

### LEGEND

- B. BOLLARD
- EM<sub>6</sub> ELECTRIC METER
- PP. POWER POLE
- LS. LIGHT STANDARD
- WM. WATER METER
- WV. WATER VALVE
- ICV. IRRIGATION CONTROL VALVE
- FH. FIRE HYDRANT
- CL. CLEANOUT
- MH. MANHOLE
- TSC. TRAFFIC SIGNAL CONTROL
- TSP. TRAFFIC SIGNAL POLE
- TELE. TELEPHONE BOX
- FL. FLOOD LIGHT
- FP. FLAG POLE
- SIGN. TRAFFIC SIGN
- PROPERTY LINE
- x- FENCE
- - - EXISTING DRAINAGE DIVIDE
- 571- EXISTING CONTOUR
- EXISTING DRAINAGE FLOW DIRECTION
- █ PROPOSED 100-YR FLOODPLAIN LIMITS
- DA A EXISTING DRAINAGE AREA ID
- 1.09 AREA IN ACRES
- 8.71 Q100 IN CUBIC FEET PER SECOND

### EXISTING DRAINAGE CRITERIA:

$$Q=(C)(A)$$

EXISTING DRAINAGE AREA TABLE						
DRAINAGE AREA ID	AREA (acres)	C	T <sub>c</sub> (minutes)	STORM FREQUENCY	I <sub>100</sub> (inch/hour)	Q <sub>100</sub> (cfs)
B-1	5.56	N/A	N/A	100	N/A	23.3
B-2	15.44	0.90	10	100	9.80	136.2
B-3	3.57	0.90	10	100	9.80	31.5
B-3.1	0.53	0.90	10	100	9.80	4.7
B-3.3	2.57	0.90	10	100	9.80	22.7
B-3.4	0.70	0.90	10	100	9.80	6.2
B-4	1.80	0.90	10	100	9.80	15.9
B-4.1	0.55	0.90	10	100	9.80	4.9
B-4.3	0.52	0.90	10	100	9.80	4.6
A-12	2.63	0.90	10	100	9.80	23.2
A-13.4	0.56	0.90	10	100	9.80	4.9
A-14	0.41	0.90	10	100	9.80	3.6

SEE NOTE 2

SEE NOTE 3

- NOTES:**
- DRAINAGE DIVIDES TAKEN FROM DRAINAGE AREA MAP PREPARED FOR "JUSTIN ROAD FROM INDUSTRIAL BOULEVARD TO JOHN KING BOULEVARD, ROCKWALL COUNTY, TEXAS", PREPARED BY WEIR & ASSOCIATES, INC., DATED JAN. 01, 2014.
  - DRAINAGE AREA B-1 IS DETAINED THROUGH ORIFICE OPENINGS IN BOTTOM OF SCREEN WALL. Q<sub>100</sub> SHOWN IS THE DETAINED RUNOFF VALUE AND WAS OBTAINED FROM THE DRAINAGE AREA MAP PREPARED FOR "JUSTIN ROAD FROM INDUSTRIAL BOULEVARD TO JOHN KING BOULEVARD, ROCKWALL COUNTY, TEXAS", PREPARED BY WEIR & ASSOCIATES, INC., DATED JAN. 01, 2014.
  - THE SUM OF B-2A, B-2B AND B-2C EQUAL B-2 AS SHOWN ON DRAINAGE AREA MAP PREPARED FOR "JUSTIN ROAD FROM INDUSTRIAL BOULEVARD TO JOHN KING BOULEVARD, ROCKWALL COUNTY, TEXAS", PREPARED BY WEIR & ASSOCIATES, INC., DATED JAN. 01, 2014. THE PROPOSED 6'X4' BOX IN JUSTIN ROAD WAS DESIGNED FOR ALL OF B-2; HOWEVER, BASED ON SURVEYED CONDITIONS A PORTION OF B-2 DRAINS TO AN EXISTING 24" STORM DRAIN THAT DRAINS NORTH TOWARDS THE RAILROAD. THE PROPOSED SITE DESIGN UTILIZES THIS 24" SYSTEM AND THE PROPOSED RUNOFF DOES NOT EXCEED THE EXISTING RUNOFF CONDITIONS TO THIS SYSTEM (REFER TO NOTE 4, THIS SHEET).
  - EXISTING FLOW TO EX. 24" HEADWALL NORTH OF SITE IS 30.05 CFS:  
 B-2A (EXISTING CONDITION @ C=0.9 (PAVED), T<sub>c</sub>=10 MIN, I=9.8 IN/HR) = 24.43 CFS  
 + B-2B (EXISTING CONDITION @ C=0.3 (GRASS FIELD), T<sub>c</sub>=20 MIN, I=8.40 IN/HR) = 5.62 CFS  
 = 30.05 CFS

PROPOSED FLOW TO EX. 24" HEADWALL NORTH OF SITE IS 6.88 CFS (REF: DA 2, SHEET C3.2).  
 THE PROPOSED FLOW TO THE EXISTING 24" HEADWALL NORTH OF THE SITE IS LESS THAN THE EXISTING FLOW TO SAID HEADWALL.

NOTE: ALL RESPONSIBILITY FOR ADEQUACY OF DESIGN REMAINS WITH THE DESIGN ENGINEER. THE CITY OF ROCKWALL, IN REVIEWING AND RELEASING PLANS FOR CONSTRUCTION, ASSUMES NO RESPONSIBILITY FOR ADEQUACY OR ACCURACY OF DESIGN.

