



DOUBLE OAK

Town of Double Oak
Town Council –Public Meeting

Double Oak Town Hall
320 Waketon Road, Double Oak
TX 75077

Tuesday, January 17, 2023
7:00 p.m.

OUT OF RESPECT FOR ALL THOSE IN ATTENDANCE, PLEASE REFRAIN FROM TALKING TO OTHER MEMBERS OF THE AUDIENCE DURING THE MEETING

- I. Opening:** Call to Order
Roll Call
Invocation
Pledge of Allegiance – American Flag
Pledge of Allegiance – Texas Flag

“Honor the Texas flag; I pledge allegiance to thee, Texas, one state under God, one and indivisible.”

II. Citizen Comments-Non-Agenda Subjects

- III. Consent Agenda** - All consent agenda items listed are considered to be routine by the Town Council and will be enacted by one motion. There will be no separate discussion of these items unless a Council Member so requests, in which event the item will be removed from the Consent Agenda and considered in its normal sequence on the agenda. Information concerning consent agenda items is available for public review.

1. Consideration, and action on minutes of December 19, 2022. *

IV. Mayor, Council Members and Staff reports:

2. Mayor and Council
3. Public Works - Code Enforcement – Animal Control
4. Administration
5. Public Safety
6. Road and Drainage Committee

V. New business agenda (consideration and action):

7. Update on Braum’s Development.

Presentation: Helen Pacione, Braum’s Director of Real Estate

8. Discussion, consideration, and action on a presentation and overview of the Comprehensive Drainage Plan.

Presentation: Steve Templer, Town Engineer, Halff & Associates

9. Discussion, consideration, and action on the 2022-2023 Asphalt, Mill, and Overlay Bid Project.
Presentation: Steve Templer, Town Engineer, Halff & Associates
10. Discussion, consideration, and action on eCode 360 Premium.
Presentation: Council Member Jean Hillyer
11. Discussion, consideration, and action on extending Dell warranty with Datamax.
Presentation: Council Member Jean Hillyer
12. Discussion, consideration, and action on updating the assigned fund balances for fiscal year-end 2022.
Presentation: Town Treasurer Billie Garrett
13. Discussion, consideration, and action on 2022-2023 first quarter financial report.
Presentation: Town Treasurer Billie Garrett
14. Discussion and consideration of developing a possible “Double Oak Citizens Refund Program” for the Cross Timbers Water Supply Backflow project.
Presentation: Mayor Pro Tem Patrick Johnson
Deputy Mayor Pro Tem Connie Schoenrade

VI. Old business agenda (consideration and action):

15. Council – staff announcements and comments:
 - Ruben Rivas celebrated his 17-year anniversary with Double Oak on January 6, 2023.
 - Cassandra Gaines celebrated her 2-year anniversary with Double Oak on January 4, 2023.
 - Lynn Jones will celebrate her 9-year anniversary with Double Oak on January 20, 2023.
 - Saturday, May 6, 2023, Municipal Election Day.

Seats up for election:

Mayor seat
Two Council seats

First day to file for a place on the ballot is January 18, 2023
Last day to file for a place on the ballot is February 17, 2023, by 5:00 p.m.

16. Adjournment

As authorized by Section 551.071 of the Texas Government Code, this meeting may be convened into closed Executive Session for the purpose of seeking confidential legal advice from the Town Attorney, or on any other item covered under the code, on any agenda item listed herein.

The Town of Double Oak reserves the right to reconvene, recess or realign the Regular Session or called Executive Session or order of business at any time prior to adjournment.

I certify that the above notice of meeting was posted by Friday, January 13, 2023, by 5:00 p.m. on:

- 1) Bulletin board located to the right of the front door at Town Hall, 320 Waketon Road, Double Oak, Texas
- 2) On the Town's website (<https://www.doubleoak.texas.gov>)

Eileen Kennedy

Town Secretary

PUBLIC PARTICIPATION If you wish to address the Council, please sign the "CITIZENS WHO WISH TO SPEAK TO THE TOWN COUNCIL" sheet before the meeting begins. Pursuant to Section 551.007 of the Texas Government Code, citizens wishing to address the Council for items listed as public hearings will be recognized when the public hearing is opened. For citizens wishing to speak on a non-public hearing item, they may either address the Council during the Citizen Comments portion of the meeting or when the item is considered by the Town Council.

This facility is wheelchair accessible and accessible parking spaces are available. Requests for accommodations or interpretive services must be made 48 hours prior to this meeting. Please contact the Town Secretary's office at 972.539.9464, fax 972.539.9613 or email to eileen.kennedy@doubleoak.texas.gov for additional information.

* Backup attached

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UNAPPROVED-NOT FOR PUBLICATION

**STATE OF TEXAS
COUNTY OF DENTON
TOWN OF DOUBLE OAK**

The Double Oak Town Council met in regular session at 7:00 p.m. December 19, 2022, at the Double Oak Town Hall, located at 320 Waketon Road with the following members present to-wit:

Mike Donnelly	Mayor
Patrick Johnson	Mayor Pro-Tem
Connie Schoenrade	Deputy Mayor Pro-Tem
Scott Whisenhunt	Council Member
Casey Parsons	Council Member
Jean Hillyer	Council Member

Also in attendance were Town Secretary Eileen Kennedy, Public Works Coordinator Randall Anglin, Police Chief Ruben Rivas, and Town Attorney David Berman.

Mayor Donnelly called the meeting to order at 7:01 p.m.

Council Member Scott Whisenhunt gave the invocation and Mayor Pro-Tem Patrick Johnson led the pledge of allegiance to the American and Texas flags.

II. Citizen Comments-Non-Agenda Subjects

No one signed up to speak

III. Consent Agenda - All consent agenda items listed are considered to be routine by the Town Council and will be enacted by one motion. There will be no separate discussion of these items unless a Council Member so requests, in which event the item will be removed from the Consent Agenda and considered in its normal sequence on the agenda. Information concerning consent agenda items is available for public review.

1. Consideration, and action on minutes of December 5, 2022.

Deputy Mayor Pro-Tem Schoenrade wanted added to item 6 that the detective Chief Rivas had previously mentioned was not going to join. Mayor Pro-Tem Johnson had asked about the head count and Chief Rivas said we are still needing the detective and one officer. Additionally in item number 9 just for consistency, if you could do the part time/reserve officers on the lines that were indicated toward the bottom of item 9.

Motion Johnson, seconded Schoenrade to Deputy Mayor Pro-Tem Schoenrade comment changes in regard to the reserve officers as well as the missing comments from Jill Glover and to approve the minutes and to amend Chief Rivas comments.

AYE: Hillyer, Johnson, Schoenrade, Parsons, Whisenhunt
NAY: None
ABSTAIN: None

Motion Carried

IV. Mayor, Council Members and Staff reports:

2. Mayor and Council

Mayor Pro-Tem Johnson said it is going to get really cold the next few days, please take the extra precautions to protect your pool equipment and pipes and such, it could get expensive if we do not.

Council Member Hillyer said that she would like to thank the Volunteer Fire Department for the great job they did last Sunday, taking Santa around to meet our young and our young at heart. They did a fabulous job; it takes a lot of dedication for volunteers to spend an entire day making that happen. Thank you.

3. Public Works - Code Enforcement – Animal Control

Randall Anglin said that Waketon Road is now open both lanes in both directions. There are a few items left, the rails are on back order, the road signs and speed limit signs will be posted in the next ten days. They are placing in sod and grass around Chinn Chapel all the way back to Kings Road and Cross Timbers Drive. A majority of the mailboxes have been placed in, there were a couple that they had to relocate the sidewalk because they were against the curb. The brick mailboxes will be the next to go in.

4. Administration

Eileen Kennedy, Town Secretary, stated that the Town Auditor, Carl Deaton, has completed the Town's annual audit and will be coming back in January or February to give his report. We are gearing up for the May 6, 2023, election, the notice of election has been posted, the first day to file is January 18 and the last day is February the 17 at 5pm. Lynn Jones and I will be going to the Election Law Seminar in Denton on January 12-13th. The Denton County Election Office will have their entity meeting on January 20.

5. Public Safety

Chief Rivas stated that they had their police banquet Sunday night, thank you for those who joined us, it means a lot to the officers. Chief Rivas again recognized Corporal Leinweber who received the departments meritorious award for this year and Officer Henderson received Officer of the Year award. Chief Rivas thanked them all for a job well done this year. Officer Scalco will be released this week; he will be out on his own. Officer Housmans still has a few more weeks of training then she will be out on her own. There has been complaints about speeders on Waketon so the speed limit signs will be going up pretty soon so we can start enforcing them. Mayor Pro-Tem Johnson asked

how we are doing on the head count; Chief Rivas said it is the same. Mayor Donnelly stated that there is one officer and one detective position open.

6. Road and Drainage Committee

Gary Goodman spoke about having a meeting with Halff and had a presentation on what they might do for a drainage study. There will be a meeting in April of 2023 to talk about proposed roads for crack sealing during the summer. The committee has decided to start evaluating roads for crack sealing and reconstruction sometime in the late summer so that we can produce a proposal and have it ready for Council to act on when they so desire. Deputy Mayor Pro-Tem Schoenrade said is there a way that we can get the project covered by the SLRF funds, Randall Anglin stated that has been proposed. Council Member Hillyer stated that the SLRF funds may be used for the study, anything that comes out of that that we elect to pursue we can always point back to the study that justifies using that, so we have done our due diligence as opposed to just doing these and assuming the use.

V. New business agenda (consideration and action):

7. Discussion, consideration, and action on presentation by Cross Timbers Water Supply Corporation on backflow prevention devices required by CTWSC.

Cody Claitt, Cross Timbers Water, stated he is running the backflow program and gave a bit of history. In 2009, TCEQ said that all backflow systems that are attached to irrigation that have septic systems will no longer be allowed to have a double check valve. 2020 they revised that and said all backflow assemblies must be tested annually and must be an RPZ. Mayor Pro-Tem Johnson asked if the inspection will be free every year? Council Member Parsons stated no it will be between \$100 to \$150 a year. Council Member Hillyer stated that Cross Timbers Water has no choice. It is mandated by TCEQ. The customers have to maintain everything on the back side of the meter to be in compliance with the state and Cross Timbers Water.

8. Discussion, consideration, and action on sprinkler repairs on town property.

Randall Anglin stated that there are two estimates in the packet brought forward by Scott's Sprinklers. The \$2450 estimate is for repairs to zones 2 and 3 that were damaged during the construction project and to be paid by the contractor. The \$1475.00 estimate is the new portion between the sidewalk and the curb, just west of the driveway where we did not have a curb or spray heads before. The road was skinnier at that time and water traveled through and it will no longer do that, so we looked at adding irrigation. The estimate is to add an additional zone and to split zone 2 into two halves.

Motion Hillyer, seconded Parsons to approve the estimate from Scott's Sprinklers LLC in the amount of \$1475 for the proposed changes to our sprinkler system to cover the area between the street and the sidewalk.

AYE: Hillyer, Johnson, Schoenrade, Parsons, Whisenhunt
NAY: None
ABSTAIN: None

Motion Carried

9. Discussion, consideration, and action on amending check writing - spending authorization resolution.

Town Attorney David Berman stated we have talked about a draft resolution at the request of Council just to impose more controls over the mayor's discretionary spending control. The draft Resolution maintains the \$2000 spending limit, the mayor may only expend funds in strict compliance with the budget except for emergencies which is pretty much what state law requires anyways. It says that funds in excess of \$2000, an expenditure must be approved by the Council if the expenditure is made from funds held by the Town whether in the general fund or any fund comprised of revenues from any source. It also contains a sentence; an expenditure violation of those requirements is void. Town Attorney Berman went over the spending guidelines from the drafted Resolution. What it does not say is in the event that they Mayor does make an expenditure that exceeds the expenditure guidelines over \$2000 and does not have prior council approval, the resolution indicates that the expenditure would be void. That does not prohibit the council from considering it at the next available council meeting the ratification of the expenditure, there may be a circumstance because of the timing of the meetings he does not have a chance to, or the expenditure needs to be made quickly.

Motion Hillyer, seconded Schoenrade that we adopt the resolution of the Town Council of the Town of Double Oak Texas adopting the expenditure guidelines and check authorization levels providing an appealing clause, providing a severability clause, and providing an effective date. Once approved to be signed by our mayor and our attorney.

AYE: Hillyer, Johnson, Schoenrade, Parsons, Whisenhunt
NAY: None
ABSTAIN: None

Motion Carried

10. Discussion, consideration, and action amending and adopting the Investment Policy.

Deputy Mayor Pro-Tem Schoenrade, top of the page on Exhibit A, the heading should have the Town of Double Oak. Deputy Mayor Pro-Tem Schoenrade suggested in the Investment Strategy Section, A, remove the "or barbell" method of investment strategy because that is a no risk or high-risk investment strategy. We should be conservative with the Town funds. Council Member Hillyer stated that barbell investing is typically in bonds which we do not have. Barbell is only high-risk if your investment time frame is a mismatch as to when you need the funds. The Investment Committee setting the time frames for those investments to roll over and be reinvested based on the need for the funds that are in that asset. Changing it really limits the ability of future Investment Committees to do their job. By a vote of hands by the Town Council the phrase "or barbell" will stay in the resolution. Mr. Carl Deaton, Town Auditor,

commented that we do not do the CAFR so that should be removed from the policy. Town Attorney Berman stated to strike out part of the sentence and put “the financial policy applies to all financial aspects of the Town and includes.” Deputy Mayor Pro-Tem Schoenrade asked that the mayor be put back into the list of members.

No action taken on this item.

11. Discussion and action on the Town Organization Chart.

This item will be postponed to a future council meeting.

12. Discussion, consideration, and action on amending and adopting an ordinance related to reserve/part-time police officers.

Town Attorney Berman said this is a codified ordinance that will amend the Code of Ordinances and will clarify the distinction between part time police officers and members of the reserve force.

Motion Parson, second Johnson that we approve the ordinance that is presented to amend the code of ordinances as presented for the distinction between unpaid reserve officers and paid part time officers.

AYE: Hillyer, Johnson, Schoenrade, Parsons, Whisenhunt

NAY: None

ABSTAIN: None

Motion Carried

VI. Old business agenda (consideration and action):

13. Council – staff announcements and comments:

Council Member Hillyer asked at the last meeting we did not approve premium pay for the reserves because Connie was not comfortable with the hours. Will that be moved to another meeting. Mayor Pro-Tem Johnson stated that he believed because of the confusion of the past and now this starts moving forward I do not see where we would need to take that into consideration. Council Member Parsons said to bring it up and put it on an agenda and a decision may be made then.

Mayor Pro-Tem Johnson asked if it would be possible to have someone from Braum’s come and give an update.

14. Adjournment

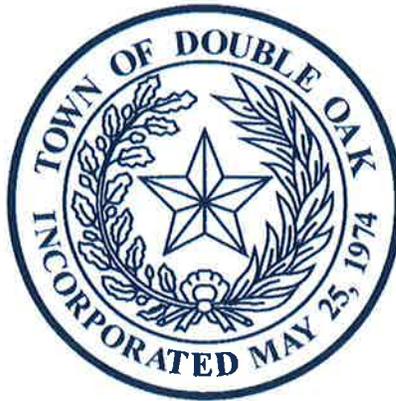
With no further business to come before the Council, motion Hillyer, second Whisenhunt, the meeting was adjourned at 9:58 p.m.

Approved:

Mike Donnelly, Mayor

Attest:

Eileen Kennedy, Town Secretary



Double Oak Police Department Activity Log

Date Range: 10/1/2022 - 10/31/2022 Times: All Times

CALL TYPE	#
ABANDONED VEHICLE	1
ADMINISTRATIVE DUTY	2
AGENCY ASSIST	17
ALARM	5
ALARM COMMERCIAL FIRE	0
ALARM HOLDUP PANIC SILENT	0
ALARM MEDICAL	0
ANIMAL BITE REPORT	1
ANIMAL COMPLAINT	0
ANIMAL CRUELTY REPORT	0
ASSAULT	0
ASSAULT SEXUAL	0
BUILDING CHECK	205
BREATHING PROBLEMS	0
BURGLARY	1
CARBON MONOXIDE OR HAZMAT	0
CARDIAC OR RESP ARREST	0
CHEST PAIN	0
CHILD CUSTODY	1
CLOSE PATROL	44
CONVULSIONS SEIZURES	0
CRIMINAL MISCHIEF	1
CRIMINAL TRESPASS	0
DEADLY CONDUCT	0
DISTURBANCE	2
DISTURBANCE DOMESTIC	2
EMERGENCY MESSAGE	0
ENTRAPMENTS	0
ESCORT COURTESY	0
FALLS	0
FIRE GRASS	0
FIRE ILLEGAL BURN	0
FIRE UNKNOWN	0
FIREWORKS COMPLAINT	0
FOLLOW UP INVESTIGATION	2
FORGERY FRAUD	3
FOUND PROPERTY	1
GUN SHOTS HEARD	0
HANG UP 911	3

CALL TYPE	#
HARASSMENT	0
HEMORRHAGE LACERATIONS	0
ILLEGAL DUMPING	0
INTOXICATED PERSON	0
JUVENILE COMPLAINT	0
LOOSE LIVESTOCK	0
MEET COMPLAINANT	9
MISSING PERSON	0
MOTOR/BOATER ASSIST	0
NARCOTICS	0
NEAR DROWNING	0
NOISE COMPLAINT	2
OPEN DOOR	9
ORDINANCE VIOLATION	1
OVERDOSE POISONING	0
PERSON WITH A GUN	0
PSYCH OR SUICIDE ATTEMPT	0
PRISONER TRANSFER	0
RECKLESS DRIVER/BOATER	1
ROAD BLOCKAGE HAZARD	2
ROBBERY	0
SAFETY INSPECTION	1
SEARCH AND RESCUE	0
SICK PERSON	0
SPECIAL PATROL	7
SUSP PERSON/VEHICLE/ACTIVITY	7
TERRORISTIC THREAT	0
THEFT	1
TRAFFIC	161
TRAFFIC COMPLAINT	1
TRAFFIC TRANSPORT INCIDENT	2
UNCONSCIOUS FAINTING	0
VEHICLE CHECK	0
VEHICLE COMPLAINT	2
VACATION WATCH	29
WALK THRU	0
WARRANT SERVICE	0
WATER MAIN BREAK	0
WELFARE CONCERN	2

TOTAL CALLS FOR SERVICE: 528



TRAFFIC STOPS	#
WRITTEN CITATIONS	56
WRITTEN WARNINGS	101
TRAFFIC CLEARED N1	1
TRAFFIC CLEARED N8	3
TOTAL STOPS:	161

Double Oak Police Department Activity Log

Date Range: 11/1/2022 - 11/30/2022 Times: All Times

CALL TYPE	#
ABANDONED VEHICLE	0
ADMINISTRATIVE DUTY	1
AGENCY ASSIST	15
ALARM	3
ALARM COMMERCIAL FIRE	0
ALARM HOLDUP PANIC SILENT	0
ALARM MEDICAL	0
ANIMAL BITE REPORT	1
ANIMAL COMPLAINT	2
ANIMAL CRUELTY REPORT	1
ASSAULT	1
ASSAULT SEXUAL	0
BUILDING CHECK	164
BREATHING PROBLEMS	1
BURGLARY	0
CARBON MONOXIDE OR HAZMAT	0
CARDIAC OR RESP ARREST	0
CHEST PAIN	0
CHILD CUSTODY	0
CLOSE PATROL	39
CONVULSIONS SEIZURES	0
CRIMINAL MISCHIEF	0
CRIMINAL TRESPASS	0
DEADLY CONDUCT	0
DISTURBANCE	1
DISTURBANCE DOMESTIC	0
EMERGENCY MESSAGE	0
ENTRAPMENTS	0
ESCORT COURTESY	0
FALLS	1
FIRE GRASS	0
FIRE ILLEGAL BURN	0
FIRE UNKNOWN	0
FIREWORKS COMPLAINT	0
FOLLOW UP INVESTIGATION	3
FORGERY FRAUD	1
FOUND PROPERTY	0
GUN SHOTS HEARD	0

CALL TYPE	#
HANG UP 911	2
HARASSMENT	1
HEMORRHAGE LACERATIONS	0
ILLEGAL DUMPING	0
INTOXICATED PERSON	0
JUVENILE COMPLAINT	1
LOOSE LIVESTOCK	0
MEET COMPLAINANT	5
MISSING PERSON	1
MOTOR/BOATER ASSIST	5
NEAR DROWNING	0
NOISE COMPLAINT	0
OPEN DOOR	1
ORDINANCE VIOLATION	1
OVERDOSE POISONING	0
PERSON WITH A GUN	0
PSYCH OR SUICIDE ATTEMPT	0
PRISONER TRANSFER	2
RECKLESS DRIVER/BOATER	1
ROAD BLOCKAGE HAZARD	2
ROBBERY	0
SAFETY INSPECTION	0
SEARCH AND RESCUE	0
SICK PERSON	1
SPECIAL PATROL	0
SUSP PERSON/VEHICLE/ACTIVITY	4
TERRORISTIC THREAT	0
THEFT	1
TRAFFIC	115
TRAFFIC COMPLAINT	3
TRAFFIC TRANSPORT INCIDENT	1
UNCONSCIOUS FAINTING	0
VEHICLE CHECK	0
VEHICLE COMPLAINT	2
VACATION WATCH	62
WALK THRU	0
WARRANT SERVICE	0
WELFARE CONCERN	5



TOTAL CALLS FOR SERVICE: 450

TRAFFIC STOPS	#
WRITTEN CITATIONS	52
WRITTEN WARNINGS	64
TRAFFIC CLEARED N1	0
TRAFFIC CLEARED N8	0
TOTAL STOPS:	116

**Double Oak Police Department
Activity Log**

Date Range: 12/1/2022 - 12/31/2022 Times: All Times

CALL TYPE	#
ABANDONED VEHICLE	0
ADMINISTRATIVE DUTY	1
AGENCY ASSIST	14
ALARM	2
ALARM COMMERCIAL FIRE	0
ALARM HOLDUP PANIC SILENT	0
ALARM MEDICAL	0
ANIMAL BITE REPORT	1
ANIMAL COMPLAINT	0
ANIMAL CRUELTY REPORT	1
ASSAULT	0
ASSAULT SEXUAL	0
BUILDING CHECK	220
BREATHING PROBLEMS	1
BURGLARY	4
CARBON MONOXIDE OR HAZMAT	1
CARDIAC OR RESP ARREST	0
CHEST PAIN	0
CHILD CUSTODY	1
CLOSE PATROL	49
CONVULSIONS SEIZURES	0
CRIMINAL MISCHIEF	0
CRIMINAL TRESPASS	0
DEADLY CONDUCT	0
DISTURBANCE	0
DISTURBANCE DOMESTIC	1
EMERGENCY MESSAGE	0
ENTRAPMENTS	0
ESCORT COURTESY	0
FALLS	0
FIRE GRASS	0
FIRE ILLEGAL BURN	0
FIRE UNKNOWN	0
FIREWORKS COMPLAINT	0
FOLLOW UP INVESTIGATION	6
FORGERY FRAUD	1
FOUND PROPERTY	2
GUN SHOTS HEARD	0
HANG UP 911	0

CALL TYPE	#
HARASSMENT	0
HEMORRHAGE LACERATIONS	0
ILLEGAL DUMPING	0
INTOXICATED PERSON	0
JUVENILE COMPLAINT	0
LOOSE LIVESTOCK	0
MEET COMPLAINANT	8
MISSING PERSON	0
MOTOR/BOATER ASSIST	1
NARCOTICS	1
NEAR DROWNING	0
NOISE COMPLAINT	0
OPEN DOOR	1
ORDINANCE VIOLATION	0
OVERDOSE POISONING	0
PERSON WITH A GUN	0
PSYCH OR SUICIDE ATTEMPT	0
PRISONER TRANSFER	0
RECKLESS DRIVER/BOATER	1
ROAD BLOCKAGE HAZARD	6
ROBBERY	0
SAFETY INSPECTION	0
SEARCH AND RESCUE	0
SICK PERSON	0
SPECIAL PATROL	7
SUSP PERSON/VEHICLE/ACTIVITY	7
TERRORISTIC THREAT	1
THEFT	2
TRAFFIC	115
TRAFFIC COMPLAINT	1
TRAFFIC TRANSPORT INCIDENT	4
UNCONSCIOUS FAINTING	0
VEHICLE CHECK	0
VEHICLE COMPLAINT	2
VACATION WATCH	92
WALK THRU	6
WARRANT SERVICE	0
WATER MAIN BREAK	2
WELFARE CONCERN	4

TOTAL CALLS FOR SERVICE: 566



TRAFFIC STOPS	#
WRITTEN CITATIONS	34
WRITTEN WARNINGS	77
TRAFFIC CLEARED N1	0
TRAFFIC CLEARED N8	5
TOTAL STOPS:	116

4th Quarter 2022 CID Report

October 1st – December 31st 2022

Arrest Warrants obtained: 0

Search Warrants obtained: 0

Subpoenas obtained: 0

Cases filed with DA's office: 1

Total Number of Defendants on cases filed: 2

Cases forwarded to other jurisdictions: 3

Total number of defendants on cases forwarded: 0

There were numerous other reports that were followed up on or that did not rise to a criminal offense to include multiple criminal trespass warnings issued, civil dispute calls, verbal disturbances between family members, mental health calls and welfare concern calls. Background investigations for multiple applicants were conducted this quarter yielding two new Patrol Officers. Corporal Leinweber worked patrol, training a new Officer additional to case load.

CASE WORK SUMMARY:

220076037

THEFT \$2500-\$30,000

CASE FILED WITH DA

Victim reported his fence had been torn down by a neighbor and place at the neighbor's curb for trash pick-up. Detective Murphy obtained survey of property lines and obtained value of fence. Case was filed with DA's office.

220293767

MAILBOX HIT & RUN

INACTIVE

Victim reported her mailbox was struck during the night. Vehicle was located using neighbor's video surveillance. Investigator conducted traffic stop of actor's parent. Restitution was made by actor's parents and victim declined to prosecute.

220299593

BURGLARY OF HABITATION

INACTIVE

Contractor of home being remodeled informed Police of a possible burglary of the home. Contacted owners of home via phone calls, but no calls were returned. Home was placed on close patrol. Home construction continued and with no response from owners of home.

220305215

BURGLARY OF STRUCTURE (LOCKED MAILBOX)

ACTIVE

Local church reported finding their locked mailbox broken into. No video surveillance exists of premise and no victims have come forward of missing mail. Case has been forwarded to United States Postal Inspector with a suspect already identified and arrested by Flower Mound PD in relation to multiple church mail fraud.

220301934

FRAUDULENT USE / POSS OF IDENTIFYING INFORMATION

ACTIVE

Victim reported someone opening a phone account in her name.

220308816

VIOLATION OF PROTECTIVE ORDER

ACTIVE

Third party reported seeing the respondent and protected party of a protection order together in a vehicle in the parking lot of a business in town.

220311462

FRAUD / SCAM

ACTIVE

Victim reported being scammed by online cryptocurrency investment company.

220315765

DOMESTIC VIOLENCE

ACTIVE

Victim reported domestic violence between her and her boyfriend from weeks prior.

220335299

THEFT OF PROPERTY

ACTIVE

Victim reported jewelry gone missing from her home with a possible suspect. Interview with suspect completed and pawn shop records / online sale ads were searched.

220338409

BURGLARY OF MOTOR VEHICLE

ACTIVE

Victim reported his vehicle broken into at a local business after driving from a Dallas Mall to Double Oak with a high dollar purchase. Pawn record search and online sale ads were searched.

220351771

THEFT OF PREOPRTY

ACTIVE

Victim reported jewelry gone missing from her home with a possible suspect. Pawn record / online sale ads were searched. Case is still active.

220362978

BURGLARY OF HABITATION

ACTIVE

Victim reported finding his wallet missing from his vehicle in the garage. Victim's credit / debit cards were used at a local business. Video surveillance videos and transaction details were obtained from business. It was determined suspects purchased \$1500 in Visa gift cards.

220363372

FORGERY / FRAUD

ACTIVE

Victim reported money wiring fraud from his account.



