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Volume 1 of 4

STATE OF TEXAS
DEPARTMENT OF TRANSPORTATION

PLANS OF PROPOSED
STATE HIGHWAY IMPROVEMENT

CSJ: 2121-01-104

FEDERAL AID PROJECT NO. F 2B24(096)

IH 10 WIDENING PROJECT
EL PASO COUNTY

NET LENGTH OF ROADWAY=	18,900	FT.=	3.580 MI.
NET LENGTH OF BRIDGE =	1,100	FT.=	0.210 MI.
NET LENGTH OF PROJECT=	20,000	FT.=	3.790 MI.

DESIGN SPEED = 70 MPH
A.D.T. (2023)= 119,600
A.D.T. (2043)= 160,700
FUNCTIONAL CLASS: URBAN FREEWAY

FEDERAL AID PROPJECT NO.			
F 2B24 (096)			
CONT	SECT	JOB	HIGHWAY
2121	01	104	IH 10
DIST	COUNTY		SHEET NO.
ELP	EL PASO		1

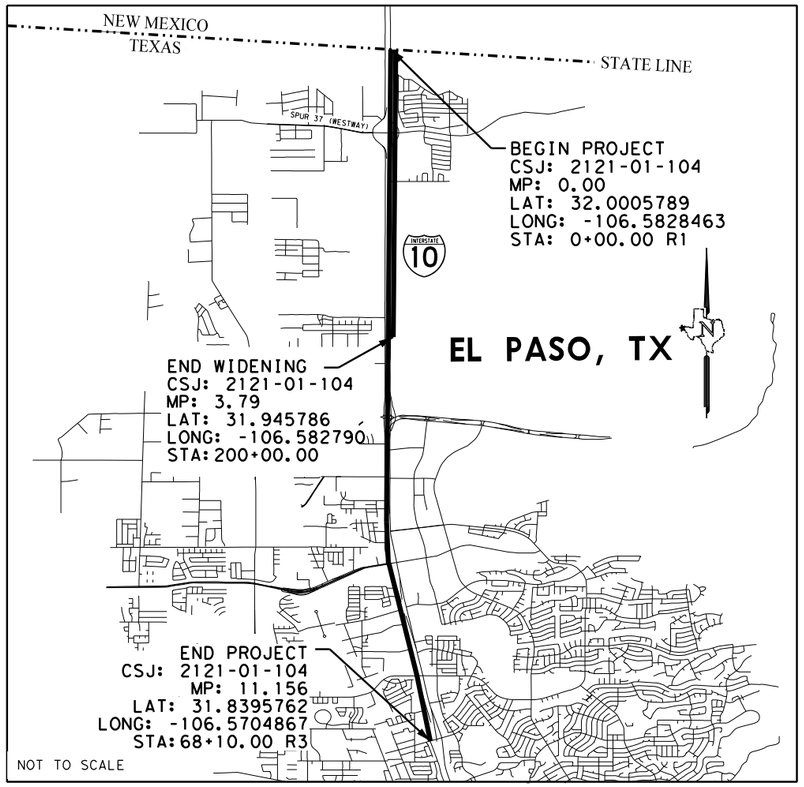
FINAL PLANS

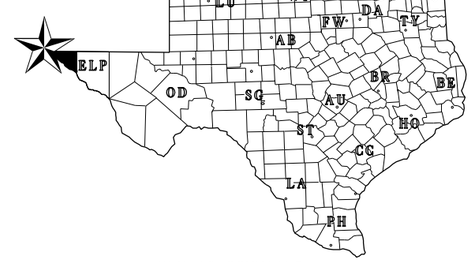
CONTRACTOR: _____
LETTING DATE: MAY 2, 2024
TIME CHARGES BEGAN: _____
DATE CONTRACTOR BEGAN WORK: _____
DATE WORK WAS ACCEPTED: _____
TOTAL DAYS CHARGED: _____
ORIGINAL CONTRACT AMOUNT: $ _____
AMOUNT OF CONTRACT AMENDMENTS: $ _____
FINAL CONTRACT COST: $ _____

_____ 20 _____

_____
AREA ENGINEER

LIMITS:
FROM: 0.22 MI. W OF FM 1905 (ANTONIO ST) TO: 0.83 MI. E. OF SPUR 37
FOR THE CONSTRUCTION OF: WF-WIDEN FREEWAY
CONSISTING OF: EXPAND FROM 4 TO 6 LANES AND OPERATIONAL IMPROVEMENTS
FROM: 0.22 MI. W OF FM 1905 (ANTONIO ST) TO SPUR 37; INCIDENTALS TO INCLUDE
LANDSCAPE IMPROVEMENTS FROM 0.22 MI. W. OF FM 1905 (ANTONIO ST) TO SH 20 (MESA ST)





KEY TO COUNTIES

EXCEPTIONS: NONE
EQUATIONS: STA.566+43.75 R1(IH 10)BK=STA. 567+81.33 R2(IH 10)AH
EQUATIONS: STA.576+00.00 R2 (IH 10)BK=STA. 13+47.44 R3(IH 10)AH
RAILROAD: N/A
TDLR: N/A

REQUIRED SIGNS SHALL BE IN ACCORDANCE WITH BC (1)- 21 THRU BC (12)- 21 AND THE "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".

STATE OF TEXAS
JESUS S. HEREDIA
95705
LICENSED
PROFESSIONAL ENGINEER

3/4/2024

consor
F-12040

SPECIFICATIONS ADOPTED BY THE TEXAS DEPARTMENT OF TRANSPORTATION, NOVEMBER 1, 2014 AND SPECIFICATION ITEMS LISTED AND DATED AS FOLLOWS, SHALL GOVERN ON THIS PROJECT: REQUIRED CONTRACT PROVISIONS FOR ALL FEDERAL-AID CONSTRUCTION CONTRACTS (FORM FHWA 1273, OCTOBER 23 2023)

Texas Department of Transportation

RECOMMENDED FOR LETTING: 3/5/2024
DocuSigned by: Eduardo Perales, P.E.
SAFETY REVIEW COMMITTEE CHAIRMAN

RECOMMENDED FOR LETTING: 3/5/2024
DocuSigned by: L. Raul Ortega Jr., P.E.
DISTRICT ENGINEER
PLANNING AND DEVELOPMENT

APPROVED FOR LETTING: 3/5/2024
DocuSigned by: Tomas Trevino, P.E.
DISTRICT ENGINEER

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Texas Department of Transportation

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CONTROL	SECTION	JOB	HIGHWAY
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STATE OF TEXAS · OSCAR D. GONZALEZ · 147840 · LICENSED PROFESSIONAL ENGINEER

THE STANDARD SHEETS SPECIFICALLY IDENTIFIED ON THIS SHEET (>>) HAVE BEEN ISSUED BY ME AND ARE APPLICABLE TO THIS PROJECT.

OSCAR D. GONZALEZ — NAME — 3/28/2024 — DATE

STATE OF TEXAS · JESUS S. HEREDIA · 95705 · LICENSED PROFESSIONAL ENGINEER

THE STANDARD SHEETS SPECIFICALLY IDENTIFIED ON THIS SHEET ($) HAVE BEEN ISSUED BY ME AND ARE APPLICABLE TO THIS PROJECT.

JESUS S. HEREDIA — NAME — 3/28/2024 — DATE

STATE OF TEXAS · ADRIANA C SUSTAITA · 141394 · LICENSED PROFESSIONAL ENGINEER

THE STANDARD SHEETS SPECIFICALLY IDENTIFIED ON THIS SHEET (<) HAVE BEEN ISSUED BY ME AND ARE APPLICABLE TO THIS PROJECT.

ADRIANA C SUSTAITA — NAME — 3/28/2024 — DATE

STATE OF TEXAS · SERGIO MENDEZ · 121993 · LICENSED PROFESSIONAL ENGINEER

THE STANDARD SHEETS SPECIFICALLY IDENTIFIED ON THIS SHEET (*) HAVE BEEN ISSUED BY ME AND ARE APPLICABLE TO THIS PROJECT.

SERGIO MENDEZ — NAME — 3/28/2024 — DATE

STATE OF TEXAS · Juan C. Rodriguez · 139755 · LICENSED PROFESSIONAL ENGINEER

THE STANDARD SHEETS SPECIFICALLY IDENTIFIED ON THIS SHEET (>) HAVE BEEN ISSUED BY ME AND ARE APPLICABLE TO THIS PROJECT.

JUAN C. RODRIGUEZ — NAME — 3/28/2024 — DATE

STATE OF TEXAS · LEONARDO LEDESMA · 103621 · LICENSED PROFESSIONAL ENGINEER

THE STANDARD SHEETS SPECIFICALLY IDENTIFIED ON THIS SHEET (**) HAVE BEEN ISSUED BY ME AND ARE APPLICABLE TO THIS PROJECT.

LEONARDO LEDESMA — NAME — 3/28/2024 — DATE

NO.	DATE	REVISION	APPROV.

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Texas Department of Transportation

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TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

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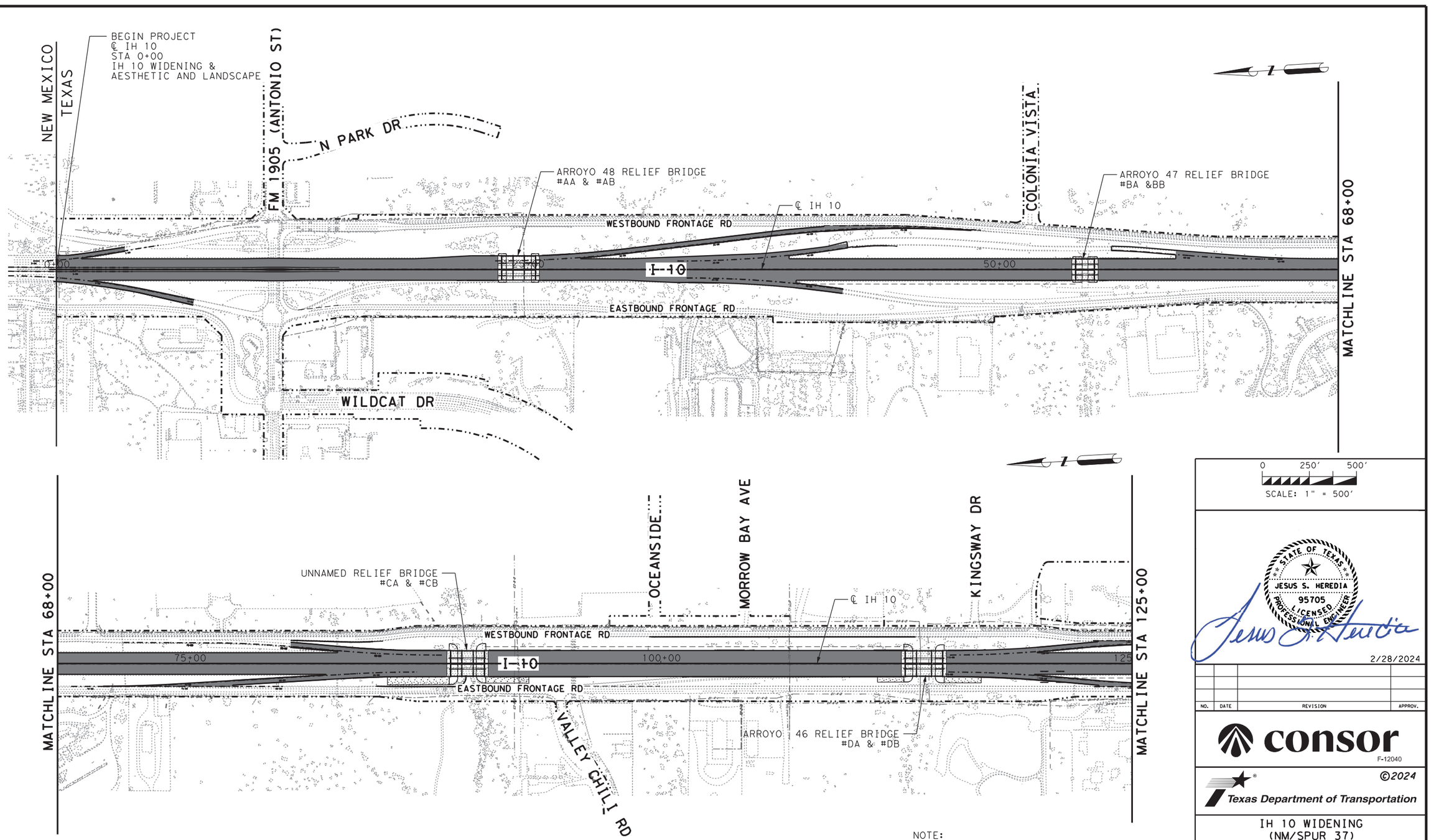

0 250′ 500′

SCALE: 1" = 500′

NOTE:

1. REFER TO "HORIZONTAL CONTROL DATA" SHEETS FOR ALIGNMENT INFORMATION.

LEGEND

- EXIST ROW
- STRUCTURES
- RECONSTRUCTED ELEMENTS

STATE OF TEXAS
JESUS S. HEREDIA
95705
LICENSED
PROFESSIONAL ENGINEER

2/28/2024

NO.	DATE	REVISION	APPROV.

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Texas Department of Transportation

IH 10 WIDENING (NM/SPUR 37)

PROJECT LAYOUT (BEGIN TO STA 125+00)

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CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

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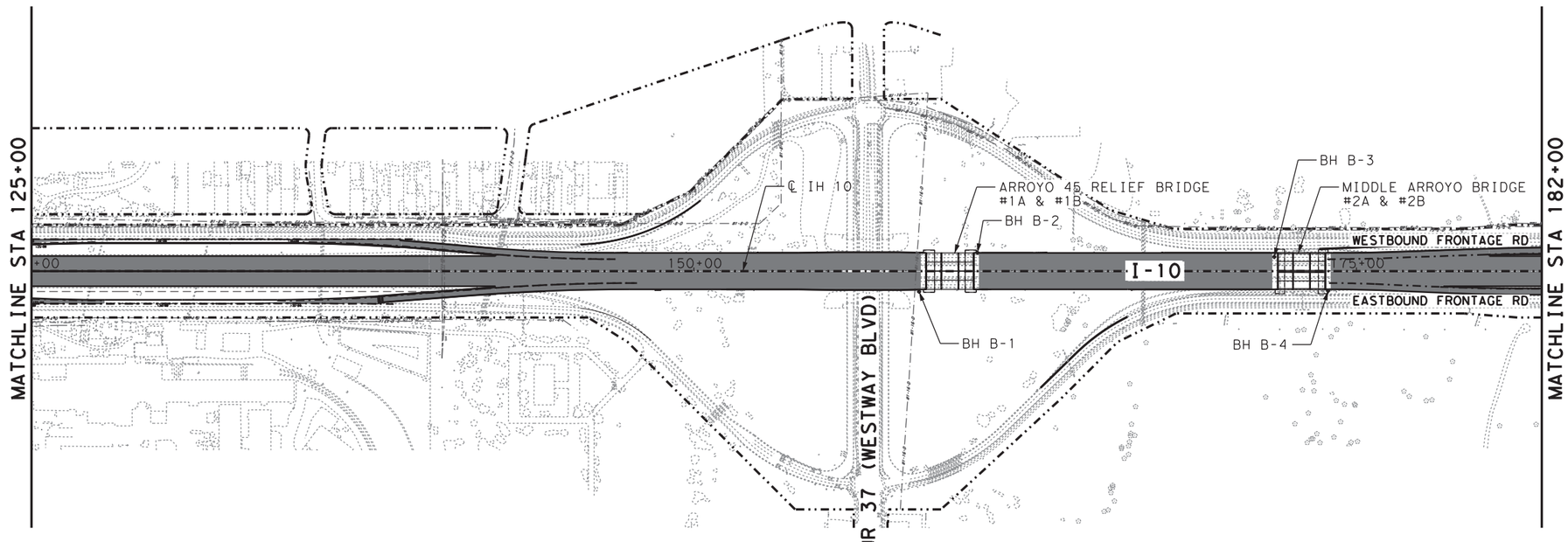

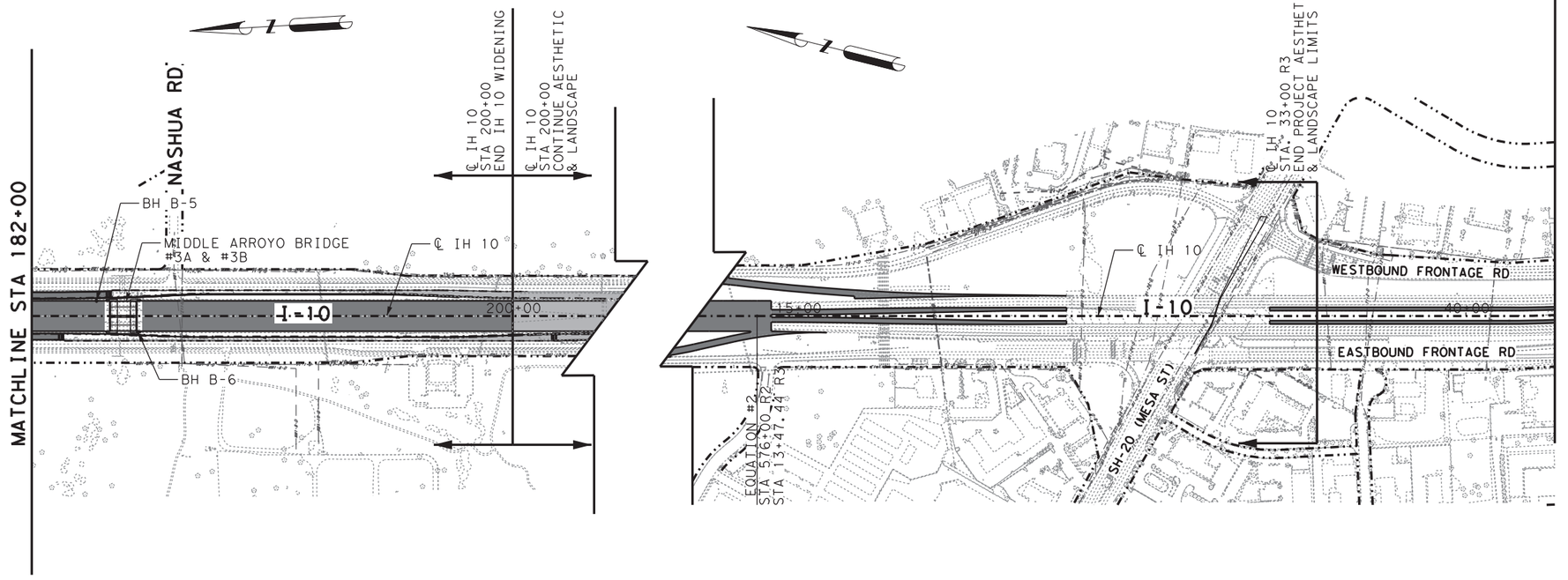

LEGEND

- EXIST ROW
- STRUCTURES
- RECONSTRUCTED ELEMENTS

NOTES:

1. REFER TO "HORIZONTAL CONTROL DATA" SHEETS FOR ALIGNMENT INFORMATION.

0 250′ 500′

SCALE: 1" = 500′

STATE OF TEXAS
JESUS S. HEREDIA
95705
LICENSED
PROFESSIONAL ENGINEER

2/28/2024

NO.	DATE	REVISION	APPROV.

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Texas Department of Transportation

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PROJECT LAYOUT
(STA 125+00 TO STA 239+00)

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********** General Notes **********

2014 Specification Book

Specification Data

Table 1

Basis of Estimate

Item	Description	Rate
275	Cement	2% by unit weight 2.2 lb./cu.ft.
310	Prime Coat (Multi-Option)	0.2 gal./sq.yd.
SS3076	Dense-Graded Hot-Mix Asphalt TY-B PG 64-22 Tack Coat (TRAIL)[2]	1 in. = 110 lb./sq.yd. 0.15 gal./sq.yd.
SS3077	Superpave Mixtures SP-C SAC-A PG70-22 Tack Coat (TRAIL)[2]	1 in. = 110 lb./sq.yd. 0.15 gal./sq.yd.

1. **Deviation from the rates shown will require approval.**
2. **Tack Coat to be applied to each layer as directed by the Engineer. Rate shown is based on the desired residual application of 0.10 gal./sq.yd.**

General Requirements

Maintain the entire project area in a neat and orderly manner throughout the duration of the work. Remove all construction litter and undesirable vegetation within the right of way inside the project limits. This work will be subsidiary to the various bid items.

General Project Description – The project consists of reconstructing and widening of the IH 10 Mainlanes from New Mexico/ Texas Stateline to IH 10 CL Sta. 200+00.00, a length of 3.78 miles, in El Paso County, Texas. The project will accommodate a lane to the inside in each direction of travel, reconstruct multiple drainage crossings and reconstruct ramps. The project will also add auxiliary lanes between ramps, install high mast lighting and ITS elements. From New Mexico/ Texas Stateline to SH 20 (Mesa St.) the project will install aesthetic and landscape elements consisting structural features with lighting.

Perform all work for this contract in accordance with the Texas Department of Transportation Standard Specifications for Construction and Maintenance of Highways, Streets and Bridges (2014) and all applicable State Standards.

Various bid items and their associated quantities have been provided within this contract in order to establish bid prices for the proposed work. Actual work performed as directed will be paid utilizing these prices with no further compensation made regardless of the final quantities.

Where nighttime work is approved, provide adequate lighting for the entire work site as directed. Traffic

Contact the Engineer or the City when construction operations are within 400 feet of a signalized intersection to determine/verify the location of loop detectors, conduit, ground-boxes, etc. Repair or replace any signal equipment damaged by construction operations. The method of repair or replacement shall be pre-approved and inspected. This work shall be completed at the Contractor's expense.

Inform the Engineer and the respective utility companies, when it becomes apparent that the utility lines will interfere with the work in progress.

The following Standard Detail sheets have been modified:

- **E&BD (MOD)**
- **PMBD (MOD)**
- **Trans-20 (MOD)**

Contractor questions on this project are to be addressed to the following individual(s):

West Area Office:

Jonathan Concha, P.E. **West Area Engineer** **Jonathan.Concha@txdot.gov**	**Aldo Madrid, P.E.** **Director of Construction** **Aldo.Madrid@txdot.gov**	**Monica Ruiz, PE** **District Construction Engineer** **Monica.Ruiz@txdot.gov**

Questions may be submitted via the Letting Pre-Bid Q&A web page. This webpage can be accessed from the Notice to Contractors dashboard located at the following Address:

https://tableau.txdot.gov/views/ProjectInformationDashboard/NoticetoContractors.

All contractor questions will be reviewed by the Engineer. All questions and any corresponding responses that are generated will be posted through the same Letting Pre-Bid Q&A web page.

The Letting Pre-Bid Q&A web page for each project can be accessed by using the dashboard to navigate to the project you are interested in by scrolling or filtering the dashboard using the controls on the left. Hover over the blue hyperlink for the project you want to view the Q&A for and click on the link in the window that pops up.

Traffic

Contact the Department's El Paso District Signal Shop at txdotelplocates@txdot.gov to request all Department utility line locates within the project limits. The Signal Shop will locate one time

only. Record locates for the purpose of refreshing and maintaining all markings throughout the duration of the project.

General ITS

Contact the Department's El Paso District Signal Shop at txdotelplocates@txdot.gov to request all Department utility line locates within the project limits. The Signal Shop will locate one time only, upon request. Record locates for the purpose of refreshing and maintaining all markings throughout the duration of the project.

Item 4 – Scope of Work

Schedule and perform all work to ensure proper drainage during the course of construction or maintenance operations. All labor, tools, equipment, and supervision required, to ensure drainage, removal, and handling of water shall be considered incidental work.

Item 5 – Control of Work

The Department will furnish horizontal and vertical reference points. Contractor must use a R.P.L.S. to verify horizontal and vertical reference points with conventional survey methods before proceeding with construction activities. Verification must be submitted for review and approval to the Department's R.P.L.S. prior to start of construction. Any discrepancies not reported will be at no additional cost to the Department.

Plan datum for this project is NAD 83 for horizontal and NAVD 88 for elevation based.

Electronic earthwork cross sections are available upon request at the Area Engineer's office.

Keep traveled surfaces used in hauling operations clear and free of dirt or other material.

Coordinate with respective utility owners before adjusting existing utility manholes, meters, valve covers, etc.

Coordinate to complete all required adjustments within project duration acceptable to the Department and each applicable Utility Agency.

Existing pavement, utilities, structures, etc. damaged as a result of construction operations will be repaired at no additional cost to the Department.

Protect from damage and destruction all areas of the right of way, which are not included in the actual limits of the proposed construction areas. Exercise care to prevent damage to trees, vegetation, irrigation system and other natural features. Protect trees, shrubs, and other landscape features from abuse, marring, or damage within the actual construction and/or fenced protection areas designated for preservation.

Restore any area disturbed or damaged to a condition "as good as" or "better than" prior to start of construction operation. This work will be at the Contractor's expense.

Precast Alternate Proposals.

When a precast or cast-in-place concrete element is included in the plans, a precast concrete alternate may be submitted in accordance with "Standard Operating Procedure for Alternate Precast Proposal Submission" found online at https://www.txdot.gov/inside-txdot/forms-publications/consultants-contractors/publications/bridge.html#design

Acceptance or denial of an alternate is at the sole discretion of the Engineer. Impacts to the project schedule and any additional costs resulting from the use of alternates are the sole responsibility of the Contractor.

Item 6 – Control of Materials

At the start of the project, the Contractor shall coordinate with the project engineer concerning the items to be purchased by the Department. It is the Contractor's responsibility to contact the Department, so that items can be ordered adequately with respect to time. The approximate lead time to receive this item is 120 calendar days (4 months).

- Radar Vehicle Sensing Device
- Field Ethernet Switch
- CCTV Cameras
- IP Addressable Power Strips

A "Material Furnished by State (Participating)" Force Account of $71,253.82 will be used to acquire materials to be furnished by the Department for ITS.

Materials to be furnished by the Department can be picked up at the Traffic Signal Shop designated below. Contact the supervisor twenty-four (24) hours in advance of picking up materials.

Traffic/ITS materials to be furnished by the Department shall be picked up at the El Paso District Headquarters. Contact the Engineer forty-eight (48) hours in advance of picking up materials to notify the Traffic Signal Shop.

To comply with the latest provisions of Build America, Buy America Act (BABA Act) of the Bipartisan Infrastructure Law, the contractor must submit an original of the TxDOT Construction Material Buy America Certification Form for all items classified as construction materials. This form is not required for materials classified as a manufactured product.

Refer to the Buy America Material Classification Sheet for clarification on material categorization.

The Buy America Material Classification Sheet is located at the link below. https://www.txdot.gov/business/resources/materials/buy-america-material-classification-sheet.html.

Item 7 – Legal Relations and Responsibilities

Comply with all requirements of the Environmental Permits Issues and Commitments (EPIC) Sheet.

Do not discharge any liquid pollutant from vehicles onto the roadside. Immediately clean spills and dispose in compliance with local, state, and federal regulations to the satisfaction of the Engineer at no additional cost to the Department.

Occupational Safety & Health Administration (OSHA) regulations prohibit operations that bring people or equipment within 10 ft. of an energized electrical line. Where workers and/or equipment may be close to an energized electrical line, notify the electrical power company and make all necessary adjustments to ensure the safety of workers near the energized line.

No significant traffic generator events identified.

Law Enforcement Personnel

Coordinate with TxDOT Engineer for off-duty Law enforcement assistance when needed to direct traffic during significant closures and detours, as approved unless otherwise directed by the engineer. The officer shall monitor or direct traffic during the closure as directed by the Engineer. Patrol vehicles must be clearly marked to correspond with the officer's agency and equipped with appropriate lights to identify them as law enforcement. For patrol vehicles not owned by a law enforcement agency, markings will be retroreflective and legible from 100 ft. from both sides and the rear of the vehicle. Lights will be high intensity and visible from all angles.

Contractor to submit a written request at least 48 hrs prior to the need for lar enforcement to the Engineer. The Engineer will make arrangements with the respective entity to formally request the services.

Fees resulting from contractor-initiated cancellations shall be the Contractor's responsibility.

The method used to direct traffic at signalized intersections shall be as approved. Additional officers and vehicles may be provided when approved or directed.

Show proof of certification by the Texas Commission on Law Enforcement Standards.

Complete the daily tracking form provided by the department and submit proof of payment such as cancelled checks for the approved invoices that have been billed to the project no later than 30 days from the invoice date.

No payment will be made for law enforcement personnel needed for moving equipment or payment for drive time to/from the event site.

Minimums, scheduling fees, etc. will not be paid; TxDOT will consider paying cancellation fees on a case-by-case basis.

Item 8 – Prosecution and Progress

Working days will be calculated in accordance with Section 8.3.1.2, "Six-Day Workweek."

Create and maintain a CPM schedule.

The CPM schedule will be created and maintained using computer software fully compatible with the department's current version of Primavera P6. Ensure that native .XER electronic CPM schedule files submitted to the engineer will import completely and accurately into the Primavera P6 software used by the Department.

Submit baseline schedule and obtain approval prior to beginning construction. The monthly progress payment will be held if the monthly update is not submitted.

Provide a Project Schedule Summary Report on a monthly basis along with the monthly progress schedule.

A Convenience 120 day delayed project start will be included for providing manufactured items to be used on the project.

Contractor work activities will be limited to the allowed lane closure times defined as daytime hours of 9 A.M. to 4 P.M. Monday through Friday or nighttime hours of 9 P.M. to 6 A.M. Sunday through Thursday, unless otherwise directed by the Engineer.

This project includes Additional Project-Specific Liquidated Damages (APSLD).

APSLD will be assessed in addition to the Schedule of Liquidated Damages (SP000---1243) for this project. APSLD will be assessed at the rate of $20,000 per day.

Substantial completion for widening and reconstruction: $20,000 per day Substantial Completion: The maximum numbers of days allowed for substantial completion shall be 30 working days. Substantial completion of the contract is defined as the point in time at which the roadway is in the final geometric configuration and traffic is following with the lane arrangement as shown in the plans for the finished roadway. All pavement construction is complete with final conditions traffic control devices and pavement markings in their final position.

Unless otherwise approved, no lane closure that restricts or interferes with traffic shall be allowed from noon on the day preceding to 10:00 pm on the day after the following holiday schedule.

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a) Easter Holiday Weekend (Friday through Sunday);
b) Memorial Day Weekend (Friday through Monday);
c) Independence Day (July 3 through noon on July 5);
d) Labor Day Weekend (Friday through Monday);
e) Thanksgiving Holiday (Wednesday through Sunday);
f) Christmas Holiday (December 23 through January 2).

Item 9 – Measurement and Payment

Monthly progress payments will be made for items of work completed by the 27th day of each month. Any work completed after the 27th will be included for payment in the subsequent monthly progress payment.

Submit Material on Hand (MOH) payment requests at least **two (2)** working days prior to the 27th of the month for payment consideration on that month's estimate.

Item 100 – Preparing Right of Way

Item 0100-6002 shall cover all items or obstructions on the Right-of-Way (ROW) requiring removal as directed by the Engineer not governed otherwise by individual removal pay items elsewhere in the plans or not quantified.

Many items needing to be removed, have been quantified. Removal of all obstructions on the Right-of-Way that are not shown or quantified on the Removal Layouts, but necessary to be removed must be removed and their removal will be paid for as subsidiary to the PREP ROW bid item. This Item shall cover all items requiring removal as directed by the Engineer not governed otherwise by individual removal pay items elsewhere in the plans.

Removal of existing loose aggregate, concrete, asphalt, and any other materials deleterious to plant growth encountered within the limits during initial grading is subsidiary to this Item.

Remove and disposed of properly of all concrete, asphalt, and materials deleterious to plant growth from all planting beds during initial grading and bed preparation and prior to plant installation subsidiary to this Item.

Accept ownership of all removed materials and dispose at approved locations off the right of way in accordance with local, state, and federal requirements.

Coordinate all right of way clearing operations with the SWP3.

Item 104 – Removing Concrete

All work items described under item 104.3 required to saw-cut, as shown on the plans, or as directed is considered subsidiary to this Item.

Remove existing hydraulic cement concrete from locations shown on the plans. Avoid damaging concrete that will remain in place. Saw-cut and remove the existing concrete to neat lines. Replace any concrete damaged by the Contractor at no expense to TXDOT Unless otherwise shown on the plans, accept ownership and properly dispose of broken concrete in accordance with federal, state, and local regulations.

Item 105 – Removing Treated and Untreated Base and Asphalt Pavement

All work items required to saw-cut the existing asphalt roadway, driveways, etc. as shown on the plans, or as directed is considered subsidiary to this Item.

Stack in piles 12 to 13 feet maximum height. Place silt fence along the perimeter of stockpiled material. Silt fence will be paid under Item 506, "Temporary Erosion, Sedimentation, and Environmental Controls". Final quantity of silt fence to be approved by the engineer prior to stockpiling. Hauling of material and incidentals to complete this work is subsidiary to this Item.

Reclaimed asphalt pavement (RAP) removed from the project may be incorporated into the project. Incorporate the RAP into the pavement mix design as approved by the Engineer. Perform any necessary tests to ensure RAP is appropriate for use. Any remaining RAP shall be delivered to:

TxDOT Maintenance Yard
6496 Doniphan Dr.
Canutillo, TX 79932

Contractor is to contact TxDOT's West Area Office Maintenance Supervisor, Chad Chairez 915-757-5900 prior to delivery of material. Hauling of RAP material and incidentals to complete is subsidiary to this Item.

Item 110 – Excavation

To eliminate all drop-off conditions, construct tapers as directed. This work will not be paid for directly but will be considered subsidiary to pertinent bid items.

Item 132 – Embankment

Locate all material sources out of sight from the roadway at an approved location. All embankment materials from proposed existing on-site cut soils that shall be utilized as soil materials and imported embankment materials shall be qualified prior to use.

Scarify and compact top 6 in. of existing roadway as directed before additional embankment or base course is placed. This work is subsidiary to various bid items.

Subgrade compaction will be density control and is subsidiary to this item.

Type C Embankment material shall meet testing requirements of Type A with the exception that the specification limit for Plasticity Index (PI) is less than or equal to 20.

Use of concrete rubble will be disallowed as suitable embankment material.

Track the side slopes of the embankment to control erosion. This work will be subsidiary to various bid items.

Item 134 –Backfill Pavement Edges

Backfill pavement edges immediately after the surface course has begun unless determined otherwise by the Engineer.

Backfill edges to allow no more than a 1:3 slope from pavement edge to existing ground.

Reclaimed asphalt pavement (RAP) may be used to backfill pavement edges. When using a Type B material, Department-owned RAP generated through the required work on the Contract is available for the Contractor's use. If insufficient RAP is available, then substitute Flexible Base of a type and grade acceptable by the Engineer to backfill pavement edges at no additional cost to the Department.

If Contractor elects to use RAP material for backfill pavement edges, the RAP material must pass a 2" sieve. All material not passing sieve will be removed and disposed of properly. This shall be considered subsidiary to Item 134.

Apply emulsified asphalt at a 50/50 solution of water to emulsion over the disturbed area with backfill material. The application rate shall achieve a final emulsion rate of 0.15 gal/SY residual asphalt.

Item 164 – Seeding for Erosion Control

The seed mix and rates will be as follows:

Table 2
Seed Mix and Rates

Scientific Name	Common Name	Rate (lb. PLS/acre)
SETARIA ITALICA	Foxtail Millet	34

Item 247 – Flexible Base

A 20-ton vibratory pad foot roller will be required for compaction of lifts 10 inches or greater, unless otherwise directed by the Engineer.

When requested, stake with blue tops at 100-foot intervals, the lines, and grade shown in the plans. (For Item 247.4)

Item 275 – Cement Treatment (Road-Mixed)

Provide Type II cement at the rates shown on the plans or as directed by the Engineer.

If prime coat will not be placed within 7 days, asphalt shall be used for curing.

No new flexible base material is required for this Item. Shape existing material or embankment in accordance with applicable bid items to conform to the typical sections shown on the plans and as directed. Pulverize or scarify material after shaping so that 100% passes a 2-1/2 in. sieve.

Item 301 – Asphalt Antistripping Agents

Hydrated Lime shall be added as an Antistripping additive between the rates of 1.0% minimum and 2.0% maximum by weight for Items 3076, 3077, 3080, 3081, and 3082. If the Hamburg Wheel Test cannot be met within these limits, Liquid Antistripping Agents may be used in conjunction with lime for Items 3076, 3077, 3080, 3081, and 3082 as approved by the Engineer.

Item 310 – Prime Coat

Cure prime coat for at least 48 hr. prior to beginning hot-mix asphalt placement operations, unless otherwise directed.

When multi option is allowed, provide AE-P, SS-1H, CSS-1H or other material approved by the Engineer.

Contractor to provide a test sample of prime coat to the engineer prior to production. Material must be tested and approved by the engineer prior to application.

Place seal coat or pavement course as shown on the plans within 14 calendar days of initial prime coat application. Otherwise, reapply prime coat as directed by the Engineer. Reapplication of the prime coat will be at the Contractor's expense.

Item 354 – Planing and Texturing Pavement

Contractor shall furnish flood light towers at stockpile locations for work performed during night hours. Provide sufficient equipment to stockpile materials during the milling operations at the designated locations shown on plans or as directed by the engineer.

Construct a taper with an asphaltic mixture at all uneven transverse joints left by planing operation. Transitions shall be at 10 feet for every 1 inch. Asphaltic material will be subsidiary to this item of work.

Department will retain ownership of planed materials. The asphalt removed under this item shall be salvaged and stockpiled in separate stockpiles as directed by the Engineer at the location listed below. RAP generated through the required work on the contract is available for the Contractor's use when shown under Item 134 or the HMA items of work, if applicable.

TXDOT Maintenance Yard
6496 Doniphan Dr.
Canutillo, TX 79932

Contact the West Area Maintenance Supervisor at (915) 757-5900 for coordination prior to delivery of materials. Stack in piles 12 to 13 feet maximum height. Place silt fence along the perimeter of stockpiled material. Silt fence will be paid under Item 506, "Temporary Erosion, Sedimentation, and Environmental Controls". Final quantity of silt fence to be approved by the engineer prior to stockpiling. Hauling of material and incidentals to complete this work is subsidiary to this Item.

Item 360 – Concrete Pavement

A pre-paving meeting will be required. Submit a paving plan detailing the location of joints and the sequence of paving for approval to the Engineer at least seven days before the pre-paving meeting. Manual placement to be used only where mechanical placement is not feasibly possible

A minimum of two additional sets of cylinders will be required for early-strength determination when concrete placement is required for early opening to traffic, as shown on the plan or as directed by the engineer.

Only multiple piece tie bars, as described in Section 360.2.2.2, "Tie Bars," and as noted on standard sheets "Continuously Reinforced Concrete Pavement," shall be used at longitudinal construction joints and only threaded couplings shall be permitted for these tie bars.

New concrete pavement adjacent to existing concrete paving will require a neat saw cut edge and drilling as per Item 361, "Repair of Concrete Pavement," regardless whether transverse or longitudinal. This work will be considered subsidiary to this Item.

When freezing weather or windy conditions in excess of 25 mph are forecasted to occur within 12 hours from the last CRCP placement of the day, cover and protect the entire CRCP placed that day with cotton blankets and polyethylene film immediately after the membrane curing has been applied. Place and weigh the film so it will remain in direct contact with the surface for a period of 48 hours and to the satisfaction of the Engineer.

Place longitudinal joints at a minimum distance of 6 in. from the lane lines to minimize any conflicts with the pavement markings. Ensure that these joints do not fall within the anticipated wheel path area.

Use Class 5 or 8 joint sealants on all sawed joints.

Item 403 – Temporary Special Shoring

General dimension and locations of shoring have been provided in the plan set for contractor information. Contractor shall provide shop drawings for the shoring systems proposed to be

used for review and approval by the Engineer. The shoring system if removable, should not disturb or damage the proposed permanent construction in the process of removal. The quantity provided shall cover the complete installation and removal of the system regardless of the actual shape that is provided/constructed by the contractor.

Item 416 – Drilled Shaft Foundations

Construct drilled shaft at all abutments as per the approved method.

Stake all foundations and locations prior to commencement of drilling operations for verification to ensure no conflicts with utility lines. Approval by Engineer will be required for all non-bridge foundations.

Cover drilled shafts with plywood and delineate with pedestrian fence, to the satisfaction of the Engineer, when no work is being performed and after working hours. This work shall be considered subsidiary to this item.

Remove spoils, daily, out of the drainage areas or as directed

Survey verify and provide the Engineer finished drilled shaft elevations.

Item 420 – Concrete Substructures

Provide High Performance Concrete (HPC) for all bridge substructure elements (Bent Caps, Columns, Abutments, and Backwalls).

Slope top of Abutment Caps, Bent Caps, except the Bearing Seats, such that water will drain away from the backwall. Maintain bridge components so that they shall remain free of all debris during construction. This work will not be paid for directly but shall be considered subsidiary to the pertinent items.

Item 421 – Hydraulic Cement Concrete

Provide strength-testing equipment in accordance with the Contract controlling test(s). Furnish curing facilities adequately sized for this project as approved. Strength-testing equipment and curing facilities shall be at a location approved by the Engineer.

Furnish and properly maintain all test molds. Furnish test molds meeting the requirements of Tex-447-A. The test molds must be ready for use when needed. The Contractor will be responsible for curing and transporting concrete specimens as directed. Furnish proper equipment to remove concrete specimens from the molds. For all concrete items, provide a wheelbarrow or other acceptable container to the Engineer. This will not be paid directly but will be subsidiary to the various bid items

Obtain approval for all concrete mix designs and concrete aggregate sources.

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Provide sulfate-resistant concrete for all structural concrete in contact with soil or groundwater. Concrete trucks will be allowed to wash out or discharge surplus concrete or drum wash water at designated areas approved by the Engineer.

Item 422 – Concrete Superstructures

Provide High Performance Concrete (HPC) for all bridge superstructure elements (Bridge Deck, Bridge Rail, and Bridge Approach Slabs). Epoxy coated reinforcement steel will be provided for the bridge decks and bridge rail only.

Item 423 – Surface Finishes for Concrete

Use the approved Mechanically Stabilized Earth (MSE) Wall Systems listed at:
https://www.txdot.gov/business/resources/highway/bridge/approved-systems/mechanically-stabilized-earth.html

Furnish Type DS backfill for all Temporary and permanent MSE wall reinforced zone.

Item 427 – Surface Finishes for Concrete

Provide a test area of 9 sq. ft. samples for each color scheme for approval, prior to application.

Provide test panels representative of the custom surface treatment a minimum of 10 days prior to beginning precast operations. Construct sample panel (s) using each type of approved form liner. Sample panels must meet the requirements of the plans and specifications and be approved before any construction form liners may be ordered, obtained, or used. Provide panels having a textured portion at least 5 ft by 5 ft surface. If directed, additional test panels shall be constructed until a satisfactory surface treatment is obtained.

Item 432 – Riprap

Wire mesh and fibers for concrete will not be allowed for concrete riprap in accordance with item 432.3.1, "Concrete Riprap" on this project for this Item. Reinforce all concrete riprap using bar reinforcement conforming to Item 440, "Reinforcement for Concrete," as shown on the plans, or as directed.

For roadway illumination assemblies, riprap may include wire mesh per standard RID(2)-20.

For areas where ground boxes are within the riprap, the riprap shall be sloped in a manner that drains away from the ground box. The material and work performed for the riprap placement shall be considered subsidiary to this item.
Finish concrete riprap with a smooth (wood float) finish, unless otherwise directed.

Obtain approval for all stone riprap material sources.

Item 440-Reinforcement For Concrete

The work performed, materials furnished, equipment, labor, tools and incidentals to provide Mechanical Couples will not be measured or paid directly but will be subsidiary to Item 420 Concrete Substructures and Item 422 Concrete Superstructures.

Item 462 – Concrete Box Culverts and Drains

Use rubber gaskets as jointing material for concrete box culverts.

The project shall use pre-cast concrete box culverts unless otherwise allowed by the Engineer.

Connection to existing concrete box culverts shall be per TxDOT standard SCC-MD and is subsidiary to the concrete box culvert pay items.

Item 464 – Reinforced Concrete Pipe

Use Class III circular pipe for all proposed reinforced concrete, unless otherwise shown on the plans.

Use rubber gaskets as jointing material for concrete pipes.

Concrete collars will be paid under Item 420, "Concrete Substructure," as shown on the plans.

Coordinate locations of all utilities and corresponding sequence of work. Repair any damage to existing utilities to the satisfaction of the Engineer and the utility owner at no additional cost to the Department.

Item 465 – Junction Boxes, Manholes, and Inlets

Field verify all low-point locations prior to their construction. Obtain approval for any necessary adjustment.

Where inlets may be exposed above the natural ground upon completion, place embankment around them to drain as directed. All such work will be considered subsidiary to this Item.

Maintain drainage at curb inlets until the final roadway surface is placed.

Coordinate the storm sewer construction with the Traffic Control Plan sequencing. Where applicable, modify Stage I portion of junction boxes, manholes, and inlets, as directed.

Coordinate all inlet locations and elevations with the project cross-sections and verify prior to their construction.

Place pedestrian fence around all incomplete junction boxes, inlets and manholes to protect pedestrians in the surrounding area, as directed. This work will be considered subsidiary to this Item.

Inlets to be constructed using Standard Drawing PMBD (MOD) will be paid for as Item 465-6045 "INLET (COMPL)(PMBD)(4FT)".

Connection of inlets and junction boxes to the top of concrete boxes shall be subsidiary to Item 462 and Item 465 per TxDOT Standard MI-CBC (FTW).

Item 479– Adjusting Manholes and Inlets

Coordinate with respective utility owners before adjusting existing utility manholes, meters, valve covers, etc.

Coordinate to complete all required adjustments within project duration acceptable to the Department and each applicable owner.

Existing manholes and inlets called out on the plans to be adjusted will be paid for by each manhole or inlets to be adjusted to final grade per standards MI-AC (FTW).

Item 480 – Cleaning Existing Culverts

Work shall be completed in compliance with the aforementioned laws under Item 7. The contractor shall adhere to confined spaces requirements and all regulations.

The Engineer may require work to be completed within a given time frame, due to unforeseen circumstances such as imminent severe weather storm, snow, an upcoming project with the same project limits, etc. Item will be used as directed by the Engineer.

Material removed at the entrance or exit of the culvert in order to gain access to or facilitate the function of the structure is subsidiary to this item.

Item 496 – Removing Structures

During removal contractor is responsible to maintain positive drainage.

Contractor shall submit a demolition plan for each structure that is to be removed in accordance with Item 496. Remove existing bridge structures in accordance with the phasing details shown on the Traffic Control Plans and the Bridge Typical Sections. Existing bridges to be removed are as follow:

1. Existing eastbound and westbound 48 ft. 8½ in. wide, 160 ft. long, four (4) span concrete slab and girder bridges at Crossing 1 (Arroyo 48, Station 24+50)
2. Existing eastbound and westbound 42 ft. wide, 80 ft. long, three (3) span continuous concrete slab bridges at Crossing 2 (Arroyo 47, Station 54+50)
3. Existing eastbound and westbound 42 ft. wide, 110 ft. long, four (4) span continuous concrete slab bridges at Crossing 5 (Unnamed Arroyo, Station 90+10)

4. Existing eastbound and westbound 42 ft. 8½ in. wide, 160 ft. long, four (4) span concrete slab and girder bridges at Crossing 7 (Arroyo 46, Station 114+00)
5. Existing eastbound and westbound 42 ft. wide, 160 ft. long, six (6) span continuous concrete slab bridges at Crossing 14 (Arroyo 45, Station 159+70)
6. Existing eastbound and westbound 42 ft. wide, 160 ft. long, six (6) span continuous concrete slab bridges at Crossing 19 (Middle Arroyo, Station 173+00)
7. Existing eastbound and westbound 42 ft. wide, 80 ft. long, three (3) span continuous concrete slab bridges at Crossing 18 (Middle Arroyo, Station 185+40)

As part of bridge removal the following items are to be removed and include but not be limited to existing concrete rail, wingwalls, expansion joints, concrete slabs, girders, caps, columns, abutments and concrete piles, existing concrete pilings support the pile bents and associated concrete caps as well as bridge abutments. This work is considered subsidiary to bid Item 496 "Removing Structures".

Notify the Department of Health when asbestos or lead removal is part of construction efforts. Refer to the plan's EPIC sheet for required action and additional information.

Do not permit debris resulting from the structure removal or construction activities to enter a natural or manmade waterway such as drainage channels, rivers, streams, bays, etc. Remove debris, which falls into such waterways. This work shall be subsidiary to the Item 496, "Removing Structures.

Contractor shall include in the demolition plans means to protect the roadway below when removal of bridge structures is on the plan set.

Removal, hauling and satisfactory disposal of the removed materials from the project site are subsidiary to this Item.

Item 502 – Barricades, Signs, and Traffic Handling

Prior to beginning construction, the Engineer will approve the routing of traffic and sequence of work.

Additional signs and barricades, placed as directed, will be considered subsidiary to this Item

In accordance with Section 7.2.6.1, designate, in writing, a Contractor Responsible Person (CRP) and a CRP alternate to take full responsibility for the set-up, maintenance, and necessary corrective measures of the traffic control plan. The CRP or CRP alternate must be present at site and implement the initial set up of every traffic control phase/stage, at each location, and/or each call out, for the entire duration of the project.

At the written request of the Engineer, immediately remove the CRP or CRP alternate from the project if, in the opinion of the Engineer, is not competent, not present at initial TCP set-ups, or

does not perform in a proper, skillful, or safe manner. These individuals shall not be reinstated without written consent of the Engineer.

CRP and CRP alternate must be trained using Department approved training. Provide a copy of the certificate of completion to the Engineer for project records. Refer to Table3 for Department approved Training.

All contractor workers involved with the traffic control implementation and maintenance must participate and complete a department approved training course. Provide a copy of the certificate of completion to the Engineer for project records. Refer to "Traffic Control Training" Material Producer List https://ftp.txdot.gov/pub/txdot-info/cmd/mpl/tct.pdf for Department approved training.

Contractor may choose to train workers involved with the traffic control implementation and maintenance with a contractor developed training in lieu of Department approved training. Contractor developed training must be equivalent to the Department approved training shown in Table 4. Provide the Engineer a copy of the course curriculum for pre-approval, prior to conducting the contractor developed training. Provide the Engineer a copy of the log of attendees after training completion for project records.

Existing regulatory signs, route marker auxiliaries, guide signs, and warning signs that must be removed due to widening shall be relocated temporarily and erected on approved supports at locations shown in the plans, or as directed. This work will not be paid for directly but is considered subsidiary to this Item.

Notify the Department officials when major traffic changes are to be made, such as detours. Coordinate with the Department on all traffic changes. Advance notification for the following week's work must be made by 5 P.M. on Wednesdays.

If Law Enforcement Personnel is required by the Engineer, coordinate with local law enforcement as directed or agreed. Complete the weekly tracking form provided by the Department and submit invoices with 5% allowance for Law Enforcement payments by Contractor that agree with the tracking form for payment at the end of each month where approved services were provided.

Provide access to intersecting side roads and driveways at all times, unless otherwise directed.

Any approved change to the sequence of work or TCP, must be signed and sealed by a Contractor's Licensed Professional Engineer assuming full responsibility for any additional barricade signs and devices needed.

Use striping operations to channelize traffic into the newly completed roadway, as directed. Maintain shoulders and median areas in a condition capable of serving as emergency paths, as approved. This work will be subsidiary to this Item.

Use portable changeable message signs (PCMS) to alert public of construction two weeks prior to construction.

Use flaggers when directed. Provide two-way radio communication for all flaggers.

Place and maintain sufficient additional warning signs, beacons, delineators, and barricades to warn and guide the public of all hazards in the construction zone limits at all times, and as directed.

Use flashing arrow boards on all tapers for each lane closure.

Some signs, barricades, and channelization devices may not be shown at the precise or measured position. Place the barricades, devices, or signs, with approval, in positions to meet field conditions.

Use Type A flashing warning lights or delineators to mark open excavation, footings, foundations, or other obstructions near lanes that may be open to traffic, as directed.

Remove or cover signs that do not apply to current conditions at the end of each day's work.

Repair or replace all signs damaged by the public or due to weather events.

All project signs shall be maintained free of litter, debris, or sediment build up at the base supports. This work is subsidiary to this item of work.

All project limits signs shown on BC (2) or on the project line diagram shall be installed using ground mounted supports unless otherwise approved by the engineer. Fill any holes left by barricade or sign supports and restore the area to its original condition.

Safety Contingency

The contractor Force Account "Safety Contingency" that has been established for this project is intended to be utilized for work zone enhancement, to improve the effectiveness of the TCP that could not be foreseen in the project planning and design stage. These enhancements will be mutually agreed upon by the Engineer and the Contractor's Responsible Person based on weekly or more frequent traffic management reviews on the project. The Engineer may choose to use existing bid items if it does not slow the implementation of enhancement.

Item 504- Field Office and Laboratory

Furnish one field office Type B as described in Item 504.2.2.2

Enclose the field office and the parking area as described in Item 504.2.1.1 and provide security lighting. Keep TxDOT and Contractor field offices and parking separate with the use of a chain link fence. No contractor vehicles, equipment, dumpsters, storage, etc. will be allowed in TxDOT parking area. Allow for space to accommodate a minimum of 6 pull through parking spaces.

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A 10 lb. ABC fire extinguisher with up-to-date inspection tag, working smoke detector, first aid kit and eye wash station shall be installed in all facilities used by TxDOT personnel. They shall be mounted on a wall that is easily accessible and not blocked by any permanent features or furniture.

Inspect the fire extinguisher, smoke detectors, eye wash stations and first aid kits every month. Make necessary corrections or updates as needed or as directed within 7 calendar days of notice of corrections.

Provide laboratory equipment necessary for testing in accordance with Tex-498-A, Table 32 and a Concrete Testing Machine in accordance with Tex-498-A, Table 18. Location of the field office to be approved by the Engineer.

The work performed including incidentals and items listed above will not be paid for directly but will be subsidiary to pertinent Items.

Item 506 – Temporary Erosion, Sedimentation, and Environmental Controls

Refer to SWP3 Sheets for total acres of disturbed area. Establish the authorization requirements for Storm Water Discharges for soil disturbed area in this project, all project locations in the Contract, and Contractor Project Specific Locations (PSLs), within one mile of the project limits. Both the Department and the Contractor shall obtain an authorization to discharge storm water from TCEQ for the construction activities shown on the plans. Obtain required authorization from the TCEQ for any Contractor PSLs for construction support activities on or off the right of way.

Best Method Practices (BMP's) may be adjusted to meet field conditions, or as directed. The Engineer will verify all locations prior to placement of BMPs. Keep all inlets functional within the project limits throughout the entire length of the project to accept storm water as part of the Storm Water Pollution Prevention Plan (SWP3), as directed.

Place rain gauge(s) at locations as designated.

Grading operations will be limited to the catch point of the proposed cross-section.

Preserve any vegetation outside these limits.

Review SWP3 plans prior to placement with Engineer.

Place a weatherproof bulletin board containing the Texas Commission on Environmental Quality (TCEQ) required information on the project at a site as directed. Post the following documents:

1. TCEQ "TPDES Storm Water Program" Construction Site Notice; Primary Construction Site Notices from both Contractor and Department, completed and signed.

2. TCEQ "Primary Notice of Intents," from both Contractor and Department; and

3. TCEQ "TPDES Permit."

When the total area disturbed for all projects in the Contract and PSLs within one mile of the project limits exceeds five acres, provide a copy of Notice of Intent (NOI) PSLs on the right of way to TCEQ and the Engineer or to the appropriate Municipal Separate Storm Sewer System (MS4) Operator when on an Off-system State route.

Item 508 – Constructing Detours

Temporary roads paid under this Item may be modified from details shown in the plans to satisfy field conditions and will be removed as directed. This work will be subsidiary to this Item.

Install pipe for temporary drainage in accordance with details shown on the plans, or as directed. Upon removal, pipe will become the property of the Contractor.

Item 512 – Portable Concrete Traffic Barrier

18,000 LF of Portable Concrete Traffic Barrier (PCTB) will be provided by the Department. The PCTB will remain property of the Department upon termination for its need. Provide necessary joint connections, as needed, or as directed, subsidiary to this item. Connections will become property of the Department.

Coordinate with the Engineer two (2) weeks in advance to schedule pick-up of PCTB from the designated Department stockpile location to transport to the project. Upon completion of its use, disassemble, deliver, and neatly stack PCTB at the designated Department stockpile location, or as directed. The work performed will not be measured or paid for directly but will be subsidiary to pertinent bid items.

The portable concrete traffic barriers (PCTB) Single Slope and connection hardware to be used on this project are to be provided by the State. Place reflectors on top and haunch of PTCB subsidiary to this Item.

34,122 LF of Portable Concrete Traffic Barrier (PCTB) shall be furnished by the Contractor. Contractor shall furnish PCTB with a Joint Connection (Type R) will not be allowed for use. The PCTB will remain the property of the Department upon termination for its need. Provide joint connections as needed, or as directed, subsidiary to this item. Connections will become property of the Department.

Coordinate with the Engineer two (2) weeks in advance to schedule return of the PCTB. Upon completion of its use, disassemble, deliver, and neatly stack PCTB at the designated Department stockpile location, or as directed. The work performed will not be measured or paid for directly but will be subsidiary to pertinent bid items.

Stockpile PCTB at location at following location:
TxDOT Maintenance Yard

6496 Doniphan Dr.
Canutillo, TX 79932

Contractor will not be allowed to mix match between the two types of barriers unless approved by the Engineer.

Any increase in temporary barrier quantities that occur due to Contractor changes in the sequence of work, or the traffic control plan will not be paid.

Clean and/or surface treat any section of the PCTB furnished by the Department or by the Contractor before use, as directed, and will be subsidiary to this pay item. Surface treatment shall be Concrete Paint (match concrete gray color# 35630 with the Federal Standard 595C color swatch) as per Item 427.2.1.1.

Item 529 – Concrete Curb, Gutter and Combined Curb and Gutter

Use Class A concrete for these Items, unless otherwise shown on the plans. Wire mesh and fibers for concrete will not be allowed. Reinforce all concrete using reinforcement conforming to Item 440, "Reinforcement for concrete," as shown on the plans or as directed.

Construct the curb opening with metal plate configuration detailed in the plans, or as directed, to ensure roadway drainage to the earthen ditch. No direct payment will be made for these features. Payment will be made under this Item. All required manipulations or incidentals required to complete the work will be considered subsidiary to these items.

Perform all requiring grading for proposed concrete curb, gutter, and combined curb and gutter construction as shown on the plans. All grading, including excavation and fill/embankment will be subsidiary to this Item.

After construction, restore the adjacent surface to a condition approved by the Engineer. Consider this work subsidiary to this Item.

Item 540 – Metal Beam Guard Fence

Provide composite blockouts for all Metal Beam Guard Fence (MBGF) posts.

Install guardrails in the direction of traffic flow.

Stake the locations for approval prior to beginning the installation of the proposed MBGF.

Verify MBGF post lengths and heights prior to ordering materials.

Protect all untreated, incomplete, MBGF/Rail blunt ends exposed to traffic during construction until the permanent end treatment is installed. All work and incidentals will not be paid for directly but will be considered subsidiary to this Item.

Item 544 –Guardrail End Treatments

Provide certifications from the approved manufacturer's online training for all personnel installing end treatments prior to beginning work.

Ensure SGT is installed at proper elevations. Any grading required to set SGT at proper elevations subsidiary to this item.

Item 545 – Crash Cushion Attenuators

Furnish crash cushion attenuators at the locations shown on the plans and on the Crash Cushion Summary Sheet (CCSS) for temporary work zone and permanent applications. Crash Cushion attenuators shall meet the plan requirements and be on the Department's *Compliant Work Zone Traffic Control Devices* List.
The contractor must have an additional crush cushion attenuator on standby at all times, any damaged crash cushion attenuator must be replaced within 7 days.

Item 585 – Ride Quality for Pavement Surfaces

Use Surface Test Type B to govern ride quality for finished riding surfaces of travel lanes. Notify the District Laboratory 48 hours prior to conducting Surface Test Type B. Properly mark all starting/ending points, and leave-out sections prior to testing. Deliver test results within 24 hours of testing. Provide all profile measurements in electronic data to ELP-LAB@txdot.gov using the format specified in Tex-1001-S.

For CRCP on the travel lanes "Payment Adjustment, Schedule 1" will be used. For roadways with ACP ' Payment Adjustment, Schedule 1" will be used.

An IRI > 95 will require corrective action.

Diamond grinding or equivalent shall be used to correct areas of localized roughness. Diamond grinding shall be performed on lane width for all areas requiring corrective action. For flexible pavements, use CSS-1H emulsion to fog seal the corrected areas.

Milling will not be allowed as a corrective action for excessive deviations in the surface layer of hot mix.

Item 610 – Roadway Illumination Assemblies

Conductor runs in Illumination Layouts must contain 5 ft. of slack.

All removed salvageable Roadway Illumination Assemblies shall be returned to the Department. Verify with the Engineer before delivery of any removed and salvaged equipment to the following location:

Texas Department of Transportation Signal Shop (915-790-4245)

13301 Gateway West Blvd

El Paso, TX 79928

Item 618 – Conduit

The location of conduit is diagrammatic and may be varied to meet local conditions upon approval of the Engineer.

All bore items shall be directional.

For conduits installed by open trench method flowable backfill or concrete encasement will not be required, unless otherwise directed by the Engineer for locations where minimum trench depth cannot be achieved due to field conditions. Flowable backfill will be paid for under Item 401-6001.

Item 620 – Electrical Conductors

At every accessible point, bond together the grounding conductors that share the same conduit, junction box, ground box, or structure in accordance with the electrical detail sheets and the latest edition of the National Electrical Code.

For both transformer and shoe-base type illumination poles, provide double-pole breakaway fuse holder as shown on the Department's Materials Producers List under "Roadway Illumination and Electrical Supplies" category. Fuse holder is shown on the list under Item 610, "Roadway Illumination Assemblies," and Item 620, "Electrical Conductors." Provide 10-amp time delay fuses.

Bond metal junction boxes and metal conduit to the circuit grounding conductors in accordance with the National Electrical Code.

Refer to Article 7.18, "Electrical Requirements," for electrical certification and electrical licensing requirements.

Item 624 – Ground Boxes

Remove all conductors in ground boxes as shown on the plans to be abandoned. Payment for removal of conductors will be subsidiary to this Item.

The location of all ground boxes is diagrammatic and may be shifted to accommodate field conditions only as approved by the Engineer.

Stake all foundations and locations approved by the Engineer prior to commencement of drilling operations in order to ensure no conflicts with utility lines. Coordinate with the Utility companies for utility location within the project limits.

Ground boxes should be placed outside the path of travel leaving a clear unobstructed walking surface of at least 36" whenever possible.

Install expansion joint material approved by the Engineer between the ground box and concrete riprap apron. This material and work will be subsidiary to this pay item.

Field verify all existing ground boxes, conduit, and conductors.

The Contractor shall remove all ground boxes and conductors that are connected to existing Illumination, Traffic Signal and Traffic Management poles or as shown on the plans.

Item 628 – Electrical Services

Meet at the service locations with representatives of the Department, and electrical utility company, at least 12 weeks before electric power is needed to finalize exact service pole placement and resolve any issues.

Any electrical costs for connection, test, and operation will be the responsibility of the government agency that will have the final operational control of the items built.

A "Public Utility Force Acct Work (Participating)" Force Account of $40,000 will be used to compensate local electricity provider to furnish service drops at designated locations by Engineer.

Remove the existing service enclosure and conduit on service poles that are to be reused or abandoned. Payment for removal will be considered subsidiary to this Item.

Item 644 – Small Roadside Sign Assemblies

Stake all sign locations and receive approval prior to sign placement.

The 2-1/2 inch, Schedule 10 post will meet the following requirements:

- 0.120 in. nominal wall thickness
- Seamless or electric-resistance welded steel tubing or pipe
- Steel will be HSLAS Grade 55 per ASTM A1011 or ASTM A1008

Other steel may be used, if it meets the following:

- 55,000 psi minimum yield strength
- 70,000 psi minimum tensile strength
- 20% minimum elongation in 2 in.
- Wall thickness (uncoated) to be within the range of 0.108 in. to 0.132 in. galvanization per ASTM A123 or ASTM A653 G90

For precoated steel tubing (ASTM A653), recoat tube outside diameter weld seam by metalizing with zinc wire per ASTM B833.

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Verify all post lengths to ensure the proper sign height. Remove and replace any sign installed incorrectly. This work will be done at no expense to the Department.

Provide Texas Universal Triangular Slip Base Bolt clamp type for all signs as shown on SMD (Slip-1)-08.

As directed, some regulatory and guide signs will be relocated before construction begins. Mark and locate each reference marker perpendicular to the road and along the right of way, or as directed, prior to removal. Re-erect reference markers at their original location upon completion of construction.

All signs removed will remain property of the Department.

Item 650 – Overhead Sign Supports

Verify by field survey that plan dimensions and all base plate elevations mirror field conditions. Furnish corrected column lengths to the Engineer for approval, after placement of the drill shafts.

The DMS sign support structure locations shown on the plans may be adjusted to fit field conditions. The tower heights shown on the plans are to be used for bidding purposes only. Prior to fabrication, the Contractor, in cooperation with the Engineer, will take finished grade elevations at the tower locations and will determine their exact height for fabrication, in accordance with the details shown on the plans.

All sign support quantities, pipe and structural steel, will be based on the dimensions shown on the approved shop drawings, or those established in writing. Calculations for measurement of the sign support quantities will be made from the approved shop drawings, in accordance with Item 9: Measurement and Payment, Article 1, of the Standard Specifications. Increases and decreases in quantities by change in design, after the shop drawings are approved, will be measured as specified, and the revised quantities will be the basis for payment.

Upon sign erection, clean signs on sign supports with cleaning solution capable of removing oil, grease, smears and other foreign materials.

In the event the Contractor will not be able to complete the overhead sign bridge as scheduled, the Contractor can use ground-mounted signs on an interim basis until materials are available to complete the overhead sign bridge. One exit sign and one advance sign will be required as a minimum.

Provide anti-graffiti coating on all faces of column and color Awning Red, Fed #30233 (Type II) paint for all exposed concrete columns. Paint and graffiti coating is subsidiary to this Item.

Provide smooth, round, hot-dipped galvanized (inside and outside) overhead sign supports. Submit shop drawings to the Engineer for approval.

Weld all tubular structural frame pipe or seamless steel pipe to meet material standards shown on "Monotube Sign Structure Standards" plan sheets.

Provide a coating system of a polyamide-cured epoxy prime coat, a polyamide-cured epoxy intermediate coat material. All three system coats should be manufactured from the same company to ensure compatibility among coats, from one of the following manufacturers or an approved equal:

1. Ameron
   201 N Berry St.
   Brea, California 92821
   Local telephone contact: (714) -256-7755
   Prime Coat: Amerlock® 400
   Top Coat: Amercoat® 450 HS

2. ICI/DEVOE Coatings
   5480 Clover Leaf Pkwy
   Valley View, Ohio 44125
   Local telephone contact: (216)328-1581
   Prime Coat: Devran 4170 Corrosion Resistant Epoxy
   Intermediate Coat: Devran 4170 Corrosion Resistant Epoxy
   Top Coat: Devthane 4708 Aliphatic Urethane Enamel

3. Porter Paint Co.
   400 South 13th Street
   Louisville, KY 40201
   Local telephone contact: (502) 588-9679
   Prime Coat: Porter Paints MCR 4300
   Intermediate Coat: Porter Paints MCR 4300
   Top Coat: Porter Paints Hythane

4. Poly-Carb, Inc.
   33095 Bainbridge Road
   P.O. Box 39278
   Solon, Ohio 44139
   Local telephone contact: (419)248-1223
   Prime Coat: Mark-60 (ULTRA POX)
   Intermediate Coat: Mark-60 (ULTRA POX)
   Top Coat: Mark-73 (ULTRAKOTE)

5. Sherwin-Williams Company
   671 Beta Drive
   Mayfield Village, Ohio 44143
   Local telephone contact: (440)461-3310
   Prime Coat: Tile-Clad II Hi-Build Primer
   Intermediate Coat: Hi-Build Aliphatic Polyurethane Enamel

Surface Preparations

New unweathered galvanized support sections will have their surface prepared as well as their protective coating done at the manufacturer of the support sections.

The support sections will be prepared for coating by SSPC SPI followed by SSPC-SP7 (solvent cleaning) followed by a brush-off blast. Blasting abrasives containing more than 1% free silica will not be allowed. Before the prepared surface degrades from the prescribed standards, the prime coat will be applied. In every case, the surfaces will be coated with the epoxy prime coat on the same day of surface preparation. Careful handling and storage will be required to prevent scraping, marring, or other surface damage to the prepared surface.

Coating, Wash Primer 1.5 mils

This coat will consist of one coat of an epoxy primer to support sections. The total dry film thickness of this coat will be between 1.5 and 2.0 mils. If more than one coat is needed, expense will be borne by the Contractor.

In all cases, this coat will be applied by brush over surfaces that were prepared earlier that same day. The thinning of the epoxy material is strictly prohibited. Do not use material that is not capable of being applied as specified.

When the average dry film thickness of this coat over the entire support section is less than the specified 1.5 mils, this item will be reduced in direct proportion to the deficiency of coating if more than 16 2/3%. If the deficiency of coating is more than 16 2/3% (i.e. the average dry film thickness is less than 1.25 mils), the work for this Item will be considered unsatisfactory and will be relocated at the full expense of the Contractor, including all labor.

Coating, Urethane Topcoat

This item will consist of the application of one coat of urethane to support sections. The total dry film thickness of this coat shall not be less than 1.5 mils. If more than one pass is necessary to obtain the required thickness that coat expense will be borne by the Contractor.

All coatings are subsidiary to this Item.

Final color will be Patina Green FED #24300.

Item 658 – Delineator and Object Marker Assemblies

Verify all locations with the Engineer prior to installation.

Removal and proper disposal of all existing delineators, object markers, and any non-standard hardware assemblies are not paid directly, but will be considered subsidiary to pertinent items for payment.

Item 662 – Work Zone Pavement Markings

In those areas where existing pavement markings are to be covered or removed, field locate and record the existing pavement markings by survey or other approved method by the Engineer as directed. Place final striping on these locations.

Remove and properly dispose of tabs upon completion of the final striping. This work is considered subsidiary to various bid items.

Use raised pavement markers (RPMs) and traffic buttons for removable work zone pavement markings. Use epoxy adhesive in accordance with Section 672.2.2., "Adhesives."

Removal of RPMs, traffic buttons and adhesives will not be paid for directly but will be subsidiary to this Item.

Item 666 –Retro reflectorized Pavement Markings

Use a pilot line for final striping and remove pilot line after all striping is complete. Removal will be in accordance with the methods specified in Item 677, "Eliminating Existing Pavement Markings and Markers," and will be subsidiary to this Item.

Air blasting is required as pavement surface preparation.

In those areas where existing pavement markings are to be covered or removed, field locate and record the existing pavement markings by survey or other approved method by the Engineer as directed. Place final striping on these locations.

Reference all existing striping and other pavement markings to allow these markings to be re-established. Ensure the markings (lane lines, edge lines, ramp gores, etc.) are in line with signs, TMS arrows, etc. located on overhead sign supports. Intersections shall be striped as per the Pavement Markings Standard.

Use Item 666-6197 Refl Pav Mrk Ty II (W) (Symbol) as sealer for Item 668-6115 Prefab Pav Mrk TY C (Multi)(Shield).

Item 672 – Raised Pavement Markers

Use a pilot line for final pavement markers and remove pilot line after all striping is complete. Remove pilot line in accordance with the methods specified in Item 677, "Eliminating Existing Pavement Markings and Markers," and will be subsidiary to this Item.

Air blasting is required for pavement surface preparation.

Do not place raised pavement markers when the pavement surface temperature is below 60°F.

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Completely remove all existing raised pavement markers from pavement where raised pavement markers are proposed as shown in the plans. This will include all RPMs in the surrounding area of the proposed RPM. Removal of raised pavement markers is subsidiary to various bid items

Raised pavement marking spacing must be in compliance with the requirements as shown on the plans.

Removal of all existing RPMs will be considered subsidiary to the various bid items except for those in the New Mexico limits. For removal in New Mexico use Item 677-6038 Elim Ext Pav Mrk & Mrkrs (Plowable RPMS).

Item 738 – Cleaning and Sweeping Highways

This work is in addition to ITEM 5-CONTROL OF WORK and should not be used as a substitute for general cleaning requirements.

Use a self-contained vacuum broom to sweep the roadway and keep it free of sediment as directed. The contractor will be responsible for any sweeping above and beyond maintenance required to keep fugitive sediment off the roadway as directed by the Engineer.

Item 1005 – Loose Aggregate for Ground Cover

Protect newly graded areas from traffic and erosion.

Secure locally quarried aggregate rock that is clean, free from foreign materials and debris prior to placement and as approved by the Engineer.

For aggregate Type I provide crushed limestone rock, graded to range from ¾ inch to 1 1/2 inch placed in a uniform 2" layer. Provide a color: Desert Tan rock color as approved prior to placement. Place rock where shown on the plans or as directed.

The aggregate shall fill in the eroded areas, gaps, improve and satisfy the layer thickness and to the satisfaction of the engineer.

Provide a sample of each aggregate color to project Engineer for approval.

Keep aggregate 1 in below top of concrete or concrete curb.

Rock colors will not be changed to match Contractor's rock.

Item 2017 – Rmv, Stckpl, Cln, Rely Lose Agrgt & Blds

Stock pile materials at an approved site or within TxDOT right of way or as instructed by the Engineer.

Item 3076 – Dense-Graded Hot-Mix Asphalt

Provide aggregates with a Surface Aggregate Classification (SAC) of "A" for all surface mixes. Provide aggregates with a minimum SAC of B for all other layers unless otherwise shown on the plans.

In place of typical tack materials shown in Table 18 under Item 3096, use a tracking resistant asphalt interlayer (TRAIL) material as a tack coat. TRAIL shall only be required prior to the final riding surface layer of HMA. Approved TRAIL products are found on TxDOT's Material Producer List under Asphalt Interlayer (Tracking Resistant) website here: https://www.txdot.gov/business/resources/materials.html

Do not dilute the tack coat. Tack coat shall be applied to each layer as directed by the Engineer

Hydrated Lime shall be added as an additive as per Item 301 "Asphalt Antistripping Agents" between the rates of 1% minimum and 2.0% maximum by weight. If the Hamburg Wheel Test cannot be met within these limits, Liquid Antistripping agents as approved by the Engineer may be used in conjunction with lime.

Supply Warm-Mix Asphalt (WMA) under this Item.

When Reclaimed Asphalt Pavement (RAP) is used in the production of hot-mix asphaltic concrete, use fractionated RAP. Do not exceed 10.0% of Fractionated RAP on surface mixtures. Department-owned RAP generated through the required work on the Contract is available for the Contractor's use. Contractor may use Contractor-owned fractionated RAP and replace it with an equal quantity of Department-owned RAP when RAP is generated through the required work on the Contract.

Use of Recycled Asphalt Shingles (RAS)is not allowed for any mixtures.

Substitute PG Binders (grade dumping) will not be allowed for any mixtures.

Obtain the current version of the templates at http://www.txdot.gov/inside-txdot/forms-publications/consultants-contractors/forms/site-manager.html Submit electronically to the Engineer.

Design the mixture at 50 gyrations (Ndesign).

Do not cover with asphaltic material, any existing survey monuments, manholes, or valve covers, etc. Adjustments will be done in coordination with the respective utility owners.

Place a string line or other suitable marking to ensure smooth, neat lines, or as directed. Provide smooth transitions to existing driveways and intersections.

Place longitudinal joints approximately 6 in. from the stripe, or as directed by the Engineer. Avoid placing joint under the wheel path. Avoid placing longitudinal joints on the outside travel lane on multi-lane roadway.

Operate the spreading and finishing machine at a uniform forward speed consistent with the plant production rate, hauling capability, and roller train capacity to result in a continuous operation. The speed will be slow enough, so that stopping between trucks is not ordinarily required. If the Engineer determines non-uniform delivery of material is affecting the HMA placement, the Engineer may require the paving operations to cease until acceptable methods are employed to minimize starting and stopping of the paver.

Taper ACP placed at curb inlets, drainage inlets, and slotted drains as shown on plans.

After completion of pavement work under overpass structure(s), measure the lowest vertical clearance for each structure in US Customary Units, under the direction of the Engineer and El Paso Bridge Section.

Post vertical clearance signs and advanced warning clearance signs for structures at 3" below the measured minimum vertical clearance for each structure. Cost for this work, signs, and incidentals will be paid under Item 644 "Small Roadside Sign Assemblies".

Item 3077 – Superpave Mixtures

Use Surface Aggregate Classification "A" material for all surface mixes.

In place of typical tack materials shown in Table 18 under Item 3096, use a tracking resistant asphalt interlayer (TRAIL) material as a tack coat. TRAIL shall only be required prior to the final riding surface layer of HMA. Approved TRAIL products are found on TxDOT's Material Producer List under Asphalt Interlayer (Tracking Resistant) at:
https://www.txdot.gov/business/resources/materials.html

Hydrated Lime shall be added as an additive as per Item 301 "Asphalt Antistripping Agents" between the rates of 1% minimum and 2.0% maximum by weight. If the Hamburg Wheel Test cannot be met within these limits, Liquid Antistripping agents as approved by the Engineer may be used in conjunction with lime.

Supply Warm-Mix Asphalt (WMA) under this Item.

When Reclaimed Asphalt Pavement (RAP) is used in the production of hot-mix asphaltic concrete, use fractionated RAP. Do not exceed 10.0% of Fractionated RAP on surface mixtures. Department-owned RAP generated through the required work on the Contract is available for the Contractor's use. Contractor may use Contractor-owned fractionated RAP and replace it with an equal quantity of Department-owned RAP when RAP is generated through the required work on the Contract.

Use of Recycled Asphalt Shingles (RAS) is not allowed for any mixtures.

Substitute PG Binders (grade dumping) will not be allowed for any mixtures.

Obtain the current version of the templates at http://www.txdot.gov/inside-txdot/forms-publications/consultants-contractors/forms/site-manager.html Submit electronically to the Engineer.

Design the mixture at 50 gyrations (Ndesign).

Do not cover with asphaltic material, any existing survey monuments, manholes, or valve covers, etc. Adjustments will be done in coordination with the respective utility owners.

Place a string line or other suitable marking to ensure smooth, neat lines, or as directed. Provide smooth transitions to existing driveways and intersections.

Place longitudinal joints approximately 6 in. from the stripe, or as directed by the Engineer. Avoid placing joint under the wheel path. Avoid placing longitudinal joints on the outside travel lane on multi-lane roadway.

Operate the spreading and finishing machine at a uniform forward speed consistent with the plant production rate, hauling capability, and roller train capacity to result in a continuous operation. The speed will be slow enough, so that stopping between trucks is not ordinarily required. If the Engineer determines non-uniform delivery of material is affecting the HMA placement, the Engineer may require the paving operations to cease until acceptable methods are employed to minimize starting and stopping of the paver.

Item 6005 – Testing, Training, Documentation, Final Acceptance, and Warranty

The 90 day Final Acceptance Test will begin only when all TMS equipment installation, cabling, wiring, testing, field work, TransVista operations center work, etc. for the entire project is completed and acceptance to TxDOT. Partial testing is not allowed.

Item 6007 – Fiber Optic Cable (Single Mode)

Furnish equipment compatible with the Department's equipment and mounting facilities. Submit equipment list and specifications for approval prior to delivery.

Fiber optic cable road markers must be installed equidistant between fiber ground boxes containing fiber optic cable or as approved by the Engineer. Fiber optic cable road markers shall read "FIBER OPTIC CABLE BURIED BELOW CALL TXDOT AT TXDOTELPLOCATES@TXDOT.GOV" or as directed by the Engineer.

Provide compact fiber patch panels and splice tray modules for the sizes specified to maximize empty rack space.

Clearly label fiber assignments and ID for ITS field device on fiber distribution housing modules per District requirements.
All fiber optic equipment that will be used by the Contractor on this project shall be certified and calibrated to latest NIST calibration standards by an independent and accredited calibration laboratory before the Contractor can begin work on the fiber optic cable system. The Contractor shall provide documentation on the most recent fiber optic certifications of their workers and equipment. The Contractor shall provide documentation on the most recent calibration reports of their fiber optic equipment.

This project requires the placement of fiber optic cable. Splicing fiber optic cable of different manufacturers may result in signal degradation as measured through splice loss and DB loss per mile. The contractor must supply documentation of the compatibility of the fiber types with the fiber optic cable submittals. If testing of the new fiber optic cable after installation shows evidence of signal degradation outside of tolerable specifications due to the use of different fiber types, the contractor is responsible for replacing the newly installed fiber optic cable with material that results in signal quality with specifications.

The contractor is responsible for testing any existing Fiber Optic Cable strands that will be used for the communication links back to the Traffic Management Center or to an Aggregation Point (any existing fiber back to Traffic Management Center or to an Aggregation Point to which new fiber will be spliced) for new or relocated ITS Equipment, identifying which fibers can be used and ensuring that the Fiber Optic Cable meets requirements tested in Fiber Optic Cable specification for DB loss.

Install 100 feet of slack of “trunkline” fiber optic cable in each ITS Type 2 splice enclosure ground box that fiber passes through, racked to side of ground box using support hooks. Rack and hooks are subsidiary to the item ITS Ground Box with no direct payment.

Use ST connectors where fiber optic cables terminate in ITS equipment.

Item 6010 – Closed Circuit Television Field Equipment (Digital) (Install Only)

Contractor to configure and integrate the video feed off each camera to communicate with TransVista. At the conclusion of major construction activities, Contractor to maintain the video feed off each camera to TransVista.

The Department will provide IP addressable power strip. The contractor will install, configure, and integrate the IP addressable power strip with the TxDOT Traffic Management Center. This work will be subsidiary to item 6010-6011.

Item 6156 – High Mast Illumination Assemblies

Erect and place in operation high mast illumination poles before removing existing illumination facilities.

The high mast power cable must meet the latest edition of Department Standard sheets, “High Mast Illumination Details” (HMID) and Department Material Specification (DMS) 11021, “High Mast Assembly Kits.”

Furnish stainless steel pulley material for the Wire Rope Pulley as shown on the HMID standard.

Provide pre-qualified LED lamps from the Material Producer List (MPL) of the wattages shown on the plans, shipped and secured within the fixture. No alternatives are allowed.

Item 6185 – Truck Mounted Attenuator (TMA) and Trailer Attenuator (TA)

All TMA Operators must participate in a TMA workshop to be conducted by the El Paso District Safety Office, on the proper use of TMAs, prior to working on Department Right of Way (ROW). A certificate of completion will be issued to TMA Operators that successfully complete the TMA workshop. The certificate of completion must be carried by TMA Operators at all times while working on Department right of way.

Acquire the TCP and TMA Operator’s certificates of completion prior to the authorization to begin work. No time suspension will be granted and no traffic control work will be allowed without certificates of completion.

In addition to the shadow vehicle with truck mounted attenuator (TMA) that are specified as being required on the traffic control plan for this project, provide 1 additional shadow vehicle(s) with TMA for TCP (6-1)-12 as detailed on General Note 4 of this standard sheet.

Therefore, 2 total shadow vehicles with TMA will be required for this type of work. The contractor will be responsible for determining if one or more of these operations will be ongoing at the same time to determine the total number of TMAs needed for the project.

The supporting vehicle for the TMA shall have a minimum gross (i.e., ballasted) vehicular weight of 19,000 pounds.

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Basis of Estimate for Stationary TMAs				
		TMA(Stationary)		
Phase	Standard	Required	Additional	TOTAL
1	TCP 1-5)-18	1	-	1
1	TCP (2-1)-18	1	-	1
1 & 2	TCP (2-6)-18	1	-	1
1	TCP (5-1)-18	1	-	1
2 &3	TCP (6-6)-12	2	-	2

Basis of Estimate for Mobile TMAs			
	TMA(Mobile)		
Standard	Required	Additional	TOTAL
TCP (3-3)-14	3	-	3

Item 6304 – Radar Vehicle Sensing Device (RVSD) (INSTALL ONLY)

Contractor to install RVSD according to the manufacture's recommendations to achieve the specified accuracy and reliability. Contractor to provide calibration results to TxDOT.
Contractor to configure and integrate the RVSD system to communicate with TransVista through fiber optics and cellular network. Contractor to maintain RVSD communication link until project is accepted.

Item 6377 – System Integration

Contractor to program all field equipment provided by the state including cellular modems.

The Contractor shall relocate the Department's existing fiber optic cable if it is in conflict with the given construction phase sequencing to avoid interruption of the ITS peripherals connected to the fiber optic cable such as CCTV cameras, Dynamic Message Signs (DMS), Radar Vehicle Sensing Device (RVSD), Lane Control Signal (LCS), etc. This work shall be subsidiary to the various ITS items. Select and install the equipment that meets the Department's specifications as to achieve and complete a fully operational system. Furnish and install all incidentals not expressed in the general notes, specifications or not shown in the plans, which may be necessary for the complete and proper construction. This will be subsidiary to various bid items. All fiber optic cables, and electrical conductors must be labeled with a heat shrink label. This is subsidiary to various bid

items. For items where heat shrink does not fit over the connector, the cable will be labeled as direct by the Engineer. Furnish equipment compatible with the Department equipment and mounting facilities. Submit equipment list and specifications for approval prior to delivery. Submit the following data prior to final acceptance during construction of Traffic Management equipment for approval by the Engineer and TransVista. Freeway Management System Geographic Information System (FMSGIS) Data by providing survey information in the following format (NAD 83) and (latitude and longitude) of all poles (CCTV, RVSD, HAR, Drum Sign), ground boxes, traffic signal controller cabinets, and communication cabinets, HAR beacon signs, and overhead sign structures (LCS and DMS). Digital photos and serials on all poles (CCTV, RVSD, HAR, Drum Sign), traffic signal controller cabinets, and communication cabinets, elements in controller and communication cabinets, and overhead sign structures (LCS and DMS). Fiber optic cable and channel assignments and distribution, to include all patch panels, fiber jumpers, and fiber trays, in system software approved by the Engineer.

MAINTENANCE OF ITS AND OTHER ELECTRICAL TRAFFIC EQUIPMENT

The contractor shall be responsible for the operation and maintenance of all ITS and other electrical traffic equipment within the project limits through the duration of the project. The contractor shall repair, supply and/or replace any damaged equipment or fiber optic cable within 2 business days.

A "Contractor Force Account Work (Participating)" Force Account of $50,000 will be used to ensure contractor maintains TxDOT's ITS System and elements operational during construction.

If any equipment must be returned to the equipment manufacturer, the contractor will coordinate with the State to obtain warranty repair. ITS equipment no longer covered by warranty repair will be replaced by equipment approved by the state. ITS equipment under warranty coverage will be sent back to the manufacture by the state and the state will provide a temporary replacement to the contractor to limit downtime during the warranty repair.

The contractor shall complete an inventory on all ITS equipment and communication status prior to construction work beginning. An electronic copy of the report shall be given to the state in the form of a USB flash drive. Any equipment Determined to be non-functional during the inventory shall not be responsibility of the contractor to maintain during the duration of the project, unless equipment is replaced by the State.

Fiber optic cable shall be tested prior to and after installation with OTDR. Provide test results to the State in electronic format in the form of a USB flash drive.

Furnish, install, repair, replace, maintain, modify, or remove the following ITS equipment. Conform to TxDOT standards, the most current version of the National Electric Code (NEC), local utility requirements, the requirement of this item, and the pertinent requirements of the following ITS equipment:

- **Power, Flashing Devices and Power Cable** shall be measured by the linear foot. All connections and all other work subsidiary to make a working system shall be considered subsidiary to this Item.
- **Radar Vehicle Sensing Device (RVSD)** shall be measured by each complete unit in place.
- **RVSD Controller** shall be measured by each complete unit in place.
- **CCTV Camera** shall be measured by each complete unit in place.
- **CCTV Camera Controller** shall be measured by each complete unit in place.
- **Fiber Optic Data Transceiver** shall be measured by each complete unit in place.
- **Fiber Optic Cable** shall be measured by the linear foot. All connections and all other work subsidiary to make a working system shall be considered subsidiary to this item.
- **Splice Fiber Optic Cable** as described herein shall be measured by each splice.
- **Fiber Optic Video Receiver** shall be measured by each complete unit in place.
- **Fiber Optic Video Transmitter** shall be measured by each complete unit in place.
- **Field Ethernet Switch** shall be measured by each complete unit in place.
- **Terminal Server/Media Converter** shall be measured by each complete unit in place.
- **Add/Drop Multiplexor** shall be measured by each complete unit in place.
- **T1 Multiplexor/Demultiplexor** shall be measured by each complete unit in place.

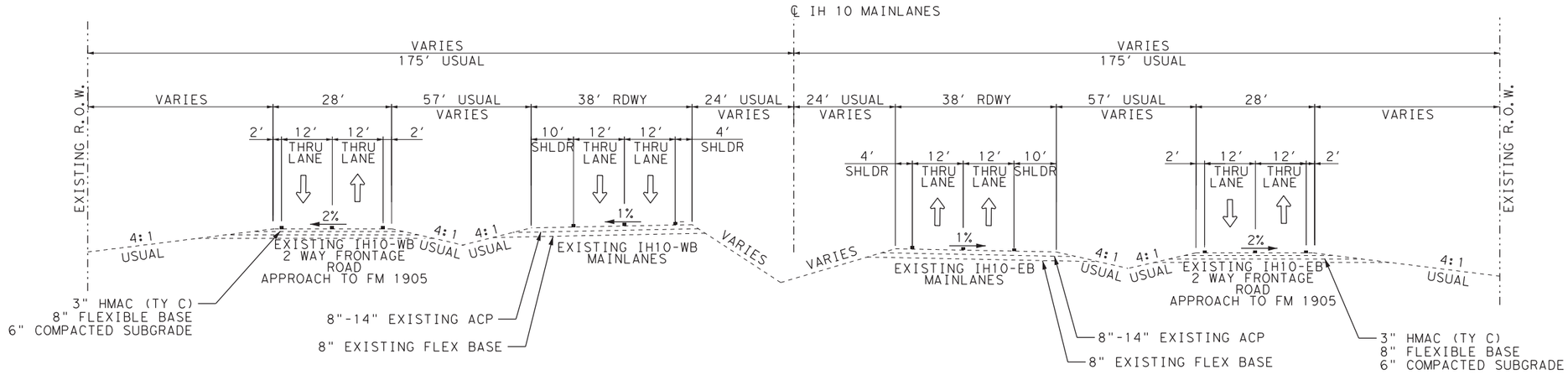
Payment for the maintenance of the ITS equipment will be through the project's contractor force account.

NOTES:

1. TYPICAL SECTIONS ARE FOR GENERAL INFORMATION ONLY DO NOT USE FOR QUANTITY CALCULATIONS OR AS A CONSTRUCTION DETAIL. REFER TO LAYOUTS, SPECIFICATION DETAILS, AND STATE STANDARDS FOR PROPER CONSTRUCTION.
2. AVERAGE IH10 PAVEMENT DEPTH IS DETERMINED FROM TXDOT AS-BUILTS.

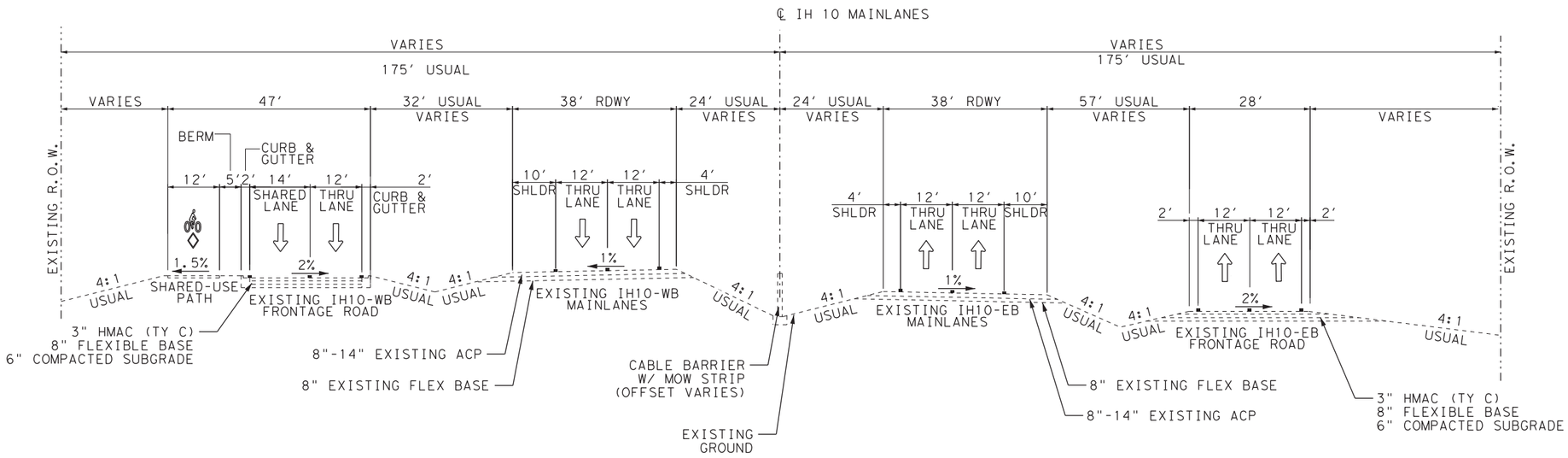
LEGEND

⇧ EXISTING TRAFFIC FLOW ARROWS



EXISTING IH 10 TYPICAL SECTION

ML STA. 00+00 TO STA. 12+00



EXISTING IH 10 TYPICAL SECTION

	ML STA. 12+00	TO STA. 30+00
	ML STA. 62+00	TO STA. 157+00
BRIDGE LIMITS	ML STA. 23+73	TO STA. 25+38
BRIDGE LIMITS	ML STA. 54+16	TO STA. 54+96
BRIDGE LIMITS	ML STA. 89+40	TO STA. 90+50
BRIDGE LIMITS	ML STA. 113+26	TO STA. 114+91

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STATE OF TEXAS
JESUS S. HEREDIA
95705
LICENSED PROFESSIONAL ENGINEER

2/28/2024

NO.	DATE	REVISION	APPROV.

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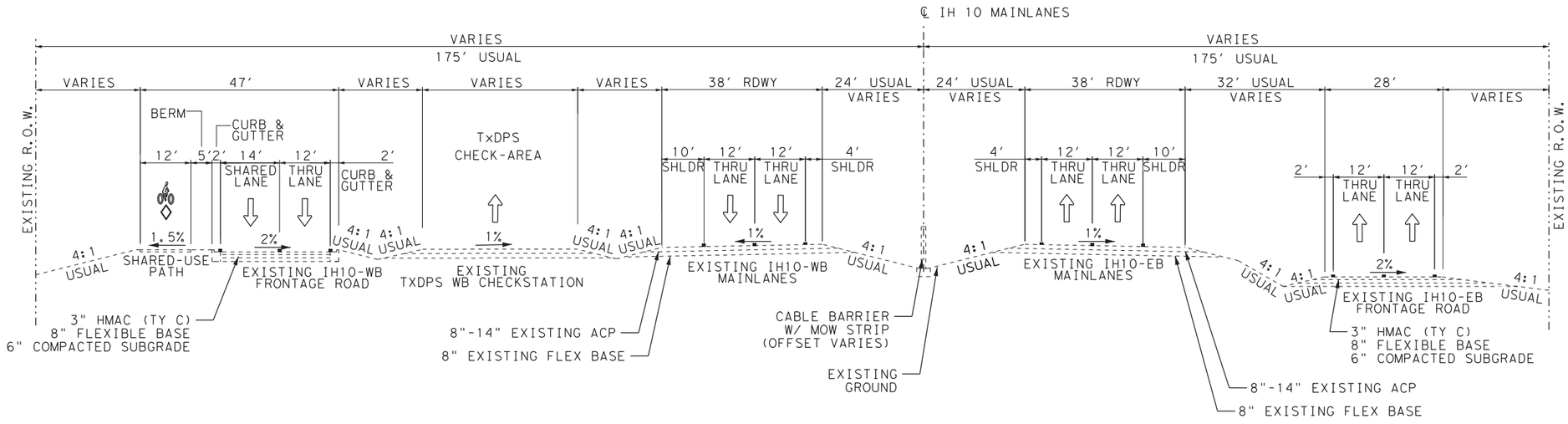
Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

EXISTING TYPICAL SECTIONS

SHEET 1 OF 4

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		9
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



EXISTING IH 10 TYPICAL SECTION

ML STA. 30+00 TO STA. 62+00

NOTES:

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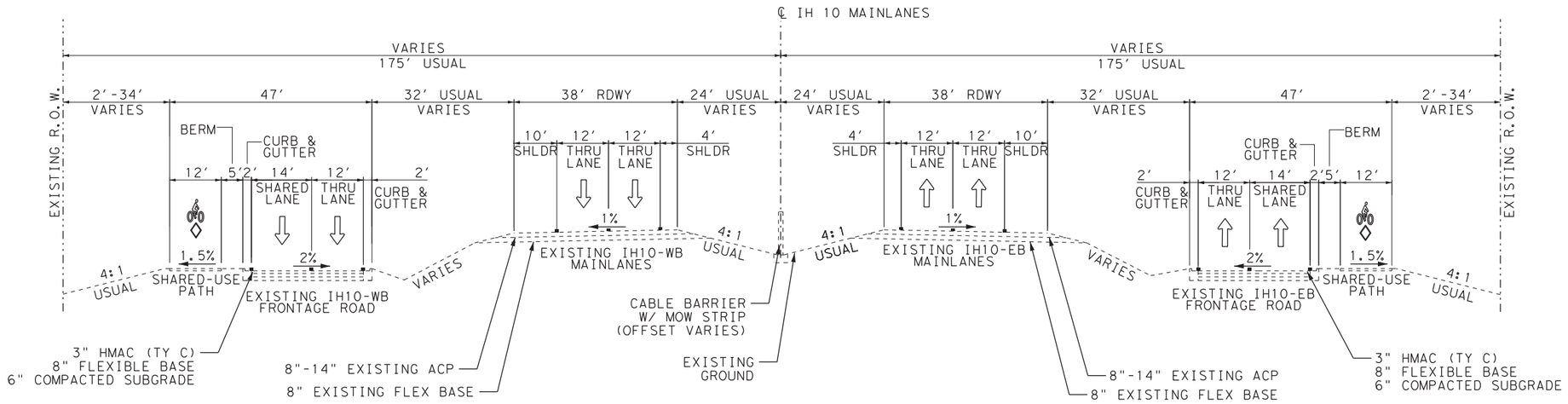
2. AVERAGE IH10 PAVEMENT DEPTH IS DETERMINED FROM TXDOT AS-BUILTS.

LEGEND

⇧ EXISTING TRAFFIC FLOW ARROWS



EXISTING IH 10 TYPICAL SECTION

ML STA. 157+00 TO STA. 169+10
ML STA. 177+00 TO STA. 181+52
ML STA. 194+86 TO STA. 203+50
BRIDGE LIMITS ML STA. 158+65 TO STA. 160+65

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IH 10 WIDENING
(NM/SPUR 37)

EXISTING TYPICAL SECTIONS

SHEET 2 OF 4

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		10
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

NOTES:

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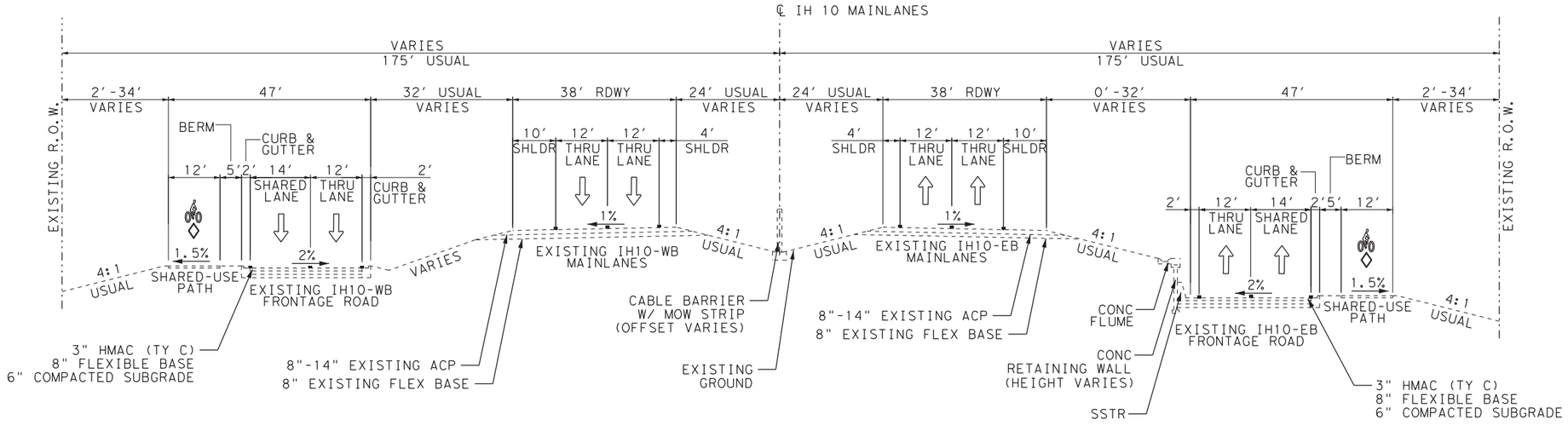
2. AVERAGE IH10 PAVEMENT DEPTH IS DETERMINED FROM TXDOT AS-BUILTS.

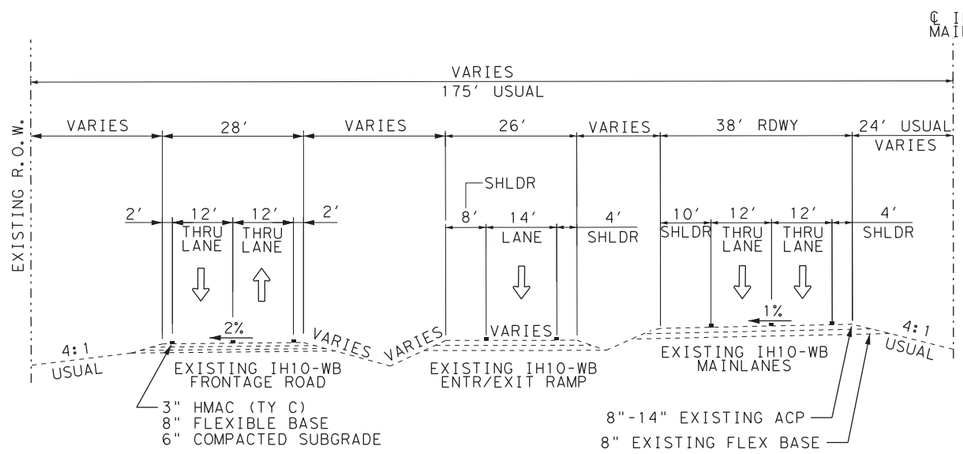
LEGEND

⇧ EXISTING TRAFFIC FLOW ARROWS



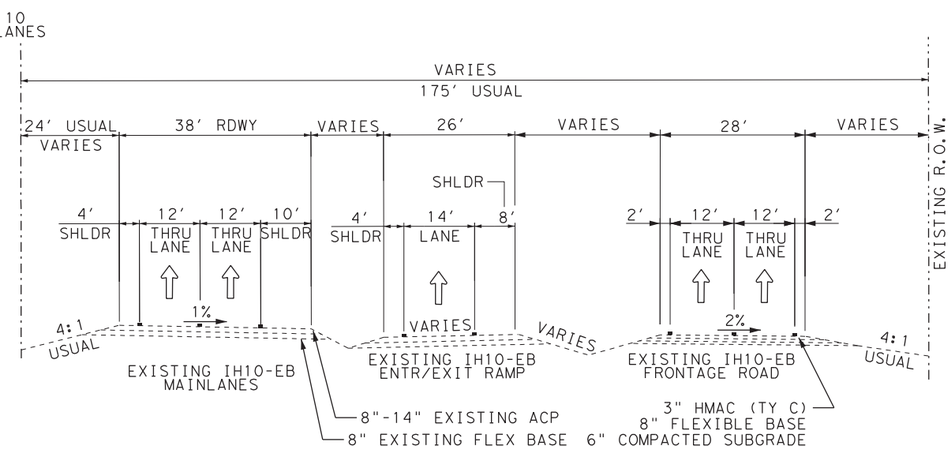
EXISTING IH 10 TYPICAL SECTION

ML STA. 169+10 TO STA. 177+00
ML STA. 181+52 TO STA. 194+86
BRIDGE LIMITS ML STA. 171+93 TO STA. 173+93
BRIDGE LIMITS ML STA. 184+82 TO STA. 186+02



EXISTING TYPICAL SECTION: WB ENTR/EXIT RAMPS

ML STA. 0+00R1 TO STA. 4+00R1



EXISTING TYPICAL SECTION: EB ENTR/EXIT RAMPS

ML STA. 0+00 R1 TO STA. 5+00 R1
ML STA. 14+50 R1 TO STA. 16+50 R1
ML STA. 39+50 R1 TO STA. 48+00 R1
ML STA. 96+50 R1 TO STA. 106+00 R1
ML STA. 141+50 R1 TO STA. 147+00 R1
ML STA. 165+00 R1 TO STA. 171+00 R1

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IH 10 WIDENING
(NM/SPUR 37)

EXISTING TYPICAL SECTIONS

SHEET 3 OF 4

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		11
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

NOTES:

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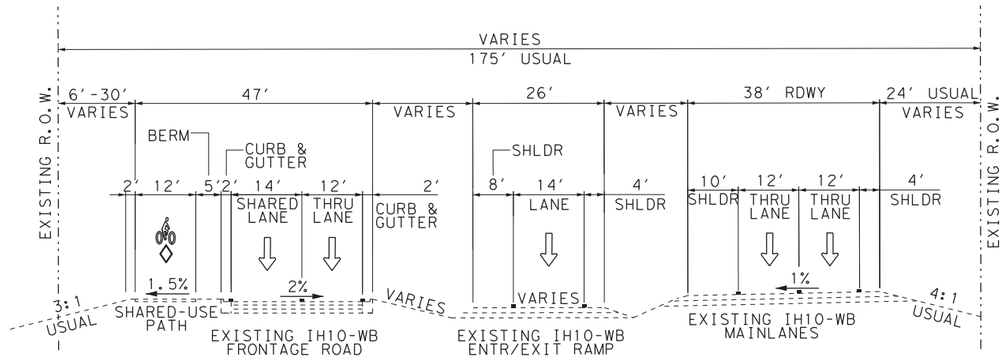
2. AVERAGE IH10 PAVEMENT DEPTH IS DETERMINED FROM TXDOT AS-BUILTS.

LEGEND

⇧ EXISTING TRAFFIC FLOW ARROWS



EXISTING TYPICAL SECTION: WB ENTR/EXIT RAMPS

ML STA. 76+00 R1 TO STA. 84+00 R1
ML STA. 143+50 R1 TO STA 146+00 R1
ML STA. 174+50 R1 TO STA. 181+75 R1

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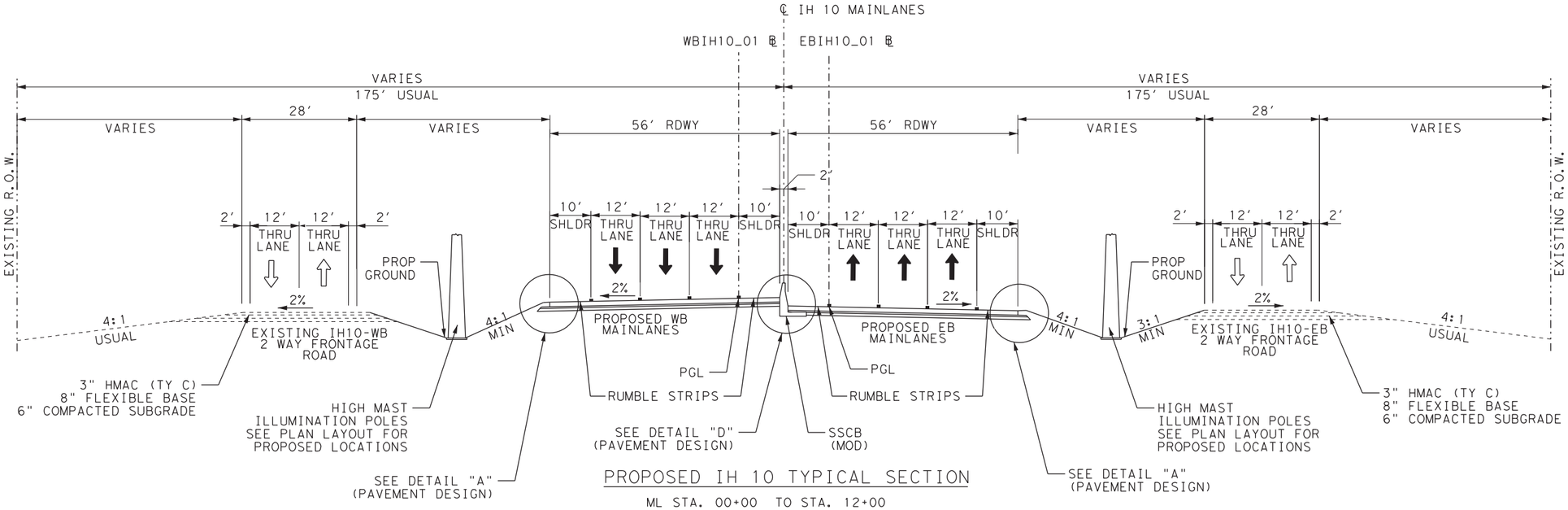
EXISTING TYPICAL SECTIONS

SHEET 4 OF 4

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		12
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



PROPOSED IH 10 TYPICAL SECTION

ML STA. 00+00 TO STA. 12+00

NOTES:

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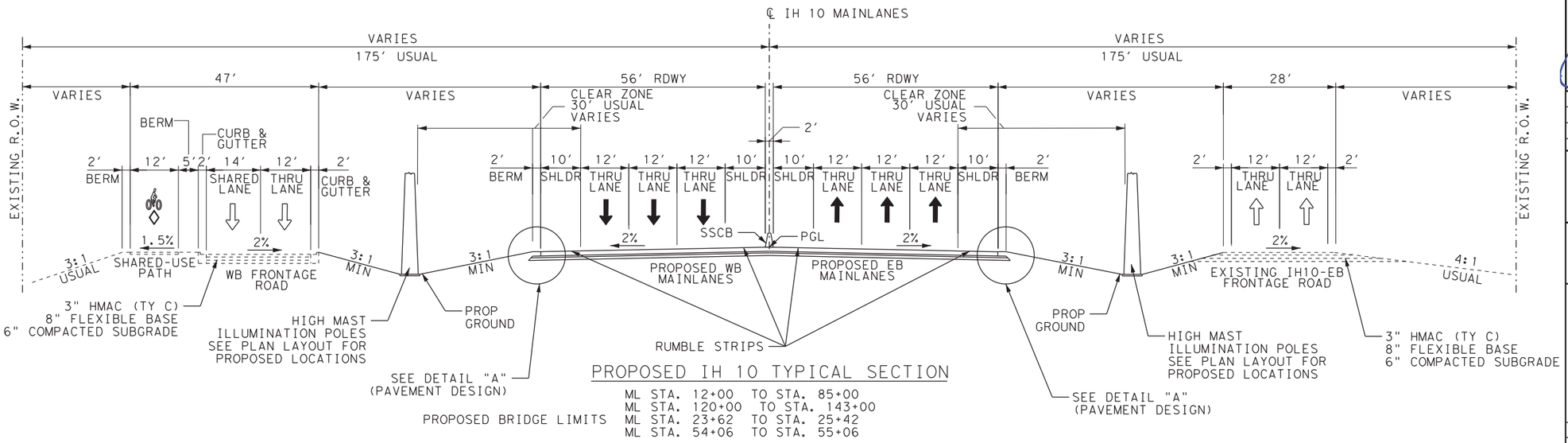
3. REFER TO PROPOSED TYPICAL SECTIONS PAVEMENT DESIGN DETAILS.

LEGEND

- PROPOSED TRAFFIC FLOW ARROWS
- EXISTING TRAFFIC FLOW ARROWS



PROPOSED IH 10 TYPICAL SECTION

ML STA. 12+00 TO STA. 85+00
ML STA. 120+00 TO STA. 143+00
ML STA. 23+62 TO STA. 25+42
ML STA. 54+06 TO STA. 55+06

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IH 10 WIDENING
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PROPOSED TYPICAL SECTIONS

SHEET 1 OF 4

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		13
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

NOTES:

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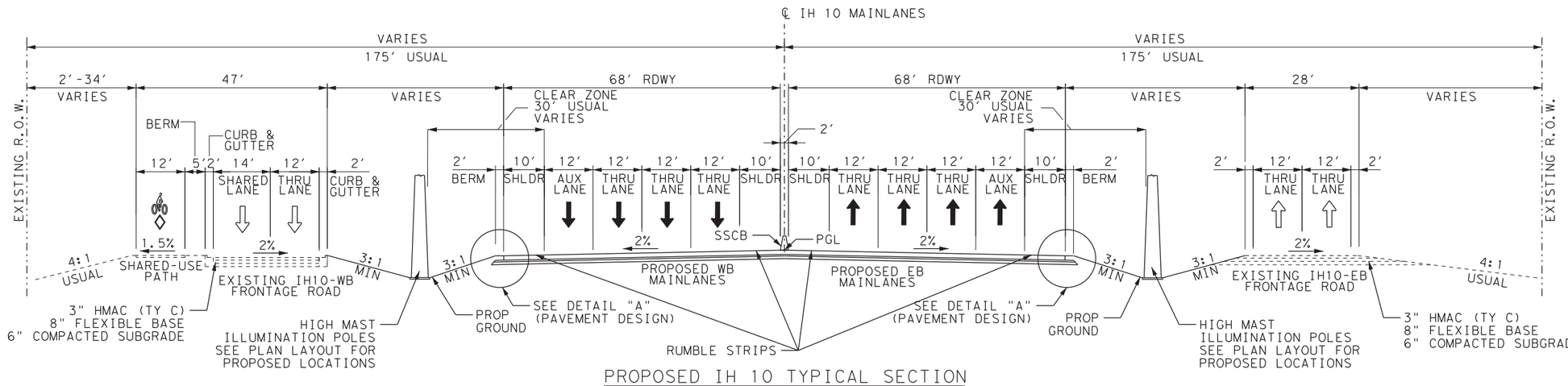
3. REFER TO PROPOSED TYPICAL SECTIONS PAVEMENT DESIGN DETAILS.

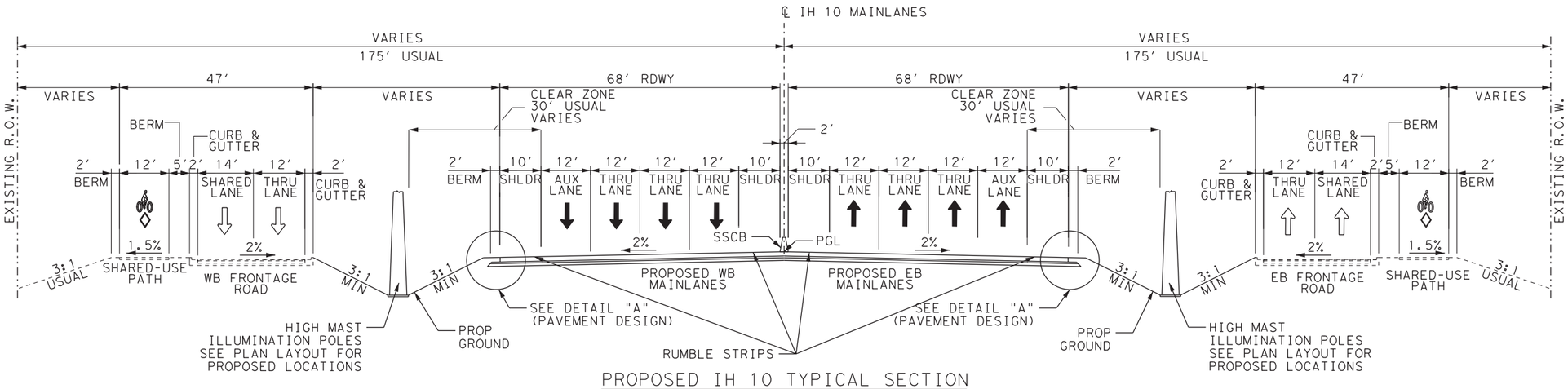


PROPOSED IH 10 TYPICAL SECTION

PROPOSED BRIDGE LIMITS
ML STA. 85+00 TO STA. 120+00
ML STA. 143+00 TO STA. 157+00
ML STA. 88+85 TO STA. 90+65
ML STA. 112+96 TO STA. 114+96

LEGEND

- PROPOSED TRAFFIC FLOW ARROWS
- EXISTING TRAFFIC FLOW ARROWS



PROPOSED IH 10 TYPICAL SECTION

PROPOSED BRIDGE LIMITS
ML STA. 157+00 TO STA. 173+18
ML STA. 158+76 TO STA. 160+56
ML STA. 172+03 TO STA. 173+83

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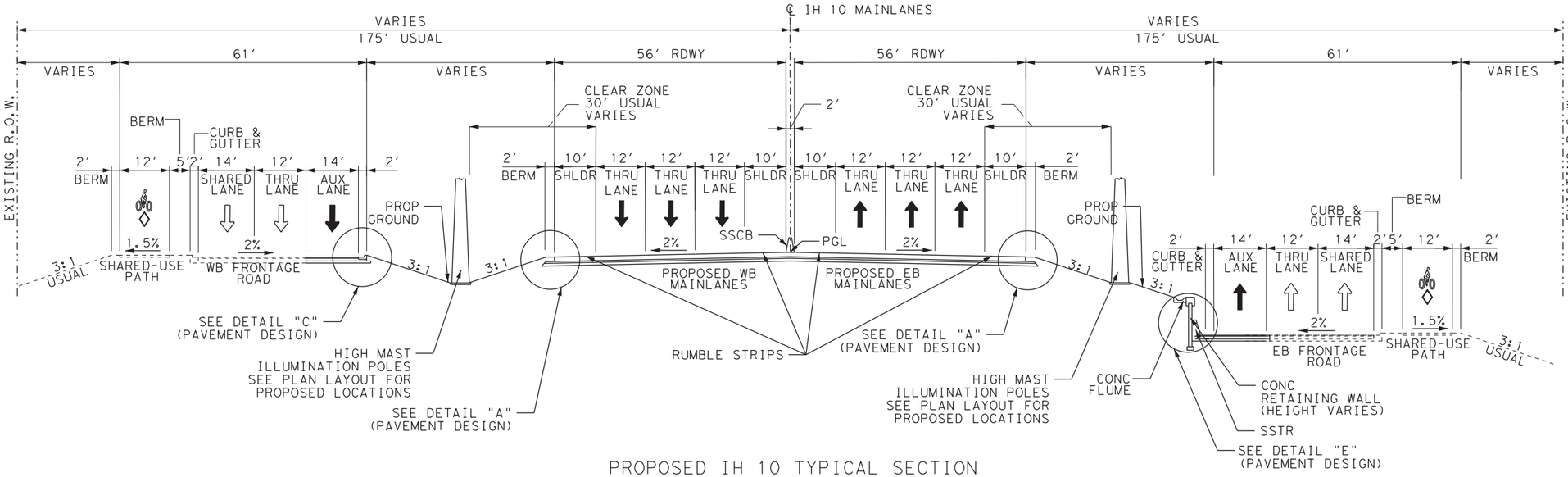
IH 10 WIDENING
(NM/SPUR 37)

PROPOSED TYPICAL SECTIONS

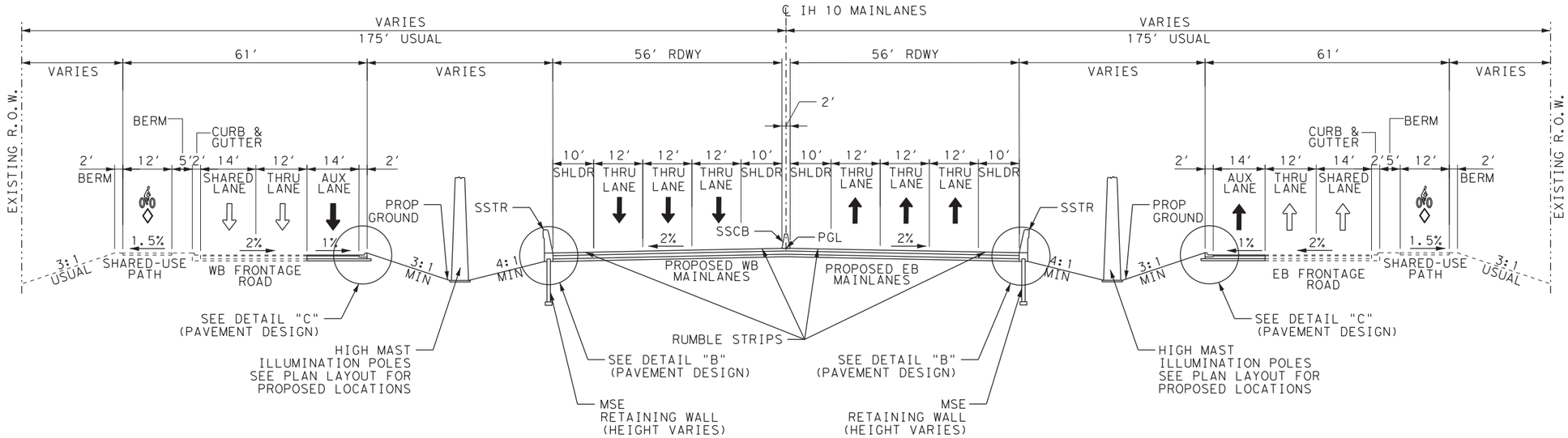
SHEET 2 OF 4

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		14
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



PROPOSED IH 10 TYPICAL SECTION

ML STA. 173+18 TO STA. 181+15
ML STA. 201+50 TO STA. 203+50



PROPOSED IH 10 TYPICAL SECTION

ML STA. 181+15 TO STA. 201+50
PROPOSED BRIDGE LIMITS ML STA. 184+93 TO STA. 185+93

NOTES:

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3. REFER TO PROPOSED TYPICAL SECTIONS PAVEMENT DESIGN DETAILS.

LEGEND

- PROPOSED TRAFFIC FLOW ARROWS
- EXISTING TRAFFIC FLOW ARROWS
- (A) 13" CONC PVMT (CONT REINF-CRCP)
- (C) 4" D-GR HMA TY-B PG 64-22
- (D) PRIME COAT (MULTI-OPTION)
- (E) 6" CEMENT TREAT (SUBGRADE)
- (F) 3" SUPERPAVE MIXTURE SP-C SAC-A PG70-22
- (G) 8" FLEX BASE (CMP IN PLC) (TY A GR 5)
- (H) 6" COMPACTED SUBGRADE

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STATE OF TEXAS
JESUS S. HEREDIA
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2/28/2024

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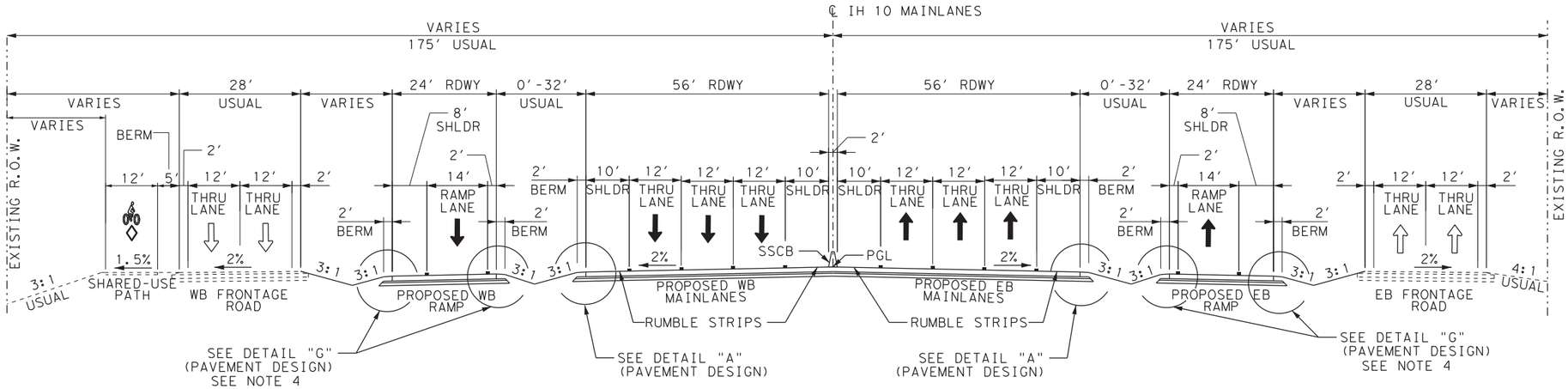
Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

PROPOSED TYPICAL SECTIONS

SHEET 3 OF 4

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		15
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



PROPOSED IH 10 WESTBOUND ENT/EXT RAMP TYPICAL SECTION

ML STA. 2+53 TO STA. 4+88
ML STA. 27+78 TO STA. 40+79
ML STA. 80+35 TO STA. 82+86
ML STA. 119+60 TO STA. 122+87
ML STA. 139+14 TO STA. 142+77
ML STA. 180+00 TO STA. 185+00
ML STA. 201+46 TO STA. 203+40

PROPOSED IH 10 EASTBOUND ENT/EXT RAMP TYPICAL SECTION

ML STA. 4+75 TO STA. 10+20
ML STA. 39+31 TO STA. 41+85
ML STA. 77+36 TO STA. 82+34
ML STA. 119+53 TO STA. 123+00
ML STA. 137+81 TO STA. 142+23
ML STA. 178+55 TO STA. 183+26
ML STA. 201+46 TO STA 203+40

NOTES:

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3. REFER TO PROPOSED TYPICAL SECTIONS PAVEMENT DESIGN DETAILS.
4. REFER TO DRAINAGE SHEETS TO DETERMINE LIMITS OF CONC CURB ON RAMPS.

LEGEND

↑ PROPOSED TRAFFIC FLOW ARROWS

⇧ EXISTING TRAFFIC FLOW ARROWS

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STATE OF TEXAS
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IH 10 WIDENING
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PROPOSED TYPICAL SECTIONS

SHEET 4 OF 4

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		16
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

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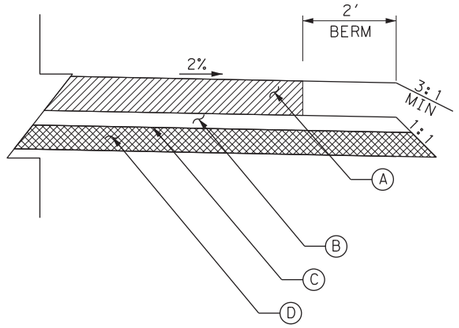
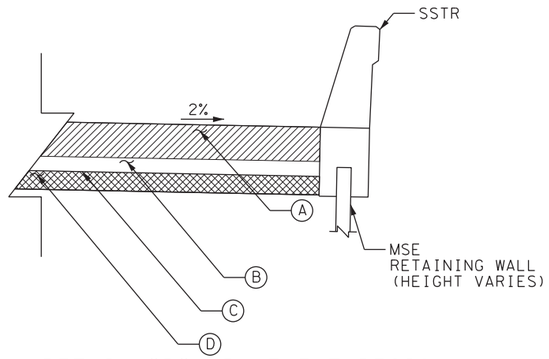


DETAIL "A" (PAVEMENT DESIGN)



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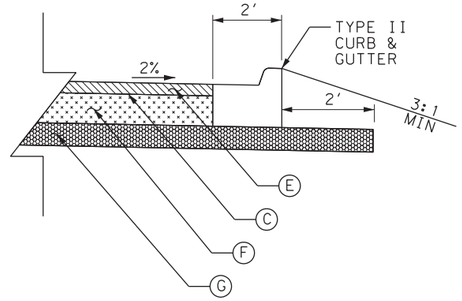

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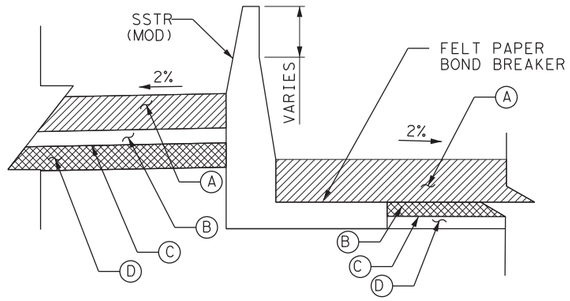
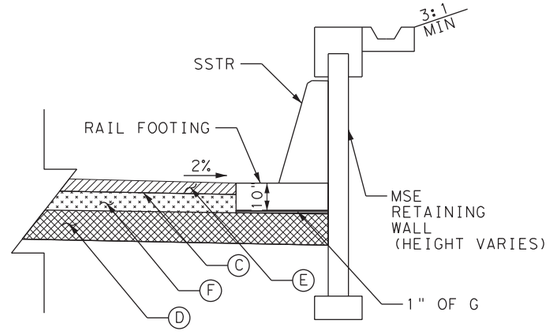
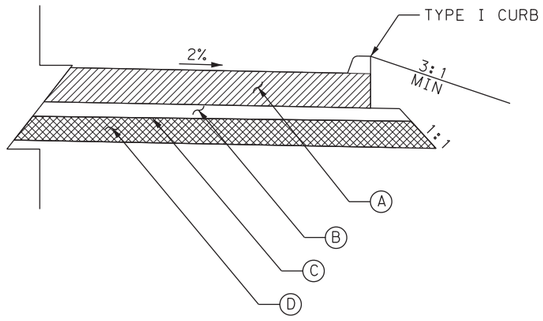


DETAIL "D" (PAVEMENT DESIGN)



DETAIL "E" (PAVEMENT DESIGN)



DETAIL "G" (PAVEMENT DESIGN)

NOTES:

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3. REFER TO PROPOSED TYPICAL SECTIONS PAVEMENT DESIGN DETAILS.

LEGEND

- ↑ PROPOSED TRAFFIC FLOW ARROWS
- ⇧ EXISTING TRAFFIC FLOW ARROWS
- (A) 13" CONC PAVEMENT (CRCP)
- (B) 4" D-GR HMA TY-B PG 64-22
- (C) PRIME COAT (MULTI-OPTION)
- (D) 6" CEMENT TREAT (SUBGRADE)
- (E) 3" SUPERPAVE MIXTURE SP-C SAC-A PG 70-22
- (F) 8" FLEX BASE (CMP IN PLC) (TY A GR 5)
- (G) 6" COMPACTED SUBGRADE

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JESUS S. HEREDIA
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LICENSED
PROFESSIONAL ENGINEER

2/28/2024

NO.	DATE	REVISION	APPROV.

