

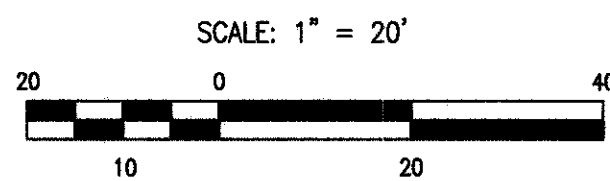
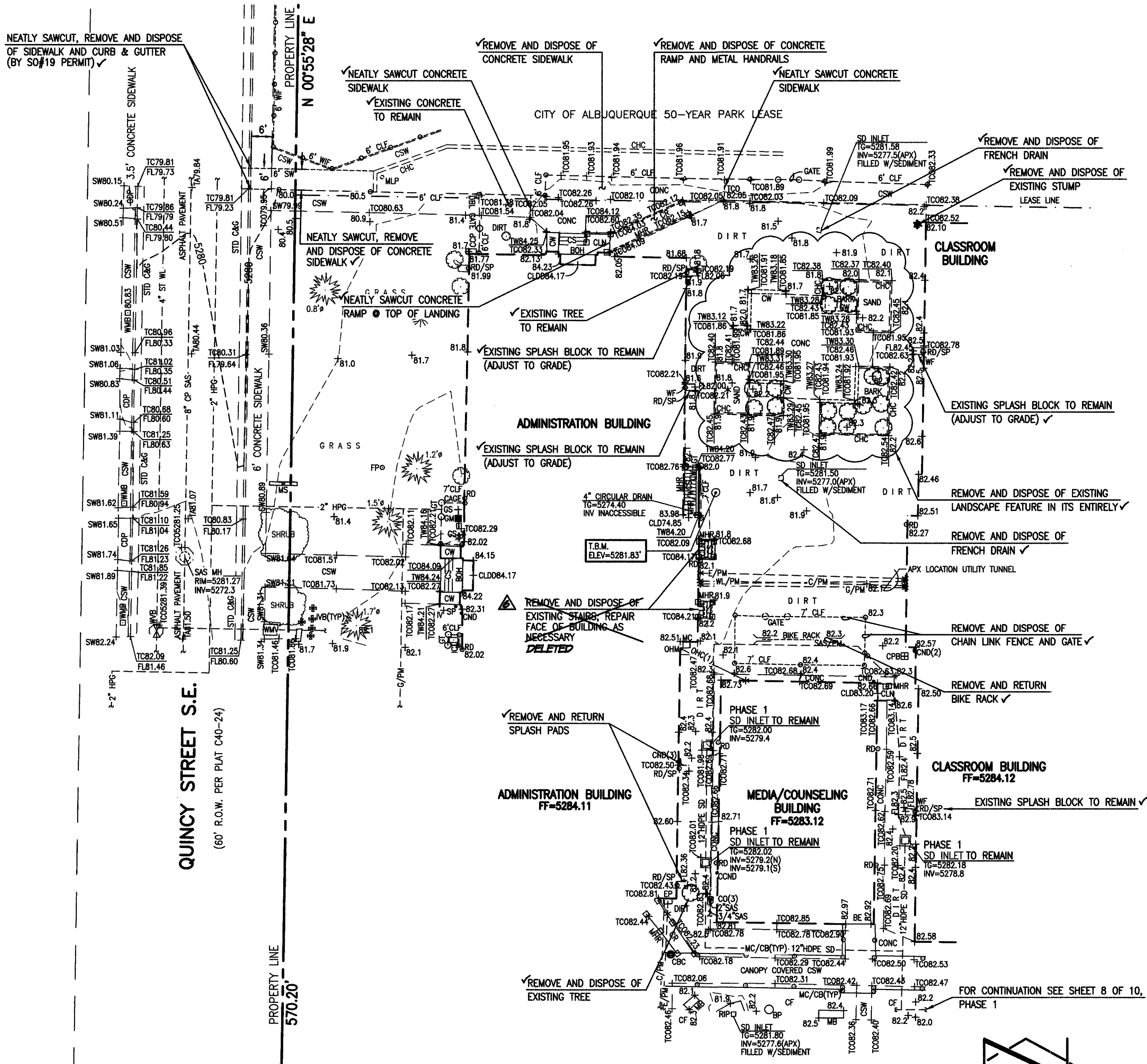
DESIGN SURVEY NOTE:

THIS IS NOT A BOUNDARY SURVEY. DATA IS SHOWN FOR ORIENTATION ONLY. BOUNDARY INFORMATION DEPICTED BY THIS PLAN IS BASED UPON UNRECORDED BOUNDARY SURVEY BY HIGH MESA CONSULTING GROUP (NMPS 11184) DATED 02-04-2011, (2010.182.8). THE TOPOGRAPHIC INFORMATION DEPICTED HEREON IS BASED UPON TOPOGRAPHIC SURVEY PREPARED BY HIGH MESA CONSULTING GROUP (NMPS 11184) DATED 02-04-2011 (2010.182.8), UPDATED BY HIGH MESA CONSULTING GROUP (NMPS 15075) DATED 04-03-2012 (2011.183.3), AND SUPPLEMENTED BY ENGINEER'S SITE VISIT DATED 09-26-2012.

**HIGH MESA Consulting Group**

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EXISTING CONDITIONS, DEMOLITION AND DRAINAGE PLANS  
DRAINAGE IMPROVEMENTS - PHASE 2  
WHITTIER ELEMENTARY SCHOOL



RECORD DRAWING LEGEND	
CONSTRUCT	RECORD INFORMATION (VERIFIED BY ENGINEER)
✓	AS-CONSTRUCTED = AS-DESIGNED (VERIFIED BY ENGINEER)
38' 42"	RECORD INFORMATION (VERIFIED BY ENGINEER)
+25.2	RECORD INFORMATION (VERIFIED BY ENGINEER)
28.98' 42"	RECORD INFORMATION (VERIFIED BY ENGINEER)
✓	AS-CONSTRUCTED = AS-DESIGNED (VERIFIED BY AS-BUILT SURVEY)
31.8	RECORD INFORMATION FROM AS-BUILT SURVEY
+26.9	RECORD INFORMATION FROM AS-BUILT SURVEY
31.25' 22"	RECORD INFORMATION FROM AS-BUILT SURVEY

DRAINAGE PLAN

I. INTRODUCTION AND EXECUTIVE SUMMARY  
THIS PROJECT, LOCATED IN THE LOWER SOUTHEAST HEIGHTS OF THE ALBUQUERQUE METROPOLITAN AREA, REPRESENTS A MODIFICATION TO AN EXISTING SITE WITHIN AN INFILL AREA. THE PROPOSED COURTYARD DEVELOPMENT IS COMPRISED OF NEW PAVING WITH ASSOCIATED PRIVATE STORM DRAIN AND LANDSCAPING IMPROVEMENTS. THE EXISTING COURTYARD CURRENTLY LACKS POSITIVE DRAINAGE AND IS PLAGUED BY NUISANCE PONDING. THE PROPOSED STORM DRAIN IMPROVEMENTS WILL PROVIDE POSITIVE DRAINAGE FROM THE COURTYARD TO QUINCY STREET SE.  
THIS SUBMITTAL IS MADE IN SUPPORT OF GRADING, PAVING AND SO#19 PERMITS WITHIN THE JURISDICTION OF THE CITY OF ALBUQUERQUE.

II. PROJECT DESCRIPTION  
AS SHOWN BY THE VICINITY MAP, THE SCHOOL SITE OCCUPIES THE BLOCK BOUNDED ON THE NORTH BY KATHRYN AVENUE SE, ON THE EAST BY TRUMAN STREET SE, ON THE SOUTH BY ANDERSON AVENUE SE AND ON THE WEST BY QUINCY STREET SE. THE CURRENT LEGAL DESCRIPTION IS TRACT A, BLOCK 7A, RIDGECREST ADDITION, KNOWN AS WHITTIER ELEMENTARY SCHOOL. AS SHOWN BY PANEL 354 OF 825 OF THE NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAPS PUBLISHED BY FEMA FOR BERNALILLO COUNTY, NEW MEXICO, SEPTEMBER 26, 2008, THIS SCHOOL SITE LIES ADJACENT TO AN AO DEPTH 1 DESIGNATED FLOOD HAZARD ZONE THAT COINCIDES WITH TRUMAN STREET SE AND KATHRYN AVENUE SE. WHERE THE FLOOD ZONE IS CONFINED TO THE STREET, THIS APPARENT STREET FLOODING DOES NOT IMPACT THE PROJECT SITE THAT IS LOCATED ON THE WEST SIDE OF THE CAMPUS, AWAY FROM THE STREETS IDENTIFIED BY THE FLOODPLAIN MAPPING.

