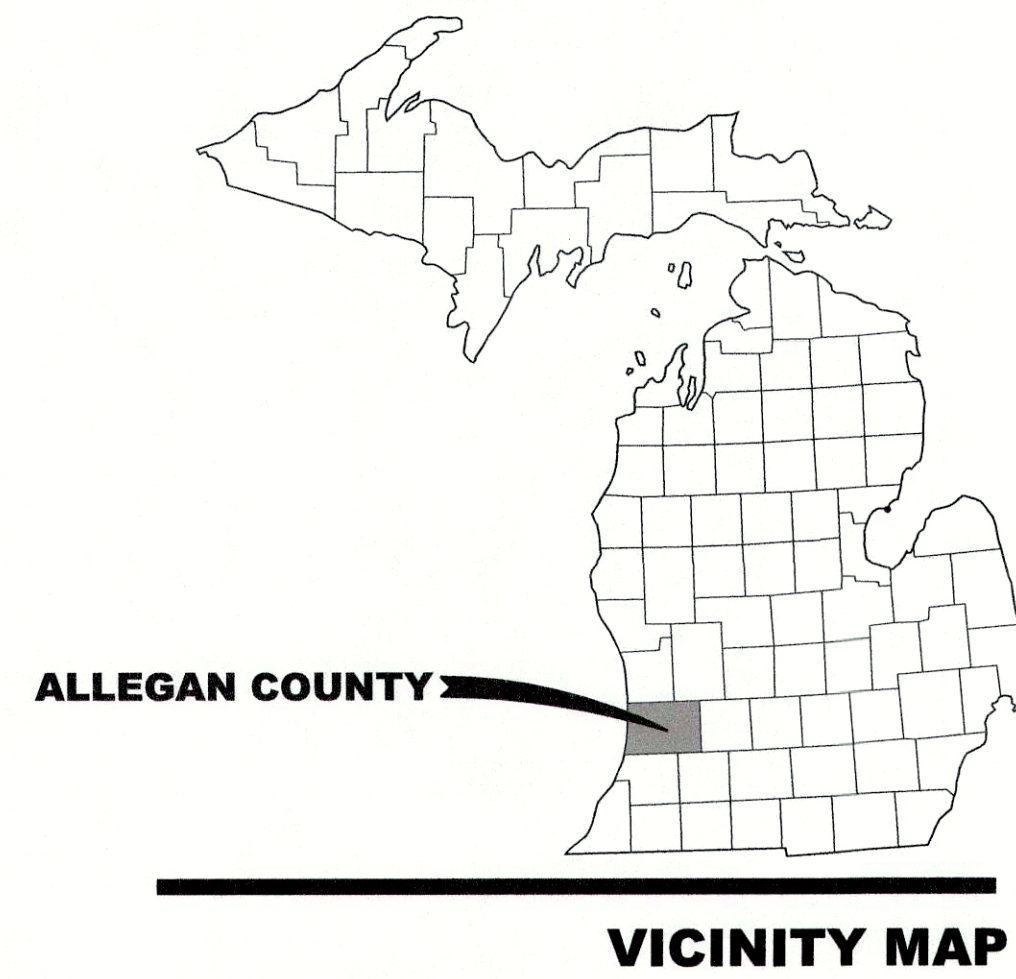


# ALLEGAN COUNTY ROAD COMMISSION

## LEE TOWNSHIP, ALLEGAN COUNTY, MICHIGAN

# 103RD AVENUE, 52ND STREET, & 104TH AVENUE RECONSTRUCTION

**JUNE 2020**

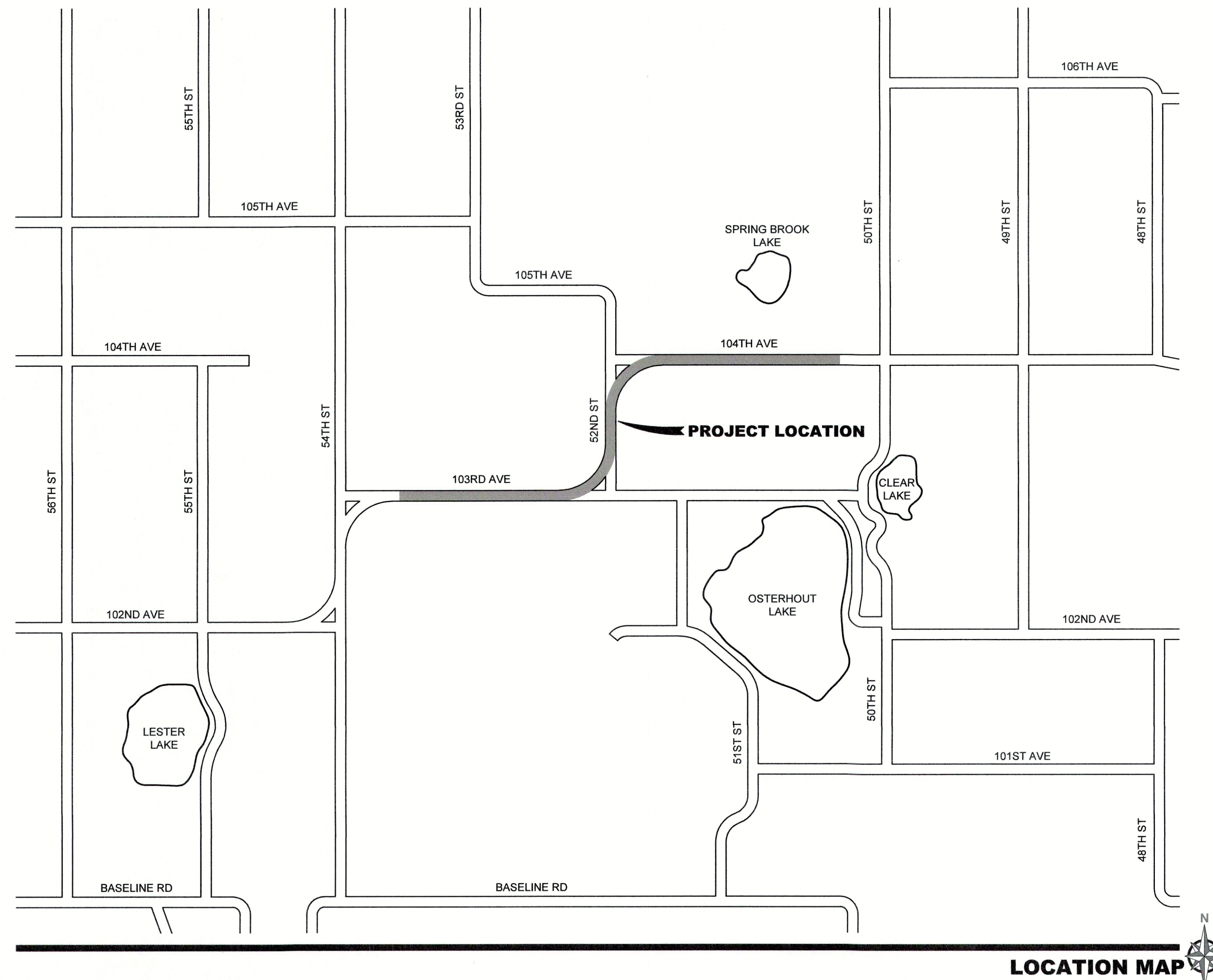


4796 Campus Drive  
Kalamazoo, MI 49008  
P: 269.385.0011  
F: 269.382.6972

ALLEGAN COUNTY ROAD COMMISSION  
LEE TOWNSHIP, ALLEGAN COUNTY, MICHIGAN  
103RD AVENUE, 52ND STREET, & 104TH AVENUE RECONSTRUCTION

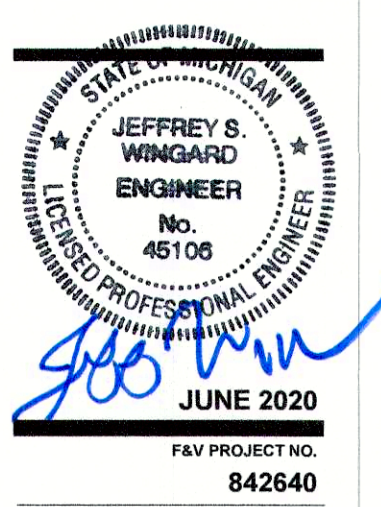
**INDEX OF DRAWINGS**

DESCRIPTION	SHEET NO.
COVER SHEET	CS
EXISTING & PROPOSED CROSS SECTIONS	C1-C2
NOTES & DETAILS	C3
EXISTING CONDITIONS & REMOVALS PLAN	C4-C8
PLAN & PROFILES	C9-C23
MAINTAINING TRAFFIC PLAN	C24
INTERSECTION DETAILS	C25
SUPERELEVATION CURVE PAVEMENT PROFILES & CROSS SECTIONS	C26



**LOCATION MAP**

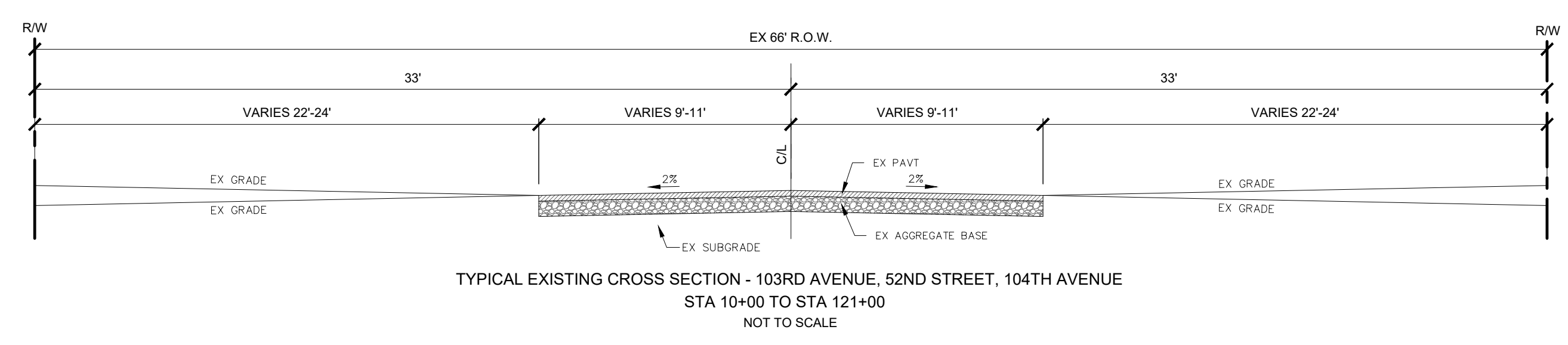
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**6/12/2020**



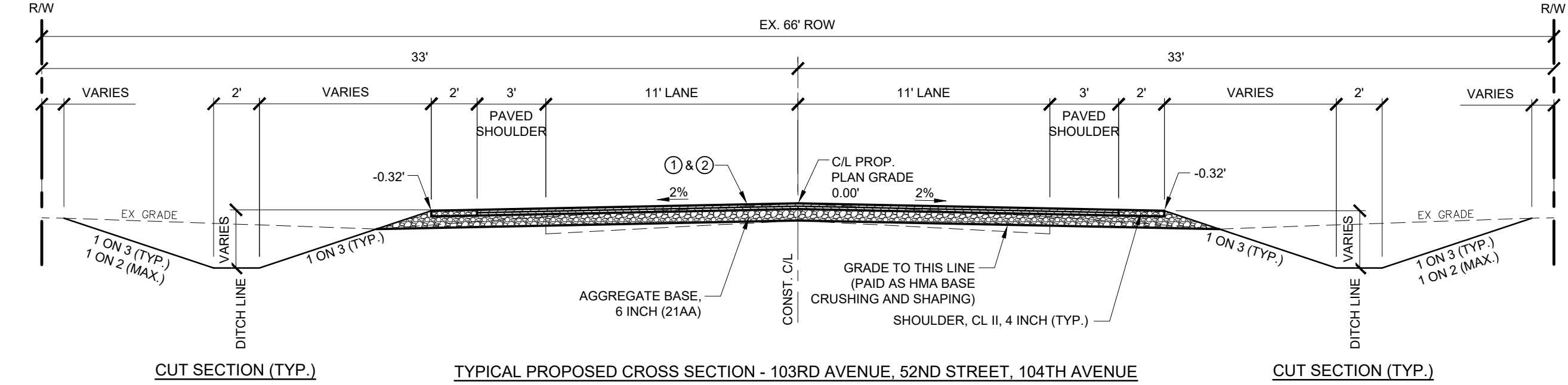
**CS**

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TYPICAL EXISTING CROSS SECTION - 103RD AVENUE, 52ND STREET, 104TH AVENUE  
STA 10+00 TO STA 121+00  
NOT TO SCALE



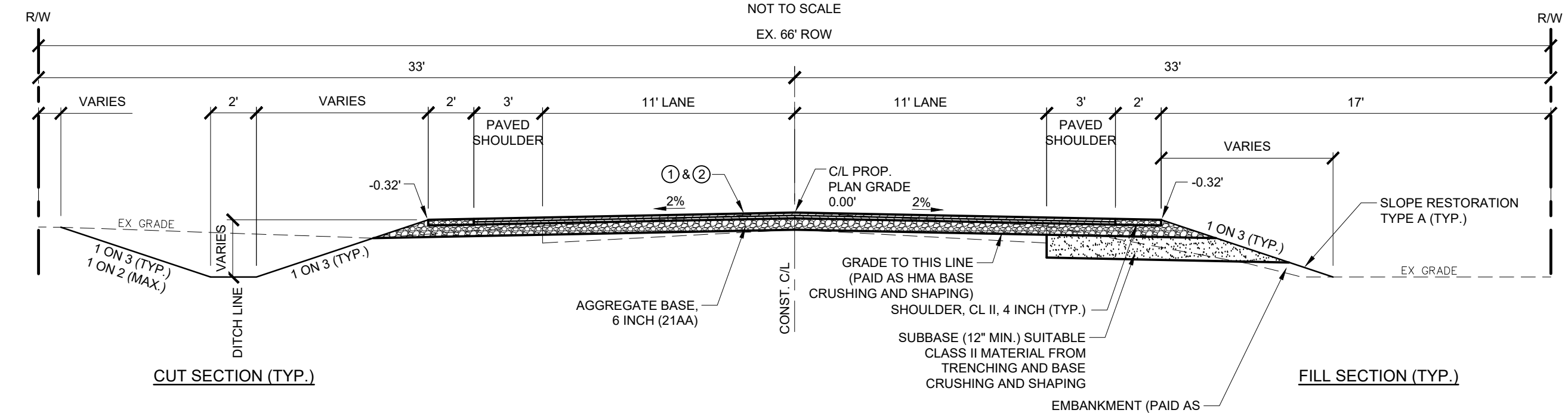
TYPICAL PROPOSED CROSS SECTION - 103RD AVENUE, 52ND STREET, 104TH AVENUE

NOTE: FOR A SLOPE GREATER THAN 1 ON 3 USE SLOPE RESTORATION TYPE C (TYP.)

STA 10+63 TO STA 19+03  
STA 22+13 TO STA 27+34  
STA 30+70 TO STA 34+89  
STA 37+53 TO STA 43+06  
STA 60+50 TO STA 62+97

STA 66+93 TO STA 73+74.24  
STA 82+36.44 TO STA 90+05  
STA 95+96 TO STA 101+26  
STA 109+19 TO STA 109+96  
STA 110+22 TO STA 116+75  
STA 119+80 TO STA 121+00

NOTE: FOR A SLOPE GREATER THAN 1 ON 3 USE SLOPE RESTORATION TYPE C (TYP.)



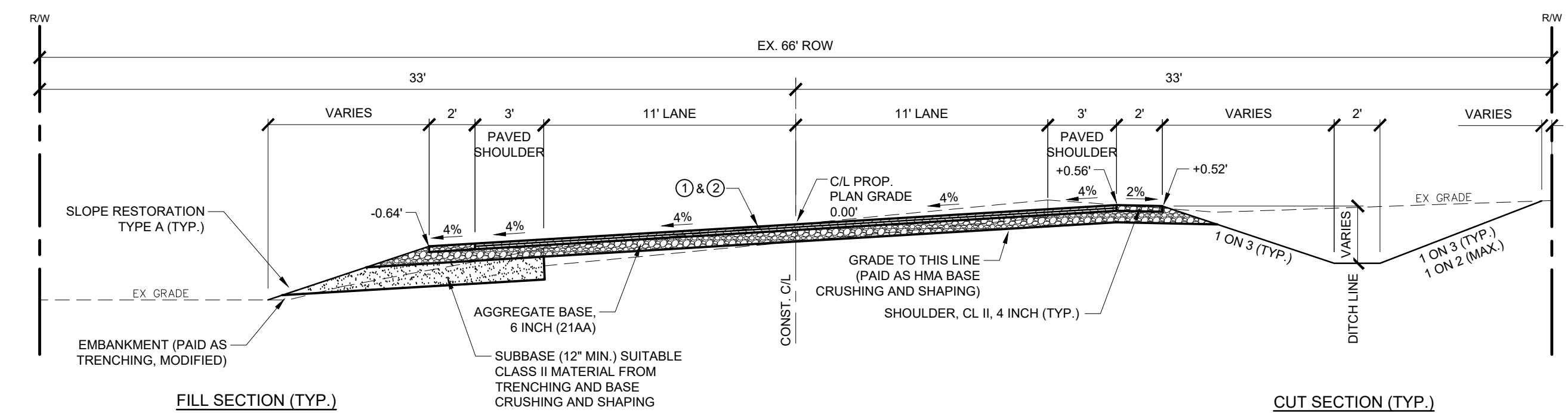
TYPICAL PROPOSED CROSS SECTION - 103RD AVENUE, 52ND STREET, 104TH AVENUE

NOTE: FOR A SLOPE GREATER THAN 1 ON 3 USE SLOPE RESTORATION TYPE C (TYP.)

STA 10+00 TO STA 10+63  
STA 29+78 TO STA 30+70  
STA 34+89 TO STA 37+53  
STA 109+03 TO STA 109+19  
STA 109+96 TO STA 110+22

STA 19+03 TO STA 19+99  
STA 22+00 TO STA 22+13  
STA 27+34 TO STA 27+58  
STA 43+06 TO STA 43+76  
STA 59+24 TO STA 60+50

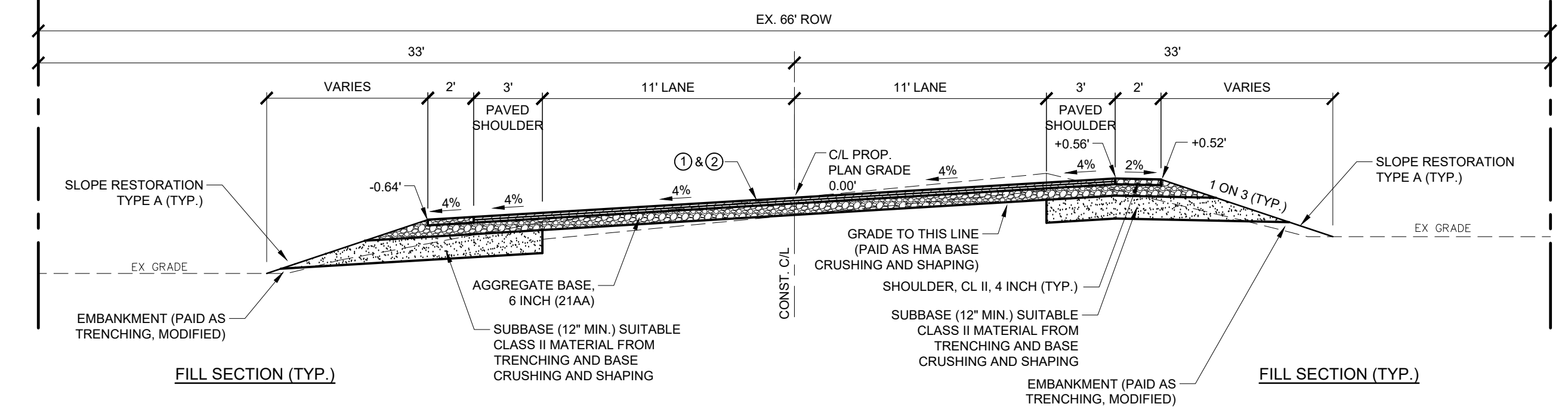
STA 62+97 TO STA 66+93  
STA 90+05 TO STA 95+96  
STA 101+26 TO STA 104+12  
STA 116+75 TO STA 117+25  
STA 119+79 TO STA 119+80



TYPICAL PROPOSED CROSS SECTION (SUPERELEVATION) - 103RD AVENUE & 52ND STREET

NOTE: FOR A SLOPE GREATER THAN 1 ON 3 USE SLOPE RESTORATION TYPE C (TYP.)

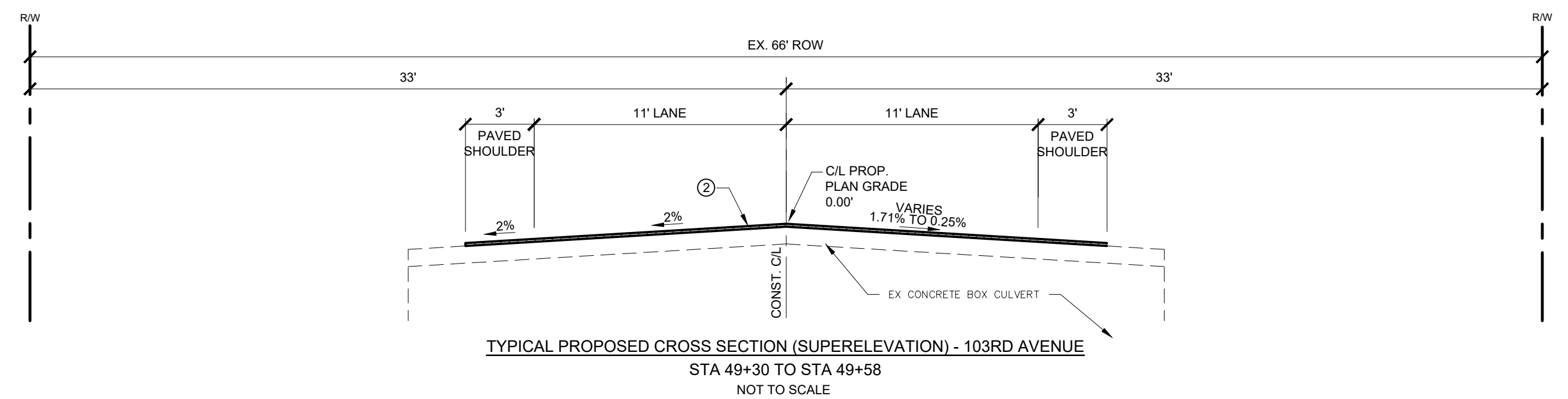
STA 49+58 TO STA 56+52



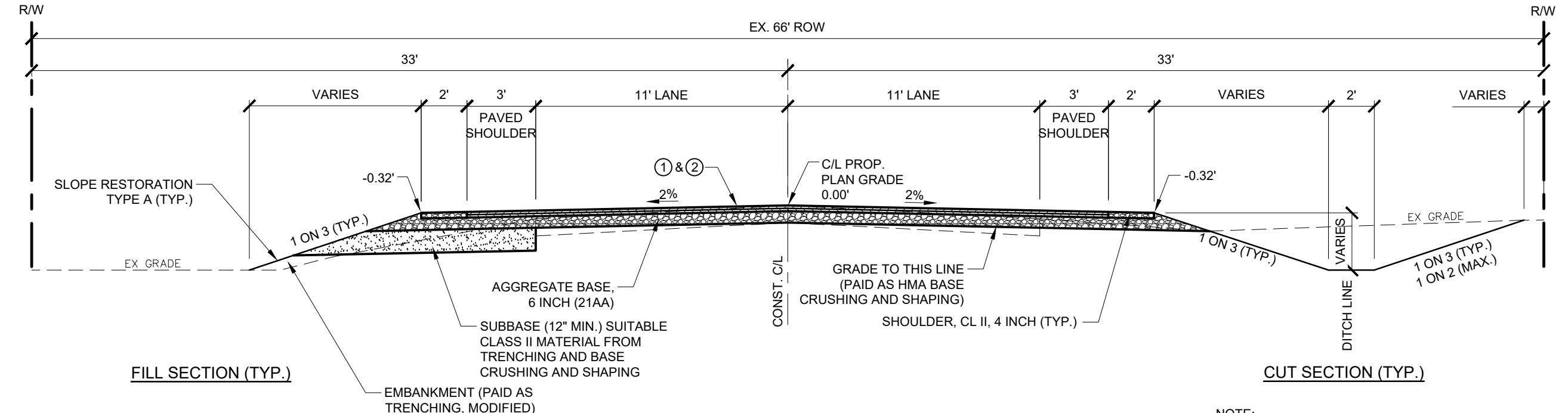
TYPICAL PROPOSED CROSS SECTION (SUPERELEVATION) - 103RD AVENUE & 52ND STREET

NOTE: FOR A SLOPE GREATER THAN 1 ON 3 USE SLOPE RESTORATION TYPE C (TYP.)

STA 48+59.92 TO STA 49+30  
STA 56+52 TO STA 58+65.08



TYPICAL PROPOSED CROSS SECTION (SUPERELEVATION) - 103RD AVENUE  
STA 49+30 TO STA 49+58  
NOT TO SCALE

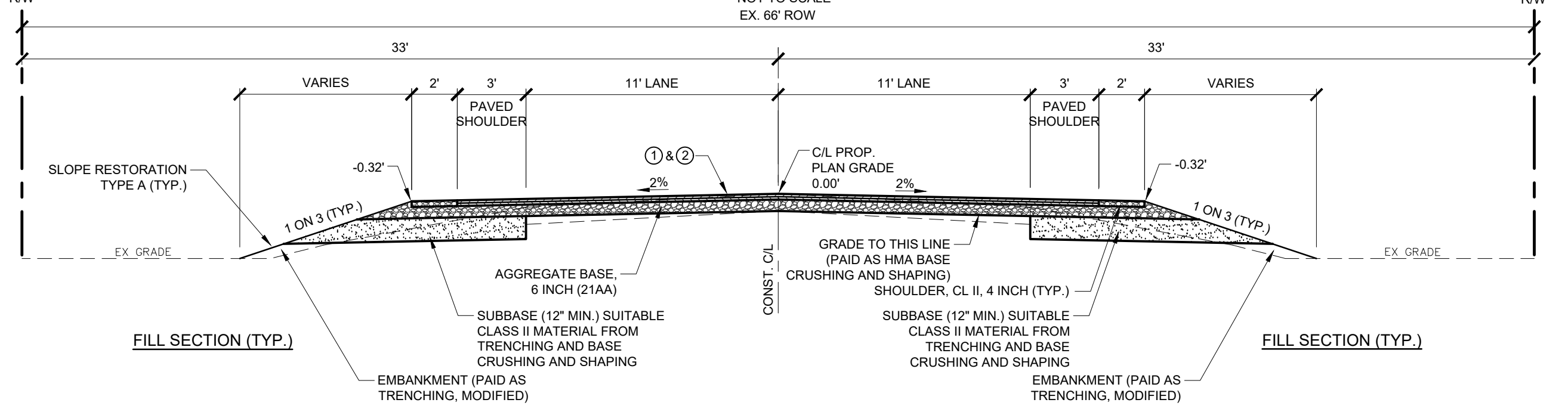


TYPICAL PROPOSED CROSS SECTION - 103RD AVENUE, 52ND STREET, 104TH AVENUE

NOTE: FOR A SLOPE GREATER THAN 1 ON 3 USE SLOPE RESTORATION TYPE C (TYP.)

STA 19+03 TO STA 19+99  
STA 22+00 TO STA 22+13  
STA 27+34 TO STA 27+58  
STA 43+06 TO STA 43+76  
STA 59+24 TO STA 60+50

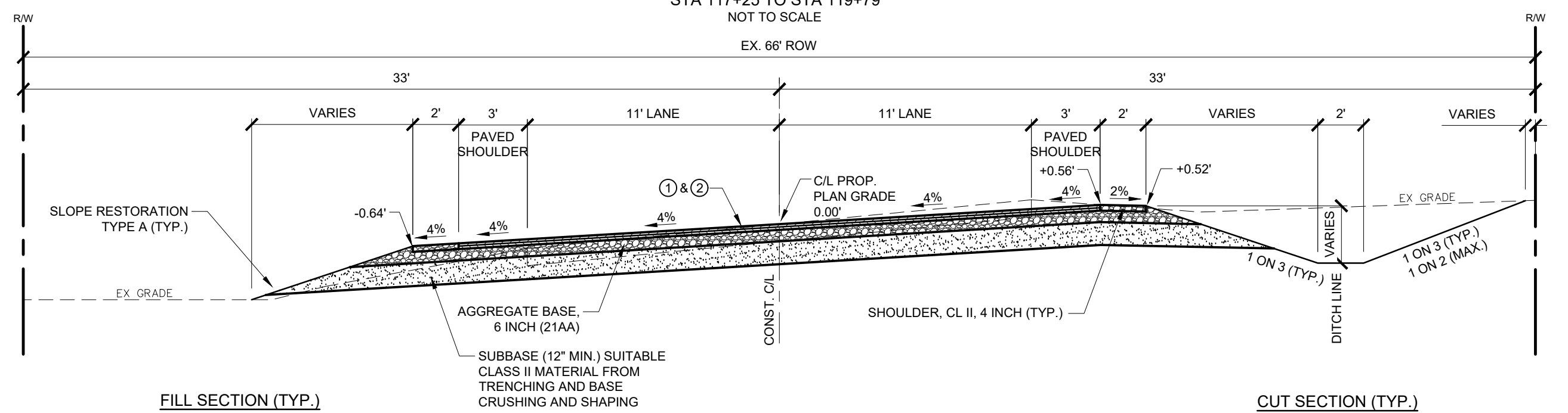
STA 62+97 TO STA 66+93  
STA 90+05 TO STA 95+96  
STA 101+26 TO STA 104+12  
STA 116+75 TO STA 117+25  
STA 119+79 TO STA 119+80



TYPICAL PROPOSED CROSS SECTION - 103RD AVENUE, 52ND STREET, 104TH AVENUE

NOTE: FOR A SLOPE GREATER THAN 1 ON 3 USE SLOPE RESTORATION TYPE C (TYP.)

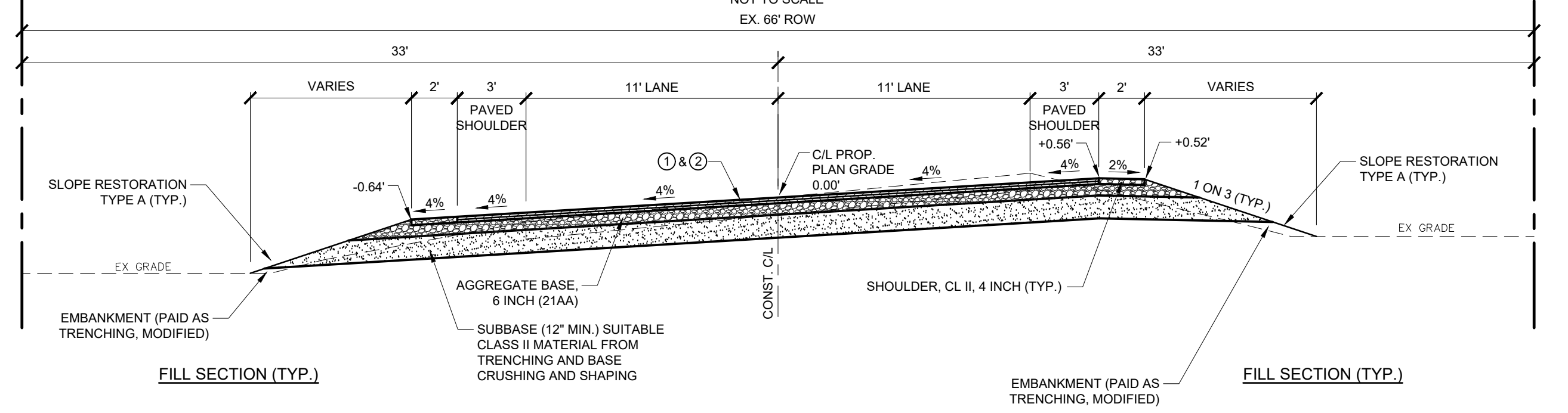
STA 19+99 TO STA 22+00  
STA 27+58 TO STA 29+78  
STA 43+76 TO STA 48+59.92  
STA 58+65.08 TO STA 59+24  
STA 104+12 TO STA 109+03  
STA 117+25 TO STA 119+79



TYPICAL PROPOSED CROSS SECTION (SUPERELEVATION) - 103RD AVENUE & 52ND STREET

NOTE: FOR A SLOPE GREATER THAN 1 ON 3 USE SLOPE RESTORATION TYPE C (TYP.)

WHERE PEAT EXCAVATION IS REQUIRED  
STA 53+50 TO STA 56+52



TYPICAL PROPOSED CROSS SECTION (SUPERELEVATION) - 103RD AVENUE & 52ND STREET

NOTE: FOR A SLOPE GREATER THAN 1 ON 3 USE SLOPE RESTORATION TYPE C (TYP.)

