

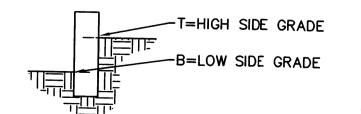


- COORDINATE WITH LANDSCAPE ARCHITECT IN FIELD.
- 2. CONSTRUCT 6" HIGH CONCRETE PINNED CURB PER C.O.A. STD. DWG. 2415-B (TYPE 1 PINNED CURB). SEE SITE PLAN FOR ADDITIONAL INFORMATION.
- PROVIDE SHALLOW DEPRESSION (4" TO 6" DEEP) WITHIN LANDSCAPING TO CAPTURE STORM WATER FOR WATER HARVESTING.
- CONSTRUCT NEW CONCRETE WALKS AT ELEVATIONS SHOWN. GRADEBREAKS INDICATES SLOPE CHANGES. SEE CONSTRUCTION PLAN SHEET 6 OF 19.
- 5. 0.1' CONTOURS SHOWN THIS AREA TO CLARIFY GRADING.
- . BASED ON PRE-DESIGN MEETING WITH CURTIS CHERNE (COA HYDROLOGY), DISCHARGE IS PERMITTED TO CONTINUE TO DRAIN ACROSS WALK TO EDITH BLVD.
- EXISTING DRAINAGE OPENING. CONTRACTOR TO CLEAR ANY OBSTRUCTION TO DRAINAGE.

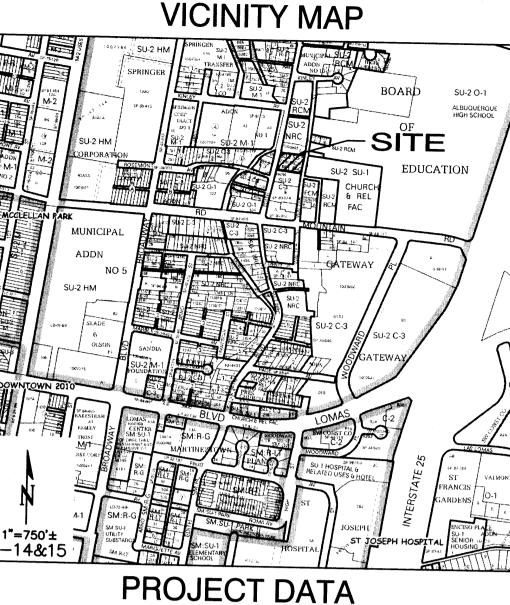
- PROVIDED. SEE WALL AND STAIR ELEVATIONS (SHEET 16 OF 19) FOR ADDITIONAL HEIGHT / WALL / GUARDRAIL / DETAIL INFORMATION.
- 10. CONSTRUCT CONCRETE MOW CURB. SEE CONSTRUCTION PLAN SHEET 6 OF 19.
- 11. EXISTING TREE TO REMAIN. COORDINATE PROTECTION OF TREE WITH LANDSCAPE ARCHITECT.
- 12. EXISTING GRASS TO REMAIN IN AREAS </= 6:1 SLOPE. REGRADE IN AREAS > 6:1. COORDINATE WITH LANDSCAPE ARCHITECT.
- 13. GRADE LANDSCAPE AREAS ON THE NORTH AND WEST SIDES OF NEW PAVEMENT TO PROVIDE A SERIES OF SHALLOW (6" DEEP) WATER HARVESTING (WATER QUALITY RETENTION PONDS) TO CAPTURE STORM WATER FROM IMPERVIOUS PAVEMENT. EXCESS FLOW WILL CONTINUE TO OVERFLOW AT THE NORTHWEST CORNER TO FOLLOW THE HISTORIC FLOWPATH.

