

# CITY OF ALBUQUERQUE



January 17, 2018

Thomas D. Johnson, PE  
TGC Engineering Inc.  
330 Louisiana Blvd NE  
Albuquerque, NM 87108

RE: **Sonic @ 8<sup>th</sup> and Bridge**  
**531 Bridge Blvd SW**  
**Request for Certificate of Occupancy – Permeant**  
**Hydrology Final Inspection - Approved**  
**Engineer's Stamp Date 8/18/17 (L14D025A)**  
**Certification Dated: 1/15/18**

Dear Mr. Johnston,

Based on the certification received 1/16/18, this submittal is approved for release of Certificate of Occupancy (Permanent) by Hydrology.

If you have any questions, you can contact me at 924-3695 or [dpeterson@cabq.gov](mailto:dpeterson@cabq.gov).

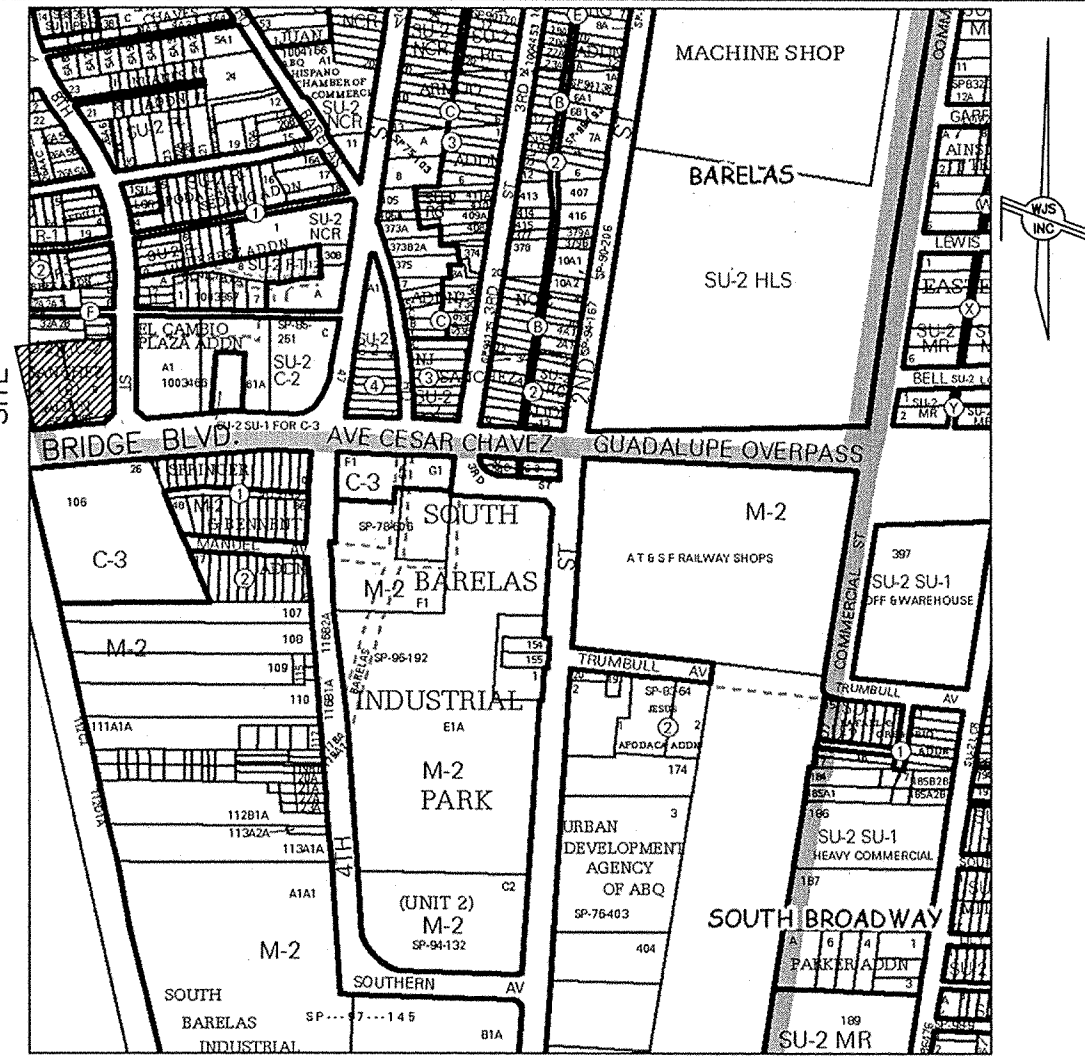
Sincerely,

Dana Peterson, P.E.  
Senior Engineer, Planning Dept.  
Development and Review Services

C: Email      Serna, Yvette M.; Fox, Debi; Tena, Victoria C.; Sandoval, Darlene M.



