

February 22, 2022

Mr. Jeff Melvin
Oxbow Bluff

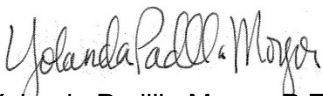
Re: Lot 39 5004 Sandpiper Ct. Lot Specific Grading and Drainage Plan

Dear Jeff:

Based on the revised grading and drainage plan for the above referenced Lot stamped dated 02/22/2022 by Ron E Hensley, The Groupe, it appears that all the comments have been addressed in regard to the grading and drainage. The plan is attached for reference.

Please let me know if you have any comments or concerns.

Sincerely,



Yolanda Padilla Moyer, P.E.
Vice President
Community Development and Planning

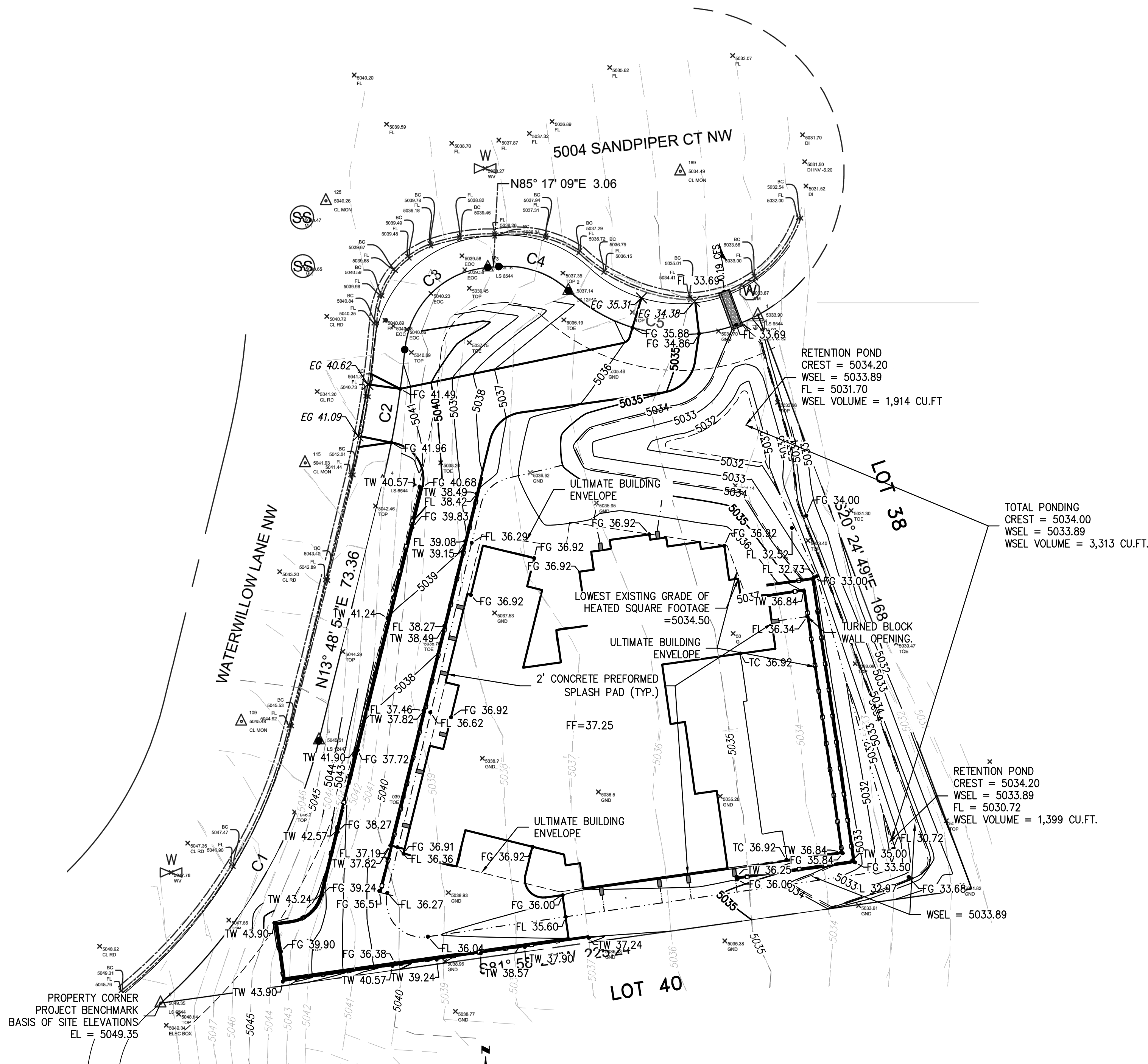
YPM

cc: Diego Ruiz, Diego Hand Crafted Homes
Ron Hensley, the Group

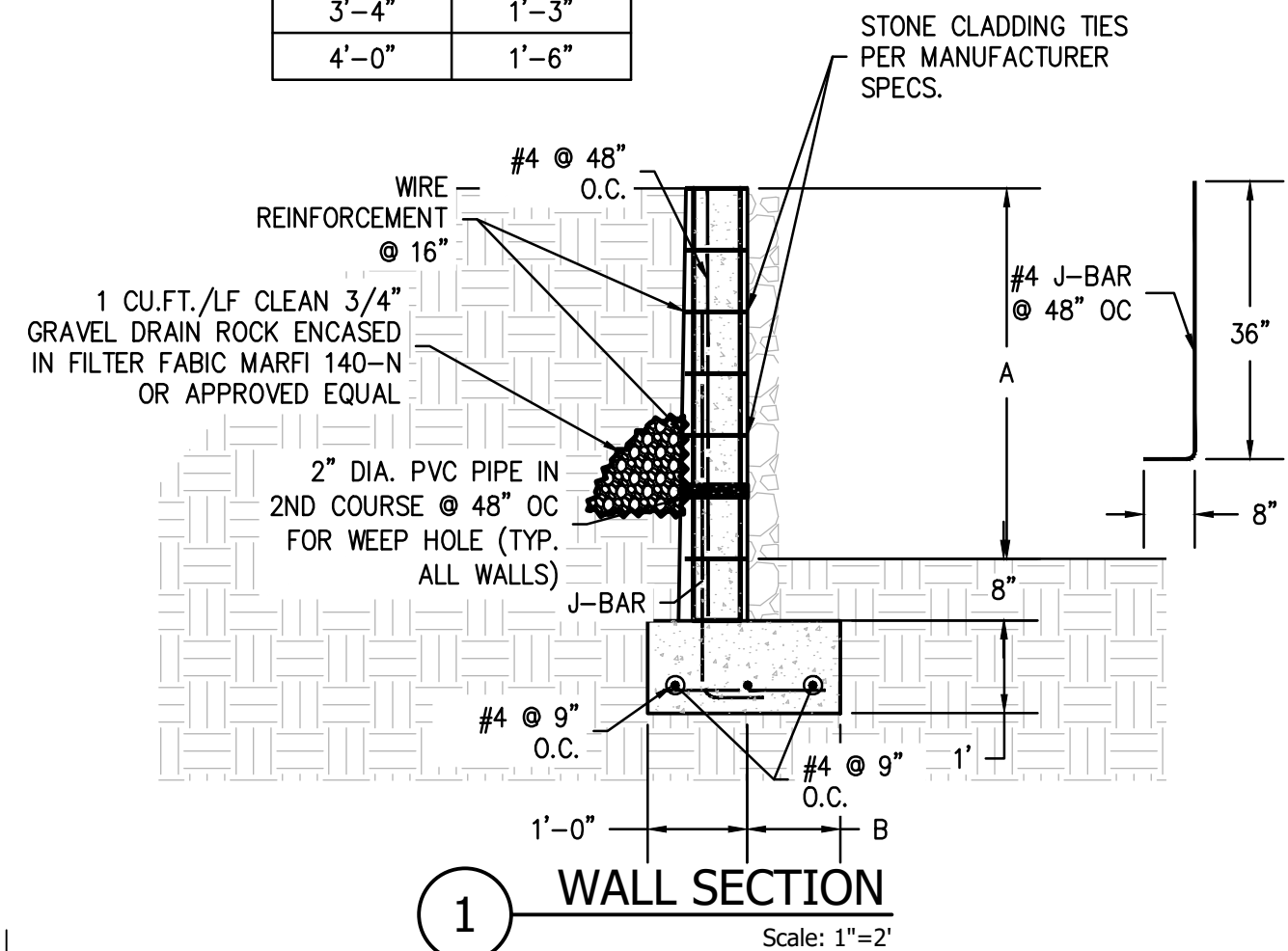
Engineering ▲

Spatial Data ▲

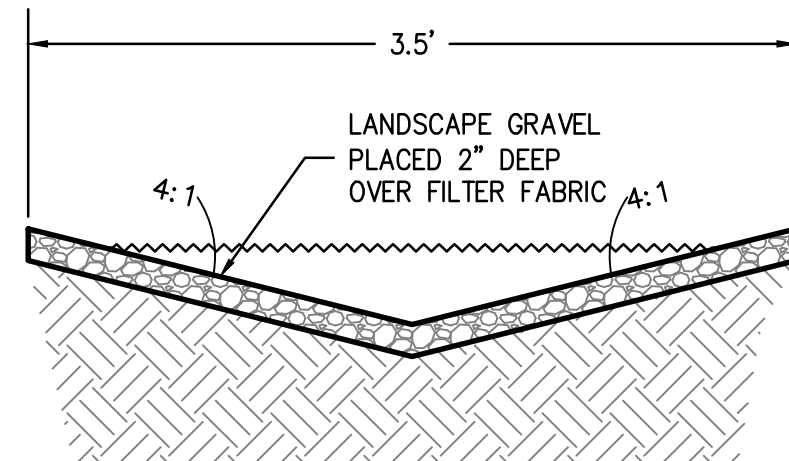
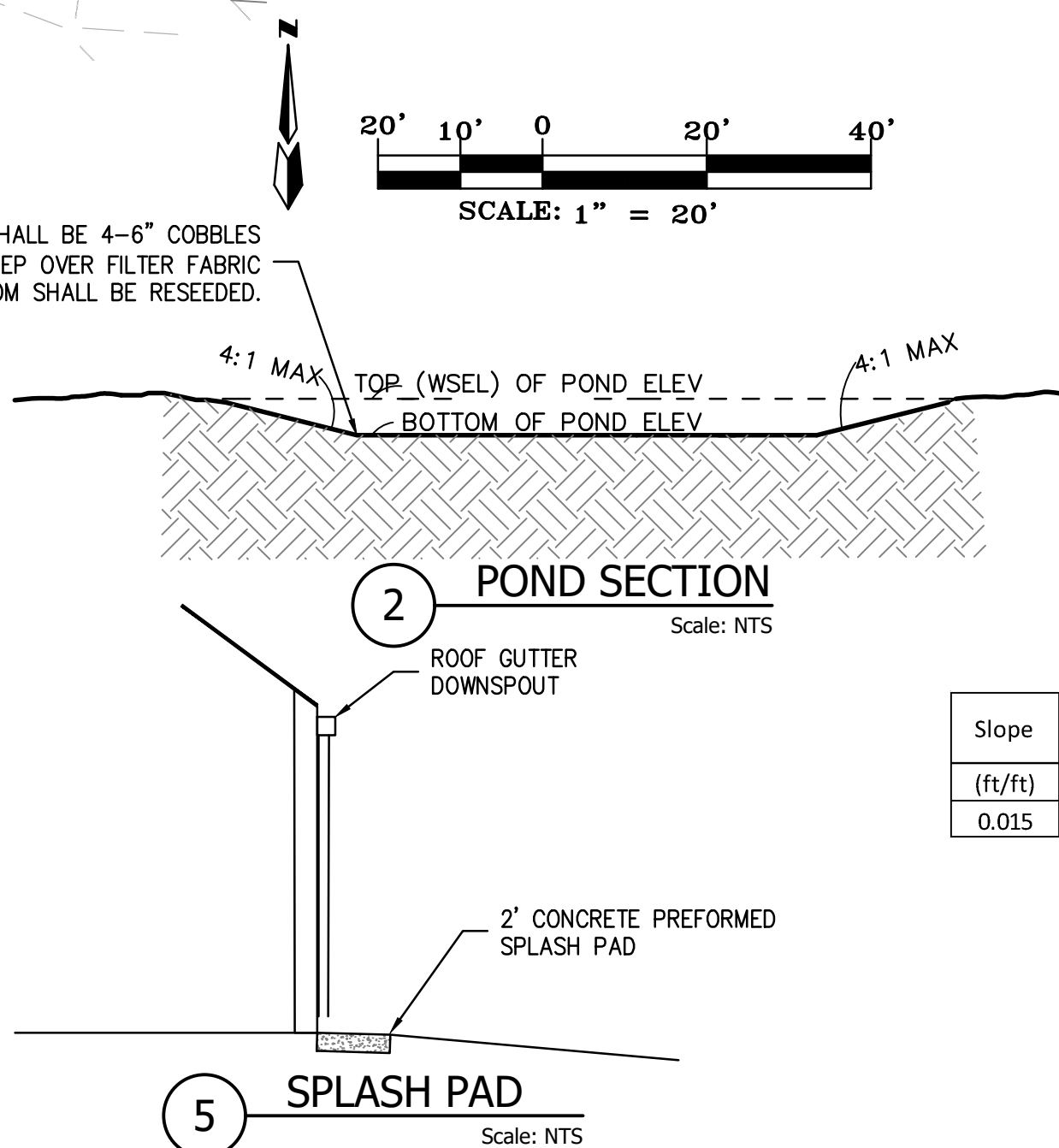
Advanced Technologies ▲



