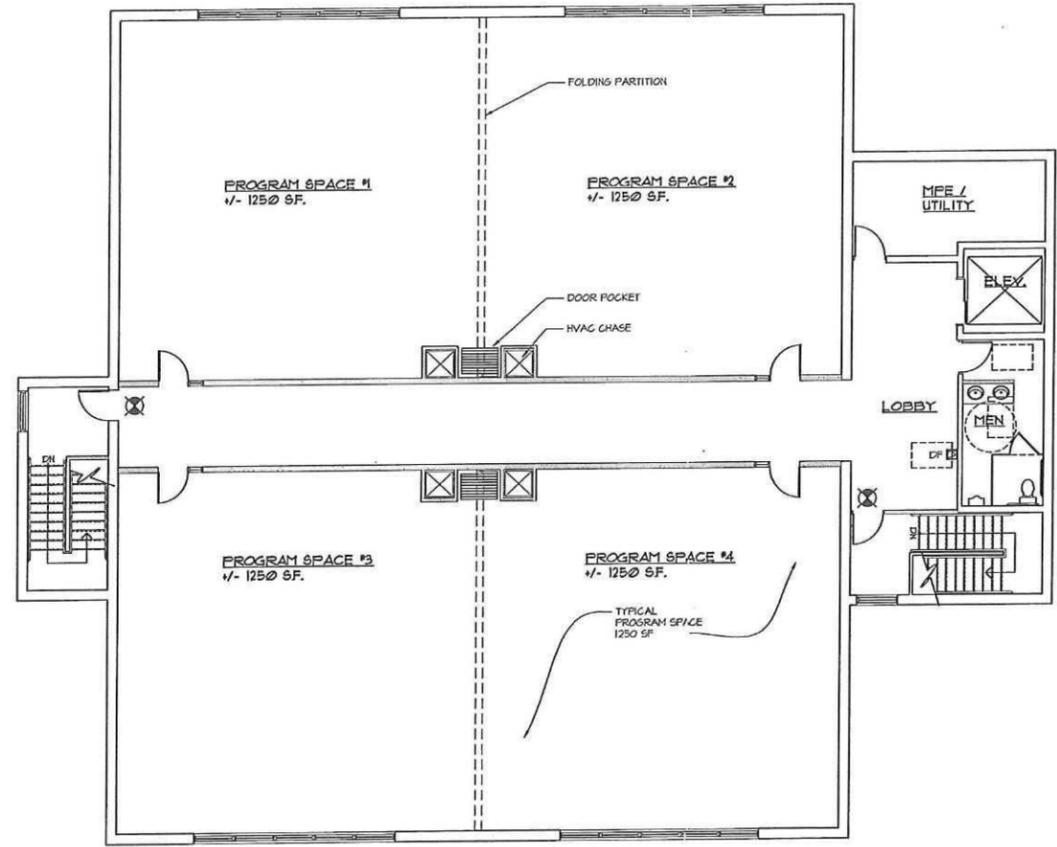
SCHEME 1A - LOWER LEVEL - EXISTING W/ NEW CORE + ADDITION
 DEMOLISH 1950 WING AND BUILD NEW WING
UPPER DUBLIN TOWNSHIP - EPI CENTER UPPER DUBLIN, PA

date: 5.31.2011
 scale: 1/8" = 1'-0"



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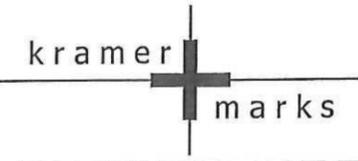
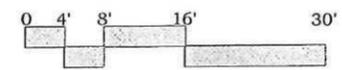


UPPER LEVEL - SCHEME 2



SCALE : 1/8" = 1'-0"
 +/- 5,000 NET SF PROGRAM SPACE
 4 PROGRAM SPACES @ 1250 SF EA.
 +/- 6,000 GROSS SF OF NEW PROGRAM SF
 +/- 894 GROSS SF OF NEW CORE
 +/- 193 SF OF NEW STAIR
 +/- 1,167 GROSS SF
 TOTAL UPPER LEVEL GROSS = 1,167 SF
 TOTAL LOWER LEVEL GROSS = 1,167 SF
 TOTAL GROSS SF BLDG AREA = 14,334 SF

