CITY OF ALBUQUERQUE

Planning Department Alan Varela, Director



Mayor Timothy M. Keller

July 8, 2024

Luis Noriega Tierra West, LLC 5571 Midway Park Place NE Albuquerque, NM, 87109

RE: Human Bean Westside Drive 10850 Golf Course NW Grading and Drainage Plan Engineer's Stamp Date: 2/29/24 Hydrology File: A12D008B3

Dear Mr. Noriega:

PO Box 1293

NM 87103

Based upon the information provided in your submittal received 6/13/2024, the Grading & Drainage Plans are approved for Building Permit, and Grading Permit. Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a 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.
 - 2. Please provide the executed paper Drainage Covenant (latest revision) printed on one-side only with Exhibit A and a check for **\$25.00** made out to "**Bernalillo County**" for the stormwater quality pond per Article 6-15(C) of the DPM to Hydrology for review at Plaza de Sol.

^{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, 924-3420) 14 days prior to any earth disturbance.

If you have any questions, please contact me at 924-3995 or rbrissette@cabq.gov.

Sincerely,

and Mar

Anthony Montoya, Jr., P.E. Senior Engineer, Hydrology Planning Department, Development Review Services

Dev E AND 7	N BEAN WEST
Dev Dev Dev	Project Title: HUMAN BEAN WEST

ity of Albuquerque Planning Department

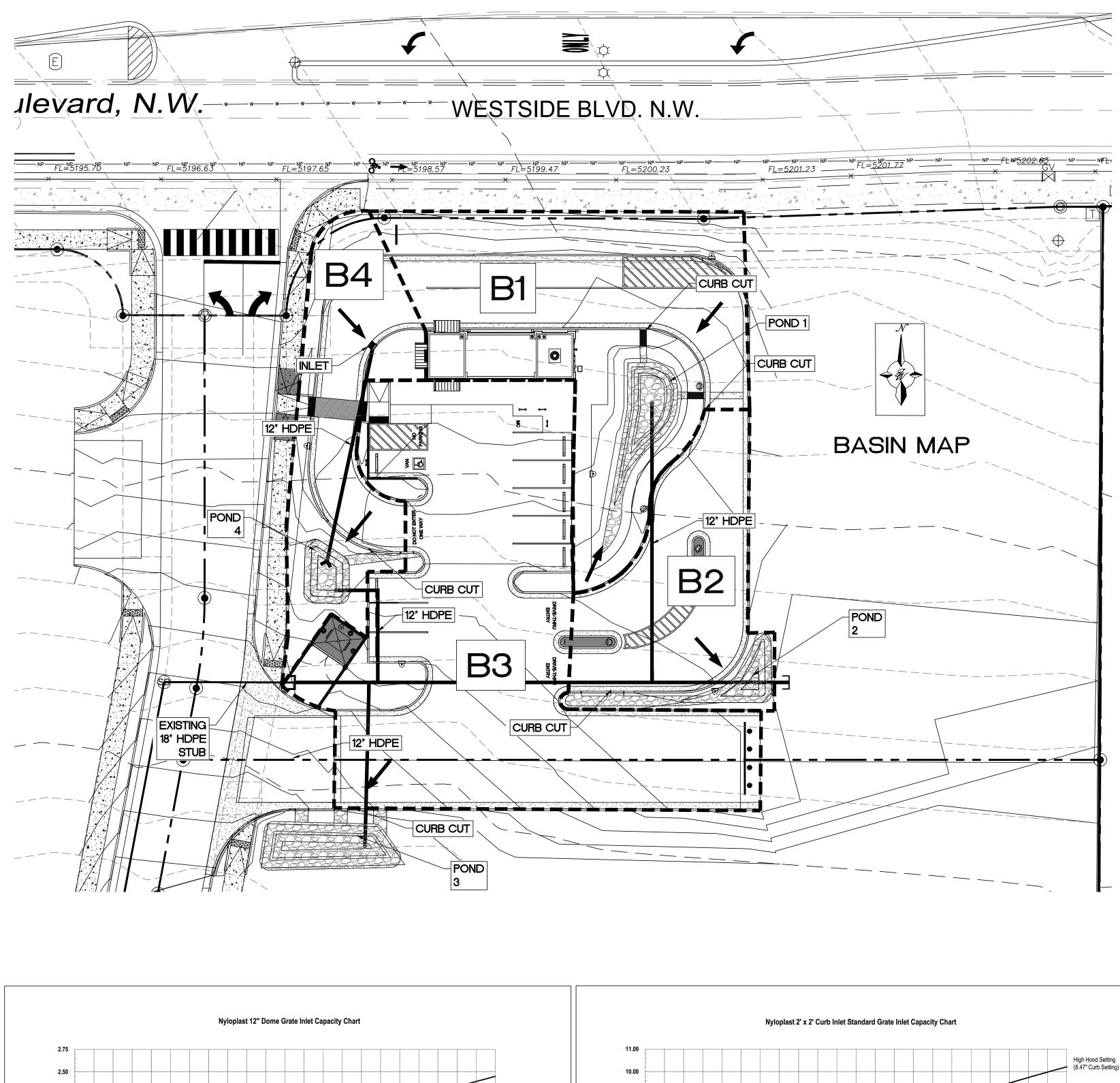
TRANSPORTATION INFORMATION SHEET (DTIS)