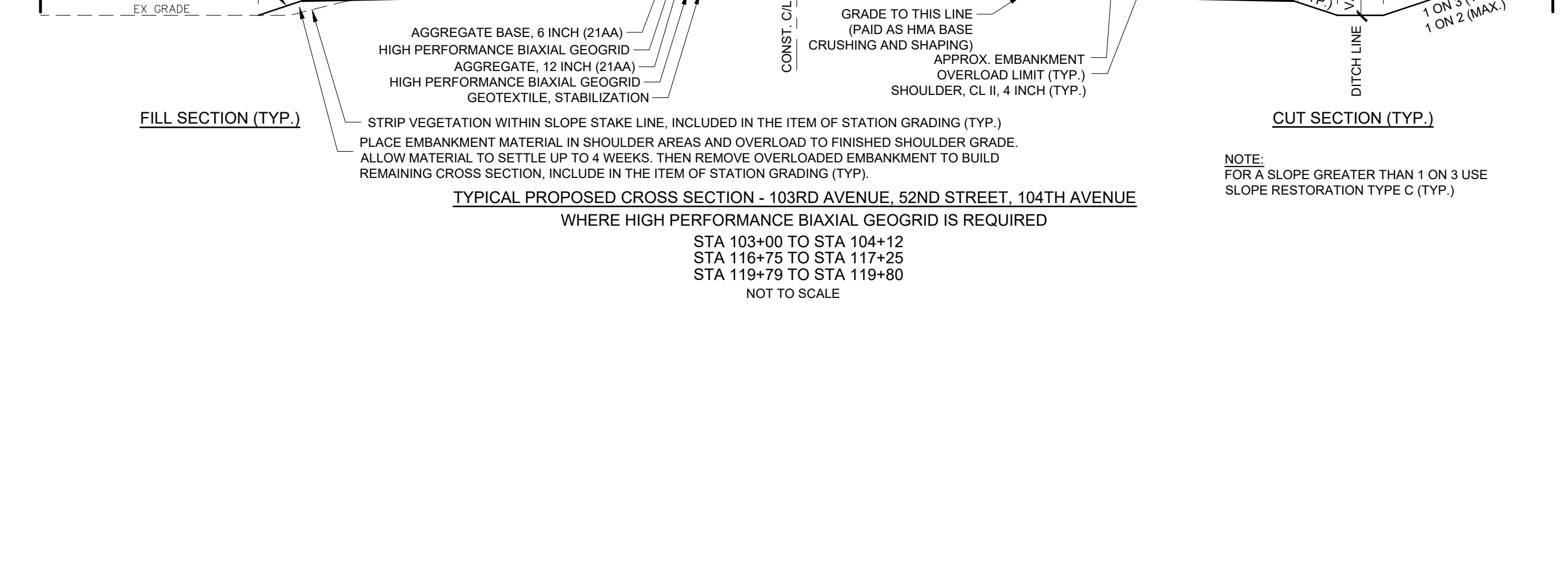
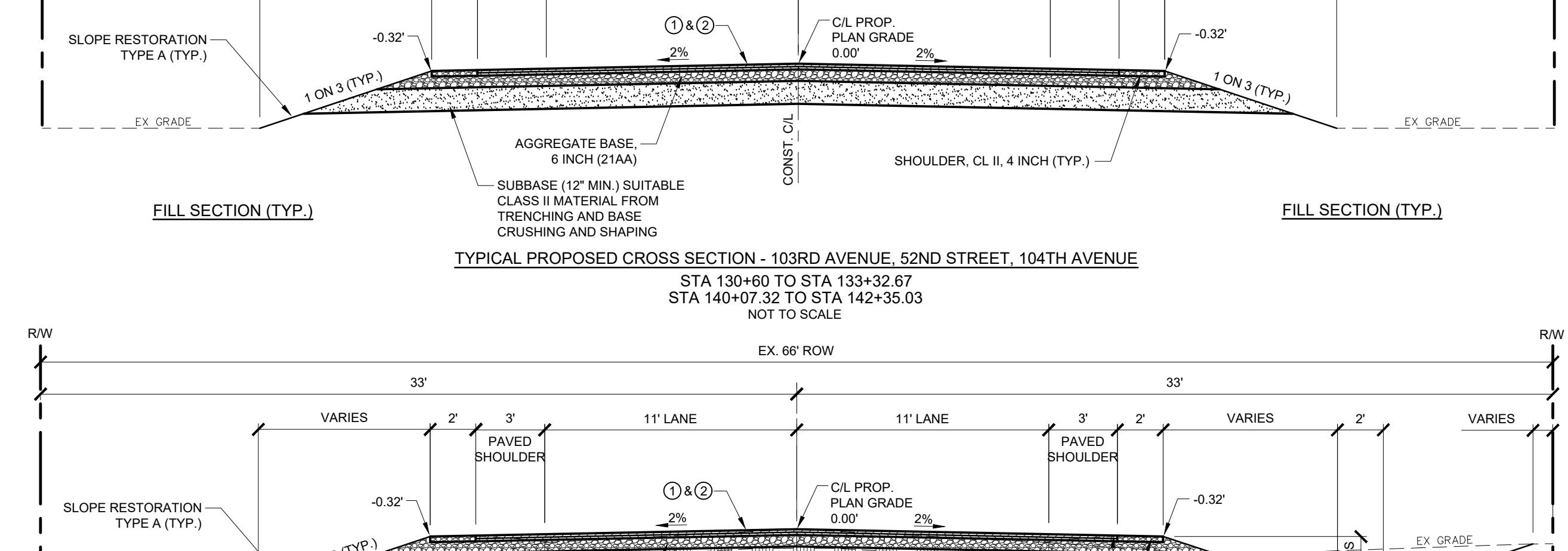
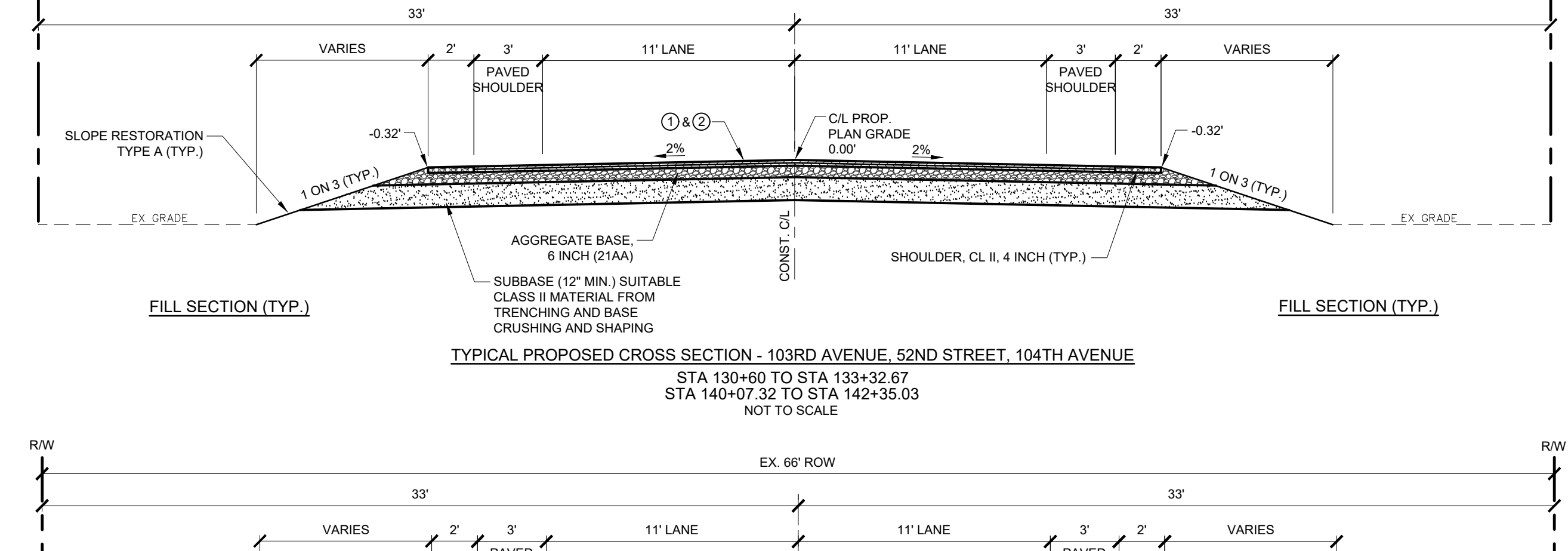
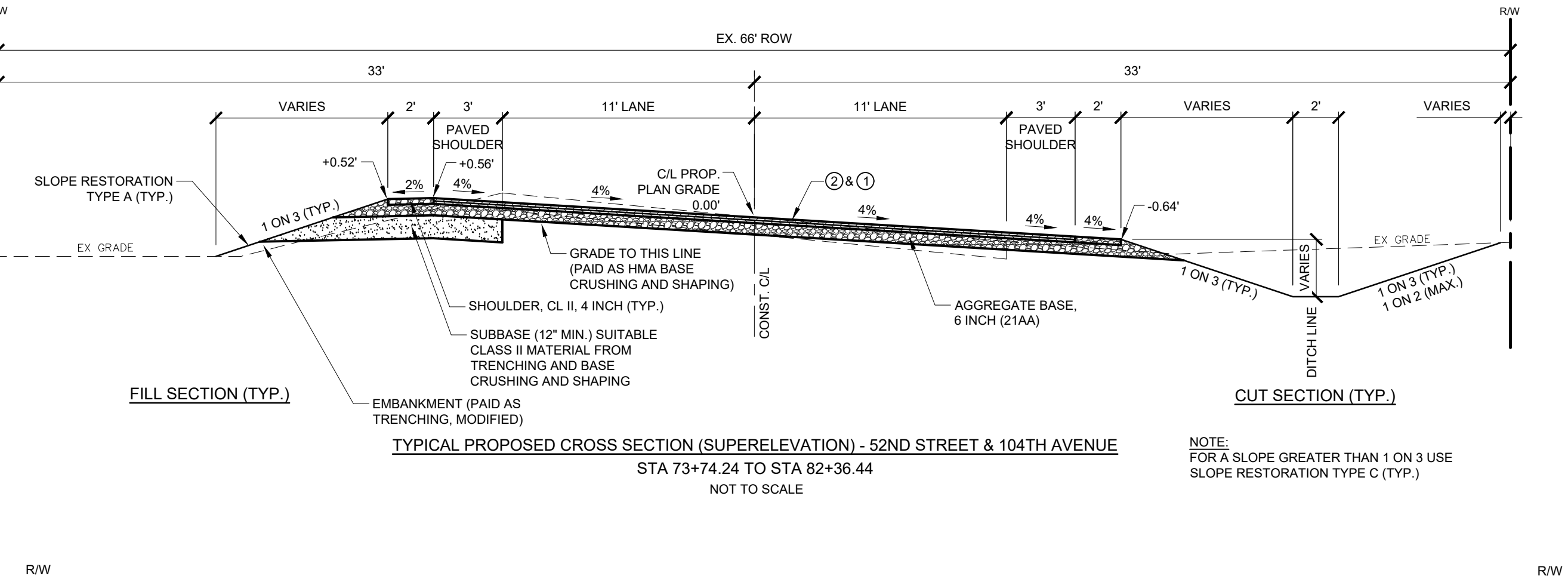
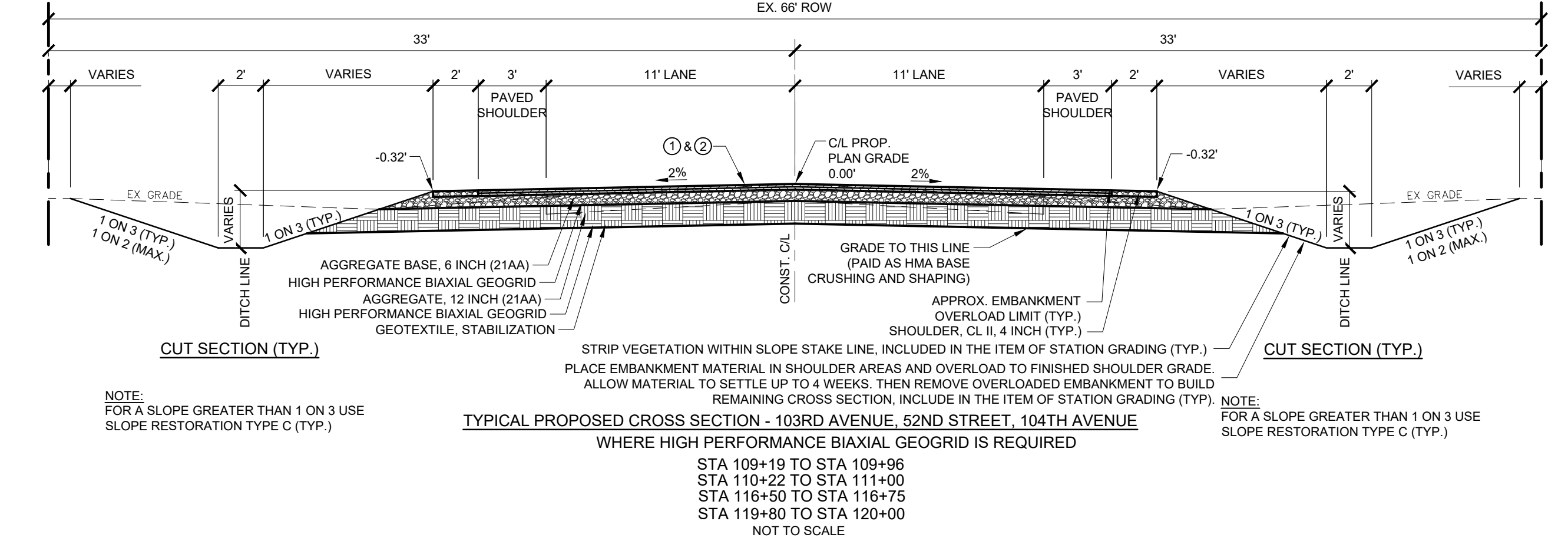
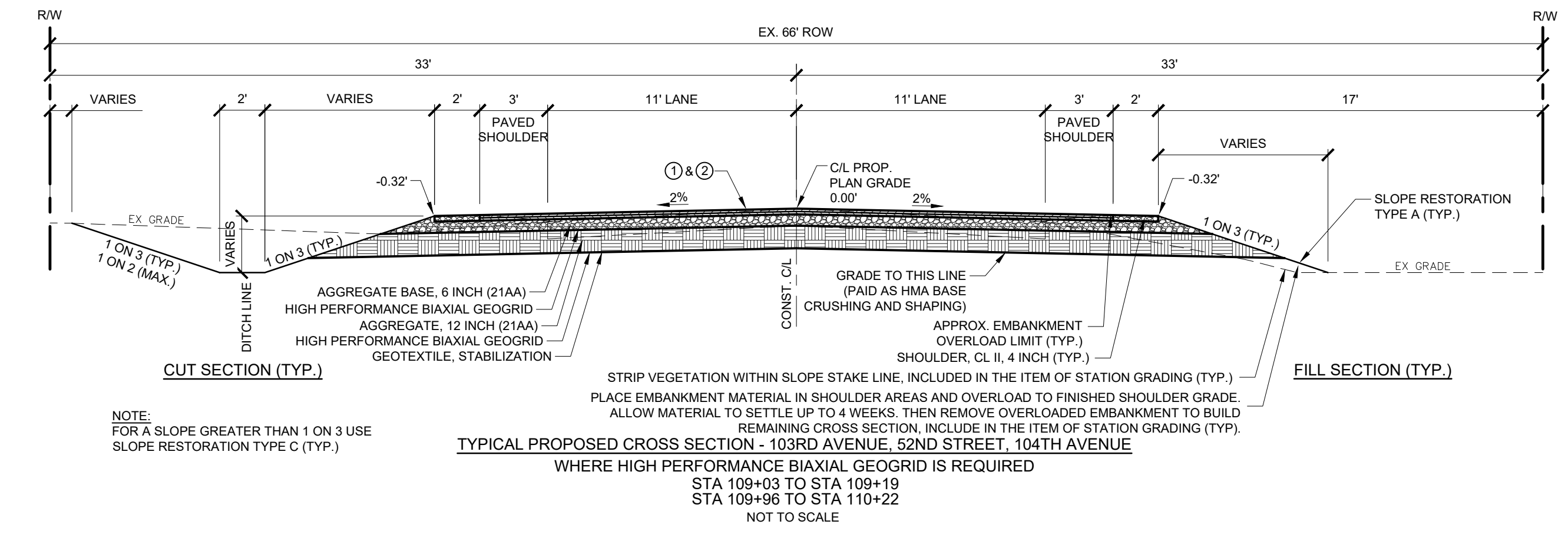
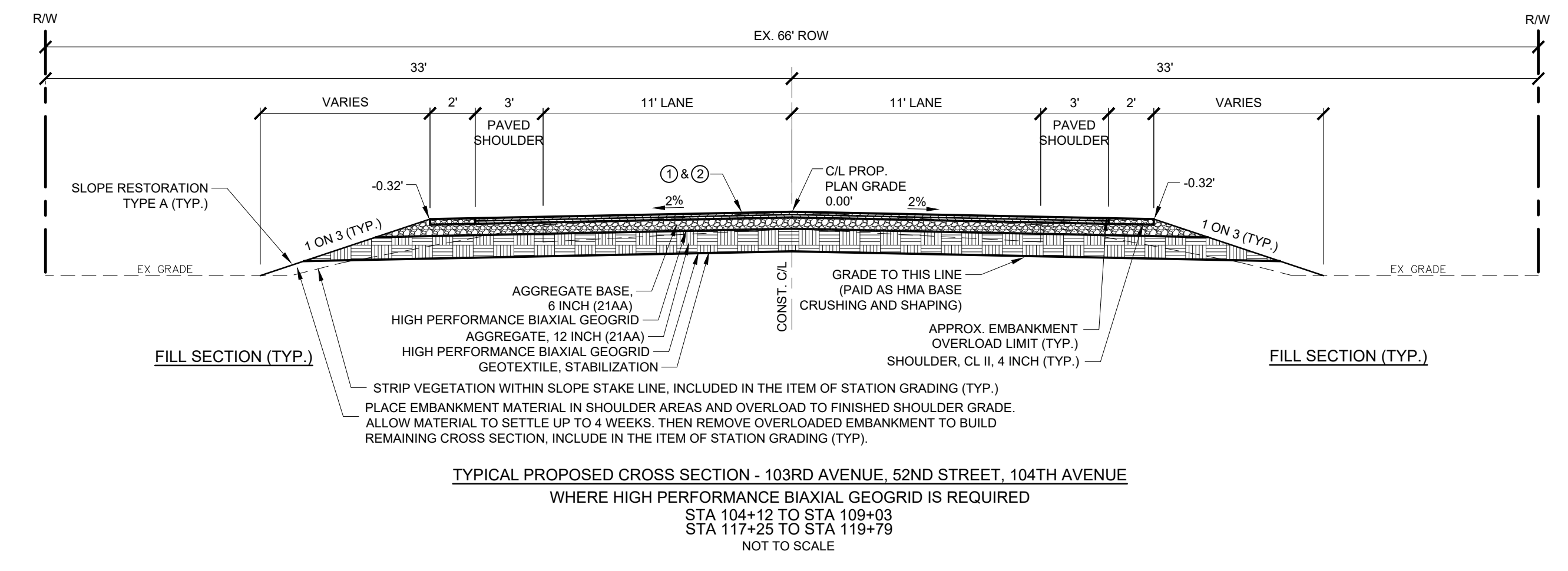
WHERE PEAT EXCAVATION IS REQUIRED  
STA 56+52 TO STA 58+00

REVISION:

**ALLEGAN COUNTY ROAD COMMISSION**  
LEE TOWNSHIP, ALLEGAN COUNTY, MICHIGAN  
**103RD AVENUE, 52ND STREET, & 104TH AVENUE RECONSTRUCTION**  
**EXISTING & PROPOSED CROSS SECTIONS**

DESIGN TEAM:	PROJ. MGR.: JSW	DATE: FEB 2020
CHECKED BY:	DESIGNED BY: TRS	DRAWN BY: BCC
DRAWING INFORMATION:	842640_C2	061220 euponline-pierre

JUNE 2020  
F&V PROJECT NO.  
842640



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## CONSTRUCTION NOTES

### SOIL EROSION CONTROL MEASURES

TO PROTECT SLOPES AND DITCHES, SOIL OR SEED / MULCH SHOULD BE PLACED AS SOON AS POSSIBLE AND AS DIRECTED BY THE ENGINEER. TEMPORARY SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE UTILIZED DURING CONSTRUCTION IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS AND AS NECESSARY TO CONTROL SOIL EROSION AND SEDIMENTATION AND AS DIRECTED BY ENGINEER.

### PLAN ELEVATIONS

ELEVATIONS SHOWN IN THESE PLANS ARE BASED ON USGS DATUM NAVD88.

### UNDERGROUND UTILITIES

FOR PROTECTION OF UNDERGROUND UTILITIES, THE CONTRACTOR SHALL DIAL 1-800-482-7171 A MINIMUM OF THREE WORKING DAYS EXCLUDING SATURDAYS, SUNDAYS & HOLIDAYS PRIOR TO EXCAVATING IN THE VICINITY OF UTILITY LINES. ALL "MISS DIG" PARTICIPATING MEMBERS WILL THUS BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING THE UTILITY OWNERS WHO MAY NOT BE PART OF THE "MISS DIG" ALERT SYSTEM.

### ADJUSTING MONUMENT BOXES

IT IS THE INTENT THAT ALL GOVERNMENT CORNERS ON THIS PROJECT BE PRESERVED AND THAT, WHERE NECESSARY, MONUMENT BOXES BE PLACED OR ADJUSTED, WHETHER SHOWN OR NOT.

### PROPERTY CORNER PRESERVATION

CONTRACTOR SHALL TAKE CARE TO ENSURE THAT PROPERTY CORNERS BEHIND THE SIDEWALKS SCHEDULED FOR REMOVAL AND REPLACEMENT ARE NOT DISTURBED. THESE PROPERTY CORNERS WILL BE IDENTIFIED AND STAKED BY THE SURVEYORS PRIOR TO THE START OF CONSTRUCTION.

### PUBLIC UTILITIES

THE EXISTING UTILITIES LISTED BELOW AND SHOWN ON THESE PLANS REPRESENT THE BEST INFORMATION AVAILABLE. THIS INFORMATION DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO SATISFY HIMSELF AS TO THEIR ACCURACY OR OF HIS RESPONSIBILITY IN CASE UTILITIES HAVE BEEN CONSTRUCTED OR REMOVED.

TELEPHONE	FRONTIER / VERIZON 311 S. CEDAR MILAY CITY, MI 48444 P 810.724.3127 ATTN: KATHRYN ANDERSON	ELECTRIC	CONSUMERS ENERGY 4000 CLAY AVE., SW GRAND RAPIDS, MI 49548 P 616.530.4185 ATTN: KYLEE MAYCROFT
-----------	--	----------	--

THE CONTRACTOR SHALL EXPOSE AND VERIFY LOCATION AND DEPTH OF EXISTING UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. CONFLICTS IN GRADES SHALL BE REPORTED TO ENGINEER AND ADJUSTMENTS SHALL BE MADE AT NO ADDITIONAL COST TO OWNER. THE OWNERS OF EXISTING SERVICE FACILITIES THAT ARE WITHIN THE GRADING OR STRUCTURE LIMITS WILL MOVE THEM TO LOCATIONS DESIGNATED BY THE ENGINEER OR WILL REMOVE THEM ENTIRELY FROM THE ROAD RIGHT-OF-WAY. OWNERS OF PUBLIC UTILITIES WILL NOT BE REQUIRED TO MOVE ADDITIONAL POLES OR STRUCTURES IN ORDER TO FACILITATE THE OPERATION OF CONSTRUCTION EQUIPMENT UNLESS IT IS DETERMINED BY THE ENGINEER THAT SUCH POLES OR STRUCTURES CONSTITUTE A HAZARD TO THE PUBLIC OR ARE EXTRAORDINARILY DANGEROUS TO THE CONTRACTOR'S OPERATIONS. NO ADDITIONAL COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR DELAYS DUE TO MATERIAL SHORTAGES OR OTHER REASONS BEYOND CONTROL OF THE OWNER, OR FOR DELAYS IN CONSTRUCTION DUE TO ENCOUNTERING OF EXISTING UTILITIES THAT ARE, OR ARE NOT, SHOWN ON PLANS. WORK STOPPAGE BY EMPLOYEES OF UTILITY COMPANIES WHICH RESULTS IN A DELAY OF UTILITY REVISIONS ON ANY PORTION OF THIS PROJECT MAY BE CONSIDERED THE BASIS FOR A CLAIM FOR AN EXTENSION OF THE TIME FOR COMPLETION, BUT WILL NOT BE CONSIDERED THE BASIS FOR A CLAIM FOR EXTRA COMPENSATION OR AN ADJUSTMENT IN CONTRACT UNIT PRICES.

### LAWN SPRINKLER SYSTEMS AND LANDSCAPING

OWNERS OF EXISTING LAWN SPRINKLER SYSTEMS AND/OR LANDSCAPING SHALL BE NOTIFIED (IN WRITING WITH A COPY SENT TO THE ENGINEER) BY THE CONTRACTOR TWO WEEKS IN ADVANCE OF ANY WORK TO BE DONE THAT WILL AFFECT THOSE SYSTEMS AND/OR LANDSCAPING. IF THE PROPERTY OWNER FAILS TO RELOCATE THE LAWN SPRINKLER SYSTEM PRIOR TO THE CONTRACTOR BEGINNING WORK, AND IF THE CONTRACTOR CUTS THE SYSTEM DURING THE CONSTRUCTION, THE CONTRACTOR SHALL CAP THE SYSTEM PIPE AND WITNESS THE LOCATION OF THE CAP WITH A WOODEN STAKE FOR THE PROPERTY OWNERS USE. THE CONTRACTOR SHALL PLACE THE SALVAGED SPRINKLER HEADS ON THE PROPERTY OWNERS PROPERTY. IF THE PROPERTY OWNER FAILS TO RELOCATE THE LANDSCAPING PRIOR TO THE CONTRACTOR BEGINNING WORK, THE CONTRACTOR SHALL CAREFULLY SALVAGE THE LANDSCAPING ITEMS AND STOCKPILE THEM ON THE PROPERTY OWNERS PROPERTY. ANY OTHER MODIFICATION TO THE LAWN SPRINKLER SYSTEMS AND/OR LANDSCAPING, IS THE RESPONSIBILITY OF THE OWNER AND IS NOT PART OF THIS CONTRACT. THIS WORK IS INCLUDED IN OTHER ITEMS OF THE PROJECT.

### REMOVAL OF DRIVEWAYS

EXISTING DRIVEWAYS SHALL BE REMOVED WHERE NECESSARY, WHERE SHOWN ON PLANS OR DIRECTED BY ENGINEER. GRADING AND PREPARATION FOR NEW DRIVEWAY SHALL BE INCLUDED IN STATION GRADING.

### DRIVEWAYS

EXISTING DRIVEWAYS SHALL BE REMOVED WHERE NECESSARY, WHERE SHOWN ON PLANS OR DIRECTED BY ENGINEER. GRADING AND PREPARATION FOR NEW DRIVEWAY SHALL BE INCLUDED IN STATION GRADING. CONTRACTOR SHALL MAINTAIN ACCESS TO DRIVEWAYS DURING CONSTRUCTION WITH 22A AGGREGATE OR BITUMINOUS MILLINGS, INCLUDED IN STATION GRADING PAY ITEM.

### NOTICE TO RESIDENTS

THE CONTRACTOR SHALL NOTIFY RESIDENTS 24 HOURS IN ADVANCE OF DISRUPTION TO SERVICE, SUCH AS DRIVEWAY CLOSING OR UTILITY SERVICE.

### SAWCUTTING PAVEMENT

SAWCUTTING EXISTING PAVEMENT AT REMOVAL LIMITS WHERE INDICATED ON THE PLANS AND AS DIRECTED BY THE ENGINEER SHALL BE INCLUDED IN STATION GRADING.

### REMOVING PAVEMENT & MAINTAINING TRAFFIC

REMOVING PAVEMENT & GRAVEL SHALL BE INCLUDED IN PAVEMENT REMOVAL, AND SHALL INCLUDE REMOVAL OF THE ENTIRE PAVEMENT SECTION INCLUDING THE BITUMINOUS SURFACE AND THE UNDERLYING AGGREGATE BASE REGARDLESS OF THICKNESS. THE CONTRACTOR SHALL MAINTAIN A MINIMUM OF ONE LANE OF TRAFFIC AT ALL TIMES TO ALLOW EMERGENCY VEHICLE ACCESS AND FOR ACCESS TO LOCAL BUSINESSES AND RESIDENCES.

### RELOCATION OF POLES

POWER POLE RELOCATIONS WILL BE RELOCATED BY THE UTILITY COMPANY THROUGHOUT THE PROJECT TO A LOCATION DETERMINED IN THE FIELD. THE CONTRACTOR SHALL COORDINATE THE CONSTRUCTION ACTIVITIES WITH THE POLE RELOCATIONS. CONTRACTOR TO HOLD POLES.

### MAILBOXES

CONTRACTOR SHALL RELOCATE MAILBOX POSTS TO ALLOW FOR MAIL DELIVERY DURING CONSTRUCTION, INCLUDED IN PROJECT CLEANUP.

### EXISTING SIGNS

COUNTY TO REMOVE AND REPLACE ALL SIGNS WITH A THREE DAY NOTICE.

### TREE REMOVAL

WOOD IS TO BE PLACED OUTSIDE OF THE R.O.W. AT THE DRIVEWAYS FOR THE PROPERTIES SPECIFIED ON THE PLANS.

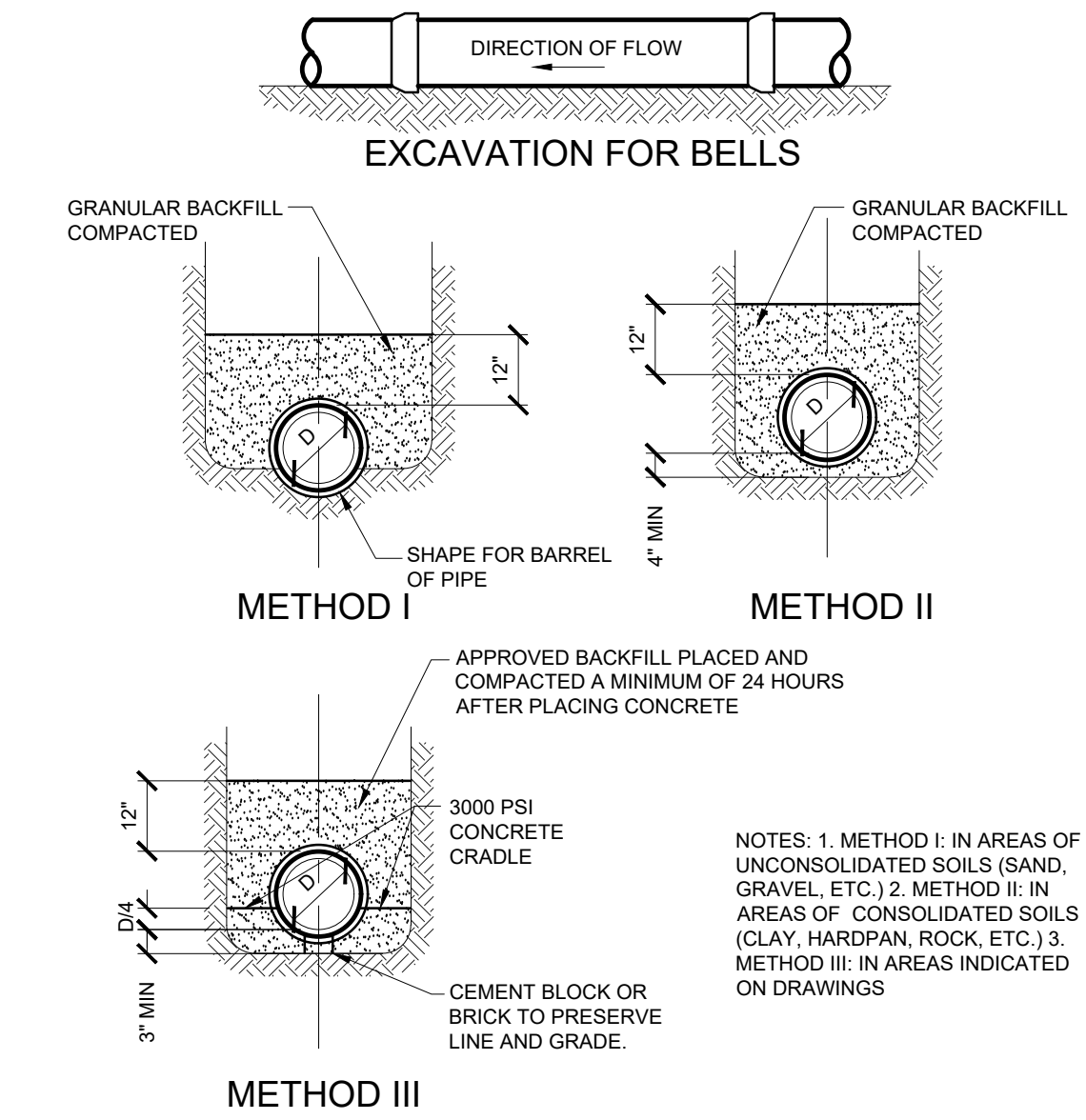
HMA APPLICATION TABLE						
COURSE	TYPE	ITEM	EST. YIELD	BINDER GRADE	AWI	REMARKS
①	BASE	HMA, 4E1	220 LBS/SYD	PG 64-28	-	
②	SURFACE	HMA, 4E1	220 LBS/SYD	PG 64-28	220	
③	SURFACE	HMA, 4E1	220 LBS/SYD	PG 64-28	220	DRIVEWAY - 1 LIFT

NOTE: BOND COAT SHALL BE APPLIED BETWEEN SUCCESSIVE COURSES OF HMA (PAYMENT INCLUDED IN HMA MIX). APPLICATION RATE 0.05 - 0.15 GAL/SYD SS-IH, AS DIRECTED BY ENGINEER.

