CITY OF ALBUQUER

Planning Department Alan Varela, Director



Mayor Timothy M. Keller

January 23, 2023

Bruce Stidworthy, P.E. Bohannan Huston Inc. 7500 Jefferson St. NE Courtyard I Albuquerque, NM 87109

RE: **Citizen Church North** 7518 Oakland Ave NE **Grading and Drainage Plan** Engineer's Stamp Date: 1/13/2023 Hydrology File: C19D005

Dear Mr. Stidworthy:

Based upon the information provided in your submittal received 1/13/2023, the Grading & Drainage Plan is approved for Grading Permit and Building Permit approval. Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a PO Box 1293 copy of this letter.

PRIOR TO CERTIFICATE OF OCCUPANCY:

Albuquerque

- 1. Engineer's Certification, per the DPM Part 6-14 (F): Engineer's Certification Checklist For Non-Subdivision is required.
- NM 87103 2. Please provide the executed paper Drainage Covenant (latest revision) printed on one-side only with Exhibit A and a check for \$25 made out to "Bernalillo County" for the stormwater quality ponds per Article 6-15(C) of the DPM to Hydrology for review. Once the review is done, Hydrology will send back an email stating our approval/comments.

www.cabq.gov

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 924-3695 or tchen@cabq.gov.

Sincerely,

Tieque Cha

Tiequan Chen, P.E. Principal Engineer, Hydrology Planning Department, Development Review Services



City of Albuquerque

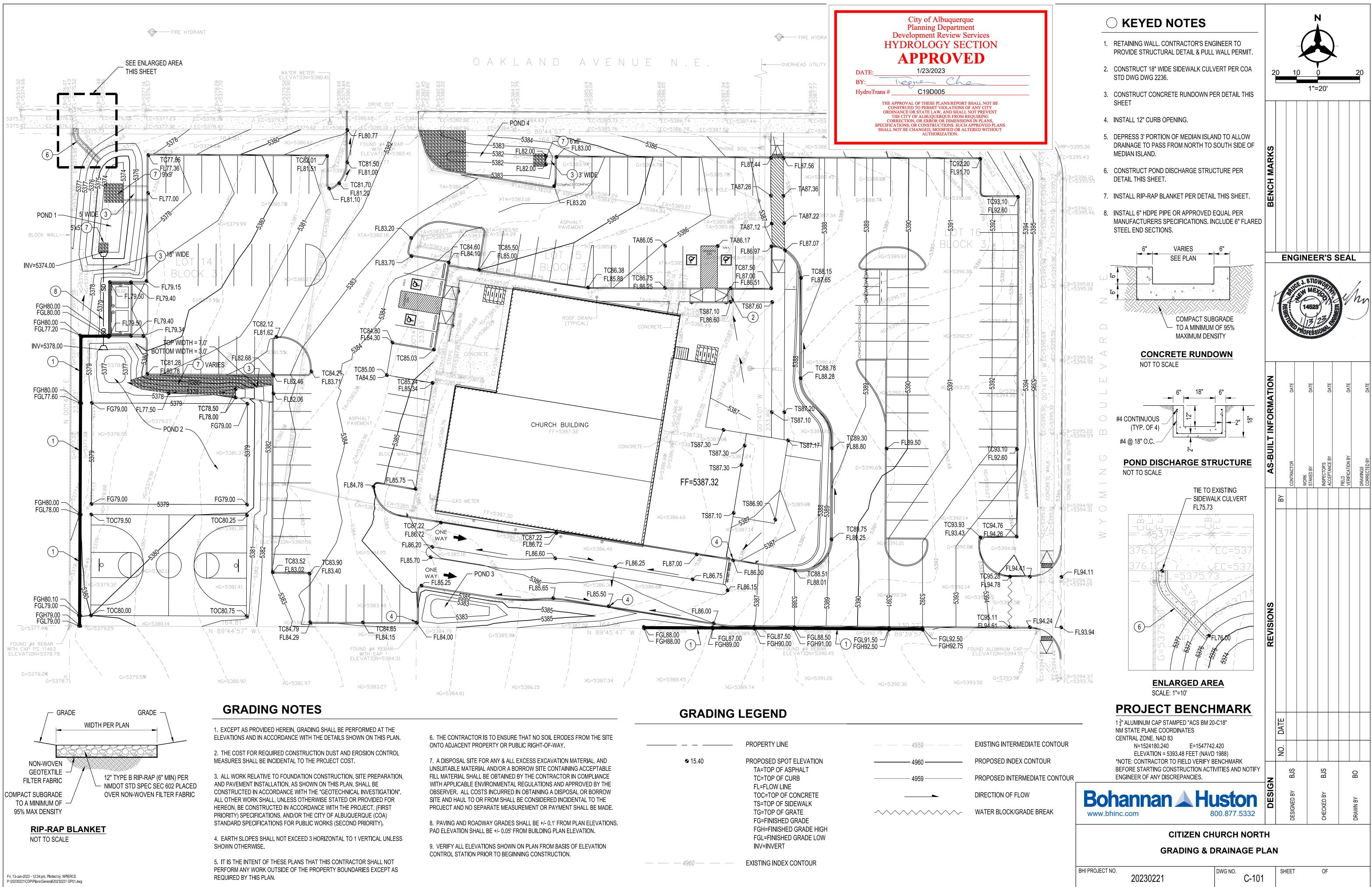
Planning Department Development & Building Services Division DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 11/2018)

