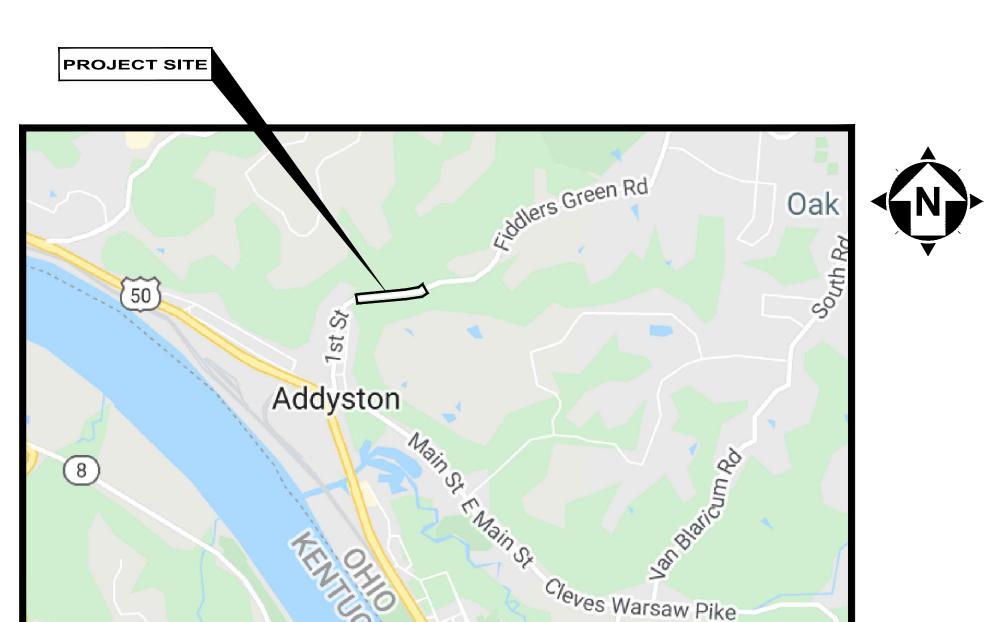
# VILLAGE OF ADDYSTON HAMILTON COUNTY, OHIO

# 1ST STREET STABILIZATION

210766



**VICINITY MAP** 

Fernbank Park

NOT TO SCALE

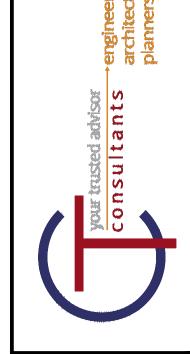
TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS THERETO SHALL GOVERN THIS IMPROVEMENT.

#### SOURCE OF BOUNDARY INFORMATION

THE SURVEY INFORMATION SHOWN ON THESE PLANS IS BASED UPON A SURVEY PERFORMED BY CT CONSULTANTS, INC. IN FEBRUARY 2020.

	INDEX	OF SHEETS
NO.	DWG NAME	SHEET NAME
1	TTL	TITLE
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5	PNP2	PLAN & PROFILE 13+00 - 18+15
6	XSEC	CROSS SECTIONS
7	WALL PLAN	TEST BORING LOGS
8	МОТ	MAINTENANCE OF TRAFFIC
9	EROS	EROSION CONTROL





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SIABILIZATION	<b>DATE</b> : 09/11/2024		•
DYSTON, OH -	DESIGNED BY: RIAD		
	DRAWN BY: RLAD		
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	CHECKED BY: SRIG		

O.D.O.T. SPECIFICATIONS

THE LATEST STANDARD SPECIFICATIONS OF THE OHIO DEPARTMENT OF

		PROJE	CT NO:	
		210	766	
		DRAWIN	IG NAME	
		Т	ГL	
		SHEET	OF	
SHAWN RIGGS , VILLAGE ENGINEER	PE #84714	1	9	
				-

**VILLAGE OF ADDYSTON OFFICIALS** 

MAYOR LISA MEAR

**VILLAGE CLERK** 

MARGARET ANN DOZIER

VILLAGE COUNCIL

AL GICK

PAM JACKSON

CATHY NIXON-BYESS

DAN PILLOW

ANN PILLOW

JENNIFER WIEHE

#### **GENERAL NOTES**

#### CONSTRUCTION STIPULATION

THE CONTRACTOR SHALL NOT STORE MATERIALS AND EQUIPMENT, OPERATE EQUIPMENT ON OR OVER PROPERTY OTHER THAN THE PUBLIC RIGHT-OF-WAY OR AREAS THAT ARE A PART OF THE PROJECT CONSTRUCTION. THE CONTRACTOR SHALL LIMIT THEIR WORK AREA TO THE EASEMENTS AND RIGHTS-OF-WAY SHOWN ON THESE PLANS UNLESS WRITTEN PERMISSION IS GIVEN BY THE PROPERTY OWNER AND APPROVED BY THE VILLAGE OF ADDYSTON.

THE CONTRACTOR SHALL SUBMIT, IN WRITING, A SCHEDULE OF OPERATIONS TO THE ENGINEER AND RECEIVE APPROVAL BEFORE STARTING WORK ON THIS PROJECT.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ORGANIZE THE WORK IN SUCH A MANNER TO PROVIDE THE MOST SAFETY WITH THE LEAST INCONVENIENCE TO THE PUBLIC.

#### MAINTAINING STREET TRAFFIC

THE CONTRACTOR SHALL BE ALLOWED TO CLOSE 1ST STREET WITHIN THE PROJECT LIMITS DURING WORK HOURS.

THE CONTRACTOR SHALL MAINTAIN TRAFFIC TO ALL ROADWAYS INTERSECTING THE CONSTRUCTION AREAS.

WORK HOURS SHALL BE LIMITED TO THE HOURS OF 8:00 A.M. TO 4:00 P.M., MONDAY THROUGH FRIDAY.

ALL MAINTENANCE OF TRAFFIC PROCEDURES SHALL MEET THE REQUIREMENTS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND ODOT STANDARD SPECIFICATIONS. THE CONTRACTOR SHALL PROVIDE SUFFICIENT SIGN, WARNING LIGHTS, BARRICADES, DETOUR SIGNS, OR OTHER NECESSARY DEVICES TO MAKE THE SITE SAFE TO THE TRAVELING PUBLIC. THE COST FOR THESE MAINTENANCE OF TRAFFIC ITEMS SHALL BE INCLUDED WITH MAINTENANCE OF TRAFFIC LUMP SUM.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO SUBMIT TO THE ENGINEER AND THE OWNER A TRAFFIC CONTROL PLAN FOR THIS PROJECT.

PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE VILLAGE OF ADDYSTON POLICE DEPARTMENT AND FIRE DEPARTMENT. AT ALL TIMES, EMERGENCY VEHICLES SHALL BE GIVEN ACCESS.

DURING NON-WORK HOURS, THE EXISTING PAVEMENT SHALL BE CLEAR OF ALL CONSTRUCTION EQUIPMENT AND MATERIAL TO PROVIDE ACCESS FOR OWNERS AND EMERGENCY VEHICLES TO ALL PROPERTIES ON 1ST STREET.

#### MATERIALS AND SPECIFICATIONS

ALL CONSTRUCTION SHALL CONFORM TO THESE PLANS AND SPECIFICATIONS, AND THE 2023 OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS THERETO.

UNLESS OTHERWISE SPECIFIED, ALL MATERIALS SHALL BE NEW. BOTH WORKMANSHIP AND MATERIALS SHALL BE OF PREMIUM QUALITY, PROPER AND SUFFICIENT FOR THE PURPOSE CONTEMPLATED. THE CONTRACTOR SHALL FURNISH, IF SO REQUIRED, SATISFACTORY EVIDENCE AS TO TYPE AND QUALITY OF MATERIALS AND WORKMANSHIP.

ALL ITEMS OF EQUIPMENT AND/OR MATERIAL PROPOSED BY THE CONTRACTOR FOR SUBSTITUTIONS MUST BE APPROVED BY THE ENGINEER IN WRITING AND SHALL BE EQUAL OR SUPERIOR TO THE ITEMS SPECIFIED IN THE CONTRACT DOCUMENTS. IF SAID SUBSTITUTION PROPOSED BY THE CONTRACTOR FOR A SPECIFIED ITEM REQUIRES ENGINEERING REVISIONS, THE TOTAL EXPENSE OF SAID REVISIONS SHALL BE PAID BY THE CONTRACTOR.

ANY ITEMS OF LABOR AND MATERIALS REQUIRED BUT NOT SHOWN AS A SEPARATE PAY ITEM IN THE PROPOSAL SHALL BE FURNISHED AND INSTALLED AS INCIDENTAL TO THE CONTRACT, EXCEPT AS NOTED IN THE PLANS AND SPECIFICATIONS.

#### **OPEN TRENCHES**

ALL OPEN TRENCHES FOR STORM SEWERS, WATER MAINS, ETC., SHALL BE PROPERLY DELINEATED FROM THE TRAVELED ROADWAY BY REFLECTIVE DRUMS. TRENCHES SHALL EITHER BE BACKFILLED OR COVERED FOR ANY EXTENDED PERIODS OF NO CONSTRUCTION IN ORDER TO MAINTAIN CONTINUOUS TWO-WAY TRAFFIC, PART WIDTH CONSTRUCTION AND OFF PEAK TRAFFIC VOLUME PERIODS SHALL BE UTILIZED TO CONSTRUCT ANY REQUIRED UTILITY CROSSOVERS, LATERALS, OR CATCH BASIN LEADS WITHIN THE TRAVELED ROADWAY.

#### PERMITS

THE CONTRACTOR SHALL OBTAIN ALL PERMITS AND PAY ALL CHARGES AND FEES AS MAY BE NECESSARY AND REQUIRED BY THE VILLAGE OR STATE. NO CONSTRUCTION SHALL COMMENCE UNTIL ALL HAMILTON COUNTY AND THE VILLAGE OF ADDYSTON PERMITS HAVE BEEN ISSUED AS REQUIRED.

#### RESPONSIBILITY

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM HIS WORK IN SUCH A MANNER AS NOT TO DAMAGE OR DESTROY ANY EXISTING FEATURE, (I.E. EXISTING INLETS, CONDUITS, ETC.) WHICH IS NOT MARKED FOR REPLACEMENT OR REMOVAL. IF ANY SUCH DAMAGE DOES OCCUR DUE TO THE OPERATIONS OF THE CONTRACTOR, HE SHALL REPLACE THE DAMAGED PORTION AT HIS EXPENSE.

THE CONTRACTOR SHALL EXERCISE DUE CARE DURING CONSTRUCTION SO AS NOT TO DESTROY ANY TREES, PLANTS, SHRUBS OR STRUCTURES OUTSIDE OF THE INDICATED WORK LIMITS AND THOSE NOT SPECIFICALLY MARKED FOR REMOVAL OR RELOCATION WITHIN THE WORK LIMITS.

IN SOME INSTANCES, THE CONTRACTOR WILL BE REQUIRED TO EXCAVATE UNDER AND AROUND THE EXISTING UTILITIES. EXTREME CARE SHOULD BE USED NOT TO DAMAGE THE UTILITY DURING THIS OPERATION.

THE CONTRACTOR MUST CONTACT OUPS (OHIO UTILITIES PROTECTION SERVICE) AT 811 OR 800-362-2764 AT LEAST 48 HOURS, BUT NO MORE THAN 10 WORKING DAYS, BEFORE BEGINNING ANY DIGGING, EXCLUDING SATURDAYS, SUNDAYS AND LEGAL HOLIDAYS. NON-MEMBER UTILITIES MUST BE CONTACTED DIRECTLY.

