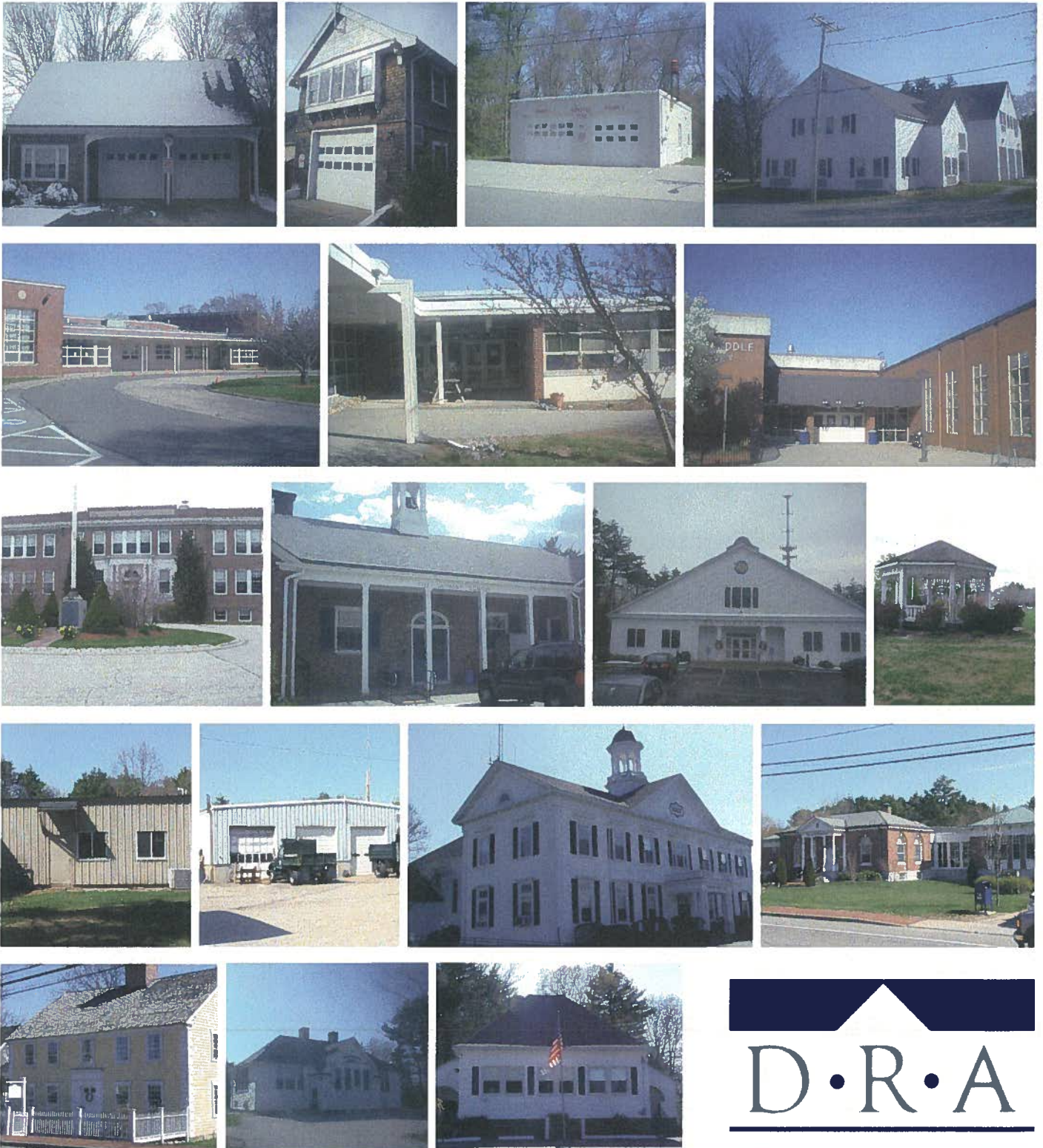


TOWN OF HANOVER

Volume 2-Appendix

Municipal Facilities Assessment-2011
Capital Improvement Committee
Hanover, Massachusetts
September 2011

Building Study



Drummey Rosane Anderson Inc.

Planning

Architecture

Interior Design

Volume One:

Title Page
Table of Contents
Cover Letter
Executive Summary

Building Reports

1. Fire Station 1
2. Fire Station 2
3. Fire Station 3
4. Fire Station 4 – Headquarters
5. Center Elementary School
6. Cedar Elementary School
7. Hanover Middle School
8. Sylvester Elementary School
9. Salmond School (Admin. Building)
10. Police Station
11. Recreation Area Support Facilities
12. Public Works Facility – 219 Winter St.
13. Public Works - Highway Garage and Yard
14. Town Hall
15. Library
16. Stetson House
17. Curtis School
18. Recreation Center (formerly Grange Hall)

15-Year Capital Budget Plan

End of Volume One

Town of Hanover - MUNICIPAL FACILITIES ASSESSMENT - 2011

Table of Contents

Volume Two:

Title Page

Table of Contents for Volume Two

Appendices:

Appendix A – Map of Town with building locations noted.

Appendix B – Building Plans

Appendix C – Site Plans;

Appendix D – Building Plans on Disk; (AutoCad drawing files by building)

Appendix E – Photographs; DVD format disk

Appendix F – Staff survey forms; Meeting notes from interviews

Appendix G – Consultant's Reports:

CES (MEP Engineer's) Report

EDG (Structural Engineer's) Report

Nitsch (Site Engineer's) Report

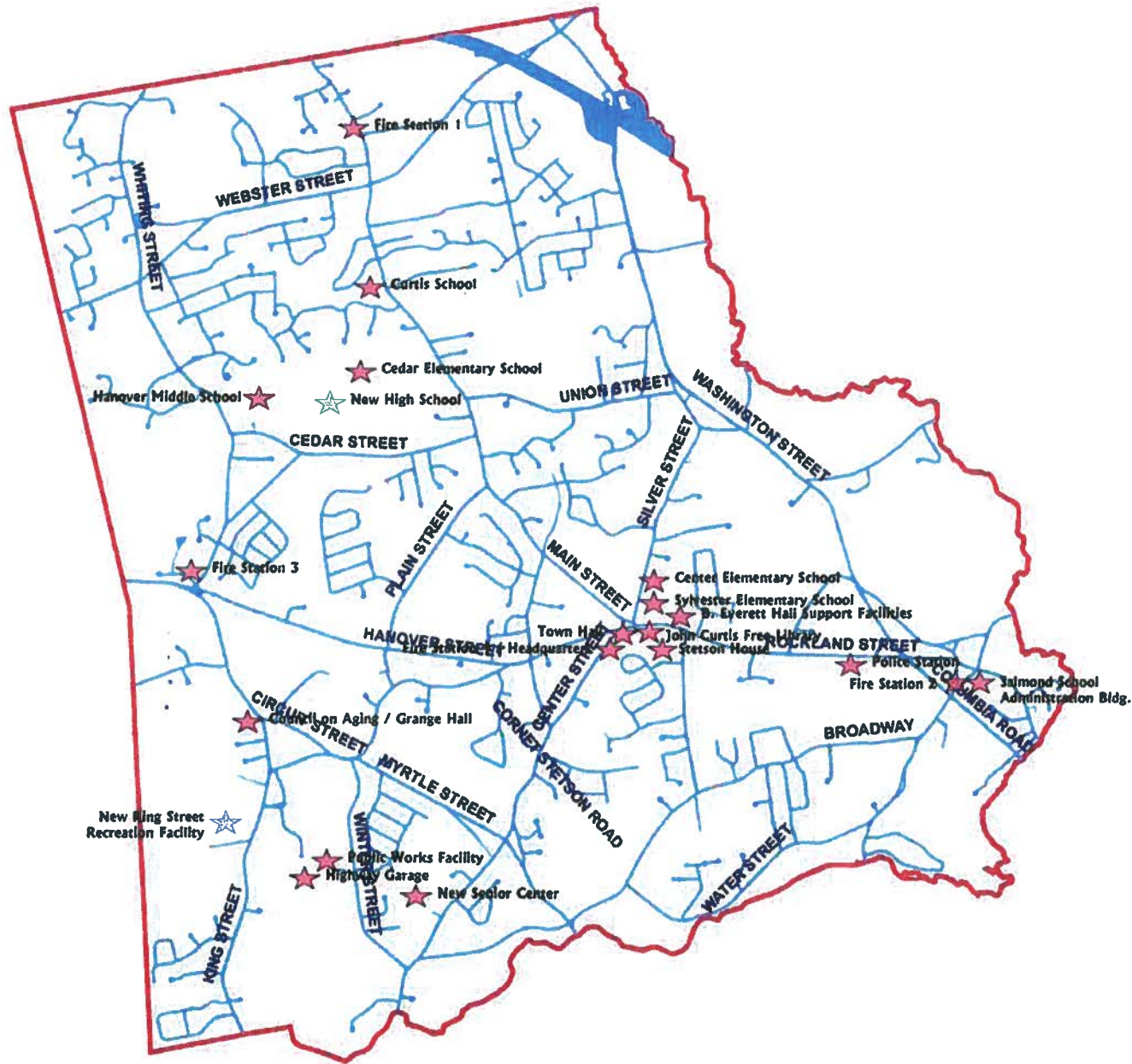
End of Volume Two

Vol.2

Appendix A

Map of Town with Building Locations Noted

TOWN OF HANOVER - GEOGRAPHIC INFORMATION SYSTEM



- ★ Municipal Facilities Included in the Building Study
- ★ Other Significant Town Facilities

MAP LEGEND

- Parcels (July 2006)
- Town Line (Surveyed)
- Roads



HANOVER GIS
TOWN OF HANOVER
PLANNING DEPARTMENT

NOTES & SOURCES:

The information depicted on this map is for planning purposes only. It is not adequate for legal boundary definition, regulatory interpretation, or parcel-level analysis. This map was created using the Town of Hanover ArcReader 3.1 GIS Viewer. For more information contact Andrew R. Fort, Town Planner for the Town of Hanover, at (781) 825-7441. Photogrammetric basebase data and GIS coverage provided by Environmental Partners Group (EPG) in 2004. Initial source data provided by the Assessors Department and Department of Public Works. Additional layers were created by MassGIS and the Town Planner in 2006.

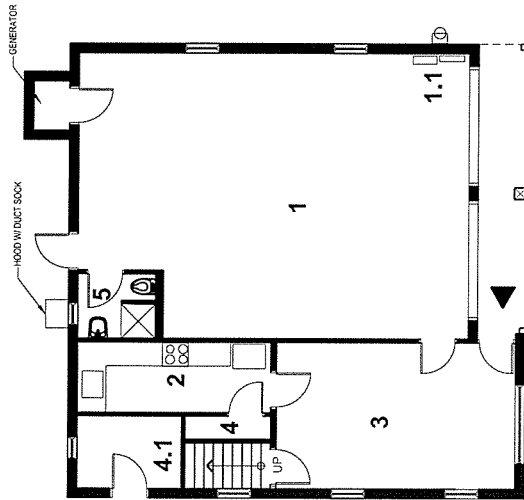
0 0.25 0.5 1 Miles

Vol.2

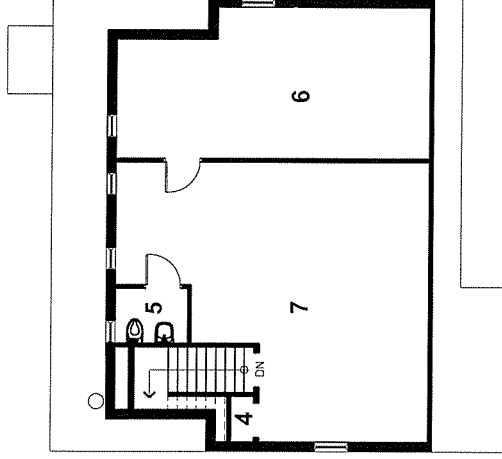
Appendix B

Building Plans

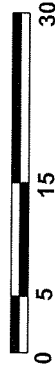
ROOM LEGEND		
1. FIRE ENGINE GARAGE	1.1 ELEC. PANELS AND METER	
2. KITCHEN		
3. COMMON ROOM		
4. CLOSET	4.1 BOILER ROOM	
5. TOILET ROOM		
6. DORM ROOM		
7. RECREATION ROOM		
GRAPHIC LEGEND		
▶ - MAIN ENTRANCE LOCATION		



FIRST FLOOR PLAN



SECOND FLOOR PLAN



D·R·A

Drumrey
Rosane
Anderson
Inc.

Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459

617-964-1700
617-969-9054 fax

FIRE STATION 1 TOWN BUILDING STUDY

Hanover, Massachusetts

Scale: SEE BAR SCALE

Drawn by: CHM

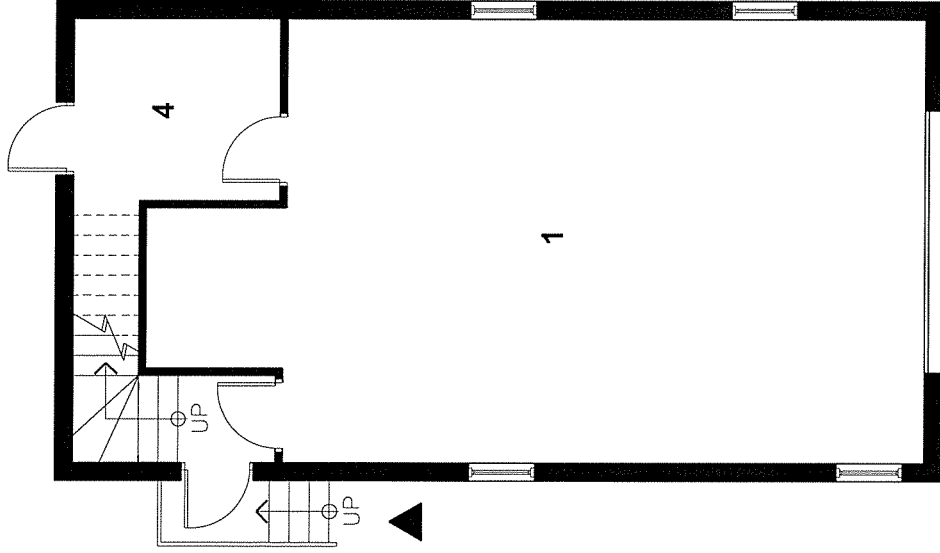
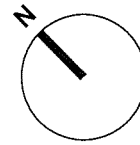
Job# 09017.00

ROOM LEGEND

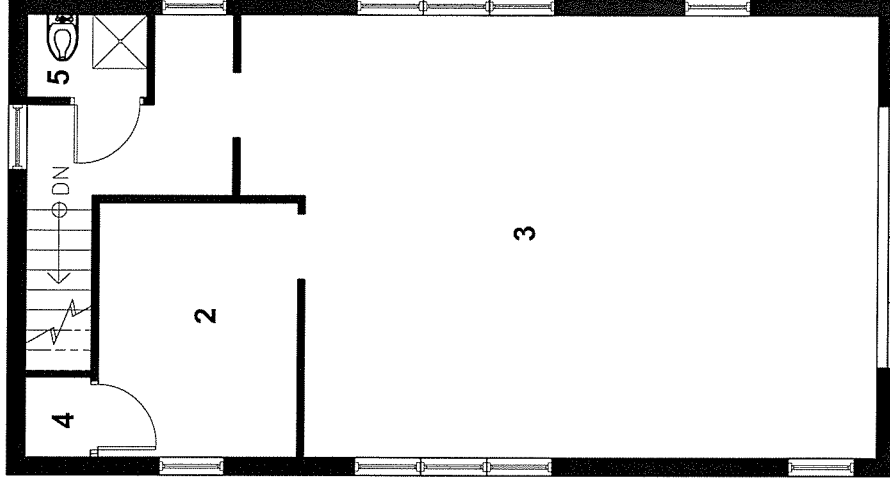
- 1. FIRE ENGINE GARAGE
- 2. KITCHEN
- 3. COMMON ROOM
- 4. MECHANICAL ROOM
- 5. TOILET ROOM

GRAPHIC LEGEND

- ▶ - MAIN ENTRANCE LOCATION



FIRST FLOOR PLAN



SECOND FLOOR PLAN



D·R·A

Drumme
Rosane
Anderson
Inc.

Architecture
Interior Design

Colby Hall
141 Hemick Road
Newton Centre, MA
02459

617-964-1700
617-969-9054 fax

FIRE STATION 2 TOWN BUILDING STUDY Hanover, Massachusetts

Scale: SEE BAR SCALE

Drawn by: EJL

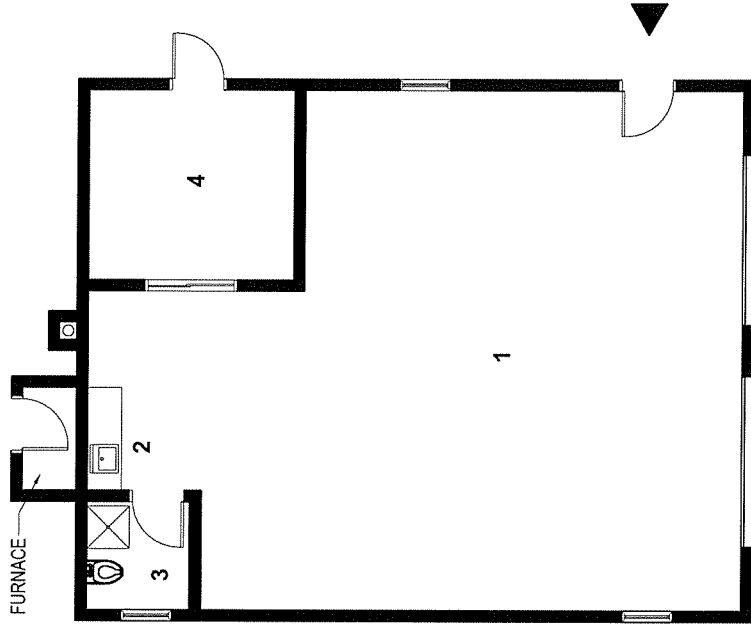
Job# 09017.00

ROOM LEGEND

- 1. FIRE ENGINE GARAGE
- 2. KITCHENETTE
- 3. TOILET ROOM
- 4. DAY ROOM

GRAPHIC LEGEND

- ▶ - MAIN ENTRANCE LOCATION



FIRST FLOOR PLAN



D·R·A

Drumrey
Rosane
Anderson
Inc.

Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459

617-964-1700
617-969-9054 fax

FIRE STATION 3 TOWN BUILDING STUDY Hanover, Massachusetts

Scale: SEE BAR SCALE

Drawn by: CHM

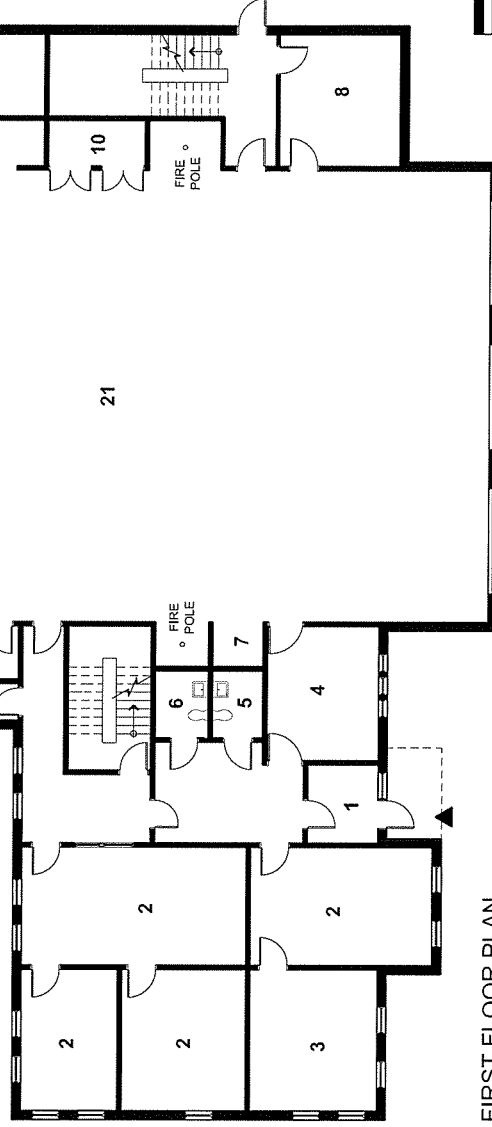
Job# 09017.00

ROOM LEGEND

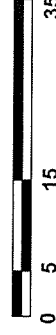
- | | |
|---------------------|------------------|
| 1. VESTIBULE | 11. STORAGE ROOM |
| 2. OFFICE | 12. DAY ROOM |
| 3. CONFERENCE ROOM | 13. FILE ROOM |
| 4. DISPATCH OFFICE | 14. RADIO ROOM |
| 5. MEN'S TOILET | 15. LAUNDRY ROOM |
| 6. WOMEN'S TOILET | 16. DORM ROOM |
| 7. JANITOR'S AREA | 17. CLOSET |
| 8. LOCKER ROOM | 18. LOCKER ROOM |
| 9. UNIFORM CLOSET | 19. TOILET ROOM |
| 10. MACHINE SHOP | 20. DORM ROOM |
| 21. MECHANICAL ROOM | 21. GARAGE |
| | 22. KITCHEN |

GRAPHIC LEGEND

- ▶ - MAIN ENTRANCE LOCATION



FIRST FLOOR PLAN



D·R·A

Drumrey
Rosane
Anderson
Inc.

Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459

617-964-1700
617-969-9054 fax

FIRE HEADQUARTERS TOWN BUILDING STUDY

Hanover, Massachusetts

Scale: SEE BAR SCALE

Drawn by: CHM

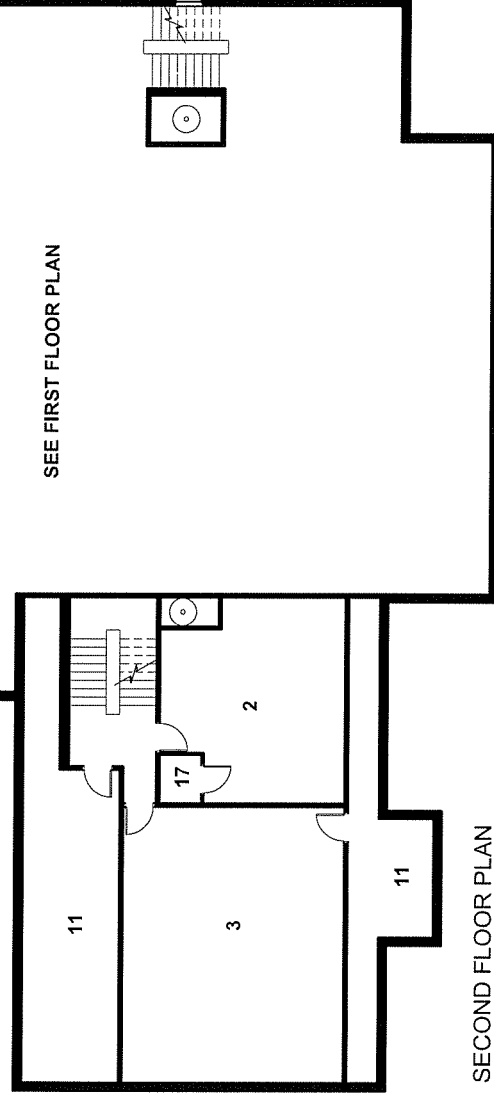
Job# 09017.00

ROOM LEGEND

- | | |
|---------------------|------------------|
| 1. VESTIBULE | 11. STORAGE ROOM |
| 2. OFFICE | 12. DAY ROOM |
| 3. CONFERENCE ROOM | 13. FILE ROOM |
| 4. DISPATCH OFFICE | 14. RADIO ROOM |
| 5. MEN'S TOILET | 15. LAUNDRY ROOM |
| 6. WOMEN'S TOILET | 16. DORM ROOM |
| 7. JANITOR'S AREA | 17. CLOSET |
| 8. UNIFORM CLOSET | 18. LOCKER ROOM |
| 9. MACHINE SHOP | 19. TOILET ROOM |
| 10. MECHANICAL ROOM | 20. DORM ROOM |
| | 21. GARAGE |
| | 22. KITCHEN |

GRAPHIC LEGEND

- - MAIN ENTRANCE LOCATION



SECOND FLOOR PLAN



D·R·A

Drumrey
Rosane
Anderson
Inc.

Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459

617-964-1700
617-969-9054 fax

FIRE HEADQUARTERS TOWN BUILDING STUDY

Hanover, Massachusetts

Scale: SEE BAR SCALE

Drawn by: CHM

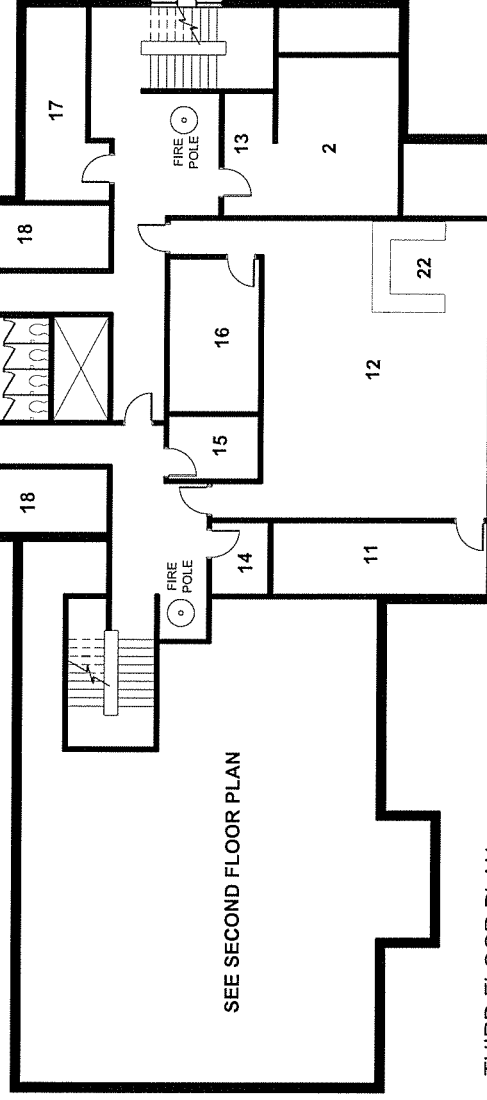
Job# 09017.00

ROOM LEGEND

- | | |
|---------------------|------------------|
| 1. VESTIBULE | 11. STORAGE ROOM |
| 2. OFFICE | 12. DAY ROOM |
| 3. CONFERENCE ROOM | 13. FILE ROOM |
| 4. DISPATCH OFFICE | 14. RADIO ROOM |
| 5. MEN'S TOILET | 15. LAUNDRY ROOM |
| 6. WOMEN'S TOILET | 16. DORM ROOM |
| 7. JANITOR'S AREA | 17. CLOSET |
| 8. UNIFORM CLOSET | 18. LOCKER ROOM |
| 9. MACHINE SHOP | 19. TOILET ROOM |
| 10. MECHANICAL ROOM | 20. DORM ROOM |
| | 21. GARAGE |
| | 22. KITCHEN |

GRAPHIC LEGEND

- ▶ - MAIN ENTRANCE LOCATION



SEE SECOND FLOOR PLAN

THIRD FLOOR PLAN



D·R·A

Drumme
Rosane
Anderson
Inc.

Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459

617-964-1700
617-969-9054 fax

FIRE HEADQUARTERS TOWN BUILDING STUDY

Hanover, Massachusetts

Scale: SEE BAR SCALE

Drawn by: CHM

Job# 09017.00

ROOM LEGEND

- | | |
|-----------------------------|---------------------------|
| 1. GENERAL CLASSROOM | 17. HEALTH |
| 2. KINDERGARTEN | 18. AUDITORIUM |
| 3. PRE-KINDERGARTEN | 19. STAGE |
| 4. SPED | 20. SERVICE |
| 5. OFFICE | 21. KITCHEN |
| 6. WORK ROOM | 22. RECEIVING |
| 7. STORAGE | 23. TEACHER'S DINING ROOM |
| 8. ELECTRICAL ROOM | 24. VESTIBULE |
| 9. CLOSET | 25. MUSIC |
| 10. STAIRS | 26. GYMNASIUM |
| 11-B. TOILET ROOM-BOY'S | 27. GUIDANCE |
| 11-G. TOILET ROOM-GIRL'S | 28. CONFERENCE |
| 11-T. TOILET ROOM-TEACHER'S | 29. CORRIDOR |
| 11-U. TOILET ROOM-UNISEX | 30. ART |
| 12. JANITOR | 31. FREEZER |
| 13. MECHANICAL ROOM | 32. REFRIDGER |
| 14. LIBRARY | 33. CAFETERIA |
| 15. LOBBY | |
| 16. MAIN OFFICE | |

GRAPHIC LEGEND

- ▶ - MAIN ENTRANCE LOCATION



FIRST FLOOR PLAN



D·R·A

Drumey
Rosane
Anderson
Inc.

Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459

617-964-1700
617-969-9054 fax

CENTER SCHOOL TOWN BUILDING STUDY Hanover, Massachusetts

Scale: SEE BAR SCALE

Drawn by: MJQ

Job# 09017.00

ROOM LEGEND

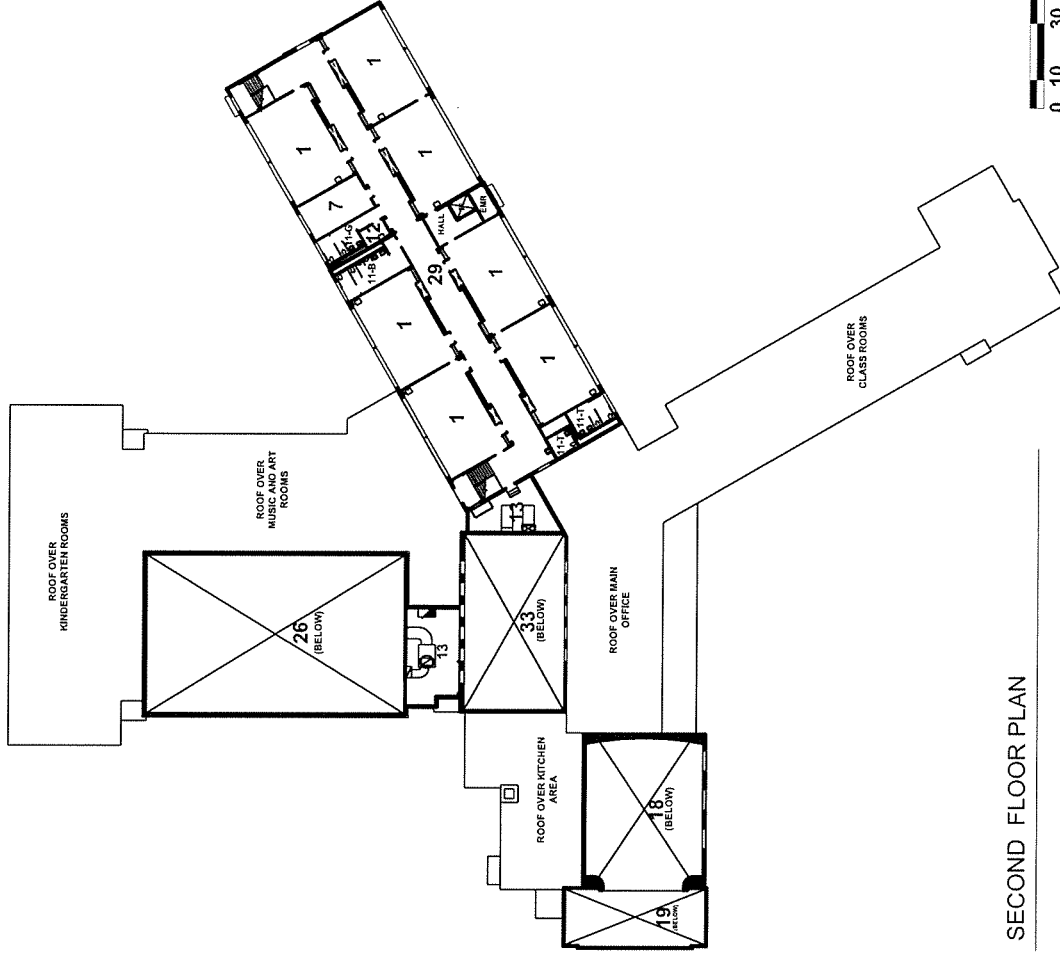
- | | |
|-----------------------------|---------------------------|
| 1. GENERAL CLASSROOM | 17. HEALTH |
| 2. KINDERGARTEN | 18. AUDITORIUM |
| 3. PRE-KINDERGARTEN | 19. STAGE |
| 4. SPED | 20. SERVICE |
| 5. OFFICE | 21. KITCHEN |
| 6. WORK ROOM | 22. RECEIVING |
| 7. STORAGE | 23. TEACHER'S DINING ROOM |
| 8. ELECTRICAL ROOM | 24. VESTIBULE |
| 9. CLOSET | 25. MUSIC |
| 10. STAIRS | 26. GYMNASIUM |
| 11-B. TOILET ROOM- BOY'S | 27. GUIDANCE |
| 11-G. TOILET ROOM-GIRL'S | 28. CONFERENCE |
| 11-T. TOILET ROOM-TEACHER'S | 29. CORRIDOR |
| 11-U. TOILET ROOM-UNISEX | 30. ART |
| 12. JANITOR | 31. FREEZER |
| 13. MECHANICAL ROOM | 32. REFRIDGE |
| 14. LIBRARY | 33. CAFETERIA |
| 15. LOBBY | |
| 16. MAIN OFFICE | |

GRAPHIC LEGEND

- - MAIN ENTRANCE LOCATION



SECOND FLOOR PLAN



D·R·A

Drumrey
Rosane
Anderson
Inc.

Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459

617-964-1700
617-969-9054 fax

CENTER SCHOOL TOWN BUILDING STUDY

Hanover, Massachusetts

Scale: SEE BAR SCALE

Drawn by: MJQ

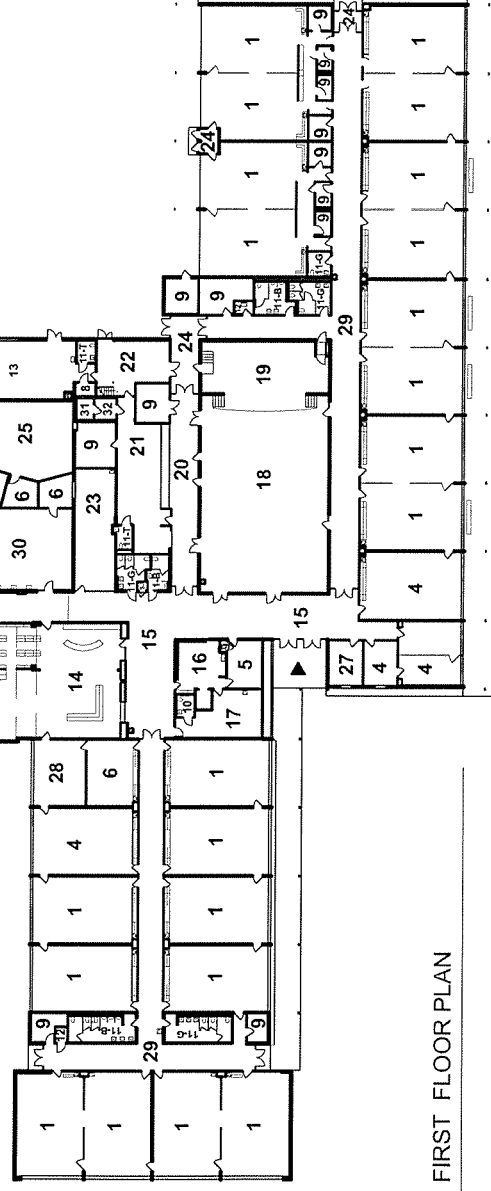
Job# 09017.00

ROOM LEGEND

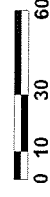
- | | |
|-----------------------------|---------------------------|
| 1. GENERAL CLASSROOM | 16. MAIN OFFICE |
| 2. KINDERGARTEN | 17. HEALTH |
| 3. PRE-KINDERGARTEN | 18. CAFETORIUM |
| 4. SPED | 19. STAGE |
| 5. OFFICE | 20. SERVICE |
| 6. WORK ROOM | 21. KITCHEN |
| 7. STORAGE | 22. RECEIVING |
| 8. ELECTRICAL ROOM | 23. TEACHER'S DINING ROOM |
| 9. CLOSET | 24. VESTIBULE |
| 10. STAIRS | 25. MUSIC |
| 11-B. TOILET ROOM- BOY'S | 26. GYMNASIUM |
| 11-G. TOILET ROOM-GIRL'S | 27. GUIDANCE |
| 11-T. TOILET ROOM-TEACHER'S | 28. CONFERENCE |
| 12. JANITOR | 29. CORRIDOR |
| 13. MECHANICAL ROOM | 30. ART |
| 14. LIBRARY | 31. FREEZER |
| 15. LOBBY | 32. REFRIDGE |
| | 33. PREP ROOM |

GRAPHIC LEGEND

- ▶ - MAIN ENTRANCE LOCATION



FIRST FLOOR PLAN



D·R·A

Drumrey
Rosane
Anderson
Inc.

Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459

617-964-1700
617-969-9054 fax

CEDAR SCHOOL TOWN BUILDING STUDY Hanover, Massachusetts

Scale: SEE BAR SCALE

Drawn by: MJQ

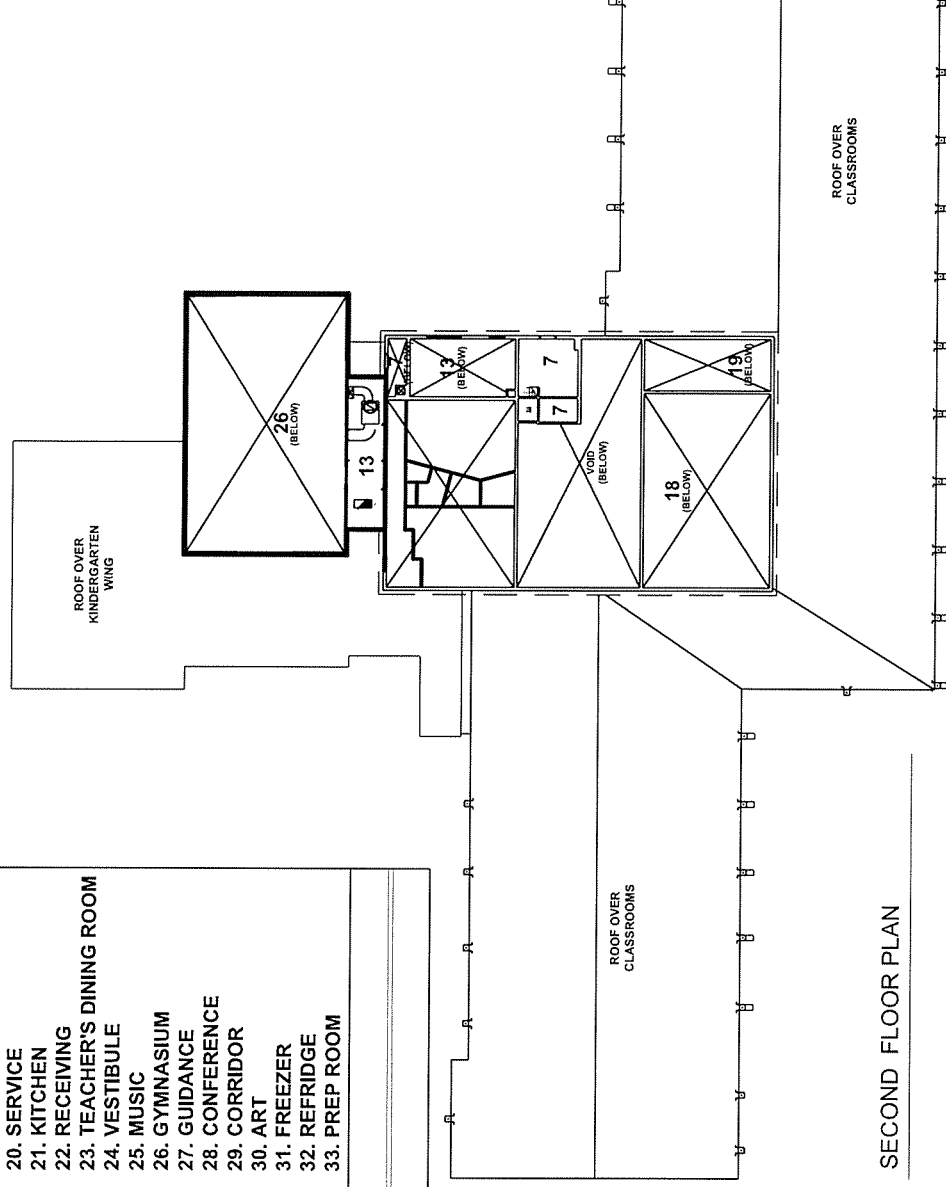
Job# 09017.00

ROOM LEGEND

- | | |
|-----------------------------|---------------------------|
| 1. GENERAL CLASSROOM | 16. MAIN OFFICE |
| 2. KINDERGARTEN | 17. HEALTH |
| 3. PRE-KINDERGARTEN | 18. CAFETORIUM |
| 4. SPED | 19. STAGE |
| 5. OFFICE | 20. SERVICE |
| 6. WORK ROOM | 21. KITCHEN |
| 7. STORAGE | 22. RECEIVING |
| 8. ELECTRICAL ROOM | 23. TEACHER'S DINING ROOM |
| 9. CLOSET | 24. VESTIBULE |
| 10. STAIRS | 25. MUSIC |
| 11-B. TOILET ROOM-BOY'S | 26. GYMNASIUM |
| 11-G. TOILET ROOM-GIRL'S | 27. GUIDANCE |
| 11-T. TOILET ROOM-TEACHER'S | 28. CONFERENCE |
| 12. JANITOR | 29. CORRIDOR |
| 13. MECHANICAL ROOM | 30. ART |
| 14. LIBRARY | 31. FREEZER |
| 15. LOBBY | 32. REFRIDGE |
| | 33. PREP ROOM |

GRAPHIC LEGEND

- - MAIN ENTRANCE LOCATION



D·R·A

Drumme
Rosane
Anderson
Inc.

Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459

617-964-1700
617-969-9054 fax

CEDAR SCHOOL TOWN BUILDING STUDY Hanover, Massachusetts

Scale: SEE BAR SCALE

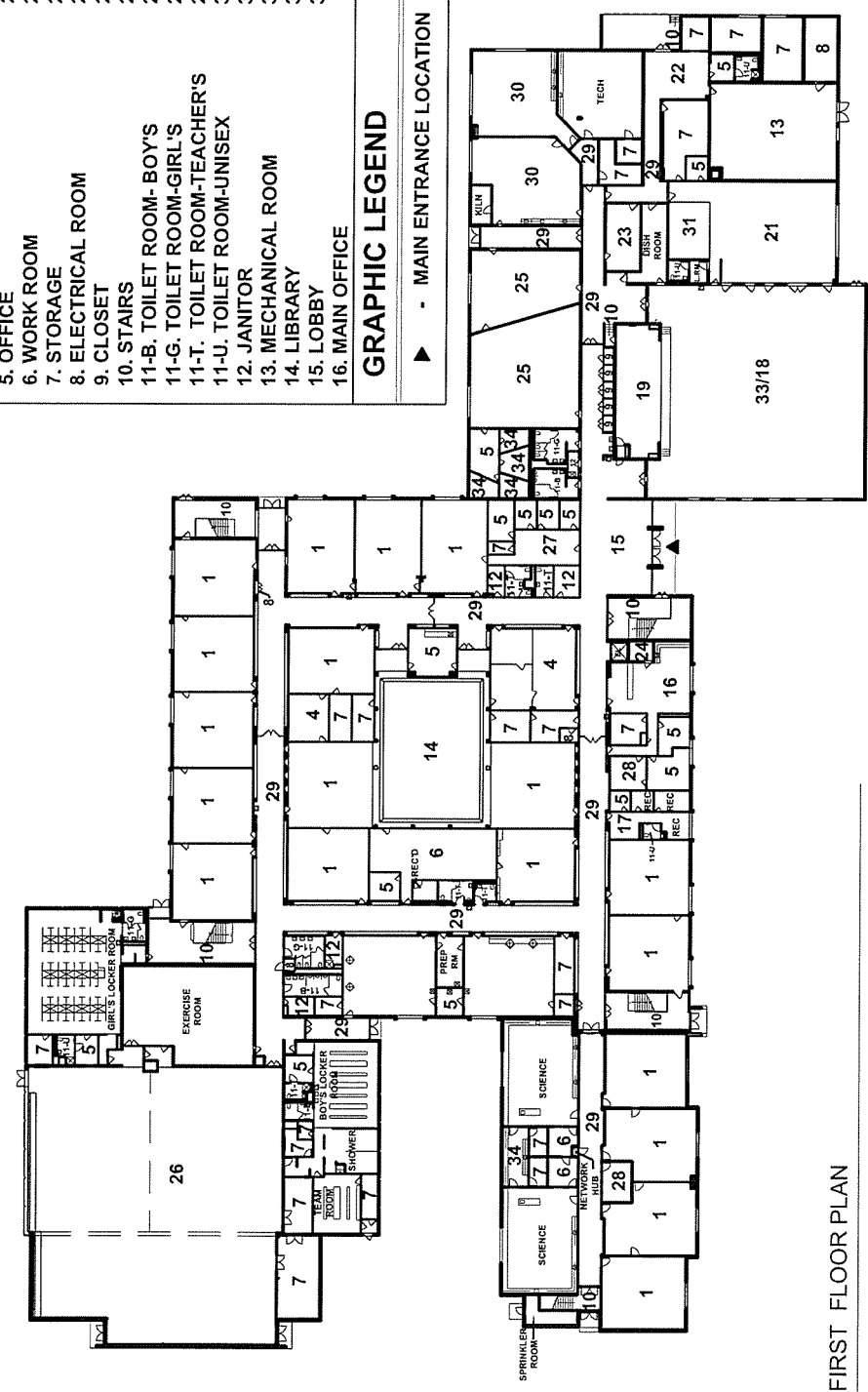
Drawn by: MJQ

Job# 09017.00

ROOM LEGEND

- | | |
|-----------------------------|---------------------------|
| 1. GENERAL CLASSROOM | 17. HEALTH |
| 2. KINDERGARTEN | 18. AUDITORIUM |
| 3. PRE-KINDERGARTEN | 19. STAGE |
| 4. SPED | 20. SERVICE |
| 5. OFFICE | 21. KITCHEN |
| 6. WORK ROOM | 22. RECEIVING |
| 7. STORAGE | 23. TEACHER'S DINING ROOM |
| 8. ELECTRICAL ROOM | 24. VESTIBULE |
| 9. CLOSET | 25. MUSIC |
| 10. STAIRS | 26. GYMNASIUM |
| 11-B. TOILET ROOM-BOY'S | 27. GUIDANCE |
| 11-G. TOILET ROOM-GIRL'S | 28. CONFERENCE |
| 11-T. TOILET ROOM-TEACHER'S | 29. CORRIDOR |
| 11-U. TOILET ROOM-UNISEX | 30. ART |
| 12. JANITOR | 31. FREEZER |
| 13. MECHANICAL ROOM | 32. REFRIDGE |
| 14. LIBRARY | 33. CAFETERIA |
| 15. LOBBY | 34. PREP ROOM |
| 16. MAIN OFFICE | |

GRAPHIC LEGEND



D·R·A

Drumme
Rosane
Anderson
Inc.
Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459
617-964-1700
617-969-9054 fax

HANOVER MIDDLE SCHOOL TOWN BUILDING STUDY Hanover, Massachusetts

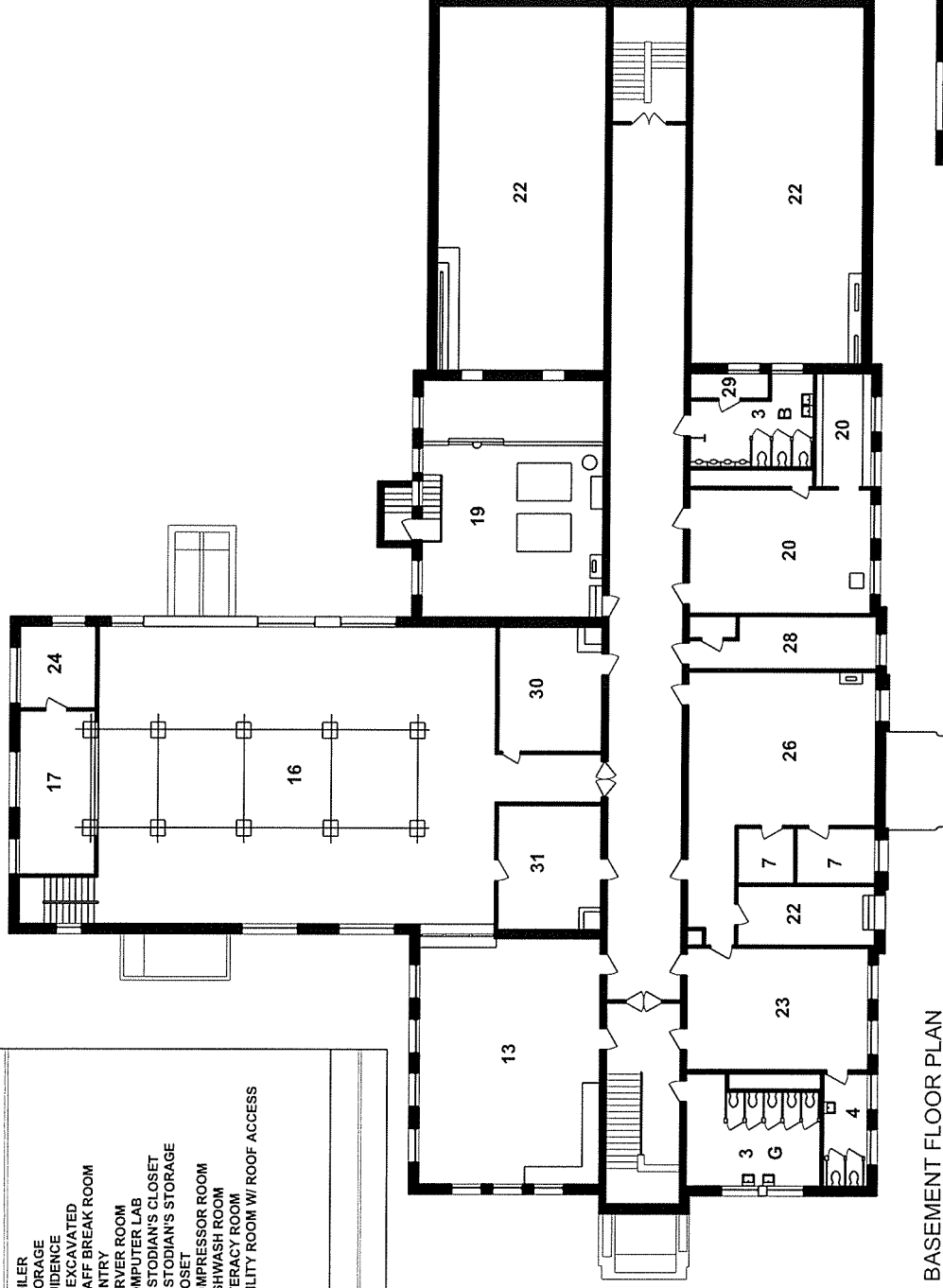
Scale: SEE BAR SCALE
Drawn by: MJQ
Job# 09017.00

ROOM LEGEND

1. CLASSROOM
2. AUDITORIUM/GYMNASIUM
3. TOILET
4. STAFF TOILET
5. SPED / RESOURCE ROOM
6. SPED LANGUAGE ROOM
7. OFFICE
8. PRINCIPAL'S OFFICE
9. HEALTH
10. SECRETARY
11. ENTRY
12. STAGE
13. SCIENCE CLASSROOM
14. MUSIC ROOM
15. MEETING ROOM
16. CAFETERIA
17. KITCHEN
18. FAN ROOM
19. BOILER
20. STORAGE
21. GUIDANCE
22. UNEXCAVATED
23. STAFF BREAK ROOM
24. PANTRY
25. SERVER ROOM
26. COMPUTER LAB
27. CUSTODIAN'S CLOSET
28. CUSTODIAN'S STORAGE
29. CLOSET
30. COMPRESSOR ROOM
31. DISHWASH ROOM
32. LITERACY ROOM
33. UTILITY ROOM W/ ROOF ACCESS

GRAPHIC LEGEND

- ▶ - MAIN ENTRY LOCATION



BASEMENT FLOOR PLAN

D·R·A

Drumey
Rosane
Anderson
Inc.

Colby Hall
141 Herick Road
Newton Centre, MA
02459

Architecture
Interior Design

617-964-1700
617-969-9054 fax

SYLVESTER SCHOOL TOWN BUILDING STUDY Hanover, Massachusetts

Scale: SEE BAR SCALE

Drawn by: EJL

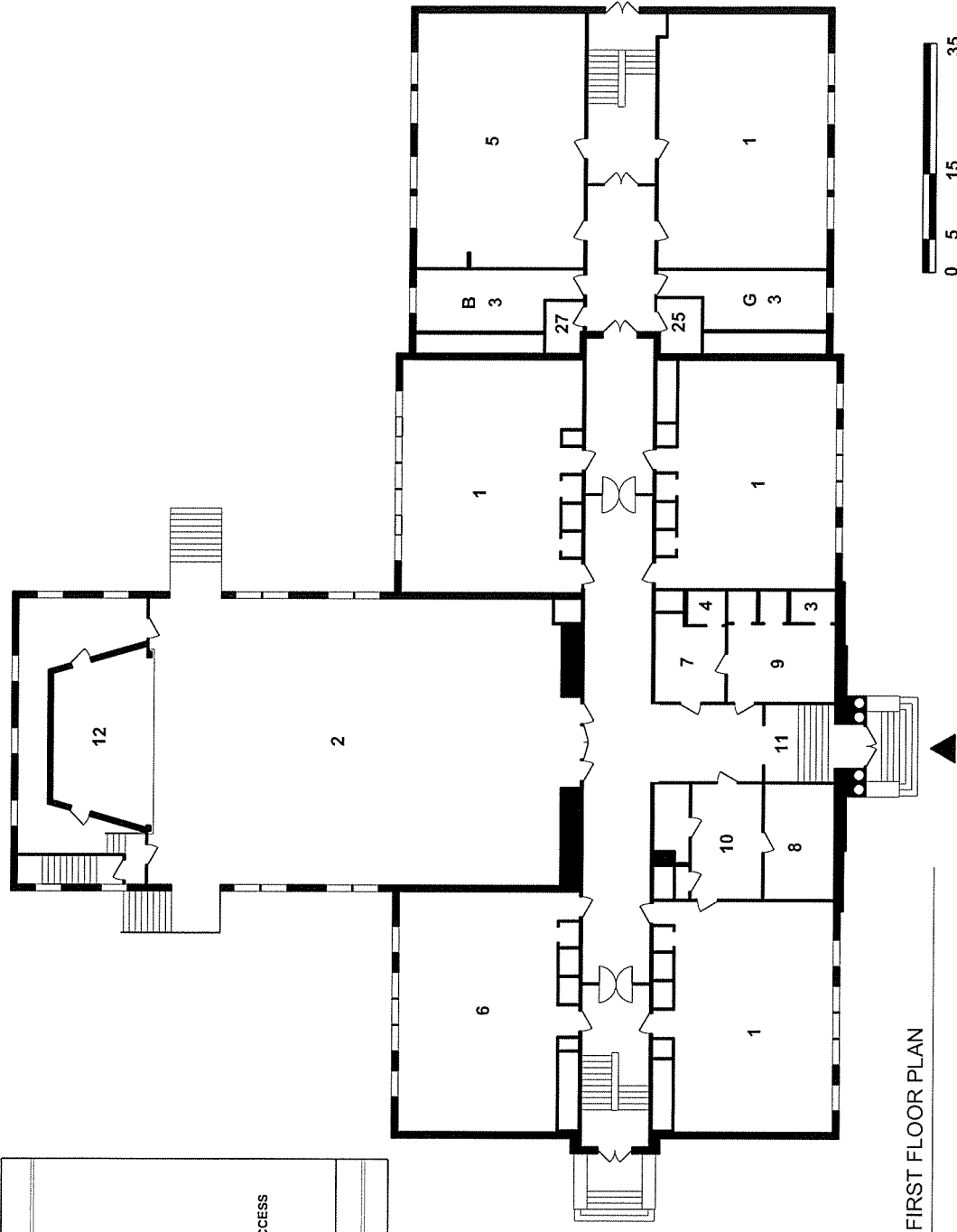
Job# 09017.00

ROOM LEGEND

- | | |
|-------------------------|---------------------------------|
| 1. CLASSROOM | 19. BOILER |
| 2. AUDITORIUM/GYMNASIUM | 20. STORAGE |
| 3. TOILET | 21. GUIDANCE |
| 4. STAFF TOILET | 22. UNEXCAVATED |
| 5. SPED / RESOURCE ROOM | 23. STAFF BREAK ROOM |
| 6. SPED LANGUAGE ROOM | 24. PANTRY |
| 7. OFFICE | 25. SERVER ROOM |
| 8. PRINCIPALS OFFICE | 26. COMPUTER LAB |
| 9. HEALTH | 27. CUSTODIAN'S CLOSET |
| 10. SECRETARY | 28. CUSTODIAN'S STORAGE |
| 11. ENTRY | 29. CLOSET |
| 12. STAGE | 30. COMPRESSOR ROOM |
| 13. SCIENCE CLASSROOM | 31. DISHWASH ROOM |
| 14. MUSIC ROOM | 32. LITERACY ROOM |
| 15. MEETING ROOM | 33. UTILITY ROOM W/ ROOF ACCESS |
| 16. CAFETERIA | |
| 17. KITCHEN | |
| 18. FAN ROOM | |

GRAPHIC LEGEND

- ▶ - MAIN ENTRY LOCATION



FIRST FLOOR PLAN

D·R·A

Drumey
Rosane
Anderson
Inc.

Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459

617-964-1700
617-969-9054 fax

SYLVESTER SCHOOL TOWN BUILDING STUDY Hanover, Massachusetts

Scale: SEE BAR SCALE

Drawn by: MJQ

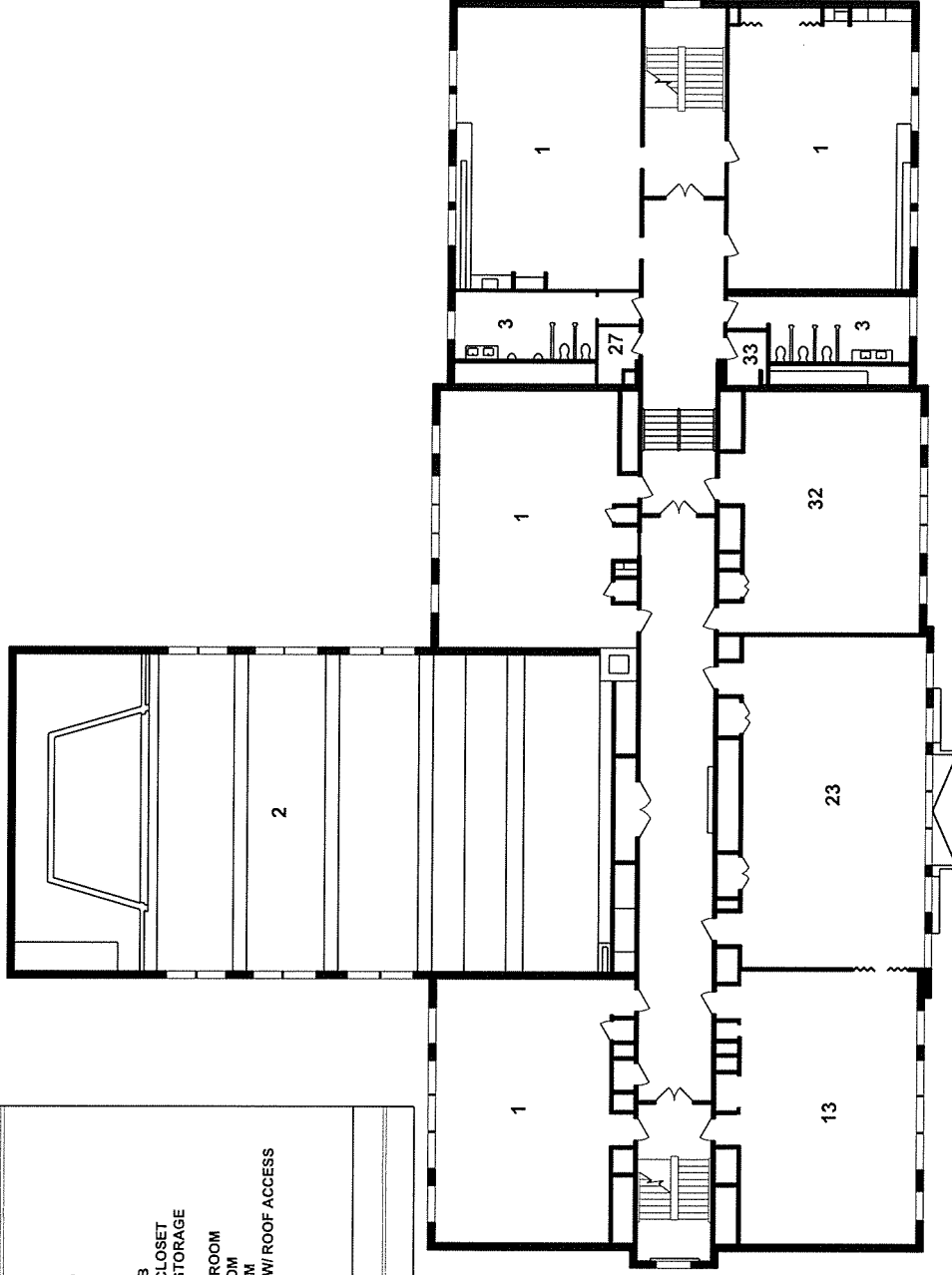
Job# 09017.00

ROOM LEGEND

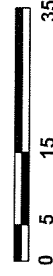
- | | |
|-------------------------|---------------------------------|
| 1. CLASSROOM | 19. BOILER |
| 2. AUDITORIUM/GYMNASIUM | 20. STORAGE |
| 3. TOILET | 21. GUIDANCE |
| 4. STAFF TOILET | 22. UNEXCAVATED |
| 5. SPED / RESOURCE ROOM | 23. LIBRARY |
| 6. SPED / LANGUAGE ROOM | 24. PANTRY |
| 7. OFFICE | 25. SERVER ROOM |
| 8. PRINCIPALS OFFICE | 26. COMPUTER LAB |
| 9. HEALTH | 27. CUSTODIAN'S CLOSET |
| 10. SECRETARY | 28. CUSTODIAN'S STORAGE |
| 11. ENTRY | 29. CLOSET |
| 12. STAGE | 30. COMPRESSOR ROOM |
| 13. SCIENCE CLASSROOM | 31. DISHWASH ROOM |
| 14. MUSIC ROOM | 32. LITERACY ROOM |
| 15. MEETING ROOM | 33. UTILITY ROOM W/ ROOF ACCESS |
| 16. CAFETERIA | |
| 17. KITCHEN | |
| 18. FAN ROOM | |

GRAPHIC LEGEND

- - MAIN ENTRY LOCATION



SECOND FLOOR PLAN



D·R·A

Drumey
Rosane
Anderson
Inc.

Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459

617-964-1700
617-969-9054 fax

SYLVESTER SCHOOL TOWN BUILDING STUDY

Hanover, Massachusetts

Scale: SEE BAR SCALE

Drawn by: EJL

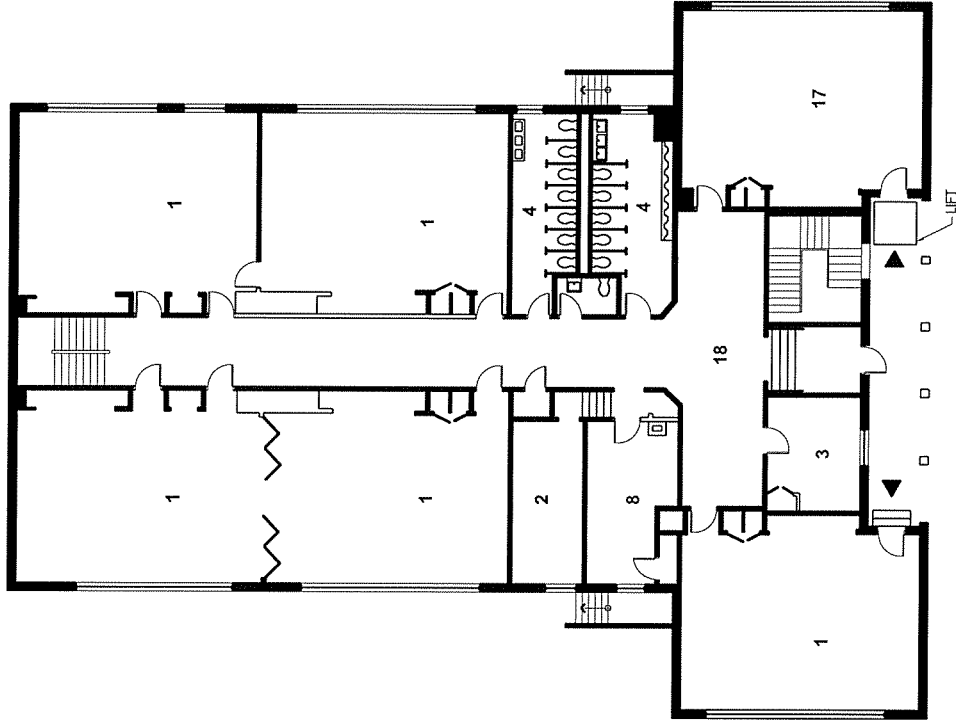
Job# 09017.00

ROOM LEGEND

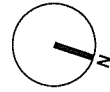
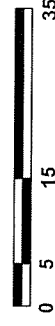
1. OFFICE IN FORMER CLASSROOM
2. PLATFORM
3. OFFICE
4. BATHROOM
5. CORRIDOR
6. FILES STORAGE
7. COMPUTERS
8. BOILER ROOM
9. ELECTRICAL ROOM
10. FORMER KITCHEN
11. STORAGE
12. STAIRS
13. UNEXCAVATED
14. COMPUTER ROOM
15. TEACHERS LOUNGE
16. FORMER SERVING AREA
17. BOARD MEETING ROOM
18. ENTRY HALL

GRAPHIC LEGEND

- ▶ - MAIN ENTRY LOCATION



FIRST FLOOR PLAN



D·R·A

Drumey
Rosane
Anderson
Inc.

Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459

617-964-1700
617-969-9054 fax

SALMOND SCHOOL TOWN BUILDING STUDY

Hanover, Massachusetts

Scale: SEE BAR SCALE

Drawn by: E.J.L.

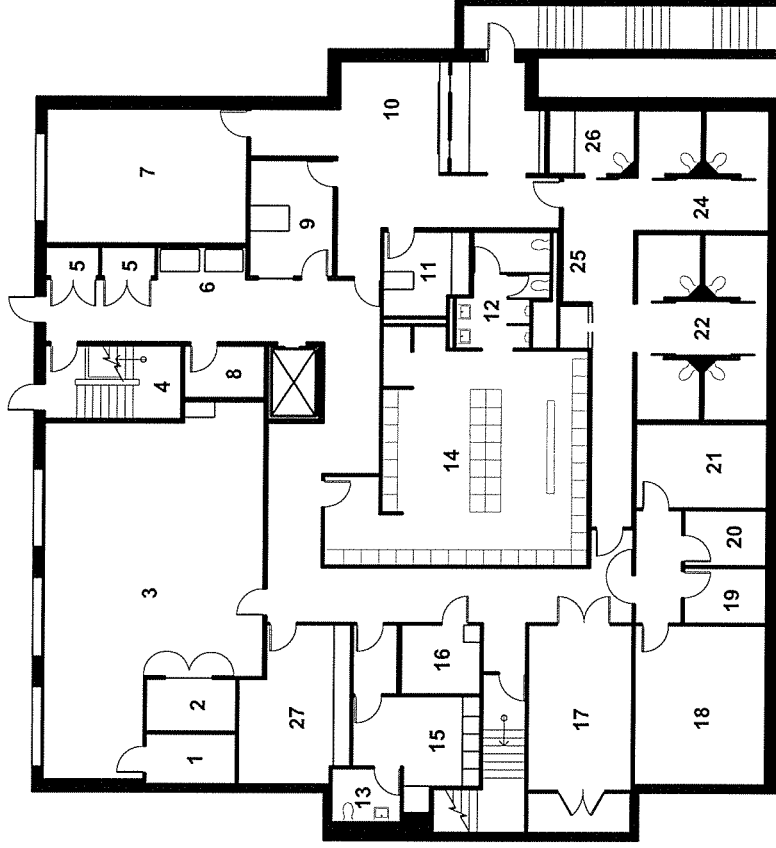
Job# 09017.00

ROOM LEGEND

- | | |
|-----------------------|------------------------------|
| 1. BULK EVIDENCE | 14. MALE LOCKERS |
| 2. BULK STORAGE | 15. FEMALE LOCKERS |
| 3. GARAGE | 16. CUSTODIAN |
| 4. STAIRS | 17. BOILER ROOM |
| 5. STORAGE | 18. STORAGE AND DEAD RECORDS |
| 6. VENDING MACHINE | 19. ELECTRIC |
| 7. SALLY PORT | 20. EMERGENCY ELECTRIC |
| 8. ELEVATOR MECHANICS | 21. ALARM 911 / TELEPHONE |
| 9. INTEROGATION | 22. MALE DETENTION |
| 10. BOOKING | 23. ELEVATOR |
| 11. BREATH. | 24. FEMALE DETENTION |
| 12. MEN'S TOILET | 25. MATRON |
| 13. TOILET | 26. SPECIAL HOLDING CELL |
| | 27. STAFF KITCHEN |

GRAPHIC LEGEND

- ▶ - MAIN ENTRY LOCATION



GROUND FLOOR PLAN (LOWER LEVEL)



D·R·A

Drumey
Rosane
Anderson
Inc.

Architecture
Interior Design

Colby Hall
141 Herlick Road
Newton Centre, MA
02459

617-964-1700
617-969-9054 fax

POLICE STATION TOWN BUILDING STUDY Hanover, Massachusetts

Scale: SEE BAR SCALE

Drawn by: MJQ

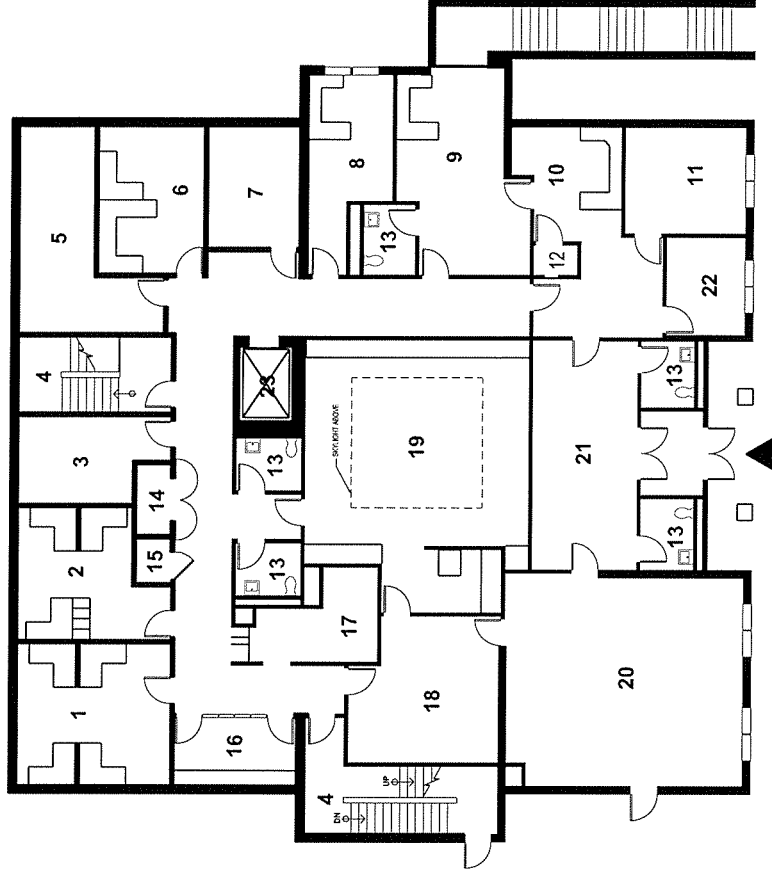
Job# 09017.00

ROOM LEGEND

- | | |
|---------------------------|---------------------------|
| 1. OIC | 13. TOILET |
| 2. DETECTIVES | 14. SPECIAL OPS |
| 3. OFFICE | 15. ARMORY |
| 4. STAIRS | 16. WRITING REPORT |
| 5. RECORDS | 17. EVIDENCE |
| 6. PROSECUTOR/SECRETARY | 18. SQUAD ROOM |
| 7. D.A.R.E. SGI/SECRETARY | 19. COMMUNICATIONS CENTER |
| 8. LT OFFICE | 20. TRAINING / COMMUNITY |
| 9. CHIEF OFFICE | 21. LOBBY |
| 10. CHIEF SECRETARY | 22. INTERVIEW ROOM |
| 11. INT CONFERENCE | 23. ELEVATOR |
| 12. SUPPLIES | |

GRAPHIC LEGEND

- ▶ - MAIN ENTRY LOCATION



FIRST FLOOR PLAN (UPPER LEVEL)

D·R·A

Drumey
Rosane
Anderson
Inc.

Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459

617-964-1700
617-969-9054 fax

POLICE STATION TOWN BUILDING STUDY Hanover, Massachusetts

Scale: SEE BAR SCALE

Drawn by: MJQ

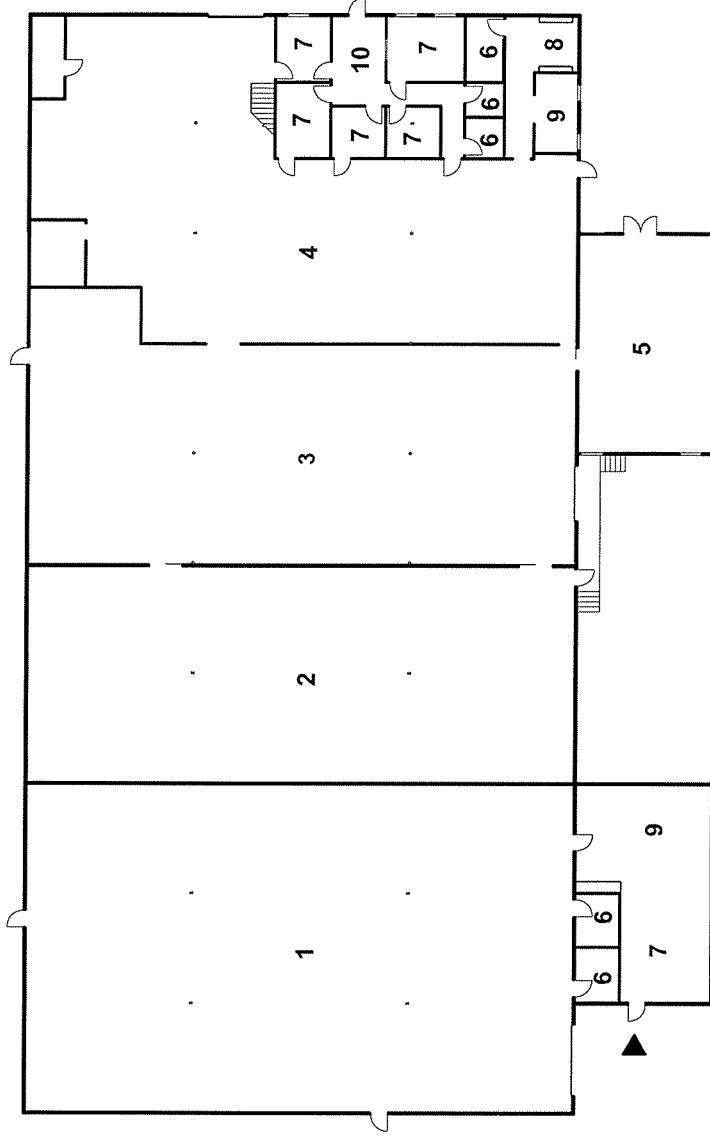
Job# 09017.00

ROOM LEGEND

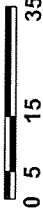
- 1. STORAGE BAY 1
- 2. STORAGE BAY 2
- 3. STORAGE BAY 3
- 4. STORAGE BAY 4
- 5. STORAGE BAY 5
- 6. TOILETS
- 7. OFFICE
- 8. LOCKERS
- 9. LUNCH AREA
- 10. LOBBY

GRAPHIC LEGEND

- ▶ - MAIN ENTRANCE LOCATION



FIRST FLOOR PLAN



D·R·A

Drumrey
Rosane
Anderson
Inc.

Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459

617-964-1700
617-969-9054 fax

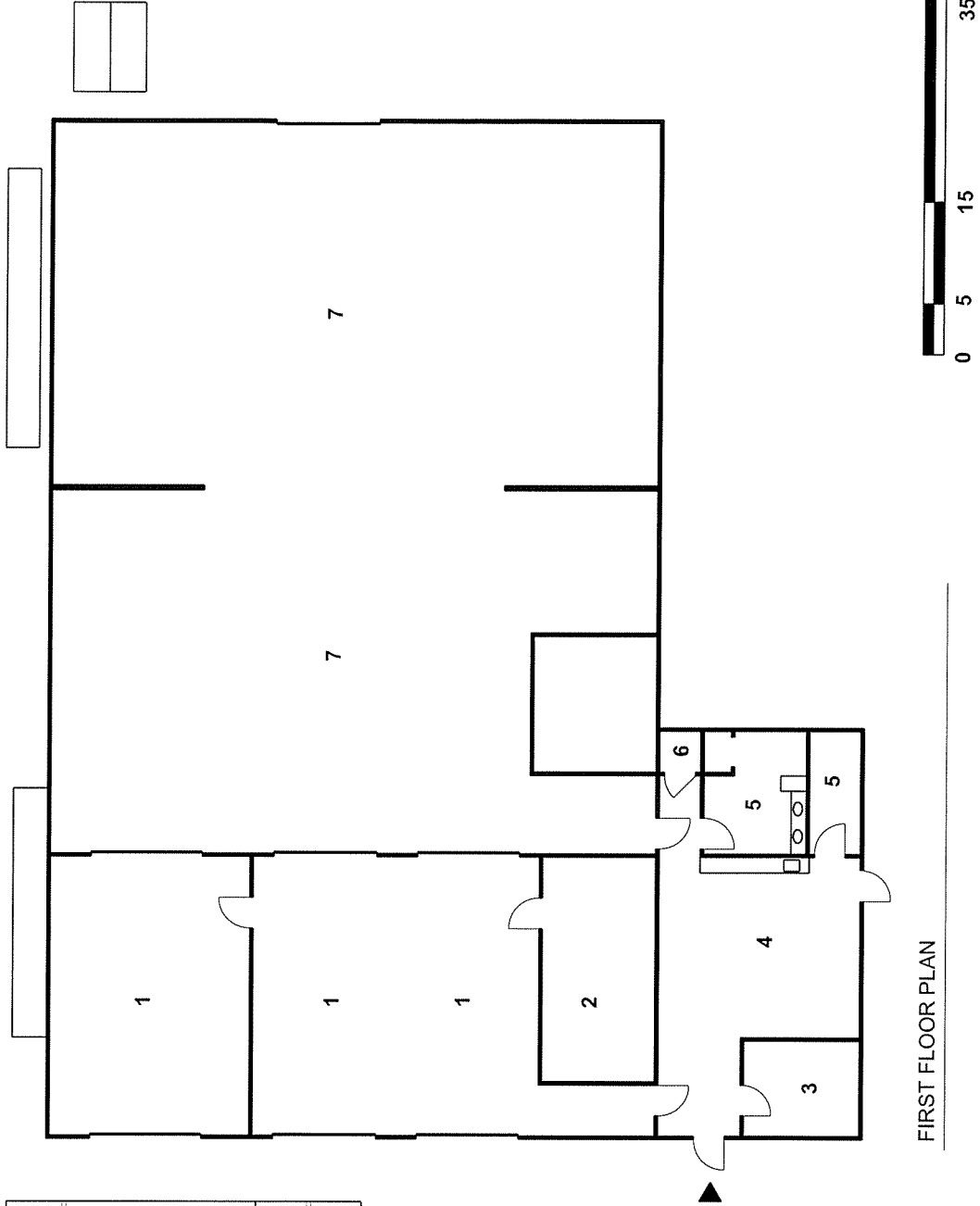
**DPW 219 WINTER STREET
TOWN BUILDING STUDY**
Hanover, Massachusetts

Scale: SEE BAR SCALE

Drawn by: MJQ

Job# 09017.00

ROOM LEGEND	
1.	GARAGE BAY
2.	PARTS ROOM
3.	OFFICE
4.	LUNCHROOM
5.	TOILETS
6.	CLOSET
7.	LARGE GARAGE BAY
GRAPHIC LEGEND	
▶	- MAIN ENTRANCE LOCATION



FIRST FLOOR PLAN

D·R·A

**Drumey
Rosane
Anderson
Inc.**
Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459
617-964-1700
617-989-9054 fax

HIGHWAY GARAGE TOWN BUILDING STUDY Hanover, Massachusetts

Scale: SEE BAR SCALE
Drawn by: E.J.L.
Job#: 09017.00

ROOM LEGEND

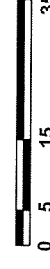
- | | |
|--------------------------------|--------------------------------|
| 1. TREASURY | 22. VENDING AREA |
| 2. ACCOUNTING | 23. ZBA |
| 3. VETERANS AFFAIRS | 24. ELEVATOR |
| 4. FINANCE | 25. MAIN FACP & TELEPHONE/DATA |
| 5. TAX COLLECTOR | 26. VENDING MACHINES |
| 6. ADVISORY COMMITTEE ROOM | 27. VNA RECEPTION |
| 7. COMPUTER COORDINATOR | 28. TOWN CLERK |
| 8. SELECTMEN'S ADMINISTRATION | 29. REGISTRAR |
| 9. ASSESSORS | 30. OFFICE |
| 10. COPY ROOM | 31. EMERGENCY MAN. OFFICE |
| 11. WAITING ROOM | 32. LOCKER ROOM |
| 12. VAULT | 33. PLANNING BOARD |
| 13-A. ACCESSIBLE TOILET(S) | 34. BOARD OF HEALTH |
| 13-N. NON ACCESSIBLE TOILET(S) | 35. PERSONNEL ADMINISTRATOR |
| 14. LUNCH ROOM | 36. PUBLIC NURSE/ANIM. CONTROL |
| 15. TOWN ADMINISTRATOR/ | 37. BUILDING DEPARTMENT |
| MANAGER OFFICE | 38. CONSERVATION COMMISSION |
| 16. SELECTMENS OFFICE | 39. FILE CABINETS |
| 17. SELECTMENS MEETING ROOM | 40. TOWN PLANNER/ |
| 18. HEARING ROOM | 41. VNA |
| 19. BOILER ROOM | 42. CUSTODIAN |
| 20. GARAGE | 43. KITCHENETTE |
| 21. STORAGE | 44. ELEVATOR SERVICE ROOM |

GRAPHIC LEGEND

- ▶ - MAIN ENTRANCE LOCATION



LOWER FLOOR PLAN



D·R·A

Drumme
Rosane
Anderson
Inc.

Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459

617-964-1700
617-969-9054 fax

TOWN HALL TOWN BUILDING STUDY Hanover, Massachusetts

Scale: SEE BAR SCALE

Drawn by: CHM

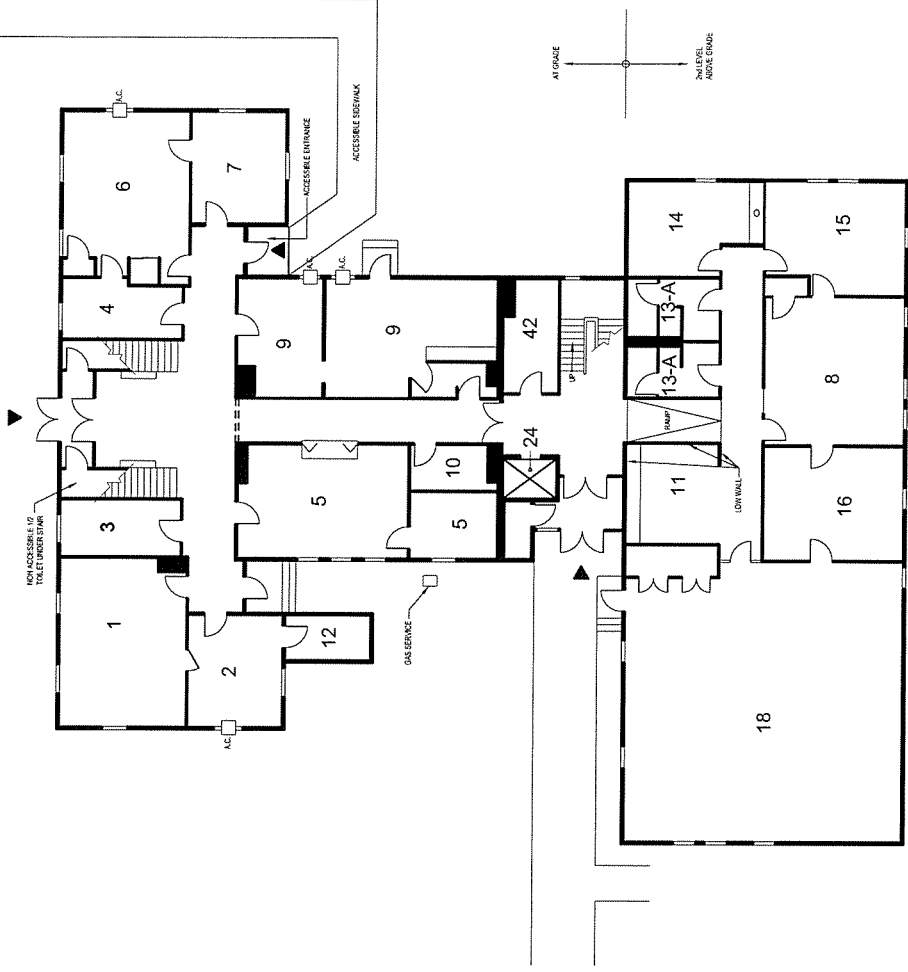
Job# 09017.00

ROOM LEGEND

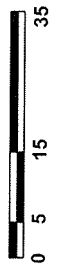
- | | |
|--------------------------------|---------------------------------|
| 1. TREASURY | 22. VENDING AREA |
| 2. ACCOUNTING | 23. ZBA |
| 3. VETERANS AFFAIRS | 24. ELEVATOR |
| 4. FINANCE | 25. MAIN FACP & TELEPHONE/DATA |
| 5. TAX COLLECTOR | 26. VENDING MACHINES |
| 6. ADVISORY COMMITTEE ROOM | 27. VNA RECEPTION |
| 7. COMPUTER COORDINATOR | 28. TOWN CLERK |
| 8. SELECTMEN'S ADMINISTRATION | 29. REGISTRAR |
| 9. ASSESSORS | 30. OFFICE |
| 10. COPY ROOM | 31. EMERGENCY MAN. OFFICE |
| 11. WAITING ROOM | 32. LOCKER ROOM |
| 12. VAULT | 33. PLANNING BOARD |
| 13-A. ACCESSIBLE TOILET(S) | 34. BOARD OF HEALTH |
| 13-N. NON ACCESSIBLE TOILET(S) | 35. PERSONNEL ADMINISTRATOR |
| 14. LUNCH ROOM | 36. PUBLIC NURSE/ ANIM. CONTROL |
| 15. TOWN ADMINISTRATOR/ | 37. BUILDING DEPARTMENT |
| MANAGER OFFICE | 38. CONSERVATION COMMISSION |
| 16. SELECTMENS OFFICE | 39. FILE CABINETS |
| 17. SELECTMENS MEETING ROOM | 40. TOWN PLANNER/ |
| 18. HEARING ROOM | 41. VNA |
| 19. BOILER ROOM | 42. CUSTODIAN |
| 20. GARAGE | 43. KITCHENETTE |
| 21. STORAGE | 44. ELEVATOR SERVICE ROOM |

GRAPHIC LEGEND

- ▶ - MAIN ENTRANCE LOCATION



FIRST FLOOR PLAN



**Drumey
Rosane
Anderson
Inc.**
Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459
617-964-1700
617-969-9054 fax

TOWN HALL TOWN BUILDING STUDY Hanover, Massachusetts

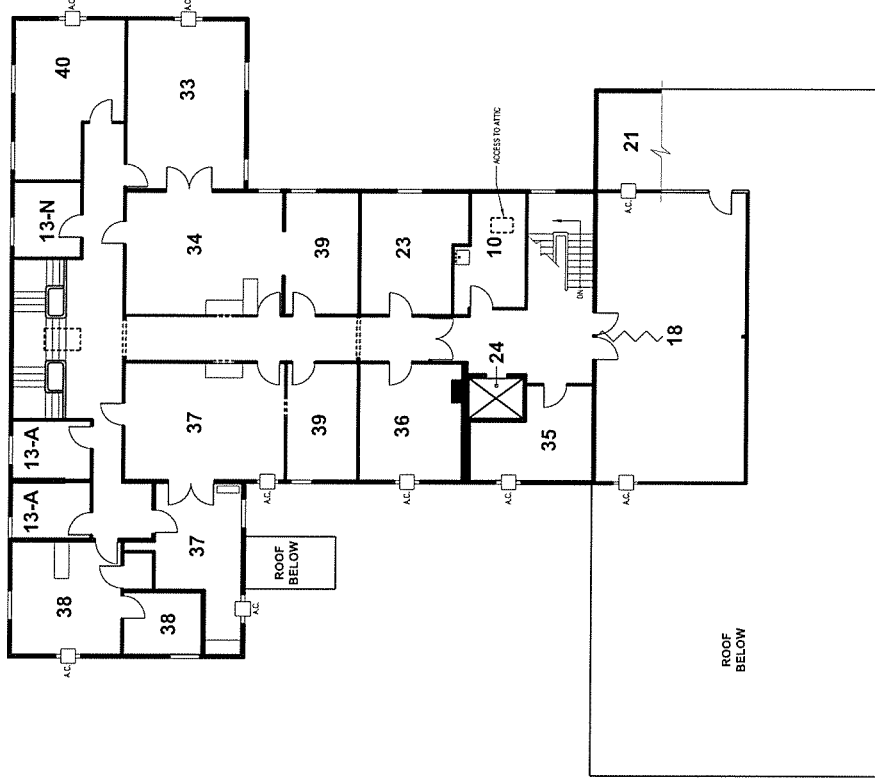
Scale: SEE BAR SCALE
Drawn by: CHM
Job# 09017.00

ROOM LEGEND

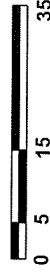
- | | |
|---|--------------------------------|
| 1. TREASURY | 22. VENDING AREA |
| 2. ACCOUNTING | 23. ZBA |
| 3. VETERANS AFFAIRS | 24. ELEVATOR |
| 4. FINANCE | 25. MAIN FACP & TELEPHONE/DATA |
| 5. TAX COLLECTOR | 26. VENDING MACHINES |
| 6. ADVISORY COMMITTEE ROOM | 27. VNA RECEPTION |
| 7. COMPUTER COORDINATOR | 28. TOWN CLERK |
| 8. SELECTMEN'S ADMINISTRATION | 29. REGISTRAR |
| 9. ASSESSORS | 30. OFFICE |
| 10. COPY ROOM | 31. EMERGENCY MAN. OFFICE |
| 11. WAITING ROOM | 32. LOCKER ROOM |
| 12. VAULT | 33. PLANNING BOARD |
| 13-A. ACCESSIBLE TOILET(S) | 34. BOARD OF HEALTH |
| 13-N. NON ACCESSIBLE TOILET(S) | 35. PERSONNEL ADMINISTRATOR |
| 14. LUNCH ROOM | 36. PUBLIC NURSE/ANIM. CONTROL |
| 15. TOWN ADMINISTRATOR/
MANAGER OFFICE | 37. BUILDING DEPARTMENT |
| 16. SELECTMENS OFFICE | 38. CONSERVATION COMMISSION |
| 17. SELECTMENS MEETING ROOM | 39. FILE CABINETS |
| 18. HEARING ROOM | 40. TOWN PLANNER/ |
| 19. BOILER ROOM | 41. VNA |
| 20. GARAGE | 42. CUSTODIAN |
| 21. STORAGE | 43. KITCHENETTE |
| | 44. ELEVATOR SERVICE ROOM |

GRAPHIC LEGEND

- - MAIN ENTRANCE LOCATION



SECOND FLOOR PLAN



D·R·A

Drumrey
Rosane
Anderson
Inc.

Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459

617-964-1700
617-969-9054 fax

TOWN HALL TOWN BUILDING STUDY Hanover, Massachusetts

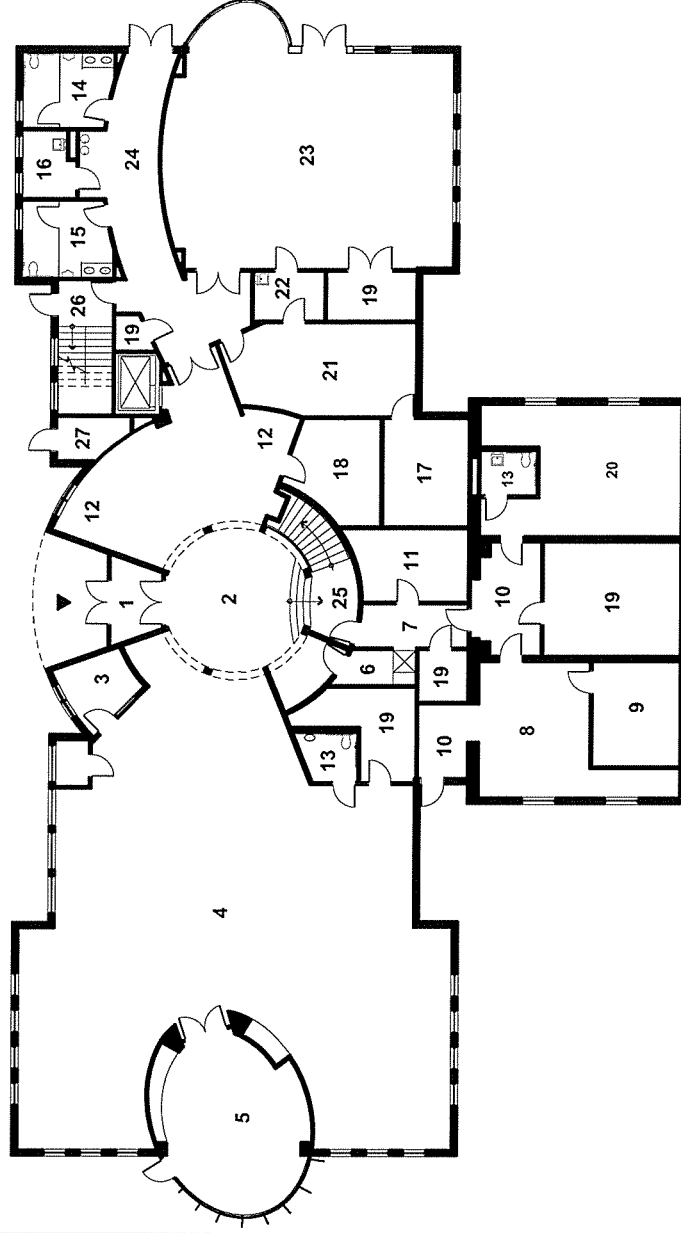
Scale: SEE BAR SCALE
Drawn by: CHM
Job# 09017.00

ROOM LEGEND

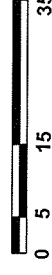
- | | |
|------------------------|--------------------------|
| 1. VESTIBULE | 21. CONFERENCE ROOM |
| 2. LOBBY | 22. PANTRY |
| 3. OFFICE | 23. MEETING ROOM |
| 4. CHILDREN'S LIBRARY | 24. NIGHT LOBBY |
| 5. STORY/CRAFT ROOM | 25. STAIR NO. 1 |
| 6. FUTURE LIFT | 26. STAIR NO. 2 |
| 7. CORRIDOR | 27. FIRE CONTROL ROOM |
| 8. MECHANICAL | 28. NON FICTION READING |
| 9. ELECTRICAL ROOM | 29. (NOT USED) |
| 10. PASSAGE | 30. YOUNG ADULT |
| 11. MAGAZINE BACKFILES | 31. QUIET STUDY |
| 12. BROWSING | 32. PERIODICALS ROOM |
| 13. TOILET | 33. READING/ LARGE PRINT |
| 14. MEN'S TOILET | 34. UPPER LOBBY |
| 15. WOMEN'S TOILET | 35. WORK ROOM |
| 16. JANITOR'S CLOSET | 36. FICTION READING |
| 17. LOCAL HISTORY | 37. REFERENCE |
| 18. BOOK SALE | 38. CIRCULATION DESK |
| 19. STORAGE | |
| 20. STAFF ROOM | |

GRAPHIC LEGEND

- ▶ - MAIN ENTRANCE LOCATION



FIRST FLOOR PLAN



D·R·A

Drumsey
Rosane
Anderson
Inc.

Architecture
Interior Design

Colby Hall
141 Hemick Road
Newton Centre, MA
02459

617-964-1700
617-969-9054 fax

JOHN CURTIS FREE LIBRARY TOWN BUILDING STUDY

Hanover, Massachusetts

Scale: SEE BAR SCALE

Drawn by: E.J.L.

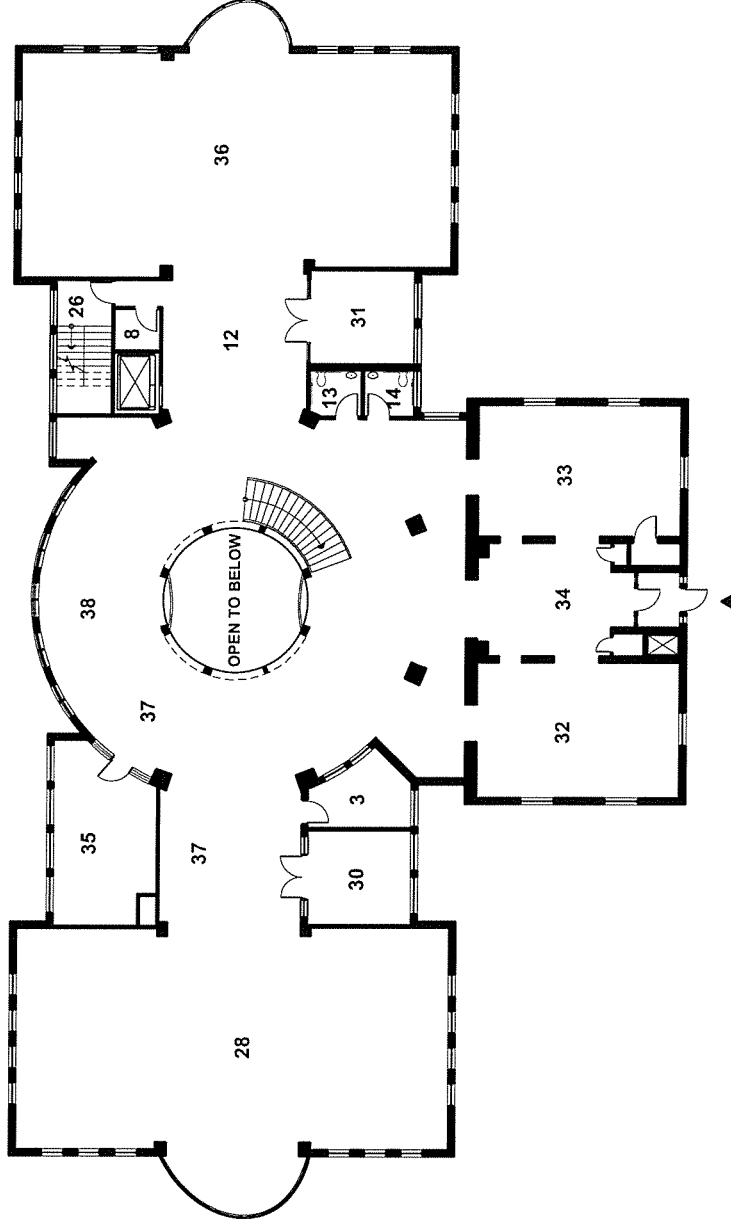
Job# 09017.00

ROOM LEGEND

- | | |
|------------------------|-------------------------|
| 1. VESTIBULE | 21. CONFERENCE ROOM |
| 2. LOBBY | 22. PANTRY |
| 3. OFFICE | 23. MEETING ROOM |
| 4. CHILDREN'S LIBRARY | 24. NIGHT LOBBY |
| 5. STORY/CRAFT ROOM | 25. STAIR NO. 1 |
| 6. FUTURE LIFT | 26. STAIR NO. 2 |
| 7. CORRIDOR | 27. FIRE CONTROL ROOM |
| 8. MECHANICAL | 28. NON FICTION READING |
| 9. ELECTRICAL ROOM | 29. (NOT USED) |
| 10. PASSAGE | 30. YOUNG ADULT |
| 11. MAGAZINE BACKFILES | 31. QUIET STUDY |
| 12. BROWSING | 32. PERIODICALS ROOM |
| 13. TOILET | 33. READING/LARGE PRINT |
| 14. MEN'S TOILET | 34. UPPER LOBBY |
| 15. WOMEN'S TOILET | 35. WORK ROOM |
| 16. JANITOR'S CLOSET | 36. FICTION READING |
| 17. LOCAL HISTORY | 37. REFERENCE |
| 18. BOOK SALE | 38. CIRCULATION DESK |
| 19. STORAGE | |
| 20. STAFF ROOM | |

GRAPHIC LEGEND

- ▶ - MAIN ENTRANCE LOCATION



SECOND FLOOR PLAN



D·R·A

Drumey
Rosane
Anderson
Inc.

Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459

617-964-1700
617-969-9054 fax

JOHN CURTIS FREE LIBRARY TOWN BUILDING STUDY

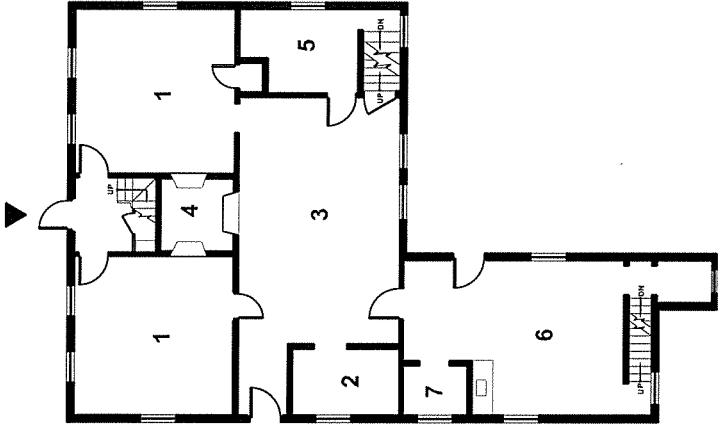
Hanover, Massachusetts

Scale: SEE BAR SCALE

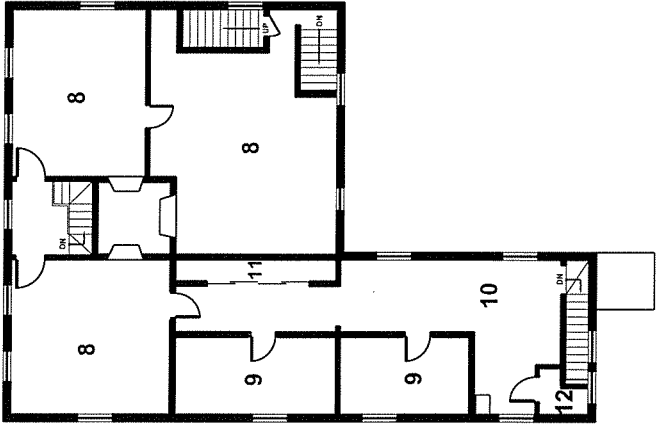
Drawn by: EUL

Job# 09017.00

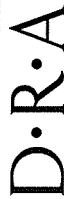
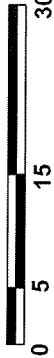
ROOM LEGEND	
1. PARLOR	
2. OFFICE	
3. DINNING	
4. FIRE PLACE	
5. HISTORIC ARCHIVES STORAGE/OFFICE	
6. KITCHEN	
7. GIFTS	
8. BEDROOMS	
9. ARTIFACT/ STORAGE	
10. HALL	
11. CLOSET/ HISTORICAL COSTUMES	
12. TOILET ROOM	
GRAPHIC LEGEND	
▶	- MAIN ENTRANCE LOCATION



FIRST FLOOR PLAN



SECOND FLOOR PLAN



Drumme
Rosane
Anderson
Inc.

Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459

617-964-1700
617-969-9054 fax

STETSON HOUSE TOWN BUILDING STUDY

Hanover, Massachusetts

Scale:SEE BAR SCALE

Drawn by: EUL

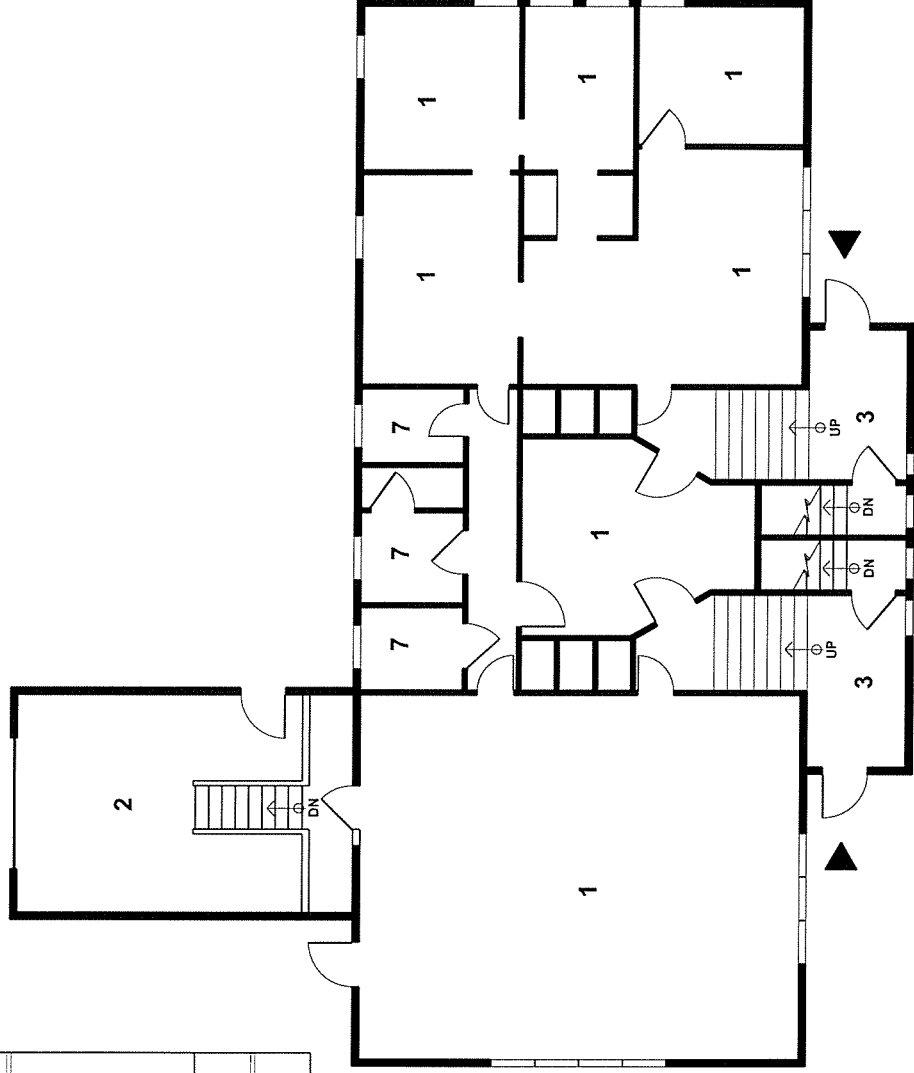
Job# 09017.00

ROOM LEGEND

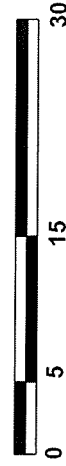
- 1. FORMER OFFICE
- 2. FORMER GARAGE
- 3. FORMER ENTRY
- 4. FORMER BOILER ROOM
- 5. STORAGE
- 6. PASSAGE/ HALL
- 7. TOILET

GRAPHIC LEGEND

- ▶ - MAIN ENTRANCE LOCATION



FIRST FLOOR PLAN



Drumey
Rosane
Anderson
Inc.
Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459
617-964-1700
617-969-9054 fax

CURTIS SCHOOL TOWN BUILDING STUDY Hanover, Massachusetts

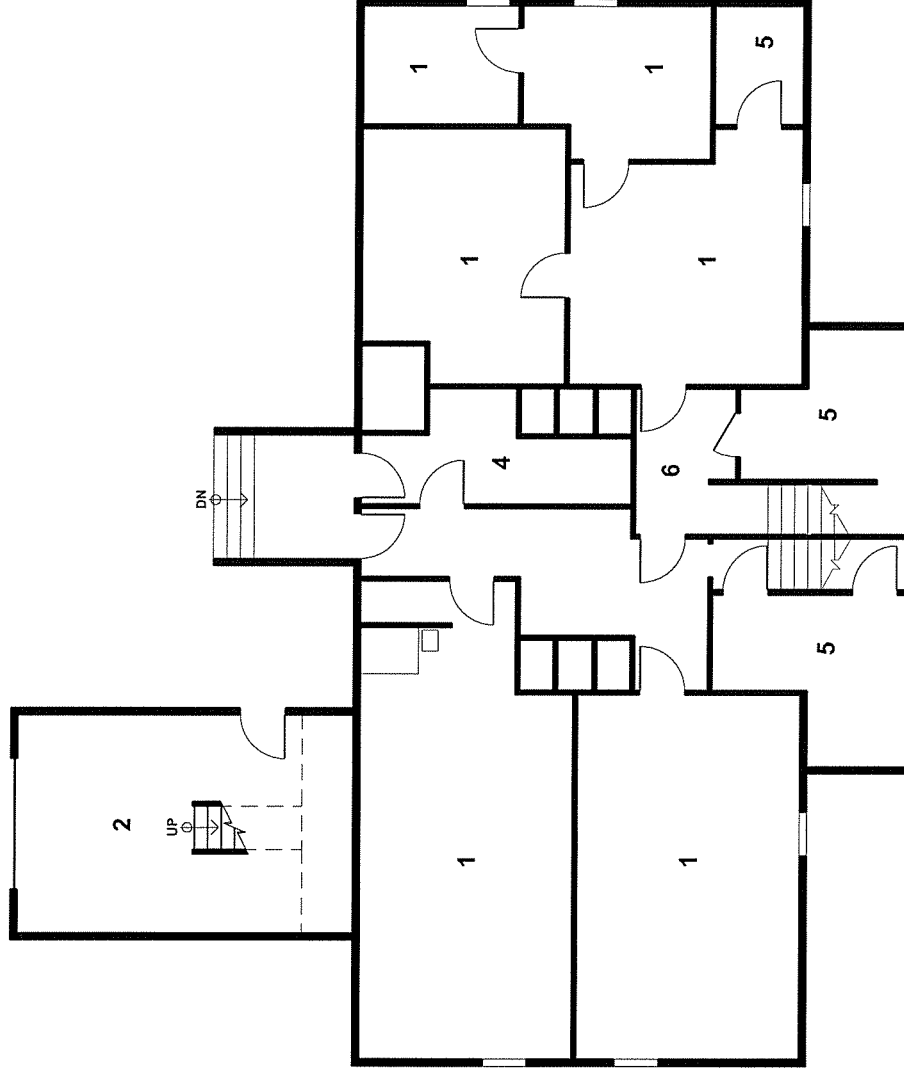
Scale: SEE BAR SCALE
Drawn by: MJQ
Job# 09017.00

ROOM LEGEND

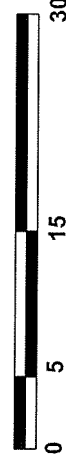
- 1. FORMER OFFICE
- 2. FORMER GARAGE
- 3. FORMER ENTRY
- 4. FORMER BOILER ROOM
- 5. STORAGE
- 6. PASSAGE/ HALL
- 7. TOILET

GRAPHIC LEGEND

- ▶ - MAIN ENTRANCE LOCATION



BASEMENT FLOOR PLAN



Drumrey
Rosane
Anderson
Inc.
Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459
617-964-1700
617-969-9054 fax

CURTIS SCHOOL TOWN BUILDING STUDY Hanover, Massachusetts

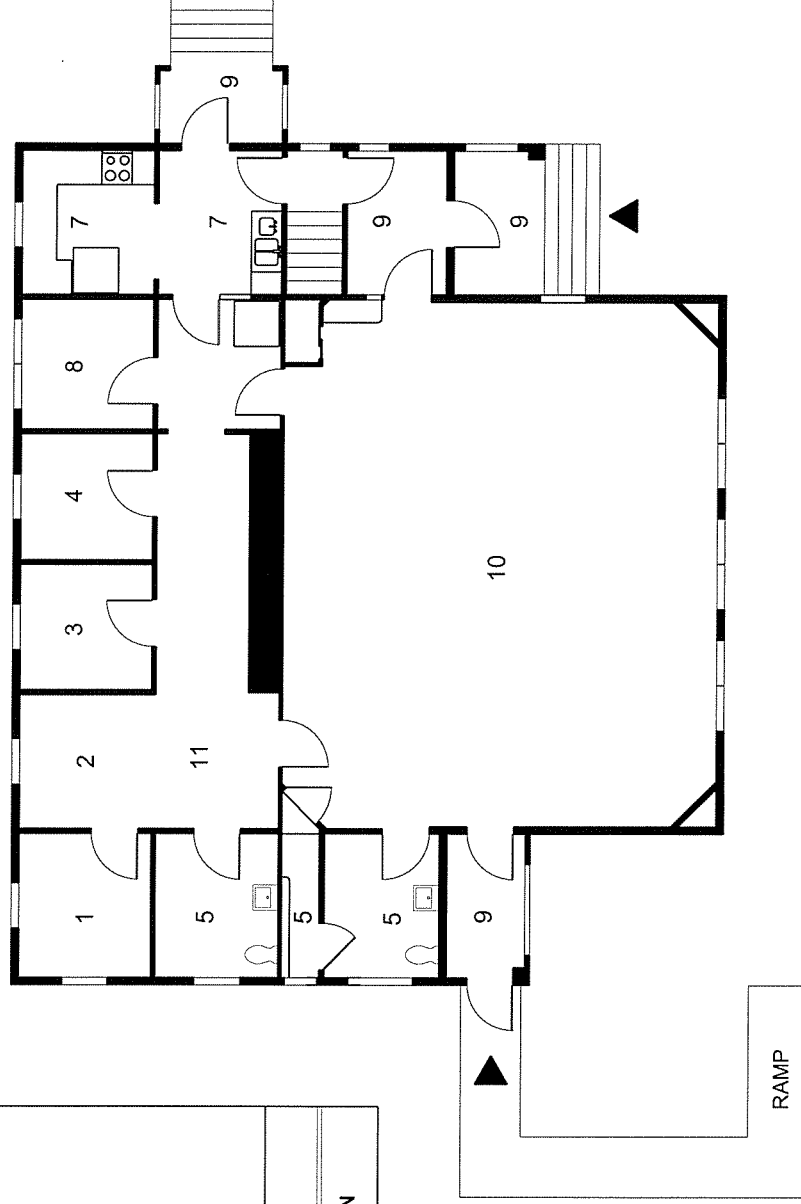
Scale: SEE BAR SCALE
Drawn by: MJQ
Job# 09017.00

ROOM LEGEND

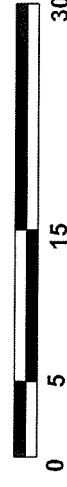
1. DIRECTOR
2. WORK STATION
3. UN-USED OFFICE
4. OFFICE
5. TOILET
6. MEETING ROOM
7. KITCHEN
8. GAME ROOM
9. ENTRY
10. MAIN ACTIVITY ROOM
11. RECEPTION
12. STORAGE
13. WORKSHOP AND STORAGE

GRAPHIC LEGEND

- ▶ - MAIN ENTRANCE LOCATION



FIRST FLOOR PLAN



D·R·A

Drumme
Rosane
Anderson
Inc.

Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459

617-964-1700
617-969-9054 fax

PARKS AND RECREATION TOWN BUILDING STUDY

Hanover, Massachusetts

Scale: SEE BAR SCALE

Drawn by: MJQ

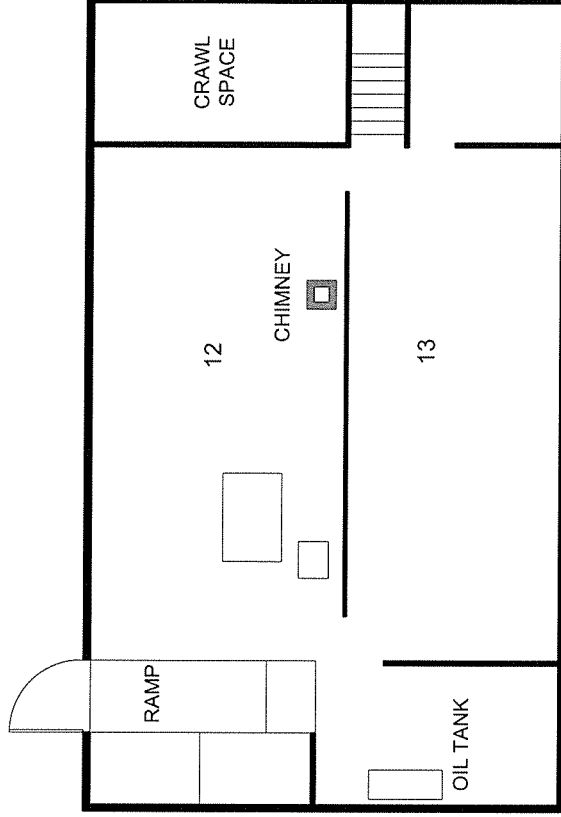
Job# 09017.00

ROOM LEGEND

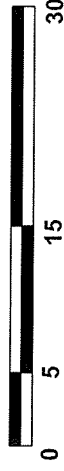
1. DIRECTOR
2. WORK STATION
3. UN-USED OFFICE
4. OFFICE
5. TOILET
6. MEETING ROOM
7. KITCHEN
8. GAME ROOM
9. ENTRY
10. MAIN ACTIVITY ROOM
11. RECEPTION
12. STORAGE
13. WORKSHOP AND STORAGE

GRAPHIC LEGEND

- - MAIN ENTRANCE LOCATION



BASEMENT FLOOR PLAN



D·R·A

Drumney
Rosane
Anderson
Inc.

Colby Hall
141 Herrick Road
Newton Centre, MA
02459

Architecture
Interior Design

617-964-1700
617-969-9054 fax

PARKS AND RECREATION TOWN BUILDING STUDY

Hanover, Massachusetts

Scale: SEE BAR SCALE

Drawn by: MJQ

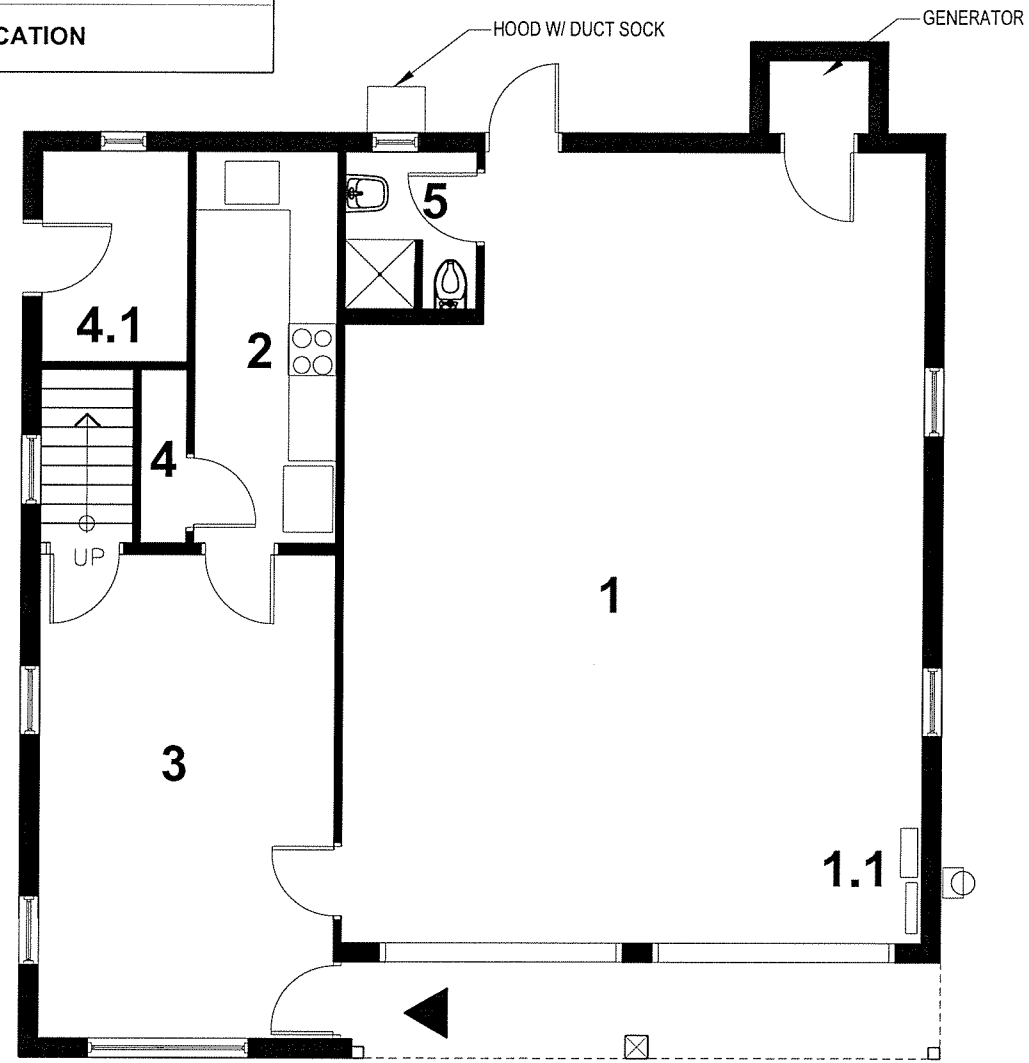
Job# 09017.00

ROOM LEGEND

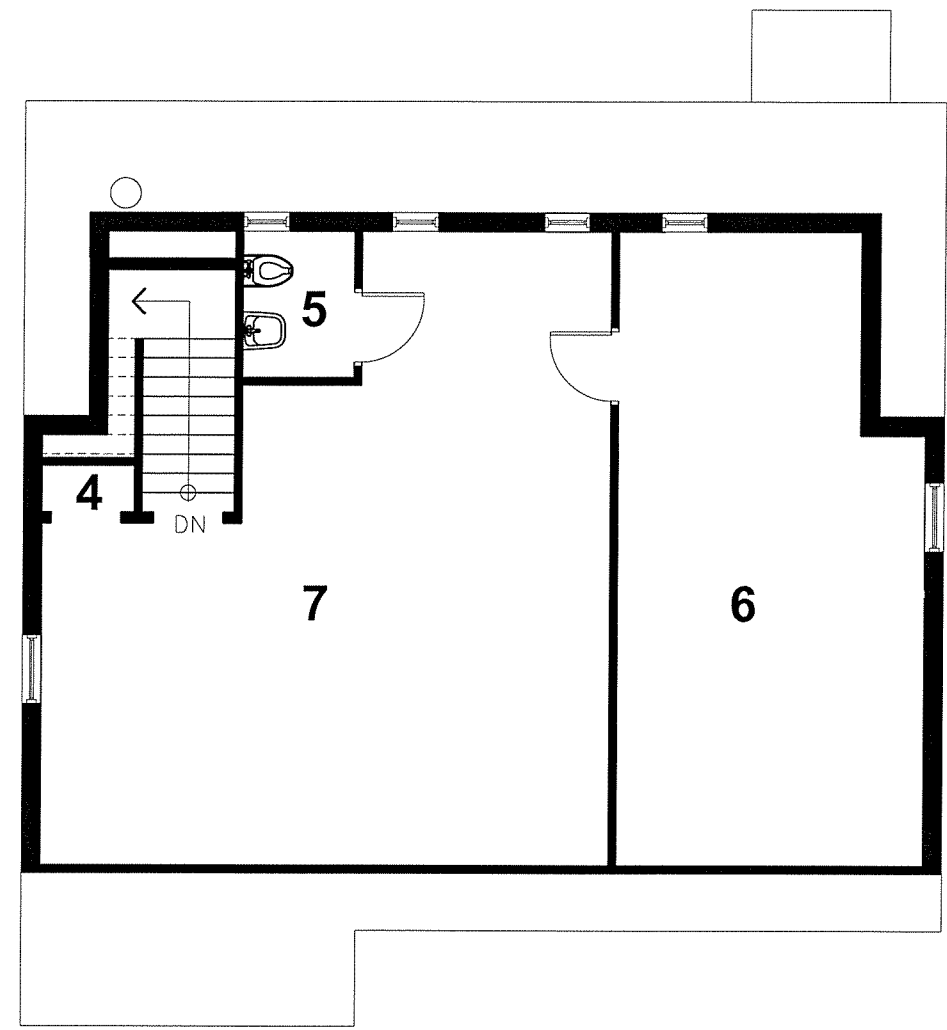
- | | |
|-----------------------|----------------------------|
| 1. FIRE ENGINE GARAGE | 1.1 ELEC. PANELS AND METER |
| 2. KITCHEN | |
| 3. COMMON ROOM | |
| 4. CLOSET | 4.1 BOILER ROOM |
| 5. TOILET ROOM | |
| 6. DORM ROOM | |
| 7. RECREATION ROOM | |

GRAPHIC LEGEND

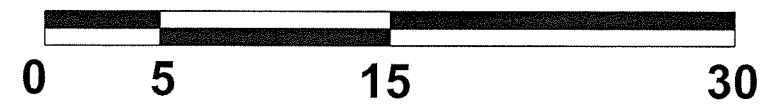
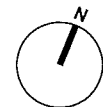
- - MAIN ENTRANCE LOCATION



FIRST FLOOR PLAN



SECOND FLOOR PLAN



Scale: SEE BAR SCALE
Drawn by: MJQ
Job#: 09017.00

FIRE STATION 1 TOWN BUILDING STUDY Hanover, Massachusetts

Colby Hall
141 Herrick Road
Newton Centre, MA
02459
617-964-1700
617-969-9054 fax

Drumney
Rosane
Anderson
Inc.
Architecture
Interior Design

D·R·A

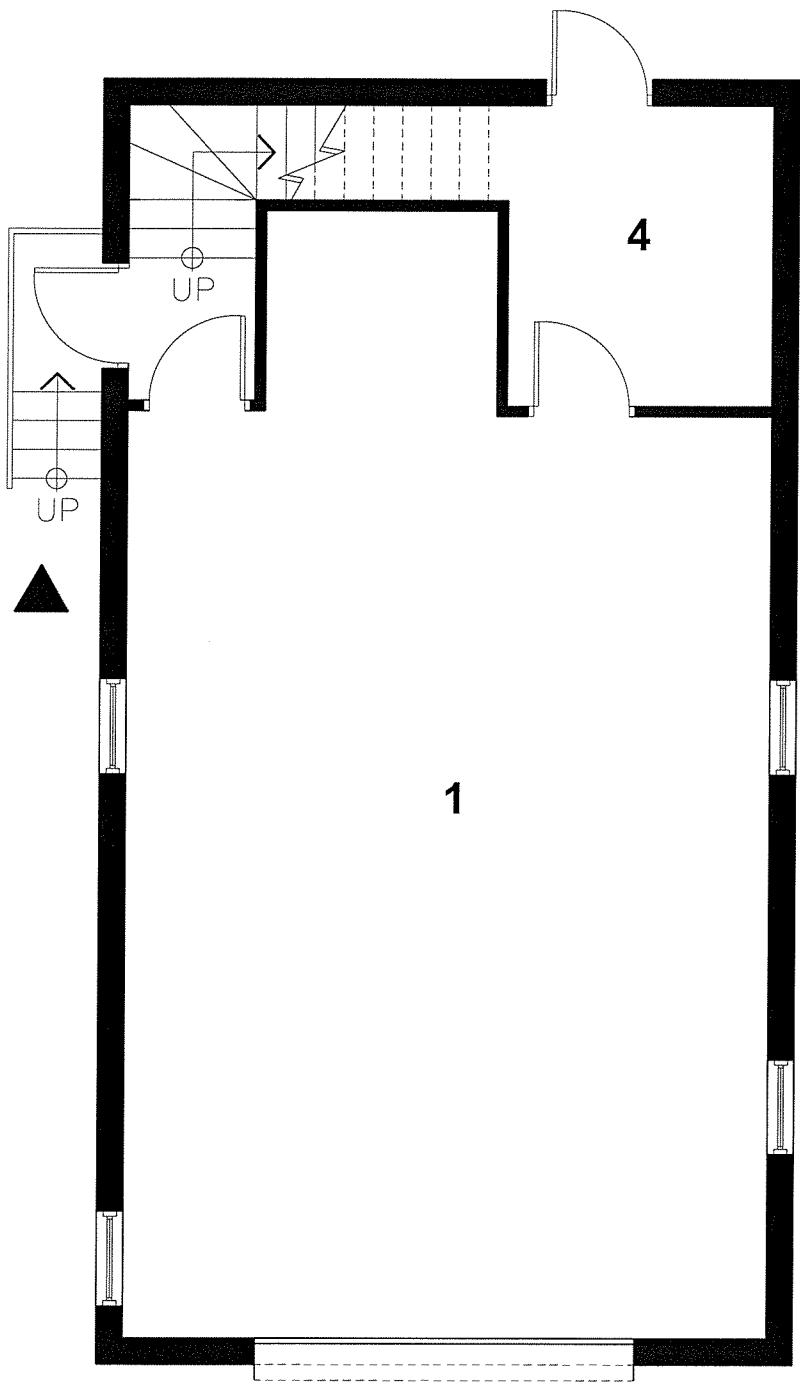


ROOM LEGEND

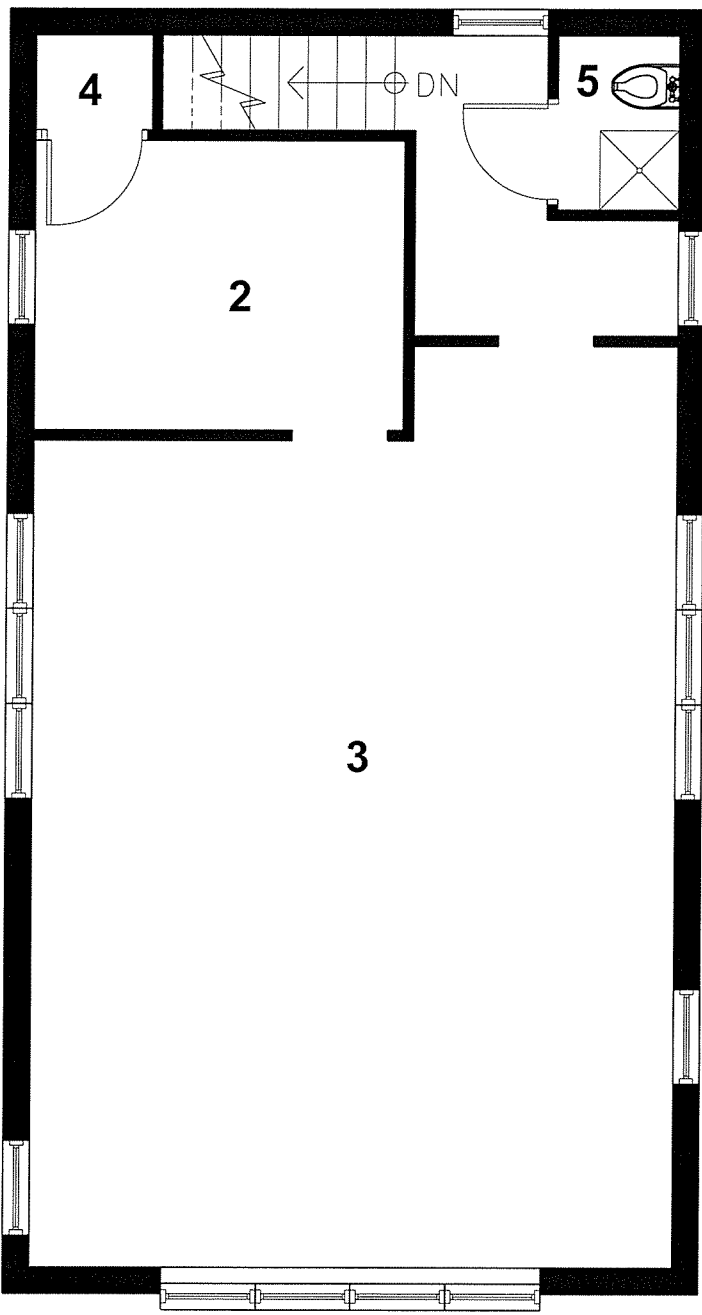
- 1. FIRE ENGINE GARAGE
- 2. KITCHEN
- 3. COMMON ROOM
- 4. MECHANICAL ROOM
- 5. TOILET ROOM

GRAPHIC LEGEND

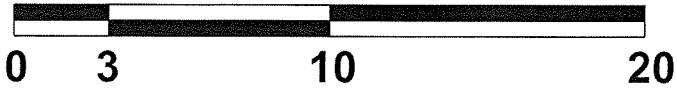
▶ - MAIN ENTRANCE LOCATION



FIRST FLOOR PLAN



SECOND FLOOR PLAN



ROOM LEGEND

1. FIRE ENGINE GARAGE

2. KITCHENETTE

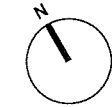
3. TOILET ROOM

4. DAY ROOM

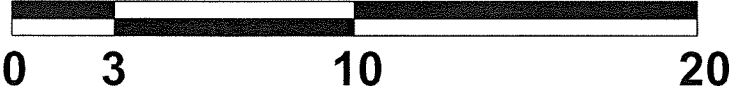
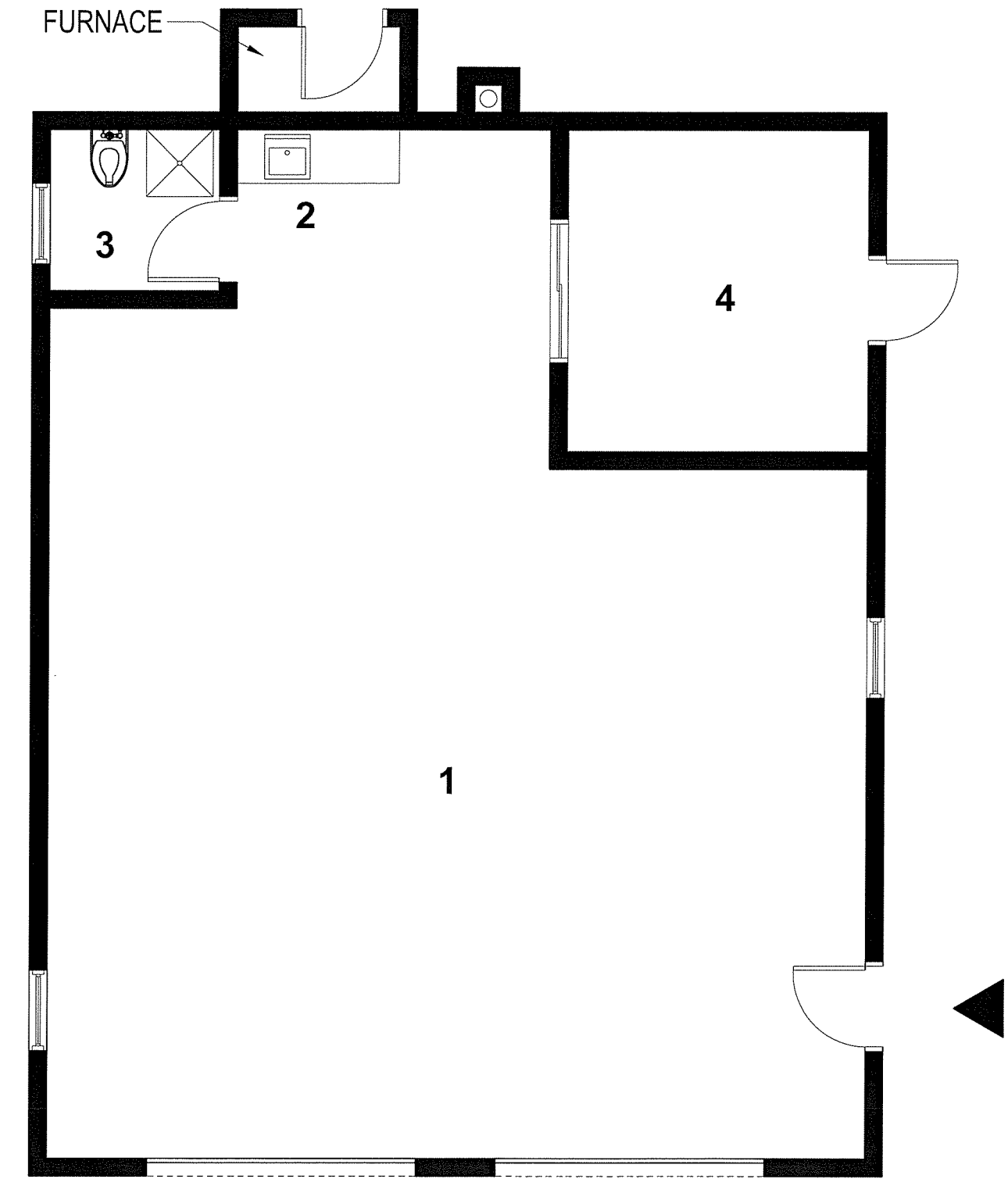
GRAPHIC LEGEND

▶

- MAIN ENTRANCE LOCATION



FIRST FLOOR PLAN



Scale:SEE BAR SCALE
Drawn by: MJQ
Job# 09017.00

FIRE STATION 3
TOWN BUILDING STUDY
Hanover, Massachusetts

Colby Hall
141 Herrick Road
Newton Centre, MA
02459
617-964-1700
617-969-9054 fax

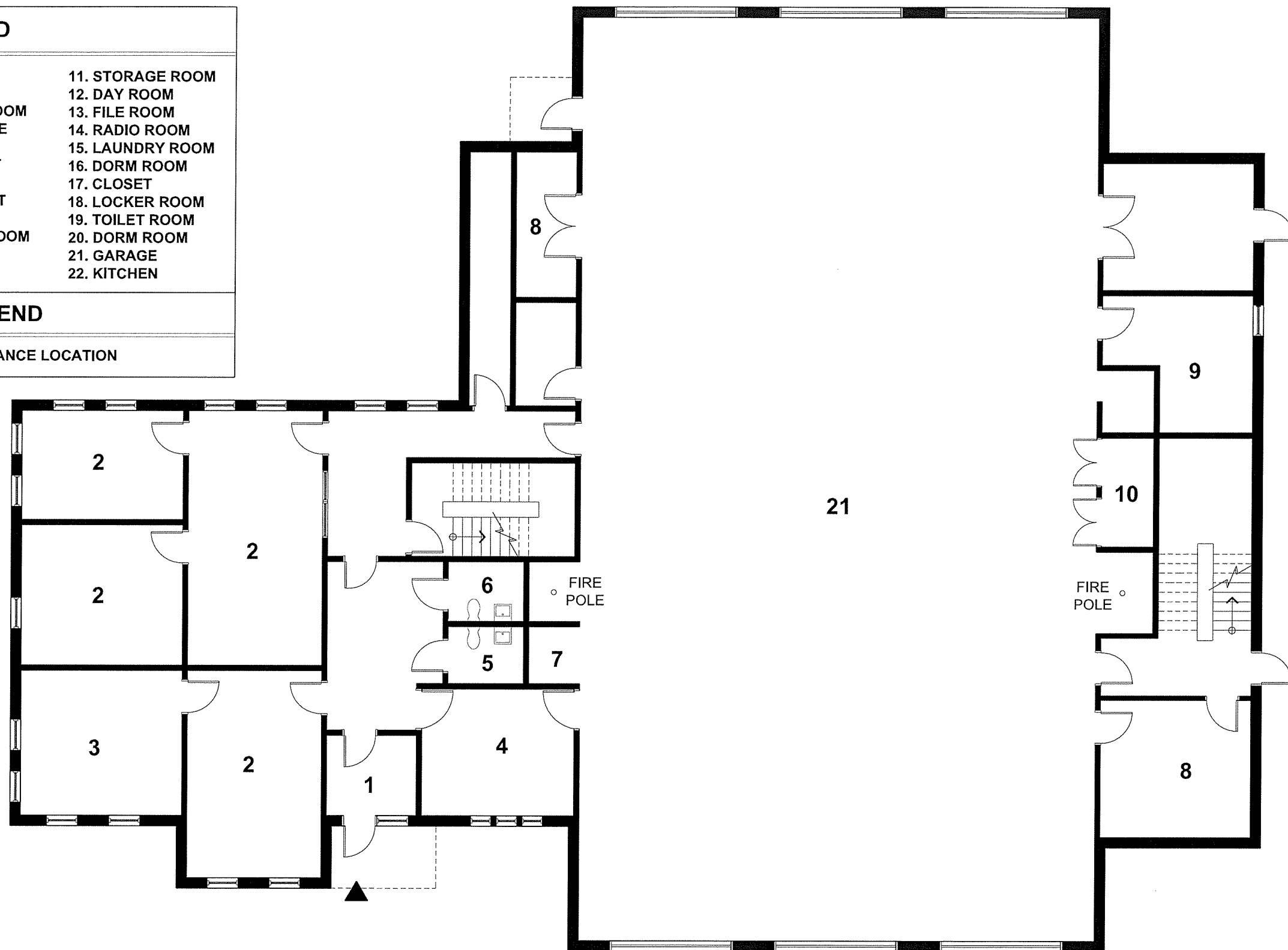
Drumme
Rosane
Anderson
Inc.
Architecture
Interior Design

ROOM LEGEND

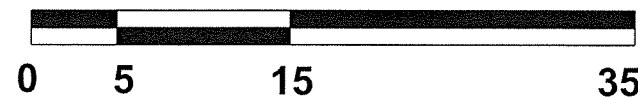
- | | |
|---------------------|------------------|
| 1. VESTIBULE | 11. STORAGE ROOM |
| 2. OFFICE | 12. DAY ROOM |
| 3. CONFERENCE ROOM | 13. FILE ROOM |
| 4. DISPATCH OFFICE | 14. RADIO ROOM |
| 5. MEN'S TOILET | 15. LAUNDRY ROOM |
| 6. WOMEN'S TOILET | 16. DORM ROOM |
| 7. JANITOR'S AREA | 17. CLOSET |
| 8. UNIFORM CLOSET | 18. LOCKER ROOM |
| 9. MACHINE SHOP | 19. TOILET ROOM |
| 10. MECHANICAL ROOM | 20. DORM ROOM |
| | 21. GARAGE |
| | 22. KITCHEN |

GRAPHIC LEGEND

- - MAIN ENTRANCE LOCATION



FIRST FLOOR PLAN



Scale: SEE BAR SCALE
 Drawn by: MJQ
 Job#: 09017.00

FIRE HEADQUARTERS TOWN BUILDING STUDY

Hanover, Massachusetts

Colby Hall
 141 Herrick Road
 Newton Centre, MA
 02459

617-964-1700
 617-969-9054 fax

Drumey
 Rosane
 Anderson
 Inc.

Architecture
 Interior Design

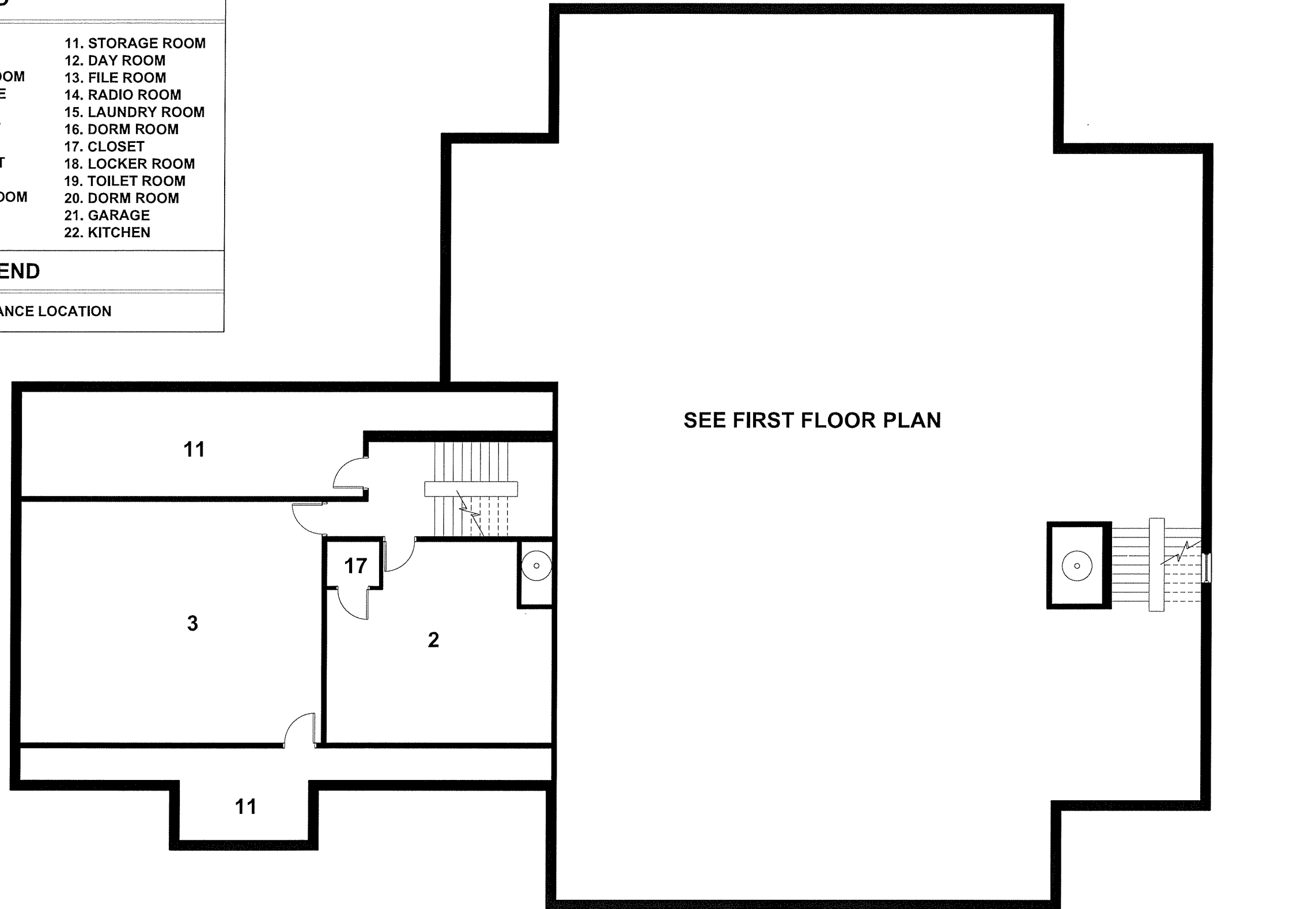
D·R·A

ROOM LEGEND

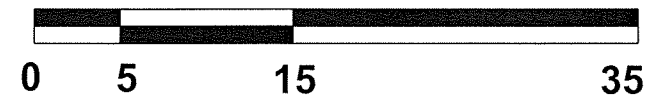
- | | |
|---------------------|------------------|
| 1. VESTIBULE | 11. STORAGE ROOM |
| 2. OFFICE | 12. DAY ROOM |
| 3. CONFERENCE ROOM | 13. FILE ROOM |
| 4. DISPATCH OFFICE | 14. RADIO ROOM |
| 5. MEN'S TOILET | 15. LAUNDRY ROOM |
| 6. WOMEN'S TOILET | 16. DORM ROOM |
| 7. JANITOR'S AREA | 17. CLOSET |
| 8. UNIFORM CLOSET | 18. LOCKER ROOM |
| 9. MACHINE SHOP | 19. TOILET ROOM |
| 10. MECHANICAL ROOM | 20. DORM ROOM |
| | 21. GARAGE |
| | 22. KITCHEN |

GRAPHIC LEGEND

- - MAIN ENTRANCE LOCATION



SECOND FLOOR PLAN



Scale: SEE BAR SCALE
 Drawn by: MJQ
 Job#: 09017.00

FIRE HEADQUARTERS TOWN BUILDING STUDY Hanover, Massachusetts

Colby Hall
 141 Herrick Road
 Newton Centre, MA
 02459
 617-964-1700
 617-969-9054 fax

Drumey
 Rosane
 Anderson
 Inc.
 Architecture
 Interior Design

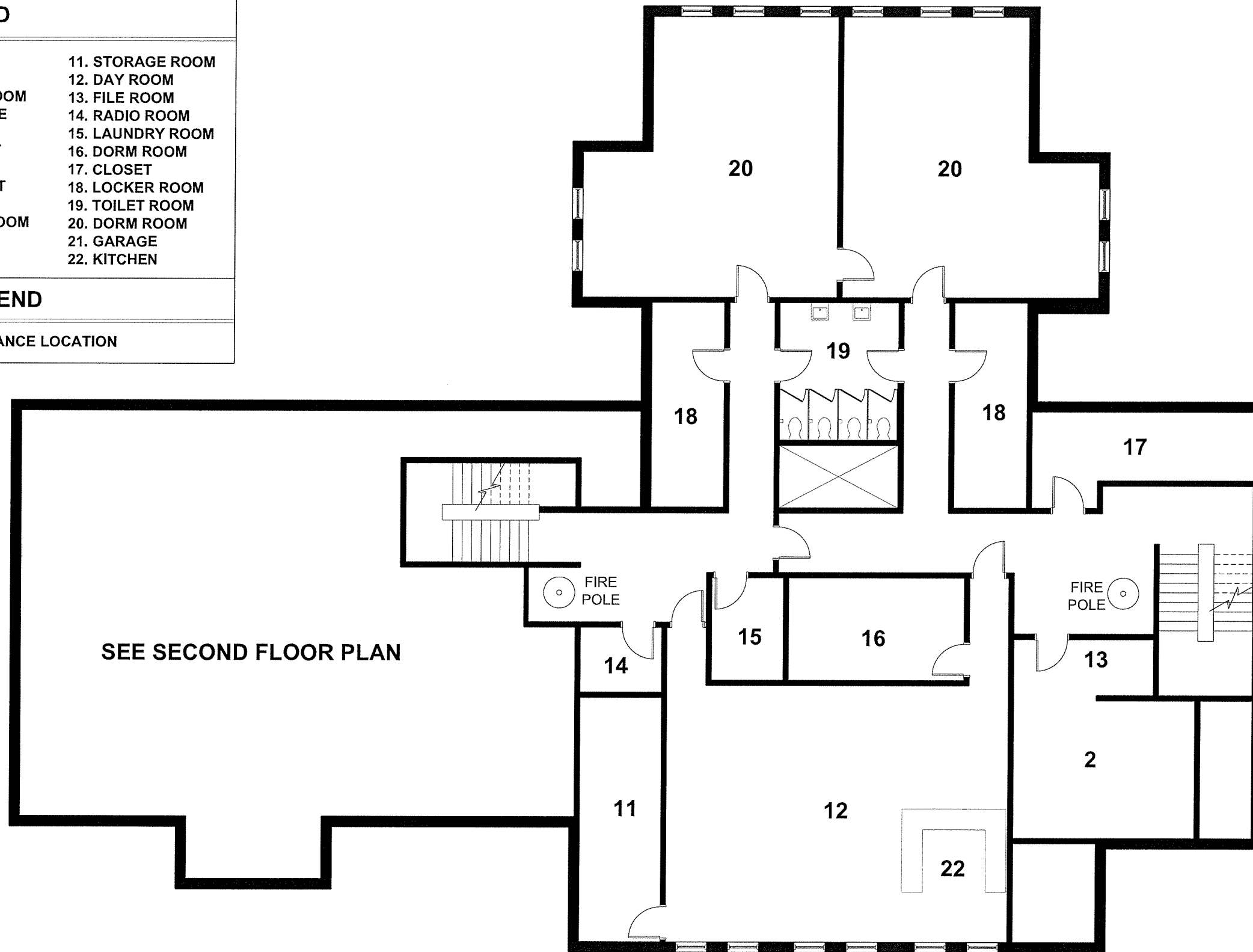
D•R•A

ROOM LEGEND

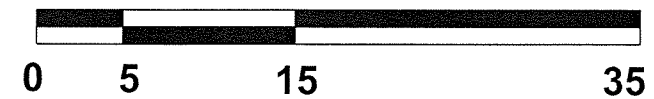
- | | |
|---------------------|------------------|
| 1. VESTIBULE | 11. STORAGE ROOM |
| 2. OFFICE | 12. DAY ROOM |
| 3. CONFERENCE ROOM | 13. FILE ROOM |
| 4. DISPATCH OFFICE | 14. RADIO ROOM |
| 5. MEN'S TOILET | 15. LAUNDRY ROOM |
| 6. WOMEN'S TOILET | 16. DORM ROOM |
| 7. JANITOR'S AREA | 17. CLOSET |
| 8. UNIFORM CLOSET | 18. LOCKER ROOM |
| 9. MACHINE SHOP | 19. TOILET ROOM |
| 10. MECHANICAL ROOM | 20. DORM ROOM |
| | 21. GARAGE |
| | 22. KITCHEN |

GRAPHIC LEGEND

- - MAIN ENTRANCE LOCATION



THIRD FLOOR PLAN



Scale: SEE BAR SCALE
 Drawn by: MJQ
 Job#: 09017.00

FIRE HEADQUARTERS TOWN BUILDING STUDY Hanover, Massachusetts

Colby Hall
 141 Herrick Road
 Newton Centre, MA
 02459
 617-964-1700
 617-969-9054 fax

Drumey
 Rosane
 Anderson
 Inc.
 Architecture
 Interior Design

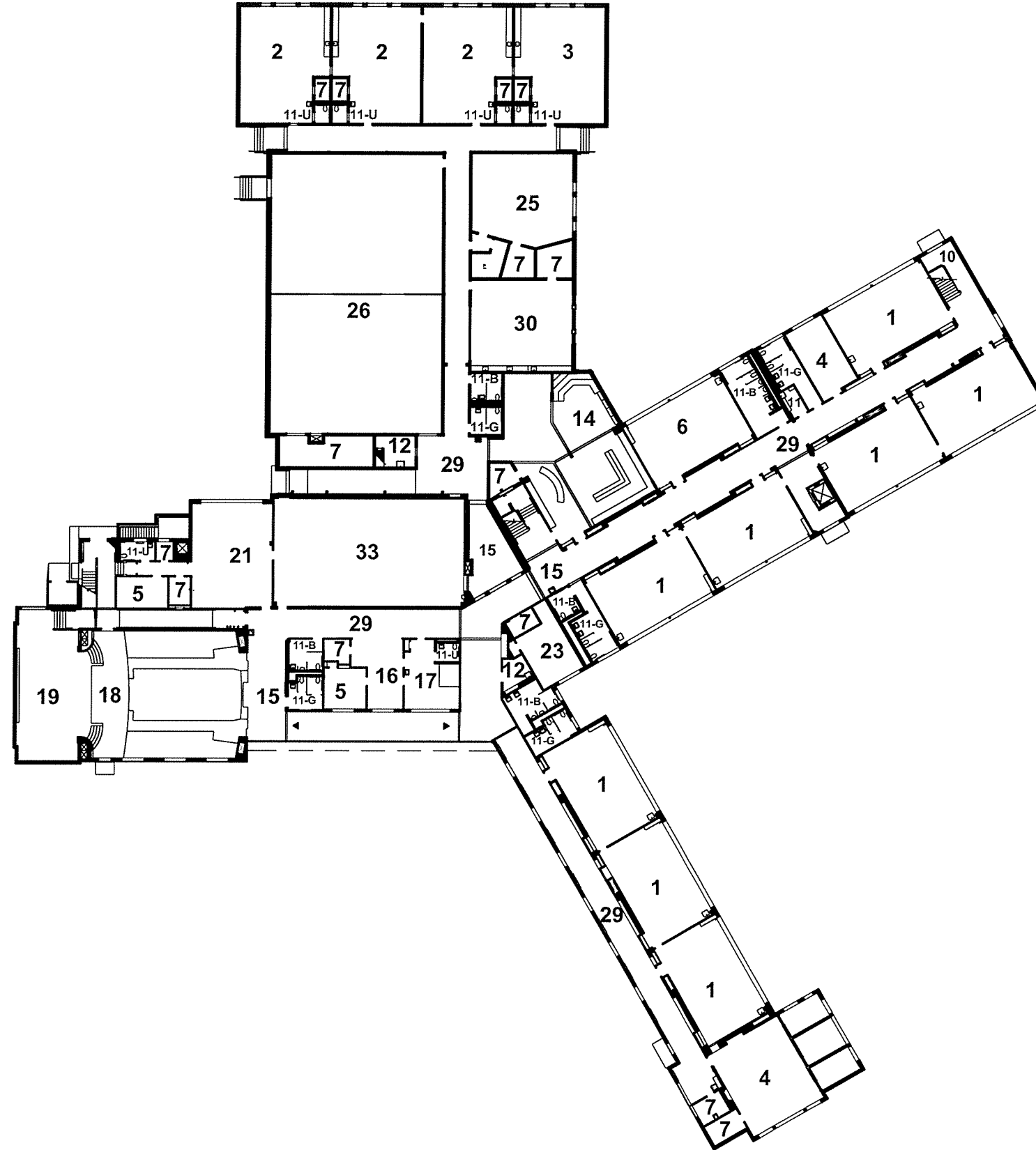
D·R·A

ROOM LEGEND

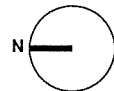
- | | |
|-----------------------------|---------------------------|
| 1. GENERAL CLASSROOM | 17. HEALTH |
| 2. KINDERGARTEN | 18. AUDITORIUM |
| 3. PRE-KINDERGARTEN | 19. STAGE |
| 4. SPED | 20. SERVICE |
| 5. OFFICE | 21. KITCHEN |
| 6. WORK ROOM | 22. RECEIVING |
| 7. STORAGE | 23. TEACHER'S DINING ROOM |
| 8. ELECTRICAL ROOM | 24. VESTIBULE |
| 9. CLOSET | 25. MUSIC |
| 10. STAIRS | 26. GYMNASIUM |
| 11-B. TOILET ROOM- BOY'S | 27. GUIDANCE |
| 11-G. TOILET ROOM-GIRL'S | 28. CONFERENCE |
| 11-T. TOILET ROOM-TEACHER'S | 29. CORRIDOR |
| 11-U. TOILET ROOM-UNISEX | 30. ART |
| 12. JANITOR | 31. FREEZER |
| 13. MECHANICAL ROOM | 32. REFRIDGE |
| 14. LIBRARY | 33. CAFETERIA |
| 15. LOBBY | |
| 16. MAIN OFFICE | |

GRAPHIC LEGEND

- - MAIN ENTRANCE LOCATION



FIRST FLOOR PLAN



Scale: SEE BAR SCALE
 Drawn by: MJQ
 Job#: 09017.00

CENTER SCHOOL TOWN BUILDING STUDY

Hanover, Massachusetts

Colby Hall
 141 Herrick Road
 Newton Centre, MA
 02459
 617-964-1700
 617-969-9054 fax

Drumey
 Rosane
 Anderson
 Inc.
 Architecture
 Interior Design

D·R·A

ROOM LEGEND

1. GENERAL CLASSROOM

2. KINDERGARTEN

3. PRE-KINDERGARTEN

4. SPED

5. OFFICE

6. WORK ROOM

7. STORAGE

8. ELECTRICAL ROOM

9. CLOSET

10. STAIRS

11-B. TOILET ROOM- BOY'S

11-G. TOILET ROOM-GIRL'S

11-T. TOILET ROOM-TEACHER'S

11-U. TOILET ROOM-UNISEX

12. JANITOR

13. MECHANICAL ROOM

14. LIBRARY

15. LOBBY

16. MAIN OFFICE

17. HEALTH

18. AUDITORIUM

19. STAGE

20. SERVICE

21. KITCHEN

22. RECEIVING

23. TEACHER'S DINING ROOM

24. VESTIBULE

25. MUSIC

26. GYMNASIUM

27. GUIDANCE

28. CONFERENCE

29. CORRIDOR

30. ART

31. FREEZER

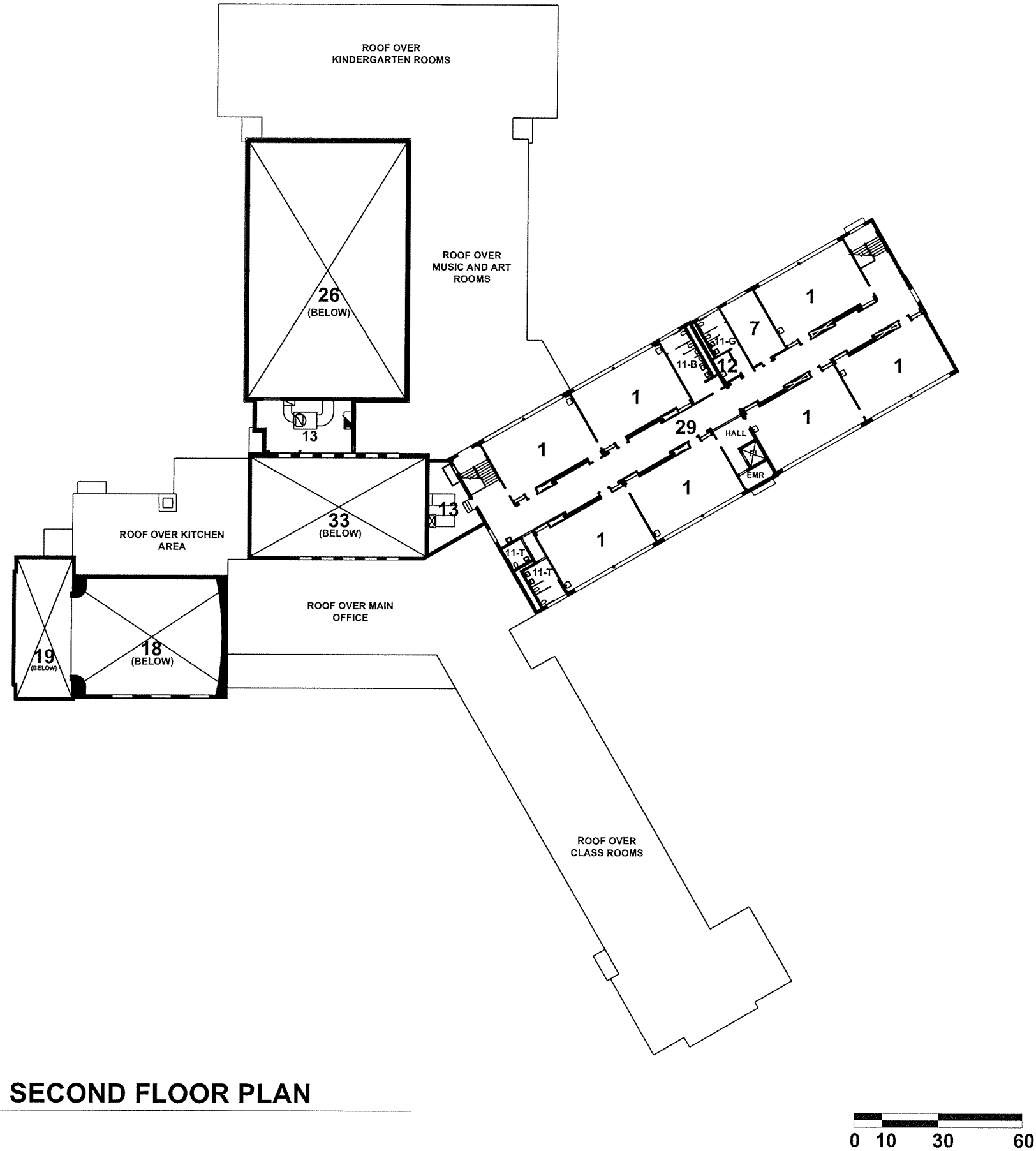
32. REFRIDGE

33. CAFETERIA

GRAPHIC LEGEND

▶

 - MAIN ENTRANCE LOCATION



SECOND FLOOR PLAN

Scale:SEE BAR SCALE
Drawn by: MJQ
Job# 09017.00

CENTER SCHOOL
TOWN BUILDING STUDY
Hanover, Massachusetts

Colby Hall
141 Herrick Road
Newton Centre, MA
02459
617-964-1700
617-969-9054 fax

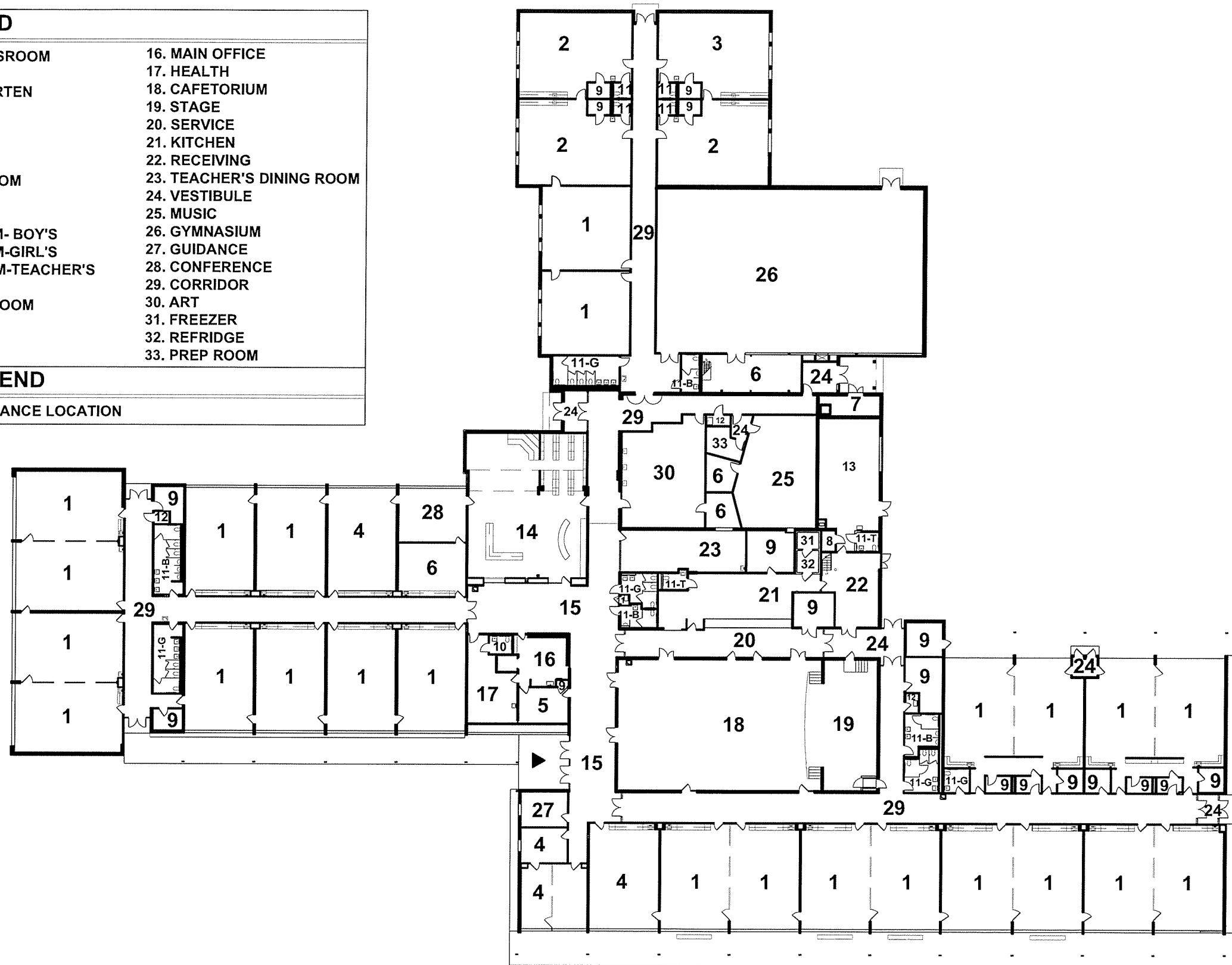
Drumey
Rosane
Anderson
Inc.
Architecture
Interior Design

