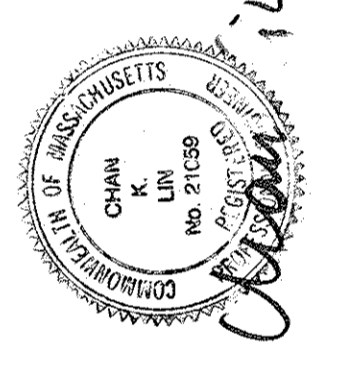
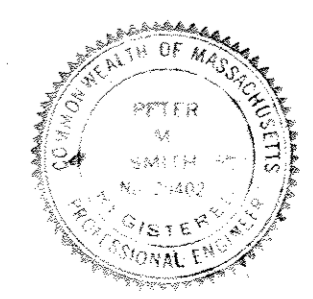


1	5/15	AMS	MLM	PNY	RECORD DRAWING
	Date	Dr. By	Ck. By	App. By	Description
					A P P R O V E D
					1/18/15 DATE



TOWN OF LEXINGTON, MASSACHUSETTS DEPARTMENT OF PUBLIC WORKS	DR. BY VVS	APP. BY RSL
NORTH LEXINGTON MAIN PUMPING STATION WEST ELEVATION & GENERAL NOTES	CK. BY JRL	FILE NO. 89-42
SCALE: AS NOTED	CONTRACT 92-1	LOB NO. 9065
CADD NO. P90028/E 3	SCALE: AS NOTED	CONTRACT 92-1