#### WATER POLLUTION, SOIL EROSION AND SILTATION CONTROL

THE CONTRACTOR SHALL TAKE EXTREME CARE AND UTILIZE BEST MANAGEMENT PRACTICES TO CONTROL SEDIMENT AND EROSION DURING THE PROJECT AND TO PREVENT UNNECESSARY EROSION, WATER POLLUTION AND SILTATION AT ALL POINTS OF THE PROJECT. TEMPORARY SEEDING AND MULCHING; INLET PROTECTION; STRAW BALES; SLOPE DRAINS, ETC., SHALL BE USED AS NECESSARY OR AS DIRECTED BY THE VILLAGE, THE COST OF WHICH SHALL BE INCIDENTAL TO THE OVERALL CONTRACT PRICE.

ALL DISTURBED AREAS ARE TO BE RESTORED (SEEDED AND MULCHED) BY THE CONTRACTOR AND SHALL PROCEED WITH JOB PROGRESSION. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR REMOVING ANY EXCESS MATERIALS AT THE SITE AND MAINTAINING ALL SEEDED AND MULCHED AREAS UNTIL PROJECT COMPLETION AND FINAL INSPECTION. A RESIDENTIAL YARD SHALL BE RESTORED WITHIN SEVEN (7) DAYS AFTER CONSTRUCTION.

ALL APPLICABLE RECOMMENDATIONS IN OHIO'S STANDARDS FOR STORMWATER MANAGEMENT, LAND DEVELOPMENT AND URBAN STREAM PROTECTION MANUAL SHALL BE FOLLOWED BY THE CONTRACTOR, INCLUDING SEEDING OF DISTURBED GROUND.

#### EROSION AND DUST CONTROL

THE CONTRACTOR SHALL TAKE EXTREME CARE TO PREVENT UNNECESSARY EROSION AT ALL POINTS OF THE PROJECT.

DUST SHALL BE KEPT TO A MINIMUM. COST OF EQUIPMENT, WATER, LABOR AND MATERIAL, ETC. REQUIRED TO PERFORM DUST CONTROL SHALL BE INCIDENTAL TO THE OVERALL BID PRICE.

#### TESTING

THE CONTRACTOR SHALL INCLUDE THE COST OF ALL REQUIRED TESTS IN THE UNIT PRICE BID FOR THE PERTINENT ITEM AND NO SEPARATE COMPENSATION IS TO BE MADE FOR SAID TESTING.

#### <u>UTILITIES</u>

UTILITIES DATA HAS NOT BEEN VERIFIED BY THE ENGINEER. THE ENGINEER OR THE OWNER IS NOT RESPONSIBLE OR LIABLE FOR DATA SUPPLIED BY OTHERS.

THE CONTRACTOR MUST CONTACT OUPS (OHIO UTILITIES PROTECTION SERVICE) AT 811 OR 800-362-2764 AT LEAST 48 HOURS, BUT NO MORE THAN 10 WORKING DAYS, BEFORE BEGINNING ANY DIGGING, EXCLUDING SATURDAYS, SUNDAYS AND LEGAL HOLIDAYS. NON-MEMBER UTILITIES MUST BE CONTACTED DIRECTLY. IT IS THE CONTRACTOR RESPONSIBILITY TO BE FAMILIAR WITH THE REQUIREMENTS OF OUPS. THE CONTRACTOR SHALL COORDINATE THE MARKINGS AND/OR LOCATING TO STAY A MINIMUM OF 2 WORKING DAYS AHEAD OF PLANNED CONSTRUCTION ACTIVITIES.

DURING CONSTRUCTION, THE CONTRACTOR SHALL REPORT IMMEDIATELY TO THE OWNERS OF THE UNDERGROUND FACILITIES ANY BREAK OR LEAK IN THE FACILITIES, OR ANY DENT, GOUGE, GROOVE OR OTHER DAMAGE. THE CONTRACTOR SHALL NOTIFY NEARBY OCCUPANTS OF ANY EMERGENCY SITUATION THAT MAY ARISE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL UTILITY ACTIVITIES AND SCHEDULES.



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ON				
REVISION				
DATE		·		

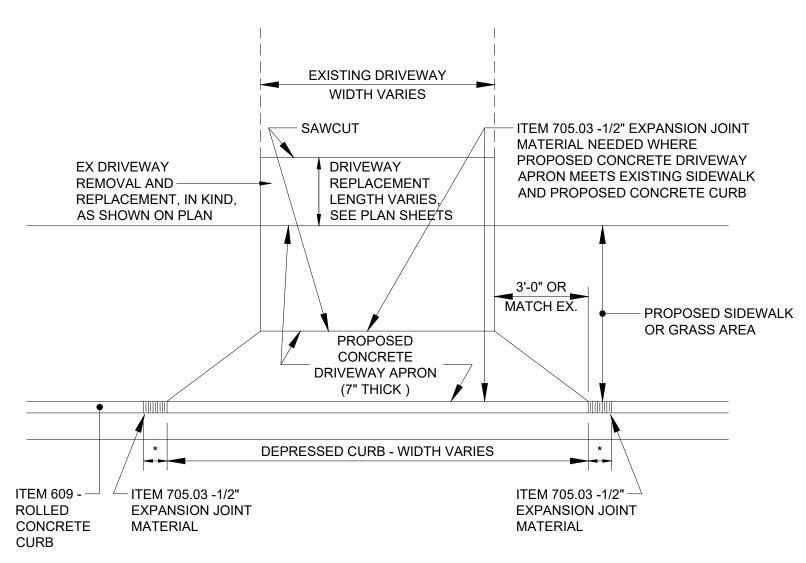
VILLAGE OF ADDYSTO 1ST STREET STABILIZAT - ADDYSTON, OH -	
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PROJECT NO:

210766

DRAWING NAME

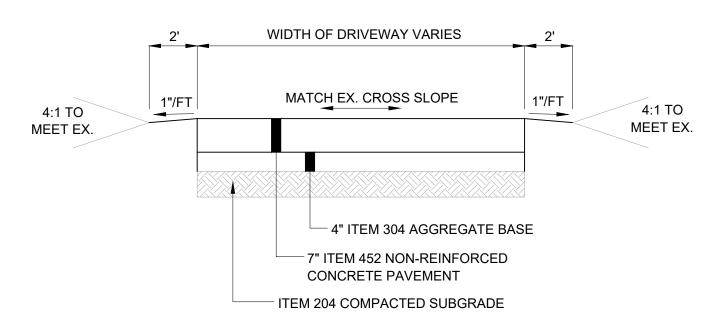
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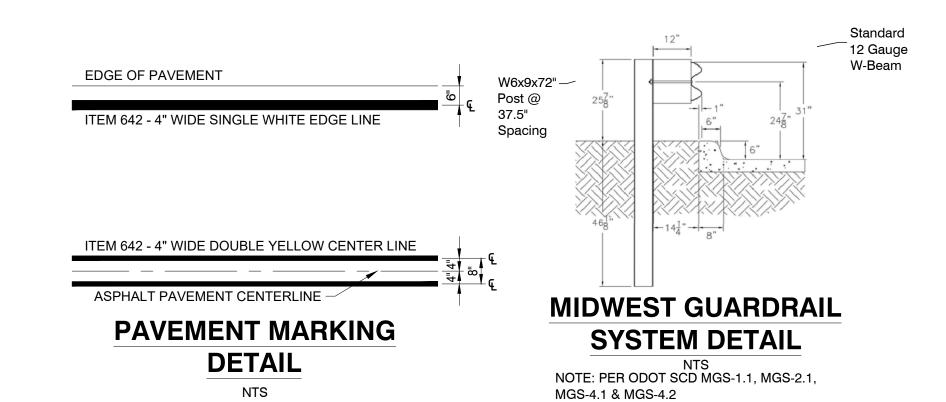
\* 1'-6" TRANSITION FROM STANDARD CURB HEIGHT TO DEPRESSED CURB

## ITEM 452 - (7") NON-REINFORCED CONCRETE **PAVEMENT - DRIVEWAY APRON**

NTS

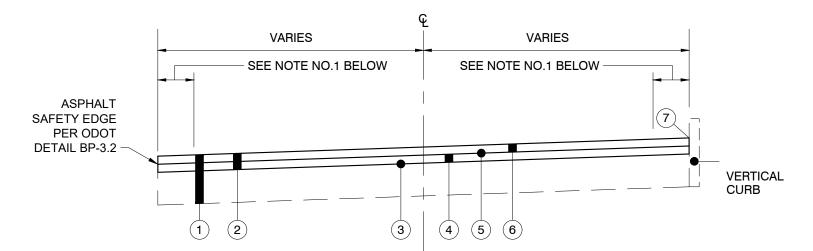


## CONCRETE DRIVEWAY REPLACEMENT



#### ASPHALT SAFETY EDGE 01-18-2019 CONCRETE CURBS AND COMBINED **CURB & GUTTER** 07-15-2022 CATCH BASIN NO. 6 07-19-2024 PIPE UNDERDRAINS 07-16-2021

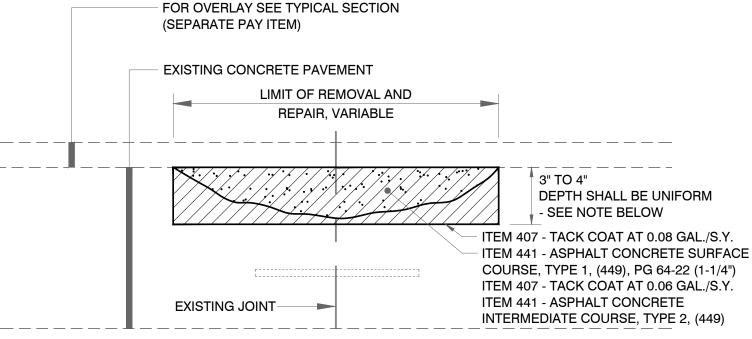
**ODOT STANDARD CONSTRUCTION DRAWINGS** BP-3.2 BP-5.1 CB-6 DM-1.2 DM-2.1 PAVED GUTTERS 01-18-2013 MGS-1.1 07-16-2021 MGS GUARDRAIL DETAILS MGS-4.1 MGS TYPE A ANCHOR ASSEMBLY 01-20-2017 MGS-4.2 MGS TYPE T ANCHOR ASSEMBLY 07-19-2013



- (1) EXISTING PAVEMENT
- 2) ITEM 254 PAVEMENT PLANING, ASPHALT CONCRETE, FULL WIDTH (3±")
- (3) ITEM 407 TACK COAT AT 0.09 GAL./S.Y. (SEE NOTE NO.1)
- ig(4ig) ITEM 441 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448), PG64-22 (1-1/2")
- (5) ITEM 407 TACK COAT AT 0.06 GAL./S.Y. (SEE NOTE NO.1)
- ig(6ig) ITEM 441 1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG 64-22
- (7) APPLY ITEM 705.04 HOT APPLIED JOINT SEALER WHERE ASPHALT MEETS CURB
- 1) THE TACK COAT SHALL BE A 1' CONTINUOUS WIDTH ALONG THE EDGES OF THE AREAS TO

#### TYPICAL RESURFACING DETAIL

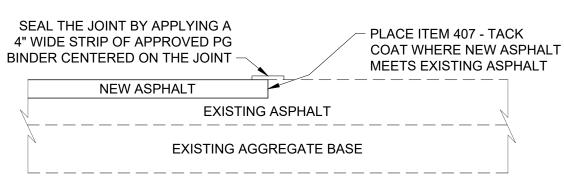
1st Street STA. 8+05 TO STA. 10+00 STA. 12+60 TO STA. 18+15



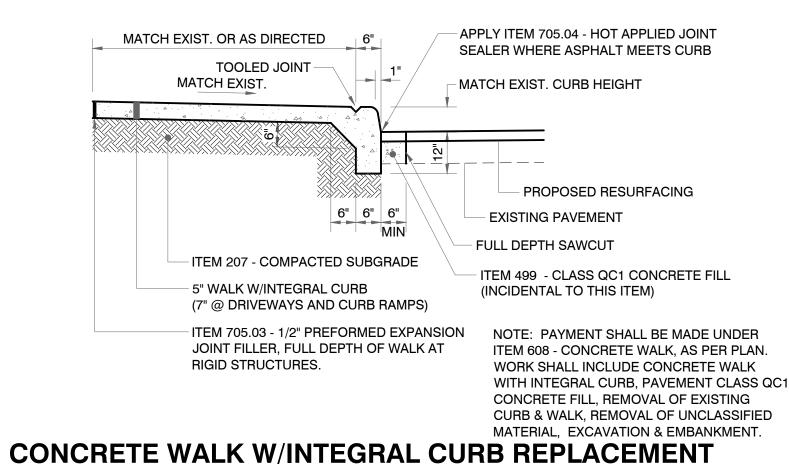
EXISTING JOINT TO BE CLEANED OF ALL DIRT AND LOOSE MATERIAL AND APPLY ITEM 705.04 - HOT APPLIED JOINT SEALER

REMOVE DETERIORATED PAVEMENT TO THE DEPTH SPECIFIED BY THE WHEN DETERIORATION EXTENDS TO A DEPTH OF MORE THAN 4" IN THE CONCRETE, AND AT THE DIRECTION OF THE ENGINEER, A FULL DEPTH REMOVAL AND CONCRETE PAVEMENT REPLACEMENT SHALL BE MADE. (UNDER A SEPARATE PAY ITEM).

