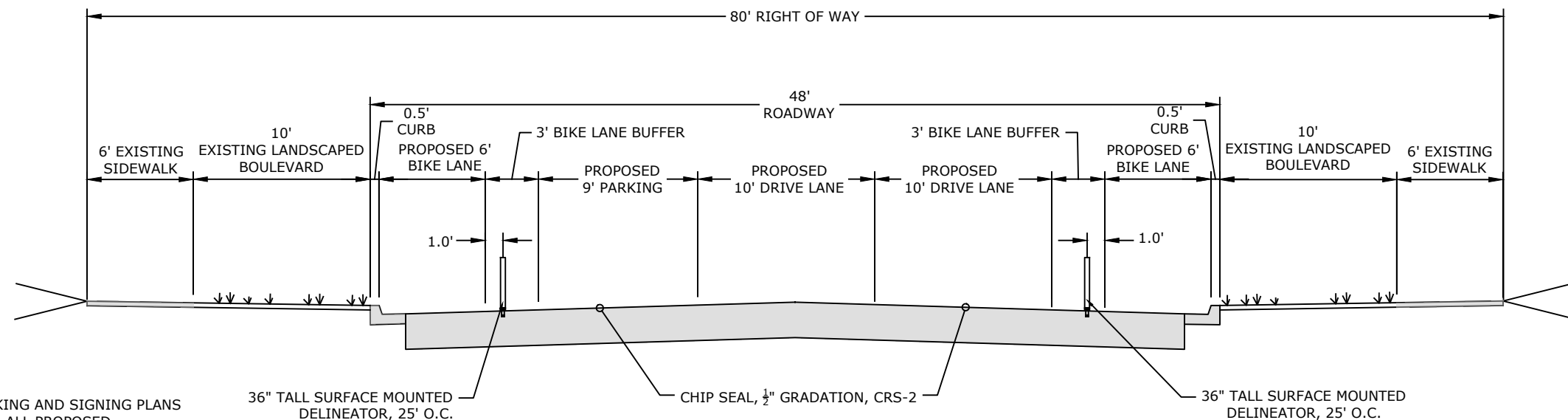


NOTE: SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS SHEETS I.4-I.6 & I.8-I.9 FOR MORE DETAIL ON ALL PROPOSED BIKE LANES, BIKE LANE BUFFERS, PARKING, ETC. ON EXISTING MARY JANE BOULEVARD

TYPICAL SECTION 1
SOUTH & NORTH MARY JANE BLVD.
EXISTING NEIGHBORHOOD COLLECTOR

NTS
 STA 29+76 - 60+80



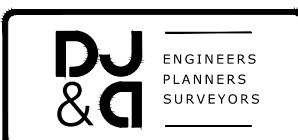
NOTE: SEE PERMANENT PAVEMENT MARKING AND SIGNING PLANS SHEET I.17 FOR MORE DETAIL ON ALL PROPOSED BIKE LANES, BIKE LANE BUFFERS, PARKING, ETC. ON EXISTING SOUTH GEORGE ELMER DRIVE

TYPICAL SECTION 2
SOUTH GEORGE ELMER DRIVE
EXISTING NEIGHBORHOOD COLLECTOR

NTS
 STA 29+30 - 41+41

REVISION	DATE	DESCRIPTION

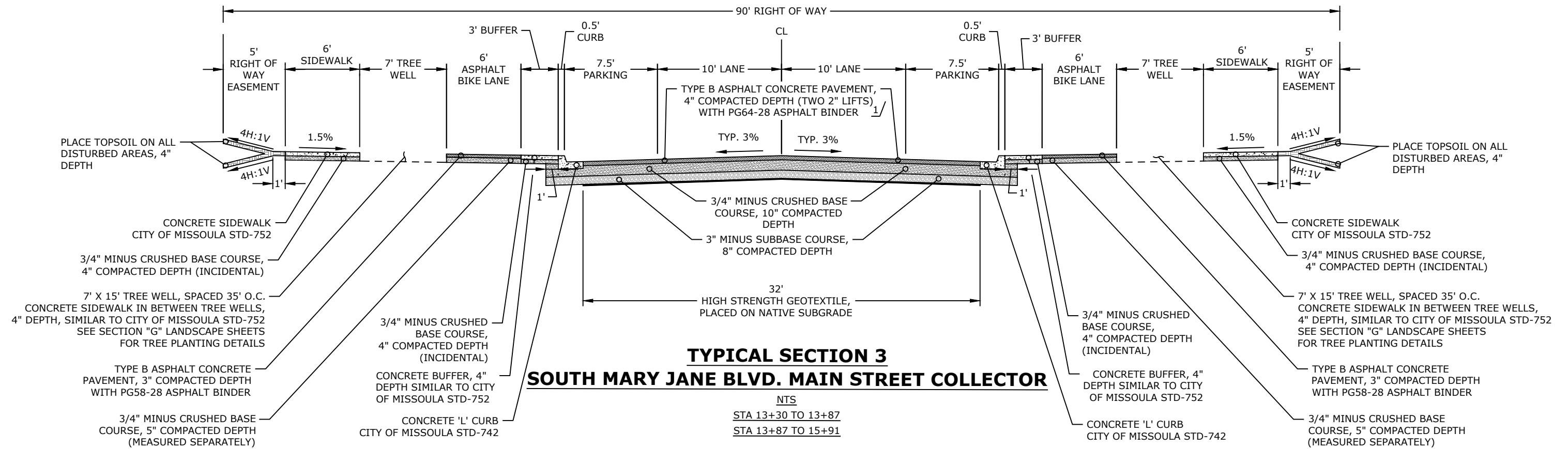
DESIGNER	JN	PROJ. NO.	7065
DRAWN	JN	DATE	04/16/2021
CHECKED	PD	SURVEYED	DJ&A, P.C.



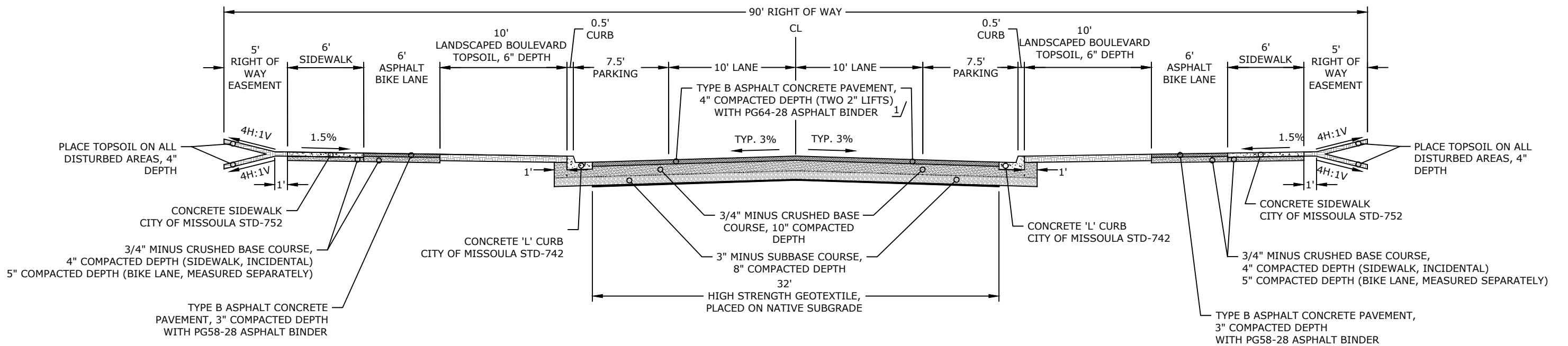
MULLAN BUILD
 100% - BID PLANS

MARY JANE BOULEVARD AND GEORGE ELMER DRIVE
 TYPICAL ROADWAY SECTIONS

SHEET	OF
B.1	B.17



TYPICAL SECTION 3
SOUTH MARY JANE BLVD. MAIN STREET COLLECTOR
NTS
STA 13+30 TO 13+87
STA 13+87 TO 15+91



TYPICAL SECTION 4
SOUTH MARY JANE BLVD. NEIGHBORHOOD COLLECTOR
NTS
STA 16+58 TO 17+45
STA 20+71 TO 22+98
STA 25+73 TO 26+18
STA 27+38 TO 28+15

FOOTNOTES:

¹/CHIP SEAL ROADWAY, CHIP SEAL SHALL BE $\frac{1}{2}$ " GRADATION, CRS-2.

NOTES:

1. ALL DISTURBED AREAS SHALL BE REESTABLISHED WITH DRYLAND SEED MIX, AS SPECIFIED IN THE SECTION "G" LANDSCAPE PLANS.
2. APPLY TRIFURILAN CHEMICAL TREATMENT JUST PRIOR TO PAVING ALL ASPHALT BIKE LANES, TRAILS AND PATHS PER THE CITY OF MISSOULA PARKS AND RECREATION DESIGN MANUAL.

