



# City of Albuquerque

Planning Department

Development & Building Services Division

## DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 11/2018)

**Project Title:** Highland High School - Title IX Gymnasium Upgrade **Building Permit #:** 2018-11701 / 2018-11703 **Hydrology File #:** K17D021A  
**DRB#:** \_\_\_\_\_ **EPC#:** \_\_\_\_\_ **Work Order#:** \_\_\_\_\_  
**Legal Description:** \_\_\_\_\_  
**City Address:** 4700 Coal Ave SE 87108

**Applicant:** Bohannon Huston Inc. **Contact:** Matt Satches  
**Address:** 7500 Jefferson St NE CY2 Albuquerque, NM, 87109  
**Phone#:** 505-823-1000 **Fax#:** \_\_\_\_\_ **E-mail:** msatches@bhinc.com  
**Owner:** APS Facility Design & Construction **Contact:** Sayre Gerhart  
**Address:** \_\_\_\_\_  
**Phone#:** 505-848-8829 **Fax#:** \_\_\_\_\_ **E-mail:** \_\_\_\_\_

**TYPE OF SUBMITTAL:** \_\_\_\_\_ PLAT ( \_\_\_\_\_ # OF LOTS) \_\_\_\_\_ RESIDENCE \_\_\_\_\_ DRB SITE ☒ ADMIN SITE

IS THIS A RESUBMITTAL?: ☒ Yes \_\_\_\_\_ No

**DEPARTMENT:** \_\_\_\_\_ TRAFFIC/ TRANSPORTATION ☒ HYDROLOGY/ DRAINAGE

Check all that Apply:

**TYPE OF SUBMITTAL:**

☒ ENGINEER/ARCHITECT CERTIFICATION  
\_\_\_\_ PAD CERTIFICATION  
\_\_\_\_ CONCEPTUAL G & D PLAN  
\_\_\_\_ GRADING PLAN  
\_\_\_\_ DRAINAGE MASTER PLAN  
\_\_\_\_ DRAINAGE REPORT  
\_\_\_\_ FLOODPLAIN DEVELOPMENT PERMIT APPLIC  
\_\_\_\_ ELEVATION CERTIFICATE  
\_\_\_\_ CLOMR/LOMR  
\_\_\_\_ TRAFFIC CIRCULATION LAYOUT (TCL)  
\_\_\_\_ TRAFFIC IMPACT STUDY (TIS)  
\_\_\_\_ OTHER (SPECIFY) \_\_\_\_\_  
\_\_\_\_ PRE-DESIGN MEETING?

**TYPE OF APPROVAL/ACCEPTANCE SOUGHT:**

\_\_\_\_ BUILDING PERMIT APPROVAL  
☒ CERTIFICATE OF OCCUPANCY  
\_\_\_\_ PRELIMINARY PLAT APPROVAL  
\_\_\_\_ SITE PLAN FOR SUB'D APPROVAL  
\_\_\_\_ SITE PLAN FOR BLDG. PERMIT APPROVAL  
\_\_\_\_ FINAL PLAT APPROVAL  
\_\_\_\_ SIA/ RELEASE OF FINANCIAL GUARANTEE  
\_\_\_\_ FOUNDATION PERMIT APPROVAL  
\_\_\_\_ GRADING PERMIT APPROVAL  
\_\_\_\_ SO-19 APPROVAL  
\_\_\_\_ PAVING PERMIT APPROVAL  
\_\_\_\_ GRADING/ PAD CERTIFICATION  
\_\_\_\_ WORK ORDER APPROVAL  
\_\_\_\_ CLOMR/LOMR  
\_\_\_\_ FLOODPLAIN DEVELOPMENT PERMIT  
\_\_\_\_ OTHER (SPECIFY) \_\_\_\_\_

**DATE SUBMITTED:** 04-22-2019 **By:** Matt Satches, P.E.

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: \_\_\_\_\_

FEE PAID: \_\_\_\_\_

April 22, 2019

Doug Hughes, PE  
Principal Engineer, Hydrology  
Planning Department  
City of Albuquerque  
600 2nd St NW  
Albuquerque, NM 87102

Re: Highland HS Title IX Gym Upgrade – Hydrology Permanent CO  
COA Hydrology #K17D021A

Dear Mr. Hughes:

Enclosed for your review is a copy of the above referenced project's Drainage Certification Submittal. This is the **Overall** As-Built Drainage Certification for the entirety of the Highland HS Title IX Gym Upgrades. Per your letter dated 4/3/2019, Hydrology Permanent CO was granted for phases 2, 4, 5, and 6. This submittal is in support of Hydrology Permanent CO for Phases 1 and 3. Their Building Permit #'s can be found below:

Phase 1: 2018-11701  
Phase 3: 2018-11703

Comments associated with Phases 1 and 3 and how they were addressed can be found below:

- *All construction fencing is to be removed from Phase 3*
  - Construction fencing is now removed.
- *The roof drains need to be connected to the down spouts in Phase 3*
  - Roof drains in the affected area are now properly connected.
- *Clean existing trench drain clear of debris and ensure proper function*
  - Trench drain is clean and functions.
- *Plates on all sidewalk culverts need to be bolted down in Phase 1*
  - Sidewalk culverts are bolted down.

With this submittal, we are requesting City of Albuquerque Hydrology Permanent Certificate of Occupancy for Phases 1 and 3 of the Highland High School Title IX Gym Upgrade Project. If you have any questions or require further information, please feel free to contact me.