III. BACKGROUND DOCUMENTS  
THE PREPARATION OF THIS PLAN RELIED UPON THE FOLLOWING DOCUMENTS:  
• TOPOGRAPHIC SURVEY PREPARED BY HIGH MESA CONSULTING GROUP (NMPS 11184) DATED 02-04-2011 AND UPDATED 04-03-2012. THIS REFERENCED SURVEY PROVIDES THE BASIS FOR THE EXISTING CONDITIONS OF THE PROJECT SITE.  
• DRAINAGE SUBMITTAL FOR KINDERGARTEN PLAYGROUND AND DRAINAGE IMPROVEMENTS AT WHITTIER ELEMENTARY SCHOOL (PHASE 1) PREPARED BY HIGH MESA CONSULTING GROUP (NMPS 8547) DATED 07-28-2011. THIS PRIOR SUBMITTAL REPRESENTS PHASE 1 DRAINAGE IMPROVEMENTS ON THE WHITTIER ELEMENTARY SCHOOL CAMPUS FOCUSED UPON MITIGATING DRAINAGE PROBLEMS ON THE SITE; PHASE 2 IS AN EXTENSION OF THE INITIAL PROJECT. UPON COMPLETION OF PHASE 2, BOTH PHASES WILL BE CERTIFIED BY THE ENGINEER OF RECORD AS A COMBINED SUBMITTAL FOR ACCEPTANCE OF THE GRADING AND DRAINAGE IMPROVEMENTS.  
• WHITTIER ELEMENTARY SCHOOL GRADING AND DRAINAGE PLAN PREPARED BY ISAACSON AND ARFMAN (NMPS 7322) DATED 10-19-2005. THIS PLAN INCLUDED THE INSTALLATION OF TWO FRENCH DRAINS IN THE COURTYARD BETWEEN THE ADMINISTRATION BUILDING, MEDIA BUILDING AND CLASSROOM BUILDING. THE APPARENT DESIGN INTENT WAS TO COLLECT AND INFILTRATE THE RUNOFF THAT COLLECTS IN THIS LOW AREA. HOWEVER, THE INLETS HAVE FAILED AND ARE DRAINING TO THE STREET. THE OVERFLOW ENCROACHING ONTO DESIGNATED SIDEWALK AREAS AND RENDERING THE COURTYARD UNUSABLE FOR SCHOOL ACTIVITIES.  
• PLATE L17, STORM FACILITIES MAPS, CITY OF ALBUQUERQUE, JULY 30, 2002. THIS MAPPING VERIFIED THE PRESENCE OF LARGE DIAMETER PUBLIC STORM DRAIN FACILITIES (30" AND 60") WITHIN KATHRYN AVENUE SE. DESPITE THE PRESENCE OF THESE FACILITIES, KATHRYN AVENUE SE EXISTS AS A DESIGNATED FLOOD HAZARD ZONE AO.  
• PLATE L17, THE ALBUQUERQUE MASTER DRAINAGE STUDY (AMDS) PREPARED BY BOHANNAN-HUSTON FOR THE CITY OF ALBUQUERQUE DATED JANUARY, 1981. THE AMDS PROVIDES BACKGROUND INFORMATION RELATIVE TO THE MASTER PLAN CORRECTION OF FLOODING IN THE PROXIMITY OF THE WHITTIER SCHOOL CAMPUS. BY CROSS-REFERENCING WITH THE COA STORM FACILITIES MAP (SEE ABOVE), IT APPEARS THE STORM DRAIN IMPROVEMENTS PROPOSED IN THE AMDS DOWNSTREAM OF THIS SITE HAVE NOT BEEN CONSTRUCTED, NECESSITATING THE CONTINUATION OF CONTROLLED DISCHARGE TO KATHRYN AVENUE SE.

IV. EXISTING CONDITIONS  
THE OVERALL SITE IS A DEVELOPED ELEMENTARY SCHOOL CAMPUS. AT PRESENT, THE SITE DRAINS TO THE ADJACENT CITY STREETS THAT SURROUND THE PROPERTY. ULTIMATELY, THE SITE DISCHARGES ITS RUNOFF TO KATHRYN AVENUE SE, AN AO DEPTH 1 DESIGNATED FLOOD HAZARD ZONE. THIS SUBMITTAL FOR THE CITY OF ALBUQUERQUE DATED JANUARY, 1981, THE AMDS PROVIDES BACKGROUND INFORMATION RELATIVE TO THE MASTER PLAN CORRECTION OF FLOODING IN THE PROXIMITY OF THE WHITTIER SCHOOL CAMPUS. BY CROSS-REFERENCING WITH THE COA STORM FACILITIES MAP (SEE ABOVE), IT APPEARS THE STORM DRAIN IMPROVEMENTS PROPOSED IN THE AMDS DOWNSTREAM OF THIS SITE HAVE NOT BEEN CONSTRUCTED, NECESSITATING THE CONTINUATION OF CONTROLLED DISCHARGE TO KATHRYN AVENUE SE.

REVIEW OF THE CITY OF ALBUQUERQUE STORM DRAIN FACILITIES MAPS INDICATES THAT AN EXISTING 60" PUBLIC STORM DRAIN PARALLELS A 30" PUBLIC STORM DRAIN ALSO WITHIN KATHRYN AVENUE SE. DESPITE THE PRESENCE OF THESE PUBLIC FACILITIES, KATHRYN AVENUE SE EXISTS AS A DESIGNATED FLOOD HAZARD ZONE. THE PRESENCE OF THE DESIGNATED FLOOD HAZARD AREAS ADJACENT TO AND DOWNSTREAM OF THIS SITE DICTATE CONTROLLED DISCHARGE. OFFSITE FLOWS DO NOT IMPACT THE PROJECT SITE AS OFFSITE FLOWS APPEAR TO BE CONTAINED WITHIN THE PUBLIC ROADWAY CORRIDORS AS SUGGESTED BY THE FLOODPLAIN MAP.

V. DEVELOPED CONDITIONS  
THE PROPOSED CONSTRUCTION CONSISTS OF DEVELOPING THE COURTYARD AREA INTO AN OUTDOOR CLASSROOM SERVED BY A NEW PRIVATE STORM DRAIN SYSTEM. RUNOFF FROM THE OUTDOOR CLASSROOM AND ADJACENT ROOF AREAS WILL DRAIN TO NEW STORM INLETS CONNECTED BY SMALL DIAMETER PIPING. AN 8" PRIVATE STORM DRAIN WILL COLLECT AND DISCHARGE THIS RUNOFF WEST TO QUINCY STREET WHERE IT WILL DISCHARGE VIA 12" SIDEWALK CULVERT TO BE CONSTRUCTED BY SO#19 PERMIT.

THE LIMITED SCOPE OF THIS PROJECT WILL RESULT IN A MINOR INCREASE IN THE IMPERVIOUSNESS OF THE SITE. THE RESULT IS A NEGLIGIBLE INCREASE IN RUNOFF GENERATED BY THIS PORTION OF THE SCHOOL SITE. DISCHARGE TO QUINCY STREET SE WILL BE CONTROLLED VIA THE 8" PRIVATE STORM DRAIN THAT RELEASES RUNOFF TO THE STREET. THIS PROJECT WILL NOT ALTER OFFSITE FLOW CONDITIONS.

VI. GRADING PLAN  
THE GRADING PLAN SHOWS 1.) EXISTING AND PROPOSED GRADES INDICATED BY SPOT ELEVATIONS AND CONTOURS AT 1'-0" INTERVALS, 2.) THE LIMIT AND CHARACTER OF THE EXISTING AND PROPOSED IMPROVEMENTS, AND 3.) CONTINUITY BETWEEN EXISTING AND PROPOSED GRADES. AS SHOWN BY THIS PLAN, THE PROPOSED OUTDOOR CLASSROOM AND PRIVATE STORM DRAIN IMPROVEMENTS WILL MITIGATE NUISANCE PONDING IN THE SUBJECT AREA.

