

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

November 5, 2024

Rick Beltramo
NV5 Engineering
6501 Americas Parkway NE, Suite 400
Albuquerque, NM 87110

**RE: Mesa Del Sol Self Storage
5500 Turing Dr. SE
Grading and Drainage Plan
Engineer's Stamp Date: 10/30/2024
Hydrology File: R16DA1004**

Dear Mr. Beltramo:

Based upon the information provided in your submittal received 11/01/2024, the Grading & Drainage Plan is approved for a **Grading Permit**. The following conditions need to be addressed prior to approval of a Building Permit.

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

1. Provide reference to Civil Detail Sheet C-2.0 for Keynote No. 8, Pond N5 Cross Section, Sheet C-501. Include erosion protection along pond alignment to maintain capacity.
2. Provide reference to Civil Detail Sheet C-2.0 for Keynote No. 7, Pond S8 Cross Section, Sheet C-501. Include erosion protection along pond wall alignments to maintain capacity.
3. Provide sections through all external boundaries showing proposed retaining walls, garden walls, property/ROW lines, existing and proposed grades. In accordance with DPM Ch.22, section 5, part B. Grading and wall construction near the property line may not endanger or encroach upon adjacent property or constrain its use.
4. Provide cross-sections for the proposed retaining walls at the southeastern area of project and the proposed garden wall at western area of project adjacent to the proposed sidewalk.
5. Please add a note in the cross sections, "Floodproof the retaining wall below the 100-year 10-day volume water surface elevation per the City's specifications."
6. Provide erosion protection at all locations of proposed improvements and particularly at outfalls into existing ponds.
7. Confirm that the pipe invert elevation discharging into the northern pond will function with the record contours shown. Over time, rainfall events and sediment may have reduced the capacity of the existing ponds.
8. Provide current elevations at top and bottom of earthen ponds to demonstrate or confirm stormwater capacity of existing ponds to accommodate runoff into ponds per the stormwater Master Plan.
9. The existing ponds should be completely developed for the 100-year 10-day storm and associated capacity, together with slope erosion protection and access barricades where needed.

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10. Per DMP, Part 6-11(D) Fencing Around Ponds: Fencing or similar barricade will prevent entry is required for private and public ponds where the water depth is 18 inches or greater unless side slopes are 3:1 (H:V) or flatter and the pond drains in 96 hours or less. Fence or barricade minimum height is to be 42 inches.
11. Please provide the Drainage Covenant with Exhibit A per Article 6-15(C) of the DPM. Please submit the original one-sided copies along with the \$25.00 recording fee check made payable to "Bernalillo County" to the Hydrology Section of Development Review Services on the Ground floor of Plaza de Sol.

As a reminder, if the project total area of disturbance (including the staging area and any work within the adjacent Right-of-Way) is 1 acre or more, then an Erosion and Sediment Control (ESC) Plan and Owner's certified Notice of Intent (NOI) is required to be submitted to the Stormwater Quality Engineer (Doug Hughes, PE, jhughes@cabq.gov, 505-924-3420) 14 days prior to any earth disturbance.

If you have any questions, please contact me at 505-924-3362 or richardmartinez@cabq.gov.

PO Box 1293

Sincerely,

Albuquerque

Richard Martinez, P.E.
Senior Engineer, Hydrology
Planning Department, Development Review Services

NM 87103

www.cabq.gov



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 09/2015)

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:** _____

Other Contact: _____ **Contact:** _____

Address: _____

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

Check all that Apply:

DEPARTMENT:

- ☐ HYDROLOGY/ DRAINAGE
☐ TRAFFIC/ TRANSPORTATION
☐ MS4/ EROSION & SEDIMENT CONTROL

TYPE OF SUBMITTAL:

- ☐ ENGINEER/ ARCHITECT CERTIFICATION
- ☐ CONCEPTUAL G & D PLAN
☐ GRADING PLAN
☐ DRAINAGE MASTER PLAN
☐ DRAINAGE ~~REPORT~~ Plan
☐ CLOMR/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL)
☐ TRAFFIC IMPACT STUDY (TIS)
☐ EROSION & SEDIMENT CONTROL PLAN (ESC)
- ☐ OTHER (SPECIFY) _____

