CITY OF ALBUQUERQUE

January 2, 2007

John M. Mackenzie, P.E.
Mark Goodwin & Associates, PA
P.O. Box 90606
Albuquerque, NM 87199

Re: Hope Christian School
~~6721 Palomas NE~~ Bool Louisiana Blvd NE
Approval of Permanent Certificate of Occupancy (C.O.)
Engineer's Stamp dated 03/08/2006 (D-18/D15)
Certification dated 12/27/2006

Based upon the information provided in your submittal received 12/28/2006, the above referenced certification is approved for release of Permanent Certificate of Occupancy by Hydrology.

If you have any questions, you can contact me at 924-3695.

Sincerely,

Curtis A. Cherne, E.I.
Engineering Associate, Planning Dept.
Development and Building Services

C: Katrina Sigala
File

P.O. Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

DRAINAGE REPORT

for

Hope Christian School

Prepared for

Hope Christian School

Prepared by

Mark Goodwin & Associates, PA
P.O. Box 90606
Albuquerque, NM 87199
(505) 828-2200

January 2006

02-06-06

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PROJECT DESCRIPTION

The following is a report for the proposed redevelopment of Hope Christian School. The school is located along Palomas Avenue NE west of Louisiana Boulevard. The report is to focus on determining the capacity of Palomas as it drains the existing neighborhood area in the fully developed condition in an effort to determine if additional drainage infrastructure is needed to safely convey storm waters during a 100-year, 6-hour storm. An informal pre-design meeting the City Engineer resulted in the request for these drainage patterns along Palomas Avenue to be studied and then reported. The area is a full block bounded on the north by Paseo del Norte, on the south by the Domingo Baca Arroyo (DBA), on the west by San Pedro Blvd., and on the east by Louisiana Blvd.

The school has recently received site development plan for subdivision (SPS) and building permit (SPBP) approval from the EPC, and they are now seeking final sign-off of the plans from the DRB. The SPS covers all phases of the redevelopment plan, while the SPBP covers only the proposed middle school construction (which is proposed to be on the SW corner of Paseo del Norte and Louisiana Blvd.). A master grading and drainage plan covering the entire campus and a specific grading and drainage plan for just the new middle school accompany this report. Subsequent grading and drainage plans for the later phases will follow on an individual basis as defined plans for those phases become developed and funding is secured.

The existing Hope Christian School covers approximately 17.3 acres, being Lots 7, 8A, 9A1, 10 & 26 of NAA, Block 11, Unit B, including Tract A, Hope Christian School, on both sides of Palomas Avenue NE (see vicinity map). The school's business office is located on the SW corner of the intersection of Paseo del Norte and Louisiana Blvd. NE, which was formerly occupied by Loeper Landscaping. The existing middle school and high school are presently located on the south side of Palomas west of Louisiana, while the elementary school is located just west of the city's Coronado reservoirs on the north side of Palomas. With the current redevelopment plan the elementary school will expand slightly NW into Lot 6 of Block 11, Unit B, which is a net increase in area of 0.78

acres. Redevelopment will consist of the swapping-out of numerous portable metal classrooms for bricks and mortar classrooms and related activity buildings. Some of the older buildings will either be razed or rehabilitated. On the site of the present business office will be the new middle school and middle school gymnasium, with related parking. After construction of the middle school future phases will come on-line over the next 2 to 6 years, as funding becomes available.

EXISTING DRAINAGE CONDITIONS IN THE VICINITY OF THE SCHOOL

The area within and surrounding the school is almost fully developed, with the only exception being Lot 23 between the elementary school and the city's Coronado reservoir, and then several lots west of the elementary school (all of which are on the north side of Palomas).

From east to west on the north side of Palomas Ave. are the following properties and uses:

- *Existing Hope Christian School Business Office - (formerly Loeper Landscaping and then proposed as a Kicks-66 Gas Station – Now proposed as the new Hope Middle School) - On 9/15/00 City Hydrology approved a grading and drainage plan, with engineers stamp dated 7/27/00, for a proposed Kicks 66 service station by Conway Oil, Inc. (City Drainage file D-18/015). At that time the property was split into two drainage basins, with the north 1.81 acres proposed to drain north into Paseo del Norte via a concrete channel and the southerly 0.87 acres draining south into Palomas Ave. The approved flow rate to the north was 8.65 cfs with rate to the south approved for 4.16 cfs. The engineer at that time was also asked to determine Palomas street capacity, which was stated in the report to be approximately 39 cfs for the north half only.*

- *Existing Security Self Storage – On 9/28/90 City Hydrology approved the grading and drainage plan for the Security Self-Storage facility (drainage file D-18/023, with engineers stamp dated 9/26/90). The approved plan involved a restricted-flow*

release of 2.6 cfs into the north one-half of Palomas Ave. due to capacity limitations within Palomas at the time of development.

