CITY OF CORPUS CHRISTI ENGINEERING SERVICES CHANGE ORDER

CHANGE ORDER NO:

Long Meadow Dr. (Hunt Dr. to St. Andrews Dr.)(Bond 2018)(RFB 4117)

PROJECT:

CONTRACTOR:	ONTRACTOR: JE Construction Services, LLC.		CHANGE ORDER DATE:				drafted 10/11/22		
ENGINEER: Freese and Nichols			PROJECT NUMBER:				18030A		
	PROJECT MANAGER: Ryan Hedrick			ONTRA		150 CD's			
OPERATING DEPT.:	Streets - Public Works								
Make the following addi	tions, modifications or deletions to the work described in the Contract Documents:								
ADDITIONS		Quantity	Unit	ι	nit Price		Total		
Long Meadow Failure a	t Saratoga								
PART A - GENERAL									
A1 Mobilization	(Max 5% Part A)	1	LS	\$	1,248.44	\$	1,248.44		
A2 Bonds and In	surance (Max 2%)	1	AL	\$	1,668.75	\$	1,668.75		
A6 Traffic Contr	ol Plan by Professional Engineer	1	EA	\$	2,400.00	\$	2,400.00		
A7 Traffic Contro	ol Mobilization/Adjustments	1	LS	\$	7,400.00	\$	7,400.00		
A8 Traffic Contr	ol Items (Signs, Barricades, Channelizing Devices, LPCBs, etc.)	1	MO	\$	1,000.00	\$	1,000.00		
A11 Temporary Tr	raffic Signalization (Timber Pole Span Wire for all Traffic Control Phases)	1	EA	\$	12,500.00	\$	12,500.00		
					Part A:	\$	26,217.19		
PART B - STREET IMI	PROVEMENTS								
B1 Mobilization	(Max 5% Part B)	1	LS	\$	6,757.52	\$	6,757.52		
B2 Street Excava	tion	494	SY	\$	21.00	\$	10,374.00		
B3 12" Compacto	ed Subgrade with top 8" Lime Stabilized	494	SY	\$	31.00	\$	15,314.00		
B4 Lime		6	TON	\$	300.00	\$	1,800.00		
B5 9" Crushed L	mestone Flexible Base (Type A, Gr. 1-2)	494	SY	\$	43.00	\$	21,242.00		
B6 Prime Coat (0	0.15 GAL/SY)	200	GAL	\$	11.00	\$	2,200.00		
B7 One Course S	urface Treatment Underseal (Asphalt Binder and Aggregate)	494	SY	\$	8.00	\$	3,952.00		
B8 3" HMACP (Гуре D) Surface Course	494	SY	\$	34.00	\$	16,796.00		
B9 6" Concrete I	Driveway	360	SF	\$	15.00	\$	5,400.00		
B15 REFL PAV N	IRK TY C HEAT APPLIED PREFAB PREFORMED THERMOPLASTIC (W)(ARROV	3	EA	\$	400.00	\$	1,200.00		
B16 REFL PAV N	IRK TY C HEAT APPLIED PREFAB PREFORMED THERMOPLASTIC (W)(WORD)	1	EA	\$	500.00	\$	500.00		
B18 REFL PAV N	MRK TY I (Y) 4"(SLD)(DBL)(090MIL)	320	LF	\$	2.00	\$	640.00		
B19 REFL PAV N	MRK TY I (W) 8"(SLD)(090MIL)	130	LF	\$	2.00	\$	260.00		
B21 TY II-C Raise	ed Pavement Marker (Reflectorized)	7	EA	\$	8.00	\$	56.00		
B22 TY II-A-A Ra	ised Pavement Marker (Reflectorized)	34	EA	\$	8.00	\$	272.00		
B29 - N1 Demo Drivev	vay	360	SF	\$	5.00	\$	1,800.00		
B29 - N2 Demo Curb a	nd Gutter	75	LF	\$	8.00	\$	600.00		
					Part B:	\$	89,163.52		
PART D - STORM WA	FER DRAINAGE IMPROVEMENTS								
D11 6" Concrete C	Curb and Gutter	75	LF	\$	29.00	\$	2,175.00		
D - N1 3" Mill and C	verlay	857.11	SY	\$	59.00	\$	50,569.49		
					Part D:	\$	52,744.49		
Additional contract time of	ue to: Scope of Work	28	DAY	\$	-	\$	-		
				Add	itions Total:	\$	168,125.20		
-									
DELETIONS									
none									
1 n/a		0	LS	\$	-	\$	-		
				Dele	etions Total:	\$	-		
Additional Calendar Days requested 28			OTAL OF THIS C	CHANG	E ORDER:	\$	168,125.20		
									