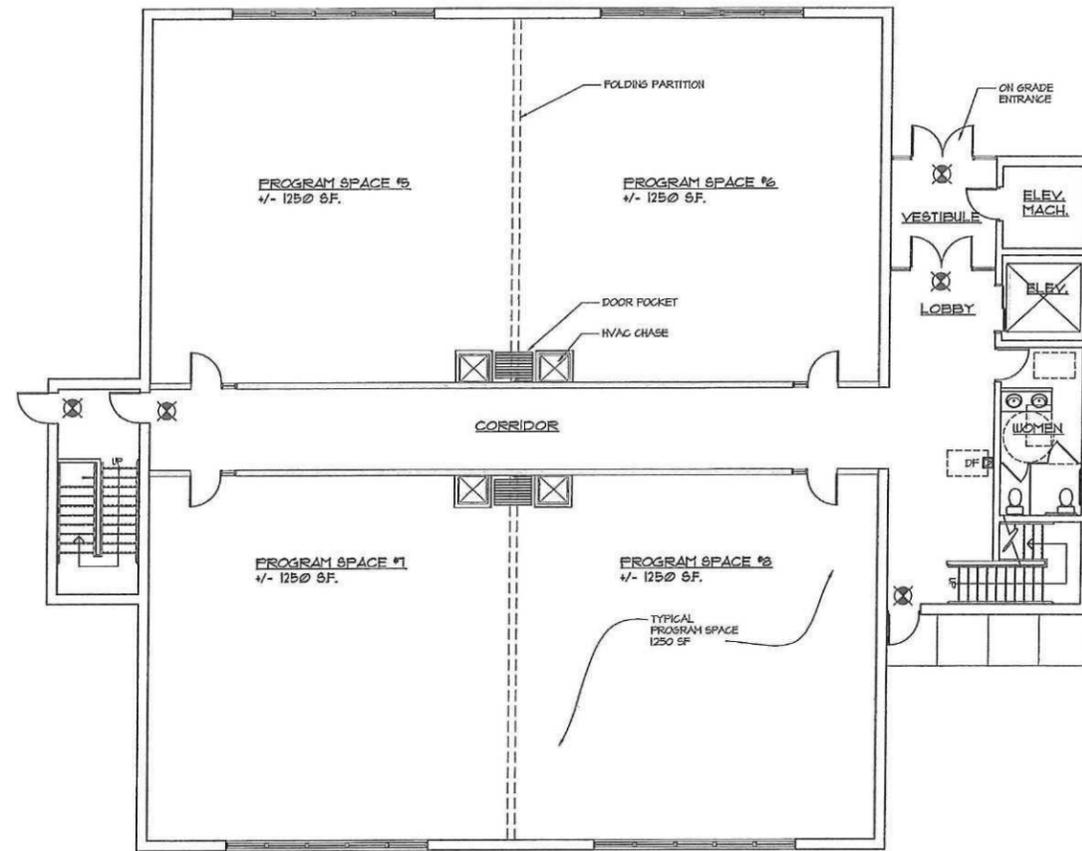
SCHEME 2 - UPPER LEVEL - NEW CONSTRUCTION
 DEMOLISH ENTIRE EXISTING BUILDING
UPPER DUBLIN TOWNSHIP - EPI CENTER UPPER DUBLIN, PA



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date: 5.31.2011
 scale: 1/8" = 1'-0"



LOWER LEVEL - SCHEME 2



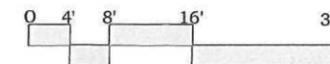
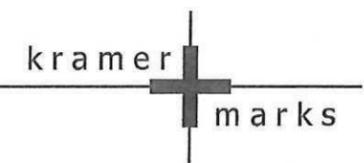
SCALE : 1/8" = 1'-0"

- +/- 5,000 NET SF PROGRAM SPACE
- 4 PROGRAM SPACES @ 1250 SF EA.
- +/- 6,000 GROSS SF OF NEW PROGRAM SP
- +/- 834 GROSS SF OF NEW CORE
- +/- 133 SF OF NEW STAIR
- +/- 1167 GROSS SF

