

THE CITY OF WALTHAM  
MASSACHUSETTS

PURCHASING DEPARTMENT

**Design for the Reconstruction of the  
Whittemore Elementary School Playground**

**ADDENDUM NO. 2**

June 1, 2018

**CHANGES, CORRECTIONS AND CLARIFICATIONS**

The attention of bidders submitting proposals for the above subject project is called to the following addendum to the specifications. The items set forth herein, whether of omission, addition, substitution or clarification are all to be included in and form a part of the proposal submitted.

THE NUMBER OF THIS ADDENDUM (NO. 2) MUST BE ENTERED PAGE 35 AT THE END OF THE BID PRICE FORM.

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**ITEM 1: ANSWERS TO POSED QUESTIONS**

**Q1.** Is the City able to make any plans of the site (either as-built or, if not those, design plans) available?

**A1.** See attached

**Q2.** Is the selection solely based on price, assuming the bidders are qualified/responsible?

**A2.** No. The selection is first based on the technical merits of the respondent.

**Q3.** How many copies should be submitted?

**A3.** Please submit 4 copies single sided printing and stapled with a single

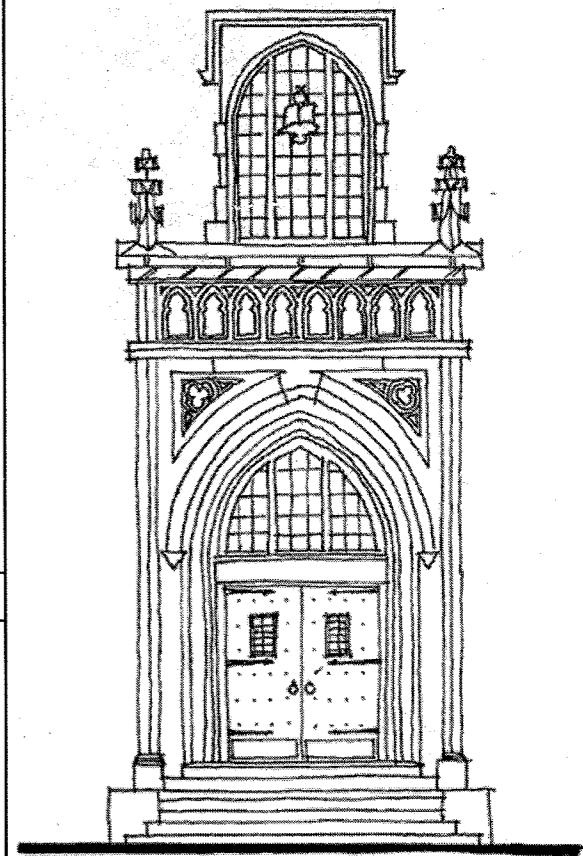
**Q5.** Does the price need to be in a separate envelope from the qualifications, or should it all be in one package?

**A5.** No

**End of Addendum 2**

# Whittemore Elementary School

30 Parmenter Road  
Waltham, Massachusetts



100 % CONSTRUCTION DOCUMENTS

September 29, 2006

## Architect

### FLANSBURGH ASSOCIATES

77 North Washington Street  
Boston, Massachusetts 02114-1910  
Telephone 617-367-3970  
Fax 617-720-7873  
www.faiarchitects.com

FAI Project No. 2015.00

## Consultants

Land Surveyor  
**Welch Associates Land Surveyors, Inc.**  
218 North Main Street  
West Bridgewater, MA 02379

Civil Engineer  
**Judith Nitsch Engineering, Inc.**  
186 Lincoln Street, Suite 200  
Boston, MA 02111

Landscape Architect  
**Geller DeVellis, Inc.**  
77 North Washington Street  
Boston, MA 02114

Furniture, Equipment and Casework Consultant  
**Tavares Design Associates, Inc.**  
319 Massachusetts Avenue  
Arlington, MA 02174

Structural Engineer  
**Engineers Design Group, Inc.**  
10 Cabot Road, Suite 210  
Medford, MA 02155

Mechanical, Electrical, Plumbing and Fire Protection Engineer  
**TMP Consulting Engineers, Inc.**  
52 Temple Place  
Boston, MA 02111

Computer/Technology Consultant  
**Edvance Technology Design, Inc.**  
2 Summer Street  
Chelmsford, MA 01824

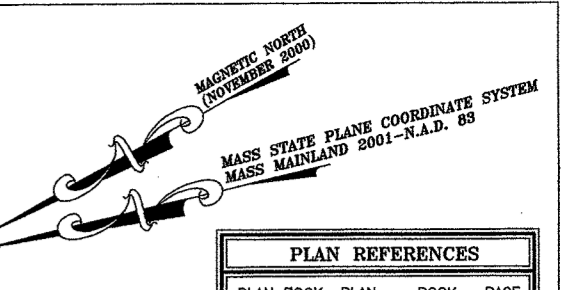
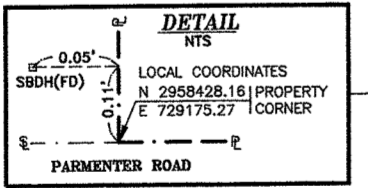
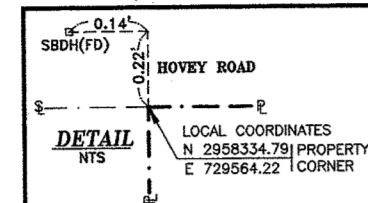
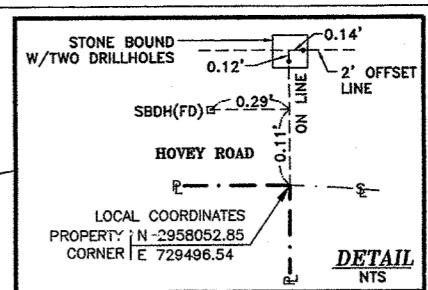
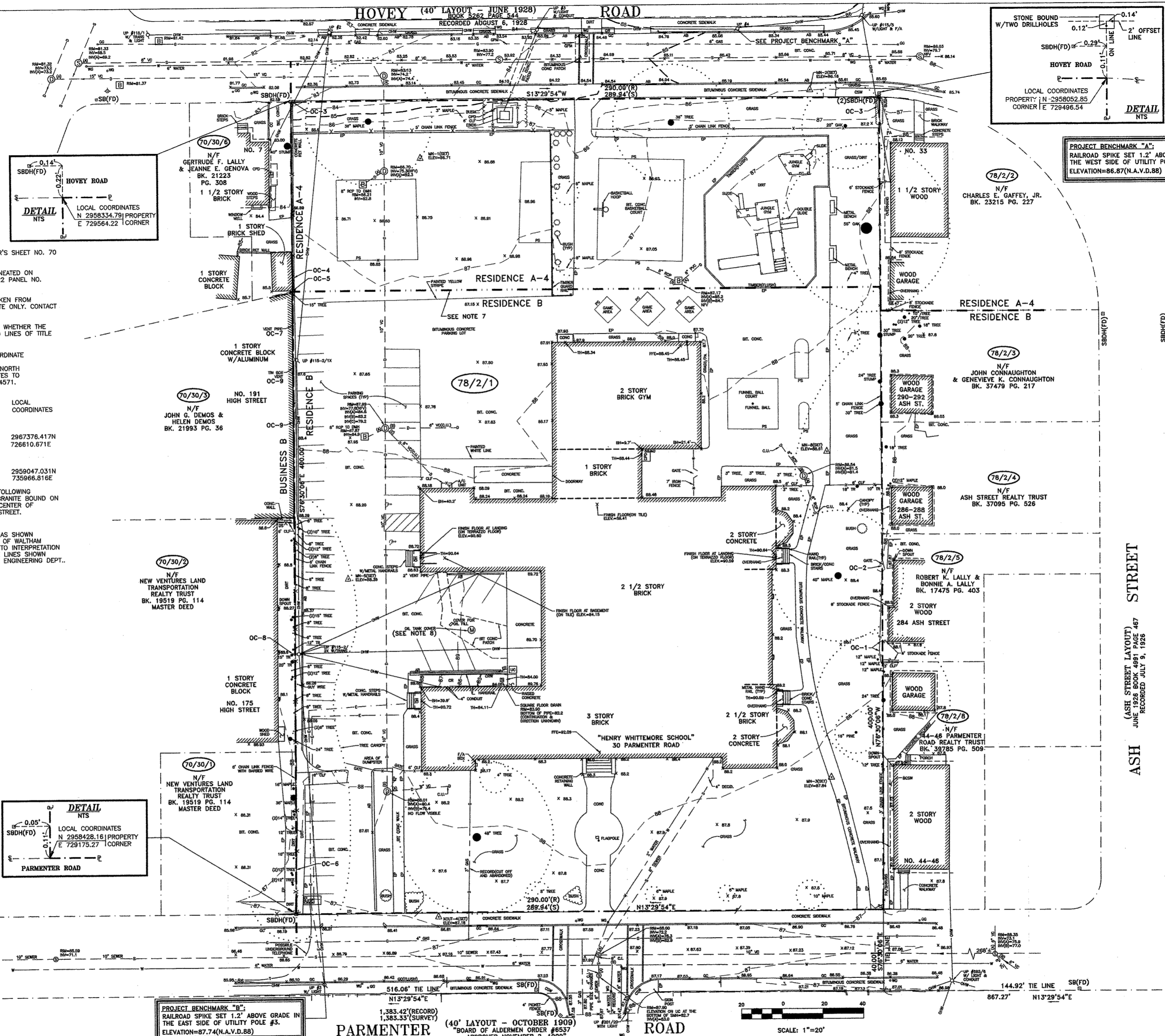
Geotechnical/Environmental Consultant  
**SEA Consultants, Inc.**  
485 Massachusetts Avenue  
Cambridge, MA 02139

## List of Drawings

A0.00	Cover Sheet	A7.01	Interior Elevations- Typical Classrooms New Building		
SURVEY		A7.02	Interior Elevations- Typical Classrooms Existing Building		
X1.00	Existing Conditions Survey	A7.03	Interior Elevations- Typical Classrooms Existing Building		
CIVIL		A7.04	Interior Elevations- Typical Classrooms Existing Building		
C-1	Site Utility Plan	A7.05	Interior Elevations- Typical Classrooms Existing Building		
C-2	Site Utility Details	A7.06	Interior Elevations- Typical Classrooms Existing Building		
C-3	Site Utility Details	A7.07	Interior Elevations- Typical Kindergartens		
C-4	Site Layout Plan	A7.08	Interior Elevations- Typical Music and Art Rooms		
LANDSCAPE		A7.09	Interior Elevations- Library/Media Center		
SP-1	Site Prep. Plan	A7.10	Interior Elevations- Main Lobby		
L-1	Layout & Materials Plan	A7.11	Interior Elevations- Cafeterium		
L-2	Grading Plan	A7.12	Interior Elevations- Gym		
L-3	Planting Plan	A7.13	Interior Elevations- Gym		
L-4	Enlargement Plan	A7.14	Interior Elevations- Existing Building Corridors		
L-5	Enlargement Plan	A7.15	Interior Elevations- Existing Building Corridors		
L-6	Site Details- Sheet I	A7.16	Interior Elevations- Existing Building Corridors		
L-7	Site Details- Sheet II	A8.01	Signage		
L-8	Site Details- Sheet III	A8.02	Millwork Details		
L-9	Site Details- Sheet IV	A8.03	Millwork Details		
ARCHITECTURAL		A8.04	Restoration Details		
A0.01	Legend	A9.01	First Floor RCP		
A0.03	Code Plan	A9.02	Second Floor RCP		
A0.04	Accessibility Standards	A9.03	Third Floor RCP		
D1.01	First Floor Demolition Plan	A9.04	RCP Details- Existing Building		
D1.02	Second Floor Demolition Plan	A9.05	RCP Details- New Building		
D1.03	Third Floor Demolition Plan	A10.01	First Floor Finish Plan		
D1.04	Roof Demo Plan	A10.02	Second Floor Finish Plan		
D1.05	Demo Elevations	A10.03	Third Floor Finish Plan		
D1.06	Demo Elevations	A10.04	Alt. 1 & 2 Second Floor Plan		
D1.07	Demo Elevations	A10.05	Alt. 1 & 2 Third Floor Plan		
A1.01	First Floor Plan	A11.01	Door Schedule		
A1.02	Second Floor Plan	A11.02	Door & View Window Details		
A1.03	Third Floor Plan	A11.03	Finish Schedule		
A1.04	Partition Types	EQUIPMENT			
A2.01	Roof Plan	EQ1.01	First Floor Equipment Plan		
A2.02	Roof Details	EQ1.02	Second Floor Equipment Plan		
A2.03	Roof Details	EQ1.03	Third Floor Equipment Plan		
A3.01	Exterior Elevations	EQ-4	Casework Elevation Details		
A3.02	Exterior Elevations	EQ-5	Casework Elevation Details		
A3.03	Exterior Elevations	EQ-6	Casework Elevation Details		
A3.04	Exterior Elevations	FS-1	Kitchen Equipment Plan, Schedule & Details		
A4.01	Building Sections	FS-2	Kitchen Equipment Rough-in & Details		
A4.02	Wall Sections- New Building	FS-3	Kitchen Exhaust		
A4.03	Wall Sections- New Building	STRUCTURAL			
A5.01	Vertical Details	S0.01	General Notes		
A5.10	Plan Details	S0.02	Typical Details		
A5.11	Plan Details	S0.03	Typical Details		
A5.12	Plan Details	S0.04	Typical Details		
A5.13	Interior Details	S0.04	Typical Details		
A5.20	Window Types	S0.05	Typical Details		
A6.01	Enlarged Toilet Plans and Elevations	S1.01	Foundation Plan		
A6.02	New Stair Plans and Sections	S1.02	Second Floor Framing Plan		
A6.03	New Stair Details	S1.03	Third Floor Framing Plan		
A6.04	Existing Stairs Plans and Details	S1.04	Roof Framing Plan		
A6.05	Elevator Plans, Sections & Details	S2.01	Sections		
A6.07	Enlarged Gym Plan	S2.02	Sections		
		S3.01	Sections		
		S3.02	Sections		
		S3.03	Sections		
		S4.01	Brace Frame Elevations		
		S4.02	Brace Frame Details		
				FIRE PROTECTION	
				FP0.00	Legend, Details & Notes Fire Protection
				FP1.11	First Floor Plan Fire Protection
				FP1.21	Second Floor Plan Fire Protection
				FP1.31	Third Floor Plan Fire Protection
				PLUMBING	
				P0.00	Legend, Details, Notes and Schedule Plumbing
				P1.11	First Floor Plan Plumbing
				P1.21	Second Floor Plan Plumbing
				P1.31	Third Floor Plan Plumbing
				P1.41	Roof Plan Plumbing
				P2.01	Enlarged Kitchen Plan Plumbing
				MECHANICAL	
				M1.01	HVAC Legend
				M1.11	First Floor Plan
				M1.21	Second Floor Plan
				M1.31	Third Floor Plan
				M1.41	Roof Plan
				M2.01	Detail Sheet No. 1
				M2.02	Detail Sheet No. 2
				M3.01	Schedule Sheet No. 1
				M3.02	Schedule Sheet No. 2
				ELECTRICAL	
				E0.00	Legend & Luminaires Schedule
				E0.01	Site Plan Electrical
				E1.01	First Floor Plan Lighting
				E1.01a	First Floor Plan Power & Systems
				E1.02	Second Floor Plan Lighting
				E1.02a	Second Floor Plan Power & Systems
				E1.03	Third Floor Plan Lighting
				E1.03a	Third Floor Plan Power & Systems
				E1.04	Roof Plan
				E1.05	Kitchen Part Plan
				E2.00	Power Distribution Riser Diagram and Schedules
				E2.01	Schedules
				E2.02	Riser Diagrams
				TECHNOLOGY	
				T1.01	First Floor Technology Plan
				T1.02	Second Floor Technology Plan
				T1.03	Third Floor Technology Plan
				T2.01	Technology Detail Sheet #1
				T2.02	Technology Detail Sheet #2
				T2.03	Technology Detail Sheet #3
				T2.04	Technology Detail Sheet #4
				T2.05	Technology Detail Sheet #5
				T2.06	Technology Detail Sheet #6
				T2.07	Technology Detail Sheet #7