TOWN OF

DOUBLE OAK

STORM WATER MASTER PLAN

January 17, 2023



HALFF TEAM



Steve Templer, PE
Project Manager

- 26 years of experience
- Located in Fort Worth
- Wide range of design experience in both municipal and state projects



Scott Rushing, PE, CFM
Drainage Engineer

- 15 years of experience
- Located in Fort Worth
- Extensive municipal master drainage plan background

PROJECT OBJECTIVES

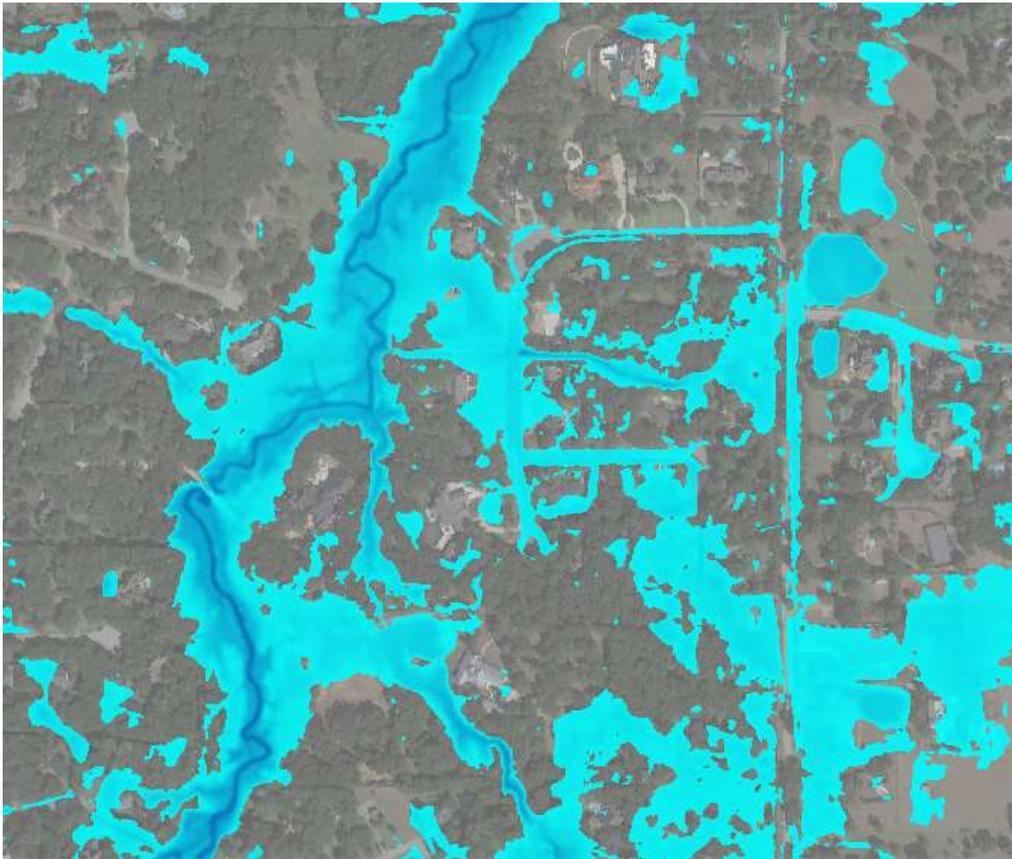


Capital Improvement Project (CIP) Planning:

- Evaluate existing flooding issues
- Develop conceptual flood mitigation alternatives
- Prioritize alternatives
- Investigate Storm Water Utility Fee



EVALUATE EXISTING FLOODING ISSUES



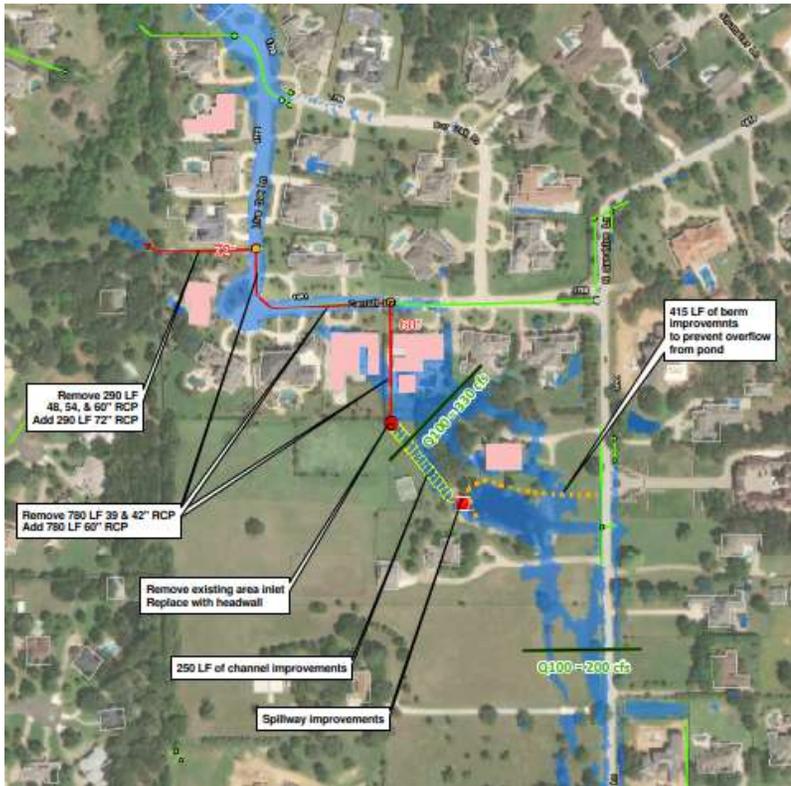
Town-wide 2D Hydraulic Model:

- HEC-RAS 2D model
- Terrain Source - 2019 TNRIS LiDAR data
- Latest Rainfall Data - NOAA Atlas 14
- Incorporate significant culvert crossings
- Develop floodplain mapping
- Identify top 10 flooding hot spots



HEC-RAS 2D Model Simulation

CONCEPTUAL ALTERNATIVE ANALYSIS



Develop Conceptual Drainage Improvement Projects:

- Evaluate drainage improvements at 5 locations
- Summarize benefits & challenges
- Develop cost estimates

PROJECT PRIORITIZATION

Table 3.3 CIP Criteria Weights

Criteria	Weight
Safety	55%
Cost Ratio	15%
Maintenance Cost	5%
Project Readiness	10%
Economic Development	10%
Other CIPs Nearby	5%

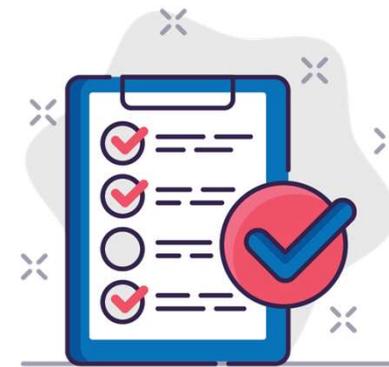
Table 3.4 Safety Sub-Criteria Weights

Safety Sub-Criteria	Weight
Impacted Parcels	10%
Street Flooding	15%
Flooding Complaints	10%
Emergency Access	20%

Public Health & Safety
Street Flooding

Criteria	Points
Depth of flooding 0 - 0.5'	0
0.5 - 1'	1
1-2'	2
2-5'	3
5-8'	4
Greater than 8'	5

Data used: Rain on mesh results within streets



Prioritize and Rank Drainage Improvement Projects:

- Develop evaluation criteria
 - Coordinate with Town
 - Example Criteria – Public Safety, Project Cost, Public Acceptance, etc.
- Prioritize & rank projects

PROJECT DELIVERABLES



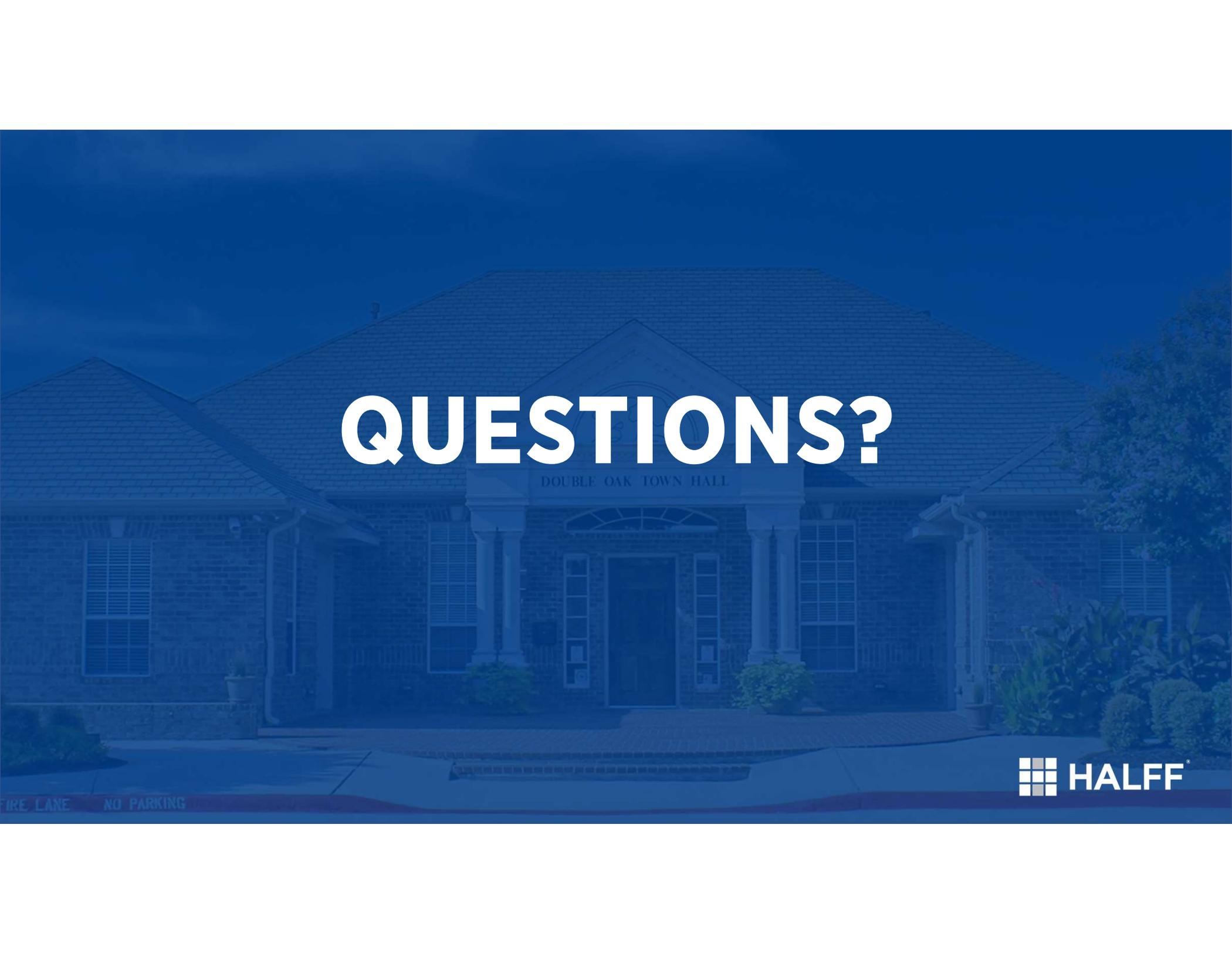
Brief Memorandum with Tables & Figures:

- Technical data from study
- Prioritized list of drainage improvement projects
- GIS floodplain mapping
- Living 2D Model

PROJECT FEES

FEE SUMMARY

Task	Description	Total
1.	2D Rain-on-Mesh Analysis & Mapping	\$32,235
2.	Conceptual Alternatives Analysis	\$18,140
3.	SWU Rate Evaluation	\$6,985
4.	Project Management/Deliverables	\$12,789
	TOTAL	\$70,149



QUESTIONS?



FIRE LANE NO PARKING

Attachment A

The Town of Double Oak has requested Halff Associates, Inc. (Halff) to provide professional engineering services for a Town-wide Storm Water Master Plan. This proposal includes the Study Objectives, Scope of Work, Exclusions, Project Fees and Schedule.

Study Objectives

1. *Assist Capital Improvement Project (CIP) Planning:* Evaluate existing flood issues within the Town and develop prioritized list of conceptual flood mitigation alternatives. Local floodplains will be developed using 2D HEC-RAS to identify flooding hotspot locations. A storm water utility fee will be evaluated to project potential revenue towards a dedicated drainage fund.

Scope of Work

Below is the detailed scope of work per task.

Task 1 – 2D Rain-on-Mesh Analysis

A. Terrain Preparation

1. Utilize 2019 TNRRIS LiDAR data to develop a Digital Elevation Model (DEM) for the Town.

B. 2D Modeling

1. Develop a 2D Rain-on-Mesh (ROM) hydraulic model using the latest version of HEC-RAS. Rainfall data will be based on NOAA Atlas 14 depths and will include the 2-, 5-, 10-, and 100-year storm events. Ultimate land use will be based on Town zoning and Manning's n-value layer will be based on the latest NearMap aerial imagery. Based on existing level of development within the town only ultimate conditions will be considered for this study.
2. Incorporate significant culvert crossings (up to 25) that impact routing of flood waters during flood events. The culvert crossing geometry will be based on as-built plan data, if available, from the Town. If as-built plan data is not available, Halff will field measure culvert crossings and estimate flowlines. Survey of culvert crossings is not included in this scope of services.
3. Develop GIS floodplain mapping/depth grids based on the 2D ROM model results for the 2-, 5-, 10-, and 100-year storm events based on ultimate conditions. Flood depth boundaries will be limited to depths greater than 0.5 ft.
4. Based on the results of the 2D ROM analysis, identify up to ten (10) flooding hot spots along creeks and channels including overtopped roads and flooded structures.

Task 2 – Conceptual Alternative Analysis

A. Conceptual Alternative Analysis

1. Develop conceptual flood mitigation alternatives for up to five (5) locations to reduce flooding problems identified under Task 2.A.1.
2. Summarize the benefits and challenges for each conceptual alternative including metrics on flood reduction.
3. Develop estimates of probable cost for each conceptual alternative.

Attachment A

4. Develop evaluation criteria, in coordination with the Town, to prioritize and rank conceptual alternatives.

Task 3 – Storm Water Utility (SWU) Rate Evaluation

A. Project Potential SWU Fee Revenue

1. Delineate impervious area for all non-residential lots within the Town.
2. Determine equivalent residential unit (ERU) by delineating impervious area for 20 typical residential lots and computing the average impervious area.
3. Determine total ERUs within the Town based on the number of residential lots and impervious area for non-residential lots.
4. Develop table of potential annual revenue at various fee amounts for a storm water utility.
5. SWU ordinance development/review and customer exemptions are not included within this scope of services.

Task 4 – Project Management / Deliverables

This scope includes the coordination and communication procedures to be implemented between the Town of Double Oak and Halff in completion of this project.

A. Project Coordination and Management

1. Conduct one (1) project kickoff meeting (Virtual) with the Town of Double Oak.
2. Conduct monthly coordination calls with the Town of Double oak (up to 6 meetings).
3. Prepare monthly progress reports for Town of Double Oak identifying work accomplished, work to be done, and outstanding issues that need attention.

B. Deliverables/Reporting

1. Prepare a brief memorandum summarizing the procedures and results of the study including tables and figures. The draft memorandum will be subject to one review by the Town. One (1) meeting (Virtual) will be scheduled to discuss Town comments.
2. Deliver a digital copy of the final memorandum to the Town of Double Oak with technical data utilized in preparation of the study in digital format, including hydrologic and hydraulic models and a GIS geodatabase with floodplain mapping/depth grids.

Exclusions

The following services are not included in the scope of work of this proposal. Halff can provide estimated fees for these services, if needed.

- A. Field survey and condition assessment of existing culvert crossings or storm drain infrastructure.
- B. Storm Water Utility ordinance development/review and customer exemptions
- C. Finish Floor Elevation (FFE) surveys and/or elevation certificates
- D. Council presentations/workshops

Attachment A

Project Fees:

The project will be a Lump Sum fee. Lump sum fee tasks will be billed monthly based on percentage of work that has been completed. A summary of the professional services fees by task is listed in the following table.

FEE SUMMARY

<u>Task</u>	<u>Description</u>	<u>Total</u>
1.	2D Rain-on-Mesh Analysis & Mapping	\$32,235
2.	Conceptual Alternatives Analysis	\$18,140
3.	SWU Rate Evaluation	\$6,985
4.	Project Management/Deliverables	\$12,789
TOTAL		\$70,149

Direct Costs for expenses such as mileage, copies, scans, etc. are included in the lump sum fees.

Schedule:

Half will complete the scope of within 7 months from written notice to proceed. A detailed schedule will be provided at the project kick-off meeting.

We appreciate the opportunity to be of service to the Town of Double Oak. If you have any questions, please do not hesitate to call me at (817) 764-7487.

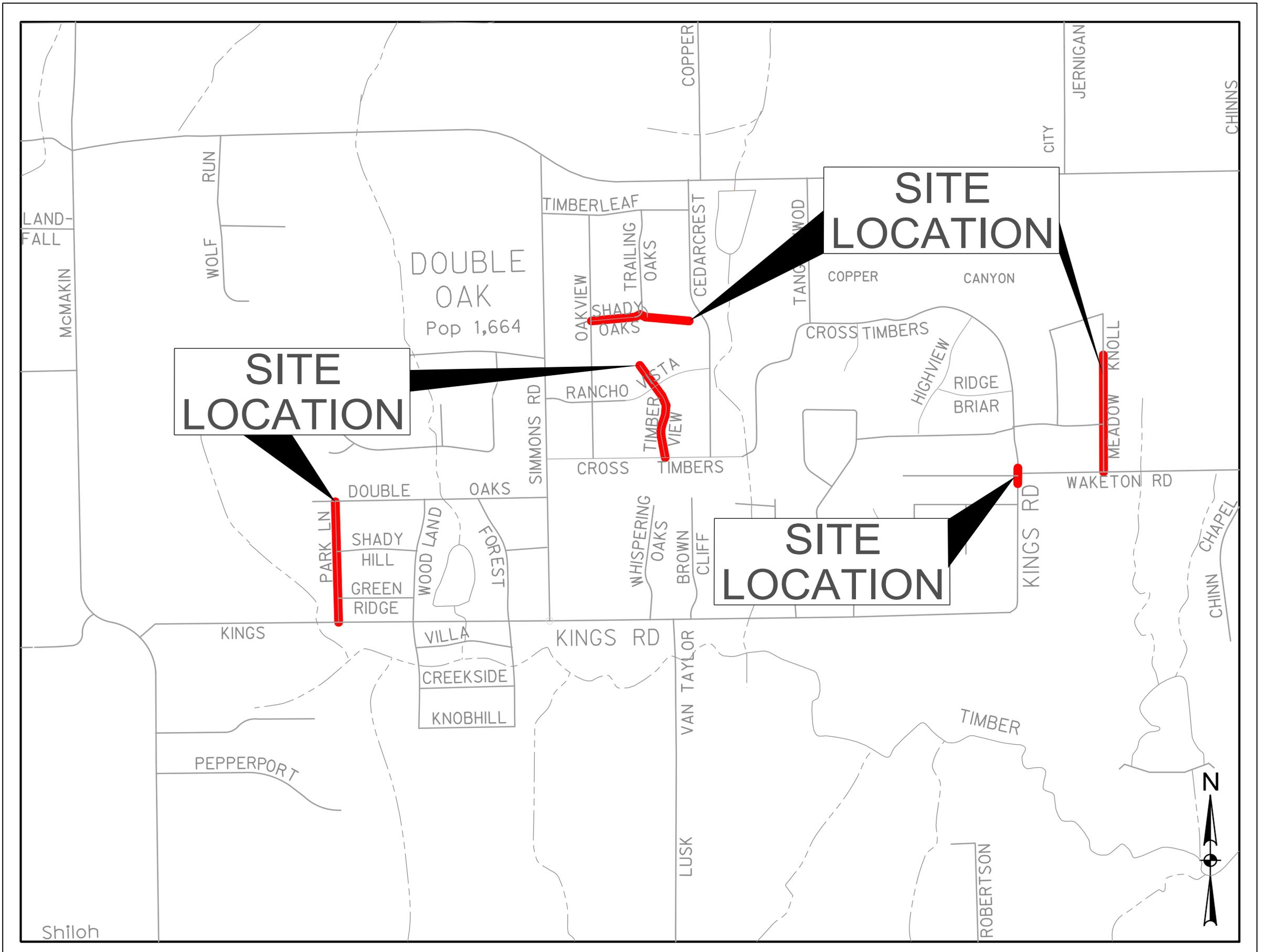
Sincerely,

HALFF ASSOCIATES, INC.



Scott Rushing, PE, CFM
Water Resources Team Leader

C: Steve Templer, PE



PREPARED FOR
TOWN OF DOUBLE OAK, TEXAS

320 WAKETON ROAD ~ DOUBLE OAK, TEXAS 75077

FINAL PLANS FOR 2022 MILL AND OVERLAY PROJECT

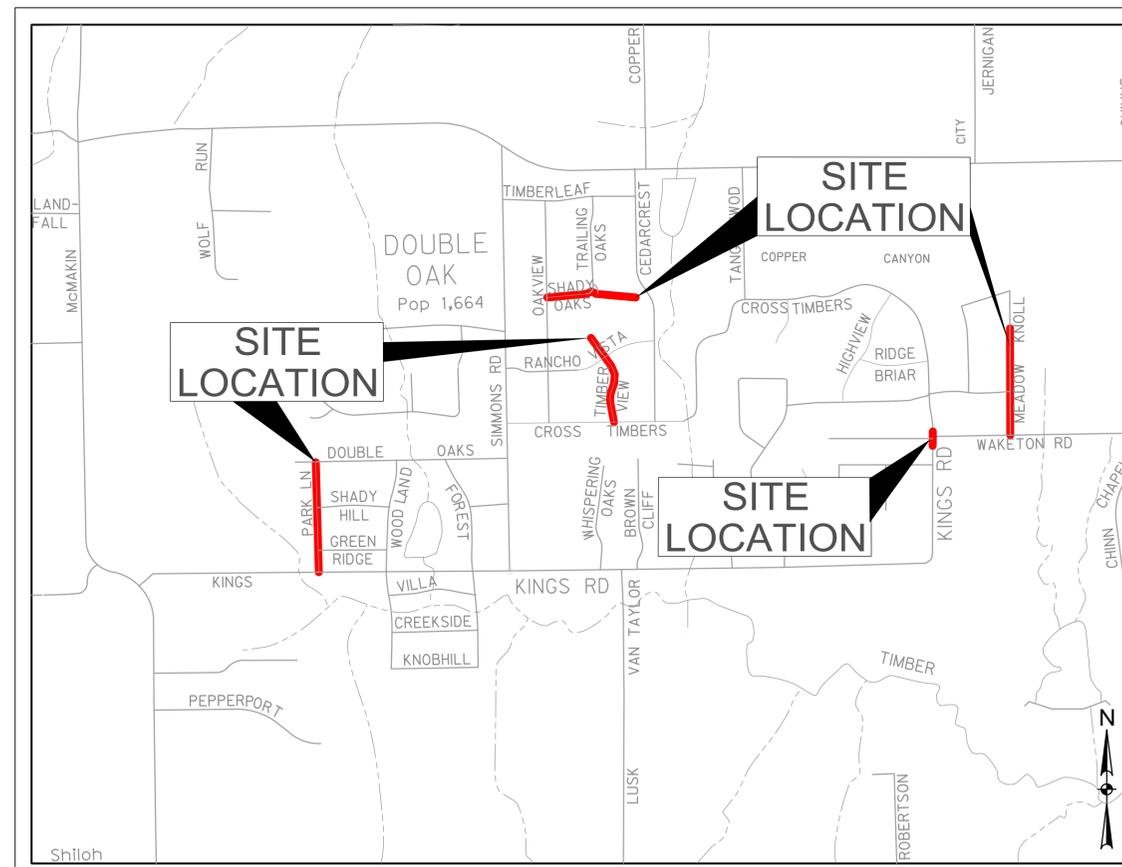
BASE BID: SHADY OAKS & KINGS ROAD

ADDITIVE ALTERNATES: PARK LN, TIMBERVIEW DR, AND MEADOW KNOLL DR.

DOUBLE OAK, TEXAS
NOVEMBER 2022

TOWN COUNCIL

MAYOR	MIKE DONNELLY
MAYOR PRO TEM	PATRICK JOHNSON
DEPUTY MAYOR PRO TEM	CONNIE SCHOENRADE
COUNCIL MEMBER	JEAN HILLYER
COUNCIL MEMBER	CASEY PARSONS
COUNCIL MEMBER	SCOTT WHISENHUNT



PREPARED FOR
TOWN OF DOUBLE OAK, TEXAS

320 WAKETON ROAD ~ DOUBLE OAK, TEXAS 75077



4000 FOSSIL CREEK BLVD.
FORT WORTH, TX 76137-2720
TEL (817) 847-1422
Info-FortWorth@Halff.com
TBPELS ENGINEERING FIRM #312

PROJECT MANAGER: STEVEN D. TEMPLER, P.E.



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- 3 TYPICAL SECTIONS
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- 5 PAVING PLAN SHADY OAKS LN (SHEET 2 OF 3)
- 6 PAVING PLAN SHADY OAKS LN (SHEET 3 OF 3)
- 7 PAVING PLAN KINGS ROAD (SHEET 1 OF 1)
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GENERAL NOTES

- All work shall conform to the requirements of the Town of Double Oak and shall be in accordance with the project details and specifications. All work not covered in the Contract Documents and the Town of Double Oak standard details and specifications for construction shall be governed by the North Central Texas Council of Governments Standard Specifications for Public Works Construction, Fourth Edition, including all amendments.
- Contractor shall locate all utilities prior to the start of construction. The Contractor shall assume responsibility for repairs to existing utilities damaged by the Contractor's activities for no additional compensation to the Contractor.
- The Contractor shall protect existing property monumentation and primary control. Any such points which the Contractor believes will be destroyed shall have offset points established by the Contractor prior to construction. Any monumentation destroyed by the Contractor shall be reestablished at Contractors expense by a registered professional land surveyor.
- It shall be the responsibility of the Contractor to: A.) Prevent any damage to private property and property owner's trees, mailboxes, poles, fences, shrubs, etc. B.) Protect all underground utilities. C.) Notify all utility companies at least 48 hours prior to excavation in accordance with Texas Law. D.) Field verify horizontal and vertical location of all utilities in the vicinity of construction activities prior to start of construction. The Contractor shall notify Engineer of any unidentified potential conflicts that may exist between the existing utilities and construction plans.
- Any damages that may occur to real property or existing improvements, including existing private and public landscape irrigation systems, shall be restored by the Contractor to at least the same condition that the real property or existing improvements were in prior to the damages. This restoration shall be subject to the Owner's approval; moreover, this restoration shall not be a basis for additional compensation to the Contractor.
- The Contractor shall maintain drainage at all times during construction. Ponding of water in streets, drives, trenches, etc. will not be allowed. The Contractor shall maintain residential driveway access at all times.
- The Contractor is responsible for coordination with utility companies and adjustment of existing sanitary sewer manholes, cleanouts, water meters, water valves, fire hydrants and other utility appurtenances to finished grade as required at no cost to the Town of Double Oak.
- Barricading and traffic control during construction shall be the responsibility of the contractor and shall conform to the "Texas Manual on Uniform Traffic Control Devices", Part VI in particular. Traffic flow and access shall be maintained during all phases of construction unless otherwise noted on the traffic control plan. The Contractor is responsible for providing traffic safety measures for work on the project. The Contractor shall assume full responsibility for public safety in the construction area during the duration of construction activities.
- The Contractor shall abide by all applicable federal, state, and local laws governing excavation. The Contractor shall provide detailed plans and specifications for trench safety systems that comply with applicable laws governing excavation. These plans shall be sealed by an Engineer experienced in the design of trench safety systems registered in the State of Texas. The Contractor shall submit completed trench safety plan to the Engineer prior to commencing work. The Contractor shall be solely responsible for all aspects of work related to excavation.

- The Contractor shall remove from the project area all surplus material. This work shall be incidental and not a separate pay item. Surplus materials from excavation include dirt, trash, rock measuring greater than 9" in the largest dimension, etc. shall be properly disposed offsite at a location acceptable to the Town of Double Oak if within the Town limits. If the location is not within the Town limits, the Contractor shall provide a letter stating so. No excess excavated material shall be deposited in low areas or along natural drainage ways without written permission from the affected property owner and the Town of Double Oak. If the Contractor places excess material in these areas without written permission, he will be responsible for all damages resulting from such fill and he shall remove the material at his own cost.
- Bidders shall make any investigation of existing subsurface conditions as deemed necessary at no additional expense to the Town of Double Oak. Neither the Town of Double Oak nor the Engineer will be responsible in any way for additional compensation for excavation work performed under this contract due to the Contractors assumptions.
- The Contractor will furnish to the Town of Double Oak the name of an OSHA certified competent person to be on the project at all times.
- No trees shall be removed unless so noted on the plans or upon the specific approval of the Town. Where trees, plants, shrubbery, etc. are adjacent to the line of the work and are not to be removed and replaced, the CONTRACTOR shall protect such trees, plants, shrubbery, etc. utilizing orange safety fencing with steel t-posts and shall not permit machinery or employees to scrape, tear the limbs from, damage, or attach guy cables to them, if in the opinion of the Engineer, such trees, plants, shrubbery, etc. would be damaged by machinery, etc., hand excavation may be required. The CONTRACTOR shall be responsible for all damages to adjacent trees, plants, shrubbery, etc., and any such damage shall be remedied to the satisfaction of the Town. The cost of such protection shall not be paid for as a separate contract pay item; the costs thereof shall be included in such pay items as are provided for in the proposal and contract.
- The Contractor shall refer to contract documents and specifications for additional information.
- CONTRACTOR shall call 1-811-DIGTESS 48 hours prior to construction activities.
- Contractor shall remove all excess millings from shoulder area and excess asphalt and rock from overlay. No separate pay item.
- Contractor to install Fire Hydrant blue Pavement Markers at the intersection of Shady Oaks Ln and Oakview Dr. (1 EA). No separate pay item.
- Contractor is not permitted to park equipment or vehicles on grass. Contractor and workers must park vehicles and equipment on roadway or adjacent streets. Any rutting, or damage to yards caused by contractor's equipment or worker's vehicles will be fixed at the contractor's expense.

UTILITY CONTACTS

Gas Companies

COSERV GAS
7701 South Stemmons
Corinth, TX 76210
office:940.321.7800
Customer Service: 1.800.566.2314
contact@coservegas.com
To report a Gas Leak: 940.270.7899

Phone Companies

FRONTIER
BILL JEZEWSKI
972-318-5186

AT&T
Leon Simon
817-338-6013
1116 Houston St. Room 1401
Ft Worth, TX 76102

Electric Companies

ONCOR ELETRIC DELIVERY
Fernando Quintar
2001 North Industrial Blvd.
Euless, TX 76039
To report a Street Light Outage: 1.888.313.6862

Cable Companies

GRANDE COMMUNICATIONS
Jerry Horn
972-410-0584
500 Little Ste. 400
Lewisville TX 75056

COSERV ELECTRIC
7701 SOUTH STEMMONS
CORINTH, TX 76210
1.800.274.4014
office: 940.321.7800
To Report a Street Light Outage:
Shirley Ashford 940.321.7800 X7611

TIME WARNER CABLE
David Chaney
1565 Chenault St Dallas 75228
214-320-7406

Water Department and Service

CROSS TIMBERS WATER SUPPLY CORPORATION
2032 E. Hickory Hill Rd.
Argyle, TX 76226
(940)-584-0780

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DOUBLE OAK
 2022 MILL AND OVERLAY PROJECT
 SHADY OAKS AND OAKVIEW DR
 AND MEADOW HOLLOW DR
 DOUBLE OAK, TX




4000 FOSSAL CREEK BLVD
 TEL: (817) 847-4422
 FAX: (817) 252-0794
 TBPE'S ENGINEERING FIRM #12

Revision No.	Date	Description



STATE OF TEXAS
 STEVEN D. TEMPLES
 88656
 LICENSED PROFESSIONAL ENGINEER
 TBPE FIRM #F-312
 11/3/2022

Project No.: 52570
 Issued:
 Drawn By: HALFF
 Checked By: SDT
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GENERAL NOTES
 2 OF 30
 Sheet Number