## EXISTING FEATURES LEGEND

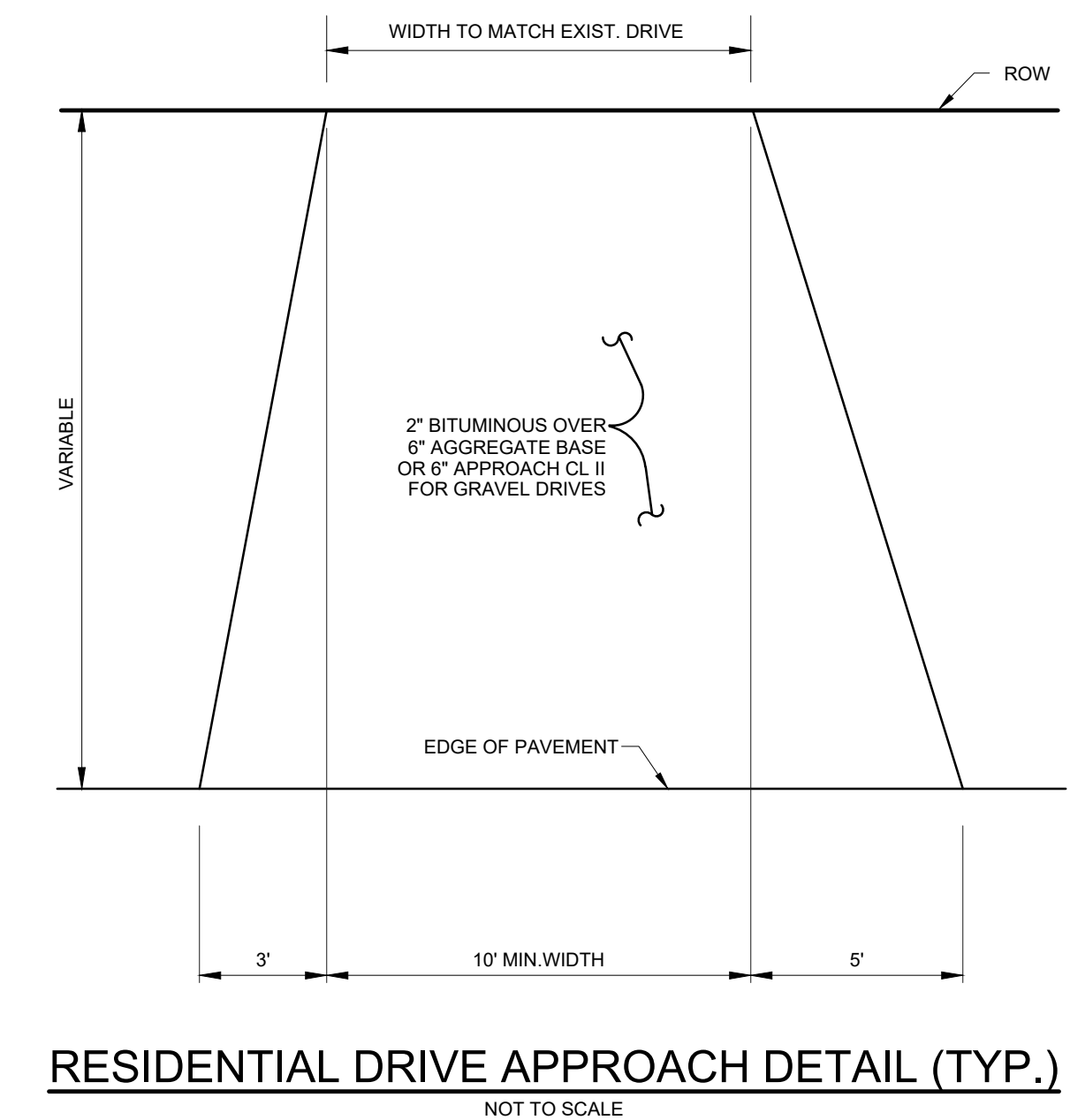
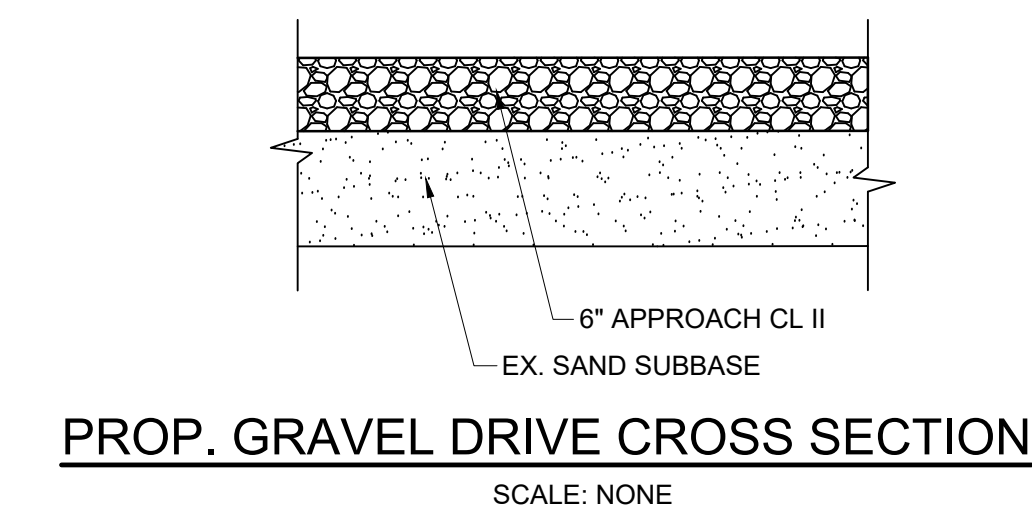
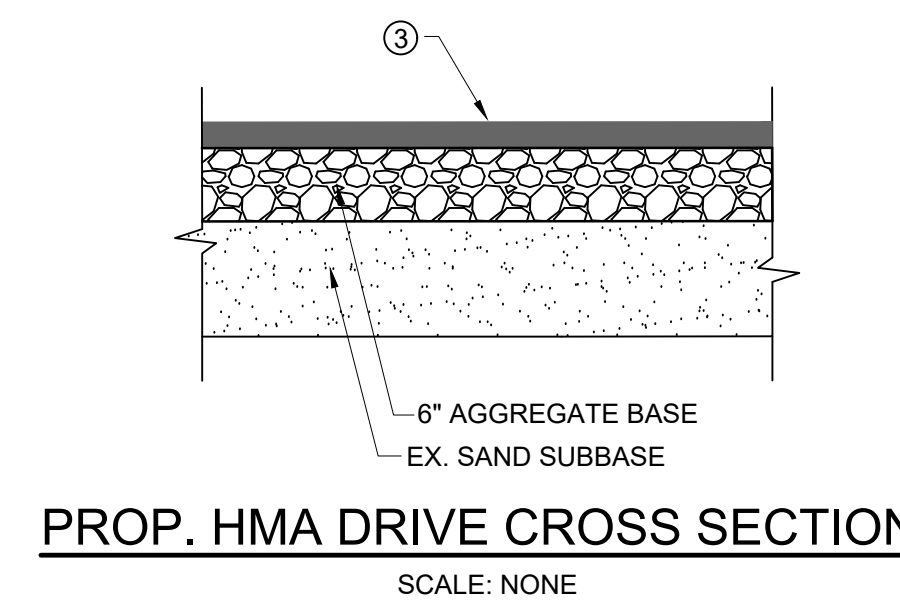
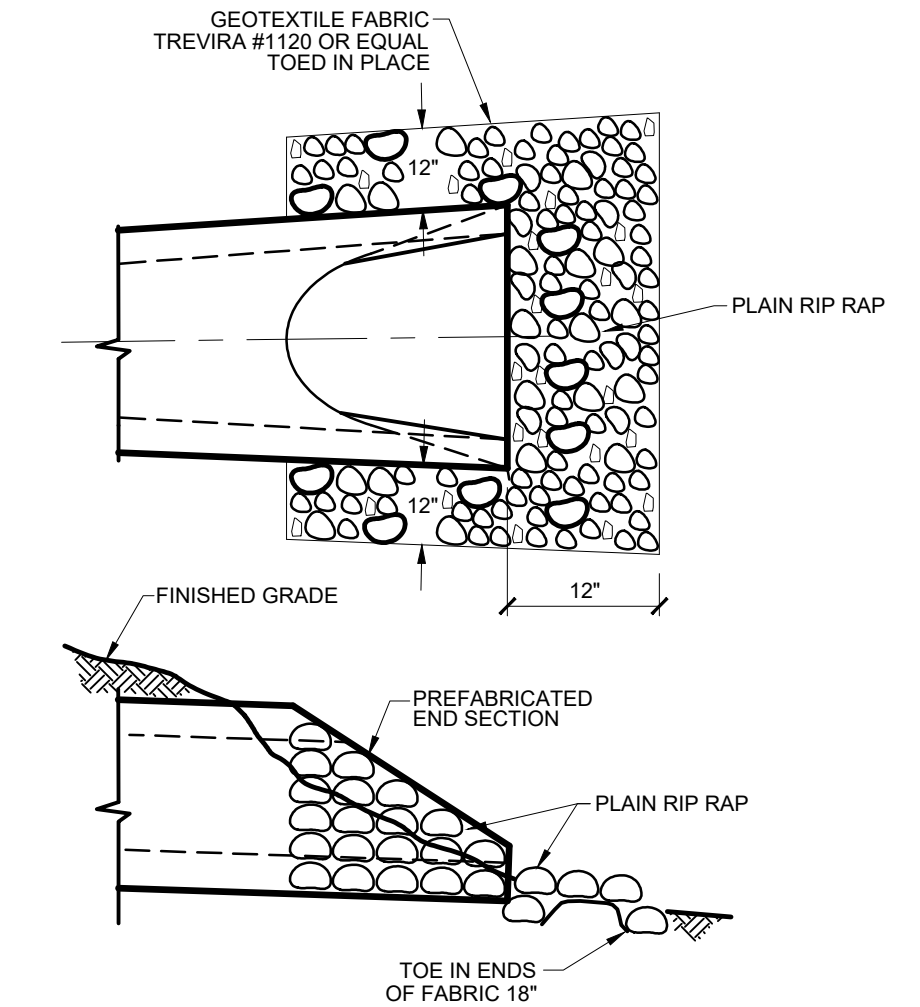
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	TREE (DECIDUOUS)		CABLE BOX		SURVEY CONTROL POINT
	BUSH		TELEPHONE RISER		BENCHMARK
	TREE (CONIFEROUS)		TELEPHONE MANHOLE		SECTION CORNER
	DEAD TREE		TELEPHONE HANDHOLE		BOUNDARY LINE
	STUMP		ELECTRICAL RISER		PROPERTY LINE
	MANHOLE		ELECTRICAL MANHOLE		WATERMAIN
	SANITARY CLEANOUT		ELECTRICAL HANDHOLE		SANITARY SEWER
	RD. CATCH BASIN		POWER POLE		STORM SEWER
	SQ. CATCH BASIN		LIGHT POLE		CULVERT (24" AND UNDER)
	FIRE HYDRANT		GUY POLE		CULVERT (24" AND UP)
	WATER VALVE		GUY ANCHOR		CABLE T.V.
	CURB STOP & BOX		PED CROSSING SIGNAL		TELEPHONE
	WELL		YARD LIGHT		ELECTRIC
	WATER MANHOLE		SIGN		GAS
	WATER METER		MAILBOX		OVERHEAD LINES
	SOIL BORING		POST		GUARDRAIL
	MONITORING WELL		FOUND CONC. MONUMENT		FENCE
			FOUND IRON ROD		WOODLINE
			SET IRON ROD		

NOTE: ALL ITEMS LISTED ON THE LEGEND MAY NOT BE PRESENT ON DRAWING.

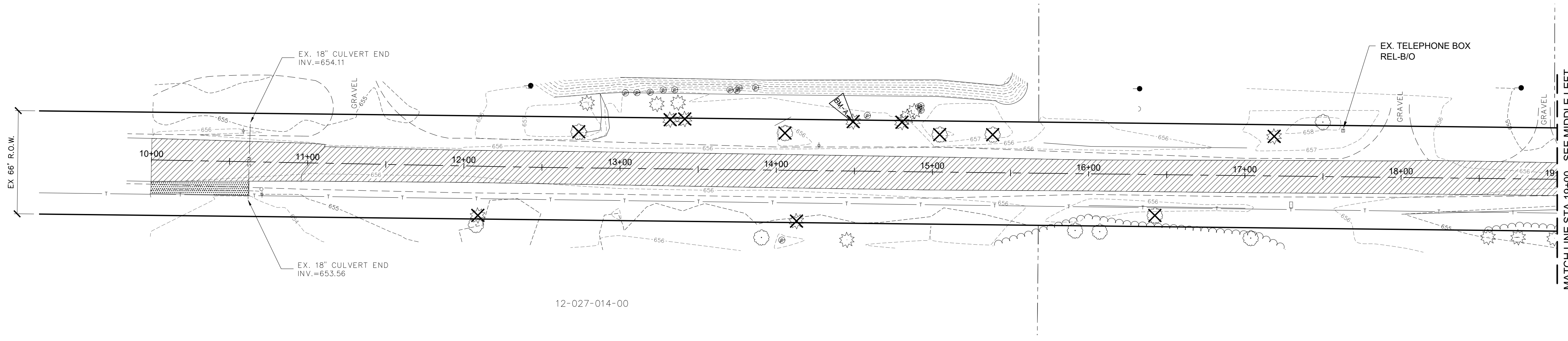


## METHODS OF BEDDING GRAVITY PIPE

NOT TO SCALE

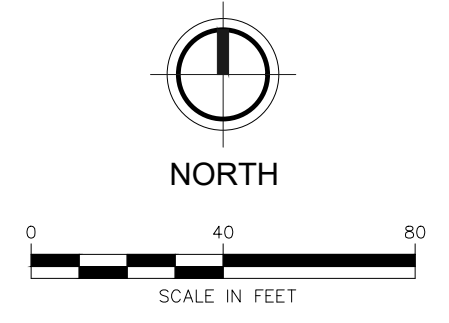






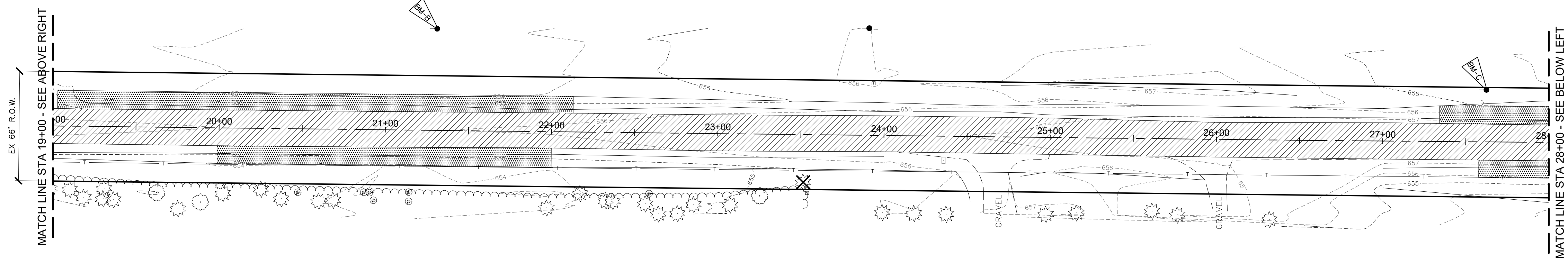
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**103RD AVENUE**  
EX. HMA PAVEMENT



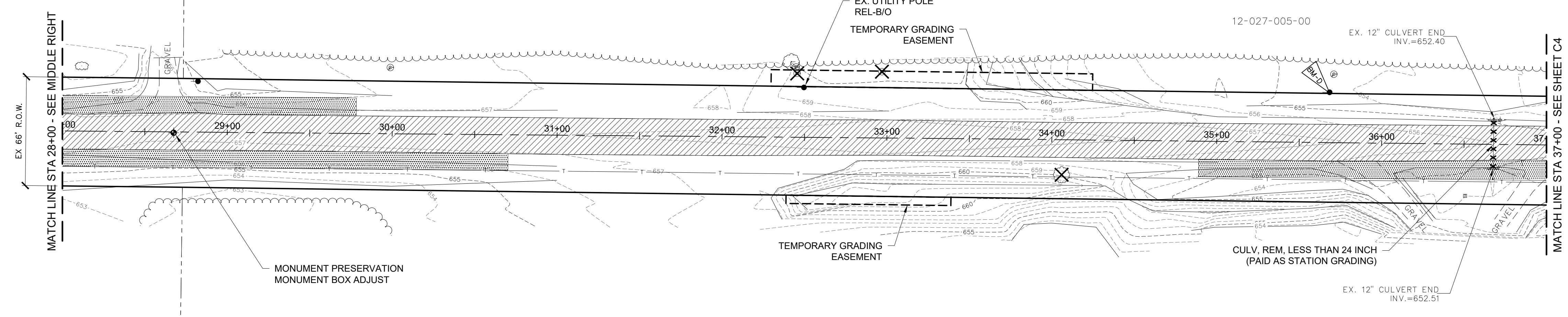
- BM-A EL. 656.35'  
SPIKE/NAIL IN SOUTH SIDE 12" PINE
- BM-B EL. 654.04'  
SPIKE/NAIL IN SOUTH SIDE POWER POLE
- BM-C EL. 655.33'  
SPIKE/NAIL IN SOUTH SIDE POWER POLE
- BM-D EL. 655.07'  
SPIKE/NAIL IN SOUTH SIDE POWER POLE

- NOTES:
1. SESC MEASURES SHALL BE INSTALLED PRIOR TO ANY REMOVALS.
  2. SEE PLAN AND PROFILE SHEETS FOR SOIL EROSION AND SEDIMENTATION CONTROL MEASURES.



12-027-013-00

**103RD AVENUE**  
EX. HMA PAVEMENT



12-027-005-00

**103RD AVENUE**  
EX. HMA PAVEMENT

- REMOVAL LEGEND**
- HMA BASE CRUSHING AND SHAPING
  - TRENCHING
  - TREE / BUSH / STUMP REMOVAL (PAID AS CLEARING)
  - REMOVAL ITEM
  - REMOVAL ITEM

REVISION:

**ALLEGAN COUNTY ROAD COMMISSION**  
LEE TOWNSHIP, ALLEGAN COUNTY, MICHIGAN  
103RD AVENUE, 52ND STREET, & 104TH AVENUE RECONSTRUCTION  
EXISTING CONDITIONS & REMOVALS PLAN

DESIGN TEAM:	PROJ. MGR.:	DATE:
	TRB	FEB 2020
	DESIGNED BY:	
	TRB	
	DRAWN BY:	
	TRB	
	CHECK BY:	
	TRB	
SMB FEB 2020		
DRAWING INFORMATION:		
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66420 tyfers		

JUNE 2020

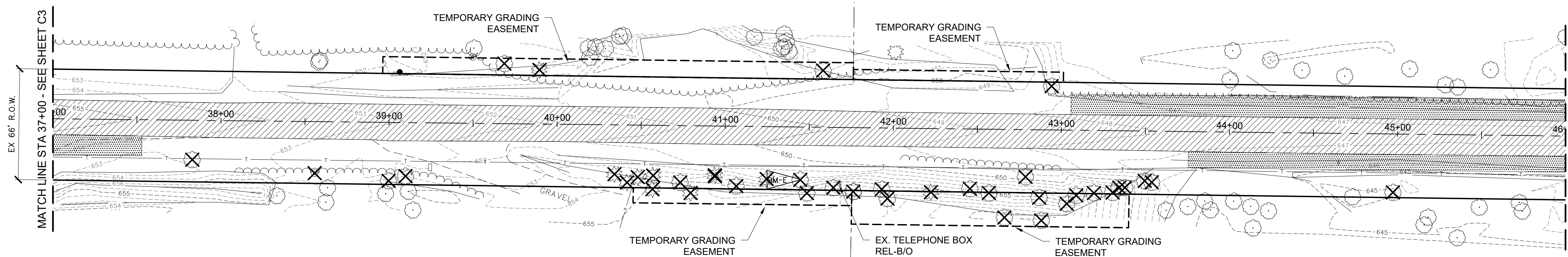
F&V PROJECT NO. 842640

**C4**

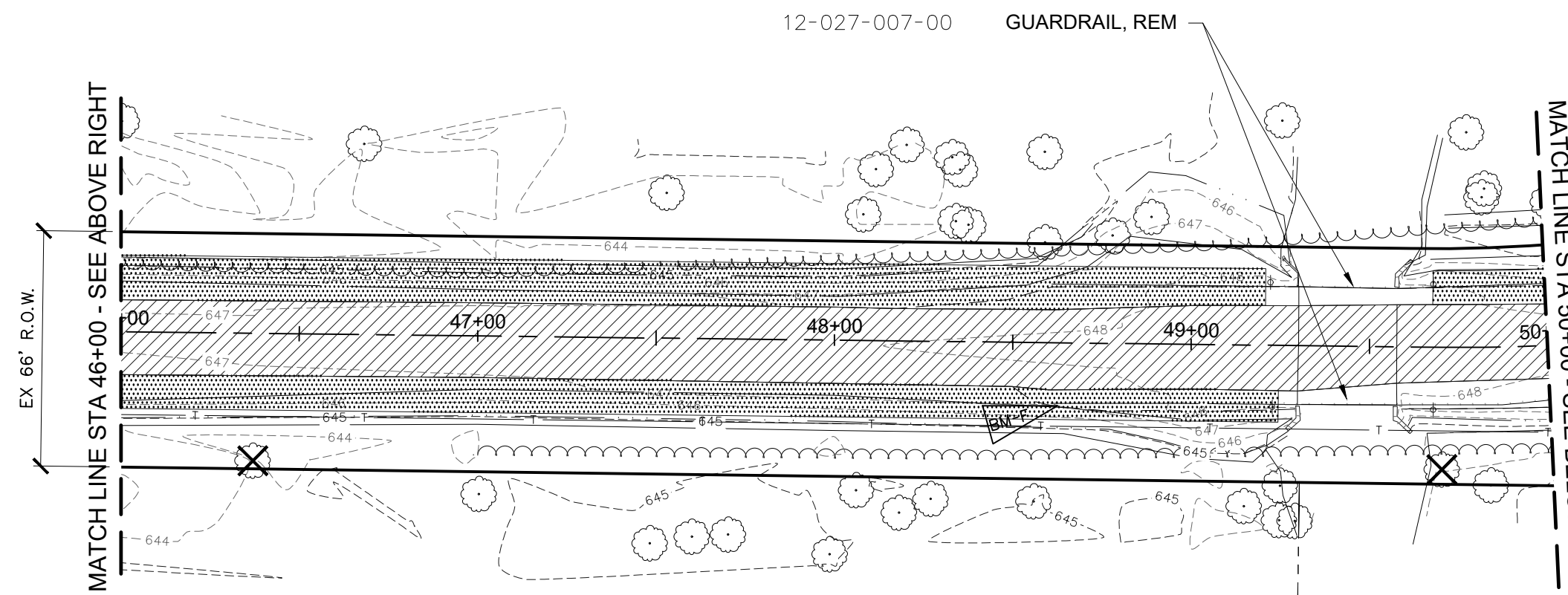
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Issued for Bids: 6/12/2020 JSW 1

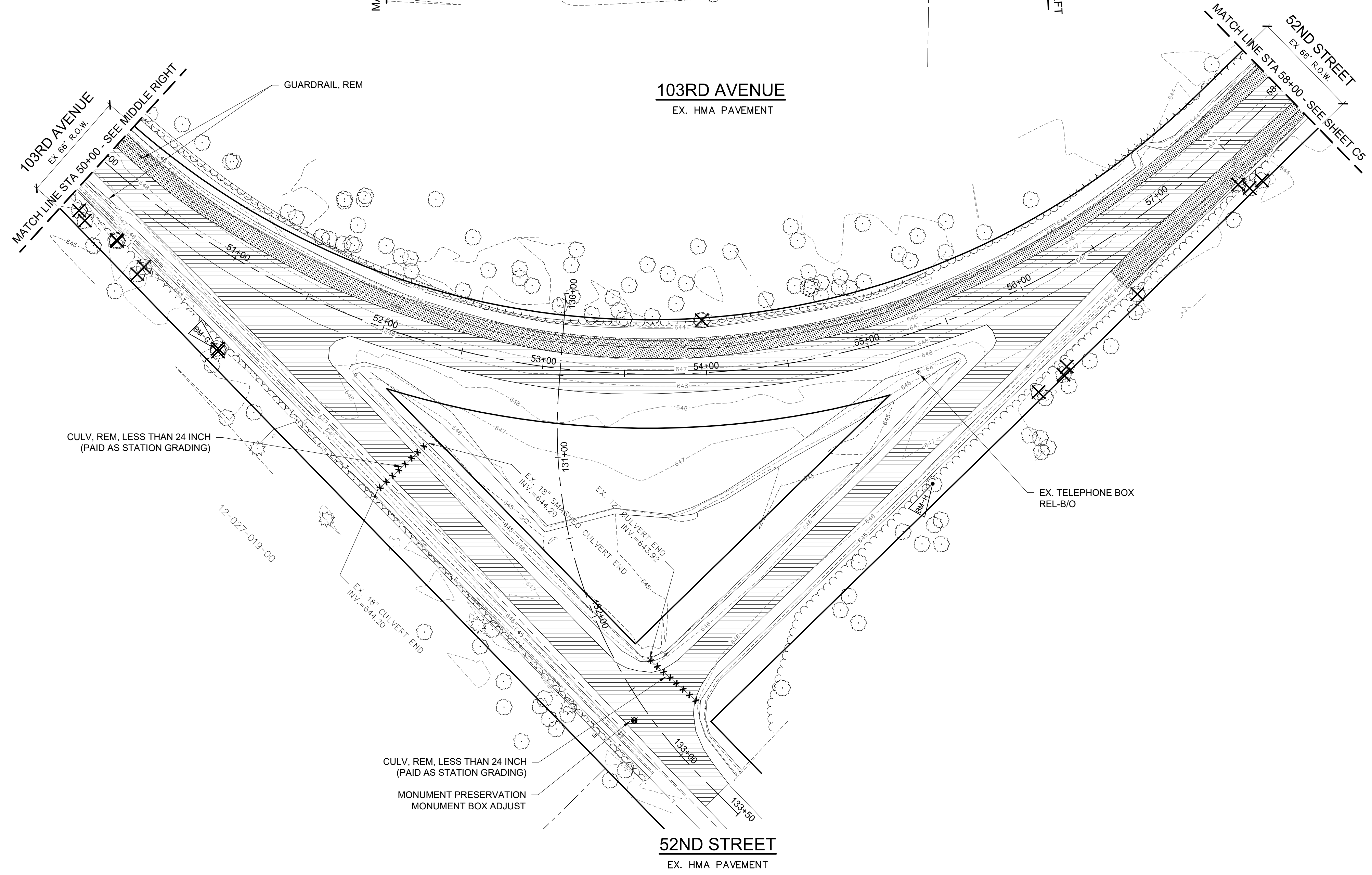




**103RD AVENUE**  
EX. HMA PAVEMENT

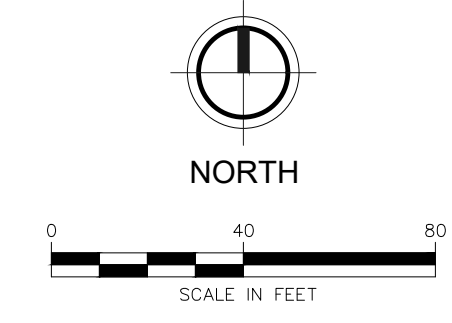


**103RD AVENUE**  
EX. HMA PAVEMENT

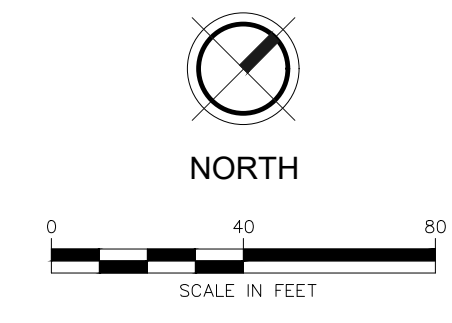
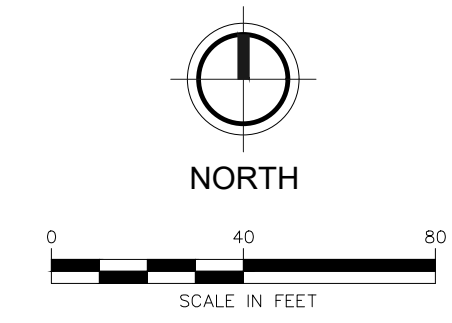


**52ND STREET**  
EX. HMA PAVEMENT

- BM-E EL. 652.65'  
SPIKE/NAIL IN NORTH SIDE 10" OAK
- BM-F EL. 650.23'  
NAIL IN TOP OF GUARDRAIL POST
- BM-G EL. 645.69'  
SPIKE/NAIL IN NORTHEAST SIDE TWIN MAPLE
- BM-H EL. 645.00'  
SPIKE/NAIL IN WEST SIDE 12" MAPLE



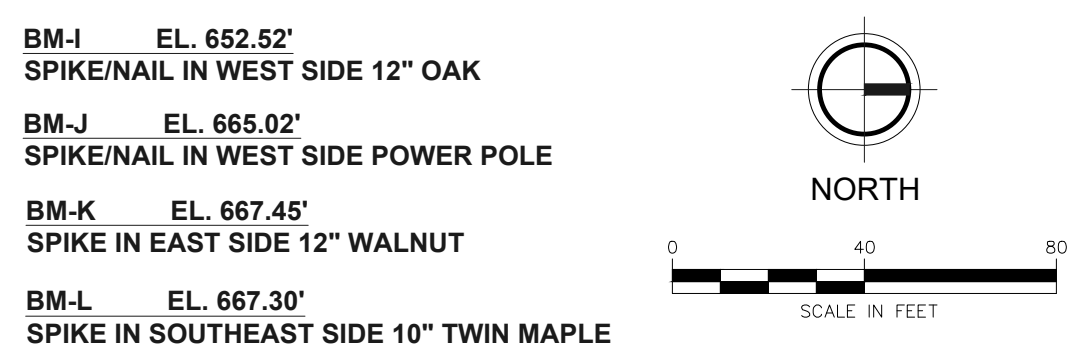
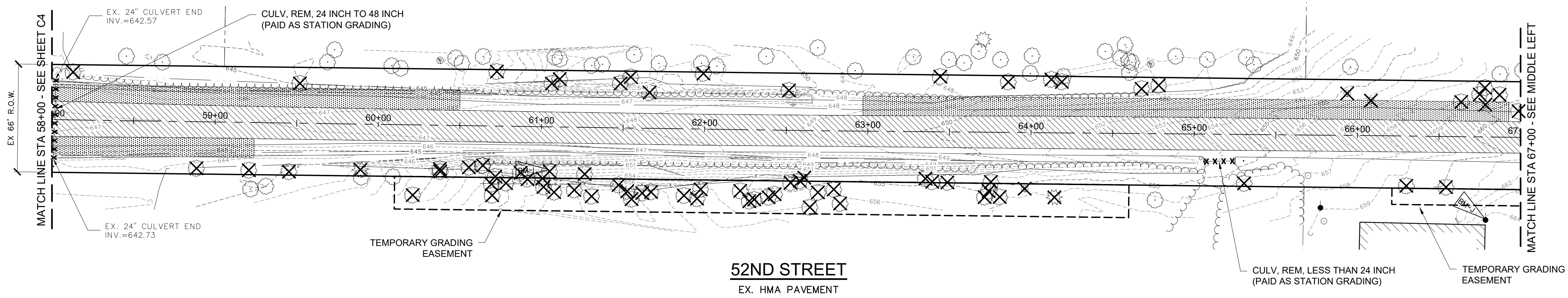
- NOTES:
1. SESC MEASURES SHALL BE INSTALLED PRIOR TO ANY REMOVALS.
  2. SEE PLAN AND PROFILE SHEETS FOR SOIL EROSION AND SEDIMENTATION CONTROL MEASURES.



