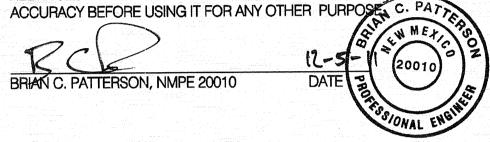
DR/	AINAGE BA	SIN CALCUL	ATIONS F	OR JIB @	98th AND A	WAL	<u>ON</u>	
BASIN	AREA	% LAND TREATMENT					DISCHARGE (CFS)	
na dia paositra di la compansiona del constante del consta	(AC)	A	В	C	D	taged again a Chantaig A Mar North	10 YR*	100YR*
						X-1-1		
HYDROLC	GICAL VO	LUMETRIC 8	DISCHAR	GE DATA (EXISTING	CALC	CULATED)	
							A =A	4.00
EXISTING BASIN	0.99	50.0%	50.0%	0.0%	0.0%		0.50	1.63
TOTAL	0.99			The control of the co			0.50	1.63
			DEVELOP	ED				
DEVELOPED BASIN	0.99	0.0%	5.0%	5.0%	90.0%	e gjeren	2.68	4.14
TOTAL	0.99						2.68	4.14

*NOTE: Peak Discharge calculated from Chapter 22 Section 2 of the COA DPM.

I, BRIAN C. PATTERSON, NMPE 20010, OF THE FIRM BOHANNAN HUSTON INC., HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 08/04/11. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY BRIAN MARTINEZ, NMRPS 18374, OF THE FIRM CARTESIAN SURVEY, INC. I FURTHER CERTIFY THAT A VISIT TO THE PROJECT SITE WAS CONDUCTED ON 11/21/11 AND IT WAS DETERMINED BY VISUAL INSPECTION THAT THE SURVEY DATA PROVIDED IS REPRESENTATIVE OF ACTUAL SITE CONDITIONS AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR PERMANENT CERTIFICATE OF OCCUPANCY.

THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THIS PROJECT. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS



GRADING AND DRAINAGE NARRATIVE

THE PURPOSE OF THIS SUBMITTAL IS TO PRESENT A GRADING AND DRAINAGE PLAN FOR A PROPOSED JACK-IN-THE-BOX DEVELOPMENT IN SW ALBUQUERQUE. THE SITE IS LOCATED AT THE SOUTHWEST CORNER OF THE 98TH AVENUE AND AVALON ROAD. THE PROJECT WILL INCLUDE A JACK-IN-THE-BOX RESTAURANT AND RETAIL BUILDING WITH PEDESTRIAN ACCESS, PARKING, AND LANDSCAPING ON APPROXIMATELY 0.99 ACRES.

THE SITE IS LOCATED WITHIN ZONE ATLAS MAP K-9-Z. THE PROJECT IS BOUNDED ALONG THE EAST BY 98TH AVENUE, ALONG THE WEST BY A DEVELOPED HOTEL SITE, ALONG THE NORTH BY A RETAIL BUILDING AND ALONG THE SOUTH BY UNDEVELOPED PROPERTY.