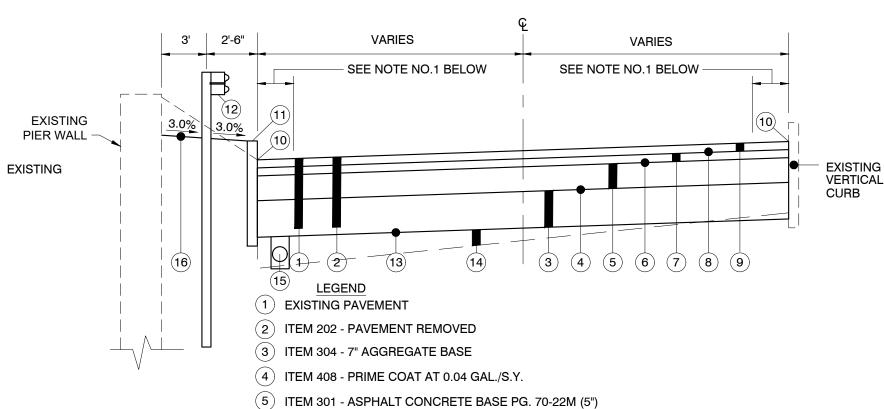
## ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR DETAIL



## **NEW ASPHALT PAVEMENT ABUTS EXISTING ASPHALT PAVEMENT DETAIL**



NOTE: THIS IS A CONTINGENCY ITEM TO ONLY BE USED AT THE DIRECTION OF THE ENGINEER



(6) ITEM 407 - TACK COAT AT 0.06 GAL./S.Y. (SEE NOTE NO.1)

7) ITEM 441 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448), PG64-22 (1-1/2") 8) ITEM 407 - TACK COAT AT 0.06 GAL./S.Y. (SEE NOTE NO.1)

9) ITEM 441 - 1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG 64-22

10) APPLY ITEM 705.04 - HOT APPLIED JOINT SEALER WHERE ASPHALT MEETS CURB

11) ITEM 609 - CURB, TYPE 6

12) ITEM 606 - MIDWEST GUARDRAIL SYSTEM (STA 10+02 TO 12+55, INCLUDING BOTH TERMINAL ENDS)

13) ITEM 204 - SUBGRADE COMPACTION

14) ITEM 203 - ROADWAY, MISC.: EMBANKMENT (ROADWAY CONSTRUCTION) - THIS LS ITEM IS AN ALL INCLUSIVE FOR ANY EMBANKMENT MATERIAL NEEDED BELOW PAVEMENT SUBGRADE NECESSARY.

15) ITEM 605 - UNDERDRAIN, MISC.: 6" UNDERDRAIN

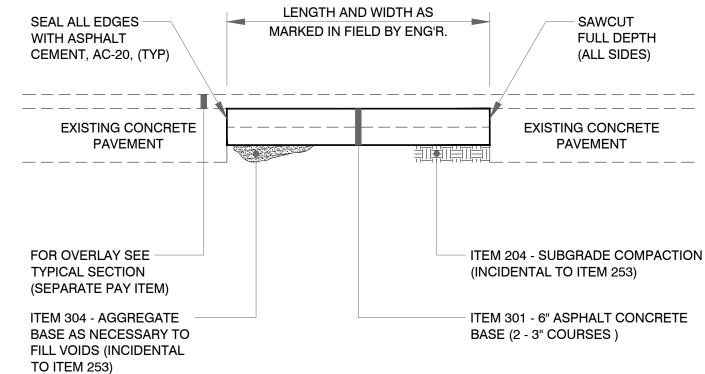
16) 4" ODOT 653 TOPSOIL FURNISHED & PLACED, & ODOT 659 SEEDING & MULCHING

1) THE TACK COAT SHALL BE A 1' CONTINUOUS WIDTH ALONG THE EDGES OF THE AREAS TO BE RECONSTRUCTED

2) SPOILS FROM PIER WALL CONSTRUCTION LEFT ALONG SHOULDER. COST TO RE-GRADE ANY AREAS BEYOND THE PAVEMENT BASED ON THE THE TYPICAL SECTIONSHALL BE INCIDENTAL

## TYPICAL RECONSTRUCTION DETAIL

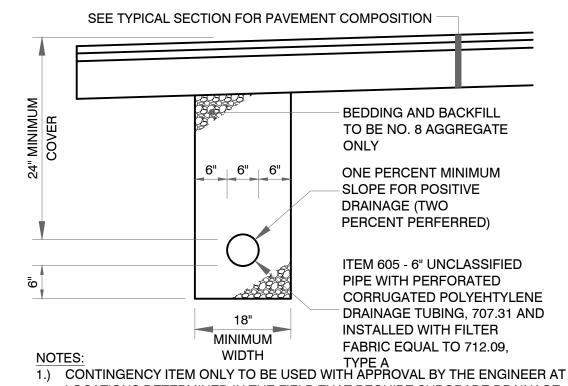
1st Street STA. 10+00 TO STA. 12+60



1.) A CONTINGENCY QUANTITY OF ITEM 253 - PAVEMENT REPAIR IS INCLUDED IN THE CONTRACT TO REPLACE ANY PAVEMENT / BASE AREAS AS REQUIRED PRIOR TO PAVING. THE CONTRACTOR SHALL REPAIR ONLY THOSE AREAS MARKED IN THE FIELD BY THE ENGINEER AFTER THE PLANING OPERATIONS.

2.) THE BASE REPAIR AREAS WILL BE MARKED BY THE ENGINEER PRIOR TO THE PLANING OPERATIONS TO OBTAIN INITIAL QUANTITIES AND AFTER THE PAVEMENT PLANING FOR THE

### **ITEM 253 - PAVEMENT REPAIR DETAIL**



LOCATIONS DETERMINED IN THE FIELD THAT REQUIRE SUBGRADE DRAINAGE.

2.) CONTRACTOR TO ADJUST ALIGNMENT OF THE UNDERDRAIN WHERE NECESSARY (UNDER THE SUPERVISION OF THE ENGINEER) BOTH HORIZONTALLY AND VERTICALLY TO AVOID GAS AND WATER SERVICES.

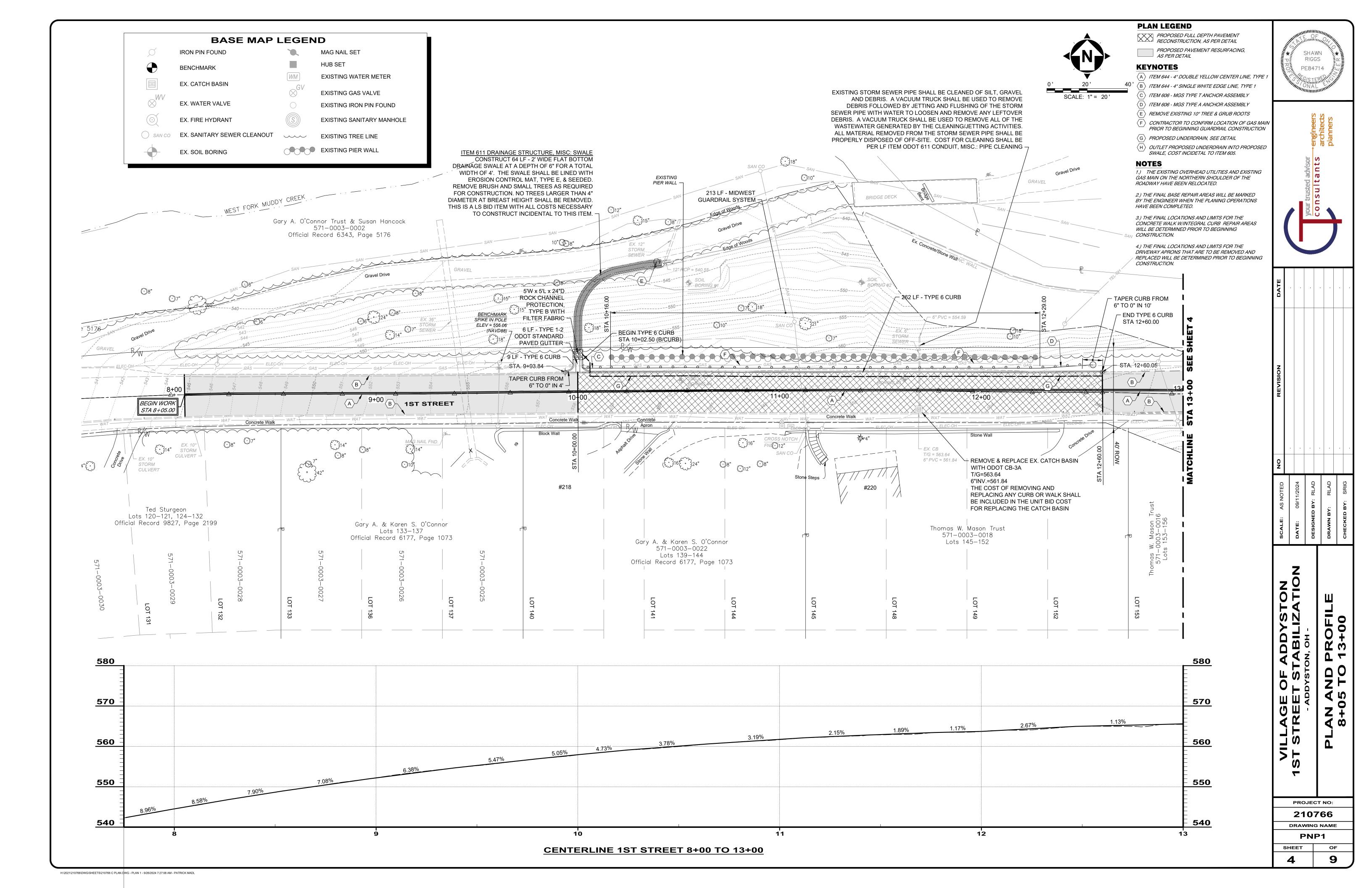
3.) THE CONTRACTOR SHALL TIE THE PROPOSED 6" UNDERDRAIN INTO INLETS AS DIRECTED BY THE ENGINEER.