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IH 10 WIDENING
(NM/SPUR 37)

PROPOSED TYPICAL SECTIONS PAVEMENT DESIGN DETAILS

SHEET 1 OF 1

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		17
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

Estimate & Quantity Sheet

CONTROLLING PROJECT ID 2121-01-104 **DISTRICT** El Paso **COUNTY** El Paso
HIGHWAY IH 10

			CONTROL SECTION JOB		**2121-01-104**	TOTAL EST.	TOTAL FINAL
			PROJECT ID		**A00185043**		
			COUNTY		**El Paso**		
			HIGHWAY		**IH 10**		
ALT	**BID CODE**	**DESCRIPTION**	**UNIT**	EST.	FINAL		
	100-6002	PREPARING ROW	STA	204.000		204.000	
	104-6001	REMOVING CONC (PAV)	SY	917.000		917.000	
	104-6009	REMOVING CONC (RIPRAP)	SY	9,847.000		9,847.000	
	104-6023	REMOVING CONC (CTB)	LF	2,518.000		2,518.000	
	104-6024	REMOVING CONC (RETAINING WALLS)	SY	1,177.000		1,177.000	
	104-6027	REMOVING CONC (APPR SLAB)	SY	2,574.000		2,574.000	
	104-6029	REMOVING CONC (CURB OR CURB & GUTTER)	LF	4,318.000		4,318.000	
	104-6054	REMOVING CONCRETE(MOW STRIP)	LF	17,036.000		17,036.000	
	105-6021	REMOVING STAB BASE AND ASPH PAV (0-4")	SY	2,574.000		2,574.000	
	105-6072	REMOVING STAB BASE & ASPH PAV(26"-32")	SY	186.000		186.000	
	105-6082	REMOVING STAB BASE & ASPH PV(10 TO 16")	SY	189,475.000		189,475.000	
	110-6001	EXCAVATION (ROADWAY)	CY	272,709.000		272,709.000	
	110-6002	EXCAVATION (CHANNEL)	CY	16,632.000		16,632.000	
	132-6006	EMBANKMENT (FINAL)(DENS CONT)(TY C)	CY	104,435.000		104,435.000	
	134-6002	BACKFILL (TY B)	STA	1,586.000		1,586.000	
	164-6009	BROADCAST SEED (TEMP) (WARM)	SY	2,269.000		2,269.000	
	166-6001	FERTILIZER	AC	0.500		0.500	
	168-6001	VEGETATIVE WATERING	MG	57.000		57.000	
	192-6017	VEGETATION BARRIER	SY	838,037.000		838,037.000	
	192-6024	PLANT MATERIAL (30 GAL) (TREE)	EA	267.000		267.000	
	192-6030	PLANT MATERIAL (3 GAL) (SHRUB)	EA	1,833.000		1,833.000	
	192-6032	PLANT MATERIAL (10 GAL) (SHRUB)	EA	1,422.000		1,422.000	
	192-6033	PLANT MATERIAL (15 GAL) (SHRUB)	EA	1,027.000		1,027.000	
	192-6063	PLANT BED PREP (TYPE I)	SY	33,528.000		33,528.000	
	247-6053	FL BS (CMP IN PLC)(TYD GR1-2)(FNAL POS)	CY	3,581.000		3,581.000	
	247-6382	FL BS (CMP IN PLC)(TY A GR 5)(8")	SY	13,467.000		13,467.000	
	275-6001	CEMENT	TON	1,493.000		1,493.000	
	275-6019	CEMENT TREAT (SUBGRADE)(6")	SY	298,948.000		298,948.000	
	310-6001	PRIME COAT (MULTI OPTION)	GAL	61,895.000		61,895.000	
	354-6045	PLANE ASPH CONC PAV (2")	SY	882.000		882.000	
	360-6007	CONC PVMT (CONT REINF - CRCP) (13")	SY	284,844.000		284,844.000	
	400-6002	STRUCT EXCAV (BOX)	CY	3,038.000		3,038.000	
	400-6003	STRUCT EXCAV (PIPE)	CY	4,691.000		4,691.000	
	400-6005	CEM STABIL BKFL	CY	5,020.800		5,020.800	
	400-6008	CUT & RESTORE ASPH PAVING	SY	993.000		993.000	
	402-6001	TRENCH EXCAVATION PROTECTION	LF	4,199.000		4,199.000	
	403-6001	TEMPORARY SPL SHORING	SF	56,345.000		56,345.000	

Estimate & Quantity Sheet

CONTROLLING PROJECT ID 2121-01-104 **DISTRICT** El Paso **COUNTY** El Paso
HIGHWAY IH 10

		CONTROL SECTION JOB		**2121-01-104**		TOTAL EST.	TOTAL FINAL
		PROJECT ID		**A00185043**			
		COUNTY		**El Paso**			
		HIGHWAY		**IH 10**			
ALT	**BID CODE**	**DESCRIPTION**	**UNIT**	EST.	FINAL		
	416-6001	DRILL SHAFT (18 IN)	LF	206.000		206.000	
	416-6004	DRILL SHAFT (36 IN)	LF	8,906.000		8,906.000	
	416-6015	DRILL SHAFT (NON - REINFORCED) (12 IN)	LF	7.000		7.000	
	416-6018	DRILL SHAFT (SIGN MTS) (24 IN)	LF	82.000		82.000	
	416-6022	DRILL SHAFT (SIGN MTS) (48 IN)	LF	313.000		313.000	
	416-6026	DRILL SHAFT (HIGH MAST POLE) (60 IN)	LF	1,015.000		1,015.000	
	416-6068	DRILL SHAFT (SIGN MTS) (60 IN)	LF	68.000		68.000	
	420-6007	CL A CONC (FLUME)	CY	133.000		133.000	
	420-6014	CL C CONC (ABUT)(HPC)	CY	893.900		893.900	
	420-6026	CL C CONC (BENT)(HPC)	CY	637.700		637.700	
	420-6038	CL C CONC (COLUMN)(HPC)	CY	433.800		433.800	
	420-6066	CL C CONC (RAIL FOUNDATION)	CY	68.000		68.000	
	420-6071	CL C CONC (COLLAR)	EA	10.000		10.000	
	422-6002	REINF CONC SLAB (HPC)	SF	150,502.000		150,502.000	
	422-6016	APPROACH SLAB (HPC)	CY	1,464.000		1,464.000	
	423-6005	RETAINING WALL (SPREAD FOOTING)	SF	40,361.000		40,361.000	
	425-6020	PRESTR CONC BOX BEAM (5XB20)	LF	12,727.620		12,727.620	
	425-6022	PRESTR CONC BOX BEAM (5XB28)	LF	3,573.040		3,573.040	
	425-6026	PRESTR CONC BOX BEAM (5XB40)	LF	3,192.000		3,192.000	
	427-6002	CONCRETE PAINT FINISH	SF	280,652.000		280,652.000	
	432-6001	RIPRAP (CONC)(4 IN)	CY	3,684.000		3,684.000	
	432-6008	RIPRAP (CONC)(CL B)(RR8&RR9)	CY	1,411.900		1,411.900	
	432-6010	RIPRAP (CONC)(CL B)(5 IN)	CY	838.000		838.000	
	432-6024	RIPRAP (STONE COMMON)(DRY)(12 IN)	CY	1,905.000		1,905.000	
	432-6027	RIPRAP (STONE COMMON)(DRY)(24 IN)	CY	199.000		199.000	
	432-6031	RIPRAP (STONE PROTECTION)(12 IN)	CY	305.000		305.000	
	432-6033	RIPRAP (STONE PROTECTION)(18 IN)	CY	2,611.000		2,611.000	
	432-6044	RIPRAP (CONC)(FLUME)	CY	197.000		197.000	
	450-6023	RAIL (TY SSTR)	LF	4,943.000		4,943.000	
	450-6054	RAIL (TY SSTR) (W/DRAIN SLOTS)	LF	4,039.000		4,039.000	
	450-6111	RAIL (TY SSTR) (W/DRAIN SLOT) (HPC)	LF	2,564.000		2,564.000	
	454-6018	SEALED EXPANSION JOINT (4 IN) (SEJ - M)	LF	1,861.000		1,861.000	
	459-6008	GABION MATTRESSES (GALV)(18 IN)	SY	166.000		166.000	
	462-6057	CONC BOX CULV (6 FT X 6 FT)(EXTEND)	LF	23.000		23.000	
	462-6066	CONC BOX CULV (8 FT X 7 FT)(EXTEND)	LF	78.000		78.000	
	462-6101	CONC BOX CULV (10 FT X 4 FT)	LF	425.000		425.000	
	464-6005	RC PIPE (CL III)(24 IN)	LF	4,241.000		4,241.000	

Estimate & Quantity Sheet

CONTROLLING PROJECT ID 2121-01-104 **DISTRICT** El Paso **COUNTY** El Paso
HIGHWAY IH 10

						TOTAL EST.	TOTAL FINAL
		CONTROL SECTION JOB		**2121-01-104**			
		PROJECT ID		**A00185043**			
		COUNTY		**El Paso**			
		HIGHWAY		**IH 10**			
ALT	**BID CODE**	**DESCRIPTION**	**UNIT**	EST.	FINAL		
	464-6008	RC PIPE (CL III)(36 IN)	LF	11.000		11.000	
	465-6003	MANH (COMPL)(PRM)(60IN)	EA	1.000		1.000	
	465-6006	JCTBOX(COMPL)(PJB)(4FTX4FT)	EA	1.000		1.000	
	465-6016	INLET (COMPL)(PCO)(3FT)(BOTH)	EA	5.000		5.000	
	465-6045	INLET (COMPL)(PMBD)(4FT)	EA	8.000		8.000	
	465-6071	INLET (COMPL)(PSL)(RC)(4FTX4FT)	EA	11.000		11.000	
	465-6128	INLET (COMPL)(PSL)(FG)(4FTX4FT-4FTX4FT)	EA	7.000		7.000	
	465-6130	INLET (COMPL)(PSL)(FG)(3FTX5FT-3FTX5FT)	EA	1.000		1.000	
	465-6146	INLET(COMPL)(PSL)(SFG)(3FTX3FT-3FTX3FT)	EA	2.000		2.000	
	465-6147	INLET(COMPL)(PSL)(SFG)(4FTX4FT-4FTX4FT)	EA	10.000		10.000	
	465-6158	INLET(COMPL)(PAZD)(FG)(3FTX3FT-3FTX3FT)	EA	6.000		6.000	
	466-6009	HEADWALL (CH - FW - 0) (DIA= 36 IN)	EA	1.000		1.000	
	466-6171	WINGWALL (PW - 1) (HW=10 FT)	EA	1.000		1.000	
	466-6184	WINGWALL (PW - 1) (HW=9 FT)	EA	1.000		1.000	
	467-6389	SET (TY II) (24 IN) (RCP) (3: 1) (P)	EA	4.000		4.000	
	467-6395	SET (TY II) (24 IN) (RCP) (6: 1) (P)	EA	3.000		3.000	
	479-6003	ADJUSTING MANHOLES & INLETS	EA	5.000		5.000	
	480-6001	CLEAN EXIST CULVERTS	EA	3.000		3.000	
	496-6002	REMOV STR (INLET)	EA	15.000		15.000	
	496-6003	REMOV STR (MANHOLE)	EA	1.000		1.000	
	496-6004	REMOV STR (SET)	EA	3.000		3.000	
	496-6006	REMOV STR (HEADWALL)	EA	1.000		1.000	
	496-6007	REMOV STR (PIPE)	LF	1,333.000		1,333.000	
	496-6009	REMOV STR (BRIDGE 0 - 99 FT LENGTH)	EA	4.000		4.000	
	496-6010	REMOV STR (BRIDGE 100 - 499 FT LENGTH)	EA	10.000		10.000	
	496-6087	REMOV STR (DRAINAGE FLUME)	EA	32.000		32.000	
	496-6100	REMOVE STR (GABION)	LF	121.000		121.000	
	500-6001	MOBILIZATION	LS	1.000		1.000	
	502-6001	BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	43.000		43.000	
	506-6002	ROCK FILTER DAMS (INSTALL) (TY 2)	LF	1,330.000		1,330.000	
	506-6011	ROCK FILTER DAMS (REMOVE)	LF	1,330.000		1,330.000	
	506-6020	CONSTRUCTION EXITS (INSTALL) (TY 1)	SY	2,072.000		2,072.000	
	506-6024	CONSTRUCTION EXITS (REMOVE)	SY	2,072.000		2,072.000	
	506-6038	TEMP SEDMT CONT FENCE (INSTALL)	LF	830.000		830.000	
	506-6039	TEMP SEDMT CONT FENCE (REMOVE)	LF	830.000		830.000	
	506-6041	BIODEG EROSN CONT LOGS (INSTL) (12")	LF	925.000		925.000	
	506-6043	BIODEG EROSN CONT LOGS (REMOVE)	LF	925.000		925.000	

Estimate & Quantity Sheet

CONTROLLING PROJECT ID 2121-01-104 **DISTRICT** El Paso **COUNTY** El Paso
HIGHWAY IH 10

						TOTAL EST.	TOTAL FINAL
		CONTROL SECTION JOB		**2121-01-104**			
		PROJECT ID		**A00185043**			
		COUNTY		**El Paso**			
		HIGHWAY		**IH 10**			
ALT	**BID CODE**	**DESCRIPTION**	**UNIT**	EST.	FINAL		
	508-6003	CONSTRUCTING DETOURS (TY 1)	SY	37,965.000		37,965.000	
	508-6004	CONSTRUCTING DETOURS (TY 2)	SY	1,515.000		1,515.000	
	512-6001	PORT CTB (FUR & INST)(SGL SLOPE)(TY 1)	LF	34,122.000		34,122.000	
	512-6013	PORT CTB (DES SOURCE)(SGL SLP)(TY 1)	LF	18,000.000		18,000.000	
	512-6025	PORT CTB (MOVE)(SGL SLP)(TY 1)	LF	53,845.000		53,845.000	
	512-6037	PORT CTB (STKPL)(SGL SLP)(TY 1)	LF	52,417.000		52,417.000	
	514-6001	PERM CTB (SGL SLOPE) (TY 1) (42)	LF	18,625.000		18,625.000	
	514-6003	PERM CTB (SGL SLOPE) (TY 3) (42)	LF	363.000		363.000	
	514-6017	PERM CONC TRF BARR (SGL SLP) (TY 1 SPL)	LF	1,401.000		1,401.000	
	529-6001	CONC CURB (TY I)	LF	9,144.000		9,144.000	
	529-6002	CONC CURB (TY II)	LF	516.000		516.000	
	529-6008	CONC CURB & GUTTER (TY II)	LF	5,172.000		5,172.000	
	533-6001	RUMBLE STRIPS (SHOULDER)	LF	71,195.000		71,195.000	
	540-6001	MTL W-BEAM GD FEN (TIM POST)	LF	11,600.000		11,600.000	
	540-6006	MTL BEAM GD FEN TRANS (THRIE-BEAM)	EA	29.000		29.000	
	540-6016	DOWNSTREAM ANCHOR TERMINAL SECTION	EA	21.000		21.000	
	542-6001	REMOVE METAL BEAM GUARD FENCE	LF	10,740.000		10,740.000	
	542-6003	REMOVE DOWNSTREAM ANCHOR TERMINAL	EA	33.000		33.000	
	542-6004	RM MTL BM GD FENCE TRANS (THRIE-BEAM)	EA	63.000		63.000	
	543-6021	REMOVE CABLE BARRIER	LF	16,558.000		16,558.000	
	543-6022	REMOVE CABLE BARRIER TERMINAL SECTION	EA	16.000		16.000	
	544-6001	GUARDRAIL END TREATMENT (INSTALL)	EA	18.000		18.000	
	544-6003	GUARDRAIL END TREATMENT (REMOVE)	EA	35.000		35.000	
	545-6003	CRASH CUSH ATTEN (MOVE & RESET)	EA	18.000		18.000	
	545-6005	CRASH CUSH ATTEN (REMOVE)	EA	32.000		32.000	
	545-6007	CRASH CUSH ATTEN (INSTL)(L)(N)(TL3)	EA	32.000		32.000	
	610-6009	REMOVE RD IL ASM (TRANS-BASE)	EA	47.000		47.000	
	610-6010	REMOVE RD IL ASM (U/P)	EA	4.000		4.000	
	610-6101	REPLACE LUMINAIRE W/LED (150W EQ)	EA	2.000		2.000	
	610-6104	IN RD IL (U/P) (TY 1) (150W EQ) LED	EA	2.000		2.000	
	613-6005	HI MST IL POLE (150 FT)(80 MPH)	EA	29.000		29.000	
	618-6023	CONDT (PVC) (SCH 40) (2")	LF	20,395.000		20,395.000	
	618-6024	CONDT (PVC) (SCH 40) (2") (BORE)	LF	1,285.000		1,285.000	
	618-6062	CONDT (RM) (3/4")	LF	120.000		120.000	
	618-6070	CONDT (RM) (2")	LF	1,160.000		1,160.000	
	620-6010	ELEC CONDR (NO.6) INSULATED	LF	10,150.000		10,150.000	
	620-6012	ELEC CONDR (NO.4) INSULATED	LF	78,045.000		78,045.000	

Estimate & Quantity Sheet

CONTROLLING PROJECT ID 2121-01-104 **DISTRICT** El Paso **COUNTY** El Paso
HIGHWAY IH 10

			CONTROL SECTION JOB		**2121-01-104**	TOTAL EST.	TOTAL FINAL
			PROJECT ID		**A00185043**		
			COUNTY		**El Paso**		
			HIGHWAY		**IH 10**		
ALT	**BID CODE**	**DESCRIPTION**	**UNIT**	EST.	FINAL		
	624-6002	GROUND BOX TY A (122311)W/APRON	EA	84.000		84.000	
	624-6028	REMOVE GROUND BOX	EA	7.000		7.000	
	628-6002	REMOVE ELECTRICAL SERVICES	EA	1.000		1.000	
	628-6063	ELC SRV TY A 240/480 100(NS)AL(E)EX(O)	EA	2.000		2.000	
	628-6073	ELC SRV TY A 240/480 100(NS)SS(E)GC(O)	EA	2.000		2.000	
	636-6002	ALUMINUM SIGNS (TY G)	SF	1,053.000		1,053.000	
	636-6003	ALUMINUM SIGNS (TY O)	SF	2,411.000		2,411.000	
	644-6001	IN SM RD SN SUP&AM TY10BWG(1)SA(P)	EA	13.000		13.000	
	644-6002	IN SM RD SN SUP&AM TY10BWG(1)SA(P-BM)	EA	2.000		2.000	
	644-6004	IN SM RD SN SUP&AM TY10BWG(1)SA(T)	EA	69.000		69.000	
	644-6017	IN SM RD SN SUP&AM TY10BWG(2)SA(P)	EA	1.000		1.000	
	644-6030	IN SM RD SN SUP&AM TYS80(1)SA(T)	EA	10.000		10.000	
	644-6033	IN SM RD SN SUP&AM TYS80(1)SA(U)	EA	28.000		28.000	
	644-6034	IN SM RD SN SUP&AM TYS80(1)SA(U-1EXT)	EA	13.000		13.000	
	644-6035	IN SM RD SN SUP&AM TYS80(1)SA(U-2EXT)	EA	1.000		1.000	
	644-6051	IN SM RD SN SUP&AM TYS80(2)SA(P-EXAL)	EA	7.000		7.000	
	644-6064	IN BRIDGE MNT CLEARANCE SGN ASSM(TY N)	EA	4.000		4.000	
	644-6076	REMOVE SM RD SN SUP&AM	EA	103.000		103.000	
	644-6077	REMOVE BRDG MNT CLEARANCE SIGN ASSM	EA	4.000		4.000	
	647-6001	INSTALL LRSS (STRUCT STEEL)	LB	5,644.000		5,644.000	
	647-6003	REMOVE LRSA	EA	10.000		10.000	
	650-6030	INS OH SN SUP(30 FT CANT)(CIRC TUBE)	EA	7.000		7.000	
	650-6047	INS OH SN SUP(40 FT CANT)(CIRC TUBE)	EA	1.000		1.000	
	650-6165	INS OH SN SUP(155 FT BRDG)(CIRC TUBE)	EA	1.000		1.000	
	650-6204	REMOVE OVERHD SIGN SUP	EA	2.000		2.000	
	658-6013	INSTL DEL ASSM (D-SW)SZ (BRF)CTB	EA	132.000		132.000	
	658-6026	INSTL DEL ASSM (D-SY)SZ (BRF)CTB	EA	73.000		73.000	
	658-6027	INSTL DEL ASSM (D-SY)SZ (BRF)CTB (BI)	EA	226.000		226.000	
	658-6061	INSTL DEL ASSM (D-SW)SZ 1(BRF)GF2	EA	225.000		225.000	
	658-6064	INSTL DEL ASSM (D-SY)SZ 1(BRF)GF2	EA	82.000		82.000	
	658-6080	INSTL DEL ASSM (D-SW)SZ 1(WFLX)GND	EA	89.000		89.000	
	658-6083	INSTL DEL ASSM (D-SW)SZ 1(WFLX)SRF	EA	21.000		21.000	
	658-6092	INSTL DEL ASSM (D-DW)SZ 1(WFLX)GND	EA	7.000		7.000	
	662-6047	WK ZN PAV MRK REMOV (REFL) TY I-A	LF	109,619.000		109,619.000	
	662-6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	121,958.000		121,958.000	
	662-6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	121,958.000		121,958.000	
	662-6059	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	LF	109,619.000		109,619.000	

Estimate & Quantity Sheet

CONTROLLING PROJECT ID 2121-01-104 **DISTRICT** El Paso **COUNTY** El Paso
HIGHWAY IH 10

			CONTROL SECTION JOB		**2121-01-104**		TOTAL EST.	TOTAL FINAL
			PROJECT ID		**A00185043**			
			COUNTY		**El Paso**			
			HIGHWAY		**IH 10**			
ALT	**BID CODE**	**DESCRIPTION**		**UNIT**	EST.	FINAL		
	662-6061	WK ZN PAV MRK REMOV (W)4"(DOT)		LF	100.000		100.000	
	662-6071	WK ZN PAV MRK REMOV (W)8"(SLD)		LF	19,370.000		19,370.000	
	666-6020	REFL PAV MRK TY I (W)6"(LNDP)(090MIL)		LF	580.000		580.000	
	666-6035	REFL PAV MRK TY I (W)8"(SLD)(090MIL)		LF	24,020.000		24,020.000	
	666-6038	REFL PAV MRK TY I (W)12"(LNDP)(090MIL)		LF	2,992.000		2,992.000	
	666-6041	REFL PAV MRK TY I (W)12"(SLD)(090MIL)		LF	7,120.000		7,120.000	
	666-6047	REFL PAV MRK TY I (W)24"(SLD)(090MIL)		LF	20.000		20.000	
	666-6053	REFL PAV MRK TY I (W)(ARROW)(090MIL)		EA	29.000		29.000	
	666-6062	REFL PAV MRK TY I(W)(UTURN ARW)(090MIL)		EA	2.000		2.000	
	666-6071	REFL PAV MRK TY I(W)(LNDP ARW)(090MIL)		EA	2.000		2.000	
	666-6074	REFL PAV MRK TY I (W)(NUMBER)(090MIL)		EA	7.000		7.000	
	666-6077	REFL PAV MRK TY I (W)(WORD)(090MIL)		EA	24.000		24.000	
	666-6171	REFL PAV MRK TY II (W) 6" (BRK)		LF	6,540.000		6,540.000	
	666-6173	REFL PAV MRK TY II (W) 6" (LNDP)		LF	580.000		580.000	
	666-6174	REFL PAV MRK TY II (W) 6" (SLD)		LF	75,870.000		75,870.000	
	666-6178	REFL PAV MRK TY II (W) 8" (SLD)		LF	24,020.000		24,020.000	
	666-6179	REFL PAV MRK TY II (W) 12" (LNDP)		LF	2,965.000		2,965.000	
	666-6180	REFL PAV MRK TY II (W) 12" (SLD)		LF	6,855.000		6,855.000	
	666-6182	REFL PAV MRK TY II (W) 24" (SLD)		LF	20.000		20.000	
	666-6184	REFL PAV MRK TY II (W) (ARROW)		EA	29.000		29.000	
	666-6187	REFL PAV MRK TY II (W) (UTURN ARROW)		EA	2.000		2.000	
	666-6190	REFL PAV MRK TY II (W) (LNDP ARW)		EA	2.000		2.000	
	666-6191	REFL PAV MRK TY II (W) (NUMBER)		EA	7.000		7.000	
	666-6192	REFL PAV MRK TY II (W) (WORD)		EA	24.000		24.000	
	666-6197	REFL PAV MRK TY II (W) (SYMBOL)		EA	16.000		16.000	
	666-6210	REFL PAV MRK TY II (Y) 6" (SLD)		LF	78,645.000		78,645.000	
	666-6227	PAVEMENT SEALER 10"		LF	23,070.000		23,070.000	
	666-6285	REF PROF PAV MRK TY I(W)6"(SLD)(090MIL)		LF	45,215.000		45,215.000	
	666-6289	REF PROF PAV MRK TY I(Y)6"(SLD)(090MIL)		LF	37,895.000		37,895.000	
	666-6305	RE PM W/RET REQ TY I (W)6"(BRK)(090MIL)		LF	8,190.000		8,190.000	
	666-6308	RE PM W/RET REQ TY I (W)6"(SLD)(090MIL)		LF	33,282.000		33,282.000	
	666-6320	RE PM W/RET REQ TY I (Y)6"(SLD)(090MIL)		LF	44,594.000		44,594.000	
	668-6010	PREFAB PAV MRK TY B (W)(6")(BRK)CNTST		LF	23,070.000		23,070.000	
	668-6115	PREFAB PAV MRK TY C (MULTI) (SHIELD)		EA	16.000		16.000	
	672-6004	PLOWABLE REFL PAV MRKR TY II-C-R		EA	188.000		188.000	
	672-6007	REFL PAV MRKR TY I-C		EA	24.000		24.000	
	672-6008	REFL PAV MRKR TY I-R		EA	224.000		224.000	

Estimate & Quantity Sheet

CONTROLLING PROJECT ID 2121-01-104 **DISTRICT** El Paso **COUNTY** El Paso
HIGHWAY IH 10

		CONTROL SECTION JOB		**2121-01-104**		TOTAL EST.	TOTAL FINAL
		PROJECT ID		**A00185043**			
		COUNTY		**El Paso**			
		HIGHWAY		**IH 10**			
ALT	**BID CODE**	**DESCRIPTION**	**UNIT**	EST.	FINAL		
	672-6009	REFL PAV MRKR TY II-A-A	EA	16.000		16.000	
	672-6010	REFL PAV MRKR TY II-C-R	EA	3,622.000		3,622.000	
	677-6001	ELIM EXT PAV MRK & MRKS (4")	LF	157,159.000		157,159.000	
	677-6002	ELIM EXT PAV MRK & MRKS (6")	LF	9,620.000		9,620.000	
	677-6003	ELIM EXT PAV MRK & MRKS (8")	LF	7,605.000		7,605.000	
	677-6008	ELIM EXT PAV MRK & MRKS (ARROW)	EA	10.000		10.000	
	677-6012	ELIM EXT PAV MRK & MRKS (WORD)	EA	2.000		2.000	
	677-6038	ELIM EXT PAV MRK & MRKRS(PLOWABLE RPMS)	EA	112.000		112.000	
	678-6002	PAV SURF PREP FOR MRK (6")	LF	169,171.000		169,171.000	
	678-6004	PAV SURF PREP FOR MRK (8")	LF	24,020.000		24,020.000	
	678-6005	PAV SURF PREP FOR MRK (10")	LF	23,070.000		23,070.000	
	678-6006	PAV SURF PREP FOR MRK (12")	LF	10,112.000		10,112.000	
	678-6008	PAV SURF PREP FOR MRK (24")	LF	20.000		20.000	
	678-6009	PAV SURF PREP FOR MRK (ARROW)	EA	31.000		31.000	
	678-6012	PAV SURF PREP FOR MRK (UTURN ARR)	EA	2.000		2.000	
	678-6015	PAV SURF PREP FOR MRK (NUMBER)	EA	7.000		7.000	
	678-6016	PAV SURF PREP FOR MRK (WORD)	EA	24.000		24.000	
	678-6025	PAV SURF PREP FOR MRKS (SHIELD)	EA	16.000		16.000	
	738-6001	CLEANING / SWEEPING (CENTER MEDIAN)	CYC	60.000		60.000	
	738-6003	CLEANING / SWEEPING (OUTSIDE MAIN LANE)	CYC	60.000		60.000	
	1002-6002	LANDSCAPE AMENITY (TY 1)	EA	44.000		44.000	
	1002-6003	LANDSCAPE AMENITY (TY 2)	EA	17.000		17.000	
	1002-6004	LANDSCAPE AMENITY (TY 3)	EA	39.000		39.000	
	1002-6005	LANDSCAPE AMENITY (TY 4)	EA	31.000		31.000	
	1002-6006	LANDSCAPE AMENITY (TY 5)	EA	20.000		20.000	
	1005-6001	LOOSE AGGR FOR GROUNDCOVER (TYPE I)	CY	52,379.000		52,379.000	
	2017-6001	RMV,STCKPL,CLN,RELY LOSE AGRGT & BLDRS	STA	3.000		3.000	
	3076-6001	D-GR HMA TY-B PG64-22	TON	65,607.000		65,607.000	
	3077-6022	SP MIXES SP-C SAC-A PG70-22	TON	2,323.000		2,323.000	
	4230-6001	ORNAMENTAL STEEL STRUCTURE	SF	5,815.000		5,815.000	
	6001-6002	PORTABLE CHANGEABLE MESSAGE SIGN	EA	4.000		4.000	
	6007-6096	FIBER OPTIC PATCH PANEL (12 POSITION)	EA	4.000		4.000	
	6008-6046	ITS GRND MNT CAB (TY 6) (CONF 2) (REM)	EA	1.000		1.000	
	6010-6011	CCTV FIELD EQUIP (DIGITAL) (INSTL ONLY)	EA	3.000		3.000	
	6010-6013	REMOVE CCTV FIELD EQUIPMENT	EA	3.000		3.000	
	6027-6003	CONDUIT (PREPARE)	LF	630.000		630.000	
	6027-6008	GROUND BOX (PREPARE)	EA	4.000		4.000	

Estimate & Quantity Sheet

CONTROLLING PROJECT ID 2121-01-104 **DISTRICT** El Paso **COUNTY** El Paso
HIGHWAY IH 10

			CONTROL SECTION JOB		**2121-01-104**	TOTAL EST.	TOTAL FINAL
			PROJECT ID		**A00185043**		
			COUNTY		**El Paso**		
			HIGHWAY		**IH 10**		
ALT	**BID CODE**	**DESCRIPTION**	**UNIT**	EST.	FINAL		
	6062-6043	REMOVE ITS RADIO	EA	8.000		8.000	
	6064-6063	ITS POLE (60 FT)(REM)	EA	7.000		7.000	
	6133-6002	REMOVE DRUM SIGN ASSEMBLY	EA	4.000		4.000	
	6137-6005	INSTALLATION OF FES (FIELD CABINET)	EA	3.000		3.000	
	6156-6001	LED HI MST IL ASM (6 FIXT)(SYM)(TY S)	EA	4.000		4.000	
	6156-6002	LED HI MST IL ASM (6 FIXT)(ASYM)(TY A)	EA	22.000		22.000	
	6156-6009	LED HI MST IL AM(6 FIXT)ASYM(TY A)SHLD	EA	3.000		3.000	
	6163-6001	REMOVE EXISTING CABLES (FIBER)	LF	525.000		525.000	
	6163-6002	REMOVE EXISTING CABLES (POWER)	LF	315.000		315.000	
	6185-6002	TMA (STATIONARY)	DAY	1,788.000		1,788.000	
	6185-6005	TMA (MOBILE OPERATION)	DAY	844.000		844.000	
	6304-6003	ITS RVSD (DC ONLY) (INSTALL ONLY)	EA	3.000		3.000	
	6304-6007	ITS RVSD (DC ONLY) (REMOVE)	EA	1.000		1.000	
	6377-6001	SYSTEM INTEGRATION	LS	1.000		1.000	
	6489-6002	BACKLIT W/ PERIMETER LED RDSD SGN	EA	28.000		28.000	
	6528-6001	LED AESTHETIC LIGHT ASSEMBLY	EA	2.000		2.000	
	06	MATERIAL FURNISHED BY STATE (PARTICIPATING)	LS	1.000		1.000	
	14	PUBLIC UTILITY FORCE ACCT WORK (PARTICIPATING)	LS	1.000		1.000	
	18	LAW ENFORCEMENT: CONTRACTOR FORCE ACCOUNT WORK (PARTICIPATING)	LS	1.000		1.000	
		OTHER: CONTRACTOR FORCE ACCOUNT WORK (PARTICIPATING)	LS	1.000		1.000	
		CONTRACTOR FORCE ACCOUNT WORK (PARTICIPATING)	LS	1.000		1.000	
		SAFETY CONTINGENCY: CONTRACTOR FORCE ACCOUNT WORK (PARTICIPATING)	LS	1.000		1.000	
		EROSION CONTROL MAINTENANCE: CONTRACTOR FORCE ACCOUNT WORK (PART)	LS	1.000		1.000	

SUMMARY OF TCP ITEMS (CSJ 2121-01-104)				
ITEM	0738 6001	0738 6003	6185 6002	6185 6005
DESCRIPTION	CLEANING / SWEEPING (CENTER MEDIAN)	CLEANING / SWEEPING (OUTSIDE MAIN LANE)	TMA (STATIONARY)	TMA (MOBILE OPERATION)
	CYC	CYC	DAY	DAY
STA 0+00 R1 TO STA 203+50 R1	60	60	200	50
TOTAL	**60**	**60**	**200**	**50**

SUMMARY OF TCP (STAGE 1) ITEMS (CSJ: 2121-01-104)				
ITEM	0508 6003			
DESCRIPTION	CONSTRUCTING DETOURS (TY 1)			
	SY			
SHEET	1	OF	20	914
SHEET	2	OF	20	2,247
SHEET	3	OF	20	1,745
SHEET	4	OF	20	1,090
SHEET	5	OF	20	2,515
SHEET	6	OF	20	2,458
SHEET	7	OF	20	2,221
SHEET	8	OF	20	2,226
SHEET	9	OF	20	2,378
SHEET	10	OF	20	1,921
SHEET	11	OF	20	1,630
SHEET	12	OF	20	2,498
SHEET	13	OF	20	2,408
SHEET	14	OF	20	1,185
SHEET	15	OF	20	2,336
SHEET	16	OF	20	2,957
SHEET	17	OF	20	1,659
SHEET	18	OF	20	2,217
SHEET	19	OF	20	1,360
SHEET	20	OF	20	
TOTAL				37,965

FOR CONTRACTOR INFORMATION ONLY				
ITEM	0354 6048			3076 6001	3076 6066
DESCRIPTION	PLANE ASPH CONC PAV (3")			D-GR HMA TY-B PG 64-22	TACK COAT
	SY			TON	GAL
SHEET	1	OF	20	914	151	137
SHEET	2	OF	20	2,247	371	337
SHEET	3	OF	20	1,745	288	262
SHEET	4	OF	20	1,090	180	164
SHEET	5	OF	20	2,515	415	377
SHEET	6	OF	20	2,458	406	369
SHEET	7	OF	20	2,221	366	333
SHEET	8	OF	20	2,226	367	334
SHEET	9	OF	20	2,378	392	357
SHEET	10	OF	20	1,921	317	288
SHEET	11	OF	20	1,630	269	245
SHEET	12	OF	20	2,498	412	375
SHEET	13	OF	20	2,408	397	361
SHEET	14	OF	20	1,185	196	178
SHEET	15	OF	20	2,336	385	350
SHEET	16	OF	20	2,957	488	444
SHEET	17	OF	20	1,659	274	249
SHEET	18	OF	20	2,217	366	333
SHEET	19	OF	20	1,360	224	204
SHEET	20	OF	20			
TOTAL				37,965	6,264	5,695

NO.	DATE	REVISION	APPROV.

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Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

SUMMARY OF TCP QUANTITIES

SHEET 1 OF 4

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		19
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

STAGE 2 SUMMARY OF TCP ITEMS (CSJ: 2121-01-104)

ITEM				0403 6001	0512 6001	0512 6013	0545 6005	0545 6007	0662 6047	0662 6049	0662 6057	0662 6059	0662 6061	0662 6071	0677 6001	0677 6003
DESCRIPTION				TEMPORARY SPL SHORING	PORT CTB (FUR & INST)(SGL SLOPE)(TY 1)	PORT CTB (DES SOURCE)(SGL SLP)(TY 1)	CRASH CUSH ATTEN (REMOVE)	CRASH CUSH ATTEN (INSTL)(L)(N)(TL3)	WK ZN PAV MRK REMOV (REFL) TY I-A	WK ZN PAV MRK REMOV (REFL) TY I-C	WK ZN PAV MRK REMOV (TRAF BTN) TY W	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	WK ZN PAV MRK REMOV (W)4"(DOT)	WK ZN PAV MRK REMOV (W)8"(SLD)	ELIM EXT PAV MRK & MRKS (4")	ELIM EXT PAV MRK & MRKS (8")
				SF	LF	LF	EA	EA	LF	LF	LF	LF	LF	LF	LF	LF
SHEET	1	OF	22			625		1	1,970	2,465	2,465	1,970	100		4,535	
SHEET	2	OF	22	408		1,400			1,400	2,015	2,015	1,400		775	3,415	775
SHEET	3	OF	22	5,500		2,200			2,200	2,875	2,875	2,200		380	5,013	380
SHEET	4	OF	22			2,937	3	4	2,200	2,750	2,750	2,200		10	4,950	10
SHEET	5	OF	22			2,200			2,200	2,702	2,702	2,200		598	4,902	689
SHEET	6	OF	22			2,253	1	1	2,200	2,750	2,750	2,200			4,950	
SHEET	7	OF	22			3,160		3	2,200	2,747	2,747	2,200		425	4,947	425
SHEET	8	OF	22			2,200			2,200	3,235	3,235	2,200			5,435	
SHEET	9	OF	22		1,175	1,025			2,200	2,750	2,750	2,200		209	4,950	209
SHEET	10	OF	22		3,056		4	4	2,200	2,750	2,750	2,200			4,950	
SHEET	11	OF	22		2,200				2,200	3,054	3,054	2,200		861	5,254	861
SHEET	12	OF	22		2,804		2	4	2,200	2,750	2,750	2,200			4,950	
SHEET	13	OF	22		2,447				2,200	2,750	2,750	2,200			4,950	
SHEET	14	OF	22		2,200				2,200	2,750	2,750	2,200			4,950	
SHEET	15	OF	22		2,200				2,200	3,195	3,195	2,200		771	5,395	771
SHEET	16	OF	22		2,777		3	3	2,200	2,750	2,750	2,200			4,950	
SHEET	17	OF	22		2,551			4	2,200	2,750	2,750	2,200			4,950	
SHEET	18	OF	22		2,650		2	2	2,200	3,081	3,081	2,200		195	5,281	195
SHEET	19	OF	22		2,850		3	3	2,200	2,750	2,750	2,200			4,950	
SHEET	20	OF	22		2,150				2,200	2,688	2,688	2,200			4,888	
SHEET	21	OF	22		100		1	1	2,060	841	841	2,060			2,901	
SHEET	22	OF	22													
TOTAL				5,908	29,159	18,000	19	30	45,030	56,398	56,398	45,030	100	4,224	101,466	4,315

NO.	DATE	REVISION	APPROV.

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Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

SUMMARY OF TCP QUANTITIES

SHEET 2 OF 4

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		20
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

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SUMMARY OF TCP (STAGE 3) ITEMS (CSJ: 2121-01-104)

ITEM				0508 6004	0512 6001	0512 6025	0512 6037	0545 6005	0545 6003	0662 6047	0662 6049	0662 6057
DESCRIPTION				CONSTRUCTING DETOURS (TY 2)	PORT CTB (FUR & INST) (SGL SLOPE) (TY 1)	PORT CTB (MOVE) (SGL SLP) (TY 1)	PORT CTB (STKPL) (SGL SLP) (TY 1)	CRASH CUSH ATTEN (REMOVE)	CRASH CUSH ATTEN (MOVE & RESET)	WK ZN PAV MRK REMOV (REFL) TY I-A	WK ZN PAV MRK REMOV (REFL) TY I-C	WK ZN PAV MRK REMOV (TRAF BTN) TY W
				SY	LF	LF	LF	EA	EA	LF	LF	LF
SHEET	1	OF	22			600	500		1	1,874	2,265	2,265
SHEET	2	OF	22			1,236	251			1,845	2,038	2,038
SHEET	3	OF	22			2,302	2,238		1	2,351	2,750	2,750
SHEET	4	OF	22	34		2,200	2,200			2,200	2,750	2,750
SHEET	5	OF	22	1,481		2,872	2,872			2,329	3,875	3,875
SHEET	6	OF	22			3,302	3,302			3,302	2,750	2,750
SHEET	7	OF	22			2,317	2,317		1	2,978	2,750	2,750
SHEET	8	OF	22			2,688	2,688	1	1	3,300	2,750	2,750
SHEET	9	OF	22			3,730	3,730	1	1	3,921	2,750	2,750
SHEET	10	OF	22			3,100	3,100			3,300	2,750	2,750
SHEET	11	OF	22			2,200	2,200			3,300	2,750	2,750
SHEET	12	OF	22			2,200	2,200			3,300	2,750	2,750
SHEET	13	OF	22			3,528	3,528	1	1	3,980	2,750	2,750
SHEET	14	OF	22			3,080	3,080	1	1	4,400	2,750	2,750
SHEET	15	OF	22			2,496	2,496			2,838	2,750	2,750
SHEET	16	OF	22			2,200	2,200			2,200	2,750	2,750
SHEET	17	OF	22			2,692	2,692		1	2,482	2,750	2,750
SHEET	18	OF	22			2,677	2,677		1	3,470	2,750	2,750
SHEET	19	OF	22		2,132	2,035	2,263		1	4,321	2,750	2,750
SHEET	20	OF	22		2,260					2,462	2,588	2,588
SHEET	21	OF	22		570				1	1,443	1,564	1,564
SHEET	22	OF	22							401	502	502
TOTAL				**1,515**	**4,962**	**47,455**	**46,534**	**4**	**11**	**61,997**	**56,832**	**56,832**

ITEM				0662 6059	0662 6071	6001 6002
DESCRIPTION				WK ZN PAV MRK REMOV (TRAF BTN) TY Y	WK ZN PAV MRK REMOV (W)8" (SLD)	PORTABLE CHANGEABLE MESSAGE SIGN
				LF	LF	EA
SHEET	1	OF	22	1,874		1
SHEET	2	OF	22	1,845	302	
SHEET	3	OF	22	2,351		
SHEET	4	OF	22	2,200		
SHEET	5	OF	22	2,329		
SHEET	6	OF	22	3,302		
SHEET	7	OF	22	2,978		1
SHEET	8	OF	22	3,300		1
SHEET	9	OF	22	3,921		
SHEET	10	OF	22	3,300		
SHEET	11	OF	22	3,300		
SHEET	12	OF	22	3,300		
SHEET	13	OF	22	3,980		
SHEET	14	OF	22	4,400		
SHEET	15	OF	22	2,838		1
SHEET	16	OF	22	2,200		
SHEET	17	OF	22	2,482		
SHEET	18	OF	22	3,470		
SHEET	19	OF	22	4,321		
SHEET	20	OF	22	2,462		
SHEET	21	OF	22	1,443		
SHEET	22	OF	22	401		
TOTAL				**61,997**	**302**	**4**

NO.	DATE	REVISION	APPROV.

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Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

SUMMARY OF TCP QUANTITIES

SHEET 3 OF 4

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		21
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

SUMMARY OF TCP (STAGE 4) ITEMS (CSJ: 2121-01-104)

ITEM				0512 6025	0512 6037	0545 6003	0545 6005	0662 6047	0662 6049	0662 6057	0662 6059	0662 6071
DESCRIPTION				PORT CTB (MOVE) (SGL SLP) (TY 1)	PORT CTB (STKPL) (SGL SLP) (TY 1)	CRASH CUSH ATTEN (MOVE & RESET)	CRASH CUSH ATTEN (REMOVE)	WK ZN PAV MRK REMOV (REFL) TY I-A	WK ZN PAV MRK REMOV (REFL) TY I-C	WK ZN PAV MRK REMOV (TRAF BTN) TY W	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	WK ZN PAV MRK REMOV (W)8"(SLD)
				LF	LF	EA	EA	LF	LF	LF	LF	LF
SHEET	1	OF	21	100	100							1,062
SHEET	2	OF	21	985	985	1	1	648	648	648	648	554
SHEET	3	OF	21	64	64	1	1					
SHEET	4	OF	21			1	1		971	971		782
SHEET	5	OF	21						1,765	1,765		1,638
SHEET	6	OF	21									
SHEET	7	OF	21						261	261		514
SHEET	8	OF	21						602	602		780
SHEET	9	OF	21						287	287		572
SHEET	10	OF	21						1,361	1,361		1,220
SHEET	11	OF	21									
SHEET	12	OF	21						1,033	1,033		866
SHEET	13	OF	21						576	576		1,157
SHEET	14	OF	21									
SHEET	15	OF	21									3,734
SHEET	16	OF	21									292
SHEET	17	OF	21									
SHEET	18	OF	21						1,224	1,224		1,673
SHEET	19	OF	21	454	454	1	1	332			332	
SHEET	20	OF	21	3,556	3,556	2	2	1,612			1,612	
SHEET	21	OF	21	724	724	1	1					
TOTAL				**5,883**	**5,883**	**7**	**7**	**2,592**	**8,728**	**8,728**	**2,592**	**14,844**

NO.	DATE	REVISION	APPROV.

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Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

SUMMARY OF TCP QUANTITIES

SHEET 4 OF 4

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		22
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

SUMMARY OF REMOVAL ITEMS (CSJ: 2121-01-104)

ITEM	0104 6001	0104 6009	0104 6023	0104 6024	0104 6027	0104 6029	0104 6054	0105 6021	0105 6082	0105 6072	0496 6002	0496 6003	0496 6004	0496 6006
DESCRIPTION	REMOVING CONC (PAV)	REMOVING CONC (RIPRAP)	REMOVING CONC (CTB)	REMOVING CONC (RETAINING WALLS)	REMOVING CONC (APPR SLAB)	REMOVING CONC (CURB OR CURB & GUTTER)	REMOVING CONCRETE (MOW STRIP)	REMOVING STAB BASE AND ASPH PAV (0-4")	REMOVING STAB BASE & ASPH PV(10 TO 16")	REMOVING STAB BASE & ASPH PAV(26"-32")	REMOV STR (INLET)	REMOV STR (MANHOLE)	REMOV STR (SET)	REMOV STR (HEADWALL)
	SY	SY	LF	SY	SY	LF	LF	SY	SY	SY	EA	EA	EA	EA
SHEET 1 OF 24									8,333					
SHEET 2 OF 24			100				582		11,142		1			
SHEET 3 OF 24		774	533		405		885	405	8,799					
SHEET 4 OF 24							1,100		12,171		2		2	
SHEET 5 OF 24						782	1,100		10,806		1			
SHEET 6 OF 24		709			350		972	350	10,000					
SHEET 7 OF 24	791													
SHEET 8 OF 24							1,100		9,497					
SHEET 9 OF 24		285					1,100		10,159					
SHEET 10 OF 24		1,905		245	348	505	948	348	8,662					
SHEET 11 OF 24											1		1	
SHEET 12 OF 24							1,100		12,004		1	1		
SHEET 13 OF 24	126	1,707			355		896	355	8,338					
SHEET 14 OF 24														
SHEET 15 OF 24						480	1,100		9,449		2			
SHEET 16 OF 24						1,092	1,100		10,043					
SHEET 17 OF 24							1,100		13,387		2			
SHEET 18 OF 24		2,507			349		430	349	7,703					
SHEET 19 OF 24					158		1,084	158	11,622					
SHEET 20 OF 24		1,042	771	134	260	749	905	260	10,267					
SHEET 21 OF 24											1			
SHEET 22 OF 24		918	1,027	754	349		934	349	8,470					
SHEET 23 OF 24						710								1
SHEET 24 OF 24			87	44			600		8,623	186	4			
TOTAL	917	9,847	2,518	1,177	2,574	4,318	17,036	2,574	189,475	186	15	1	3	1

SUMMARY OF REMOVAL ITEMS (CSJ: 2121-01-104)

ITEM	0496 6007	0496 6009	0496 6010	0496 6087	0496 6100	0542 6001	0542 6003	0542 6004	0543 6021	0543 6022	0544 6003	0545 6005
DESCRIPTION	REMOV STR (PIPE)	REMOV STR (BRIDGE 0 - 99 FT LENGTH)	REMOV STR (BRIDGE 100 - 499 FT LENGTH)	REMOV STR (DRAINAGE FLUME)	REMOVE STR (GABION)	REMOVE METAL BEAM GUARD FENCE	REMOVE DOWNSTREAM ANCHOR TERMINAL	RM MTL BM GD FENCE TRANS (THRIE-BEAM)	REMOVE CABLE BARRIER	REMOVE CABLE BARRIER TERMINAL SECTION	GUARDRAIL END TREATMENT (REMOVE)	CRASH CUSH ATTEN (REMOVE)
	LF	EA	EA	EA	LF	LF	EA	EA	LF	EA	EA	EA
SHEET 1 OF 24											1	1
SHEET 2 OF 24	69					626	2		555	1	2	
SHEET 3 OF 24			2	1		991	4	8	831	2	4	
SHEET 4 OF 24	170			2		275	1		1,100		1	
SHEET 5 OF 24	68								1,100			
SHEET 6 OF 24		2				845	4	8	918	2	4	
SHEET 7 OF 24				3								
SHEET 8 OF 24				3					1,100			
SHEET 9 OF 24				2					1,100			
SHEET 10 OF 24			2			1,274	5	8	894	2	5	
SHEET 11 OF 24	329			1								
SHEET 12 OF 24	470			2					1,100			
SHEET 13 OF 24			2			1,226	3	8	842	2	4	
SHEET 14 OF 24				2								
SHEET 15 OF 24	50			2		188	1		1,100			
SHEET 16 OF 24									1,100			
SHEET 17 OF 24	115			1					1,100			
SHEET 18 OF 24			2			1,436	4	8	375	2	2	
SHEET 19 OF 24				1		848	2	4	1,057	1	4	
SHEET 20 OF 24			2			1,620	3	9	878	1	5	1
SHEET 21 OF 24				4								
SHEET 22 OF 24		2				1,411	4	10	808	2	3	
SHEET 23 OF 24	36			8	121							
SHEET 24 OF 24	26								600	1		
TOTAL	1,333	4	10	32	121	10,740	33	63	16,558	16	35	2

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Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

SUMMARY OF REMOVAL QUANTITIES

SHEET 1 OF 2

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		23
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

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SUMMARY OF REMOVAL ITEMS (CSJ: 2121-01-104)

ITEM	0610 6009	0610 6010	0624 6028	0628 6002	6008 6046	6010 6013	6062 6043	6064 6063	6133 6002	6304 6007	6163 6001	6163 6002	2017 6001
DESCRIPTION	REMOVE RD IL ASM (TRANS-BASE)	REMOVE RD IL ASM (U/P)	REMOVE GROUND BOX	REMOVE ELECTRICAL SERVICES	ITS GRND MNT CAB (TY 6) (CONF 2) (REM)	REMOVE CCTV FIELD EQUIPMENT	REMOVE ITS RADIO	ITS POLE (60 FT) (REM)	REMOVE DRUM SIGN ASSEMBLY	ITS RVSD (DC ONLY) (REMOVE)	REMOVE EXISTING CABLES (FIBER)	REMOVE EXISTING CABLES (POWER)	RMV, STCKPL, CLN, RELY LOSE AGRGT & BLDRS
	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	LF	LF	STA
SHEET 1 OF 24	5							1					
SHEET 2 OF 24			2		1	1	5	1	2				
SHEET 3 OF 24	1												1
SHEET 4 OF 24	3		2					1					
SHEET 5 OF 24													
SHEET 6 OF 24	3												
SHEET 7 OF 24													0.27
SHEET 8 OF 24			1			1		1					
SHEET 9 OF 24	4							1					
SHEET 10 OF 24	8	4											
SHEET 11 OF 24													0.30
SHEET 12 OF 24								1					
SHEET 13 OF 24	4												
SHEET 14 OF 24													1
SHEET 15 OF 24	2												
SHEET 16 OF 24													
SHEET 17 OF 24	7							1					
SHEET 18 OF 24			2			1	3		2	1	525	315	
SHEET 19 OF 24	3												
SHEET 20 OF 24	5												
SHEET 21 OF 24													
SHEET 22 OF 24	2			1									
SHEET 23 OF 24													
SHEET 24 OF 24													
TOTAL	47	4	7	1	1	3	8	7	4	1	525	315	3

NO.	DATE	REVISION	APPROV.

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Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

SUMMARY OF REMOVAL QUANTITIES

SHEET 2 OF 2

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		24
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

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SUMMARY OF ROADWAY ITEMS (CSJ: 2121-01-104)

ITEM	0100 6002	0110 6001	0110 6002	0132 6006	0134 6002	0275 6001	0275 6019	0310 6001	0360 6007	0422 6016	0427 6002	0432 6001	0450 6023	0450 6054	0514 6001	0514 6003
DESCRIPTION	PREPARING ROW	EXCAVATION (ROADWAY)	EXCAVATION (CHANNEL)	EMBANKMENT (FINAL) (DENS CONT) (TY C)	BACKFILL (TY B)	CEMENT	CEMENT TREAT (SUBGRADE) (6")	PRIME COAT (MULTI OPTION)	CONC PVMT (CONT REINF - CRCP) (13")	APPROACH SLAB (HPC)	CONCRETE PAINT FINISH	RIPRAP (CONC) (4 IN)	RAIL (TY SSTR)	RAIL (TY SSTR) (W/DRAIN SLOTS)	PERM CTB (SGL SLOPE) (TY 1) (42)	PERM CTB (SGL SLOPE) (TY 3) (42)
	STA	CY	CYCY	CY	STA	TON	SY	GAL	SY	CY	SF	CY	LF	LF	LF	LF
SHEET 1 OF 19	7	17,676		1,462		57	11,441	2,289	10,998		5,920					
SHEET 2 OF 19	11	26,621		1,804	1,576	72	14,497	2,900	13,886		8,800				300	139
SHEET 3 OF 19	11	25,164	2,743	2,942		63	12,689	2,538	12,200	209	7,360				920	
SHEET 4 OF 19	11	26,798		8,117		88	17,738	3,548	17,128		8,800				1,100	
SHEET 5 OF 19	11	26,170		2,755		72	14,545	2,909	13,934		8,800				1,100	
SHEET 6 OF 19	11	14,612	651	3,706		68	13,687	2,738	13,153	183	8,000				1,000	
SHEET 7 OF 19	11	13,032		1,157		75	14,998	3,000	14,387		8,800				1,100	
SHEET 8 OF 19	11	2,442		9,357		76	15,362	3,073	14,751		8,800				1,100	
SHEET 9 OF 19	11	7,512	5,625	13,240	2	71	14,220	2,844	13,731	222	7,360	250			920	
SHEET 10 OF 19	11	14,278		4,094	5	87	17,478	3,496	16,867		8,800				1,100	
SHEET 11 OF 19	11	20,787	5,374	867		68	13,674	2,735	13,196	222	7,192	116			899	
SHEET 12 OF 19	11	6,806		1,666		79	15,808	3,162	15,198		8,800				1,100	
SHEET 13 OF 19	11	27,497		2,661		72	14,536	2,908	13,925		8,800				1,100	
SHEET 14 OF 19	11	12,342		1,958	3	85	17,097	3,420	16,487		9,550	10		125	1,100	
SHEET 15 OF 19	11	10,611	588	1,170		70	14,070	2,814	13,654	222	7,972			104	696	224
SHEET 16 OF 19	11	1,555		17,432		86	17,208	3,442	16,606	95	8,800				1,100	
SHEET 17 OF 19	11	2,526	643	16,804		71	14,265	2,787	13,433	128	14,422		746	459	920	
SHEET 18 OF 19	11	9,797	1,008	5,156		66	13,334	2,667	12,889	183	19,643		356	1,584	1,000	
SHEET 19 OF 19	10	2,902		8,087		63	12,667	2,534	12,139		19,000		422	1,478	950	
TOTAL	**204**	**269,128**	**16,632**	**104,435**	**1,586**	**1,389**	**279,314**	**55,804**	**268,562**	**1,464**	**185,619**	**376**	**1,524**	**3,750**	**17,505**	**363**

SUMMARY OF ROADWAY ITEMS (CJS: 2121-01-104)

ITEM	0514 6017	0529 6002	0529 6008	0540 6001	0540 6006	0540 6016	0544 6001	0545 6007	3076 6001
DESCRIPTION	PERM CONC TRF BARR (SGL SLP) (TY 1 SPL)	CONC CURB (TY II)	CONC CURB & GUTTER (TY II)	MTL W-BEAM GD FEN (TIM POST)	MTL BEAM GD FEN TRANS (THRIE-BEAM)	DOWNSTREAM ANCHOR TERMINAL SECTION	GUARDRAIL END TREATMENT (INSTALL)	CRASH CUSH ATTEN (INSTL) (L) (N) (TL3)	D-GR HMA TY-B PG64-22
	LF	LF	LF	LF	EA	EA	EA	EA	TON
SHEET 1 OF 19	740								2,511
SHEET 2 OF 19	661								3,181
SHEET 3 OF 19				475	4	2	2		2,785
SHEET 4 OF 19				150		1	1		3,894
SHEET 5 OF 19				325		1	2		3,191
SHEET 6 OF 19				475	4	2	1		3,004
SHEET 7 OF 19									3,291
SHEET 8 OF 19				700		3	2		3,371
SHEET 9 OF 19		516		1,725	4		2		3,121
SHEET 10 OF 19				1,350		3	2		3,836
SHEET 11 OF 19				1,925	4	1			3,001
SHEET 12 OF 19				375		1	1		3,469
SHEET 13 OF 19									3,189
SHEET 14 OF 19			491	250		2	2	1	3,753
SHEET 15 OF 19				1,350	5	1			3,089
SHEET 16 OF 19			425	1,075	2	2	2		3,777
SHEET 17 OF 19			281	550	2			1	3,139
SHEET 18 OF 19									2,934
SHEET 19 OF 19									2,787
TOTAL	**1,401**	**516**	**1,197**	**10,725**	**25**	**19**	**17**	**2**	**61,323**

NO.	DATE	REVISION	APPROV.

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Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

SUMMARY OF ROADWAY QUANTITIES

SHEET 1 OF 3

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		25
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

SUMMARY OF ROADWAY ITEMS (EB RAMPS) (CSJ: 2121-01-104)										
ITEM	0275 6001	0275 6019	0310 6001	0360 6007	0427 6002	0432 6001	0450 6023	0450 6054	0529 6001	3076 6001
DESCRIPTION	CEMENT	CEMENT TREAT (SUBGRADE) (	PRIME COAT (MULTI	CONC PVMT (CONT REINF -	CONCRETE PAINT FINISH	RIPRAP (CONC)(4 IN)	RAIL (TY SSTR)	RAIL (TY SSTR)	CONC CURB (TY I)	D-GR HMA TY-B PG64-22
	TON	SY	GAL	SY	SF	CY	LF	LF	LF	TON
EB_EX_00A										
SHEET 1 OF 1	9	1,742	349	1,440		5			1,297	379
EB_EX_00B										
SHEET 1 OF 1	4	816	164	677		11			501	178
EB_ENT_01										
SHEET 1 OF 1	8	1,604	321	1,328		16			994	349
EB_EX_02										
SHEET 1 OF 1	6	1,129	226	936		12			694	246
EB_ENT_02										
SHEET 1 OF 1	7	1,432	287	1,186		8			891	312
EB_EX_03										
SHEET 1 OF 1	8	1,623	325	1,361	5,652		897	45		357
TOTAL	**42**	**8,346**	**1,672**	**6,928**	**5,652**	**52**	**897**	**45**	**4,377**	**1,821**

SUMMARY OF ROADWAY ITEMS (WB RAMPS) (CSJ: 2121-01-104)												
ITEM	0275 6001	0275 6019	0310 6001	0360 6007	0427 6002	0432 6001	0450 6023	0529 6001	0529 6008	0540 6001	0540 6016	3076 6001
DESCRIPTION	CEMENT	CEMENT TREAT (SUBGRADE) (6")	PRIME COAT (MULTI OPTION)	CONC PVMT (CONT REINF - CRCP) (13")	CONCRETE PAINT FINISH	RIPRAP (CONC)(4 IN)	RAIL (TY SSTR)	CONC CURB (TY I)	CONC CURB & GUTTER (TY II)	MTL W-BEAM GD FEN (TIM POST)	DOWNSTREAM ANCHOR TERMINAL SECTION	D-GR HMA TY-B PG64-22
	TON	SY	GAL	SY	SF	CY	LF	LF	LF	LF	EA	TON
WB_ENT_00A												
SHEET 1 OF 1	4	692	139	562		6		541				151
WB_ENT_00B & WB_ENT_DPS												
SHEET 1 OF 2	13	2,632	527	2,180		7		1,651		200	1	573
SHEET 2 OF 2	13	2,577	516	2,132		8		950				561
WB_EX_DPS												
SHEET 1 OF 1	3	620	124	513								135
WB_EX_01												
SHEET 1 OF 1	4	811	163	671		5		249	189			177
WB_ENT_02												
SHEET 1 OF 1	6	1,062	213	881		11		652				231
WB _EX_02												
SHEET 1 OF 1	6	1,179	236	977		11		724				257
WB_ENT_03												
SHEET 1 OF 1	9	1,715	343	1,438	5,868		978					378
TOTAL	**58**	**11,288**	**2,261**	**9,354**	**5,868**	**48**	**978**	**4,767**	**189**	**200**	**1**	**2,463**

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Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

SUMMARY OF ROADWAY QUANTITIES

SHEET 2 OF 3

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		26
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

SUMMARY OF ROADWAY ITEMS (RAMP TERMINALS) (CSJ: 2121-01-104)					
ITEM	0247 6382	0310 6001	0354 6045	0529 6008	3077 6022
DESCRIPTION	FL BS (CMP IN PLC)(TY A GR 5)(8")	PRIME COAT (MULTI OPTION)	PLANE ASPH CONC PAV (2")	CONC CURB & GUTTER (TY II)	SP MIXES SP-C SAC-A PG70-22
	SY	GAL	SY	LF	TON
WB_ENT_00B_TRM					
SHEET 1 OF 1	1,194	193	87	783	207
EB_ENT_01_TRM					
SHEET 1 OF 1	1,027	166	77		178
TOTAL	**2,221**	**359**	**164**	**783**	**385**

SUMMARY OF ROADWAY ITEMS (AUX LANES) (CSJ: 2121-01-104)													
ITEM	0247 6382	0310 6001	0354 6045	0420 6066	0427 6002	0450 6023	0450 6054	0529 6008	0540 6001	0540 6006	0540 6016	0544 6001	3077 6022
DESCRIPTION	FL BS (CMP IN PLC)(TY A GR 5)(8")	PRIME COAT (MULTI OPTION)	PLANE ASPH CONC PAV (2")	CL C CONC (RAIL FOUNDATION)	CONCRETE PAINT FINISH	RAIL (TY SSTR)	RAIL (TY SSTR) (W/DRAIN SLOTS)	CONC CURB & GUTTER (TY II)	MTL W-BEAM GD FEN (TIM POST)	MTL BEAM GD FEN TRANS (THRIE-BEAM)	DOWNSTREAM ANCHOR TERMINAL SECTION	GUARDRAIL END TREATMENT (INSTALL)	SP MIXES SP-C SAC-A PG70-22
	SY	GAL	SY	CY	SF	LF	LF	LF	LF	EA	EA	EA	TON
WB_AUX_00 & EB_AUX_00													
SHEET 1 OF 2	3,156	504	195					873					543
SHEET 2 OF 2	2,425	387	146					700					417
WB_AUX_01 & EB_AUX_01													
SHEET 1 OF 2	3,153	500	173	34	4,321	721		830	350	3		1	540
SHEET 2 OF 2	2,512	408	204	34	4,302	473	244	600	325	1	1		438
TOTAL	**11,246**	**1,799**	**718**	**68**	**8,623**	**1,194**	**244**	**3,003**	**675**	**4**	**1**	**1**	**1,938**

NO.	DATE	REVISION	APPROV.

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Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

SUMMARY OF ROADWAY QUANTITIES

SHEET 3 OF 3

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		27
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

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SUMMARY OF RETAINING WALL ITEMS (CSJ: 2121-01-094)								
ITEM	0110 6001	0247 6053	0400 6008	0403 6001	0420 6007	0423 6005	0427 6002	0450 6023
DESCRIPTION	EXCAVATION (ROADWAY)	FL BS (CMP IN PLC) (TYD GR1-2) (FNAL POS)	CUT & RESTORE ASPH PAVING	TEMPORARY SPL SHORING	CL A CONC (FLUME)	RETAINING WALL (SPREAD FOOTING)	CONCRETE PAINT FINISH	RAIL (TY SSTR)
	CY	CY	SY	SF	CY	SF	SF	LF
RETAINING WALL EB #11	206	206	230	3,175	37	3,199	1,748	
RETAINING WALL EB #12	118	118		2,126	22	1,725	936	
RETAINING WALL EB #13	81	81		1,737	15	1,215	674	
RETAINING WALL EB #14	139	139		2,445	25	1,895	1,147	
RETAINING WALL EB #1	509	509	452	6,267		7,287	4,774	
RETAINING WALL EB #2	278	278		5,429	34	4,997	3,316	
RETAINING WALL EB #3	2,250	2,250	135	20,200		20,043	12,961	350
TOTAL	**3,581**	**3,581**	**817**	**41,379**	**133**	**40,361**	**25,556**	**350**

NO.	DATE	REVISION	APPROV.

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Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

SUMMARY OF RTW QUANTITIES

SHEET 1 OF 1

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		28
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

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PLOTDRIVER: pdfv8.plt
USER: Oziel.Bautista

SUMMARY OF DRAINAGE ITEMS (CSJ: 2121-01-104)

ITEM	0400 6002	0400 6003	0400 6005	0400 6008	0402 6001	0403 6001	0420 6071	0432 6001	0432 6008	0432 6010	0432 6024	0432 6027	0432 6031
DESCRIPTION	STRUCT EXCAV (BOX)	STRUCT EXCAV (PIPE)	CEM STABIL BKFL	CUT & RESTORE ASPH PAVING	TRENCH EXCAVATION PROTECTION	TEMPORARY SPL SHORING	CL C CONC (COLLAR)	RIPRAP (CONC)(4 IN)	RIPRAP (CONC)(CL B)(RR8&RR9)	RIPRAP (CONC)(CL B)(5 IN)	RIPRAP (STONE COMMON)(DRY)(12 IN)	RIPRAP (STONE COMMON)(DRY)(24 IN)	RIPRAP (STONE PROTECTION)(12 IN)
	CY	CY	CY	SY	LF	SF	EA	CY	CY	CY	CY	CY	CY
EASTBOUND													
SHEET 1 OF 20													
SHEET 2 OF 20													
SHEET 3 OF 20													
SHEET 4 OF 20													
SHEET 5 OF 20													
SHEET 6 OF 20													
SHEET 7 OF 20													
SHEET 8 OF 20								34					
SHEET 9 OF 20	357		219		50		1	247					
SHEET 10 OF 20													
SHEET 11 OF 20								405					
SHEET 12 OF 20													
SHEET 13 OF 20													
SHEET 14 OF 20													
SHEET 15 OF 20								34	75				
SHEET 16 OF 20		32	20		24			47					
SHEET 17 OF 20		326	162	85	268			100					
SHEET 18 OF 20		1,944	604		1,113		2						
SHEET 19 OF 20		20	23		20			198					
SHEET 20 OF 20		253	118		204		1	189					
WESTBOUND													
SHEET 1 OF 21													
SHEET 2 OF 21													
SHEET 3 OF 21													
SHEET 4 OF 21													
SHEET 5 OF 21	69		50		110			19					
SHEET 6 OF 21													
SHEET 7 OF 21													
SHEET 8 OF 21	164		114		235		1	324					
SHEET 9 OF 21								108					
SHEET 10 OF 21								344					
SHEET 11 OF 21								545					
SHEET 12 OF 21													
SHEET 13 OF 21	125		49		100		2						
SHEET 14 OF 21								93					
SHEET 15 OF 21								52	112				283
SHEET 16 OF 21		235	96	91	201			31					
SHEET 17 OF 21		517	192		401			90					
SHEET 18 OF 21		71	33		69								
SHEET 19 OF 21		377	141		295		1						
SHEET 20 OF 21		635	219		459		1	212					
SHEET 21 OF 21		268	108		225			49					1
WB DETENTION PONDS													
SHEET 1 OF 1	2,249		502		425								
CULVERT LAYOUT													
SHEET 1 OF 3		13	8				1						21
SHEET 2 OF 3	47		61			1,076							
SHEET 3 OF 3	27		24			688							
MISC. DETAILS													
SHEET 1 OF 7											375		
SHEET 2 OF 7										228		199	
SHEET 3 OF 7										410	40		
SHEET 4 OF 7										200	1,490		
SHEET 5 OF 7													
SHEET 6 OF 7													
SHEET 7 OF 7													
TOTAL	3,038	4,691	2,743	176	4,199	1,764	10	3,121	187	838	1,905	199	305

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Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

SUMMARY OF DRAINAGE QUANTITIES

SHEET 1 OF 3

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		29
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

ITEM	SUMMARY OF DRAINAGE ITEMS (CSJ: 2121-01-104)												
	0432 6033	0432 6044	0459 6008	0462 6057	0462 6066	0462 6101	0464 6005	0464 6008	0465 6003	0465 6006	0465 6016	0465 6045	0465 6071
DESCRIPTION	RIPRAP (STONE PROTECTION) (18 IN)	RIPRAP (CONC) (FLUME)	GABION MATTRESSES (GALV) (18 IN)	CONC BOX CULV (6 FT X 6 FT) (EXTEND)	CONC BOX CULV (8 FT X 7 FT) (EXTEND)	CONC BOX CULV (10 FT X 4 FT)	RC PIPE (CL III) (24 IN)	RC PIPE (CL III) (36 IN)	MANH (COMPL) (PRM) (60IN	JCTBOX (COMPL) (PJB) (4FT X4FT)	INLET (COMPL) (PCO) (3FT) (BOTH)	INLET (COMPL) (PMBD) (4FT)	INLET (COMPL) (PSL) (RC) (4FTX4FT)
	CY	CY	SY	LF	LF	LF	LF	LF	EA	EA	EA	EA	EA
EASTBOUND													
SHEET 1 OF 20		34											
SHEET 2 OF 20													
SHEET 3 OF 20													
SHEET 4 OF 20													
SHEET 5 OF 20													
SHEET 6 OF 20													
SHEET 7 OF 20							95			1			
SHEET 8 OF 20													
SHEET 9 OF 20		36					428		1				1
SHEET 10 OF 20													
SHEET 11 OF 20		24											
SHEET 12 OF 20													
SHEET 13 OF 20													
SHEET 14 OF 20		2											
SHEET 15 OF 20													
SHEET 16 OF 20							24						1
SHEET 17 OF 20							283						
SHEET 18 OF 20							1,113					1	6
SHEET 19 OF 20		2					20						
SHEET 20 OF 20							204						1
WESTBOUND													
SHEET 1 OF 21													
SHEET 2 OF 21													
SHEET 3 OF 21		17											
SHEET 4 OF 21		7											
SHEET 5 OF 21		10					104						
SHEET 6 OF 21		5											
SHEET 7 OF 21		8											
SHEET 8 OF 21		6					232						
SHEET 9 OF 21		3											
SHEET 10 OF 21		12											
SHEET 11 OF 21		3											
SHEET 12 OF 21		7											
SHEET 13 OF 21		15					88						
SHEET 14 OF 21		1											
SHEET 15 OF 21													
SHEET 16 OF 21							201				2		
SHEET 17 OF 21							401				1	1	
SHEET 18 OF 21							69						
SHEET 19 OF 21							295					3	2
SHEET 20 OF 21		4					459				2	1	
SHEET 21 OF 21		1					225					2	
WB DETENTION PONDS													
SHEET 1 OF 1						425							
CULVERT LAYOUT													
SHEET 1 OF 3								11					
SHEET 2 OF 3					78								
SHEET 3 OF 3				23									
MISC. DETAILS													
SHEET 1 OF 7													
SHEET 2 OF 7													
SHEET 3 OF 7													
SHEET 4 OF 7													
SHEET 5 OF 7	2,044												
SHEET 6 OF 7	324												
SHEET 7 OF 7	243		166										
TOTAL	2,611	197	166	23	78	425	4,241	11	1	1	5	8	11

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Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

SUMMARY OF DRAINAGE QUANTITIES

SHEET 2 OF 3

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		30
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

ITEM	0465 6128	0465 6130	0465 6146	0465 6147	0465 6158	0466 6009	0466 6171	0466 6184	0467 6389	0467 6395	0479 6003	0480 6001
DESCRIPTION	INLET (COMPL) (PSL) (FG) (4FTX4FT-4FTX4FT)	INLET (COMPL) (PSL) (FG) (3FTX5FT-3FTX5FT)	INLET (COMPL) (PSL) (SFG) (3FTX3FT-3FTX3FT)	INLET (COMPL) (PSL) (SFG) (4FTX4FT-4FTX4FT)	INLET (COMPL) (PAZD) (FG) (3FTX3FT-3FTX3FT)	HEADWALL (CH - FW - 0) (DIA= 36 IN)	WINGWALL (PW - 1) (HW=10 FT)	WINGWALL (PW - 1) (HW=9 FT)	SET (TY II) (24 IN) (RCP) (3: 1) (P)	SET (TY II) (24 IN) (RCP) (6: 1) (P)	ADJUSTING MANHOLES & INLETS	CLEAN EXIST CULVERTS
	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA
EASTBOUND												
SHEET 1 OF 20												
SHEET 2 OF 20												
SHEET 3 OF 20												
SHEET 4 OF 20												
SHEET 5 OF 20												
SHEET 6 OF 20												
SHEET 7 OF 20										1		
SHEET 8 OF 20												
SHEET 9 OF 20	2											
SHEET 10 OF 20												
SHEET 11 OF 20												
SHEET 12 OF 20												
SHEET 13 OF 20												
SHEET 14 OF 20												
SHEET 15 OF 20												
SHEET 16 OF 20					1							
SHEET 17 OF 20				3	1				2			
SHEET 18 OF 20	1		1	2								
SHEET 19 OF 20			1	2								
SHEET 20 OF 20		1		1							3	
WESTBOUND												
SHEET 1 OF 21												
SHEET 2 OF 21												
SHEET 3 OF 21												
SHEET 4 OF 21											1	
SHEET 5 OF 21										2		
SHEET 6 OF 21												
SHEET 7 OF 21												
SHEET 8 OF 21	1											
SHEET 9 OF 21												
SHEET 10 OF 21												
SHEET 11 OF 21												
SHEET 12 OF 21											1	
SHEET 13 OF 21	2											
SHEET 14 OF 21												
SHEET 15 OF 21												
SHEET 16 OF 21												
SHEET 17 OF 21				1	1				2			
SHEET 18 OF 21	1											
SHEET 19 OF 21												
SHEET 20 OF 21					3							
SHEET 21 OF 21				1								
WB DETENTION PONDS												
SHEET 1 OF 1												
CULVERT LAYOUT												
SHEET 1 OF 3						1						1
SHEET 2 OF 3								1				1
SHEET 3 OF 3							1					1
MISC. DETAILS												
SHEET 1 OF 7												
SHEET 2 OF 7												
SHEET 3 OF 7												
SHEET 4 OF 7												
SHEET 5 OF 7												
SHEET 6 OF 7												
SHEET 7 OF 7												
TOTAL	7	1	2	10	6	1	1	1	4	3	5	3

'SUMMARY OF DRAINAGE ITEMS (CSJ: 2121-01-104)

NO.	DATE	REVISION	APPROV.

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Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

SUMMARY OF DRAINAGE QUANTITIES

SHEET 3 OF 3

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		31
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

NOTE:
REFER TO VOLUME 4.

SUMMARY OF #AA BRIDGE														
ITEMS		400 6005	403 6001	416 6001	416 6004	420 6014	420 6026	420 6038	422 6002	425 6020	427 6002	432 6008	450 6111	454 6018
ITEM DESCRIPTION	PHASE	CEM STABIL BKFL	TEMPORARY SPL SHORING	DRILL SHAFT (18 IN)	DRILL SHAFT (36 IN)	CL C CONC (ABUT)(HPC)	CL C CONC (BENT)(HPC)	CL C CONC (COLUMN)(HPC)	REINF CONC SLAB (HPC)	PRESTR CONC BOX BEAM (5XB20)	CONCRETE PAINT FINISH	RIPRAP (CONC)(CL B)(RR8&RR9)	RAIL (TY SSTR) (W/DRAIN SLOT) (HPC)	SEALED EXPANSION JOINT (4 IN) (SEJ - M)
UNITS		CY	SF	LF	LF	CY	CY	CY	SF	LF	SF	CY	LF	LF
2 ABUTMENTS	I	98.6	322		150	23.6					372	20.6		
	II	89.1		46	150	32.0					442	34.2		
2 INTERIOR BENTS	I				150		27.0	12.6						
	II				150		25.4	12.6						
SUPERSTRUCTURE	I								4,823	714.01				54
	II								5,400	714.01	2,925		214.00	60
PROJECT TOTALS		187.7	322	46	600	55.6	52.4	25.2	10,223	1,428.02	3,739	54.8	214.00	114

SUMMARY OF #AB BRIDGE															
ITEMS		400 6005	403 6001	416 6001	416 6004	420 6014	420 6026	420 6038	422 6002	425 6020	427 6002	432 6008	450 6111	454 6018	514 6001
ITEM DESCRIPTION	PHASE	CEM STABIL BKFL	TEMPORARY SPL SHORING	DRILL SHAFT (18 IN)	DRILL SHAFT (36 IN)	CL C CONC (ABUT)(HPC)	CL C CONC (BENT)(HPC)	CL C CONC (COLUMN)(HPC)	REINF CONC SLAB (HPC)	PRESTR CONC BOX BEAM (5XB20)	CONCRETE PAINT FINISH	RIPRAP (CONC)(CL B)(RR8&RR9)	RAIL (TY SSTR) (W/DRAIN SLOT) (HPC)	SEALED EXPANSION JOINT (4 IN) (SEJ - M)	PERM CTB (SGL SLOPE) (TY 1) (42)
UNITS		CY	SF	LF	LF	CY	CY	CY	SF	LF	SF	CY	LF	LF	LF
2 ABUTMENTS	I	106.4	322		150	25.3					400	22.2			
	II	143.2		46	250	45.1					638	45.5			
2 INTERIOR BENTS	I				150		29.1	12.6							
	II				200		40.2	16.8							
SUPERSTRUCTURE	I								5,243	714.02	1,404			60	180
	II								8,310	892.52	2,928		214.00	94	
PROJECT TOTALS		249.6	322	46	750	70.4	69.3	29.4	13,553	1,606.54	5,370	67.7	214.00	154	180

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Texas Department of Transportation

IH 10 WIDENING (NMSL/SPUR 37)

SUMMARY OF BRIDGE QUANTITIES

SHEET 1 OF 7

FED.RD. DIV.NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
6	TEXAS	SEE TITLE SHEET			IH 10
STATE DISTRICT	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
ELP	EL PASO	2121	01	104	32

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NOTE:
REFER TO VOLUME 4.

SUMMARY OF #BA BRIDGE

ITEMS		400 6005	403 6001	416 6001	416 6004	420 6014	422 6002	425 6026	427 6002	432 6008	450 6111	454 6018
ITEM DESCRIPTION	PHASE	CEM STABIL BKFL	TEMPORARY SPL SHORING	DRILL SHAFT (18 IN)	DRILL SHAFT (36 IN)	CL C CONC (ABUT)(HPC)	REINF CONC SLAB (HPC)	PRESTR CONC BOX BEAM (5XB40)	CONCRETE PAINT FINISH	RIPRAP (CONC)(CL B)(RR8&RR9)	RAIL (TY SSTR) (W/DRAIN SLOT) (HPC)	SEALED EXPANSION JOINT (4 IN) (SEJ - M)
UNITS		CY	SF	LF	LF	CY	SF	LF	SF	CY	LF	LF
2 ABUTMENTS	I	117.8	355		228	29.6			538	30.9		
	II	106.4		42	228	39.4			628	47.2		
SUPERSTRUCTURE	I						2,679	398.00				54
	II						3,000	398.00	1,802		130.00	60
PROJECT TOTALS		224.2	355	42	456	69.0	5,679	796.00	2,968	78.1	130.00	114

SUMMARY OF #BB BRIDGE

ITEMS		400 6005	403 6001	416 6001	416 6004	420 6014	422 6002	425 6026	427 6002	432 6008	450 6111	454 6018	514 6001
ITEM DESCRIPTION	PHASE	CEM STABIL BKFL	TEMPORARY SPL SHORING	DRILL SHAFT (18 IN)	DRILL SHAFT (36 IN)	CL C CONC (ABUT)(HPC)	REINF CONC SLAB (HPC)	PRESTR CONC BOX BEAM (5XB40)	CONCRETE PAINT FINISH	RIPRAP (CONC)(CL B)(RR8&RR9)	RAIL (TY SSTR) (W/DRAIN SLOT) (HPC)	SEALED EXPANSION JOINT (4 IN) (SEJ - M)	PERM CTB (SGL SLOPE) (TY 1) (42)
UNITS		CY	SF	LF	LF	CY	SF	LF	SF	CY	LF	LF	LF
2 ABUTMENTS	I	127.2	355		228	31.7			580	33.4			
	II	106.4		42	228	39.6			628	47.2			
SUPERSTRUCTURE	I						2,913	398.00	780			60	100
	II						3,000	398.00	1,805		130.00	60	
PROJECT TOTALS		233.6	355	42	456	71.3	5,913	796.00	3,793	80.6	130.00	120	100

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Texas Department of Transportation

IH 10 WIDENING (NMSL/SPUR 37)

SUMMARY OF BRIDGE QUANTITIES

SHEET 2 OF 7

FED.RD. DIV.NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
6	TEXAS	SEE TITLE SHEET			IH 10
STATE DISTRICT	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
ELP	EL PASO	2121	01	104	33

NOTE:
REFER TO VOLUME 4.

SUMMARY OF #CA BRIDGE

ITEMS		400 6005	403 6001	416 6004	420 6014	420 6026	420 6038	422 6002	425 6020	427 6002	432 6008	450 6111	454 6018
ITEM DESCRIPTION	PHASE	CEM STABIL BKFL	TEMPORARY SPL SHORING	DRILL SHAFT (36 IN)	CL C CONC (ABUT)(HPC)	CL C CONC (BENT)(HPC)	CL C CONC (COLUMN)(HPC)	REINF CONC SLAB (HPC)	PRESTR CONC BOX BEAM (5XB20)	CONCRETE PAINT FINISH	RIPRAP (CONC)(CL B)(RR8&RR9)	RAIL (TY SSTR) (W/DRAIN SLOT) (HPC)	SEALED EXPANSION JOINT (4 IN) (SEJ - M)
UNITS		CY	SF	LF	CY	CY	CY	SF	LF	SF	CY	LF	LF
2 ABUTMENTS	I	42.4	901	216	23.6					372	36.6		
	II	55.7		288	35.5					534	64.0		
2 INTERIOR BENTS	I			132		27.0	29.8						
	II			176		36.5	39.8						
SUPERSTRUCTURE	I							4,823	714.01				54
	II							7,560	892.51	2,937		194.00	84
PROJECT TOTALS		98.1	901	812	59.1	63.5	69.6	12,383	1,606.52	3,843	100.6	194.00	138

SUMMARY OF #CB BRIDGE

ITEMS		400 6005	403 6001	416 6004	420 6014	420 6026	420 6038	422 6002	425 6020	427 6002	432 6008	450 6111	454 6018	514 6001
ITEM DESCRIPTION	PHASE	CEM STABIL BKFL	TEMPORARY SPL SHORING	DRILL SHAFT (36 IN)	CL C CONC (ABUT)(HPC)	CL C CONC (BENT)(HPC)	CL C CONC (COLUMN)(HPC)	REINF CONC SLAB (HPC)	PRESTR CONC BOX BEAM (5XB20)	CONCRETE PAINT FINISH	RIPRAP (CONC)(CL B)(RR8&RR9)	RAIL (TY SSTR) (W/DRAIN SLOT) (HPC)	SEALED EXPANSION JOINT (4 IN) (SEJ - M)	PERM CTB (SGL SLOPE) (TY 1) (42)
UNITS		CY	SF	LF	CY	CY	CY	SF	LF	SF	CY	LF	LF	LF
2 ABUTMENTS	I	45.8	901	216	25.3					400	39.5			
	II	55.7		288	35.9					534	64.7			
2 INTERIOR BENTS	I			132		29.1	29.8							
	II			176		36.5	39.8							
SUPERSTRUCTURE	I							5,243	714.02	1,404			60	180
	II							7,560	892.52	2,937		194.00	84	
PROJECT TOTALS		101.5	901	812	61.2	65.6	69.6	12,803	1,606.54	5,275	104.2	194.00	144	180

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Texas Department of Transportation

IH 10 WIDENING (NMSL/SPUR 37)

SUMMARY OF BRIDGE QUANTITIES

SHEET 3 OF 7

FED.RD. DIV.NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
6	TEXAS	SEE TITLE SHEET			IH 10
STATE DISTRICT	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
ELP	EL PASO	2121	01	104	34

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NOTE:
REFER TO VOLUME 4.

SUMMARY OF #DA BRIDGE													
ITEMS		400 6005	403 6001	416 6004	420 6014	420 6026	420 6038	422 6002	425 6022	427 6002	432 6008	450 6111	454 6018
ITEM DESCRIPTION	PHASE	CEM STABIL BKFL	TEMPORARY SPL SHORING	DRILL SHAFT (36 IN)	CL C CONC (ABUT)(HPC)	CL C CONC (BENT)(HPC)	CL C CONC (COLUMN)(HPC)	REINF CONC SLAB (HPC)	PRESTR CONC BOX BEAM (5XB28)	CONCRETE PAINT FINISH	RIPRAP (CONC)(CL B)(RR8&RR9)	RAIL (TY SSTR) (W/DRAIN SLOT) (HPC)	SEALED EXPANSION JOINT (4 IN) (SEJ - M)
UNITS		CY	SF	LF	CY	CY	CY	SF	LF	SF	CY	LF	LF
2 ABUTMENTS	I	43.7	984	222	25.1					412	36.2		
	II	57.3		296	38.5					598	64.4		
2 INTERIOR BENTS	I			150		27.0	25.1						
	II			192		36.5	33.5						
SUPERSTRUCTURE	I							5358.34	794.01				54
	II							8400.00	992.51	3263		214.00	84
PROJECT TOTALS		101.0	984	860	63.5	63.5	58.6	13,758	1,786.52	4273	100.6	214.00	138

SUMMARY OF #DB BRIDGE														
ITEMS		400 6005	403 6001	416 6004	420 6014	420 6026	420 6038	422 6002	425 6022	427 6002	432 6008	450 6111	454 6018	514 6001
ITEM DESCRIPTION	PHASE	CEM STABIL BKFL	TEMPORARY SPL SHORING	DRILL SHAFT (36 IN)	CL C CONC (ABUT)(HPC)	CL C CONC (BENT)(HPC)	CL C CONC (COLUMN)(HPC)	REINF CONC SLAB (HPC)	PRESTR CONC BOX BEAM (5XB28)	CONCRETE PAINT FINISH	RIPRAP (CONC)(CL B)(RR8&RR9)	RAIL (TY SSTR) (W/DRAIN SLOT) (HPC)	SEALED EXPANSION JOINT (4 IN) (SEJ - M)	PERM CTB (SGL SLOPE) (TY 1) (42)
UNITS		CY	SF	LF	CY	CY	CY	SF	LF	SF	CY	LF	LF	LF
2 ABUTMENTS	I	47.0	984	222	26.8					444	39.0			
	II	57.1		296	38.8					598	62.3			
2 INTERIOR BENTS	I			150		29.1	25.1							
	II			192		36.5	33.5							
SUPERSTRUCTURE	I							5,825	794.01	1,560			60	200
	II							8,400	992.51	3,263		214.00	84	
PROJECT TOTALS		104.1	984	860	65.7	65.6	58.6	14,225	1,786.52	5,865	101.3	214.00	144	200

NO.	DATE	REVISION	APPROV.

CivilCorp
ENGINEERS • SURVEYORS
2825 WILCREST DRIVE, SUITE 100, HOUSTON TEXAS 77042
TEL: 713-785-9815 FAX: 713-782-6922 TXENG FIRM 10283

Texas Department of Transportation

IH 10 WIDENING (NMSL/SPUR 37)

SUMMARY OF BRIDGE QUANTITIES

SHEET 4 OF 7

FED.RD. DIV.NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
6	TEXAS	SEE TITLE SHEET			IH 10
STATE DISTRICT	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
ELP	EL PASO	2121	01	104	35

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NOTE:
REFER TO VOLUME 3.

SUMMARY OF #1A BRIDGE												
ITEMS		400 6005	403 6001	416 6004	420 6014	420 6026	420 6038	422 6002	425 6020	432 6008	450 6111	454 6018
ITEM DESCRIPTION	PHASE	CEM STABIL BKFL	TEMPORARY SPL SHORING	DRILL SHAFT (36 IN)	CL C CONC (ABUT)(HPC)	CL C CONC (BENT)(HPC)	CL C CONC (COLUMN)(HPC)	REINF CONC SLAB (HPC)	PRESTR CONC BOX BEAM (5XB20)	RIPRAP (CONC)(CL B)(RR8&RR9)	RAIL (TY SSTR) (W/DRAIN SLOT) (HPC)	SEALED EXPANSION JOINT (4 IN) (SEJ - M)
UNITS		CY	SF	LF	CY	CY	CY	SF	LF	CY	LF	LF
2 ABUTMENTS	I	56	376	150	23.6					37		59
	II	75		200	37.6					66		79
2 INTERIOR BENTS	I			180		27.0	12.6					
	II			180		36.4	12.6					
SUPERSTRUCTURE	I							4,823	720.00			
	II							7,560	900.00		200.0	
PROJECT TOTALS		131	376	710	61.2	63.4	25.2	12,383	1,620.00	103	200.0	138

SUMMARY OF #1B BRIDGE													
ITEMS		400 6005	403 6001	416 6004	420 6014	420 6026	420 6038	422 6002	425 6020	432 6008	450 6111	454 6018	514 6001
ITEM DESCRIPTION	PHASE	CEM STABIL BKFL	TEMPORARY SPL SHORING	DRILL SHAFT (36 IN)	CL C CONC (ABUT)(HPC)	CL C CONC (BENT)(HPC)	CL C CONC (COLUMN)(HPC)	REINF CONC SLAB (HPC)	PRESTR CONC BOX BEAM (5XB20)	RIPRAP (CONC)(CL B)(RR8&RR9)	RAIL (TY SSTR) (W/DRAIN SLOT) (HPC)	SEALED EXPANSION JOINT (4 IN) (SEJ - M)	PERM CTB (SGL SLOPE) (TY 1) (42)
UNITS		CY	SF	LF	CY	CY	CY	SF	LF	CY	LF	LF	LF
2 ABUTMENTS	I	61	376	150	25.5					40		64	
	II	76		200	37.7					66		79	
2 INTERIOR BENTS	I			180		29.1	12.6						
	II			180		36.4	12.6						
SUPERSTRUCTURE	I							5,243	720.00				180
	II							7,560	900.00		200.0		
PROJECT TOTALS		137	376	710	63.2	65.5	25.2	12,803	1,620.00	106	200.0	143	180

NO.	DATE	REVISION	APPROV.

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Texas Department of Transportation

IH 10 WIDENING (NMSL/SPUR 37)

SUMMARY OF BRIDGE QUANTITIES

SHEET 5 OF 7

FED.RD. DIV.NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
6	TEXAS	SEE TITLE SHEET			IH 10
STATE DISTRICT	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
ELP	EL PASO	2121	01	104	36

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NOTE:
REFER TO VOLUME 3.

SUMMARY OF #2A BRIDGE												
ITEMS		400 6005	403 6001	416 6004	420 6014	420 6026	420 6038	422 6002	425 6020	432 6008	450 6111	454 6018
ITEM DESCRIPTION	PHASE	CEM STABIL BKFL	TEMPORARY SPL SHORING	DRILL SHAFT (36 IN)	CL C CONC (ABUT)(HPC)	CL C CONC (BENT)(HPC)	CL C CONC (COLUMN)(HPC)	REINF CONC SLAB (HPC)	PRESTR CONC BOX BEAM (5XB20)	RIPRAP (CONC)(CL B)(RR8&RR9)	RAIL (TY SSTR) (W/DRAIN SLOT) (HPC)	SEALED EXPANSION JOINT (4 IN) (SEJ - M)
UNITS		CY	SF	LF	CY	CY	CY	SF	LF	CY	LF	LF
2 ABUTMENTS	I	56	268	120	23.5					30		59
	II	72		160	37.5					69		79
2 INTERIOR BENTS	I			150		27.0	18.1					
	II			150		36.4	18.1					
SUPERSTRUCTURE	I							4,823	720.00			
	II							7,560	900.00		200.0	
PROJECT TOTALS		128	268	580	61.0	63.4	36.2	12,383	1,620.00	99	200.0	138

SUMMARY OF #2B BRIDGE													
ITEMS		400 6005	403 6001	416 6004	420 6014	420 6026	420 6038	422 6002	425 6020	432 6008	450 6111	454 6018	514 6001
ITEM DESCRIPTION	PHASE	CEM STABIL BKFL	TEMPORARY SPL SHORING	DRILL SHAFT (36 IN)	CL C CONC (ABUT)(HPC)	CL C CONC (BENT)(HPC)	CL C CONC (COLUMN)(HPC)	REINF CONC SLAB (HPC)	PRESTR CONC BOX BEAM (5XB20)	RIPRAP (CONC)(CL B)(RR8&RR9)	RAIL (TY SSTR) (W/DRAIN SLOT) (HPC)	SEALED EXPANSION JOINT (4 IN) (SEJ - M)	PERM CTB (SGL SLOPE) (TY 1) (42)
UNITS		CY	SF	LF	CY	CY	CY	SF	LF	CY	LF	LF	LF
2 ABUTMENTS	I	61	268	120	25.4					32		64	
	II	72		160	37.6					71		79	
2 INTERIOR BENTS	I			150		29.1	18.1						
	II			150		36.4	18.1						
SUPERSTRUCTURE	I							5,243	720.00				180
	II							7,560	900.00		200.0		
PROJECT TOTALS		133	268	580	63.0	65.5	36.2	12,803	1,620.00	103	200.0	143	180

NO.	DATE	REVISION	APPROV.

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Texas Department of Transportation

IH 10 WIDENING (NMSL/SPUR 37)

SUMMARY OF BRIDGE QUANTITIES

SHEET 6 OF 7

FED.RD. DIV.NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
6	TEXAS	SEE TITLE SHEET			IH 10
STATE DISTRICT	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
ELP	EL PASO	2121	01	104	37

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NOTE:
REFER TO VOLUME 3.

SUMMARY OF # 3A BRIDGE											
ITEMS		400 6005	403 6001	416 6001	416 6004	420 6014	422 6002	425 6026	432 6008	450 6111	454 6018
ITEM DESCRIPTION	PHASE	CEM STABIL BKFL	TEMPORARY SPL SHORING	DRILL SHAFT (18 IN)	DRILL SHAFT (36 IN)	CL C CONC (ABUT)(HPC)	REINF CONC SLAB (HPC)	PRESTR CONC BOX BEAM (5XB40)	RIPRAP (CONC)(CL B)(RR8&RR9)	RAIL (TY SSTR) (W/DRAIN SLOT) (HPC)	SEALED EXPANSION JOINT (4 IN) (SEJ - M)
UNITS		CY	SF	LF	LF	CY	SF	LF	CY	LF	LF
2 ABUTMENTS	I	118	441		180	27.3			25		59
	II	102		10	180	36.4			37		55
SUPERSTRUCTURE	I						2,680	400.00			
	II						3,000	400.00		130.0	
PROJECT TOTALS		220	441	10	360	63.7	5,680	800.00	62	130.0	114

SUMMARY OF #3B BRIDGE												
ITEMS		400 6005	403 6001	416 6001	416 6004	420 6014	422 6002	425 6026	432 6008	450 6111	454 6018	514 6001
ITEM DESCRIPTION	PHASE	CEM STABIL BKFL	TEMPORARY SPL SHORING	DRILL SHAFT (18 IN)	DRILL SHAFT (36 IN)	CL C CONC (ABUT)(HPC)	REINF CONC SLAB (HPC)	PRESTR CONC BOX BEAM (5XB40)	RIPRAP (CONC)(CL B)(RR8&RR9)	RAIL (TY SSTR) (W/DRAIN SLOT) (HPC)	SEALED EXPANSION JOINT (4 IN) (SEJ - M)	PERM CTB (SGL SLOPE) (TY 1) (42)
UNITS		CY	SF	LF	LF	CY	SF	LF	CY	LF	LF	LF
2 ABUTMENTS	I	127	441		180	29.4			27		64	
	II	102		20	180	36.6			37		55	
SUPERSTRUCTURE	I						2,913	400.00				100
	II						3,000	400.00		130.0		
PROJECT TOTALS		229	441	20	360	66.0	5,913	800.00	64	130.0	119	100

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Texas Department of Transportation

IH 10 WIDENING (NMSL/SPUR 37)

SUMMARY OF BRIDGE QUANTITIES

SHEET 7 OF7

FED.RD. DIV.NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
6	TEXAS	SEE TITLE SHEET			IH 10
STATE DISTRICT	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	SHEET NO.
ELP	EL PASO	2121	01	104	38

SUMMARY OF ILLUMINATION QUANTITIES (CSJ: 2121-01-104)

ITEM	0416 6026	0432 6001	0610 6101	0610 6104	0613 6005	0618 6023	0618 6024	0618 6062	0618 6070	0620 6010	0620 6012	0624 6002	0628 6063	0628 6073	6027 6008	6156 6001	6156 6002	6156 6009
DESCRIPTION	DRILL SHAFT (HIGH MAST POLE) (60 IN)	RIPRAP (CONC) (4 IN)	REPLACE LUMINAIRE W/LED (150W EQ)	IN RD IL (U/P) (TY 1) (150W EQ) LED	HI MST IL POLE (150 FT) (80 MPH)	CONDT (PVC) (SCH 40) (2")	CONDT (PVC) (SCH 40) (2") (BORE)	CONDT (RM) (3/4")	CONDT (RM) (2")	ELEC CONDR (NO. 6) INSULATED	ELEC CONDR (NO. 4) INSULATED	GROUND BOX TY A (122311) W/APRON	ELC SRV TY A 240/480 100(NS)AL (E)EX(O)	ELC SRV TY A 240/480 100(NS)SS (E)GC(O)	GROUND BOX (PREPARE)	LED HI MST IL ASM (6 FIXT) (SYM) (TY S)	LED HI MST IL ASM (6 FIXT) (ASYM) (TY A)	LED HI MST IL AM (6 FIXT) ASYM(TY A) SHLD
	LF	CY	EA	EA	EA	LF	LF	LF	LF	LF	LF	EA	EA	EA	EA	EA	EA	EA
SHEET 1 OF 21	35	3			1	710	35				2,310	4					1	
SHEET 2 OF 21	70	6			2	1,150					3,540	3					2	
SHEET 3 OF 21	35	3			1	955			220		3,615	4					1	
SHEET 4 OF 21	35	3			1	1,150	420			3,900	1,740	5	1				1	
SHEET 5 OF 21	70	6			2	1,120	235			4,170		5					2	
SHEET 6 OF 21	35	3			1	255					795	1					1	
SHEET 7 OF 21	35	3			1	1,620					4,965	5					1	
SHEET 8 OF 21	35	3			1	1,475	210				5,175	5					1	
SHEET 9 OF 21																		
SHEET 10 OF 21	70	6		2	2	1,295	50	120	230	2,080	6,860	8		1			2	
SHEET 11 OF 21	35	3			1	1,185	160				6,715	4					1	
SHEET 12 OF 21	35	3			1	990			185		5,900	5					1	
SHEET 13 OF 21	70	6			2	1,150	40				4,080	5					1	1
SHEET 14 OF 21	35	3			1	660					2,025	2						1
SHEET 15 OF 21	70	6			2	1,055	75				7,510	6		1			1	1
SHEET 16 OF 21																		
SHEET 17 OF 21	140	12	2		4	2,680			525		13,530	11				3	1	
SHEET 18 OF 21	105	9			3	1,470	60				4,740	7				1	2	
SHEET 19 OF 21	35	3			1	495					1,515	1					1	
SHEET 20 OF 21	70	6			2	820					2,520	3					2	
SHEET 21 OF 21						160					510		1		1			
TOTAL	**1,015**	**87**	**2**	**2**	**29**	**20,395**	**1,285**	**120**	**1,160**	**10,150**	**78,045**	**84**	**2**	**2**	**1**	**4**	**22**	**3**

NO.	DATE	REVISION	APPROV.

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Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

SUMMARY OF ILLUMINATION QUANTITIES

SHEET 1 OF 1

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		39
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

SUMMARY OF PAVEMENT MARKINGS AND DELINEATORS QUANTITIES (CSJ: 2121-01-104)

ITEM				533 6001	658 6013	658 6026	658 6027	658 6061	658 6064	658 6080	658 6083	658 6092	666 6020	666 6035	666 6038	666 6041	666 6047
DESCRIPTION				RUMBLE STRIPS (SHOULDER)	INSTL DEL ASSM (D-SW)SZ (BRF)CTB	INSTL DEL ASSM (D-SY)SZ (BRF)CTB	INSTL DEL ASSM (D-SY)SZ (BRF)CTB (BI)	INSTL DEL ASSM (D-SW)SZ 1(BRF)GF2	INSTL DEL ASSM (D-SY)SZ 1(BRF)GF2	INSTL DEL ASSM (D-SW)SZ 1(WFLX)GND	INSTL DEL ASSM (D-SW)SZ 1(WFLX)SRF	INSTL DEL ASSM (D-DW)SZ 1(WFLX)GND	REFL PAV MRK TY I (W)6"(LNDP)(090MIL)	REFL PAV MRK TY I (W)8"(SLD)(090MIL)	REFL PAV MRK TY I (W)12"(LNDP)(090MIL)	REFL PAV MRK TY I (W)12"(SLD)(090MIL)	REFL PAV MRK TY I (W)24"(SLD)(090MIL)
				LF	EA	EA	EA	EA	EA	EA	EA	EA	LF	LF	LF	LF	LF
SHEET	1	OF	26														
SHEET	2	OF	26														
SHEET	3	OF	26														
SHEET	4	OF	26							3					27	265	
SHEET	5	OF	26	2,475			8			11				915		120	
SHEET	6	OF	26	4,250			11										
SHEET	7	OF	26	2,235	6		11	14		1			115	535		160	
SHEET	8	OF	26	2,390			11	8		29			220	1,750		360	
SHEET	9	OF	26	4,400			11	7		10				1,145			
SHEET	10	OF	26	3,180	6		11	16		5				695		690	
SHEET	11	OF	26	3,705			11			4			90	190		95	
SHEET	12	OF	26	4,110			11	4	20	9			65	2,285		335	
SHEET	13	OF	26	2,290	8		11	39	2				90	1,365	280	700	20
SHEET	14	OF	26	4,400			11	14	13						550		
SHEET	15	OF	26	2,870	8		11	30	15					590	355	500	
SHEET	16	OF	26	3,810			11	7		9				2,895		215	
SHEET	17	OF	26	4,400			11			1				1,600	155	715	
SHEET	18	OF	26	2,975	2		11	3		7		7		1,890	5	695	
SHEET	19	OF	26	3,200	7	4	9	18							545	65	
SHEET	20	OF	26					3						535			
SHEET	21	OF	26	4,120			11	16	3						515	160	
SHEET	22	OF	26	2,440	26	16	11	11						2,025		585	
SHEET	23	OF	26	3,500	25	15	11		6		21			1,895	160	400	
SHEET	24	OF	26	4,315	30	25	11		7					2,435	20	335	
SHEET	25	OF	26	2,130	14	11	11	14	10					1,275	130	725	
SHEET	26	OF	26	4,000		2	11	21	6						250		
SUBTOTAL				**71,195**	**132**	**73**	**226**	**225**	**82**	**89**	**21**	**7**	**580**	**24,020**	**2,992**	**7,120**	**20**

SUMMARY OF PAVEMENT MARKINGS AND DELINEATORS QUANTITIES (CSJ: 2121-01-104)

ITEM				666 6053	666 6062	666 6071	666 6074	666 6077	666 6171	666 6173	666 6174	666 6178	666 6179	666 6180
DESCRIPTION				REFL PAV MRK TY I (W)(ARROW)(090MIL)	REFL PAV MRK TY I(W)(UTURN ARW)(090MIL)	REFL PAV MRK TY I(W)(LNDP ARW)(090MIL)	REFL PAV MRK TY I (W)(NUMBER)(090MIL)	REFL PAV MRK TY I (W)(WORD)(090MIL)	REFL PAV MRK TY II (W) 6" (BRK)	REFL PAV MRK TY II (W) 6" (LNDP)	REFL PAV MRK TY II (W) 6" (SLD)	REFL PAV MRK TY II (W) 8" (SLD)	REFL PAV MRK TY II (W) 12" (LNDP)	REFL PAV MRK TY II (W) 12" (SLD)
				EA	EA	EA	EA	EA	LF	LF	LF	LF	LF	LF
SHEET	1	OF	26											
SHEET	2	OF	26											
SHEET	3	OF	26											
SHEET	4	OF	26											
SHEET	5	OF	26				1		80		2,155	915		120
SHEET	6	OF	26						80		2,050			
SHEET	7	OF	26							115	2,330	535		160
SHEET	8	OF	26				1			220	3,515	1,750		360
SHEET	9	OF	26								3,975	1,145		
SHEET	10	OF	26	1				1	190		3,125	695		690
SHEET	11	OF	26						280	90	3,420	190		95
SHEET	12	OF	26			1	1		280	65	3,865	2,285		335
SHEET	13	OF	26	8		1		5	280	90	2,430	1,365	280	700
SHEET	14	OF	26						280		3,305		550	
SHEET	15	OF	26	2				2	280		3,310	590	355	500
SHEET	16	OF	26				1		270		3,980	2,895		215
SHEET	17	OF	26	4				4	550		4,490	1,600	155	715
SHEET	18	OF	26	1			1		530		4,980	1,890	5	695
SHEET	19	OF	26	1				2	20		2,220		545	65
SHEET	20	OF	26	4	2			2	250		1,080	535		
SHEET	21	OF	26	2				2	900		4,415		515	160
SHEET	22	OF	26				1		550		5,160	2,025		585
SHEET	23	OF	26	3				3	550		4,450	1,895	160	400
SHEET	24	OF	26	1			1	1	550		4,840	2,435	20	335
SHEET	25	OF	26	2				2	370		3,775	1,275	130	725
SHEET	26	OF	26						250		3,000		250	
SUBTOTAL				**29**	**2**	**2**	**7**	**24**	**6,540**	**580**	**75,870**	**24,020**	**2,965**	**6,855**

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Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

SUMMARY OF PAVEMENT MARKINGS AND DELINEATORS QUANTITIES

SHEET 1 OF 3

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		40
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

SUMMARY OF PAVEMENT MARKINGS AND DELINEATORS QUANTITIES (CSJ: 2121-01-104)

ITEM				666 6182	666 6184	666 6187	666 6190	666 6191	666 6192	666 6197	666 6210	666 6227	666 6285	666 6289	666 6305	666 6308	666 6320
DESCRIPTION				REFL PAV MRK TY II (W) 24" (SLD)	REFL PAV MRK TY II (W) (ARROW)	REFL PAV MRK TY II (W) (UTURN ARROW)	REFL PAV MRK TY II (W) (LNDP ARW)	REFL PAV MRK TY II (W) (NUMBER)	REFL PAV MRK TY II (W) (WORD)	REFL PAV MRK TY II (W) (SYMBOL)	REFL PAV MRK TY II (Y) 6" (SLD)	PAVEMENT SEALER 10"	REF PROF PAV MRK TY I(W)6"(SLD)(090MIL)	REF PROF PAV MRK TY I(Y)6"(SLD)(090MIL)	RE PM W/RET REQ TY I (W)6"(BRK)(090MIL)	RE PM W/RET REQ TY I (W)6"(SLD)(090MIL)	RE PM W/RET REQ TY I (Y)6"(SLD)(090MIL)
				LF	EA	EA	EA	EA	EA	EA	LF	LF	LF	LF	LF	LF	LF
SHEET	1	OF	26														
SHEET	2	OF	26												160		610
SHEET	3	OF	26												650	919	1,546
SHEET	4	OF	26												840	1,708	1,708
SHEET	5	OF	26					1		4	2,115	720	1,080	715	80	1,075	1,400
SHEET	6	OF	26								2,200	1,160			80	2,050	2,200
SHEET	7	OF	26								2,330	1,120	1,665	760		665	1,570
SHEET	8	OF	26					1			3,525	1,080	3,325	1,305		190	2,200
SHEET	9	OF	26								4,695	1,120	1,775	2,495		2,200	2,200
SHEET	10	OF	26		1				1		3,495	1,100	1,665	1,775	190	1,460	1,720
SHEET	11	OF	26								3,300	1,100	1,915	1,100	280	1,505	2,200
SHEET	12	OF	26				1	1			4,090	1,100	1,955	1,890	280	1,910	2,200
SHEET	13	OF	26	20	8		1		5	4	2,970	1,120	1,700	1,100	280	730	1,870
SHEET	14	OF	26								3,300	1,100	1,105	1,100	280	2,200	2,200
SHEET	15	OF	26		2				2	4	3,310	1,120	2,010	1,740	280	1,300	1,570
SHEET	16	OF	26					1			4,445	1,100	2,370	2,245	270	1,610	2,200
SHEET	17	OF	26		4				4		4,500	1,100	2,290	2,300	550	2,200	2,200
SHEET	18	OF	26		1			1			5,000	1,100	4,205	2,800	530	775	2,200
SHEET	19	OF	26		1				2		2,270	1,100	620	670	20	1,600	1,600
SHEET	20	OF	26		4	2			2		760		1,080	760	250		
SHEET	21	OF	26		2				2		4,640	1,100	2,415	2,640	900	2,000	2,000
SHEET	22	OF	26					1			5,160	1,100	4,410	3,470	550	750	1,690
SHEET	23	OF	26		3				3		4,635	1,100	2,700	2,885	550	1,750	1,750
SHEET	24	OF	26		1			1	1		5,115	1,100	2,725	2,915	550	2,115	2,200
SHEET	25	OF	26		2				2	4	3,790	1,180	3,205	2,230	370	570	1,560
SHEET	26	OF	26								3,000	1,250	1,000	1,000	250	2,000	2,000
SUBTOTAL				20	29	2	2	7	24	16	78,645	23,070	45,215	37,895	8,190	33,282	44,594

SUMMARY OF PAVEMENT MARKINGS AND DELINEATORS QUANTITIES (CSJ: 2121-01-104)

ITEM				668 6010	668 6115	672 6004	672 6007	672 6009	672 6010	677 6001	677 6002	677 6003	677 6008	677 6012
DESCRIPTION				PREFAB PAV MRK TY B (W)(6")(BRK)CNTST	PREFAB PAV MRK TY C (MULTI) (SHIELD)	PLOWABLE REFL PAV MRKR TY II-C-R	REFL PAV MRKR TY I-C	REFL PAV MRKR TY II-A-A	REFL PAV MRKR TY II-C-R	ELIM EXT PAV MRK & MRKS (4")	ELIM EXT PAV MRK & MRKS (6")	ELIM EXT PAV MRK & MRKS (8")	ELIM EXT PAV MRK & MRKS (ARROW)	ELIM EXT PAV MRK & MRKS (WORD)
				LF	EA	EA	EA	EA	EA	LF	LF	LF	EA	EA
SHEET	1	OF	26										2	
SHEET	2	OF	26			16					610		1	
SHEET	3	OF	26			62					3,115			
SHEET	4	OF	26			98					5,895			
SHEET	5	OF	26	720	4	12			120			155		
SHEET	6	OF	26	1,160					90	70		220		
SHEET	7	OF	26	1,120					105					
SHEET	8	OF	26	1,080					168					
SHEET	9	OF	26	1,120					140	1,380		680		
SHEET	10	OF	26	1,100					102	2,085		165		
SHEET	11	OF	26	1,100					83	3,483				
SHEET	12	OF	26	1,100					223	3,230				
SHEET	13	OF	26	1,120	4			16	191	1,515		225	4	2
SHEET	14	OF	26	1,100					162	1,965		365		
SHEET	15	OF	26	1,120	4				170	2,475			1	
SHEET	16	OF	26	1,100					250	2,960			1	
SHEET	17	OF	26	1,100					210	4,950				
SHEET	18	OF	26	1,100					260	4,200		320		
SHEET	19	OF	26	1,100					147	110				
SHEET	20	OF	26				24		13	2,090		535		
SHEET	21	OF	26	1,100					194	5,000		350		
SHEET	22	OF	26	1,100					236	4,905		275		
SHEET	23	OF	26	1,100					224	4,880				
SHEET	24	OF	26	1,100					214	4,870				
SHEET	25	OF	26	1,180	4				195	3,275				
SHEET	26	OF	26	1,250					125	2,250			1	
SUBTOTAL				23,070	16	188	24	16	3,622	55,693	9,620	3,290	10	2

NO.	DATE	REVISION	APPROV.

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Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

SUMMARY OF PAVEMENT MARKINGS AND DELINEATORS QUANTITIES

SHEET 2 OF 3

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		41
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

SUMMARY OF PAVEMENT MARKINGS AND DELINEATORS QUANTITIES (CSJ: 2121-01-104)

ITEM				677 6038	678 6002	678 6004	678 6005	678 6006	678 6008	678 6009	678 6012	678 6015	678 6016	678 6025
DESCRIPTION				ELIM EXT PAV MRK & MRKRS(PLOWABLE RPMS)	PAV SURF PREP FOR MRK (6")	PAV SURF PREP FOR MRK (8")	PAV SURF PREP FOR MRK (10")	PAV SURF PREP FOR MRK (12")	PAV SURF PREP FOR MRK (24")	PAV SURF PREP FOR MRK (ARROW)	PAV SURF PREP FOR MRK (UTURN ARR)	PAV SURF PREP FOR MRK (NUMBER)	PAV SURF PREP FOR MRK (WORD)	PAV SURF PREP FOR MRKS (SHIELD)
				EA	LF	LF	LF	LF	LF	EA	EA	EA	EA	EA
SHEET	1	OF	26											
SHEET	2	OF	26		770									
SHEET	3	OF	26	40	3,115									
SHEET	4	OF	26	60	4,256			292						
SHEET	5	OF	26	12	4,350	915	720	120				1		4
SHEET	6	OF	26		4,330		1,160							
SHEET	7	OF	26		4,775	535	1,120	160						
SHEET	8	OF	26		7,260	1,750	1,080	360				1		
SHEET	9	OF	26		8,065	1,145	1,120							
SHEET	10	OF	26		6,810	695	1,100	690		1			1	
SHEET	11	OF	26		7,090	190	1,100	95						
SHEET	12	OF	26		8,300	2,285	1,100	335		1		1		
SHEET	13	OF	26		5,770	1,365	1,120	980	20	9			5	4
SHEET	14	OF	26		6,885		1,100	550						
SHEET	15	OF	26		6,900	590	1,120	855		2			2	4
SHEET	16	OF	26		8,695	2,895	1,100	215				1		
SHEET	17	OF	26		9,540	1,600	1,100	870		4			4	
SHEET	18	OF	26		10,510	1,890	1,100	700		1		1		
SHEET	19	OF	26		4,510		1,100	610		1			2	
SHEET	20	OF	26		2,090	535				4	2		2	
SHEET	21	OF	26		9,955		1,100	675		2			2	
SHEET	22	OF	26		10,870	2,025	1,100	585				1		
SHEET	23	OF	26		9,635	1,895	1,100	560		3			3	
SHEET	24	OF	26		10,505	2,435	1,100	355		1		1	1	
SHEET	25	OF	26		7,935	1,275	1,180	855		2			2	4
SHEET	26	OF	26		6,250		1,250	250						
SUBTOTAL				**112**	**169,171**	**24,020**	**23,070**	**10,112**	**20**	**31**	**2**	**7**	**24**	**16**

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IH 10 WIDENING
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SUMMARY OF PAVEMENT MARKINGS AND DELINEATORS QUANTITIES

SHEET 3 OF 3

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		42
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

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SUMMARY OF SIGNS ITEMS (CSJ: 2121-01-104)

ITEM				416 6015	416 6018	416 6022	416 6068	636 6002	636 6003	644 6001	644 6002	644 6004	644 6017	644 6030	644 6034
DESCRIPTION				DRILL SHAFT (NON - REINFORCED) (12 IN)	DRILL SHAFT (SIGN MTS) (24 IN)	DRILL SHAFT (SIGN MTS) (48 IN)	DRILL SHAFT (SIGN MTS) (60 IN)	ALUMINUM SIGNS (TY G)	ALUMINUM SIGNS (TY O)	IN SM RD SN SUP&AM TY10BWG(1) SA(P)	IN SM RD SN SUP&AM TY10BWG(1)SA (P-BM)	IN SM RD SN SUP&AM TY10BWG(1) SA(T)	IN SM RD SN SUP&AM TY10BWG(2)SA (P)	IN SM RD SN SUP&AM TYS80(1) SA(T)	IN SM RD SN SUP&AM TYS80(1)SA(U -1EXT)
				LF	LF	LF	LF	SF	SF	EA	EA	EA	EA	EA	EA
SHEET	1	OF	25												
SHEET	2	OF	25												
SHEET	3	OF	25												
SHEET	4	OF	25												
SHEET	5	OF	25		14			198		2		5		1	1
SHEET	6	OF	25		11			102				4		1	1
SHEET	7	OF	25		11			102				1			
SHEET	8	OF	25			53			398			4		2	1
SHEET	9	OF	25									7			1
SHEET	10	OF	25	7				23		2		4	1	2	
SHEET	11	OF	25		14			219				1			1
SHEET	12	OF	25									5			1
SHEET	13	OF	25			84			413		2	10		2	
SHEET	14	OF	25							2		2			
SHEET	15	OF	25				68		863						
SHEET	16	OF	25			10		109				5		1	1
SHEET	17	OF	25									2		1	2
SHEET	18	OF	25			33			162	1		3			
SHEET	19	OF	25			32			129	2		1			
SHEET	20	OF	25												
SHEET	21	OF	25		21	33		193	162			2			
SHEET	22	OF	25			35			129	1		4			
SHEET	23	OF	25							1		7			4
SHEET	24	OF	25		11	33		107	155			1			
SHEET	25	OF	25							2		1			
SUBTOTAL				7	82	313	68	1,053	2,411	13	2	69	1	10	13

SUMMARY OF SIGNS QUANTITIES (CSJ: 2121-01-104)

ITEM				644 6035	644 6051	644 6064	644 6076	644 6077	647 6001	647 6003	650 6030	650 6047	650 6165	650 6204
DESCRIPTION				IN SM RD SN SUP&AM TYS80(1)SA(U -2EXT)	IN SM RD SN SUP&AM TYS80(2)SA(P -EXAL)	IN BRIDGE MNT CLEARANCE SGN ASSM(TY N)	REMOVE SM RD SN SUP&AM	REMOVE BRDG MNT CLEARANCE SIGN ASSM	INSTALL LRSS (STRUCT STEEL)	REMOVE LRSA	INS OH SN SUP (30 FT CANT) (CIRC TUBE)	INS OH SN SUP(40 FT CANT)(CIRC TUBE)	INS OH SN SUP(155 FT BRDG)(CIRC TUBE)	REMOVE OVERHD SIGN SUP
				EA	EA	EA	EA	EA	LB	EA	EA	EA	EA	EA
SHEET	1	OF	25				2							
SHEET	2	OF	25											
SHEET	3	OF	25											
SHEET	4	OF	25											
SHEET	5	OF	25		1		6		1,045					
SHEET	6	OF	25			2	12	2	584					
SHEET	7	OF	25				1		614	1				
SHEET	8	OF	25		1		3			1		1		
SHEET	9	OF	25				4			1				
SHEET	10	OF	25				10		204	1				
SHEET	11	OF	25				2		1,080	1				
SHEET	12	OF	25		1		5							
SHEET	13	OF	25				10			1	2			1
SHEET	14	OF	25				6			1				
SHEET	15	OF	25		1					1			1	1
SHEET	16	OF	25	1	1		3		491	1				
SHEET	17	OF	25				4			1				
SHEET	18	OF	25		1		12				1			
SHEET	19	OF	25			2	3	2			1			
SHEET	20	OF	25											
SHEET	21	OF	25				5		1,059		1			
SHEET	22	OF	25		1		3				1			
SHEET	23	OF	25				7							
SHEET	24	OF	25				2		567		1			
SHEET	25	OF	25				3							
SUBTOTAL				1	7	4	103	4	5,644	10	7	1	1	2

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IH 10 WIDENING
(NM/SPUR 37)

SUMMARY OF SIGNS QUANTITIES

SHEET 1 OF 1

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		43
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

SUMMARY OF ITS ITEMS (CSJ: 2121-01-104)											
ITEM				0644 6033	6007 6096	6010 6011	6027 6003	6027 6008	6137 6005	6304 6003	6377 6001	6489 6002
DESCRIPTION				IN SM RD SN SUP&AM TYS80(1)SA(U)	FIBER OPTIC PATCH PANEL (12 POSITION)	CCTV FIELD EQUIP (DIGITAL) (INSTL ONLY)	CONDUIT (PREPARE)	GROUND BOX (PREPARE)	INSTALLATION OF FES (FIELD CABINET)	ITS RVSD (DC ONLY) (INSTALL ONLY)	SYSTEM INTEGRATION	BACKLIT W/PERIMETER LED RDSD SGN
				EA	EA	EA	LF	EA	EA	EA	LS	EA
SHEET	1	OF	21	4								4
SHEET	3	OF	21	4	1	1			1	1		4
SHEET	4	OF	21									
SHEET	5	OF	21									
SHEET	6	OF	21	4								4
SHEET	7	OF	21									
SHEET	8	OF	21		1	1			1	1		
SHEET	9	OF	21	4								4
SHEET	10	OF	21									
SHEET	11	OF	21									
SHEET	12	OF	21									
SHEET	13	OF	21	4								4
SHEET	14	OF	21									
SHEET	15	OF	21	4								4
SHEET	17	OF	21		2	1	630	3	1	1		
SHEET	18	OF	21									
SHEET	19	OF	21	4								4
SHEET	20	OF	21									
SHEET	21	OF	21									
TOTAL				**28**	**4**	**3**	**630**	**3**	**3**	**3**	**1**	**28**

NO.	DATE	REVISION	APPROV.

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Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

SUMMARY OF ITS QUANTITIES

SHEET 1 OF 1

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		44
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

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SUMMARY OF AESTHETIC QUANTITIES		
ITEM	4230	6528
	6001	6001
ITEM DESCRIPTION	ORNAMENTAL STEEL STRUCTURE	LED AESTHETIC LIGHT ASSEMBLY
UNIT	SF	EA
LOS MOCHIS	2,925	1
LOOP 375	1,026	
ARTCRAFT	830	
THORN	1,034	1
TOTAL	5,815	2

NO.	DATE	REVISION	APPROV.

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Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

SUMMARY OF AESTHETIC QUANTITIES

SHEET 1 OF 1

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		46
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

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SUMMARY OF LANDSCAPE ITEMS (CSJ: 2121-01-104)

ITEM		0192 6017	0192 6024	0192 6030	0192 6032	0192 6033	0192 6063	1002 6002	1002 6003	1002 6004	1002 6005	1002 6006	1005 6001
DESCRIPTION		VEGETATION BARRIER	PLANT MATERIAL (30 GAL) (TREE)	PLANT MATERIAL (3 GAL) (SHRUB)	PLANT MATERIAL (10 GAL) (SHRUB)	PLANT MATERIAL (15 GAL) (SHRUB)	PLANT BED PREP (TYPE I)	LANDSCAPE AMENITY (TY 1)	LANDSCAPE AMENITY (TY 2)	LANDSCAPE AMENITY (TY 3)	LANDSCAPE AMENITY (TY 4)	LANDSCAPE AMENITY (TY 5)	LOOSE AGGR FOR GROUNDCOVER (TYPE I)
		SY	EA	EA	EA	EA	SY	EA	EA	EA	EA	EA	CY
SHEET 1 OF 56		5,708											357
SHEET 2 OF 56		30,986		38	62	58	399	2					1,937
SHEET 3 OF 56		29,309	20	89	51	31	1,980	1		5			1,832
SHEET 4 OF 56		32,637	20	98	66	43	2,180	2		5			2,040
SHEET 5 OF 56		31,227	8	61	64	36	1,281	3		1	1	1	1,952
SHEET 6 OF 56		18,578	8	32	34	19	713			2			1,161
SHEET 7 OF 56		14,286		21	30	13	208		3				893
SHEET 8 OF 56		10,059			8	5							629
SHEET 9 OF 56		9,959	4	25	19	9	612	1			2		622
SHEET 10 OF 56		15,475	6	52	34	13	896		4		3		967
SHEET 11 OF 56		12,083		14	15	12	139		2				755
SHEET 12 OF 56		10,939			6	6							684
SHEET 13 OF 56		11,598	14	74	92	58	1,730	2		2	3		725
SHEET 14 OF 56		17,594			5	12							1,100
SHEET 15 OF 56		29,438	14	74	55	45	1,730	2		2	3		1,840
SHEET 16 OF 56		38,231	22	106	85	45	2,442	2		4	3		2,389
SHEET 17 OF 56		35,206	26	104	73	53	2,343			6	1		2,200
SHEET 18 OF 56		574											36
SHEET 19 OF 56		0	0	0	0	0	0	0	0	0	0	0	0
SHEET 20 OF 56		0	0	0	0	0	0	0	0	0	0	0	0
SHEET 21 OF 56		1,117											70
SHEET 22 OF 56		3,388											212
SHEET 23 OF 56		1,952											122
SHEET 24 OF 56		3,200											200
SHEET 25 OF 56		6,534											408
SHEET 26 OF 56		10,567											660
SHEET 27 OF 56		11,186											699
SHEET 28 OF 56		6,407											400
SHEET 29 OF 56		11,680	2	38	20	6	398		4			1	730
SHEET 30 OF 56		10,225	2	22	4	7	121					1	639
SHEET 31 OF 56		9,258	2	26	4	8	121					1	579
SHEET 32 OF 56		14,047	2	62	13	23	406	1			1		878
SHEET 33 OF 56		11,999		44		18							750
SHEET 34 OF 56		12,296											769
SHEET 35 OF 56		8,113											507
SHEET 36 OF 56		14,370	16	80	32	16	963					9	898
SHEET 37 OF 56		15,256	6	63	12	25	361					3	954
SHEET 38 OF 56		10,739											671
SHEET 39 OF 56		16,839	2	10	34	33	121					1	1,052
SHEET 40 OF 56		25,251	8	32	38	74	825				4		1,578
SHEET 41 OF 56		20,609		36	66	64	798	4					1,288
SHEET 42 OF 56		23,334	4	30	58	32	551		2		2		1,458
SHEET 43 OF 56		9,661											604
SHEET 44 OF 56		14,890	4	36	48	29	726	2			1	1	931
SHEET 45 OF 56		15,391	6	24	23	10	563			1	1		962
SHEET 46 OF 56		1,816											114
SHEET 47 OF 56		1,149		18	7	2							72
SHEET 48 OF 56		3,167		19	8	2							198
SHEET 49 OF 56		11,115		27	21	9	598	3					695
SHEET 50 OF 56		30,298	6	60	63	33	1,360	4		1	1		1,894
SHEET 51 OF 56		44,531	16	118	106	49	2,677	6		3	2		2,783
SHEET 52 OF 56		31,369	10	58	59	31	1,374	2		1	3		1,961
SHEET 53 OF 56		17,815		50	36	14	936	4	2				1,113
SHEET 54 OF 56		16,579	4	38	22	10	640	2				2	1,036
SHEET 55 OF 56		25,462	31	127	49	47	2,336	1		6			1,591
SHEET 56 OF 56		12,540	4	27		27							784
TOTAL		**838,037**	**267**	**1,833**	**1,422**	**1,027**	**32,528**	**44**	**17**	**39**	**31**	**20**	**52,379**

NO.	DATE	REVISION	APPROV.

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Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

SUMMARY OF LANDSCAPING QUANTITIES

SHEET 1 OF 1

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		46A
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

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I. STORMWATER POLLUTION PREVENTION-CLEAN WATER ACT SECTION 402

TPDES TXR 150000: Stormwater Discharge Permit or Construction General Permit required for projects with 1 or more acres disturbed soil. Projects with any disturbed soil must protect for erosion and sedimentation in accordance with Item 506.

List MS4 Operator(s) that may receive discharges from this project. They may need to be notified prior to construction activities.

1. N/A

☐ No Action Required ☒ Required Action

Action No.

1. Prevent stormwater pollution by controlling erosion and sedimentation in accordance with TPDES Permit TXR 150000
2. Comply with the SWP3 and revise when necessary to control pollution or required by the Engineer.
3. Post Construction Site Notice (CSN) with SWP3 information on or near the site, accessible to the public and TCEQ, EPA or other inspectors.
4. When Contractor project specific locations (PSL's) increase disturbed soil area to 5 acres or more, submit NOI to TCEQ and the Engineer.

II. WORK IN OR NEAR STREAMS, WATERBODIES AND WETLANDS CLEAN WATER ACT SECTIONS 401 AND 404

USACE Permit required for filling, dredging, excavating or other work in any water bodies, rivers, creeks, streams, wetlands or wet areas.

The Contractor must adhere to all of the terms and conditions associated with the following permit(s):

☐ No Permit Required
☒ Nationwide Permit 14 - PCN not Required (less than 1/10th acre waters or wetlands affected)
☐ Nationwide Permit 14 - PCN Required (1/10 to <1/2 acre, 1/3 in tidal waters)
☐ Individual 404 Permit Required
☐ Other Nationwide Permit Required: NWP# _____

Required Actions: List waters of the US permit applies to, location in project and check Best Management Practices planned to control erosion, sedimentation and post-project TSS.

1.

2.

