

Rael, Rudy E.

From: Rael, Rudy E.
Sent: Wednesday, September 28, 2016 11:21 AM
To: 'bwarren@bhinc.com'
Subject: Highland High School

Mr. Warren;

This email is being sent in lieu of an attached comment letter in order to expedite our response to previous comments. Response to comments should continue to be included in the resubmittal. A reply to these comments via email will not be considered a resubmittal.

Based upon the information provided in your resubmittal received 9/1/16, the above referenced Grading and Drainage Report and plan cannot be approved for Grading Permit or Building Permit until the following comments are addressed:

- The plans are too cluttered, provide a separate Demo plan showing what is to remain and what is being demolished.
- Provide a detail for the retaining walls. Separate permit is required for the walls.
- Provide roof flows. Where are the flows headed in the NE addition? Is there a water harvest pond for this new area?
- Connect the new drive with the old drive per Master plan dated 9/2/2015 provided by High Mesa Consulting Group.
Consult with Transportation.

Additional comments may be provided when new plans are resubmitted.

If you should have any questions feel free to contact me or Abiel Carrillo at 924-3986.

Rudy E. Rael, CE, CFM
Engineer Associate, Hydrology
Planning Department
600 2nd St. NW Suite 201
Albuquerque NM 87102
(505) 924-3977



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

Project Title: _____ Building Permit #: _____ City Drainage #: _____

DRB#: _____ EPC#: _____ Work Order#: _____

Legal Description: _____

City Address: _____

Engineering Firm: _____ Contact: _____

Address: _____

Phone#: _____ Fax#: _____ E-mail: _____

Owner: _____ Contact: _____

Address: _____

Phone#: _____ Fax#: _____ E-mail: _____

Architect: _____ Contact: _____

Address: _____

Phone#: _____ Fax#: _____ E-mail: _____

Surveyor: _____ Contact: _____

Address: _____

Phone#: _____ Fax#: _____ E-mail: _____

Contractor: _____ Contact: _____

Address: _____

Phone#: _____ Fax#: _____ E-mail: _____

TYPE OF SUBMITTAL:

- _____ DRAINAGE REPORT
- _____ DRAINAGE PLAN 1st SUBMITTAL
- _____ DRAINAGE PLAN RESUBMITTAL
- _____ CONCEPTUAL G & D PLAN
- _____ GRADING PLAN
- _____ EROSION & SEDIMENT CONTROL PLAN (ESC)
- _____ ENGINEER'S CERT (HYDROLOGY)
- _____ CLOMR/LOMR
- _____ TRAFFIC CIRCULATION LAYOUT (TCL)
- _____ ENGINEER'S CERT (TCL)
- _____ ENGINEER'S CERT (DRB SITE PLAN)
- _____ ENGINEER'S CERT (ESC)
- _____ SO-19
- _____ OTHER (SPECIFY)

CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

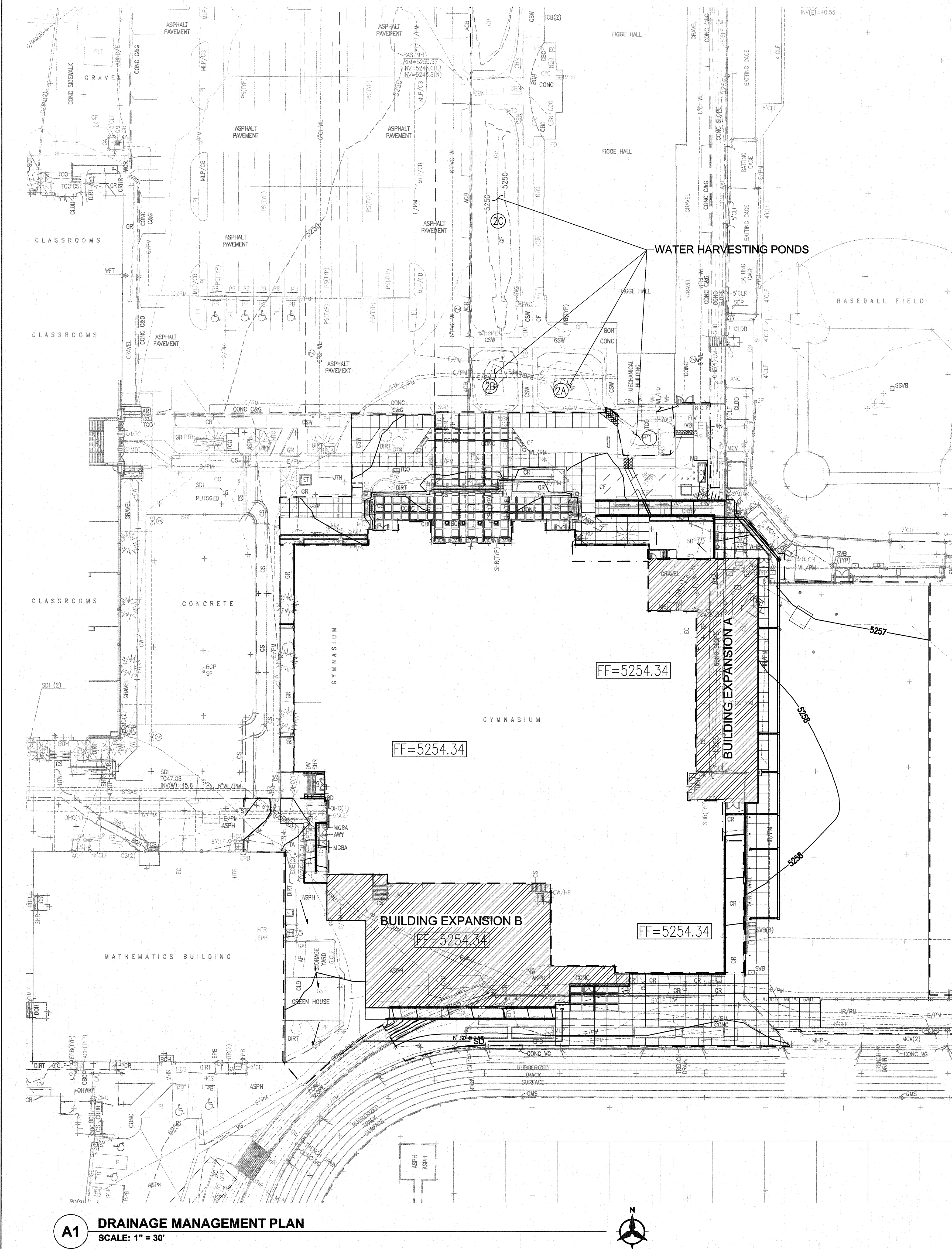
- _____ SIA/FINANCIAL GUARANTEE RELEASE
- _____ PRELIMINARY PLAT APPROVAL
- _____ S. DEV. PLAN FOR SUB'D APPROVAL
- _____ S. DEV. FOR BLDG. PERMIT APPROVAL
- _____ SECTOR PLAN APPROVAL
- _____ FINAL PLAT APPROVAL
- _____ CERTIFICATE OF OCCUPANCY (PERM)
- _____ CERTIFICATE OF OCCUPANCY (TCL TEMP)
- _____ FOUNDATION PERMIT APPROVAL
- _____ BUILDING PERMIT APPROVAL
- _____ GRADING PERMIT APPROVAL
- _____ PAVING PERMIT APPROVAL
- _____ WORK ORDER APPROVAL
- _____ GRADING CERTIFICATION
- _____ SO-19 APPROVAL
- _____ ESC PERMIT APPROVAL
- _____ ESC CERT. ACCEPTANCE
- _____ OTHER (SPECIFY)

WAS A PRE-DESIGN CONFERENCE ATTENDED: _____ Yes _____ No _____ Copy Provided

DATE SUBMITTED: _____ By: _____

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
4. **Erosion and Sediment Control Plan:** Required for any new development and redevelopment site with 1-acre or more of land disturbing area, including project less than 1-acre than are part of a larger common plan of development



A1 DRAINAGE MANAGEMENT PLAN
SCALE: 1" = 30'

DRAINAGE MANAGEMENT NARRATIVE

I. INTRODUCTION

The purpose of the plan is to present a drainage management plan detailing the proposed drainage conditions at Highland High School for the first phase of construction on the renovated high school. Please refer to the approved master drainage management plan, stamp date 9-2-2015 for more information regarding final site conditions.