ROOM LEGEND

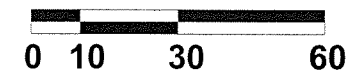
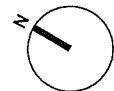
- | | |
|-----------------------------|---------------------------|
| 1. GENERAL CLASSROOM | 16. MAIN OFFICE |
| 2. KINDERGARTEN | 17. HEALTH |
| 3. PRE-KINDERGARTEN | 18. CAFETORIUM |
| 4. SPED | 19. STAGE |
| 5. OFFICE | 20. SERVICE |
| 6. WORK ROOM | 21. KITCHEN |
| 7. STORAGE | 22. RECEIVING |
| 8. ELECTRICAL ROOM | 23. TEACHER'S DINING ROOM |
| 9. CLOSET | 24. VESTIBULE |
| 10. STAIRS | 25. MUSIC |
| 11-B. TOILET ROOM- BOY'S | 26. GYMNASIUM |
| 11-G. TOILET ROOM-GIRL'S | 27. GUIDANCE |
| 11-T. TOILET ROOM-TEACHER'S | 28. CONFERENCE |
| 12. JANITOR | 29. CORRIDOR |
| 13. MECHANICAL ROOM | 30. ART |
| 14. LIBRARY | 31. FREEZER |
| 15. LOBBY | 32. REFRIDGE |
| | 33. PREP ROOM |

GRAPHIC LEGEND

- - MAIN ENTRANCE LOCATION



FIRST FLOOR PLAN



Scale: SEE BAR SCALE
 Drawn by: MJQ
 Job#: 09017.00

CEDAR SCHOOL TOWN BUILDING STUDY

Hanover, Massachusetts

Colby Hall
 141 Herrick Road
 Newton Centre, MA
 02459

Drumney
 Rosane
 Anderson
 Inc.
 Architecture
 Interior Design

617-964-1700
 617-969-9054 fax

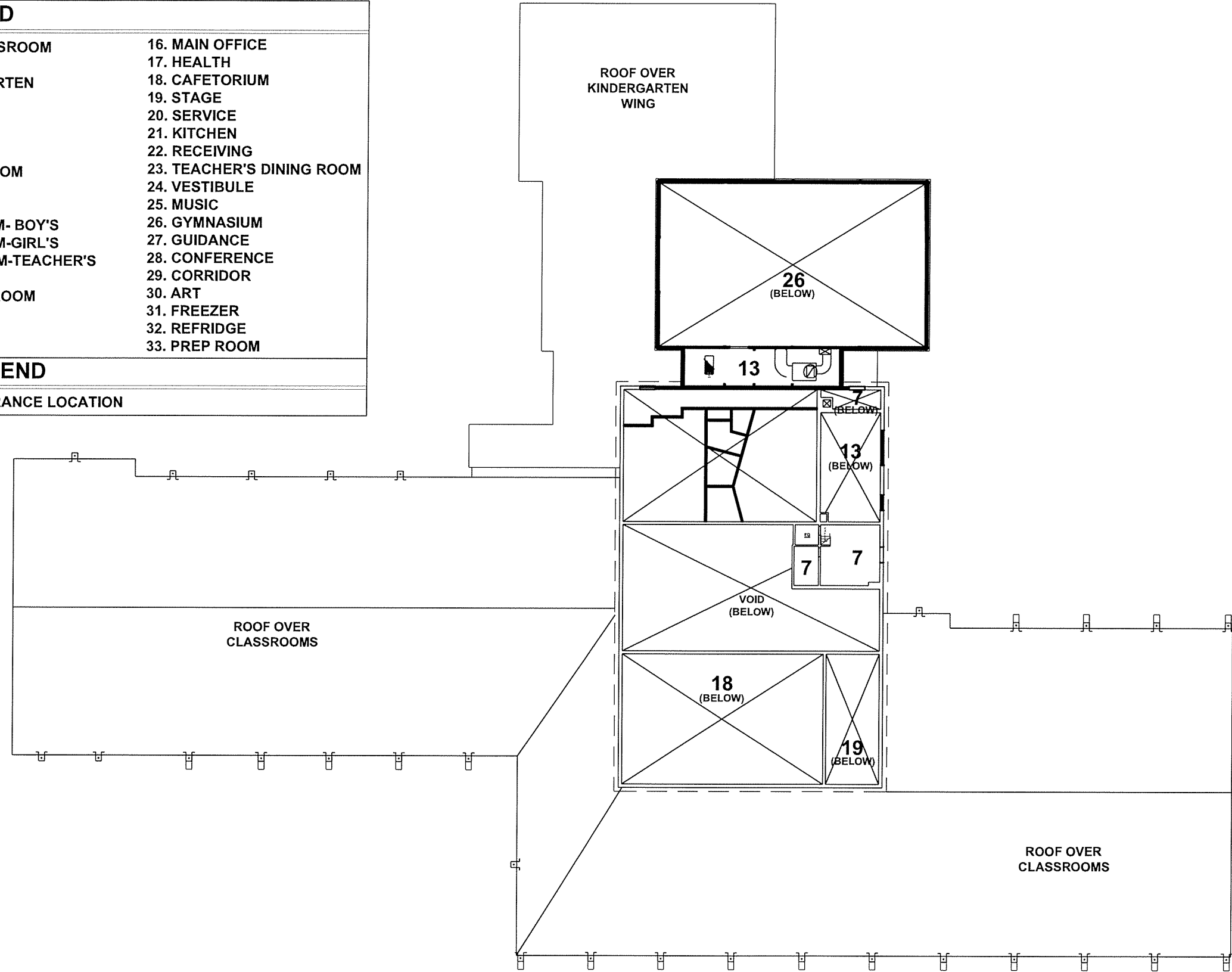
D·R·A

ROOM LEGEND

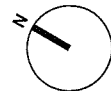
- | | |
|-----------------------------|---------------------------|
| 1. GENERAL CLASSROOM | 16. MAIN OFFICE |
| 2. KINDERGARTEN | 17. HEALTH |
| 3. PRE-KINDERGARTEN | 18. CAFETORIUM |
| 4. SPED | 19. STAGE |
| 5. OFFICE | 20. SERVICE |
| 6. WORK ROOM | 21. KITCHEN |
| 7. STORAGE | 22. RECEIVING |
| 8. ELECTRICAL ROOM | 23. TEACHER'S DINING ROOM |
| 9. CLOSET | 24. VESTIBULE |
| 10. STAIRS | 25. MUSIC |
| 11-B. TOILET ROOM- BOY'S | 26. GYMNASIUM |
| 11-G. TOILET ROOM-GIRL'S | 27. GUIDANCE |
| 11-T. TOILET ROOM-TEACHER'S | 28. CONFERENCE |
| 12. JANITOR | 29. CORRIDOR |
| 13. MECHANICAL ROOM | 30. ART |
| 14. LIBRARY | 31. FREEZER |
| 15. LOBBY | 32. REFRIDGE |
| | 33. PREP ROOM |

GRAPHIC LEGEND

- - MAIN ENTRANCE LOCATION



SECOND FLOOR PLAN



Scale: SEE BAR SCALE
 Drawn by: MJQ
 Job#: 09017.00

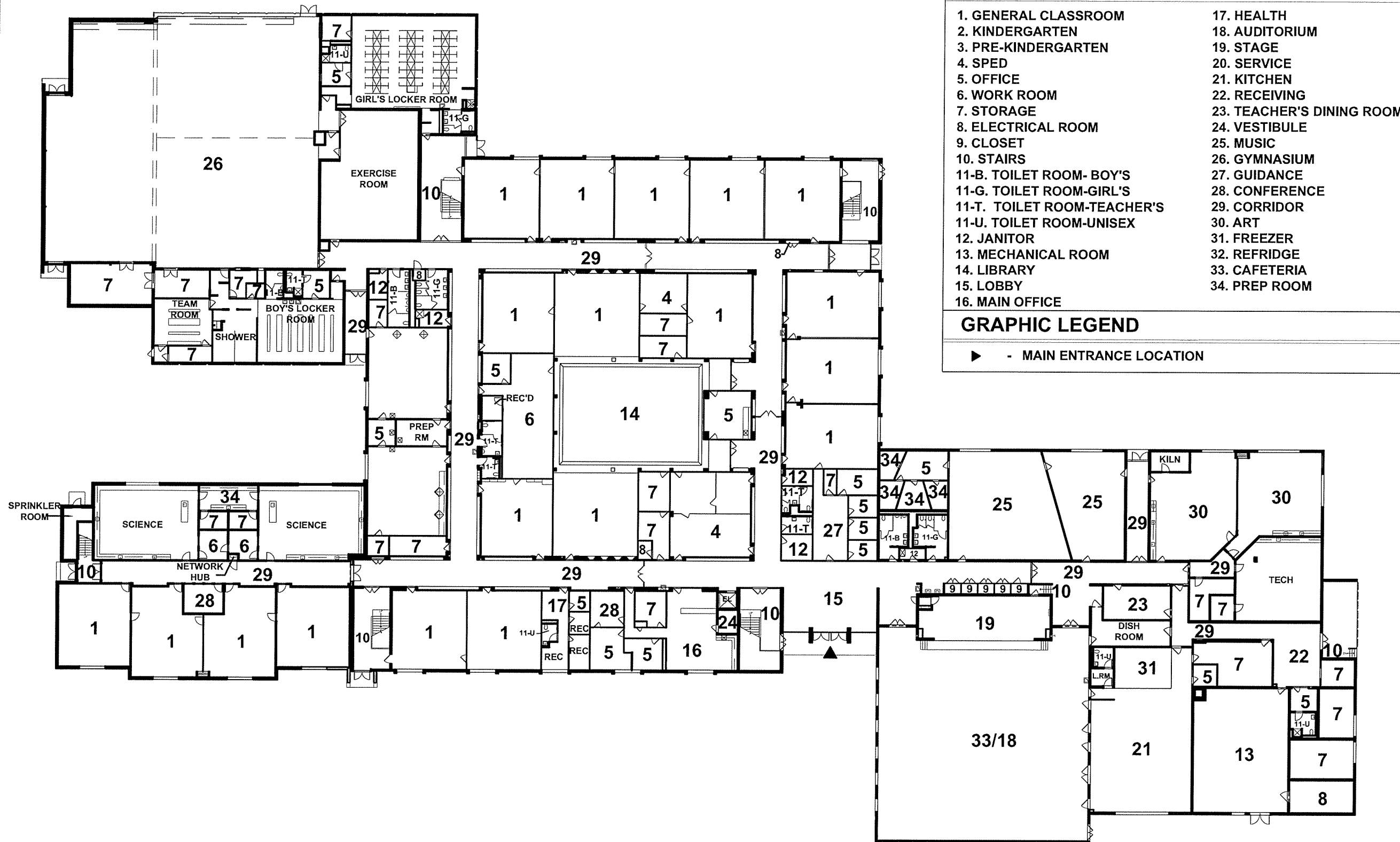
CEDAR SCHOOL TOWN BUILDING STUDY

Hanover, Massachusetts

Colby Hall
 141 Herrick Road
 Newton Centre, MA
 02459
 617-964-1700
 617-969-9054 fax

Drumey
 Rosane
 Anderson
 Inc.
 Architecture
 Interior Design

D·R·A



ROOM LEGEND	
1. GENERAL CLASSROOM	17. HEALTH
2. KINDERGARTEN	18. AUDITORIUM
3. PRE-KINDERGARTEN	19. STAGE
4. SPED	20. SERVICE
5. OFFICE	21. KITCHEN
6. WORK ROOM	22. RECEIVING
7. STORAGE	23. TEACHER'S DINING ROOM
8. ELECTRICAL ROOM	24. VESTIBULE
9. CLOSET	25. MUSIC
10. STAIRS	26. GYMNASIUM
11-B. TOILET ROOM- BOY'S	27. GUIDANCE
11-G. TOILET ROOM-GIRL'S	28. CONFERENCE
11-T. TOILET ROOM-TEACHER'S	29. CORRIDOR
11-U. TOILET ROOM-UNISEX	30. ART
12. JANITOR	31. FREEZER
13. MECHANICAL ROOM	32. REFRIDGE
14. LIBRARY	33. CAFETERIA
15. LOBBY	34. PREP ROOM
16. MAIN OFFICE	

GRAPHIC LEGEND	
▶	- MAIN ENTRANCE LOCATION

FIRST FLOOR PLAN



Scale: SEE BAR SCALE
 Drawn by: MJQ
 Job#: 09017.00

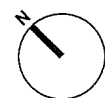
HANOVER MIDDLE SCHOOL TOWN BUILDING STUDY Hanover, Massachusetts

Colby Hall
 141 Herrick Road
 Newton Centre, MA
 02459

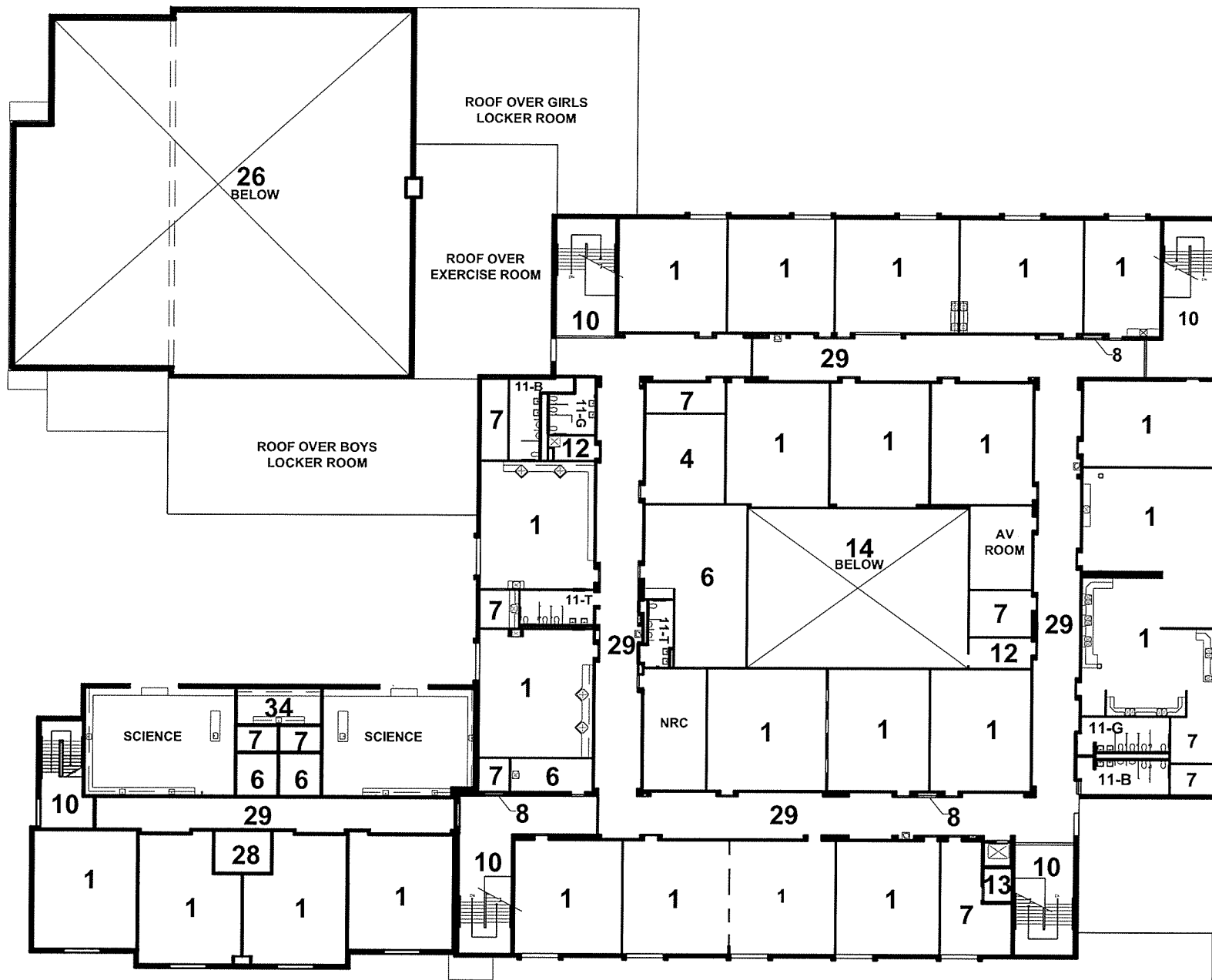
Drumey
 Rosane
 Anderson
 Inc.
 Architecture
 Interior Design

617-964-1700
 617-969-9054 fax





SECOND FLOOR PLAN



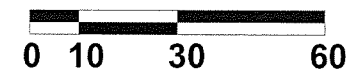
ROOM LEGEND

- | | |
|-----------------------------|---------------------------|
| 1. GENERAL CLASSROOM | 17. HEALTH |
| 2. KINDERGARTEN | 18. AUDITORIUM |
| 3. PRE-KINDERGARTEN | 19. STAGE |
| 4. SPED | 20. SERVICE |
| 5. OFFICE | 21. KITCHEN |
| 6. WORK ROOM | 22. RECEIVING |
| 7. STORAGE | 23. TEACHER'S DINING ROOM |
| 8. ELECTRICAL ROOM | 24. VESTIBULE |
| 9. CLOSET | 25. MUSIC |
| 10. STAIRS | 26. GYMNASIUM |
| 11-B. TOILET ROOM- BOY'S | 27. GUIDANCE |
| 11-G. TOILET ROOM-GIRL'S | 28. CONFERENCE |
| 11-T. TOILET ROOM-TEACHER'S | 29. CORRIDOR |
| 11-U. TOILET ROOM-UNISEX | 30. ART |
| 12. JANITOR | 31. FREEZER |
| 13. MECHANICAL ROOM | 32. REFRIDGE |
| 14. LIBRARY | 33. CAFETERIA |
| 15. LOBBY | 34. PREP ROOM |
| 16. MAIN OFFICE | |

GRAPHIC LEGEND

- - MAIN ENTRANCE LOCATION

ROOF OVER
CAFETORIUM AND
ARTS ROOMS



Scale: SEE BAR SCALE
Drawn by: MJQ
Job# 09017.00

HANOVER MIDDLE SCHOOL TOWN BUILDING STUDY

Hanover, Massachusetts

Colby Hall
141 Herrick Road
Newton Centre, MA
02459
617-964-1700
617-969-9054 fax

Drumme
Rosane
Anderson
Inc.
Architecture
Interior Design

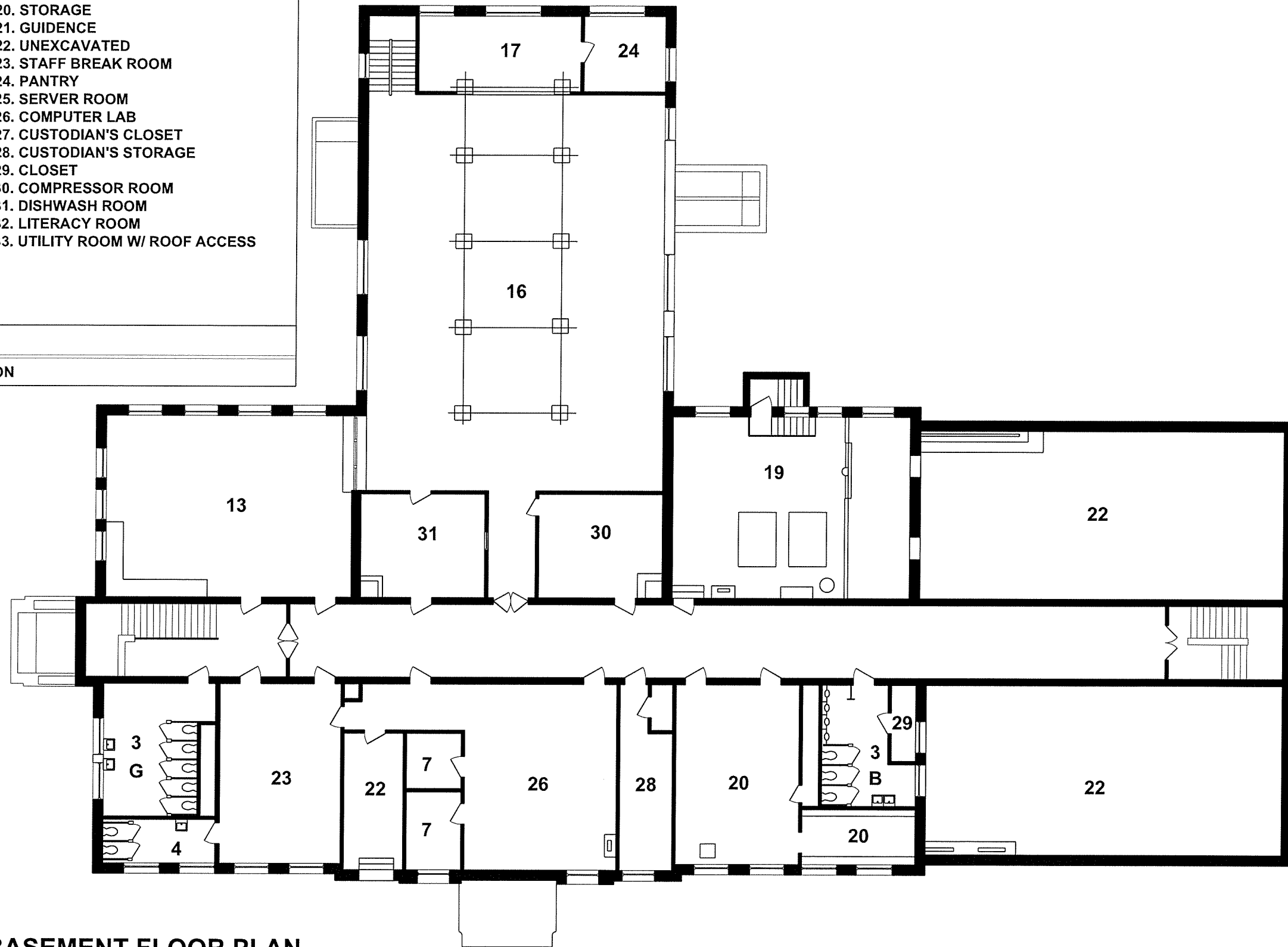
D·R·A

ROOM LEGEND

- | | |
|-------------------------|---------------------------------|
| 1. CLASSROOM | 19. BOILER |
| 2. AUDITORIUM/GYMNASIUM | 20. STORAGE |
| 3. TOILET | 21. GUIDENCE |
| 4. STAFF TOILET | 22. UNEXCAVATED |
| 5. SPED / RESOURCE ROOM | 23. STAFF BREAK ROOM |
| 6. SPED LANGUAGE ROOM | 24. PANTRY |
| 7. OFFICE | 25. SERVER ROOM |
| 8. PRINCIPALS OFFICE | 26. COMPUTER LAB |
| 9. HEALTH | 27. CUSTODIAN'S CLOSET |
| 10. SECRETARY | 28. CUSTODIAN'S STORAGE |
| 11. ENTRY | 29. CLOSET |
| 12. STAGE | 30. COMPRESSOR ROOM |
| 13. SCIENCE CLASSROOM | 31. DISHWASH ROOM |
| 14. MUSIC ROOM | 32. LITERACY ROOM |
| 15. MEETING ROOM | 33. UTILITY ROOM W/ ROOF ACCESS |
| 16. CAFETERIA | |
| 17. KITCHEN | |
| 18. FAN ROOM | |

GRAPHIC LEGEND

- - MAIN ENTRY LOCATION



BASEMENT FLOOR PLAN

0 5 15 35

Scale: SEE BAR SCALE
 Drawn by: EJJ
 Job#: 09017.00

SYLVESTER SCHOOL TOWN BUILDING STUDY

Hanover, Massachusetts

Colby Hall
 141 Herrick Road
 Newton Centre, MA
 02459

617-964-1700
 617-969-9054 fax

Drumney
 Rosane
 Anderson
 Inc.

Architecture
 Interior Design

D·R·A

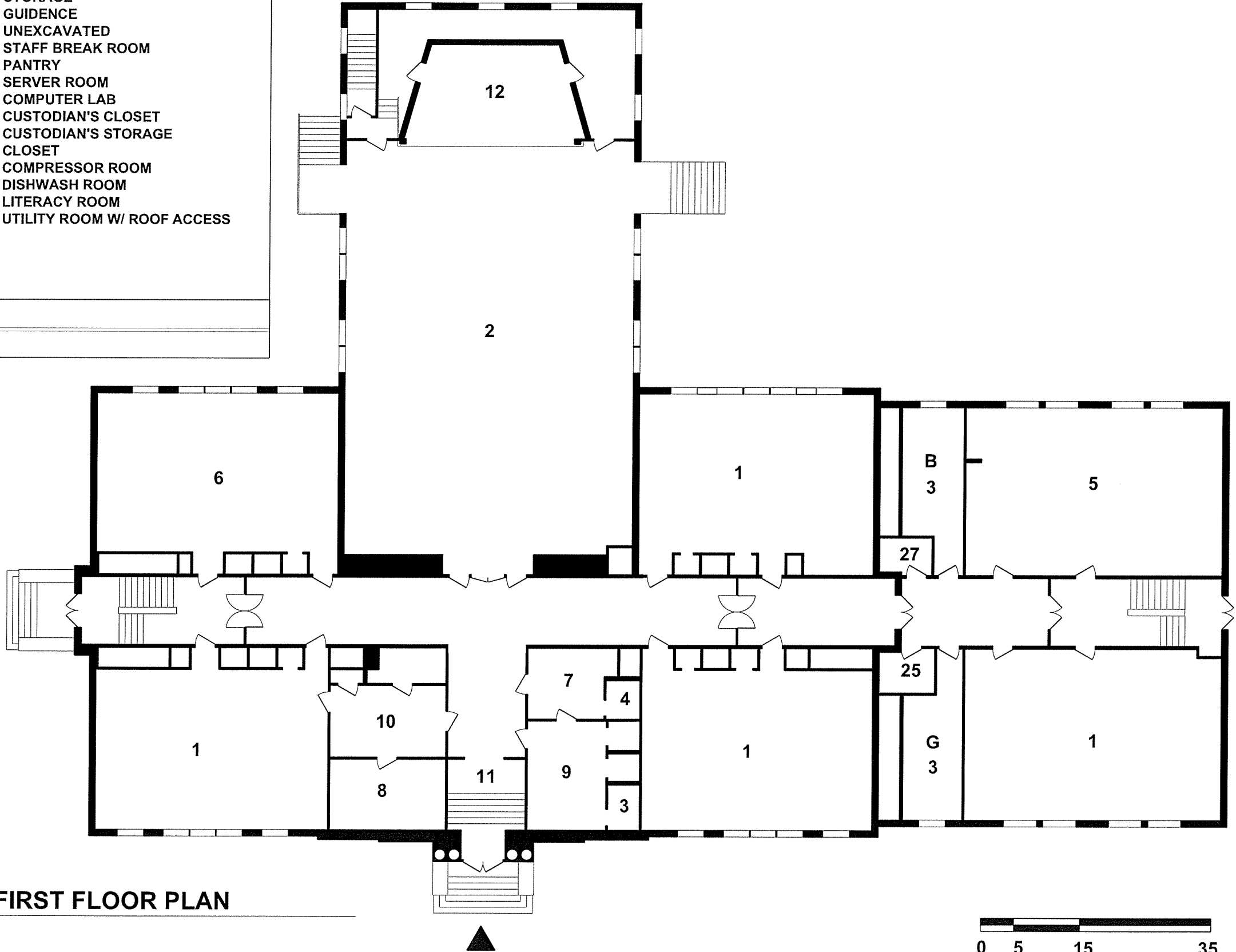
ROOM LEGEND

1. CLASSROOM
2. AUDITORIUM/GYMNASIUM
3. TOILET
4. STAFF TOILET
5. SPED / RESOURCE ROOM
6. SPED LANGUAGE ROOM
7. OFFICE
8. PRINCIPALS OFFICE
9. HEALTH
10. SECRETARY
11. ENTRY
12. STAGE
13. SCIENCE CLASSROOM
14. MUSIC ROOM
15. MEETING ROOM
16. CAFETERIA
17. KITCHEN
18. FAN ROOM

19. BOILER
20. STORAGE
21. GUIDENCE
22. UNEXCAVATED
23. STAFF BREAK ROOM
24. PANTRY
25. SERVER ROOM
26. COMPUTER LAB
27. CUSTODIAN'S CLOSET
28. CUSTODIAN'S STORAGE
29. CLOSET
30. COMPRESSOR ROOM
31. DISHWASH ROOM
32. LITERACY ROOM
33. UTILITY ROOM W/ ROOF ACCESS

GRAPHIC LEGEND

▶ - MAIN ENTRY LOCATION



FIRST FLOOR PLAN

Scale: SEE BAR SCALE
 Drawn by: E.J.L.
 Job#: 09017.00

SYLVESTER SCHOOL
 TOWN BUILDING STUDY
 Hanover, Massachusetts

Colby Hall
 141 Herrick Road
 Newton Centre, MA
 02459
 617-964-1700
 617-969-9054 fax

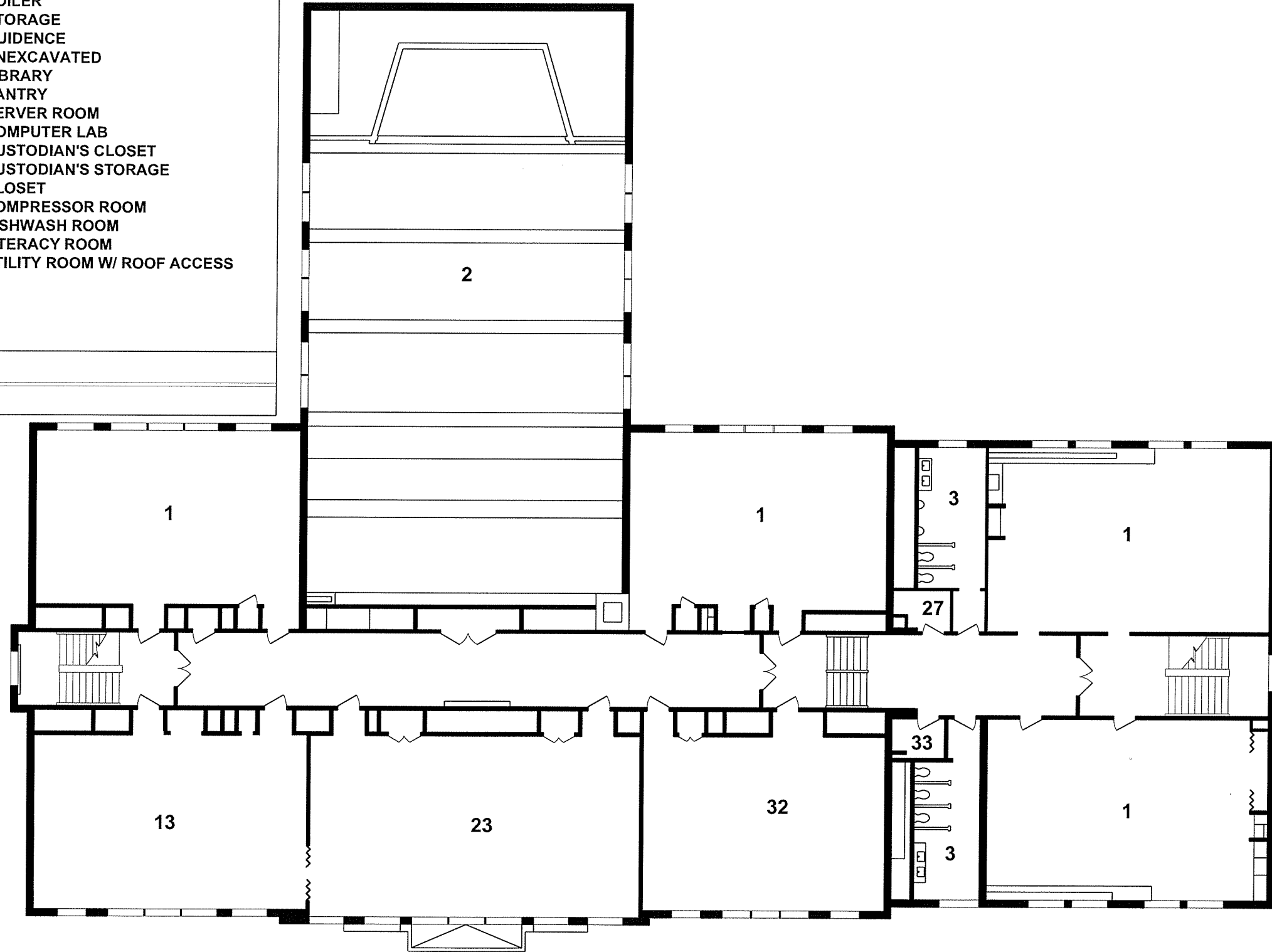
Drumey
 Rosane
 Anderson
 Inc.
 Architecture
 Interior Design

ROOM LEGEND

- | | |
|-------------------------|---------------------------------|
| 1. CLASSROOM | 19. BOILER |
| 2. AUDITORIUM/GYMNASIUM | 20. STORAGE |
| 3. TOILET | 21. GUIDENCE |
| 4. STAFF TOILET | 22. UNEXCAVATED |
| 5. SPED / RESOURCE ROOM | 23. LIBRARY |
| 6. SPED LANGUAGE ROOM | 24. PANTRY |
| 7. OFFICE | 25. SERVER ROOM |
| 8. PRINCIPALS OFFICE | 26. COMPUTER LAB |
| 9. HEALTH | 27. CUSTODIAN'S CLOSET |
| 10. SECRETARY | 28. CUSTODIAN'S STORAGE |
| 11. ENTRY | 29. CLOSET |
| 12. STAGE | 30. COMPRESSOR ROOM |
| 13. SCIENCE CLASSROOM | 31. DISHWASH ROOM |
| 14. MUSIC ROOM | 32. LITERACY ROOM |
| 15. MEETING ROOM | 33. UTILITY ROOM W/ ROOF ACCESS |
| 16. CAFETERIA | |
| 17. KITCHEN | |
| 18. FAN ROOM | |

GRAPHIC LEGEND

- - MAIN ENTRY LOCATION



SECOND FLOOR PLAN

Scale: SEE BAR SCALE
 Drawn by: E.J.L.
 Job#: 09017.00

SYLVESTER SCHOOL TOWN BUILDING STUDY

Hanover, Massachusetts

Colby Hall
 141 Herrick Road
 Newton Centre, MA
 02459

Drumey
 Rosane
 Anderson
 Inc.
 Architecture
 Interior Design

617-964-1700
 617-969-9054 fax

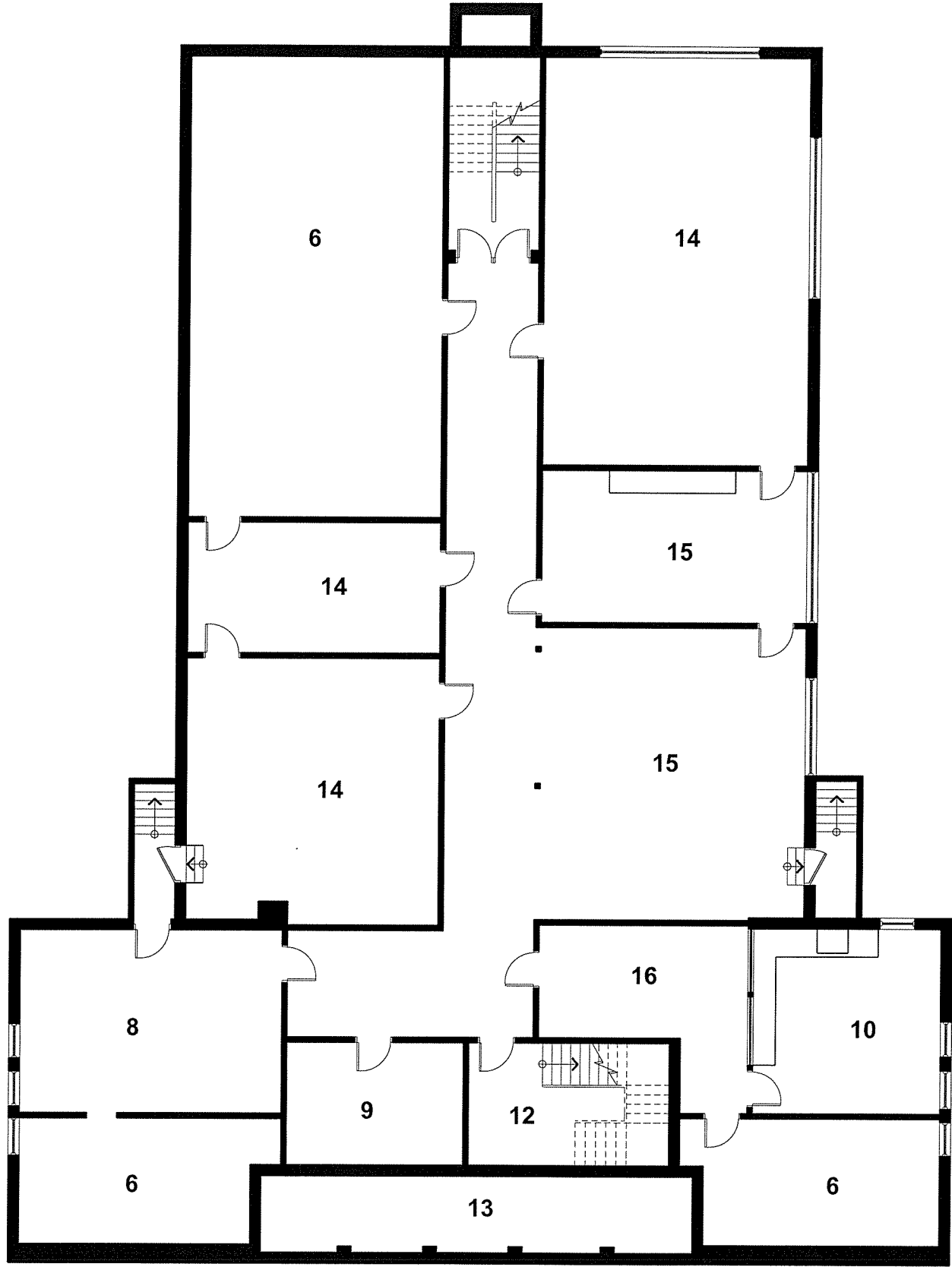
D·R·A

ROOM LEGEND

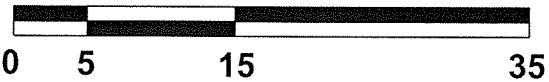
1. OFFICE IN FORMER CLASSROOM
2. PLATFORM
3. OFFICE
4. BATHROOM
5. CORRIDOR
6.FILES STORAGE
7. COMPUTERS
8. BOILER ROOM
9. ELECTRICAL ROOM
10. FORMER KITCHEN
11. STORAGE
12. STAIRS
13. UNEXCAVATED
14. COMPUTER ROOM
15. TEACHERS LOUNGE
16. FORMER SERVING AREA
17. BOARD MEETING ROOM
18. ENTRY HALL

GRAPHIC LEGEND

▶ - MAIN ENTRY LOCATION



BASEMENT FLOOR PLAN



Scale: SEE BAR SCALE
 Drawn by: EUL
 Job# 09017.00

SALMOND SCHOOL
 TOWN BUILDING STUDY
 Hanover, Massachusetts

Colby Hall
 141 Herrick Road
 Newton Centre, MA
 02459
 617-964-1700
 617-969-9054 fax

Drumme
 Rosane
 Anderson
 Inc.
 Architecture
 Interior Design

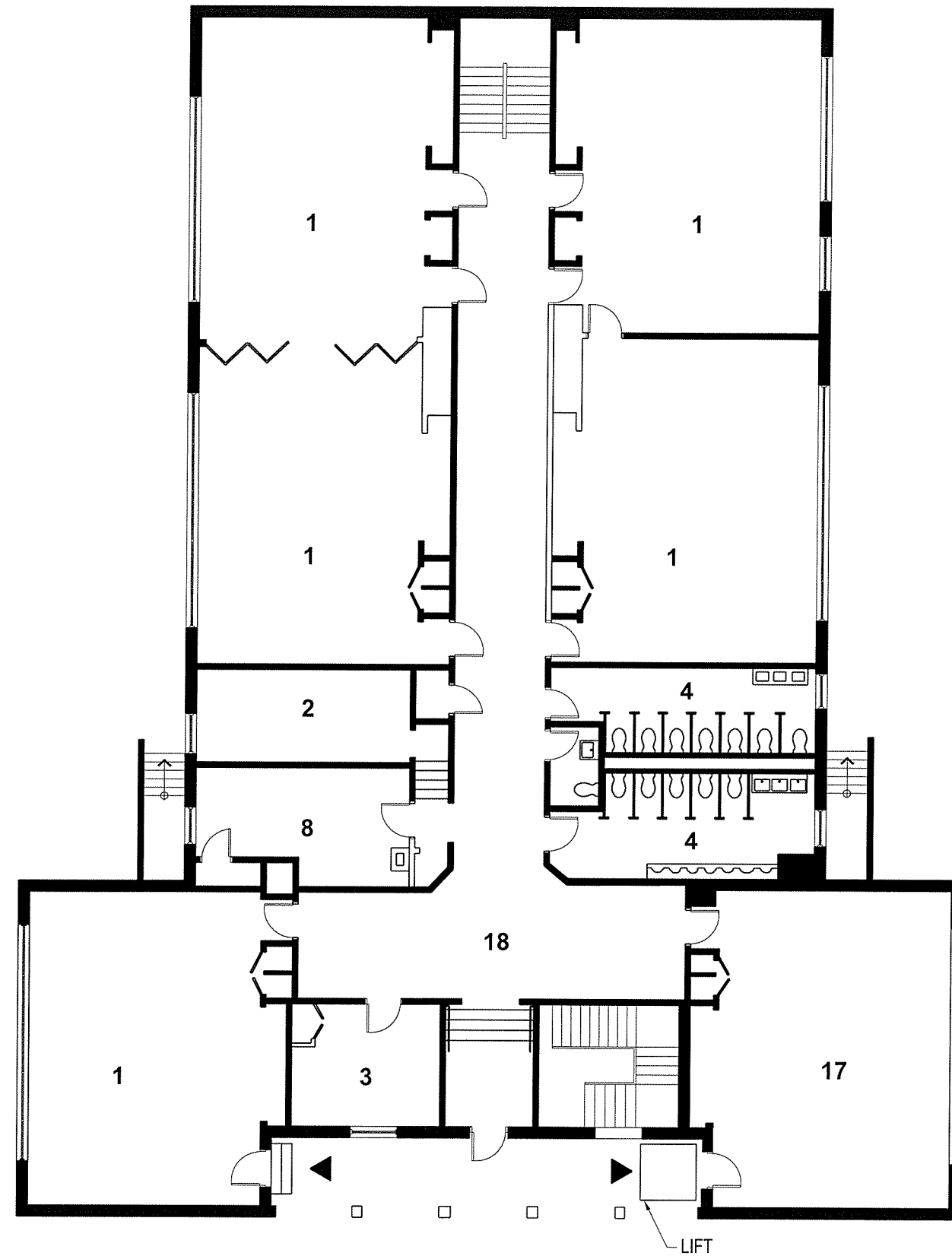
D·R·A

ROOM LEGEND

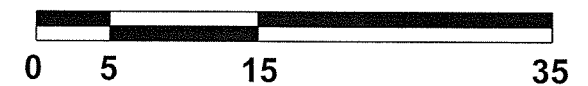
1. OFFICE IN FORMER CLASSROOM
2. PLATFORM
3. OFFICE
4. BATHROOM
5. CORRIDOR
6. FILES STORAGE
7. COMPUTERS
8. BOILER ROOM
9. ELECTRICAL ROOM
10. FORMER KITCHEN
11. STORAGE
12. STAIRS
13. UNEXCAVATED
14. COMPUTER ROOM
15. TEACHERS LOUNGE
16. FORMER SERVING AREA
17. BOARD MEETING ROOM
18. ENTRY HALL

GRAPHIC LEGEND

- - MAIN ENTRY LOCATION



FIRST FLOOR PLAN



Scale: SEE BAR SCALE
 Drawn by: E.J.L.
 Job#: 09017.00

SALMOND SCHOOL TOWN BUILDING STUDY

Hanover, Massachusetts

Colby Hall
 141 Herrick Road
 Newton Centre, MA
 02459
 617-964-1700
 617-969-9054 fax

Drumsey
 Rosane
 Anderson
 Inc.
 Architecture
 Interior Design

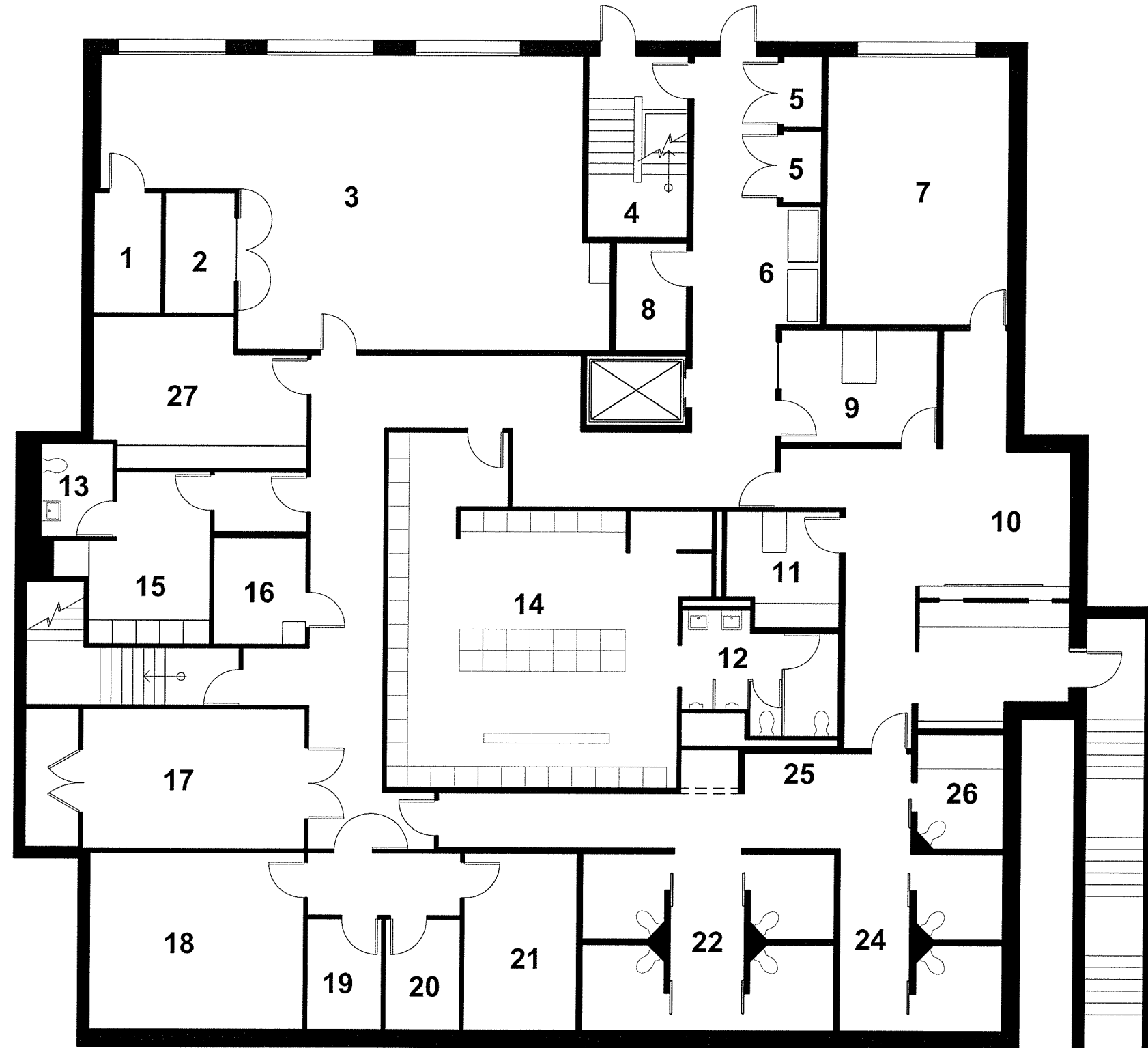
D·R·A

ROOM LEGEND

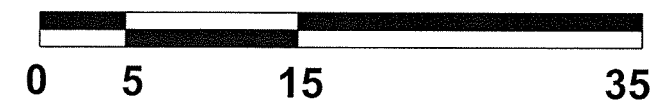
- | | |
|-----------------------|------------------------------|
| 1. BULK EVIDENCE | 14. MALE LOCKERS |
| 2. BULK STORAGE | 15. FEMALE LOCKERS |
| 3. GARAGE | 16. CUSTODIAN |
| 4. STAIRS | 17. BOILER ROOM |
| 5. STORAGE | 18. STORAGE AND DEAD RECORDS |
| 6. VENDING MACHINE | 19. ELECTRIC |
| 7. SALLY PORT | 20. EMERGENCY ELECTRIC |
| 8. ELEVATOR MECHANICS | 21. ALARM 911 / TELEPHONE |
| 9. INTEROGATION | 22. MALE DETENTION |
| 10. BOOKING | 23. ELEVATOR |
| 11. BREATH. | 24. FEMALE DETENTION |
| 12. MEN'S TOILET | 25. MATRON |
| 13. TOILET | 26. SPECIAL HOLDING CELL |
| | 27. STAFF KITCHEN |

GRAPHIC LEGEND

- - MAIN ENTRY LOCATION



GROUND FLOOR PLAN (LOWER LEVEL)



Scale: SEE BAR SCALE
 Drawn by: MJQ
 Job#: 09017.00

POLICE STATION TOWN BUILDING STUDY

Hanover, Massachusetts

Colby Hall
 141 Herrick Road
 Newton Centre, MA
 02459
 617-964-1700
 617-969-9054 fax

Drumey
 Rosane
 Anderson
 Inc.
 Architecture
 Interior Design

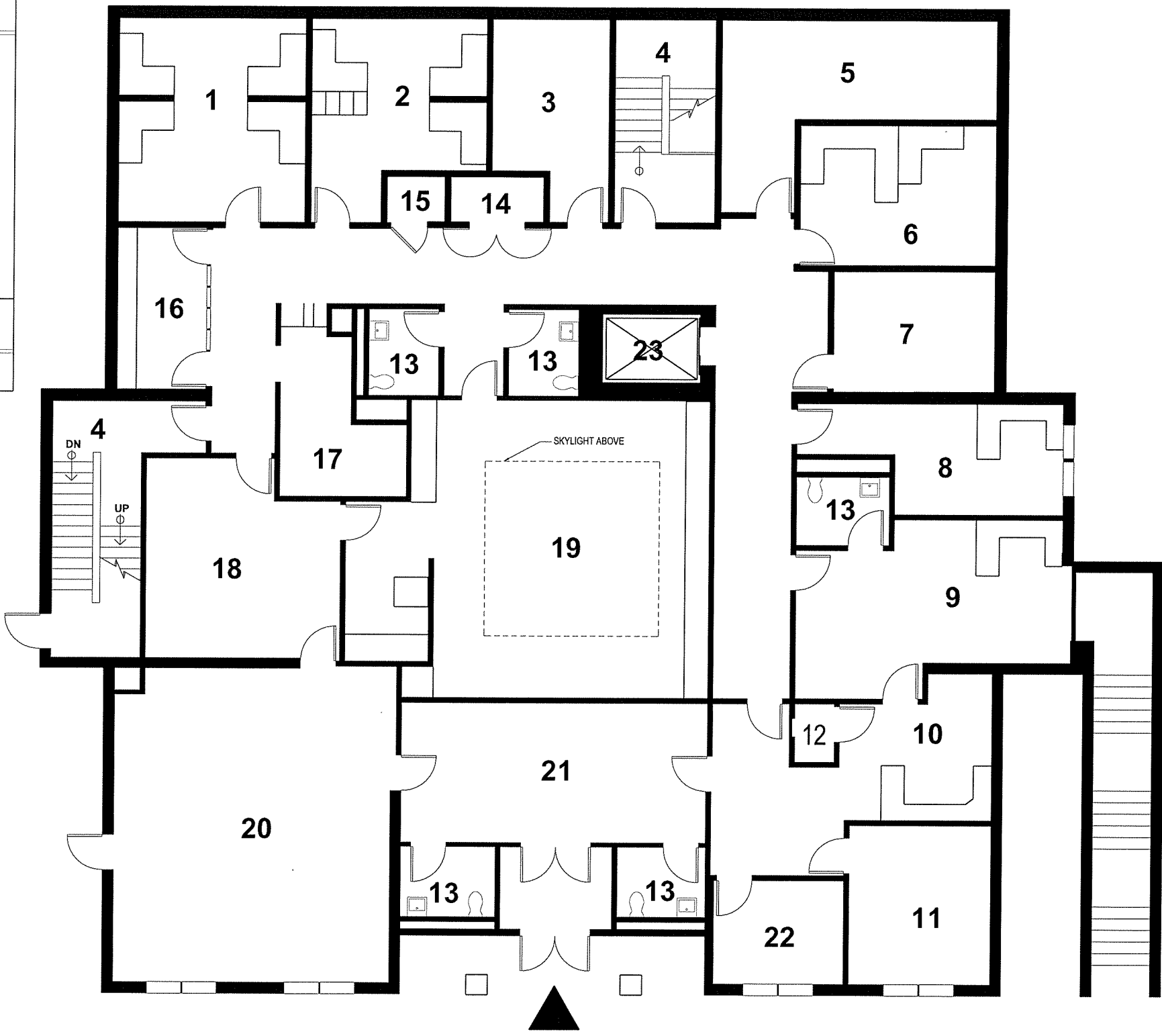
D·R·A

ROOM LEGEND

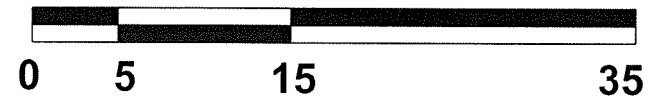
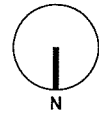
1. OIC	13. TOILET
2. DETECTIVES	14. SPECIAL OPS
3. OFFICE	15. ARMORY
4. STAIRS	16. WRITING REPORT
5. RECORDS	17. EVIDENCE
6. PROSECUTOR/SECRETARY	18. SQUAD ROOM
7. D.A.R.E. SG/SECRETARY	19. COMMUNICATIONS CENTER
8. LT OFFICE	20. TRAINING / COMMUNITY
9. CHIEF OFFICE	21. LOBBY
10. CHIEF SECRETARY	22. INTERVIEW ROOM
11. INT CONFERENCE	23. ELEVATOR
12. SUPPLIES	

GRAPHIC LEGEND

▶ - MAIN ENTRY LOCATION



FIRST FLOOR PLAN (UPPER LEVEL)



Drumney
Rosane
Anderson
Inc.

Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459

617-964-1700
617-969-9054 fax

POLICE STATION
TOWN BUILDING STUDY
Hanover, Massachusetts

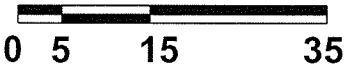
Scale: SEE BAR SCALE

Drawn by: EUL

Job# 09017.00



FIRST FLOOR PLAN



ROOM LEGEND

- 1. STORAGE BAY 1
- 2. STORAGE BAY 2
- 3. STORAGE BAY 3
- 4. STORAGE BAY 4
- 5. STORAGE BAY 5
- 6. TOILETS
- 7. OFFICE
- 8. LOCKERS
- 9. LUNCH AREA
- 10. LOBBY

GRAPHIC LEGEND

▶ - MAIN ENTRANCE LOCATION



ROOM LEGEND

1. GARAGE BAY

2. PARTS ROOM

3. OFFICE

4. LUNCHROOM

5. TOILETS

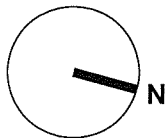
6. CLOSET

7. LARGE GARAGE BAY

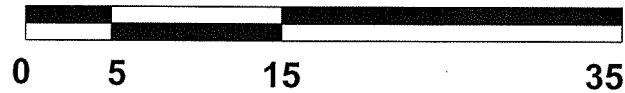
GRAPHIC LEGEND

▶

 - MAIN ENTRANCE LOCATION

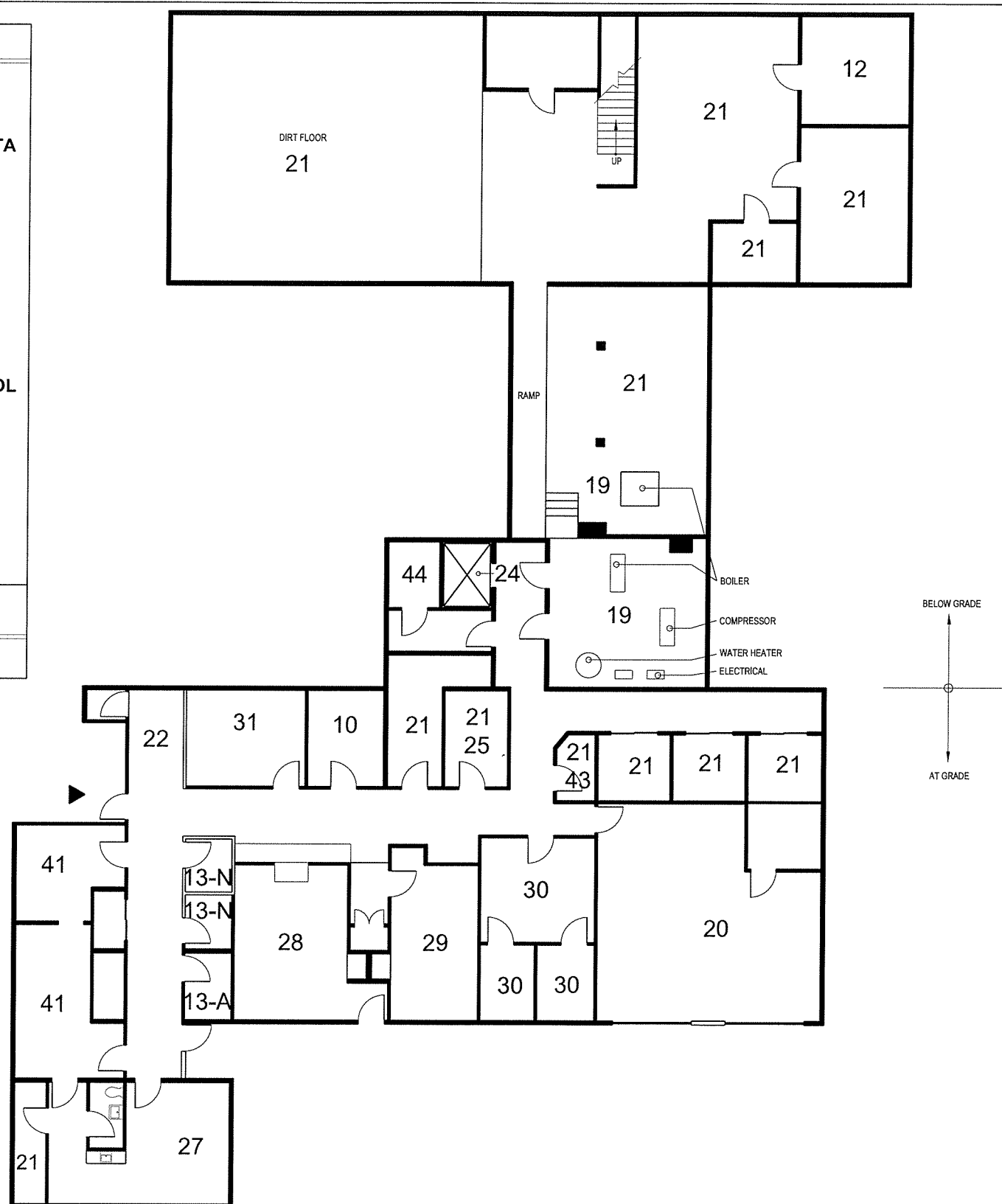


FIRST FLOOR PLAN

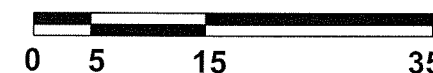
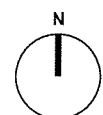


1. TREASURY
2. ACCOUNTING
3. VETERANS AFFAIRS
4. FINANCE
5. TAX COLLECTOR
6. ADVISORY COMMITTEE ROOM
7. COMPUTER COORDINATOR
8. SELECTMEN'S ADMINISTRATION
9. ASSESSORS
10. COPY ROOM
11. WAITING ROOM
12. VAULT
- 13-A. ACCESSIBLE TOILET(S)
- 13-N. NON ACCESSIBLE TOILET(S)
14. LUNCH ROOM
15. TOWN ADMINISTRATOR/
MANAGER OFFICE
16. SELECTMENS OFFICE
17. SELECTMENS MEETING ROOM
18. HEARING ROOM
19. BOILER ROOM
20. GARAGE
21. STORAGE
22. VENDING AREA
23. ZBA
24. ELEVATOR
25. MAIN FACP & TELEPHONE/DATA
26. VENDING MACHINES
27. VNA RECEPTION
28. TOWN CLERK
29. REGISTRAR
30. OFFICE
31. EMERGENCY MAN. OFFICE
32. LOCKER ROOM
33. PLANNING BOARD
34. BOARD OF HEALTH
35. PERSONNEL ADMINISTRATOR
36. PUBLIC NURSE/ ANIM. CONTROL
37. BUILDING DEPARTMENT
38. CONSERVATION COMMISSION
39. FILE CABINETS
40. TOWN PLANNER/
41. VNA
42. CUSTODIAN
43. KITCHENETTE
44. ELEVATOR SERVICE ROOM

► - MAIN ENTRANCE LOCATION



LOWER FLOOR PLAN



D·R·A

TOWN HALL
TOWN BUILDING STUDY
Hanover, Massachusetts

**Drumrey
Rosane
Anderson
Inc.**
Architecture
Interior Design
Colby Hall
141 Herrick Road
Newton Centre, MA
02459
617-964-1700
617-969-9054 fax

Scale: SEE BAR SCALE

Drawn by: CHM

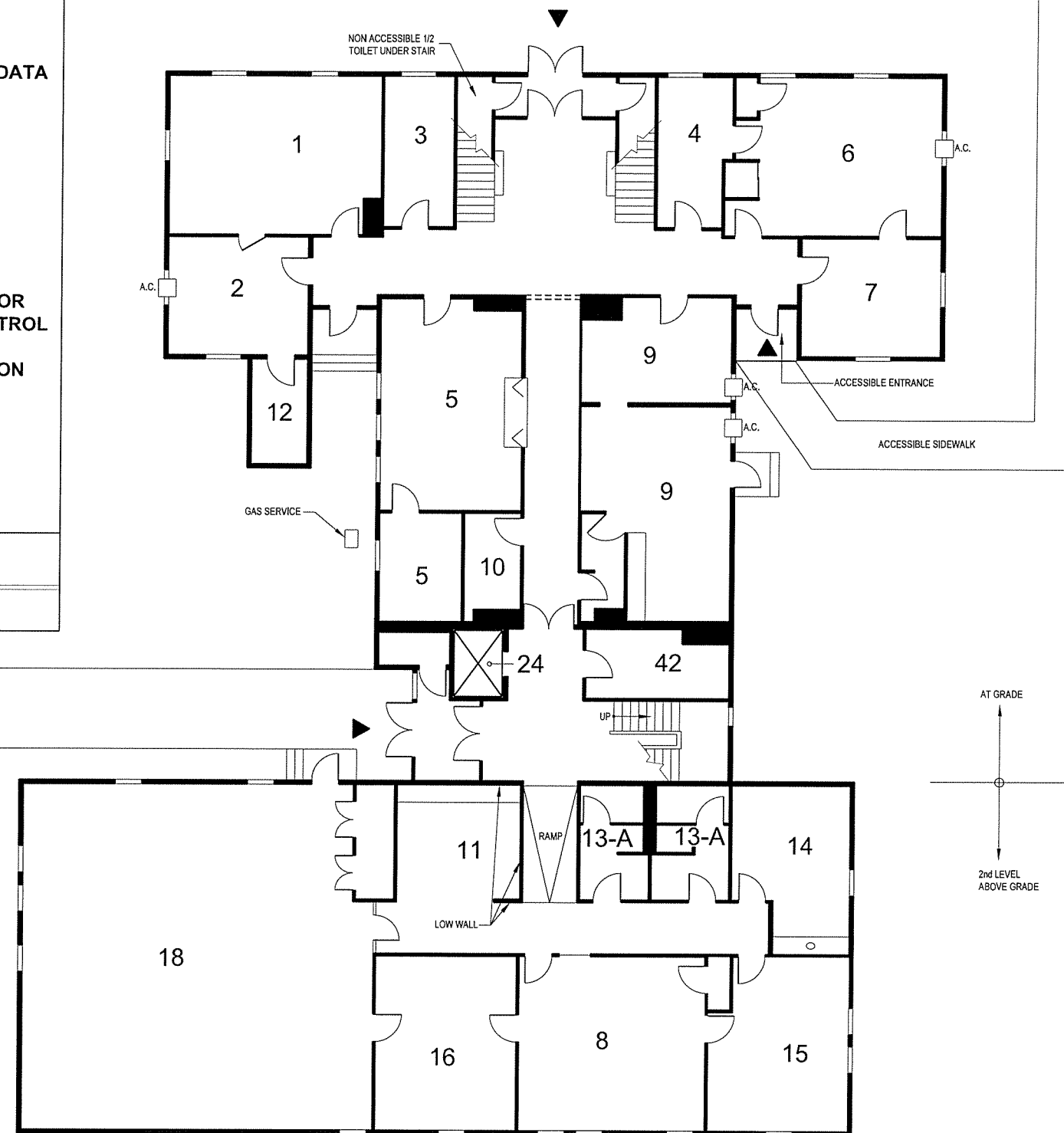
Job# 09017.00

ROOM LEGEND

- | | |
|---|---------------------------------|
| 1. TREASURY | 22. VENDING AREA |
| 2. ACCOUNTING | 23. ZBA |
| 3. VETERANS AFFAIRS | 24. ELEVATOR |
| 4. FINANCE | 25. MAIN FACP & TELEPHONE/DATA |
| 5. TAX COLLECTOR | 26. VENDING MACHINES |
| 6. ADVISORY COMMITTEE ROOM | 27. VNA RECEPTION |
| 7. COMPUTER COORDINATOR | 28. TOWN CLERK |
| 8. SELECTMEN'S ADMINISTRATION | 29. REGISTRAR |
| 9. ASSESSORS | 30. OFFICE |
| 10. COPY ROOM | 31. EMERGENCY MAN. OFFICE |
| 11. WAITING ROOM | 32. LOCKER ROOM |
| 12. VAULT | 33. PLANNING BOARD |
| 13-A. ACCESSIBLE TOILET(S) | 34. BOARD OF HEALTH |
| 13-N. NON ACCESSIBLE TOILET(S) | 35. PERSONNEL ADMINISTRATOR |
| 14. LUNCH ROOM | 36. PUBLIC NURSE/ ANIM. CONTROL |
| 15. TOWN ADMINISTRATOR/
MANAGER OFFICE | 37. BUILDING DEPARTMENT |
| 16. SELECTMENS OFFICE | 38. CONSERVATION COMMISSION |
| 17. SELECTMENS MEETING ROOM | 39. FILE CABINETS |
| 18. HEARING ROOM | 40. TOWN PLANNER/ |
| 19. BOILER ROOM | 41. VNA |
| 20. GARAGE | 42. CUSTODIAN |
| 21. STORAGE | 43. KITCHENETTE |
| | 44. ELEVATOR SERVICE ROOM |

GRAPHIC LEGEND

- - MAIN ENTRANCE LOCATION



FIRST FLOOR PLAN

0 5 15 35

Scale: SEE BAR SCALE
 Drawn by: CHM
 Job#: 09017.00

TOWN HALL TOWN BUILDING STUDY Hanover, Massachusetts

Colby Hall
 141 Herrick Road
 Newton Centre, MA
 02459
 617-964-1700
 617-969-9054 fax

Drumey
 Rosane
 Anderson
 Inc.
 Architecture
 Interior Design

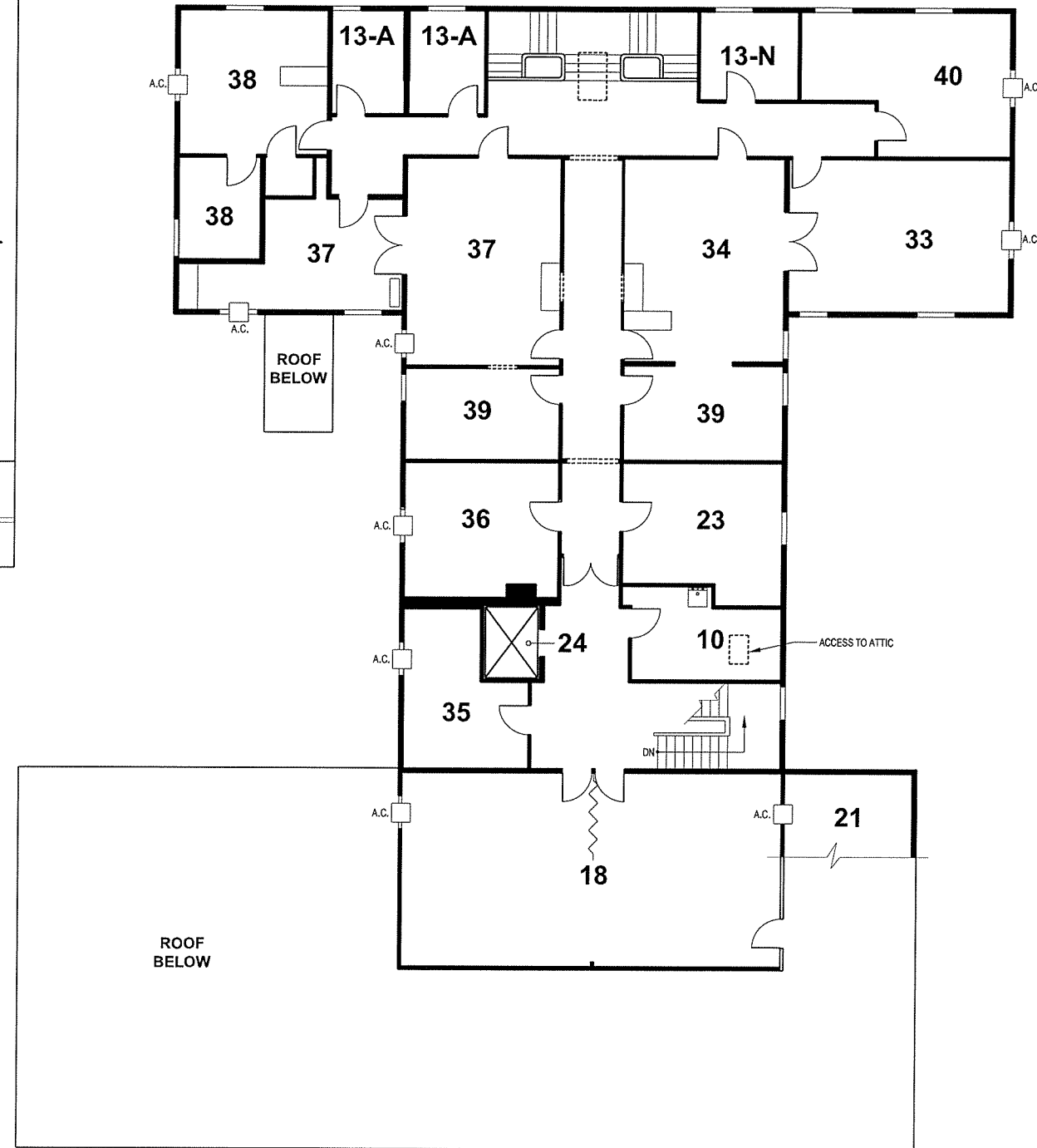
D·R·A

ROOM LEGEND

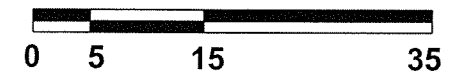
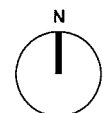
- | | |
|---|---------------------------------|
| 1. TREASURY | 22. VENDING AREA |
| 2. ACCOUNTING | 23. ZBA |
| 3. VETERANS AFFAIRS | 24. ELEVATOR |
| 4. FINANCE | 25. MAIN FACP & TELEPHONE/DATA |
| 5. TAX COLLECTOR | 26. VENDING MACHINES |
| 6. ADVISORY COMMITTEE ROOM | 27. VNA RECEPTION |
| 7. COMPUTER COORDINATOR | 28. TOWN CLERK |
| 8. SELECTMEN'S ADMINISTRATION | 29. REGISTRAR |
| 9. ASSESSORS | 30. OFFICE |
| 10. COPY ROOM | 31. EMERGENCY MAN. OFFICE |
| 11. WAITING ROOM | 32. LOCKER ROOM |
| 12. VAULT | 33. PLANNING BOARD |
| 13-A. ACCESSIBLE TOILET(S) | 34. BOARD OF HEALTH |
| 13-N. NON ACCESSIBLE TOILET(S) | 35. PERSONNEL ADMINISTRATOR |
| 14. LUNCH ROOM | 36. PUBLIC NURSE/ ANIM. CONTROL |
| 15. TOWN ADMINISTRATOR/
MANAGER OFFICE | 37. BUILDING DEPARTMENT |
| 16. SELECTMENS OFFICE | 38. CONSERVATION COMMISSION |
| 17. SELECTMENS MEETING ROOM | 39. FILE CABINETS |
| 18. HEARING ROOM | 40. TOWN PLANNER/ |
| 19. BOILER ROOM | 41. VNA |
| 20. GARAGE | 42. CUSTODIAN |
| 21. STORAGE | 43. KITCHENETTE |
| | 44. ELEVATOR SERVICE ROOM |

GRAPHIC LEGEND

- - MAIN ENTRANCE LOCATION



SECOND FLOOR PLAN



Scale: SEE BAR SCALE
 Drawn by: CHM
 Job#: 09017.00

TOWN HALL TOWN BUILDING STUDY Hanover, Massachusetts

Colby Hall
 141 Herrick Road
 Newton Centre, MA
 02459
 617-964-1700
 617-969-9054 fax

Drumey
 Rosane
 Anderson
 Inc.
 Architecture
 Interior Design

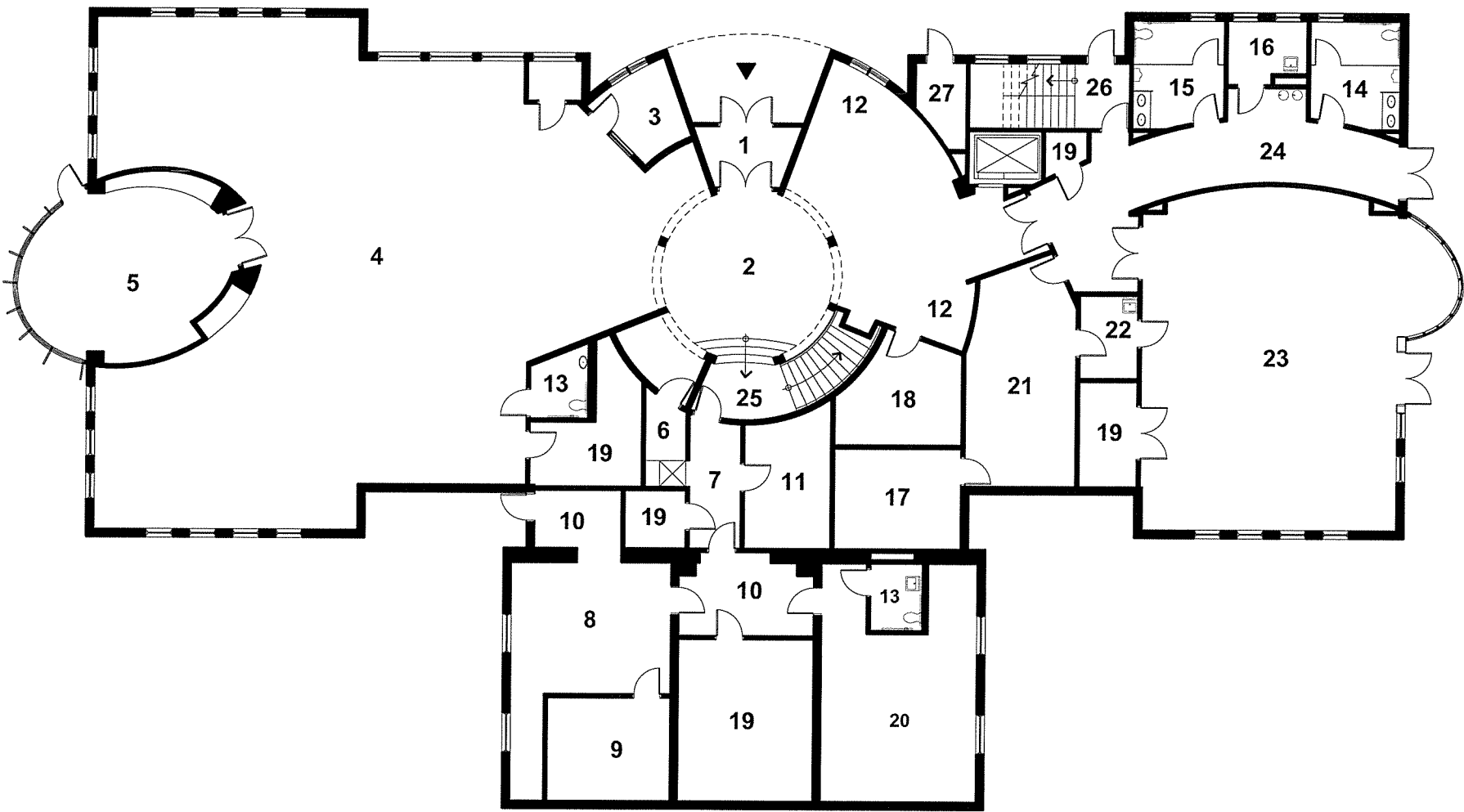
D·R·A

ROOM LEGEND

- | | |
|------------------------|--------------------------|
| 1. VESTIBULE | 21. CONFERENCE ROOM |
| 2. LOBBY | 22. PANTRY |
| 3. OFFICE | 23. MEETING ROOM |
| 4. CHILDREN'S LIBRARY | 24. NIGHT LOBBY |
| 5. STORY/CRAFT ROOM | 25. STAIR NO. 1 |
| 6. FUTURE LIFT | 26. STAIR NO. 2 |
| 7. CORRIDOR | 27. FIRE CONTROL ROOM |
| 8. MECHANICAL | 28. NON FICTION READING |
| 9. ELECTRICAL ROOM | 29. (NOT USED) |
| 10. PASSAGE | 30. YOUNG ADULT |
| 11. MAGAZINE BACKFILES | 31. QUIET STUDY |
| 12. BROWSING | 32. PERIODICALS ROOM |
| 13. TOILET | 33. READING/ LARGE PRINT |
| 14. MEN'S TOILET | 34. UPPER LOBBY |
| 15. WOMEN'S TOILET | 35. WORK ROOM |
| 16. JANITOR'S CLOSET | 36. FICTION READING |
| 17. LOCAL HISTORY | 37. REFERENCE |
| 18. BOOK SALE | 38. CIRCULATION DESK |
| 19. STORAGE | |
| 20. STAFF ROOM | |

GRAPHIC LEGEND

▶ - MAIN ENTRANCE LOCATION



FIRST FLOOR PLAN

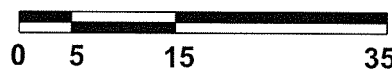
Scale: SEE BAR SCALE
Drawn by: E.J.L.
Job#: 09017.00