The elevation of the ordinary high water marks of any areas requiring work to be performed in the waters of the US requiring the use of a nationwide permit can be found on the Bridge Layouts.

Best Management Practices:

Erosion	Sedimentation	Post-Construction TSS
☐ Temporary Vegetation	☐ Silt Fence	☐ Vegetative Filter Strips
☐ Blankets/Matting	☒ Rock Berm	☐ Retention/Irrigation Systems
☐ Mulch	☐ Triangular Filter Dike	☐ Extended Detention Basin
☒ Seeding	☐ Sand Bag Berm	☐ Constructed Wetlands
☐ Interceptor Swale	☐ Straw Bale Dike	☐ Wet Basin
☐ Diversion Dike	☐ Brush Berms	☐ Erosion Control Compost
☐ Biodegradable Erosion Control Logs	☒ Erosion Control Logs	☐ Mulch Filter Berm and Socks
☐ Mulch Filter Berm and Socks	☐ Mulch Filter Berm and Socks	☐ Compost Filter Berm and Socks
☐ Compost Filter Berm and Socks	☐ Compost Filter Berm and Socks	☐ Vegetation Lined Ditches
	☐ Stone Outlet Sediment Traps	☐ Sand Filter Systems
	☐ Sediment Basins	☒ Gabions

III. CULTURAL RESOURCES

Refer to TxDOT Standard Specifications in the event historical issues or archeological artifacts are found during construction. Upon discovery of archeological artifacts (bones, burnt rock, flint, pottery, etc.) cease work in the immediate area and contact the Engineer immediately.

☐ No Action Required ☒ Required Action

Action No.

1. In the event that unanticipated archeological deposits/findings are encountered during construction operations, work in the immediate area shall cease. Contractor shall contact TxDOT archeological staff such that post-review discovery procedures are implemented.
2. Contractor shall non re-initiate construction operations until authorized, in writing, from TxDOT archeological staff.

IV. VEGETATION RESOURCES

Preserve native vegetation to the extent practical.
Contractor must adhere to Construction Specification Requirements Specs 162, 164, 192, 193, 506, 730, 751, 752 in order to comply with requirements for invasive species, beneficial landscaping, and tree/brush removal commitments.

☐ No Action Required ☒ Required Action

Action No.

1. Do not disturb vegetation and/or soils beyond existing Right of Way (ROW) limits.
2. Minimize disturbance to existing/native vegetation throughout project limits.
3. In accordance with Executive Order 13112 on Invasive Species, seeding and replanting with TxDOT approved seeding specifications will be performed where possible.

V. FEDERAL LISTED, PROPOSED THREATENED, ENDANGERED SPECIES, CRITICAL HABITAT, STATE LISTED SPECIES, CANDIDATE SPECIES AND MIGRATORY BIRDS.

☐ No Action Required ☒ Required Action

Action No.

1. See EPIC Sheet 2 of 2.

VI. HAZARDOUS MATERIALS OR CONTAMINATION ISSUES

General (applies to all projects):
Comply with the Hazard Communication Act (the Act) for personnel who will be working with hazardous materials by conducting safety meetings prior to beginning construction and making workers aware of potential hazards in the workplace. Ensure that all workers are provided with personal protective equipment appropriate for any hazardous materials used.

Obtain and keep on-site Material Safety Data Sheets (MSDS) for all hazardous products used on the project, which may include, but are not limited to the following categories: Paints, acids, solvents, asphalt products, chemical additives, fuels and concrete curing compounds or additives. Provide protected storage, off bare ground and covered, for products which may be hazardous. Maintain product labelling as required by the Act.

LIST OF ABBREVIATIONS

BMP:	Best Management Practice	SPCC:	Spill Prevention Control and Countermeasure
CGP:	Construction General Permit	SWP3:	Storm Water Pollution Prevention Plan
DSHS:	Texas Department of State Health Services	PCN:	Pre-Construction Notification
FHWA:	Federal Highway Administration	PSL:	Project Specific Location
MOA:	Memorandum of Agreement	TCEQ:	Texas Commission on Environmental Quality
MOU:	Memorandum of Understanding	TPDES:	Texas Pollutant Discharge Elimination System
MS4:	Municipal Separate Stormwater Sewer System	TPWD:	Texas Parks and Wildlife Department
MBTA:	Migratory Bird Treaty Act	TxDOT:	Texas Department of Transportation
NOT:	Notice of Termination	T&E:	Threatened and Endangered Species
NWP:	Nationwide Permit	USACE:	U.S. Army Corps of Engineers
NOI:	Notice of Intent	USFWS:	U.S. Fish and Wildlife Service

VI. HAZARDOUS MATERIALS OR CONTAMINATION ISSUES Cont'd

General (applies to all projects):
Maintain an adequate supply of on-site spill response materials, as indicated in the MSDS. In the event of a spill, take actions to mitigate the spill as indicated in the MSDS, in accordance with safe work practices, and contact the District Spill Coordinator immediately. The Contractor shall be responsible for the proper containment and cleanup of all product spills.

Contact the Engineer if any of the following are detected:
* Dead or distressed vegetation (not identified as normal)
* Trash piles, drums, canister, barrels, etc.
* Undesirable smells or odors
* Evidence of leaching or seepage of substances

Does the project involve any bridge class structure rehabilitation or replacements (bridge class structures not including box culverts)?

☒ Yes ☐ No

If "No", then no further action is required. If "Yes", then TxDOT is responsible for completing asbestos assessment/inspection.

Are the results of the asbestos inspection positive (is asbestos present)?

☐ Yes ☒ No

If "Yes", then TxDOT must retain a DSHS licensed asbestos consultant to assist with the notification, develop abatement/mitigation procedures, and perform management activities as necessary.

☒ No Action Required ☐ Required Action

Action No.

1.

2 .

3.

Any other evidence indicating possible hazardous materials or contamination discovered on site. Hazardous Materials or Contamination Issues Specific to this Project:

☒ No Action Required ☐ Required Action

VII. OTHER ENVIRONMENTAL ISSUES

(includes regional issues such as Edwards Aquifer District, etc.)

☐ No Action Required ☒ Required Action

1. Minimize particulate matter emissions by using on-going dust control measures, as indicated in Standard Specifications. The Texas Emission Reduction Plan (TERP) provides financial incentives to reduce emissions from vehicles and equipment. TxDOT encourages construction Contractors to use this and other local and/or federal incentive programs to the fullest possible extent, in an effort to minimize fossil fuel emissions.

STATE OF TEXAS
JESUS S. HEREDIA
95705
LICENSED PROFESSIONAL ENGINEER

2/28/2024

Texas Department of Transportation — Design Division Standard

ENVIRONMENTAL PERMITS, ISSUES AND COMMITMENTS

EPIC

FILE: epic.dgn	DN: TxDOT	CK: RG	DW: VP	CK: AR
© TxDOT: February 2015	CONT	SECT	JOB	HIGHWAY
REVISIONS 12-12-2011 (DS)	2121	01	104	IH 10
05-07-14 ADDED NOTE SECTION IV.	DIST	COUNTY		SHEET NO.
01-23-2015 SECTION I (CHANGED ITEM 1122 TO ITEM 506, ADDED GRASSY SWALES.	ELP	EL PASO		47

DATE: 2/28/2024
FILE: c:\dms\pwe-useast-006\melanye.gutierrez\dms49340\C_104_S_EPI01_02.dgn

V. FEDERAL LISTED, PROPOSED THREATENED, ENDANGERED SPECIES, CRITICAL HABITAT, STATE LISTED SPECIES, CANDIDATE SPECIES AND MIGRATORY BIRDS.

☐ No Action Required ☒ Required Action

The Migratory Bird Treaty Act of 1918 staes that it is unlawful to kill, capture, collect, possess, buy, sell, trade, or transport any migratory bird, nets, young, feather, or egg in part or in whole, without a Federal permit issued in accordance to the Act's policies and regulations. The contractor would remove all old migratory bird nests from any structue where work would be done from October 1 to February 15. In addition, the contractor would be prepared to prevent migratory birds from building nest(s) between February 15 and October 1. In the event that migratory birds are encountered on-site during project construction, efforts to avoid adverse impacts on protected birds, active nests, eggs and/or young would be observed.

Contractor must adhere to Construction Specification Requirements Specs 162, 164, 192, 193, 506, 730, 751, and 752 in order to comply with the requirements for invasive species, beneficial landscaping, and tree/brush removal commitments.

The following Best Management Practices (BMPs) will be implemented by TxDOT. However, they only eliminate coordination for the Texas horned lizard.

Western Burrowing Owl - Bird BMPs: a) Prior to construction, perform daytime surveys for nests including under bridges and in culverts to determine if they are active before removal. Nests that are active should not be disturbed; b) Do not disturb, destroy, or remove active nests, including ground nesting birds, during the nesting season; c) Avoid the removal of unoccupied, inactive nests, as practicable; d) Prevent the establishment of active nests during the nesting season on TxDOT owned and operated facilities and structures proposed for replacement or repair; e) Do not collect, capture, relocate, or transport birds, eggs, young, or active nests without a permit.

Mountain short-horned lizard and Texas horned lizard - Terrestrial Reptile BMPs: a) Apply hydro-mulching and/ or hydroseeding in areas for soil stabilization and/or revegetation of disturbed areas where feasible. If hydro-mulching and/or hydroseeding are not feasible due to site conditions, utilize erosion control blankets or mats that contain no netting or contain loosely woven, natural fiber netting is preferred. Plastic netting should be avoided to the extent practicable. b) For open trenches and excavated pits, install escape ramps at an angle of less than 45 degrees (1:1) in areas left uncovered. Visually inspect excavation areas for trapped wildlife prior to backfilling. c) Inform contractors that if reptiles are found on project site allow species to safely leave the project area. d) Avoid or minimize disturbing or removing downed trees, rotting stumps, and leaf litter where feasible. e) Contractors will be advised of potential occurrence in the project area, and to avoid harming the species if encountered. f) Due to increased activity (mating) of reptiles during the spring,construction activities like clearing or grading should attempt to be scheduled outside of the spring (April-May) season. Also, timing ground disturbing activities before October when reptiles become less active and may be using burrows in the project area is also encouraged. When designing roads with curbs, consider using Type I or Type III curbs to provide a gentle slope to enable species to get out of roadways.

Woodhouse's toad - Amphibian and Aquatic Reptile BMPs: Unless absence of the species can be demonstrated, assume presence in suitable habitat and implement the following BMPs. Absence can only be demonstrated using TPWD-approved survey efforts (contact TPWD for minimum survey protocols for species and project site conditions).

1. For projects within one mile of a known occupied location or observation of the species recorded from 1980 until the current year and suitable habitat is present, coordinate with TPWD.
2. For new location roadway projects, coordinate with TPWD.
3. For projects within existing right-of-way (ROW) when work is in water or will permanently impact a water feature and potential habitat exists for the target species complete the following: a) Contractors will be advised of potential occurrence in the project area, and to avoid harming the species if encountered. b) Minimize impacts to wetland, temporary and permanent open water features, including depressions, and riverine habitats. c) Maintain hydrologic regime and connections between wetlands and other aquatic features. d) Use barrier fencing to direct animal movements away from construction activities and areas of potential wildlife-vehicle collisions in construction areas directly adjacent, or that may directly impact, potential habitat for the target species. e) Apply hydromulching and/or hydroseeding in areas for soil stabilization and/or revegetation of disturbed areas where feasible. If hydromulching and/or hydroseeding are not feasible due to site conditions, using erosion control blankets or mats that contain no netting, or only contain loosely woven natural fiber netting is preferred. Plastic netting should be avoided to the extent practicable. f) Project specific locations (PSLs) proposed within state-owned ROW should be located in uplands away from aquatic features. g) When work is directly adjacent to the water, minimize impacts to shoreline basking sites (e.g., downed trees, sand bars, exposed bedrock) and overwinter sites (e.g., brush and debris piles, crayfish burrows) where feasible. h) Avoid or minimize disturbing or removing downed trees, rotting stumps, and leaf litter, which may be refugia for terrestrial amphibians, where feasible. i) If gutters and curbs are part of the roadway design, where feasible install gutters that do not include the side box inlet and include sloped (i.e. mountable) curbs to allow small animals to leave roadway. If this modification to the entire curb system is not possible, install sections of sloped curb on either side of the storm water drain for several feet to allow small animals to leave the roadway. Priority areas for these design recommendations are those with nearby wetlands or other aquatic features.
4. For projects that require acquisition of additional ROW and work within that new ROW is in water or will permanently impact a water feature, implement (a) - (i) above plus (j) - (l) below, where applicable:
j) For sections of roadway adjacent to wetlands or other aquatic features, install wildlife barriers that prevent climbing. Barriers should terminate at culvert openings in order to funnel animals under the road. The barriers should be of the same length as the adjacent feature or 80 feet long in each direction, or whichever is the lesser of the two. k) For culvert extensions and culvert replacement/installation, incorporate measures to funnel animals toward culverts such as concrete wingwalls and barrier walls with overhangs. l) When riprap or other bank stabilization devices are necessary, their placement should not impede the movement of terrestrial or aquatic wildlife through the water feature. Where feasible, biotechnical streambank stabilization methods using live native vegetation or a combination of vegetative and structural materials should be used.

In addition to BMPs required for a TCEQ Storm Water Pollution Prevention Plan and/or 401 water quality permit: Minimize the use of equipment in streams and riparian areas during construction. When possible, equipment access should be from banks, bridge decks, or barges. When temporary stream crossings are unavoidable, remove stream crossings once they are no longer needed and stabilize banks and soils around the crossing.

American bumblebee - No Insects BMPs.

American badger - Fossorial Mammal BMPs: - When a construction zone is adjacent to active BTPD burrows or pocket gopher mounds, erect barriers to discourage individuals moving through or into the construction area. When seeding or revegetation is planned in an area adjacent to BTPD burrows or pocket gopher mounds, a vegetative barrier should be considered in the planting to discourage dispersal into the ROW.

Mexican free-tailed bat - Bat BMPs: To determine the appropriate best management practice to avoid or minimize impacts to bats, review the habitat description for the species of interest on the TPWD Rare, Threatened, and Endangered Species of Texas by County List or other trusted resources. All bat surveys and other activities that include direct contact with bats shall comply with TPWD recommended white-nose syndrome protocols located on the TPWD Wildlife Habitat Assessment Program website under "Project Design and Construction". The following survey and exclusion protocols should be followed prior to commencement of construction activities. For the purposes of this document, structures are defined as bridges, culverts (concrete or metal), wells, and buildings.

1. For activities that have the potential to impact structures, cliffs or caves, or trees; a qualified biologist will perform a habitat assessment and occupancy survey of the feature(s) with roost potential as early in the planning process as possible or withinone year before project letting.
2. For roosts where occupancy is strongly suspected but unconfirmed during the initial survey, revisit feature(s) at most four weeks prior to scheduled disturbance to confirm absence of bats.
3. If bats are present or recent signs of occupation (i.e., piles of guano, distinct musky odor, or staining and rub marks at potential entry points) are observed, take appropriate measures to ensure that bats are not harmed, such as implementing non-lethal exclusion activities or timing or phasing of construction.
4. Exclusion devices can be installed by a qualified individual between September 1 and March 31. Exclusion devices should be used for a minimum of seven days when minimum nighttime temperatures are above 50°F AND minimum daytime temperatures are above 70°F. Prior to exclusion, ensure that alternate roosting habitat is available in the immediate area. If no suitable roosting habitat is available, installation of alternate roosts is recommended to replace the loss of an occupied roost. If alternate roost sites are not provided, bats may seek shelter in other inappropriate sites, such as buildings, in the surrounding area. See Section 2: Standard Recommendations for recommended acceptable methods for excluding bats from structures.
5. If feature(s) used by bats are removed as a result of construction, replacement structures should incorporate bat-friendly design or artificial roosts should be constructed to replace these features, as practicable.
6. Conversion of property containing cave or cliff features to transportation purposes should be avoided where feasible. If removal of dead fronds is necessary at other times of the year, limit frond removal to extended warms periods (nighttime temperatures ~55°F for at least two consecutive nights), so bats can move away from the disturbance and find new roosts.
7. Large hollow trees, snags (dead standing trees), and trees with shaggy bark should be surveyed for colonies and, if found, should not be disturbed until the bats are no longer occupying these features. Post-occupancy surveys should be conducted by a qualified biologist prior to tree removal from the landscape.
8. Retain mature, large diameter hardwood forest species and native/ornamental palm trees where feasible. In all instances, avoid harm or death to bats. Bats should only be handled as a last resort and after communication with TPWD.

Gray-checkered whiptail - Terrestrial Reptile BMPs: Apply hydromulching and/or hydroseeding in areas for soil stabilization and/or revegetation of disturbed areas where feasible. If hydromulching and/or hydroseeding are not feasible due to site conditions, utilize erosion control blankets or mats that contain no netting or contain loosely woven, natural fiber netting is preferred. Plastic netting should be avoided to the extent practicable. For open trenches and excavated pits, install escape ramps at an angle of less than 45 degrees (1:1) in areas left uncovered. Visually inspect excavation areas for trapped wildlife prior to backfilling. Inform Contractors that if reptiles are found on project site allow species to safely leave the project area. Avoid or minimize disturbing or removing downed trees, rotting stumps, and leaf litter where feasible. Contractors will be advised of potential occurrence in the project area, and to avoid harming the species if encountered.

Sand prickley-pear, Stebbin's desert dandelion, Texas false salgrass - Vegetation BMPs: a) Minimize the amount of vegetation cleared. Removal of native vegetation should be avoided to the greatest extent possible. Wherever practicable, impacted vegetation should be replaced with in-kind on-site replacement/restoration of native vegetation. b) The use of seed mix that contains seeds from only locally adapted native species is recommended.

LIST OF ABBREVIATIONS

BMP:	Best Management Practice	SPCC:	Spill Prevention Control and Countermeasure
CGP:	Construction General Permit	SW3P:	Storm Water Pollution Prevention Plan
DSHS:	Texas Department of State Health Services	PCN:	Pre-Construction Notification
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MOU:	Memorandum of Understanding	TPDES:	Texas Pollutant Discharge Elimination System
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NOT:	Notice of Termination	T&E:	Threatened and Endangered Species
NWP:	Nationwide Permit	USACE:	U.S. Army Corps of Engineers
NOI:	Notice of Intent	USFWS:	U.S. Fish and Wildlife Service

STATE OF TEXAS
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PROFESSIONAL ENGINEER

2/28/2024

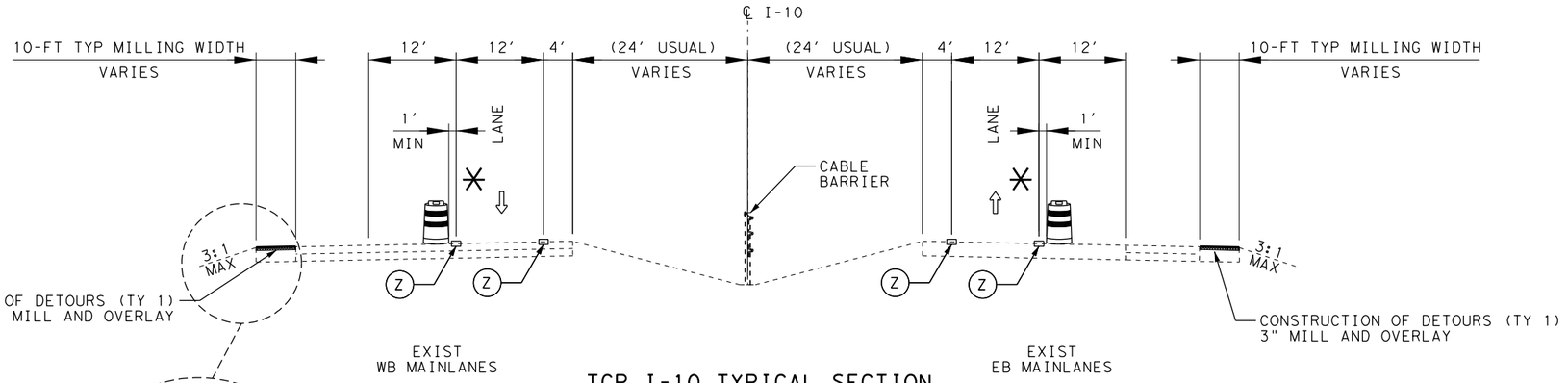
Texas Department of Transportation — Design Division Standard

ENVIRONMENTAL PERMITS, ISSUES AND COMMITMENTS

EPIC

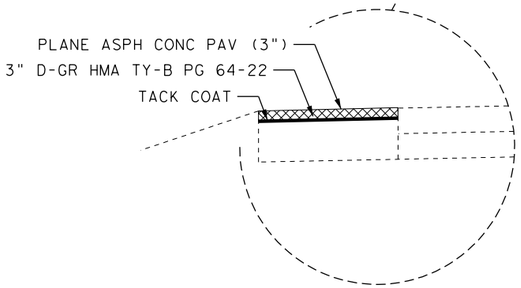
FILE: epic.dgn	DN: TxDOT	CK: RG	DW: VP	CK: AR		
©TxDOT: February 2015	CONT	SECT	JOB		HIGHWAY	
REVISIONS	2121	01	104		IH 10	
12-12-2011 (DS)	DIST	COUNTY			SHEET NO.	
05-07-14 ADDED NOTE SECTION IV.	ELP	EL PASO			48	
01-23-2015 SECTION I (CHANGED ITEM 1122 TO ITEM 506, ADDED GRASSY SWALES.						

NOTE:
EXISTING STRIPING TO REMAIN DURING
TEMP PAVEMENT CONSTRUCTION.



TCP I-10 TYPICAL SECTION

TEMPORARY PAVEMENT CONSTRUCTION
STAGE 1

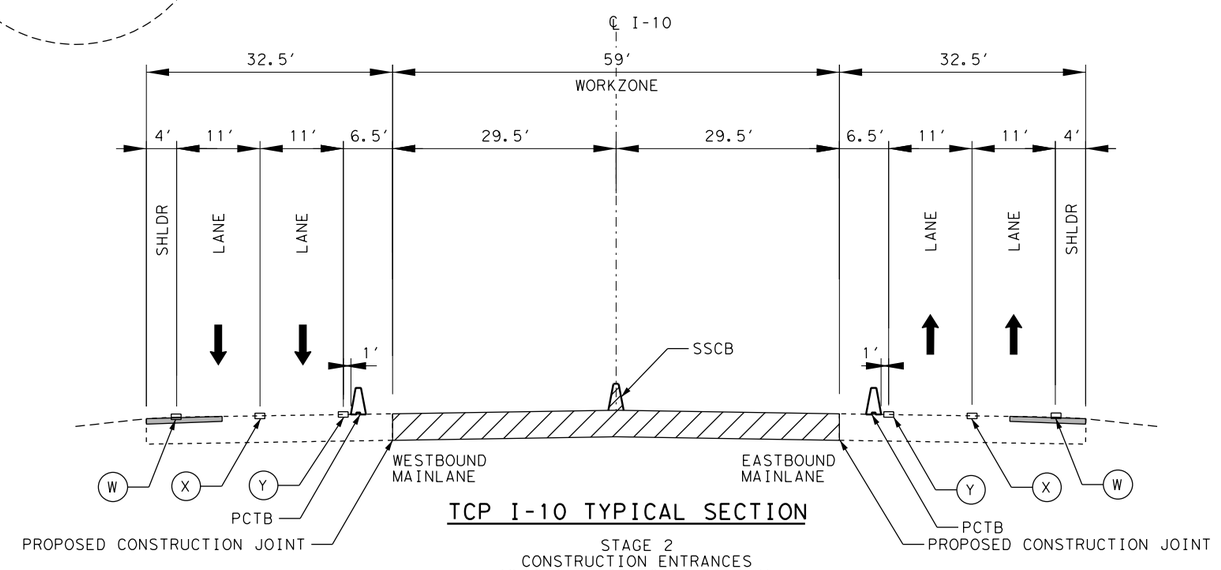


OFF-PEAK LANE CLOSURE

1. SHIFT TRAFFIC TO INSIDE LANE
2. CONSTRUCT TEMPORARY PAVEMENT

PEAK TIME OPERATION

1. MAINTAIN EXISTING NUMBER OF LANES
2. PREVENT DROP OFF EDGE CONDITION
3. PLACE 3:1 (MAX) COMPACTED SAFETY SLOPE WITH CHANNELIZING DEVICE



TCP I-10 TYPICAL SECTION

STAGE 2
CONSTRUCTION ENTRANCES
ML STA 55+00 TO 60+00 (EB)
ML STA 109+00 TO 114+00 (WB)

LEGEND

- PERM CONSTRUCTION THIS PHASE
- PERM CONSTRUCTION PREVIOUS PHASE
- TEMP CONSTRUCTION THIS PHASE
- TEMP CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- CHANNELIZING DEVICE
- (W) WHITE EDGE LINE
  WK ZN PAV MRK REMOV (REFL)TY I-C
  WK ZN PAV MRK REMOV (TRAF BTN)TY W
- (X) WHITE BRK LINE
  WK ZN PAV MRK REMOV (REFL)TY I-C
  WK ZN PAV MRK REMOV (TRAF BTN)TY W
- (Y) YELLOW EDGE LINE
  WK ZN PAV MRK REMOV (REFL)TYI-A
  WK ZN PAV MRK REMOV (TRAF BTN)TY Y
- (Z) EXIST PAVEMENT MARKING
- PROPOSED TRAFFIC FLOW ARROWS
- EXISTING TRAFFIC FLOW ARROWS

N.T.S

3/28/2024

NO.	DATE	REVISION	APPROV.

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F-12040

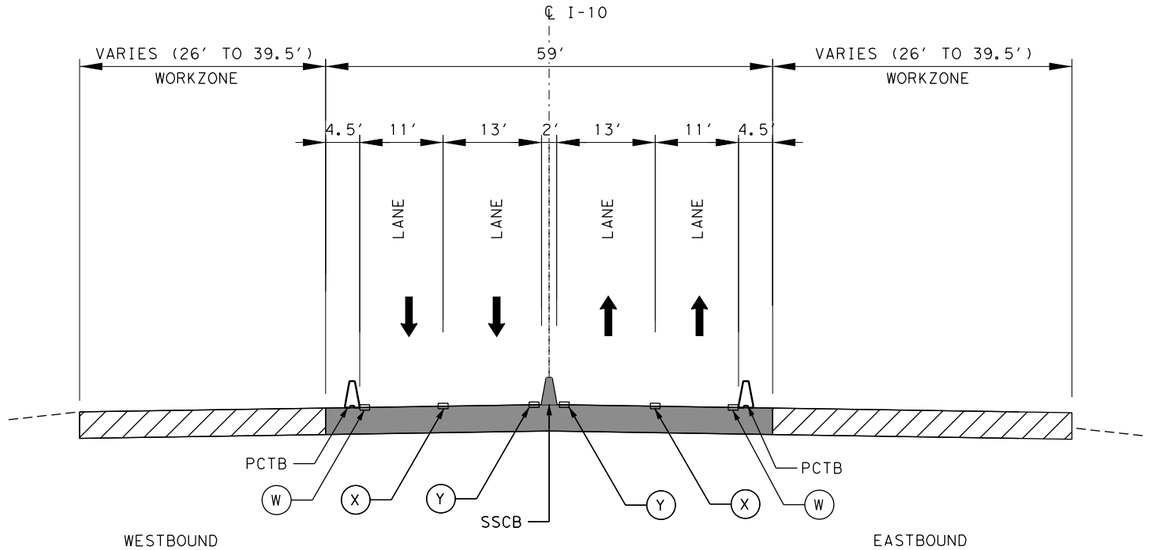
Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN TYPICAL SECTIONS

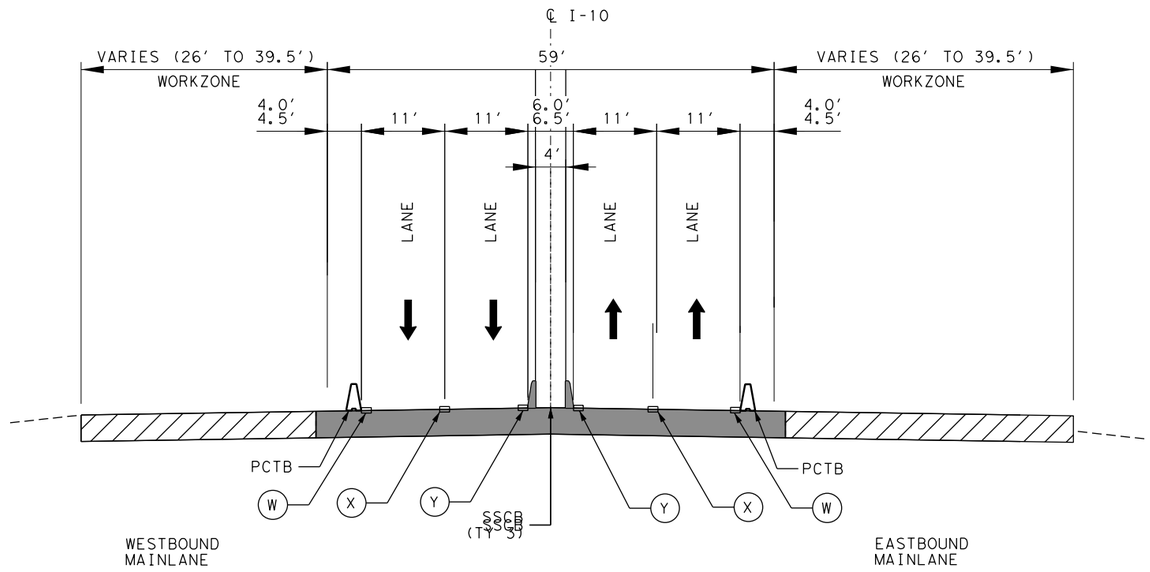
SHEET 1 OF 4

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		49
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



TCP I-10 TYPICAL SECTION

STAGE 3



TCP I-10 TYPICAL SECTION

STAGE 3 AT UNDERPASS
ML STA 10+20 TO STA 13+08
ML STA 155+33 TO STA 157+75

LEGEND

- PERM CONSTRUCTION THIS PHASE
- PERM CONSTRUCTION PREVIOUS PHASE
- TEMP CONSTRUCTION THIS PHASE
- TEMP CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- CHANNELIZING DEVICE
- (W) WHITE EDGE LINE
  WK ZN PAV MRK REMOV (REFL)TY I-C
  WK ZN PAV MRK REMOV (TRAF BTN)TY W
- (X) WHITE BRK LINE
  WK ZN PAV MRK REMOV (REFL)TY I-C
  WK ZN PAV MRK REMOV (TRAF BTN)TY W
- (Y) YELLOW EDGE LINE
  WK ZN PAV MRK REMOV (REFL)TYI-A
  WK ZN PAV MRK REMOV (TRAF BTN)TY Y
- (Z) EXIST PAVEMENT MARKING
- PROPOSED TRAFFIC FLOW ARROWS
- EXISTING TRAFFIC FLOW ARROWS

N.T.S

STATE OF TEXAS
OSCAR D. GONZALEZ
147840
LICENSED
PROFESSIONAL ENGINEER

3/28/2024

NO.	DATE	REVISION	APPROV.

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Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN TYPICAL SECTIONS

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		50
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

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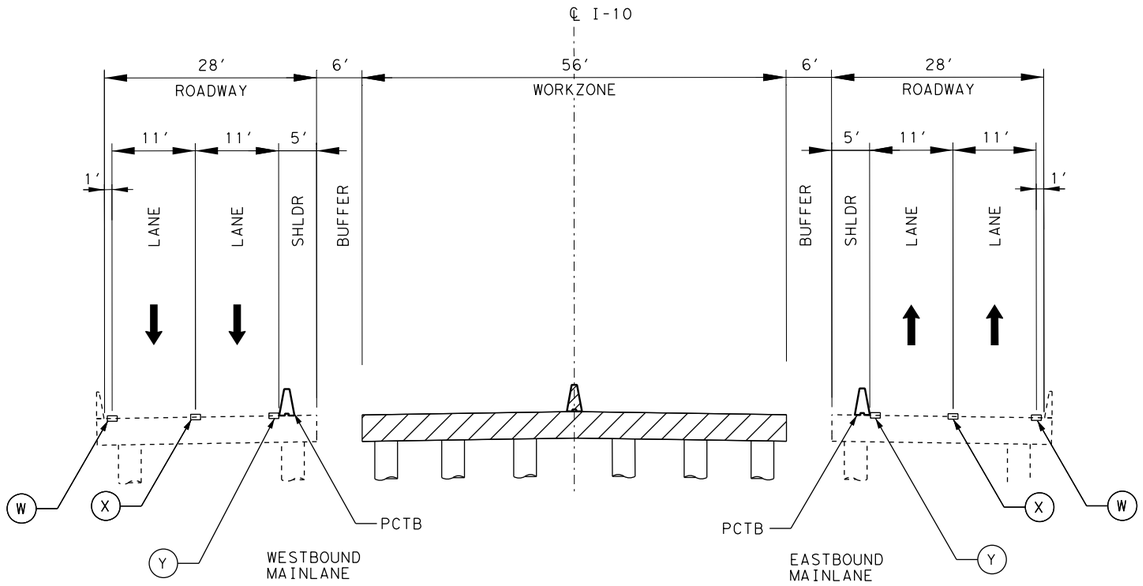


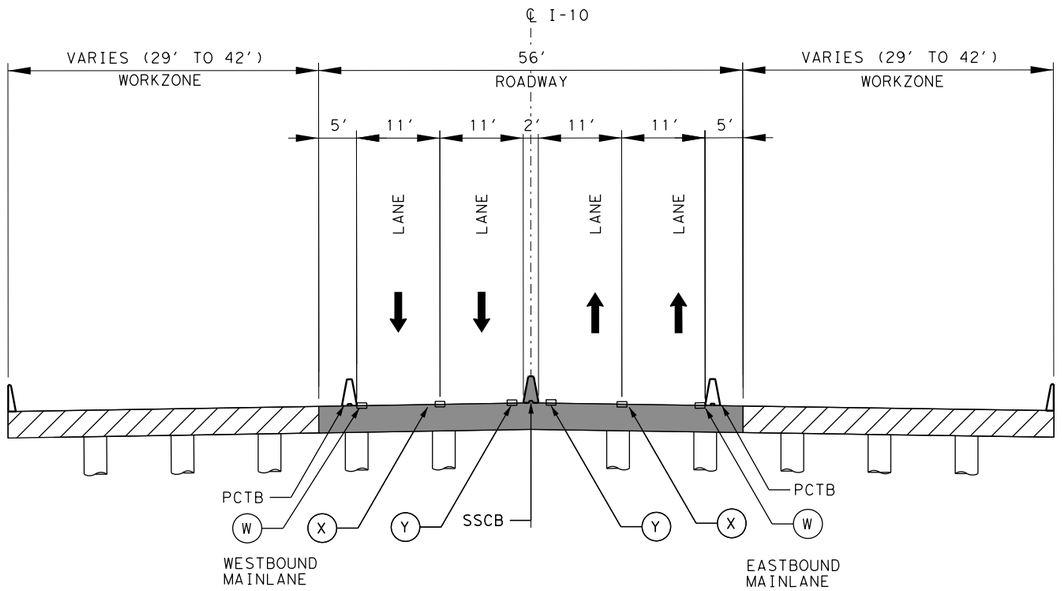
TCP I-10 BRIDGE CROSSING TYPICAL SECTION

STAGE 2

NOTE:
SEE BRIDGE LAYOUT SHEETS FOR BRIDGE DEMO LIMITS, WORK ZONE DIMENSIONS AN DBRIDGE DIMENSIONS.

LEGEND

- PERM CONSTRUCTION THIS PHASE
- PERM CONSTRUCTION PREVIOUS PHASE
- TEMP CONSTRUCTION THIS PHASE
- TEMP CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- CHANNELIZING DEVICE
- (W) WHITE EDGE LINE
  WK ZN PAV MRK REMOV (REFL)TY I-C
  WK ZN PAV MRK REMOV (TRAF BTN)TY W
- (X) WHITE BRK LINE
  WK ZN PAV MRK REMOV (REFL)TY I-C
  WK ZN PAV MRK REMOV (TRAF BTN)TY W
- (Y) YELLOW EDGE LINE
  WK ZN PAV MRK REMOV (REFL)TYI-A
  WK ZN PAV MRK REMOV (TRAF BTN)TY Y
- (Z) EXIST PAVEMENT MARKING
- PROPOSED TRAFFIC FLOW ARROWS
- EXISTING TRAFFIC FLOW ARROWS



TCP I-10 BRIDGE CROSSING TYPICAL SECTION

STAGE 3

N.T.S

STATE OF TEXAS
OSCAR D. GONZALEZ
147840
LICENSED
PROFESSIONAL ENGINEER

3/28/2024

NO.	DATE	REVISION	APPROV.

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F-12040

Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN TYPICAL SECTIONS

SHEET 3 OF 4

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		51
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

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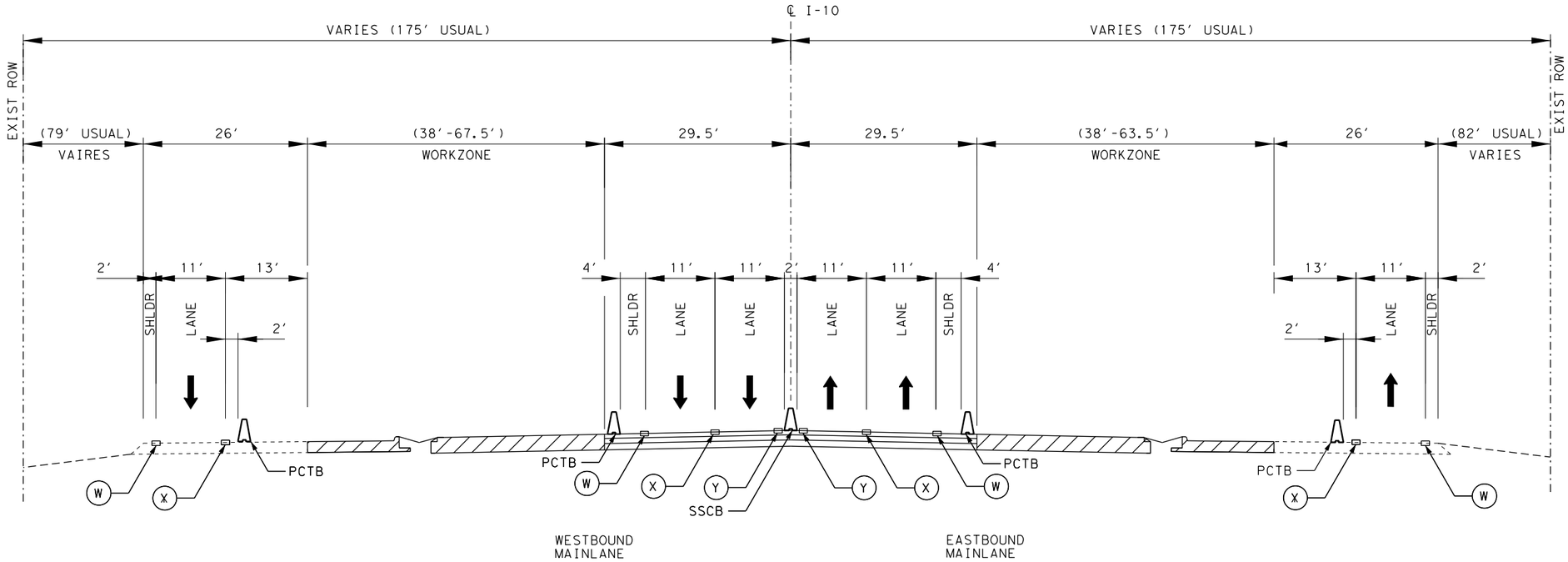
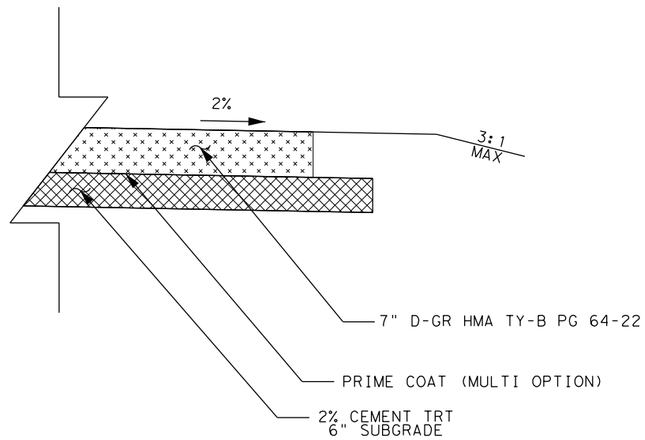


TCP I-10 TYPICAL SECTION

AUXILIARY LANE
STAGE 3

LEGEND

- PERM CONSTRUCTION THIS PHASE
- PERM CONSTRUCTION PREVIOUS PHASE
- TEMP CONSTRUCTION THIS PHASE
- TEMP CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- CHANNELIZING DEVICE
- (W) WHITE EDGE LINE
  WK ZN PAV MRK REMOV (REFL)TY I-C
  WK ZN PAV MRK REMOV (TRAF BTN)TY W
- (X) WHITE BRK LINE
  WK ZN PAV MRK REMOV (REFL)TY I-C
  WK ZN PAV MRK REMOV (TRAF BTN)TY W
- (Y) YELLOW EDGE LINE
  WK ZN PAV MRK REMOV (REFL)TYI-A
  WK ZN PAV MRK REMOV (TRAF BTN)TY Y
- (Z) EXIST PAVEMENT MARKING
- PROPOSED TRAFFIC FLOW ARROWS
- EXISTING TRAFFIC FLOW ARROWS



CONSTRUCTION OF DETOURS (TY 2)

MAINLANE AND RAMPS

N.T.S

STATE OF TEXAS
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147840
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3/28/2024

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Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN
TYPICAL SECTIONS

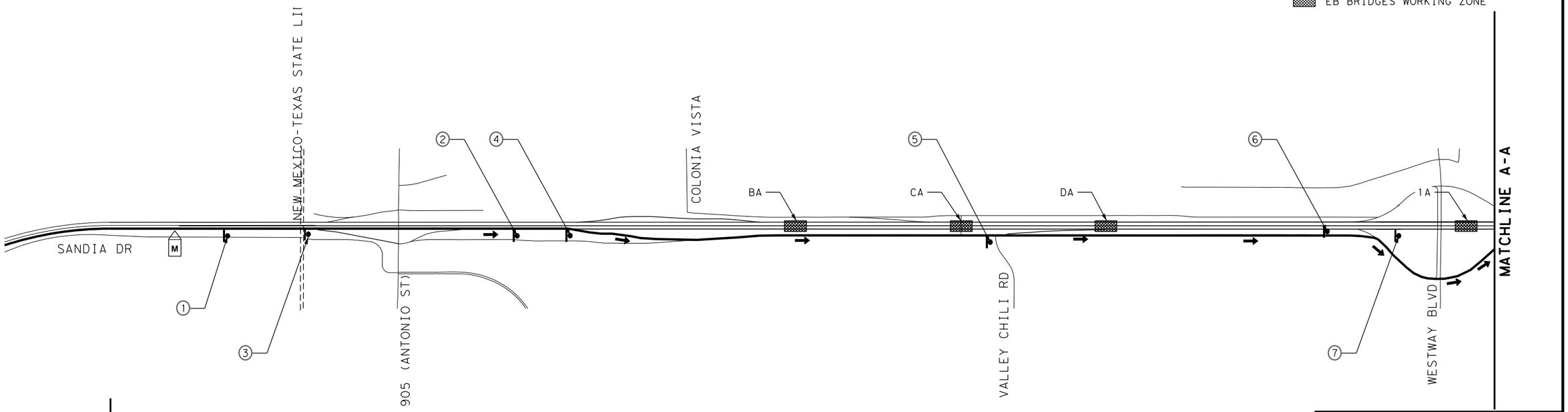
SHEET 4 OF 4

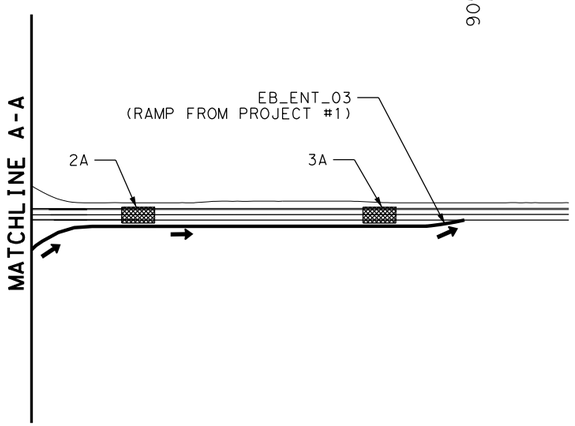
FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		52
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

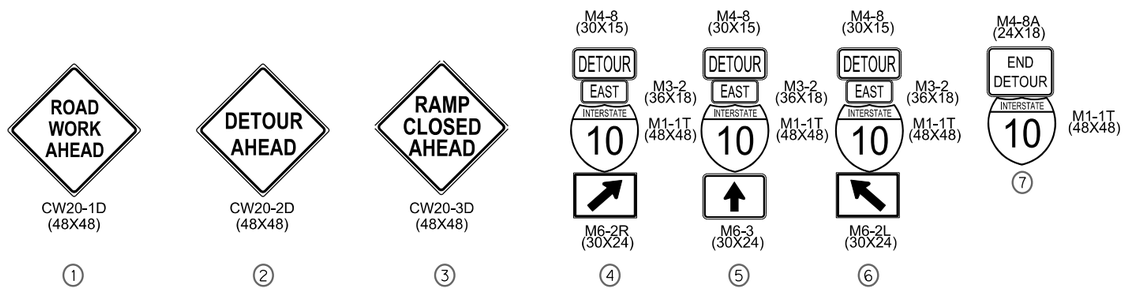
3/28/2024 11:23:08 AM c:\bms\pwe-useast-006\perla.gonzalez\dms48822\C_104_S_TTYP03.dgn

LEGEND:

- M — PORTABLE CHANGEABLE MESSAGE SIGN
- TYPE III BARRICADE
- PROPOSED TCP SIGN
- DIRECTION OF DETOUR TRAFFIC
- EB BRIDGES WORKING ZONE







NOTES:

1. THIS DETOUR IS FOR CLOSURE OF IH 10 DURING BRIDGE DECK POUR OF EB BRIDGES(BA,CA,DA,1A,2A,3A)UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
2. FOR DIVIDED HIGHWAYS AND WHERE SPACE PERMITS, SHOWN SIGNS SHALL BE PLACED ON BOTH SIDES OF ROADWAY UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
3. SIGN AND PORTABLE CHANGEABLE MESSAGE SIGN LOCATIONS AND SPACING SHALL BE PER TXDOT'S BC STANDARDS, TMUTCD, OR AS DIRECTED BY THE ENGINEER.
4. EXISTING AND OTHER SIGNS THAT ARE IN CONFLICT WITH THESE SIGNS SHALL BE COVERED PER ENGINEER'S DIRECTION.
5. FOR CLOSURE AND MERGING LANES OF IH 10, USE ADDITIONAL SIGNS AND OTHER TRAFFIC CONTROL DEVICES PER TXDOT STANDARD DRAWING TCP(6-6)-12.

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Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN DETOUR LAYOUT

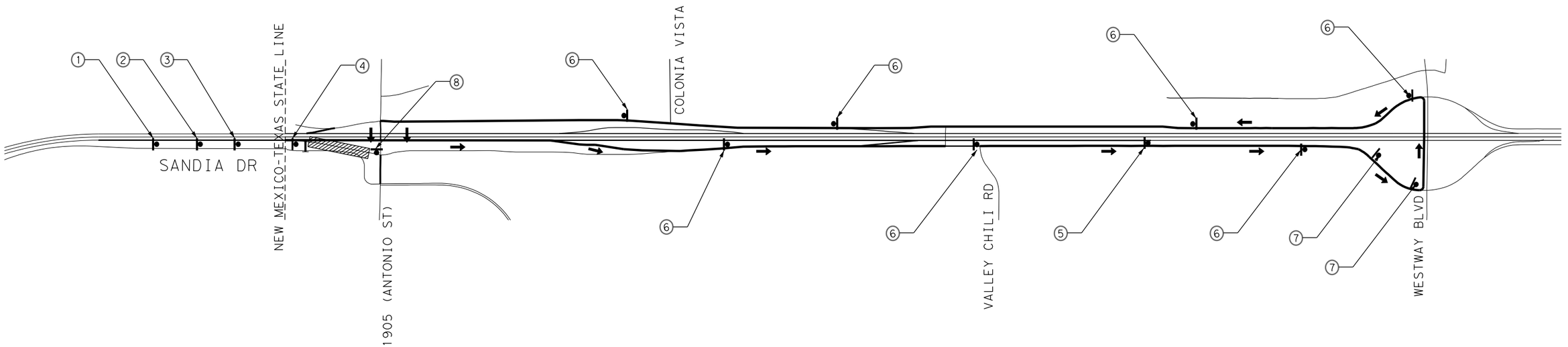
(IH 10 EB)

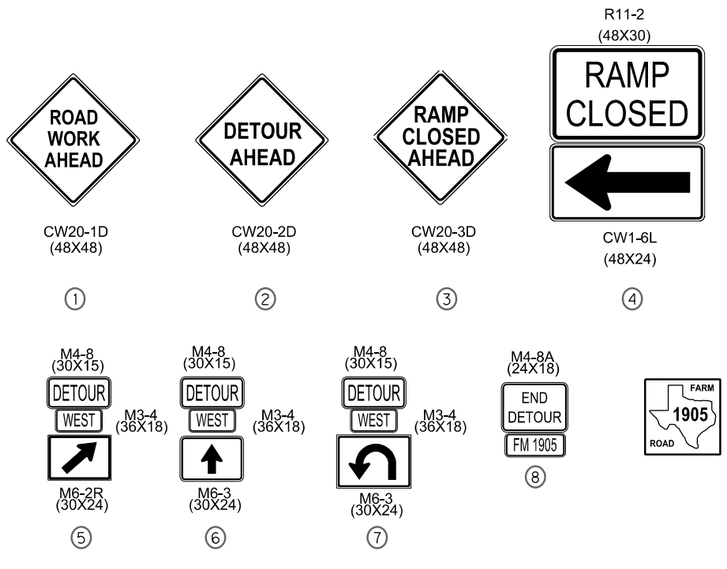
SHEET 1 OF 6

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		54
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

LEGEND:

- M — PORTABLE CHANGEABLE MESSAGE SIGN
- TYPE III BARRICADE
- PROPOSED TCP SIGN
- DIRECTION OF DETOUR TRAFFIC
- EB_EX_00 WORKING ZONE





NOTES:

1. THIS DETOUR IS FOR CLOSURE OF RAMP EB_EX_00 DURING RECONSTRUCTION OF THIS RAMP. INSTALLATION AND REMOVAL SHALL BE AS PER ENGINEER'S DIRECTION.
2. FOR DIVIDED HIGHWAYS AND WHERE SPACE PERMITS, SHOWN SIGNS SHALL BE PLACED ON BOTH SIDES OF ROADWAY UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
3. SIGN AND PORTABLE CHANGEABLE MESSAGE SIGN LOCATIONS AND SPACING SHALL BE PER TXDOT'S BC STANDARDS, TMUTCD, OR AS DIRECTED BY THE ENGINEER.
4. EXISTING AND OTHER SIGNS THAT ARE IN CONFLICT WITH THESE SIGNS SHALL BE COVERED PER ENGINEER'S DIRECTION.

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Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

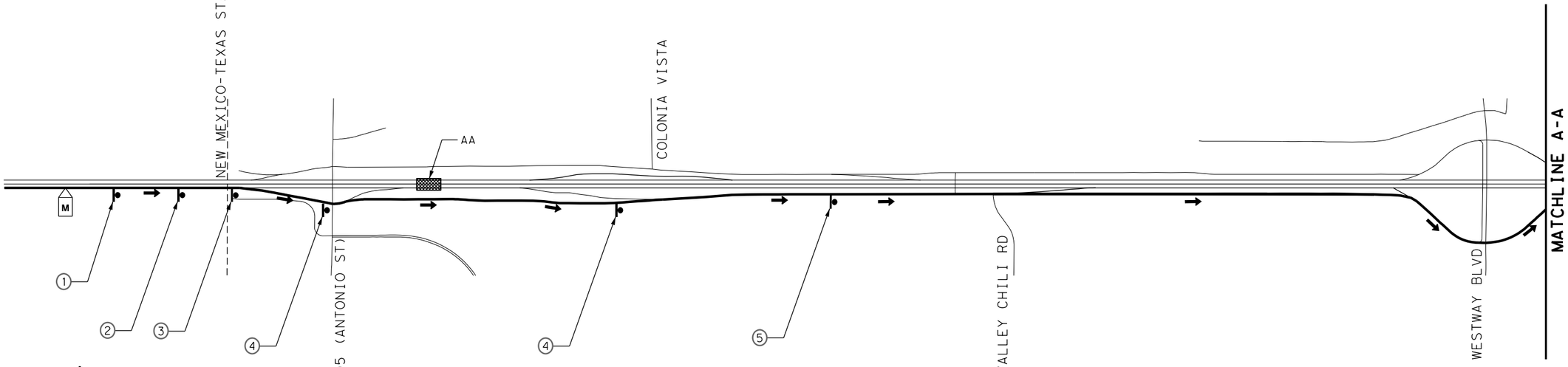
TRAFFIC CONTROL PLAN
DETOUR LAYOUT
(EB_EX_00)

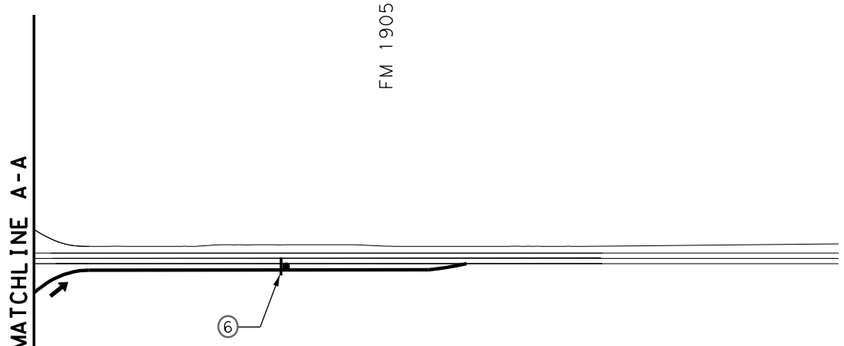
SHEET 2 OF 6

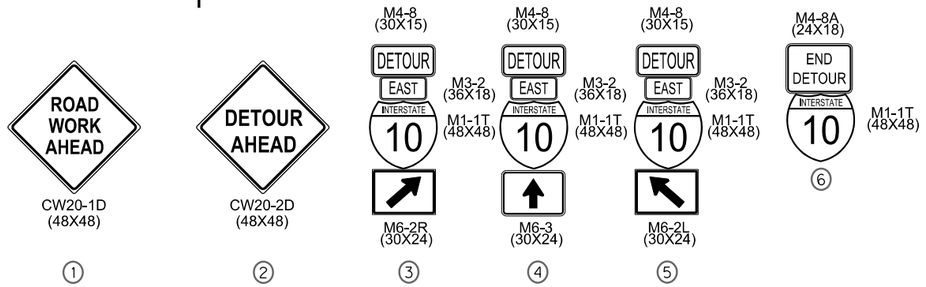
FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		55
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

LEGEND:

- PORTABLE CHANGEABLE MESSAGE SIGN
- TYPE III BARRICADE
- PROPOSED TCP SIGN
- DIRECTION OF DETOUR TRAFFIC
- BRIDGE A-A WORKING ZONE







NOTES:

1. THIS DETOUR IS FOR CLOSURE OF IH 10 DURING BRIDGE DECK POUR OF EB BRIDGE(AA)UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
2. FOR DIVIDED HIGHWAYS AND WHERE SPACE PERMITS, SHOWN SIGNS SHALL BE PLACED ON BOTH SIDES OF ROADWAY UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
3. SIGN AND PORTABLE CHANGEABLE MESSAGE SIGN LOCATIONS AND SPACING SHALL BE PER TXDOT'S BC STANDARDS, TMUTCD, OR AS DIRECTED BY THE ENGINEER.
4. EXISTING AND OTHER SIGNS THAT ARE IN CONFLICT WITH THESE SIGNS SHALL BE COVERED PER ENGINEER'S DIRECTION.
5. FOR CLOSURE AND MERGING LANES OF IH 10, USE ADDITIONAL SIGNS AND OTHER TRAFFIC CONTROL DEVICES PER TXDOT STANDARD DRAWING TCP(6-6)-12.

STATE OF TEXAS
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Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN DETOUR LAYOUT

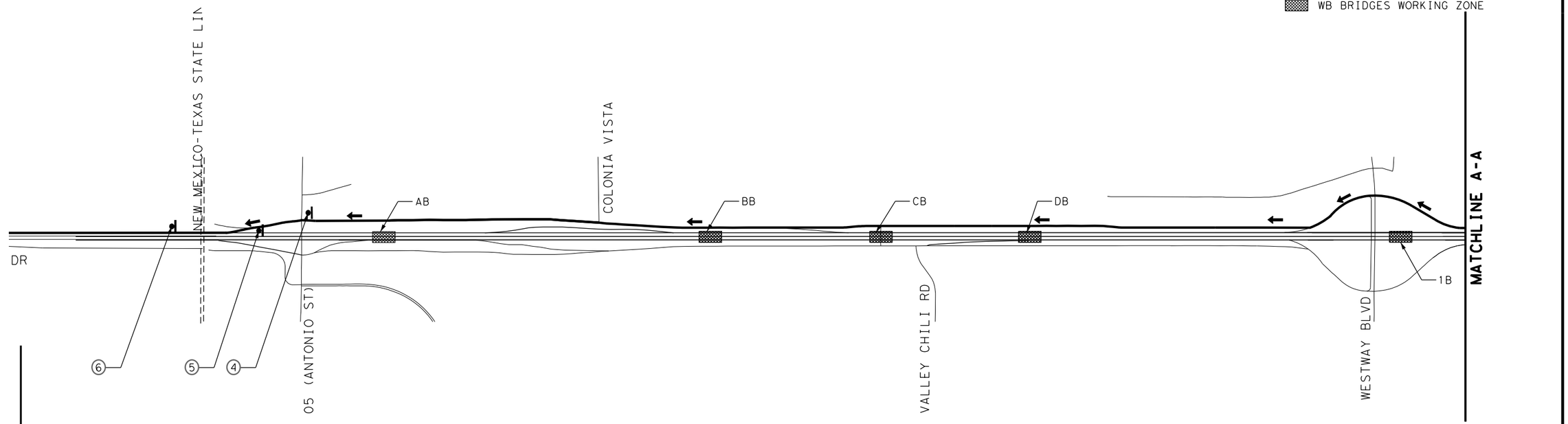
(IH 10 EB)

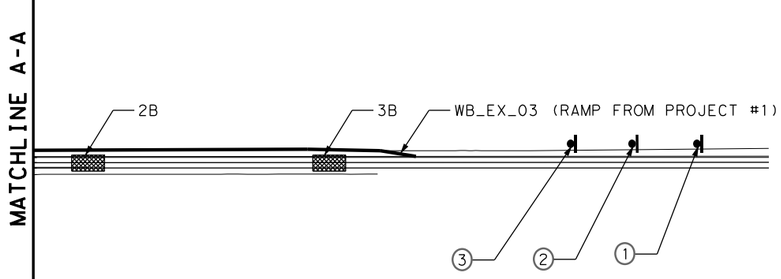
SHEET 3 OF 6

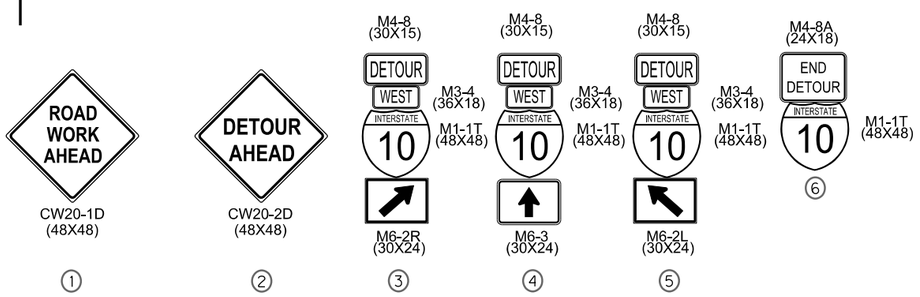
FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		56
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

LEGEND:

- M — PORTABLE CHANGEABLE MESSAGE SIGN
- TYPE III BARRICADE
- PROPOSED TCP SIGN
- DIRECTION OF DETOUR TRAFFIC
- WB BRIDGES WORKING ZONE







NOTES:

1. THIS DETOUR IS FOR CLOSURE OF IH 10 DURING BRIDGE DECK POUR OF WB BRIDGES (AB, BB, CB, DB, 1B, 2B, 3B) UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
2. FOR DIVIDED HIGHWAYS AND WHERE SPACE PERMITS, SHOWN SIGNS SHALL BE PLACED ON BOTH SIDES OF ROADWAY UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
3. SIGN AND PORTABLE CHANGEABLE MESSAGE SIGN LOCATIONS AND SPACING SHALL BE PER TXDOT'S BC STANDARDS, TMUTCD, OR AS DIRECTED BY THE ENGINEER.
4. EXISTING AND OTHER SIGNS THAT ARE IN CONFLICT WITH THESE SIGNS SHALL BE COVERED PER ENGINEER'S DIRECTION.
5. FOR CLOSURE AND MERGING LANES OF IH 10, USE ADDITIONAL SIGNS AND OTHER TRAFFIC CONTROL DEVICES PER TXDOT STANDARD DRAWING TCP(6-6)-12.

STATE OF TEXAS
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3/28/2024

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IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN
DETOUR LAYOUT

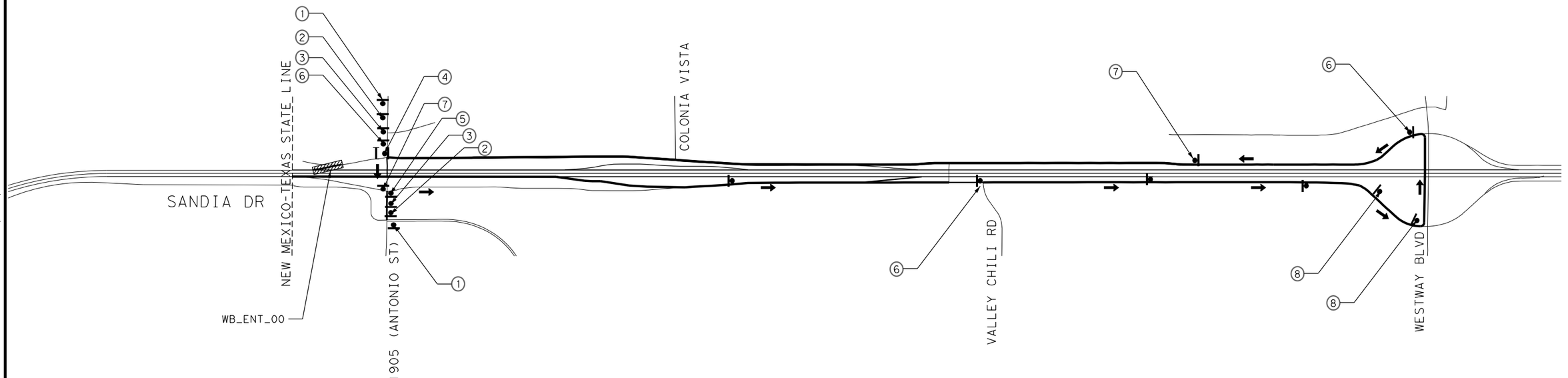
(IH 10 WB)

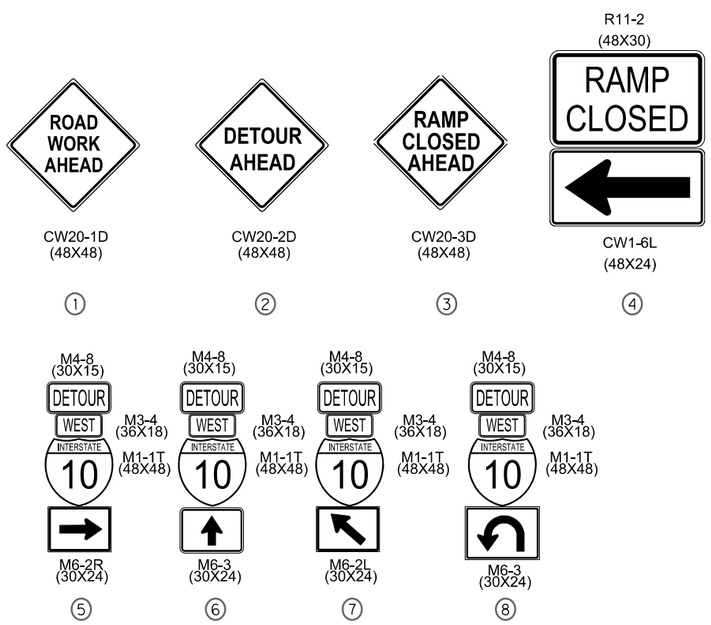
SHEET 4 OF 6

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		57
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

LEGEND:

- PORTABLE CHANGEABLE MESSAGE SIGN
- TYPE III BARRICADE
- PROPOSED TCP SIGN
- DIRECTION OF DETOUR TRAFFIC
- WB_ENT_00 WORKING ZONE





NOTES:

1. THIS DETOUR IS FOR CLOSURE OF RAMP WB_ENT_00 DURING RECONSTRUCTION OF THIS RAMP. INSTALLATION AND REMOVAL SHALL BE AS PER ENGINEER'S DIRECTION.
2. FOR DIVIDED HIGHWAYS AND WHERE SPACE PERMITS, SHOWN SIGNS SHALL BE PLACED ON BOTH SIDES OF ROADWAY UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
3. SIGN AND PORTABLE CHANGEABLE MESSAGE SIGN LOCATIONS AND SPACING SHALL BE PER TXDOT'S BC STANDARDS, TMUTCD, OR AS DIRECTED BY THE ENGINEER.
4. EXISTING AND OTHER SIGNS THAT ARE IN CONFLICT WITH THESE SIGNS SHALL BE COVERED PER ENGINEER'S DIRECTION.

STATE OF TEXAS
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IH 10 WIDENING
(NM/SPUR 37)

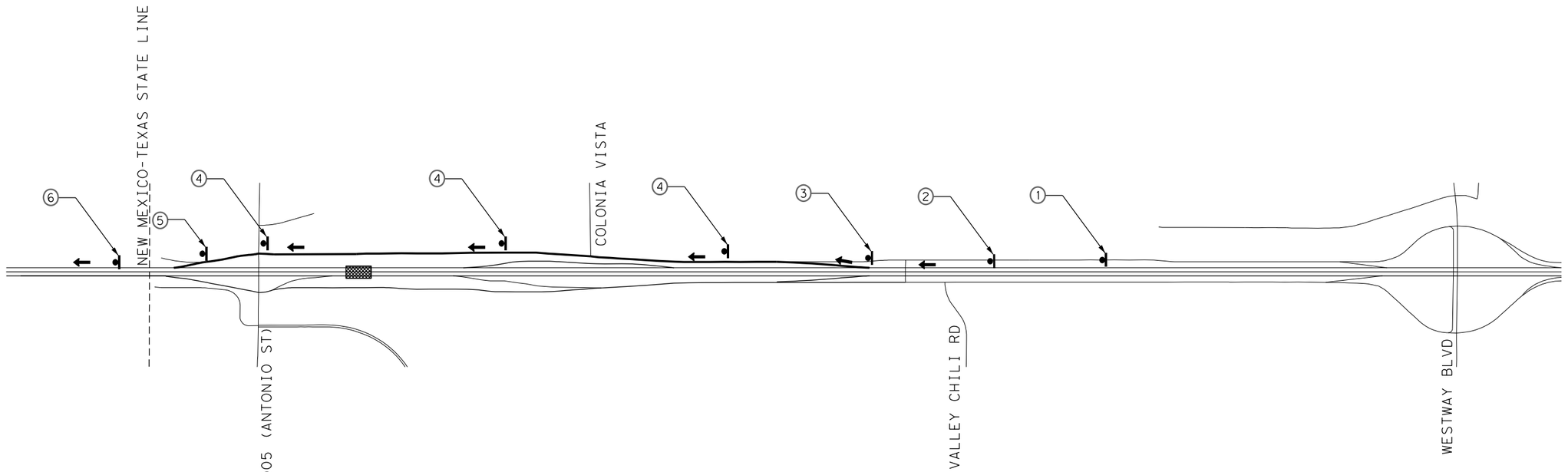
TRAFFIC CONTROL PLAN
DETOUR LAYOUT
(WB_ENT_00)

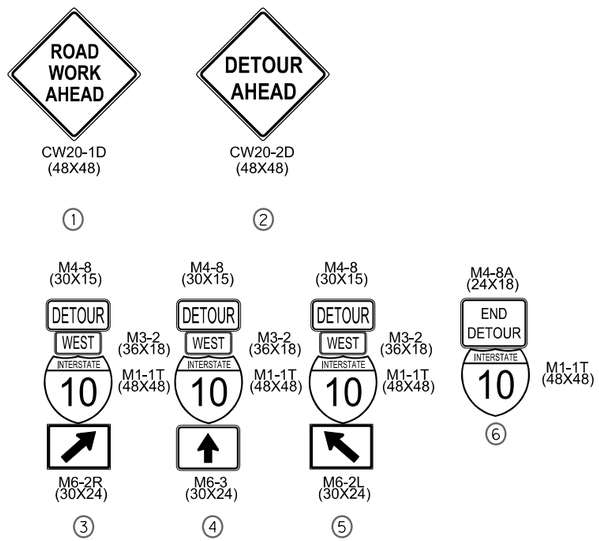
SHEET 5 OF 6

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		58
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

LEGEND:

- M — PORTABLE CHANGEABLE MESSAGE SIGN
- TYPE III BARRICADE
- PROPOSED TCP SIGN
- DIRECTION OF DETOUR TRAFFIC





NOTES:

1. THIS DETOUR IS FOR CLOSURE OF IH 10 DURING BRIDGE DECK POUR OF WB BRIDGE(AB)UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
2. FOR DIVIDED HIGHWAYS AND WHERE SPACE PERMITS, SHOWN SIGNS SHALL BE PLACED ON BOTH SIDES OF ROADWAY UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
3. SIGN LOCATIONS AND SPACING SHALL BE PER TXDOT'S BC STANDARDS, TMUTCD, OR AS DIRECTED BY THE ENGINEER.
4. EXISTING AND OTHER SIGNS THAT ARE IN CONFLICT WITH THESE SIGNS SHALL BE COVERED PER ENGINEER'S DIRECTION.
5. FOR CLOSURE AND MERGING LANES OF IH 10, USE ADDITIONAL SIGNS AND OTHER TRAFFIC CONTROL DEVICES PER TXDOT STANDARD DRAWING TCP(6-6)-12.

STATE OF TEXAS
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PROFESSIONAL ENGINEER

3/28/2024

NO.	DATE	REVISION	APPROV.

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Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN
DETOUR LAYOUT
(IH 10 WB)

SHEET 6 OF 6

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		59
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

SEQUENCE OF WORK

GENERAL NOTES APPLICABLE TO ALL STAGES:

1. ALL WORK SHALL BE COMPLETED WITHIN THE RIGHT OF WAY.
2. THE TRAFFIC CONTROL PLAN SHOWN HEREIN IS THE RECOMMENDED METHOD AND SEQUENCE FOR ACCOMPLISHING THE WORK. THE CONTRACTOR MAY MODIFY OR DEVIATE FROM THE PLAN SO LONG AS THE SCHEDULE REQUIREMENTS ARE MET AND IS SUBJECT TO APPROVAL BY THE ENGINEER.
3. INSTALL AND MAINTAIN SWPPP CONSTRUCTION SITE NOTICE.
4. INSTALL AND ADJUST ADVANCE WARNING SIGNS, AS NECESSARY.
5. COVER ANY SIGNS THAT MAY CONFLICT WITH TCP.
6. PRIOR TO BEGINNING A NEXT STAGE OF CONSTRUCTION, THE CONTRACTOR IS TO COMPLETE THE CURRENT WORKING STAGE TO A SUBSTANTIAL LEVEL OF COMPLETION APPROVED BY THE ENGINEER.
7. REMOVE ANY CONFLICTING STRIPING.
8. DRAINAGE STRUCTURES TO BE CONSTRUCTED IN PHASES. THE CONTRACTOR SHALL MAINTAIN PARTIALLY CONSTRUCTED DRAINAGE SYSTEMS FREE OF DEBRIS AND DIRT TO ALLOW POSITIVE DRAINAGE AT ALL TIMES.
9. CONTRACTOR IS TO MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.
10. PLACEMENT OF PCTB AND OTHER TCP DEVICES REQUIRING TEMPORARY LANE CLOSURE, CONTRACTOR TO REFER TO TXDOT STANDARDS FOR DETAILS.
11. INSTALL TEMPORARY PAVEMENT MARKINGS, AS NECESSARY.
12. INSTALL AND ADJUST TCP SIGNS, AS NECESSARY.
13. PROVIDE ACCESS TO IH 10 AND FRONTAGE ROADS AT ALL TIMES.
14. PRIOR TO ADVANCE WARNING SIGNS, TEMP PAVEMENT MARKINGS AND PCTB INSTALLATION IN NEW MEXICO, THE CONTRACTOR AND TXDOT WILL COORDINATE WITH NMDOT.
15. CONTRACTOR WILL PROVIDE TxDOT AND NMDOT A MINIMAL OF 2 WEEKS NOTICE PRIOR TO IH 10 CLOSURES.
16. IH 10 CLOSURES SHALL BE PERFORMED DURING NON- PEAK HOURS OR ON WEEKENDS TO THE GREATEST EXTENT POSSIBLE. DEVIATION FROM WILL ONLY BE ALLOWED WITH APPROVAL OF ENGINEER.

STAGE 1

1. PLACE TCP ADVANCE WARNING SIGNING
2. FOLLOW OFF-PEAK AND PEAK TIME OPERATIONAL DETAIL FOR WIDENING OF OUTSIDE SHOULDER.
3. INSTALL SWP3 DEVICES FOR OUTSIDE SHOULDER PAVEMENT WIDENING AS SHOWN ON THE PLANS.
4. CONSTRUCT TEMP OUTSIDE SHOULDER PAVEMENT WIDENING AS SHOWN ON THE PLANS.
5. BRIDGE APPROACH LOCATIONS INSTALL PCTB WITH CRASH CUSHION ATTENUATOR

STAGE 2

1. PLACE TPC ADVANCE SIGNING
2. INSTALL PCTB ON PROPOSED INSIDE EDGE OF PAVEMENT, CHANNELING DEVICES, SIGNING AND TEMPORARY PAVEMENT MARKINGS AS SHOWN IN THE TCP LAYOUTS.
3. REDUCE INSIDE & OUTSIDE SHOULDER ON IH 10 WESTBOUND AND EASTBOUND MAINLANES IN WORK ZONE; SEE TCP TYPICAL SECTIONS FOR DETAILS.
4. SHIFT EASTBOUND AND WESTBOUND IH 10 TRAFFIC TO WORK ZONE LANES; SEE TCP PLANS FOR DETAILS.
5. REMOVE EXISTING PAVEMENT AND BRIDGE DRAINAGE STRUCTURES WITHIN THE WORK ZONE.
6. CONSTRUCT PERMANENT SSCB AS SHOWN IN THE PLAN AND PROFILE SHEETS ALONG THE CENTER PORTION OF IH 10 WITH CRCP AND BRIDGE HYDRAULIC STRUCTURE AS SHOWN ON PLANS
7. CONSTRUCT TEMPORARY PAVEMENT FROM NEW EB IH 10 PAVEMENT TO EB_EX_00B RAMP, GRADE AND ELEVATION IMPROVEMENTS ARE NECESSARY FOR STAGE 3.
8. CLOSE EASTBOUND OR WESTBOUND IH 10 ML AND DETOUR THROUGH S DESERT BLVD AND N DESERT BLVD RESPECTIVELY WHEN PERFORMING DECK POURS, PLACING BEAMS OR ANY OTHER STRUCTURAL RELATED ITEMS. CLOSURES WILL BE LIMITED TO ONE DIRECTION AT ANYTIME.

STAGE 3

1. CONTRACTOR SHALL VERIFY THE CONSTRUCTION AND OPERATION OF THE PROPOSED RAMPS FROM CSI 2121-01-094 TO PROCEED WITH STAGE 3 SEQUENCE OF WORK.
2. PLACE TPC ADVANCE SIGNING
3. ADJUST PCTB AS SHOWN ON TYPICAL SECTIONS TO PROPOSED EDGE OF PAVEMENT, INSTALL CHANNELING DEVICES, SIGNING AND TEMPORARY PAVEMENT MARKINGS AS SHOWN IN THE TCP LAYOUTS.
4. SHIFT EASTBOUND AND WESTBOUND IH 10 TRAFFIC TO NEW CONSTRUCTED LANES ALONG INSIDE OF IH 10; SEE PLANS FOR DETAILS.
5. CONSTRUCT TEMPORARY IH 10 CONNECTION TO RAMPS THAT ARE TO REMAIN IN OPERATION IN THIS STAGE. THE FOLLOWING RAMPS ARE TO REMAIN OPEN: WB_ENT_00A, EB_EX_00B, EB_ENT_03 AND WB_EX_03.
6. REMOVE EXISTING PAVEMENT AND BRIDGE DRAINAGE STRUCTURES WITHIN THE WORK ZONE.
7. CONSTRUCT OUTSIDE PORTION OF EASTBOUND AND WESTBOUND IH 10 ML WITH CPCR, BRIDGES, DRAINAGE STRUCTURES, STORM DRAIN FACILITIES, AND RETAINING WALLS AS SHOWN ON THE PLANS.
8. INSTALL ITS AND ILLUMINATION COMPONENTS
9. RECONSTRUCT WESTBOUND RAMPS WB_ENT_00B, WB_EX_01, WB_ENT_02 WB_EX_02 AND WB_ENT_03 RECONSTRUCT EASTBOUND RAMPS EB_EX_00A, EB_ENT_01, EB_EX_02, EB_ENT_02 AND EB_EX_03 ALL OTHER RAMPS WILL REMAIN OPERATIONAL.

STAGE 4

1. CONTRACTOR SHALL VERIFY THE CONSTRUCTION AND OPERATION OF THE PROPOSED RAMPS FROM CSI 2121-04-094 TO PROCEED WITH STAGE 4 SEQUENCE OF WORK.
2. PLACE TPC ADVANCE SIGNING
3. INSTALL ITS AND ILLUMINATION COMPONENTS NOT INSTALLED IN STAGE 3.
4. OPEN NEW WESTBOUND RAMPS TO TRAFFIC WB_ENT_00B, WB_EX_01, WB_ENT_02, WB_EX_02 AND WB_ENT_03 OPEN NEW EASTBOUND RAMPS TO TRAFFIC EB_EX_00A, EB_ENT_01, EB_ENT_02, EB_EX_02 AND EB_EX_03.
5. RECONSTRUCT IH 10 WESTBOUND RAMP WB_ENT_00A
   RECONSTRUCT IH 10 EASTBOUND RAMP EB_EX_00B.
6. REMOVE AND CLEAN UP ALL REMAINING TCP DEVICES. INSTALL PERMANENT STRIPING. SEE TYPICAL SECTIONS FOR FINAL STRIPING LAYOUT AND DETAILS.

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Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

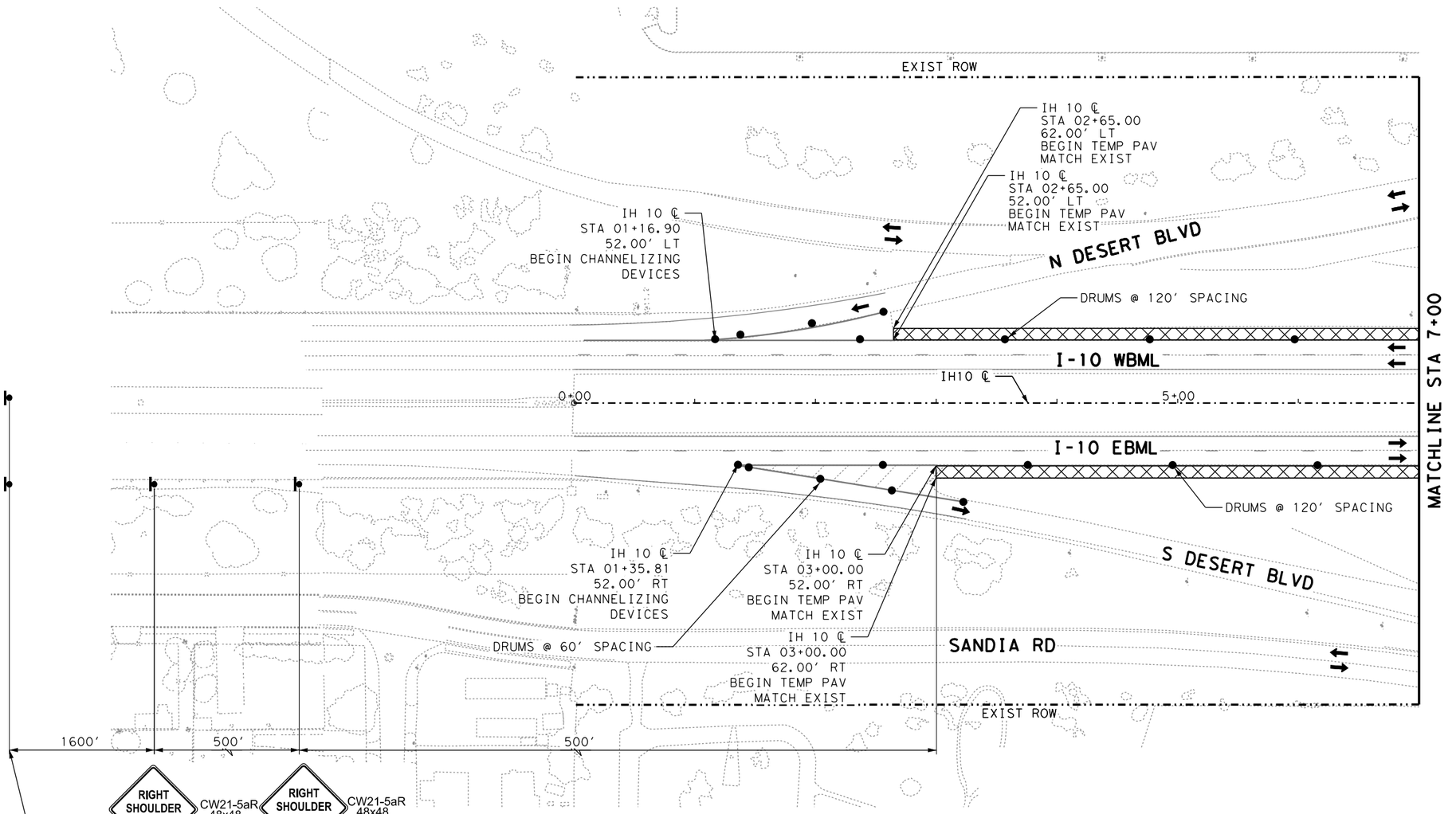
TRAFFIC CONTROL PLAN
SEQUENCE OF WORK

SHEET 1 OF 1

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		60
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

LEGEND:

- TEMP CONSTRUCTION THIS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR



NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ UNLESS OTHERWISE NOTED.
2. TRAFFIC UTILIZES EXISTING PAVEMENT MARKINGS ALONG IH 10 AND FRONTAGE ROADS.
3. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.
4. PROPOSED PERMANENT SIGNS INSTALLED DURING CONSTRUCTION ARE NOT SHOWN ON THIS SHEET. REFER TO SIGNING LAYOUTS SHEETS.

TRAFFIC CONTROL QUANTITIES

ITEM	DESCRIPTION	UNIT	QUANTITY
0508 6003	CONSTRUCTING DETOURS (TY 1)	SY	914

0 50' 100'
SCALE: 1" = 100'

STATE OF TEXAS
OSCAR D. GONZALEZ
147840
LICENSED
PROFESSIONAL ENGINEER

3/28/2024

NO.	DATE	REVISION	APPROV.

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Texas Department of Transportation

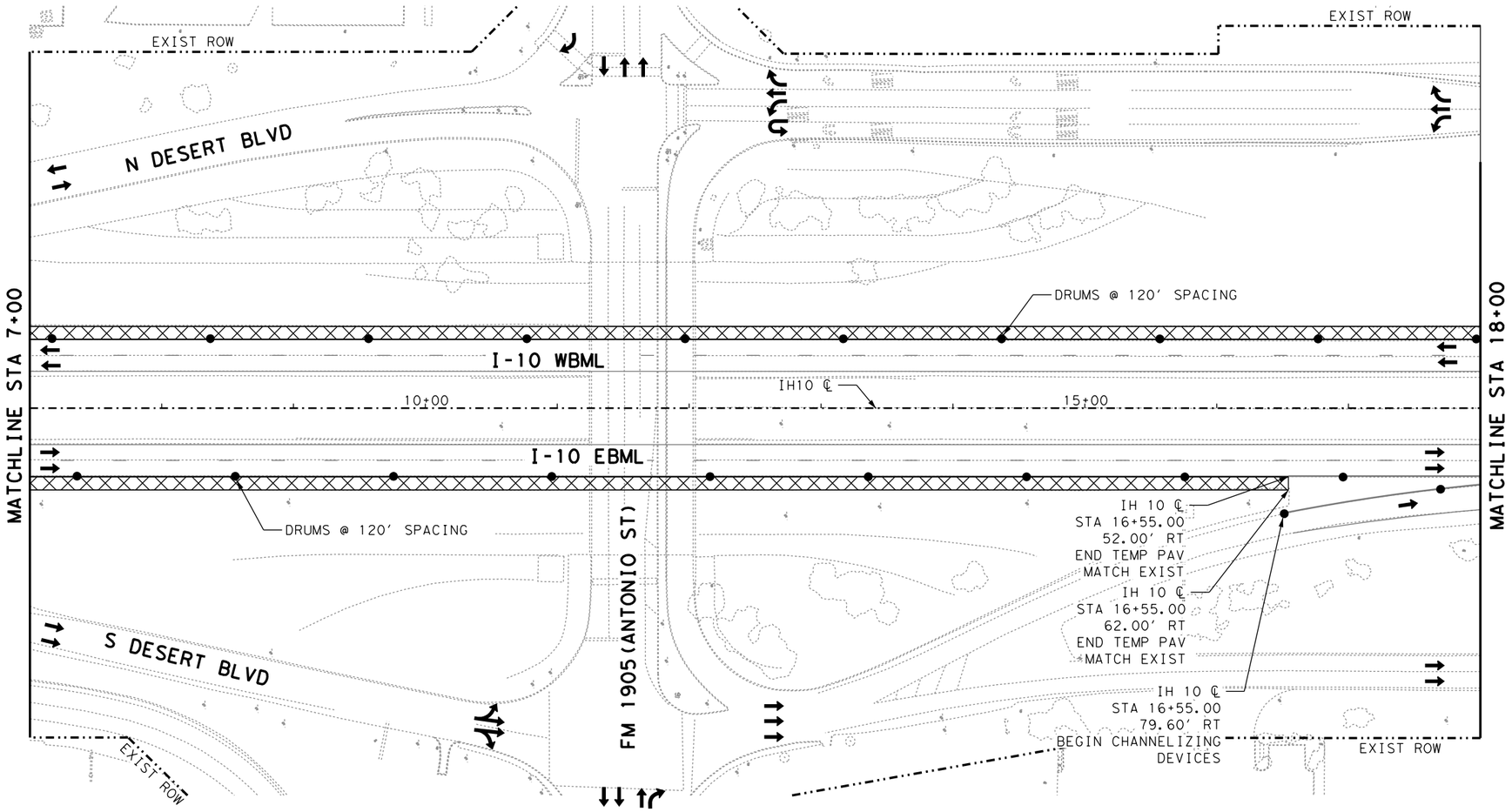
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 1

BEGIN PHASE TO STA 7+00 R1

SHEET 1 OF 20

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		61
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- TEMP CONSTRUCTION THIS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ UNLESS OTHERWISE NOTED.
2. TRAFFIC UTILIZES EXISTING PAVEMENT MARKINGS ALONG IH 10 AND FRONTAGE ROADS.
3. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.
4. PROPOSED PERMANENT SIGNS INSTALLED DURING CONSTRUCTION ARE NOT SHOWN ON THIS SHEET. REFER TO SIGNING LAYOUTS SHEETS.

TRAFFIC CONTROL QUANTITIES

ITEM	DESCRIPTION	UNIT	QUANTITY
0508 6003	CONSTRUCTING DETOURS (TY 1)	SY	2,247

STATE OF TEXAS
OSCAR D. GONZALEZ
147840
PROFESSIONAL ENGINEER
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3/28/2024

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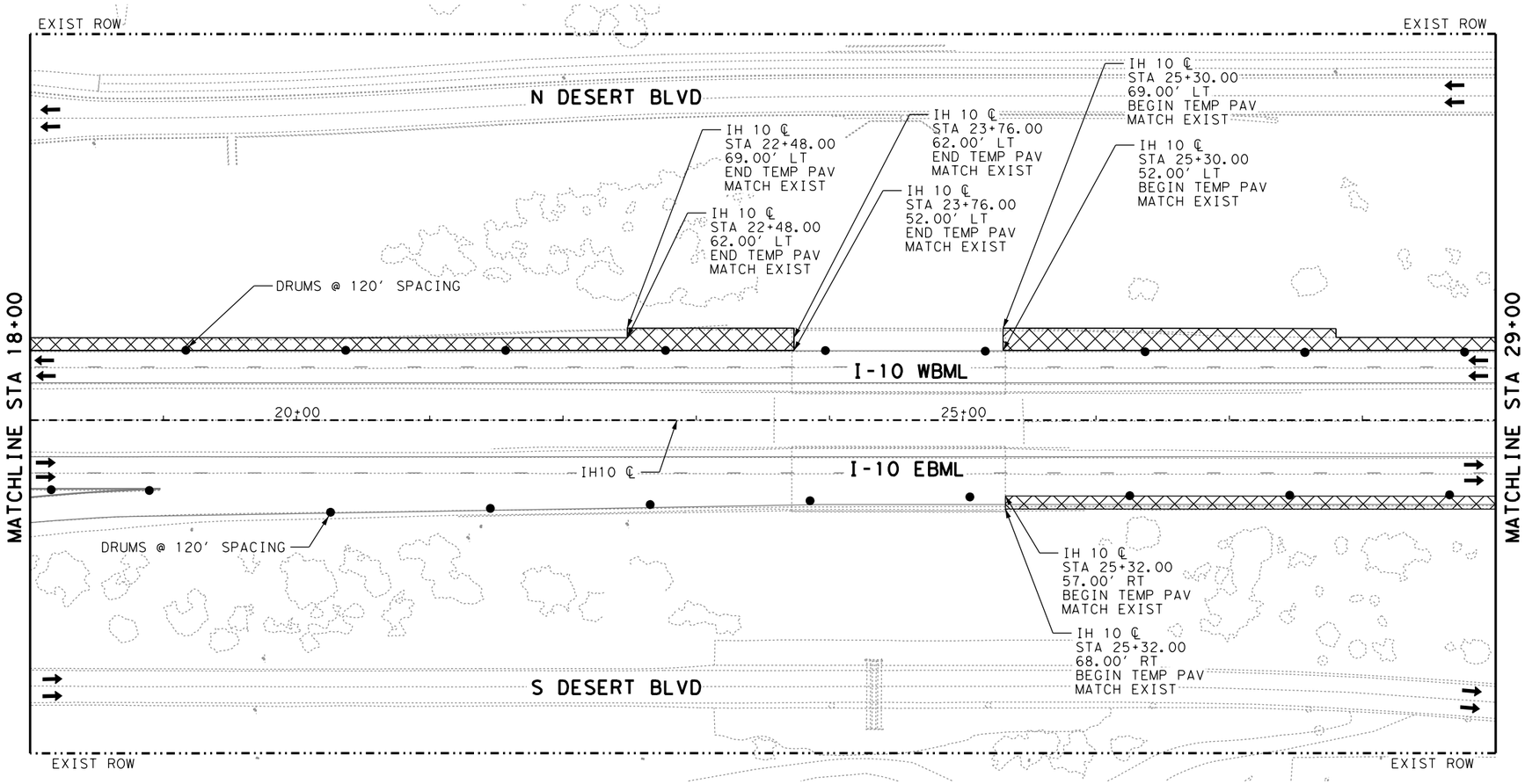
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 1

STA 7+00 TO STA 18+00

SHEET 2 OF 20

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		62
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- TEMP CONSTRUCTION THIS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'

SCALE: 1" = 100'

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ UNLESS OTHERWISE NOTED.
2. TRAFFIC UTILIZES EXISTING PAVEMENT MARKINGS ALONG IH 10 AND FRONTAGE ROADS.
3. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.
4. PROPOSED PERMANENT SIGNS INSTALLED DURING CONSTRUCTION ARE NOT SHOWN ON THIS SHEET. REFER TO SIGNING LAYOUTS SHEETS.

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0508 6003	CONSTRUCTING DETOURS (TY 1)	SY	1,745

STATE OF TEXAS
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3/28/2024

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IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 1

STA 18+00 TO STA 29+00

SHEET 3 OF 20

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		63
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

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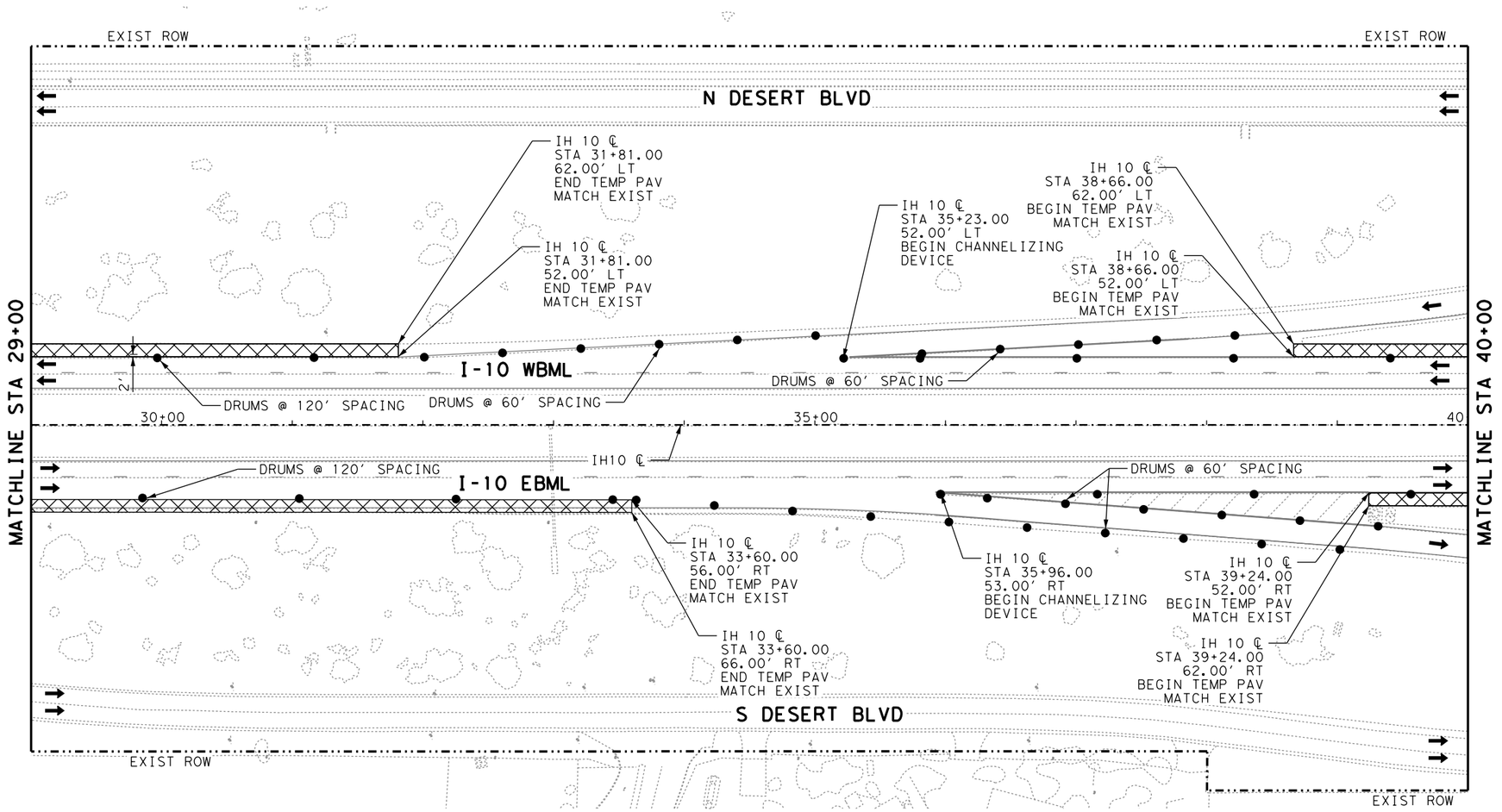

LEGEND:

- TEMP CONSTRUCTION THIS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ UNLESS OTHERWISE NOTED.
2. TRAFFIC UTILIZES EXISTING PAVEMENT MARKINGS ALONG IH 10 AND FRONTAGE ROADS.
3. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.
4. PROPOSED PERMANENT SIGNS INSTALLED DURING CONSTRUCTION ARE NOT SHOWN ON THIS SHEET. REFER TO SIGNING LAYOUTS SHEETS.

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0508 6003	CONSTRUCTING DETOURS (TY 1)	SY	1,090

0 50' 100'
SCALE: 1" = 100'

STATE OF TEXAS
OSCAR D. GONZALEZ
147840
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3/28/2024

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Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 1

STA 29+00 TO STA 40+00

SHEET 4 OF 20

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		64
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

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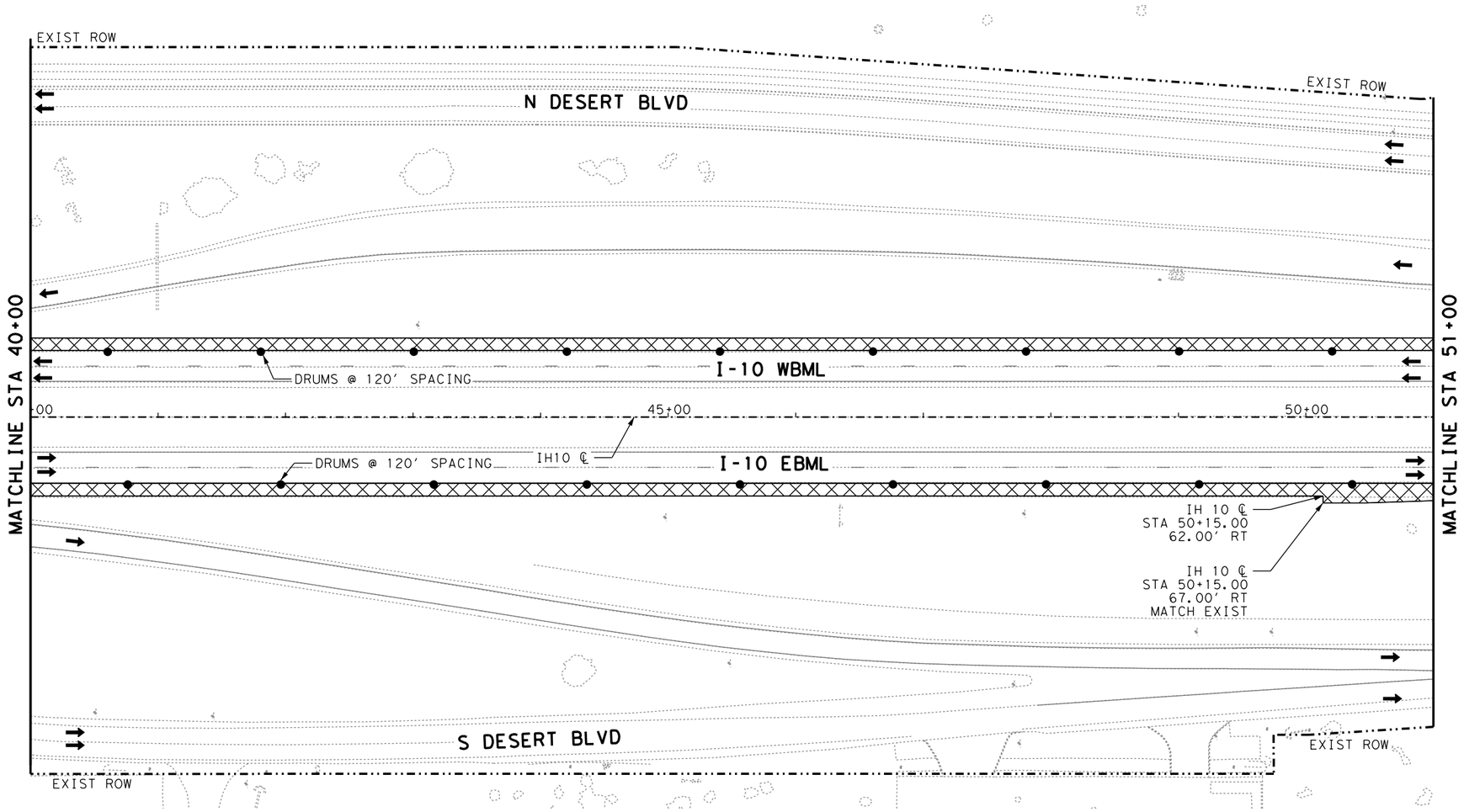
USER: pgonzalez

LEGEND:

- TEMP CONSTRUCTION THIS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR



NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ UNLESS OTHERWISE NOTED.
2. TRAFFIC UTILIZES EXISTING PAVEMENT MARKINGS ALONG IH 10 AND FRONTAGE ROADS.
3. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.
4. PROPOSED PERMANENT SIGNS INSTALLED DURING CONSTRUCTION ARE NOT SHOWN ON THIS SHEET. REFER TO SIGNING LAYOUTS SHEETS.

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0508 6003	CONSTRUCTING DETOURS (TY 1)	SY	2,515

0 50' 100'
SCALE: 1" = 100'

STATE OF TEXAS
OSCAR D. GONZALEZ
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PROFESSIONAL ENGINEER

3/28/2024

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Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 1

STA 40+00 TO STA 51+00

SHEET 5 OF 20

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		65
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

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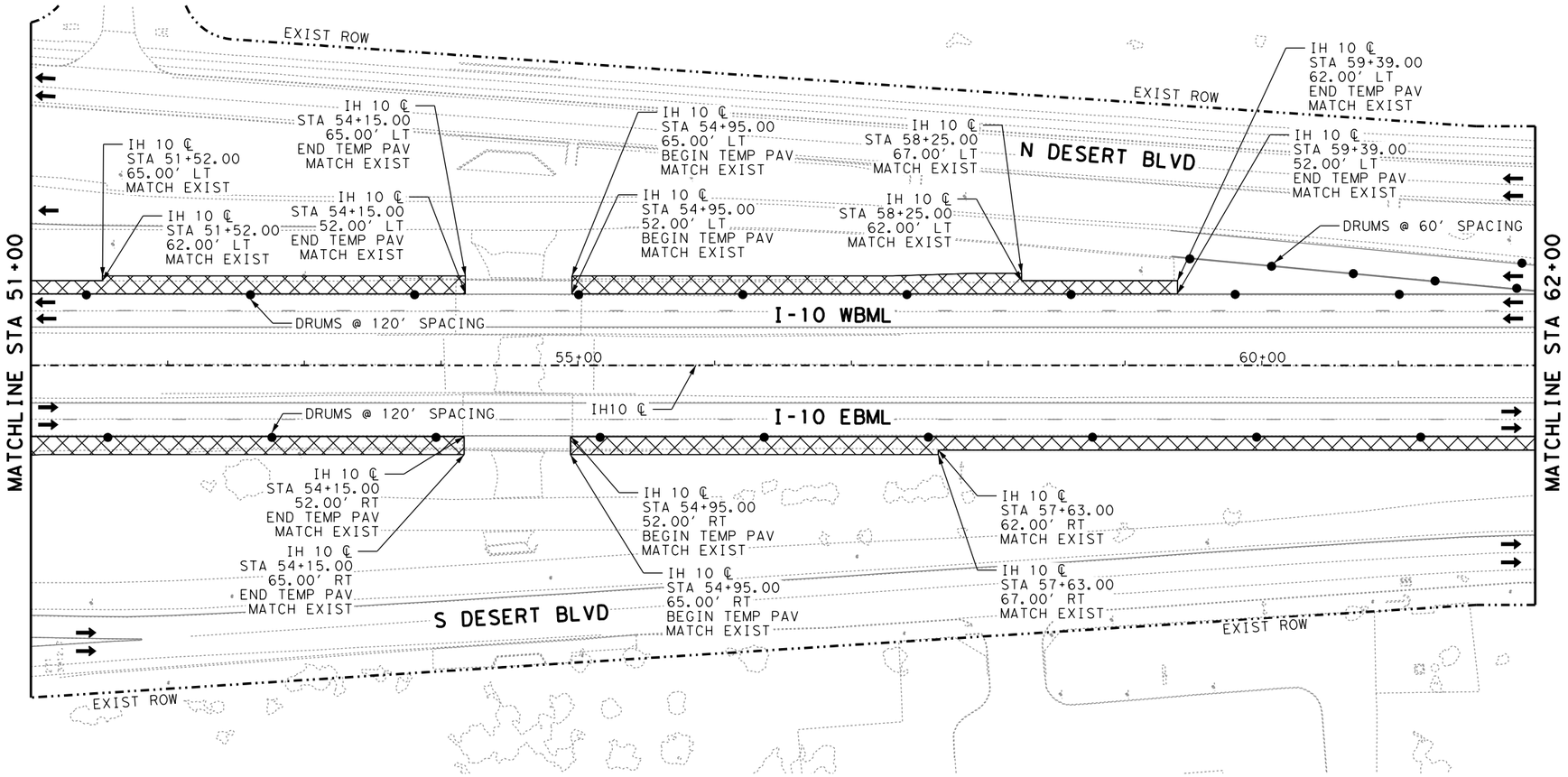

LEGEND:

- TEMP CONSTRUCTION THIS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ UNLESS OTHERWISE NOTED.
2. TRAFFIC UTILIZES EXISTING PAVEMENT MARKINGS ALONG IH 10 AND FRONTAGE ROADS.
3. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.
4. PROPOSED PERMANENT SIGNS INSTALLED DURING CONSTRUCTION ARE NOT SHOWN ON THIS SHEET. REFER TO SIGNING LAYOUTS SHEETS.

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0508 6003	CONSTRUCTING DETOURS (TY 1)	SY	2,458

STATE OF TEXAS
OSCAR D. GONZALEZ
147840
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PROFESSIONAL ENGINEER

3/28/2024

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Texas Department of Transportation

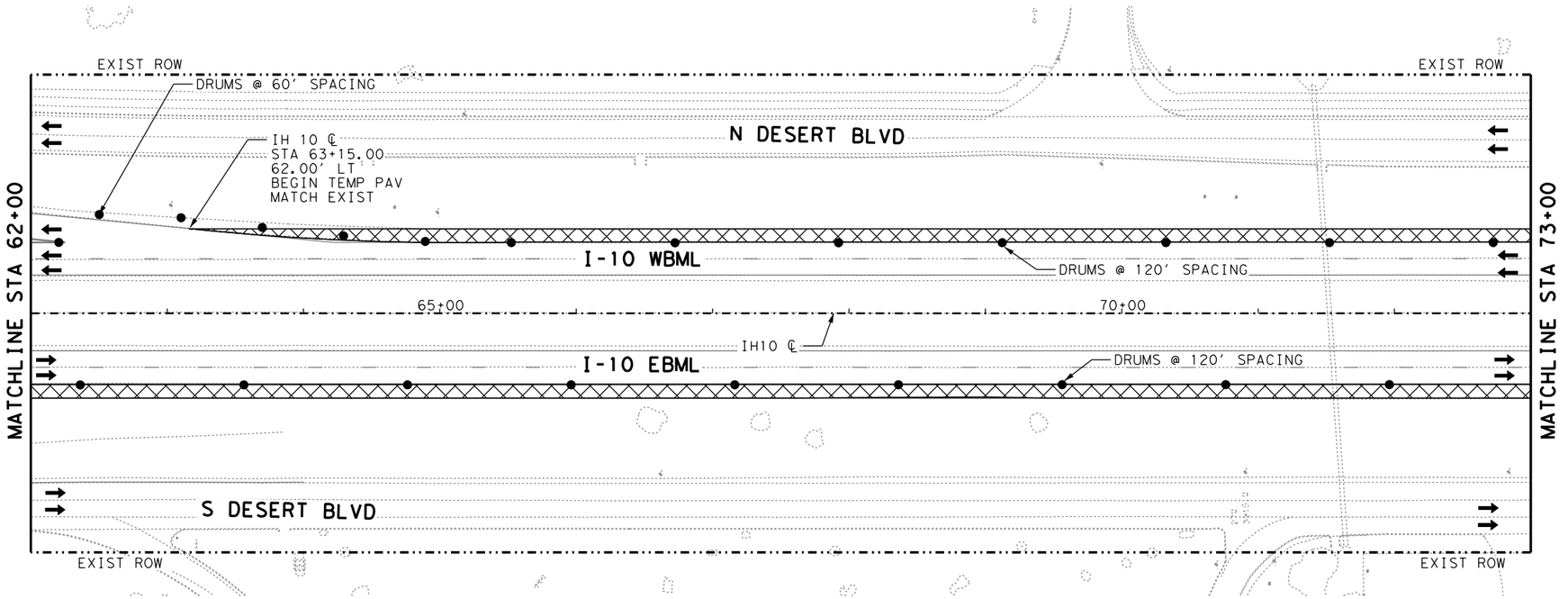
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 1

STA 51+00 TO STA 62+00

SHEET 6 OF 20

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		66
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- TEMP CONSTRUCTION THIS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ UNLESS OTHERWISE NOTED.
2. TRAFFIC UTILIZES EXISTING PAVEMENT MARKINGS ALONG IH 10 AND FRONTAGE ROADS.
3. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.
4. PROPOSED PERMANENT SIGNS INSTALLED DURING CONSTRUCTION ARE NOT SHOWN ON THIS SHEET. REFER TO SIGNING LAYOUTS SHEETS.

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0508 6003	CONSTRUCTING DETOURS (TY 1)	SY	2,221

STATE OF TEXAS
OSCAR D. GONZALEZ
147840
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3/28/2024

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Texas Department of Transportation

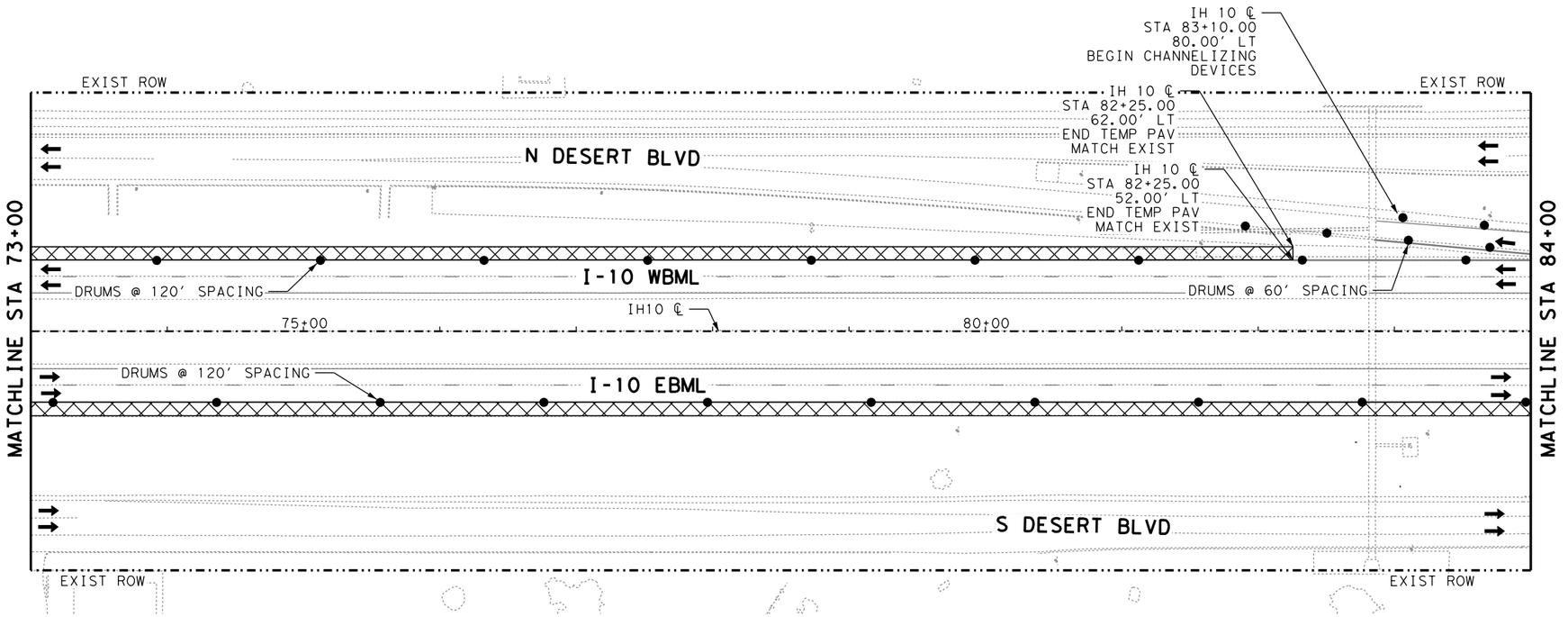
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 1

STA 62+00 TO STA 73+00

SHEET 7 OF 20

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		67
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- TEMP CONSTRUCTION THIS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ UNLESS OTHERWISE NOTED.
2. TRAFFIC UTILIZES EXISTING PAVEMENT MARKINGS ALONG IH 10 AND FRONTAGE ROADS.
3. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.
4. PROPOSED PERMANENT SIGNS INSTALLED DURING CONSTRUCTION ARE NOT SHOWN ON THIS SHEET. REFER TO SIGNING LAYOUTS SHEETS.

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0508 6003	CONSTRUCTING DETOURS (TY 1)	SY	2,226

STATE OF TEXAS
OSCAR D. GONZALEZ
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3/28/2024

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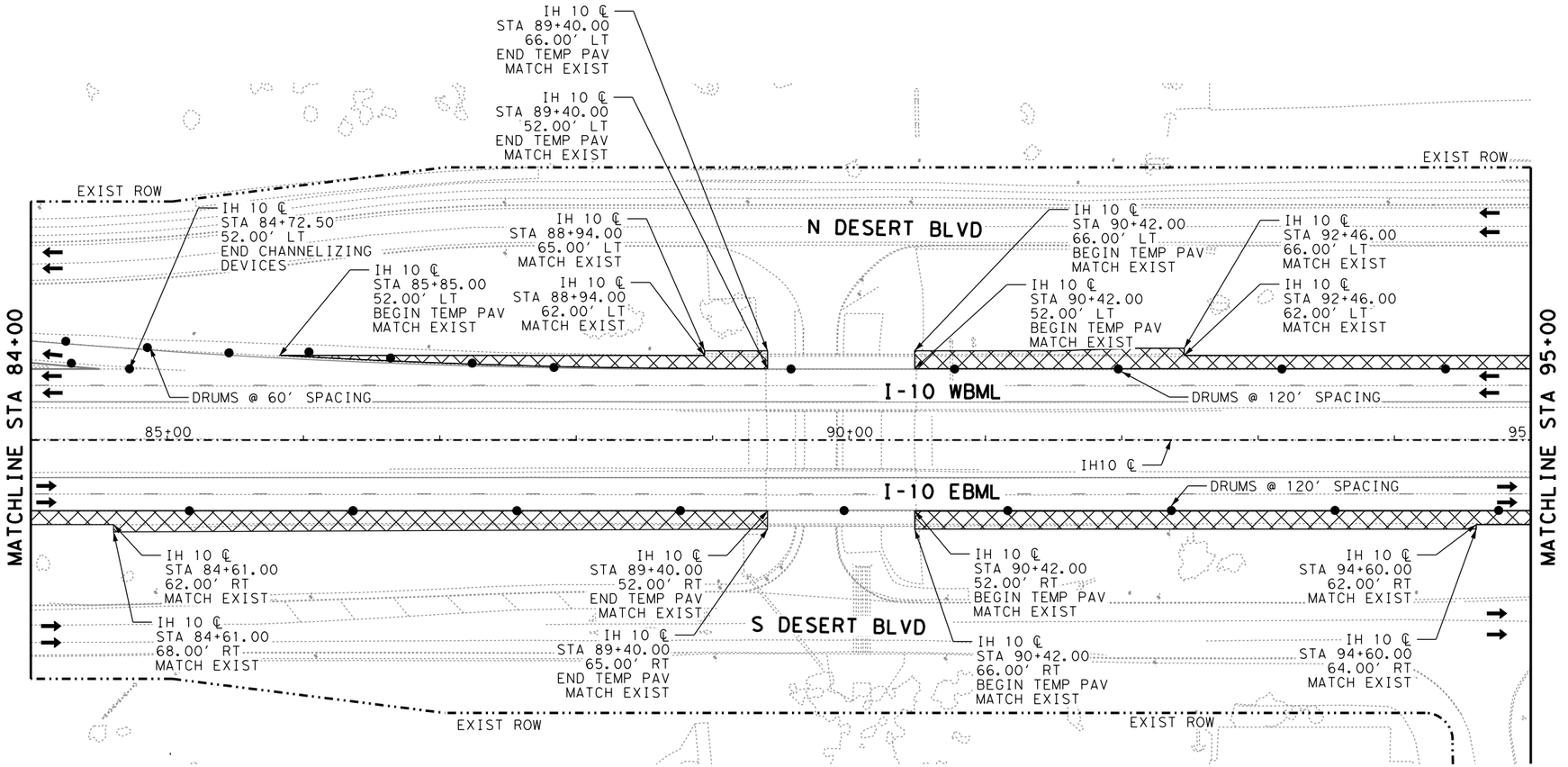
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 1

STA 73+00 TO STA 84+00

SHEET 8 OF 20

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		68
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- TEMP CONSTRUCTION THIS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ UNLESS OTHERWISE NOTED.
2. TRAFFIC UTILIZES EXISTING PAVEMENT MARKINGS ALONG IH 10 AND FRONTAGE ROADS.
3. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.
4. PROPOSED PERMANENT SIGNS INSTALLED DURING CONSTRUCTION ARE NOT SHOWN ON THIS SHEET. REFER TO SIGNING LAYOUTS SHEETS.

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0508 6003	CONSTRUCTING DETOURS (TY 1)	SY	2,378

0 50' 100'
SCALE: 1" = 100'

STATE OF TEXAS
OSCAR D. GONZALEZ
147840
PROFESSIONAL ENGINEER
3/28/2024

NO.	DATE	REVISION	APPROV.

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IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 1

STA 84+00 TO STA 95+00

SHEET 9 OF 20

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		69
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

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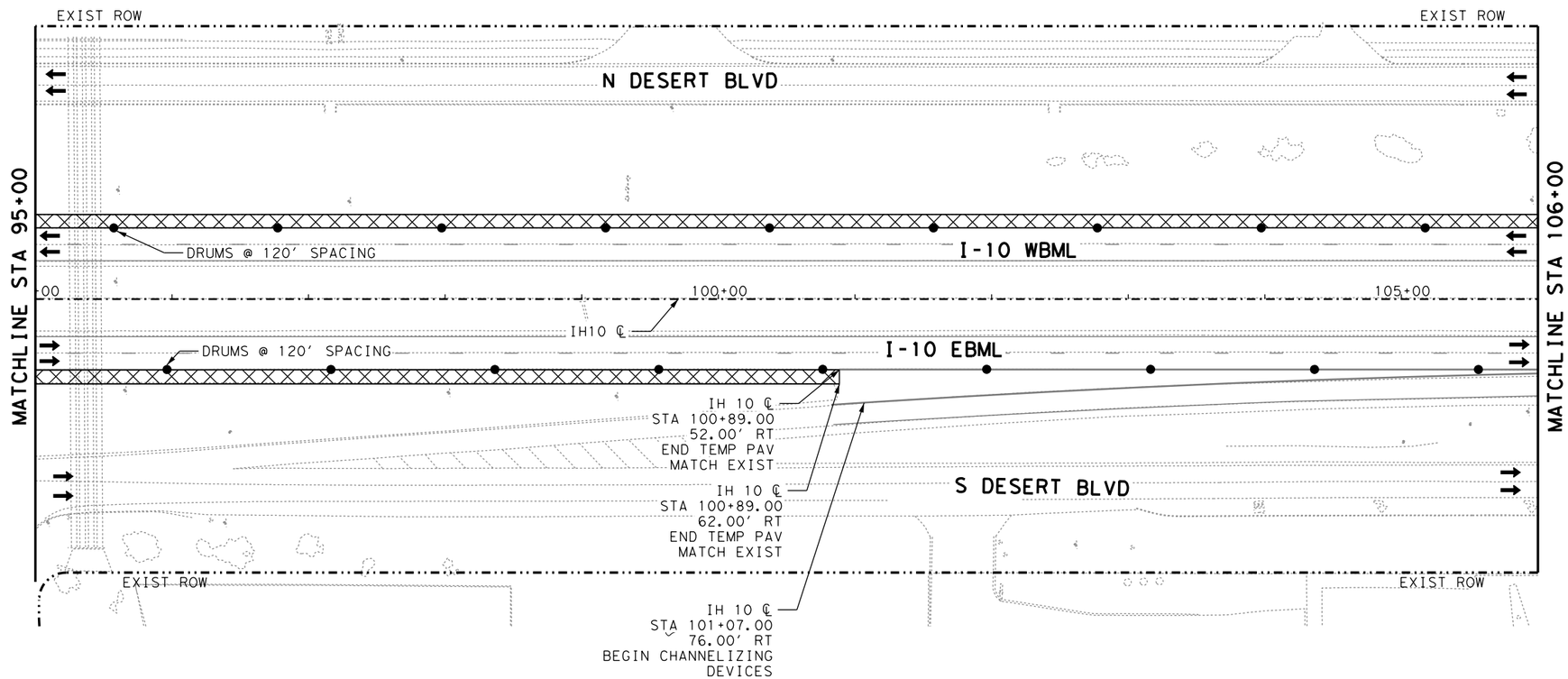
USER: pgonzalez



LEGEND:

- TEMP CONSTRUCTION THIS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'

SCALE: 1" = 100'

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ UNLESS OTHERWISE NOTED.
2. TRAFFIC UTILIZES EXISTING PAVEMENT MARKINGS ALONG IH 10 AND FRONTAGE ROADS.
3. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.
4. PROPOSED PERMANENT SIGNS INSTALLED DURING CONSTRUCTION ARE NOT SHOWN ON THIS SHEET. REFER TO SIGNING LAYOUTS SHEETS.

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0508 6003	CONSTRUCTING DETOURS (TY 1)	SY	1,921

STATE OF TEXAS
OSCAR D. GONZALEZ
147840
PROFESSIONAL ENGINEER

3/28/2024

NO.	DATE	REVISION	APPROV.

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Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 1

STA 95+00 TO STA 106+00

SHEET 10 OF 20

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		70
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

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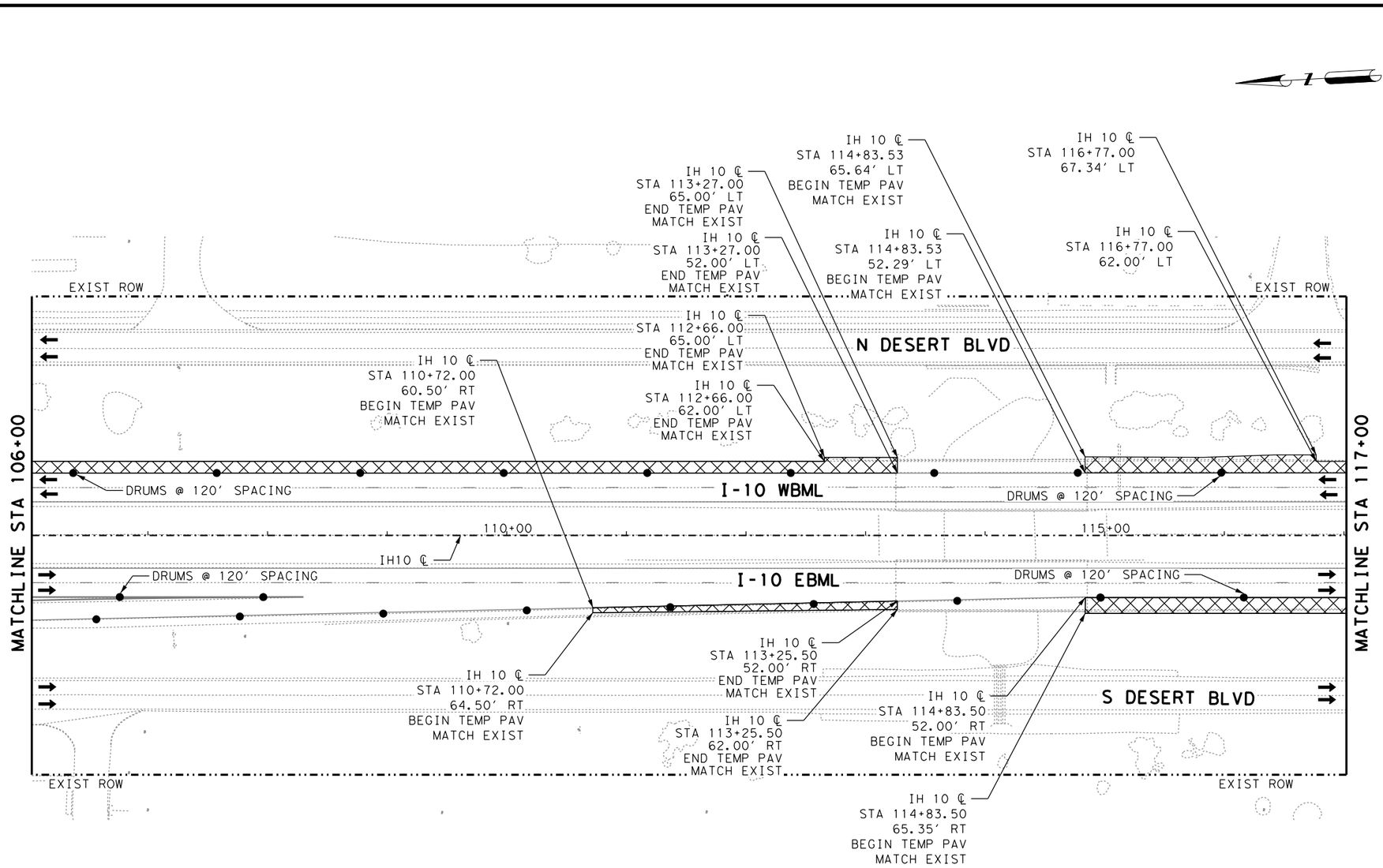


LEGEND:

- TEMP CONSTRUCTION THIS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ UNLESS OTHERWISE NOTED.
2. TRAFFIC UTILIZES EXISTING PAVEMENT MARKINGS ALONG IH 10 AND FRONTAGE ROADS.
3. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.
4. PROPOSED PERMANENT SIGNS INSTALLED DURING CONSTRUCTION ARE NOT SHOWN ON THIS SHEET. REFER TO SIGNING LAYOUTS SHEETS.

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0508 6003	CONSTRUCTING DETOURS (TY 1)	SY	1,630

STATE OF TEXAS
OSCAR D. GONZALEZ
147840
LICENSED
PROFESSIONAL ENGINEER

3/28/2024

NO.	DATE	REVISION	APPROV.

consor
F-12040

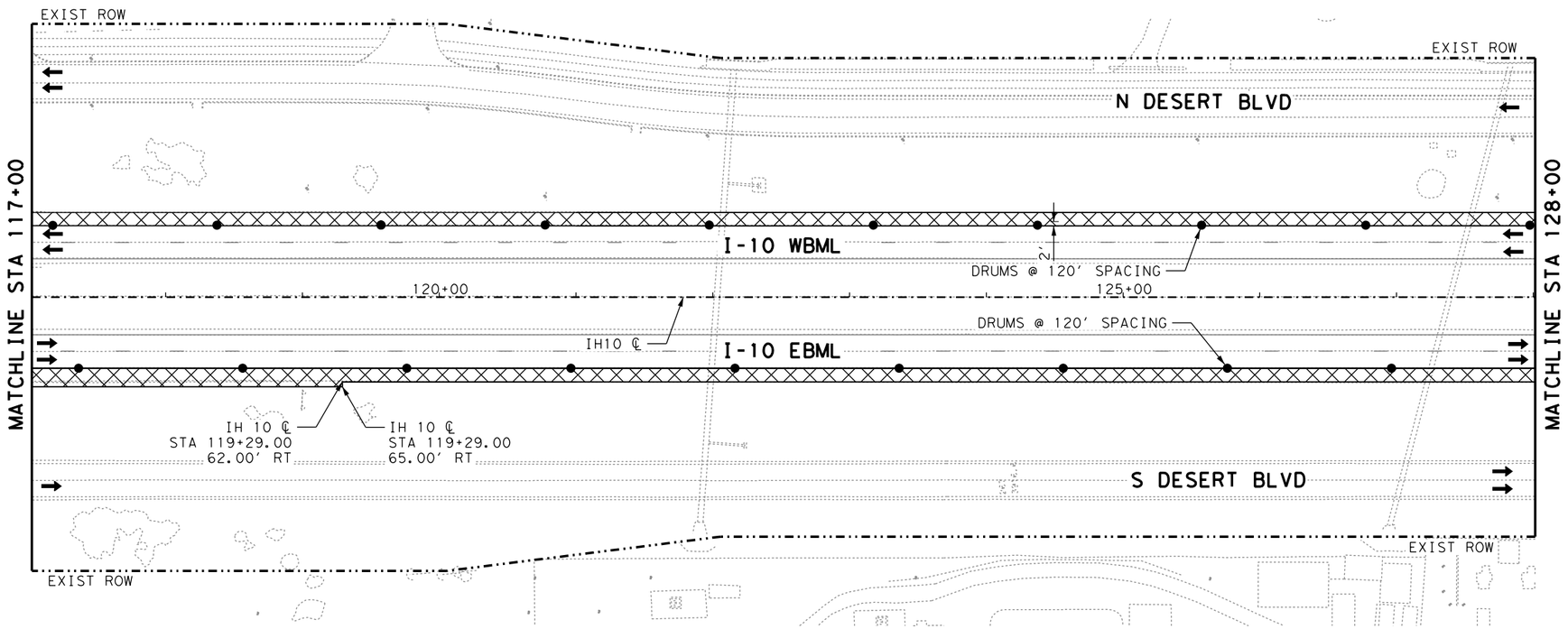
Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 1

STA 106+00 TO STA 117+00
SHEET 11 OF 20

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		71
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- TEMP CONSTRUCTION THIS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ UNLESS OTHERWISE NOTED.
2. TRAFFIC UTILIZES EXISTING PAVEMENT MARKINGS ALONG IH 10 AND FRONTAGE ROADS.
3. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.
4. PROPOSED PERMANENT SIGNS INSTALLED DURING CONSTRUCTION ARE NOT SHOWN ON THIS SHEET. REFER TO SIGNING LAYOUTS SHEETS.