VICINITY MAP (L-14-Z)



LEGEND

- WM WATER METER
- PH FIRE HYDRANT
- LP LIGHT POLE
- EM ELECTRIC METER
- GM GAS METER
- TEL TELEPHONE RISER
- ELEC ELECTRIC VAULT
- KFMR ELECTRIC TRANSFORMER
- SPOT ELEVATION
- ELEVATIONS ARE TO ANNOTATED SPOTS
- EC EDGE OF CONCRETE
- TA TOP OF ASPHALT
- TC TOP OF CONCRETE
- FL FLOWLINE
- TW TOP OF WALL
- BURIED ELECTRIC LINE
- GAS LINE
- CHAIN LINK FENCE
- EXISTING CONTOURS @0.5 FT. INTERVALS
- INDEX CONTOURS @1 FT. INTERVALS
- PROPOSED CONTOURS @ 0.5' INTERVALS
- PROPOSED SPOT ELEVATION
- TC TOP OF CONCRETE
- FL FLOW LINE
- TW TOP OF WALL
- TA TOP OF ASPHALT

LEGAL DESCRIPTION

Lots lettered "A" and "B", in Block numbered Six (6), of the N.J. SANCHEZ ADDITION, as the same are shown and designated on the plat thereof filed in the office of the County Clerk of Bernalillo County, New Mexico on August 21 1987, in Volume C34, Folio 113.

FLOOD ZONE DESIGNATION

It is hereby certified that this property is not located within a 100-year flood hazard boundary in accordance with current HUD Federal Administration Flood Hazard Boundary Maps dated August 16, 2012. "Zone X (0.2% Flood Hazard) Panel 350002 0333 H.

BENCH MARK

Basis of elevations: ACS STATION "B-L13" NAVD 88 MSL ELEVATION: 4956.034  
TBM: #4 REBAR AT SOUTHWEST CORNER OF PROPERTY MSL: 4953.69

NOTICE TO CONTRACTOR

PROPOSED CONTOURS AND SPOT ELEVATIONS SHOWN ARE TO FINISHED SURFACES AND ARE PROVIDED FOR THE PURPOSE OF SHOWING FLOW ROUTING.

CONTRACTOR IS RESPONSIBLE FOR THE ABATEMENT OF SEDIMENT ONTO ADJOINING PUBLIC RIGHTS-OF-WAY DURING CONSTRUCTION AND FOR THE REMOVAL OF ANY SEDIMENT DEPOSITED IN PUBLIC RIGHT-OF-WAY.

CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS PRIOR TO ANY GRADING OR CONSTRUCTION.

SITE IS NOT SUBJECT TO NPDES SWPPP REQUIREMENTS (DISTURBED AREA < 1 ACRE).

DRAINAGE NOTES:

ROOF DRAINAGE CONVEYED TO PAVED PARKING LOT VIA DOWNSPOUTS (SEE ROOF PLAN)

ALL ELEVATIONS GIVEN ARE TO TOP OF PROPOSED GRADE

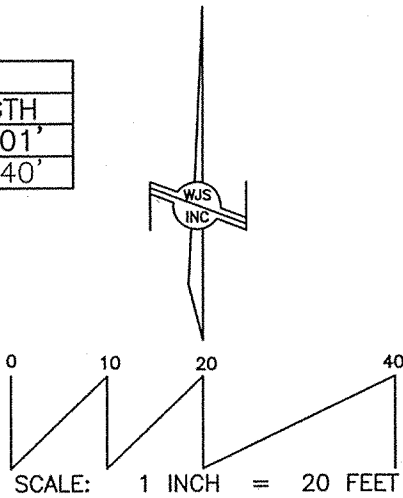
NO FREE DISCHARGE IS PERMITTED TO THE ALBUQUERQUE RIVERSIDE DRAIN

THE POND ON TRACTS 32-B AND 32-A-1-B, M.R.G.C.D. MAP 41, IS FOR THE BENEFIT OF LOTS A AND B, BLOCK 6, N.J. SANCHEZ ADDITION, AND IS TO BE MAINTAINED BY THE OWNERS OF LOTS A AND B.