Εī	Email:	
Υ	Applicant/Owner:	Contact:
Ϋ́	Address:	Phone:
Εĭ	Email:	
	TYPE OF DEVELOPMENT: Plat (# of lots)	Single Family Home
]	All other Developments
	RE-SUBMITTAL: YES 🗸 NO	YES VO
D I	DEPARTMENT: TRANSPORTATION	HYDROLOGY/DRAINAGE
U D	Check all that apply under Both the Type of Submittal and the Type of Approval Sought:	nd the Type of Approval Sought:
H	TYPE OF SUBMITTAL:	TYPE OF APPROVAL SOUGHT:
	Engineering / Architect Certification	Pad Certification
	Conceptual Grading & Drainage Plan	Building Permit
5	Grading & Drainage Plan, and/or Drainage	Grading Permit
1 [Keport	Paving Permit
	Drainage Report (Work Order)	SO-19 Permit
	Drainage Master Plan	Foundation Permit
	Conditional Letter of Map Revision (CLOMR)	Certificate of Occupancy - Temp
	Letter of Map Revision (LOMR)	Preliminary / Final Plat
	Floodplain Development Permit	Site Plan for Building Permit - DFT
	Traffic Circulation Layout (TCL) – Administrative	Work Order (DRC)
Γ	Traffic Circulation Layout (TCL) – DFT	Release of Financial Guarantee (ROFG)
	Approval	CLOMR / LOMR
	Traffic Impact Study (TIS)	Conceptual TCL - DFT
	Street Light Layout	OTHER (SPECIFY)

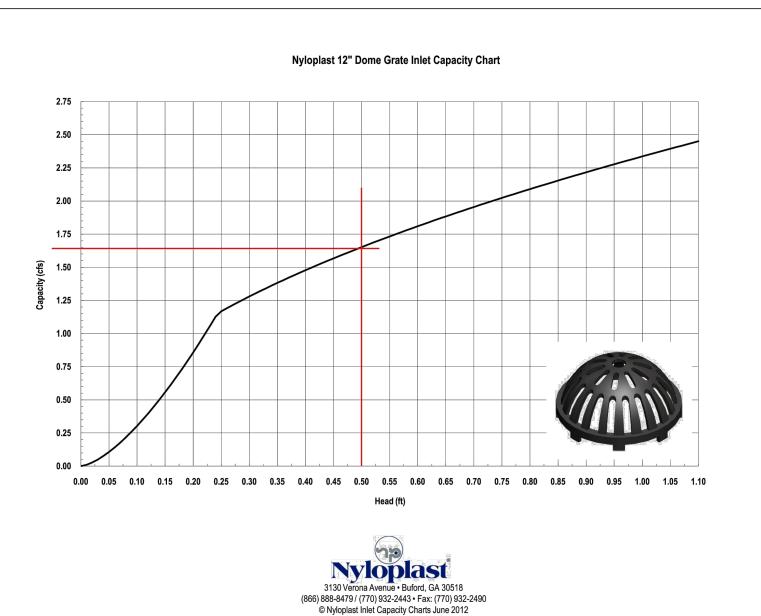
DATE SUBMITTED: 06/13/2024

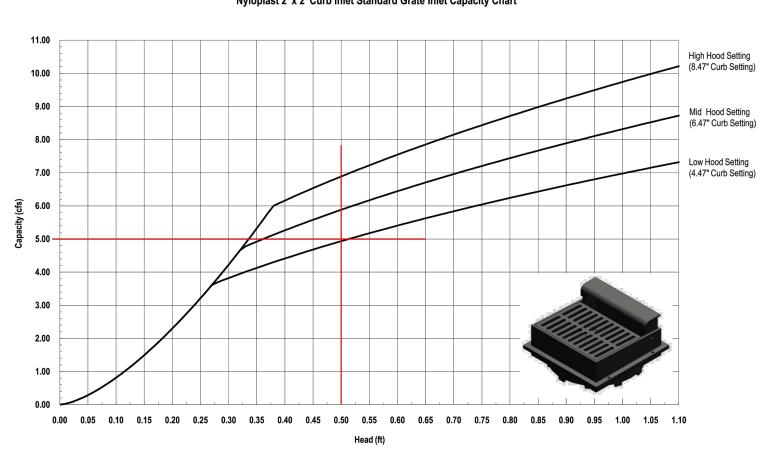
REV. 04/03/24

OTHER (SPECIFY).