II. METHODOLOGY

The site is located in the City of Albuquerque, therefore The City of Albuquerque Development Process Manual Section 22.2 was used to analyze the site's proposed drainage. Precipitation Zone 2 was used due to the site lying West of the San Mateo and East of the Rio Grande, per Section 22.2.

III. PROPOSED HYDROLOGIC CONDITIONS

For this phase, two separate gym expansions will be constructed. Expansion A at the northeast corner of the building and Expansion B at the southwest corner. Some additional site improvements will also be included with this phase of construction. The proposed grading of the site improvement for Expansion A adheres to the master drainage management plan as part of sub-basin N-2. Expansion B is being constructed on an area that is currently a 100% impervious surface.

The series of water harvesting area in front of the existing Figgy Hall building were analyzed for volume capacity to capture the first flush requirement for the Building Expansion A and site improvements. The volume of water discharging to these ponds in first flush storm will use approximately 35% of the provided ponding volume.

FIRST FLUSH CALCULATIONS

Expansion A Roof Area: 32850 SF Site Improvements Paved Area: 9350 SF
Rainfall Depth: 0.44" (roof) 0.34" (pavement*)
* - Initial Abstraction of 0.1" was used for paved area per DPM Chapter 22, Table A-7.

Total First Flush Retaining Volume: 1470 CF

HARVESTING AREA VOLUME ANALYSIS

#1: Volume Provided = 184 CF
#2A: Volume Provided = 829 CF
#2B: Volume Provided = 617 CF
#2C: Volume Provided = 2685 CF
Total Volume Available = 4131 CF

The analysis provided above demonstrates that the first flush volume from the redevelopment is fully captured in the series of water harvesting areas with 65% (2661 CF) of the provided volume available for additional rainfall discharge.

IV. CONCLUSION

The proposed condition peak discharge from the site either adheres to the approved drainage pattern in the master drainage management plan or equivalent to that of the existing condition. The implementation of these grading concepts and construction of the water harvesting area would result in the safe passage of the 100 year storm event as with the existing conditions. With this plan we request approval for building permit.

100% CONSTRUCTION DOCUMENTS

NO	DATE	DESCRIPTION
1	2016-06-23	DATE:
2	140001	PROJECT #:
3	BHW	DRAWN BY:
4	JLM	CHD BY:

