CITY OF ALBUQUERQUE

Planning Department
Transportation Development Services Section

April 6, 2011

Isaac Benton, R.A.
Integrated Design & Architecture
9061/2 Park Avenue SW
Albuquerque, NM 87102

Re: Certification Submittal for a Permanent Building Certificate of Occupancy (C.O.)
for La Promesa Charter School, [L-10 / D007]
6800 Gonzales SW
Architect's Stamp Dated 04/05/11

Dear Mr. Benton:

Based upon the information provided in your submittal received 04-06-11, Transportation Development has no objection to the issuance of a Permanent Certificate of Occupancy.

This letter serves as a "green tag" from Transportation Development for a Permanent Certificate of Occupancy to be issued by the Building and Safety Division.

If you have any questions, please contact me at (505)924-3999.

Sincerely,

Richard Dourte, P.E.
City Engineer
Development and Building Services
Planning Department

c: Engineer
Hydrology file
CO Clerk

PO Box 1293
Albuquerque
NM 87103
www.cabq.gov

Mr. Nilo Salgado-Fernandez, P.E.
City of Albuquerque
Transportation Development
Planning Department
600 2nd St. NW
Albuquerque, NM 87103

April 5, 2011

Re: Traffic 'TCL' Certification

Dear Mr. Salgado-Fernandez:

I, Isaac Benton, AIA, of the firm Integrated Design & Architecture, hereby certify that this project is in substantial compliance with and in accordance with the design intent of the approved TCL plan (L10-D007) dated 11-01-10. The record information edited onto the original design document has been obtained by Isaac Benton of the firm Integrated Design & Architecture. I further certify that I have personally visited the project site on April 1, 2011 and have determined by visual inspection that the data provided is representative of actual site conditions and is true and correct to the best of my knowledge and belief.

The record information presented hereon is not necessarily complete and intended only to verify substantial compliance of the traffic aspects of this project. Those relying on the record document are advised to obtain independent verification of its accuracy before using it for any other purpose.

Isaac Benton, AIA

Date 4/5/11

6800 GONZALES

O/P.O. 4-6-11.

Rec 4-6-11

RECEIVED
MAR 8 ? 2011
LAND DEVELOPMENT SECTION

906 ½ Park Avenue SW Albuquerque NM 87102 fax 505.243.3583 info@integrateddesignarch.com integrateddesignarch.com tel 505.243.3499

CITY OF ALBUQUERQUE

November 1, 2010

Isaac Benton Jr., R.A.
Integrated Design & Architecture
906 ½ Park Avenue SW
Albuquerque, NM 87102

Re: La Promesa Charter School, 6900 Gonzales Rd SW, Traffic Circulation Layout
Architect's Stamp dated 11-01-10 (L10-D007)

Dear Mr. Benton,

The TCL submittal received 10-26-10 is approved for Building Permit. The plan is stamped and signed as approved. A copy of this plan will be needed for each of the building permit plans. Please keep the original to be used for certification of the site for final C.O. for Transportation. **Public infrastructure or work done within City Right-of-Way shown on these plans is for information only and is not part of approval. A separate DRC and/or other appropriate permits are required to construct these items.**

If a temporary CO is needed, a copy of the original TCL that was stamped as approved by the City will be needed. This plan must include a statement that identifies the outstanding items that need to be constructed or the items that have not been built in "substantial compliance," as well as the signed and dated stamp of a NM registered architect or engineer. Submit this TCL with a completed Drainage and Transportation Information Sheet to Hydrology at the Development Services Center of Plaza Del Sol Building.

When the site is completed and a final C.O. is requested, use the original City stamped approved TCL for certification. A NM registered architect or engineer must stamp, sign, and date the certification TCL along with indicating that the development was built in "substantial compliance" with the TCL. Submit this certification TCL with a completed Drainage and Transportation Information Sheet to Hydrology at the Development Services Center of Plaza Del Sol Building.

Once verification of certification is completed and approved, notification will be made to Building Safety to issue Final C.O. To confirm that a final C.O. has been issued, call Building Safety at 924-3306.

Sincerely,

Kristal D. Metro, P.E.
Traffic Engineer, Planning Dept.
Development and Building Services

C: File

PO Box 1293
Albuquerque
NM 87103
www.cabq.gov

DRAINAGE AND TRANSPORTATION INFORMATION SHEET
(REV 12/2005)

PROJECT TITLE: LA PROMESA CHARTER SCHOOL ZONE MAP: K-10
DRB#: _____ EPC#: _____ WORK ORDER#: _____

LEGAL DESCRIPTION: LOTS 150 & 151 TOWN OF ATRISCO GRANT, UNIT 6
CITY ADDRESS: 6900 GONZALES ROAD SW

ENGINEERING FIRM: APPLIED ENGR & SURVEY CONTACT: GILBERT ALDAZ
ADDRESS: 1605 BLAIR DR. NE. PHONE: 480-8125
CITY, STATE: ABQ, N.M. ZIP CODE: 87112

OWNER: Y.E.S. HOUSING CONTACT: JOE ORTEGA
ADDRESS: 104 ROMA NW PHONE: 923-9607
CITY, STATE: ABQ, N.M. ZIP CODE: 87102

ARCHITECT: INTEGRATED DESIGN & ARCHITECTURE CONTACT: ISAAC BENTON
ADDRESS: 906 ½ PARK AVE. S.W. PHONE: 243-3499
CITY, STATE: ABQ, N.M. ZIP CODE: 87102

SURVEYOR: CARTESIAN SURVEYS CONTACT: _____
ADDRESS: P.O. BOX 44414 PHONE: 896-3050
CITY, STATE: RIO RANCHO, NM ZIP CODE: 87174

CONTRACTOR: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
CITY, STATE: _____ ZIP CODE: _____

TYPE OF SUBMITTAL:
- _____ DRAINAGE REPORT
- _____ DRAINAGE PLAN 1st SUBMITTAL
- _____ DRAINAGE PLAN RESUBMITTAL
- _____ CONCEPTUAL G & D PLAN
- _____ GRADING PLAN
- _____ EROSION CONTROL PLAN
- _____ ENGINEER'S CERT (HYDROLOGY)
- _____ CLOMR/LOMR
- X TRAFFIC CIRCULATION LAYOUT
- _____ ENGINEER'S CERT (TCL)
- _____ ENGINEER'S CERT (DRB SITE PLAN)
- _____ OTHER (SPECIFY)

