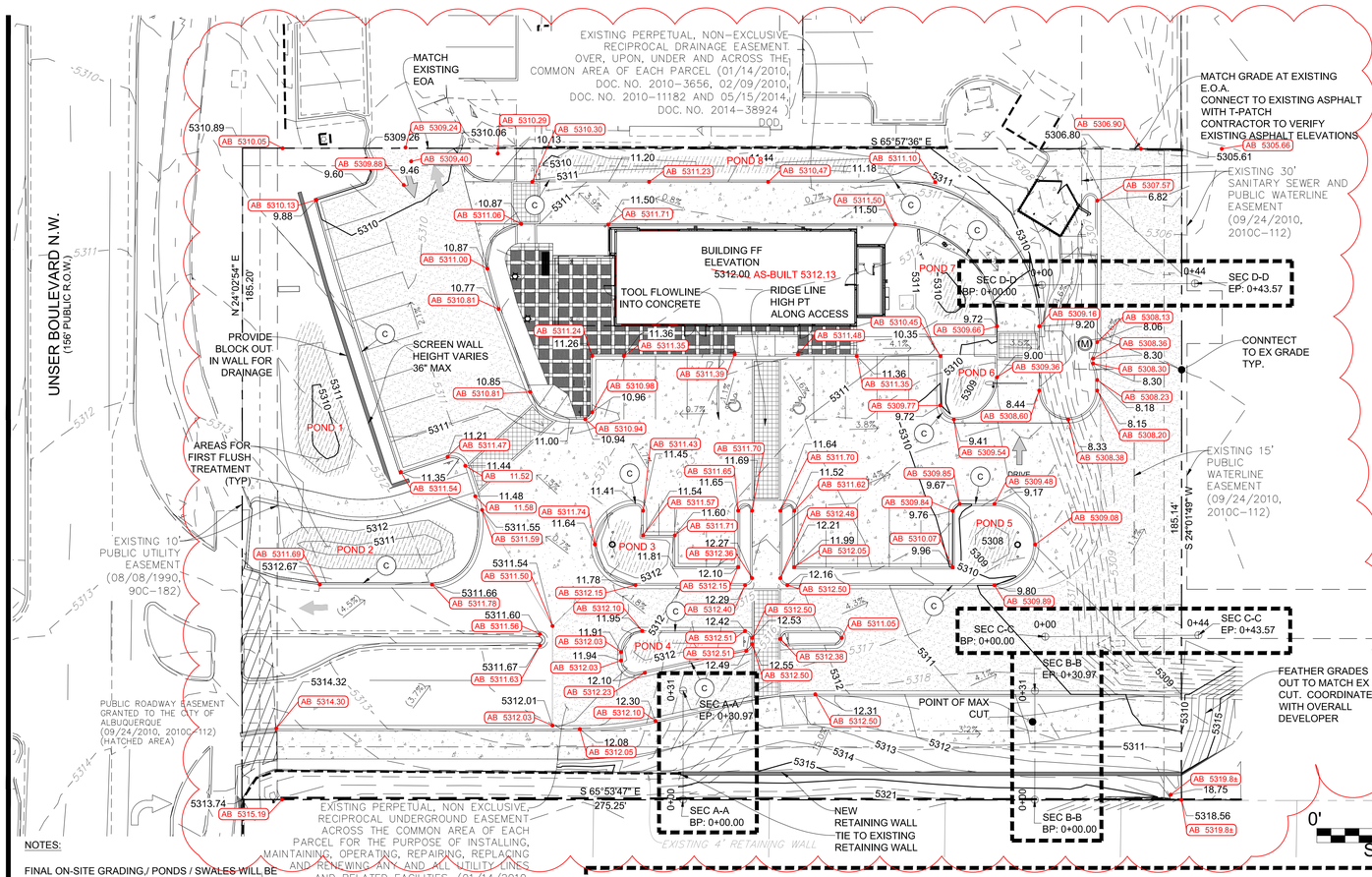


GRADING NOTES:

1. ANY EARTHWORK REQUIRED FOR THIS CONSTRUCTION SHALL BE COMPLETED IN ACCORDANCE WITH ALL APPLICABLE SECTIONS OF THE PROJECT SPECIFICATIONS, GEOTECHNICAL INVESTIGATION FOR THE SITE AND THE CITY STANDARDS AND SPECIFICATIONS.
2. IF THE SUBGRADE SHOULD BECOME FROZEN, DESICCATED, SATURATED, OR DISTURBED, THE AFFECTED MATERIAL SHOULD BE REMOVED OR THESE MATERIALS SHOULD BE SCARIFIED, MOISTURE CONDITIONED, AND RECOMPACTED PRIOR TO FOUNDATION, FLOOR SLAB AND PAVEMENT CONSTRUCTION.
3. FILL SHOULD BE PLACED AND COMPACTED IN HORIZONTAL (6-8") LIFTS, USING EQUIPMENT AND PROCEDURES THAT WILL PRODUCE RECOMMENDED MOISTURE CONTENTS AND DENSITIES THROUGHOUT THE LIFT. REFER TO GEOTECHNICAL RECOMMENDATIONS FOR COMPACTION REQUIREMENTS.
4. NO RUBBLE OR DEBRIS INCLUDING TIMBER, CONCRETE RUBBLE, TREES, BRUSH, AND ASPHALT SHALL BE PLACED IN THE BACKFILL UNDER ANY OF THE PROPOSED BUILDINGS, STREETS, CURB & GUTTER, SIDEWALK, DRAINAGE STRUCTURES, WITHIN FIVE (5) FEET OF A BUILDING FOOTPRINT OR BE IN THE PLACEMENT OF ANY UNCLASSIFIED FILL. PROPERLY GRADED RUBBLE MAY BE USED IN SOME LOCATIONS AS SPECIFIED AND VERIFIED BY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL AND HAULING OF SUCH MATERIALS TO A SUITABLE SPOIL AREA.
5. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE DESIGN, MAINTENANCE AND OPERATION OF ANY REQUIRED DEWATERING SYSTEM. THE CONTRACTOR SHALL PERFORM SUCH INDEPENDENT INVESTIGATION AS DEEMED NECESSARY TO DETERMINE THE SUBSURFACE GROUNDWATER CONDITIONS AND UNSTABLE SOIL CONDITIONS TO BE ENCOUNTERED THROUGHOUT THE CONSTRUCTION.
6. IMMEDIATELY PUMP OR BAIL OUT WATER FOUND IN EXCAVATIONS, WHETHER RAIN OR SEEPAGE. EXCAVATIONS MUST BE KEPT FREE FROM WATER AT ALL TIMES. TAKE ALL MEASURES AND FURNISH ALL EQUIPMENT AND LABOR NECESSARY TO CONTROL THE FLOW, DRAINAGE AND ACCUMULATION OF WATER AS REQUIRED TO PERMIT COMPLETION OF THE WORK AND TO AVOID DAMAGE TO THE WORK.
7. WHEN FREEZING TEMPERATURES MAY BE EXPECTED, DO NOT EXCAVATE TO THE FULL DEPTH INDICATED UNLESS THE FOOTING OR SLABS ARE TO BE POURED IMMEDIATELY AFTER THE EXCAVATION HAS BEEN COMPLETED. IF PLACING OF CONCRETE IS DELAYED, PROTECT THE BOTTOMS OF EXCAVATIONS FROM FROST UNTIL CONCRETE IS PLACED.
8. NO FILL MATERIAL SHALL BE PLACED, SPREAD OR ROLLED WHILE IT IS FROZEN OR THAWING OR DURING UNFAVORABLE WEATHER CONDITIONS. WHEN THE WORK IN PROGRESS IS INTERRUPTED BY HEAVY RAIN, FILL OPERATIONS SHALL NOT BE RESUMED UNTIL THE GEOTECHNICAL ENGINEER INDICATES THAT THE MOISTURE CONTENT AND DENSITY OF THE PREVIOUSLY PLACED FILL ARE AS SPECIFIED.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROVISION OF ADEQUATE SHORING AND/OR BRACING NECESSARY TO FACILITATE THE EXCAVATION ASSOCIATED WITH THE CONSTRUCTION OF THE WALLS, PIPELINES AND FOUNDATIONS. THE BRACING AND/OR SHORING OF EXCAVATED WALLS OR TRENCHES SHALL BE IN COMPLIANCE WITH OSHA REGULATIONS AND SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER. THE COST OF SHORING AND/OR BRACING SHALL BE INCLUDED IN THE COST OF THE SPECIFIC CONSTRUCTION ITEM REQUIRING THE SHORING AND/OR BRACING.
10. THE CONTRACTOR IS RESPONSIBLE FOR REVIEWING THE SITE PRIOR TO BIDDING TO VERIFY SITE CONDITIONS.
11. BUILDING CONTRACTOR(S) WILL BE RESPONSIBLE FOR CONSTRUCTING POSITIVE DRAINAGE AWAY FROM ALL STRUCTURES.
12. SIDEWALK SLOPES SHALL NOT EXCEED 2.0% MAXIMUM CROSS SLOPES AND 5.0% MAXIMUM LONGITUDINAL SLOPES, UNLESS OTHERWISE NOTED. THE SLOPE IN THE HANDICAP PARKING SPACES AND ASSOCIATED STRIPED ISLAND SHALL NOT EXCEED 2.0%.
13. THE CONTRACTOR SHALL FOLLOW ANY GEOTECHNICAL RECOMMENDATIONS FOR PAVEMENT DESIGN AND RECOMMENDATIONS REGARDING EXCAVATION, COMPACTION, MATERIALS, EMBANKMENT, PAVEMENT SUBEXCAVATION, MOISUTRE CONTROL, AND TOPSOIL REMOVAL AND REPLACEMENT. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF DISCREPANCIES BETWEEN THE SITE IMPROVEMENTS PLANS AND THE GEOTECHNICAL RECOMMENDATIONS.