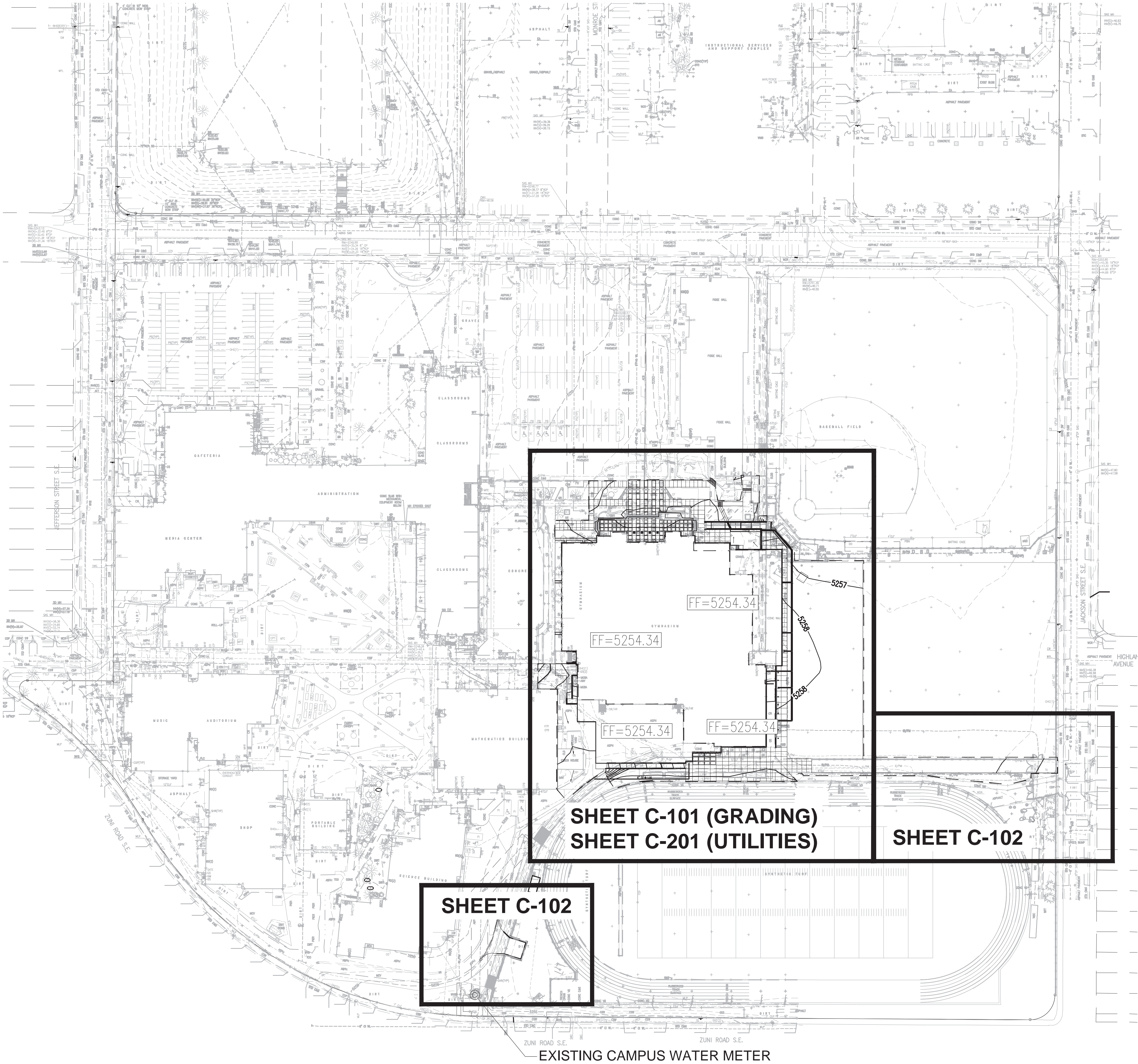
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SHEET TITLE

DRAINAGE MANAGEMENT PLAN

DMP-001
SHEET OF



A1 OVERALL CIVIL PLAN
SCALE: 1" = 60'



EXISTING CAMPUS WATER METER

GRADING SHEET NOTES

1. EXCEPT AS PROVIDED HEREIN, GRADING SHALL BE PERFORMED AT THE ELEVATIONS AND IN ACCORDANCE WITH THE DETAILS SHOWN ON THIS PLAN.
2. THE COST FOR REQUIRED CONSTRUCTION DUST AND EROSION CONTROL MEASURES SHALL BE INCIDENTAL TO THE PROJECT COST.
3. 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 OTHER WORK 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.
4. EARTH SLOPES SHALL NOT EXCEED 5 HORIZONTAL TO 1 VERTICAL PER THE GEOTECHNICAL REPORT UNLESS SHOWN OTHERWISE.
5. 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.
6. THE CONTRACTOR IS TO ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO ADJACENT PROPERTY OR PUBLIC RIGHT-OF-WAY.
7. 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 THE 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.
8. PAVING AND ROADWAY GRADES SHALL BE +/- 0.1' FROM PLAN ELEVATIONS. PAD ELEVATION SHALL BE +/- 0.05' FROM BUILDING PLAN ELEVATION.
9. ALL PROPOSED CONTOURS REFLECT TOP OF PAVEMENT ELEVATIONS IN THE PARKING AREA AND MUST BE ADJUSTED FOR MEDIANS AND ISLANDS.
10. VERIFY ALL ELEVATIONS SHOWN ON PLAN FROM BASIS OF ELEVATION CONTROL STATION PRIOR TO BEGINNING CONSTRUCTION.
11. SIDEWALK CROSS-SLOPES SHALL BE AT A MINIMUM OF 1.0% AND A MAXIMUM OF 2.0%.
12. 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.
13. 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

