## **CITY OF ALBUQUERQUE**



July 21, 2016

Richard J. Berry, Mayor

Joseph J. Casares, Jr., P.E. JCII Group, LLC 7225 Arenoso Pl NW Albuquerque, NM, 87120

#### RE: Coordinated Vision, Inc Grading and Drainage Plan Engineer's Stamp Date 6-21-2016 (File:D16D002G)

Dear Mr. Casares:

Based upon the information provided in your submittal received 6-27-2016, the above referenced Grading and Drainage Plan is approved for ESC Building Permit and for SO-19 Permit with the following condition:

- The construction of the sidewalk in the Right of Way must include a depressed landscape buffer as shown on the revised Standard Drawings 2405A and B.
- PO Box 1293 Please attach a copy of this approved plan in the construction sets when submitting for the building permit. Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist will be required.
- Albuquerque See attached the latest SO-19 Notes, which include the contact numbers for the Contractor to schedule inspections (no need to resubmit plan).

Prior to any grading on the site, an ESC Grading Permit must be processed through the Stormwater New Mexico 87103 Quality Engineer (see attached), since the site is over 1-acre.

If you have any questions, you can contact me at 924-3986.

www.cabq.gov

Sincerely.

Abiel Carrillo, P.E. Principal Engineer, Planning Dept. Development Review Services

Orig: Drainage file



## City of Albuquerque

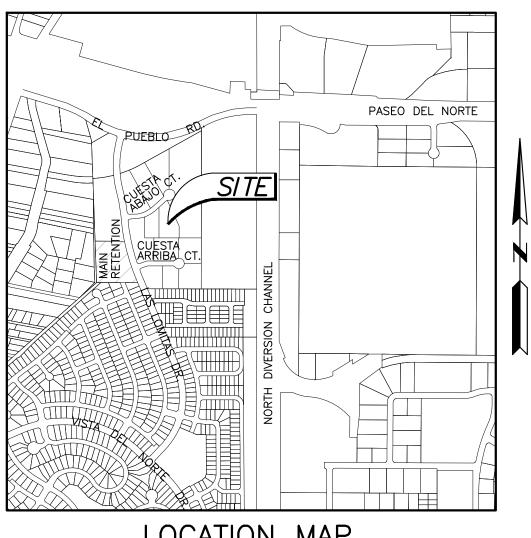
Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 09/2015)

Project Title: CVI Development	_ Building Permit #: City Drainage #:
DRB#: EPC#:	Work Order#:
Legal Description: Las Lomitias Business Park	Endivision Lot 11, Sec. 12 127, TILN, R3E
City Address: 1320 Cuesta Abayo Ct., Alb	ugnenque NM
Engineering Firm: JCII Group, LLC	Contact: Joe Casares
Address: 7225 Arenoso P. NW	
Phone#: 505-264-6918 Fax#:	E-mail: JCII Groupsgmail.com
Owner:	Contact:
Address:	
Phone#: Fax#:	E-mail:
Architect:	Contact:
Address:	
Phone#: Fax#:	E-mail:
Other Contact:	Contact:
Address:	
Phone#: Fax#:	E-mail:
TYPE OF SUBMITTAL: ENGINEER/ ARCHITECT CERTIFICATION CONCEPTUAL G & D PLAN GRADING PLAN DRAINAGE MASTER PLAN DRAINAGE REPORT CLOMR/LOMR TRAFFIC CIRCULATION LAYOUT (TCL) TRAFFIC IMPACT STUDY (TIS)	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 PAVING PERMIT APPROVAL GRADING/ PAD CERTIFICATION
EROSION & SEDIMENT CONTROL PLAN (ESC)	WORK ORDER APPROVAL CLOMR/LOMR
S THIS A RESUBMITTAL?: Yes No	PRE-DESIGN MEETING OTHER (SPECIFY)
DATE SUBMITTED: 6-27-2016 By: Joe	Casares f

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED:



### LOCATION MAP SCALE: 1"=1000'±

ZONE ATLAS MAP D-16-Z

## EXECUTIVE SUMMARY

THIS PLAN SERVES TO SUPPORT THE PROPOSED DEVELOPMENT FOR COORDINATED VISION, INC. THE SITE IS LOCATED IN THE CITY OF ALBUQUERQUE AND IS KNOWN AS LOT 11 OF THE LAS LOMITAS BUSINESS PARK SUBDIVISION. THIS SUBDIVISION IS LOCATED SOUTH OF PASEO DEL NORTE AND APPROXIMATELY 850 FEET WEST OF THE NORTH DIVERSION CHANNEL. THE SITE ADDRESS IS 1320 CUESTA ABAJO COURT. THE PROPOSED CONSTRUCTION CONSISTS OF NEW BUILDINGS, UTILITIES, GRADING & DRAINAGE IMPROVEMENTS, PARKING LOT, WALKWAYS, LANDSCAPE AND OTHER AMENITIES AS REQUIRED FOR A FULLY FUNCTIONAL SITE. OFF-SITE CONSTRUCTION WILL INCLUDE SIDEWALK, SIDEWALK CULVERT, DRIVE PAD AND FIRE LINE CONNECTION. MOST LOTS WITHIN THIS SUBDIVISION ARE NOT DEVELOPED EXCEPT FOR BERMS AT MOST LOT LINES. HOWEVER, THE LOT DIRECTLY TO THE SOUTH OF THE PROPOSED SITE IS FULLY DEVELOPED. ALSO, STREET PAVEMENT, CURB AND GUTTER, PUBLIC UTILITIES AND DRAINAGE STRUCTURES FOR THE SUBDIVISION ARE IN PLACE. DUE TO THESE DEVELOPMENTS, OFF-SITE STORMWATER SHOULD NOT IMPACT THIS SITE. IT IS PROPOSED THAT STORMWATER GENERATED ON-SITE WILL BE STRATEGICALLY CONTROLLED AND CONVEYED TO THE SUBDIVISION'S MAIN RETENTION BASIN LOCATED APPROXIMATELY 500 FEET WEST OF THE SITE. THE TOTAL RUN-OFF GENERATED ON-SITE DURING A 100 YEAR, 24-HOUR EVENT IS DETERMINED TO BE 2.85 CFS. THIS RUN-OFF WILL BE DIRECTED TOWARD THE RIGHT-OF-WAY THEN TO THE SUBDIVISION'S MAIN RETENTION BASIN. THE RUN-OFF DIRECTED TO THE RIGHT-OF-WAY (2.85 CFS) DOES NOT EXCEED THE ALLOWABLE 4.79 CFS AS ACCORDING TO DRAINAGE REPORT D-16/D002C ON FILE WITH COA.

