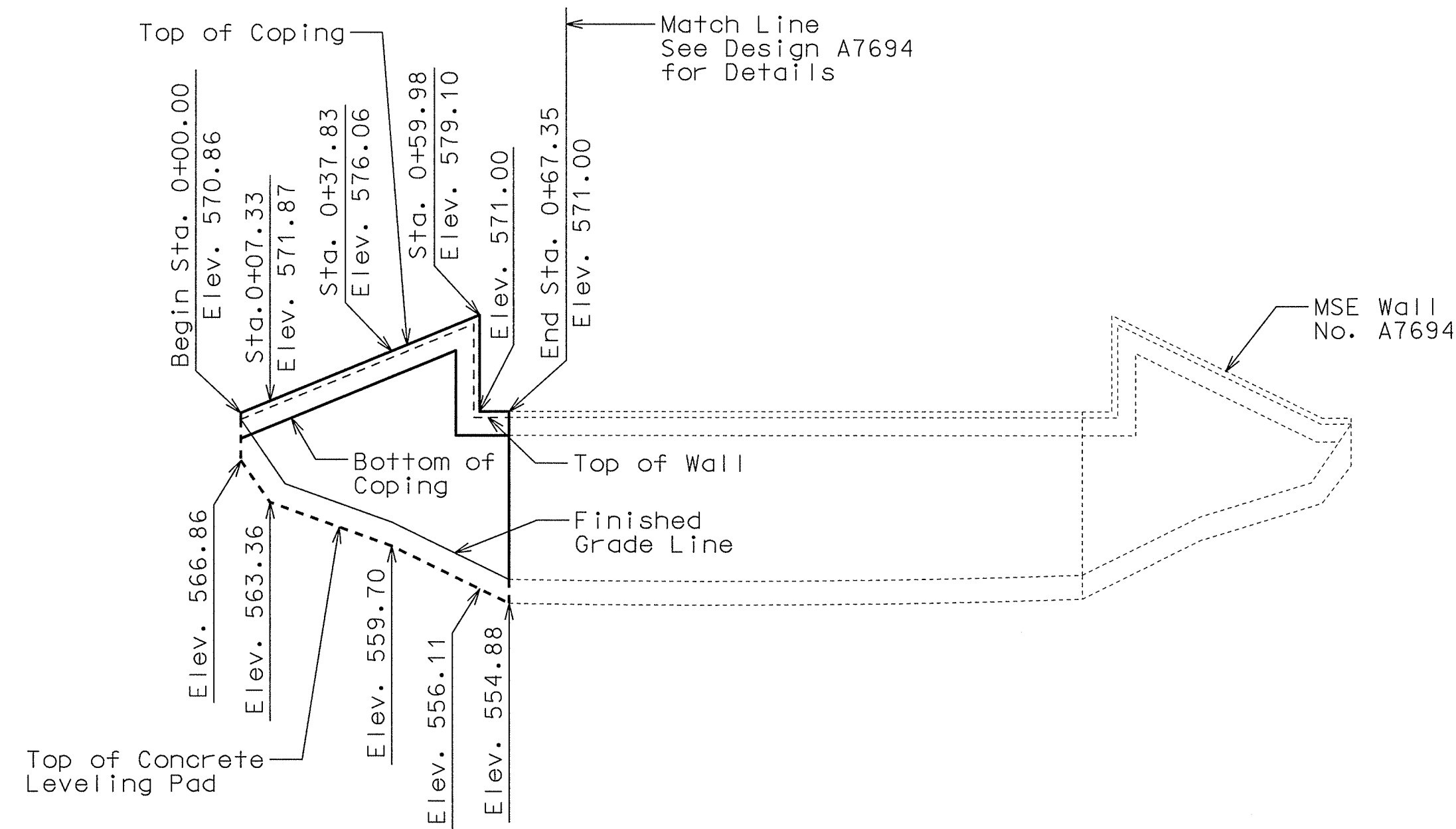


MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



ELEVATION

Note: Leveling Pad and Fence not shown for clarity.

GENERAL NOTES:

Design Specifications::
 2002 - AASHTO 17th Edition
 Load Factor Design
 Seismic Performance Category A
 Acceleration Coefficient = 0.08

All concrete for leveling pad and coping shall be Class B or B-1 with f'c = 4000 psi.

The MSE wall system shall be built vertical.