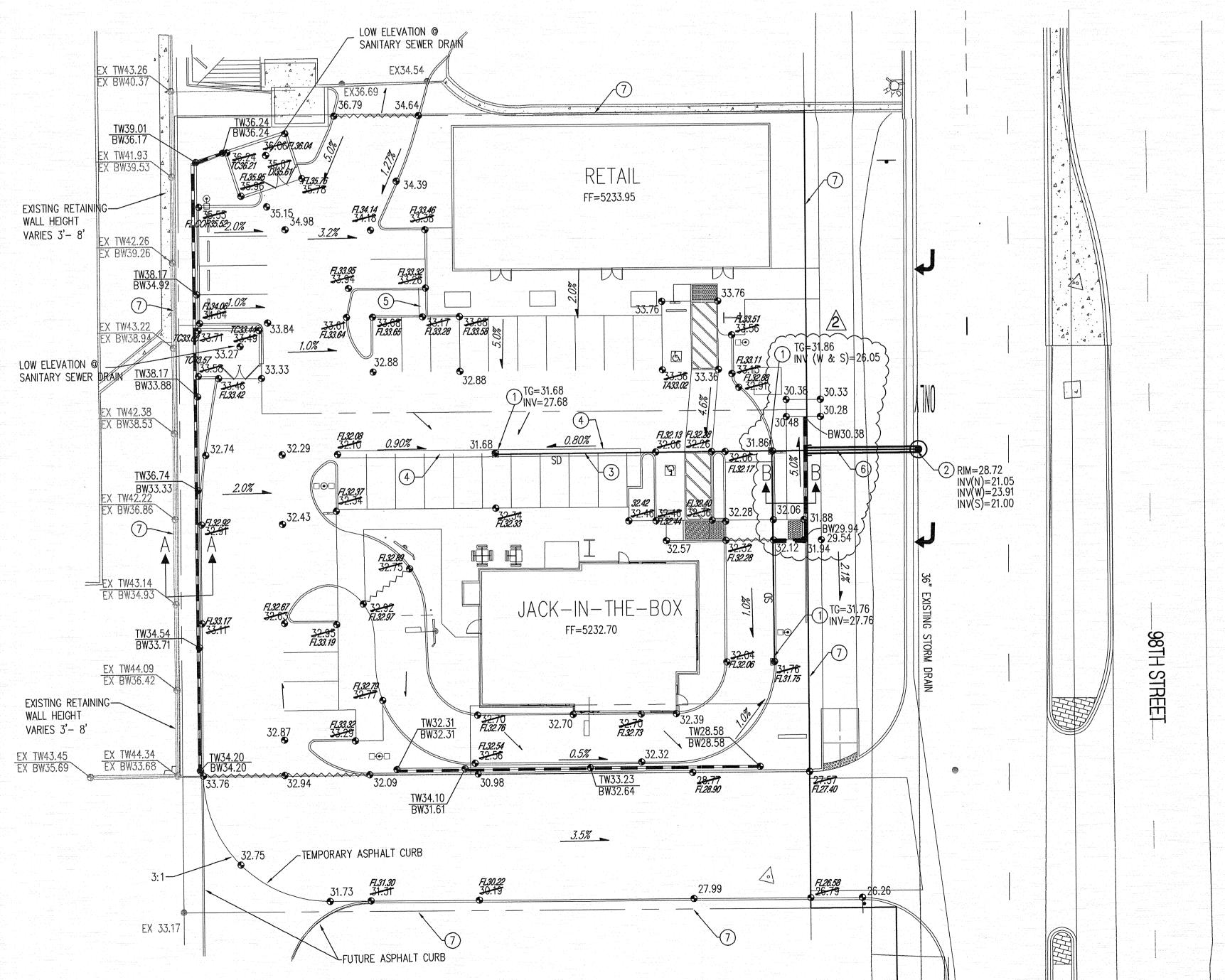
III. EXISTING HYDROLOGIC CONDITIONS THE SITE ENCOMPASSES APPROXIMATELY 0.99 ACRES AND IS UNDEVELOPED. SLOPES FOR THE SITE RANGE BETWEEN 3 TO 4% TO THE

SOUTHEAST AND THERE IS LIMITED VEGETATION COVER. CURRENTLY, THE SITE DRAINS VIA SURFACE FLOW TOWARD A SWALE ON THE WEST SIDE OF 98TH AVENUE. THE RUNOFF, 1.63 CFS, FLOWS SOUTH ALONG 98TH AVENUE, ENTERING THE EXISTING INLET AT THE NORTHWEST CORNER OF VOLCANO ROAD AND 98TH AVENUE.

THERE IS LIMITED OFFSITE FLOW ENTERING THE SITE. THE HOTEL SITE TO THE WEST CONTAINS ITS FLOWS ON SITE, DRAINING NORTH TO AVALON AVENUE. FLOW FROM THE PROPERTY TO THE NORTH IS INTERCEPTED BY A CONCRETE SWALE AT THE PROPERTY LINE, DRAINING TO 98TH STREET. THE JACK-IN-THE-BOX SITE IS HIGHER THAN THE 98TH AVENUE RIGHT-OF-WAY AND THE UNDEVELOPED PROPERTY TO THE SOUTH.