DPM CH6 HYDROLOGY SECTION

(ft)

(ft)

Precipitation Zone 1 HUMAN BEAN ON WESTSIDE SE Corner of Westside Blvd & GolfCourse Rd 2/27/2024 TWLLC Date

POND-3 VOLUME CALCULATIONS

ELEVATION AREA VOLUME CUMULATIVE

5188.25 570 245.25 581

(cf)

(sf)

5186.25 56 0

5187.25 273 164.5

5187.75 411 171

Equations: Weighted $E = Ea^*Aa + Eb^*Ab + Ec^*Ac + Ed$ Volume = Weighted E * Total Area Flow = Qa*Aa + Qb*Ab + Qc*Ac + Qd*Ad

POND-1 VOLUME CALCULATIONS ELEVATION VOLUME CUMULATIVE VOLUME (cf) (cf) 5191.64 36 0 5192.64 117 76.5 5193.64246181.55194.64495370.5 258 SWQV

629

VOLUME (cf)

165

336

TOTAL

SWQV

TOTAL

PON	D-2 VOLUM		TIONS	
ELEVATION (ft)	AREA (sf)	VOLUME (cf)	CUMULATIVE VOLUME (cf)	
5192	16	0	0	
5193	91	53.5	54	
5193.5	150	60.25	114	SWQV
5194	226	94	208	TOTAL

POND	-4 VOLUN		ATIONS	
ELEVATION (ft)	AREA (sf)	VOLUME (cf)	CUMULATIVE VOLUME (cf)	
5191	8	0	0	
5 1 92	5 <mark>1</mark>	29.5	30	
5193	128	89.5	119	SWQV
5194	232	180	299	TOTAL

	SWQV	SWQV
BASIN	REQUIRED	PROVIDED
	(CF)	(CF)
B1	165	258
B2	111	114
B3	334	336
B4	75	119
TOTAL	686	827

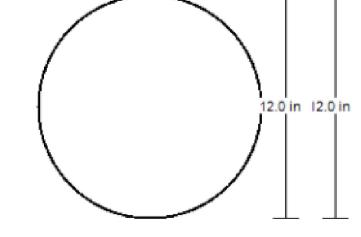
Historic Conditions

Basin Descriptions													100-Year, 6-Hour		
Tract	Tract	Area Are		Area	Treatme	ent A	Treat	ment B	Trea	tment C	Treat	ment D	Weighted E	Volume	Flow
		(sf)	(acres)	(sq miles)	%	(acres)	%	(acres)	%	(acres)	%	(acres)	(in)	(ac-ft)	cfs
H1	4-B	25,187	0.58	0.00090	100%	0.578	0%	0.000	0%	0.000	0%	0.000	0.550	0.027	0.89
Total		25,187	0.58	0.00090		0.578		0.000		0.000		0.000		0.027	0.890

Basin Descriptions											100-Year, 6-Hour				
Basin	Tract	Area	Area	Area	tme	nt A	Treatment B		Treatment C	•	Treatment I	D	Weighted E	Volume	Flow
ID		(sf)	(acres)	(sq miles)	%	(acres)	%	(acres)	%	(acres)	%	(acres)	(in)	(ac-ft)	cfs
B1	4-B	7,272	0.17	0.00026	0%	0.000	0%	0.000	35%	0.058	65%	0.109	1.789	0.025	0.61
B2	4-B	3,740	0.09	0.00013	0%	0.000	0%	0.000	15%	0.013	85%	0.073	2.047	0.015	0.34
B3	4-B	10,600	0.24	0.00038	0%	0.000	0%	0.000	10%	0.024	90%	0.219	2.111	0.043	0.97
B4	4-B	3,575	0.08	0.00013	0%	0.000	0%	0.000	40%	0.033	60%	0.049	1.724	0.012	0.30
Total		25,187	0.58	0.00090		0.000		0.000		0.128		0.450		0.094	2.222

Storr	Stormwater Quality Volume Equation									
Total Impervious Area =		Σ	Area in "Treatment D"							
Retainage depth = 0.42" Po	er DPM		0.42	IN						
Retention Volume =			0.42 x area D /12	CF						

12" STORM PIPE CAPACITY
Manning Formula
Discharge
0.012
0.020 ft/ft
12.0 in
12.0 in
5.46 cfs
\frown T T