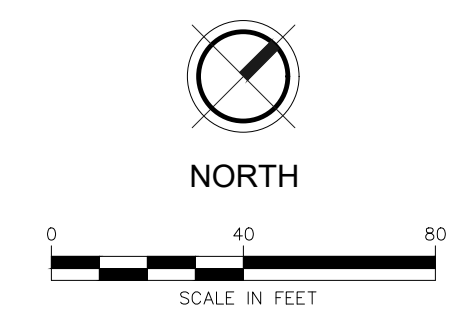
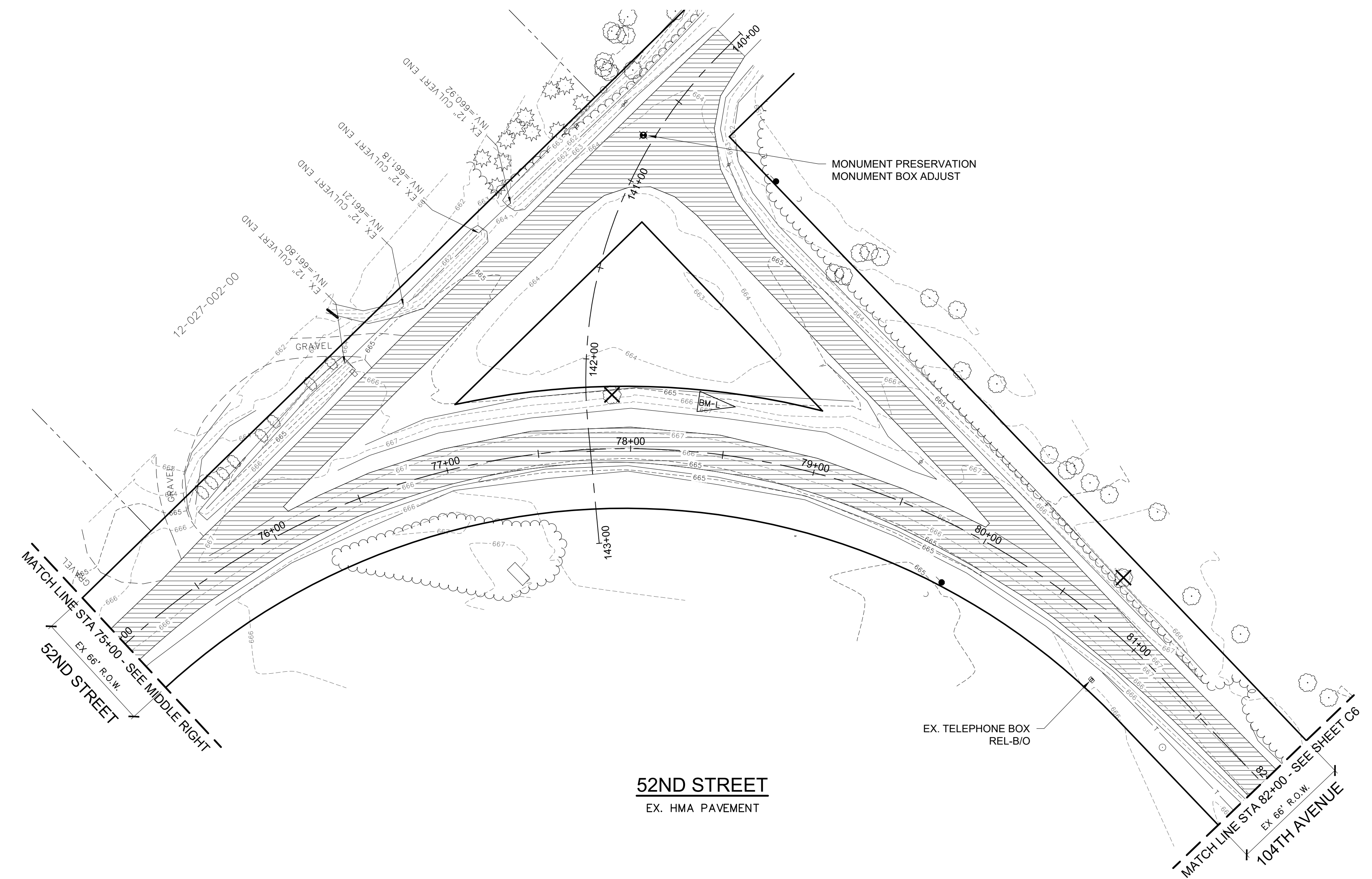
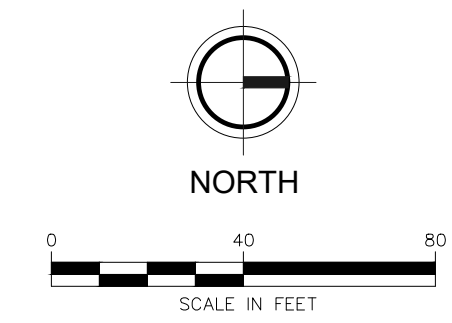
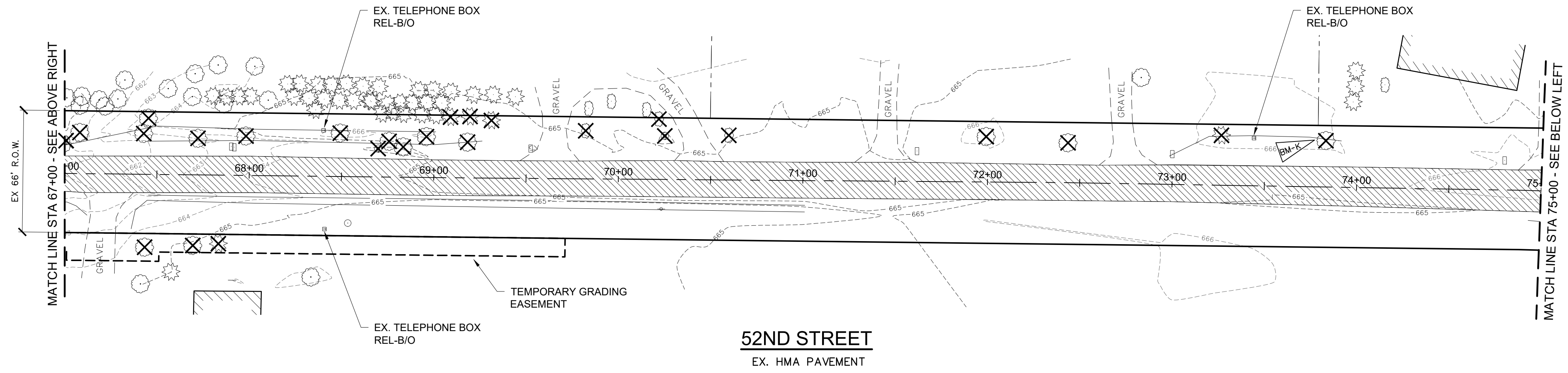
- REMOVAL LEGEND**
- HMA BASE CRUSHING AND SHAPING
  - TRENCHING
  - TREE / BUSH / STUMP REMOVAL (PAID AS CLEARING)
  - REMOVAL ITEM
  - REMOVAL ITEM

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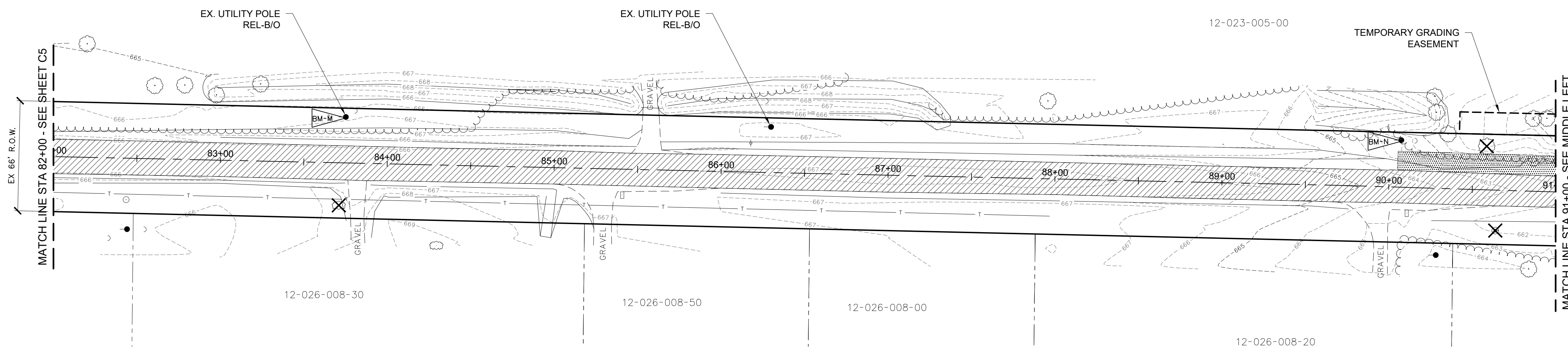
- NOTES:
1. SESC MEASURES SHALL BE INSTALLED PRIOR TO ANY REMOVALS.
  2. SEE PLAN AND PROFILE SHEETS FOR SOIL EROSION AND SEDIMENTATION CONTROL MEASURES.



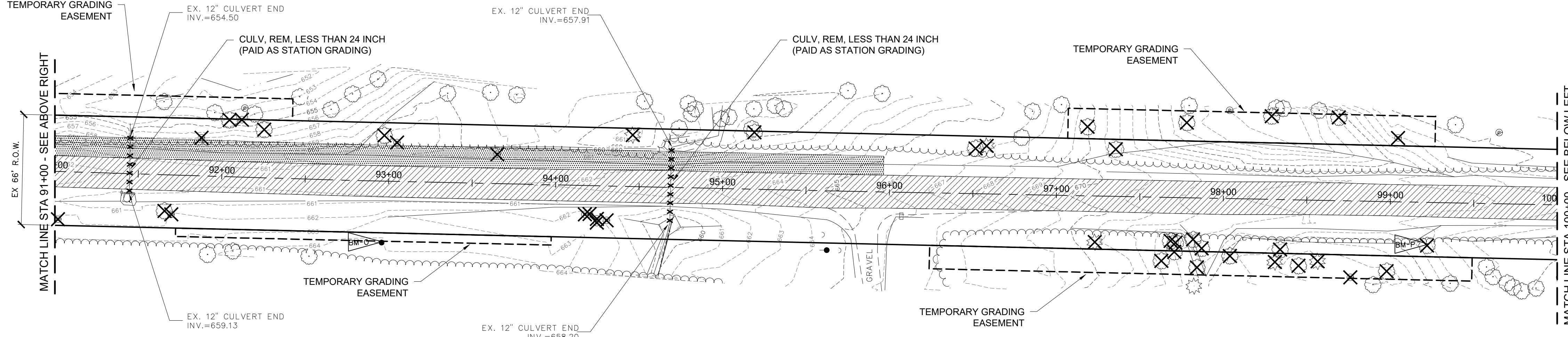
- REMOVAL LEGEND**
- HMA BASE CRUSHING AND SHAPING
  - TRENCHING
  - TREE / BUSH / STUMP REMOVAL (PAID AS CLEARING)
  - REMOVAL ITEM
  - REMOVAL ITEM

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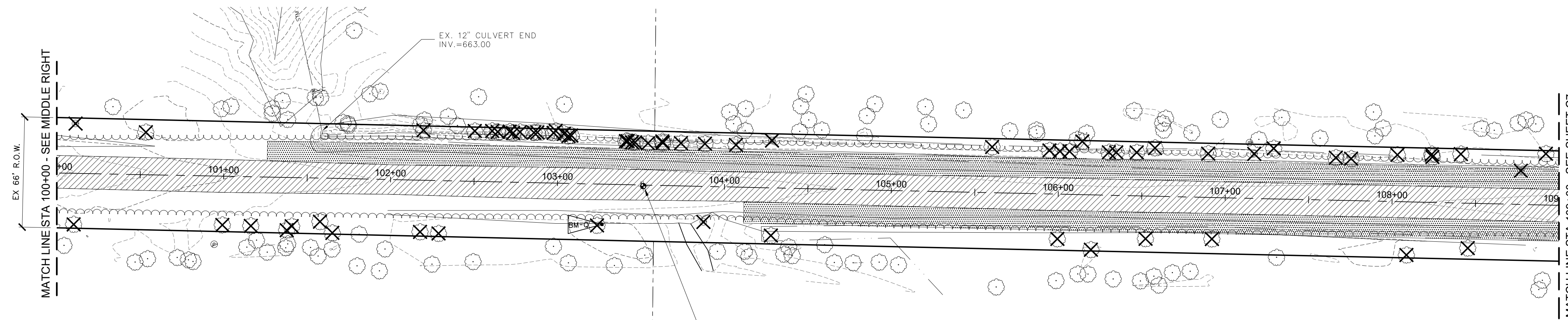




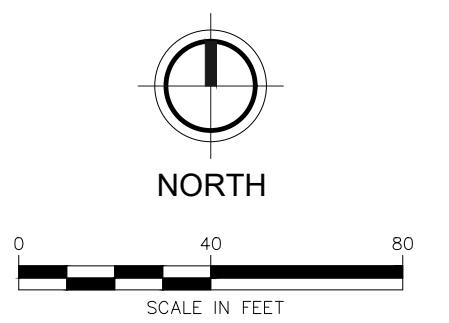
**104TH AVENUE**  
EX. HMA PAVEMENT



**104TH AVENUE**  
EX. HMA PAVEMENT



**104TH AVENUE**  
EX. HMA PAVEMENT



- BM-M EL. 667.50'  
SPIKE/NAIL IN SOUTH SIDE POWER POLE
- BM-N EL. 662.71'  
SPIKE IN SOUTH SIDE POWER POLE
- BM-O EL. 664.80'  
SPIKE/NAIL IN NORTH SIDE POWER POLE
- BM-P EL. 673.96'  
SPIKE/NAIL IN NORTH SIDE 24" OAK
- BM-Q EL. 671.51'  
SPIKE IN EAST SIDE 42" MAPLE

- NOTES:
1. SESC MEASURES SHALL BE INSTALLED PRIOR TO ANY REMOVALS.
  2. SEE PLAN AND PROFILE SHEETS FOR SOIL EROSION AND SEDIMENTATION CONTROL MEASURES.

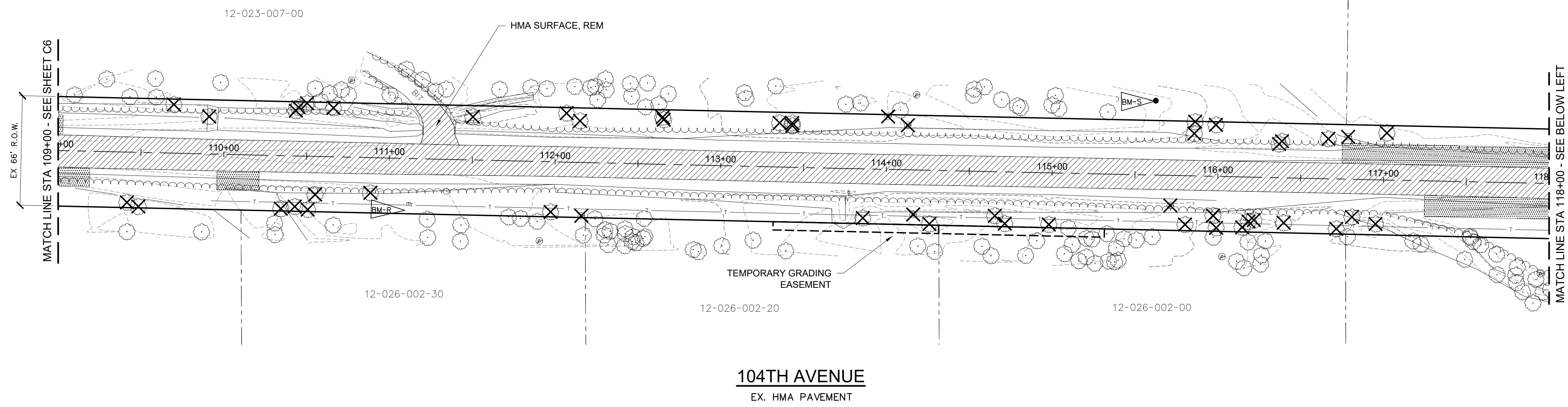
- REMOVAL LEGEND**
- HMA BASE CRUSHING AND SHAPING
  - TRENCHING
  - TREE / BUSH / STUMP REMOVAL (PAID AS CLEARING)
  - REMOVAL ITEM
  - REMOVAL ITEM

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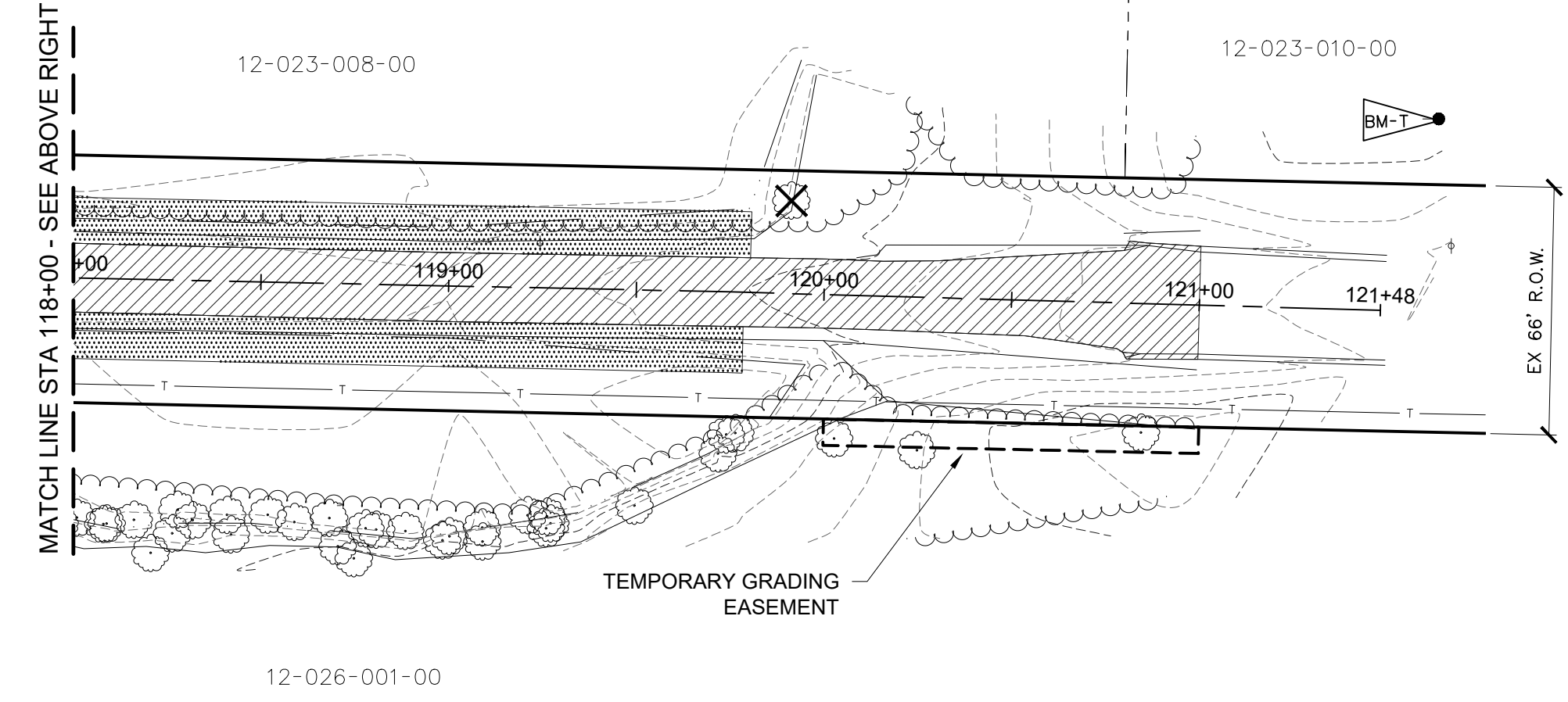
Issued for Bids: 6/12/2020 JSW 1



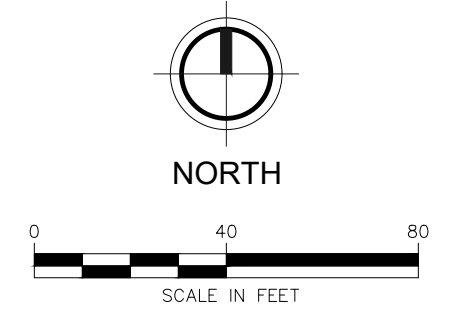
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**104TH AVENUE**  
EX. HMA PAVEMENT



**104TH AVENUE**  
EX. HMA PAVEMENT



BM-R EL. 668.60'  
SPIKE/NAIL IN NORTH SIDE 24" POPLAR  
BM-S EL. 672.53'  
SPIKE IN SOUTH SIDE POWER POLE  
BM-T EL. 676.77'  
SPIKE/NAIL IN SOUTH SIDE POWER POLE

- NOTES:
1. SESC MEASURES SHALL BE INSTALLED PRIOR TO ANY REMOVALS.
  2. SEE PLAN AND PROFILE SHEETS FOR SOIL EROSION AND SEDIMENTATION CONTROL MEASURES.

**REMOVAL LEGEND**

- HMA BASE CRUSHING AND SHAPING
- TRENCHING
- TREE / BUSH / STUMP REMOVAL (PAID AS CLEARING)
- REMOVAL ITEM
- REMOVAL ITEM

**FLEISCHMANN**  
DESIGN. BUILD. OPERATE.

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P: 269.385.0011  
F: 269.382.6972

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REVISION:

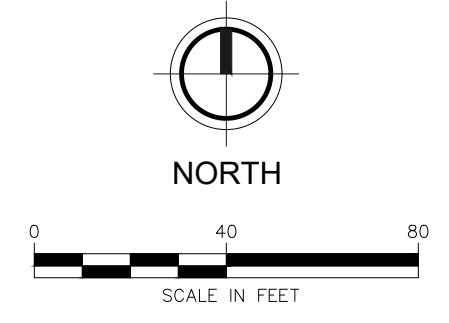
**ALLEGAN COUNTY ROAD COMMISSION**  
LEE TOWNSHIP, ALLEGAN COUNTY, MICHIGAN  
103RD AVENUE, 52ND STREET, & 104TH AVENUE RECONSTRUCTION  
**EXISTING CONDITIONS & REMOVALS PLAN**

DESIGN TEAM: PROJ. MGR.: JSW  
DESIGNED BY: TRS  
DRAWN BY: RJC  
CHECK BY:  
SMB FEB 2020  
DRAWING INFORMATION:  
842640\_C8  
86520 tytrs

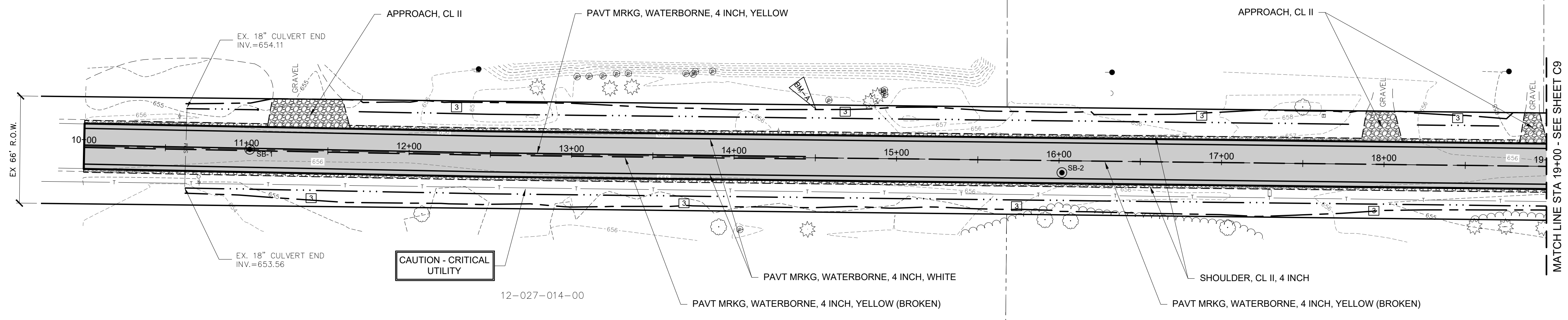
JUNE 2020  
F&V PROJECT NO.  
842640

**C8**

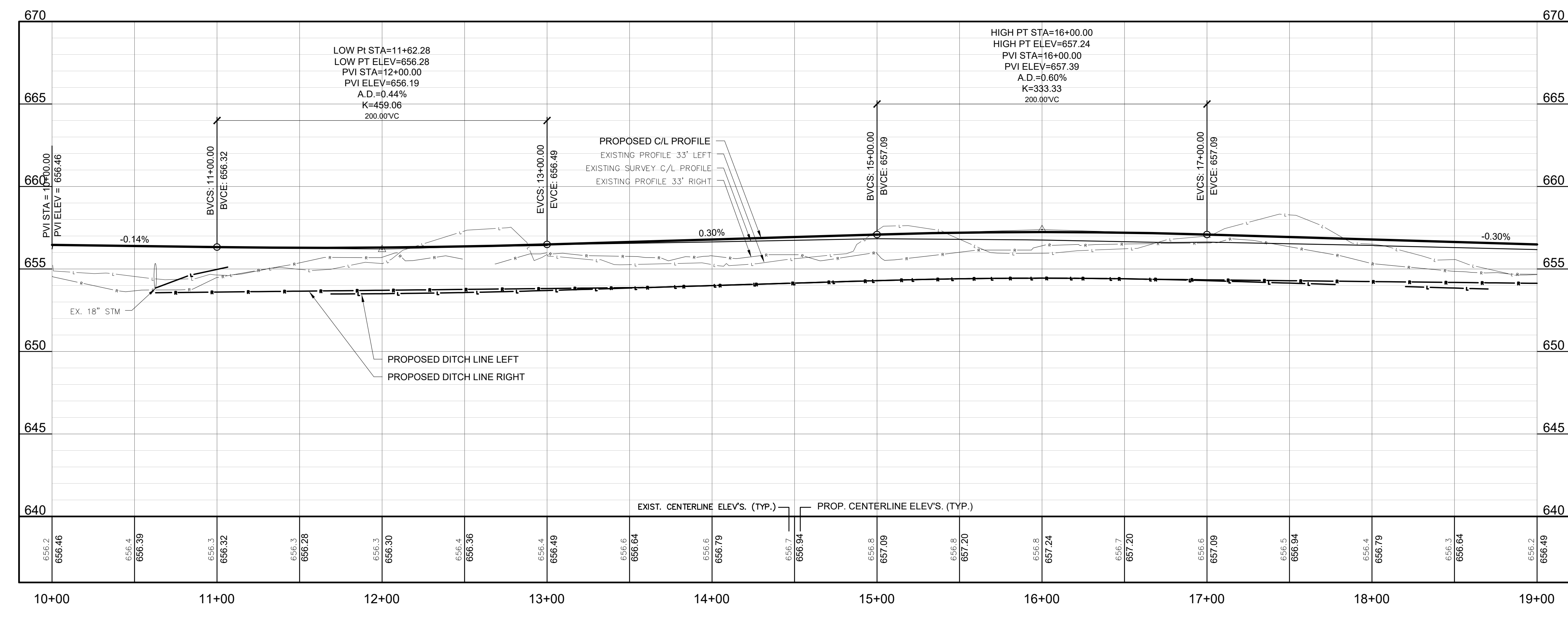




BM-A EL. 656.35'  
SPIKE/NAIL IN SOUTH SIDE 12" PINE



**103RD AVENUE**  
EX. HMA PAVEMENT



SOIL EROSION & SEDIMENTATION CONTROL MEASURES	
KEY	DETAIL
3	PERMANENT /TEMPORARY SEEDING

- LEGEND**
- STM — PROP. STORM CULVERT
  - PROP. DITCH LINE
  - - - PROP. SLOPE STAKE LINE
  - ▶ PROP. FLARED END SECTION
  - PROP. HMA PAVEMENT
  - ▨ PROP. GRAVEL DRIVE / SHOULDER
  - - - PROP. SILT FENCE
  - SB-1 SOIL BORING

ALLEGAN COUNTY ROAD COMMISSION  
LEE TOWNSHIP, ALLEGAN COUNTY, MICHIGAN  
103RD AVENUE, 52ND STREET, & 104TH AVENUE RECONSTRUCTION  
PLAN & PROFILES

DESIGN TEAM: PROJ. MGR.: JMW  
DESIGNED BY: TRS  
DRAWN BY: RJC  
CHECK BY:  
SMB FEB 2020  
DRAWING INFORMATION:  
842640\_C9  
66520 tytrs

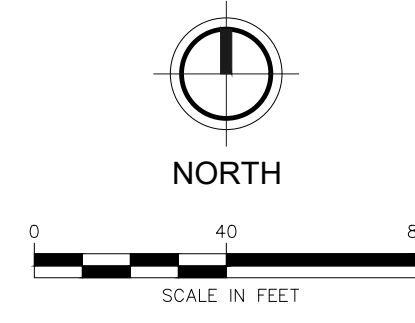
JUNE 2020  
FAV PROJECT NO.  
842640



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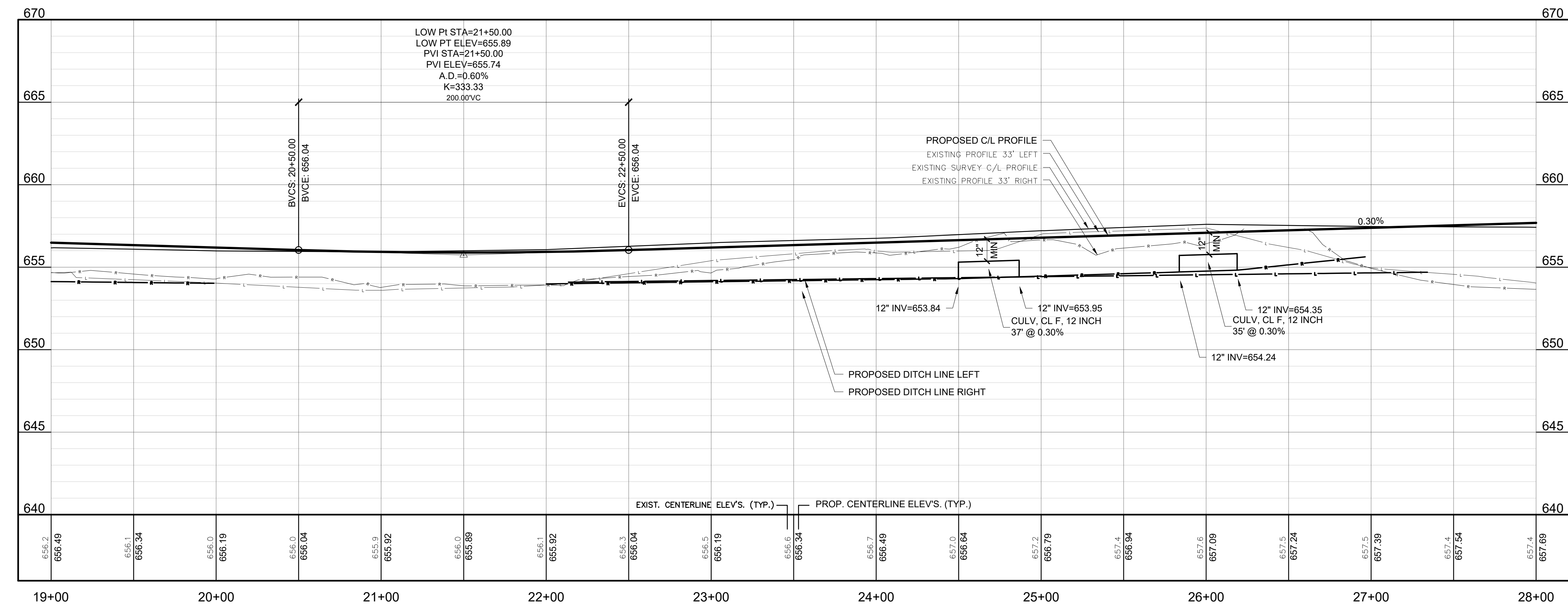
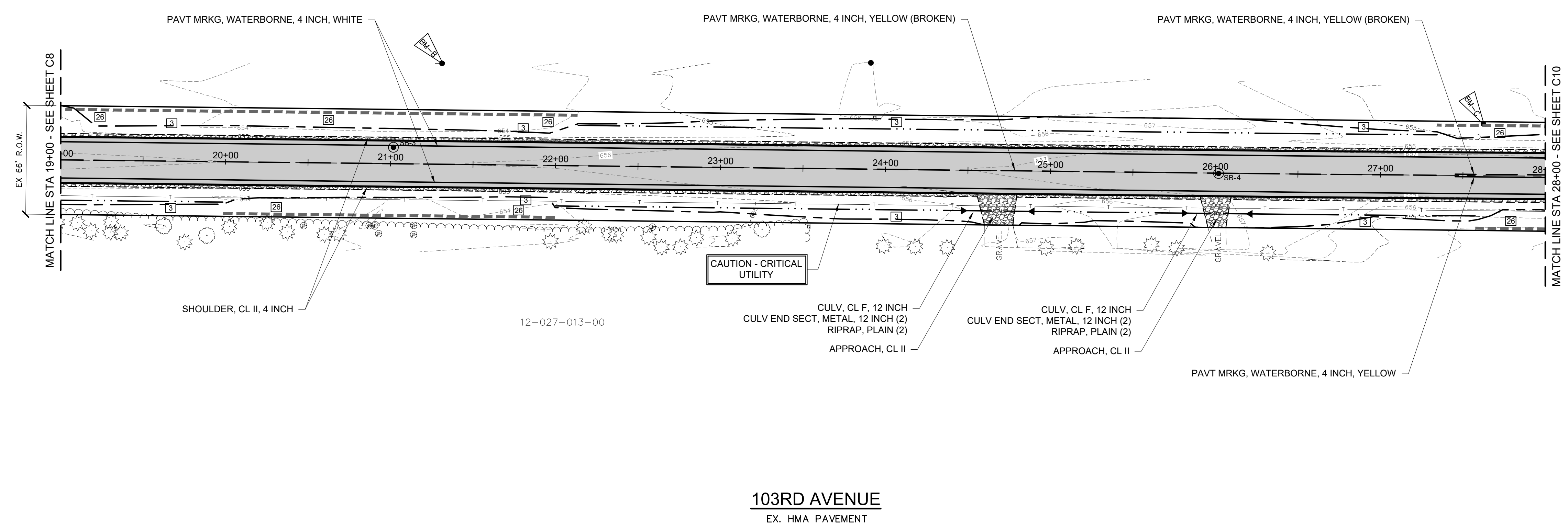
Issued for Bids: 6/12/2020 JSW 1