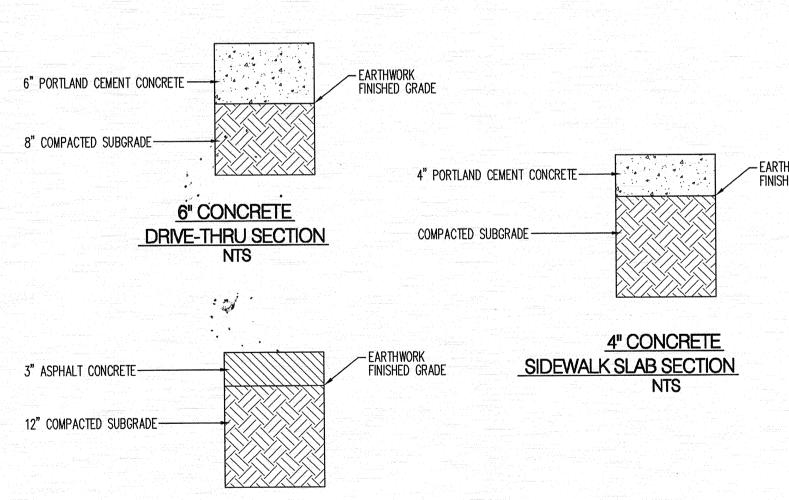
IV. PROPOSED HYDROLOGIC CONDITIONS THE PROPOSED SITE RUNOFF, 4.14 CFS, DRAINS WITH A PORTION OF THE SITE ENTERING INLETS IN THE PARKING AREA AND AN INLET IN THE DRIVE-THRU. THE REMAING PORTION DISCHARGING OFFSITE VIA PROPOSED CURB & GUTTER. THE ON-SITE STORM DRAIN SYSTEM WILL DISCHARGE TO THE EXISTING STORM DRAIN IN 98TH AVENUE. THE SURFACE RUNOFF DISCHARGING OFFSITE WILL FLOW EXISTING HYDROLOGIC CONDITIONS AND BE CONVEYED BY THE EXISTING SWALE ON THE WEST SIDE OF 98TH AVENUE AND ENTER THE EXISTING INLET AT THE NORTHWEST CORNER OF VOLCANO ROAD AND 98TH AVENUE.

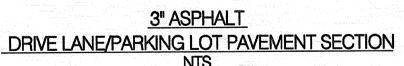
THE GRADING AND DRAINAGE PLAN FOR THE JACK-IN-THE-BOX SITE IS CONSISTENT WITH THE APPROVED DRAINAGE MANAGEMENT PLAN. THE PLAN IS CAPABLE OF SAFELY PASSING THE 100 YEAR STORM AND MEETS CITY REQUIREMENTS. ALL ANALYSIS WAS COMPLETED IN ACCORDANCE WITH SECTION 22.2 OF THE DEVELOPMENT PROCESS MANUAL.

