#### **STATE OF KANSAS**

#### INDEX OF SHEETS

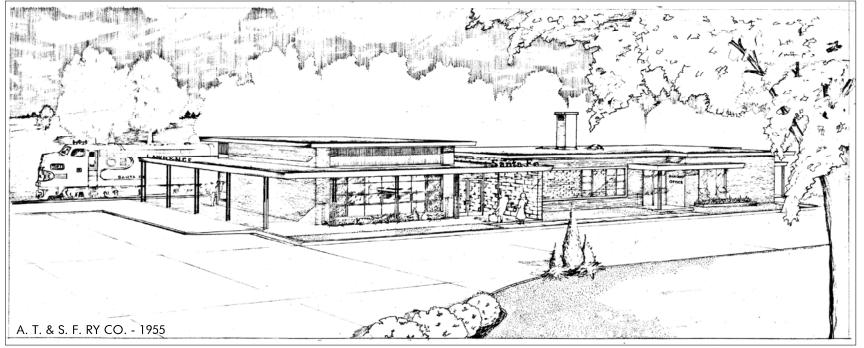
1\_\_\_\_\_TITLE SHEET
2\_\_\_\_SHEET INDEX
3-4\_\_\_SITE DRAWINGS
5-54\_\_ARCHITECTURAL DRAWINGS
55-69\_MECHANICAL DRAWINGS
70-77\_PLUMBING DRAWINGS
78-89\_ELECTRICAL DRAWINGS
90-92\_FIRE DRAWINGS
93-143\_CIVIL ENGINEERING DRAWINGS

# DEPARTMENT OF TRANSPORTATION PLAN AND PROFILE OF PROPOSED

23 TE-0373-01

SANTA FE STATION - PRESERVATION PROJECT LAWRENCE, KANSAS DOUGLAS COUNTY

# SANTA FE STATION

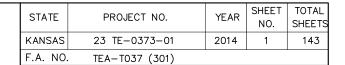


## PRESERVATION PROJECT

413 E 7TH STREET, LAWRENCE KS July 15, 2015

#### CONVENTIONAL SIGNS

COUNTY LINE	CENTER LINE OF PROJECT	GROSS LENGTH OF PROJECT	FT.		
CITY LIMITS	TERRACE	EVOEDTIONS	ЕТ		
STATE OR NATIONAL LINE		EXCEPTIONS	FI.		
TOWNSHIP , SECTION or GRANT LINE		ADDITIONS	FT.		DECOM FOR ADDROVAL DATE
PROPERT LINE	ACCESS CONTROL				RECOM. FOR APPROVAL-DATE
HIGHWAY FENCE	POWER POLE				
EXISTING FENCE					
	MARSH				
CONSTRUCTION LIMITS		NET LENGTH OF DDG IFOT	CT	VIII EC	
RIGHT OF WAY LINE	・ TREES	NET LENGTH OF PROJECT	FI.	MILES	
TRAVELED WAY		NET LENGTH OF BRIDGES	FT.	MILES	COUNTY OFFICIAL
RAILROADS	STREAM OR CREEK	NET LENGTH OF ROAD	FT.	MILES	SSSTEET STEETING





### PROJECT LOCATION

#### PLANS PREPARED BY:



#### <u>ARCHITECT</u>

HERNLY ASSOCIATES, INC. 920 Massachusetts St. Suite 2 Lawrence, KS 66044 P) 785-749-5806 F) 785-749-1515



### MASONRY/STRUCTURAL CONSULTANT

DGM CONSULTANTS, PA 10251 Goddard St. Overland Park, KS 66241 P) 913-894-2048 F) 913-894-2225



#### MECHANICAL ENGINEER

HUGHES CONSULTING ENGINEERING, PA 714 Vermont St. Suite 200 Lawrence, KS 66044 P) 785-842-2292 F) 785-842-2492