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10/16/2022

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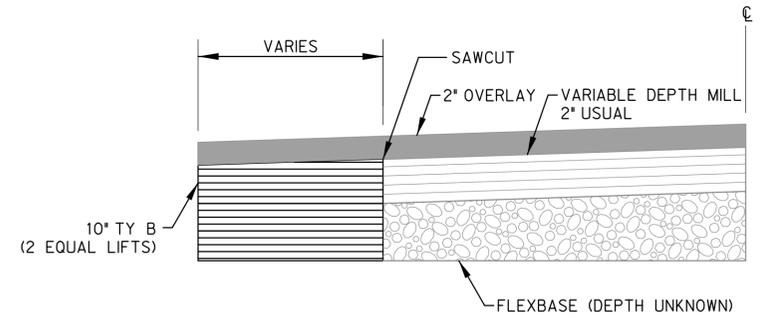
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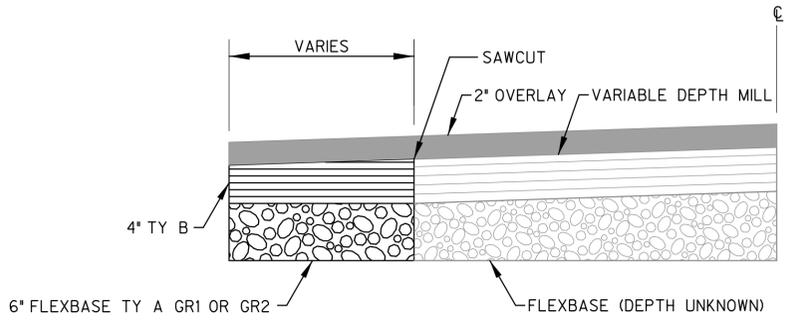
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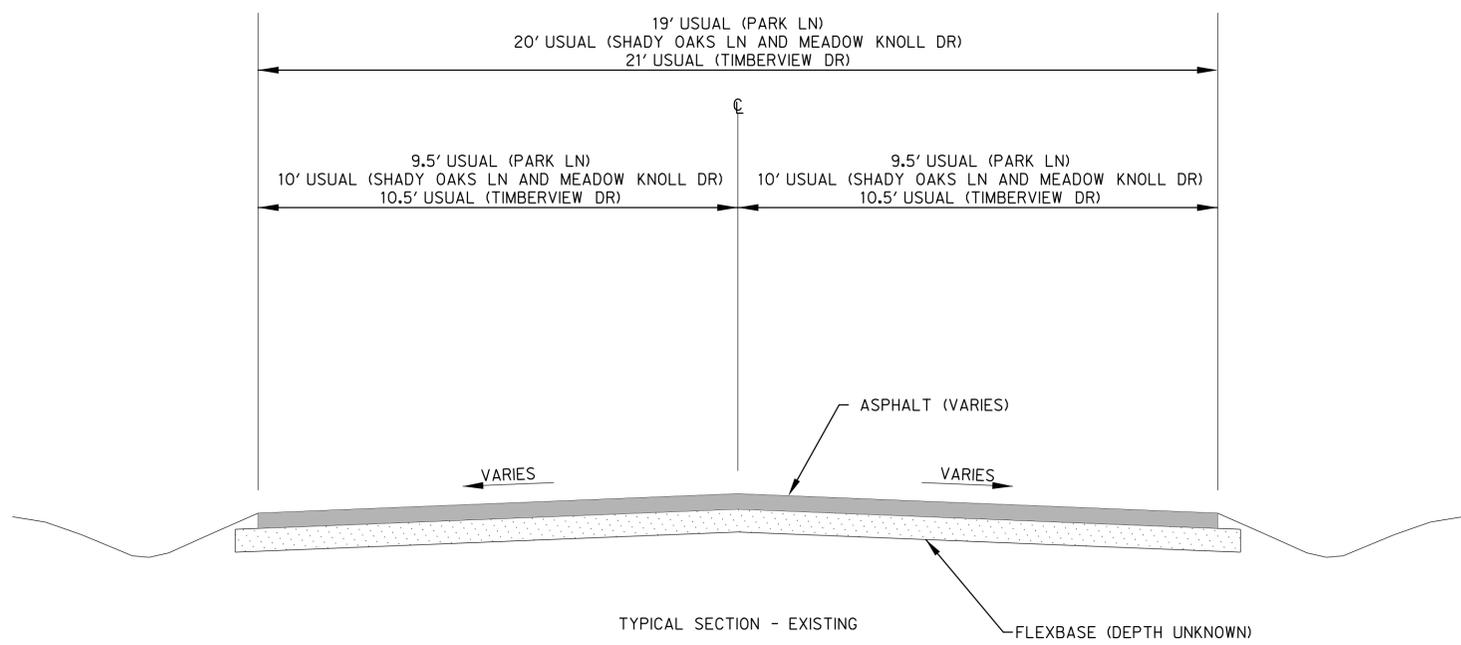
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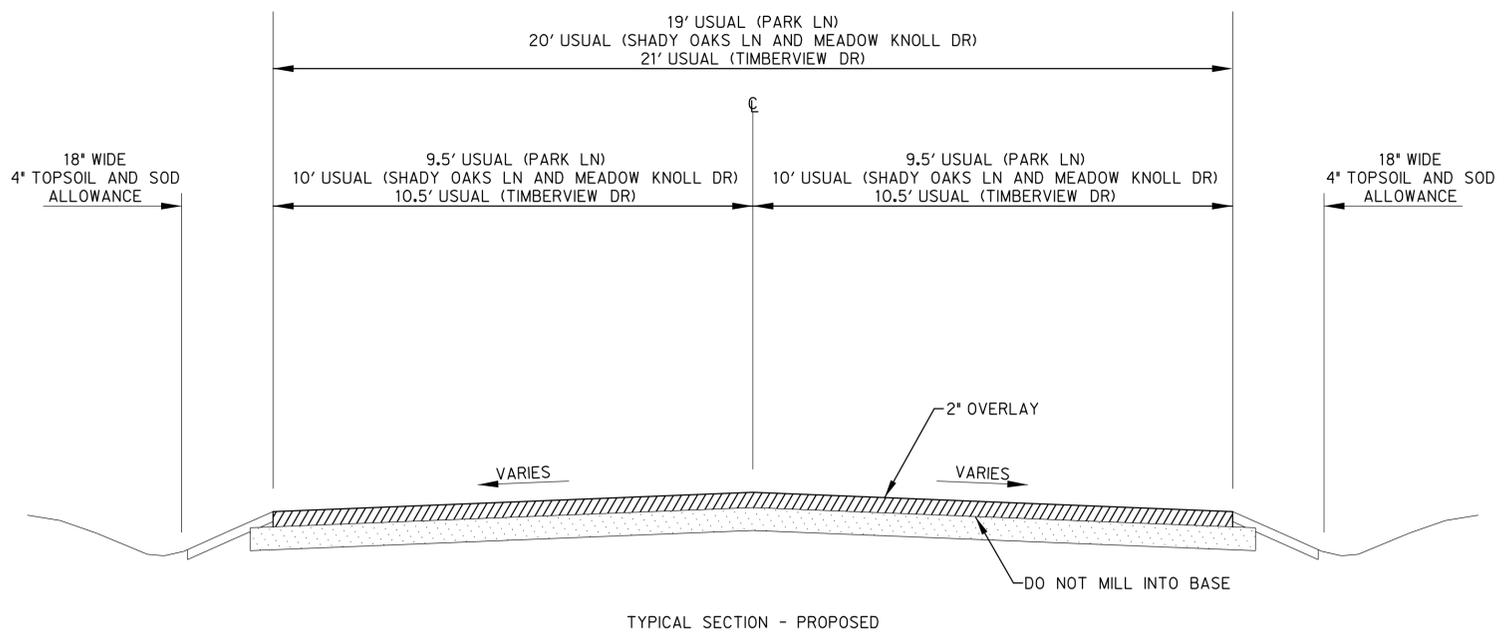
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OPTION 2 - FULL DEPTH REPAIR



TYPICAL SECTION - EXISTING



TYPICAL SECTION - PROPOSED

DOUBLE OAK
2022 MILL AND OVERLAY PROJECT
SHADY OAKS LN AND MEADOW KNOLL DR
AND MEADOW KNOLL DR
DOUBLE OAK, TX



HALFF
4000 FOSSIL CREEK BLVD
DALLAS, TX 75243-2997
TEL (817) 847-4422
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TBPES ENGINEERING FIRM #112

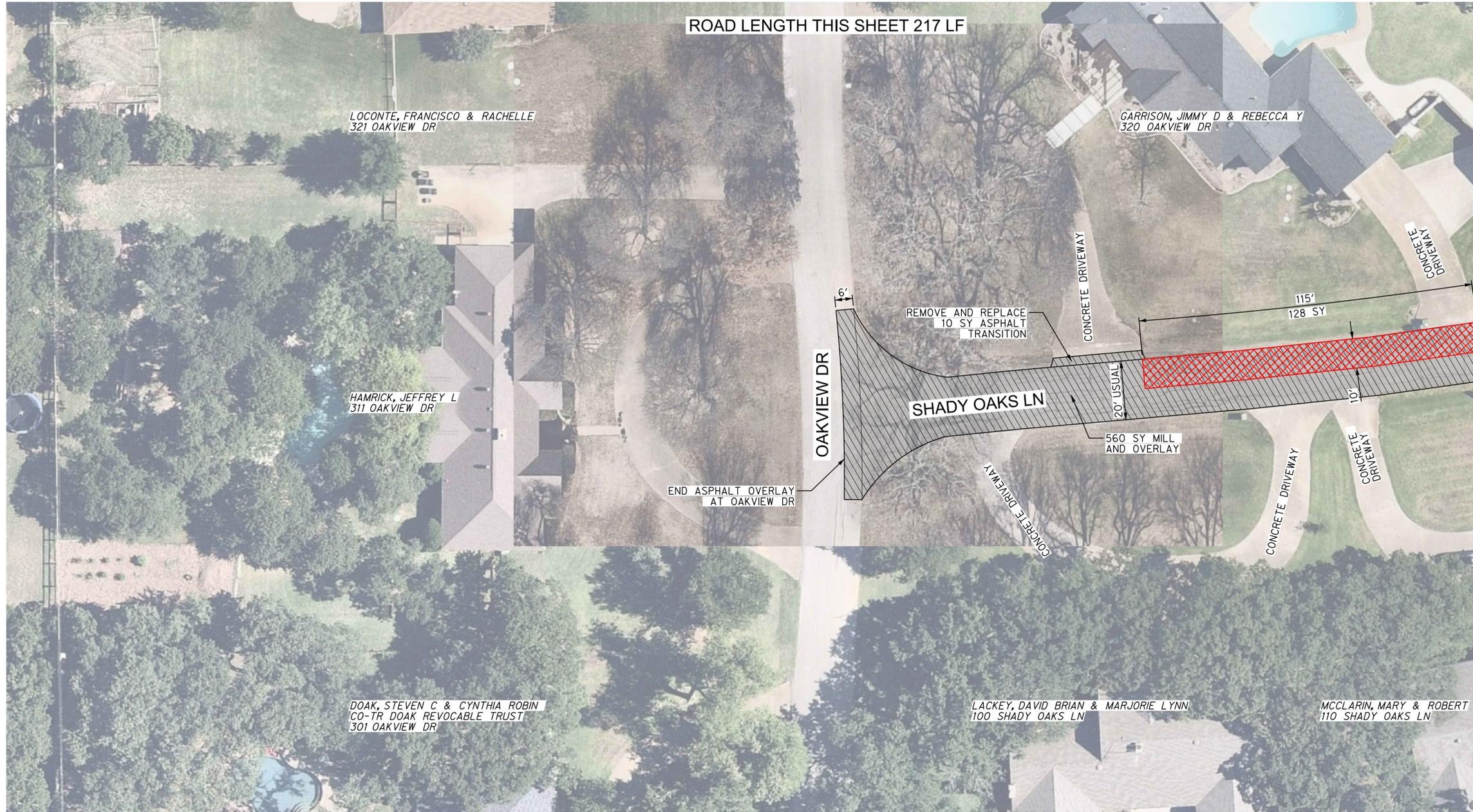
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TBPE FIRM #F-312
11/3/2022

Project No.: 52570
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TYPICAL SECTIONS



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LOCONTE, FRANCISCO & RACHELLE
321 OAKVIEW DR

HAMRICK, JEFFREY L
311 OAKVIEW DR

DOAK, STEVEN C & CYNTHIA ROBIN
CO-TR DOAK REVOCABLE TRUST
301 OAKVIEW DR

GARRISON, JIMMY D & REBECCA Y
320 OAKVIEW DR

LACKEY, DAVID BRIAN & MARJORIE LYNN
100 SHADY OAKS LN

MCCLARIN, MARY & ROBERT
110 SHADY OAKS LN

OAKVIEW DR

SHADY OAKS LN

CONCRETE DRIVEWAY

CONCRETE DRIVEWAY

CONCRETE DRIVEWAY

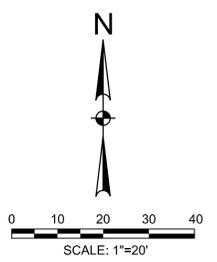
CONCRETE DRIVEWAY

CONCRETE DRIVEWAY

MATCHLINE - SEE SHEET 5

NOTES:

- REFER TO PAVEMENT DETAILS AND STANDARD DETAILS FOR PAVING NOTES, DETAILS, AND OTHER INFORMATION.
- CONTRACTOR SHALL MATCH EDGE OF PROPOSED PAVEMENT TO ALL EXISTING DRIVEWAYS. THIS MAY REQUIRE A FLARE TO THE DRIVEWAY TO MAINTAIN A STRAIGHT ROADWAY EDGE.
- CONTRACTOR TO VERIFY LOCATIONS OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
- CONTRACTOR TO PROTECT ALL TREES, MAILBOXES, AND LANDSCAPING ADJACENT TO PAVEMENT.
- QUANTITY AND LIMITS OF ASPHALT TRANSITIONS ARE APPROXIMATE. DEPTH OF MILLING NEAR DRIVEWAYS MAY VARY TO ALLOW BETTER TIE-INS. AT NO TIME SHALL THE CONTRACTOR MILL INTO THE BASE. DEPTH CHANGES ARE SUBSIDIARY TO VARIABLE DEPTH MILL.
- QUANTITY FOR REMOVE AND REPLACE ASPHALT TRANSITION ON DRIVEWAY IS APPROXIMATE BASED ON AN AVERAGE 3' WIDTH. ACTUAL WIDTH AND LIMITS ON DRIVEWAYS WILL VARY AND BE AGREED UPON IN THE FIELD. QUANTITIES WILL BE MEASURED IN THE FIELD.
- AN ALLOWANCE IS PROVIDED FOR BLOCK SODDING. IT IS THE INTENT TO MINIMIZE THE NEED EXCEPT WHERE SHOWN ON THE PLANS. THERE MAY BE CIRCUMSTANCES CAUSED BY PAVEMENT REDUCTION OR GRASS DYING DUE TO THE ASPHALT OPERATION THAT MAY NECESSITATE THE NEED FOR ADDITIONAL BLOCK SODDING.
- CONTRACTOR TO TAKE PICTURES AND VIDEO THE PROJECT SITE TO DOCUMENT THE EXISTING CONDITIONS PRIOR TO BEGINNING WORK.



LEGEND

-  LIMITS OF MILL AND OVERLAY
-  LIMITS OF FULL DEPTH REPAIR
-  APPROXIMATE LIMITS OF BLOCK SOD

DOUBLE OAK
2022 MILL AND OVERLAY PROJECT
SHADY OAKS AND MEADOW HOLLOW DR
DOUBLE OAK, TX



HALFF
4000 FOSSIL CREEK BLVD
FARMERSVILLE, TX 77936-1017-2397
TEL (817) 847-4422
FAX (817) 232-0798
TBPES ENGINEERING FIRM #12

Revision No.	Date	Description



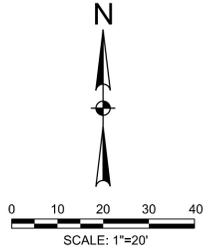
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Scale: AS NOTED
Sheet Title
SHADY OAKS LN PAVING PLAN SHEET (1 OF 3)
4 OF 30
Sheet Number

MATCHLINE - SEE SHEET 5



NOTES:

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LEGEND

	LIMITS OF MILL AND OVERLAY
	LIMITS OF FULL DEPTH REPAIR
	APPROXIMATE LIMITS OF BLOCK SOD

DOUBLE OAK
2022 MILL AND OVERLAY PROJECT
SHADY OAKS LN AND CEDARCREST LN
AND MEADOW HOLLOW DR
DOUBLE OAK, TX

HALFF
4000 FOSSIL CREEK BLVD
FARMERSVILLE, TX 77936
TEL (817) 847-4422
FAX (817) 252-0794
TBPES ENGINEERING FIRM #12

Revision No.	Date	Description

STEVEN D. TEMPLE
88656
LICENSED PROFESSIONAL ENGINEER
STATE OF TEXAS

Project No.: 52570
 Issued:
 Drawn By: HALFF
 Checked By: SDT
 Scale: AS NOTED
 Sheet Title
**SHADY OAKS LN
 PAVING PLAN
 SHEET (3 OF 3)**
 6 OF 30
 Sheet Number

PTW 10/16/2022

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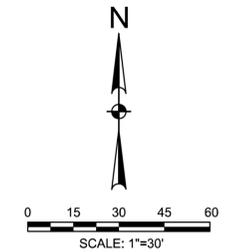
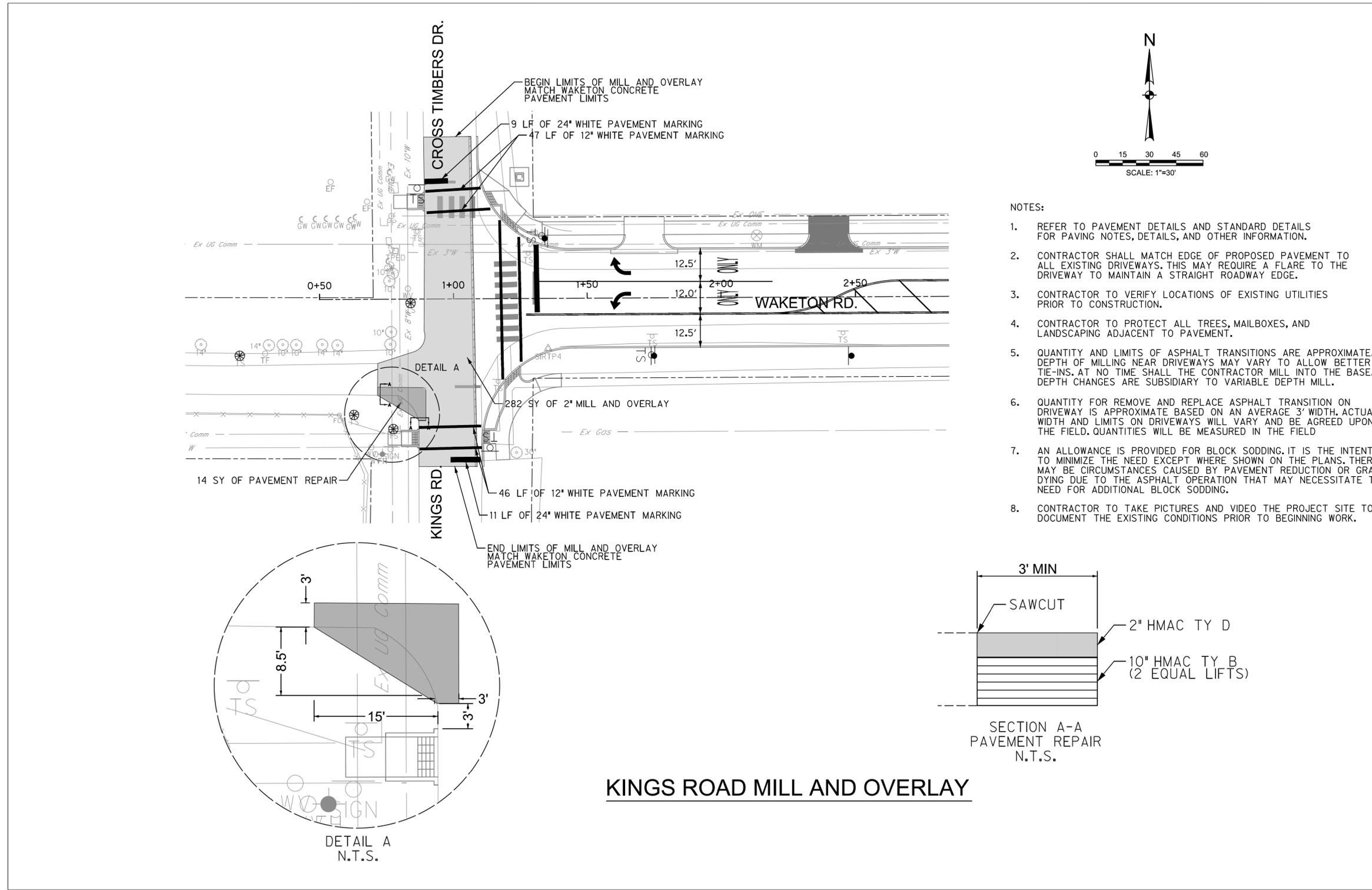
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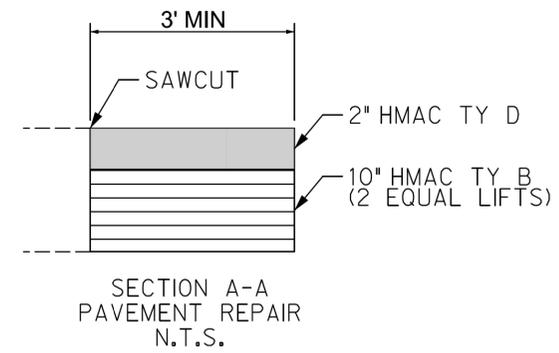
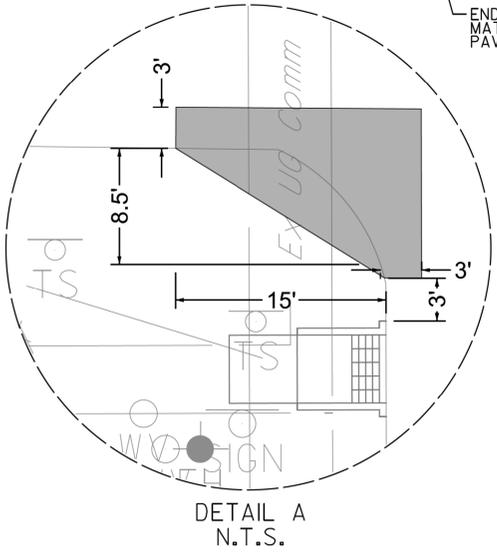
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KINGS ROAD MILL AND OVERLAY

DOUBLE OAK
2022 MILL AND OVERLAY PROJECT
SHADY OAK AND MEADOW KNOLL DR
DOUBLE OAK, TX

HALFF
4000 FOSSIL CREEK BLVD
DALLAS, TX 75247-2997
TEL (817) 847-4422
FAX (817) 253-0794
TBPES ENGINEERING FIRM #12

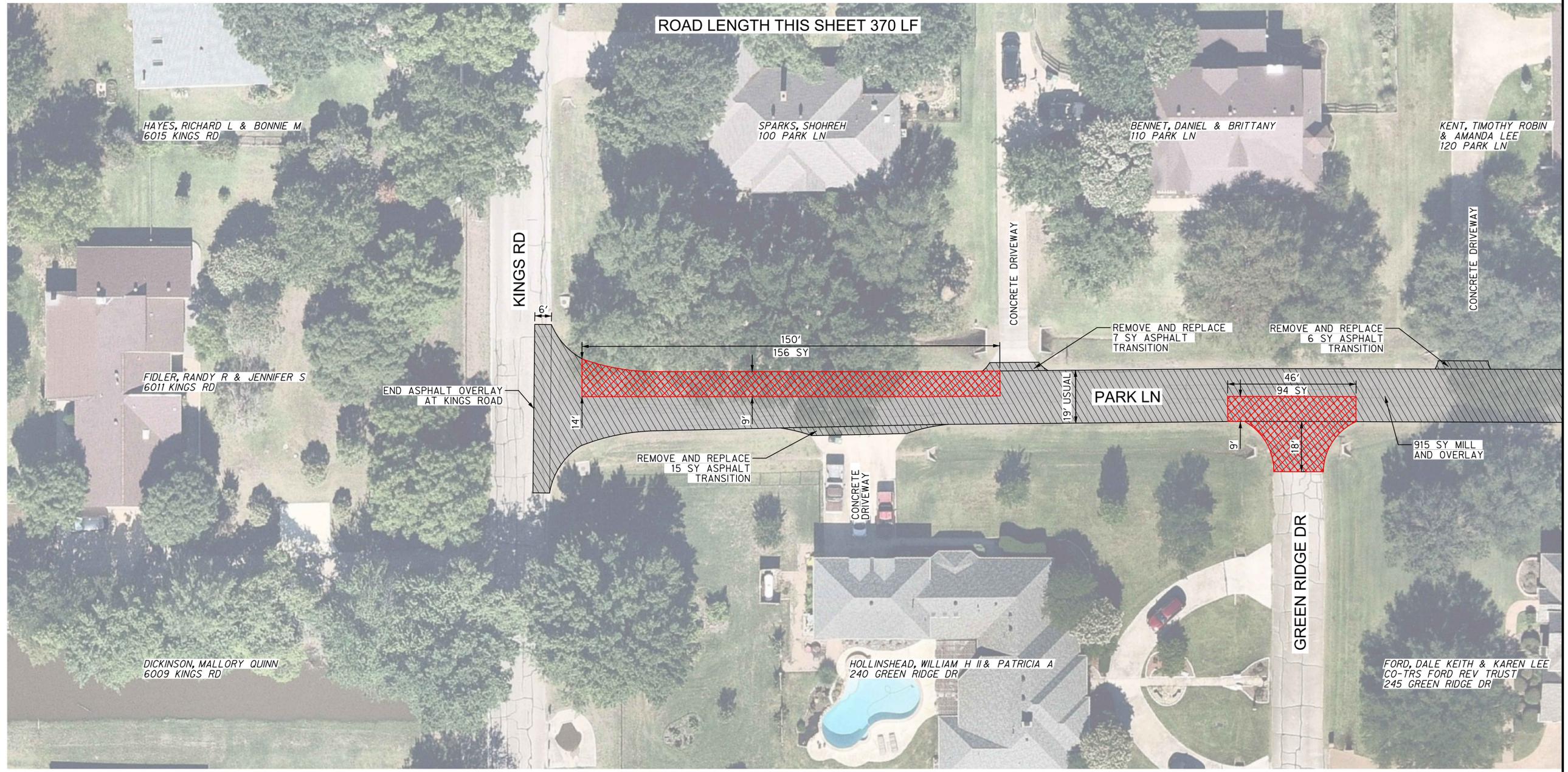
Revision No.	Date	Description

STEVEN D. TEMPLE
88656
LICENSED PROFESSIONAL ENGINEER

TBPE FIRM #F-312
11/3/2022

Project No.: 52570
Issued:
Drawn By: HALFF
Checked By: SDT
Scale: AS NOTED
Sheet Title
KINGS ROAD PAVING PLAN SHEET (1 OF 1)
\$PAVE130F 30
Sheet Number

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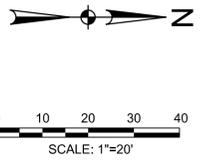


ROAD LENGTH THIS SHEET 370 LF

MATCHLINE - SEE SHEET 9

NOTES:

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LEGEND

	LIMITS OF MILL AND OVERLAY
	LIMITS OF FULL DEPTH REPAIR

DOUBLE OAK
 2022 MILL AND OVERLAY PROJECT
 SHADY OAK AND MEADOW HOLLOW DR
 DOUBLE OAK, TX

HALFF
 4000 FOSSIL CREEK BLVD
 TEL: (817) 847-4422
 FAX: (817) 252-0798
 TBPELS ENGINEERING FIRM #112

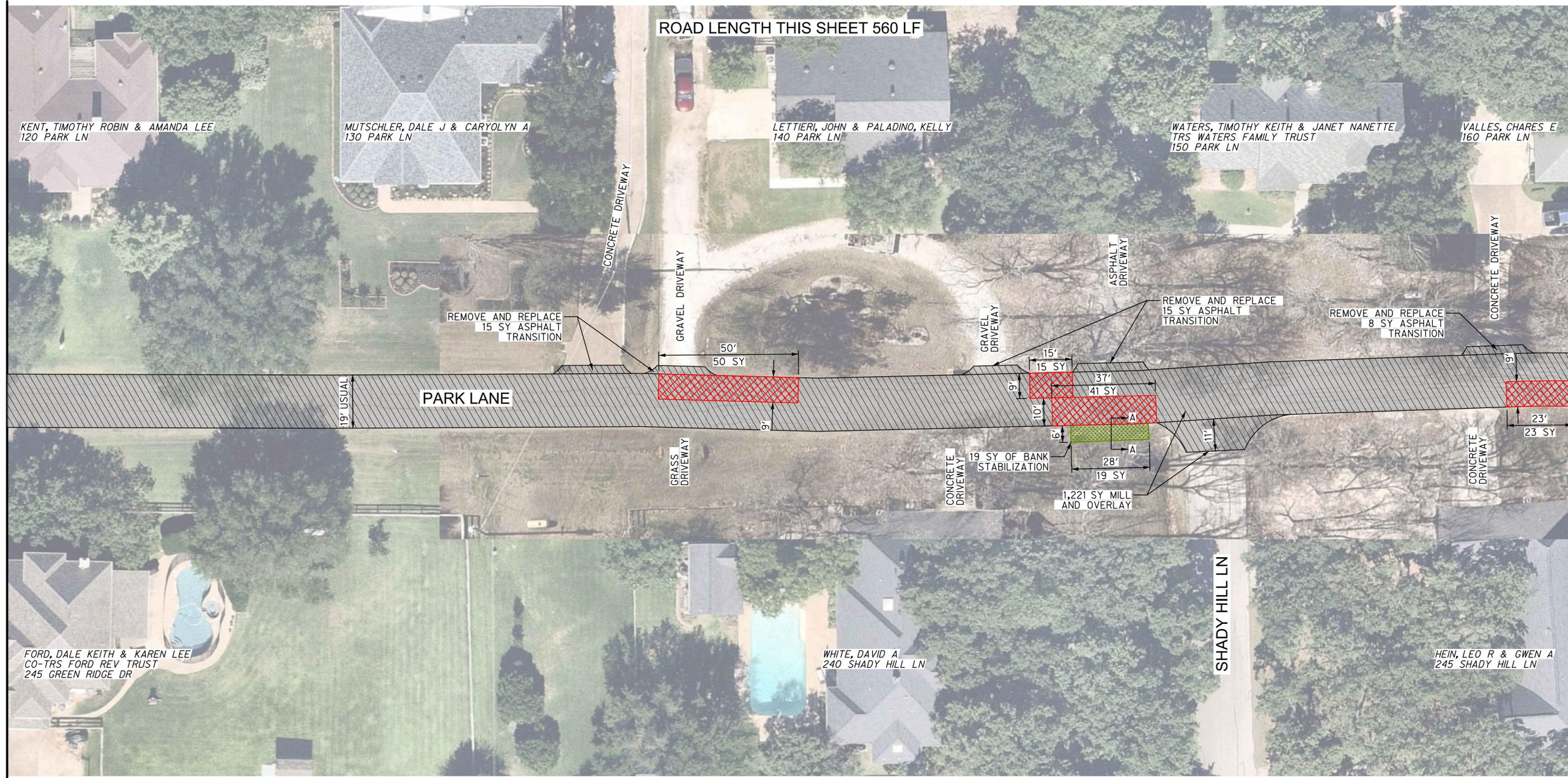
Revision No.	Date	Description

TBPE FIRM #F-312
 11/3/2022

Project No.: 52570
Issued:
Drawn By: HALFF
Checked By: SDT
Scale: AS NOTED
Sheet Title
PARK LN PAVING PLAN SHEET (1 OF 3)
8 OF 30
Sheet Number

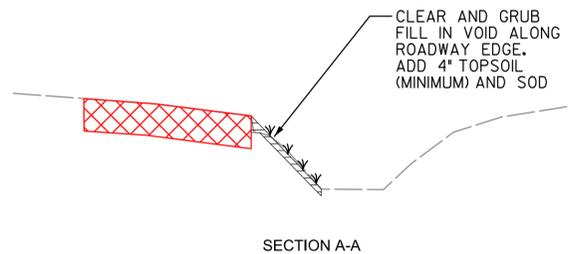
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MATCHLINE - SEE SHEET 8



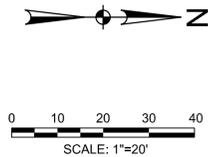
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LEGEND

- LIMITS OF MILL AND OVERLAY
- LIMITS OF FULL DEPTH REPAIR



DOUBLE OAK
 2022 MILL AND OVERLAY PROJECT
 SHADY OAK AND MEADOW HOLLOW DR
 DOUBLE OAK, TX

HALFF
 4000 FOSSIL CREEK BLVD
 TEL: (817) 847-4422
 FAX: (817) 232-0794
 TBPES ENGINEERING FIRM #112

Revision No.	Date	Description

TBPE FIRM #F-312
 11/3/2022

Project No.: 52570
Issued:
Drawn By: HALFF
Checked By: SDT
Scale: AS NOTED
Sheet Title
PARK LN PAVING PLAN SHEET (2 OF 3)
9 OF 30 Sheet Number

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10/14/2022

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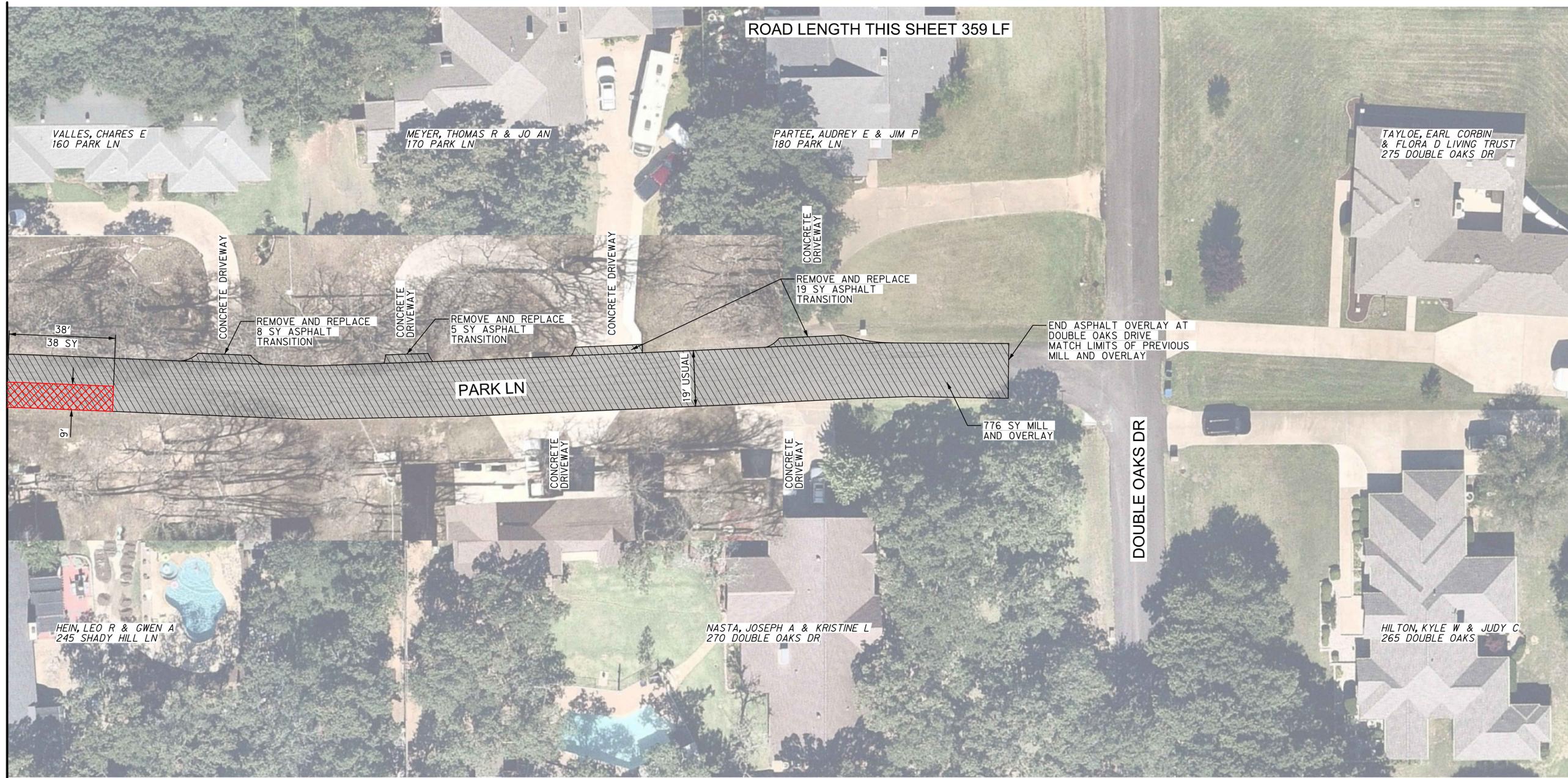
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1/23/2022