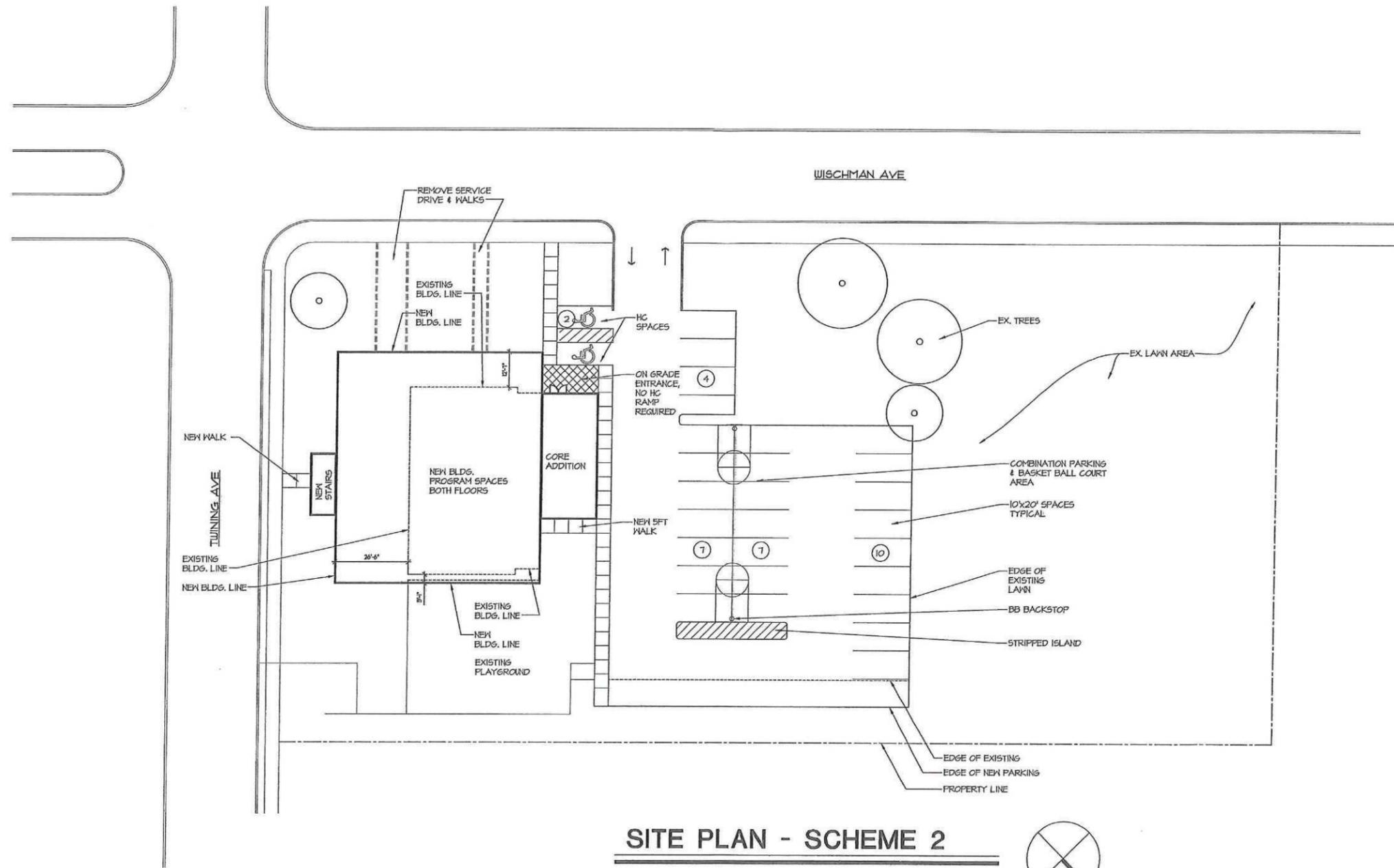
SCHEME 2 - LOWER LEVEL - NEW CONSTRUCTION
DEMOLISH ENTIRE EXISTING BUILDING

UPPER DUBLIN TOWNSHIP - EPI CENTER UPPER DUBLIN, PA

date: 5.31.2011
 scale: 1/8" = 1'-0"



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SITE PLAN - SCHEME 2

SCALE : 1" = 20'-0"