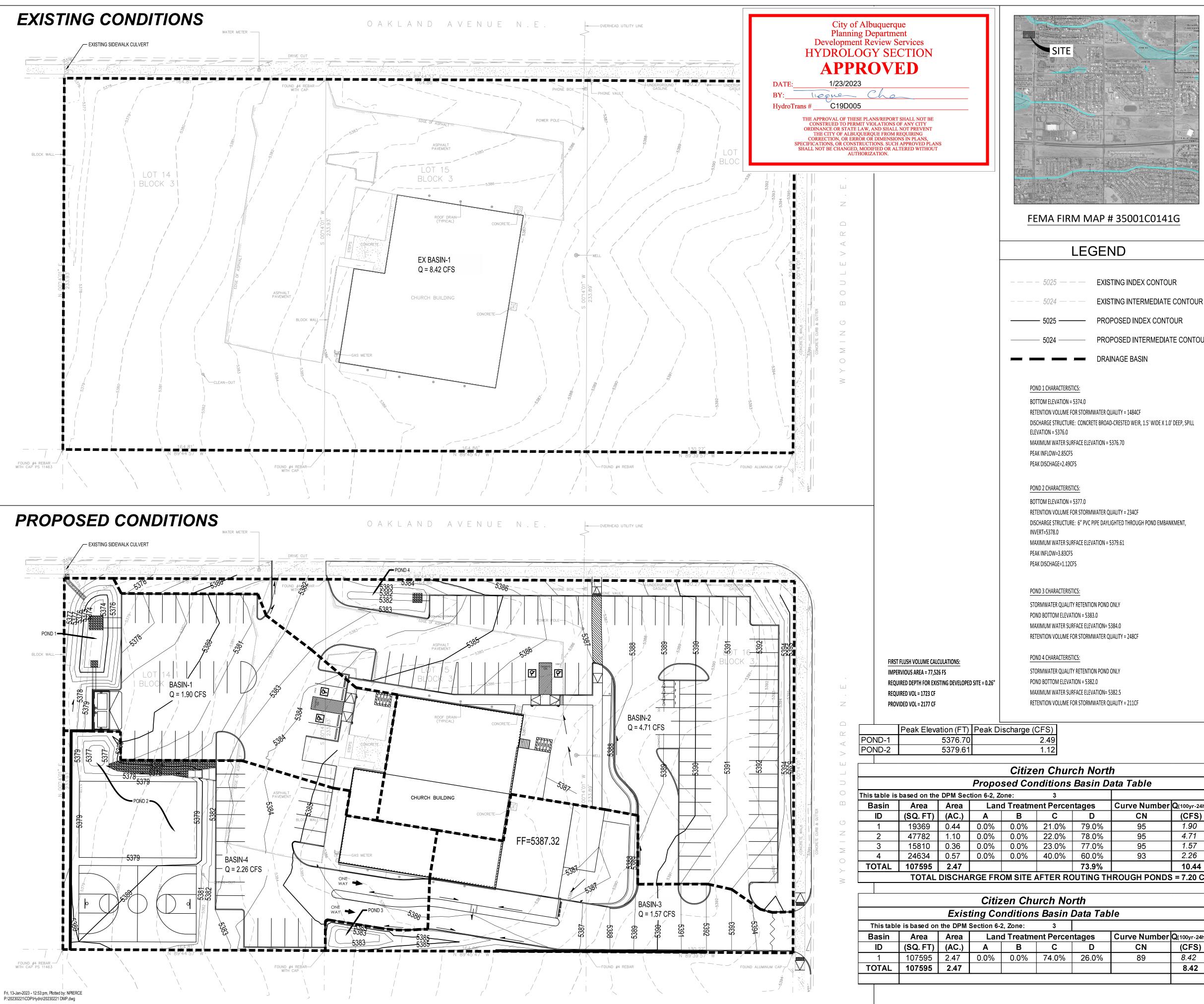
		ermit #: Hydrology File #: C19D005
		Work Order#:
Legal Description: North Albuquerque Acres UN 3 TR		
City Address: 7518 Oakland Ave NE, Albuquerque, NM 87	113	
Address: 7500 Jefferson St. NE, Albuquerque, NM 87109 Phone#: 505-823-1000 Owner: Citizen Church Address: 7518 Oakland Ave NE, Albuquerque, NM 87113	_Fax#:	Contact: Bruce Stidworthy E-mail: bstidwor@bhinc.com Contact: Chris Baldwin E-mail: Chris Baldwin
Phone#:	_ Fax#:	E-mail:
TYPE OF SUBMITTAL:PLAT (# OF]	LOTS) R	RESIDENCE DRB SITE X ADMIN SITE
IS THIS A RESUBMITTAL?: X Ye	es	No
DEPARTMENT: TRAFFIC/ TRANSPOR	TATION <u>×</u>	HYDROLOGY/ DRAINAGE
Check all that Apply: TYPE OF SUBMITTAL: ENGINEER/ARCHITECT CERTIFICATION PAD CERTIFICATION OAD CERTIFICATION CONCEPTUAL G & D PLAN ×GRADING PLAN DRAINAGE MASTER PLAN DRAINAGE MASTER PLAN DRAINAGE REPORT FLOODPLAIN DEVELOPMENT PERMIT A ELEVATION CERTIFICATE CLOMR/LOMR TRAFFIC CIRCULATION LAYOUT (TCL) TRAFFIC IMPACT STUDY (TIS) OTHER (SPECIFY) PRE-DESIGN MEETING?	PPLIC	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 SITE PLAN FOR BLDG. PERMIT APPROVAL SITE PLAN FOR BLDG. PERMIT APPROVAL SIA/ RELEASE OF FINANCIAL GUARANTEE FOUNDATION PERMIT APPROVAL SO-19 APPROVAL GRADING PERMIT APPROVAL GRADING/ PAD CERTIFICATION WORK ORDER APPROVAL CLOMR/LOMR FLOODPLAIN DEVELOPMENT PERMIT OTHER (SPECIFY)