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0508 6003	CONSTRUCTING DETOURS (TY 1)	SY	2,498

0 50' 100'
SCALE: 1" = 100'

STATE OF TEXAS
OSCAR D. GONZALEZ
147840
LICENSED
PROFESSIONAL ENGINEER

3/28/2024

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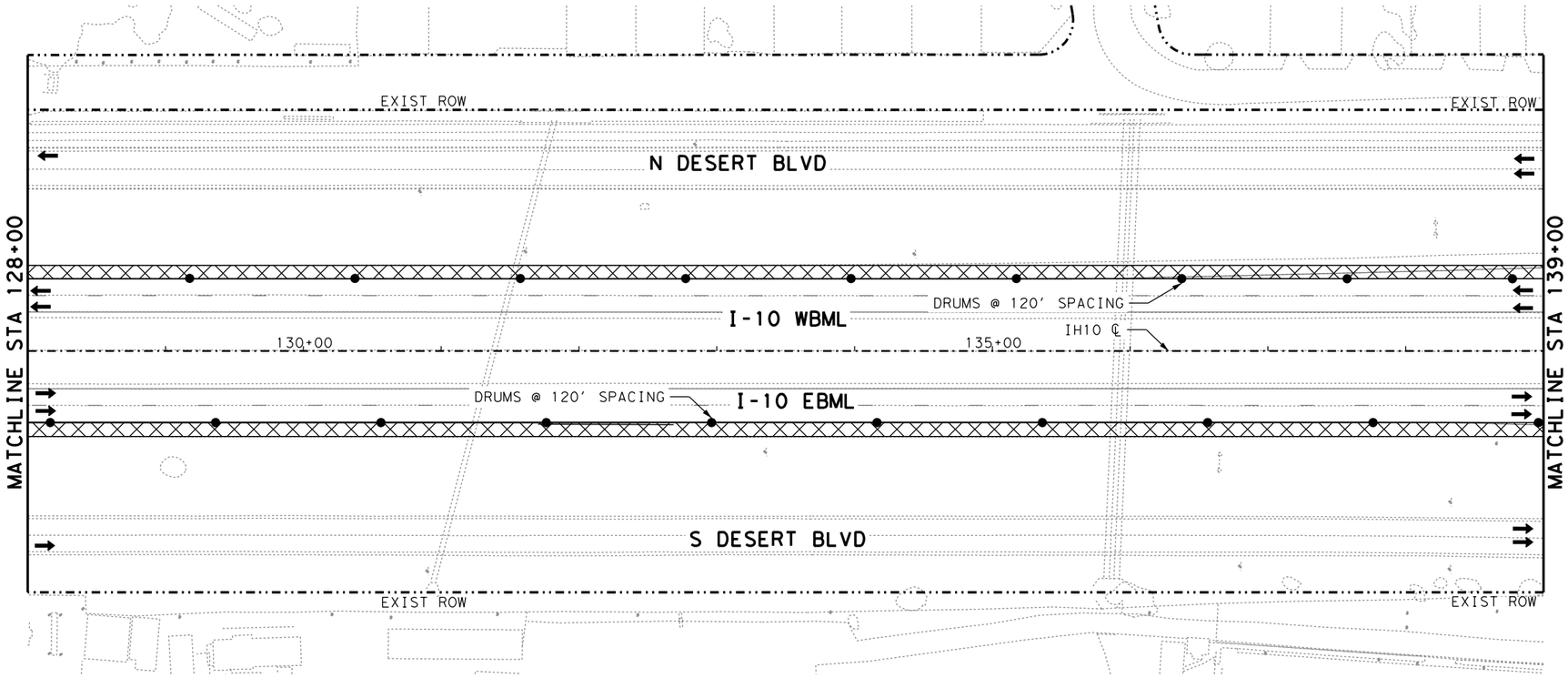
Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 1

STA 117+00 TO STA 128+00
SHEET 12 OF 20

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		72
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- TEMP CONSTRUCTION THIS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ UNLESS OTHERWISE NOTED.
2. TRAFFIC UTILIZES EXISTING PAVEMENT MARKINGS ALONG IH 10 AND FRONTAGE ROADS.
3. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.
4. PROPOSED PERMANENT SIGNS INSTALLED DURING CONSTRUCTION ARE NOT SHOWN ON THIS SHEET. REFER TO SIGNING LAYOUTS SHEETS.

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0508 6003	CONSTRUCTING DETOURS (TY 1)	SY	2,408

STATE OF TEXAS
OSCAR D. GONZALEZ
147840
LICENSED
PROFESSIONAL ENGINEER
3/28/2024

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Texas Department of Transportation

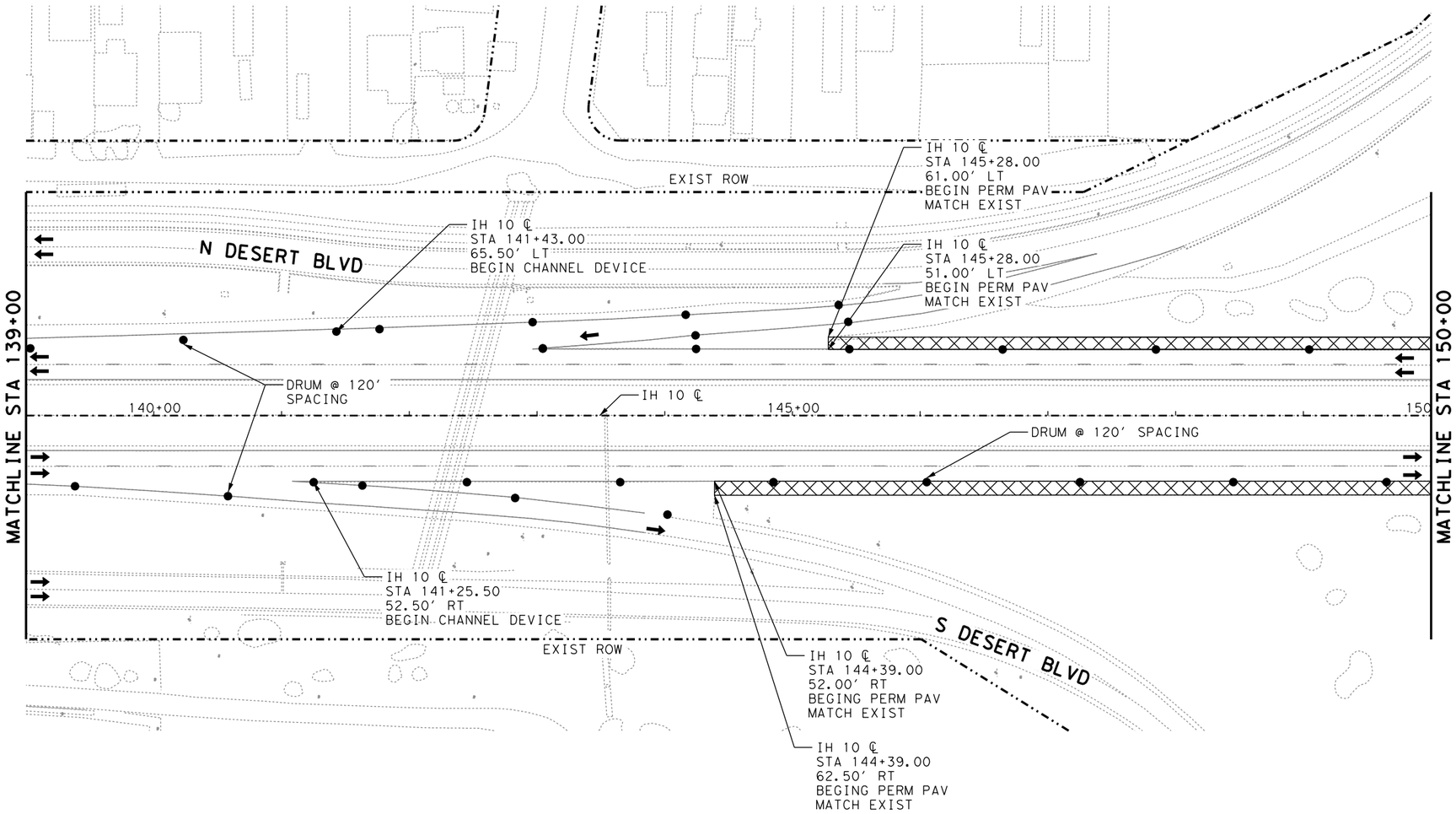
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 1

(STA 128+00 TO 139+00)

SHEET 13 OF 20

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		73
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- TEMP CONSTRUCTION THIS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ UNLESS OTHERWISE NOTED.
2. TRAFFIC UTILIZES EXISTING PAVEMENT MARKINGS ALONG IH 10 AND FRONTAGE ROADS.
3. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.
4. PROPOSED PERMANENT SIGNS INSTALLED DURING CONSTRUCTION ARE NOT SHOWN ON THIS SHEET. REFER TO SIGNING LAYOUTS SHEETS.

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0508 6003	CONSTRUCTING DETOURS (TY 1)	SY	1,185

0 50' 100'
SCALE: 1" = 100'

STATE OF TEXAS
OSCAR D. GONZALEZ
147840
LICENSED
PROFESSIONAL ENGINEER

3/28/2024

NO.	DATE	REVISION	APPROV.

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Texas Department of Transportation

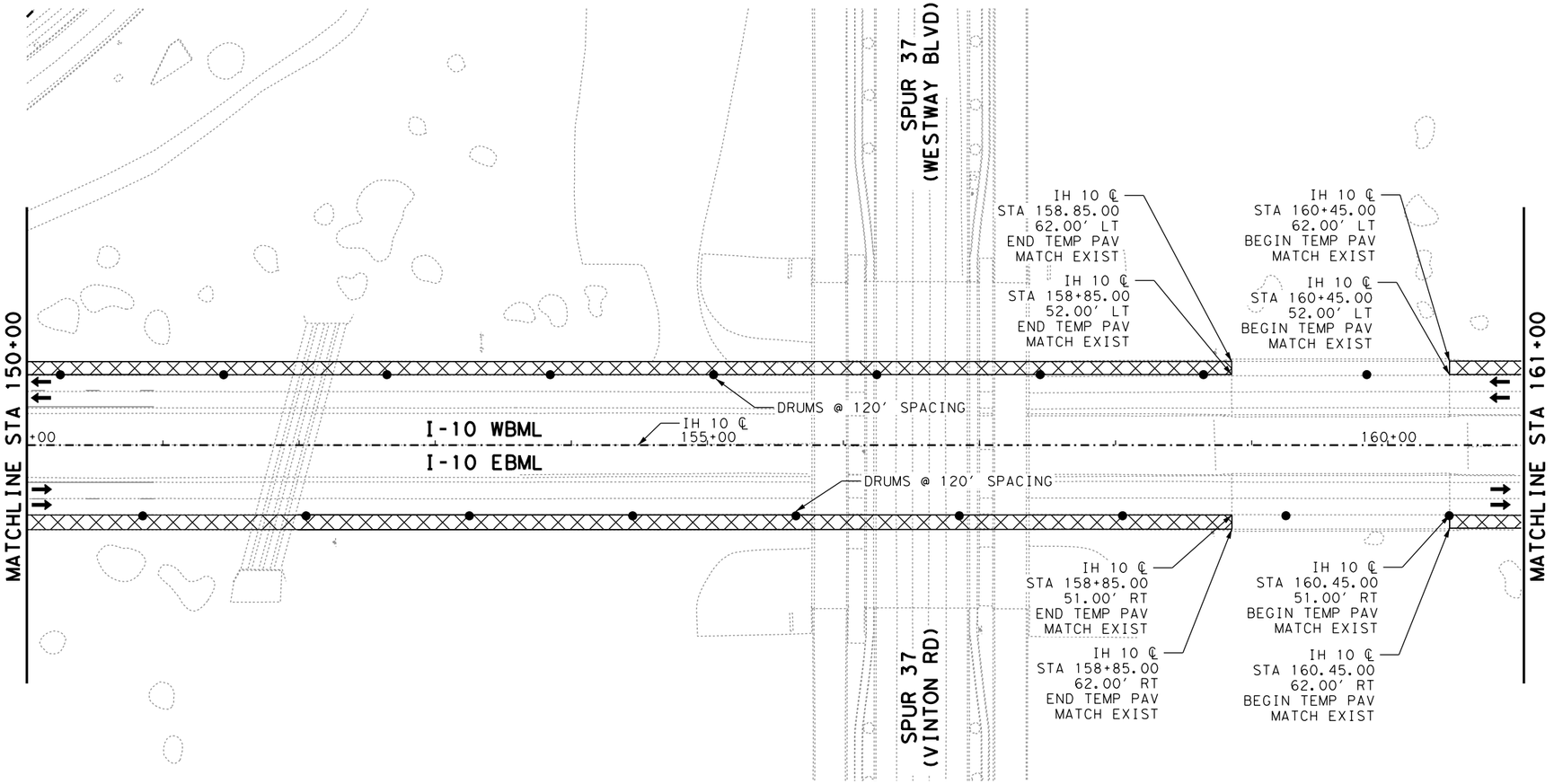
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 1

(STA 139+00 TO STA 150+00)

SHEET 14 OF 20

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		74
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- TEMP CONSTRUCTION THIS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ UNLESS OTHERWISE NOTED.
2. TRAFFIC UTILIZES EXISTING PAVEMENT MARKINGS ALONG IH 10 AND FRONTAGE ROADS.
3. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.
4. PROPOSED PERMANENT SIGNS INSTALLED DURING CONSTRUCTION ARE NOT SHOWN ON THIS SHEET. REFER TO SIGNING LAYOUTS SHEETS.

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0508 6003	CONSTRUCTING DETOURS (TY 1)	SY	2,336

3/28/2024

NO.	DATE	REVISION	APPROV.

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Texas Department of Transportation

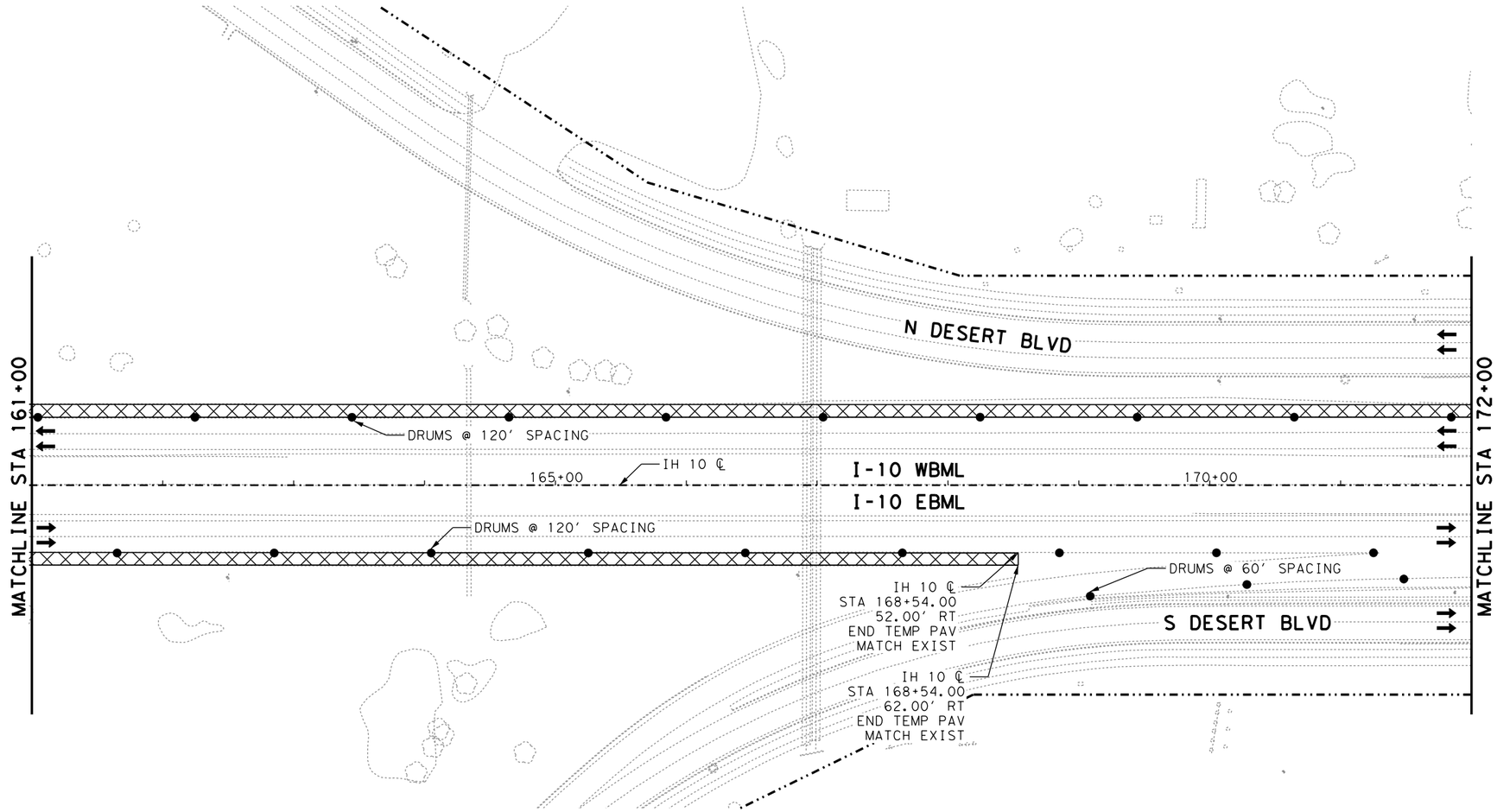
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 1

(STA 150+00 R1 TO STA 161+00)

SHEET 15 OF 20

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		75
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- TEMP CONSTRUCTION THIS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ UNLESS OTHERWISE NOTED.
2. TRAFFIC UTILIZES EXISTING PAVEMENT MARKINGS ALONG IH 10 AND FRONTAGE ROADS.
3. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.
4. PROPOSED PERMANENT SIGNS INSTALLED DURING CONSTRUCTION ARE NOT SHOWN ON THIS SHEET. REFER TO SIGNING LAYOUTS SHEETS.

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0508 6003	CONSTRUCTING DETOURS (TY 1)	SY	2,957

STATE OF TEXAS
OSCAR D. GONZALEZ
147840
PROFESSIONAL ENGINEER

3/28/2024

NO.	DATE	REVISION	APPROV.

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Texas Department of Transportation

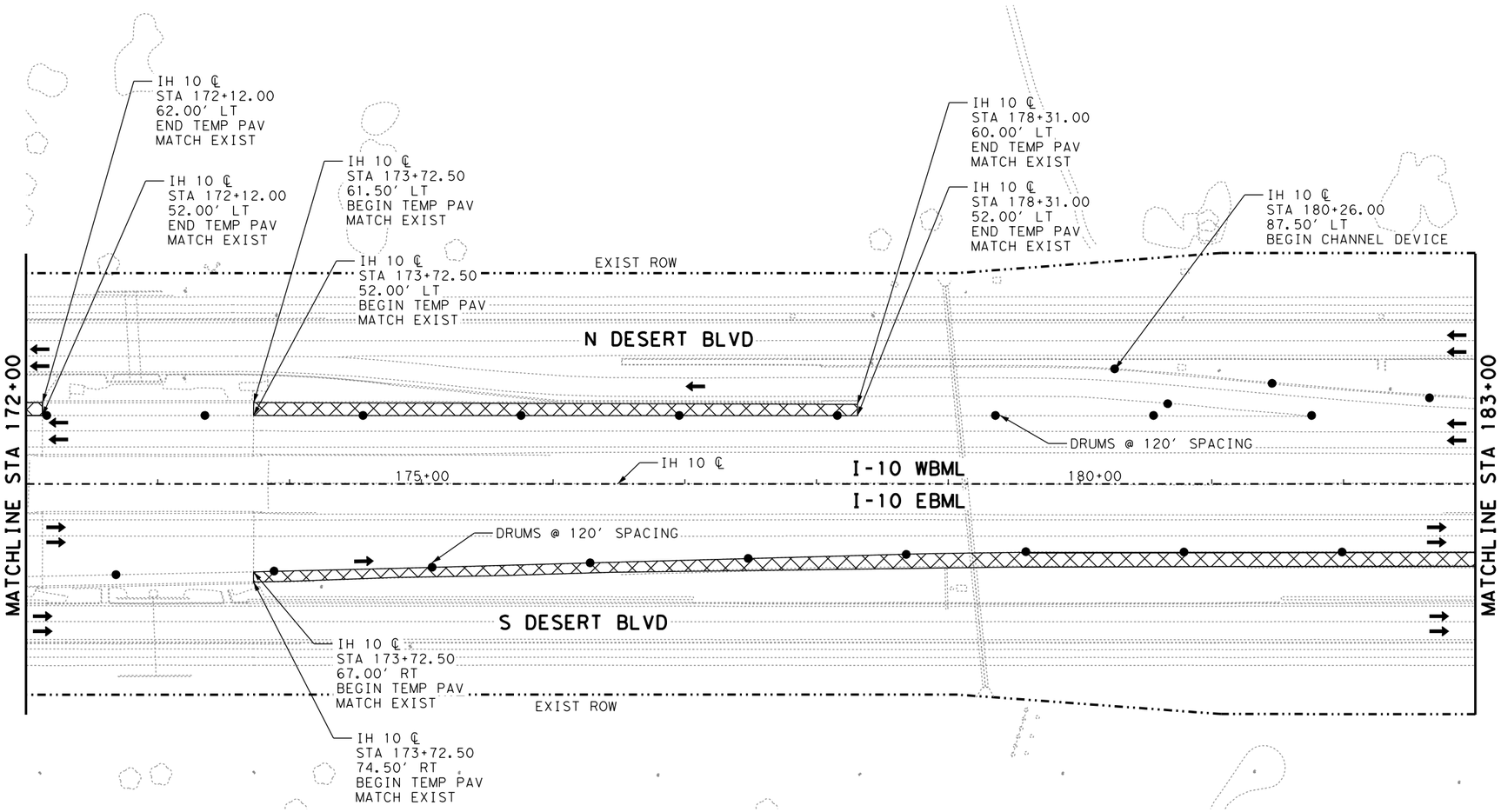
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 1

(STA 161+00 TO STA 172+00)

SHEET 16 OF 20

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		76
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- TEMP CONSTRUCTION THIS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ UNLESS OTHERWISE NOTED.
2. TRAFFIC UTILIZES EXISTING PAVEMENT MARKINGS ALONG IH 10 AND FRONTAGE ROADS.
3. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.
4. PROPOSED PERMANENT SIGNS INSTALLED DURING CONSTRUCTION ARE NOT SHOWN ON THIS SHEET. REFER TO SIGNING LAYOUTS SHEETS.

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0508 6003	CONSTRUCTING DETOURS (TY 1)	SY	1,659

STATE OF TEXAS
OSCAR D. GONZALEZ
147840
LICENSED
PROFESSIONAL ENGINEER
3/28/2024

NO.	DATE	REVISION	APPROV.

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Texas Department of Transportation

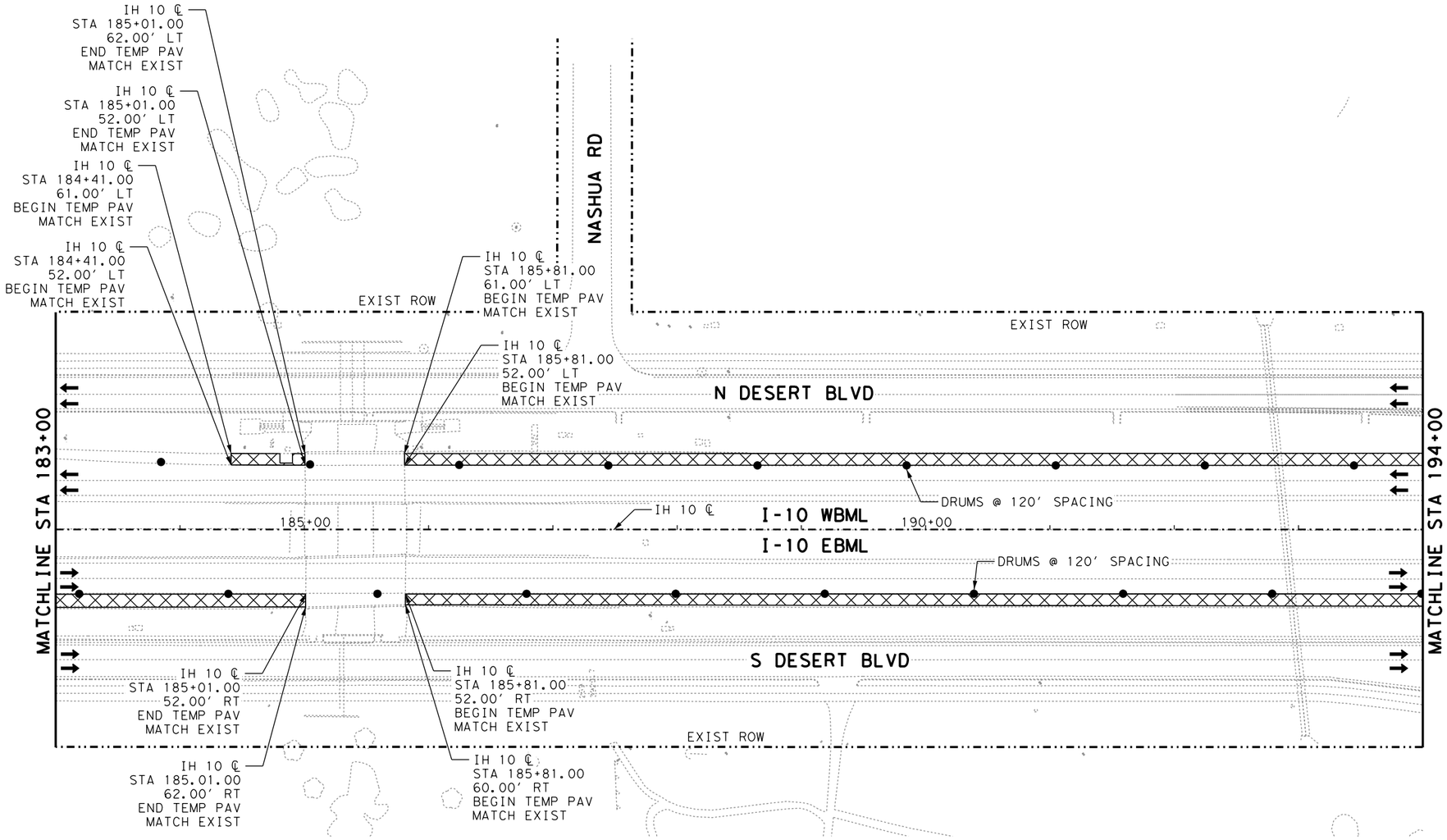
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 1

(STA 172+00 TO STA 183+00)

SHEET 17 OF 20

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		77
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- TEMP CONSTRUCTION THIS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ UNLESS OTHERWISE NOTED.
2. TRAFFIC UTILIZES EXISTING PAVEMENT MARKINGS ALONG IH 10 AND FRONTAGE ROADS.
3. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.
4. PROPOSED PERMANENT SIGNS INSTALLED DURING CONSTRUCTION ARE NOT SHOWN ON THIS SHEET. REFER TO SIGNING LAYOUTS SHEETS.

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0508 6003	CONSTRUCTING DETOURS (TY 1)	SY	2,217

STATE OF TEXAS
OSCAR D. GONZALEZ
147840
LICENSED
PROFESSIONAL ENGINEER

3/28/2024

NO.	DATE	REVISION	APPROV.

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Texas Department of Transportation

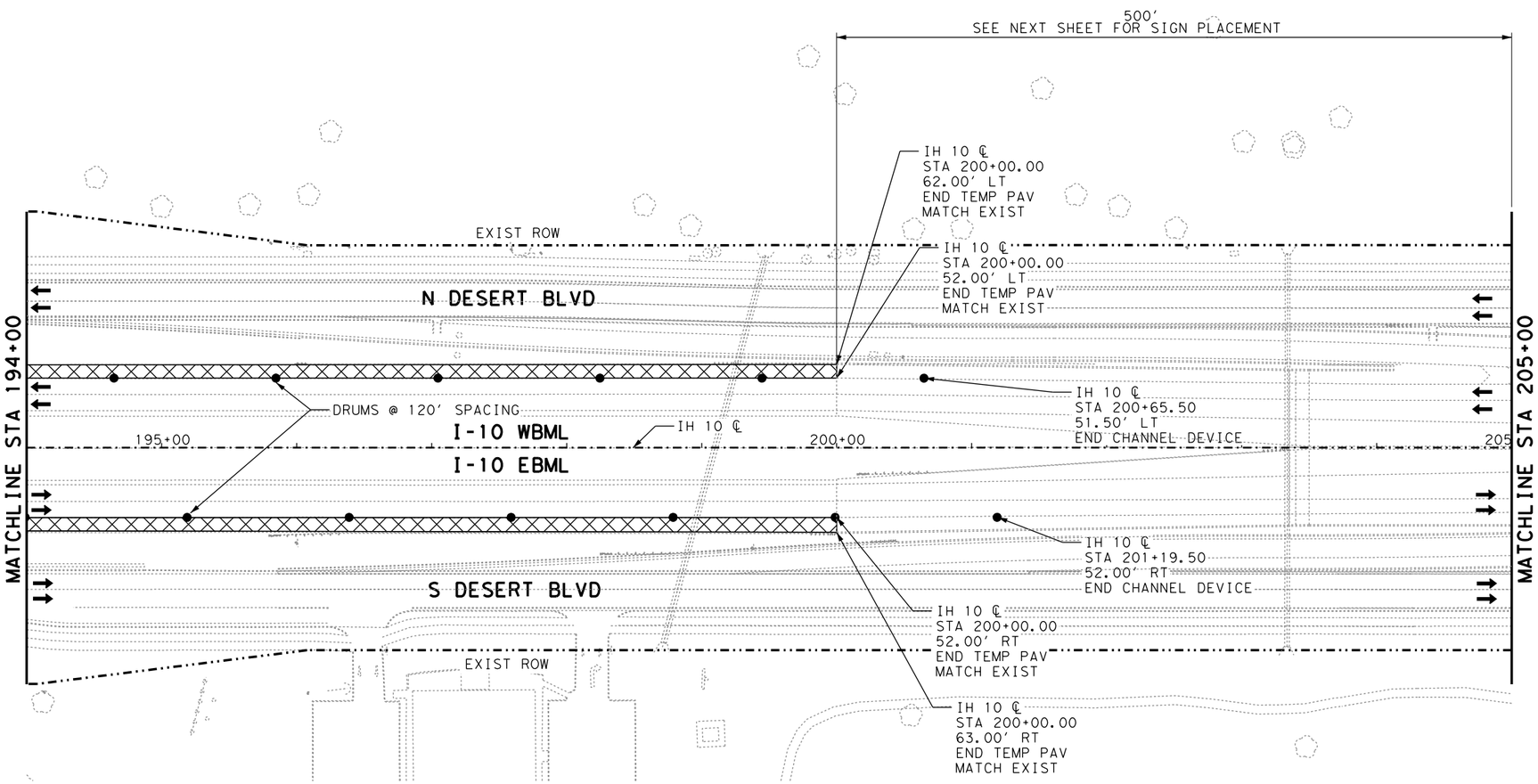
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 1

(STA 183+00 TO STA 194+00)

SHEET 18 OF 20

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		78
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- TEMP CONSTRUCTION THIS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ UNLESS OTHERWISE NOTED.
2. TRAFFIC UTILIZES EXISTING PAVEMENT MARKINGS ALONG IH 10 AND FRONTAGE ROADS.
3. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.
4. PROPOSED PERMANENT SIGNS INSTALLED DURING CONSTRUCTION ARE NOT SHOWN ON THIS SHEET. REFER TO SIGNING LAYOUTS SHEETS.

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0508 6003	CONSTRUCTING DETOURS (TY 1)	SY	1,360

0 50' 100'
SCALE: 1" = 100'

STATE OF TEXAS
OSCAR D. GONZALEZ
147840
LICENSED
PROFESSIONAL ENGINEER

3/28/2024

NO.	DATE	REVISION	APPROV.

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Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 1

(STA 194+00 TO STA 205+00)

SHEET 19 OF 20

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		79
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

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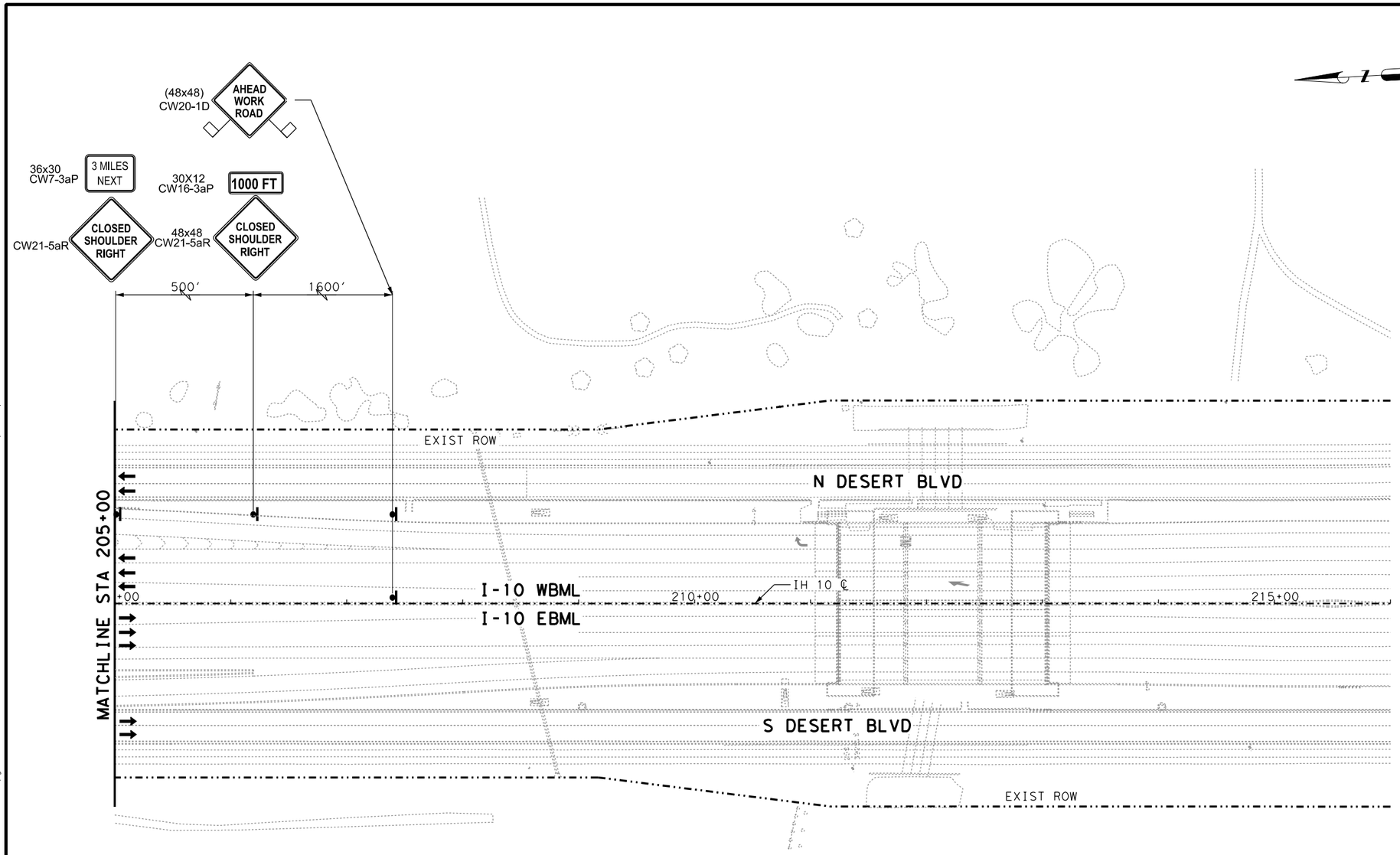

LEGEND:

- TEMP CONSTRUCTION THIS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ UNLESS OTHERWISE NOTED.
2. TRAFFIC UTILIZES EXISTING PAVEMENT MARKINGS ALONG IH 10 AND FRONTAGE ROADS.
3. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.
4. PROPOSED PERMANENT SIGNS INSTALLED DURING CONSTRUCTION ARE NOT SHOWN ON THIS SHEET. REFER TO SIGNING LAYOUTS SHEETS.

0 50' 100'
SCALE: 1" = 100'

STATE OF TEXAS
OSCAR D. GONZALEZ
147840
LICENSED
PROFESSIONAL ENGINEER

3/28/2024

NO.	DATE	REVISION	APPROV.

consor
F-12040

Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 1

(STA 205+00 TO STA END PROJECT)
SHEET 20 OF 20

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		80
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

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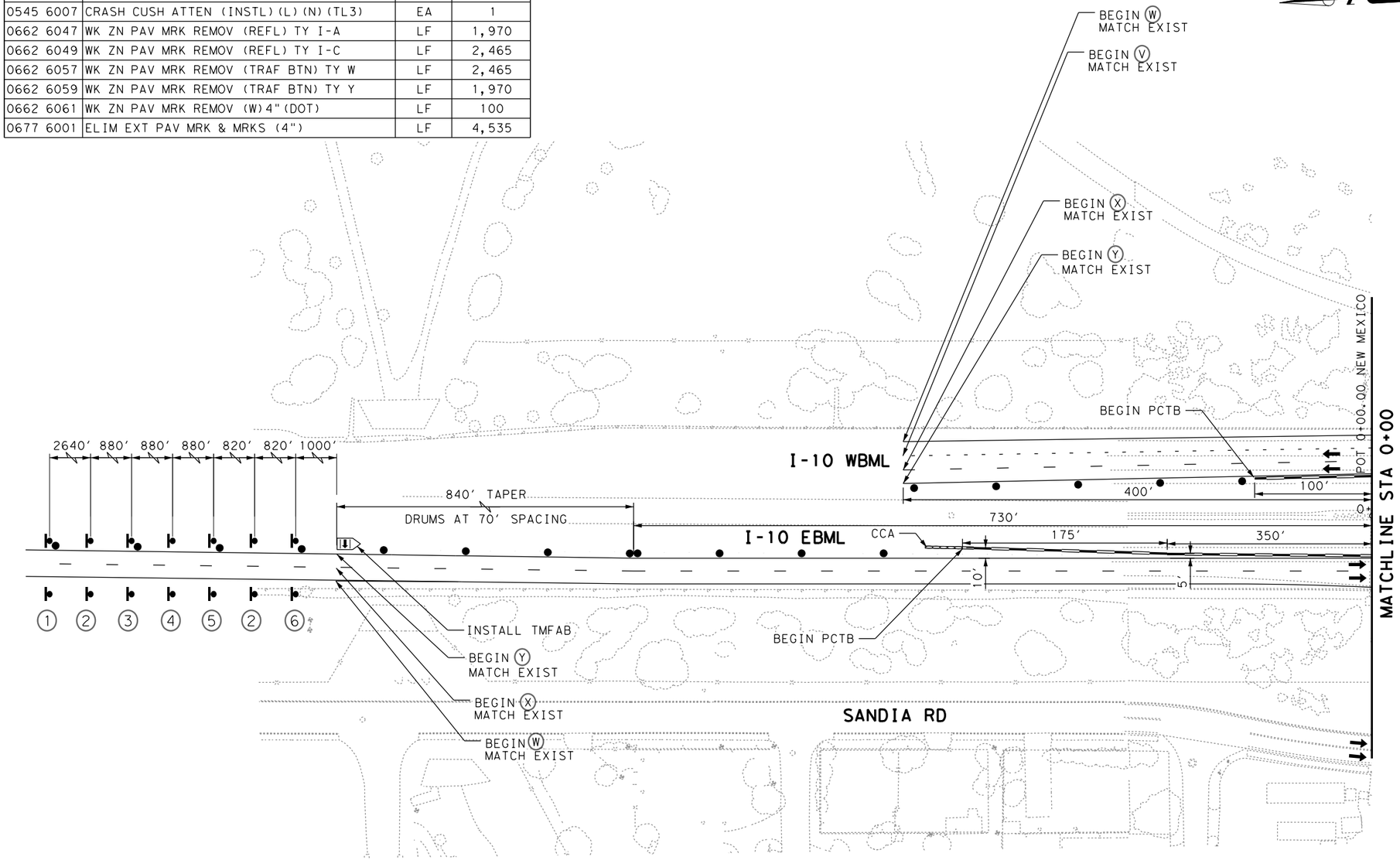
TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0512 6013	PORT CTB (DES SOURCE)(SGL SLP)(TY 1)	LF	625
0545 6007	CRASH CUSH ATTEN (INSTL)(L)(N)(TL3)	EA	1
0662 6047	WK ZN PAV MRK REMOV (REFL) TY I-A	LF	1,970
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	2,465
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	2,465
0662 6059	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	LF	1,970
0662 6061	WK ZN PAV MRK REMOV (W)4"(DOT)	LF	100
0677 6001	ELIM EXT PAV MRK & MRKS (4")	LF	4,535



LEGEND:

- PERM CONSTRUCTION THIS PHASE
- TEMP CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'

(1) CW20-1 48x48 — ROAD WORK 1 1/2 MILE

(2) CW20-8T 48x48 — NARROW LANES AHEAD

(3) CW3-5 48x48 — SPEED LIMIT 60

(4) R2-1 48x60 — SPEED LIMIT 60

(5) CW21-5aL 48x48 — LEFT SHOULDER CLOSED
1/2 MILE
CW16-3aP 30X12

(6) CW21-5aL 48x48 — LEFT SHOULDER CLOSED
NEXT 3 MILES
CW7-3aP 36x30

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ UNLESS OTHERWISE NOTED.
2. TRAFFIC UTILIZES EXISTING PAVEMENT MARKINGS ALONG IH 10 AND FRONTAGE ROADS.
3. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.
4. PROPOSED PERMANENT SIGNS INSTALLED DURING CONSTRUCTION ARE NOT SHOWN ON THIS SHEET. REFER TO SIGNING LAYOUTS SHEETS.
5. PRIOR TO INSTALLING CHANNELIZING DEVICES IN THE STATE OF NEW MEXICO, COORDINATION WITH NMDOT WILL BE ESTABLISHED.
6. ALL PROPOSED CONSTRUCTION ENTRANCE AND EXIT LOCATIONS CAN BE ADJUSTED TO ACCOMODATE SITE CONDITIONS AS APPROVED BY THE ENGINEER.

STATE OF TEXAS
OSCAR D. GONZALEZ
147840
LICENSED
PROFESSIONAL ENGINEER

3/28/2024

NO.	DATE	REVISION	APPROV.

consor
F-12040

Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 2

BEGIN PHASE TO STA 0+00

SHEET 1 OF 22

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		81
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

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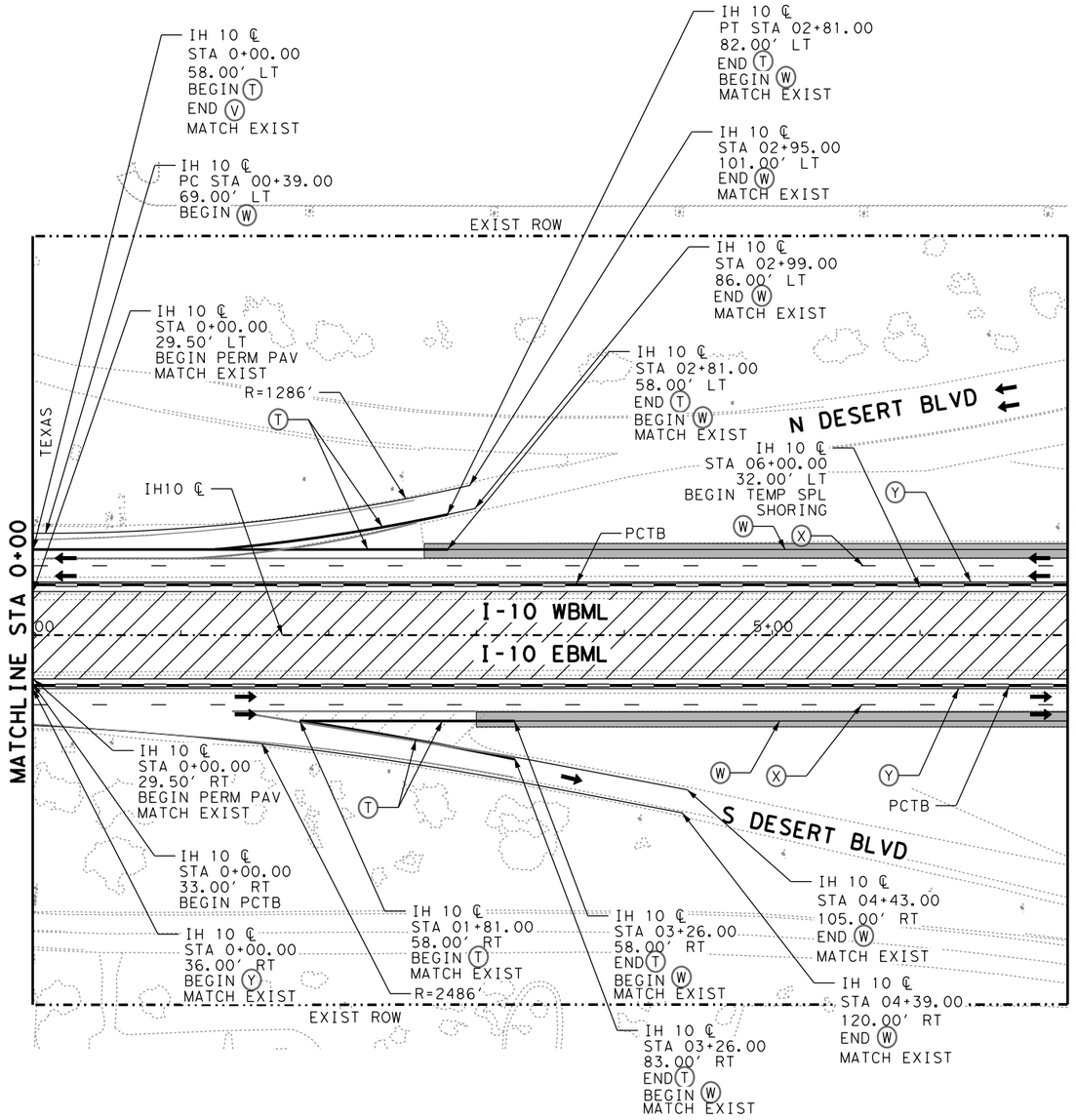

LEGEND:

- PERM CONSTRUCTION THIS PHASE
- TEMP CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0403 6001	TEMPORARY SPL SHORING	SF	408
0512 6013	PORT CTB (DES SOURCE)(SGL SLP)(TY 1)	LF	1,400
0662 6047	WK ZN PAV MRK REMOV (REFL) TY I-A	LF	1,400
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	2,015
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	2,015
0662 6059	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	LF	1,400
0662 6071	WK ZN PAV MRK REMOV (W)8"(SLD)	LF	775
0677 6001	ELIM EXT PAV MRK & MRKS (4")	LF	3,415
0677 6003	ELIM EXT PAV MRK & MRKS (8")	LF	775

NOTES:

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2. TRAFFIC UTILIZES EXISTING PAVEMENT MARKINGS ALONG IH 10 AND FRONTAGE ROADS.
3. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.
4. PROPOSED PERMANENT SIGNS INSTALLED DURING CONSTRUCTION ARE NOT SHOWN ON THIS SHEET. REFER TO SIGNING LAYOUTS SHEETS.
5. PRIOR TO INSTALLING CHANNELIZING DEVICES IN THE STATE OF NEW MEXICO, COORDINATION WITH NMDOT WILL BE ESTABLISHED.
6. ALL PROPOSED CONSTRUCTION ENTRANCE AND EXIT LOCATIONS CAN BE ADJUSTED TO ACCOMODATE SITE CONDITIONS AS APPROVED BY THE ENGINEER.

STATE OF TEXAS
OSCAR D. GONZALEZ
147840
LICENSED
PROFESSIONAL ENGINEER

3/28/2024

NO.	DATE	REVISION	APPROV.

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F-12040

Texas Department of Transportation

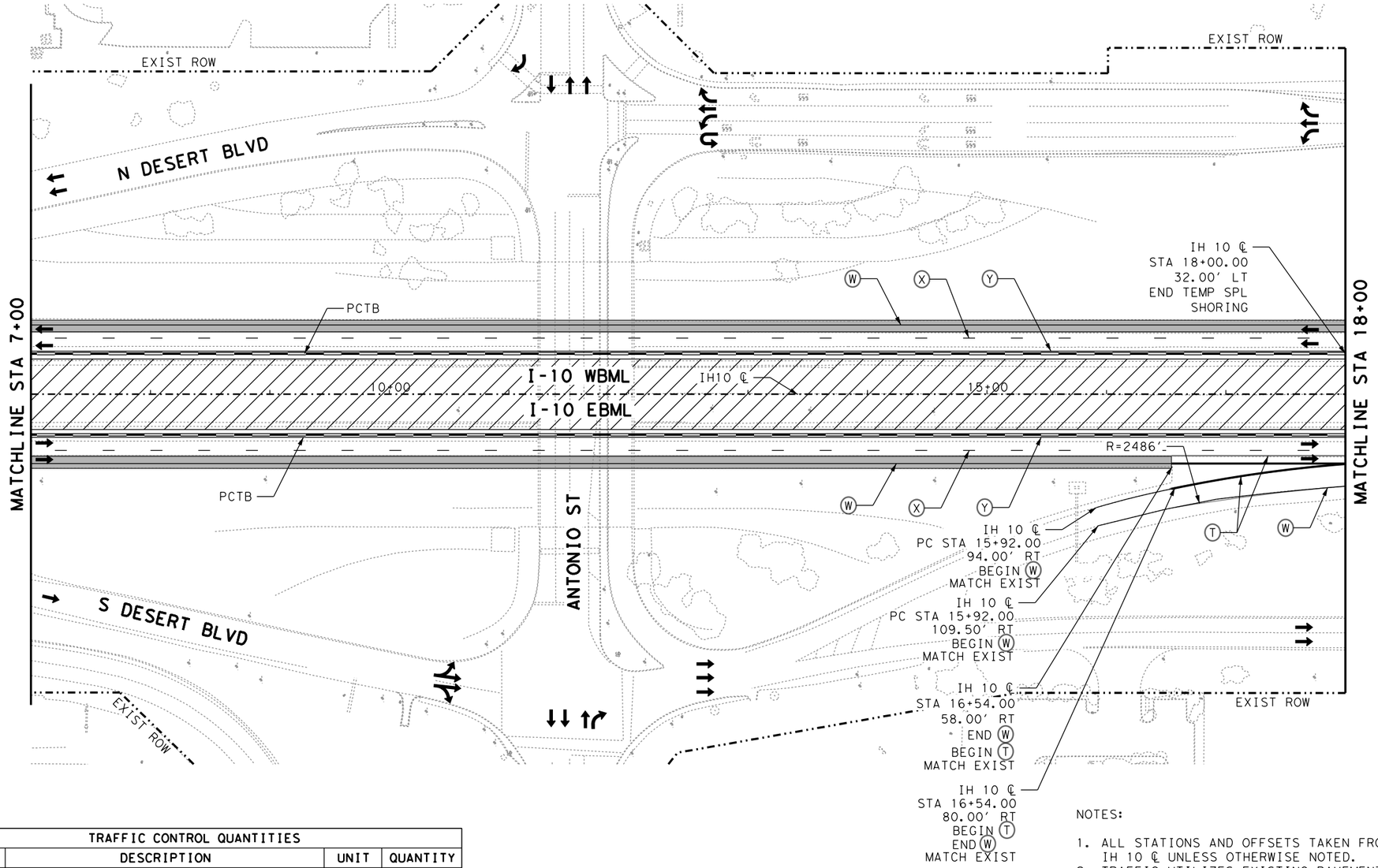
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 2

STA 0+00 TO STA 7+00

SHEET 2 OF 22

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		82
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- PERM CONSTRUCTION THIS PHASE
- TEMP CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0403 6001	TEMPORARY SPL SHORING	SF	5,500
0512 6013	PORT CTB (DES SOURCE)(SGL SLP)(TY 1)	LF	2,200
0662 6047	WK ZN PAV MRK REMOV (REFL) TY I-A	LF	2,200
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	2,875
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	2,875
0662 6059	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	LF	2,200
0662 6071	WK ZN PAV MRK REMOV (W)8"(SLD)	LF	380
0677 6001	ELIM EXT PAV MRK & MRKS (4")	LF	5,013
0677 6003	ELIM EXT PAV MRK & MRKS (8")	LF	380

NOTES:

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2. TRAFFIC UTILIZES EXISTING PAVEMENT MARKINGS ALONG IH 10 AND FRONTAGE ROADS.
3. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.
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STATE OF TEXAS
OSCAR D. GONZALEZ
147840
LICENSED
PROFESSIONAL ENGINEER
3/28/2024

NO.	DATE	REVISION	APPROV.

consor
F-12040

Texas Department of Transportation

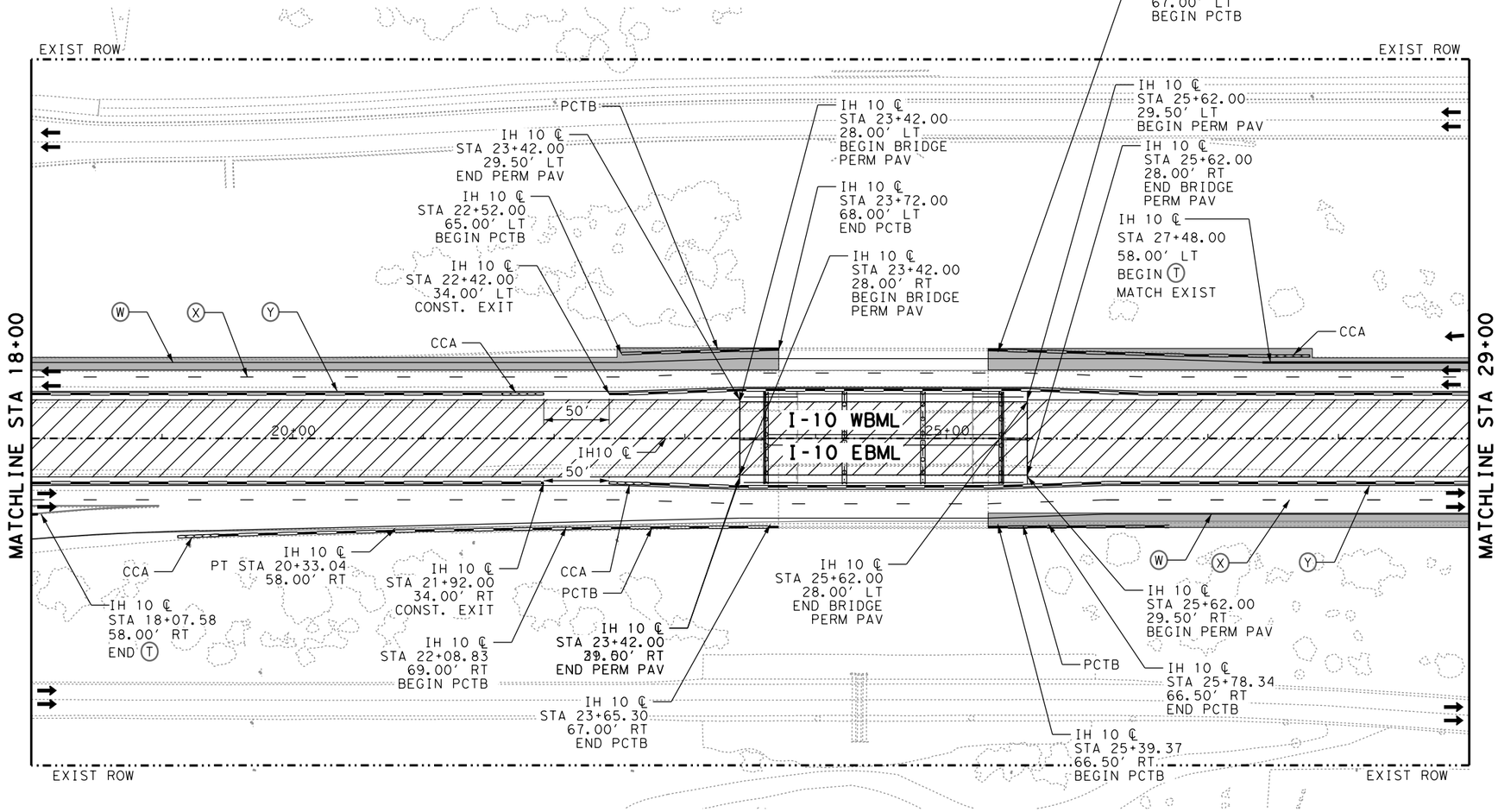
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN
STAGE 2

STA 7+00 TO STA 18+00

SHEET 3 OF 22

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		83
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- PERM CONSTRUCTION THIS PHASE
- TEMP CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- Ⓣ WRK ZN PAV MRK (W)(8")(SLD)
- Ⓥ WRK ZN PAV MRK (W)(4")(DOT)
- Ⓦ WHITE EDGE LINE (RAISED PAV MRK)
- Ⓧ WHITE LANE LINE (RAISED PAV MRK)
- Ⓨ YELLOW EDGE LINE (RAISED PAV MRK)
- Ⓩ EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0512 6013	PORT CTB (DES SOURCE)(SGL SLP)(TY 1)	LF	2,937
0545 6005	CRASH CUSH ATTEN (REMOVE)	EA	3
0545 6007	CRASH CUSH ATTEN (INSTL)(L)(N)(TL3)	EA	4
0662 6047	WK ZN PAV MRK REMOV (REFL) TY I-A	LF	2,200
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	2,750
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	2,750
0662 6059	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	LF	2,200
0662 6071	WK ZN PAV MRK REMOV (W)8"(SLD)	LF	10
0677 6001	ELIM EXT PAV MRK & MRKS (4")	LF	4,950
0677 6003	ELIM EXT PAV MRK & MRKS (8")	LF	10

NOTES:

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STATE OF TEXAS
OSCAR D. GONZALEZ
147840
PROFESSIONAL ENGINEER
3/28/2024

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Texas Department of Transportation

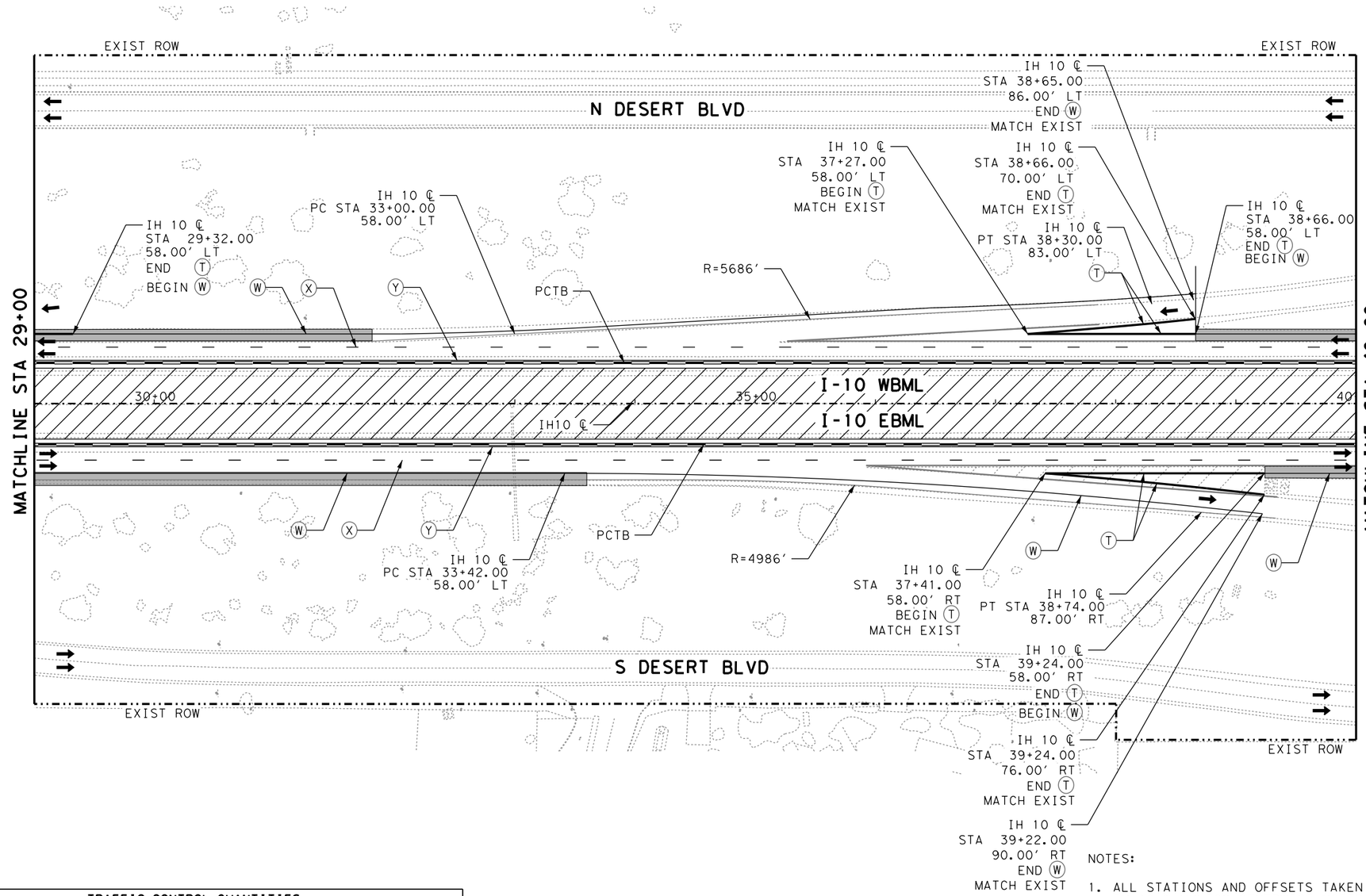
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 2

STA 18+00 TO STA 29+00

SHEET 4 OF 22

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		84
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- PERM CONSTRUCTION THIS PHASE
- TEMP CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0512 6013	PORT CTB (DES SOURCE)(SGL SLP)(TY 1)	LF	2,200
0662 6047	WK ZN PAV MRK REMOV (REFL) TY I-A	LF	2,200
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	2,702
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	2,702
0662 6059	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	LF	2,200
0662 6071	WK ZN PAV MRK REMOV (W)8"(SLD)	LF	598
0677 6001	ELIM EXT PAV MRK & MRKS (4")	LF	4,902
0677 6003	ELIM EXT PAV MRK & MRKS (8")	LF	689

NOTES:

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STATE OF TEXAS
OSCAR D. GONZALEZ
147840
LICENSED
PROFESSIONAL ENGINEER

3/28/2024

NO.	DATE	REVISION	APPROV.

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F-12040

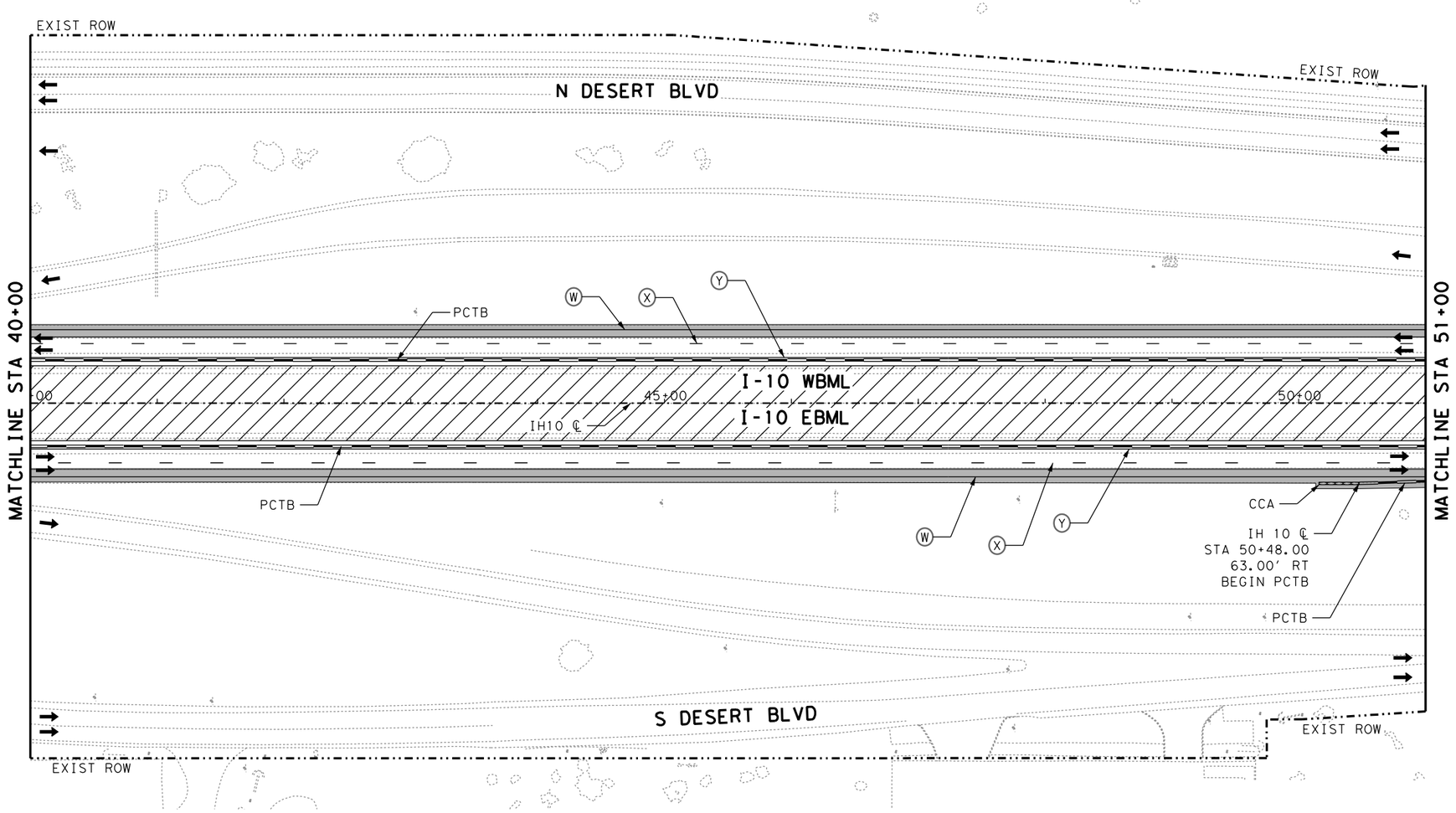
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 2

STA 29+00 TO STA 40+00

SHEET 5 OF 22

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		85
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- PERM CONSTRUCTION THIS PHASE
- TEMP CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0512 6013	PORT CTB (DES SOURCE)(SGL SLP)(TY 1)	LF	2,253
0545 6005	CRASH CUSH ATTEN (REMOVE)	EA	1
0545 6007	CRASH CUSH ATTEN (INSTL)(L)(N)(TL3)	EA	1
0662 6047	WK ZN PAV MRK REMOV (REFL) TY I-A	LF	2,200
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	2,750
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	2,750
0662 6059	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	LF	2,200
0677 6001	ELIM EXT PAV MRK & MRKS (4")	LF	4,950

NOTES:

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2. TRAFFIC UTILIZES EXISTING PAVEMENT MARKINGS ALONG IH 10 AND FRONTAGE ROADS.
3. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.
4. PROPOSED PERMANENT SIGNS INSTALLED DURING CONSTRUCTION ARE NOT SHOWN ON THIS SHEET. REFER TO SIGNING LAYOUTS SHEETS.
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STATE OF TEXAS
OSCAR D. GONZALEZ
147840
LICENSED
PROFESSIONAL ENGINEER

3/28/2024

NO.	DATE	REVISION	APPROV.

consor
F-12040

Texas Department of Transportation

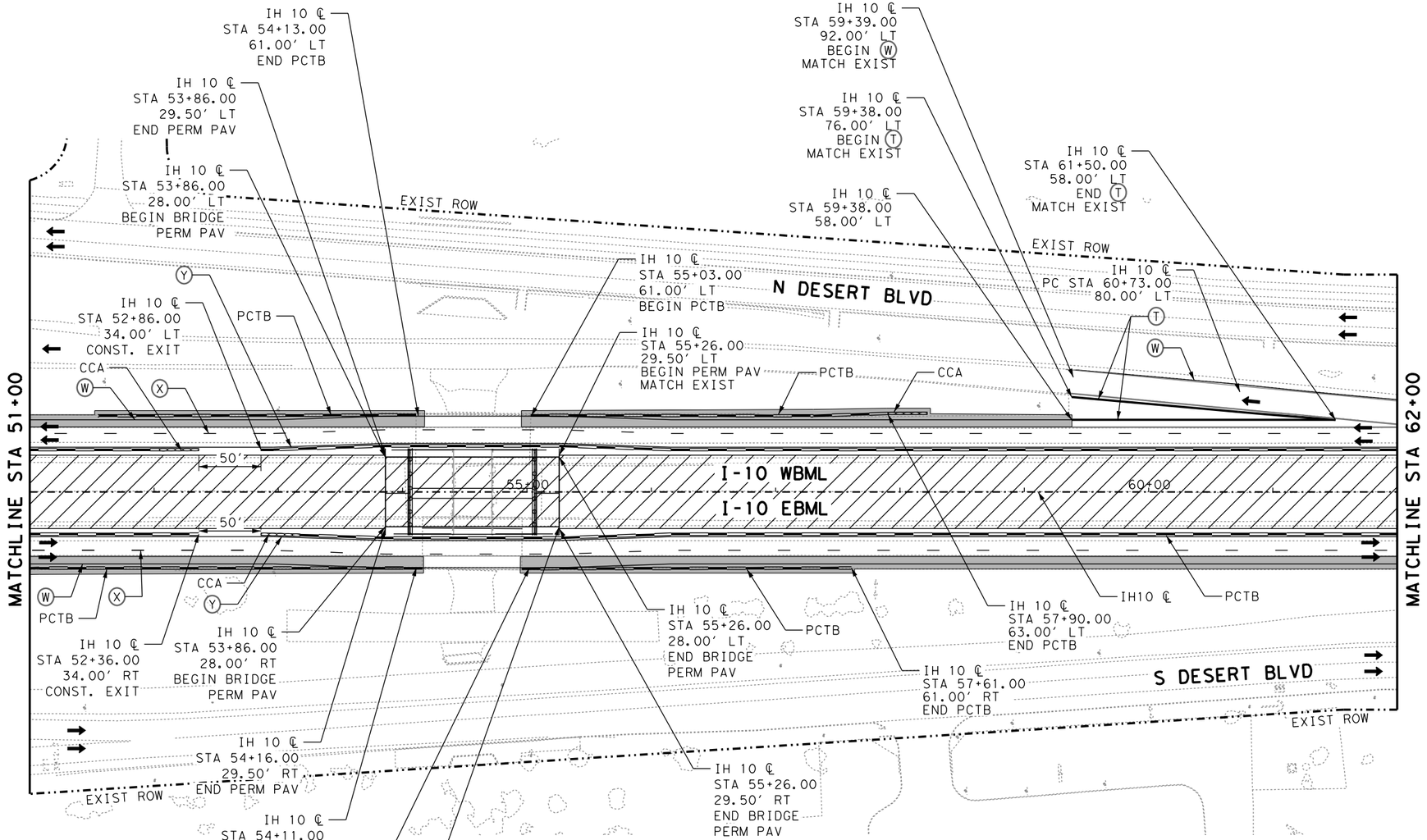
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 2

STA 40+00 TO STA 51+00

SHEET 6 OF 22

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		86
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- PERM CONSTRUCTION THIS PHASE
- TEMP CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0512 6013	PORT CTB (DES SOURCE)(SGL SLP)(TY 1)	LF	3,160
0545 6007	CRASH CUSH ATTEN (INSTL)(L)(N)(TL3)	EA	3
0662 6047	WK ZN PAV MRK REMOV (REFL) TY I-A	LF	2,200
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	2,747
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	2,747
0662 6059	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	LF	2,200
0662 6071	WK ZN PAV MRK REMOV (W)8"(SLD)	LF	425
0677 6001	ELIM EXT PAV MRK & MRKS (4")	LF	4,947
0677 6003	ELIM EXT PAV MRK & MRKS (8")	LF	425

NOTES:

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STATE OF TEXAS
OSCAR D. GONZALEZ
147840
LICENSED
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3/28/2024

NO.	DATE	REVISION	APPROV.

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Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 2

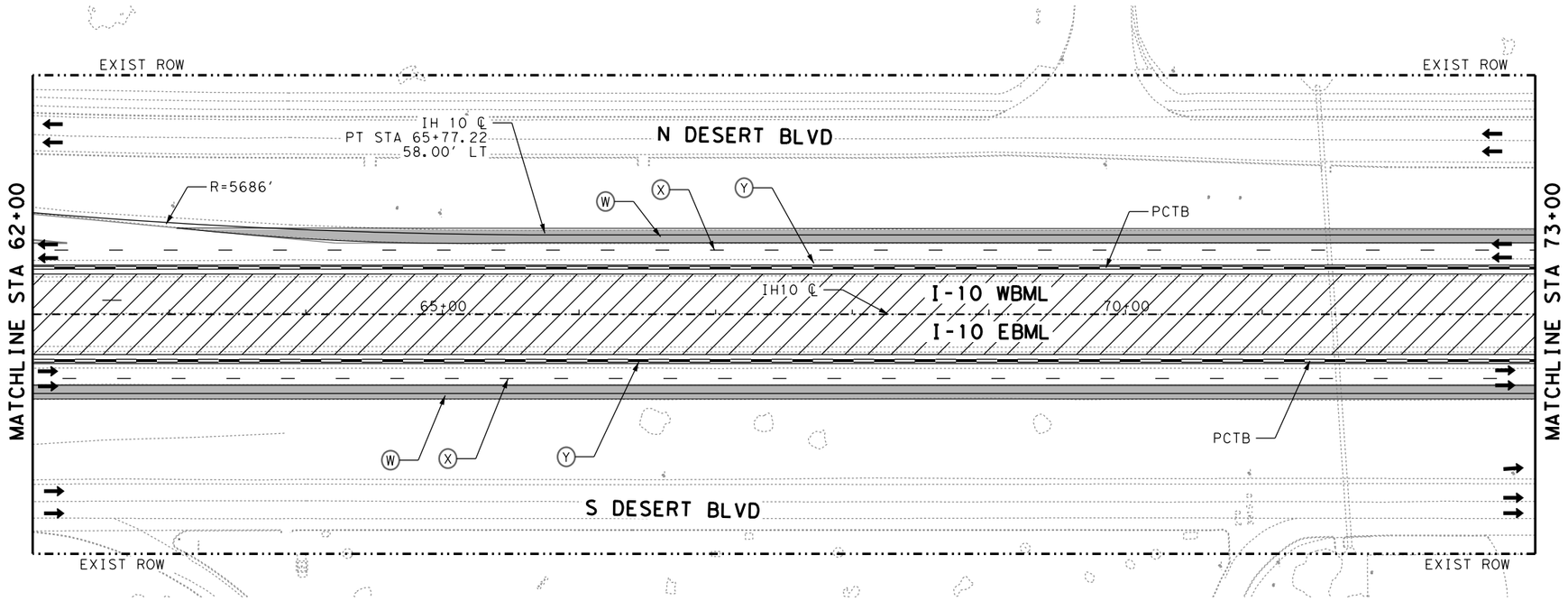
STA 51+00 TO STA 62+00

SHEET 7 OF 22

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		87
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

LEGEND:

- PERM CONSTRUCTION THIS PHASE
- TEMP CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR



0 50' 100'
SCALE: 1" = 100'

STATE OF TEXAS
OSCAR D. GONZALEZ
147840
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PROFESSIONAL ENGINEER

3/28/2024

NO.	DATE	REVISION	APPROV.

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F-12040

Texas Department of Transportation

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0512 6013	PORT CTB (DES SOURCE)(SGL SLP)(TY 1)	LF	2,200
0662 6047	WK ZN PAV MRK REMOV (REFL) TY I-A	LF	2,200
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	3,235
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	3,235
0662 6059	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	LF	2,200
0677 6001	ELIM EXT PAV MRK & MRKS (4")	LF	5,435

NOTES:

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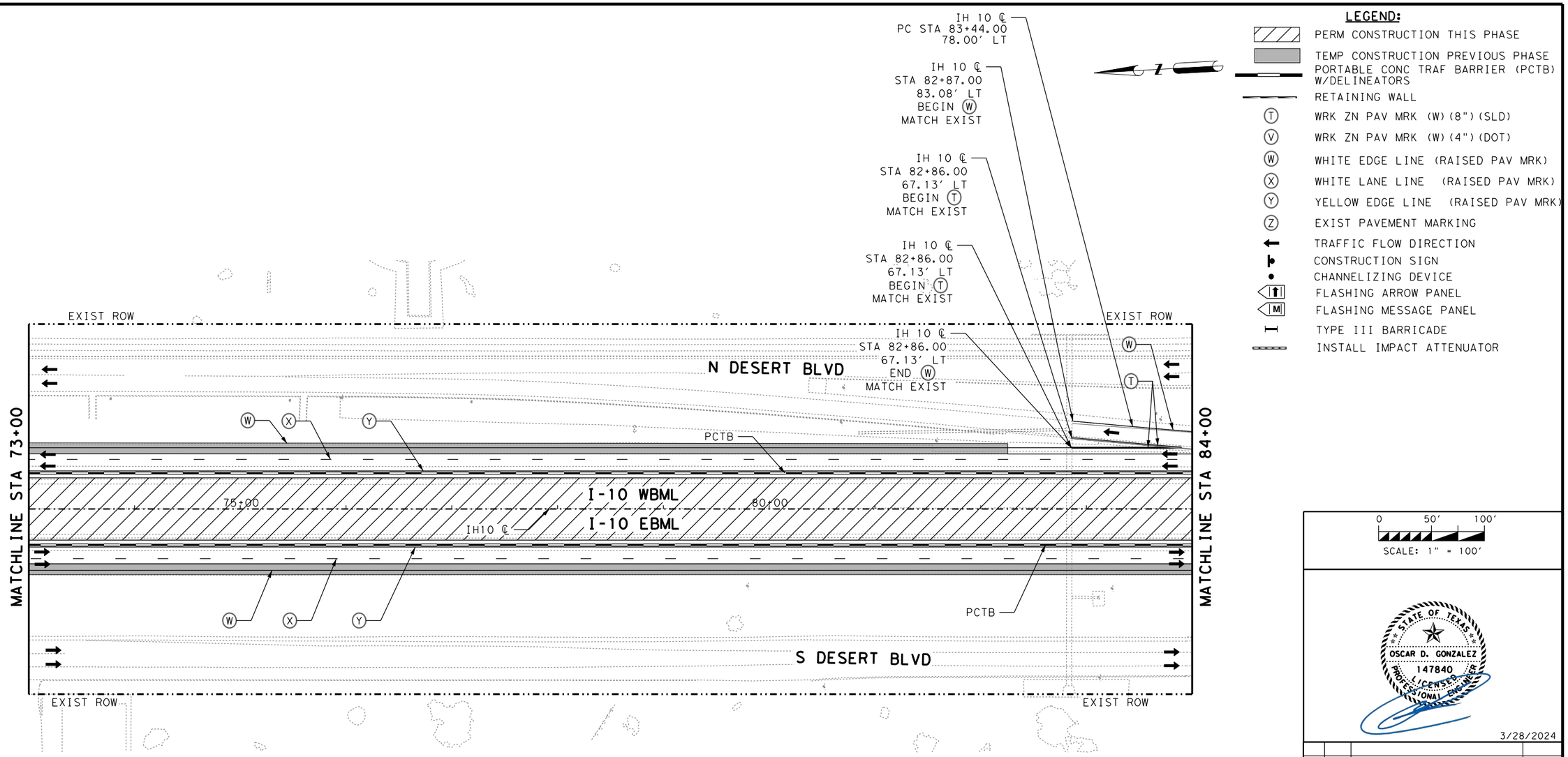
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 2

STA 62+00 TO STA 73+00

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		88
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0512 6001	PORT CTB (FUR & INST)(SGL SLOPE)(TY 1)	LF	1,175
0512 6013	PORT CTB (DES SOURCE)(SGL SLP)(TY 1)	LF	1,025
0662 6047	WK ZN PAV MRK REMOV (REFL) TY I-A	LF	2,200
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	2,750
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	2,750
0662 6059	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	LF	2,200
0662 6071	WK ZN PAV MRK REMOV (W)8"(SLD)	LF	209
0677 6001	ELIM EXT PAV MRK & MRKS (4")	LF	4,950
0677 6003	ELIM EXT PAV MRK & MRKS (8")	LF	209

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ UNLESS OTHERWISE NOTED.
2. TRAFFIC UTILIZES EXISTING PAVEMENT MARKINGS ALONG IH 10 AND FRONTAGE ROADS.
3. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.
4. PROPOSED PERMANENT SIGNS INSTALLED DURING CONSTRUCTION ARE NOT SHOWN ON THIS SHEET. REFER TO SIGNING LAYOUTS SHEETS.
5. PRIOR TO INSTALLING CHANNELIZING DEVICES IN THE STATE OF NEW MEXICO, COORDINATION WITH NMDOT WILL BE ESTABLISHED.
6. ALL PROPOSED CONSTRUCTION ENTRANCE AND EXIT LOCATIONS CAN BE ADJUSTED TO ACCOMODATE SITE CONDITIONS AS APPROVED BY THE ENGINEER.

STATE OF TEXAS
OSCAR D. GONZALEZ
147840
LICENSED
PROFESSIONAL ENGINEER

3/28/2024

NO.	DATE	REVISION	APPROV.

consor
F-12040

Texas Department of Transportation

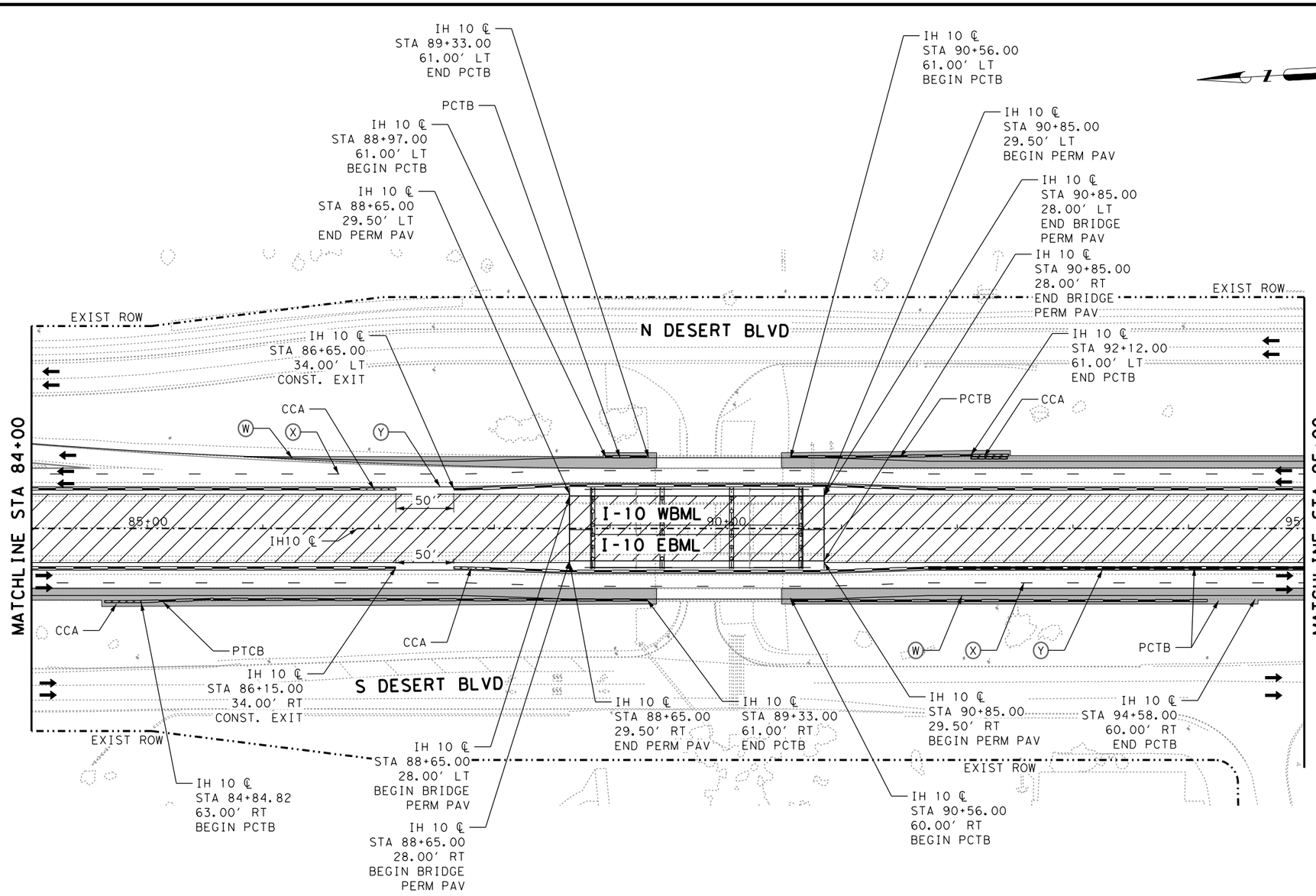
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN
STAGE 2

STA 73+00 TO STA 84+00

SHEET 9 OF 22

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		89
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- PERM CONSTRUCTION THIS PHASE
- TEMP CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0512 6001	PORT CTB (FUR & INST)(SGL SLOPE)(TY 1)	LF	3,056
0545 6005	CRASH CUSH ATTEN (REMOVE)	EA	4
0545 6007	CRASH CUSH ATTEN (INSTL)(L)(N)(TL3)	EA	4
0662 6047	WK ZN PAV MRK REMOV (REFL) TY I-A	LF	2,200
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	2,750
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	2,750
0662 6059	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	LF	2,200
0677 6001	ELIM EXT PAV MRK & MRKS (4")	LF	4,950

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ UNLESS OTHERWISE NOTED.
2. TRAFFIC UTILIZES EXISTING PAVEMENT MARKINGS ALONG IH 10 AND FRONTAGE ROADS.
3. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.
4. PROPOSED PERMANENT SIGNS INSTALLED DURING CONSTRUCTION ARE NOT SHOWN ON THIS SHEET. REFER TO SIGNING LAYOUTS SHEETS.
5. PRIOR TO INSTALLING CHANNELIZING DEVICES IN THE STATE OF NEW MEXICO, COORDINATION WITH NMDOT WILL BE ESTABLISHED.
6. ALL PROPOSED CONSTRUCTION ENTRANCE AND EXIT LOCATIONS CAN BE ADJUSTED TO ACCOMODATE SITE CONDITIONS AS APPROVED BY THE ENGINEER.

OSCAR D. GONZALEZ
147840
PROFESSIONAL ENGINEER
STATE OF TEXAS

3/28/2024

NO.	DATE	REVISION	APPROV.

consor
F-12040

Texas Department of Transportation

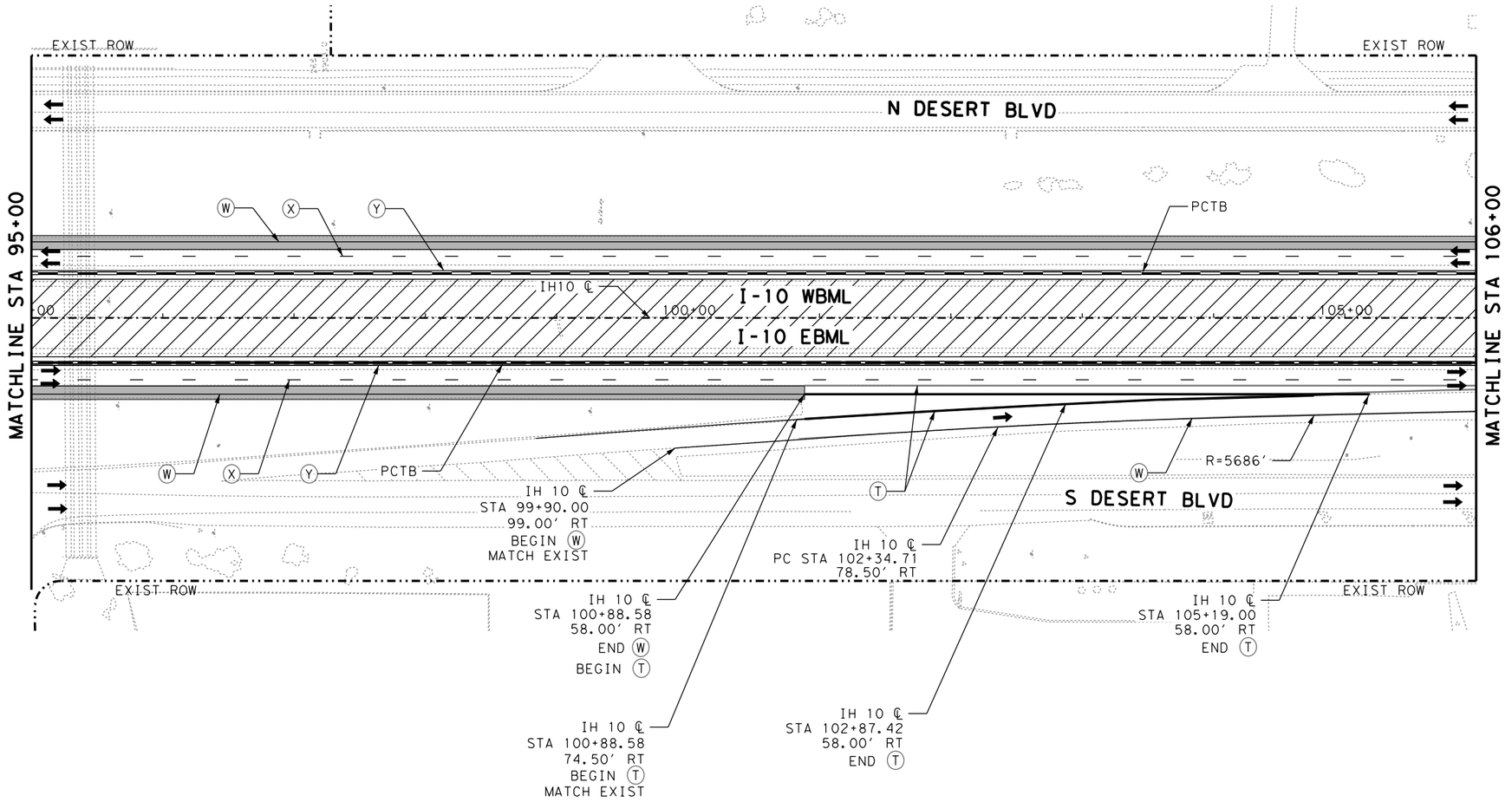
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN
STAGE 2

STA 84+00 TO STA 95+00

SHEET 10 OF 22

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		90
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- PERM CONSTRUCTION THIS PHASE
- TEMP CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0512 6001	PORT CTB (FUR & INST)(SGL SLOPE)(TY 1)	LF	2,200
0662 6047	WK ZN PAV MRK REMOV (REFL) TY I-A	LF	2,200
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	3,054
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	3,054
0662 6059	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	LF	2,200
0662 6071	WK ZN PAV MRK REMOV (W)8"(SLD)	LF	861
0677 6001	ELIM EXT PAV MRK & MRKS (4")	LF	5,254
0677 6003	ELIM EXT PAV MRK & MRKS (8")	LF	861

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ UNLESS OTHERWISE NOTED.
2. TRAFFIC UTILIZES EXISTING PAVEMENT MARKINGS ALONG IH 10 AND FRONTAGE ROADS.
3. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.
4. PROPOSED PERMANENT SIGNS INSTALLED DURING CONSTRUCTION ARE NOT SHOWN ON THIS SHEET. REFER TO SIGNING LAYOUTS SHEETS.
5. PRIOR TO INSTALLING CHANNELIZING DEVICES IN THE STATE OF NEW MEXICO, COORDINATION WITH NMDOT WILL BE ESTABLISHED.
6. ALL PROPOSED CONSTRUCTION ENTRANCE AND EXIT LOCATIONS CAN BE ADJUSTED TO ACCOMODATE SITE CONDITIONS AS APPROVED BY THE ENGINEER.

STATE OF TEXAS
OSCAR D. GONZALEZ
147840
LICENSED
PROFESSIONAL ENGINEER
3/28/2024

NO.	DATE	REVISION	APPROV.

consor
F-12040

Texas Department of Transportation

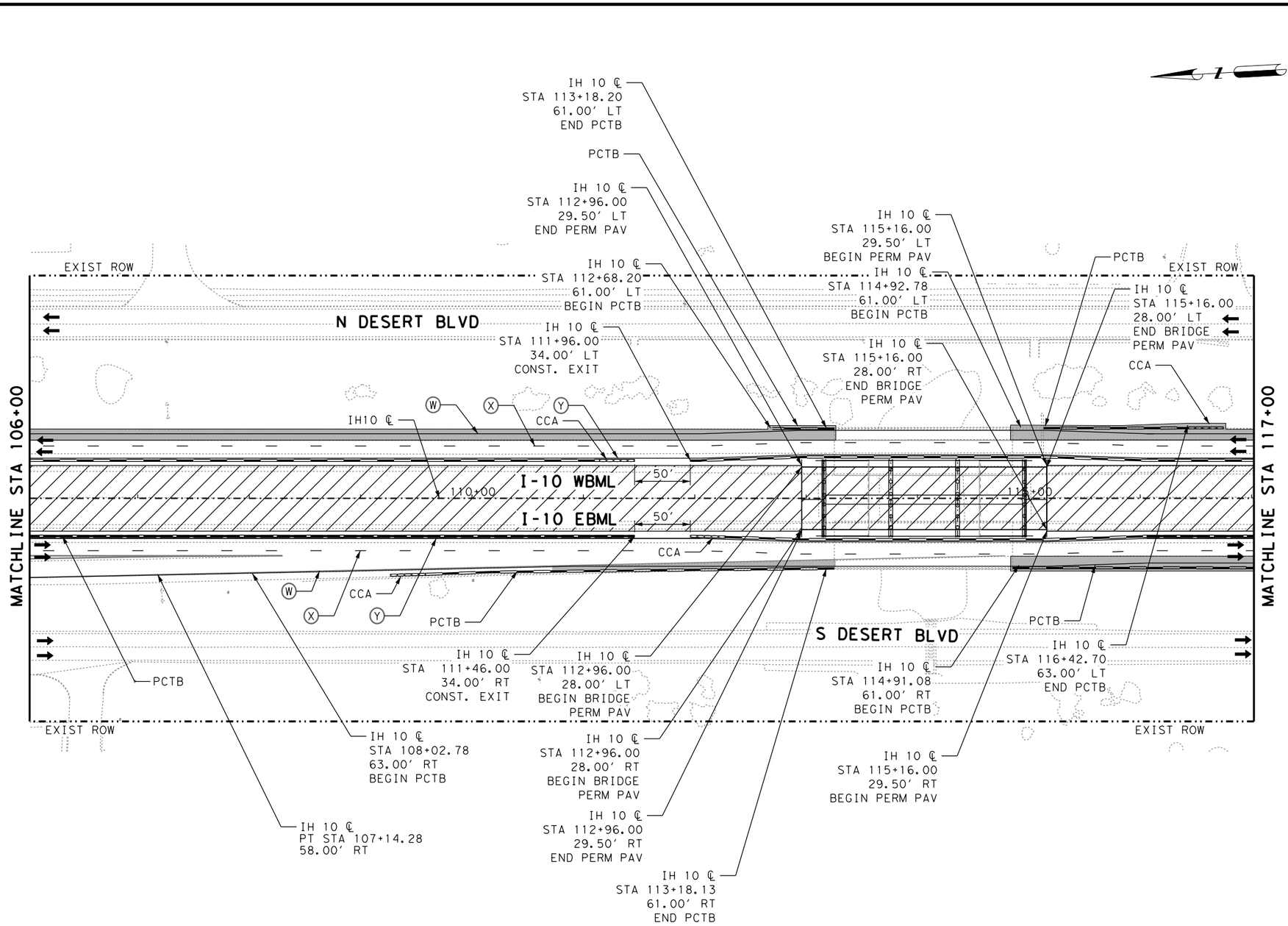
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 2

STA 95+00 TO STA 106+00

SHEET 11 OF 22

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		91
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- PERM CONSTRUCTION THIS PHASE
- TEMP CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50′ 100′
SCALE: 1" = 100′

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0512 6001	PORT CTB (FUR & INST)(SGL SLOPE)(TY 1)	LF	2,804
0545 6005	CRASH CUSH ATTEN (REMOVE)	EA	2
0545 6007	CRASH CUSH ATTEN (INSTL)(L)(N)(TL3)	EA	4
0662 6047	WK ZN PAV MRK REMOV (REFL) TY I-A	LF	2,200
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	2,750
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	2,750
0662 6059	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	LF	2,200
0677 6001	ELIM EXT PAV MRK & MRKS (4")	LF	4,950

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ UNLESS OTHERWISE NOTED.
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3. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.
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6. ALL PROPOSED CONSTRUCTION ENTRANCE AND EXIT LOCATIONS CAN BE ADJUSTED TO ACCOMODATE SITE CONDITIONS AS APPROVED BY THE ENGINEER.

STATE OF TEXAS
OSCAR D. GONZALEZ
147840
LICENSED
PROFESSIONAL ENGINEER

3/28/2024

NO.	DATE	REVISION	APPROV.

consor
F-12040

Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 2

STA 106+00 TO STA 117+00

SHEET 12 OF 22

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		92
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

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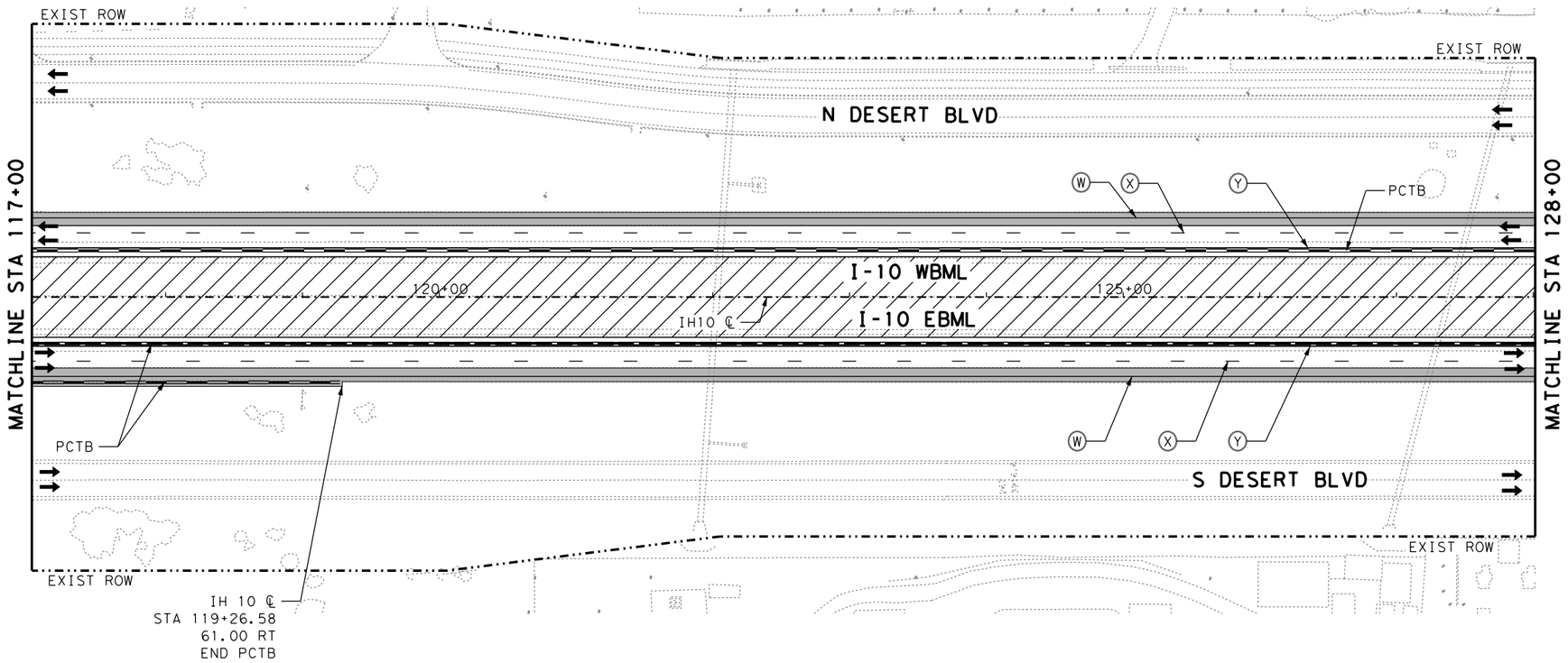

LEGEND:

- PERM CONSTRUCTION THIS PHASE
- TEMP CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50′ 100′
SCALE: 1" = 100′

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0512 6001	PORT CTB (FUR & INST)(SGL SLOPE)(TY 1)	LF	2,447
0662 6047	WK ZN PAV MRK REMOV (REFL) TY I-A	LF	2,200
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	2,750
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	2,750
0662 6059	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	LF	2,200
0677 6001	ELIM EXT PAV MRK & MRKS (4")	LF	4,950

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ UNLESS OTHERWISE NOTED.
2. TRAFFIC UTILIZES EXISTING PAVEMENT MARKINGS ALONG IH 10 AND FRONTAGE ROADS.
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STATE OF TEXAS
OSCAR D. GONZALEZ
147840
LICENSED
PROFESSIONAL ENGINEER

3/28/2024

NO.	DATE	REVISION	APPROV.

consor
F-12040

Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

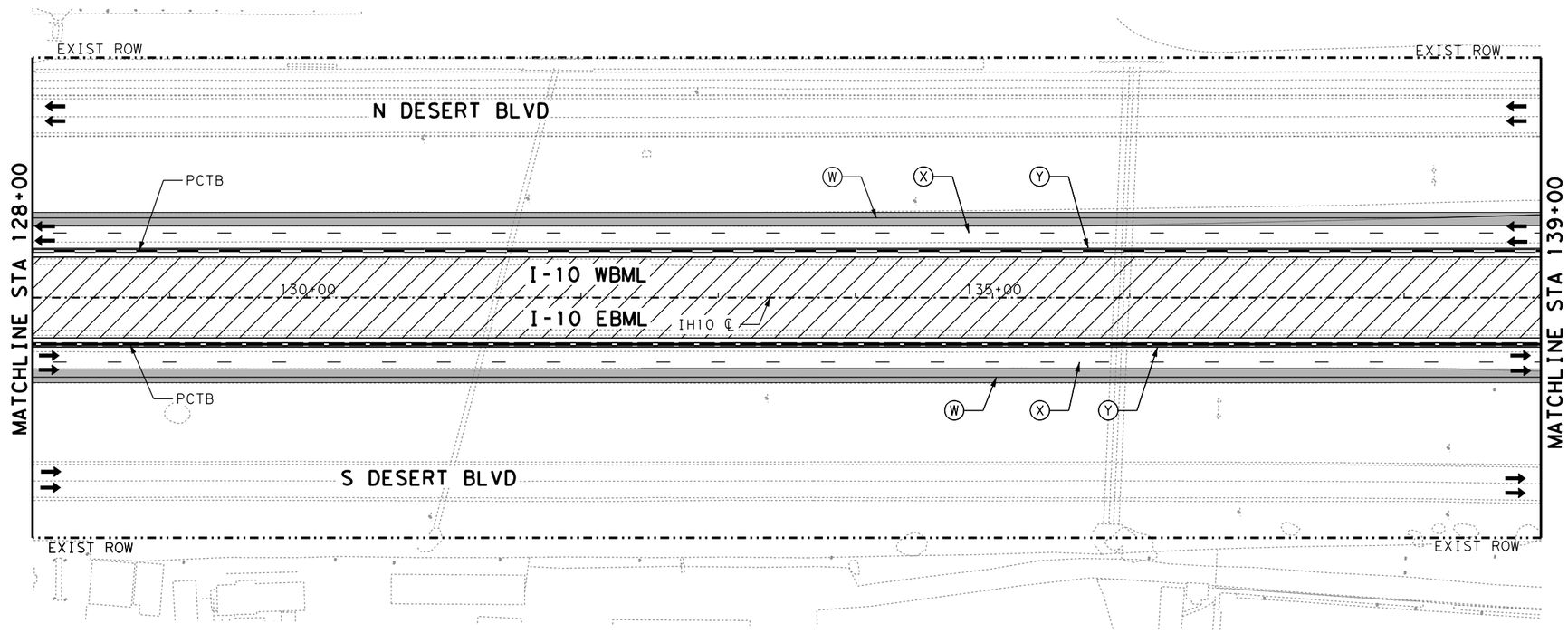
TRAFFIC CONTROL PLAN STAGE 2

STA 117+00 TO STA 128+00
SHEET 13 OF 22

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		93
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

LEGEND:

- PERM CONSTRUCTION THIS PHASE
- TEMP CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR



TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0512 6001	PORT CTB (FUR & INST)(SGL SLOPE)(TY 1)	LF	2,200
0662 6047	WK ZN PAV MRK REMOV (REFL) TY I-A	LF	2,200
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	2,750
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	2,750
0662 6059	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	LF	2,200
0677 6001	ELIM EXT PAV MRK & MRKS (4")	LF	4,950

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ UNLESS OTHERWISE NOTED.
2. TRAFFIC UTILIZES EXISTING PAVEMENT MARKINGS ALONG IH 10 AND FRONTAGE ROADS.
3. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.
4. PROPOSED PERMANENT SIGNS INSTALLED DURING CONSTRUCTION ARE NOT SHOWN ON THIS SHEET. REFER TO SIGNING LAYOUTS SHEETS.
5. PRIOR TO INSTALLING CHANNELIZING DEVICES IN THE STATE OF NEW MEXICO, COORDINATION WITH NMDOT WILL BE ESTABLISHED.
6. ALL PROPOSED CONSTRUCTION ENTRANCE AND EXIT LOCATIONS CAN BE ADJUSTED TO ACCOMODATE SITE CONDITIONS AS APPROVED BY THE ENGINEER.

0 50′ 100′
SCALE: 1" = 100′

STATE OF TEXAS
OSCAR D. GONZALEZ
147840
LICENSED
PROFESSIONAL ENGINEER

3/28/2024

NO.	DATE	REVISION	APPROV.

consor
F-12040

Texas Department of Transportation

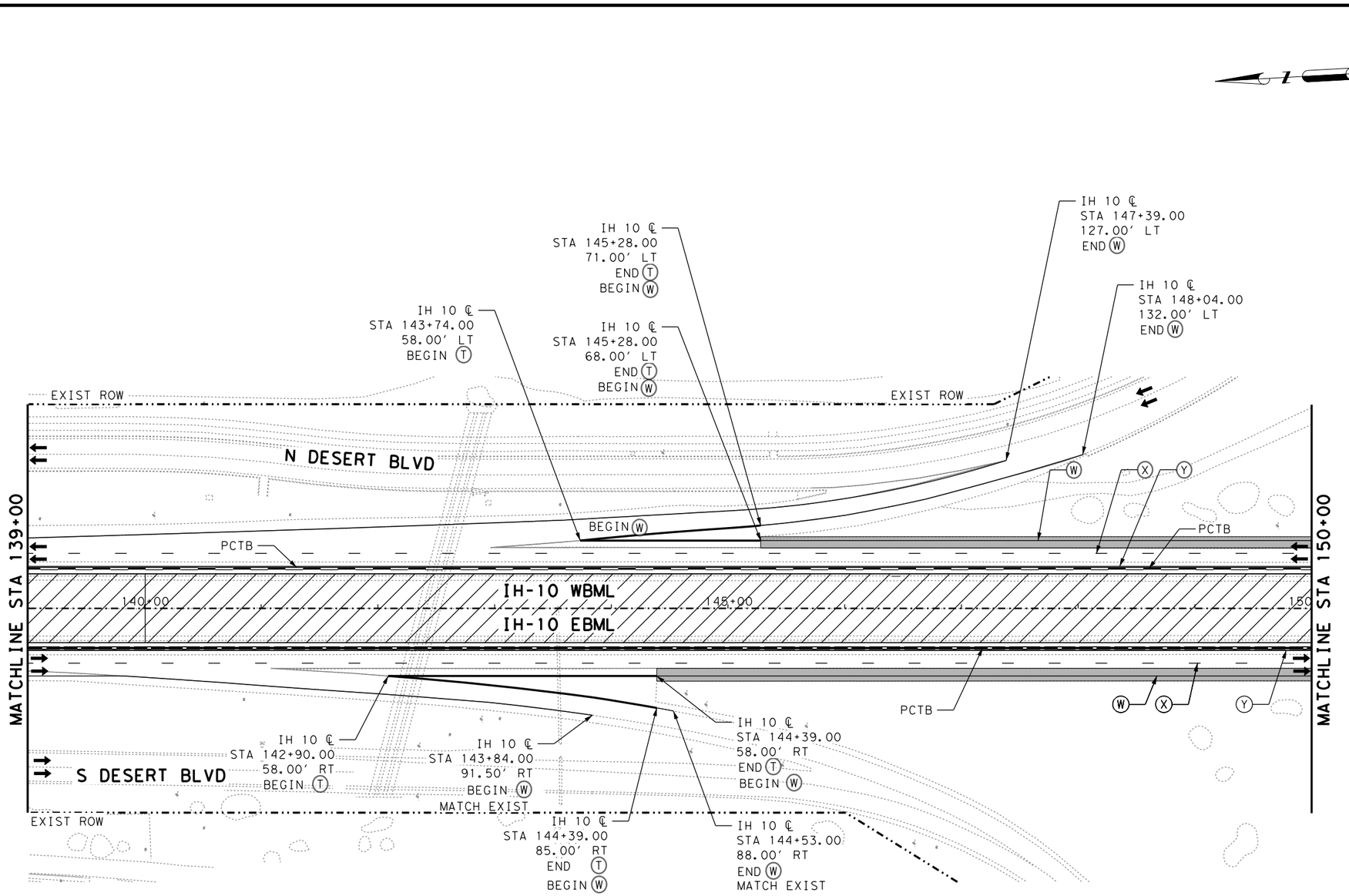
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 2

STA 128+00 TO 139+00

SHEET 14 OF 22

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		94
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- PERM CONSTRUCTION THIS PHASE
- TEMP CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0512 6001	PORT CTB (FUR & INST)(SGL SLOPE)(TY 1)	LF	2,200
0662 6047	WK ZN PAV MRK REMOV (REFL) TY I-A	LF	2,200
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	3,195
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	3,195
0662 6059	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	LF	2,200
0662 6071	WK ZN PAV MRK REMOV (W)8"(SLD)	LF	771
0677 6001	ELIM EXT PAV MRK & MRKS (4")	LF	5,395
0677 6003	ELIM EXT PAV MRK & MRKS (8")	LF	771

NOTES:

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3. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.
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STATE OF TEXAS
OSCAR D. GONZALEZ
147840
LICENSED
PROFESSIONAL ENGINEER

3/28/2024

NO.	DATE	REVISION	APPROV.

consor
F-12040

Texas Department of Transportation

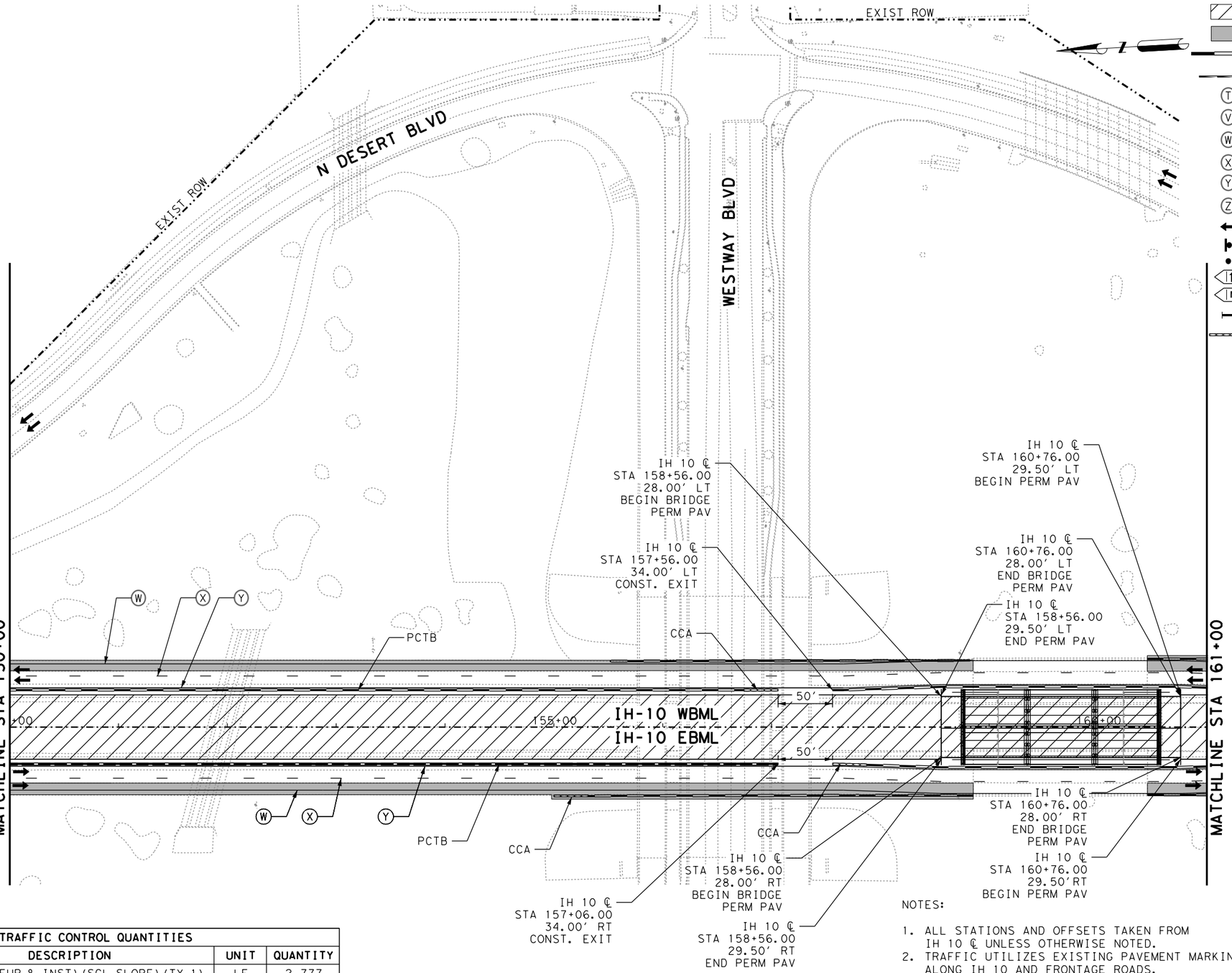
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 2

STA 139+00 TO STA 150+00

SHEET 15 OF 22

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		95
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- PERM CONSTRUCTION THIS PHASE
- TEMP CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0512 6001	PORT CTB (FUR & INST)(SGL SLOPE)(TY 1)	LF	2,777
0545 6005	CRASH CUSH ATTEN (REMOVE)	EA	3
0545 6007	CRASH CUSH ATTEN (INSTL)(L)(N)(TL3)	EA	3
0662 6047	WK ZN PAV MRK REMOV (REFL) TY I-A	LF	2,200
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	2,750
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	2,750
0662 6059	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	LF	2,200
0677 6001	ELIM EXT PAV MRK & MRKS (4")	LF	4,950

NOTES:

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3. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.
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STATE OF TEXAS
OSCAR D. GONZALEZ
147840
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3/28/2024

NO.	DATE	REVISION	APPROV.

consor
F-12040

Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 2

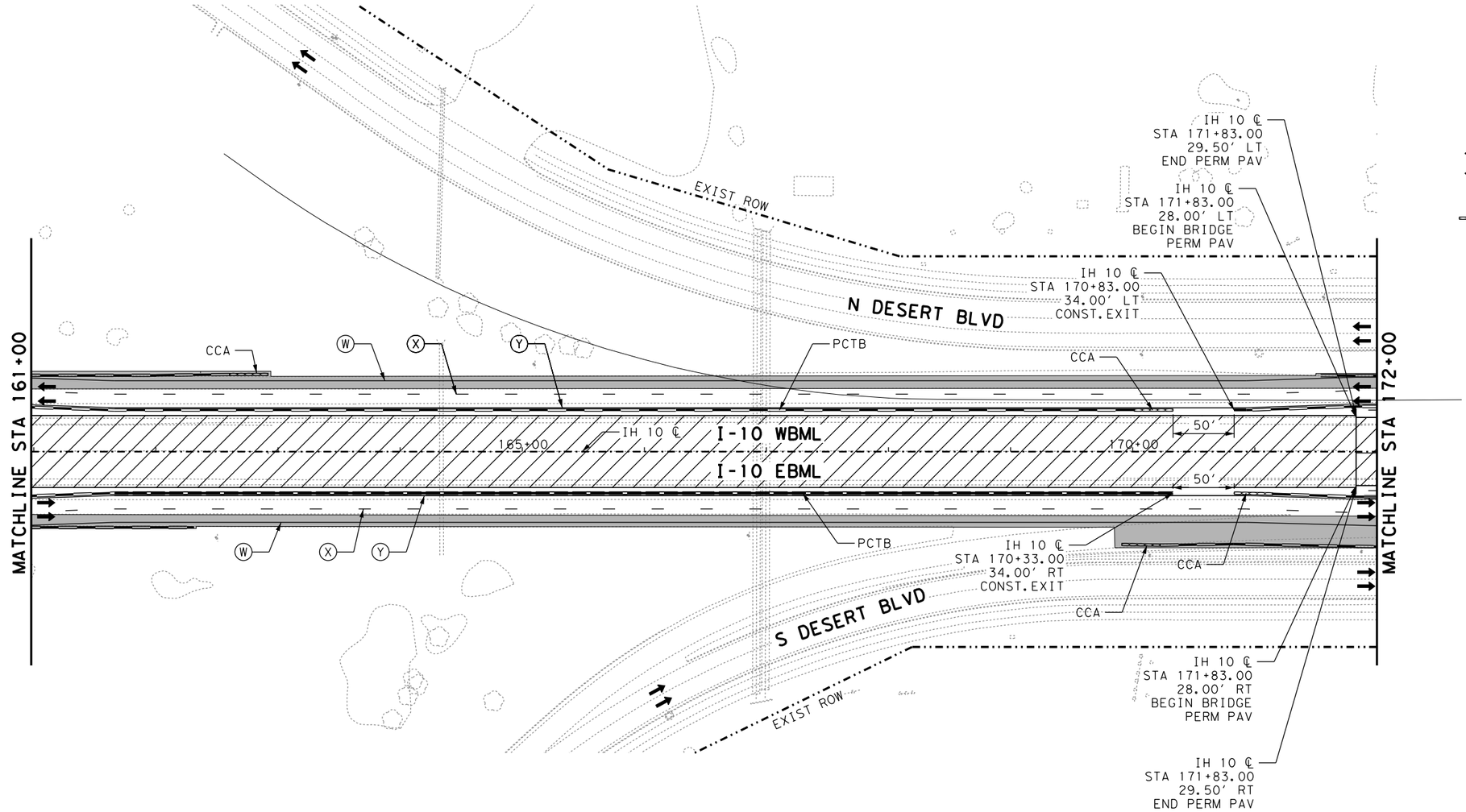
STA 150+00 TO STA 161+00

SHEET 16 OF 22

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		96
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

LEGEND:

- PERM CONSTRUCTION THIS PHASE
- TEMP CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR



TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0512 6001	PORT CTB (FUR & INST)(SGL SLOPE)(TY 1)	LF	2,551
0545 6007	CRASH CUSH ATTEN (INSTL)(L)(N)(TL3)	EA	4
0662 6047	WK ZN PAV MRK REMOV (REFL) TY I-A	LF	2,200
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	2,750
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	2,750
0662 6059	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	LF	2,200
0677 6001	ELIM EXT PAV MRK & MRKS (4")	LF	4,950

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ UNLESS OTHERWISE NOTED.
2. TRAFFIC UTILIZES EXISTING PAVEMENT MARKINGS ALONG IH 10 AND FRONTAGE ROADS.
3. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.
4. PROPOSED PERMANENT SIGNS INSTALLED DURING CONSTRUCTION ARE NOT SHOWN ON THIS SHEET. REFER TO SIGNING LAYOUTS SHEETS.
5. PRIOR TO INSTALLING CHANNELIZING DEVICES IN THE STATE OF NEW MEXICO, COORDINATION WITH NMDOT WILL BE ESTABLISHED.
6. ALL PROPOSED CONSTRUCTION ENTRANCE AND EXIT LOCATIONS CAN BE ADJUSTED TO ACCOMODATE SITE CONDITIONS AS APPROVED BY THE ENGINEER.

0 50' 100'
SCALE: 1" = 100'

STATE OF TEXAS
OSCAR D. GONZALEZ
147840
LICENSED
PROFESSIONAL ENGINEER

3/28/2024

NO.	DATE	REVISION	APPROV.

consor
F-12040

Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 2

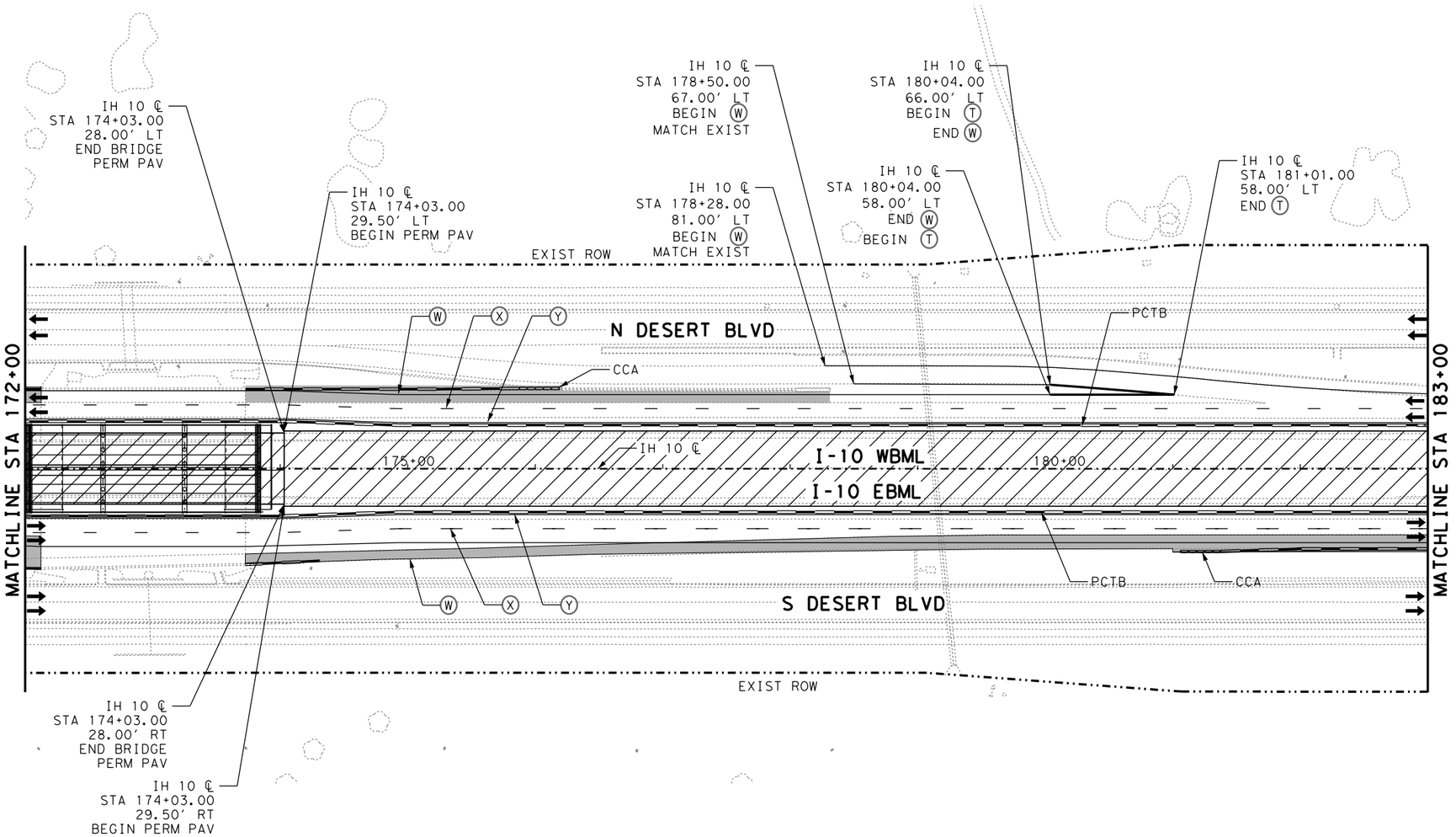
STA 161+00 TO STA 172+00

SHEET 17 OF 22

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		97
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

LEGEND:

- PERM CONSTRUCTION THIS PHASE
- TEMP CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR



TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0512 6001	PORT CTB (FUR & INST)(SGL SLOPE)(TY 1)	LF	2,650
0545 6005	CRASH CUSH ATTEN (REMOVE)	EA	2
0545 6007	CRASH CUSH ATTEN (INSTL)(L)(N)(TL3)	EA	2
0662 6047	WK ZN PAV MRK REMOV (REFL) TY I-A	LF	2,200
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	3,081
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	3,081
0662 6059	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	LF	2,200
0662 6071	WK ZN PAV MRK REMOV (W)8"(SLD)	LF	195
0677 6001	ELIM EXT PAV MRK & MRKS (4")	LF	5,281
0677 6003	ELIM EXT PAV MRK & MRKS (8")	LF	195

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ UNLESS OTHERWISE NOTED.
2. TRAFFIC UTILIZES EXISTING PAVEMENT MARKINGS ALONG IH 10 AND FRONTAGE ROADS.
3. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.
4. PROPOSED PERMANENT SIGNS INSTALLED DURING CONSTRUCTION ARE NOT SHOWN ON THIS SHEET. REFER TO SIGNING LAYOUTS SHEETS.
5. PRIOR TO INSTALLING CHANNELIZING DEVICES IN THE STATE OF NEW MEXICO, COORDINATION WITH NMDOT WILL BE ESTABLISHED.
6. ALL PROPOSED CONSTRUCTION ENTRANCE AND EXIT LOCATIONS CAN BE ADJUSTED TO ACCOMODATE SITE CONDITIONS AS APPROVED BY THE ENGINEER.

0 50' 100'
SCALE: 1" = 100'

STATE OF TEXAS
OSCAR D. GONZALEZ
147840
LICENSED PROFESSIONAL ENGINEER
3/28/2024

NO.	DATE	REVISION	APPROV.

consor
F-12040

Texas Department of Transportation

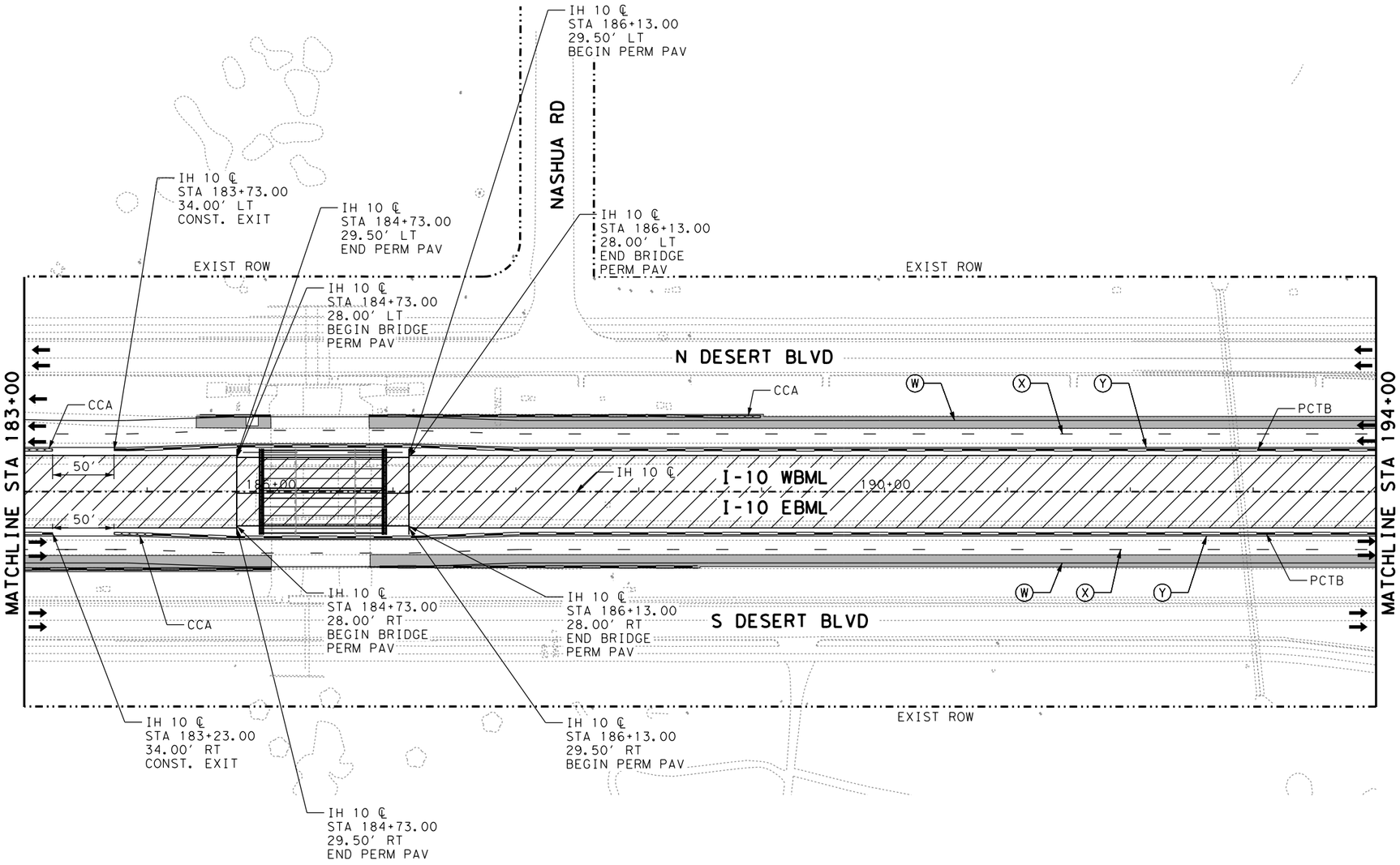
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 2

STA 172+00 TO STA 183+00

SHEET 18 OF 22

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		98
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- PERM CONSTRUCTION THIS PHASE
- TEMP CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0512 6001	PORT CTB (FUR & INST)(SGL SLOPE)(TY 1)	LF	2,850
0545 6005	CRASH CUSH ATTEN (REMOVE)	EA	3
0545 6007	CRASH CUSH ATTEN (INSTL)(L)(N)(TL3)	EA	3
0662 6047	WK ZN PAV MRK REMOV (REFL) TY I-A	LF	2,200
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	2,750
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	2,750
0662 6059	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	LF	2,200
0677 6001	ELIM EXT PAV MRK & MRKS (4")	LF	4,950

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ UNLESS OTHERWISE NOTED.
2. TRAFFIC UTILIZES EXISTING PAVEMENT MARKINGS ALONG IH 10 AND FRONTAGE ROADS.
3. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.
4. PROPOSED PERMANENT SIGNS INSTALLED DURING CONSTRUCTION ARE NOT SHOWN ON THIS SHEET. REFER TO SIGNING LAYOUTS SHEETS.
5. PRIOR TO INSTALLING CHANNELIZING DEVICES IN THE STATE OF NEW MEXICO, COORDINATION WITH NMDOT WILL BE ESTABLISHED.
6. ALL PROPOSED CONSTRUCTION ENTRANCE AND EXIT LOCATIONS CAN BE ADJUSTED TO ACCOMODATE SITE CONDITIONS AS APPROVED BY THE ENGINEER.