30 PARKING SPACES



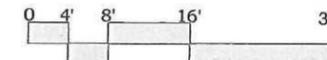
SCHEME 2 - SITE PLAN - NEW CONSTRUCTION

DEMOLISH ENTIRE EXISTING BUILDING

UPPER DUBLIN TOWNSHIP- EPI CENTER UPPER DUBLIN, PA

date: 5.31.2011
scale: 1/8" = 1'-0"

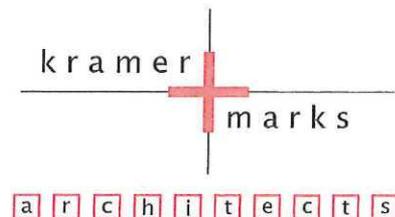
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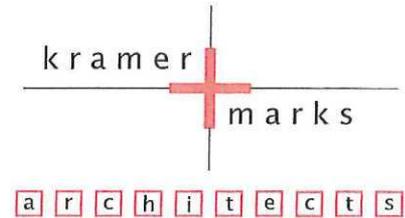
May 27, 2011



EPI CENTER STUDY FOR UPPER DUBLIN TOWNSHIP

A. Partial Demolition – Schemes 1 & 1A

1. Goal was to provide 10,000 S.F. net of program space. Net program space we interpret as the usable area/space within the walls of a room. A building's efficiency determines its final gross S.F. The thickness of walls, structure elements, its corridors, and support spaces are included in the gross. A 10,000 S.F. net area at 65% efficiency requires 15,385 S.F. of gross building area. The existing building without the 1950's addition is two-stories with approximately 11,000 gross S.F. This will only provide 8,130 SF of net program space. New toilet rooms and an elevator would be required, which necessitates a core addition with resultant increase in area. The existing toilet rooms do not comply with current ADA requirements, and ADA access is needed to both floors. The requirement of 10,000 S.F. cannot be met within the existing walls, which could provide currently only 8,130 S.F. based on total gut of existing areas in basement/lower level.
 - a) We recommend an addition with the new toilets and elevator as a more cost effective way of providing these amenities. This addition would be approximately 1,600 – 1,800 S.F. This would increase the existing building gross.
 - b) We calculated toilet rooms for maximum number of people as 2 water closets per gender. These could be located on one floor or stacked for efficiency with men on 1st floor and women on 2nd floor (150 S.F. per toilet room)
 - c) Utilization of existing shell would provide 4 program spaces on the 2nd floor. This would maintain the existing wide central corridor and the existing communicating stair to the lower floor. This scheme converts the existing boiler room into program spaces and would have a contemporary HVAC system installed in the building. This would allow for 2 program spaces. A large high ceiling space of 2,500 S.F. net. A remaining low ceiling space of the oldest section utilized as program space for uses unaffected by ceiling height. This would require the removal of existing mechanical and structural obstructions throughout the basement/lower level.



Pros:

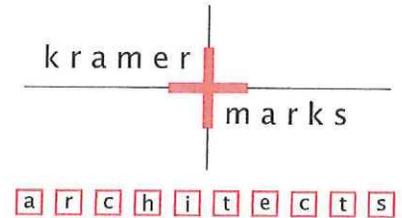
- Allows retention of existing historic structure, stone walls, and roof.
- Conserves majority of historic wall, roof, and foundation structure for related cost savings, and neighborhood sustainable appeal.
- Although inefficient, the existing oversize corridor can double as Gallery space for local artists and recreation craft programs.
- If existing corridor walls are non-structural, they can be replaced with folding or operable partitions to allow larger spaces to be created.

Cons:

- Restricts layout to conform to existing structural walls and elements.
- Existing structure may conceal unknown problems, environmental or structural. Lower level could also have ground water problems.
- Existing structure will need to be insulated to current energy standard. To meet current standards structure may need to be gutted back to basic structural elements.
- Existing windows will need to be replaced with energy efficient units.
- Existing mechanical system will need to be replaced.
- Low ceiling height in the one lower level program space of 2,100 S.F.
- Handicap ramp will be required to access building.