KEYED NOTES

- LANDSCAPING AREA
- CONCRETE PAD TO BE REMOVED
- 6" STAND UP CURB, CONCRETE OR EQUAL
- 12" CURB DRAIN OPENING
- EDGE OF EXISTING CURB (MATCH)
- WATER BLOCK
- INSTALL OVERFLOW SPILLWAY (SEE DETAIL)
- ADA ACCESSIBLE RAMP
- EXISTING HEADER CURB AND CHAIN LINK FENCE TO REMAIN
- TRASH BIN ENCLOSURES - CENTER DRAIN TO DISCHARGE TO SANITARY SEWER

CURVE INFORMATION		
CURVE NO.	RADIUS	LENGTH
C1	2728.37'	317.01'
(C1)	2728.37'	230.40'



ACS MONUMENT "B-L13"  
x=1,518,508.493  
y=1,481,048.910  
Ground-to-grid:  
0.999683861  
Mapping Angle:  
-0°14'02.76"  
NMSP CENTRAL ZONE  
NAD 83  
MSL ELEVATION: 4956.034  
NAVD 88

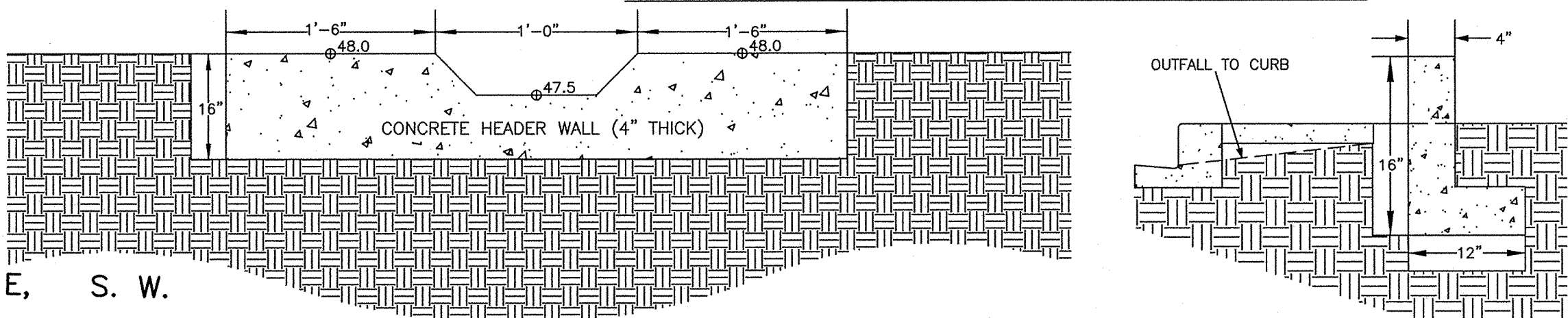
DRAINAGE CERTIFICATE

I, Thomas D. Johnston, NMPE 17158, of the firm of TGC ENGINEERING 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 August 18, 2017. The headwall for the emergency spillway has been replaced by rip-rap cobble. The record information edited onto the original design document has been obtained by Thomas D. Johnston, NMPS 14269, of the firm of WAYJOHN SURVEYING INC. I further certify that I have personally visited the project site on January 12, 2018 and have determined by visual inspection 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 final 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 this record document are advised to obtain independent verification of its accuracy before using it for any other purpose.

AS-BUILT 01-15-18  
THOMAS D. JOHNSTON, NMPE NO. 17158  
8/18/17

I, THOMAS D. JOHNSTON, NEW MEXICO REGISTERED PROFESSIONAL ENGINEER NO. 17158, DO HEREBY CERTIFY THAT I INSPECTED THIS SITE ON MAY 17, 2017, AND THAT, AS OF THAT DATE, THERE HAD BEEN NO RECENT ALTERATION OF GRADE OR EVIDENCE OF GRADING OPERATIONS ON THIS SITE.

OVERFLOW SPILLWAY (NO SCALE)



DRAINAGE CONCEPT

THE DRAINAGE CONCEPT FOR THIS SITE IS TO RETAIN THE FIRST FLUSH OF PRECIPITATION WITHIN THE LANDSCAPED AREAS. ADDITIONAL PRECIPITATION SHALL FREE DISCHARGE THE EXCESS RUNOFF FROM IMPERVIOUS SURFACES VIA THE DRIVEWAY OPENING TO THE WEST, AS IT HAS OCCURRED HISTORICALLY. SINCE THE PROPOSED DEVELOPMENT CREATES A SMALLER NET DISCHARGE, ONLY THE FIRST FLUSH WILL BE RETAINED.