DATE SUBMITTED: _____ ____By: ____Bruce Stidworthy, PE

ELECTRONIC SUBMITTAL RECEIVED:

FEE PAID:





- EXISTING INTERMEDIATE CONTOUR
- PROPOSED INTERMEDIATE CONTOUR

DRAINAGE NARRATIVE

INTRODUCTION:

THE PROJECT IS LOCATED ON THE SOUTHWEST CORNER OF WYOMING BLVD AND OAKLAND AVE NE. THE PROJECT IS AN EXISTING CHURCH WHICH IS GETTING A SMALL ADDITION AND SITE IMPROVEMENTS, INCLUDING ADDITIONAL PARKING.

PER FEMA COMMUNITY MAP PANEL #35001C0141G, THE SITE IS NOT LOCATED WITHIN A FLOODPLAIN. THE SITE IS 2.47 ACRES LOCATED WITHIN RAINFALL ZONE 3.

EXISTING CONDITIONS:

THE SITE IS CURRENTLY PARTIALLY DEVELOPED WITH A BUILDING AND SOME ASPHALT PARKING. THE SITE SLOPES GENERALLY FROM EAST TO WEST. THERE IS NO ONSITE STORM DRAINAGE INFRASTRUCTURE. THE SITE SHEET FLOWS AND FREE DISCHARGES ONTO OAKLAND AVENUE. THERE IS NO STORMDRAIN WITHIN OAKLAND AVENUE ADJACENT TO THE SITE. THE UPSTREAM EXTENT OF STORM DRAIN IN OAKLAND AVENUE IS APPROXIMATELY 350' WEST OF THE SITE.