S=7.8% PROPOSED SLOPE

PROPOSED SLOPE TRANSITION



TEMPORARY PHASE TRANSITION PAVEMENT



PROPERTY: THE SITE IS A FULLY DEVELOPED PUBLIC PARK PROPERTY LOCATED WITHIN C.O.A. VICINITY MAP J-15. THE PARK IS BOUND TO THE EAST BY WALTER STREET NE, TO THE WEST BY EDITH BLVD. AND TO THE NORTH AND SOUTH BY DEVELOPED RESIDENTIAL PROPERTIES.

PROPOSED IMPROVEMENTS: THE PROPOSED IMPROVEMENTS INCLUDE ADA ACCESSIBLE RAMPS AND VARIOUS IMPROVEMENTS TO PLAY AREAS, GRASS FIELDS, RETAINING WALL TRANSITIONS, PLAYGROUND AND PICNIC

LEGAL: SANTA BARBARA PARK, ALBUQUERQUE, N.M.

BENCHMARK: "17-J14" A 3 1/4" ALUMINUM DISC SET FLUSH WITH THE TOP OF CONCRETE. PUBLISHED GRID COORDINATES (NAD 83 CENTRAL ZONE) N=,488,866.762, E=1,519,149.317, ELEV.=4957.484 (NAVD 1988), LATITUDE 35°5'29.65906"N, LONGITUDE 106°39'19.40075"W (WGS 84)

OFF-SITE: NO OFF-SITE DRAINAGE AFFECTS THIS PROPERTY.

FLOOD HAZARD: PER BERNALILLO COUNTY FIRM MAP #35001C0332G, DATED SEPTEMBER 2008, THE SITE IS LOCATED WITHIN FLOODZONE 'X' (UNSHADED) DESIGNATED AS FLOOD INSURANCE RATE ZONES FOR AREAS OUTSIDE THE 0.2-PERCENT-ANNUAL-CHANCE FLOODPLAIN.

DRAINAGE PLAN CONCEPT:

THE SITE DEMOLITION AND NEW CONSTRUCTION WILL NOT SIGNIFICANTLY ALTER EXISTING DRAINAGE PATTERNS OR RATES. SITE DISCHARGE WILL CONTINUE TO PASS WEST TO EDITH BLVD.

PER A PRE-DESIGN MEETING WITH COA HYDROLOGY ENGINEER: CURTIS CHERNE P.E., A TEMPORARY ASPHALT CURB WILL BE INSTALLED ALONG THE NORTH EDGE OF THE EXISTING ASPHALT BASKETBALL PAVEMENT TO DEFLECT MINOR DISCHARGE TO EDITH BLVD. WHEN THIS PORTION OF THE PARK IS REDEVELOPED (PHASE II), A PERMANENT CURB WILL BE CONSTRUCTED. STORM WATER WILL CONTINUE TO DISCHARGE FORM THE SITE AS PER THE EXISTING RELEASE CHARACTERISTICS.

ENGINEER: ISAACSON & ARFMAN, P.A. 128 MONROE ST NE, ABQ. NM 87108

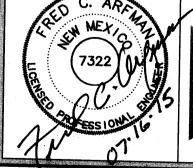
PHONE: (505) 268-8828 SURVEYOR: BOHANNAN HUSTON

ROBERT LOCKMAN NMPS NO. 18331 COURTYARD 1 7500 JEFFERSON ST NE, ABQ. NM 87109 LAND DEVELOPMENT SECTION,

WATER QUALITY REQUIRMENTS

PER THE CITY OF ALBUQUERQUE DRAINAGE ORDINANCE, ALL NEW DEVELOPMENT PROJECTS SHALL MANAGE THE RUNOFF FROM PRECIPITATION WHICH OCCURS DURING THE 90TH PERCENTILE STORM EVENT - THE PRECIPITATION EVENT THAT IS LESS THAN OR EQUAL TO NINETY PERCENT OF ALL RAINFALL EVENTS IN A CALENDAR YEAR. THE ORDINANCE DEFINES THE 90TH PERCENTILE STORM EVENTS AS 0.44 INCHES AND THE REQUIRED STORAGE AS 0.34" [0.44" LESS 0.1" FOR INITIAL ABSTRACTION].