CHECK TYPE OF APPROVAL SOUGHT:
- _____ SIA/FINANCIAL GUARANTEE RELEASE
- _____ PRELIMINARY PLAT APPROVAL
- _____ S. DEV. PLAN FOR SUB'D APPROVAL
- _____ S. DEV. FOR BLDG. PERMIT APPROVAL
- _____ SECTOR PLAN APPROVAL
- _____ FINAL PLAT APPROVAL
- _____ FOUNDATION PERMIT APPROVAL
- X BUILDING PERMIT APPROVAL
- _____ CERTIFICATE OF OCCUPANCY (PERM)
- _____ CERTIFICATE OF OCCUPANCY (TEMP)
- _____ GRADING PERMIT APPROVAL
- _____ PAVING PERMIT APPROVAL
- _____ WORK ORDER APPROVAL
- _____ OTHER (SPECIFY)

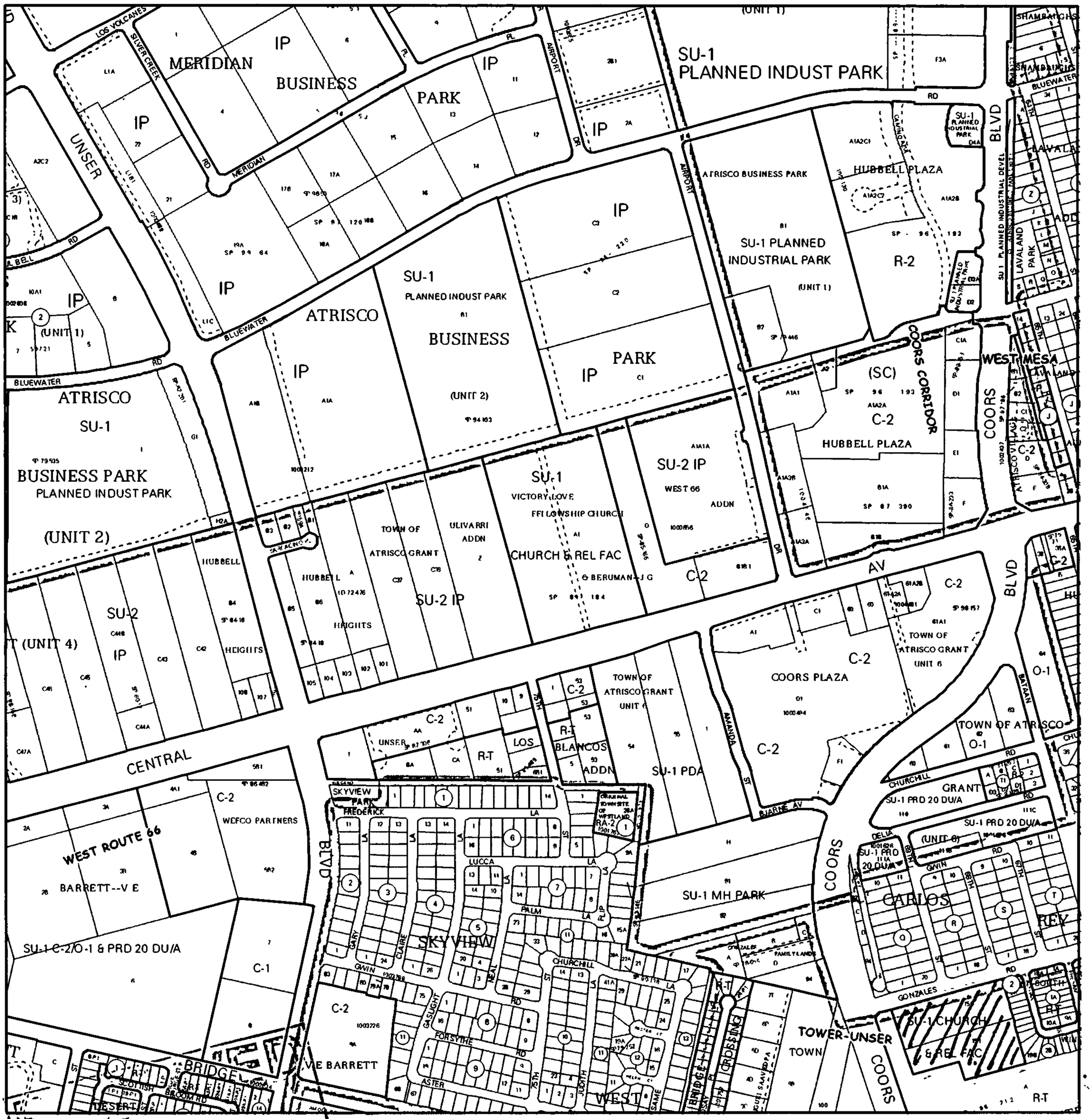
RECEIVED
OCT 26 2010
HYDROLOGY SECTION

WAS A PRE-DESIGN CONFERENCE ATTENDED:
- X YES - KRISTAL METRO - 10-14-10
- _____ NO
- X COPY PROVIDED

DATE SUBMITTED: Oct. 26, 2010 BY: Jim McHood 243-3499

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location, and scope to the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

1. **Conceptual Grading and Drainage Plan**: Required for approval of Site Development Plans greater than five (5) acres and Sector Plans.
2. **Drainage Plans**: Required for building permits, grading permits, paving permits and site plans less than five (5) acres.
3. **Drainage Report**: Required for subdivision containing more than ten (10) lots or constituting five (5) acres or more.