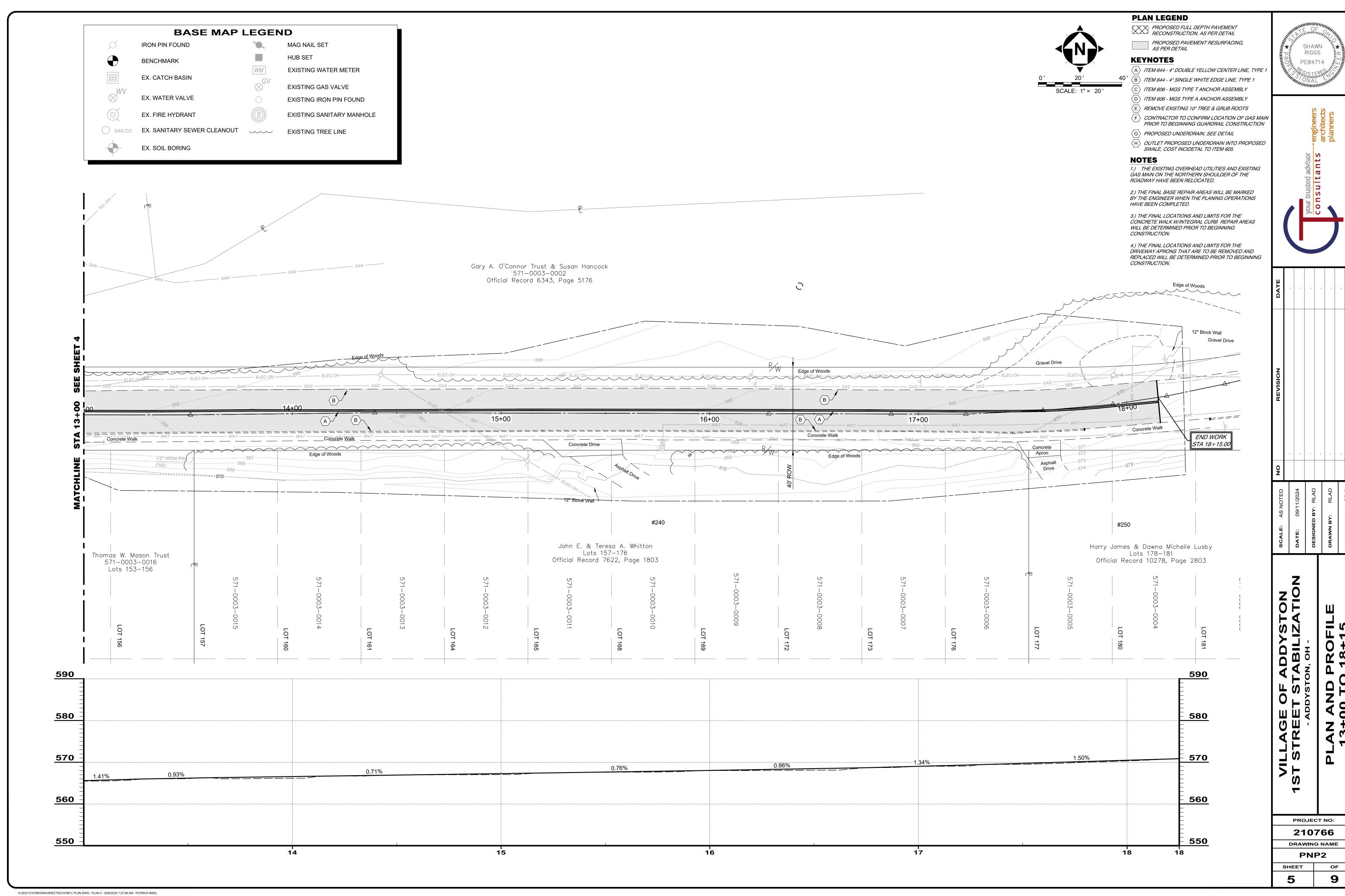
**ITEM 605 - UNDERDRAIN, MISC.: 6" UNDERDRAIN DETAIL** 