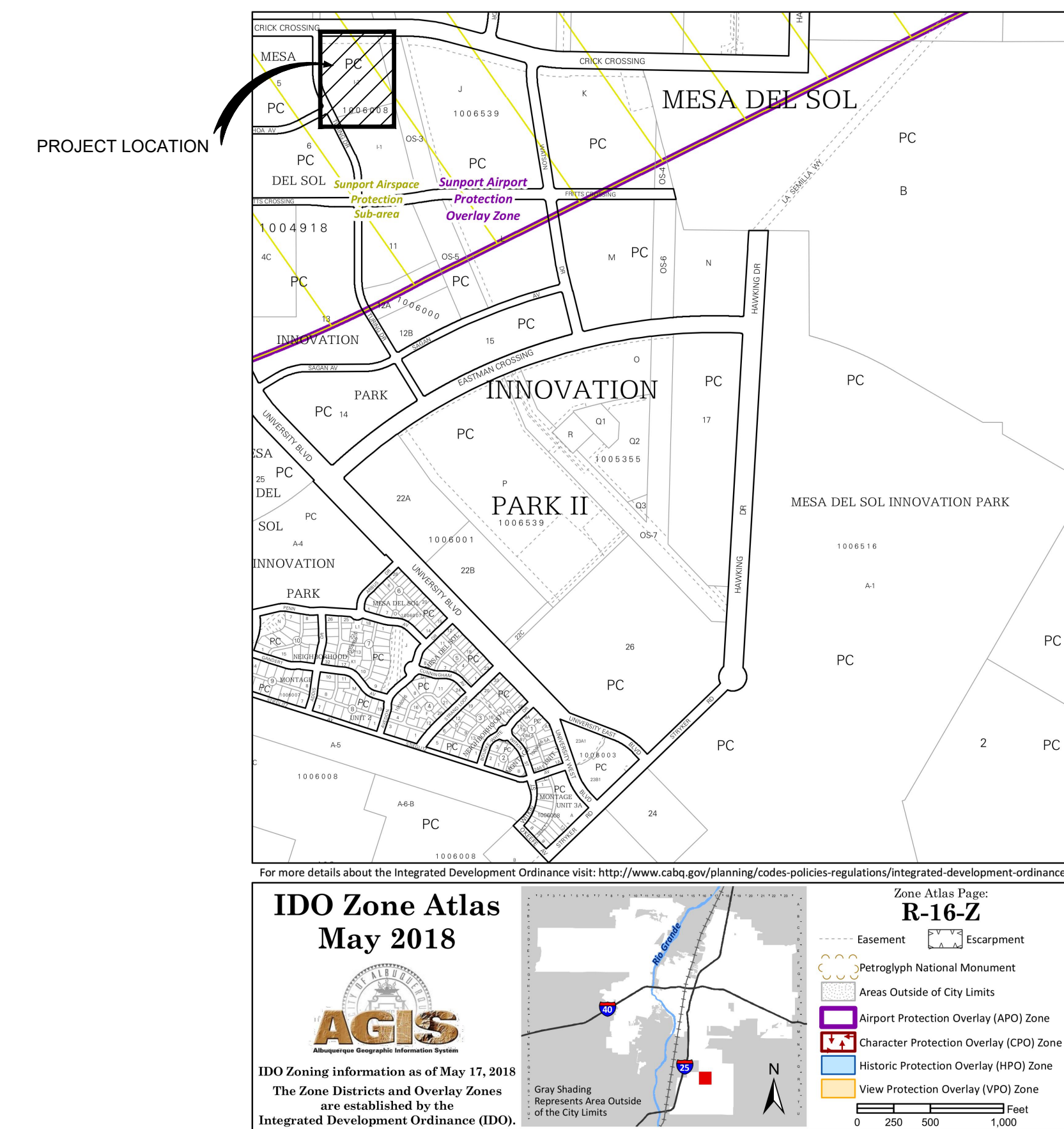
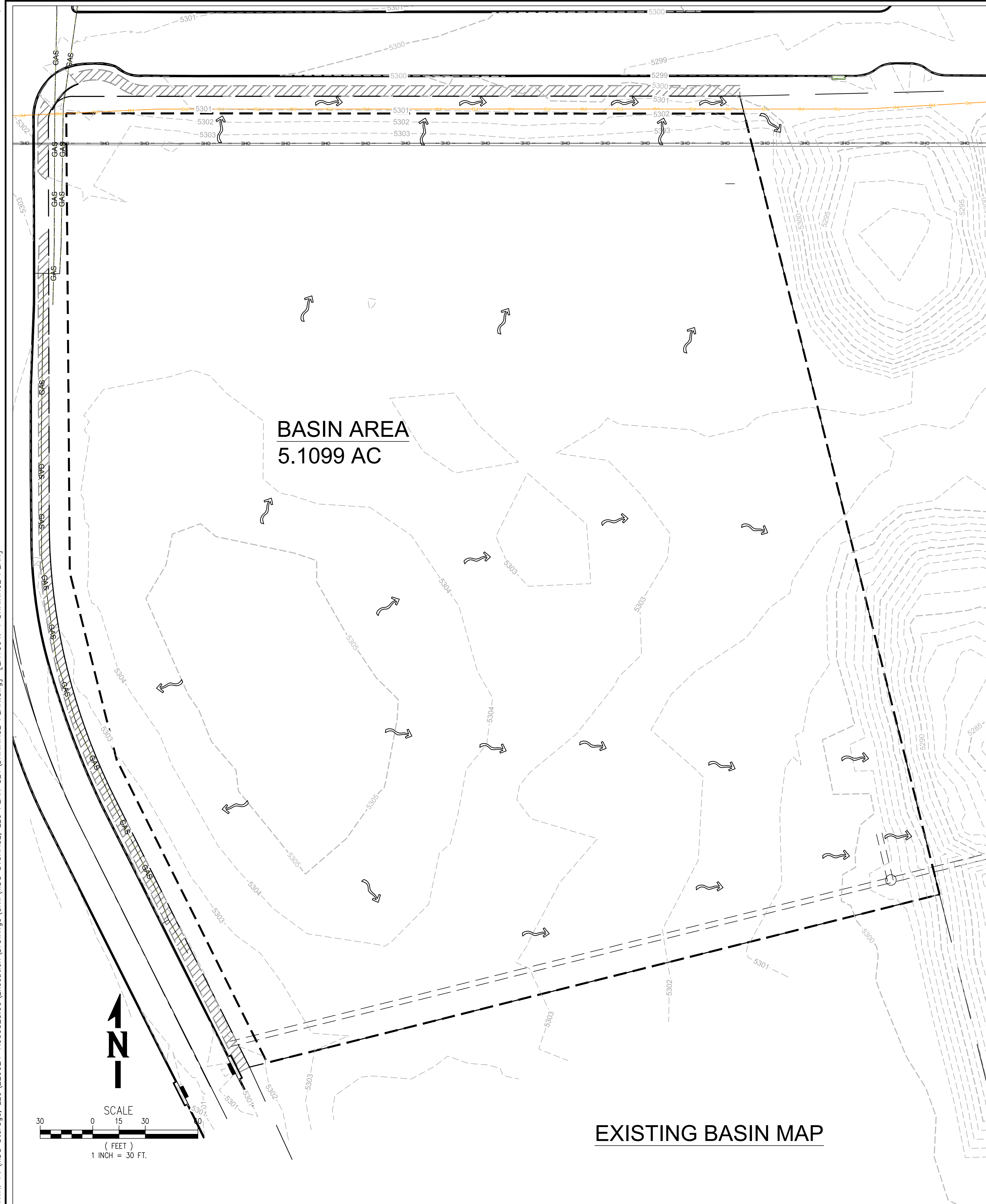
CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- ☐ 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
- ☐ PRE-DESIGN MEETING
☐ OTHER (SPECIFY) _____

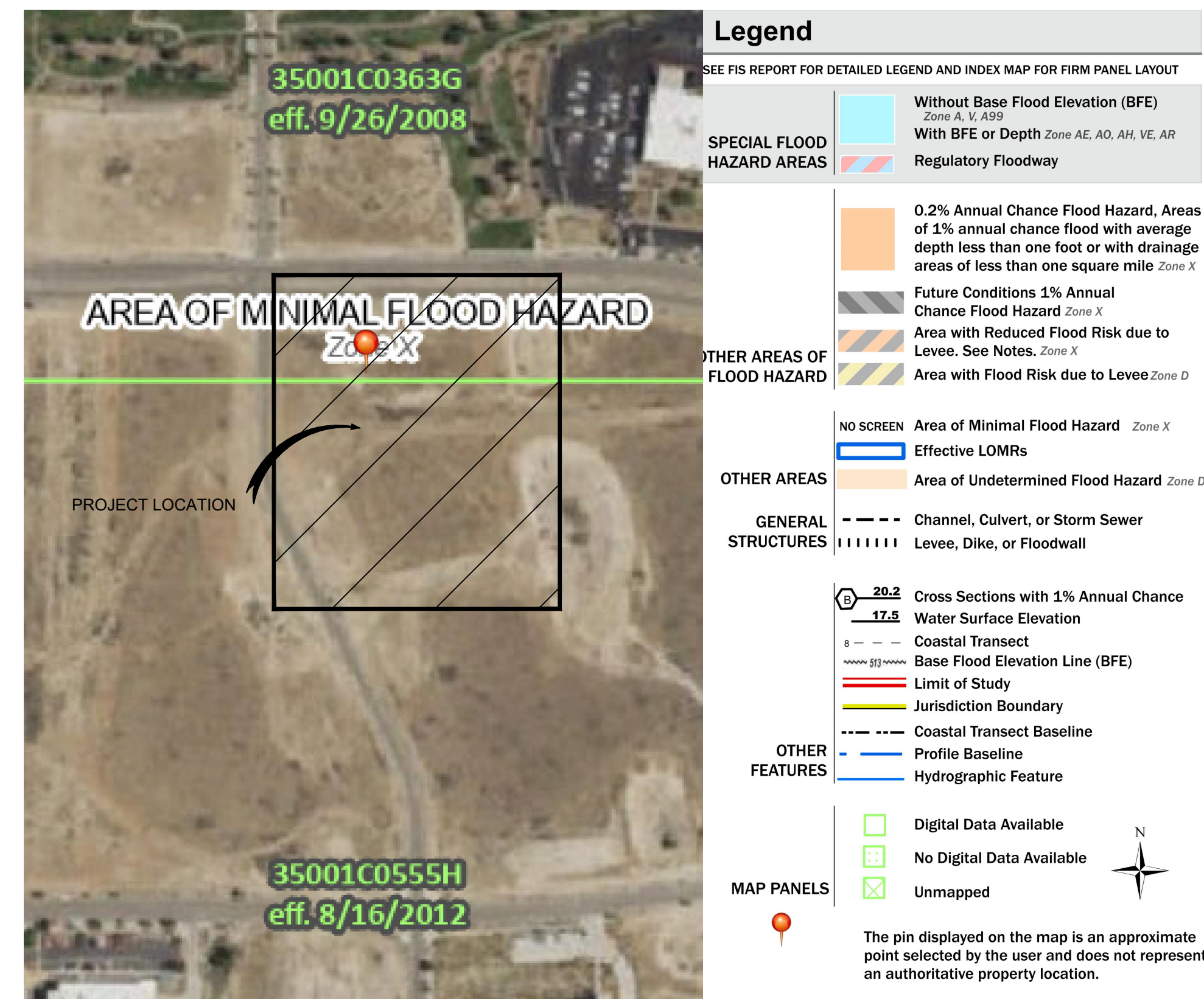
IS THIS A RESUBMITTAL?: ☐ Yes ☐ No

DATE SUBMITTED: _____ **By:** _____

COA STAFF: _____ ELECTRONIC SUBMITTAL RECEIVED: _____




VICINITY MAP



FIRM MAP: MAP#35001C0555H

City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
APPROVED

DATE: 11/04/2024

BY: 

HydroTrans # R16DA1004

THE APPROVAL OF THESE PLANS/REPORT SHALL NOT BE
CONSIDERED TO IMPLY THAT THE CITY OF ALBUQUERQUE
GUARANTEES OR WARRANTS THE ACCURACY, COMPLETENESS,
CORRECTION, OR LACK OF OMISSIONS IN PLANS,
SPECIFICATIONS, OR CONSULTATIONS. AS SUCH APPROVED PLANS
SHALL NOT BE CHANGED, MODIFIED OR ALTERED WITHOUT
PERMISSION.

