GRADING & DRAINAGE PLAN

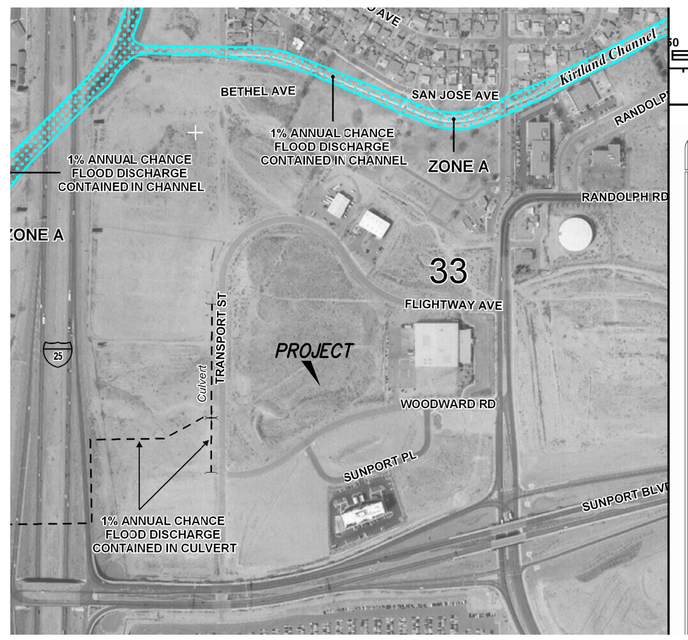
THE LIGHT INDUSTRIAL ZONED PROJECT IS LOCATED IN THE DEVELOPED SUNPORT PARK SUBDIVISION (AIRPORT AREA) APPROX. 2 MILES SOUTH OF THE DOWNTOWN CORE OF ALBUQUERQUE, NM. THE GRADING & DRAINAGE SCHEME HEREON IS IN COMPLIANCE WITH THE BERNALILLO COUNTY FLOOD HAZARD ORDINANCE, NO.88-46, AND THE CITY STORM DRAINAGE ORDINANCE. THE PLAN IS REQUIRED IN ORDER TO FACILITATE THE OWNER'S REQUEST FOR EXCAVATION AND GRADING PERMIT. THE PLAN SHOWS:

1. EXISTING CONTOURS, AND SPOT ELEVATIONS AND EXISTING DRAINAGE PATTERNS AND EXISTING IMPROVEMENTS: INCLUDING SURFACE UTILITIES/EASEMENTS.
2. PROPOSED IMPROVEMENTS: APPROX. 2 ACRES OF GRADING FOR SPECULATIVE DEVELOPMENT, NEW GRADE ELEVATIONS, PERIMETER SILT FENCING AND REVEGETATION
3. CONTINUITY BETWEEN EXISTING AND PROPOSED ELEVATIONS.
4. QUANTIFICATION AND ACCEPTANCE OF UPSTREAM OFF-SITE FLOWS WHICH CONTRIBUTE TO THE DEVELOPED FLOWS GENERATED BY THE IMPROVEMENTS.

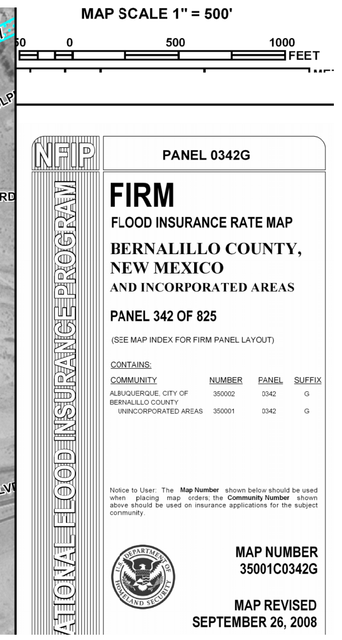
THE PURPOSE OF THE PLAN IS TO ESTABLISH CRITERIA FOR CONTROLLING STORM RUNOFF AND EROSION, AND ESSENTIALLY ALLOWING HISTORIC FLOWS TO CONTINUE TO DRAIN THROUGH THE PROPERTY. PRESENTLY, THE SITE IS BOUNDED ON ALL SIDES BY UNDEVELOPED PROPERTY. WOODWARD RD ON THE SOUTH IS AN IMPROVED ASPHALT MAJOR LOCAL ROADWAY MAINTAINED BY THE CITY OF ALBUQUERQUE. THE SITE CURRENTLY DRAINS AT APPROXIMATELY 7% TO TO THE WEST.