ONSITE HYDROLOGY

DRAINAGE DATA

THIS SITE LIES WITHIN PRECIPITATION ZONE 2

Condition	Return Table 4 (Years)	Treatment Type	Area (sq. ft.)	Precip. (in.)	Runoff Table A-9 (cfs/ac)	Volume (cu. Ft.)	Rate (cfs)
EXISTING	100	A	13,182	0.53	1.56	582.2	0.47
		B	0	0.78	2.28	0.0	0.00
		C	19,902	1.13	3.14	1,874.1	1.43
EXISTING	10	D	37,238	2.12	4.70	6,578.7	4.02
		A	13,182	0.13	0.38	142.8	0.11
		B	0	0.28	0.95	0.0	0.00
DEVELOPED	100	C	19,902	0.52	1.71	862.4	0.78
		D	37,238	1.34	3.14	4,158.2	2.68
		A	10,550	0.53	1.56	466.0	0.38
DEVELOPED	10	B	24,113	0.78	2.28	1,567.3	1.26
		C	4,235	1.13	3.14	398.8	0.31
		D	31,424	2.12	4.70	5,551.6	3.39
DEVELOPED	10	A	10,550	0.13	0.38	114.3	0.09
		B	24,113	0.28	0.95	562.6	0.53
		C	4,235	0.52	1.71	183.5	0.17
TOTAL (EXT)	100					9,035.0	5.9
						5,163.5	3.6
						7,983.7	5.3
TOTAL (DEV)	100					4,369.5	3.0

FLOW RATE INCREASES (100-YR) = -0.6 CFS  
FLOW RATE INCREASES (10-YR) = -0.5 CFS  
6-HOUR RUNOFF INCREASE (100-YR) = -1,051.4 CU. FT.  
6-HOUR RUNOFF INCREASE (10-YR) = -794.0 CU. FT.

FIRST FLUSH INFORMATION

THE FIRST FLUSH PRECIPITATION USED IS 0.34" (0.03") OF PRECIPITATION FOR ANY STORM. FIRST FLUSH RETENTION POND VOLUME = (0.03")xIMPERVIOUS SURFACE IN sf. FIRST FLUSH VOLUME = 943 cf. THE NORTHWEST PONDING AREA WILL CARRY THE FIRST FLUSH. PONDING VOLUME = 4370 cf.

