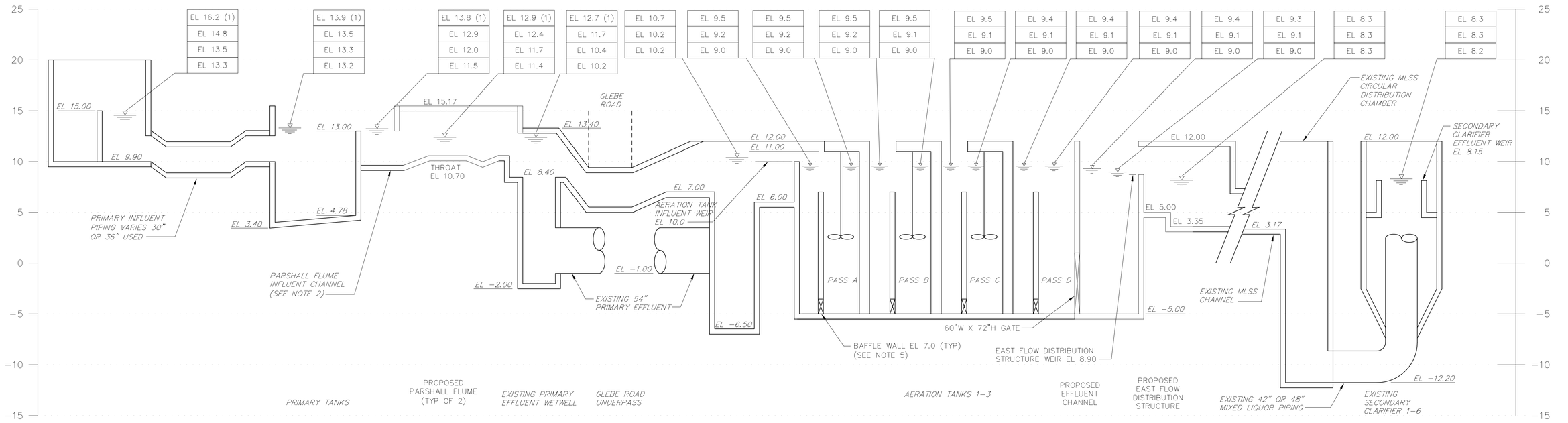
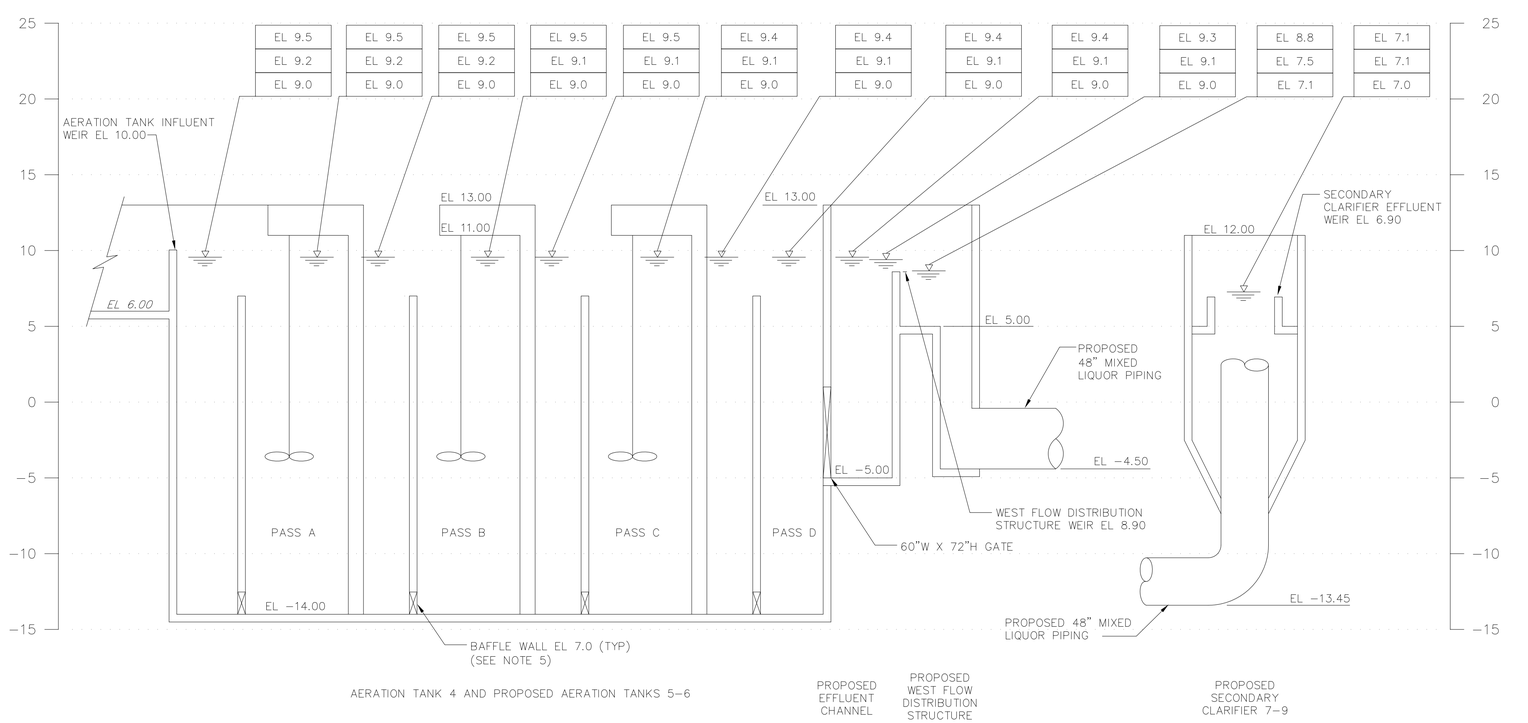