## PROJECT DESCRIPTION

AS SHOWN ON THE LOCATION MAP THE SITE (61,864 SF = APPROXIMATELY 1.4 ACRES) IS LOCATED IN THE CITY OF ALBUQUERQUE AT 1320 CUESTA ABAJO COURT. CURRENTLY THE SITE IS UNDEVELOPED. THE SITE IS PLATTED AS "LAS LOMITAS BUSINESS PARK SUBDIVISION WITHIN THE ELENA GALLEGOS GRANT. PROJECTED SECTIONS 22 & 27, TOWNSHIP 11N, RANGE 3E, NMPM, CITY OF ALBUQUERQUE, BERNALILLO COUNTY NEW MEXICO, MAY 2005," WHICH IS RECORDED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO ON OCTOBER 27, 2005, IN BOOK 2005C, PAGE 357. FURTHERMORE, THE SITE IS LOCATED IN FLOOD ZONE X AS INDICATED BY FIRM NUMBER 35001C0136G, RECORDED ON SEPTEMBER 26, 2008 BY THE FEMA.

## III. BACKGROUND DOCUMENTS

THERE IS A FULL DRAINAGE REPORT AND ASSOCIATED ANALYSIS FOR THIS SUBDIVISION ON FILE WITH THE COA. SAID REPORT IS DETERMINED TO BE FILED AS D-16/D002C AND SEALED BY A N.M. PROFESSIONAL ENGINEER ON 9/06/07. THE PLAT. THE FIRM. THE COA DEVELOPMENT PROCESS MANUAL. THE SITE SURVEY. AND THE PROPÓSED GRADING AND DRAINAGE PLAN WERE UTILIZED FOR THE EXECUTION OF THIS HYDROLOGY AND HYDRAULIC ANALYSIS.

## IV. EXISTING CONDITIONS

CURRENTLY THE SITE IS UNDEVELOPED EXCEPT FOR EARTHEN BERMS ALONG LOT LINES. IN FACT IT HAS BEEN OBSERVED THAT ALL LOTS WITHIN THIS BUSINESS PARK SUBDIVISION HAVE BEEN CONSTRUCTED WITH BERMS ALONG ADJACENT LOT LINES. THERE IS VERY LITTLE VEGETATION ON THE PROJECT SITE. THE SITE NATURALLY DRAINS NORTHWESTERLY.

## V. DEVELOPED CONDITIONS

THE PROPOSED ON-SITE CONSTRUCTION CONSISTS OF NEW BUILDINGS, UTILITIES, GRADING & DRAINAGE GRAVEL PARKING LOT, WALKWAYS, LANDSCAPE AND OTHER AMENITIES. OFF-SITE CONSTRUCTION WILL INCLUDE SIDEWALK, SIDEWALK CULVERT, DRIVE PAD AND FIRE LINE CONNECTION. IT'S PROPOSED THAT STORMWATER RUNOFF GENERATED ON-SITE WILL BE CONTROLLED AND CONVEYED TOWARDS THE SUBDIVISION'S MAIN RETENTION BASIN. THE PROPOSED DEVELOPED CONDITIONS INCLUDES A DETENTION BASIN. WHICH WILL BE DEPRESSED 12-INCHES BELOW THE SIDEWALK CULVERT TO CREATE RETENTION FOR FIRST FLUSH. FIRST FLUSH RETENTION IS SIZED APPROPRIATELY IN ORDER TO MANAGE THE RUNOFF FROM PRECIPITATION WHICH OCCURS DURING 90TH PERCENTILE STORM EVENT (0.44in). THE SITE IS DESIGNED TO FACILITATE DRAINAGE TOWARDS THE DETENTION/RETENTION BASIN, AND ULTIMATELY TO THE SIDEWALK CULVERT. ROOF RUN-OFF WILL BE CONVEYED UTILIZING ROOF GUTTERS AND WILL BE DIRECTED TOWARDS WATER HARVESTING TANKS. PROPOSED DRAINAGE STRUCTURES ARE SIZED TO ACCOMMODATE THE 100-YR 24-HOUR EVENT.

## VI. EROSION CONTROL

CURRENTLY NO HARD SURFACES EXIST AT THE SITE. HOWEVER, AFTER DEVELOPMENT APPROXIMATELY 17.3% OF THE SITE WILL BE MADE-UP OF CONCRETE AND ROOFTOP. THE PROPOSED CONSTRUCTION WILL INCREASE THE AMOUNT OF IMPERVIOUS AREA. PERMANENT EROSION CONTROL AT CULVERT OUTLET, PIPE OUTLET, AND SWALES WILL CONSIST OF 6-INCH ANGULAR RIP-RAP. GRAVEL AND GRASSY LANDSCAPED AREAS WILL BE USED TO PROVIDE SEDIMENT AND EROSION CONTROL WITHIN THE DETENTION/RETNETION BASIN. A 4-INCH THICK GRAVEL BED WILL MAKE UP THE PARKING LOT, AND WILL PROVIDE VOLUME TO RETAIN THE FIRST FLUSH GENERATED FROM DIRECT PARKING LOT RAINFALL.

#### VII. WATER QUALITY ENHANCEMENTS NO WATER QUALITY ENHANCEMENTS ARE PROPOSED

## VIII. GRADING PLAN

- THE GRADING PLAN ON SHEET C101 SHOWS: 1. EXISTING GRADE SPOT ELEVATION AS TAKEN FROM RECENT TOPOGRAPHY
- 2. PROPOSED GRADES INDICATED BY SPOT ELEVATIONS AND CONTOUR LINES
- 3. THE LIMITS AND CHARACTER OF THE EXISTING FEATURES 4. THE LIMITS AND CHARACTER OF THE PROPOSED IMPROVEMENTS
- 5. CONTINUITY BETWEEN EXISTING AND PROPOSED GRADES

## IX. CALCULATIONS

THE CALCULATIONS HEREON ANALYZE THE HYDROLOGY FOR BOTH THE EXISTING AND DEVELOPED CONDITIONS UPON A 100 YEAR, 24-HOUR RAINFALL EVENT. PROCEDURE FOR 40 ACRES AND SMALLER BASINS, AS SET FORTH IN CHAPTER 22 OF THE DEVELOPMENT PROCESS MANUAL (DPM), VOLUME 1, 1997 REVISIONS, AND AHYMO ARE USED TO QUANTIFY THE PEAK RATE OF DISCHARGE (Q) AND VOLUME (V) OF ON-SITE STORMWATER RUN-OFF. ALL DATA UTILIZED FOR EACH PROCEDURE CAN BE FOUND IN TABLES 1 AND 2. RESULTS OF CALCULATIONS FOR HYDROLOGY AND HYDRAULIC CALCULATIONS ARE PRESENTED BELOW.