### RECORD DRAWING

THE SIGNED AND SEALED CONSTRUCTION DOCUMENT HAS BEEN REVISED TO REFLECT CONSTRUCTION RECORDS MAINTAINED AND PROVIDED BY THE CONTRACTOR FOR THIS PROJECT. THE INFORMATION SHOWN ON THIS RECORD DRAWING, WHICH WAS PROVIDED BY THE CONTRACTOR, OR OTHERS NOT ASSOCIATED WITH THE DESIGN ENGINEER, CANNOT BE VERIFIED FOR ACCURACY OR COMPLETENESS. PACHECO KOCH SHALL ASSUME NO LIABILITY FOR ANY CHANGES MADE DURING CONSTRUCTION THAT WERE NOT SPECIFICALLY APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION. THE SEALED CONSTRUCTION DRAWINGS ARE ON FILE AT THE OFFICES OF PACHECO KOCH.

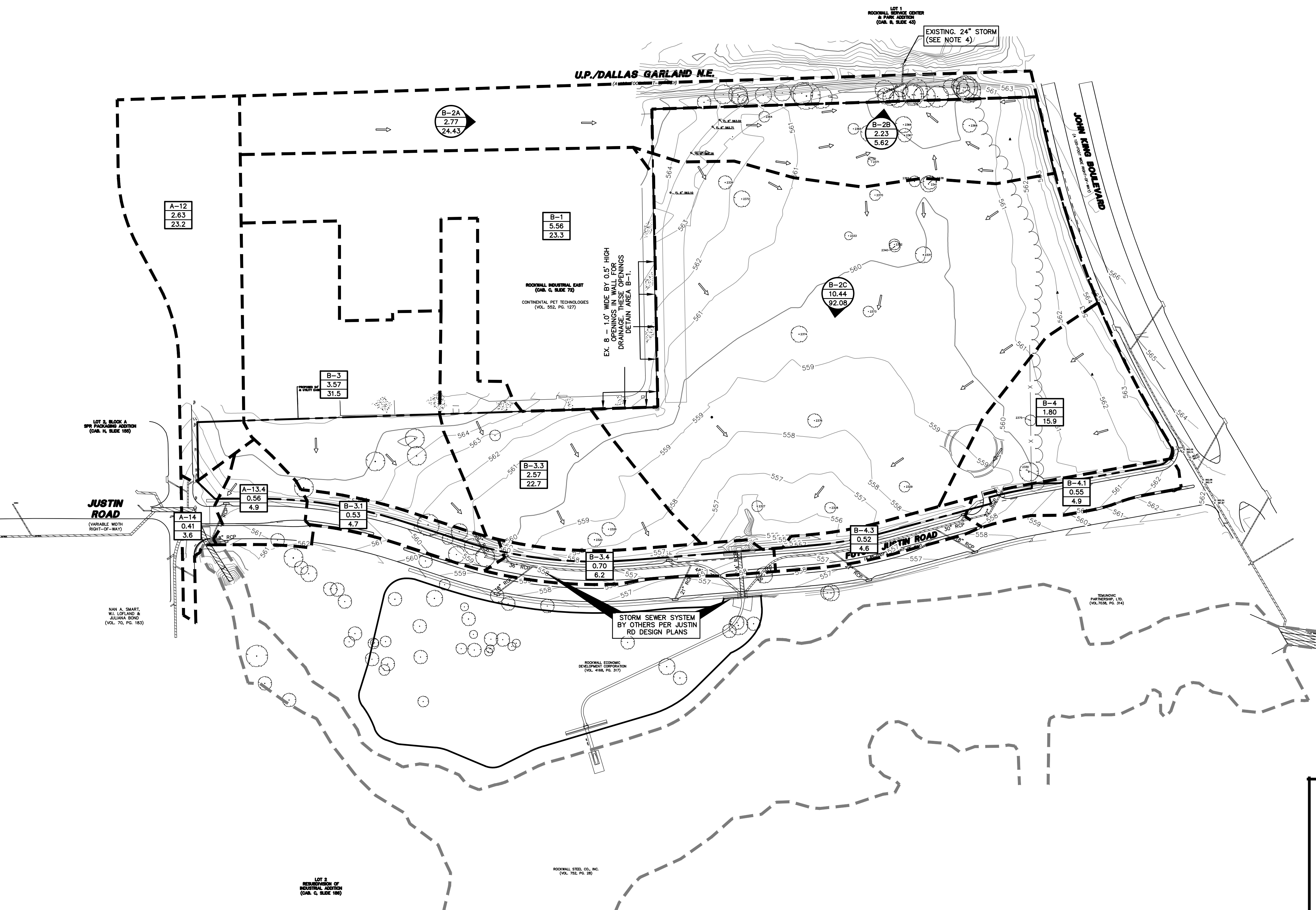
ATTESTED BY: *Steven Heilbrun*  
 SIGNATURE: \_\_\_\_\_  
 ENGINEER OF RECORD: STEVEN HEILBRUN, P.E.  
 CONTRACTOR: BOB MOORE CONSTRUCTION, INC.  
 DATE REVISED: 09/29/2016

NO.	DATE	REVISION
1	09/29/2016	RECORD DRAWINGS

**Pacheco Koch**  
 7557 RAMBLER ROAD, SUITE 1400  
 DALLAS, TX 75231 972.235.3031  
 TX REG. ENGINEERING FIRM F-14439  
 TX REG. SURVEYING FIRM LS-101938-05

**EXISTING DRAINAGE AREA MAP**  
**CHANNELL BTS**  
**NWC JUSTIN RD. & JOHN KING BLVD.**  
**CHANNELL SUBDIVISION LOT 2, BLOCK A**  
**CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS**

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
SMH/MG	MG	NOV 2014	1"=100'			<b>C3.1</b>



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CHANNELL BTS-LOT 2 BLOCK A CHANNELL SUBDIVISION