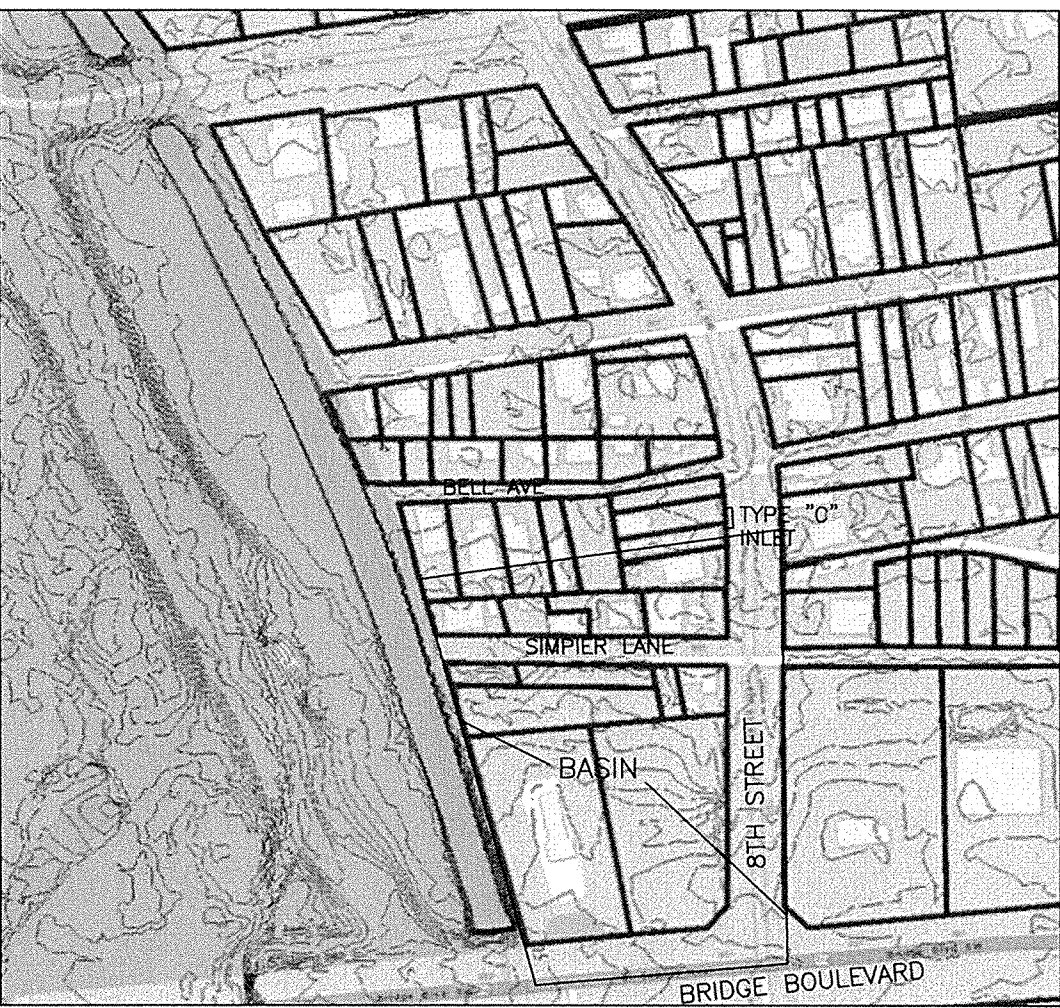
OFFSITE BASIN

OFFSITE BASIN CONTAINS 3.3 ACRES, ALL OF WHICH DRAIN INTO A DOUBLE "C" INLET LOCATED ON THE WEST CURB LINE OF EIGHTH STREET, SW, BETWEEN SIMPIER LANE AND BELL AVENUE SW. THE STORM SEWER PIPE IS 15" DIAMETER, WITH 0.4% SLOPE. CURRENT DISCHARGE CONDITIONS FOR THE BASIN EXCEED CAPACITY OF THE EXISTING STORM DRAIN PIPE. SINCE THE SITE HAS A NET REDUCTION IN DISCHARGE, NO ADDITIONAL RETENTION IS REQUIRED.

DRAINAGE DATA - 3.3 ACRE OFFSITE BASIN (10% A, 15% B, 15% C, 60% D)

Condition	Return Table 4 (Years)	Treatment Type	Area (sq. ft.)	Precip. (in.)	Runoff Table A-9 (cfs/ac)	Volume (cu. Ft.)	Rate (cfs)
EXISTING	100	A	14,734	0.53	1.56	650.8	0.53
		B	21,562	0.78	2.28	1,401.5	1.13
		C	21,562	1.13	3.14	2,038.9	1.56
EXISTING	10	D	86,248	2.12	4.70	15,237.1	9.31
		A	14,734	0.13	0.38	158.6	0.13
		B	21,562	0.28	0.95	503.1	0.47
TOTAL (EXT)	100	C	21,562	0.52	1.71	934.4	0.85
		D	86,248	1.34	3.14	9,631.0	6.22
TOTAL (DEV)	10					19,328.3	12.5
						11,228.1	7.7

OFFSITE BASIN MAP



ORIFICE EQUATION FOR DOUBLE "C" INLET: Q = A\*(Cv\*(2gh))  
A=2708 sq.in. (18.806 sf); Cv: 0.6  
INVERT OF DROP INLET (BOTTOM OF PIPE TO BOTTOM OF GRATE: 1.08 FEET  
Q CAPACITY: 94.1 cfs > 12.5 cfs FOR DIRECTED FLOWS TO INLET  
NO BACKWATER CONDITION

DRAINAGE AND GRADING PLAN

SONIC 8TH AND BRIDGE

**TGC ENGINEERING, INC.** (505)266-7256  
330 LOUISIANA BLVD. NE  
ALBUQUERQUE, NM 87108  
Fax: (505) 255-2887

SHEET NO. C1

DESIGN DATE:  
8/18/2017

REVISION:  
2

CITY PROJECT NO:  
L14/D025A





# 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  
☐ 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: \_\_\_\_\_