SITE CHARACTERISTICS: LAND TREATMENT (DPM CH. 22, TABLE A-4) IMPERVIOUS = DPERVIOUS = CFOR ADDITIONAL DATA USED, SEE TABLE 1 ON THIS SHEET.

DRAINAGE AREA - PRE-DEVELOPMENT 61,864 sf = 100% PERVIOUSANALYSIS RESULTS  $Q = 4.40 \, \text{cfs}$ V = 5,743 cf

DRAINAGE AREA - POST DEVELOPMENT NOTE: 6,000 SF OF ROOFTOP RUNOFF WILL BE HARVESTED ON-SITE THEREFORE, (61,864 SF - 6,000 SF = 54,864 SF ~ 1.26 AC) (15,512 SF - 6,000 SF) = 9,512 sf = 17.3% IMPERVIOUS45,352 sf = 82.7% PERVIOUS

ANALYSIS RESULTS Q = 4.30 cfs (RUN-OFF WILL BE ROUTED THROUGH SITE) V = 6,268 cfVff = 1,753 cf (FIRST FLUSH WILL BE RETAINED ON SITE)

#### HYDRAULIC ANALYSIS FOR CAPACITY (Q) OF SITE DRAINAGE AMENITIES:

OFF-SITE CULVERT CAPACITY (Q): INLET OPEN AREA (A) = 1.00 sfSUBMERGED HEAD (h) = 0.04 ft  $Q = (0.67A)[(2gh)^0.5] = 1.08 \text{ cfs}$ 

ROOF DRAIN CAPACITY (Q):

ROOFTOP DRAINAGE AREA:

6,000 sf = 100% IMPERVIOUSANALYSIS RESULTS  $Q = 0.65 \, \text{cfs}$ V = 1,260 cf

Vff = 220 cf

### DETENTION BASIN DESCRIPTION AND VOLUME (V) CALCULATIONS:

THE TOTAL VOLUME IS CALCULATED AS FOLLOWS; POLYGONAL CHARACTERISTICS: BOTTOM PERIMETER AREA = 640 sfTOP PERIMETER AREA = 1,572 sf DEPTH = 1.5' ft

## X. STORM WATER CONTROL MEASURES

TO MANAGE THE FIRST FLUSH IN ORDER TO PREVENT A HIGH CONCENTRATION OF POLLUTANTS FROM RUNNING OFF-SITE AND TO COMPLY WITH THE CITY MS4, A RETENTION BASIN AND WATER HARVESTING TANKS ARE PROPOSED ON-SITE. THE FIRST FLUSH VOLUME IS AS FOLLOWS;

FIRST FLUSH VOL. = 61,864 sf X [(0.44 in - 0.10 in)/12] = 1,753 cfRETENTION BASIN = 1,659 cf HARVEST TANKS = (2) AT 515 GAL. = 137 cf

(1,753 cf) - (1,659 cf + 137 cf) < 0 (FIRST FLUSH RETENTION MET)

## XI. CONCLUSION

THIS PLAN SUPPORTS THE PROPOSED DEVELOPMENT. THE PROPOSED STORM DRAINAGE FACILITIES WILL ADEQUATELY CONVEY STORMWATER GENERATED ON-SITE BY A 100 YEAR, 24-HOUR STORM EVENT. ALSO, IF CONSTRUCTED IN ACCORDANCE WITH THE ASSOCIATED GRADING AND DRAINAGE PLAN, THE SITE HYDRAULICS WILL ALLOW 2.85 CFS OF STORMWATER TO RUN OFF INTO THE RIGHT-OF-WAY. ALSO, THE PROPOSED DEVELOPMENT WILL PROVIDE 1,659 CF OF STORMWATER DETENTION ON-SITE, 1,796 CF OF RETENTION ON-SITE, AND 137 CF OF HARVESTED WATER. FURTHERMORE. THE RUN-OFF DIRECTED TO THE RIGHT-OF-WAY (2.85 CFS) DOES NOT EXCEED THE ALLOWABLE 4.79 CFS AS ACCORDING TO DRAINAGE REPORT D-16/D002C ON FILE WITH COA. ALL ON-SITE STORM DRAINAGE FACILITIES WILL BE PRIVATELY OWNED, OPERATED AND MAINTAINED.

#### TABLE 1: DATA USED FOR CALCULATIONS (DPM)

	(TAKEN FROM CHAPTER 22 OF THE DEVELOPMENT PROCESS MANUAL, VOLUME 1, 1997 REVISIONS.)		
	(Q) = CiA = 100 - YR. PEAK DISCHARGE FOR ZONE 2;		
	PERVIOUS; C = 0.61 (DPM CH. 22, TABLE A-11) i = 5.05 ((DPM CH. 22, TABLE A-10)		
E	IMPERVIOUS; C = 0.93 (DPM CH. 22, TABLE A-11) i = 5.05 (DPM CH. 22, TABLE A-10)		
	<pre>100-YR., 24-HOUR VOLUME (V) = [6 HOUR VOL. + IMPERVIOUS AREA]*[24-HOUR PRECIP 6 HOUR PRECIP,] 12in/ft FOR ZONE 2; 6 HOUR VOL. = (WEIGHTED EXCESS PRECIPITATION)*(LAND TREATMENT) EXCESS PRECIPITATION FOR THE 100-YR. 6-HOUR STORM CAN BE FOUND IN TABLE A-8 OF DPM, CH. 22. 24-HOUR PRECIPITATION = 2.75 (DPM CH. 22, TABLE A-2) 6-HOUR PRECIPITATION = 2.35 (DPM CH. 22, TABLE A-2)</pre>		
	A SPREADSHEET WAS USED TO FACILITATE THESE CALCULATIONS. RESULTS CAN BE FOUND IN "IX. CALCULATIONS" SHOWN ON THIS SHEET.		