0 50' 100'
SCALE: 1" = 100'

STATE OF TEXAS
OSCAR D. GONZALEZ
147840
PROFESSIONAL ENGINEER

3/28/2024

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Texas Department of Transportation

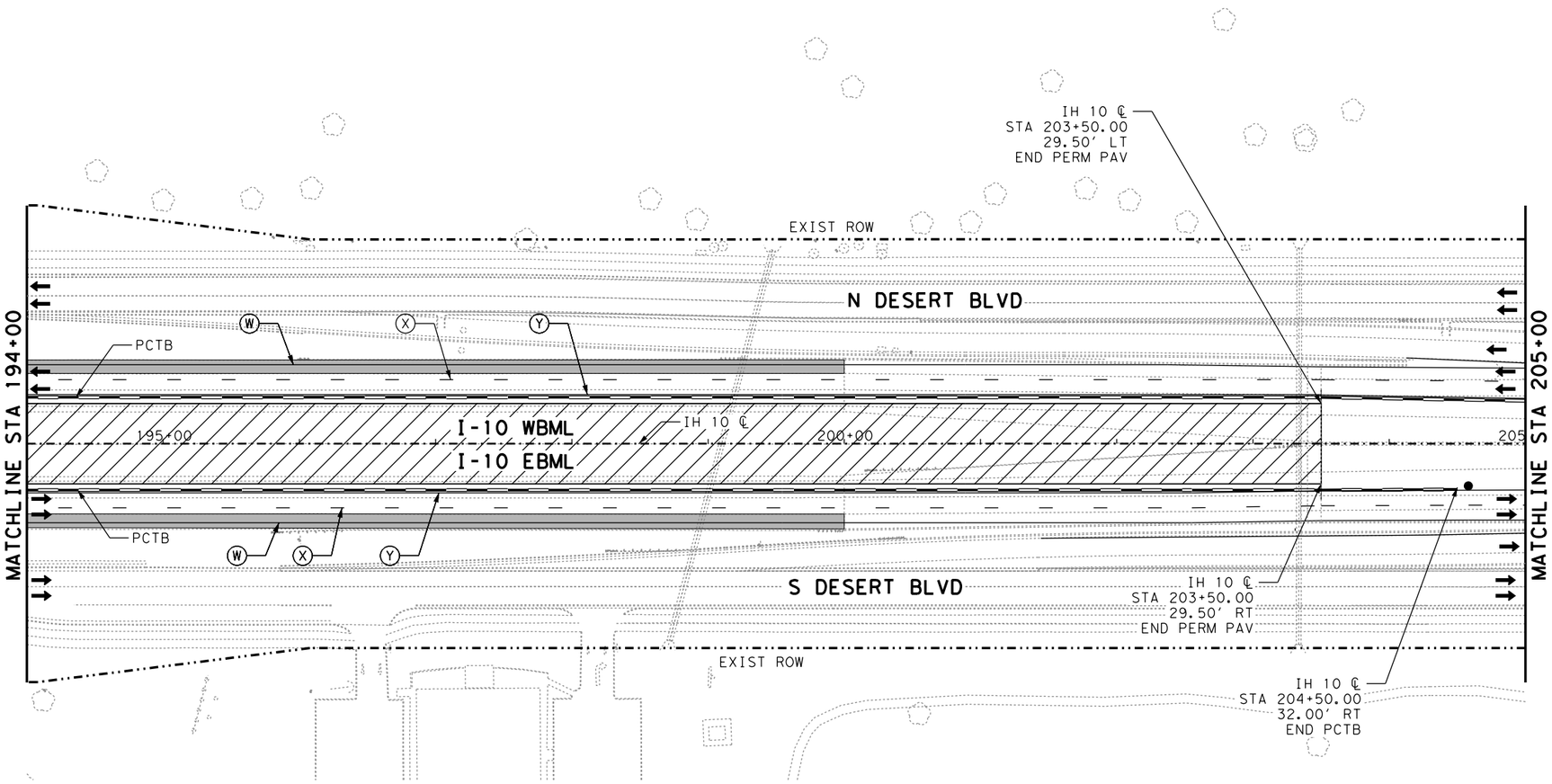
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 2

STA 183+00 TO STA 194+00

SHEET 19 OF 22

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		99
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- PERM CONSTRUCTION THIS PHASE
- TEMP CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0512 6001	PORT CTB (FUR & INST)(SGL SLOPE)(TY 1)	LF	2,150
0662 6047	WK ZN PAV MRK REMOV (REFL) TY I-A	LF	2,200
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	2,688
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	2,688
0662 6059	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	LF	2,200
0677 6001	ELIM EXT PAV MRK & MRKS (4")	LF	4,888

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ UNLESS OTHERWISE NOTED.
2. TRAFFIC UTILIZES EXISTING PAVEMENT MARKINGS ALONG IH 10 AND FRONTAGE ROADS.
3. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.
4. PROPOSED PERMANENT SIGNS INSTALLED DURING CONSTRUCTION ARE NOT SHOWN ON THIS SHEET. REFER TO SIGNING LAYOUTS SHEETS.
5. PRIOR TO INSTALLING CHANNELIZING DEVICES IN THE STATE OF NEW MEXICO, COORDINATION WITH NMDOT WILL BE ESTABLISHED.
6. ALL PROPOSED CONSTRUCTION ENTRANCE AND EXIT LOCATIONS CAN BE ADJUSTED TO ACCOMODATE SITE CONDITIONS AS APPROVED BY THE ENGINEER.

STATE OF TEXAS
OSCAR D. GONZALEZ
147840
LICENSED
PROFESSIONAL ENGINEER
3/28/2024

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consor
F-12040

Texas Department of Transportation

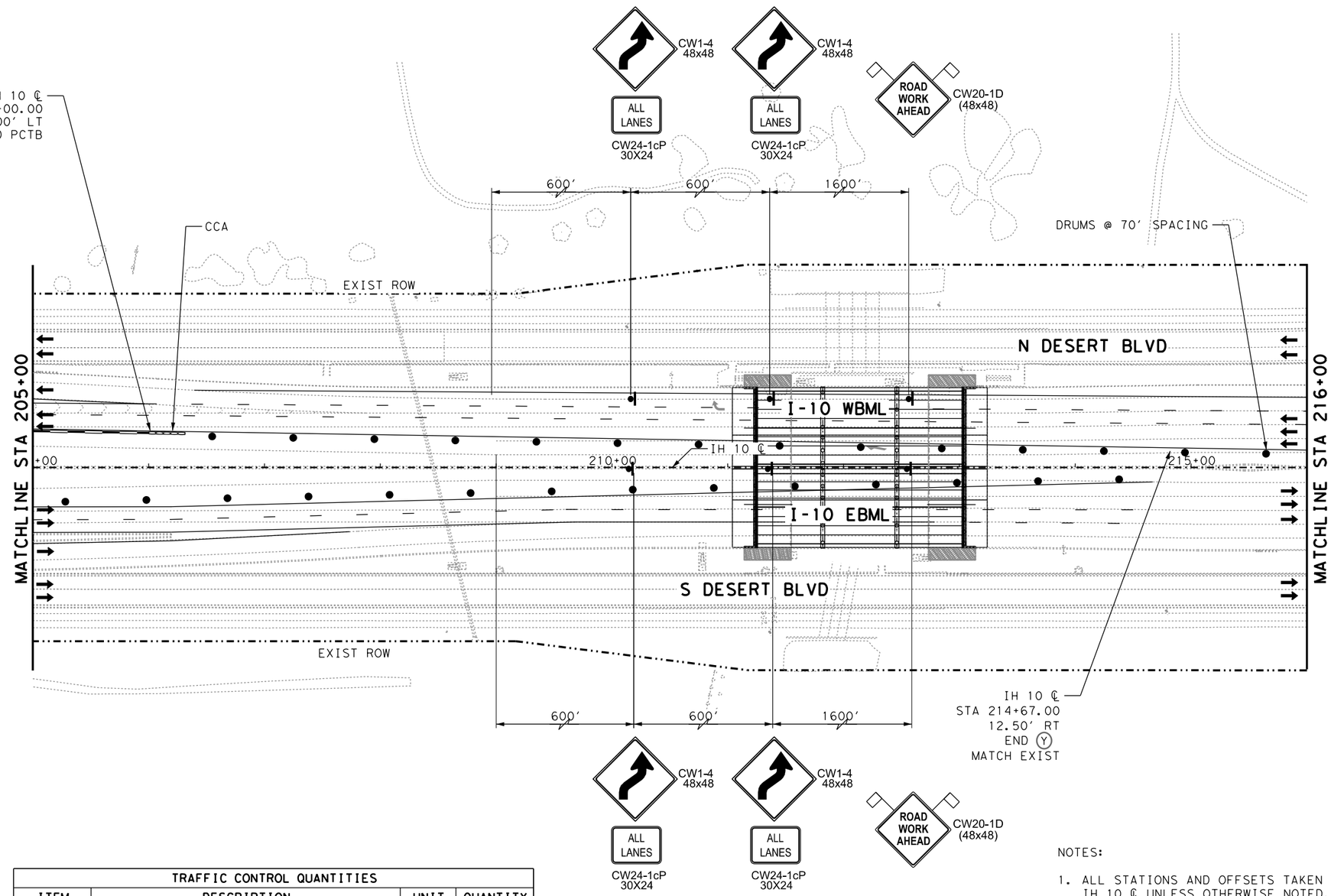
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 2

STA 194+00 TO STA 205+00

SHEET 20 OF 22

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		100
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- PERM CONSTRUCTION THIS PHASE
- TEMP CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- Ⓣ WRK ZN PAV MRK (W)(8")(SLD)
- Ⓥ WRK ZN PAV MRK (W)(4")(DOT)
- Ⓦ WHITE EDGE LINE (RAISED PAV MRK)
- Ⓧ WHITE LANE LINE (RAISED PAV MRK)
- Ⓨ YELLOW EDGE LINE (RAISED PAV MRK)
- Ⓩ EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

SCALE: 1" = 100'

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0512 6001	PORT CTB (FUR & INST)(SGL SLOPE)(TY 1)	LF	100
0545 6005	CRASH CUSH ATTEN (REMOVE)	EA	1
0545 6007	CRASH CUSH ATTEN (INSTL)(L)(N)(TL3)	EA	1
0662 6047	WK ZN PAV MRK REMOV (REFL) TY I-A	LF	2,060
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	841
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	841
0662 6059	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	LF	2,060
0677 6001	ELIM EXT PAV MRK & MRKS (4")	LF	2,901

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ UNLESS OTHERWISE NOTED.
2. TRAFFIC UTILIZES EXISTING PAVEMENT MARKINGS ALONG IH 10 AND FRONTAGE ROADS.
3. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.
4. PROPOSED PERMANENT SIGNS INSTALLED DURING CONSTRUCTION ARE NOT SHOWN ON THIS SHEET. REFER TO SIGNING LAYOUTS SHEETS.
5. PRIOR TO INSTALLING CHANNELIZING DEVICES IN THE STATE OF NEW MEXICO, COORDINATION WITH NMDOT WILL BE ESTABLISHED.
6. ALL PROPOSED CONSTRUCTION ENTRANCE AND EXIT LOCATIONS CAN BE ADJUSTED TO ACCOMODATE SITE CONDITIONS AS APPROVED BY THE ENGINEER.

OSCAR D. GONZALEZ
147840
LICENSED PROFESSIONAL ENGINEER
STATE OF TEXAS
3/28/2024

NO.	DATE	REVISION	APPROV.

consor
F-12040

Texas Department of Transportation

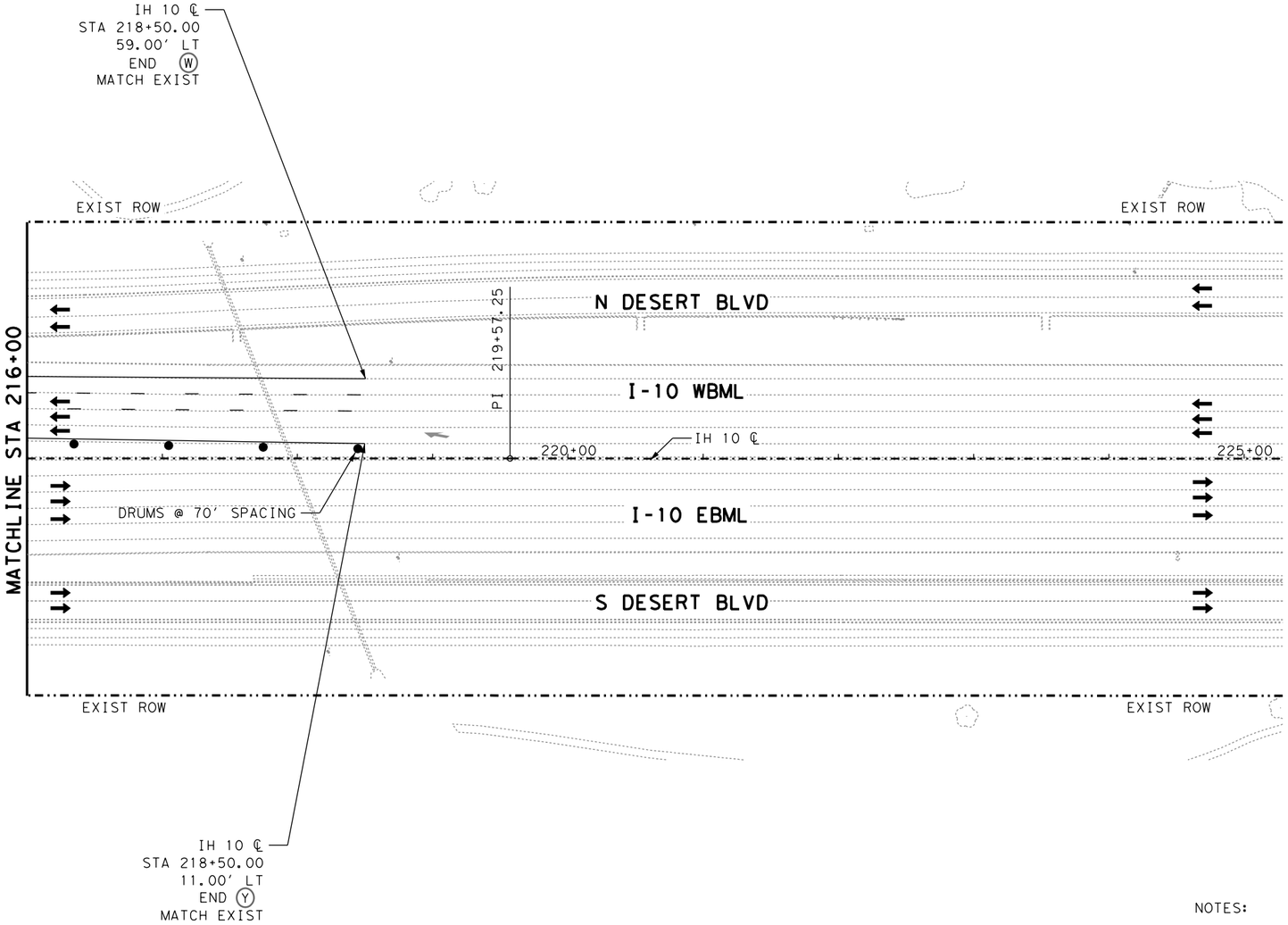
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 2

STA 205+00 TO STA 216+00

SHEET 21 OF 22

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		101
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- PERM CONSTRUCTION THIS PHASE
- TEMP CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- Ⓣ WRK ZN PAV MRK (W)(8")(SLD)
- Ⓥ WRK ZN PAV MRK (W)(4")(DOT)
- Ⓦ WHITE EDGE LINE (RAISED PAV MRK)
- Ⓧ WHITE LANE LINE (RAISED PAV MRK)
- Ⓨ YELLOW EDGE LINE (RAISED PAV MRK)
- Ⓩ EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ UNLESS OTHERWISE NOTED.
2. TRAFFIC UTILIZES EXISTING PAVEMENT MARKINGS ALONG IH 10 AND FRONTAGE ROADS.
3. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.
4. PROPOSED PERMANENT SIGNS INSTALLED DURING CONSTRUCTION ARE NOT SHOWN ON THIS SHEET. REFER TO SIGNING LAYOUTS SHEETS.
5. PRIOR TO INSTALLING CHANNELIZING DEVICES IN THE STATE OF NEW MEXICO, COORDINATION WITH NMDOT WILL BE ESTABLISHED.
6. ALL PROPOSED CONSTRUCTION ENTRANCE AND EXIT LOCATIONS CAN BE ADJUSTED TO ACCOMODATE SITE CONDITIONS AS APPROVED BY THE ENGINEER.

STATE OF TEXAS
OSCAR D. GONZALEZ
147840
LICENSED
PROFESSIONAL ENGINEER

3/28/2024

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F-12040

Texas Department of Transportation

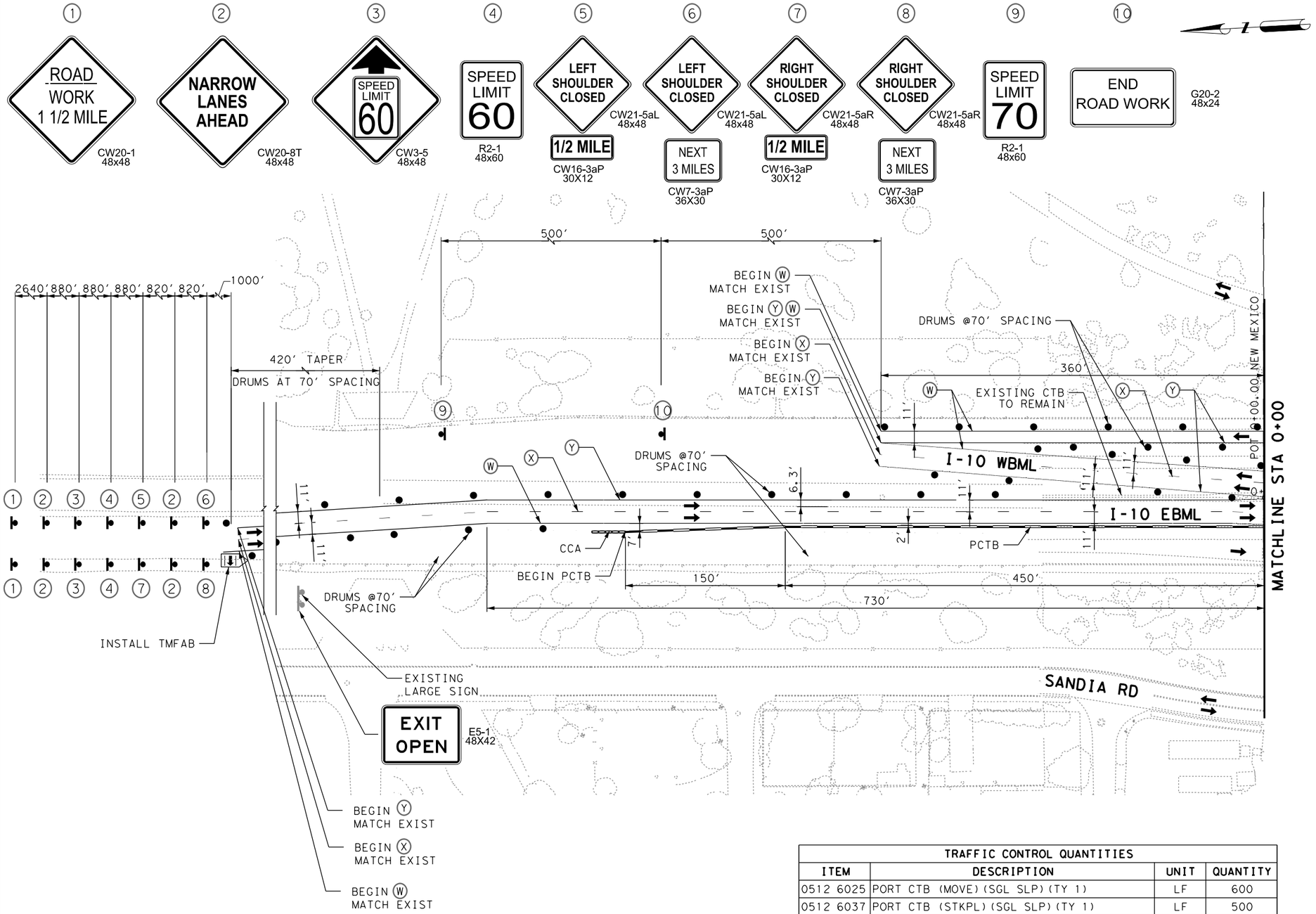
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 2

STA 216+00 TO END PROJECT

SHEET 22 OF 22

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		101A
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0512 6025	PORT CTB (MOVE)(SGL SLP)(TY 1)	LF	600
0512 6037	PORT CTB (STKPL)(SGL SLP)(TY 1)	LF	500
0545 6003	CRASH CUSH ATTEN (MOVE & RESET)	EA	1
0662 6047	WK ZN PAV MRK REMOV (REFL) TY I-A	LF	1,874
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	2,265
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	2,265
0662 6059	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	LF	1,874
6001 6002	PORTABLE CHANGEABLE MESSAGE SIGN	EA	1

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ R1 UNLESS OTHERWISE NOTED.
2. FOR DEMOLITION LIMITS REFER TO REMOVAL LAYOUT SHEETS.

STATE OF TEXAS
OSCAR D. GONZALEZ
147840
LICENSED PROFESSIONAL ENGINEER
3/28/2024

NO.	DATE	REVISION	APPROV.

consor
F-12040

Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 3

BEGIN PHASE TO STA 0+00

SHEET 1 OF 22

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		102
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

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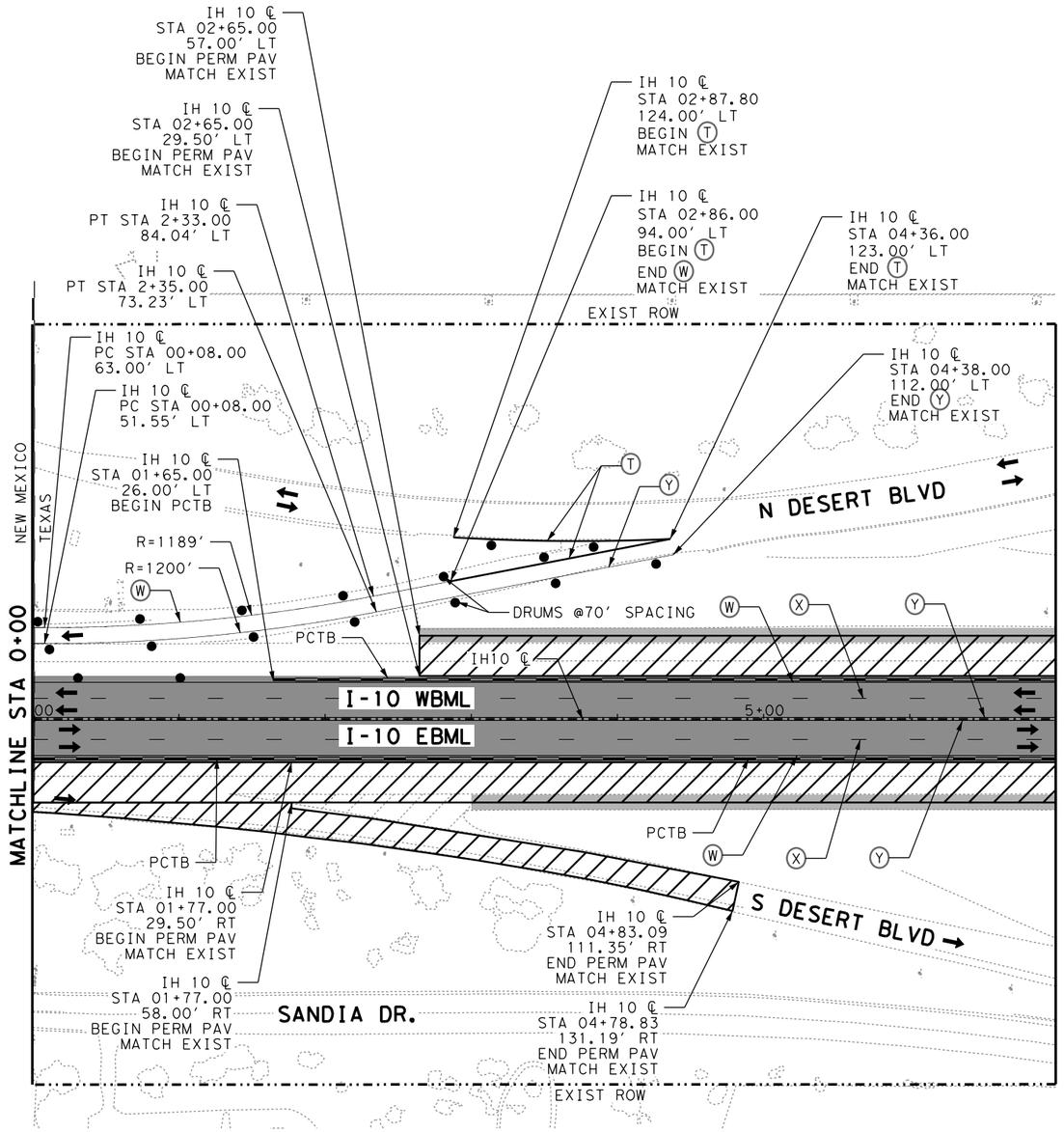


LEGEND:

- PERM CONSTRUCTION THIS PHASE
- PERM CONSTRUCTION PREVIOUS PHASE
- TEMP CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0512 6025	PORT CTB (MOVE)(SGL SLP)(TY 1)	LF	1,236
0512 6037	PORT CTB (STKPL)(SGL SLP)(TY 1)	LF	251
0662 6047	WK ZN PAV MRK REMOV (REFL) TY I-A	LF	1,845
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	2,038
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	2,038
0662 6059	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	LF	1,845
0662 6071	WK ZN PAV MRK REMOV (W)8"(SLD)	LF	302

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ R1 UNLESS OTHERWISE NOTED.
2. FOR DEMOLITION LIMITS REFER TO REMOVAL LAYOUT SHEETS.

STATE OF TEXAS
OSCAR D. GONZALEZ
147840
LICENSED
PROFESSIONAL ENGINEER

3/28/2024

NO.	DATE	REVISION	APPROV.

consor
F-12040

Texas Department of Transportation

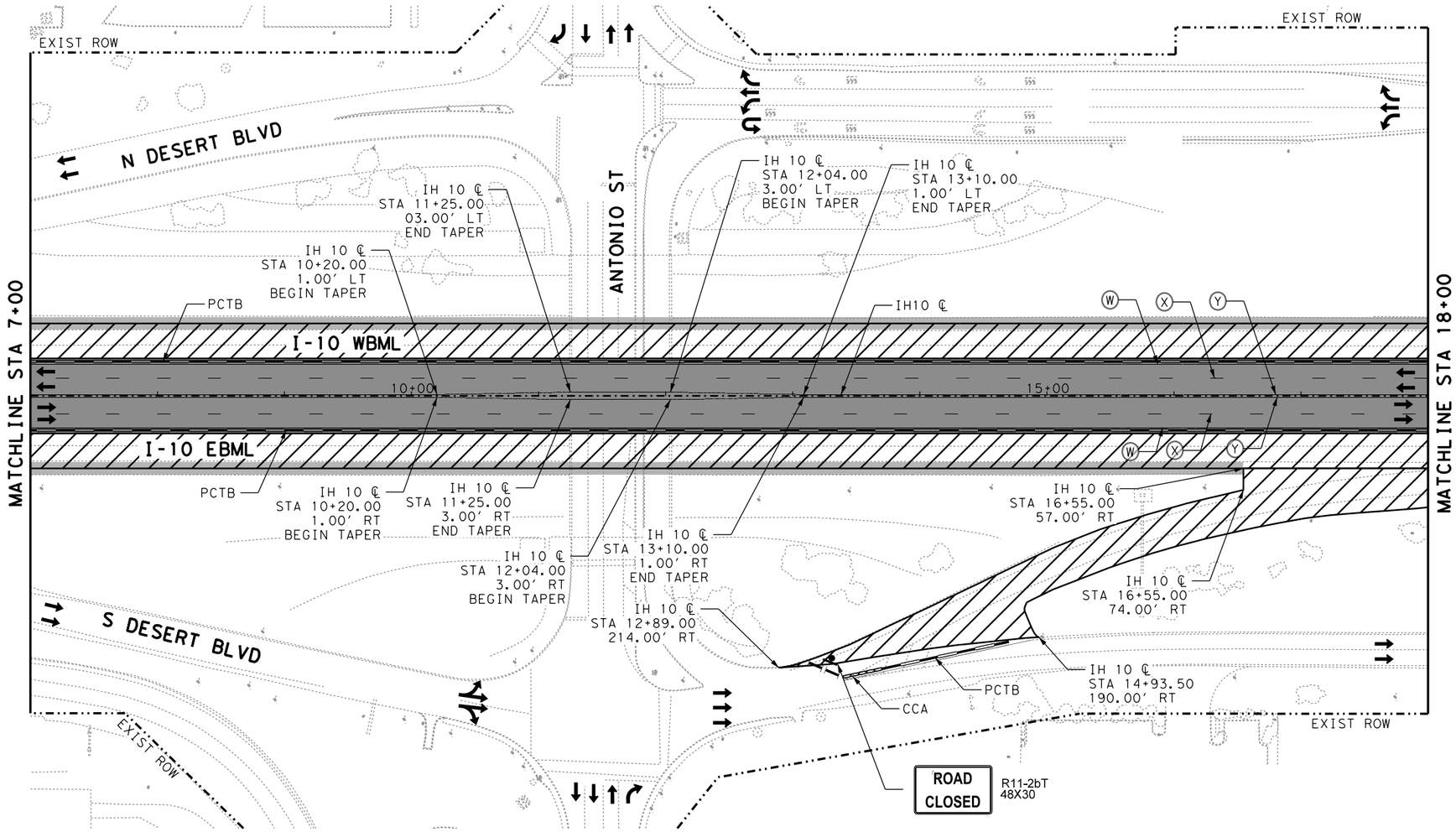
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 3

STA 0+00 TO STA 7+00

SHEET 2 OF 22

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		103
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- PERM CONSTRUCTION THIS PHASE
- PERM CONSTRUCTION PREVIOUS PHASE
- TEMP CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50′ 100′
SCALE: 1" = 100′

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0512 6025	PORT CTB (MOVE)(SGL SLP)(TY 1)	LF	2,302
0512 6037	PORT CTB (STKPL)(SGL SLP)(TY 1)	LF	2,238
0545 6003	CRASH CUSH ATTEN (MOVE & RESET)	EA	1
0662 6047	WK ZN PAV MRK REMOV (REFL) TY I-A	LF	2,351
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	2,750
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	2,750
0662 6059	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	LF	2,351

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ R1 UNLESS OTHERWISE NOTED.
2. FOR DEMOLITION LIMITS REFER TO REMOVAL LAYOUT SHEETS.

STATE OF TEXAS
OSCAR D. GONZALEZ
147840
LICENSED PROFESSIONAL ENGINEER

3/28/2024

NO.	DATE	REVISION	APPROV.

consor
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Texas Department of Transportation

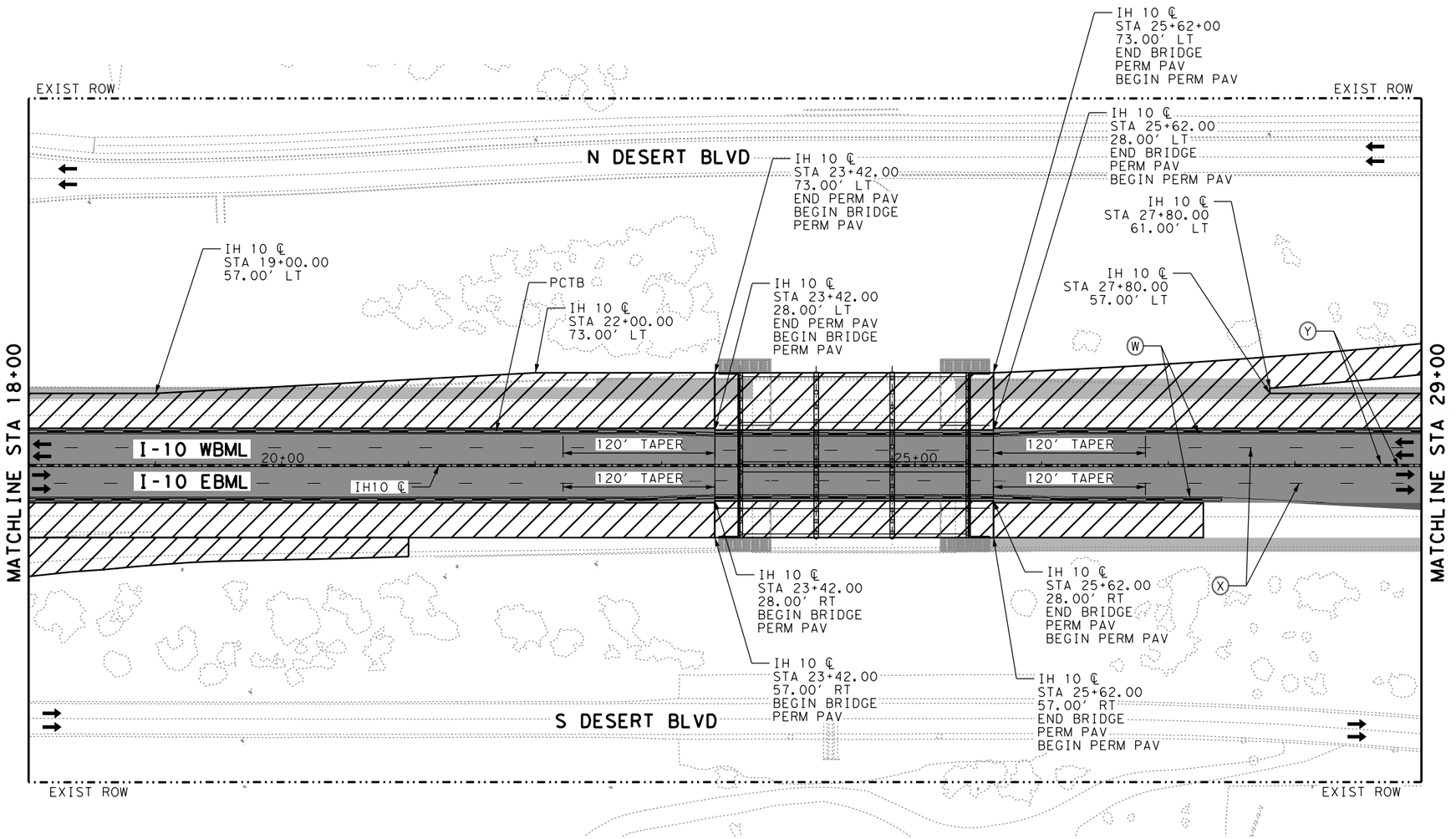
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 3

STA 7+00 TO STA 18+00

SHEET 3 OF 22

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		104
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- PERM CONSTRUCTION THIS PHASE
- PERM CONSTRUCTION PREVIOUS PHASE
- TEMP CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0508 6004	CONSTRUCTING DETOURS (TY 2)	SY	34
0512 6025	PORT CTB (MOVE)(SGL SLP)(TY 1)	LF	2,200
0512 6037	PORT CTB (STKPL)(SGL SLP)(TY 1)	LF	2,200
0662 6047	WK ZN PAV MRK REMOV (REFL) TY I-A	LF	2,200
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	2,750
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	2,750
0662 6059	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	LF	2,200

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ R1 UNLESS OTHERWISE NOTED.
2. FOR DEMOLITION LIMITS REFER TO REMOVAL LAYOUT SHEETS.

STATE OF TEXAS
OSCAR D. GONZALEZ
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PROFESSIONAL ENGINEER

3/28/2024

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Texas Department of Transportation

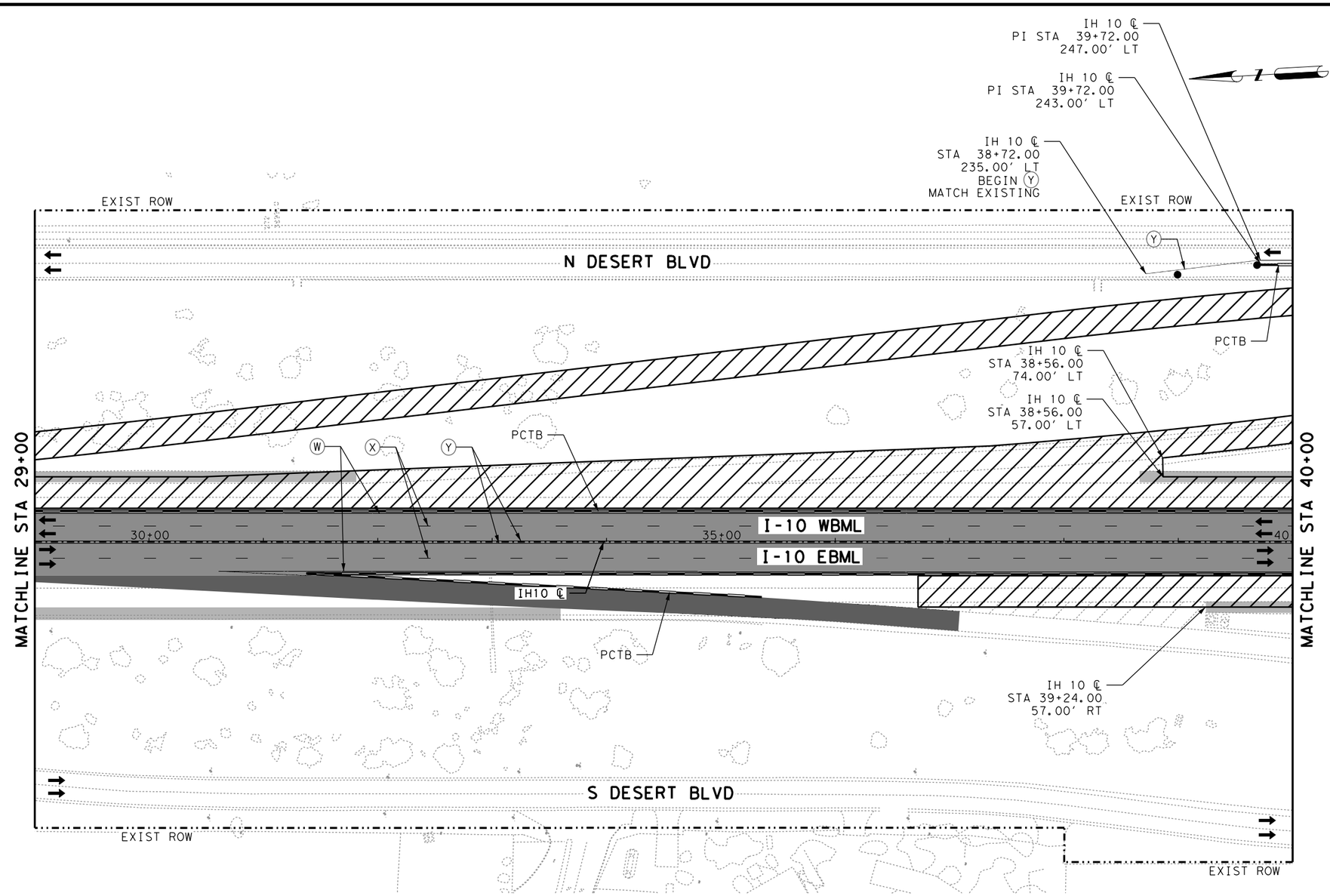
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 3

STA 18+00 TO STA 29+00

SHEET 4 OF 22

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		105
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- PERM CONSTRUCTION THIS PHASE
- PERM CONSTRUCTION PREVIOUS PHASE
- TEMP CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'

SCALE: 1" = 100'

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0508 6004	CONSTRUCTING DETOURS (TY 2)	SY	1,481
0512 6025	PORT CTB (MOVE)(SGL SLP)(TY 1)	LF	2,872
0512 6037	PORT CTB (STKPL)(SGL SLP)(TY 1)	LF	2,872
0662 6047	WK ZN PAV MRK REMOV (REFL) TY I-A	LF	2,329
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	3,875
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	3,875
0662 6059	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	LF	2,329

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ R1 UNLESS OTHERWISE NOTED.
2. FOR DEMOLITION LIMITS REFER TO REMOVAL LAYOUT SHEETS.

OSCAR D. GONZALEZ
147840
LICENSED PROFESSIONAL ENGINEER
STATE OF TEXAS

3/28/2024

NO.	DATE	REVISION	APPROV.

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Texas Department of Transportation

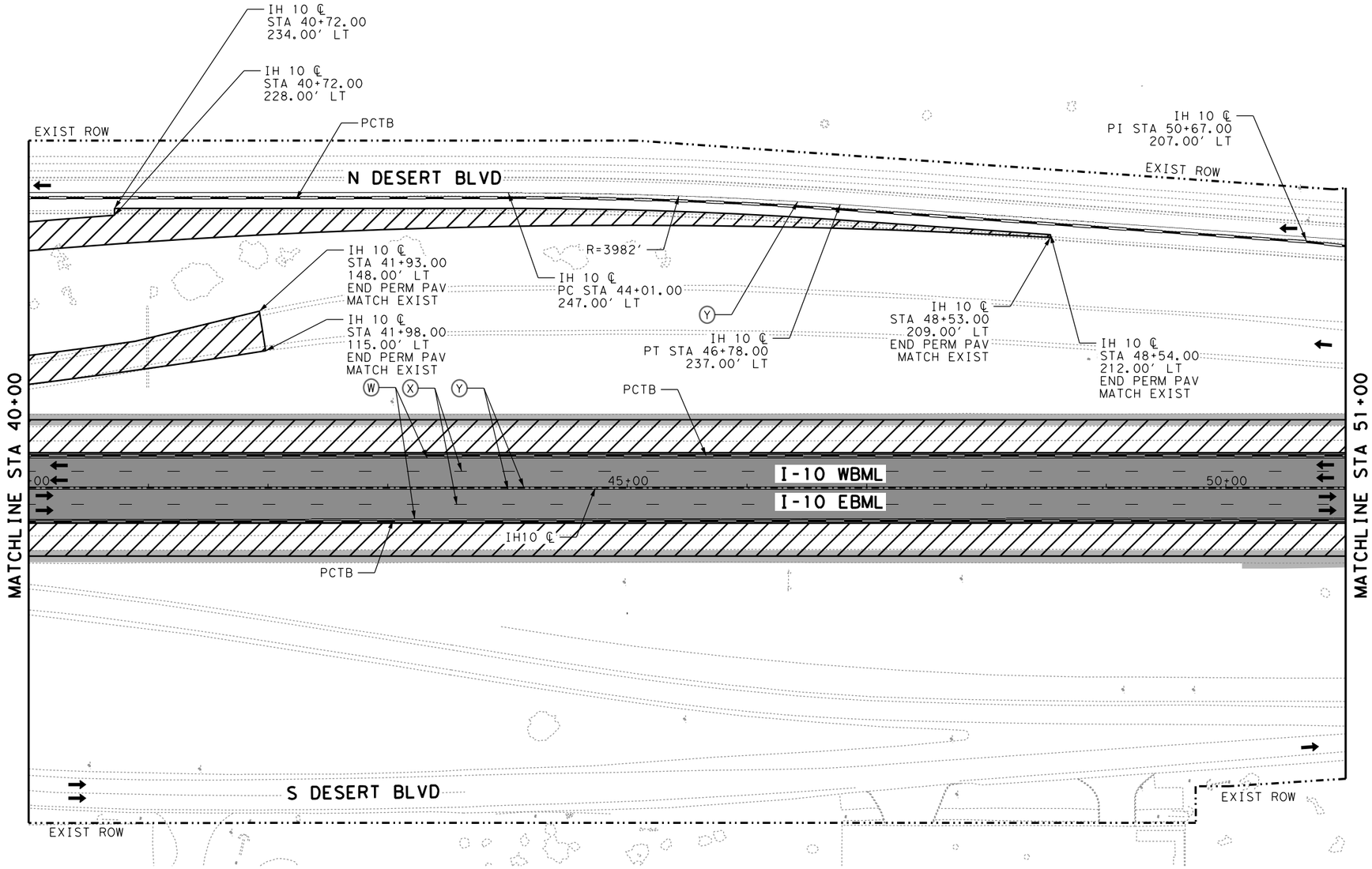
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN
STAGE 3

STA 29+00 TO STA 40+00

SHEET 5 OF 22

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		106
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- PERM CONSTRUCTION THIS PHASE
- PERM CONSTRUCTION PREVIOUS PHASE
- TEMP CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ R1 UNLESS OTHERWISE NOTED.
2. FOR DEMOLITION LIMITS REFER TO REMOVAL LAYOUT SHEETS.

TRAFFIC CONTROL QUANTITIES

ITEM	DESCRIPTION	UNIT	QUANTITY
0512 6025	PORT CTB (MOVE)(SGL SLP)(TY 1)	LF	3,302
0512 6037	PORT CTB (STKPL)(SGL SLP)(TY 1)	LF	3,302
0662 6047	WK ZN PAV MRK REMOV (REFL) TY I-A	LF	3,302
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	2,750
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	2,750
0662 6059	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	LF	3,302

0 50' 100'
SCALE: 1" = 100'

STATE OF TEXAS
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PROFESSIONAL ENGINEER
LICENSED

3/28/2024

NO.	DATE	REVISION	APPROV.

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Texas Department of Transportation

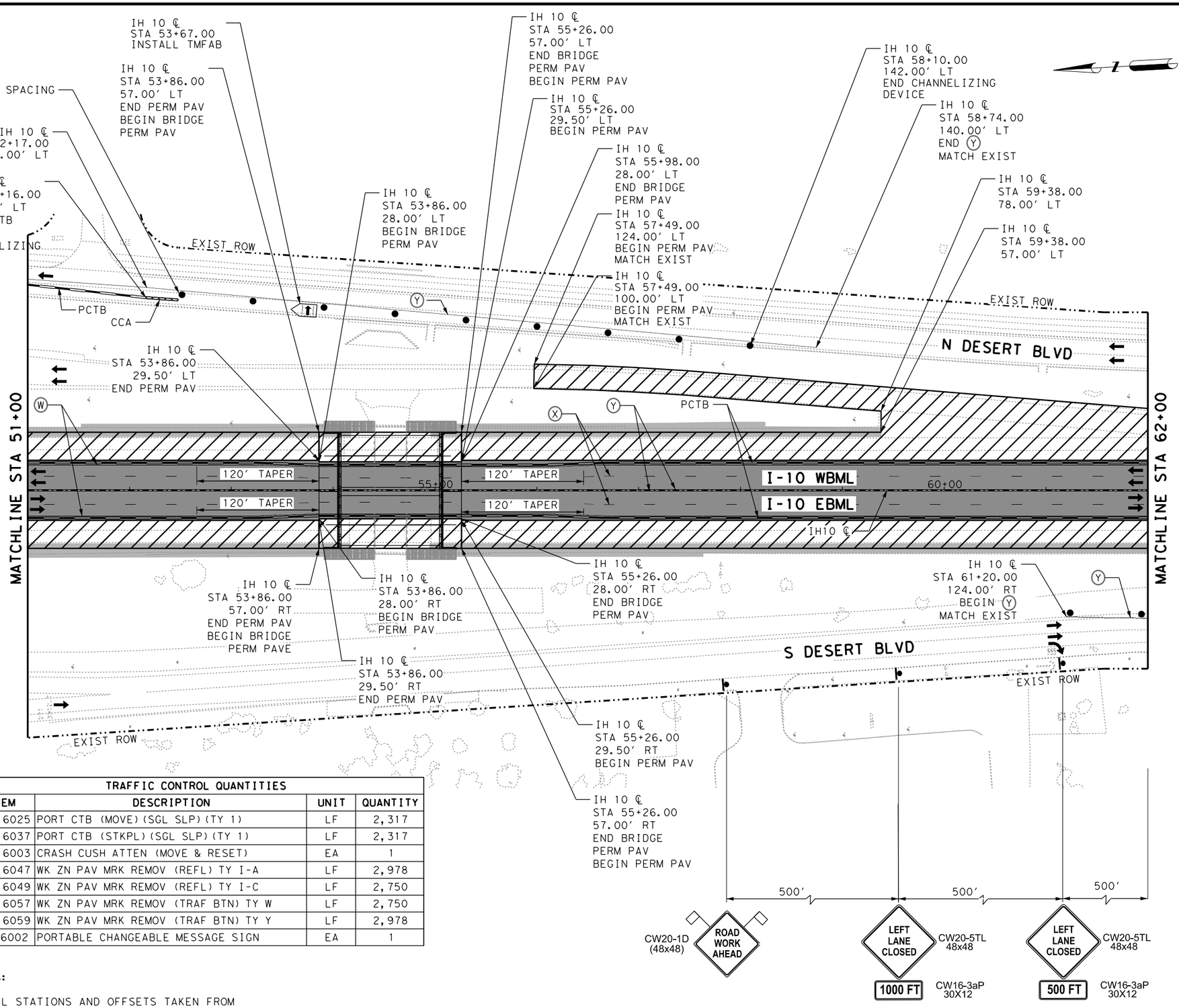
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 3

STA 40+00 TO STA 51+00

SHEET 6 OF 22

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		107
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- PERM CONSTRUCTION THIS PHASE
- PERM CONSTRUCTION PREVIOUS PHASE
- TEMP CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0512 6025	PORT CTB (MOVE)(SGL SLP)(TY 1)	LF	2,317
0512 6037	PORT CTB (STKPL)(SGL SLP)(TY 1)	LF	2,317
0545 6003	CRASH CUSH ATTEN (MOVE & RESET)	EA	1
0662 6047	WK ZN PAV MRK REMOV (REFL) TY I-A	LF	2,978
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	2,750
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	2,750
0662 6059	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	LF	2,978
6001 6002	PORTABLE CHANGEABLE MESSAGE SIGN	EA	1

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ R1 UNLESS OTHERWISE NOTED.
2. FOR DEMOLITION LIMITS REFER TO REMOVAL LAYOUT SHEETS.

0 50' 100'
SCALE: 1" = 100'

STATE OF TEXAS
OSCAR D. GONZALEZ
147840
PROFESSIONAL ENGINEER

3/28/2024

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Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 3

STA 51+00 TO STA 62+00
SHEET 7 OF 22

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		108
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

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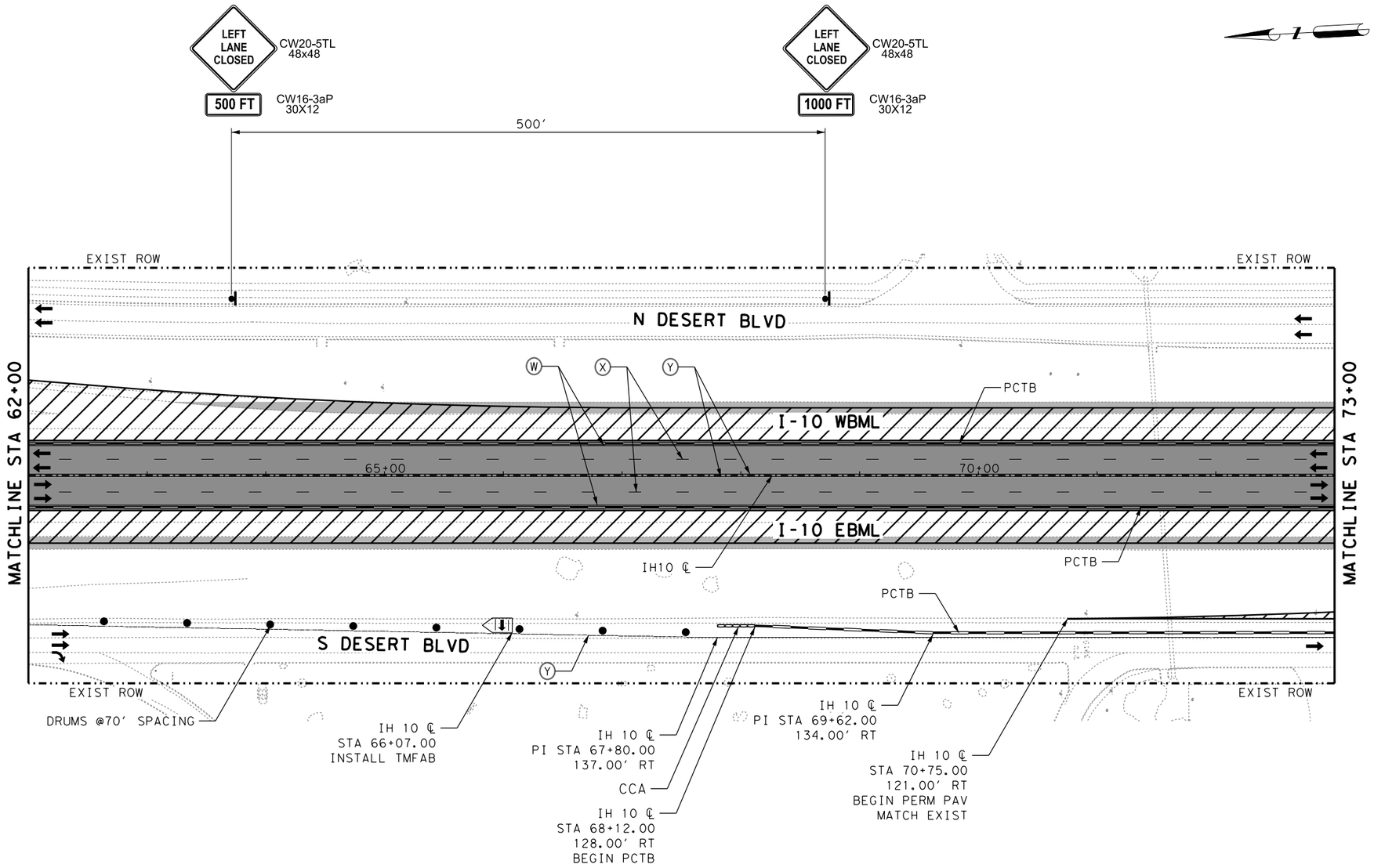

LEGEND:

- PERM CONSTRUCTION THIS PHASE
- PERM CONSTRUCTION PREVIOUS PHASE
- TEMP CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0512 6025	PORT CTB (MOVE)(SGL SLP)(TY 1)	LF	2,688
0512 6037	PORT CTB (STKPL)(SGL SLP)(TY 1)	LF	2,688
0545 6005	CRASH CUSH ATTEN (REMOVE)	EA	1
0545 6003	CRASH CUSH ATTEN (MOVE & RESET)	EA	1
0662 6047	WK ZN PAV MRK REMOV (REFL) TY I-A	LF	3,300
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	2,750
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	2,750
0662 6059	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	LF	3,300
6001 6002	PORTABLE CHANGEABLE MESSAGE SIGN	EA	1

NOTES:

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2. FOR DEMOLITION LIMITS REFER TO REMOVAL LAYOUT SHEETS.

OSCAR D. GONZALEZ
147840
LICENSED PROFESSIONAL ENGINEER
STATE OF TEXAS
3/28/2024

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Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 3

STA 62+00 TO STA 73+00

SHEET 8 OF 22

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		109
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

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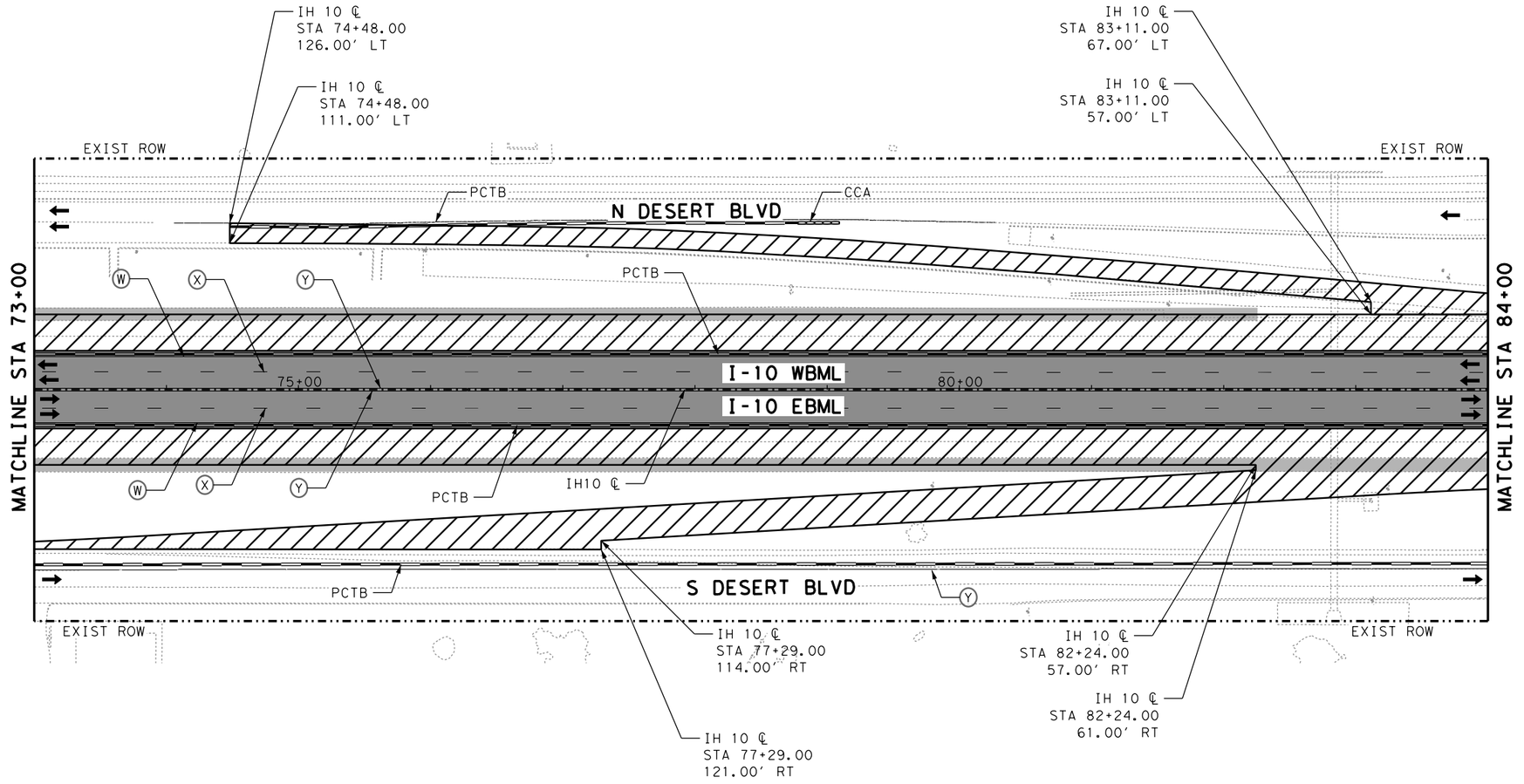

LEGEND:

- PERM CONSTRUCTION THIS PHASE
- PERM CONSTRUCTION PREVIOUS PHASE
- TEMP CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0512 6025	PORT CTB (MOVE)(SGL SLP)(TY 1)	LF	3,730
0512 6037	PORT CTB (STKPL)(SGL SLP)(TY 1)	LF	3,730
0545 6003	CRASH CUSH ATTEN (MOVE & RESET)	EA	1
0545 6005	CRASH CUSH ATTEN (REMOVE)	EA	1
0662 6047	WK ZN PAV MRK REMOV (REFL) TY I-A	LF	3,921
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	2,750
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	2,750
0662 6059	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	LF	3,921

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ R1 UNLESS OTHERWISE NOTED.
2. FOR DEMOLITION LIMITS REFER TO REMOVAL LAYOUT SHEETS.

STATE OF TEXAS
OSCAR D. GONZALEZ
147840
LICENSED
PROFESSIONAL ENGINEER

3/28/2024

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Texas Department of Transportation

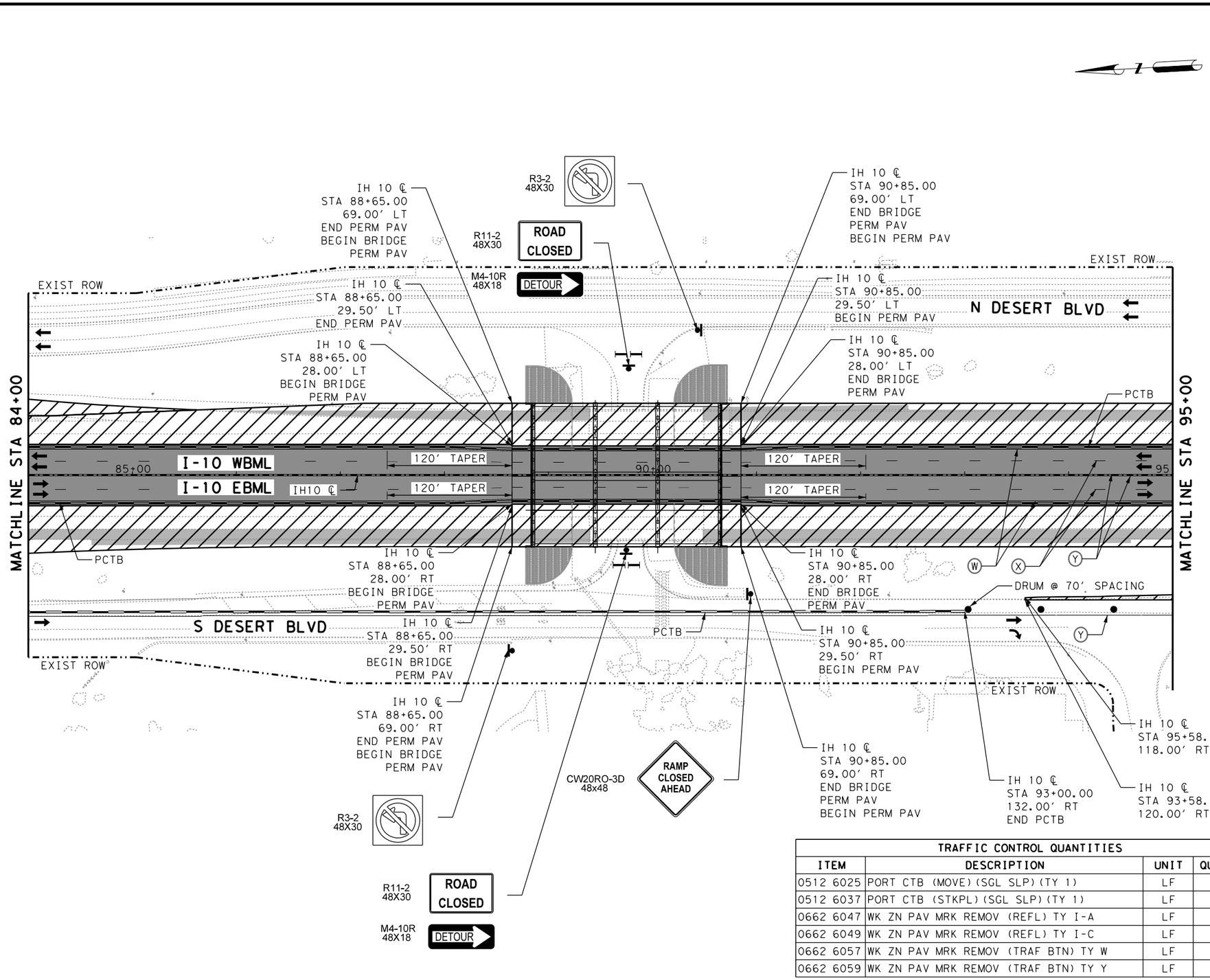
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 3

STA 73+00 TO STA 84+00

SHEET 9 OF 22

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		110
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- PERM CONSTRUCTION THIS PHASE
- PERM CONSTRUCTION PREVIOUS PHASE
- TEMP CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0512 6025	PORT CTB (MOVE)(SGL SLP)(TY 1)	LF	3,100
0512 6037	PORT CTB (STKPL)(SGL SLP)(TY 1)	LF	3,100
0662 6047	WK ZN PAV MRK REMOV (REFL) TY I-A	LF	3,300
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	2,750
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	2,750
0662 6059	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	LF	3,300

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ R1 UNLESS OTHERWISE NOTED.
2. FOR DEMOLITION LIMITS REFER TO REMOVAL LAYOUT SHEETS.

STATE OF TEXAS
OSCAR D. GONZALEZ
147840
LICENSED
PROFESSIONAL ENGINEER
3/28/2024

NO.	DATE	REVISION	APPROV.

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F-12040

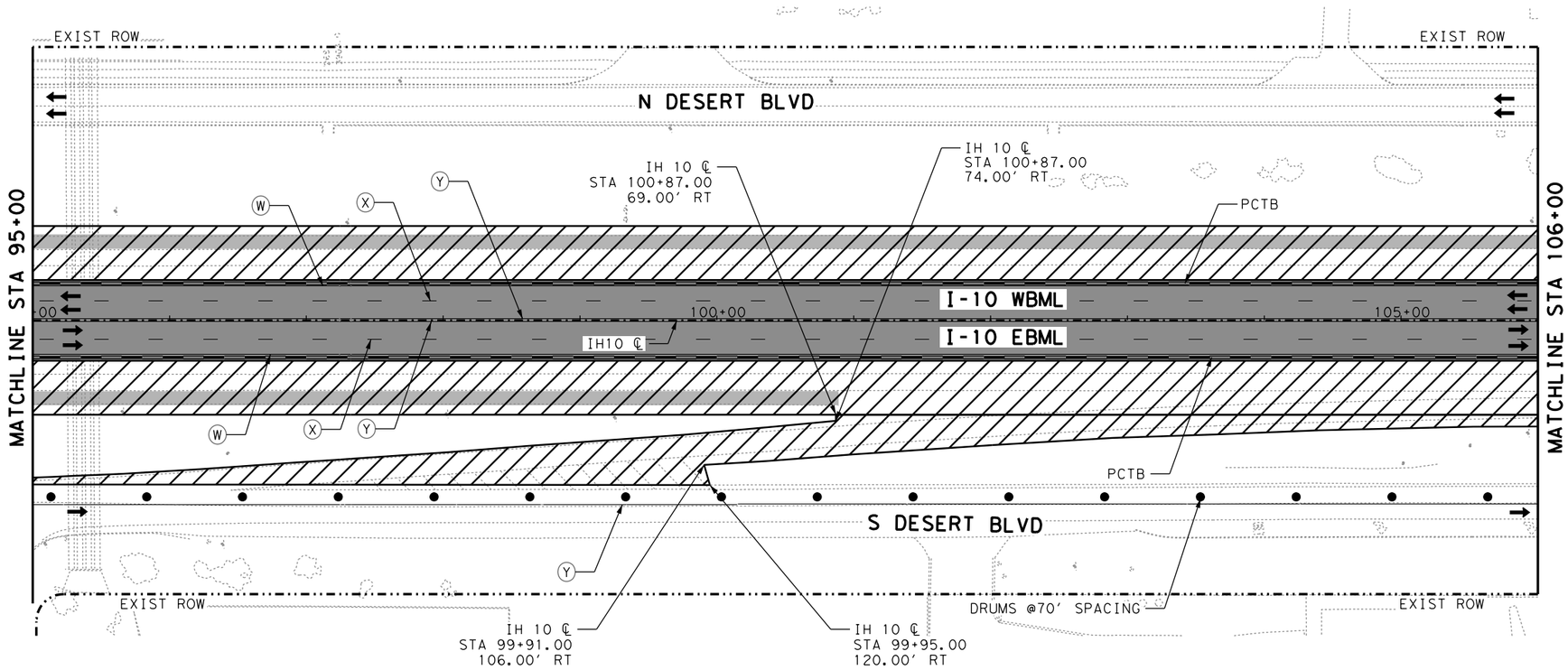
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 3

STA 84+00 TO STA 95+00

SHEET 10 OF 22

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		111
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- PERM CONSTRUCTION THIS PHASE
- PERM CONSTRUCTION PREVIOUS PHASE
- TEMP CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0512 6025	PORT CTB (MOVE)(SGL SLP)(TY 1)	LF	2,200
0512 6037	PORT CTB (STKPL)(SGL SLP)(TY 1)	LF	2,200
0662 6047	WK ZN PAV MRK REMOV (REFL) TY I-A	LF	3,300
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	2,750
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	2,750
0662 6059	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	LF	3,300

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ R1 UNLESS OTHERWISE NOTED.
2. FOR DEMOLITION LIMITS REFER TO REMOVAL LAYOUT SHEETS.

STATE OF TEXAS
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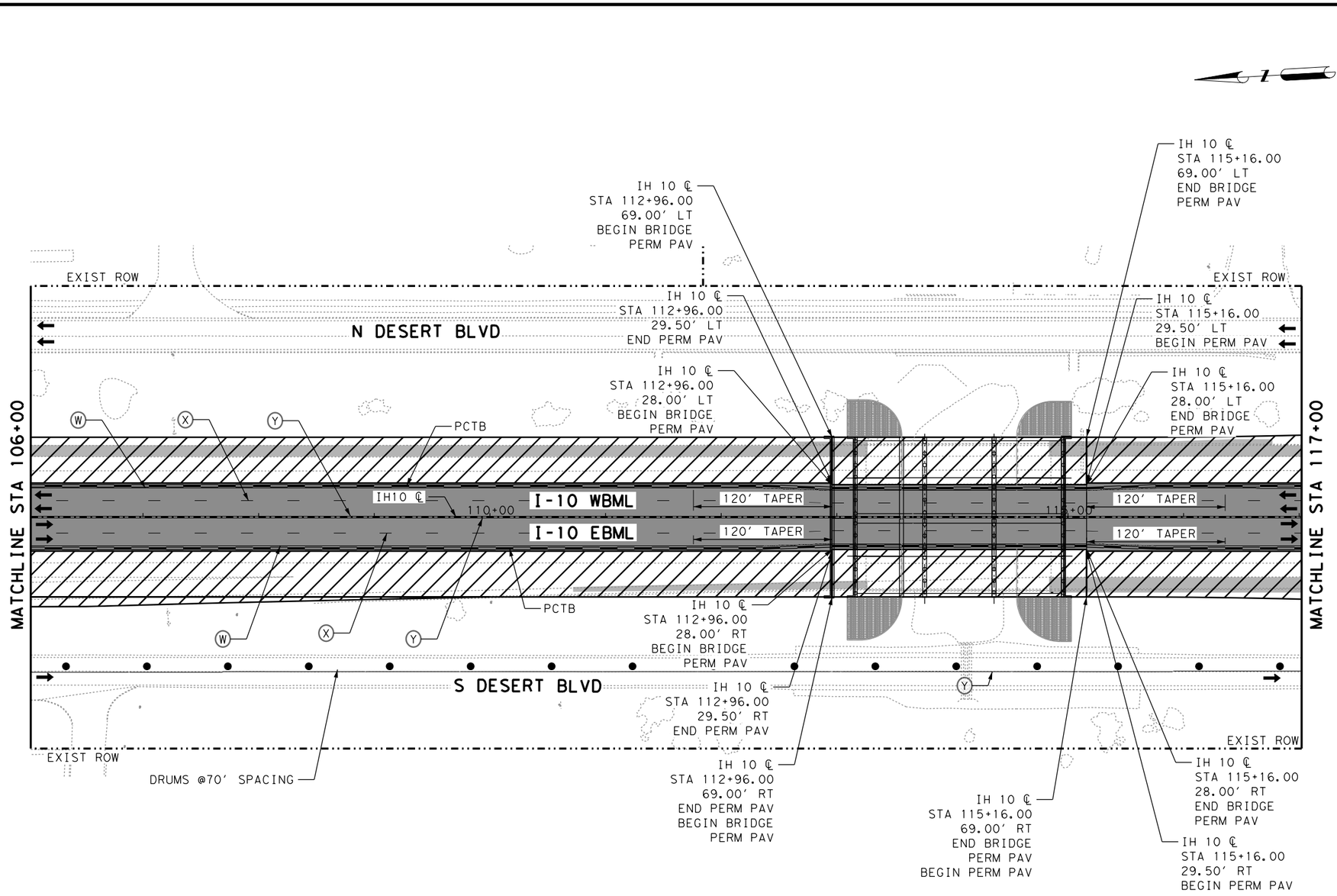
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 3

STA 95+00 TO STA 106+00

SHEET 11 OF 22

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		112
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- PERM CONSTRUCTION THIS PHASE
- PERM CONSTRUCTION PREVIOUS PHASE
- TEMP CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0512 6025	PORT CTB (MOVE)(SGL SLP)(TY 1)	LF	2,200
0512 6037	PORT CTB (STKPL)(SGL SLP)(TY 1)	LF	2,200
0662 6047	WK ZN PAV MRK REMOV (REFL) TY I-A	LF	3,300
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	2,750
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	2,750
0662 6059	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	LF	3,300

NOTES:

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2. FOR DEMOLITION LIMITS REFER TO REMOVAL LAYOUT SHEETS.

STATE OF TEXAS
OSCAR D. GONZALEZ
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PROFESSIONAL ENGINEER

3/28/2024

NO.	DATE	REVISION	APPROV.

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Texas Department of Transportation

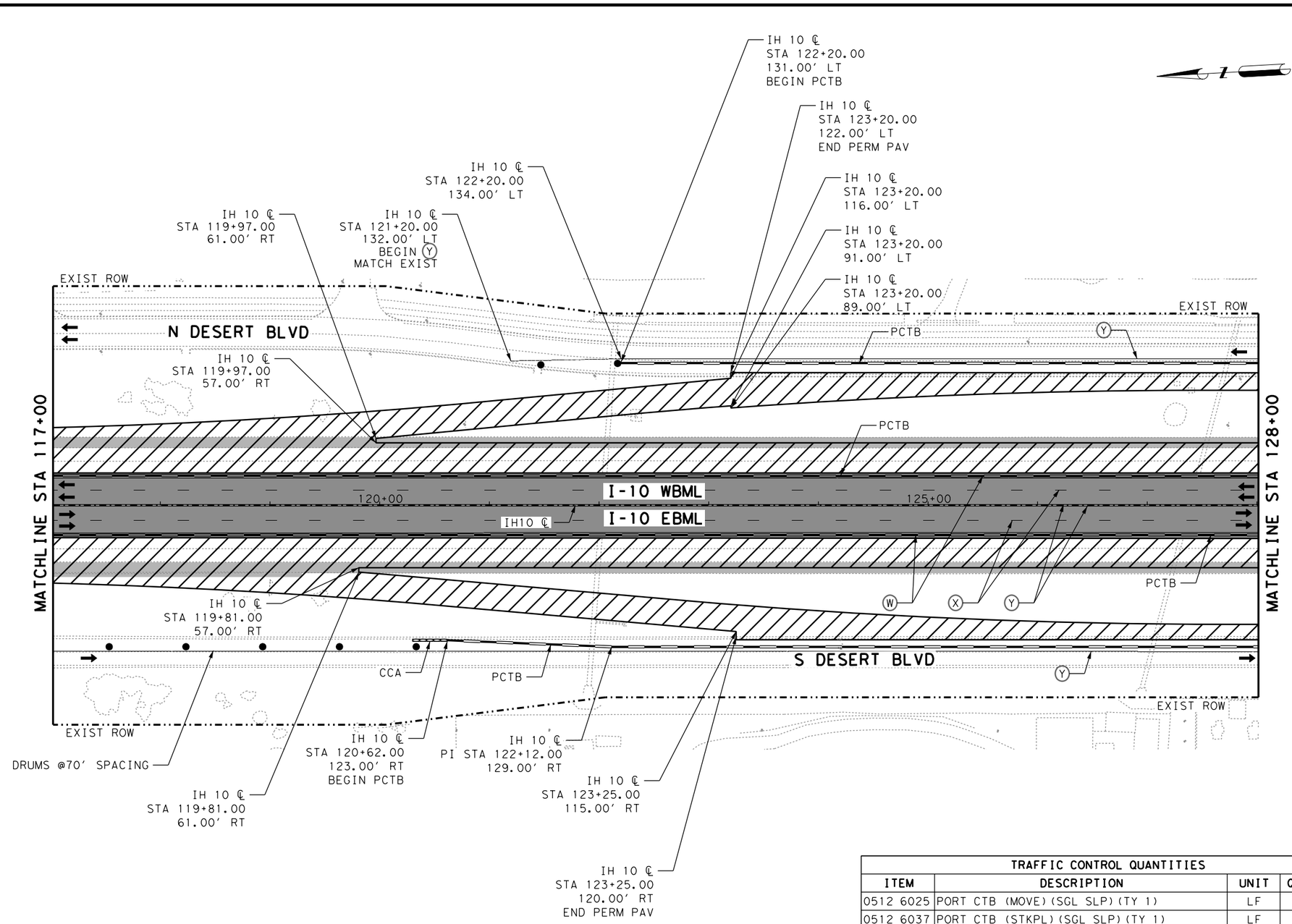
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 3

STA 106+00 TO STA 117+00

SHEET 12 OF 22

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		113
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- PERM CONSTRUCTION THIS PHASE
- PERM CONSTRUCTION PREVIOUS PHASE
- TEMP CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0512 6025	PORT CTB (MOVE)(SGL SLP)(TY 1)	LF	3,528
0512 6037	PORT CTB (STKPL)(SGL SLP)(TY 1)	LF	3,528
0545 6003	CRASH CUSH ATTEN (MOVE & RESET)	EA	1
0545 6005	CRASH CUSH ATTEN (REMOVE)	EA	1
0662 6047	WK ZN PAV MRK REMOV (REFL) TY I-A	LF	3,980
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	2,750
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	2,750
0662 6059	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	LF	3,980

NOTES:

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2. FOR DEMOLITION LIMITS REFER TO REMOVAL LAYOUT SHEETS.

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147840
PROFESSIONAL ENGINEER
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3/28/2024

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Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 3

STA 117+00 TO STA 128+00

SHEET 13 OF 22

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		114
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

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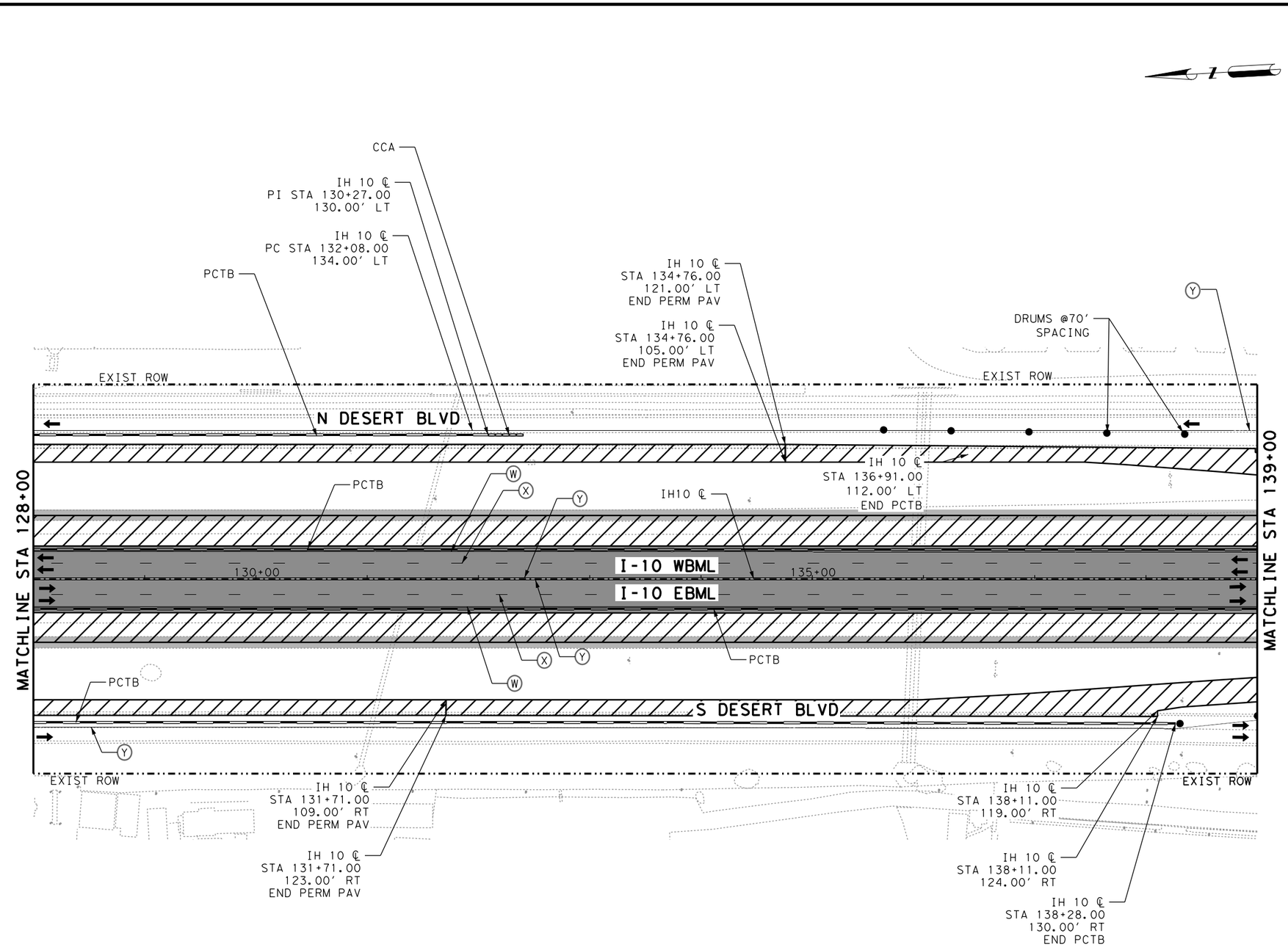
USER: pgonzalez



LEGEND:

- PERM CONSTRUCTION THIS PHASE
- PERM CONSTRUCTION PREVIOUS PHASE
- TEMP CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ R1 UNLESS OTHERWISE NOTED.
2. FOR DEMOLITION LIMITS REFER TO REMOVAL LAYOUT SHEETS.

TRAFFIC CONTROL QUANTITIES

ITEM	DESCRIPTION	UNIT	QUANTITY
0512 6025	PORT CTB (MOVE)(SGL SLP)(TY 1)	LF	3,080
0512 6037	PORT CTB (STKPL)(SGL SLP)(TY 1)	LF	3,080
0545 6003	CRASH CUSH ATTEN (MOVE & RESET)	EA	1
0545 6005	CRASH CUSH ATTEN (REMOVE)	EA	1
0662 6047	WK ZN PAV MRK REMOV (REFL) TY I-A	LF	4,400
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	2,750
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	2,750
0662 6059	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	LF	4,400

0 50' 100'
SCALE: 1" = 100'

STATE OF TEXAS
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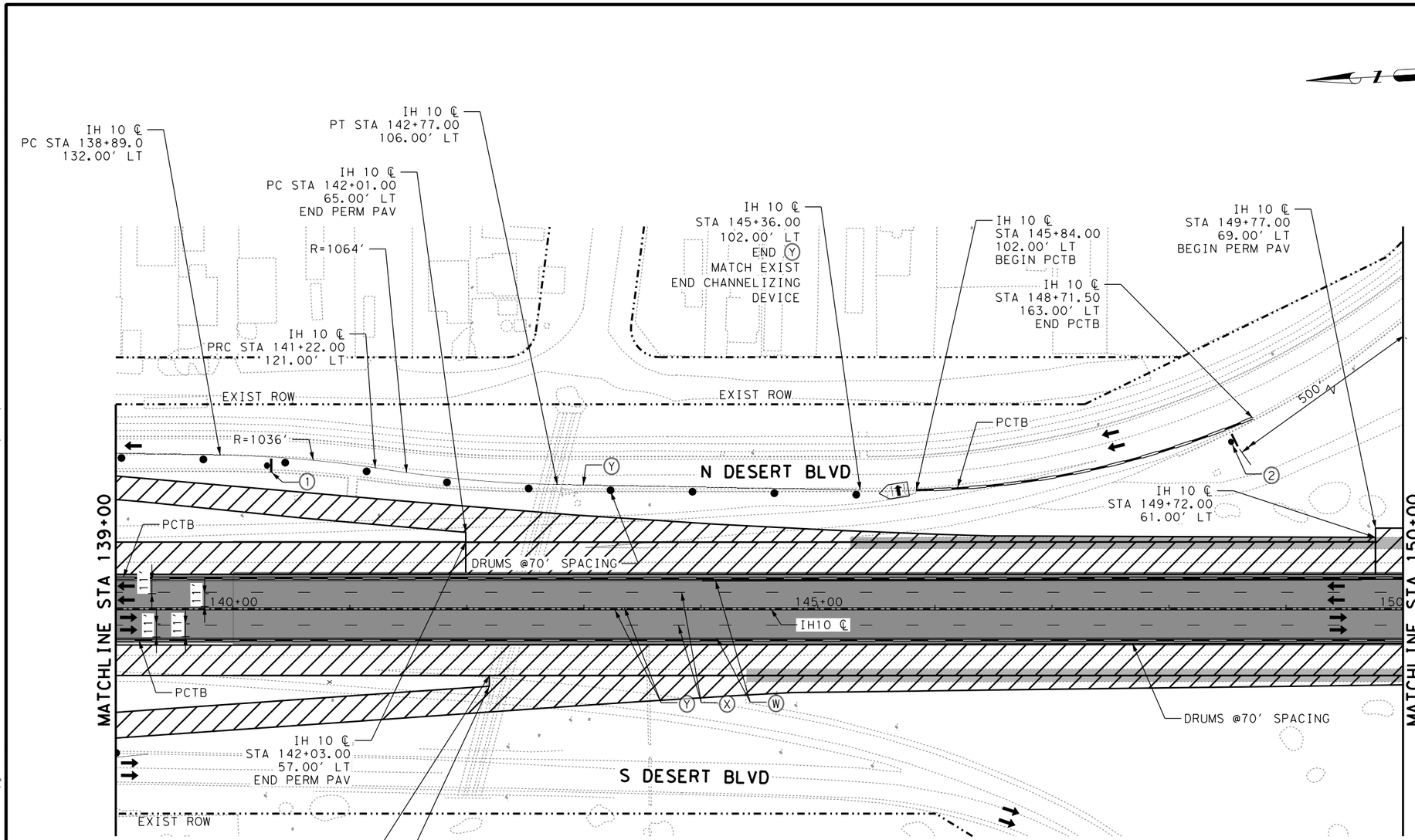
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 3

STA 128+00 TO STA 139+00

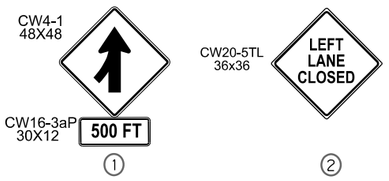
SHEET 14 OF 22

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		115
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- PERM CONSTRUCTION THIS PHASE
- PERM CONSTRUCTION PREVIOUS PHASE
- TEMP CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- Ⓣ WRK ZN PAV MRK (W)(8")(SLD)
- Ⓥ WRK ZN PAV MRK (W)(4")(DOT)
- Ⓦ WHITE EDGE LINE (RAISED PAV MRK)
- Ⓧ WHITE LANE LINE (RAISED PAV MRK)
- Ⓨ YELLOW EDGE LINE (RAISED PAV MRK)
- Ⓩ EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR



TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0512 6025	PORT CTB (MOVE)(SGL SLP)(TY 1)	LF	2,496
0512 6037	PORT CTB (STKPL)(SGL SLP)(TY 1)	LF	2,496
0662 6047	WK ZN PAV MRK REMOV (REFL) TY I-A	LF	2,838
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	2,750
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	2,750
0662 6059	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	LF	2,838
6001 6002	PORTABLE CHANGEABLE MESSAGE SIGN	EA	1

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ R1 UNLESS OTHERWISE NOTED.
2. FOR DEMOLITION LIMITS REFER TO REMOVAL LAYOUT SHEETS.

0 50' 100'
SCALE: 1" = 100'

STATE OF TEXAS
OSCAR D. GONZALEZ
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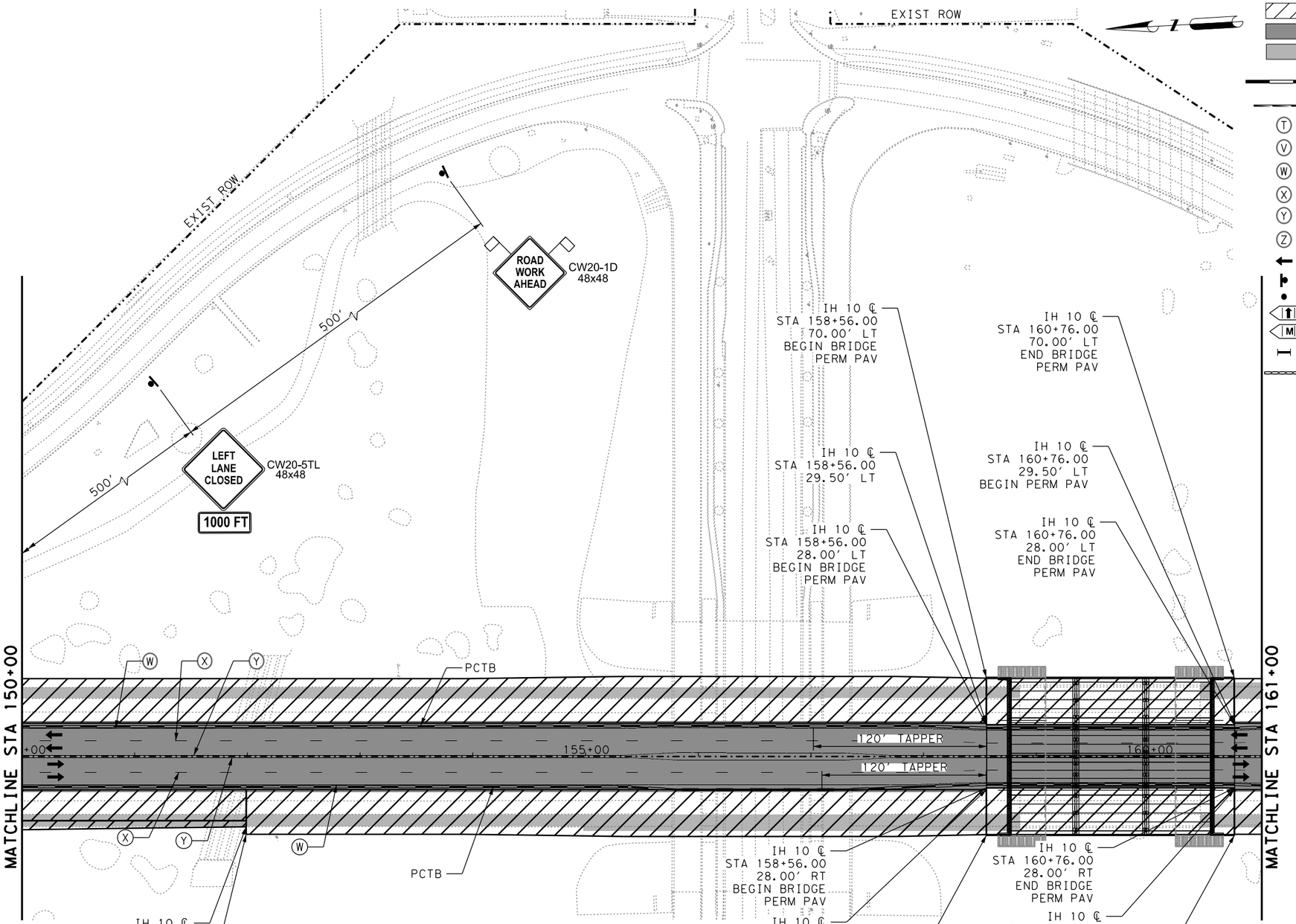
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 3

STA 139+00 TO STA 150+00

SHEET 15 OF 22

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		116
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- PERM CONSTRUCTION THIS PHASE
- PERM CONSTRUCTION PREVIOUS PHASE
- TEMP CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ R1 UNLESS OTHERWISE NOTED.
2. FOR DEMOLITION LIMITS REFER TO REMOVAL LAYOUT SHEETS.

TRAFFIC CONTROL QUANTITIES

ITEM	DESCRIPTION	UNIT	QUANTITY
0512 6025	PORT CTB (MOVE)(SGL SLP)(TY 1)	LF	2,200
0512 6037	PORT CTB (STKPL)(SGL SLP)(TY 1)	LF	2,200
0662 6047	WK ZN PAV MRK REMOV (REFL) TY I-A	LF	2,200
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	2,750
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	2,750
0662 6059	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	LF	2,200

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Texas Department of Transportation

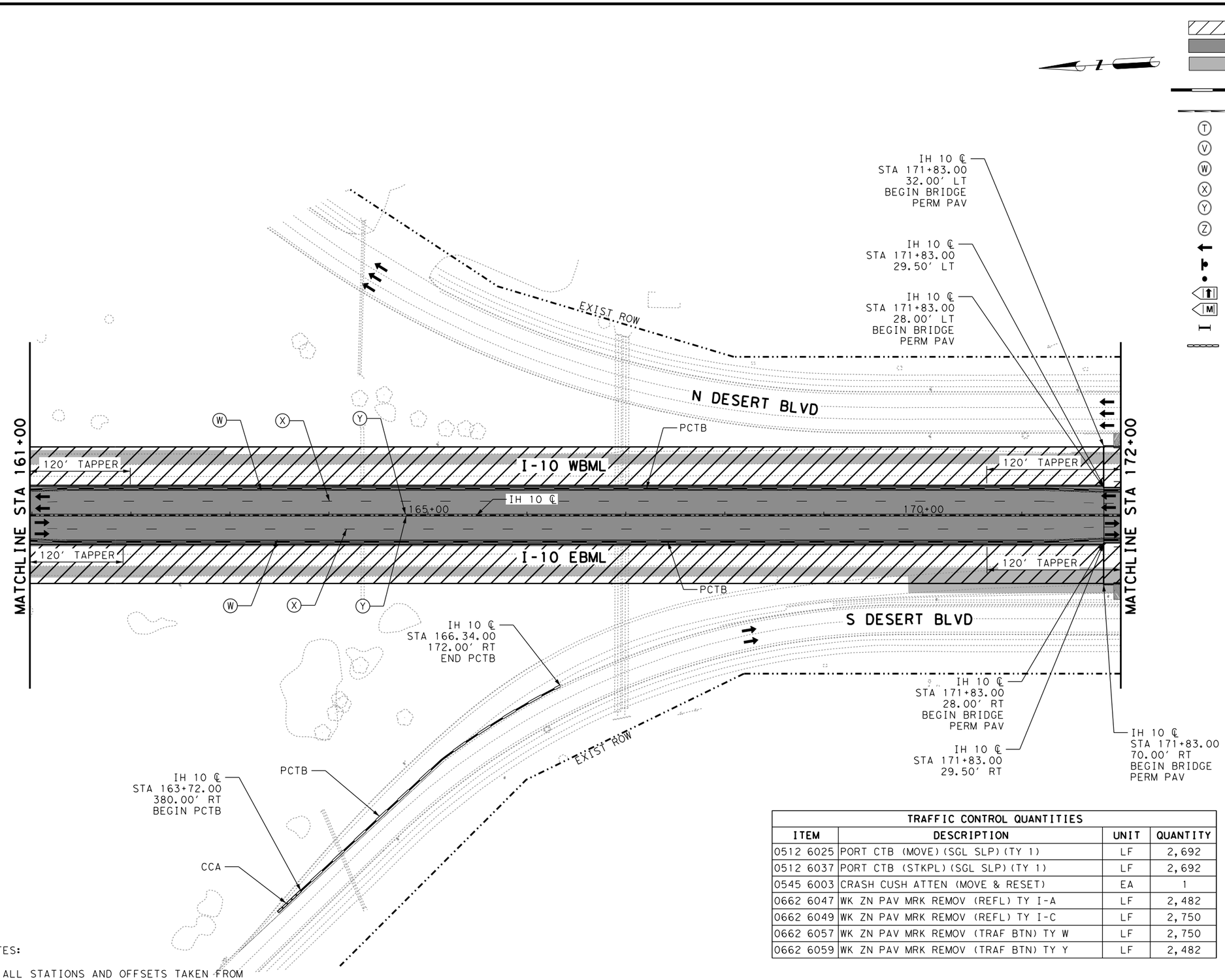
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 3

STA 150+00 TO STA 161+00

SHEET 16 OF 22

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		117
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- PERM CONSTRUCTION THIS PHASE
- PERM CONSTRUCTION PREVIOUS PHASE
- TEMP CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

NOTES:

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2. FOR DEMOLITION LIMITS REFER TO REMOVAL LAYOUT SHEETS.

TRAFFIC CONTROL QUANTITIES

ITEM	DESCRIPTION	UNIT	QUANTITY
0512 6025	PORT CTB (MOVE)(SGL SLP)(TY 1)	LF	2,692
0512 6037	PORT CTB (STKPL)(SGL SLP)(TY 1)	LF	2,692
0545 6003	CRASH CUSH ATTEN (MOVE & RESET)	EA	1
0662 6047	WK ZN PAV MRK REMOV (REFL) TY I-A	LF	2,482
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	2,750
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	2,750
0662 6059	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	LF	2,482

0 50' 100'
SCALE: 1" = 100'

STATE OF TEXAS
OSCAR D. GONZALEZ
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3/28/2024

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Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 3

STA 139+00 TO STA 161+00

SHEET 17 OF 22

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		118
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

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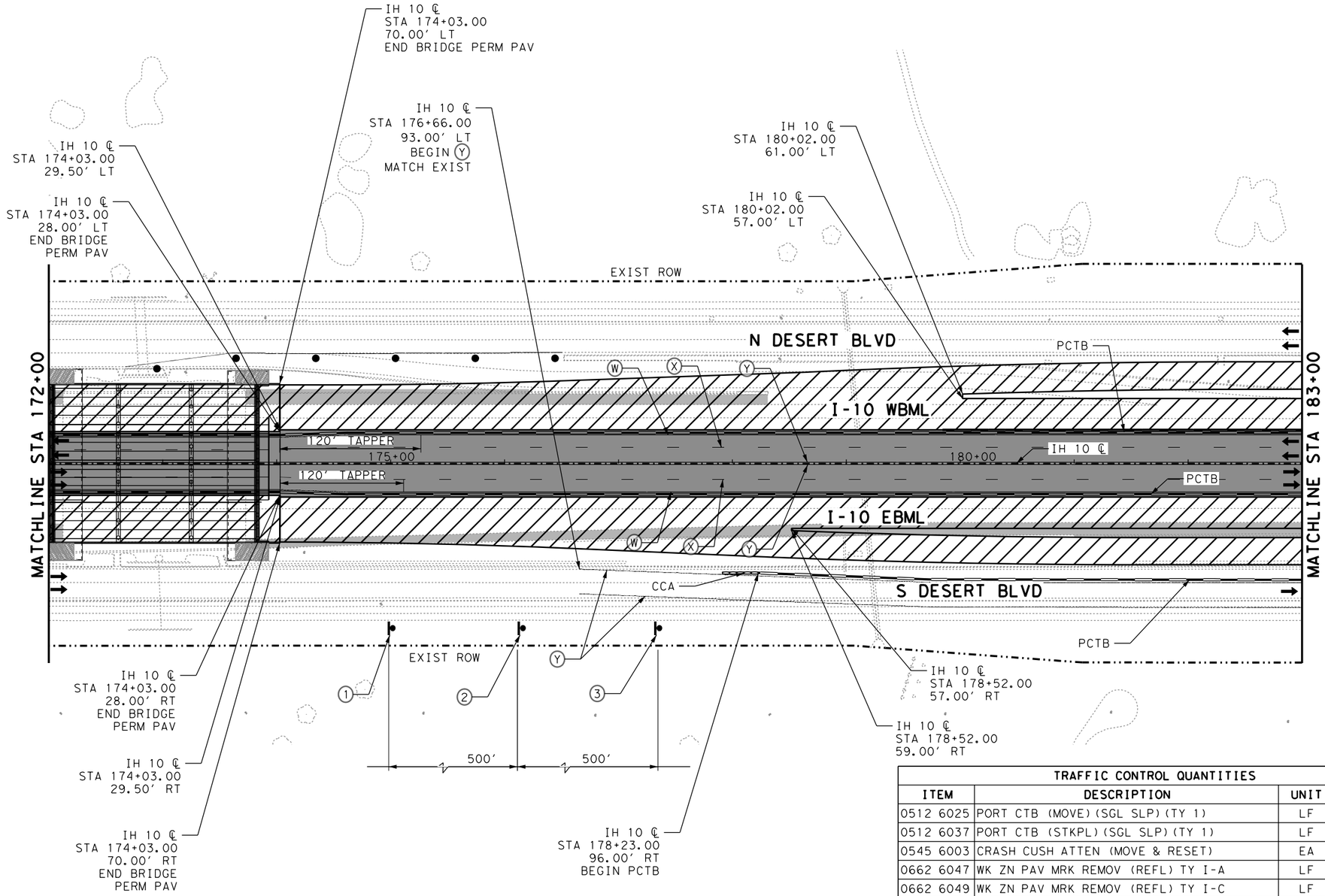


LEGEND:

- PERM CONSTRUCTION THIS PHASE
- PERM CONSTRUCTION PREVIOUS PHASE
- TEMP CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

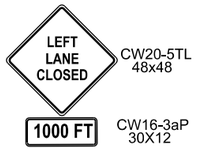
0 50' 100'
SCALE: 1" = 100'

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0512 6025	PORT CTB (MOVE)(SGL SLP)(TY 1)	LF	2,677
0512 6037	PORT CTB (STKPL)(SGL SLP)(TY 1)	LF	2,677
0545 6003	CRASH CUSH ATTEN (MOVE & RESET)	EA	1
0662 6047	WK ZN PAV MRK REMOV (REFL) TY I-A	LF	3,470
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	2,750
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	2,750
0662 6059	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	LF	3,470

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ R1 UNLESS OTHERWISE NOTED.
2. FOR DEMOLITION LIMITS REFER TO REMOVAL LAYOUT SHEETS.

1



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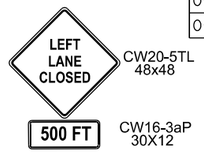

3

STATE OF TEXAS
OSCAR D. GONZALEZ
147840
LICENSED
PROFESSIONAL ENGINEER

3/28/2024

NO.	DATE	REVISION	APPROV.

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Texas Department of Transportation

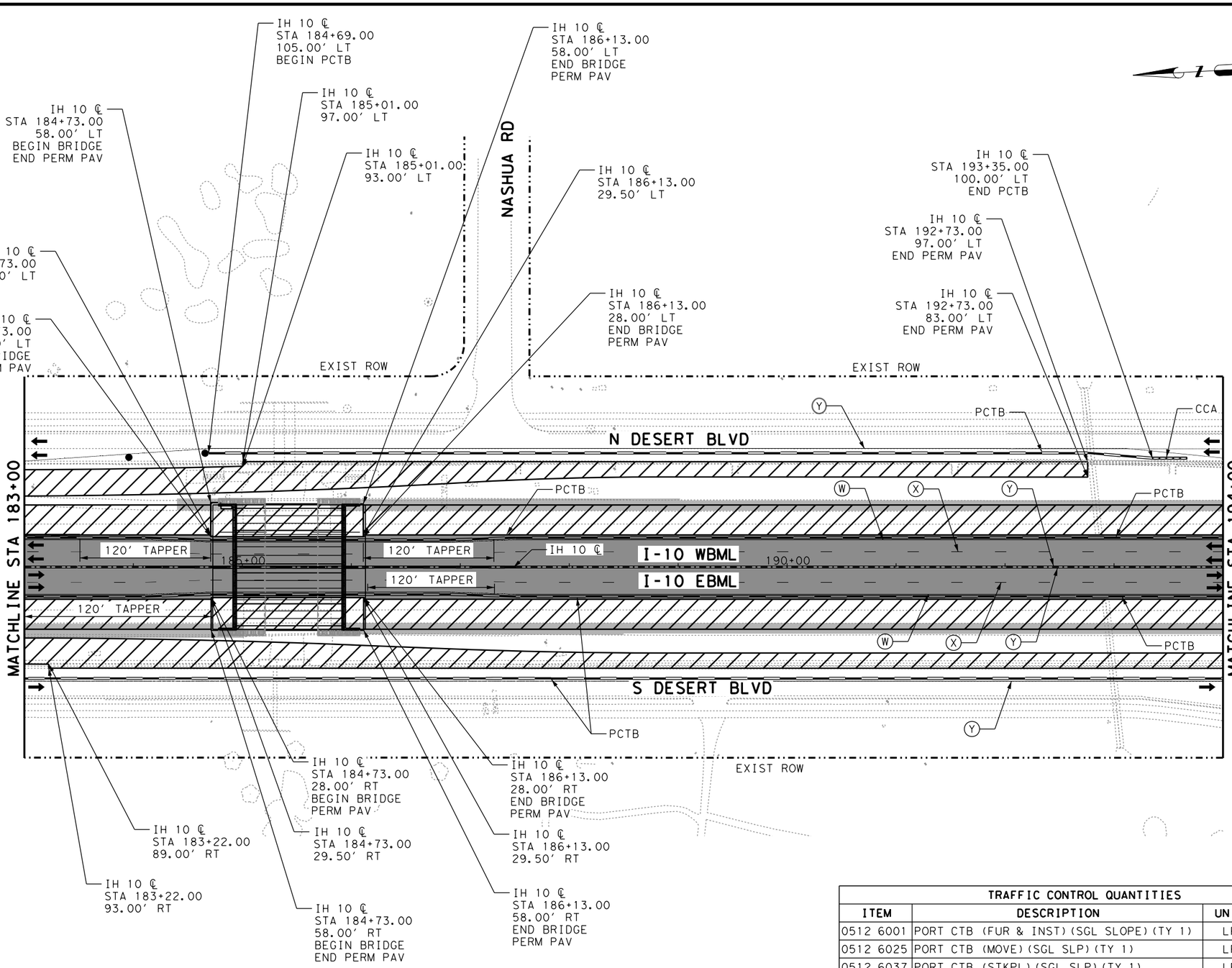
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 3

STA 172+00 TO STA 183+00

SHEET 18 OF 22

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		119
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- PERM CONSTRUCTION THIS PHASE
- PERM CONSTRUCTION PREVIOUS PHASE
- TEMP CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ R1 UNLESS OTHERWISE NOTED.
2. FOR DEMOLITION LIMITS REFER TO REMOVAL LAYOUT SHEETS.

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0512 6001	PORT CTB (FUR & INST)(SGL SLOPE)(TY 1)	LF	2,132
0512 6025	PORT CTB (MOVE)(SGL SLP)(TY 1)	LF	2,035
0512 6037	PORT CTB (STKPL)(SGL SLP)(TY 1)	LF	2,263
0545 6003	CRASH CUSH ATTEN (MOVE & RESET)	EA	1
0662 6047	WK ZN PAV MRK REMOV (REFL) TY I-A	LF	4,321
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	2,750
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	2,750
0662 6059	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	LF	4,321

0 50′ 100′
SCALE: 1" = 100′

STATE OF TEXAS
OSCAR D. GONZALEZ
147840
LICENSED
PROFESSIONAL ENGINEER

3/28/2024

NO.	DATE	REVISION	APPROV.

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Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN
STAGE 3

STA 183+00 TO STA 194+00

SHEET 19 OF 22

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		120
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

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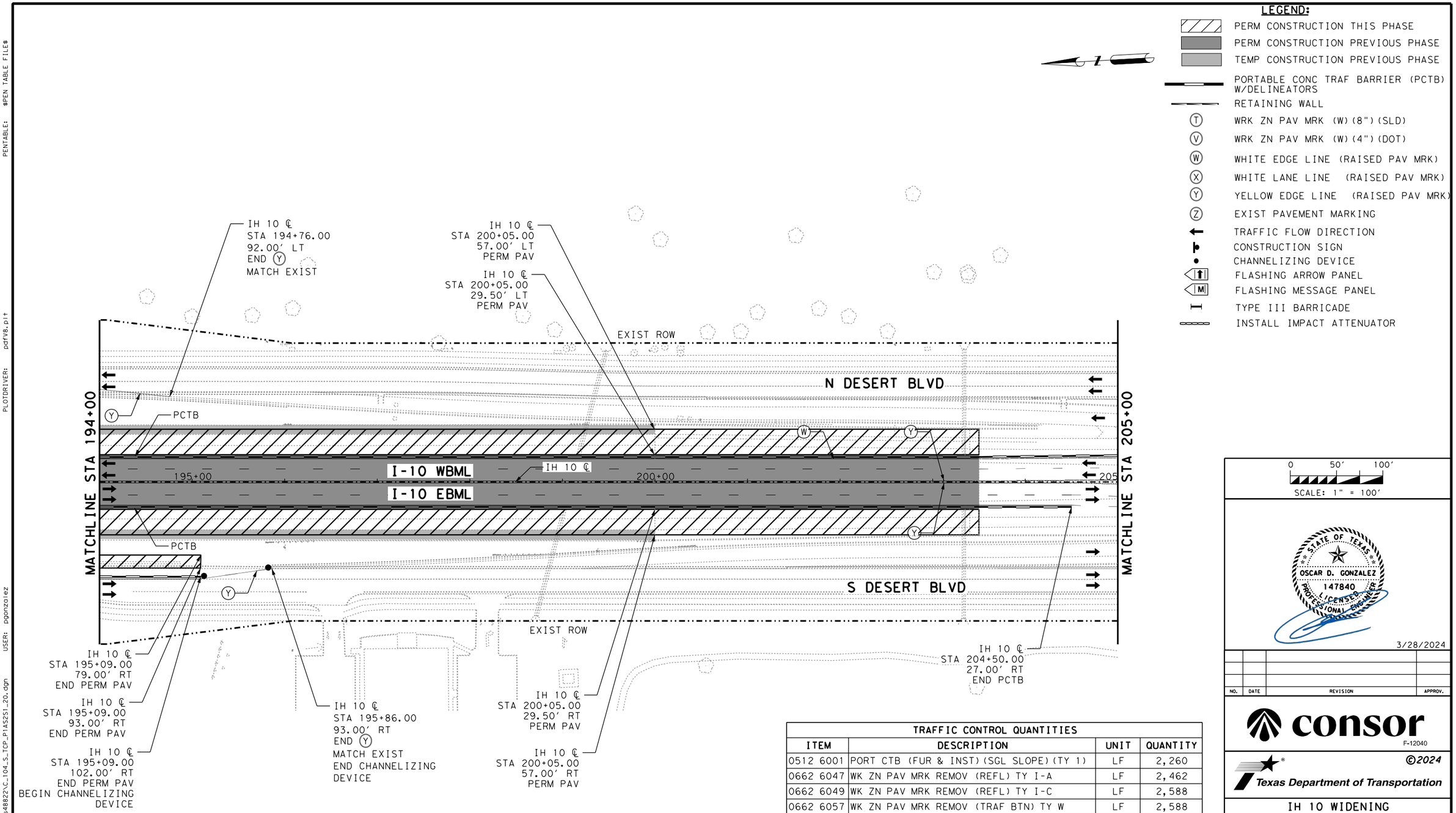

LEGEND:

- PERM CONSTRUCTION THIS PHASE
- PERM CONSTRUCTION PREVIOUS PHASE
- TEMP CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- Ⓣ WRK ZN PAV MRK (W)(8")(SLD)
- Ⓥ WRK ZN PAV MRK (W)(4")(DOT)
- Ⓦ WHITE EDGE LINE (RAISED PAV MRK)
- Ⓧ WHITE LANE LINE (RAISED PAV MRK)
- Ⓨ YELLOW EDGE LINE (RAISED PAV MRK)
- Ⓩ EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0512 6001	PORT CTB (FUR & INST)(SGL SLOPE)(TY 1)	LF	2,260
0662 6047	WK ZN PAV MRK REMOV (REFL) TY I-A	LF	2,462
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	2,588
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	2,588
0662 6059	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	LF	2,462

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ R1 UNLESS OTHERWISE NOTED.
2. FOR DEMOLITION LIMITS REFER TO REMOVAL LAYOUT SHEETS.

0 50' 100'
SCALE: 1" = 100'

STATE OF TEXAS
OSCAR D. GONZALEZ
147840
LICENSED
PROFESSIONAL ENGINEER
3/28/2024

NO.	DATE	REVISION	APPROV.

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Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 3

STA 194+00 TO STA 205+00
SHEET 20 OF 22

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		121
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

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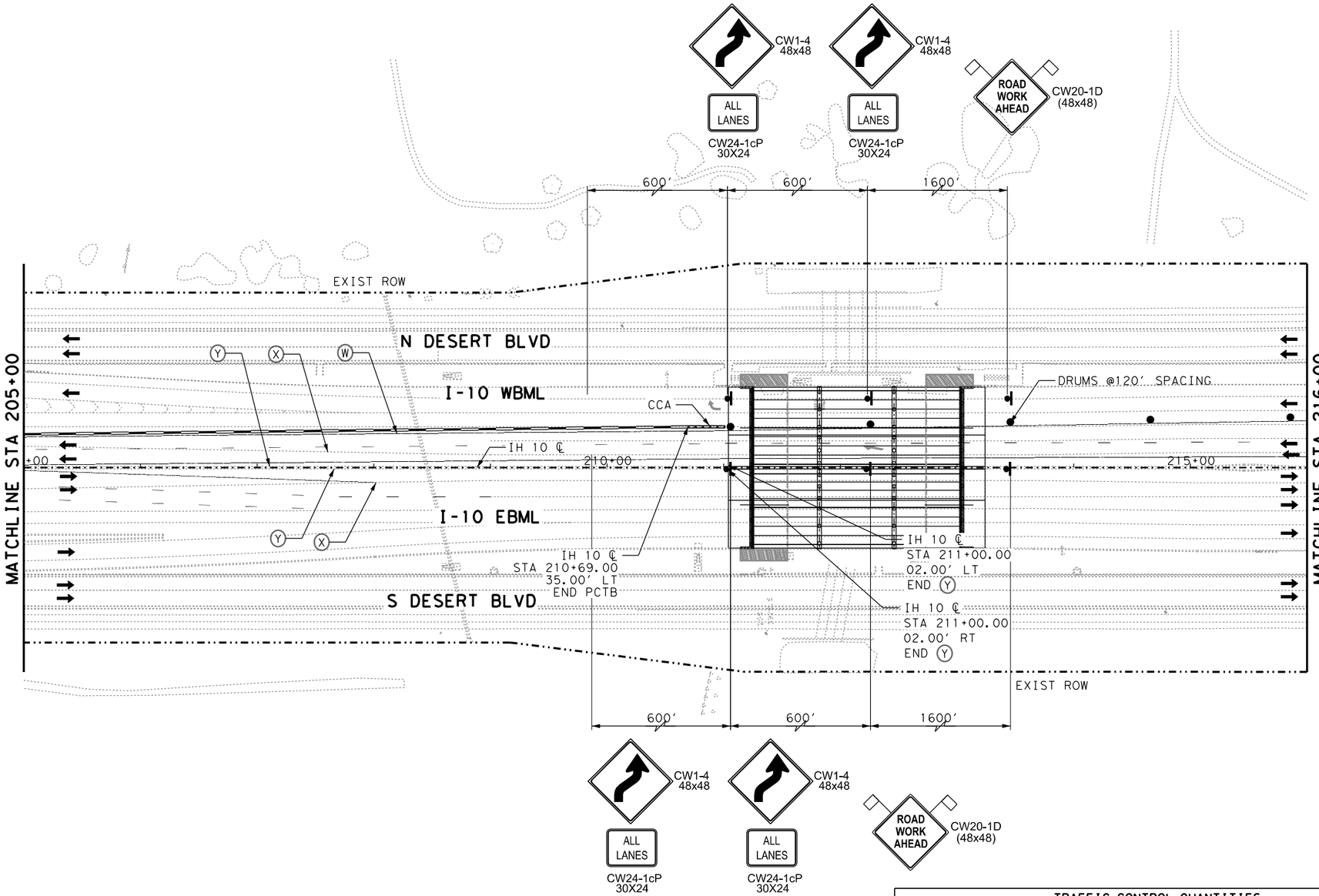

LEGEND:

- PERM CONSTRUCTION THIS PHASE
- PERM CONSTRUCTION PREVIOUS PHASE
- TEMP CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ R1 UNLESS OTHERWISE NOTED.
2. FOR DEMOLITION LIMITS REFER TO REMOVAL LAYOUT SHEETS.

TRAFFIC CONTROL QUANTITIES

ITEM	DESCRIPTION	UNIT	QUANTITY
0512 6001	PORT CTB (FUR & INST)(SGL SLOPE)(TY 1)	LF	570
0545 6003	CRASH CUSH ATTEN (MOVE & RESET)	EA	1
0662 6047	WK ZN PAV MRK REMOV (REFL) TY I-A	LF	1,443
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	1,564
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	1,564
0662 6059	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	LF	1,443

STATE OF TEXAS
OSCAR D. GONZALEZ
147840
LICENSED
PROFESSIONAL ENGINEER

3/28/2024

NO.	DATE	REVISION	APPROV.

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Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN
STAGE 3

STA 205+00 TO STA 216+00

SHEET 21 OF 22

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		122
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

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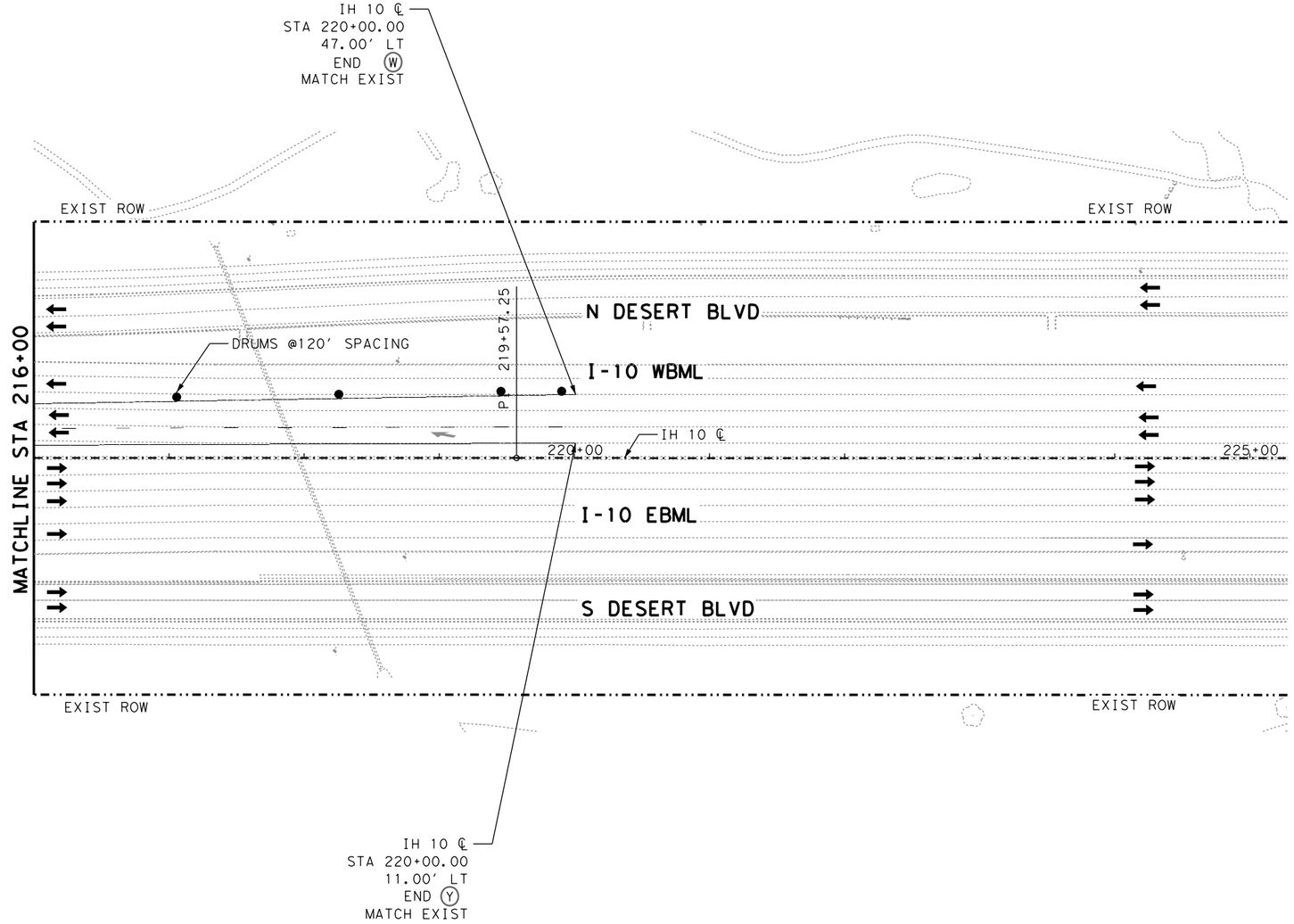

LEGEND:

- PERM CONSTRUCTION THIS PHASE
- PERM CONSTRUCTION PREVIOUS PHASE
- TEMP CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- Ⓣ WRK ZN PAV MRK (W)(8")(SLD)
- Ⓥ WRK ZN PAV MRK (W)(4")(DOT)
- Ⓦ WHITE EDGE LINE (RAISED PAV MRK)
- Ⓧ WHITE LANE LINE (RAISED PAV MRK)
- Ⓨ YELLOW EDGE LINE (RAISED PAV MRK)
- Ⓩ EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ R1 UNLESS OTHERWISE NOTED.
2. FOR DEMOLITION LIMITS REFER TO REMOVAL LAYOUT SHEETS.

TRAFFIC CONTROL QUANTITIES

ITEM	DESCRIPTION	UNIT	QUANTITY
0662 6047	WK ZN PAV MRK REMOV (REFL) TY I-A	LF	401
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	502
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	502
0662 6059	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	LF	401

0 50' 100'
SCALE: 1" = 100'

STATE OF TEXAS
OSCAR D. GONZALEZ
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3/28/2024

NO.	DATE	REVISION	APPROV.

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Texas Department of Transportation

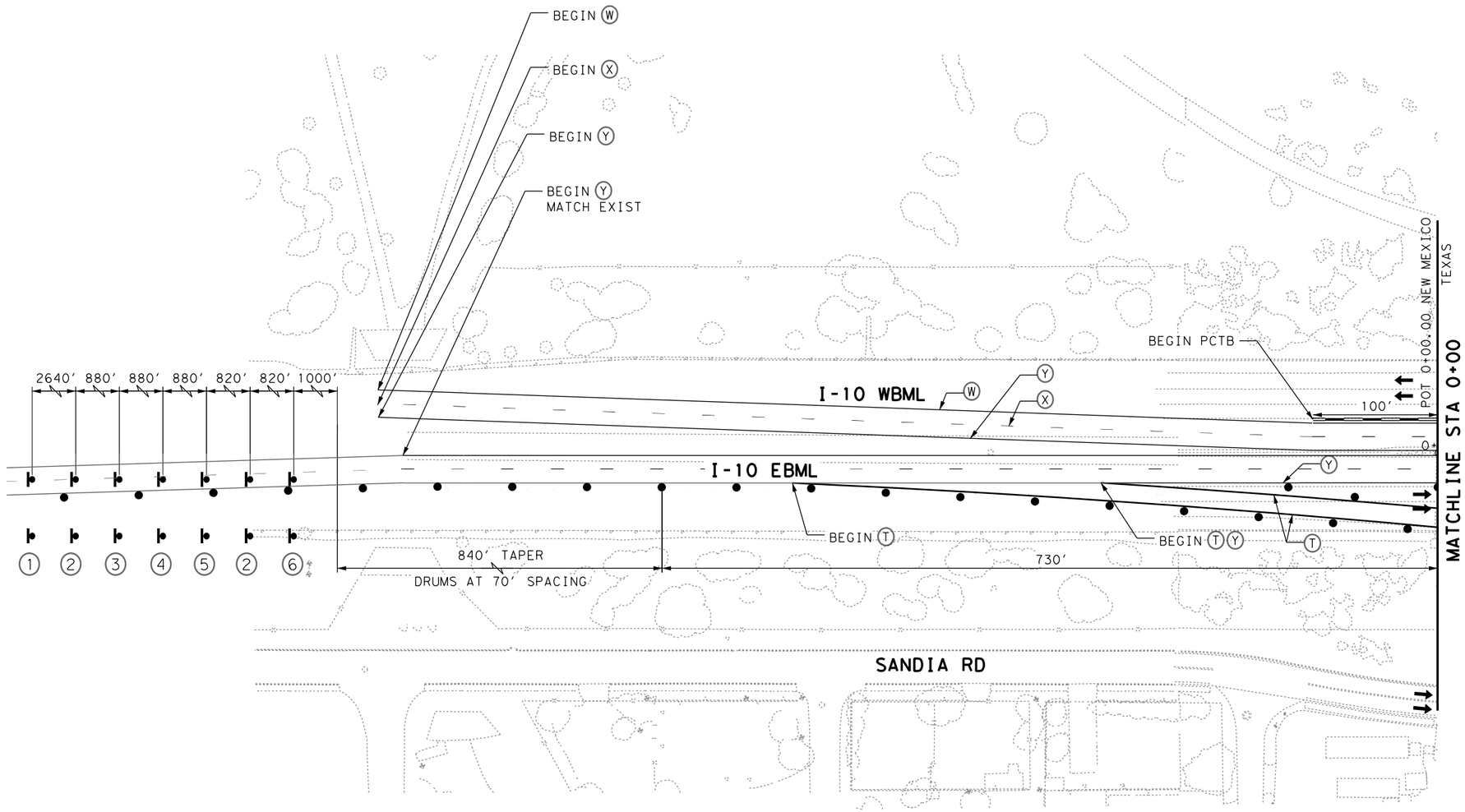
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 3

STA 216+00 TO END PROJECT

SHEET 22 OF 22

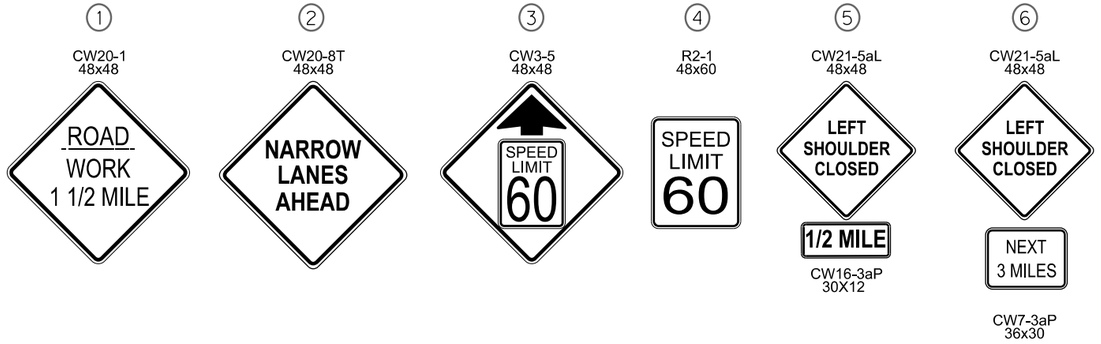
FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		122A
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- PERM CONSTRUCTION THIS PHASE
- PERM CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'



TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0512 6025	PORT CTB (MOVE)(SGL SLP)(TY 1)	LF	100
0512 6037	PORT CTB (STKPL)(SGL SLP)(TY 1)	LF	100
0662 6071	WK ZN PAV MRK REMOV (W)8"(SLD)	LF	1,062

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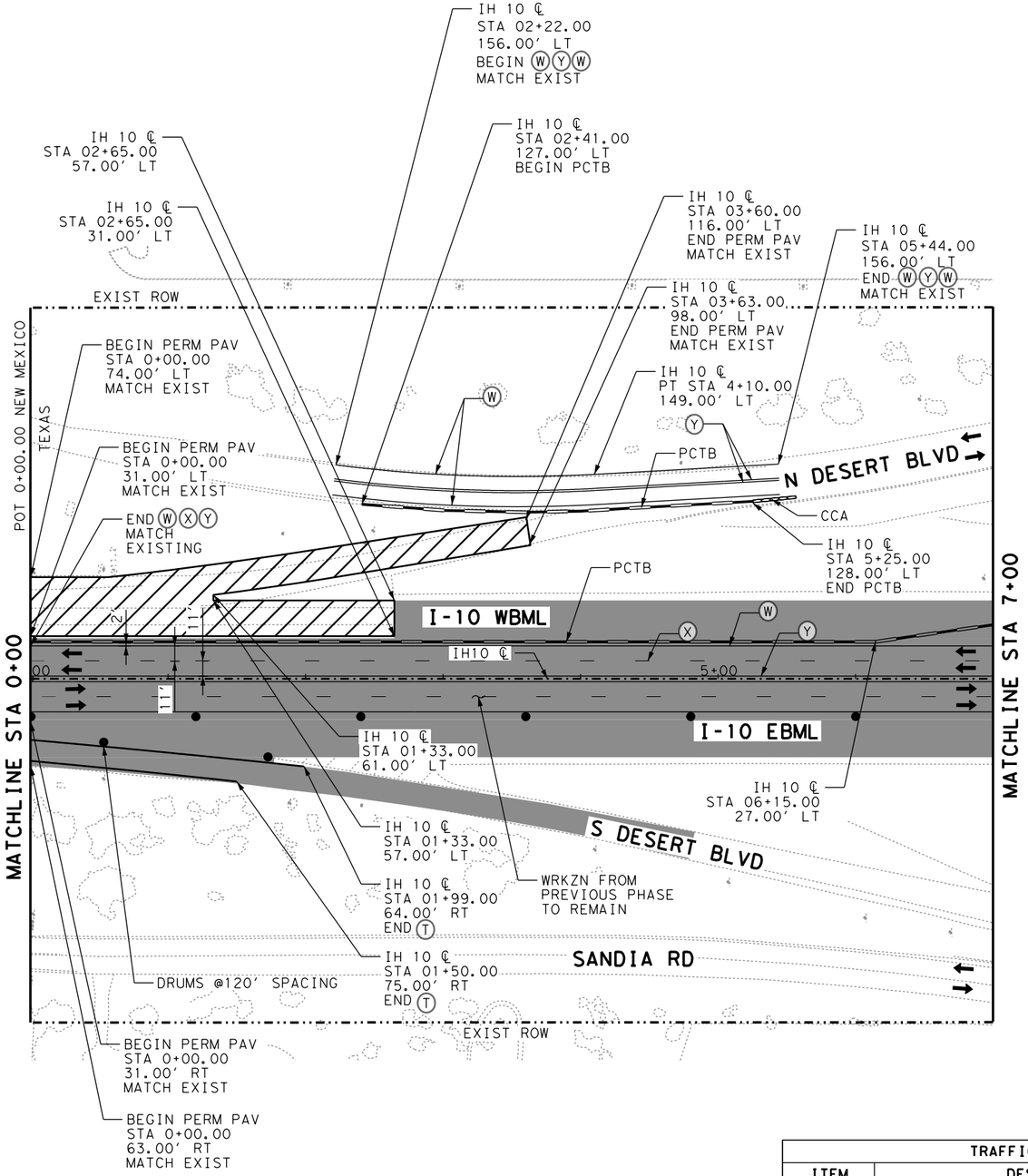
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 4

BEGIN PHASE TO STA 0+00

SHEET 1 OF 21

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		123
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- PERM CONSTRUCTION THIS PHASE
- PERM CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ R1 UNLESS OTHERWISE NOTED.
2. FOR DEMOLITION LIMITS REFER TO REMOVAL LAYOUT SHEETS.