IN THE FULLY DEVELOPED CONDITION (FOLLOWING THE REMOVAL / REPLACEMENT OF THE EXISTING ASPHALT BASKETBALL COURTS - SEE SHEET CG-102), THE IMPERVIOUS AREA WILL BE 0.27 ACRES(±). THE REQUIRED STORMWATER RETENTION FOR THIS IMPERVIOUS AREA = 333 CF (BASED ON THE 0.34" REQUIREMENT).



ISAACSON & ARFMAN, P.A. Consulting Engineering Associates 128 Monroe Street N.E. Albuquerque, New Mexico 87108

> Ph. 505-268-8828 www.iacivil.com 2081 CG-101.dwg Jul 16,2015

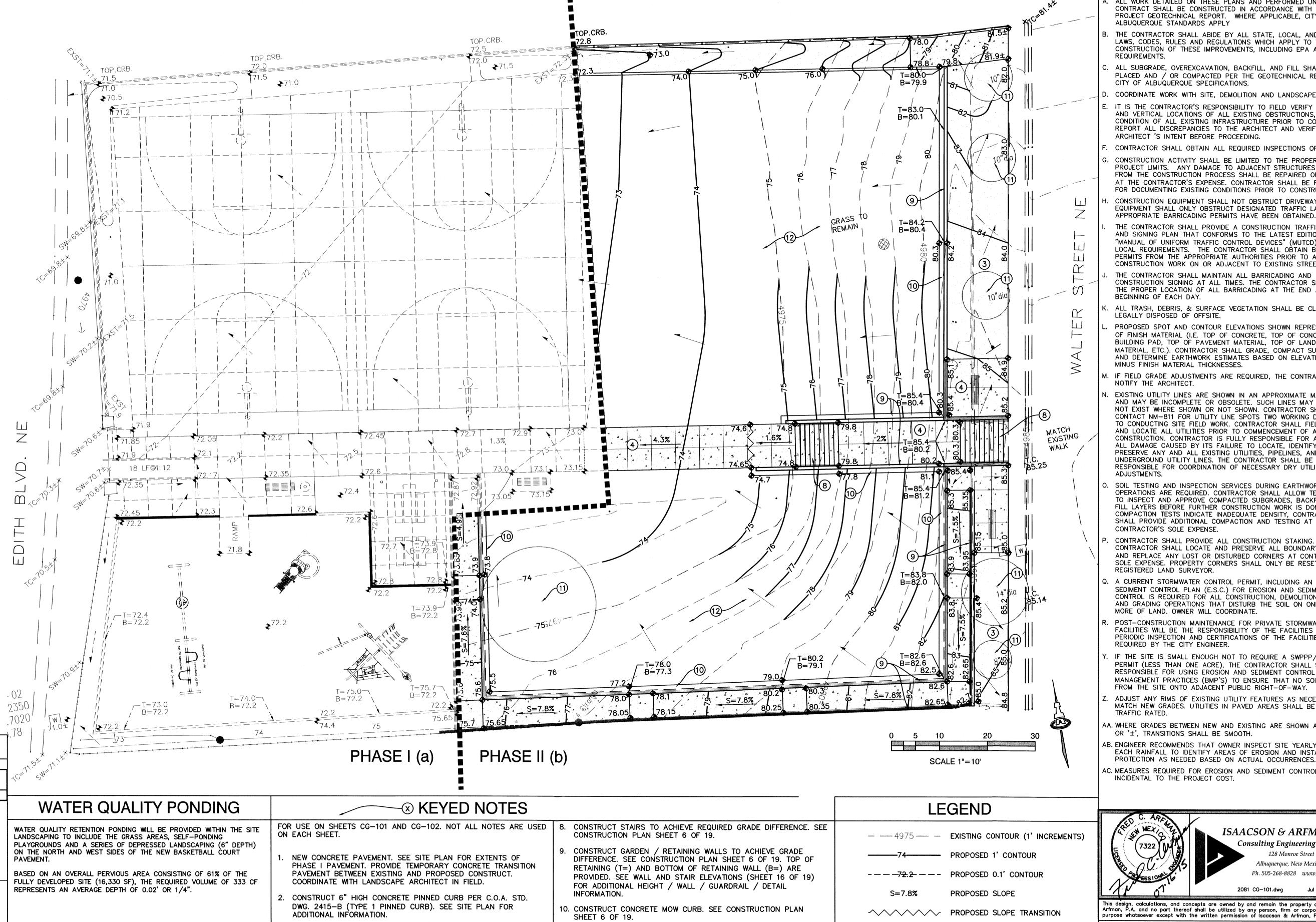
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SANTA BARBARA **PARK**