Why was this Change no	cessary: nent requested that a section of Long Meadow Drive between Saratoga Blyd and Middlecc	eff Cirolo k	ddad to the mr-i	t dua t-	significant	od foil	uras. The new		

The Public Works Department requested that a section of Long Meadow Drive between Saratoga Blvd and Middlecoff Circle be added to the project due to significant road failures. The new scope will require an additional 28 contract days to complete.

This Contract Modification represents Final Adjustment for any and all amounts due or to become due to Contractor for changes referred to herein. Contractor further releases all other claims, if any (except those claims previously submitted in writing in strict accordance with the Contract), for additional compensation under this Contract, including without limitation any rights Contractor may have for additional compensation arising out of delays or disruption of Contractor's schedule as may have arisen prior to the date of this Contract Modification. Unless otherwise expressly provided herein, the time of completion and all other terms and conditions of the Contract remain unchanged.

CITY OF CORPUS CHRISTI ENGINEERING SERVICES CHANGE ORDER

PROJECT:	Long Meadow Dr. (Hunt Dr. to St. A	andrews Dr.)(Bo	nd 2018)(RFB 4117)		CHANGE ORDER NO):	[
CONTRACTOR:	JE Construction Services, LLC.	,	,,		CHANGE ORDER DATE		10/11/22
ENGINEER:	Freese and Nichols				PROJECT NUMBER		30A
PROJECT MANAGER:	Ryan Hedrick				ORIGINAL CONTRACT TIME		CD's
PERATING DEPT.:	Streets - Public Works				ORIGINAL CONTRACT TIME	. 150	CDs
DI EKATING DELT	Streets - 1 ubile Works						
Original Contrac	t Amount				\$	1,825,283.00	
Original Contrac					\$		
	ge Order Contingency Amount (25%)	41. 603			·	456,320.75	
Remaining Avail	able Contingency Amount (including	this CO)			\$	288,195.55	
Previously Appre	oved Change Order Amount				\$	_	
Proposed Change					\$	168,125.20	
Revised Contrac					\$	1,993,408.20	
					<u></u>	9.21%	
Percent of Total	Change Orders (including this CO)					9.21%	
Original Contrac	t Time for Substantial Completion					150	CD's
Notice to Procee						10/3/2022	020
	tial Completion Date					3/2/2023	
31.5	compressor zane						
Previously Appro	oved Change Order Time					0	CD's
Additional Time	on This Change Order					28	CD's
Revised Contrac	t Time for Substantial Completion					178	CD's
Revised Substan	tial Completion Date					3/30/2023	
REVIEWED BY:	_	Initial	Date	REQUESTED BY:	JE Construction Services, LLC.		
Eng. Proj. Specialist	Liza Steele	LS					
Constr. Supervisor	Amie Wojtasczyk	ADW					
Constr. Inspector	Geoffrey Mayer	G. M.					
Constr. Sr. Project Mgr.	Ruben Barrera	R. B.			Grant Dietze		Date
					Vice President		
			CITY OF CORP	US CHRISTI			
					SECTION/FUND	SECTIO	N/FUND
				FUND:	XXXX-XXX	XXXX-XXX	
				ACCOUNT:	XXXXXX	XXXXXX	
RECOMMENDED BY:	:			ACTIVITY:	xxxxxx-xx-xxxx	XXXXXX-XX-X	xxx-xxx
	Brett Van Hazel		Date	AMOUNT:	\$0.00	\$0.00	
	Construction Engineer						
APPROVED AS TO				APPROVED BY:			n/a
FORM	Kent McIlyar		Date	(\$50,000.00 - \$99,999.99)	0		Date
	Assistant City Attorney				Assistant City Manager		
							initials
RECOMMENDED BY:				Authorized		Legistrar No.	
	Kamil Taras		Date			0 35	
	Management and Budget Designee			By Council		_Council Date	
APPROVED BY:				ATTEST:			
	Jeff H. Edmonds		Date		Rebecca Huerta		Date
	Director of Engineering Services			(≥ \$100,000.00 or ≥ 25%)			