**HOVEY (40' LAYOUT - JUNE 1928)**  
BOOK 3262 PAGE 544  
RECORDED AUGUST 6, 1928

**PARMENTER (40' LAYOUT - OCTOBER 1909)**  
BOARD OF ALDERMEN ORDER #6537  
APPROVED NOVEMBER 2, 1909



**PLAN REFERENCES**

PLAN BOOK	PLAN	BOOK	PAGE
376	28	5282	545
355	18	6958	85
369	18	19519	112
		7302	286
		6140	420

FILED PLAN NO. 731

**UTILITY OPERATING AUTHORITIES**

DRAIN/SEWER/WATER	CITY OF WALTHAM
GAS	KEYSPAN
ELECTRIC	NSTAR
CABLE	COMCAST
TELEPHONE	VERIZON

**UTILITY LEGEND**

SEWER	S
DRAIN	D
WATER	W
GAS	G
ELECTRIC	E
TELEPHONE	T

**LEGEND**

AB	ASPHALT BERM
BIT CONC	BITUMINOUS CONCRETE
BCSW	BITUMINOUS CONCRETE SIDEWALK
BH	BUILDING HEIGHT
CB	CATCH BASIN
CLF	CHAIN LINK FENCE
CONC	CONCRETE
CC	CONCRETE CURB
CPD	CONCRETE PAD
CR	CONCRETE RAMP
CRW	CONCRETE RETAINING WALL
CJ.U.	CONTINUATION UNKNOWN
F/A	DRAIN MANHOLE
EP	EDGE OF PAVEMENT
EBOX	ELECTRIC BOX
FTE	FINISH FLOOR ELEVATION
GA	GAS
GG	GAS GATE
GPM	GAS PAINTMARK
GC	GRANITE CURB
GR	GRASS
H	HYDRANT
M	MANHOLE
NFV	NO FLOW VISIBLE
OH	OVERHANG
OHW	OVERHEAD WIRES
PS	PAINTED STRIPE
PA	PLANTED AREA
RET.	RETAINING
S	SEWER MANHOLE
SI	SIGN
TH	THRESHOLD
TRANS.	TRANSFORMER
TR	TREE
(TYP)	TYPICAL
UC	UTILITY COVER
UF	UTILITY FLOW
UP	UTILITY POLE
OWG	WATER GATE
WPM	WATER PAINTMARK

**PARCEL DATA**

ASSESSOR'S MAP	78 BLOCK 2 LOT 1
CURRENT OWNER OF RECORD:	CITY OF WALTHAM
DEED REFERENCE:	BOOK 4852 PAGE 64
PLAN REFERENCE:	PLAN BOOK 355 PLAN NO. 1
AREA:	2.662 ACRES

August 10, 2006  
DATE  
*Pamela M. Welch*  
PAMELA M. WELCH  
No. 30129  
PAMELA M. WELCH AS AGENT FOR WELCH ASSOCIATES  
LAND SURVEYORS, INC. - REGISTRATION NUMBER 36129  
ORIGINAL IS STAMPED WITH PROFESSIONAL LAND SURVEYOR'S  
BLUE INK STAMP.  
WELCH ACAD FILE: W060303E

- NOTES:**
- CIRCLED LOT NUMBERS REFER TO CITY OF WALTHAM ASSESSOR'S SHEET NO. 70 AND 78.
  - PARCEL IS LOCATED ENTIRELY WITHIN FLOOD ZONE C AS DELINEATED ON F.E.M.A FLOOD INSURANCE RATE MAP FOR COMMUNITY NO. 250222 PANEL NO. 0004 B WITH AN EFFECTIVE DATE OF DECEMBER 18, 1979.
  - UNDERGROUND UTILITY LOCATIONS AS SHOWN HEREON ARE TAKEN FROM AVAILABLE RECORD AND FIELD INFORMATION AND ARE APPROXIMATE ONLY. CONTACT DIG-SAFE BEFORE PLANNING ANY CONSTRUCTION.
  - WELCH ASSOCIATES DOES NOT STATE ANY OPINION REGARDING WHETHER THE OCCUPATION AND USES NOT IN CONFORMANCE WITH THE RECORD LINES OF TITLE HAVE RIPEENED TO PRESCRIPTIVE EASEMENTS OR ADVERSE TITLE.
  - THE COORDINATES SHOWN HEREON ARE ON A LOCALIZED COORDINATE SYSTEM DERIVED FROM THE STATE PLANE COORDINATE SYSTEM: MASSACHUSETTS MAINLAND 2001 ZONE AS REFERENCED TO THE NORTH AMERICAN DATUM OF 1983. TO CONVERT THE LOCAL COORDINATES TO STATE PLANE COORDINATES, APPLY THE GRID FACTOR OF .999984571. THE HORIZONTAL CONTROL UTILIZED IS AS FOLLOWS:
- | CONTROL POINT             | STATE PLANE COORDINATES (MASS MAINLAND 2001-NAD 83) | LOCAL COORDINATES |
|---------------------------|---|-------------------|
| STATION 89CC              |   |                   |
| MASS GEODETIC SURVEY      | 2967271.286N  | 2967376.417N      |
| DISC STAMPED "89CC 87.25" | 726584.928E   | 726610.671E       |
| STATION 10475             |   |                   |
| MASS GEODETIC SURVEY      | 2959047.165N  | 2959047.031N      |
| PUNCH MARK IN RR SPIKE    | 735966.741E   | 735966.816E       |
- THE ELEVATIONS SHOWN ON THIS PLAN ARE BASED ON THE FOLLOWING BENCHMARK: M.D.P.W. TRAVERSE DISK 89-00 SET FLUSH IN A GRANITE BOUND ON THE WEST SIDE OF LEXINGTON STREET, 367 FT SOUTH OF THE CENTER OF WORCESTER LANE, 31 FT WEST OF THE CENTER OF LEXINGTON STREET. ELEVATION=86.45(N.A.V.D. 1988)
  - SUBJECT PARCEL IS SITUATED WITHIN TWO ZONING DISTRICTS AS SHOWN HEREON. FOR FURTHER ZONING INFORMATION CONSULT THE CITY OF WALTHAM ZONING BYLAWS. ZONE LINES AS SHOWN HEREON ARE SUBJECT TO INTERPRETATION BY THE CITY OF WALTHAM ZONING ENFORCEMENT OFFICER. ZONE LINES SHOWN WERE SCALED FROM CITY OF WALTHAM PLANS PROVIDED BY THE ENGINEERING DEPT.
  - POSSIBLE LOCATION OF 10,000 GALLON OIL TANK.
- OCCUPATION NOT IN AGREEMENT WITH RECORD LINES OF TITLE (POSSIBLE ENCROACHMENTS).
- OC-1. STOCKADE FENCE CROSSES PROPERTY LINE.(LOT 78/2/5)
  - OC-2. GATE IN FENCE ALLOWS ACCESS BETWEEN SUBJECT PROPERTY AND ADJUTING LOT 78/2/5.
  - OC-3. OVERHEAD WIRES SERVICING ADJOINERS CROSS SUBJECT PROPERTY.(LOT 70/30/6) & (LOT 78/2/2)
  - OC-4. CONCRETE RETAINING WALL STRADDLES PROPERTY LINE.(LOT 70/30/6)
  - OC-5. BUILDING OVERHANG EXTENDS ONTO SUBJECT PROPERTY.(LOT 70/30/6)
  - OC-6. 6' CHAIN LINK FENCE CROSSES PROPERTY LINE.(LOT 70/30/1)
  - OC-7. VENT PIPE ENCLOSES ON SUBJECT PROPERTY.(LOT 70/30/3)
  - OC-8. UTILITY POLE SUPPORT CROSSES PROPERTY LINE.(LOT 70/30/2)
  - OC-9. TIN VENT EXTENDS ONTO SUBJECT PROPERTY.

Add.No.	Description of Revision	Date
1	ZONING DATA	08/10/06

**GELLER DEVELLIS, INC.**  
Landscape Architect

**JUDITH NITSCH ENGINEERING, INC.**  
Civil Engineer

**WELCH ASSOCIATES LAND SURVEYORS, INC.**  
Land Surveyor

**ENGINEERS DESIGN GROUP, INC.**  
Structural Engineer

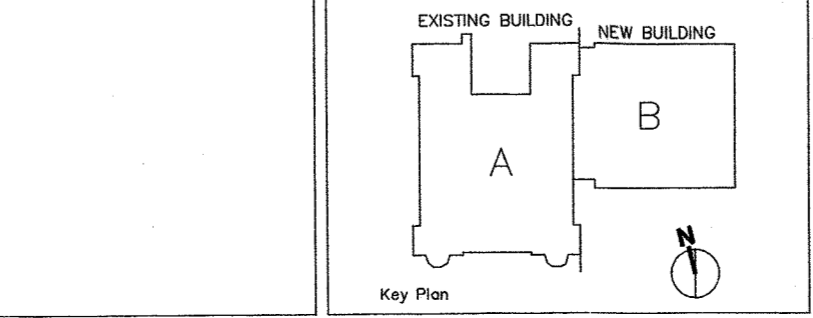
**TMP CONSULTING ENGINEERS, INC.**  
Mechanical, Electrical, Plumbing, and Fire Protection Engineer

**TAVARES DESIGN ASSOCIATES, INC.**  
Furniture, Equipment and Casework Consultant

**EDVANCE TECHNOLOGY DESIGN, INC.**  
Computer/Technology Consultant

**FLANSBURGH ASSOCIATES**  
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Boston, Massachusetts 02114  
Telephone 617-367-3970  
Facsimile 617-720-7873  
www.faiarchitects.com

Architecture  
Master Planning  
Space Planning  
Interior Design



**EXISTING CONDITONS SURVEY**

WHITTEMORE ELEMENTARY SCHOOL  
30 Parmenter Street  
Waltham, Massachusetts

Plot Date: 4/14/06  
Job Number: 2015.00  
Scale: 1"=20'  
Drawn by: P.G.G.  
Checked by: P.H.A.  
Issue Date: 4/14/06

