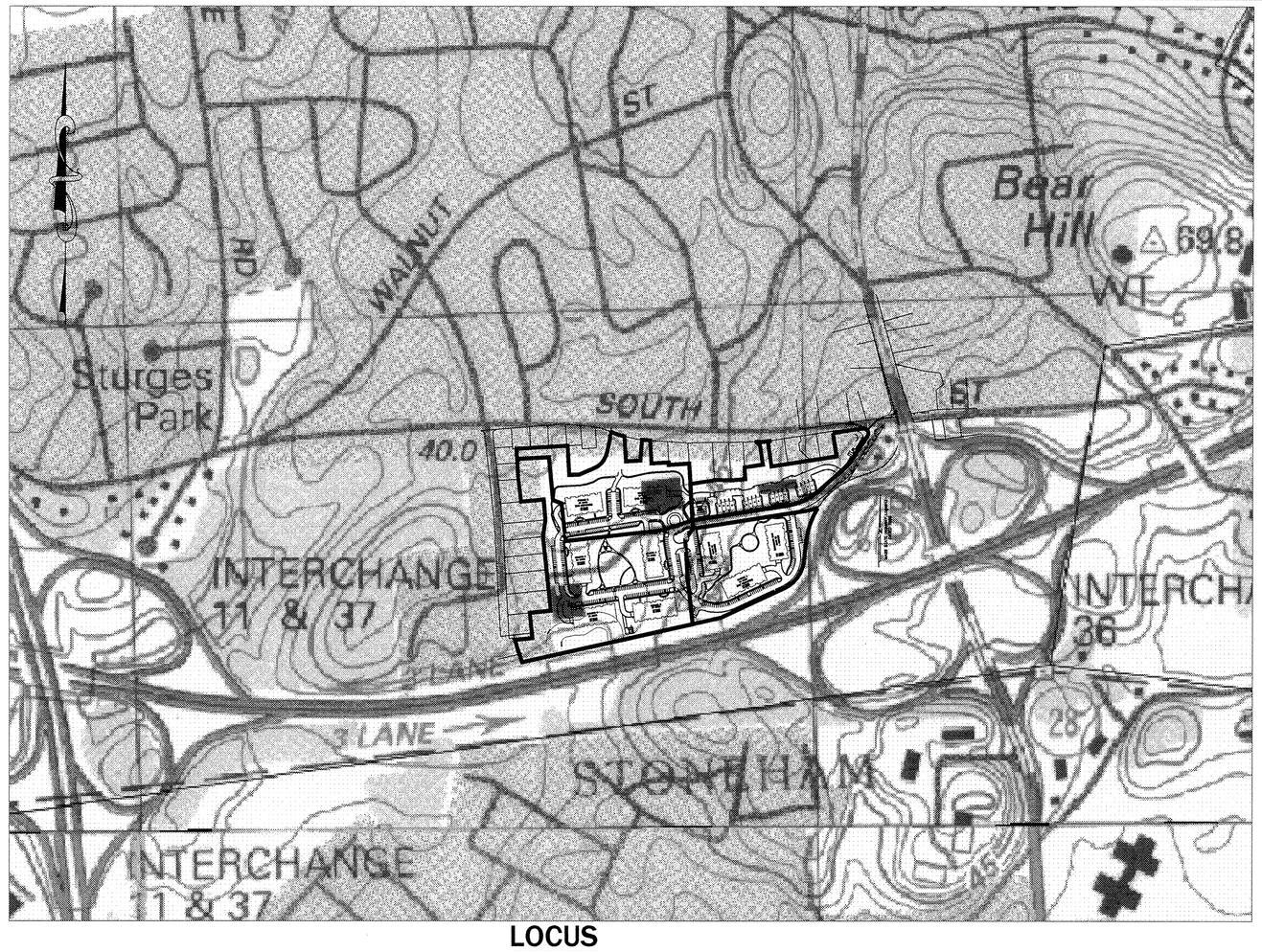


LOCUS
SCALE: 1" = 400'±

SITE PLANS
FOR
READING WOODS

JACOB WAY
READING, MASSACHUSETTS

APPLICANT:

PULTE HOMES OF NEW ENGLAND, LLC
115 FLANDERS ROAD
WESTBORO, MA 01581

ZONING SUMMARY

ZONING DISTRICT: BUSINESS C		
ZONING REG. REQUIREMENT	REQUIRED	PROVIDED (MIN.)
MIN. LOT AREA	N/A	±4.8 Ac.
FRONTAGE	N/A	1056 FT
MIN. FRONT YARD	10 FT	14 FT
MIN. SIDE YARD	10 FT	40 FT
MIN. REAR YARD	10 FT	69 FT
MIN. SIDE YARD(ADJ. RES)	100 FT	103 FT
MIN. REAR YARD(ADJ. RES)	100 FT	101 FT
VEGETATED BUFFER(ADJ. RES)	25 FT	30 FT
BUILDING SEPARATION	50 FT	51 FT
MAX. BUILDING HEIGHT	55/95* FT	<55 FT
MAX. STORIES	4	4
MAX. LOT COVERAGE	60%	16%
MIN. PARKING (2 SP./UNIT)	448	516
ZONING OVERLAY: GATEWAY SMART GROWTH		
DISTRICT REQUIREMENT	REQUIRED	PROVIDED (MIN.)
MIN. LOT AREA	N/A	10 Ac.
FRONTAGE	N/A	40.2 FT
MIN. FRONT YARD	10 FT	170 FT
MIN. SIDE YARD	10 FT	102 FT
MIN. REAR YARD	10 FT	55 FT
MIN. SIDE YARD(ADJ. RES)	100 FT	102 FT
MIN. REAR YARD(ADJ. RES)	100 FT	124 FT
VEGETATED BUFFER(ADJ. RES)	30 FT	35 FT
BUILDING SEPARATION	50 FT	85 FT
MAX. BUILDING HEIGHT	55 FT	<55 FT
MAX. STORIES	4	4
MAX. LOT COVERAGE	60%	17%
MIN. PARKING (1.6 SP./UNIT)	320	379

* WITHIN 400 FT OF RTE 128

SITE IS COMPRISED OF THE FOLLOWING PARCELS:
ASSESSOR'S MAP 4 PARCELS 57,69,74,77,84,85,86,87

DENSITY PER DISTRICT:

DISTRICT A (3.75 AC) : 16 TOWNHOUSE UNITS
DISTRICT B (5.6 AC): 86 SENIOR HOUSING UNITS
DISTRICT C (10.0 AC): 200 HOUSING UNITS (20% AFFORDABLE)
DISTRICT D (5.45 AC): 122 SENIOR HOUSING UNITS

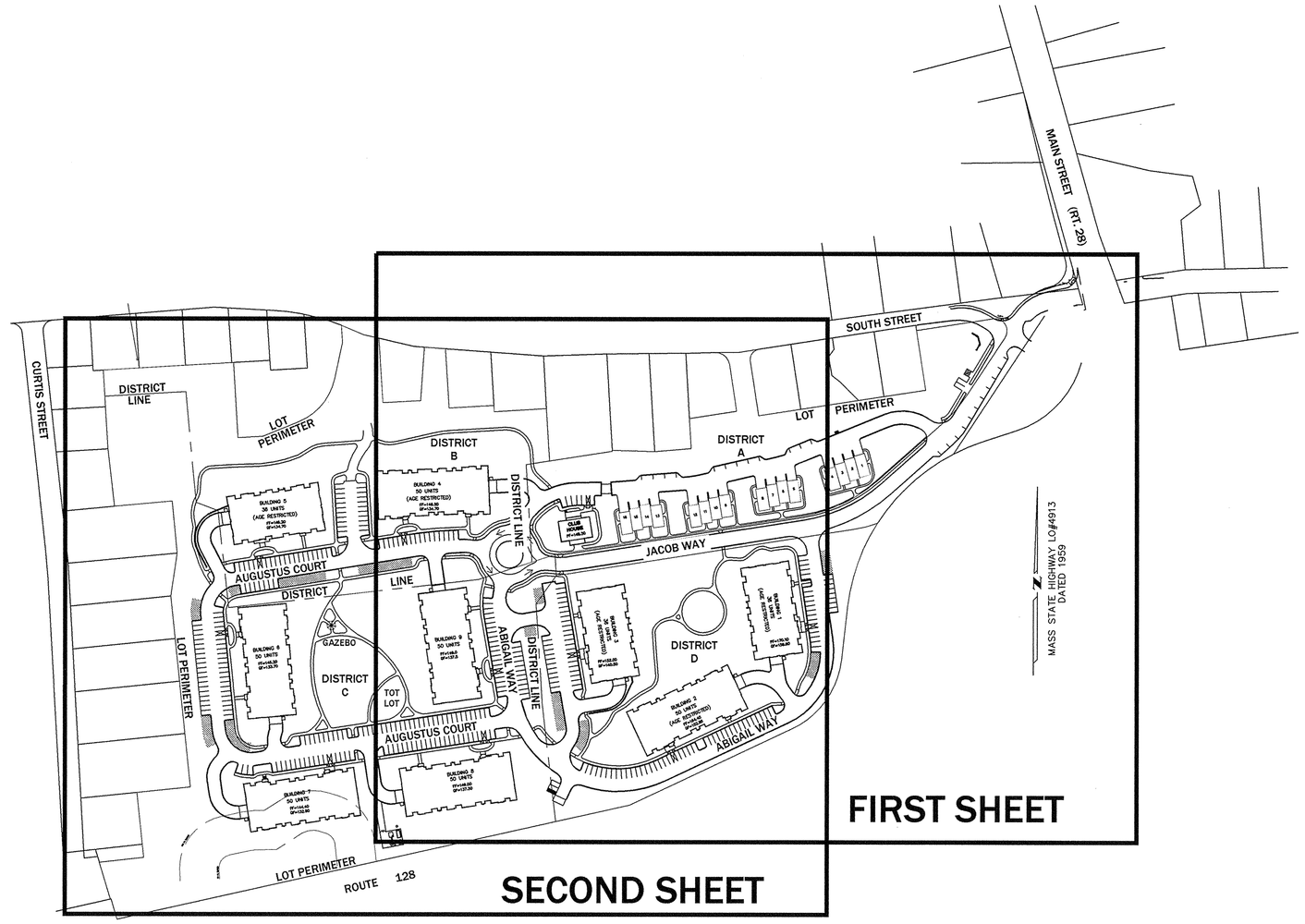
PARKING REQUIREMENTS: BUSINESS "C" – 2 SPACES/UNIT = 448 SPACES REQUIRED
GATEWAY SMART GROWTH – 1.6 SPACES/UNIT = 320 SPACES REQUIRED
TOTAL REQUIRED = 768 SPACES

PARKING PROVIDED =

UNIT PARKING:
SURFACE = 354
COVERED = 458
FUTURE = 68
TOTAL = 880

MISCELLANEOUS PARKING:
CLUB HOUSE = 6
GUEST(TOWNHOUSE)= 9

SITE TOTAL = 895 SPACES



SHEET INDEX
SCALE: 1" = 150'