REVISION	DATE	DESCRIPTION

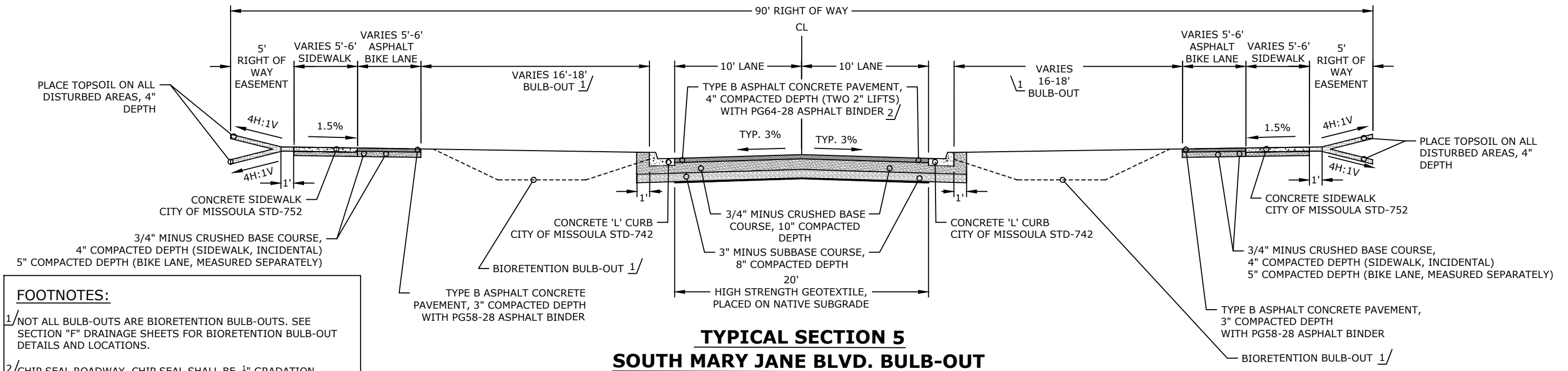
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CHECKED PD SURVEYED DJ&A, P.C.



MULLAN BUILD
100% - BID PLANS

MARY JANE BOULEVARD
TYPICAL ROADWAY SECTIONS

SHEET
OF
B.2 B.17



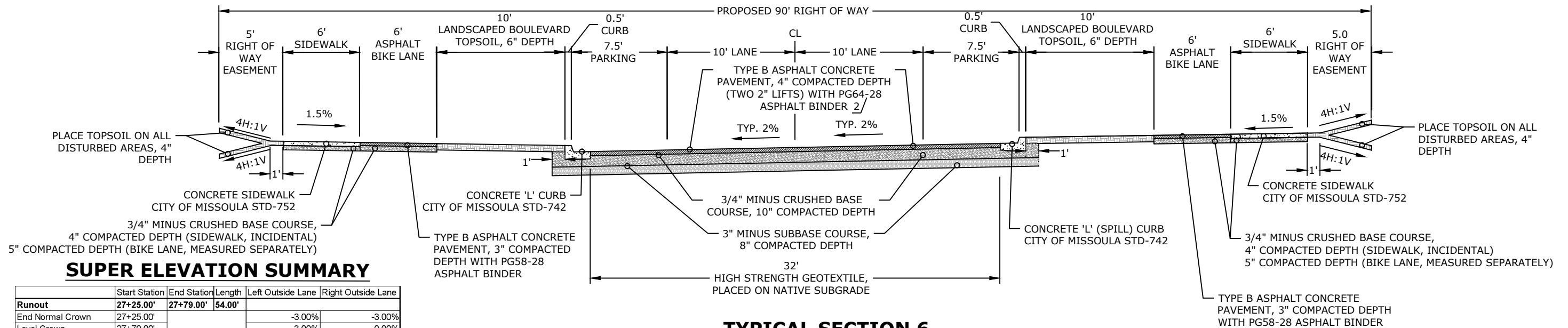
FOOTNOTES:

1/NOT ALL BULB-OUTS ARE BIORETENTION BULB-OUTS. SEE SECTION "F" DRAINAGE SHEETS FOR BIORETENTION BULB-OUT DETAILS AND LOCATIONS.

2/CHIP SEAL ROADWAY, CHIP SEAL SHALL BE $\frac{1}{2}$ " GRADATION, CRS-2.

TYPICAL SECTION 5
SOUTH MARY JANE BLVD. BULB-OUT

NTS
STA 15+91 TO 16+58
STA 17+45 TO 19+68
STA 23+98 TO 25+73
STA 26+18 TO 27+38



TYPICAL SECTION 6
SOUTH MARY JANE BLVD. NEIGHBORHOOD COLLECTOR

NTS
STA 28+15 TO 28+86

NOTES:

1. ALL DISTURBED AREAS SHALL BE REESTABLISHED WITH DRYLAND SEED MIX, AS SPECIFIED IN THE SECTION "G" LANDSCAPE PLANS.

2. APPLY TRIFURILAN CHEMICAL TREATMENT JUST PRIOR TO PAVING ALL ASPHALT BIKE LANES, TRAILS AND PATHS PER THE CITY OF MISSOULA PARKS AND RECREATION DESIGN MANUAL.

SUPER ELEVATION SUMMARY

	Start Station	End Station	Length	Left Outside Lane	Right Outside Lane
Runout	27+25.00'	27+79.00'	54.00'		
End Normal Crown	27+25.00'			-3.00%	-3.00%
Level Crown	27+79.00'			-3.00%	0.00%
Runoff	27+79.00'	28+15.00'	36.00'		
Level Crown	27+79.00'			-3.00%	0.00%
Begin Curve	28+03.26'				
Reverse Crown	28+15.00'			-2.00%	2.00%
Begin Full Super	28+33.00'			-2.00%	2.00%
Transition Out Region	29+41.00'	30+32.00'	91.00'		
Reverse Crown	29+41.00'			-2.00%	2.00%
Runoff	29+60.00'	29+96.00'	36.00'		
End Full Super	29+60.00'			-2.00%	2.00%
End Curve	29+71.35'				
Level Crown	29+96.00'			-2.00%	0
Runout	29+96.00'	30+32.00'	36.00'	-2.00%	0
Level Crown	29+96.00'			-2.00%	
Begin Normal Crown	30+32.00'			-2.00%	-2.00%

REVISION	DATE	DESCRIPTION

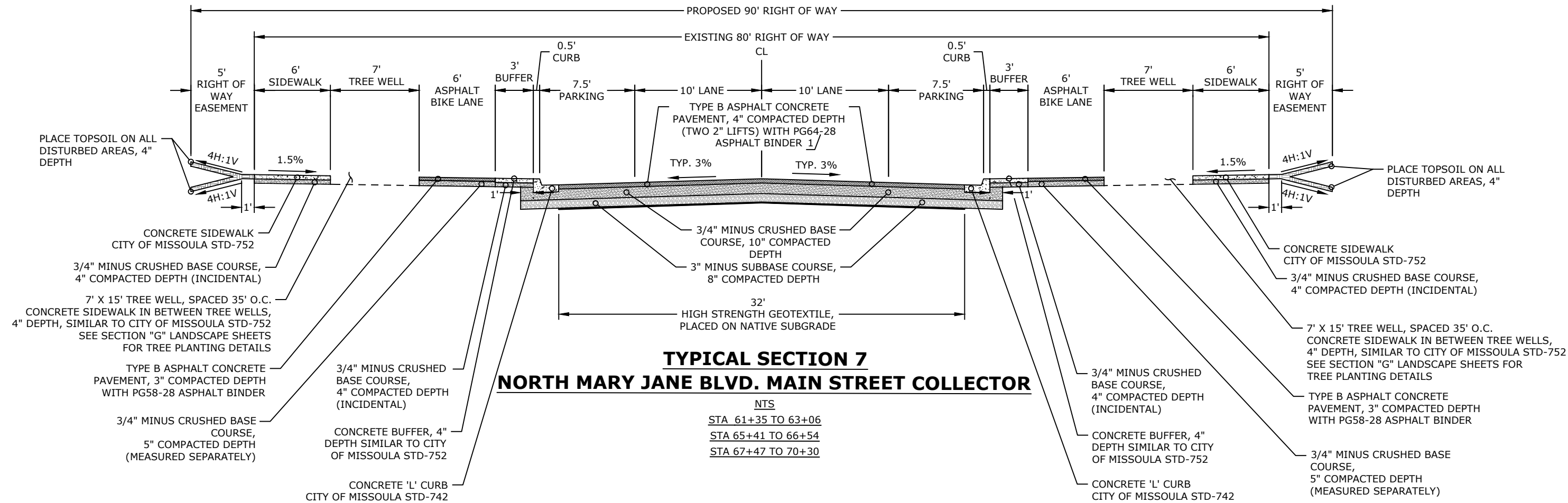
DESIGNER	JN	PROJ. NO.	7065
DRAWN	JN	DATE	04/16/2021
CHECKED	PD	SURVEYED	DJA, P.C.