**X1.00**

**THIS PLAN WAS NOT PREPARED IN RECORDABLE FORMAT. DO NOT RECORD.**



**GENERAL NOTES**

- TOPOGRAPHIC DATA, PROPERTY LINE INFORMATION, AND EXISTING SITE FEATURES WERE OBTAINED FROM A PLAN ENTITLED "EXISTING CONDITIONS SURVEY, WHITTEMORE ELEMENTARY SCHOOL, WALTHAM MASSACHUSETTS", PREPARED BY WELCH ASSOCIATES, DATED FEBRUARY 22, 2001.
- THE LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES SHALL BE CONSIDERED APPROXIMATE AND MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY UTILITY CONNECTIONS OR CROSSINGS OF PROPOSED UTILITIES AND EXISTING UTILITIES. THE CONTRACTOR SHALL CONTACT THE RESPECTIVE UTILITY COMPANIES RELATIVE TO THE LOCATIONS AND ELEVATIONS OF THEIR LINES. THE CONTRACTOR SHALL KEEP A RECORD OF ANY DISCREPANCIES OR CHANGES IN THE LOCATIONS OF ANY UTILITIES SHOWN OR ENCOUNTERED DURING CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO JUDITH NITSCH ENGINEERING, INC.
- THE CONTRACTOR SHALL COMPLY WITH MASSACHUSETTS GENERAL LAWS CHAPTER 82, SECTION 40, AS AMENDED, WHICH STATES THAT NO ONE MAY EXCAVATE IN THE COMMONWEALTH OF MASSACHUSETTS EXCEPT IN AN EMERGENCY WITHOUT 72 HOURS NOTICE, EXCLUSIVE OF SATURDAYS, SUNDAYS, AND LEGAL HOLIDAYS, TO NATURAL GAS PIPELINE COMPANIES, AND MUNICIPAL UTILITY DEPARTMENTS THAT SUPPLY GAS, ELECTRICITY, TELEPHONE, OR CABLE TELEVISION SERVICE IN OR TO THE CITY OR TOWN WHERE THE EXCAVATION IS TO BE MADE. THE CONTRACTOR SHALL CALL "DIG SAFE" AT 1-888-DIG-SAFE.
- ALL UTILITY CONNECTIONS ARE SUBJECT TO THE APPROVAL OF, AND GRANTING OF PERMITS BY, THE CITY OF WALTHAM. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO SEE THAT ALL PERMITS AND APPROVALS ARE OBTAINED BEFORE STARTING CONSTRUCTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR MAKING ALL NECESSARY ARRANGEMENTS FOR AND FOR PERFORMING ANY NECESSARY WORK INVOLVED IN CONNECTION WITH THE DISCONTINUANCE OF ANY UTILITIES OR WITHIN THE JURISDICTION OF ANY UTILITY COMPANIES, SUCH AS ELECTRICITY, TELEPHONE, WATER, GAS, AND ANY SYSTEM OR SYSTEMS WHICH WILL BE AFFECTED BY THE WORK TO BE PERFORMED UNDER THIS CONTRACT. THE CONTRACTOR SHALL NOTIFY ALL APPROPRIATE AGENCIES, DEPARTMENTS, AND UTILITY COMPANIES, IN WRITING, AT LEAST 48 HOURS AND NOT MORE THAN 30 DAYS PRIOR TO ANY CONSTRUCTION. CONSTRUCTION SHALL NOT INTERFERE WITH OR INTERRUPT UTILITIES WHICH ARE TO REMAIN IN OPERATION.
- THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, RULES, REGULATIONS AND SAFETY CODES IN THE CONSTRUCTION OF ALL IMPROVEMENTS.
- THE CONTRACTOR SHALL TAKE ADEQUATE PRECAUTIONS TO PROTECT ALL WALKS, GRADING, SIDEWALKS AND SITE DETAILS OUTSIDE OF THE LIMITS OF REGRADING AND WORK AS SHOWN ON THE DRAWINGS AND SHALL REPAIR AND REPLACE OR OTHERWISE MAKE GOOD AS DIRECTED BY THE ENGINEER OR OWNER'S DESIGNATED REPRESENTATIVE ANY SUCH OR OTHER DAMAGE SO CAUSED.
- THE CONTRACTOR SHALL REMOVE FROM THE SITE ALL RUBBISH AND DEBRIS FOUND THEREON. STORAGE OF SUCH MATERIALS ON THE PROJECT SITE WILL NOT BE PERMITTED. THE CONTRACTOR SHALL LEAVE THE SITE IN SAFE, CLEAN, AND LEVEL CONDITION UPON COMPLETION OF THE SITE CLEARANCE WORK.
- THE CONTRACTOR SHALL REMOVE FROM THE AREA OF CONSTRUCTION PAVEMENT, CONCRETE, GRANITE CURBING, CEMENT CURBING, POLES AND FOUNDATIONS, ISLANDS, TREE BERMS AND OTHER FEATURES WITHIN THE LIMITS OF CONSTRUCTION AS REQUIRED TO ACCOMMODATE NEW CONSTRUCTION WHETHER SPECIFIED ON THE DRAWINGS OR NOT.
- FOR SITE LAYOUT, GRADING, MATERIALS, PLANTINGS, GROUND COVER, EROSION CONTROL, AND DETAILS SEE LANDSCAPE ARCHITECT'S DRAWINGS.
- ALL WATER, SEWER, AND DRAIN WORK SHALL BE PERFORMED ACCORDING TO THE REQUIREMENTS AND STANDARD SPECIFICATIONS OF THE CITY OF WALTHAM.
- ELEVATIONS REFER TO N.A.V.D. 1988.
- GAS, TELEPHONE AND ELECTRIC SERVICES ARE TO BE DESIGNED BY EACH UTILITY COMPANY IN COORDINATION WITH THE MECHANICAL, ELECTRIC AND PLUMBING CONSULTANTS. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES AND DESIGN OF NEW UTILITIES WITH ELECTRIC, CABLE TELEVISION AND TELECOMMUNICATION UTILITIES.
- INSTALL WATER LINES WITH A MINIMUM OF FIVE FEET OF COVER AND A MAXIMUM OF SEVEN FEET.
- MAINTAIN 10 FEET HORIZONTAL SEPARATION BETWEEN SEWER AND WATER LINES. ENCASE BOTH UTILITIES WITH CONCRETE IF 10 FEET SEPARATION CANNOT BE MAINTAINED. WHEREVER THERE IS LESS THAN 10 FEET OF HORIZONTAL SEPARATION AND 18" OF VERTICAL SEPARATION BETWEEN A PROPOSED OR EXISTING SEWER LINE TO REMAIN AND A PROPOSED OR EXISTING WATER LINE TO REMAIN, BOTH UTILITIES SHALL BE ENCASED IN CONCRETE.
- UTILITY STRUCTURES TO BE ABANDONED SHALL BE REMOVED TO A DEPTH OF NO LESS THAN 3 FEET BELOW FINISHED GRADE. THE BOTTOMS OF THE STRUCTURES SHALL BE BROKEN AND THE STRUCTURES SHALL BE BACKFILLED WITH GRAVEL BORROW AND COMPACTED.
- CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES EXCEPT THOSE NOTED TO BE ABANDONED OR REMOVED & DISPOSED.
- THE GENERAL CONTRACTOR IS RESPONSIBLE FOR TRENCHING, BACKFILLING, AND SURFACE RESTORATION FOR THE GAS LINE INSTALLATION.
- FOR SOIL INFORMATION REFER TO GEOTECHNICAL REPORT.
- REFER TO THE PLUMBING PLANS FOR THE LOCATION OF THE BUILDING UNDERDRAINS

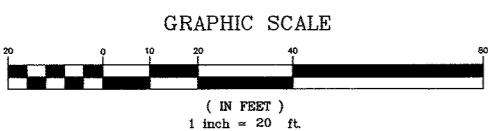
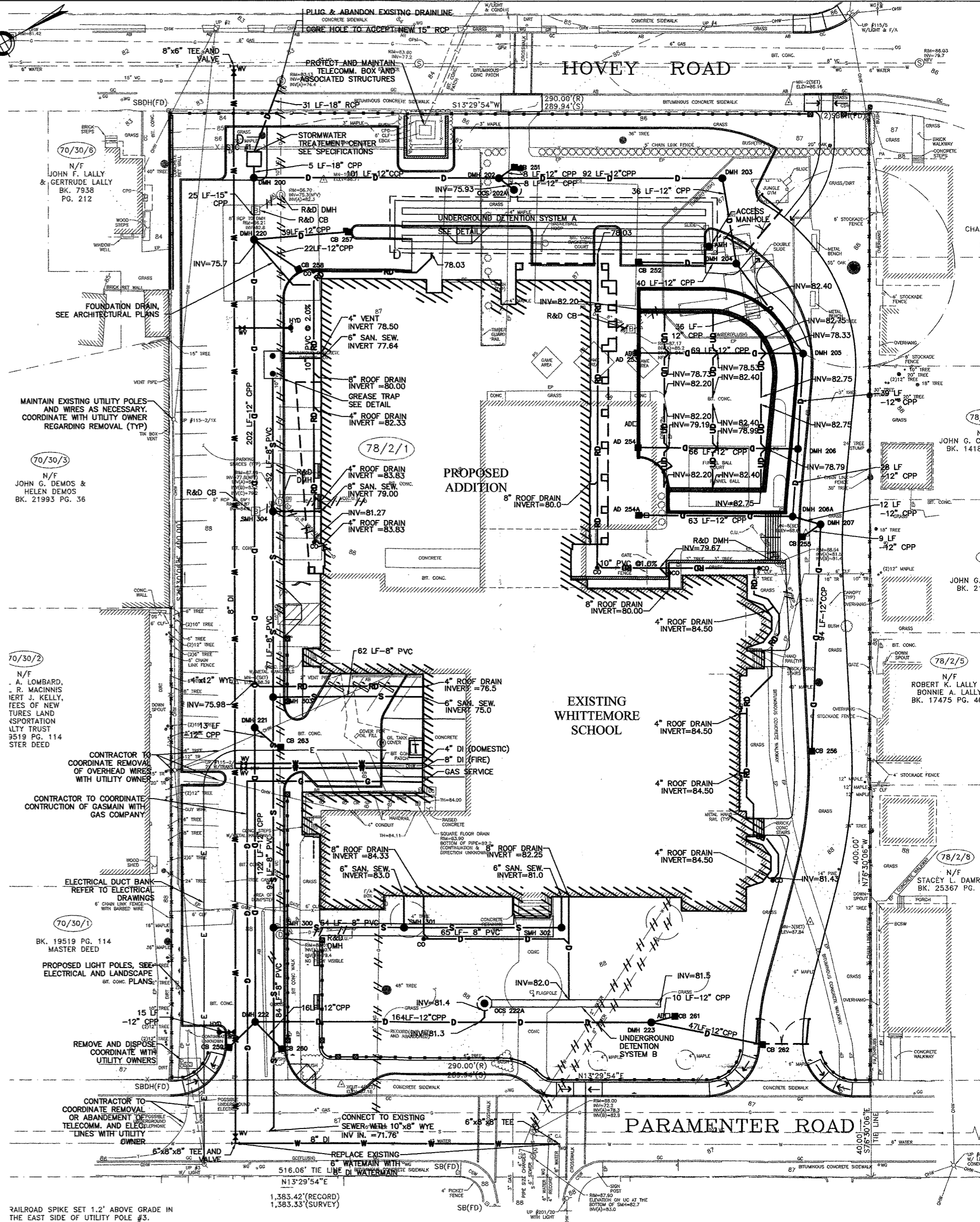
**SANITARY INVERTS**

MANHOLE	RIM ELEVATION	INVERT IN	INVERT OUT
10"x8" WYE		71.76	
SMH #300	87.7	76.52 (FROM SMH #301)	73.44 (TO 10"x8" WYE)
		73.54 (FROM SMH #303)	
SMH #301	88.2	78.24 (FROM SMH #302)	78.14 (TO SMH #300)
		80.74 (FROM BUILDING)	
SMH #302	88.2	80.74 (FROM BUILDING)	78.89 (TO SMH #301)
SMH #303	87.7	74.59 (FROM SMH #304)	74.49 (TO SMH #302)
		74.69 (FROM BUILDING)	
SMH #304	87.4	76.86 (FROM GREASE TRAP)	75.36 (TO SMH #303)
		77.94 (FROM BUILDING)	
GREASE TRAP	80.0	77.48 (FROM BUILDING)	77.38 (TO SMH #304)

**STORM INVERTS**

MANHOLE	RIM ELEVATION	INVERT IN	INVERT OUT
EX DMH	83.1	74.32 (FROM STC #1)	
STC #1	84.0	74.59 (FROM DMH #200)	74.49 (TO EX DMH)
DMH # 201	83.9	74.89 (FROM DMH #220)	74.62 (TO STC #1)
		74.85 (FROM DMH #202)	
DMH # 202	83.2	75.70 (FROM DMH #203)	75.60 (TO DMH #200)
		75.77 (FROM OCS #202A)	
		77.67 (FROM CB #251)	
DMH #202A	83.2	75.03 (FROM SWM A)	75.93 (TO DMH #202)
DMH # 203	83.3	76.72 (FROM DMH #204)	76.62 (TO DMH #202)
DMH # 204	84.2	77.18 (FROM DMH #205)	77.08 (TO DMH #203)
		77.56 (FROM CB #252)	
DMH # 205	86.9	77.64 (FROM DMH #206)	77.54 (TO DMH #204)
		77.64 (FROM AD #253)	
DMH # 206	87.9	78.13 (FROM DMH #206A)	78.03 (TO DMH #205)
		78.13 (FROM AD #254)	
DMH #206A	87.2	78.52 (FROM DMH #207)	78.42 (TO DMH #206)
		78.52 (FOR AD #254A)	
DMH # 207	86.7	81.41 (FROM CB #255)	78.64 (TO DMH #206)
		81.17 (FROM CB #256)	
DMH # 220	83.8	75.07 (FROM DMH #221)	74.97 (TO DMH #200)
		77.82 (FROM CB #257)	
		77.18 (FROM CB #258)	
DMH #221	87.8	76.75 (FROM DMH #222)	76.08 (TO DMH #220)
		82.17 (FROM CB #263)	
DMH #222	87.2	78.77 (FROM DMH #223)	77.97 (TO DMH #221)
		81.35 (FROM CB #259)	
		81.30 (FROM CB #260)	
DMH #223	87.6	82.40 (FROM CB #261)	81.23 (TO DMH #223)
		81.33 (FROM CB #262)	

CATCH BASIN	RIM ELEVATION	INVERT IN	INVERT OUT
CB #251	82.75		77.75 (TO DMH #202)
CB #252	82.96		77.96 (TO DMH #204)
AD #253	83.45		78.33 (TO DMH #205)
AD #254	83.50		78.79 (TO DMH #206)
AD #254A	83.60		79.15 (TO DMH #206A)
CB #255	86.50		81.50 (TO DMH #207)
CB #256	87.00		82.00 (TO DMH #207)
CB #257	83.00		78.00 (TO DMH #220)
CB #258	83.40		78.40 (TO DMH #220)
CB #259	87.00		82.10 (TO DMH #222)
CB #260	87.00		82.10 (TO DMH #222)
CB #261	87.50		82.50 (TO DMH #223)
CB #262	86.70		81.80 (TO DMH #223)
CB #263	87.30		82.30 (TO DMH #221)



**LEGEND & ABBREVIATIONS**

- DMH PROPOSED DRAIN MANHOLE
- CB PROPOSED CATCH BASIN
- SMH PROPOSED SEWER MANHOLE
- CO PROPOSED CLEANOUT
- W PROPOSED WATER LINE
- D PROPOSED DRAIN LINE
- RD PROPOSED ROOF DRAIN LINE
- S PROPOSED SEWER LINE
- T PROPOSED TELEPHONE LINE
- E PROPOSED ELECTRIC LINE
- G PROPOSED GAS LINE (BY OTHERS)
- LINE TO BE ABANDONED
- RD ROOF DRAIN
- SS SANITARY SEWER
- UD UNDER DRAIN
- R&D REMOVE AND DISPOSE