SHEET INDEX

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	LEGEND & GENERAL NOTES
3–4	EXISTING CONDITIONS
5–6	DEMOLITION PLAN
7–8	LAYOUT & MATERIALS PLAN
9–10	GRADING PLAN
11–12	DRAINAGE PLAN
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15–16	MISCELLANEOUS UTILITY PLAN
17–21	DRIVEWAY PROFILES
22–27	DETAILS
28–34	SEQUENCE PLAN
35	SNOW STORAGE PLAN
36	SOIL TESTING PLAN
37	SOUTH STREET RELOCATION PLAN

ADDITIONAL PLANS

HUNTRESS ASSOCIATES LANDSCAPE PLANS

L1–L2	LANDSCAPE PLANS
L3	VILLAGE GREEN ENLARGEMENT PLAN
L4	CLUBHOUSE ENLARGEMENT PLAN
L5	TYPICAL BUILDING PLANTING PLAN
L6	SITE ENLARGEMENT PLAN
L7	ENTRY WALL DETAILS
L8	SITE LIGHTING PLAN
SK–1	PARKING LOT % LANDSCAPE AREA
SK–2	WILDLIFE SEED MIXTURES

DERMOT J. KELLY ASSOCIATES PLAN

1	TRAFFIC SIGNAL MODIFICATION PLAN

COUGHLIN ENVIRONMENTAL SERVICES PLANS

1–3	PUMP STATION PLANS

COMMONWEALTH OF MASSACHUSETTS
PAUL A. MARCHIONDA
CIVIL
No. 30015
REGISTERED PROFESSIONAL ENGINEER
6-3-11

REGISTRY USE ONLY

APPROVED BY THE TOWN OF READING PLANNING BOARD
DATE

REV.	DESCRIPTION	DATE	DRW:	DSG:	CHK:
5	MISC. REVISIONS	6/3/11			
4	ENGINEERING COMMENTS	3/14/11			
3	CON. COM. REVISIONS	3/9/11			
2	CPDC COMMENTS	2/15/11			
1	CON. COM. REVISIONS	2/8/11			

COVER SHEET

READING WOODS
in
READING, MA
Prepared For
PULTE HOMES OF NEW ENGLAND, L.L.C.
115 FLANDERS ROAD
WESTBORO, MA 01581

Marchionda & Associates, L.P.
Engineering and Planning Consultants
62 Montvale Avenue
Suite I
Stoneham, MA 02180
TEL: (781) 438–6121
FAX: (781) 438–9654
Email: engineering@marchionda.com
Website: www.marchionda.com

DATE: 1/4/11
H:\PROJECTS\487-187\PLANS\PB\6-3-2011\COVER.DWG
M. & A. NO.: 487–187 | SCALE: AS SHOWN
SHEET 1 OF 37

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LEGEND OF EXISTING CONDITIONS SYMBOLS

- SEWER MANHOLE
- DRAIN MANHOLE
- MISCELLANEOUS MANHOLE
- CATCH BASIN
- CABLE MANHOLE
- TELEPHONE MANHOLE
- ELECTRIC MANHOLE
- WATER MANHOLE
- GAS SERVICE VALVE
- GG GAS GATE VALVE
- WATER SERVICE VALVE
- WG WATER GATE VALVE
- DS DOWN SPOUT
- HYDRANT
- SH SPRINKLER HEAD
- PIV POST INDICATOR VALVE
- UTILITY POLE
- LP LIGHT POLE
- LP LIGHT POLE
- LIGHT POLE
- EBOX ELECTRIC BOX
- ICV IRRIGATION CONTROL VALVE
- HH HAND HOLE
- TS TRAFFIC SIGNAL
- SIGN
- MB MAIL BOX
- FP FLAG POLE
- MP METAL POLE
- W/UGE WITH UNDERGROUND ELECTRIC
- DECIDUOUS TREE
- CONIFEROUS TREE
- SHRUB
- S SANITARY SEWER
- D STORM DRAIN
- W WATER LINE
- G GAS LINE
- E ELECTRIC CONDUIT
- T TELEPHONE CONDUIT
- CATV TV CABLE CONDUIT
- OH OVERHEAD WIRE
- UNDETERMINED UTILITY LINE LOCATION
- HANDICAP RAMP
- FENCE LINE
- HEDGE
- WOODS
- PLANTINGS
- 130 CONTOUR
- BUILDING

LEGEND OF PROPOSED SYMBOLS

- FINISH GRADE CONTOUR — 100
- TESTHOLE — TH-A1
- PROPOSED EROSION CONTROL BARRIER
- PROPOSED LANDSCAPE RETAINING WALL
- PROPOSED ENGINEERED RETAINING WALL
- PROPOSED SPOT GRADE — 212x0
- PROPOSED FLARED END STRUCTURE
- PROPOSED RIP RAP SLOPE
- PROPOSED DRAIN LINE — 12"HDPE
- PROPOSED DRAIN MANHOLE
- PROPOSED CATCHBASIN
- PROPOSED DOUBLE CATCHBASIN
- PROPOSED DRAINAGE FLOW ARROW
- PROPOSED SEWER MANHOLE AND SEWER LINE — 8"PVC
- PROPOSED SEWER SERVICE — SS
- PROPOSED FIRE HYDRANT W/VALVE
- PROPOSED WATER MAIN W/VALVE — 8"DI
- PROPOSED WATER SERVICE W/ GATE — WS
- PROPOSED TRANSFORMER — T
- TOP OF FOUNDATION ELEVATION — TF=109.00
- PROPOSED TREE LINE
- PROPOSED CENTERLINE — 1+00
- PROPOSED FOOTING DRAIN — FD
- PROPOSED ELECTRIC — PTEC
- PROPOSED GAS MAIN — G
- PROPOSED GAS SERVICE — G
- PROPOSED CHAIN LINK FENCE
- PROP. CEDAR STOCKADE/BOARD FENCE
- PROPOSED SPLIT RAIL FENCE
- ACCESSIBLE PARKING
- LUMINAIRE
- SIGN
- PROPOSED CEMENT CONCRETE — PROP. CONC.
- PROPOSED BLOCK PAVERS
- PROPOSED GRASS PAVERS

LEGEND OF SURVEY SYMBOLS & ABBREVIATIONS

- DRILLHOLE FOUND — DH
- DRILLHOLE SET — DH
- IRON ROD FOUND — IR
- IRON ROD SET — IR
- IRON PIPE FOUND — IP
- IRON PIPE SET — IP
- MASS HIGHWAY BOUND/DRILLHOLE — MHB
- COUNTY BOUND/BACK CENTER — CBBC
- COUNTY BOUND/BRASS PIN LEAD PLUG — CBBPLP
- STONE BOUND/DRILLHOLE — SBDH
- STONE BOUND CENTER — SB
- CONCRETE BOUND/DRILLHOLE — CBDH
- CROSS CUT FND — xFND
- CROSS CUT SET — xSET
- EXISTING DITCH

NOTES:

1) LEGEND MAY INCLUDE SYMBOLS THAT DO NOT APPEAR IN THIS PLAN SET.

GENERAL ABBREVIATIONS

EDGE OF PAVEMENT	EOP
BIT. CONC. SIDEWALK/WALKWAY	BCSW/BCW
BITUMINOUS BERM	BB
SLOPED GRANITE CURB	SGC
VERTICAL GRANITE CURB	VGC
CEMENT CONCRETE CURB	CC
GRANITE CURB INLET	CI
LANDSCAPED AREA	L/S
BROKEN WHITE LANE LINE	BWL
DOUBLE YELLOW LINE	DYL
SINGLE WHITE LINE	SWL
IRRIGATION CONTROL VALVE	ICV
REMOVE & REPLACE/RELOCATE	R&R

UTILITY ABBREVIATIONS

MANHOLE	MH
HANDHOLE	HH
CATCH BASIN	CB
DOUBLE CATCH BASIN	DCB
AREA DRAIN	AD
CLEAN OUT	CO
DRAIN	D
SEWER	S
SEWER FORCE MAIN	FM
WATER	W
ELECTRIC	E
OVERHEAD WIRE	OHW
UTILITY POLE	UP
HEADWALL	HW
FLARED END SECTION	FES
HIGH DENSITY POLYETHYLENE PIPE	HDPE
DUCTILE IRON PIPE	DIP
POLYVINYLCHLORIDE PIPE	PVC
REINFORCED CONCRETE PIPE	RCP
CAST IRON	CIP
CORRUGATED METAL PIPE	CMP
INVERT ELEVATION	I=
RIM ELEVATION	R=
RECHARGE	RCHG
FOUNDATION DRAIN	FD
ROOF DRAIN	RD
OIL & GRIT SEPERATOR	OGS
STORMWATER QUALITY UNIT	WQU

GENERAL NOTES:

1) THE CONTRACTOR SHALL NOTIFY DIGSAFE (1-888-344-7233) AT LEAST 72 HOURS BEFORE ANY EXCAVATION.
2) HANDICAP ACCESSIBLE ROUTES, HANDICAP PARKING SPACES, CURB CUTS, RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE FEDERAL AMERICANS WITH DIABILITIES ACT AND WITH STATE AND LOCAL LAWS AND REGULATIONS WHICHEVER MAY BE MORE STRICT.
3) AREAS DISTURBED DURING CONSTRUCTION THAT ARE NOT BEING REPLACED WITH IMPERVIOUS SURFACES SHALL BE REPLACED WITH LOAM AND SEED UNLESS OTHERWISE SPECIFIED.
4) THE APPLICANT SHALL PROVIDE THE NECESSARY EASEMENT OR OWNERSHIP RIGHTS OVER THE NEW PORTION OF JACOB WAY, WHERE NECESSARY.
5) THE CONTRACTOR SHALL BE RESPONSIBLE FOR APPLYING FOR AND OBTAINING ALL NECESSARY PERMITS, PAY FEES AND POST BONDS ASSOCIATED WITH THE WORK AS INDICATED ON THE DRAWINGS, SPECIFICATIONS AND IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFORMING TO ALL APPLICABLE LOCAL, STATE AND FEDERAL CONSTRUCTION REQUIREMENTS. IF THE PLANS ARE CONTRARY TO ANY REQUIREMENTS, THE CONTRACTOR SHALL NOTIFY THE OWNER OR ENGINEER. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR ARRANGING FOR ALL NECESSARY LOCAL AND/OR STATE INSPECTIONS.
6) SPEED SHALL BE POSTED AT 15 M.P.H.. TRAFFIC SIGNAGE AND MARKINGS SHALL CONFORM TO THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
7) AREAS OUTSIDE OF THE PROPOSED LIMIT OF WORK DISTURBED BY THE CONTRACTOR SHALL BE RESTORED TO THEIR ORIGINAL CONDITION, AT THE CONTRACTOR'S EXPENSE.
8) THE TOWN ENGINEERING DIVISION SHALL BE NOTIFIED AT LEAST 72 HOURS IN ADVANCE OF EXCAVATION.
9) IN THE EVENT THAT EVIDENCE OF CONTAMINATED SOIL, GROUNDWATER OR OTHER MEDIA IS ENCOUNTERED, ALL WORK SHALL CEASE IN THE VICINITY IN ORDER TO PREVENT THE SPREADING OF THE SUSPECTED CONTAMINATION. THE OWNER SHALL BE IMMEDIATELY NOTIFIED SO THAT THE APPROPRIATE TESTING AND SUBSEQUENT ACTION CAN BE TAKEN.
10) THE CONTRACTOR SHALL PREVENT DUST, SEDIMENT AND DEBRIS FROM EXITING THE SITE, AND SHALL BE RESPONSIBLE FOR ANY CLEANUP, REPAIR OR CORRECTIVE ACTION NECESSARY.
11) DAMAGE FROM CONSTRUCTION LOADS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
12) CONTRACTOR SHALL CONTROL STORMWATER RUNOFF DURING CONSTRUCTION.
13) WHERE EROSION CONTROL IS NOT REQUIRED, BRIGHT ORANGE POLYPROPYLENE FENCING SHALL BE INSTALLED AROUND ANY TREES TO BE SAVED AND SHALL DENOTE THE LIMIT OF WORK.
14) KEY LOCK BOXES SHALL BE INSTALLED AT THE ENTRANCES AND AT THE GARAGE DOORS OF ALL THE 4 STORY BUILDINGS. THE EXACT LOCATION TO BE APPROVED BY THE READING FIRE DEPARTMENT.
15) A FIRE PROTECTION SIGNALING SYSTEM SHALL BE INSTALLED IN ALL 4 STORY BUILDINGS COMPLIANT WITH 780 CMR 907 AND N.F.P.A. 72. THE FIRE ALARM SYSTEM SHALL BE SUPERVISED BY A CENTRAL STATION SERVICE AND THE BUILDINGS SHALL BE MONITORED BY A FIRE DEPARTMENT MASTER BOX.
16) AS-BUILTS SHALL BE PROVIDED FOR ALL UTILITY AND ROADWAY SITE WORK. THESE AS-BUILTS SHALL BE CERTIFIED BY A REGISTERED PROFESSIONAL ENGINEER OR SURVEYOR. AS-BUILTS SHALL BE IN ACCORDANCE WITH TOWN STANDARDS AND FURNISHED TO THE TOWN IN BOTH PAPER AND ELECTRONIC FORM. A BOND FOR AS-BUILT PLANS SHALL BE SUBMITTED PRIOR TO CONSTRUCTION.