JE Construction Services

7505 Up River Rd. Corpus Christi, TX 78409

Change Request 01 Rev 01

TO: City of Corpus Christi

PROJECT: Long Meadow Drive

Please see pricing below reflecting the quantities necessary to perform full depth repair of the right lane on Long Meadow beginning at the fence line of American Bank going towards Saratoga Blvd for roughly 320 LF. Full depth repair will also include full width of the road at the intersection of Long Meadow and Saratoga just before the cross walk striping and not extending past the American Bank driveway on the left lane. There is one pot hole on the left lane that will also receive full depth repair. The left lane will receive a 3" mill and overlay roughly 300 LF from the first American Bank driveway to just past the fence line.

Upon request from the city, original contract items have been applied to capture the required scopes of work pricing with additional change order contract items necessary to complete the scope of work. There will be phasing for each side of the road to allow one way traffic from Saratoga through Long Meadow. Please advise.

Labor, Material, Insurances, Bonds, Overhead and Profit to provide the following:

- Over run of quantities in the original contract to perform the street reconstruction on the south side of Long Meadow Dr.

	Long Meodow Saratoga towards Hunt Dr. Rev 1					
Contract Item	Description	Unit	Qty	Unit Price	Tota	I
A01	Mobiliztion 5% Part A	LS	1	\$ 1,748.59	\$	1,748.59
A02	Bonds and Insurance	LS	1	\$ 2,071.80	\$	2,071.80
A06	Traffic Control Plan by Professional Engineer	EA	1	\$ 12,000.00	\$	12,000.00
A07	Traffic Control Mobilization/Adjustments	LS	1	\$ 7,400.00	\$	7,400.00
A08	Traffic Control Items (Signs Barricades Channeli	MOS	1	\$ 1,000.00	\$	1,000.00
A11	Temporary Traffic Signalization	EA	1	\$ 12,500.00	\$	12,500.00
B01	Mobiliztion 5% Part B	LS	1	\$ 8,200.40	\$	8,200.40
B02	Street Excavation	SY	660	\$ 21.00	\$	13,860.00
B03	12" Compacted Subgrade with top 8" Lime Stabilized	SY	660	\$ 31.00	\$	20,460.00
B04	Lime	TON	12	\$ 300.00	\$	3,600.00
B05	9" Crushed Limestone Flexible Base (Type A Gr. 1-	SY	660	\$ 43.00	\$	28,380.00
B06	Prime Coat (0.15 GAL/SY)	GAL	200	\$ 11.00	\$	2,200.00
B07	One Course Surface Treatment Underseal (Asphalt Bi	SY	660	\$ 8.00	\$	5,280.00
B08	3" HMACP (Type D) Surface Course	SY	1280	\$ 34.00	\$	43,520.00
B09	6" Concrete Driveway	SF	360	\$ 15.00	\$	5,400.00
B15	REFL PAV MRK TY C HEAT APPLIED PREFAB PREFORMED THERMOPLASTIC (W)(ARROW)(125 MIL)	EA	3	\$ 400.00	\$	1,200.00
B16	REFL PAV MRK TY C HEAT APPLIED PREFAB PREFORMED THERMOPLASTIC (W)(WORD)(125 MIL)	EA	1	\$ 500.00	\$	500.00
B18	REFL PAV MRK TY I (Y) 4"(SLD)(DBL)(090MIL)	LF	320	\$ 2.00	\$	640.00
B19	REFL PAV MRK TY I (W) 8"(SLD)(090MIL)	LF	130	\$ 2.00	\$	260.00
B21	TY I-C Raised Pavement Marker (Reflectorized)	EA	7	\$ 8.00	\$	56.00
B22	TY II-A-A Raised Pavement Marker (Reflectorized)	EA	34	\$ 8.00	\$	272.00
CO 1.1	Demo Driveway	SF	360	\$ 5.00	\$	1,800.00
CO1.2	3" Mill And Overlay	SY	620	\$ 59.00	\$	36,580.00
Total					\$	207,180.20

Exclusions: Common fill/topsoil, anchor bolts, utilities and conduit/piping; Windstorm Engineering/Certification; TxDOT Traffic Control; Fencing (temp and permanent), Materials Testing, Permits, Repair/relocation to unknown underground utilities; Disposal of any contaminated materials; any work not specifically stated above.