JOHN CURTIS FREE LIBRARY
TOWN BUILDING STUDY
Hanover, Massachusetts

Colby Hall
141 Herrick Road
Newton Centre, MA
02459

Drumme
Rosane
Anderson
Inc.
Architecture
Interior Design

D·R·A

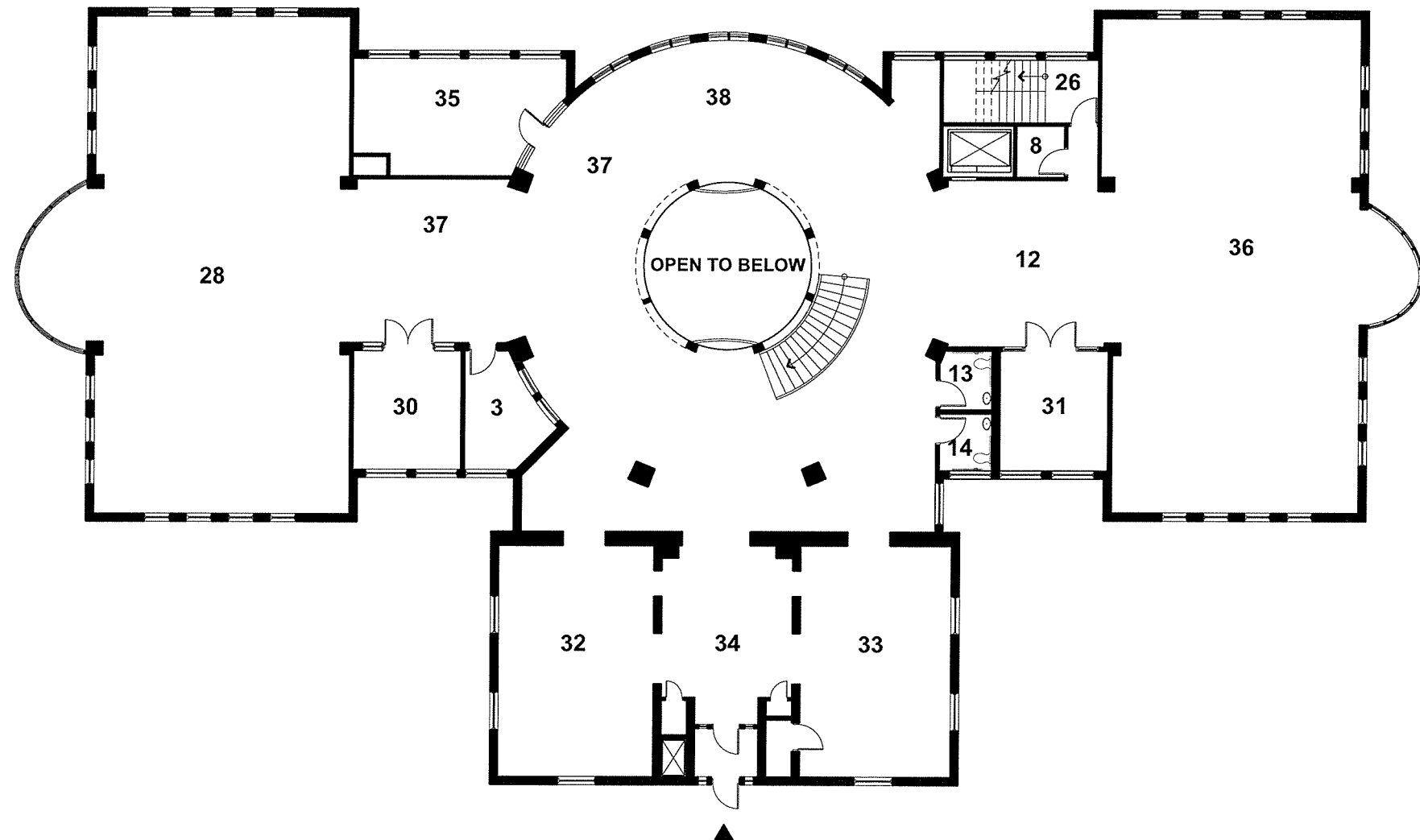


ROOM LEGEND

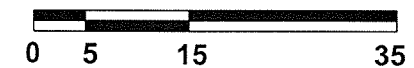
- | | |
|------------------------|--------------------------|
| 1. VESTIBULE | 21. CONFERENCE ROOM |
| 2. LOBBY | 22. PANTRY |
| 3. OFFICE | 23. MEETING ROOM |
| 4. CHILDREN'S LIBRARY | 24. NIGHT LOBBY |
| 5. STORY/CRAFT ROOM | 25. STAIR NO. 1 |
| 6. FUTURE LIFT | 26. STAIR NO. 2 |
| 7. CORRIDOR | 27. FIRE CONTROL ROOM |
| 8. MECHANICAL | 28. NON FICTION READING |
| 9. ELECTRICAL ROOM | 29. (NOT USED) |
| 10. PASSAGE | 30. YOUNG ADULT |
| 11. MAGAZINE BACKFILES | 31. QUIET STUDY |
| 12. BROWSING | 32. PERIODICALS ROOM |
| 13. TOILET | 33. READING/ LARGE PRINT |
| 14. MEN'S TOILET | 34. UPPER LOBBY |
| 15. WOMEN'S TOILET | 35. WORK ROOM |
| 16. JANITOR'S CLOSET | 36. FICTION READING |
| 17. LOCAL HISTORY | 37. REFERENCE |
| 18. BOOK SALE | 38. CIRCULATION DESK |
| 19. STORAGE | |
| 20. STAFF ROOM | |

GRAPHIC LEGEND

- - MAIN ENTRANCE LOCATION



SECOND FLOOR PLAN



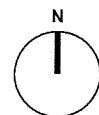
Scale: SEE BAR SCALE
 Drawn by: E.J.L.
 Job#: 09017.00

JOHN CURTIS FREE LIBRARY TOWN BUILDING STUDY Hanover, Massachusetts

Colby Hall
 141 Herrick Road
 Newton Centre, MA
 02459
 617-964-1700
 617-969-9054 fax

Drumey
 Rosane
 Anderson
 Inc.
 Architecture
 Interior Design

D·R·A



ROOM LEGEND

1. PARLOR

2. OFFICE

3. DINNING

4. FIRE PLACE

5. HISTORIC ARCHIVES STORAGE/OFFICE

6. KITCHEN

7. GIFTS

8. BEDROOMS

9. ARTIFACT/ STORAGE

10. HALL

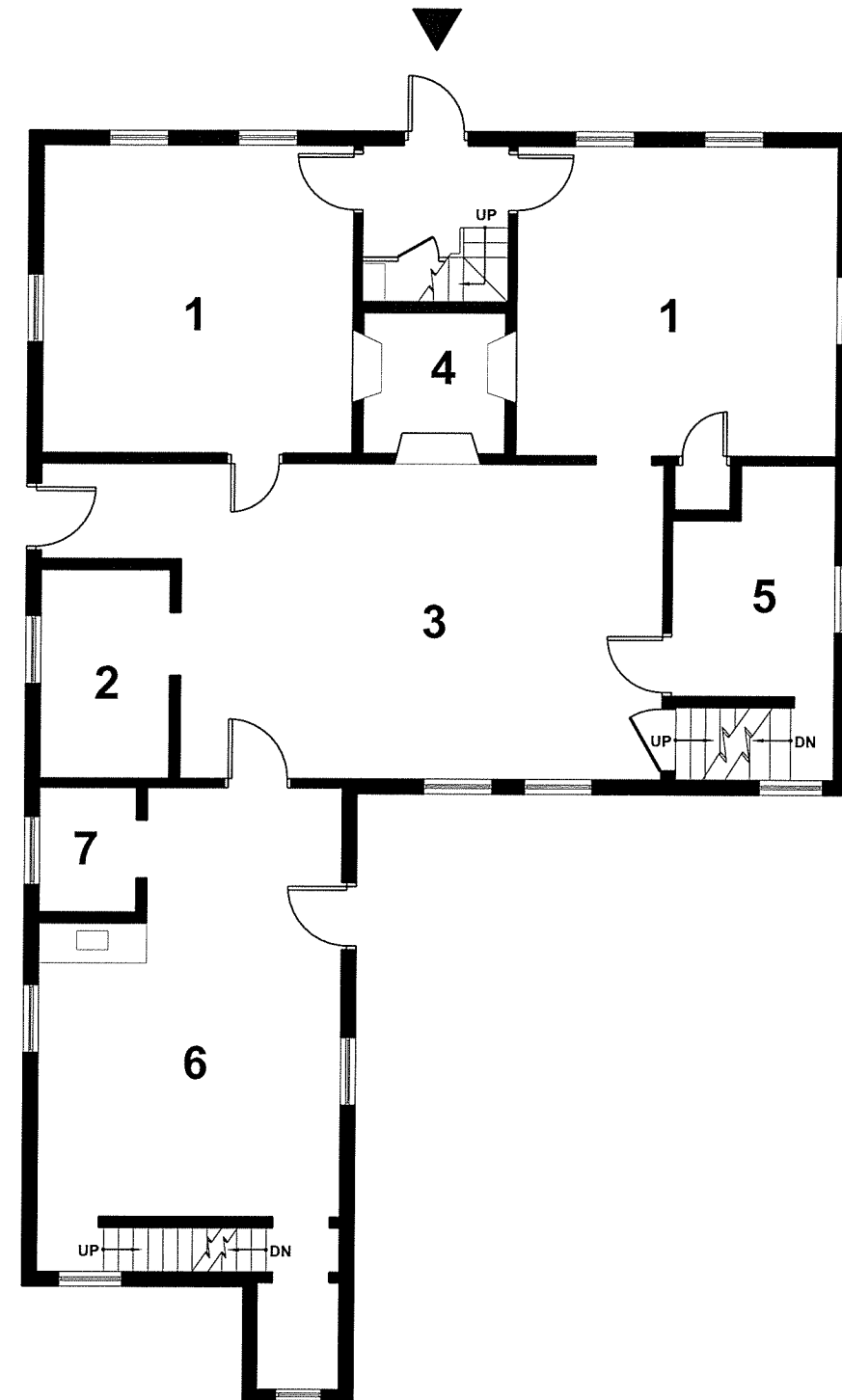
11. CLOSET/ HISTORICAL COSTUMES

12. TOILET ROOM

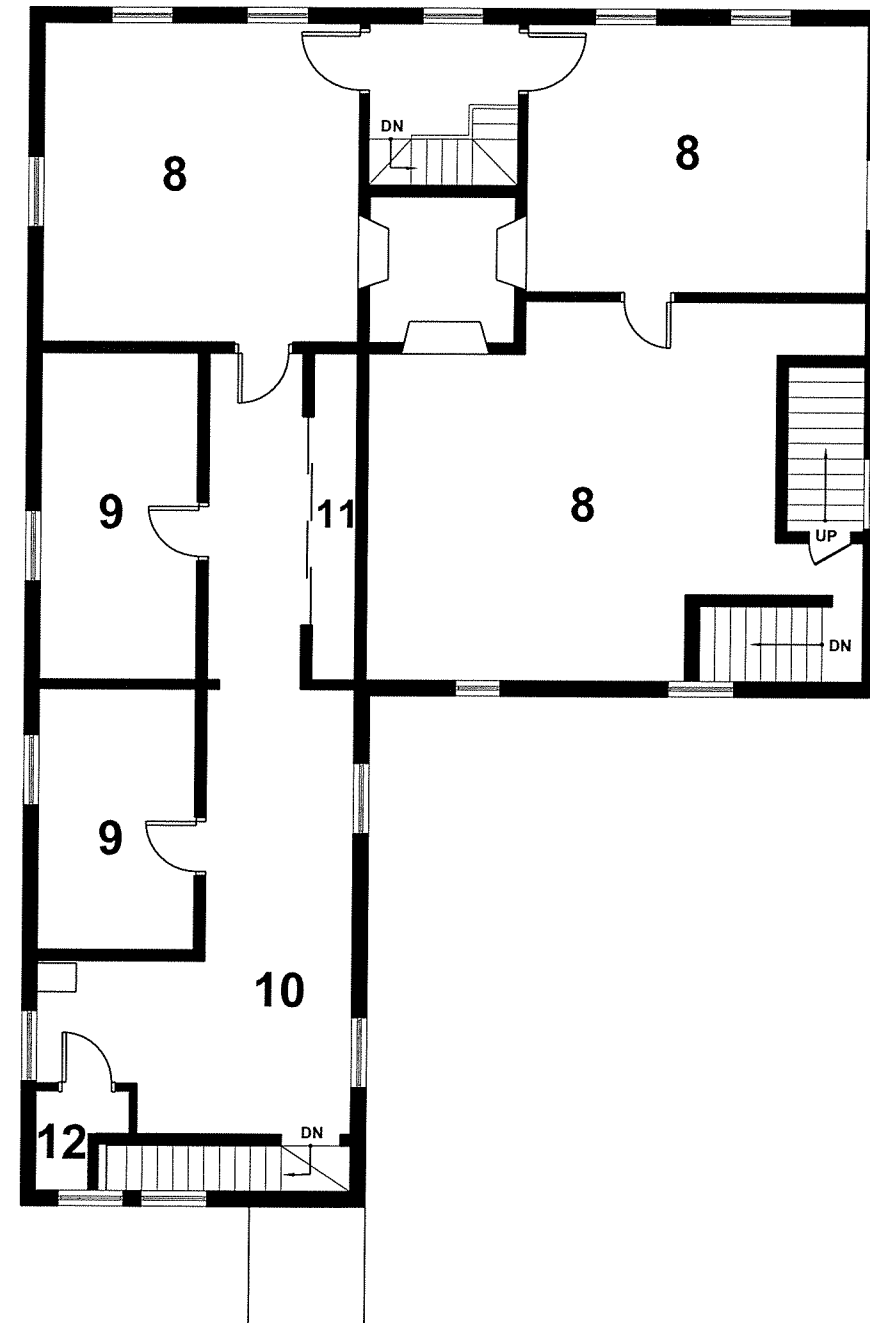
GRAPHIC LEGEND

▶

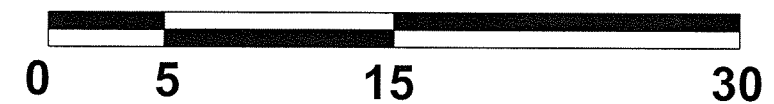
 - MAIN ENTRANCE LOCATION



FIRST FLOOR PLAN



SECOND FLOOR PLAN





ROOM LEGEND

1. FORMER OFFICE

2. FORMER GARAGE

3. FORMER ENTRY

4. FORMER BOILER ROOM

5. STORAGE

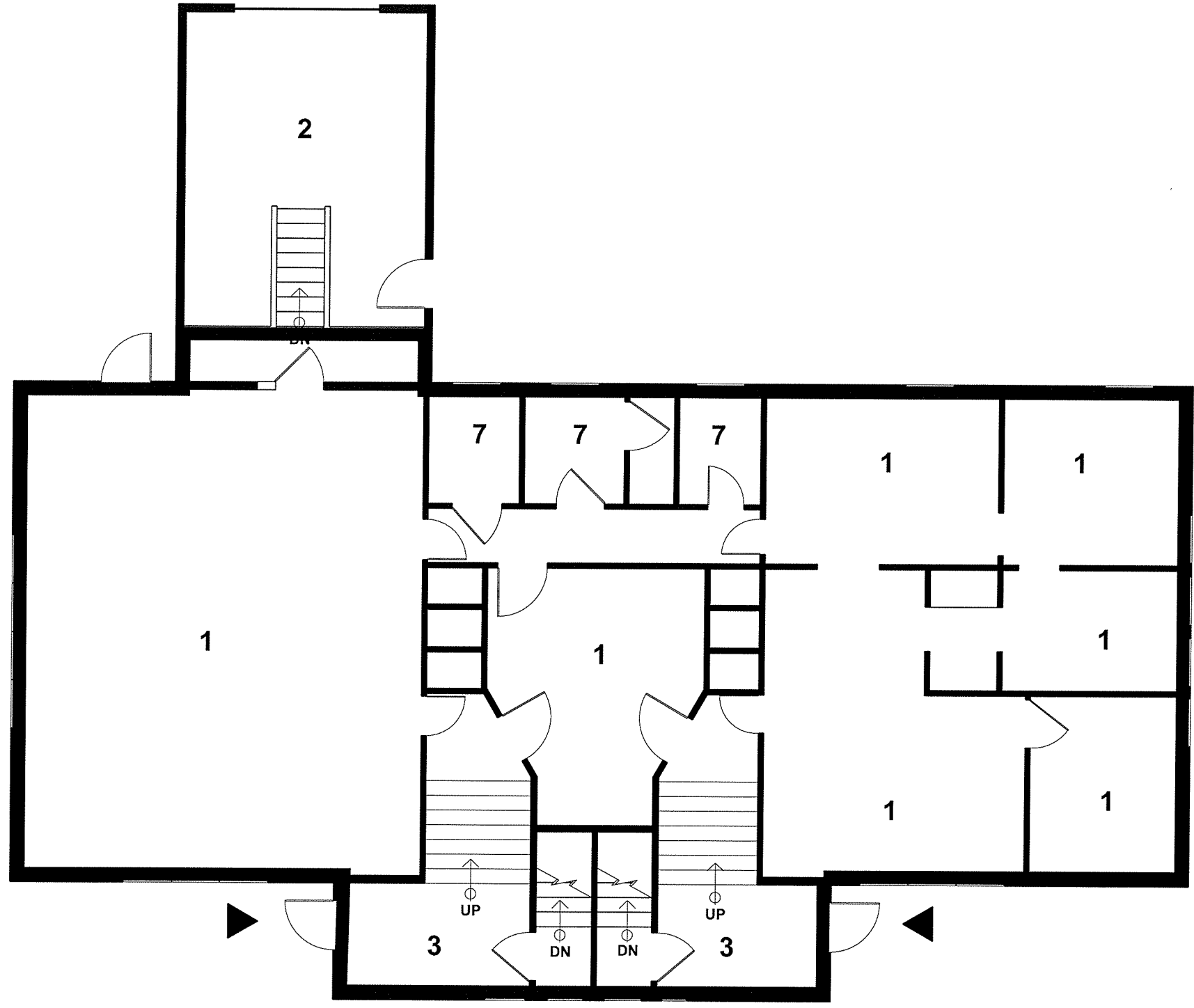
6. PASSAGE/ HALL

7. TOILET

GRAPHIC LEGEND

▶

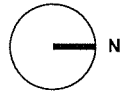
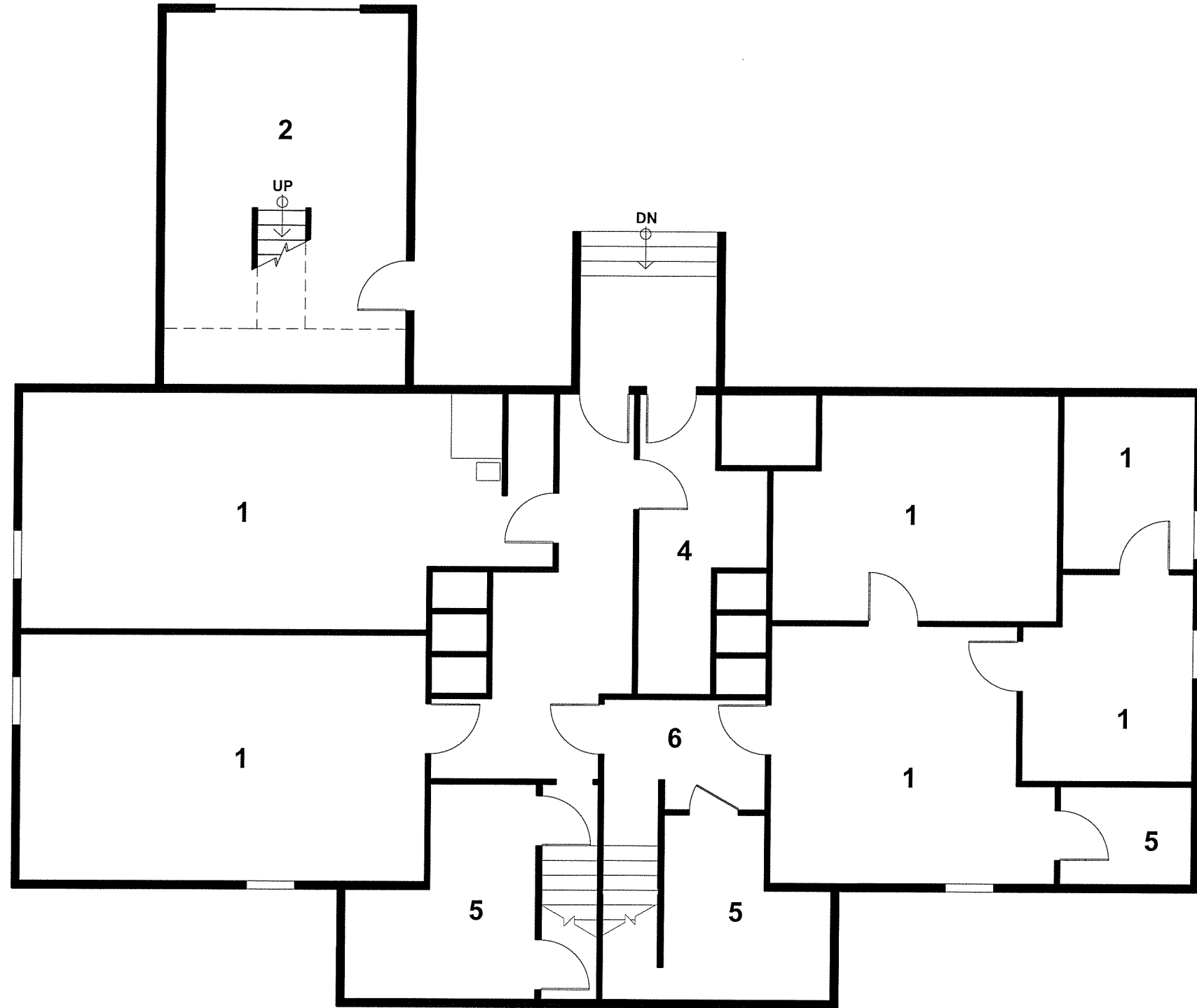
 - MAIN ENTRANCE LOCATION



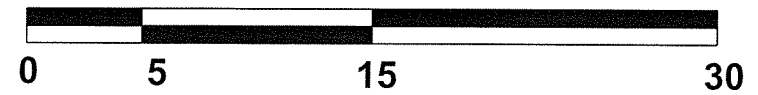
FIRST FLOOR PLAN

1. FORMER OFFICE
2. FORMER GARAGE
3. FORMER ENTRY
4. FORMER BOILER ROOM
5. STORAGE
6. PASSAGE/ HALL
7. TOILET

► - MAIN ENTRANCE LOCATION



BASEMENT FLOOR PLAN



**Drumme
Rosane
Anderson
Inc.**

Colby Hall
141 Herrick Road
Newton Centre, MA
02459

**617-964-1700
617-969-9054 fax**

**CURTIS SCHOOL
TOWN BUILDING STUDY**
Hanover, Massachusetts

Scale: SEE BAR SCALE

Drawn by: E.J.L.

Job# 09017.00

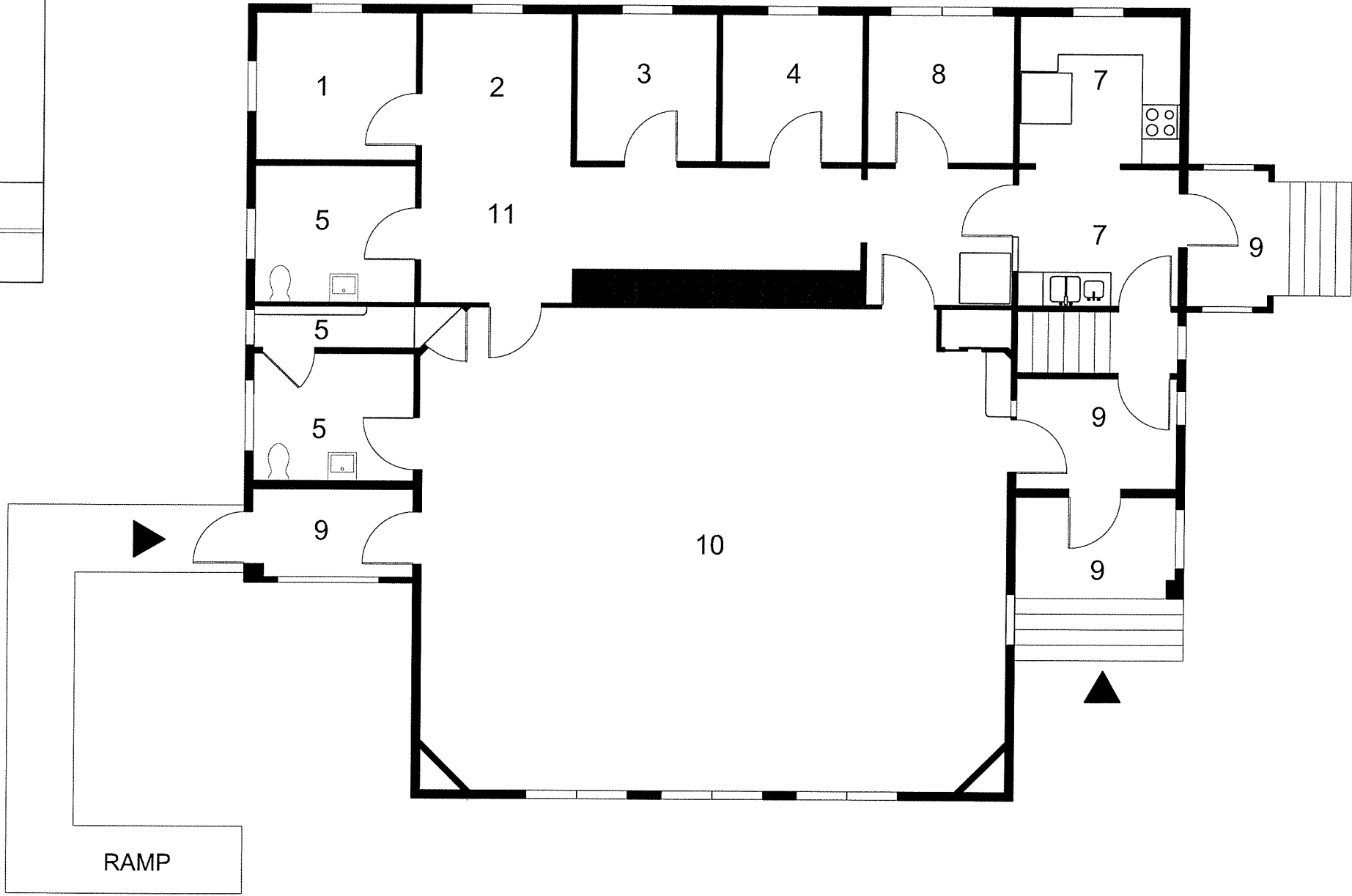
D·R·A

ROOM LEGEND

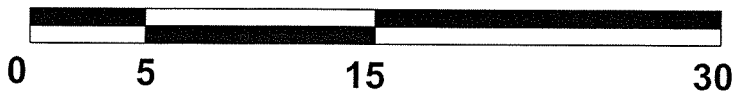
1. DIRECTOR
2. WORK STATION
3. UN-USED OFFICE
4. OFFICE
5. TOILET
6. MEETING ROOM
7. KITCHEN
8. GAME ROOM
9. ENTRY
10. MAIN ACTIVITY ROOM
11. RECEPTION
12. STORAGE
13. WORKSHOP AND STORAGE

GRAPHIC LEGEND

▶ - MAIN ENTRANCE LOCATION



FIRST FLOOR PLAN



Scale: SEE BAR SCALE
Drawn by: E.J.L.
Job#: 09017.00

PARKS AND RECREATION TOWN BUILDING STUDY

Hanover, Massachusetts

Colby Hall
141 Herrick Road
Newton Centre, MA
02459
617-964-1700
617-969-9054 fax

Drumey
Rosane
Anderson
Inc.
Architecture
Interior Design

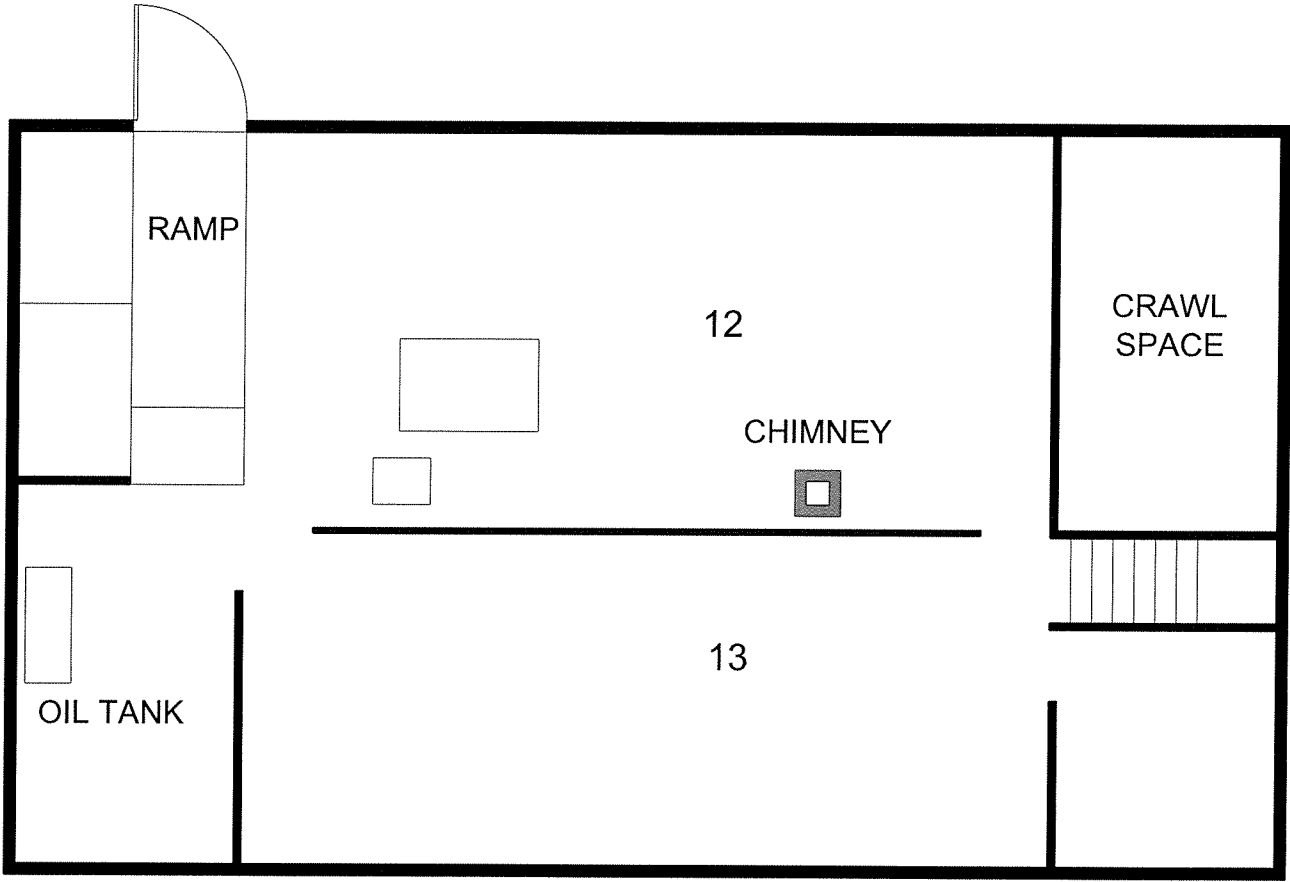
D·R·A

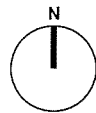


ROOM LEGEND
1. DIRECTOR
2. WORK STATION
3. UN-USED OFFICE
4. OFFICE
5. TOILET
6. MEETING ROOM
7. KITCHEN
8. GAME ROOM
9. ENTRY
10. MAIN ACTIVITY ROOM
11. RECEPTION
12. STORAGE
13. WORKSHOP AND STORAGE

GRAPHIC LEGEND
▶ - MAIN ENTRANCE LOCATION

BASEMENT FLOOR PLAN





SITE PLAN



D·R·A

Drumey
Rosane
Anderson
Inc.

Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459

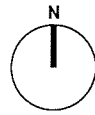
617-964-1700
617-969-9054 fax

FIRE STATION 1 TOWN BUILDING STUDY Hanover, Massachusetts

Scale: SEE BAR SCALE

Drawn by: E.J.L.

Job# 09017.00



SITE PLAN



D·R·A

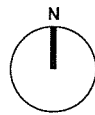
Drumney
Rosane
Anderson
Inc.
Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459
617-964-1700
617-969-9054 fax

FIRE STATION 2 TOWN BUILDING STUDY

Hanover, Massachusetts

Scale: SEE BAR SCALE
Drawn by: E.J.L.
Job#: 09017.00



SITE PLAN



PRIVATE
RESIDENCE

EQUIPMENT
APRON

FIRE STATION
#3

POWER POLE

CIRCUIT STREET

D·R·A

Drumney
Rosane
Anderson
Inc.

Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459

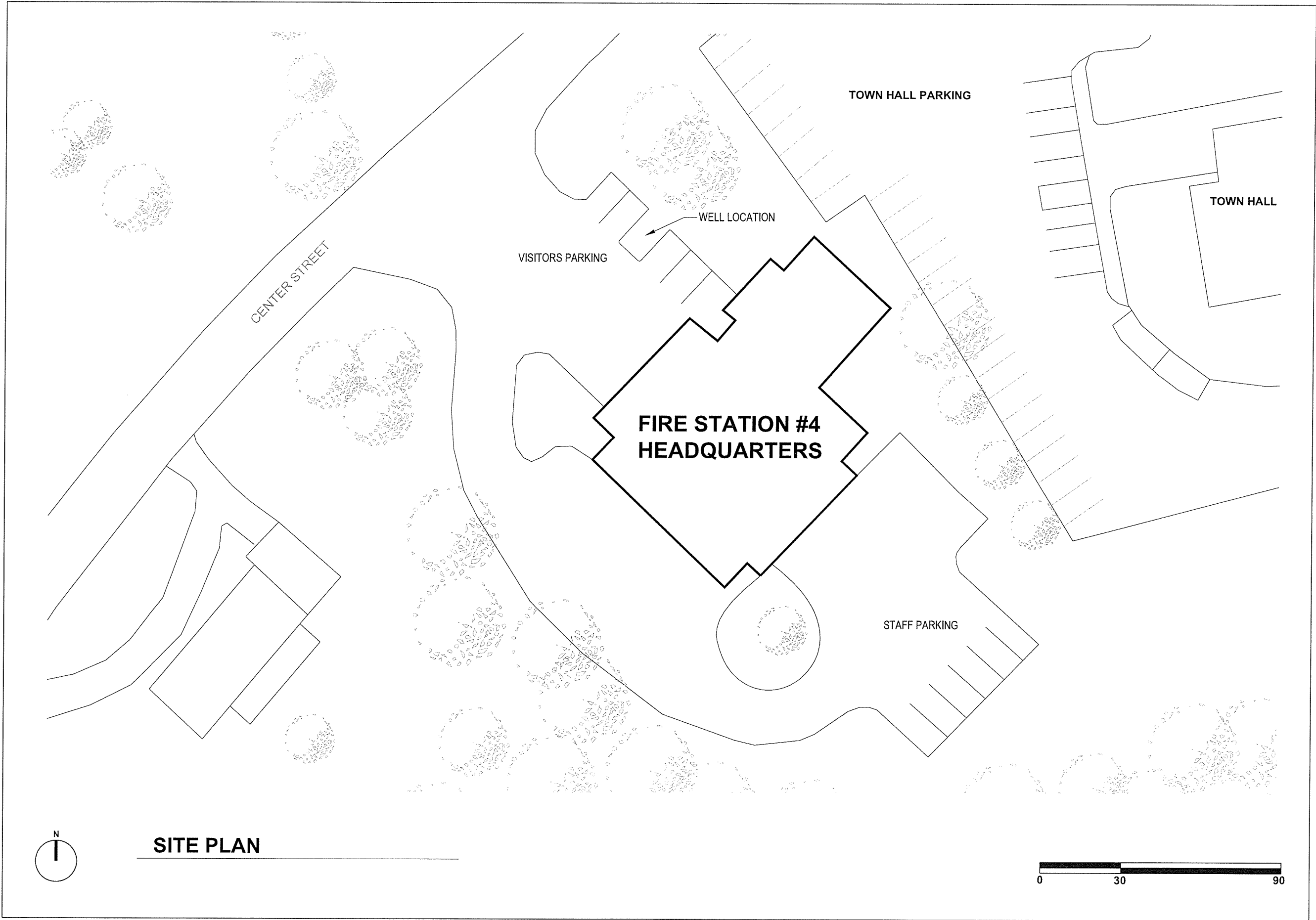
617-964-1700
617-969-9054 fax

FIRE STATION 3 TOWN BUILDING STUDY Hanover, Massachusetts

Scale: SEE BAR SCALE

Drawn by: E.J.L

Job# 09017.00



SITE PLAN

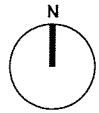
Scale: SEE BAR SCALE
Drawn by: E.J.L.
Job#: 09017.00

**FIRE HEADQUARTERS
TOWN BUILDING STUDY**
Hanover, Massachusetts

Colby Hall
141 Herrick Road
Newton Centre, MA
02459
617-964-1700
617-969-9054 fax

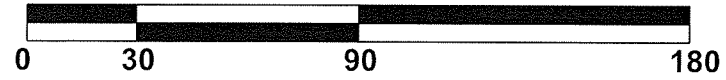
Drumney
Fosane
Anderson
Inc.
Architecture
Interior Design

D·R·A



SITE PLAN

SILVER STREET



D·R·A

Drumey
Rosane
Anderson
Inc.

Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459

617-964-1700
617-969-9054 fax

CENTER ELEMENTARY SCHOOL

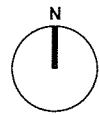
TOWN BUILDING STUDY

Hanover, Massachusetts

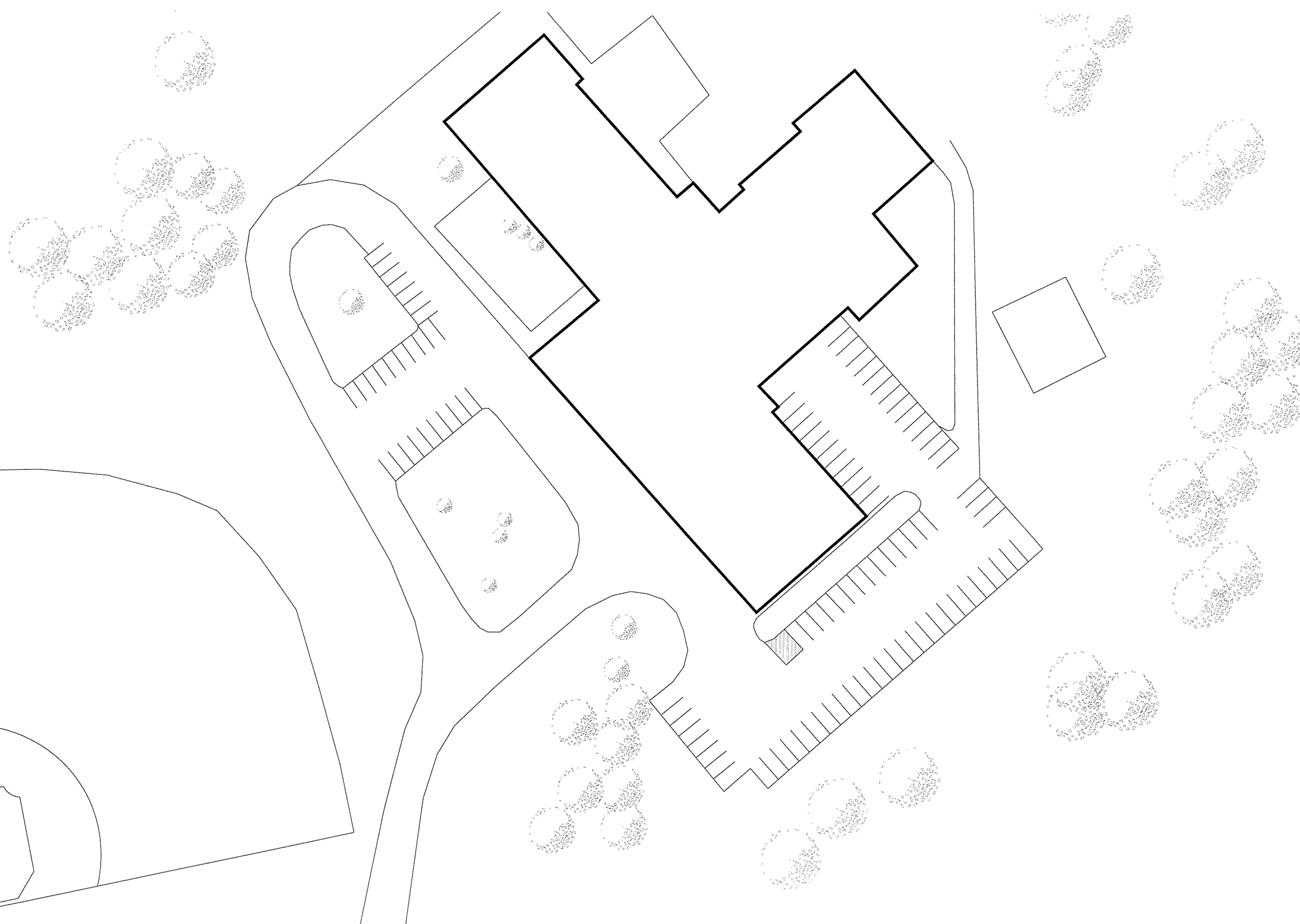
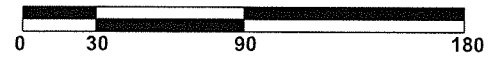
Scale: SEE BAR SCALE

Drawn by: EUL

Job# 09017.00



SITE PLAN



D·R·A

Drumney
Rosane
Anderson
Inc.

Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459

617-964-1700
617-969-9054 fax

CEDAR SCHOOL

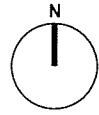
TOWN BUILDING STUDY

Hanover, Massachusetts

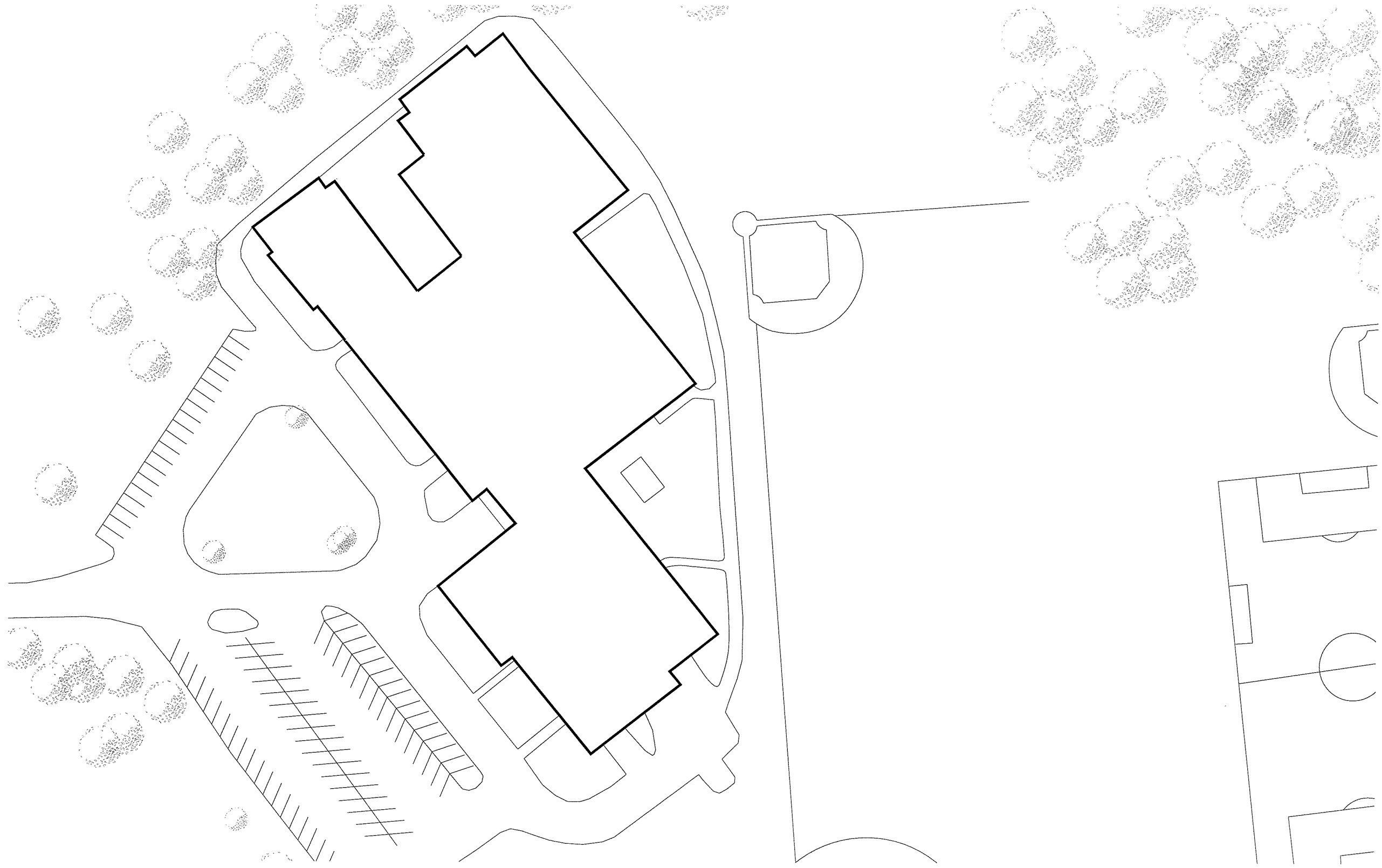
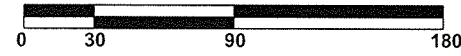
Scale: SEE BAR SCALE

Drawn by: E.J.L.

Job# 09017.00



SITE PLAN



D·R·A

Drumrey
Rosane
Anderson
Inc.

Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459

617-964-1700
617-969-9054 fax

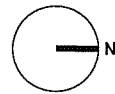
HANOVER MIDDLE SCHOOL TOWN BUILDING STUDY

Hanover, Massachusetts

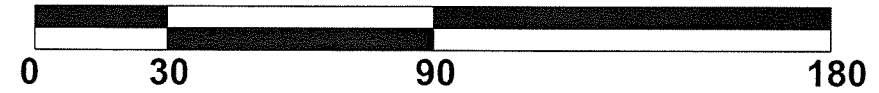
Scale: SEE BAR SCALE

Drawn by: E.J.L.

Job# 09017.00



SITE PLAN



HANOVER STREET

D•R•A

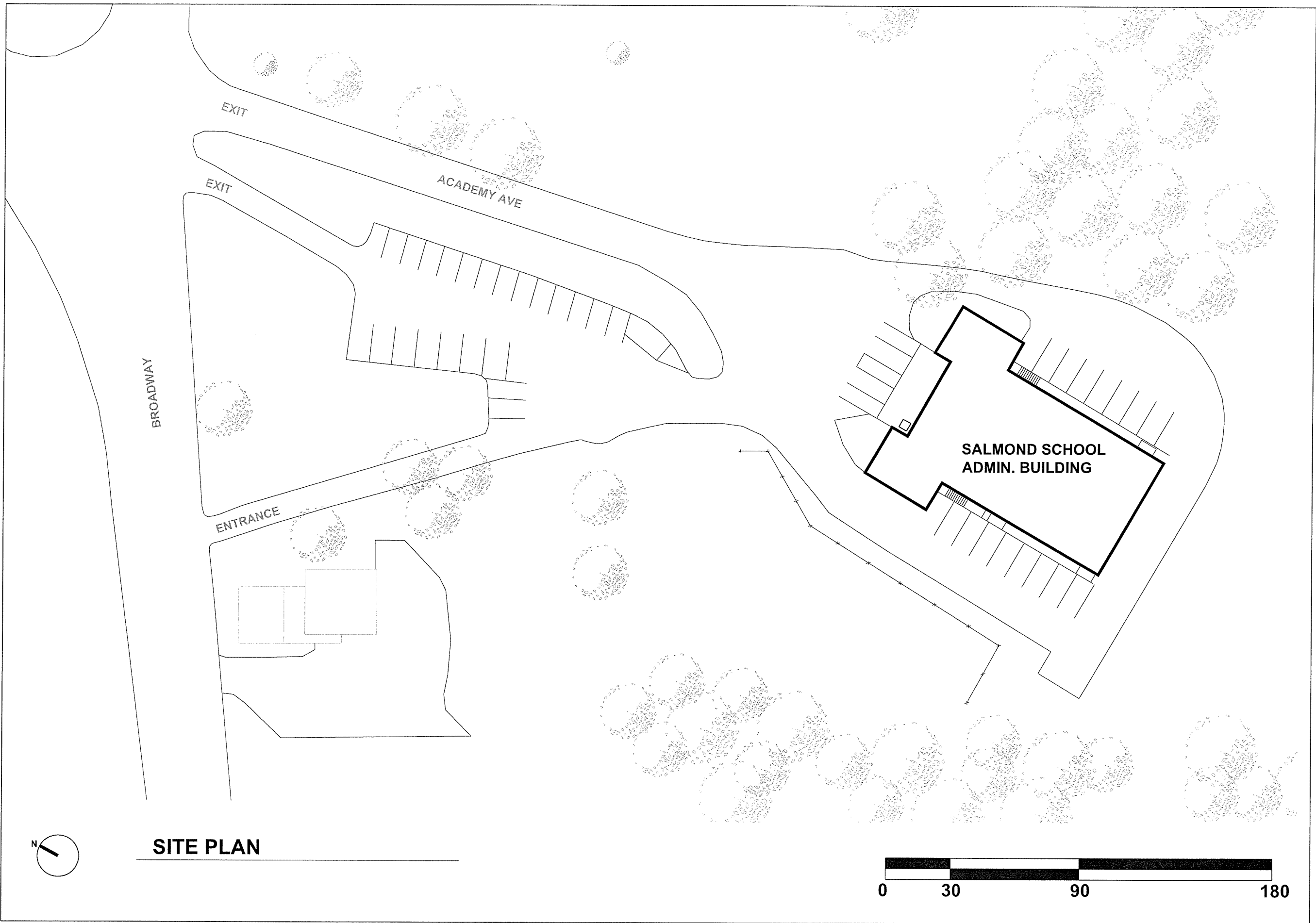
Drumey
Rosane
Anderson
Inc.
Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459
617-964-1700
617-969-9054 fax

SYLVESTER SCHOOL TOWN BUILDING STUDY

Hanover, Massachusetts

Scale: SEE BAR SCALE
Drawn by: EJJ
Job# 09017.00



SITE PLAN



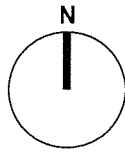
**Drumey
Rosane
Anderson
Inc.**
Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459
617-964-1700
617-969-9054 fax

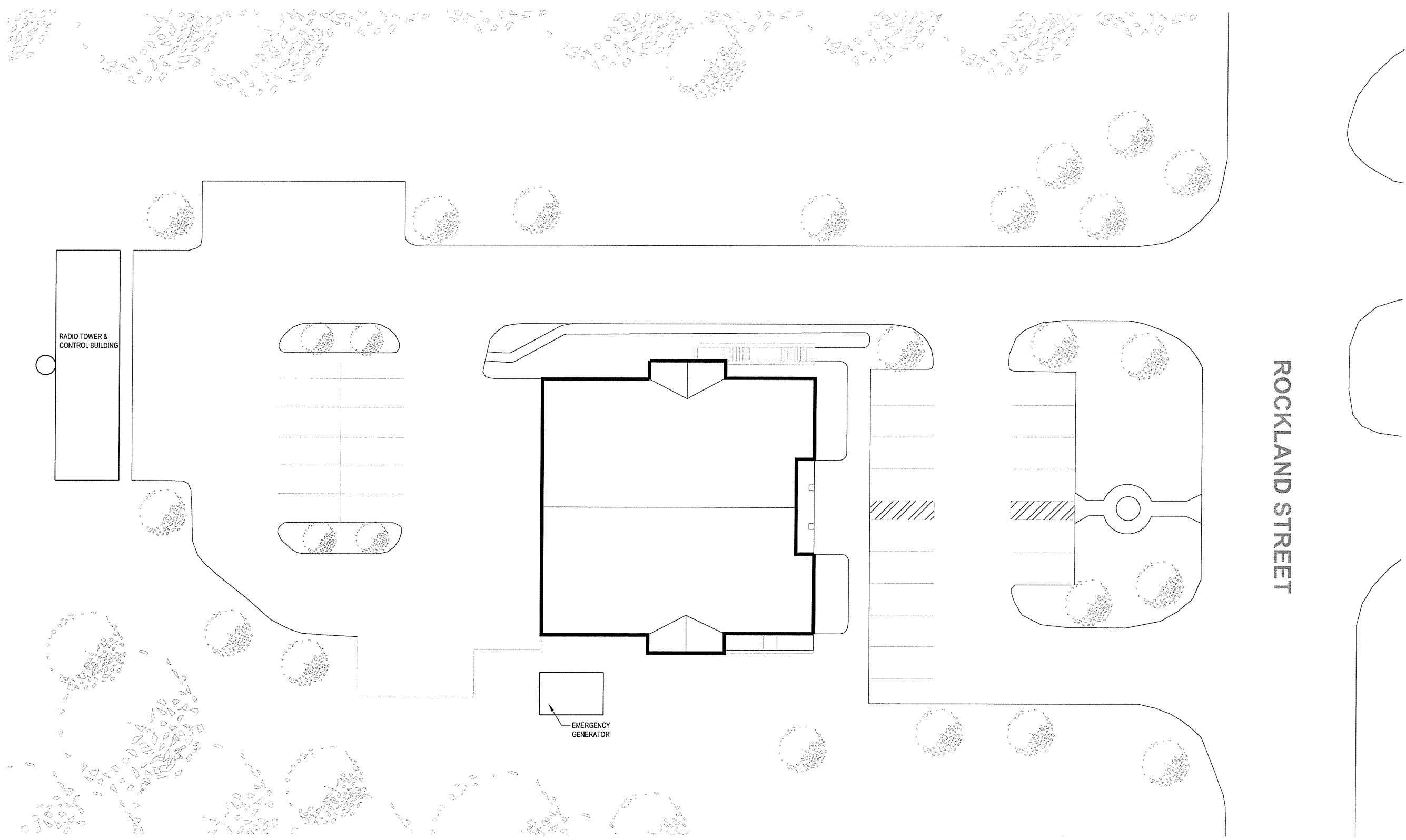
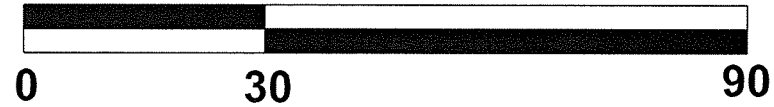
SALMOND SCHOOL TOWN BUILDING STUDY

Hanover, Massachusetts

Scale: SEE BAR SCALE
Drawn by: EJL
Job# 09017.00



SITE PLAN



D·R·A

Drumme
Rosane
Anderson
Inc.

Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459

617-964-1700
617-969-9054 fax

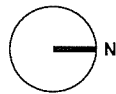
POLICE STATION TOWN BUILDING STUDY

Hanover, Massachusetts

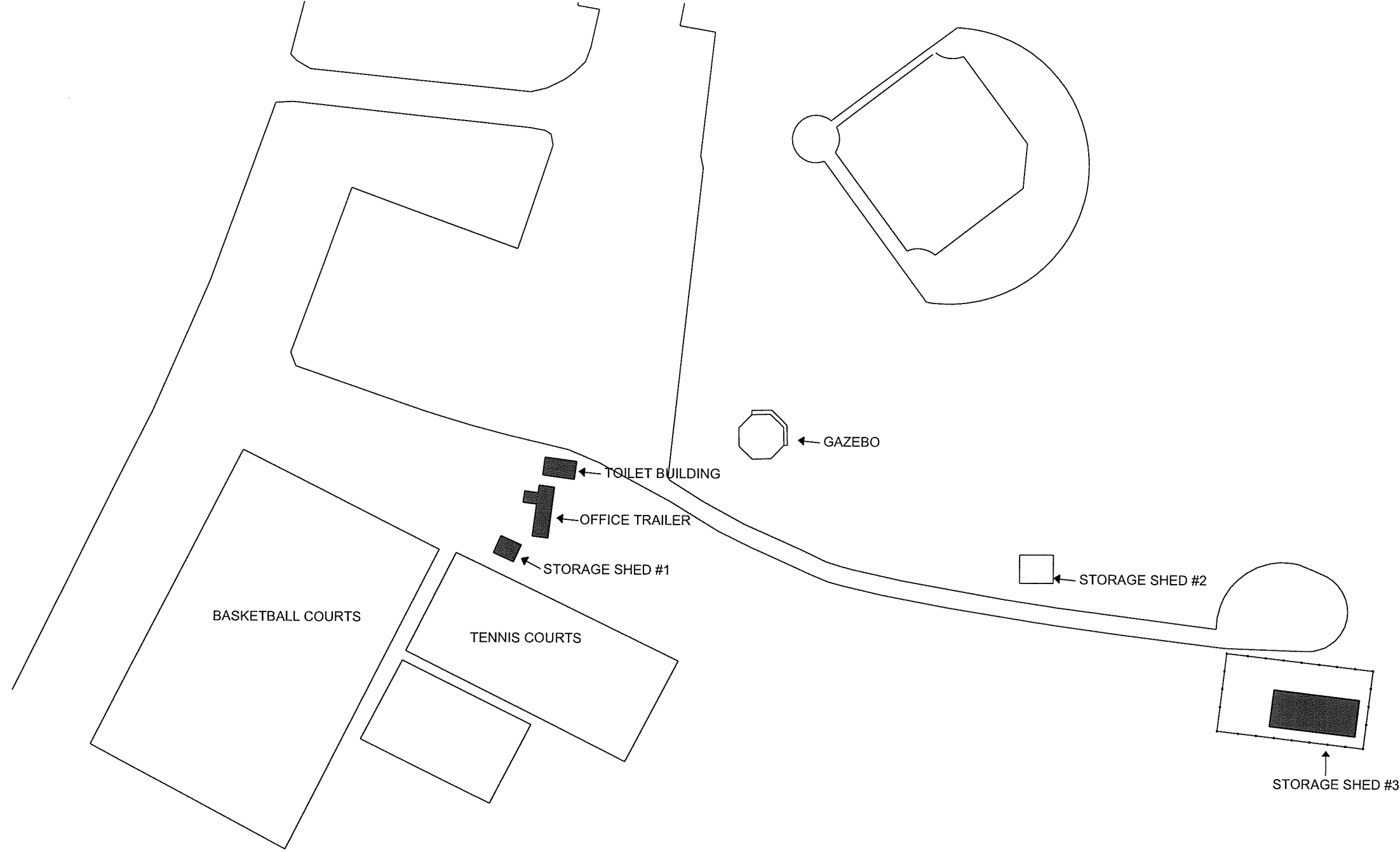
Scale: SEE BAR SCALE

Drawn by: EUL

Job# 09017.00



SITE PLAN



0 10 30 60

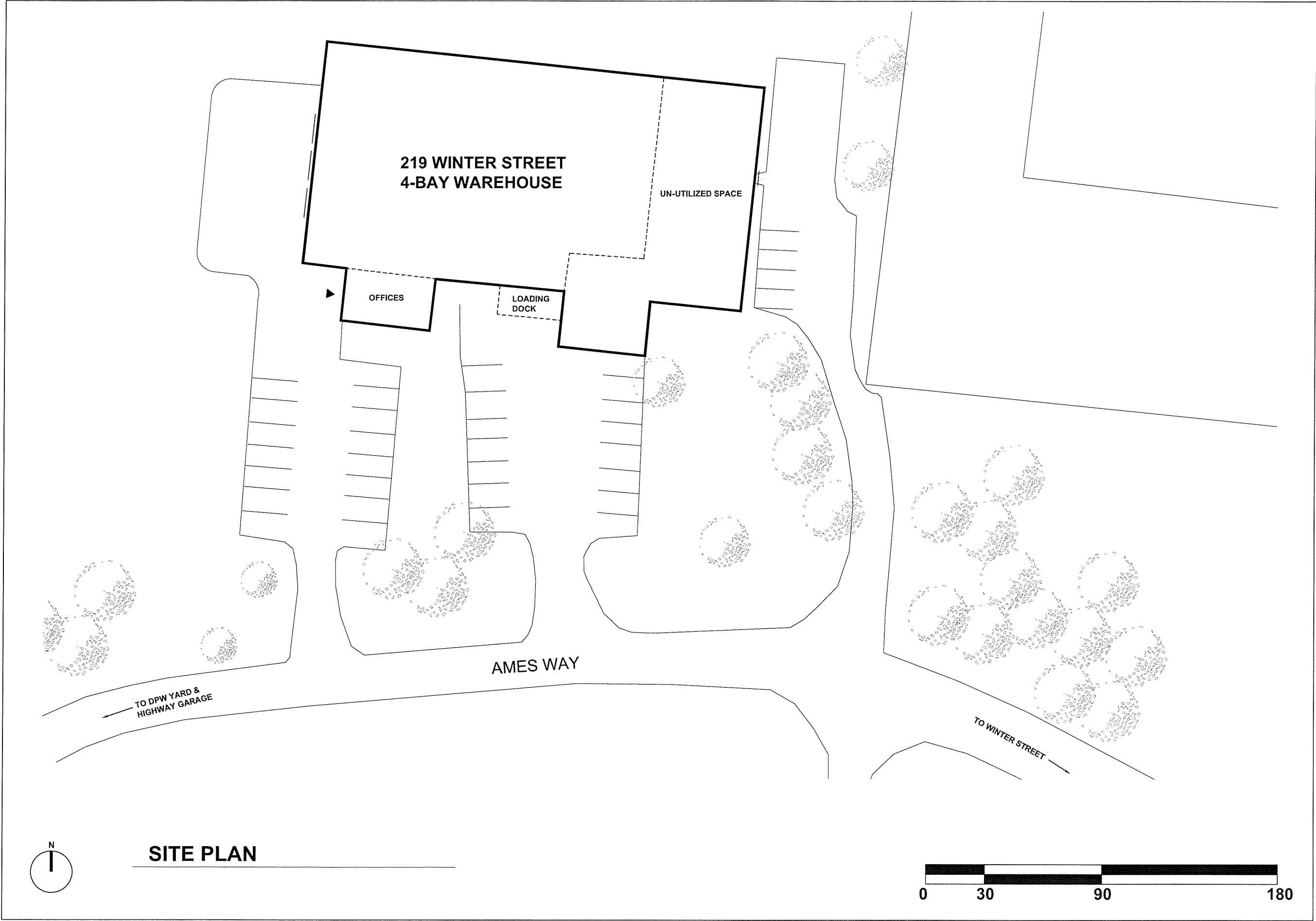
D·R·A

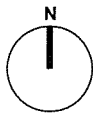
Drumey
Rosane
Anderson
Inc.
Architecture
Interior Design

Calby Hall
141 Herrick Road
Newton Centre, MA
02459
617-964-1700
617-969-9054 fax

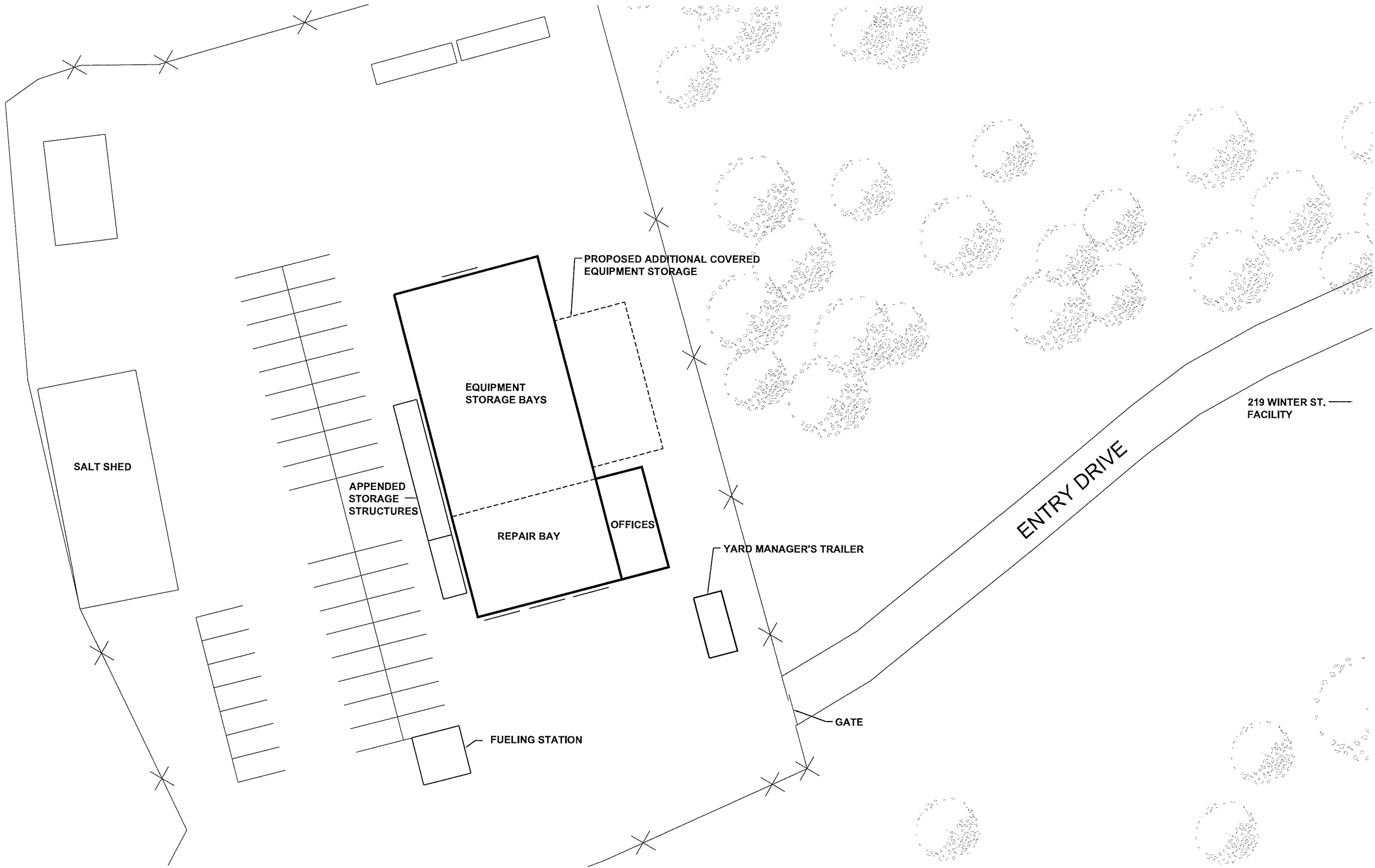
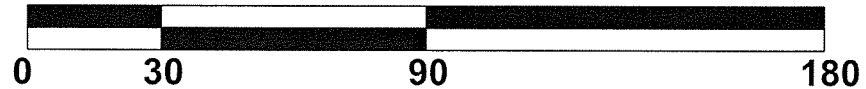
EVERETT HALL FACILITIES TOWN BUILDING STUDY Hanover, Massachusetts

Scale: SEE BAR SCALE
Drawn by: MJQ
Job#: 09017.00





SITE PLAN



D·R·A

Drumney
Rosane
Anderson
Inc.

Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459

617-964-1700
617-969-9054 fax

HIGHWAY GARAGE TOWN BUILDING STUDY

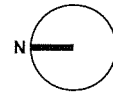
Hanover, Massachusetts

Scale: SEE BAR SCALE

Drawn by: EJJ

Job# 09017.00

TBD



SITE PLAN

HANOVER STREET

LIBRARY

HISTORIC
ENTRANCE

TOWN HALL

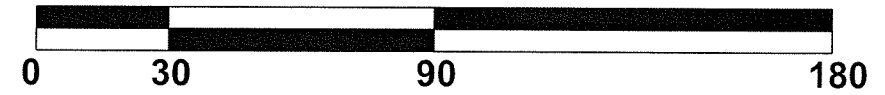
MAIN
ENTRANCE

ACCESSIBLE
ENTRANCE
(NOT FULLY
COMPLIANT)

ACCESSIBLE
ENTRANCE

ACCESSIBLE
PARKING

FIRE STATION



D·R·A

Drumrey
Rosane
Anderson
Inc.

Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459

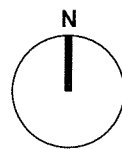
617-964-1700
617-969-9054 fax

TOWN HALL TOWN BUILDING STUDY Hanover, Massachusetts

Scale: SEE BAR SCALE

Drawn by: EJJ

Job# 09017.00



SITE PLAN

HANOVER STREET

SYLVESTER
SCHOOL

STETSON
HOUSE

BARN

COBBLER'S
SHOP

CARRIAGE
HOUSE

LIBRARY

TOWN
HALL



D·R·A

Drumey
Rosane
Anderson
Inc.

Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459

617-964-1700
617-969-9054 fax

JOHN CURTIS FREE LIBRARY TOWN BUILDING STUDY

Hanover, Massachusetts

Scale SEE BAR SCALE

Drawn by: E.J.L.

Job# 09017.00



SITE PLAN

HANOVER STREET

STETSON
HOUSE

LIBRARY

BARN

COBBLER'S
SHOP

CARRIAGE
HOUSE



D·R·A

Drumey
Rosane
Anderson
Inc.

Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459

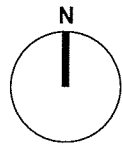
617-964-1700
617-969-9054 fax

STETSON HOUSE TOWN BUILDING STUDY Hanover, Massachusetts

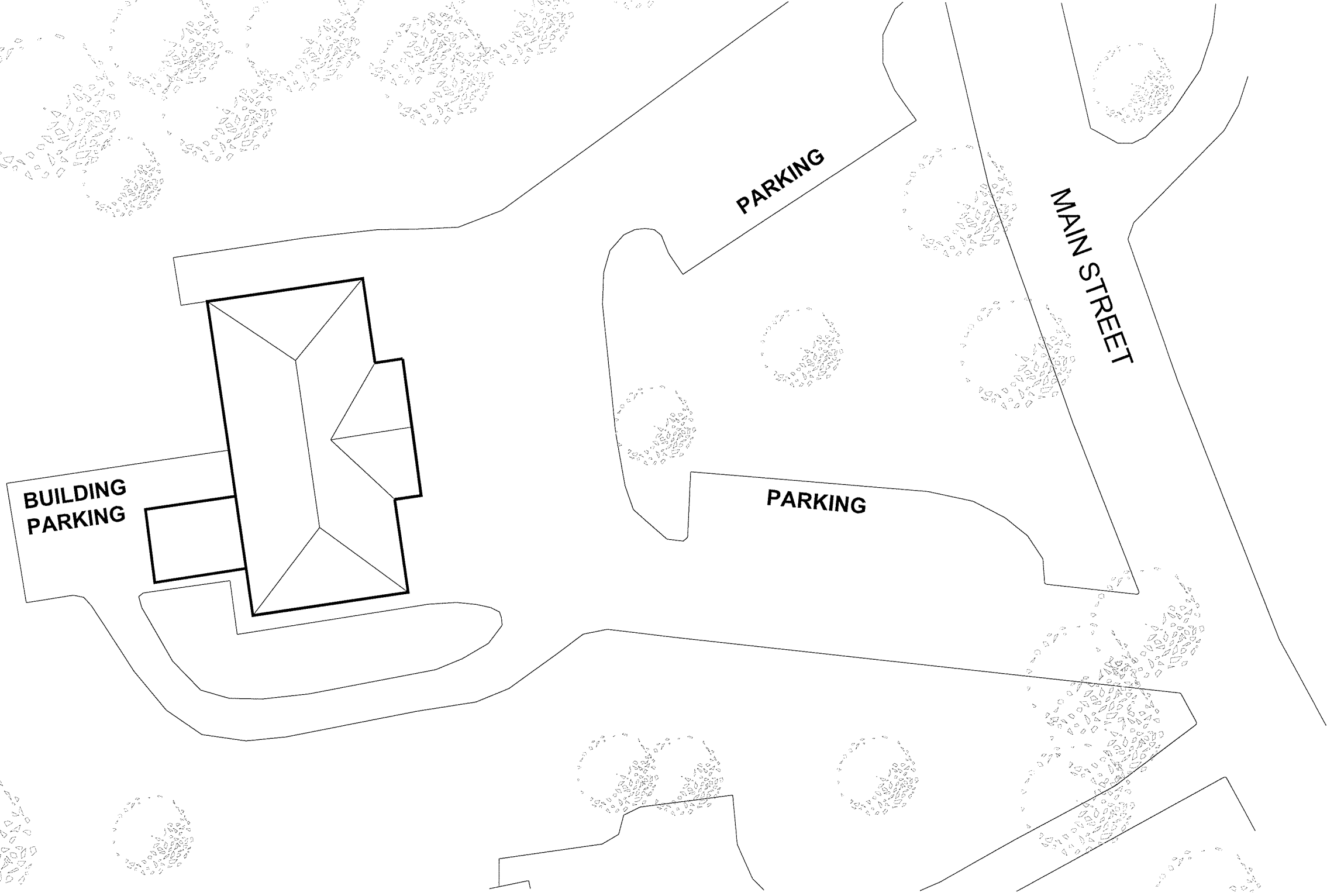
Scale: SEE BAR SCALE

Drawn by: EJI

Job# 09017.00



SITE PLAN



0 30 90

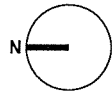
D·R·A

Drumme
Rosane
Anderson
Inc.
Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459
617-964-1700
617-969-9054 fax

CURTIS SCHOOL TOWN BUILDING STUDY Hanover, Massachusetts

Scale: SEE BAR SCALE
Drawn by: E.J.L.
Job# 09017.00



SITE PLAN

OVERHEAD POWER TRANSMISSION LINES

POWER STATION

CIRCUIT ST.

RAMP



D·R·A

Drumney
Rosane
Anderson
Inc.

Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459

617-964-1700
617-969-9054 fax

PARKS AND RECREATION TOWN BUILDING STUDY

Hanover, Massachusetts

Scale: SEE BAR SCALE

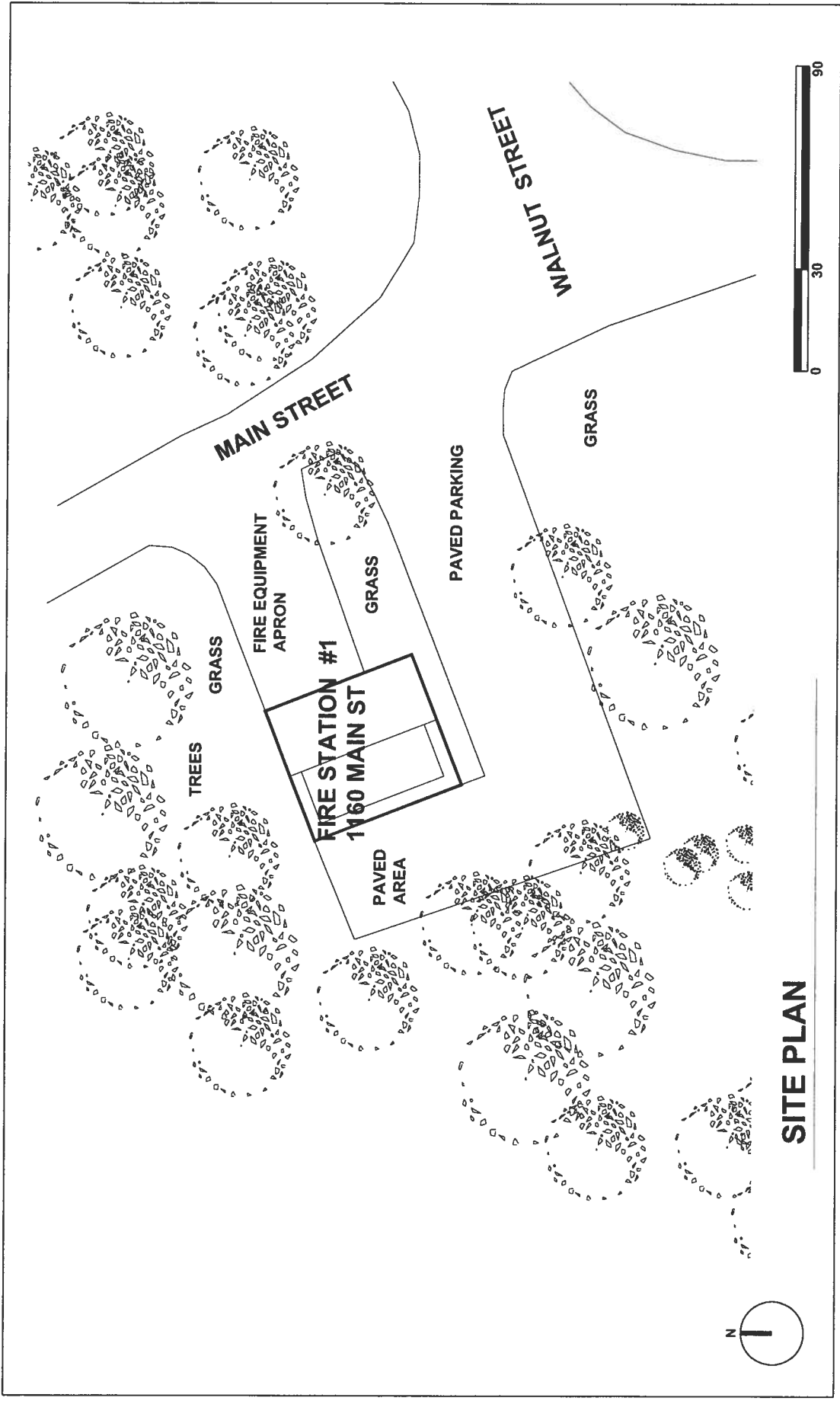
Drawn by: E.J.L

Job# 09017.00

Vol.2

Appendix C

Site Plans



SITE PLAN



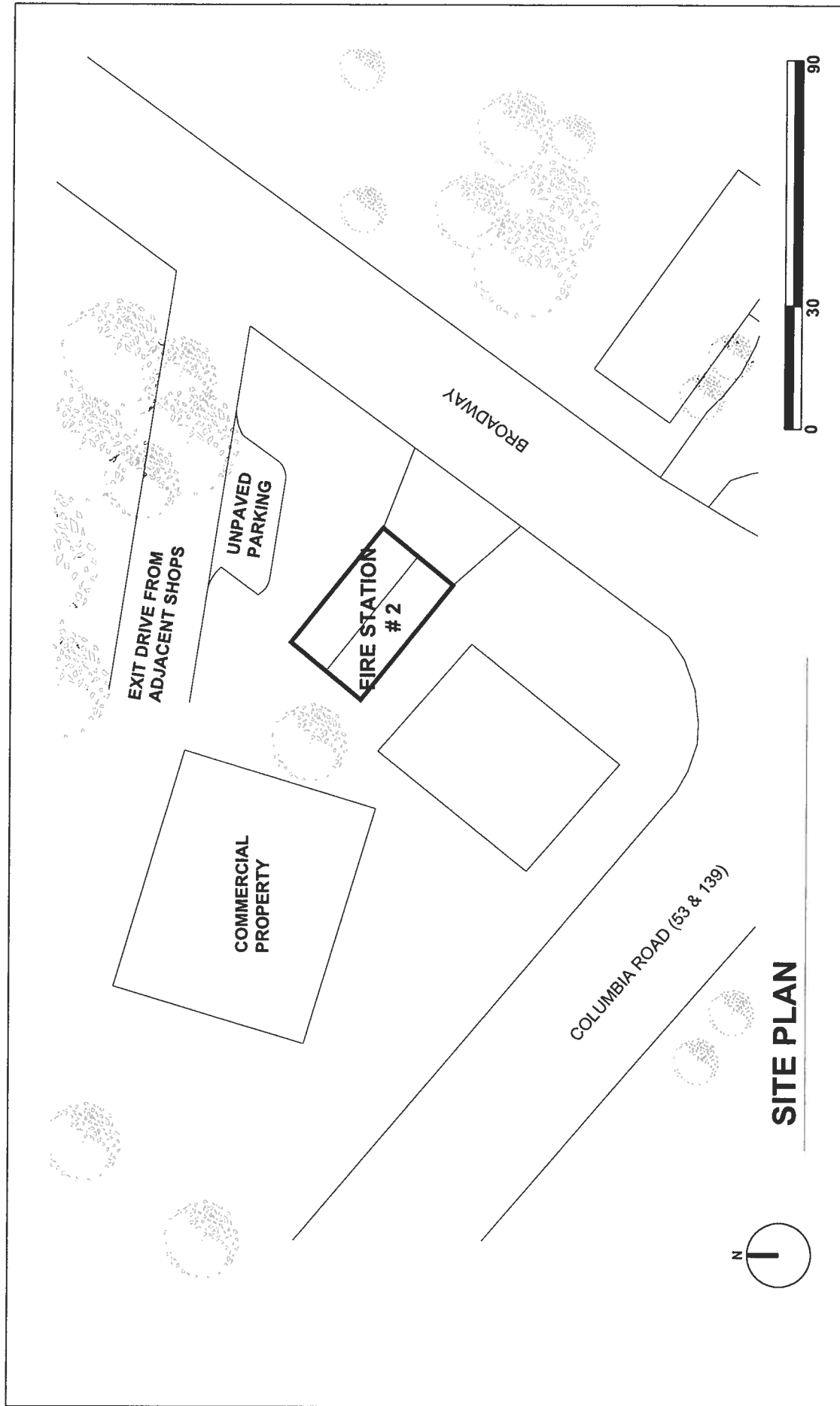
**Drumey
Rosane
Anderson
Inc.**
Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459
617-964-1700
617-969-9054 fax

FIRE STATION 1 TOWN BUILDING STUDY

Hanover, Massachusetts

Scale: SEE BAR SCALE
Drawn by: EJL
Job#: 09017.00



SITE PLAN

D·R·A

Drumey
Rosane
Anderson
Inc.

Architecture
Interior Design

Colby Hall
1411 Herrick Road
Newton Centre, MA
02459

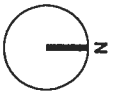
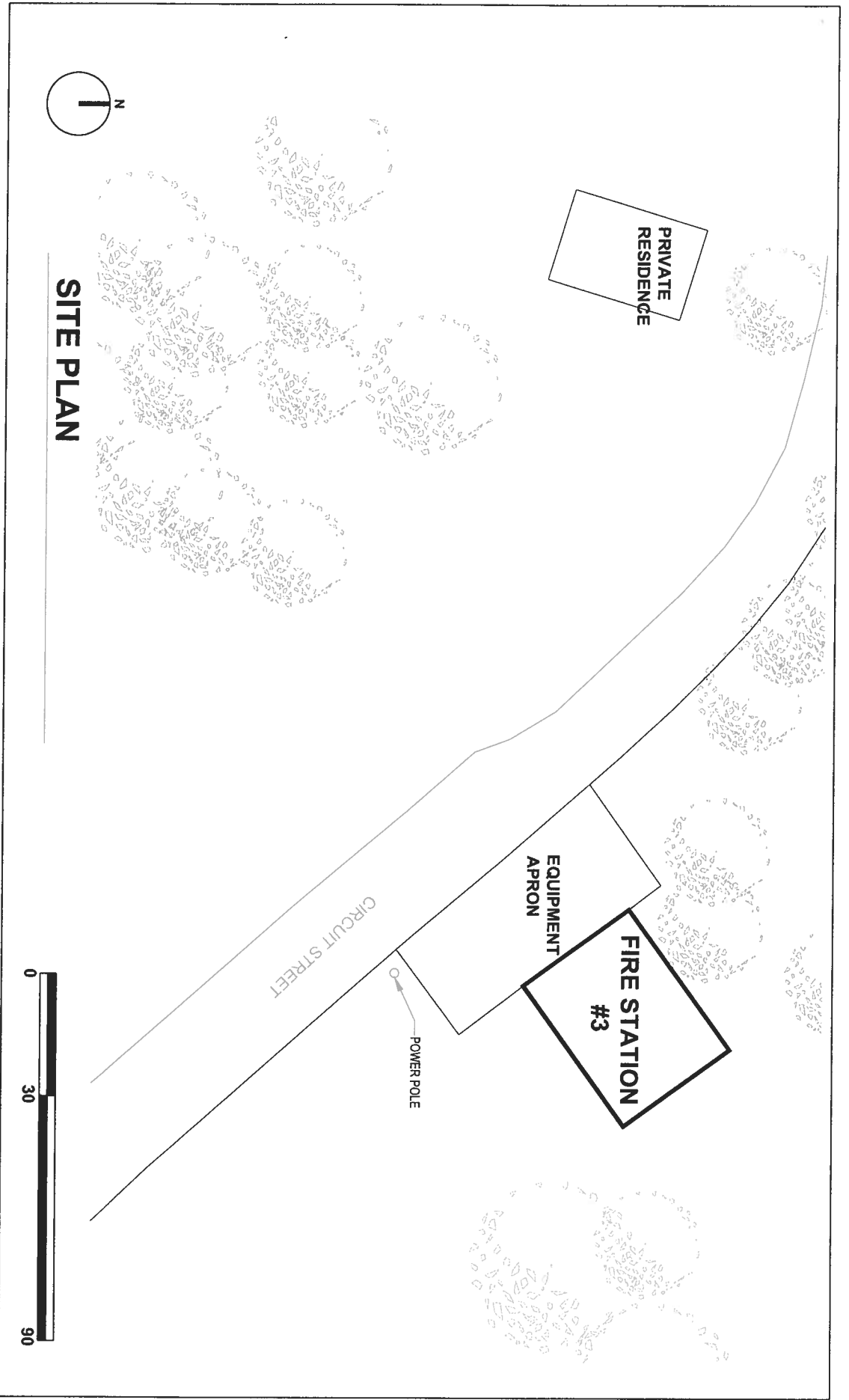
617-964-1700
617-969-9054 fax

FIRE STATION 2 TOWN BUILDING STUDY Hanover, Massachusetts

Scale: SEE BAR SCALE

Drawn by: E.J.L.