HISTORICAL SITE RUNOFF OUTFALL LOCATIONS WILL REMAIN UNCHANGED. THE SITE IS NOT IMPACTED ADVERSELY BY ANY OFF-SITE DRAINAGE FLOWS.

FREE DISCHARGE OF DEVELOPED FLOW IS NOT ACCEPTABLE SINCE THE SITE LIES WITHIN THE OVERALL MASTERPLAN FOR THE SUNPORT PARK REGIONAL AREA. RUNOFF WILL NOT BE ALLOWED TO CONCENTRATE AT THE PROPERTY BOUNDARY.



FIRM MAP



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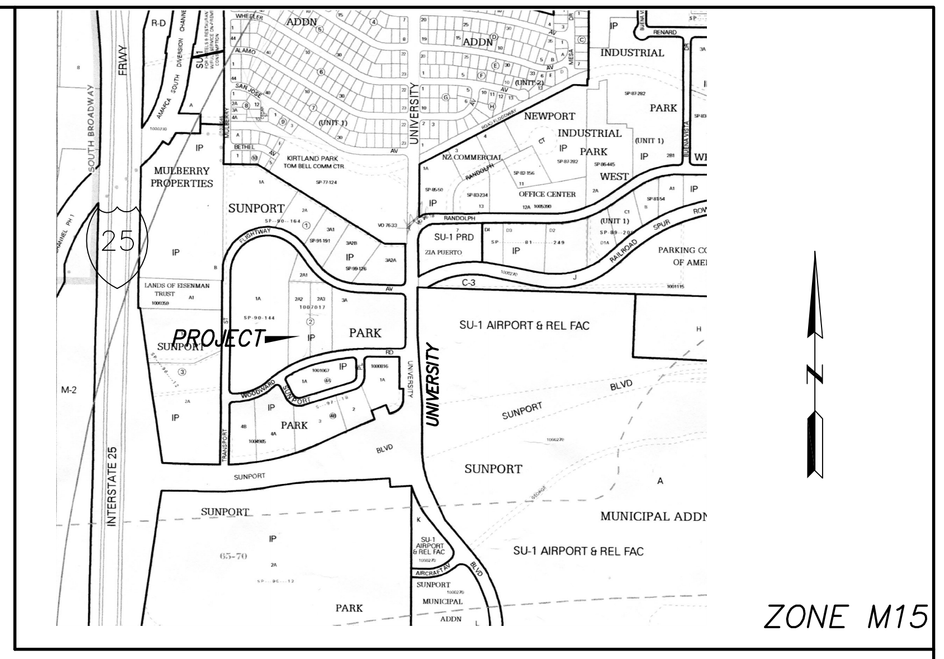
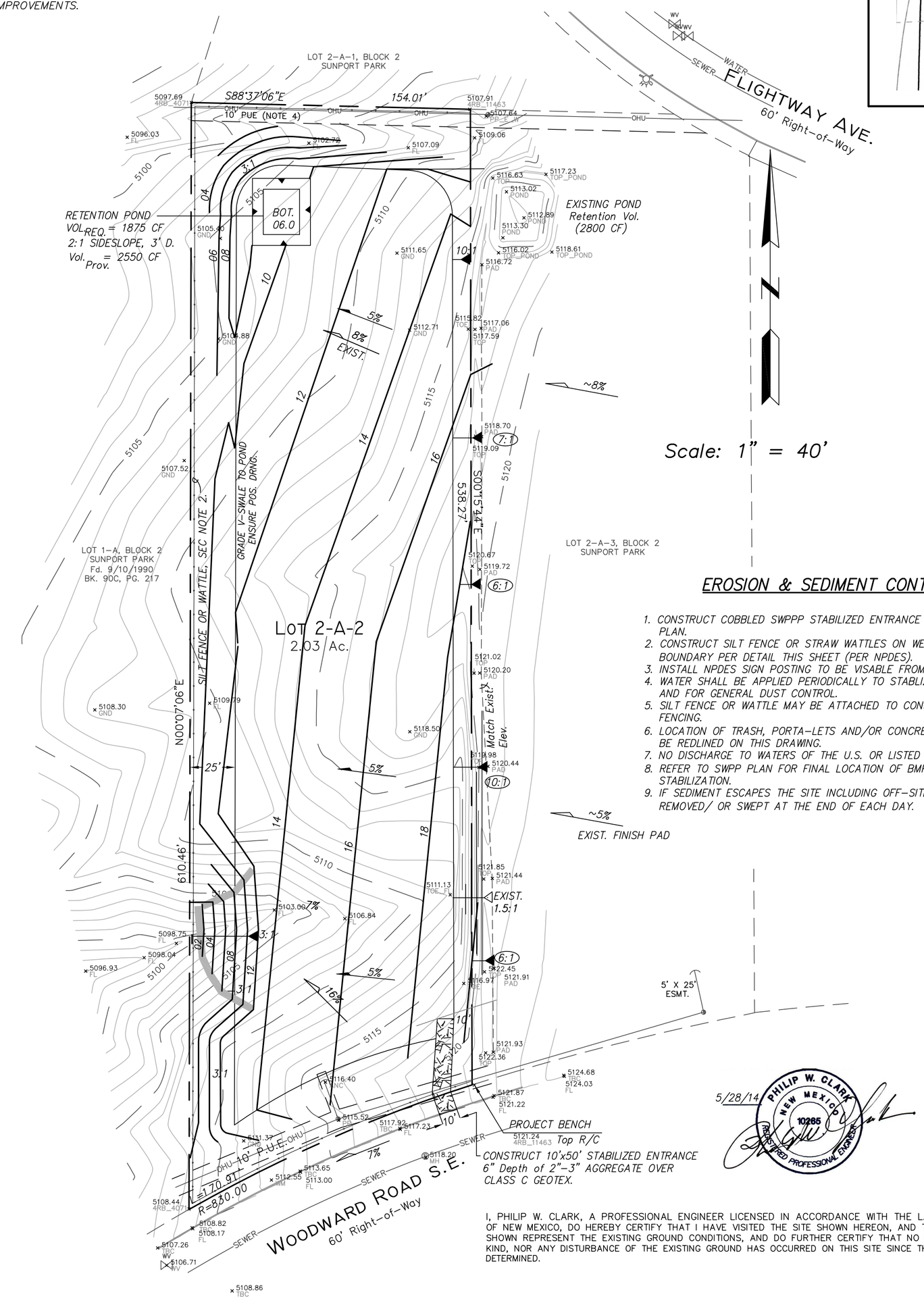