JE Construction Services				
Date:				
Print:				
Signature:				

JE Construction Services

Project Name: Long Meadow Drive

Project Number: 18030A	
Submittal Name: Traffic Control Plan	
Specification Section: 025802	
Date: 9/7/2022	
Γο: Geoffry Mayer, City of Corpus Christi	
From: John M Gonzalez JE Construction	APPROVED AS SUBMITTED
Contractor's Stamp:	☐ APPROVED AS NOTED ☐ REVISE AND RESUBBIT
	THIS STAMP CERTIFIES THAT J.E. CONSTRUCTION SERVICES HAS REVIEWED THIS SUBMITTAL FOR GENERAL CONFORMANCE WITH THE CONTRACT DOCUMENTS ONLY. IT NEITHER OVERRIDES NOR SUPERCEDES ANY OF THE REQUIREMENTS AS SET FORTH BY THE DRAWINGS OR SPECIFICATIONS.
	JE CONSTRUCTION SERVICES JMG OATE 9/7/22 JOB # 18030A SUBMITTAL TCP
Arch/Engineer Stamp:	

7505 Up River Road Corpus Christi, Texas 78409 Off: 361.289.2901

Fax: 361.289.2904

TYPE III BARRICADES (3)

CONTRACTOR SHALL PROVIDE TEMPORARY TRAFFIC SIGNAL

MEASURES/DESIGN AT SARATOGA/LONG MEADOW. REFER TO TRAFFIC SIGNAL

SHEETS BY OTHERS. SEE NOTE 16.

FROM INTERSECTION)

PCMS *R* (LOCATE APPROX. 300'

SIGN SPACING (TYPICAL):

LONG MEADOW DR. = 120' MIN.

ST. ANDREWS DR. = 120' MIN. SARATOGA BLVD. = 320' MIN.

(SOME SPACINGS MAY NOT BE SHOWN TO SCALE)

MONTECITA DR. = 120' MIN.