MULLAN BUILD
100% - BID PLANS

MARY JANE BOULEVARD
TYPICAL ROADWAY SECTIONS

SHEET	OF
B.3	B.17



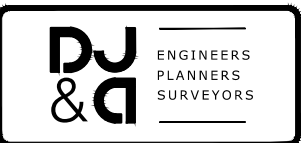
- NOTES:**
1. ALL DISTURBED AREAS SHALL BE REESTABLISHED WITH DRYLAND SEED MIX, AS SPECIFIED IN THE SECTION "G" LANDSCAPE PLANS.
 2. APPLY TRIFURILAN CHEMICAL TREATMENT JUST PRIOR TO PAVING ALL ASPHALT BIKE LANES, TRAILS AND PATHS PER THE CITY OF MISSOULA PARKS AND RECREATION DESIGN MANUAL.

FOOTNOTES:

1/CHIP SEAL ROADWAY, CHIP SEAL SHALL BE 1/2" GRADATION, CRS-2.

REVISION	DATE	DESCRIPTION

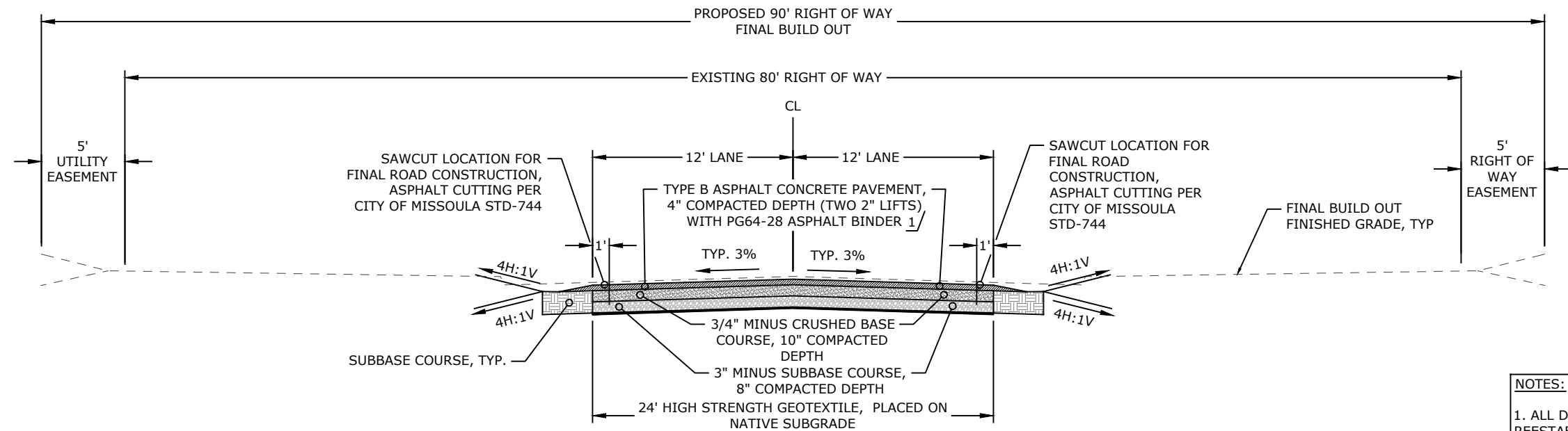
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DRAWN	JN	DATE	04/16/2021
CHECKED	PD	SURVEYED	DJ&A, P.C.



MULLAN BUILD
100% - BID PLANS

MARY JANE BOULEVARD
TYPICAL ROADWAY SECTIONS

SHEET	OF
B.4	B.17



FOOTNOTES:

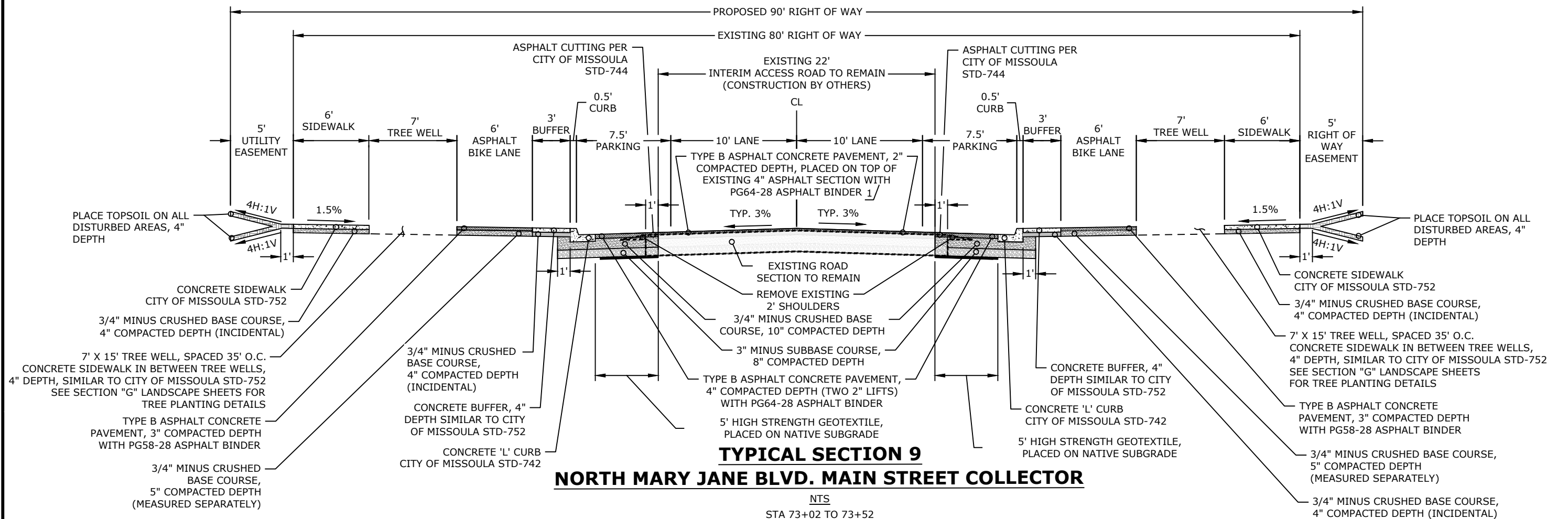
¹/CHIP SEAL ROADWAY, CHIP SEAL SHALL BE $\frac{1}{2}$ " GRADATION, CRS-2.

NOTES:

1. ALL DISTURBED AREAS SHALL BE REESTABLISHED WITH DRYLAND SEED MIX, AS SPECIFIED IN THE SECTION "G" LANDSCAPE PLANS.
2. APPLY TRIFURILAN CHEMICAL TREATMENT JUST PRIOR TO PAVING ALL ASPHALT BIKE LANES, TRAILS AND PATHS PER THE CITY OF MISSOULA PARKS AND RECREATION DESIGN MANUAL.

INTERIM SECTION 8 NORTH MARY JANE BLVD. (CONSTRUCTED BY OTHERS)

NTS
STA 70+86 TO 73+52



TYPICAL SECTION 9 NORTH MARY JANE BLVD. MAIN STREET COLLECTOR

NTS
STA 73+02 TO 73+52

REVISION	DATE	DESCRIPTION

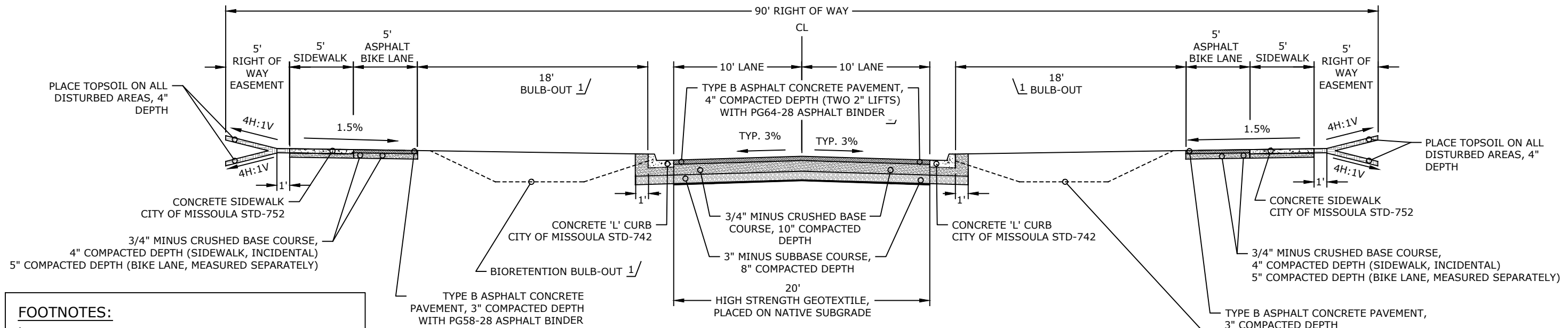
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DRAWN	JN	DATE	04/16/2021
CHECKED	PD	SURVEYED	DJA, P.C.