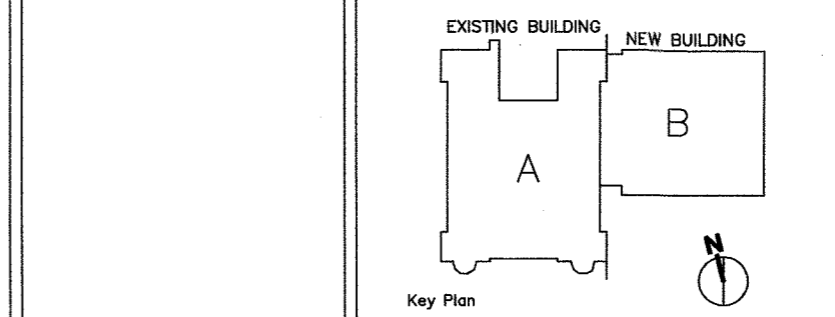
Add.No	Description of Revision	Date

<p><b>GELLER DEVELLIS, INC.</b> Landscape Architect</p> <p><b>JUDITH NITSCH ENGINEERING, INC.</b> Civil Engineer</p> <p><b>WELCH ASSOCIATES LAND SURVEYORS, INC.</b> Land Surveyor</p> <p><b>ENGINEERS DESIGN GROUP, INC.</b> Structural Engineer</p>	<p><b>TMP CONSULTING ENGINEERS, INC.</b> Mechanical, Electrical, Plumbing, and Fire Protection Engineer</p> <p><b>TAVARES DESIGN ASSOCIATES, INC.</b> Furniture, Equipment and Casework Consultant</p> <p><b>EDVANCE TECHNOLOGY DESIGN, INC.</b> Computer/Technology Consultant</p>
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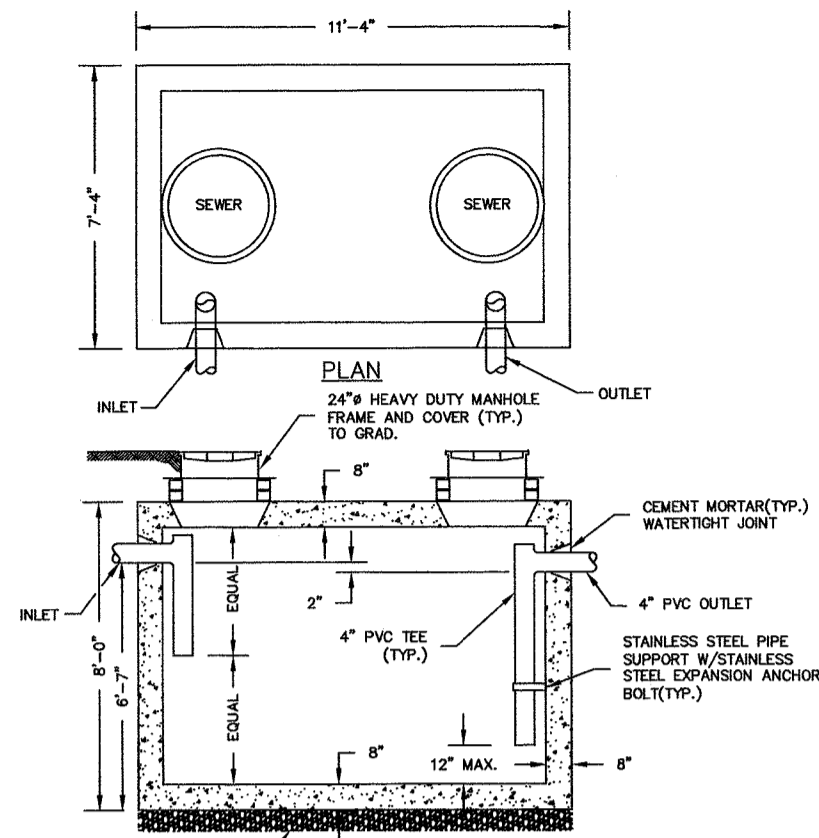


**SITE UTILITY PLAN**

WHITTEMORE ELEMENTARY SCHOOL  
30 Parmenter Road  
Waltham, Massachusetts

Plot Date: Sept 29, 2006  
Job Number: 2015.00  
Scale: 1"=20'  
Drawn by:  
Checked by:  
Issue Date: Sept 29, 2006

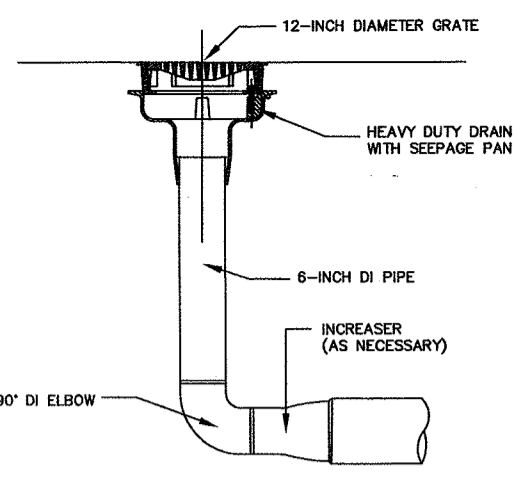
**C-1**



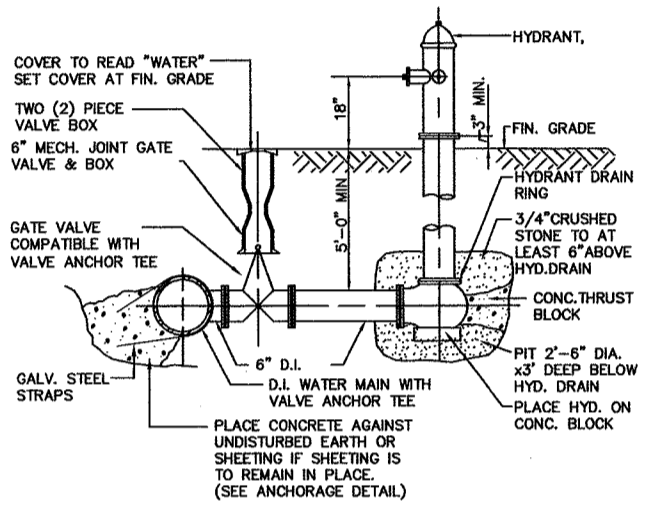
**2500 GALLON GREASE TRAP DETAIL**  
NOT TO SCALE

**SPECIFICATIONS:**

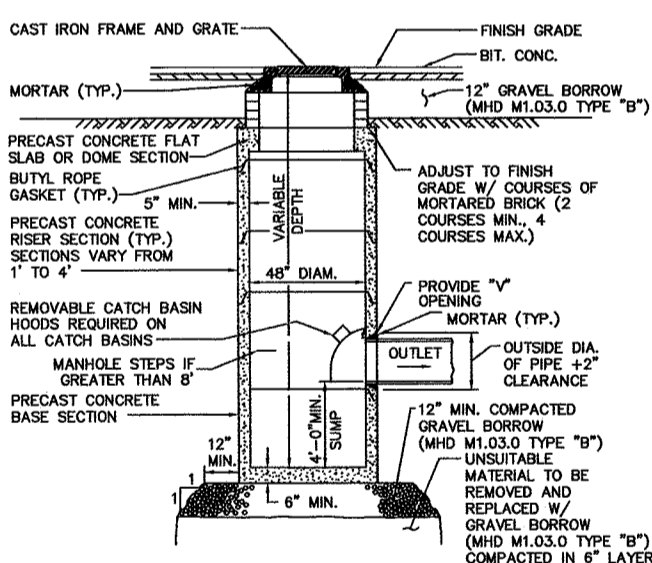
1. CONCRETE MINIMUM STRENGTH - 5,000 PSI @ 28 DAYS
2. STEEL REINFORCEMENT - ASTM A615 GR. 60, A185 OR A497 - 1" MIN. COVER
3. DESIGN LOADING - AASHTO M207-45 GARBARTH COVER 0 TO 5 FEET
4. WATER TABLE - 0 FEET
5. CONSTRUCTION JOINT - SEALED WITH 1" DIA. BUTYL RUBBER OR EQUIVALENT
6. TOTAL CAPACITY - 2,500 GALLONS



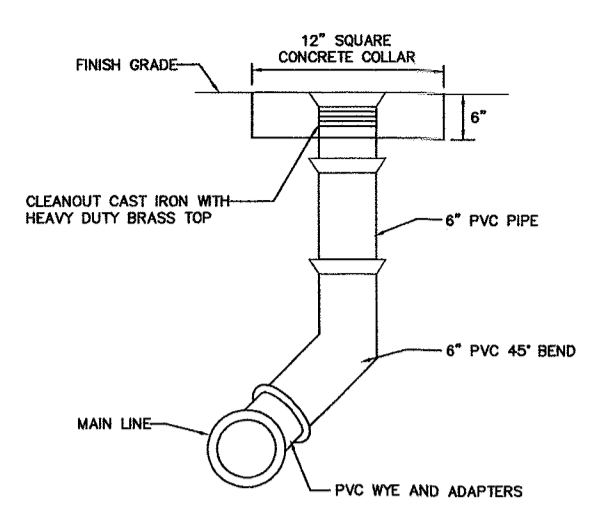
**AREA DRAIN DETAIL**  
NOT TO SCALE



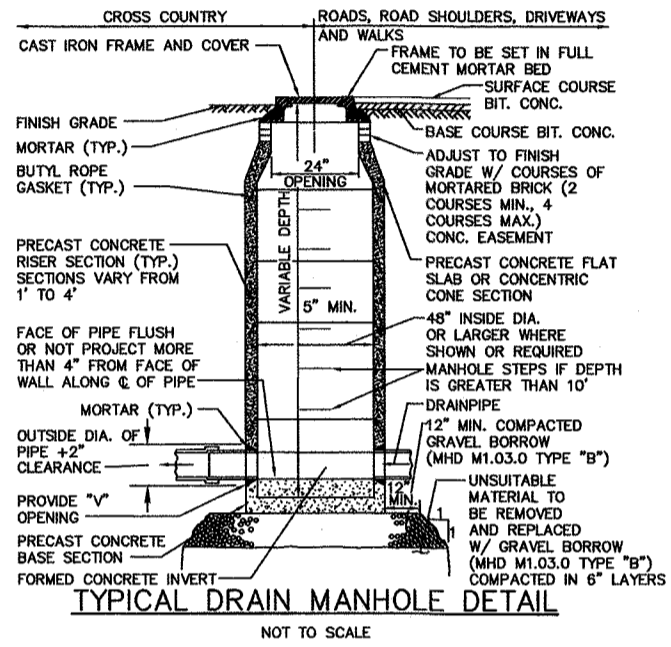
**FIRE HYDRANT DETAIL**  
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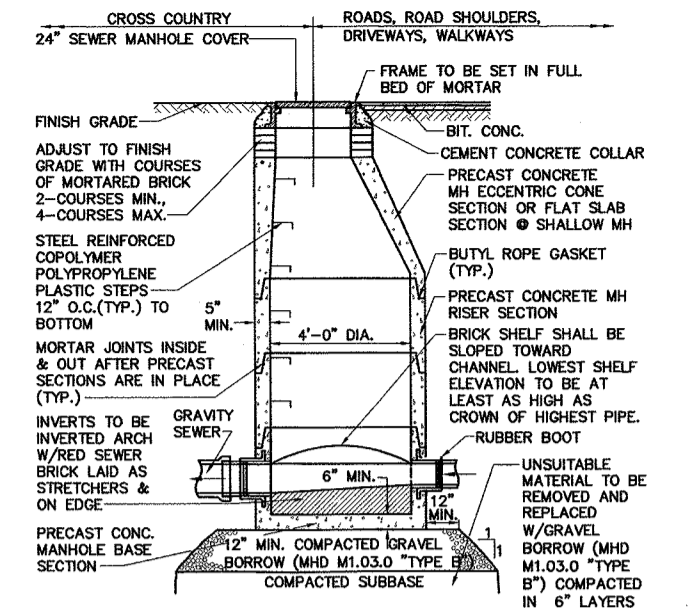
**TYPICAL CATCH BASIN DETAIL**  
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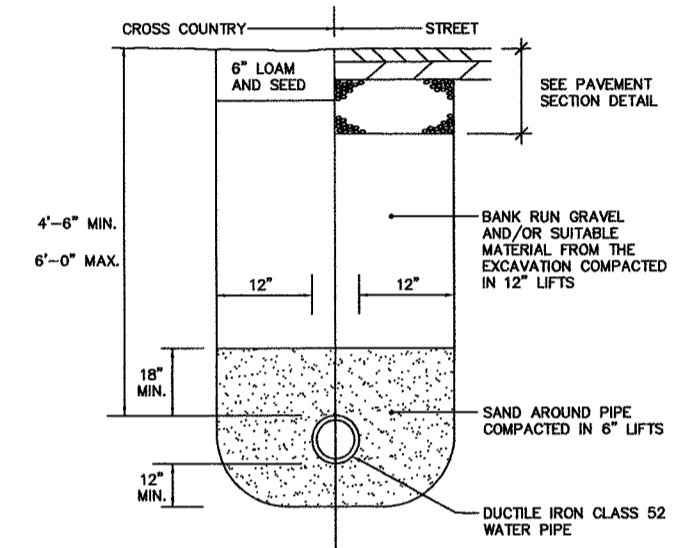
**TYPICAL CLEANOUT DETAIL**  
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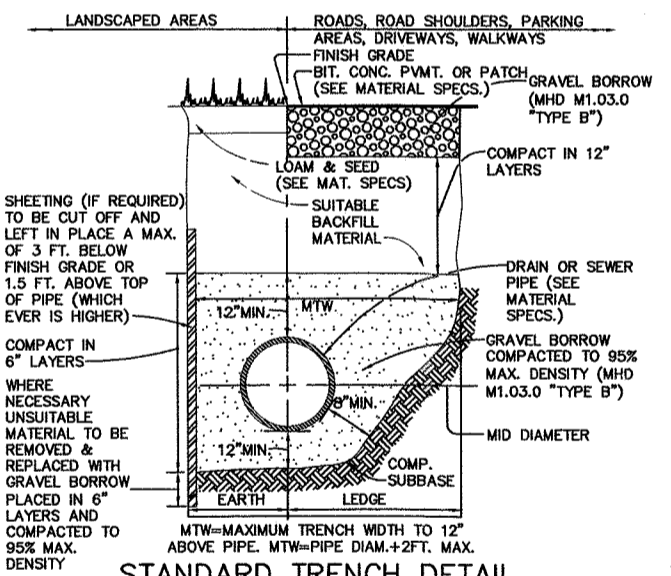
**TYPICAL DRAIN MANHOLE DETAIL**  
NOT TO SCALE



**TYPICAL SEWER MANHOLE DETAIL**  
NOT TO SCALE



**WATER TRENCH DETAIL**  
NOT TO SCALE



**STANDARD TRENCH DETAIL FOR UTILITY PIPE**  
NOT TO SCALE

TABLE OF BEARING AREAS IN SQUARE FEET AGAINST UNDISTURBED MATERIAL FOR FITTING.