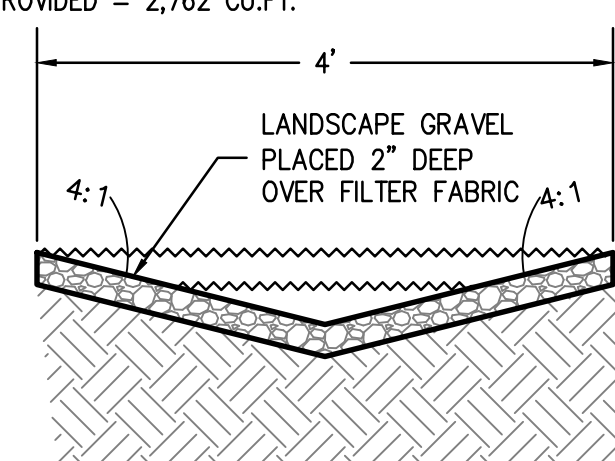
DIMENSION TABLE	
MAX A	B
2'-0"	0'-6"
2'-8"	0'-9"
3'-4"	1'-3"
4'-0"	1'-6"



POND SIDES SHALL BE 4-6" COBBLES PLACED 12" DEEP OVER FILTER FABRIC BOTTOM SHALL BE RESEDED.



Slope	n	Depth	Q	Area	Veloc	Wp	Yc	TopWidth	Energy
(ft/ft)	(coef.)	(ft)	(cfs)	(sqft)	(ft/s)	(ft)	(ft)	(ft)	(ft)
0.015	0.03	0.40	1.24	0.64	1.94	3.30	0.36	3.20	0.46



CIPOLLETTI DISCHARGE WEIR $Q = C H^{1.5}$ $C = 2.54 \tan(152/2)$			
C	WIDTH (L) (ft.)	DEPTH (H) (ft.)	FLOW (Q) (cfs)
10.16	1.08	0.20	0.18
10.16	4.00	0.51	1.91



FIRM MAP NO. 35001C0114H VICINITY MAP G-11-Z

LOCATION & DESCRIPTION

THE PROPOSED SITE IS 0.59 ACRES LOCATED ON SANDPIPER CT. EAST OF WATERWILLOW LANE. AS SEEN ON THE VICINITY MAP.

FLOODPLAIN STATUS

THE CONSTRUCTION OF THIS PROJECT, AS SHOWN ON FEMA'S FLOOD INSURANCE RATE MAP 35001C0114H, DATED AUGUST 16, 2012 IS NOT WITHIN A DESIGNATED 100-YEAR FLOODPLAIN. AN EXHIBIT WITH THE SITE SHOWN ON THE FIRM PANEL IS INCLUDED ON THIS SHEET.

METHODOLOGY

EQUATIONS:
WEIGHTED $E = E_a * A_a + E_b * A_b + E_c * A_c + E_d * A_d / (\text{Total Area})$

FLOW = $Q_a * A_a + Q_b * A_b + Q_c * A_c + Q_d * A_d$

WHERE FOR 100-YEAR, 6-HOUR STORM(ZONE1)

$E_a = 0.55$ $Q_a = 1.54$
 $E_b = 0.73$ $Q_b = 2.16$
 $E_c = 0.95$ $Q_c = 2.87$
 $E_d = 2.24$ $Q_d = 4.12$

PRECIPITATION

THE 100-YR 6-HR DURATION STORM WAS USED AS THE DESIGN STORM FOR THIS ANALYSIS. THIS SITE IS WITHIN ZONE 1 AS IDENTIFIED IN THE DEVELOPMENT PROCESS MANUAL, SECTION 6-2.

EXISTING DRAINAGE

THIS SITE IS LOCATED WITHIN BASIN F OF THE OXBOW BLUFF DRAINAGE MASTER PLAN G11/D14. THE OXBOW DRAINAGE CRITERIA ALLOWS HISTORIC DISCHARGE. GIVING THE LOT AN ALLOWABLE DISCHARGE OF 0.91 CFS

BASIN	AREA (sf)	TREATMENT A % sf	TREATMENT B % sf	TREATMENT C % sf	TREATMENT D % sf	WEIGHTED E	VOLUME (cu.-ft.)	FLOW (cfs)
ALLOWABLE	25752	100%	25752	0%	0	0%	0	0.5500
PROPOSED	25752	0%	0	46%	11752	0%	0	1.5509

DEVELOPED CONDITION

THIS SITE WILL BE DEVELOPED AS A SINGLE FAMILY HOME WITH DEVELOPED RUNOFF ROUTED TO RETENTION PONDS WITH COMBINED WSEL VOLUME OF 3,313 CU.FT. AND THE TOTAL CAPACITY OF THE POND IS 3,631 CU.FT. OR 100% OF THE TOTAL RUNOFF FROM THE LOT AND DISCHARGES LESS THAN THE HISTORIC FLOW RATE. WITH A FINAL RETAINED VOLUME OF 2,762 CU.FT.