MULLAN BUILD
100% - BID PLANS

MARY JANE BOULEVARD
TYPICAL ROADWAY SECTIONS

SHEET
OF
B.5 B.17



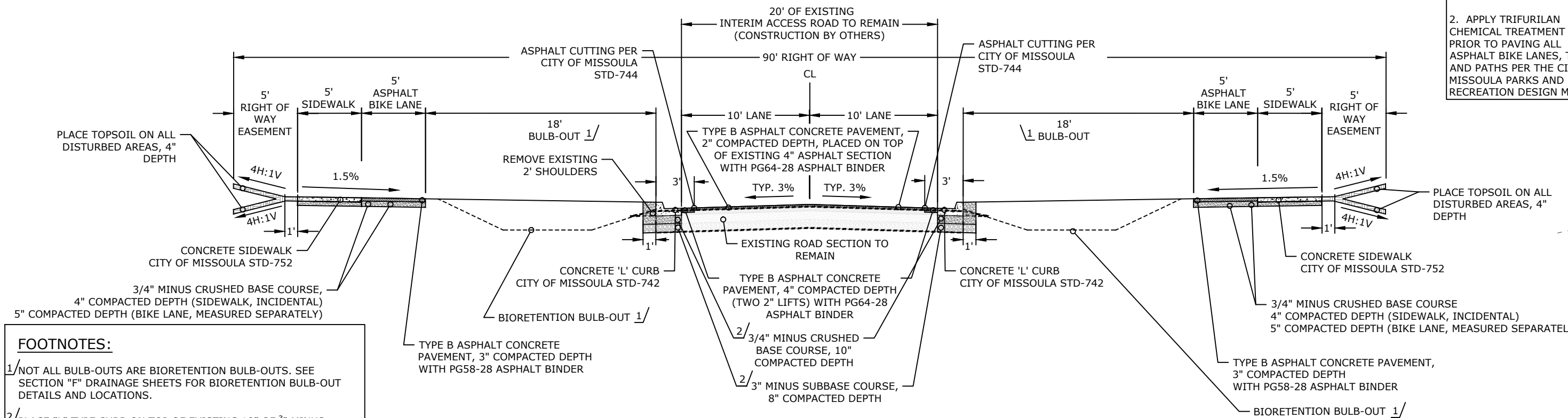
FOOTNOTES:

1/NOT ALL BULB-OUTS ARE BIORETENTION BULB-OUTS. SEE SECTION "F" DRAINAGE SHEETS FOR BIORETENTION BULB-OUT DETAILS AND LOCATIONS.

TYPICAL SECTION 10
NORTH MARY JANE BLVD. BULB-OUT

NTS
STA 63+06 TO 64+60
STA 76+00 TO 77+82

- NOTES:**
1. ALL DISTURBED AREAS SHALL BE REESTABLISHED WITH DRYLAND SEED MIX, AS SPECIFIED IN THE SECTION "G" LANDSCAPE PLANS.
 2. APPLY TRIFURILAN CHEMICAL TREATMENT JUST PRIOR TO PAVING ALL ASPHALT BIKE LANES, TRAILS AND PATHS PER THE CITY OF MISSOULA PARKS AND RECREATION DESIGN MANUAL.



FOOTNOTES:

1/NOT ALL BULB-OUTS ARE BIORETENTION BULB-OUTS. SEE SECTION "F" DRAINAGE SHEETS FOR BIORETENTION BULB-OUT DETAILS AND LOCATIONS.

2/PLACE "L" TYPE CURB ON TOP OF EXISTING 10" OF 3/4" MINUS CRUSHED BASE COURSE AND 8" OF 3" MINUS SUBBASE FROM EXISTING ROADWAY CONSTRUCTION. ADDITIONAL BASE AND SUBBASE MATERIALS WILL ALSO NEED TO BE IMPORTED TO EXTEND THE BASE AND SUBBASE MATERIALS ONE (1) FOOT BEYOND THE BACK OF CURB PER CITY OF MISSOULA STD-742.

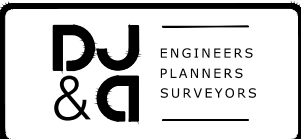
3/CHIP SEAL ROADWAY, CHIP SEAL SHALL BE 1/2" GRADATION, CRS-2.

TYPICAL SECTION 11
NORTH MARY JANE BLVD. BULB-OUT

NTS
STA 70+86 TO 73+02

REVISION	DATE	DESCRIPTION

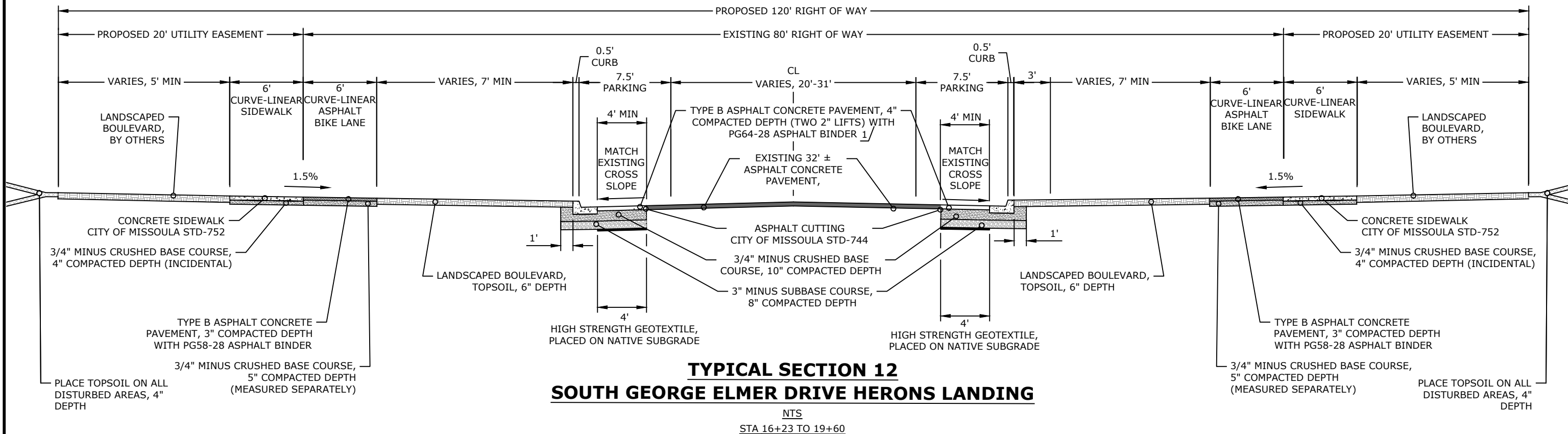
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DRAWN	JN	DATE	04/16/2021
CHECKED	PD	SURVEYED	DJ&A, P.C.



MULLAN BUILD
100% - BID PLANS

MARY JANE BOULEVARD
TYPICAL ROADWAY SECTIONS

SHEET	OF
B.6	B.17



FOOTNOTES:

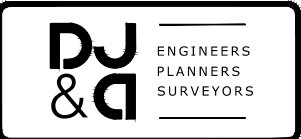
¹/CHIP SEAL ROADWAY, CHIP SEAL SHALL BE ½" GRADATION, CRS-2.

NOTES:

1. ALL DISTURBED AREAS SHALL BE REESTABLISHED WITH DRYLAND SEED MIX, AS SPECIFIED IN THE SECTION "G" LANDSCAPE PLANS.
2. APPLY TRIFURILAN CHEMICAL TREATMENT JUST PRIOR TO PAVING ALL ASPHALT BIKE LANES, TRAILS AND PATHS PER THE CITY OF MISSOULA PARKS AND RECREATION DESIGN MANUAL.

REVISION	DATE	DESCRIPTION

DESIGNER	JN	PROJ. NO.	7065
DRAWN	JN	DATE	04/16/2021
CHECKED	PD	SURVEYED	DJ&A, P.C.

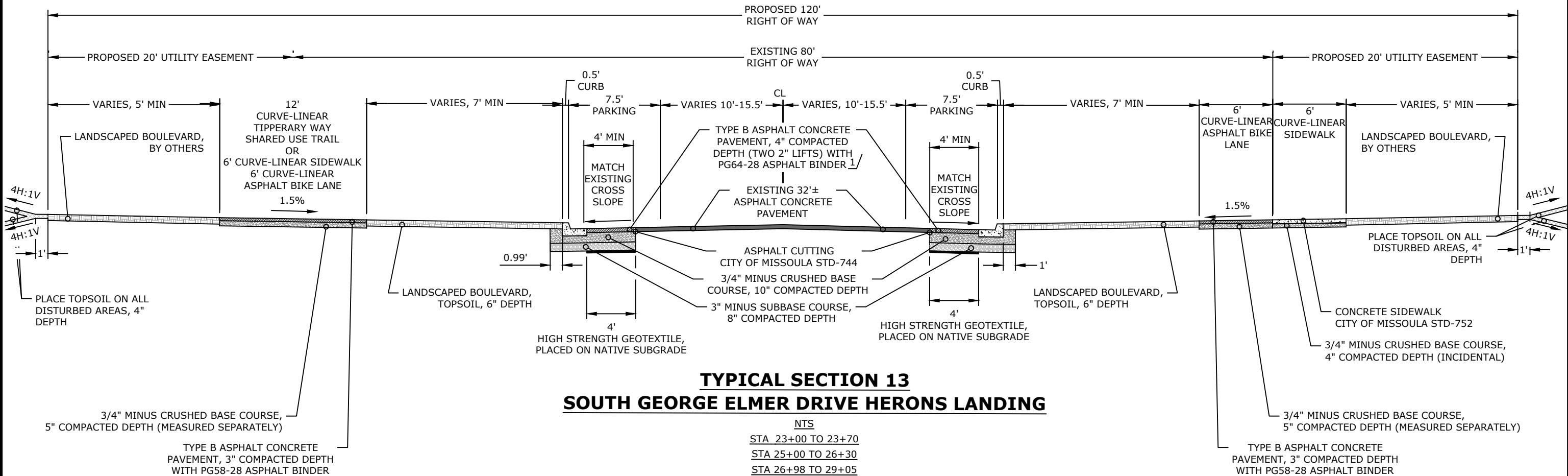


MULLAN BUILD
100% - BID PLANS

GEORGE ELMER DRIVE TYPICAL ROADWAY SECTIONS

SHEET	OF
B.7	B.17

- NOTES:
1. ALL DISTURBED AREAS SHALL BE REESTABLISHED WITH DRYLAND SEED MIX, AS SPECIFIED IN THE SECTION "G" LANDSCAPE PLANS.
 2. APPLY TRIFURILAN CHEMICAL TREATMENT JUST PRIOR TO PAVING ALL ASPHALT BIKE LANES, TRAILS AND PATHS PER THE CITY OF MISSOULA PARKS AND RECREATION DESIGN MANUAL.