SIZE OF MAIN (INCHES)	90° BEND (S.F.)	45° BEND (S.F.)	DEAD END (S.F.)
4	2.3	1.3	1.6
6	4.7	2.5	3.3
8	8.0	4.5	6.0
12	17.0	9.5	12.0

- NOTES:**
1. FOR FITTINGS WITH LESS THAN 45° DEFLECTION USE BEARING AREAS FOR 45° BEND.
  2. BEARING AREAS BASED ON HORIZONTAL PASSIVE SOIL PRESSURE OF 2000 PSF AND A MINIMUM INTERNAL WATER PRESSURE OF 175 PSIG. JOINTS SHALL NOT BE ENCASED IN CONCRETE. BEARING AREAS MAY BE DISREGARDED FOR TRENCHES IN ROCK WHERE THE TOP OF THE ROCK FACE IS AT OR ABOVE THE CROWN OF THE PIPE. HOWEVER, CONCRETE BACKING SHALL BE PLACED BETWEEN THE PIPE AND ROCK FACE.
  3. RESTRAINED JOINTS SHALL BE FURNISHED ON ALL HYDRANT BRANCHES AND VERTICAL BENDS

**THRUST BLOCK DETAIL**  
NOT TO SCALE

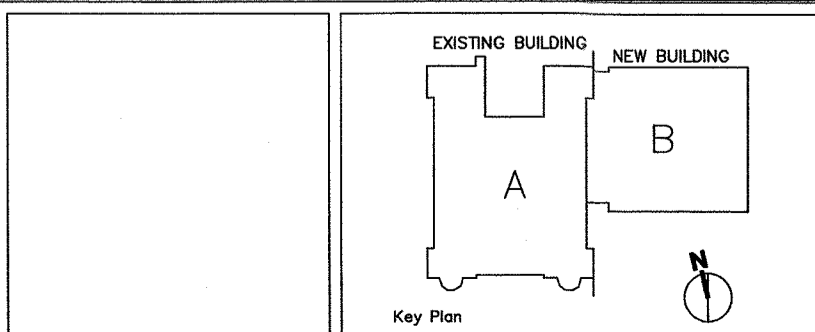
Add.No	Description of Revision	Date

<b>GELLER DEVELLIS, INC.</b> Landscape Architect	<b>TMP CONSULTING ENGINEERS, INC.</b> Mechanical, Electrical, Plumbing, and Fire Protection Engineer
<b>JUDITH NITSCH ENGINEERING, INC.</b> Civil Engineer	<b>TAVARES DESIGN ASSOCIATES, INC.</b> Furniture, Equipment and Casework Consultant
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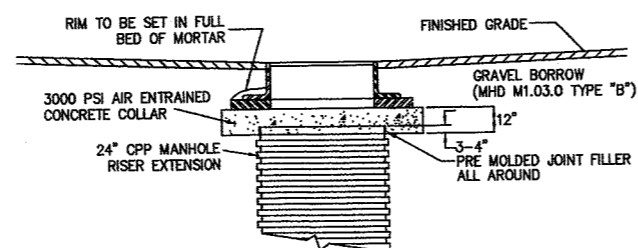


**SITE UTILITY DETAILS**

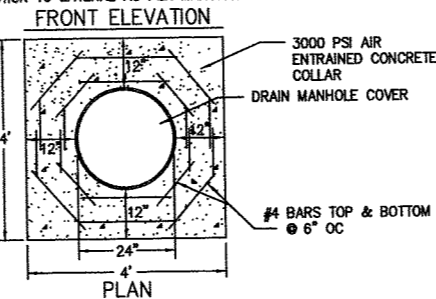
WHITEMORE ELEMENTARY SCHOOL  
30 Parmenter Road  
Waltham, Massachusetts

Plot Date: Sept 29, 2006  
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Drawn by:  
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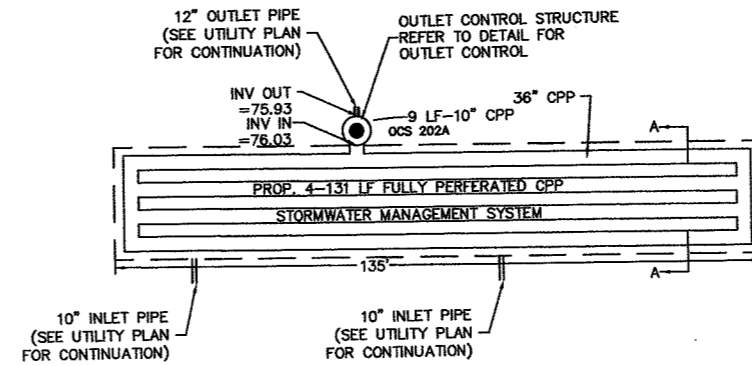
C-2



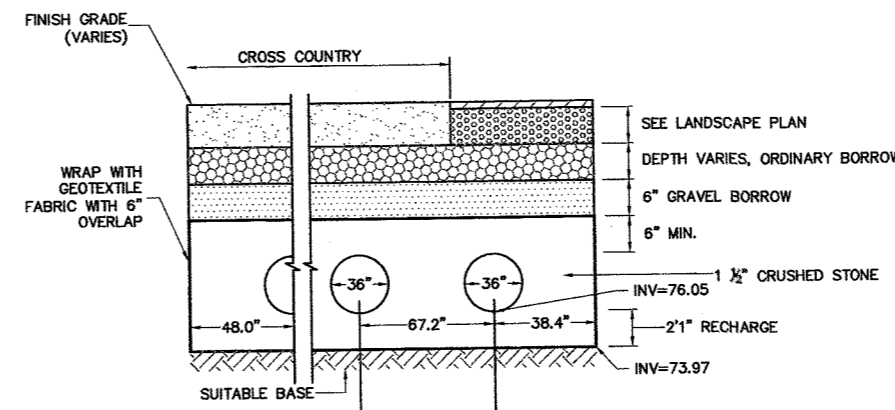
NOTE: EXTENSION CONNECTION TO LATERAL AS PER MANUFACTURER'S RECOMMENDATIONS



ACCESS MANHOLE DETAIL  
NOT TO SCALE

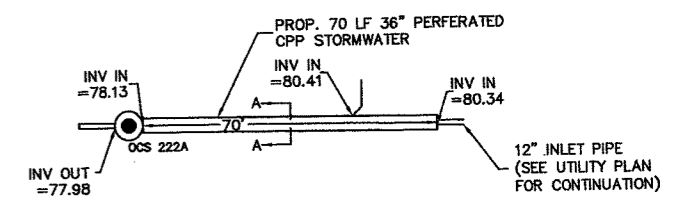


PLAN

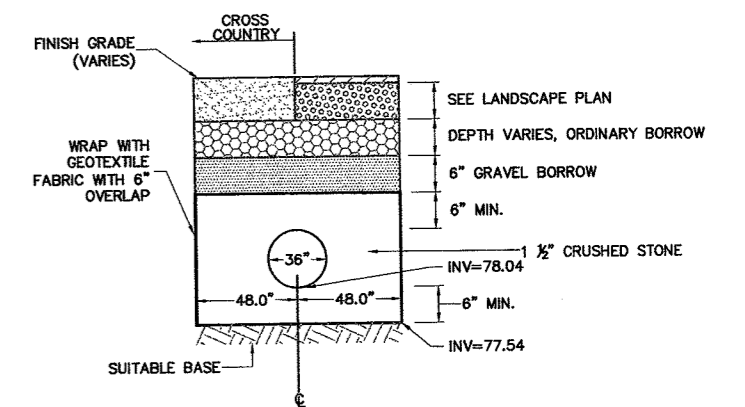


SECTION A-A

UNDERGROUND DETENTION STRUCTURE A  
NOT TO SCALE

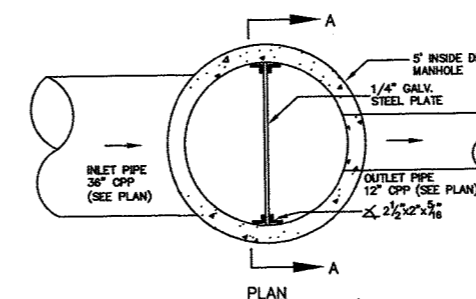


PLAN

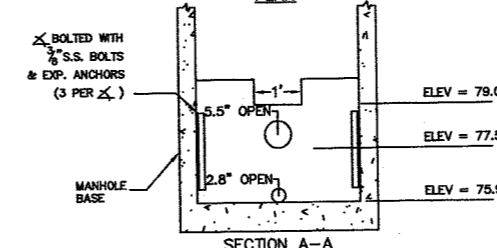


SECTION A-A

UNDERGROUND DETENTION STRUCTURE B  
NOT TO SCALE

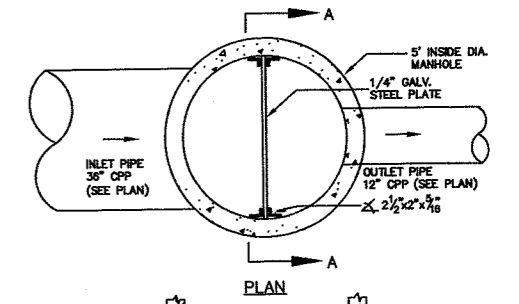


PLAN

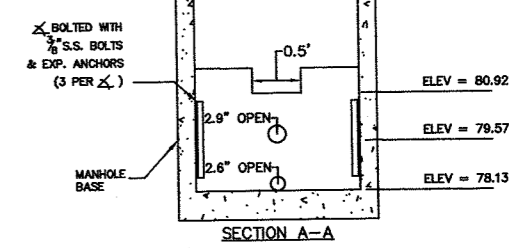


SECTION A-A

OUTLET CONTROL STRUCTURE, 202A OCS  
NOT TO SCALE



PLAN



SECTION A-A

OUTLET CONTROL STRUCTURE, 222A OCS  
NOT TO SCALE

2619.5.cdt.dwg 52501 120955

Add.No	Description of Revision	Date

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**JUDITH NITSCH ENGINEERING, INC.**  
Civil Engineer

**WELCH ASSOCIATES LAND SURVEYORS, INC.**  
Land Surveyor

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Structural Engineer

**TMP CONSULTING ENGINEERS, INC.**  
Mechanical, Electrical, Plumbing,  
and Fire Protection Engineer

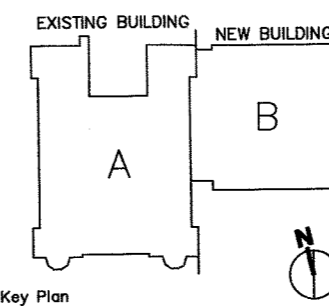
**TAVARES DESIGN ASSOCIATES, INC.**  
Furniture, Equipment and Casework Consultant

**EDVANCE TECHNOLOGY DESIGN, INC.**  
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## SITE UTILITY DETAILS

WHITTEMORE ELEMENTARY SCHOOL  
30 Parmenter Road  
Waltham, Massachusetts

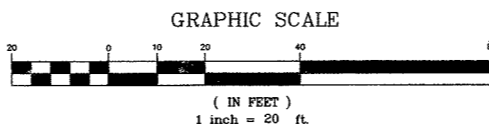
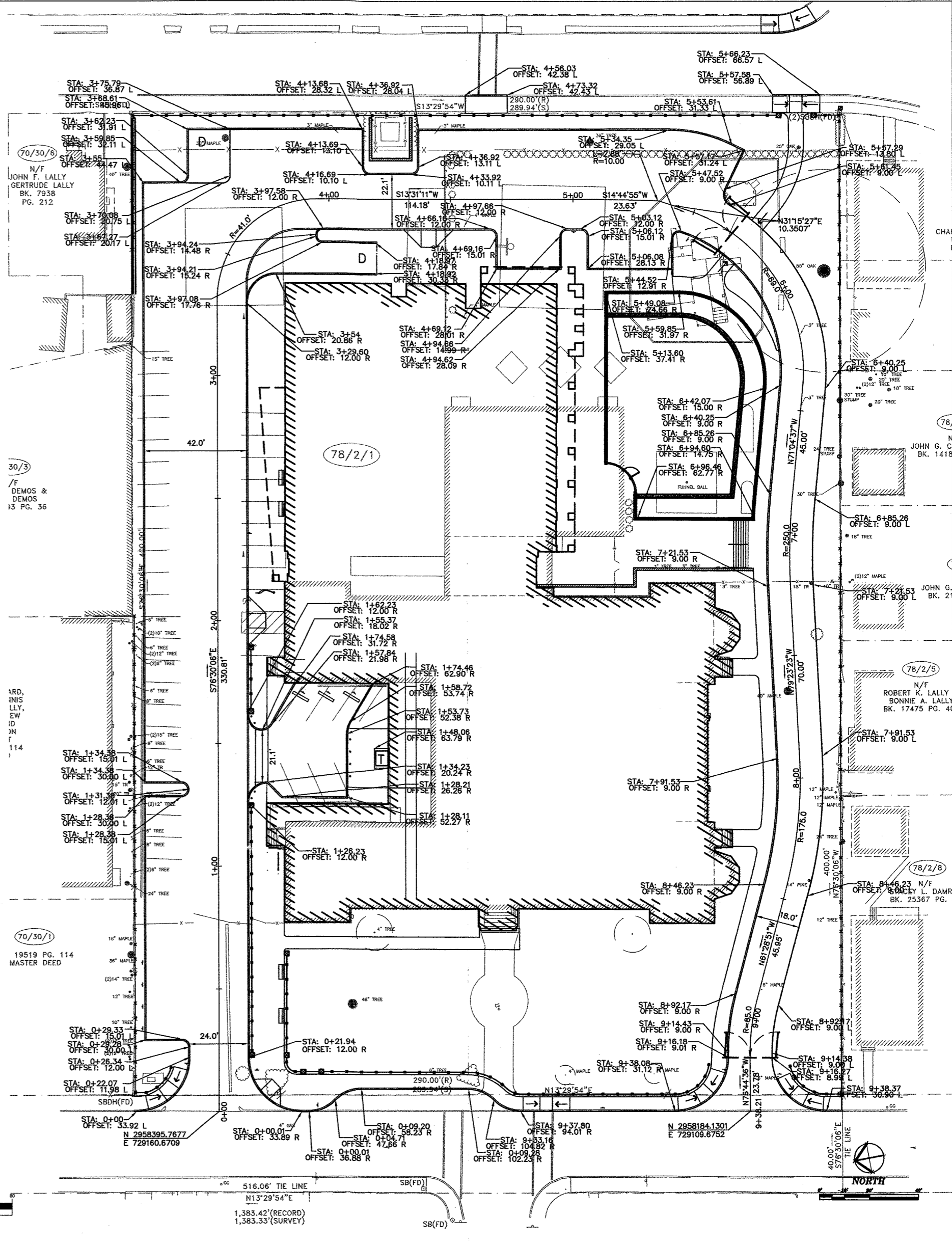
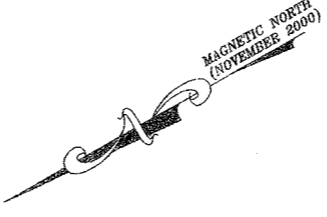
Plot Date: Sept 29, 2006  
Job Number: 2015.00  
Scale:  
Drawn by:  
Checked by:  
Issue Date: Sept 29, 2006

C-3



**LAYOUT NOTES**

1. TOPOGRAPHIC DATA, PROPERTY LINE INFORMATION, AND EXISTING SITE FEATURES WERE OBTAINED FROM A PLAN ENTITLED "EXISTING CONDITIONS SURVEY, WHITTEMORE ELEMENTARY SCHOOL, WALTHAM MASSACHUSETTS", PREPARED BY WELCH ASSOCIATES, DATED FEBRUARY 22, 2001.
2. CURB LAYOUT POINTS AND RADII REFER TO THE STREET SIDE OR "FACE" OF CURB UNLESS OTHERWISE INDICATED.
3. CONTRACTOR SHALL REFER TO LANDSCAPE PLANS FOR DESIGN AND MATERIALS OF ROADWAY AND CURBING. ITEMS INDICATED ON THIS SHEET ARE FOR LAYOUT PURPOSES ONLY. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY DISCREPANCY BETWEEN THIS SHEET AND THE LANDSCAPE PLANS.
4. FOR LOCATIONS OF EXISTING ROADWAY BOUNDS AND TRAVERSE POINTS SET BY SURVEYOR, SEE SURVEY PLAN REFERENCED IN THE GENERAL NOTES ON SHEET C-1.
5. FOR BUILDING LAYOUT AND COLUMN LOCATIONS, SEE STRUCTURAL PLANS AND DETAILS.
6. ELEVATIONS REFER TO N.A.V.D. 1988.
7. FOR GENERAL NOTES SEE SHEET C-1.