#### TABLE 2: CALCULATIONS (AHYMO):

INPUT DATA:		
	: HR RAINFALL = $2.75$ INCHES.	
**************************************	**************************************	
*S* HYDROGRAPH FO COMPUTE NM HYD PRINT HYD	**************************************	
*S* ROUTE FLOWS TH ROUTE RESERVOIR	IROUGH PROPOSED POND         ID=5 HYD=100.05 INFLOW ID=1 CODE=10         OUTFLOW STORAGE ELEVATION         (CFS)       (AC-FT)         0.001       0.000         0.002       0.016         0.003       0.033         0.196       0.043         1.193       0.069         36.10         1.851       0.082         37.27	
OUTPUT DATA:		
START AHYMO_Temp_User: Jo	TE $(MON/DAY/YR) = [DATE]$ TIME $(HR:MIN:SEC) = 14:24:46$ USER NO.=	
	ORM	
CONVECTIVE AREA DT = 0.0333 *S* ********************************	L DIST. – BASED ON NOAA ATLAS 14 FOR S (NM & AZ) – D1 33 HOURS END TIME = 23.999763 HOURS ************************************	
PEAK DISCHA	JME = 2.16695 INCHES = 0.0809 ACRE-FEET RGE RATE = 2.85 CFS AT 1.467 HOURS = 0.0022 SQ. MI.	
5	**************************************	
MAXIMUM WATER	.489 CFS – PEAK OCCURS AT HOUR 1.80 SURFACE ELEVATION = 38.00 GE = 0.0516 AC-FT INCREMENTAL TIME= 0.033333HRS	
*S* ***************	***************************************	
PRINT HYD	ID=5 CODE=10	
PEAK DISCHA BASIN AREA	100.05 34487 INCHES = 0.0689 ACRE-FEET RGE RATE = 0.49 CFS AT 1.800 HOURS = 0.0007 SQ. MI.	
FINISH		

### HYDROLOGY ANALYSIS FOR PEAK RATE OF DISCHARGE (Q) AND PEAK VOLUME (V):

DRAINAGE AREA = (SEE PRE AND POST-DEVELOPMENT MAP)

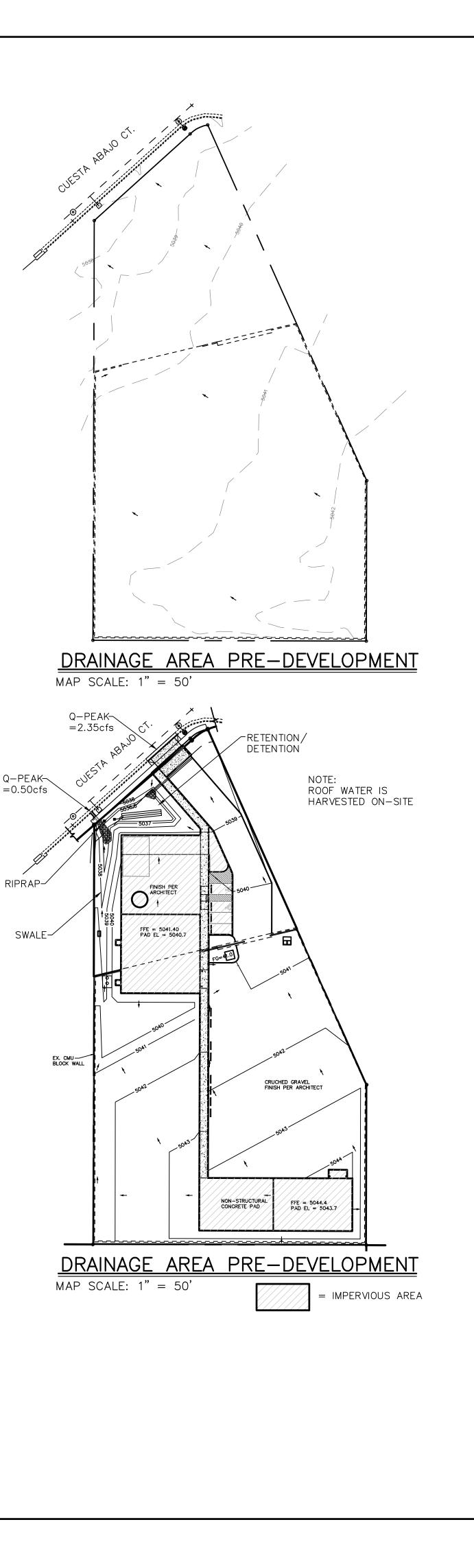
PRECIPITATION ZONE = 2 (DPM CH. 22, TABLE A-1)

PIPE ROUGHNESS (n) = 0.012PIPE FLOW AREA (A) = 0.196 sf HYDRAULIC RADIUS (R) = 0.125PIPE SLOPE (S) = .0208 ft/ft

 $Q = (1.49/n)(A)(R^{0.667})(S^{0.5}) = 0.88 \text{ cfs}$ 

DETENTION BASIN IS DESIGNED WITH 3H:1V SIDE SLOPES.

V = (1/2)[(640 SF + 1,572 SF)(1.5 FT)] = 1,659 cf



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COORDINATED VISION, INC. 320 CUESTA ABAJO ALBUQUERQUE, NEW MEXICO HYDROLOGY ANALYSIS		
REV: PHASE: 100% CONSTRUCTION DOCUMENT		
DATE: JUNE 17, 2016		
	DEVELOPMENT SERVICES         ALBUQUERQUE, NEW MEXICO         ALBUQUERQUE, NEW MEXICO         Alburger, and	

## GRADING & DRAINAGE GENERAL NOTES

ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER THIS CONTRACT, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, AND THE CITY OF ALBUQUERQUE SPECIFICATIONS.

2. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM (260-1990), FOR LOCATION OF EXISTING UTILITIES. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES.

5. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES AND OBSTRUCTIONS. SHOULD A CONFLICT EXIST. THE CONTRACTOR WILL NOTIFY THE ARCHITECT IMMEDIATELY SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY. THIS WORK IS CONSIDERED INCIDENTAL TO THE PROJECT AND NO DIRECT PAYMENT WILL BE MADE THEREFOR.

4. ALL EXCAVATION SHALL BE GOVERNED BY FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH, OSHA 29 CFR 1926.650. ALL EXCAVATION, TRENCHING, AND SHORING ACTIVITIES MUST BE CARRIED OUT IN ACCORDANCE WITH OSHA 29 CFR 1926.650 SUBPART P.

5. IT IS THE CONTRACTOR'S RESPONSIBILITY TO KNOW AND COMPLY WITH THE "OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970".

5. CONTRACTOR SHALL SCARIFY TO A DEPTH OF 8" AND RECOMPACT SUBGRADE TO 95% MAX. DENSITY AS DETERMINED BY ASTM D-1557 UNLESS NOTED OTHERWISE.

7. CONTRACTOR WILL BE RESPONSIBLE FOR FURNISHING BORROW MATERIAL OR HAULING OFF EXCESS MATERIAL. THE TRANSPORTATION AND/OR DISPOSAL OF THESE MATERIALS SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION OF THE PROJECT. ALL EXCAVATED MATERIAL THAT IS NOT REQUIRED TO 🧭 BE REUSED MUST BE REMOVED FROM THE PROJECT AREA WITHIN FOUR (4) DAYS OF EXCAVATION.