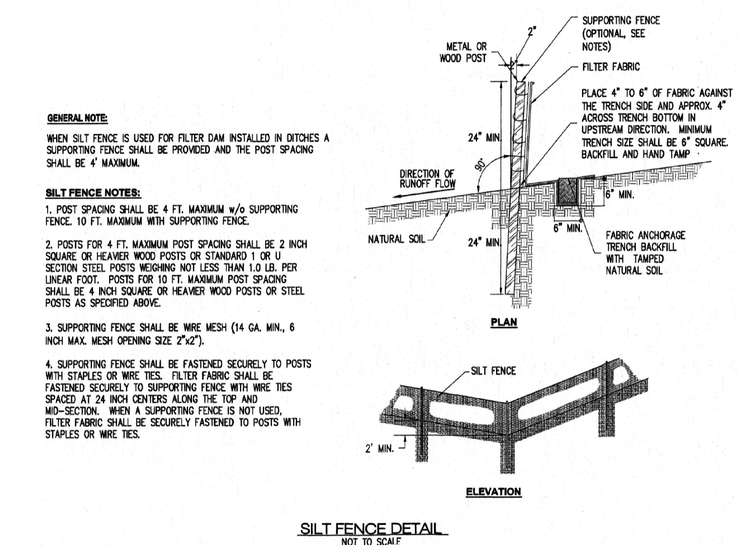
ZONE M15

VICINITY MAP



NOTES

1. ALL WORK WITHIN THE RIGHT-OF-WAY SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECS. FOR PUBLIC WORKS CONSTRUCTION, 8TH EDITION W/ UPDATES.
2. AN EXCAVATION/CONSTRUCTION PERMIT IS REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY R.O.W. AN APPROVED COPY OF THIS PLAN MUST BE SUBMITTED AT THE TIME OF APPLICATION.
3. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES, AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
4. CONTRACTOR SHALL ENSURE THAT NO SITE SOILS/SEDIMENT OR SILT ENTER THE RIGHT-OF-WAYS DURING CONSTRUCTION.
5. REVEGETATE ALL AREAS DISTURBED DUE TO CONSTRUCTION PER CITY OF ALBUQ. SPEC. 1012, NATIVE SEED MIX, CLASS A.
6. MAXIMUM SITE GRADING WITHOUT EROSION PROTECTION: 3 HORIZONTAL TO 1 VERTICAL, 3:1.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE OF NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) REQUIREMENTS INCLUDING OBTAINING THE NPDES PERMIT PRIOR TO CONSTRUCTION, NOTICE OF INTENT (NOI), NOTICE OF TERMINATION (NOT), AND IMPLEMENTATION OF THE STORM WATER POLLUTION PREVENTION (SWPP) PLAN.



SILT FENCE DETAIL
NOT TO SCALE

EROSION & SEDIMENT CONTROL NOTES

1. CONSTRUCT COBBLED SWPPP STABILIZED ENTRANCE PER NPDES ST'DS, SEE PLAN.
2. CONSTRUCT SILT FENCE OR STRAW WATTLES ON WEST, NORTH AND SOUTH BOUNDARY PER DETAIL THIS SHEET (PER NPDES).
3. INSTALL NPDES SIGN POSTING TO BE VISABLE FROM SIDEWALK OR STREET.
4. WATER SHALL BE APPLIED PERIODICALLY TO STABLIZED DISTURBED AREAS, AND FOR GENERAL DUST CONTROL.
5. SILT FENCE OR WATTLE MAY BE ATTACHED TO CONSTRUCTION SECURITY FENCING.
6. LOCATION OF TRASH, PORTA-LETS AND/OR CONCRETE WASH-OUT PITS TO BE REDLINED ON THIS DRAWING.
7. NO DISCHARGE TO WATERS OF THE U.S. OR LISTED WETLANDS.
8. REFER TO SWPP PLAN FOR FINAL LOCATION OF BMP(S) AND FINAL STABILIZATION.
9. IF SEDIMENT ESCAPES THE SITE INCLUDING OFF-SITE TRACKING, IT SHALL BE REMOVED/ OR SWEPT AT THE END OF EACH DAY.

LEGEND

EXIST. SPOT ELEVATION	+24.0
EXIST. CONTOUR	5310
NEW SPOT ELEVATION	12.0 (ADD 5100 FOR MSL)
NEW CONTOUR	12
NEW SWALE	
DRAINAGE DIRECTION, EXISTING	
NEW P.C.C., CONCRETE	
FLOWLINE	FL
WATER BLOCK	
RIPRAP STONE TYP. VVL, 4" Avg. Dia.	8" BURY

CALCULATIONS

DESIGN CRITERIA

HYDROLOGIC METHODS PER SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL (DPM) REVISED JANUARY 1993 FOR CITY OF ALBUQUERQUE ADOPTED BY THE COUNTY OF BERNALILLO
DISCHARGE RATE: Q=QPEAK x AREA.."Peak Discharge Rates For Small Watersheds"
VOLUMETRIC DISCHARGE: VOLUME = EWeighted x AREA
P100 = 2.35 Inches, Zone 2 Time of Concentration, TC = 10 Minutes
DESIGN STORM: 100-YEAR/6-HOUR, 10-YEAR/6-HOUR [ ] = 10 YEAR VALUES