BM-B EL. 654.04'  
SPIKE/NAIL IN SOUTH SIDE POWER POLE

BM-C EL. 655.33'  
SPIKE/NAIL IN SOUTH SIDE POWER POLE

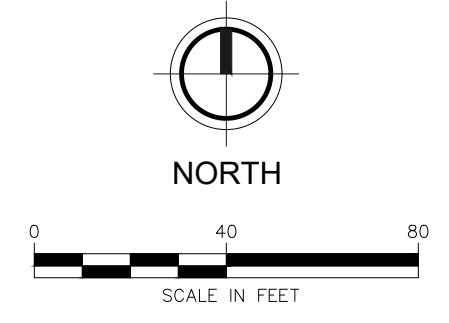


SOIL EROSION & SEDIMENTATION CONTROL MEASURES	
KEY	DETAIL
3	PERMANENT /TEMPORARY SEEDING
26	SILT FENCE

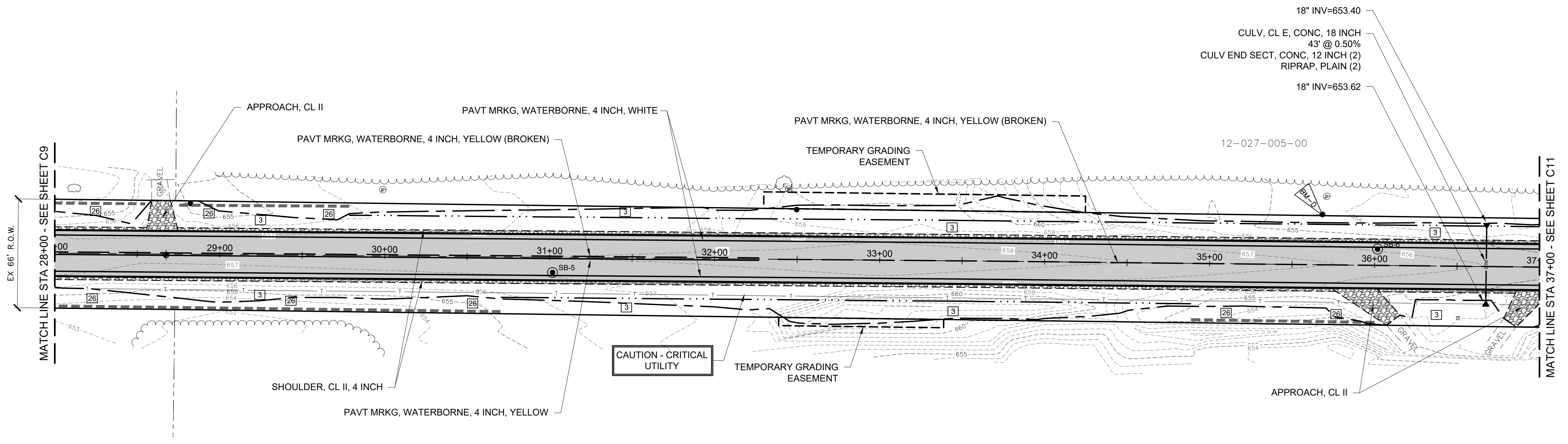
LEGEND	
	PROP. STORM CULVERT
	PROP. DITCH LINE
	PROP. SLOPE STAKE LINE
	PROP. FLARED END SECTION
	PROP. HMA PAVEMENT
	PROP. GRAVEL DRIVE / SHOULDER
	PROP. SILT FENCE
	SOIL BORING

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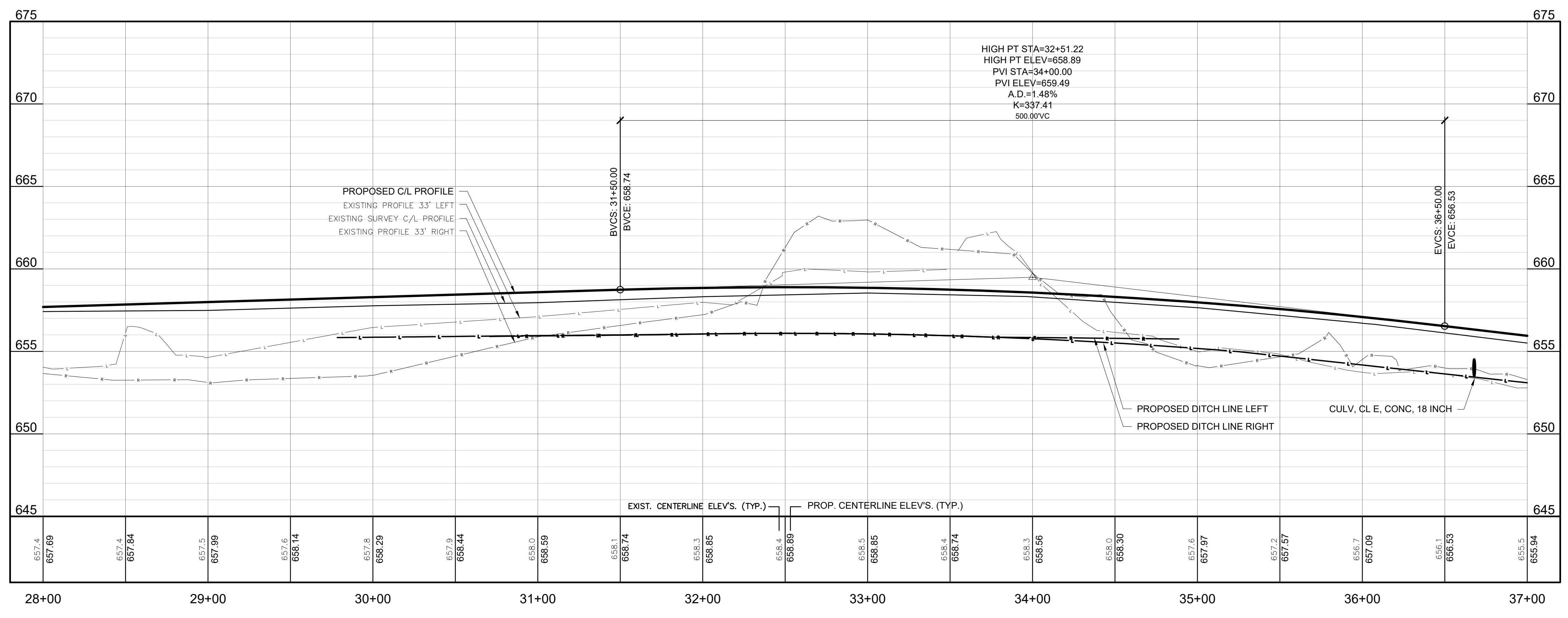




BM-D EL. 655.07  
SPIKE/NAIL IN SOUTH SIDE POWER POLE



**103RD AVENUE**  
EX. HMA PAVEMENT



SOIL EROSION & SEDIMENTATION CONTROL MEASURES	
KEY	DETAIL
3	PERMANENT /TEMPORARY SEEDING
26	SILT FENCE

LEGEND	
	PROP. STORM CULVERT
	PROP. DITCH LINE
	PROP. SLOPE STAKE LINE
	PROP. FLARED END SECTION
	PROP. HMA PAVEMENT
	PROP. GRAVEL DRIVE / SHOULDER
	PROP. SILT FENCE
	SOIL BORING

ALLEGAN COUNTY ROAD COMMISSION  
LEE TOWNSHIP, ALLEGAN COUNTY, MICHIGAN  
103RD AVENUE, 52ND STREET, & 104TH AVENUE RECONSTRUCTION  
PLAN & PROFILES

DESIGN TEAM: PROJ. MGR.: SMB  
DESIGNED BY: TRS  
DRAWN BY: RJC  
CHECKED BY: SMB  
SMB FEB 2020  
DRAWING INFORMATION:  
842640\_C11  
061220 tyhrs

JUNE 2020  
F&V PROJECT NO.  
842640

**C11**

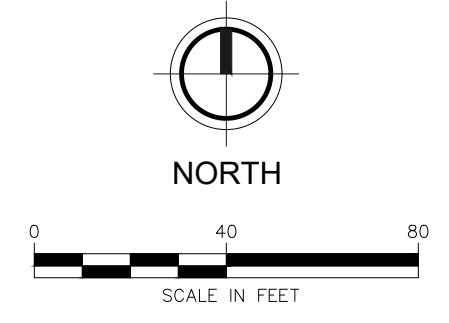
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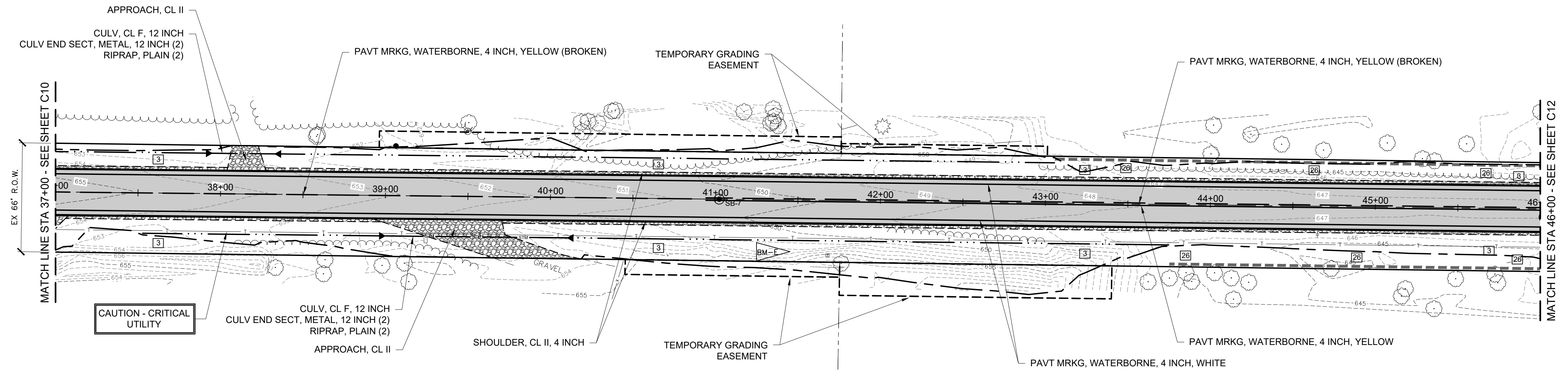


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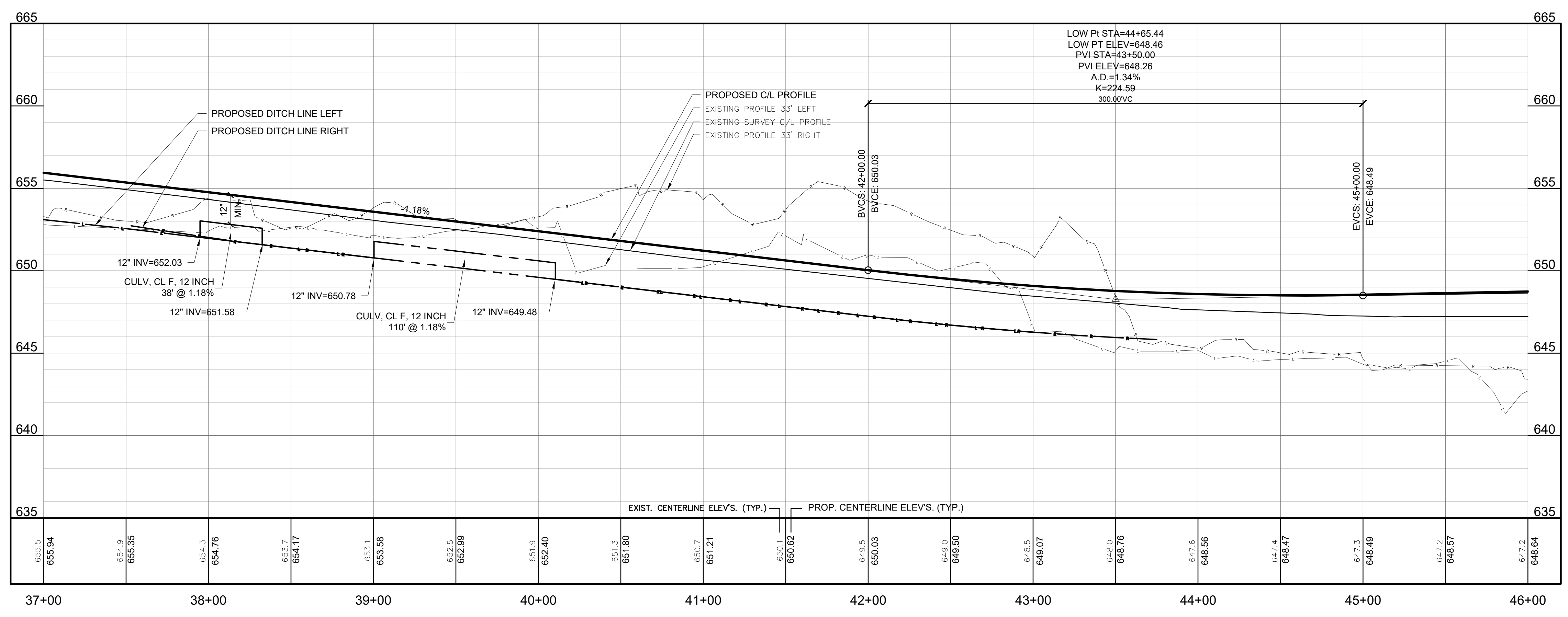




BM-E EL. 652.65'  
SPIKE/NAIL IN NORTH SIDE 10" OAK



**103RD AVENUE**  
EX. HMA PAVEMENT



SOIL EROSION & SEDIMENTATION CONTROL MEASURES	
KEY	DETAIL
3	PERMANENT /TEMPORARY SEEDING
26	SILT FENCE

LEGEND	
	PROP. STORM CULVERT
	PROP. DITCH LINE
	PROP. SLOPE STAKE LINE
	PROP. FLARED END SECTION
	PROP. HMA PAVEMENT
	PROP. GRAVEL DRIVE / SHOULDER
	PROP. SILT FENCE
	SOIL BORING

**FLEISCHMANN**  
DESIGN. BUILD. OPERATE.

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Kalamazoo, MI 49008  
P: 269.385.0011  
F: 269.382.6972

REVISION:

**ALLEGAN COUNTY ROAD COMMISSION**  
LEE TOWNSHIP, ALLEGAN COUNTY, MICHIGAN  
103RD AVENUE, 52ND STREET, & 104TH AVENUE RECONSTRUCTION  
PLAN & PROFILES

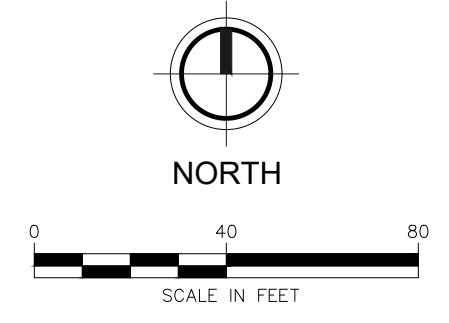
DESIGN TEAM: PROJ. MGR.: JMW  
DESIGNED BY: TRS  
DRAWN BY: JCC  
CHECK BY:  
SMB FEB 2020  
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JUNE 2020  
F&V PROJECT NO.  
842640

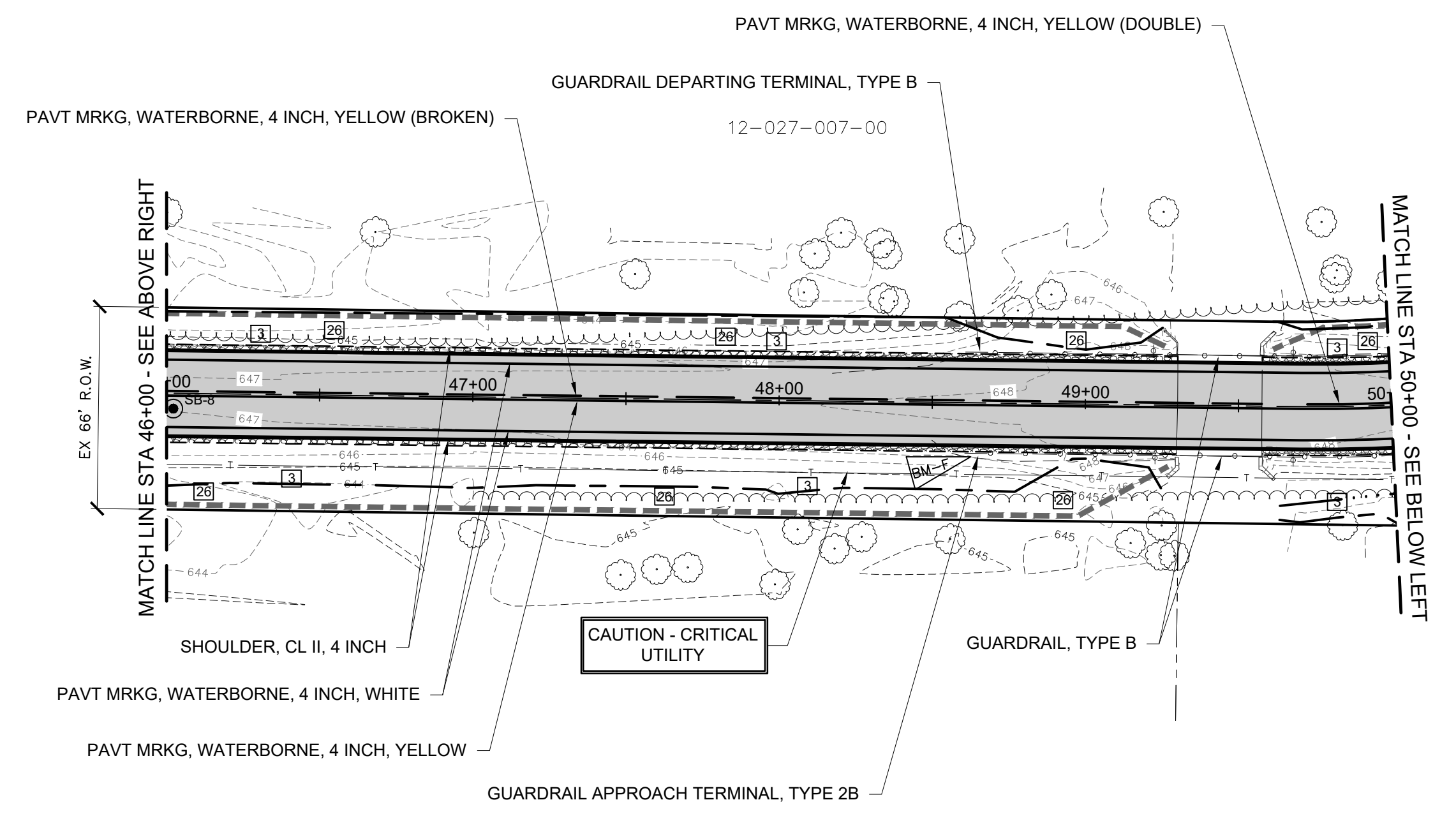
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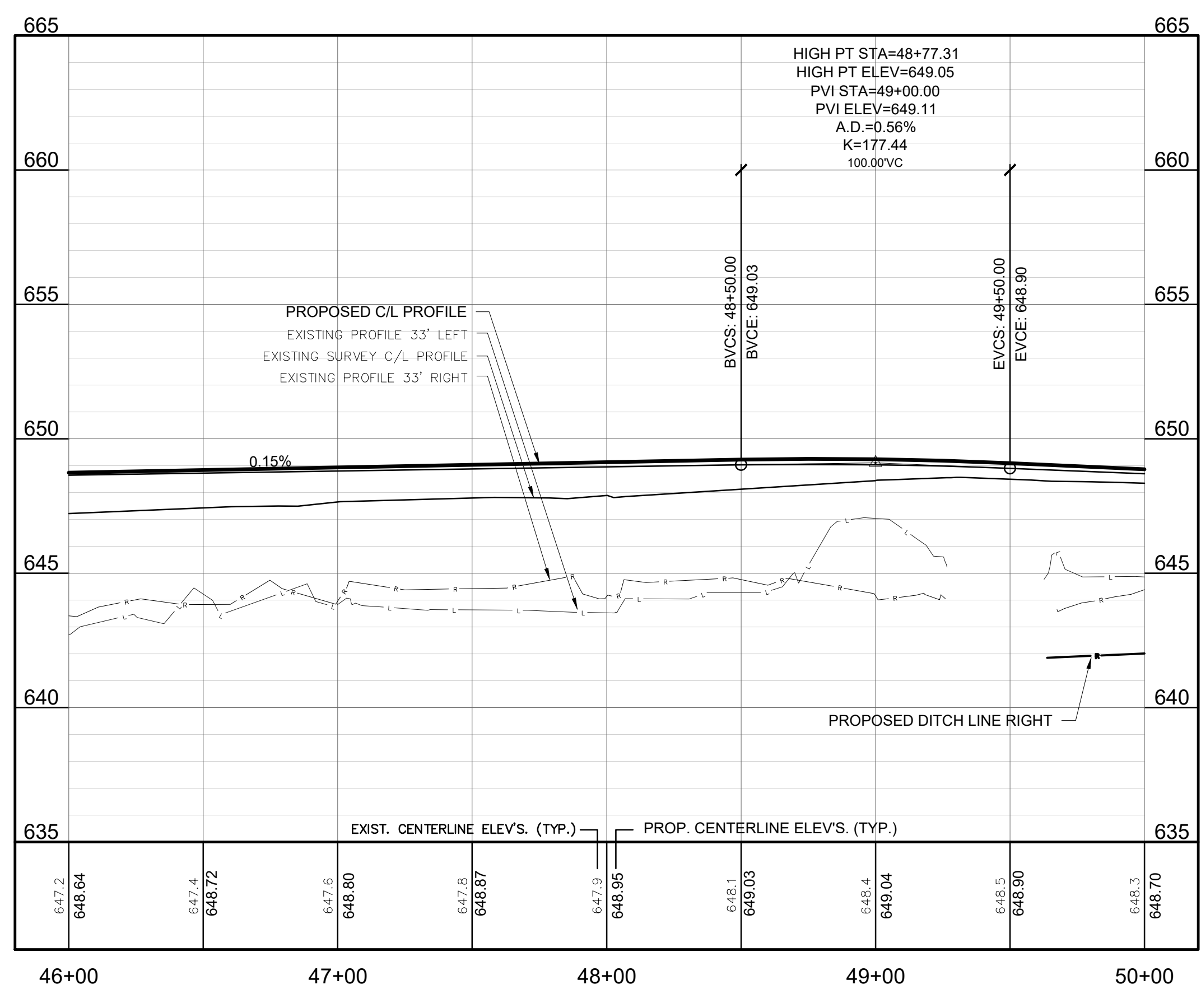




BM-F EL. 650.23'  
NAIL IN TOP OF GUARDRAIL POST



**103RD AVENUE**  
EX. HMA PAVEMENT



SOIL EROSION & SEDIMENTATION CONTROL MEASURES	
KEY	DETAIL
3	PERMANENT /TEMPORARY SEEDING
26	SILT FENCE

- LEGEND**
- STM — PROP. STORM CULVERT
  - · · · — PROP. DITCH LINE
  - - - - PROP. SLOPE STAKE LINE
  - ▶ PROP. FLARED END SECTION
  - PROP. HMA PAVEMENT
  - ▨ PROP. GRAVEL DRIVE / SHOULDER
  - - - - PROP. SILT FENCE
  - SB-1 SOIL BORING

ALLEGAN COUNTY ROAD COMMISSION  
LEE TOWNSHIP, ALLEGAN COUNTY, MICHIGAN  
103RD AVENUE, 52ND STREET, & 104TH AVENUE RECONSTRUCTION  
PLAN & PROFILES

DESIGN TEAM: SMB  
PROJ. MGR.: JMW  
DESIGNED BY: TRS  
DRAWN BY: RJC  
CHECK BY: JMW  
DATE: FEB 2020

DRAWING INFORMATION:  
842640\_C13  
08/22/20 11:45

JUNE 2020  
REV. PROJECT NO. 842640

**C13**

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Issued for Bids: 6/12/2020 JSW 1



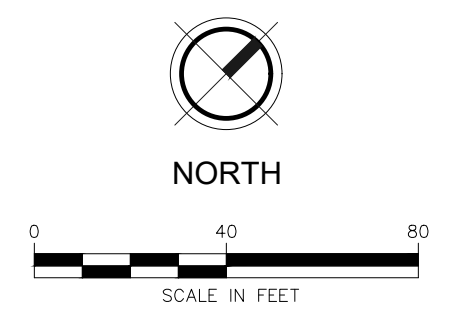
REVISION:

**ALLEGAN COUNTY ROAD COMMISSION**  
 LEE TOWNSHIP, ALLEGAN COUNTY, MICHIGAN  
 103RD AVENUE, 52ND STREET, & 104TH AVENUE RECONSTRUCTION  
**PLAN & PROFILES**

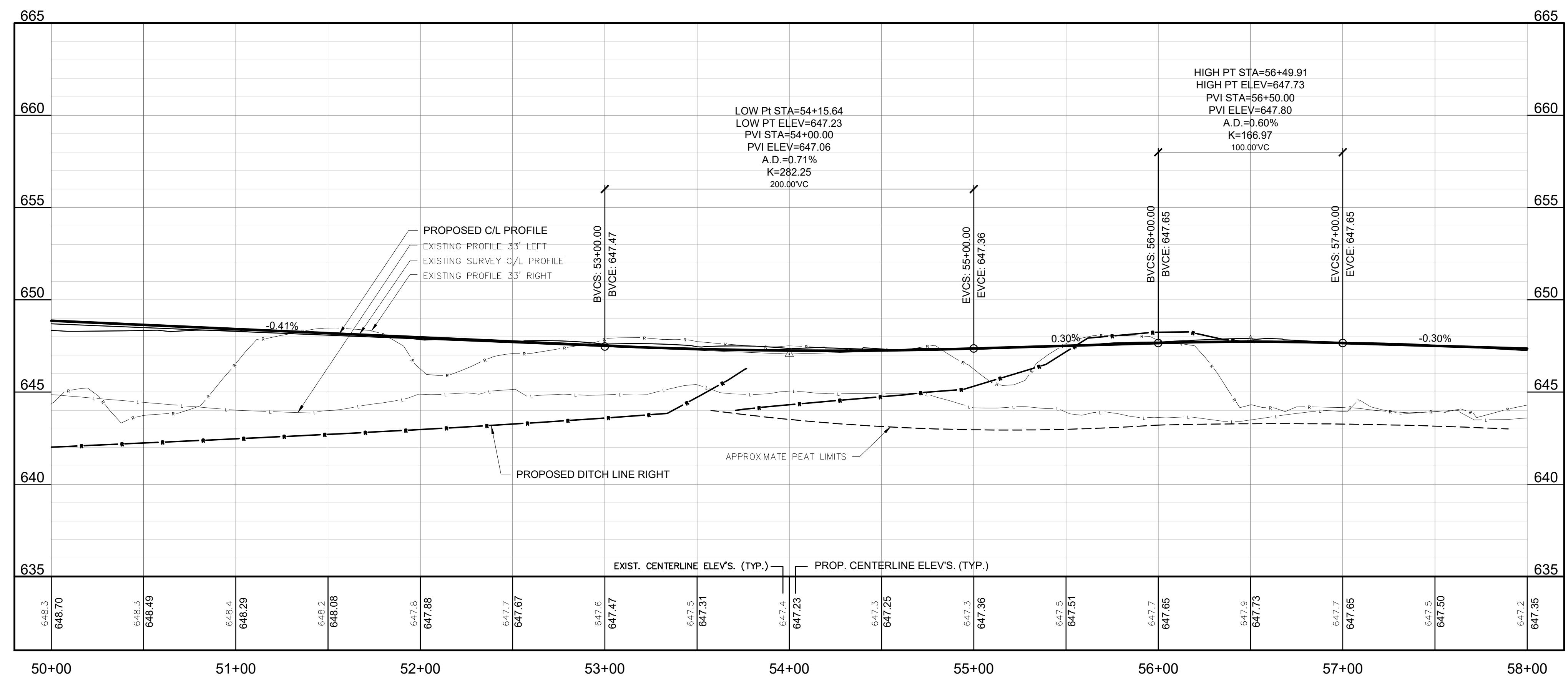
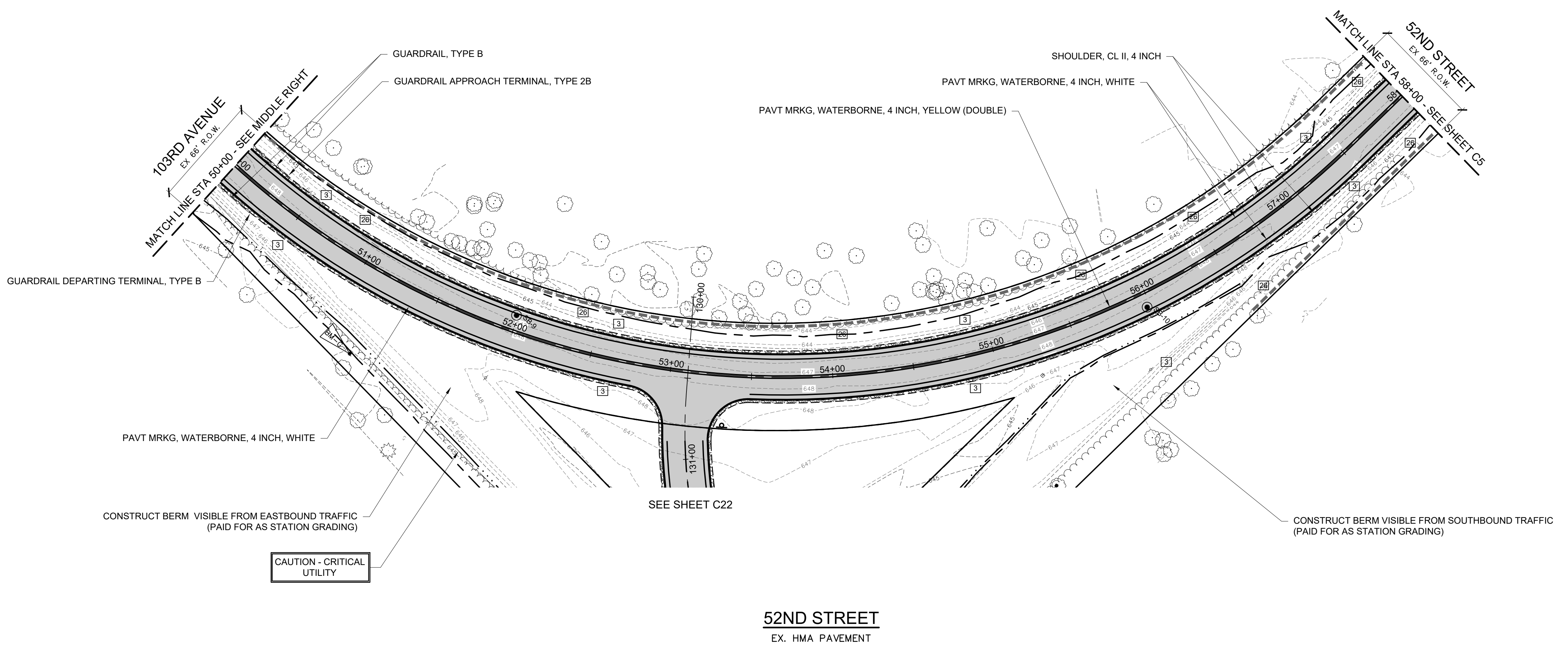
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 DESIGN TEAM:  
 DESIGNED BY: TRS  
 DRAWN BY: JCC  
 CHECK BY:  
 SMB FEB 2020  
 DRAWING INFORMATION:  
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 08/12/20 10:48