VII. CALCULATIONS  
THE CALCULATIONS CONTAINED HEREON ANALYZE THE EXISTING AND DEVELOPED CONDITIONS FOR THE 100-YEAR, 6-HOUR RAINFALL EVENT. THE PROCEDURE FOR 40 ACRE AND SMALLER BASINS, AS SET FORTH IN THE REVISION OF SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL, VOLUME 2: DESIGN CRITERIA, DATED JANUARY 1993, HAS BEEN USED TO QUANTIFY THE PEAK RATE OF DISCHARGE AND VOLUME OF RUNOFF GENERATED. AS DEMONSTRATED BY THESE CALCULATIONS, THE PROPOSED OUTDOOR CLASSROOM IMPROVEMENTS WILL RESULT IN A NEGLIGIBLE INCREASE IN THE DEVELOPED RUNOFF GENERATED BY THIS PORTION OF THE SCHOOL SITE. THE DISCHARGE CAPACITY OF THE 8" STORM DRAIN HAS BEEN EVALUATED BY THE MANNING'S EQUATION FOR GRAVITY FLOW IN PIPES.

VIII. CONCLUSIONS  
THE FOLLOWING CONCLUSIONS HAVE BEEN ESTABLISHED AS A RESULT OF THE EVALUATIONS CONTAINED HEREIN:  
1. THE PROPOSED IMPROVEMENTS WILL PROVIDE POSITIVE DRAINAGE IN THE COURTYARD THEREBY ELIMINATING PONDING.  
2. THE PROPOSED IMPROVEMENTS WILL RESULT IN A MINOR INCREASE IN THE IMPERVIOUSNESS OF THIS PORTION OF THE SITE.  
3. THE PROPOSED IMPROVEMENTS WILL RESULT IN A NEGLIGIBLE INCREASE IN RUNOFF GENERATED BY THIS PORTION OF THE SITE.  
4. THE PROPOSED IMPROVEMENTS WILL NOT ADVERSELY IMPACT DOWNSTREAM PROPERTIES OR DOWNSTREAM DRAINAGE CONDITIONS.

LEGEND

APX	APPROXIMATE
BE	BUILDING ENTRANCE
BOH	BUILDING OVERHANG
BP	OAK BARREL PLANTER
C/PM	COMMUNICATION LINE BY PAINT MARK
CBS	CONCRETE BUILDING COLUMN
CCND	COMMUNICATION CONDUIT AT POLE
CCP	COMMUNICATION PANEL
CDP	CONCRETE DRIVE PAD
CF	CRUSHER FINE
CHC	CONCRETE HEADER CURB
CLD	CENTERLINE DOOR
CLDD	CENTERLINE DOUBLE DOOR
CLF	CHAIN LINK FENCE
CLN	CONCRETE LANDING
CND	ELECTRIC CONDUIT
CNP	CONCRETE PIPE
CPB	COMMUNICATION PULLBOX
CR	CONCRETE RAMP
CSW	CONCRETE STEPS
CSW	CONCRETE SIDEWALK
CSW	CONCRETE WALL
DBL	DOUBLE
E/PM	ELECTRIC LINE BY PAINT MARK
EP	ELECTRIC PANEL
FL	FLOWLINE
FL	FLAG POLE
G/PM	GAS LINE BY PAINT MARK
GM	GAS METER
GT	GAS SERVICE
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HPC	HIGH PRESSURE GAS LINE
ICT	IRRIGATION CONTROL TIMER
INV	INVERT
IV	IRRIGATION VALVE BOX (NON FUNCTIONAL)
IVB	IRRIGATION VALVE BOX
MB	METAL BENCH
MC	METAL COVER
MC/CB	METAL CANYON COLUMN WITH 1'x1' CONCRETE BASE
MH	MANHOLE
MHR	METAL HAND RAIL
MHR/W	METAL HAND RAIL ON TOP OF WALL
MLP	METAL LIGHT POLE
OH(1)	OVERHEAD COMMUNICATION (# OF LINES)
OHM	ELECTRIC OVERHEAD MAST
RD	ROOF DRAIN
RD/SP	ROOF DRAIN WITH CONCRETE SPLASH PAD
RIP	RIP-RAP
SAS	SANITARY SEWER
SAS/PM	SANITARY SEWER LINE BY PAINT MARK
SD	STORM DRAIN
SP	STEEL POLE
ST	COA STANDARD CURB AND GUTTER
STD C&G	TOP OF ASPHALT
SW	TOP OF ASPHALT
TA	TOP OF CURB
TCO	TOP OF CONCRETE
TW	TOP OF WALL
TYP	TYPICAL
WF	WATER FAUCET
WHB	WATER HOT BOX
WIF	WROUGHT IRON FENCE
WL	WATER LINE
WL/PM	WATER LINE BY PAINT MARK
WMB	WATER METER BOX
WNV	WATER VAULT
WVB	WATER VALVE BOX
*	PAINTED UTILITY LINE-SPOT
0.8'	TREE TRUNK DIAMETER
☼	CONIFEROUS TREE
☼	SMALL DECIDUOUS TREE
☼	TREE STUMP
☼	SHRUB
○	SMALL SHRUB

CONSTRUCTION NOTES

- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM 260-1990 FOR DESIGNATION (LINE-SPOTTING) OF EXISTING PUBLIC UTILITIES AND EXISTING UTILITIES OWNED AND OPERATED BY ALBUQUERQUE PUBLIC SCHOOLS.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL POTENTIAL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL INTERPRETATIONS IT MAKES WITHOUT FIRST CONTACTING THE ENGINEER AS REQUIRED ABOVE.
- 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.
- ALL CONSTRUCTION WITHIN PUBLIC RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PROCEDURES.
- IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE MANNER ONLY. AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. IF ANY SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE OWNER OF SAID UTILITY, AND THE INFORMATION MAY BE INCOMPLETE, OR MAY BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES. THE ENGINEER HAS CONDUCTED ONLY PRELIMINARY INVESTIGATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES. THIS INVESTIGATION IS NOT CONCLUSIVE, AND MAY NOT BE COMPLETE, THEREFORE, MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES, AND UNDERGROUND UTILITY LINES. IN PLANNING AND CONDUCTING EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.
- THE DESIGN OF PLANTERS AND LANDSCAPED AREAS IS NOT PART OF THIS PLAN. ALL PLANTERS AND LANDSCAPED AREAS ADJACENT TO THE BUILDING(S) SHALL BE PROVIDED WITH POSITIVE DRAINAGE TO AVOID ANY PONDING ADJACENT TO THE STRUCTURE. FOR CONSTRUCTION DETAILS, REFER TO LANDSCAPING PLAN.
- AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY. AN APPROVED COPY OF THESE PLANS MUST BE SUBMITTED AT THE TIME OF APPLICATION FOR THIS PERMIT.
- BACKFILL COMPACTION SHALL BE ACCORDING TO RESIDENTIAL STREET USE.
- MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
- WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS

EROSION NOTES

- THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY.
- THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY SO THAT THE EXCAVATED MATERIAL IS NOT SUSCEPTIBLE TO BEING WASHED DOWN THE STREET.
- WHEN APPLICABLE, CONTRACTOR SHALL SECURE "TOPSOIL DISTURBANCE PERMIT" FROM THE CITY AND/OR FILE A NOTICE OF INTENT (N.O.I.) WITH THE EPA PRIOR TO BEGINNING CONSTRUCTION.

BENCHMARKS

PROJECT BENCHMARK

A 3 1/4" ALUMINUM DISK STAMPED "B-K17 1984", SET FLUSH IN THE TOP BACK OF CURB AT THE MEDIAN NOSE, JUST WEST OF THE INTERSECTION OF ZUNI ROAD AND WASHINGTON STREET S.E.  
ELEVATION = 5232.489 FEET (NAVD 1988)

TEMPORARY BENCHMARK (T.B.M.)

A #5 REBAR WITH CAP STAMPED "HMC CONTROL NMPS 11184" AS SHOWN ON THIS SHEET.  
ELEVATION = 5281.83 FEET (NAVD 1988)

ENGINEER'S CERTIFICATION (PHASE TWO DRAINAGE)

I, JEFFREY G. MORTENSEN, NMPE 8547, OF THE FIRM HIGH MESA CONSULTING GROUP, HEREBY CERTIFY THAT THIS PROJECT (PHASE TWO) HAS BEEN GRADED, DRAINED AND CONSTRUCTED IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 10-29-2012. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY ME OR PERSONNEL UNDER MY DIRECT SUPERVISION AS SUPPLEMENTAL SITE DATA COMBINED WITH RECORD INFORMATION OBTAINED FROM THE AS-BUILT SURVEY DATED 06-12-2013 PERFORMED UNDER THE DIRECT SUPERVISION OF CHARLES G. CALA, JR., (NMPS 11184) OF THE FIRM HIGH MESA CONSULTING GROUP AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED TO DOCUMENT COMPLETION OF THOSE IMPROVEMENTS IDENTIFIED ON THE APPROVED PLAN FOR THE OWNER AND CITY OF ALBUQUERQUE AND TO SATISFY CONDITIONS OF GRADING AND PAVING APPROVAL FOR THE CITY OF ALBUQUERQUE.

THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE AND SPECIFIC LIMITED ASPECTS OF THIS PROJECT. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.

JEFFREY G. MORTENSEN, NMPE 8547

DATE

10-29-2012



RECORD DRAWING

DESIGNED BY				REVISIONS				JOB NO.	
J.G.M./J.D.S.				1. CHG BEE RECORD DRAWING & CERTIFICATION				2010.183.1	
E.J.S./J.Y.R.								DATE	
								10-2012	
J.G.M.								SHEET	
								1 OF 3	



## CONSTRUCTION NOTES:

- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM 280-1990 FOR DESIGNATION (LINE-SPOTTING) OF EXISTING PUBLIC UTILITIES AND EXISTING UTILITIES OWNED AND OPERATED BY ALBUQUERQUE PUBLIC SCHOOLS.
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- MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
- WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.

APPROVALS	NAME	DATE
HYDROLOGY		
SIDEWALK INSPECTOR		
STORM DRAIN MAINTENANCE	JASON RODRIGUEZ VIA E-MAIL	02/11/2018

## CALCULATIONS

- SITE CHARACTERISTICS**
  - PRECIPITATION ZONE = 2
  - $P_{100, 6 \text{ HR}} = P_{360} = 2.35$
  - TOTAL PROJECT AREA ( $A_T$ ) = 18,800 SF  
0.43 AC
- LAND TREATMENTS**
  - EXISTING LAND TREATMENT**

TREATMENT	AREA (SF/AC)	%
C	7,310 / 0.17	39
D	11,490 / 0.26	61
  - DEVELOPED LAND TREATMENT**

TREATMENT	AREA (SF/AC)	%
C	3,960 / 0.09	21
D	14,840 / 0.34	79
- HYDROLOGY**
  - EXISTING CONDITION**
    - VOLUME**

$$E_w = (E_{A_A} + E_{A_B} + E_{A_C} + E_{A_D}) / A_T$$

$$E_w = (0.53 \times 0.00 + (0.78 \times 0.00) + (1.13 \times 0.17) + (2.12 \times 0.26)) / 0.43 = 1.74 \text{ IN}$$

$$V_{100, 6 \text{ HR}} = (E_w / 12) A_T = (1.74 / 12) \times 0.43 = 0.0624 \text{ AC-FT} = 2,720 \text{ CF}$$
    - PEAK DISCHARGE**

$$Q_p = Q_{pA_A} + Q_{pA_B} + Q_{pA_C} + Q_{pA_D}$$

$$Q_p = Q_{100} = (1.56 \times 0.00) + (2.28 \times 0.00) + (3.14 \times 0.17) + (4.70 \times 0.26) = 1.8 \text{ CFS}$$
  - DEVELOPED CONDITION**
    - VOLUME**

$$E_w = (E_{A_A} + E_{A_B} + E_{A_C} + E_{A_D}) / A_T$$

$$E_w = (0.53 \times 0.00 + (0.78 \times 0.00) + (1.13 \times 0.09) + (2.12 \times 0.34)) / 0.43 = 1.92 \text{ IN}$$

$$V_{100, 6 \text{ HR}} = (E_w / 12) A_T = (1.92 / 12) \times 0.43 = 0.0688 \text{ AC-FT} = 3,000 \text{ CF}$$
    - PEAK DISCHARGE**

$$Q_p = Q_{pA_A} + Q_{pA_B} + Q_{pA_C} + Q_{pA_D}$$

$$Q_p = Q_{100} = (1.56 \times 0.00) + (2.28 \times 0.00) + (3.14 \times 0.09) + (4.70 \times 0.34) = 1.9 \text{ CFS}$$
  - 8" STORM DRAIN CAPACITY (MANNING'S EQUATION FOR GRAVITY FLOW IN PIPES)**

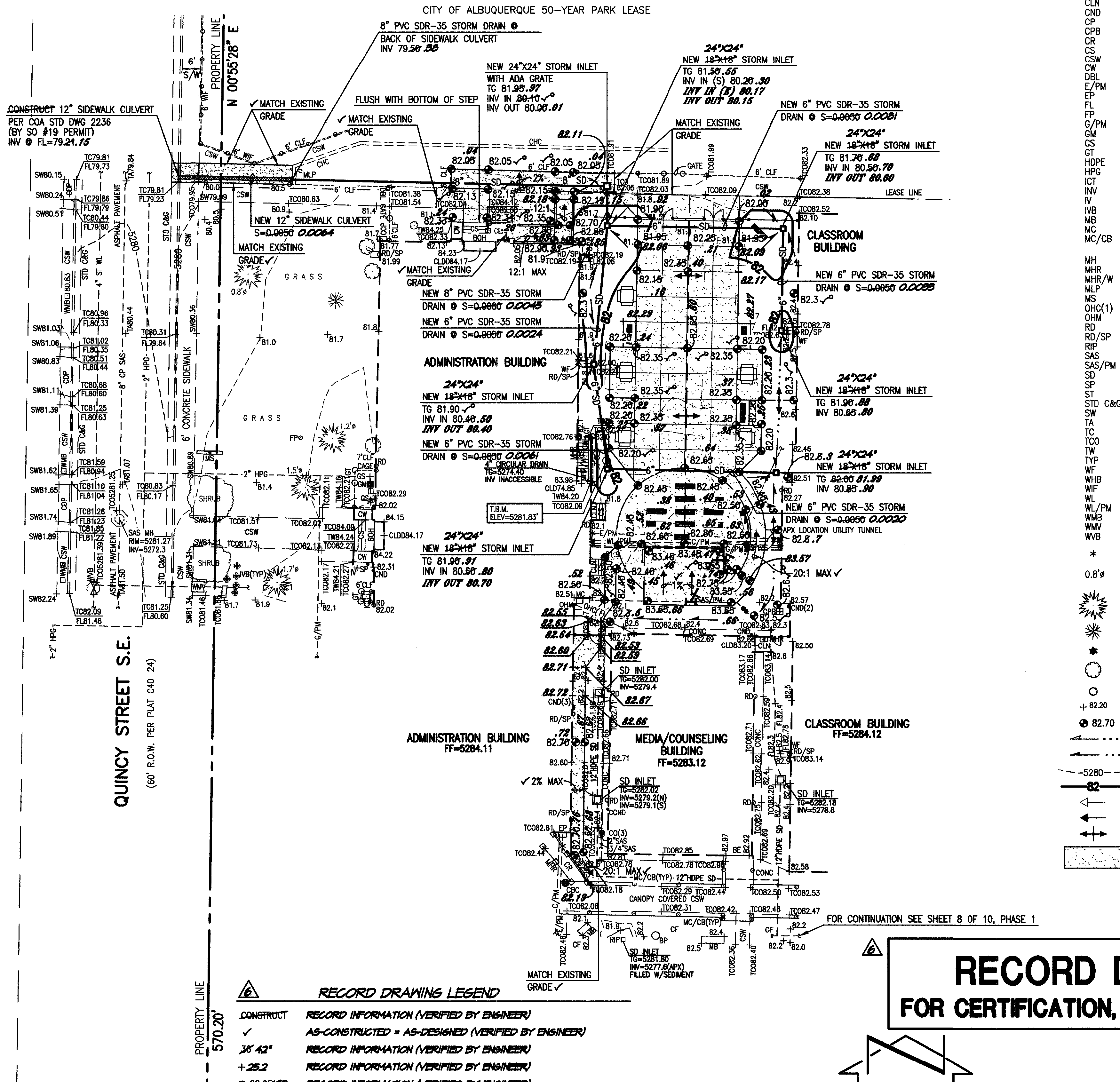
$$Q = 1.486 \text{ in}^3 \cdot A \cdot R^{2/3} \cdot S^{1/2}$$