Sincerely,



Matt Satches, PE  
Engineer  
Community Development & Planning

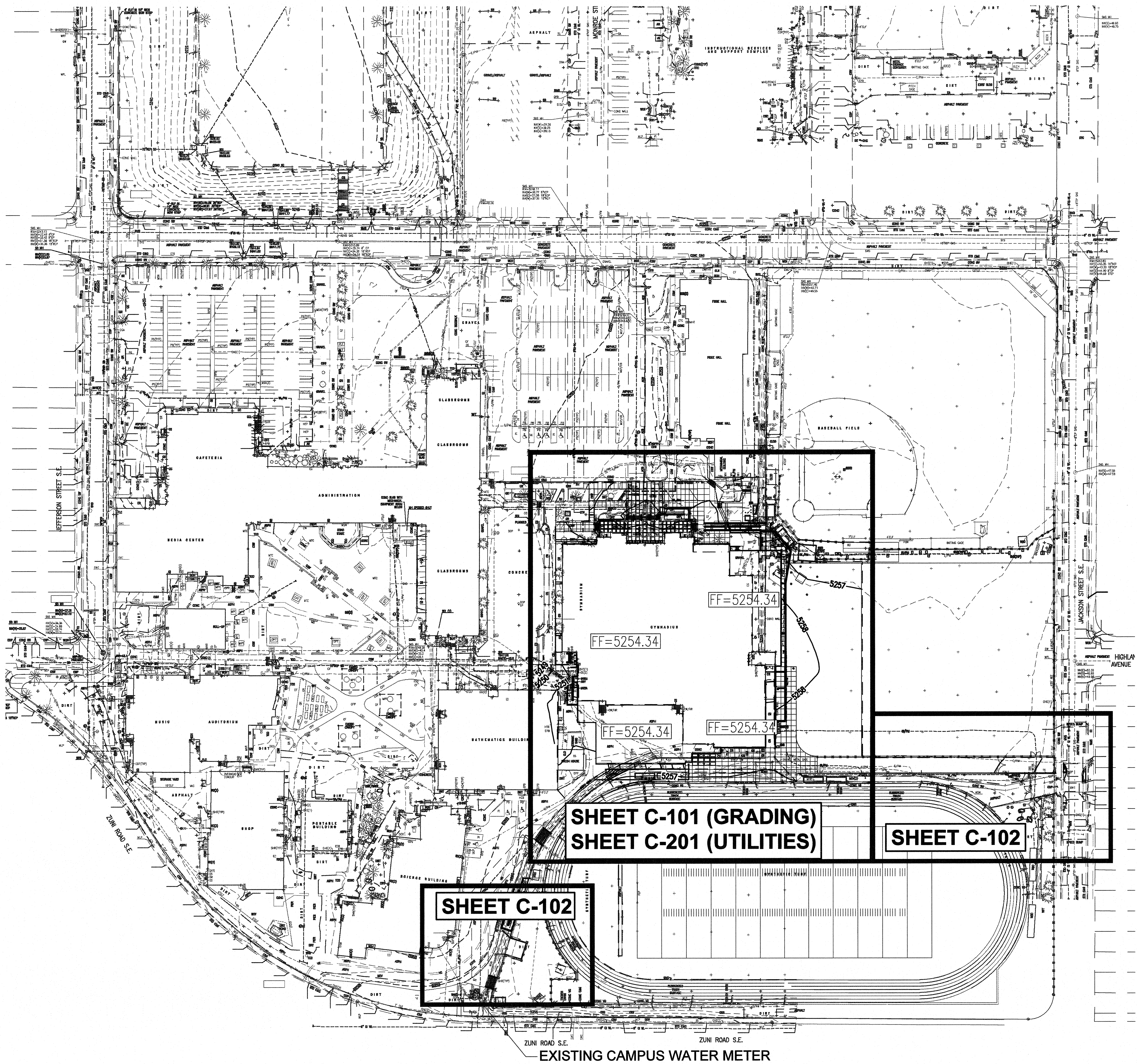
MHS/Enclosures

Engineering ▲

Spatial Data ▲

Advanced Technologies ▲





**A1 OVERALL CIVIL PLAN**  
SCALE: 1:60\_XREF

**SHEET C-102**

**SHEET C-101 (GRADING)  
SHEET C-201 (UTILITIES)**

**SHEET C-102**

EXISTING CAMPUS WATER METER

**DRAINAGE CERTIFICATION**

I, MATTHEW H. SATCHES, NMPE 24572, 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 8-28-16. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY BRIAN MARTINEZ, NMPLS 18874, OF THE FIRM CARTESIAN SURVEYS INC. I FURTHER CERTIFY THAT I HAVE PERSONALLY VISITED THE PROJECT SITE ON 4/22/2019 AND HAVE 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 OF THE AREA. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR A PERMANENT CERTIFICATE OF OCCUPANCY FOR THE OVERALL HIGHLAND HIGH SCHOOL GYM RENOVATIONS.

*Matthew H. Satches*  
MATTHEW H. SATCHES, NMPE 24572

4/22/19  
DATE 4-22-2019

**LEGEND**

FL70.22 DESIGN GRADE

AS-BUILT GRADE

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 ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.

**LANDSCAPE GENERAL NOTE:**

1. SUBGRADE FOR LANDSCAPE AREAS SHALL BE AS FOLLOWS:  
A. FOR AREAS WHERE GRAVEL MULCH IS SPECIFIED, THE SUBGRADE SHALL BE 4" BELOW FINISHED GRADES.  
B. FOR AREAS WHERE SOD (STAGING AREA) IS SPECIFIED, THE SUBGRADE SHALL BE 2.5" BELOW TOP OF FINISHED GRADES.

2. THE SUBGRADE FOR LANDSCAPE AREAS SHALL BE DONE BY THE GENERAL CONTRACTOR. SITE LANDSCAPE WILL BE INSTALLED BY THE APS ON-CALL LANDSCAPE CONTRACTOR AS SPECIFIED ON SHEET LP101.

**NOTE:**

CONTRACTOR SHALL PROVIDE AS-BUILT GRADING INFORMATION STAMPED BY A PROFESSIONAL SURVEYOR. AS-BUILT INFORMATION REQUIRED SHALL BE COORDINATED WITH THE ENGINEER AND SHALL BE SUFFICIENTLY DETAILED TO VERIFY THAT THE DRAINAGE WILL FUNCTION IN ACCORDANCE WITH THE DESIGN. AS-BUILT DATA SHALL BE PROVIDED AT LEAST 3 WORKING DAYS PRIOR TO CONTRACTOR'S REQUEST FOR TEMPORARY CERTIFICATE OF OCCUPANCY. AS-BUILT DATA SHALL BE UPDATED AND RE-SUBMITTED ONE WEEK PRIOR TO FINAL CERTIFICATE OF OCCUPANCY REQUEST. AT A MINIMUM, AS-BUILT DATA SHALL INCLUDE:

- ALL GRATES AND INVERTS OF CATCH BASINS
- APPROXIMATELY 75% OF ALL DESIGN SPOT ELEVATIONS & FINISHED FLOOR ELEVATIONS.

**GRADING SHEET NOTES**

- EXCEPT AS PROVIDED HEREIN, GRADING SHALL BE PERFORMED AT THE ELEVATIONS AND IN ACCORDANCE WITH THE DETAILS SHOWN ON THIS PLAN.
- THE COST FOR REQUIRED CONSTRUCTION DUST AND EROSION CONTROL MEASURES SHALL BE INCIDENTAL TO THE PROJECT COST.
- 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 OTHERS SHALL, UNLESS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT, (FIRST PRIORITY) SPECIFICATIONS, AND/OR THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS.
- EARTH SLOPES SHALL NOT EXCEED 5 HORIZONTAL TO 1 VERTICAL PER THE GEOTECHNICAL REPORT UNLESS SHOWN OTHERWISE.
- 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.
- THE CONTRACTOR IS TO ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO ADJACENT PROPERTY OR PUBLIC RIGHT-OF-WAY.
- 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.
- PAVING AND ROADWAY GRADES SHALL BE +/- 0.1' FROM PLAN ELEVATIONS. PAD ELEVATION SHALL BE +/- 0.05' FROM BUILDING PLAN ELEVATION.
- ALL PROPOSED CONTOURS REFLECT TOP OF PAVEMENT ELEVATIONS IN THE PARKING AREA AND MUST BE ADJUSTED FOR MEDIANS AND ISLANDS.
- VERIFY ALL ELEVATIONS SHOWN ON PLAN FROM BASIS OF ELEVATION CONTROL STATION PRIOR TO BEGINNING CONSTRUCTION.
- SIDEWALK CROSS-SLOPES SHALL BE AT A MINIMUM OF 1.0% AND A MAXIMUM OF 2.0%.
- HDPE PIPE AND FITTINGS SHALL BE INSTALLED AND BACKFILLED PER MANUFACTURER SPECIFICATIONS. CONNECTIONS TO CONCRETE MANHOLES AND CONCRETE DROP INLETS SHALL USE WATER STOP GASKETS AND SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
- ENDS OF ALL STORM DRAIN PIPES, CULVERTS, & CMP END SECTIONS (LARGER THAN 12") SHALL BE COVERED WITH STEEL BARS (TO KEEP CHILDREN OUT) APPROXIMATELY 12" SQUARE. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR REVIEW AND APPROVAL. HYDRAULIC INTEGRITY SHALL NOT BE COMPROMISED. BARS TO BE PAINTED TO MATCH BUILDING.