DRAINAGE CERTIFICATION WITH SURVEY WORK BY PROFESSIONAL SURVEYOR

I, LANCE VANDEMARK, NMPE 21777, OF THE FIRM THE VERTEX COMPANIES, INC., HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 09/08/2016. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY THOMAS JOHNSON, NMPS 06/09/2017 OF THE FIRM WAYJOHN SURVEYING, INC. I FURTHER CERTIFY THAT THE SURVEY DATA PROVIDED IS REPRESENTATIVE OF ACTUAL SITE CONDITIONS AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR CERTIFICATE OF OCCUPANCY.

THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THIS PROJECT. THOSE RELYING ON THE RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.

LANCE P. VANDEMARK NEW MEXICO 21777 LICENSED PROFESSIONAL ENGINEER 07/12/2017

Digitally signed by Lance VanDemark
Date: 2017.07.12 15:05:37 -06'00'

Signature of Engineer

Date 07/12/17

ENGINEER'S STAMP

AS-BUILT SPOT ELEVATION AB 5312.48 8

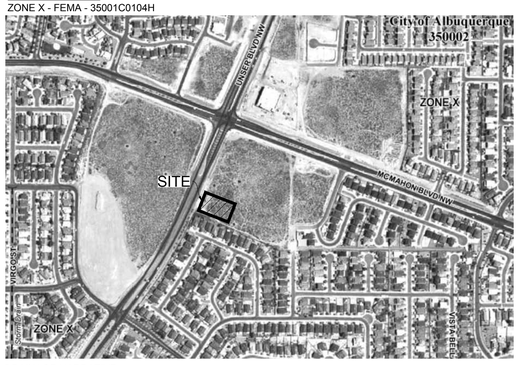
AS-BUILT ELEVATION DATA PROVIDED BY WAYJOHN SURVEYING ON 06/09/2017

NOTES:

FINAL ON-SITE GRADING,/ PONDS / SWALES WILL BE DESIGNED AS PART OF THE DRB AND BUILDING PERMIT SET .

FINAL CURB CUTS TO BE PLACE AND COORDINATE ON LANDSCAPE AND GRADING AND DRAINAGE PLAN AS PART OF THE DRB AND BUILDING PERMIT SET.

FLOOD ZONE MAP:
ZONE X - FEMA - 35001C0104H



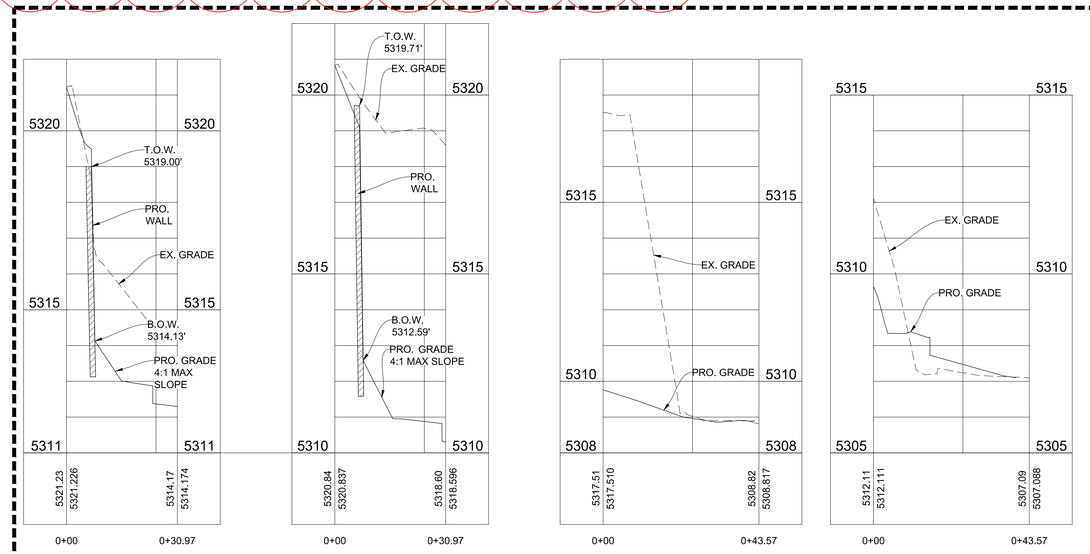
DRAINAGE NARRATIVE:

DRAINAGE TO CONFORM TO ORIGINAL MCMAHON MARKETPLACE (2007). LANDSCAPE AREAS TO BE INSTALLED WITH SURFACE LOWER TO RECEIVE RUNOFF VIA CURB NOTCHES / CUTS.

STORMWATER CONTROL MEASURES ARE TO PROVIDE MANAGEMENT OF "FIRST FLUSH" - 90% STORM EVENT. THIS IS 0.34" (0.44" MINUS 0.1" ABSTRACTION)

THE REQUIRED PONDING VOLUME IS 0.34" X TYPE 'D' AREA:
0.34/12 X 1.14AC X 71% LAND TREATMENT 'D' X 43560 = 998 C.F.

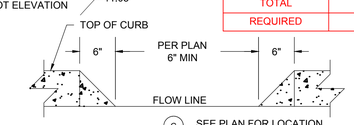
FIRST FLUSH WILL BE TREATED AND DETAINED THROUGHOUT THE LANDSCAPE ISLANDS ON SITE.
FINAL DETAILED DESIGN FOR DRAINAGE TO BE COMPLETED WITH DRB CIVIL ENG PLANS.



GRADING LEGEND

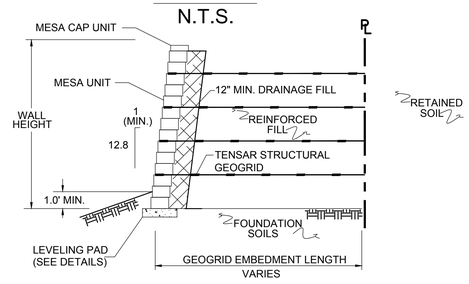
(XXX)	SLOPE	XXX
5420	MAJOR CONTOUR	5420
5420	MINOR CONTOUR	5421
5309.08	SPOT ELEVATION	11.03

POND VOLUMES	
POND 1	347 CF
POND 2	328 CF
POND 3	85 CF
POND 4	32 CF
POND 5	26 CF
POND 6	28 CF
POND 7	46 CF
POND 8	125 CF
TOTAL	1017 CF
REQUIRED	998 CF



NOTES:
1. 4500 PSI CONCRETE WITH FIBERMESH REINFORCEMENT.
2. BRUSHED FINISH ON ALL EXPOSED CONCRETE.

CURB CUT
N.T.S.



TYPICAL TIERED CROSS-SECTION
NOT TO SCALE
NOTE: FINAL WALL COLOR & STYLE TO MATCH EXISTING

HCI ENGINEERING
A DIVISION OF HABERER CARPENTRY INC.
621 SOUTHPARK DR., SUITE 1600
LITTLETON, CO. 80120
INFO@HABERERGROUP.COM

MARK D. MCCLUGGAGE AIA, CCS
1525 E. Douglas Wichita, KS 67211
Tel: (316) 265-5307 Fax: (316) 265-5646
www.gbinc.com

LANCE P. VANDEMARK NEW MEXICO 21777 LICENSED PROFESSIONAL ENGINEER 09/08/2016

VERTEX
Mains: 303.623.9116 | Direct: 720.545.0459
3734 Osage Street | Denver, CO 80211
CONTACT: LANCE VANDEMARK, P.E.

12134.230

△EPC 1ST SUB 03.30.16
△EPC 2ND SUB 05.02.16
△DRB 1ST SUB 10.03.16
7 REVISION 7 02.09.17
8 AS-BUILT 07.12.17
△
△
△
△
△
△
△

CONTRACT DATE: APRIL 24, 2016
BUILDING TYPE: EXPLORER MED54
PLAN VERSION: ARRIL 2015 (N)
SITE NUMBER:
STORE NUMBER:

TACO BELL
UNSER BLVD
ALBUQUERQUE, NM 87114

TACO BELL
EXPLORER
MEDIUM40

AS-BUILT GRADING & DRAINAGE PLAN

C2.0