1. 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.
2. MINIMUM DEPTHS OF COVER SHALL BE: 36" FOR WATERLINES AND 48" FOR SEWER, EXCEPT AT BUILDING CONNECTION.
3. 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.
4. UTILITY LINES SHALL BE INSTALLED PRIOR TO PAVEMENT, CURB AND GUTTER, AND/OR SIDEWALK, AS APPLICABLE.
5. ROUGH GRADING OF SITE (+0.5') SHALL BE COMPLETED PRIOR TO INSTALLATION OF UTILITY LINES.
6. CONTRACTOR WILL BE RESPONSIBLE FOR CONNECTIONS TO BUILDING DRAIN LINES AND ALL NECESSARY FITTINGS.
7. ALL VALVES SHALL BE ANCHORED PER CITY OF ALBUQUERQUE STANDARD DRAWING 2333.
8. FIRE LINES SHALL USE PIPE MATERIALS UNDERWRITERS LABORATORIES LISTED AND APPROVED FOR FIRE SERVICE.
9. 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.
10. 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.
11. 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:

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 SOO (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 5 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.

GENERAL SHEET NOTES

1. 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, NMAPWA PUBLIC WORKS STANDARDS SHALL APPLY.
2. 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.
3. 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.
4. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL CONTACT LINE LOCATING SERVICE FOR LOCATION OF EXISTING UTILITIES.
5. 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.
6. 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.
7. 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.
8. 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.
9. THE CONTRACTOR SHALL OBTAIN ALL THE NECESSARY PERMITS FOR THE PROJECT PRIOR TO COMMENCING CONSTRUCTION (I.E., BARRICADE, TOPSOIL DISTURBANCE, EXCAVATION PERMITS, DRIVEWAY PERMITS, ETC.).
10. 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.
11. 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.
12. 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.
13. THE CONTRACTOR SHALL MAINTAIN ALL CONSTRUCTION BARRICADES AND SIGNING AT ALL TIMES. THE CONTRACTOR SHALL VERIFY THE PROPER LOCATION OF ALL BARRICADE AT THE END AND BEGINNING OF EACH DAY.
14. 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.
15. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM (260-1990) FOR LOCATION OF EXISTING UTILITIES.
16. 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.
17. 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.
18. 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.
19. CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORK SITE. CONTRACTOR SHALL PROMPTLY REMOVE ANY GRAFFITI FROM ALL EQUIPMENT, WHETHER PERMANENT OR TEMPORARY.
20. CONTRACTOR SHALL COORDINATE WITH THE ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY (ABCUWA) 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
- - - -5025- - - EXISTING INDEX CONTOUR
- - - -5024- - - EXISTING INTERMEDIATE CONTOUR
- - - -5025- - - PROPOSED INDEX CONTOUR
- - - -5024- - - PROPOSED INTERMEDIATE CONTOUR
- ===== 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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SHEET TITLE		

OVERALL CIVIL PLAN

C-100
SHEET OF



C-101

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 36" 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