Job# 09017.00



SITE PLAN



D·R·A

Drummev
Rosane
Anderson
Inc.
Colby Hall
141 Herrick Road
Newton Centre, MA
02459
617-964-1700
617-969-9054 fax

FIRE STATION 3 TOWN BUILDING STUDY Hanover, Massachusetts

Scale: SEE BAR SCALE

Drawn by: E.J.L

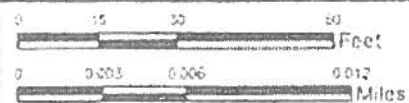
Job# 09017.00

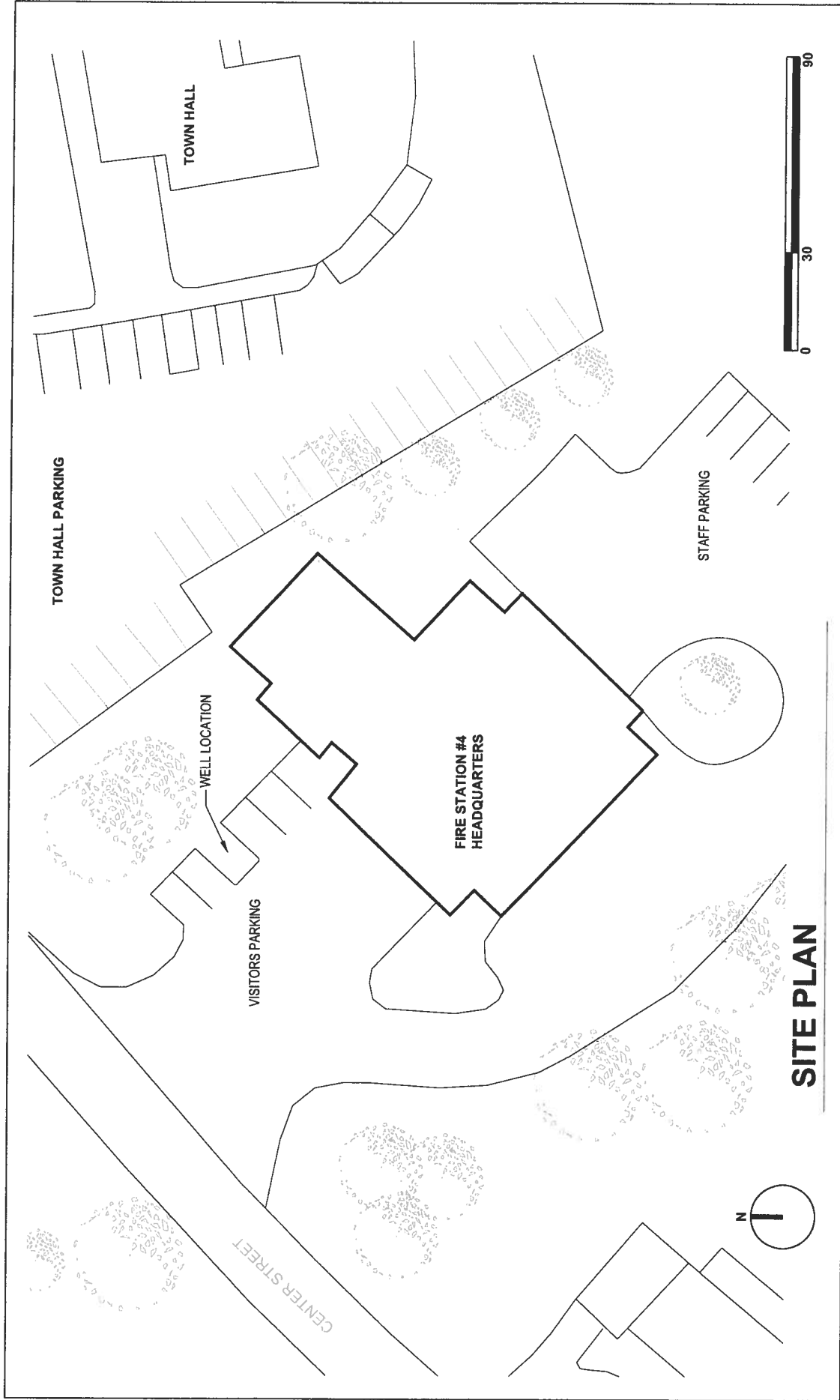


HANOVER GIS
TOWN OF HANOVER
PLANNING DEPARTMENT

NOTES & SOURCES

This information is provided for planning purposes only. It is not adequate for legal boundary definition, requiring surveying and/or professional advice. This map was created using the Town of Hanover GIS (2008) data. For more information, contact the Town of Hanover GIS (2008) data. This map was created using the Town of Hanover GIS (2008) data. For more information, contact the Town of Hanover GIS (2008) data. This map was created using the Town of Hanover GIS (2008) data. For more information, contact the Town of Hanover GIS (2008) data.





SITE PLAN

D·R·A

**Drumey
Rosane
Anderson
Inc.**

Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459

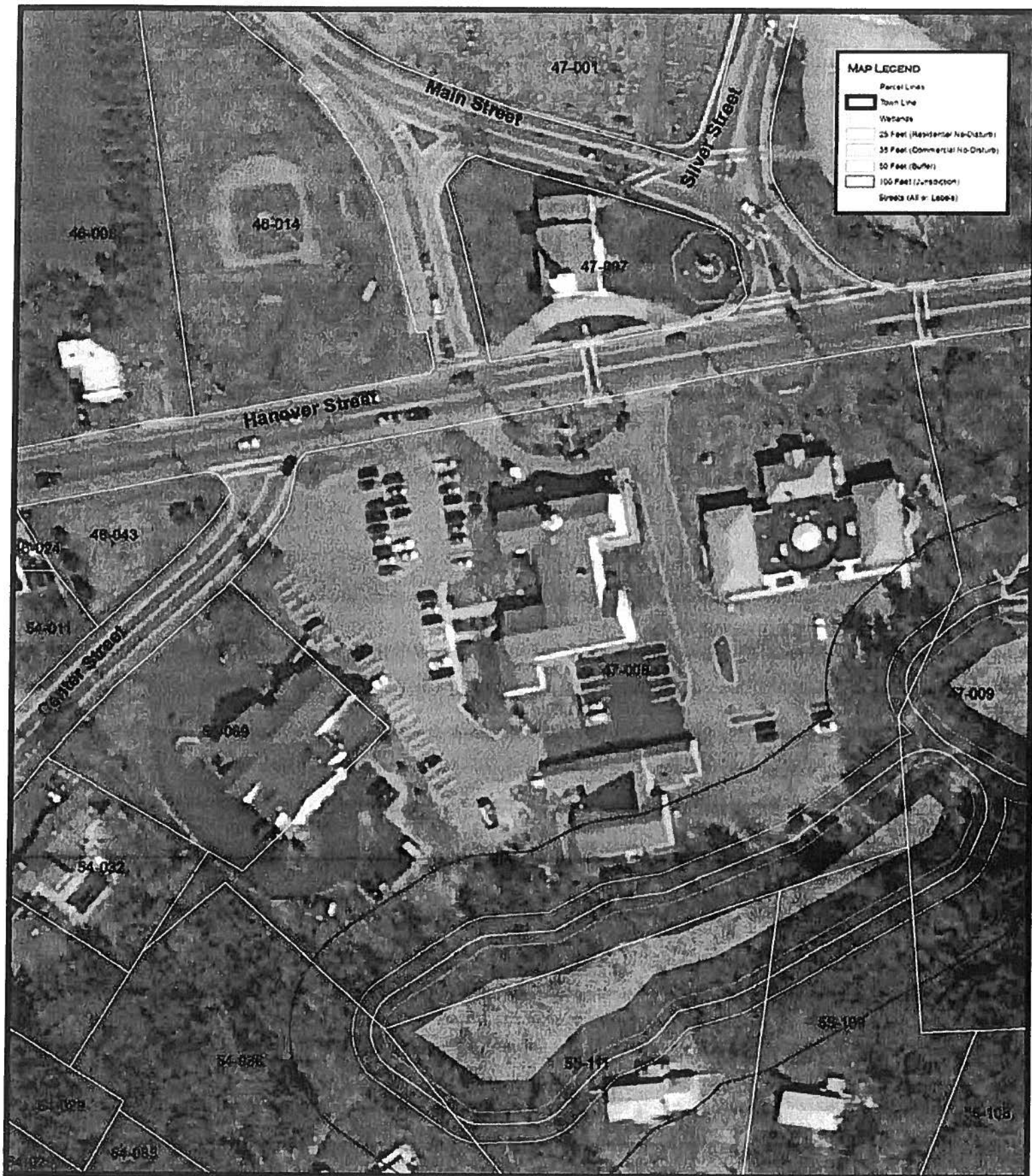
617-964-1700
617-969-9054 fax

FIRE HEADQUARTERS TOWN BUILDING STUDY **Hanover, Massachusetts**

Scale: SEE BAR SCALE

Drawn by: EJL

Job# 09017.00



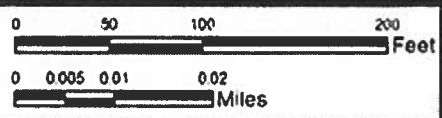
MAP LEGEND

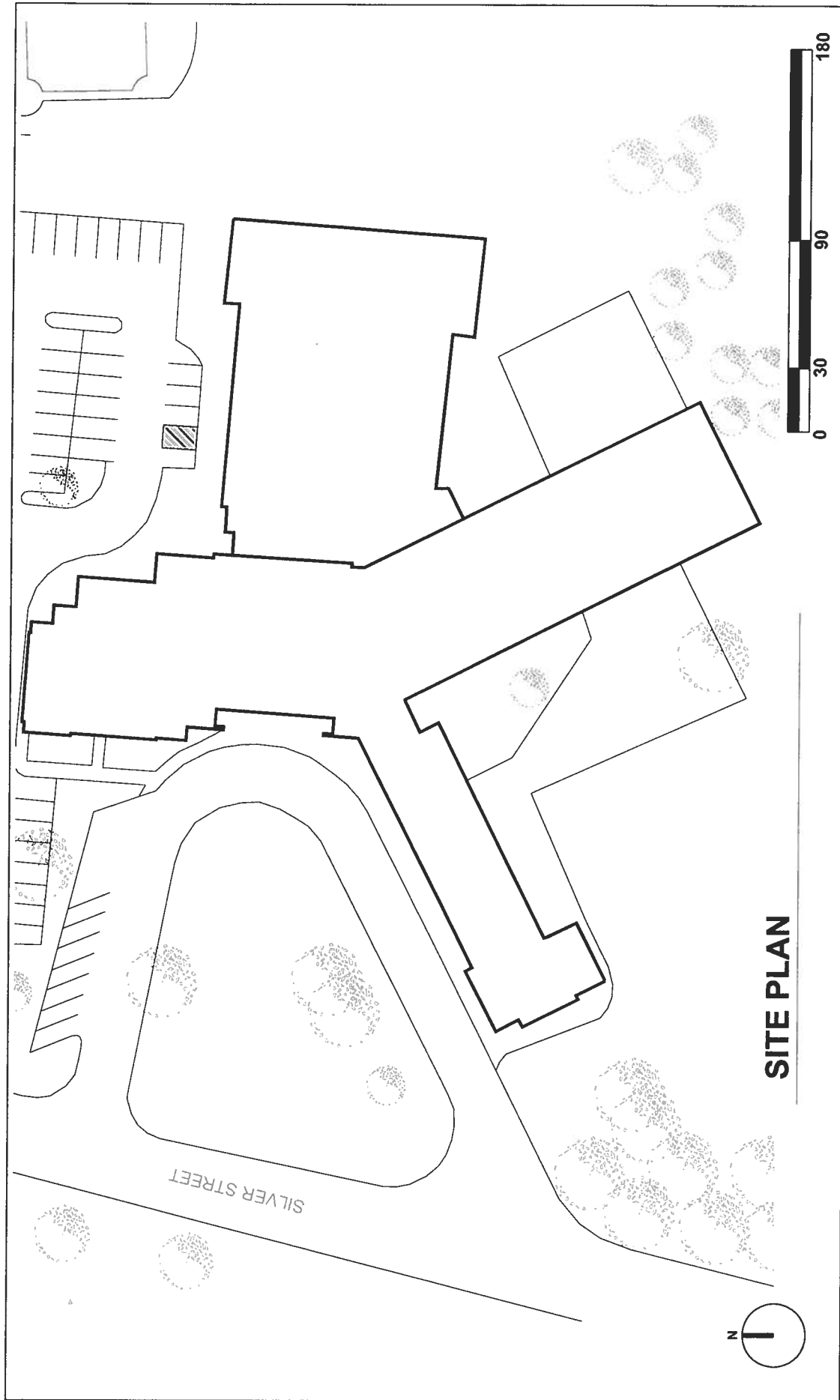
- Parcel Lines
- Thin Line
- Wetlands
- 25 Feet (Residential No-Disturb)
- 35 Feet (Commercial No-Disturb)
- 50 Feet (Buffer)
- 100 Feet (Zonation)
- Streets (All or Leases)

HANOVER GIS
TOWN OF HANOVER
PLANNING DEPARTMENT

NOTES & SOURCES

The information depicted on this map is for planning purposes only. It is not adequate for legal boundary definition, regulatory interpretation, or parcel-level analysis. This map was created using The Town of Hanover ArcReader 9.3 GIS Viewer. For more information contact Andrew R. Part, Town Planner for the Town of Hanover, at (603) 876-1841. Photogrammetric data and GIS coverage provided by Environmental Partners Group (EPG) in 2004. Initial source data provided by the Assessors Department and Department of Public Works. Additional layers were created by MassGIS and the Town Planner in 2004-2007.





SITE PLAN

D·R·A

**Drumey
Rosane
Anderson
Inc.**

Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459

617-964-1700
617-969-9054 fax

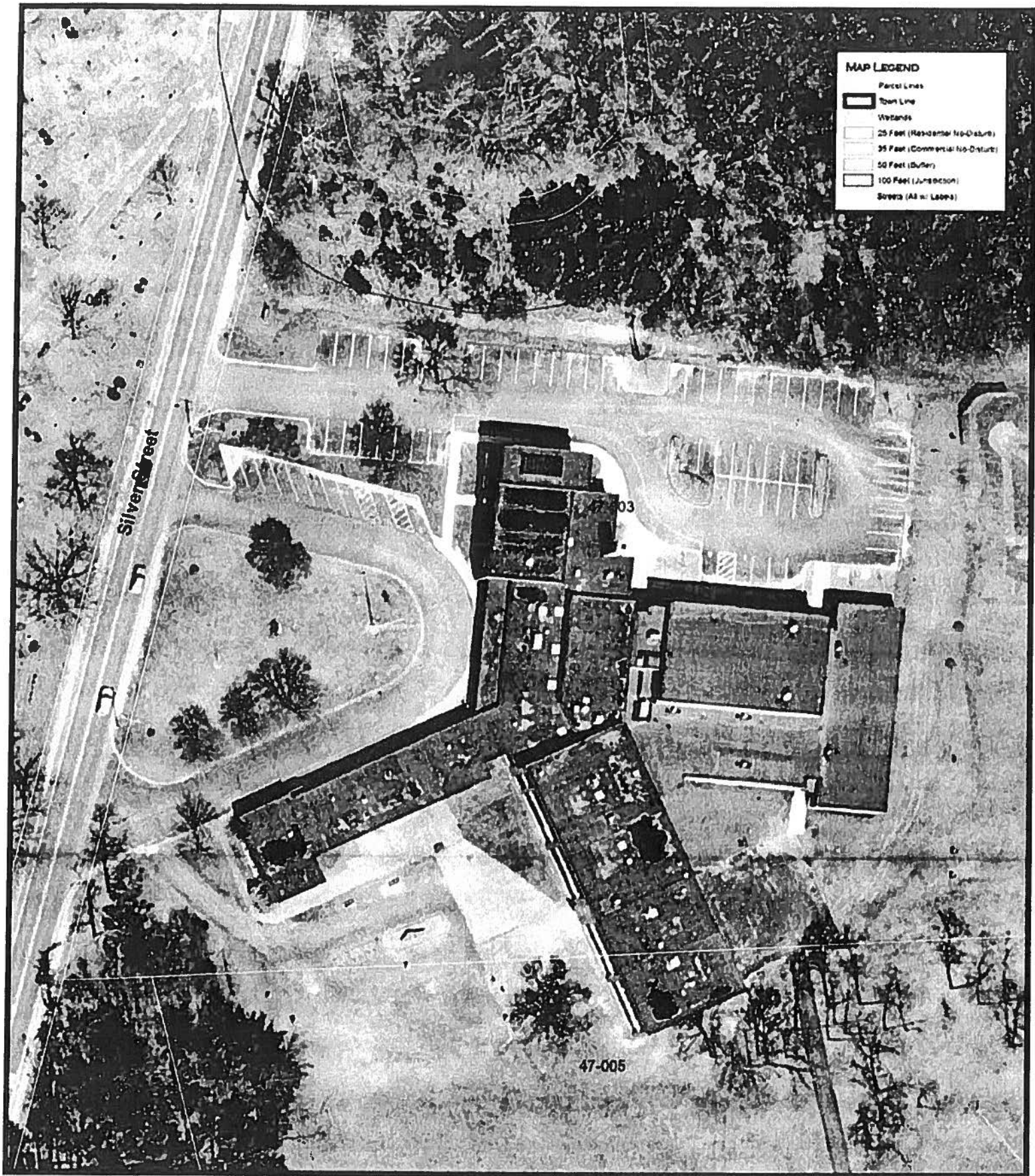
CENTER ELEMENTARY SCHOOL TOWN BUILDING STUDY

Hanover, Massachusetts

Scale: SEE BAR SCALE

Drawn by: E.J.L.

Job# 09017.00



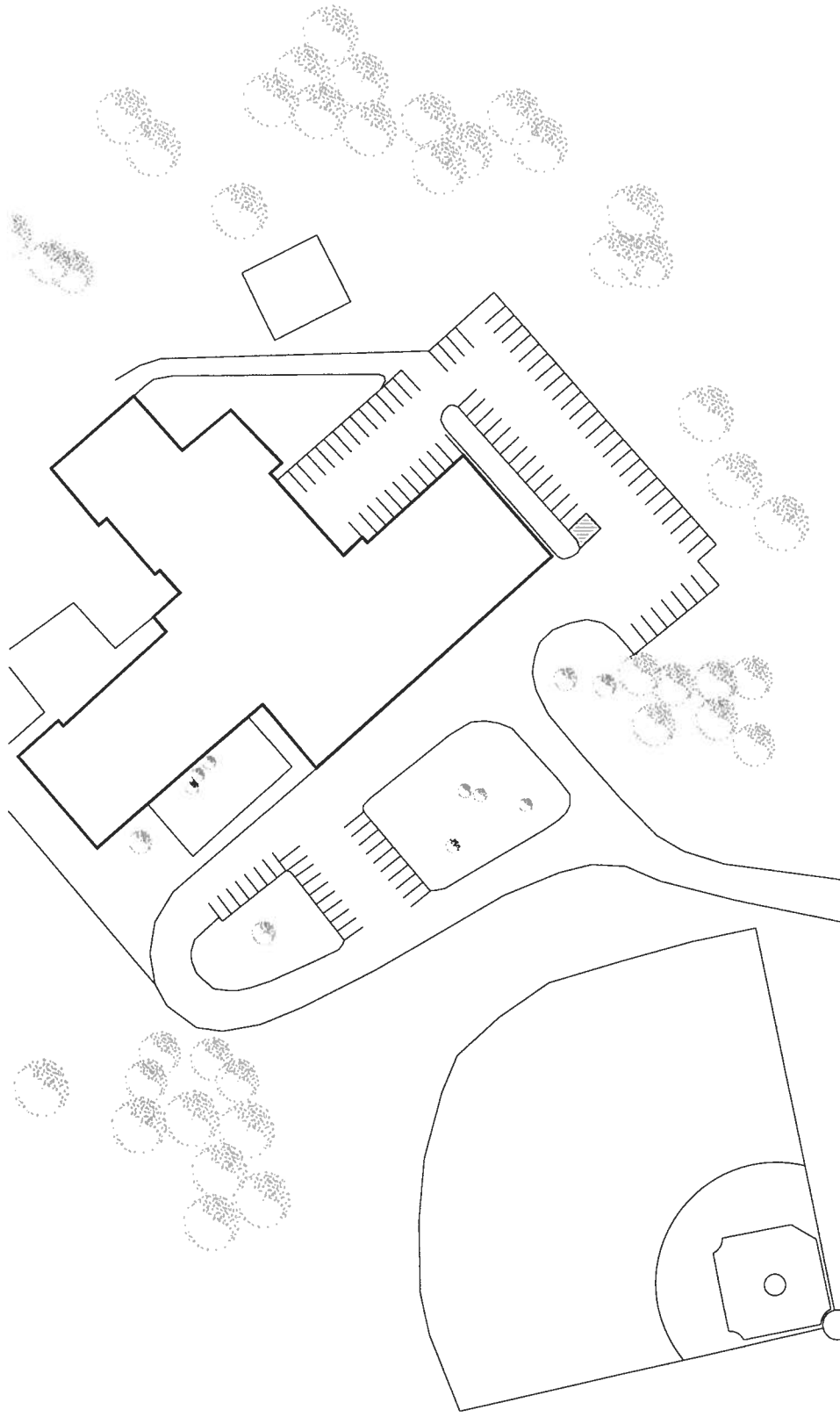
MAP LEGEND	
	Parcel Lines
	Thin Line
	Wetlands
	25 Feet (Residential No-Disturb)
	35 Feet (Commercial No-Disturb)
	50 Feet (Buffer)
	100 Feet (Jurisdiction)
	Setbacks (All w/ Leases)

CEDAR SCHOOL TOWN BUILDING STUDY Hanover, Massachusetts

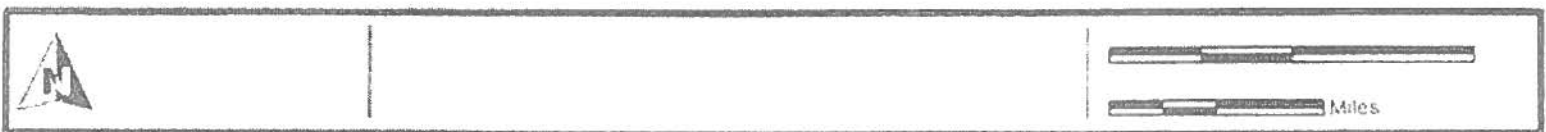
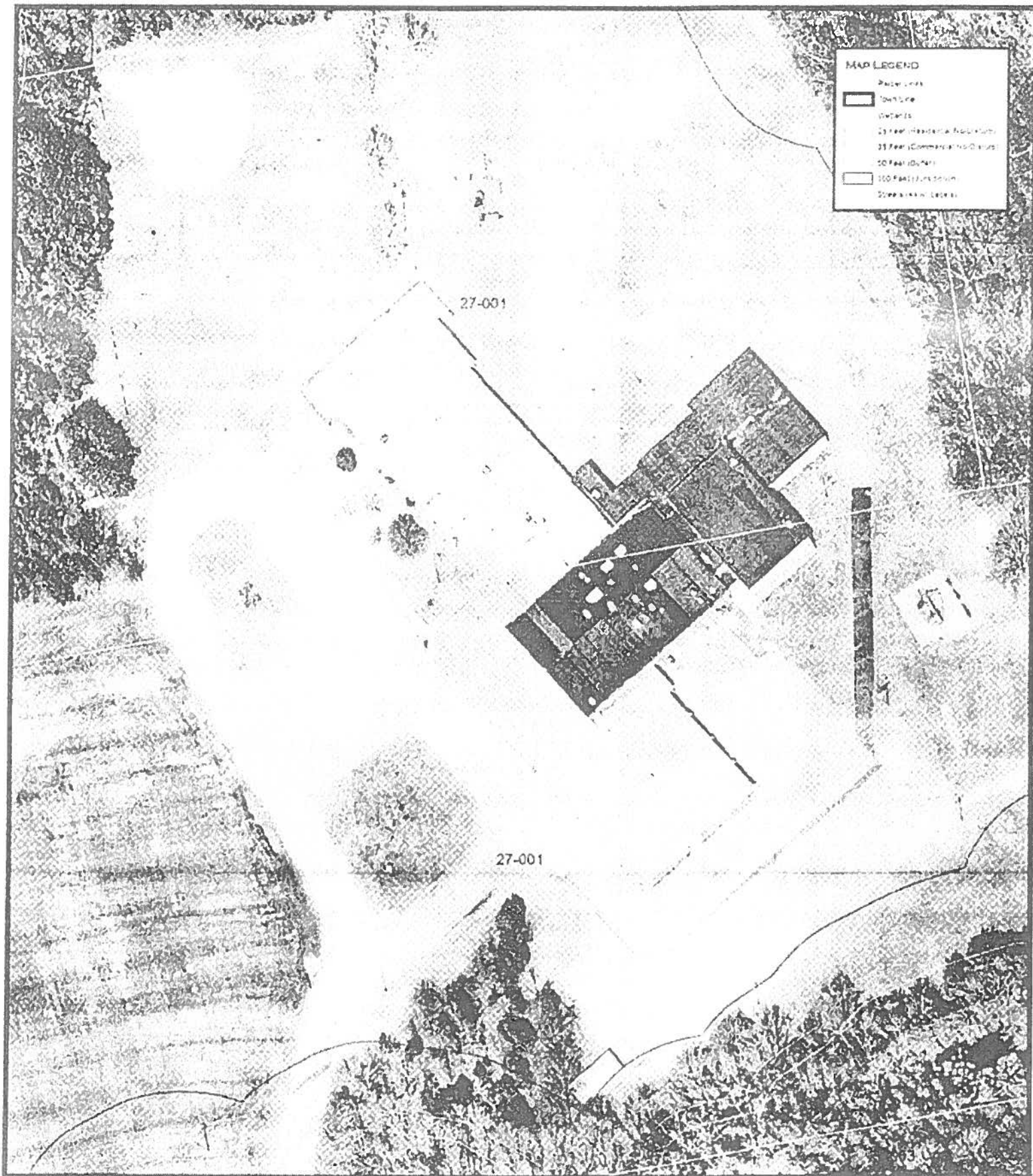
Scale: SEE BAR SCALE

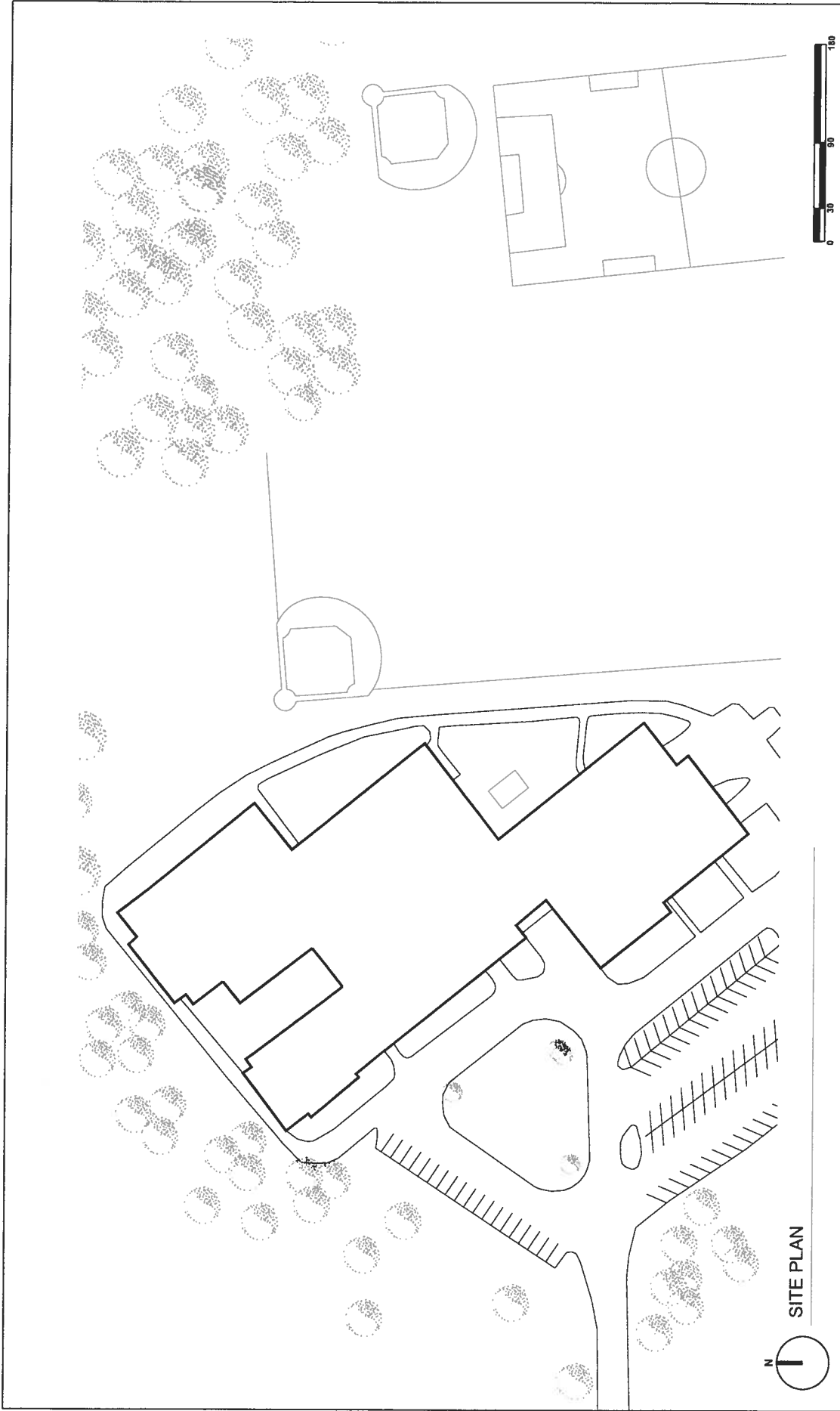
Drawn by: MJQ

Job# 09017.00



SITE PLAN





D·R·A

**Drumme
Rosane
Anderson
Inc.**

Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459

617-964-1700
617-969-9054 fax

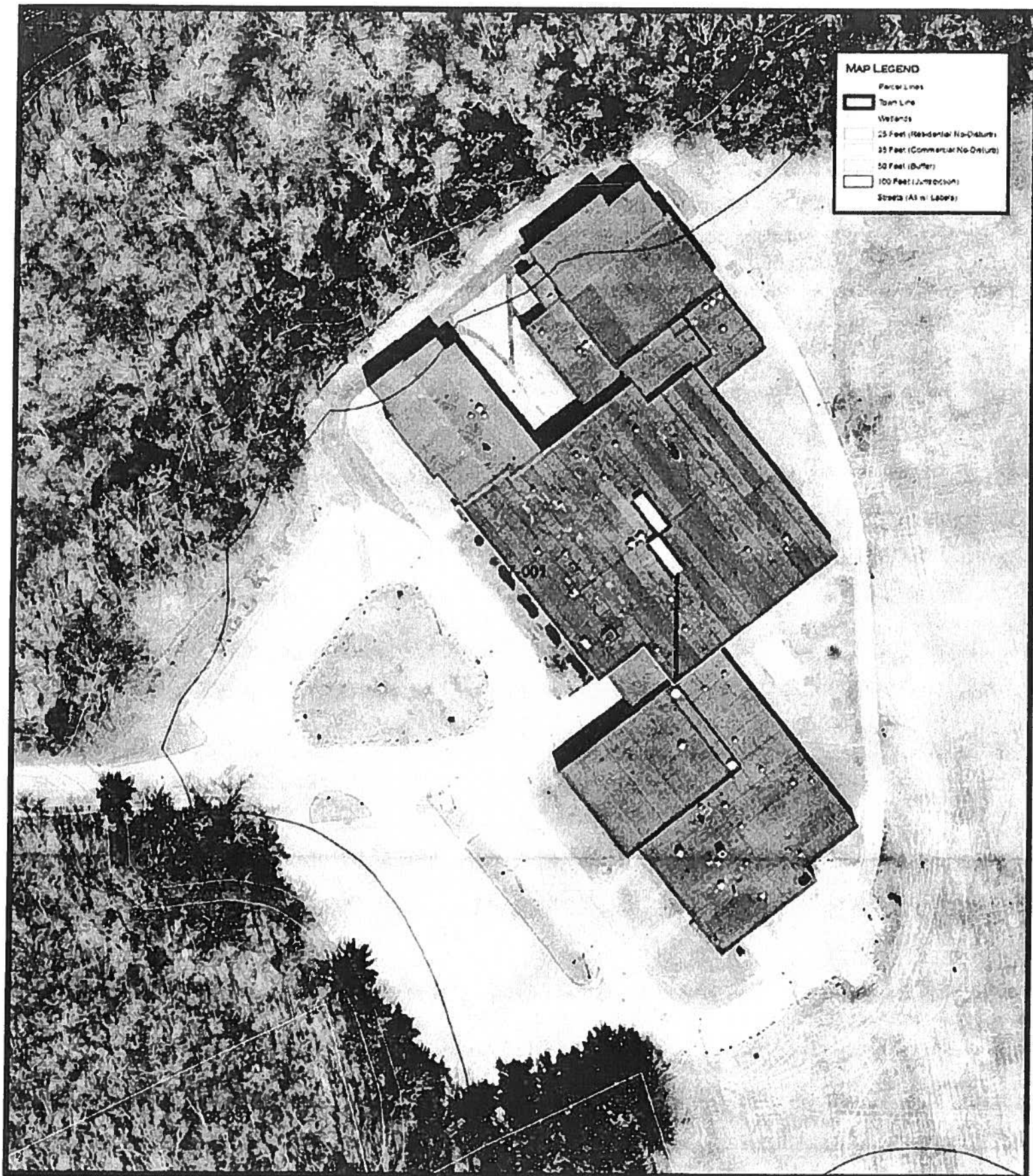
HANOVER MIDDLE SCHOOL TOWN BUILDING STUDY

Hanover, Massachusetts

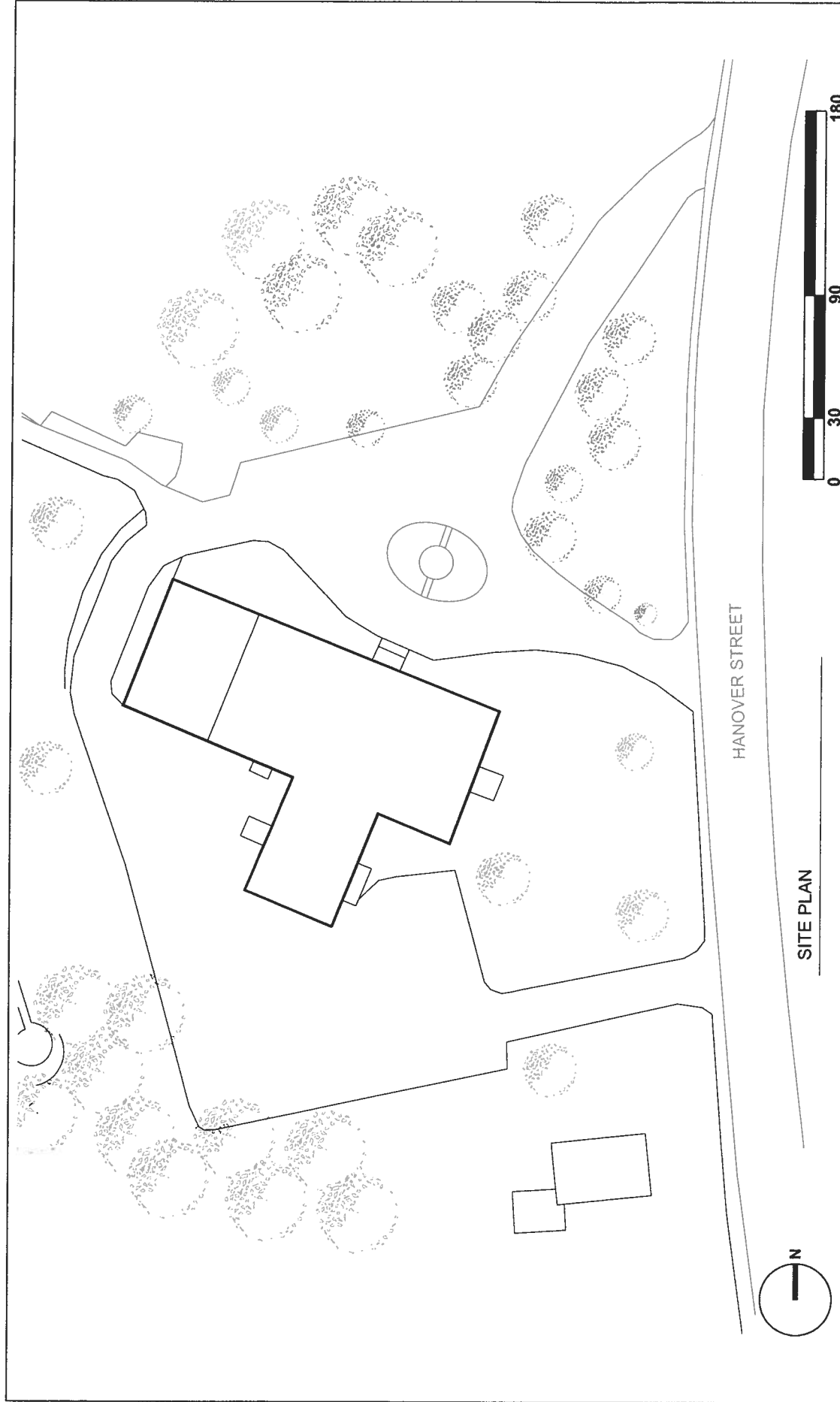
Scale: SEE BAR SCALE

Drawn by: MJQ

Job# 09017.00



HANOVER GIS
TOWN OF HANOVER
PLANNING DEPARTMENT



D·R·A

**Drumme
Rosane
Anderson
Inc.**

Architecture
Interior Design

Colby Hall
141 Hemick Road
Newton Centre, MA
02459

617-964-1700
617-969-9054 fax

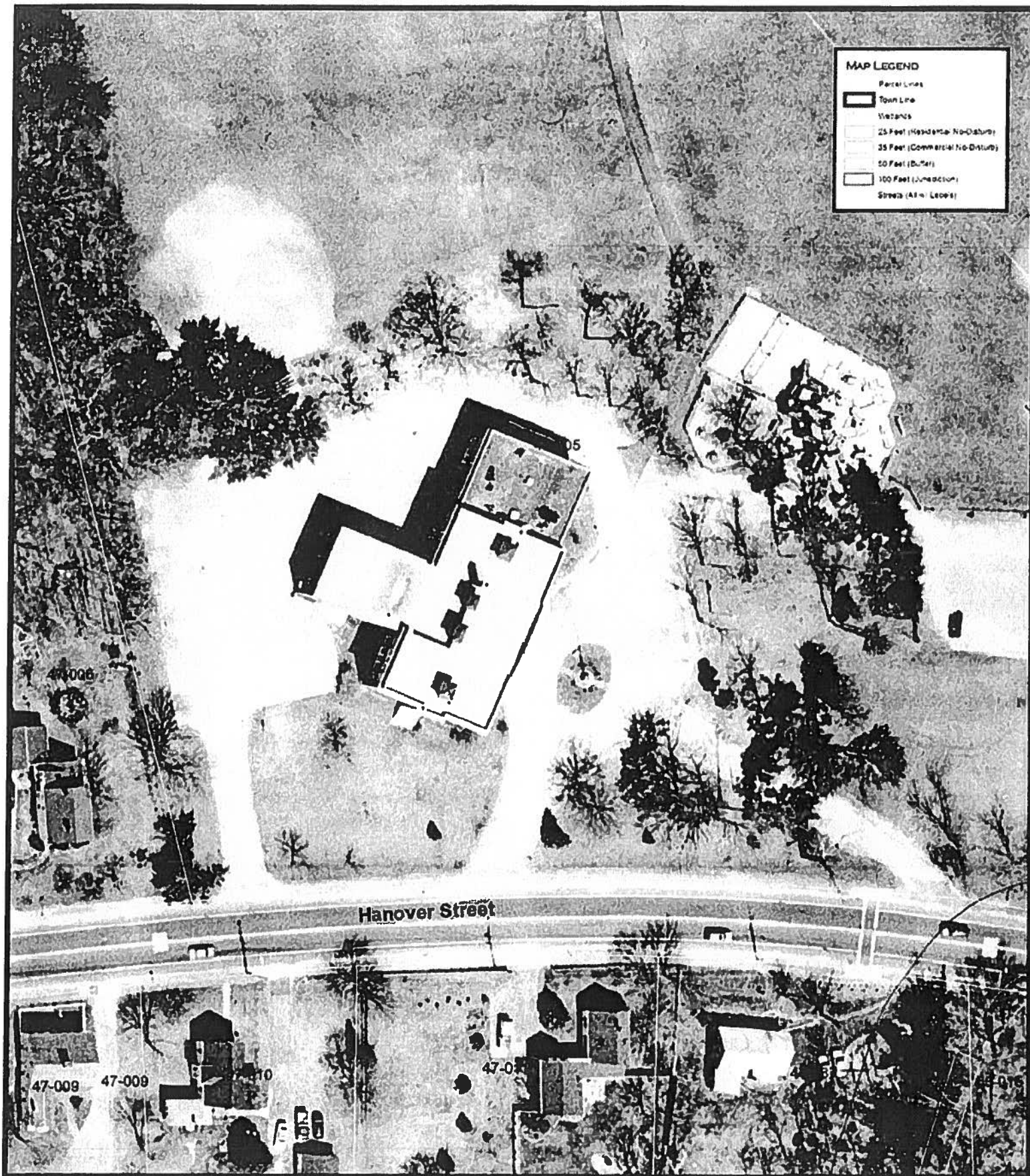
SYLVESTER SCHOOL TOWN BUILDING STUDY

Hanover, Massachusetts

Scale: SEE BAR SCALE

Drawn by: E.J.L.

Job# 09017.00

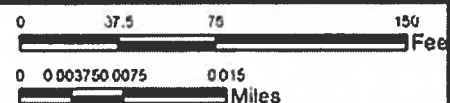


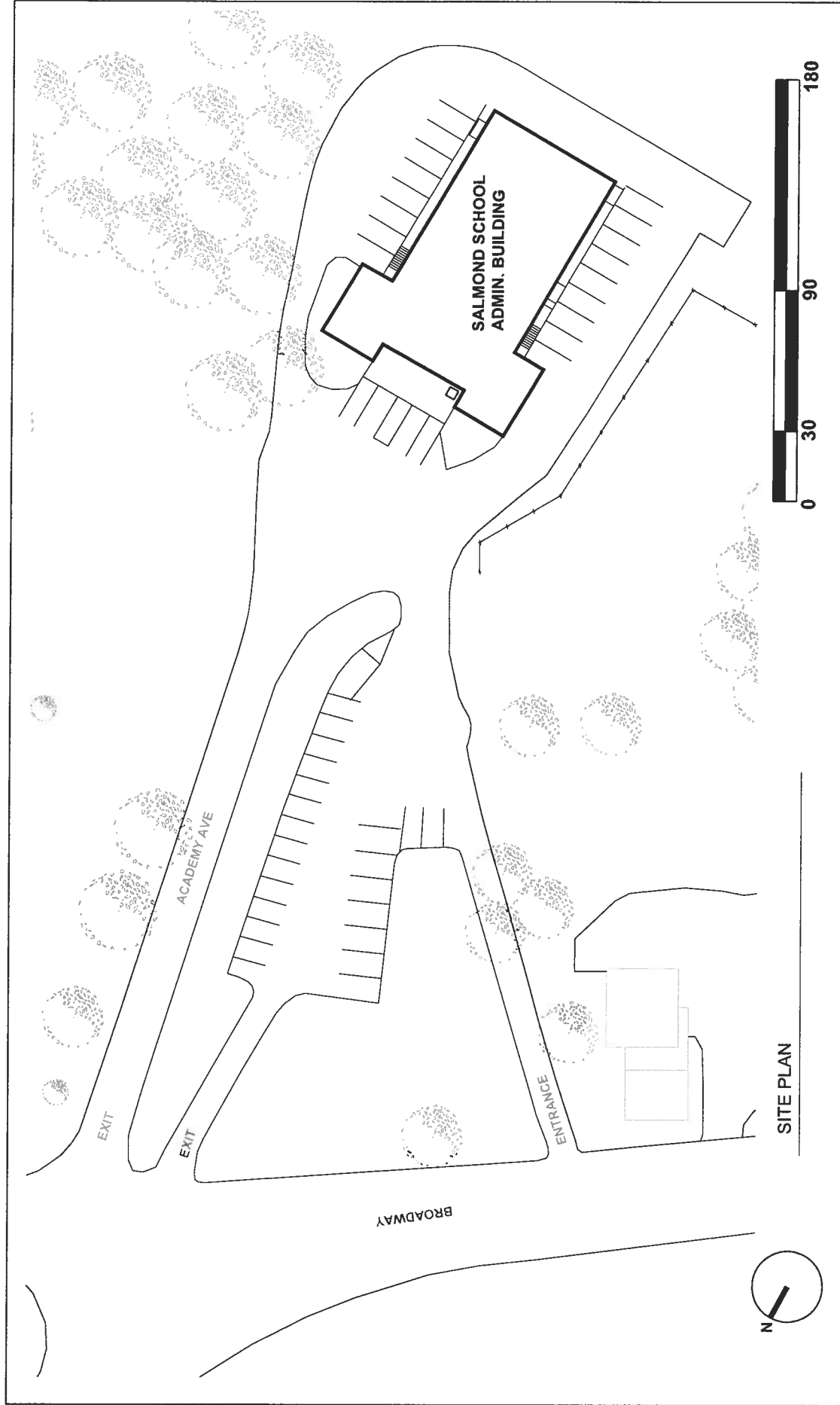
MAP LEGEND

- Parcel Lines
- Town Line
- Vegetation
- 25 Feet (Residential No-Disturb)
- 35 Feet (Commercial No-Disturb)
- 50 Feet (Buffer)
- 100 Feet (Junction)
- Streets (At 10' Level)

HANOVER GIS
TOWN OF HANOVER
PLANNING DEPARTMENT

NOTES & SOURCES:
The information depicted on this map is for planning purposes only. It is not adequate for legal boundary definition, regulatory interpretation, or parcel-level analysis. This map was created using The Town of Hanover ArcReader 8.2 GIS Viewer. For more information contact Andrea R. Park, Town Planner for the Town of Hanover, at (781) 826-7441. Photogrammetric land use data and GIS coverage is provided by Environmental Partners Group (EPG) in 2004. Initial source data provided by the Assessment Department and Department of Public Works. Additional layers were created by MassGIS and the Town Planner in 2004-2007.





SALMOND SCHOOL TOWN BUILDING STUDY

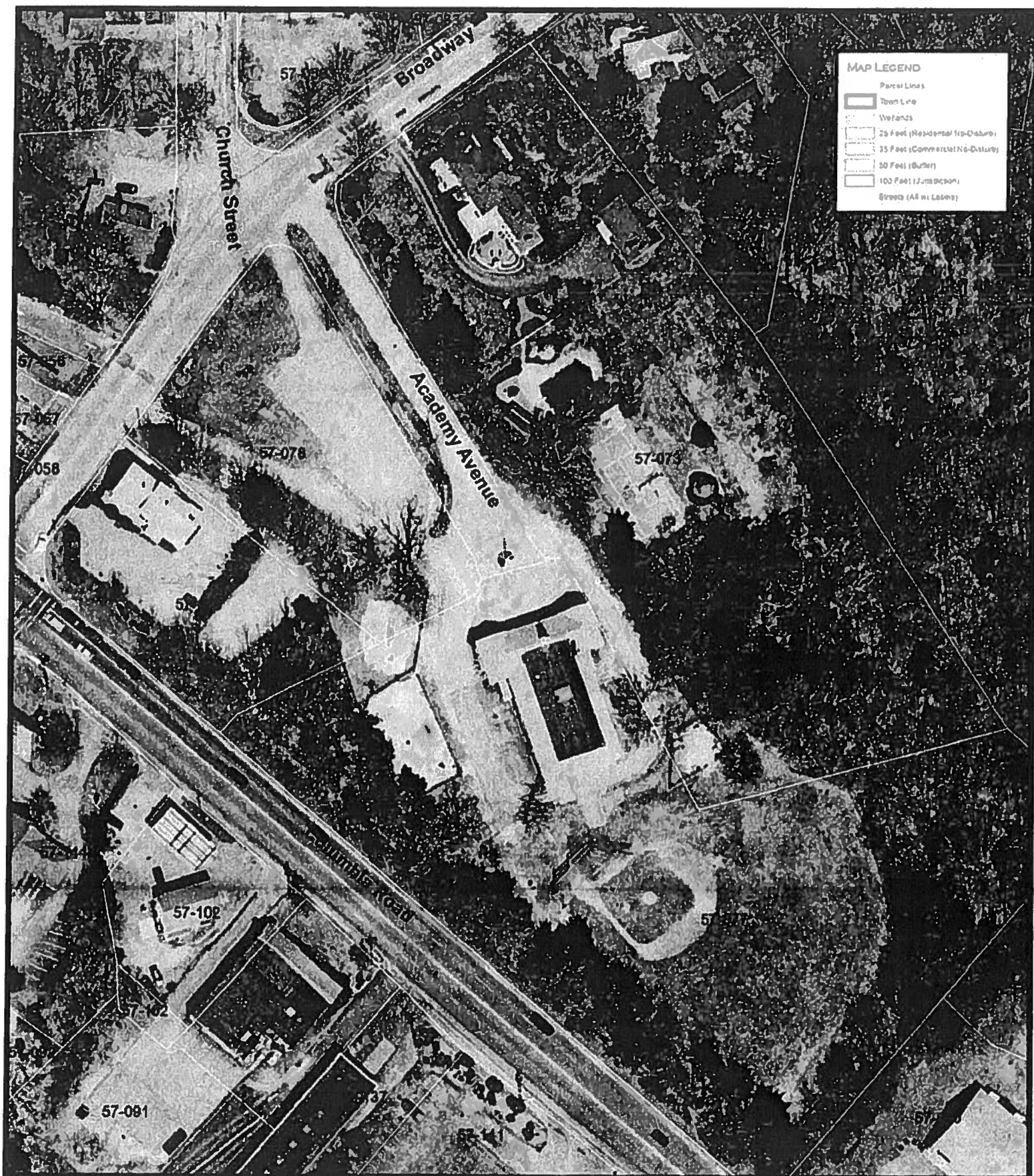
Hanover, Massachusetts

Scale: SEE BAR SCALE
 Drawn by: EJL
 Job#: 09017.00

Colby Hall
 141 Herrick Road
 Newton Centre, MA
 02459
 617-964-1700
 617-969-9054 fax

Drumme
 Rosane
 Anderson
 Inc.
 Architecture
 Interior Design

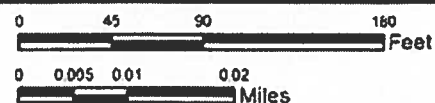
D·R·A

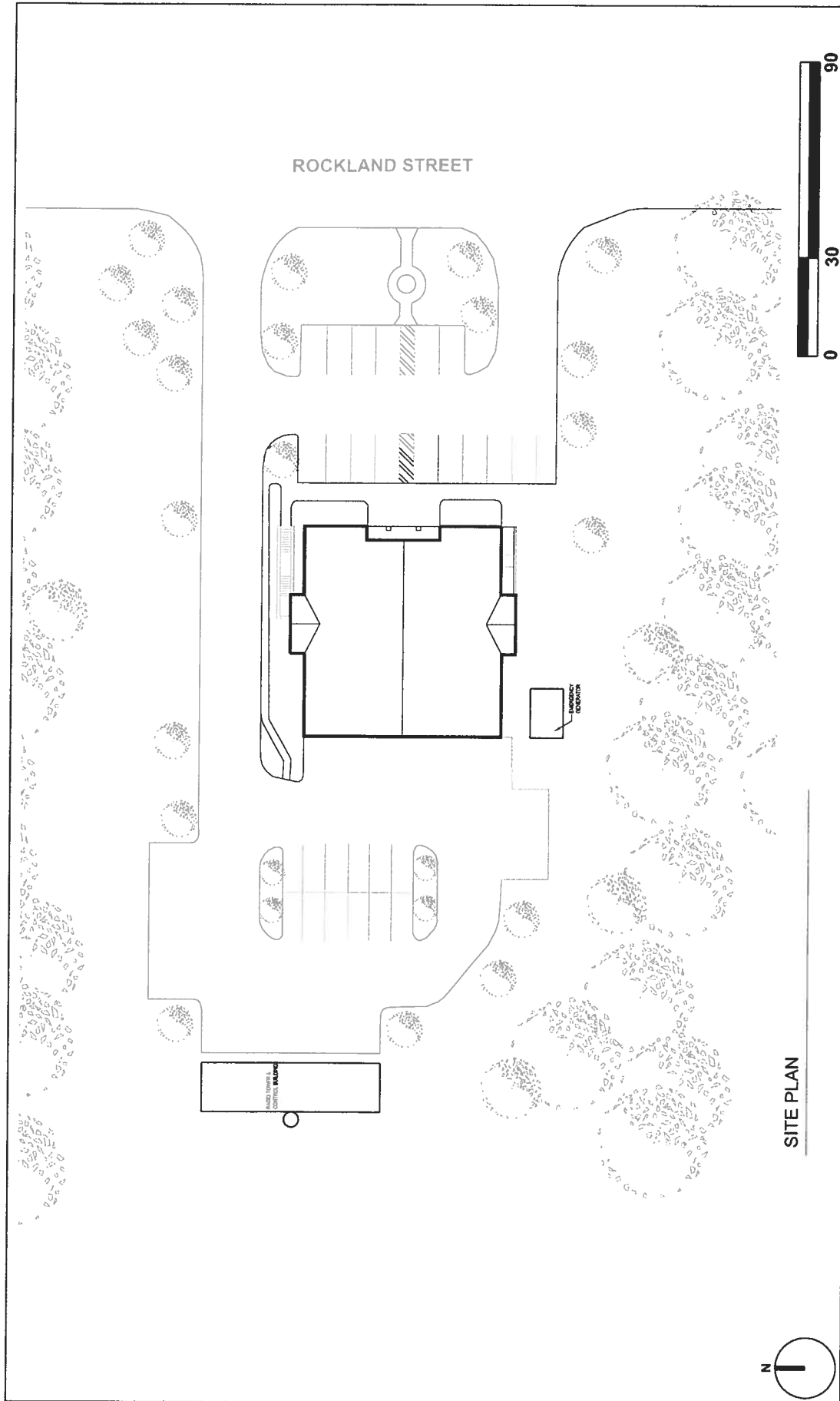


HANOVER GIS
TOWN OF HANOVER
PLANNING DEPARTMENT

NOTES & SOURCES:

The information depicted on this map is for planning purposes only. It is not adequate for legal boundary definition, regulatory interpretation, or political level analysis. This map was created using The Town of Hanover ArcReader 9.3 GIS Viewer. For more information contact Andrew R. Port, Town Planner for the Town of Hanover, at (603) 885-1441. Photogrammetric imagery data and GIS coverage are provided by Environmental Partners Group (EPG) in 2004. Initial source data provided by the Assessors' Department and Department of Public Works. Additional layers were created by MassGIS and the Town Planner in 2004-2005.



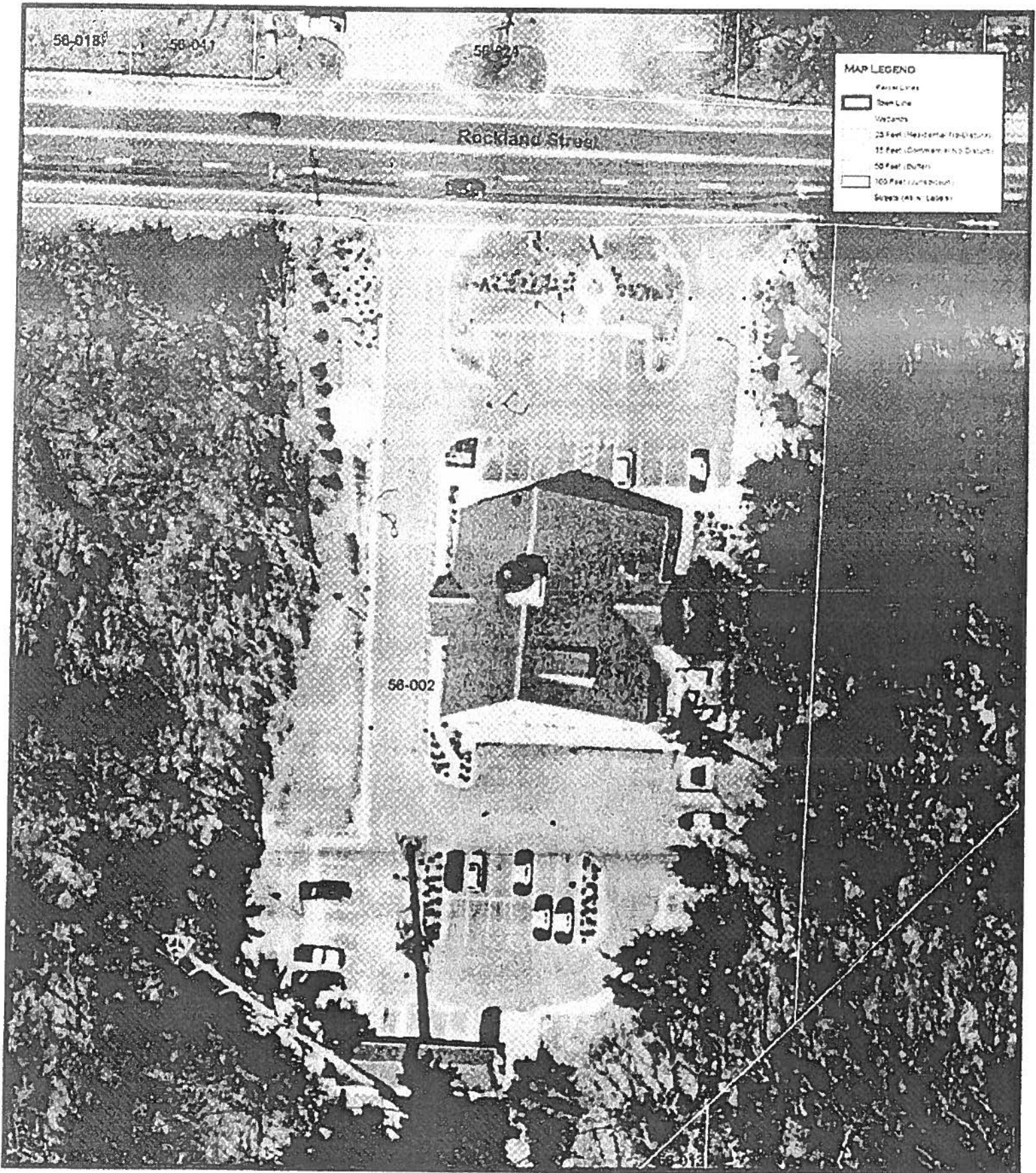


Drumey
Rosane
Anderson
Inc.
Architecture
Interior Design

Colby Hall
141 Herlick Road
Newton Centre, MA
02459
617-964-1700
617-969-9054 fax

POLICE STATION TOWN BUILDING STUDY Hanover, Massachusetts

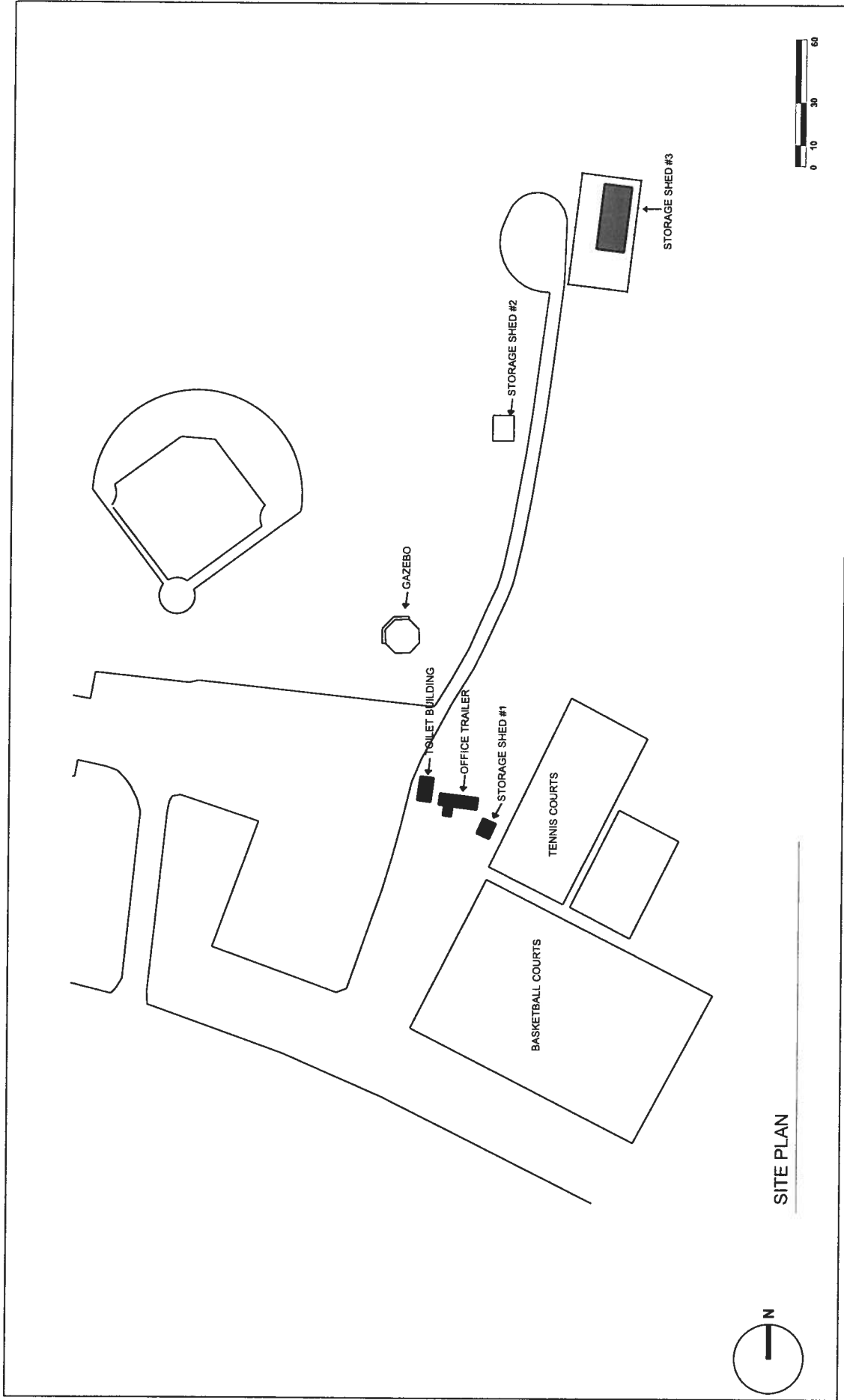
Scale: SEE BAR SCALE
Drawn by: MJQ
Job# 09017.00



HANOVER GIS
TOWN OF HANOVER
PLANNING DEPARTMENT

NOTES & SOURCES

The information depicted on this map is for planning purposes only. It is not a substitute for legal, boundary definition, regulatory interpretation or parcel level analysis. This map was created using the Town of Hanover's Aerial 0.2 GTS Viewer. For more information contact Andrew J. Hunt, Town Planner for the Town of Hanover, 610-818-2574. Photographs and land use data are GTS imagery provided by Environmental Partners Group (EPG) on 2004. Aerial photo data provided by the Assessor's Maps and Geographic Information Systems. Additional layers were created by MassGIS and the Town Planner in 2004-2007.



D·R·A

**Drumney
Rosane
Anderson
Inc.**

Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459

617-964-1700
617-969-9054 fax

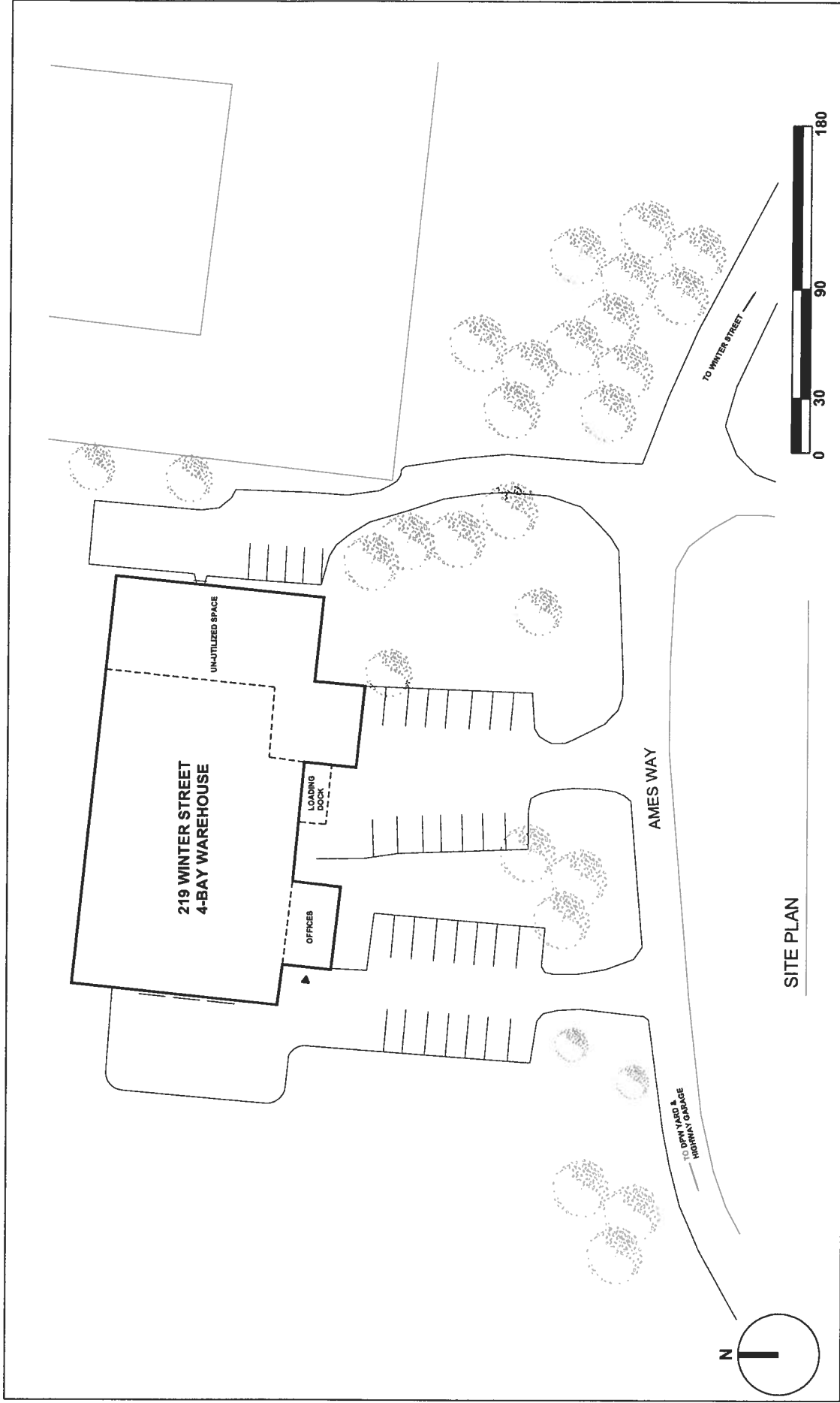
EVERESTT HALL FACILITIES TOWN BUILDING STUDY

Hanover, Massachusetts

Scale: SEE BAR SCALE

Drawn by: EJL

Job# 09017.00



SITE PLAN

D·R·A

Drumme
Rosane
Anderson
Inc.

Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459

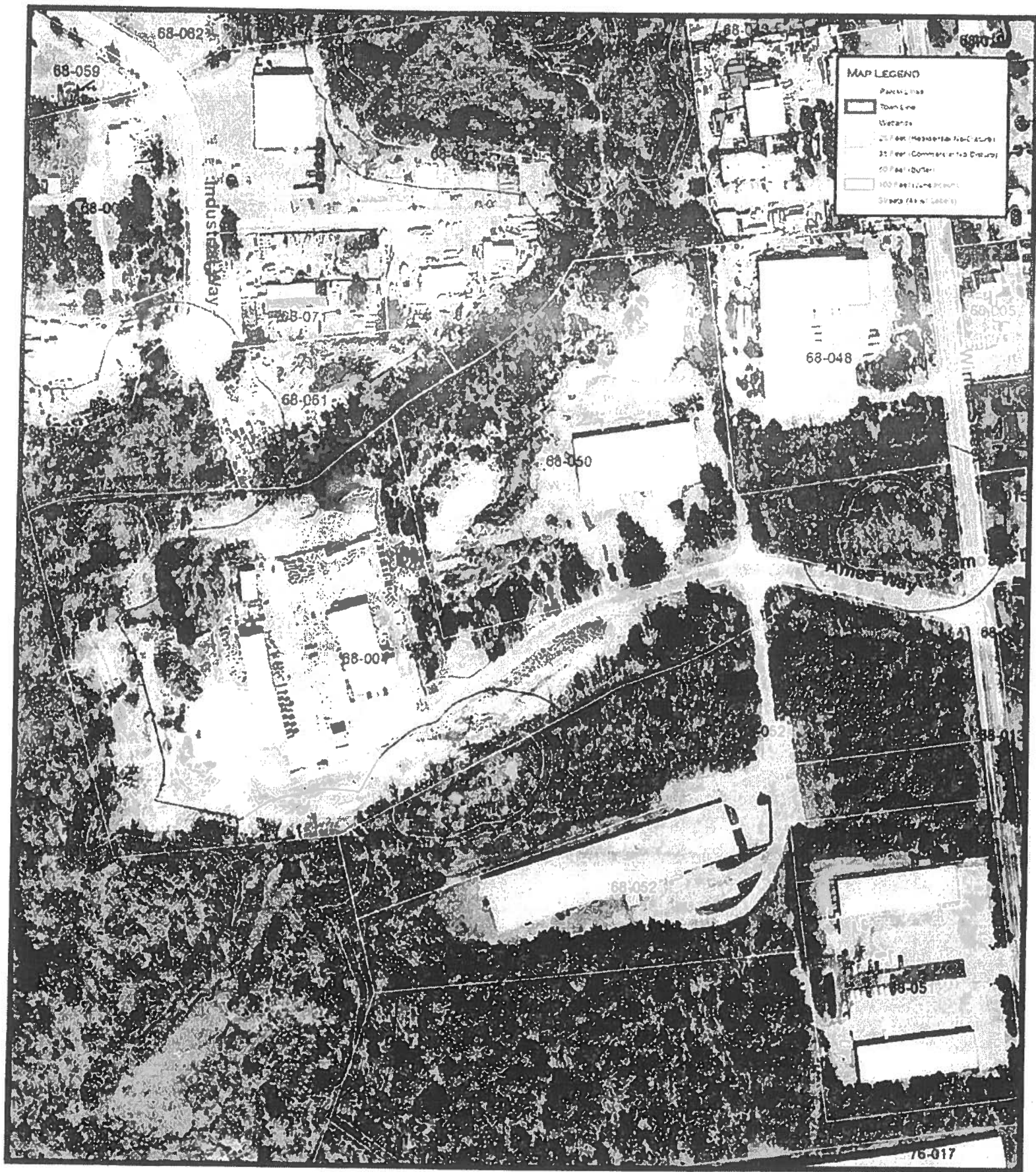
617-964-1700
617-969-9054 fax

DPW 219 WINTER STREET TOWN BUILDING STUDY Hanover, Massachusetts

Scale: SEE BAR SCALE

Drawn by: MJQ

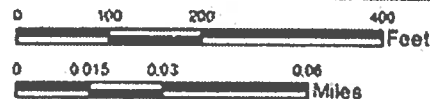
Job# 09017.00

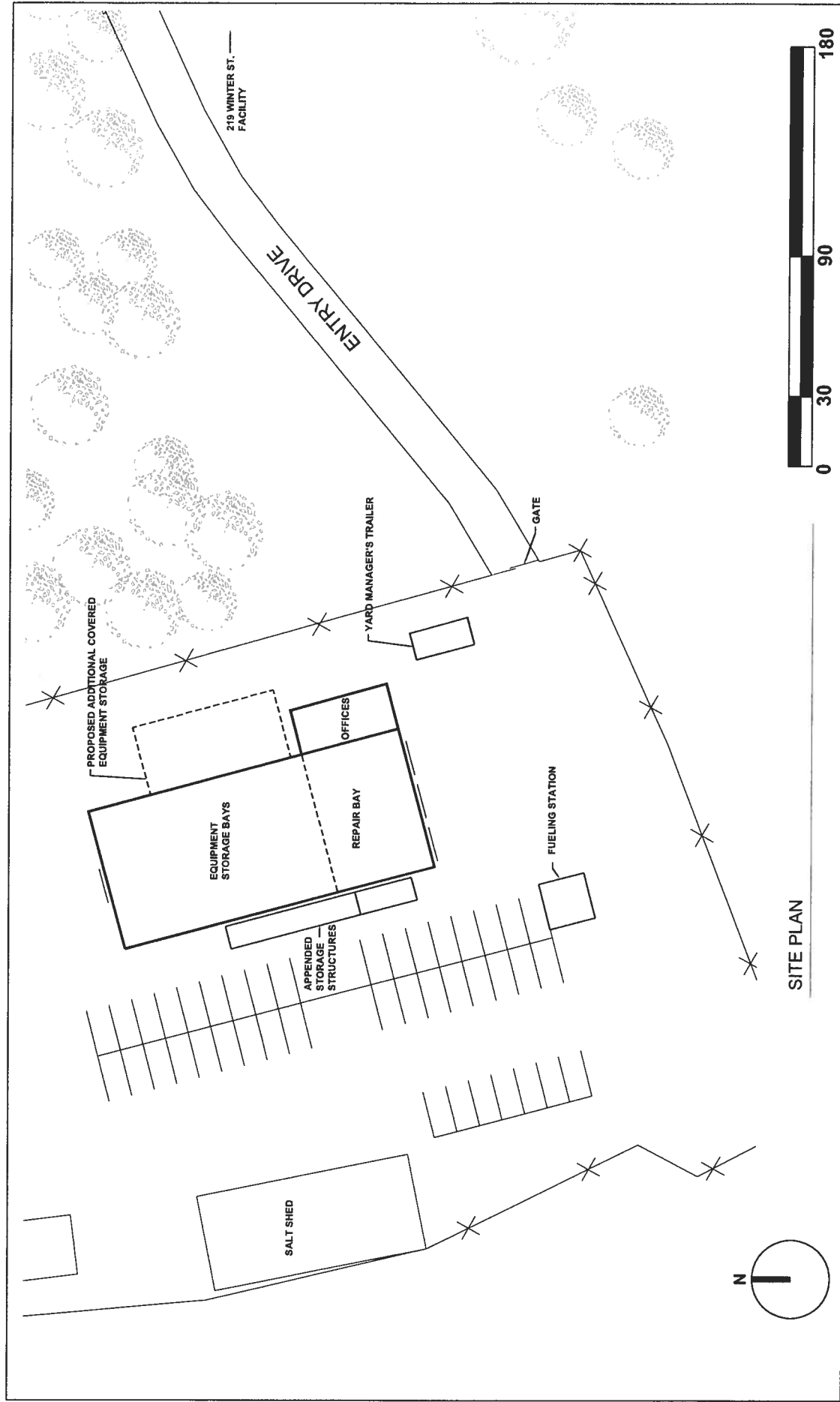


HANOVER GIS
TOWN OF HANOVER
PLANNING DEPARTMENT

NOTES & SOURCES:

The information depicted on this map is for planning purposes only. It is not adequate for legal boundary definition, regulatory interpretation, or political line analysis. This map was created using The Town of Hanover Aerials or 3.0 Cell View. For more information contact Audrey R. Park, Town Planner at the Town of Hanover, at (603) 886-7441. Photogrammetric landscape data and GIS coverage provided by Environmental Resource Group (ERG) in 2004. Initial design data provided by the Assessor's Department and Department of Public Works. Additional layers were created by Megan GDS and the Town Planner in 2004-2007.





Drumney
Rosane
Anderson
Inc.

Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459

617-964-1700
617-969-9054 fax

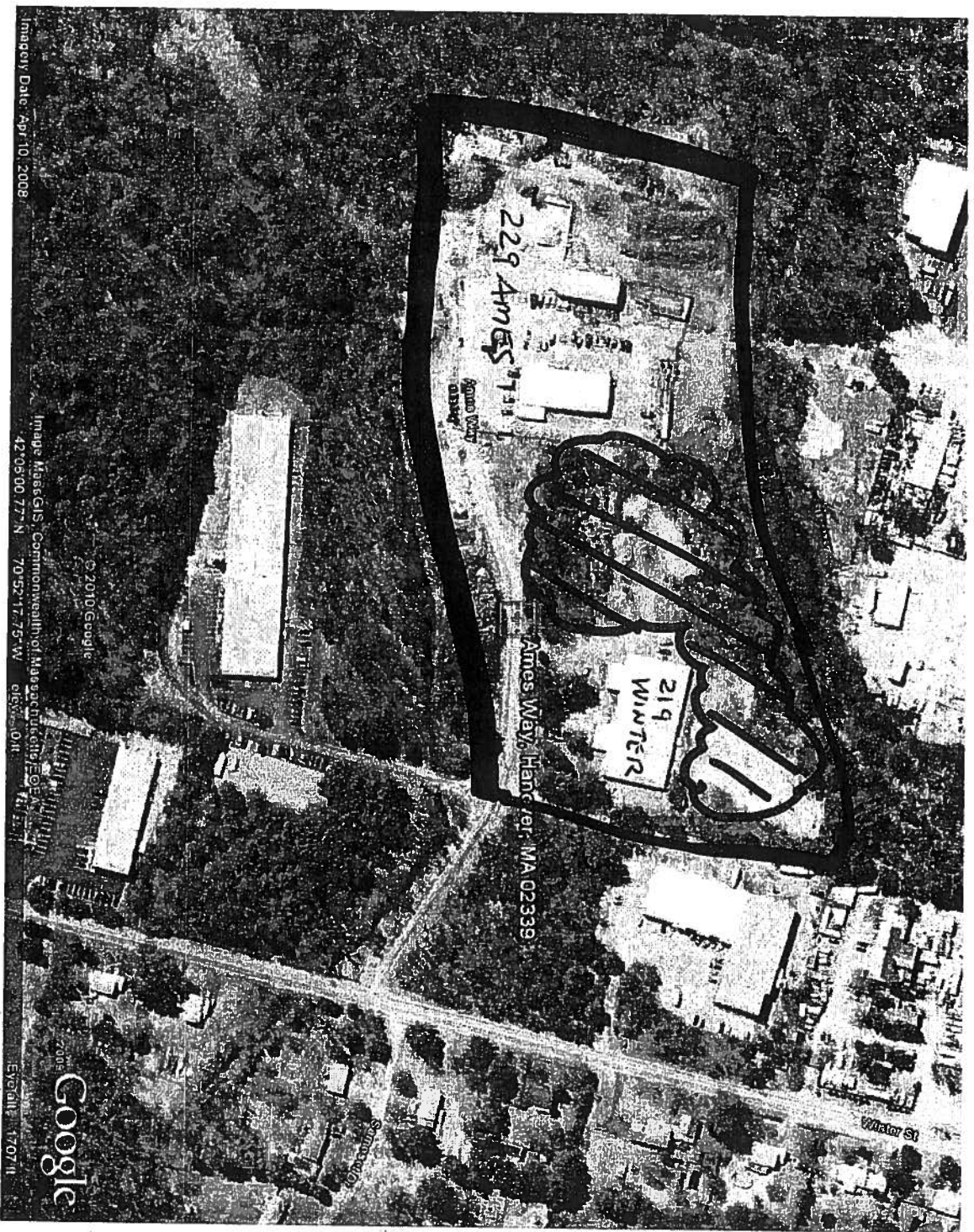
HIGHWAY GARAGE TOWN BUILDING STUDY

Hanover, Massachusetts

Scale: SEE BAR SCALE

Drawn by: E.J.L.

Job# 09017.00



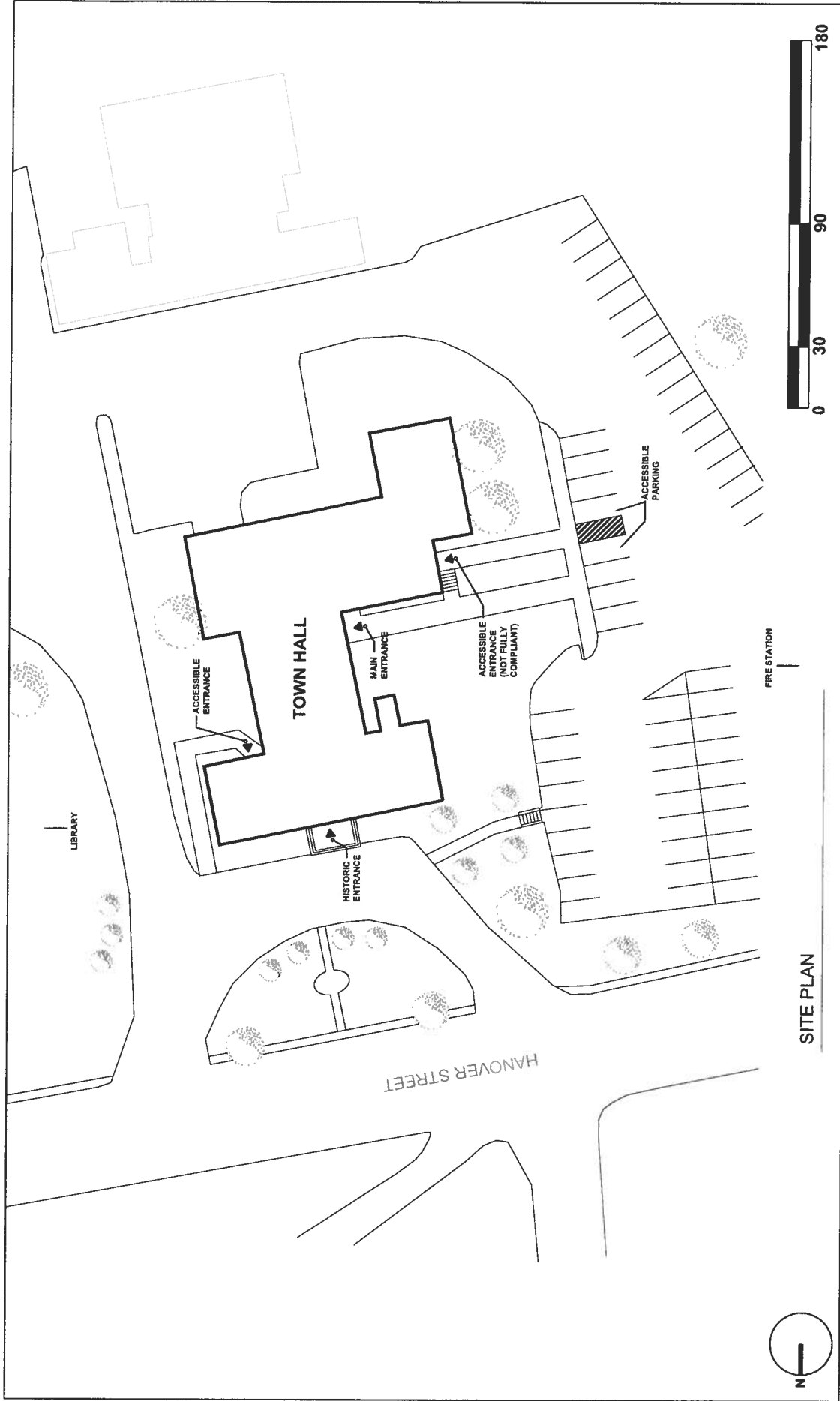
UNDER UTILIZED
SPACE



Nitsch Engineering
186 Lincoln Street, Suite 200
Boston, MA 02111-2403

Haverhill DPW Yards

June 2010



D·R·A

Drumey
Rosane
Anderson
Inc.

Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459

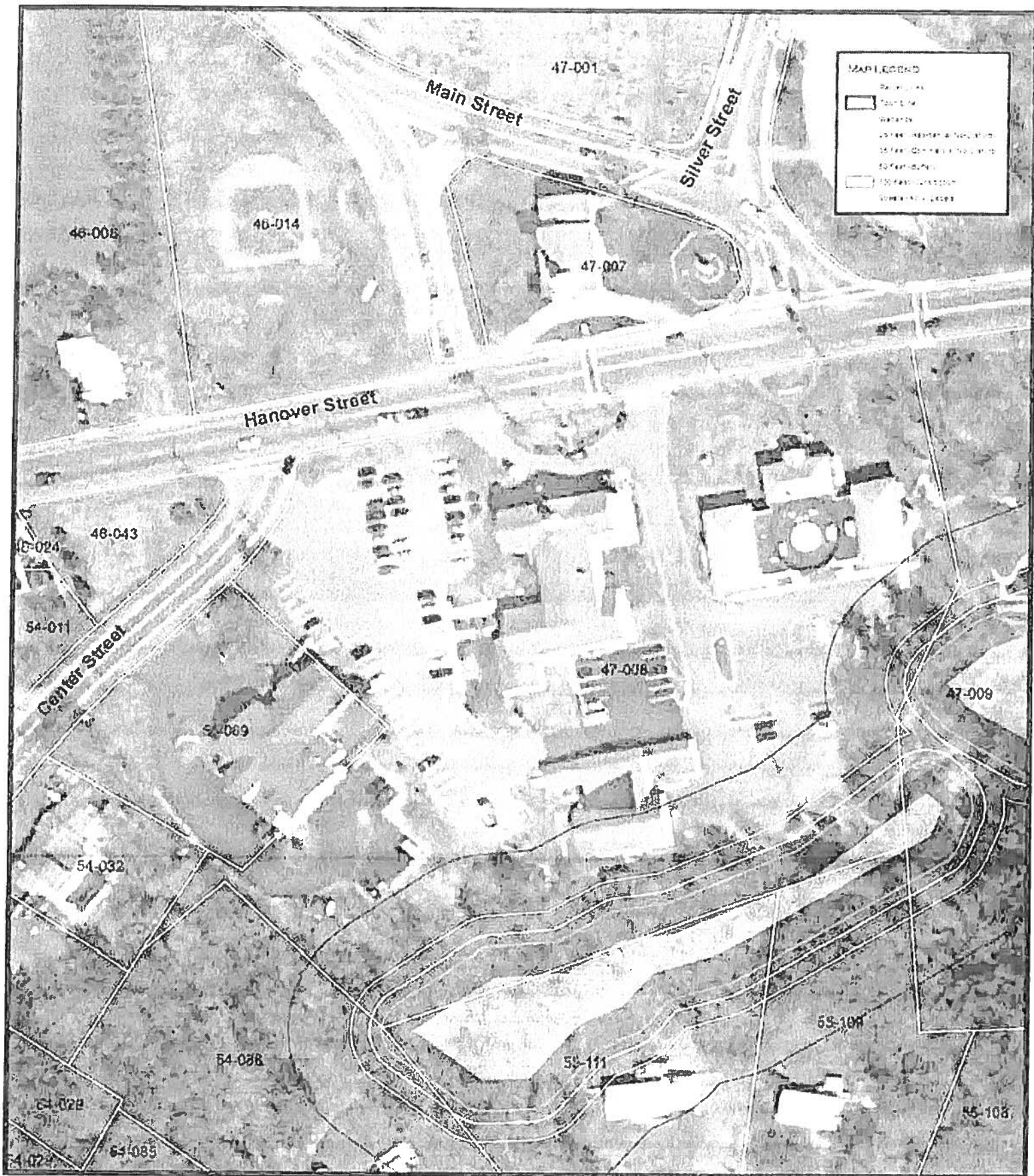
617-964-1700
617-969-9054 fax

TOWN HALL TOWN BUILDING STUDY Hanover, Massachusetts

Scale: SEE BAR SCALE

Drawn by: CHM

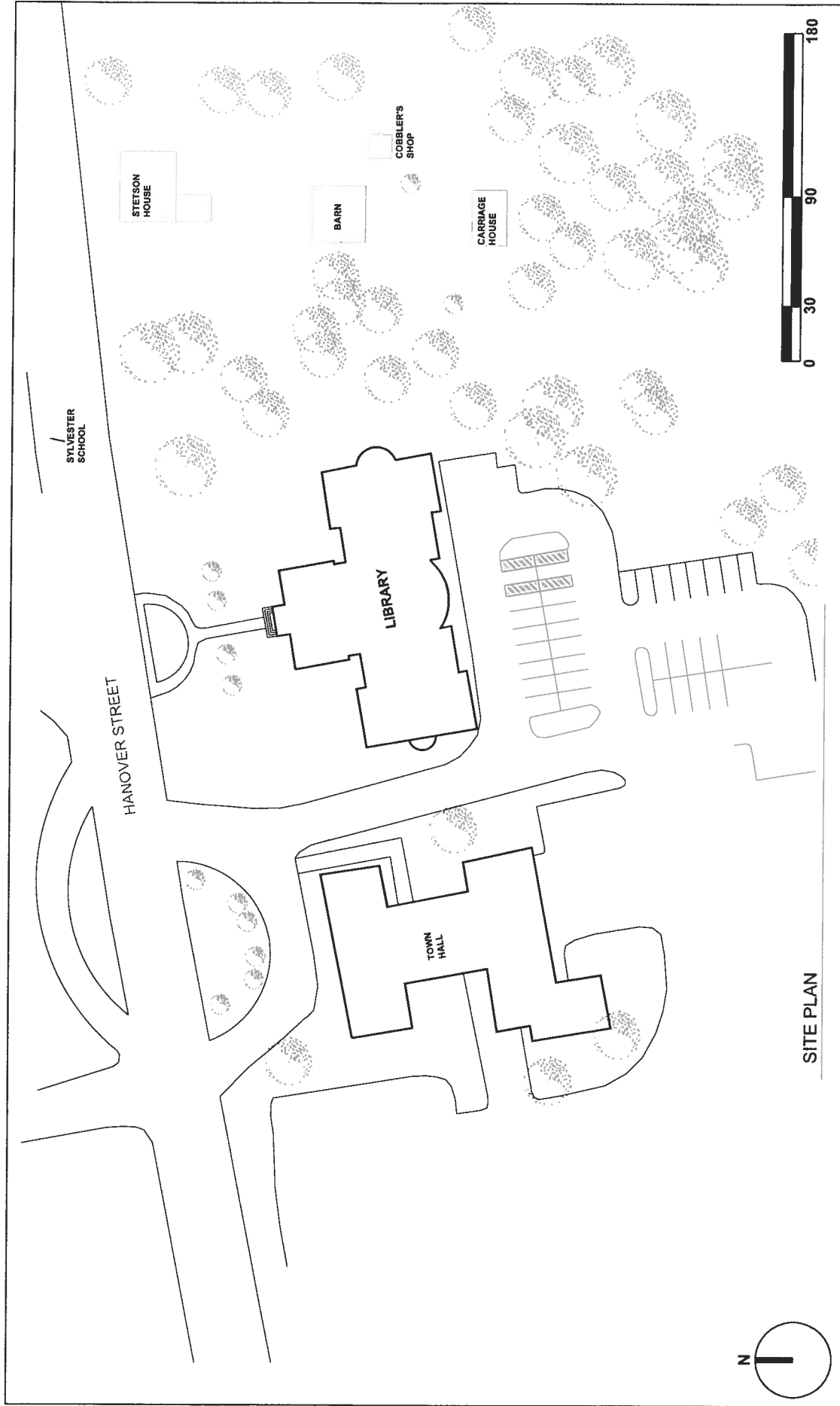
Job# 09017.00



NOTES & SOURCES

The information depicted on this map is for planning purposes only. It is not suitable for legal boundary definition, regulatory enforcement, or parcel analysis. This map was created using the Town of Hanover Air Photo 2002. For more information, please contact the Town of Hanover Planning Department at (603) 825-1661. Imagery and other maps are available at the GIS Center, 100 Main Street, Hanover, NH 03041. Imagery and other maps are available at the GIS Center, 100 Main Street, Hanover, NH 03041. Imagery and other maps are available at the GIS Center, 100 Main Street, Hanover, NH 03041.





D·R·A

**Drumney
Rosane
Anderson
Inc.**

Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459

617-964-1700
617-969-9054 fax

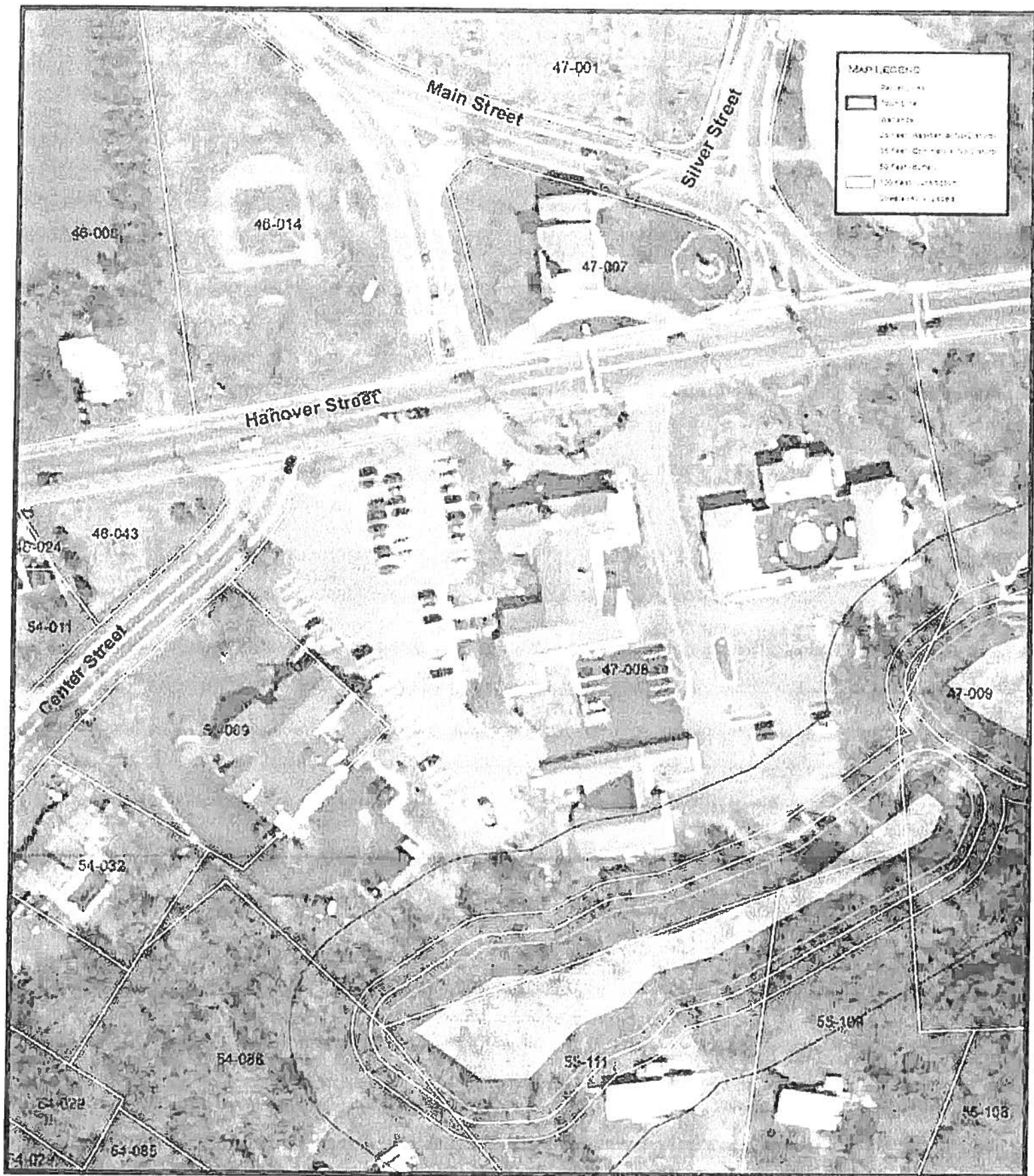
JOHN CURTIS FREE LIBRARY TOWN BUILDING STUDY

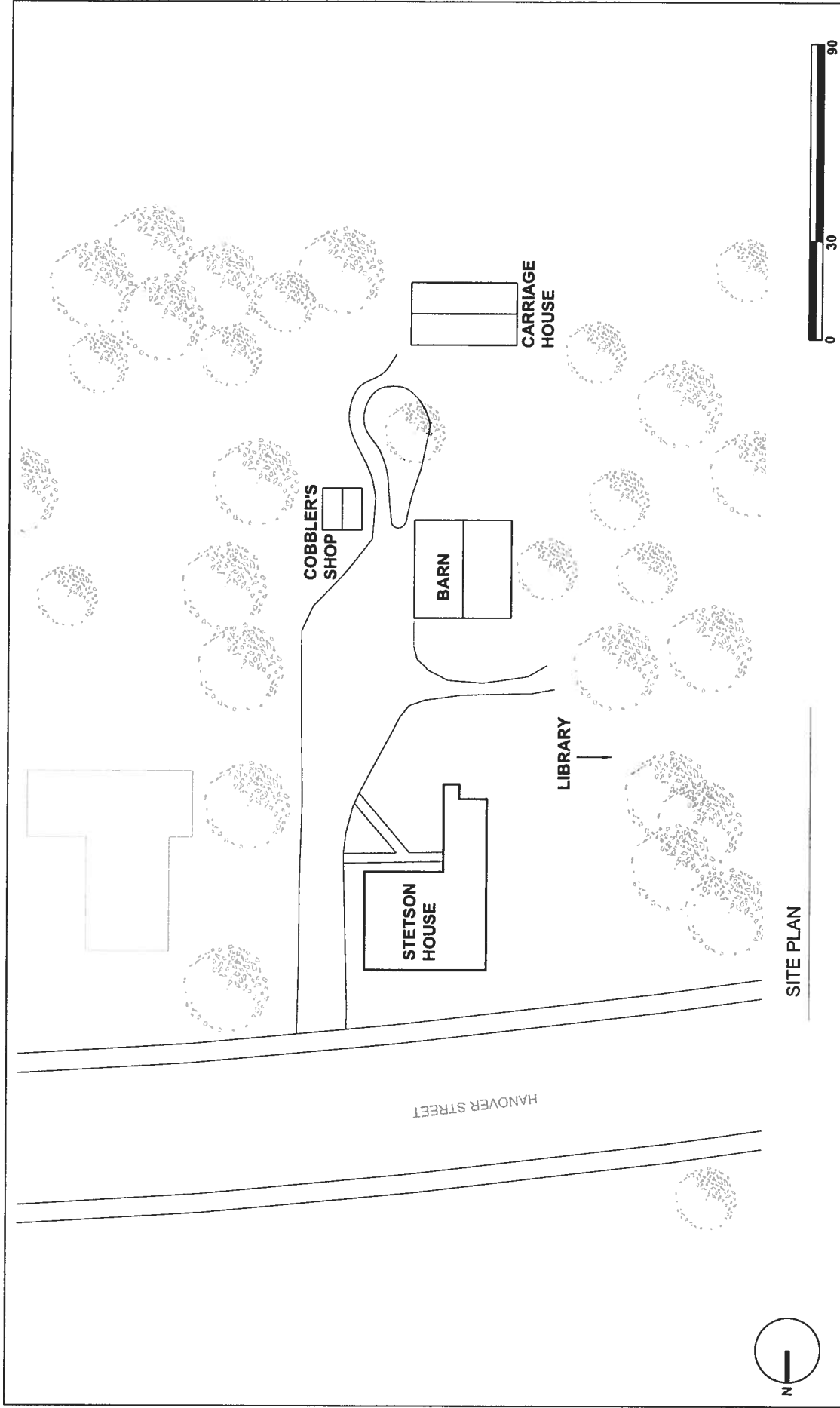
Hanover, Massachusetts

Scale: SEE BAR SCALE

Drawn by: E.J.L.

Job# 09017.00





SITE PLAN

D·R·A

**Drumey
Rosane
Anderson
Inc.**

Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459

617-964-1700
617-969-9054 fax

STETSON HOUSE TOWN BUILDING STUDY

Hanover, Massachusetts

Scale: SEE BAR SCALE

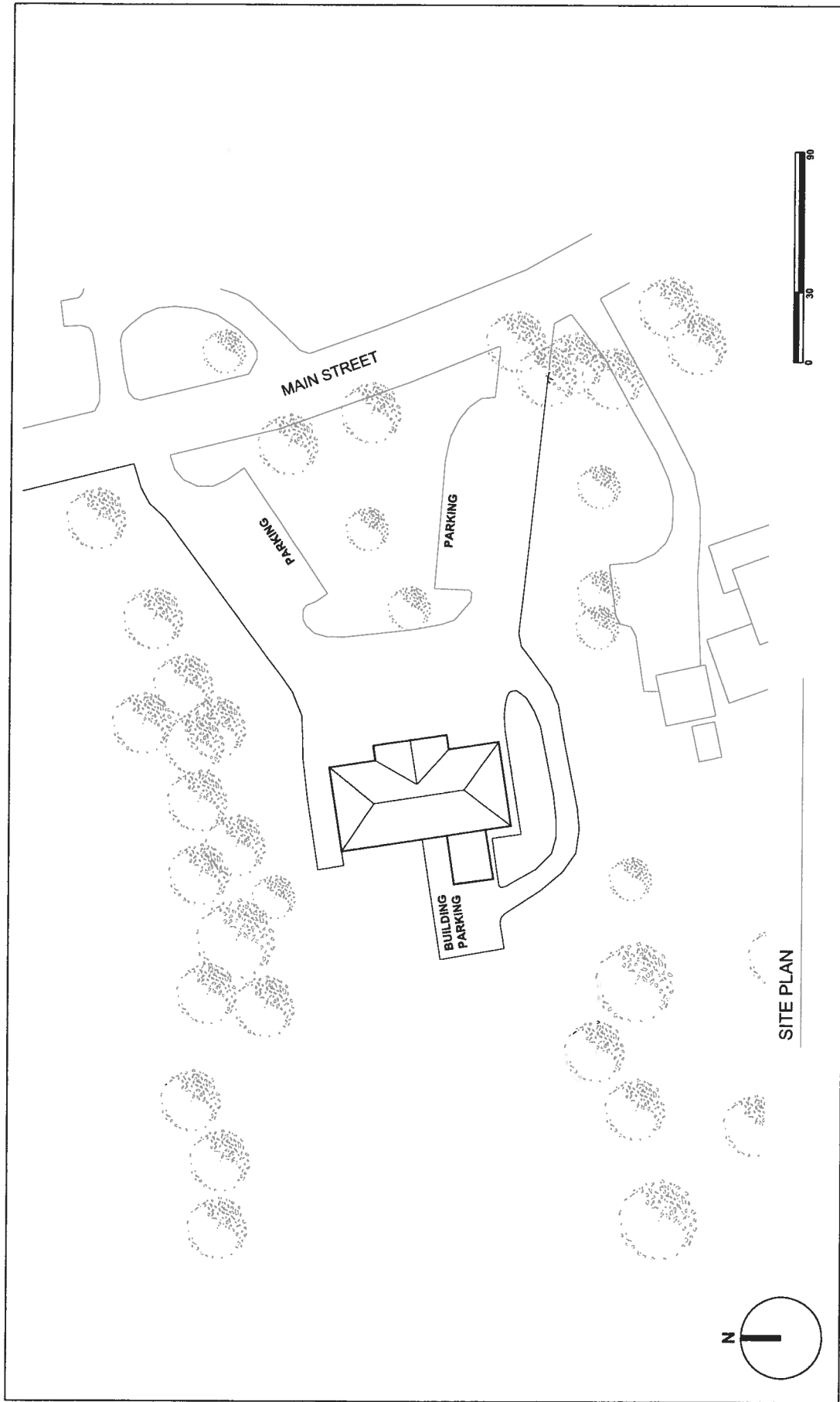
Drawn by: E.J.L.

Job# 09017.00



139
Hanover St

Image MassGIS, Commonwealth of Massachusetts EOEA
© 2010 Google



SITE PLAN

D·R·A

**Drumney
Rosane
Anderson
Inc.**

Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459

617-964-1700
617-969-9054 fax

CURTIS SCHOOL TOWN BUILDING STUDY

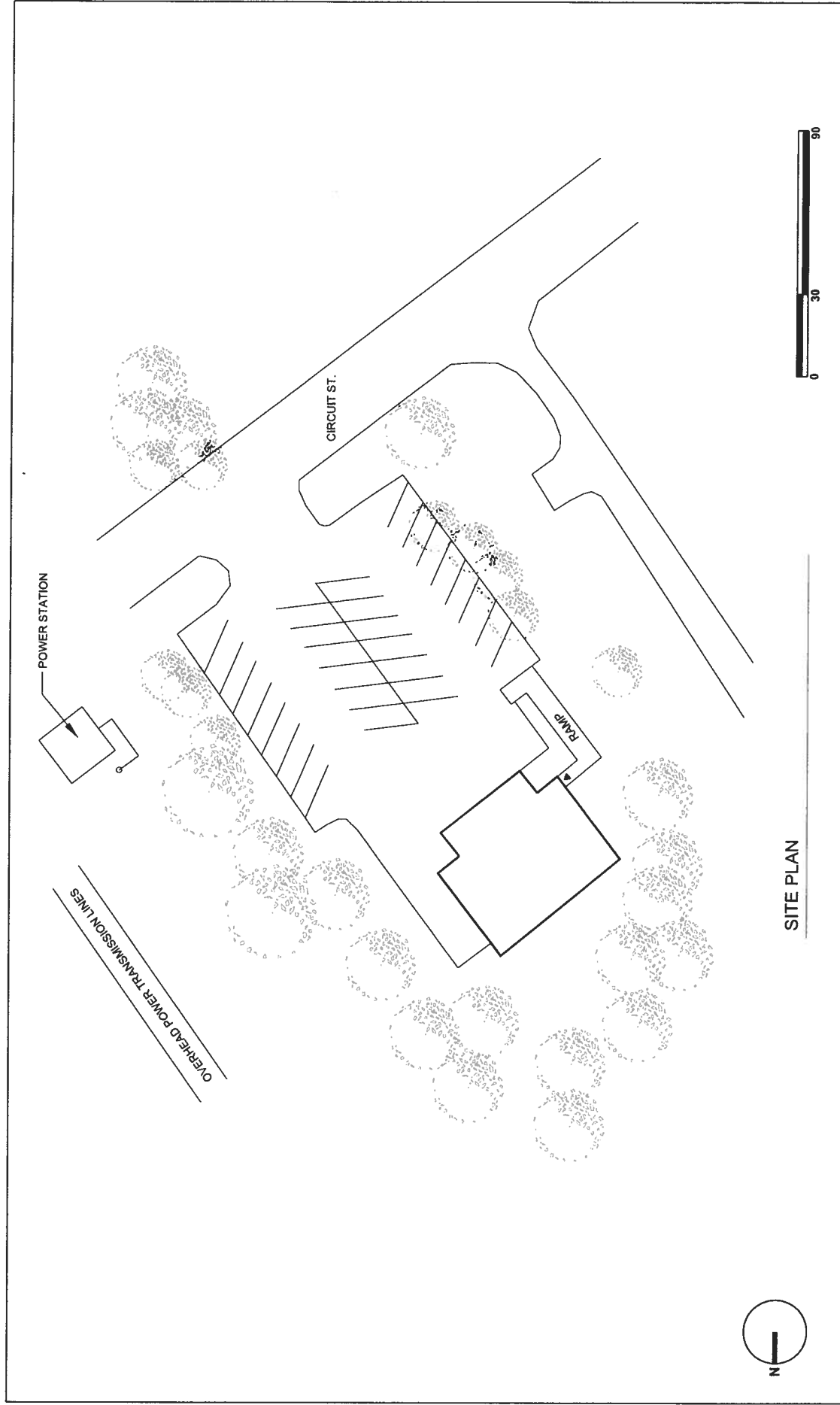
Hanover, Massachusetts

Scale: SEE BAR SCALE

Drawn by: MJQ

Job# 09017.00





D·R·A

Drumey
Rosane
Anderson
Inc.

Architecture
Interior Design

Colby Hall
141 Herrick Road
Newton Centre, MA
02459

617-964-1700
617-969-9054 fax

PARKS AND RECREATION TOWN BUILDING STUDY Hanover, Massachusetts

Scale: SEE BAR SCALE

Drawn by: MJQ

Job# 09017.00

Image Date: Apr 10, 2008

©2008 Google
Image Map GIS, Commonwealth of Massachusetts EOEA

42°08'38.29" N 70°52'42.17" W elev 841m

©2008 Google

Eye alt 380 ft

Church St

2

Vol.2

Appendix D

Building Plans (Disk)

Vol.2

Appendix E

Photographs

Appendix F

Staff Survey Forms

Meeting Notes From Interviews

and

Field Notes (by building)

Conditions Survey

Name of Building: Station 1 - Main St.Name of Respondent: F.D.Contact Information: _____
(Please print)

Please describe the conditions of your building, from your own observation. For most, there is no need to complete the entire form; please respond only to those items that you have personal first-hand knowledge about.

ExteriorFoundation / Settling / Cracks?: _____

_____Roof (leaks?): ? New roof needed - rear of bldg.

_____Windows (leaks / drafts?): -

_____Exterior Walls: Vinyl Siding - good shape

_____Landscaping: Plants new fence -

_____Parking: _____

_____Walks: _____

_____Drives: Crack in cement - front apron

_____Drainage Issues (water / snow removal): ? Floor drains

_____Exterior Lighting: Small emergency lighting only

_____Any other exterior issues / concerns: Inadequate clearance for
curb cut approach - Doors - small

Fire Protection (Sprinkler) system issues: N/A

Electrical Power System Issues: -

Fire Alarm System Issues: -

Security System Issues: Need System

Utilities: Gas, Elec., Oil, Other:

Hazardous Materials (known or suspected) (dates of surveys, if any):
Asbestos: _____

Oil Tanks: N/A

Lead Paint: ?

Are there any other items you can think of, that we need to know about, that are not covered by the above list?

Other: - Plans to build new station will allow
building to be utilized for other town projects as
to be used.
- Location not ideal to cover North Hanover area.

Thank you!!
Drummey Rosane Anderson, Inc.
Paul S. Brown, AIA, Project Manager
Brown@draws.com
1-617-964-1700 x142

The first part of the paper discusses the importance of maintaining accurate records of all transactions. It emphasizes that proper record-keeping is essential for the success of any business or organization. The author provides a detailed overview of the various methods used to collect and analyze data, highlighting the strengths and weaknesses of each approach. The second part of the paper focuses on the application of these methods in a real-world context, using a case study to illustrate the process. The author concludes by discussing the future of data analysis and the role of technology in this field.

Conditions Survey

Name of Building: Station 2 - BroadwayName of Respondent: FUContact Information: _____
(Please print)

Please describe the conditions of your building, from your own observation. For most, there is no need to complete the entire form; please respond only to those items that you have personal first-hand knowledge about.

ExteriorFoundation / Settling / Cracks?: —Roof (leaks?): 2nd floor - water stain on ceiling B side, at A corner.Windows (leaks / drafts?): 2nd Floor - Side A - Center 3
Windows need to be replacedExterior Walls: Wood Siding - OK? Siding here
Entrance door added to Side D with appropriate landing, steps, etc.Landscaping: —Parking: Unpaved parking on D side

Walks: _____

Drives: _____

Drainage Issues (water / snow removal): No floor drains

Exterior Lighting: _____

Any other exterior issues / concerns: Wood trim that has not
been covered w/ aluminum or vinyl needs to be
painted and or replaced. All sides

Fire Protection (Sprinkler) system issues: N/A

Electrical Power System Issues: _____

Fire Alarm System Issues: Needs new F.A. panel

Security System Issues: None - Need

Utilities: Gas, Elec., Oil, Other: _____

Hazardous Materials (known or suspected) (dates of surveys, if any):
Asbestos: _____

Oil Tanks: N/A

Lead Paint: ?

Are there any other items you can think of, that we need to know about, that are not covered by the above list?

Other: _____

Thank you!!
Drummeys Rosane Anderson, Inc.
Paul S. Brown, AIA, Project Manager
Brown@draws.com
1-617-964-1700 x142

12/9/2010 Field Notes

Fire 5.2: all windows are replaced newer insulating glass, except Center 3 "historic" windows above, replacements are noting special-
D.H. 6/6 removable uniting inside - no storms. yes screens
outside 1st floor & larger upper - no screens on smaller
upstairs windows, D.H. door is insulated metal door w/ i.g.
Foundation is split-face CMU.
Decorative rafter tails o.k. - underside of roof overhang needs paint

Salmon School: Stone wall along loft done good
Windows Front 8/12 D.H. - S. Pane no storm screen lower
1/2 operable gutters
forced play areas (little older) equip
S. side windows (front) 12/12 same
(back 1/2) Combo 8/12 + 12/12 same
back lower level - I.G. Replacements
Rear - large double pane replacement over doors
non-historic
basement replacements
other side same as S. side
Front door: knob; no lift & steps
no accessible toilet - not done yet

meeting w/ Jo Anne M.: last summer: Sylvester - bad floors - painted base

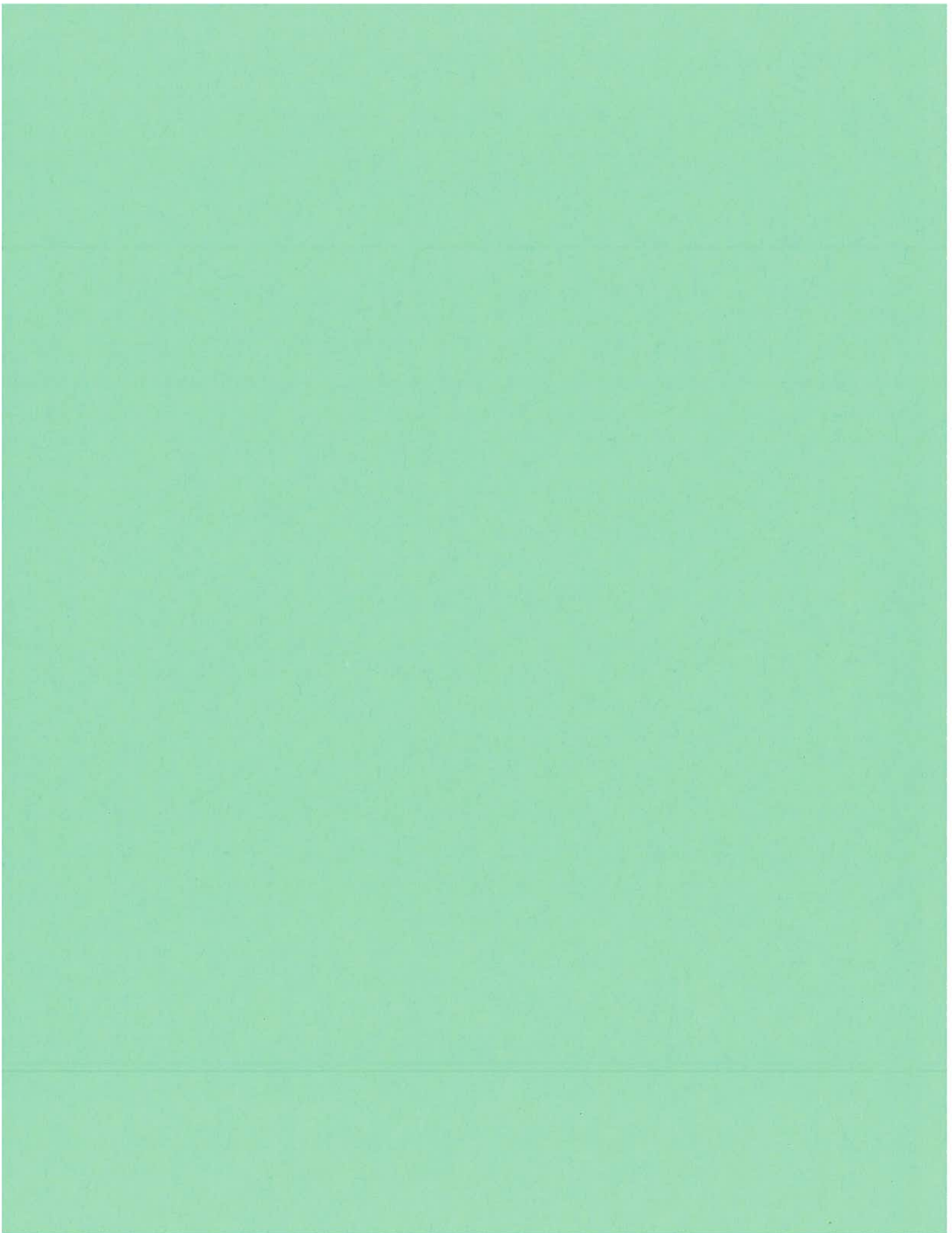
biggest issues are Center Roof m.s. - painted metal frame doors
& m.s. floors roof pretty good shape

Center School is worst; ready to fail 400k project

office areas were done w/ moisture Cedar School - spot issues
Salmon Steam traps not done yet
but boiler + traps will be done
this year along w/ acc. toilet room.
what was done - on top? or under slab?

called 12/10

Sylvester roof = large blister done
but not rest; + some spot
repairs. Steam traps done
w/ boiler 5 or 6 years ago
will be done again this year



Conditions Survey

Name of Building: Station 3 - Circuit St.Name of Respondent: F.D.Contact Information: _____
(Please print)

Please describe the conditions of your building, from your own observation. For most, there is no need to complete the entire form; please respond only to those items that you have personal first-hand knowledge about.

ExteriorFoundation / Settling / Cracks?: _____
_____Roof (leaks?): ? Condition - Flat roof.Windows (leaks / drafts?): Needs windows replaced.Exterior Walls: Cement block - New paint last year.Landscaping: ? Fly pole / bell -Parking: Inadequate - phone pole in middle & hazard
poorly maintained on one section

Walks: _____

Drives: _____

Drainage Issues (water / snow removal): Flat drains ?Exterior Lighting: Install energy efficient lightsAny other exterior issues / concerns: _____

Fire Protection (Sprinkler) system issues: N/A

Electrical Power System Issues: -

Fire Alarm System Issues: NONE - need

Security System Issues: NONE - need

Utilities: Gas, Elec., Oil, Other:

Hazardous Materials (known or suspected) (dates of surveys, if any):
Asbestos: _____

Oil Tanks: _____

Lead Paint: ?

Are there any other items you can think of, that we need to know about, that are not covered by the above list?

Other: _____

Thank you!!
Drummey Rosane Anderson, Inc.
Paul S. Brown, AIA, Project Manager
Brown@draws.com
1-617-964-1700 x142

12/9/2010 Field Notes

M.S., main hallway down stairs is abated - no other areas.

meeting w/ Bob Murray: reviewed schedule w/ Jennifer. will do everything we can

Town Hall: Windows - historic buildings are vinyl Replacement D.H.
✓ Few additions - ^{good} alum fixed over hopper thermopane - o.k. 3/8" only
Some cladding. but still to replace (D.H. thermopane)

Fire Station: ✓ Vinyl D.H. thermos good shape - no storming
also correct no elevator in building.
all wood framed.!

Attic - condensation problem is caused by large gaps in insulation - trussed roof w/ dropped ceilings - see photos.

but insulation is very ineffective - replace w/ foam (at sidewalls) etc.

Station: not open

Library: Historic windows: upper - original S. pane D.H. w/ triple-track storm. storms are very large - one on west is displaced
waiting for can back.

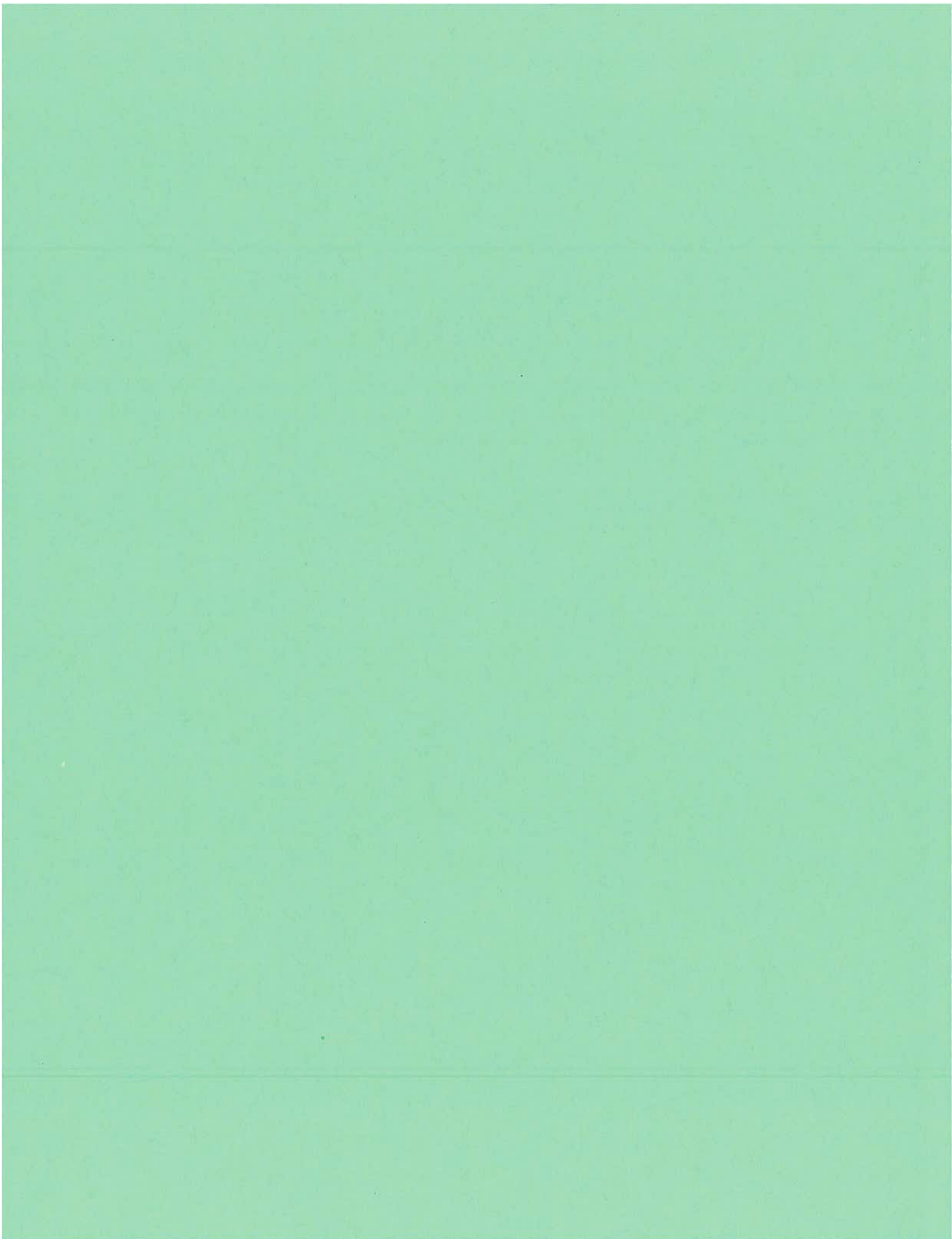
lower - historically correct D. pane double-hung see photo.

Grange: is now Bikes & Rec'n; ✓ stone foundation in front
windows are replacement Power lines on west - Substation
oil tank is not contained D.H. vinyl

See marked plan
Some paint still here
basement ep was 105. = 3 1/2 batt w/ gaps & tears
ramp is 4' + wide, but handrails are too low & non-continuous

Phil Porter - Stone acid in 5 gal carboys

can't add water to acid - add acid to water



Conditions Survey

Name of Building: Fire Station #4 - mainName of Respondent: Ken Blanchard

Contact Information: _____

(Please print)

Please describe the conditions of your building, from your own observation. For most, there is no need to complete the entire form; **please respond only to those items that you have personal first-hand knowledge about.**

Exterior

Foundation / Settling / Cracks?: _____

Roof (leaks?): #1 issue - replaced 6 yrs. ago - company at other business

gable vent blocked w/ plywood - could be causing condensation - marked photo to investigate
one section of roof Ice dams - valleys - gutter problems
 have added wire metal needles - will
 storm or in storm
 storm damage
 on the lower @
 gables.

Windows (leaks / drafts?): _____

every window replaced over 3 years - finished last spring

wants an automatic storm door

Exterior Walls: replaced entire section of wall @ front

entrance 2 years ago - was rotted out

Landscaping: _____

Parking: adequate

Walks: _____

Drives: some cracks - asphalt work baked up - drive about 20 yrs old - has been sealed a couple times

Drainage Issues (water / snow removal): ponding @ west of entry drive
- catch basin may not be pitched correctly

Trench in drive
 (by phone)
 keeps collapsing
 Drw fixes

Exterior Lighting: _____

Any other exterior issues / concerns: exterior O.H. doors - replace them all

Fire Protection (Sprinkler) system issues: does not have - would like to have
approx 800 sq ft sprinklered

Electrical Power System Issues: ✓ capacity of energ. elec. generator = gas &
22 yrs. old - is it ok? can they really operate in an emergency?

Fire Alarm System Issues: no detection in attx - remainder of system
old - only about 5 yrs. ago.

Security System Issues: one camera points to front door - not very clear - doesn't
2 more so one on each of 3 doors - + one to monitor

Utilities: Gas, Elec., Oil, Other: _____

Hazardous Materials (known or suspected) (dates of surveys, if any):

Asbestos: _____

Oil Tanks: _____

Lead Paint: _____

Are there any other items you can think of, that we need to know about, that are not covered by the above list?

Other: _____

Thank you!!

Drummey Rosane Anderson, Inc.

Paul S. Brown, AIA, Project Manager

Brown@draws.com

1-617-964-1700 x142

Wants
auto
extinguisher
on
stove top
in
kitchen -
2 fires -
guys go
A on
calls &
leave
stove
on.

to monitor
fire bugs
so
watch
remainder
knows
when
tasks
have
left.

1949

1950

1951

1952

1953

1954

1955

1956

1957

1958

1959

1960

1961

1962

1963

1964

1965

1966

1967

1968

1969

1970

1971

1972

1973

1974

1975

Conditions Survey

Name of Building: Fire HeadquartersName of Respondent: F.I.

Contact Information: _____

(Please print)

Please describe the conditions of your building, from your own observation. For most, there is no need to complete the entire form; **please respond only to those items that you have personal first-hand knowledge about.**

ExteriorFoundation / Settling / Cracks?: -Roof (leaks?): YesWindows (leaks / drafts?): Windows replaced w/in past few years.Exterior Walls: Vinyl Siding 1987.

Landscaping: _____

Parking: _____

Walks: _____

Drives: _____

Drainage Issues (water / snow removal): _____

Exterior Lighting: Street lighting (poles) should be checked
lights needed.Any other exterior issues / concerns: Overhead wires need to be
replaced soon

Fire Protection (Sprinkler) system issues: N/A - should have

Electrical Power System Issues: —

Fire Alarm System Issues: —

Security System Issues: Need

Utilities: Gas Elec., Oil, Other: —

Hazardous Materials (known or suspected) (dates of surveys, if any):

Asbestos: —

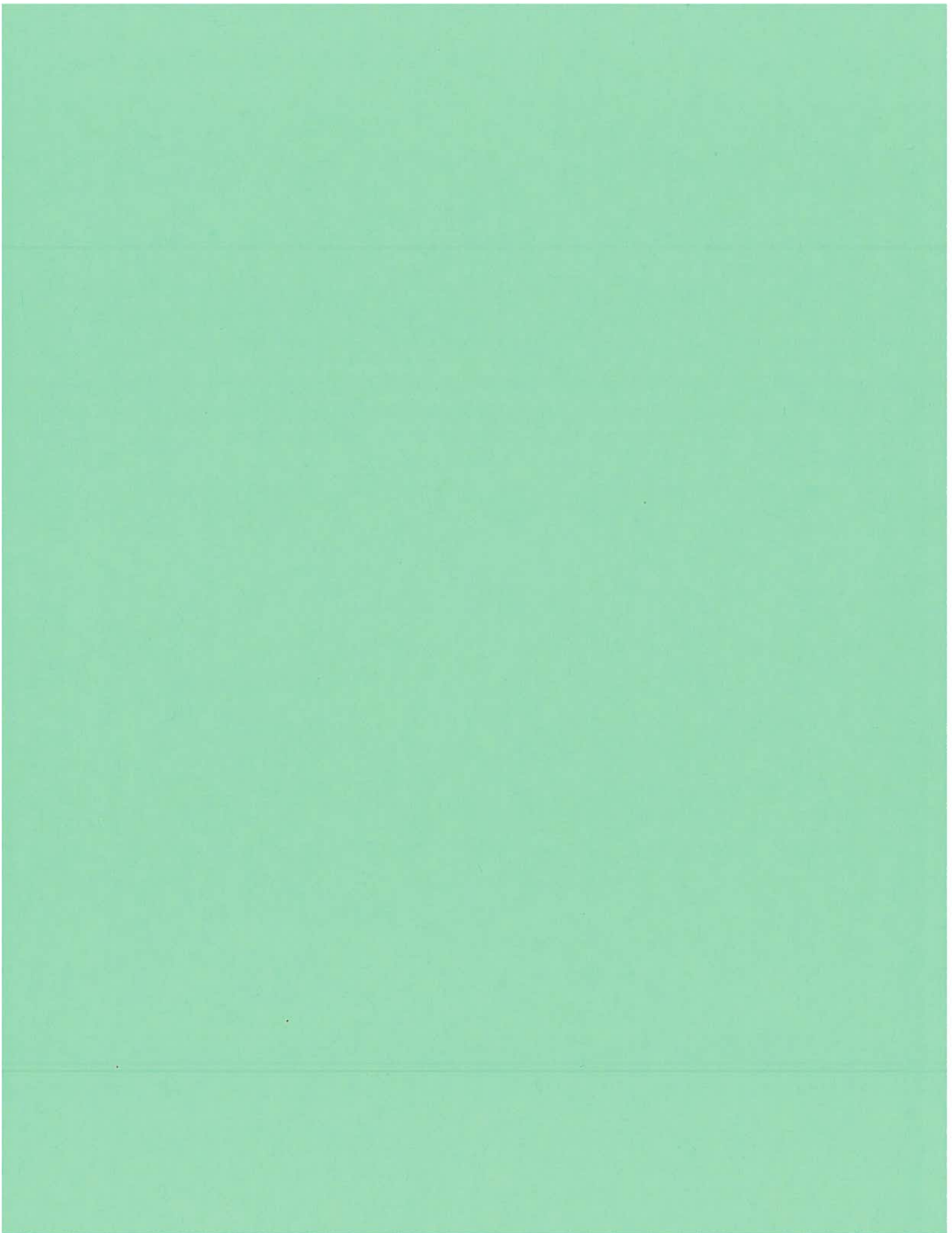
Oil Tanks: Waste oil tank.

Lead Paint: —

Are there any other items you can think of, that we need to know about, that are not covered by the above list?

Other: —

Thank you!!
Drummey Rosane Anderson, Inc.
Paul S. Brown, AIA, Project Manager
Brown@draws.com
1-617-964-1700 x142



12/9/2010 Field Notes

✓ Fire S. 2: all windows are replaced newer insulating glass, except Center 3 "historic" windows above, replacements are nothing special - D.H. 6/6 removable uniting inside - no storm. big screens outside 1st floor & larger upper - no screens on smaller upstairs windows, D.H. door is insulated metal door w.i.g. Foundation is split-face CMU. Decorative rafter tails o.k. - underside of roof overhang needs paint

✓ Salmon School: Stone wall along east done - good
Windows front 8/12 D.H. - S. Pane no storm screen lower 1/2 operable gutters
forced play areas (little older) equip.
S. side windows (front) 12/12 same
(back 1/2) Combo 8/12 + 12/12 same
back lower-level - I.G. Replacements
Rear - large double pane replacement over doors non-historic
basement replacements
other side same as S side
Front door: knob; no lift @ steps
no accessible toilet - not done yet

meeting w/ JoAnne M.: last summer: Sylvester - 1st floor - painted base

biggest issues are Center Roof

& M.S. floors

M.S. - painted metal frame doors
roof pretty good shape

Center School is worst; ready to fail 400K project

office areas were done w/ moisture barrier - Capital but boiler + traps not done yet
what was done - on top? or under slab?
Salmon steam traps not done yet
this year along w/ acc. toilet room.

Sylvester roof = large blister done but not reet; + some spot repairs. Steam traps done w/ boiler 5 or 6 years ago will be done again this year

called 12/10

Madde School - Windows: addn to left: fresh over hoppers w/ screens
5/10 I.G. units - good

12/9/2010
Field
Notes

J.M. reports roof
not too bad,
absolutely dark
main hallway & offices
floors are biggest issue

bad room floor
office waterproofing system

Kal will @ gym otherwise same all around

units still sealed
& painted! removed c 3 windows least 50%

visited mstr 1, 2 & A1 12x12 tiles w/ w/ strips of cracks below & some
very early writing of the

Cedar School - windows also 5/10 I.G. solid over hoppers
poor work but too steep? Same all around

Tom
heat biggest
repair

call him @ Gym

old wing lot water supply - other
have spring leaks - what
goes next?

873-7229
7228

all classrooms - 25 carpet over VAT

ask for Tom head custodian
Al LeRoux here a long time
781-706-4140

Cen. Hg School - windows

front & sides ok, replaced
10 years ago @ office

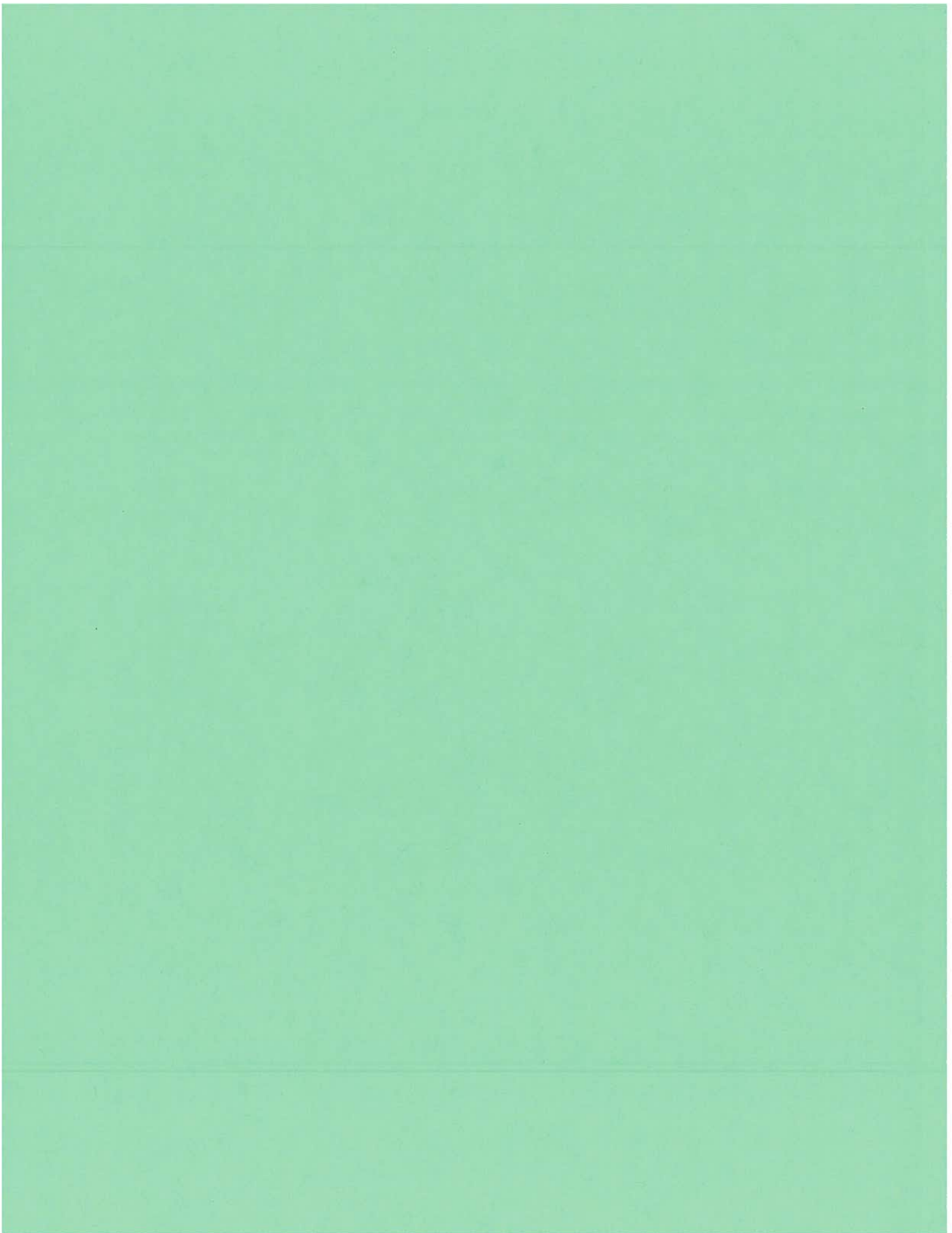
leaks by Libra
did some caulking this past summer

15-17 years ago

@ may be leak room 12 did help

old wing to repair

Front of same



notes by PB
1/12/10

Cedar elementary

56- non-accessible entrance - wood ramp

Boiler room - no central ERAS - used incinerator acc toilet room ok

57- gas-fired Boilers

roof - Rubber - same type - maple stone ballast

one leak today @ rear entrance - drifting

one leak - no steps

Cafeteria stage - lift

roof #53-62

Switched Camera

lift ①

② entrance

③ lobby

Cafeteria doors - no table ④

1966 / 2000 - additions

⑤ toilet acc lobby - near the sink

⑥ & ⑧ girls room near gymnasium

⑨ D.F. @ new wing near gym

⑩ drop curtain in gym - rod @ bottom swings dangerous

⑪ new wing classroom

⑫ ⑬ rear entrance accessible parking + paving seems ok.

⑭ sink in teachers restroom

⑮ " " Classroom old wing

17, 18, 19 - older classroom

no sprinklers

green "buckeye" cleaners - (except in bathrooms - restricted)

switched over 2 years ago - except @ Hrs.

Classroom #13 small roof leak.

⑳ 36" access desk issue @ main office window

㉑ sink in classroom

㉒ Girls toilet sinks

Cedar School

1/29/2010

- Cedar-
- ① older section of roof - EPDM flairs - ballast
 - ② asbestos tile / carpets.
 - ③ damage @ front of building - goes nowhere noted on photo.
 - ④ antiquated EMS
 - ⑤ playground + one set of swings - accessibility + compliance.
 - ⑥ someone should look @ fields to see if they could be "regulation" & useful to the town

Joanne McLaughlin + Jim

- Lower middle school
- ① asbestos tile - groundwater coming up on right side of ground floor - water bubbles up between
 - ② in-slab elec'l conduit - deteriorating - shorting out - a few weeks ago shorted out to unit ventilators - a whole wing a couple years ago.
 - ③ HVAC - has a new EMS
intake on roof is very close to exhaust
fresh air intake in gym - lower too small - often need to turn off heat in gym.
 - ④ parking - huge issue - plus traffic flow is dangerous
 - ⑤ path to H.S. - through woods - needs to be paved + lighting

Healthy Schools Committee - 900 students - Cafeteria is understized - no place upstairs to eat.
4 Zamboni lunches over 200 kids
580 on one floor 740 on the other

- Sylvester :
- ① elevator
 - ② flat rubber roof - section torn out - addition roof done 2nd or 3rd
roof drain leak in auditorium - EPC will find.
 - ③ heating - boilers are good - steam trap issues - temp control issues
 - ④ wood gym floor is wavy - wicked old - can't do gym activities
 - ⑤ water leak in basement, below gym - brick repointing ⑥ or ①?
 - ⑦ outdated clock + intercom system

12/9/2010 Field Notes

✓ Fire S. 2: all windows are replaced newer insulating glass, except Center 3 "historic" windows above, replacements are noting special - D.H. 6/6 removable uniting inside - no storm. yes screens outside 1st floor & larger upper - no screens on smaller upstairs windows, D.H. door is insulable metal door w/ 2.4. Foundation is split-face CMU. Decorative rafter tails o.k. - underside of roof overhang needs paint

Sealmont School: Stone wall along east drive - good windows - front 8/12 D.H. - S. pane no storm screen lower 1/2 operable shutters

✓ forced play areas (little (older) equip)
S. side windows (front) 12/12 same
(back 1/2) Combo 8/12 + 12/12 same

back lower level - I.G. Replacements
Rear - large double pane replacement over doors
non-historic

bureau replacement

other side same as S. side

front door: knob; no lift & steps

no accessible toilet - not done yet

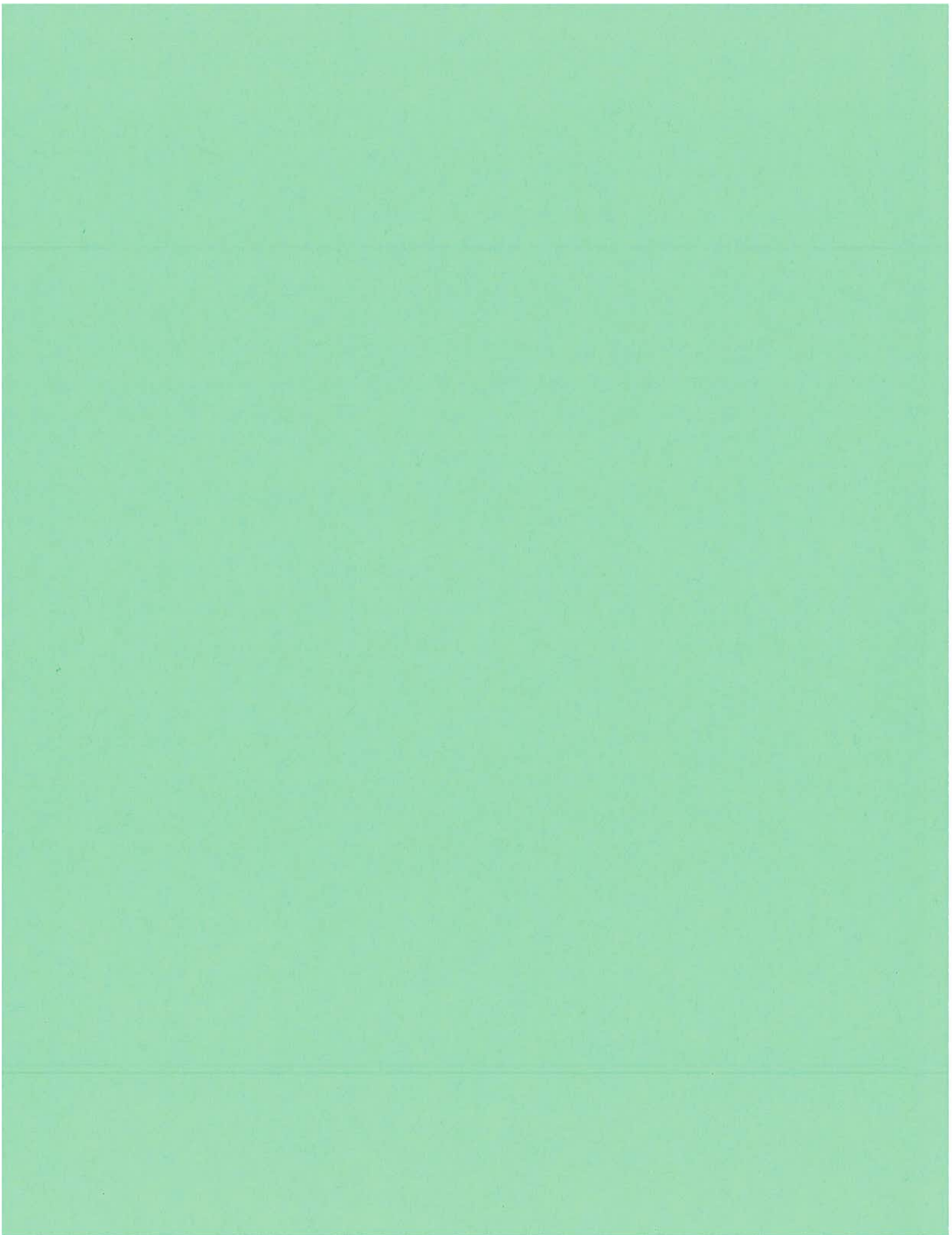
meeting w/ JoAnne M.: last summer Sylvester - bad floors - painted base
biggest issues are center roof m.s. - painted metal frame doors
& m.s. floors roof pretty good shape

Center school is worst; ready to fall took project

office areas were done w/ moisture
Capital
to find out what was done - on top? or under slab?
Cedar School - spot issues
Sealmont Steam traps not done yet
but boiler + traps will be done this year along w/ acc. toilet room.

Sylvester roof = large blister done but not rest; + some spot repairs. Steam traps done w/ boiler 5 or 6 years ago will be done again this year

called 12/10



Middle School Page 2 of 2

- Cedar:
- ① older section of roof - EPDM flairs - ballast
 - ② asbestos tile / carpets.
 - ③ damage @ front of building - goes nowhere noted on photo.
 - ④ antiquated EMS
 - ⑤ playground + one set of swings - accessibility + compliance.
 - ⑥ someone should look @ fields to see if they could be "regeneration" & useful to the town

Hanson Middle School:

- ① asbestos tile - groundwater coming up on right side of ground floor - waste bubbles up between

- ② in-slab electrical conduit - deteriorating - shorting out - a few weeks ago shorted out to unit ventilators - a whole wing a couple years ago.
- ③ HVAC - has a new EMS intake on roof is very close to exhaust fresh air intake on gym - lower too small - often need to turn off heat in gym.
- ④ parking - huge issue - plus traffic flow is dangerous
- ⑤ path to H.S. - through woods - needs to be paved + lighting

Healthy Schools Committee - 900 students - Cafeteria is understaffed - no place upstairs to eat.

4 Lunches over 200 kids

580 on one floor 7 & 8 on the other

- Sylvester:
- ① elevator
 - ② flat rubber roof - addition roof done 2nd or so roof drain leak in auditorium - EPC will find.
 - ③ heating - boilers are good - steam trap issues - temp control issues
 - ④ wood gym floor is wavy - wicked old - can't do gym activities
 - ⑤ water leak in basement, below gym - brick repointing ⑥ or ①?
 - ⑦ outdated clock + intercom system

middle school page 2

- 45 - boys room - no clearance on doors
sink room 30 under 34 to top
- 46 - cut walk equipment
new wing 13 sprinklered - door clearances are 0 1/2
- 51 - lip & gym entrance
- 52 - accessible toilets & Boys lockers
- 53 - accessible shower
- 54 - bleachers - no accessible seating
- 55-56 kitchen
- Security camera -
1 stage lift - ~~non accessible~~ stair handrails

Middle School - windows, addn to left. front over hoppers w/ screens 5/10 1st units - good

12/9/2010
Field
Notes

basement floor
office waterproofing system

Mr. reports roof
abatement done
main hallway & offices
floors are being issued

Calculus gym otherwise same all around

underneath still sealed

& paint, removed 23 windows left side

visited 12/2 & 12/1 12x12 hrs was

w/ steps of grades below & some

very early cutting of the

Cedar School - windows along 5th I.G. side over hoppers

poor curb too steep? same as usual

Calculus & Gym

old wing but water supply - other
have sprung leaks - what
goes next?

all classrooms - 25
cupped over vat

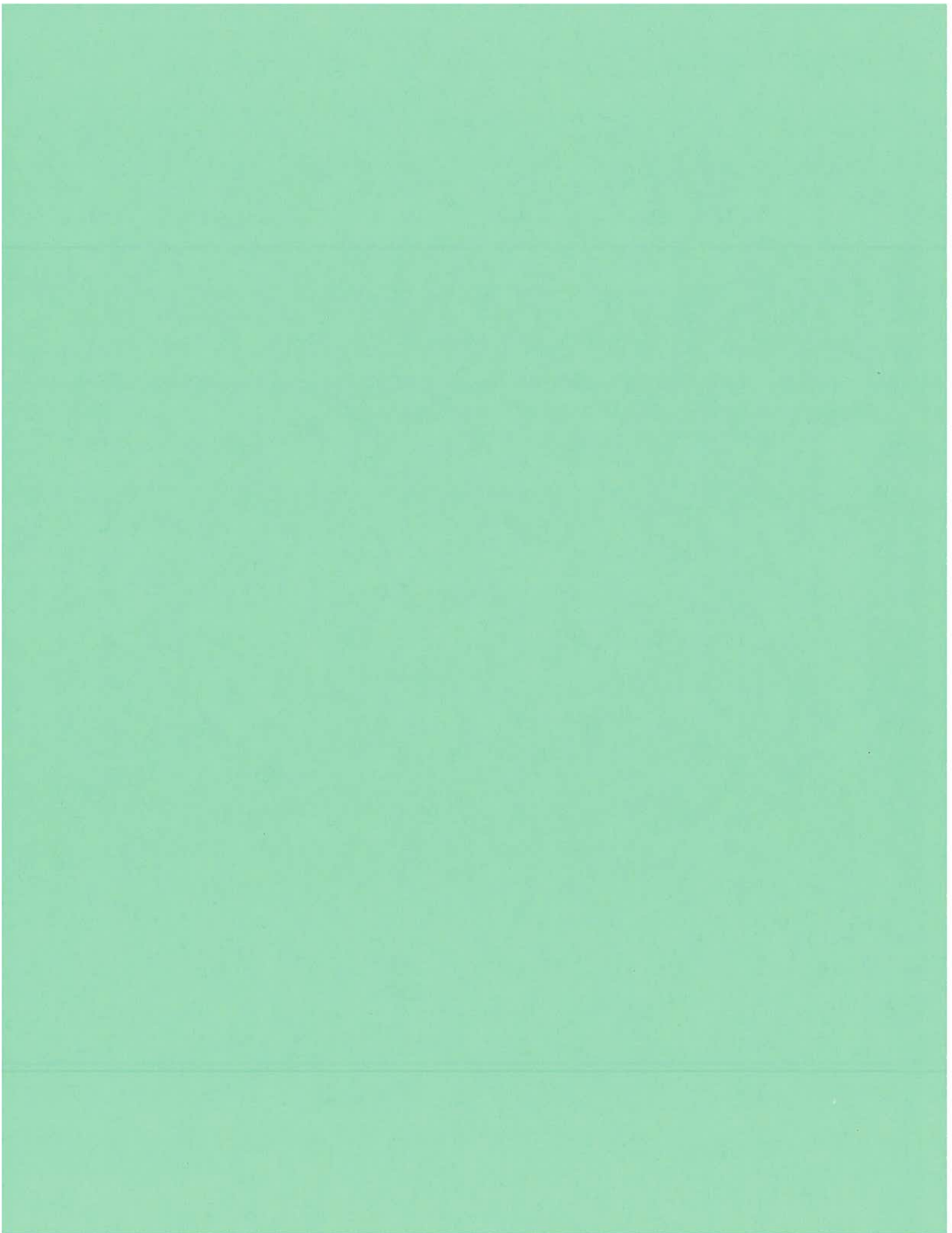
ask for 'm read custodian
lost a long time

Allegory
781-706-4140

Center School - windows
leaks by lobby

did some checking this past summer
old wing to main
front of same

front & sides o.k. replaced
10 years ago & office
15-17 years ago



12/9/2010 Field Notes

✓ Fire S. 2: all windows are replaced newer insulating glass, except Center 3 "historic" windows above, replacements are noting special-D.H. 6/6 removable units inside - no storms. yes screens outside 1st floor & larger upper - no screens on smaller upstairs windows, D.H. door is insulated metal door w/ I.G. Foundation is split-face CMU. Decorative rafter tails o.k. - underside of roof overhang needs paint

✓ Salmond School: Stone wall along east done - good Windows: front 8/12 D.H. - S. Pane no storm screen lower 1/2 operable shutters forced play areas little (older) equip S. side windows (front) 12/12 same (back 1/2) Combo 8/12 + 12/12 same back lower level - I.G. Replacements Rear - large double pane replacement over doors non-historic basement replacements other side same as S. side Front door: knob; no lift @ steps no accessible toilet - not done yet

meeting w/ JoAnne M.: last summer Sylvester - bad floors - painted base

biggest issues are Center Roof m.s. - painted metal frame doors & m.s. floors roof pretty good shape

Center School is worst; ready to fail 400k project

office areas were done w/ moisture barrier - Capital Salmond Steam traps not done yet but boiler + traps will be done this year along w/ acc. toilet room. what was done - on top? or under slab? Called 12/10

Sylvester roof = large blister done but not reet; + some spot repairs. Steam traps done w/ boiler 5 or 6 years ago will be done again this year

Sylvester School

notes by PB
1/12

- 92 - Exterior
- 93 94 95 C-1 door Threshold not accessible
- no sprinkles
- 96 kitchen hood w/ fire suppression
- 97 basement wall moisture problem @ cafeteria (behind outside steps)
- 98, 99 basement cat. space
- 100 doors to cat (2) 24 hrs on double-acting spring hinges w/ hooks
- 101 basement corridor view
- main elect source
- no energy management system
- Steam radiators - gas-fired boiler
- no sprinkles
- 103 gas boilers - 104 - steps to boiler room not code
- 104 non vented paint storage room
- 105 hot water tank
- no elevator
- 106 ~~water tank~~ non-accessible toilet room ¹⁰⁷ sinks
- 108 toilets
- 109 urinals
- 110 non-ac sink in teachers room
- 1100 privacy issues
- 112 typ basement door recess too deep? over 54
- 113 ~~shower~~ toilet no ac
- 114 115 non-ac girls room (lower level)
- 116 - double 24 hour doors @ stair - old double-acting
- 117 - non-ac D.F. @ main lobby
- 118 - entrance lobby
- 119 - Threshold @ Gym
- 120 Gym - 121 non-code steps to stage missing handrails
- ~~122~~ no lift to stage
- 122 clg. ixl tiles reported black glue mstr w/ asbestos
- 123 non-ac nurses toilet
- 124 steps in hall
- reported floor collapse in classroom over boiler room

Sylvester School P. 2

125 126 non ac girls room 1st floor

127 - non ac girls in 3rd floor classroom

128 - typ. 3rd floor classroom

3rd floor toilets are same as 2nd floor

Same non ac D.F. on 3rd floor

129 Cleanse ~~130~~ all doors swing into corridor 6th
> 1211

reported flat rubber roof - no access today no key

John Wright

701-706-4141 School
Cell phone

or Jim Hoey 701-706-2680

Sylvester School

P. 1 of 2

1/29/2010

Steve Rolfs - Town Administrator

Harrah Butler - Admin Asst

Margaret Hoffman - Community Presv. Coordinator

Jennifer Pette - Finance Director

Walter - Pirelli West

Ken Buchard - Fire

old age of building to form + disaster

Joanne Mc Donough - Business manager for schools.

Jim:

Center School roof - beyond credit life + windows & unit vents along "hot wall".

asbestos tile throughout schools -

Em. throughout all schools

renovating roofs - (+ asbestos tile) - all schools except 1, 2, 3, 4, 5.

Middle School - parking very big issue - wetlands - not enough for staff even on a normal day - they park on grass - inside contrivations
can they park it this? not feasible
at capacity for student size
needs 50 spaces

Center & Sylvester also tight on parking @ events.

Sylvester - plan was to add on to Center - filed a S.O.I.

CPC did painting - windows

has no elevator - requesting \$ for design services - one inside + one outside

Some students walk outside for Art, music, physed.

is on National Register District w/ town Hall

Sylvester - no elevator - lift to side room - training and technology downstairs.

Student population growth? some condo developments

5-8 = current "bubble" as it moves on, will handle growth.

Center School: Roof Air noise in Auditorium Unit ventilator leaks @ very noisy - can't have a presentation & heat at the same time
Asbestos floors
Intercom & clocks Boiler control issues - EMS very old
Parking - lots of degradation in front area
Parking.

Sylvester School

page 2 of 2

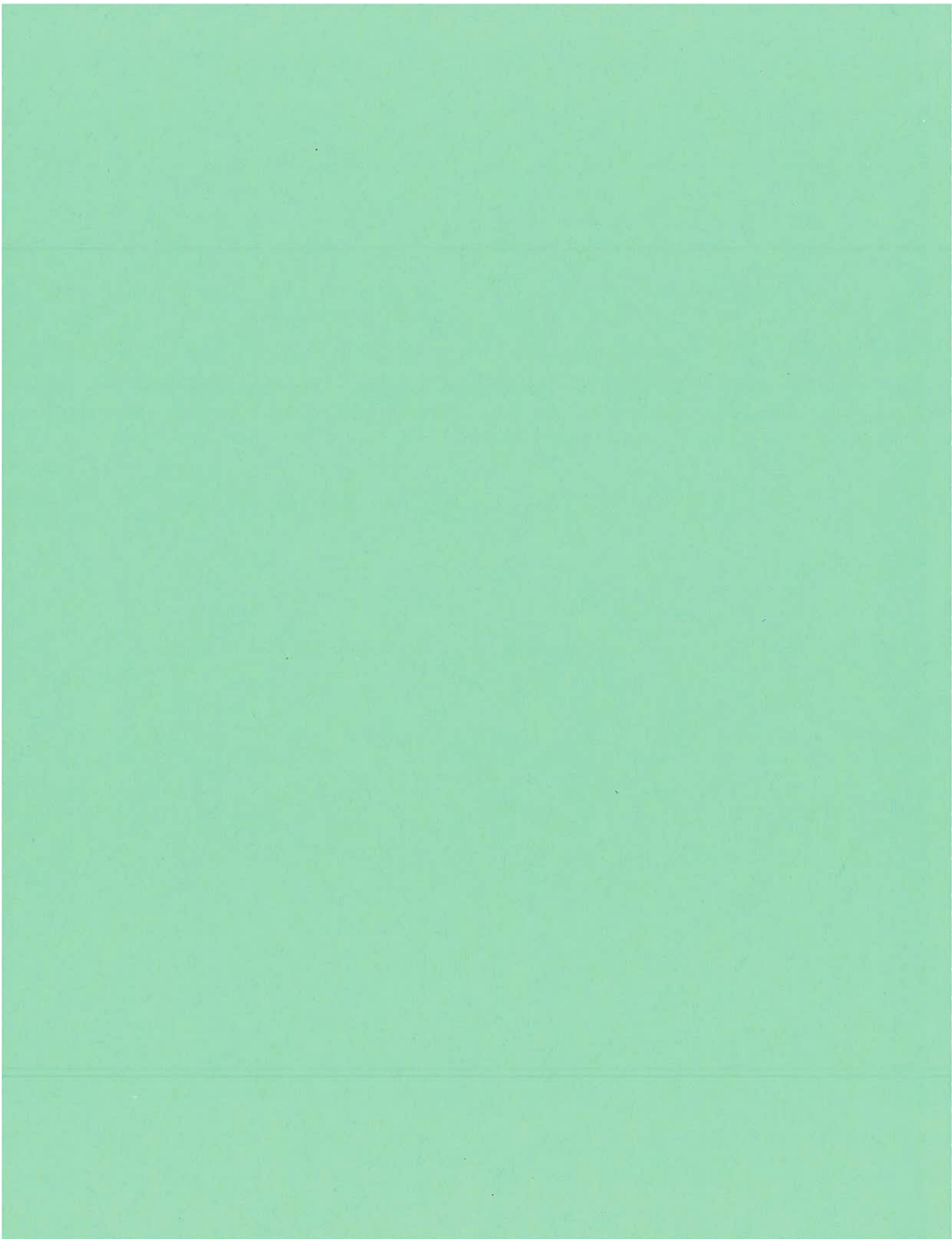
1/29/2010

- Cedar-
- ① older section of roof - EPDM flairs - ballast
 - ② asbestos tile / carpets.
 - ③ damage @ front of building - goes nowhere noted on photo.
 - ④ antiquated EMS
 - ⑤ playground + one set of swings accessibility + compliance.
 - ⑥ someone should look @ fields to see if they could be "regulation" & useful to the town

- Huachuca Middle School:
- ① asbestos tile - groundwater coming up on right side of ground floor - water bubbles up between
 - ② in-slab elec'l conduit - deteriorating - shorting out - a few weeks ago shorted out to unit ventilators - a whole wing a couple years ago.
 - ③ HVAC - has a new EMS
intake on roof is very close to exhaust
fresh air intake on gym - lower too small - often need to turn off heat in gym.
 - ④ parking - huge issue - plus traffic flow is dangerous
 - ⑤ path to HS - through woods - needs to be paved + lighting

Healthy Schools Committee - 900 students - Cafeteria is understized - no place upstairs to eat.
4 Zamin. lunches over 200 kids
500 on one floor 700 on the other

- Sylvester =
- ① elevator Section tonight
 - ② flat rubber roof - addition roof done 2nd or 3rd
roof drain leak in auditorium - EPC will find.
 - ③ heating - boilers are good - steam trap issues - temp control issues
 - ④ wood gym floor is wavy - walked old - can't do gym activities
 - ⑤ water leak in basement, below gym - brick repointing ⑥ or ①?
 - ⑦ outdated clock + intercom system



12/9/2010 Field Notes

✓ Fire 5, 2: all windows are replaced newer insulating glass, except Center 3 "historic" windows above, replacements are nothing special - D.H. 6/6 removable window handle - no storm. yes screens
style 1st floor & larger upper - no screens on smaller upstairs windows, O.H. door is insulated metal door w/ I.G.
Foundation is split-face CMU.
Decorative rafter tails o.k. - underside of roof overhang needs paint

✓ Salmon School: Stone wall along east door - good
Window front 8/12 D.H. - S. Pane no storm screen lower 1/2 operable shutters
fenced play areas (little older) equip
S. side windows (front) 12/12 same
(back 1/2) Combo 8/12 + 12/12 same
back lower level - I.G. Replacements
Rear - large double pane replacement over doors non-historic
basement replacements
other side same as S. side
Front door: knob; no lift @ steps
no accessible toilet - not done yet

meeting w/ JoAnne M.: last summer: Sylvester - back floors - painted base

biggest issues are Center Roof m.s. - painted metal frame doors
& M.S. floors roof pretty good shape

Center School is worst; ready to fail took project

office areas were done w/ moisture barrier - Capital
Salmon Steam traps not done yet
but boiler + traps will be done this year along w/ acc. toilet room.
what was done - on top? or under slab?

called 12/10

Sylvester roof - large blister done but not resealed; + some spot repairs. Steam traps done w/ boiler 5 or 6 years ago will be done again this year

notes by RB
1/12/10

Silverd School

- (63) H.C. lift to boardroom
- (64) no illuminated exit signs
- (65) good susp dly + 1 rgl dly @ boardroom
- (66) Wood D.H. windows
- (67) handrails not per code
no sprinklers
- (68) window close-up

69, 70, 71 ← sink 72 urinals } news room
no acc.
toilets

- 73 - lip @ rear door exit
- 74 - basement staff room has no sink
- 75-76 - basement elec. room
- 77 - basement boiler room exit door (F.R. but no exit sign)
- 78 - main elec in basement
- 79 - boiler in basement
- up to 91 - exterior shingle roof - o.k.
poor paint on windows

Salmon School 1/29/200

Walter - Piret Closet P.1 of 2

Ken Buchard - Fire

~~old age of building to form + disaster~~

Joanne Mc Donough - Business manager for schools.

Jim:

Steve Rolfs - Town Administrator

Harrah Butler - Admin Asst

Margaret Hoffman - Community Presv. Coordinator

Jennifer Pette - Finance Director

Center School roof - beyond useful life + windows & undercoats along "hot wall".

asbestos tile throughout schools -

Env. throughout all schools

renovating roofs - (+ asbestos tile) all schools except 1, 2, 3, 4, 5.

Middle School - parking very big issue - wetlands - not enough for staff even on a normal day - they park on grass - inside can they park this? not feasible. Needs 50 spaces.

Center & Sylvester also tight on parking @ events.

Sylvester - plan was to add on to Center - filed a S.O.I.

CPC did painting - windows

has no elevator - requesting \$ for design services - one inside + one outside

Some students walk better & farther for Art, music, physed.

is on National Register District w/ town Hall

Salmon - no elevator - lift to side room - training and technology downstairs.

Student population growth? some Cords developments

5-8 = current "bubble" as it moves on, will handle growth.

Center School - Roof Air noise in Auditorium Unit ventilator leaks @ very noisy - will have a presentation the one wall

Intercoms & clocks Boiler control issues - EMS very old Parking - lots of degradation in front area time

Salmond: ① old windows leak air - glass shades & lots of motion sensors.

② lots of leaks in basement - brick painting.

③ Superintendents floor damaged by steam boiler - says Joanne worried about weight of safe in her room.

④ general deteriorating paving outside

⑤ toilet rooms - leaks - adding H.C. to toilets. constant septic odors - strong fresh but stuff comes back up

⑥ roof has old wood gutters

⑦ boiler is on CPC action list + steam traps

* Schools - detailed visits in April - school location

In general for schools: Parking & Paving, Roofs, HVAC,

Mark

Accessibility @ handstand concerts

Toilets are tied to Sylvester septic.