8. NO SEPARATE PAYMENT WILL BE MADE FOR ANY HAULING OR DISPOSAL OF MATERIALS. THE TRANSPORTATION AND/OR DISPOSAL OF MATERIAL SHALL BE CONSIDERED INCIDENTAL TO PROJECT.

9. WHEN ABUTTING NEW CONCRETE TO EXISTING, CUT BACK EXISTING TO A NEAT STRAIGHT LINE AS REQUIRED TO REMOVE ANY BROKEN OR CRACKED CONCRETE, AND MATCH NEW TO EXISTING. COORDINATE WITH CONSTRUCTION NOTES. NO SEPARATE PAYMENT SHALL BE MADE FOR SAW CUTTING OF EXISTING PAVEMENT OR CONCRETE BUT SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT. CUTTING OF PAVEMENT OR CONCRETE SHALL BE IN CONFORMANCE WITH PROJECT SPECIFICATIONS.

10. EXERCISE CARE TO AVOID DISTURBING EXISTING UTILITIES. COORDINATE WITH THE UTILITY COMPANIES FOR ANY REQUIRED RELOCATIONS, AND IN ORDER TO PREVENT ANY SERVICE DISRUPTION.

12. CONTRACTOR SHALL PROVIDE REASONABLE ACCESS TO TEMPORARY FACILITIES WITHIN THE PROJECT AREA DURING CONSTRUCTION.

13. WATERING FOR DUST CONTROL, AS REQUIRED, SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION AND NO MEASUREMENT OR PAYMENT SHALL BE MADE THEREFOR. CONSTRUCTION AREAS SHALL BE WATERED OR OTHERWISE KEPT DUST FREE. THE CONTRACTOR SHALL USE WATERING EQUIPMENT FOR DUST POLLUTION ABATEMENT AS DIRECTED BY THE ARCHITECT.

14. THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF ALL DEMOLITION DEBRIS. WORK MATERIALS SHALL BE DISPOSED OF IN A CITY APPROVED WASTE AREA, IN ACCORDANCE WITH ALBUQUERQUE SPECIFICATIONS, SECURED BY AND AT THE EXPENSE OF THE CONTRACTOR.

15. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL ABANDONED UTILITY LINES THAT ARE EXPOSED AS A RESULT OF CONSTRUCTION UNLESS OTHERWISE DIRECTED BY THE ARCHITECT.

16. THE CONTRACTOR SHALL PROVIDE THE ARCHITECT WITH "AS-BUILT" PLANS. THE MAINTENANCE OF THESE PLANS INCLUDE AN UP TO DATE SET OF AS-BUILT PLANS FOR THE PROJECT. THESE PLANS SHALL BE KEPT CURRENT, WITHIN ONE WEEK, AT ALL TIMES AND SHALL BE SUBJECT TO REVIEW BY THE SWAMP COOLER PROJECT MANAGER AND ARCHITECT THROUGHOUT THE PROJECT. THE FINAL AS-BUILT PLANS SHALL BE PER ARCHITECT SUBMITTED TO THE ARCHITECT BEFORE FINAL PAYMENT IS MADE.

17. THE CONTRACTOR AGREES TO TAKE NECESSARY SAFETY PRECAUTIONS AS REQUIRED BY FEDERAL. STATE AND LOCAL AUTHORITIES TO PROTECT PEDESTRIAN AND VEHICULAR TRAFFIC IN THE CONSTRUCTION AREA, WHICH INCLUDE BUT ARE NOT LIMITED TO: MAINTAINING ADEQUATE WARNING SIGNS, BARRICADES, LIGHTS, GUARD FENCES, WALKS AND BRIDGES.

18. CONTRACTOR SHALL ADJUST CLEANOUT RIMS, VALVE CANS, GRATES AND MH COVERS LIDS AS NEEDED TO MATCH FINISHED ELEVATIONS.

19. CONTRACTOR'S YARD, AND ANY OTHER AREAS DISTURBED BY THE CONTRACTOR NOT INCLUDED ON THE PLANS, SHALL BE RE-ESTABLISHED TO OWNERS SATISFACTION. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO MEASUREMENT OR PAYMENT WILL BE MADE THEREFOR.

20. CONTRACTOR IS RESPONSIBLE FOR GEOTCHNICAL EVALUATION BY A REGISTERED GEOTECHNICAL ENGINEER. COORDINATE WITH GEOTECHNICAL INVESTIGATION REPORT, AND IF ANY CRITERIA WITHIN THIS BLOCK WALL REPORT CANNOT BE MET, CONTACT THE GEOTECHNICAL ENGINEER FOR SUPPLEMENTAL RECOMMENDATIONS. IF NO GEOTECHNICAL EVALUATION REPORT IS PROVIDED, OWNER ASSUMES ALL RESPONSIBILITY OF GEOTCHNICAL CONDITIONS.

21. CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND ADHERING TO A STORMWATER POLLUTION PREVENTION PLAN.

22. SAFETY RAILS ARE REQUIRED AT ALL LOCATION ADJACENT TO A PEDESTRIAN WALKWAY WHERE A VERTICAL DROP OF 24" OR MORE EXISTS, OR AS APPLICABLE PER GOVERNING BUILDING CODE. SEE ARCHITECTS PLAN FOR SAFETY RAIL DETAILS.

23. THIS PROJECT IS TO ADHERE TO THE DEVELOPMENT GUIDELINES PROVIDED FOR THE LAS LOMITAS INDUSTRIAL PARK.

24. ALL LANDSCAPED AREAS SHALL BE DEPRESSED APPROXIMATELY 6" BELOW ADJACENT CONCRETE.

25. ALL SIDEWALKS AND RAMPS TO BE APPROXIMATELY 4" ABOVE ADJACENT LANDSCAPE FINISH.

26. COORDINATE IMPROVEMENTS SHOWN ON THIS PLAN WITH THE ARCHITECTS'S SITE PLAN. COORDINATE ANY DEPENDENCIES WITH THE ARCHITECT.

27. SITE SURVEY IS BASED FROM CITY OF ALBUQUERQUE CONTROL POINT #F-442. AUTOCAD FILE WILL BE MADE AVAILABLE FOR CONSTRUCTION STAKING UPON REQUEST.

## DRAINAGE FACILITIES WITHIN THE ROW NOTICE TO CONTRACTOR (SO-19)

1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN THE RIGHT-OF-WAY. 2. ALL WORK IN THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH THE

APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.

3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT THE LINE LOCATING SERVICE, NEW MEXICO ONE CALL 260-1990 (NM ONE CALL "811") FOR THE LOCATION OF EXISTING UTILITIES.

4. PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH MINIMUM AMOUNT OF DELAY.

BACKFILL COMPACTION SHALL BE ACCORDING TO STREET USE. 6. MAINTENANCE OF THE FACILITY SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE

PROPERTY BEING SERVED.

7. WORK ON ARTERIAL STREETS SHALL BE PREFORMED ON A 24-HOUR BASIS.

APPROVALS	NAME	DATE
INSPECTOR		

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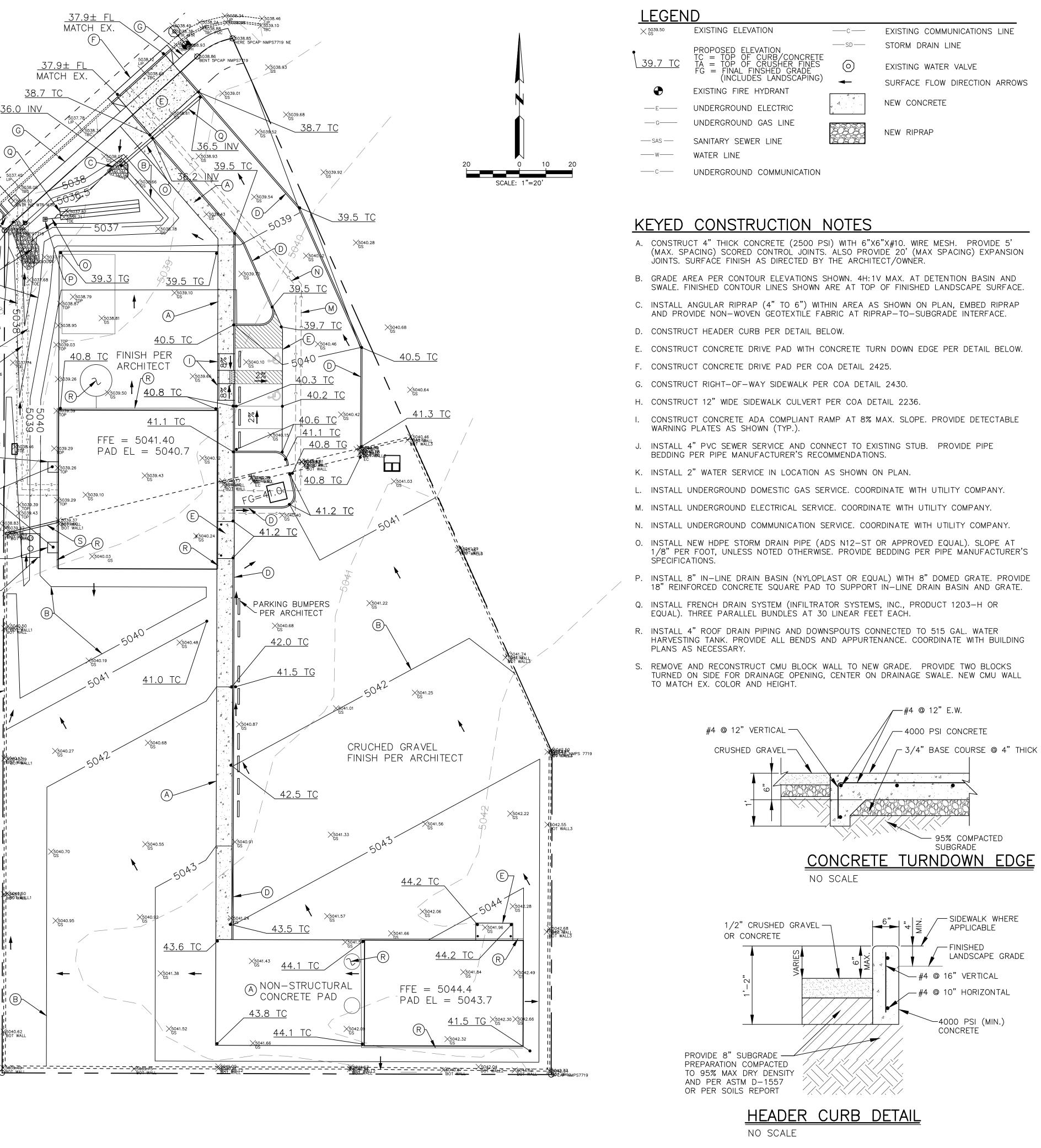
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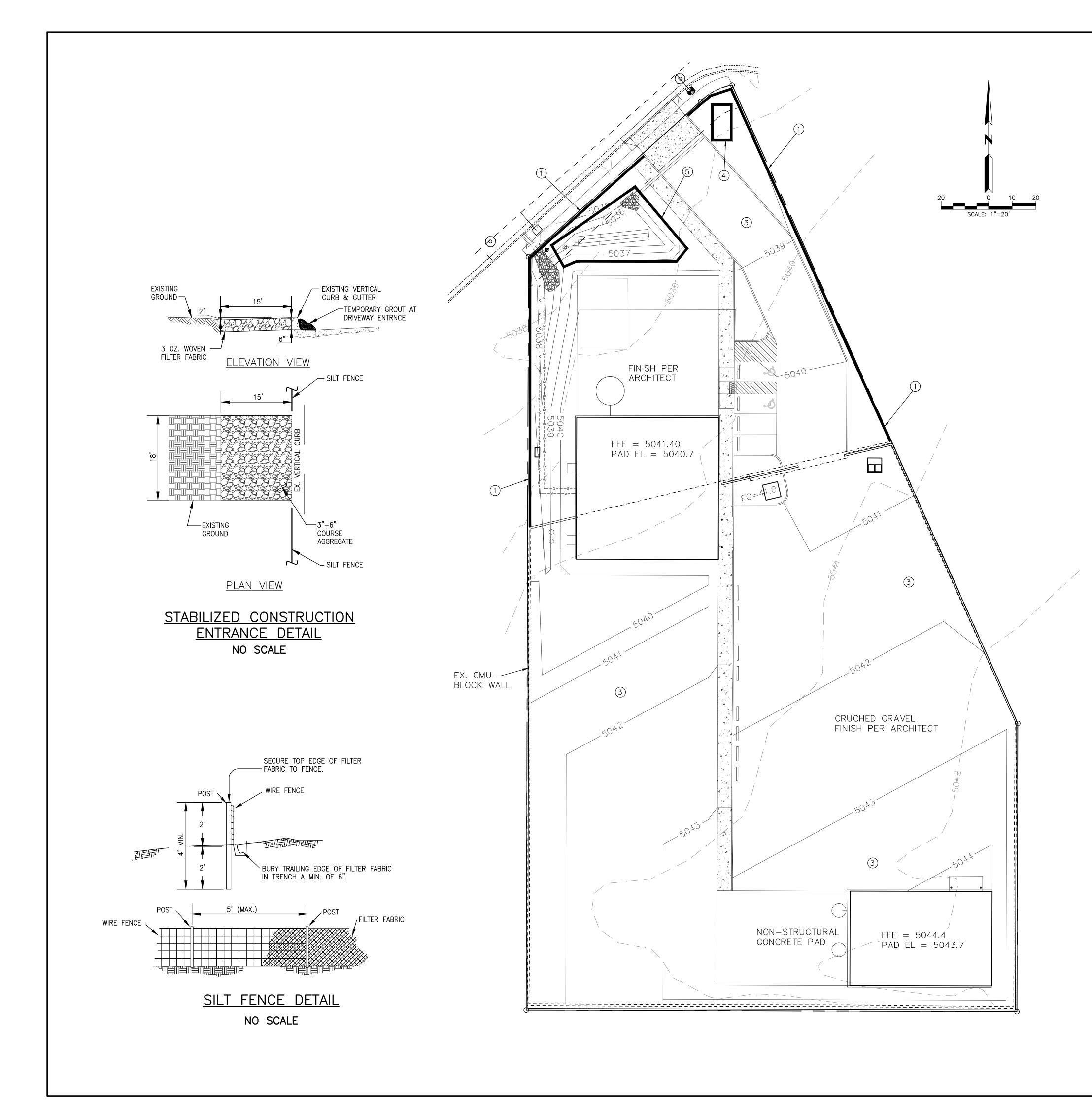
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REV:	COORDINATED VISION, INC.	1320 CUESTA ABAJO ALBUQUERQUE, NEW MEXICO	<b>GRADING AND DRAINAGE PLAN &amp;</b>	STORMWATER CONTROL
_	E: 100% C : MAY 1	CONSTRUC 1, 2016	TION DOC	CUMENT
	C	210	)1	