Add.No	Description of Revision	Date

**GELLER DEVELLIS, INC.**  
Landscape Architect

**JUDITH NITSCH ENGINEERING, INC.**  
Civil Engineer

**WELCH ASSOCIATES LAND SURVEYORS, INC.**  
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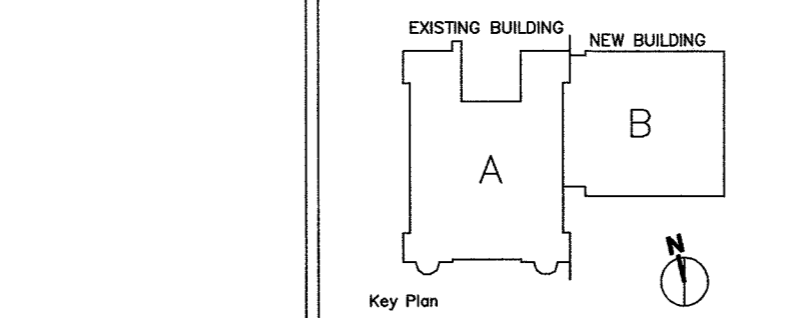
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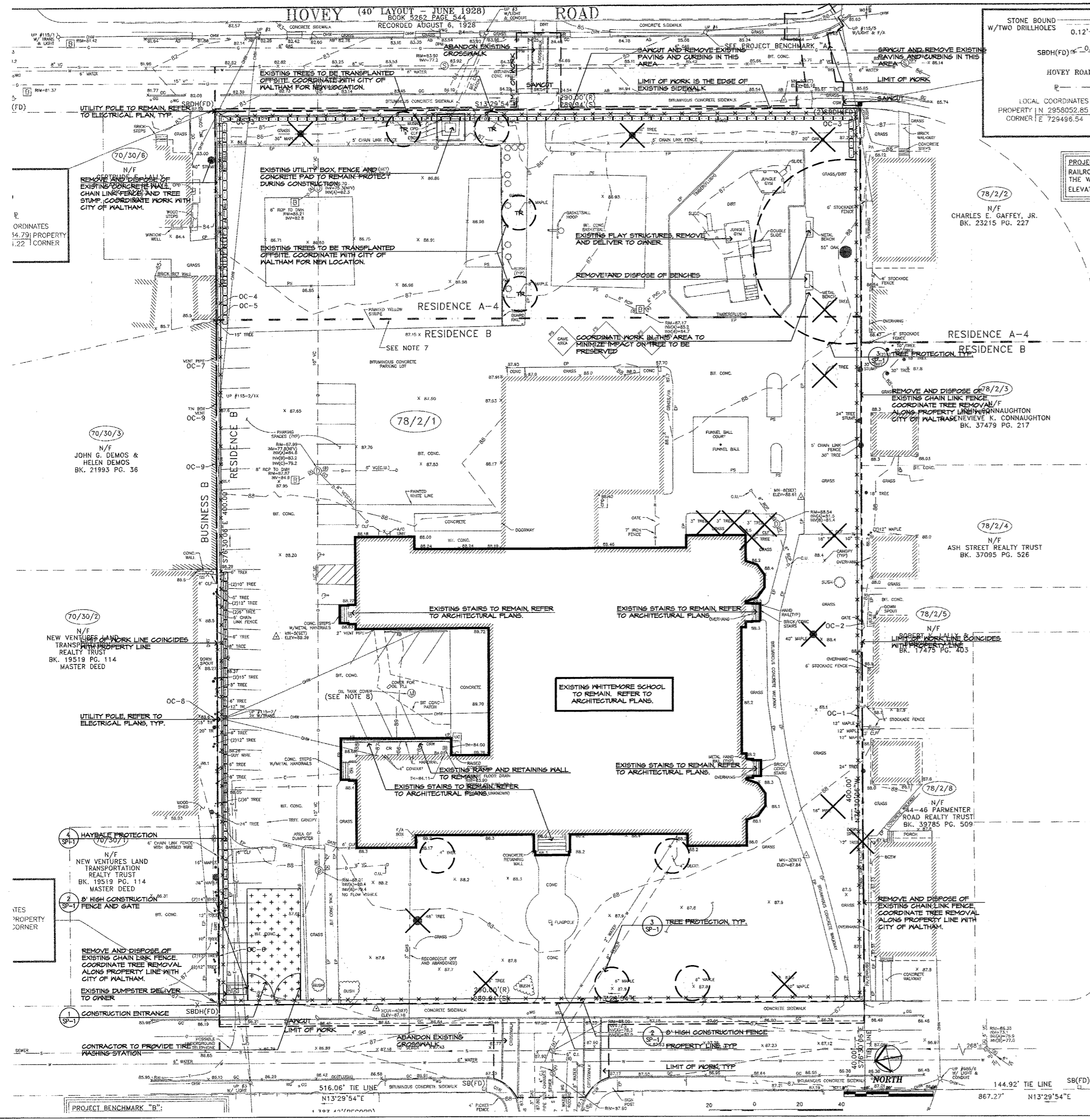


**SITE LAYOUT PLAN**

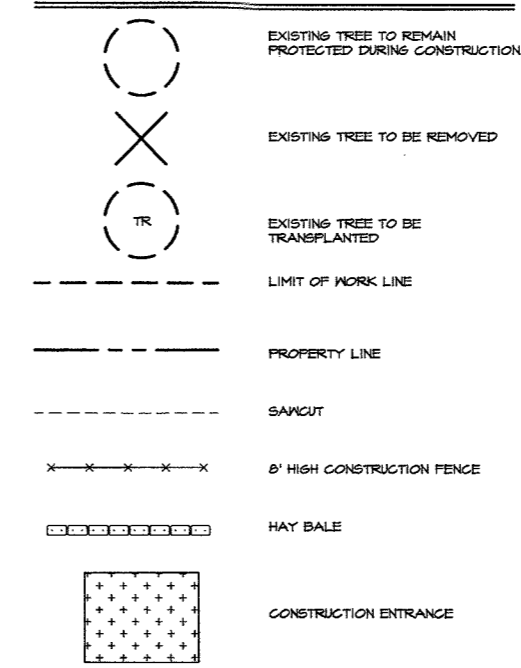
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30 Parmenter Road  
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Plot Date: Sept 29, 2006  
Job Number: 2015.00  
Scale: 1"=20'  
Drawn by:  
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Issue Date: Sept 29, 2006

**C-4**



**PROPOSED LEGEND**

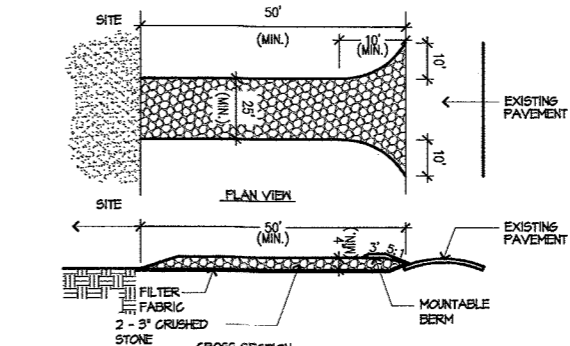


**SITE PREPARATION NOTES**

- EXISTING CONDITIONS INFORMATION IS REPRODUCED FROM THE SURVEY PREPARED BY WELCH ASSOCIATES OF WEST BRIDGEFATHER, MA AND IS DATED AUGUST 10, 2006.
- WITHIN THE LIMIT OF THE WORK LINE AS NOTED ON THE SITE PREPARATION PLANS, REMOVE AND DISCARD ALL CONCRETE PAVEMENT, BITUMINOUS CONCRETE PAVEMENT, CRACK PAVEMENT, TOP SOIL, MULCH, TRASH, TREES AND STUMPS, SHRUBBERY, CHAIN LINK FENCE POSTS, RAILS, FABRIC, GATES, FOOTINGS AND ALL APERTANCES, BOLLARDS, POSTS, CONCRETE FOOTINGS AND FOUNDATIONS, WALLS AND CURBS, UNLESS OTHERWISE NOTED.
- THE OWNER'S REPRESENTATIVE SHALL BE CONSULTED AND WILL REVIEW THE WORK ON SITE WITH THE CONTRACTOR BEFORE ANY WORK SHALL COMMENCE.
- THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS IN THE FIELD AND REPORT ANY DISCREPANCIES BETWEEN PLANS AND ACTUAL CONDITIONS TO THE OWNER'S REPRESENTATIVE PRIOR TO STARTING WORK.
- THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING CONDITIONS TO REMAIN THAT ARE DUE TO CONTRACTOR OPERATIONS.
- ALL ITEMS TO BE REMOVED THAT ARE NOT STOCKPILED FOR LATER REUSE ON THE PROJECT OR DELIVERED TO THE OWNER SHALL BE LEGALLY DISPOSED OF OFF SITE BY THE CONTRACTOR.
- THE LOCATIONS OF UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED ON THE SURVEY REFERENCED ABOVE. THE CONTRACTOR SHALL CONTACT DIGSAFE AND THE PROPER LOCAL AUTHORITIES OR RESPECTIVE UTILITY COMPANIES TO CONFIRM THE LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. ANY DAMAGE DUE TO FAILURE OF THE CONTRACTOR TO CONTACT THE PROPER AUTHORITIES SHALL BE BORNE BY THE CONTRACTOR.
- FOR UTILITIES REMOVAL, RELOCATION, OR ABANDONMENT, REFERENCE SEE UTILITIES PLANS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING HIS EFFORTS OF THE DEMOLITION WITH ALL TRADES.
- THE CONTRACTOR SHALL COORDINATE ALL ADJUSTMENT OR ABANDONMENT OF UTILITIES WITH THE RESPECTIVE UTILITY COMPANY.
- THE CONTRACTOR SHALL MAINTAIN OR ADJUST TO NEW FINISH GRADE AS NECESSARY ALL UTILITY AND SITE STRUCTURES SUCH AS LIGHT POLES, SIGN POLES, MAN HOLES, CATCH BASINS, HAND HOLES, WATER AND GAS GATES, HYDRANTS, ETC. FROM MAINTAINED UTILITY AND SITE SYSTEMS UNLESS OTHERWISE NOTED OR DIRECTED BY THE OWNER'S REPRESENTATIVE.
- LANDSCAPE ARCHITECT TO FLAG ALL TREES TO BE TRANSPLANTED PRIOR TO CONSTRUCTION START.

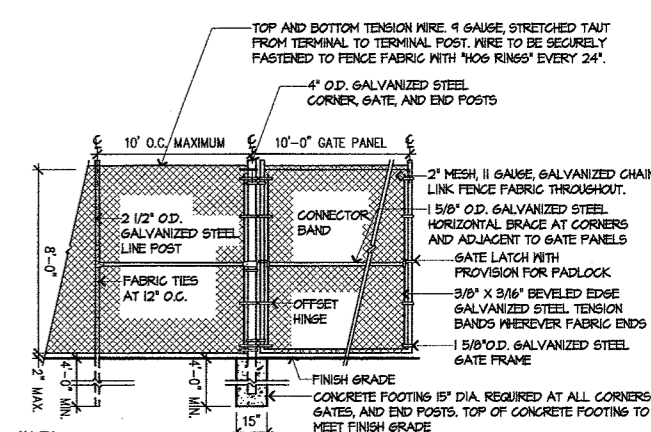
**CONSTRUCTION SEQUENCE**

- CONSTRUCT TEMPORARY AND PERMANENT EROSION CONTROL FACILITIES. EROSION CONTROL FACILITIES SHALL BE INSTALLED PRIOR TO ANY EARTHMOVING.
- ALL PERMANENT DITCHES AND SWALES ARE TO BE STABILIZED WITH VEGETATION OR RIP-RAP PRIOR TO DIRECTING RUNOFF TO THEM.
- CLEAR CUT, DEMOLISH AND DISPOSE OF EXISTING SITE ELEMENTS NOT TO REMAIN.
- GRADE AND GRAVEL ALL PAVED AREAS. ALL PROPOSED PAVED AREAS SHALL BE STABILIZED IMMEDIATELY AFTER GRADING.
- BEGIN ALL PERMANENT AND TEMPORARY SEEDING AND MULCHING. ALL CUT AND FILL SLOPES SHALL BE SEEDED AND MULCHED IMMEDIATELY AFTER THEIR CONSTRUCTION.
- DAILY OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, DRAINS, DITCHES, SILT FENCES, MULCH AND SEED AS REQUIRED.
- FINISH PAVING ALL HARD SURFACE AREAS.
- INSPECT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES.
- COMPLETE PERMANENT SEEDING AND LANDSCAPING.
- REMOVE TEMPORARY EROSION CONTROL MEASURES.
- THE CONSTRUCTION SEQUENCE SHALL BE CONFINED TO THE LIMIT OF GRADING AS SHOWN ON THE DRAWINGS.
- UPON COMPLETION OF CONSTRUCTION THE OWNER SHALL AGREE TO MAINTAIN AND CLEAN ALL DRAINAGE STRUCTURES ON A YEARLY BASIS.



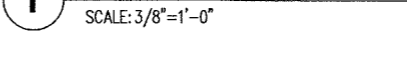
**1 CONSTRUCTION ENTRANCE**  
SCALE: 3/8"=1'-0"

NOTES:  
1. ENTRANCE WIDTH SHALL BE A TWENTY-FIVE (25) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INTERSECT OR CROSS OCCURS.  
2. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH SHALL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY. BERM SHALL BE PERMITTED, PERIODIC INSPECTION AND MAINTENANCE SHALL BE PROVIDED AS NEEDED.