- *Existing Coronado Reservoirs - In 2001 City Hydrology approved the grading and drainage plan for the Coronado Reservoir site, which included installation of a new 36" and 42" diameter storm drain running from the reservoir to the DBA. All 14 cfs of developed flow from the site are diverted to the DBA. Furthermore, approval of the development plan required the city to install new curb and gutter along the north side of Palomas that included the installation of a new single-A catch basin on the north side of Palomas just east of the site's entrance. Street flow within the north half of Palomas is intercepted by the inlet that then connects to the storm drain running south to the DBA.*

  According to an AHYMO run included in this report, the vacant Lot 23 between the new elementary school and the reservoir site will discharge approximately 3 cfs to the north side of Palomas.

- *Existing Hope Elementary School – The redeveloped Hope Christian Elementary School at full build-out will contribute 17 cfs to Palomas Avenue with 2.8 cfs being diverted into Paseo del Norte due to its west end being too far west to drain south toward Palomas.*

- *Existing Jehovah's Witness Center – The Jehovah's Witness Center and the vacant Lot 28 between the Center and the new elementary school will contribute 3 cfs each.*

- *The remaining undeveloped parcels west of the Jehovah Witness Center will discharge into the new storm drain system in San Pedro upon development (according to the site's case file D18/049). San Pedro's system was designed and built to accept fully-developed runoff from the upstream area, according the Paseo del Norte project designer Robert MacLake of Wilson & Co. (this statement was*

obtained from City Hydrology file D18/015).

From east to west on the south side of Palomas are the following uses:

- *Existing Hope Middle and High School - drains directly into the DBA via existing RCP storm drain and concrete rundown. Redevelopment will not contribute additional runoff to the channel because existing surface types and areas are close to being the same as existing.*

- *Existing Edmund Ross Elementary School - drains directly into the DBA via an existing concrete rundown. The school bus pick-up drive fronting the south side of Palomas discharges 1.2 cfs directly to the south side of Palomas (file D-18/07).*

- *Existing New Mexico Athletics Association Building - drains directly into the DBA via existing on-site storm drain and concrete rundown (city drainage file D-18/024).*

- *New Commercial Development (SE corner of Palomas and San Pedro Blvd.)-drains into Palomas and San Pedro where flows are picked-up by new inlets (file D18/046).*

FUTURE DRAINAGE CONDITIONS RESULTING FROM THE SCHOOL'S REDEVELOPMENT PLAN AND ITS AFFECT ON PALOMAS' FLOW CAPACITY

The Area west of Louisiana Blvd. is not subjected to any off-site runoff due to the recent reconstruction of Paseo del Norte from I-25 to Wyoming. Flows in Louisiana are intercepted and diverted south into the DBA. The DBA runs along the south side of the existing Hope Middle/High and Ross Elementary Schools. A water block at the Louisiana/Palomas intersection prevents any runoff from going down Palomas Avenue west of Louisiana. All development on the south side of Palomas drains south to the DBA (except as noted above). As for the north side of Palomas, all properties drain into Palomas except for ~~*the northerly portion the new middle school site and*~~ REVISED PER PLAN DATED 3/6/06 *the extreme NW portion of the elementary school,* ~~*both of*~~ *which will drain into Paseo del Norte.*

Between the existing catch basin in front of the reservoir site and Louisiana the Palomas right-of-way generates 2.34 cfs on each side of the street. Combining this north side street flow with the 4.88 cfs from the new middle school and ~~2.6~~ 6.6 cfs from the self-storage facility results in a total north-side street flow of approximately ~~9.8~~ 13.8 cfs. On a 3.5% street slope the typical type-A inlet has a capability to accept all of this gutter flow. 10 cfs The remaining 2.34 cfs on the south side of Palomas will continue west toward San Pedro Blvd. On the north side of Palomas west of the reservoir's inlet the street will collect 3 cfs from Lot 23, 17 cfs from the redeveloped Hope Elementary School, 3 cfs from Lot 28, and 3 cfs from the Jehovah's Witness Center, totaling 27 cfs. Combining that with the 7.9 cfs generated within the Palomas R/W results in a total street flow of 34.9 cfs at the intersection of San Pedro and Palomas. The capacity of Palomas, being a 40'-wide face to face street on a 3% slope, is greater than 40 cfs according to the DPM's street-flow capacity chart and other who have been asked to check the same. +4 = 30.9

HYDROLOGIC EVALUATION CRITERIA

Hydrologic results presented in this report utilized the design criteria contained within the city's Section 22.2 (Hydrology) of the Development Process Manual. The 100-year, 6-hour storm was event used to determine runoff rates with P(1 hr)=1.65", P(6 hr)=2.10" and P(24 hr)=2.43", all of which were obtained from the latest NOAA Precipitation Atlas. The on-site land treatment values used for fully developed conditions were D=85% and B=15%. For basin containing substantial areas or turf for play field the amount of type B area was increased to 33% and the percentage of Type D reduced accordingly.

CONCLUSION

The proposed drainage analysis presented in this report for the entire study area within and surrounding the new Hope Christian redevelopment plan has shown that Palomas Ave. currently has sufficient capacity to collect and convey the future runoff conditions that are anticipated to occur at full build-out. This conclusion has been derived based upon the examination of existing field conditions and with the review of numerous drainage reports and plans of the area presently on file at the City's Hydrology Division.