### NOI INPUTS OPERATOR INFORMATION: IRS EMPLOYER IDENTIFICAT POINT OF CONTACT: PROJE NOI PREPARED BY: PROJE PROJECT / SITE NAME: CV PROJECT / SITE ADDRESS: LATITUDE LONGITUDE FEDERAL OPERATOR = "AN" AND JUDICIAL BRANCHES ESTIMATED PROJECT START ESTIMATED PROJECT COMP ESTIMATED AREA TO BE DIS COMMENCED EARTH-DISTUR PREVIOUS NPDES PERMIT? MUNICIPAL SEPARATE STOP SURFACE WATERS WITHIN RECEIVING WATER IMPAIRED WATERS: CHECK ftp://ftp.nmenv.state.nm.u IMPAIRED WATERS METHOD: STATEWIDE 303D AND TMDL TIER 2, TIER 2.5, TIER 3

## GENERAL NO

- 1. THE CONTRACTOR SH (SWPPP) AND THE ER ORDER TO PREVENT
- 2. WHEN THE BMP DEVIC CONTRACTING OFFICER
- 3. MATERIALS FOR FILTE INCHES IN HEIGHT, AN ARE EITHER WOOD OR TABLE 1. "MINIMUM RE OR CURRENT REQUIRE
- SEDIMENT TRAPS, ERG ALL CULVERT OR OTH CONSTRUCTION LIMITS CONTRACTING OFFICER
- 5. SEDIMENT TRAPS ARE FILLED WITH SUCH SEE
- 6. TEMPORARY SLOPE DR SLOPE CONSTRUCTION CONTRACTING OFFICE DRAIN ASSEMBLIES AI CONTROL MEASURES
- 7. CONTRACTOR SHALL POLLUTION CONTROL REQUIREMENTS.
- 8. MINIMUM BEST MANAG RESPONSIBLE FOR PRC TO STAY IN COMPLIAN
- 9. ALL BMP CONTROL DE BMP CONTROL DEVICES THE CONTRACTOR.
- 10. BMPS (I.E. CONCRETE CONSTRUCTION PARKI
- 11. DRAINAGE INFORMATIC CONTRACTOR WILL NE
- 12. THE CONTRACTOR SHA CONSTRUCTION PHASE

## ○ CONSTRUCT

- 1. INSTALL SILT FENCE AS 2. PROVIDE STABILIZED CONS
- RUNOFF TO SEDIMENT TRA 3. PROVIDE DUST CONTROL
- 4. PROVIDE MODULAR CONCR
- 5. CONSTRUCT 1' DEEP SEDIN

## SUGGESTED (

•	INSTALL STABILIZED
•	INITIATE ROUGH GRAD
	INSTALL UTILITIES, ST
	COMPLETE FINAL BUI
	COMPLETE SITE GRAD
	INSTALL PERMANENT
	WHEN ALL CONSTRUC
	IS STABILIZED, REMO