The MSE wall system shall be a large block wall system in accordance with Sec 720.

Factor of safety shall be 2.0 for overturning, 1.5 for sliding and 2.0 for bearing.

For seismic design the factor of safety shall be 1.5 for overturning and 1.1 for sliding.

φ = 19° for backfill material to be retained by the mechanically stabilized earth wall system.

φ = 20° for foundation material the wall is to rest on.

φ ≥ 34° for the select granular backfill for structural systems.

Design φ = 34° for the select granular backfill for structural systems.

The boring logs or other factual records of subsurface data and investigations performed by the department for the design of this project is available from the Project Contact upon written request.

A rock shear key, as detailed in these plans, is estimated to be under the entire length of the wall. This rock shear key is required when shale is encountered at the bottom of leveling pad. If shale is not encountered, the rock shear key is not needed. All costs for constructing the rock shear key shall be included in the "MSE Wall System" bid item.

Panel reinforcement shall be epoxy coated.

Anchorage reinforcement shall be spaced to avoid bridge piling and roadway drop inlet behind wall.

A filter cloth meeting the requirements for a Separation Geotextile material shall be placed between the select granular backfill for structural systems and the backfill being retained by the mechanically stabilized earth wall system.

Topmost layer of reinforcement shall be fully covered with select granular backfill for structural systems, as approved by the wall manufacturer, before placement of the separation geotextile.

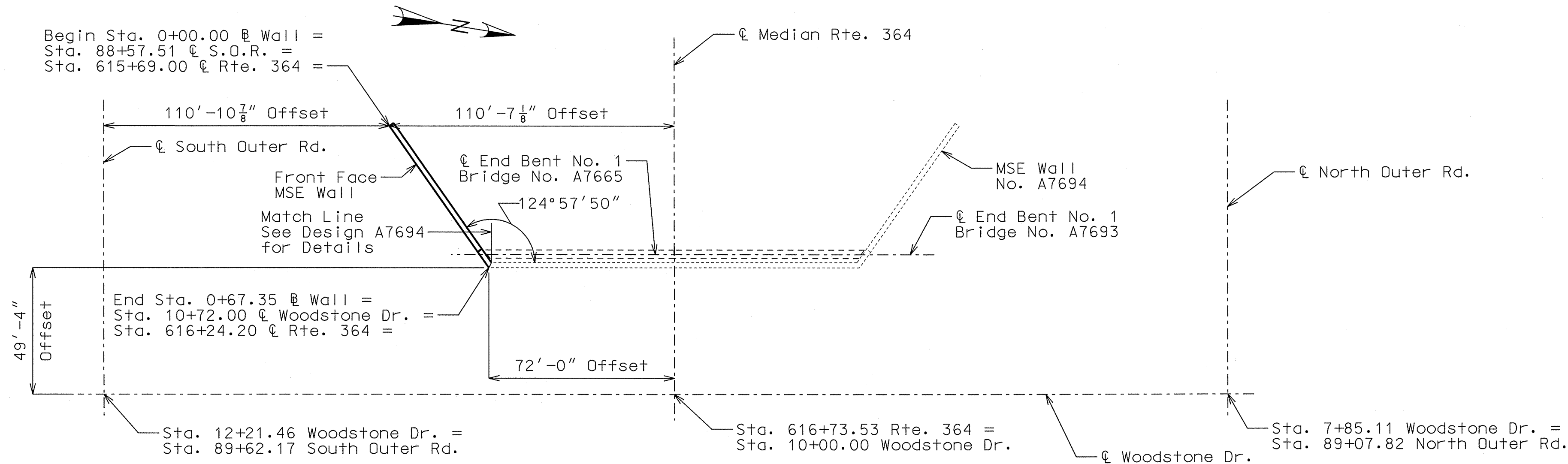
Coping shall be required on this structure. Bond breaker (roofing felt or other approved alternate) between wall panel and coping required if coping is cast in place.

The contractor shall be solely responsible to coordinate construction of this wall with adjacent wall, bridge and roadway construction and ensure that the bridge and roadway construction, resulting or existing obstructions, shall not impact the construction or performance of the wall. Soil reinforcement shall be designed and placed to avoid damage by pile driving, guardrail post installation, utility and sign foundations. (See Roadway and Bridge plans.)

Concrete and masonry protective coating shall be applied on all exposed concrete and stone areas in accordance with section 711.