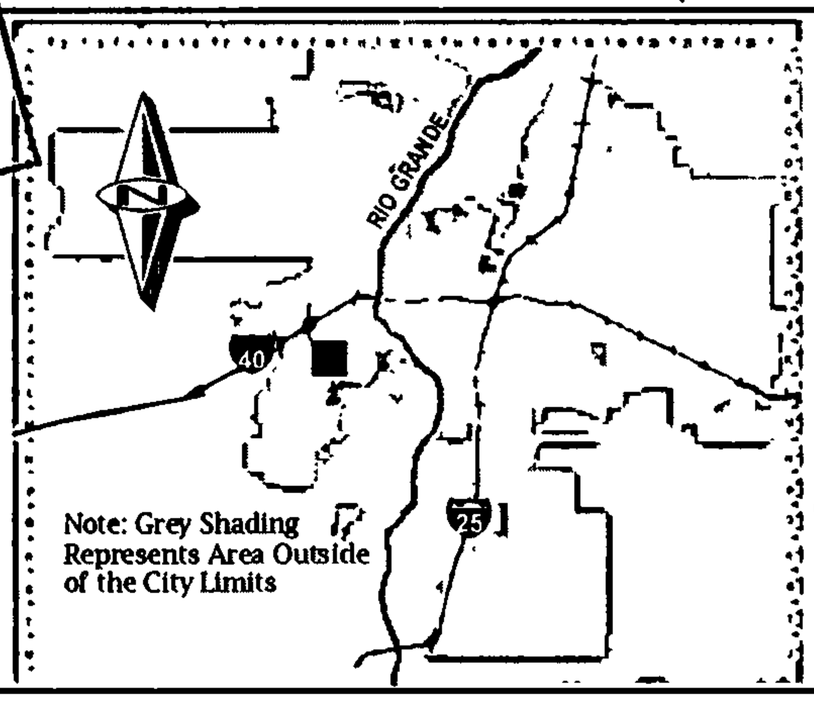


For more current information and more details visit: http://www.cabq.gov/gis

OCT 26 2010

Albuquerque Geographic Information System

Map amended through: 9/5/2006



Zone Atlas Page:

K-10-Z

· Selected Symbols

- SECTOR PLANS
- Design Overlay Zones
- City Historic Zones
- H-1 Buffer Zone
- Petroglyph Mon.
- Escarpment
- 2 Mile Airport Zone
- Airport Noise Contours
- Wall Overlay Zone

Feet

0 750 1,500

CITY OF ALBUQUERQUE

September 16, 2010

Gilbert Aldaz, P.E.
Applied Engineering
1605 Blair Dr. NE
Albuquerque, NM 87112

Re: La Promesa Charter School, Gonzales & Coors
Grading and Drainage Plan
Engineer's Stamp dated 09-07-10 (L10-D007)

Dear Mr. Aldaz,

Based upon the information provided in your submittal received 09-07-10, the above referenced plan is approved for Preliminary Plat and Final Plat action by DRB and Building Permit. Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology.

This project requires a National Pollutant Discharge Elimination System (NPDES) permit for storm water discharge.

This project requires a Topsoil Disturbance Permit since it is disturbing ¾ of an acre or more.

Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist will be required.

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

Sincerely,

Curtis Cherne, P.E.
Senior Engineer, Planning Department.
Development and Building Services

C: Brad Bingham
File

PO Box 1293
Albuquerque
NM 87103
www.cabq.gov

Applied Engineering and Surveying, Inc.
Civil Engineering, Land Planning & Surveying

September 7, 2010

Mr. Curtis Cherne, P.E.
Senior Engineer, Planning Department
Development and Building Services

RE: YOUR LETTER DATED AUGUST 16, 2010 FOR LA PROMESA CHARTER SCHOOL, GONZALES AND COORS GRADING AND DRAINAGE PLAN, ENGINEER'S STAMP DATED 08-16-10 (L-10/D007)

Dear Mr. Cherne:

Please consider the following changes that were incorporated with this revised plan:

- Added a 2nd sheet that now shows the entire site.
- The 2nd sheet shows the existing and proposed lot lines.
- The north arrow as been reoriented.
- The future building footprint is now shown.
- The ponding notes now identify the water surface elevation for each of the ponds.

If you should have any questions, please do not hesitate to call me at 480-8125.

Sincerely,

Gilbert Aldaz, P.E. and P.S.

Gilbert Aldaz, P.E & P.S., 1605 Blair Drive NE, Albuquerque, New Mexico, 87112 (505) 480-8125, Fax (505) 237-8164, E-Mail: galdaz47@yahoo.com

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 1/28/2003rd)

PROJECT TITLE: La Promessa Charter School ZONE MAP/DRG. FILE #: L-10/D7

DRB #: _____ EPC#: _____ WORK ORDER#: _____

LEGAL DESCRIPTION: Lots 150 & 151 Town of Atrisco Grant, Unit 6

CITY ADDRESS: Gonzales Road & Cobrs Blvd

ENGINEERING FIRM: Applied Engr & Survey Inc. CONTACT: Gilbert Aldaz
ADDRESS: 1605 Blair Drive NE PHONE: 480-8125
CITY, STATE: Albuquerque, NM ZIP CODE: 87112

OWNER: Yes Housing CONTACT: Joseph Ortega
ADDRESS: 104 Ronda NW PHONE: 254-1373
CITY, STATE: Albuquerque, NM ZIP CODE: 87102

ARCHITECT: Integrated Design & Arch CONTACT: Ike Bentor
ADDRESS: 624 Tijeres Ave NW PHONE: 243-3499
CITY, STATE: Albuq., NM ZIP CODE: 87102

SURVEYOR: _____ CONTACT: _____
ADDRESS _____ PHONE: _____
CITY, STATE: _____ ZIP CODE: _____

CONTRACTOR: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
CITY, STATE: _____ ZIP CODE: _____

CHECK TYPE OF SUBMITTAL:

- ____ DRAINAGE REPORT
- X DRAINAGE PLAN 1st SUBMITTAL, *REQUIRES TCL or equal*
- ____ DRAINAGE PLAN RESUBMITTAL
- ____ CONCEPTUAL GRADING & DRAINAGE PLAN
- ____ GRADING PLAN
- ____ EROSION CONTROL PLAN
- ____ ENGINEER'S CERTIFICATION (HYDROLOGY)
- ____ CLOMR/LOMR
- ____ TRAFFIC CIRCULATION LAYOUT (TCL)
- ____ ENGINEERS CERTIFICATION (TCL)
- ____ ENGINEERS CERTIFICATION (DRB APPR. SITE PLAN)
- ____ OTHER

CHECK TYPE OF APPROVAL SOUGHT:

- ____ SIA / FINANCIAL GUARANTEE RELEASE
- X PRELIMINARY PLAT APPROVAL 50 + 10 + 6 6
- ____ S. DEV. PLAN FOR SUB'D. APPROVAL
- ____ S. DEV. PLAN FOR BLDG. PERMIT APPROVAL
- ____ SECTOR PLAN APPROVAL
- X FINAL PLAT APPROVAL
- ____ FOUNDATION PERMIT APPROVAL
- X BUILDING PERMIT APPROVAL 50.00
- ____ CERTIFICATE OF OCCUPANCY (PERM.)
- ____ CERTIFICATE OF OCCUPANCY (TEMP.)
- ____ GRADING PERMIT APPROVAL
- ____ PAVING PERMIT APPROVAL
- ____ WORK ORDER APPROVAL
- ____ OTHER (SPECIFY)

WAS A PRE-DESIGN CONFERENCE ATTENDED:

- X YES - Brad Bingham 07-09-10
- ___ NO
- ___ COPY PROVIDED

RECEIVED 0.00
SEP 07 2010
HYDROLOGY SECTION

DATE SUBMITTED: GILBERT ALDAZ BY: 09-07-10

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature , location and scope ot the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

1. **Conceptual Grading and Drainage Plan:** Required for approval of Site Development Plans greater than five (5) acres and Sector Plans
2. **Drainage Plans:** Required for building permits, grading permits, paving permits and site plans less than five (5) acres.
3. **Drainage Report:** Required for subdivisions containing more than ten (10) lots or constituting five (5) acres or more.