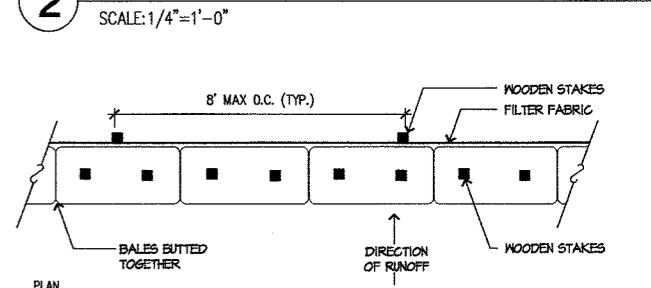
**2 8' HIGH CONSTRUCTION FENCE**  
SCALE: 1/4"=1'-0"

NOTES:  
1. ALL MATERIALS SHALL BE GALVANIZED STEEL UNLESS OTHERWISE NOTED.  
2. POST SPACING SHALL BE EQUI-DISTANT. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTINUED MAINTENANCE OF FENCE.



**3 EXISTING TREE PROTECTION**  
SCALE: 3/16"=1'-0"

NOTES:  
EXISTING TREE, WRAP WITH TWO LAYERS OF BURLAP AND WITH TWO LAYERS OF STANDARD SNOW FENCE. WIRE TO FASTEN SECURELY.  
TREE PROTECTION FENCE, USE STANDARD CHAIN LINK FENCE, 6'HT.  
METAL POST TO SUPPORT FENCE. (6 REQUIRED), DRIVEN INTO THE GROUND 2'-0" MINIMUM, EQUAL SPACING AROUND TREE.



**4 HAY BALE WITH SILTATION BARRIER**  
SCALE: 3/8"=1'-0"

NOTES:  
BALES BUTTED TOGETHER.  
DIRECTION OF RUNOFF.  
WOODEN STAKES.  
FILTER FABRIC.  
WOODEN STAKES.  
WOODEN STAKES PER BALE (TYPICAL).  
BALED HAY OR STRAW (BALED WITH TWINE).  
EMBED BALES 4" INTO GRADE.  
STOCKPILE REMOVED SOIL.  
DIRECTION OF RUNOFF.  
6" x 6" TRENCH WRAP FILTER FABRIC UNDER BACKFILL TRENCH WITH EARTH.

Add No.	Description of Revision	Date

**GELLER DEVELLIS, INC.**  
Landscape Architect

**JUDITH NITSCH ENGINEERING, INC.**  
Civil Engineer

**WELCH ASSOCIATES LAND SURVEYORS, INC.**  
Land Surveyor

**ENGINEERS DESIGN GROUP, INC.**  
Structural Engineer

**TMP CONSULTING ENGINEERS, INC.**  
Mechanical, Electrical, Plumbing, and Fire Protection Engineer

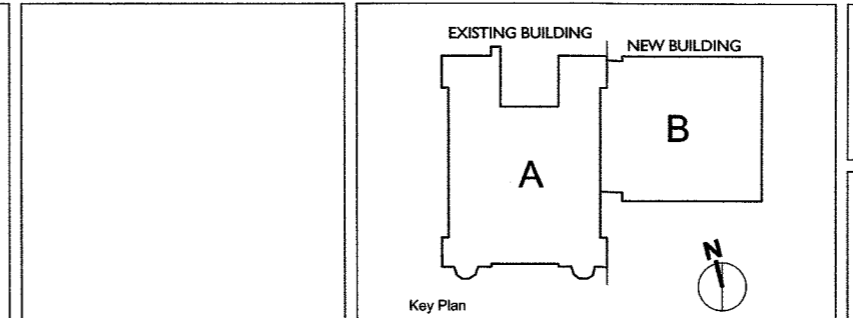
**TAVARES DESIGN ASSOCIATES, INC.**  
Furniture, Equipment and Casework Consultant

**EDVANCE TECHNOLOGY DESIGN, INC.**  
Computer/Technology Consultant

**FLANSBURGH ASSOCIATES**

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Architecture  
Master Planning  
Space Planning  
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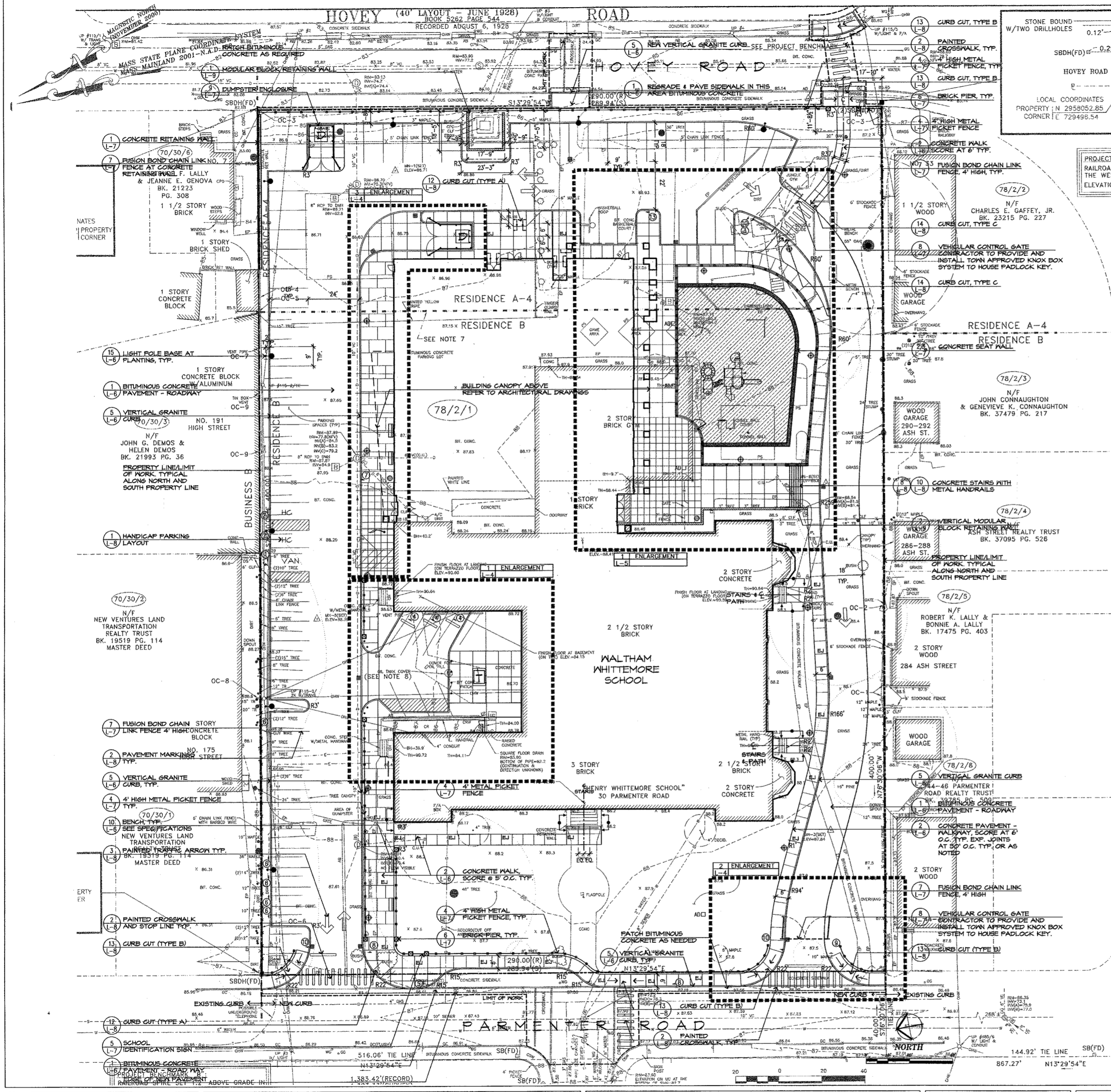
**SITE PREPARATION PLAN**

**WHITTEMORE ELEMENTARY SCHOOL**  
30 Parmenter Road  
Waltham, Massachusetts

Plot Date: Sept 29, 2006  
Job Number: 21039.B0  
Scale: 1"=20'-0"  
Drawn by: CF.MTGJPM  
Checked by: RMC,VYS  
Issue Date: Sept 29, 2006

**SP-1**





**LAYOUT AND MATERIAL NOTES**

- EXISTING CONDITIONS INFORMATION IS REPRODUCED FROM THE SURVEY PREPARED BY NELCH ASSOCIATES OF WEST BRIDGEWATER, MASSACHUSETTS AND IS DATED AUGUST 10, 2006.
- THE LOCATIONS OF UNDERGROUND UTILITIES SHOWN ARE BASED ON THE SURVEY REFERENCED ABOVE. THE CONTRACTOR SHALL NOTIFY DISSEAT AND THE PROPER LOCAL AUTHORITIES OR RESPECTIVE UTILITY COMPANIES TO CONFIRM THE LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. ANY DAMAGE DUE TO FAILURE OF THE CONTRACTOR TO CONTACT THE PROPER AUTHORITIES SHALL BE SORE BY THE CONTRACTOR.
- CONTRACTOR(S) SHALL THOROUGHLY FAMILIARIZE THEMSELVES WITH ALL CONSTRUCTION DOCUMENTS, SPECIFICATIONS, AND SITE CONDITIONS PRIOR TO BIDDING AND PRIOR TO CONSTRUCTION.
- ANY DISCREPANCIES BETWEEN DRAWINGS, SPECIFICATIONS, AND SITE CONDITIONS SHALL BE REPORTED IMMEDIATELY TO THE OWNER'S REPRESENTATIVE FOR CLARIFICATION AND RESOLUTION PRIOR TO BIDDING OR CONSTRUCTION.
- ALL WORK CONDUCTED WITHIN PUBLIC RIGHT-OF-WAYS SHALL CONFORM TO THE REQUIREMENTS AND SPECIFICATIONS OF THE CITY OF MALDEN AND THE MASSACHUSETTS HIGHWAY DEPARTMENT.
- SEE ARCHITECTURAL DRAWINGS FOR EXACT BUILDING DIMENSIONS AND ALL DETAILS CONTIGUOUS TO THE BUILDING, INCLUDING SIDEWALKS, RAMPS, UTILITY ENTRANCE LOCATIONS, MALL PACKS, CONCRETE DOOR PADS, ROOF DRAINS, ETC.
- ACCESSIBLE CURB RAMPS SHALL BE PER THE MASSACHUSETTS ARCHITECTURAL ACCESS BOARD (MAAB) AND THE AMERICANS WITH DISABILITIES ACT (ADA) ACCESSIBILITY GUIDELINES, WHICHEVER IS MORE STRINGENT.
- THE FOLLOWING LAYOUT CRITERIA SHALL CONTROL UNLESS OTHERWISE NOTED ON THE PLAN:  
ALL DIMENSIONS ARE TO OUTSIDE FACE OF BUILDING.  
ALL DIMENSIONS ARE TO FACE OF CURB AT GUTTER LINE.  
ALL DIMENSIONS ARE TO CENTER OF PAVEMENT MARKINGS.  
ALL TIES ARE TO PROPERTY LINES AND PERPENDICULAR TO THE PROPERTY LINE UNLESS OTHERWISE NOTED.
- FOR LAYOUT AND DIMENSIONING OF BUILDING, SEE ARCHITECTURAL DRAWINGS.
- SCREENED IMAGES SHOW EXISTING CONDITIONS. WHERE EXISTING CONDITIONS LIE UNDER OR ARE IMPINGED UPON BY PROPOSED BUILDINGS AND/OR SITE ELEMENTS, THE EXISTING CONDITION WILL BE REMOVED, ABANDONED AND/OR CAPPED OR DEMOLISHED AS REQUIRED.

**PROPOSED LEGEND**

- ⊕ PEDESTRIAN LIGHTING
- SITE LIGHTING
- STEEL PIPE BOLLARD
- ▭ CONCRETE PAVEMENT
- ▨ RESILIENT SURFACING
- VERTICAL GRANITE CURB
- FLASPOLE, WITH UPLIGHTS
- 4' CHAIN LINK FENCE
- 4' METAL PICKET FENCE
- ⊠ BRICK PIER
- ⊞ BIKE RACK
- BENCH
- PROPERTY LINE
- LIMIT OF WORK ALIGN
- EJ EXPANSION JOINT
- ▬ CONCRETE SEAT WALL
- ▨ MODULAR BLOCK RETAINING WALL

**SIGN SCHEDULE**

SIGN#	COPY	REQ'D	DETAIL
1	HANDICAP PARKING-VAN	1	5/A-8
2	HANDICAP PARKING	2	5/A-8
3	BUSES AND EMERGENCY VEHICLES ONLY	1	4/A-8
4	RESERVED PARKING	2	5/A-8
5	PARENT DROP-OFF / PICK-UP ONLY	1	5/A-8
6	VISITOR PARKING	4	5/A-8
7	BUS DROP OFF ONLY	1	5/A-8
8	NO PARKING/ STOPPING ANYTIME	2	5/A-8
9	DO NOT ENTER	1	4/A-8
10	STOP SIGN	3	4/A-8
11	NO VISITOR PARKING BEYOND THIS POINT	1	4/A-8
12	DO NOT DUMP (MOUNT ON FENCE ENCLOSURE)	2	5/A-8 ALT.
13	COMPACT VEHICLE PARKING	1	5/A-8