MATCHLINE - SEE SHEET 9



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LIMITS OF MILL AND OVERLAY

LIMITS OF FULL DEPTH REPAIR

DOUBLE OAK
2022 MILL AND OVERLAY PROJECT
SHADY OAK AND MEADOW HOLLOW DR
DOUBLE OAK, TX



HALFF
4000 FOSSIL CREEK BLVD
FARMERSVILLE, TX 77936
TEL: (817) 847-4422
FAX: (817) 232-0798
TYPICALS ENGINEERING FIRM #312

Revision No.	Date	Description



Project No.: 52570
Issued:
Drawn By: HALFF
Checked By: SDT
Scale: AS NOTED
Sheet Title
PARK LN PAVING PLAN SHEET (3 OF 3)
10 OF 30
Sheet Number

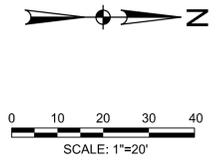


ROAD LENGTH THIS SHEET 240 LF

MATCHLINE - SEE SHEET 12

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LEGEND

 LIMITS OF MILL AND OVERLAY

 LIMITS OF FULL DEPTH REPAIR

DOUBLE OAK
2022 MILL AND OVERLAY PROJECT
SHADY OAK AND MEADOW HOLLOW DR
DOUBLE OAK, TX



HALFF
4000 FOSSIL CREEK BLVD
DALLAS, TX 75247-2997
TEL: (817) 847-4422
FAX: (817) 252-0798
TBPES ENGINEERING FIRM #12



Revision No.	Date	Description



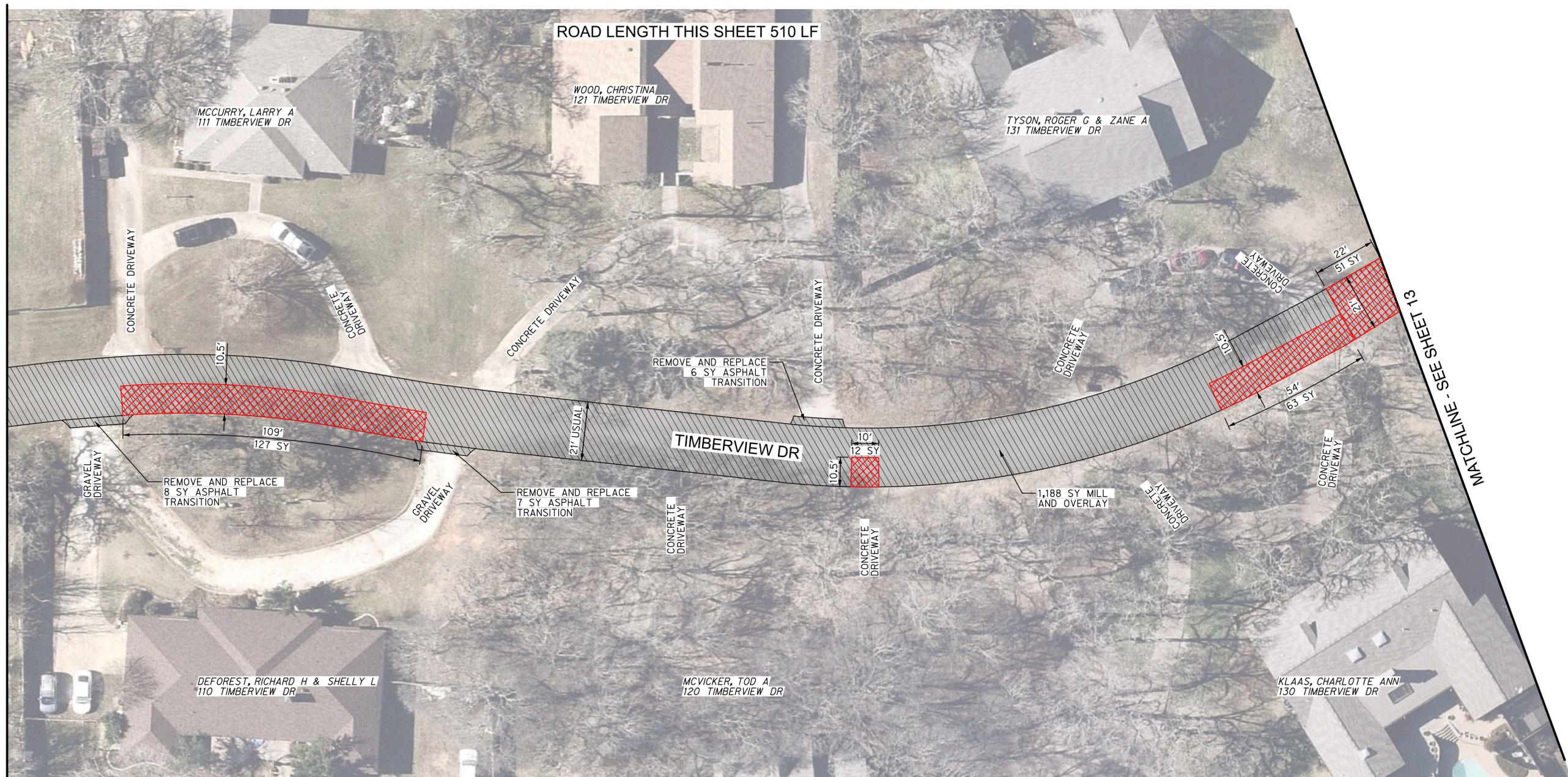
STEVEN D. TEMPLE
88656
LICENSED PROFESSIONAL ENGINEER
STATE OF TEXAS

TBPE FIRM #F-312
11/3/2022

Project No.: 52570
 Issued:
 Drawn By: HALFF
 Checked By: SDT
 Scale: AS NOTED
 Sheet Title
**TIMBERVIEW DR
 PAVING PLAN
 SHEET (1 OF 3)**
 11 OF 30
 Sheet Number

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MATCHLINE - SEE SHEET 11



MATCHLINE - SEE SHEET 13

ROAD LENGTH THIS SHEET 510 LF

MCCURRY, LARRY A
111 TIMBERVIEW DR

WOOD, CHRISTINA
121 TIMBERVIEW DR

TYSON, ROGER G & ZANE A
131 TIMBERVIEW DR

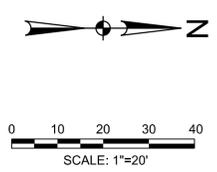
DEFOREST, RICHARD H & SHELLY L
110 TIMBERVIEW DR

MCVICKER, TOD A
120 TIMBERVIEW DR

KLAAS, CHARLOTTE ANN
130 TIMBERVIEW DR

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LEGEND

	LIMITS OF MILL AND OVERLAY
	LIMITS OF FULL DEPTH REPAIR

DOUBLE OAK
 2022 MILL AND OVERLAY PROJECT
 SHADY OAK AND MEADOW HOLLOW DR
 DOUBLE OAK, TX

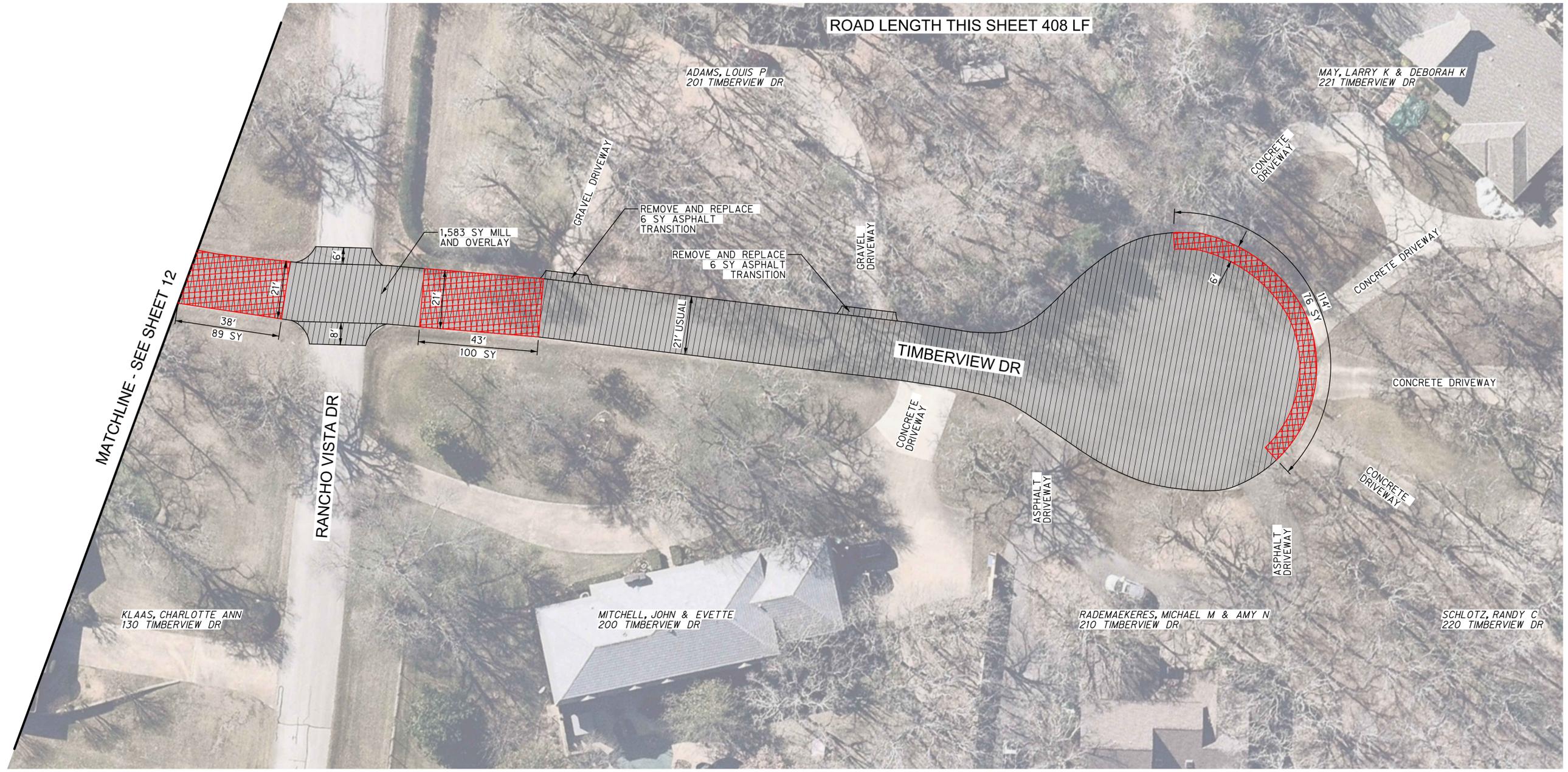
HALFF
 4000 FOSSIL CREEK BLVD
 FORT WORTH, TX 76107-2997
 TEL (817) 847-4422
 FAX (817) 232-0798
 TBPELS ENGINEERING FIRM #112

Revision No.	Date	Description

TBPE FIRM #F-312
 11/3/2022

Project No.: 52570	
Issued:	
Drawn By: HALFF	
Checked By: SDT	
Scale: AS NOTED	
Sheet Title	
TIMBERVIEW DR PAVING PLAN SHEET (2 OF 3)	
12 OF 30	
Sheet Number	

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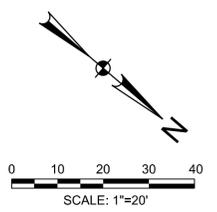


ROAD LENGTH THIS SHEET 408 LF

MATCHLINE - SEE SHEET 12

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LEGEND

	LIMITS OF MILL AND OVERLAY
	LIMITS OF FULL DEPTH REPAIR

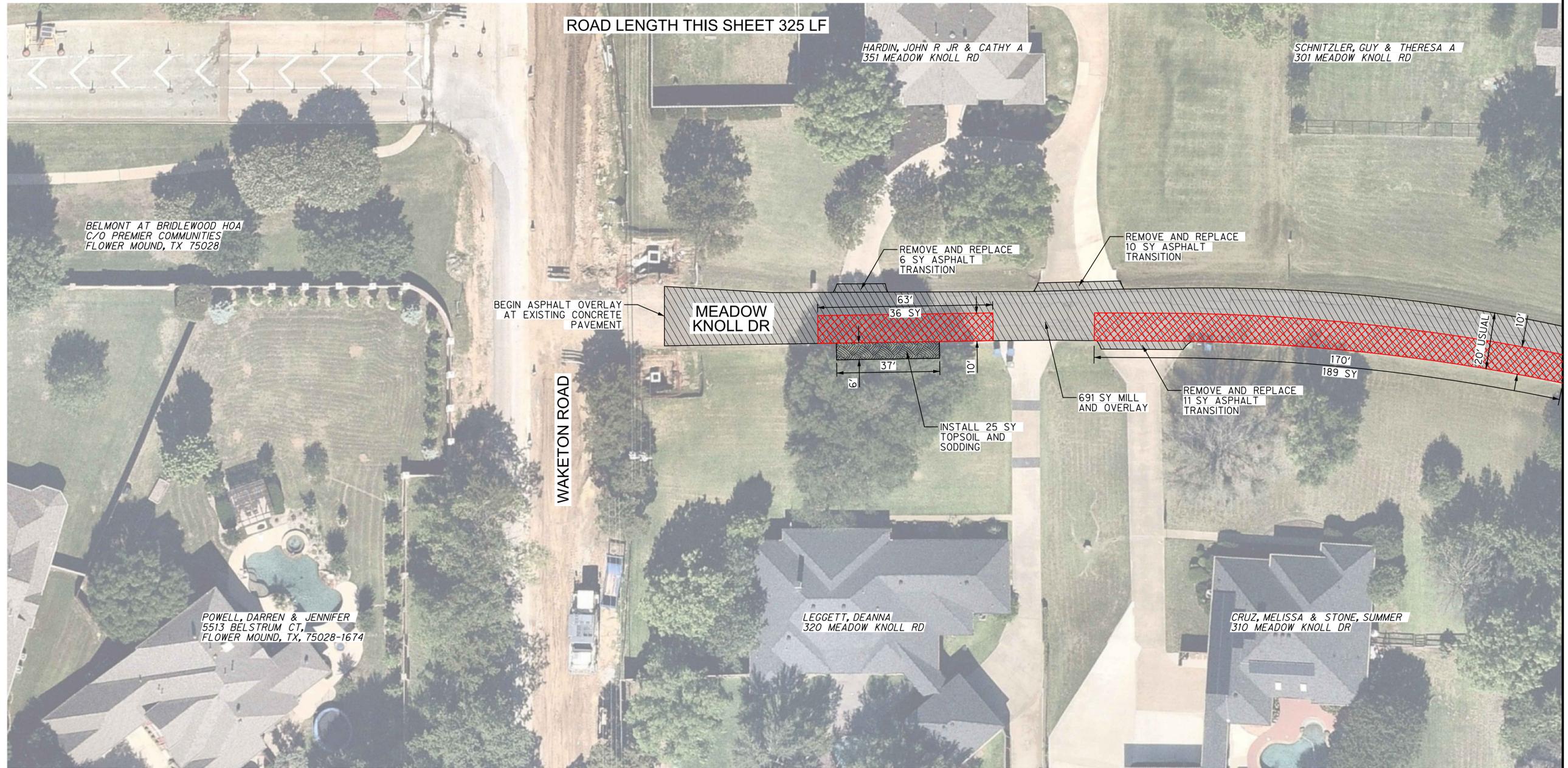
DOUBLE OAK
 2022 MILL AND OVERLAY PROJECT
 SHADY OAK AND MEADOW HOLLOW DR
 DOUBLE OAK, TX

HALFF
 4000 FOSSIL CREEK BLVD
 FORT WORTH, TEXAS 76107-2997
 TEL (817) 847-4422
 FAX (817) 252-0798
 TBPELS ENGINEERING FIRM #112

Revision No.	Date	Description

TBPE FIRM #F-312
 11/3/2022

Project No.: 52570
Issued:
Drawn By: HALFF
Checked By: SDT
Scale: AS NOTED
Sheet Title
TIMBERVIEW DR PAVING PLAN SHEET (3 OF 3)
13 OF 30
Sheet Number



ROAD LENGTH THIS SHEET 325 LF

HARDIN, JOHN R JR & CATHY A
351 MEADOW KNOLL RD

SCHNITZLER, GUY & THERESA A
301 MEADOW KNOLL RD

BELMONT AT BRIDLEWOOD HOA
C/O PREMIER COMMUNITIES
FLOWER MOUND, TX 75028

POWELL, DARREN & JENNIFER
5513 BELSTRUM CT,
FLOWER MOUND, TX, 75028-1674

LEGGETT, DEANNA
320 MEADOW KNOLL RD

CRUZ, MELISSA & STONE, SUMMER
310 MEADOW KNOLL DR

BEGIN ASPHALT OVERLAY
AT EXISTING CONCRETE
PAVEMENT

MEADOW
KNOLL DR

WAKETON ROAD

REMOVE AND REPLACE
6 SY ASPHALT
TRANSITION

REMOVE AND REPLACE
10 SY ASPHALT
TRANSITION

INSTALL 25 SY
TOPSOIL AND
SODDING

691 SY MILL
AND OVERLAY

REMOVE AND REPLACE
11 SY ASPHALT
TRANSITION

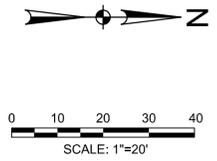
170'
189 SY

20' USUAL
10'

MATCHLINE - SEE SHEET 15

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-  LIMITS OF FULL DEPTH REPAIR

DOUBLE OAK
2022 MILL AND OVERLAY PROJECT
SHADY OAK AND MEADOW KNOLL DR
DOUBLE OAK, TX



HALFF
4000 FOSSIL CREEK BLVD
FLORESVILLE, TX 78115
TEL: (817) 847-4422
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TDP&E ENGINEERING FIRM #12

Revision No.	Date	Description



Project No.: 52570
Issued:
Drawn By: HALFF
Checked By: SDT
Scale: AS NOTED
Sheet Title MEADOW KNOLL DR PAVING PLAN SHEET (1 OF 3)
14 OF 30 Sheet Number

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10/11/2022

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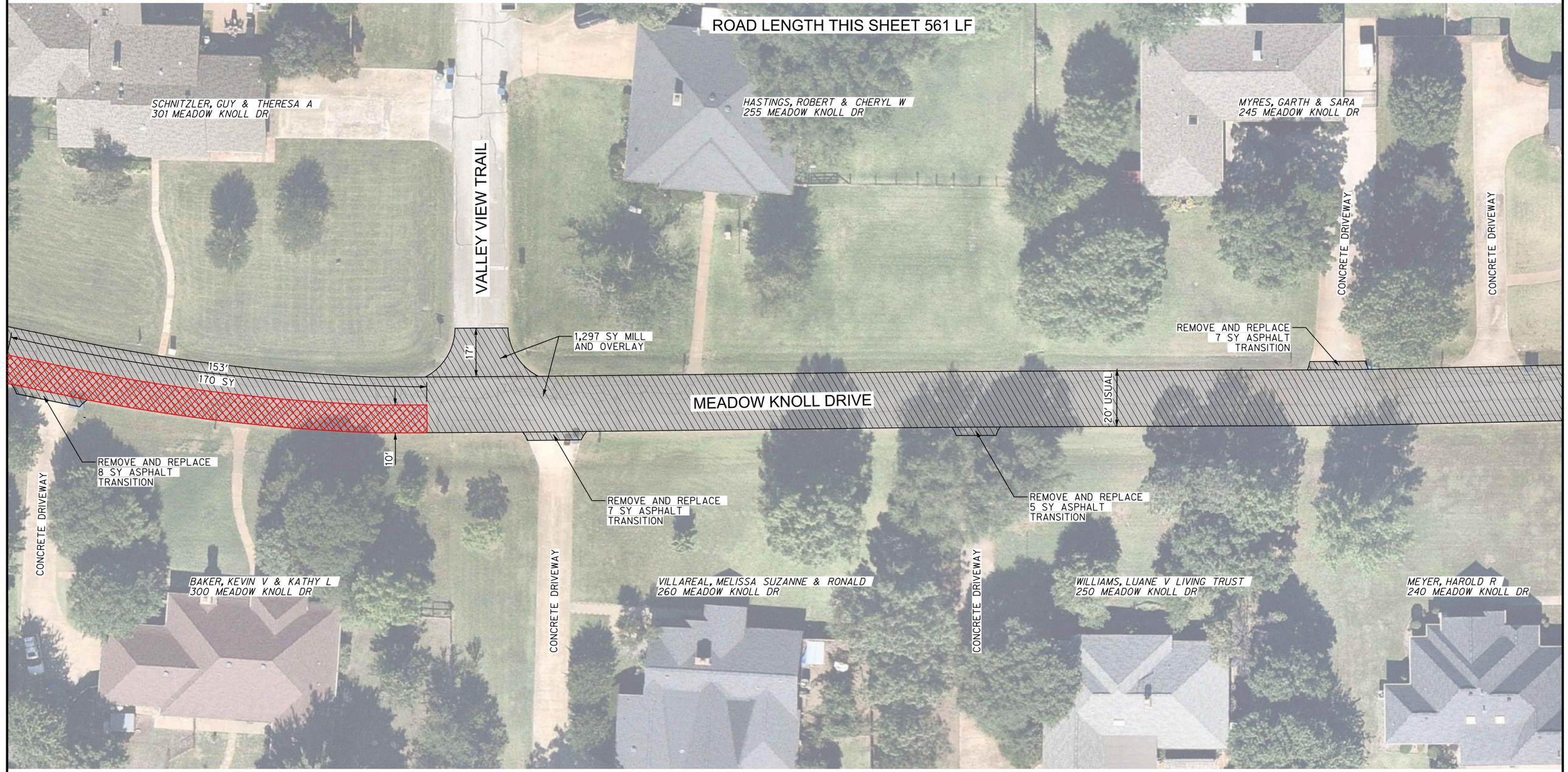
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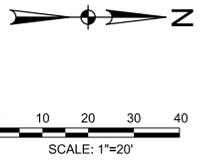
MATCHLINE - SEE SHEET 14

MATCHLINE - SEE SHEET 16



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 LIMITS OF FULL DEPTH REPAIR

DOUBLE OAK
2022 MILL AND OVERLAY PROJECT
SHADY OAK AND MEADOW KNOLL DR
DOUBLE OAK, TX



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TYPED ENGINEERING FIRM #312



Revision No.	Date	Description



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STATE OF TEXAS

Project No.: 52570
Issued:
Drawn By: HALFF
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Scale: AS NOTED
Sheet Title
MEADOW KNOLL DR
PAVING PLAN
SHEET (2 OF 3)
15 OF 30
Sheet Number

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10/14/2022

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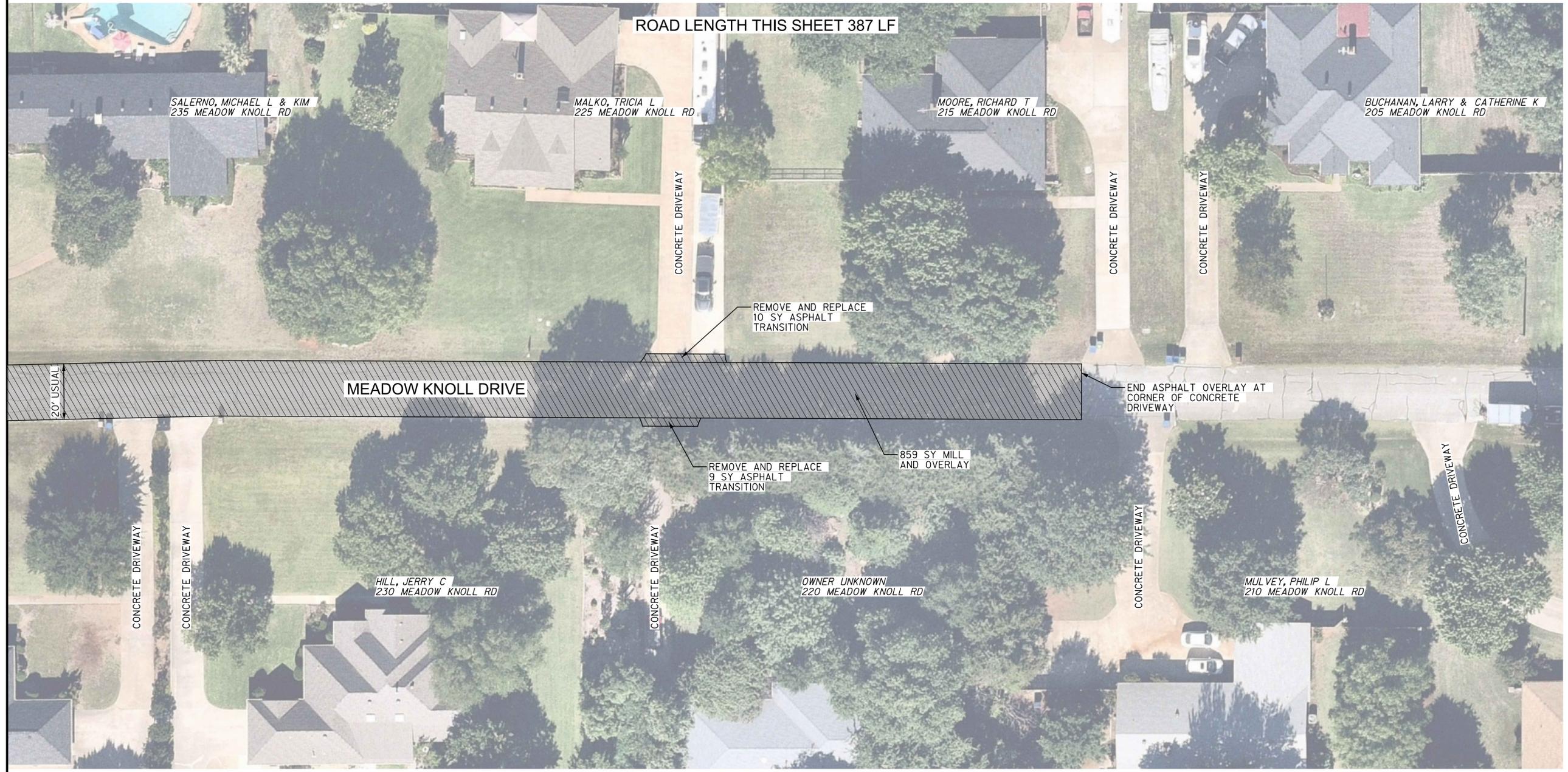
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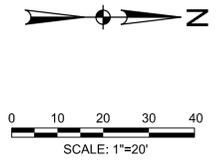
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MATCHLINE - SEE SHEET 15



NOTES:

- REFER TO PAVEMENT DETAILS AND STANDARD DETAILS FOR PAVING NOTES, DETAILS, AND OTHER INFORMATION.
- CONTRACTOR SHALL MATCH EDGE OF PROPOSED PAVEMENT TO ALL EXISTING DRIVEWAYS. THIS MAY REQUIRE A FLARE TO THE DRIVEWAY TO MAINTAIN A STRAIGHT ROADWAY EDGE.
- CONTRACTOR TO VERIFY LOCATIONS OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
- CONTRACTOR TO PROTECT ALL TREES, MAILBOXES, AND LANDSCAPING ADJACENT TO PAVEMENT.
- QUANTITY AND LIMITS OF ASPHALT TRANSITIONS ARE APPROXIMATE. DEPTH OF MILLING NEAR DRIVEWAYS MAY VARY TO ALLOW BETTER TIE-INS. AT NO TIME SHALL THE CONTRACTOR MILL INTO THE BASE. DEPTH CHANGES ARE SUBSIDIARY TO VARIABLE DEPTH MILL.
- QUANTITY FOR REMOVE AND REPLACE ASPHALT TRANSITION ON DRIVEWAY IS APPROXIMATE BASED ON AN AVERAGE 3' WIDTH. ACTUAL WIDTH AND LIMITS ON DRIVEWAYS WILL VARY AND BE AGREED UPON IN THE FIELD. QUANTITIES WILL BE MEASURED IN THE FIELD.
- AN ALLOWANCE IS PROVIDED FOR BLOCK SODDING. IT IS THE INTENT TO MINIMIZE THE NEED EXCEPT WHERE SHOWN ON THE PLANS. THERE MAY BE CIRCUMSTANCES CAUSED BY PAVEMENT REDUCTION OR GRASS DYING DUE TO THE ASPHALT OPERATION THAT MAY NECESSITATE THE NEED FOR ADDITIONAL BLOCK SODDING.
- CONTRACTOR TO TAKE PICTURES AND VIDEO THE PROJECT SITE TO DOCUMENT THE EXISTING CONDITIONS PRIOR TO BEGINNING WORK.