GENERAL NOTES

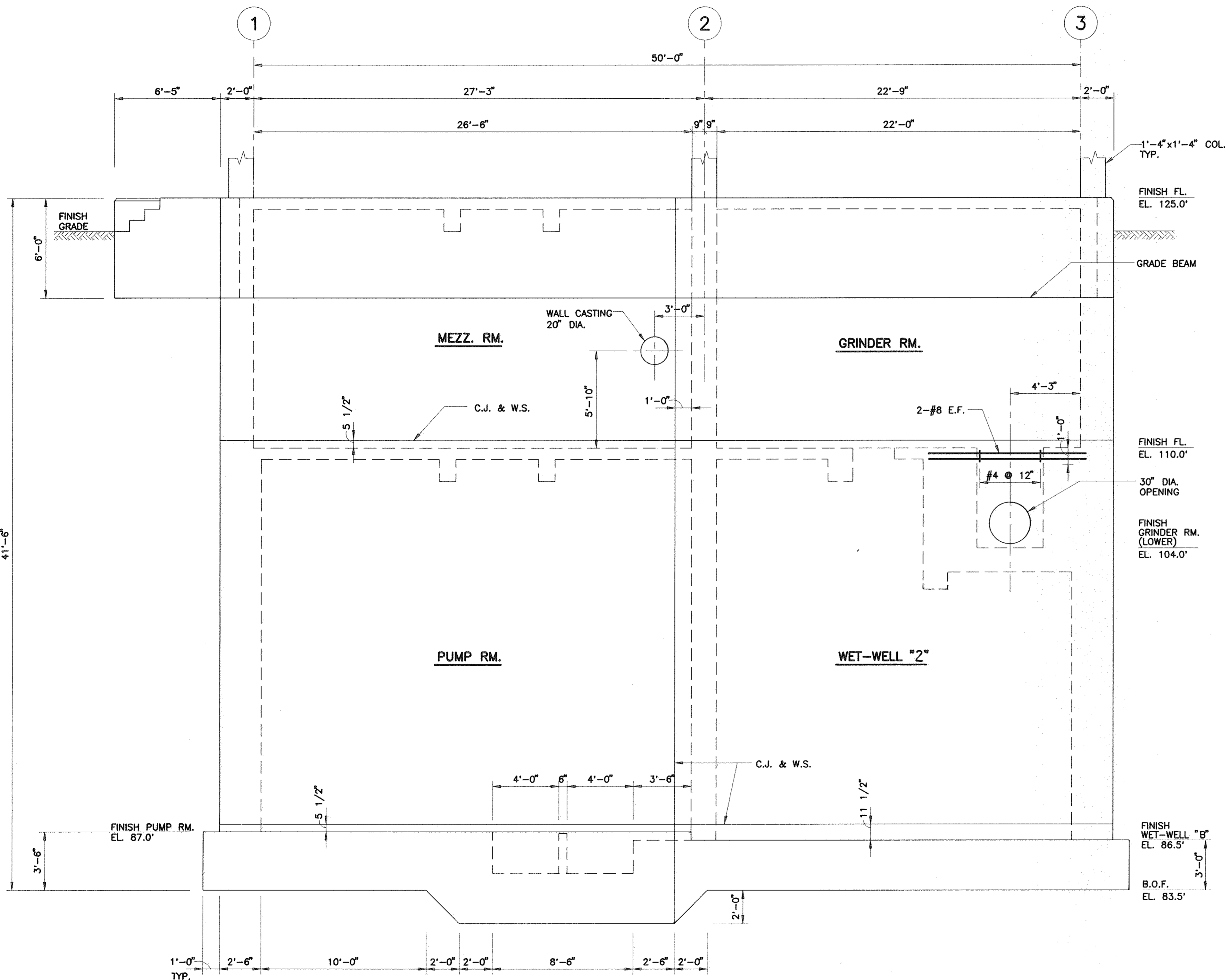
- GENERAL**
- STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL, HVAC, PLUMBING, SHOP DRAWINGS AND SPECIFICATIONS. CONSULT THESE DRAWINGS FOR LOCATIONS AND DIMENSIONS OF CHASES, OPENINGS, DEPRESSIONS, DRAIN PIPES, INSERTS, SLEEVES, BOLTS, FLOUR PITCHES, SLUICE GATE FRAMES AND OTHER PROJECT REQUIREMENTS.
 - THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL STRUCTURES AGAINST FLOTATION AND DAMAGE DURING CONSTRUCTION.
 - ALL DETAILS ARE TO BE CONSIDERED TYPICAL FOR SIMILAR CONDITIONS, UNLESS OTHERWISE NOTED.
 - EQUIPMENT PADS SHALL BE PROVIDED AS PER MANUFACTURERS' RECOMMENDATION. LOCATIONS AND SIZES TO SUIT EQUIPMENTS.
 - THE CONTRACTOR SHALL FURNISH AND INSTALL ALL ANCHOR BOLTS, GROUT, CONCRETE PADS AND REINFORCING STEEL REQUIRED FOR THE PROPER INSTALLATION OF ALL EQUIPMENT.
 - DURING CONSTRUCTION, CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF THE EXISTING BUILDING SO AS NOT TO CAUSE ANY DAMAGE. THE EXISTING PUMP STATION IS TO REMAIN OPERATIONAL DURING CONSTRUCTION.
 - PROVIDE NINE-INCH PVC WATERSTOPS IN ALL CONSTRUCTION JOINTS WHERE INDICATED ON THE DRAWINGS AND BETWEEN DRY AREA AND ANY SOURCE OF LIQUID INCLUDING THE GROUND.

- FOUNDATION**
- FOUNDATION SHALL REST ON SOIL HAVING MINIMUM BEARING CAPACITY OF 2 TONS PER SQUARE FOOT.
 - ALL BACKFILL UNDER STRUCTURAL SLABS AND FOOTINGS SHALL BE COMPACTED TO 95 PERCENT OF MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-1557 STANDARD.
 - REMOVE ALL UNSUITABLE ORGANIC MATERIALS OVER BUILDING LIMIT. SEE GEOTECHNICAL REPORT FOR LIMIT OF EXCAVATION.
 - ALL EXCAVATION AND FOUNDATION CONSTRUCTION IS TO BE IN THE DRY. NO CONCRETE SHALL BE PLACED ON WATER OR OVER FROZEN SOIL.
 - THE CONTRACTOR SHALL NOT BACKFILL AGAINST WALLS UNTIL SUPPORTING SLABS HAVE BEEN CAST AND CONCRETE HAS GAINED ITS 28 DAYS STRENGTH AGAINST CANTILEVER WALLS SHALL NOT BE PLACED UNTIL CONCRETE HAS GAINED ITS 28 DAYS STRENGTH.
 - ALL EXTERIOR CONSTRUCTION SHALL BE CARRIED DOWN A MINIMUM OF 4 FEET BELOW FINISHED EXTERIOR GRADE, UNLESS OTHERWISE SHOWN ON THE PLANS.