TRAFFIC CONTROL PLAN- PHASE 1 NARRATIVE/NOTES

- PHASE 1 CONSTRUCTION LIMITS SHALL BE LONG MEADOW DR. FROM SARATOGA BLVD. TO ST. ANDREWS DR. (STA. 0+67.45 TO STA. 12+61.01), INCLUDING THE WATER LINE TIE—IN AT SARATOGA BLVD.
- PRORT TO BEDINNING PHASE I CONSTRUCTION, THE CONTRACTOR SHALL INSTALL ALL PHASE I TRAFFIC CONTROL DEVICES AND SIGNS REQUIRED PER INSTALLA ALL PHASE I TRAFFIC CONTROL DEVICES AND SIGNS REQUIRED PER INSTRUCTION OF THE PER INSTALLA ALL PHASE I TRAFFIC CONTROL DEVICES AND SIGNS REQUIRED PER INSTALLA ALL PHASE INSTALLA A
- WITHIN THE PHEET I LIBITS. THE CONTRACTOR SHALL CONSTRUCT FULL SERTH PROBLEMS, ALL INDESCRIBED UTLIFES, STORM WHETE IMPROVEMENTS (INCLUDING ANY TEMPORARY MEASURES REQUIRED TO FACILITATE PHASE I CONSTRUCTION), CURB, SIDEMAN, ROWEWAYS, AND ADA IMPROVEMENTS, PER THE PLANS, FROM THE LEFT R.O.W. LINE TO THE LONG MECODY DR. CENTERLINE.
- TWO (2) PORTABLE CHANGEABLE MESSAGE BOARDS ARE REQUIRED FOR THIS IND (2) PORTINBLE UNINCIPABLE MESSARIE BOUNDS ARE REQUIRED FOR THIS PHASE. THE FOUR'S SHALL BE LOCATED AS SHOWN ON THIS SHEET. MESSAGE BOARDS SHALL BE IN PLACE A MINIMUM OF 7 DAYS PRIOR TO ANY PHASE 1 CONSTRUCTION. THE MESSAGE BOARDS SHALL REMAN IN PLACE FOR THE DURATION OF PHASE 1 CONSTRUCTION. MESSAGES SHALL BE AS APPROVED BY THE CITY.
- 5. CONTRACTOR SHALL PROVIDE CONTINUOUS PERSENTIAN/ADA ACCESS THROUGHOUS PHASES I CONSTRUCTION. COMMERCION SHALL DEMOLISH/RECONSTRUCT THE SIDERALK ON ONLY ONE SDE OF THE ROADWAY AT A THE. THE EXISTING SIDEWAY ON THE OPPOSITE SIDE OF THE ROADWAY SHALL REMAIN IN PLACE UNTIL THE NEW SIDEWALK IS COMPLETED ON THE FIRST SIDE. SEE DETAIL 1 ON SHEET 3 OF 3.
- TO CLARIFY THE DIRECTION OF TRAFFIC FLOW ALONG LONG VEADOW DR., TEMPORARY STRIPING WILL BE REQUIRED AS SHOWN IN THIS TRAFFIC CONTROL, PLAN. TEMPORARY STRIPING SHALL CONSIST OF A WRONG-WAY ARROW MADE WITH TYPE I-R REPLECTORIZED PAVEMENT MARKERS, PER DEFAUL 5 ON SHEET 3 OF 3.

DECREASE DRUM SPACIN

@ 50' APART

(7A)

(12)

R7-1, 12" X 18"

R7-1, 12" X 18"

G20-1bLT, 24" X 72"

, 12" X 18"

(7)

TO 6' MAX. ACROSS FROM

- 7. CONTRACTOR SHALL MOVE TRASH AND RECYCLE BINS FROM RESIDENTS'
 PROPERTIES TO A LOCATION OUTSIDE OF THE STREET CLOSURES (INCLUDING
 RESIDENTS ON STREETS CLOSED TO THRU TRAFFIC) FOR TRASH/RECYCLE
- CONTRACTOR SHALL MAINTAIN A MINIMUM LANE WIDTH OF 11' FOR ALL OPEN TRAFFIC LANES, NON-INCLUSIVE OF THE REQUIRED CHANNELIZING DEVICES.
- CONTRACTOR SHALL NOTIFY PROPERTY OWNERS OF PROPOSED CONSTRUCTION IN FRONT OF THEIR RESPECTIVE PROPERTIES AT LEAST 72 HOURS PRIOR TO START OF CONSTRUCTION. ACCESS COORDINATION IS ALSO REQUIRED.
- 10. ERECT SIGNS IN LOCATIONS NOT OBSTRUCTING THE TRAVELING PUBLIC'S VIEW OF THE NORMAL ROADWAY SIGNING OR NECESSARY SIGHT DISTANCE AT INTERSECTIONS AND CURVES.
- 11. ALL TRAFFIC CONTROL DEVICES AND SIGNAGE SHALL BE IN ACCORDANCE WITH CITY REQUIREMENTS AND THE TEXAS MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (TEXAS MUTCD), LATEST EDITION.
- ALL CONSTRUCTION TRAFFIC CONTROL SIGNS SHALL BE SKID-MOUNTED UNLESS OTHERWISE NOTED.
- 13. THE CONTRACTOR MAY BE REQUIRED TO FURNISH ADDITIONAL BARRICADES AND SIGNS TO MAINTAIN TRAFFIC AND MOTORISTS SAFETY. ALL SIGNS, BARRICADES, AND POSTS SHALL BE EITHER NEW OR FRESHLY PAINTED.
- 14. AFTER COMPLETION OF THE PROJECT, WHEN REMOVING THE BARRICADES AND SIGNS THE CONTRACTOR SHALL FILL ANY HOLES LEFT BY THE BARRICADES OR SIGN SUPPORTS AND RESTORE THE AREA IN WHICH THE SIGNS WERE REMOVED TO ITS ORIGINAL CONDITION.
- 15. REFLECTORIZED DRUMS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, AND AS APPROVED BY THE ENGINEER ALL DRUMS ALONG AN INCOMING TRAFFIC-APEGING TAPER SHALL HAVE CHEVRON SIONS, CWI-8 (L OR R ACCORDINGLY), ATTACHED.
- 16. ITEM A-11 TEMPORARY TRAFFIC SIGNALIZATION? IS INCLUDED IN THE OSCIAL, PLANS. HOWEVER, REBOWL OF EXISTING SIGNAL FELDS AND CONTRACTOR SHALL CORROBATE WITH FORM SALMAR AT THE CITY OF CORPUS CHRISTI SIGNAL SEPARTMENT, 361—826—1610, TO DETERMINE CONTRACTOR SHALL CONTRACTOR SIGNAL SEPARTMENT, 361—826—1610, TO DETERMINE CONTRACTOR SHALL COVER DESIGNS SIGNAL FELDS AND REMOVE EXISTING SIGNAL PLANS AND REMOVE EXISTING SIGNAL PLANS AND REMOVE EXISTING SIGNAL PLANS SIGNAL PLA