$$Q = 1.486 \times 0.013 \cdot 0.35 \cdot 0.17^{2/3} \cdot 0.005^{1/2}$$

$$Q_{\text{CAP}} = 0.9 \text{ CFS}$$
- COMPARISON**
  - VOLUME**

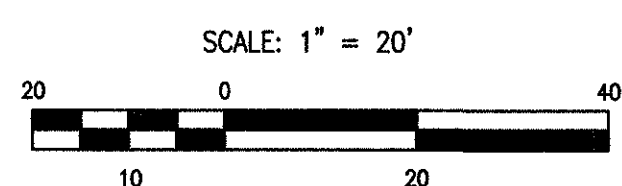
$$\Delta V_{100, 6 \text{ HR}} = 3,000 - 2,720 = 280 \text{ CF (INCREASE)}$$
  - PEAK DISCHARGE**

$$\Delta Q_{100} = 1.9 - 1.8 = 0.1 \text{ CFS (INCREASE)}$$



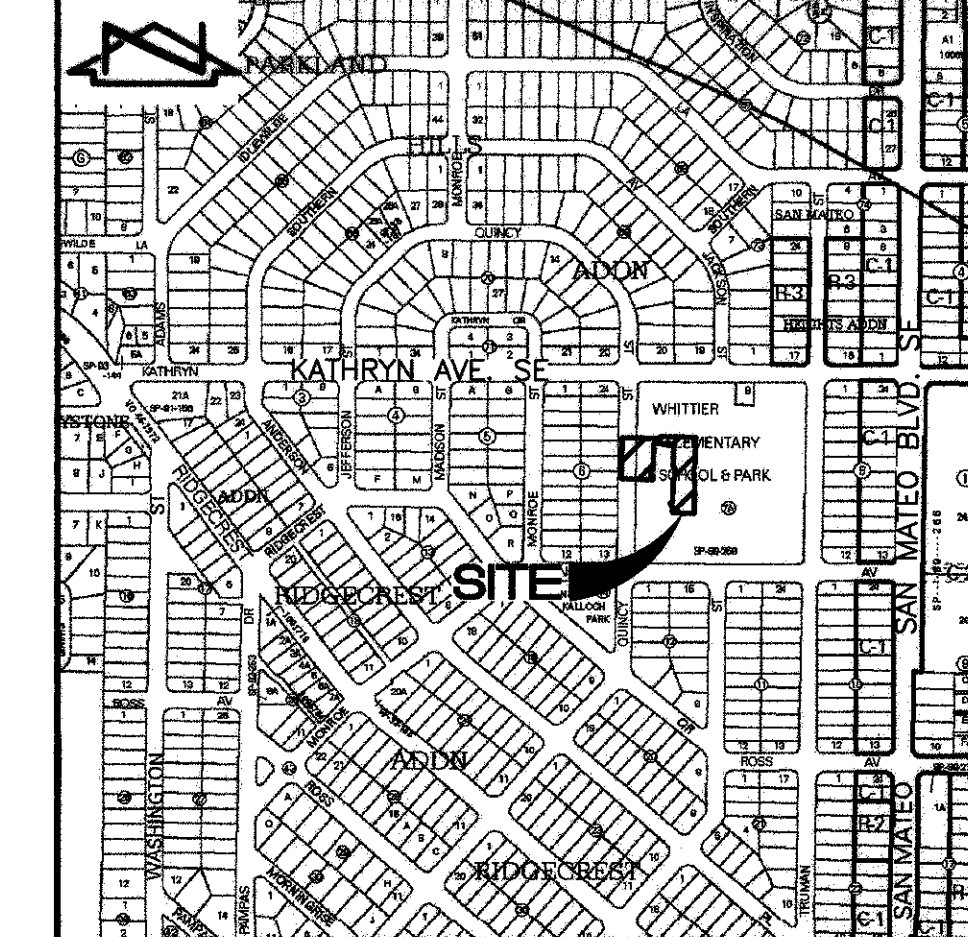
RECORD DRAWING LEGEND	
CONSTRUCT	RECORD INFORMATION (VERIFIED BY ENGINEER)
✓	AS-CONSTRUCTED = AS-DESIGNED (VERIFIED BY ENGINEER)
35' 42"	RECORD INFORMATION (VERIFIED BY ENGINEER)
+25.2	RECORD INFORMATION (VERIFIED BY ENGINEER)
28.984.12	RECORD INFORMATION (VERIFIED BY ENGINEER)
✓ 31.8	AS-CONSTRUCTED = AS-DESIGNED (VERIFIED BY AS-BUILT SURVEY)
✓ 26.9	RECORD INFORMATION FROM AS-BUILT SURVEY
31.25.22	RECORD INFORMATION FROM AS-BUILT SURVEY

**RECORD DRAWING**  
FOR CERTIFICATION, SEE SHEET 1 OF 3



## LEGEND

APX	APPROXIMATE
BE	BUILDING ENTRANCE
BOH	BUILDING OVERHANG
BP	OAK BARREL PLANTER
C/PM	COMMUNICATION LINE BY PAINT MARK
CCND	CONCRETE BUILDING COLUMN
CCP	COMMUNICATION CONDUIT AT POLE
CDP	CONCRETE DRIVE PAD
CF	CRUSHER FINES
CHC	CONCRETE HEADER CURB
CLD	CENTERLINE DOOR
CLDO	CENTERLINE DOUBLE DOOR
CLF	CHAIN LINK FENCE
CLN	CONCRETE LANDING
CND	ELECTRIC CONDUIT
CP	CONCRETE PIPE
CPB	COMMUNICATION PULLBOX
CR	CONCRETE RAMP
CSW	CONCRETE SIDEWALK
CW	CONCRETE WALL
DBL	DOUBLE
E/PM	ELECTRIC LINE BY PAINT MARK
EP	ELECTRIC PANEL
FL	FLOWLINE
FP	FLAG POLE
G/PM	GAS LINE BY PAINT MARK
GM	GAS METER
GS	GATE SERVICE
GT	GATE
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HPG	HIGH PRESSURE GAS LINE
ICT	IRRIGATION CONTROL TIMER
INV	IRRIGATION VALVE BOX (NON FUNCTIONAL)
IVB	IRRIGATION VALVE BOX
MB	METAL BENCH
MC	METAL CANYON COLUMN WITH 1'x1'
MC/CB	CONCRETE BASE
MH	MANHOLE
MHR/W	METAL HAND RAIL
MLP	METAL HAND RAIL ON TOP OF WALL
MS	METAL LIGHT POLE
OHC(1)	OVERHEAD COMMUNICATION (# OF LINES)
OHM	ELECTRIC OVERHEAD MAST
RD	ROOF DRAIN
RD/SP	ROOF DRAIN WITH CONCRETE SPLASH PAD
RIP	RIP-RAP
SAS	SANITARY SEWER
SAS/PM	SANITARY SEWER LINE BY PAINT MARK
SD	STORM DRAIN
SP	STEEL POLE
STD C&G	COA STANDARD CURB AND GUTTER
SW	SIDEWALK
TA	TOP OF ASPHALT
TC	TOP OF CURB
TCO	TOP OF CONCRETE
TW	TOP OF WALL
TYP	TYPICAL
WF	WATER FAUCET
WHB	WATER HOSE BOX
WIF	WROUGHT IRON FENCE
WL	WATER LINE
WL/PM	WATER LINE BY PAINT MARK
WMB	WATER METER BOX
WMY	WATER VAULT
WVB	WATER VALVE BOX
*	PAINTED UTILITY LINE-SPOT
0.8'	TREE TRUNK DIAMETER
(Tree Symbol)	CONIFEROUS TREE
(Star Symbol)	SMALL DECIDUOUS TREE
(Circle Symbol)	TREE STUMP
(Dashed Circle Symbol)	SHRUB
(Small Circle Symbol)	SMALL SHRUB
(Circle with + Symbol)	EXISTING ELEVATION
(Circle with dot Symbol)	PROPOSED SPOT ELEVATION
(Dashed Line Symbol)	EXISTING FLOWLINE
(Solid Line Symbol)	PROPOSED FLOWLINE
(Dashed Line with Arrow Symbol)	EXISTING CONTOUR
(Solid Line with Arrow Symbol)	PROPOSED CONTOUR
(Arrow Symbol)	EXISTING DIRECTION OF FLOW
(Double Arrow Symbol)	PROPOSED DIRECTION OF FLOW
(Crossed Arrow Symbol)	HIGH POINT / DIVIDE
(Crossed Arrow Symbol)	PROPOSED CONCRETE



**VICINITY MAP**  
SCALE: 1" = 750'



**F.I.R.M. PANEL 354 OF 825**  
SCALE: 1" = 500' EFFECTIVE DATE 09-26-2008

## EROSION NOTES

- THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY.
- THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY SO THAT THE EXCAVATED MATERIAL IS NOT SUSCEPTIBLE TO BEING WASHED DOWN THE STREET.
- WHEN APPLICABLE, CONTRACTOR SHALL SECURE "TOPSOIL DISTURBANCE PERMIT" FROM THE CITY AND/OR FILE A NOTICE OF INTENT (N.O.I.) WITH THE EPA PRIOR TO BEGINNING CONSTRUCTION.