- CONCRETE**
- CONCRETE CONSTRUCTION AND REINFORCING BAR DETAILS SHALL CONFORM TO THE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACT 318-89) AND CONCRETE SANITARY ENGINEERING STRUCTURES (ACI COMMITTEE 350R).
 - ALL CAST IN PLACE CONCRETE SHALL BE AIR ENTRAINED AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 LB. PER SQUARE INCH AT 28 DAYS.
 - REINFORCING STEEL SHALL BE GRADE 60, DEFORMED BARS CONFORMING TO ASTM A615.
 - MINIMUM SPLICE LENGTH AND DEVELOPMENT LENGTH SHALL CONFORM TO ACI 318-89.
 - FOR CONCRETE BEAMS AND GIRDERS DEEPER THAN 23 INCHES, THE CONTRACTOR SHALL PROVIDE CONTINUOUS #5 HORIZONTAL WEB BARS AT NOT MORE THAN 12 INCHES ON CENTERS ON EACH SIDE UNLESS OTHER DETAILS ARE INCLUDED IN THE BEAM SCHEDULE.
 - PROVIDE EXTRA REINFORCEMENT ALONG EACH SIDE OF OPENINGS, AS SHOWN IN TYPICAL DETAILS ON THE DRAWINGS.
 - ALL CONCRETE BASE SLABS, WALLS, AND FLOORS SHALL BE BUILT SO AS TO MINIMIZE THE EFFECTS OF SHRINKAGE BY CASTING ALTERNATE SECTIONS. ADJACENT SECTIONS MAY BE CAST WHEN PREVIOUSLY PLACED SECTION HAS CURED FOR 72 HOURS AFTER ITS INITIAL SET.
 - EXPOSED EDGES OF CONCRETE ELEMENTS SUCH AS COLUMNS, PILASTERS, BEAMS, CURBS AND EQUIPMENT PADS SHALL HAVE A 3/4" CHAMFER, UNLESS STATED OTHERWISE.
 - MAIN REINFORCING STEEL SHALL BE PLACED AND MAINTAINED AT MINIMUM CLEAR DISTANCES FROM SURFACE OF CONCRETE AS FOLLOWS:
CAST AGAINST EARTH: FOOTING AND SLABS ----- 3"
EXPOSED TO EARTH, WEATHER, LIQUID, OR MOISTURE ----- 2"
BEAMS, GIRDERS AND COLUMNS ----- 2"
 - CONCRETE FILL SPECIFIED ON DESIGN DRAWINGS SHALL BE THE SAME STRENGTH AS STRUCTURAL CONCRETE. TEMPERATURE REINFORCINGS OF #4@12" O.C. EACH WAY SHALL BE PROVIDED AT ALL EXPOSED FACE OF CONCRETE FILL AND SHALL BE DOWELED INTO THE STRUCTURAL SLABS OR WALLS, UNLESS SHOWN OTHERWISE.
 - A FLANGE JOINT SHALL BE PROVIDED FOR ALL PIPES WITH DIAMETER GREATER THAN OR EQUAL TO 6 INCHES, WHILE A PIPE SLEEVE SHALL BE PROVIDED FOR ALL PIPES WITH DIAMETER LESS THAN 6 INCHES.