JUNE 2020  
 F&V PROJECT NO.  
 842640

**C14**



BM-G EL. 645.69'  
 SPIKE/NAIL IN NORTHEAST SIDE TWIN MAPLE  
 BM-H EL. 645.00'  
 SPIKE/NAIL IN WEST SIDE 12" MAPLE

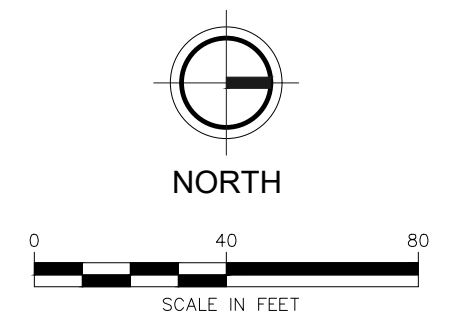
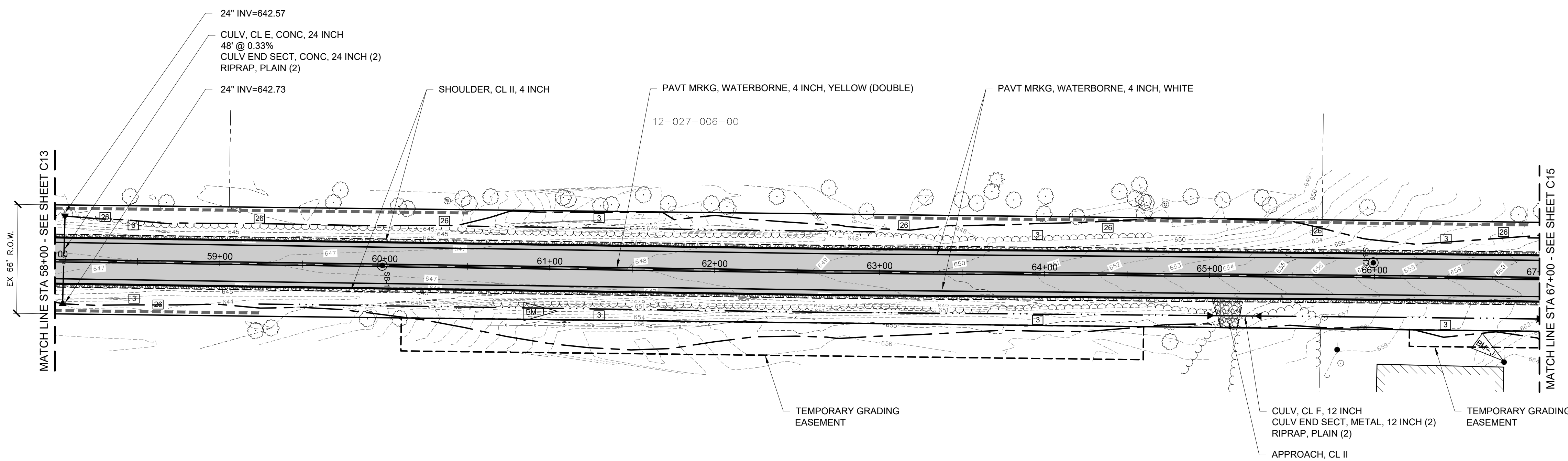


SOIL EROSION & SEDIMENTATION CONTROL MEASURES	
KEY	DETAIL
3	PERMANENT /TEMPORARY SEEDING
26	SILT FENCE

- LEGEND**
- STM — PROP. STORM CULVERT
  - · · · — PROP. DITCH LINE
  - — — PROP. SLOPE STAKE LINE
  - ▶ PROP. FLARED END SECTION
  - PROP. HMA PAVEMENT
  - ▨ PROP. GRAVEL DRIVE / SHOULDER
  - · · · — PROP. SILT FENCE
  - SB-1 SOIL BORING

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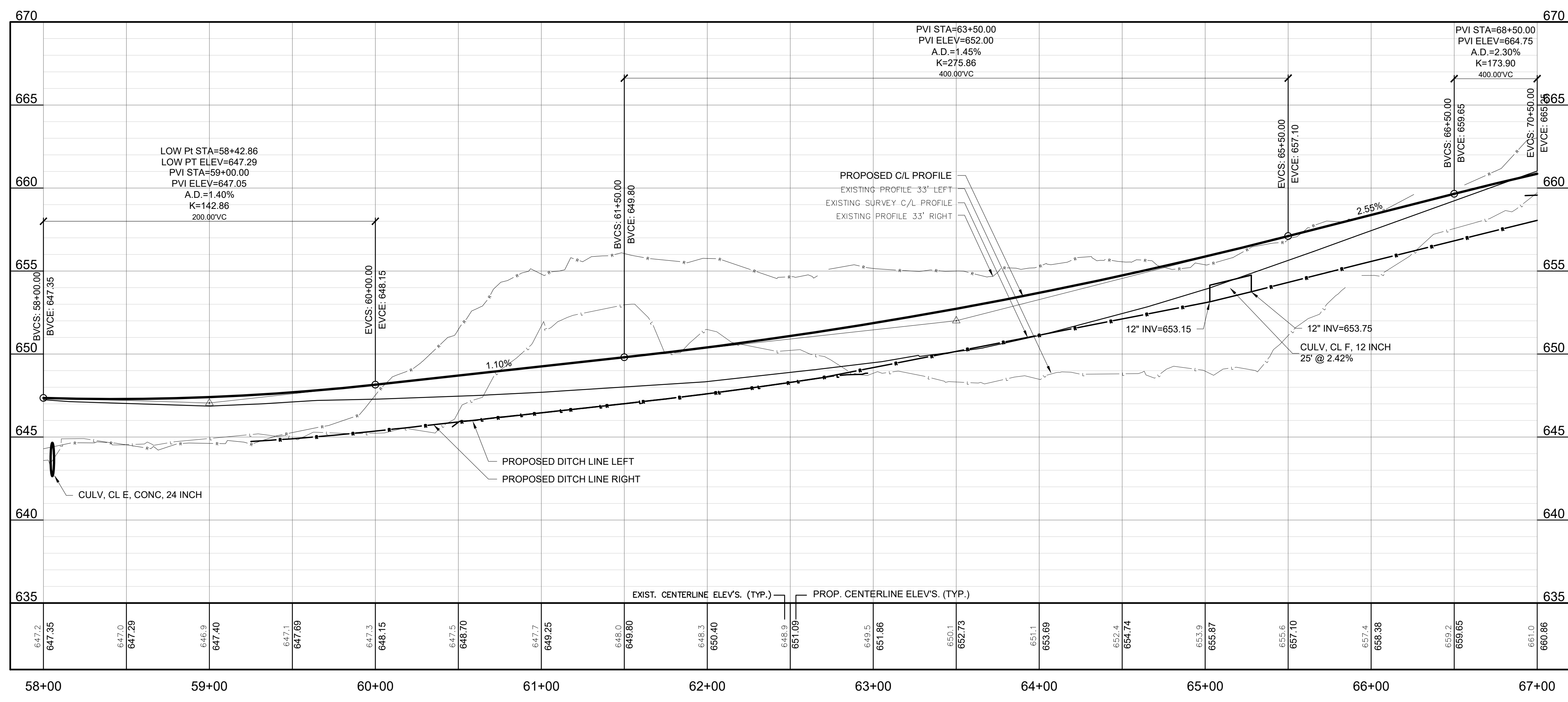




BM-I EL. 652.52'  
 SPIKE/NAIL IN WEST SIDE 12" OAK

BM-J EL. 665.02'  
 SPIKE/NAIL IN WEST SIDE POWER POLE

**52ND STREET**  
 EX. HMA PAVEMENT



SOIL EROSION & SEDIMENTATION CONTROL MEASURES

KEY	DETAIL
3	PERMANENT /TEMPORARY SEEDING
26	SILT FENCE

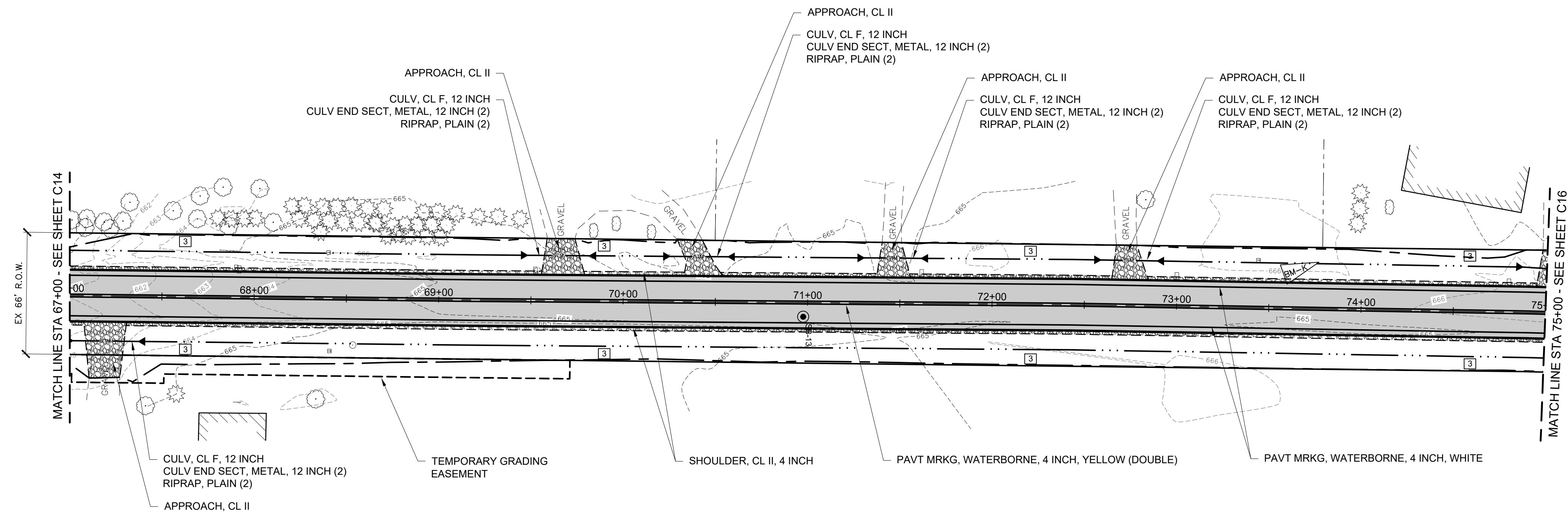
**LEGEND**

	PROP. STORM CULVERT
	PROP. DITCH LINE
	PROP. SLOPE STAKE LINE
	PROP. FLARED END SECTION
	PROP. HMA PAVEMENT
	PROP. GRAVEL DRIVE / SHOULDER
	PROP. SILT FENCE
	SOIL BORING

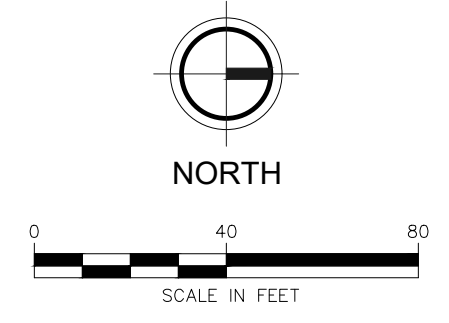
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Issued for Bids: 6/12/2020 JSW 1

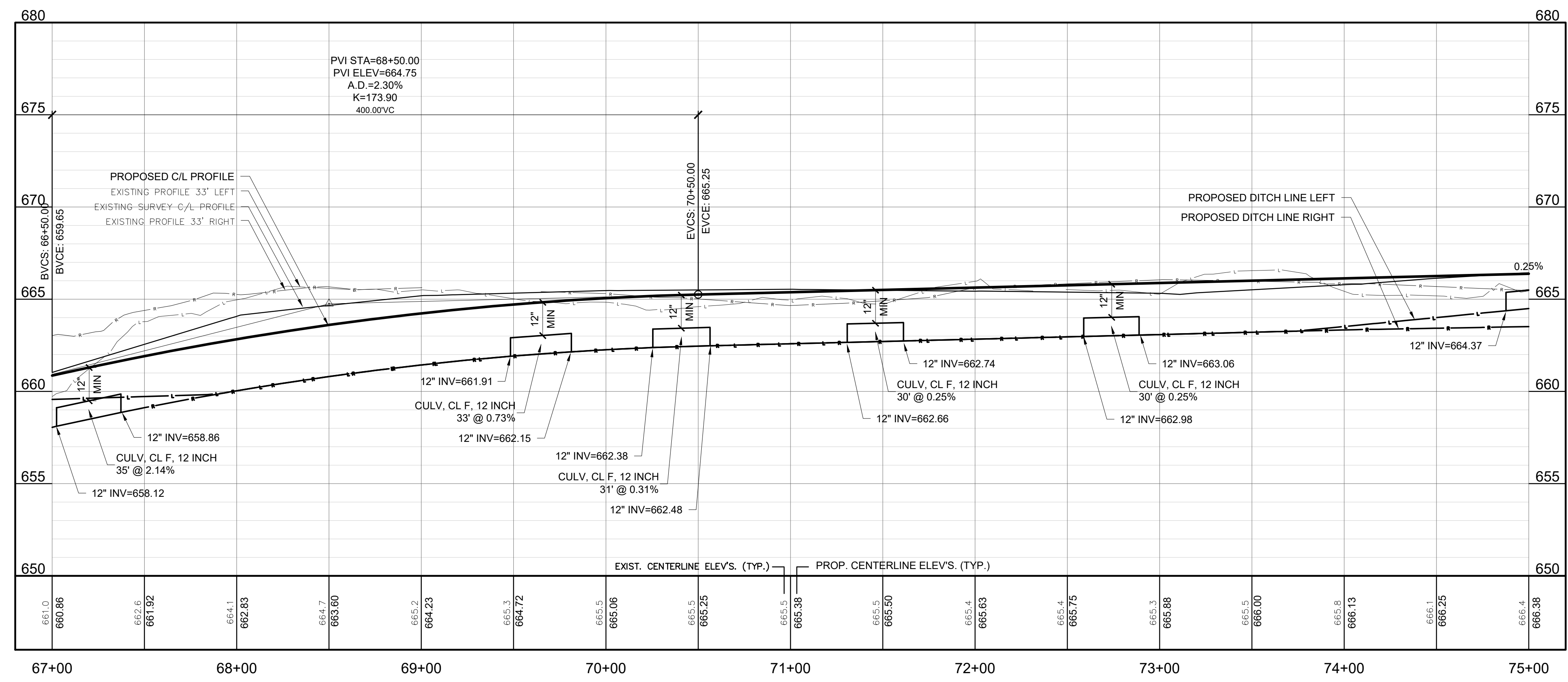




**52ND STREET**  
EX. HMA PAVEMENT



BM-K EL. 667.45'  
SPIKE IN EAST SIDE 12" WALNUT



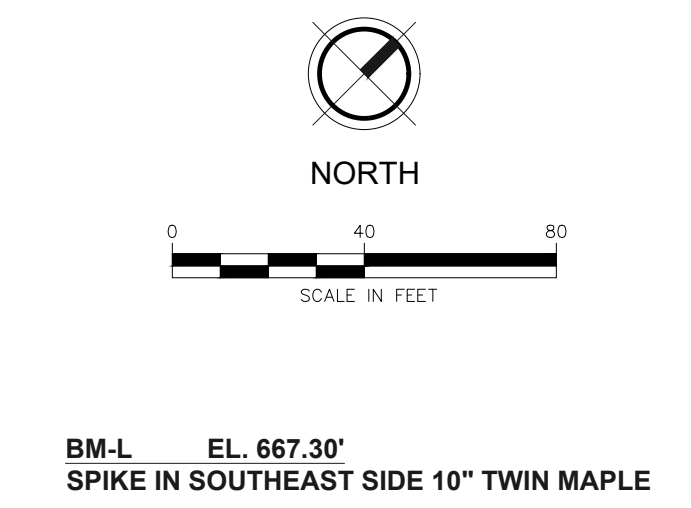
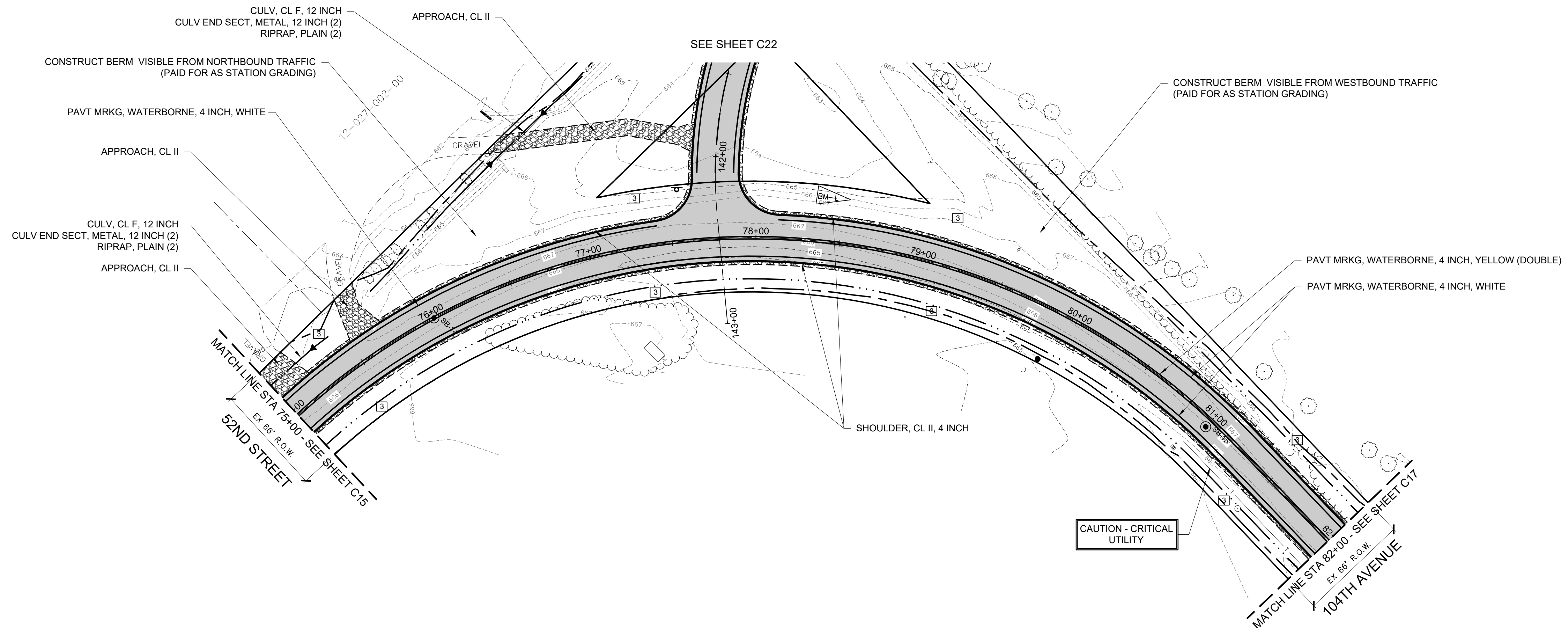
SOIL EROSION & SEDIMENTATION CONTROL MEASURES	
KEY	DETAIL
3	PERMANENT /TEMPORARY SEEDING

LEGEND	
	PROP. STORM CULVERT
	PROP. DITCH LINE
	PROP. SLOPE STAKE LINE
	PROP. FLARED END SECTION
	PROP. HMA PAVEMENT
	PROP. GRAVEL DRIVE / SHOULDER
	PROP. SILT FENCE
	SOIL BORING

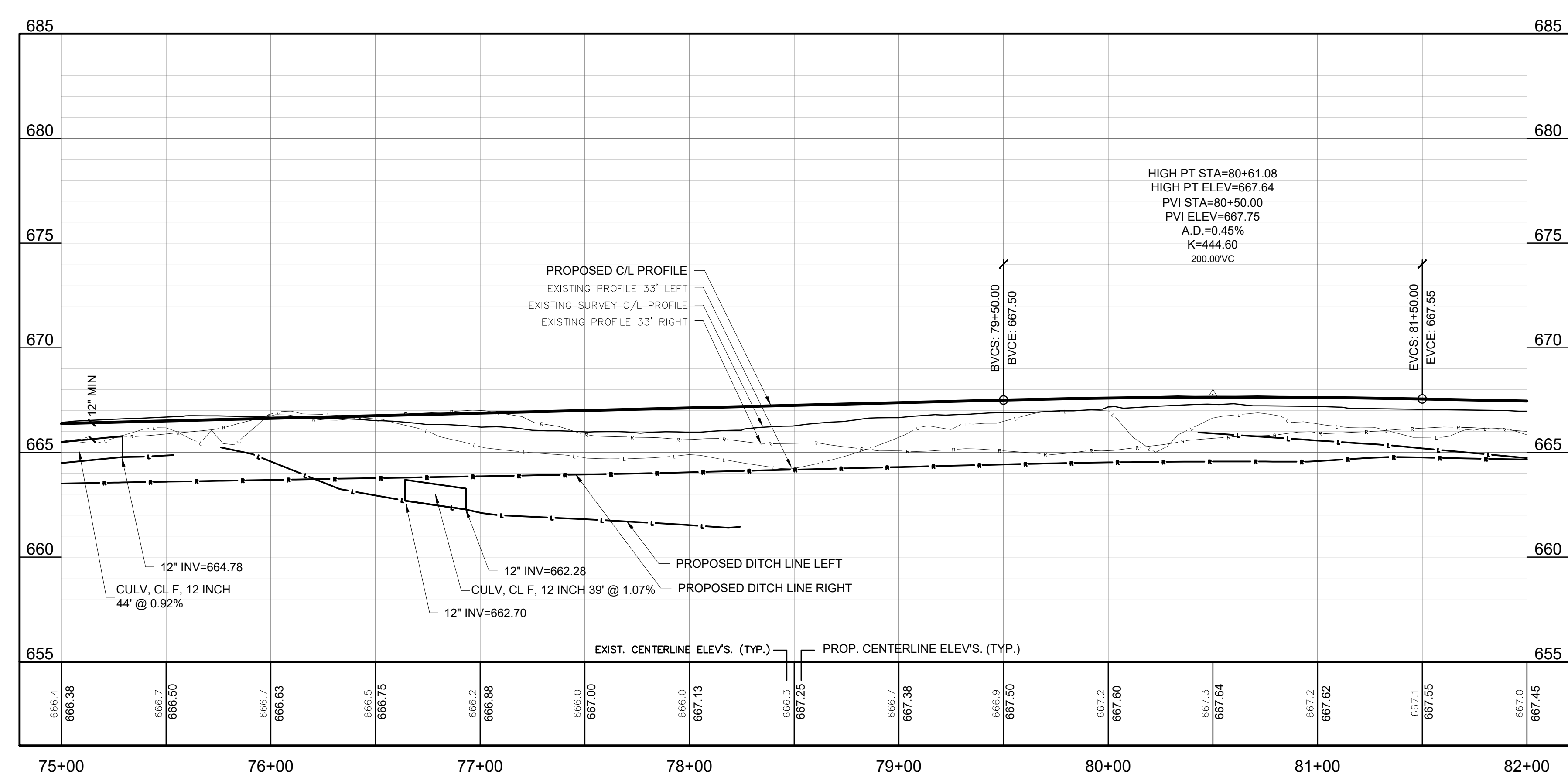
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**52ND STREET**  
EX. HMA PAVEMENT



SOIL EROSION & SEDIMENTATION CONTROL MEASURES	
KEY	DETAIL
3	PERMANENT /TEMPORARY SEEDING

- LEGEND**
- STM — PROP. STORM CULVERT
  - · · · — PROP. DITCH LINE
  - — — PROP. SLOPE STAKE LINE
  - ▶ PROP. FLARED END SECTION
  - PROP. HMA PAVEMENT
  - ▨ PROP. GRAVEL DRIVE / SHOULDER
  - · · · — PROP. SILT FENCE
  - ⊙ SB-1 SOIL BORING

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**FLEISCHMANN & WANDENBRINK**  
DESIGN. BUILD. OPERATE.

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Kalamazoo, MI 49008  
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REVISION:

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**ALLEGAN COUNTY ROAD COMMISSION**  
 LEE TOWNSHIP, ALLEGAN COUNTY, MICHIGAN  
 103RD AVENUE, 52ND STREET, & 104TH AVENUE RECONSTRUCTION  
**PLAN & PROFILES**

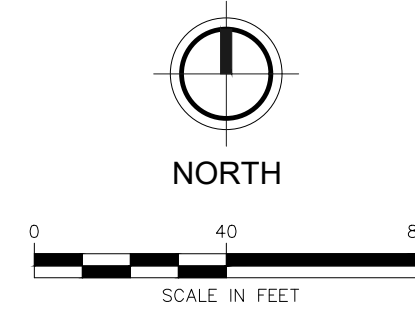
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DESIGN TEAM: SMB PROJ. MGR.: JMW DESIGNED BY: TRS DRAWN BY: JCC CHECK BY:	FEB 2020 DRAWING INFORMATION: 842640_C17 060520 tyers
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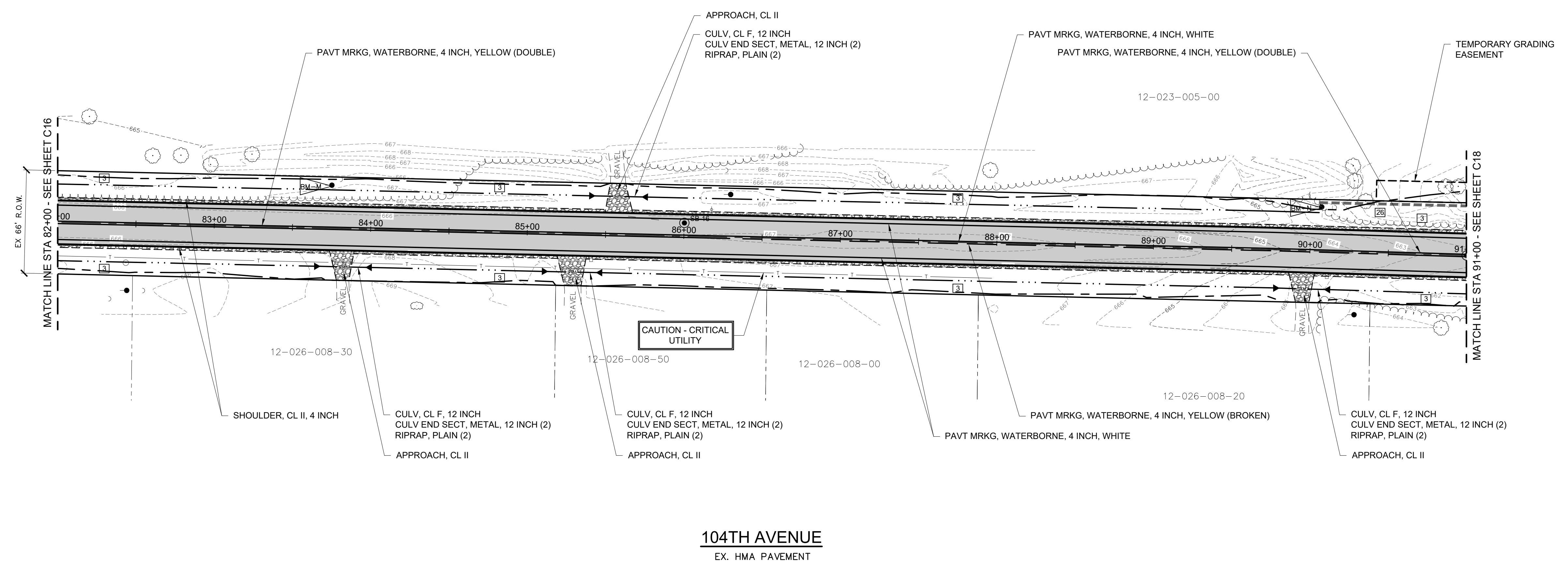
JUNE 2020  
F&W PROJECT NO. 842640

C17

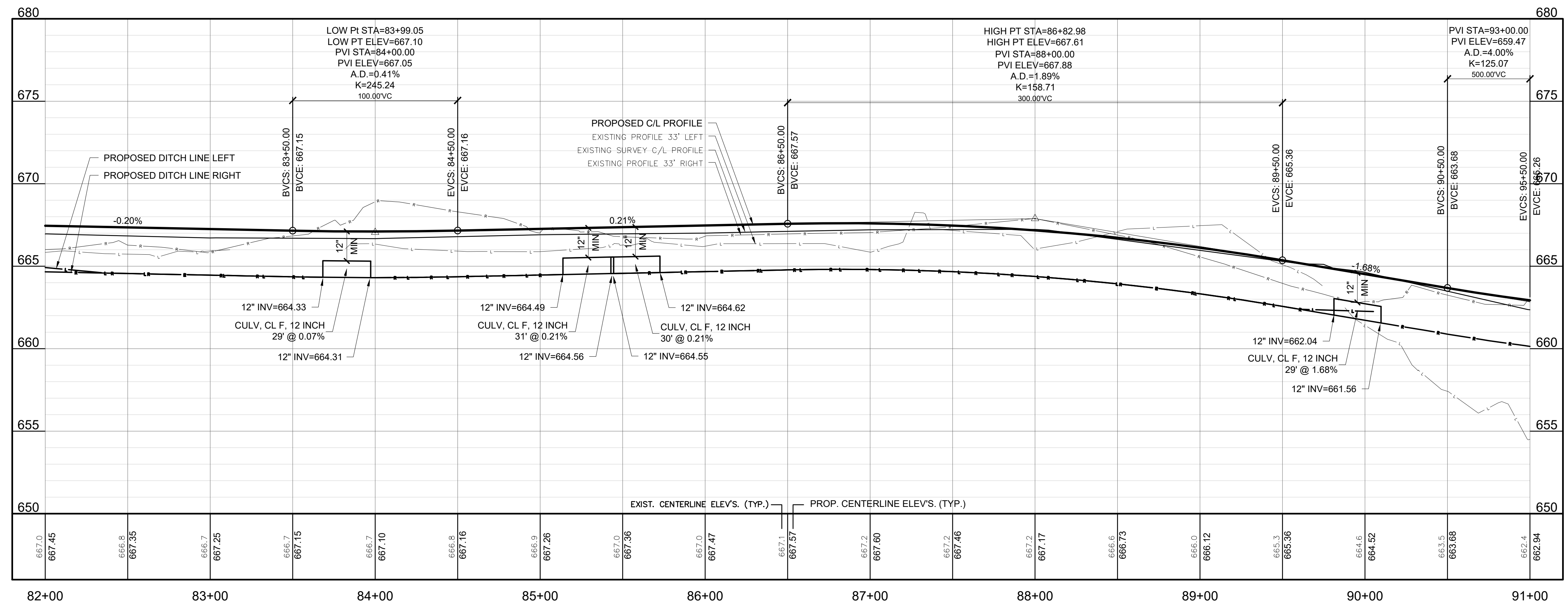


BM-M EL. 667.50'  
SPIKE/NAIL IN SOUTH SIDE POWER POLE

BM-N EL. 662.71'  
SPIKE IN SOUTH SIDE POWER POLE



**104TH AVENUE**  
EX. HMA PAVEMENT



SOIL EROSION & SEDIMENTATION CONTROL MEASURES	
KEY	DETAIL
3	PERMANENT /TEMPORARY SEEDING
26	SILT FENCE

LEGEND	
	PROP. STORM CULVERT
	PROP. DITCH LINE
	PROP. SLOPE STAKE LINE
	PROP. FLARED END SECTION
	PROP. HMA PAVEMENT
	PROP. GRAVEL DRIVE / SHOULDER
	PROP. SILT FENCE
	SOIL BORING

ALLEGAN COUNTY ROAD COMMISSION  
LEE TOWNSHIP, ALLEGAN COUNTY, MICHIGAN  
103RD AVENUE, 52ND STREET, & 104TH AVENUE RECONSTRUCTION  
PLAN & PROFILES

DESIGN TEAM: SMB  
PROJ. MGR.: JSW  
DESIGNED BY: TRS  
DRAWN BY: JCC  
CHECK BY: JCC  
SMB FEB 2020  
DRAWING INFORMATION:  
842640\_C18  
081120 tyhrs

JUNE 2020  
REV. PROJECT NO.  
842640

**C18**

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Issued for Bids: 6/12/2020 JSW 1

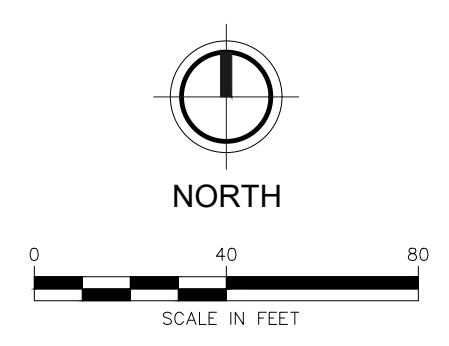
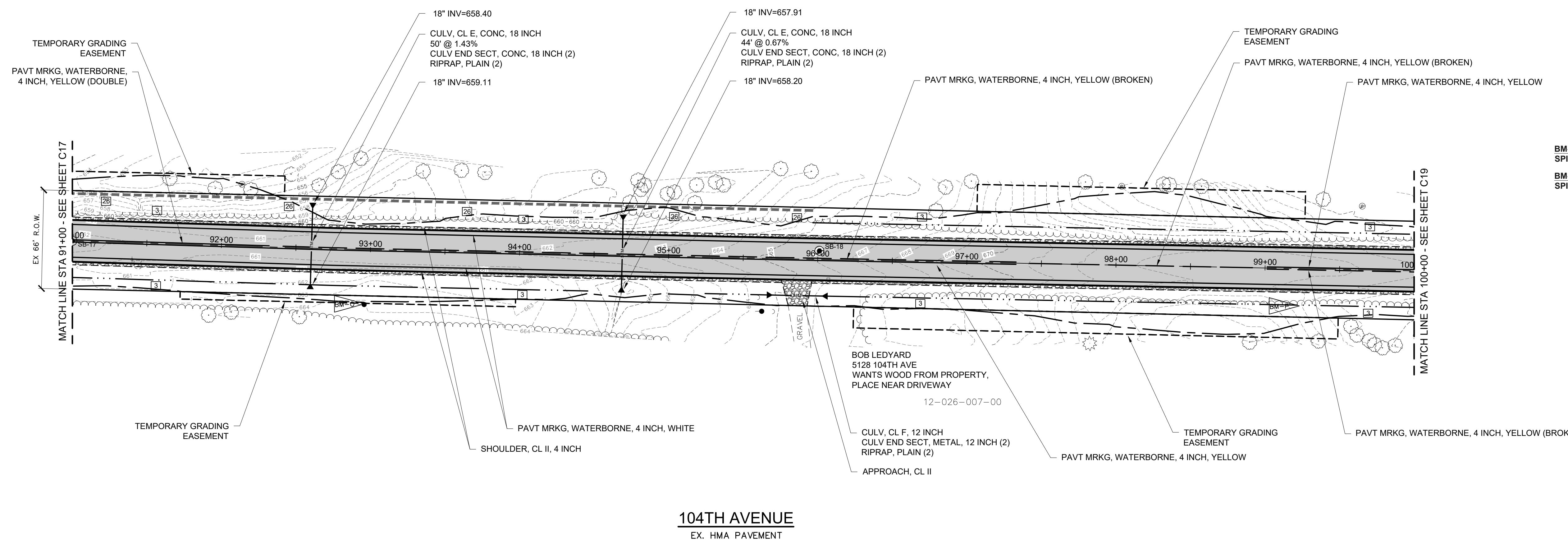