EXISTING CONDITIONS

TOTAL AREA = 2 ACRES, WHERE EXCESS PRECIP. 'B' =0.78 In. [0.28]
PEAK DISCHARGE, Q100 = 4.56 CFS [1.9], WHERE UNIT PEAK DISCHARGE 'B' = 2.28CFS/AC. [0.95]
THEREFORE: VOLUME 100 = 5663 CF [2033]

DEVELOPED CONDITIONS - WITH PORTION SITE REVEGETATED

DETERMINE LAND TREATMENTS, PEAK DISCHARGE AND VOLUMETRIC DISCHARGE FOR STUDY AREA

	AREA	LAND TREATM'T	Q Peak	E
UNDEVELOPED	--- Ac.	A	1.56[0.38]	0.53[0.13]
LANDSCAPING	---Ac.(0%)	B	2.28[0.95]	0.78[0.28]
GRAVEL & COMPACTED SOIL	2.03 Ac.(100%)	C	3.14[1.71]	1.13[0.52]
ROOF - PAVEMENT	---Ac.(0%)	D	4.70[3.14]	2.12[1.34]
	2.03 Ac.			

THEREFORE: $E_{Weighted}$ = 1.13 In.[0.52] &
Q100 = 6.3 CFS VOLUME 100 = 8205 CF±
Q10 = 3.4 CFS VOLUME 10 = 3775 CF

RECOMMEND : MINIMAL INCREASE, THEREFORE ENSURE THAT HIGH VELOCITY FLOWS ARE NOT ALLOWED AT THE BOUNDARY, AND NO CONCENTRATION OF FLOWS CROSS BOUNDARY. RETENTION OF THE INCREASE OF RUN-OFF DUE TO THE INTERIM DEVELOPMENT.

PROJECT DATA

UPC# 1-015-055-183-234-30410

LEGAL DESCRIPTION

LOT 2-A-2, SUNPORT PARK
ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

PROJECT BENCHMARK

TOP OF REBAR/CAP AT THE PROJECT SOUTHEAST CORNER MSL ELEVATION = 5121.24, AS TIED FROM AMAFCA SDC 3-1/4" DIAMETER ALUM DISK SET IN CONCRETE, SDC-11-2, MSL, NAVD 88, 5001.66, LOCATED _____

TOPOGRAPHIC DESIGN SURVEY

PROVIDED BY ALPHA PRO SURVEYING, LLC, DATED APRIL 2014, GARY E. GRITSKO, PS, ESQ.

I, PHILIP W. CLARK, A PROFESSIONAL ENGINEER LICENSED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT I HAVE VISITED THE SITE SHOWN HEREON, AND THAT THE CONTOURS SHOWN REPRESENT THE EXISTING GROUND CONDITIONS, AND DO FURTHER CERTIFY THAT NO EARTHWORK OF ANY KIND, NOR ANY DISTURBANCE OF THE EXISTING GROUND HAS OCCURRED ON THIS SITE SINCE THE CONTOURS WERE DETERMINED.

PHILIP W. CLARK NMPE #10265

5/28/14 PHILIP W. CLARK NEW MEXICO 10265 REGISTERED PROFESSIONAL ENGINEER

Clark Consulting Engineers
19 Ryan Road
Edgewood, New Mexico 87015
Tele: (505) 281-2444 Fax: (505) 281-2444

DATE	REVISION
5.27.14	ADDR. COA COMMTS

LOT 2-A-2, BLOCK 2, SUNPORT PARK
ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

AJDJ HOSPITALITY / JARIWALA

Erosion & Sediment Control Plan

DESIGNED BY: PWC	DRAWN BY: CCE	JOB #: Jariwala	1 OF 1
CHECKED BY: PWC	DATE: 4/02/14	FILE #: SEC	