**UTILITY SHEET NOTES**

- THIS CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE PROCUREMENT AND INSTALLATION OF ALL WORK AND MATERIALS RELATED TO MECHANICAL UTILITIES AS SHOWN ON THIS PLAN INCLUDING: TRENCHING, BACKFILL, SUPPORTS, CLEANOUT PADS, SERVICE STOPS AND BOXES, SERVICE LINES, TESTING, CLEANING, AND STERILIZING. ANY WORK NOT ACCEPTED BY THE ARCHITECT OR ENGINEER DUE TO IMPROPER WORKMANSHIP OR LACK OF PROPER COORDINATION SHALL BE REMOVED AND CORRECTLY INSTALLED AT THE CONTRACTOR'S EXPENSE, AS DIRECTED.
- MINIMUM DEPTHS OF COVER SHALL BE: 36" FOR WATERLINES AND 48" FOR SEWER, EXCEPT AT BUILDING CONNECTION.
- ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED OF HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE IAPMO UNIFORM PLUMBING CODE & NFPA 24, LATEST EDITION.
- UTILITY LINES SHALL BE INSTALLED PRIOR TO PAVEMENT, CURB AND GUTTER, AND/OR SIDEWALK, AS APPLICABLE.
- ROUGH GRADING OF SITE (+0.5') SHALL BE COMPLETED PRIOR TO INSTALLATION OF UTILITY LINES.
- CONTRACTOR WILL BE RESPONSIBLE FOR CONNECTIONS TO BUILDING DRAIN LINES AND ALL NECESSARY FITTINGS.
- ALL VALVES SHALL BE ANCHORED PER CITY OF ALBUQUERQUE STANDARD DRAWING 2333.
- FIRE LINES SHALL USE PIPE MATERIALS UNDERWRITERS LABORATORIES LISTED AND APPROVED FOR FIRE SERVICE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WATER METER, FIRE LINE, AND SEWER HOOKUP FEES FOR INSTALLATIONS. OWNER SHALL BE RESPONSIBLE FOR UTILITY EXPANSION CHARGES, PRORATA AND OTHER SPECIAL ASSESSMENTS.
- CONTRACTOR SHALL VERIFY INVERTS AND LOCATIONS OF EXISTING WATER/SAS LINES PRIOR TO BEGINNING WORK. ALL CONFLICTS SHALL BE BROUGHT TO ATTENTION OF THE ENGINEER AND RESOLVED PRIOR TO BEGINNING WORK.
- CONTRACTOR SHALL NOTIFY THE AUTHORITY HAVING JURISDICTION PRIOR TO INSTALLATION OF FIRE SERVICE LINES, AND PRIOR TO TESTING OF ALL WATERLINES. CONTRACTOR SHALL COMPLETE, SIGN, AND SUBMIT THE "CONTRACTOR'S MATERIAL & TEST CERTIFICATE FOR UNDERGROUND PIPING" IN ACCORDANCE WITH NFPA 24.

**LANDSCAPE GENERAL NOTE:**

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B. FOR AREAS WHERE SOD (STAGING AREA) IS SPECIFIED, THE SUBGRADE SHALL BE 2.5" BELOW TOP OF FINISHED GRADES.

2. THE SUBGRADE FOR LANDSCAPE AREAS SHALL BE DONE BY THE GENERAL CONTRACTOR. SITE LANDSCAPE WILL BE INSTALLED BY THE APS ON-CALL LANDSCAPE CONTRACTOR AS SPECIFIED ON SHEET LP101.

**NOTE:**

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- ALL GRATES AND INVERTS OF CATCH BASINS
- APPROXIMATELY 75% OF ALL DESIGN SPOT ELEVATIONS & FINISHED FLOOR ELEVATIONS.

**GENERAL SHEET NOTES**

- 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, NMADPA PUBLIC WORKS STANDARDS SHALL APPLY.
- 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 DISCHARGE.
- 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.
- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL CONTACT LINE LOCATING SERVICE FOR LOCATION OF EXISTING UTILITIES.
- 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.
- THE CONTRACTOR IS 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.
- 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.
- 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.
- THE CONTRACTOR SHALL OBTAIN ALL THE NECESSARY PERMITS FOR THE PROJECT PRIOR TO COMMENCING CONSTRUCTION (I.E., BARRICADING, TOPSOIL DISTURBANCE, EXCAVATION PERMITS, DRIVEWAY PERMITS, ETC.).
- 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.
- THE CONTRACTOR SHALL PREPARE A CONSTRUCTION TRAFFIC CONTROL AND SIGNING PLAN AND OBTAIN APPROVAL OF SUCH PLAN FROM THE BERNALILLO COUNTY TRAFFIC ENGINEERING DEPARTMENT PRIOR TO BEGINNING ANY CONSTRUCTION WORK ON OR ADJACENT TO EXISTING STREETS.
- 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.
- 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.
- THE PROJECT MUST CONFORM WITH THE EROSION AND SEDIMENT REQUIREMENTS OF THE 2003 EPA CONSTRUCTION GENERAL PERMIT OR LOCAL STANDARDS & CODES WHICHEVER IS MORE STRINGENT.
- TWO WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM (260-1990) FOR LOCATION OF EXISTING UTILITIES.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS, SHOULD A CONFLICT EXIST. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
- CONTRACTOR SHALL NOT DISTURB PERMANENT SURVEY MONUMENTS WITHOUT THE CONSENT OF THE CITY SURVEYOR AND SHALL NOTIFY THE CITY SURVEYOR AND BEAR THE EXPENSE OF REPLACING ANY THAT MAY BE DISTURBED WITHOUT PERMISSION. REPLACEMENT SHALL BE DONE ONLY BY THE CITY SURVEYOR. WHEN A CHANGE IS MADE IN THE FINISHED ELEVATIONS OF THE PAVEMENT OF ANY ROADWAY IN WHICH A PERMANENT SURVEY MONUMENT IS LOCATED, CONTRACTOR SHALL, AT HIS OWN EXPENSE, ADJUST THE MONUMENT COVER TO THE NEW GRADE, UNLESS OTHERWISE SPECIFIED. REFER TO SECTION 4.4 OF THE GENERAL CONDITIONS OF THE STANDARD SPECIFICATIONS.
- CONTRACTOR SHALL RECORD DATA ON ALL UTILITY LINES AND ACCESSORIES AS REQUIRED BY THE CITY OF ALBUQUERQUE FOR THE PREPARATION OF "AS CONSTRUCTED" DRAWINGS. CONTRACTOR SHALL NOT COVER UTILITY LINES AND ACCESSORIES UNTIL ALL DATA HAS BEEN RECORDED.
- CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORK SITE. CONTRACTOR SHALL PROMPTLY REMOVE ANY GRAFFITI FROM ALL EQUIPMENT, WHETHER PERMANENT OR TEMPORARY.
- CONTRACTOR SHALL COORDINATE WITH THE ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY (ABWCUA) FIVE (5) WORKING DAYS IN ADVANCE OF ANY WORK THAT MAY AFFECT EXISTING PUBLIC WATER OR SEWER UTILITIES. EXISTING VALVES TO BE OPERATED BY CITY PERSONNEL ONLY. CONTRACTOR SHALL CONTACT THE WATER SYSTEMS DIVISION THREE (3) WORKING DAYS PRIOR TO NEEDING VALVES TURNED ON OR OFF.