FOOTNOTES:

¹/₂ CHIP SEAL ROADWAY, CHIP SEAL SHALL BE ¹/₂" GRADATION, CRS-2.

REVISION	DATE	DESCRIPTION

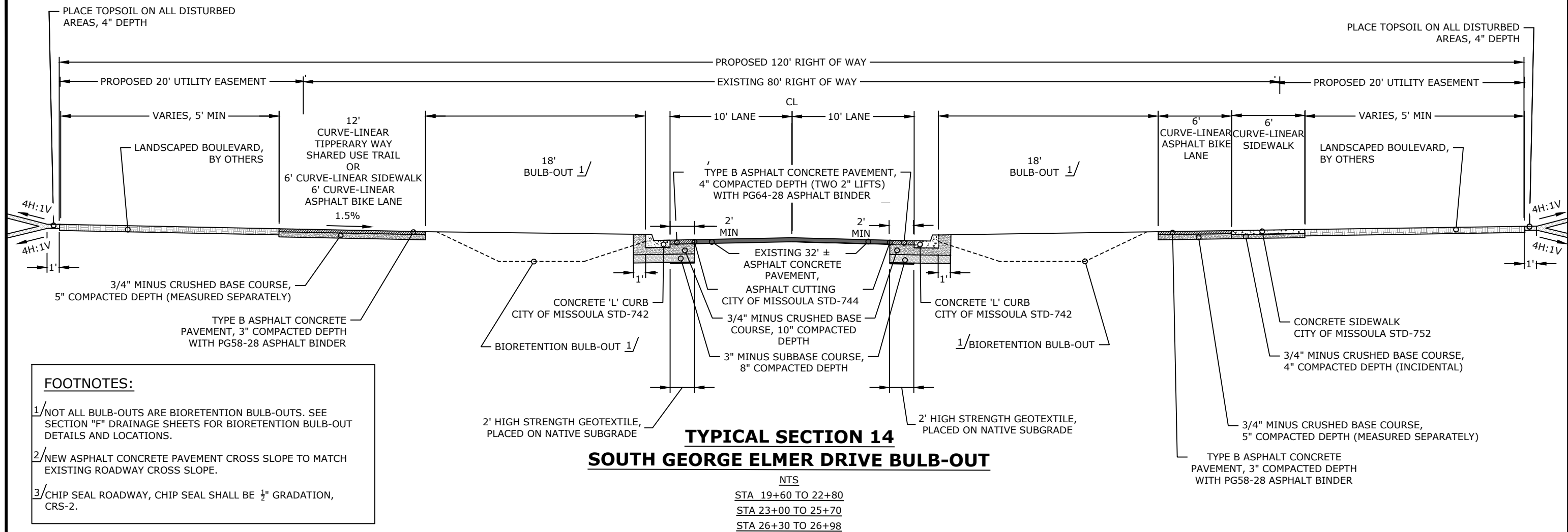
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CHECKED	PD	SURVEYED	DJ&A, P.C.



MULLAN BUILD
100% - BID PLANS

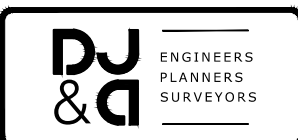
GEORGE ELMER DRIVE TYPICAL ROADWAY SECTIONS

SHEET	OF
B.8	B.17



REVISION	DATE	DESCRIPTION
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-	-	-
-	-	-
-	-	-
-	-	-

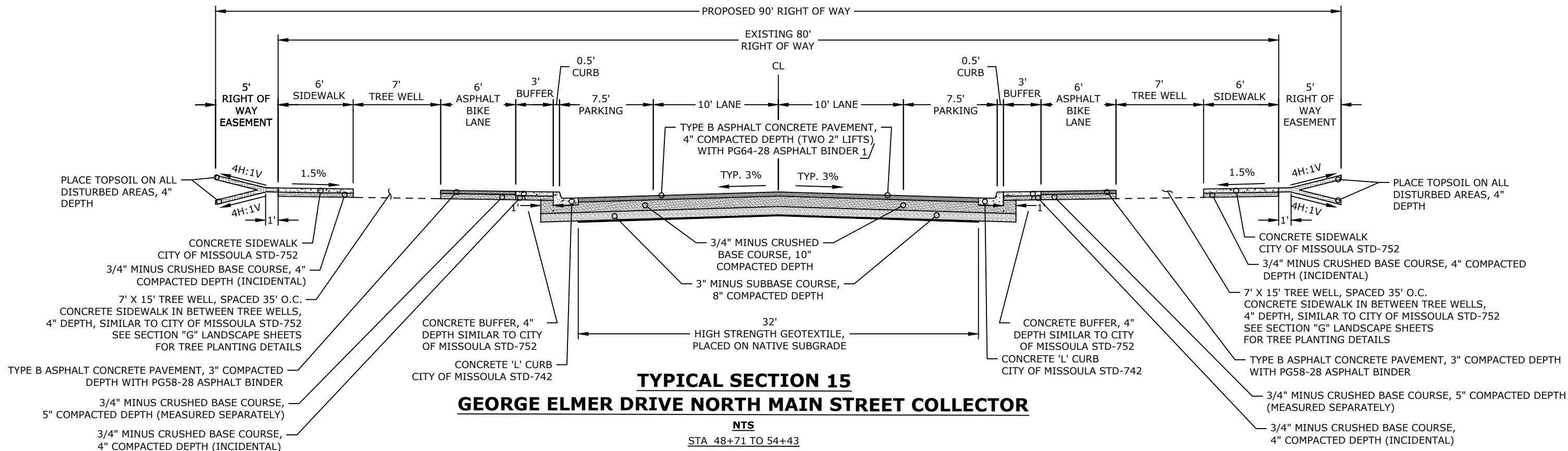
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CHECKED	PD	SURVEYED	DJ&A, P.C.



MULLAN BUILD
100% - BID PLANS

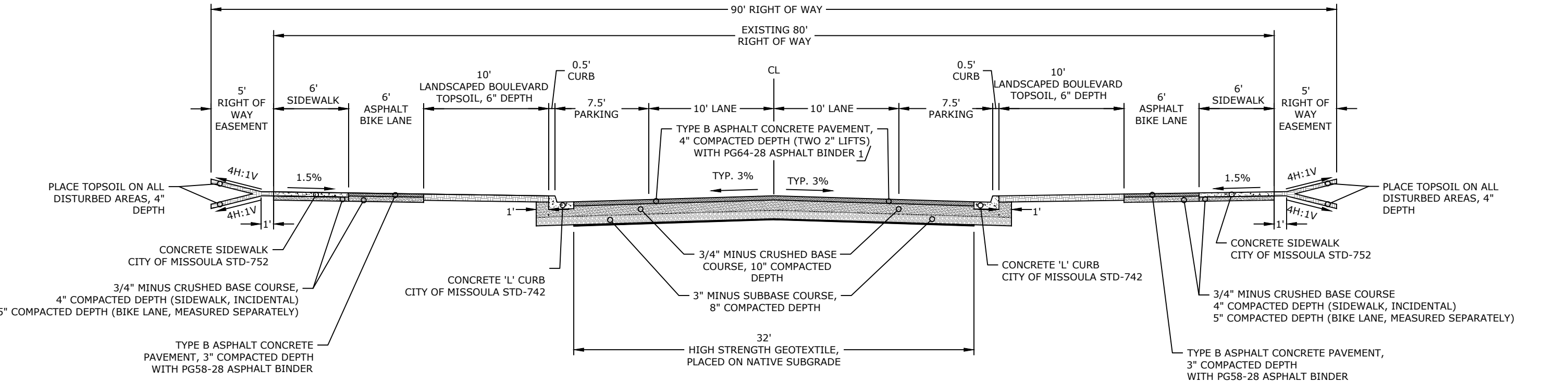
GEORGE ELMER DRIVE TYPICAL ROADWAY SECTIONS

SHEET	OF
B.9	B.17



TYPICAL SECTION 15
GEORGE ELMER DRIVE NORTH MAIN STREET COLLECTOR

NTS
STA 48+71 TO 54+43



TYPICAL SECTION 16
GEORGE ELMER DRIVE NORTH NEIGHBORHOOD COLLECTOR

NTS
STA 42+41 TO 44+38
STA 45+26 TO 48+18

FOOTNOTES:

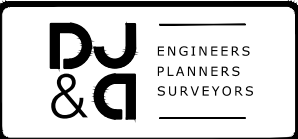
1/CHIP SEAL ROADWAY, CHIP SEAL SHALL BE 1/2" GRADATION, CRS-2.