REVISION:

**ALLEGAN COUNTY ROAD COMMISSION**  
LEE TOWNSHIP, ALLEGAN COUNTY, MICHIGAN  
103RD AVENUE, 52ND STREET, & 104TH AVENUE RECONSTRUCTION  
**PLAN & PROFILES**

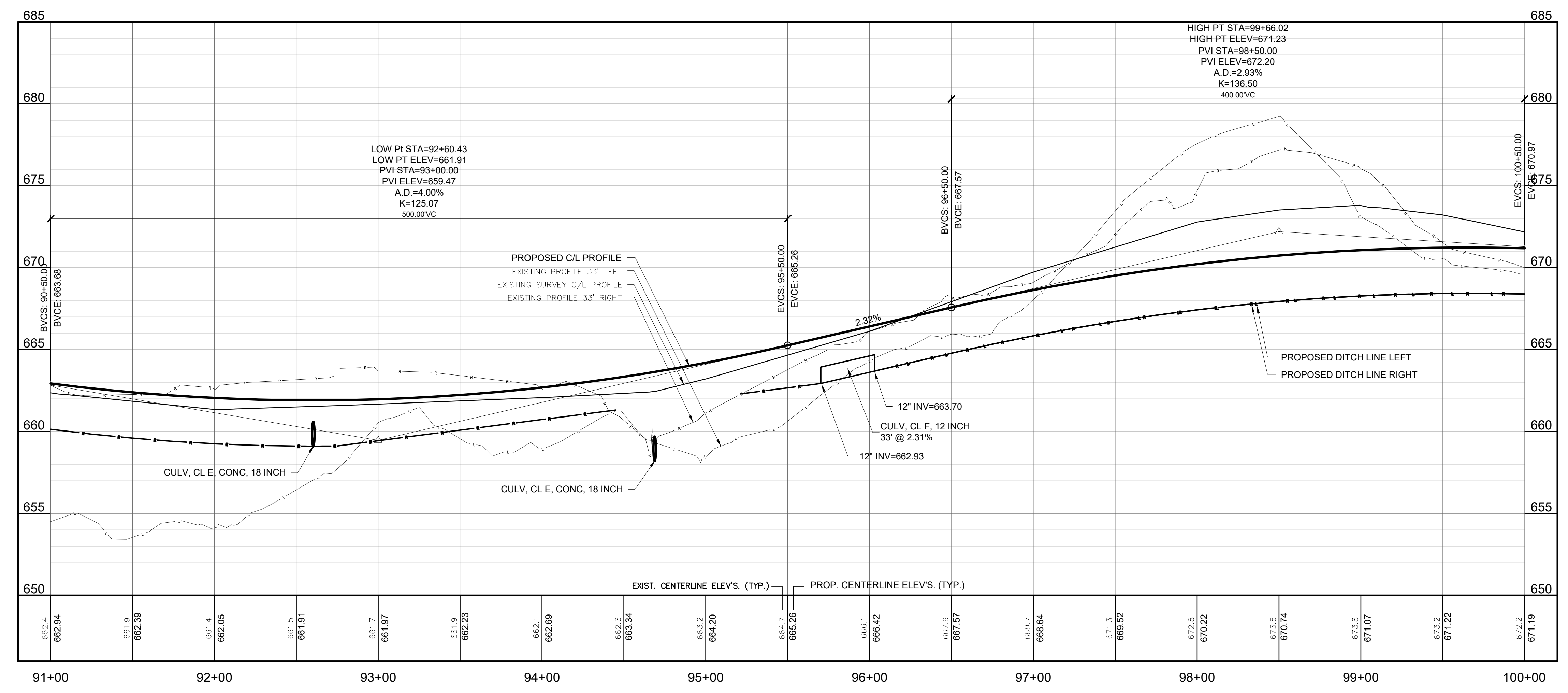
PROJ. NO.: 2019-001  
DESIGNED BY: TRS  
DRAWN BY: JCC  
CHECK BY:  
SMB FEB 2020  
DRAWING INFORMATION:  
842640\_C19  
061120 tyw/ks

JUNE 2020  
FAV PROJECT NO.  
842640



BM-O EL. 664.80'  
SPIKE/NAIL IN NORTH SIDE POWER POLE  
BM-P EL. 673.96'  
SPIKE/NAIL IN NORTH SIDE 24" OAK

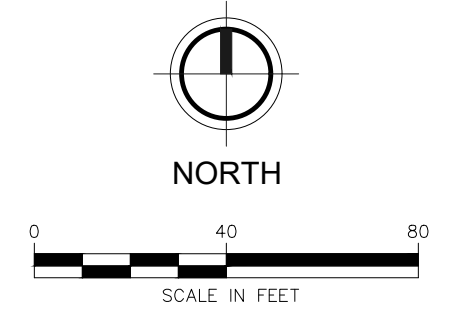
**104TH AVENUE**  
EX. HMA PAVEMENT



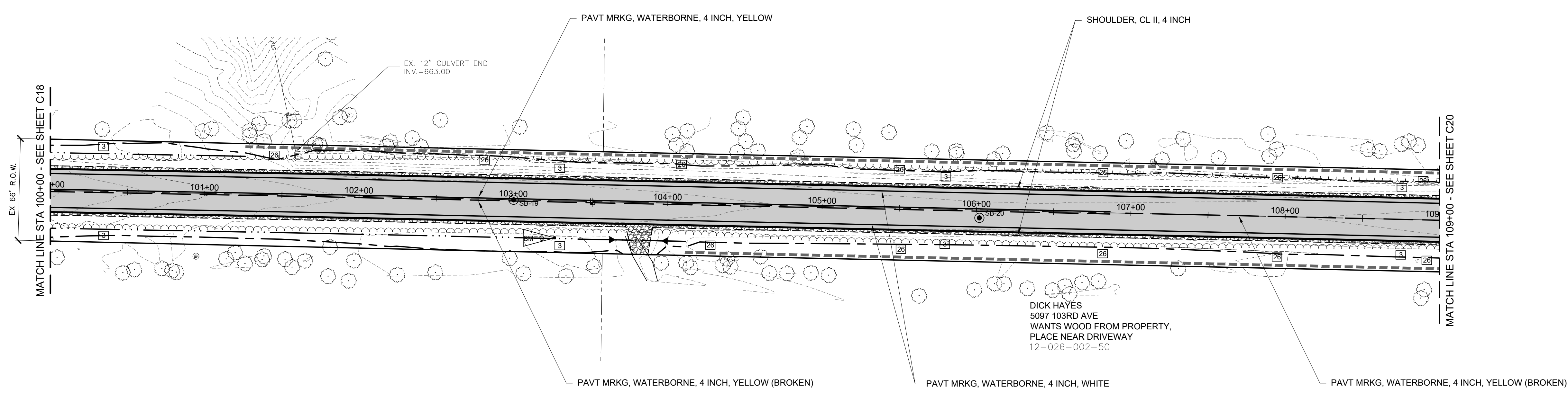
SOIL EROSION & SEDIMENTATION CONTROL MEASURES	
KEY	DETAIL
3	PERMANENT /TEMPORARY SEEDING
26	SILT FENCE

LEGEND	
	PROP. STORM CULVERT
	PROP. DITCH LINE
	PROP. SLOPE STAKE LINE
	PROP. FLARED END SECTION
	PROP. HMA PAVEMENT
	PROP. GRAVEL DRIVE / SHOULDER
	PROP. SILT FENCE
	SOIL BORING

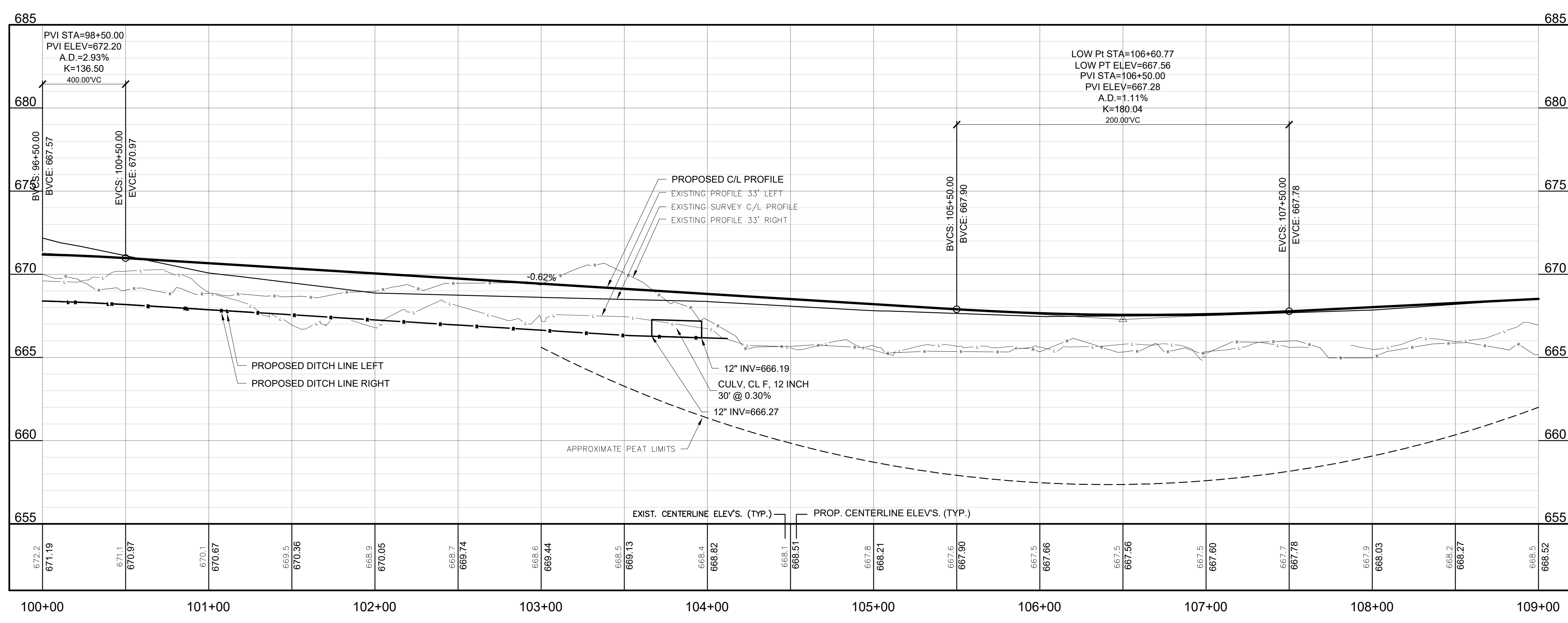
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BM-Q EL. 671.51'  
SPIKE IN EAST SIDE 42" MAPLE



**104TH AVENUE**  
EX. HMA PAVEMENT



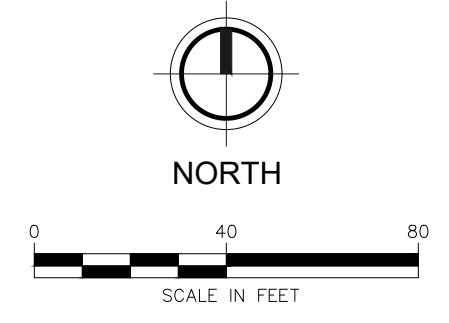
KEY	DETAIL
3	PERMANENT / TEMPORARY SEEDING
26	SILT FENCE

	PROP. STORM CULVERT
	PROP. DITCH LINE
	PROP. SLOPE STAKE LINE
	PROP. FLARED END SECTION
	PROP. HMA PAVEMENT
	PROP. GRAVEL DRIVE / SHOULDER
	PROP. SILT FENCE
	SOIL BORING

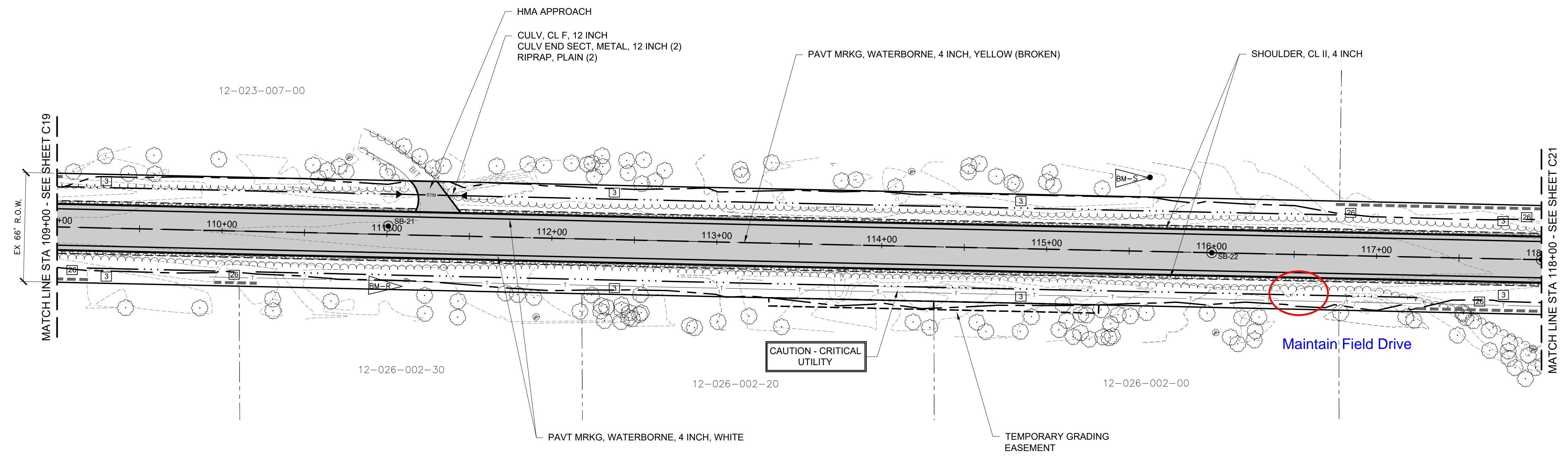
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Issued for Bids: 6/12/2020 JSW 1

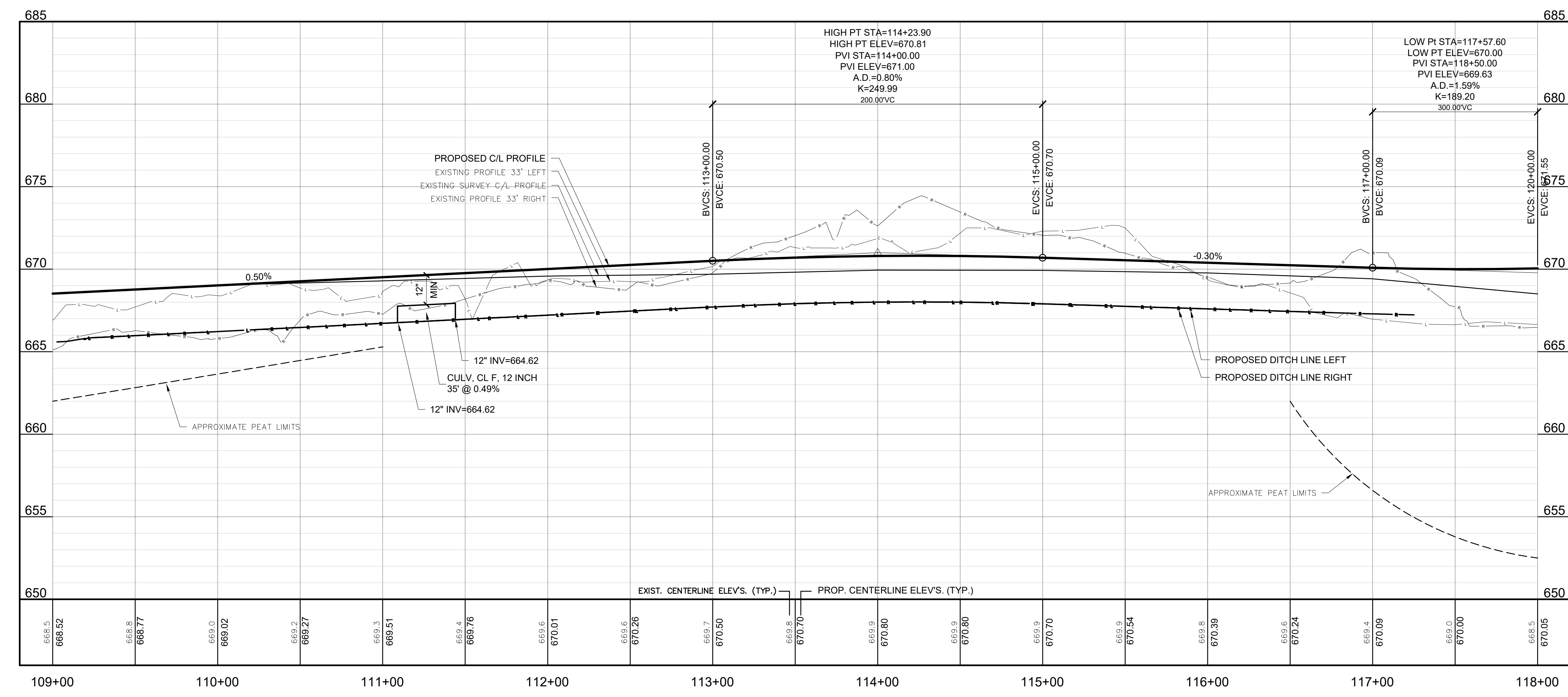




BM-R EL. 668.60'  
SPIKE/NAIL IN NORTH SIDE 24" POPLAR  
BM-S EL. 672.53'  
SPIKE IN SOUTH SIDE POWER POLE



**104TH AVENUE**  
EX. HMA PAVEMENT



**SOIL EROSION & SEDIMENTATION CONTROL MEASURES**

KEY	DETAIL
3	PERMANENT /TEMPORARY SEEDING
26	SILT FENCE

**LEGEND**

	PROP. STORM CULVERT
	PROP. DITCH LINE
	PROP. SLOPE STAKE LINE
	PROP. FLARED END SECTION
	PROP. HMA PAVEMENT
	PROP. GRAVEL DRIVE / SHOULDER
	PROP. SILT FENCE
	SOIL BORING

ALLEGAN COUNTY ROAD COMMISSION  
LEE TOWNSHIP, ALLEGAN COUNTY, MICHIGAN  
103RD AVENUE, 52ND STREET, & 104TH AVENUE RECONSTRUCTION  
PLAN & PROFILES

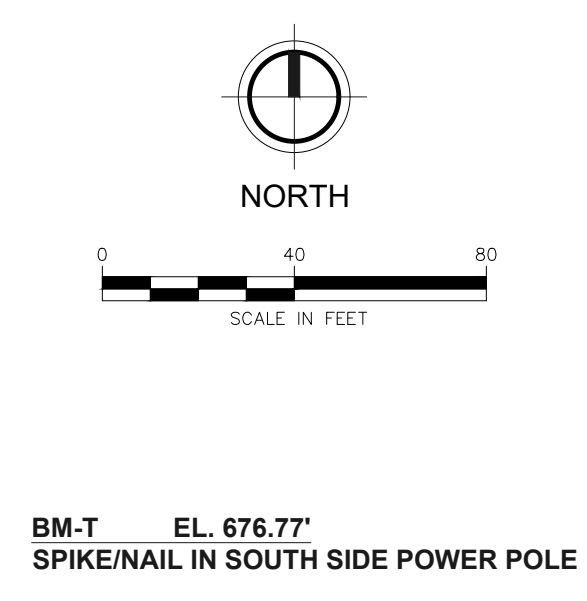
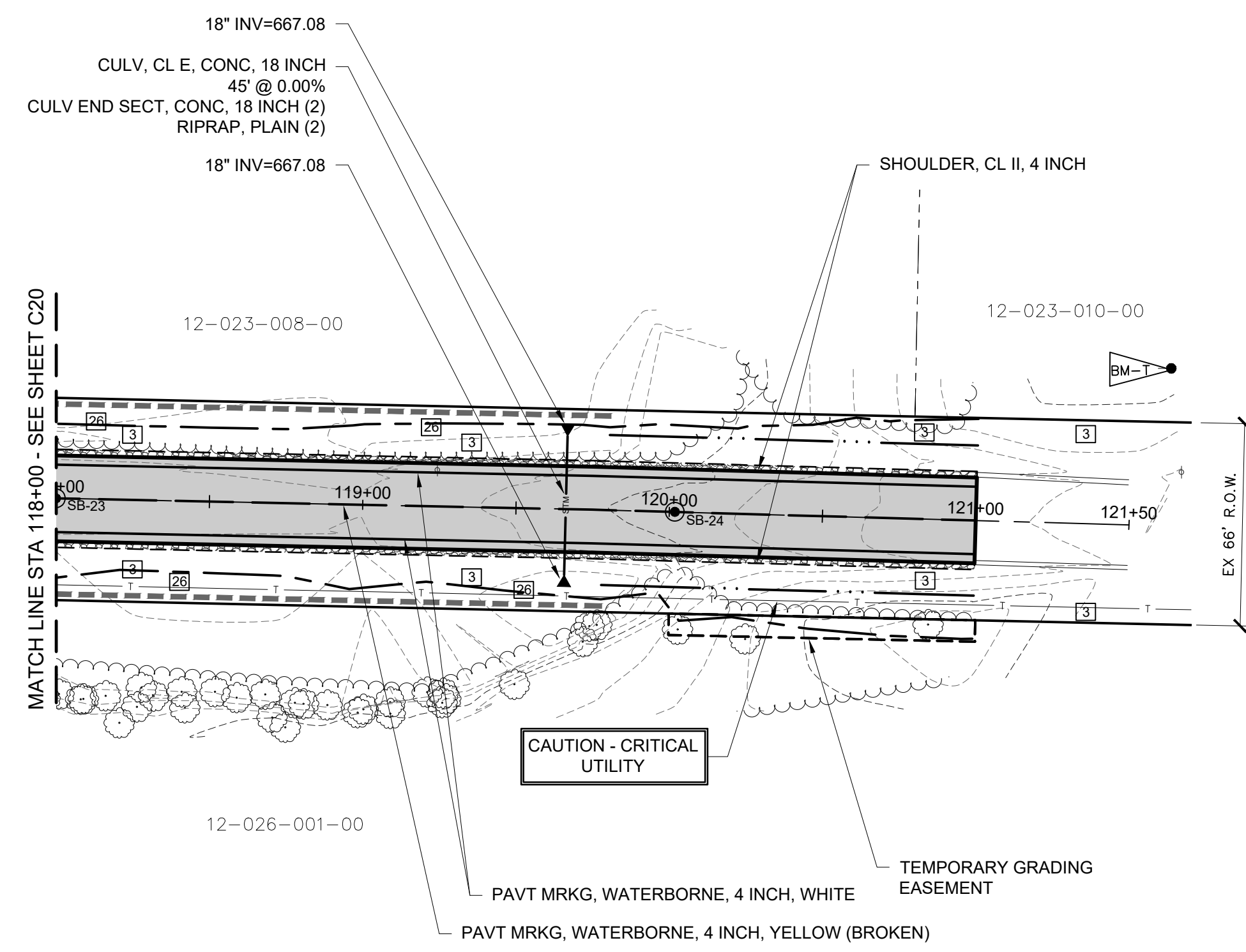
DESIGN TEAM: PROJ. MGR.: JMW  
DESIGNED BY: TRS  
DRAWN BY: RJC  
CHECK BY:  
SMB FEB 2020  
DRAWING INFORMATION:  
842640\_C21  
06520 tyhrs

JUNE 2020  
F&V PROJECT NO.  
842640

**C21**

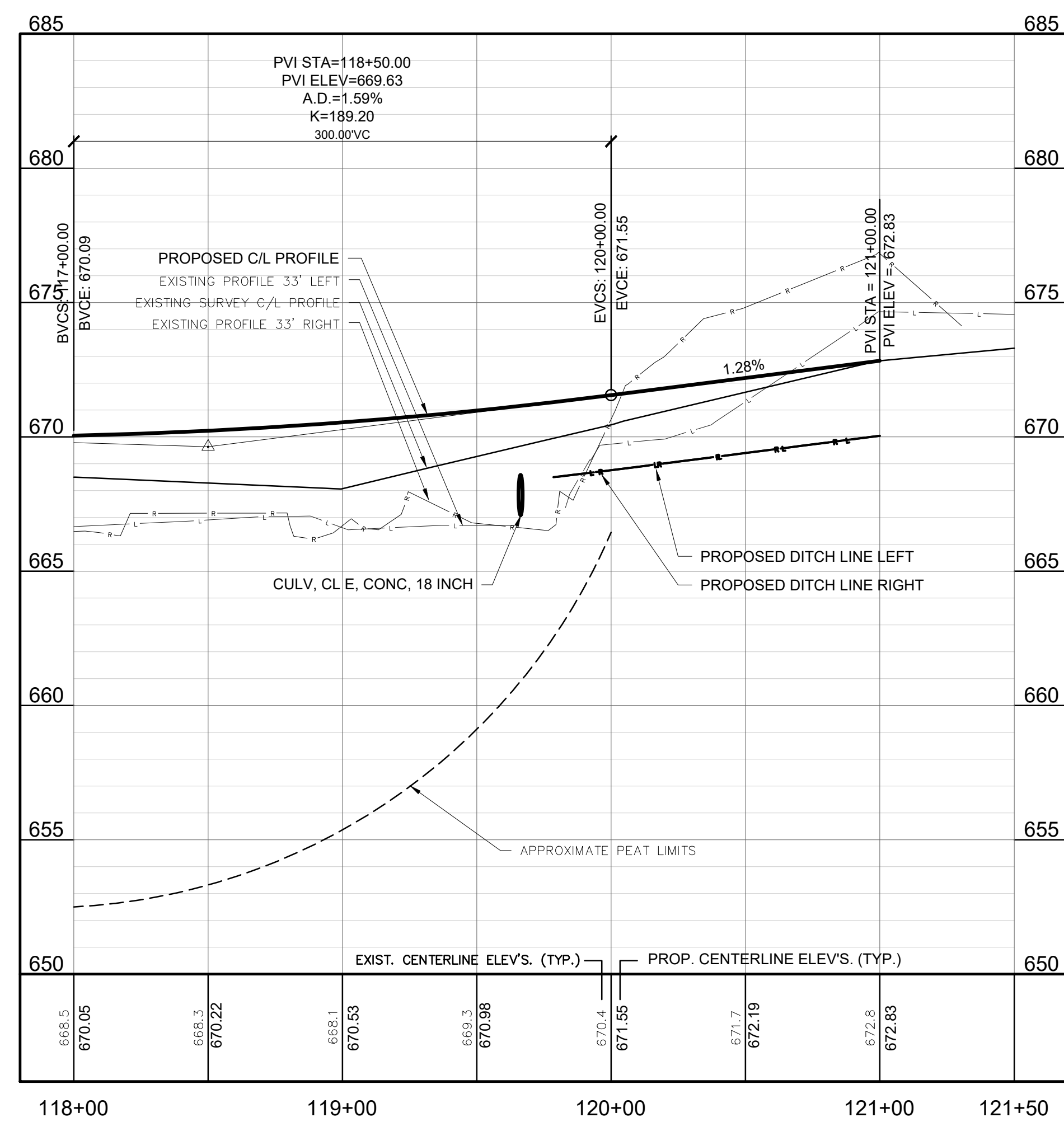
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Issued for Bids: 6/12/2020 JSW 1



BM-T EL. 676.77  
SPIKE/NAIL IN SOUTH SIDE POWER POLE

**104TH AVENUE**  
EX. HMA PAVEMENT



SOIL EROSION & SEDIMENTATION CONTROL MEASURES	
KEY	DETAIL
3	PERMANENT /TEMPORARY SEEDING
26	SILT FENCE

- LEGEND**
- PROP. STORM CULVERT
  - PROP. DITCH LINE
  - PROP. SLOPE STAKE LINE
  - PROP. FLARED END SECTION
  - PROP. HMA PAVEMENT
  - PROP. GRAVEL DRIVE / SHOULDER
  - PROP. SILT FENCE
  - SOIL BORING

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**FLEISCHMANN**  
DESIGN. BUILD. OPERATE.