Nyloplast 3130 Verona Avenue • Buford, GA 30518 (866) 888-8479 / (770) 932-2443 • Fax: (770) 932-2490 © Nyloplast Inlet Capacity Charts June 2012

Basin	Tract	Area	Area	Д
ID	ITACL	(sf)	(acres)	(sq
H1	4-B	25,187	0.58	0.0
Total		25,187	0.58	0.0
Propose	d Conditio	าร		
	ID H1 Total	IDIractH14-BTotal	ID (sf) H1 4-B 25,187	ID (sf) (acres) H1 4-B 25,187 0.58 Total 25,187 0.58 0.58

Basin Descriptions										100-Year, 6-Hour					
Basin	Tract	Area	Area	Area	tme	nt A	Treatment B		Treatment C		Treatment	D	Weighted E	Volume	Flow
ID		(sf)	(acres)	(sq miles)	%	(acres)	%	(acres)	%	(acres)	%	(acres)	(in)	(ac-ft)	cfs
B1	4-B	7,272	0.17	0.00026	0%	0.000	0%	0.000	35%	0.058	65%	0.109	1.789	0.025	0.61
B2	4-B	3,740	0.09	0.00013	0%	0.000	0%	0.000	15%	0.013	85%	0.073	2.047	0.015	0.34
B3	4-B	10,600	0.24	0.00038	0%	0.000	0%	0.000	10%	0.024	90%	0.219	2.111	0.043	0.97
B4	4-B	3,575	0.08	0.00013	0%	0.000	0%	0.000	40%	0.033	60%	0.049	1.724	0.012	0.30
Total		25,187	0.58	0.00090		0.000		0.000		0.128		0.450		0.094	2.222



LEGAL DESCRIPTION

TRACT D—1 PLAT OF TRS D—1, E—1 AMAFCA BLACK ARROYO CHANNEL ROW PARADISE HEIGHTS UNIT : CONT 7.6716 AC

City of Albuquerque Planning Department evelopment Review Services HYDROLOGY SECTION APPROVED 7/8/2024 HvdroTrans # A12D008B3 APPROVAL OF GRADING & DRAINAGE PLAN(S) SHALL EXPIRE TWO (2) YEARS AFTER THE APPROAL DATE BY THE CITY IF NO BUILDING PERMIT HAS BEEN PULLED ON THE DEVELOPMENT.

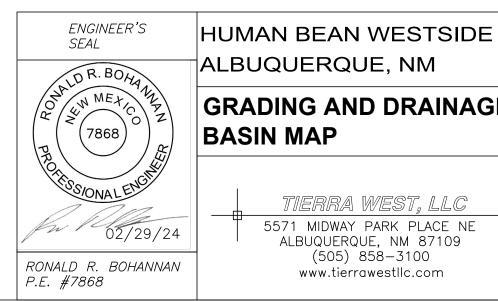
HYDROLOGY NOTES

THE PROJECT SITE IS LOCATED ON THE WEST SIDE OF ALBUQUERQUE, AND IS LOCATED ON THE NEAR THE SOUTHEAST CORNER OF GOLDCOURSE RD AND WESTSIDE BLVD. A DRIVE THRU COFFEE SHOP IS BEING PROPOSED TO BE CONSTRUCTED ON THE EASTERN TRACT (D-1-B) 1.0311 ACRE PROPERTY. IT WILL HAVE 1 ACCESS ENTRANCES TO A SHARED ACCESS ROAD ON THE WEST SIDE OF THE PROPERTY. THE SITE IS LOCATED WITHIN THE APPROVED OVERALL DRAINAGE REPORT AREA (HYDRONUM: A12D008B2)

THE SITE IS NOT LOCATED IN A 100YR FLOOD ZONE PER FEMA FIRM MAP SHOWN ON THIS PAGE.

BASIN DATA

THE INTENT OF THIS PLAN IS TO PROVIDE COMPLETE RETENTION OF THE DEVELOPED WATER QUALITY VOLUME FOR THE 100 YEAR, 24 HR. STORM EVENT FOR THE DEVELOPED PORTION OF LOT D-1-B (ROUGHLY 0.58 ACRES). THIS GRADING PLAN WILL CONTAIN THE RUN-OFF FROM ALL BUILDINGS PER THE APPROVED OVERALL DRAINAGE REPORT (HYDRONUM: A12D008B2). THE SITE HAS BEEN GRANTED 2.67 CFS PER ACRE OF DISCHARGE AS THE RUN-OFF VOLUMES HAVE BEEN ACCOUNTED FOR IN THE OVERALL MASTER DRAINAGE PLAN. THE BALANCE OF THE PROPERTY NOT ACCOUNTING THE SHARED ACCESS RD IS 0.93 ACRES. A MAX RATE OF 2.22 CFS WILL ENTER THE STORM DRAIN SYSTEM AND IS BELLOW THE ALLOWABLE FLOW RATE. IN THE FUTURE FURTHER STUDY CAN BE MADE TO IDENTIFY THE TRUE FLOW RATE REDUCTION DUE TO THE STORM WATER PONDS PROPOSED. THE EAST SIDE OF THE TRACT WILL REMAIN UNDEVELOPED UNTIL FURTHER NOTICE.