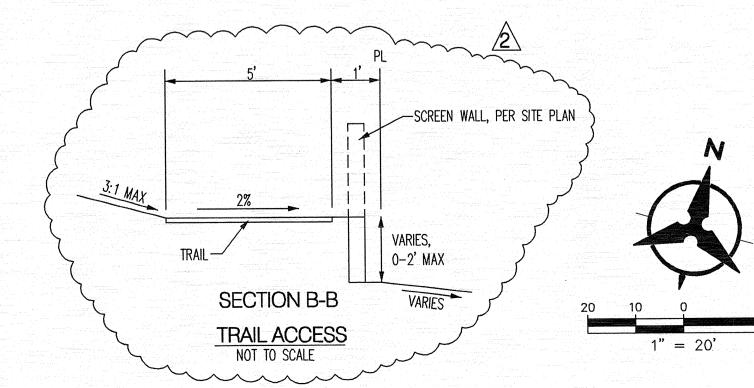


GENERAL NOTES

- 1. ALL WORK DETAILED ON THESE PLANS AND PERFORMED UNDER THIS CONTRACT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND THE PROJECT GEOTECHNICAL REPORT. WHERE APPLICABLE, CITY OF ALBUQUERQUE PUBLIC WORKS STANDARDS SHALL APPLY.
- 2. THE CONTRACTOR SHALL ABIDE BY ALL LOCAL, STATE, AND FEDERAL LAWS, RULES AND REGULATIONS WHICH APPLY TO THE CONSTRUCTION OF THESE IMPROVEMENTS, INCLUDING EPA REQUIREMENTS WITH RESPECT TO STORM WATER
- 3. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL POTENTIAL OBSTRUCTIONS INCLUDING ALL UNDERGROUND UTILITIES. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION OBSERVER OR ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
- 4. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL CONTACT LINE LOCATING SERVICE FOR LOCATION OF EXISTING UTILITIES.
- 5. ALL ELECTRICAL, TELEPHONE, CABLE TV, GAS AND OTHER UTILITY LINES, CABLES, AND APPURTENANCES ENCOUNTERED DURING CONSTRUCTION THAT REQUIRE RELOCATION, SHALL BE COORDINATED WITH THAT UTILITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ALL NECESSARY UTILITY ADJUSTMENTS. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR DELAYS OR INCONVENIENCES CAUSED BY UTILITY COMPANY WORK CREWS. THE CONTRACTOR MAY BE REQUIRED TO RESCHEDULE HIS ACTIVITIES TO ALLOW UTILITY CREWS TO PERFORM THEIR REQUIRED WORK.
- 6. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING LOCATION & ELEVATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR IS ALSO RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITY LINES WITHIN THE CONSTRUCTION AREA. ANY DAMAGE TO EXISTING FACILITIES CAUSED BY CONSTRUCTION ACTIVITY SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE AND APPROVED BY THE CONSTRUCTION OBSERVER.
- 7. CONSTRUCTION ACTIVITY SHALL BE LIMITED TO THE PROPERTY AND/OR PROJECT LIMITS. ANY DAMAGE TO ADJACENT PROPERTIES RESULTING FROM THE CONSTRUCTION PROCESS SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.
- 8. OVERNIGHT PARKING OF CONSTRUCTION EQUIPMENT SHALL NOT OBSTRUCT DRIVEWAYS OR DESIGNATED TRAFFIC LANES. THE CONTRACTOR SHALL NOT STORE ANY EQUIPMENT OR MATERIAL WITHIN THE PUBLIC RIGHT-OF-WAY.
- 9. THE CONTRACTOR SHALL OBTAIN ALL THE NECESSARY PERMITS FOR THE PROJECT PRIOR TO COMMENCING CONSTRUCTION (I.E., BARRICADING, TOPSOIL DISTURBANCE, EXCAVATION PERMITS, EPA STORM WATER PERMITS, ETC.).
- 10. ALL PROPERTY CORNERS DESTROYED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. ALL PROPERTY CORNERS MUST BE RESET BY A REGISTERED LAND SURVEYOR.
- 11. ALL BARRICADES AND CONSTRUCTION SIGNING SHALL CONFORM TO APPLICABLE SECTIONS OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), US DEPARTMENT OF TRANSPORTATION, LATEST EDITION.
- 12. THE CONTRACTOR SHALL MAINTAIN ALL CONSTRUCTION BARRICADES AND SIGNING AT ALL TIMES. THE CONTRACTOR SHALL VERIFY THE PROPER LOCATION OF ALL BARRICADING AT THE END AND BEGINNING OF EACH DAY.
- 13. THE CONTRACTOR SHALL TAKE ALL STEPS NECESSARY TO CONFORM WITH EPA REQUIREMENTS, INCLUDING COMPLIANCE WITH NPDES PHASE 2 REQUIREMENTS.
- 14. THE CONTRACTOR IS RESPONSIBLE FOR SWPPP COMPLIANCE AND IMPLEMENTATION.
- 15. THE CONTRACTOR SHALL PREPARE A CONSTRUCTION TRAFFIC CONTROL AND SIGNING PLAN AND OBTAIN APPROVAL OF SUCH PLAN FROM THE CITY OF ALBUQUERQUE, TRAFFIC ENGINEERING DEPARTMENT, PRIOR TO BEGINNING ANY CONSTRUCTION WORK ON OR ADJACENT TO EXISTING STREETS