4798 Campus Drive  
Kalamazoo, MI 49008  
P: 269.385.0011  
F: 269.382.6972

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REVISION:

**ALLEGAN COUNTY ROAD COMMISSION**  
LEE TOWNSHIP, ALLEGAN COUNTY, MICHIGAN  
103RD AVENUE, 52ND STREET, & 104TH AVENUE RECONSTRUCTION  
**PLAN & PROFILES**

DESIGN TEAM:	PROJ. MGR.:	SRW
	DESIGNED BY:	TRB
	DRAWN BY:	RCG
	CHECK BY:	
	SMB	FEB 2020
DRAWING INFORMATION:		
842640_C22		
061120 tyers		

JUNE 2020  
F&V PROJECT NO.  
842640

**C22**

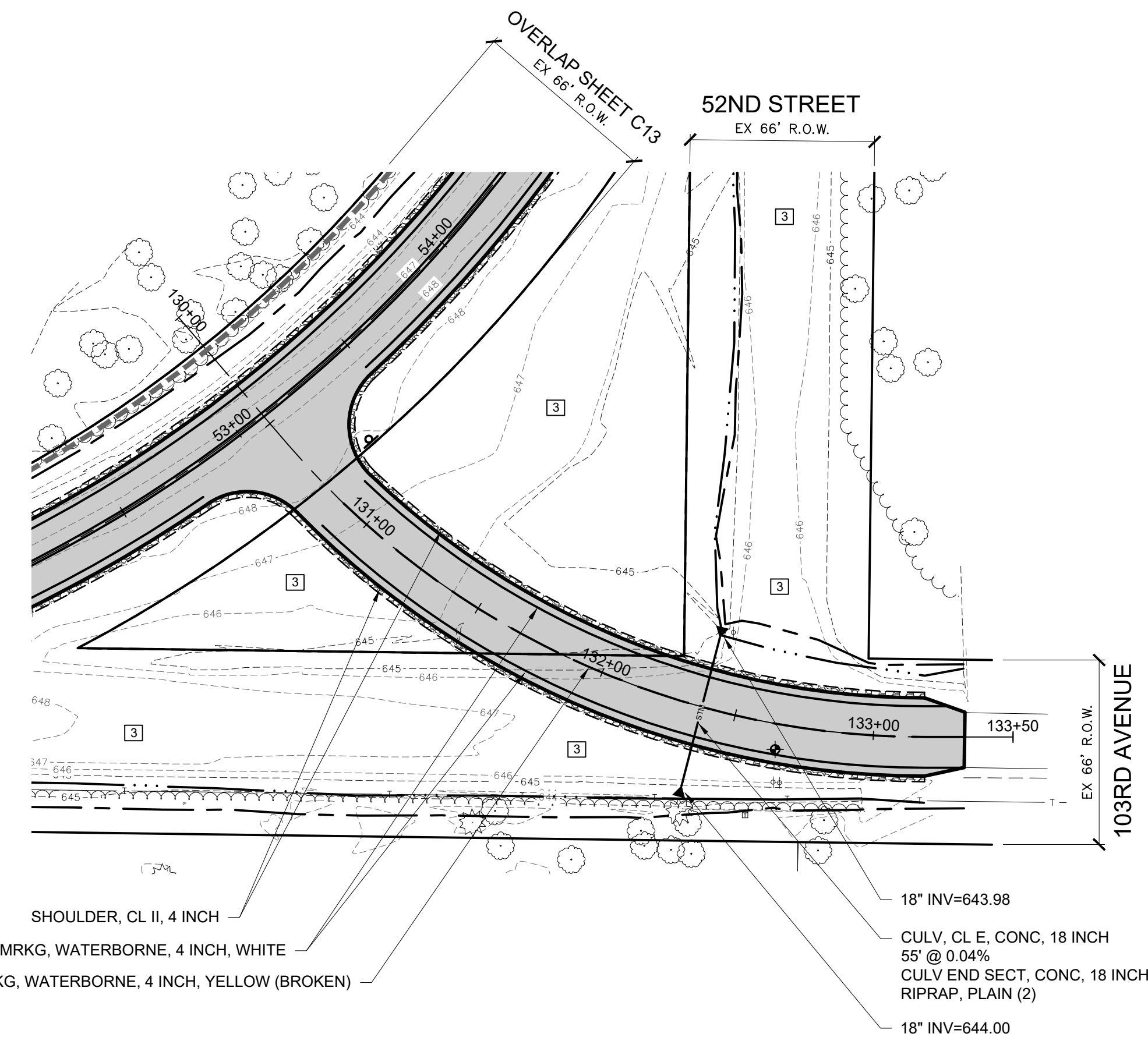


REVISION:

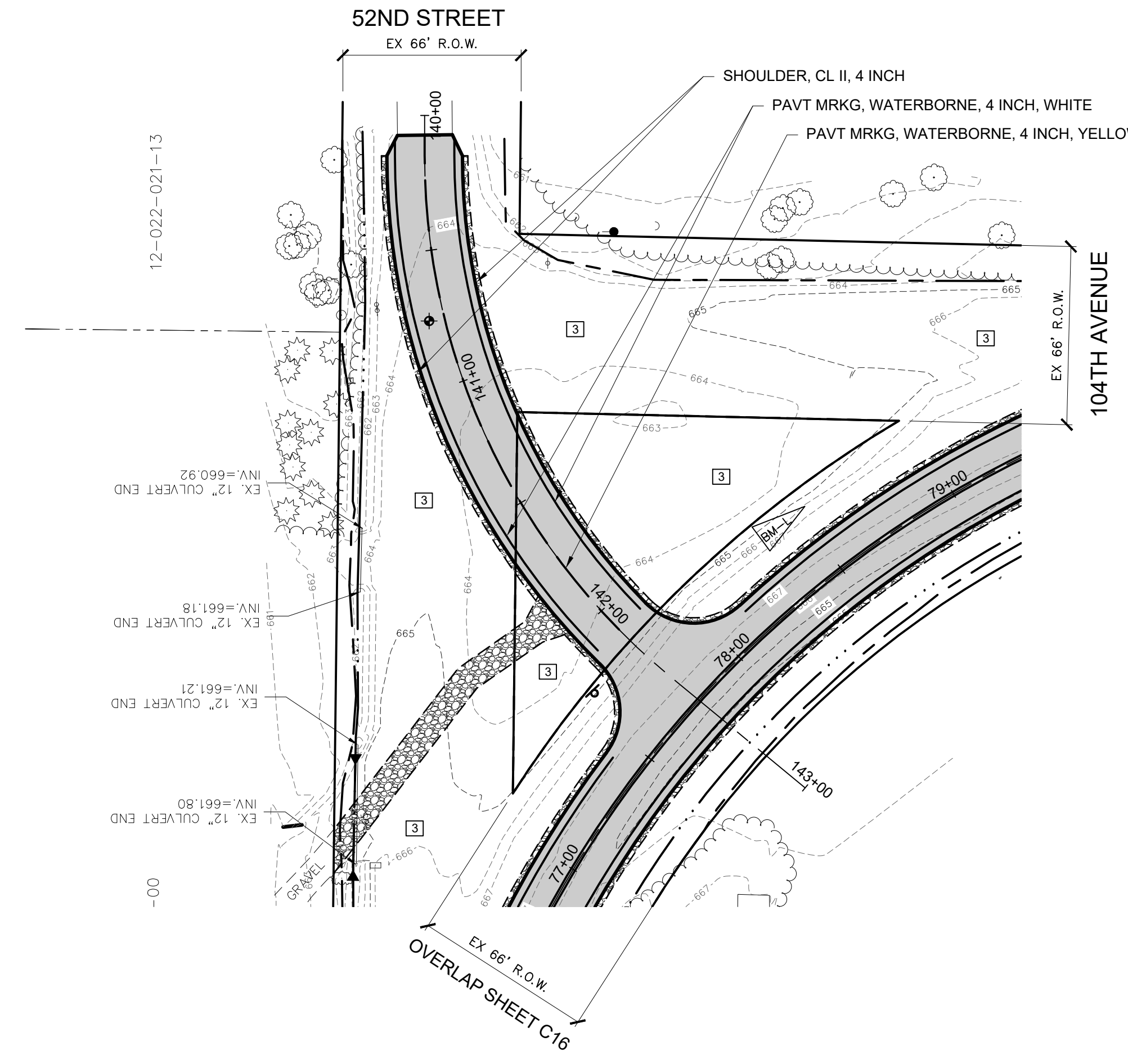
**ALLEGAN COUNTY ROAD COMMISSION**  
LEE TOWNSHIP, ALLEGAN COUNTY, MICHIGAN  
**103RD AVENUE, 52ND STREET, & 104TH AVENUE RECONSTRUCTION**  
**PLAN & PROFILES**

DESIGN TEAM: PROJ. MGR.: JSW  
DRAWN BY: TRS  
CHECK BY: RJC  
SMB FEB 2020  
DRAWING INFORMATION:  
842640\_C23  
060520 tyers

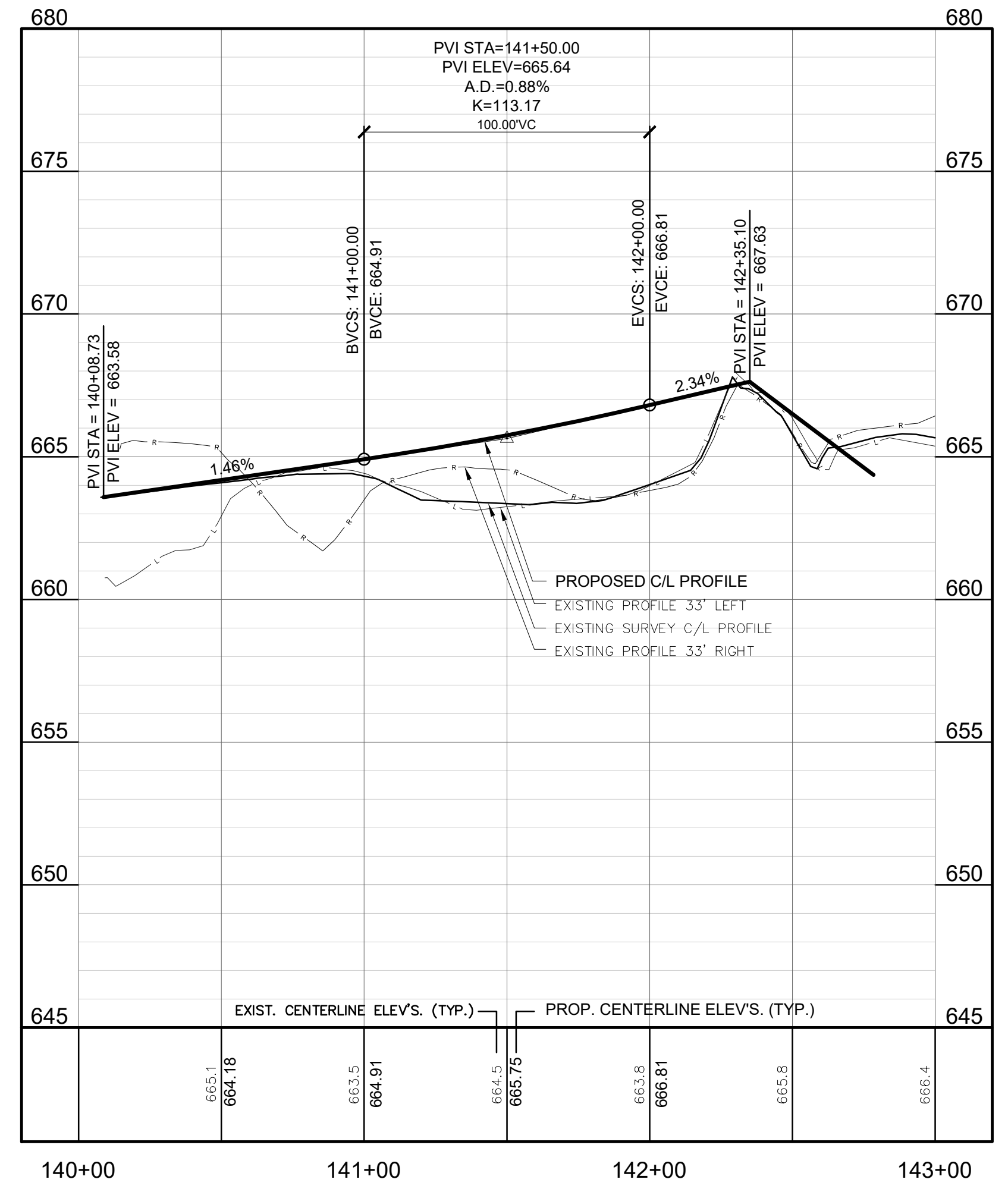
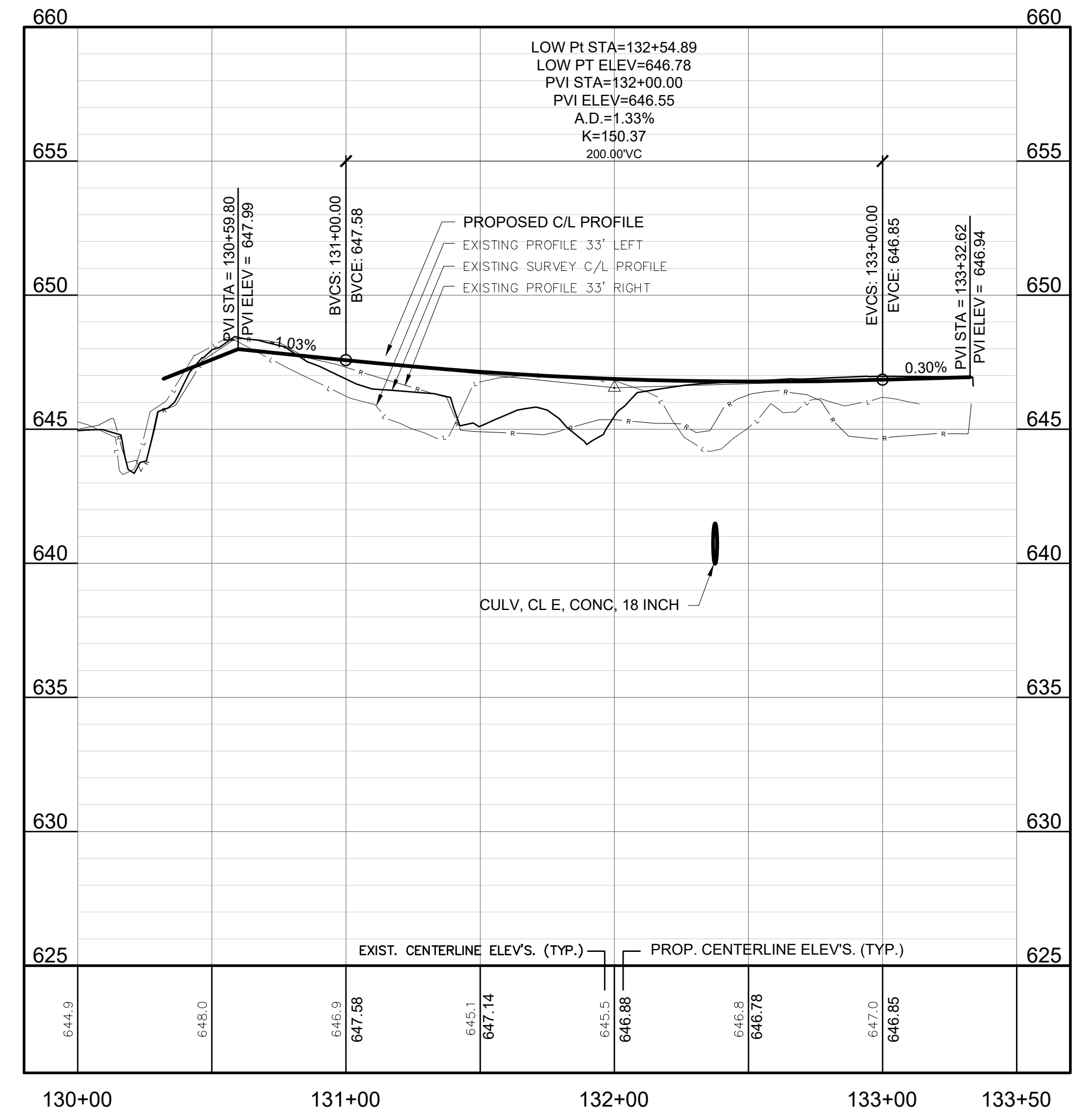
JUNE 2020  
REV. PROJECT NO.  
842640



**103RD AVENUE**  
EX. HMA PAVEMENT



**52ND STREET**  
EX. HMA PAVEMENT



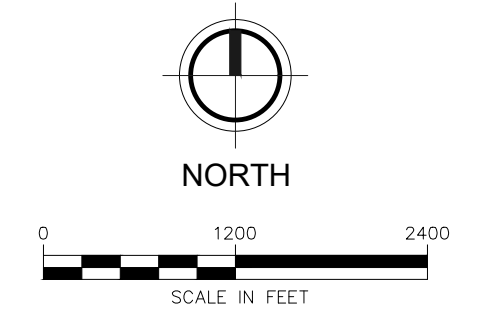
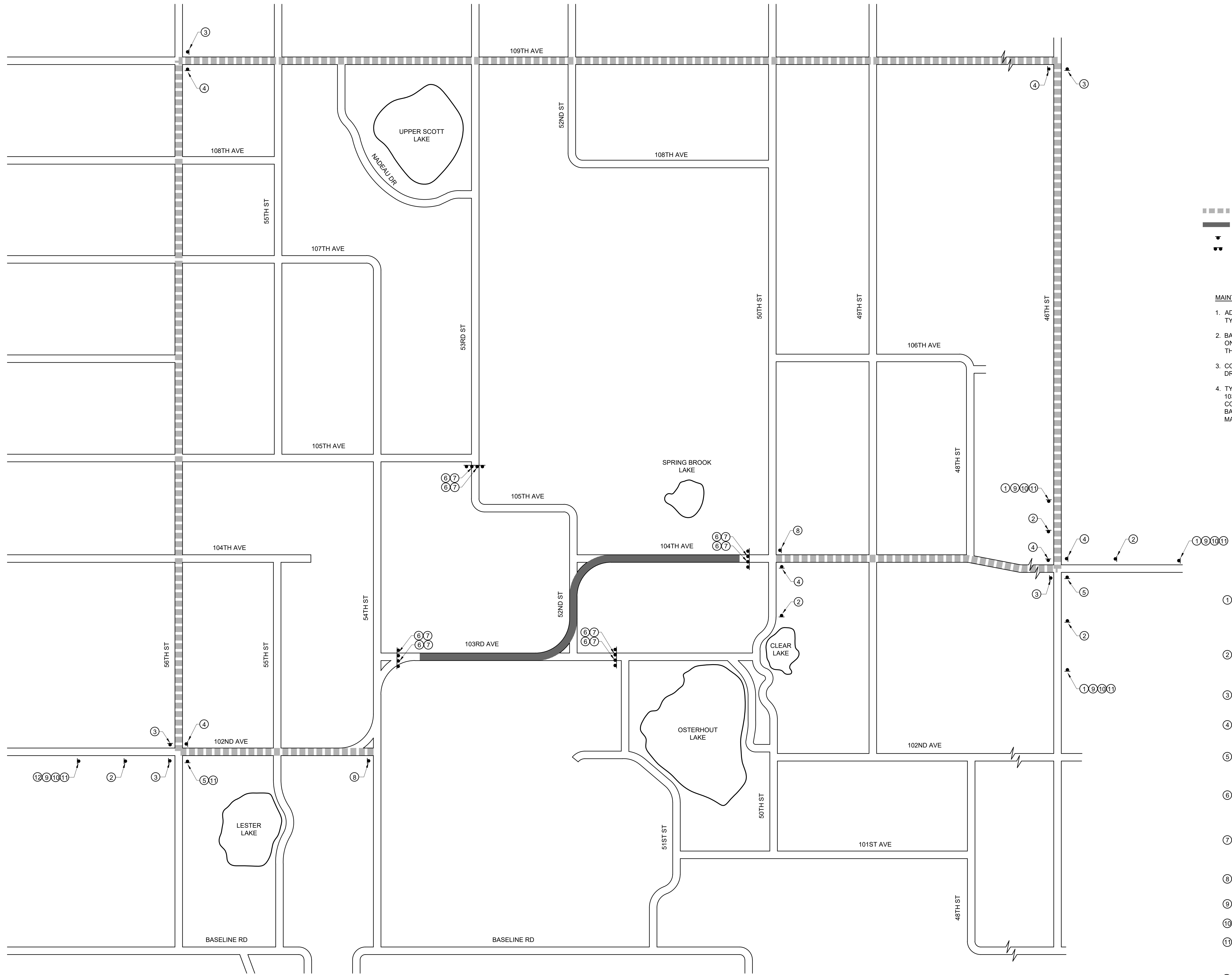
**SOIL EROSION & SEDIMENTATION CONTROL MEASURES**

KEY	DETAIL
3	PERMANENT /TEMPORARY SEEDING

- LEGEND**
- STM — PROP. STORM CULVERT
  - · · · — PROP. DITCH LINE
  - - - - PROP. SLOPE STAKE LINE
  - ▶ PROP. FLARED END SECTION
  - PROP. HMA PAVEMENT
  - ▨ PROP. GRAVEL DRIVE / SHOULDER
  - - - - PROP. SILT FENCE
  - SB-1 SOIL BORING

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 User: jrb  
 Plot: 842640\_C24.dwg - 6/16/2020 10:12 AM



**LEGEND**

- ▬▬▬▬ DETOUR ROUTE
- ▬▬▬▬ PROJECT LOCATION
- ▼ SIGN
- ▬▬ BARRICADE, TYPE III, HIGH INTENSITY, LIGHTED

**MAINTAINING TRAFFIC NOTES:**

1. ADVANCE SIGNING PER MDOT MAINTAINING TRAFFIC TYPICAL M0040A.
2. BARRICADES, PLASTIC DRUMS, AND SIGNS PAID FOR ONE TIME ONLY REGARDLESS OF HOW MANY TIMES THEY ARE USED DURING CONSTRUCTION.
3. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONSTRUCTION.
4. TYPICAL ADVANCE SIGNING IS SHOWN FOR WORK ON 103RD AVENUE, 52ND STREET, & 104TH AVENUE. CONTRACTOR IS RESPONSIBLE FOR RELOCATING BARRICADES, PLASTIC DRUMS, AND SIGNS, AND MAINTAINING TRAFFIC AS APPROVED BY ENGINEER.

①		W20-3 (48" x 48") 16 SR TYPE B SIGN
②		W20-2 (48" x 48") 16 SR TYPE B SIGN
③		M4-9L (30"x24") 5 SR TYPE B SIGN
④		M4-9R (30"x24") 5 SR TYPE B SIGN
⑤		M4-9 (30" x 24") 5 SR TYPE B SIGN
⑥		R11-3 (60" x 30") 12.5 SR TYPE B SIGN MOUNT ON SEPARATE POSTS ABOVE AND BEHIND BARRICADE
⑦		BARRICADE, TYPE III, HIGH INTENSITY, LIGHTED
⑧		M4-8a (24" x 12") 2 SR TYPE B SIGN
⑨		D3-1 (24" x 12") 3 SR TYPE B SIGN
⑩		D3-1 (24" x 12") 3 SR TYPE B SIGN
⑪		D3-1 (24" x 12") 3 SR TYPE B SIGN
⑫		W20-1 (48" x 48") 16 SR TYPE B SIGN

**TYPICAL ADVANCE SIGNING**

REVISION:

**ALLEGAN COUNTY ROAD COMMISSION**  
 LEE TOWNSHIP, ALLEGAN COUNTY, MICHIGAN  
**103RD AVENUE, 52ND STREET, & 104TH AVENUE RECONSTRUCTION**  
**MAINTAINING TRAFFIC PLAN**

DESIGN TEAM: PROJ MGR: JRB  
 DESIGNED BY: TRS  
 DRAWN BY: JCC  
 CHECKED BY:

SMB FEB 2020

DRAWING INFORMATION:  
842640\_C24  
060520 tyler

JUNE 2020  
 F&V PROJECT NO.  
 842640

**C24**

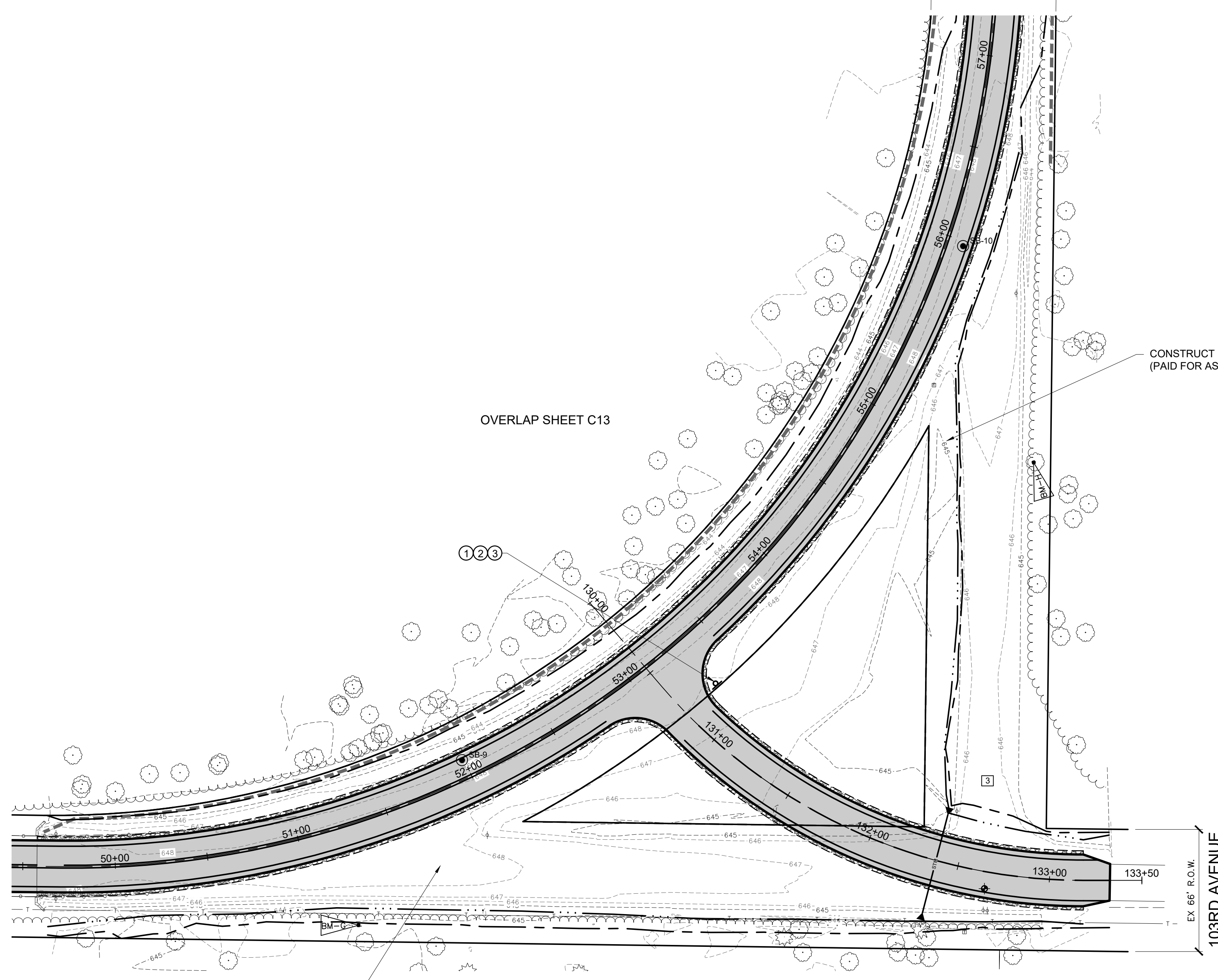


4798 Campus Drive  
 Kalamazoo, MI 49008  
 P: 269.385.0011  
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52ND STREET  
EX 66' R.O.W.



OVERLAP SHEET C13

103RD AVENUE  
EX. HMA PAVEMENT

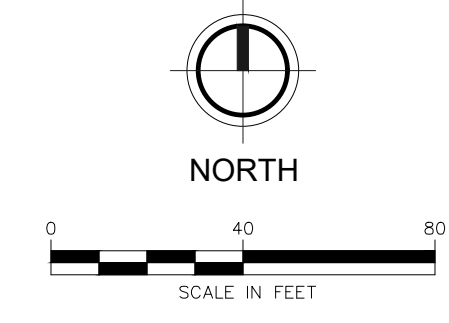
CONSTRUCT BERM VISIBLE FROM EASTBOUND TRAFFIC  
(PAID FOR AS STATION GRADING)

CONSTRUCT BERM VISIBLE FROM SOUTHBOUND TRAFFIC  
(PAID FOR AS STATION GRADING)

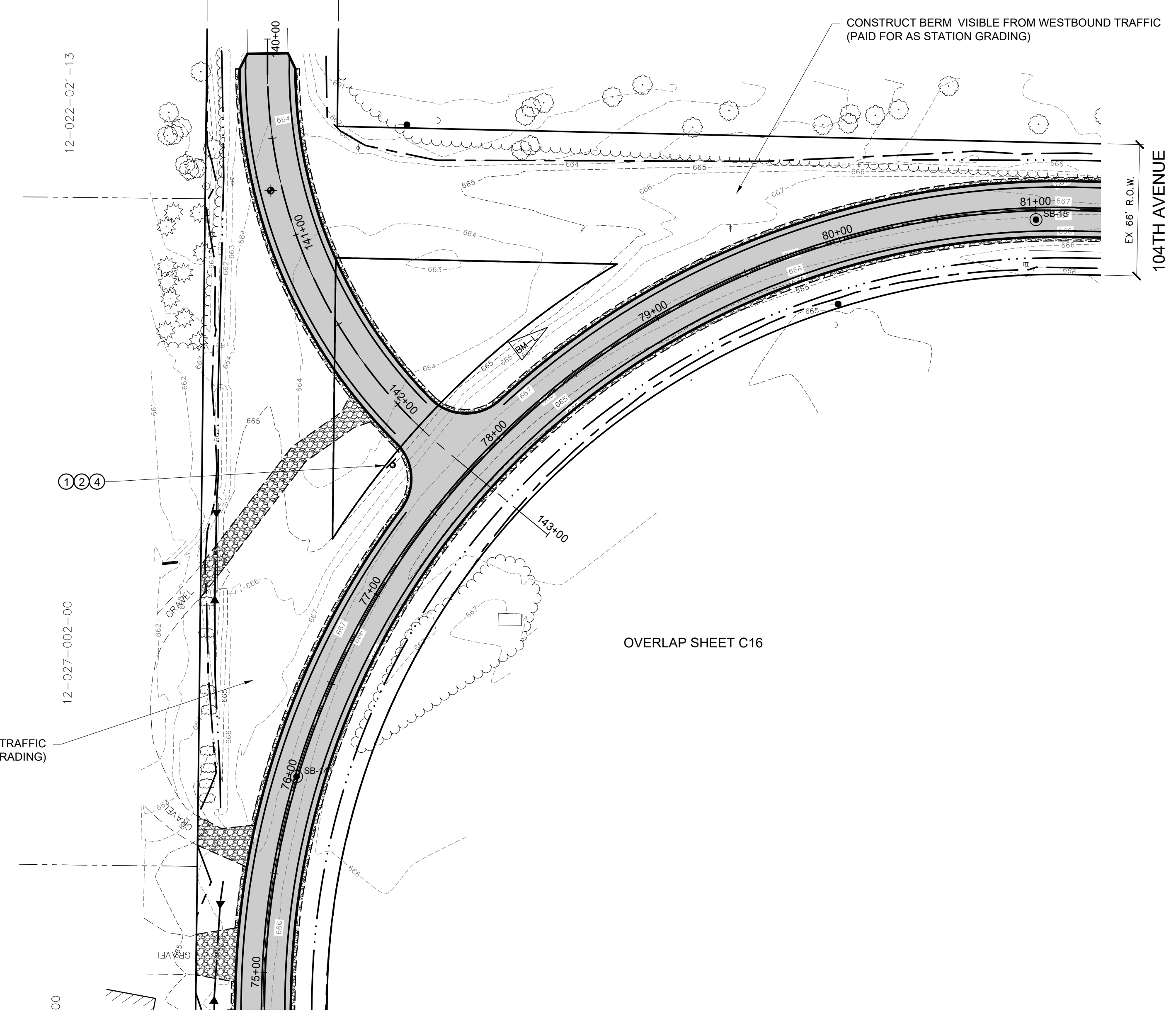
CONSTRUCT BERM VISIBLE FROM NORTHBOUND TRAFFIC  
(PAID FOR AS STATION GRADING)

LEGEND

- STM — PROP. STORM CULVERT
- - - PROP. DITCH LINE
- ▶ PROP. FLARED END SECTION
- ▭ PROP. HMA PAVEMENT
- ▨ PROP. GRAVEL DRIVE / SHOULDER
- - - PROP. SILT FENCE
- SB-1 SOIL BORING
- ① R1-1 (30"x30")  
6.25 SFT TYPE IIIA SIGN  
POST, STEEL, 3 LB
- ② D3-1 (24"x6")  
2 SFT TYPE IIIB SIGN
- ③ D3-1 (24"x6")  
2 SFT TYPE IIIB SIGN
- ④ D3-1 (24"x6")  
2 SFT TYPE IIIB SIGN



52ND STREET  
EX 66' R.O.W.



OVERLAP SHEET C16

52ND STREET  
EX. HMA PAVEMENT

REVISION:

**ALLEGAN COUNTY ROAD COMMISSION**  
LEE TOWNSHIP, ALLEGAN COUNTY, MICHIGAN  
103RD AVENUE, 52ND STREET, & 104TH AVENUE RECONSTRUCTION  
**INTERSECTION DETAILS**

DESIGN TEAM:	PROJ. MGR.: JSW
	DESIGNED BY: TRS
	DRAWN BY: JCC
	CHECK BY:
SMB	FEB 2020
DRAWING INFORMATION:	
842640_C25	
86520 bytes	

JUNE 2020  
F&V PROJECT NO.  
842640

**C25**

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REVISION:

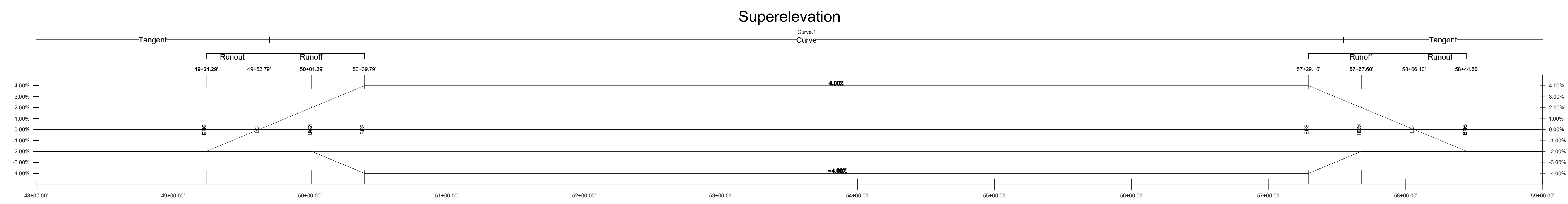
**ALLEGAN COUNTY ROAD COMMISSION**  
LEE TOWNSHIP, ALLEGAN COUNTY, MICHIGAN  
**103RD AVENUE, 52ND STREET, & 104TH AVENUE RECONSTRUCTION**  
SUPERELEVATION CURVE PAVEMENT PROFILES & CROSS SECTIONS

DESIGN TEAM:	PROJ. MGR.: JSW
	DESIGNED BY: TRS
	DRAWN BY: JCC
	CHECKED BY:
SMB	FEB 2020
DRAWING INFORMATION:	
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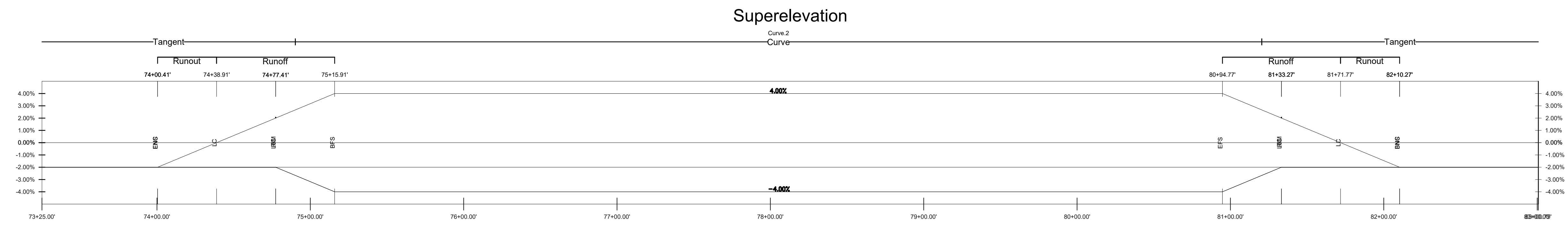
JUNE 2020  
F&V PROJECT NO.  
842640

**C26**

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**52ND STREET & 104TH AVENUE - FULL SUPERELEVATION  
PAVEMENT PROFILES & CROSS SECTIONS**  
SCALE: 1"=40' HORIZ.



**103RD AVENUE & 52ND STREET - FULL SUPERELEVATION  
PAVEMENT PROFILES & CROSS SECTIONS**  
SCALE: 1"=40' HORIZ.