**PROJECT NO:** 210766

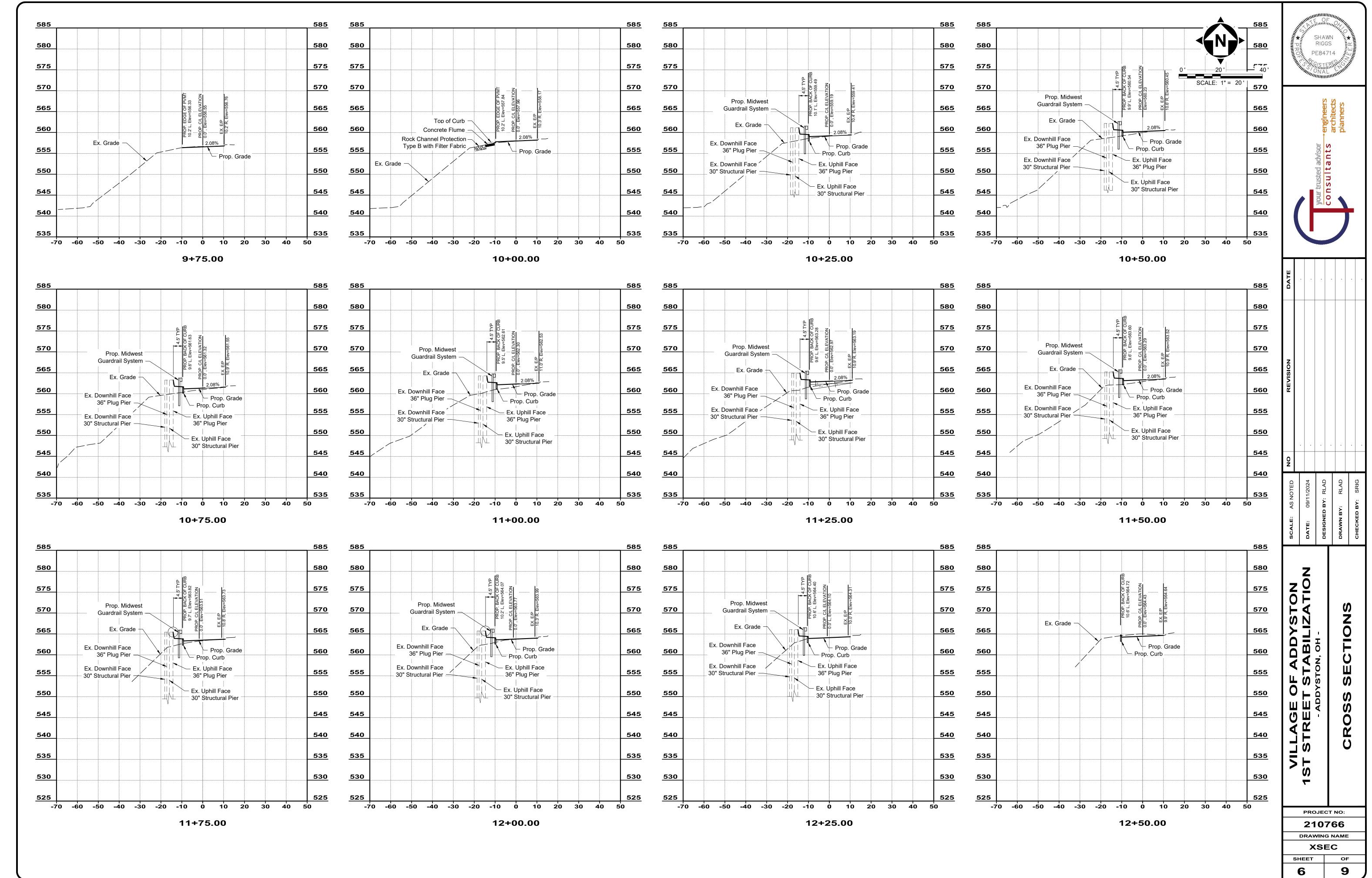
> **DETAILS** SHEET 3 9

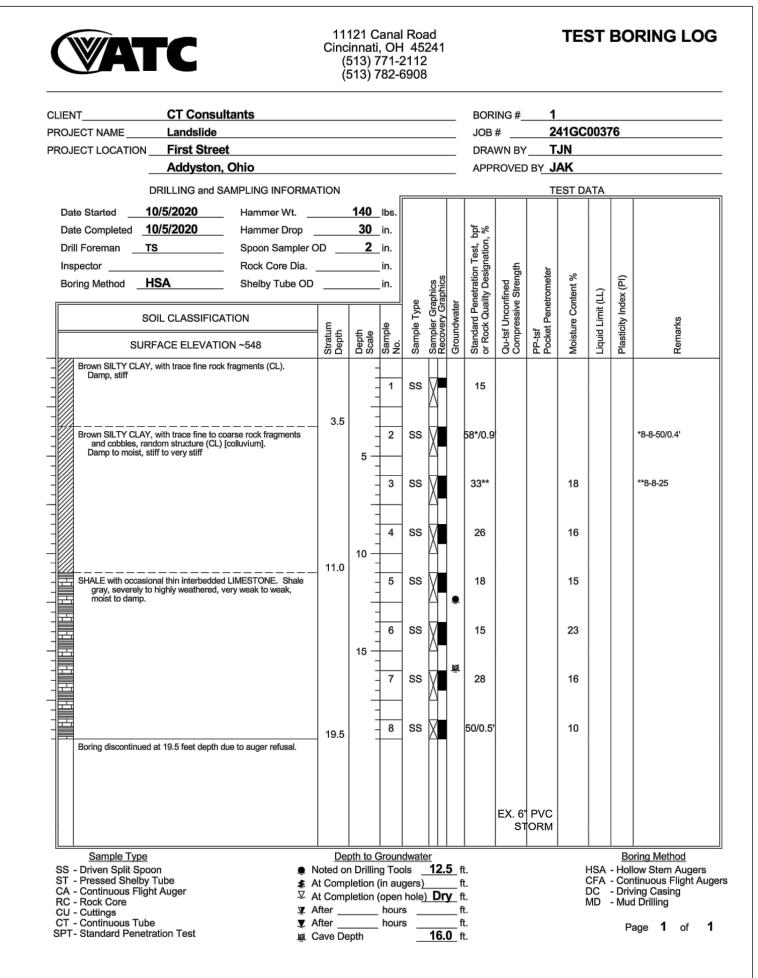
DRAWING NAME

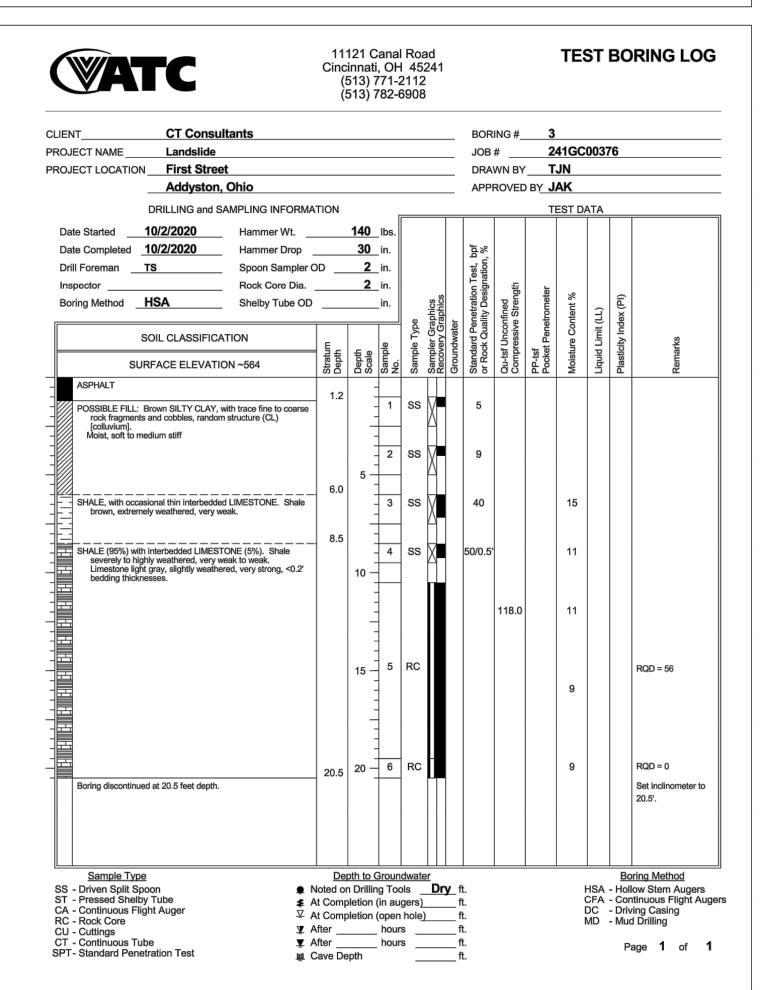


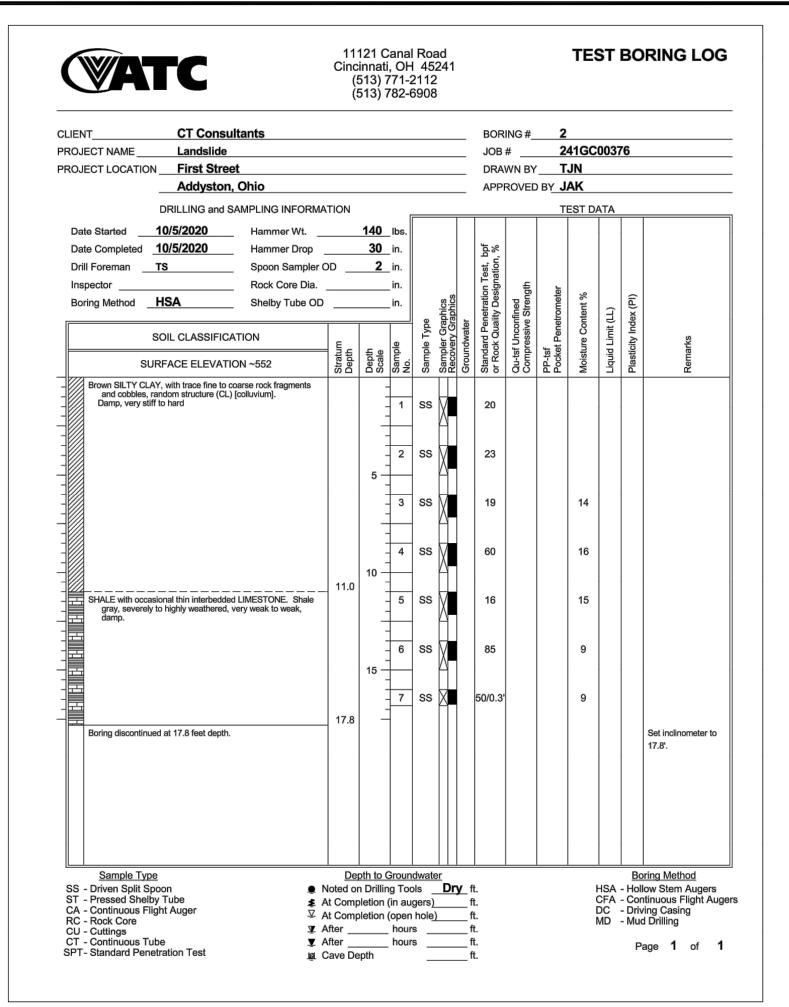


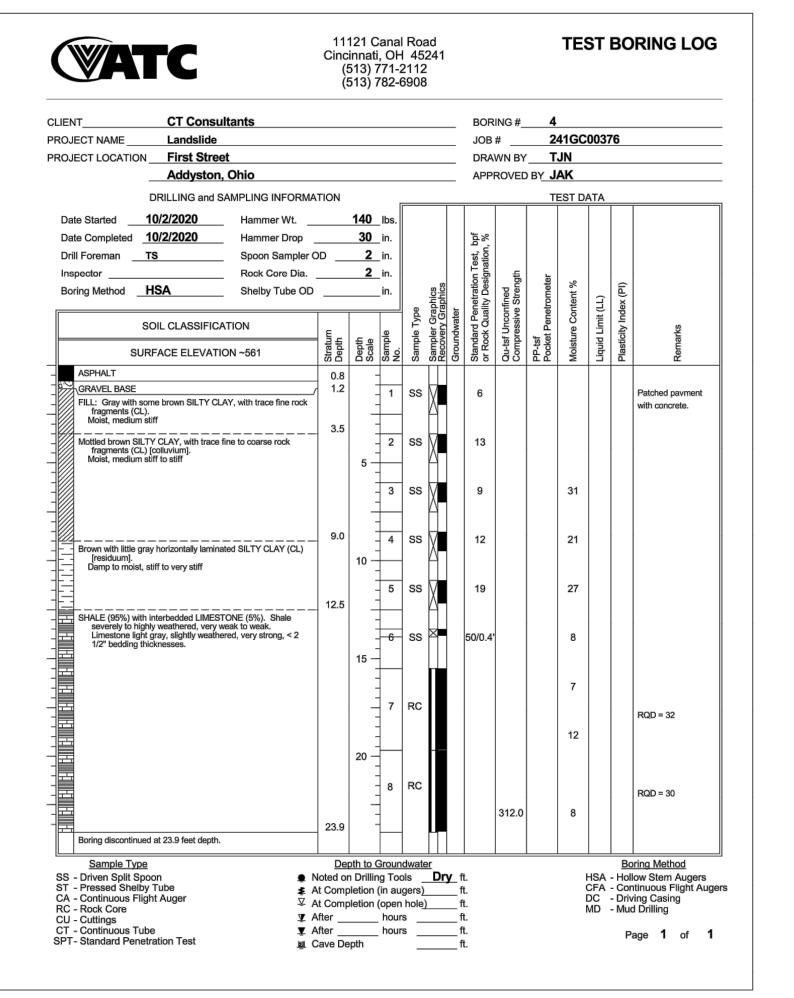
















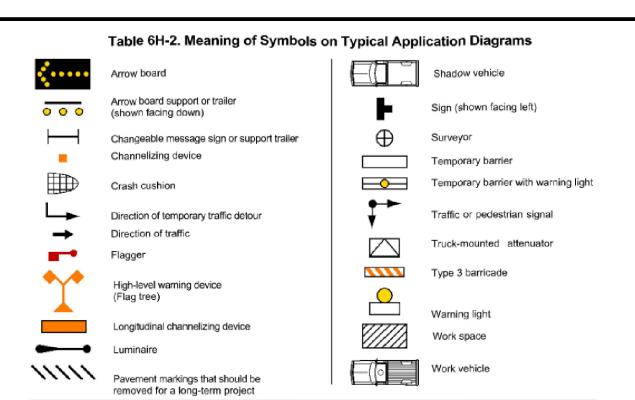
- ADDYSTON, OH PIER WALL -

WALL PLAN
DRAWING NAME
280EM00780
PROJECT NO:

OF

8

SHEET



#### Table 6H-3. Meaning of Letter Codes on Typical Application Diagrams

Road Type	Distance Between Signs**		
Road Type	Α	В	С
Urban (low speed)*	100 feet	100 feet	100 feet
Urban (high speed)*	350 feet	350 feet	350 feet
Rural	500 feet	500 feet	500 feet
Expressway / Freeway	1,000 feet	1,500 feet	2,640 feet

Speed category to be determined by highway agency \*\* The column headings A, B, and C are the dimensions shown in Figures 6H-1 through 6H-46. The A dimension is the distance from the transition or point of restriction to the first sign. The B dimension is the distance between the first and second signs. The C dimension is the distance between the second and third signs. (The "first sign" is the sign in a three-sign series that is closest to the TTC zone. The "third sign" is the sign that is furthest upstream from the TTC zone.)

#### Table 6H-4. Formulas for Determining Taper Length

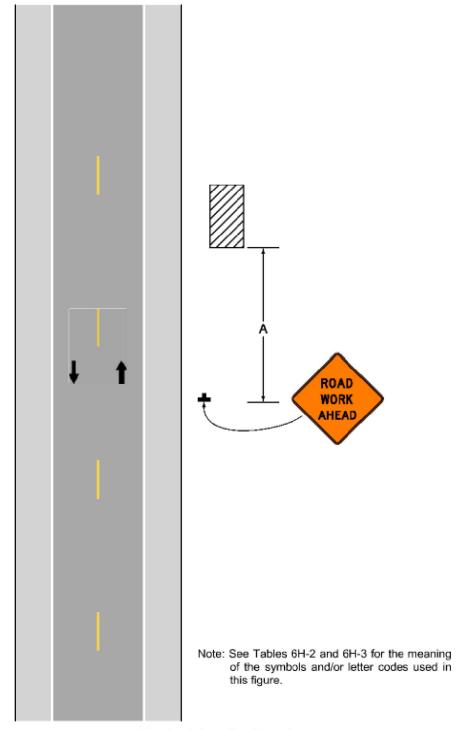
Speed (S)	Taper Length (L) in feet
40 mph or less	$L = \frac{WS^2}{60}$
45 mph or more	L= WS

speed prior to work starting, or the anticipated

Where: L = taper length in feet
W = width of offset in feet
S = posted speed limit, or off-peak 85th-percentile

#### SYMBOLS AND TAPER RATES

NOT TO SCALE



Typical Application 1

#### WORK BEYOND THE SHOULDER

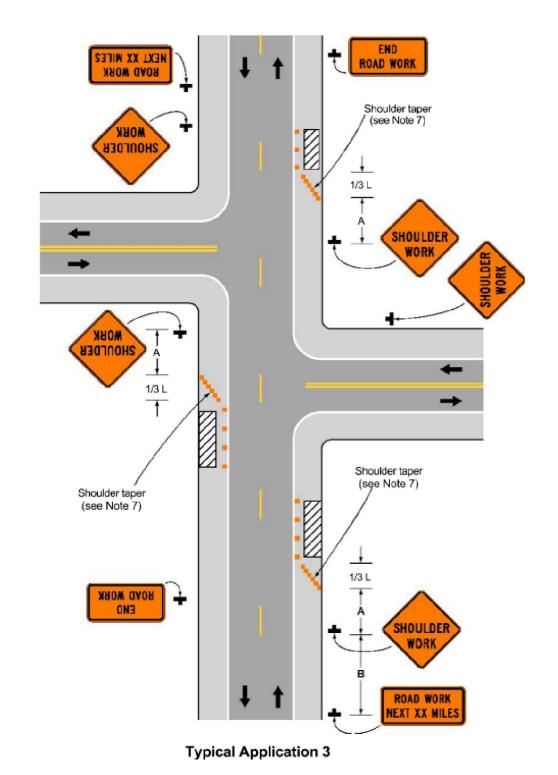
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CONDITION I