EROSION CONTROL NOTES:

1) THIS SITE IS SUBJECT TO THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PROGRAM OF THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY AND THE PULTE HOMES NSQP PROGRAM. SITE OPERATORS SHALL CONFORM TO MEET THE CRITERIA FOR A NPDES GENERAL PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES.
2) EROSION CONTROL BARRIER (WHERE SHOWN) REPRESENTS THE LIMIT OF WORK. WHERE NO EROSION CONTROL BARRIER IS REQUIRED (SUCH AS UPSLOPE AREAS), A LIMIT OF WORK LINE HAS BEEN SHOWN.
3) STOCKPILING LOCATIONS SHALL BE FIELD DETERMINED AND SHALL NOT LIE WITHIN THE 100-FOOT WETLAND BUFFER. DIVERSION BERMS AND EROSION CONTROL BARRIERS SHALL BE INSTALLED DOWNGRADIENT OF STOCKPILES IN ACCORDANCE WITH THE PLAN AND DETAILS.
4) PROPOSED EROSION AND SEDIMENTATION CONTROL MEASURES WILL INCLUDE SILTATION FENCES, HAY BALES, CRUSHED STONE, RIPRAP, LOAM/SEED, HYDROSEEDING, MULCHING, EROSION CONTROL MATTING, DIVERSION BERMS, AND SEDIMENTATION BASINS AS FURTHER DESCRIBED HEREIN.
5) AS A MINIMUM, SILTATION FENCES, HAY BALES AND CONSTRUCTION FENCE WILL BE USED FOR THE PERIMETER EROSION CONTROL BARRIER AS SHOWN ON THIS PLAN AND ELSEWHERE AS CONDITIONS WARRANT. HAY BALES AND SILT SACS WILL ALSO BE USED TO PROTECT OFFLINE CATCH BASINS (PRIOR TO BINDER) AND ELSEWHERE AS CONDITIONS WARRANT. THE CONTRACTOR WILL BE REQUIRED TO KEEP A REASONABLE STOCK OF SILTATION FENCE AND HAY BALES ON SITE TO BE ABLE TO SUPPLEMENT OR MAKE REPAIRS AS NECESSARY.
6) CRUSHED STONE AND/OR RIPRAP WILL BE USED TO CONSTRUCT THE TRACKING PADS, CUT SLOPE TREATMENT AREAS, CHECK DAMS, SEDIMENTATION BASIN OUTLET PROTECTION, AND ELSEWHERE AS CONDITIONS WARRANT. THE CONTRACTOR WILL BE REQUIRED TO KEEP A REASONABLE STOCK OF CRUSHED STONE AND RIPRAP ON SITE TO BE ABLE TO SUPPLEMENT OR MAKE REPAIRS AS NECESSARY.
7) LOAMING AND SEEDING WILL BE USED AS A PERMANENT STABILIZATION MEASURE FOR ALL REVEGETATED AREAS OF THE SITE. HYDROSEEDING MAY BE USED IN CERTAIN AREAS IN LIEU OF STANDARD SEEDING METHODS SHOULD CONDITIONS WARRANT.
8) EROSION CONTROL MATTING WILL BE USED TO REINFORCE SLOPES GREATER THAN 3H:1V AND ELSEWHERE AS CONDITIONS WARRANT. THE CONTRACTOR WILL BE REQUIRED TO KEEP A REASONABLE STOCK OF EROSION CONTROL MATTING ON SITE TO BE ABLE TO SUPPLEMENT OR MAKE REPAIRS AS NECESSARY.
9) MULCHING MAY BE USED TO REINFORCE SEEDED AREAS WHERE EROSION CONTROL MATTING IS NOT REQUIRED OR WARRANTED, BUT WHERE SOME PROTECTION IS WARRANTED. MULCHING MAY ALSO BE USED TO STABILIZE AREAS WHERE CONSTRUCTION ACTIVITIES WILL TEMPORARILY CEASE FOR MORE THAN 14 DAYS.
10) SEDIMENTATION BASINS MAY BE USED THROUGH OUT THE SITE TO TREAT RUNOFF AND SHALL BE SIZED IN ACCORDANCE WITH NPDES REQUIREMENTS AND THE RECOMENDATIONS OF THE EROSION CONTROL MONITOR. DIVERSION BERMS MAY BE UTILIZED TO DIVERT UNTREATED STORMWATER TO THE SEDIMENTATION BASINS. SEDIMENTATION BASINS AND DIVERSION BERMS WILL BE ADDED, REMOVED, AND ADJUSTED AS THE SITE EVOLVES THROUGHOUT THE CONSTRUCTION PROCESS, AS NECESSARY.
11) STABILIZATION MEASURES WILL BE REQUIRED TO BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, NOT MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED, UNLESS PRECLUDED BY SNOW COVER OR FROZEN GROUND CONDITIONS IN WHICH CASE STABILIZATION MEASURES MUST BE INITIATED AS SOON AS PRACTICABLE. WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 14 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE.
12) EROSION AND SEDIMENTATION CONTROLS WILL BE REQUIRED TO BE INSPECTED EITHER ONCE EVERY SEVEN CALENDAR DAYS, OR ONCE EVERY FOURTEEN CALENDAR DAYS AND WITHIN TWENTY-FOUR HOURS OF THE END OF A STORM EVENT OF 0.5 INCHES OR GREATER, IN ACCORDANCE WITH NPDES REQUIREMENTS, BY AN EROSION CONTROL MONITOR. COPIES OF THE NPDES INSPECTION REPORTS SHALL BE KEPT ON SITE. THE SITE CONTRACTOR SHALL FOLLOW THE RECOMMENDATIONS OF THE EROSION CONTROL MONITOR.
13) EROSION AND SEDIMENTATION CONTROLS WILL BE REQUIRED TO BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT TO ENSURE THAT THEY FUNCTION AS INTENDED. DEFICIENCIES WILL BE CORRECTED BY CLEANING, REPAIRING, OR REPLACING THE AFFECTED CONTROL(S) OR PORTION(S) THEREOF TO REESTABLISH PROPER FUNCTIONING AS QUICKLY AS POSSIBLE. SEDIMENTATION CONTROLS WILL BE REQUIRED TO BE CLEANED OR REPLACED WHEN THE ACCUMULATED SEDIMENT EXCEEDS 50 PERCENT OF THE DESIGN CAPACITY OF THE CONTROL. ANY OFF-SITE ACCUMULATIONS OF SEDIMENT WILL BE REQUIRED TO BE REMOVED AS QUICKLY AS POSSIBLE IN A MANNER THAT MINIMIZES ADDITIONAL DISTURBANCE. THIS INCLUDES STREET SWEEPING OF SURROUNDING STREETS AS NECESSARY.
14) CRUSHED STONE TRACKING PADS SHALL BE USED WHERE ANY TEMPORARY CONSTRUCTION ENTRANCE ARE LOCATED ADJACENT TO ANY EXISTING TRAVELED WAY OR DRIVEWAY.
15) DIRT BAGS SHALL BE USED DURING ALL DEWATERING ACTIVITIES (SEE DETAIL SHEET).

UTILITY NOTES:

1) GRAVITY SEWER MAIN SHALL BE 8-INCH SDR-35 PVC.
2) SEWER FORCE MAIN SHALL BE 4" SDR-21 PVC.
3) WATER MAIN SHALL BE CEMENT LINED DUCTILE IRON (CLDI), CLASS 52, 8" DIAMETER UNLESS OTHERWISE NOTED.
4) STORM DRAINAGE PIPES SHALL BE 12" HDPE, UNLESS NOTED OTHERWISE. ROOF DRAIN LEADER PIPES SHALL BE 6" HDPE, UNLESS NOTED OTHERWISE. ROOF DRAIN COLLECTION PIPES SHALL BE 12" HDPE, UNLESS NOTED OTHERWISE.
5) LOCATION OF THE EXISTING UTILITIES ARE APPROXIMATE AND ARE SHOWN FOR REPRESENTATIONAL PURPOSES ONLY. EXACT LOCATIONS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. THE UTILITY INFORMATION DEPICTED DOES NOT GUARANTEE THE LOCATION, SIZE OR SERVICABILITY OF THE EXISTING UTILITIES. IN THE EVENT THAT THE PROPOSED WORK IS IN CONFLICT WITH AN EXISTING UTILITY, OR THAT THE EXISTING CONDITIONS PREVENT THE WORK FROM BEING PERFORMED AS PROPOSED, THE LOCATION, SIZE AND ELEVATION OF THE CONNECTIONS TO THE EXISTING UTILITIES SHALL BE DETERMINED BY THE CONTRACTOR. THE OWNER SHALL BE IMMEDIATELY NOTIFIED OF ANY CHANGES NECESSARY. FAILURE TO NOTIFY THE OWNER OF ANY ADDITIONAL WORK REQUIRED, PRIOR TO PERFORMING SAID WORK, RELEASES THE OWNER OF ANY OBLIGATION FROM ADDITIONAL PAYMENTS WHICH OTHERWISE MAY BE WARRANTED FOR RESOLUTION OF THE CONFLICTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL REQUIRED UTILITY PERMIT(S) ARE OBTAINED.
6) UTILITY TRENCHES IN SOUTH STREET SHALL BE TEMPORARILY PATCHED IN ACCORDANCE WITH TOWN STANDARDS.
7) A MINIMUM OF 5 FEET OF COVER SHALL BE MAINTAINED OVER WATER MAIN. **CONTRACTOR SHALL TAKE NOTE THAT THERE ARE SEVERAL AREAS WHERE THE WATER MAIN NEEDS TO BE DEEPER THAN THE MINIMUM OF 5 FEET TO AVOID CONFLICTS WITH OTHER UTILITIES.
8) AN IRRIGATION SYSTEM SHALL BE DESIGNED(BY OTHERS) AND INSTALLED BY THE CONTRACTOR.
9) THIS PROJECT IS SUBJECT TO A SEWER CONNECTION PERMIT ISSUED BY THE MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION. CONTRACTOR SHALL BE FAMILIAR AND COMPLY WITH ALL CONDITIONS OF THIS PERMIT. NO SEWER CONNECTIONS SHALL BE MADE UNTIL THE DEP SEWER PERMIT IS OBTAINED.
10) SEWERS SHOULD BE KEPT REMOTE FROM PUBLIC WATER SUPPLY WELLS, WATER MAINS OR OTHER POTABLE WATER SUPPLY SOURCES AND STRUCTURES. WHEREVER FEASIBLE, SEWERS SHOULD BE LAID AT A MINIMUM OF 10 FEET, HORIZONTALLY, FROM ANY EXISTING OR PROPOSED WATER MAIN. SHOULD LOCAL CONDITIONS PREVENT A LATERAL SEPARATION OF 10 FEET TO A WATER MAIN, THE WATER MAIN SHOULD BE LAID IN A SEPARATE TRENCH AND THE ELEVATION OF THE CROWN OF THE SEWER PLACED AT LEAST 18" BELOW THE INVERT OF THE WATER MAIN.
11) SOLID, GASKETED AND LOCKABLE MANHOLE COVERS SHOULD BE USED IN AREAS DESIGNATED AS A BUFFER ZONE OF ANY WETLANDS.
12) ALL SEWER PIPING AND/OR STRUCTURES SHALL MEET THE REQUIREMENTS OF THE TOWN OF READING.
13) RIM ELEVATIONS, DRAINAGE AND SEWER INVERTS AND ELEVATIONS OF DITCHES SHALL BE SET ACCORDING TO THE UTILITY, GRADING AND DRAINAGE PLANS.
14) THE RIMS OF ALL STRUCTURES (INCLUDING MANHOLES, PULL BOXES, HAND HOLES, CLEANOUTS, VALVE COVERS ETC.) SHALL BE SET FLUSH WITH THE FINISHED SURFACE OF PAVEMENT, GRAVEL OR CONCRETE SURFACE. RIMS SHOULD BE SET 1" ABOVE THE SURFACE OF ANY LANSCAPE, LOAM, SEED OR OTHER EARTH MATERIALS, WITH THE GROUND TAPERED DOWN FROM THE RIM TO THE SURFACE.
15) THE LOCATION, SIZE, DEPTH, AND SPECIFICATIONS OF ANY PROPOSED PRIVATE UTILITY SERVICES SHALL BE INSTALLED ACCORDING TO THE REQUIREMENTS OF, AND BE APPROVED BY THE RESPECTIVE SERVICE PROVIDER/UTILITY COMPANIES.
16) THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR AND SHALL BE RESPONSIBLE FOR ANY FEES ASSOCIATED WITH THE REMOVAL AND/OR RELOCATION OF UTILITY POLES, GAS, ELECTRIC, TELEPHONE, CABLE AND ANY OTHER PRIVATE UTILITIES, WHETHER WORK IS PERFORMED BY THE CONTRACTOR OR THE UTILITY COMPANY.
17) SITE CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR. SITE CONTRACTOR SHALL BE RESPONSIBLE FOR EXCAVATION, INSTALLATION AND BACKFILL OF ELECTRICAL SITEWORK RELATED ITEMS INCLUDING, BUT NOT LIMITED TO: PULL BOXES, CONDUITS, DUCT BANKS, LIGHT POLE BASES AND CONCRETE PADS. CONCRETE ENCASEMENT OF ANY DUCT BANK SHALL BE PROVIDED, IF REQUIRED BY THE UTILITY COMPANY.
18) SITE CONTRACTOR SHALL COORDINATE WITH THE GAS UTILITY COMPANY. SITE CONTRACTOR SHALL BE RESPONSIBLE FOR EXCAVATION, AND BACKFILL OF GAS TRENCHES.
19) ALL DRAINAGE AND SANITARY SEWER STRUCTURE INSIDE DIAMETERS SHALL BE DETERMINED BY THE MANUFACTURER BASED ON THE PIPE CONFIGURATION AS SHOWN ON THE UTILITY AND DRAINAGE PLANS.
20) F.S.= FIRE SERVICE; RD=ROOF DRAIN; FD=FOUNDATION DRAIN.
21) ALL UTILITIES, RECHARGE AREAS AND SERVICES SHALL BE FIELD LOCATED BY MARCHIONDA & ASSOCIATES PRIOR TO BACKFILL. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THIS AS-BUILT WORK.
22) FOLLOWING CONSTRUCTION, AS-BUILT PLANS SHOWING THE LOCATION OF ALL UNDERGROUND UTILITIES, IN A FORM ACCEPTABLE TO THE TOWN, SHALL BE PREPARED AND SUBMITTED TO THE ENGINEERING DEPARTMENT. AS-BUILT PLANS SHALL BE CERTIFIED BY A REGISTERED PROFESSIONAL ENGINEER OR SURVEYOR.
23) FIRE ALARM SHALL BE IN CONFORMANCE WITH TOWN SPECIFICATIONS.
24) ALL EXISTING SEWER AND DRAIN LINES TO BE UTILIZED SHALL BE TELEVISION INSPECTED FOR INTEGRITY BEFORE RE-USE. THE TOWN ENGINEERING DIVISION SHALL BE NOTIFIED OF ALL INSPECTIONS 36 HOURS IN ADVANCE. LINES DEEMED UNSUITABLE FOR RE-USE SHALL BE REPLACED IN THEIR ENTIRETY.

LAYOUT AND MATERIALS NOTES:

1) REFER TO DETAIL SHEETS FOR TYPICAL ROAD SECTION TYPES.
2) PAVEMENT MARKINGS SHALL CONFORM TO PART 3 (MARKINGS) OF THE MOST RECENT EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS."
3) ALL WALLS GREATER THAN 4' IN HEIGHT SHALL BE DESIGNED BY A REGISTERED STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.
4) THE SITE CONTRACTOR IS RESPONSIBLE FOR THE INSPECTIONS OF ALL STRUCTURAL RETAINING WALLS (>4') DURING CONSTRUCTION SO THAT THE CONTRACTOR CAN OBTAIN A CERTIFICATION FROM A STRUCTURAL ENGINEER THAT THE WALLS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE STAMPED STRUCTURAL DESIGN PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL PROVIDE THIS CERTIFICATION TO THE OWNER.
5) GUARD RAILS SHALL BE PROVIDED ALONG THE SHOULDER OF ALL DRIVES WHERE A DOWNWARD SLOPE IN EXCESS OF 4:1 IS PROPOSED ADJACTENT TO THE DRIVEWAY.
6) VERTICAL GRANITE CURB SHALL BE USED ALONG THE EXISTING PORTION OF JACOB WAY TO THE CIRCLE. BIT CONC. CAPE COD BERM SHALL BE USED ELSWHERE THROUGHOUT THE SITE, EXCEPT AT THE TRANSITIONS TO ACCESSIBLE CURB RAMPS AND CURB INLETS WHICH SHALL BE A VERTICAL GRANITE TRANSITION OR AS OTHERWISE SPECIFIED. WHEREVER FEASIBLE, REUSE THE EXISTING GRANITE CURBING THAT IS ON-SITE TO ACHIEVE THESE TRANSITIONS.
7) ALL ISLANDS SHALL HAVE A 3 FT MIN RADIUS CURB RETURN.
8) SLOPES OR GRADES WITHIN HANDICAPPED SPACES AND ACCESS AISLES SHALL NOT EXCEED 2% IN ANY DIRECTION.
9) BUILDING ENTRANCES AND STAIRS ARE SHOWN PICTORIALLY ON THESE PLANS. ACTUAL SIZES MAY VARY. REFER TO ARCHITECTURAL PLANS FOR ACTUAL SIZES.
10) DIMENSIONS ARE FROM THE FACE OF CURB, FACE OF BUILDING, FACE OF WALL OR CENTERLINE OF PAVEMENT MARKINGS, UNLESS OTHERWISE NOTED.
11) THE PROPOSED DETAIL PERTAINING TO THE BUILDINGS SHOWN HEREON IS TO USED AS A GUIDE ONLY. SEE ARCHITECTURAL PLANS AND INDIVIDUAL BUILDING PLOT PLANS FOR EXACT BUILDING DIMENSIONS, ELEVATIONS AND DETAILS CONTIGUOUS TO THE BUILDINGS, INCLUDING SIDEWALKS, RAMPS, BUILDING ENTRANCES, STAIRWAYS, WALKWAYS, UTILITY PENETRATIONS, FOUNDATION ELEVATIONS, SEWER LATERAL INVERTS, RETAINING WALLS AND GRADING AROUND UNITS.
12) ALL SIGNAGE AND TRAFFIC MARKINGS SHALL CONFORM TO MUTCD STANDARDS.

DEMOLITION NOTES:

1) THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING MANMADE SURFACE FEATURES WITHIN THE LIMIT OF WORK INCLUDING, BUT NOT LIMITED TO: ALL BUILDINGS, PAVEMENT, CONCRETE, SLABS, CURBING, FENCES, POLES, FOUNDATIONS, EXISTING UTILITIES, SIGNS ETC., UNLESS OTHERWISE INDICATED ON THE PLANS.
2) ALL UNSUITABLE MATERIAL WITHIN THE BUILDING FOOTPRINTS AND A SUITABLE DISTANCE BEYOND SHALL BE REMOVED AND DISPOSED OF PROPERLY.
3) EXISTING UTILITES SHALL BE TERMINATED, UNLESS OTHERWISE INDICATED, IN CONFORMANCE WITH THE REQUIREMENTS OF THE MUNICIPALITY OR OF THE INDIVIDUAL PRIVATE UTILITY COMPANIES. THE CONTRACTOR SHALL COORDINATE THE SERVICE DISCONNECTIONS WITH THE MUNICIPALITY, OR THE PRIVATE UTILITY COMPANIES.
4) ALL EXISTING PIPES NOT TO BE UTILIZED SHALL BE REMOVED OR FILLED TO THE TOWN ENGINEERING DIVISION'S SATISFACTION.
5) CONTRACTOR SHALL DISPOSE OF ALL DEMOLITION DEBRIS ACCORDING TO ANY APPLICABLE FEDERAL, STATE OR LOCAL STATUTES, REGULATIONS OR ORDINANCES.
5) PAVEMENT REMOVAL MAY BE DONE COINCIDENTALY WITH ANTICIPATED CONSTRUCTION SEQUENCE OR PHASE.