- MASONRY**
- CONCRETE MASONRY UNITS SHALL CONFORM TO THE SPECIFICATIONS FOR THE DESIGN AND CONSTRUCTION OF CONCRETE MASONRY BY THE NATIONAL CONCRETE MASONRY ASSOCIATION.
 - ALL CONCRETE MASONRY UNITS SHALL BE TYPE N1 AS PER ASTM C90 AND SHALL HAVE MINIMUM COMPRESSIVE STRENGTH OF 1000 PSI OVER GROSS AREA. MORTAR SHALL BE TYPE S AS PER ASTM C476 OR C270.
 - GROUT SHALL HAVE MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AND SHALL HAVE A MINIMUM OF 8 INCHES SLUMP AS PER ASTM C143.
 - PROVIDE #5 VERTICAL BARS AT 24" O.C. FOR 8" EXTERIOR CMU WALL FULLY GROUTED IN CELL. HORIZONTAL REINFORCINGS TO BE 3/16" DIA. HEAVY DUTY TRUSS TYPE TIES AT 16" O.C. VERTICALLY.
 - METAL TIES AND ANCHORS SHALL BE OF CORROSION RESISTANT METAL OR SHALL BE COATED WITH CORROSION RESISTANT METAL, SUCH AS COPPER, ZINC, OR OTHER METAL HAVING EQUIVALENT OR BETTER CORROSION RESISTANT QUALITIES.
 - PROVIDE LINTELS OVER ALL MASONRY OPENINGS. ONE ANGLE FOR EACH 4" OF WALL THICKNESS. L 4"x3-1/2"x5/16" FOR SPAN UP TO 5'-0" AND L 5"x3-1/2"x5/16" FOR SPANS 5'-0" TO 7'-0" UNLESS NOTED OTHERWISE. LINTELS TO HAVE 8" MINIMUM BEARING ON EACH END.
 - OPENINGS IN WALLS SHALL BE REINFORCED ON BOTH SIDES WITH A MINIMUM OF 2#5 VERTICAL BARS ON BOTH SIDES.

- STRUCTURAL STEEL**
- ALL STRUCTURAL STEEL SHALL BE ASTM A36. DETAIL AND ERECT IN ACCORDANCE WITH THE MANUAL OF STEEL CONSTRUCTION (NINTH EDITION, 1989) BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC).
 - ALL WELDING WILL CONFORM TO THE AWS D1.1, STRUCTURAL WELDING CODE. ALL WELDING ELECTRODES WILL BE E70XX.
 - FIELD CONNECTIONS SHALL BE MADE WITH 3/4" DIA. A325-X HIGH STRENGTH BOLTS UNLESS OTHERWISE NOTED. ONE HARDENED WASHER SHALL BE INSTALLED UNDER ELEMENT TURNED IN TIGHTENING.
 - ALL STRUCTURAL STEEL SHALL HAVE ONE COAT OF SHOP PAINT, EXCEPT IN THE VICINITY OF AREA TO BE FIELD WELDED.
 - ALUMINUM GRATING SHALL BE 2" x 3/16" FOR SPAN UP TO 3'-6", 2" x 3/16" FOR SPAN UP TO 5'-0" CAPABLE OF SUPPORTING 250 PSF OF LIVE LOAD WITH MAXIMUM DEFLECTION OF 1/240 OF SPAN. SUBMIT FOR APPROVAL SUPPORT LAYOUT FOR THE GRATING.



NOTE:
WALL REINFORCEMENT IS IDENTICAL TO EAST ELEVATION, EXCEPT CONCEALED BEAM REBARS.

WEST ELEVATION
SCALE: 1/4"=1'-0"

DESIGN LOADS

LATERAL EARTH PRESSURE:	
DRY SOIL	60 PSF/FT
IMMERSED SOIL	95 PSF/FT
SURCHARGE	2'-0" SOIL
DESIGN FLOOD LEVEL	ELEV. 123.0'
ROOF (BASIC SNOW LOAD)	40 PSF
WIND LOAD	21 PSF
SEISMIC	ZONE 2
STAIR AND GRATING	250 PSF
FLOOR	250 PSF
HOIST A	2 TON
HOIST B	1.5 TON
EQUIPMENT	AS PER MANUFACTURER'S

RECORD DRAWING

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