Sacrificial graffiti protection coating shall be applied on all exposed concrete and stone areas in accordance with section 711.

Existing and proposed utilities oriented parallel to the MSE wall alignment shall not be located within or below the Select Granular Backfill zone behind the MSE walls. This zone extends from the back face of MSE wall to the 1:1 slope as shown on these plans.



PLAN

Note: Coping, Leveling Pad, Gutter and Fence not shown for clarity.

Estimated Quantities for MSE Wall		
Item		Total
Mechanically Stabilized Earth Wall System	sq. ft.	841.0
Concrete and Masonry Protection System	lump sum	1
Sacrificial Graffiti Protection System	lump sum	1

MSE Wall Systems Data Table					
Proprietary Wall Systems		Combination Wall Systems			
Manufacturer	System	Facing Unit Manufacturer	Facing Unit	Geogrid Manufacturer	Geogrid

MSE Wall Systems Data Table is to be completed by MoDOT construction personnel to record the manufacturer of the proprietary wall system or the manufacturers of the combination wall system that was used for constructing the MSE wall.

DETAILS FOR MSE WALL A7666

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 01 of 03

B.M. #176 - SPIKE IN P.P. 109' ± N. OF N. EDGE W.B.L. @ STA. 575+79 ± IN FRONT OF WILCOXEN OFFICE SUPPLY, ELEV. 548.12

B.M. #178 - SPIKE IN BACK SIDE OF P.P. 72' ± N. OF N. EDGE W.B.L. RTE. 94 STA. 616+40 ± ELEV. 573.01

B.M. 1-01 - 80D SPIKE IN P.P. 3" BELOW GROUND LEVEL. 75' ± S/O EP EBL RTE. 94 IN FRONT OF #4109. PLAZA 94 ELEV. 564.80

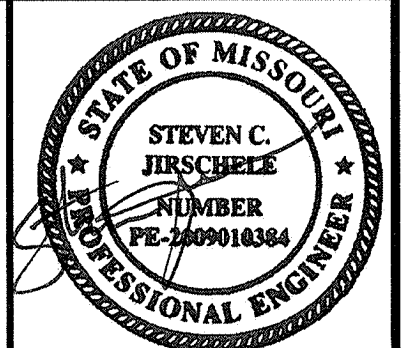
RETAINING WALL AT WOODSTONE DRIVE

STATE ROAD FROM RTE. 364 & RTE. 94 INTERCHANGE TO JUST WEST OF CENTRAL SCHOOL ROAD

ABOUT 2.0 MILES WEST OF RTE. 364 & RTE. 94 INTERCHANGE

STA. 615+69.00 @ RTE. 364

STD. 607.11
STD. 617.10
STD.



DATE	6-5-09
DATE PREPARED	MAY 2009
ROUTE	364
STATE	MO
DISTRICT	BR
SHEET NO.	01
COUNTY	ST. CHARLES
JOB NO.	J6U1028P
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	A7666

DESCRIPTION	DATE

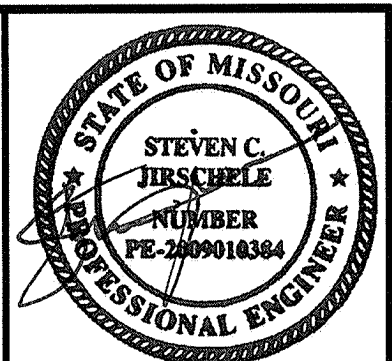
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL
 JEFFERSON CITY, MO 65102
 1-888-ASK-MODOT (1-888-275-6636)