LEGEND

	LIMITS OF MILL AND OVERLAY
	LIMITS OF FULL DEPTH REPAIR

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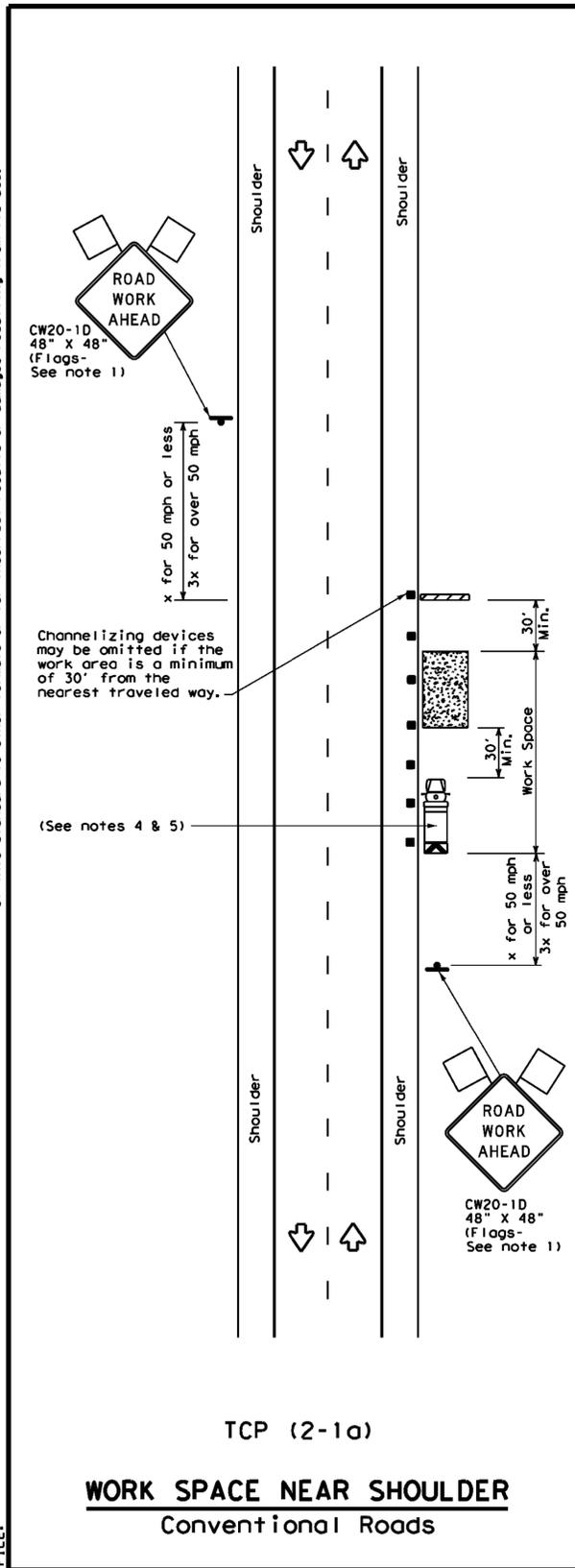
Revision No.	Date	Description

TBPE FIRM #F-312
11/3/2022

Project No.: 52570
Issued:
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Scale: AS NOTED
Sheet Title
MEADOW KNOLL DR PAVING PLAN SHEET (3 OF 3)
16 OF 30
Sheet Number

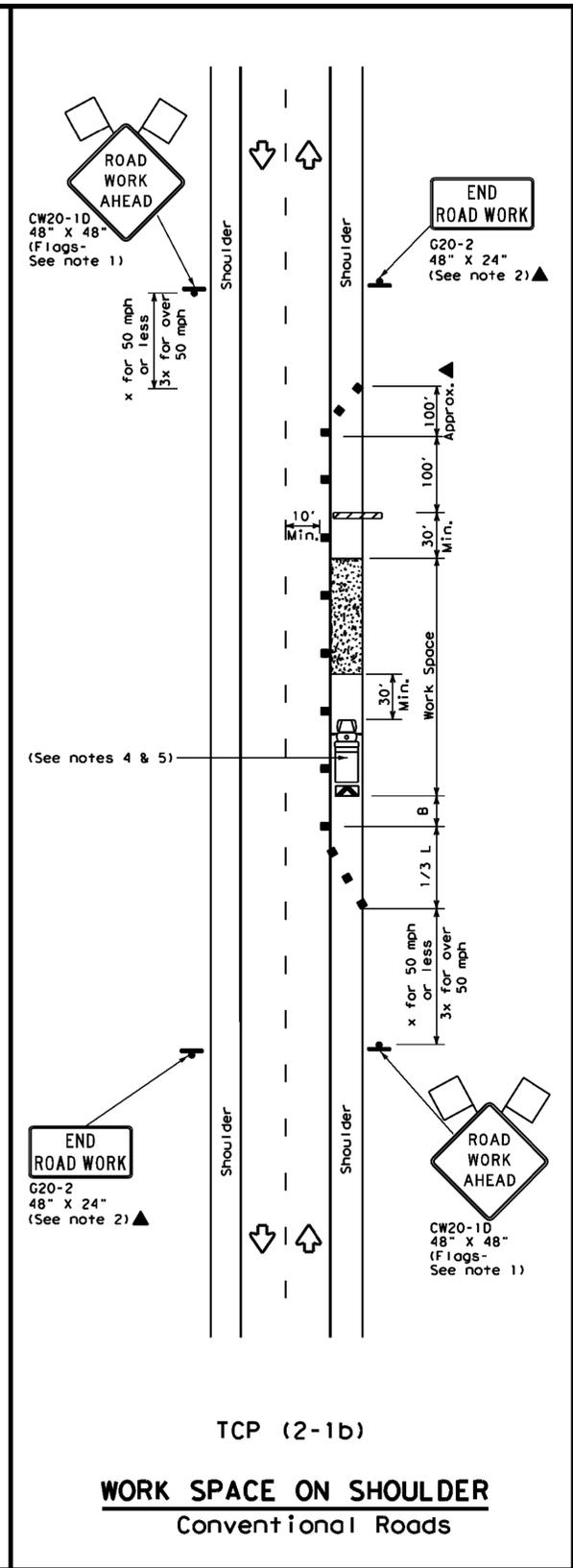
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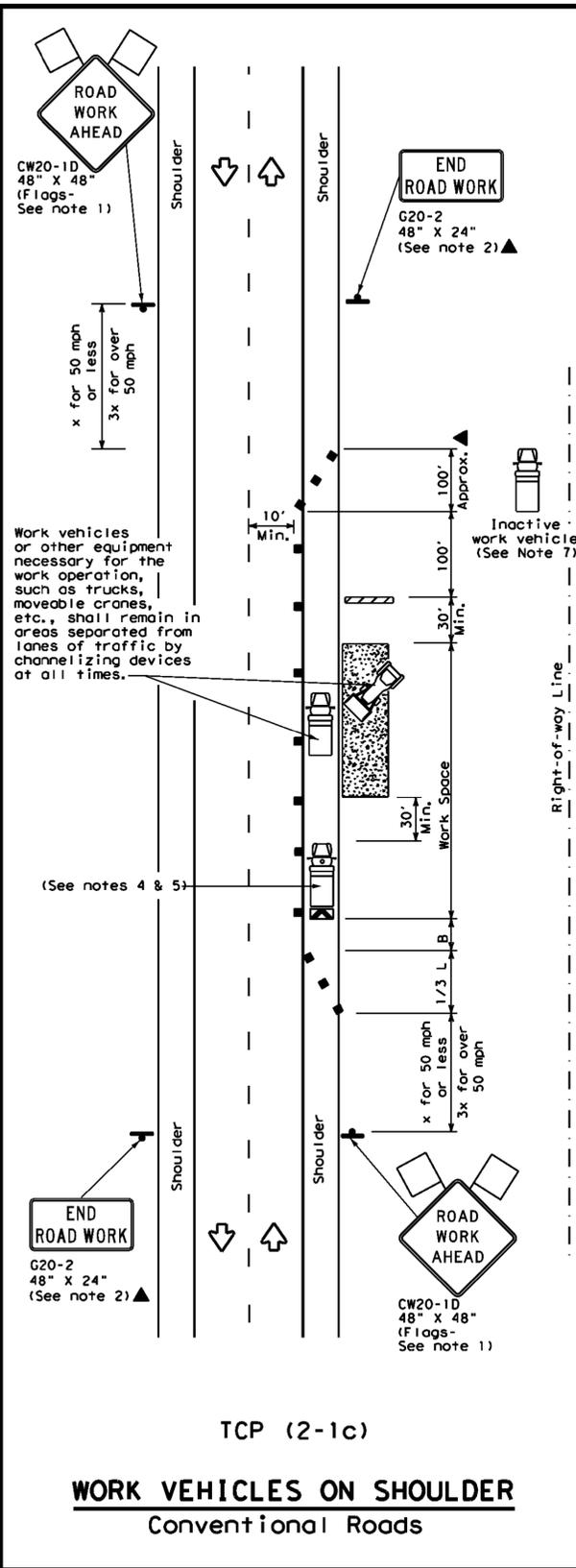
TCP (2-1a)

WORK SPACE NEAR SHOULDER
Conventional Roads



TCP (2-1b)

WORK SPACE ON SHOULDER
Conventional Roads



TCP (2-1c)

WORK VEHICLES ON SHOULDER
Conventional Roads

LEGEND

	Type 3 Barricade		Channelizing Devices
	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 **			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 = 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**
- Flags attached to signs where shown, are REQUIRED.
 - All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated in the plans, or for routine maintenance work, when approved by the Engineer.
 - Stockpiled material should be placed a minimum of 30 feet from nearest traveled way.
 - 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.
 - Additional Shadow Vehicles with TMAs may be positioned off the paved surface, next to those shown in order to protect a wider work space.
 - See TCP(5-1) for shoulder work on divided highways, expressways and freeways.
 - Inactive work vehicles or other equipment should be parked near the right-of-way line and not parked on the paved shoulder.
 - CW21-5 "SHOULDER WORK" signs may be used in place of CW20-1D "ROAD WORK AHEAD" signs for shoulder work on conventional roadways.



TRAFFIC CONTROL PLAN
CONVENTIONAL ROAD
SHOULDER WORK

TCP(2-1)-18

FILE: tcp2-1-18.dgn	DN:	CK:	DN:	CK:
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REVISIONS	DIST	COUNTY	SHEET NO.	
2-94 4-98				
8-95 2-12				
1-97 2-18				



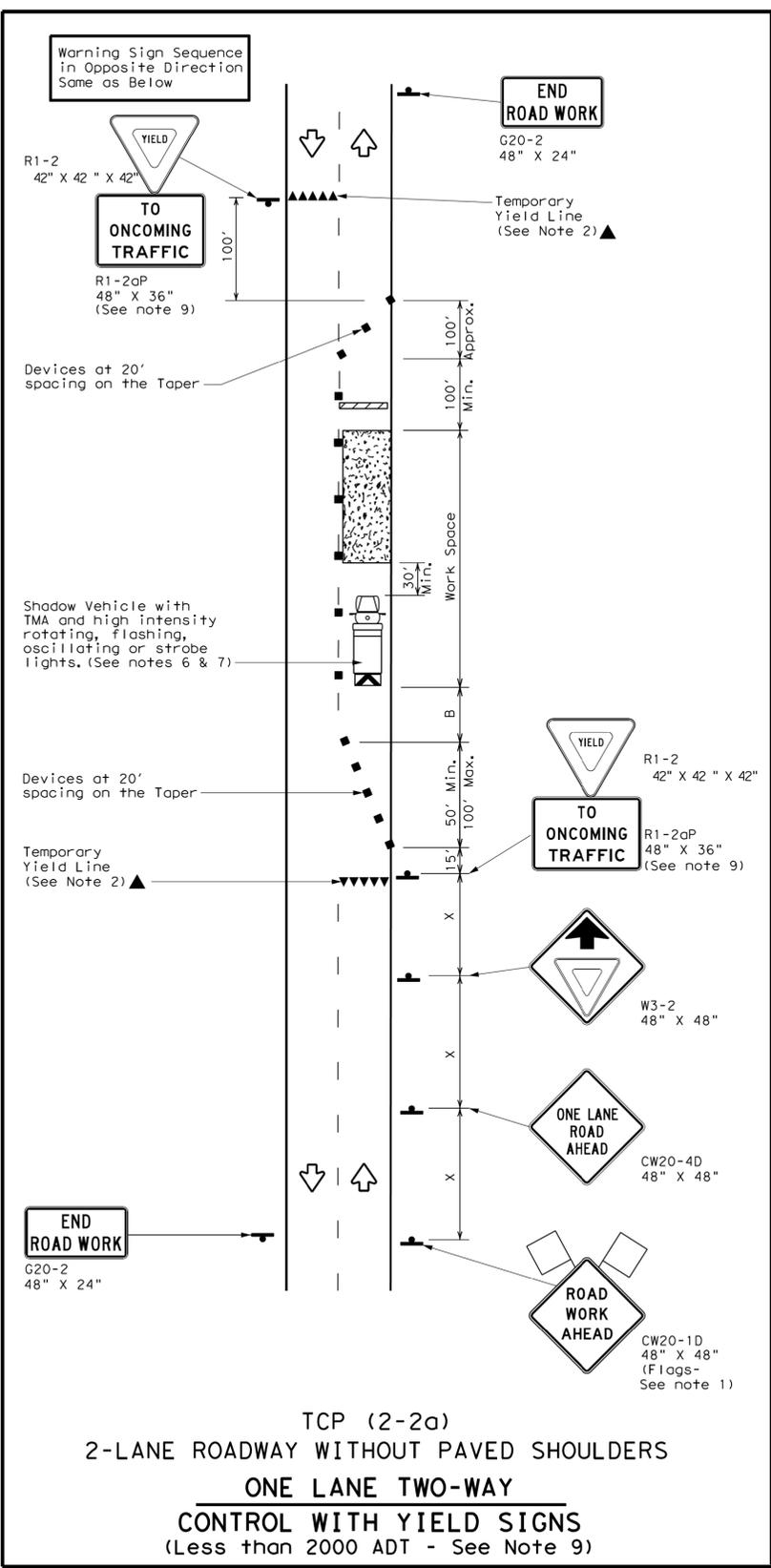
Project No.: 52570
 Issued:
 Drawn By: HALFF
 Checked By: SDT
 Scale: AS NOTED
 Sheet Title
TRAFFIC CONTROL PLAN
 TCP (2-1) - 18
 17 OF 30
 Sheet Number



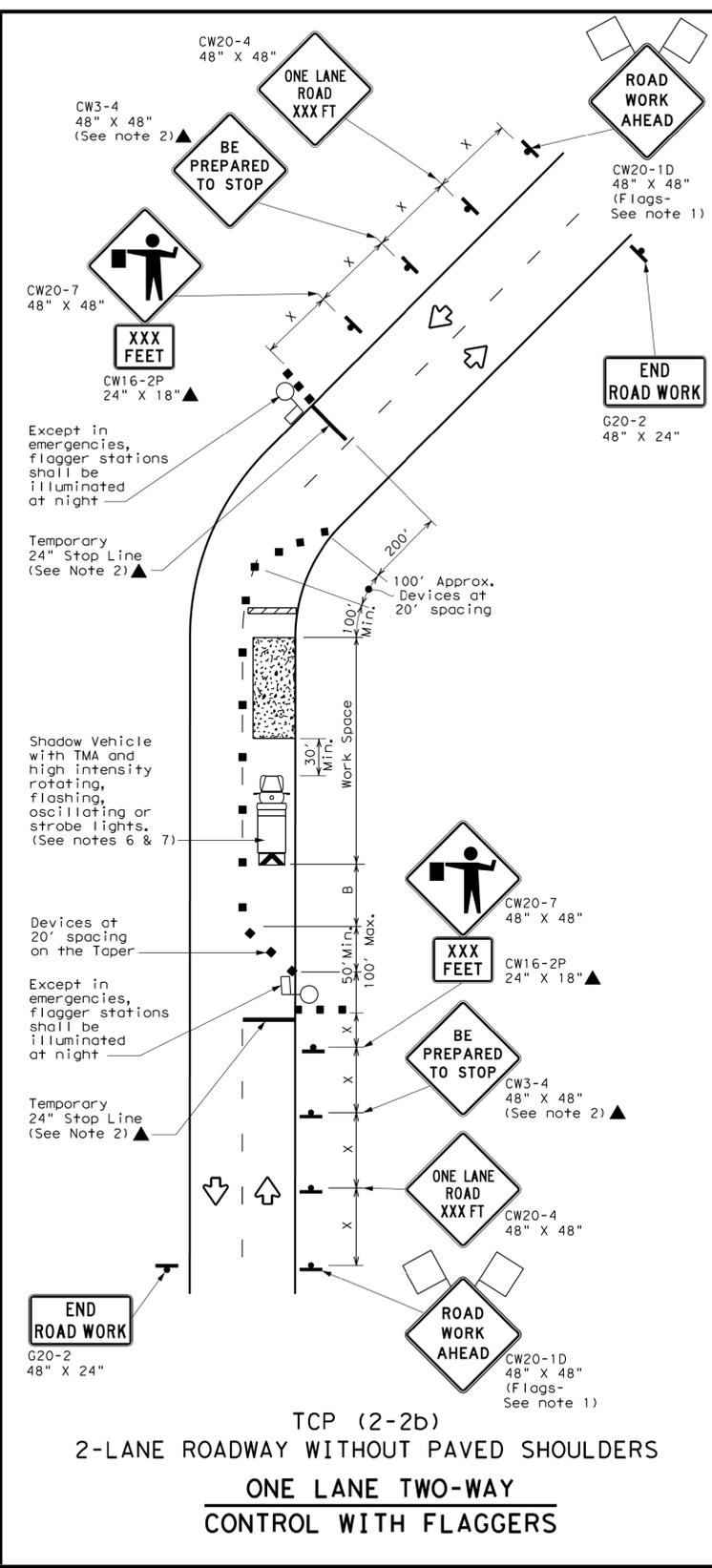
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TCP (2-2a)
2-LANE ROADWAY WITHOUT PAVED SHOULDERS
ONE LANE TWO-WAY
CONTROL WITH YIELD SIGNS
 (Less than 2000 ADT - See Note 9)



TCP (2-2b)
2-LANE ROADWAY WITHOUT PAVED SHOULDERS
ONE LANE TWO-WAY
CONTROL WITH FLAGGERS

LEGEND			
	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board		Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed * X	Formula L = WS / 60	Minimum Desirable Taper Lengths * X			Suggested Maximum Spacing of Channelizing Devices		Minimum Sign Spacing "x" Distance	Suggested Longitudinal Buffer Space "B"	Stopping Sight Distance
		10' Offset	11' Offset	12' Offset	On a Taper	On a Tangent			
30	L = WS / 60	150'	165'	180'	30'	60'	120'	90'	200'
35		205'	225'	245'	35'	70'	160'	120'	250'
40	L = WS	265'	295'	320'	40'	80'	240'	155'	305'
45		450'	495'	540'	45'	90'	320'	195'	360'
50	L = WS	500'	550'	600'	50'	100'	400'	240'	425'
55		550'	605'	660'	55'	110'	500'	295'	495'
60	L = WS	600'	660'	720'	60'	120'	600'	350'	570'
65		650'	715'	780'	65'	130'	700'	410'	645'
70	L = WS	700'	770'	840'	70'	140'	800'	475'	730'
75		750'	825'	900'	75'	150'	900'	540'	820'

* 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**
- Flags attached to signs where shown, are REQUIRED.
 - 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.
 - The CW3-4 "BE PREPARED TO STOP" sign may be installed after the CW20-4 "ONE LANE ROAD XXX FT" sign, but proper sign spacing shall be maintained.
 - Flaggers should use two-way radios or other methods of communication to control traffic.
 - Length of work space should be based on the ability of flaggers to communicate.
 - 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.
 - Additional Shadow Vehicles with TMAs may be positioned off the paved surface, next to those shown in order to protect a wider work space.
- TCP (2-2a)**
- The R1-2 "YIELD" sign traffic control may be used on projects with approaches that have adequate sight distance. For projects in urban areas, work space should be no longer than one half city block. In rural areas, roadways with less than 2000 ADT, work space should be no longer than 400 feet.
 - The R1-2aP "YIELD TO ONCOMING TRAFFIC" sign shall be placed on a support at a 7 foot minimum mounting height.
- TCP (2-2b)**
- Channelizing devices on the center line may be omitted when a pilot car is leading traffic and approved by the Engineer.
 - If the work space is located near a horizontal or vertical curve, the buffer distances should be increased in order to maintain stopping sight distance to the flagger and a queue of stopped vehicles. (See table above).
 - Flaggers should use 24" STOP/SLOW paddles to control traffic. Flags should be limited to emergency situations.

Traffic Operations Division Standard

TRAFFIC CONTROL PLAN
ONE-LANE TWO-WAY
TRAFFIC CONTROL

TCP (2-2) - 18

FILE: tcp2-2-18.dgn	DIST: COUNTY	JOB: HIGHWAY
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8-95 3-03		
1-97 2-12		
4-98 2-18		

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 TCP (2-2) - 18
 18 OF 30
 Sheet Number

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BARRICADE AND CONSTRUCTION (BC) STANDARD SHEETS GENERAL NOTES:

- 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).
- The development and design of the Traffic Control Plan (TCP) is the responsibility of the Engineer.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- Traffic control devices should be in place only while work is actually in progress or a definite need exists.
- The Engineer has the final decision on the location of all traffic control devices.
- 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:

- 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.
- Except in emergency situations, flagger stations shall be illuminated when flagging is used at night.

COMPLIANT WORKZONE TRAFFIC CONTROL DEVICES

- Only pre-qualified products shall be used. The "Compliant Work Zone Traffic Control Devices List" (CWZTCD) describes pre-qualified products and their sources.
- 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	DW: TxDOT	CK: TxDOT	DW: TxDOT
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4-03 7-13			
9-07 8-14			
5-10 5-21			

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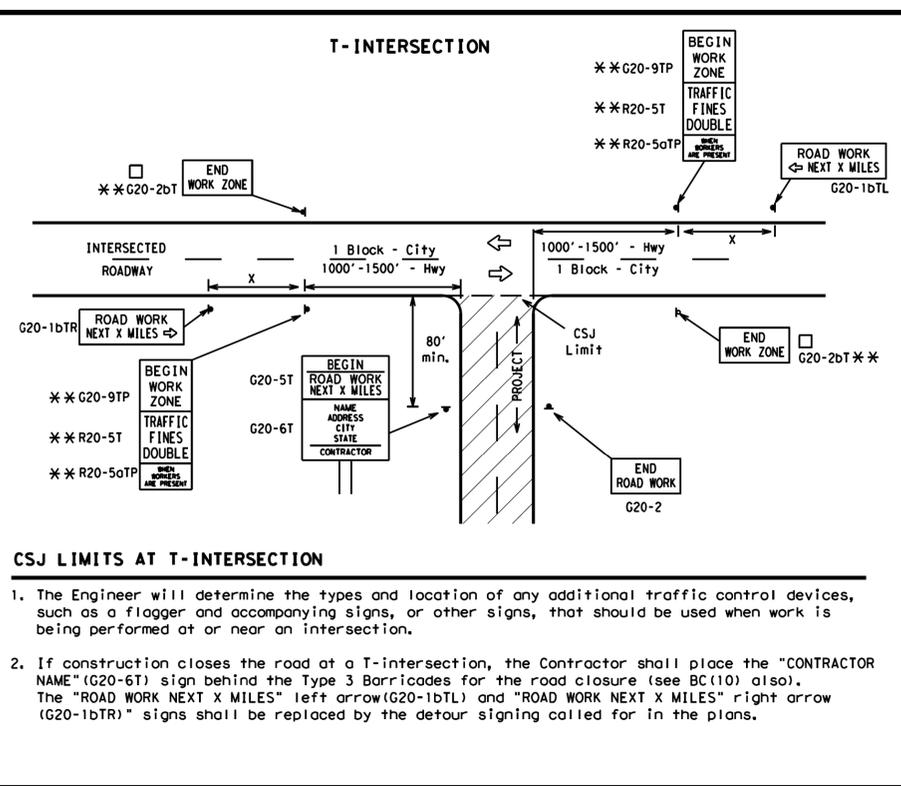
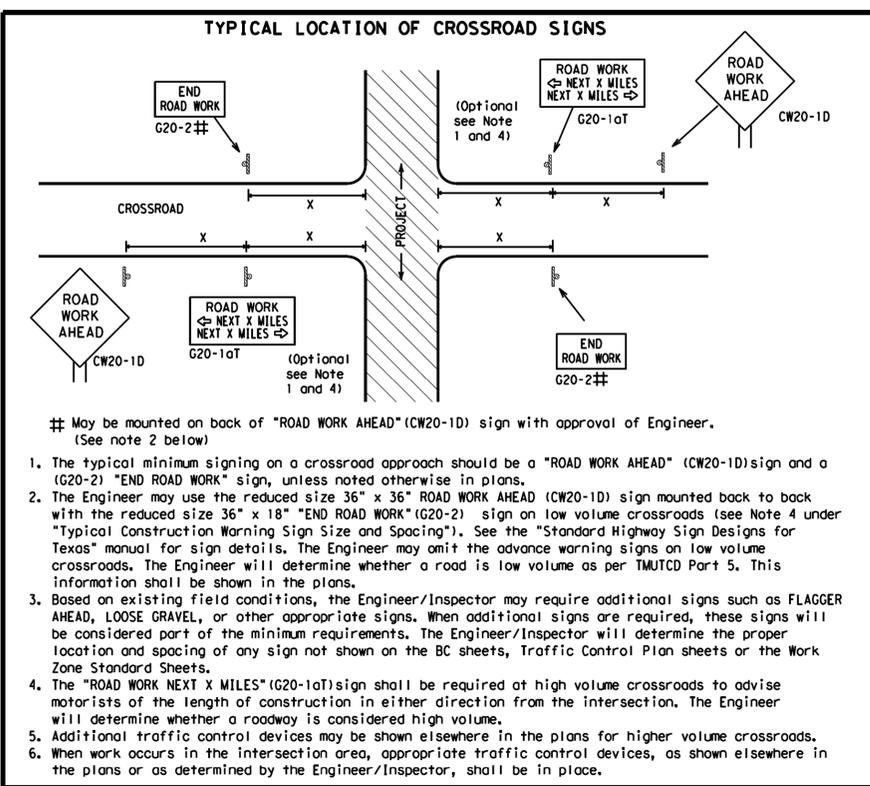
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BARRICADE AND CONSTRUCTION BC (1) - 21
 19 OF 30
 Sheet Number

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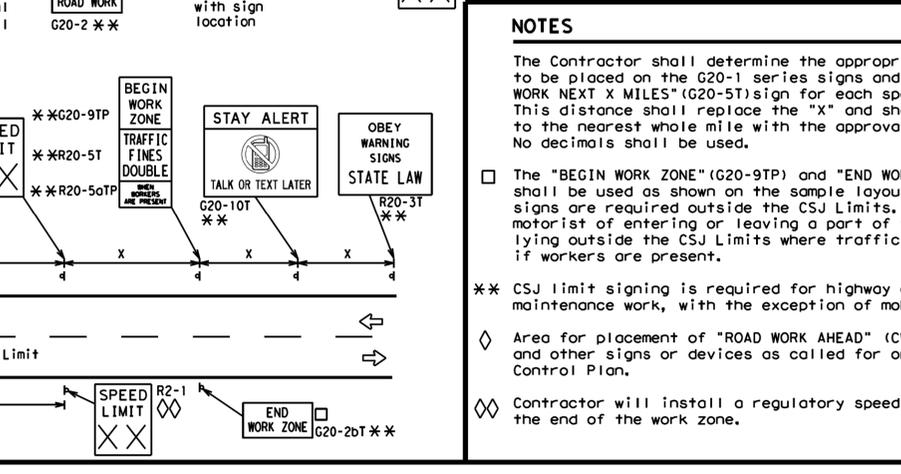
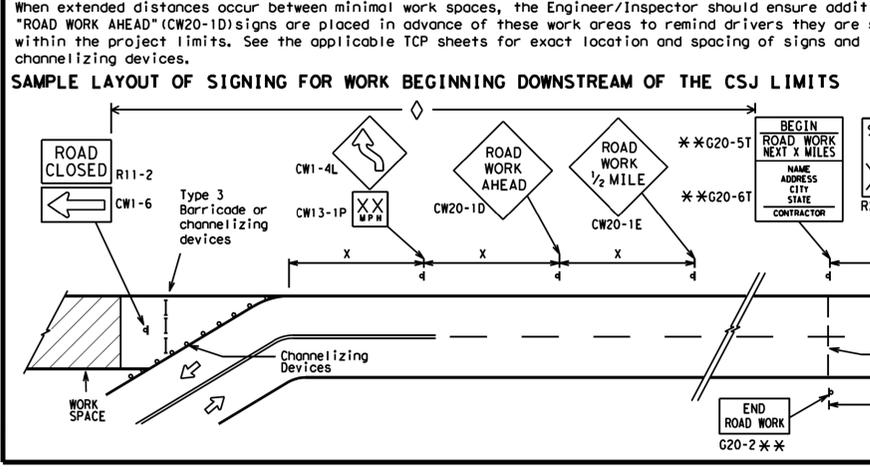
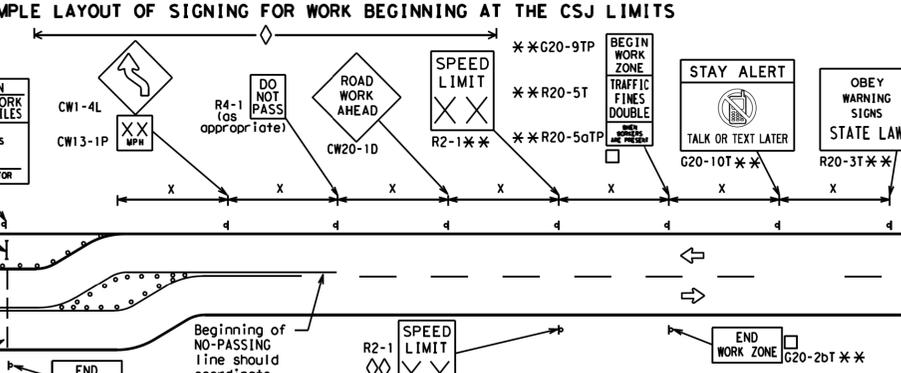
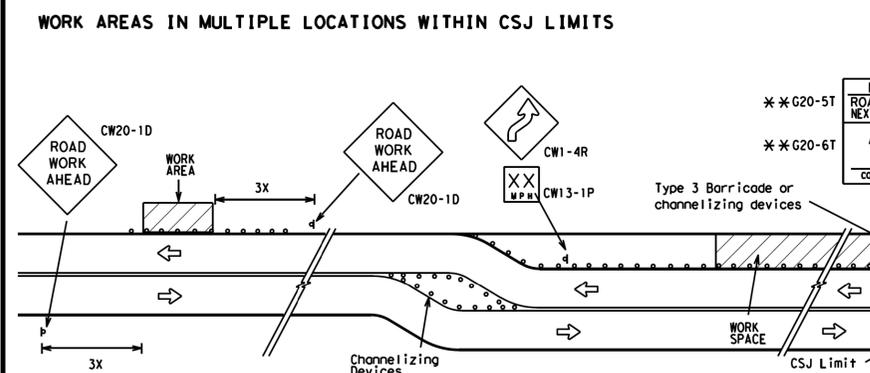
TYPICAL CONSTRUCTION WARNING SIGN SIZE AND SPACING^{1,5,6}

Sign Number or Series	SIZE		SPACING	
	Conventional Road	Expressway/Freeway	Posted Speed MPH	Sign Spacing "X" Feet (Approx.)
CW20 ⁴	48" x 48"	48" x 48"	30	120
CW21			35	160
CW22			40	240
CW23	36" x 36"	48" x 48"	45	320
CW1, CW2, CW7, CW8, CW9, CW11, CW14			50	400
CW10, CW12			55	500 ²
CW3, CW4, CW5, CW6, CW8-3, CW9-3, CW10, CW12	48" x 48"	48" x 48"	65	700 ²
			70	800 ²
			75	900 ²
			80	1000 ²
			*	*

* 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.
¹ Minimum distance from work area to first Advance Warning sign nearest the work area and/or distance between each additional sign.

GENERAL NOTES

- Special or larger size signs may be used as necessary.
- Distance between signs should be increased as required to have 1500 feet advance warning.
- Distance between signs should be increased as required to have 1/2 mile or more advance warning.
- 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".
- Only diamond shaped warning sign sizes are indicated.
- 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.



LEGEND

—	Type 3 Barricade
○ ○ ○	Channelizing Devices
□	Sign
X	See Typical Construction Warning Sign Size and Spacing chart or the TMUTCD for sign spacing requirements.

SHEET 2 OF 12

Texas Department of Transportation
 Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION PROJECT LIMIT

BC (2) - 21

FILE: bc-21.dgn	DATE: TxDOT	CHK: TxDOT	DATE: TxDOT	CHK: TxDOT
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9-07	8-14			
7-13	5-21			
		DIST	COUNTY	SHEET NO.