(12)

TEMPORARY WORK ZONE STRIPING WRONG-WAY ARROW (LOCATE AS SHOWN)



LEGEND

TRAFFIC CONTROL SIGN

REFLECTORIZED TRAFFIC DRUM

TYPE III BARRICADE DIRECTION OF TRAFFIC

PHASE 1 WORK AREA

R11-2, 48" X 30" & M4-10R/L, 48" X 18 W/TYPE III BARRICADES

ROAD

CLOSED

@ 50' APART

(4

SEE SHEET 3 OF 3 FOR TCP FOR

WORK AS NEEDED

ANDREWS INTERSECTION TIE-IN

G20-5T, 48" X 24"

& G20-6T, 48" X 30"

(PLACE APPROX 80 FROM INTERSECTION)

NAME ADDRESS CITY STATE

ECT #18030A-LONG MEADOW DRIVE DR. TO ST. ANDREWS DR. (BOND 2018) 2 **PROJECT**

> AS SHOWN 8/22/2022

Christi, '

Corpus

JEC-L NGMEDOW

TCP1.1

ALEXANDER OF THE PARTY OF THE P PHASE 1 25'-30' TYP. LONG MEADOW DR. PORTABLE CHANGEABLE MESSAGE BOARD MESSAGES BEFORE CONSTRUCTION 25'-30' WORK AREA 13'-19' TYP. PCMS A & B PCMS A & B 2'-8' BUFFER 11' MIN TRAVEL LANE FOR NORTHBOUND TRAFFIC 0'-5' _ I __ 4' TYP. LONG LONG 0'-6' 2' MEADOW MEADOW ROAD WK ONE WAY TEMP WZ STRIPING (Y)(4")(SLD) 3:1 FDGE SLOPE WRPM's TY II-A-A BEGINNING SEEK [DAY] ALTERNATE EXISTING SIDEWALK-TO REMAIN IN PLACE TOP OF PROP, SUBGRADE-EXISTING UNDISTURBED PAVEMENT-FOR PEDESTRIAN USE [DATE] ROTE FOR NORTHBOUND ONE-WAY TRAFFIC

R7-1, 12" X 18"

PHASE 1 TYPICAL CONSTRUCTION SECTION

LONG MEADOW DR.

R7-1, 12" X 18"

5

4' TYP.

DEDESTRIANS TO US

FROM PHASE 1

CONSTRUCTED SIDEWALK

SIGN SPACING (TYPICAL):

MONTECITA DR. = 120'

LONG MEADOW DR. = 120' MIN.

ST. ANDREWS DR. = 120' MIN. SARATOGA BLVD. = 320' MIN.