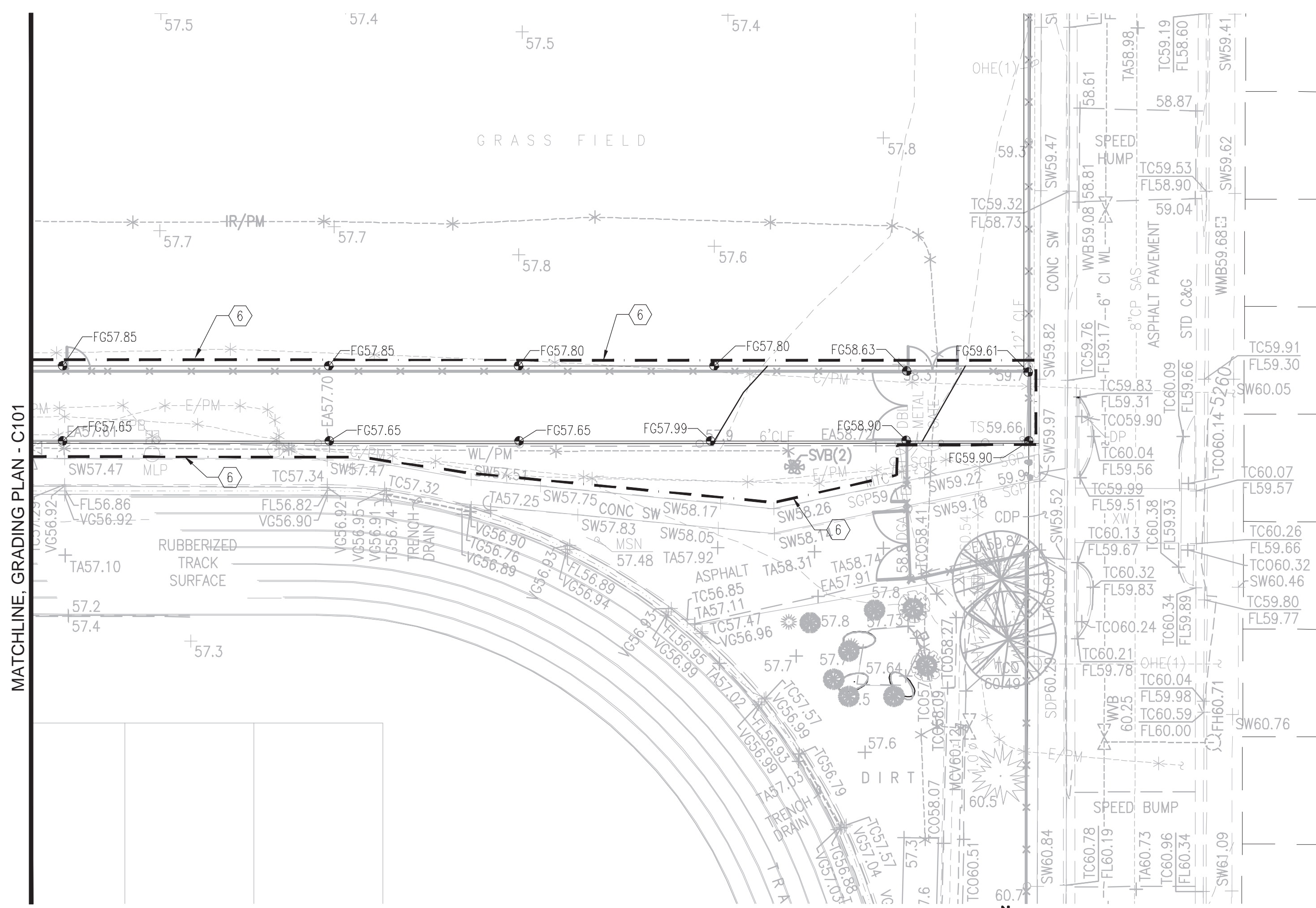
NOTE
HDPE PIPE AND FITTINGS SHALL BE INSTALLED AND BACKFILLED PER MANUFACTURER SPECIFICATIONS. CONNECTIONS TO CONCRETE MANHOLES AND CONCRETE DROP INLETS SHALL USE WATER STOP GASKETS AND SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS

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.