#### CIVIL ENGINEER

BARTLETT & WEST 544 Columbia St. Lawrence, KS 66049 P) 785-749-9452

KANSAS DEPARTMENT OF TRANSPORTATION

### INDEX FOR ALL SHEETS

#### **ARCHITECTURAL**

(1) TS - TITLE SHEET

(2) SI - SHEET INDEX

(3) 0.0 - EXISTING SITE (4) 0.1 - SCHEMATIC SITE DESIGN

(5) 1.A.0 - DEMOLITION PLAN - WEST PORTION

(6) 1.A.1 - DEMOLITION PLAN - EAST PORTION

(7) 1.A.2 - DEMOLITION PLAN - BATHROOMS 7 & 8

(8) 1.A.3 - FLOOR PLAN OVERVIEW

(9) 1.A.4 - BUILDING INTERFACE WITH SITE- WEST PORTION

(10) 1.A.5 - BUILDING INTERFACE WITH SITE - EAST PORTION

(11) 1.A.6 - FLOOR PLAN - TICKET OFFICE, BATHROOMS (12) 1.A.7 - FLOOR PLAN - TICKET OFFICE, BATHROOMS

(13) 1.A.8 - FLOOR PLAN - VESTIBULES 2 & 3

(14) 1.A.9 - FLOOR PLAN - FREIGHT OFFICE & VESTIBULE 14 (15) 1.E.O - EXTERIOR PLAN - WEST PORTION

(16) 1.E.1 - EXTERIOR PLAN - EAST PORTION

(17) 1.I.0 - FINISH FLOOR PLAN (ALTERNATE #1)

(18) 1.R.0 - ROOF DEMOLITION PLAN

(19) 1 R 1 - ROOF PLAN

(20) 1.R.2 - ROOF PLAN - OVERALL DIMENSIONS

(21) 1.R.3 - ROOF DRAINAGE PLAN

(22) 1.W.0 - FLOOR PLAN & STOREFRONT DETAILS

(23) 2.A.0 - ELEVATION DETAILS

(24) 2.E.0 - EXISTING ELEVATIONS

(25) 2.R.0 - ELEVATIONS

(26) 2.W.0 - ELEVATIONS

(27) 3.A.0 - INTERIOR ELEVATIONS - BATHROOM 7

(28) 3.A.1 - INTERIOR ELEVATIONS - BATHROOM 8

(29) 3.A.2 - INTERIOR ELEVATIONS & FOUNTAIN DETAIL

(30) 3.A.3 - INTERIOR ELEVATIONS & DOOR 12D DETAIL (31) 3.I.0 - INTERIOR ELEVATIONS (ALTERNATE #1)

(32) 3.W.0 - INTERIOR STORM WINDOW ELEVATIONS

(33) 3.W.1 - INTERIOR STORM WINDOW ELEVATIONS

(34) 4.A.0 - REFLECTED CEILING PLAN - BATHROOMS

(35) 4.E.0 - REFLECTED CEILING PLAN - ROOF & CANOPY

(36) 4.I.0 - REFLECTED CEILING PLAN (ALTERNATE #1)

(37) 5.A.0 - STRUCTURAL CLAY TILE WALL SECTIONS

(38) 5.A.1 - WALL SECTION, JAMB, HEAD, CONCRETE DETAILS

(39) 5.A.2 - JAMB, HEAD, WALL SUPPORT, PANIC DETAILS

(41) 5.E.1 - COLUMN DETAILS, SOFFIT SECTION

(42) 5.R.0 - ROOF SECTIONS

(43) 5.R.1 - FASCIA. WATER SPOUT, ROOF DRAIN DETAILS

(44) 5.R.2 - ROOF AND CHIMNEY SECTIONS

(46) 5.W.1 - ROOF INSULATION DETAILS (ALTERNATE #2)

(47) 6.E.0 - EXTERIOR PHOTO KEY

(50) 610 - INTERIOR PHOTO KEY (ALTERNATE #1)

(53) 7.I.0 - FINISH SCHEDULE (ALTERNATE #1)

(54) 7.I.1 - FINISH SCHEDULE (ALTERNATE #1)