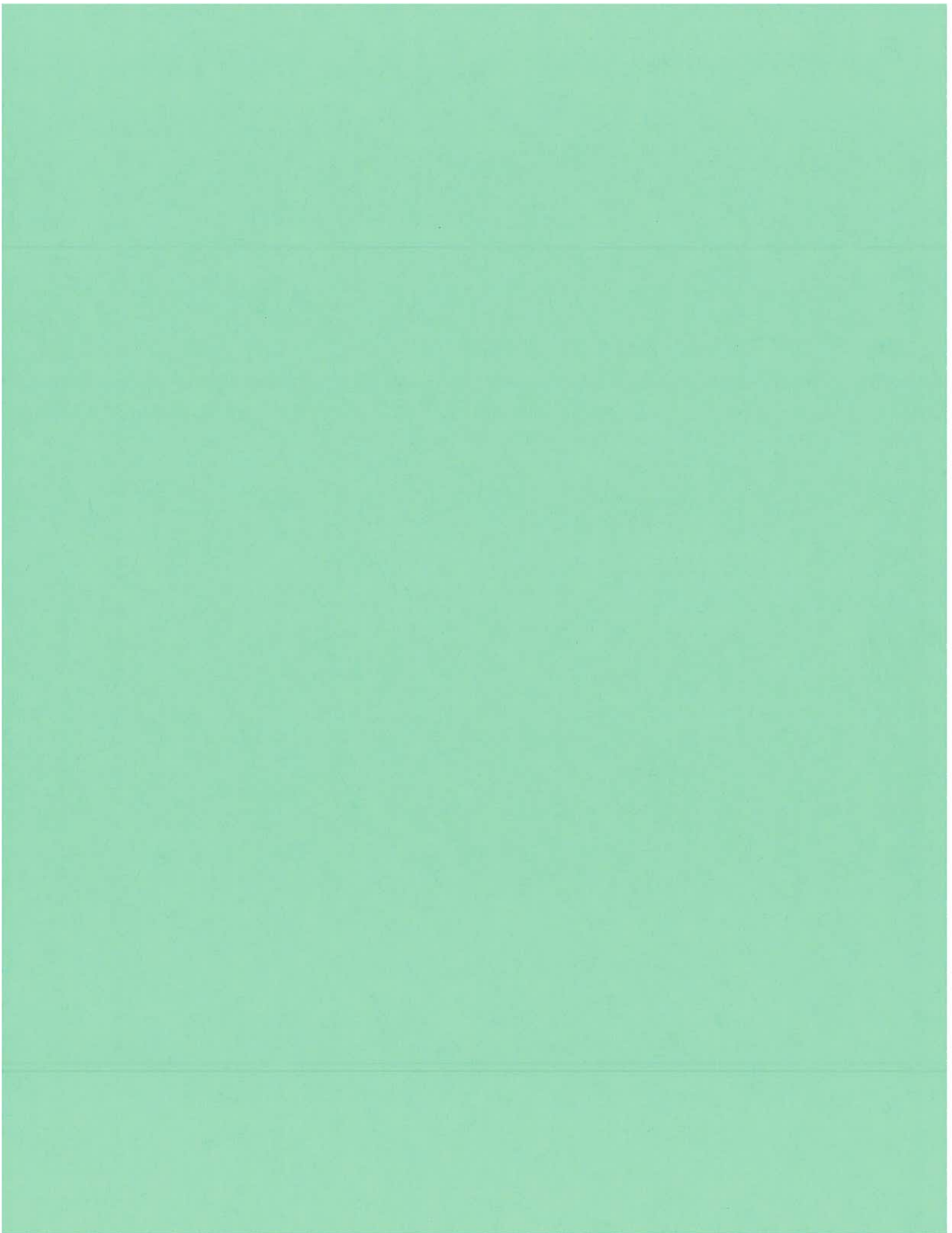
Trailer is used for camp 6-8 weeks in summer - sell Italian rice + pizza

may move to 45 acre site @ King St.

will move Middle School camp to

could always be a pre-school camp @ B. Everett Hall
back sheds are storage for Arts & Crafts - but it happens under tent @ picnic tables. DFW

does have gravel drive embarrassing - will always need storage - security is big issue



Conditions SurveyName of Building: main Police StationName of Respondent: Walter - Police Chief

Contact Information: _____

(Please print)

Please describe the conditions of your building, from your own observation. For most, there is no need to complete the entire form; **please respond only to those items that you have personal first-hand knowledge about.**

Exterior

Foundation / Settling / Cracks?: _____

Roof (leaks?): _____

Windows (leaks / drafts?): _____

Exterior Walls: _____

Landscaping: _____

Parking: day to day even available non-visitors parking - 18 police spots left
slow landscaping can be an issue

Walks: _____

Drives: _____

Drainage Issues (water / snow removal): none

Exterior Lighting: _____

Any other exterior issues / concerns: communications tower - managed by Steve
rest w/ Jeff Blanchard - annual tower inspection

Interior:

Please describe the first three most important issues:

1) HVAC -- budget better every year heating & cooling - National grid may not have done this one - constant breakdown - ? not enough radiant heat? No heat in community room in N.E. corner. If the study addresses this issue only, chert will be happy.
Siganor HVAC Tech = maintenance -

2) Septic - essentially had a failed system - under orders from Board of Health to pump every year - talk to Tony - Bldg Commr & Bd of Health

3) Replaced Boiler a year ago - warranted parts only - paid 10K labor -

4) Elevator - Electrical power cuts out every once in a while -
Interior Finishes (paint, carpet, ceiling tiles, etc.):

Walls: _____

Floors: _____

Ceilings: _____

Layout / Space issues: _____

Air Quality: not an issueTemperature Control: see aboveWater / Toilets: see above

Lighting: _____

Mechanical Equipment Issues (Heating and/or A/C): see above

Plumbing Equipment issues: _____

Electrical -
tends to be
susceptible
to elec
stroke
surges during
storms
had a fire -
have lost
equipment -
covered by
insurance

Fire Protection (Sprinkler) system issues: is sprinkled - inspected annually
by a company from N.H.

Electrical Power System Issues: _____

Sizeable emergency generator powered by gas - exercises weekly - also powers
emergency alarm tower - has had maintenance issues
needs a back heater - has one? added?

Fire Alarm System Issues: _____

Security System Issues: Building surveillance 16 static cameras - have had to replace

16 doors are prop card security doors - water damage from mechanical equipment
Utilities: Gas, Elec. Oil Other: _____
Direct gas none recording device
above

Hazardous Materials (known or suspected) (dates of surveys, if any):

Asbestos: none aware of

Oil Tanks: none

Lead Paint: none

Are there any other items you can think of, that we need to know about, that are not covered by the above list?

Other: _____

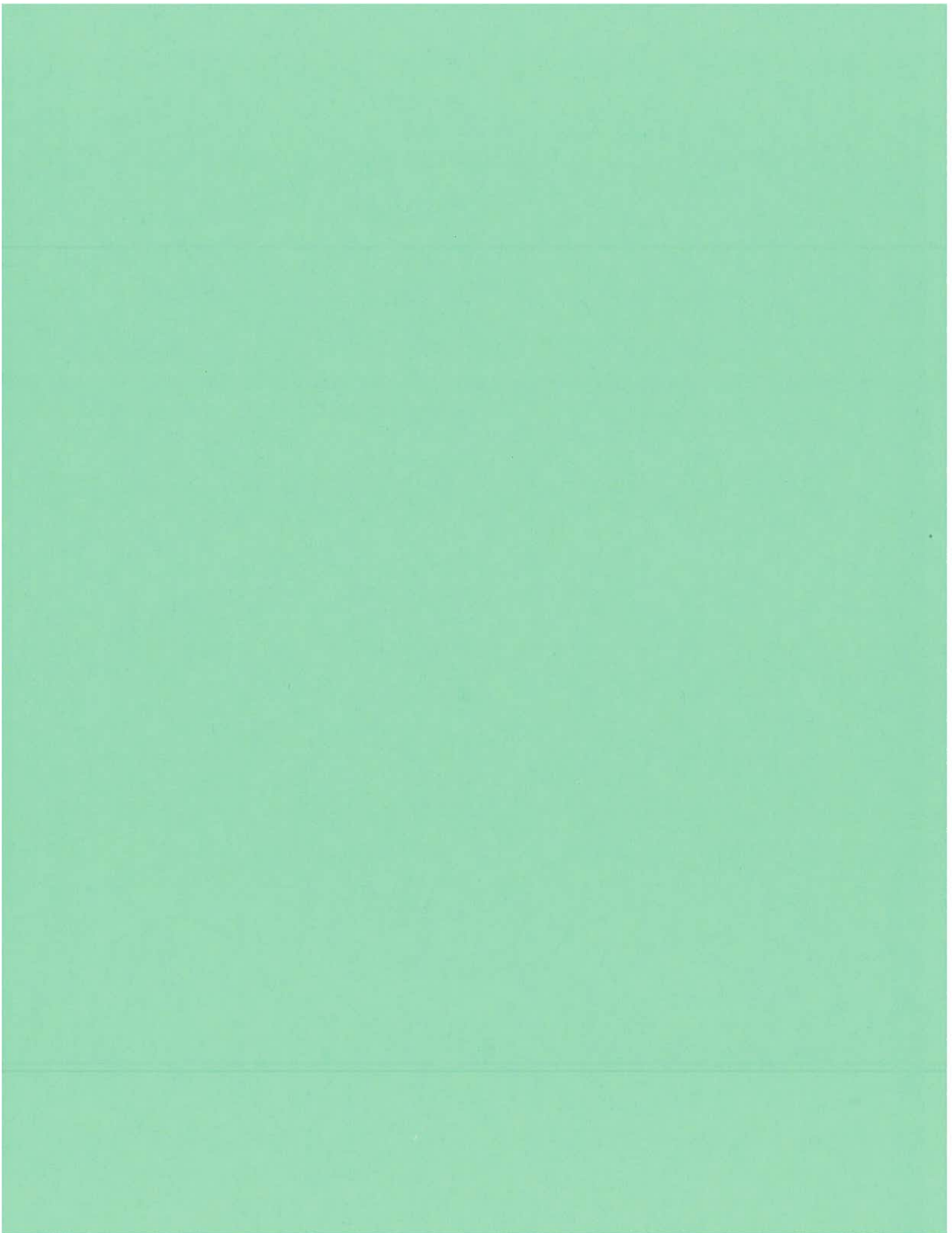
Thank you!!

Drummey Rosane Anderson, Inc.

Paul S. Brown, AIA, Project Manager

Brown@draws.com

1-617-964-1700 x142



1/29/2010

Salmon: ① old windows leak air - glass slides & lets old water seep in

② lots of leaks in basement - brick pointing.

③ superheated floor damaged by steam boiler - says to have water about weight of scale in her room.

④ general deteriorating painting, outside

⑤ don't rooms - leaks - adding AC to vents.

constant seeps odor - strong flush of shift comes back up

⑥ roof has old wood gutters

⑦ baby is on left section 1st + steam traps

*Students - detailed visit in April. school vacation

In general for schools: Parking & Parking, Pools, HVAC,

Recreation Facility

B. Everett Hall

Map

Accessibility @ underground concerts

Tables are fixed to Sylvester septre.

Table is used for camp 6-8 weeks in summer - sell Ritzville

+ P122A

May move to 45 cur side @ King St.

will move Middle School camp to

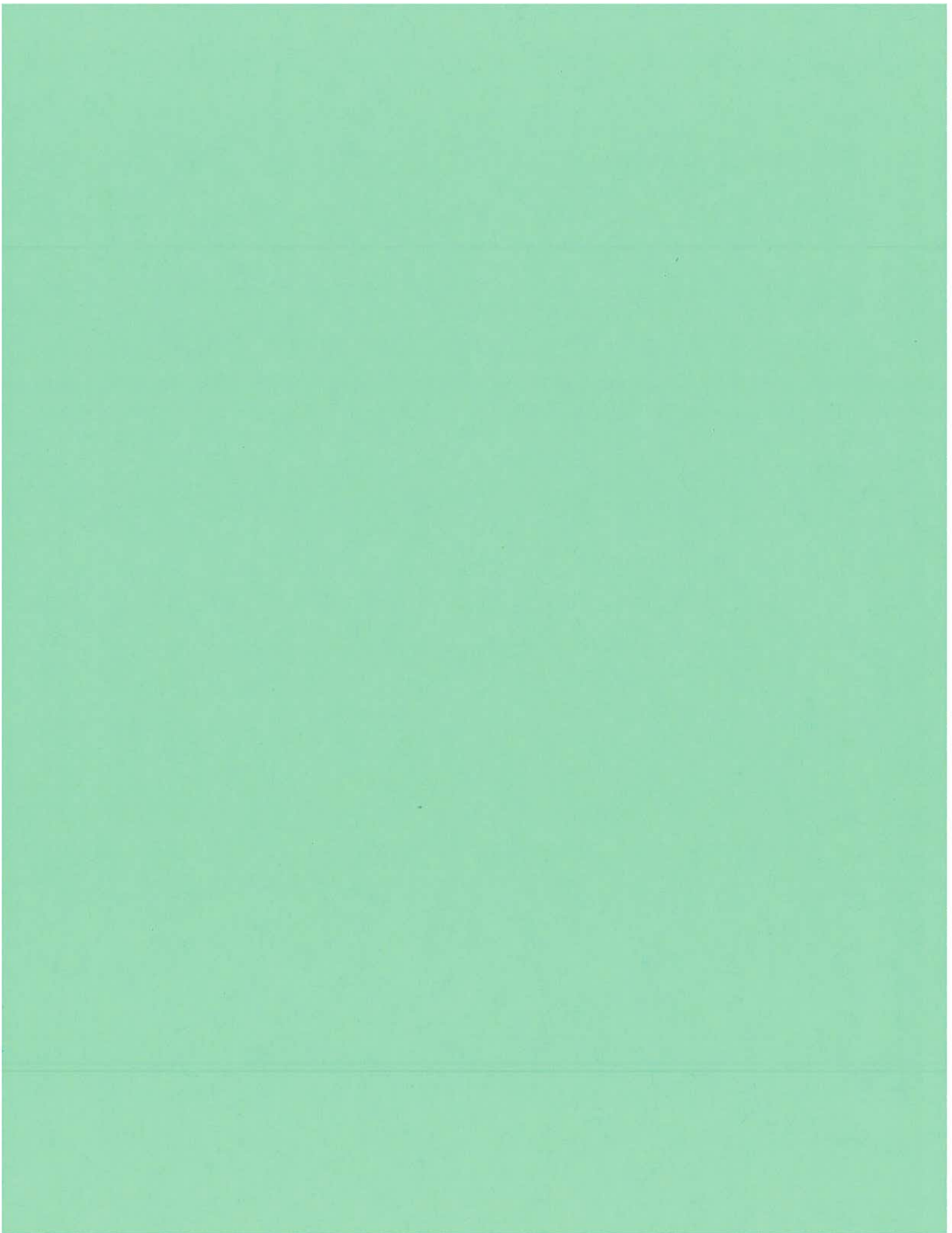
could always be a pre-school camp @ B. Everett Hall

back sheds are storage for Art & Crafts - but it happens

under tent @ prize tables. DM

doors have gravel drive - interesting - will always need

storage - security is big issue



219 under St.

22,000 s.f.

purchased 6 yrs ago - machine shop prior

metal bldg - bad roof 27,28 leaks inside

water distribution crew - pipes hydrants tanks 50' 6"

35,36 - women's room no women on staff

37,38 - men's room

39,40 - second bay - untreated

3rd & 4th bays - could be good for climate

controlled records space - 4000 s.f. for visitor +
more for Jan Hall
records.

about 1000 s.f. of unused office space

41,42,43 ↑ visitor wants to move here
to be closer to O&W

up to 47 - Toilet areas near ~~toilet~~ offices

48 front room for supervisors offices - 3 people

cash list

Sprinklers

moving offices over
appropriate parking

facility has good elec'll service

bulk space general shop space for O&W + General Building

roof repairs

toilet upgrading envelope

Need a generator for office

maintenancel
being contemplated

notes by PB
1/13

219 winter St. 22,000 s.f.

purchased 6 yrs ago - machine shop prior

metal bldg - bad roof 27,28 leaks inside

water distribution crew - pipes hydrants tanks 5006

35, 36 - women's room no women on staff

37, 38 - men's room

39, 40 - second bay - untreated

3rd & 4th bays - could be good for climate
controlled records space

about 1000 s.f. of unused office space

41, 42, 43 ↑ visitor wants to move here
to be closer to OEM's

up to 47 - Toilet areas near ~~toilet~~ offices

48 found room for supervisors offices - 3 people

wish list

sprinklers

roof repairs

moving offices over
appropriate parking

facility has good elec service

Conditions Survey

Name of Building: 219 Winter Street - Water Dist Garage

Name of Respondent : Victor Diniak

Contact Information: _____

(Please print)

Please describe the conditions of your building, from your own observation. For most, there is no need to complete the entire form; please respond only to those items that you have personal first-hand knowledge about.

Exterior

Foundation / Settling / Cracks?: no major problems that I am aware of

Roof (leaks?): Roof has minor leaks. Some cracking of roof material where the roof meets the walls. Money has been appropriated for a new EPDM roofing system

Windows (leaks / drafts?): _____

Exterior Walls: When we move the DPW offices we would like to clean up the front of the building to make it more presentable

Landscaping: _____

Parking: _____

Walks: _____

Drives: _____

Drainage Issues (water / snow removal): minor drainage issues in loading dock area

Exterior Lighting: _____

Any other exterior issues / concerns: _____

site security is an issue. Need better fencing/exterior security cameras

Interior:

Please describe the first three most important issues:

Long range plan is to redevelop the unused portion of the building for DPW office space

as well as to provide for climate controlled records storage and shop space

Building needs fire sprinklers

Unused portion needs a major cleanup

Interior Finishes (paint, carpet, ceiling tiles, etc.):

Walls: need redevelopment to be usable as office space

Floors: floors are dirty in the unused portion of the building

Ceilings: _____

Layout / Space issues: _____

Air Quality: _____

Temperature Control: _____

Water / Toilets: _____

Lighting: lighting is inadequate in the unused space. Need better lighting controls

Mechanical Equipment Issues (Heating and/or A/C): _____

unknown

Plumbing Equipment issues: unknown

Fire Protection (Sprinkler) system issues: Building lacks a fire sprinkler system

Electrical Power System Issues: The only issue we know of is that the building has no standby power. This needs to be added if we move the offices.

Fire Alarm System Issues: Fire alarm needs to be upgraded when we renovate the space

Security System Issues: Security system is functional but old.

Utilities: Gas, Elec., Oil, Other: Gas heat - currently unit heaters

Hazardous Materials (known or suspected) (dates of surveys, if any):

Asbestos: _____

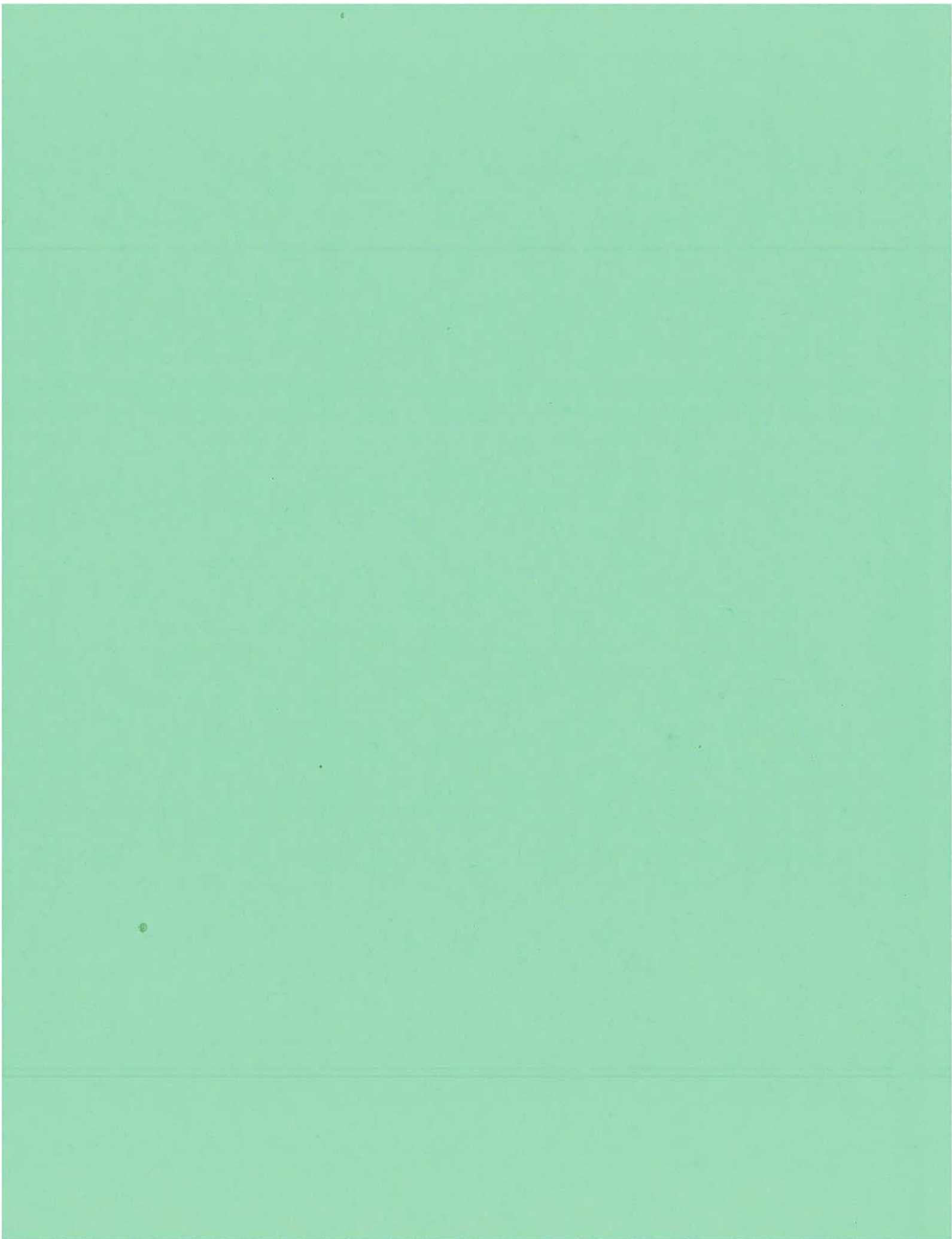
Oil Tanks: none

Lead Paint: unknown

Are there any other items you can think of, that we need to know about, that are not covered by the above list?

Other: _____

Thank you!!
Drummey Rosane Anderson, Inc.
Paul S. Brown, AIA, Project Manager
Brown@draws.com
1-617-964-1700 x142



Victor Dineale
Curt Maclean

notes 1/13/10
1/13/10

Highway Garage

metal building

1977

original metal roof - dry rot rubber
washers
going to use EPDM over

1-4 S. facade

⑤ Salt shed - 1980

Truss roof

1000 ton shed - fill it w/ 1500 tons

use 4000 tons per year

+ interior pipes + cleanup of rusted door

~~prefer an overhead door~~

want track washing station under shed

Ventilation? basically o.k.

run-off from tanks goes to tight tank
drains are plugged for oil.

total vehicle maintenance

up to (17) interior of front bay

Steel framed (18)

3 bays in front

have a plan of the original building

will scan & send - does not show 1980 addition

3 Sections - North side added

9 Sunders - can get all in center room
plus other equipment

want to add sprinklers + shed on side

ventilation issue when starting fleet

waste oil burner heats 1980 shed 100%, plus part of center area

Big Issues: Sprinklers

Ventilation

Vehicle wash station - will be forced into it by
EPA - enclosed 1/29/10

outside covered shed space w/ block heaters

Separate heating vent system for office shed spaces

CMV block wall storage bldg - general storage bldg, when roof
fails, strip it off, move stuff to Z19, use walls + pad to
shelter gear equipment

Perimeter fence - o.k. - they make repairs

Highway Garage P.2

Refer automated operation of main gate w/camera

Platz brush pile 3 on site vehicle conflict
prefer to put road outside fence, but
can't monitor it

Apr-Sept: 7-2:30 m-r 8-12 su.

old "bugler" alarm for bldg.
v.g tanks - monitored @ downtown

Town-wide fuel filling station - including police + schools
but not school buses.

no accessibility

1d men's room 2d women's room

21 break room - no ice sink

can have up to 10 guys here "cashing"
during a storm

no female employees

(22) cost office

Victor's office 3 @ water T. plant
is across town

Conditions Survey

Name of Building: Highway Garage

Name of Respondent : Victor Diniak

Contact Information: _____
(Please print)

Please describe the conditions of your building, from your own observation. For most, there is no need to complete the entire form; please respond only to those items that you have personal first-hand knowledge about.

Exterior

Foundation / Settling / Cracks?: none that we are aware of

Roof (leaks?): Roof has minor leaks. Money has been appropriated for a roof replacement

Windows (leaks / drafts?): There is only one window

Exterior Walls: faded

Landscaping: none

Parking: adequate

Walks: _____

Drives: _____

Drainage Issues (water / snow removal): _____

Exterior Lighting: adequate

Any other exterior issues / concerns: some of the doors are getting a little old

The bigger issue is the general yard improvements needed which are outlined in the DPW's capital plan.

Could use automatic door openers on front mechanics bay doors.

Interior:

Please describe the first three most important issues:

Space is too small to house the entire sander fleet

Building needs fire sprinklers

ventilation is poor

Interior Finishes (paint, carpet, ceiling tiles, etc.):

Walls: dirty

Floors: _____

Ceilings: _____

Layout / Space issues: need more interior spacer

Air Quality: poor when vehicles are starting up

Temperature Control: _____

Water / Toilets: _____

Lighting: _____

Mechanical Equipment Issues (Heating and/or A/C): _____

Heating system in employee area needs to be decoupled from system in shop area

Plumbing Equipment issues: _____

Fire Protection (Sprinkler) system issues: needs fire sprinklers

Electrical Power System Issues: none

Fire Alarm System Issues: needs a new fire alarm system

Security System Issues: burglar alarm is quite old

Utilities: Gas, Elec., Oil, Other: oil

Hazardous Materials (known or suspected) (dates of surveys, if any):
Asbestos: _____

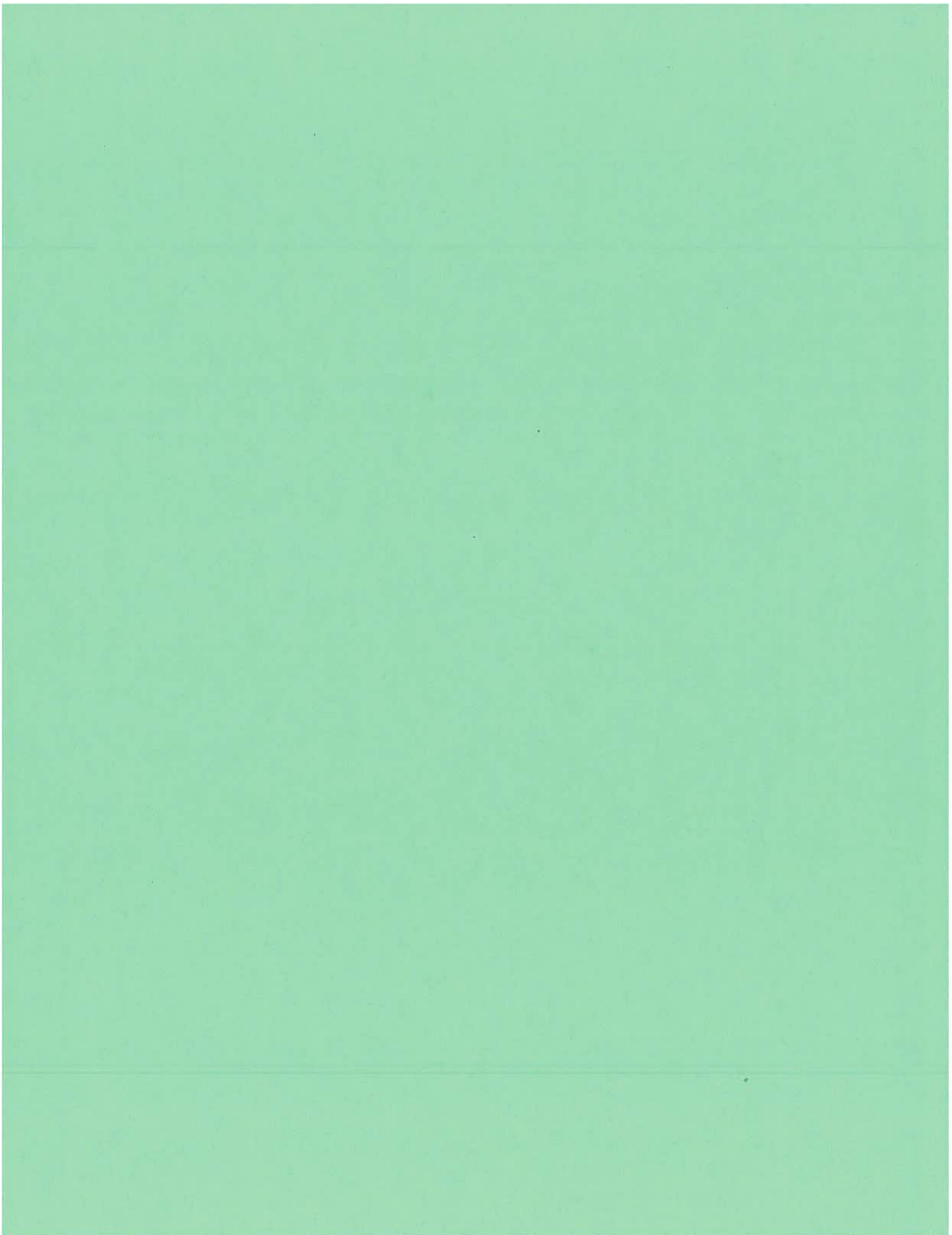
Oil Tanks: above ground and contained

Lead Paint: _____

Are there any other items you can think of, that we need to know about, that are not covered by the above list?

Other: please see the DPW's capital plan for our long range plan for the facility

Thank you!!
Drummey Rosane Anderson, Inc.
Paul S. Brown, AIA, Project Manager
Brown@draws.com
1-617-964-1700 x142



12/9/2010 Field Notes

M.S. main hallway down stairs is abated - no other areas.

meeting w/ Bob Murray: reviewed spreadsheets w/ Jennifer. will do everything we can

Town Hall: Windows - historic buildings are vinyl Replacement D.H.

✓ Row addition - ^{good} aluminum fixed over-hopper
thermostat - o.k. 3/4" only
Some cladding. but still tight.
(D.H. therm@VNA)

Fire Station:

✓ Very D.H. thermos good shape - no storming
also correct no elevator in building.
all wood framed.!

Attic - Condensation problem is caused by
large gaps in insulation - trussed roof w/
dropped ceilings - see photos.

but insulation is very ineffective - replace w/ foam
(at sidewalls) etc.

Station: not open

Library: Historic windows: upper - original 5 pane D.H. w/ triple-track
Storms - storms are very large - one on west
is displaced
waiting for call back.

lower - historically correct D. Pane double-hung
see photo.

Grange: is now Boks & Rec'n ; Stone foundation in front
✓ windows are replacement Power lines on west - Substation
oil tank is not contained D.H. vinyl

see marked plan

Some paint still here
basement exp was 105. = 3 1/2 batt w/ gaps & tears
ramp is 4' + wide, but handrails are too low & non-continuous

Paul Porter: Store acid in 5 gal carboys

can't add water to
acid - add acid to
water

Town Hall

not in PB

1/13

also see

marked-up plans

Steve Rolling
Tom Obrien
custodian

Wester

Tom
manager

Addition 1977

roof - o.k. 1995 or 1996 - asphalt shingles

windows replaced '95 or '96

Painted 2002 trim @ front - rest '04

front historic has vinyl siding

has generator - gas

no security system no cameras

open 7:30-4:30 + 3 evenings per week

all gas

no oil on site

one hot-air furnace is old

Question about vinyl siding - moisture in old building

all wireless

administrators compressor tied to O's + F.P. system

WOTC - entire bldg sprinklered except attic

2 hot water tanks

Communication cable hard to install

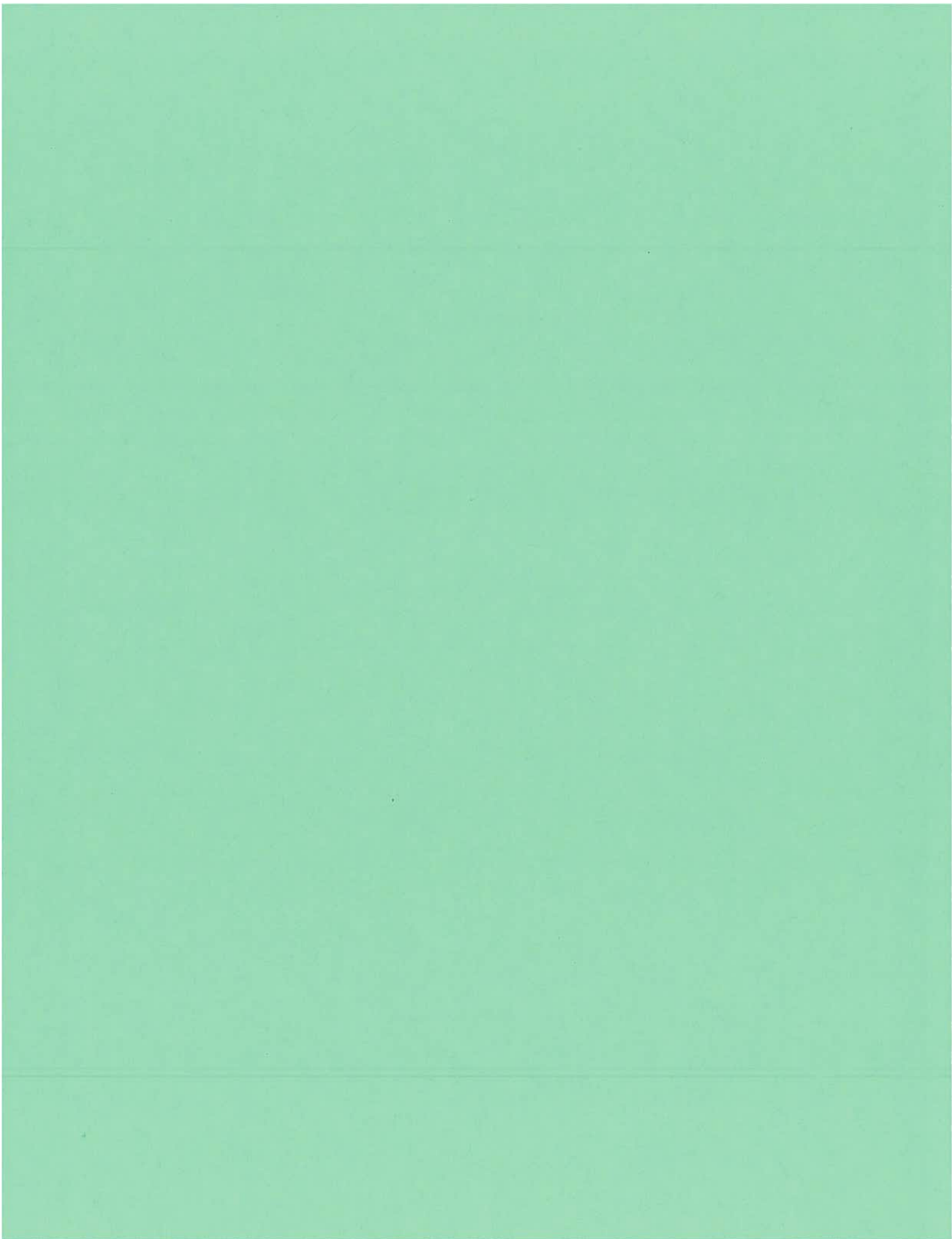
1/29

Fire Alarm System general upgrade needed.

can emerg. gen. capacity be extended to other areas of the building?

extend sprinklers to attic.

records storage in basement areas - dampness - need to come up with a plan for archival storage



12/9/2010 Field Notes

M.S. main hallway down stairs is ~~abandoned~~ - no other areas.

meeting w/ Bob Murray: reviewed spreadsheet w/ Jennifer.
will do everything we can

Town Hall: windows - historic building are vinyl Replacement D.H.
✓ Raw addition - ^{good} alum fixed over-hopper
thermopane - o.k. 3/8" only
Some cladding. but still to rot -
(D.H. thermopane)

Fire Station: ✓ Very D.H. thermos good shape - no storms
also correct no elevator in building.
all wood framed. !
Attic - condensation problem is caused by
large gaps in insulation - trussed roof w/
dropped ceilings - see photos.
batt insulation is very ineffective - replace w/ foam
(at sidewalls) etc.

Stetson: not open

Library: Historic windows: upper - original S. pane D.H. w/ tripple-track
w/amy for can back. Storms - storms are very large - one on west
is displaced
lower - historically correct D. pane divided lites
see photo.

Grange: ✓ is raw Bunks & Pail: stone foundation in front
windows are replacement Power lines on west - Substation
oil tank is not contained D.H. - vinyl
Some paint still here
basement ep wall ins. = 3 1/2 batt w/ gaps & tears
ramp is 4' + wide, but handrails are too low & non-continuous

See marked PVA

Phil Porter: Store acid in 5 gal carboys
can't add water to acid - add acid to water

Conditions SurveyName of Building: LibraryName of Respondent: Loraine Welsh

Contact Information: _____

(Please print)

Please describe the conditions of your building, from your own observation. For most, there is no need to complete the entire form; **please respond only to those items that you have personal first-hand knowledge about.**

Exterior

Foundation / Settling / Cracks?: _____

Roof (leaks?): falling snow & ice on all sides - particularly south -
not a main door but besideWindows (leaks / drafts?): lots on back wall - was very hot when constructed -
could not get sealant to adhere

Exterior Walls: _____

Landscaping: _____

Parking: _____

Walks: _____

Drives: _____

Drainage Issues (water / snow removal): _____

Exterior Lighting: _____

Any other exterior issues / concerns: _____

Interior:

Please describe the first three most important issues:

leaks around windows & skylight

Interior Finishes (paint, carpet, ceiling tiles, etc.):

Walls: _____

Floors: _____

Ceilings: _____

Layout / Space issues: _____

Air Quality: _____

Temperature Control: _____

Water / Toilets: had a problem with septic - but was resolved.Lighting: Inadequate lighting in 2 front rooms - chandelier in each room w/ shades - but too low max.

Mechanical Equipment Issues (Heating and/or A/C): _____

Plumbing Equipment issues: _____

Fire Protection (Sprinkler) system issues: _____

Electrical Power System Issues: _____

Fire Alarm System Issues: _____

Security System Issues: _____

Utilities: Gas, Elec., Oil, Other: _____

Hazardous Materials (known or suspected) (dates of surveys, if any):

Asbestos: _____

Oil Tanks: _____

Lead Paint: _____

Are there any other items you can think of, that we need to know about, that are not covered by the above list?

Other: _____

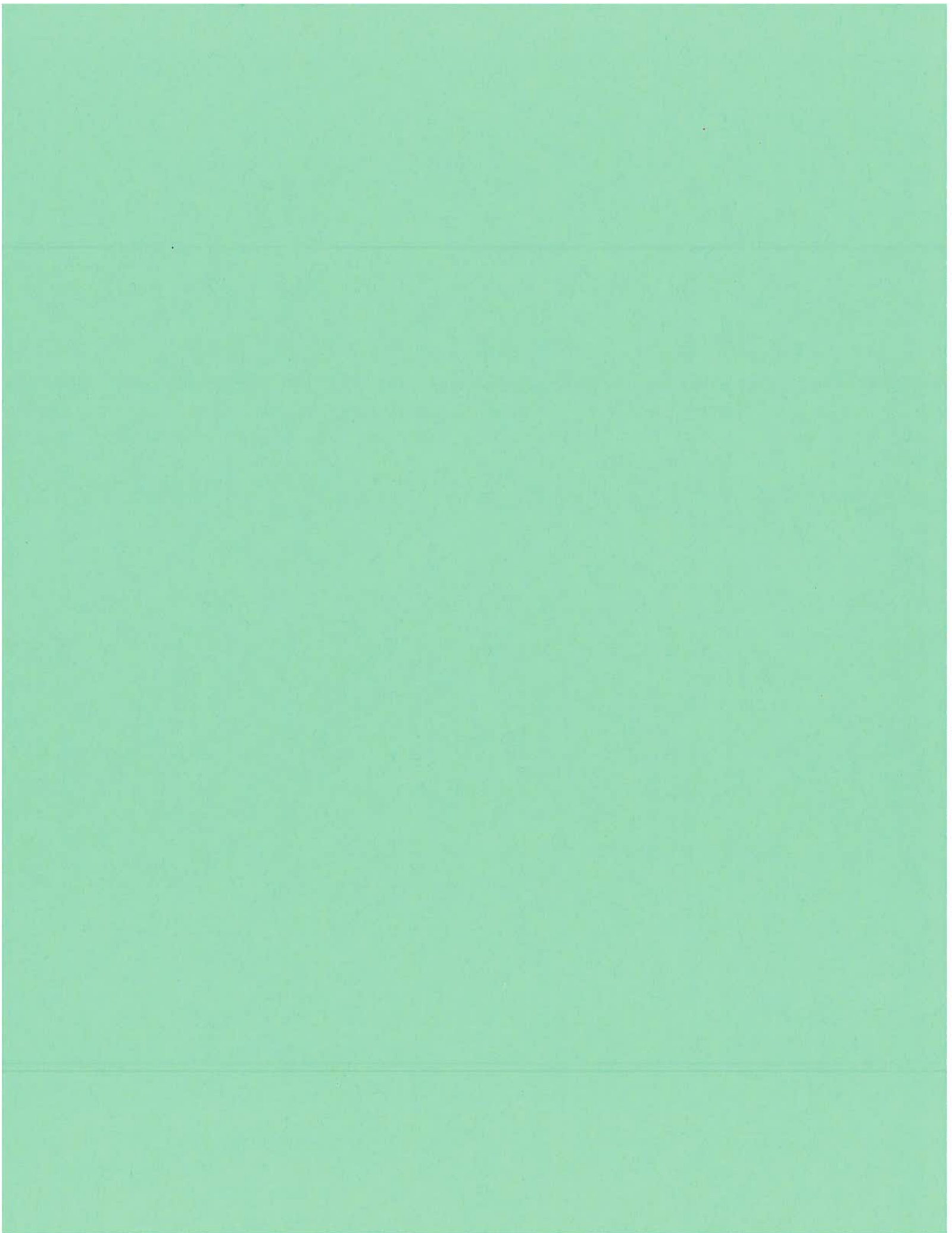
Thank you!!

Drummey Rosane Anderson, Inc.

Paul S. Brown, AIA, Project Manager

Brown@draws.com

1-617-964-1700 x142



Stetson

1/29/2010

Steve Rollins

Jennifer Pothle

Margaret - Stetson House + Cortez School

Stetson - exterior painting -

climate control on 2nd floor

preservation of building in its present state

need a storage room 2 Temp control - light heat
on National Register

identify sources of funds: Friends of Stetson
CPC
Historic Commission
and others.

Cortez "It can't continue the way it is; we must move forward"

Cost benefit to keep is not realistic? Can apartment be
used for some other use?

when school left, 2 sump pumps were working @ low damp -
now it's dry.

save the facade, & build behind it.

History: School, School Admin + Police Station,

Fire Station? Ambulances - response time to north side of town
field space is also important.

but also possibly sell it. for senior housing - Life Care Center?

1/29/2010

Curtis School

Steve Rollins
Jennifer Pahlke

Margaret - Statzen House + Curtis School

Statzen - exterior painting -

climate control on 2nd floor

preservation of building in its present state

need a storage room ~ Temp control - light heat
on National Register

Identify sources of funds: Friends of Statzen
CPC
Historic Commission
and others.

Curtis "It can't continue the way it is; we must move forward"

Cost benefit to keep is not realistic? Can a portion be
used for some other use?

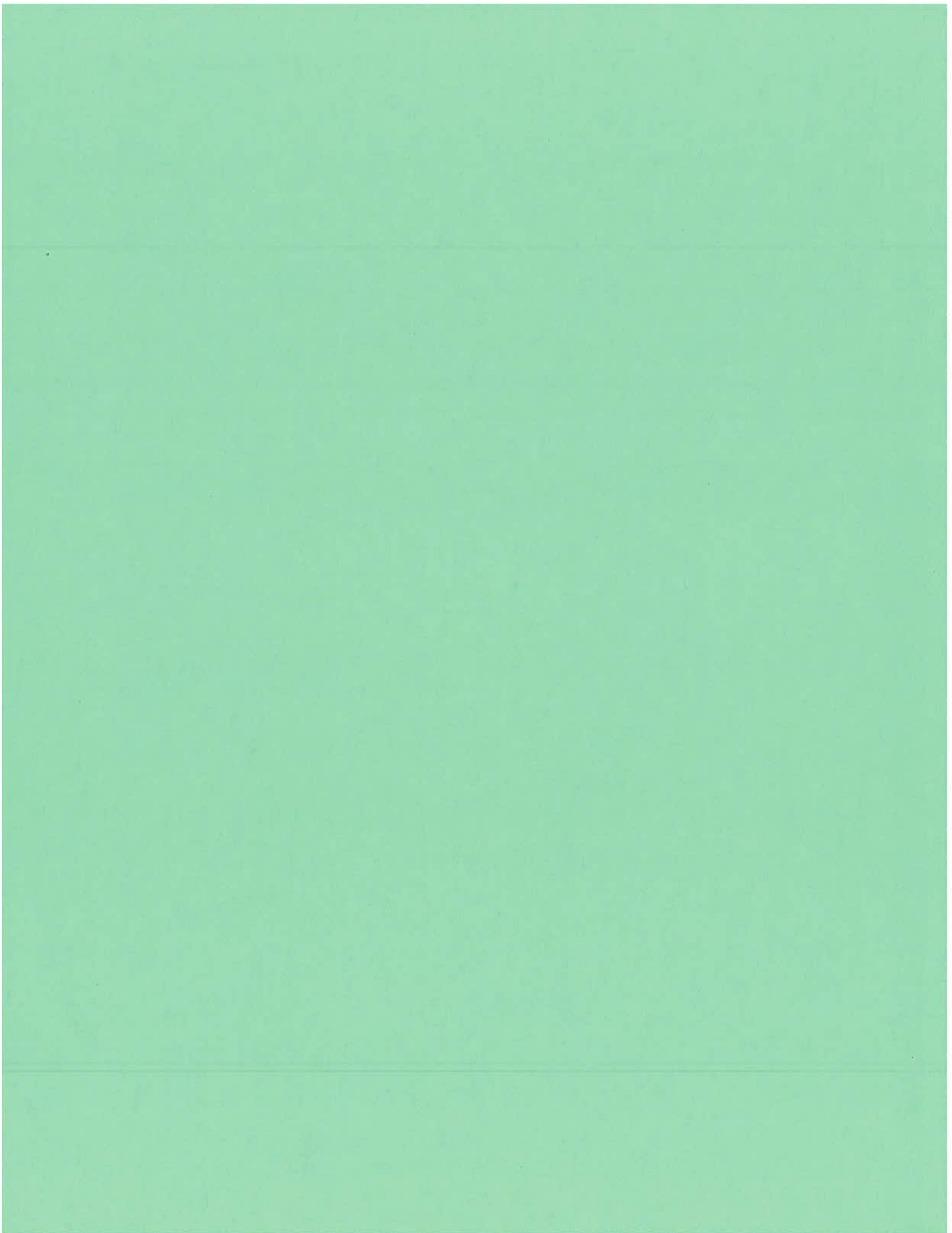
when school left, 2 sump pumps were working @ low damp
now it's dry.

save the facade, & build behind it.

History: School, School Admin + Police Station,

Fire Station? Ambulances - response time to north side of town
field space is also important.

but also possibly sell it. for senior housing - Life Care Center?



12/9/2010 Field Notes

M.S. main hallway down stairs is abated - no other areas.

meeting w/ Bob Murray: reviewed spreadsheets w/ Jennifer.
will do everything we can

Town Hall: Windows - historic buildings are vinyl Replacement D.H.
✓ Few additions - ^{good} alum fixed over-hopper
thermopane - o.k. 3/8" only
Some cladding. but still to go -
(D.H. thermopane)

Fire Station: ✓ Vinyl D.H. thermos good shape - no storms
also correct no elevator in building.
all wood framed!
Attic - condensation problem is caused by
large gaps in insulation - trussed roof w/
dropped ceilings - see photos.
batt insulation is very ineffective - replace w/ foam
(at stairwells) etc.

Stetson: not open

Library: Historic windows: upper - original 5 pane. D.H. w/ triple-track
Storms - storms are very large. one on west
is replaced.
lower - historically correct 12. Pane double-hung
see photo.

Grange: is now Parks & Rec'n; stone foundation in front
✓ windows are replacement
oil tank is not contained D.H. - vinyl
Some paint still here
basement approx 105. = 3 1/2 batt w/ gaps & tears
ramp is 4' + wide, but handrails are too low & non-continuous

see
marked
plan

Ant Pater: store acid in 5 gal carboys

can't add water to
acid - add acid to
water

notes by PB
1/13/10

~~166 (some) JT~~
~~166 (some) JT~~

Council on Aging / Grange Hall

will move in march / april

will remove parks + ic

prohibit

no ramp rules not compliant

not level at top - no adequate
elevation

see notes on plans

B. Ennet Hall (trailer)

3:04 Survey - 503-397-7730

3:54 - Mark D'angelo

pre-fab sil. bldg

10h at work

Trailer photo inside

lot + 105

11' x 19'

boys 1 toilet 1 sink
not all

106 107

Storage area for

girls 2 toilets 1 sink

clint, no walls 5' floor

2445 #1
included not in notes not
not covered by plan
& could not handle
been transferred
owned by OPW
to local town planner
Bldg inspector more about rules
OPW keep planning forward

worked
red
blower



Vol.2

Appendix G

Consultant Reports

CES Report (MEP Engineer)
EDG Report (Structural Engineer)
Nitsch Report (Site Engineer)

Following paragraphs A-E were produced by Consulting Engineering Services, Inc.

A. PLUMBING NARRATIVE

APPLICABLE CODES AND STANDARDS

The plumbing systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th Edition
2. Massachusetts Fire Prevention Regulations
3. Massachusetts State Fuel Gas and Plumbing Code
4. ASHRAE 90.1

PLUMBING UTILITIES

1. Domestic Water:
 - a. Existing Domestic Water Service: The existing building is currently served by a domestic water service which enters the boiler room. The domestic water service equipment includes a water meter and isolation valves. This water service currently serves all of the buildings domestic water needs. The water distribution system is original to the building and each subsequent addition/renovation.
2. Natural Gas:
 - a. Existing Natural Gas Service: There is currently a natural gas service to the building serving the boiler, hot water heater and generator. This service enters the rear of the building at the boiler room.
3. Sanitary:
 - a. Existing Sanitary Service: The stations sanitary sewer system provides sanitary waste drainage for plumbing fixtures located throughout the Station. The piping material above grade is primarily cast iron. The Plumbing fixtures drain to buried sanitary waste piping exiting the building and running to the buildings sanitary waste system.
4. Fuel Oil:
 - a. There is currently no on site fuel storage.

PLUMBING FIXTURES AND SPECIALTIES

1. Existing plumbing fixtures are as follows:
 - Water closets are floor mounted; tank type, vitreous china.
 - Lavatories recess counter mounted vitreous china. Faucets are a combination of single lever handle and two lever handles.

DOMESTIC HOT WATER SYSTEMS

1. Existing Domestic Hot Water System: The facilities domestic hot water is generated by a Bradford White gas fired water heater which feeds all the buildings hot water needs. The water heater is in good condition.

B. FIRE PROTECTION NARRATIVE

FIRE PROTECTION SERVICE

1. There is no fire protection coverage (sprinklers) currently at the facility.

C. MECHANICAL SYSTEMS:

APPLICABLE CODES AND STANDARDS

The mechanical systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th edition
2. Massachusetts Fire Prevention Regulations
3. International Mechanical Code
4. NFPA, Latest Version
5. ASHRAE 90.1

EXISTING SYSTEMS

1. The existing building is heated by a steam boiler. The steam boiler is H.O. Smith with burner currently operating on Natural gas. This equipment is of a residential size, appears to be of the appropriate size for the facility with no problems noted and is in good condition.
2. The present Heating and ventilating system consists of steam radiators in the living and common areas of the first and second floor and gas fired unit heaters in the apparatus bay.
3. Exhaust systems servicing the apparatus bays were noted as insufficient by operating personnel for vehicles.
4. The existing temperature control is via wall mounted electric residential type thermostats.

ELECTRICAL NARRATIVE

APPLICABLE CODES AND STANDARDS

The electrical power, interior lighting, and fire alarm systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th Edition
2. Massachusetts State Fire Prevention Regulations
3. NFPA Latest Edition
4. 2008 Massachusetts Electrical Code

5. Illuminating Engineering Society Lighting Handbook (IESNA), 9th Edition
6. ASHRAE 90.1

EXISTING SYSTEMS

1. The building is served by a 120/240volts, single-phase, 3-wire electrical service; capacity was noted as being 150 amp main circuit breaker. The service equipment is located on the ground level of the building. The service equipment is in good condition.
2. The lighting throughout the facility consists primarily of surface mounted 1' x 4' wraparound fluorescent fixtures. The lighting throughout the facility is in good condition. The light levels appear to be within recommended levels.
3. The fire alarm system is a Firelite Miniscan 4024 four zone FACP. There are manual fire alarm pull stations and ADA horn strobes located throughout the building. Heat detectors are located throughout the building including the apparatus bay for detection and alarm. The system and devices appear to be newer and in very good condition.
4. Site lighting is accomplished via building mounted residential type incandescent fixtures.
5. There exists an Owen standby generator to power the facility during a power outage. This unit is natural gas fired and manual transfer. The unit appears to be in good condition.
6. Life safety emergency lighting was not noted and is provided via Emergency battery units with unit mounted emergency light heads.
7. There is currently no security or controlled access system at the facility. It was noted by personnel that the addition of a security system is desired.

D. MEP SYSTEMS CONCLUSION

In general, the systems vary in age from original to the building, to as recent as 3-5 years old. Most equipment is in good condition and meets the needs of the residential nature of the facility. Upgrade of the vehicle exhaust system in the bays should be implemented.

Plumbing systems throughout seem to be in good physical and working condition. The desire was expressed to expand the second floor bath to a full bath to accommodate the 24 hour operation of the facility.

The electrical systems appear to be in good condition and operating without issues. The lighting systems are newer and in good condition, the addition of automated lighting controls in select areas should be implemented in order to meet current energy codes and to save on energy costs. Fire alarm system and emergency power generation are in good condition. Replacing the existing exterior fixtures with energy efficient units should be implemented to save on energy costs. Addition of a security system as well as the addition of emergency battery units should be implemented for both protection of personnel and equipment.

Following paragraphs A-E were produced by Consulting Engineering Services, Inc.

A. PLUMBING NARRATIVE

APPLICABLE CODES AND STANDARDS

The plumbing systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th Edition
2. Massachusetts Fire Prevention Regulations
3. Massachusetts State Fuel Gas and Plumbing Code
4. ASHRAE 90.1

PLUMBING UTILITIES

1. Domestic Water:
 - a. Existing Domestic Water Service: The existing building is currently served by a domestic water service which enters the boiler room. The domestic water service equipment includes a water meter and isolation valves. This water service currently serves all of the buildings domestic water needs. The water distribution system is original to the building and each subsequent addition/renovation.
2. Natural Gas:
 - a. Existing Natural Gas Service: There is currently a natural gas service to the building serving the boiler, hot water heater and generator. This service enters the rear of the building at the boiler room.
3. Sanitary:
 - a. Existing Sanitary Service: The building's sanitary sewer system provides sanitary waste drainage for plumbing fixtures located throughout the facility. The piping material above grade is primarily cast iron. The Plumbing fixtures drain to buried sanitary waste piping exiting the building and running to the buildings sanitary waste system.
4. Fuel Oil:
 - a. There is currently no on site fuel storage.

PLUMBING FIXTURES AND SPECIALTIES

1. Existing plumbing fixtures are as follows:
 - Water closets are floor mounted; tank type, vitreous china.
 - Lavatories are recess counter mounted vitreous china. Faucets are a combination of single lever handle and two lever handles.

DOMESTIC HOT WATER SYSTEMS

1. Existing Domestic Hot Water System: The facilities domestic hot water is generated by a 40 gallon A.O. Smith gas fired water heater which feeds all the buildings hot water needs. The water heater is in very good condition.

B. FIRE PROTECTION NARRATIVE

FIRE PROTECTION SERVICE

1. There is no fire protection coverage (sprinklers) currently at the facility.

C. MECHANICAL SYSTEMS:

APPLICABLE CODES AND STANDARDS

The mechanical systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th edition
2. Massachusetts Fire Prevention Regulations
3. International Mechanical Code
4. NFPA, Latest Version
5. ASHRAE 90.1

EXISTING SYSTEMS

1. The existing building is heated by a hot water boiler. The boiler is Weil Mclain with burner currently operating on Natural gas. This equipment is of residential size 110 MBH, appears to be of the appropriate size for the facility with no problems noted and is in good condition.
2. The present Heating and ventilating system consists of hot water baseboard radiation in the living and common areas of the first and second floor and hot water unit heaters in the apparatus bay.
3. Exhaust systems servicing the apparatus bay were noted as insufficient by operating personnel for vehicles.
4. The existing temperature control is via wall mounted electric residential type thermostats.

ELECTRICAL NARRATIVE

APPLICABLE CODES AND STANDARDS

The electrical power, interior lighting, and fire alarm systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th Edition
2. Massachusetts State Fire Prevention Regulations
3. NFPA Latest Edition

4. 2008 Massachusetts Electrical Code
5. Illuminating Engineering Society Lighting Handbook (IESNA), 9th Edition
6. ASHRAE 90.1

EXISTING SYSTEMS

1. The building is served by a 120/240volts, single-phase, 3-wire electrical service; capacity was noted as being 100 amp main circuit breaker. The service equipment is located in the exterior only entry boiler room at the rear of the building. The service equipment is in good condition.
2. The lighting throughout the facility consists primarily of residential type incandescent fixtures. The lighting throughout the facility is in good condition. The light levels appear to be within recommended levels.
3. There currently is no fire alarm system located in the facility.
4. Site lighting is accomplished via building mounted residential type incandescent fixtures.
5. There exists a 15KW standby generator to power the facility during a power outage. This unit is natural gas fired and manual transfer. The unit appears to be in good condition.
6. Life safety emergency lighting was not noted and should be provided via Emergency battery units with unit mounted emergency light heads as well as exit signs.
7. There is currently no security or controlled access system at the facility. It was noted by personnel that the addition of a security system is desired.

D. MEP SYSTEMS CONCLUSION

In general, the systems vary in age from original to the building, to as recent as 3-5 years old. Most equipment is in very good condition and meets the needs of the residential nature of the facility.

Plumbing systems throughout seem to be in good physical and working condition.

The Electrical systems appear to be in good condition and operating without issues. The lighting systems are appropriate for the facility and in good condition, the addition of automated lighting controls in select areas should be implemented in order to meet current energy codes and to save on energy costs. Exterior building mounted fixture should be replaced with higher efficiency units. Fire alarm system should be added along with a security system and both should be tied into a notification system. The emergency power generation unit is in good condition. Replacing the existing exterior fixtures with energy efficient units should be implemented to save on energy costs. Addition of emergency battery units and exit signs should be implemented for protection of occupants.

Following paragraphs A-E were produced by Consulting Engineering Services, Inc.

A. PLUMBING NARRATIVE

APPLICABLE CODES AND STANDARDS

The plumbing systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th Edition
2. Massachusetts Fire Prevention Regulations
3. Massachusetts State Fuel Gas and Plumbing Code
4. ASHRAE 90.1

PLUMBING UTILITIES

1. Domestic Water:
 - a. Existing Domestic Water Service: The existing building is currently served by a domestic water service. The domestic water service equipment includes a water meter and isolation valves. This water service currently serves all of the buildings domestic water needs. The water distribution system is original to the building and each subsequent renovation.
2. Natural Gas:
 - a. Existing Natural Gas Service: There is currently a natural gas service to the building serving the gas fired unit heaters and the generator. This service enters towards the rear of the building.
3. Sanitary:
 - a. Existing Sanitary Service: The Stations sanitary sewer system provides sanitary waste drainage for plumbing fixtures located throughout the Station. The piping material above grade is primarily cast iron. The Plumbing fixtures drain to buried sanitary waste piping exiting the building and running to the buildings sanitary waste system.
4. Fuel Oil:
 - a. There is currently no on site fuel storage.

PLUMBING FIXTURES AND SPECIALTIES

1. Existing plumbing fixtures are as follows:
 - Water closets are floor mounted; tank type, vitreous china.
 - Lavatories recess counter mounted vitreous china. Faucets are a combination of single lever handle and two lever handles.
 - Apparatus bay floor drains are clogged and should be routed out to ensure adequate drainage.

DOMESTIC HOT WATER SYSTEMS

1. Existing Domestic Hot Water System: The facilities domestic hot water is generated by a Rheem 30 gallon, 6 KW electric water heater which feeds all the buildings hot water needs. The water heater is in good condition.

B. FIRE PROTECTION NARRATIVE

FIRE PROTECTION SERVICE

1. There is no fire protection coverage (sprinklers) currently at the facility.

C. MECHANICAL SYSTEMS:

APPLICABLE CODES AND STANDARDS

The mechanical systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th edition
2. Massachusetts Fire Prevention Regulations
3. International Mechanical Code
4. NFPA, Latest Version
5. ASHRAE 90.1

EXISTING SYSTEMS

1. The existing building is heated by gas fired unit heaters. This equipment appears to be of the appropriate size for the facility with no problems noted and is in good condition.
2. There is no exhaust system servicing the apparatus bay for vehicles.

ELECTRICAL NARRATIVE

APPLICABLE CODES AND STANDARDS

The electrical power, interior lighting, and fire alarm systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th Edition
2. Massachusetts State Fire Prevention Regulations
3. NFPA Latest Edition
4. 2008 Massachusetts Electrical Code
5. Illuminating Engineering Society Lighting Handbook (IESNA), 9th Edition
6. ASHRAE 90.1

EXISTING SYSTEMS

1. The building is served by an overhead 120/240volts, single-phase, 3-wire electrical service; capacity was noted as being 100 amp main circuit breaker. The service equipment is located on the ground level of the building. The service equipment is in fair condition.
2. The lighting throughout the facility consists primarily of a mix of surface mounted fluorescent and incandescent fixtures and metal halide fixtures in the apparatus bays. The lighting throughout the facility is in good condition. The light levels appear to be within recommended levels.
3. There currently is no fire alarm system in the facility and one should be added.
4. Site lighting is accomplished via building mounted photocell controlled wall pack type fixtures these fixtures appear newer and are in very good condition.
5. There exists a standby generator to power the facility during a power outage. This unit is natural gas fired 6KW manual transfer by Winco. The unit appears to be in good condition.
6. Life safety emergency lighting was not noted and should be provided via Emergency battery units with unit mounted emergency light heads.
7. There is currently no security or controlled access system at the facility. It was noted by personnel that the addition of a security system is desired.

D. MEP SYSTEMS CONCLUSION

In general, the systems vary in age from original to the building, to as recent as 3-5 years old. Most equipment is in good condition and meets the needs of the facility.

Plumbing systems throughout seem to be in good working condition however fixtures are older and in fair/poor condition and should be replaced.

The Electrical systems appear to be in good condition and operating without issues the service entry panelboard however is older and should be replaced. The lighting systems are in good condition, the addition of automated lighting controls in select areas should be implemented in order to meet current energy codes and to save on energy costs. Fire alarm system should be added as there is currently none in the facility. The emergency power generator is in good condition. Addition of a security system as well as the addition of emergency battery units should be implemented for both protection of personnel and equipment.

Following paragraphs A-E were produced by Consulting Engineering Services, Inc.

A. PLUMBING NARRATIVE

APPLICABLE CODES AND STANDARDS

The plumbing systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th Edition
2. Massachusetts Fire Prevention Regulations
3. Massachusetts State Fuel Gas and Plumbing Code
4. ASHRAE 90.1

PLUMBING UTILITIES

1. Domestic Water:
 - a. Existing Domestic Water Service: The existing building is currently served by a domestic water service which enters the boiler room. The domestic water service equipment includes a water meter and isolation valves. This water service currently serves all of the Stations domestic water needs. The water distribution system is original to the building.
2. Natural Gas:
 - a. Existing Natural Gas Service: There is currently a natural gas service to the building serving the boiler, hot water heater and generator. These services enter the rear of the building at the boiler room.
3. Sanitary:
 - a. Existing Sanitary Service: The facilities sanitary sewer system provides sanitary waste drainage for plumbing fixtures located throughout the facility. The piping material above grade is primarily cast iron. The Plumbing fixtures drain to buried sanitary waste piping exiting the building and running to the buildings sanitary waste system.
4. Fuel Oil:
 - a. There is currently one on site above ground oil storage tank utilized for waste oil.

PLUMBING FIXTURES AND SPECIALTIES

1. Existing plumbing fixtures are as follows:
 - Water closets are wall mounted; with auto flush valves, vitreous china.
 - Urinals are wall mounted vitreous china, with flush valves.
 - Lavatories are wall hung vitreous china. Faucets are a combination of single lever handle and two lever handle type.

DOMESTIC HOT WATER SYSTEMS

1. Existing Domestic Hot Water System: The buildings domestic hot water is generated by a gas fired water heater which feeds all the stations hot water needs. The water heater is in good condition.

B. FIRE PROTECTION NARRATIVE

FIRE PROTECTION SERVICE

1. There is no fire protection coverage (sprinklers) currently at the facility.

C. MECHANICAL SYSTEMS:

APPLICABLE CODES AND STANDARDS

The mechanical systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th edition
2. Massachusetts Fire Prevention Regulations
3. International Mechanical Code
4. NFPA, Latest Version
5. ASHRAE 90.1

EXISTING SYSTEMS

1. The existing building is heated by a single hot water boiler. The hot water boiler is a Burnham with its burner currently operating on Natural gas and a capacity of 313 MBH. This equipment is approximately 22 years old and in good condition. Despite its age and condition it was expressed by building personnel that this equipment has been problematic for a number of years in its ability to supply adequate heat to some areas of the building. It is not known if this is due to the equipment, controls or distribution.
2. The present Heating and Ventilating systems consist of finned tube radiation, unit ventilators, roof top units, ceiling mounted split systems and exhaust systems.
3. Unit Ventilators are approximately 20 years old manufactured by Carrier. They have begun to fail and repairs are becoming more frequent as they are at the end of the useful life. It has also become difficult to obtain repair parts for repairs when needed, obtaining these parts may become more of an issue as more units fail and require replacement parts.
4. A number of areas within the building are served by independent split systems including the day room and watch room. The dorm area is served by overhead A/C system. The office area HVAC unit has been problematic with frequent breakdowns.

D. ELECTRICAL NARRATIVE

APPLICABLE CODES AND STANDARDS

The electrical power, interior lighting, and fire alarm systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements, including the Bureau of School Facilities.

1. Massachusetts State Building Code 7th Edition
2. Massachusetts State Fire Prevention Regulations
3. NFPA Latest Edition
4. 2008 Massachusetts Electrical Code
5. Illuminating Engineering Society Lighting Handbook (IESNA), 9th Edition
6. ASHRAE 90.1

EXISTING SYSTEMS

1. The building is served by a 208Y/120volts, 3-phase, 4-wire electrical service; capacity was noted as being rated 600 amps. The service equipment is located on the ground level of the building. The service equipment is in very good condition.
2. There are a number of electrical panels located throughout the facility. These panel boards all are in good condition.
3. The lighting throughout the facility consists primarily of 2' x 4' acrylic lens troffers. The lighting throughout the facility is in good/fair condition. The light levels appear to be within recommended levels.
4. The fire alarm system is a Honeywell Silent Night 5 zone system. There are manual fire alarm pull stations and horn strobes located throughout the building. Heat and smoke detectors are located in select areas in the building. It was noted by building personnel during the walk-thru that the system had been operating problem free.
5. Site lighting is accomplished via building mounted lights and a number of pole mounted flood lights.
6. There exists a 60KW standby generator at the facility that covers all the life safety items within the building. This unit is complete with transfer switch and distribution panel. The generator operates on natural gas as a fuel source.
7. Life safety emergency lighting is provided via lighting throughout the facility being wired to the emergency generator as well as battery powered exit lighting units.
8. There is currently no controlled access or security system installed at the facility.

E. MEP SYSTEMS CONCLUSION

In general, the systems vary in age from original to the building, to as recent as 3-5 years old. Some equipment such as the unit ventilators have begun to experience problems due to their age and should be replaced. The boiler although still having some life left has been problematic and should be examined along with the overall HVAC systems in order to determine the causes of ongoing heating and air conditioning problems.

Town of Hanover – MUNICIPAL FACILITIES ASSESSMENT – 2010

Section 4 – Fire Station 4

Plumbing systems throughout seem to be in good physical and working condition. Replacement of faucets and flush valves on toilets and urinals to automatic units should be implemented as a water conservation measure.

The Electrical systems appear to be in good condition and operating without issues. The lighting systems are in good condition, the addition of automated lighting controls in select areas should be implemented in order to meet current energy codes and to save on energy costs. Fire alarm system, emergency power generation and exit lighting systems appear to be in good condition. A new security system should be installed as none currently exists.

Following paragraphs A-E were produced by Consulting Engineering Services, Inc.

A. PLUMBING NARRATIVE

APPLICABLE CODES AND STANDARDS

The plumbing systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th Edition
2. Massachusetts Fire Prevention Regulations
3. Massachusetts State Fuel Gas and Plumbing Code
4. ASHRAE 90.1

PLUMBING UTILITIES

1. Domestic Water:
 - a. Existing Domestic Water Service: The existing building is currently served by a 2" domestic water service which enters the basement at the boiler room. The domestic water service equipment includes a water meter and isolation valves. This water service currently serves all of the Schools domestic water needs. The water distribution system is original to the building and each subsequent addition/renovation.
2. Natural Gas:
 - a. Existing Natural Gas Service: There is currently a natural gas service to the building that enters the building adjacent to the sprinkler service in the basement. This service serves the boilers and the hot water heater.
3. Sanitary:
 - a. Existing Sanitary Service: The School's sanitary sewer system provides sanitary waste drainage for plumbing fixtures located throughout the School. The piping material above grade is primarily cast iron. The Plumbing fixtures drain to buried sanitary waste piping exiting the building and running to the buildings sanitary waste system.
4. Fuel Oil:
 - a. There is currently no on site fuel storage.

PLUMBING FIXTURES AND SPECIALTIES

1. Existing plumbing fixtures are as follows:
 - Water closets are wall mounted; vitreous china with flush valves.
 - Urinals are wall mounted vitreous china, with flush valves.
 - Lavatories are wall hung vitreous china. Faucets are a combination of single lever handle and two lever handles.
 - Drinking fountains are surface mounted stainless steel units. The units are in good condition.

Town of Hanover – MUNICIPAL FACILITIES ASSESSMENT – 2010

Section 5 – Center Elementary School

- Janitor's mop sinks are wall mounted basins with some floor mounted units all with 2-faucets and vacuum breakers. These basins are in good condition.
- Typical classroom sinks are counter top, 2-lever gooseneck faucets and are in good condition.

DOMESTIC HOT WATER SYSTEMS

1. Existing Domestic Hot Water System: The Schools domestic hot water is generated by gas fired water heater 125 gallon which feeds the schools hot water needs. The water heater is in good condition.

B. FIRE PROTECTION NARRATIVE

FIRE PROTECTION SERVICE

1. There is complete fire protection system coverage (sprinklers) currently at the facility. A 6" fire protection service line enters the basement of the school complete with isolation valves and fire alarm system monitoring no backflow preventer was noted.
2. The kitchen hood is supplied with a fire suppression system within the hood and is in good condition.

C. MECHANICAL SYSTEMS:

APPLICABLE CODES AND STANDARDS

The mechanical systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th edition
2. Massachusetts Fire Prevention Regulations
3. International Mechanical Code
4. NFPA, Latest Version
5. ASHRAE 90.1

EXISTING SYSTEMS

1. The existing building is heated by two hot water boilers. The two hot water boilers are Burnham with burners currently operating on Natural gas and a capacity of 2957 MBH each. This equipment is approximately 15 years old and in very good condition.
2. The present Heating and Ventilating systems consist of finned tube radiation, unit ventilators in the classrooms and exhaust systems. The auditorium is served by two closet mounted H & V units which were noted by personnel as being very loud when operating. They had been told that the units were oversized. The cafeteria was noted as also being served by ceiling mounted H & V units without any noted issues. Both the cafeteria and the auditorium systems included a supply air component.
3. Unit Ventilators in classrooms appear newer and are in very good condition with no noted problems.

4. Exhaust systems servicing the classrooms utilize a single exhaust grille. Exhaust grills are located in the ceilings opposite the exterior walls containing the unit ventilators.
5. The existing temperature controls in the school are newer Honeywell controls some pneumatic controls still exist and have been problematic. The temperature control system air compressor is located in the Boiler Room and includes an air dryer this unit is older in fair condition.

D. ELECTRICAL NARRATIVE

APPLICABLE CODES AND STANDARDS

The electrical power, interior lighting, and fire alarm systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th Edition
2. Massachusetts State Fire Prevention Regulations
3. NFPA Latest Edition
4. 2008 Massachusetts Electrical Code
5. Illuminating Engineering Society Lighting Handbook (IESNA), 9th Edition
6. ASHRAE 90.1

EXISTING SYSTEMS

1. The building is served by a 208Y/120volts, 3-phase, 4-wire electrical service; capacity was noted as being rated 1200 amps. The service equipment is located in the basement of the building. The service equipment switchboard is in very good condition.
2. There are a number of electrical panels located throughout the facility. These panel boards are a mix of newer and older having been added and/or replaced at the time of various building additions and/or on an as-needed basis. The condition of these panel boards range from very good to fair/poor. The majority of the older panel boards do not have spare circuit breakers available for new circuits to be added, or have space to add new circuit breakers.
3. The lighting throughout the facility consists primarily of 2' x 4' fluorescent acrylic lens troffers fixtures in the classrooms and 2' x 4' acrylic lens troffers in the corridors. The lighting throughout the facility is in good condition during a follow-up walkthrough it was noted that the upgrade of ballasts and lamps was being implemented per the 2009 National Grid energy audit recommendation. The light levels appear to be within recommended levels.
4. The fire alarm system is a Harrington main FACP with manual fire alarm pull stations, horn strobes and smoke detectors located throughout the building. All devices appear to be ADA compliant including booster panel for driving strobes.
5. Site lighting is accomplished via building mounted wall packs and flood lights.
6. There is no standby emergency generator at the facility.
7. Life safety emergency and exit lighting is provided via Emergency battery units with unit mounted emergency light heads, units are newer and in good condition.

Town of Hanover – MUNICIPAL FACILITIES ASSESSMENT – 2010

Section 5 – Center Elementary School

8. The existing clock system is functioning without any noted problems and appears to be in good condition. The existing paging system is older but was noted as function without any problems.
9. There is currently a controlled access system by Magnum Alert at the main front entry including a CCTV camera. All systems were noted as functioning without any issues.

E. MEP SYSTEMS CONCLUSION

In general, the systems vary in age from original to the building, to as recent as a year old. Some equipment such as the H & V units serving the auditorium should be investigated to determine the cause of the excessive noise and in order to determine a resolution to the problem. The existing pneumatic controls should be replaced to correct the ongoing problems.

Plumbing systems throughout seem to be in good physical and working condition. Replacement of faucets and flush valves on toilets and urinals to automatic units should be implemented as a water conservation measure.

The Electrical systems appear to be in good condition and operating without issues. The older distribution equipment (panelboards) should be replaced with newer equipment with additional breaker spaces added to meet any future needs and to alleviate the possibility of overloading individual circuits when new equipment and or devices are added to existing circuitry. The lighting systems are newer and in good condition. Fire alarm system, emergency lighting and exit lighting systems are newer and appear to be in good condition. Existing paging, clock and security system are in good working order.

Following paragraphs A-E were produced by Consulting Engineering Services, Inc.

A. PLUMBING NARRATIVE

APPLICABLE CODES AND STANDARDS

The plumbing systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th Edition
2. Massachusetts Fire Prevention Regulations
3. Massachusetts State Fuel Gas and Plumbing Code
4. ASHRAE 90.1

PLUMBING UTILITIES

1. Domestic Water:
 - a. Existing Domestic Water Service: The existing building is currently served by a 2" domestic water service which enters the boiler room. The domestic water service equipment includes a water meter and isolation valves. This water service currently serves all of the Schools domestic water needs. The water distribution system is original to the building and each subsequent addition/renovation.
2. Natural Gas:
 - a. Existing Natural Gas Service: There is currently a natural gas service to the building that enters the building in the boiler room. This service serves the boilers and the hot water heater.
3. Sanitary:
 - a. Existing Sanitary Service: The School's sanitary sewer system provides sanitary waste drainage for plumbing fixtures located throughout the School. The piping material above grade is primarily cast iron. The Plumbing fixtures drain to buried sanitary waste piping exiting the building and running to the buildings sanitary waste system.
4. Fuel Oil:
 - a. There is currently no on site fuel storage.

PLUMBING FIXTURES AND SPECIALTIES

1. Existing plumbing fixtures are as follows:
 - Water closets are wall and floor mounted; vitreous china with flush valves.
 - Urinals are wall mounted vitreous china, with flush valves.
 - Lavatories are wall hung vitreous china. Faucets are of the single lever handle.
 - Drinking fountains are surface wall mounted stainless steel units. Most are ADA compliant. The units are in good condition.

Town of Hanover – MUNICIPAL FACILITIES ASSESSMENT – 2010

Section 6 – Cedar Elementary School

- Janitor's mop sinks are floor mounted basins units all with 2-faucets and vacuum breakers. These basins are in good condition.
- Classroom sinks are counter top stainless steel, 2-lever gooseneck faucets and are in good condition units do not appear to be ADA compliant.

DOMESTIC HOT WATER SYSTEMS

1. Existing Domestic Hot Water System: The Schools domestic hot water is generated by gas fired water heater 125 gallon which feeds the schools hot water needs. The water heater is in good condition.

B. FIRE PROTECTION NARRATIVE

FIRE PROTECTION SERVICE

1. There is no fire protection system coverage (sprinklers) currently in most of the facility. Sprinklers are included in the most recent addition (Gym Wing) complete with incoming service, isolation valves and fire alarm system monitoring.
2. The kitchen hood is not supplied with a fire suppression system within the hood.

C. MECHANICAL SYSTEMS:

APPLICABLE CODES AND STANDARDS

The mechanical systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th edition
2. Massachusetts Fire Prevention Regulations
3. International Mechanical Code
4. NFPA, Latest Version
5. ASHRAE 90.1

EXISTING SYSTEM

1. The existing building is heated by two hot water boilers. The two hot water boilers are both Weil McLain with burners currently operating on Natural gas. The boilers were installed in 1999 with a capacity of 3392 MBH each. This equipment is approximately 13 years old and in very good condition.
2. The present Heating and Ventilating systems consist of finned tube radiation, unit ventilators in the classrooms and exhaust systems. The gymnasium is served by a single closet mounted H & V unit. The cafeteria was noted as also being served by ceiling mounted H & V units (2) without any noted issues. Both the cafeteria and the gymnasium systems included a supply air component.
3. Unit Ventilators in classrooms appear newer and are in very good condition with no noted problems.

4. Exhaust systems servicing the classrooms utilize a single exhaust grille. Exhaust grills are located in the ceilings opposite the exterior walls containing the unit ventilators in the latest addition and in the wall slightly above the floor in the original building.
5. The existing temperature controls in the school are pneumatic controls these were noted as operating without problems. The temperature control system air compressor is located in the Boiler Room and includes an air dryer this unit is older in fair condition.

D. ELECTRICAL NARRATIVE

APPLICABLE CODES AND STANDARDS

The electrical power, interior lighting, and fire alarm systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th Edition
2. Massachusetts State Fire Prevention Regulations
3. NFPA Latest Edition
4. 2008 Massachusetts Electrical Code
5. Illuminating Engineering Society Lighting Handbook (IESNA), 9th Edition
6. ASHRAE 90.1

EXISTING SYSTEMS

1. The building is served by a 208Y/120volts, 3-phase, 4-wire electrical service; capacity was noted as being rated 1200 amps. The service equipment is located in the basement of the building. The service equipment switchboard is approximately 10 years old and in very good condition.
2. There are a number of electrical panels located throughout the facility. These panel boards are a mix of newer and older having been added and/or replaced at the time of various building additions and/or on an as-needed basis. The condition of these panel boards range from very good to good. The majority of the panel boards have spare circuit breakers available for new circuits to be added, or have space to add new circuit breakers.
3. The lighting throughout the facility consists primarily of 2' x 4' fluorescent acrylic lens troffers fixtures in the classrooms and 1' x 4' acrylic wraparounds in the corridors. The lighting throughout the facility is in good condition. The exception is that approximately 50% of the pendent wraparounds in the older classrooms are in poor condition. The light levels appear to be within recommended levels.
4. The fire alarm system is a Pyrotronics main FACP with manual fire alarm pull stations, horn strobes and smoke detectors located throughout the building. All devices appear to be ADA compliant.
5. Site lighting is accomplished via down lights in canopies and building mounted flood lights as well as pole mounted floods in the parking lot.
6. There is no standby emergency generator at the facility.
7. Life safety emergency and exit lighting is provided via Emergency battery units with unit mounted emergency light heads, units are older and in poor condition.

Town of Hanover – MUNICIPAL FACILITIES ASSESSMENT – 2010

Section 6 – Cedar Elementary School

8. The existing clock and paging systems are both older and were noted to be problematic and should be replaced.
9. There is currently a controlled access system by Gemini which includes motion sensors and a CCTV camera at the main front entry. All systems were noted as functioning with any issues.

E. MEP SYSTEMS CONCLUSION

In general, the systems vary in age from original to the building, to as recent as 3-5 years old. All HVAC systems seem to be newer and in good condition.

Plumbing systems throughout seem to be in good physical and working condition. Replacement of faucets and flush valves on toilets and urinals to automatic units should be implemented as a water conservation measure. Kitchen hood should be provided with a fire suppression system.

The Electrical systems appear to be in good condition and operating without issues. The lighting systems are newer and in good condition. Approximately 50% of the classroom lighting in the older classrooms should be replaced. The existing Fire alarm system is in good condition. Emergency lighting and exit lighting systems are older and in poor condition and should be replaced. Existing paging and clock systems should be replaced due to their age and ongoing problems. The existing security systems are in good working order.

Following paragraphs A-E were produced by Consulting Engineering Services, Inc.

A. PLUMBING NARRATIVE

APPLICABLE CODES AND STANDARDS

The plumbing systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th Edition
2. Massachusetts Fire Prevention Regulations
3. Massachusetts State Fuel Gas and Plumbing Code
4. ASHRAE 90.1

PLUMBING UTILITIES

1. Domestic Water:
 - a. Existing Domestic Water Service: The existing building is currently served by a 3" domestic water service which enters at the boiler room. The domestic water service equipment includes a water meter and isolation valves. This water service currently serves all of the Schools domestic water needs. The water distribution system is original to the building and each subsequent addition/renovation.
2. Natural Gas:
 - a. Existing Natural Gas Service: There is currently a natural gas service to the building that enters the building in the boiler room. This service serves the boilers, generator and the hot water heater.
3. Sanitary:
 - a. Existing Sanitary Service: The School's sanitary sewer system provides sanitary waste drainage for plumbing fixtures located throughout the School. The piping material above grade is primarily cast iron. The Plumbing fixtures drain to buried sanitary waste piping exiting the building and running to the buildings sanitary waste system.
4. Fuel Oil:
 - a. There is currently no on site fuel storage.

PLUMBING FIXTURES AND SPECIALTIES

1. Existing plumbing fixtures are as follows:
 - Water closets are wall mounted; vitreous china with flush valves.
 - Urinals are wall mounted vitreous china, with flush valves.
 - Lavatories are wall hung vitreous china. Faucets are of the single lever handle.
 - Drinking fountains are surface wall mounted stainless steel units. Most are not ADA compliant. The units are in good condition.

Town of Hanover – MUNICIPAL FACILITIES ASSESSMENT – 2010

Section 7 – Hanover Middle School

- Janitor's mop sinks are floor mounted basins units all with 2-faucets and vacuum breakers. These basins are in good condition.
- Classroom sinks are counter top, 2-lever faucets and are in good condition units do not appear to be ADA compliant.

DOMESTIC HOT WATER SYSTEMS

1. Existing Domestic Hot Water System: The Schools domestic hot water is generated by gas fired 600 Gallon water heater which feeds all the schools hot water needs. The water heater is in good condition.