APPROVAL OF GRADING & DRAINAGE PLAN(S) SHALL EXPIRE TWO (2) YEARS AFTER THE APPROVAL DATE BY THE CITY IF NO BUILDING PERMIT HAS BEEN PULLED ON THE DEVELOPMENT



 DETENTION/RETENTION POND
 FLOW ARROW

OVERVIEW Tract 1-2 is planned to be a storage facility including office building, utilizing a wide range of types and sizes of metal storage buildings, located on the 51-acre site. Tract 1-2 is located at the intersection of Crick Avenue and Turning Drive. More specifically the site is adjacent to and south of Crick Avenue, and adjacent to and east of Turning Drive. The site has one main vehicular access point from Turning Drive, just south of the Crick Avenue intersection and an emergency only access point from Turning Drive at the far south end of the site. The project is within the Mesa Del Sol (MDS) Drainage Master Plan (DMP) hydrologic basin "DA1", consisting of 49.5 acres, generating 220.8 cfs (4.46 cfs/cu) and 356.897 cf (7.195 cf/cu) of runoff during the 10-year 6-hour storm event, and accommodates the 100-year 10-day storm volume. All runoff from Tract 1-2 drains into a Regional Pond adjacent to and east of the site, Tract OS-3. In addition to the 100-year criteria the Regional Pond also accommodates the 100-year 10-day storm volume. Portions of the pond is constructed and operational. A public storm drain has been constructed as a part of the back-bone infrastructure improvement for the area. An existing 36" storm drain crosses Tract 1-2 along the south boundary and is within a 30' wide public easement. The storm drain serves Tract 1-2 and the Turning Drive and outfalls into the Regional Pond. A portion of the Regional Pond has been constructed along with the storm drain. The existing pond is temporary and will need to be expanded and graded to the ultimate Design.

ONSITE DRAINAGE PLAN Tract I-2 is 5 acres, generating a total of 22.8 cfs (Q100-year 6-hr storm event), which is the design storm for the onsite drainage. Below is a table providing the hydrologic design information. Hydrologically the site is divided in 2 parts, the north half and the south half. The north half of the project will drain to various several small median retention/detention ponds, designed to retain on-site for water harvesting. Storm water flows from the alley gutters into the ponds. Once the ponds a minimum elevation, water begins to overflow from the ponds, and drain by surface flow north to Pond N5. Pond N5 also provides retention and detention ponding. Ultimately all the minimum ponding requirements are provided. A storm drain system collects and discharges the runoff, sized for the 100-year design storm of 11.3 cfs. Pond N5 is a landscaped area and also median takes benefit of Water Harvesting. A small portion of the site drains directly to the east, Tract OS-3. This area is a slope area. The north basin discharges 11.6 cfs.

The south half of the project will drain to various several small retention/detention ponds (Pond S1 thru pond S7), designed to retain on-site for "Water Harvesting" purposes. Storm water flows from the alley gutters into the ponds. Once the ponds fill up and reach a minimum elevation, water begins to flow into storm drain inlets, ponding beyond that elevation is Detention ponding. The downstream storm drain system is design to collect and convey the entire 100-year design storm. The ponding system the south storm drain connects to the existing S4 storm drain and discharges to the Regional Pond. A small portion of the site drains directly to the east, Tract OS-3. Tract S10 is a slope area.

Areas south of Ponds S1 thru S7 drain by surface flow to Pond S8, located adjacent to the south boundary. Pond S8 also retains and detains storm water for the minimum retention volumes required and provide Water Harvesting opportunities. Detention ponding then discharges to a storm drain outlet that also connects to the existing 24" storm drain, ultimately discharging to the Regional Pond. The south basins combined discharge 11.3 cfs (100-year storm event).

WATER HARVESTING All runoff from improved and developed areas of the development discharge into one of the retention/detention ponds. Every storm, no matter what size, will capture storm water thru retention ponding in landscape areas, maximizing the opportunity for Water Harvesting and reducing the need for irrigation.

REGIONAL POND (Tract OS-3) Tract I-2 does not propose constructing improvements or expanding the Regional Pond as a part of this project directly. Tract OS-3, Regional Pond is a shared responsibility among 50 acres of land and multiple landowners. Due to ownership issues and final design criteria, the Regional Pond is not ready for final design. Therefore, Tract I-2 proposes to go forward with the project while the required planning, coordination and final design of the Regional Pond can be properly provided. In the interim Tract I-2 proposes to provide a Financial Guarantee for Tract I-2s shared responsibility of Tract I-2 for the Regional Pond

FROM MESA DEL SOL MASTER DRAINAGE MANAGEMENT PLAN											
DRAINAGE AREA	Area	Area	Land Treatment				Q(100)/AC	Q(100)	V(100)/hour	V(100)10day	Total Volume
(SQ. FT.)	(AC)	A	B	C	D		(cfs/ac)	(cfs)	(CF)	(CF)	Provided (CF)
DA-1	2,156,475	49,506.9	0.0%	10.0%	0.0%	90.0%	4.46	220.8	356,897	615,674	765,696
Tract 1-2	222,587	5,109.9	0.0%	10.0%	0.0%	90.0%	4.46	22.8	36,838	63,549	79,034

Tract 1-2 North		POND HYDRAULICS 0.5" RETAINED VOLUME ANALYSIS							DEPTH D(ft)		VOLUME (cf)	BASIN	HYDROLOGY BASIN AREA (sf)		BASIN VOLUME (cf) 0.5" REQUIRED		COMMENTS
	BOTTOM Area (sf)	BOTTOM Elev. (ft)	TOP Area (sf)	TOP Elev. (ft)	AVERAGE AREA (ft)												
Median Pond N1	834	5301.5	834	5302.5	834			0.70	584	BASIN N1	12222			509			
Median Pond N2	476	5301.5	476	5302.5	476			0.70	333	BASIN N2	6526			272			
Median Pond N3	124	5301.5	124	5302.5	124			0.70	87	BASIN N3	9467			304			
Median Pond N4	468	5301.5	468	5302.5	468			0.70	328	BASIN N4	14150			590			
				VOLUME PROVIDED (cf)					1,331		42,375			1,766	Subtotal		
										BASIN N5	13826			576			
										BASIN N6	12793			533			
										BASIN N7	12835			535			
										BASIN N8	10566			440			
										BASIN N9	4569			190			
										BASIN N10	2758			115			
										BASIN N11	12634			526			
											69,981			2916	Subtotal		
Pond N5	2781	5300.5	4725	5301.5	3753.0			1.0	3,753	TOTAL	112,356			4,682	Total		
										VOLUME PROVIDED (cf)	5,084						
										REQUIRED (cf)	4,682						
								CHECK	[OK]	403	CHECK	222,587	AC				
										TOTALS	5,109	SF					