THE SITE DISCHARGES APPROXIMATELY 8.42 CFS TO THE OAKLAND AVENUE RIGHT OF WAY VIA SURFACE FLOW OVER THE SIDEWALK AND THROUGH AN EXISTING SIDEWALK CULVERT LOCATED NEAR THE NORTHWEST CORNER OF THE SITE. THERE ARE NO OFFSITE DRAINAGE BASINS WHICH IMPACT THE SITE.

THE HYDROLOGIC ANALYSIS PROVIDED WITH THIS DRAINAGE SUBMITTAL HAS BEEN PREPARED IN ACCORDANCE WITH THE RECENT ADOPTION OF THE NEW DEVELOPMENT

PROCESS MANUAL, SPECIFICALLY CHAPTER 6 (DRAINAGE, FLOOD CONTROL, AND EROSIOI

CONTROL). LAND TREATMENT PERCENTAGES WERE CALCULATED BASED ON THE ACTUAL

PROPOSED BASIN DATA TABLES SHOWN ON THIS SHEET. HEC-HMS WAS USED TO ANALYZE

THE PROPOSED SITE WILL FOLLOW THE SAME EXISTING DRAINAGE SCHEME AND OUTFALL LOCATION AS UNDER EXISTING CONDITIONS. THE SITE IS DIVIDED INTO 4 ONSITE BASINS.

WHERE IT DRAINS INTO POND 1 WHICH HAS BOTH FIRST FLUSH VOLUME AND DETENTION

OF THE EXISTING BUILDING AND A SMALL PORTION OF THE ROOF OF THE ADDITION. BASIN 2

DRAINS TO THE SURFACE OF OAKLAND VIA THE EXISTING DRIVEWAY LOCATED AT THE

NORTHWEST CORNER OF THE BASIN. PRIOR TO DISCHARING TO THE DRIVEWAY, FLOWS

FROM THIS BASIN PASS THROUGH POND 4 WHICH IS A FIRST FLUSH POND LOCATED JUST

BASIN 3 IS THE SOUTHEAST PORTION OF THE SITE AND INCLUDES A PORTION OF THE ROOF

OF THE EXISTING BUILDING AS WELL AS A PORTION OF THE ADDITION. THESE SECTIONS OF

THROUGH A CURB OPENING INTO A LANDSCAPE AREA WHICH CONTAINS POND 3 - A SMALL FIRST FLUSH POND. WHEN POND 3 IS FULL IT OVERFLOWS THROUGH A CURB OPENING

BASIN 4 IS THE SOUTHWEST PORTION OF THE SITE AND CONTAINS A SMALL PORTION OF

INTO THE ASPHALT DRIVEWAY SOUTH OF THE BUILDING. THIS BASIN DRAINS TO POND 2

WHICH HAS BOTH FIRST FLUSH AND DETENTION VOLUME. POND 2 DRAINS INTO POND 1.

EXISTING CONDITIONS. HEC-HMS WAS USED TO MODEL THE FLOWS FROM BASINS 3 & 4 ROUTED THROUGH POND 2, AND THE FLOWS FROM BASIN 1 AND THE DISCHARGE FROM

POND 2 WERE ROUTED THROUGH POND 1 RESULTING IN TOTAL DISCHARGE FROM POND 1

OF 2.49 CFS WHICH IS THEN COMBINED WITH THE FREE DISCHARGE FLOW FROM BASIN 4

PONDING. THE STORMWATER QUALITY PONDING VOLUME EXCEEDS THE REQUIRED VOLUME AS SHOWN IN THE FIRST FLUSH VOLUME CALCULATIONS SHOWN ON THIS SHEET

THE TOTAL RUNOFF FROM THE SITE IS 7.20 CFS. THIS IS LESS THAN THE 8.42 CFS IN

THE ROOF OF THE EXISTING BUILDING. ROOF DRAINS IN THIS BASIN DISCHARGE AT GRADE

ONTO THE ASPHALT PARKING NEAR THE SOUTHEAST CORNER OF BASIN 4.

THE CHARACTERISTICS OF POND 2 ARE LABELED ON THIS SHEET.

RESULTING IN TOTAL DISCHARGE FROM THE SITE OF 7.20 CFS.