## BENCHMARKS

### PROJECT BENCHMARK

A 3 1/4" ALUMINUM DISK STAMPED "8-K17 1984", SET FLUSH IN THE TOP BACK OF CURB AT THE MEDIAN NOSE, JUST WEST OF THE INTERSECTION OF ZUNI ROAD AND WASHINGTON STREET S.E. ELEVATION = 5232.489 FEET (NAVD 1988)

### TEMPORARY BENCHMARK (T.B.M.)

A #5 REBAR WITH CAP STAMPED "HMCG CONTROL NMPS 11184" AS SHOWN ON THIS SHEET. ELEVATION = 5281.83 FEET (NAVD 1988)

## LEGAL DESCRIPTION

TRACT A, BLOCK 7A, RIDGECREST ADDITION, ALBUQUERQUE, NEW MEXICO,

**DESIGN SURVEY NOTE:**  
THIS IS NOT A BOUNDARY SURVEY. DATA IS SHOWN FOR ORIENTATION ONLY. BOUNDARY INFORMATION DEPICTED BY THIS PLAN IS BASED UPON UNRECORDED BOUNDARY SURVEY BY HIGH MESA CONSULTING GROUP (NMPS 11184) DATED 02-04-2011, (2010.182.8). THE TOPOGRAPHIC INFORMATION DEPICTED HEREON IS BASED UPON TOPOGRAPHIC SURVEY PREPARED BY HIGH MESA CONSULTING GROUP (NMPS 11184) DATED 02-04-2011 (2010.182.8), UPDATED BY HIGH MESA CONSULTING GROUP (NMPS 15075) DATED 04-03-2012 (2011.183.3), AND SUPPLEMENTED BY ENGINEER'S SITE VISIT DATED 09-26-2012.

*08-13-2013*  
*10-29-2012*  
JEFFREY G. PORTER  
PROFESSIONAL ENGINEER  
NEW MEXICO  
8547

**HIGH MESA Consulting Group**

6010-B MIDWAY PARK BLVD. NE • ALBUQUERQUE, NEW MEXICO 87109  
PHONE: 505.345.4250 • FAX: 505.345.4254 • www.highmesacg.com

**GRADING AND DRAINAGE PLAN**  
**DRAINAGE IMPROVEMENTS - PHASE 2**  
**WHITTIER ELEMENTARY SCHOOL**

DESIGNED BY	DATE	BY	REVISIONS	JOB NO.
J.G.M./J.D.S.	06/15	B.E.E.	RECORD DRAWING & CERTIFICATION	2010.183.1
DRAWN BY	DATE	BY	REVISIONS	JOB NO.
E.J.S.				10-2012
APPROVED BY	DATE	BY	REVISIONS	JOB NO.
J.G.M.				3 OF 3

File Path: P:\DATA\2010\183\1831\DWG\B1 Plot Date: 08-08-2013  
File Name: 10831\_P22\_S12-R6.DWG Plot Time: 07:09 am



File Path: P:\WMA\2010.183.1\ENR\183.1\Plot Date: 09-08-2013  
File Name: 10183.1\_P22-RECORD.DWG Plot Time: 07:23 am

#### DESIGN SURVEY NOTE:

THIS IS NOT A BOUNDARY SURVEY. DATA IS SHOWN FOR ORIENTATION ONLY. BOUNDARY INFORMATION DEPICTED BY THIS PLAN IS BASED UPON UNRECORDED BOUNDARY SURVEY BY HIGH MESA CONSULTING GROUP (NMPS 11184) DATED 02-04-2011, (2010.182.8). THE TOPOGRAPHIC INFORMATION DEPICTED HEREON IS BASED UPON TOPOGRAPHIC SURVEY PREPARED BY HIGH MESA CONSULTING GROUP (NMPS 11184) DATED 02-04-2011 (2010.182.8), UPDATED BY HIGH MESA CONSULTING GROUP (NMPS 15075) DATED 04-03-2012 (2011.183.3). AND SUPPLEMENTED BY ENGINEER'S SITE VISIT DATED 09-26-2012.

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#### SITE PLAN

### DRAINAGE IMPROVEMENTS - PHASE 2 WHITTIER ELEMENTARY SCHOOL

## RECORD DRAWING FOR CERTIFICATION, SEE SHEET 1 OF 3

#### LEGEND

APX	APPROXIMATE
BE	BUILDING ENTRANCE
BP	BUILDING OVERHANG
BO	OAK BARREL PLANTER
C/PM	COMMUNICATION LINE BY PAINT MARK
CBC	CONCRETE BUILDING COLUMN
COND	COMMUNICATION CONDUIT AT POLE
CCP	COMMUNICATION PANEL
CDP	CONCRETE DRIVE PAD
CF	CRUSHER FINES
CHC	CONCRETE HEADER CURB
CLD	CENTERLINE DOOR
CLDF	CENTERLINE DOUBLE DOOR
CLN	CHAIN LINK FENCE
CND	CONCRETE LANDING
CP	ELECTRIC CONDUIT
CPB	COMMUNICATION PULLBOX
CR	CONCRETE RAMP
CS	CONCRETE STEPS
CSW	CONCRETE SIDEWALK
CW	CONCRETE WALL
DBL	DOUBLE
E/PM	ELECTRIC LINE BY PAINT MARK
EP	ELECTRIC PANEL
FL	FLOWLINE
FP	FLAG POLE
G/PM	GAS LINE BY PAINT MARK
GM	GAS METER
GS	GAS SERVICE
GT	GATE
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HPG	HIGH PRESSURE GAS LINE
ICT	IRRIGATION CONTROL TIMER
IV	IRRIGATION VALVE BOX (NON FUNCTIONAL)
IVB	IRRIGATION VALVE BOX
MB	METAL BENCH
MC	METAL COVER
MC/CB	METAL CANOPY COLUMN WITH 1'x1' CONCRETE BASE
MH	MANHOLE
MHR	METAL HAND RAIL
MHR/W	METAL HAND RAIL ON TOP OF WALL
MLP	METAL LIGHT POLE
MS	METAL SIGN
OH(1)	OVERHEAD COMMUNICATION (# OF LINES)
OHM	ELECTRIC OVERHEAD MAST
RD/SP	ROOF DRAIN
RIP-RAP	ROOF DRAIN WITH CONCRETE SPLASH PAD
SAS	SANITARY SEWER
SAS/PM	SANITARY SEWER LINE BY PAINT MARK
SD	STORM DRAIN
SP	STEEL POLE
STD	STEEL
STD C&G	COA STANDARD CURB AND GUTTER SIDEWALK
SW	TOP OF ASPHALT
TA	TOP OF CURB
TCO	TOP OF CONCRETE
TW	TOP OF WALL
TYP	TYPICAL
WF	WATER FAUCET
WHB	WATER HOT BOX
WL	WATER LINE
WL/PM	WATER LINE BY PAINT MARK
WMB	WATER METER BOX
WV	WATER VAULT
WVB	WATER VALVE BOX
*	PAINTED UTILITY LINE-SPOT
0.8"	TREE TRUNK DIAMETER
CONIFEROUS TREE	
SMALL DECIDUOUS TREE	
TREE STUMP	
SHRUB	
SMALL SHRUB	
PROPOSED CONCRETE	