**LEGEND**

- PROPERTY LINE
- LIMITS OF GRADING
- EXISTING INDEX CONTOUR
- EXISTING INTERMEDIATE CONTOUR
- PROPOSED INDEX CONTOUR
- PROPOSED INTERMEDIATE CONTOUR
- PROPOSED STORM DRAIN LINE
- PROPOSED STORM DRAIN MANHOLE
- PROPOSED STORM DRAIN INLETS

**SMPC Architects**  
PRINCIPLES OF DESIGN

115 Arroyo Drive SE  
Albuquerque, New Mexico 87108  
760.255.8888  
F 505.969.9995  
www.smpcarchitects.com

**Bohannon  
Huston**  
www.bhinc.com  
800.877.5332

NEW MEXICO  
REGISTERED PROFESSIONAL ENGINEER  
24572

APS

**ALBUQUERQUE PUBLIC SCHOOLS  
HIGHLAND HIGH SCHOOL  
TITLE IX GYMNASIUM UPGRADE**

4700 Coal Ave. SE  
Albuquerque, NM 87108

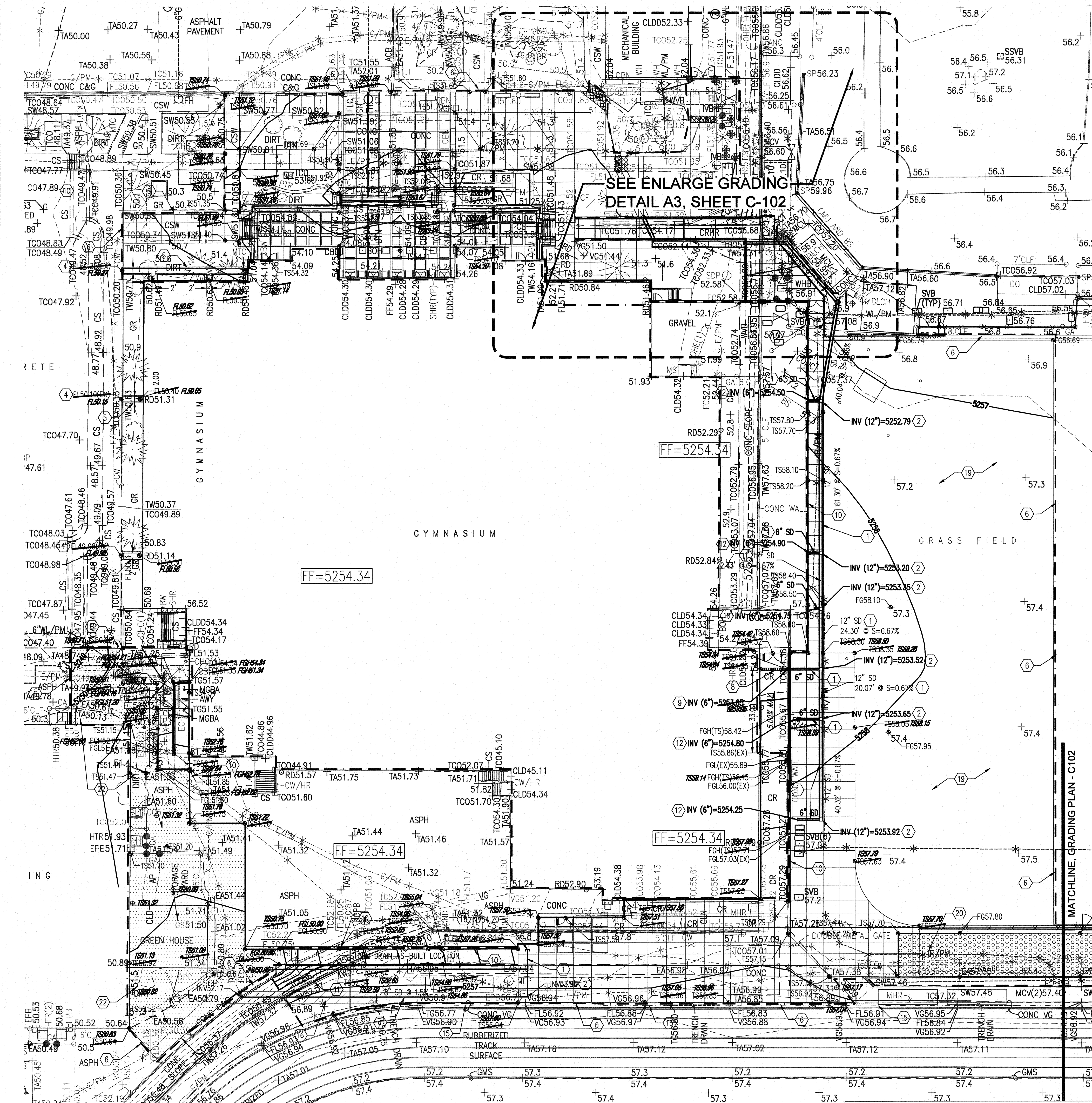
**100% CONSTRUCTION DOCUMENTS**

NO	DATE	DESCRIPTION
1	2016-06-23	PROJECT # 140001
2		DRAWN BY: BHW
3		CHD BY: JLM
4		Copyright: SMPC Architects © 2014
5		These documents were prepared for this specific project only. SMPC Architects' liability is limited to this specific project, and does not extend to reuse of these documents for other projects.
6		SHEET TITLE