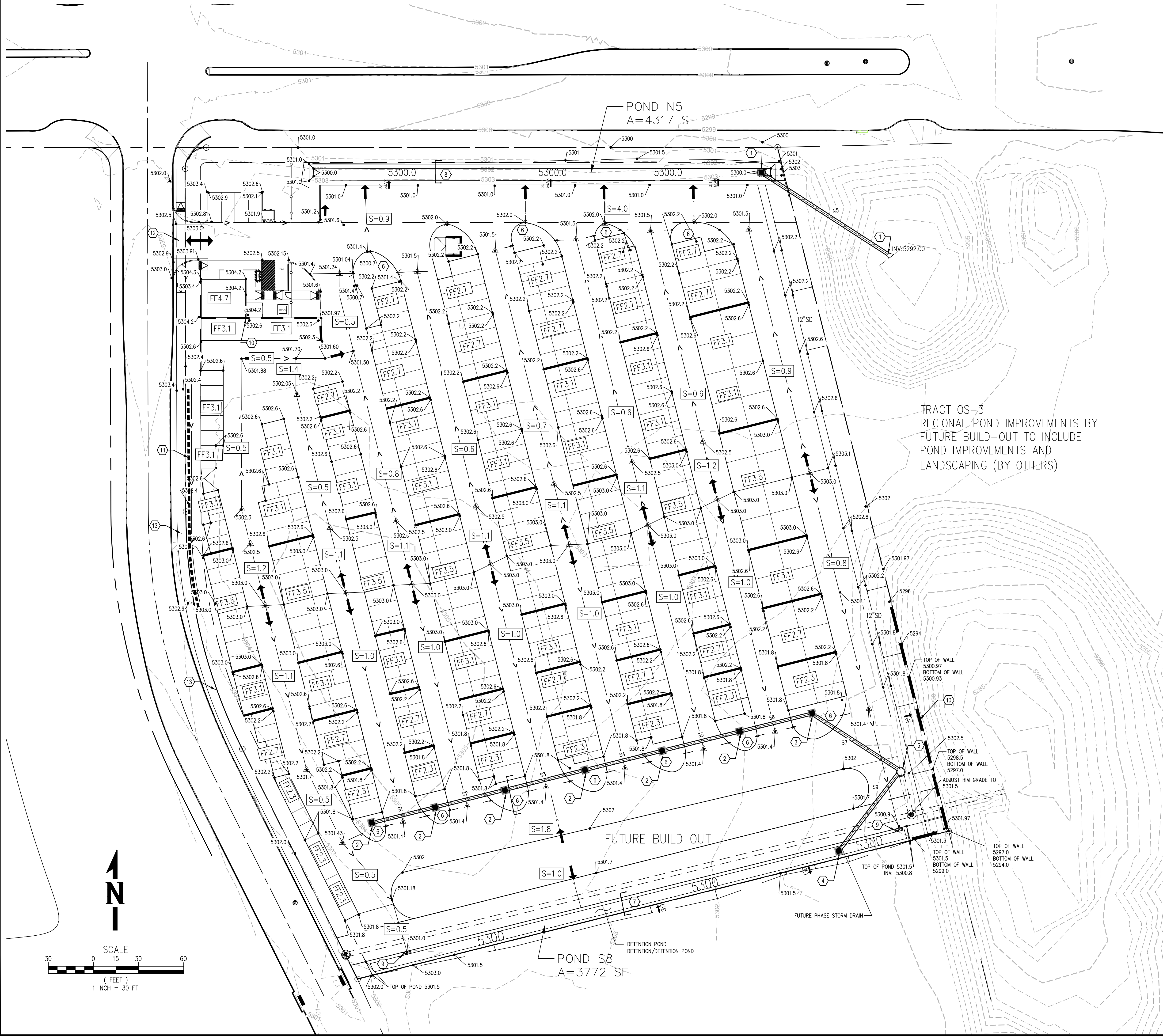
Tract 1-2 South		POND HYDRAULICS 0.5' RETAINED VOLUME ANALYSIS											
		BOTTOM Area (sf)	BOTTOM Elev. (ft)	TOP Area (sf)	TOP Elev. (ft)	AVERAGE AREA (ft)		DEPTH D (ft)	VOLUME cft	BASIN	HYDROLOGY BASIN AREA (sf)	BASIN VOLUME (cft) 0.5' REQUIRED	COMMENTS
	Median Pond S1	121	5300.8	296	5301.8	209		0.70	148	BASIN S1	10221	426	
	Median Pond S2	163	5300.8	352	5301.8	236		0.70	180	BASIN S2	3952	412	
	Median Pond S3	283	5300.8	522	5301.8	403		0.70	282	BASIN S3	10166	424	
	Median Pond S4	283	5300.8	517	5301.8	400		0.70	280	BASIN S4	11036	460	
	Median Pond S5	283	5300.8	522	5301.8	403		0.70	282	BASIN S5	10166	424	
	Median Pond S6	283	5300.8	533	5301.8	408		0.70	286	BASIN S6	11291	470	
	Median Pond S7	419	5300.8	702	5301.8	561		0.70	352				
	SUM								VOLUME PROVIDED (cft)	1,848	62,771	2,615	
										BASIN S7	10696	445	
										BASIN S8	10236	429	
										BASIN S9	22736	960	Pond and Future Development
										BASIN S10	36580	0	Drains Directly to Regional Pond
											47,460	1,824	
	POND S8	1476	5299.90	3750	5300.9	2613		1.0	2,613				
		Detention Surface =	5301.5	Retention Surface	5300.9	VOLUME PROVIDED (cft)		4,461	[OK]		110,231	SF	Maximum depth of pond 1.5'
						REQUIRED (cft)		4,440	2.5306	ACRES			

BASIN HYDROLOGY 100 YEAR EVENT		SOUTH BASINS				
BASIN ID	AREA (sf)	AREA (acre)	q (cfs/acre)	Q-100yr (cfs)	V100-6hr (cu ft)	V100-10day (cu ft)
BASIN S1	10221	0.2346	4.46	1.0	1692	2,918
BASIN S2	9892	0.2271	4.46	1.0	1637	2,824
BASIN S3	10165	0.2334	4.46	1.0	1682	2,902
BASIN S4	11036	0.2534	4.46	1.1	1826	3,151
BASIN S5	10166	0.2334	4.46	1.0	1682	2,902
BASIN S6	11291	0.2592	4.46	1.2	1869	3,268
BASIN S7	10686	0.2453	4.46	1.1	1768	3,051
BASIN S8	10298	0.2364	4.46	1.1	1704	2,940
BASIN S9	22796	0.5233	4.46	2.3	3773	6,508
BASIN S10	3680	0.0845	4.46	0.4	609	1,051
SUBTOTAL SOUTH	110231	2.5306		11.3	18,243	31,470
TOTAL NORTH AND SOUTH	222,587	5.1089		22.8	36,337	63,547

BASIN HYDROLOGY 100 YEAR EVENT		NORTH BASINS				
BASIN ID	AREA (sf)	AREA (acre)	q (cfs/ac)	Q-100-yr (cfs)	V100-6hr (cu ft)	V100-10day (cu ft)
BASIN1N1	12222	0.2806	4.46	1.3	2023	3,469
BASIN1N2	6526	0.1498	4.46	0.7	1080	1,863
BASIN1N3	9467	0.2173	4.46	1.0	1567	2,703
BASIN1N4	14160	0.3251	4.46	1.4	2348	4,043
BASIN1N5	13628	0.3174	4.46	1.4	2293	3,947
BASIN1N6	12793	0.2937	4.46	1.3	2117	3,552
BASIN1N7	12835	0.2947	4.46	1.3	2124	3,592
BASIN1N8	10566	0.2426	4.46	1.1	1749	3,017
BASIN1N9	4569	0.1049	4.46	0.5	756	1,304
BASIN1N10	2758	0.0633	4.46	0.3	466	787
BASIN1N11	12634	0.2900	4.46	1.3	2091	3,607
SUBTOTALNORTH	112,356	2.5793		11.5	18,594	32,077