CH2MHILL

1034 South Brentwood Blvd.
 Suite 2300
 St. Louis, MO 63117
 (314) 421-0900
 Certificate of Authority # F00384008

Designed APR. 2009
 Detailed MAY 2009
 Checked MAY 2009



DATE
6-5-09

DATE PREPARED
MAY 2009

ROUTE 364 STATE MO

DISTRICT BR SHEET NO. 02

COUNTY
ST. CHARLES

JOB NO.
J6U1028P

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A7666

DESCRIPTION	DATE

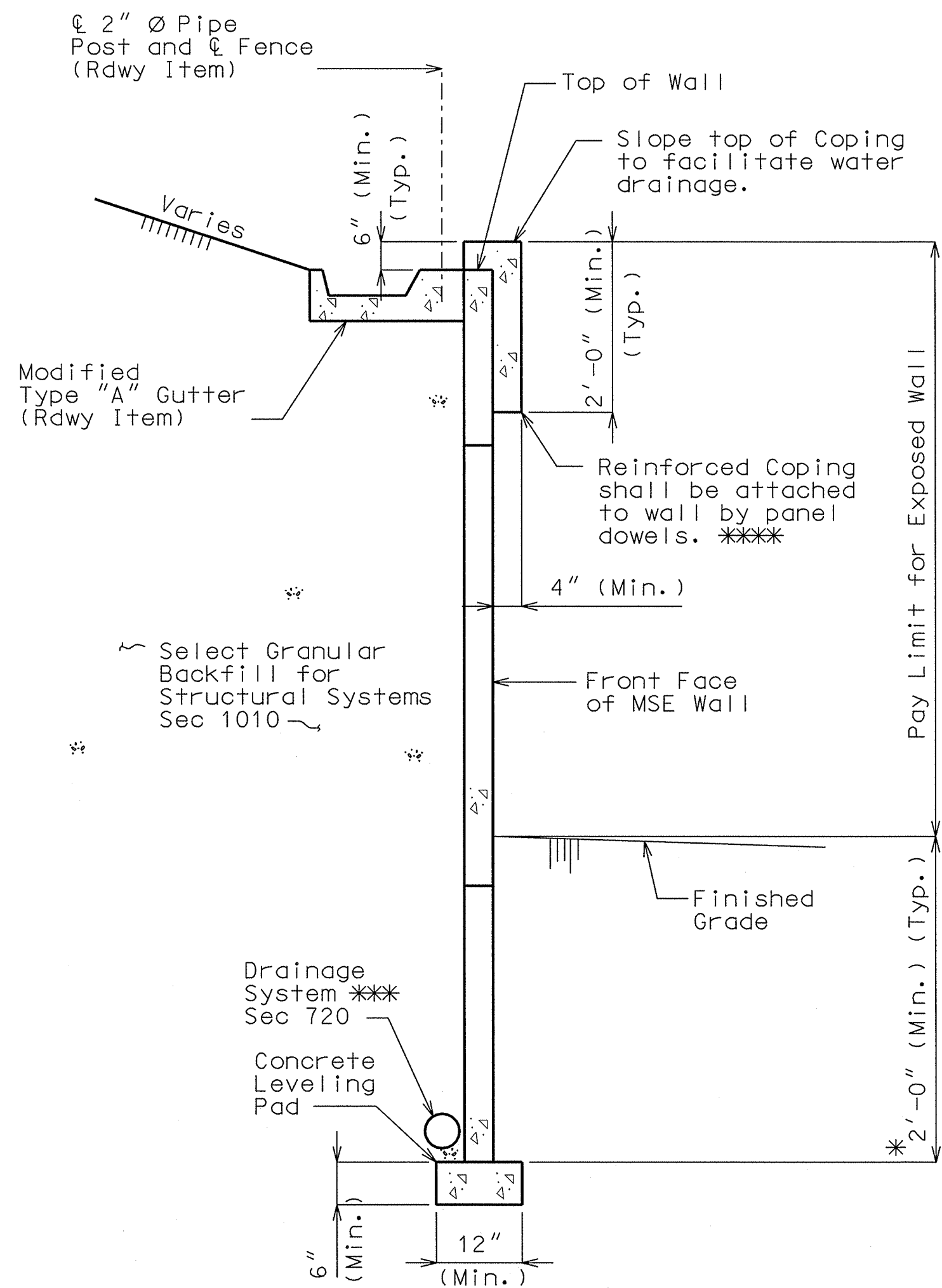
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