CITY OF ALBUQUERQUE

March 31, 2011

Gilbert Aldaz, P.E.
Applied Engineering & Survey
1605 Blair Dr. NE
Albuquerque, NM 87112

Re: La Promessa Charter School, 6900 Gonzales Rd SW,
Request for Permanent C.O. - Approved
Engineer's Stamp dated: 09-07-10 (L-10/D007)
Certification dated: 03-19-11

Dear Mr. Aldaz,

Based upon the information provided in the Certification received 03-29-11, the above referenced Certification is approved for a release of a Permanent Certificate of Occupancy by Hydrology.

If you have any questions, you can contact me at 924-3982.

Sincerely,

Timothy E. Sims,
Plan Checker—Hydrology Section
Development and Building Services

C: CO Clerk—Katrina Sigala
File

PO Box 1293
Albuquerque
NM 87103
www.cabq.gov

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 1/28/2003rd)

PROJECT TITLE: La Promessa Charter School ZONE MAP/DRG. FILE #: L-10/D7
DRB #: _____ EPC#: _____ WORK ORDER#: _____

LEGAL DESCRIPTION: Lots 150 & 151, Town of Atrisco Grant, Unit 6
CITY ADDRESS: Gonzales Road & Cobrs Blvd

ENGINEERING FIRM: Applied Engr & Survey Inc. CONTACT: Gilbert Aldaz
ADDRESS: 1605 Blair Drive NE PHONE: 480-8125
CITY, STATE: Albuquerque, NM ZIP CODE: 87112

OWNER: Yes Housing CONTACT: Joseph Ortega
ADDRESS: 104 Roma NW PHONE: 254-1373
CITY, STATE: Albuquerque, NM ZIP CODE: 87102

ARCHITECT: Integrated Design & Arch CONTACT: Ike Bentor
ADDRESS: 624 Tijeras Ave NW PHONE: 243-3499
CITY, STATE: Albuq., NM ZIP CODE: 87102

SURVEYOR: _____ CONTACT: _____
ADDRESS _____ PHONE: _____
CITY, STATE: _____ ZIP CODE: _____

CONTRACTOR: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
CITY, STATE: _____ ZIP CODE: _____

CHECK TYPE OF SUBMITTAL:

____ DRAINAGE REPORT
____ DRAINAGE PLAN 1st SUBMITTAL, *REQUIRES TCL or equal*
____ DRAINAGE PLAN RESUBMITTAL
____ CONCEPTUAL GRADING & DRAINAGE PLAN
____ GRADING PLAN
____ EROSION CONTROL PLAN
X ENGINEER'S CERTIFICATION (HYDROLOGY)
____ CLOMR/LOMR
____ TRAFFIC CIRCULATION LAYOUT (TCL)
____ ENGINEERS CERTIFICATION (TCL)
____ ENGINEERS CERTIFICATION (DRB APPR. SITE PLAN)
____ OTHER

CHECK TYPE OF APPROVAL SOUGHT:

____ SIA / FINANCIAL GUARANTEE RELEASE
____ PRELIMINARY PLAT APPROVAL
____ S. DEV. PLAN FOR SUB'D. APPROVAL
____ S. DEV. PLAN FOR BLDG. PERMIT APPROVAL
____ SECTOR PLAN APPROVAL
____ FINAL PLAT APPROVAL
____ FOUNDATION PERMIT APPROVAL
____ BUILDING PERMIT APPROVAL
X CERTIFICATE OF OCCUPANCY (PERM.)
____ CERTIFICATE OF OCCUPANCY (TEMP.)
____ GRADING PERMIT APPROVAL
____ PAVING PERMIT APPROVAL
____ WORK ORDER APPROVAL
____ OTHER (SPECIFY)

WAS A PRE-DESIGN CONFERENCE ATTENDED:

X YES - Brad Bingham 07-09-10
__ NO
__ COPY PROVIDED

RECEIVED
MAR 29 2011
HYDROLOGY SECTION

DATE SUBMITTED: 03-21-11 BY: Gilbert Aldaz

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature , location and scope ot the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

1. **Conceptual Grading and Drainage Plan:** Required for approval of Site Development Plans greater than five (5) acres and Sector Plans.
2. **Drainage Plans:** Required for building permits, grading permits, paving permits and site plans less than five (5) acres.
3. **Drainage Report:** Required for subdivisions containing more than ten (10) lots or constituting five (5) acres or more.

Timothy Sims
Plan Checker–Hydrology
Planning Department
Development & Building Services Division
600 2nd St. NW, Suite 201
Albuquerque, NM 87102