#### CONSTRUCTION NOTES

- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM 260-1990 FOR DESIGNATION (LINE-SPOTTING) OF EXISTING PUBLIC UTILITIES AND EXISTING UTILITIES OWNED AND OPERATED BY ALBUQUERQUE PUBLIC SCHOOLS.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL POTENTIAL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL INTERPRETATIONS IT MAKES WITHOUT FIRST CONTACTING THE ENGINEER AS REQUIRED ABOVE.
- 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.
- ALL CONSTRUCTION WITHIN PUBLIC RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PROCEDURES.
- IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE MANNER ONLY. AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. IF ANY SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE OWNER OF SAID UTILITY, AND THE INFORMATION MAY BE INCOMPLETE, OR MAY BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES. THE ENGINEER HAS CONDUCTED ONLY A PRELIMINARY INVESTIGATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES. THIS INVESTIGATION IS NOT CONCLUSIVE, AND MAY NOT BE COMPLETE, THEREFORE, MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES, AND UNDERGROUND UTILITY LINES. IN PLANNING AND CONDUCTING EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.
- THE DESIGN OF PLANTERS AND LANDSCAPED AREAS IS NOT PART OF THIS PLAN. ALL BUILDERS AND LANDSCAPED AREAS ADJACENT TO THE BUILDING(S) SHALL BE PROVIDED WITH POSITIVE DRAINAGE TO AVOID ANY PONDING ADJACENT TO THE STRUCTURE. FOR CONSTRUCTION DETAILS, REFER TO LANDSCAPING PLAN.
- AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY. AN APPROVED COPY OF THESE PLANS MUST BE SUBMITTED AT THE TIME OF APPLICATION FOR THIS PERMIT.
- BACKFILL COMPACTION SHALL BE ACCORDING TO RESIDENTIAL STREET USE.
- MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
- WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.

#### EROSION NOTES

- THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY.
- THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY SO THAT THE EXCAVATED MATERIAL IS NOT SUSCEPTIBLE TO BEING WASHED DOWN THE STREET.
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#### BENCHMARKS

##### PROJECT BENCHMARK

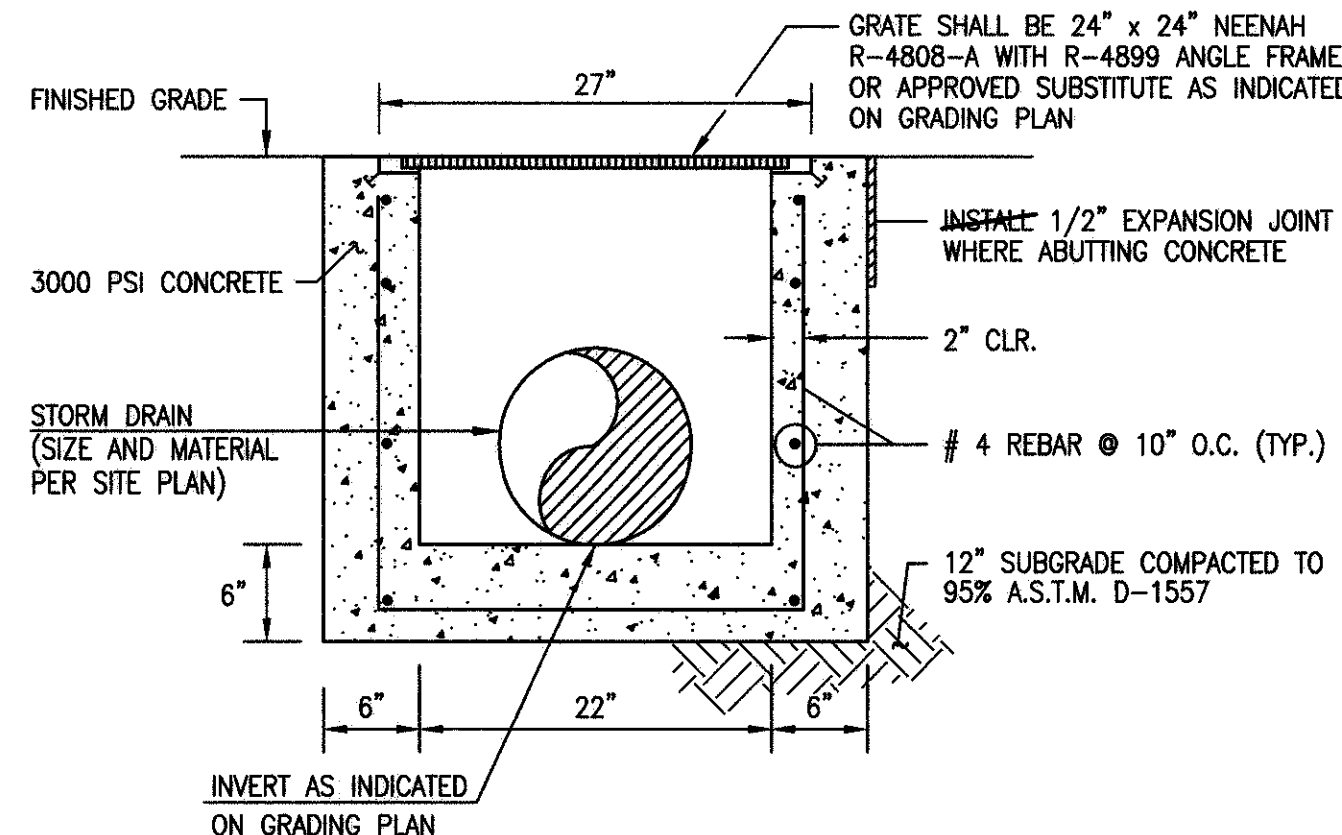
A 3 1/4" ALUMINUM DISK STAMPED "B-K17 1984", SET FLUSH IN THE TOP BACK OF CURB AT THE MEDIAN NOSE, JUST WEST OF THE INTERSECTION OF ZUNI ROAD AND WASHINGTON STREET S.E.  
ELEVATION = 5232.489 FEET (NAVD 1988)

##### TEMPORARY BENCHMARK (T.B.M.)

A #5 REBAR WITH CAP STAMPED "HMC CONTROL NMPS 11184" AS SHOWN ON THIS SHEET.  
ELEVATION = 5281.83 FEET (NAVD 1988)

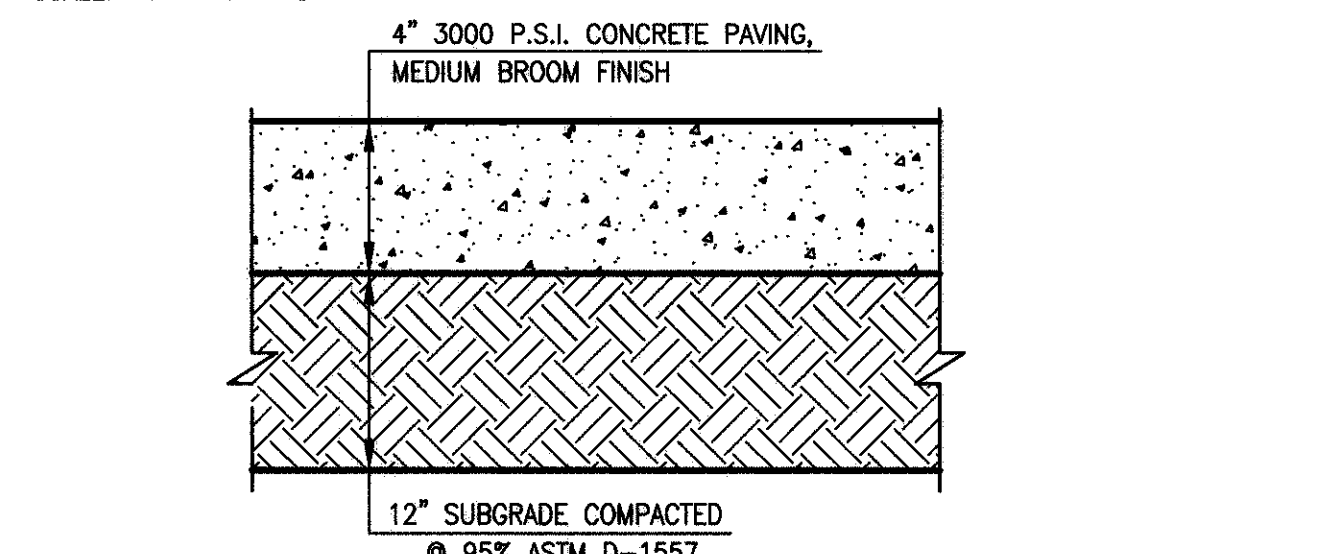
#### TYPICAL 18"x18" STORM INLET SECTION

SCALE: 1" = 1' - 0"



#### TYPICAL 24"x24" STORM INLET SECTION

SCALE: 1" = 1' - 0"