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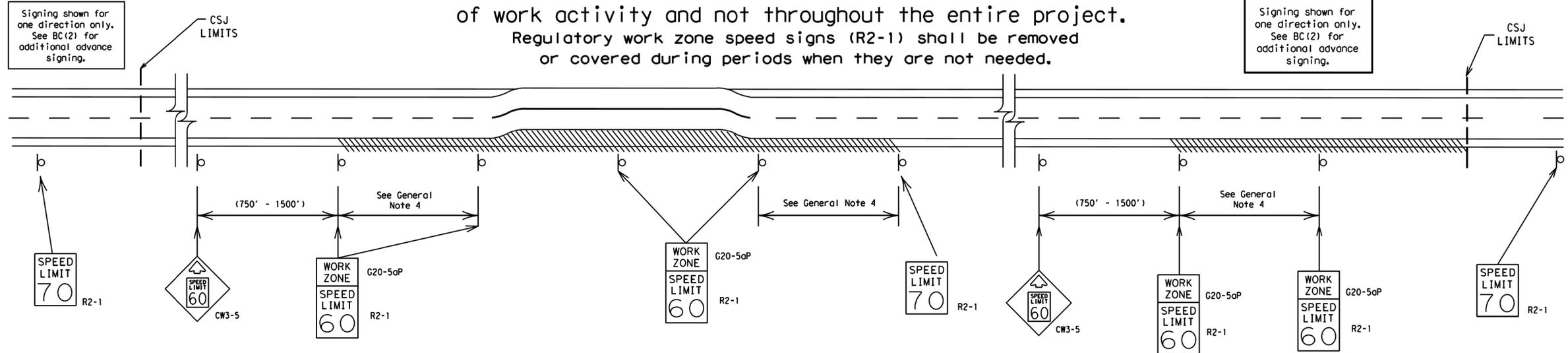
STEVEN D. TEMPLE
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 BARRICADE AND CONSTRUCTION
 BC (2) - 21
 20 OF 30
 Sheet Number

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:

- rough road or damaged pavement surface
- substantial alteration of roadway geometrics (diversions)
- construction detours
- grade
- width
- 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

- Regulatory work zone speed limits should be used only for sections of construction projects where speed control is of major importance.
- Regulatory work zone speed limit signs shall be placed on supports at a 7 foot minimum mounting height.
- Speed zone signs are illustrated for one direction of travel and are normally posted for each direction of travel.
- 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
- Regulatory speed limit signs shall have black legend and border on a white reflective background (See "Reflective Sheeting" on BC(4)).
- 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.
- Turning signs from view, laying signs over or down will not be allowed, unless as otherwise noted under "REMOVING OR COVERING" on BC(4).
- 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.
- Speeds shown on details above are for illustration only. Work Zone Speed Limits should only be posted as approved for each project.
- 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.

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SHEET 3 OF 12

Texas Department of Transportation
Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION WORK ZONE SPEED LIMIT

BC (3) - 21

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2022 MILL AND OVERLAY PROJECT
SHADY OAK AND MEADOW KNOLL DR
DOUBLE OAK, TX

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TBPE ENGINEERING FIRM #12

Revision No.	Date	Description

STATE OF TEXAS
STEVEN D. TEMPLE
88656
LICENSED PROFESSIONAL ENGINEER

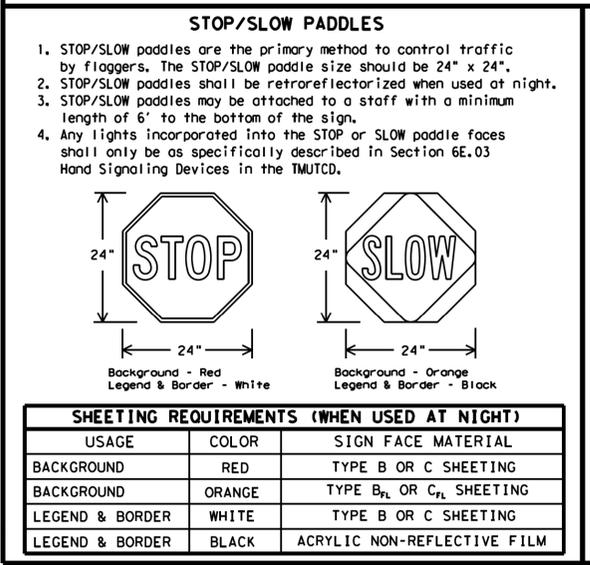
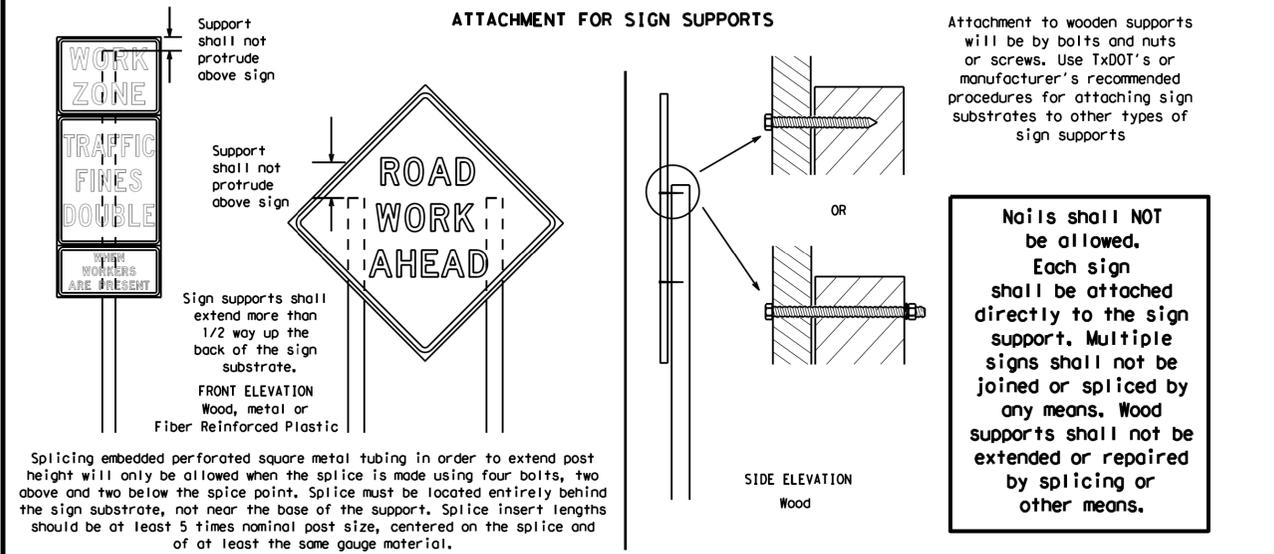
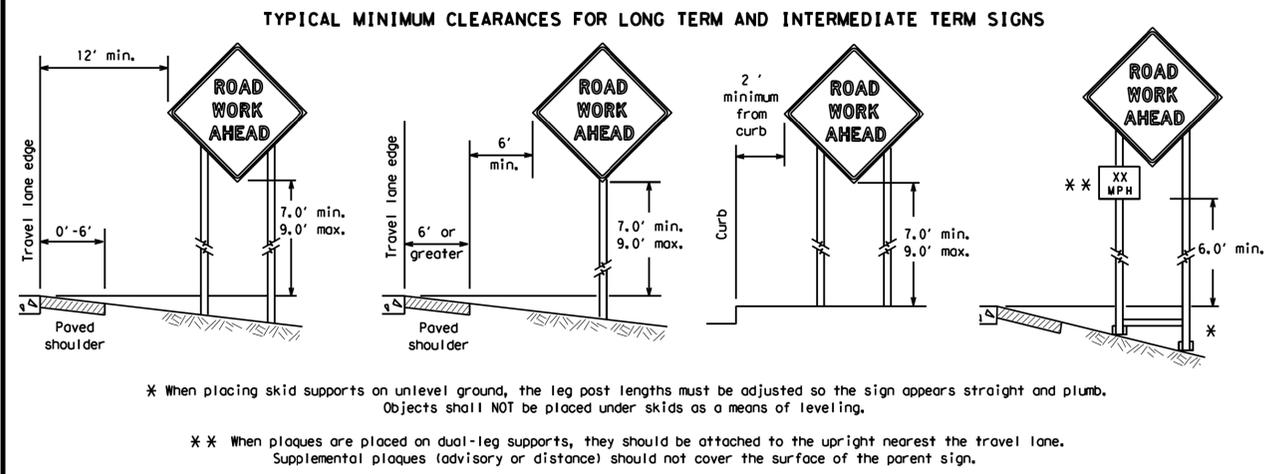
TBPE FIRM #F-312
11/3/2022

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 Drawn By: HALFF
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 Scale: AS NOTED
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BARRICADE AND CONSTRUCTION BC (3) - 21
 21 OF 30
 Sheet Number

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CONTRACTOR REQUIREMENTS FOR MAINTAINING PERMANENT SIGNS WITHIN THE PROJECT LIMITS

- 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.
- 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.
- When existing permanent signs are moved and relocated due to construction purposes, they shall be visible to motorists at all times.
- 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.
- 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.
- 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

- Contractor shall install and maintain signs in a straight and plumb condition and/or as directed by the Engineer.
- Wooden sign posts shall be painted white.
- Barricades shall NOT be used as sign supports.
- 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 travelling public safely through the work zone.
- 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.
- 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.
- 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.
- 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.
- 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)

- 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.
- Long-term stationary - work that occupies a location more than 3 days.
- 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.
- Short-term stationary - daytime work that occupies a location for more than 1 hour in a single daylight period.
- Short, duration - work that occupies a location up to 1 hour.
- Mobile - work that moves continuously or intermittently (stopping for up to approximately 15 minutes.)

SIGN MOUNTING HEIGHT

- 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.
- 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.
- Long-term/Intermediate-term Signs may be used in lieu of Short-term/Short Duration signing.
- 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.
- 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

- 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

- 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.
- "Mesh" type materials are NOT an approved sign substrate, regardless of the tightness of the weave.
- 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

- 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).
- White sheeting, meeting the requirements of DMS-8300 Type A, shall be used for signs with a white background.
- 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

- 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

- When sign messages may be confusing or do not apply, the signs shall be removed or completely covered.
- 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.
- 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.
- 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.
- Burlap shall NOT be used to cover signs.
- Duct tape or other adhesive material shall NOT be affixed to a sign face.
- Signs and anchor stubs shall be removed and holes backfilled upon completion of work.

SIGN SUPPORT WEIGHTS

- Where sign supports require the use of weights to keep from turning over, the use of sandbags with dry, cohesionless sand should be used.
- The sandbags will be tied shut to keep the sand from spilling and to maintain a constant weight.
- Rock, concrete, iron, steel or other solid objects shall not be permitted for use as sign support weights.
- 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.
- 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.
- 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.
- Sandbags shall NOT be placed under the skid and shall not be used to level sign supports placed on slopes.

FLAGS ON SIGNS

- 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.

SHEET 4 OF 12

**BARRICADE AND CONSTRUCTION
TEMPORARY SIGN NOTES**

BC (4) - 21

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DOUBLE OAK
2022 MILL AND OVERLAY PROJECT
SHADY OAK AND MEADOW HOLLOW DR
AND MEADOW HOLLOW DR
DOUBLE OAK, TX

4000 FOSSIL CREEK BLVD
 FORT WORTH, TX 76107-2197
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 TBPES ENGINEERING FIRM #912

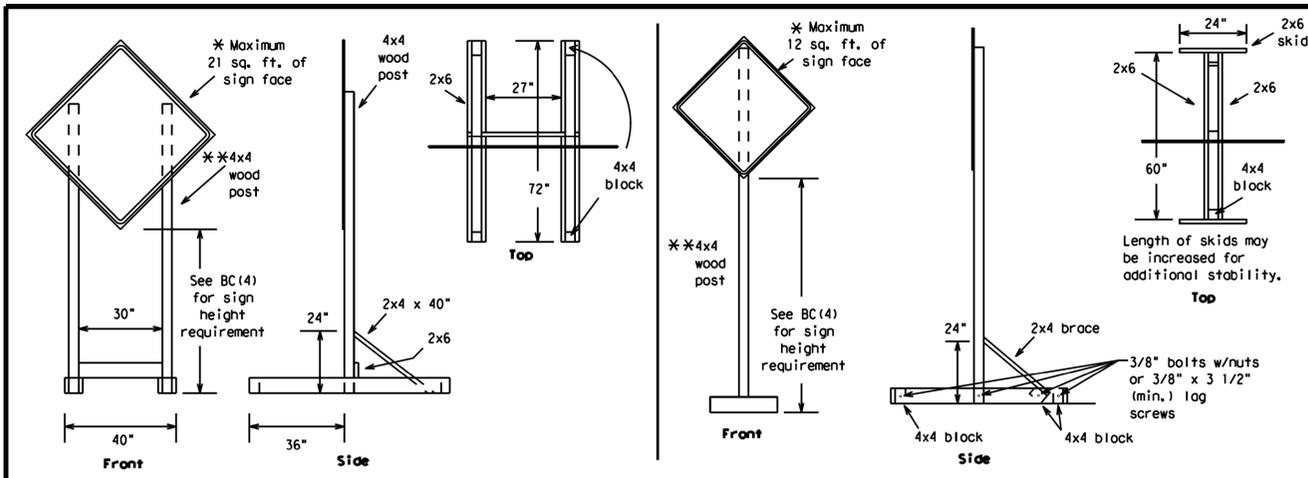
Revision No.	Date	Description

TBPE FIRM #F-312
11/3/2022

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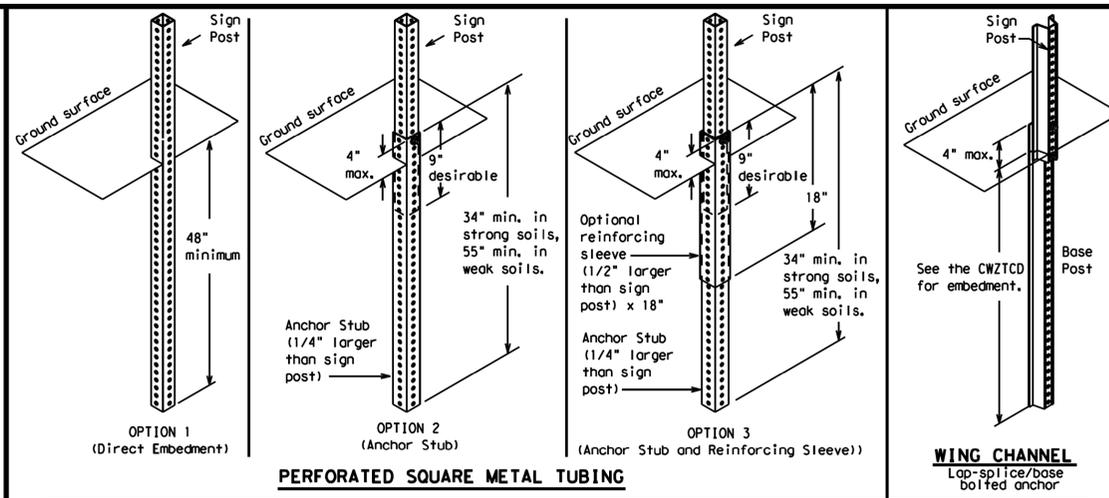
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SKID MOUNTED WOOD SIGN SUPPORTS

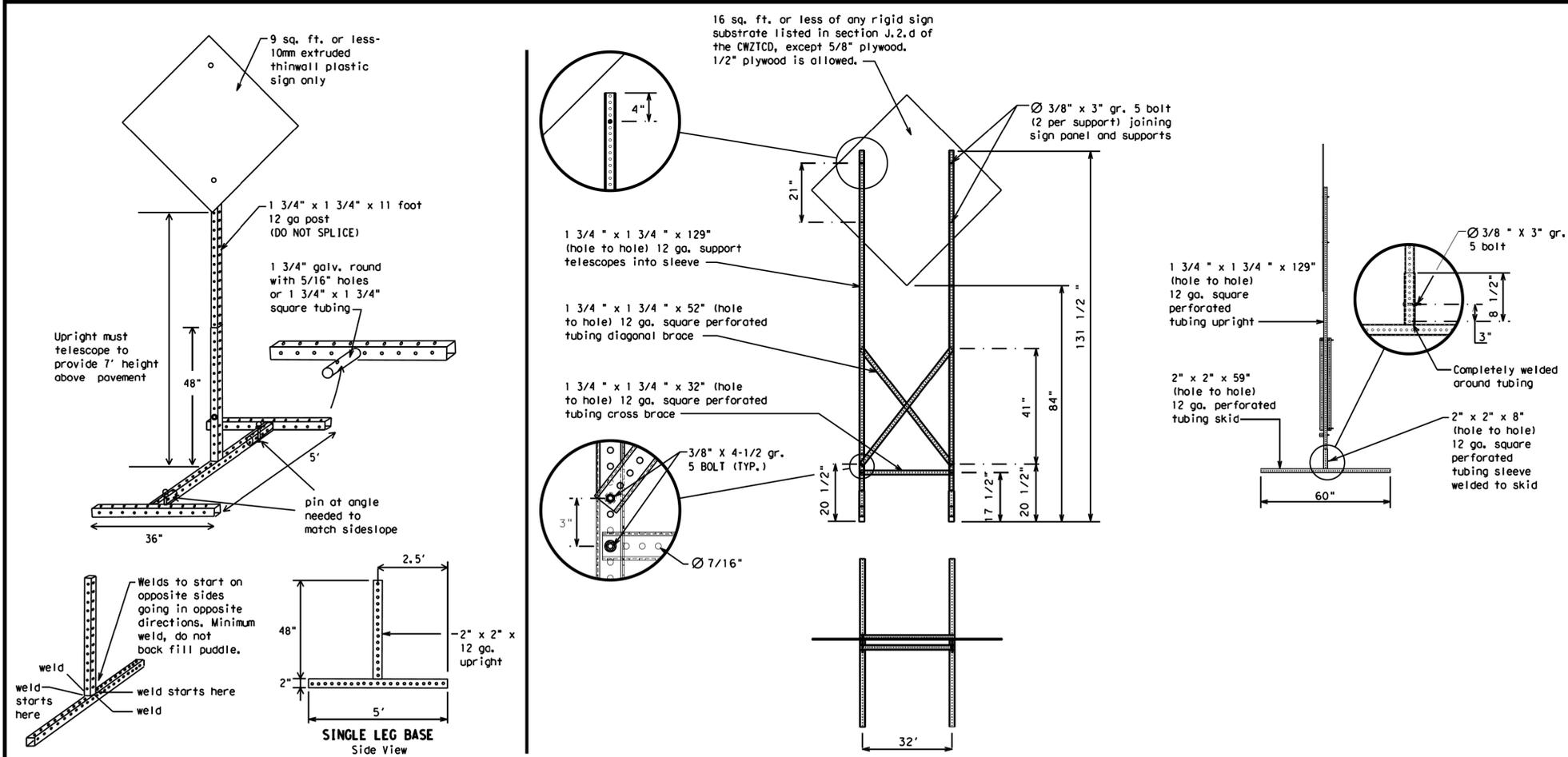
* LONG/INTERMEDIATE TERM STATIONARY - PORTABLE SKID MOUNTED SIGN SUPPORTS



PERFORATED SQUARE METAL TUBING

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

- 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.
 - No more than 2 sign posts shall be placed within a 7 ft. circle, except for specific materials noted on the CWZTCD List.
 - 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.

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BARRICADE AND CONSTRUCTION TYPICAL SIGN SUPPORT

BC (5) - 21

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 DOUBLE OAK

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 TRAFFIC ENGINEERING FIRM #12

Revision No.	Date	Description

STATE OF TEXAS
 STEVEN D. TEMPLE
 88656
 LICENSED PROFESSIONAL ENGINEER
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BARRICADE AND CONSTRUCTION
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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

- The Engineer/Inspector shall approve all messages used on portable changeable message signs (PCMS).
- 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.
- 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.
- Use the word "EXIT" to refer to an exit ramp on a freeway; i.e., "EXIT CLOSED." Do not use the term "RAMP."
- Always use the route or interstate designation (IH, US, SH, FM) along with the number when referring to a roadway.
- When in use, the bottom of a stationary PCMS message panel should be a minimum 7 feet above the roadway, where possible.
- 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.
- 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.
- Do not "flash" messages or words included in a message. The message should be steady burn or continuous while displayed.
- 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.
- Do not use the word "Danger" in message.
- Do not display the message "LANES SHIFT LEFT" or "LANES SHIFT RIGHT" on a PCMS. Drivers do not understand the message.
- Do not display messages that scroll horizontally or vertically across the face of the sign.
- 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 TMTUCD.
- 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.
- Each line of text should be centered on the message board rather than left or right justified.
- 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	WORD OR PHRASE	ABBREVIATION
Access Road	ACCS RD	Major	MAJ
Alternate	ALT	Miles	MI
Avenue	AVE	Miles Per Hour	MPH
Best Route	BEST RTE	Minor	MNR
Boulevard	BLVD	Monday	MON
Bridge	BRDC	Normal	NORM
Cannot	CANT	North	N
Center	CTR	Northbound	(route) N
Construction ahead	CONST AHD	Parking	PKING
CROSSING	XING	Road	RD
Detour Route	DETOUR RTE	Right Lane	RT LN
Do Not	DONT	Saturday	SAT
East	E	Service Road	SERV RD
Eastbound	(route) E	Shoulder	SHLDR
Emergency	EMER	Slippery	SLIP
Emergency Vehicle	EMER VEH	South	S
Entrance, Enter	ENT	Southbound	(route) S
Express Lane	EXP LN	Speed	SPD
Expressway	EXPWY	Street	ST
XXXX Feet	XXXX FT	Sunday	SUN
Fog Ahead	FOG AHD	Telephone	PHONE
Freeway	FRWY, FWY	Temporary	TEMP
Freeway Blocked	FWY BLKD	Thursday	THURS
Friday	FRI	To Downtown	TO DWNTN
Hazardous Driving	HAZ DRIVING	Traffic	TRAF
Hazardous Material	HAZMAT	Travelers	TRVLRS
High-Occupancy	HOV	Tuesday	TUES
Vehicle	HWY	Time Minutes	TIME MIN
Highway	HR, HRS	Upper Level	UPR LEVEL
Hour(s)	HR, HRS	Vehicles (s)	VEH, VEHS
Information	INFO	Warning	WARN
It Is	ITS	Wednesday	WED
Junction	JCT	Weight Limit	WT LIMIT
Left	LFT	West	W
Left Lane	LFT LN	Westbound	(route) W
Lane Closed	LN CLOSED	Wet Pavement	WET PVMT
Lower Level	LWR LEVEL	Will Not	WONT
Maintenance	MAINT		

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
XXXXXXXXX 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

MERGE RIGHT	FORM X LINES RIGHT
DETOUR NEXT X EXITS	USE XXXX RD EXIT
USE EXIT XXX	USE EXIT I-XX NORTH
STAY ON US XXX SOUTH	USE I-XX E TO I-XX N
TRUCKS USE US XXX N	WATCH FOR TRUCKS
WATCH FOR TRUCKS	EXPECT DELAYS
EXPECT DELAYS	PREPARE TO STOP
REDUCE SPEED XXX FT	END SHOULDER USE
USE OTHER ROUTES	WATCH FOR WORKERS
STAY IN LANE	

Location List

AT FM XXXX
BEFORE RAILROAD CROSSING
NEXT X MILES
PAST US XXX EXIT
XXXXXXXXX TO XXXXXXXX
US XXX TO FM XXXX

Warning List

SPEED LIMIT XX MPH
MAXIMUM SPEED XX MPH
MINIMUM SPEED XX MPH
ADVISORY SPEED XX MPH
RIGHT LANE EXIT
USE CAUTION
DRIVE SAFELY
DRIVE WITH CARE

**** Advance Notice List**

TUE-FRI XX AM-X PM
APR XX-XX X PM-X AM
BEGINS MONDAY
BEGINS MAY XX
MAY X-X XX PM - XX AM
NEXT FRI-SUN
XX AM TO XX PM
NEXT TUE AUG XX
TONIGHT XX PM-XX AM

** See Application Guidelines Note 6.

APPLICATION GUIDELINES

- Only 1 or 2 phases are to be used on a PCMS.
- The 1st phase (or both) should be selected from the "Road/Lane/Ramp Closure List" and the "Other Condition List".
- A 2nd phase can be selected from the "Action to Take/Effect on Travel, Location, General Warning, or Advance Notice Phase Lists".
- A Location Phase is necessary only if a distance or location is not included in the first phase selected.
- 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.
- 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

- The words RIGHT, LEFT and ALL can be interchanged as appropriate.
- Roadway designations IH, US, SH, FM and LP can be interchanged as appropriate.
- EAST, WEST, NORTH and SOUTH (or abbreviations E, W, N and S) can be interchanged as appropriate.
- Highway names and numbers replaced as appropriate.
- ROAD, HIGHWAY and FREEWAY can be interchanged as needed.
- AHEAD may be used instead of distances if necessary.
- FT and MI, MILE and MILES interchanged as appropriate.
- AT, BEFORE and PAST interchanged as needed.
- 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

- 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.
- 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.
- 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.
- 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.

SHEET 6 OF 12



Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)

BC (6) - 21

FILE#	bc-21.dgn	DWG	TxDOT	CHK	TxDOT	DRW	TxDOT	CHK	TxDOT
REV	1	NOVEMBER 2002	CONT	SECT	JOB	HIGHWAY			
REV	2	7-13	DIST	COUNTY	SHEET NO.				



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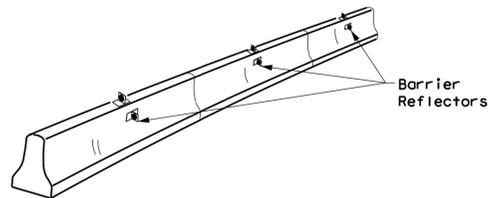


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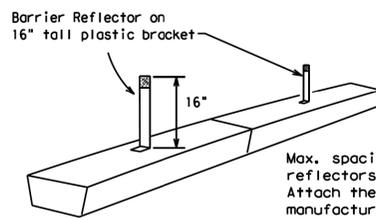
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- Barrier Reflectors shall be pre-qualified, and conform to the color and reflectivity requirements of DMS-8600. A list of prequalified Barrier Reflectors can be found at the Material Producer List web address shown on BC(1).
- Color of Barrier Reflectors shall be as specified in the TMUTCD. The cost of the reflectors shall be considered subsidiary to Item 512.



CONCRETE TRAFFIC BARRIER (CTB)

- 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.
- 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.
- When CTB separates traffic traveling in the same direction, no barrier reflectors will be required on top of the CTB.
- Barrier Reflector units shall be yellow or white in color to match the edgeline being supplemented.
- Maximum spacing of Barrier Reflectors is forty (40) feet.
- Pavement markers or temporary flexible-reflective roadway marker tabs shall NOT be used as CTB delineation.
- Attachment of Barrier Reflectors to CTB shall be per manufacturer's recommendations.
- Missing or damaged Barrier Reflectors shall be replaced as directed by the Engineer.
- Single slope barriers shall be delineated as shown on the above detail.



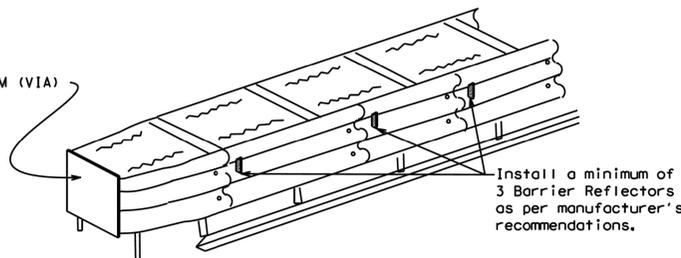
LOW PROFILE CONCRETE BARRIER (LPCB)

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.

Max. spacing of barrier reflectors is 20 feet. Attach the delineators as per manufacturer's recommendations.

See D & OM (VIA)



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 appropriate 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

WARNING LIGHTS

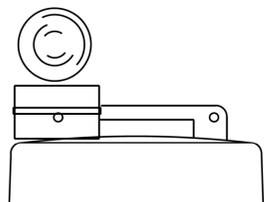
- Warning lights shall meet the requirements of the TMUTCD.
- Warning lights shall NOT be installed on barricades.
- Type A-Low Intensity Flashing Warning Lights are commonly used with drums. They are intended to warn of or mark a potentially hazardous area. Their use shall be as indicated on this sheet 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.
- 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".
- The Engineer/Inspector or the plans shall specify the location and type of warning lights to be installed on the traffic control devices.
- 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.
- 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.
- The location of warning lights and warning reflectors on drums shall be as shown elsewhere in the plans.

WARNING LIGHTS MOUNTED ON PLASTIC DRUMS

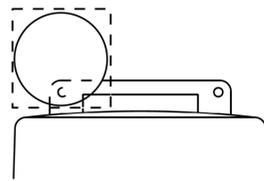
- Type A flashing warning lights are intended to warn drivers that they are approaching or are in a potentially hazardous area.
- Type A random flashing warning lights are not intended for delineation and shall not be used in a series.
- A series of sequential flashing warning lights placed on channelizing 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.
- 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.
- Type A, Type C and Type D warning lights shall be installed at locations as detailed on other sheets in the plans.
- Warning lights shall not be installed on a drum that has a sign, chevron or vertical panel.
- 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

- 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.
- 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.
- The warning reflector shall have a minimum retroreflective surface area (one-side) of 30 square inches.
- Round reflectors shall be fully reflectorized, including the area where attached to the drum.
- 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.
- 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.
- When used near two-way traffic, both sides of the warning reflector shall be reflectorized.
- The warning reflector should be mounted on the side of the handle nearest approaching traffic.
- The maximum spacing for warning reflectors should be identical to the channelizing device spacing requirements.



Type C Warning Light or approved substitute mounted on a drum adjacent to the travel way.

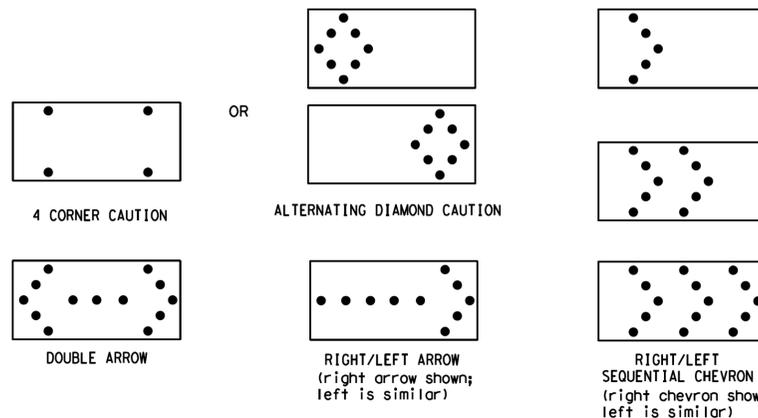


Warning reflector may be round or square. Must have a yellow reflective surface area of at least 30 square inches

DATE: FILE:

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.

- 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.
- 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.
- 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.
- The Flashing Arrow Board should be able to display the following symbols:



- The "CAUTION" display consists of four corner lamps flashing simultaneously, or the Alternating Diamond Caution mode as shown.
- The straight line caution display is NOT ALLOWED.
- 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.
- 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.
- The sequential arrow display is NOT ALLOWED.
- The flashing arrow display is the TxDOT standard; however, the sequential chevron display may be used during daylight operations.
- The Flashing Arrow Board shall be mounted on a vehicle, trailer or other suitable support.
- A Flashing Arrow Board SHALL NOT BE USED to laterally shift traffic.
- 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.
- 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

SHEET 7 OF 12

TRUCK-MOUNTED ATTENUATORS

- Truck-mounted attenuators (TMA) used on TxDOT facilities must meet the requirements outlined in the Manual for Assessing Safety Hardware (MASH).
- Refer to the CWZTCD for the requirements of Level 2 or Level 3 TMAs.
- Refer to the CWZTCD for a list of approved TMAs.
- TMAs are required on freeways unless otherwise noted in the plans.
- 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.
- 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.