September 23, 1013

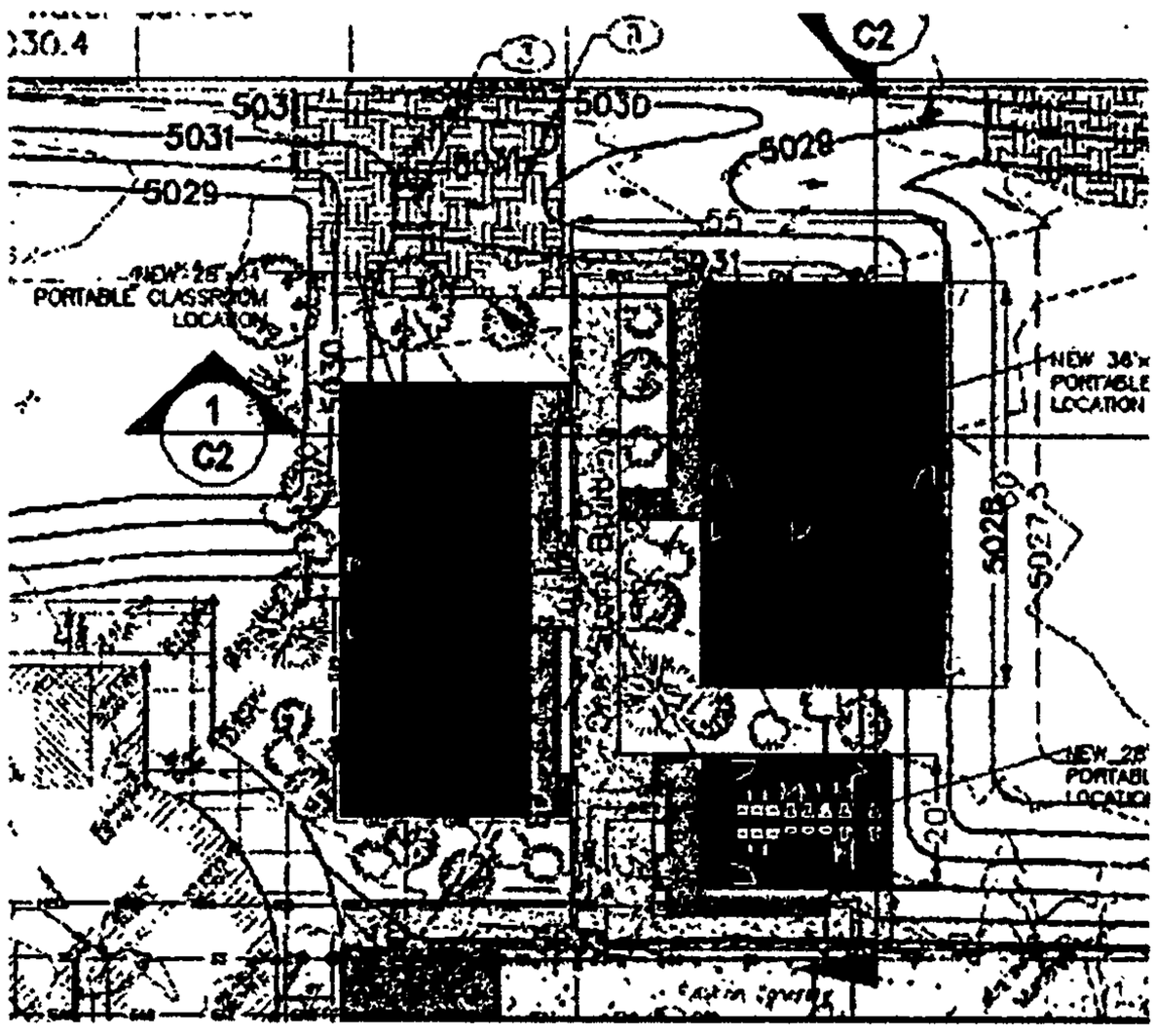
Re: Reduction in Retention Pond capacity at Nuestros Valores Charter School, Albuquerque, NM

Mr. Sims

You will find below our methodology and calculations showing the proposed reduction of the retention pond capacity at the Nuestros Valores Charter School. This minor reduction in the pond's capacities are required to provide adequate foundation support for the new portable classroom facilities the school needs to accommodate an increase in the student population.

The basis for these calculations is the site plans submitted to the City of Albuquerque in 2009 for the building of the current school infrastructure. The "Proposed Grading/Drainage Improvements" plan in this submittal shows the locations, contours and 100 year rainfall event depths for three retention ponds located to the east and west of the main school facility. Additionally, the drawing shows the area for a "Future One Story Building" which was graded to accommodate the anticipated future growth of the school. This area is where the client would like to locate the new buildings, which will be three portable class room buildings instead of a one story structure. It should be noted that all three of the existing retention ponds are interconnected, allowing water transfer between the three ponds.

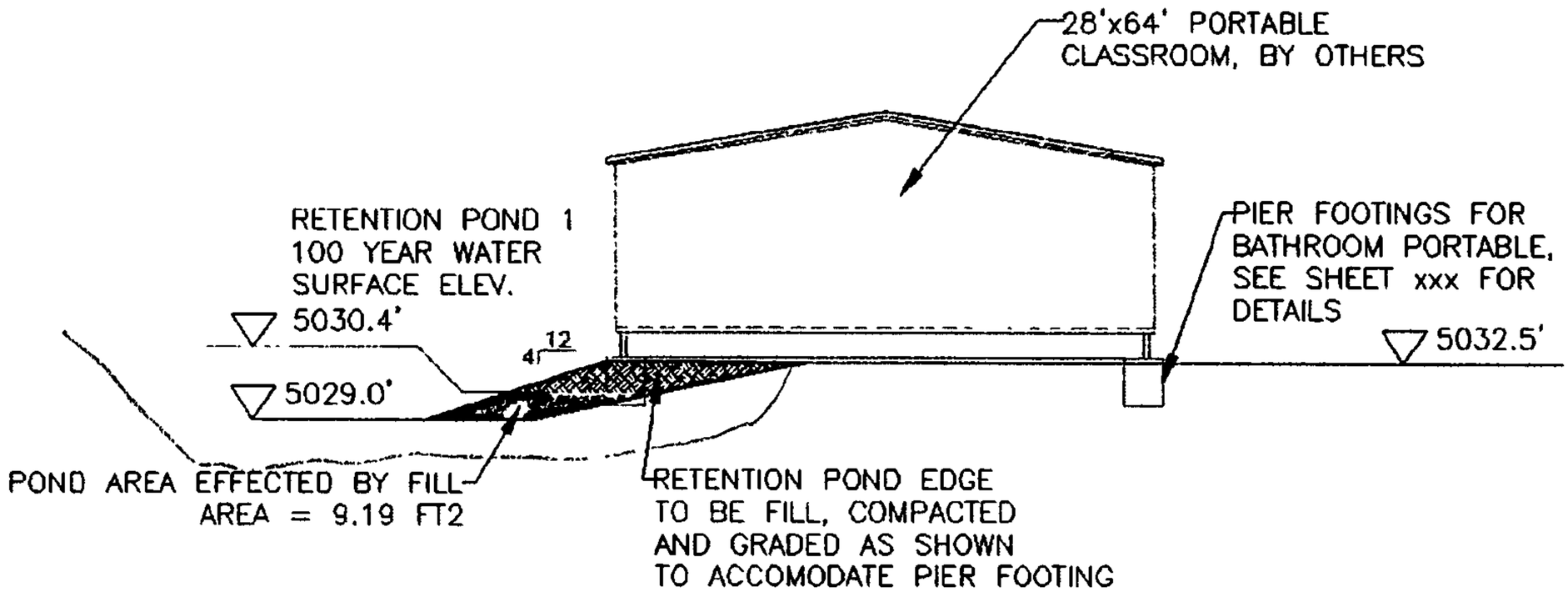
Because of the sizes of the new portable classrooms and the architectural requirements between the classrooms, the new buildings were sited so as to encroach upon retention ponds 1 and 2 along their southern and northern edges, respectively. In addition, the building layout will extend into the drainage link between retention ponds 1 and 2 along the western edge of the link. Retention Pond 3 is not affected by the new building locations. This layout is shown in the figure shown below.