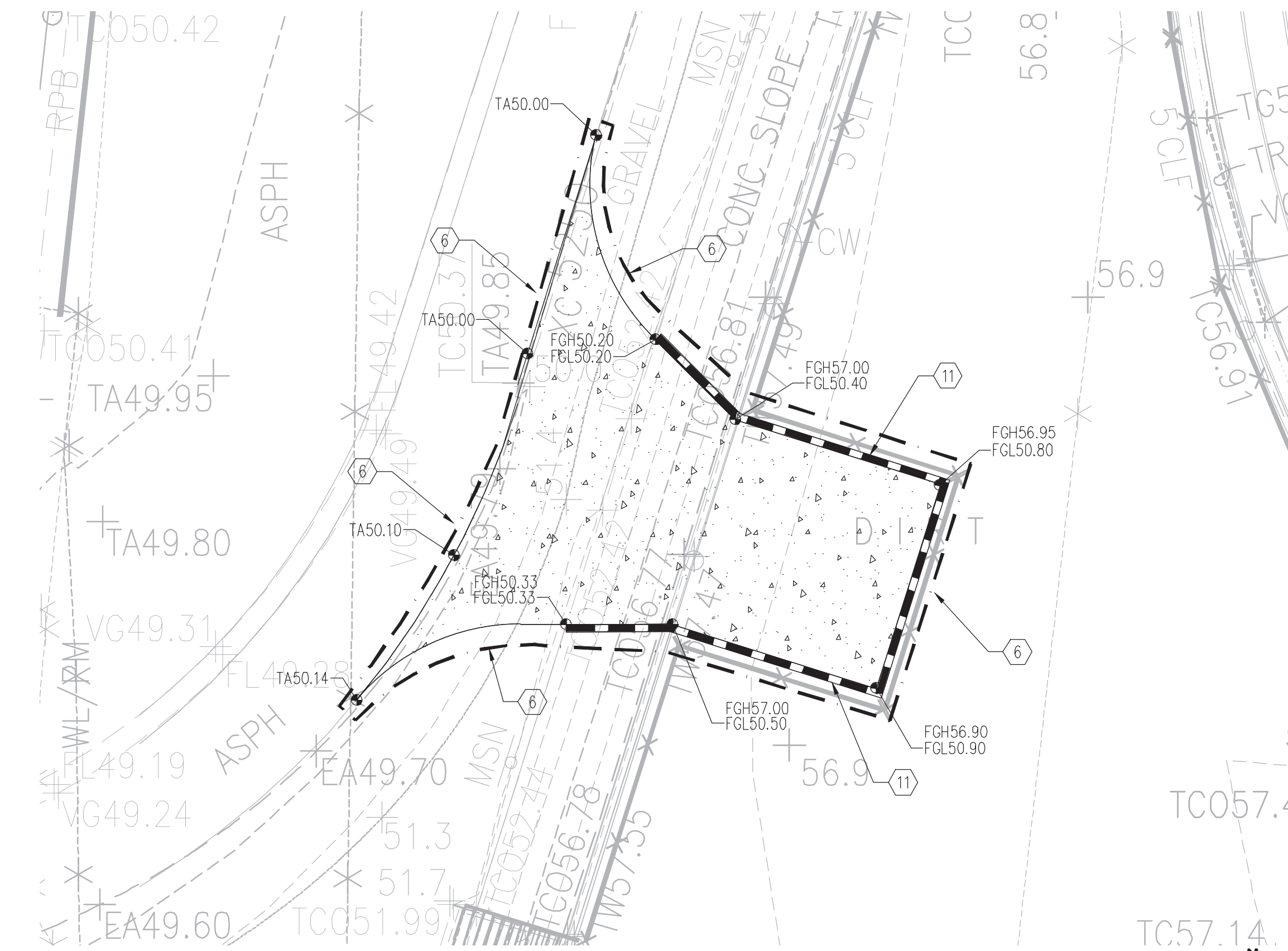
NOTE
SIDEWALK CROSS-SLOPES SHALL BE AT A MINIMUM OF 1.0% AND A MAXIMUM OF 2.0%

LEGEND

- | | |
|--|--|
| | PROPERTY LINE |
| | LIMITS OF GRADING |
| | EXISTING INDEX CONTOUR |
| | EXISTING INTERMEDIATE CONTOUR |
| | EXISTING GROUND SPOT ELEVATION |
| | PROPOSED INDEX CONTOUR |
| | PROPOSED INTERMEDIATE CONTOUR |
| | PROPOSED FINISHED GRADE SPOT ELEVATION |
| | PROPOSED TOP OF CURB |
| | PROPOSED FLOW LINE |
| | PROPOSED TOP OF SIDEWALK |
| | PROPOSED 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 |



A1 GRADING PLAN
SCALE: 1" = 20'