ALBUQUERQUE, NM **GRADING AND DRAINAGE BASIN MAP**

> TIERRA WEST, LLC 5571 MIDWAY PARK PLACE NE ALBUQUERQUE, NM 87109 (505) 858–3100 www.tierrawestllc.com

DRAWN BY ΒF DATE 02/26/2024

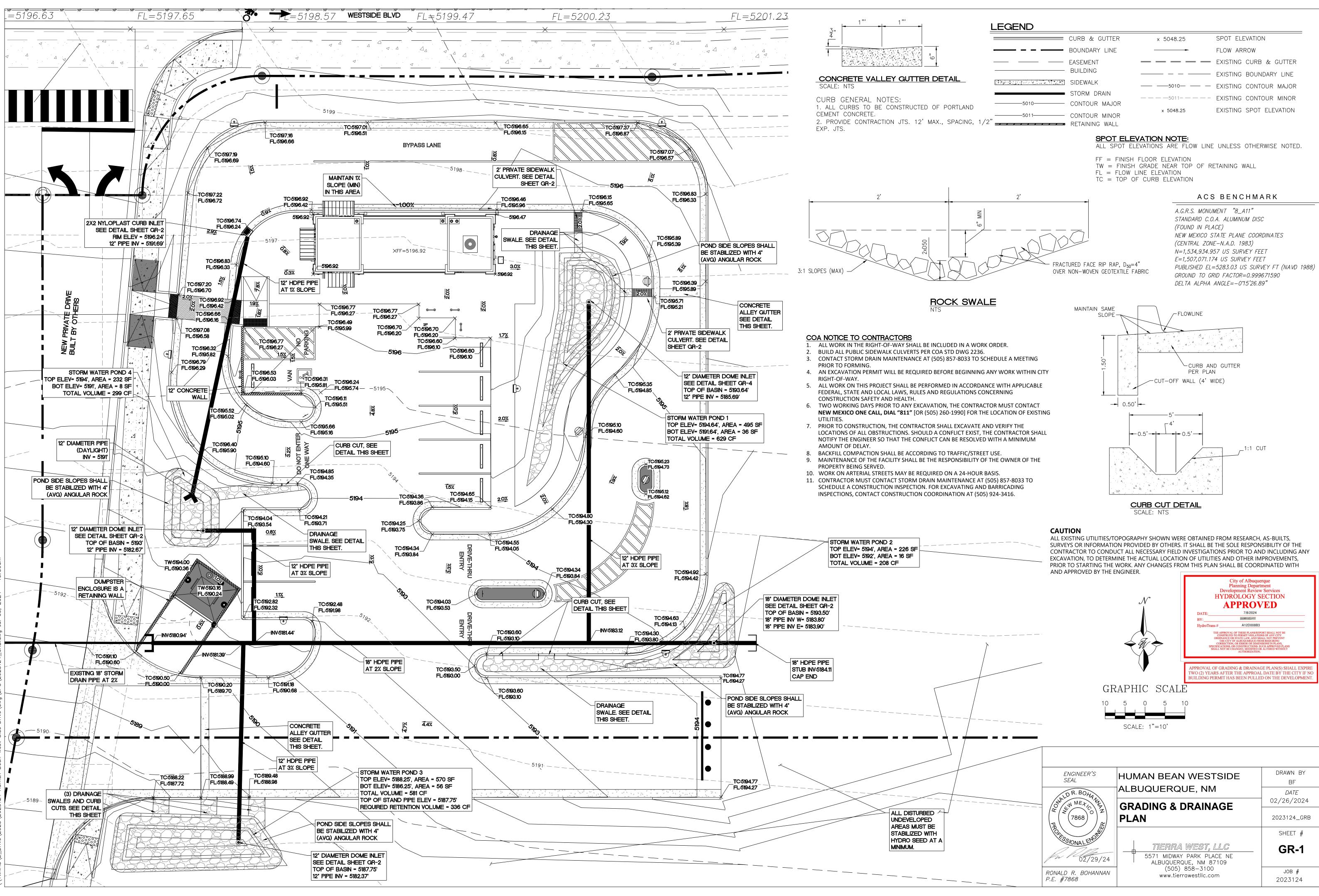
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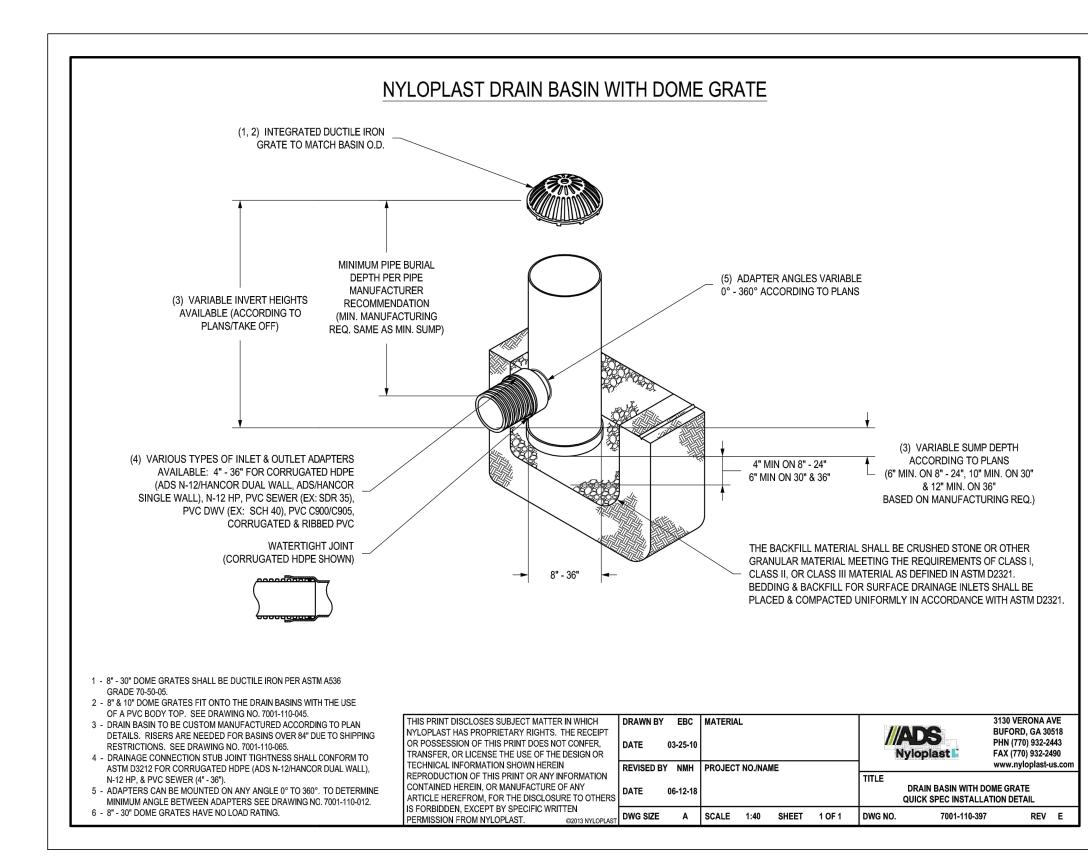
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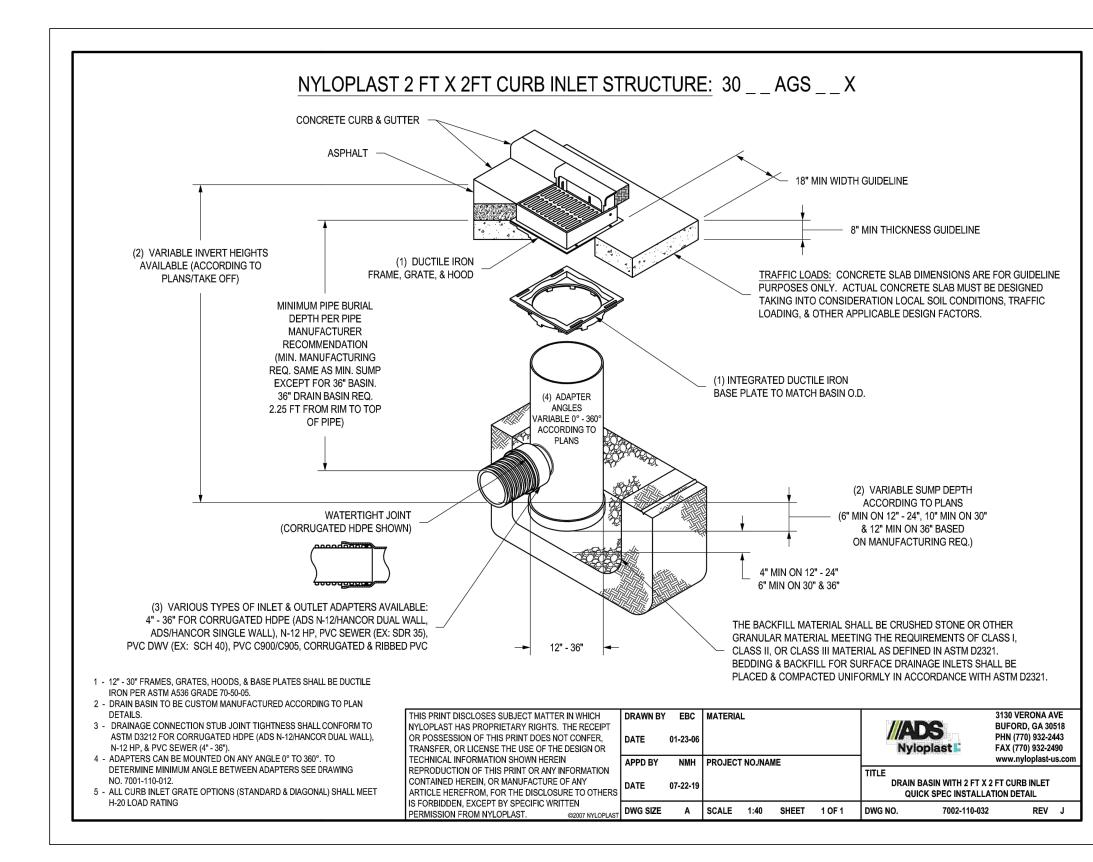