B. FIRE PROTECTION NARRATIVE

FIRE PROTECTION SERVICE

1. There is no fire protection system coverage (sprinklers) currently in most of the facility. The newest addition does include sprinklers.
2. The kitchen hood is supplied with a fire suppression system within the hood.

C. MECHANICAL SYSTEMS:

APPLICABLE CODES AND STANDARDS

The mechanical systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th edition
2. Massachusetts Fire Prevention Regulations
3. International Mechanical Code
4. NFPA, Latest Version
5. ASHRAE 90.1

EXISTING SYSTEM

1. The existing building is heated by two hot water boilers. The two hot water boilers are both Cleaver Brooks with burners currently operating on Natural gas. The boilers were installed in 1999 with a capacity of 6123 MBH each. This equipment is approximately 13 years old and in very good condition.
2. The present Heating and Ventilating systems consist of finned tube radiation, unit ventilators in the classrooms with associated exhaust systems and roof top units serving the inner core upper level classrooms. The gymnasium is served by two ceiling mounted H & V units it was noted by school personnel that there were ongoing problems with these units over or under heating the gymnasium these units include a fresh air component.
3. Unit Ventilators in classrooms appear newer and are in very good condition with no noted problems.

4. Exhaust systems servicing the classrooms utilize a single exhaust grille. Exhaust grills are located in the ceilings opposite the exterior walls containing the unit ventilators. It was noted that all roof exhaust fans had been replaced within the last year.
5. Air conditioning is provided in select areas via packaged roof top units and split systems, these units all appear to be in good working order.
6. The existing temperature controls in the school are new, by Johnson Controls including CO2 sensors in classrooms with set back function for energy savings. The temperature control system air compressor is located in the Boiler Room and includes an air dryer this unit is older but in good condition.

D. ELECTRICAL NARRATIVE

APPLICABLE CODES AND STANDARDS

The electrical power, interior lighting, and fire alarm systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th Edition
2. Massachusetts State Fire Prevention Regulations
3. NFPA Latest Edition
4. 2008 Massachusetts Electrical Code
5. Illuminating Engineering Society Lighting Handbook (IESNA), 9th Edition
6. ASHRAE 90.1

EXISTING SYSTEMS

1. The building is served by a 480Y/277volts, 3-phase, 4-wire electrical service; capacity was noted as being rated 1200 amps. The service equipment is located in the buildings main electric room off the boiler room. The service equipment switchboard is in very good condition including the main having been recently replaced.
2. There are a number of electrical panels located throughout the facility. These panel boards are a mix of newer and older having been added and/or replaced at the time of various building additions/renovations and/or on an as-needed basis. The condition of these panel boards range from good to fair. The majority of the panel boards have no spare circuit breakers available for new circuits to be added, or space to add new circuit breakers.
3. The lighting throughout the facility consists primarily of 2' x 4' 2-lamp fluorescent acrylic lens troffers fixtures in the corridors and older 1' x 4' acrylic wraparounds in the classrooms. The light levels appear to be within recommended levels.
4. The fire alarm system is a Pyrotronics addressable main FACP with manual fire alarm pull stations, horn strobes and smoke detectors located throughout the building. All devices appear to be ADA compliant.
5. Site lighting is accomplished via building mounted wall packs at all exit doors and pole mounted lighting in the parking area.
6. There is an indoor Kohler standby emergency generator at the facility the generator is in very good condition and is located in the main electric room.

Town of Hanover – MUNICIPAL FACILITIES ASSESSMENT – 2010

Section 7 – Hanover Middle School

7. Life safety emergency and exit lighting is provided via power from the emergency generator including battery powered exit signs.
8. The existing clock and paging systems are both older however it was noted that only the clock system had been experiencing problems.
9. There is currently a controlled access system by Gemini which includes motion sensors and a CCTV camera at the main front entry. All systems were noted as functioning with any issues.

E. MEP SYSTEMS CONCLUSION

In general, the systems vary in age from original to the building, to as recent as 3-5 years old. All mechanical heating and cooling systems seem to be in good operating condition with the exception of the H & V units serving the gymnasium which should be checked in order to determine the cause of the over/under heating problems that they have been experiencing.

Plumbing systems throughout seem to be in good physical and working condition. Replacement of faucets and flush valves on toilets and urinals to automatic units should be implemented as a water conservation measure.

The Electrical systems appear to be in good condition and operating without issues. The lighting systems are newer and in good condition with the exception of the classroom wraparounds which should be upgraded. The existing Fire alarm system is in good condition. Emergency lighting and exit lighting systems are newer and in good condition. Existing paging system is in good condition. The clock system has had problems mainly due to the cost associated with replacing broken or damaged units which should be addressed. The existing security systems are in good working order. The existing satellite panelboards should be replaced. It was noted that they have experienced some problems with the underground conduit system this should be addressed over time with new and/or wiring replacements being run overhead rather than continuing to utilize the underground system.

Following paragraphs A-E were produced by Consulting Engineering Services, Inc.

A. PLUMBING NARRATIVE

APPLICABLE CODES AND STANDARDS

The plumbing systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th Edition
2. Massachusetts Fire Prevention Regulations
3. Massachusetts State Fuel Gas and Plumbing Code
4. ASHRAE 90.1

PLUMBING UTILITIES

1. Domestic Water:
 - a. Existing Domestic Water Service: The existing building is currently served by a 4" domestic water service which enters the boiler room. The domestic water service equipment includes a water meter and isolation valves and is located in the basement women's toilet area. This water service currently serves all of the Schools domestic water needs. The water distribution system is original to the building and each subsequent addition/renovation.
2. Natural Gas:
 - a. Existing Natural Gas Service: There is currently a natural gas services to the building serving the boilers and hot water heater. This service enters the rear of the building at the boiler room and serves the boilers and hot water heater.
3. Sanitary:
 - a. Existing Sanitary Service: The School's sanitary sewer system provides sanitary waste drainage for plumbing fixtures located throughout the School. The piping material above grade is primarily cast iron. The Plumbing fixtures drain to buried sanitary waste piping exiting the building and running to the buildings sanitary waste system.
4. Fuel Oil:
 - a. There is currently no on site fuel storage.

PLUMBING FIXTURES AND SPECIALTIES

1. Existing plumbing fixtures are as follows:
 - Water closets are a combination of wall mounted on the upper levels and floor mounted in the basement; with flush valves, vitreous china.
 - Urinals are wall mounted vitreous china, with flush valves.
 - Lavatories are counter top vitreous china. Faucets are a combination of single lever handle and two lever handles.

Town of Hanover – MUNICIPAL FACILITIES ASSESSMENT – 2010

Section 8 – Sylvester Elementary School

- Drinking fountains are surface mounted stainless steel units. Most are non-ADA compliant. The units are in good condition.
- Janitor's mop sinks are wall mounted basins with 2-faucets and vacuum breakers. These basins are in good condition.
- Typical classroom sinks are counter top, single lever faucets and are in good condition.

DOMESTIC HOT WATER SYSTEMS

1. Existing Domestic Hot Water System: The Schools domestic hot water is generated by a 74 gallon gas fired water heater which feed the schools hot water needs. The water heater is new and in very good condition.

B. FIRE PROTECTION NARRATIVE

FIRE PROTECTION SERVICE

1. There is no fire protection coverage (sprinklers) currently at the facility.
2. The kitchen hood is supplied with a fire suppression system within the hood and is in very good condition.

C. MECHANICAL SYSTEMS:

APPLICABLE CODES AND STANDARDS

The mechanical systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th edition
2. Massachusetts Fire Prevention Regulations
3. International Mechanical Code
4. NFPA, Latest Version
5. ASHRAE 90.1

EXISTING SYSTEMS

1. The existing building is heated by two steam boilers. These two boilers have their burners currently operating on Natural gas and a capacity of 2713 MBH each. This equipment is approximately 6 years old and in very good condition.
2. The present Heating and Ventilating systems consist of steam radiators throughout the facility, there are approximately 6 newer unit ventilators installed in select classrooms/areas and exhaust systems. The gymnasium is served by a closet mounted H & V unit as well as steam radiation. The H & V unit includes a supply air component.
3. Unit Ventilators are newer manufactured by Herman Nelson and appear in very good condition with no noted problems.

4. Exhaust systems servicing the classrooms utilize a single exhaust grille. Exhaust grills are located on the wall high above floor level opposite the exterior walls.
5. The existing temperature controls in the school are pneumatic. The temperature control system air compressor is located in the Boiler Room and includes an air dryer and is in very good condition. The temperature control problems that were noted however may be due to the know steam trap issue which at the time of this report writing was in the process of being budgeted under the green communities grant received by the town. Temperature control issues should be re-evaluated after the steam traps have been repaired.

D. ELECTRICAL NARRATIVE

APPLICABLE CODES AND STANDARDS

The electrical power, interior lighting, and fire alarm systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th Edition
2. Massachusetts State Fire Prevention Regulations
3. NFPA Latest Edition
4. 2008 Massachusetts Electrical Code
5. Illuminating Engineering Society Lighting Handbook (IESNA), 9th Edition
6. ASHRAE 90.1

EXISTING SYSTEMS

1. The building is served by a 120/240 volts, single-phase, 3-wire electrical service; capacity was noted as being rated 400 amps. The service equipment is located in the basement of the building. The service equipment is newer and in very good condition.
2. There are a number of electrical panels located throughout the facility. These panelboards are older having been added at the time of various building additions and/or on an as-needed basis. The condition of these panelboards range from fair to poor. The majority of the panel boards do not have spare circuit breakers available for new circuits to be added, or have space to add new circuit breakers.
3. The lighting throughout the facility consists primarily of 1' x 4' 2-lamp wraparound fluorescent fixtures, these fixtures with the exception of some (approximately 30% in the classrooms) are in very good condition. The light levels appear to be within recommended levels.
4. The fire alarm system is a Gamewell main FACP, there are manual fire alarm pull stations, horn strobes and smoke detectors located throughout the building. The system is in very good condition and was noted as having been problem free.
5. Site lighting is accomplished via building mounted flood lights.
6. There is no standby generator located at this facility.
7. Life safety emergency lighting is provided via Emergency battery units with unit mounted emergency light heads and battery powered exit signs, units are newer and in good condition.

Town of Hanover – MUNICIPAL FACILITIES ASSESSMENT – 2010

Section 8 – Sylvester Elementary School

8. The existing clock and paging system have had ongoing problems. The paging system appears to be older and in need of replacement where as the clock system appears newer and may just need to be repaired.
9. There is currently a controlled access system at the main front entry as well as CCTV cameras at three exterior locations. Motion sensors are also located throughout the facility. All systems were noted as functioning without any issues.

E. MEP SYSTEMS CONCLUSION

In general, the systems vary in age from original to the building, to as recent as 3-5 years old. Boilers have been recently replaced however heating problems still exist. It is believed that these will be corrected once the steam traps have been repaired/replaced.

Plumbing systems throughout seem to be in good physical and working condition. Replacement of faucets and flush valves on toilets and urinals to automatic units should be implemented as a water conservation measure.

The Electrical systems appear to be in good condition and operating without issues. The older distribution equipment (panelboards) should be replaced with newer equipment with additional breaker spaces to meet any future needs and to alleviate the possibility of overloading individual circuits when new equipment and or devices are added to existing circuitry. The lighting systems are newer and in good condition, a small portion of the classroom lighting should be upgraded. The addition of automated lighting controls should be implemented in order to meet current energy codes and to save on energy costs. Fire alarm system, exit and emergency lighting systems are newer and appear to be in good condition. Existing paging system which has been problematic should be replaced and clock system should be repaired and/or replaced.

Following paragraphs A-E were produced by Consulting Engineering Services, Inc.

A. PLUMBING NARRATIVE

APPLICABLE CODES AND STANDARDS

The plumbing systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th Edition
2. Massachusetts Fire Prevention Regulations
3. Massachusetts State Fuel Gas and Plumbing Code
4. ASHRAE 90.1

PLUMBING UTILITIES

1. Domestic Water:
 - a. Existing Domestic Water Service: The existing building is currently served by a 2" domestic water service which enters the basement mechanical space. The domestic water service equipment includes a water meter and isolation valves. This water service currently serves all of the Schools domestic water needs. The water distribution system is original to the building and each subsequent addition/renovation.
2. Natural Gas:
 - a. Existing Natural Gas Service: There is currently a natural gas services to the building serving the boiler and hot water heater. This service enters the left side of the building and runs overhead to the boiler room and serves the boiler and hot water heater.
3. Sanitary:
 - a. Existing Sanitary Service: The School's sanitary sewer system provides sanitary waste drainage for plumbing fixtures located throughout the School. The piping material above grade is primarily cast iron. The Plumbing fixtures drain to buried sanitary waste piping exiting the building and running to the buildings sanitary waste system.
4. Fuel Oil:
 - a. There is currently no on site fuel storage.

PLUMBING FIXTURES AND SPECIALTIES

1. Existing plumbing fixtures are as follows:
 - Water closets are floor mounted; with flush valves, vitreous china.
 - Urinals are wall mounted vitreous china, with flush valves.
 - Lavatories are wall mounted vitreous china. Faucets are two lever handles.
 - Janitor's mop sinks are floor mounted basins with 2-faucets and vacuum breakers. These basins are in good condition.

DOMESTIC HOT WATER SYSTEMS

1. Existing Domestic Hot Water System: The buildings domestic hot water is generated by a 50 gallon gas fired water heater which feeds the buildings hot water needs. The water heater is in good condition.

B. FIRE PROTECTION NARRATIVE

FIRE PROTECTION SERVICE

1. There is no fire protection coverage (sprinklers) currently at the facility.

C. MECHANICAL SYSTEMS:

APPLICABLE CODES AND STANDARDS

The mechanical systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th edition
2. Massachusetts Fire Prevention Regulations
3. International Mechanical Code
4. NFPA, Latest Version
5. ASHRAE 90.1

EXISTING SYSTEMS

1. The existing building is heated by a steam boiler. This boiler has its burner currently operating on Natural gas and a capacity of 2450 MBH each. This equipment appears to be 40+ years old however the burner itself appears to be approximately 10 years old and in good condition.
2. The present Heating and Ventilating systems consist of steam radiators throughout the facility, with approximately 4 newer unit ventilators installed in select areas and exhaust systems.
3. Unit Ventilators are newer manufactured by Herman Nelson and appear in good condition with no noted problems.
4. Exhaust systems servicing the building utilize a single exhaust grille mounted low on the wall and believed to be via gravity. Rooms containing unit ventilators do include an outside air component offering some ventilation to the spaces served.
5. The existing temperature controls in the building are pneumatic. The temperature control system air compressor is located in the Boiler Room and is older but in good condition. Temperature control problems were noted by operations personnel, however may be due to the known steam trap issue which at the time of this report writing was in the process of being budgeted under the green communities grant received by the town. Temperature control issues should be re-evaluated after the steam traps are repaired.

D. ELECTRICAL NARRATIVE

APPLICABLE CODES AND STANDARDS

The electrical power, interior lighting, and fire alarm systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th Edition
2. Massachusetts State Fire Prevention Regulations
3. NFPA Latest Edition
4. 2008 Massachusetts Electrical Code
5. Illuminating Engineering Society Lighting Handbook (IESNA), 9th Edition
6. ASHRAE 90.1

EXISTING SYSTEMS

1. The building is served by a 120/240 volts, single-phase, 3-wire electrical service; capacity was noted as being rated 400 amps. The service equipment is located in the basement of the building. The service equipment consists of fused disconnect switches and is in good condition.
2. There are a number of electrical panels located throughout the facility. These panel boards all are older having been added at the time of various building additions and/or on an as-needed basis. The condition of these panel boards range from fair to poor. The majority of the panel boards do not have spare circuit breakers available for new circuits to be added, or have space to add new circuit breakers.
3. The lighting throughout the facility consists primarily of 1' x 4' 2-lamp wraparound fluorescent fixtures, these fixtures with the exception of some approximately 50% located in the basement are in very good condition. The light levels appear to be within recommended levels.
4. The fire alarm system is a Gamewell main FACP there are manual fire alarm pull stations, horn strobes and smoke detectors located throughout the building. The system is in good condition and was noted as having been problem free.
5. Site lighting is accomplished via building mounted wall packs and pole mounted flood lights in the parking area.
6. There is no standby generator located at this facility.
7. Life safety emergency lighting is provided via Emergency battery units with unit mounted emergency light heads and battery powered exit signs, units are newer and in good condition. Approximately 20 % of the exit signs are older and should be replaced.
8. There is currently a controlled access system at the main front entry by Gemini. Motion sensors are also located throughout the facility. This system was noted as functioning without any issues.

E. MEP SYSTEMS CONCLUSION

In general, the systems vary in age from original to the building, to as recent as 3-5 years old. The Boiler is old having far exceeded its expected life. The new burner has prolonged its life but the boiler should be replaced. It is believed that the inconsistent distribution of heat by the system will be corrected once the steam traps have been repaired/replaced.

Plumbing systems throughout seem to be in good physical and working condition. Replacement of faucets and flush valves on toilets and urinals to automatic units should be implemented as a water conservation measure. Select sinks and drinking fountains should be replaced with ADA compliant units. It was noted by operations personnel that there was a problem with sewage smells when flushing toilets this could be caused by a vent stack issue and should be investigated.

The Electrical systems appear to be in good condition and operating without issues. The older distribution equipment (panelboards) should be replaced with newer equipment with additional breaker spaces to meet any future needs and to alleviate the possibility of overloading individual circuits when new equipment and/or devices are added to existing circuitry. The lighting systems are newer and in good condition, a small portion of the lighting in the basement approximately 50% should be upgraded. The addition of automated lighting controls should be implemented in order to meet current energy codes and to save on energy costs. Fire alarm system, exit and emergency lighting systems are newer and appear to be in good condition. A small percentage approximately 20% of the exit lights are older and should be replaced.

Following paragraphs A-E were produced by Consulting Engineering Services, Inc.

A. PLUMBING NARRATIVE

APPLICABLE CODES AND STANDARDS

The plumbing systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th Edition
2. Massachusetts Fire Prevention Regulations
3. Massachusetts State Fuel Gas and Plumbing Code
4. ASHRAE 90.1

PLUMBING UTILITIES

1. Domestic Water:
 - a. Existing Domestic Water Service: The existing building is currently served by a 2" domestic water service which enters the basement next to the sprinkler service. The domestic water service equipment includes a water meter and isolation valves. This water service currently serves all of the Stations domestic water needs. The water distribution system is original to the building.
2. Natural Gas:
 - a. Existing Natural Gas Service: There is currently a natural gas service to the building serving the boilers, hot water heater and generator. This service enters the building at the side of the building at the boiler room adjacent to the generator.
3. Sanitary:
 - a. Existing Sanitary Service: The Station's sanitary sewer system provides sanitary waste drainage for plumbing fixtures located throughout the Station. The piping material above grade is primarily cast iron. The Plumbing fixtures drain to buried sanitary waste piping exiting the building and running to the buildings sanitary waste system. It was noted that the septic system has had to be pumped out a number of times and that there has been a problem of solids buildup in the distribution box.
4. Fuel Oil:
 - a. There is currently no on site fuel storage.

PLUMBING FIXTURES AND SPECIALTIES

1. Existing plumbing fixtures are as follows:
 - Water closets are wall mounted; with flush valves, vitreous china.
 - Urinals are wall mounted vitreous china, with flush valves.
 - Lavatories are wall hung and counter mounted vitreous china. Faucets are a combination of single lever handle and two lever handles.

Town of Hanover – MUNICIPAL FACILITIES ASSESSMENT – 2010

Section 10 – Police Station

- Janitor's mop sinks are wall mounted basins with 2-faucets and vacuum breakers. These basins are in good/fair condition.

DOMESTIC HOT WATER SYSTEMS

1. Existing Domestic Hot Water System: The Stations domestic hot water is generated by a hot water boiler which feeds an 82 gallon storage tank. This equipment is in very good condition. This equipment feeds all the facilities hot water needs.

B. FIRE PROTECTION NARRATIVE

FIRE PROTECTION SERVICE

1. There is full fire protection coverage (sprinklers) currently at the facility. This service enters the building in the basement at the boiler room and includes all backflow prevention devices and valves as well as Fire alarm system monitoring

C. MECHANICAL SYSTEMS:

APPLICABLE CODES AND STANDARDS

The mechanical systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th edition
2. Massachusetts Fire Prevention Regulations
3. International Mechanical Code
4. NFPA, Latest Version
5. ASHRAE 90.1

EXISTING SYSTEMS

1. The existing building is heated by a single hot water boiler. The boiler is a Burnham with its burner currently operating on Natural gas and a capacity of 1281 MBH each. This equipment was replaced just 2 years ago because of failure do to an improper water treatment system which has now been corrected and is in very good condition.
2. The present HVAC systems consist of hot water finned tube radiation, Air Handler units in the attic with a ducted VAV air distribution system. The heating and cooling systems were noted as the single biggest problem in the facility. It is believed to be a controls issue that is causing this ongoing problem as the Mechanical equipment is either new in the case of the boiler or original to the building in the case of the air handling units which would put them at only 10 years old. It was also noted that there was a lack of baseboard radiation in some areas at the exterior walls causing some spaces to be cold.
3. The dispatch area was noted as being provided with its own dedicated HVAC system.

D. ELECTRICAL NARRATIVE

APPLICABLE CODES AND STANDARDS

The electrical power, interior lighting, and fire alarm systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th Edition
2. Massachusetts State Fire Prevention Regulations
3. NFPA Latest Edition
4. 2008 Massachusetts Electrical Code
5. Illuminating Engineering Society Lighting Handbook (IESNA), 9th Edition
6. ASHRAE 90.1

EXISTING SYSTEMS

1. The building is served by a 208Y/120volts, 3-phase, 4-wire electrical service; capacity was noted as being rated 1200 amps. The service equipment is located in the basement of the building. The service equipment is in very good condition.
2. It was noted by operations personnel that they have had issues with surges during storms which in the past has taken out various electronic equipment. Upon investigation it was noted that the switchboard is provided with surge protection which appeared to be added after the fact. It should be investigated to ensure that all wiring entering or leaving the facility is provided with appropriate surge protection. This would include wiring to the remote garage and cell tower as this could transmit surges back into the building due to ground lightning strikes in the immediate area.
3. There are a number of electrical panels located throughout the facility. These panel boards all are original to the facility and are all in very good condition. These panel boards all seem to have spare circuit breakers available for new circuits to be added, or have space to add new circuit breakers.
4. The lighting throughout the facility consists primarily of 3 lamp 2' x 4' parabolic's with manual dual level switching. The lighting throughout the facility is in good condition. Upon review of the recently conducted energy audit conducted by National Grid it is highly recommended that these measures be implemented as the payback period is only 13 months. The light levels throughout the facility appear to be within recommended levels.
5. The fire alarm system is an Edwards EST main FACP being original the building and is in very good condition with no noted problems or issues. There are manual fire alarm pull stations, horn strobes and magnetic door holders located throughout the building. Heat and smoke detectors are located in select areas throughout the building.
6. Site lighting is accomplished via pole mounted shoebox type lights located around the facility and bollard lighting located at the main entry door.
7. There exists a 200KW Kohler standby generator complete with two automatic transfer switches one for life safety and one for standby power. We were informed that this generator has been problem free since a repair related to a block heater and that the generator backs up the entire facility with the exception of the air conditioning.

Town of Hanover – MUNICIPAL FACILITIES ASSESSMENT – 2010

Section 10 – Police Station

8. Life safety emergency lighting is provided via select lighting fixtures being wired to the emergency generator power source. Exit lighting is also provided throughout and is in very good condition.
9. A building wide paging system is in place and was noted as functioning without any issues or problems.
10. There is currently a complete controlled access and security system installed at the facility. The system includes motion sensors access control and CCTV cameras both inside and outside the facility. All systems were noted as functioning without any issues.

E. MEP SYSTEMS CONCLUSION

In general, the systems vary in age from original to the building to as recent as 2 years old. Some equipment mainly the heating and cooling system and controls should be investigated in order to determine the source of the ongoing problems and what corrective measures should be taken to correct them.

Plumbing systems throughout seem to be in good physical and working condition with no issues or problems noted during the inspections or by operating personnel. One item that was noted was the problem with the septic system which should be investigated to determine the cause of the problem and the corrective measures which should be taken.

The Electrical systems appear to be in very good condition and operating without issues. The lighting systems are newer and in good condition, the addition of automated lighting controls should be implemented in order to meet current energy codes and to save on energy costs, as well as the implementation of the recently conducted energy audit. Fire alarm system, emergency power generation and exit lighting systems are newer and appear to be in good condition. Existing paging system is in good working order and operating without problem.

Following paragraphs A-E were produced by Consulting Engineering Services, Inc.

A. PLUMBING NARRATIVE

APPLICABLE CODES AND STANDARDS

The plumbing systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th Edition
2. Massachusetts Fire Prevention Regulations
3. Massachusetts State Fuel Gas and Plumbing Code
4. ASHRAE 90.1

PLUMBING UTILITIES

1. Domestic Water:
 - a. Existing Domestic Water Service: The existing public toilet building is currently served by a domestic water service. The domestic water service equipment includes a water meter and isolation valves. This water service currently serves all of the facilities domestic water needs. The water distribution system is original to the building. The trailer and two storage shed's have no water service.
2. Natural Gas:
 - a. Existing Natural Gas Service: There is currently no gas service to any of the structures located at this site.
3. Sanitary:
 - a. Existing Sanitary Service: The public toilets sanitary sewer system provides sanitary waste drainage for plumbing fixtures located within the structure. The piping material above grade is primarily cast iron. The Plumbing fixtures drain to buried sanitary waste piping exiting the building and running to the buildings sanitary waste system. The trailer and two storage shed's have no sewer services.
4. Fuel Oil:
 - a. There is currently no on site fuel storage.

PLUMBING FIXTURES AND SPECIALTIES

1. Existing plumbing fixtures are as follows:
 - Water closets are wall mounted; with flush valves, vitreous china.
 - Urinals are wall mounted vitreous china, with flush valves.
 - Lavatories are wall hung vitreous china. Faucets are a combination of single lever handle and two lever handles and some with function.

DOMESTIC HOT WATER SYSTEMS

1. Existing Domestic Hot Water System: The public toilet facility's domestic hot water is generated by an electric water heater which feeds all the buildings hot water needs. The water heaters are in good condition.

B. FIRE PROTECTION NARRATIVE

FIRE PROTECTION SERVICE

1. There is no fire protection coverage (sprinklers) currently in any of the structures at this facility.

C. MECHANICAL SYSTEMS:

APPLICABLE CODES AND STANDARDS

The mechanical systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th edition
2. Massachusetts Fire Prevention Regulations
3. International Mechanical Code
4. NFPA, Latest Version
5. ASHRAE 90.1

EXISTING SYSTEMS

1. All structures with the exception of the on site trailer have no heat or air conditioning. The trailer has an integrated heating and air conditioning unit with supplemental electric baseboard heat.
2. Exhaust systems are present only in the public rest rooms building. The adequacy of this system was indeterminable due to winter conditions and the building being shut down.

D. ELECTRICAL NARRATIVE

APPLICABLE CODES AND STANDARDS

The electrical power, interior lighting, and fire alarm systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th Edition
2. Massachusetts State Fire Prevention Regulations
3. NFPA Latest Edition
4. 2008 Massachusetts Electrical Code
5. Illuminating Engineering Society Lighting Handbook (IESNA), 9th Edition
6. ASHRAE 90.1

EXISTING SYSTEMS

1. The building is served by a 120/240 volts, 1-phase, 3-wire electrical service. This service feeds the storage shed located adjacent to the trailer underground from a pole top transformer. The electric meter is located on the exterior of the shed and the main service panel inside. This service panel intern feeds power to all the structures on site including the trailer and public restrooms via underground feeds to each building. The service equipment located in the shed appears to be in very good condition.
2. The lighting throughout the facilities is in good condition. The lighting within the public restrooms should be replaced.
3. There is no fire alarm system present in any of the structures on site.
4. There is no site lighting with the exception of the basketball and tennis court lighting which is fed from the storage shed panel and control via individual switches mounted on the exterior of the shed. These switches were noted during the field visit as being in very poor condition and in need of replacement.
5. There is no standby power serving any of the structures at the site.
6. There is no life safety or emergency lighting located in any of the facilities on site.

E. MEP SYSTEMS CONCLUSION

In general, the systems vary in age from original to the buildings to as recent as 3-5 years old. Heating and ventilating equipment within the trailer appears to be in good condition. Ventilation equipment in the public restroom was unable to be examined do to the fact that the facility was shut down for the winter but should be examined to ensure it if functioning properly.

Plumbing fixtures in the public restrooms should all be replaced due to age and physical condition. Replacement of faucets and flush valves on toilets and urinals to automatic units should be implemented as a water conservation measure.

The Electrical systems appear to be in good condition and operating without issues. The basketball and tennis court lighting controls mounted on the exterior of the storage shed should be replaced with weather appropriate switches. The lighting within the public toilets building should be replaced.

Following paragraphs A-E were produced by Consulting Engineering Services, Inc.

A. PLUMBING NARRATIVE

APPLICABLE CODES AND STANDARDS

The plumbing systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th Edition
2. Massachusetts Fire Prevention Regulations
3. Massachusetts State Fuel Gas and Plumbing Code
4. ASHRAE 90.1

PLUMBING UTILITIES

1. Domestic Water:
 - a. Existing Domestic Water Service: The existing building is currently served by a 1" domestic water service which enters a closet in the kitchen area of the renovated portion of the facility. The domestic water service equipment includes a water meter and isolation valves. This water service currently serves all of the buildings domestic water needs. The water distribution system is original to the building and each subsequent addition/renovation.
2. Natural Gas:
 - a. Existing Natural Gas Service: There is currently a natural gas service to the building serving the gas fired unit heaters in the renovated garage bay area. These services enter the rear of the building.
3. Sanitary:
 - a. Existing Sanitary Service: The facilities sanitary sewer system provides sanitary waste drainage for plumbing fixtures located throughout the building. The piping material above grade is primarily cast iron. The Plumbing fixtures drain to buried sanitary waste piping exiting the building and running to the buildings sanitary waste system.
4. Fuel Oil:
 - a. There is currently no on site fuel storage.

PLUMBING FIXTURES AND SPECIALTIES

1. Existing plumbing fixtures are as follows:
 - Water closets are floor mounted; tank and flush valve type, vitreous china.
 - Urinals are wall mounted vitreous china, with flush valves.
 - Lavatories are a combination of wall hung and counter top vitreous china. Faucets are a combination of single lever handle and two lever handles.

DOMESTIC HOT WATER SYSTEMS

1. Existing Domestic Hot Water System: The facilities domestic hot water is generated by a 30 gallon electric hot water heater which feeds the hot water needs of the facility. The water heater is in good condition.

B. FIRE PROTECTION NARRATIVE

FIRE PROTECTION SERVICE

1. There is no fire protection coverage (sprinklers) currently at the facility.

C. MECHANICAL SYSTEMS:

APPLICABLE CODES AND STANDARDS

The mechanical systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th edition
2. Massachusetts Fire Prevention Regulations
3. International Mechanical Code
4. NFPA, Latest Version
5. ASHRAE 90.1

EXISTING SYSTEMS

1. The existing building is heated by use of ceiling mounted gas fired unit heaters. These units are newer and in very good condition.
2. There is currently no heating in the unfinished portion of the building.
3. Exhaust systems are provided via thru wall exhaust fans venting out thru the exterior wall.

D. ELECTRICAL NARRATIVE

APPLICABLE CODES AND STANDARDS

The electrical power, interior lighting, and fire alarm systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th Edition
2. Massachusetts State Fire Prevention Regulations
3. NFPA Latest Edition
4. 2008 Massachusetts Electrical Code
5. Illuminating Engineering Society Lighting Handbook (IESNA), 9th Edition
6. ASHRAE 90.1

EXISTING SYSTEMS

1. The building is served by a 208Y/120volts, 3-phase, 4-wire electrical service; capacity was noted as being rated 1200 amps. The service equipment switchboard is located at the far end of the building away from the portion of the building which has been renovated. The service equipment is in good condition.
2. There are a number of electrical panels located throughout the facility. These panel boards vary in age from original to the building for those in the unoccupied portion to new those in the renovated portion. The condition of these panel boards range from good to poor. The majority of the older panel boards do not have spare circuit breakers available for new circuits to be added, or have space to add new circuit breakers.
3. The lighting throughout the facility consists primarily of 1' x 4' Industrial fluorescent fixtures in the garage bay area. The lighting throughout the renovated portion of the building is in good condition, although utilizes older T12 lamping. The lighting located in the unoccupied portion of the building is in very poor condition. The light levels appear to be within recommended levels for the occupied portion of the building.
4. The fire alarm system is a Firelite main FACP. This equipment appears to be in good condition. All devices within the occupied portion appear to be in very good condition. Those devices located within the unoccupied portion of the building appear in fair/poor condition and should be replaced. The mounting height of the panel should also be corrected in that the panel is mounted too high.
5. Site lighting is accomplished via building mounted wall packs.
6. There is currently no standby power generation on site. The desire was expressed by operations personnel to add a generator in order to allow for the future expansion.
7. Life safety emergency lighting is provided via Emergency battery units with unit mounted emergency light heads and battery powered exit signs, units are newer and in good condition within the occupied space but should be added in the unoccupied portion of the building.
8. There is currently a controlled access system at the building this includes motion sensors and magnetic contacts in the occupied area. The system was noted as functioning without any issues but requiring to be expanded and the desire to include exterior cameras.

E. MEP SYSTEMS CONCLUSION

In general, the systems vary in age from original to the building, to as recent as 3-5 years old. Some equipment such as heating units in the unoccupied areas should be replaced as they are not currently working. These upgrades however should take into consideration what the intended fit-out of the space is to be in order to provide the appropriate system.

Plumbing systems throughout the occupied spaces are newer and appear to be in good physical and working condition. Replacement of faucets and flush valves on sinks and urinals should be implemented with automatic units as a water conservation measure.

The Electrical systems appear to be in good condition and operating without issues within the occupied spaces. The older distribution equipment (panelboards) in the unoccupied space should be replaced with newer equipment with additional breaker spaces to meet any future needs. The lighting systems are newer and in good condition in the occupied areas, the addition of automated lighting controls should be incorporated in order to meet current energy codes and to save on energy costs. New lighting should be installed on a temporary basis in the

Town of Hanover – MUNICIPAL FACILITIES ASSESSMENT – 2010

Section 12 – Public Works Garage

unoccupied areas. Fire alarm system should be expanded to cover the entire building. Exit and emergency lighting systems are newer and appear to be in good condition in the occupied areas however need to be installed in the unoccupied space. The existing security system should be expanded to cover the unoccupied space.

Following paragraphs A-E were produced by Consulting Engineering Services, Inc.

A. PLUMBING NARRATIVE

APPLICABLE CODES AND STANDARDS

The plumbing systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th Edition
2. Massachusetts Fire Prevention Regulations
3. Massachusetts State Fuel Gas and Plumbing Code
4. ASHRAE 90.1

PLUMBING UTILITIES

1. Domestic Water:
 - a. Existing Domestic Water Service: The existing building is currently served by a 2" domestic water service which enters the water heater closet. The domestic water service equipment includes a water meter and isolation valves. This water service currently serves all of the buildings domestic water needs. The water distribution system is original to the building and each subsequent addition/renovation.
2. Natural Gas:
 - a. Existing Natural Gas Service: There was no natural gas service to the building noted nor any gas fired equipment noted at this facility.
3. Sanitary:
 - a. Existing Sanitary Service: The Building's sanitary sewer system provides sanitary waste drainage for plumbing fixtures located throughout the building. The piping material above grade is primarily cast iron. The Plumbing fixtures drain to buried sanitary waste piping exiting the building and running to the buildings sanitary waste system.
4. Fuel Oil:
 - a. There are currently 3 fuel tanks located on the site one 660 gallon above ground heating oil tank, one underground 10,000 gallon diesel fuel and one 10,000 gallon gasoline tank.

PLUMBING FIXTURES AND SPECIALTIES

1. Existing plumbing fixtures are as follows:
 - Water closets are floor mounted tank type; vitreous china.
 - Urinals are wall mounted vitreous china, with flush valves.
 - Lavatories are counter mounted vitreous china. Faucets are of the single lever handle type.

DOMESTIC HOT WATER SYSTEMS

1. Existing Domestic Hot Water System: The buildings domestic hot water is generated by an 80 gallon electric hot water heater which feed the all the buildings hot water needs. The water heater is new and in very good condition.

B. FIRE PROTECTION NARRATIVE

FIRE PROTECTION SERVICE

1. There is no fire protection coverage (sprinklers) currently at the facility.

C. MECHANICAL SYSTEMS:

APPLICABLE CODES AND STANDARDS

The mechanical systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th edition
2. Massachusetts Fire Prevention Regulations
3. International Mechanical Code
4. NFPA, Latest Version
5. ASHRAE 90.1

EXISTING SYSTEMS

1. The existing building is heated by oil fired ceiling hung forced hot air heating and ventilating units. Three of these units are utilized to heat the space two being older and needing to be replaced and one being newer and in good condition. These units are also utilized to provide heat to the office and lounge area adjacent to the garage which is an issue that should be corrected for the safety of personnel.
2. Exhaust systems servicing the garage area are via thru the wall fans are in poor condition and should be replaced.

ELECTRICAL NARRATIVE

APPLICABLE CODES AND STANDARDS

The electrical power, interior lighting, and fire alarm system were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th Edition
2. Massachusetts State Fire Prevention Regulations
3. NFPA Latest Edition
4. 2008 Massachusetts Electrical Code
5. Illuminating Engineering Society Lighting Handbook (IESNA), 9th Edition

6. ASHRAE 90.1

EXISTING SYSTEMS

1. The building is served by a 208Y/120volts, 3-phase, 4-wire electrical service; capacity was noted as being rated 200 amps. The service equipment is located in garage bay area and consists of a fused disconnect switch which appears to be in good condition.
2. There are a number of electrical panels located throughout the facility. These panel boards all are a mix of newer and older having been added at the time of various building additions and/or on an as-needed basis. The condition of these panel boards range from good for the newer panel to poor. The majority of the panel boards do not have spare circuit breakers available for new circuits to be added, or have space to add new circuit breakers.
3. The lighting throughout the facility consists primarily of 1' x 4' 2-lamp wraparound fluorescent fixtures in the office area and industrial fluorescent fixtures in the garage bays. The lighting throughout the facility is in fair/poor condition and should be upgraded. The light levels appear to be lower than recommended levels.
4. The fire alarm system consists of 120 volt smoke detectors. Given the usage of the facility a fire alarm system including heats, smokes and carbon monoxide detectors should be added and tied into a notification system for prompt response time.
5. Site lighting is accomplished via building mounted wall packs and a number of pole mounted flood lights.
6. There exists a 45KW oil fired standby generator the generator is old and in fair condition it is housed and exhausted thru a combustible wooden shed. This unit is manually transferred upon loss of normal power.
7. There was no Life safety emergency lighting provided at the facility emergency exit lighting is insufficient and was not functioning.
8. There is currently a controlled access system at the facility consisting of magnetic contacts on exterior doors. This system is older and should be upgraded and should include the requested exterior CCTV cameras.

D. MEP SYSTEMS CONCLUSION

In general, the systems vary in age from original to the building, to as recent as 3-5 years old. Some equipment such as the older oil fired unit heaters should be scheduled for replacement in order to improve the reliability, efficiency and to cut down on the operational and maintenance costs associated with the heating system. The office/lounge area should be removed from the garage heating system and provided with an independent system.

Plumbing systems throughout seem to be in good physical and working condition. Replacement of faucets and flush valves on urinals to automatic units should be implemented as a water conservation measure.

The Electrical systems appear to be in good condition and operating without issues. The older distribution equipment (panelboards) should be replaced with newer equipment with additional breaker spaces to meet any future needs and to alleviate the possibility of overloading individual circuits when new equipment and or devices are added to existing circuitry. The lighting systems are older and should be upgraded to newer fixtures utilizing new lamp and ballast technology. The addition of automated lighting controls in some areas should be implemented in order to meet current energy codes and to save on energy costs. Fire alarm system, emergency

Town of Hanover – MUNICIPAL FACILITIES ASSESSMENT – 2010

Section 13 – Highway Garage

power generation, emergency lighting and exit lighting systems are all older and/or nonexistent and should be addressed. Existing security system is older and inadequate give the value of much of the equipment on site and should be upgraded.

Following paragraphs A-E were produced by Consulting Engineering Services, Inc.

A. PLUMBING NARRATIVE

APPLICABLE CODES AND STANDARDS

The plumbing systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th Edition
2. Massachusetts Fire Prevention Regulations
3. Massachusetts State Fuel Gas and Plumbing Code
4. ASHRAE 90.1

PLUMBING UTILITIES

1. Domestic Water:
 - a. Existing Domestic Water Service: The existing building is currently served by a 2" domestic water service which enters in the basement of the building. The domestic water service equipment includes a water meter and isolation valves. This water service currently serves all of the buildings domestic water needs. The water distribution system is original to the building and/or each subsequent addition/renovation.
2. Natural Gas:
 - a. Existing Natural Gas Service: There is currently a natural gas service to the building serving the boilers and generator. This service enters the side of the building into the basement boiler room area.
3. Sanitary:
 - a. Existing Sanitary Service: The building's sanitary sewer system provides sanitary waste drainage for plumbing fixtures located throughout the facility. The piping material above grade is primarily cast iron. The Plumbing fixtures drain to buried sanitary waste piping exiting the building and running to the buildings sanitary waste system.
4. Fuel Oil:
 - a. There is currently no on site fuel storage.

PLUMBING FIXTURES AND SPECIALTIES

1. Existing plumbing fixtures are as follows:
 - Water closets are a mix of wall mounted and floor mounted tank type; wall mounted units are provided with flush valves, all units are vitreous china.
 - Urinals are wall mounted vitreous china, with flush valves.
 - Lavatories are wall hung vitreous china. Faucets are a combination of single lever handle and two lever handles.
 - Janitor's mop sinks are wall mounted basins with 2-faucets and vacuum breakers. These basins are in good condition.

DOMESTIC HOT WATER SYSTEMS

1. Existing Domestic Hot Water System: The buildings domestic hot water is generated by 2-40 gallon electric water heaters which feed all the buildings hot water needs. The water heaters are in good condition.

B. FIRE PROTECTION NARRATIVE

FIRE PROTECTION SERVICE

1. There is full fire protection coverage currently at the facility. This service enters the building in the basement at the boiler room and includes valves as well as Fire alarm system monitoring. One item noted by building personnel that was a concern was that the dry sprinkler system utilizes the pneumatic temperature controls compressor rather than a compressor dedicated to the sprinkler system. This should be corrected.

C. MECHANICAL SYSTEMS:

APPLICABLE CODES AND STANDARDS

The mechanical systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th edition
2. Massachusetts Fire Prevention Regulations
3. International Mechanical Code
4. NFPA, Latest Version
5. ASHRAE 90.1

EXISTING SYSTEMS

1. The existing building is heated by two hot water boilers. The two boilers are both gas fired manufactured by Weil McClain. One unit is newer rated at 780 MBH and is about 10 years old and in good condition. The second boiler is rated 626 MBH and is approximately 25+ years old and in fair condition and should be replaced as its life expectancy is being approached.
2. The present Heating and Ventilating systems consist of finned tube radiation, unit ventilators in some of the smaller areas and exhaust systems. The hearing room is served by a newer closet mounted HVAC unit which includes a supply air component. Some areas such as the office area were also noted to be served by a split system A/C and thru the wall A/C units. Mechanical equipment is located primarily on exterior walls and in various indoor mechanical spaces within the building.
3. Unit Ventilators in some office areas were newer McQuay units and appeared to be in good condition.
4. A number of exterior doors are heated via ceiling mounted heating units which appeared to be older and should be checked for proper operation.
5. The existing temperature controls in the building are pneumatic. The temperature control system air compressor is located in the Boiler Room and includes an air dryer and appears

to be in good condition. Pneumatic tubing associated with the controls system have been failing at the connections to various units and should be replaced.

6. Some thru the wall/window AC units exist in select small office areas.

D. ELECTRICAL NARRATIVE

APPLICABLE CODES AND STANDARDS

The electrical power, interior lighting, and fire alarm systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th Edition
2. Massachusetts State Fire Prevention Regulations
3. NFPA Latest Edition
4. 2008 Massachusetts Electrical Code
5. Illuminating Engineering Society Lighting Handbook (IESNA), 9th Edition
6. ASHRAE 90.1

EXISTING SYSTEMS

1. The building is served by a 208Y/120volts, 3-phase, 4-wire electrical service; capacity was noted as being rated 400 amps. The service equipment is located in the basement of the building. The service equipment is in good/fair condition.
2. There are a number of electrical panels located throughout the facility. These panel boards all are a mix of new and old having been added at the time of various building additions and/or on an as-needed basis. The condition of these panelboards range from good to poor. The majority of the panelboards do not have spare circuit breakers available for new circuits to be added, or have space to add new circuit breakers.
3. The lighting throughout the facility consists primarily of 1' x 4', 2-lamp wraparound fluorescent fixtures and some 2' x 4' acrylic lens troffers. The lighting throughout the facility is in good condition. The existing 2' x 4' fixtures are older and should be replaced. The light levels appear to be within recommended levels.
4. The fire alarm system is a Simplex main FACP the system appears to be in good condition however the devices throughout are older and should be replaced with ADA compliant devices.
5. Site lighting is accomplished via building mounted wall packs.
6. There exists a Winco exterior natural gas fired standby generator that serves the facility. The unit is complete with indoor transfer switch and distribution panel. The Transfer switch is in poor condition and should be replaced. The generator currently powers emergency lighting, one boiler and associated pumps, and some computer related power.
7. Life safety emergency lighting is provided via a combination of lighting fixtures wired to the generator and emergency battery units with unit mounted emergency light heads units. Battery units appear to be in good condition, we were however unable to test the lighting connected to the emergency generator.

8. There is currently no controlled access or security system located in the facility however the desire for one was expressed.

E. MEP SYSTEMS CONCLUSION

In general, the systems vary in age from original to the building to as recent as 3-5 years old. Some equipment such as the older boiler, the pneumatic control system tubing have reached their life expectancy and should be replaced in order to improve the reliability, efficiency and to cut down on the operational and maintenance costs associated with the heating system.

Plumbing systems throughout seem to be in good physical and working condition. Replacement of faucets and flush valves on toilets, urinals and sinks to automatic units should be implemented as a water conservation measure. Sprinkler system should have a dedicated air compressor installed for the dry system including fire alarm system monitoring.

The Electrical systems appear to be in good condition and operating without issues. The older distribution equipment (panelboards) should be replaced with newer equipment with additional breaker spaces to meet any future needs and to alleviate the possibility of overloading individual circuits when new equipment and or devices are added to existing circuitry. The lighting systems are newer and in good condition with the exception of the older 2' x 4' fixtures which should be replaced. The addition of automated lighting controls should be implemented in order to meet current energy codes and to save on energy costs. Fire alarm system is older and should be replaced/upgraded to an ADA compliant system. Emergency power generation and exit lighting systems are newer and appear to be in good condition. A security and control access system should be added.

Following paragraphs A-E were produced by Consulting Engineering Services, Inc.

A. PLUMBING NARRATIVE

APPLICABLE CODES AND STANDARDS

The plumbing systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th Edition
2. Massachusetts Fire Prevention Regulations
3. Massachusetts State Fuel Gas and Plumbing Code
4. ASHRAE 90.1

PLUMBING UTILITIES

1. Domestic Water:
 - a. Existing Domestic Water Service: The existing building is currently served by a 2" domestic water service which enters the water service room located at the rear of the building and has an exterior only entry. The domestic water service equipment includes a water meter and isolation valves. This water service currently serves all of the buildings domestic water needs. The water distribution system is original to the building.
2. Natural Gas:
 - a. Existing Natural Gas Service: There is currently a natural gas service to the building which serves the boiler.
3. Sanitary:
 - a. Existing Sanitary Service: The buildings sanitary sewer system provides sanitary waste drainage for plumbing fixtures located throughout the facility. The piping material above grade is primarily cast iron. The Plumbing fixtures drain to buried sanitary waste piping exiting the building and running to the buildings sanitary waste system.
4. Fuel Oil:
 - a. There is currently no on site fuel storage.

PLUMBING FIXTURES AND SPECIALTIES

1. Existing plumbing fixtures are as follows:
 - Water closets are wall mounted; with flush valves, vitreous china.
 - Urinals are wall mounted vitreous china, with flush valves.
 - Lavatories are wall hung vitreous china. Faucets are two lever handle type.

DOMESTIC HOT WATER SYSTEMS

1. Existing Domestic Hot Water System: The libraries domestic hot water is generated by an 80 gallon electric fired water heater which feeds all the buildings hot water needs. The water heater is in very good condition.

B. FIRE PROTECTION NARRATIVE

FIRE PROTECTION SERVICE

1. There is full fire protection coverage (sprinklers) currently at the facility. This service enters the building in the water service room located at the rear of the building. This service includes all backflow prevention devices and valves as well as Fire alarm system monitoring. This system includes a dry system and includes a dedicated air compressor and fire alarm system monitoring.

C. MECHANICAL SYSTEMS:

APPLICABLE CODES AND STANDARDS

The mechanical systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th edition
2. Massachusetts Fire Prevention Regulations
3. International Mechanical Code
4. NFPA, Latest Version
5. ASHRAE 90.1

EXISTING SYSTEMS

1. The existing building is heated by a hot water boiler. The hot water boiler is a Smith with burners currently operating on Natural gas and a capacity of 1082 MBH. This equipment is original to the facility approximately 8 years old and in very good condition.
2. The present HVAC systems consist of finned tube radiation, indoor air handlers and air conditioning units. All units are original to the building and in very good condition. Air conditioning is supplied via DX cooling. Mechanical equipment is located primarily on exterior walls and in various indoor mechanical spaces within the building.
3. The existing temperature controls in the library are by Honeywell. The electronic temperature controls system is original to the building and in very good condition.

D. ELECTRICAL NARRATIVE

APPLICABLE CODES AND STANDARDS

The electrical power, interior lighting, and fire alarm systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th Edition

2. Massachusetts State Fire Prevention Regulations
3. NFPA Latest Edition
4. 2008 Massachusetts Electrical Code
5. Illuminating Engineering Society Lighting Handbook (IESNA), 9th Edition
6. ASHRAE 90.1

EXISTING SYSTEMS

1. The building is served by a 208Y/120volts, 3-phase, 4-wire electrical service; capacity was noted as being rated 1200 amps. The service equipment switchboard is located on the ground level of the building. The service equipment is in very good condition.
2. There are a number of electrical panels located throughout the facility. These panel boards are original to the building and in very good condition.
3. The lighting throughout the facility consists primarily of recess mounted 2' x 2'-T8 fluorescent fixtures, fluorescent down lights, 4' pendent mounted direct/indirect fluorescents and a large quantity of incandescent track lights. The lighting throughout the facility is in good condition. Consideration should be given to replace some or all of the incandescent track lights in order to cut down on operating and lamp replacement costs. Automatic lighting controls should be implemented as an energy saving measure in offices and those areas where it is deemed appropriate. The light levels appear to be within recommended levels. It was noted by operations personnel that the lighting level in the two front reading rooms currently lit by chandeliers is insufficient and should be supplemented.
4. The fire alarm system is an Edwards addressable main FACP and is original to the building and in very good condition. There are manual fire alarm pull stations, ADA compliant horn strobes and duct smoke detectors located throughout the building. Heat and smoke detectors are located in select areas throughout the building for detection and alarm.
5. Site lighting is accomplished via building mounted lights, pole mounted fixtures and Bollards.
6. Life safety emergency lighting is provided via emergency light heads powered a central battery pack located in the boiler room. Emergency light heads units are newer and in good condition.
7. Emergency exit lighting is provided via battery powered exit signs and is in very good condition.

E. MEP SYSTEMS CONCLUSION

In general, most of the systems are original to the building (8 years old), and in very good physical and operating condition.

Plumbing systems throughout seem to be in good physical and working condition. Replacement of faucets and flush valves on toilets and urinals to automatic units should be implemented as a water conservation measure.

The Electrical systems appear to be in very good condition and operating without issues. The lighting systems are newer and in good condition, the addition of automated lighting controls in the office areas should be implemented in order to meet current energy codes and to save on energy costs. Existing incandescent track lighting should be replaced in order to cut energy costs and re-lamping costs. Fire alarm system, emergency lighting and exit lighting systems are newer and appear to be in very good condition.

Following paragraphs A-E were produced by Consulting Engineering Services, Inc.

A. PLUMBING NARRATIVE

APPLICABLE CODES AND STANDARDS

The plumbing systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th Edition
2. Massachusetts Fire Prevention Regulations
3. Massachusetts State Fuel Gas and Plumbing Code
4. ASHRAE 90.1

PLUMBING UTILITIES

1. Domestic Water:
 - a. Existing Domestic Water Service: The existing building is currently served by a 1" domestic water service which enters the basement. The domestic water service equipment includes a water meter and isolation valves. This water service currently serves all of the houses domestic water needs. The water distribution system is original to the building and each subsequent addition/renovation.
2. Natural Gas:
 - a. Existing Natural Gas Service: There is currently a natural gas service to the building serving the boiler and hot water heater. This service enters the building into the basement at the boiler room.
3. Sanitary:
 - a. Existing Sanitary Service: The houses sanitary sewer system provides sanitary waste drainage for plumbing fixtures located throughout the building. The piping material above grade is primarily cast iron. The Plumbing fixtures drain to buried sanitary waste piping exiting the building and running to the buildings sanitary waste system.
4. Fuel Oil:
 - a. There is currently no on site fuel storage.

PLUMBING FIXTURES AND SPECIALTIES

1. Existing plumbing fixtures are as follows:
 - Water closets floor mounted tank type; vitreous china.
 - Lavatories are pedestal mounted vitreous china with dual handles.
 - Kitchen sink is stainless steel counter mounted with single lever handle

DOMESTIC HOT WATER SYSTEMS

1. Existing Domestic Hot Water System: The houses domestic hot water is generated by gas fired water heater which feed the buildings hot water needs. The water heater is in good condition.

B. FIRE PROTECTION NARRATIVE

FIRE PROTECTION SERVICE

1. There is no fire protection coverage (sprinklers) currently at the facility.

C. MECHANICAL SYSTEMS:

APPLICABLE CODES AND STANDARDS

The mechanical systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th edition
2. Massachusetts Fire Prevention Regulations
3. International Mechanical Code
4. NFPA, Latest Version
5. ASHRAE 90.1

EXISTING SYSTEMS

1. The existing house is heated by a gas fired forced hot air furnace located in the basement. This unit appears to be new and in very good condition including ductwork to floor mounted registers. This furnace is a Weathermaker 9200 and is tagged as being Energy Star compliant.
2. The present Heating and Ventilating systems consist of floor mounted registers. It was noted that the front portion of the house was not heated but that the heating provided in the rear portion of the house seemed to provide sufficient heat to avoid any problems.

D. ELECTRICAL NARRATIVE

APPLICABLE CODES AND STANDARDS

The electrical power, interior lighting, and fire alarm systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th Edition
2. Massachusetts State Fire Prevention Regulations
3. NFPA Latest Edition
4. 2008 Massachusetts Electrical Code
5. Illuminating Engineering Society Lighting Handbook (IESNA), 9th Edition

6. ASHRAE 90.1

EXISTING SYSTEMS

1. The building is served by a 120/240volts, single-phase, 3-wire electrical service; capacity was noted as being rated 100 amps. The service equipment is located in the basement of the house and consists of a circuit breaker panelboard; this panel is older in fair condition and should be replaced.
2. The lighting throughout the house is typical of a single family residence consisting of incandescent lamps and some incandescent track lighting.
3. There is no central fire alarm system in the building. There is however sporadic 120 volt smoke detectors.
4. There is currently a controlled access at the main front entry this system was noted as having been problematic and should be repaired or replaced.

E. MEP SYSTEMS CONCLUSION

In general, the systems vary in age from original to the building to as recent as 3-5 years old. Some equipment such as the heating system furnace are new and in very good condition. There was a desire expressed to add an environmentally controlled document storage room within the facility it should be noted that the addition of this type of room and the equipment involved may necessitate the upgrade of the electrical service capacity.

Plumbing systems throughout seem to be in good physical and working condition.

The Electrical systems appear to be in fair condition and operating without issues. The older service panel should be replaced with newer equipment with additional breaker spaces to meet any future needs and to alleviate the possibility of overloading individual circuits when new equipment and or devices are added to existing circuitry. The lighting systems are typical of a home. A fire alarm system should be installed, and should be tied into a notification system. The existing security system should be repaired/replaced.

Following paragraphs A-E were produced by Consulting Engineering Services, Inc.

A. PLUMBING NARRATIVE

APPLICABLE CODES AND STANDARDS

The plumbing systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th Edition
2. Massachusetts Fire Prevention Regulations
3. Massachusetts State Fuel Gas and Plumbing Code
4. ASHRAE 90.1

PLUMBING UTILITIES

1. Domestic Water:
 - a. Existing Domestic Water Service: The existing building is currently served by a decommissioned domestic water service which enters the basement. The domestic water service equipment includes a water meter and isolation valves. This water service currently serves all of the Schools domestic water needs. The water distribution system is original to the building and each subsequent addition/renovation. This service was disconnected at the time of the inspection.
2. Natural Gas:
 - a. Existing Natural Gas Service: There is currently a decommissioned natural gas services to the building serving the boiler and hot water heater. This service was disconnected at the time the inspection was conducted. This service enters the rear of the building at the boiler room.
3. Sanitary:
 - a. Existing Sanitary Service: The School's sanitary sewer system provides sanitary waste drainage for plumbing fixtures located throughout the School. The piping material above grade is primarily cast iron. The Plumbing fixtures drain to buried sanitary waste piping exiting the building and running to the buildings sanitary waste system.
4. Fuel Oil:
 - a. There is currently no on site fuel storage.

PLUMBING FIXTURES AND SPECIALTIES

1. Existing plumbing fixtures are as follows:
 - Water closets are floor mounted; tank type, vitreous china.
 - Urinals are floor mounted with flush valve, vitreous china.
 - Lavatories are wall hung and counter mounted vitreous china. Faucets are of the two lever handle type.

DOMESTIC HOT WATER SYSTEMS

1. Existing Domestic Hot Water System: The Schools domestic hot water is generated by a gas fired water heater which feeds the schools hot water needs.

B. FIRE PROTECTION NARRATIVE

FIRE PROTECTION SERVICE

1. There is no fire protection coverage (sprinklers) currently at the facility.

C. MECHANICAL SYSTEMS:

APPLICABLE CODES AND STANDARDS

The mechanical systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th edition
2. Massachusetts Fire Prevention Regulations
3. International Mechanical Code
4. NFPA, Latest Version
5. ASHRAE 90.1

EXISTING SYSTEMS

1. The existing building is currently unheated. The current heating system in the building consists of a hot water boiler in the basement which has been decommissioned including the burner having been removed. This equipment appears very old and unsalvageable and would need to be replaced.
2. The present Heating and ventilating systems although decommissioned consist of finned tube radiation located throughout the school most appear to be in poor condition. Some thru the wall air conditioning units for select small areas in the basement however their operational capability was unable to be confirmed.
3. The only visible exhaust system in the building is a single thru the wall exhaust fan located on the rear wall of the building.

D. ELECTRICAL NARRATIVE

APPLICABLE CODES AND STANDARDS

The electrical power, interior lighting, and fire alarm systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th Edition
2. Massachusetts State Fire Prevention Regulations
3. NFPA Latest Edition

4. 2008 Massachusetts Electrical Code
5. Illuminating Engineering Society Lighting Handbook (IESNA), 9th Edition
6. ASHRAE 90.1

EXISTING SYSTEMS

1. The building is served by a 120/240 volts, single-phase, 3-wire electrical service. The service equipment is located in the basement of the building. The service equipment is poor condition.
2. There are a number of electrical panels located throughout the facility. These panel boards all are older having been added at the time of various building additions and/or on an as-needed basis. The condition of these panel boards is poor.
3. The lighting throughout the facility consists primarily of 1' x 4' 2-lamp wraparound fluorescent fixtures and incandescent fixtures. The lighting throughout the facility is in poor condition.
4. The fire alarm system is a new system and in very good condition. There are manual fire alarm pull stations, horn strobes and smoke detectors located throughout the building.
5. Site lighting is accomplished via building mounted flood lights.
6. Life safety emergency lighting is provided via Emergency battery units with unit mounted emergency light heads units.

E. MEP SYSTEMS CONCLUSION

In general, the systems vary in age from original to the building to as recent as 3-5 years old in the case of the fire alarm system which is the only salvageable system. In general all MEP systems are in poor condition and would need to be replaced if the building were to be re-commissioned. Including the testing of all incoming and outgoing service lines and system.

Following paragraphs A-E were produced by Consulting Engineering Services, Inc.

A. PLUMBING NARRATIVE

APPLICABLE CODES AND STANDARDS

The plumbing systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th Edition
2. Massachusetts Fire Prevention Regulations
3. Massachusetts State Fuel Gas and Plumbing Code
4. ASHRAE 90.1

PLUMBING UTILITIES

1. Domestic Water:
 - a. Existing Domestic Water Service: The existing building is currently served by a 3/4" domestic water service which enters the basement. The domestic water service equipment includes a water meter and isolation valves. This water service currently serves all of the buildings domestic water needs. The water distribution system is original to the building and each subsequent addition/renovation.
2. Natural Gas:
 - a. Existing Natural Gas Service: There is currently no gas service to the building.
3. Sanitary:
 - a. Existing Sanitary Service: The building's sanitary sewer system provides sanitary waste drainage for plumbing fixtures located throughout the facility. The piping material above grade is primarily cast iron. The Plumbing fixtures drain to buried sanitary waste piping exiting the building and running to the buildings sanitary waste system.
4. Fuel Oil:
 - a. There is currently a heating fuel oil tank located in the basement serving the heating system furnace.

PLUMBING FIXTURES AND SPECIALTIES

1. Existing plumbing fixtures are as follows:
 - Water closets are floor mounted; tank type, vitreous china.
 - Lavatories are wall hung vitreous china. Faucets are of the two lever handle type.

DOMESTIC HOT WATER SYSTEMS

1. Existing Domestic Hot Water System: The facilities domestic hot water is generated by an 80 gallon electric water heater which feeds all the buildings hot water needs. The water heater is in good condition.

B. FIRE PROTECTION NARRATIVE

FIRE PROTECTION SERVICE

1. There is no fire protection coverage (sprinklers) currently at the facility.

C. MECHANICAL SYSTEMS:

APPLICABLE CODES AND STANDARDS

The mechanical systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th edition
2. Massachusetts Fire Prevention Regulations
3. International Mechanical Code
4. NFPA, Latest Version
5. ASHRAE 90.1

EXISTING SYSTEMS

1. The existing building is heated by a forced air furnace. The furnace is a Bryant unit with its burner operating on oil. This equipment is approximately 3-5 years old and in very good condition.
2. The present Heating and Ventilating systems consist of floor mounted registers providing ducted heated air from the furnace in the basement all ductwork is newer and in very good condition.
3. Air conditioning is provided via thru the wall air conditioning units. These units are in good condition.
4. The existing temperature controls in the building are via electric thermostats.

D. ELECTRICAL NARRATIVE

APPLICABLE CODES AND STANDARDS

The electrical power, interior lighting, and fire alarm systems were reviewed in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

1. Massachusetts State Building Code 7th Edition
2. Massachusetts State Fire Prevention Regulations
3. NFPA Latest Edition
4. 2008 Massachusetts Electrical Code
5. Illuminating Engineering Society Lighting Handbook (IESNA), 9th Edition
6. ASHRAE 90.1

EXISTING SYSTEMS

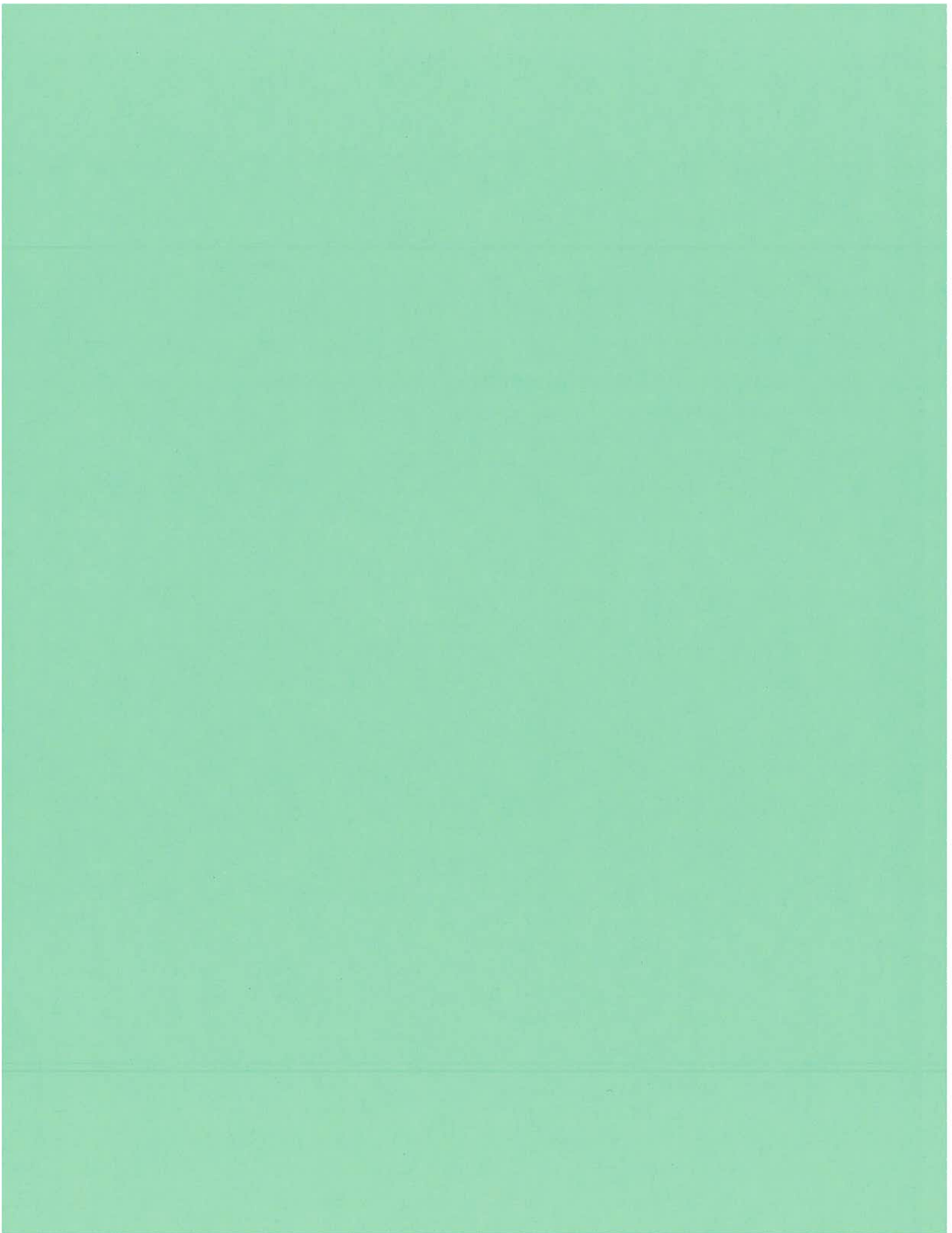
1. The building is served by a 120/240 volts, single-phase, 3-wire electrical service; capacity was noted as being rated 200 amps. The service equipment is located in the basement of the building. The service equipment is new and in very good condition.
2. The lighting throughout the facility consists primarily of 1' x 4' 2-lamp wraparound fluorescent fixtures, 2' x 4' recessed troffers and fluorescent strip fixtures. The lighting throughout the facility is in good condition. The light levels appear to be within recommended levels.
3. The fire alarm system is local only 120 volt smoke detectors.
4. Site lighting is accomplished via building mounted light fixtures and a number of pole mounted lights.
5. Life safety emergency lighting is provided via Emergency battery units with unit mounted emergency light heads and battery powered exit lights, units are newer and in good condition.
6. There is currently no controlled access or security system located in the facility.

E. MEP SYSTEMS CONCLUSION

In general, the systems vary in age from original to the building to as recent as 3-5 years old.

Plumbing systems throughout seem to be in good physical and working condition.

The Electrical systems appear to be in very good condition and operating without issues. The lighting systems are newer and in good condition, the addition of automated lighting controls should be implemented in order to meet current energy codes and to save on energy costs. The fire alarm system should be upgraded to include a notification tie in for prompt response given the facility is often unoccupied. The emergency lighting and exit lighting systems are newer and appear to be in very good condition. Given that the facility is often unoccupied the occupants would like a security system installed, this system could incorporate the recommended fire alarm upgrades as well.



Curtis Elementary School Structural Report

October 8, 2010

PURPOSE

The purpose of this report is to describe in broad terms the structure of the existing building, to comment on the condition of the existing building, and on the feasibility of renovation and expansion of the facility.

SCOPE

1. Description of existing structure
2. Comments on the existing condition
3. Comments on the feasibility of renovation and expansion

BASIS OF THE REPORT

This report is based on an inspection performed on April 19, 2010. No structural or construction drawings of the facility are currently available.

During our site visit, we did not remove any finishes or take measurements so our understanding of the structure is limited to the available drawings and observations at the exterior skin.

BUILDING DESCRIPTION

The building, located at 848 Main Street, was constructed in 1896 and is a two-story (including a basement) wood framed structure supported on perimeter stone foundation walls. The exterior is covered in vinyl siding with asphalt shingles on the roof. There has been a garage/maintenance shed added, with wood stud walls and a sloped roof at the rear.

EXISTING CONDITIONS

The building is in reasonably fair condition with no evidence of any foundation settlement. The framing at the first floor level is spongy with evidence of slopes at various locations.

The basement window levels are in line with the exterior grade, resulting in potential moisture problems.

The building has obviously gone through various remodeling stages. None of which have increased the structural integrity of the building as originally constructed.

FEASIBILITY OF RENOVATION AND EXPANSION OF THE STRUCTURE

The existing wood framed structure may be difficult to adapt to layouts compatible with current educational requirements. Further investigation of the wood framed structure by removal of finishes, etc. would be required to assess the capacity of the building to sustain the required Code loading, both lateral and vertical.

Removal of any load resisting elements could reduce the existing capacity of the structure and depending on the extent, various proportional upgrades would be necessary to satisfy the Massachusetts State Building Code. It would appear that there are very few options to allow adjustment of the interior walls. Any layout revision would likely be cost prohibitive with respect to the structural elements.

If any proposed work is permitted after February 6, 2011, then the code requirements would need to comply with the 8th Edition of the Massachusetts State Building Code.

Primary Structural Code Issues Related to the Existing Structure

If any repairs, renovations, additions or change of occupancy or use are made to the existing structure, a check for compliance with 780 CMR, Chapter 34 "Existing Structures" (Massachusetts Amendments to The International Existing Building Code 2009) and reference code "International Existing Building Code 2009" (IEBC 2009) would be required. The intent of the IEBC and the related Massachusetts Amendments to IEBC is to provide alternative approaches to alterations, repairs, additions and/or a change of occupancy or use without requiring full compliance with the code requirements for new construction.

The IEBC provides three compliance methods for the repair, alteration, change of use or additions to an existing structure. Compliance is required with only one of the three compliance alternatives. Once the compliance alternative is selected, any project would have to comply with all requirements of that particular method. The requirements from the three compliance alternatives cannot be applied in combination with each other.

The three compliance methods are as follows:

1. Prescription Compliance Method.
2. Work Area Compliance Method.
3. Performance Compliance Method.

Comment

The approach is to evaluate the compliance requirements for each of the three methods and select the method that would yield the most cost effective solution for the structural scope of the project. The selection of the compliance method may have to be re-evaluated after the impact of the selected method is understood and after analyzing the compliance requirements of the other disciplines, Architectural, Mechanical, Fire Protection, Electrical and Plumbing. A detailed analysis

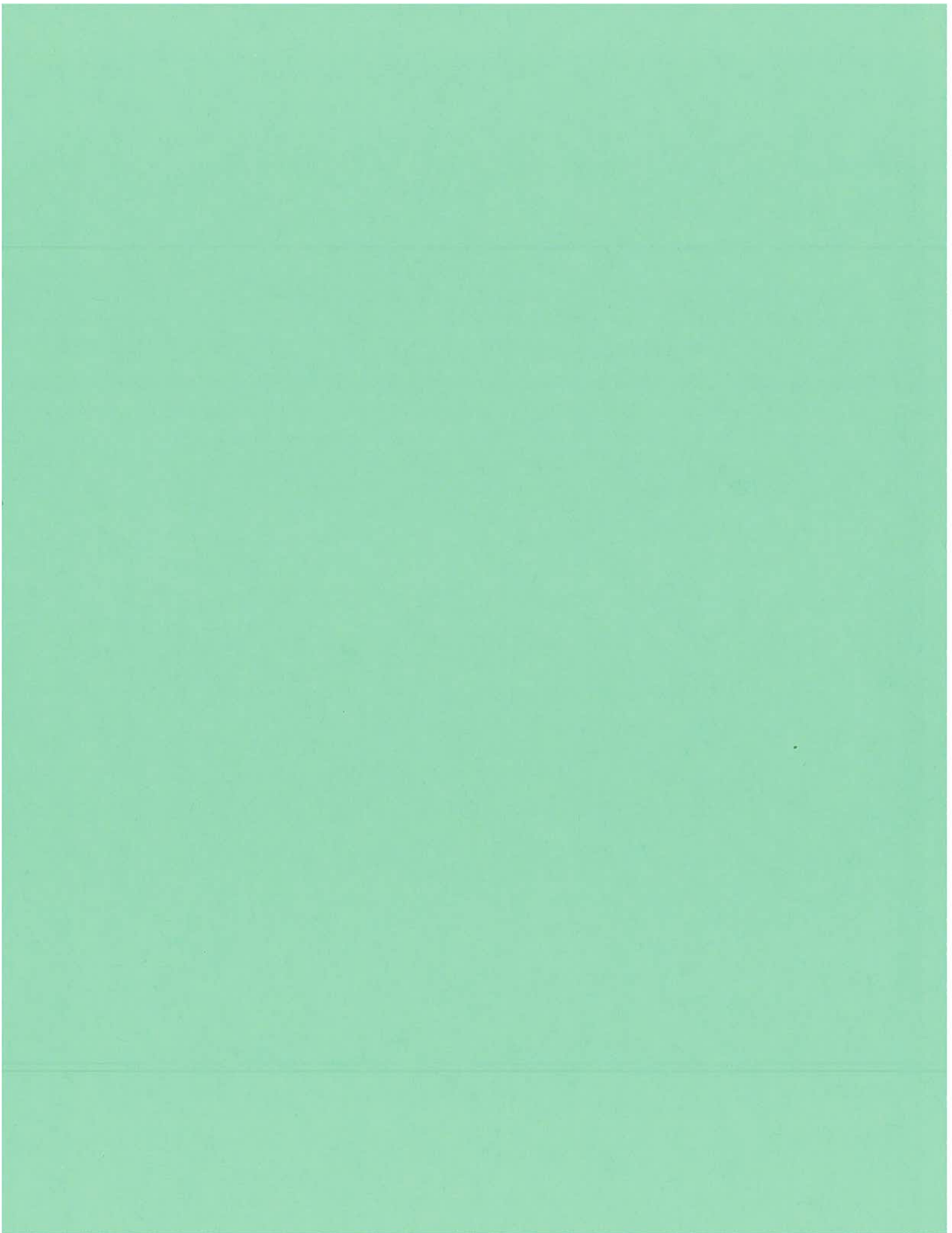
of the code provisions would need to be carried out under a feasibility study incorporating various renovation/repair options.

EXECUTIVE SUMMARY

The building is in reasonably fair condition with no evidence of foundation settlement. The exterior and interior walls do not exhibit any distress, although with vinyl siding and plaster covering the main structural elements, there is no guarantee that the wood framing is in sound condition.

Adaptability of the structure may prove difficult and cost prohibitive.

Any additions should be kept structurally separate and extreme care needs to be taken to avoid any renovations, which would jeopardize the existing structure and resulting compliance with some of the more stringent requirements of Chapter 34 of the 8th Edition of the Massachusetts State Building Code (Repairs, Alterations, Additions, & Change of Use of Existing Buildings).



MEMORANDUM

TO: Paul S. Brown, AIA, LEED® AP
Drummey Rosane Anderson, Inc.
FROM: John M. Schmid, PE, LEED® AP
DATE: May 27, 2010 (Revised June 23, 2010)
RE: Hanover Town-Wide facilities Study

Nitsch Project #7753P

On April 21, 2010, John M. Schmid, PE, LEED® AP, conducted a site visit to five (5) public buildings in Hanover to evaluate issues previously raised to the Consultant Team regarding utility/infrastructure concerns. Nitsch Engineering visited the following properties:

Fire Station Head Quarters, Center Street;
Hanover Middle School, Whiting Street;
Curtis School, 848 Main Street;
Public Works Facility, 219 Winter Street; and
DPW Compound, 229 Ames Way

Nitsch Engineering offers our assessment of the issues identified Drummey, Rosane, Anderson, Inc. (DRA) Preliminary findings letter, dated as last revised April 6, 2010.

Fire Station Head Quarters

Mr. Schmid met with Fire Fighter John Allen and made the following observations/assessments:

Front Parking Lot: The bituminous concrete berm that delineated a landscaped island over the below grade irrigation well was removed to improve site circulation. The landscaped area now consists of crushed stone. The Fire Department should confirm that the well structure and cover is capable of supporting vehicle loads. If it is, the area should be paved with bituminous concrete and incorporated into the formal parking lot. If the structure is not capable, and cannot be modified to, support vehicle loads, the area should be protected from vehicles to prevent vehicles from parking/driving over the well. The well should also be inspected to ensure no damage has occurred to date.

Trench at Driveway: The Fire Department reports that the pavement over a utility trench at the fire apparatus' driveway periodically settles. Should the trench continue to settle, the utility trench should be exposed and covered with an H-20 loading compliant concrete cap. This should mitigate future settlement concerns.

Catch Basin Puddles: In several areas of the parking lot, there are depressions in the pavement several feet from catch basins. This is likely a result of poor soil compaction near the structures. Presently, this does not appear to be a significant issue. However, should the parking lots be resurfaced, care should be taken to address these depressions prior to placing the new pavement.

Light Poles: The ornamental bases on the light poles are rotted and the bolts within the bases are beginning to rot. The ornamental bases should be repair/replaced to ensure further damage to the light poles is mitigated.

Flag Pole: The flag pole requires repainting.

Pavement Berm: The pavement berm is damaged throughout the driveway & parking lots. The berm should be repaired to ensure that the stormwater management system can function per design. Stormwater is likely breaching the broken berm and flowing into unintended areas.

Parking Lot Grading: The Fire Department reports that the flat grades in the side/rear parking areas hold water and causes minor ponding and icing conditions. When the parking lot is resurfaced, care should be taken to address the flat areas prior to placing the new pavement.

Catch Basin Frame & Grate Settlement: There is catch basin in the rear parking areas that has settled. The frame and grate should be repaired and reset. The area around the catch basin may require some regarding.

Hanover Middle School

Mr. Schmid met with James Hoey to observe the groundwater infiltration conditions experienced at the school over the past few years. Mr. Schmid made the following observations/assessments:

The groundwater infiltration issues may be caused by a rising ground water table, broken roof drains, or possibly other conduit that may be directing water under the building slab.

Mr. Hoey stated that this issue has been occurring over the past few years. However, this issue did not occur during the March 2010 record rainfall. Mr. Hoey also indicated that the school conducted a study and there is a report with its findings. The School should consult this report regarding any recommendation is proposes.

Driveway/ Parking Lot: Mr. Schmid also notes that the pavement is in poor condition consisting of numerous cracks, broken or missing berm, and damaged catch basins. When the parking lot is resurfaced, the Town should consider full depth reconstruction or the pavement cracks will likely return in the future.

Police Station

Nitsch Engineering was requested to inquire about a reported septic system failure/issue that the Police Station. Mr. Schmid inquired with the Board of Health (BOH) regarding this concern. The BOH reports that the septic system required a filter in the septic tank to prevent solids from flowing to the distribution box. The filter was installed on June 29, 2009 and the BOH is not aware of any lingering issues regarding the system appears to be functioning properly.

Curtis School

Nitsch Engineering visited the Curtis School to access what impacts to the existing utilities may be required should the building be reused. Nitsch Engineering understands that the building was constructed in 1896 as the Town's first elementary school. The building has served several uses in recent years, and was abandoned about six (6) years ago.

Nitsch Engineering anticipates that all existing exterior utility services would likely need to be replaced or upgraded to meet current code requirements and/or load demands. This includes the Title V septic system, domestic water and fire water supply, electrical, cable, telephone, and internet service.

The site's current stormwater management needs appear to be served by passive surface infiltration (water infiltration in lawn areas). Significant changes to the site's impervious surfaces and site uses will likely require a formal storm water management system, most likely rain gardens, drywells, or below grade storage and infiltration systems.

In regards to future uses, the facility could support future public uses (e.g.; fire department substation, library, park department, recreational ball field, etc.) if the infrastructure is improvements and the building renovated to meet the new program demands and code requirements.

DPW Yard- 229 Ames

Mr. Schmid met with Victor Diniak to review and discuss overall DPW operations. The most significant concern is to be able to maintain safe daily operations within the yard while maintaining public access to the compost pile. This also includes providing safe access to the Town's fuel tanks for public vehicles. Presently, there could be numerous parties seeking the same route through the site for several different purposes and with limited familiarity with the site.

Nitsch Engineering recommends that the Town seriously consider improving public access to the compost pile before an accident occurs. The effort could be accomplished by reconfiguring several onsite operations; such as the exterior salt pile, public compost pile, and aggregate materials storage bins. This would also include constructing a driveway outside the existing fence line to the rear of the facility. This would allow the public to access the compost piles without having to formally enter the site and engage with daily site activities. The enclosed sketch illustrates this conceptual scheme. This effort would likely require approval from the Conservation Commission because it appears proposed driveway is located within a buffer zone to a regulated area.

The existing gate to the DPW yard is also operated by town personnel 24-hours a day to access the fuel tanks. There have been instances in the past where the gate was left unlocked after personnel used the fuel tank. The town should also consider the installation of an automated gate. This will help to ensure that the yard is safely secured at all times.

219 Winter Street

Mr. Schmid met with Victor Diniak to review and discuss the Public Works Facility. The Town acquired this building in 2004 and is presently used for Water District operations. The DPW will also be using a portion of the building as office and shop space.

The town should consider developing a Master Plan for both the 229 Ames Yard and the 219 Winter Yard. These parcels abut each other and offer some underutilized space. With thoughtful planning both properties could be reconfigured to provide the DPW safer and more efficient operations.

Presently, there are some exterior site issues:

Material Storage: The Water District is storing materials in the front driveway. The facility should be enclosed with a fence and gated to mitigate material theft.

ADA Accessibility: The building does not appear to provide accessible access to the main entrance.

Stormwater Management: The depressed loading dock ponds water after storm events. The drainage system should be inspected and repaired to ensure it functions properly.

Paul S. Brown, AIA, LEED® AP: Nitsch Project #7753P
May 27, 2010
Page 4 of 4

Fire Service: The building does not have a fire depression system. A new fire service may be required if the fire suppression system cannot be served off the domestic water service.

Title V Sewage Disposal System: Nitsch Engineering understands that the final building use is still being developed. The existing Title V Sewage Disposal System should be evaluated to confirm that it is designed for the proposed building programs.

Summary

Nitsch Engineering appreciates this opportunity to offer our assessment for the requested items. Please contact me if you have any questions.

G:/Project Cprrespondence/R19555A