CITY OF ALBUQUERQUE

Planning Department
Transportation Development Services Section

October 19, 2006

Jon Anderson, Registered Architect
912 Roma Avenue NW
Albuquerque, NM 87102

Re: Certification Submittal for Final Building Certificate of Occupancy for
Hope Christian Middle School, [D18 / D15]
6800 Palomas NE
Architect's Stamp Dated 10/13/06

P.O. Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

Dear Mr. Anderson:

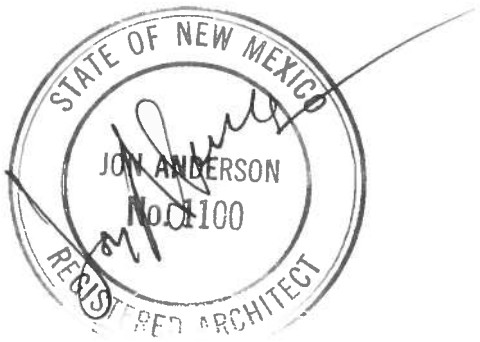
The TCL / Letter of Certification submitted on October 16, 2006 is sufficient for acceptance by this office for final Certificate of Occupancy (C.O.). Notification has been made to the Building and Safety Section.

Sincerely,

Nilo E. Salgado-Fernandez, P.E.
Senior Traffic Engineer
Development and Building Services
Planning Department

c: Engineer
Hydrology file
CO Clerk

JON ANDERSON ARCHITECT AIA
912 ROMA AVENUE NORTHWEST
ALBUQUERQUE NEW MEXICO 87102
505 764 8306 FAX 505 764 2879



October 13, 2006

Wilfred A. Gallegos, P.E.
Traffic Engineer, Planning Dept.
City of Albuquerque
Development and Building Services
Plaza del Sol
600 Second Street NW
Albuquerque, NM 87102

Re: Hope Christian Middle School
8005 Louisiana Blvd. NE

06DRB case #: 00125 & 00128SPS
UPC No. 101806347445110416

Dear Wilfed,

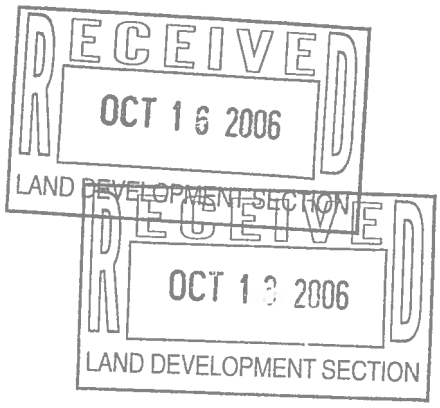
Per your request I am writing this letter to tell you that I have visited the above referenced site. The purpose of this visit was to visually observe the status of the site improvements to make sure that everything was in substantial compliance with the approved Hope Christian Site Development Plan for Building Permit dated January 26, 2006.

It appears that all work described on this drawing has been accomplished, and is in compliance with the Traffic Circulation Layout on the approved DRB submittal.

This letter of Certification has been prepared to satisfy the requirements of the City of Albuquerque Transportation Department. If you should have any questions or comments concerning this letter or the above information, please do not hesitate to call.

Sincerely

Jon Anderson



CITY OF ALBUQUERQUE

March 31, 2006

John M. MacKenzie, PE
Mark Goodwin & Associates, PA
P.O. Box 90606
Albuquerque, NM 87199

Re: Hope Christian School Redevelopment, 6721 Palomas NE
Master Grading & Drainage Plan for Hope Christian School Campus
Engineer's Stamp dated 3-8-06, Grading & Drainage Plan for Hope Christian Middle School-Engineer's Stamp dated 3-8-06 (D18-D15)

Dear Mr. MacKenzie,

Based upon the information provided in your submittal dated 3-9-06, the above referenced plans are approved for Site Development Plan for Subdivision for the Hope Christian School Campus, Site Development Plan for Building Permit and Building Permit for the Hope Christian Middle School. Please attach a copy of the Middle School approved plan to the construction sets prior to sign-off by Hydrology. Additionally, prior to release of the Certificate of Occupancy an Engineer's Certification of the Middle School grading plan per the DPM checklist will be required.

The Middle School project requires a National Pollutant Discharge Elimination System (NPDES) permit. Refer to the attachment that is provided with this letter for details. If you have any questions please feel free to call the Municipal Development Department Hydrology section at 768-3654 (Charles Caruso).

If you have any questions, you can contact me at 924-3990.

Sincerely,

Phillip J. Lovato, E.I., C.F.M.
Engineering Associate, Hydrology,
Development and Building Services,
Planning Department

cc: Charles Caruso, DMD
file

P.O. Box 1293
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AHYMO PROGRAM SUMMARY TABLE (AHYMO_97) - - VERSION: 1997.02D RUN DATE (MON/DAY/YR) =03/06/2006
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FINISH										