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2	CPDC COMMENTS	2/15/11			
1	CON. COM. REVISIONS	2/8/11			

LEGEND & NOTES

READING WOODS
in
READING, MA
Prepared For
PULTE HOMES OF NEW ENGLAND, L.L.C.
115 FLANDERS ROAD
WESTBORO, MA 01581

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COMMONWEALTH OF MASSACHUSETTS — PAUL A. MARCHIONDA — CIVIL — No. 20015 — REGISTERED PROFESSIONAL ENGINEER
6-3-11

DATE: 1/4/11
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M. & A. NO.: 487-187 | SCALE: NOT TO SCALE
SHEET 2 OF 37

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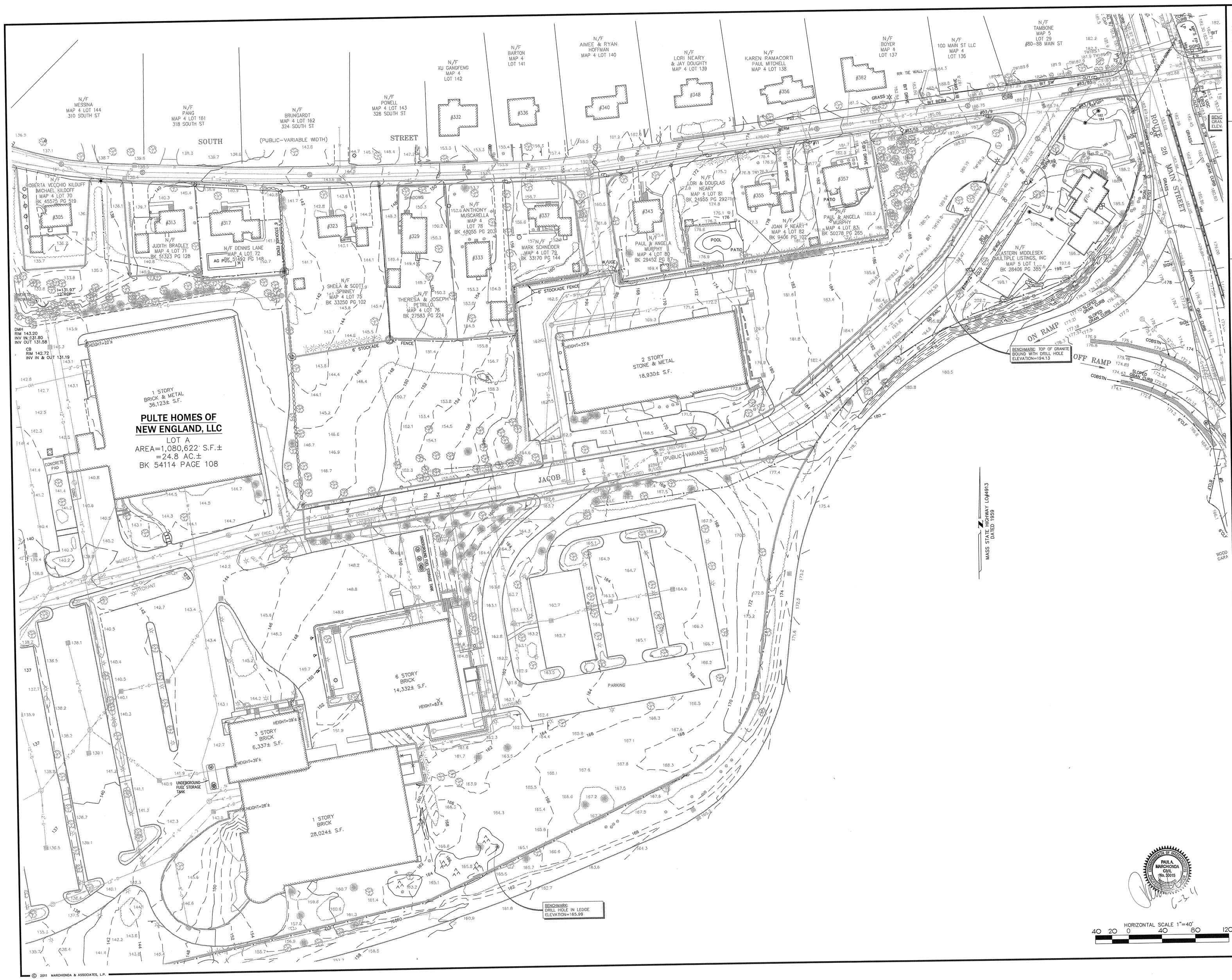

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EXISTING CONDITIONS

READING WOODS
in
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SHEET 3 OF 37

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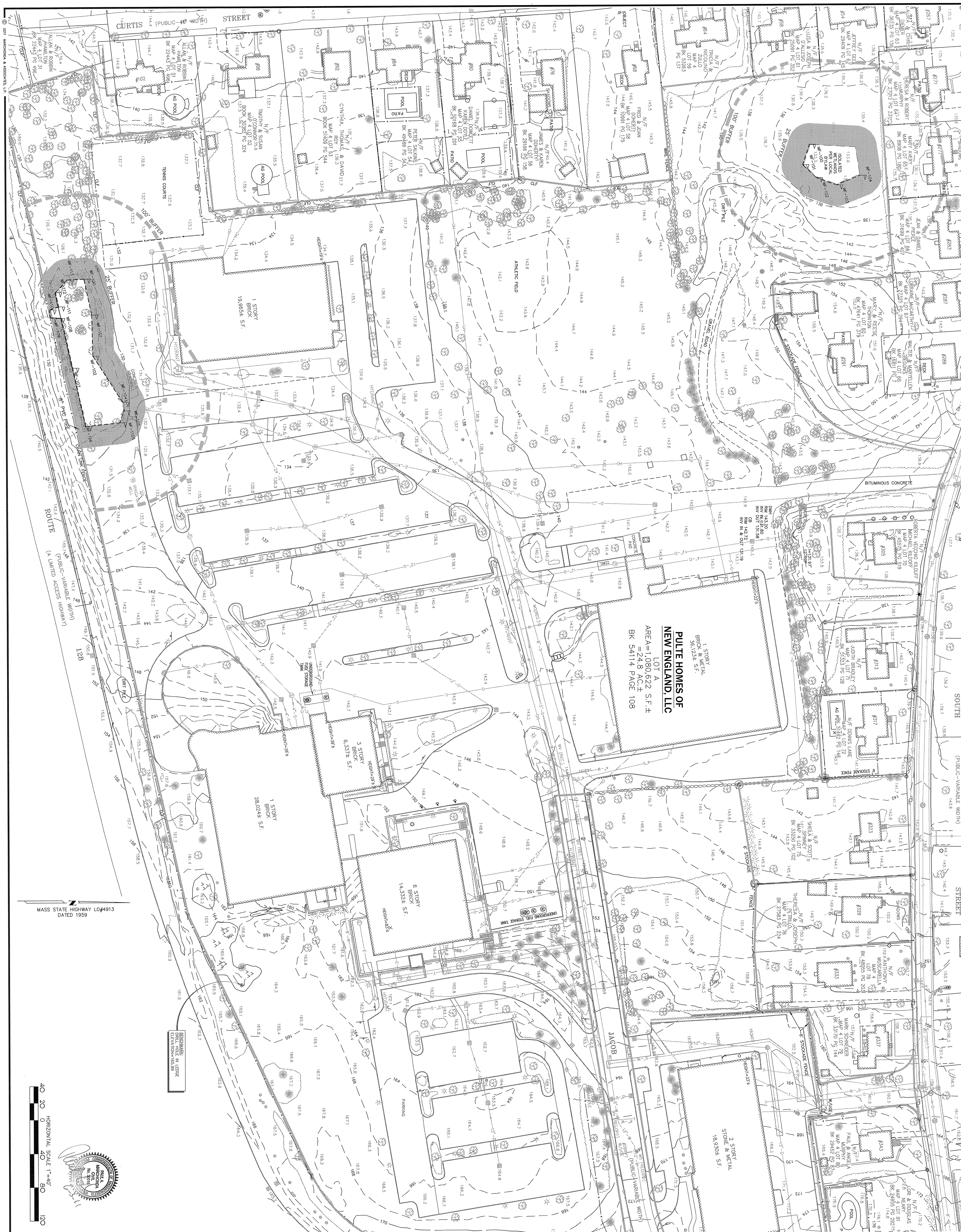

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EXISTING CONDITIONS

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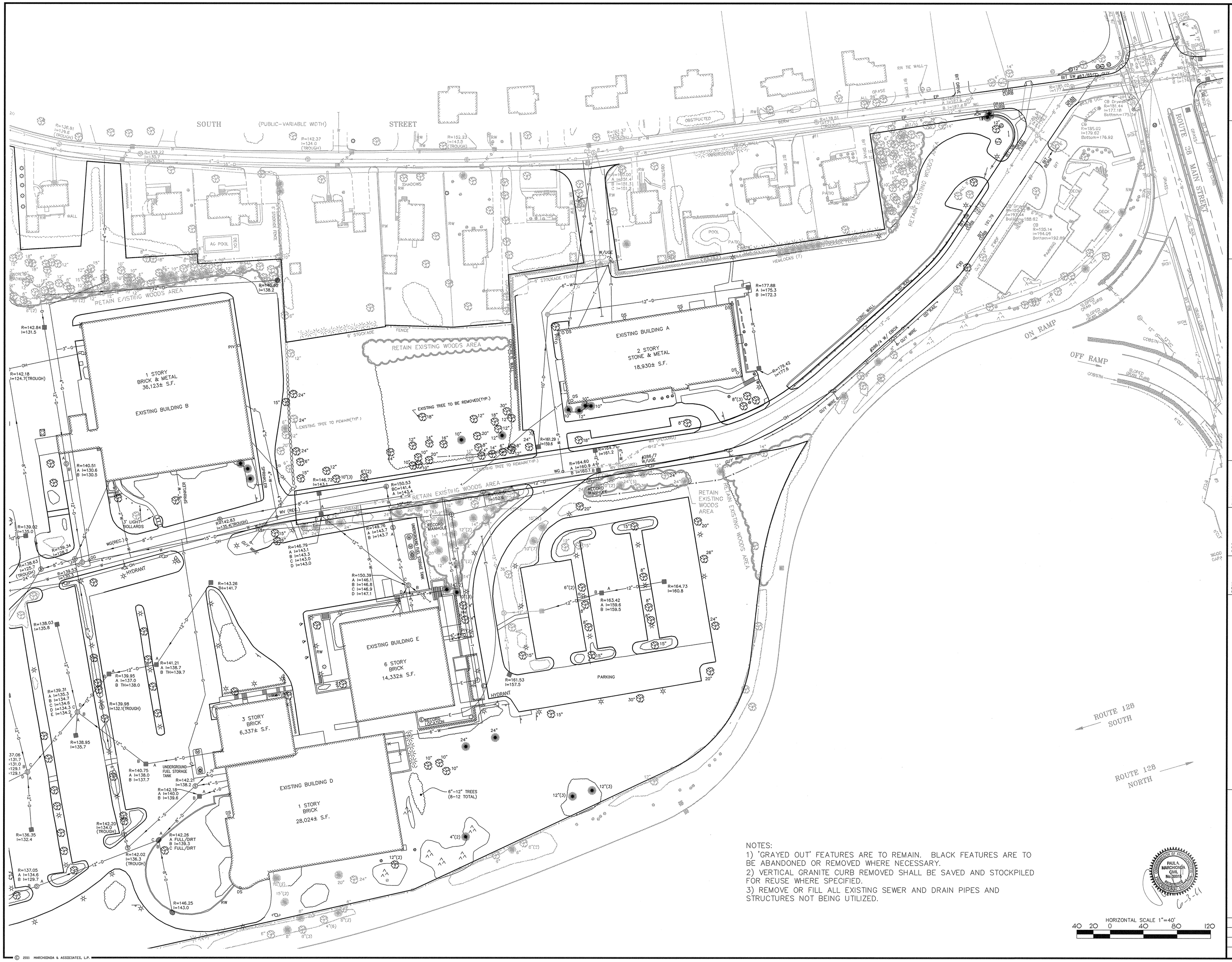