PRG	DESIGN QTY	COMBINED QTY	INVERTS	UPSTREAM	DOWNSTREAM	DELTA (FT)	LENGTH (FT)	SLOPE (F/FT)	PIPE SIZE (IN)	AREA (INCHES)	AREA (SQ. FT)	VELOCITY (FT/SECOND)	On Normal Depth	COMPUTED QTY	COMMENTS
PIPE#1	0.5	0.5	5258.0	5258.0	5258.0	0.00	0.00	0.32	0.000					2.0	12" HDPE Pipe Between Pond S1 and S2
PIPE#2	1.0	1.0	5258.5	5258.2	5258.2	0.24	48.0	0.006	12	1.570	0.64	0.500	2.0	12" HDPE Pipe Between Pond S1 and S2	
PIPE#3	1.0	2.5	5258.2	5257.7	5257.7	0.50	55.0	0.010	12	1.570	0.64	0.625	2.6	12" HDPE Pipe Between Pond S3 and S4	
PIPE#4	1.0	3.0	5257.7	5256.8	5256.8	0.90	54.0	0.018	12	1.570	0.64	0.875	4.0	12" HDPE Pipe Between Pond S3 and S4	
PIPE#5	1.0	4.6	5256.6	5254.4	5254.4	1.89	54.0	0.035	12	1.570	0.64	0.750	5.6	12" HDPE Pipe Between Pond S5 and S6	
PIPE#6	1.0	4.6	5256.6	5254.4	5254.4	1.89	54.0	0.035	12	1.570	0.64	0.750	5.6	12" HDPE Pipe Between Pond S5 and S6	
PIPE#7	0.6	6.3	5254.4	5252.7	5252.7	1.70	73.0	0.032	12	1.570	0.64	0.750	8.2	12" HDPE Pipe Between Pond S6 and S7	
PIPE#8	0.6	6.3	5250.3	5248.3	5248.3	2.00	73.0	0.062	12	1.570	0.38	0.750	8.5	12" HDPE Pipe Between S7 and Proposed SD MH. Invert=85.35	
PIPE#9	4.5	4.5	5250.6	5238.35	5238.35	9.65	64.0	0.161	12	1.570	2.87	0.750	10.9	12" HDPE Pipe Between S8 and Proposed SD MH. Invert=88.35	
PIPE#10	11.2	11.2	5250.6	5230.00	5230.00	6.00	105.0	0.057	15	1.963	5.71	1.0	0.940	13.3	invert of 85.35

PIPE DESIGNATION	PERIMETER Length (ft)	GRADE/CONCRETE OR ORIENTATION	COMPUTED THICKNESS (in.)	USEH (in.)	OUTLET PIPE DESIGN OR ORIENTATION	AREA (sq. ft.)	VELOCITY (FT/SEC)	D COMPUTED (in.)	D REQD (in.)	COMMENTS
PIPE29	4.0	0-2.8 x 0.1 x H+11.5	0.1	0.5	12	1.570	0.34	0.500	1.99	12" Nysagast Inlet with 12"x12" grate and 12" HDPE Pipe outlet
PIPE32	1.0	4.0 Q=2.8 x 0.1 x H+11.5	0.2	0.5	12	1.570	0.64	0.500	1.99	12" Nysagast Inlet with 12"x12" grate and 12" HDPE Pipe outlet
PIPE33	1.0	4.0 Q=2.8 x 0.1 x H+11.5	0.2	0.5	12	1.570	0.64	0.625	2.81	12" Nysagast Inlet with 12"x12" grate and 12" HDPE Pipe outlet
PIPE34	1.1	4.0 Q=2.8 x 0.1 x H+11.5	0.2	0.5	12	1.570	0.70	0.625	2.98	12" Nysagast Inlet with 12"x12" grate and 12" HDPE Pipe outlet
PIPE35	1.0	4.0 Q=2.8 x 0.1 x H+11.5	0.2	0.5	12	1.570	0.64	0.750	4.63	12" Nysagast Inlet with 12"x12" grate and 12" HDPE Pipe outlet
PIPE36	1.1	4.0 Q=2.8 x 0.1 x H+11.5	0.2	0.5	12	1.570	0.70	0.750	5.70	12" Nysagast Inlet with 12"x12" grate and 12" HDPE Pipe outlet
PIPE37	0.6	4.0 Q=2.8 x 0.1 x H+11.5	0.1	0.5	12	1.570	0.38	0.750	5.27	Between Pond S7 and connection with ex. 3D H.I. soffit gages soffit of existing 24" 3D inlet of 65.35
PIPE38	4.5	6.0 Q=2.8 x 0.1 x H+11.5	0.4	0.5	12	1.570	2.87	0.750	6.69	18" Nysagast Inlet Grate and 12" HDPE Pipe Outlet from Pond S8 to proposed SDH Pond.
PIPE39	11.2	8.0 Q=2.8 x 0.1 x H+11.5	0.6	0.6	12	1.570	71.93	0.750	6.69	24" Nysagast Inlet Grate and 12" HDPE Pipe Outlet from Pond N5 to proposed SDH Pond.



- KEYNOTES:**
- INSTALL 24" NYLOPLAST DRAIN BASIN WITH 12" HDPE PIPE & END SECTION INV: 5292.00. SEE TABLES ON SHEET C-501 FOR DRAIN BASIN GRATE & INVERTS.
 - INSTALL 12" NYLOPLAST DRAIN BASIN WITH 12" HDPE STORM DRAIN LINE. SEE TABLES ON SHEET C-501 FOR DRAIN ELEVATIONS & INVERTS.
 - INSTALL 12" NYLOPLAST DRAIN BASIN WITH 12" HDPE STORM DRAIN LINE CONNECTING TO NEW STORM DRAIN MANHOLE. SEE TABLES ON SHEET C-501 FOR GRATE ELEVATIONS AND INVERTS.
 - INSTALL 18" NYLOPLAST DRAIN BASIN WITH 12" HDPE PIPE CONNECTING TO NEW STORM DRAIN MANHOLE. INV: IN=5288.35. SEE TABLE FOR GRATE ELEVATIONS & INVERTS.
 - CONSTRUCT 4' DIAMETER MANHOLE AT TERMINUS OF EXISTING 24" RCP STORM DRAIN. INVERT: IN=5285.93 OUT= 5285.83 RIM= 5302.5
 - TYPICAL MEDIAN POND CROSS SECTIONS PER SHEET C-501.
 - TYPICAL POND S8 CROSS SECTION ON SHEET C-501.
 - TYPICAL POND N5 CROSS SECTION ON SHEET C-501.
 - CONSTRUCT 5' WIDE STORM DRAIN RUNDOWN, 6" THICK RIP RAP INLET STRUCTURE.
 - BUILD RETAINING WALL. SEE STRUCTURAL PLAN FOR DETAILS.
 - BUILD GARDEN WALL, UP TO 24" VERTICAL SPLIT. SEE LANDSCAPING PLAN FOR DETAIL.
 - VALLEY GUTTER. SEE PAVING PLAN FOR DETAIL.
 - SIDEWALK PLAN. SEE PAVING PLAN FOR DETAIL.

- LEGEND:**
- STEPPED FOOTING (PER DETAIL 2.3 SHEET C-2.0)
 - EXISTING CONTOURS
 - PROPOSED STORM DRAIN PIPE
 - PROPOSED RETAINING WALL
 - PROPOSED GARDEN WALL
 - PROPOSED INLETS
 - FLOW DIRECTION
 - FLOW DIRECTION TO PONDS
 - STORM DRAIN RUNDOWN
 - FINISHED FLOOR ELEVATION 5303.1
 - 3:1 MAX SLOPE
 - GRADE CONTROL POINT
 - PROPOSED ELEVATION
 - EXISTING ELEVATION
 - SWALE
 - SLOPE %
 - CROSS SECTION

City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
APPROVED

DATE: 11/06/2024
BY: [Signature]
HydroTeam # R16DA1004

THE APPROVAL OF THESE PLANS DOES NOT CONSTITUTE A GUARANTEE OF ANY CITY ENGINEER OR PLANNING DEPARTMENT. THE CITY OF ALBUQUERQUE, NEW MEXICO, AND ITS EMPLOYEES SHALL NOT BE LIABLE FOR ANY DAMAGE, LOSS, OR INJURY TO PERSONS OR PROPERTY, OR TO ANY OTHER PARTY, ARISING OUT OF OR FROM THE USE OF THESE PLANS, SPECIFICATIONS, OR CONSTRUCTION, EVEN IF ADVISED IN WRITING THAT SUCH DAMAGE, LOSS, OR INJURY COULD BE CAUSED BY SUCH USE.