BARRICADE AND CONSTRUCTION ARROW PANEL, REFLECTORS, WARNING LIGHTS & ATTENUATOR

BC (7) - 21

FILE#	bc-21.dgn	DWG	TxDOT	CHK	TxDOT	DRW	TxDOT	CRK	TxDOT
REV	1	DATE	NOVEMBER 2002	BY		APP		CHK	
REV	2	DATE	8-14	BY		APP		CHK	
REV	3	DATE	7-13	BY		APP		CHK	

DOUBLE OAK
2022 MILL AND OVERLAY PROJECT
SHADY OAK AND MEADOW KNOLL DR
DOUBLE OAK, TX



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TDP/ELS ENGINEERING FIRM #012

Revision No.	Date	Description



Project No.: 52570
Issued:
Drawn By: HALFF
Checked By: SDT
Scale: AS NOTED
Sheet Title
BARRICADE AND CONSTRUCTION BC (7) - 21
25 OF 30
Sheet Number

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.
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:

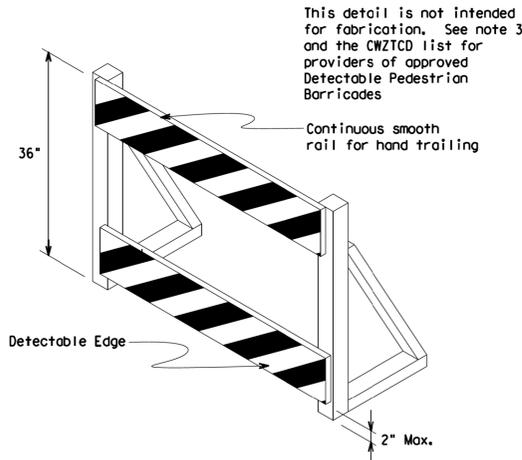
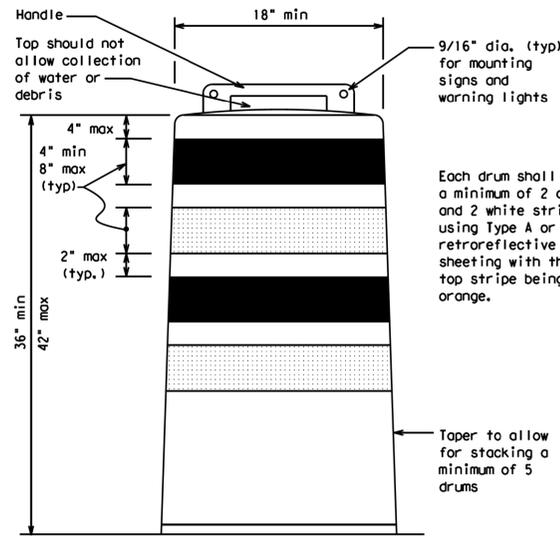
- 1. Plastic drums shall be a two-piece design; the "body" of the drum shall be the top portion and the "base" shall be the bottom.
2. The body and base shall lock together in such a manner that the body separates from the base when impacted by a vehicle traveling at a speed of 20 MPH or greater but 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.

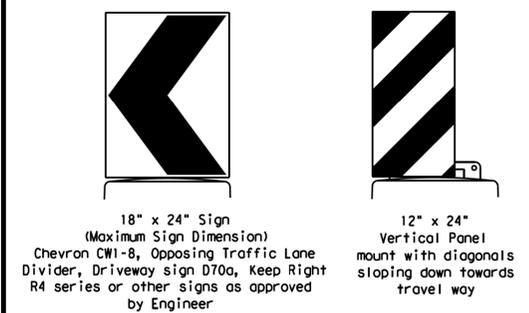
BALLAST

- 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.



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 BFL or Type CFL 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

DOUBLE OAK 2022 MILL AND OVERLAY PROJECT SHADY OAK AND MEADOW KNOLL DR DOUBLE OAK, TX

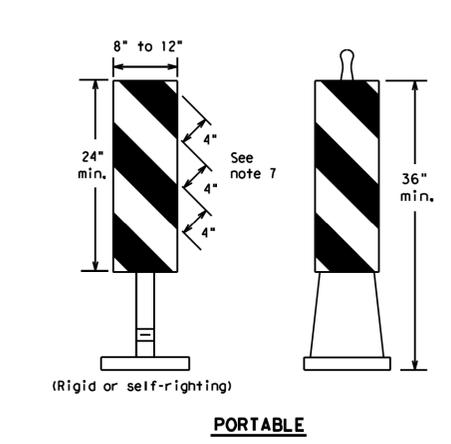
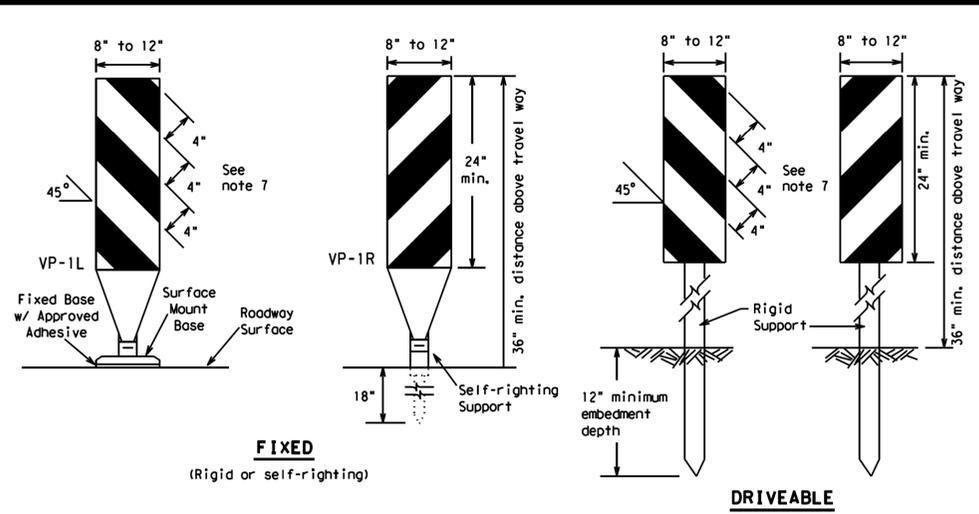
HALFF 4000 FOSSIL CREEK BLVD FORT WORTH, TX 76107-2997 TEL (817) 847-4422 FAX (817) 252-0794 TBPELS ENGINEERING FIRM #12

Table with columns for Revision No., Date, and Description.

Professional Engineer Seal for Steven D. Temple, License No. 88636, State of Texas.

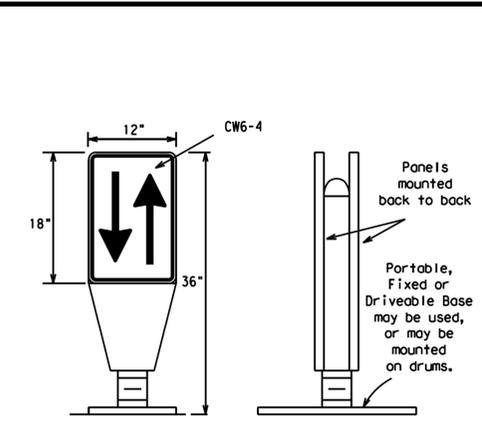
Project No.: 52570, Issued: Drawn By: HALFF, Checked By: SDT, Scale: AS NOTED, Sheet Title: BARRICADE AND CONSTRUCTION BC (8) - 21, 26 OF 30, Sheet Number

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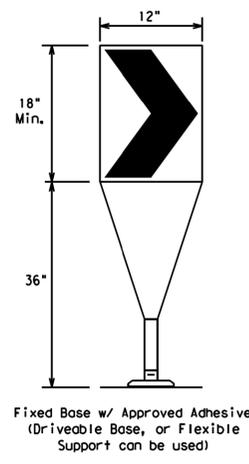
- Vertical Panels (VP's) are normally used to channelize traffic or divide opposing lanes of traffic.
- VP's may be used in daytime or nighttime situations. They may be used at the edge of shoulder drop-offs and other areas such as lane transitions where positive daytime and nighttime delineation is required. The Engineer/Inspector shall refer to the Roadway Design Manual for additional requirements on the use VP's for drop-offs.
- 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.
- VP's used on expressways and freeways or other high speed roadways, may have more than 270 square inches of retroreflective area facing traffic.
- Self-righting supports are available with portable base. See "Compliant Work Zone Traffic Control Devices List" (CWZTCD).
- Sheeting for the VP's shall be retroreflective Type A or Type B conforming to Departmental Material Specification DMS-8300, unless noted otherwise.
- 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)



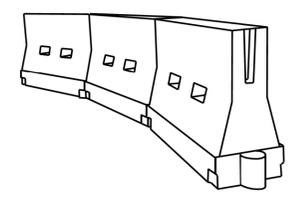
- Opposing Traffic Lane Dividers (OTLD) are delineation devices designed to convert a normal one-way roadway section to two-way operation. OTLD's are used on temporary centerlines. The upward and downward arrows on the sign's face indicate the direction of traffic on either side of the divider. The base is secured to the pavement with an adhesive or rubber weight to minimize movement caused by a vehicle impact or wind gust.
- The OTLD may be used in combination with 42" cones or VPs.
- Spacing between the OTLD shall not exceed 500 feet. 42" cones or VPs placed between the OTLD's should not exceed 100 foot spacing.
- 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)



- The chevron shall be a vertical rectangle with a minimum size of 12 by 18 inches.
- 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.
- 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.
- To be effective, the chevron should be visible for at least 500 feet.
- 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.
- 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



LONGITUDINAL CHANNELIZING DEVICES (LCD)

- 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.
- LCDs may be used instead of a line of cones or drums.
- LCDs shall be placed in accordance to application and installation requirements specific to the device, and used only when shown on the CWZTCD list.
- LCDs should not be used to provide positive protection for obstacles, pedestrians or workers.
- LCDs shall be supplemented with retroreflective delineation as required for temporary barriers on BC(7) when placed roughly parallel to the travel lanes.
- 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

- 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.
- 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.
- 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.
- 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.
- 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

GENERAL NOTES

- 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).
- 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.
- 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).
- 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.
- Portable bases shall be fabricated from virgin and/or recycled rubber. The portable bases shall weigh a minimum of 30 lbs.
- 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.
- 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.

Posted Speed	Formula	Minimum Desirable Taper Lengths			Suggested Maximum Spacing of Channelizing Devices	
		10' Offset	11' Offset	12' Offset	On a Taper	On a Tangent
30	L = 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'

*X 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

SHEET 9 OF 12



BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES

BC (9) - 21

FILE: bc-21.dgn	DWG: TxDOT	CHK: TxDOT	APP: TxDOT	CRK: TxDOT
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REVISIONS	DIST	COUNTY	SHEET NO.	
9-07 8-14				
7-13 5-21				

DOUBLE OAK
 2022 MILL AND OVERLAY PROJECT
 SHADY OAK AND MEADOW KNOLL DR
 AND MEADOW KNOLL DR
 DOUBLE OAK, TX



Revision No.	Date	Description



Project No.: 52570
 Issued:
 Drawn By: HALFF
 Checked By: SDT
 Scale: AS NOTED
 Sheet Title
 BARRICADE AND CONSTRUCTION
 BC (9) - 21
 27 OF 30
 Sheet Number

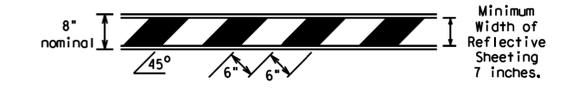
1/3/2022 9:44:45 PM an1725 HALFF
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 FTW: 10/18/2009

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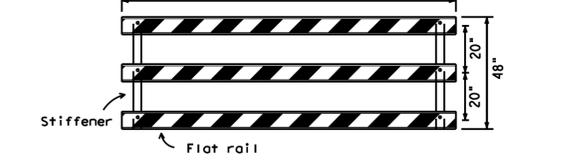
TYPE 3 BARRICADES

- Refer to the Compliant Work Zone Traffic Control Devices List (CWZTCL) for details of the Type 3 Barricades and a list of all materials used in the construction of Type 3 Barricades.
- Type 3 Barricades shall be used at each end of construction projects closed to all traffic.
- 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.
- 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.
- 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".
- Barricades shall not be placed parallel to traffic unless an adequate clear zone is provided.
- Warning lights shall NOT be installed on barricades.
- 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. Sandbags 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.
- 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.

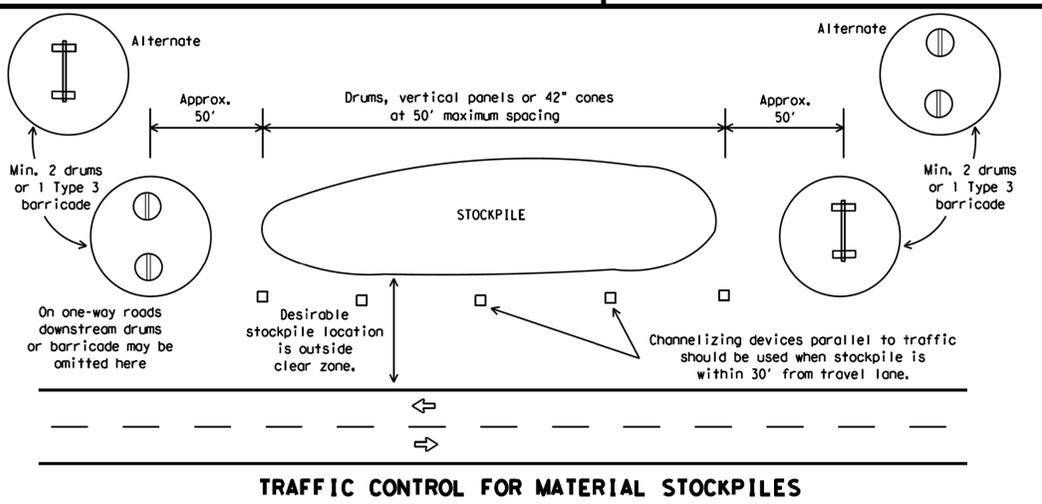


TYPICAL STRIPING DETAIL FOR BARRICADE RAIL



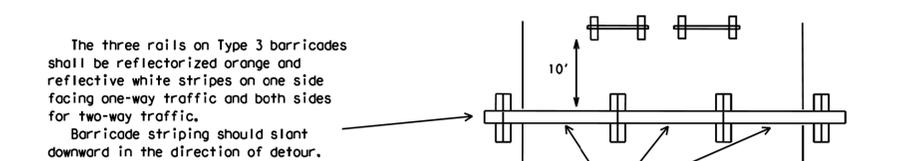
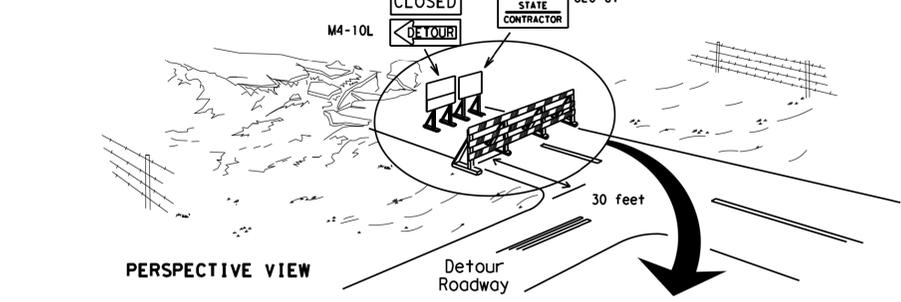
Stiffener may be inside or outside of support, but no more than 2 stiffeners shall be allowed on one barricade.

TYPICAL PANEL DETAIL FOR SKID OR POST TYPE BARRICADES



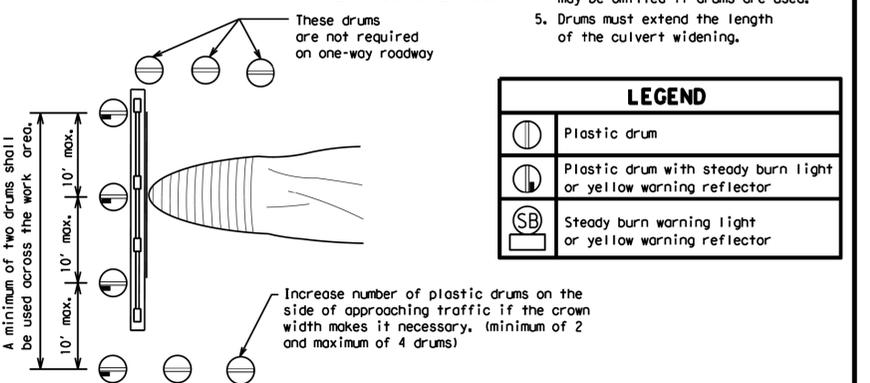
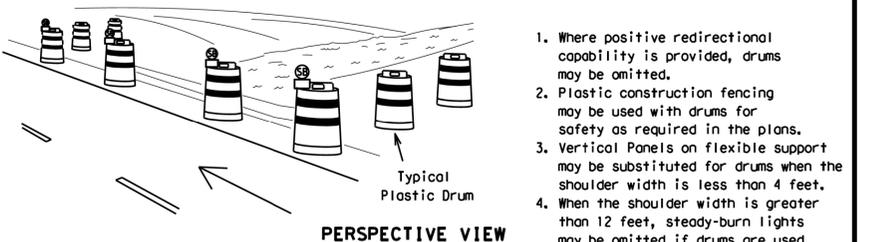
TRAFFIC CONTROL FOR MATERIAL STOCKPILES

Each roadway of a divided highway shall be barricaded in the same manner.



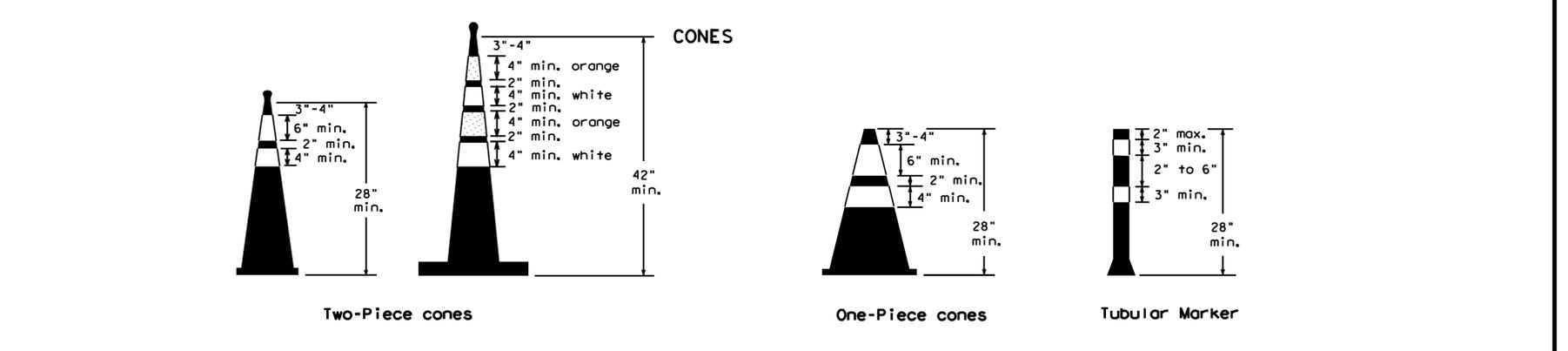
- Signs should be mounted on independent supports at a 7 foot mounting height in center of roadway. The signs should be a minimum of 10 feet behind Type 3 Barricades.
- Advance signing shall be as specified elsewhere in the plans.

TYPE 3 BARRICADE (POST AND SKID) TYPICAL APPLICATION



LEGEND	
	Plastic drum
	Plastic drum with steady burn light or yellow warning reflector
	Steady burn warning light or yellow warning reflector

CULVERT WIDENING OR OTHER ISOLATED WORK WITHIN THE PROJECT LIMITS



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.

- Traffic cones and tubular markers shall be predominantly orange, and meet the height and weight requirements shown above.
- 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.
- 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.
- 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.
- 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.
- 42" two-piece cones, vertical panels or drums are suitable for all work zone durations.
- Cones or tubular markers used on each project should be of the same size and shape.

SHEET 10 OF 12

Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES

BC (10) - 21

FILE: bc-21.dgn	DWG: TxDOT	CHK: TxDOT	DES: TxDOT	CRK: TxDOT
© TxDOT November 2002	CONT	SECT	JOB	HIGHWAY
REVISIONS	DIST	COUNTY	SHEET NO.	
9-07 8-14				
7-13 5-21				

DOUBLE OAK
 2022 MILL AND OVERLAY PROJECT
 SHADY OAK AND MEADOW KNOLL DR
 DOUBLE OAK, TX

HALFF
 4000 FOSSIL CREEK BLVD
 FORT WORTH, TEXAS 76107-2197
 TEL (817) 847-4422
 FAX (817) 253-0794
 TBPE ENGINEERING FIRM #012

Revision No.	Date	Description

STEVEN D. TEMPLE
 LICENSED PROFESSIONAL ENGINEER
 88636
 TBPE FIRM #F-312
 11/3/2022

Project No.: 52570
Issued:
Drawn By: HALFF
Checked By: SDT
Scale: AS NOTED
Sheet Title
BARRICADE AND CONSTRUCTION BC (10) - 21
28 OF 30
Sheet Number

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DATE: FILE:

WORK ZONE PAVEMENT MARKINGS

GENERAL

- 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.
- Color, patterns and dimensions shall be in conformance with the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD).
- Additional supplemental pavement marking details may be found in the plans or specifications.
- Pavement markings shall be installed in accordance with the TMUTCD and as shown on the plans.
- 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).
- 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.
- All work zone pavement markings shall be installed in accordance with Item 662, "Work Zone Pavement Markings."

RAISED PAVEMENT MARKERS

- Raised pavement markers are to be placed according to the patterns on BC(12).
- 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

- Removable prefabricated pavement markings shall meet the requirements of DMS-8241.
- Non-removable prefabricated pavement markings (foil back) shall meet the requirements of DMS-8240.

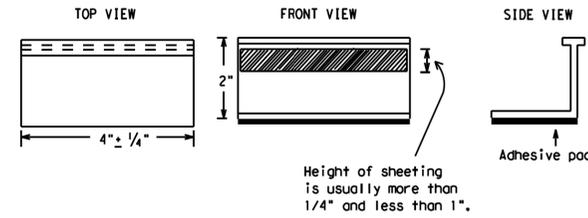
MAINTAINING WORK ZONE PAVEMENT MARKINGS

- The Contractor will be responsible for maintaining work zone pavement markings within the work limits.
- 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.
- 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.
- 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

- 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.
- 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.
- 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".
- The removal of pavement markings may require resurfacing or seal coating portions of the roadway as described in Item 677.
- Subject to the approval of the Engineer, any method that proves to be successful on a particular type pavement may be used.
- Blast cleaning may be used but will not be required unless specifically shown in the plans.
- Over-painting of the markings SHALL NOT BE permitted.
- Removal of raised pavement markers shall be as directed by the Engineer.
- 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.
- 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**

- Temporary flexible-reflective roadway marker tabs used as guidemarks shall meet the requirements of DMS-8242.
- 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.
 - 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.
 - Small design variances may be noted between tab manufacturers.
- 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

- Raised pavement markers used as guidemarks shall be from the approved product list, and meet the requirements of DMS-4200.
- All temporary construction raised pavement markers provided on a project shall be of the same manufacturer.
- 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).

SHEET 11 OF 12



BARRICADE AND CONSTRUCTION PAVEMENT MARKINGS

BC(11)-21

FILE: bc-21.dgn	DW: TxDOT	CHK: TxDOT	DR: TxDOT	CK: TxDOT
© TxDOT February 1998	CONT	SECT	JOB	HIGHWAY
REVISIONS				
2-98	9-07	5-21		
1-02	7-13			
11-02	8-14			
DIST		COUNTY	SHEET NO.	

DOUBLE OAK
 2022 MILL AND OVERLAY PROJECT
 SHADY OAK AND MEADOW KNOLL DR
 DOUBLE OAK, TX



Revision No.	Date	Description

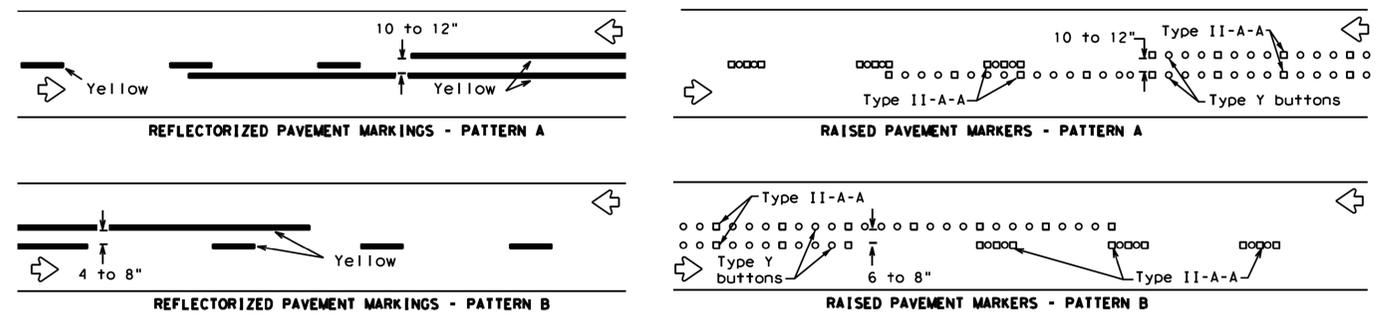


Project No.: 52570
Issued:
Drawn By: HALFF
Checked By: SDT
Scale: AS NOTED
Sheet Title
BARRICADE AND CONSTRUCTION BC(11)-21
29 OF 30
Sheet Number

1/23/2022 9:45:24 PM
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 DATE: 11/3/2022
 FILE: an1725
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 HALFF
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 FTW: 10/18/2022

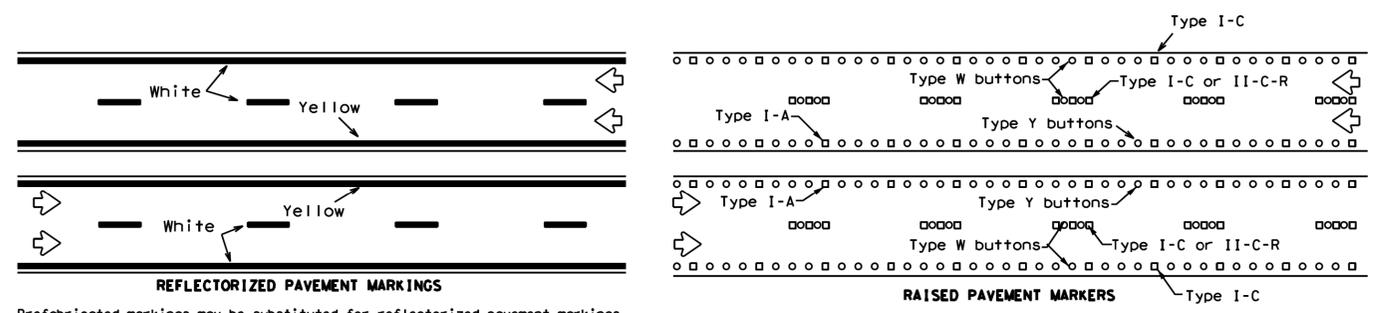
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PAVEMENT MARKING PATTERNS



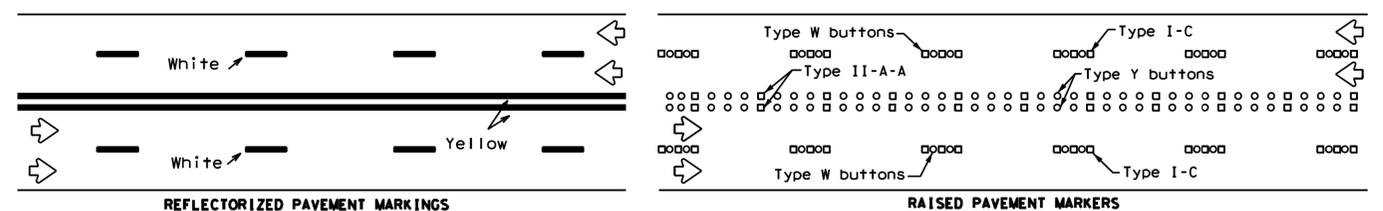
Pattern A is the TXDOT Standard, however Pattern B may be used if approved by the Engineer. Prefabricated markings may be substituted for reflectorized pavement markings.

CENTER LINE & NO-PASSING ZONE BARRIER LINES FOR TWO-LANE, TWO-WAY HIGHWAYS



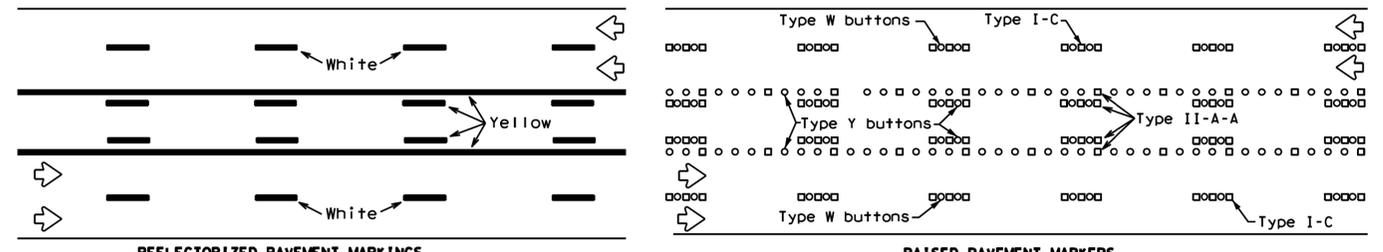
Prefabricated markings may be substituted for reflectorized pavement markings.

EDGE & LANE LINES FOR DIVIDED HIGHWAY



Prefabricated markings may be substituted for reflectorized pavement markings.

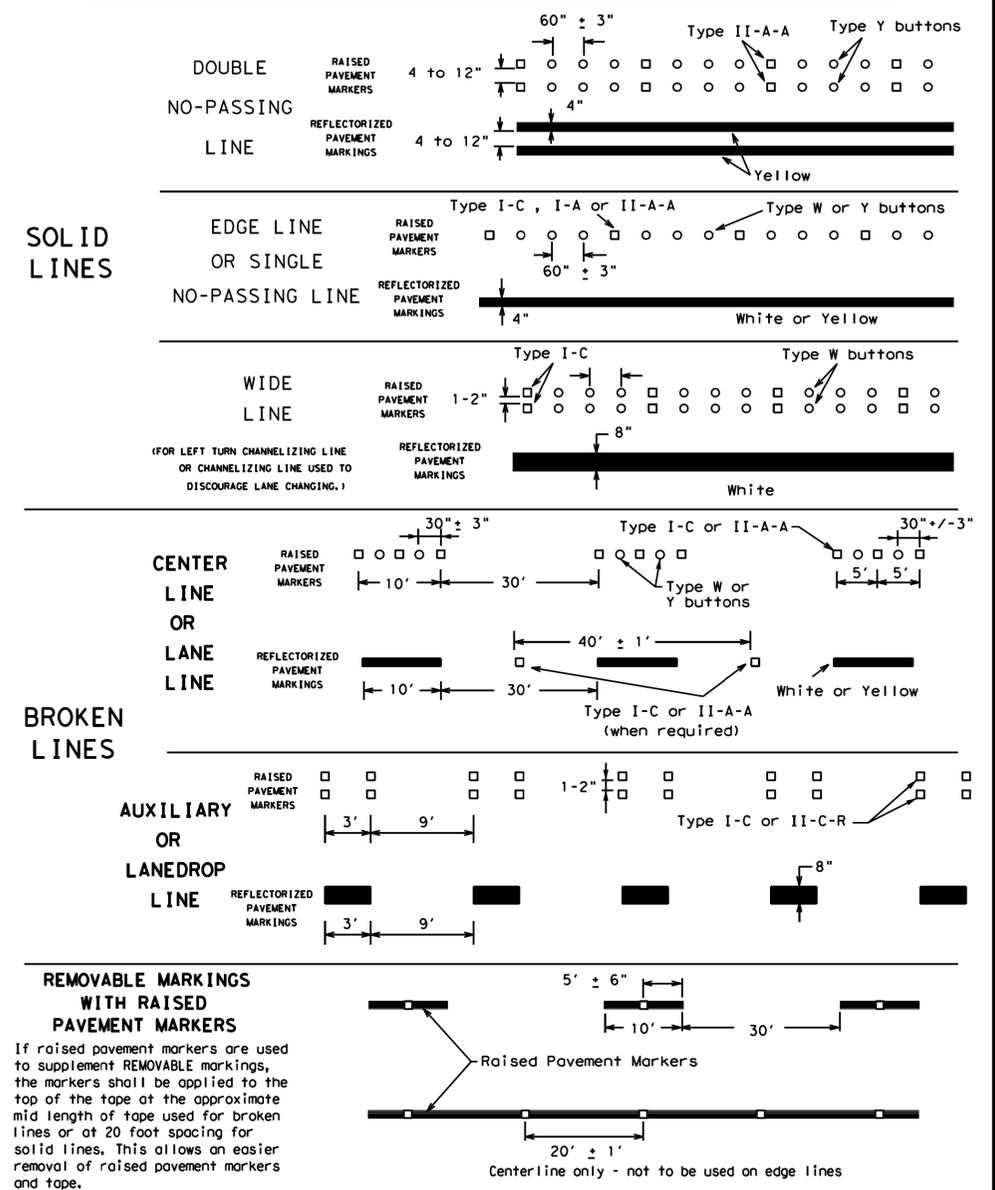
LANE & CENTER LINES FOR MULTILANE UNDIVIDED HIGHWAYS



Prefabricated markings may be substituted for reflectorized pavement markings.

