UTILITY CALCULATIONS

PER TITLE V (310 CMR 15.203) REGULATIONS:
COUNTRY CLUB, DINING ROOM SEAT, SNACK BAR, OR LUNCH ROOM: 10 GALLONS PER DAY PER SEAT.
COUNTRY CLUB, LOCKERS AND SHOWERS: 20 GALLONS PER DAY PER LOCKER.

PROPOSED BUILD OUT*:

33 SNACK BAR SEATS	@ 10 GPD/EA =	330 GPD
46 MENS LOCKERS	@ 20 GPD/EA =	920 GPD
46 WOMENS LOCKERS	@ 20 GPD/EA =	920 GPD
	=	2,170 GPD

PROPOSED POOL FILTRATION SYSTEM:
2-4,000 GALLON PER MONTH CYCLES
= 266 GPD

TOTAL FLOW TO SANITARY SYSTEM = 2,436 GPD

PROPOSED WATER USAGE:

AVERAGE DAILY DEMAND = SEWER FLOW/2 + 10% UNACCOUNTED LOSSES.
AVE. DEMAND = 2,436/2 + 10%
= 1,340 GPD

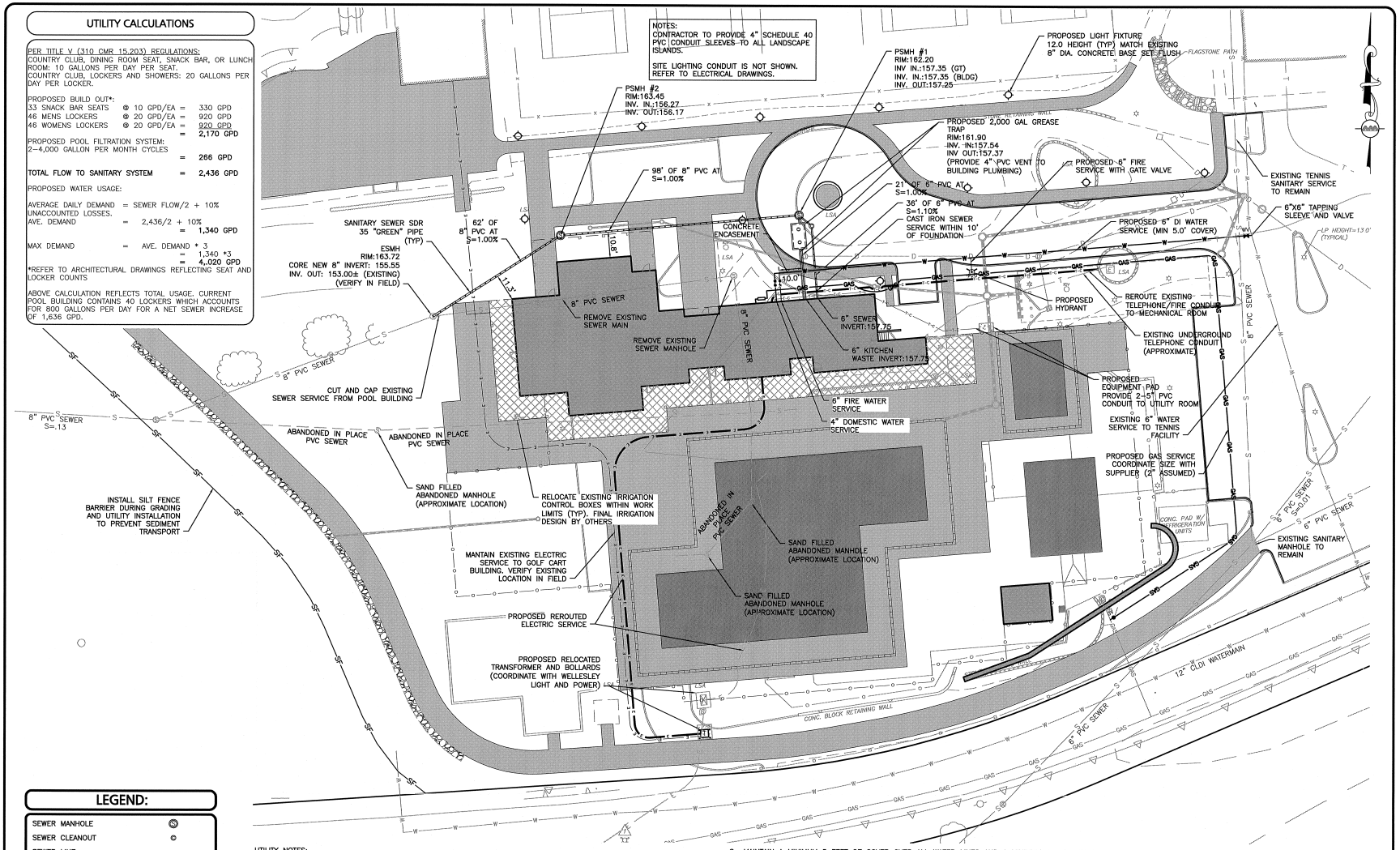
MAX DEMAND = AVE. DEMAND * 3
= 1,340 *3
= 4,020 GPD