**OVERALL CIVIL PLAN**

**C-100**  
SHEET OF





**A1 GRADING PLAN**  
SCALE: 1/2"=XREF

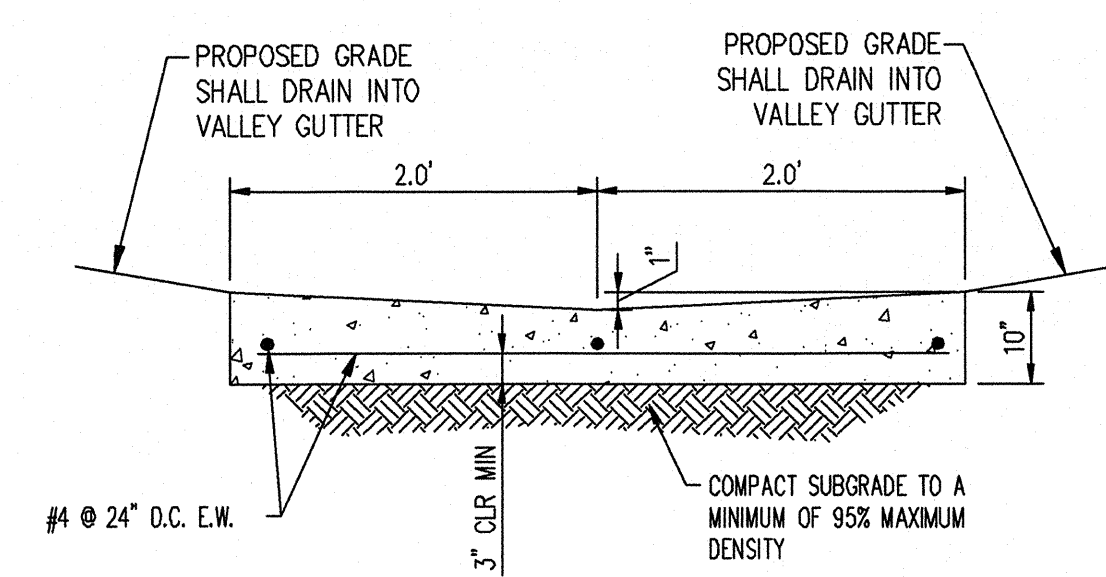


**DRAINAGE CERTIFICATION**  
I, MATTHEW H. SATCHES, NMPE 24572, OF THE FIRM BOHANNAN HUSTON INC, HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 6-28-19. THE RECORD INFORMATION EDITED ON THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY BRIAN MARTINEZ, NMPLS 18374, OF THE FIRM CARTESIAN SURVEYS INC. I FURTHER CERTIFY THAT I HAVE PERSONALLY VISITED THE PROJECT SITE ON 4/22/2019 AND HAVE 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 OF THE AREA. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR A PERMANENT CERTIFICATE OF OCCUPANCY FOR THE OVERALL HIGHLAND HIGH SCHOOL GYM RENOVATIONS.

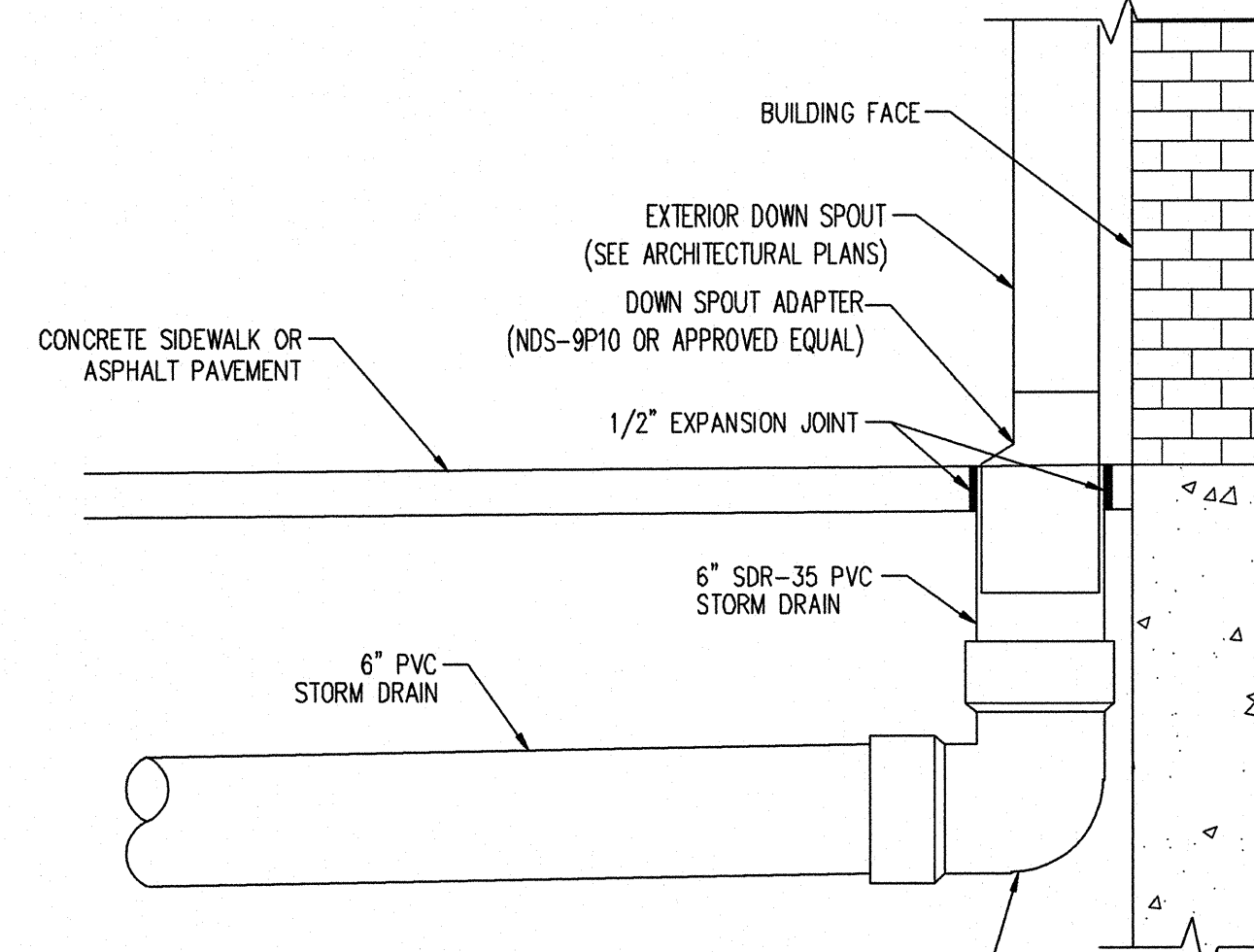
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*Matthew H. Satches*  
MATTHEW H. SATCHES, NMPE 24572  
DATE 4-22-2019

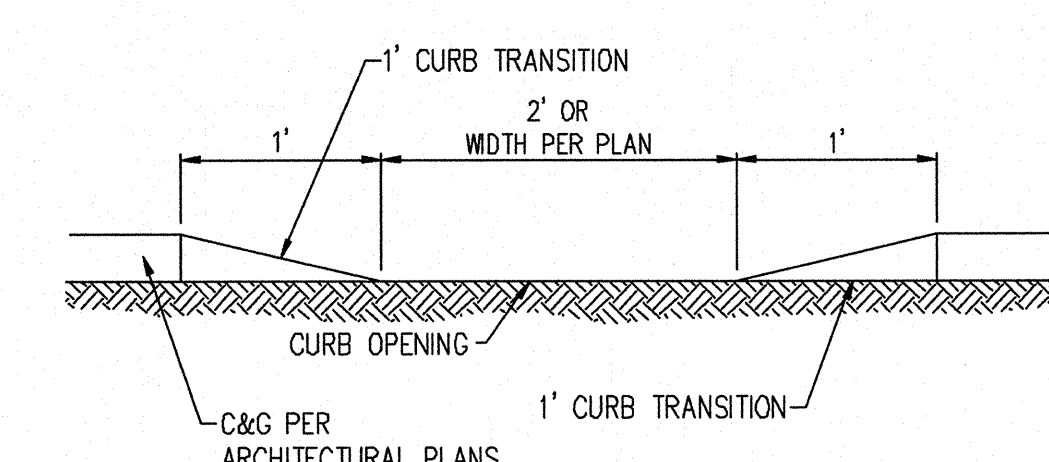
**LEGEND**  
FL70.22 DESIGN GRADE  
FL70.22 AS-BUILT GRADE