MRWM

GRADING & DRAINAGE - PHASE I

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07/16/15			2081
Drawn By:			
BJB			☐ CG-101
FCA			SH. 4 OF 19
100			



11. EXISTING TREE TO REMAIN. COORDINATE PROTECTION OF TREE WITH

12. EXISTING GRASS TO REMAIN IN AREAS </= 6:1 SLOPE. REGRADE

NEW PAVEMENT TO PROVIDE A SERIES OF SHALLOW (6" DEEP)

CAPTURE STORM WATER FROM IMPERVIOUS PAVEMENT. EXCESS

FLOW WILL CONTINUE TO OVERFLOW AT THE NORTHWEST CORNER

IN AREAS > 6:1. COORDINATE WITH LANDSCAPE ARCHITECT.

13. GRADE LANDSCAPE AREAS ON THE NORTH AND WEST SIDES OF

WATER HARVESTING (WATER QUALITY RETENTION PONDS) TO

LANDSCAPE ARCHITECT.

TO FOLLOW THE HISTORIC FLOWPATH.

3. PROVIDE SHALLOW DEPRESSION (4" TO 6" DEEP) WITHIN

5. 0.1' CONTOURS SHOWN THIS AREA TO CLARIFY GRADING.

PLAN SHEET 6 OF 19.

ACROSS WALK TO EDITH BLVD.

OBSTRUCTION TO DRAINAGE.

E. CONSTRUCT NEW CONCRETE WALKS AT ELEVATIONS SHOWN.

6. BASED ON PRE-DESIGN MEETING WITH CURTIS CHERNE (COA

EXISTING DRAINAGE OPENING. CONTRACTOR TO CLEAR ANY

GRADEBREAKS INDICATES SLOPE CHANGES. SEE CONSTRUCTION

HYDROLOGY), DISCHARGE IS PERMITTED TO CONTINUE TO DRAIN

LANDSCAPING TO CAPTURE STORM WATER FOR WATER HARVESTING.

CALCULATIONS

Treatment Sl %

0 0%

16329.7 61%

10440.3 | 39%

0

0

14456

0

12314

On-Site Volume of Runoff: $V360 = E^*A / 12$

26770

0%

100%

54%

0%

46%

100%

On-Site Peak Discharge Rate: Qp = QpAAA+QpBAB+QpCAC+QpDAD / 43,50

On-Site Weighted Excess Precipitation (100-Year, 6-Hour Storm)

Treatment Sl % EXCESS PRECIP:

0% | Precip. Zone 2

 $E_A = 0.53$

 $E_{\rm B} = 0.78$

 $E_{\rm C} = 1.13$

 $E_D = 2.12$

EAAA + EBAB + ECAC + EDAD

1.30 in. Developed E = 1.40 in.