NOTES:
1) 'GRAYED OUT' FEATURES ARE TO REMAIN. BLACK FEATURES ARE TO BE ABANDONED OR REMOVED WHERE NECESSARY.
2) VERTICAL GRANITE CURB REMOVED SHALL BE SAVED AND STOCKPILED FOR REUSE WHERE SPECIFIED.
3) REMOVE OR FILL ALL EXISTING SEWER AND DRAIN PIPES AND STRUCTURES NOT BEING UTILIZED.

HORIZONTAL SCALE 1"=40'
40 20 0 40 80 120

PAUL A. MARCHIONDA CIVIL No. 20015 COMMONWEALTH OF MASSACHUSETTS PROFESSIONAL ENGINEER
6-3-11

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DEMOLITION PLAN

READING WOODS
in
READING, MA

Prepared For
PULTE HOMES OF NEW ENGLAND, L.L.C.
115 FLANDERS ROAD
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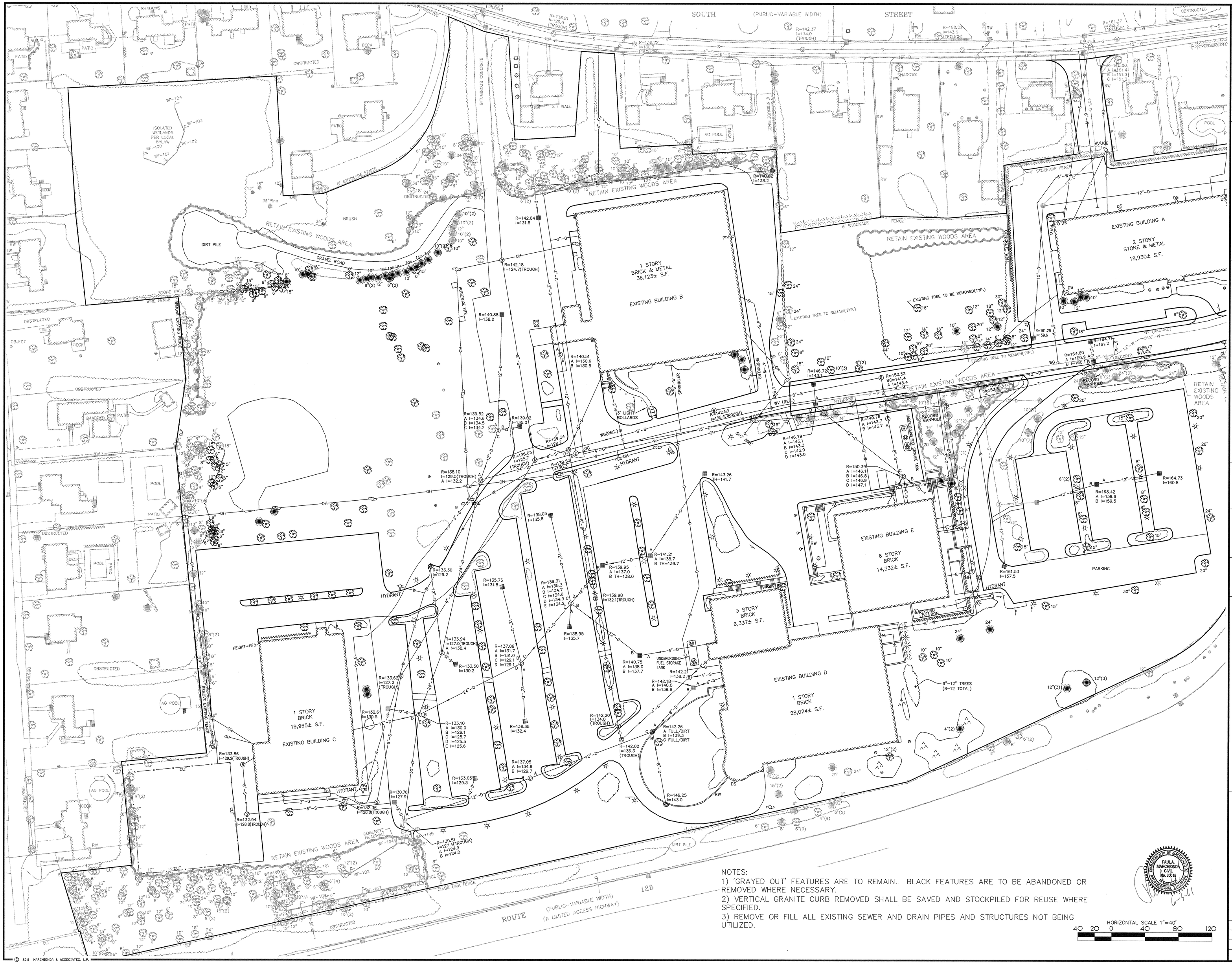

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HORIZONTAL SCALE 1"=40'

40 20 0 40 80 120

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DEMOLITION PLAN

READING WOODS

in

READING, MA

Prepared For

PULTE HOMES OF NEW ENGLAND, L.L.C.

115 FLANDERS ROAD
WESTBORO, MA 01581

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PAUL A. MARCHIONDA CIVIL No. 30015 REGISTERED PROFESSIONAL ENGINEER COMMONWEALTH OF MASSACHUSETTS

6-3-11

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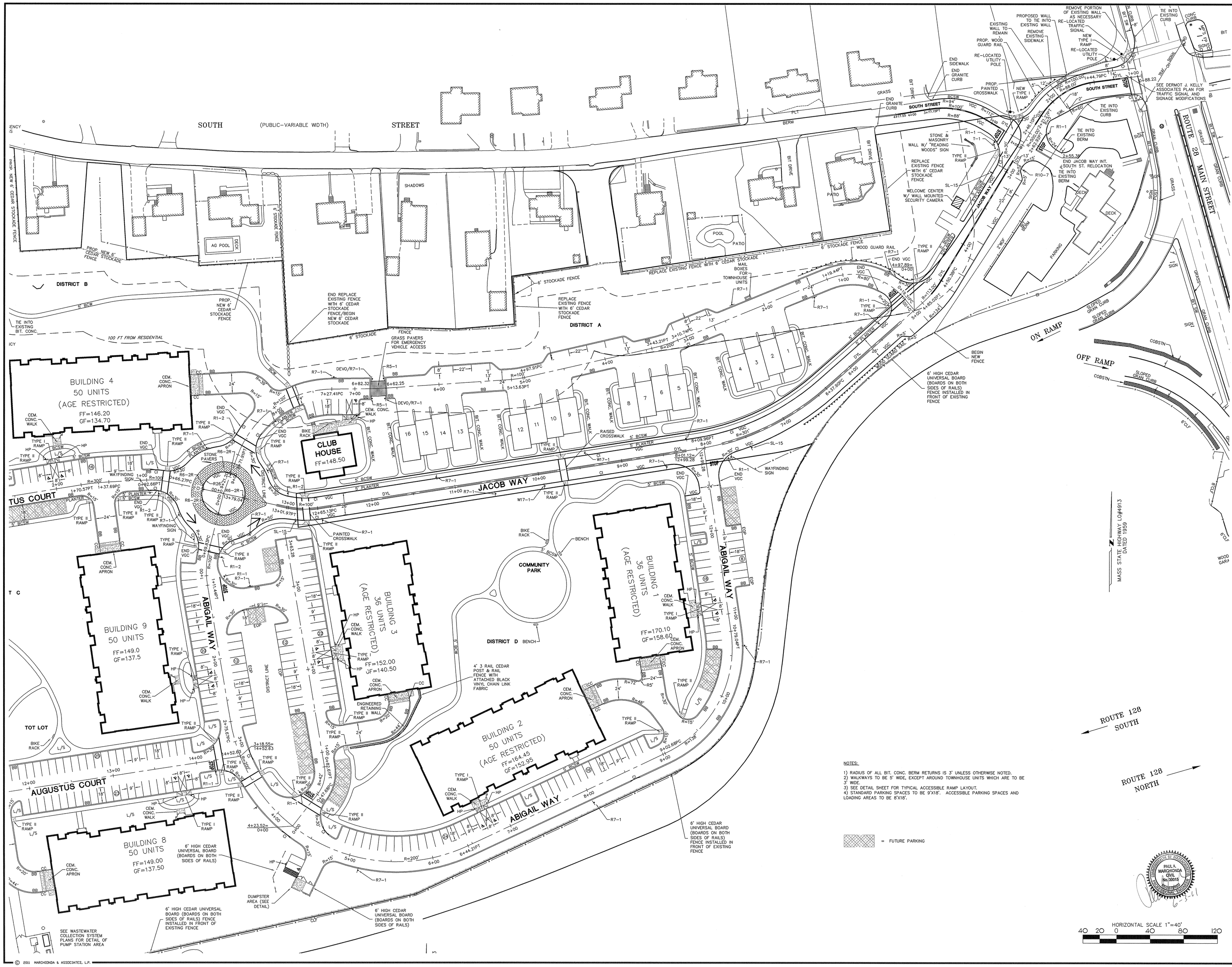

NOTES:

1) RADIUS OF ALL BIT. CONC. BERM RETURNS IS 3' UNLESS OTHERWISE NOTED.
2) WALKWAYS TO BE 5' WIDE, EXCEPT AROUND TOWNHOUSE UNITS WHICH ARE TO BE 3' WIDE.
3) SEE DETAIL SHEET FOR TYPICAL ACCESSIBLE RAMP LAYOUT.
4) STANDARD PARKING SPACES TO BE 9'X18'. ACCESSIBLE PARKING SPACES AND LOADING AREAS TO BE 8'X18'.