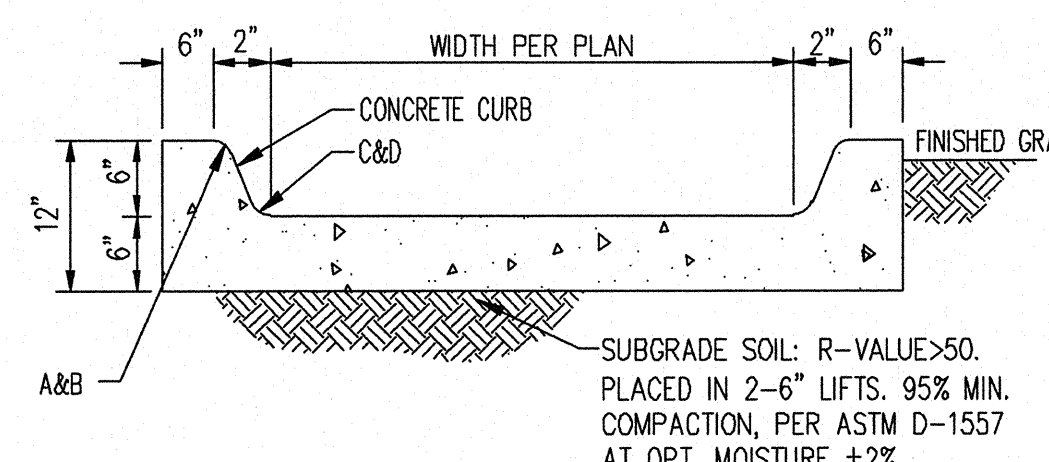
**A5 4' CONCRETE VALLEY GUTTER**  
N.T.S.



**A4 DOWN SPOUT CONNECTION DETAIL**  
N.T.S.



**A3 TYPICAL CURB OPENING**  
N.T.S.



**A2 CONCRETE RUNDOWN**  
N.T.S.

**SHEET KEYNOTES\***

1. INSTALL HDPE (N12 WT. OR APPROVED EQUAL) STORM DRAIN PIPE, SIZE PER PLANS.
2. INSTALL PRE-FABRICATED STORM DRAIN FITTING, SEE PLANS FOR SIZE.
3. INSTALL 24" SIDEWALK CULVERT PER COA STD DWG 2236, MODIFIED TO PROVIDE ALUMINUM DIAMOND PLATE WITH 1" x 1" ALUMINUM ANGLE.
4. INSTALL CURB OPENING PER DETAIL A3, SHEET C-101.
5. INSTALL CONCRETE RUNDOWN PER DETAIL A2, SHEET C-101.
6. MATCH EXISTING ELEVATION.
7. SEE LANDSCAPE PLAN FOR SWALE DETAILS.
8. INSTALL HDPE TRENCH DRAIN, CONTRACTOR TO SUBMIT SHOP DRAWING TO ENGINEER FOR REVIEW.
9. CONNECT TO TRENCH DRAIN CATCH BASIN; PROVIDE FITTINGS AS NECESSARY.
10. RETAINING WALL; SEE ARCHITECTURAL PLAN FOR DETAILS.
11. SITE RETAINING WALL; SEE CIVIL STRUCTURAL SHEET C-400 FOR DETAILS.
12. CONNECT TO ROOF DRAIN DRAIN SPOUT PER DETAIL A4, SHEET C-101.
13. INSTALL 30" NYLOPLAST INLET BASIN (OR APPROVED EQUAL) WITH SOLID GRATE COVER.
14. REMOVE EXISTING SINGLE SIDEWALK CULVERT, INSTALL 2-24" SIDEWALK CULVERT PER COA STD DWG 2236, MODIFIED TO PROVIDE ALUMINUM DIAMOND PLATE WITH 1" x 1" ALUMINUM ANGLE.
15. CLEAN EXISTING TRENCH DRAIN CLEAR OF DEBRIS AND ENSURE PROPER FUNCTION.
16. INSTALL 4" WIDE VALLEY GUTTER PER DETAIL A5, SHEET C-101.
17. SAWCUT, REMOVE & REPLACE EXISTING ASPHALT, CURBS, LANDSCAPE MATERIALS, & IRRIGATION EQUIPMENT; REPLACE IN KIND. CONTRACTOR TO UTILIZE TRENCH BOX FOR THIS INSTALLATION.
18. CONNECT TO ROOF DRAIN WITHIN 5' OF BUILDING. SEE PLUMBING PLAN FOR CONTINUATION.
19. CONTRACTOR SHALL GRADE STAGING AREA TO TOP OF SUBGRADE (2.5' BELOW FINISHED GRADES SHOWN). COORDINATE WITH LANDSCAPE ARCHITECT AND APS ON-CALL LANDSCAPE CONTRACTOR FOR EXTENTS OF GRADING.

\* - NOT ALL KEYNOTED USED ON THIS SHEET

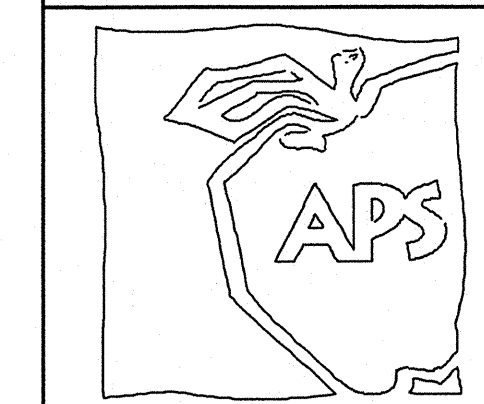
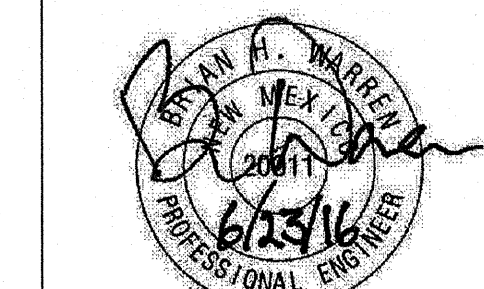
**NOTE**  
HDPE PIPE AND FITTINGS SHALL BE INSTALLED AND BACKFILLED PER MANUFACTURER SPECIFICATIONS. CONNECTIONS TO CONCRETE MANHOLES AND CONCRETE DROP INLETS SHALL USE WATER STOP GASKETS AND SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS

**NOTE**  
ENDS OF ALL STORM DRAIN PIPES, CULVERTS, & CMP END SECTIONS (LARGER THAN 12") SHALL BE COVERED WITH STEEL BARS (TO KEEP CHILDREN OUT) APPROXIMATELY 12" SQUARE. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR REVIEW AND APPROVAL. HYDRAULIC INTEGRITY SHALL NOT BE COMPROMISED. BARS TO BE PAINTED TO MATCH BUILDING.