TRAFFIC CONTROL QUANTITIES

ITEM	DESCRIPTION	UNIT	QUANTITY
0512 6025	PORT CTB (MOVE)(SGL SLP)(TY 1)	LF	985
0512 6037	PORT CTB (STKPL)(SGL SLP)(TY 1)	LF	985
0545 6003	CRASH CUSH ATTEN (MOVE & RESET)	EA	1
0545 6005	CRASH CUSH ATTEN (REMOVE)	EA	1
0662 6047	WK ZN PAV MRK REMOV (REFL) TY I-A	LF	648
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	648
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	648
0662 6059	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	LF	648
0662 6071	WK ZN PAV MRK REMOV (W)8"(SLD)	LF	554

STATE OF TEXAS
OSCAR D. GONZALEZ
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3/28/2024

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Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 4

STA 0+00 TO STA 7+00

SHEET 2 OF 21

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		124
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

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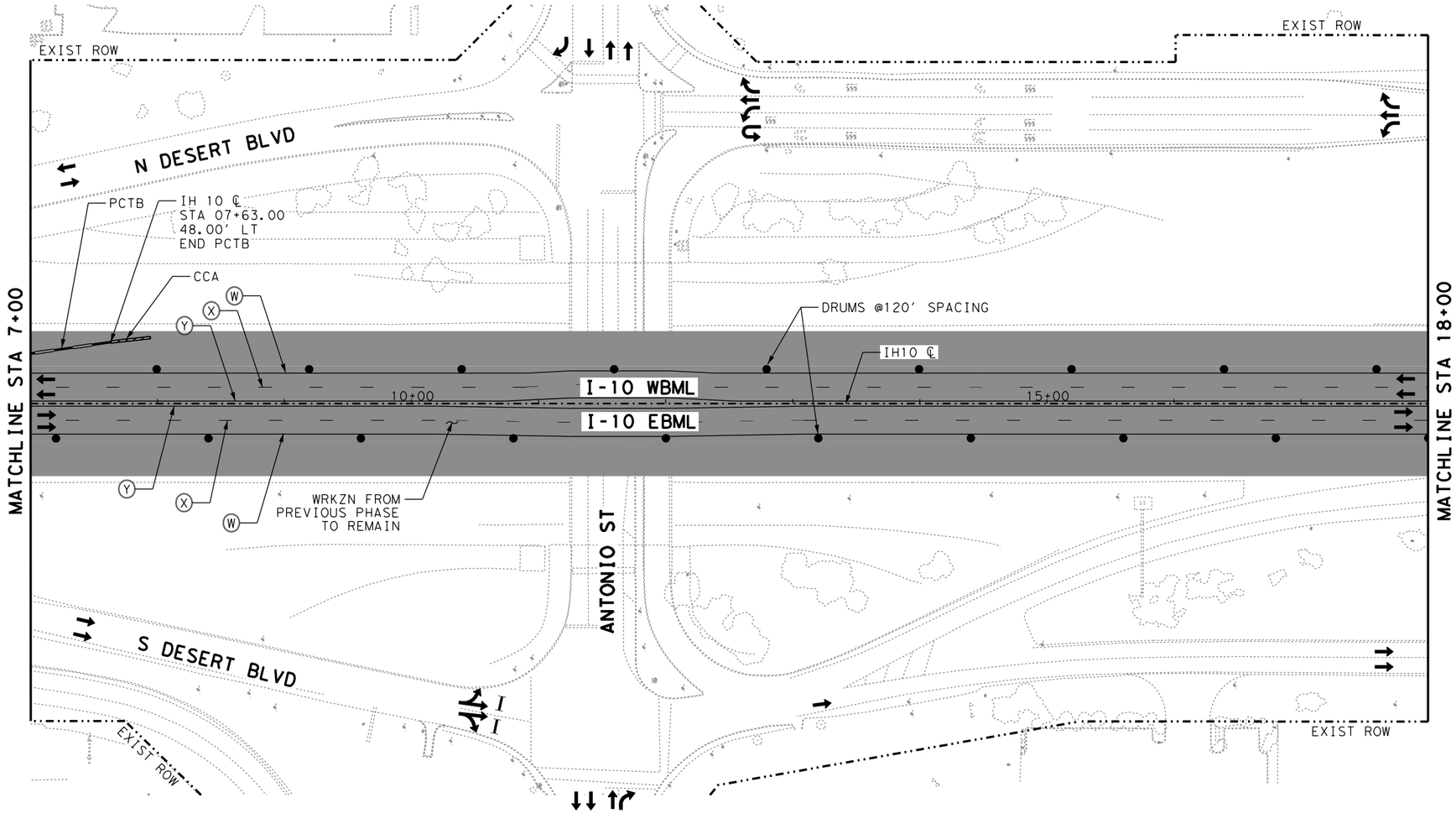
LEGEND:

- PERM CONSTRUCTION THIS PHASE
- PERM CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR



0 50' 100'
SCALE: 1" = 100'

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0512 6025	PORT CTB (MOVE)(SGL SLP)(TY 1)	LF	64
0512 6037	PORT CTB (STKPL)(SGL SLP)(TY 1)	LF	64
0545 6003	CRASH CUSH ATTEN (MOVE & RESET)	EA	1
0545 6005	CRASH CUSH ATTEN (REMOVE)	EA	1

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ R1 UNLESS OTHERWISE NOTED.
2. FOR DEMOLITION LIMITS REFER TO REMOVAL LAYOUT SHEETS.

STATE OF TEXAS
OSCAR D. GONZALEZ
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3/28/2024

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Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 4

STA 7+00 TO STA 18+00

SHEET 3 OF 21

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		125
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

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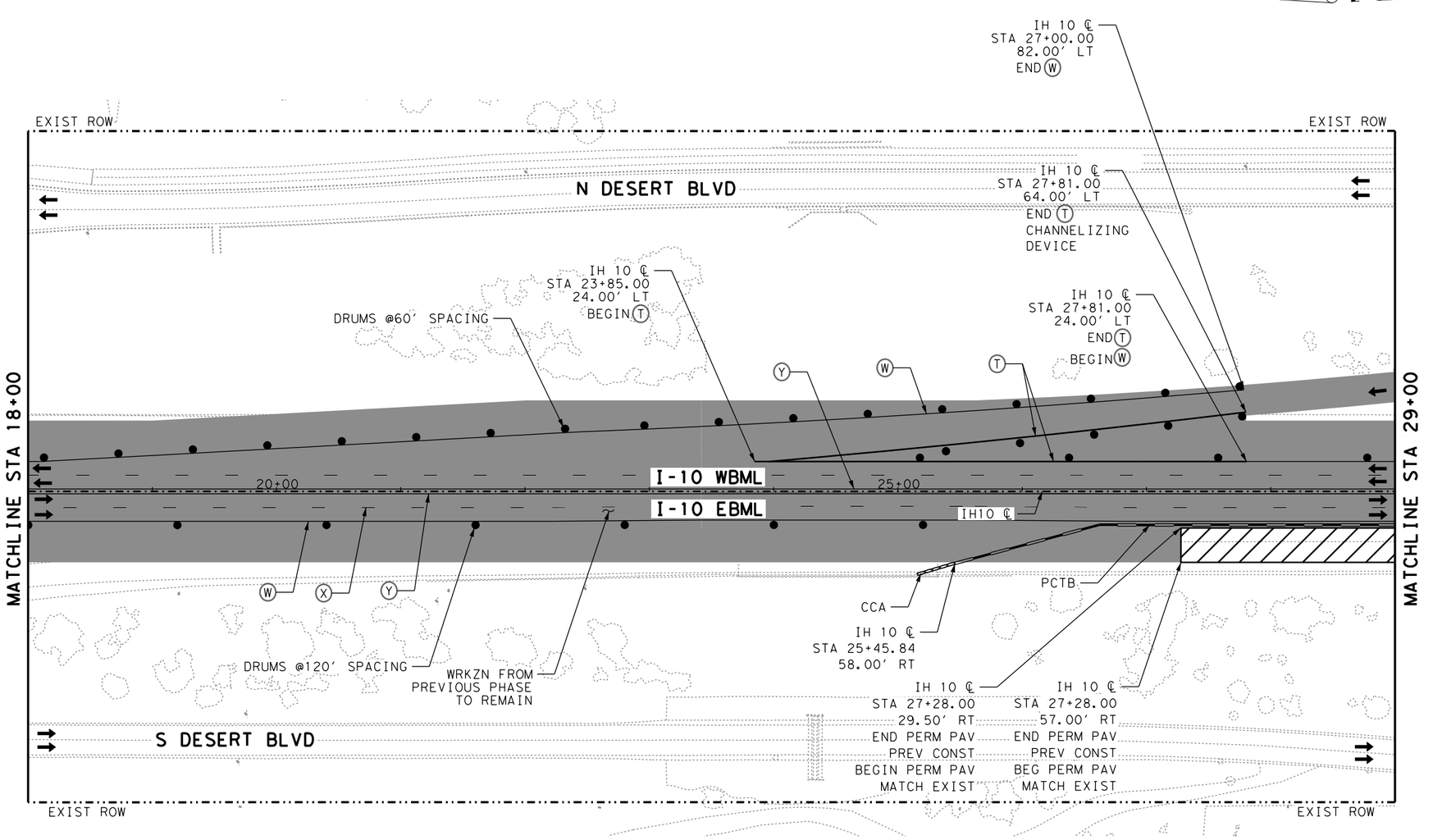
LEGEND:

- PERM CONSTRUCTION THIS PHASE
- PERM CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR



TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0545 6003	CRASH CUSH ATTEN (MOVE & RESET)	EA	1
0545 6005	CRASH CUSH ATTEN (REMOVE)	EA	1
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	971
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	971
0662 6071	WK ZN PAV MRK REMOV (W)8"(SLD)	LF	782

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ R1 UNLESS OTHERWISE NOTED.
2. FOR DEMOLITION LIMITS REFER TO REMOVAL LAYOUT SHEETS.

0 50' 100'
SCALE: 1" = 100'

STATE OF TEXAS
OSCAR D. GONZALEZ
147840
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3/28/2024

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Texas Department of Transportation

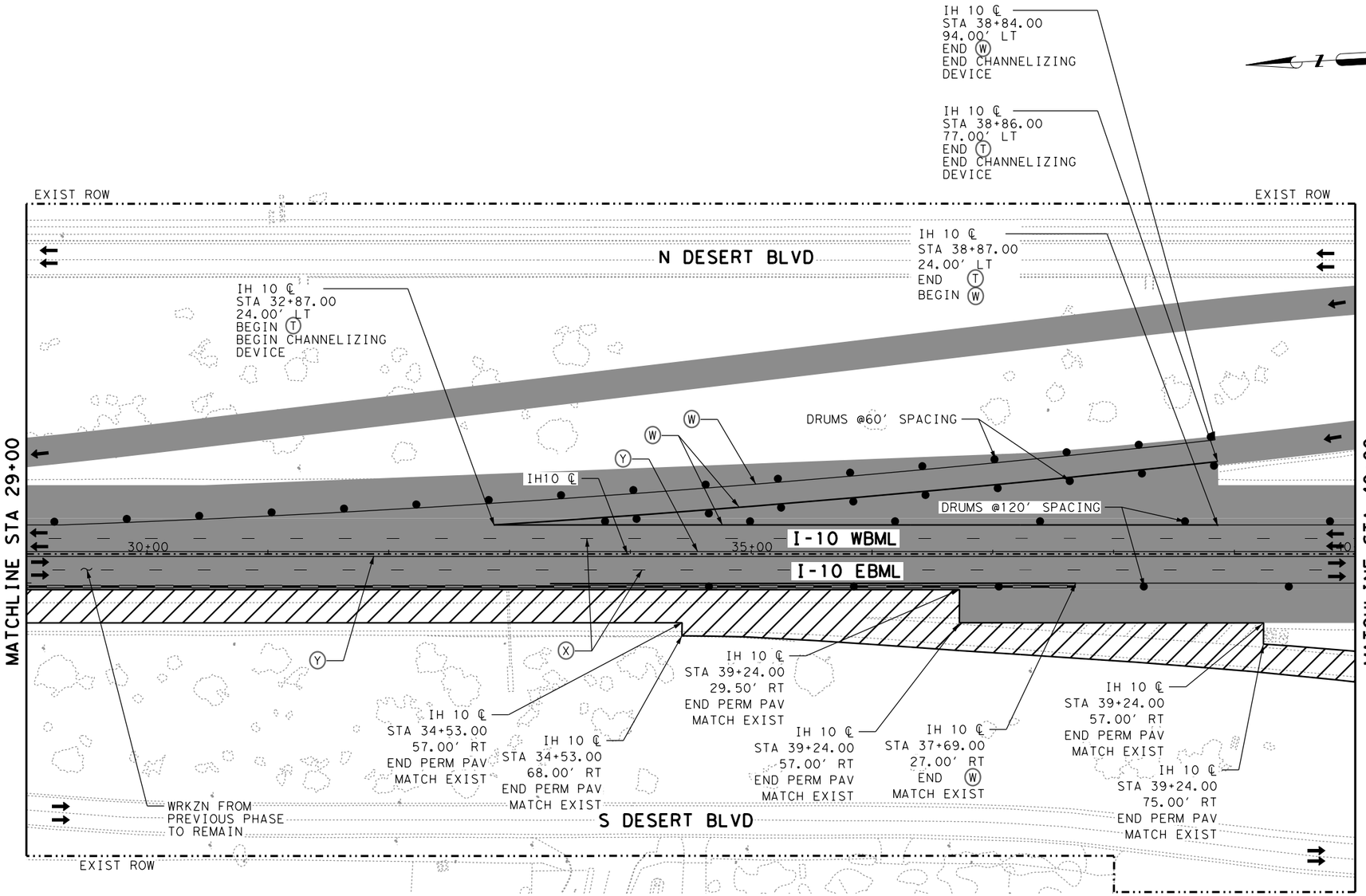
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN
STAGE 4

STA 18+00 TO STA 29+00

SHEET 4 OF 21

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		126
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- PERM CONSTRUCTION THIS PHASE
- PERM CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	1,765
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	1,765
0662 6071	WK ZN PAV MRK REMOV (W)8"(SLD)	LF	1,638

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ R1 UNLESS OTHERWISE NOTED.
2. FOR DEMOLITION LIMITS REFER TO REMOVAL LAYOUT SHEETS.

STATE OF TEXAS
OSCAR D. GONZALEZ
147840
PROFESSIONAL ENGINEER
3/28/2024

NO.	DATE	REVISION	APPROV.

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Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN
STAGE 4

STA 29+00 TO STA 40+00
SHEET 5 OF 21

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		127
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

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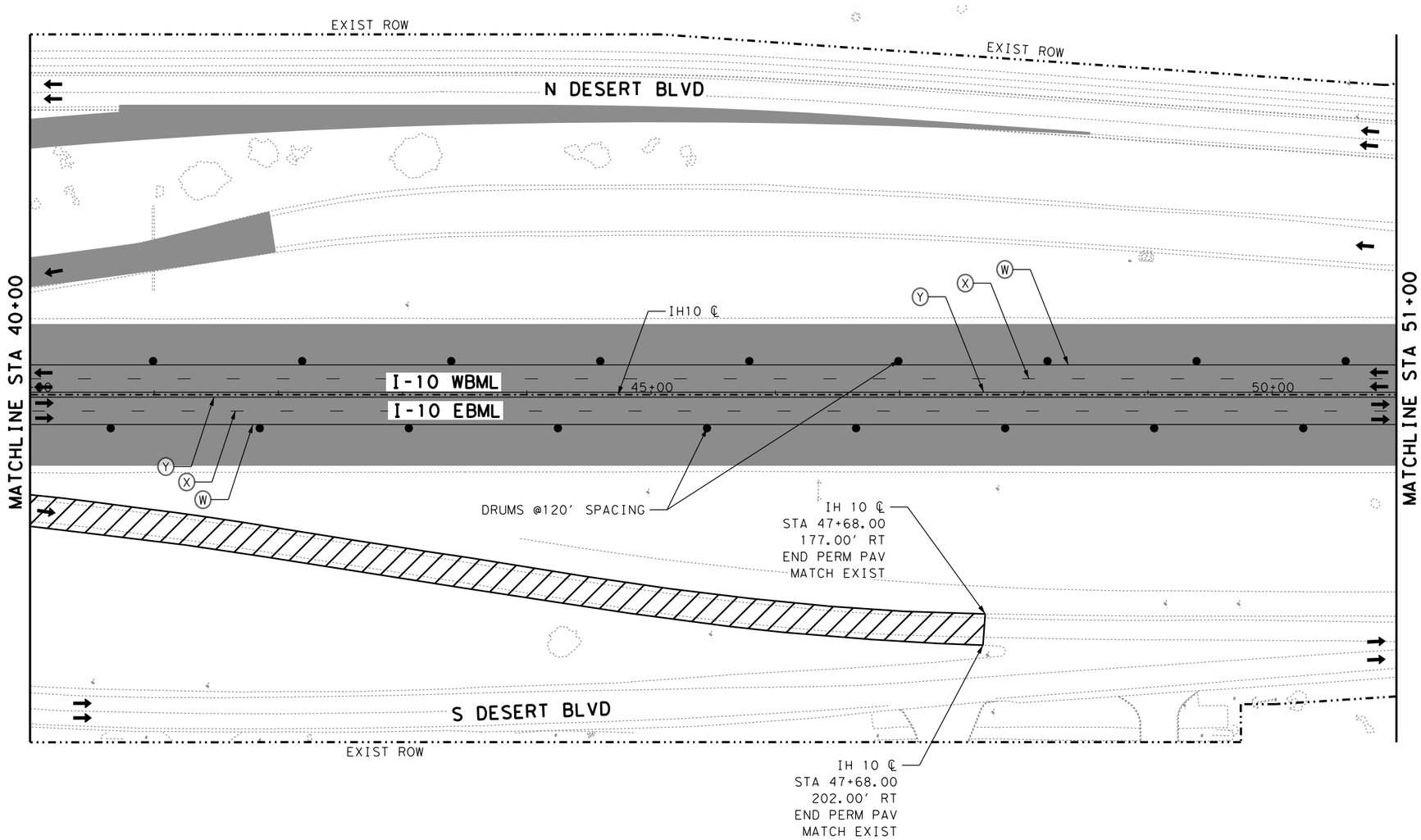

LEGEND:

- PERM CONSTRUCTION THIS PHASE
- PERM CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ R1 UNLESS OTHERWISE NOTED.
2. FOR DEMOLITION LIMITS REFER TO REMOVAL LAYOUT SHEETS.

0 50' 100'
SCALE: 1" = 100'

STATE OF TEXAS
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NO.	DATE	REVISION	APPROV.

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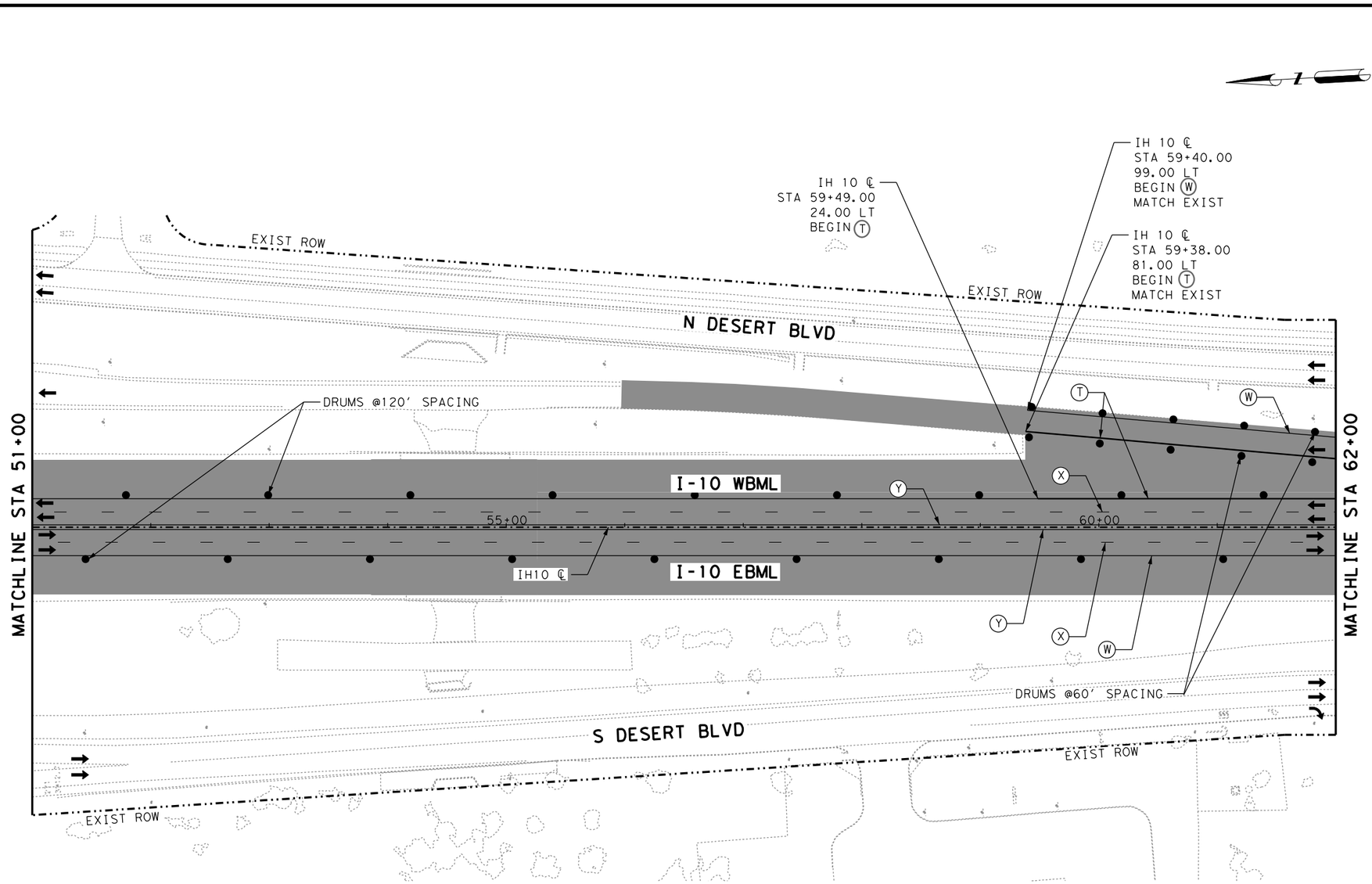
Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 4

STA 40+00 TO STA 51+00
SHEET 6 OF 21

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		128
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- PERM CONSTRUCTION THIS PHASE
- PERM CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	261
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	261
0662 6071	WK ZN PAV MRK REMOV (W)8"(SLD)	LF	514

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ R1 UNLESS OTHERWISE NOTED.
2. FOR DEMOLITION LIMITS REFER TO REMOVAL LAYOUT SHEETS.

STATE OF TEXAS
OSCAR D. GONZALEZ
147840
PROFESSIONAL ENGINEER
LICENSED

3/28/2024

NO.	DATE	REVISION	APPROV.

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Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 4

STA 51+00 TO STA 62+00
SHEET 7 OF 21

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		129
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

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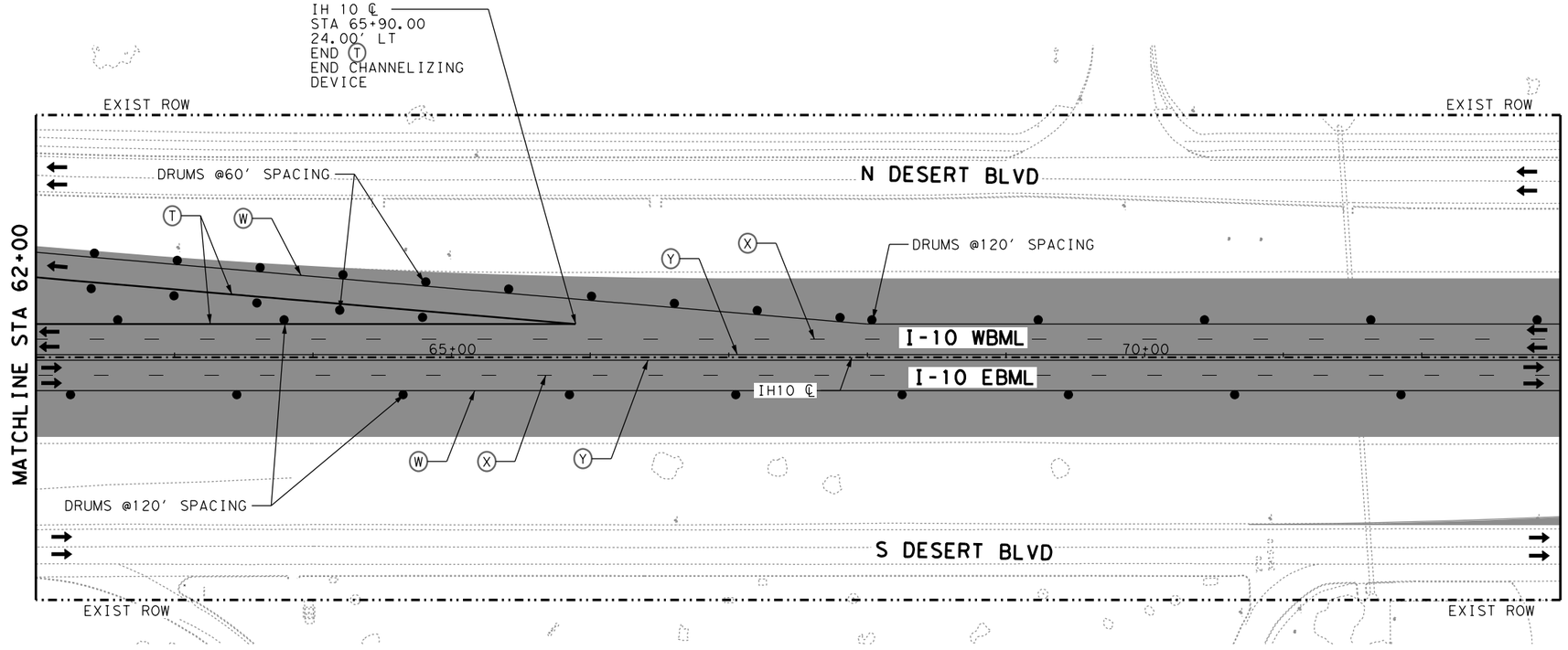

LEGEND:

- PERM CONSTRUCTION THIS PHASE
- PERM CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- Ⓣ WRK ZN PAV MRK (W)(8")(SLD)
- Ⓥ WRK ZN PAV MRK (W)(4")(DOT)
- Ⓦ WHITE EDGE LINE (RAISED PAV MRK)
- Ⓧ WHITE LANE LINE (RAISED PAV MRK)
- Ⓨ YELLOW EDGE LINE (RAISED PAV MRK)
- Ⓩ EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	602
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	602
0662 6071	WK ZN PAV MRK REMOV (W)8"(SLD)	LF	780

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ R1 UNLESS OTHERWISE NOTED.
2. FOR DEMOLITION LIMITS REFER TO REMOVAL LAYOUT SHEETS.

STATE OF TEXAS
OSCAR D. GONZALEZ
147840
LICENSED
PROFESSIONAL ENGINEER

3/28/2024

NO.	DATE	REVISION	APPROV.

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Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN
STAGE 4

STA 62+00 TO STA 73+00
SHEET 8 OF 21

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		130
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

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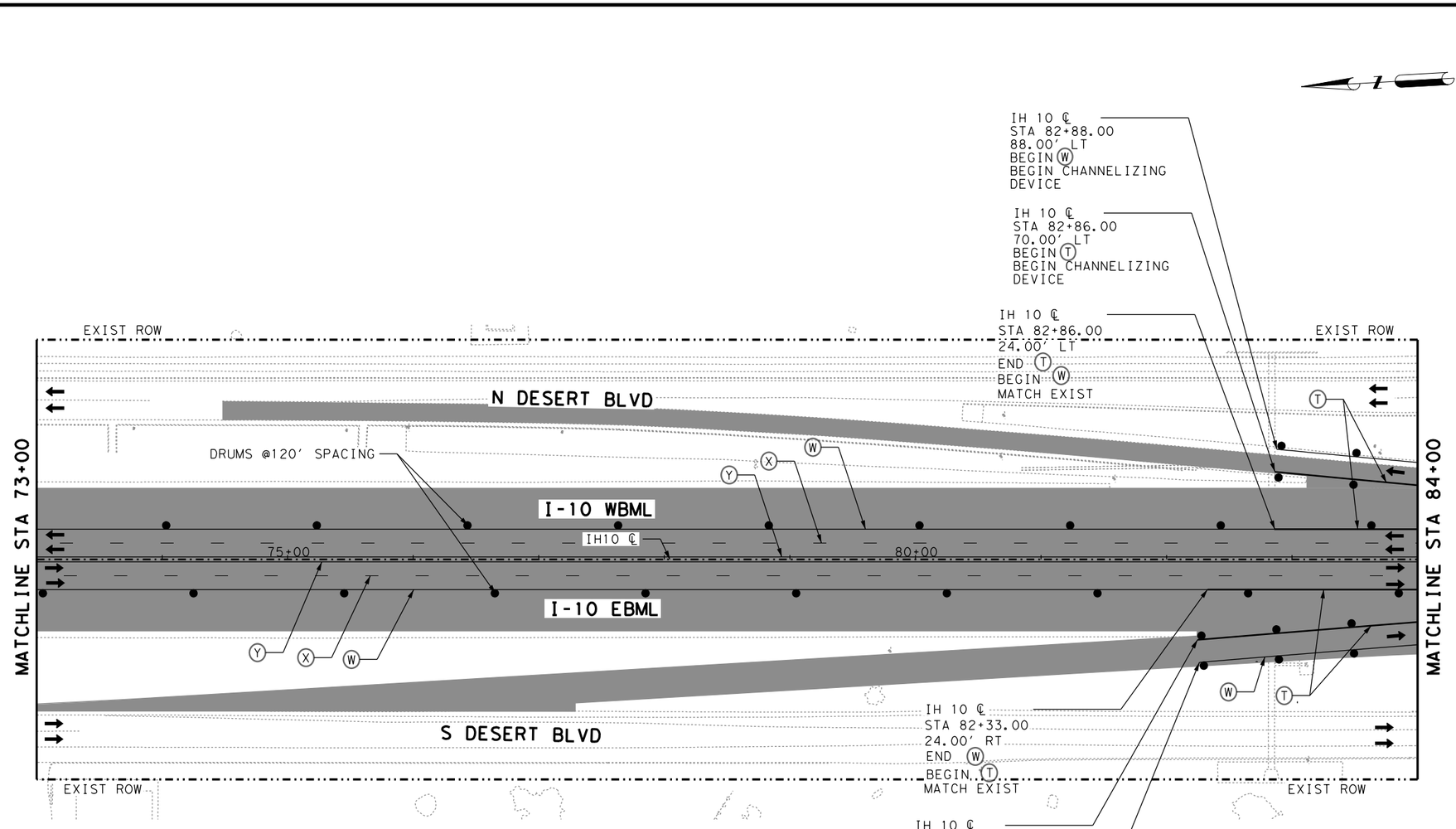

LEGEND:

- PERM CONSTRUCTION THIS PHASE
- PERM CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	287
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	287
0662 6071	WK ZN PAV MRK REMOV (W)8"(SLD)	LF	572

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ R1 UNLESS OTHERWISE NOTED.
2. FOR DEMOLITION LIMITS REFER TO REMOVAL LAYOUT SHEETS.

STATE OF TEXAS
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3/28/2024

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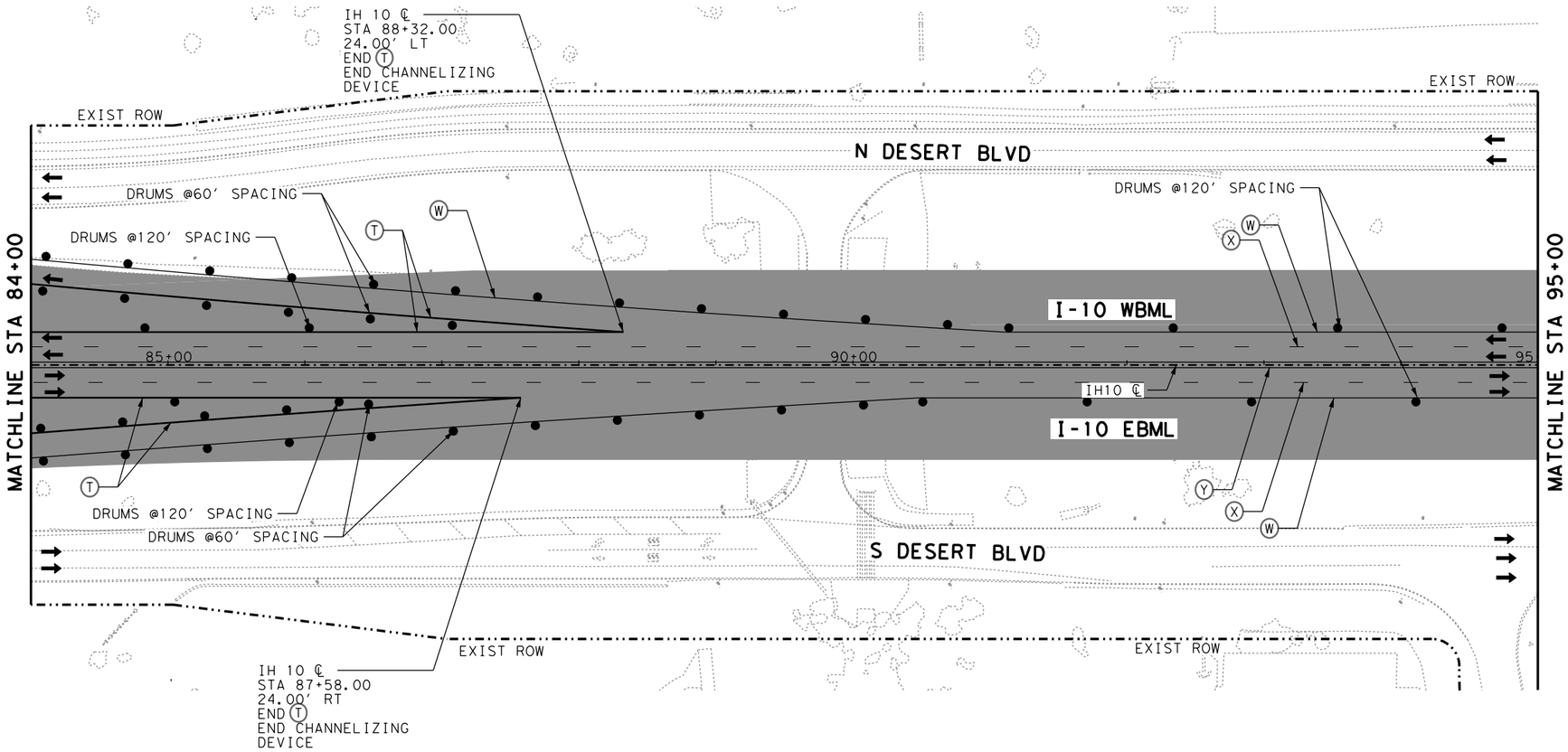
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 4

STA 73+00 TO STA 84+00

SHEET 9 OF 21

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		131
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- PERM CONSTRUCTION THIS PHASE
- PERM CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	1,361
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	1,361
0662 6071	WK ZN PAV MRK REMOV (W)8"(SLD)	LF	1,220

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ R1 UNLESS OTHERWISE NOTED.
2. FOR DEMOLITION LIMITS REFER TO REMOVAL LAYOUT SHEETS.

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STATE OF TEXAS
3/28/2024

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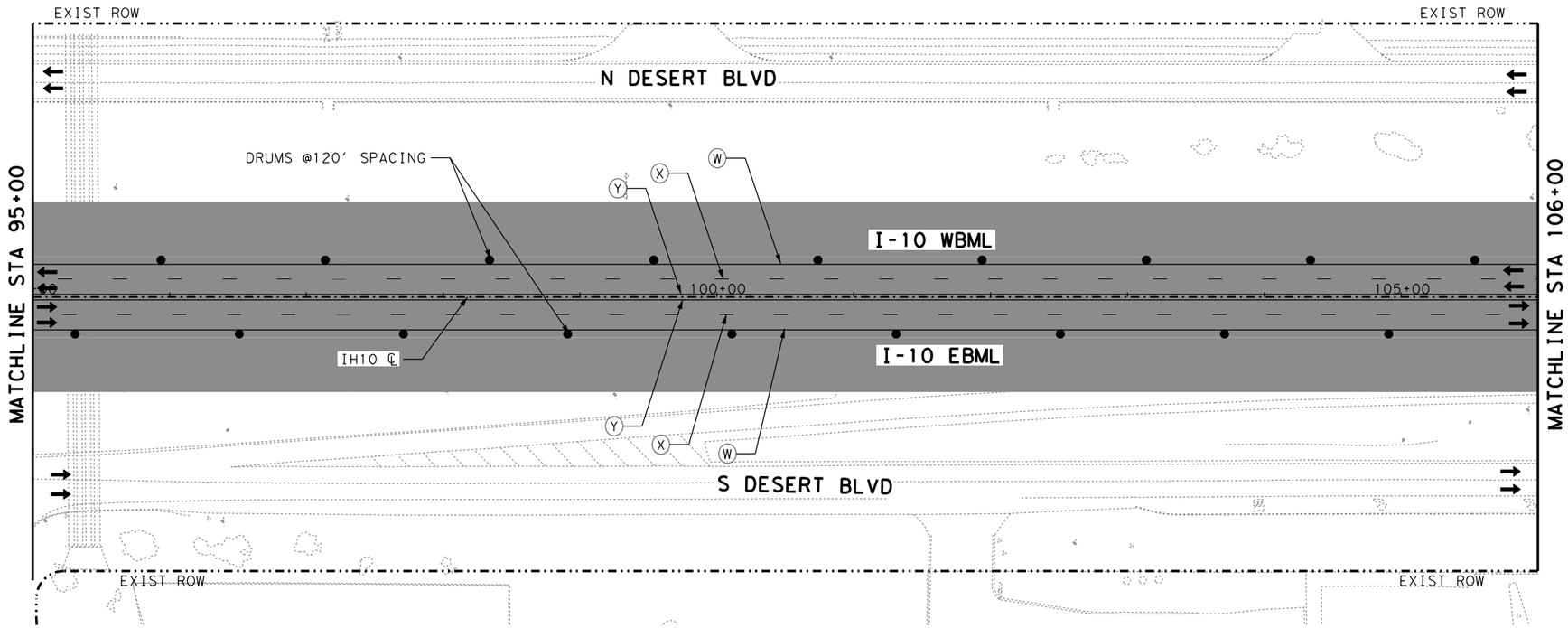
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 4

STA 84+00 TO STA 95+00
SHEET 10 OF 21

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		132
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- PERM CONSTRUCTION THIS PHASE
- PERM CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'

STATE OF TEXAS
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IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN
STAGE 4

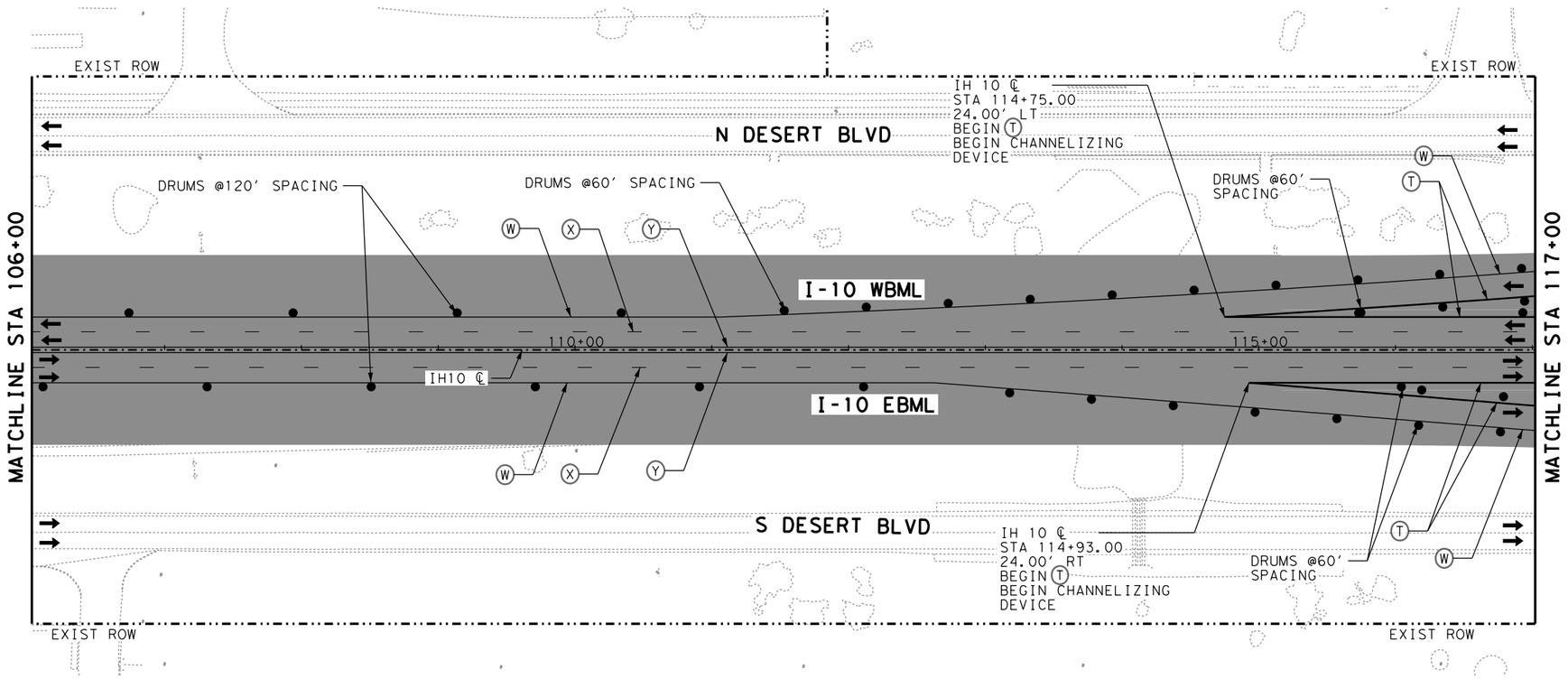
STA 95+00 TO STA 106+00

SHEET 11 OF 21

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		133
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ R1 UNLESS OTHERWISE NOTED.
2. FOR DEMOLITION LIMITS REFER TO REMOVAL LAYOUT SHEETS.



LEGEND:

- PERM CONSTRUCTION THIS PHASE
- PERM CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	1,033
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	1,033
0662 6071	WK ZN PAV MRK REMOV (W)8"(SLD)	LF	866

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ R1 UNLESS OTHERWISE NOTED.
2. FOR DEMOLITION LIMITS REFER TO REMOVAL LAYOUT SHEETS.

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3/28/2024

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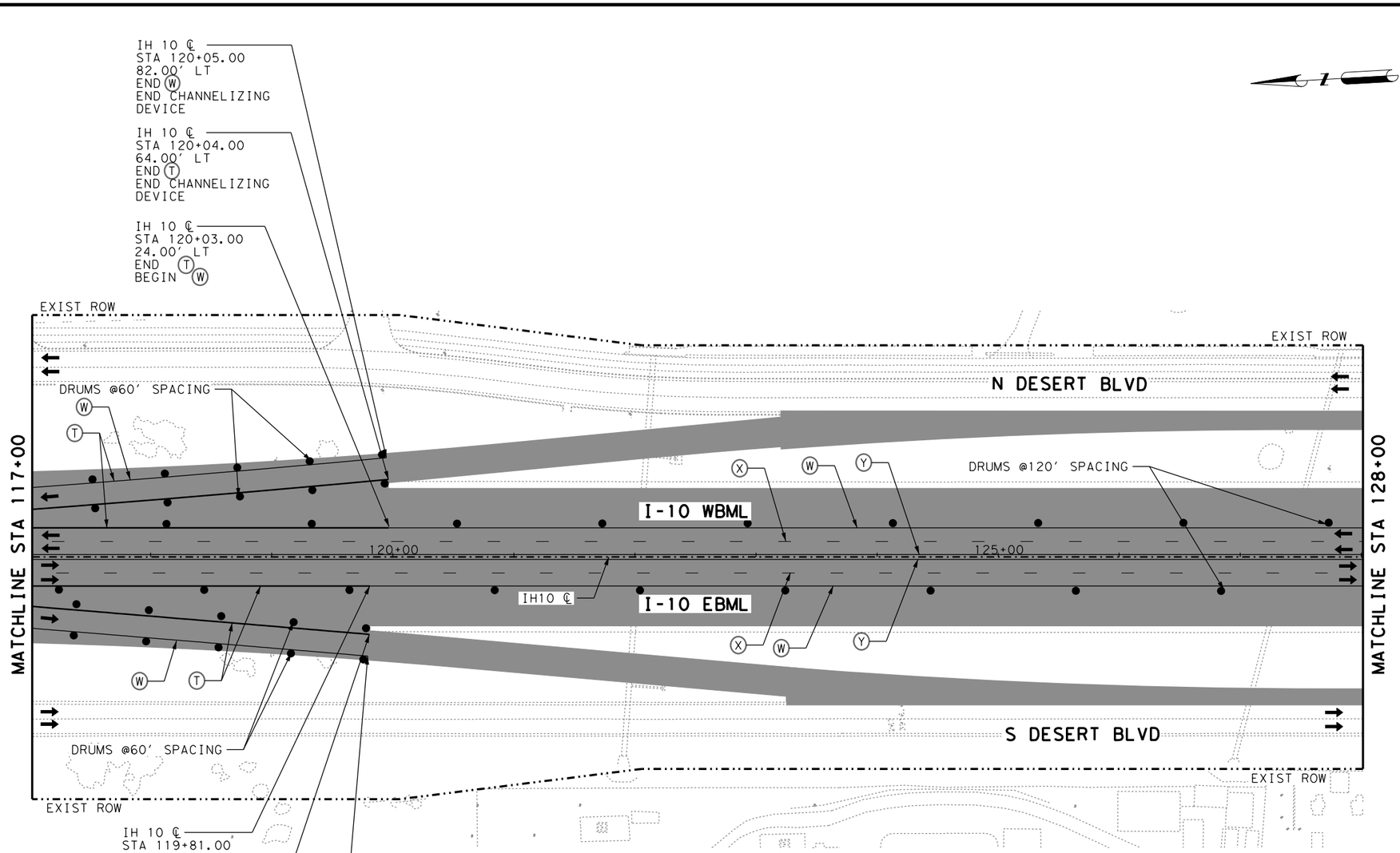
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 4

STA 106+00 TO STA 117+00
SHEET 12 OF 21

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		134
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- PERM CONSTRUCTION THIS PHASE
- PERM CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	576
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	576
0662 6071	WK ZN PAV MRK REMOV (W)8"(SLD)	LF	1,157

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ R1 UNLESS OTHERWISE NOTED.
2. FOR DEMOLITION LIMITS REFER TO REMOVAL LAYOUT SHEETS.

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3/28/2024

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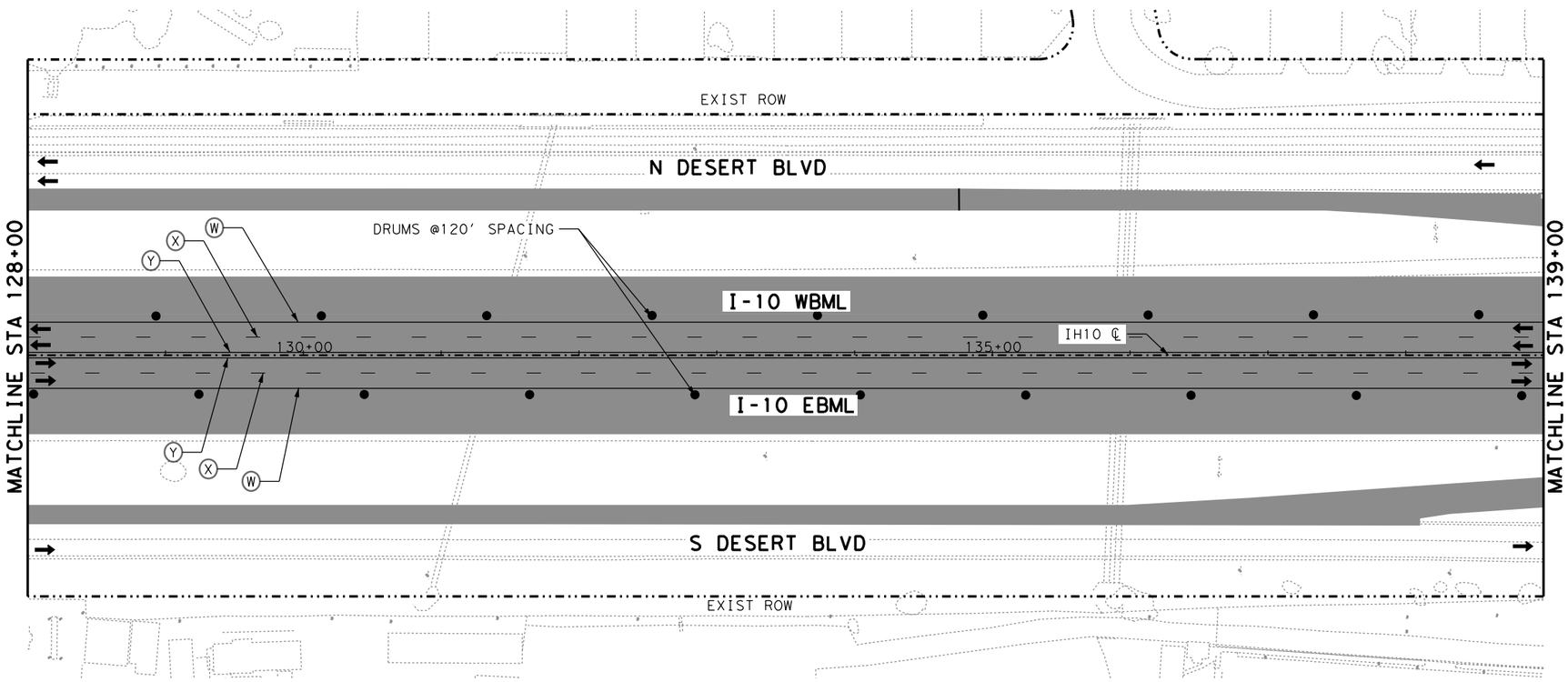
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN
STAGE 4

STA 117+00 TO STA 128+00
SHEET 13 OF 21

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		135
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- PERM CONSTRUCTION THIS PHASE
- PERM CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'

STATE OF TEXAS
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3/28/2024

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Texas Department of Transportation

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ R1 UNLESS OTHERWISE NOTED.
2. FOR DEMOLITION LIMITS REFER TO REMOVAL LAYOUT SHEETS.

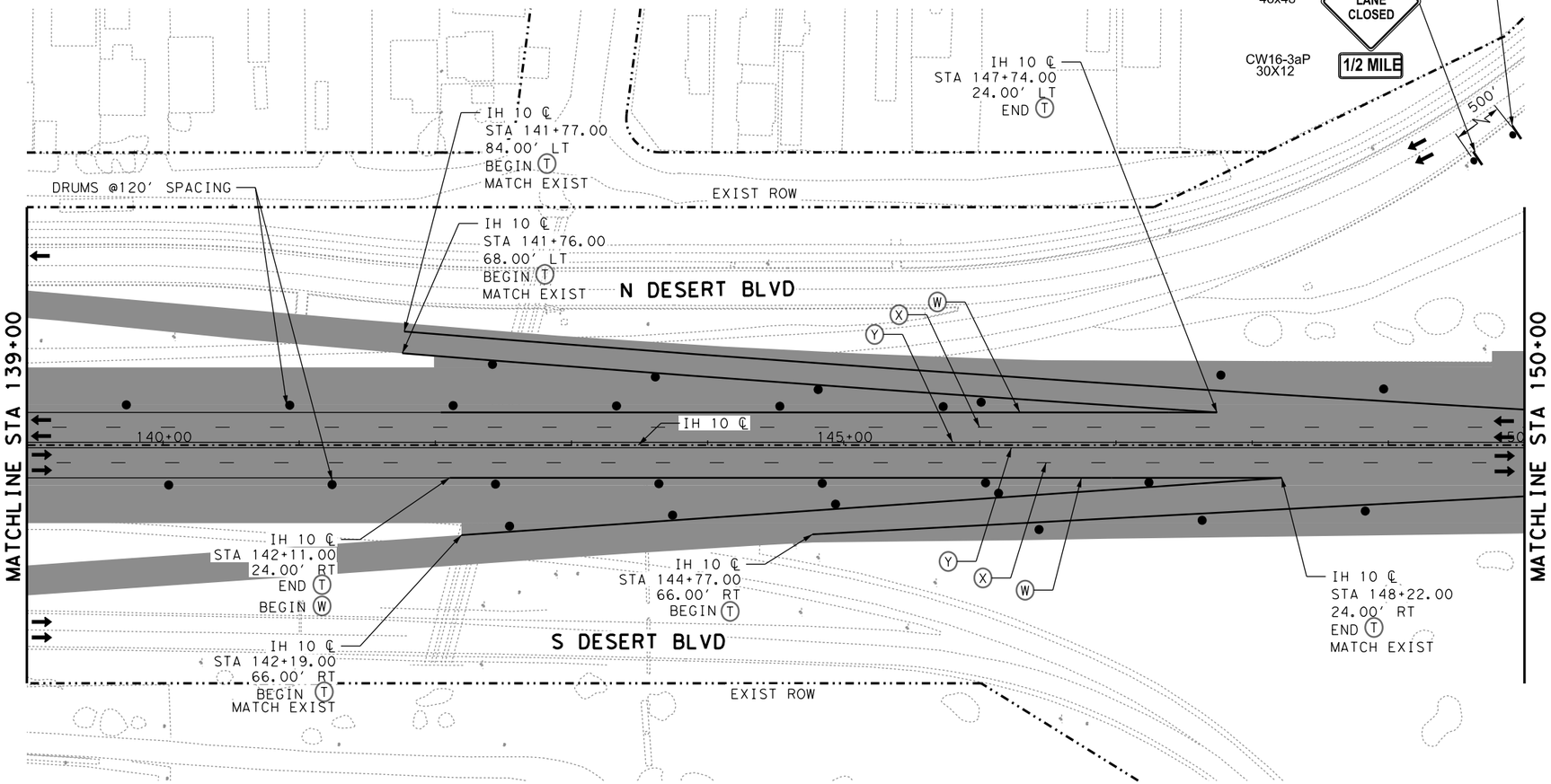
IH 10 WIDENING (NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 4

STA 128+00 TO STA 139+00

SHEET 14 OF 21

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		136
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- PERM CONSTRUCTION THIS PHASE
- PERM CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0662 6071	WK ZN PAV MRK REMOV (W)8"(SLD)	LF	3,734

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ R1 UNLESS OTHERWISE NOTED.
2. FOR DEMOLITION LIMITS REFER TO REMOVAL LAYOUT SHEETS.

STATE OF TEXAS
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Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 4

STA 139+00 TO STA 150+00

SHEET 15 OF 21

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		137
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

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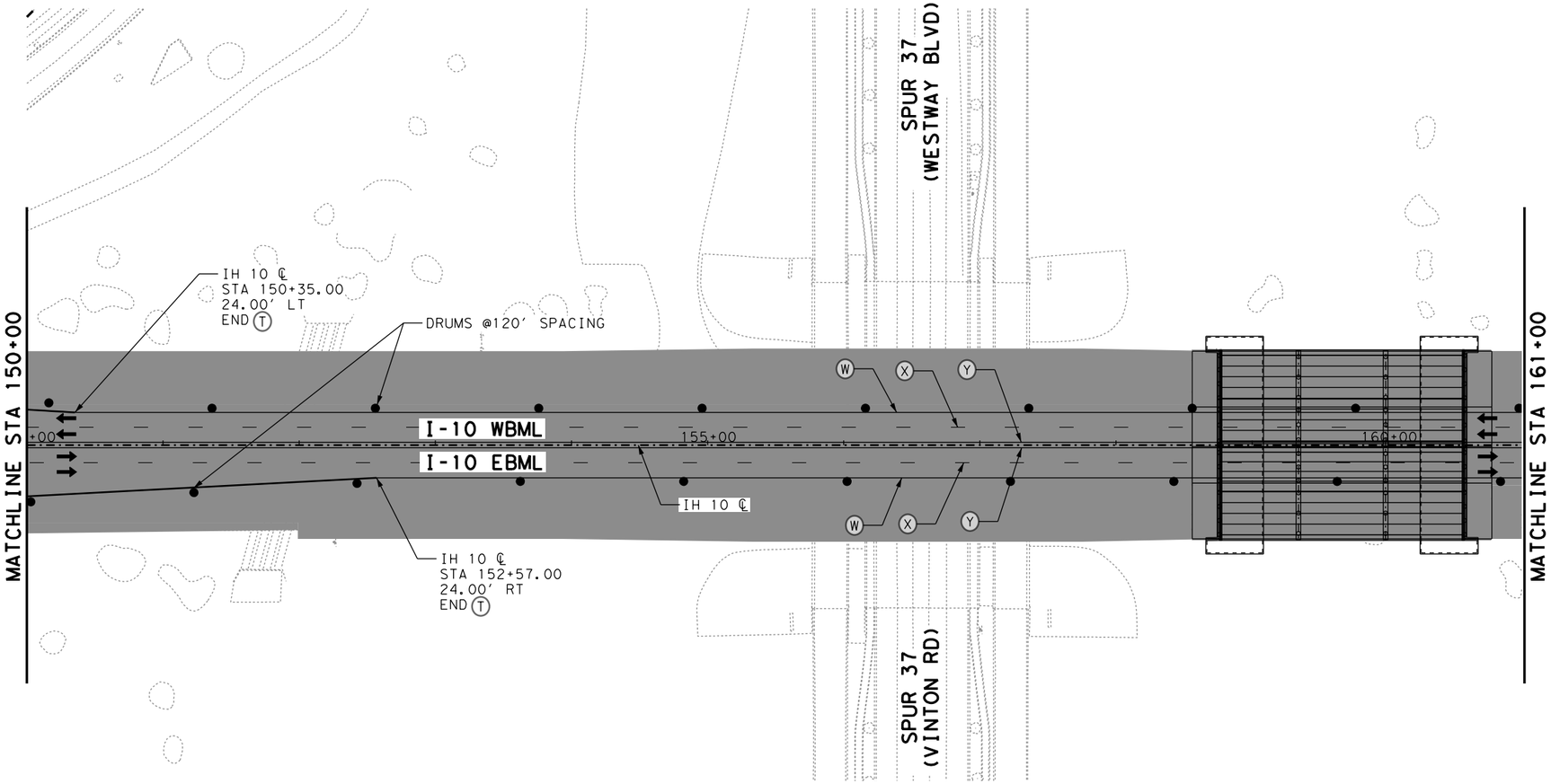

LEGEND:

- PERM CONSTRUCTION THIS PHASE
- PERM CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'

SCALE: 1" = 100'

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0662 6071	WK ZN PAV MRK REMOV (W)8"(SLD)	LF	292

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ R1 UNLESS OTHERWISE NOTED.
2. FOR DEMOLITION LIMITS REFER TO REMOVAL LAYOUT SHEETS.

STATE OF TEXAS
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3/28/2024

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IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 4

STA 150+00 TO STA 161+00

SHEET 16 OF 21

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		138
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

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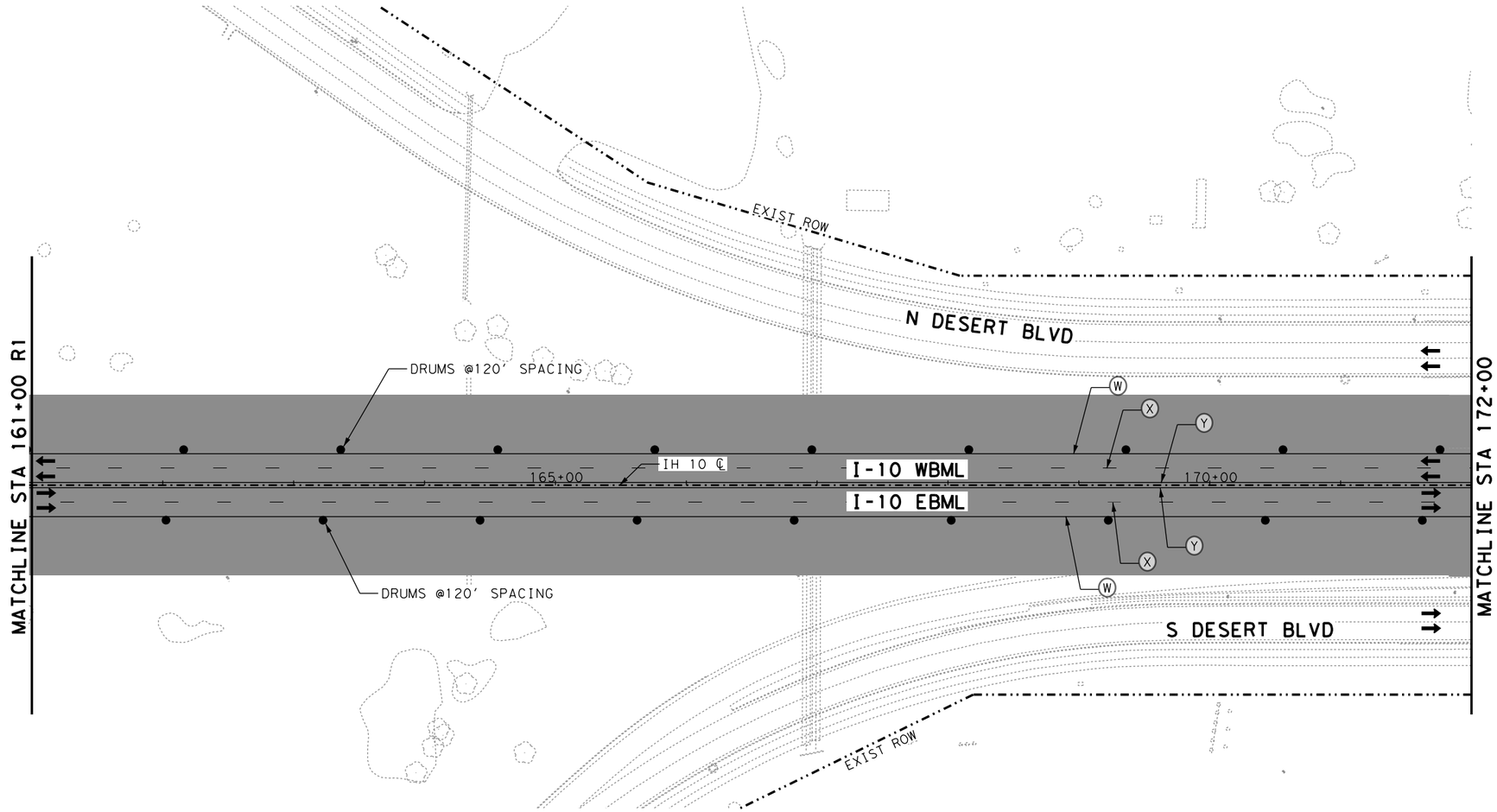

LEGEND:

- PERM CONSTRUCTION THIS PHASE
- PERM CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'

SCALE: 1" = 100'

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ R1 UNLESS OTHERWISE NOTED.
2. FOR DEMOLITION LIMITS REFER TO REMOVAL LAYOUT SHEETS.

STATE OF TEXAS
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3/28/2024

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IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN
STAGE 4

STA 161+00 TO STA 172+00

SHEET 17 OF 21

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		139
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

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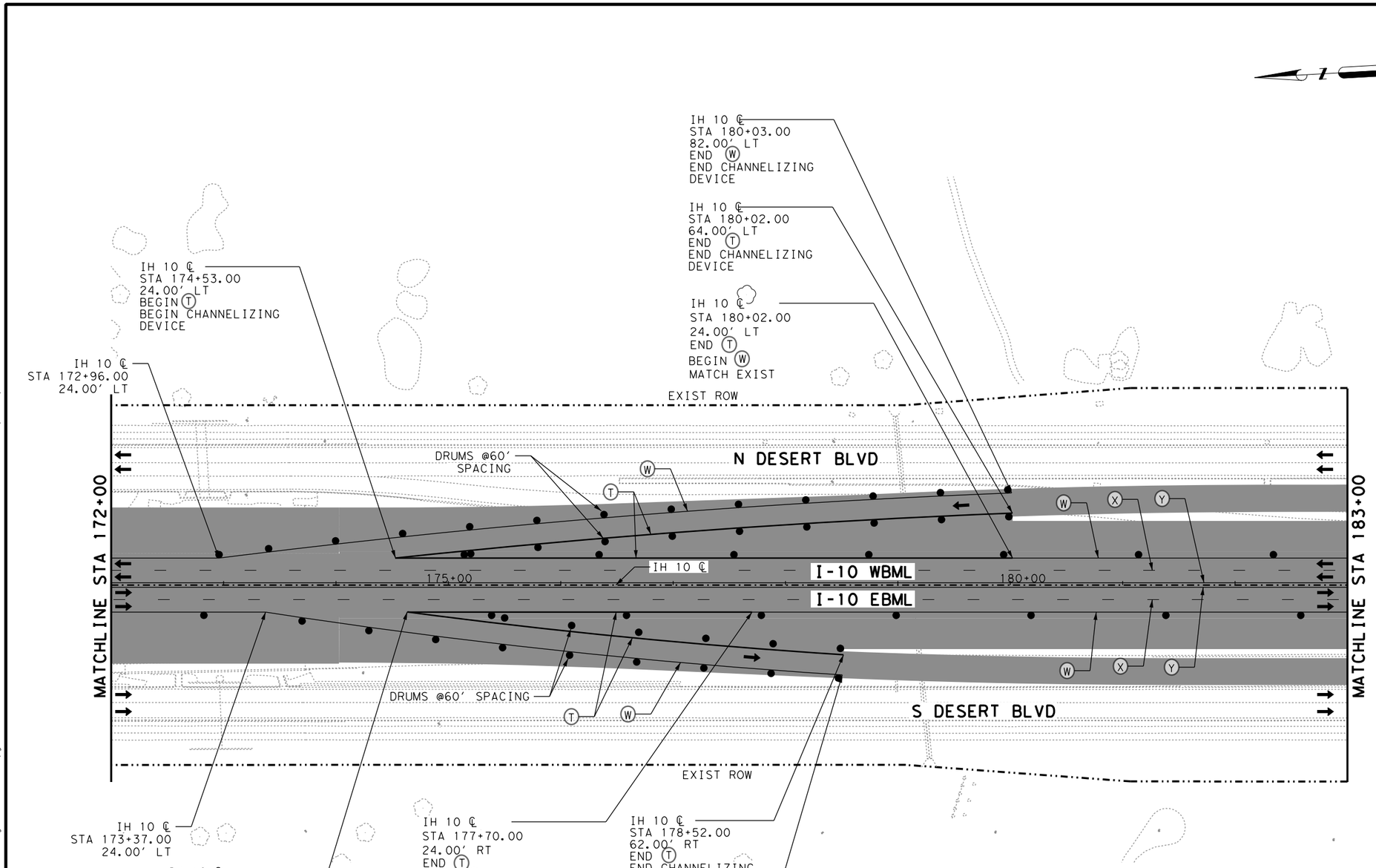


LEGEND:

- PERM CONSTRUCTION THIS PHASE
- PERM CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0662 6049	WK ZN PAV MRK REMOV (REFL) TY I-C	LF	1,224
0662 6057	WK ZN PAV MRK REMOV (TRAF BTN) TY W	LF	1,224
0662 6071	WK ZN PAV MRK REMOV (W)8"(SLD)	LF	1,673

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ R1 UNLESS OTHERWISE NOTED.
2. FOR DEMOLITION LIMITS REFER TO REMOVAL LAYOUT SHEETS.

OSCAR D. GONZALEZ
147840
LICENSED PROFESSIONAL ENGINEER
STATE OF TEXAS
3/28/2024

NO.	DATE	REVISION	APPROV.

consor
F-12040

Texas Department of Transportation

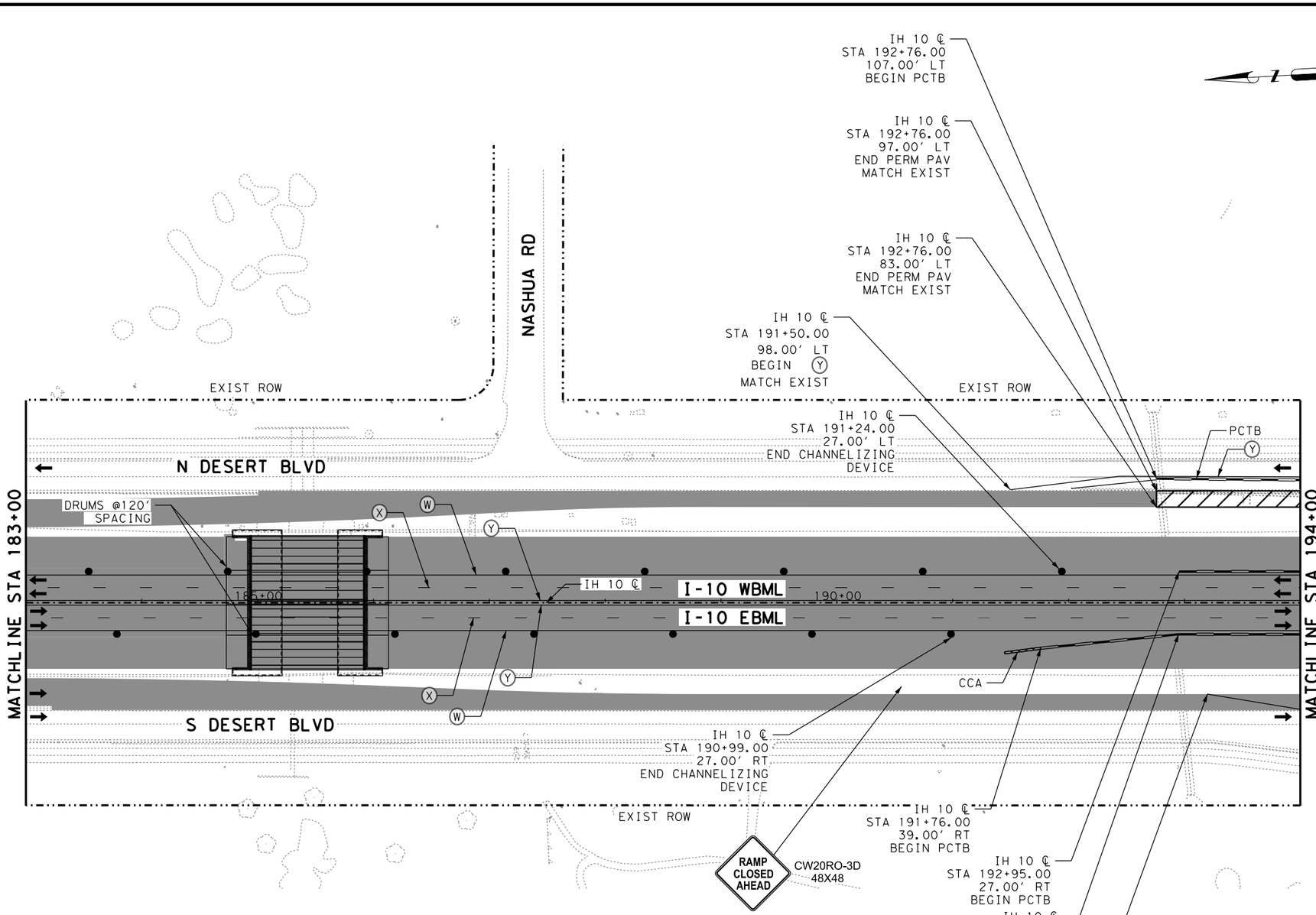
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 4

STA 172+00 TO STA 183+00

SHEET 18 OF 21

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		140
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- PERM CONSTRUCTION THIS PHASE
- PERM CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0512 6025	PORT CTB (MOVE)(SGL SLP)(TY 1)	LF	454
0512 6037	PORT CTB (STKPL)(SGL SLP)(TY 1)	LF	454
0545 6003	CRASH CUSH ATTEN (MOVE & RESET)	EA	1
0545 6005	CRASH CUSH ATTEN (REMOVE)	EA	1
0662 6059	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	LF	332
0662 6047	WK ZN PAV MRK REMOV (REFL) TY I-A	LF	332

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ R1 UNLESS OTHERWISE NOTED.
2. FOR DEMOLITION LIMITS REFER TO REMOVAL LAYOUT SHEETS.

STATE OF TEXAS
OSCAR D. GONZALEZ
147840
LICENSED
PROFESSIONAL ENGINEER

3/28/2024

NO.	DATE	REVISION	APPROV.

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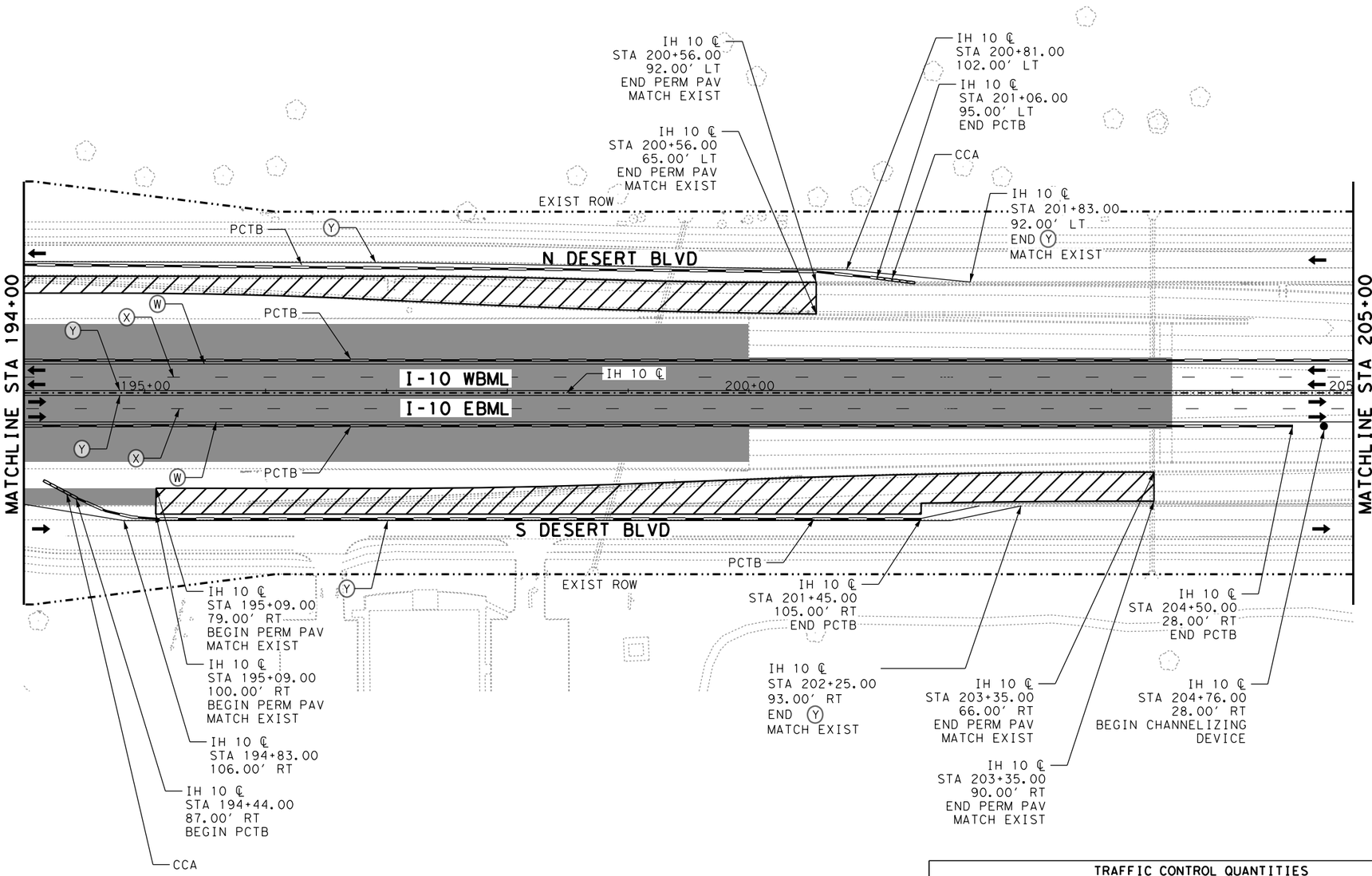
Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN
STAGE 4

STA 183+00 TO STA 194+00

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		141
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- PERM CONSTRUCTION THIS PHASE
- PERM CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ R1 UNLESS OTHERWISE NOTED.
2. FOR DEMOLITION LIMITS REFER TO REMOVAL LAYOUT SHEETS.

TRAFFIC CONTROL QUANTITIES

ITEM	DESCRIPTION	UNIT	QUANTITY
0512 6025	PORT CTB (MOVE)(SGL SLP)(TY 1)	LF	3,556
0512 6037	PORT CTB (STKPL)(SGL SLP)(TY 1)	LF	3,556
0545 6003	CRASH CUSH ATTEN (MOVE & RESET)	EA	2
0545 6005	CRASH CUSH ATTEN (REMOVE)	EA	2
0662 6059	WK ZN PAV MRK REMOV (TRAF BTN) TY Y	LF	1,612
0662 6047	WK ZN PAV MRK REMOV (REFL) TY I-A	LF	1,612

0 50' 100'
SCALE: 1" = 100'

STATE OF TEXAS
OSCAR D. GONZALEZ
147840
LICENSED
PROFESSIONAL ENGINEER

3/28/2024

NO.	DATE	REVISION	APPROV.

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Texas Department of Transportation

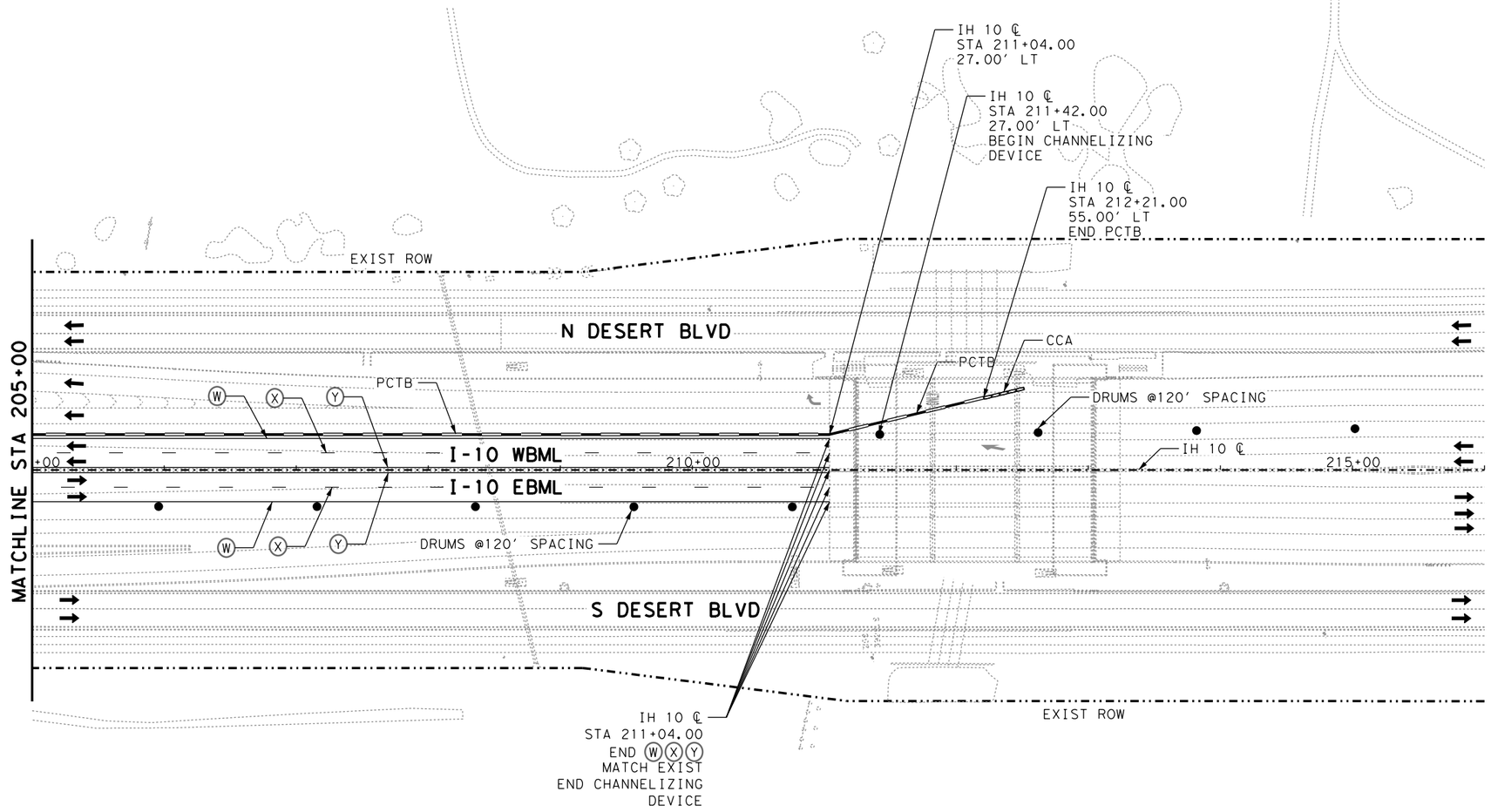
IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 4

STA 194+00 TO STA 205+00

SHEET 20 OF 21

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		142
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10



LEGEND:

- PERM CONSTRUCTION THIS PHASE
- PERM CONSTRUCTION PREVIOUS PHASE
- PORTABLE CONC TRAF BARRIER (PCTB) W/DELINEATORS
- RETAINING WALL
- (T) WRK ZN PAV MRK (W)(8")(SLD)
- (V) WRK ZN PAV MRK (W)(4")(DOT)
- (W) WHITE EDGE LINE (RAISED PAV MRK)
- (X) WHITE LANE LINE (RAISED PAV MRK)
- (Y) YELLOW EDGE LINE (RAISED PAV MRK)
- (Z) EXIST PAVEMENT MARKING
- TRAFFIC FLOW DIRECTION
- CONSTRUCTION SIGN
- CHANNELIZING DEVICE
- FLASHING ARROW PANEL
- FLASHING MESSAGE PANEL
- TYPE III BARRICADE
- INSTALL IMPACT ATTENUATOR

0 50' 100'
SCALE: 1" = 100'

TRAFFIC CONTROL QUANTITIES			
ITEM	DESCRIPTION	UNIT	QUANTITY
0512 6025	PORT CTB (MOVE)(SGL SLP)(TY 1)	LF	724
0512 6037	PORT CTB (STKPL)(SGL SLP)(TY 1)	LF	724
0545 6003	CRASH CUSH ATTEN (MOVE & RESET)	EA	1
0545 6005	CRASH CUSH ATTEN (REMOVE)	EA	1

NOTES:

1. ALL STATIONS AND OFFSETS TAKEN FROM IH 10 ℄ R1 UNLESS OTHERWISE NOTED.
2. FOR DEMOLITION LIMITS REFER TO REMOVAL LAYOUT SHEETS.

STATE OF TEXAS
OSCAR D. GONZALEZ
147840
LICENSED
PROFESSIONAL ENGINEER

3/28/2024

NO.	DATE	REVISION	APPROV.

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Texas Department of Transportation

IH 10 WIDENING
(NM/SPUR 37)

TRAFFIC CONTROL PLAN STAGE 4

STA 205+00 TO END PROJECT

SHEET 21 OF 21

FED RD DIV NO.	FEDERAL AID PROJECT		SHEET NO.
6	SEE TITLE SHEET		143
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

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SHEET OMITTED

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6	SEE TITLE SHEET		144
STATE	DISTRICT	COUNTY	
TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

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BARRICADE AND CONSTRUCTION (BC) STANDARD SHEETS GENERAL NOTES:

1. The Barricade and Construction Standard Sheets (BC sheets) are intended to show typical examples for placement of temporary traffic control devices, construction pavement markings, and typical work zone signs. The information contained in these sheets meet or exceed the requirements shown in the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD).

2. The development and design of the Traffic Control Plan (TCP)is the responsibility of the Engineer.

3. The Contractor may propose changes to the TCP that are signed and sealed by a licensed professional engineer for approval. The Engineer may develop, sign and seal Contractor proposed changes.

4. The Contractor is responsible for installing and maintaining the traffic control devices as shown in the plans. The Contractor may not move or change the approximate location of any device without the approval of the Engineer.

5. Geometric design of lane shifts and detours should, when possible, meet the applicable design criteria contained in manuals such as the American Association of State Highway and Transportation Officials (AASHTO), "A Policy on Geometric Design of Highways and Streets," the TxDOT "Roadway Design Manual" or engineering judgment.

6. When projects abut, the Engineer(s) may omit the END ROAD WORK, TRAFFIC FINES DOUBLE, and other advance warning signs if the signing would be redundant and the work areas appear continuous to the motorists. If the adjacent project is completed first, the Contractor shall erect the necessary warning signs as shown on these sheets, the TCP sheets or as directed by the Engineer. The BEGIN ROAD WORK NEXT X MILES sign shall be revised to show appropriate work zone distance.

7. The Engineer may require duplicate warning signs on the median side of divided highways where median width will permit and traffic volumes justify the signing.

8. All signs shall be constructed in accordance with the details found in the "Standard Highway Sign Designs for Texas," latest edition. Sign details not shown in this manual shall be shown in the plans or the Engineer shall provide a detail to the Contractor before the sign is manufactured.

9. The temporary traffic control devices shown in the illustrations of the BC sheets are examples. As necessary, the Engineer will determine the most appropriate traffic control devices to be used.

10. Where highway construction or maintenance work is being undertaken, other than mobile operations as defined by the Texas Manual on Uniform Traffic Control Devices, CSJ limit signs are required. CSJ limit signs are shown on BC(2). The OBEY WARNING SIGNS STATE LAW sign, STAY ALERT TALK OR TEXT LATER and the WORK ZONE TRAFFIC FINES DOUBLE sign with plaque shall be erected in advance of the CSJ limits. The BEGIN ROAD WORK NEXT X MILES, CONTRACTOR and END ROAD WORK signs shall be erected at or near the CSJ limits. For mobile operations, CSJ limit signs are not required.

11. Traffic control devices should be in place only while work is actually in progress or a definite need exists.

12. The Engineer has the final decision on the location of all traffic control devices.

13. Inactive equipment and work vehicles, including workers' private vehicles must be parked away from travel lanes. They should be as close to the right-of-way line as possible, or located behind a barrier or guardrail, or as approved by the Engineer.

WORKER SAFETY NOTES:

1. Workers on foot who are exposed to traffic or to construction equipment within the right-of-way shall wear high-visibility safety apparel meeting the requirements of ISEA "American National Standard for High-Visibility Apparel," or equivalent revisions, and labeled as ANSI 107-2004 standard performance for Class 2 or 3 risk exposure. Class 3 garments should be considered for high traffic volume work areas or night time work.

2. Except in emergency situations, flagger stations shall be illuminated when flagging is used at night.

COMPLIANT WORKZONE TRAFFIC CONTROL DEVICES

1. Only pre-qualified products shall be used. The "Compliant Work Zone Traffic Control Devices List" (CWZTCD) describes pre-qualified products and their sources.

2. Work zone traffic control devices shall be compliant with the Manual for Assessing safety Hardware (MASH).

THE DOCUMENTS BELOW CAN BE FOUND ON-LINE AT http://www.txdot.gov
COMPLIANT WORK ZONE TRAFFIC CONTROL DEVICES LIST (CWZTCD)
DEPARTMENTAL MATERIAL SPECIFICATIONS (DMS)
MATERIAL PRODUCER LIST (MPL)
ROADWAY DESIGN MANUAL - SEE "MANUALS (ONLINE MANUALS)"
STANDARD HIGHWAY SIGN DESIGNS FOR TEXAS (SHSD)
TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD)
TRAFFIC ENGINEERING STANDARD SHEETS

SHEET 1 OF 12

Texas Department of Transportation | Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION GENERAL NOTES AND REQUIREMENTS

BC(1)-21

FILE: bc-21.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT November 2002	CONT	SECT	JOB	HIGHWAY
REVISIONS 4-03 7-13 9-07 8-14 5-10 5-21	2121	51	104	IHWY0
	DIST	COUNTY		SHEET NO.
	DSP	ELCTXSO		145

DATE: 2/28/2024 5:32:07 PM
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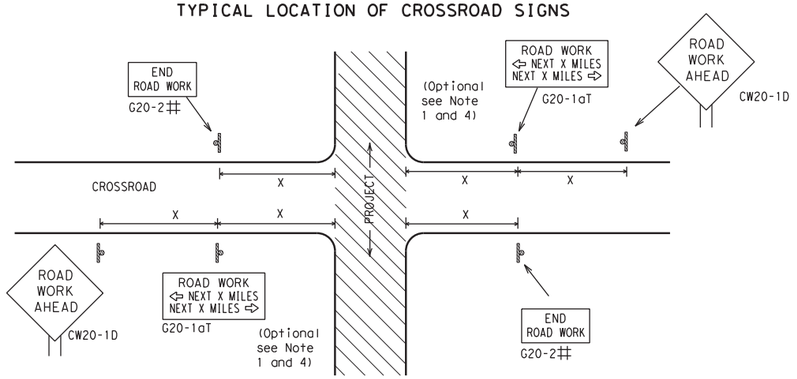
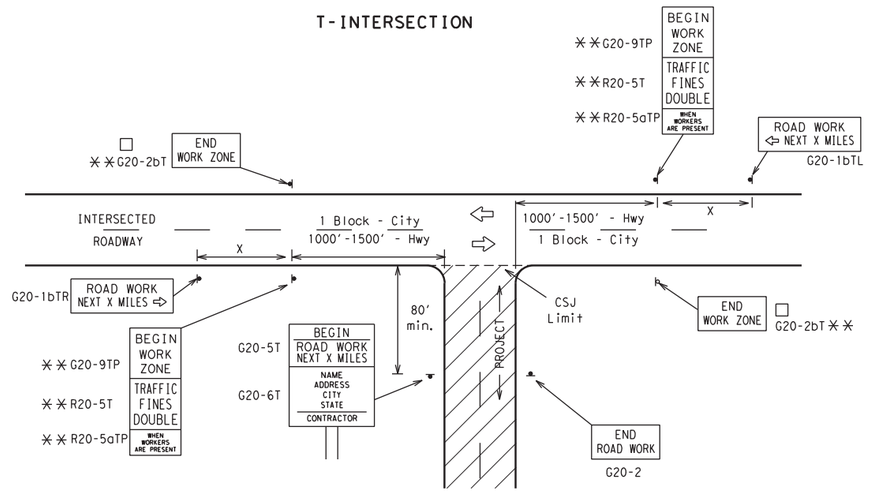
TYPICAL LOCATION OF CROSSROAD SIGNS



May be mounted on back of "ROAD WORK AHEAD"(CW20-1D) sign with approval of Engineer. (See note 2 below)

1. The typical minimum signing on a crossroad approach should be a "ROAD WORK AHEAD" (CW20-1D)sign and a (G20-2) "END ROAD WORK" sign, unless noted otherwise in plans.
2. The Engineer may use the reduced size 36" x 36" ROAD WORK AHEAD (CW20-1D) sign mounted back to back with the reduced size 36" x 18" "END ROAD WORK"(G20-2) sign on low volume crossroads (see Note 4 under "Typical Construction Warning Sign Size and Spacing"). See the "Standard Highway Sign Designs for Texas" manual for sign details. The Engineer may omit the advance warning signs on low volume crossroads. The Engineer will determine whether a road is low volume as per TMUTCD Part 5. This information shall be shown in the plans.
3. Based on existing field conditions, the Engineer/Inspector may require additional signs such as FLAGGER AHEAD, LOOSE GRAVEL, or other appropriate signs. When additional signs are required, these signs will be considered part of the minimum requirements. The Engineer/Inspector will determine the proper location and spacing of any sign not shown on the BC sheets, Traffic Control Plan sheets or the Work Zone Standard Sheets.
4. The "ROAD WORK NEXT X MILES"(G20-1aT)sign shall be required at high volume crossroads to advise motorists of the length of construction in either direction from the intersection. The Engineer will determine whether a roadway is considered high volume.
5. Additional traffic control devices may be shown elsewhere in the plans for higher volume crossroads.
6. When work occurs in the intersection area, appropriate traffic control devices, as shown elsewhere in the plans or as determined by the Engineer/Inspector, shall be in place.

T-INTERSECTION



CSJ LIMITS AT T-INTERSECTION

1. The Engineer will determine the types and location of any additional traffic control devices, such as a flagger and accompanying signs, or other signs, that should be used when work is being performed at or near an intersection.
2. If construction closes the road at a T-intersection, the Contractor shall place the "CONTRACTOR NAME"(G20-6T) sign behind the Type 3 Barricades for the road closure (see BC(10) also). The "ROAD WORK NEXT X MILES" left arrow(G20-1bTL) and "ROAD WORK NEXT X MILES" right arrow (G20-1bTR)" signs shall be replaced by the detour signing called for in the plans.

TYPICAL CONSTRUCTION WARNING SIGN SIZE AND SPACING[1,5,6]

SIZE

Sign Number or Series	Conventional Road	Expressway/ Freeway
CW20[4] CW21 CW22 CW23 CW25	48" x 48"	48" x 48"
CW1, CW2, CW7, CW8, CW9, CW11, CW14	36" x 36"	48" x 48"
CW3, CW4, CW5, CW6, CW8-3, CW10, CW12	48" x 48"	48" x 48"

SPACING

Posted Speed	Sign △ Spacing "X"
MPH	Feet (Apprx.)
30	120
35	160
40	240
45	320
50	400
55	500[2]
60	600[2]
65	700[2]
70	800[2]
75	900[2]
80	1000[2]
✳	✳[3]

✳ For typical sign spacings on divided highways, expressways and freeways, see Part 6 of the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD) typical application diagrams or TCP Standard Sheets.

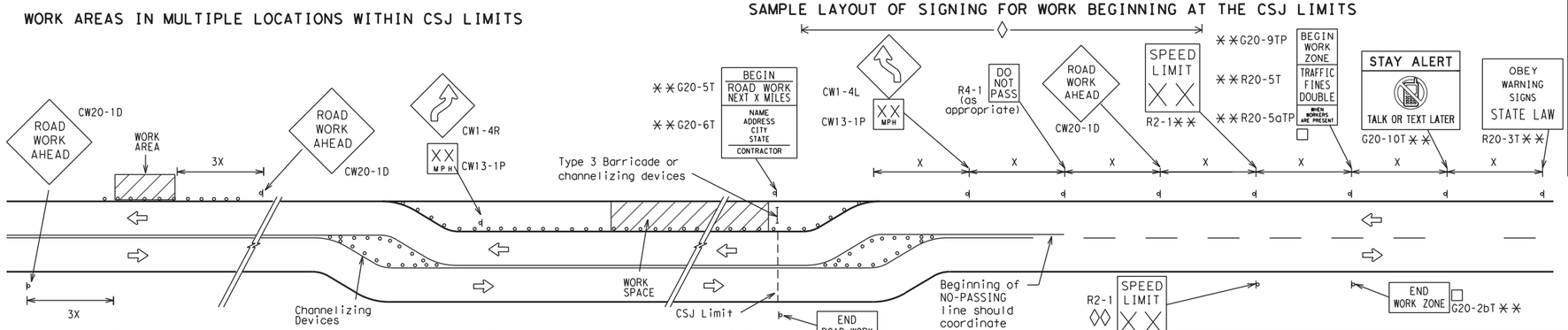
△ Minimum distance from work area to first Advance Warning sign nearest the work area and/or distance between each additional sign.

GENERAL NOTES

1. Special or larger size signs may be used as necessary.
2. Distance between signs should be increased as required to have 1500 feet advance warning.
3. Distance between signs should be increased as required to have 1/2 mile or more advance warning.
4. 36" x 36" "ROAD WORK AHEAD" (CW20-1D)signs may be used on low volume crossroads at the discretion of the Engineer as per TMUTCD Part 5. See Note 2 under "Typical Location of Crossroad Signs".
5. Only diamond shaped warning sign sizes are indicated.
6. See sign size listing in "TMUTCD", Sign Appendix or the "Standard Highway Sign Designs for Texas" manual for complete list of available sign design sizes.

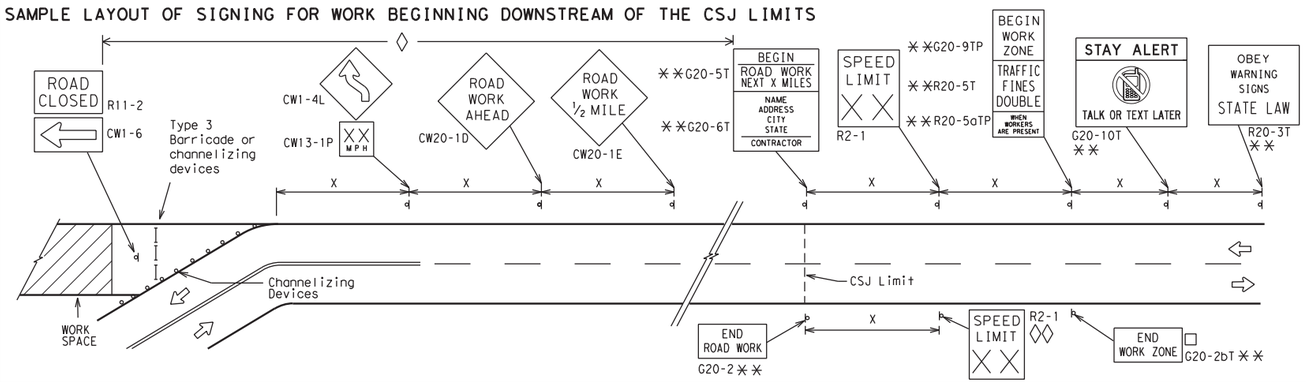
WORK AREAS IN MULTIPLE LOCATIONS WITHIN CSJ LIMITS

SAMPLE LAYOUT OF SIGNING FOR WORK BEGINNING AT THE CSJ LIMITS



When extended distances occur between minimal work spaces, the Engineer/Inspector should ensure additional "ROAD WORK AHEAD"(CW20-1D)signs are placed in advance of these work areas to remind drivers they are still within the project limits. See the applicable TCP sheets for exact location and spacing of signs and channelizing devices.

SAMPLE LAYOUT OF SIGNING FOR WORK BEGINNING DOWNSTREAM OF THE CSJ LIMITS



NOTES

The Contractor shall determine the appropriate distance to be placed on the G20-1 series signs and "BEGIN ROAD WORK NEXT X MILES"(G20-5T)sign for each specific project. This distance shall replace the "X" and shall be rounded to the nearest whole mile with the approval of the Engineer. No decimals shall be used.

□ The "BEGIN WORK ZONE"(G20-9TP) and "END WORK ZONE" (G20-2bT) shall be used as shown on the sample layout when advance signs are required outside the CSJ Limits. They inform the motorist of entering or leaving a part of the work zone lying outside the CSJ Limits where traffic fines may double if workers are present.

✳✳ CSJ limit signing is required for highway construction and maintenance work, with the exception of mobile operations.

◊ Area for placement of "ROAD WORK AHEAD" (CW20-1D)sign and other signs or devices as called for on the Traffic Control Plan.

◊◊ Contractor will install a regulatory speed limit sign at the end of the work zone.

LEGEND	
⊢⊣	Type 3 Barricade
○ ○ ○	Channelizing Devices
▭	Sign
X	See Typical Construction Warning Sign Size and Spacing chart or the TMUTCD for sign spacing requirements.

Texas Department of Transportation

Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION PROJECT LIMIT

BC(2)-21

FILE: bc-21.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT November 2002	CONT	SECT	JOB	HIGHWAY
REVISIONS	2121	01	104	IH 10
9-07 8-14	DIST	COUNTY		SHEET NO.
7-13 5-21	ELP	EL PASO		146

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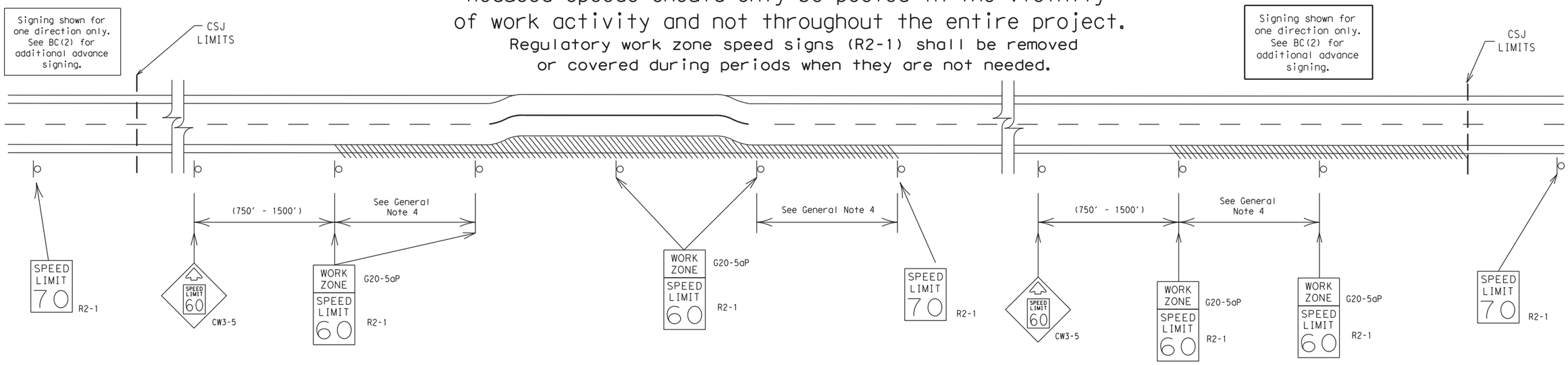
TYPICAL APPLICATION OF WORK ZONE SPEED LIMIT SIGNS

Work zone speed limits shall be regulatory, established in accordance with the "Procedures for Establishing Speed Zones," and approved by the Texas Transportation Commission, or by City Ordinance when within Incorporated City Limits.

Reduced speeds should only be posted in the vicinity of work activity and not throughout the entire project.

Regulatory work zone speed signs (R2-1) shall be removed or covered during periods when they are not needed.



GUIDANCE FOR USE:

LONG/INTERMEDIATE TERM WORK ZONE SPEED LIMITS

This type of work zone speed limit should be included on the design of the traffic control plans when restricted geometrics with a lower design speed are present in the work zone and modification of the geometrics to a higher design speed is not feasible.

Long/Intermediate Term Work Zone Speed Limit signs, when approved as described above, should be posted and visible to the motorist when work activity is present. Work activity may also be defined as a change in the roadway that requires a reduced speed for motorists to safely negotiate the work area, including:

a) rough road or damaged pavement surface
b) substantial alteration of roadway geometrics (diversions)
c) construction detours
d) grade
e) width
f) other conditions readily apparent to the driver

As long as any of these conditions exist, the work zone speed limit signs should remain in place.

SHORT TERM WORK ZONE SPEED LIMITS

This type of work zone speed limit may be included on the design of the traffic control plans when workers or equipment are not behind concrete barrier, when work activity is within 10 feet of the traveled way or actually in the traveled way.

Short Term Work Zone Speed Limit signs should be posted and visible to the motorists only when work activity is present. When work activity is not present, signs shall be removed or covered.
(See Removing or Covering on BC(4)).

GENERAL NOTES

1. Regulatory work zone speed limits should be used only for sections of construction projects where speed control is of major importance.
2. Regulatory work zone speed limit signs shall be placed on supports at a 7 foot minimum mounting height.
3. Speed zone signs are illustrated for one direction of travel and are normally posted for each direction of travel.
4. Frequency of work zone speed limit signs should be:
   40 mph and greater 0.2 to 2 miles
   35 mph and less 0.2 to 1 mile
5. Regulatory speed limit signs shall have black legend and border on a white reflective background (See "Reflective Sheeting" on BC(4)).
6. Fabrication, erection and maintenance of the"ADVANCE SPEED LIMIT"(CW3-5)sign, "WORK ZONE"(G20-5aP) plaque and the "SPEED LIMIT"(R2-1)signs shall not be paid for directly, but shall be considered subsidiary to Item 502.
7. Turning signs from view, laying signs over or down will not be allowed, unless as otherwise noted under "REMOVING OR COVERING" on BC(4).
8. Techniques that may help reduce traffic speeds include but are not limited to:
   A. Law enforcement.
   B. Flagger stationed next to sign.
   C. Portable changeable message sign (PCMS).
   D. Low-power (drone) radar transmitter.
   E. Speed monitor trailers or signs.
9. Speeds shown on details above are for illustration only. Work Zone Speed Limits should only be posted as approved for each project.
10. For more specific guidance concerning the type of work, work zone conditions and factors impacting allowable regulatory construction speed zone reduction see TxDOT form #1204 in the TxDOT e-form system.

Texas Department of Transportation

Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION WORK ZONE SPEED LIMIT

BC(3)-21

FILE: bc-21.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT November 2002	CONT	SECT	JOB	HIGHWAY
REVISIONS 9-07 8-14 7-13 5-21	2121	01	104	IH 10
	DIST	COUNTY		SHEET NO.
	ELP	EL PASO		147

DATE: 2/28/2024 5:32:28 PM
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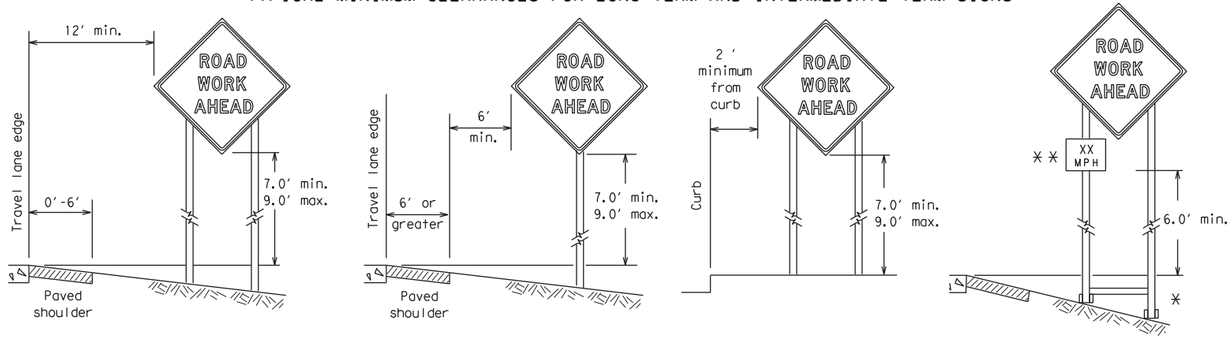
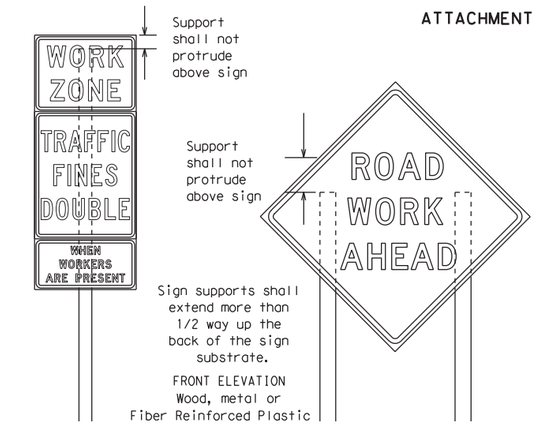
TYPICAL MINIMUM CLEARANCES FOR LONG TERM AND INTERMEDIATE TERM SIGNS



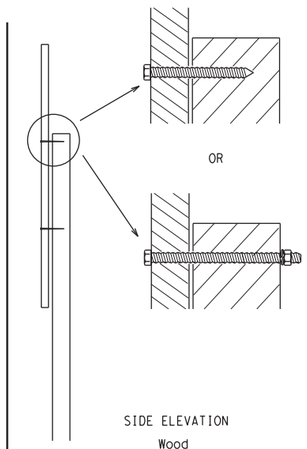
⁎ When placing skid supports on unlevel ground, the leg post lengths must be adjusted so the sign appears straight and plumb. Objects shall NOT be placed under skids as a means of leveling.

⁎⁎ When plaques are placed on dual-leg supports, they should be attached to the upright nearest the travel lane. Supplemental plaques (advisory or distance) should not cover the surface of the parent sign.

ATTACHMENT FOR SIGN SUPPORTS



FRONT ELEVATION
Wood, metal or
Fiber Reinforced Plastic



SIDE ELEVATION
Wood

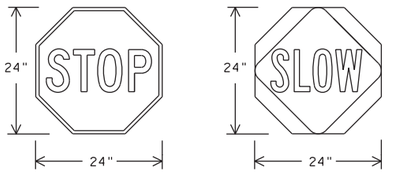
Attachment to wooden supports will be by bolts and nuts or screws. Use TxDOT's or manufacturer's recommended procedures for attaching sign substrates to other types of sign supports

Nails shall NOT be allowed. Each sign shall be attached directly to the sign support. Multiple signs shall not be joined or spliced by any means. Wood supports shall not be extended or repaired by splicing or other means.

Splicing embedded perforated square metal tubing in order to extend post height will only be allowed when the splice is made using four bolts, two above and two below the spice point. Splice must be located entirely behind the sign substrate, not near the base of the support. Splice insert lengths should be at least 5 times nominal post size, centered on the splice and of at least the same gauge material.

STOP/SLOW PADDLES

1. STOP/SLOW paddles are the primary method to control traffic by flaggers. The STOP/SLOW paddle size should be 24" x 24".
2. STOP/SLOW paddles shall be retroreflectorized when used at night.
3. STOP/SLOW paddles may be attached to a staff with a minimum length of 6' to the bottom of the sign.
4. Any lights incorporated into the STOP or SLOW paddle faces shall only be as specifically described in Section 6E.03 Hand Signaling Devices in the TMUTCD.



Background - Red
Legend & Border - White

Background - Orange
Legend & Border - Black

SHEETING REQUIREMENTS (WHEN USED AT NIGHT)		
USAGE	COLOR	SIGN FACE MATERIAL
BACKGROUND	RED	TYPE B OR C SHEETING
BACKGROUND	ORANGE	TYPE B_{FL} OR C_{FL} SHEETING
LEGEND & BORDER	WHITE	TYPE B OR C SHEETING
LEGEND & BORDER	BLACK	ACRYLIC NON-REFLECTIVE FILM

CONTRACTOR REQUIREMENTS FOR MAINTAINING PERMANENT SIGNS WITHIN THE PROJECT LIMITS

1. Permanent signs are used to give notice of traffic laws or regulations, call attention to conditions that are potentially hazardous to traffic operations, show route designations, destinations, directions, distances, services, points of interest, and other geographical, recreational, specific service (LOGO), or cultural information. Drivers proceeding through a work zone need the same, if not better route guidance as normally installed on a roadway without construction.
2. When permanent regulatory or warning signs conflict with work zone conditions, remove or cover the permanent signs until the permanent sign message matches the roadway condition. For details for covering large guide signs see the TS-CD standard.
3. When existing permanent signs are moved and relocated due to construction purposes, they shall be visible to motorists at all times.
4. If existing signs are to be relocated on their original supports, they shall be installed on crashworthy bases as shown on the SMD Standard sheets. The signs shall meet the required mounting heights shown on the BC Sheets or the SMD Standards. This work should be paid for under the appropriate pay item for relocating existing signs.
5. If permanent signs are to be removed and relocated using temporary supports, the Contractor shall use crashworthy supports as shown on the BC standard sheets, TLRS standard sheets or the CWZTCD list. The signs shall meet the required mounting heights shown on the BC, or the SMD standard sheets during construction. This work should be paid for under the appropriate pay item for relocating existing signs.
6. Any sign or traffic control device that is struck or damaged by the Contractor or his/her construction equipment shall be replaced as soon as possible by the Contractor to ensure proper guidance for the motorists. This will be subsidiary to Item 502.

GENERAL NOTES FOR WORK ZONE SIGNS

1. Contractor shall install and maintain signs in a straight and plumb condition and/or as directed by the Engineer.
2. Wooden sign posts shall be painted white.
3. Barricades shall NOT be used as sign supports.
4. All signs shall be installed in accordance with the plans or as directed by the Engineer. Signs shall be used to regulate, warn, and guide the traveling public safely through the work zone.
5. The Contractor may furnish either the sign design shown in the plans or in the "Standard Highway Sign Designs for Texas" (SHSD). The Engineer/Inspector may require the Contractor to furnish other work zone signs that are shown in the TMUTCD but may have been omitted from the plans. Any variation in the plans shall be documented by written agreement between the Engineer and the Contractor's Responsible Person. All changes must be documented in writing before being implemented. This can include documenting the changes in the Inspector's TxDOT diary and having both the Inspector and Contractor initial and date the agreed upon changes.
6. The Contractor shall furnish sign supports listed in the "Compliant Work Zone Traffic Control Device List" (CWZTCD) for small roadside signs. Supports for temporary large roadside signs shall meet the requirements detailed on the Temporary Large Roadside Signs (TLRS) standard sheets.The Contractor shall install the sign support in accordance with the manufacturer's recommendations. If there is a question regarding installation procedures, the Contractor shall furnish the Engineer a copy of the manufacturer's installation recommendations so the Engineer can verify the correct procedures are being followed.
7. The Contractor is responsible for installing signs on approved supports and replacing signs with damaged or cracked substrates and/or damaged or marred reflective sheeting as directed by the Engineer/Inspector.
8. Identification markings may be shown only on the back of the sign substrate. The maximum height of letters and/or company logos used for identification shall be 1 inch.
9. The Contractor shall replace damaged wood posts. New or damaged wood sign posts shall not be spliced.

DURATION OF WORK (as defined by the "Texas Manual on Uniform Traffic Control Devices" Part 6)

1. The types of sign supports, sign mounting height,the size of signs, and the type of sign substrates can vary based on the type of work being performed. The Engineer is responsible for selecting the appropriate size sign for the type of work being performed. The Contractor is responsible for ensuring the sign support, sign mounting height and substrate meets manufacturer's recommendations in regard to crashworthiness and duration of work requirements.
   a. Long-term stationary - work that occupies a location more than 3 days.
   b. Intermediate-term stationary - work that occupies a location more than one daylight period up to 3 days, or nighttime work lasting more than one hour.
   c. Short-term stationary - daytime work that occupies a location for more than 1 hour in a single daylight period.
   d. Short, duration - work that occupies a location up to 1 hour.
   e. Mobile - work that moves continuously or intermittently (stopping for up to approximately 15 minutes.)

SIGN MOUNTING HEIGHT

1. The bottom of Long-term/Intermediate-term signs shall be at least 7 feet, but not more than 9 feet, above the paved surface, except as shown for supplemental plaques mounted below other signs.
2. The bottom of Short-term/Short Duration signs shall be a minimum of 1 foot above the pavement surface but no more than 2 feet above the ground.
3. Long-term/Intermediate-term Signs may be used in lieu of Short-term/Short Duration signing.
4. Short-term/Short Duration signs shall be used only during daylight and shall be removed at the end of the workday or raised to appropriate Long-term/Intermediate sign height.
5. Regulatory signs shall be mounted at least 7 feet, but not more than 9 feet, above the paved surface regardless of work duration.

SIZE OF SIGNS

1. The Contractor shall furnish the sign sizes shown on BC (2) unless otherwise shown in the plans or as directed by the Engineer.

SIGN SUBSTRATES

1. The Contractor shall ensure the sign substrate is installed in accordance with the manufacturer's recommendations for the type of sign support that is being used. The CWZTCD lists each substrate that can be used on the different types and models of sign supports.
2. "Mesh" type materials are NOT an approved sign substrate, regardless of the tightness of the weave.
3. All wooden individual sign panels fabricated from 2 or more pieces shall have one or more plywood cleat, 1/2" thick by 6" wide, fastened to the back of the sign and extending fully across the sign. The cleat shall be attached to the back of the sign using wood screws that do not penetrate the face of the sign panel. The screws shall be placed on both sides of the splice and spaced at 6" centers. The Engineer may approve other methods of splicing the sign face.

REFLECTIVE SHEETING

1. All signs shall be retroreflective and constructed of sheeting meeting the color and retro-reflectivity requirements of DMS-8300 for rigid signs or DMS-8310 for roll-up signs. The web address for DMS specifications is shown on BC(1).
2. White sheeting, meeting the requirements of DMS-8300 Type A, shall be used for signs with a white background.
3. Orange sheeting, meeting the requirements of DMS-8300 Type B_{FL} or Type C_{FL}, shall be used for rigid signs with orange backgrounds.

SIGN LETTERS

1. All sign letters and numbers shall be clear, and open rounded type uppercase alphabet letters as approved by the Federal Highway Administration (FHWA) and as published in the "Standard Highway Sign Design for Texas" manual. Signs, letters and numbers shall be of first class workmanship in accordance with Department Standards and Specifications.

REMOVING OR COVERING

1. When sign messages may be confusing or do not apply, the signs shall be removed or completely covered.
2. Long-term stationary or intermediate stationary signs installed on square metal tubing may be turned away from traffic 90 degrees when the sign message is not applicable. This technique may not be used for signs installed in the median of divided highways or near any intersections where the sign may be seen from approaching traffic.
3. Signs installed on wooden skids shall not be turned at 90 degree angles to the roadway. These signs should be removed or completely covered when not required.
4. When signs are covered, the material used shall be opaque, such as heavy mil black plastic, or other materials which will cover the entire sign face and maintain their opaque properties under automobile headlights at night, without damaging the sign sheeting.
5. Burlap shall NOT be used to cover signs.
6. Duct tape or other adhesive material shall NOT be affixed to a sign face.
7. Signs and anchor stubs shall be removed and holes backfilled upon completion of work.

SIGN SUPPORT WEIGHTS

1. Where sign supports require the use of weights to keep from turning over, the use of sandbags with dry, cohesionless sand should be used.
2. The sandbags will be tied shut to keep the sand from spilling and to maintain a constant weight.
3. Rock, concrete, iron, steel or other solid objects shall not be permitted for use as sign support weights.
4. Sandbags should weigh a minimum of 35 lbs and a maximum of 50 lbs.
5. Sandbags shall be made of a durable material that tears upon vehicular impact. Rubber (such as tire inner tubes) shall NOT be used.
6. Rubber ballasts designed for channelizing devices should not be used for ballast on portable sign supports. Sign supports designed and manufactured with rubber bases may be used when shown on the CWZTCD list.
7. Sandbags shall only be placed along or laid over the base supports of the traffic control device and shall not be suspended above ground level or hung with rope, wire, chains or other fasteners. Sandbags shall be placed along the length of the skids to weigh down the sign support.
8. Sandbags shall NOT be placed under the skid and shall not be used to level sign supports placed on slopes.

FLAGS ON SIGNS

1. Flags may be used to draw attention to warning signs. When used, the flag shall be 16 inches square or larger and shall be orange or fluorescent red-orange in color. Flags shall not be allowed to cover any portion of the sign face.

Texas Department of Transportation

Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION TEMPORARY SIGN NOTES

BC(4)-21

FILE: bc-21.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
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9-07 8-14	DIST	COUNTY		SHEET NO.
7-13 5-21	ELP	EL PASO		148

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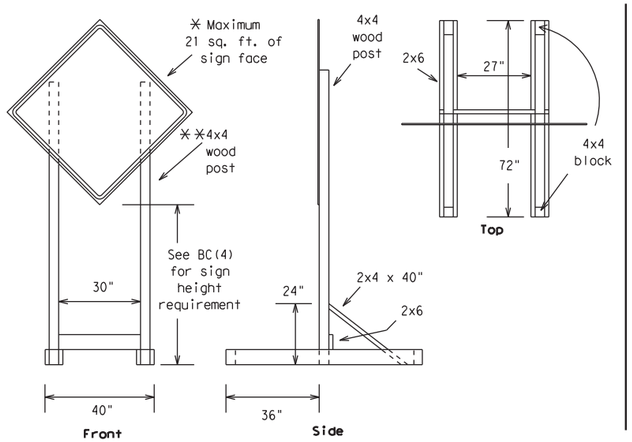
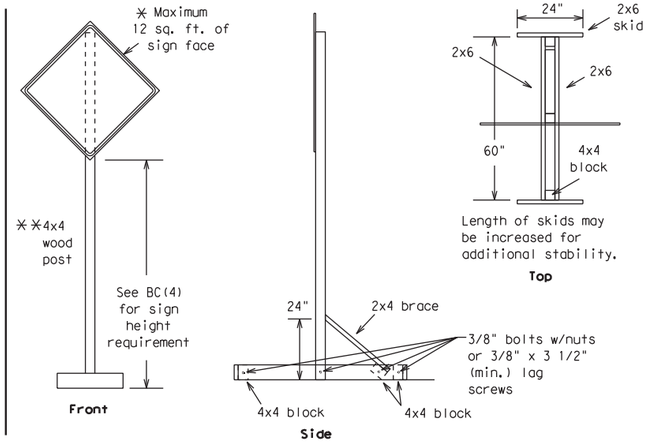
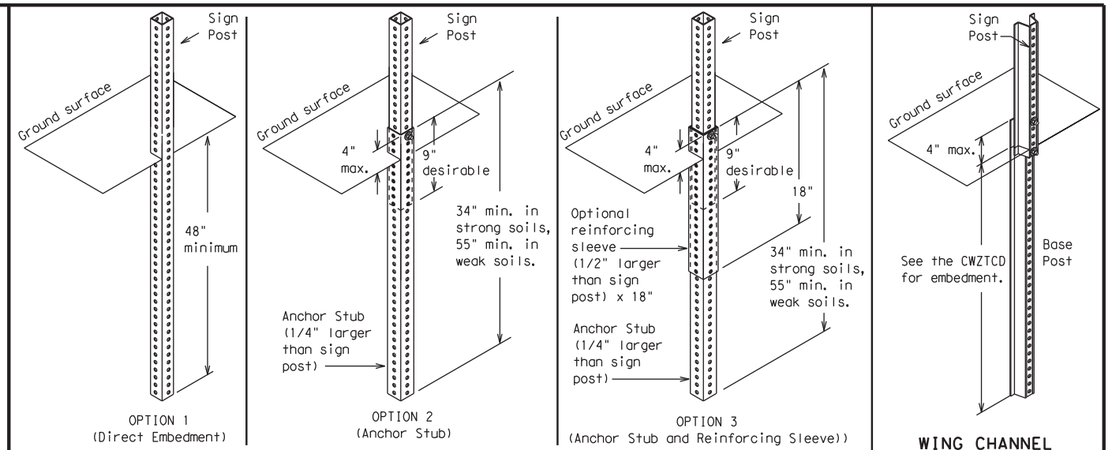




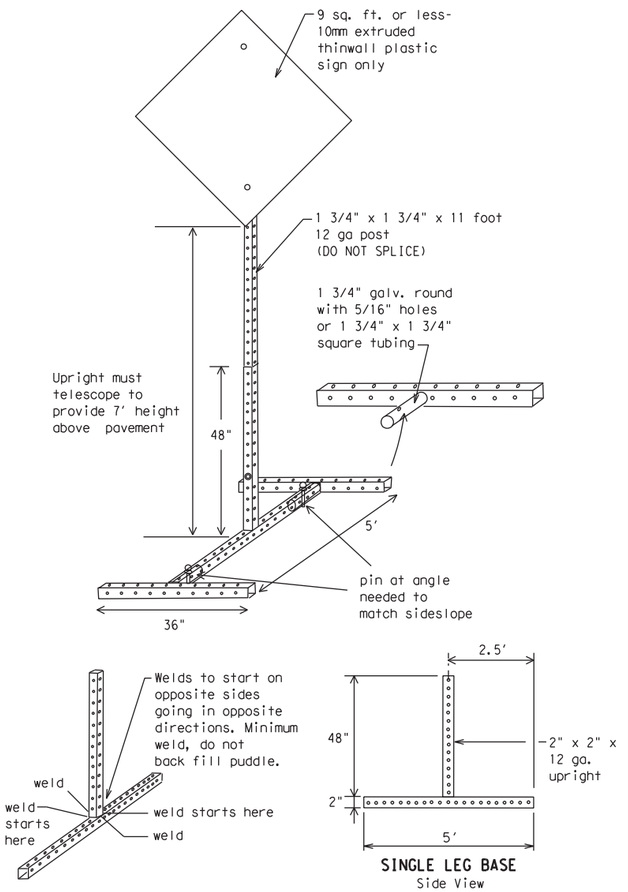
SKID MOUNTED WOOD SIGN SUPPORTS

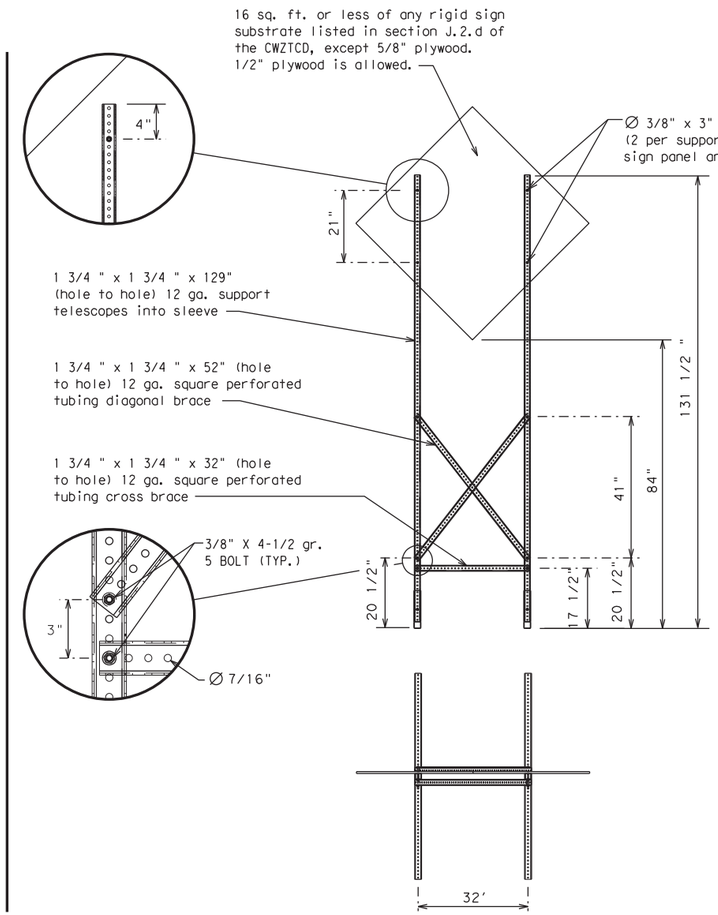
* LONG/INTERMEDIATE TERM STATIONARY - PORTABLE SKID MOUNTED SIGN SUPPORTS

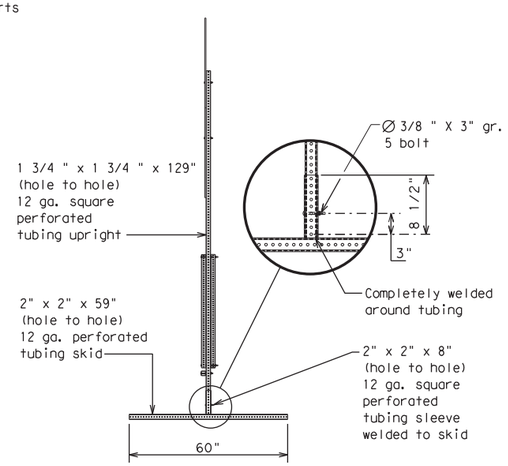


GROUND MOUNTED SIGN SUPPORTS

Refer to the CWZTCD and the manufacturer's installation procedure for each type sign support.
The maximum sign square footage shall adhere to the manufacturer's recommendation.
Two post installations can be used for larger signs.







SKID MOUNTED PERFORATED SQUARE STEEL TUBING SIGN SUPPORTS

* LONG/INTERMEDIATE TERM STATIONARY - PORTABLE SKID MOUNTED SIGN SUPPORTS

WEDGE ANCHORS

Both steel and plastic Wedge Anchor Systems as shown on the SMD Standard Sheets may be used as temporary sign supports for signs up to 10 square feet of sign face. They may be set in concrete or in sturdy soils if approved by the Engineer. (See web address for "Traffic Engineering Standard Sheets" on BC(1)).

OTHER DESIGNS

MORE DETAILS OF APPROVED LONG/INTERMEDIATE AND SHORT TERM SUPPORTS CAN BE FOUND ON THE CWZTCD LIST. SEE BC(1) FOR WEBSITE LOCATION.