1	NOI INPUTS				
	PERATOR INFORMATION: SEE CONTRACTOR OR OWNER REPRESENTATIVE S EMPLOYER IDENTIFICATION NUMBER (EIN):				
	OINT OF CONTACT: PROJECT MANAGER				
	OI PREPARED BY: PROJECT MANAGER				
	ROJECT / SITE NAME: CVI DEVELOPMENT ROJECT / SITE ADDRESS: 1320 CUESTA ABAJO COURT NE				
L	ATITUDE	35.171389			
	EDERAL OPERATOR = "ANY DEPARTMENT, AGENCY, OR INSTRUMENTALITY ND JUDICIAL BRANCHES OF THE FEDERAL GOVERNMENT OF THE UNITED				
	STIMATED PROJECT START DATE	TO BE DETERMINED BY PROJECT MANAGER			
	ESTIMATED PROJECT COMPLETION DATE TO BE DETERMINED BY PROJECT MANAGER				
	STIMATED AREA TO BE DISTURBED (NEAREST 1/4 ACRE)	1 1/2 ACRES			
	REVIOUS NPDES PERMIT? IF YES, PERMIT NO:	NO			
Μ	UNICIPAL SEPARATE STORM SEWER SYSTEM (MS4): CITY OF ALBUQUERQ	UE (REGULATED MS4)			
	URFACE WATERS WITHIN 50 FT? YES\NO	NO			
	ECEIVING WATER IPAIRED WATERS: CHECK IMPAIRED WATERS MAP AND TMDL LISTING AT:	RIO GRANDE			
	p://ftp.nmenv.state.nm.us/www/swqb/WQMP-CPP/WQMP-CPPAppendixB	3-May2011.pdf (OR CURRENT LINK)			
	PAIRED WATERS METHOD: ONLINE CONSULTATION OF NEW MEXICO ENVIR	RONMENT DEPARTMENT LISTING OF			
	TATEWIDE 303D AND TMDL IMPAIRMENTS. ER 2, TIER 2.5, TIER 3 WATERS: CONSULT 2012 CGP APPENDIX "F" , I				
Cł	HEMICAL TREATMENT INFORMATION: NO CHEMICAL TREATMENT PROPOSED				
	IDANGERED SPECIES CRITERIA (A, B, C, D, E, or F): UNKNOWN AT TH	IS TIME			
	STORIC PRESERVATION : NO KNOWN HISTORIC SITES EXIST IN THE PRO-				
N	DTE: NOI, SWPPP AND ESCP MUST MEET THE REQUIREMENTS OF THE C	CONSTRUCTION GENERAL PERMIT			
G	ENERAL NOTES				
	THE CONTRACTOR SHALL MODIFY THE NPDES COMPLIANT STOR (SWPPP) AND THE EROSION AND SEDIMENT CONTROL PLAN (ES EACH PHASE OF CONSTRUCTION. CHANGES AND ADJUSTMENTS ORDER TO PREVENT RUNOFF FROM THE CONSTRUCTION SITE A	SCP) AS SITE CONDITIONS CHANGE DURING TO THESE PLANS SHALL BE MADE IN			
2.	WHEN THE BMP DEVICES ARE NO LONGER REQUIRED FOR THE CONTRACTING OFFICER, THEY SHALL BE OBLITERATED, REMOVED				
3.	MATERIALS FOR FILTER FENCE WILL CONSIST OF STANDARD WOVEN LIVE-STOCK WIRE, A MIN. OF 24 INCHES IN HEIGHT, AND A MIN. OF 14-GAGE WIRE WITH A MAX. MESH SPACING OF 6 INCHES; POSTS ARE EITHER WOOD OR STEEL WITH A MIN. LENGTH OF 4 FEET; FABRIC WILL MEET THE REQUIREMENTS OF TABLE 1. "MINIMUM REQUIREMENTS FOR SILT FENCE CONSTRUCTION" (SOURCE: USEPA, 1992; VDCR, 1995), OR CURRENT REQUIREMENTS.				
4.	SEDIMENT TRAPS, EROSION CHECKS, AND/OR FILTERS ARE TO ALL CULVERT OR OTHER DRAINS AND IN ALL DITCHES BEFORE CONSTRUCTION LIMITS OR ENTERS A STREAM, AND AT OTHER I CONTRACTING OFFICER.	THE WATER (RUNOFF) LEAVES THE PROJECT			
5.	SEDIMENT TRAPS ARE TO BE CLEANED OF ACCUMULATED SEDII FILLED WITH SUCH SEDIMENT.	MENT WHEN APPROXIMATELY 75 PERCENT			
5.	TEMPORARY SLOPE DRAINS (BERMS, DRAINS, AND RIPRAP, IF NECESSARY) ARE TO BE USED TO PROTECT SLOPE CONSTRUCTION. LOCATION AND SPACING OF THE DRAIN ASSEMBLY WILL BE DESIGNATED BY THE CONTRACTING OFFICER. ALL SLOPE DRAINS ARE TO BE IN PLACE BY THE END OF EACH WORK SHIFT. THE DRAIN ASSEMBLIES ARE TO BE USED UNTIL THE SLOPES ARE PROTECTED WITH PERMANENT EROSION CONTROL MEASURES AS INDICATED ON THIS PLAN.				
7.	CONTRACTOR SHALL BE RESPONSIBLE FOR ALL INSPECTIONS REPOLLUTION CONTROL DEVICES AND THE NOTICE OF INTENT AND REQUIREMENTS.				
3.	MINIMUM BEST MANAGEMENT PRACTICES (BMPs) ARE SHOWN B RESPONSIBLE FOR PROVIDING ADDITIONAL BMPs AS MAY REQUI TO STAY IN COMPLIANCE WITH THE GENERAL CONSTRUCTION P	RED BY CONSTRUCTION PHASING IN ORDER			
9.	ALL BMP CONTROL DEVICES ARE TO BE INSPECTED BY THE CONTRACTOR AFTER EACH RAIN EVENT. ANY BMP CONTROL DEVICES FOUND IN UNSATISFACTORY CONDITIONS ARE TO BE REPAIRED / REPLACED BY THE CONTRACTOR.				
0.	D. BMPS (I.E. CONCRETE WASHOUT, CONSTRUCTION ENTRANCE, TRASH CONTAINMENT) ALONG WITH CONSTRUCTION PARKING SHALL BE LOCATED TO MINIMIZE SITE DISTURBANCE.				
1.	. DRAINAGE INFORMATION NEEDED TO COMPLETE THE NOTICE OF INTENT (NOI) IS PROVIDED IN THIS PLAN. CONTRACTOR WILL NEED TO VERIFY GENERAL INFORMATION.				
2. THE CONTRACTOR SHALL SPECIFICALLY DEFINE ALL REQUIRED CONTROL MEASURES FOR EACH CONSTRUCTION PHASE.					
OCONSTRUCTION NOTES (BMPs)					
2.	. INSTALL SILT FENCE AS SHOWN ON PLAN AND PER DETAIL THIS SHEET. PROVIDE STABILIZED CONSTRUCTION ENTRANCE PER DETAIL THIS SHEET. GRADE TO FACILITATE RUNOFF TO SEDIMENT TRAP				
3. PROVIDE DUST CONTROL DAILY THROUGHOUT SITE BY MEANS OF WATERTRUCK					
4. PROVIDE MODULAR CONCRETE WASHOUT, CLEAN AND REMOVE CONCRETE AS NEEDED					
5. CONSTRUCT 1' DEEP SEDIMENT TRAP. CLEAN AND REMOVE SEDIMENT AT 75% CAPACITY					
<u>SI</u> 2.	JGGESTED CONSTRUCTION SEQUE INSTALL STABILIZED CONSTRUCTION ENTRANCE, SEDIMENT TRAP, AND SIL INITIATE ROUGH GRADING AND EARTHWORK.				
3. 4. 5. 5. 7.	INSTALL UTILITIES, STORM SEWER, CURB & CONCRETE PADS AND SIDEWA COMPLETE FINAL BUILDING CONSTRUCTION. COMPLETE SITE GRADING AND PREPARE SURFACE FOR PERMANENT LANE INSTALL PERMANENT LANDSCAPING AND OTHER SITE AMENITIES. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED, REMOVE ALL BMP DEVICES.				

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REV:

PHASE: 100% CONSTRUCTION DOCUMENT DATE: JUNE 17, 2016

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