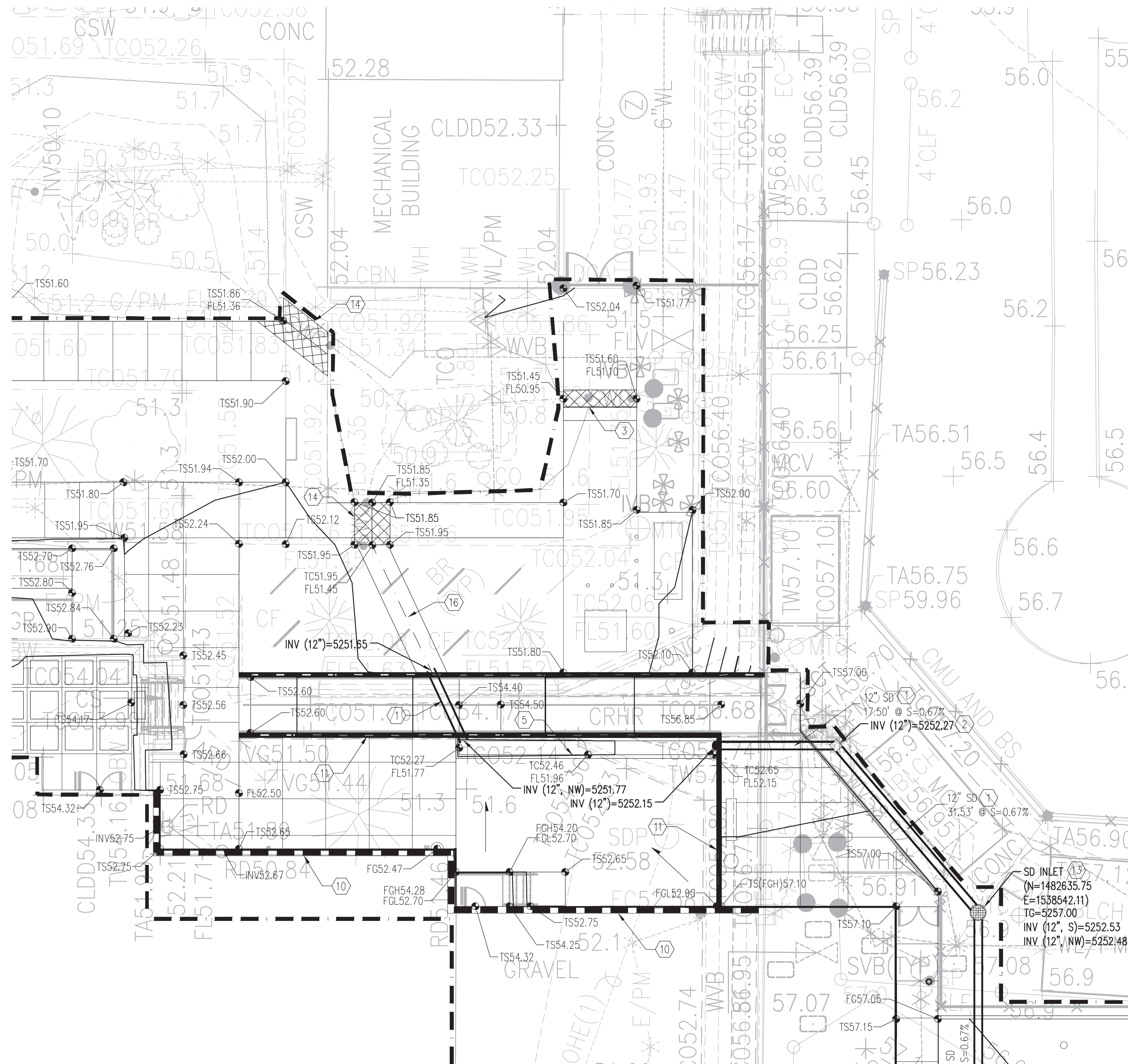


A2 GRADING PLAN - TURNAROUND AREA
SCALE: 1" = 10'

PAVING LEGEND

CONCRETE PAVEMENT SECTION
SEE DETAIL (RIGHT)

CONCRETE PAVEMENT SECTION
NOT TO SCALE



A3 ENLARGED GRADING PLAN
SCALE: 1" = 10'