GENERAL NOTES

1. Nails may be used in the assembly of wooden sign supports, but 3/8" bolts with nuts or 3/8" x 3 1/2" lag screws must be used on every joint for final connection.
2. No more than 2 sign posts shall be placed within a 7 ft. circle, except for specific materials noted on the CWZTCD List.
3. When project is completed, all sign supports and foundations shall be removed from the project site. This will be considered subsidiary to Item 502.

* See BC(4) for definition of "Work Duration."

** Wood sign posts MUST be one piece. Splicing will NOT be allowed. Posts shall be painted white.

☐ See the CWZTCD for the type of sign substrate that can be used for each approved sign support.

Texas Department of Transportation | Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION TYPICAL SIGN SUPPORT

BC(5)-21

FILE: bc-21.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT November 2002	CONT	SECT	JOB	HIGHWAY
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DATE: DATE/TIME 5:33:13 PM
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WHEN NOT IN USE, REMOVE THE PCMS FROM THE RIGHT-OF-WAY OR PLACE THE PCMS BEHIND BARRIER OR GUARDRAIL WITH SIGN PANEL TURNED PARALLEL TO TRAFFIC

PORTABLE CHANGEABLE MESSAGE SIGNS

1. The Engineer/Inspector shall approve all messages used on portable changeable message signs (PCMS).
2. Messages on PCMS should contain no more than 8 words (about four to eight characters per word), not including simple words such as "TO," "FOR," "AT," etc.
3. Messages should consist of a single phase, or two phases that alternate. Three-phase messages are not allowed. Each phase of the message should convey a single thought, and must be understood by itself.
4. Use the word "EXIT" to refer to an exit ramp on a freeway; i.e., "EXIT CLOSED." Do not use the term "RAMP."
5. Always use the route or interstate designation (IH, US, SH, FM) along with the number when referring to a roadway.
6. When in use, the bottom of a stationary PCMS message panel should be a minimum 7 feet above the roadway, where possible.
7. The message term "WEEKEND" should be used only if the work is to start on Saturday morning and end by Sunday evening at midnight. Actual days and hours of work should be displayed on the PCMS if work is to begin on Friday evening and/or continue into Monday morning.
8. The Engineer/Inspector may select one of two options which are available for displaying a two-phase message on a PCMS. Each phase may be displayed for either four seconds each or for three seconds each.
9. Do not "flash" messages or words included in a message. The message should be steady burn or continuous while displayed.
10. Do not present redundant information on a two-phase message; i.e., keeping two lines of the message the same and changing the third line.
11. Do not use the word "Danger" in message.
12. Do not display the message "LANES SHIFT LEFT" or "LANES SHIFT RIGHT" on a PCMS. Drivers do not understand the message.
13. Do not display messages that scroll horizontally or vertically across the face of the sign.
14. The following table lists abbreviated words and two-word phrases that are acceptable for use on a PCMS. Both words in a phrase must be displayed together. Words or phrases not on this list should not be abbreviated, unless shown in the TMUTCD.
15. PCMS character height should be at least 18 inches for trailer mounted units. They should be visible from at least 1/2 (.5) mile and the text should be legible from at least 600 feet at night and 800 feet in daylight. Truck mounted units must have a character height of 10 inches and must be legible from at least 400 feet.
16. Each line of text should be centered on the message board rather than left or right justified.
17. If disabled, the PCMS should default to an illegible display that will not alarm motorists and will only be used to alert workers that the PCMS has malfunctioned. A pattern such as a series of horizontal solid bars is appropriate.

WORD OR PHRASE	ABBREVIATION
Access Road	ACCS RD
Alternate	ALT
Avenue	AVE
Best Route	BEST RTE
Boulevard	BLVD
Bridge	BRDG
Cannot	CANT
Center	CTR
Construction Ahead	CONST AHD
CROSSING	XING
Detour Route	DETOUR RTE
Do Not	DONT
East	E
Eastbound	(route) E
Emergency	EMER
Emergency Vehicle	EMER VEH
Entrance, Enter	ENT
Express Lane	EXP LN
Expressway	EXPWY
XXXX Feet	XXXX FT
Fog Ahead	FOG AHD
Freeway	FRWY, FWY
Freeway Blocked	FWY BLKD
Friday	FRI
Hazardous Driving	HAZ DRIVING
Hazardous Material	HAZMAT
High-Occupancy	HOV
Vehicle Highway	HWY
Hour(s)	HR, HRS
Information	INFO
It Is	ITS
Junction	JCT
Left	LFT
Left Lane	LFT LN
Lane Closed	LN CLOSED
Lower Level	LWR LEVEL
Maintenance	MAINT

WORD OR PHRASE	ABBREVIATION
Major	MAJ
Miles	MI
Miles Per Hour	MPH
Minor	MNR
Monday	MON
Normal	NORM
North	N
Northbound	(route) N
Parking	PKING
Road	RD
Right Lane	RT LN
Saturday	SAT
Service Road	SERV RD
Shoulder	SHLDR
Slippery	SLIP
South	S
Southbound	(route) S
Speed	SPD
Street	ST
Sunday	SUN
Telephone	PHONE
Temporary	TEMP
Thursday	THURS
To Downtown	TO DWNTN
Traffic	TRAF
Travelers	TRVLRS
Tuesday	TUES
Time Minutes	TIME MIN
Upper Level	UPR LEVEL
Vehicles (s)	VEH, VEHS
Warning	WARN
Wednesday	WED
Weight Limit	WT LIMIT
West	W
Westbound	(route) W
Wet Pavement	WET PVMT
Will Not	WONT

Roadway designation # IH-number, US-number, SH-number, FM-number

RECOMMENDED PHASES AND FORMATS FOR PCMS MESSAGES DURING ROADWORK ACTIVITIES

(The Engineer may approve other messages not specifically covered here.)

Phase 1: Condition Lists

Road/Lane/Ramp Closure List

FREEWAY CLOSED X MILE	FRONTAGE ROAD CLOSED
ROAD CLOSED AT SH XXX	SHOULDER CLOSED XXX FT
ROAD CLSD AT FM XXXX	RIGHT LN CLOSED XXX FT
RIGHT X LANES CLOSED	RIGHT X LANES OPEN
CENTER LANE CLOSED	DAYTIME LANE CLOSURES
NIGHT LANE CLOSURES	I-XX SOUTH EXIT CLOSED
VARIOUS LANES CLOSED	EXIT XXX CLOSED X MILE
EXIT CLOSED	RIGHT LN TO BE CLOSED
MALL DRIVEWAY CLOSED	X LANES CLOSED TUE - FRI
XXXXXXXX BLVD CLOSED	

Other Condition List

ROADWORK XXX FT	ROAD REPAIRS XXXX FT
FLAGGER XXXX FT	LANE NARROWS XXXX FT
RIGHT LN NARROWS XXXX FT	TWO-WAY TRAFFIC XX MILE
MERGING TRAFFIC XXXX FT	CONST TRAFFIC XXX FT
LOOSE GRAVEL XXXX FT	UNEVEN LANES XXXX FT
DETOUR X MILE	ROUGH ROAD XXXX FT
ROADWORK PAST SH XXXX	ROADWORK NEXT FRI-SUN
BUMP XXXX FT	US XXX EXIT X MILES
TRAFFIC SIGNAL XXXX FT	LANES SHIFT *

* LANES SHIFT in Phase 1 must be used with STAY IN LANE in Phase 2.

Phase 2: Possible Component Lists

Action to Take/Effect on Travel List		Location List	Warning List	** Advance Notice List
MERGE RIGHT	FORM X LINES RIGHT	AT FM XXXX	SPEED LIMIT XX MPH	TUE-FRI XX AM- X PM
DETOUR NEXT X EXITS	USE XXXXX RD EXIT	BEFORE RAILROAD CROSSING	MAXIMUM SPEED XX MPH	APR XX-XX X PM-X AM
USE EXIT XXX	USE EXIT I-XX NORTH	NEXT X MILES	MINIMUM SPEED XX MPH	BEGINS MONDAY
STAY ON US XXX SOUTH	USE I-XX E TO I-XX N	PAST US XXX EXIT	ADVISORY SPEED XX MPH	BEGINS MAY XX
TRUCKS USE US XXX N	WATCH FOR TRUCKS	XXXXXXX TO XXXXXXX	RIGHT LANE EXIT	MAY X-X XX PM - XX AM
WATCH FOR TRUCKS	EXPECT DELAYS	US XXX TO FM XXXX	USE CAUTION	NEXT FRI-SUN
EXPECT DELAYS	PREPARE TO STOP		DRIVE SAFELY	XX AM TO XX PM
REDUCE SPEED XXX FT	END SHOULDER USE		DRIVE WITH CARE	NEXT TUE AUG XX
USE OTHER ROUTES	WATCH FOR WORKERS			TONIGHT XX PM- XX AM
STAY IN LANE *				

** See Application Guidelines Note 6.

APPLICATION GUIDELINES

1. Only 1 or 2 phases are to be used on a PCMS.
2. The 1st phase (or both) should be selected from the "Road/Lane/Ramp Closure List" and the "Other Condition List".
3. A 2nd phase can be selected from the "Action to Take/Effect on Travel, Location, General Warning, or Advance Notice Phase Lists".
4. A Location Phase is necessary only if a distance or location is not included in the first phase selected.
5. If two PCMS are used in sequence, they must be separated by a minimum of 1000 ft. Each PCMS shall be limited to two phases, and should be understandable by themselves.
6. For advance notice, when the current date is within seven days of the actual work date, calendar days should be replaced with days of the week. Advance notification should typically be for no more than one week prior to the work.

WORDING ALTERNATIVES

1. The words RIGHT, LEFT and ALL can be interchanged as appropriate.
2. Roadway designations IH, US, SH, FM and LP can be interchanged as appropriate.
3. EAST, WEST, NORTH and SOUTH (or abbreviations E, W, N and S) can be interchanged as appropriate.
4. Highway names and numbers replaced as appropriate.
5. ROAD, HIGHWAY and FREEWAY can be interchanged as needed.
6. AHEAD may be used instead of distances if necessary.
7. FT and MI, MILE and MILES interchanged as appropriate.
8. AT, BEFORE and PAST interchanged as needed.
9. Distances or AHEAD can be eliminated from the message if a location phase is used.

PCMS SIGNS WITHIN THE R.O.W. SHALL BE BEHIND GUARDRAIL OR CONCRETE BARRIER OR SHALL HAVE A MINIMUM OF FOUR (4) PLASTIC DRUMS PLACED PERPENDICULAR TO TRAFFIC ON THE UPSTREAM SIDE OF THE PCMS, WHEN EXPOSED TO ONE DIRECTION OF TRAFFIC. WHEN EXPOSED TO TWO WAY TRAFFIC, THE FOUR DRUMS SHOULD BE PLACED WITH ONE DRUM AT EACH OF THE FOUR CORNERS OF THE UNIT.

FULL MATRIX PCMS SIGNS

1. When Full Matrix PCMS signs are used, the character height and legibility/visibility requirements shall be maintained as listed in Note 15 under "PORTABLE CHANGEABLE MESSAGE SIGNS" above.
2. When symbol signs, such as the "Flagger Symbol"(CW20-7) are represented graphically on the Full Matrix PCMS sign and, with the approval of the Engineer, it shall maintain the legibility/visibility requirement listed above.
3. When symbol signs are represented graphically on the Full Matrix PCMS, they shall only supplement the use of the static sign represented, and shall not substitute for, or replace that sign.
4. A full matrix PCMS may be used to simulate a flashing arrow board provided it meets the visibility, flash rate and dimming requirements on BC(7), for the same size arrow.

Texas Department of Transportation

Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)

BC(6)-21

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9-07 8-14	DIST	COUNTY		SHEET NO.
7-13 5-21	BSP	ELCHISO		150

100

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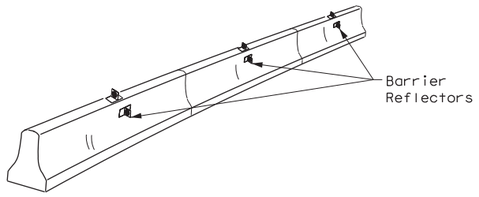
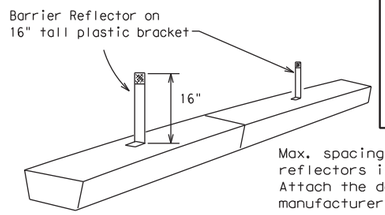
1. Barrier Reflectors shall be pre-qualified, and conform to the color and reflectivity requirements of DMS-8600. A list of prequalified Barrier Reflectors can be found at the Material Producer List web address shown on BC(1).
2. Color of Barrier Reflectors shall be as specified in the TMUTCD. The cost of the reflectors shall be considered subsidiary to Item 512.



CONCRETE TRAFFIC BARRIER (CTB)

3. Where traffic is on one side of the CTB, two (2) Barrier Reflectors shall be mounted in approximately the midsection of each section of CTB. An alternate mounting location is uniformly spaced at one end of each CTB. This will allow for attachment of a barrier grapple without damaging the reflector. The Barrier Reflector mounted on the side of the CTB shall be located directly below the reflector mounted on top of the barrier, as shown in the detail above.
4. Where CTB separates two-way traffic, three barrier reflectors shall be mounted on each section of CTB. The reflector unit on top shall have two yellow reflective faces (Bi-Directional)while the reflectors on each side of the barrier shall have one yellow reflective face, as shown in the detail above.
5. When CTB separates traffic traveling in the same direction, no barrier reflectors will be required on top of the CTB.
6. Barrier Reflector units shall be yellow or white in color to match the edgeline being supplemented.
7. Maximum spacing of Barrier Reflectors is forty (40) feet.
8. Pavement markers or temporary flexible-reflective roadway marker tabs shall NOT be used as CTB delineation.
9. Attachment of Barrier Reflectors to CTB shall be per manufacturer's recommendations.
10. Missing or damaged Barrier Reflectors shall be replaced as directed by the Engineer.
11. Single slope barriers shall be delineated as shown on the above detail.

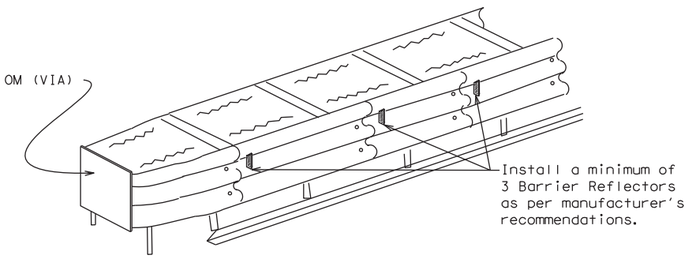


Max. spacing of barrier reflectors is 20 feet. Attach the delineators as per manufacturer's recommendations.

LOW PROFILE CONCRETE BARRIER (LPCB)

LOW PROFILE CONCRETE BARRIER (LPCB) USED IN WORK ZONES

LPCB is approved for use in work zone locations, where the posted speed is 45mph, or less. See Roadway Standard Sheet LPCB.

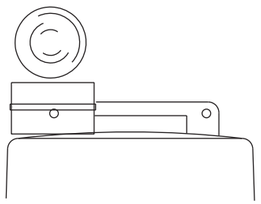


DELINEATION OF END TREATMENTS

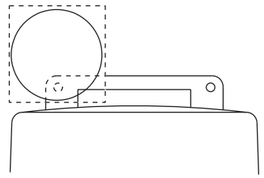
END TREATMENTS FOR CTB'S USED IN WORK ZONES

End treatments used on CTB's in work zones shall meet the apppropriate crashworthy standards as defined in the Manual for Assessing Safety Hardware (MASH). Refer to the CWZTCD List for approved end treatments and manufacturers.

BARRIER REFLECTORS FOR CONCRETE TRAFFIC BARRIER AND ATTENUATORS



Type C Warning Light or approved substitute mounted on a drum adjacent to the travel way.



Warning reflector may be round or square.Must have a yellow reflective surface area of at least 30 square inches

WARNING LIGHTS

1. Warning lights shall meet the requirements of the TMUTCD.
2. Warning lights shall NOT be installed on barricades.
3. Type A-Low Intensity Flashing Warning Lights are commonly used with drums. They are intended to warn of or mark a potentially hazardous area. Their use shall be as indicated on this sheet and/or other sheets of the plans by the designation "FL". The Type A Warning Lights shall not be used with signs manufactured with Type B_{FL} or C_{FL} Sheeting meeting the requirements of Departmental Material Specification DMS-8300.
4. Type-C and Type D 360 degree Steady Burn Lights are intended to be used in a series for delineation to supplement other traffic control devices. Their use shall be as indicated on this sheet and/or other sheets of the plans by the designation "SB".
5. The Engineer/Inspector or the plans shall specify the location and type of warning lights to be installed on the traffic control devices.
6. When required by the Engineer, the Contractor shall furnish a copy of the warning lights certification. The warning light manufacturer will certify the warning lights meet the requirements of the latest ITE Purchase Specifications for Flashing and Steady-Burn Warning Lights.
7. When used to delineate curves, Type-C and Type D Steady Burn Lights should only be placed on the outside of the curve, not the inside.
8. The location of warning lights and warning reflectors on drums shall be as shown elsewhere in the plans.

WARNING LIGHTS MOUNTED ON PLASTIC DRUMS

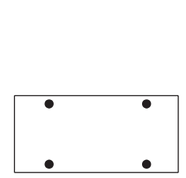
1. Type A flashing warning lights are intended to warn drivers that they are approaching or are in a potentially hazardous area.
2. Type A random flashing warning lights are not intended for delineation and shall not be used in a series.
3. A series of sequential flashing warning lights placed on channelizing devices to form a merging taper may be used for delineation. If used, the successive flashing of the sequential warning lights should occur from the beginning of the taper to the end of the merging taper in order to identify the desired vehicle path. The rate of flashing for each light shall be 65 flashes per minute, plus or minus 10 flashes.
4. Type C and D steady-burn warning lights are intended to be used in a series to delineate the edge of the travel lane on detours, on lane changes, on lane closures, and on other similar conditions.
5. Type A, Type C and Type D warning lights shall be installed at locations as detailed on other sheets in the plans.
6. Warning lights shall not be installed on a drum that has a sign, chevron or vertical panel.
7. The maximum spacing for warning lights on drums should be identical to the channelizing device spacing.

WARNING REFLECTORS MOUNTED ON PLASTIC DRUMS AS A SUBSTITUTE FOR TYPE C (STEADY BURN) WARNING LIGHTS

1. A warning reflector or approved substitute may be mounted on a plastic drum as a substitute for a Type C, steady burn warning light at the discretion of the Contractor unless otherwise noted in the plans.
2. The warning reflector shall be yellow in color and shall be manufactured using a sign substrate approved for use with plastic drums listed on the CWZTCD.
3. The warning reflector shall have a minimum retroreflective surface area (one-side) of 30 square inches.
4. Round reflectors shall be fully reflectorized, including the area where attached to the drum.
5. Square substrates must have a minimum of 30 square inches of reflectorized sheeting. They do not have to be reflectorized where it attaches to the drum.
6. The side of the warning reflector facing approaching traffic shall have sheeting meeting the color and retroreflectivity requirements for DMS 8300-Type B or Type C.
7. When used near two-way traffic, both sides of the warning reflector shall be reflectorized.
8. The warning reflector should be mounted on the side of the handle nearest approaching traffic.
9. The maximum spacing for warning reflectors should be identical to the channelizing device spacing requirements.

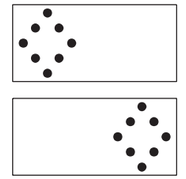
Arrow Boards may be located behind channelizing devices in place for a shoulder taper or merging taper, otherwise they shall be delineated with four (4) channelizing devices placed perpendicular to traffic on the upstream side of traffic.

1. The Flashing Arrow Board should be used for all lane closures on multi-lane roadways, or slow moving maintenance or construction activities on the travel lanes.
2. Flashing Arrow Boards should not be used on two-lane, two-way roadways, detours, diversions or work on shoulders unless the "CAUTION" display (see detail below) is used.
3. The Engineer/Inspector shall choose all appropriate signs, barricades and/or other traffic control devices that should be used in conjunction with the Flashing Arrow Board.
4. The Flashing Arrow Board should be able to display the following symbols:

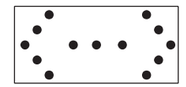


4 CORNER CAUTION

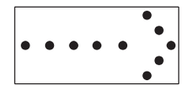
OR



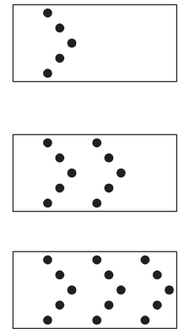
ALTERNATING DIAMOND CAUTION



DOUBLE ARROW



RIGHT/LEFT ARROW
(right arrow shown; left is similar)



RIGHT/LEFT SEQUENTIAL CHEVRON
(right chevron shown; left is similar)

5. The "CAUTION" display consists of four corner lamps flashing simultaneously, or the Alternating Diamond Caution mode as shown.
6. The straight line caution display is NOT ALLOWED.
7. The Flashing Arrow Board shall be capable of minimum 50 percent dimming from rated lamp voltage. The flashing rate of the lamps shall not be less than 25 nor more than 40 flashes per minute.
8. Minimum lamp "on time" shall be approximately 50 percent for the flashing arrow and equal intervals of 25 percent for each sequential phase of the flashing chevron.
9. The sequential arrow display is NOT ALLOWED.
10. The flashing arrow display is the TxDOT standard; however, the sequential chevron display may be used during daylight operations.
11. The Flashing Arrow Board shall be mounted on a vehicle, trailer or other suitable support.
12. A Flashing Arrow Board SHALL NOT BE USED to laterally shift traffic.
13. A full matrix PCMS may be used to simulate a Flashing Arrow Board provided it meets visibility, flash rate and dimming requirements on this sheet for the same size arrow.
14. Minimum mounting height of trailer mounted Arrow Boards should be 7 feet from roadway to bottom of panel.

REQUIREMENTS			
TYPE	MINIMUM SIZE	MINIMUM NUMBER OF PANEL LAMPS	MINIMUM VISIBILITY DISTANCE
B	30 x 60	13	3/4 mile
C	48 x 96	15	1 mile

ATTENTION

Flashing Arrow Boards shall be equipped with automatic dimming devices.

WHEN NOT IN USE, REMOVE THE ARROW BOARD FROM THE RIGHT-OF-WAY OR PLACE THE ARROW BOARD BEHIND CONCRETE TRAFFIC BARRIER OR GUARDRAIL.

FLASHING ARROW BOARDS

TRUCK-MOUNTED ATTENUATORS

1. Truck-mounted attenuators (TMA) used on TxDOT facilities must meet the requirements outlined in the Manual for Assessing Safety Hardware (MASH).
2. Refer to the CWZTCD for the requirements of Level 2 or Level 3 TMAs.
3. Refer to the CWZTCD for a list of approved TMAs.
4. TMAs are required on freeways unless otherwise noted in the plans.
5. A TMA should be used anytime that it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the work performance.
6. The only reason a TMA should not be required is when a work area is spread down the roadway and the work crew is an extended distance from the TMA.

Texas Department of Transportation — Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION ARROW PANEL, REFLECTORS, WARNING LIGHTS & ATTENUATOR

BC(7)-21

FILE: bc-21.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
© TxDOT November 2002	CONT	SECT	JOB	HIGHWAY
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9-07 8-14	DIST	COUNTY		SHEET NO.
7-13 5-21	BSP	ELCHXSO		151

101

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GENERAL NOTES

1. For long term stationary work zones on freeways, drums shall be used as the primary channelizing device.
2. For intermediate term stationary work zones on freeways, drums should be used as the primary channelizing device but may be replaced in tangent sections by vertical panels, or 42" two-piece cones. In tangent sections, one-piece cones may be used with the approval of the Engineer but only if personnel are present on the project at all times to maintain the cones in proper position and location.
3. For short term stationary work zones on freeways, drums are the preferred channelizing device but may be replaced in tapers, transitions and tangent sections by vertical panels, two-piece cones or one-piece cones as approved by the Engineer.
4. Drums and all related items shall comply with the requirements of the current version of the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD) and the "Compliant Work Zone Traffic Control Devices List" (CWZTCD).
5. Drums, bases, and related materials shall exhibit good workmanship and shall be free from objectionable marks or defects that would adversely affect their appearance or serviceability.
6. The Contractor shall have a maximum of 24 hours to replace any plastic drums identified for replacement by the Engineer/Inspector. The replacement device must be an approved device.

GENERAL DESIGN REQUIREMENTS

Pre-qualified plastic drums shall meet the following requirements:

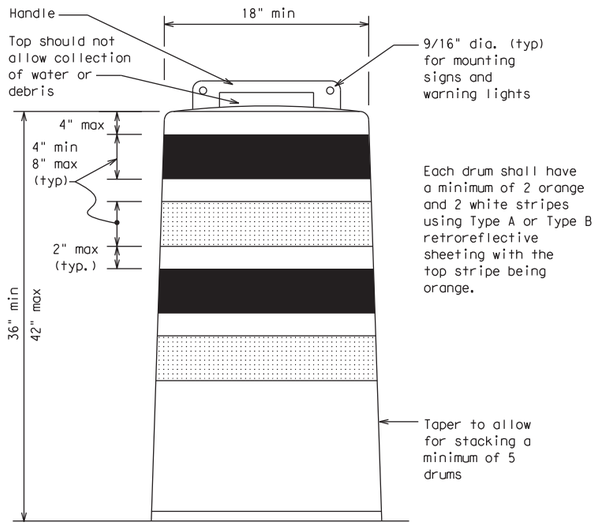
1. Plastic drums shall be a two-piece design; the "body" of the drum shall be the top portion and the "base" shall be the bottom.
2. The body and base shall lock together in such a manner that the body separates from the base when impacted by a vehicle traveling at a speed of 20 MPH or greater but prevents accidental separation due to normal handling and/or air turbulence created by passing vehicles.
3. Plastic drums shall be constructed of lightweight flexible, and deformable materials. The Contractor shall NOT use metal drums or single piece plastic drums as channelization devices or sign supports.
4. Drums shall present a profile that is a minimum of 18 inches in width at the 36 inch height when viewed from any direction. The height of drum unit (body installed on base) shall be a minimum of 36 inches and a maximum of 42 inches.
5. The top of the drum shall have a built-in handle for easy pickup and shall be designed to drain water and not collect debris. The handle shall have a minimum of two widely spaced 9/16 inch diameter holes to allow attachment of a warning light, warning reflector unit or approved compliant sign.
6. The exterior of the drum body shall have a minimum of four alternating orange and white retroreflective circumferential stripes not less than 4 inches nor greater than 8 inches in width. Any non-reflectorized space between any two adjacent stripes shall not exceed 2 inches in width.
7. Bases shall have a maximum width of 36 inches, a maximum height of 4 inches, and a minimum of two footholds of sufficient size to allow base to be held down while separating the drum body from the base.
8. Plastic drums shall be constructed of ultra-violet stabilized, orange, high-density polyethylene (HDPE) or other approved material.
9. Drum body shall have a maximum unballasted weight of 11 lbs.
10. Drum and base shall be marked with manufacturer's name and model number.

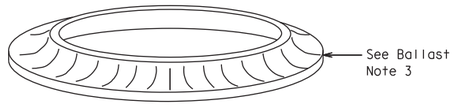
RETROREFLECTIVE SHEETING

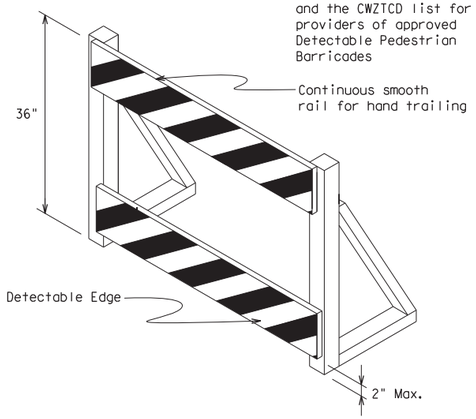
1. The stripes used on drums shall be constructed of sheeting meeting the color and retroreflectivity requirements of Departmental Materials Specification DMS-8300, "Sign Face Materials," Type A or Type B reflective sheeting shall be supplied unless otherwise specified in the plans.
2. The sheeting shall be suitable for use on and shall adhere to the drum surface such that, upon vehicular impact, the sheeting shall remain adhered in-place and exhibit no delaminating, cracking, or loss of retroreflectivity other than that loss due to abrasion of the sheeting surface.

BALLAST

1. Unballasted bases shall be large enough to hold up to 50 lbs. of sand. This base, when filled with the ballast material, should weigh between 35 lbs (minimum) and 50 lbs (maximum). The ballast may be sand in one to three sandbags separate from the base, sand in a sand-filled plastic base, or other ballasting devices as approved by the Engineer. Stacking of sandbags will be allowed, however height of sandbags above pavement surface may not exceed 12 inches.
2. Bases with built-in ballast shall weigh between 40 lbs. and 50 lbs. Built-in ballast can be constructed of an integral crumb rubber base or a solid rubber base.
3. Recycled truck tire sidewalls may be used for ballast on drums approved for this type of ballast on the CWZTCD list.
4. The ballast shall not be heavy objects, water, or any material that would become hazardous to motorists, pedestrians, or workers when the drum is struck by a vehicle.
5. When used in regions susceptible to freezing, drums shall have drainage holes in the bottoms so that water will not collect and freeze becoming a hazard when struck by a vehicle.
6. Ballast shall not be placed on top of drums.
7. Adhesives may be used to secure base of drums to pavement.

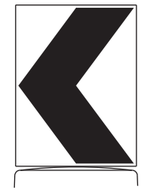




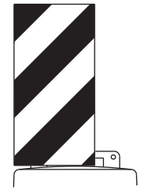


DETECTABLE PEDESTRIAN BARRICADES

1. When existing pedestrian facilities are disrupted, closed, or relocated in a TTC zone, the temporary facilities shall be detectable and include accessibility features consistent with the features present in the existing pedestrian facility. Refer to WZ(BTS-2) for Pedestrian Control requirements for Sidewalk Diversions, Sidewalk Detours and Crosswalk Closures.
2. Where pedestrians with visual disabilities normally use the closed sidewalk, a Detectable Pedestrian Barricade shall be placed across the full width of the closed sidewalk instead of a Type 3 Barricade.
3. Detectable pedestrian barricades similar to the one pictured above, longitudinal channelizing devices, some concrete barriers, and wood or chain link fencing with a continuous detectable edging can satisfactorily delineate a pedestrian path.
4. Tape, rope, or plastic chain strung between devices are not detectable, do not comply with the design standards in the "Americans with Disabilities Act Accessibility Guidelines (ADAAG)" and should not be used as a control for pedestrian movements.
5. Warning lights shall not be attached to detectable pedestrian barricades.
6. Detectable pedestrian barricades should use 8" nominal barricade rails as shown on BC(10) provided that the top rail provides a smooth continuous rail suitable for hand trailing with no splinters, burrs, or sharp edges.



18" x 24" Sign
(Maximum Sign Dimension)
Chevron CW1-8, Opposing Traffic Lane Divider, Driveway sign D70a, Keep Right R4 series or other signs as approved by Engineer



12" x 24"
Vertical Panel
mount with diagonals sloping down towards travel way

Plywood, Aluminum or Metal sign substrates shall NOT be used on plastic drums

SIGNS, CHEVRONS, AND VERTICAL PANELS MOUNTED ON PLASTIC DRUMS

1. Signs used on plastic drums shall be manufactured using substrates listed on the CWZTCD.
2. Chevrons and other work zone signs with an orange background shall be manufactured with Type B_{FL} or Type C_{FL} Orange sheeting meeting the color and retroreflectivity requirements of DMS-8300, "Sign Face Material," unless otherwise specified in the plans.
3. Vertical Panels shall be manufactured with orange and white sheeting meeting the requirements of DMS-8300 Type A or Type B. Diagonal stripes on Vertical Panels shall slope down toward the intended traveled lane.
4. Other sign messages (text or symbolic) may be used as approved by the Engineer. Sign dimensions shall not exceed 18 inches in width or 24 inches in height, except for the R9 series signs discussed in note 8 below.
5. Signs shall be installed using a 1/2 inch bolt (nominal) and nut, two washers, and one locking washer for each connection.
6. Mounting bolts and nuts shall be fully engaged and adequately torqued. Bolts should not extend more than 1/2 inch beyond nuts.
7. Chevrons may be placed on drums on the outside of curves, on merging tapers or on shifting tapers. When used in these locations, they may be placed on every drum or spaced not more than on every third drum. A minimum of three (3) should be used at each location called for in the plans.
8. R9-9, R9-10, R9-11 and R9-11a Sidewalk Closed signs which are 24 inches wide may be mounted on plastic drums, with approval of the Engineer.

Texas Department of Transportation

Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES

BC(8)-21

FILE: bc-21.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT November 2002	CONT	SECT	JOB	HIGHWAY
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9-07 5-21	DSP	ELCHXSO		152
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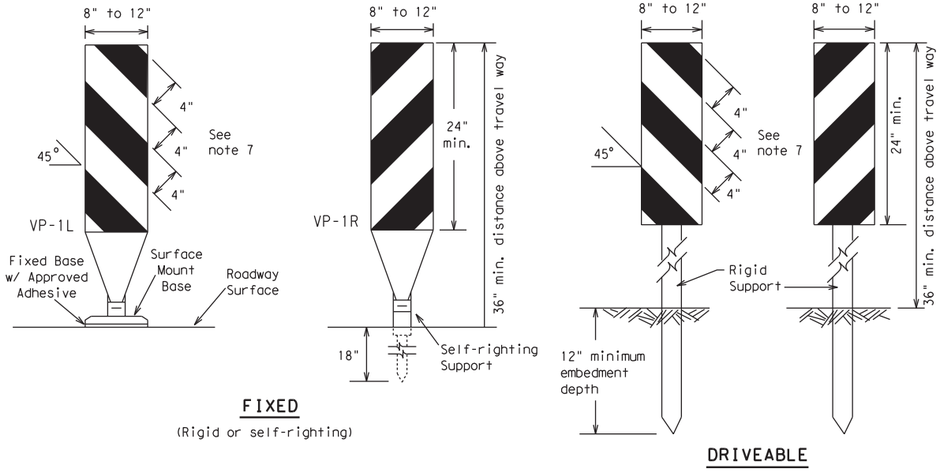
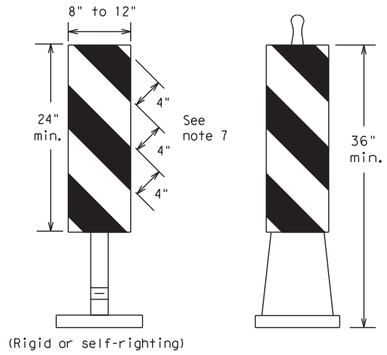


FIXED
(Rigid or self-righting)

DRIVEABLE

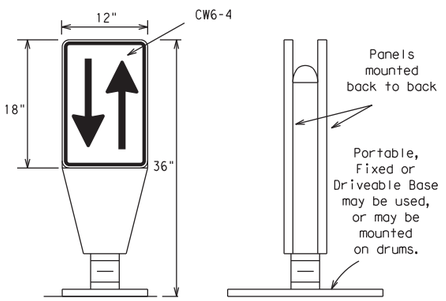


(Rigid or self-righting)

PORTABLE

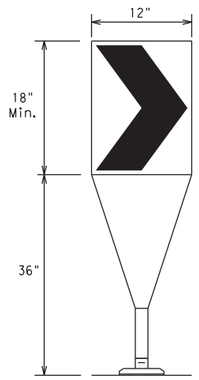
1. Vertical Panels (VP's) are normally used to channelize traffic or divide opposing lanes of traffic.
2. VP's may be used in daytime or nighttime situations. They may be used at the edge of shoulder drop-offs and other areas such as lane transitions where positive daytime and nighttime delineation is required. The Engineer/Inspector shall refer to the Roadway Design Manual for additional requirements on the use VP's for drop-offs.
3. VP's should be mounted back to back if used at the edge of cuts adjacent to two-way two lane roadways. Stripes are to be reflective orange and reflective white and should always slope downward toward the travel lane.
4. VP's used on expressways and freeways or other high speed roadways, may have more than 270 square inches of retroreflective area facing traffic.
5. Self-righting supports are available with portable base. See "Compliant Work Zone Traffic Control Devices List" (CWZTCD).
6. Sheeting for the VP's shall be retroreflective Type A or Type B conforming to Departmental Material Specification DMS-8300, unless noted otherwise.
7. Where the height of reflective material on the vertical panel is 36 inches or greater, a panel stripe of 6 inches shall be used.

VERTICAL PANELS (VPs)



1. Opposing Traffic Lane Dividers (OTLD) are delineation devices designed to convert a normal one-way roadway section to two-way operation. OTLD's are used on temporary centerlines. The upward and downward arrows on the sign's face indicate the direction of traffic on either side of the divider. The base is secured to the pavement with an adhesive or rubber weight to minimize movement caused by a vehicle impact or wind gust.
2. The OTLD may be used in combination with 42" cones or VPs.
3. Spacing between the OTLD shall not exceed 500 feet. 42" cones or VPs placed between the OTLD's should not exceed 100 foot spacing.
4. The OTLD shall be orange with a black non-reflective legend. Sheeting for the OTLD shall be retroreflective Type B_{FL} or Type C_{FL} conforming to Departmental Material Specification DMS-8300, unless noted otherwise. The legend shall meet the requirements of DMS-8300.

OPPOSING TRAFFIC LANE DIVIDERS (OTLD)



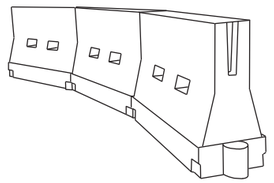
Fixed Base w/ Approved Adhesive (Driveable Base, or Flexible Support can be used)

1. The chevron shall be a vertical rectangle with a minimum size of 12 by 18 inches.
2. Chevrons are intended to give notice of a sharp change of alignment with the direction of travel and provide additional emphasis and guidance for vehicle operators with regard to changes in horizontal alignment of the roadway.
3. Chevrons, when used, shall be erected on the outside of a sharp curve or turn, or on the far side of an intersection. They shall be in line with and at right angles to approaching traffic. Spacing should be such that the motorist always has three in view, until the change in alignment eliminates its need.
4. To be effective, the chevron should be visible for at least 500 feet.
5. Chevrons shall be orange with a black nonreflective legend. Sheeting for the chevron shall be retroreflective Type B_{FL} or Type C_{FL} conforming to Departmental Material Specification DMS-8300, unless noted otherwise. The legend shall meet the requirements of DMS-8300.
6. For Long Term Stationary use on tapers or transitions on freeways and divided highways, self-righting chevrons may be used to supplement plastic drums but not to replace plastic drums.

CHEVRONS

GENERAL NOTES

1. Work Zone channelizing devices illustrated on this sheet may be installed in close proximity to traffic and are suitable for use on high or low speed roadways. The Engineer/Inspector shall ensure that spacing and placement is uniform and in accordance with the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD).
2. Channelizing devices shown on this sheet may have a driveable, fixed or portable base. The requirement for self-righting channelizing devices must be specified in the General Notes or other plan sheets.
3. Channelizing devices on self-righting supports should be used in work zone areas where channelizing devices are frequently impacted by errant vehicles or vehicle related wind gusts making alignment of the channelizing devices difficult to maintain. Locations of these devices shall be detailed elsewhere in the plans. These devices shall conform to the TMUTCD and the "Compliant Work Zone Traffic Control Devices List" (CWZTCD).
4. The Contractor shall maintain devices in a clean condition and replace damaged, nonreflective, faded, or broken devices and bases as required by the Engineer/Inspector. The Contractor shall be required to maintain proper device spacing and alignment.
5. Portable bases shall be fabricated from virgin and/or recycled rubber. The portable bases shall weigh a minimum of 30 lbs.
6. Pavement surfaces shall be prepared in a manner that ensures proper bonding between the adhesives, the fixed mount bases and the pavement surface. Adhesives shall be prepared and applied according to the manufacturer's recommendations.
7. The installation and removal of channelizing devices shall not cause detrimental effects to the final pavement surfaces, including pavement surface discoloration or surface integrity. Driveable bases shall not be permitted on final pavement surfaces. The Engineer/Inspector shall approve all application and removal procedures of fixed bases.



LONGITUDINAL CHANNELIZING DEVICES (LCD)

1. LCDs are crashworthy, lightweight, deformable devices that are highly visible, have good target value and can be connected together. They are not designed to contain or redirect a vehicle on impact.
2. LCDs may be used instead of a line of cones or drums.
3. LCDs shall be placed in accordance to application and installation requirements specific to the device, and used only when shown on the CWZTCD list.
4. LCDs should not be used to provide positive protection for obstacles, pedestrians or workers.
5. LCDs shall be supplemented with retroreflective delineation as required for temporary barriers on BC(7) when placed roughly parallel to the travel lanes.
6. LCDs used as barricades placed perpendicular to traffic should have at least one row of reflective sheeting meeting the requirements for barricade rails as shown on BC(10). Place reflective sheeting near the top of the LCD along the full length of the device.

WATER BALLASTED SYSTEMS USED AS BARRIERS

1. Water ballasted systems used as barriers shall not be used solely to channelize road users, but also to protect the work space per the appropriate Manual for Assessing Safety Hardware (MASH) crashworthiness requirements based on roadway speed and barrier application.
2. Water ballasted systems used to channelize vehicular traffic shall be supplemented with retroreflective delineation or channelizing devices to improve daytime/nighttime visibility. They may also be supplemented with pavement markings.
3. Water ballasted systems used as barriers shall be placed in accordance to application and installation requirements specific to the device, and used only when shown on the CWZTCD list.
4. Water ballasted systems used as barriers should not be used for a merging taper except in low speed (less than 45 MPH) urban areas. When used on a taper in a low speed urban area, the taper shall be delineated and the taper length should be designed to optimize road user operations considering the available geometric conditions.
5. When water ballasted systems used as barriers have blunt ends exposed to traffic, they should be attenuated as per manufacturer recommendations or flared to a point outside the clear zone.

If used to channelize pedestrians, longitudinal channelizing devices or water ballasted systems must have a continuous detectable bottom for users of long canes and the top of the unit shall not be less than 32 inches in height.

HOLLOW OR WATER BALLASTED SYSTEMS USED AS LONGITUDINAL CHANNELIZING DEVICES OR BARRIERS

Posted Speed	Formula	Minimum Desirable Taper Lengths ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices On a Taper	On a Tangent
30	$L = \frac{WS^2}{60}$	150'	165'	180'	30'	60'
35		205'	225'	245'	35'	70'
40		265'	295'	320'	40'	80'
45	L = WS	450'	495'	540'	45'	90'
50		500'	550'	600'	50'	100'
55		550'	605'	660'	55'	110'
60		600'	660'	720'	60'	120'
65		650'	715'	780'	65'	130'
70		700'	770'	840'	70'	140'
75		750'	825'	900'	75'	150'
80		800'	880'	960'	80'	160'

** Taper lengths have been rounded off.
L=Length of Taper (FT.) W=Width of Offset (FT.)
S=Posted Speed (MPH)

SUGGESTED MAXIMUM SPACING OF CHANNELIZING DEVICES AND MINIMUM DESIRABLE TAPER LENGTHS

Texas Department of Transportation

Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES

BC(9)-21

FILE: bc-21.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
© TxDOT November 2002	CONT	SECT	JOB	HIGHWAY
REVISIONS	2021	051	104	IHWY0
9-07 8-14	DIST	COUNTY		SHEET NO.
7-13 5-21	BSP	ELC*SO		153

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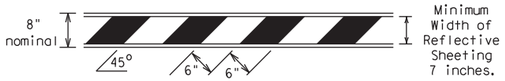
FILE: DOCUMENT NAME east-006\perlo.gonzalez\dms48832\C_104_S_BC(10)-21_10.dgn

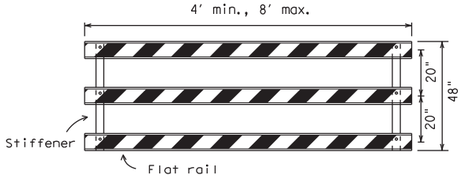
TYPE 3 BARRICADES

1. Refer to the Compliant Work Zone Traffic Control Devices List (CWZTCD) for details of the Type 3 Barricades and a list of all materials used in the construction of Type 3 Barricades.
2. Type 3 Barricades shall be used at each end of construction projects closed to all traffic.
3. Barricades extending across a roadway should have stripes that slope downward in the direction toward which traffic must turn in detouring. When both right and left turns are provided, the chevron striping may slope downward in both directions from the center of the barricade. Where no turns are provided at a closed road, striping should slope downward in both directions toward the center of roadway.
4. Striping of rails, for the right side of the roadway, should slope downward to the left. For the left side of the roadway, striping should slope downward to the right.
5. Identification markings may be shown only on the back of the barricade rails. The maximum height of letters and/or company logos used for identification shall be 1".
6. Barricades shall not be placed parallel to traffic unless an adequate clear zone is provided.
7. Warning lights shall NOT be installed on barricades.
8. Where barricades require the use of weights to keep from turning over, the use of sandbags with dry, cohesionless sand is recommended. The sandbags will be tied shut to keep the sand from spilling and to maintain a constant weight. Sand bags shall not be stacked in a manner that covers any portion of a barricade rails reflective sheeting. Rock, concrete, iron, steel or other solid objects will NOT be permitted. Sandbags should weigh a minimum of 35 lbs and a maximum of 50 lbs. Sandbags shall be made of a durable material that tears upon vehicular impact. Rubber (such as tire inner tubes) shall not be used for sandbags. Sandbags shall only be placed along or upon the base supports of the device and shall not be suspended above ground level or hung with rope, wire, chains or other fasteners.
9. Sheeting for barricades shall be retroreflective Type A or Type B conforming to Departmental Material Specification DMS-8300 unless otherwise noted.

Barricades shall NOT be used as a sign support.



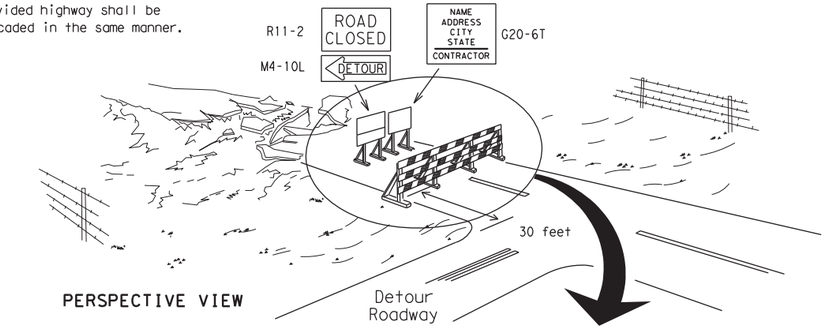
TYPICAL STRIPING DETAIL FOR BARRICADE RAIL



Stiffener may be inside or outside of support, but no more than 2 stiffeners shall be allowed on one barricade.

TYPICAL PANEL DETAIL FOR SKID OR POST TYPE BARRICADES

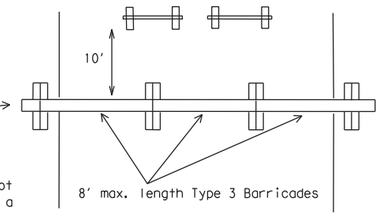
Each roadway of a divided highway shall be barricaded in the same manner.



PERSPECTIVE VIEW

The three rails on Type 3 barricades shall be reflectorized orange and reflective white stripes on one side facing one-way traffic and both sides for two-way traffic.

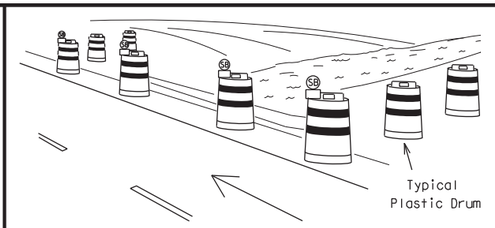
Barricade striping should slant downward in the direction of detour.



PLAN VIEW

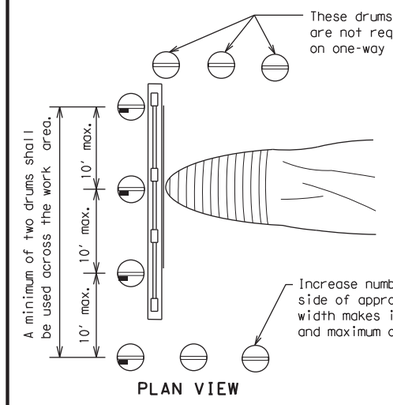
1. Signs should be mounted on independent supports at a 7 foot mounting height in center of roadway. The signs should be a minimum of 10 feet behind Type 3 Barricades.
2. Advance signing shall be as specified elsewhere in the plans.

TYPE 3 BARRICADE (POST AND SKID) TYPICAL APPLICATION



PERSPECTIVE VIEW

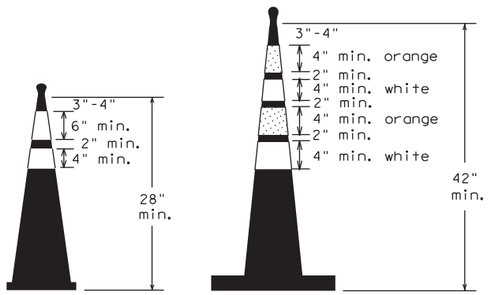
1. Where positive redirectional capability is provided, drums may be omitted.
2. Plastic construction fencing may be used with drums for safety as required in the plans.
3. Vertical Panels on flexible support may be substituted for drums when the shoulder width is less than 4 feet.
4. When the shoulder width is greater than 12 feet, steady-burn lights may be omitted if drums are used.
5. Drums must extend the length of the culvert widening.



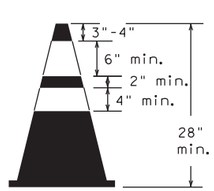
PLAN VIEW

LEGEND	
	Plastic drum
	Plastic drum with steady burn light or yellow warning reflector
SB	Steady burn warning light or yellow warning reflector

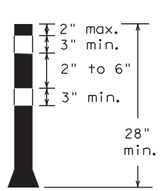
CULVERT WIDENING OR OTHER ISOLATED WORK WITHIN THE PROJECT LIMITS



Two-Piece cones



One-Piece cones

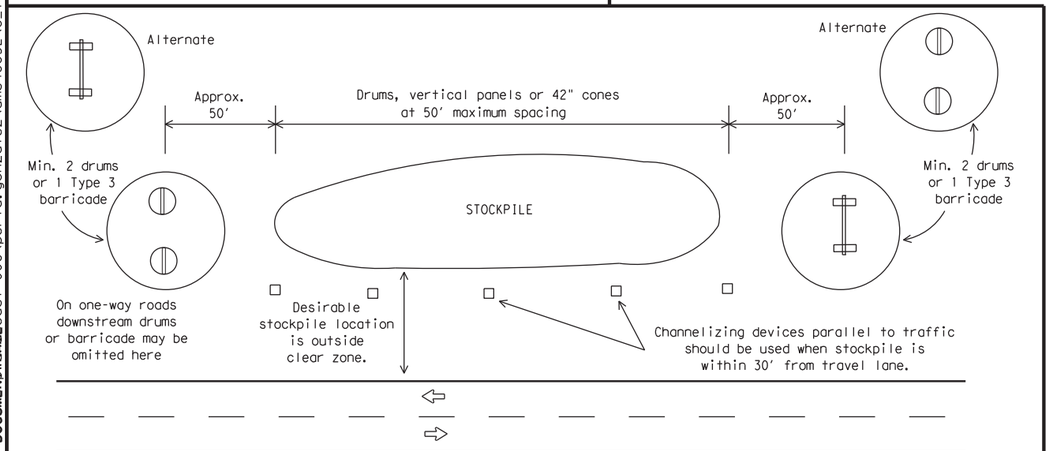


Tubular Marker

28" Cones shall have a minimum weight of 9 1/2 lbs.

42" 2-piece cones shall have a minimum weight of 30 lbs. including base.

1. Traffic cones and tubular markers shall be predominantly orange, and meet the height and weight requirements shown above.
2. One-piece cones have the body and base of the cone molded in one consolidated unit. Two-piece cones have a cone shaped body and a separate rubber base, or ballast, that is added to keep the device upright and in place.
3. Two-piece cones may have a handle or loop extending up to 8" above the minimum height shown, in order to aid in retrieving the device.
4. Cones or tubular markers shall have white or white and orange reflective bands as shown above. The reflective bands shall have a smooth, sealed outer surface and meet the requirements of Departmental Material Specification DMS-8300 Type A or Type B.
5. 28" cones and tubular markers are generally suitable for short duration and short-term stationary work as defined on BC(4). These should not be used for intermediate-term or long-term stationary work unless personnel is on-site to maintain them in their proper upright position.
6. 42" two-piece cones, vertical panels or drums are suitable for all work zone durations.
7. Cones or tubular markers used on each project should be of the same size and shape.



TRAFFIC CONTROL FOR MATERIAL STOCKPILES

SHEET 10 OF 12

Texas Department of Transportation

Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES

BC(10)-21

FILE: bc-21.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT November 2002	CONT	SECT	JOB	HIGHWAY
REVISIONS 9-07 8-14 7-13 5-21	2021	01	104	IHWY0
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	BSP	ELCHISO		154

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WORK ZONE PAVEMENT MARKINGS

GENERAL

1. The Contractor shall be responsible for maintaining work zone and existing pavement markings, in accordance with the standard specifications and special provisions, on all roadways open to traffic within the CSJ limits unless otherwise stated in the plans.
2. Color, patterns and dimensions shall be in conformance with the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD).
3. Additional supplemental pavement marking details may be found in the plans or specifications.
4. Pavement markings shall be installed in accordance with the TMUTCD and as shown on the plans.
5. When short term markings are required on the plans, short term markings shall conform with the TMUTCD, the plans and details as shown on the Standard Plan Sheet WZ(STPM).
6. When standard pavement markings are not in place and the roadway is opened to traffic, DO NOT PASS signs shall be erected to mark the beginning of the sections where passing is prohibited and PASS WITH CARE signs at the beginning of sections where passing is permitted.
7. All work zone pavement markings shall be installed in accordance with Item 662, "Work Zone Pavement Markings."

RAISED PAVEMENT MARKERS

1. Raised pavement markers are to be placed according to the patterns on BC(12).
2. All raised pavement markers used for work zone markings shall meet the requirements of Item 672, "RAISED PAVEMENT MARKERS" and Departmental Material Specification DMS-4200 or DMS-4300.

PREFABRICATED PAVEMENT MARKINGS

1. Removable prefabricated pavement markings shall meet the requirements of DMS-8241.
2. Non-removable prefabricated pavement markings (foil back) shall meet the requirements of DMS-8240.

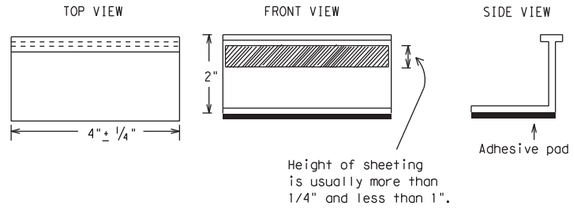
MAINTAINING WORK ZONE PAVEMENT MARKINGS

1. The Contractor will be responsible for maintaining work zone pavement markings within the work limits.
2. Work zone pavement markings shall be inspected in accordance with the frequency and reporting requirements of work zone traffic control device inspections as required by Form 599.
3. The markings should provide a visible reference for a minimum distance of 300 feet during normal daylight hours and 160 feet when illuminated by automobile low-beam headlights at night, unless sight distance is restricted by roadway geometrics.
4. Markings failing to meet this criteria within the first 30 days after placement shall be replaced at the expense of the Contractor as per Specification Item 662.

REMOVAL OF PAVEMENT MARKINGS

1. Pavement markings that are no longer applicable, could create confusion or direct a motorist toward or into the closed portion of the roadway shall be removed or obliterated before the roadway is opened to traffic.
2. The above shall not apply to detours in place for less than three days, where flaggers and/or sufficient channelizing devices are used in lieu of markings to outline the detour route.
3. Pavement markings shall be removed to the fullest extent possible, so as not to leave a discernable marking. This shall be by any method approved by TxDOT Specification Item 677 for "Eliminating Existing Pavement Markings and Markers".
4. The removal of pavement markings may require resurfacing or seal coating portions of the roadway as described in Item 677.
5. Subject to the approval of the Engineer, any method that proves to be successful on a particular type pavement may be used.
6. Blast cleaning may be used but will not be required unless specifically shown in the plans.
7. Over-painting of the markings SHALL NOT BE permitted.
8. Removal of raised pavement markers shall be as directed by the Engineer.
9. Removal of existing pavement markings and markers will be paid for directly in accordance with Item 677, "ELIMINATING EXISTING PAVEMENT MARKINGS AND MARKERS," unless otherwise stated in the plans.
10. Black-out marking tape may be used to cover conflicting existing markings for periods less than two weeks when approved by the Engineer.

Temporary Flexible-Reflective Roadway Marker Tabs



STAPLES OR NAILS SHALL NOT BE USED TO SECURE TEMPORARY FLEXIBLE-REFLECTIVE ROADWAY MARKER TABS TO THE PAVEMENT SURFACE

1. Temporary flexible-reflective roadway marker tabs used as guidemarks shall meet the requirements of DMS-8242.
2. Tabs detailed on this sheet are to be inspected and accepted by the Engineer or designated representative. Sampling and testing is not normally required, however at the option of the Engineer, either "A" or "B" below may be imposed to assure quality before placement on the roadway.
   A. Select five (5) or more tabs at random from each lot or shipment and submit to the Construction Division, Materials and Pavement Section to determine specification compliance.
   B. Select five (5) tabs and perform the following test. Affix five (5) tabs at 24 inch intervals on an asphaltic pavement in a straight line. Using a medium size passenger vehicle or pickup, run over the markers with the front and rear tires at a speed of 35 to 40 miles per hour, four (4) times in each direction. No more than one (1) out of the five (5) reflective surfaces shall be lost or displaced as a result of this test.
3. Small design variances may be noted between tab manufacturers.
4. See Standard Sheet WZ(STPM) for tab placement on new pavements. See Standard Sheet TCP(7-1) for tab placement on seal coat work.

RAISED PAVEMENT MARKERS USED AS GUIDEMARKS

1. Raised pavement markers used as guidemarks shall be from the approved product list, and meet the requirements of DMS-4200.
2. All temporary construction raised pavement markers provided on a project shall be of the same manufacturer.
3. Adhesive for guidemarks shall be bituminous material hot applied or butyl rubber pad for all surfaces, or thermoplastic for concrete surfaces.

Guidemarks shall be designated as:
YELLOW - (two amber reflective surfaces with yellow body).
WHITE - (one silver reflective surface with white body).

DEPARTMENTAL MATERIAL SPECIFICATIONS	
PAVEMENT MARKERS (REFLECTORIZED)	DMS-4200
TRAFFIC BUTTONS	DMS-4300
EPOXY AND ADHESIVES	DMS-6100
BITUMINOUS ADHESIVE FOR PAVEMENT MARKERS	DMS-6130
PERMANENT PREFABRICATED PAVEMENT MARKINGS	DMS-8240
TEMPORARY REMOVABLE, PREFABRICATED PAVEMENT MARKINGS	DMS-8241
TEMPORARY FLEXIBLE, REFLECTIVE ROADWAY MARKER TABS	DMS-8242

A list of prequalified reflective raised pavement markers, non-reflective traffic buttons, roadway marker tabs and other pavement markings can be found at the Material Producer List web address shown on BC(1).

Texas Department of Transportation

Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION PAVEMENT MARKINGS

BC(11)-21

FILE: bc-21.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
© TxDOT February 1998	CONT	SECT	JOB	HIGHWAY
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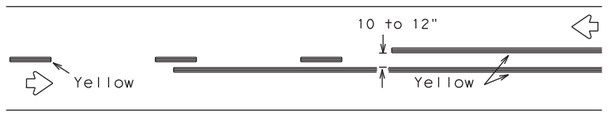
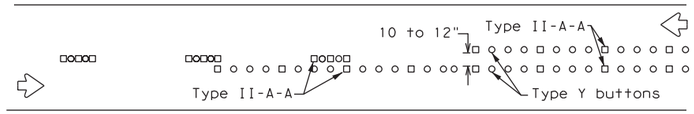
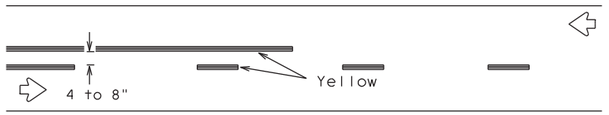
PAVEMENT MARKING PATTERNS



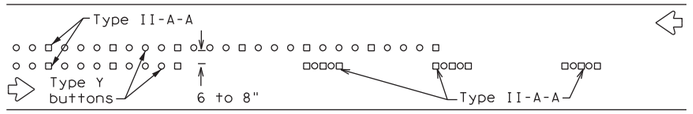
REFLECTORIZED PAVEMENT MARKINGS - PATTERN A



RAISED PAVEMENT MARKERS - PATTERN A



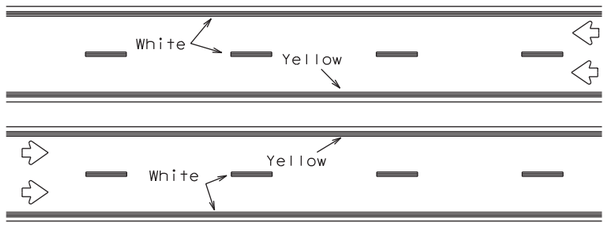
REFLECTORIZED PAVEMENT MARKINGS - PATTERN B



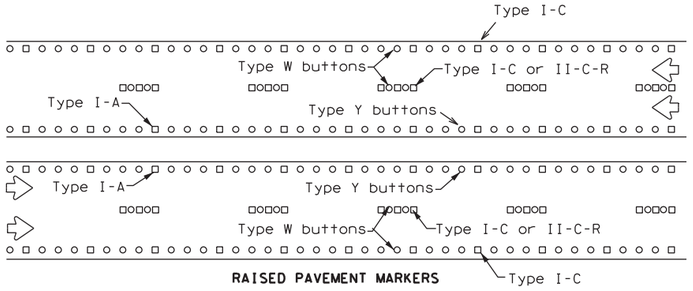
RAISED PAVEMENT MARKERS - PATTERN B

Pattern A is the TXDOT Standard, however Pattern B may be used if approved by the Engineer.
Prefabricated markings may be substituted for reflectorized pavement markings.

CENTER LINE & NO-PASSING ZONE BARRIER LINES FOR TWO-LANE, TWO-WAY HIGHWAYS



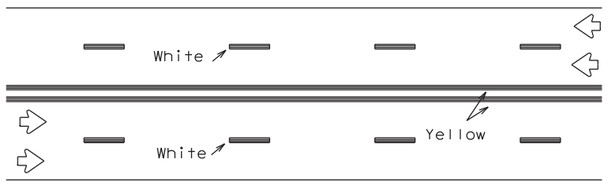
REFLECTORIZED PAVEMENT MARKINGS



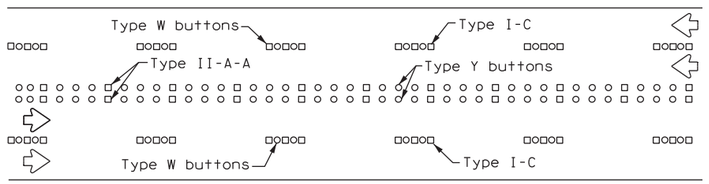
RAISED PAVEMENT MARKERS

Prefabricated markings may be substituted for reflectorized pavement markings.

EDGE & LANE LINES FOR DIVIDED HIGHWAY



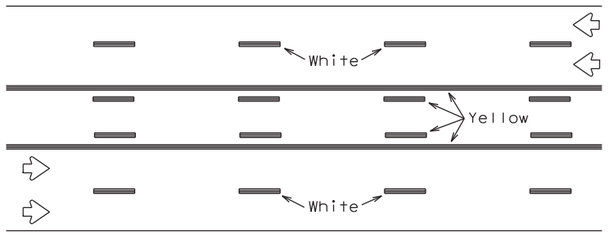
REFLECTORIZED PAVEMENT MARKINGS



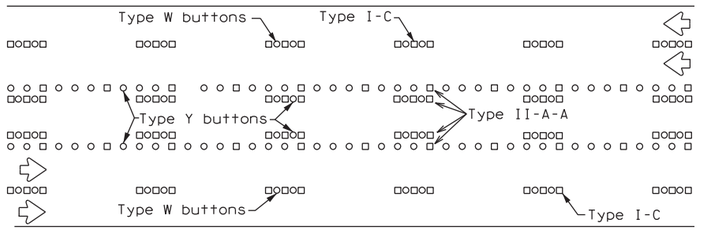
RAISED PAVEMENT MARKERS

Prefabricated markings may be substituted for reflectorized pavement markings.

LANE & CENTER LINES FOR MULTILANE UNDIVIDED HIGHWAYS



REFLECTORIZED PAVEMENT MARKINGS



RAISED PAVEMENT MARKERS

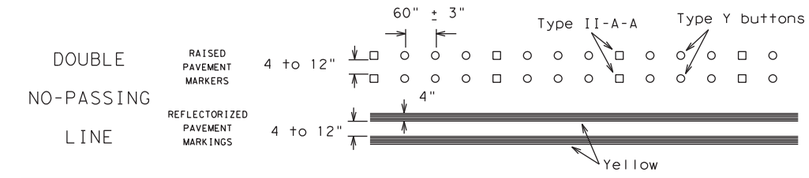
Prefabricated markings may be substituted for reflectorized pavement markings.

TWO-WAY LEFT TURN LANE

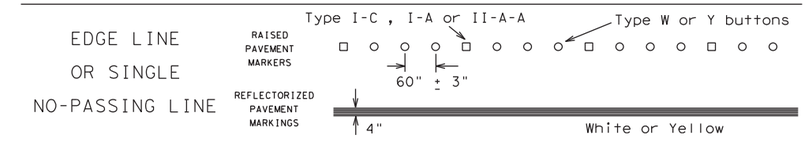
STANDARD WORK ZONE PAVEMENT MARKINGS DETAILS

SOLID LINES

DOUBLE NO-PASSING LINE

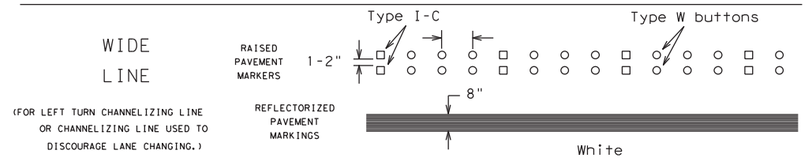


EDGE LINE OR SINGLE NO-PASSING LINE



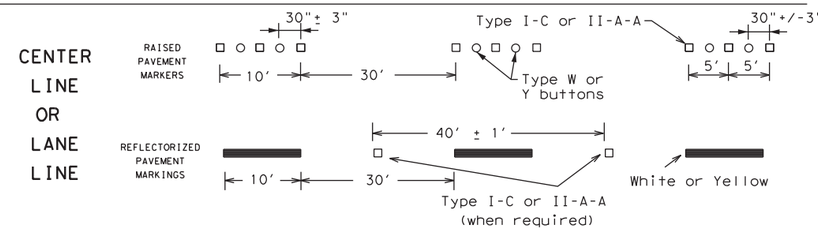
WIDE LINE

(FOR LEFT TURN CHANNELIZING LINE OR CHANNELIZING LINE USED TO DISCOURAGE LANE CHANGING.)

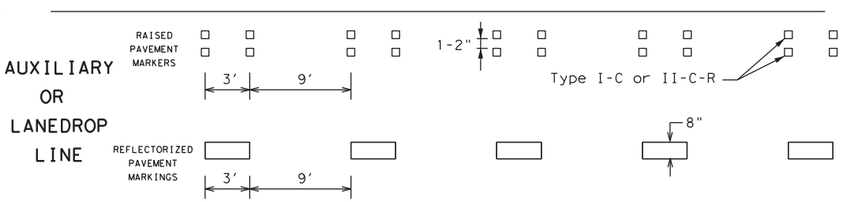


BROKEN LINES

CENTER LINE OR LANE LINE

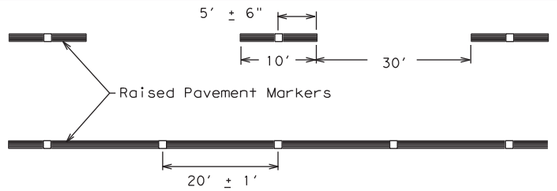


AUXILIARY OR LANEDROP LINE



REMOVABLE MARKINGS WITH RAISED PAVEMENT MARKERS

If raised pavement markers are used to supplement REMOVABLE markings, the markers shall be applied to the top of the tape at the approximate mid length of tape used for broken lines or at 20 foot spacing for solid lines. This allows an easier removal of raised pavement markers and tape.



Centerline only - not to be used on edge lines

Raised pavement markers used as standard pavement markings shall be from the approved products list and meet the requirements of Item 672 "RAISED PAVEMENT MARKERS."

Texas Department of Transportation

Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION PAVEMENT MARKING PATTERNS

BC(12)-21

FILE: bc-21.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT February 1998	CONT	SECT	JOB	HIGHWAY
REVISIONS 1-97 9-07 5-21 2-98 7-13 11-02 8-14	2121	01	104	IH 10
	DIST	COUNTY		SHEET NO.
	ELP	EL PASO		156

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LOC NO.	TCP PHASE	PLAN SHEET NUMBER	LOCATION	STA	TEST LEVEL	DIRECTION OF TRAFFIC (UNI/BI)	FOUNDATION PAD		BACKUP SUPPORT			AVAILABLE SITE LENGTH	CRASH CUSHION									
															MOVE / RESET		L	L	R	R	S	S
							PROPOSED MATERIAL	PROPOSED THICKNESS	DESCRIPTION	WIDTH	HEIGHT		INSTALL	REMOVE	MOVE/ RESET	FROM LOC.#	N	W	N	W	N	W
1	STAGE 2	1 OF 21	IH-10 EBML	525' IN NM	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"		1				X					
2	STAGE 2	4 OF 21	IH-10 EBML	19+44	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"		1				X					
3	STAGE 2	4 OF 21	WBML CONSTRUCTION ENTRANCE	21+60	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"		1	1			X					
4	STAGE 2	4 OF 21	EBML CONSTRUCTION ENTRANCE	22+74	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"		1	1			X					
5	STAGE 2	4 OF 21	IH-10 WBML	27+46	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"		1	1			X					
6	STAGE 2	6 OF 21	IH-10 EBML	50+48	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"		1	1			X					
7	STAGE 2	7 OF 21	WBML CONSTRUCTION ENTRANCE	52+04	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"		1				X					
8	STAGE 2	7 OF 21	EBML CONSTRUCTION ENTRANCE	53+14	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"		1				X					
9	STAGE 2	7 OF 21	IH-10 WBML	57+90	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"		1				X					
10	STAGE 2	10 OF 21	IH-10 EBML	84+95	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"		1	1			X					
11	STAGE 2	10 OF 21	WBML CONSTRUCTION ENTRANCE	86+83	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"		1	1			X					
12	STAGE 2	10 OF 21	EBML CONSTRUCTION ENTRANCE	87+97	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"		1	1			X					
13	STAGE 2	10 OF 21	IH-10 WBML	92+13	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"		1	1			X					
14	STAGE 2	12 OF 21	IH-10 EBML	109+58	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"		1	1			X					
15	STAGE 2	12 OF 21	WBML CONSTRUCTION ENTRANCE	111+14	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"		1	1			X					
16	STAGE 2	12 OF 21	EBML CONSTRUCTION ENTRANCE	112+27	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"		1				X					
17	STAGE 2	12 OF 21	IH-10 WBML	116+43	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"		1				X					
18	STAGE 2	16 OF 21	IH-10 EBML	155+32	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"		1	1			X					
19	STAGE 2	16 OF 21	WBML CONSTRUCTION ENTRANCE	156+74	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"		1	1			X					
20	STAGE 2	16 OF 21	EBML CONSTRUCTION ENTRANCE	157+88	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"		1	1			X					
21	STAGE 2	17 OF 21	IH-10 WBML	162+60	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"		1				X					
22	STAGE 2	17 OF 21	WBML CONSTRUCTION ENTRANCE	170+01	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"		1				X					
23	STAGE 2	17 OF 21	IH-10 EBML	170+22	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"		1				X					
24	STAGE 2	17 OF 21	EBML CONSTRUCTION ENTRANCE	171+14	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"		1				X					
25	STAGE 2	18 OF 21	IH-10 WBML	175+87	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"		1	1			X					
26	STAGE 2	18 OF 21	IH-10 EBML	181+38	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"		1	1			X					
27	STAGE 2	18 OF 21	WBML CONSTRUCTION ENTRANCE	182+91	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"		1	1			X					
28	STAGE 2	19 OF 21	EBML CONSTRUCTION ENTRANCE	184+05	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"		1	1			X					
29	STAGE 2	19 OF 21	IH-10 WBML	188+68	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"		1	1			X					
												TOTALS	29	18								

LEGEND:
L=LOW MAINTENANCE
R=REUSABLE
S=SACRIFICIAL
N=NARROW
W=WIDE

FOR DEFINITIONS SEE THE "CRASH CUSHION CATEGORIZATION CHART.PDF" AT THE DESIGN DIVISION (ROADWAY STANDARDS) WEBSITE. USE QUICK LINKS TO ACCESS ATTENUATORS / CRASH CUSHIONS SECTION.
http://www.dot.state.tx.us/insdtdot/orgchart/cmd/cserve/standard/rdwyIse.htm

CRASH CUSHION SUMMARY OF QUANTITIES

FILE: ccss.dgn	DN: TxDOT	CK:	CK:
© TxDOT	CONT	SECT	JOB	HIGHWAY
REVISIONS	2121	01	104	IH 10
	DIST	COUNTY	
	ELP	EL PASO	
	FEDERAL AID PROJECT		SHEET NO.
	SEE TITLE SHEET		157

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LOC NO.	TCP PHASE	PLAN SHEET NUMBER	LOCATION	STA	TEST LEVEL	DIRECTION OF TRAFFIC (UNI/BI)	FOUNDATION PAD		BACKUP SUPPORT			AVAILABLE SITE LENGTH	CRASH CUSHION									
															MOVE / RESET		L	L	R	R	S	S
							PROPOSED MATERIAL	PROPOSED THICKNESS	DESCRIPTION	WIDTH	HEIGHT		INSTALL	REMOVE	MOVE/ RESET	FROM LOC.#	N	W	N	W	N	W
30	STAGE 2	21 OF 22	IH-10 WBML	206+00	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"		1	1			X					
31	STAGE 3	1 OF 22	IH-10 EBML	550' IN NM	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"				1	1	X					
32	STAGE 3	3 OF 22	S DESERT BLVD (FRTG RD.)	13+70	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"				1	2	X					
33	STAGE 3	7 OF 22	N DESERT BLVD (FRTG RD.)	52+17	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"				1	7	X					
34	STAGE 3	8 OF 22	S DESERT BLVD (FRTG RD.)	68+11	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"			1	1	8	X					
35	STAGE 3	9 OF 22	N DESERT BLVD (FRTG RD.)	78+78	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"			1	1	9	X					
36	STAGE 3	13 OF 22	S DESERT BLVD (FRTG RD.)	120+61	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"			1	1	16	X					
37	STAGE 3	14 OF 22	N DESERT BLVD (FRTG RD.)	132+09	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"			1	1	17	X					
38	STAGE 3	17 OF 22	S DESERT BLVD (FRTG RD.)	163+72	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"				1	21	X					
39	STAGE 3	18 OF 22	S DESERT BLVD (FRTG RD.)	178+23	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"				1	22	X					
40	STAGE 3	19 OF 22	N DESERT BLVD (FRTG RD.)	193+35	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"				1	23	X					
41	STAGE 3	21 OF 22	IH-10 EBML	210+70	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"				1	24	X					
42	STAGE 4	2 OF 21	N DESERT BLVD (FRTG RD.)	5+25	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"			1	1	31	X					
43	STAGE 4	3 OF 21	IH-10 WBML	7+63	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"			1	1	32	X					
44	STAGE 4	4 OF 21	IH-10 EBML	25+45	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"			1	1	33	X					
45	STAGE 4	19 OF 21	IH-10 EBML	191+76	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"			1	1	38	X					
46	STAGE 4	20 OF 21	S DESERT BLVD (FRTG RD.)	194+44	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"			1	1	39	X					
47	STAGE 4	20 OF 21	N DESERT BLVD (FRTG RD.)	201+06	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"			1	1	40	X					
48	STAGE 4	21 OF 21	IH-10 WBML	212+21	TL-3	UNI	EXIST	-	TEMP. PCTB (SGL SLOPE) (TY1)	24"	42"			1	1	41	X					
												TOTALS	1	12	18							

LEGEND:
L=LOW MAINTENANCE
R=REUSABLE
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FOR DEFINITIONS SEE THE "CRASH CUSHION CATEGORIZATION CHART.PDF" AT THE DESIGN DIVISION (ROADWAY STANDARDS) WEBSITE. USE QUICK LINKS TO ACCESS ATTENUATORS / CRASH CUSHIONS SECTION.
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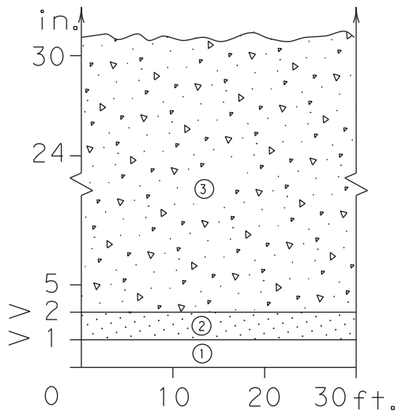
CRASH CUSHION SUMMARY OF QUANTITIES

SHEET 1 OF 1

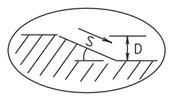
FILE: ccss.dgn	DN: TxDOT	CK:	CK:
© TxDOT	CONT	SECT	JOB	HIGHWAY
REVISIONS	2121	01	104	IH 10
	DIST	COUNTY	
	ELP	EL PASO	
	FEDERAL AID PROJECT		SHEET NO.
	SEE TITLE SHEET		158

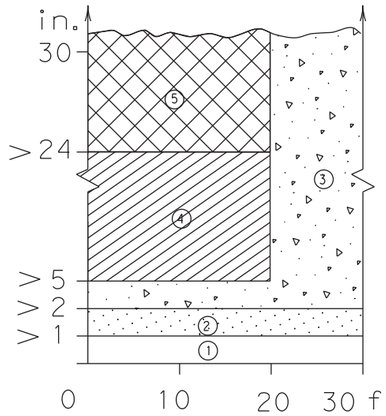
DEFINITION OF TREATMENT ZONES FOR VARIOUS EDGE CONDITIONS

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

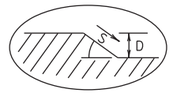


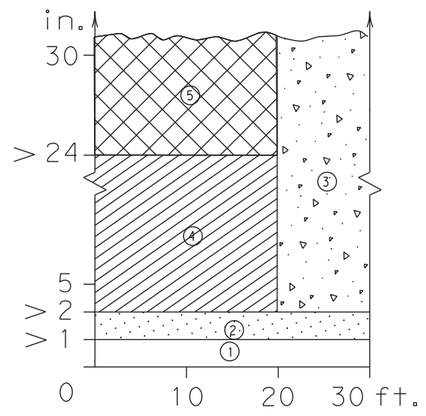
Edge Condition I
S = (3:1) (or flatter)



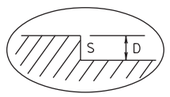


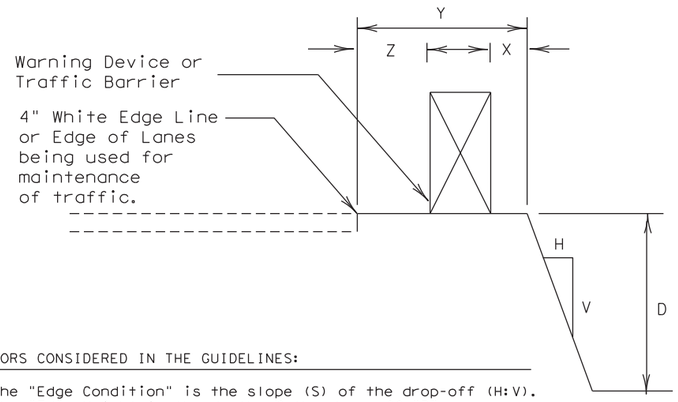
Edge Condition II
S = ((2.99):1) to (1:1)





Edge Condition III
S is steeper than (1:1)





FACTORS CONSIDERED IN THE GUIDELINES:

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.

Zone	Treatment Types Guidelines:
①	No treatment.
②	CW 8-11 "Uneven Lanes" signs.
③	CW 8-9a "Shoulder Drop-Off" or CW 8-11 signs plus vertical panels.
④	CW 8-9a or CW 8-11, signs plus drums. Where restricted space precludes the use of drums, use vertical panels. An edge fill may be provided to change the edge slope to that of the preferable Edge Condition I.
⑤	Check indications (Figure-1) for positive 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:

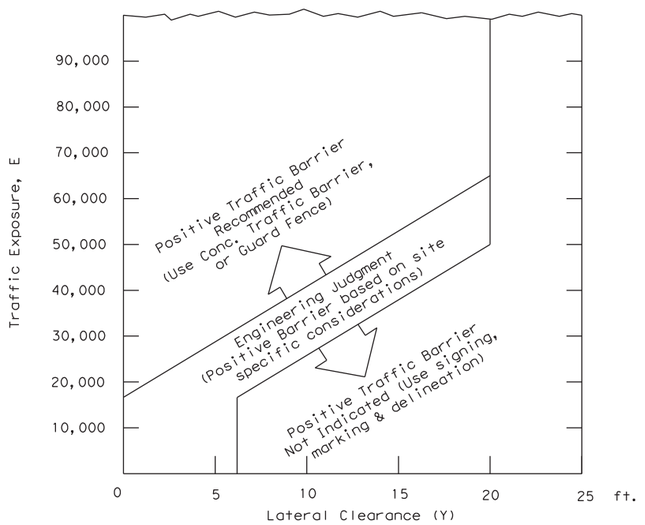
1. Edge Condition I: Most vehicles are able to traverse an edge condition with a slope rate of (3 to 1) or flatter. The slope must be constructed with a compacted material capable of supporting vehicles.

2. Edge Condition II: Most vehicles are able to traverse an edge condition with a slope between (2.99 to 1) and (1to 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" exeeds 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 greater than 2 inches and up 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, particularly 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 (▨)



1 E = ADT x 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.

3 An approved end treatment should be provided for any positive barrier end located within a lateral offset of 20 feet from the edge of the travel lane.

These guidelines 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 on-line manuals.

Engineer's Seal

Date 2/28/2024

Texas Department of Transportation
Traffic Operations Division

TREATMENT FOR VARIOUS EDGE CONDITIONS

DN: TXDOT	CK: TXDOT	DW: TXDOT	CK: TXDOT

REVISIONS	CONT	SECT	JOB	HIGHWAY
03-01	2121	01	104	IH 10
08-01 correct typos	DIST	COUNTY		SHEET NO.
	ELP	EL PASO		159

DATE: 2/28/2024 5:34:51 PM
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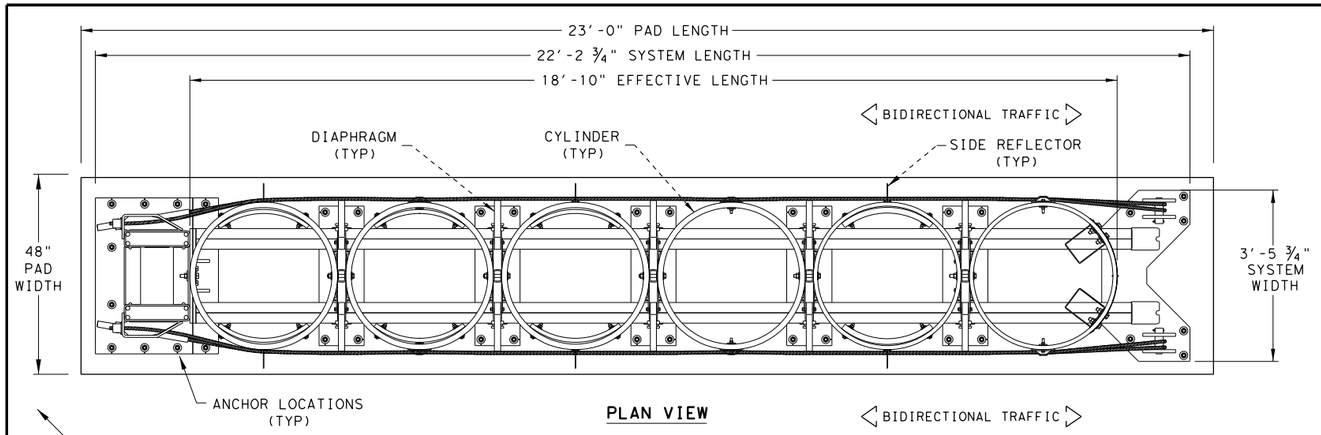
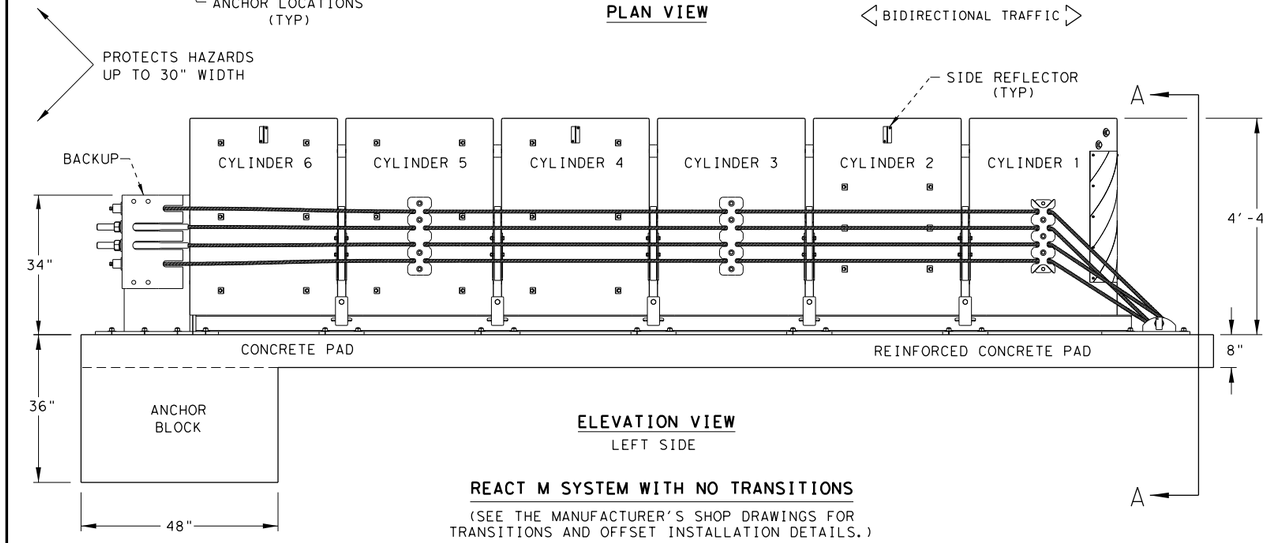
DATE:
FILE:



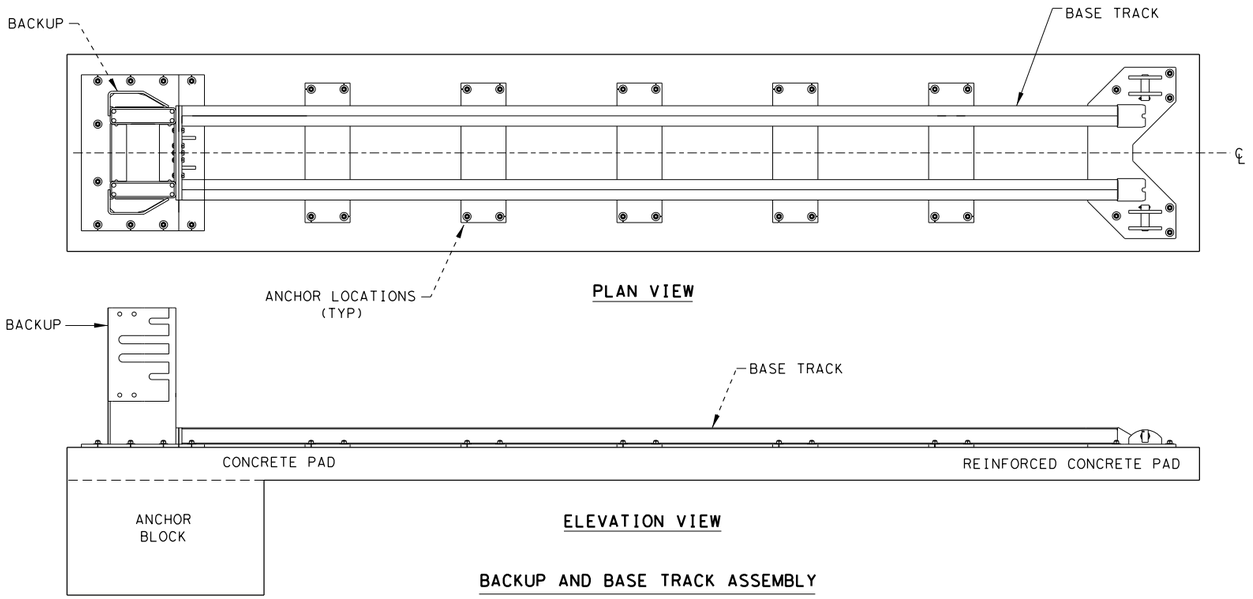
PLAN VIEW



ELEVATION VIEW
LEFT SIDE

REACT M SYSTEM WITH NO TRANSITIONS

(SEE THE MANUFACTURER'S SHOP DRAWINGS FOR TRANSITIONS AND OFFSET INSTALLATION DETAILS.)

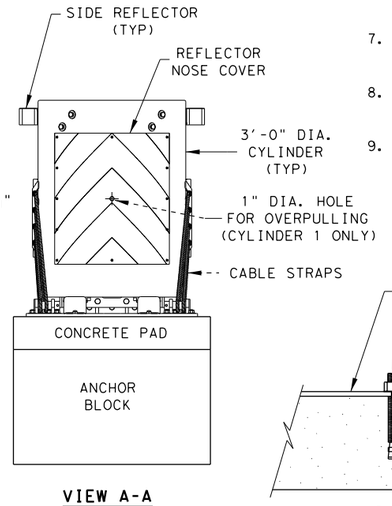


PLAN VIEW

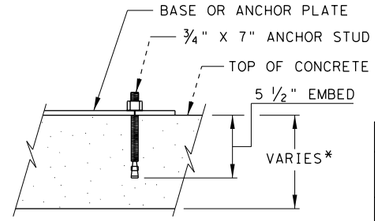
ELEVATION VIEW

BACKUP AND BASE TRACK ASSEMBLY

(SEE THE MANUFACTURER'S SHOP DRAWINGS FOR TRANSITIONS, OFFSETS, BIDIRECTIONAL AND UNIDIRECTIONAL INSTALLATION DETAILS.)



VIEW A-A



ANCHORING DETAIL
*SEE FOUNDATION TYPES TABLE

GENERAL NOTES

1. FOR SPECIFIC INFORMATION REGARDING INSTALLATION AND TECHNICAL GUIDANCE OF THE SYSTEM, CONTACT: TRINITY HIGHWAY - ENERGY ABSORPTION AT 1(888)323-6374 OR WEBSITE: www.trinityhighway.com.
2. THE NOSE OF THE REACT M SHALL BE CLAD WITH A PLASTIC WRAP WITH STANDARD DELINEATION ADHERED TO THE WRAP AND SHALL HAVE A SERIES OF SIDE MARKER REFLECTORS ON BOTH SIDES OF THE UNIT. SEE SITE PLAN VIEWS FOR MARKER AND PLASTIC WRAP COLOR ORIENTATION.
3. FOR BI-DIRECTIONAL TRAFFIC, APPROPRIATE TRANSITION DETAILS WILL BE AS SHOWN ON THE MANUFACTURER'S SHOP DRAWINGS.
4. DETAILS OF COMPONENTS FOR THE REACT M, BACKUPS AND REINFORCING DETAILS WILL BE SHOWN ON THE MANUFACTURER'S SHOP DRAWINGS FURNISHED TO THE ENGINEER.
5. IF THE CROSS-SLOPE VARIES MORE THAN 2% OVER THE LENGTH OF THE SYSTEM, THE CONCRETE PAD WILL REQUIRE LEVELING. MAXIMUM PERMISSIBLE CROSS-SLOPE IS 8%.
6. THE INSTALLATION AREA SHOULD BE FREE FROM CURBS, ELEVATED OBJECTS, OR DEPRESSIONS.
7. THE REACT M SYSTEM SHOULD BE APPROXIMATELY PARALLEL WITH THE BARRIER OR CENTERLINE OF MERGING BARRIERS.
8. ALL STEEL COMPONENTS TO BE HOT DIPPED GALVANIZED EXCEPT STAKES, DRIVE SPIKES, THREADED BOLTS IN BACKUP UNIT, AND WEDGE FITTINGS ON CABLES.
9. THIS DRAWING REPRESENTS THE REACT M TL-3 SYSTEM, RE-DIRECTIVE, NON-GATING CRASH CUSHION THAT CAN PROTECT HAZARDS UP TO 30-INCHES IN WIDTH.

DESIGN DATA TABLE FOR REACT M

TEST NUMBER	TEST LEVEL	OVERALL LENGTH	TRANSITION LENGTH	SYSTEM WIDTH
3-30 TO 3-36	TL-3	22'-2 ¾"	-	3'-5 ¾"
3-37A	TL-3	22'-2 ¾"	9'-10 ¾"	3'-5 ¾"
3-38	TL-3	22'-2 ¾"	-	3'-5 ¾"

ANCHOR SYSTEM TYPE

APPROVED ADHESIVE, 7" STUDS, 5.5" EMBEDMENT

FOUNDATION TYPES

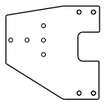
MINIMUM 8" REINFORCED PORTLAND CEMENT CONCRETE PAD (REQUIRED REINFORCING STEEL FOR CONCRETE PAD SHALL BE SHOWN ON THE MANUFACTURER'S SHOP DRAWINGS.

MINIMUM 8" NON-REINFORCED PORTLAND CEMENT CONCRETE ROADWAY MEASURING AT LEAST 12' WIDE BY 50' LONG)

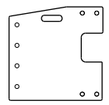
MINIMUM 7" CONCRETE DECK STRUCTURE, OR MINIMUM 6" REINFORCED CONCRETE ROADWAY

NOTE:
THIS STANDARD IS A BASIC REPRESENTATION OF THE REACT M SYSTEM AND IS NOT INTENDED TO REPLACE THE PRODUCT DESCRIPTION ASSEMBLY MANUAL.

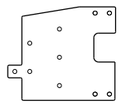
BACKUP ASSEMBLY TYPES FOR SYSTEM TRANSITIONS



SAFETY SHAPE BARRIER TRANSITION (ADAPTER)
TRANSITION PLATE(S) (OPTIONAL)
REQUIRED W/BI-DIRECTIONAL TRAFFIC FLOWS ONLY.



VERTICAL WALL BARRIER TRANSITION (ADAPTER)
TRANSITION PLATE(S) (OPTIONAL)
REQUIRED W/UNIDIRECTIONAL TRAFFIC FLOWS ONLY.



VERTICAL WALL BARRIER TRANSITION (ADAPTER)
TRANSITION PLATE(S) (OPTIONAL)
REQUIRED W/BI-DIRECTIONAL TRAFFIC FLOWS ONLY.

NOTES:
CONTACT THE MANUFACTURER WITH SITE SPECIFIC DATA (SSD) FOR THE CORRECT BACKUP ASSEMBLY AND TRANSITION PANELS OR SIDE PANELS USED FOR STANDARD AND BI-DIRECTIONAL INSTALLATIONS: AT DIVIDED-HIGHWAY MEDIANS OR UNDIVIDED ROADWAYS WHERE THE SYSTEM IS EXPOSED TO IMPACTS FROM ONE OR TWO DIFFERENT DIRECTIONS OF TRAFFIC FLOW.

LOW MAINTENANCE

Texas Department of Transportation

Design Division Standard

TRINITY HIGHWAY ENERGY ABSORPTION CRASH CUSHION REACT M (NARROW) (MASH TL-3)

REACT (M) -21

FILE: reactm21.dgn	DN: TXDOT	CK: KM	DW: SS	CK: CL
©TxDOT: JULY 2021	CONT	SECT	JOB	HIGHWAY
REVISIONS	2121	01	104	IH 10
	DIST	COUNTY		SHEET NO.
	ELP	EL PASO		159A

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3/28/2024
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TEXAS	ELP	EL PASO	
CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

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CONTROL	SECTION	JOB	HIGHWAY
2121	01	104	IH 10

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2121	01	104	IH 10

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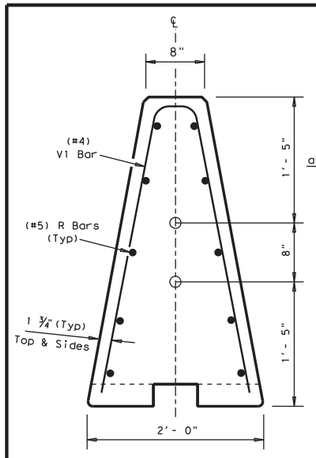
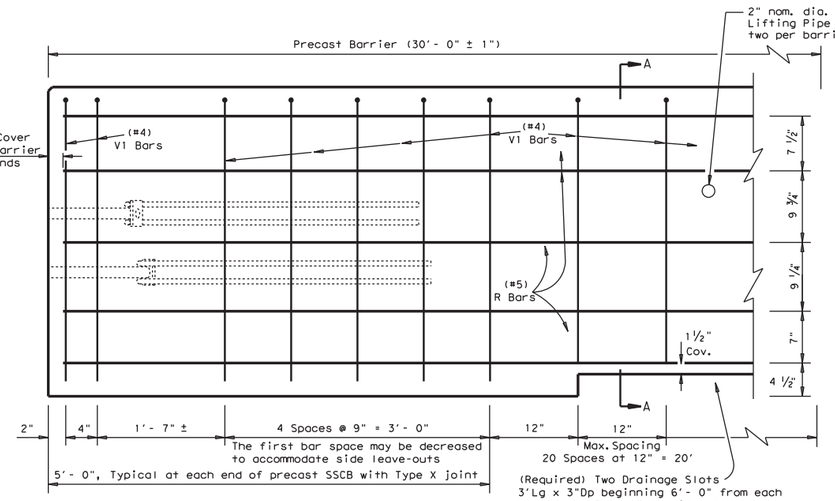


End View Precast Barrier

Pipe locations for Joint Type X connection



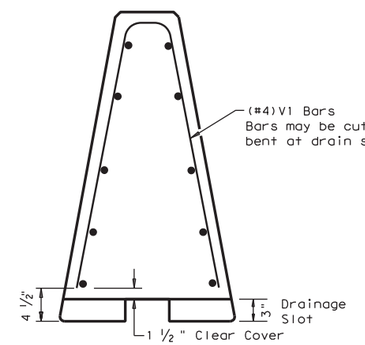
Reinforcement for Precast (SSCB) Single Slope Concrete Barrier (Type 1)

Showing reinforcement for Joint Connection (Type X)

V1 Bar

#4 Rebar

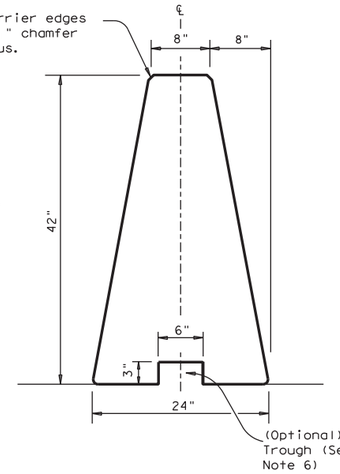
Note:
V1 Bars above the drainage slots may bent to accomadate 1 ½" clear cover as directed by the Engineer.



Section A-A

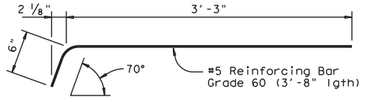
Steel Placement at (Required) Drainage Slots

All precast barrier edges shall have a ¾" chamfer or tooled radius.



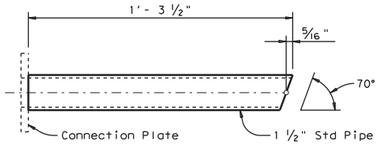
Single Slope Concrete Traffic Barrier

Precast SSCB barrier may be connected to cast-in-place SSBC. The joint connection "Types" may be used in the cast-in-place barrier, to match the precast barrier connection.



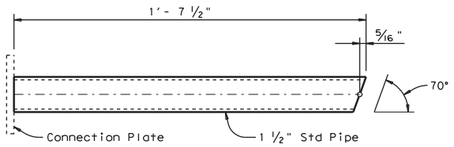
DEFORMED BAR ANCHOR DETAILS

Two (2) Bars required per assembly.
Eight (8) required per Joint.



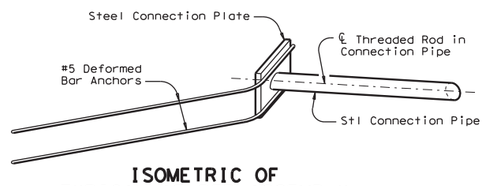
UPPER CONNECTION PIPE DETAILS

One (1) Steel Pipe required per Upper Assembly.
Two (2) required per Joint.



LOWER CONNECTION PIPE DETAILS

One (1) Steel Pipe required per Lower Assembly.
Two (2) required per Joint.

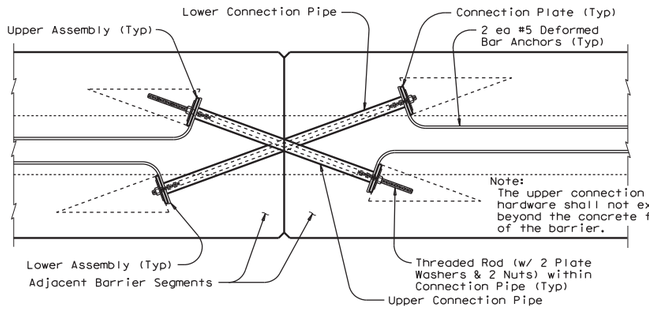


ISOMETRIC OF TYPICAL WELDED ASSEMBLY

Four (4) [2 Upper & 2 Lower] Assemblies required per Joint.

General Notes

1. Concrete shall be Class H with a minimum compressive strength of 3,600 psi.
2. Where used, rebar reinforcement shall be Grade 60 and conform to ASTM A615.
3. Precast barrier length shall be 30 ft. unless otherwise specified on the plans.
4. All precast barrier edges shall have a ¾" chamfer or a tooled radius.
5. All concrete, reinforcement, joint connection systems, grout etc. as shown, are considered as part of the barrier payment.
6. Conduit trough when required shall be shown elsewhere on the plans, or as directed by the Engineer.
7. Regardless of the method of handling, barrier lifting points shall be approx. 7.5 feet from the ends of the barrier. Lifting devices and attachments to barrier sections shall be approved by the Engineer.
8. Surface finishing and grouting (where required) shall be two parts sand one part cement with enough water to make the mixture plastic. Grouting shall be done in a manner that will assure a smooth surface. Surface finishing shall be considered subsidiary to the various bid items.
9. All steel assemblies shall be galvanized after fabrication in accordance with Item 445, "Galvanizing."



TYPE X JOINT INSTALLATION DETAIL

Barrier reinforcing and Type X Joint Leave-Out dimensions not shown for clarity.

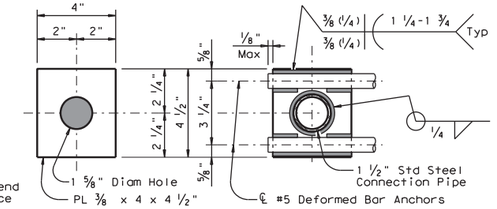
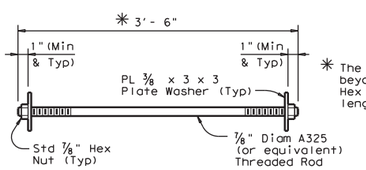


PLATE DIMENSIONS | WELDING DETAILS

CONNECTION PLATE DETAILS

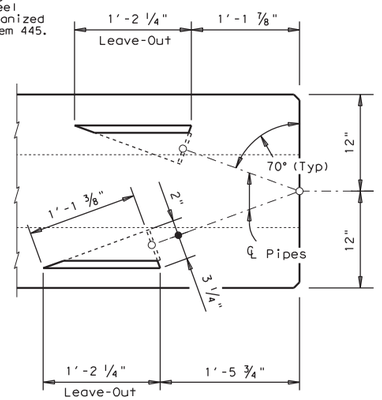
One (1) Plate required per assembly.
Four (4) required per Joint. All steel fittings for joint Type X shall be galvanized after fabrication in accordance with Item 445.



✳ The connection hardware shall not extend beyond the concrete face of the barrier. Hex head bolts may be provided. The proper length of all hardware should be verified.

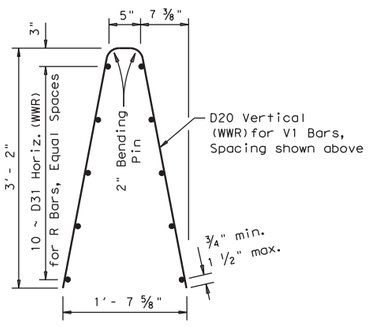
CONNECTION BOLT OR THREADED ROD DETAIL

Two (2) Threaded Rods (Or Equivalent Hex Hd. Bolts) (w/ Two (2) PL ⅜ x 3 x 3 Plate Washers & Two (2) Std Hex Nuts) required per Joint.



BARRIER PLAN AT JOINT

Weight of one precast 30 ft. (SSCB) segment = Approx. 10.5 Tons or 717 lbs per ft.



Welded Wire Reinforcement (WWR) Option for Bars R and V1

(WWR) General Notes

1. Deformed Welded Wire Reinforcement (WWR) shall conform to ASTM A497.
2. Welded wire cage may be cut or bent to accommodate the Type X joint connection and drainage slots, as directed by the Engineer.
3. All reinforcement shall comply with Item 440, "Reinforcing Steel."
4. Combinations of reinforcing steel and WWR will be permitted, as directed by the Engineer. The dimension from the end of the barrier section to the first wire shall not exceed 3".

SHEET 1 OF 2

Texas Department of Transportation | Design Division Standard

SINGLE SLOPE CONCRETE BARRIER

PRECAST BARRIER (TYPE 1)

SSCB(2)-10

FILE: sscb210.dgn	DN: TxDOT	CK: AM	DW: BD	CK:
©TxDOT December 2010	CONT	SECT	JOB	HIGHWAY
REVISIONS	2121	01	104	IH 10
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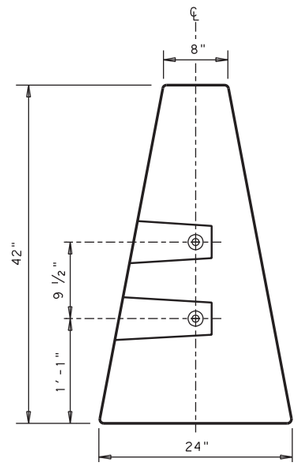
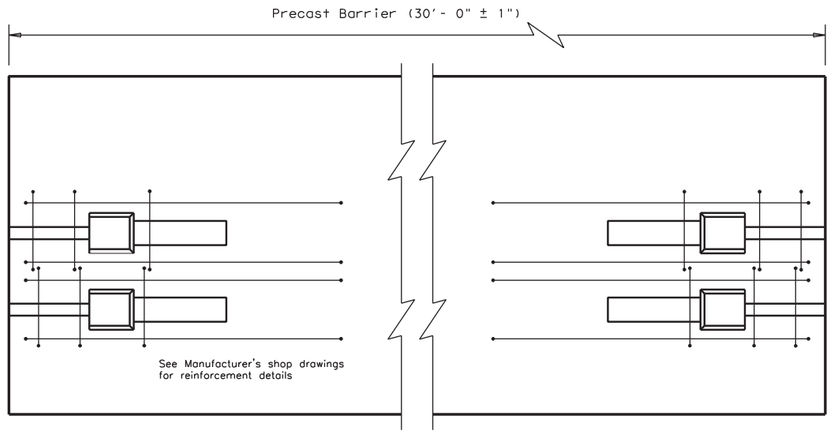
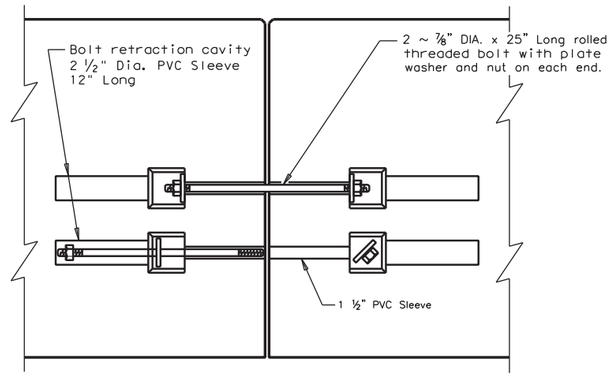


END VIEW
"QUICK-BOLT" POCKET LOCATIONS

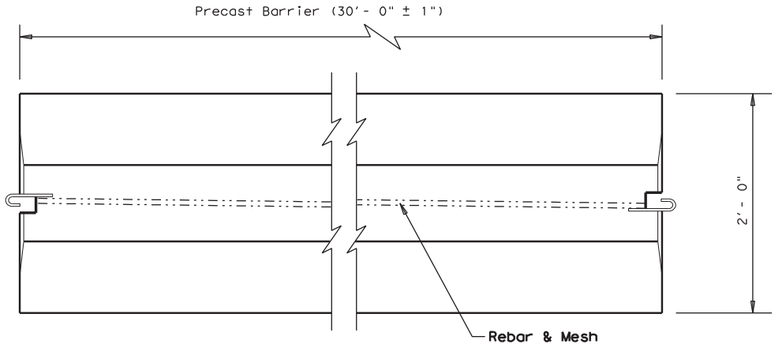


ELEVATION VIEW
"QUICK-BOLT" (SSCB)
See Manufacturer's shop drawing for additional details

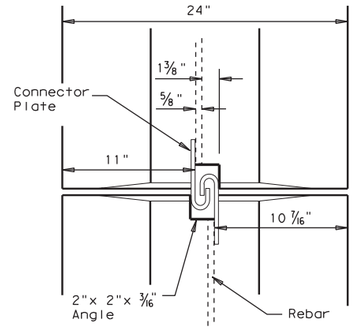


ELEVATION VIEW SHOWING JOINT CONNECTION
"QUICK-BOLT"

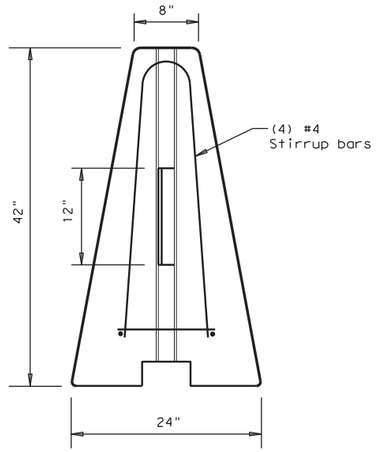
Joint Connection (Type Q)



TOP VIEW
PRECAST (SSCB) WITH J-J HOOKS
See Manufacturer's shop drawing for additional details



VIEW FROM ABOVE
J-J HOOK CONNECTION



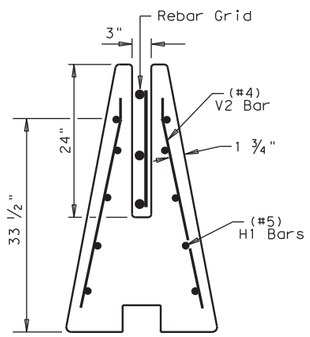
END VIEW

Proprietary Joint Connections (SSCB)

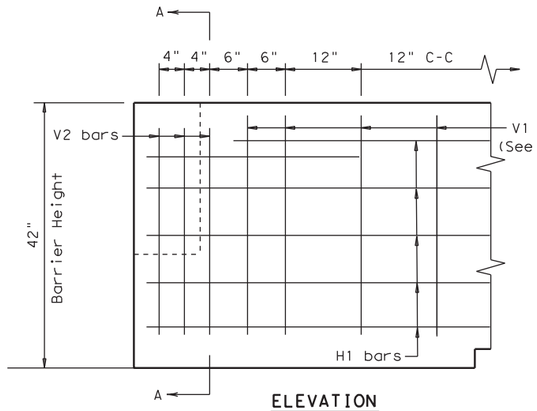
Two proprietary joint connections are acceptable as alternates to the (Type X) connection shown, here on. These joint connections types are:

J-J Hooks by Easi-Set Industries, (800)547-4045
Quick-Bolt by Bexar Concrete, (210)497-3773

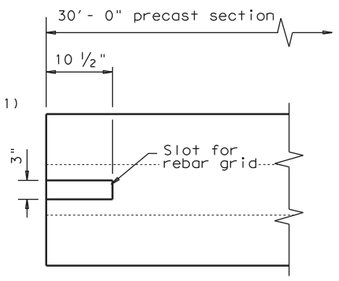
If one of these connection systems are exclusively specified in the plans, prior approval for sole source use must be obtained. Details of the connection components and barrier reinforcement for these systems, will be shown on the manufacturer's shop drawing(s) furnished to the Engineer.



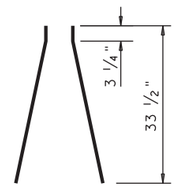
SECTION A-A
Showing (Type R) Rebar Grid



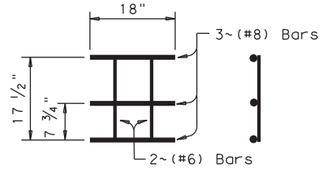
ELEVATION
V1 Bars (See Sheet 1)



TOP VIEW
JOINT CONNECTION
Typical at both ends of barrier segment



(#4) V2 BARS
6 ~ two piece bars per barrier segment



WELDED REBAR GRID

Joint Connection (Type R)

Texas Department of Transportation — Design Division Standard

SINGLE SLOPE CONCRETE BARRIER

PRECAST BARRIER
(TYPE 1)

SSCB(2)-10

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©TxDOT December 2010	CONT	SECT	JOB	HIGHWAY
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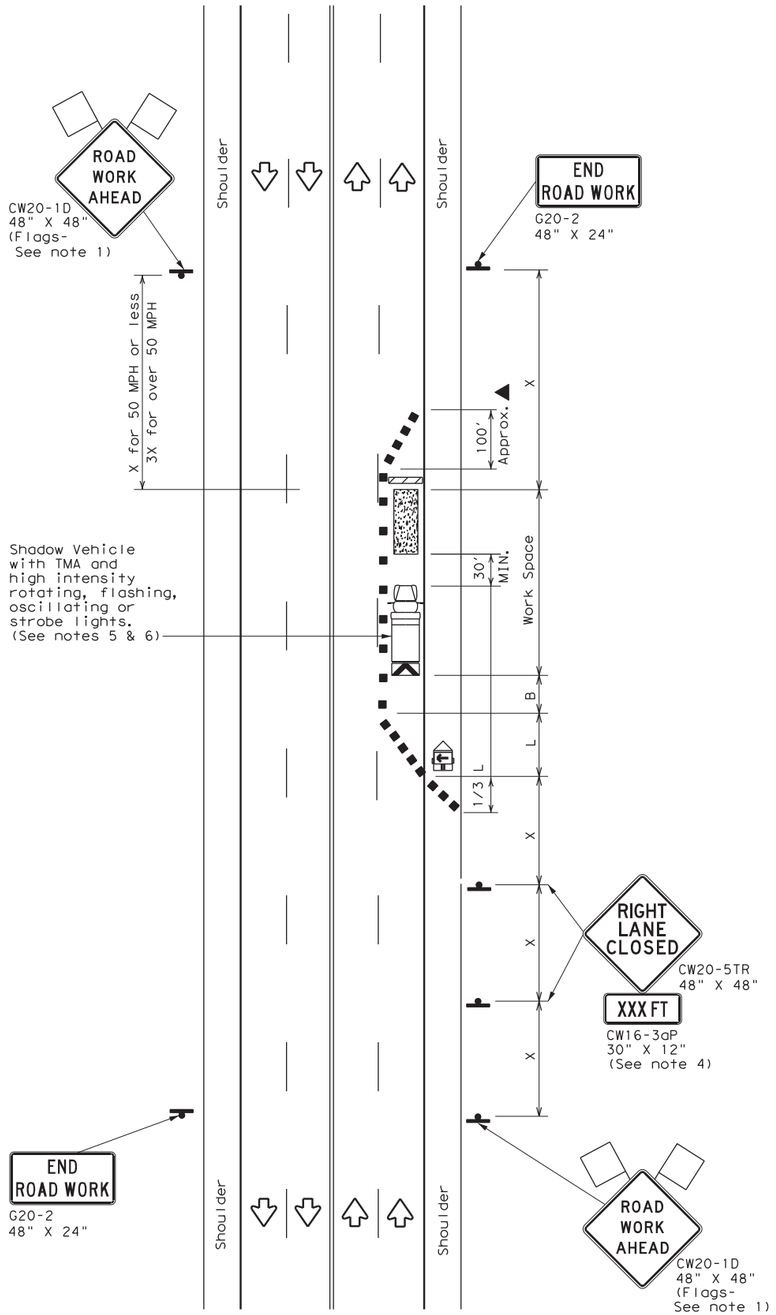
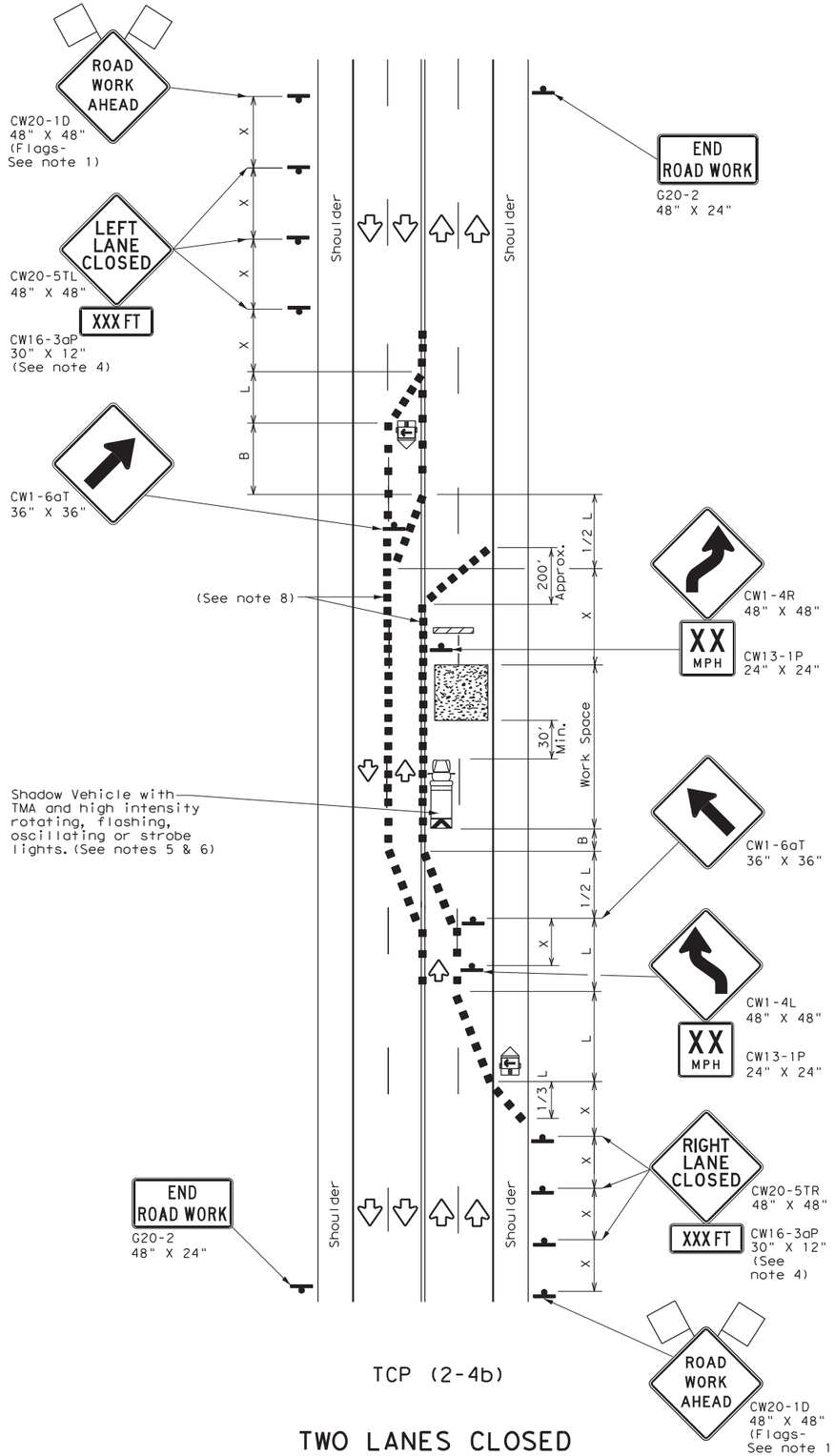


TCP (2-4a)

ONE LANE CLOSED



TCP (2-4b)

TWO LANES CLOSED

LEGEND			
	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board	M	Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed *	Formula	Minimum Desirable Taper Lengths ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices: On a Taper	On a Tangent	Minimum Sign Spacing "X" Distance	Suggested Longitudinal Buffer Space "B"
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60'	120'	90'
35		205'	225'	245'	35'	70'	160'	120'
40		265'	295'	320'	40'	80'	240'	155'
45	L=WS	450'	495'	540'	45'	90'	320'	195'
50		500'	550'	600'	50'	100'	400'	240'
55		550'	605'	660'	55'	110'	500'	295'
60		600'	660'	720'	60'	120'	600'	350'
65		650'	715'	780'	65'	130'	700'	410'
70		700'	770'	840'	70'	140'	800'	475'
75		750'	825'	900'	75'	150'	900'	540'

* Conventional Roads Only

** Taper lengths have been rounded off.
L=Length of Taper(FT) W=Width of Offset(FT) S=Posted Speed(MPH)

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
		✓	✓	

GENERAL NOTES

1. Flags attached to signs where shown, are REQUIRED.
2. All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated elsewhere in the plans, or for routine maintenance work, when approved by the Engineer.
3. The downstream taper is optional. When used, it should be 100 feet minimum length per lane.
4. For short term applications, when post mounted signs are not used, the distance legend may be shown on the sign face rather than on a CW16-3aP supplemental plaque.
5. A Shadow Vehicle with a TMA should be used anytime it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the performance or quality of the work. If workers are no longer present but road or work conditions require the traffic control to remain in place, Type 3 Barricades or other channelizing devices may be substituted for the Shadow Vehicle and TMA.
6. Additional Shadow Vehicles with TMAs may be positioned in each closed lane, on the shoulder or off the paved surface, next to those shown in order to protect a wider work space.

TCP (2-4a)

7. If this TCP is used for a left lane closure, CW20-5TL "LEFT LANE CLOSED"signs shall be used and channelizing devices shall be placed on the centerline to protect the work space from opposing traffic with the arrow board placed in the closed lane near the end of the merging taper.

TCP (2-4b)

8. For shorter durations where traffic is directed over a yellow centerline, channelizing devices which separate two-way traffic should be spaced on tapers at 20' or 15' if posted speeds are 35 mph or slower, and for tangent sections, at 1/2(S) where S is the speed in mph. This tighter devices spacing is intended for the area of conflicting markings, not the entire work zone.

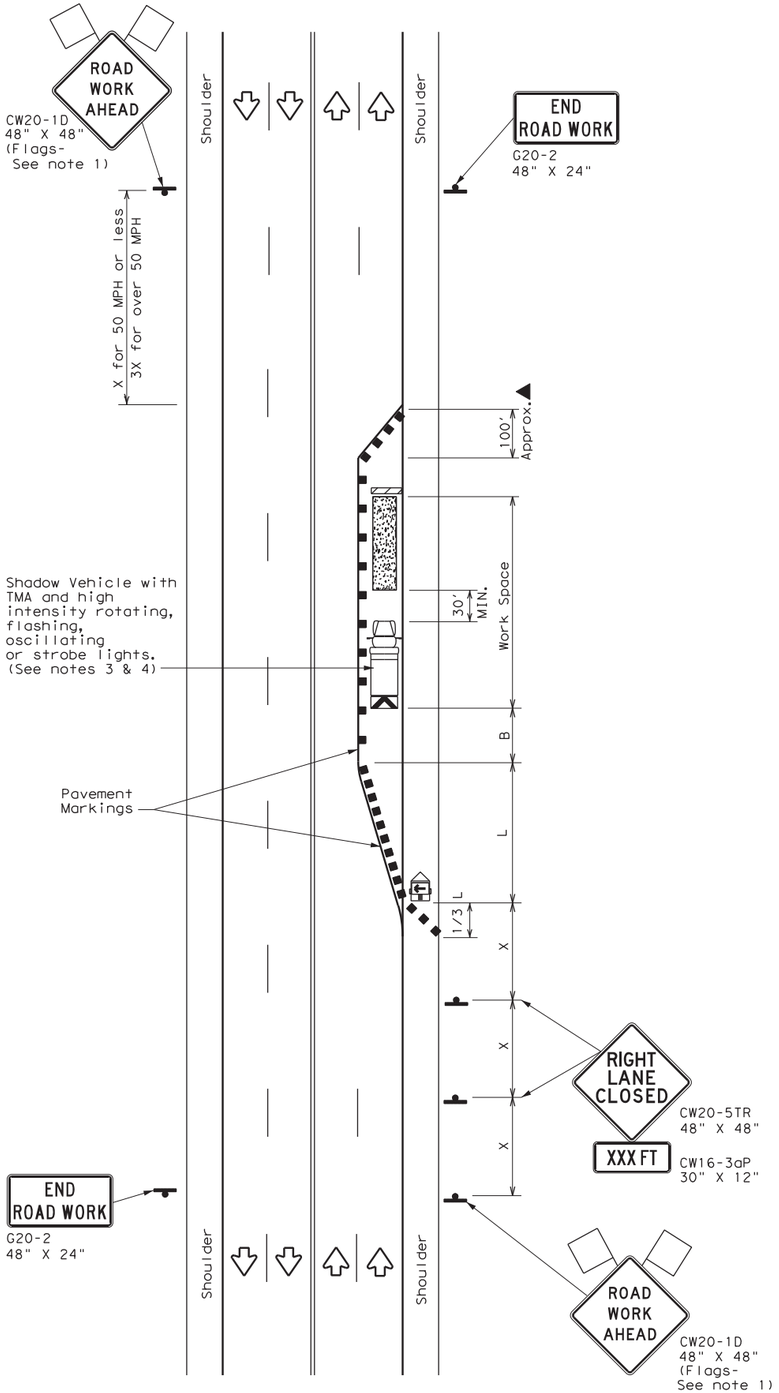
Texas Department of Transportation

Traffic Operations Division Standard

TRAFFIC CONTROL PLAN LANE CLOSURES ON MULTILANE CONVENTIONAL ROADS

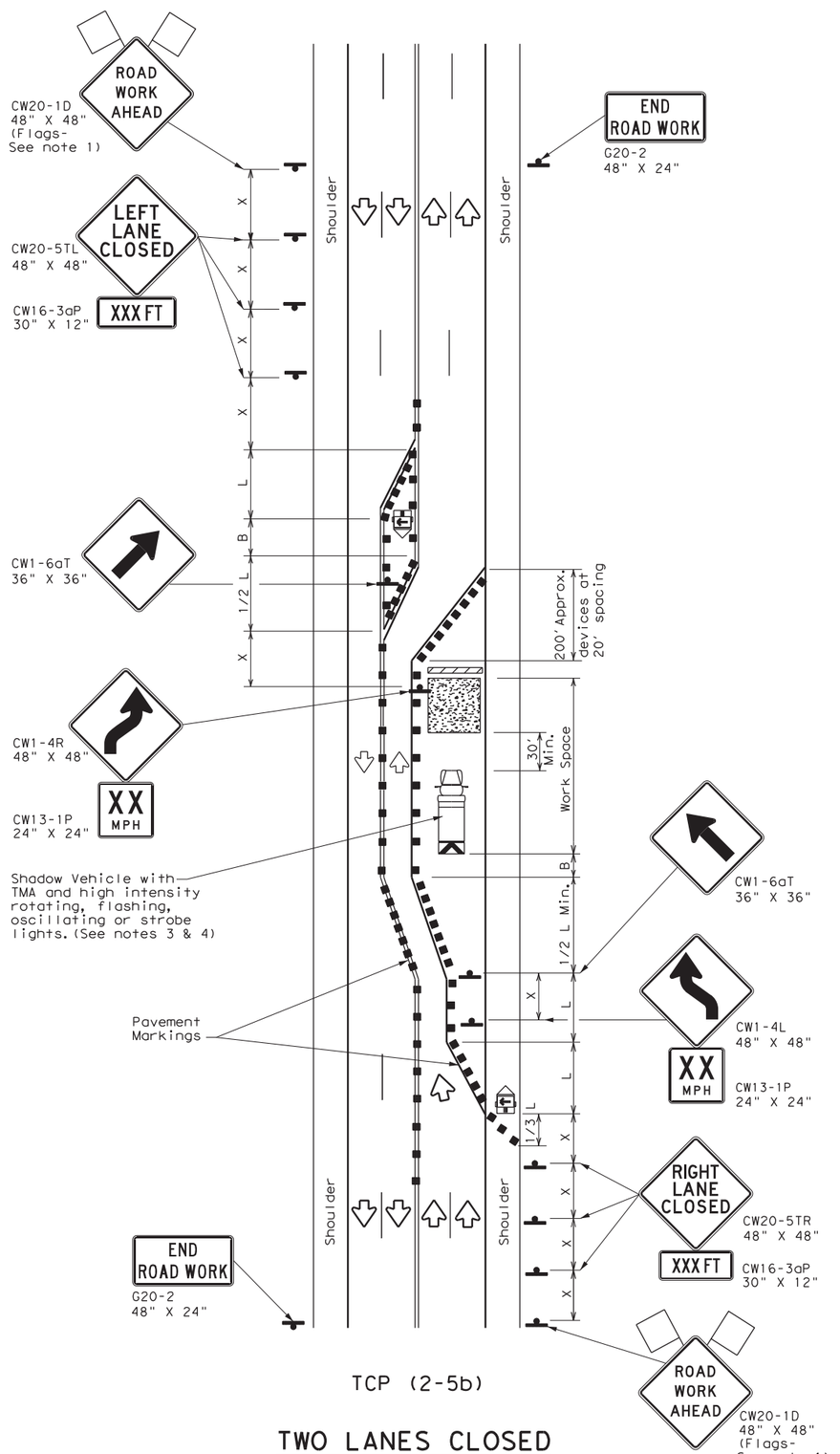
TCP(2-4)-18

FILE: tcp2-4-18.dgn	DN:	CK:	DW:	CK:
©TxDOT December 1985	CONT	SECT	JOB	HIGHWAY
REVISIONS 8-95 3-03	2121	01	104	IH 10
1-97 2-12	DIST	COUNTY		SHEET NO.
4-98 2-18	ELP	EL PASO		165



TCP (2-5a)

ONE LANE CLOSED



TCP (2-5b)

TWO LANES CLOSED

LEGEND			
	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board	M	Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed *	Formula	Minimum Desirable Taper Lengths **			Suggested Maximum Spacing of Channelizing Devices		Minimum Sign Spacing "X" Distance	Suggested Longitudinal Buffer Space "B"
		10' Offset	11' Offset	12' Offset	On a Taper	On a Tangent		
30	$L = \frac{WS^2}{60}$	150'	165'	180'	30'	60'	120'	90'
35		205'	225'	245'	35'	70'	160'	120'
40		265'	295'	320'	40'	80'	240'	155'
45	L = WS	450'	495'	540'	45'	90'	320'	195'
50		500'	550'	600'	50'	100'	400'	240'
55		550'	605'	660'	55'	110'	500'	295'
60		600'	660'	720'	60'	120'	600'	350'
65		650'	715'	780'	65'	130'	700'	410'
70		700'	770'	840'	70'	140'	800'	475'
75		750'	825'	900'	75'	150'	900'	540'

* Conventional Roads Only

** Taper lengths have been rounded off.
L=Length of Taper(FT) W=Width of Offset(FT) S=Posted Speed(MPH)

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
			✓	✓

GENERAL NOTES

1. Flags attached to signs where shown, are REQUIRED.
2. All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated elsewhere in the plans, or for routine maintenance work, when approved by the Engineer.
3. A Shadow Vehicle with a TMA should be used anytime it can be positioned 30 to 100 feet in advance of the area of crew eposure without adversely affecting the performance or quality of the work. If workers are no longer present but road or work conditions require the traffic control to remain in place, Type 3 Barricades or other channelizing devices may be substitutued for the Shadow Vehicle and TMA.
4. Additional Shadow Vehicles with TMAs may be positioned in each closed lane, on the shoulder or off the paved surface, next to those shown in order to protect a wider work space.
5. The downstream taper is optional. When used, it should be 100 feet approximately per lane, with channelizing devices spaced at 20 feet.