**DROP-OFFS IN WORK ZONES** 

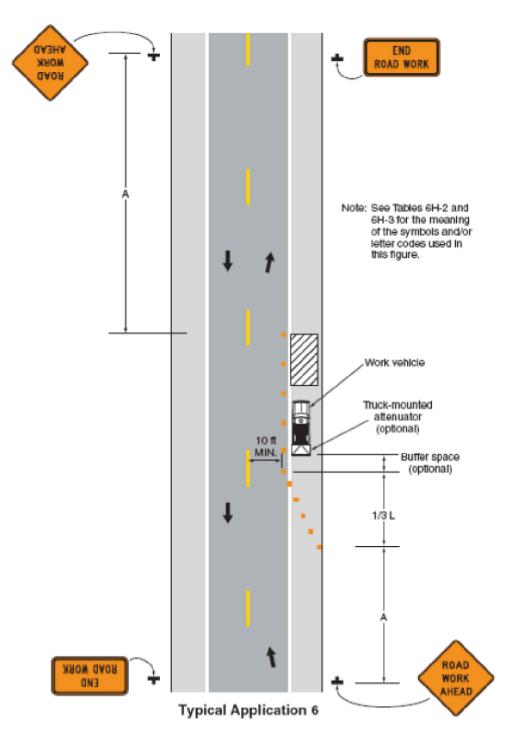
NOT TO SCALE

DROP-OFFS BETWEEN ADJACENT TRAVELED LANE(S) / PAVED SHOULDER



### WORK ON THE SHOULDERS

NOT TO SCALE



## SHOULDER WORK WITH MINOR ENCROACHMENT

NOT TO SCALE

#### **1ST STREET LANE CLOSURE NOTES**

- 1. DURING THE REMOVAL OF THE ASPHALT WEARING COURSE, THE REPAIR OF THE BASE PAVEMENT AND/OR THE CONSTRUCTION OF THE ASPHALT COURSES FOR THE ROADWAY, THE CONTRACTOR WILL BE PERMITTED TO CLOSE ONE LANE OF PAVEMENT WHILE MAINTAINING TRAFFIC IN THE OTHER LANE ON AN ALTERNATING FLOW BASIS.
- 2. THE CONTRACTOR WILL BE HELD STRICTLY TO THE FLAGGING REQUIREMENTS LISTED UNDER ITEM 614.08. THE CLOSING OF THE LANE TO TRAFFIC WILL BE PERMITTED DURING THE ABOVE OPERATIONS AND FOR THE PERIODS OF TIME CONSISTENT WITH THE REQUIREMENTS OF THE SPECIFICATIONS FOR THE PROTECTION OF THE COMPLETED ASPHALT CONCRETE COURSES.
- 3. DURING PAVEMENT REMOVAL AND THE CONSTRUCTION/GRADING OF THE ASPHALT RECONSTRUCTION SECTION, THE CONTRACTOR WILL BE PERMITTED TO CLOSE FIRST STREET TO THROUGH TRAFFIC FOR THE DURATION OF THAT PHASE OF THE PROJECT.
- 4 THE ROAD SHALL BE RE-OPENED TO THROUGH TRAFFIC FOR EXTENDED PERIODS (GREATER THAT ONE WEEK) OF NO CONSTRUCTION ACTIVITY PLACE ADVANCE NOTIFICATION SIGNAGE ON FIDDLERS GREEN ROAD AT BRIDGETOWN ROAD, STATING THAT THE ROAD IS CLOSED TO THROUGH TRAFFIC AT THE ADDYSTON CORPORATION LINE (2 MILES AHEAD). PLACE TYPE III BARRICADES AT THE NORTH CORPORATION LINE AND AT MAIN STREET. BARRICADES SHALL STATE "ROAD CLOSED, LOCAL TRAFFIC ONLY" AND PROVIDE CLOSURE DATE RANGE. THE CONTRACTOR SHALL COORDINATE WITH THE HAMILTON COUNTY ENGINEER'S OFFICE (ERIC BECK (513-946-4250) REGARDING PLACEMENT OF DETOUR SIGNAGE OUTSIDE OF THE VILLAGE. PROVISIONS FOR EMERGENCY VEHICLE ACCESS SHALL BE MAINTAINED AT ALL TIMES

## TRAFFIC CONTROL GENERAL NOTES

- 1. ALL TRAFFIC CONTROL DEVICES AND INSTALLATION PROCEDURES SHALL BE IN ACCORDANCE WITH CURRENT EDITION OF THE OHIO MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD) AND OHIO DEPARTMENT OF TRANSPORTATION (ODOT) STANDARDS.
- 2. THE CONTRACTOR SHALL COORDINATE WORK ITEMS TO MINIMIZE INTERRUPTIONS TO TRAFFIC ON 1ST STREET
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE TRAFFIC CONTROL DEVICES AT ALL TIMES DURING CONSTRUCTION ACTIVITIES AND SHALL COORDINATE THE ITEMS OF WORK TO KEEP TRAFFIC HAZARDS AND/OR INCONVENIENCES TO A MINIMUM.
- 4. THE CONTRACTOR SHALL FURNISH THE NAME AND PHONE NUMBER OF THE INDIVIDUAL IN HIS OR HER DIRECT EMPLOY WHO IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF THE TRAFFIC CONTROL FOR THIS PROJECT. THIS PERSON SHALL BE ABLE TO BE CONTACTED ON A 24-HOUR PER DAY BASIS TO FURNISH AND MAINTAIN TRAFFIC CONTROL IN CASE OF AN EMERGENCY.
- TRAFFIC CONTROL DEVICES SHALL BE UTILIZED AS INDICATED ON THE FIGURE APPROPRIATE FOR THE LEVEL OF ROADWAY ENCROACHMENT. REFER TO CURRENT EDITION OF THE OHIO MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD) FOR ADDITIONAL INFORMATION PERTAINING TO RESPECTIVE TRAFFIC CONTROL TYPICAL APPLICATION FIGURES.
- 6. TRAFFIC CONTROL TYPICAL APPLICATION 1 SHALL GOVERN DURING THE PROJECT SET UP AND CLEAN UP WHEN WORKERS, VEHICLES OR OTHER EQUIPMENT ARE LOCATED BEYOND THE SHOULDER, BUT WITHIN THE RIGHT-OF-WAY.
- TRAFFIC CONTROL TYPICAL APPLICATION 3 SHALL GOVERN DURING THE PROJECT SET UP AND CLEAN UP WHEN WORKERS, VEHICLES OR OTHER EQUIPMENT ARE LOCATED WITHIN 15' OF THE EDGE OF PAVEMENT AND NOT CLOSING A TRAVEL LANE.
- TRAFFIC CONTROL TYPICAL APPLICATION 6 SHALL BE USED DURING CONSTRUCTION ACTIVITIES WHEN IT IS NECESSARY FOR THE CONTRACTOR TO MARGINALLY ENCROACH INTO THE ADJACENT TRAVEL LANE FOR LESS THAN 12 HOURS AT A TIME.
- 9. TRAFFIC CONTROL TYPICAL APPLICATION 10 SHALL BE USED DURING CONSTRUCTION ACTIVITIES WHEN THE TRAVEL LANE WILL BE CLOSED FOR LESS THAN 12 HOURS AT A TIME.
- 10. SPACING OF TRAFFIC CONTROL SIGNS SHALL BE ACCORDING TO OMUTCD TABLE 6H-3 USING THE RURAL ROAD CRITERIA. TAPER LENGTHS SHALL BE CALCULATED USING OMUTCD TABLE 6H-4.
- 11. THROUGHOUT THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE PROJECT ENGINEER TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE TABLE BELOW TO INFORM THE VILLAGE OF ADDYSTON. THIS NOTIFICATION SHALL BE RECEIVED BY THE PROJECT ENGINEER PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE SIGNS OR MESSAGE BOARDS. INFORMATION SHOULD INCLUDE, BUT IS NOT LIMITED TO, ALL CONSTRUCTION ACTIVITIES THAT IMPACT OR INTERFERE WITH TRAFFIC AND SHALL LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, DURATION OF RESTRICTION, NUMBER OF LANES MAINTAINED, NUMBER OF LANES CLOSED, MINIMUM VERTICAL CLEARANCE, MINIMUM WIDTH OF DRIVABLE PAVEMENT, DETOUR ROUTES, IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT

ENGINEER.

NOTIFICATION TIME TABLE LANE CLOSURES & RESTRICTIONS

DURATION OF CLOSURE >= 2 WEEKS < 2 WEEKS

14 CALENDAR DAYS PRIOR TO CLOSURE 5 BUSINESS DAYS PRIOR TO CLOSURE

START OF CONSTRUCTION & TRAFFIC PATTERN CHANGES

14 CALENDAR DAYS PRIOR TO IMPLEMENTATION

ANY UNFORESEEN CONDITIONS NOT SPECIFIED IN THE PLANS REQUIRING TRAFFIC RESTRICTIONS SHALL ALSO BE REPORTED TO THE PROJECT ENGINEER USING THE NOTIFICATION TIME TABLE.

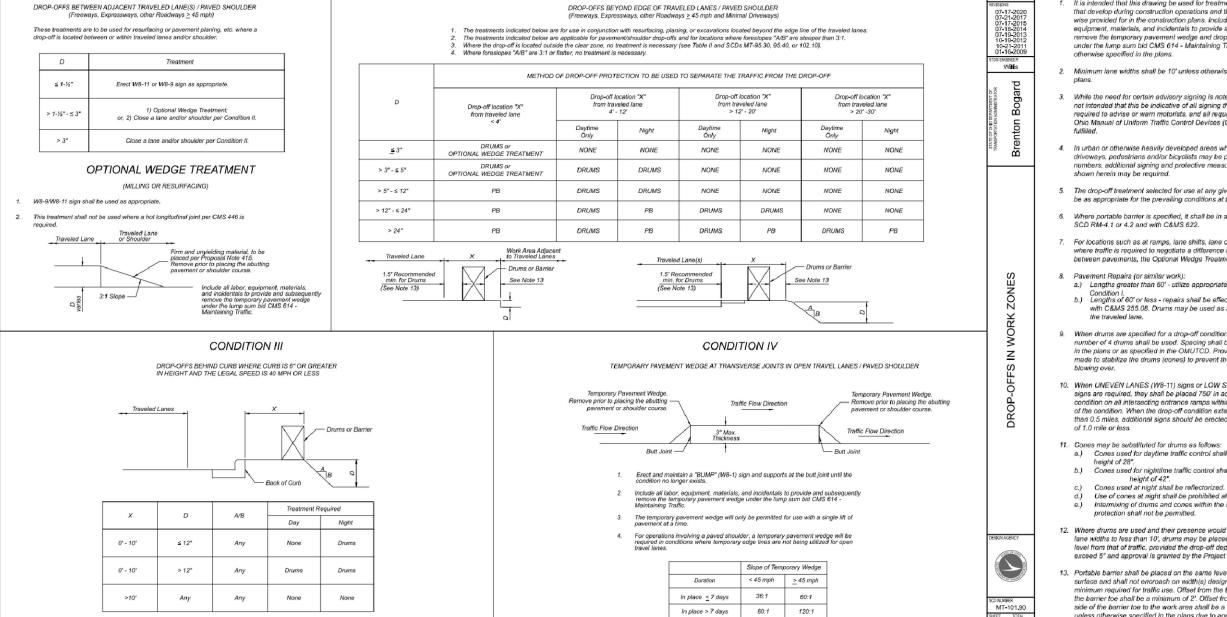
REFLECTORIZED BACKGROUND MEETING MINIMUM RETROREFLECTIVITY STANDARDS AS INDICATED IN THE CURRENT EDITION OF THE

Note: See Tables 6H-2 and 6H-3 for the meaning of the symbols and/or letter codes used in this figure.	(optional) A
FUD WORK	50 to 100 ft  So to 100 ft  ROAD  WORK  XX FT  ROAD  WORK  XX FT

Typical Application 10

TRAVELED LANE CLOSURES

NOT TO SCALE



CONDITION II

- It is intended that this drawing be used for treatment of drop-off that develop during construction operations and that are not other-wise provided for in the construction plans. Include all labor, equipment, materials, and incidentals to provide and subsequently remove the temporary pavement wedge and drop-off treatments under the lump sum bid CMS 614 - Maintaining Traffic, unless otherwise specified in the plans.
- . Minimum lane widths shall be 10' unless otherwise specified in the not intended that this be indicative of all signing that may be

required to advise or warn motorists, and all requirements of the

- Ohio Manual of Uniform Traffic Control Devices (OMUTCD) must be In urban or otherwise heavily developed areas where intersections, driveways, pedestrians and/or bicyclists may be present in significanumbers, additional signing and protective measures other than those
- shown herein may be required. The drop-off treatment selected for use at any given location shall be as appropriate for the prevailing conditions at the site.
- For locations such as at ramps, lane shifts, lane closures, etc.
- a.) Lengths greater than 60' utilize appropriate treatment from Condition I.
  b.) Lengths of 60' or less - repairs shall be effected in accordance with C&MS 255.08. Drums may be used as a separator adjacent to

between pavements, the Optional Wedge Treatment shall be provided.