**NOTE**  
SIDEWALK CROSS-SLOPES SHALL BE AT A MINIMUM OF 1.0% AND A MAXIMUM OF 2.0%

**LEGEND**

- PROPERTY LINE
- LIMITS OF GRADING
- 5025--- EXISTING INDEX CONTOUR
- 5024--- EXISTING INTERMEDIATE CONTOUR
- 5025.25 EXISTING GROUND SPOT ELEVATION
- 5025 PROPOSED INDEX CONTOUR
- 5024 PROPOSED INTERMEDIATE CONTOUR
- 26.75 PROPOSED FINISHED GRADE SPOT ELEVATION
- TC=TOP OF CURB, FL=FLOW LINE, TS=TOP OF SIDEWALK, TG=TOP OF GRATE, FGH=FINISH GROUND HIGH, FGL=FINISH GROUND LOW
- PROPOSED CURB & GUTTER
- PROPOSED RETAINING WALL
- DIRECTION OF FLOW
- WATER BLOCK/GRADE BREAK
- PROPOSED STORM DRAIN LINE
- PROPOSED STORM DRAIN MANHOLE
- PROPOSED STORM DRAIN INLETS



**ALBUQUERQUE PUBLIC SCHOOLS  
HIGHLAND HIGH SCHOOL  
TITLE IX GYMNASIUM UPGRADE**

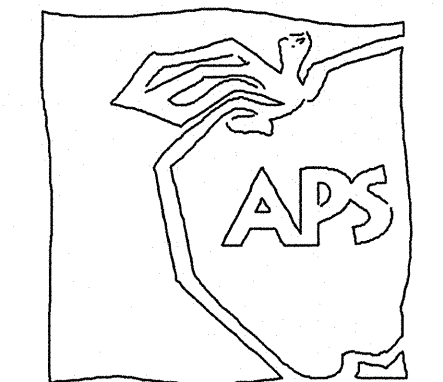
4700 Coal Ave. SE  
Albuquerque, NM 87108

**100% CONSTRUCTION DOCUMENTS**

NO	DATE	DESCRIPTION
DATE:	2016-06-23	
PROJECT #:	140001	
DRAWN BY:	BHW	
CHD BY:	JLM	
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**GRADING PLAN**





**ALBUQUERQUE PUBLIC SCHOOLS  
HIGHLAND HIGH SCHOOL  
TITLE IX GYMNASIUM UPGRADE**

4700 Coal Ave. SE  
Albuquerque, NM 87108

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**GRADING  
PLAN**

**C-102**  
SHEET OF

**SHEET KEYNOTES\***

1. INSTALL HDPE (N12 WT. OR APPROVED EQUAL) STORM DRAIN PIPE, SIZE PER PLANS.
2. INSTALL PRE-FABRICATED STORM DRAIN FITTING, SEE PLANS FOR SIZE.
3. INSTALL 24" SIDEWALK CULVERT PER COA STD DWG 2236, MODIFIED TO PROVIDE ALUMINUM DIAMOND PLATE WITH 1" x 1" ALUMINUM ANGLE.
4. INSTALL CURB OPENING PER DETAIL A3, SHEET C-101.
5. INSTALL CONCRETE RUNDOWN PER DETAIL A2, SHEET C-101.
6. MATCH EXISTING ELEVATION.
7. SEE LANDSCAPE PLAN FOR SWALE DETAILS.
8. INSTALL HDPE TRENCH DRAIN. CONTRACTOR TO SUBMIT SHOP DRAWING TO ENGINEER FOR REVIEW.
9. CONNECT TO TRENCH DRAIN CATCH BASIN; PROVIDE FITTINGS AS NECESSARY.
10. RETAINING WALL; SEE ARCHITECTURAL PLAN FOR DETAILS.
11. SITE RETAINING WALL; SEE CIVIL STRUCTURAL SHEET C-400 FOR DETAILS.
12. CONNECT TO ROOF DRAIN DOWN SPOUT PER DETAIL A4, SHEET C-101.
13. INSTALL 30" NYLOPLAST INLET BASIN (OR APPROVED EQUAL) WITH SOLID GRATE COVER.
14. REMOVE EXISTING SINGLE SIDEWALK CULVERT. INSTALL 2-24" SIDEWALK CULVERT PER COA STD DWG 2236, MODIFIED TO PROVIDE ALUMINUM DIAMOND PLATE WITH 1" x 1" ALUMINUM ANGLE.
15. CLEAN EXISTING TRENCH DRAIN CLEAR OF DEBRIS AND ENSURE PROPER FUNCTION.
16. INSTALL 4" WIDE VALLEY GUTTER PER DETAIL A5, SHEET C-101.
17. SAWCUT, REMOVE & REPLACE EXISTING ASPHALT, CURBS, LANDSCAPE MATERIALS, & IRRIGATION EQUIPMENT; REPLACE IN KIND. CONTRACTOR TO UTILIZE TRENCH BOX FOR THIS INSTALLATION.
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- PROPOSED STORM DRAIN LINE
- PROPOSED STORM DRAIN MANHOLE
- PROPOSED STORM DRAIN INLETS

**DRAINAGE CERTIFICATION**

I, MATTHEW H. SATCHER, NMPE 24572, OF THE FIRM BOHANNAN HUSTON INC, HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAW IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 6-23-16. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY BRIAN MARTINEZ, NMPLS 18374, OF THE FIRM CARTESIAN SURVEYS INC. I FURTHER CERTIFY THAT I HAVE PERSONALLY VISITED THE PROJECT SITE ON 4/22/2019 AND HAVE 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 OF THE AREA. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR A PERMANENT CERTIFICATE OF OCCUPANCY FOR THE OVERALL HIGHLAND HIGH SCHOOL GYM RENOVATIONS.