B. Complete Demolition and New Structure – Scheme 2

1. In this study, the existing structure is to be removed and replaced with new, providing the 10,000 S.F. net program space in approximately 14,344 gross S.F. structure. This new structure can be shifted on site to maintain more of the lawn area towards its residential neighbors. This new structure can be more efficiently laid out to suit Township needs. Structure would be two stories with on-grade entrances and first floor and no basement areas. The exterior walls could be constructed in a contemporary energy efficient manner with a veneer, reminiscent of the original stone structure. The roof structure could be low-sloped to accommodate HVAC equipment. This would allow a more efficient system. The treatment to hide the equipment could be designed to echo the original sloped roofs while screening the roof top units.



Pros:

- More efficient floor plan and site plan. Building can be shifted as desired.
- Energy efficient construction methods inherent in new construction.
- On-grade entrance eliminates basement feel of the existing ground floor and eliminates use of handicap ramp.
- Better use of site to maintain open space towards the residential neighbors.
- Ceiling heights not limited.
- No basement.

Cons:

- Removal of existing structure that has been a part of the community neighborhood fabric for over 100 years.
- Requires new foundation walls, exterior walls, floor and roof structure.
- Exterior design costs a factor of community acceptance.

Budget Cost Estimates

The following is a rough estimate of the 2 schemes.

EPI Center for Upper Dublin Township

Rough estimate

Scheme 1, with PS add'n

	unit	quan	cost	total
Demolish existing 1950s wing	SF	9,432	\$ 15.00	\$ 141,480
Selective Interior Demolition	SF	10,448	\$ 10.00	\$ 104,480
Core Addition	SF	1,067	\$ 185.00	\$ 197,395
Program Space Add'n	SF	2,058	\$ 185.00	\$ 380,730
Interior Renovations	SF	10,448	\$ 75.00	\$ 783,600
New windows	ea	56	\$ 1,500.00	\$ 84,000
New roof	Sf	5,244	\$ 12.00	\$ 62,928
Exterior wall repairs	Sf	14,294	\$ 8.00	\$ 114,352
Fire Protection	SF	14,294	\$ 3.50	\$ 50,029
Fire Service	LS	1	\$ 15,000.00	\$ 15,000
New Utilities	LS	1	\$ 15,000.00	\$ 15,000
Sub TTL				\$ 1,948,994
Hidden conditions contingency %		10		\$ 194,899
<i>SITEWORK</i>				\$ -
New Parking & lighting	ea	30	\$ 1,800.00	\$ 54,000
Landscape Allowance	LS	1	\$ 15,000.00	\$ 15,000
HC Ramp	LF	60	\$ 250.00	\$ 15,000
				\$ 2,227,893
			\$ 155.86	

Scheme2, new const.

	unit	quan	cost	total
Demolish Existing	SF	19880	12.5	\$ 248,500
New construction	SF	14344	185	\$ 2,653,640
<i>SITEWORK</i>				\$ -
New Parking & lighting	ea	30	2900	\$ 87,000
Landscape Allowance	LS	1	15000	\$ 15,000
				\$ 3,004,140
			\$ 209.58	

Scheme 1A, no PS add'n

	unit	quan	cost	total
Demolish existing 1950s wing	SF	9,432	\$ 15.00	\$ 141,480
Selective Interior Demolition	SF	10,448	\$ 10.00	\$ 104,480
Core Addition	SF	1,067	\$ 185.00	\$ 197,395
Interior Renovations	SF	10,448	\$ 75.00	\$ 783,600
New windows	ea	56	\$ 1,500.00	\$ 84,000
New roof	Sf	5,244	\$ 12.00	\$ 62,928
Exterior wall repairs	Sf	14,294	\$ 8.00	\$ 114,352
Fire Protection	SF	11,515	\$ 3.50	\$ 40,303
Fire Service	LS	1	\$ 15,000.00	\$ 15,000
New Utilities	LS	1	\$ 15,000.00	\$ 15,000
Sub TTL				\$ 1,558,538
Hidden conditions contingency %		10		\$ 155,854
			\$ -	\$ -
<i>SITWORK</i>			\$ -	\$ -
New Parking & lighting	ea	30	\$ 1,800.00	\$ 54,000
Landscape Allowance	LS	1	\$ 15,000.00	\$ 15,000
HC Ramp	LF	60	\$ 250.00	\$ 15,000
				\$ 1,798,391
			\$ 146.98	