REQUIRED WATER QUALITY VOLUME

LOT DRAINAGE AS DEPICTED ON THIS PLAN SHALL BE MAINTAINED.

LOT DEPICTED HEREON SHALL BE RESPONSIBLE FOR MAINTAINING WATER QUALITY RETENTION ON THE LOT IMMEDIATELY PRIOR TO DISCHARGE. THE VOLUME SHALL BE EQUAL TO: IMPERVIOUS AREA * 0.42/12 IN CUBIC FEET.

IMPERVIOUS AREA = 14,000 SQ.FT.

REQUIRED VOLUME = $14,000 * 0.42/12 = 490$ CU.FT.
VOLUME PROVIDED = 2,762 CU.FT.

NOTES

THE ENGINEER HAS UNDERTAKEN LIMITED FIELD VERIFICATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UNDERGROUND UTILITY LINES, MAKES NO REPRESENTATION PERTAINING THERETO AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY, AND PRESERVE ANY AND ALL EXISTING UTILITIES. THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS OF THE LOCATION OF THESE LINES AND FACILITIES IN PLANNING AND CONDUCTING EXCAVATION, WHETHER BY CALLING OR NOTIFYING THE UTILITIES, COMPLYING WITH "BLUE STAKES" PROCEDURES, OR OTHERWISE.

THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL REMAIN THE RESPONSIBILITY OF THE CONTRACTOR.

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, ARE INTENDED FOR USE ON THIS PROJECT AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF THE GROUP. IN THE EVENT OF UNAUTHORIZED USE, THE USER ASSUMES ALL RESPONSIBILITY AND LIABILITY WHICH RESULTS.

GENERAL NOTES:

1. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER THIS CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREIN, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 2020 EDITION.

2. THE EROSION PROTECTION SPECIFIED ON THIS PLAN IS THE MINIMUM RECOMMENDED. THE OWNER IS ENCOURAGED TO INCORPORATE EROSION RESISTANT LANDSCAPING ON AREAS WHERE EROSION MAY OCCUR SUCH AS SLOPES AND SWALES. THE OWNER IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION CONTROL FEATURES NECESSARY TO PRESERVE THE DESIGN INTENT OF THE GRADING PLAN.

3. THE DRAINAGE INFRASTRUCTURE SHOWN ON THIS PLAN IS THE RESPONSIBILITY OF THE PROPERTY OWNER.

4. ALL DISTURBED AREAS OUTSIDE THE BUILDING ENVELOPE MUST BE RESEED IN ACCORDANCE WITH THE SEED MIX INDICATED IN THE OXBOW GUIDELINES.

5. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, (260-1990) FOR LOCATION OF EXISTING UTILITIES.

6. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS AND EXISTING PAVEMENT. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OR SURVEYOR SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM OF DELAY.

EROSION CONTROL NOTES

1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.

2. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.

3. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.

4. REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.

5. ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL (CITY) ACCEPTANCE OF ANY PROJECT.

LEGEND

- FLOW ARROW
- SLOPE ARROW
- PROPOSED ELEVATION
- EXISTING ELEVATION
- GRADE BREAK
- PROPOSED CONTOUR
- EXISTING CONTOUR
- PROPOSED EASEMENT
- EXISTING WALL
- PROPOSED WALL
- SWALE / FLOW LINE
- SPLASH PAD



THE HENSLEY ENGINEERING GROUP
300 BRANDING IRON RD. SE
RIO RANCHO, NEW MEXICO 87124
Phone: (505) 410-1622

PROJECT NUMBER
5004 SANDPIPER CT. N.W.

PROJECT LOCATION
ALBUQUERQUE, NM

PROJECT NAME
BROWN'S RESIDENCE

PROJECT NUMBER
-PROJECT NUMBER-

PROJECT PROGRESS
SITE PLAN

DRAWN BY
REH

CHECKED BY
REH / REH

DATE
FEB. 22, 2022

SCALE
AS NOTED

SHEET
C 2

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