NOTES:

1. ALL DISTURBED AREAS SHALL BE REESTABLISHED WITH DRYLAND SEED MIX, AS SPECIFIED IN THE SECTION "G" LANDSCAPE PLANS.
2. APPLY TRIFURILAN CHEMICAL TREATMENT JUST PRIOR TO PAVING ALL ASPHALT BIKE LANES, TRAILS AND PATHS PER THE CITY OF MISSOULA PARKS AND RECREATION DESIGN MANUAL.

REVISION	DATE	DESCRIPTION

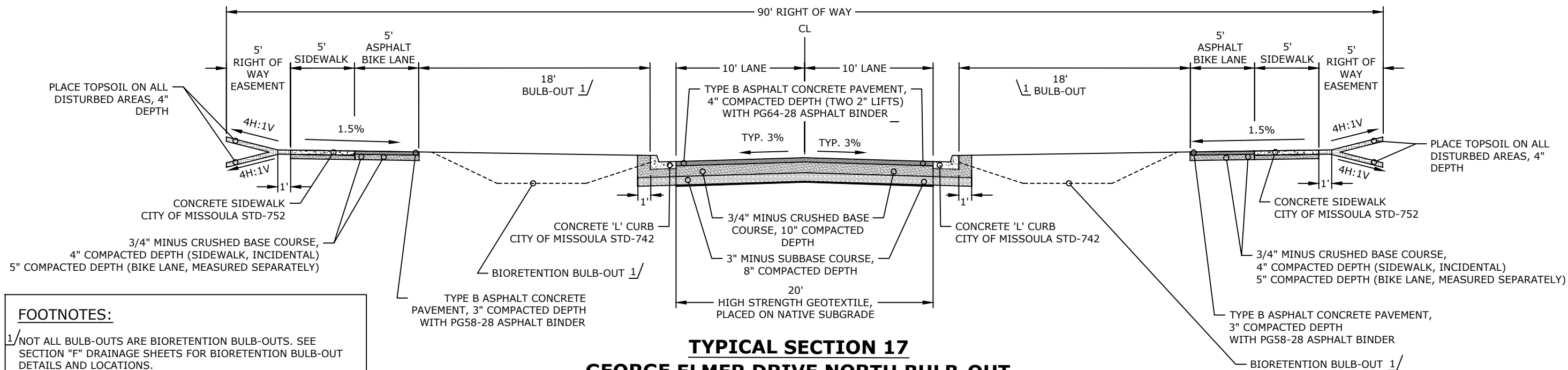
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DRAWN	JN	DATE	04/16/2021
CHECKED	PD	SURVEYED	DJ&A, P.C.



MULLAN BUILD
100% - BID PLANS

GEORGE ELMER DRIVE TYPICAL ROADWAY SECTIONS

SHEET	OF
B.10	B.17



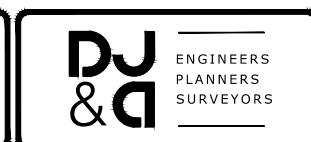
TYPICAL SECTION 17 GEORGE ELMER DRIVE NORTH BULB-OUT

NTS
STA 41+61 TO 42+41
STA 48+18 TO 48+71

- NOTES:**
1. ALL DISTURBED AREAS SHALL BE REESTABLISHED WITH DRYLAND SEED MIX, AS SPECIFIED IN THE SECTION "G" LANDSCAPE PLANS.
 2. APPLY TRIFURILAN CHEMICAL TREATMENT JUST PRIOR TO PAVING ALL ASPHALT BIKE LANES, TRAILS AND PATHS PER THE CITY OF MISSOULA PARKS AND RECREATION DESIGN MANUAL.

REVISION	DATE	DESCRIPTION

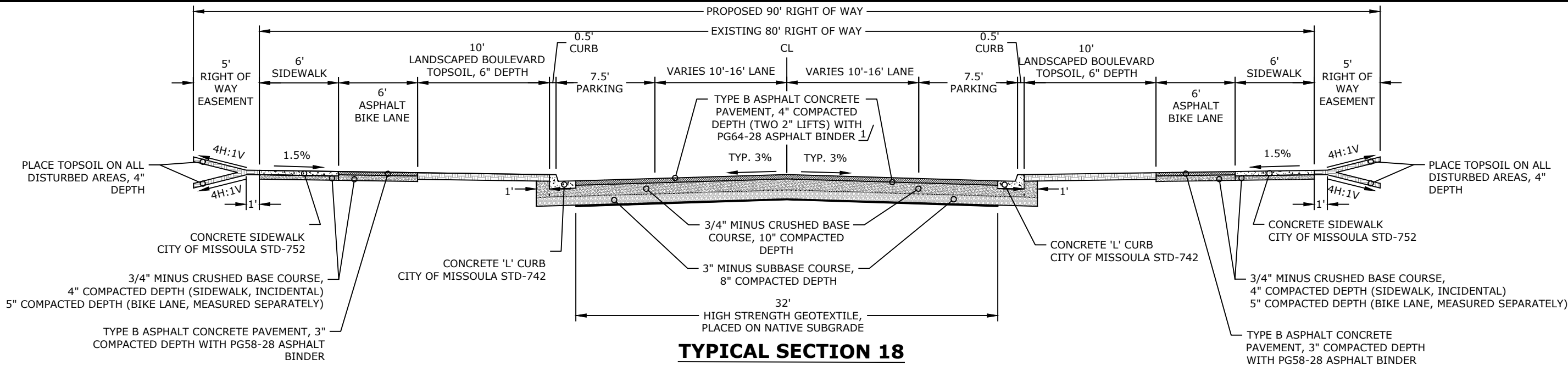
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DRAWN	JN	DATE	04/16/2021
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MULLAN BUILD
100% - BID PLANS

GEORGE ELMER DRIVE TYPICAL ROADWAY SECTIONS

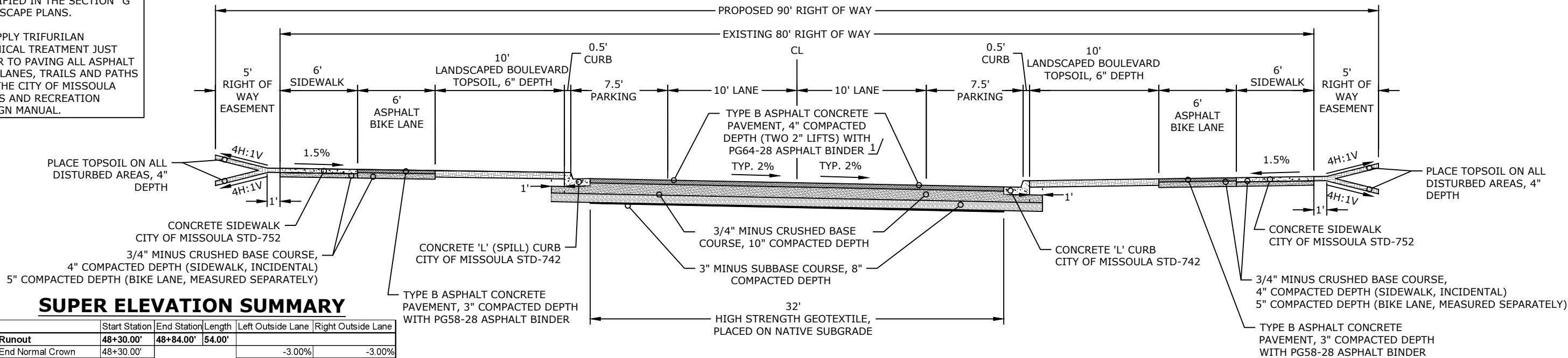
SHEET	OF
B.11	B.17



TYPICAL SECTION 18
ENGLAND BLVD. NEIGHBORHOOD COLLECTOR

- NOTES:**
1. ALL DISTURBED AREAS SHALL BE REESTABLISHED WITH DRYLAND SEED MIX, AS SPECIFIED IN THE SECTION "G" LANDSCAPE PLANS.
 2. APPLY TRIFURILAN CHEMICAL TREATMENT JUST PRIOR TO PAVING ALL ASPHALT BIKE LANES, TRAILS AND PATHS PER THE CITY OF MISSOULA PARKS AND RECREATION DESIGN MANUAL.