(SOME SPACINGS MAY NOT BE SHOWN TO SCALE)

13'-19' TYE

-NEWLY CONSTRUCTED

PAVEMENT FROM PHASE 1 PHASE 2 TYPICAL CONSTRUCTION SECTION

1_2'-8' BUFFER

_2'__|_0'-6' _

-TOP OF PROP, SUBGRADE

11' MIN. TRAVEL LANE FOR SOUTHBOUND TRAFFIC

TEMP WZ STRIPING (Y)(4")(SLD)-W/RPM's TY II-A-A



LEGEND

PHASE 2 WORK AREA

PCMS A & B

CONST

ONE WAY

SWITCH

BEGINNING

[DAY]

[DATE]



#18030A- LONG MEADOW DRIVE TO ST. ANDREWS DR. (BOND 2018)

Christi, . HO **PROJECT** Corpus

AS SHOWN 8/22/2022

JEC-L NGMEDOW

TCP1.2

PCMS A & B

NB LONG

MEADOW

CLOSED

SEEK

ALTERNATE

ROTE

DETAIL 1- TYPICAL SIDEWALK CLOSURE

R9-10L, 48" X 24" W/TYPE II BARRICADE



DETAIL 2- MONTECITA DR. TEMPORARY CLOSURE FOR INTERSECTION CONSTRUCTION



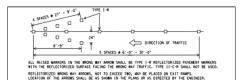
DETAIL 3-SARATOGA BLVD.
TEMPORARY OUTSIDE LANE CLOSURE FOR TIE-IN WORK



DETAIL 4-ST. ANDREWS DR.
TEMPORARY HALF-WIDTH CLOSURE FOR TIE-IN WORK
(ONE LANE TWO-WAY CONTROL W/FLAGGERS)

FLAGGER OPERATION NOTES

- FLAGGERS SHALL HAVE POSITIVE COMMUNICATION BETWEEN EACH OTHER TO APPROPRIATELY DIRECT TRAFFIC. TWO—WAY RADIOS ARE PREFERRED.
- 2. FLAGGERS SHOULD USE 24" STOP/SLOW PADDLES TO CONTROL TRAFFIC. FLAGS SHOULD BE LIMITED TO EMERGENCY USE.
- CONTRACTOR SHALL MAINTAIN A MINIMUM LANE WIDTH OF 11' FOR THE OPEN TRAFFIC LANE.



WRONG WAY ARROW DETAIL

DETAIL 5- TEMPORARY STRIPING DETAIL FOR TRAFFIC FLOW DIRECTION



RTP ENGINEERING PLLC

PROJECT #18030A- LONG MEADOW DRIVE HUNT DR. TO ST. ANDREWS DR. (BOND 2018) Corpus Christi, Texas

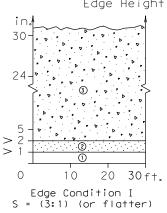
AS SHOWN ate: 8/22/2022

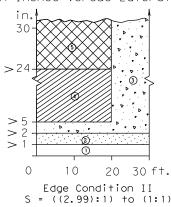
Project No: JEC-LNGMEDOW-

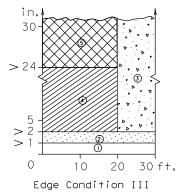
TCP1.3

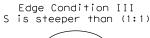
DEFINITION OF TREATMENT ZONES FOR VARIOUS EDGE CONDITIONS

Edge Height (D) in Inches versus Lateral Clearance (Y) in Feet

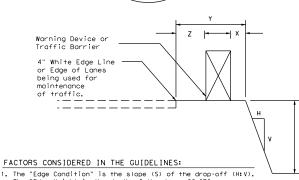












- 1. The "Edge Condition" is the slope (S) of the drop-off (H:V). The "Edge Height is the depth of the drop-off "D".
- 2. Distance "X" is to be the maximum practical under job conditions. Two feet minimum for high speed conditions. Distance "Y" is the lateral clearance from edge of travel lane to edge of dropoff, Distance "Z" does not have a minimum.
- 3. In addition to the factors considered in the guidelines, each construction zone drop-off situation should be analyzed individually, taking into account other variables, such as: traffic mix, posted speed in the construction zone, horizontal curvature, and the practicality of the treatment options.
- 4. The conditions for indicating the use of positive or protective barriers are given by Zone-5 and Figure-1. Traffic barriers are primarily applicable for high speed conditions. Urban areas with speeds of 30 mph or less may have a lesser need for signing, delineation, and barriers. Right-angled edges, however, with "D" greater than 2 inches and located within a lateral offset of 6 feet, may indicate a higher level of treatment.
- 5. If the distance "Y" must be less than 3 feet, the use of a positive barrier may not be feasible. In such a case, consider either: 1) narrowing the lanes to a desired 11 to 12 feet or 10 foot minimum (see CW20-8 sign), or 2) provide an edge slope such as Edge Condition I.