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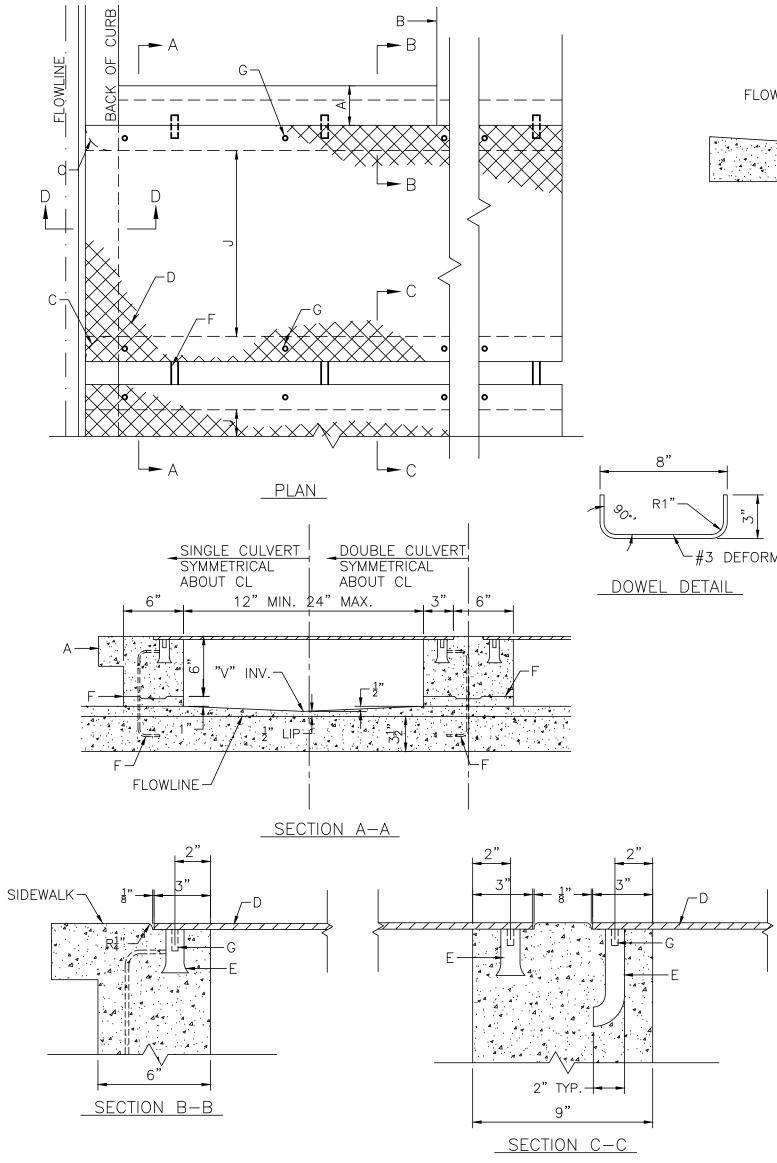
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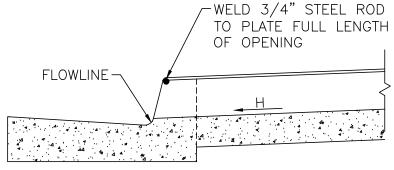