- When drums are specified for a drop-off condition, a minimum number of 4 drums shall be used. Spacing shall be as indicated in the plans or as specified in the OMUTCD. Provisions shall be
- 10. When UNEVEN LANES (W8-11) signs or LOW SHOULDER (W8-9) signs are required, they shall be placed 750' in advance of the condition on all intersecting entrance ramps within the limits of the condition. When the drop-off condition extends more
- a.) Cones used for daytime traffic control shall have a minimum
- height of 26".

  b.) Cones used for nightlime traffic control shall have a minimum height of 42".

  c.) Cones used at night shall be reflectorized.

  d.) Use of cones at night shall be prohibited along tapers.

  intermixing of drums and cones within the same run of barrier protection shall not be permitted.
- 12. Where drums are used and their presence would reduce traveled
- lane widths to less than 10", drums may be placed on the opposite level from that of traffic, provided the drop-off depth does not exceed 5" and approval is granted by the Project Engineer. Portable barrier shall be placed on the same level as the traffic surface and shall not encroach on width(s) designated as the minimum required for traffic use. Offset from the travel way to the barrier toe shall be a minimum of 2'. Offset from the back side of the barrier toe to the work area shall be a minimum of 2'

12. UNLESS OTHERWISE SPECIFIED, ALL WARNING SIGNS SHALL BE 48" X 48", WITH A BLACK LEGEND ON A FLUORESCENT ORANGE

PROJECT NO:

210766

DRAWING NAME

MOT

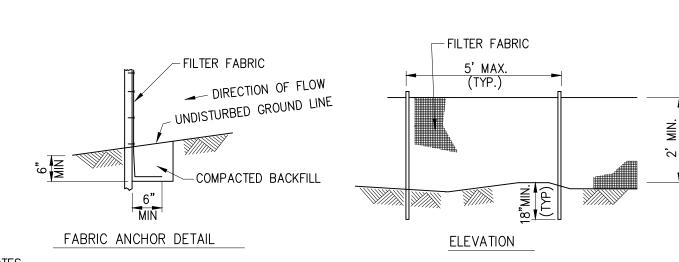
OF

9

SHEET

RIGGS

PE84714



<u>NOTES</u>

- 1. TEMPORARY SEDIMENT FENCE SHALL BE INSTALLED PRIOR TO ANY GRADING WORK IN THE AREA TO BE PROTECTED. THEY SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD AND REMOVED IN CONJUNCTION WITH THE FINAL GRADING AND SITE STABILIZATION.
- 2. FILTER FABRIC SHALL MEET THE REQUIREMENTS OF MATERIAL SPECIFICATION 592 GEOTEXTILE TABLE 1 OR 2, CLASS I WITH EQUIVALENT OPENING SIZE OF AT LEAST 30 FOR NONWOVEN AND 50 FOR WOVEN.
- 3. FENCE POSTS SHALL BE EITHER STANDARD STEEL POST OR WOOD POST WITH A MINIMUM CROSS-SECTIONAL AREA OF 3.0 SQ. IN.



#### PERIMETER SILT FENCE DETAIL

SCALE: NOT TO SCALE

# Erosion Prevention and Sediment Control Site Inspection Form

Erosion Prevention and Sediment Control Site Inspection Form

Introduction: By using some simple Best Management Practices (BMP's) developers and contractors can do their share to protect Clermont County's water resources from the harmful effects of sediment. The topography of the site and the extent of the construction activities will determine which of these practices are applicable to any given site, but the BMP's listed here are applicable to most construction sites. For details on the installation and maintenance of these BMP's, please refer to the approved plans and or the Rainwater and Land Development, Ohio's Standards for Storm Water Management, Land Development and Urban Stream Protection (ODNR, 1996).

Temporary Stabilization is the most effective BMP. All disturbed areas that will lie dormant for 21 days or more must be stabilized within 7 days of the date the area becomes inactive. The goal of temporary stabilization is to provide cover quickly. Areas within 50 feet of a stream must be stabilized within 2 days of reaching final grade. This is accomplished by seeding with fast-growing grasses, then covering with straw mulch. See the Rainwater and Land Development Manual for seasonally adjusted seeding specifications. To minimize your costs of temporary stabilization, leave natural cover in place for as long as possible by only disturbing areas worked within the next 21 days.

Construction Entrances are installed to minimize off-site tracking of sediments. A rough stone access drive underlain with woven geotextile shall be installed at every point where vehicles enter or exit the site. Every individual lot should also have its own drive once construction on the lot begins. Maintenance is performed by top dressing with stone and/or street sweeping.

Silt Fence or Mulch Berms are typically used at the perimeter of a disturbed area. They are only for small drainage areas on relatively flat slopes or around small soil storage piles; not suitable where runoff is concentrated in a ditch, pipes or though streams. For large drainage areas where flow is concentrated, collect runoff in diversion berms or channels and pass it through a sediment pond prior to discharging it from the site. Combination barriers constructed of silt fence supported by welded wire fencing, mulch berms supported by rock check dams, or silt fence embedded within rock check dams may be effective within small channels. As with all sediment controls, silt fence or mulch berms must be capable of ponding runoff so that sediment can settle out of suspension. These must be installed within 7 days of first grubbing the area it controls. Whenever practical they should be installed before clearing or grubbing the area it controls.

Inlet Protection must be installed on all yard drains and curb drains when these inlets do not drain to a sediment trap or basin. Even if there is a sediment trap or basin, inlet protection is still recommended, as it will reduce the amount of sediment entering the basin and increase the overall sediment removal efficiency. Best used on roads with little or no traffic. If working properly, inlet protection will cause water to pond. If used on curb inlets, streets will flood temporarily during heavy storms, (overflow should be built-in.) Check with the authority that has jurisdiction over the roads before installing. They may prefer an alternate BMP. Care should be taken when placing inlet protection so that the runoff is not diverted to public roads or other areas where it could cause a

Permanent Stabilization must occur on areas at final grade within 7 days of reaching final grade. This is usually accomplished by using seed and mulch, but special measures are sometimes required. This is particularly true in drainage ditches or on steep slopes. These measures include the addition of topsoil, erosion control matting, rock riprap or retaining walls. See the Rainwater and Land Development Manual for seasonally adjusted seeding specifications. At all times of the year, the area should be temporarily stabilized until a permanent seeding can be applied.

Inspections shall be performed at least once a week and within 24 hours after a storm event greater than 1/2 inch of rainfall within a 24-hour duration using the enclosed Inspection Form. Inspections can be tracked using the enclosed Inspection Log. These shall be maintained throughout the development process and kept on file for three years per OEPA requirements. Erosion prevention and sediment control (EP&SC) measures shall be observed to ensure correct operation. Discharge locations shall be inspected to determine effectiveness of EP&SC measures in preventing significant impacts to the receiving waters. Where practices require repair or maintenance, it must be accomplished within three days of the inspection or as soon as site conditions allow. Repairs to sediment ponds shall be completed within 10 days or as soon as site conditions allow. Most of these BMP's are easy to implement with a little bit of planning and go a long way toward keeping your site clean and organized if they are properly installed and maintained. Please be sure to inform all parties on site how these BMPs affect their operations on the site, particularly those that will be working near a

Inspector: Amount of rainfall since last inspection: \_\_\_\_\_inches Overall site conditions: **Construction Entrances** Is the entrance installed correctly according to the approved plan? YES NO N/A (Check for mud in stones/street, runoff diverted from street, etc..)

Sediment Basins/Traps:

Are all Basins installed correctly according to the approved plan? YES NO N/A (Check for runoff directed to basin, down slope areas stabilized, riser pipe wrapped with wire fence/filter fabric, emergency overflow, accumulated sediment more than 40% of volume, etc..) Action Needed:

Are all Silt Fence/Mulch Berm (SF/MB) installed correctly according to the approved plan? YES NO N/A (Check for fabric trenched in, follow contour, turned upslope at ends, silt accumulated, broken stakes, tight fabric, installed in all areas where sediment could leave the site) Action Needed:

**Inlet Protection:** 

Are all Inlet Protections installed correctly according to the approved plan? YES NO N/A Check for runoff ponding, in good shape, silt accumulated, etc..) Action Needed:

Are all disturbed areas that will lie dormant for 21 days or more stabilized with seed/straw or mulch? (stockpiles, hillsides, etc..) YES NO N/A

Are all areas stabilized still in good condition and not eroding? YES NO N/A

Have areas that achieved final grade within the last 7 days been stabilized? YES NO N/A

Do all storm water outflow areas have riprap or concrete to prevent scouring? YES NO N/A

Are the Stream Crossings installed correctly according to the approved plan? YES NO N/A (Check for stabilized edges, runoff diverted from stream, mud over stones, end of useful life, etc..) Action Needed:

If you answered "no" to any of the above questions, note any corrective action needed above, and note on the Inspection Log when the action was completed.

#### Inspection Log

Wood or metal stakes to secure the

Straw bale (alternative materials

provide structural containment. Alternative materials or products

will require design modification.

Wood or metal stakes to

secure the straw bales

Straw bale

(alternative

materials or

be used to

provide structural

products may

containment)

(2 per straw bale)

or products may be used to

Polyethylene lining

10 millimeters);

The lining should

extend over the

straw bales.

straw bales (2 per straw bale)

Metal pins or staples to

secure the polyethylene

lining to the straw bales

L = inside length

W = inside width

**CONCRETE WASHOUT DETAIL** 

Metal pins or staples

polyethylene lining

to the straw bales

to secure the

SCALE: NOT TO SCALE

Plan View

staples to

should extend polyethylene

over the straw lining to the \

Straw bales entrenched

.4 inches into the soil

secure the

straw bales

Compacted soil

Not to Scale

lining (10

millimeters);

The lining

L = 10 Feet

The site shall be inspected before and after storm events with 0.5 inches or greater predicted or actual precipitation, and documented on the Construction Site Inspection Form. Incidents of noncompliance must be reported to the Engineer. A log of all inspections, as shown below, shall be kept current.

Corrective Actions Performed/Date:

#### PERMANENT SEEDING

Permanent seeding includes the seedbed preparation, seeding, and the establishment of perennial vegetation used to permanently stabilize soil, prevent sediment pollution, reduce runoff by promoting infiltration, and provide storm water quality benefits offered by dense vegetation.

#### CONDITIONS WHERE PRACTICE APPLIES

- Areas or portions of construction-sites which can be brought to final grade. Applications of permanent seeding should not be delayed while construction on limited portions of the site being completed.
- Areas on that will be regraded, but will be dormant for a year or more.

Healthy dense turf will have a dramatic long lasting effect on stormwater quality as well as promoting infiltration and reducing the amount of runoff. To establish quality vegetation, careful preparation of the seedbed, soil, even subsoil is highly encouraged.

 $\underline{\textbf{Soil Compaction}} \textbf{--Stormwater quality and the amount of runoff both vary significantly with soil compaction.}$ Non-compacted soils improve stormwater by promoting:

- dense vegetation high infiltration & lower runoff rates.
- pollutant filtration, deposition & absorption, and beneficial biologic activity in the soil.

Construction activity can cause highly compacted soils but also offers the opportunity to improve soil condition. The best time for improving soil condition is during the establishment of permanent vegetation. It is highly recommended that subsoilers, plows or others implements be specified as part of final seedbed preparation. Use discretion in slip-prone areas

Minimum Soil Conditions--Vegetation cannot be expected to stabilize soil that is unstable due to its texture, structure, water movement or excessively steep slope. The following minimum soil conditions are needed for the establishment and maintenance of a long-lived vegetation cover. If these conditions cannot be met, see the Standards and Specifications for Resoiling. Soils must include enough fine-grained material to hold at least a moderate amount of available moisture. The soil must be free from material that is toxic or otherwise harmful to plant growth.