 $2906 \quad \text{CF} \quad \text{Developed V}_{36} = 3115 \quad \text{CF}$

 $2.0 \text{ CFS} | \text{Developed } Q_p = 2.1 \text{ CFS}$

 $A_A + A_B + A_C + A_D$

 $Q_{pC} = 3.14$

 $Q_{pD} = 4.70$

AREA OF SITE: 26770 SF

HISTORIC FLOWS:

DEVELOPED FLOWS:

otal Area = 26770

Area A

Area B

Area D

otal Area

Area A

Area B

Area C

Area D

Historic =

Historic V =

For Precipitation Zo 2

 $Q_{pA} = 1.56$

Area C

CALCULATIONS: SANTA BARBARA PARK: 12/22/14

Based on Drainage Design Criteria for City of Albuquerque

Section 22.2, DPM, Vol 2, dated Jan., 1993 ON-SITE CALCULATIONS: 100-YEAR, 6-HOUR STORM

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GENERAL NOTES

- ALL WORK DETAILED ON THESE PLANS AND PERFORMED UNDER THIS CONTRACT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT GEOTECHNICAL REPORT. WHERE APPLICABLE. CITY OF ALBUQUERQUE STANDARDS APPLY
- THE CONTRACTOR SHALL ABIDE BY ALL STATE, LOCAL, AND FEDERAL LAWS, CODES, RULES AND REGULATIONS WHICH APPLY TO THE CONSTRUCTION OF THESE IMPROVEMENTS, INCLUDING EPA AND ADA
- ALL SUBGRADE, OVEREXCAVATION, BACKFILL, AND FILL SHALL BE PLACED AND / OR COMPACTED PER THE GEOTECHNICAL REPORT AND CITY OF ALBUQUERQUE SPECIFICATIONS.
- COORDINATE WORK WITH SITE, DEMOLITION AND LANDSCAPE PLANS.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING OBSTRUCTIONS, AND CONDITION OF ALL EXISTING INFRASTRUCTURE PRIOR TO CONSTRUCTION. REPORT ALL DISCREPANCIES TO THE ARCHITECT AND VERIFY THE ARCHITECT 'S INTENT BEFORE PROCEEDING.
- CONTRACTOR SHALL OBTAIN ALL REQUIRED INSPECTIONS OF THE WORK. CONSTRUCTION ACTIVITY SHALL BE LIMITED TO THE PROPERTY AND/OR PROJECT LIMITS. ANY DAMAGE TO ADJACENT STRUCTURES RESULTING FROM THE CONSTRUCTION PROCESS SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE. CONTRACTOR SHALL BE RESPONSIBLE
- FOR DOCUMENTING EXISTING CONDITIONS PRIOR TO CONSTRUCTION. CONSTRUCTION EQUIPMENT SHALL NOT OBSTRUCT DRIVEWAYS. EQUIPMENT SHALL ONLY OBSTRUCT DESIGNATED TRAFFIC LANES IF
- THE CONTRACTOR SHALL PROVIDE A CONSTRUCTION TRAFFIC CONTROL AND SIGNING PLAN THAT CONFORMS TO THE LATEST EDITION OF THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND LOCAL REQUIREMENTS. THE CONTRACTOR SHALL OBTAIN BARRICADING PERMITS FROM THE APPROPRIATE AUTHORITIES PRIOR TO ANY CONSTRUCTION WORK ON OR ADJACENT TO EXISTING STREETS.
- THE CONTRACTOR SHALL MAINTAIN ALL BARRICADING AND CONSTRUCTION SIGNING AT ALL TIMES. THE CONTRACTOR SHALL VERIFY THE PROPER LOCATION OF ALL BARRICADING AT THE END AND BEGINNING OF EACH DAY.
- ALL TRASH, DEBRIS, & SURFACE VEGETATION SHALL BE CLEARED AND LEGALLY DISPOSED OF OFFSITE.
- PROPOSED SPOT AND CONTOUR ELEVATIONS SHOWN REPRESENT TOP OF FINISH MATERIAL (I.E. TOP OF CONCRETE, TOP OF CONCRETE BUILDING PAD, TOP OF PAVEMENT MATERIAL, TOP OF LANDSCAPING MATERIAL, ETC.). CONTRACTOR SHALL GRADE, COMPACT SUBGRADE AND DETERMINE EARTHWORK ESTIMATES BASED ON ELEVATIONS SHOWN MINUS FINISH MATERIAL THICKNESSES.