CONDITIONS IN EACH ONSITE BASIN AND ARE SUMMARIZED IN THE EXISTING AND

RUNOFF AND POND ROUTING. THIS SITE WAS ANALYZED FOR THE 100-YEAR, 24-HOUR

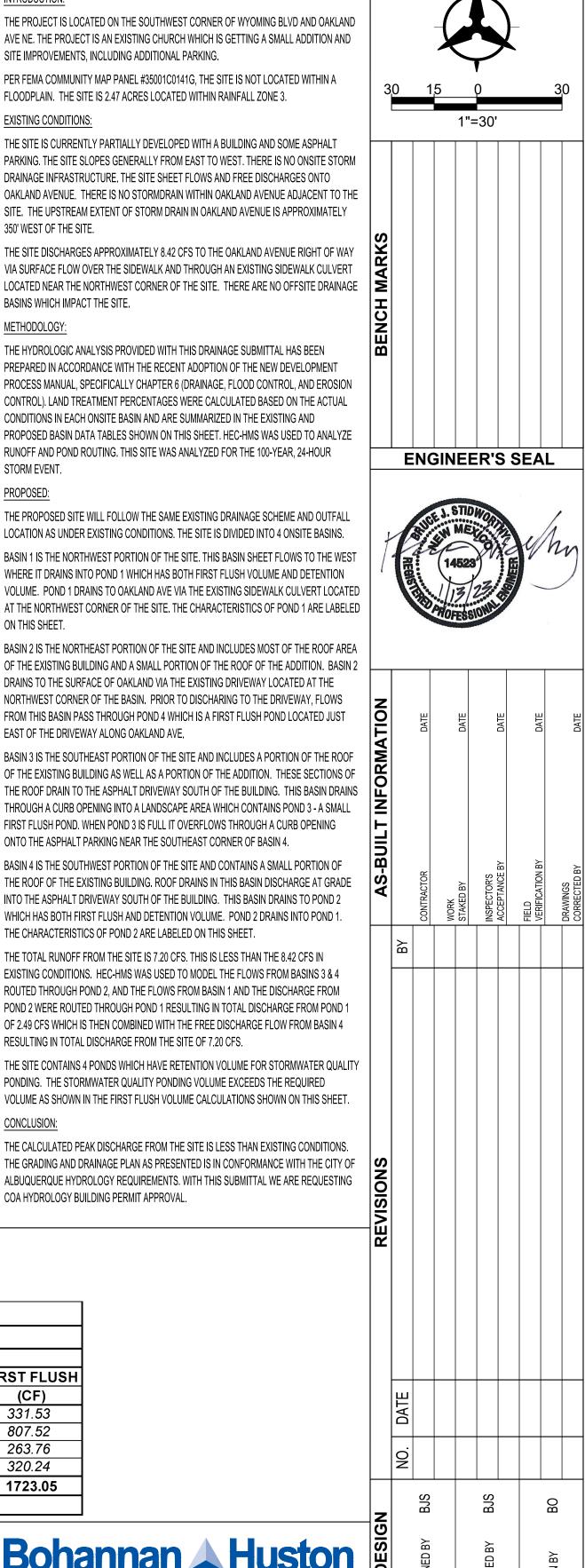
METHODOLOGY:

STORM EVENT.

PROPOSED:

ON THIS SHEET.

EAST OF THE DRIVEWAY ALONG OAKLAND AVE.



CONCLUSION: THE CALCULATED PEAK DISCHARGE FROM THE SITE IS LESS THAN EXISTING CONDITIONS. THE GRADING AND DRAINAGE PLAN AS PRESENTED IS IN CONFORMANCE WITH THE CITY OF ALBUQUERQUE HYDROLOGY REQUIREMENTS. WITH THIS SUBMITTAL WE ARE REQUESTING COA HYDROLOGY BUILDING PERMIT APPROVAL.

Nort	h		
nsin D	ata Table		
jes	Curve Number	Q(100)(r-24hr)	FIRST FI LISH
D	CN	(CFS)	(CF)
79.0%	95	1.90	331.53
'8.0%	95	4.71	807.52
77.0%	95	1.57	263.76
60.0%	93	2.26	320.24
3.9%		10.44	1723.05
ING TH		5 = 7.20 CF	S
1			Dah
ta Tab	ble		Boha
			www.bhind
ges	Curve Number	Q (100yr-24hr)	
D	CN	(CFS)	
96.0%	89	842	

DRAINAGE MANAGEMENT PLAN

BHI PROJECT NO.

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20230221
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DWG NO. DMP - 00 Я

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