*REFER TO ARCHITECTURAL DRAWINGS REFLECTING SEAT AND LOCKER COUNTS

ABOVE CALCULATION REFLECTS TOTAL USAGE. CURRENT POOL BUILDING CONTAINS 40 LOCKERS WHICH ACCOUNTS FOR 800 GALLONS PER DAY FOR A NET SEWER INCREASE OF 1,636 GPD.

NOTES:
CONTRACTOR TO PROVIDE 4" SCHEDULE 40 PVC CONDUIT SLEEVES TO ALL LANDSCAPE ISLANDS.

SITE LIGHTING CONDUIT IS NOT SHOWN. REFER TO ELECTRICAL DRAWINGS.



LEGEND:

- SEWER MANHOLE
- SEWER CLEANOUT
- SEWER LINE
- CONCRETE PIPE ENCASEMENT
- WATER LINE — W —
- WATER (FIRE SERVICE) — W-F —
- WATER (DOMESTIC SERVICE) — W-D —
- WATER VALVE
- HYDRANT
- GAS VALVE
- GAS LINE — GAS —
- GREASE TRAP
- LIGHT FIXTURE
- TRANSFORMER
- ELECTRICAL CONDUIT — E — E —
- TELE/CABLE CONDUIT — T/C — T/C —

UTILITY NOTES:

1. THE LATEST STANDARDS OF THE TOWN OF WELLESLEY CONSTRUCTION REGULATIONS SHALL BE FOLLOWED WHEN INSTALLING SANITARY SEWER, WATER LINE, AND STORM DRAIN WORK. ALL WORK WILL BE INSPECTED BY TOWN OF WELLESLEY PERSONNEL, AS NEEDED, AND ALL COSTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
2. THE CONTRACTOR SHALL REFER TO ARCHITECT'S PLANS AND SPECIFICATIONS FOR ACTUAL LOCATION OF ALL ROOF DRAIN LATERALS. UTILITY ENTRANCES TO INCLUDE SANITARY SEWER LATERALS, WATER SERVICE, AND ELECTRIC SERVICE. THE CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO AVOID CONFLICTS. THE CONTRACTOR SHALL COORDINATE WITH THE PROPER AGENCY THE LOCATION AND SCHEDULING OF UTILITY CONNECTIONS.
3. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED TO THE ENGINEER FOR RESOLUTION.
4. THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENTS OF ELECTRIC, TELEPHONE AND ANY OTHER UTILITY WITH THE UTILITY OWNER.
5. THE CONTRACTOR SHALL USE THE FOLLOWING PIPE MATERIALS:
   SEWER – PVC (POLYVINYL CHLORIDE) "GREEN PIPE"
   DRAIN – RCP (REINFORCED CONCRETE PIPE) UNLESS OTHERWISE NOTED SEE GRADING & DRAINAGE PLAN
   WATER – TYPE K COPPER (OR OTHERWISE ACCEPTABLE TO WELLESLEY DEPARTMENT OF PUBLIC WORKS)
6. BEFORE WORK BEGINS ON THE SEWER OR STORM DRAIN, THE CONTRACTOR WILL COORDINATE WITH THE TOWN FOR THE APPROPRIATE PERMIT AND INSPECTION FEE.
7. ALL UTILITY CONNECTIONS THROUGH THE BUILDING WALL SHALL BE BY MEANS OF FLEXIBLE JOINTS.
8. MAINTAIN A MINIMUM 5 FEET OF COVER OVER ALL WATER LINES AND A MINIMUM 4 FEET OF COVER OVER ALL SANITARY SEWER LINES.
9. A MINIMUM OF 10 FEET CLEAR HORIZONTALLY SHALL BE MAINTAINED BETWEEN WATER MAINS AND SANITARY SEWER MAINS AND/OR STORM DRAINS. WHENEVER CONDITIONS PREVENT A LATERAL SEPARATION OF AT LEAST 10 FEET TO A WATER MAIN, THE WATER MAIN SHALL BE LAID IN A SEPARATE TRENCH AND THE DIFFERENCE IN ELEVATION BETWEEN THE WATER MAIN AND THE SEWER MAIN SHALL BE AT LEAST 18 INCHES.
10. IN THE CASE THAT WATER MAINS CROSS SANITARY SEWER MAINS AND/OR STORM DRAINS AND ARE SEPARATED BY LESS THAN 18" OF VERTICAL CLEARANCE, THE CROSSING SHALL BE ENCASED IN CONCRETE FOR A MINIMUM OF 10 FEET HORIZONTALLY ON EITHER SIDE OF THE CROSSING OR CONTINUOUSLY WHERE THERE IS LESS THAN 10 FEET OF SEPARATION.
11. THE EROSION MEASURES SHOWN HEREON REPRESENT THE MINIMAL NECESSARY TO BE IMPLEMENTED DURING CONSTRUCTION. ADDITIONAL MEASURES MAY BE REQUIRED BASED ON FIELD CONDITIONS OR AS SPECIFIED IN THE ORDER OF CONDITIONS. IT IS THE DESIGN INTENT TO UTILIZE A SILT SOCK EROSION BARRIER OR APPROVED EQUAL.
12. LOCATIONS OF UNDERGROUND CONDUIT IS APPROXIMATE AND SHOWN BASED ON RECORD PLANS. EXACT LOCATIONS SHOULD BE VERIFIED PRIOR TO CONSTRUCTION.
13. SITE UTILITY LAYOUTS ARE SCHEMATIC. ADDITIONAL STRUCTURES AND JUNCTION POINTS MAY BE REQUIRED BY WELLESLEY LIGHT AND POWER OR VERIZON.

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)

1910

COMMONWEALTH OF MASSACHUSETTS
PHILIP L. CORDEIRO
CIVIL
No. 41783
REGISTERED PROFESSIONAL ENGINEER
12-4-12
PROFESSIONAL ENGINEER FOR ALLEN & MAJOR ASSOCIATES, INC.

REV.	DATE	DESCRIPTION

APPLICANT\OWNER:
WELLESLEY COUNTRY CLUB
300 WELLESLEY AVE.
WELLESLEY, MA 02481

PROJECT:
WELLESLEY COUNTRY CLUB
PROPOSED POOL
REPLACEMENT AND RENOVATION
WELLESLEY, MA

PROJECT NO.	1917-01	DATE:	DECEMBER 4, 2012
SCALE:	1"=20'	DWG. NAME:	UTILITIES
DESIGNED BY:	PLC	CHECKED BY:	PLC

PREPARED BY:

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DRAWING TITLE:	SHEET No.
PROPOSED UTILITIES PLAN	C-4

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