Treatment Types Guidelines:

(1) No treatment 2

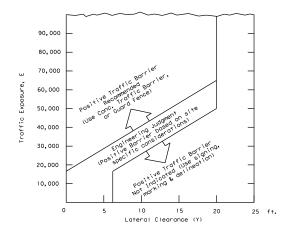
Zone

- CW 8-11 "Uneven Lanes" signs.
- 3 CW 8-9a Shoulder Drop-Off" or CW 8-11 signs plus vertical panels.
- CW8-9a or CW 8-11, signs plus drums. Where restricted space precludes the use of drums, use vertical panels. An edge slope to that of the profered Edge Condition I.
- Check indications (Figure-1) for possitive barrier, Where positive barrier is not indicated, the treatment shown above for Zone-4 may be used after consideration of other applicable factors.

Edge Condition Notes:

- 1. Edge Condition I: Most vehicles are able to traverse an edge condition with a slope rate of (3 to 1) or flatter. The slope must be constructed with a compacted material capable of supporting vehicles.
- 2. Edge Condition II: Most vehicles are able to traverse an edge condition with a slope between (2.99 to 1) and (1 to 1) so long as "D" does not exceed 5 inches. Under-carriage drag on most automobiles will occur when "D" exceeds 6 inches. As "D" exceeds 24 inches, the possibility for rollover is greater in most vehicles.
- 3. Edge Condition III: When slopes are greater than (1 to 1) and where "D" is greater than 2 inches, a more difficult control factor may exist for some vehicles, if not properly treated. For example, where "D" is account to 24 inches different types of vehicles may experience different steering control at different edge heights. Automobiles might experience more steering control differential when "D" is greater than 2 inches and up to 5 inches. Trucks, particularily those with high loads, have more steering control differential when "D" is greater than 5 inches and up to 24 inches. When "D" exceeds 24 inches, the possibility of rollover is greater for most vehicles.
- 4. Milling or overlay operations that result in Edge Condition III should not be in place without appropriate warning treatments, and these conditions should not be left in place for extended periods of time.

FIGURE-1: CONDITIONS INDICATING USE OF POSITIVE BARRIER FOR ZONE 5 ()



- E = ADT \times T Where ADT is that portion of the average daily traffic volume traveling within 20 feet (generally two adjacent lanes) of the edge dropoff condition; and, T is the duration time in years of the dropoff condition.
- 2. Figure-1 provides a practical approach to the use of positive barriers for the protection of vehicles from pavement drop-offs. Other factors, such as the presence of heavy machinery, construction workers, or the mix and volume of traffic may make the use of positive barriers appropriate, even when the edge condition alone may not justify the use of a barrier.
- An approved end treatment should be provided for any positive barrier end located within the clear zone.

These quidelines apply to temporary traffic control areas or work zones where continuous pavement edges or drop-offs exists parallel and adjacent to a lane used by traffic. The edge conditions may be present between shoulders and travel lanes, between adjacent or opposing travel lanes, or at intermediate points across the width of the paved surface. Due to the variability in construction operations, tolerances in the variables may be allowed by the engineer. These guidelines do not apply to short term operations. These guidelines do not constitute a rigid standard or policy; rather, they are guidance to be used in conjunction with engineering judgement. These guidelines may be updated on the Design Division's





TREATMENT FOR VARIOUS EDGE CONDITIONS

LE: edgecon. dgn		DN:		CK: DW:			CK:	CK:	
TxDOT August :	2000	CONT	SECT	JOB		HI	HIGHWAY		
REVISIONS 03-01									
03-01 08-01 9-21		DIST	COUNTY			SHEET NO.			
9.51									