Seed Mix	Seedin	g Rate	- Notes:
Geed Wilx	lb./ac.	lb./1,000 ft. <sup>2</sup>	- Notes.
	Gene	eral Use	
Creeping Red Fescue Ryegrass Kentucky Bluegrass	20-40 10-20 10-20	1/2-1 1/4-1/2 1/4-1/2	
Tall Fescue	40	1	
Dwarf Fescue	40	1	
	Steep Banks	or Cut Slopes	
Tall Fescue	40	1	
Crown Vetch Tall Fescue	10 20	1/4 1/2	Do not seed later than August
Flat Pea Tall Fescue	20 20	1/2 1/2	Do not seed later than Augus
	Road Dito	hes and Swale	es
Tall Fescue	40	1	
Dwarf Fescue Kentucky Bluegrass	90 5	2 1/4	
	L	awns	
Perennial Ryegrass Kentucky Bluegrass	60 60	1 1/2 1 1/2	
Creeping Red Fescue Kentucky Bluegrass	60 60	1 1/2 1 1/2	For shaded areas

Mixture	Formula	lb./ac.	lb./1,000 sq. ft.	Time	Mowing
Creeping Red Fescue Ryegrass Kentucky Bluegrass	10-10-10	500	12	Fall, yearly or as needed	Not close than 3"
Tall Fescue	10-10-10	500	12		Not close than 4"
Dwarf Fescue	10-10-10	500	12		Not closer than 2"
Crown Vetch Fescue	0-20-20	400	10	Spring, yearly following establishment and every 4-7 yrs. thereafter	Do not mov
Flat Pea Fescue	0-20-20	400	10		Do not mov

SITE PREPARATION

1. A subsoiler, plow or other implement shall be used to reduce soil compaction and allow maximum states and the second both runoff rate and water quality.) Subsoiling s infiltration. (Maximizing infiltration will help control both runoff rate and water quality.) Subsoiling should be done when the soil moisture is low enough to allow the soil to crack or fracture. Subsoiling shall not be done on slip-prone areas where soil preparation should be limited to what is necessary for establishing

The site shall be graded as needed to permit the use of conventional equipment for seedbed preparation

Resoil shall be applied where needed to establish vegetation.

Lime--Agricultural group limestone shall be applied to acid soil as recommended by a soil test. In lieu of a soil test, lime shall be applied at the rate of 100 lb./1,000 sq. ft. or 2 tons/ac.

Fertilizer--Fertilizer shall be applied as recommended by a soil test. In lieu of a soil test, fertilizer shall be pplied at a rate of 12 lb./1,000 sq. ft. or 500 lb./ac. of 10-10-10- or 12-12-12 analysis.

The lime and fertilizer shall be worked into the soil with a disk harrow, spring-tooth harrow, or other suitable field implement to a depth of 3 in. On sloping land the soil shall be worked on the contour.

SEEDING DATES AND SOIL CONDITIONS Seeding should be done March 1 to May 31 or August 1 to September 30. These seeding dates are ideal

growing season. Tillage/seedbed preparation should be done when the soil is drv enough to crumble and not form ribbons when compressed by hand. For winter seeding, see the following section on dormant

Mulch material shall be applied immediately after seeding. Seedings made during optimum seeding dates and with favorable soil conditions and on very flat areas may not need mulch to achieve adequate stabilization. Dormant seeding shall be mulched.

but, with the use of additional mulch and irrigation, seedings may be made any time throughout the

Straw--If straw is used it shall be unrotted small-grain straw applied at the rate of 2 tons/ac. or 90 lb./1,000 sq. ft. (two to three bales). The mulch shall be spread uniformly by hand or mechanically so the soil surface is covered. For uniform distribution of hand-spread mulch, divide area into approximately 1,000 sq. ft. sections and spread two 45-lb. bales of straw in each section

Hydroseeders--If wood cellulose fiber is used, it shall be used at 2,000 lb./ac. or 46 lb./1,000 sq. ft. Other--Other acceptable mulches include mulch mattings applied according to manufacturer's recommendations or wood chips applied at 6 tons/ac.

Straw Mulch Anchoring Methods Straw mulch shall be anchored immediately to minimize loss by wind or water.

Mechanical--A disk, crimper, or similar type tool shall be set straight to punch or anchor the mulch material into the soil. Straw mechanically anchored shall not be finely chopped by, generally, be left longer than 6

**SEEDING NOTES** SCALE: NOT TO SCALE

#### PERMANENT SEEDING, CONTINUED

Permanent seeding shall not be considered established for at least 1 full yr. from the time of planting. Seeded areas shall be inspected for failure and vegetation conditions, it may be necessary to irrigate, fertilize, overseed, or reestablish plantings in order to provider permanent vegetation for adequate erosion control.

2. Maintenance fertilization rates shall be established by soil test recommendations or by using the rates shown in the following table.

the seeds are likely to germinate but probably will not be able to survive the winter.

#### Seeding shall not be planted from October 1 through November 20. During this period

- \* From October 1 through November 20, prepare the seedbed, add the required amounts of lime and fertilizer, then mulch and anchor. After November 20, and before March 15, broadcast the selected seed mixture. Increase the seeding rates by 50%
- From November 20 through March 15, when soil conditions permit, prepare the seedbed, lime and fertilize, apply the selected seed mixture, mulch and anchor, Increase the seeding rates by 50% for this type of seeding.

2. The following methods may be used for "Dormant Seeding"

- Apply seed uniformly with a cyclone seeder, drill, cultipacker seeder, or hydro-seeder (slurry may include seed and fertilizer) on a firm, moist seedbed
- Where feasible, except when a cultipacker type seeder is used, the seedbed should be firmed following seeding operations with a cultipacker, roller, or light drag. On sloping land, seeding operations should be on the contour where feasible.
- Mulch Nettings--Nettings shall be used according to the manufacturer's recommendations. Netting may be necessary to hold mulch in place in areas of concentrated runoff and on critical slopes.
- Asphalt Emulsion--Asphalt shall be applied as recommended by the manufacturer or at the rate of 160 gal./ac.
- Synthetic Binders--Synthetic binders such as Acrylic DLR (Agri-Tac), DAC-70, Petroset, Terra Tack or equal may be used at rates recommended by the
- Wood Cellulose Fiber--Wood cellulose fiber binder shall be applied at a net dry weight of 750 lb./ac. The wood cellulose fiber shall be mixed with water and the mixture shall contain a maximum of 50 lb./100 gal. of wood cellulose fiber.

manufacturer.

Permanent seeding shall include irrigation to establish vegetation during dry or hot weather or on adverse site conditions as needed for adequate moisture for seed germination and plant growth.

2. Excessive irrigation rates shall be avoided and irrigation monitored to prevent erosion and damage from runoff.

#### **TEMPORARY SEEDING**

Temporary seeding provides erosion control on areas in between construction operations. Grasses which are quick growing are seeded and usually mulched to provide prompt, temporary soil stabilization. It effectively minimizes the area of a construction-site prone to erosion and should be used everywhere the sequence of construction operations allows vegetation to be established.

#### CONDITIONS WHERE PRACTICE APPLIES

emporary seeding should be applied on exposed soil where additional work (grading,etc.) is not scheduled for more than 21 days. Permanent seeding should be applied if the areas will be idle for more than a year.

#### PLANNING CONSIDERATIONS

This practice has the potential to drastically reduce the amount of sediment eroded from a construction-site. Control efficiencies greater than 90% will be achieved with proper applications of temporary seeding. Because practices used to trap sediment are usually much less effective, temporary seeding is to be used even on areas where runoff is treated by sediment trapping practices. Because temporary seeding is highly effective and practical on construction-sites, its liberal use is highly recommende

- 1. Structural erosion- and sediment-control practices such as diversions and sediment traps shall be installed and stabilized with temporary seeding prior to grading the rest of the construction-site.
- 2. Temporary seed shall be applied between construction operations on soil that will not be graded or reworked for 21 days or more. These idle areas should be seeded as soon as possible after grading or shall be seeded within 7 days. Several applications of temporary seeing are necessary on typical construction projects
- 3. The seedbed should be pulverized and loose to ensure the success of establishing vegetation. However, temporary seeding shall not be postponed if ideal seedbed preparation is not possible.
- 4. Soil Amendments--Applications of temporary vegetation shall establish adequate stands of vegetation which may require the use of soil amendments. Soil tests should be taken on the site to predict the need for lime and fertilizer.

5. Seeding Method--Seed shall be applied uniformly with a cyclone seeder, drill cultipacker seeder, or hydroseeder. When feasible, seed that has been broadcast shall be covered by raking or dragging and then lightly tamped into place using a roller or cultipacker. If hydroseeding is used, the seed and fertilizer will be mixed on-site and the

Temporary Seeding Spe	cies Selection		
Seeding Dates	Species	Lb./1,000 ft. <sup>2</sup>	Pe
March 1 to August 15	Oats	3	4
March 1 to August 15	Tall Fescue	1	40
	Annual Ryegrass	1	40
	Perennial Ryegrass	1	40
	Tall Fescue	1 1	40
	Annual Ryegrass	1	40
Assessed 4C to Newsonshow	Rye	3	2
August 16 to November 1	Tall Fescue	1 1	40
	Annual Ryegrass	1 1	40
	Wheat	3	2
	Tall Fescue	1	40
	Annual Ryegrass	1	40
	Perennial Ryegrass	1	40
	Tall Fescue	1	40
	Annual Ryegrass	1 1	40

Note: Other approved seed species may be substituted.

#### Applications of temporary seeding shall include mulch which shall be applied during or immediately after seeding. Seedings made during optimum seeding dates and with favorable

soil conditions and on very flat areas may not need mulch to achieve adequate stabilization. Straw--If straw is used, it shall be unrotted small-grain straw applied at the rate of 2

tons/ac. or 90 lb./1,000 sq. ft. (two to three bales). The mulch shall be spread uniformly

by hand or mechanically so the soil surface is covered. For uniform distribution of hand-spread mulch, divide area into approximately 1,000-sq.-ft. sections and spread two 45-lb. bales of straw in each section.

Hydroseeders--If wood cellulose fiber is used, it shall be used at 2,000 lb/ac. or 46

Other--Other acceptance mulches include mulch mattings applied according to manufacturer's recommendations or wood chips applied at 6 tons/ac

Straw mulch shall be anchored immediately to minimize loss by wind or water. Anchoring Methods:

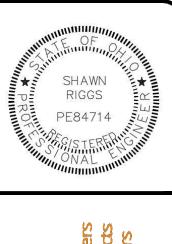
Mechanical--A disk, crimper, or similar type tool shall be set straight to punch or anchor the mulch material into the soil. Straw mechanically anchored shall not be finely chopped but, generally, be left longer than 6 in.

Mulch Nettings--Nettings shall be used according to the manufacturer's recommendations. Netting may be necessary to hold mulch in place in areas of concentration runoff and on

Asphalt Emulsion--Asphalt shall be applied as recommended by the manufacturer or at the rate of 160 gal./ac.

Synthetic Binders--Synthetic binders such as Acrylic DLR (Agri-Tac), DCA-70, Petroset, Terra Tack or equal may be used at rates recommended by the manufacturer.

Wood-Cellulose Fiber--Wood-cellulose fiber binder shall be applied at a net dry weight of 750 lb./ac. The wood-cellulose fiber shall be mixed with water and the mixture shall contain a maximum of 50 lb./100 gal.





**PROJECT NO:** 210766 **DRAWING NAME EROS** 

SEDIMENT CONTROL SITE INSPECTION FORM

SCALE: NOT TO SCALE