New Portable Buildings Layout

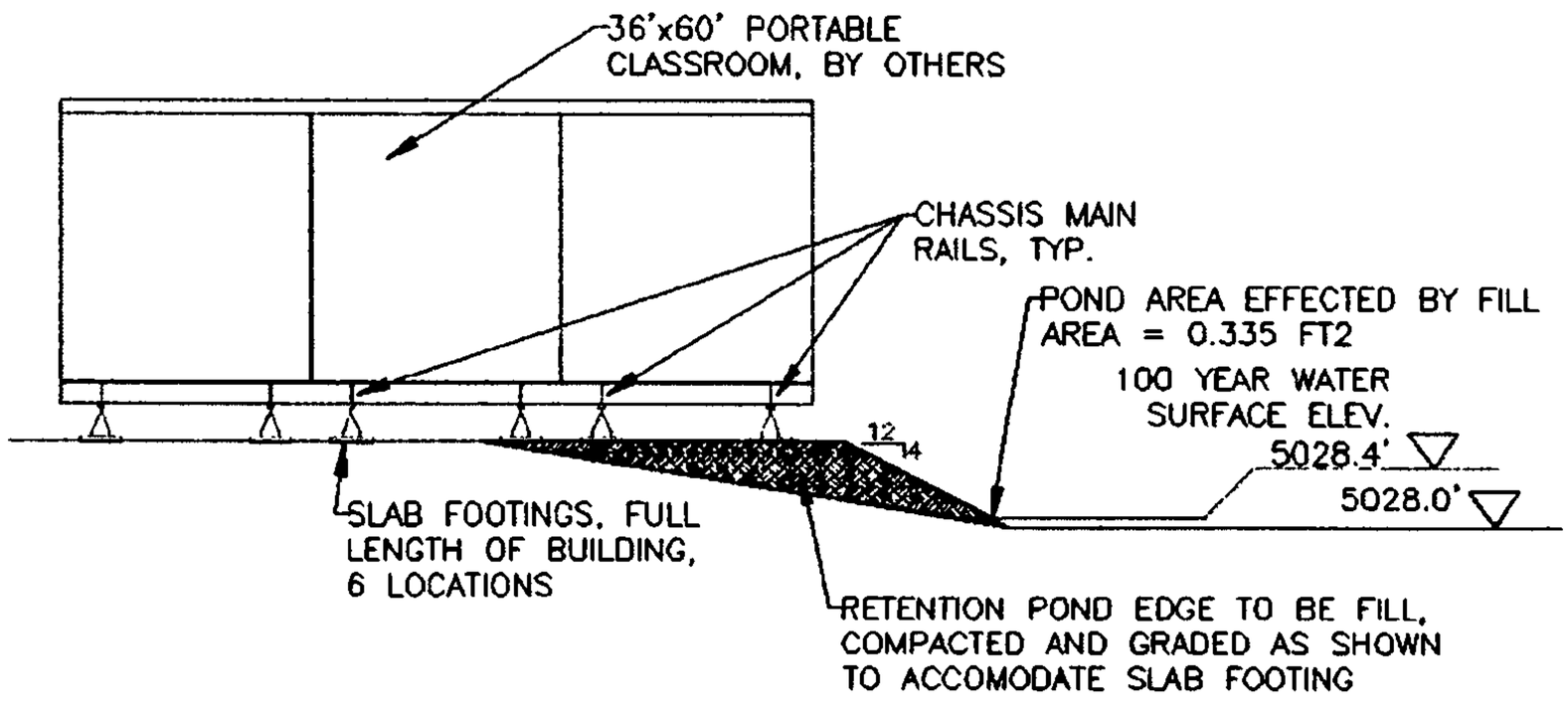
In determining the effect that the portable buildings will have on the existing retention ponds, cross sections were drawn to show the extent of encroachment that the bank modifications will have on the existing retention ponds sides.