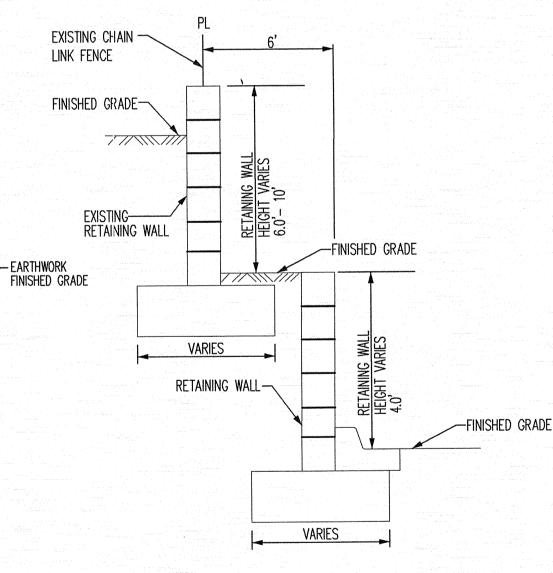


GRADING NOTES

- 1. EXCEPT AS PROVIDED HEREIN, GRADING SHALL BE PERFORMED AT THE ELEVATIONS AND IN ACCORDANCE WITH THE DETAILS SHOWN ON THIS PLAN.
- 2. ALL WORK RELATIVE TO FOUNDATION CONSTRUCTION, SITE PREPARATION, AND PAVEMENT INSTALLATION, AS SHOWN ON THIS PLAN, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "GEOTECHNICAL INVESTIGATION," AS PROVIDED BY THE ARCHITECT OR OWNER. ALL OTHER WORK SHALL, UNLESS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS.
- 3. EARTH SLOPES SHALL NOT EXCEED 3 HORIZONTAL TO 1 VERTICAL UNLESS SHOWN OTHERWISE.
- 4. IT IS THE INTENT OF THESE PLANS THAT THIS CONTRACTOR SHALL NOT PERFORM ANY WORK OUTSIDE OF THE PROPERTY BOUNDARIES EXCEPT AS REQUIRED BY THIS PLAN.
- 5. THE CONTRACTOR IS TO ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO ADJACENT PROPERTY OR PUBLIC RIGHT-OF-WAY. THIS SHOULD BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS OR SILT FENCE AT THE PROPERTY LINES AND WETTING THE SOIL TO PROTECT IT FROM WIND EROSION. THE COST FOR REQUIRED CONSTRUCTION DUST AND EROSION CONTROL MEASURES SHALL BE INCIDENTAL TO THE PROJECT COST.
- 6. A DISPOSAL SITE FOR ANY & ALL EXCESS EXCAVATION MATERIAL, AND UNSUITABLE MATERIAL AND/OR A BORROW SITE CONTAINING ACCEPTABLE FILL MATERIAL SHALL BE OBTAINED BY THE CONTRACTOR IN COMPLIANCE WITH APPLICABLE ENVIRONMENTAL REGULATIONS AND APPROVED BY THE OBSERVER. ALL COSTS INCURRED IN OBTAINING A DISPOSAL OR BORROW SITE AND HAUL TO OR FROM SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE.
- 7. VERIFY ALL ELEVATIONS SHOWN ON PLAN FROM BASIS OF ELEVATION CONTROL STATION PRIOR TO BEGINNING CONSTRUCTION.
- 8. ALL ELEVATIONS ARE TAKEN AT THE TOP OF ASPHALT UNLESS OTHERWISE
- 9. ALL CURB IS 6" MEDIAN CURB UNLESS OTHERWISE NOTED. ALL ELEVATIONS SHOWN ALONG MEDIAN CURB ARE AT FLOWLINE UNLESS OTHERWISE INDICATED.
- 10. PAVING AND ROADWAY GRADES SHALL BE +/- 0.1' FROM PLAN ELEVATIONS. PAD ELEVATION SHALL BE $\pm /- 0.05$ FROM BUILDING PLAN ELEVATION.

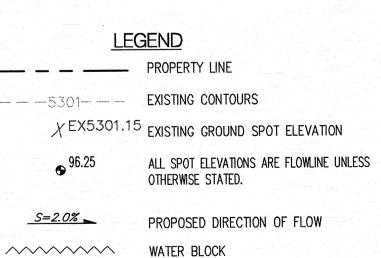
KEYED NOTES

- INSTALL 24" NYLOPLAST CURB INLET STRUCTURE WITH 2'x2' STEEL EAR RECTANGULAR GRATE H-20 RATED (OR APPROVED EQUAL)
- CONNECT TO EXISTING STORM DRAIN WITH NEW 4' MANHOLE, TYPE C OR E TO BE COMPLETED BY WORK ORDER.
- INSTALL 12" HDPE (N-12WT OR APPROVED EQUAL) STORM DRAIN
- 4. INSTALL 2' WIDE CONCRETE VALLEY GUTTER PER COA STD. DWG
- 5. INSTALL 2' WIDE SIDEWALK CULVERT PER COA STD. DWG 2236.
- 6. INSTALL 18" RCP STORM DRAIN.
- PROPERTY LINE



SECTION A-A

RETAINING WALL DETAIL NOT TO SCALE (RETAINING HEIGHT IS TAKEN TO BE DIFFERENCE IN FINISHED GRADES.)



PROPOSED STORM DRAIN INLET

PROPOSED RETAINING WALL

GRADING PLAN

DEAMAGE CERT

SITE INFORMATION

1268 F

MK TYPE: 9A_LG2

98TH / AVALON

DRAWN BY: LJCA

ALBUQUERQUE, NM

ADDRESS:

SCALE:

Mon, 5-Dec-2011 - 8:40:am, Plotted by: BPATTERSON P:\20110214\CDP\Plans\General\Drainage Cert\20110214_GP01_drainage cert.dwg

REVISIONS TO GP PER AA SUBMITTAL 12-5-11 JACK IN THE BOX #1268 F 98TH / AVALON ALBUQUERQUE, NEW MEXICO

9330 BALBOA AVENUE

SAN DIEGO, CA 92123 2007 Jack in the Box Inc

are the property of Jack in the Box Inc

without its previous written consent

DATES

REVISIONS

RELEASE:

PERMIT:

P.M. UPDATES:

CONSTRUCTION:

MAY 18, 2011

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