TWO-WAY LEFT TURN LANE

STANDARD WORK ZONE PAVEMENT MARKINGS DETAILS



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."

SHEET 12 OF 12



BARRICADE AND CONSTRUCTION PAVEMENT MARKING PATTERNS

BC (12) - 21

FILE: bc-21.dgn	DWG: TxDOT	CHK: TxDOT	DRW: TxDOT	CRK: TxDOT
© TxDOT February 1998	CONT	SECT	JOB	HIGHWAY
REVISIONS	DIST	COUNTY	SHEET NO.	
1-97 9-07 5-21				
2-98 7-13				
11-02 8-14				

DOUBLE OAK
 2022 MILL AND OVERLAY PROJECT
 SHADY OAK AND MEADOW KNOLL DR
 DOUBLE OAK, TX



Revision No.	Date	Description



TBPE FIRM #F-312
 11/3/2022
 Project No.: 52570
 Issued:
 Drawn By: HALFF
 Checked By: SDT
 Scale: AS NOTED
 Sheet Title
 BARRICADE AND CONSTRUCTION
 BC (12) - 21
 30 OF 30
 Sheet Number

TOWN OF DOUBLE OAK - 2022 Mill and Overlay Project

Engineers Opinion of Probable Construction Cost

Date: 11/03/2022

ITEM NO.	DESCRIPTION	UNIT	QTY	UNIT PRICE	EXTENDED PRICE
Shady Oaks and Kings Drive at Waketon					
1-1	Mobilization, (10% max), work fully performed	LS	1	\$18,000.00	\$18,000.00
1-2	Variable Depth Mill Of Existing Asphalt And Replace With 2-Inch Asphalt Overlay	SY	2957	\$24.00	\$70,968.00
1-3	Full Depth Repair (with 8-inch TY B Asphalt)	SY	617	\$124.00	\$76,508.00
1-4	Barricades, Signs And Traffic Handling	MO	1	\$2,350.00	\$2,350.00
1-5	Block Sodding (Allowance)	SY	267	\$8.00	\$2,136.00
1-6	Pavement Markings	LS	1	\$10,000.00	\$10,000.00
1-7	Miscellaneous Construction Contingency	LS	1	\$13,000.00	\$13,000.00
10% Contingency					\$19,296.20
Shady Oaks and Kings Drive Subtotal					\$212,258.20
Park Lane					
2-1	Mobilization, (10% max), work fully performed	LS	1	\$14,000.00	\$14,000.00
2-2	Variable Depth Mill Of Existing Asphalt And Replace With 2-Inch Asphalt Overlay	SY	3004	\$24.00	\$72,096.00
2-3	Full Depth Repair (with 8-inch TY B Asphalt)	SY	417	\$124.00	\$51,708.00
2-4	Barricades, Signs And Traffic Handling	MO	1	\$2,350.00	\$2,350.00
2-5	Block Sodding (Allowance)	SY	355	\$8.00	\$2,840.00
2-6	Miscellaneous Construction Contingency	LS	1	\$14,419.20	\$14,419.20
2-7	Bank Stabilization (including grass)	SY	19	\$170.00	\$3,230.00
10% Contingency					\$16,064.32
Park Lane Subtotal					\$176,707.52
Timber View					
3-1	Mobilization, (10% max), work fully performed	LS	1	\$20,000.00	\$20,000.00
3-2	Variable Depth Mill Of Existing Asphalt And Replace With 2-Inch Asphalt Overlay	SY	3397	\$24.00	\$81,528.00
3-3	Full Depth Repair (with 8-inch TY B Asphalt)	SY	685	\$124.00	\$84,940.00
3-4	Barricades, Signs And Traffic Handling	MO	1	\$2,350.00	\$2,350.00
3-5	Block Sodding (Allowance)	SY	335	\$8.00	\$2,680.00
3-6	Miscellaneous Construction Contingency	LS	1	\$16,305.60	\$16,305.60
10% Contingency					\$20,780.36
Timberview Subtotal					\$228,583.96
Meadow Knoll					
4-1	Mobilization, (10% max), work fully performed	LS	1	\$10,000.00	\$10,000.00
4-2	Variable Depth Mill Of Existing Asphalt And Replace With 2-Inch Asphalt Overlay	SY	2901	\$24.00	\$69,624.00
4-3	Full Depth Repair (with 8-inch TY B Asphalt)	SY	395	\$124.00	\$48,980.00
4-4	Barricades, Signs And Traffic Handling	MO	1	\$2,350.00	\$2,350.00
4-5	Block Sodding (Allowance)	SY	392	\$8.00	\$3,136.00
4-6	Miscellaneous Construction Contingency	LS	1	\$13,924.80	\$13,924.80
10% Contingency					\$14,801.48
Meadow Knoll Subtotal					\$162,816.28
2022 Mill and Overlay Project Total					\$780,365.96

** Brown Cliff Court is not suited for a full depth repair with mill and overlay due to the amount of base repair needed. Recommend this street be reconstructed in the near future.

10

eCode360 Premium First Year Timeline

With the 6 months of free Premium eCode, here is how the billing works out:

- Sep 18, 2022 – Double Oak Code went live on eCode. Because it past the middle of the month, we will delay invoices until Oct 1 and use Oct 1 as the “starting” date.
- Oct 1, 2022 – Invoice for \$395.00 as it has been in the past (You have already received this invoice.
- Apr 1, 2023 – Invoice for \$997.50. This amount reflects the full Premium eCode price of \$1,195, less the six months you will have paid for at the \$395.00 rate. This comes to \$197.50. ($\$1,195$ minus $\$197.50 = \997.50).
- Oct 1, 2023 – No invoice as in the past
- Apr 1, 2024 and each year thereafter – Invoice for \$1,195.00

These numbers are based on the assumption that you will continue with the Premium level after the 6 months free. The lower levels are \$995 and \$695, but with those levels you will not be receiving the features of Premium eCode. (For reference, of the 3,000 municipalities with codes on eCode, only about 4% do not use Premium level.)

	\$695	\$995	\$2,195
eCode Features	Lite	Standard	Premium
Read the Code Online	X	X	X
Search the Code	X	X	X
Search Selected Chapters	X	X	X
View New Laws	X	X	X
Print	X	X	X
Email	X	X	X
Download and Use Search App	X	X	X
Share on Social Media	X	X	X
View an A-Z Index	X	X	X
User Management: Create New Users; Remove Users, Change Passwords	X	X	X
Configure Site Settings: Change Banner picture, colors; Translation on/off	X	X	X
View Archives		X	X
Narrow Search Results with Checkboxes		X	X
Use Multicode		X	X
Download Code to Word		X	X
View Dashboard Analytics: Code Usage, Search Topics		X	X
Create Notes for yourself; Share with Municipal Group		X	X
View the Number of Printed Code Books in Circulation; Supplementation Schedule		X	X
View New Law Indicators			X
Download Code to PDF			X
View Public Documents (Agendas, Minutes, Resolutions, etc.)			X
eAlert Update Notifications			X
Advanced Search in Menu Bar			X
Create Notes for the Public to see and use			X
Upload and Manage Public Documents			X
Edit New Law Titles & Descriptions			X



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Coppell, Texas 75019
Dallas: 972-432-2300
Fort Worth: 817-581-2800
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datamextexas.com



Quote

Town of Double Oak	January 4, 2023
320 Waketon Rd.	Brian Shults
Double Oak TX 75077	972-355-5995

Your Contact
Richard Martin

ITEM #	DESCRIPTION	UNIT PRICE	QTY	QUOTE
1	<p>Dell 1 Yr Warranty Extension</p> <ul style="list-style-type: none"> • For Tag # • valid through 1/30/2024 • Next Day ProSupport Mission Critical 4 Hour 7x24 On-Site Warranty <p>Datamax Credentials:</p> <ul style="list-style-type: none"> • Microsoft Gold Partner • Dell Preferred Partner • Backup / Disaster Recovery + Business Continuity • Document Imaging with Business Process Workflow <p>Our Relationship with Dell:</p> <ul style="list-style-type: none"> • We are a Dell Direct Partner offering all of Dell's Solutions • We assist with Dell Service and / or Configuration Needs • We are local, offering IT solutions that protect your investment! 		1	1798.53

Datamax is a technology management company. We provide information technology solutions utilizing the best and most proven implementations in the industry.

Our own TechCare IT Management support provides onsite and remote services to comfort our customer as they utilize today's technology to better their organization. The staff of Datamax has provided an unyielding level of support to our customers for over 35 years.

We appreciate the opportunity you give us and we hope to build a long term relationship and create a raving fan experience for your organization.

Total	\$1798.53
Total Does Not Include Tax	

Prices quoted above are good for 5 Days unless otherwise stated. An authorized signature is required on this form before order will be placed. Warranty information varies from manufacturer to manufacturer. Special warranty agreements must be outlined in this quote to otherwise supersede the manufacturer's warranty. Software issues do not carry labor warranty.

In the event that you do not accept product on delivery, a restocking fee may apply.

I/We accept this quote and realize that by signing this we are committed to the purchase of the above equipment and/or services.

Approved By _____ Date _____ Purchase Order# _____

Thank you for this opportunity to serve you.

4:06 PM
01/13/23
Accrual Basis

Town of Double Oak
Profit & Loss Budget vs. Actual
October 2022 through September 2023

	Oct '22 - Sep 23	Budget	\$ Over Budget	% of Budget
Ordinary Income/Expense				
Income				
400000 · Tax Revenue				
401101 · Current Property Taxes-M & O	677,235.11	1,235,201.96	-557,966.85	54.8%
401201 · Penalty & Interest	756.44	2,500.00	-1,743.56	30.3%
401301 · Prior Year Property Taxes	1,294.07	2,000.00	-705.93	64.7%
401315 · Sales Taxes	165,391.78	650,000.00	-484,608.22	25.4%
401601 · Franchise-Cross Timbers Water	0.00	24,000.00	-24,000.00	0.0%
401701 · Franchise-Cable TV	4,335.31	35,000.00	-30,664.69	12.4%
401801 · Franchise-Electric	0.00	95,000.00	-95,000.00	0.0%
401805 · Franchise-Garbage	3,529.70	13,000.00	-9,470.30	27.2%
401811 · Franchise-Gas	0.00	17,000.00	-17,000.00	0.0%
401901 · Franchise-Telephone	3,987.05	500.00	3,487.05	797.4%
401912 · Prior Year Carry Over	0.00	0.00	0.00	0.0%
400000 · Tax Revenue - Other	0.00	0.00	0.00	0.0%
Total 400000 · Tax Revenue	856,529.46	2,074,201.96	-1,217,672.50	41.3%
420000 · Fines and Forfeitures				
420101 · Court Fines	14,970.38	120,000.00	-105,029.62	12.5%
420113 · Court Forfeitures	0.00	0.00	0.00	0.0%
420000 · Fines and Forfeitures - Other	0.00	0.00	0.00	0.0%
Total 420000 · Fines and Forfeitures	14,970.38	120,000.00	-105,029.62	12.5%
430000 · Licenses and Permits				
430101 · Fences	340.00	1,275.00	-935.00	26.7%
430102 · Commercial Buildings	0.00	6,000.00	-6,000.00	0.0%
430103 · Oil and Gas Drilling	0.00	0.00	0.00	0.0%
430201 · New Homes	0.00	3,000.00	-3,000.00	0.0%
430202 · Erosion Control	0.00	0.00	0.00	0.0%
430301 · Misc Construction	6,290.00	23,000.00	-16,710.00	27.3%
430401 · Roofs	1,360.00	1,275.00	85.00	106.7%
430501 · Septic Systems	3,250.00	5,000.00	-1,750.00	65.0%
430601 · Sprinkler Systems	85.00	500.00	-415.00	17.0%
430701 · Swimming Pools	325.00	2,000.00	-1,675.00	16.3%
430801 · Water Wells	0.00	0.00	0.00	0.0%
430901 · Plats and Subdivision Fees	250.00	0.00	250.00	100.0%
Total 430000 · Licenses and Permits	11,900.00	42,050.00	-30,150.00	28.3%
440000 · Other Revenue				
440101 · Administration Fees	254.12	1,000.00	-745.88	25.4%
440102 · Animal Control Fees	0.00	0.00	0.00	0.0%
440103 · Building Contributions	0.00	0.00	0.00	0.0%
440150 · FEMA Revenue	0.00	0.00	0.00	0.0%
440160 · Capital Lease Proceeds	0.00	0.00	0.00	0.0%
440201 · Interest Income	6,919.06	9,500.00	-2,580.94	72.8%
440203 · Police Dept. Contracts	0.00	0.00	0.00	0.0%
440205 · Police Dept. Contributions	0.00	0.00	0.00	0.0%
440206 · Police Training Grants	0.00	0.00	0.00	0.0%
440210 · Police State Training Funds	0.00	0.00	0.00	0.0%
440700 · Insurance Proceeds	0.00	0.00	0.00	0.0%
Total 440000 · Other Revenue	7,173.18	10,500.00	-3,326.82	68.3%

Town of Double Oak
Profit & Loss Budget vs. Actual

October 2022 through September 2023

	Oct '22 - Sep 23	Budget	\$ Over Budget	% of Budget
440300 · Charges for Services				
440301 · Lien Release	0.00	0.00	0.00	0.0%
440401 · Lot Mowing Fees	0.00	0.00	0.00	0.0%
440501 · Misc. Income	0.00	250.00	-250.00	0.0%
440601 · Sewage Service	5,082.67	25,000.00	-19,917.33	20.3%
440701 · Town Hall Rental Fees	0.00	0.00	0.00	0.0%
Total 440300 · Charges for Services	5,082.67	25,250.00	-20,167.33	20.1%
440400 · Park Funds				
440401A · Gazebo Funds	0.00	0.00	0.00	0.0%
Total 440400 · Park Funds	0.00	0.00	0.00	0.0%
440500 · Carry Over from previous year	0.00	0.00	0.00	0.0%
Total Income	895,655.69	2,272,001.96	-1,376,346.27	39.4%
Gross Profit	895,655.69	2,272,001.96	-1,376,346.27	39.4%
Expense				
510000 · Town Administration				
521000 · Town Salary Adjustments	0.00	0.00	0.00	0.0%
521012 · Attorney Fees	7,338.75	25,000.00	-17,661.25	29.4%
521033 · Custodial Services	1,673.32	5,500.00	-3,826.68	30.4%
521041 · Denton Central Appraisal Dist	1,768.74	8,237.00	-6,468.26	21.5%
521050 · Election Expense	0.00	4,500.00	-4,500.00	0.0%
521051 · Electricity	1,414.08	6,500.00	-5,085.92	21.8%
521060 · Financial Auditors	1,500.00	10,000.00	-8,500.00	15.0%
521070 · Natural Gas	589.36	2,000.00	-1,410.64	29.5%
521073 · Printer Copier	1,631.20	6,000.00	-4,368.80	27.2%
521133 · Ordinance Codification	395.00	1,500.00	-1,105.00	26.3%
521160 · Postage	531.91	3,000.00	-2,468.09	17.7%
521200 · Tax Billing Expense	0.00	1,500.00	-1,500.00	0.0%
521201 · Communications	1,856.49	11,000.00	-9,143.51	16.9%
521220 · Water	418.87	2,500.00	-2,081.13	16.8%
521230 · Archive System	0.00	5,000.00	-5,000.00	0.0%
521250 · Outdoor Siren	0.00	0.00	0.00	0.0%
530050 · Ambulance Service	0.00	29,075.00	-29,075.00	0.0%
Total 510000 · Town Administration	19,119.47	121,312.00	-102,192.53	15.8%
520000 · Administrative				
521010 · Advertising	0.00	2,000.00	-2,000.00	0.0%
521020 · Bank Charges	0.00	100.00	-100.00	0.0%
521030 · Cleaning Supplies	0.00	0.00	0.00	0.0%
521031 · Computer Supplies/Software	6,634.37	25,000.00	-18,365.63	26.5%
521032 · Council Contingency	300.00	849.00	-549.00	35.3%
521034 · Technology Fund	0.00	3,500.00	-3,500.00	0.0%
521074 · Meetings	0.00	150.00	-150.00	0.0%
521075 · Goodwill	39.96	500.00	-460.04	8.0%
521076 · Incentive Pay	461.52	1,500.00	-1,038.48	30.8%
521090 · General Liability Insurance	2,949.58	5,513.20	-2,563.62	53.5%
521091 · Health/Dental/Life Insurance	5,836.20	17,069.04	-11,232.84	34.2%
521130 · Membership & Dues	525.00	1,500.00	-975.00	35.0%
521131 · Car Maintenance-Fuel-Travel	0.00	0.00	0.00	0.0%
521150 · Office Supplies	967.86	6,000.00	-5,032.14	16.1%
521151 · Other Professional Services	530.00	2,200.00	-1,670.00	24.1%
521153 · Other Supplies	260.19	650.00	-389.81	40.0%

Town of Double Oak
Profit & Loss Budget vs. Actual
 October 2022 through September 2023

	Oct '22 - Sep 23	Budget	\$ Over Budget	% of Budget
521161 · Publications & Subscriptions	119.00	200.00	-81.00	59.5%
521162 · Printing and Copying	0.00	450.00	-450.00	0.0%
521170 · Payroll Taxes - FICA	6,217.04	12,580.05	-6,363.01	49.4%
521172 · TWC Unemployment Insurance	48.14	2,400.00	-2,351.86	2.0%
521190 · Town Secretary Salary	25,404.80	82,565.60	-57,160.80	30.8%
521191 · Longevity Pay-Administration	1,540.00	1,540.00	0.00	100.0%
521192 · Worker's Compensation Ins.	645.12	891.60	-246.48	72.4%
521194 · Asst Town Secretary Salary	23,033.04	73,839.53	-50,806.49	31.2%
521195 · Overtime	2,289.32	5,000.00	-2,710.68	45.8%
521196 · TMRS-Retirement	3,499.28	14,149.24	-10,649.96	24.7%
521202 · Training Seminars	970.00	2,000.00	-1,030.00	48.5%
Total 520000 · Administrative	82,270.48	262,147.26	-179,876.78	31.4%
530000 · Public Works				
521021 · Building Repair/Remodeling	9,838.96	0.00	9,838.96	100.0%
521025 · Building Expenditures	0.00	2,000.00	-2,000.00	0.0%
521120 · Lien Filing Expense	0.00	100.00	-100.00	0.0%
530025 · Mosquito Control Program	0.00	200.00	-200.00	0.0%
530100 · Animal Control Officer	4,156.25	18,000.00	-13,843.75	23.1%
530101 · Public Works Director Salary	22,076.96	71,750.00	-49,673.04	30.8%
530102 · Public Works Director TMRS	1,750.74	6,229.03	-4,478.29	28.1%
530103 · Public Works Director FICA	1,455.40	5,538.22	-4,082.82	26.3%
530104 · Public Works Director (H/D/L)	4,469.83	13,077.36	-8,607.53	34.2%
530105 · PW Director (TWC/Unempl Ins)	0.00	0.00	0.00	0.0%
530106 · Building Official Overtime	0.00	0.00	0.00	0.0%
530110 · Building Inspectors	16,000.00	0.00	16,000.00	100.0%
530111 · Building Inspectors Phone	0.00	0.00	0.00	0.0%
530115 · Code Enforcement	0.00	0.00	0.00	0.0%
530116 · Code Enforcement Liab Ins-TML	632.05	1,181.40	-549.35	53.5%
530125 · Council Discretionary Fund	0.00	0.00	0.00	0.0%
530150 · Grounds Maintenance	4,045.94	9,000.00	-4,954.06	45.0%
530151 · Grounds Equipment	0.00	0.00	0.00	0.0%
530175 · Equipment Repair/Maintenance	0.00	0.00	0.00	0.0%
530180 · Minor Equipment	183.49	0.00	183.49	100.0%
530200 · Lot Mowing/Tree Trim Service	700.00	5,500.00	-4,800.00	12.7%
530201 · Public Works Training	0.00	2,500.00	-2,500.00	0.0%
530202 · Longevity Pay- Public Works	45.00	45.00	0.00	100.0%
530203 · Vehicle Payment	0.00	0.00	0.00	0.0%
530204 · Vehicle Maintenance	275.95	750.00	-474.05	36.8%
530205 · Vehicle Fuel	69.81	2,000.00	-1,930.19	3.5%
530206 · Uniforms	0.00	0.00	0.00	0.0%
530210 · Membership Dues/Licensing	0.00	500.00	-500.00	0.0%
530230 · Other Professional Services	388.68	2,000.00	-1,611.32	19.4%
530231 · Other Supplies	0.00	1,000.00	-1,000.00	0.0%
530235 · Printing	0.00	200.00	-200.00	0.0%
530240 · Postage	0.00	0.00	0.00	0.0%
530245 · Computer Support	2,232.12	12,290.00	-10,057.88	18.2%
530250 · Health Inspector	750.00	2,500.00	-1,750.00	30.0%
530260 · Septic Inspections	2,680.00	5,000.00	-2,320.00	53.6%
530270 · Sewage Services	4,497.11	25,000.00	-20,502.89	18.0%
530271 · Vehicle Reimbursement	0.00	0.00	0.00	0.0%
530272 · Incentive Pay	184.56	600.00	-415.44	30.8%
530273 · Worker's Compensation Ins	322.56	445.80	-123.24	72.4%
530277 · General Liability Insurance	0.00	0.00	0.00	0.0%
530280 · Hazardous Waste Disposal	0.00	0.00	0.00	0.0%
530650 · Public Works-Cell phone	473.78	500.00	-26.22	94.8%

Town of Double Oak
Profit & Loss Budget vs. Actual
 October 2022 through September 2023

	Oct '22 - Sep 23	Budget	\$ Over Budget	% of Budget
531020 · Credit Card Convenience Fee	0.00	0.00	0.00	0.0%
531201 · Weather Siren	0.00	785.00	-785.00	0.0%
Total 530000 · Public Works	77,229.19	188,691.81	-111,462.62	40.9%
540000 · Streets and Drainage				
540019 · Engineering General	6,485.50	50,000.00	-43,514.50	13.0%
540060 · Crack Seal & Potholes	443.95	35,000.00	-34,556.05	1.3%
540110 · Current Year Road Repairs	0.00	200,000.00	-200,000.00	0.0%
540111 · Prior Year Road Repairs	0.00	0.00	0.00	0.0%
540155 · MS4 Stormwater	0.00	7,500.00	-7,500.00	0.0%
540177 · Public Works Projects Costs	0.00	0.00	0.00	0.0%
540200 · Sign Repair and Replacement	0.00	2,000.00	-2,000.00	0.0%
Total 540000 · Streets and Drainage	6,929.45	294,500.00	-287,570.55	2.4%
550000 · Police Department				
550120 · Capital Equipment (Auto)	0.00	0.00	0.00	0.0%
550135 · Computer Equip/Supplies/SW Main	7,308.25	41,500.00	-34,191.75	17.6%
550140 · Equipment Repair & Maintenance	0.00	1,000.00	-1,000.00	0.0%
550145 · Health/Dental/Life Insurance	28,897.81	126,276.84	-97,379.03	22.9%
550219 · Membership Dues	0.00	500.00	-500.00	0.0%
550220 · Minor Equipment	322.52	1,000.00	-677.48	32.3%
550230 · Other Professional Services	0.00	100.00	-100.00	0.0%
550240 · Office Supplies	89.71	700.00	-610.29	12.8%
550248 · Publications	0.00	400.00	-400.00	0.0%
550249 · External Contracts	358.00	5,000.00	-4,642.00	7.2%
550250 · Postage	0.00	0.00	0.00	0.0%
550251 · Printing	0.00	900.00	-900.00	0.0%
550252 · Police Chief Salary	30,799.60	100,098.70	-69,299.10	30.8%
550253 · Police Asst. Chief Salary	27,374.56	88,967.35	-61,592.79	30.8%
550254 · Police Officers' Salary	90,753.44	513,517.56	-422,764.12	17.7%
550255 · Administrative Assistant PD	0.00	0.00	0.00	0.0%
550256 · Crossing Guard	1,746.16	4,000.00	-2,253.84	43.7%
550257 · Police Department Overtime	2,185.74	5,000.00	-2,814.26	43.7%
550261 · Criminal Investigations	0.00	2,000.00	-2,000.00	0.0%
550262 · General Liability Insurance	10,323.51	19,296.20	-8,972.69	53.5%
550263 · TWC Unemployment Ins	0.00	0.00	0.00	0.0%
550264 · Incentive Pay	2,163.53	9,600.00	-7,436.47	22.5%
550271 · Salaries Benefits - FICA	10,274.62	55,349.94	-45,075.32	18.6%
550275 · Salaries Benefits - TMRS	10,433.62	61,909.90	-51,476.28	16.9%
550276 · Human Resources	1,441.06	1,500.00	-58.94	96.1%
550277 · Longevity Pay	1,860.00	2,345.00	-485.00	79.3%
550278 · Worker's Compensation Ins	12,902.40	17,832.00	-4,929.60	72.4%
550280 · Communications	1,720.20	14,000.00	-12,279.80	12.3%
550281 · Training	3,063.30	15,000.00	-11,936.70	20.4%
550286 · Training Ammo	74.95	5,000.00	-4,925.05	1.5%
550290 · Uniforms	3,878.83	24,000.00	-20,121.17	16.2%
550291 · Patrol Equipment	0.00	7,000.00	-7,000.00	0.0%
550292 · Community Programs	1,386.00	3,000.00	-1,614.00	46.2%
550293 · Traffic Management	0.00	100.00	-100.00	0.0%
550294 · Evidence Room Supplies	0.00	100.00	-100.00	0.0%
550295 · Goodwill	650.00	1,000.00	-350.00	65.0%
550300 · Vehicle Fuel	2,659.93	30,000.00	-27,340.07	8.9%
550400 · Vehicle Repair & Maintenance	516.43	10,000.00	-9,483.57	5.2%
Total 550000 · Police Department	253,184.17	1,167,993.49	-914,809.32	21.7%

Profit & Loss Budget vs. Actual

October 2022 through September 2023

	Oct '22 - Sep 23	Budget	\$ Over Budget	% of Budget
560000 · Municipal Court				
560010 · Judges Services	1,700.00	10,000.00	-8,300.00	17.0%
560015 · Jury Services	0.00	240.00	-240.00	0.0%
560018 · Jail Services	1,330.00	0.00	1,330.00	100.0%
560020 · Prosecuting Attorney	2,081.25	10,000.00	-7,918.75	20.8%
560025 · Other Professional Services	340.00	480.00	-140.00	70.8%
560026 · Court Clerk - Salary	20,534.36	65,820.78	-45,286.42	31.2%
560027 · Court Clerk- FICA	1,531.10	5,632.37	-4,101.27	27.2%
560028 · Court Clerk - TMRS	1,765.07	6,334.93	-4,569.86	27.9%
560029 · Court Clerk Ins (H/D/L)	2,919.87	8,534.52	-5,614.65	34.2%
560030 · Court Clerk - Longevity	905.00	905.00	0.00	100.0%
560031 · Overtime	972.93	6,000.00	-5,027.07	16.2%
560035 · Court Supplies,Equip & S/W Main	6,277.26	6,000.00	277.26	104.6%
560055 · Membership Dues	0.00	0.00	0.00	0.0%
560076 · Incentive Pay	276.88	900.00	-623.12	30.8%
Total 560000 · Municipal Court	40,633.72	120,847.60	-80,213.88	33.6%
570000 · Double Oak Vol. Fire Department				
570010 · DOVFD Capital Equip Contributio	0.00	0.00	0.00	0.0%
570020 · DOVFD Operations Contribution	25,000.00	100,000.00	-75,000.00	25.0%
570021 · General Liability Insurance	7,163.26	13,389.20	-6,225.94	53.5%
570022 · Worker's Compensation Ins	2,257.92	3,120.60	-862.68	72.4%
Total 570000 · Double Oak Vol. Fire Departm...	34,421.18	116,509.80	-82,088.62	29.5%
Total Expense	513,787.66	2,272,001.96	-1,758,214.30	22.6%
Net Ordinary Income	381,868.03	0.00	381,868.03	100.0%
Net Income	381,868.03	0.00	381,868.03	100.0%

Town of Double Oak
Balance Sheet
As of January 13, 2023

	<u>Jan 13, 23</u>
ASSETS	
Current Assets	
Checking/Savings	
102302 · Independent Bank Money Market	1,990,341.50
102303 · Independent Bank Checking	727,822.13
102304 · Police Leose Training Fund	864.96
102306 · John B. Wright Memorial Fund	566.75
102307 · DO Police Dept Chapter 59	8.78
102400 · Petty Cash	499.21
102450 · DATCU	3,278.14
106101 · Certificate of Deposit	427,624.57
Total Checking/Savings	3,151,006.04
Accounts Receivable	
106100 · Accounts Receivable	29,963.83
Total Accounts Receivable	29,963.83
Other Current Assets	
104100 · Bartonville Water Certificate	2,000.00
106150 · Interest Receivable	225.00
106400 · Employee Receivables	-66.09
106700 · Property Taxes Receivable	10,443.89
106900 · Prepaid Costs	20,132.44
Total Other Current Assets	32,735.24
Total Current Assets	3,213,705.11
TOTAL ASSETS	3,213,705.11
LIABILITIES & EQUITY	
Liabilities	
Current Liabilities	
Accounts Payable	
202000 · Accounts Payable	7,881.27
Total Accounts Payable	7,881.27
Other Current Liabilities	
106300 · Allowance for Uncoll Taxes	10,443.89
200000 · Payroll Liabilities	
201200 · FICA/Medicare Withholding	1,012.22
201500 · TMRS Payable	1,895.68
202507 · Dependant Health Care Cover...	-2,258.09
202508 · AFLAC Deduction	258.66
202509 · Child Support Withholding Or...	111.85
202513 · Vision Insurance	759.99
202516 · Dependent Life Insurance	155.66
200000 · Payroll Liabilities - Other	7,684.88
Total 200000 · Payroll Liabilities	9,620.85

Town of Double Oak
Balance Sheet
 As of January 13, 2023

	Jan 13, 23
200504 · Town Hall Reservation Deposits	500.00
201250 · Cr Card Fees/Collection Charges	287.35
202250 · Town Hall Renovations	200.00
202501 · Court Fees & Fines Due State	40,374.79
202502 · Technology Fees	3,429.00
202503 · Court Security Fees	16,755.10
202504 · Police LEOSE Training Account	864.96
202506 · Child Safety Fund	7,231.93
202511 · Omnibase Fees Due	486.70
202512 · Court Collections	-19,282.26
202760 · Time Payment Reimbursement F...	675.81
203002 · Park Fund Account	215.78
203006 · CARES - CLFRF - SLFRF Funds	374,047.19
203060 · Waketon Road Reconstruction	32,891.36
203090 · Waketon Road-Town of Double ...	-92,372.46
2050000 · Accrued Payroll	22,774.04
205555 · Police Grants	347.25
206250 · Sewer System Maintenance	10,321.51
206500 · Police-Chapter 59	8.78
208000 · Golf Tournament	44.85
2110 · Direct Deposit Liabilities	-254.37
Total Other Current Liabilities	419,612.05
Total Current Liabilities	427,493.32
Total Liabilities	427,493.32
Equity	
3000 · Fund Balances	209,371.05
3100 · Town Contingency	100,000.00
3150 · Stormwater Structures Fund	100,000.00
3200 · Road Contingency	150,000.00
3250 · Denton County Bond Project Fund	120,000.00
3450 · Town Hall Technology Fund	38,352.96
3550 · TCEQ MS4 (5-year) Fund	20,000.00
3600 · Street and Drainage Fund	185,392.58
3650 · Cross Timbers Drainage Project	20,000.00
3800 · Police Vehicle Fund	80,007.67
3850 · Police Body Camera Project Fund	16,401.00
3900 · Retained Earnings	1,364,818.50
et Income	381,868.03
Total Equity	2,786,211.79
TOTAL LIABILITIES & EQUITY	3,213,705.11