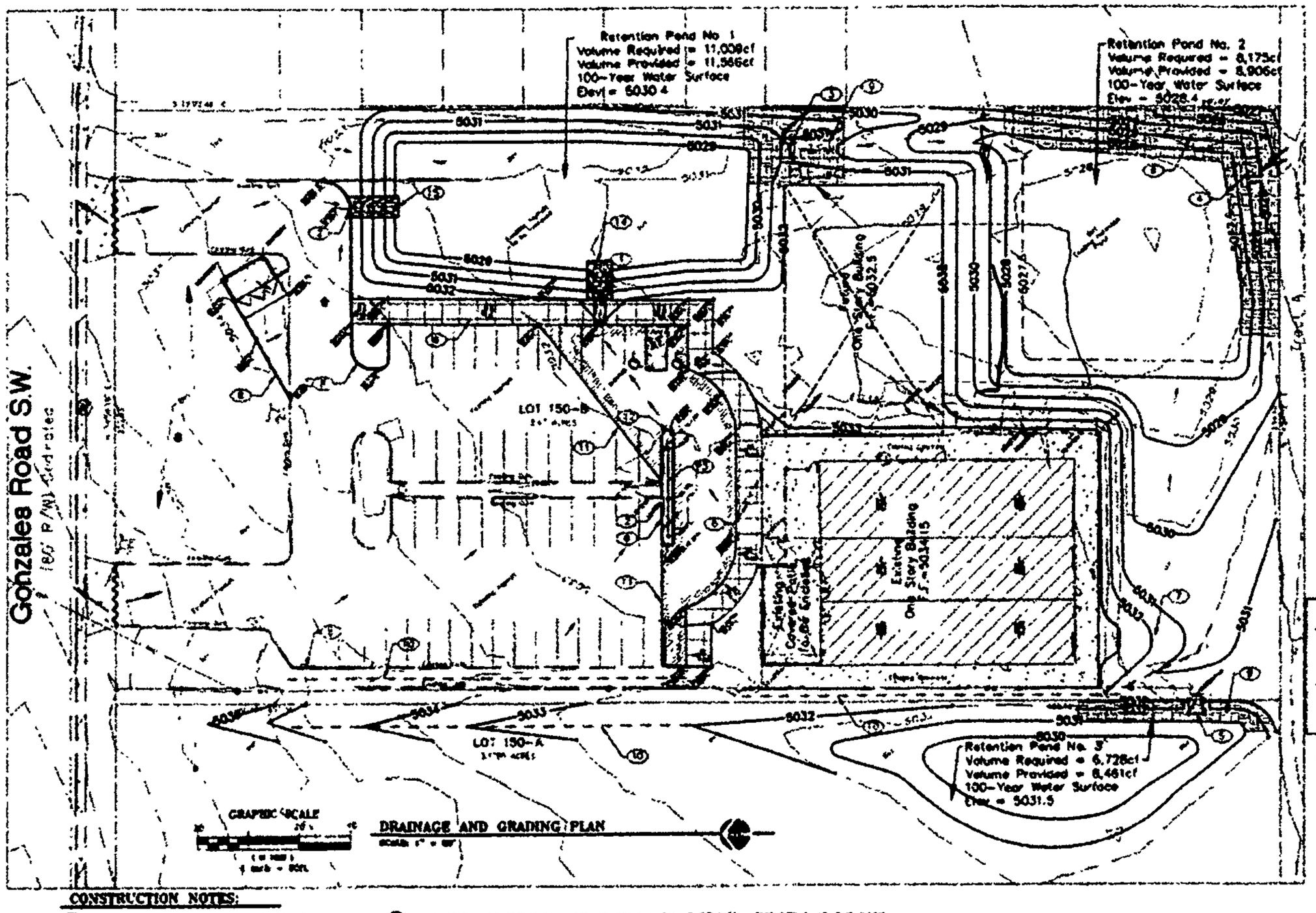
Starting with Retention Pond 1, we have drawn the cross section through the pond and adjacent building which shows this encroachment. It should be noted that this condition occurs only along a 31'-10" length of the southern portion of retention Pond 1 and not along the entire length of the southern side. This length is itself conservative since it does not account for the corner bend of the pond. This condition is shown below.



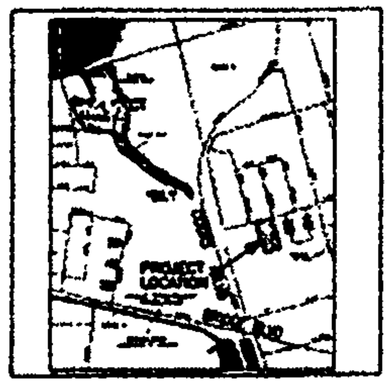
The area of fill that affects the capacity of Retention Pond 1 as shown above is 9.19 ft^2. This occurs for a conservative length of 31'-10" along the southern edge of Retention Pond 1. The corresponding volume that is removed from water storage of the pond based upon the 100 Year Water Surface Elevation is conservatively calculated at 293 ft^3 . This reduces the capacity of Retention Pond 1 from 11,566 ft^3 to 11,273 ft^3, a 2.6% reduction in the retention pond capacity and still above the required capacity of 11,099 ft^3.

Considering Retention Pond 2 in the same manner, we show the cross section through the large portable adjacent to Retention Pond 2. The length of fill occurs along the entire 60' of the building side and is shown in the sketch below. The area of fill that affects the capacity of Retention Pond 2 based upon the 100 Year Water Surface Elevation as shown below is 0.335 ft^2. This occurs for a length of 60'-0" along the northern edge of Retention Pond 2. The corresponding volume that is removed for water storage from the pond is conservatively calculated at 20.1 ft^3 . This reduces the capacity of Retention Pond 2 from 8,906 ft^3 to 8,885.9 ft^3, a 0.2% in the retention pond capacity and still above the required capacity of 8,175 ft^3.

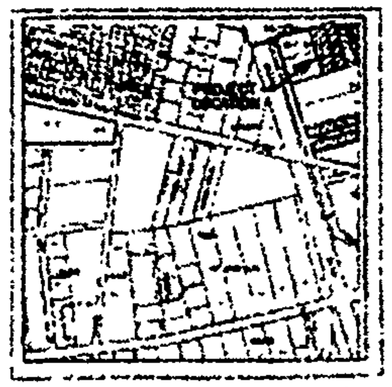




DRAINAGE AND GRADING PLAN

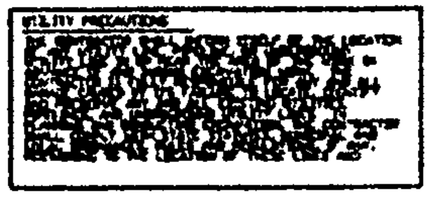


FIRM MAP 35001C0320D



VICINITY MAP 1-10

LEGEND



APPLIED ENGINEERING AND SURVEYING, INC.

CONSULTANTS

PROFESSIONAL SEAL

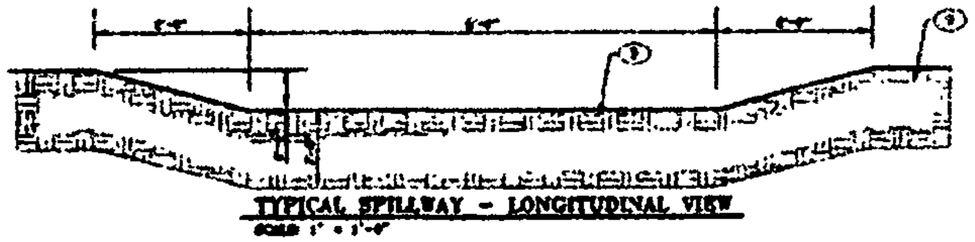
LA PROMESSA CHARTER SHOOL
ALBUQUERQUE, NEW MEXICO