= FUTURE PARKING

HORIZONTAL SCALE 1"=40'
40 20 0 40 80 120

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LAYOUT AND MATERIALS PLAN

READING WOODS
in
READING, MA

Prepared For

PULTE HOMES OF NEW ENGLAND, L.L.C.
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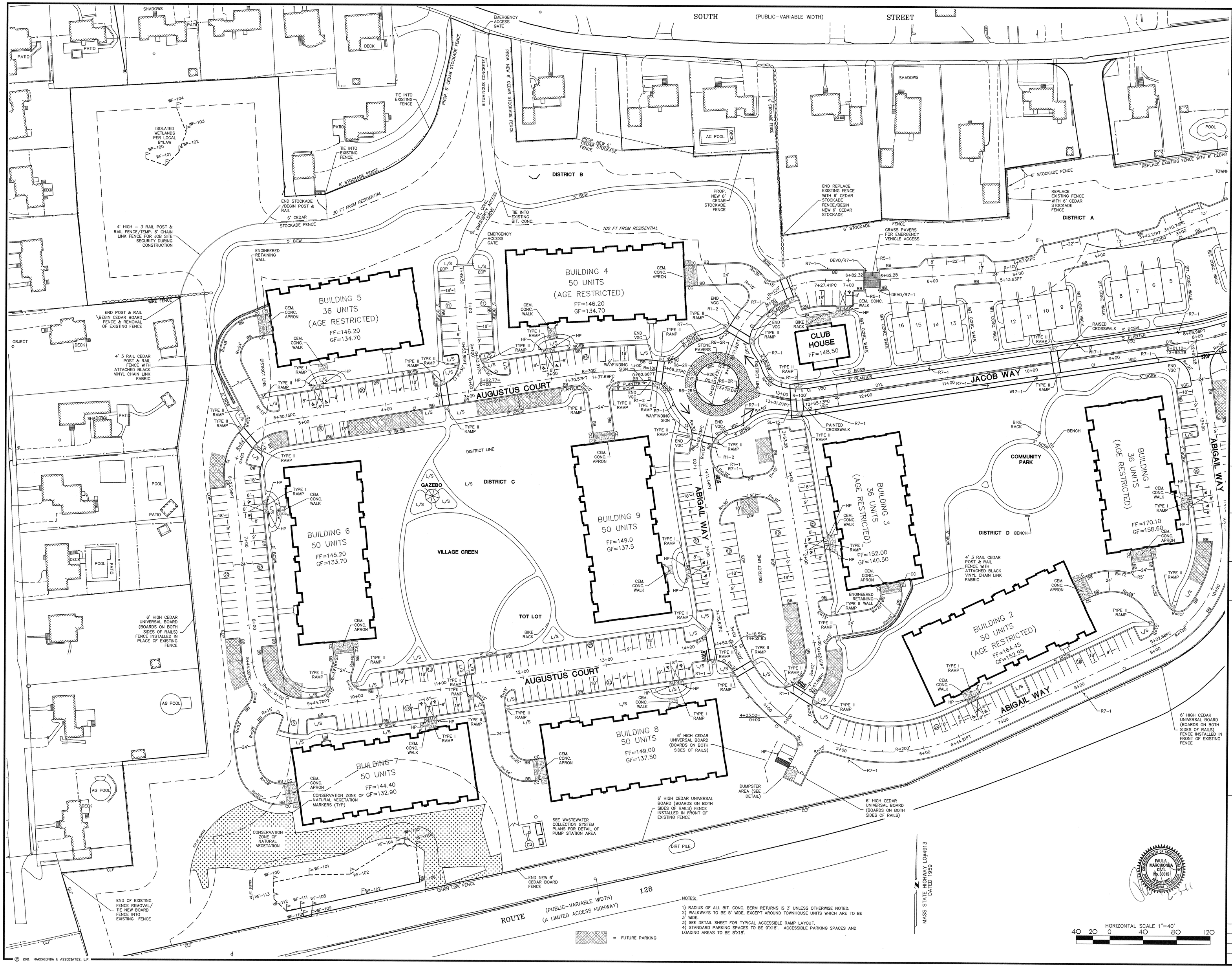

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LAYOUT AND MATERIALS PLAN

READING WOODS in READING, MA

Prepared For

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115 FLANDERS ROAD
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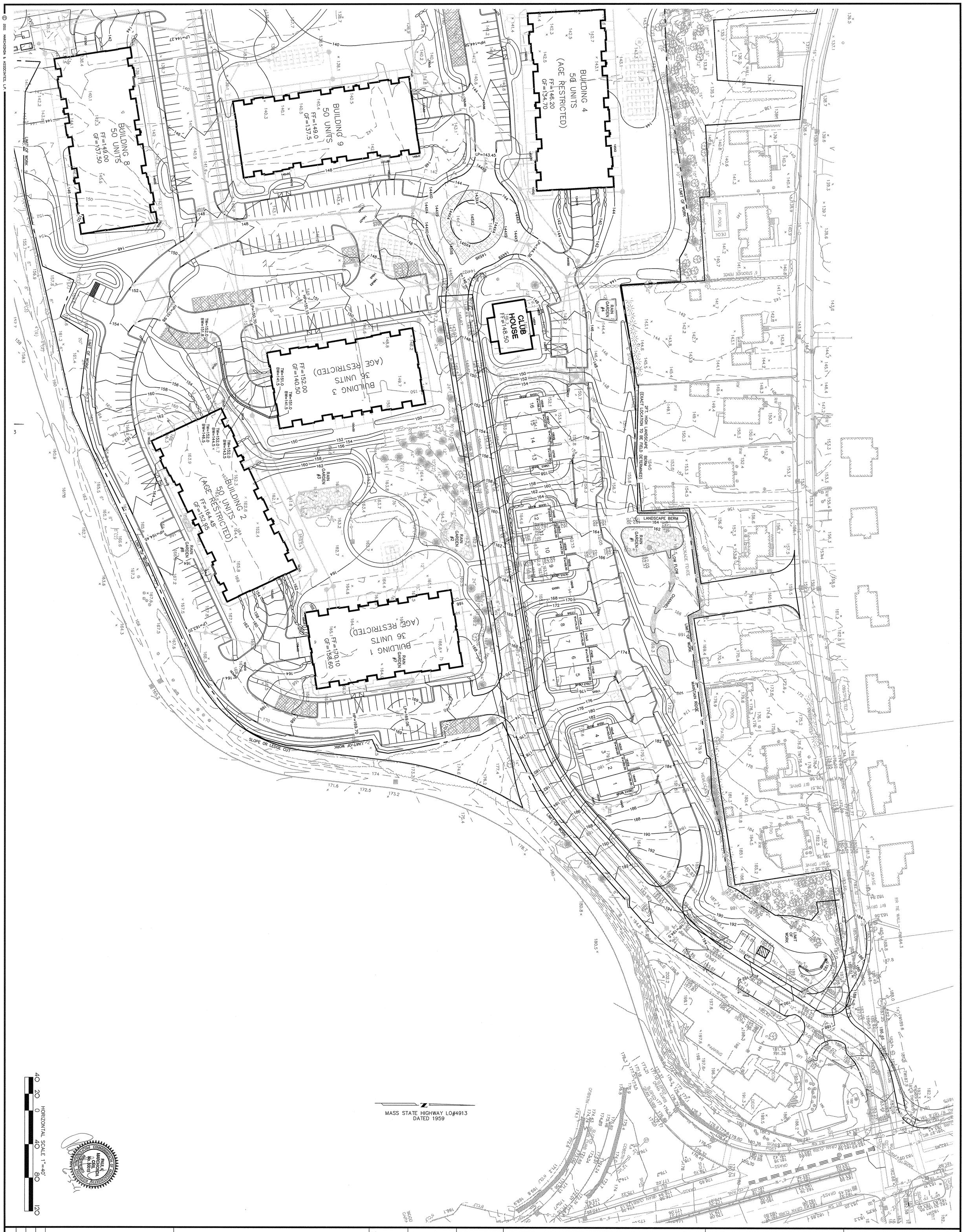

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GRADING PLAN

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in
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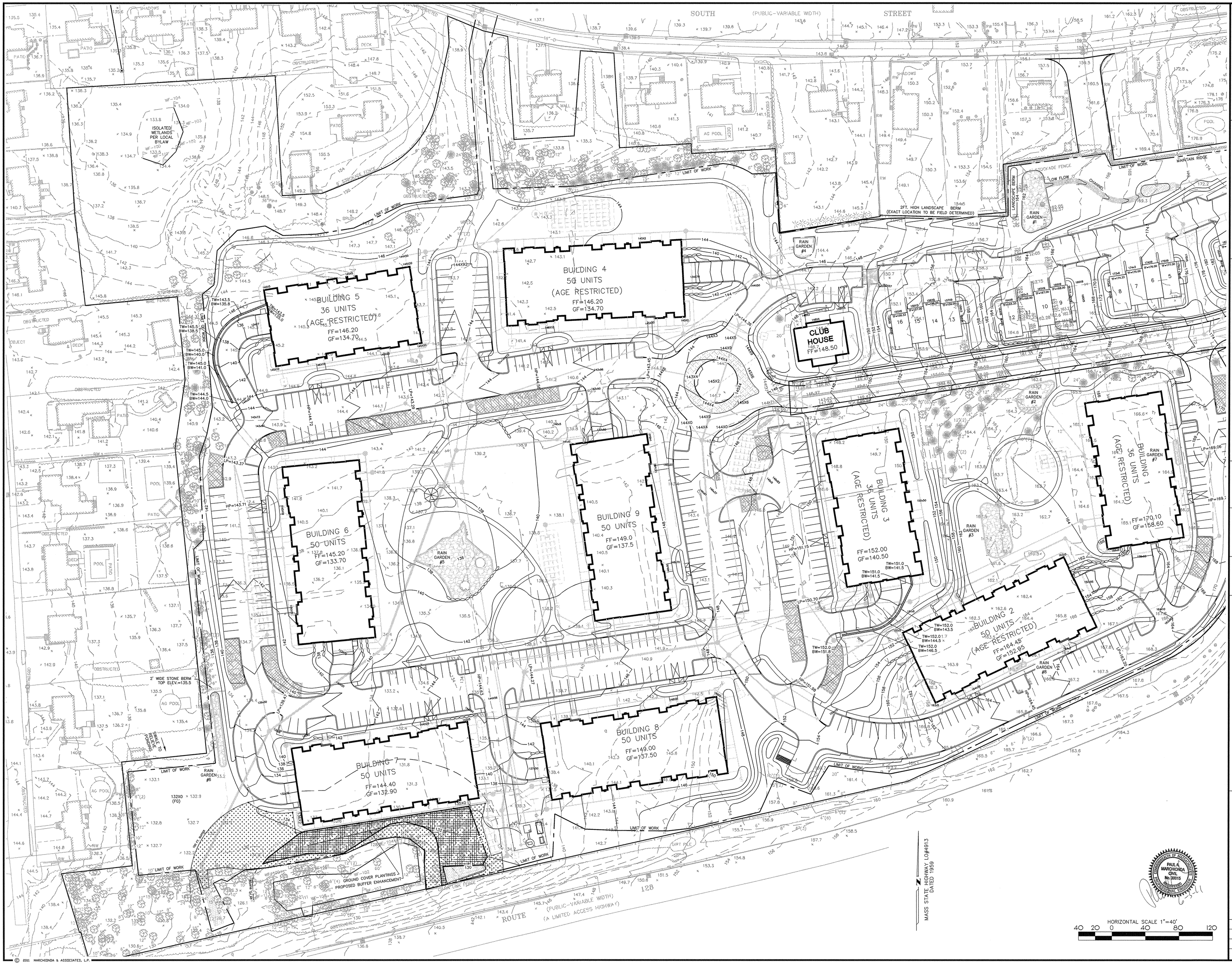