NTS
STA 29+85 TO 48+30
STA 53+13 TO 65+78



TYPICAL SECTION 19
ENGLAND BLVD. NEIGHBORHOOD COLLECTOR

NTS
STA 49+20 TO 52+23

SUPER ELEVATION SUMMARY

	Start Station	End Station	Length	Left Outside Lane	Right Outside Lane
Runout	48+30.00'	48+84.00'	54.00'		
End Normal Crown	48+30.00'			-3.00%	-3.00%
Level Crown	48+84.00'			0.00%	-3.00%
Runoff	48+84.00'	49+38.00'	54.00'		
Level Crown	48+84.00'			0.00%	-3.00%
Begin Curve	49+08.15'				
Reverse Crown	49+20.00'			2.00%	-2.00%
Begin Full Super	49+38.00'			2.00%	-2.00%
Transition Out Region	52+05.00'	53+13.00'	108.00'		
Reverse Crown	52+05.00'			2.00%	-2.00%
Runoff	52+23.00'	52+59.00'	36.00'		
End Full Super	52+23.00'			2.00%	-2.00%
End Curve	52+35.46'				
Level Crown	52+59.00'			0.00%	-3.00%
Runout	52+59.00'	53+13.00'	54.00'		
Level Crown	52+59.00'			0.00%	-3.00%
Begin Normal Crown	53+13.00'			-3.00%	-3.00%

FOOTNOTES:

1/CHIP SEAL ROADWAY, CHIP SEAL SHALL BE 1/2" GRADATION, CRS-2.

REVISION	DATE	DESCRIPTION

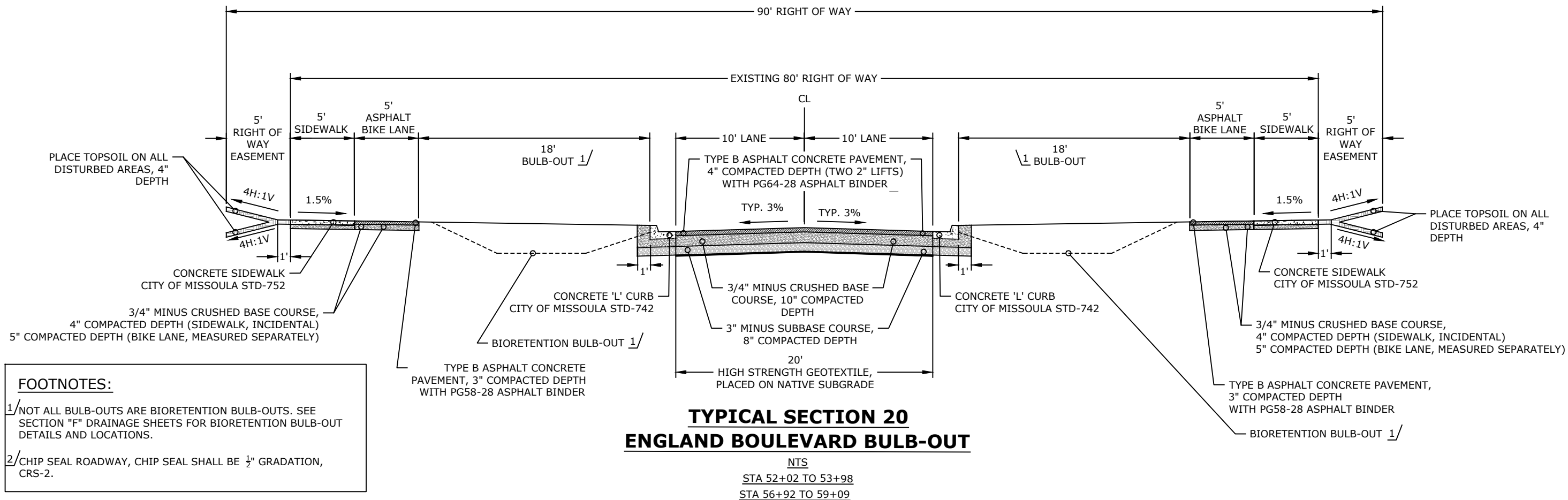
DESIGNER JN PROJ. NO. 7065
DRAWN JN DATE 04/16/2021
CHECKED PD SURVEYED DJA, P.C.



MULLAN BUILD
100% - BID PLANS

ENGLAND BOULEVARD TYPICAL ROADWAY SECTIONS

SHEET
OF
B.12 | B.17



FOOTNOTES:

1/NOT ALL BULB-OUTS ARE BIORETENTION BULB-OUTS. SEE SECTION "F" DRAINAGE SHEETS FOR BIORETENTION BULB-OUT DETAILS AND LOCATIONS.

2/CHIP SEAL ROADWAY, CHIP SEAL SHALL BE 1/2" GRADATION, CRS-2.

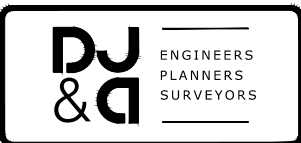
NOTES:

1. ALL DISTURBED AREAS SHALL BE REESTABLISHED WITH DRYLAND SEED MIX, AS SPECIFIED IN THE SECTION "G" LANDSCAPE PLANS.

2. APPLY TRIFURILAN CHEMICAL TREATMENT JUST PRIOR TO PAVING ALL ASPHALT BIKE LANES, TRAILS AND PATHS PER THE CITY OF MISSOULA PARKS AND RECREATION DESIGN MANUAL.

REVISION	DATE	DESCRIPTION

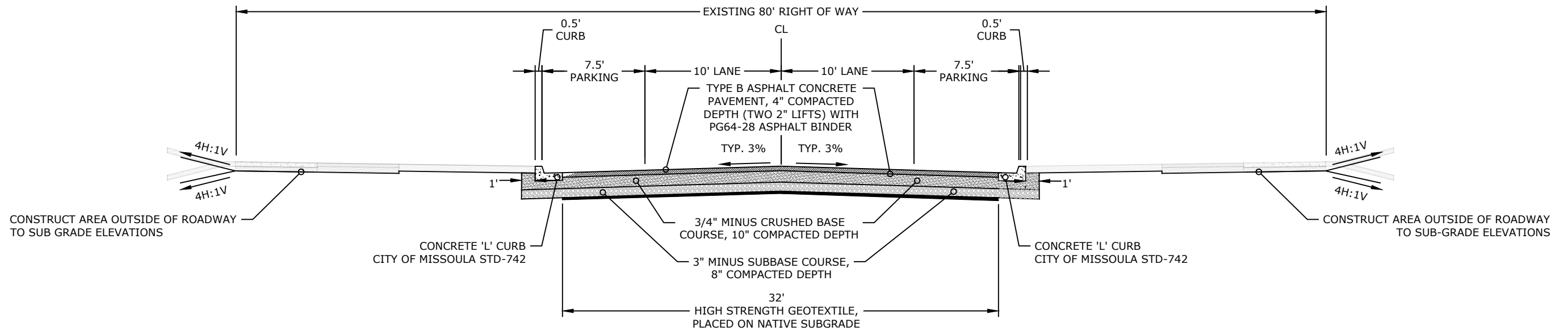
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DRAWN	JN	DATE	04/16/2021
CHECKED	PD	SURVEYED	DJ&A, P.C.



MULLAN BUILD
100% - BID PLANS

ENGLAND BOULEVARD TYPICAL ROADWAY SECTIONS


SHEET	OF
B.13	B.17



TYPICAL SECTION 20 PRIMARY ROAD

NTS

LEGEND

 LIMITS OF DEFERRED ITEMS NOT TO BE BUILT AS PART OF MULLAN BUILD PROJECT

NOTES:

1. ALL DISTURBED AREAS SHALL BE REESTABLISHED WITH DRYLAND SEED MIX, AS SPECIFIED IN THE SECTION "G" LANDSCAPE PLANS.

REVISION	DATE	DESCRIPTION
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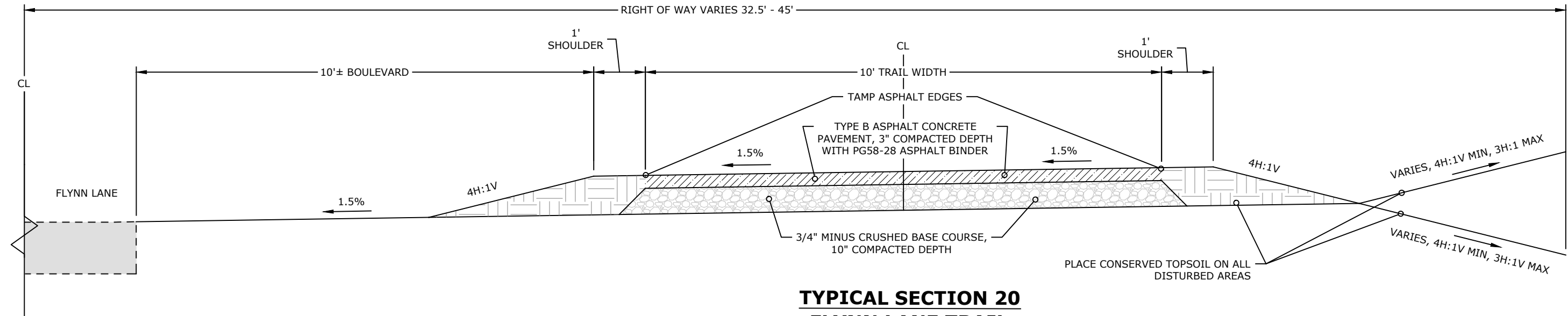
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 DRAWN JN DATE 04/16/2021
 CHECKED PD SURVEYED DJ&A, P.C.