PROPOSED GRADING/DRAINAGE IMPROVEMENTS

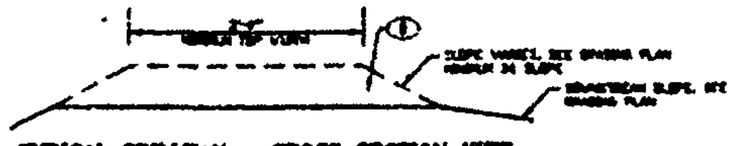
C-101

CONSTRUCTION NOTES:

1. CONSTRUCT 2-18' WIDE BY 6" DEEP SIDEWALK CULVERTS WITH STEEL PLATE TOP PER CITY STD DWG 2236
2. PROVIDE 6' WIDE CURB OPENING TO ALLOW FLOWS FROM ASPHALT AREA TO DRAIN INTO LANDSCAPED AREA
3. CONSTRUCT A DRAINAGE POND SPILLWAY FOR POND NO. 1 WITH SPILLWAY ELEVATION = 5031.5 PER DETAIL SHOWN ON THIS SHEET
4. CONSTRUCT A DRAINAGE POND SPILLWAY FOR POND NO. 2 WITH SPILLWAY ELEVATION = 5029.5 PER DETAIL SHOWN ON THIS SHEET
5. CONSTRUCT A DRAINAGE POND SPILLWAY FOR POND NO. 3 WITH SPILLWAY ELEVATION = 5031.5 PER DETAIL SHOWN ON THIS SHEET
6. NEW SIDEWALK SEE SITE PLAN BY ARCHITECT
7. NEW HANDICAP RAMP, SEE DETAILS BY ARCHITECT
8. NEW CURB, SEE SITE PLAN BY ARCHITECT.
9. COMPACTION REQUIREMENTS - FOLLOWING ALL CUT EARTHWORK, THE SOILS AT THE BASE OF EXCAVATIONS SHALL BE SCARIFIED TO A DEPTH OF 6 INCHES AND MOISTURE CONDITIONED TO OPTIMUM MOISTURE CONTENT (+/-2%). THE SURFACE OF THE NATURAL SOILS AT THE BASE OF EXCAVATIONS SHOULD BE COMPACTED TO 95% MAXIMUM DRY DENSITY AS DETERMINED BY ASTM STANDARD D1557 MODIFIED PROCTOR TESTING (ASTM D-1557) WILL BE NECESSARY TO DETERMINE THE MAXIMUM DRY DENSITY AND OPTIMUM MOISTURE CONTENT OF THE NATURAL SOILS AT THE BASE OF EXCAVATIONS AS WELL AS ON ALL ENGINEERED FILL PLACED. THE SURFACE OF NATURAL SOILS SHOULD BE TESTED FOR COMPACTION PRIOR TO PLACING ENGINEERED FILL. ENGINEERED FILL SHOULD BE PLACED IN LOOSE LIFTS A MAXIMUM OF EIGHT-INCHES THICK. EACH LIFT OF FILL SHOULD BE COMPACTED PRIOR TO PLACING ADDITIONAL LIFTS. COMPACTION TESTING SHOULD BE PERFORMED ON FILL AT A MINIMUM OF EVERY OTHER LIFT UNTIL FINISHED GRADE IS REACHED
10. CONSTRUCT 6" DEEP EARTH SWALE TO DRAIN FLOWS.
11. LIMITS OF ASPHALT REMOVAL AND REPLACEMENT
12. PROVIDE 6' WIDE CURB OPENING TO ALLOW OVERFLOWS FROM WATERHARVESTING AREA TO DRAIN INTO ASPHALT
13. GRADE 6' DEEP SWALE FOR WATER HARVESTING ISLAND.
14. 15'LONG X 10'WIDE X 12" THICK, 4" ROUND FRACTURE ROCK WITH FILTER BLANKET AT BOTTOM
15. 19'LONG X 8'WIDE X 12" THICK, 4" ROUND FRACTURE ROCK WITH FILTER BLANKET AT BOTTOM



TYPICAL SPILLWAY - LONGITUDINAL VIEW



TYPICAL SPILLWAY - CROSS SECTION VIEW

As stated previously, the retaining pond system design in the 2009 drawings is a network of three retention ponds connected by spillways with differing exit elevations for Pond 1 to Pond 2 and for Pond 3 to Pond 2. These elevations are 5030.4 and 5031.5 respectively. An additional check for system capacity is looking at the reduction in capacity of the entire system. The original system capacity was (11,566 + 8,906 + 8461) = 28,933 ft^3. With the reduction described above, the new system capacity is (11,273 + 8,885.9 + 8,461) = 28,619.9 ft^3, a 1.1% reduction in overall system capacity.

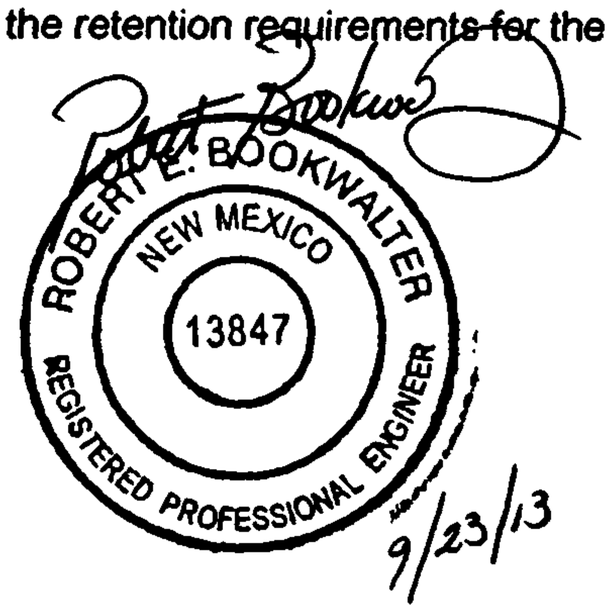
Curve Number for the building site

As is seen on the original 2009 drawings, the original designer provided additional volume in the ponds while also prepping an area for the future location of a new building facility. This additional volume amounts to an 11.7% increase above the required volume.

Because the existing surface has been graded, compacted and has a layer of gravel over the majority of the site, an approximate Curve Number (CN) could be assumed to be in the 86 – 93 range for this surface. An impervious surface for the roofs and asphalt that will replace the surface described above would have a CN value of 98. It seems reasonable that the original storage capacity took into these considerations in their design.

Conclusion

Our conclusion is that the small modifications to the edges of Ponds 1 & 2 are minor and will still easily meet the retention requirements for the drainage system.



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