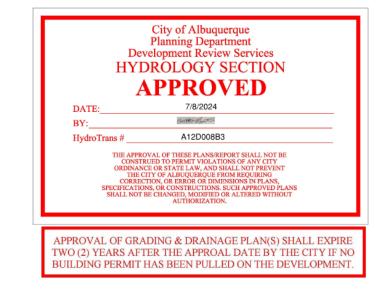
<u>SECTION D-D</u>

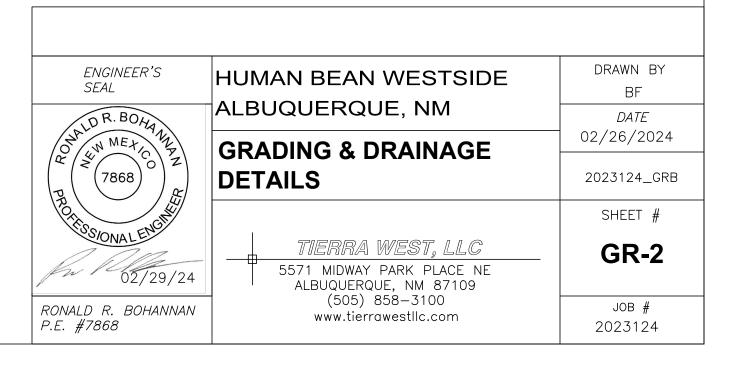
GENERAL NOTES:

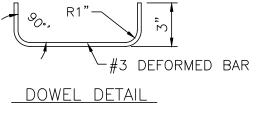
- 1. PLACING OF DRAIN THRU EX. SIDEWALK AND C&G REQUIRES THAT ENTIRE STONES BE REMOVED AND REPLACED AS DETAILED.
- 2. BOTTOM SLAB OF CULVERT SHALL BE POURED MONOLITHICALLY WITH NEW GUTTER
- 3. THE INVERT SHALL BE TROWELED TO PRODUCE A HARD POLISHED SURFACE OF MAX DENSITY AND SMOOTHNESS. INVERT SHALL BE V-SHAPED TO WITHIN 3" OF OUTLET, THEN WARPED TO PARALLEL FLOWLINE AT OUTLET.
- 4. ALL EXPOSED CONC. SURFACE SHALL MATCH GRADE. COLOR, FINISH AND SCORING OF ADJACENT CURB AND SIDEWALK
- 5. SIDEWALK REPLACED DURING CONSTRUCTION SHALL BE POURED MONOLITHICALLY WITH CULVERT WALLS.
- 6. IF ROD ANCHORS ARE USED, DRILL & TAP FOR F.H. MACHINE SCREW. ATTACH ANCHORS TO PLATE AND SECURE PLATE IN PLACE PRIOR TO POURING WALLS.
- 7. LENGTH OF EACH PLATE SHALL BE SUCH THAT THE WEIGHT WILL NOT EXCEED 300LDS. AND SHALL BE STRESS RELIEVED AFTER FABRICATION. CLEAN SURFACE OF PLATE AND FRAMING MEMBERS AND PAINT W/ONE SHOP COAT RED OXIDE AND TWO FINISH COATS ALUMINUM PAINT (AASHTO M 69)
- 8. THE CITY WILL NOT ASSUME RESPONSIBLITY FOR MAINTENANCE OF ANY SIDEWALK CULVERT INSTALLED BY OR FOR PRIVATE PROPERTY OWNERS

CONSTRUCTION NOTES:

- A. MATCH NEAREST CONTROL JOINT, INSTALL 1/2" EXPANSION JOINT
- B. EDGE OF SIDEWALK OR SETBACK
- C. 3" RADIUS
- D. 3/8" CHECKERED STEEL PLATE (PAINT PER NOTE 7, ABOVE)
- E. FOR SECURING PLATE USE 1"x5" S.S. ROD ANCHOR, "RED HEAD MULTI-SET II SRM-38 ANCHOR" OR APPROVED EQUAL. INSTALL PER MANUFACTOR'S INSTRUCTIONS AT MAX. 24" O.C. A MIN. OF 2 PER SIDE AND ONE WITHIN 6" OF EACH OTHER
- F. CONSTRUCTION JOINT IS OPTIONAL. IF USED SPACE DOWELS AT 18" O.C. MAX. 1-1/2" MIN. FROM FACE OF CONC.
- G. 3/8" 16x1 1/4" COUNTERSUNK, F.H. STAINLESS STEEL, MACHINE SCREW.
- H. SLOPE 1/4" PER FT. MIN.
- J. DRAIN WIDTH PER PLAN (12" MIN, 24" MAX.)







SIDEWALK CULVERT DETAIL