105 WEST CAPITAL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

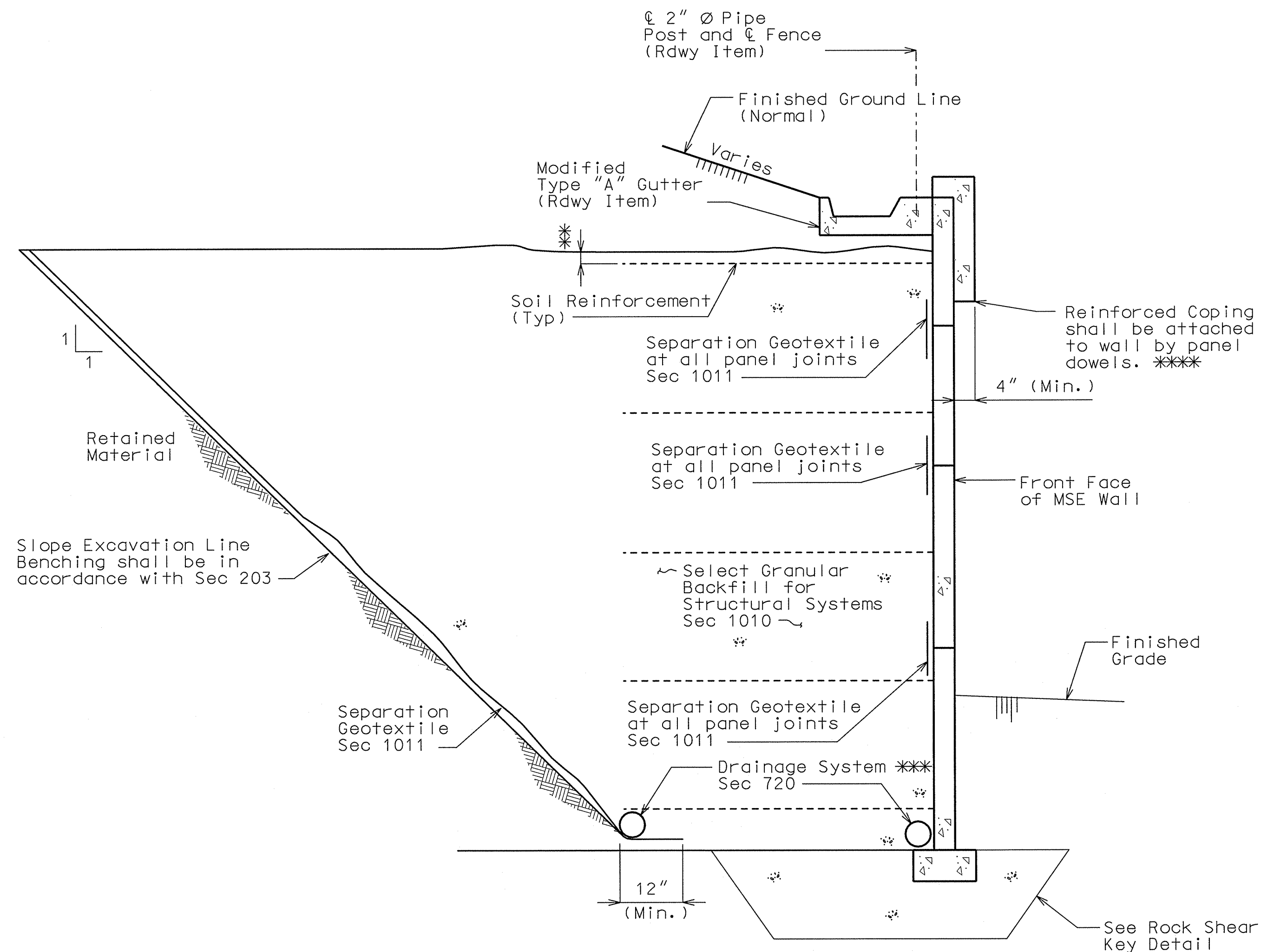
CH2MHILL

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Suite 2300
St. Louis, MO 63117
(314) 421-0900
Certificate of Authority # F00384008



TYPICAL SECTION THRU WALL

* For minimum embedment see AASHTO & Geotechnical Report



TYPICAL SECTION THRU WALL SHOWING FILTER CLOTH AND ROCK SHEAR KEY

- * Topmost layer of reinforcement shall be fully covered with select granular backfill for structural systems, as approved by the wall manufacturer, before placement of the Separation Geotextile.
- *** Adjustment in the vertical alignment of the drainage pipes from that depicted in the plans may be necessary to ensure positive flow out of the drainage system.
- Outlet ends of pipes shall be located to avoid clogging or flow into the drainage system.
- **** Inverted U-shape reinforced capstone may be used in lieu of coping. Panel dowels for capstone as required by manufacturer.

DETAILS FOR MSE WALL A7666

Detailed MAY 2009
Checked MAY 2009

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 02 of 03