- IF FIELD GRADE ADJUSTMENTS ARE REQUIRED, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT.
- EXISTING UTILITY LINES ARE SHOWN IN AN APPROXIMATE MANNER ONLY AND MAY BE INCOMPLETE OR OBSOLETE. SUCH LINES MAY OR MAY NOT EXIST WHERE SHOWN OR NOT SHOWN. CONTRACTOR SHALL CONTACT NM-811 FOR UTILITY LINE SPOTS TWO WORKING DAYS PRIOR TO CONDUCTING SITE FIELD WORK. CONTRACTOR SHALL FIELD VERIFY AND LOCATE ALL UTILITIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION. 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. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF NECESSARY DRY UTILITY
- SOIL TESTING AND INSPECTION SERVICES DURING EARTHWORK OPERATIONS ARE REQUIRED. CONTRACTOR SHALL ALLOW TESTING LABS TO INSPECT AND APPROVE COMPACTED SUBGRADES, BACKFILL, AND FILL LAYERS BEFORE FURTHER CONSTRUCTION WORK IS DONE. SHOULD COMPACTION TESTS INDICATE INADEQUATE DENSITY, CONTRACTOR SHALL PROVIDE ADDITIONAL COMPACTION AND TESTING AT THE CONTRACTOR'S SOLE EXPENSE.
- CONTRACTOR SHALL PROVIDE ALL CONSTRUCTION STAKING. CONTRACTOR SHALL LOCATE AND PRESERVE ALL BOUNDARY CORNERS AND REPLACE ANY LOST OR DISTURBED CORNERS AT CONTRACTOR'S SOLE EXPENSE. PROPERTY CORNERS SHALL ONLY BE RESET BY A REGISTERED LAND SURVEYOR.
- Q. A CURRENT STORMWATER CONTROL PERMIT, INCLUDING AN EROSION SEDIMENT CONTROL PLAN (E.S.C.) FOR EROSION AND SEDIMENT CONTROL IS REQUIRED FOR ALL CONSTRUCTION, DEMOLITION CLEARING. AND GRADING OPERATIONS THAT DISTURB THE SOIL ON ONE ACRE OR MORE OF LAND. OWNER WILL COORDINATE.
- POST-CONSTRUCTION MAINTENANCE FOR PRIVATE STORMWATER FACILITIES WILL BE THE RESPONSIBILITY OF THE FACILITIES OWNER. PERIODIC INSPECTION AND CERTIFICATIONS OF THE FACILITIES MAY BE REQUIRED BY THE CITY ENGINEER.
- IF THE SITE IS SMALL ENOUGH NOT TO REQUIRE A SWPPP/NPDES PERMIT (LESS THAN ONE ACRE), THE CONTRACTOR SHALL STILL BE RESPONSIBLE FOR USING EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMP'S) TO ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO ADJACENT PUBLIC RIGHT-OF-WAY.
- ADJUST ANY RIMS OF EXISTING UTILITY FEATURES AS NECESSARY TO MATCH NEW GRADES. UTILITIES IN PAVED AREAS SHALL BE HS-25
- AA. WHERE GRADES BETWEEN NEW AND EXISTING ARE SHOWN AS 'MATCH' OR '±', TRANSITIONS SHALL BE SMOOTH.
- AB. ENGINEER RECOMMENDS THAT OWNER INSPECT SITE YEARLY AND AFTER EACH RAINFALL TO IDENTIFY AREAS OF EROSION AND INSTALL EROSION PROTECTION AS NEEDED BASED ON ACTUAL OCCURRENCES.
- AC. MEASURES REQUIRED FOR EROSION AND SEDIMENT CONTROL SHALL BE INCIDENTAL TO THE PROJECT COST.



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> SANTA BARBARA **PARK**

-T=HIGH SIDE GRADE

MRWM

GRADING & DRAINAGE - PHASE II

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07/16/15				2081
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