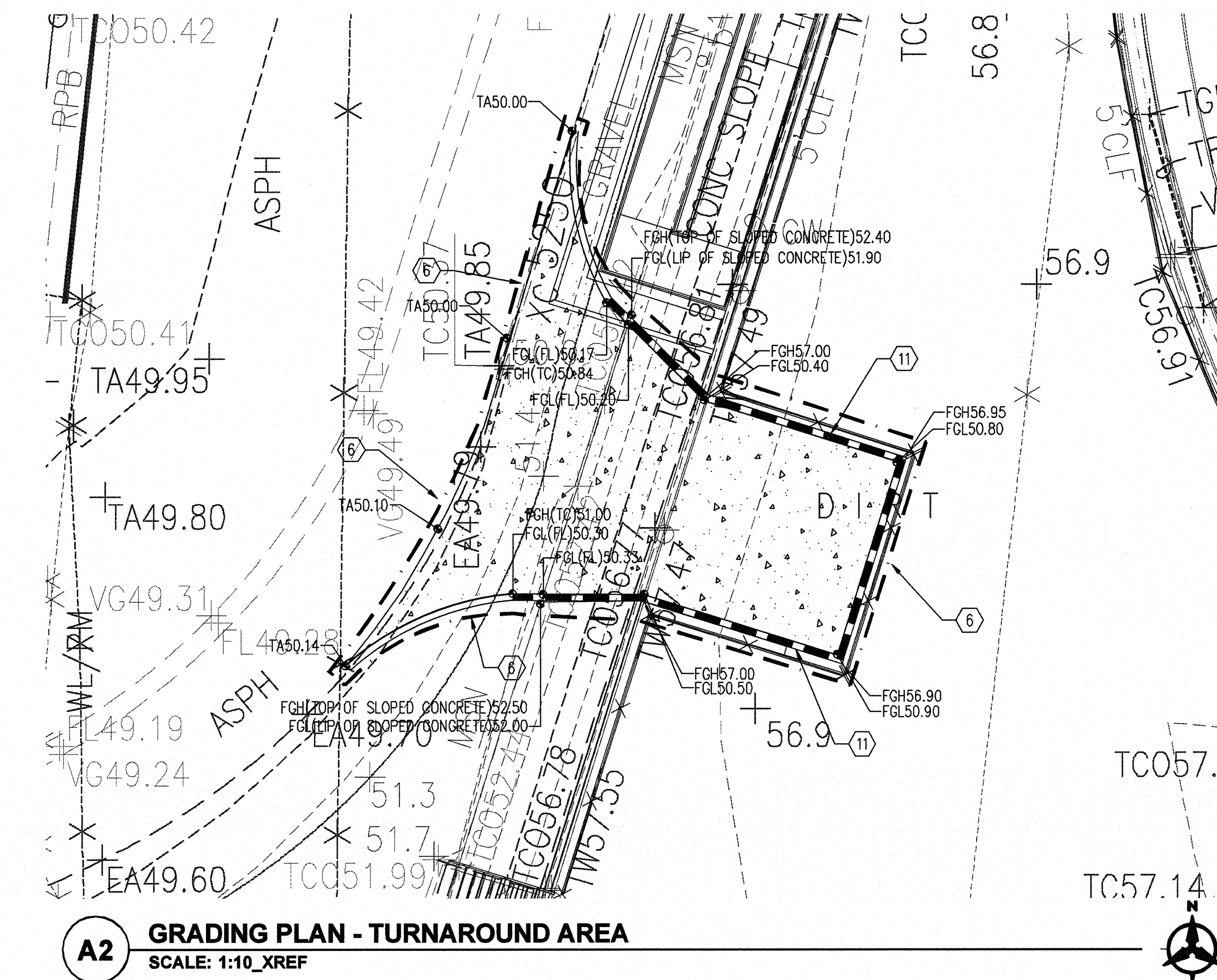
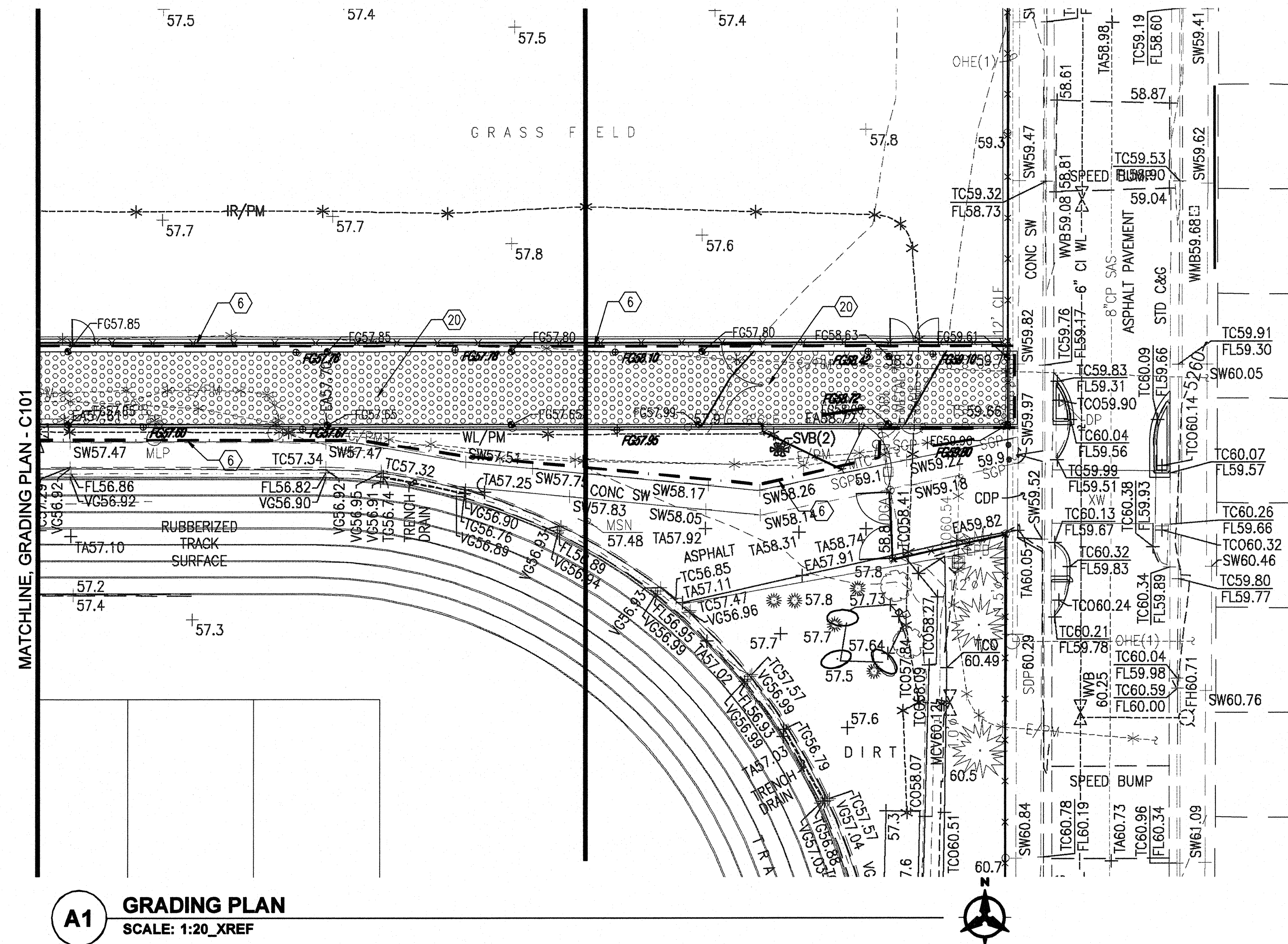
THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THIS PROJECT. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER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

*Matthew H. Satcher*  
MATTHEW H. SATCHER, NMPE 24572  
DATE 4/22/19  
4/22/2019

**LEGEND**

● FL70.22 DESIGN GRADE  
● FL70.22 AS-BUILT GRADE

MATTHEW H. SATCHER  
REGISTERED PROFESSIONAL ENGINEER  
NEW MEXICO  
24572



**PAVING LEGEND**

- CONCRETE PAVEMENT SECTION SEE DETAIL (RIGHT)
  - #4 @ 12" O.C. E.W.
  - 6" PORTLAND CEMENT CONCRETE PAVEMENT (4000 PSI)
  - 8" AGGREGATE BASE COURSE @ 95% MAXIMUM DENSITY WITH 4" MAXIMUM LIFTS
  - 12" SUBGRADE PREPARATION @ 95% MAXIMUM DENSITY PER ASTM D-1557 (R200)
- CONCRETE PAVEMENT SECTION NOT TO SCALE**