APPROVAL OF GRADING & DRAINAGE PLANS SHALL EXPIRE TWO (2) YEARS AFTER THE APPROVAL DATE BY THE CITY IF NO BUILDING PERMIT HAS BEEN FILED ON THE DEVELOPMENT.

WHPacific

MINXUAN LIN
NEW MEXICO
20088
10/30/2024
PROFESSIONAL ENGINEER

REVISIONS		REMARKS	
NO.	BY	DATE	

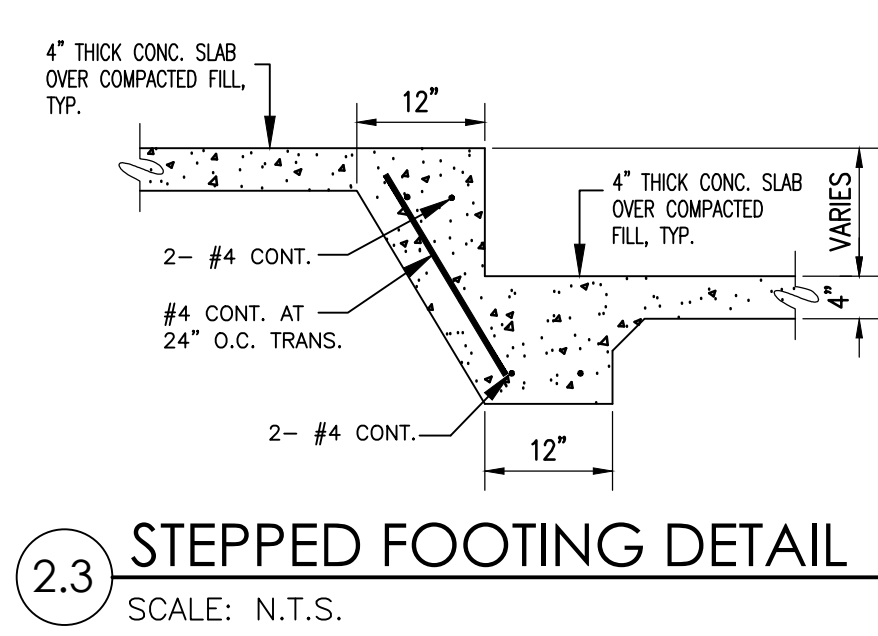
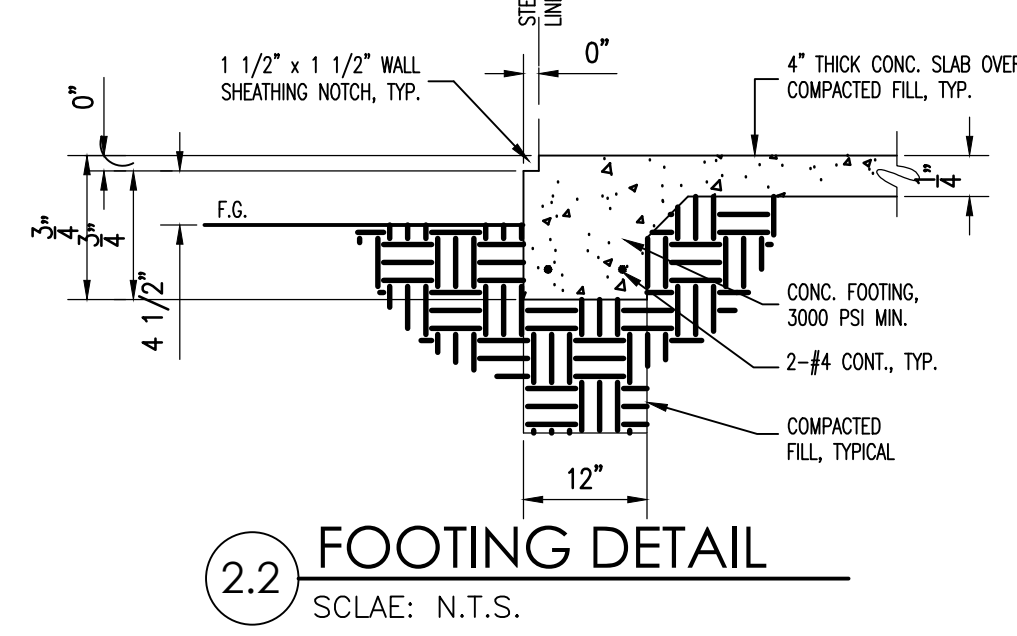
SHEET INFO		NOT FOR CONSTRUCTION		SCALE	
DRAWN	CHECKED	APPROVED	LAST EDIT	PLOT DATE	SUBMITTAL
				10/30/2024	

GRADING AND DRAINAGE PLAN

MESA DEL SOL SELF STORAGE

PROJECT NUMBER: [Blank] DRAWING FILE NAME: [Blank]