TCP (2-5a)

6. If this TCP is used for a left lane closure, CW20-5TL "LEFT LANE CLOSED" signs shall be used and channelizing devices shall be placed on the centerline to protect the work space from opposing traffic, with the arrow board placed in the closed lane near the end of the merging taper.

TCP (2-5b)

7. Conflicting pavement markings shall be removed for long-term projects.

Texas Department of Transportation

Traffic Operations Division Standard

TRAFFIC CONTROL PLAN LONG TERM LANE CLOSURES MULTILANE CONVENTIONAL RDS.

TCP(2-5)-18

FILE: tcp2-5-18.dgn	DN:	CK:	DW:	CK:
©TxDOT December 1985	CONT	SECT	JOB	HIGHWAY
REVISIONS 8-95 2-12	2121	01	104	IH 10
1-97 3-03	DIST	COUNTY		SHEET NO.
4-98 2-18	ELP	EL PASO		166

DATE: 2/28/2024 5:36:19 PM
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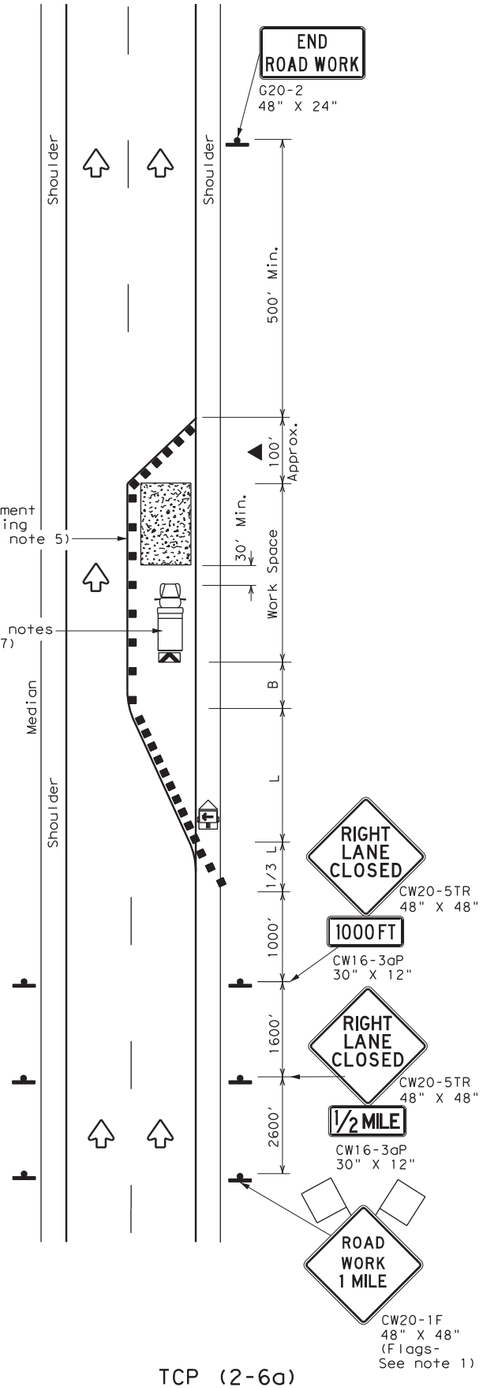
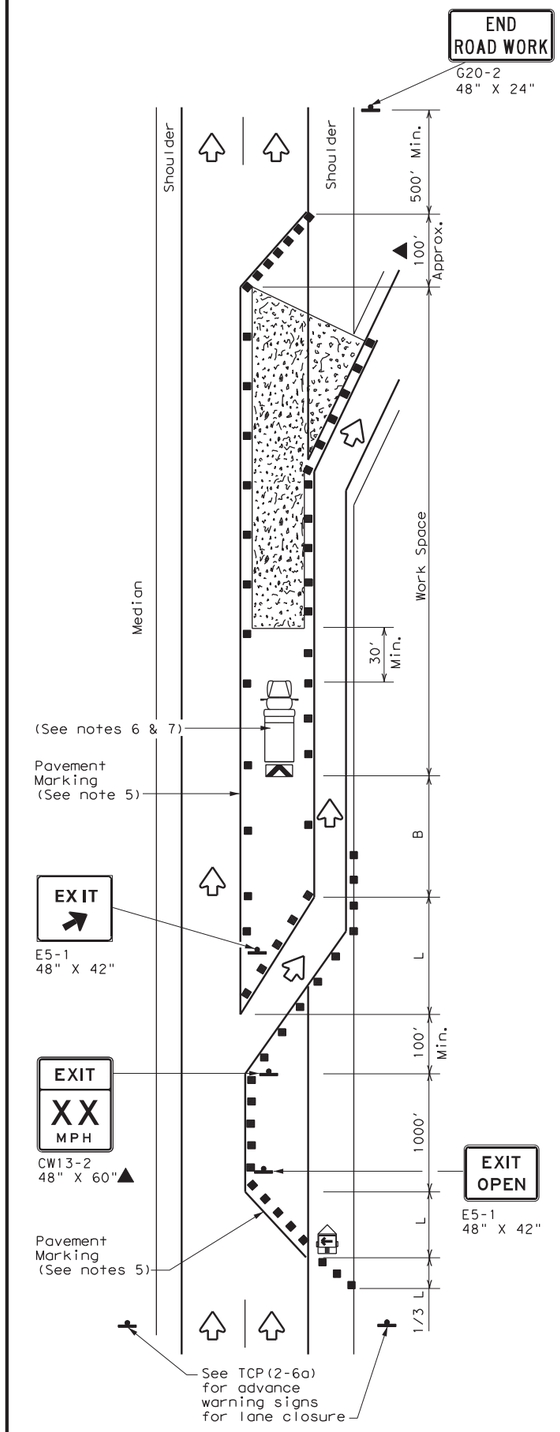


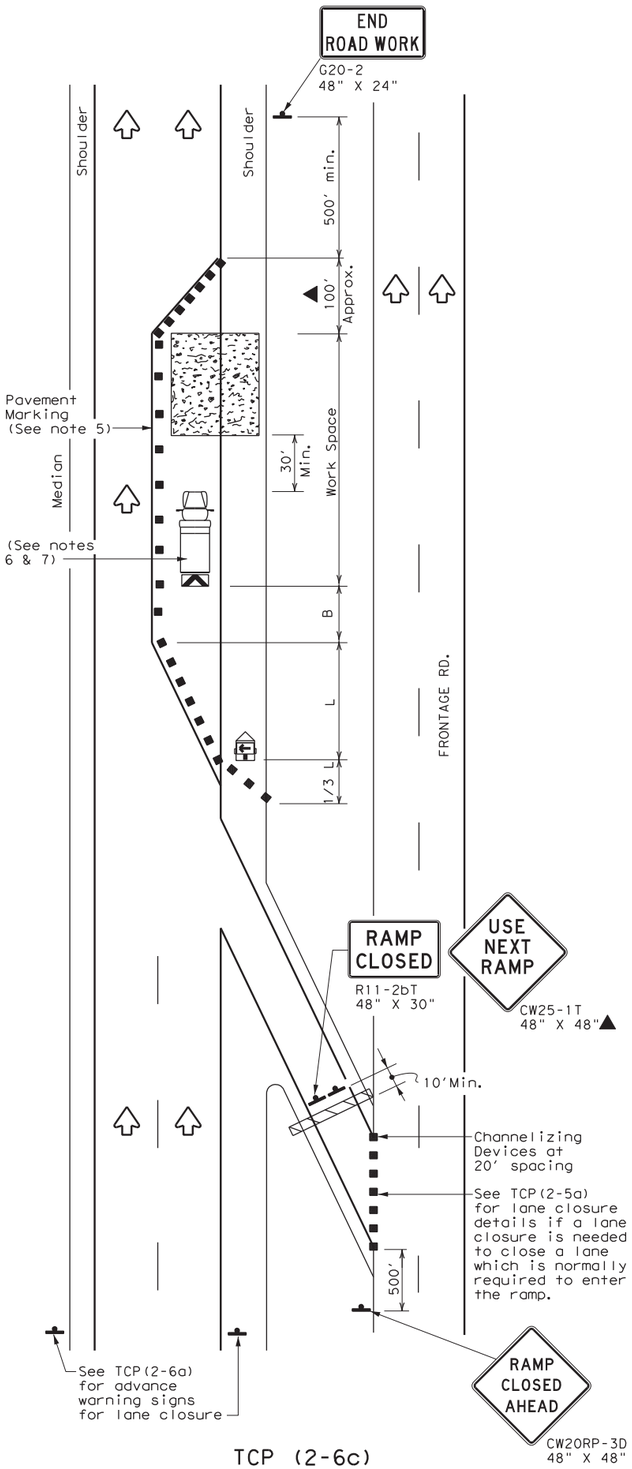
TCP (2-6a)

ONE LANE CLOSURE



TCP (2-6b)

LANE CLOSURE NEAR EXIT RAMPS



TCP (2-6c)

LANE CLOSURE NEAR ENTRANCE RAMPS

LEGEND			
	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board	M	Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed *	Formula	Minimum Desirable Taper Lengths ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices: On a Taper	On a Tangent	Minimum Sign Spacing "X" Distance	Suggested Longitudinal Buffer Space "B"
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60'	120'	90'
35		205'	225'	245'	35'	70'	160'	120'
40		265'	295'	320'	40'	80'	240'	155'
45	L=WS	450'	495'	540'	45'	90'	320'	195'
50		500'	550'	600'	50'	100'	400'	240'
55		550'	605'	660'	55'	110'	500'	295'
60		600'	660'	720'	60'	120'	600'	350'
65		650'	715'	780'	65'	130'	700'	410'
70		700'	770'	840'	70'	140'	800'	475'
75		750'	825'	900'	75'	150'	900'	540'

* Conventional Roads Only

** Taper lengths have been rounded off.
L=Length of Taper(FT) W=Width of Offset(FT) S=Posted Speed(MPH)

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
			✓	✓

GENERAL NOTES

1. Flags attached to signs where shown, are REQUIRED.
2. All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated elsewhere in the plans, or for routine maintenance work, when approved by the Engineer.
3. Channelizing devices used to close lanes may be supplemented with the Chevron Alignment Sign placed on every other channelizing device. Chevrons may be attached to plastic drums as per BC Standards.
4. Channelizing devices used along the work space or along tangent sections may be supplemented with vertical panels (VP) placed on everyother channelizing device. If night time conditions make it difficult to see at least two VPs, the VPs may be placed on each channelizing device.
5. The placement of pavement markings may be omitted on Intermediate-term stationary work zones with the approval of the Engineer.
6. Shadow Vehicle with TMA and high intensity rotating, flashing,oscillating or strobe lights. Shadow Vehicle with TMA and high intensity rotating, flashing, oscillating or strobe lights. A Shadow Vehicle with a TMA should be used anytime it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the performance or quality of the work. If workers are no longer present but road or work conditions require the traffic control to remain in place, Type 3 Barricades or other channelizing devices may be substituted for the Shadow Vehicle and TMA.
7. Additional Shadow Vehicles with TMAs may be positioned in each closed lane, on the shoulder or off the paved surface, next to those shown in order to protect a wider work space.

Texas Department of Transportation

Traffic Operations Division Standard

TRAFFIC CONTROL PLAN LANE CLOSURES ON DIVIDED HIGHWAYS

TCP(2-6)-18

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© TxDOT December 1985	CONT	SECT	JOB	HIGHWAY
REVISIONS 2-94 4-98 8-95 2-12 1-97 2-18	2121	01	104	IH 10
	DIST	COUNTY		SHEET NO.
	ELP	EL PASO		167

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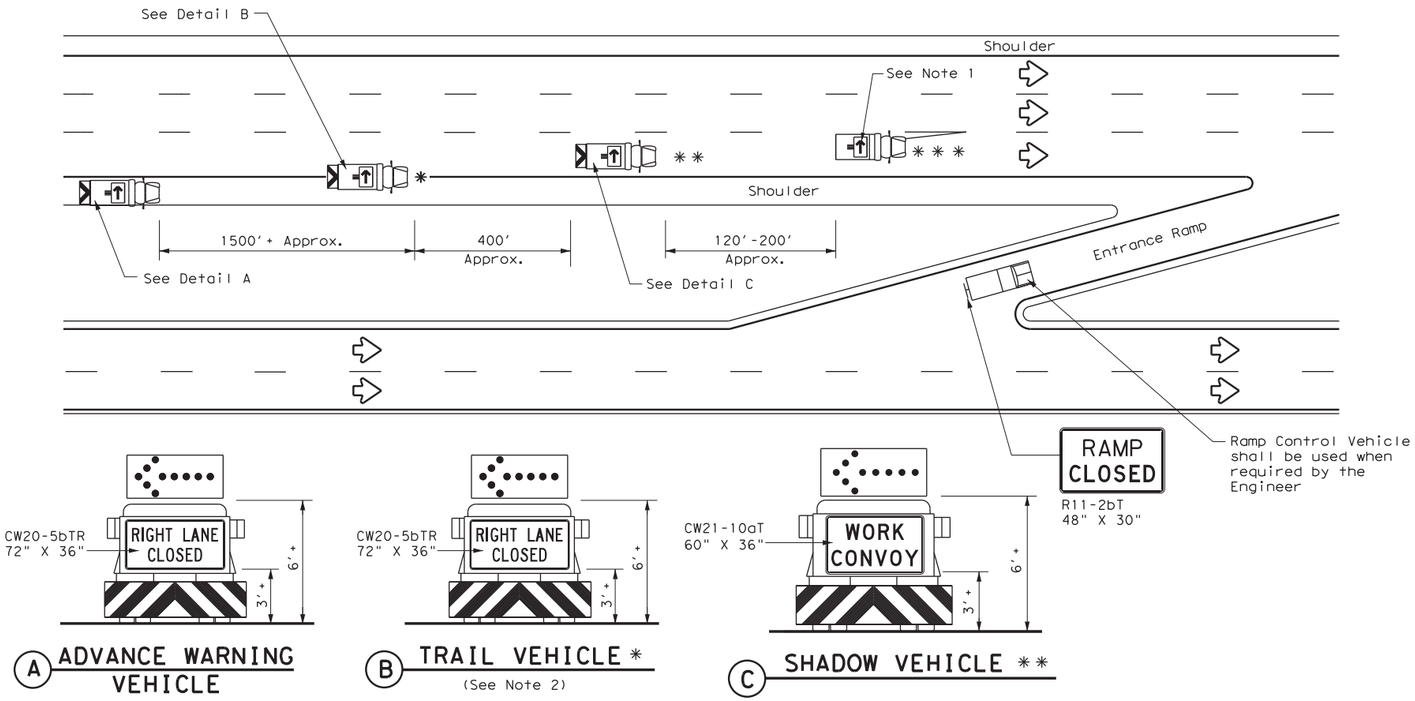
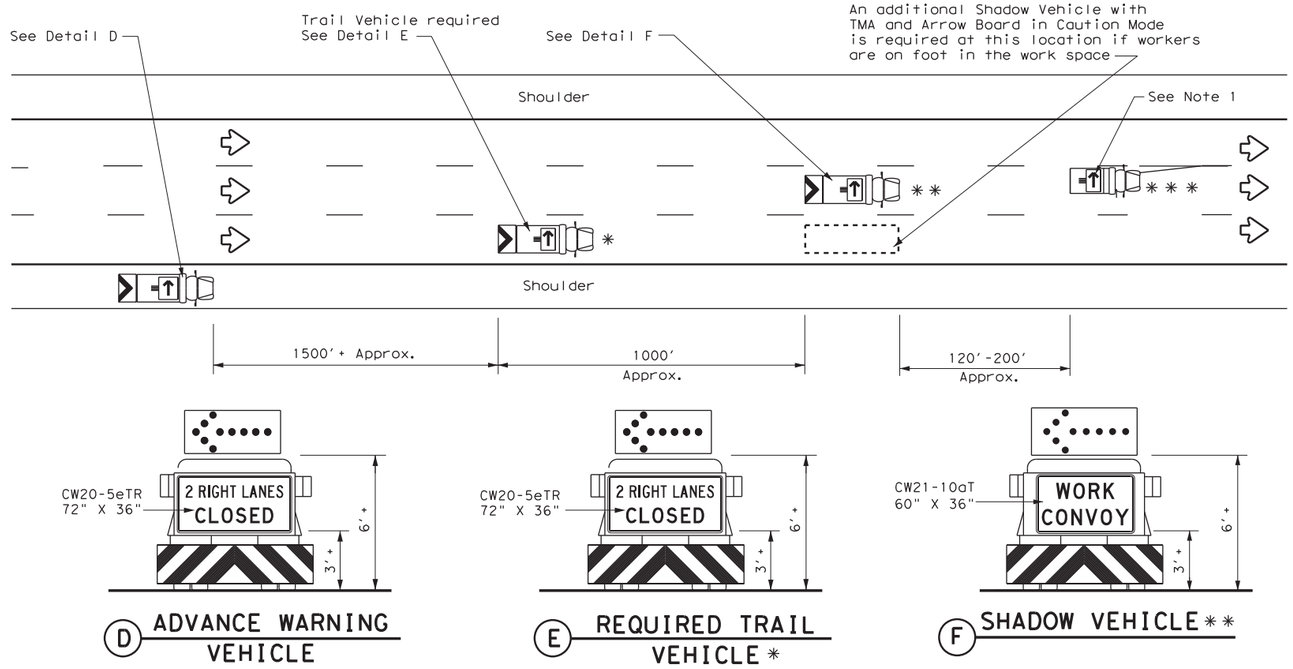
DATE: 2/28/2024 5:36:41 PM



RIGHT LANE CLOSURE ON DIVIDED HIGHWAY - TCP(3-2a)



INTERIOR LANE CLOSURE ON MULTI-LANE DIVIDED HIGHWAY - TCP(3-2b)

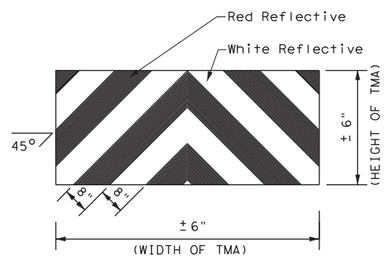
LEGEND

*	Trail Vehicle	ARROW BOARD DISPLAY	
**	Shadow Vehicle		
***	Work Vehicle		RIGHT Directional
	Heavy Work Vehicle		LEFT Directional
	Truck Mounted Attenuator (TMA)		Double Arrow
	Traffic Flow		CAUTION (Alternating Diamond or 4 Corner Flash)

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
✓				

GENERAL NOTES

1. ADVANCE WARNING, TRAIL and SHADOW vehicles shall be equipped with Type B or Type C flashing arrow boards as per the Barricade and Construction (BC) standards. Arrow boards on WORK vehicles will be optional based on the type of work being performed. The arrow boards shall be operated from inside the vehicle.
2. For TCP(3-2a) the Engineer will determine if the TRAIL VEHICLE is required based on prevailing roadway conditions, traffic volume, and sight distance restrictions. All other vehicles shown for both TCP(3-2a) and TCP(3-2b) are required.
3. The use of amber high intensity rotating, flashing, oscillating, or strobe lights on vehicles are required. Blue high intensity rotating, flashing, oscillating or strobe lights when mounted on the driver's side of the vehicle may be operated simultaneously with the amber beacons or strobe lights.
4. The use of truck mounted attenuators (TMA) on the ADVANCE WARNING, SHADOW, and TRAIL vehicles are required.
5. Reflective sheeting on the rear of the TMA shall meet or exceed the reflectivity and color requirements of DMS 8300, Type A.
6. Each vehicle shall have two-way radio communication capability.
7. When work convoys must change lanes, the TRAIL VEHICLE should change lanes first to shadow the other convoy vehicles.
8. Vehicle spacing between the TRAIL VEHICLE and the SHADOW VEHICLE will vary depending on sight distance restrictions. Motorists approaching the work convoy should be able to see the TRAIL VEHICLE in time to slow down and/or change lanes as they approach the TRAIL VEHICLE. Vehicle spacing between the WORK VEHICLE and SHADOW VEHICLE may vary according to terrain, work activity and other factors.
9. Standard 48" X 48" diamond shaped warning signs with the same message as those shown may be used where adequate mounting space exists.
10. The signs shown should be used on the Advance Warning Vehicle. As an option, a portable changeable message sign (PCMS) or a truck mounted changeable message sign (TMCMS) with a minimum character height of 12", and displaying the same legend may be substituted for these signs. An appropriate directional arrow display, simulating the size and legibility of the flashing arrow board, must be used in the second phase of the PCMS/TMCMS message. When this is done, the arrow board will not be required on the Advance Warning Vehicle.
11. Standard diamond shape versions of the CW20-5 series signs may be used as an option if the rectangular signs shown are not available.
12. The principles on this sheet may be used to close lanes from the left side of the roadway considering the number of lanes, shoulder width, sight distance, and ramp frequency.
13. Signs and flashing arrow board modes shall be appropriately altered when implementing left lane closures or interior closures which close the left lanes.
14. The Advance Warning Vehicle may straddle the edgeline when shoulder width makes it necessary.



STRIPING FOR TMA

Texas Department of Transportation

Traffic Operations Division Standard

TRAFFIC CONTROL PLAN MOBILE OPERATIONS DIVIDED HIGHWAYS

TCP(3-2)-13

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©TxDOT December 1985	CONT	SECT	JOB	HIGHWAY
REVISIONS	2121	01	104	IH 10
2-94 4-98	DIST	COUNTY		SHEET NO.
8-95 7-13	ELP	EL PASO		168
1-97				

176

DATE: 2/28/2024 5:36:52 PM
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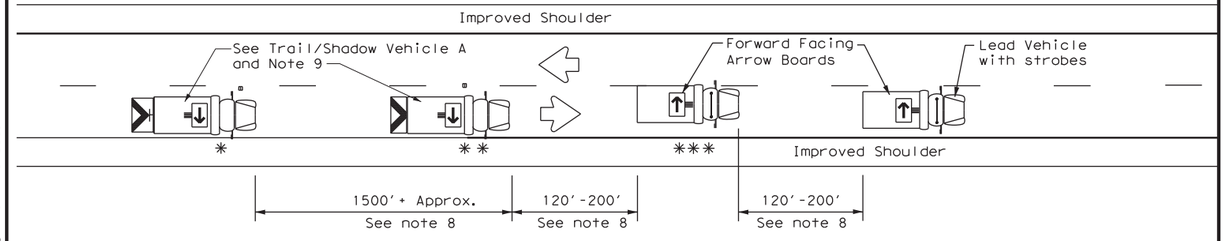
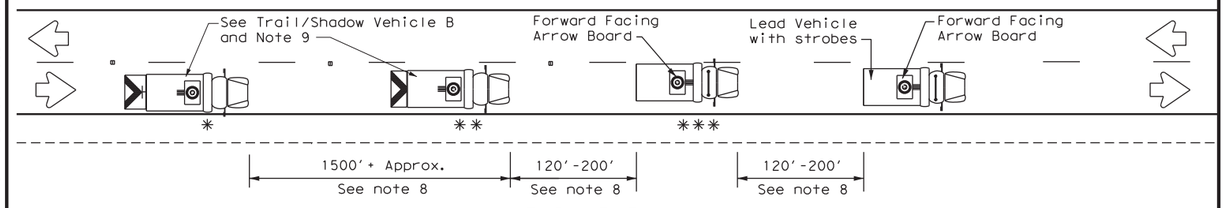


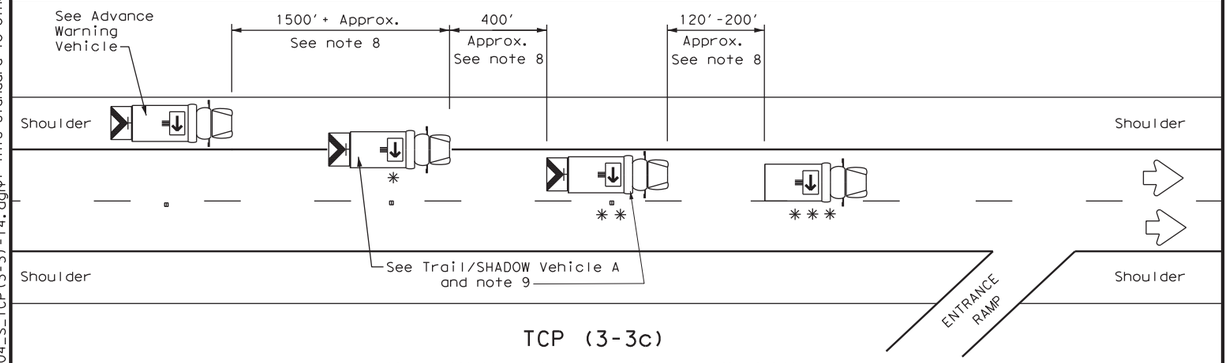
TCP (3-3a)

TWO LANE HIGHWAY WITH PAVED SHOULDERS (WORK ON TRAVEL LANE)



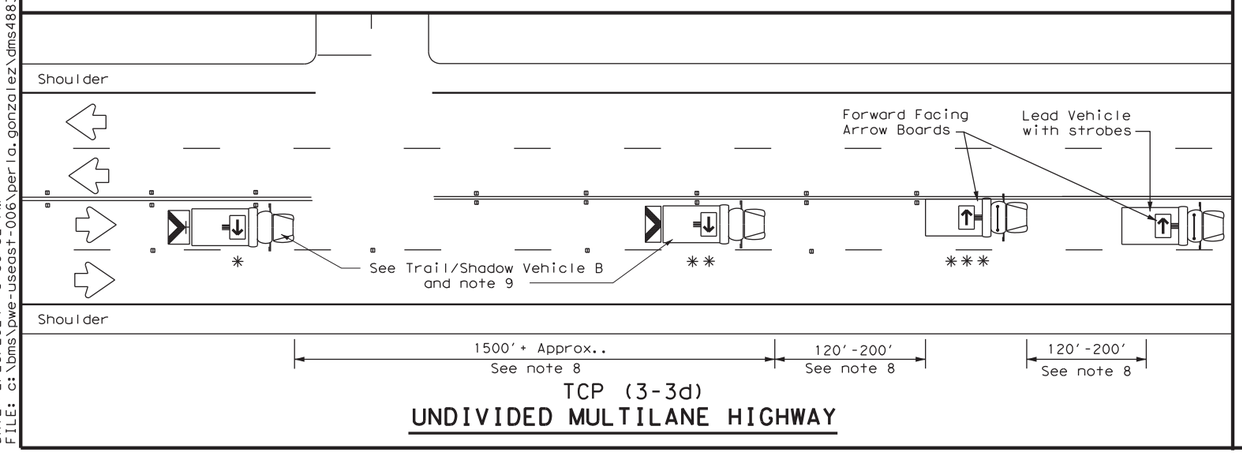
TCP (3-3b)

TWO LANE HIGHWAY WITHOUT PAVED SHOULDERS (WORK ON TRAVEL LANE)



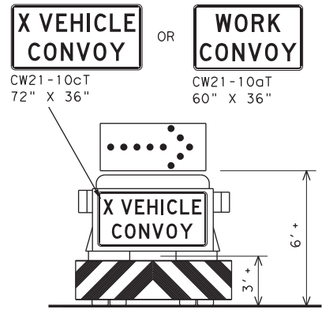
TCP (3-3c)

DIVIDED MULTILANE HIGHWAY



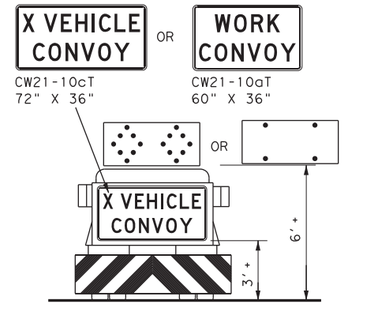
TCP (3-3d)

UNDIVIDED MULTILANE HIGHWAY



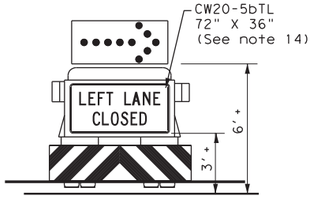
TRAIL/SHADOW VEHICLE A

with RIGHT Directional display
Flashing Arrow Board

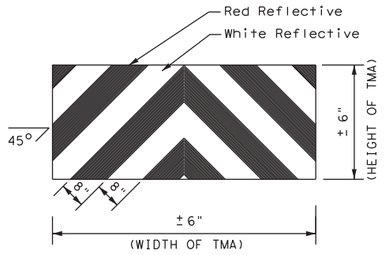


TRAIL/SHADOW VEHICLE B

with Flashing Arrow Board
in Caution Mode



ADVANCE WARNING VEHICLE



STRIPING FOR TMA

LEGEND			
*	Trail Vehicle	ARROW BOARD DISPLAY	
**	Shadow Vehicle		
***	Work Vehicle		RIGHT Directional
	Heavy Work Vehicle		LEFT Directional
	Truck Mounted Attenuator (TMA)		Double Arrow
	Traffic Flow		CAUTION (Alternating Diamond or 4 Corner Flash)

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
✓				

GENERAL NOTES

1. TRAIL, SHADOW, and LEAD vehicles shall be equipped with arrow boards as illustrated. When a LEAD vehicle is not used on two way roads the WORK vehicle must have an arrow board. For divided roadways, the arrow board on the WORK vehicle is optional based on the type of work being performed. The Engineer will determine if the LEAD vehicle and/or TRAIL vehicle are required based on prevailing roadway conditions, traffic volume, and sight distance restrictions.
2. The use of amber high intensity rotating, flashing, oscillating, or strobe lights on vehicles are required. Blue high intensity rotating, flashing, oscillating, or strobe lights when mounted on the driver's side of the vehicle may be operated simultaneously with the amber beacons or strobe lights.
3. The use of truck mounted attenuators (TMA) on the SHADOW VEHICLE, ADVANCE WARNING and TRAIL VEHICLE are required.
4. Reflective sheeting on the rear of the TMA shall meet or exceed the reflectivity and color requirements of DEPARTMENTAL MATERIAL SPECIFICATION DMS 8300, Type A.
5. Flashing arrow boards shall be Type B or Type C as per the Barricade and Construction (BC) standards. The board shall be controlled from inside the vehicle.
6. Each vehicle shall have two-way radio communication capability.
7. When work convoys must change lanes, the TRAIL VEHICLE should change lanes first to shadow the other convoy vehicles.
8. Vehicle spacing between the TRAIL VEHICLE and the SHADOW VEHICLE will vary depending on sight distance restrictions. Motorists approaching the convoy should be able to see the TRAIL VEHICLE in time to slow down and/or change lanes as they approach the TRAIL VEHICLE. Vehicle spacing between the WORK VEHICLE and SHADOW VEHICLE and vehicle spacing between WORK VEHICLE and LEAD VEHICLE may vary according to terrain, work activity and other factors.
9. X VEHICLE CONVOY (CW21-10cT) or WORK CONVOY (CW21-10aT) signs shall be used on TRAIL VEHICLES and SHADOW VEHICLES as shown. As an option 48" x 48" diamond shaped WORK CONVOY (CW21-10T) or X VEHICLE CONVOY (CW21-10bT) signs may be used where adequate mounting space exists. When used, the X VEHICLE CONVOY sign shall have the number of the convoy vehicles displayed on the sign in the number designation "X" location. The X VEHICLE CONVOY sign shall not be used on the SHADOW VEHICLE if a TRAIL VEHICLE is used.
10. For divided highways with two or three lanes in one direction, the appropriate LEFT LANE CLOSED (CW20-5bTL), RIGHT LANE CLOSED (CW20-5bTR), or CENTER LANE CLOSED (CW20-5dT) sign should be used on the Advance Warning Vehicle. As an option, a portable changeable message sign (PCMS) or truck mounted changeable message sign (TMCMS) with a minimum character height of 12", and displaying the same legend may be substituted for these signs. An appropriate directional arrow display, simulating the size and legibility of the flashing arrow board may be used in the second phase of the PCMS/TMCMS message. When this is done, the arrow board will not be required on the Advance Warning Vehicle.
11. A double arrow shall not be displayed on the arrow board on the Advance Warning Vehicle.
12. For divided highways with three or four lanes in each direction, use TCP(3-2).
13. Standard diamond shape versions of the CW20-5 series signs may be used as an option if the rectangular signs shown are not available.
14. The Advance Warning Vehicle may straddle the edgeline when Shoulder width makes it necessary.
15. On two-lane two-way roadways, the work and protection vehicles should pull over periodically to allow motor vehicle traffic to pass. If motorists are not allowed to pass the work convoy, a DO NOT PASS (R4-1) sign should be placed on the back of the rearmost protection vehicle.

Texas Department of Transportation

Traffic Operations Division Standard

TRAFFIC CONTROL PLAN MOBILE OPERATIONS RAISED PAVEMENT MARKER INSTALLATION/ REMOVAL

TCP(3-3)-14

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©TxDOT September 1987	CONT	SECT	JOB	HIGHWAY
REVISIONS	2121	01	104	IH 10
2-94 4-98	DIST	COUNTY		SHEET NO.
8-95 7-13	ELP	EL PASO		169
1-97 7-14				

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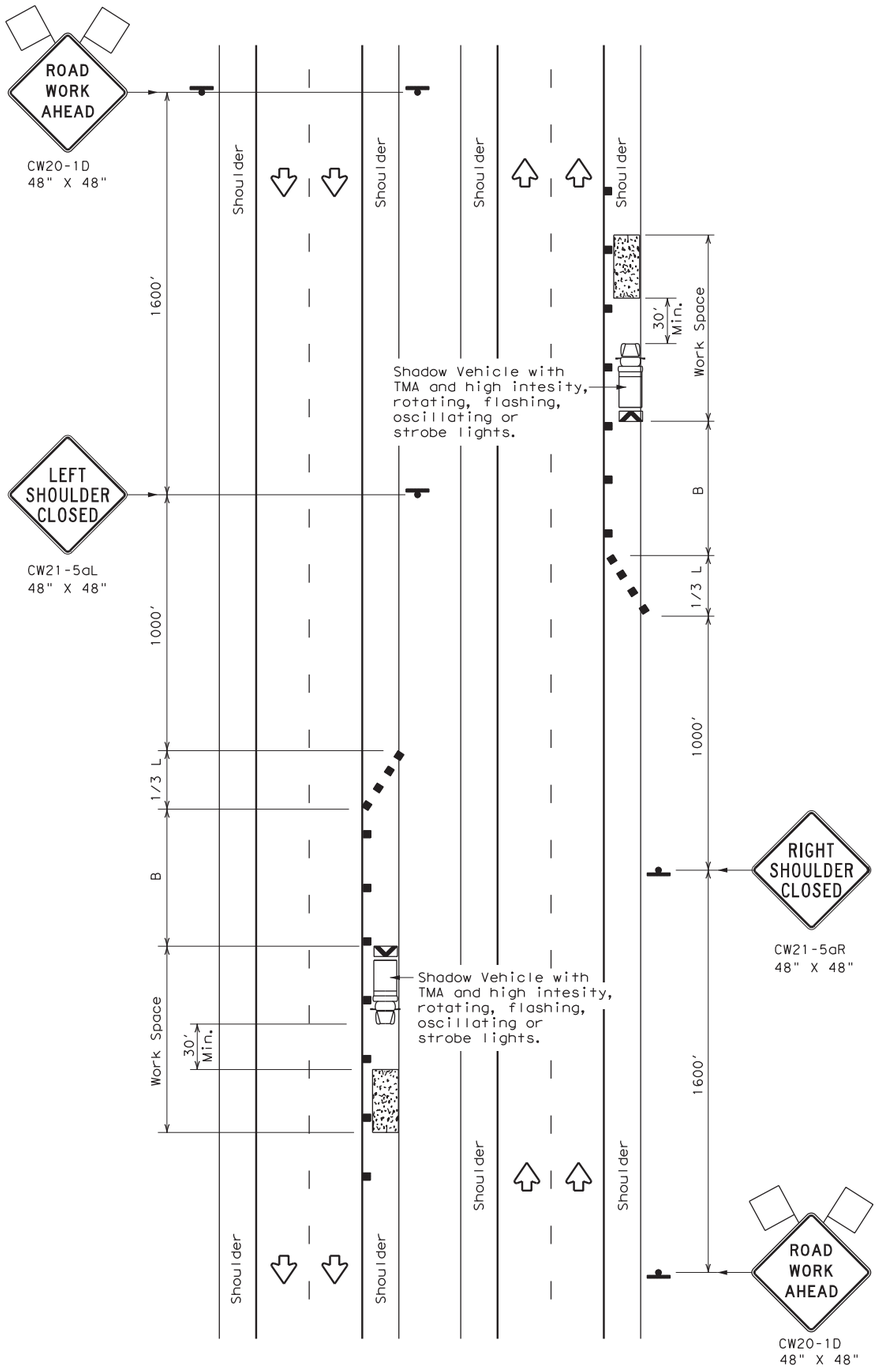
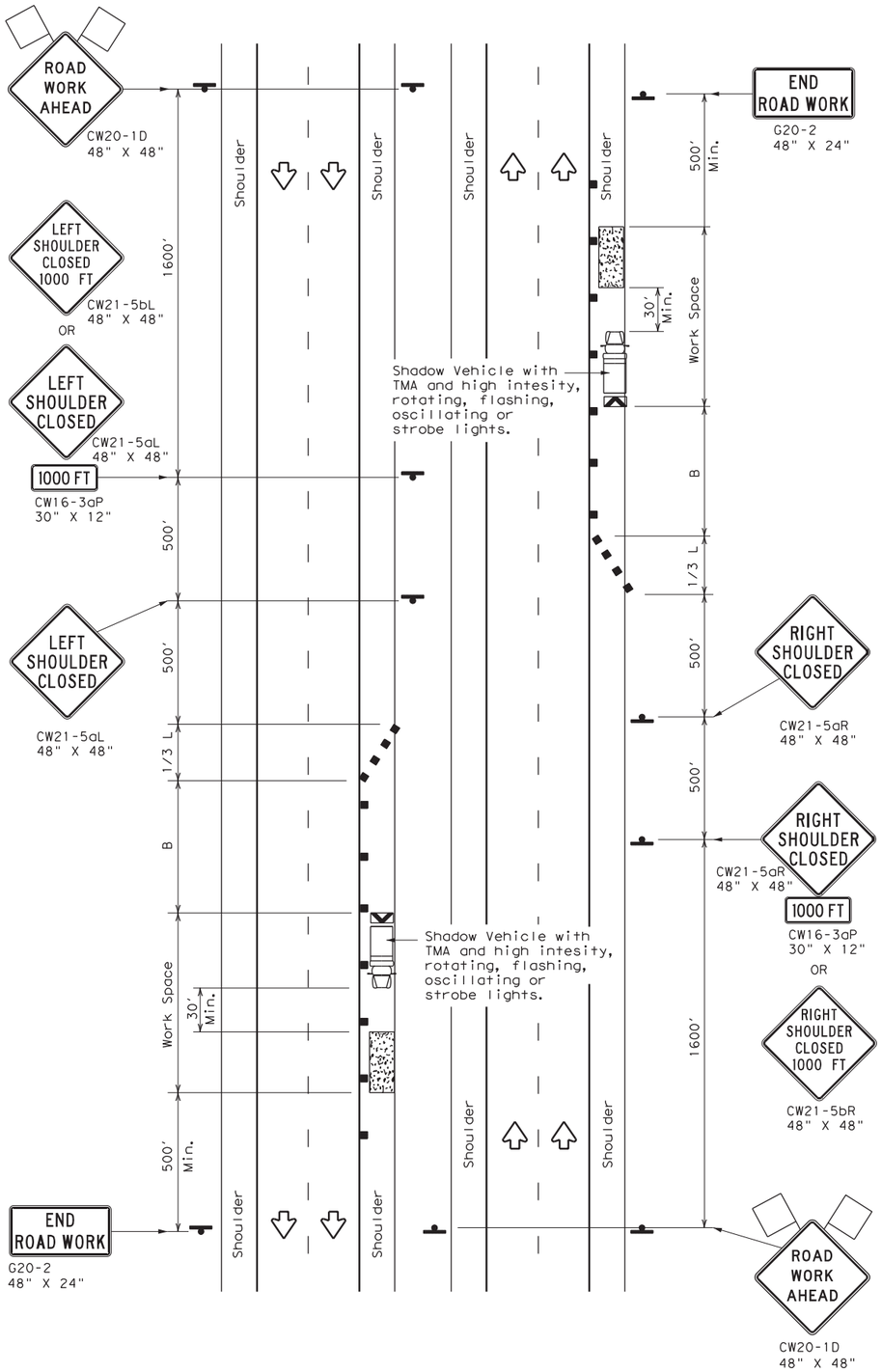


TCP (5-1a)

WORK AREA ON SHOULDER



TCP (5-1b)

WORK AREA ON SHOULDER

LEGEND			
	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board	M	Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed *	Formula	Minimum Desirable Taper Lengths ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices: On a Taper	On a Tangent	Suggested Longitudinal Buffer Space "B"
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60'	90'
35		205'	225'	245'	35'	70'	120'
40		265'	295'	320'	40'	80'	155'
45	L=WS	450'	495'	540'	45'	90'	195'
50		500'	550'	600'	50'	100'	240'
55		550'	605'	660'	55'	110'	295'
60		600'	660'	720'	60'	120'	350'
65		650'	715'	780'	65'	130'	410'
70		700'	770'	840'	70'	140'	475'
75		750'	825'	900'	75'	150'	540'
80		800'	880'	960'	80'	160'	615'

* Conventional Roads Only
** Taper lengths have been rounded off.
L=Length of Taper(FT) W=Width of Offset(FT) S=Posted Speed(MPH)

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	TCP(5-1a)	TCP(5-1b)	TCP(5-1b)	

GENERAL NOTES

1. A Shadow Vehicle with a TMA should be used anytime it can be positioned 30' to 100' in advance of the area of crew exposure without adversely effecting the performance or quality of the work. Type 3 barricades or drums may be substituted when workers on foot are no longer present when approved by the Engineer.
2. 28" tall or taller one-piece cones will be allowed only for Short Duration or Short Term stationary operations when workers are present to maintain the devices upright and in proper location. Intermediate Term stationary work areas should use Drums, Vertical Panels or 42" tall two-piece cones.

Texas Department of Transportation

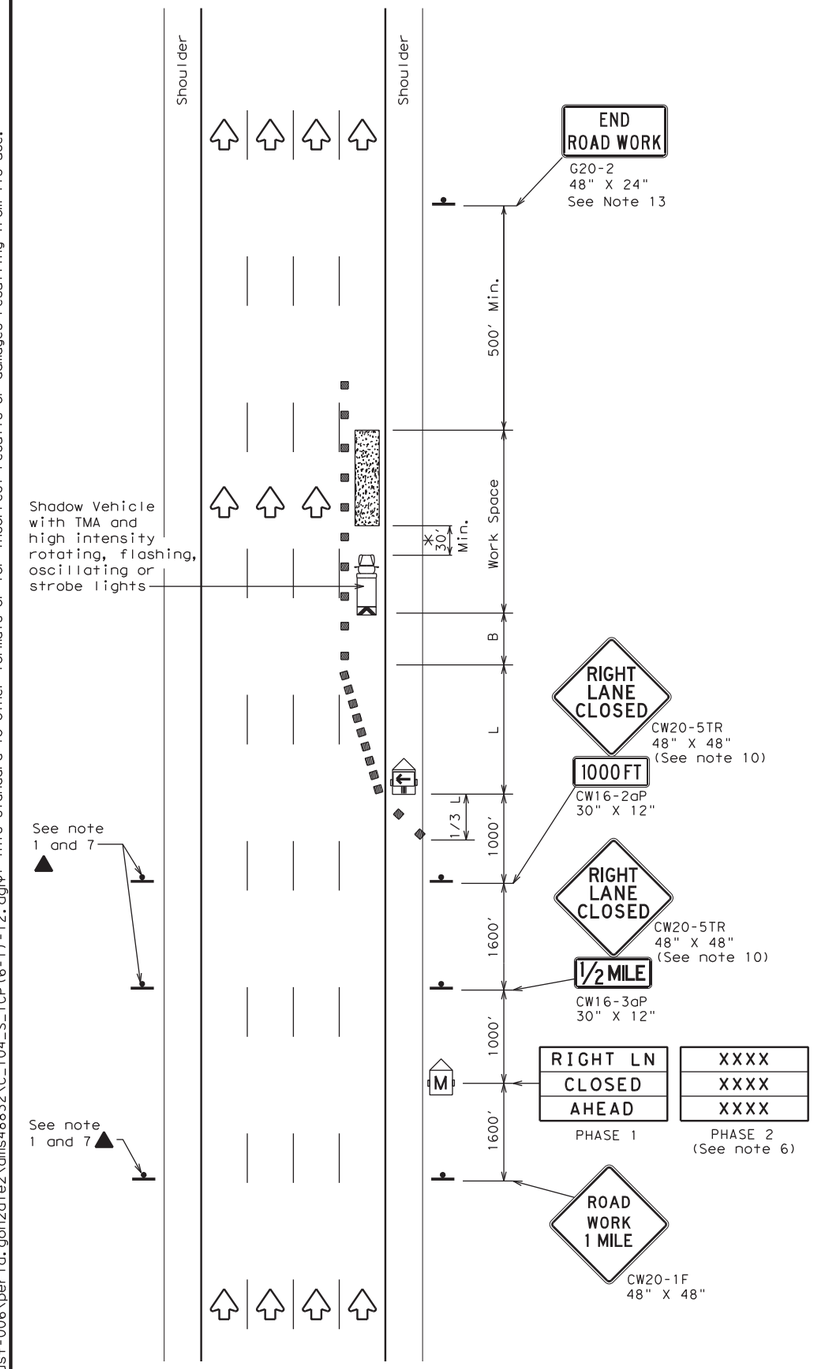
Traffic Operations Division Standard

TRAFFIC CONTROL PLAN SHOULDER WORK FOR FREEWAYS / EXPRESSWAYS

TCP(5-1)-18

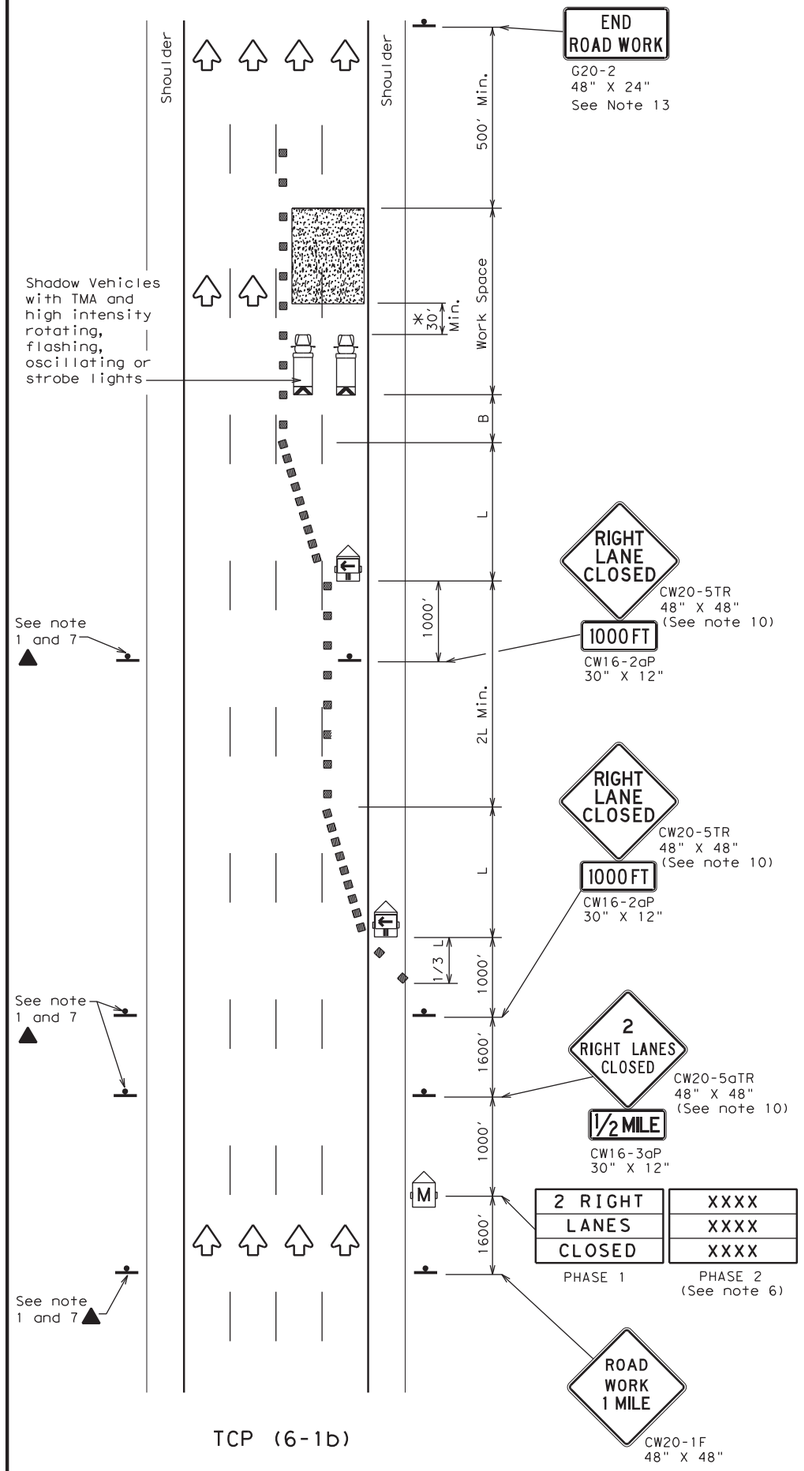
FILE: tcp5-1-18.dgn	DN:	CK:	DW:	CK:
©TxDOT February 2012	CONT	SECT	JOB	HIGHWAY
REVISIONS 2-18	2121	01	104	IH 10
	DIST	COUNTY		SHEET NO.
	ELP	EL PASO		170

FILE: c:\dms\pwe-useast-006\perla.gonzalez\dms48832\C_104_S_TCP(6-1)-12.dgn
DATE: 2/28/2024 5:37:14 PM



TCP (6-1a)

TYPICAL FREEWAY ONE LANE CLOSURE



TCP (6-1b)

TYPICAL FREEWAY TWO LANE CLOSURE

LEGEND			
	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board	M	Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed	Formula	Minimum Desirable Taper Lengths "L" ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices: On a Taper	On a Tangent	Suggested Longitudinal Buffer Space "B"
45	L=WS	450'	495'	540'	45'	90'	195'
50		500'	550'	600'	50'	100'	240'
55		550'	605'	660'	55'	110'	295'
60		600'	660'	720'	60'	120'	350'
65		650'	715'	780'	65'	130'	410'
70		700'	770'	840'	70'	140'	475'
75		750'	825'	900'	75'	150'	540'
80		800'	880'	960'	80'	160'	615'

** Taper lengths have been rounded off.
L=Length of Taper(FT) W=Width of Offset(FT) S=Posted Speed(MPH)

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	✓	✓	✓	

GENERAL NOTES

1. All traffic control devices illustrated are REQUIRED. Devices denoted with the triangle symbol may be omitted when stated elsewhere in the plans.
2. Drums or 42"cones are the typical channelizing devices. For Intermediate Term Stationary work, drums shall be used on tapers with drums or 42" cones used on tangent sections. Other channelizing devices may be used as directed by the Engineer.
3. All construction signs and barricades placed during any phase of work shall remain in place until removal is approved by the Engineer.
4. The Engineer may direct the Contractor to furnish additional signs and barricades as required to maintain traffic flow, detours and motorist safety during construction.
5. Static message boards or changeable message signs stating the date and duration of ramp or freeway lane closures shall be placed a minimum of seven (7) calendar days in advance of the actual closure.
6. Phase 2 of the PCMS message should include appropriate information formatted as shown on BC(6), such as "MERGE LEFT," recommended advisory speed, delay information, or other specific warnings.
7. Duplicate construction warning signs should be erected on the medians side of freeways where median width will permit and traffic volume justifies the signing.
8. The number of closed lanes may be increased provided the spacing of traffic control devices, taper lengths and tangent lengths meet the requirements of the TMUTCD.
9. Warning signs for intermediate term stationary work should be mounted at 7' to the bottom of the sign.
10. Warning signs shown shall be appropriately altered for left lane closures. When signs are mounted at 1' height for short term stationary or short duration work, sign versions shown in the SHSD for Texas with distances on the sign face rather than mounted on a plaque below the sign may be used.
11. When possible, PCMS units should be located in advance of the last available exit ramp prior to the lane closure to allow motorists an alternate route. They may also be relocated to improve advance warning in case of unanticipated queuing or congestion.
12. For Intermediate Term Stationary work at night, floodlights should be used to illuminate the work area and equipment crossings. Floodlights shall not produce a disabling glare condition for road users or workers.
13. The END ROAD WORK (G20-2) sign may be omitted when it conflicts with G20-2 signs already in place on the project.

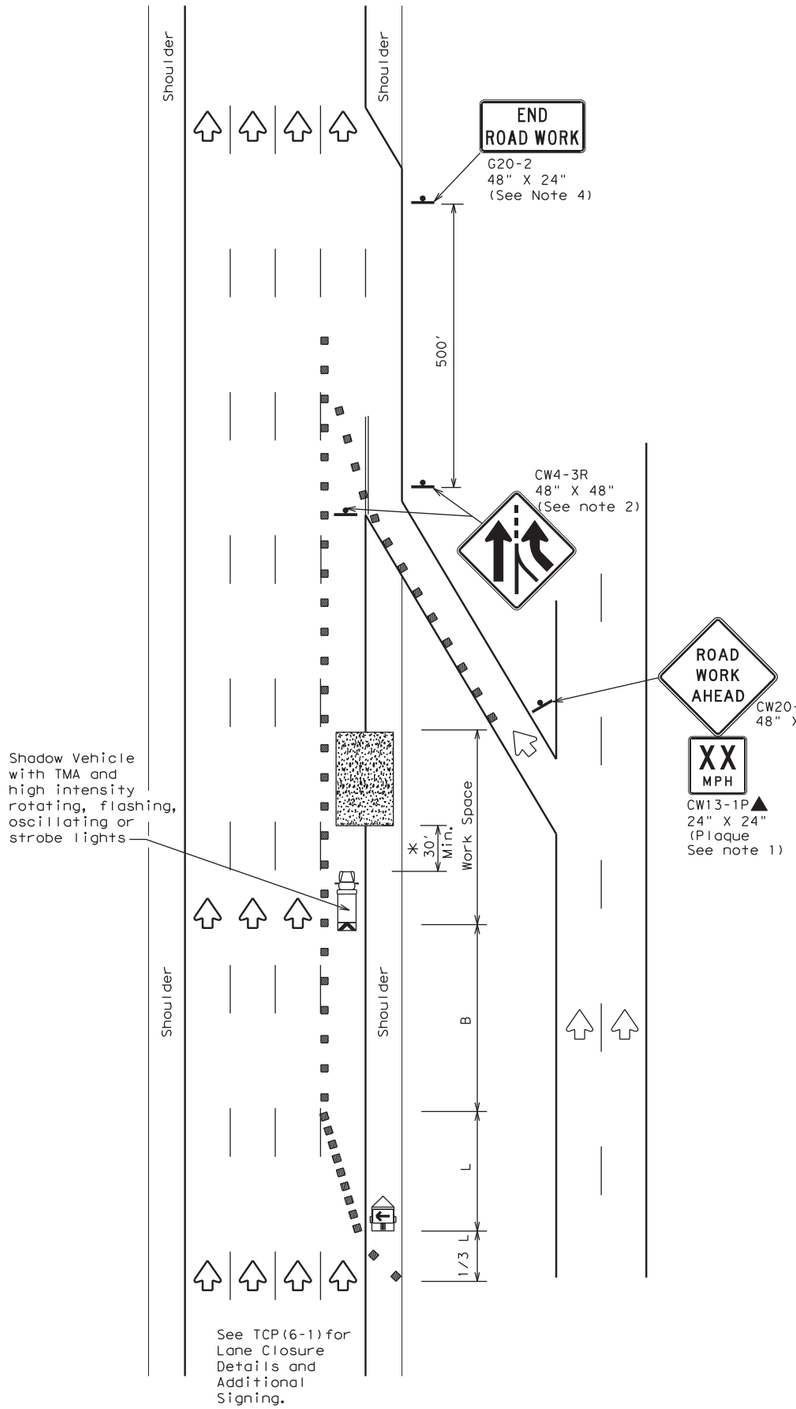
* A shadow vehicle equipped with a Truck Mounted Attenuator is typically required. A shadow vehicle equipped with a TMA shall be used if it can be positioned 30' to 100' in advance of the area of crew exposure without adversely affecting the work performance.

Texas Department of Transportation
Traffic Operations Division Standard

TRAFFIC CONTROL PLAN FREEWAY LANE CLOSURES

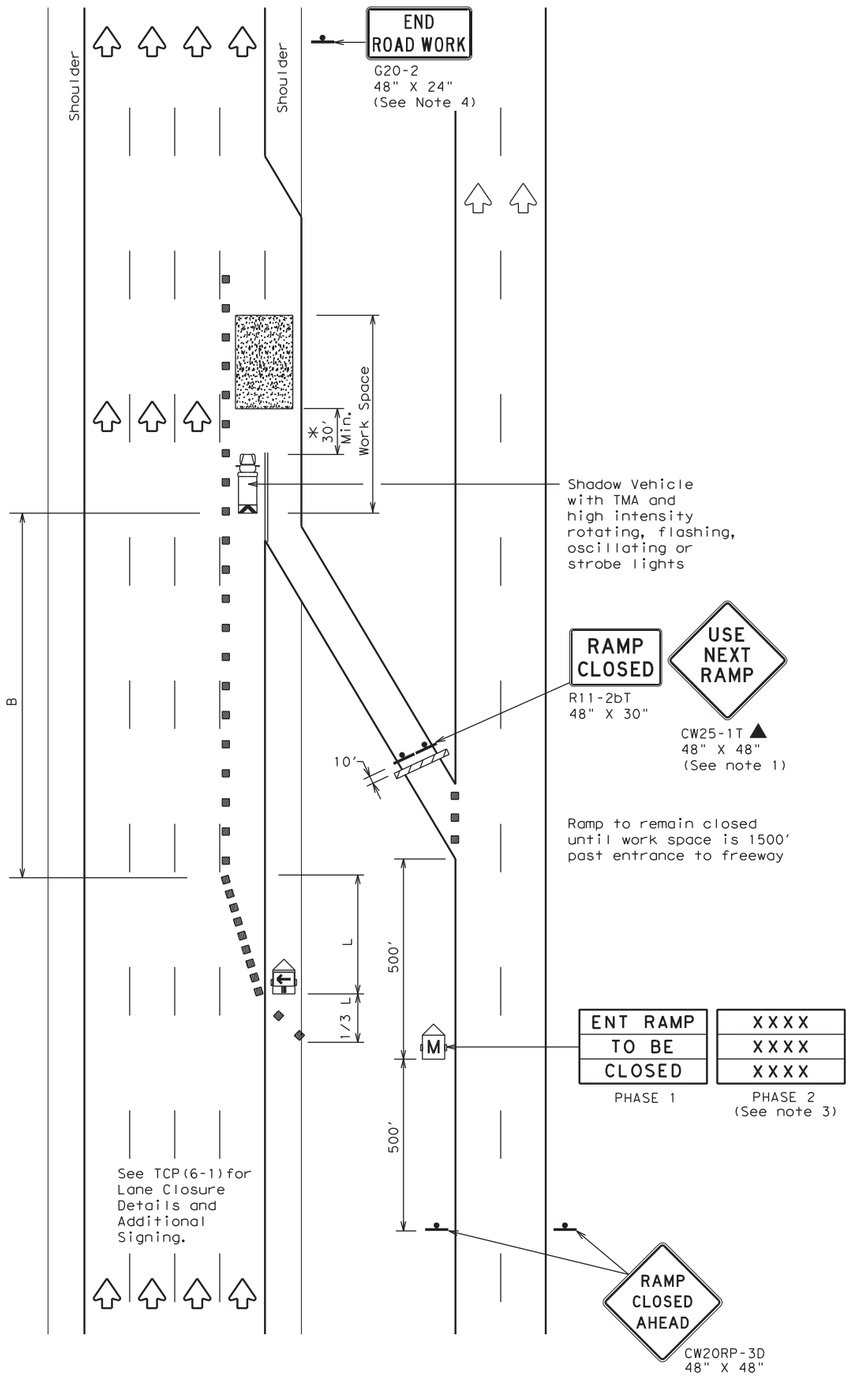
TCP(6-1)-12

FILE: tcp6-1.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT February 1998	CONT	SECT	JOB	HIGHWAY
REVISIONS 8-12	2121	01	104	IH 10
	DIST	COUNTY		SHEET NO.
	ELP	EL PASO		171



TCP (6-2a)

ENTRANCE RAMP OPEN
WORK WITHIN 500' OF RAMP



TCP (6-2b)

ENTRANCE RAMP CLOSED

LEGEND			
	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board	M	Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed	Formula	Minimum Desirable Taper Lengths "L" **			Suggested Maximum Spacing of Channelizing Devices		Suggested Longitudinal Buffer Space "B"
		10' Offset	11' Offset	12' Offset	On a Taper	On a Tangent	
45	L=WS	450'	495'	540'	45'	90'	195'
50		500'	550'	600'	50'	100'	240'
55		550'	605'	660'	55'	110'	295'
60		600'	660'	720'	60'	120'	350'
65		650'	715'	780'	65'	130'	410'
70		700'	770'	840'	70'	140'	475'
75		750'	825'	900'	75'	150'	540'
80		800'	880'	960'	80'	160'	615'

** Taper lengths have been rounded off.
L=Length of Taper(FT) W=Width of Offset(FT) S=Posted Speed(MPH)

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	✓	✓	✓	

GENERAL NOTES

1. All traffic control devices illustrated are REQUIRED. Devices denoted with the triangle symbol may be omitted when stated elsewhere in the plans.
2. ADDED LANE Symbol (CW4-3) sign may be omitted when sign between ramp and mainlane can be seen from both roadways.
3. See "Advance Notice List" on BC(6) for recommended date and time formatting options for PCMS Phase 2 message.
4. The END ROAD WORK (G20-2) sign may be omitted when it conflicts with G20-2 signs already in place on the project.

* A shadow vehicle equipped with a Truck Mounted Attenuator is typically required. A shadow vehicle equipped with a TMA shall be used if it can be positioned 30' to 100' in advance of the area of crew exposure without adversely affecting the work performance.

Additional requirements for lane closures and advance signing shall be as shown on TCP (6-1) or as directed by the Engineer.

Texas Department of Transportation
Traffic Operations Division Standard

TRAFFIC CONTROL PLAN
WORK AREA NEAR RAMP

TCP(6-2)-12

FILE: tcp6-2.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT February 1994	CONT	SECT	JOB	HIGHWAY
REVISIONS	2121	01	104	IH 10
1-97 8-98	DIST	COUNTY		SHEET NO.
4-98 8-12	ELP	EL PASO		172

202

DATE: 2/28/2024 5:37:26 PM
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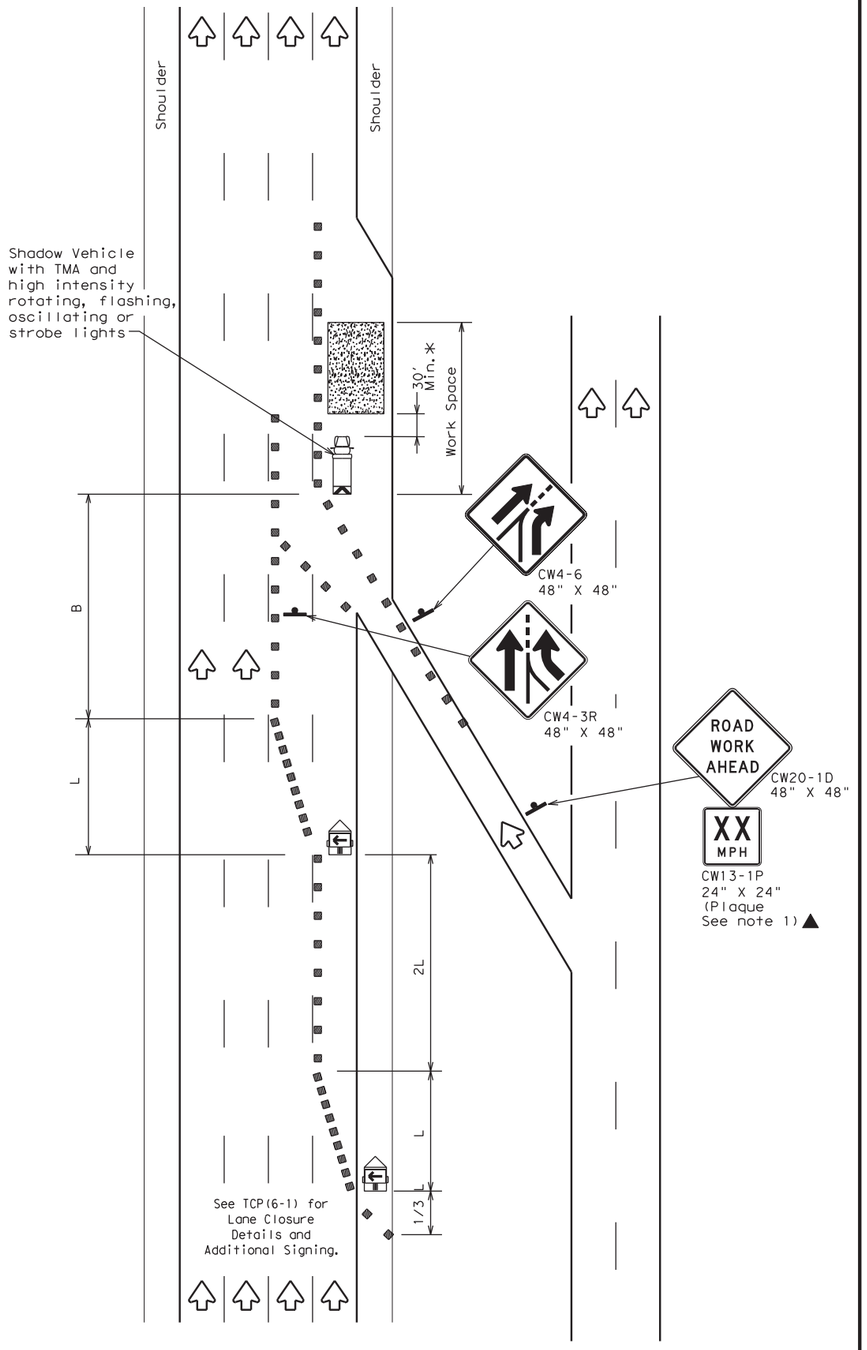
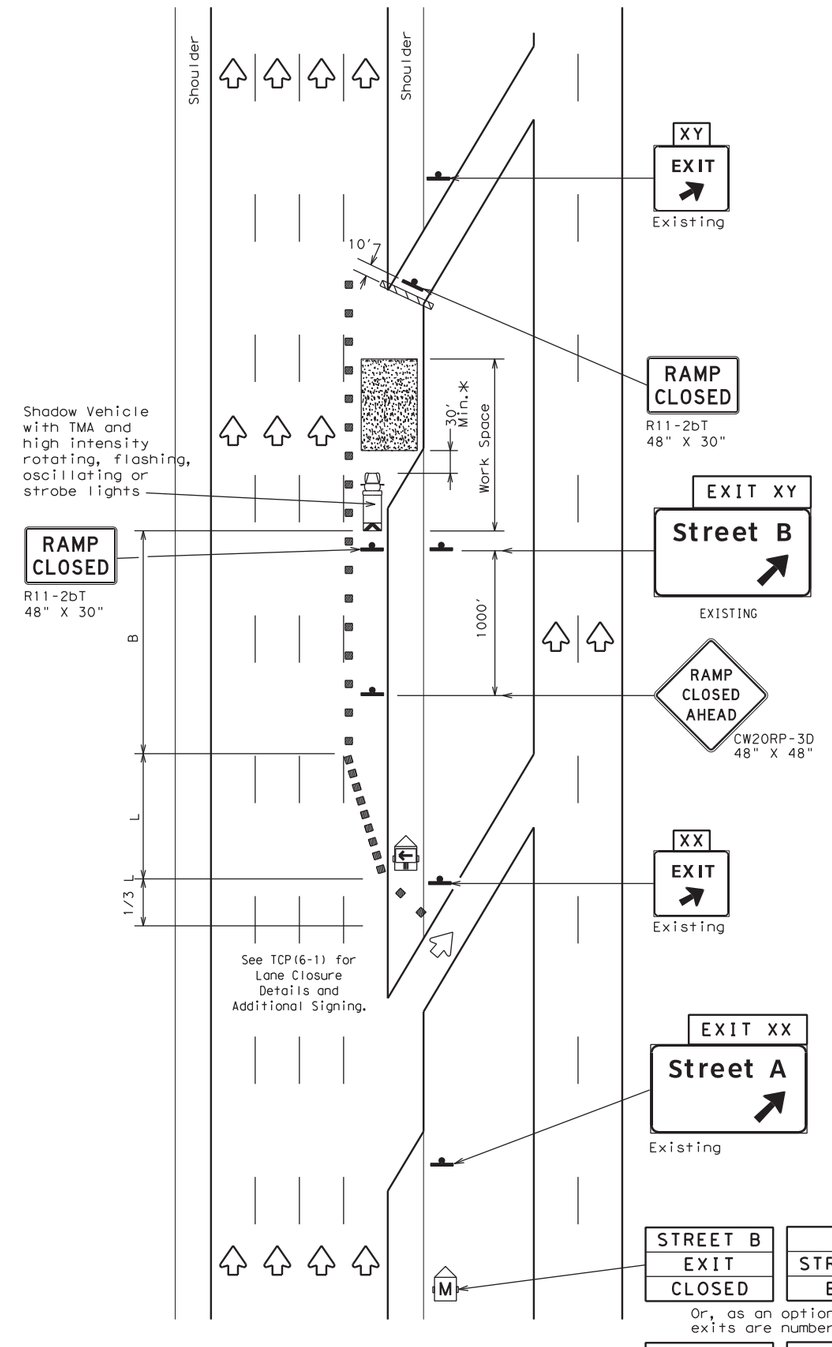


TCP (6-3a)

ENTRANCE RAMP OPEN



TCP (6-3b)

EXIT RAMP CLOSED

TRAFFIC EXITS PRIOR TO CLOSED RAMP

LEGEND			
	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board	M	Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed	Formula	Minimum Desirable Taper Lengths "L" ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices On a Taper	On a Tangent	Suggested Longitudinal Buffer Space "B"
45	L=WS	450'	495'	540'	45'	90'	195'
50		500'	550'	600'	50'	100'	240'
55		550'	605'	660'	55'	110'	295'
60		600'	660'	720'	60'	120'	350'
65		650'	715'	780'	65'	130'	410'
70		700'	770'	840'	70'	140'	475'
75		750'	825'	900'	75'	150'	540'
80		800'	880'	960'	80'	160'	615'

** Taper lengths have been rounded off.
L=Length of Taper(FT) W=Width of Offset(FT) S=Posted Speed(MPH)

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	✓	✓	✓	

GENERAL NOTES:

1. All traffic control devices illustrated are REQUIRED. Devices denoted with the triangle symbol may be omitted when stated elsewhere in the plans.

*A shadow vehicle equipped with a Truck Mounted Attenuator is typically required. A shadow vehicle equipped with a TMA shall be used if it can be positioned 30' to 100' in advance of the area of crew exposure without adversely affecting the work performance.

Additional requirements for lane closures and advance signing shall be as shown on TCP (6-1) or as directed by the Engineer.

Texas Department of Transportation
Traffic Operations Division Standard

TRAFFIC CONTROL PLAN
WORK AREA BEYOND RAMP

TCP(6-3)-12

FILE: tcp6-3.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT February 1994	CONT	SECT	JOB	HIGHWAY
REVISIONS	2121	01	104	IH 10
1-97 8-98	DIST	COUNTY		SHEET NO.
4-98 8-12	ELP	EL PASO		173

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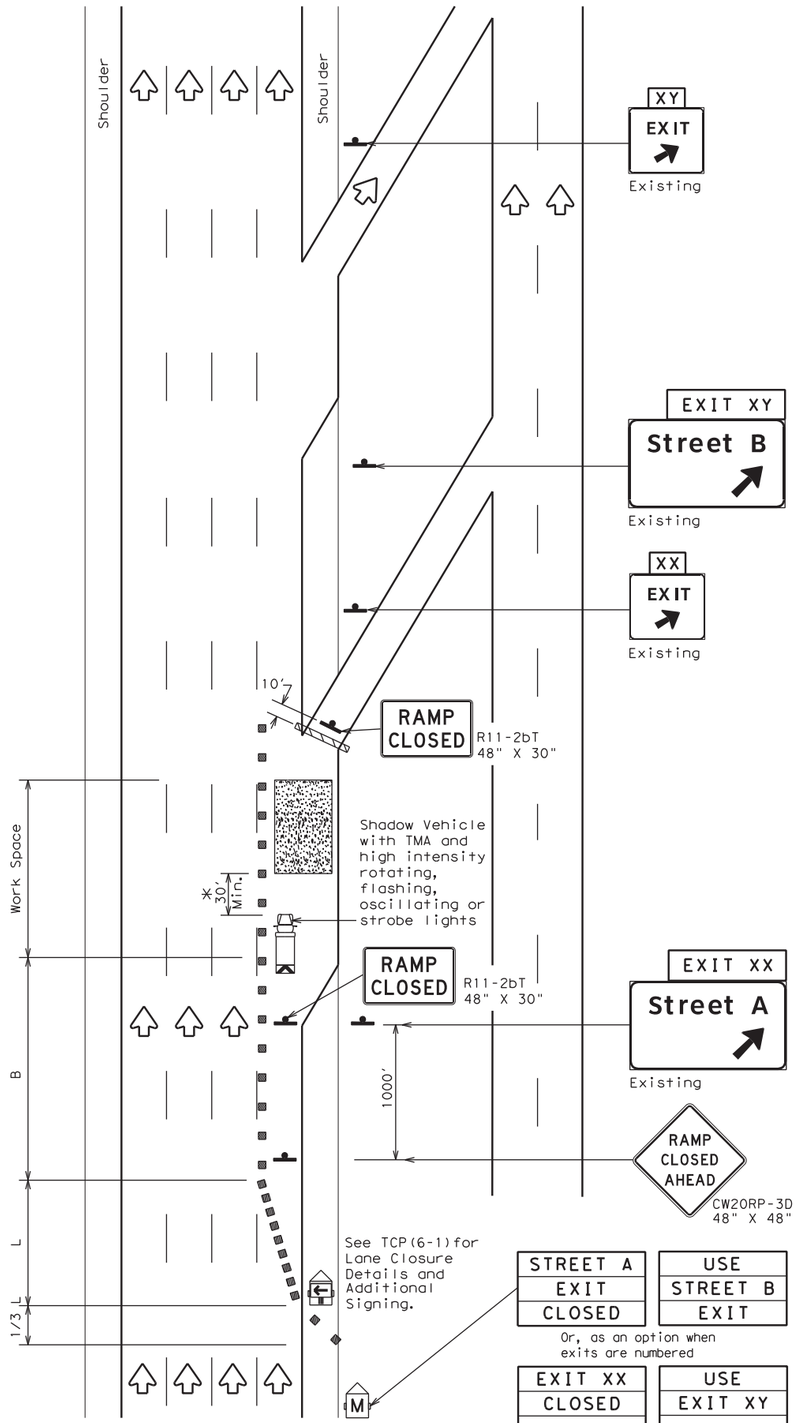
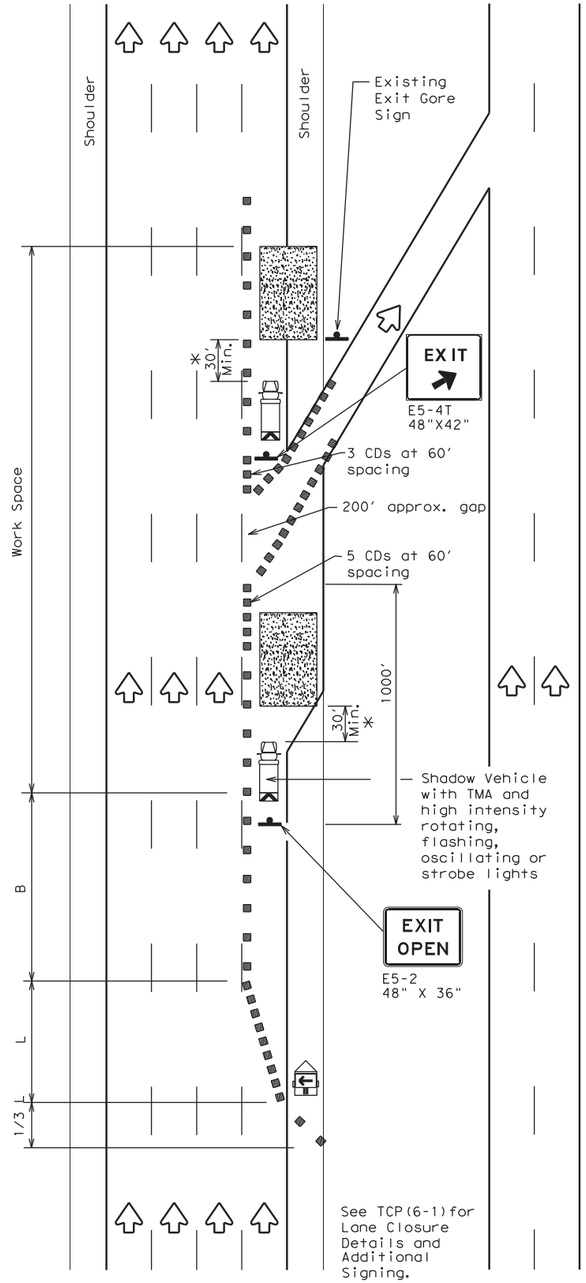
DATE: 2/28/2024 5:37:48 PM



TCP (6-4a)

EXIT RAMP CLOSED
TRAFFIC EXITS PAST CLOSED RAMP



TCP (6-4b)

EXIT RAMP OPEN

LEGEND			
	Type 3 Barricade		Channelizing Devices (CDs)
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board	M	Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed	Formula	Minimum Desirable Taper Lengths "L" ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices: On a Taper	On a Tangent	Suggested Longitudinal Buffer Space "B"
45	L=WS	450'	495'	540'	45'	90'	195'
50		500'	550'	600'	50'	100'	240'
55		550'	605'	660'	55'	110'	295'
60		600'	660'	720'	60'	120'	350'
65		650'	715'	780'	65'	130'	410'
70		700'	770'	840'	70'	140'	475'
75		750'	825'	900'	75'	150'	540'
80		800'	880'	960'	80'	160'	615'

** Taper lengths have been rounded off.
L=Length of Taper(FT) W=Width of Offset(FT) S=Posted Speed(MPH)

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	✓	✓	✓	

GENERAL NOTES

1. All traffic control devices illustrated are REQUIRED. Devices denoted with the triangle symbol may be omitted when stated elsewhere in the plans.
2. See BC Standards for sign details.

*A shadow vehicle equipped with a Truck Mounted Attenuator is typically required. A shadow vehicle equipped with a TMA shall be used if it can be positioned 30' to 100' in advance of the area of crew exposure without adversely affecting the work performance.

Additional requirements for lane closures and advance signing shall be as shown on TCP (6-1) or as directed by the Engineer.

Texas Department of Transportation
Traffic Operations Division Standard

TRAFFIC CONTROL PLAN
WORK AREA AT EXIT RAMP

TCP(6-4)-12

FILE: tcp6-4.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT Feburary 1994	CONT	SECT	JOB	HIGHWAY
REVISIONS	2121	01	104	IH 10
1-97 8-98	DIST	COUNTY		SHEET NO.
4-98 8-12	ELP	EL PASO		174

DATE: 2/28/2024 5:37:58 PM
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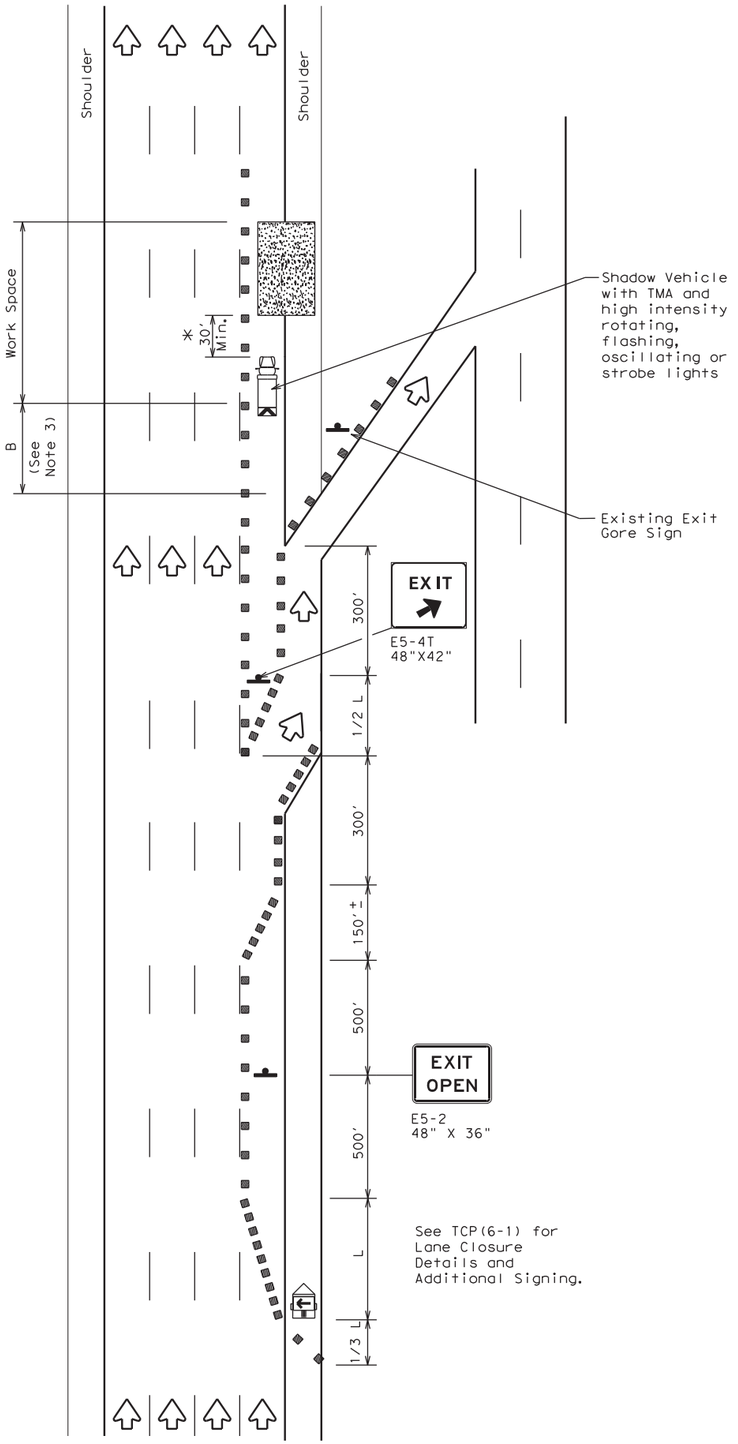
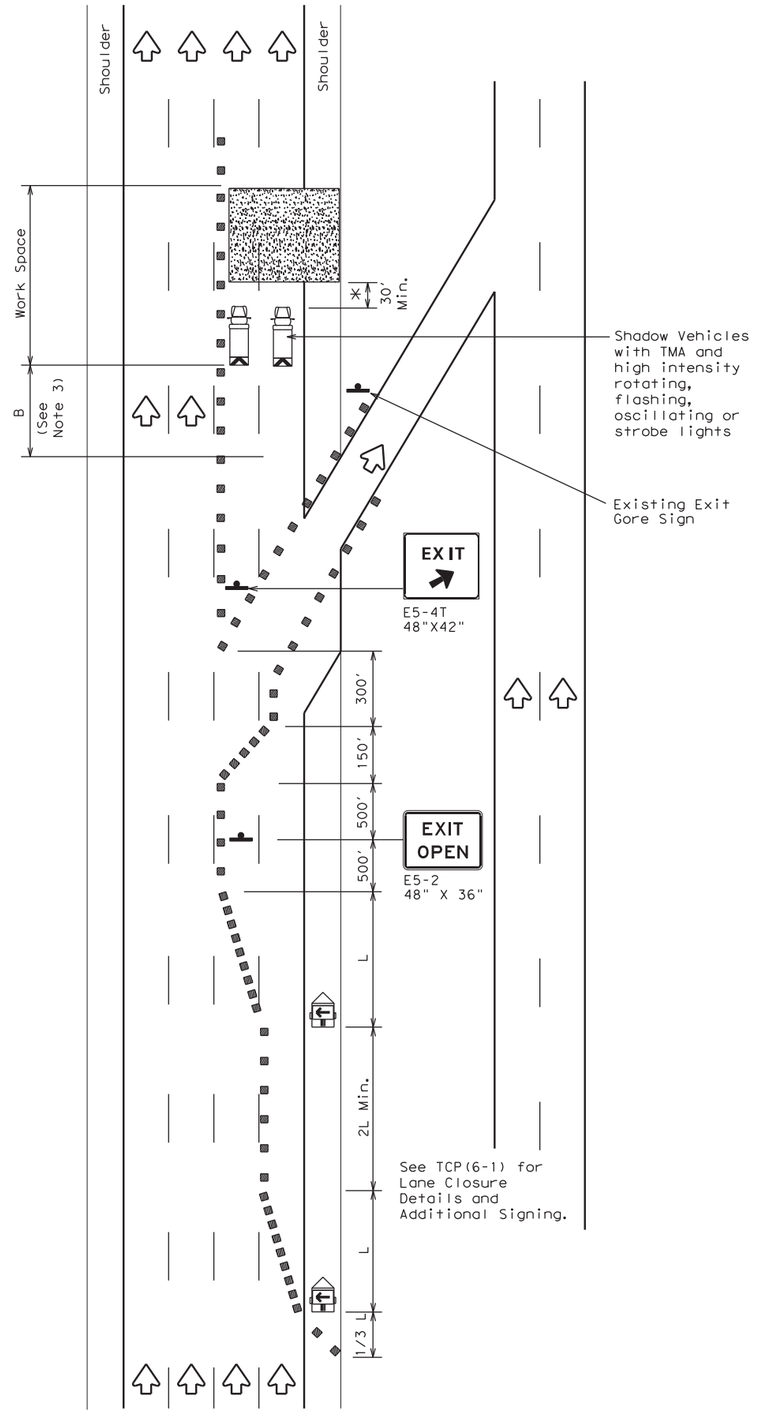


TCP (6-5a)

EXIT RAMP OPEN



TCP (6-5b)

EXIT RAMP OPEN
TWO LANE CLOSURE WITHIN 1500' PAST EXIT RAMP

LEGEND			
	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board	M	Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed	Formula	Minimum Desirable Taper Lengths "L" ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices On a Taper	On a Tangent	Suggested Longitudinal Buffer Space "B"
45	L=WS	450'	495'	540'	45'	90'	195'
50		500'	550'	600'	50'	100'	240'
55		550'	605'	660'	55'	110'	295'
60		600'	660'	720'	60'	120'	350'
65		650'	715'	780'	65'	130'	410'
70		700'	770'	840'	70'	140'	475'
75		750'	825'	900'	75'	150'	540'
80		800'	880'	960'	80'	160'	615'

** Taper lengths have been rounded off.
L=Length of Taper(FT) W=Width of Offset(FT) S=Posted Speed(MPH)

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	✓	✓	✓	

GENERAL NOTES

1. All traffic control devices illustrated are REQUIRED. Devices denoted with the triangle symbol may be omitted when stated elsewhere in the plans.
2. See BC standards for sign details.
3. If adequate longitudinal buffer length "B" does not exist between the work space and the exit ramp, consideration should be given to closing the ramp.

* A shadow vehicle equipped with a Truck Mounted Attenuator is typically required. A shadow vehicle equipped with a TMA shall be used if it can be positioned 30' to 100' in advance of the area of crew exposure without adversely affecting the work performance.

Additional requirements for lane closures and advance signing shall be as shown on TCP (6-1) or as directed by the Engineer.

Texas Department of Transportation
Traffic Operations Division Standard

TRAFFIC CONTROL PLAN
WORK AREA BEYOND EXIT RAMP

TCP(6-5)-12

FILE: tcp6-5.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT Feburary 1998	CONT	SECT	JOB	HIGHWAY
REVISIONS	2121	01	104	IH 10
1-97 8-98	DIST	COUNTY		SHEET NO.
4-98 8-12	ELP	EL PASO		175

DATE: 2/28/2024 5:38:10 PM
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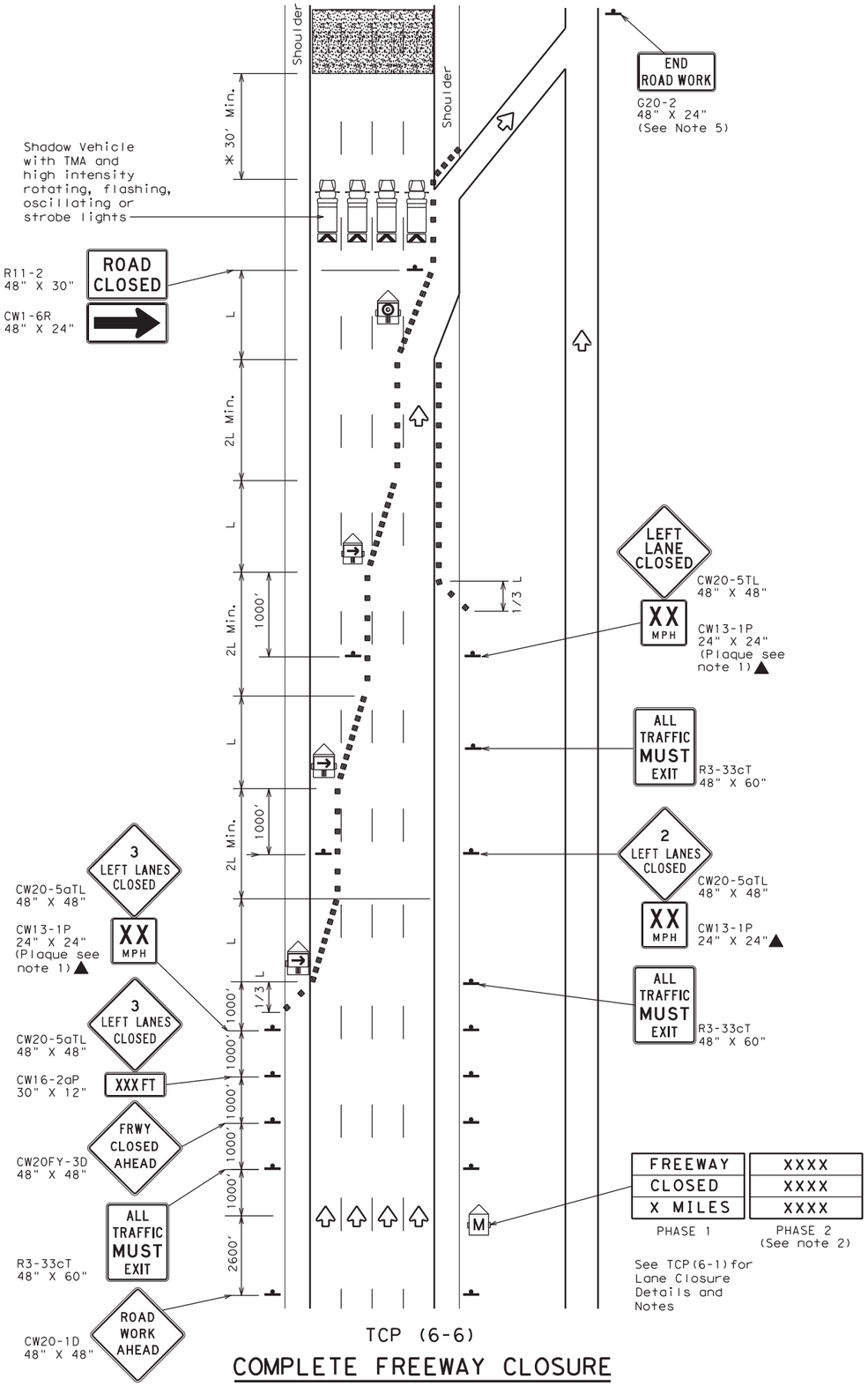


TCP (6-6)

COMPLETE FREEWAY CLOSURE

LEGEND			
	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board	M	Portable Changeable Message Sign (PCMS)
	Flashing Arrow Board in Caution Mode		Traffic Flow
	Sign		

Posted Speed	Formula	Minimum Desirable Taper Lengths "L" ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices: On a Taper	On a Tangent	Suggested Longitudinal Buffer Space "B"
45	L=WS	450'	495'	540'	45'	90'	195'
50		500'	550'	600'	50'	100'	240'
55		550'	605'	660'	55'	110'	295'
60		600'	660'	720'	60'	120'	350'
65		650'	715'	780'	65'	130'	410'
70		700'	770'	840'	70'	140'	475'
75		750'	825'	900'	75'	150'	540'
80		800'	880'	960'	80'	160'	615'

** Taper lengths have been rounded off.
L=Length of Taper(FT) W=Width of Offset(FT) S=Posted Speed(MPH)

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	✓	✓	✓	

GENERAL NOTES

1. All traffic control devices illustrated are REQUIRED. Devices denoted with the triangle symbol may be omitted when stated elsewhere in the plans.
2. Phase 2 of the PCMS message should include appropriate information formatted as shown on BC(6), such as "MERGE RIGHT," recommended speed, delay, exit information, or other specific warnings.
3. Where queuing is anticipated beyond signing shown, additional PCMS signs, other warning signs, devices or Law Enforcement Officers should be available to warn approaching high speed traffic of the end of the queue, as directed by the Engineer.
4. Entrance ramps located from the advance warning area to the exit ramp should be closed whenever possible.
5. The END ROAD WORK (G20-2) sign may be omitted when it conflicts with G20-2 signs already in place on the project.

* A shadow vehicle equipped with a Truck Mounted Attenuator is typically required. A shadow vehicle equipped with a TMA shall be used if it can be positioned 30' to 100' in advance of the area of crew exposure without adversely affecting the work performance.

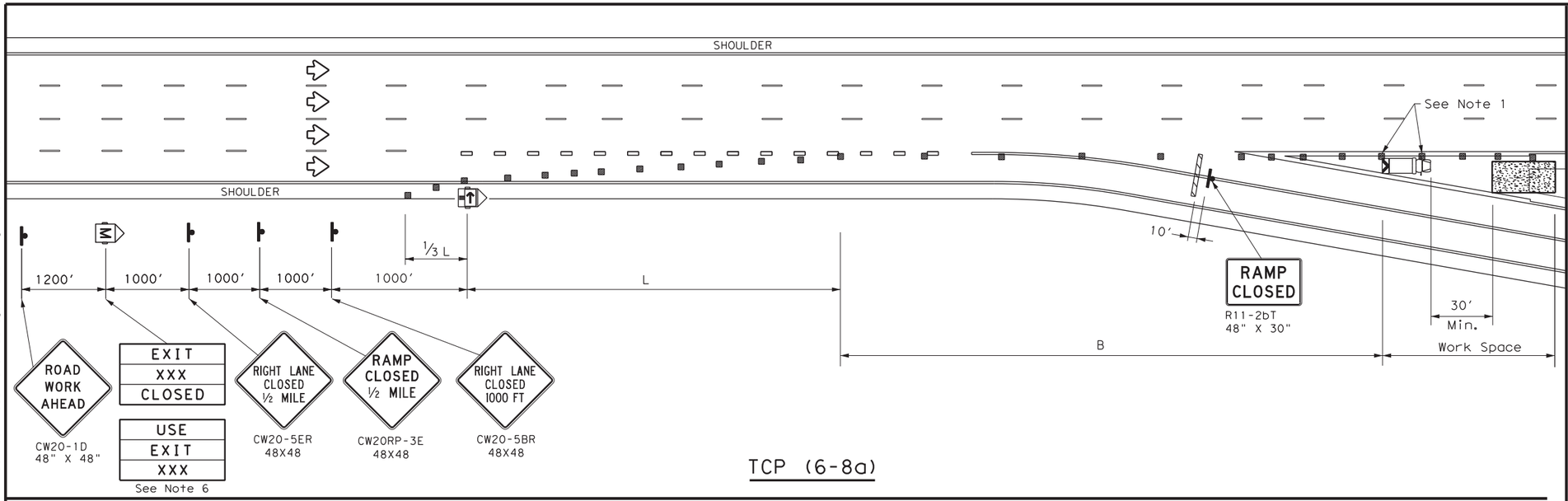
Additional requirements for lane closures and advance signing shall be as shown on TCP (6-1) or as directed by the Engineer.

Texas Department of Transportation
Traffic Operations Division Standard

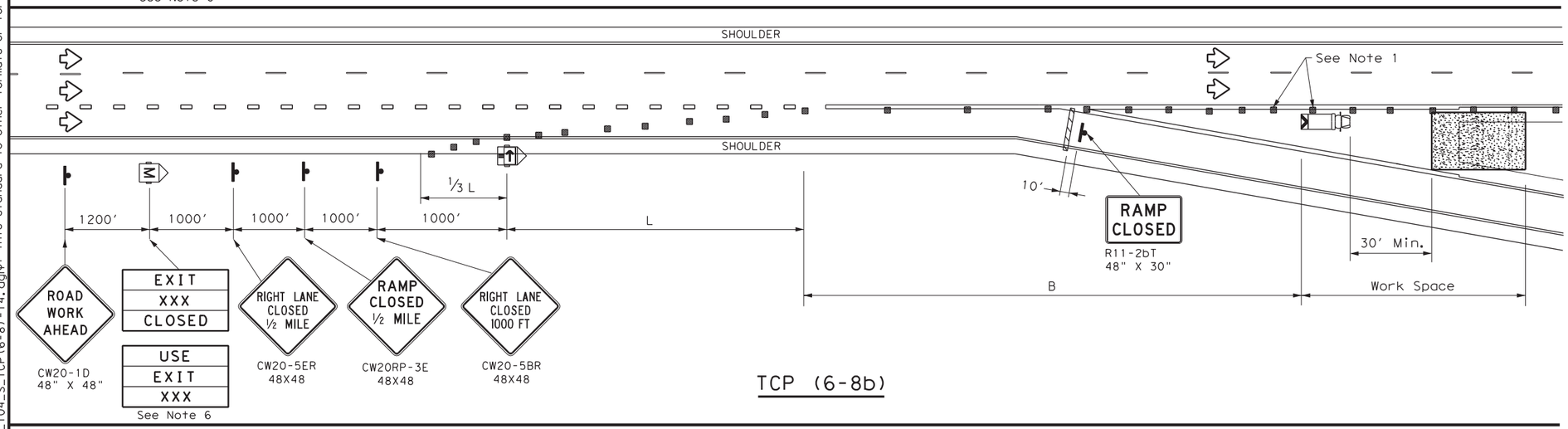
TRAFFIC CONTROL PLAN FREEWAY CLOSURE

TCP(6-6)-12

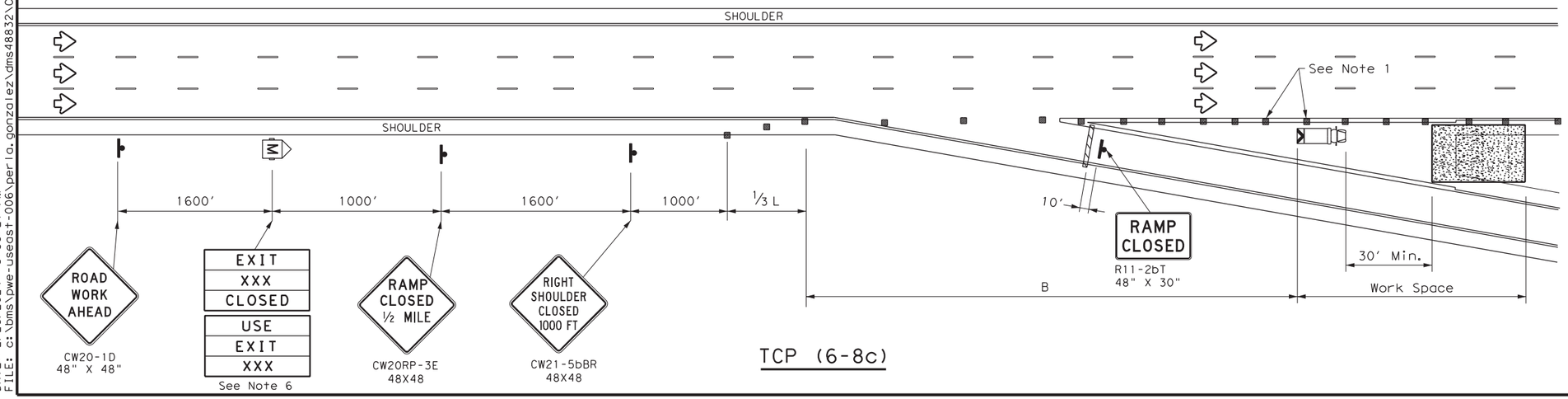
FILE: tcp6-6.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT February 1994	CONT	SECT	JOB	HIGHWAY
REVISIONS	2121	01	104	IH 10
1-97 8-98	DIST	COUNTY		SHEET NO.
4-98 8-12	ELP	EL PASO		176



TCP (6-8a)



TCP (6-8b)



TCP (6-8c)

LEGEND			
	Type 3 Barricade		Channelizing Devices (CDs)
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board		Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed	Formula	Minimum Desirable Taper Lengths "L" ** 10′ Offset	11′ Offset	12′ Offset	Suggested Maximum Spacing of Channelizing Devices On a Taper	On a Tangent	Suggested Longitudinal Buffer Space "B"
45	L=WS	450′	495′	540′	45′	90′	195′
50		500′	550′	600′	50′	100′	240′
55		550′	605′	660′	55′	110′	295′
60		600′	660′	720′	60′	120′	350′
65		650′	715′	780′	65′	130′	410′
70		700′	770′	840′	70′	140′	475′
75		750′	825′	900′	75′	150′	540′
80		800′	880′	960′	80′	160′	615′

** Taper lengths have been rounded off.
L=Length of Taper(FT) W=Width of Offset(FT)
S=Posted Speed(MPH)

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	✓	✓		

GENERAL NOTES

1. Place channelizing devices in the gore at 20′ spacing.
2. See the Standard Highway Sign Design for Texas (SHSD) for sign details.
3. The PCMS may be omitted when a permanent DMS sign is available in an appropriate location to display a similar message as called for on the PCMS.
4. When it is determined that a through lane should be closed in addition to the exit ramp, refer to TCP(6-4) for traffic control details.
5. Truck mounted attenuator is required.
6. The PCMS may be omitted if replaced with a "RAMP CLOSED" AHEAD (CW20RP-3D) Sign.
7. Roadway ADT should be greater than 10,000.

Texas Department of Transportation

Traffic Operations Division Standard

WORK IN EXIT GORE FOR ADT GREATER THAN 10,000

TCP(6-8)-14

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©TxDOT February 2014	CONT	SECT	JOB	HIGHWAY
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	DIST	COUNTY		SHEET NO.
	ELP	EL PASO		177

208

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CONTROL	SECTION	JOB	HIGHWAY
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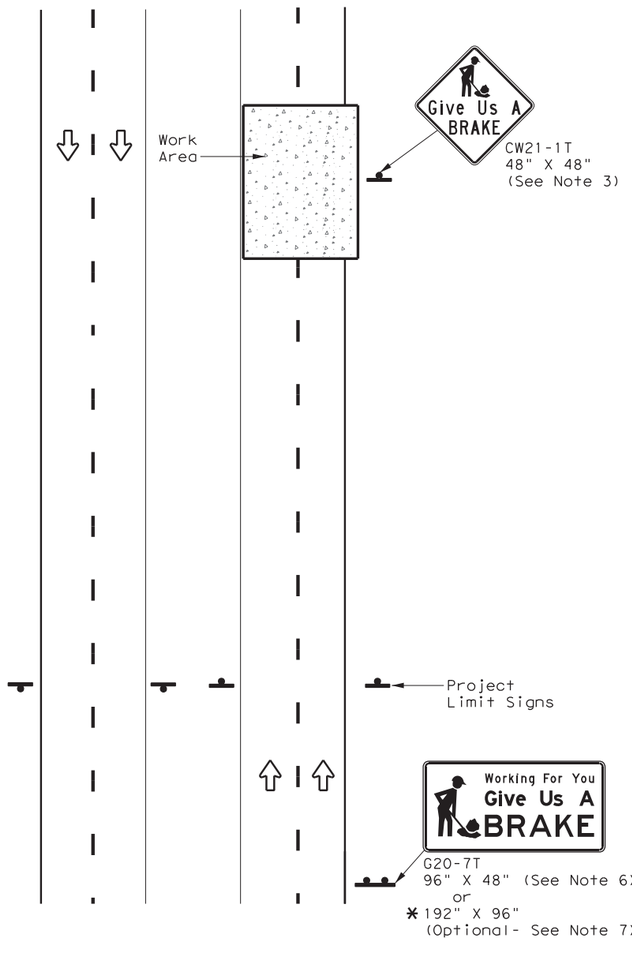
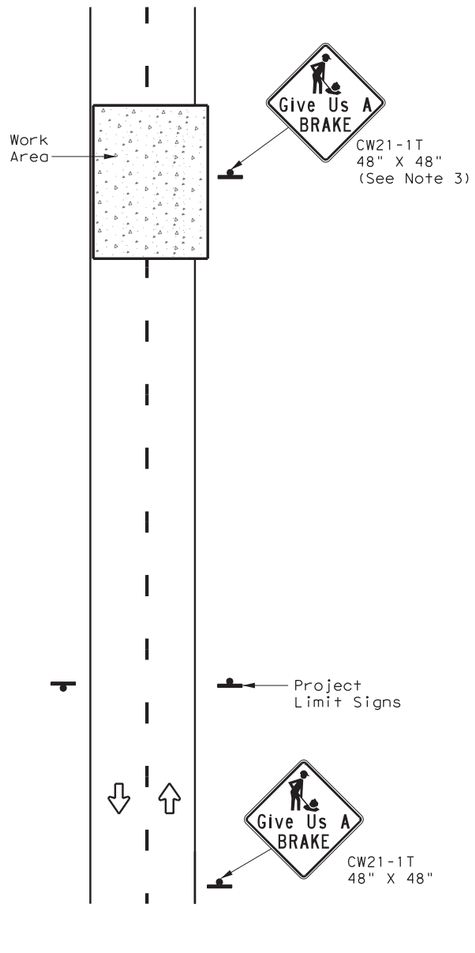


DIVIDED HIGHWAY



UNDIVIDED HIGHWAY

SIGNS ARE SHOWN FOR ONE DIRECTION OF TRAVEL

* When the optional larger WORKING FOR YOU GIVE US A BRAKE (G20-7T) 192" x 96" sign is required, the locations shall be noted elsewhere in the plans.

SUMMARY OF LARGE SIGNS

BACKGROUND COLOR	SIGN DESIGNATION	SIGN	SIGN DIMENSIONS	REFLECTIVE SHEETING	SQ FT	GALVANIZED STRUCTURAL STEEL			DRILLED SHAFT 24" DIA. (LF)
						Size	(LF) ①	(LF) ②	
Orange	G20-7T	Working For You Give Us A BRAKE	96" X 48"	Type B_{FL} or C_{FL}	32	▲	▲	▲	▲
Orange	G20-7T	Working For You Give Us A BRAKE	192" X 96"	Type B_{FL} or C_{FL}	128	W8x18	16	17	12

▲ See Note 6 Below

LEGEND	
	Sign
	Large Sign
	Traffic Flow

DEPARTMENTAL MATERIAL SPECIFICATIONS	
PLYWOOD SIGN BLANKS	DMS-7100
ALUMINUM SIGN BLANKS	DMS-7110
SIGN FACE MATERIALS	DMS-8300

COLOR	USAGE	SHEETING MATERIAL
ORANGE	BACKGROUND	TYPE B_{FL} OR TYPE C_{FL}
BLACK	LEGEND & BORDERS	NON-REFLECTIVE ACRYLIC FILM

GENERAL NOTES

1. See BC and SMD sheets for additional sign support details.
2. Sign locations shall be approved by the Engineer.
3. For projects more than two miles in length, Give Us a BRAKE signs should be repeated halfway through the project. The Give Us a Brake (CW21-1T) may be used for this purpose.
4. Work zone speed limits are sometimes used in conjunction with GIVE US A BRAKE signing. See BC(3) for location and spacing of construction speed zone signing when required.
5. Give Us a Brake (CW21-1T) signs and supports shall be considered subsidiary to Item 502, "Barricades, Signs and Traffic Handling."
6. The 96" X 48" Working For You Give Us A BRAKE (G20-7T) may use a 1/2" or 5/8" plywood substrate or 0.125" aluminum sheeting substrate and may be supported by two 4" x 6" wood posts with drilled holes for breakaway as per BC(5) and will be subsidiary to Item 502.
7. The Working For You Give Us A BRAKE (G20-7T) 192" X 96" sign shall be paid for under the following specification items:
   Item 636 - Aluminum Signs
   Item 647 - Large Roadside Sign Supports and Assemblies.
   Item 416 - Drilled Shaft Foundations
8. All signs shall be constructed in accordance with the details found in the "Standard Highway Sign Designs for Texas," latest edition. Sign details not shown in this manual shall be shown in the plans or the Engineer shall provide a detail to the Contractor before the sign is manufactured.

Texas Department of Transportation

Traffic Operations Division Standard

WORK ZONE "GIVE US A BRAKE" SIGNS

WZ(BRK)-13

FILE: wzbrk-13.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT August 1995	CONT	SECT	JOB	HIGHWAY
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6-96 5-98 7-13	DIST	COUNTY		SHEET NO.
8-96 3-03	ELP	EL PASO		180

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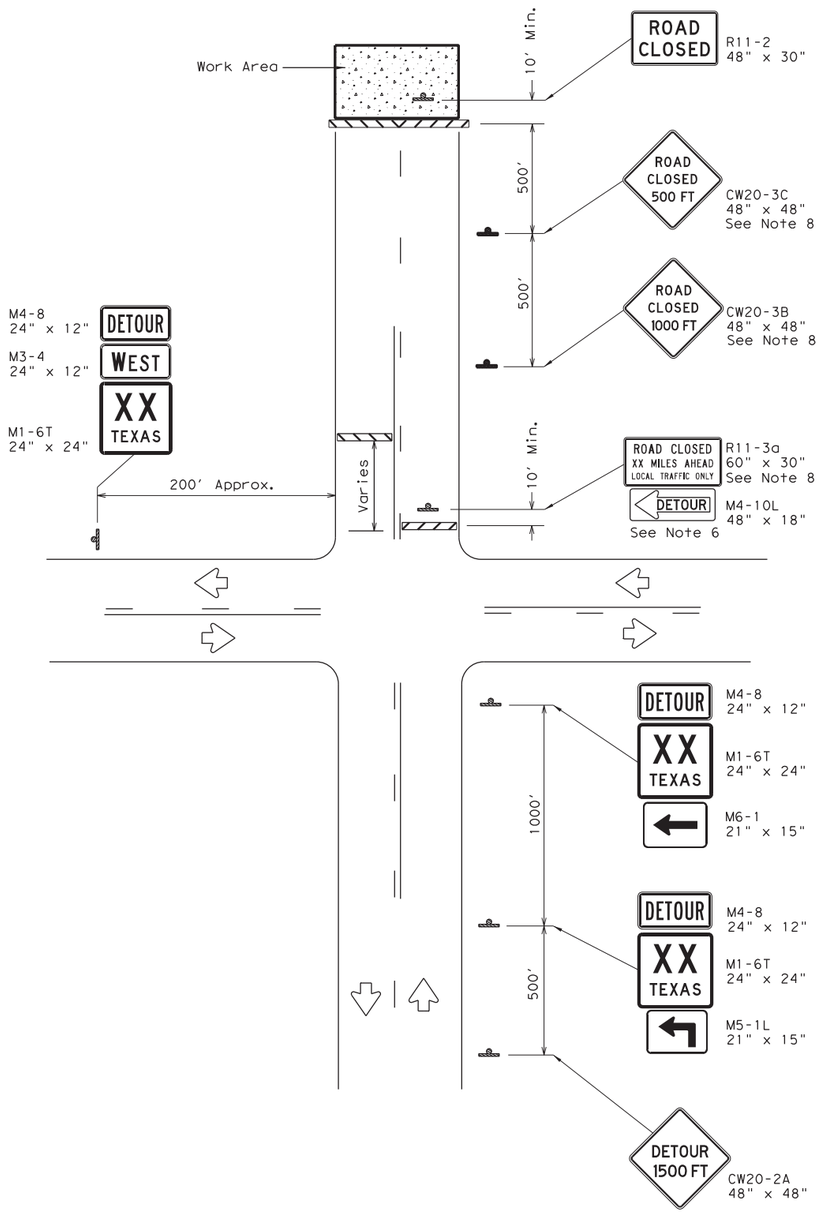
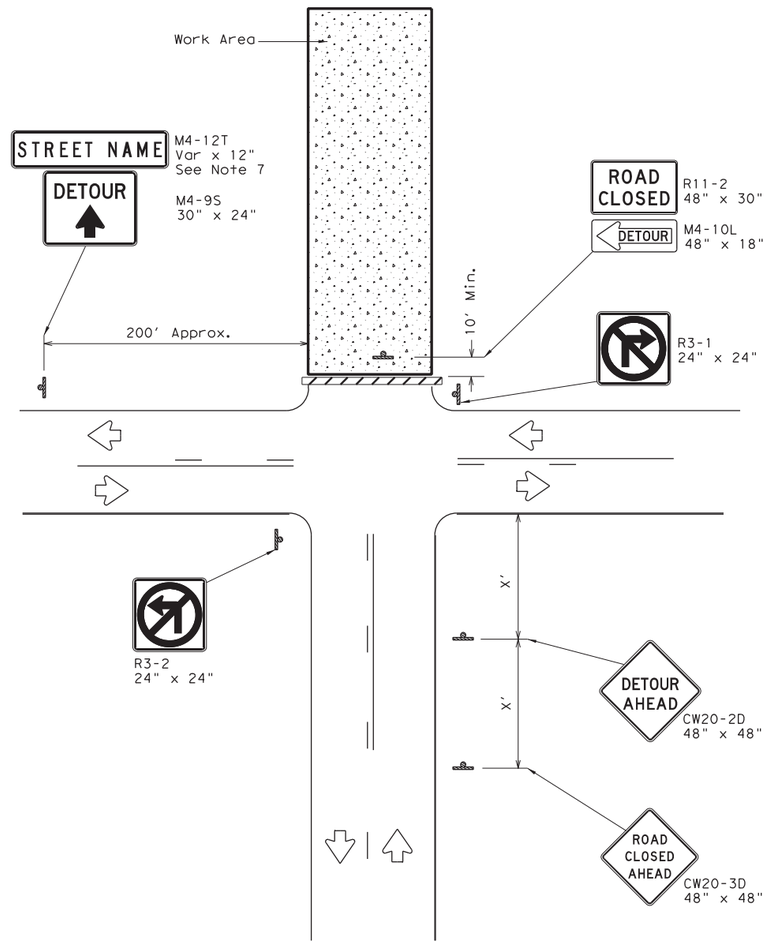


ROAD CLOSURE BEYOND THE INTERSECTION

Signing for a Numbered Route with an Off-Site Detour



ROAD CLOSURE AT THE INTERSECTION

Signing for an Un-numbered Route with an Off-Site Detour

LEGEND	
	Type 3 Barricade
	Sign

Posted Speed *	Minimum Sign Spacing "X" Distance
30	120'
35	160'
40	240'
45	320'
50	400'
55	500'
60	600'
65	700'
70	800'
75	900'

* Conventional Roads Only

GENERAL NOTES

1. This sheet is intended to provide details for temporary work zone road closures. For permanent road closure details see the D&OM standards.
2. Barricades used shall meet the requirements shown on Barricade and Construction Standard BC(10) and listed on the Compliant Work Zone Traffic Control Devices list (CWZTCD).
3. Stockpiled materials shall not be placed on the traffic side of barricades.
4. Barricades at the road closure should extend from pavement edge to pavement edge.
5. Detour signing shown is intended to illustrate the type of signing that is appropriate for numbered routes or un-numbered routes as labeled. It does not indicate the full extent of detour signing required. Detour routes should be signed as shown elsewhere in the plans.
6. If the road is open for a significant distance beyond the intersection or there are significant origin/destination points beyond the intersection, the signs and barricades at this location should be located at the edge of the traveled way.
7. The Street Name (M4-12T) sign is to be placed above the DETOUR (M4-9S) sign.
8. For urban areas where there is a shorter distance between the intersection and the actual closure location, the ROAD CLOSED XX MILES AHEAD (R11-3a) sign may be replaced with a ROAD CLOSED TO THRU TRAFFIC (R11-4) sign. If adequate space does not exist between the intersection and the closure a single ROAD CLOSED AHEAD (CW20-3D) sign spaced as per the table above may replace the ROAD CLOSED 1000 FT (CW20-3B) and ROAD CLOSED 500 FT (CW20-3C) signs.
9. Signs and barricades shown shall be subsidiary to Item 502. Locations where these details will be required shall be as shown elsewhere in the plans.

Texas Department of Transportation

Traffic Operations Division Standard

WORK ZONE ROAD CLOSURE DETAILS

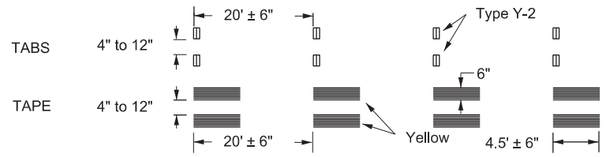
WZ(RCD)-13

FILE: wzrcd-13.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT August 1995	CONT	SECT	JOB	HIGHWAY
REVISIONS	2121	01	104	IH 10
1-97 4-98 7-13	DIST	COUNTY		SHEET NO.
2-98 3-03	ELP	EL PASO		181

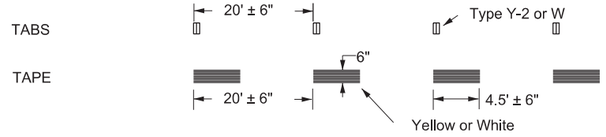
WORK ZONE SHORT TERM PAVEMENT MARKINGS DETAILS

SOLID LINES

DOUBLE NO-PASSING LINE

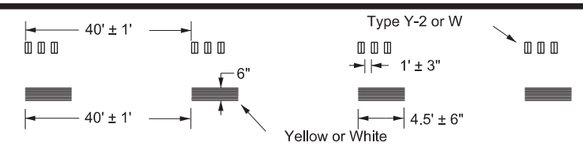


SINGLE NO-PASSING LINE or CHANNELIZATION LINE



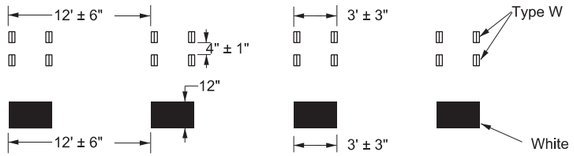
BROKEN LINES

(FOR CENTER LINE OR LANE LINE)

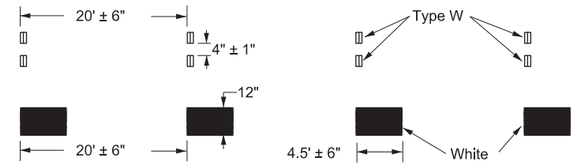


WIDE DOTTED LINES

(FOR LANE DROP LINES)



WIDE GORE MARKINGS



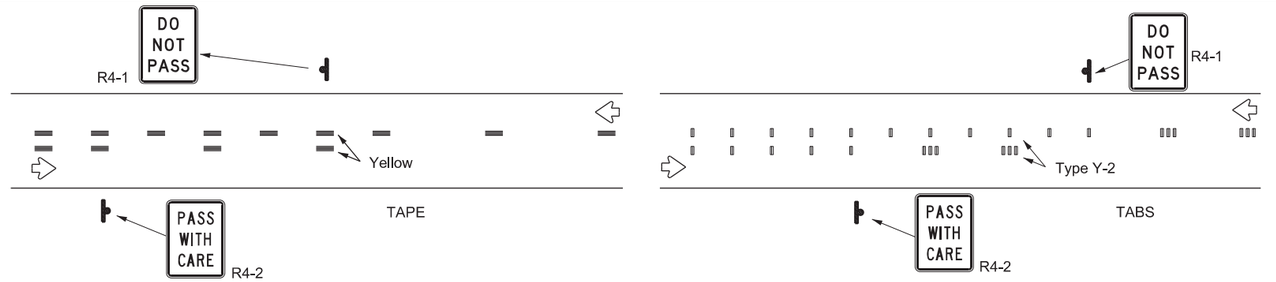
NOTES:

1. Short term pavement markings may be prefabricated markings (stick down tape) or temporary flexible reflective roadway marker tabs unless otherwise specified elsewhere in plans.
2. Short term pavement markings shall NOT be used to simulate edge lines.
3. Dimensions indicated on this sheet are typical and approximate. Variations in size and height may occur between markers or devices made by manufacturers, by as much as 1/4 inch, unless otherwise noted.
4. Temporary flexible-reflective roadway marker tabs will require normal maintenance replacement when used on roadways with an ADT per lane of up to 7500 vehicles with no more than 10% truck mix. When roadways exceed these values, additional maintenance replacement of devices should be planned.
5. No segment of roadway open to traffic shall remain without permanent pavement markings for a period greater than 14 calendar days. The Contractor will be responsible for maintaining short term pavement markings until permanent pavement markings are in place. When the Contractor is responsible for placement of permanent pavement markings, no segment of roadway shall remain without permanent pavement markings for a period greater than 14 calendar days unless weather conditions prohibit placement. Permanent pavement markings shall be placed as soon as weather permits.
6. For two lane, two-way roadways, DO NOT PASS signs shall be erected to mark the beginning of sections where passing is prohibited and PASS WITH CARE signs shall be erected to mark the beginning of sections where passing is permitted. Signs shall be in accordance with the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD) and may be used to indicate the limits of no-passing zones for up to 14 calendar days. Permanent pavement markings should then be placed.
7. For low volume two lane, two-way roadways of 4000 ADT or less, no-passing lines may be omitted when approved by the Engineer. DO NOT PASS and PASS WITH CARE signs shall be erected (see note 6).
8. For exit gores where a lane is being dropped place wide gore markings or retroreflective channelizing devices to guide motorist through the exit. If channelizing devices are to be used it should be noted elsewhere in the plans. One piece cones are not allowed for this purpose.

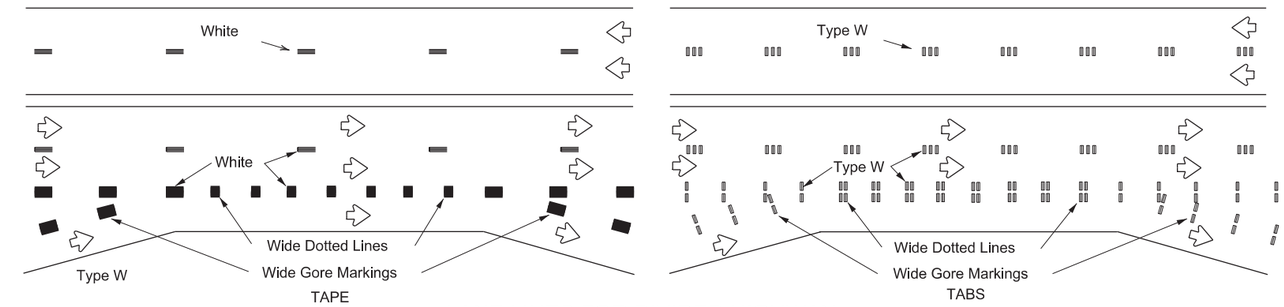
TEMPORARY FLEXIBLE, REFLECTIVE ROADWAY MARKER TABS (TABS)

1. Temporary flexible-reflective roadway marker tabs detailed on this sheet will be designated Type Y-2 (two amber reflective surfaces with yellow body); Type Y (one amber reflective surface with yellow body); and Type W (one white or silver reflective surface with white body). Additional details may be found on BC(11).
2. Tabs shall meet requirements of Departmental Material Specification DMS-8242.
3. When dry, tabs shall be visible for a minimum distance of 200 feet during normal daylight hours and when illuminated by automobile low-beam head light at night, unless sight distance is restricted by roadway geometrics.
4. No two consecutive tabs nor four tabs per 1000 feet of line shall be missing or fail to meet the visual performance requirements of Note 3.

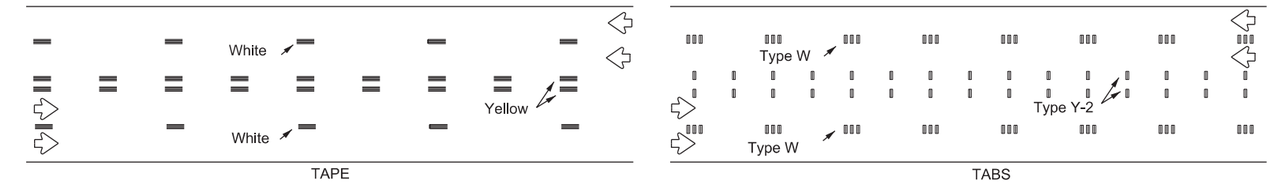
WORK ZONE SHORT TERM PAVEMENT MARKINGS PATTERNS



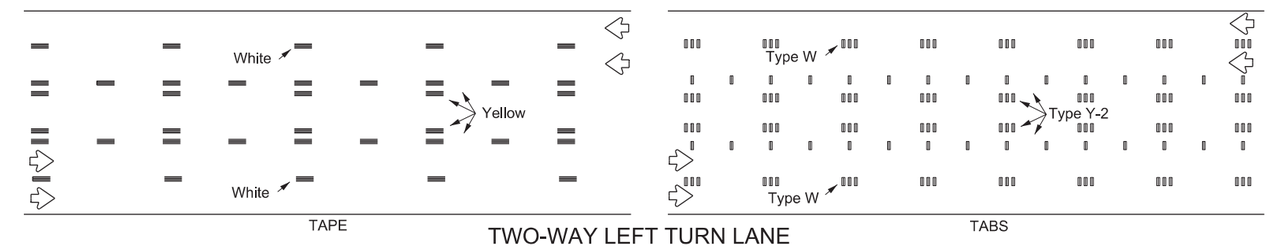
CENTER LINE & NO-PASSING ZONE BARRIER LINES FOR TWO LANE TWO-WAY HIGHWAYS



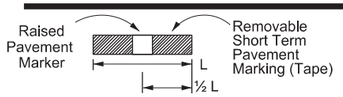
LANE LINES FOR DIVIDED HIGHWAY



LANE & CENTER LINES FOR MULTILANE UNDIVIDED HIGHWAYS



TWO-WAY LEFT TURN LANE



If raised pavement markers are used to supplement REMOVABLE short term markings, the markers shall be applied to the top of the tape at the approximate mid length of the tape. This allows an easier removal of raised markers and tape.

PREFABRICATED PAVEMENT MARKINGS

1. Temporary Removable Prefabricated Pavement Markings shall meet the requirements of DMS-8241.
2. Non-removable Prefabricated Pavement Markings shall meet the requirements of either DMS-8240 "Permanent Prefabricated Pavement Markings" or DMS-8243 "Temporary Costruction-Grade Prefabricated Pavement Markings."

RAISED PAVEMENT MARKERS

1. All raised pavement markers used for work zone markings shall meet the requirements of Item 672, "RAISED PAVEMENT MARKERS" and DMS-4200.

DEPARTMENTAL MATERIAL SPECIFICATIONS (DMS) & MATERIAL PRODUCER LISTS (MPL)

1. DMSs referenced above can be found along with embedded links to their respective MPLs at the following website:

http://www.txdot.gov/business/contractors_consultants/material_specifications/default.htm

Texas Department of Transportation

Traffic Safety Division Standard

WORK ZONE SHORT TERM PAVEMENT MARKINGS

WZ(STPM)-23

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