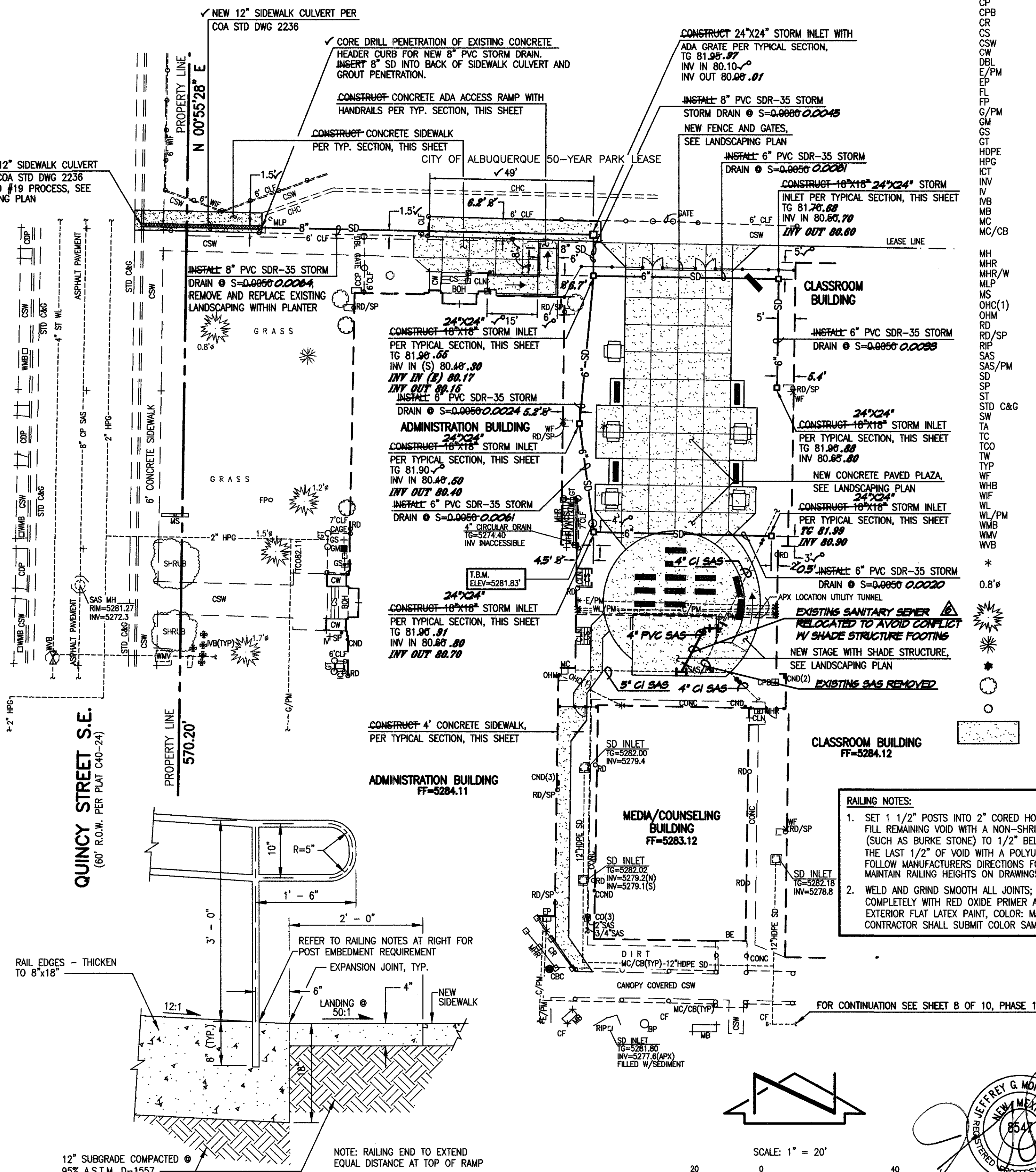
#### TYPICAL CONCRETE PAVEMENT/ SIDEWALK SECTION

SCALE: 1" = 0' - 6"



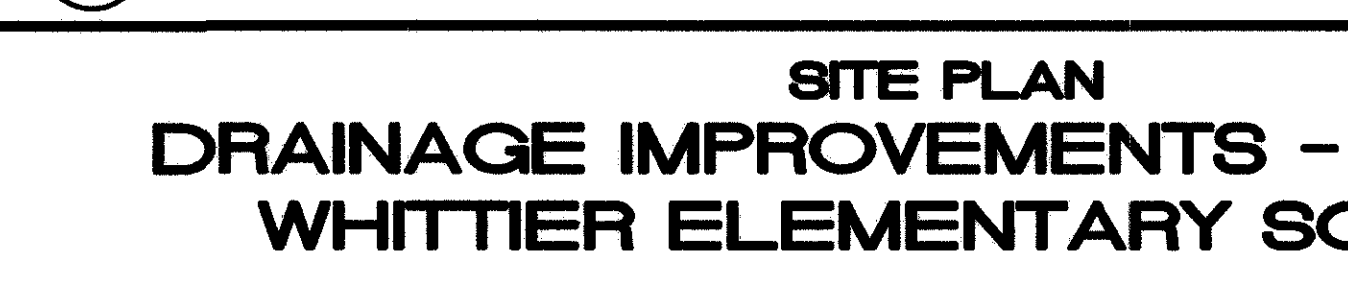
#### RECORD DRAWING LEGEND

CONSTRUCT	RECORD INFORMATION (VERIFIED BY ENGINEER)
✓	AS-CONSTRUCTED = AS-DESIGNED (VERIFIED BY ENGINEER)
36' 42"	RECORD INFORMATION (VERIFIED BY ENGINEER)
+25.2	RECORD INFORMATION (VERIFIED BY ENGINEER)
28.96.42	RECORD INFORMATION (VERIFIED BY ENGINEER)
✓	AS-CONSTRUCTED = AS-DESIGNED (VERIFIED BY AS-BUILT SURVEY)
31' 31.8	RECORD INFORMATION FROM AS-BUILT SURVEY
+26.9	RECORD INFORMATION FROM AS-BUILT SURVEY
31.25.22	RECORD INFORMATION FROM AS-BUILT SURVEY



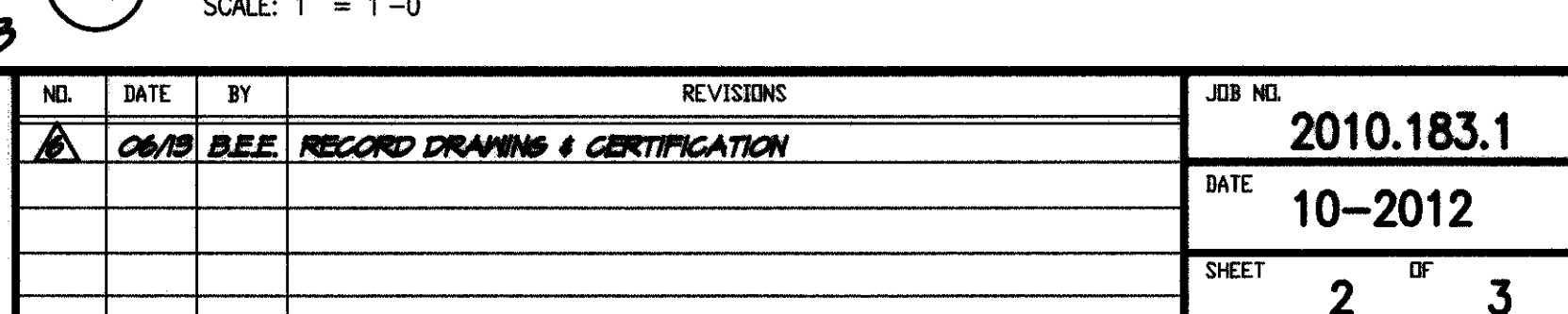
#### TYPICAL RAIL END

SCALE: 1" = 1' - 0"



#### ADA ACCESS RAMP CROSS SECTION

SCALE: 1" = 1' - 0"



16-29-2012  
08-13-2013

DESIGNED BY	DATE	BY	REVISIONS	JOB NO.
J.G.M./J.D.S.	06/19	B.E.E.	RECORD DRAWING & CERTIFICATION	2010.183.1
DRAWN BY		E.J.S./J.Y.R.		DATE
APPROVED BY		J.G.M.		10-2012
				SHEET
				2 OF 3