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GRADING PLAN

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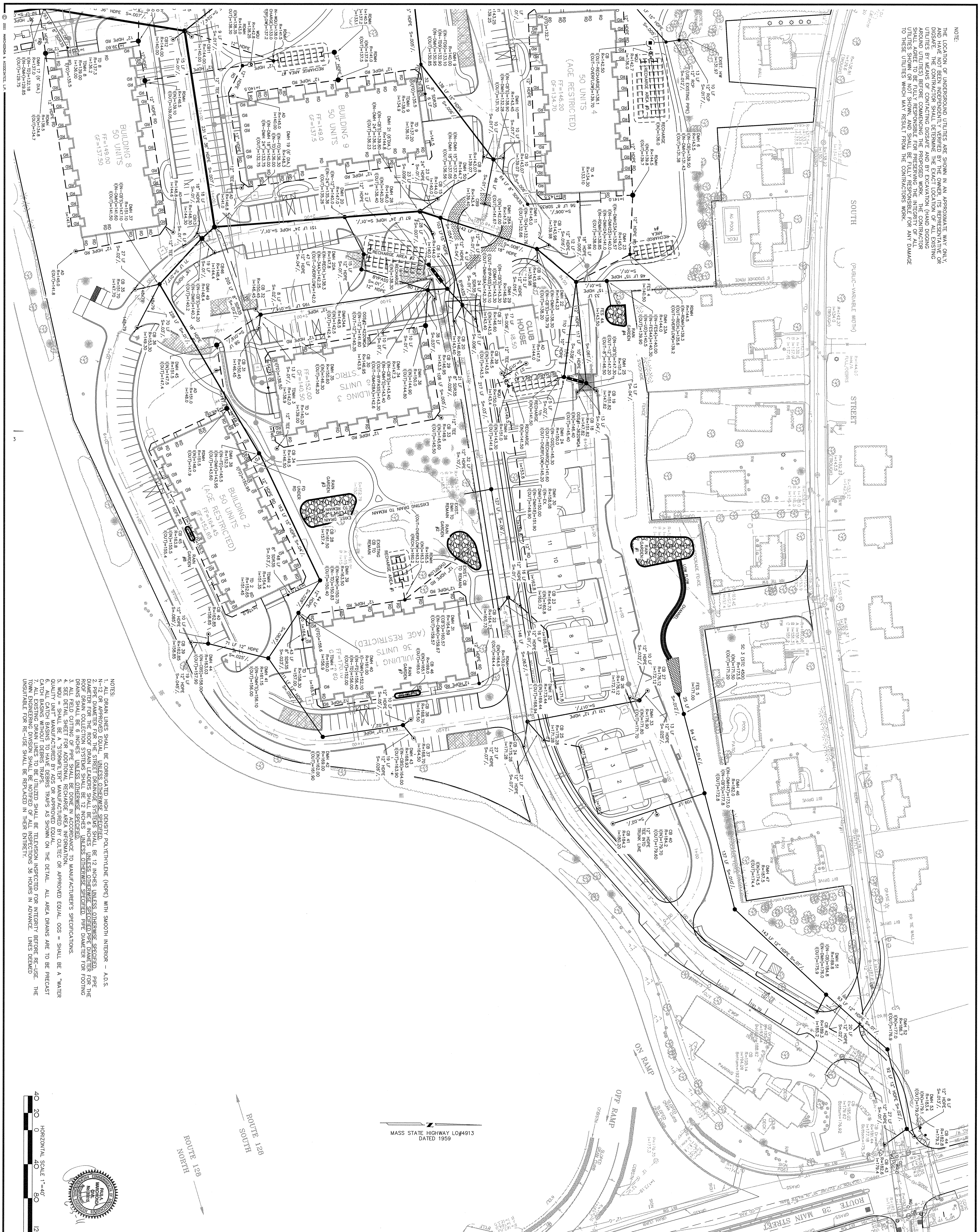

NOTE:

THE LOCATION OF UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY, AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER, ITS REPRESENTATIVE OR DIGSAFE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BY MEANS OF CONTACTING DIGSAFE AND BY EXCAVATION (HAND DIGGING AROUND UTILITIES) BEFORE COMMENCING THE PROPOSED WORK. THE CONTRACTOR SHALL AGREE TO BE FULLY RESPONSIBLE FOR PRESERVING THE INTEGRITY OF ALL UTILITIES SHOWN OR NOT SHOWN, AND SHALL BE FULLY RESPONSIBLE FOR ANY DAMAGE TO THESE UTILITIES WHICH MAY RESULT FROM THE CONTRACTORS WORK.

NOTES:

1. ALL DRAIN LINES SHALL BE CORRUGATED HIGH DENSITY POLYETHYLENE (HDPE) WITH SMOOTH INTERIOR – A.D.S. N-12 OR APPROVED EQUAL, UNLESS OTHERWISE SPECIFIED.
2. PIPE DIAMETER FOR THE STREET DRAINAGE SYSTEMS SHALL BE 12 INCHES UNLESS OTHERWISE SPECIFIED. PIPE DIAMETER FOR THE ROOF DRAIN LEADERS SHALL BE 6 INCHES UNLESS OTHERWISE SPECIFIED. PIPE DIAMETER FOR THE ROOF DRAIN COLLECTION SYSTEMS SHALL BE 12 INCHES UNLESS OTHERWISE SPECIFIED. PIPE DIAMETER FOR FOOTING DRAINS SHALL BE 6 INCHES UNLESS OTHERWISE SPECIFIED.
3. ALL FIELD CUTTING OF PIPE SHALL BE DONE IN ACCORDANCE TO MANUFACTURER'S SPECIFICATIONS.
4. SEE DETAIL SHEET FOR ADDITIONAL RECHARGE AREA INFORMATION.
5. WQU = SHALL BE A "STORMFILTER" MANUFACTURED BY CULTEC OR APPROVED EQUAL. OGS = SHALL BE A "WATER QUALITY UNIT" MANUFACTURED BY ADS OR APPROVED EQUAL.
6. ALL CATCH BASINS TO HAVE DEBRIS TRAPS AS SHOWN ON THE DETAIL. ALL AREA DRAINS ARE TO BE PRECAST CATCH BASINS WITHOUT DEBRIS TRAPS.
7. ALL EXISTING DRAIN LINES TO BE UTILIZED SHALL BE TELEVISION INSPECTED FOR INTEGRITY BEFORE RE-USE. THE TOWN ENGINEERING DIVISION SHALL BE NOTIFIED OF ALL INSPECTIONS 36 HOURS IN ADVANCE. LINES DEEMED UNSUITABLE FOR RE-USE SHALL BE REPLACED IN THEIR ENTIRETY.

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DRAINAGE PLAN

READING WOODS
in
READING, MA

Prepared For

PULTE HOMES OF NEW ENGLAND, L.L.C.
115 FLANDERS ROAD
WESTBORO, MA 01581

DRW: DSG: CHK:

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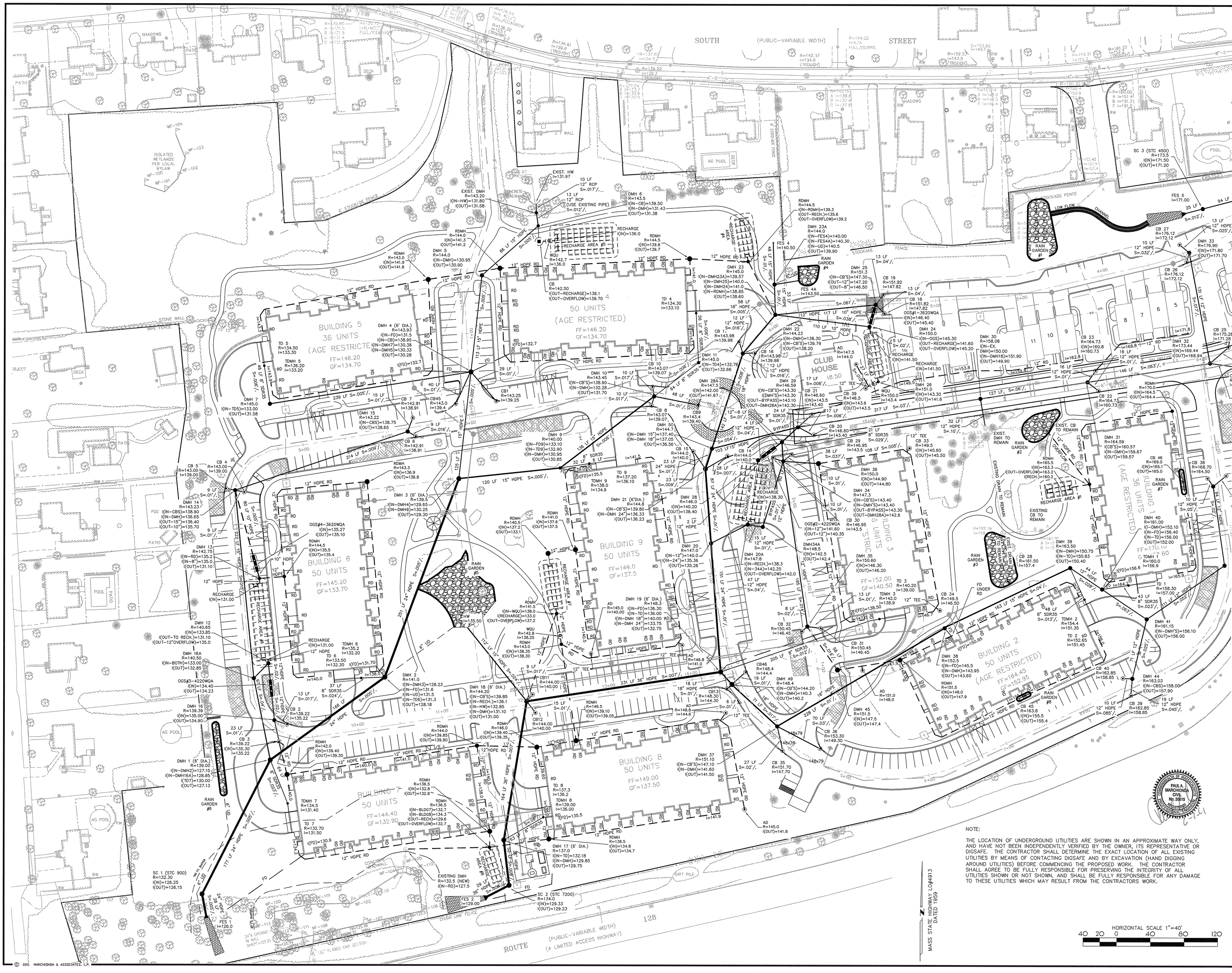

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