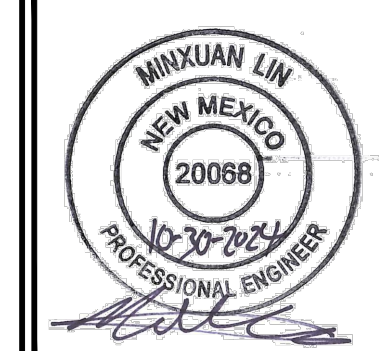
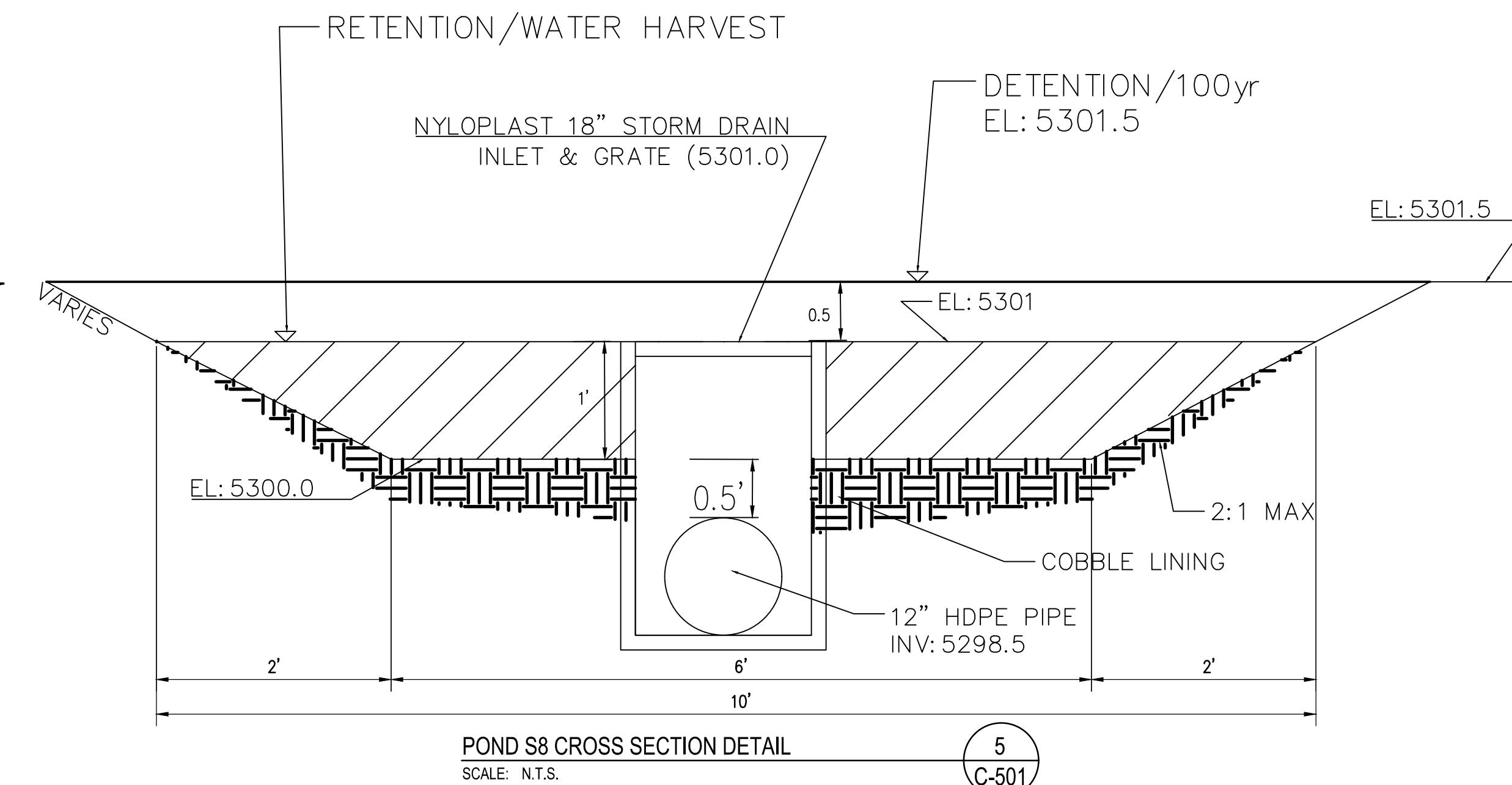
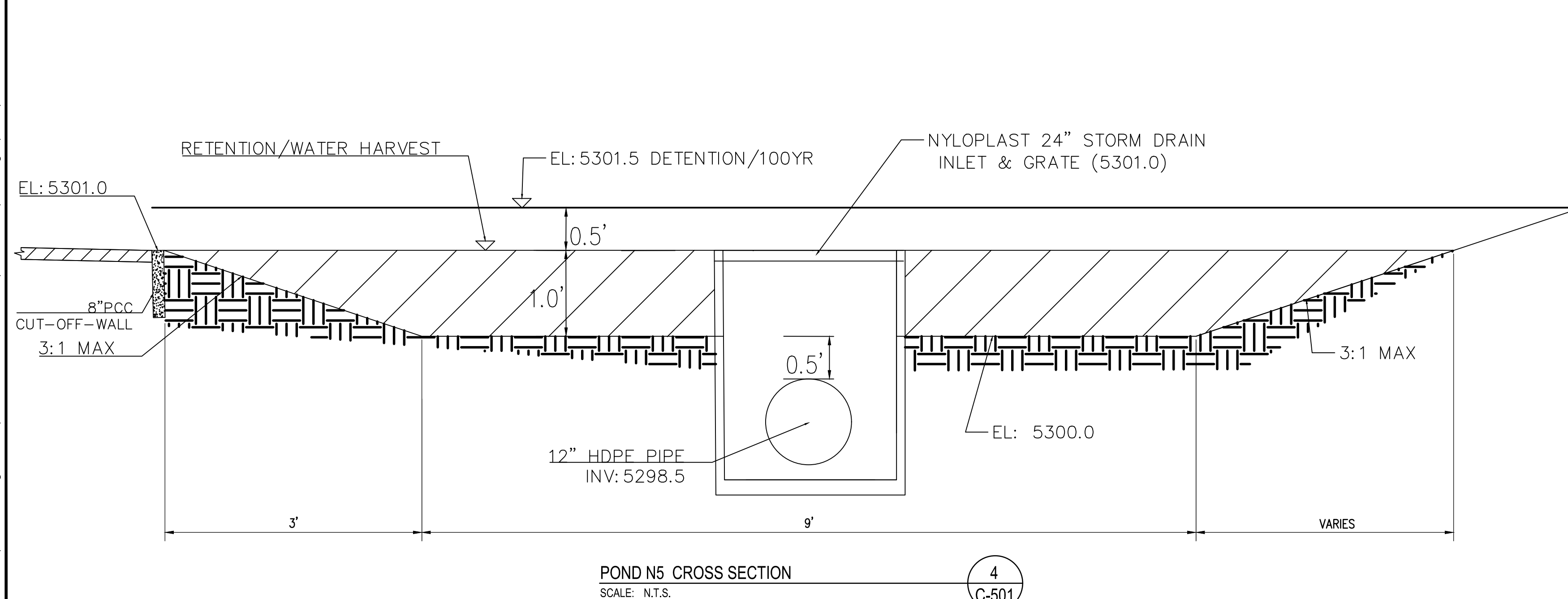
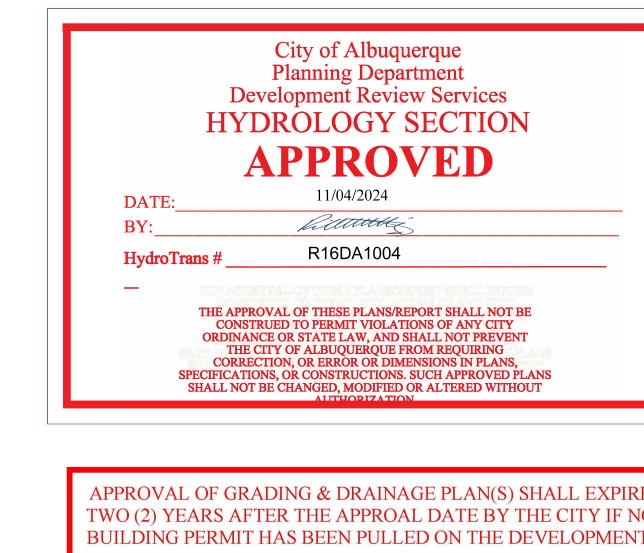
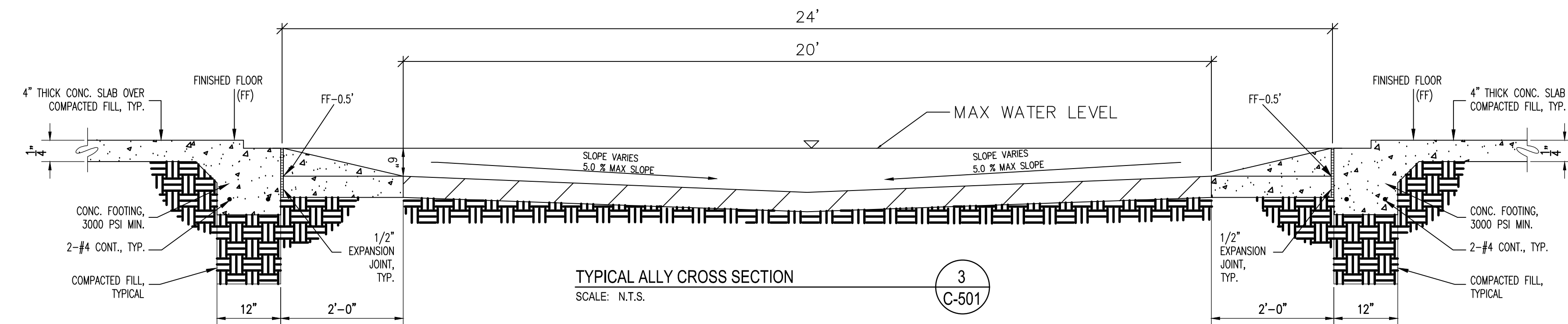
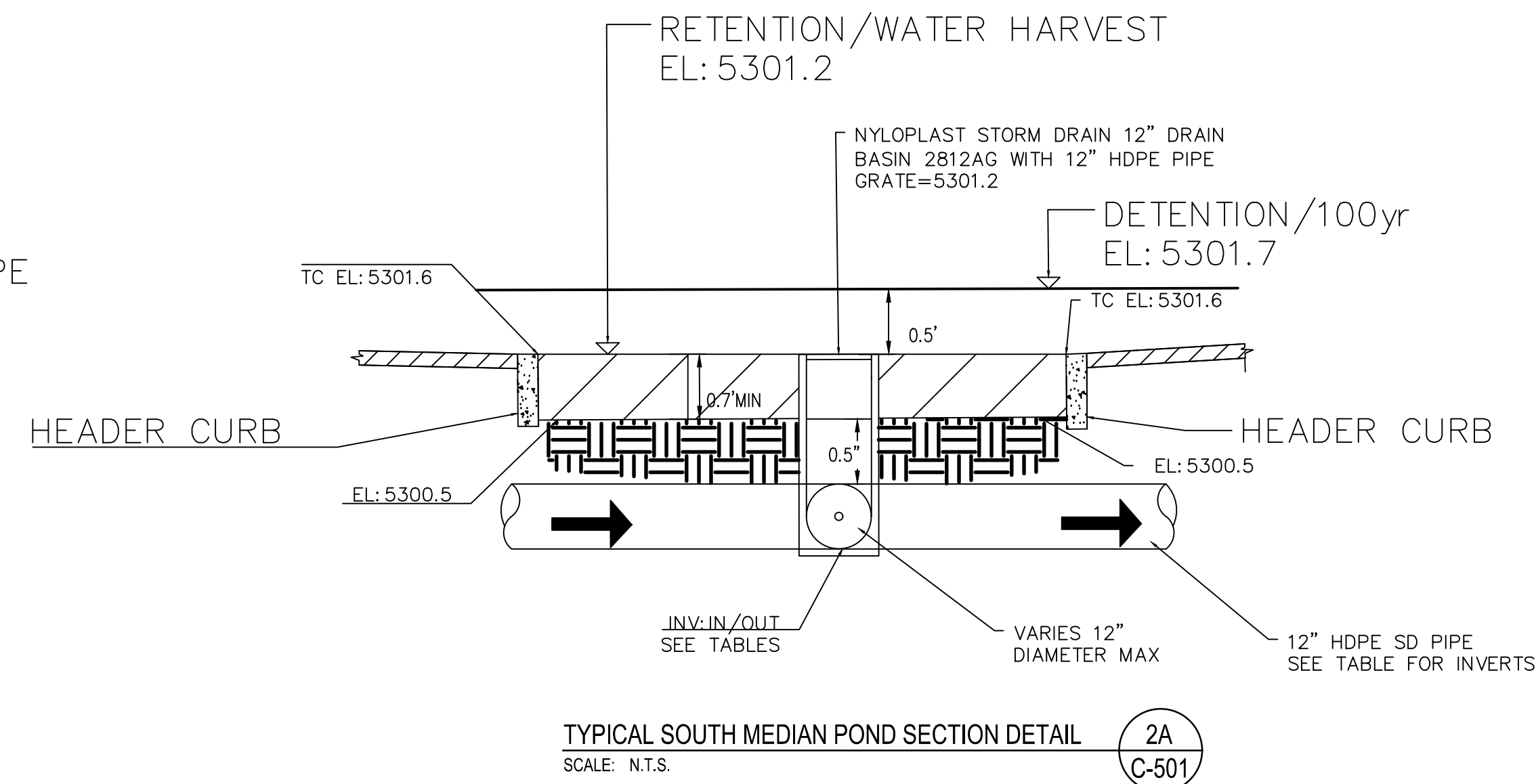
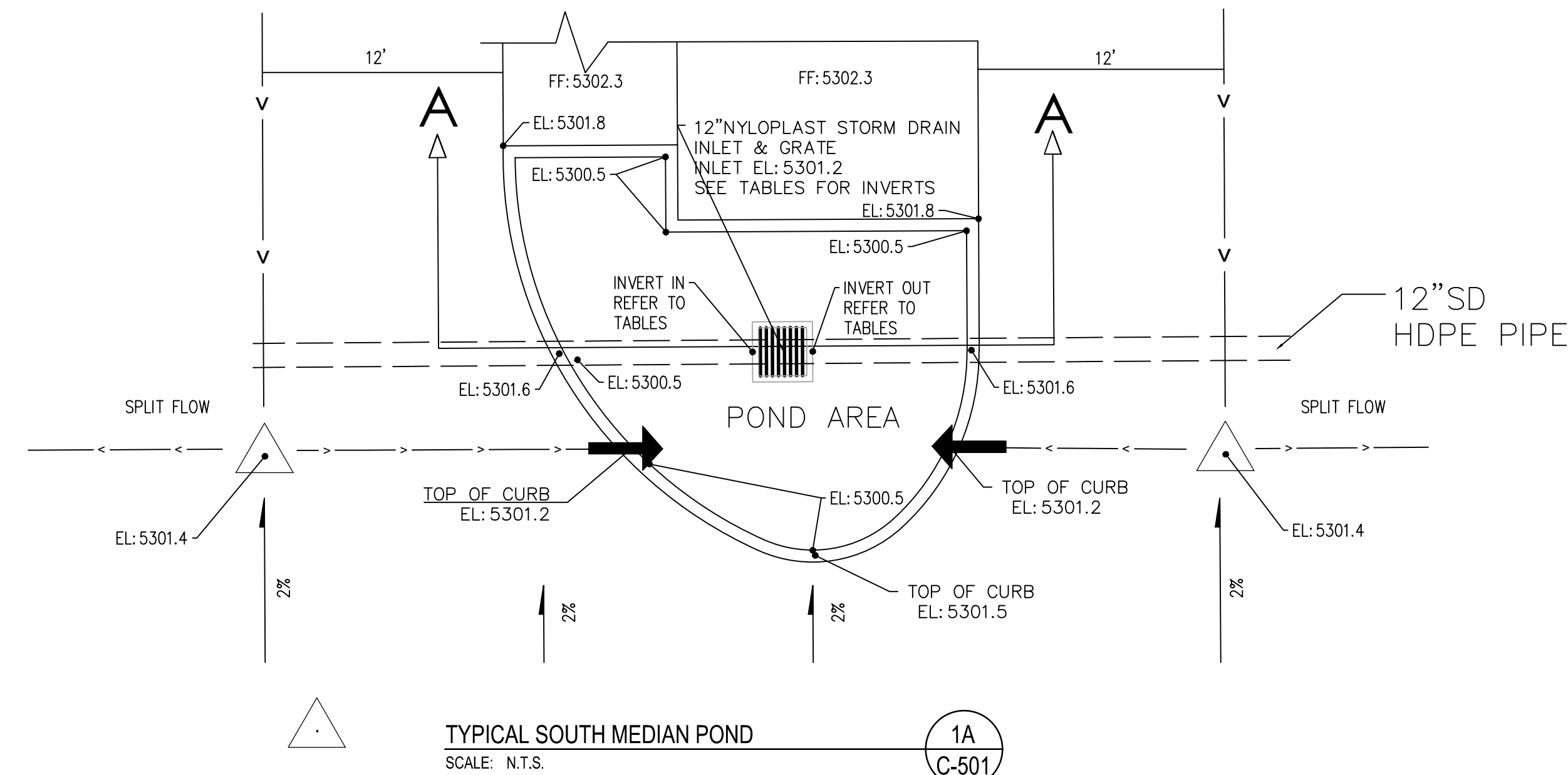
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PIPE	DESIGN	COMBINED	INVERTS	
	Q (cfs)	Q (cfs)	UPSTREAM	DOWNSTREAM
PIPES1	0.5	0.5	5298.7	5298.5
PIPES2	1.0	1.5	5298.5	5298.2
PIPES3	1.0	2.5	5298.2	5297.7
PIPES4	1.1	3.6	5297.7	5296.6
PIPES5	1.0	4.6	5296.6	5294.7
PIPES6	1.1	5.7	5294.7	5293.1
PIPES7	0.6	6.3	5293.1	5286.35
PIPES8	4.5	4.5	5298.0	5288.35
PIPEN5	11.2	11.2	5298.0	5292.00

HDPE STORM DRAIN PIPE INVERT TABLE
SCALE: N.T.S.

6
C-501,

[illegible]

SHEET INFO	
DRAWN	
CHECKED	
APPROVED	
LAST EDIT	10/30/2024
PLOT DATE	10/30/2024

NOT FOR CONSTRUCTION

CIVIL DETAILS.

SCALE

PROJECT NUMBER	DRAWING FILE NAME
	CIVIL DETAILS.

SHEET NUMBER

C-2.0