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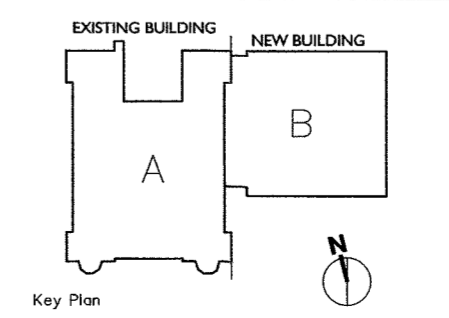
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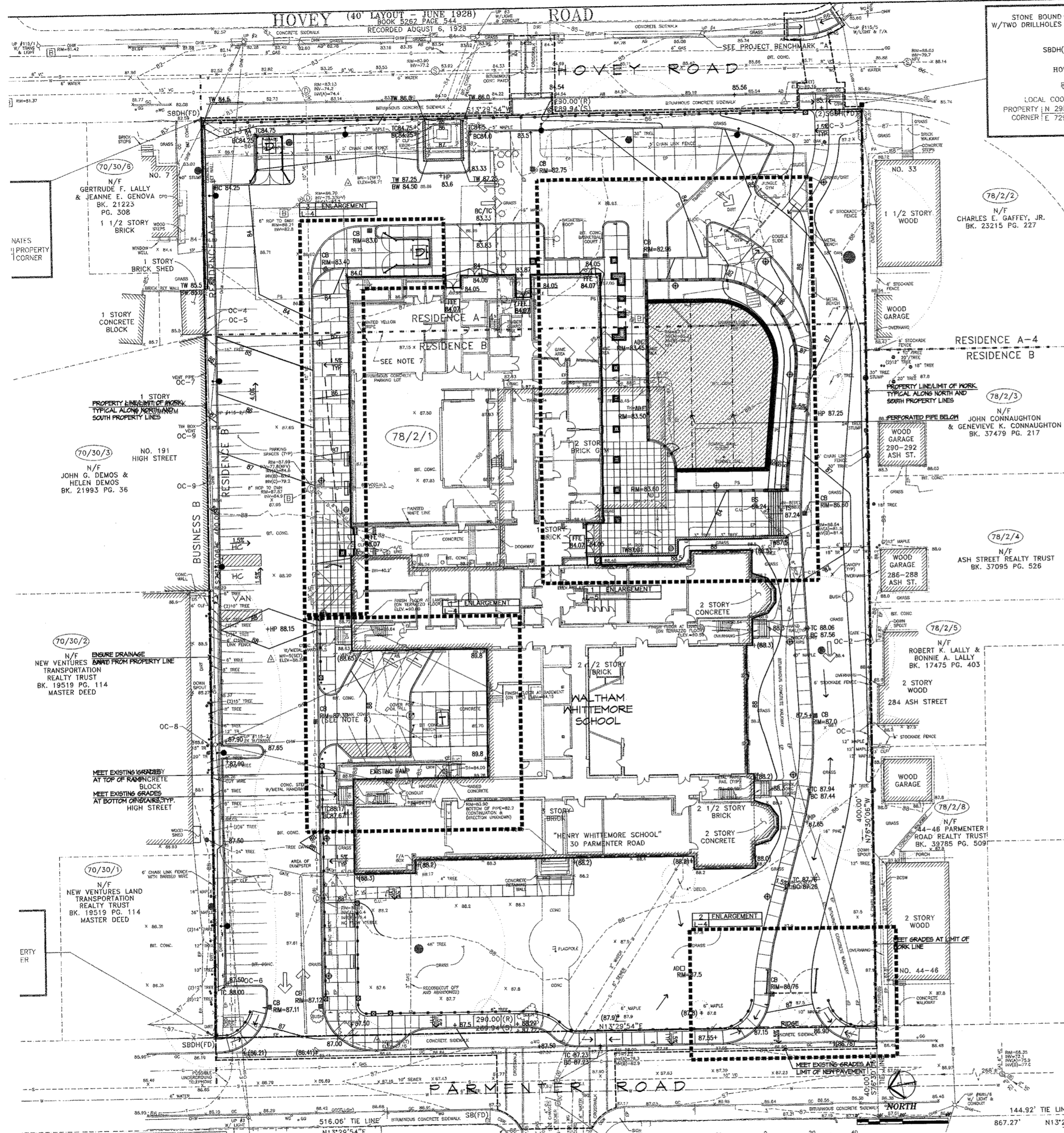


**LAYOUT AND MATERIALS PLAN**

**WHITTEMORE ELEMENTARY SCHOOL**  
30 Parmenter Road  
Waltham, Massachusetts

Plot Date: Sept 29, 2006  
Job Number: 21039.BO  
Scale: 1"=20'-0"  
Drawn by: CF/MTG/JPM  
Checked by: RMC/VJS  
Issue Date: Sept 29, 2006

**L-1**



**GRADING NOTES**

- EXISTING CONDITIONS INFORMATION IS REPRODUCED FROM THE SURVEY PREPARED BY WELCH ASSOCIATES OF WEST BRIDgewater, MA AND IS DATED AUGUST 10, 2006.
- PRIOR TO THE START OF ANY EXCAVATION FOR THE PROJECT, BOTH ON AND OFF THE SITE, THE CONTRACTOR SHALL NOTIFY DIGSAFE AND BE PROVIDED WITH A DIGSAFE NUMBER INDICATING THAT ALL EXISTING UTILITIES HAVE BEEN LOCATED AND MARKED.
- WHERE PROPOSED GRADES MEET EXISTING GRADES, CONTRACTOR SHALL BLEND GRADES TO PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING AND NEW WORK. PONDS AT TRANSITION AREAS WILL NOT BE ALLOWED.
- CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AWAY FROM ALL BUILDING FOUNDATIONS, STRUCTURES AND PLANTING BEDS.
- MAXIMUM SLOPE IN DISTURBED AREAS SHALL NOT EXCEED 5:1, UNLESS OTHERWISE NOTED.
- ENSURE ALL EXISTING (TO REMAIN), AND PROPOSED MANHOLE COVERS PROPERLY IDENTIFY UTILITY SERVICED.
- CONTRACTOR SHALL VERIFY EXISTING GRADES AND NOTIFY OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES.
- BITUMINOUS CONCRETE ELEVATIONS AT CATCH BASINS TO BE 1/4 INCH ABOVE RIM ELEVATION SHOWN FOR CATCH.
- CONTRACTOR TO ADJUST UTILITY ELEMENT MEANT TO BE FLUSH WITH GRADE (CLEAN-OUTS, UTILITY MANHOLES, CATCH BASINS, INLETS, ETC) THAT IS AFFECTED BY SITE WORK OR GRADE CHANGES, WHETHER SPECIFICALLY NOTED ON PLANS OR NOT.
- SCREENED IMAGES SHOW EXISTING CONDITIONS. WHERE EXISTING CONDITIONS LIE UNDER OR ARE IMPINGED UPON BY PROPOSED BUILDINGS AND/OR SITE ELEMENTS, THE EXISTING CONDITION WILL BE REMOVED, ABANDONED AND/OR CAPPED OR DEMOLISHED AS REQUIRED.

**GRADING LEGEND**

PROPERTY LINE	
110	PROPOSED CONTOUR MAJOR LINE
112	PROPOSED CONTOUR MINOR LINE
---	LIMIT OF WORK LINE
---	LIMIT OF NEW PAVEMENT
---	PERFORATED PIPE
+100.50	SPOT GRADE PROPOSED
+100.50	SPOT GRADE EXISTING
CB	CATCH BASIN - REFER TO CIVIL PLANS
AD	AREA DRAIN - REFER TO CIVIL PLANS
T	TRANSFORMER

Add No.	Description of Revision	Date

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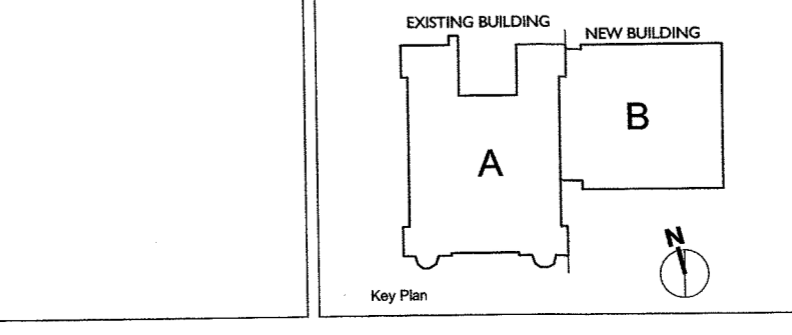
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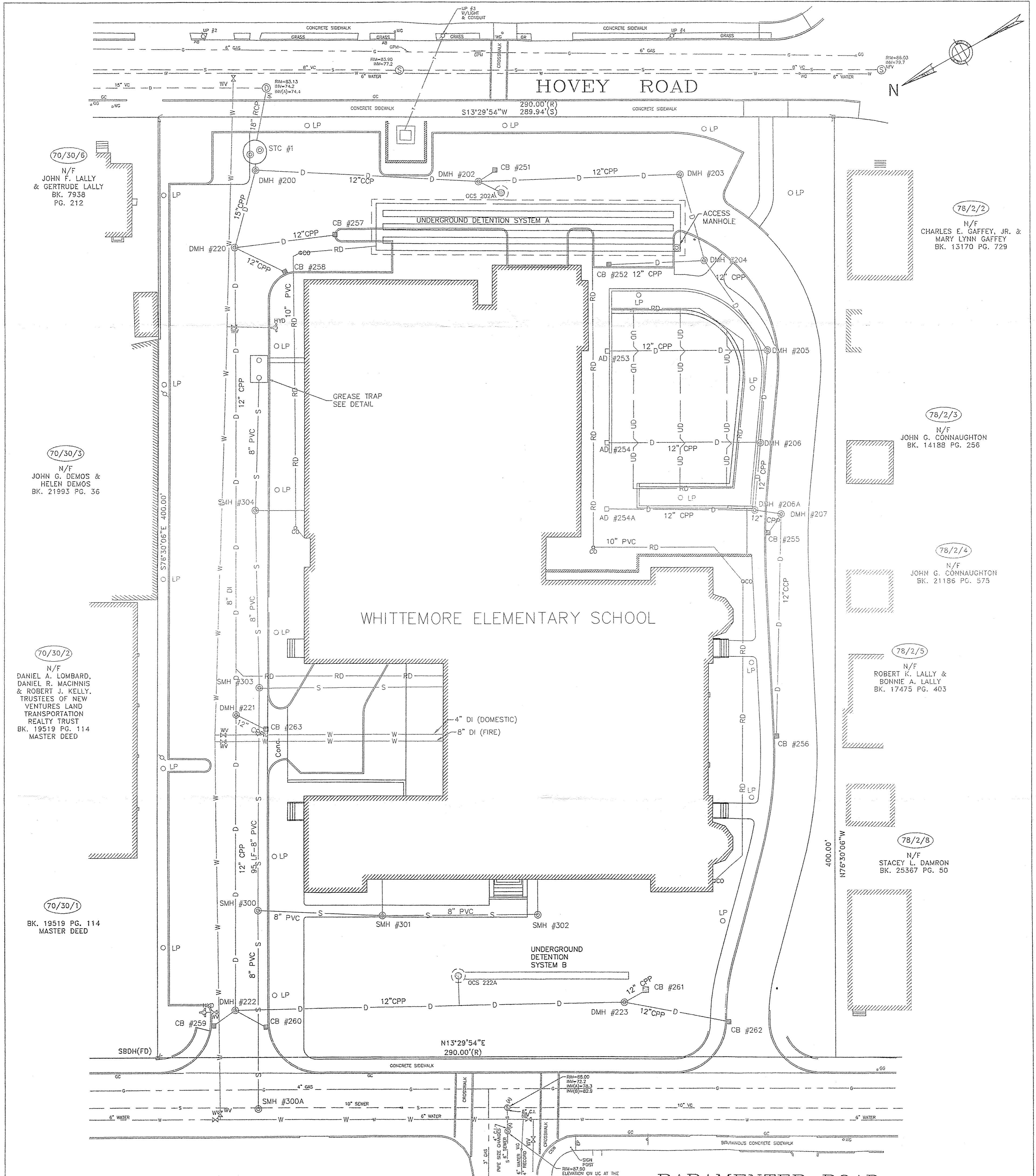
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**L-2**





**SANITARY INVERTS**

MANHOLE	RIM ELEVATIONS	INVERT IN	INVERT OUT
10"x8" WYE	-	71.76	
SMH #300	87.80	76.45 {FROM SMH #301} 73.60 {FROM SMH #303}	73.50 {TO 10"x8" WYE}
SMH #301	88.29	78.28 {FROM SMH #302}	78.12 {TO SMH #300}
SMH #302	88.35	80.70 {FROM BUILDING}	78.91 {TO SMH #301}
SMH #303	87.60	74.80 {FROM SMH #304} 74.65 {FROM BUILDING}	74.49 {TO SMH #300}
SMH #304	87.23	76.90 {FROM GREASE TRAP} 77.90 {FROM BUILDING}	75.30 {TO SMH #303}
GREASE TRAP	84.99	77.48 {FROM BUILDING}	77.38 {TO SMH #304}

**STORM INVERTS**

MANHOLE	RIM ELEVATIONS	INVERT IN	INVERTS OUT
EX. DMH	83.13	74.30 {FROM STC #1}	
STC #1	84.07	74.65 {FROM DMH #200}	74.55 {TO EX. DMH}
DMH #200	83.98	74.80 {FROM DMH #220} 74.82 {FROM DMH #202}	74.70 {TO STC #1}
DMH #202	82.93	75.69 {FROM DMH #203} 75.75 {FROM OCS #202A} 77.55 {FROM CB #251}	75.60 {TO DMH #200}
DMH #202A	83.03	75.00 {FROM SMH #1}	75.90 {TO DMH #202}
DMH #203	84.71	76.68 {FROM DMH #204}	76.60 {TO DMH #202}
DMH #204	85.32	77.20 {FROM DMH #205} 77.50 {FROM CB #252}	77.05 {TO DMH #203}
DMH #205	86.93	77.70 {FROM DMH #206} 77.60 {FROM AD #253}	77.48 {TO DMH #204}
DMH #206	87.75	78.15 {FROM DMH #206A} 78.18 {FROM AD #254}	78.03 {TO DMH #205}
DMH #206A	87.27	78.50 {FROM DMH #207} 78.52 {FOR ad #254A}	78.35 {TO DMH #206}
DMH #207	86.77	81.35 {FROM CB #255} 81.15 {FROM CB #256}	78.59 {TO DMH #206A}
DMH #220	83.32	75.10 {FROM DMH #221} 77.65 {FROM CB #257} 77.18 {FROM CB #258}	74.99 {TO DMH #200}
DMH #221	87.66	76.81 {FROM DMH #222} 82.20 {FROM CB #263}	76.05 {TO DMH #220}
DMH #222	87.25	78.82 {FROM DMH #223} 81.30 {FROM CB #259} 81.20 {FROM CB #260}	77.80 {TO DMH #221}
DMH #223	87.43	82.42 {FROM CB #261} 81.23 {FROM CB #262}	81.15 {TO DMH #222}

**CATCH BASIN**

CATCH BASIN	RIM ELEVATIONS	INVERT OUT
CB #251	82.88	77.80 {TO DMH #202}
CB #252	83.04	77.90 {TO DMH #204}
AD #253	83.48	78.30 {TO DMH #205}
AD #254	83.46	78.75 {TO DMH #206}
AD #254A	83.50	79.20 {TO DMH #206A}
CB #255	86.73	81.45 {TO DMH #207}
CB #256	87.22	82.10 {TO DMH #207}
CB #257	83.02	77.90 {TO DMH #220}
CB #258	83.46	78.40 {TO DMH #220}
CB #259	87.14	82.00 {TO DMH #221}
CB #260	87.08	82.15 {TO DMH #221}
CB #261	87.21	82.51 {TO DMH #223}
CB #262	86.64	81.75 {TO DMH #223}
CB #263	87.37	82.45 {TO DMH #221}

Dennis O'Brien P.L.S.

PARAMENTER ROAD  
 AS-BUILT PLAN OF  
 WHITTEMORE ELEMENTARY SCHOOL  
 IN  
 WALTHAM, MASS.  
 Middlesex County  
 Scale: 1" = 20' July 28, 2008  
 Dennis O'Brien P.L.S.  
 11 Concord Street Franklin, Mass. 02038  
 { 508 } 541 - 0048