FLOW CONDITION	INFLUENT FLOW (MGD)	RECYCLE FLOW (MGD)	RAS (MGD)	UNITS IN OPERATION/UNITS AVAILABLE			
				PARSHALL FLUME	PRIMARY CLARIFIER	AERATION TANK	SECONDARY CLARIFIER
MAX 7 DAY	88	8	60.48	2/2	8/8	5/6	8/9 (4)
DESIGN AVERAGE	40	4	22	2/2	8/8	6/6	9/9
MINIMUM	22.4	1.4	11.9	2/2	8/8	6/6	9/9

NOTES:

1. FOR THE PURPOSE OF THE HYDRAULIC DESIGN OF THE PARSHALL FLUMES, IT WAS ASSUMED THAT 130 MGD WOULD BE SENT ENTIRELY TO THE AERATION TANKS AND ALL PASSES WOULD BE IN SERVICE DURING THIS EXTREME EVENT. IT SHOULD BE NOTED THAT NO PROVISIONS CURRENTLY EXIST FOR DELIVERING 130 MGD THROUGH THE SECONDARY SYSTEMS AND NO PROCESS EVALUATIONS HAVE BEEN PERFORMED.
2. EXISTING PARSHALL FLUME INFLUENT CHANNEL BOTTOM EL 9.60. PROPOSED PARSHALL FLUME INFLUENT CHANNEL BOTTOM EL 9.17.
3. THE EXISTING EFFLUENT CHANNEL BOTTOM ELEVATION FOR AERATION TANK 4 WILL BE RAISED FROM EL −14.00 TO EL −5.00.
4. NEW 140'−0" DIAMETER TANK OUT OF SERVICE.
5. AERATION TANK BAFFLE WALL TYPICAL FOR ALL PASSES. PASS "A, B AND C" HAVE THREE BAFFLE WALLS EACH AND PASS "D" HAS ONE.

EL XX.X — DENOTES WATER SURFACE ELEVATION AT MAX 7−DAY
EL XX.X — DENOTES WATER SURFACE ELEVATION AT DESIGN AVERAGE
EL XX.X — DENOTES WATER SURFACE ELEVATION AT MINIMUM



NO.	ISSUED FOR	DATE	BY
A	CONFORMED DOCUMENT	9−01−06	AJS

DESIGNED MLS/GJD
DRAWN JRM/RWC
CHECKED MLS
PROJ.ENGR. JPN
CAD REF. NO. 2G009000A
APPROVED

HORIZONTAL DATUM IS REFERENCED TO VIRGINIA STATE GRID, NORTH AMERICAN DATUM 1983 (NAD 83)

VERTICAL DATUM IS REFERENCED TO NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29)

COMMONWEALTH OF VIRGINIA — CRAIG MURRAY — Cert. No. 032296 — PROFESSIONAL ENGINEER

MALCOLM PIRNIE
Independent Environmental Engineers, Scientists & Consultants
1101 Wilson Boulevard Suite 1400
Arlington, VA 22209

ARLINGTON COUNTY — VIRGINIA

ARLINGTON COUNTY WATER POLLUTION CONTROL PLANT

UPGRADE AND EXPANSION PHASE 7B

GENERAL HYDRAULIC PROFILE

NOT TO SCALE

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.

DATE: DECEMBER 2005

DRAWING NUMBER G00−12

SHEET . OF

User:DESAIR Spec:ARLINGTON CNTY Files:\\PR−03\DEN\2G009000A.DWG Scale:1:1 Date:08/10/2006 Time:13:28 Layout:G00−12