MULLAN BUILD
100% - BID PLANS

ENGLAND BOULEVARD TYPICAL ROADWAY SECTIONS

SHEET
OF
B.14 | B.17



TYPICAL SECTION 20
FLYNN LANE TRAIL

NTS
STA 10+00 to 37+20

- NOTES:
- 1. ALL DISTURBED AREAS SHALL BE REESTABLISHED WITH DRYLAND SEED MIX, AS SPECIFIED IN THE SECTION "G" LANDSCAPE PLANS.
 - 2. APPLY TRIFURILAN CHEMICAL TREATMENT JUST PRIOR TO PAVING ALL ASPHALT BIKE LANES, TRAILS AND PATHS PER THE CITY OF MISSOULA PARKS AND RECREATION DESIGN MANUAL.

REVISION	DATE	DESCRIPTION
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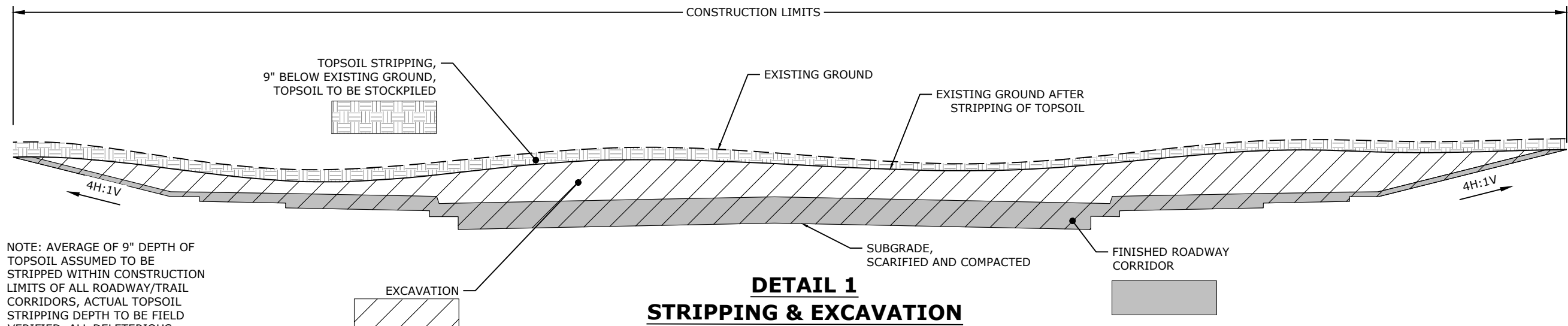
DESIGNER	JN	PROJ. NO.	7065
DRAWN	JN	DATE	04/16/2021
CHECKED	PD	SURVEYED	DJ&A, P.C.

DJ&A

ENGINEERS
PLANNERS
SURVEYORS

MULLAN BUILD
100% - BID PLANS

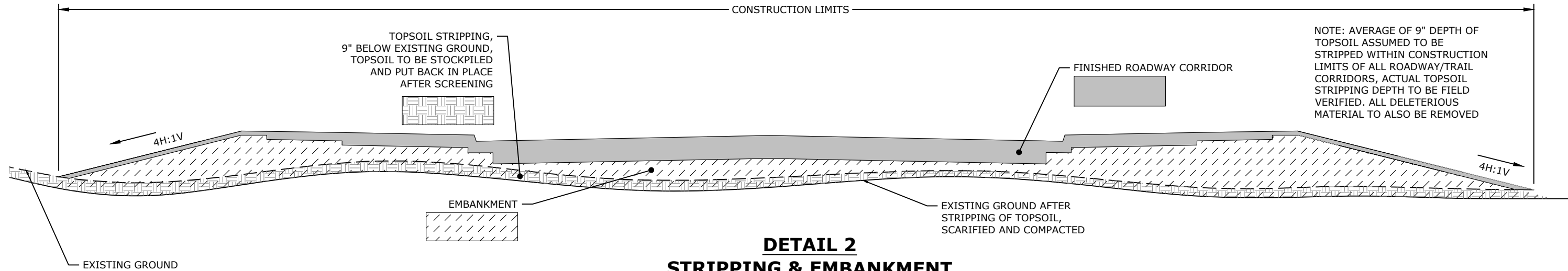
FLYNN LANE TRAIL TYPICAL SECTIONS



NOTE: AVERAGE OF 9" DEPTH OF TOPSOIL ASSUMED TO BE STRIPPED WITHIN CONSTRUCTION LIMITS OF ALL ROADWAY/TRAIL CORRIDORS, ACTUAL TOPSOIL STRIPPING DEPTH TO BE FIELD VERIFIED. ALL DELETERIOUS MATERIAL TO ALSO BE REMOVED

DETAIL 1
STRIPPING & EXCAVATION

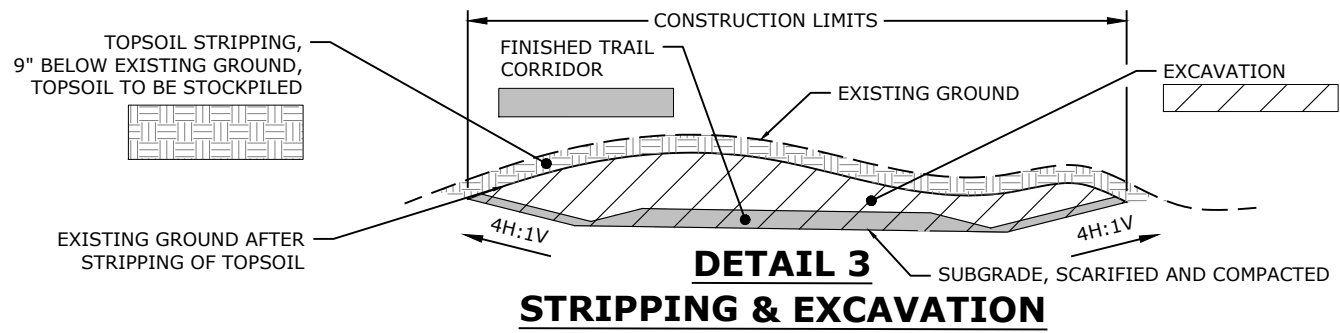
SCALE: NTS



NOTE: AVERAGE OF 9" DEPTH OF TOPSOIL ASSUMED TO BE STRIPPED WITHIN CONSTRUCTION LIMITS OF ALL ROADWAY/TRAIL CORRIDORS, ACTUAL TOPSOIL STRIPPING DEPTH TO BE FIELD VERIFIED. ALL DELETERIOUS MATERIAL TO ALSO BE REMOVED

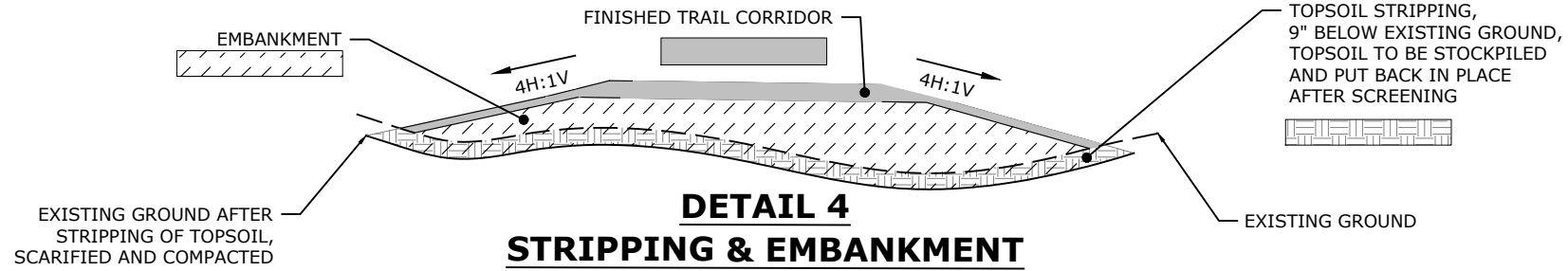
DETAIL 2
STRIPPING & EMBANKMENT

SCALE: NTS



NOTE: AVERAGE OF 9" DEPTH OF TOPSOIL ASSUMED TO BE STRIPPED WITHIN CONSTRUCTION LIMITS OF ALL ROADWAY/TRAIL CORRIDORS, ACTUAL TOPSOIL STRIPPING DEPTH TO BE FIELD VERIFIED. ALL DELETERIOUS MATERIAL TO ALSO BE REMOVED

DETAIL 3
STRIPPING & EXCAVATION

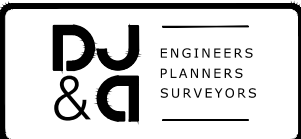


DETAIL 4
STRIPPING & EMBANKMENT

SCALE: NTS

REVISION	DATE	DESCRIPTION

DESIGNER	JN	PROJ. NO.	7065
DRAWN	JN	DATE	04/16/2021
CHECKED	PD	SURVEYED	DJ&A, P.C.



MULLAN BUILD
100% - BID PLANS

GENERAL EARTHWORK DETAILS

SHEET	OF
B.17	B.17