#### **MECHANICAL**

(55) M.A.1 - MECHANICAL SCHEDULES AND DEMOLITION PLAN

(56) M.A.2 - MECHANICAL LAYOUT

(57) M.A.3 - MECHANICAL DETAILS

(58) M.1.0 - MECHANICAL DEMOLITION PLAN WEST (59) M.2.0 - MECHANICAL DEMOLITION PLAN EAST

(60) M.3.0 - MECHANICAL & VENTILATION SCHEDULES

(61) M.4.0 - MECHANICAL AIR SIDE WEST & GENERAL NOTES

(62) M.5.0 - MECHANICAL AIR SIDE EAST

(63) M.6.0 - MECHANICAL HYDRONIC FLOOR PLAN WEST

(64) M.7.0 - MECHANICAL HYDRONIC FLOOR PLAN EAST

(65) M.8.0 - BOILER ROOM PIPING SCHEMATICS (66) M.9.0 - SITE MAP/ GSHP WELL LOCATIONS

(67) M.10.0 - BOILER ROOM ELEVATIONS & SECTIONS

(68) M.11.0 - AIR HANDLER CABINET DETAILS

(69) M.12.0 - ENLARGED BOILER ROOM PLAN

#### **PLUMBING**

(70) P.A.1 - DEMOLITION PLAN & GENERAL NOTES

(71) P.A.2 - SANITARY PLUMBING PLAN

(72) P.A.3 - DOMESTIC SUPPLY PLAN

(73) P.A.4 - PLUMBING FIXTURE LAYOUT & PLUMBING SCHED

(74) P.A.5 - SECTIONS & DETAILS (75) P.A.6 - PLUMBING FIXTURE ELEVATION DETAIL

(76) P.A.7 - WATER CLOSET SECTION

(77) P.A.8 - URINAL SECTION

#### **ELECTRICAL**

(81) E.2.0 - ELECTRICAL DEMOLITION PLAN EAST

(83) E.4.0 - ELECTRICAL RISER & CONDUIT SCHEDULE

(84) E.5.0 - LIGHTING SCHEDULE & BOILER ROOM SECTIONS

(87) E.8.0 - POWER LAYOUT WEST

(89) E.10.0 - PHOTOVOLTAIC PANEL LAYOUT

#### FIRE

(92) F.3.0 - FIRE SUPPRESSION LAYOUT EAST

#### CIVIL

(93) C.1.1 EXISTING CONDITIONS

(95) C.2.1 SITE DEMOLITION NOTES

(96) C.2.2 SITE DEMOLITION PLAN

(98) C.3.1 SITE LAYOUT NOTES

(99) C.3.2 SITE LAYOUT PLAN

(100) C.3.3 SITE LAYOUT PLAN

(102) C.3.5 SITE LAYOUT PLAN

(103) C.3.6 SITE LAYOUT PLAN

(104) C.4.1 GRADING NOTES

(107) C.4.4 GRADING PLAN

(108) C.5.1 EROSION CONTROL NOTES

(110) C.6.1 LANDSCAPE NOTES

(111) C.6.2 LANDSCAPE PLAN (112) C.7.1 TRAFFIC CONTROL PLAN

(113) C.7.2 TRAFFIC CONTROL PLAN

(114) C.7.3 TRAFFIC CONTROL PLAN

(116) C.8.2 SITE DETAILS

(117) C.8.3 SITE DETAILS

(119) C.8.5 CONCRETE STEP DETAILS (120) C.9.1 CITY STANDARD DETAILS

(121) C.9.2 CITY STANDARD DETAILS

(123) C.9.4 CITY STANDARD DETAILS

(124) C.9.5 CITY STANDARD DETAILS

(127) C.10.2 KDOT DETAILS - TEMPORARY EROSION AND POLLUTION CONTROL

(128) C.10.3 KDOT DETAILS - TEMPORARY EROSION AND POLLUTION CONTROL

(129) C.10.4 KDOT DETAILS - TEMPORARY EROSION AND POLLUTION CONTROL

(132) C.10.7 KDOT DETAILS - TEMPORARY EROSION AND POLLUTION CONTROL (133) C.10.8 KDOT DETAILS - TEMPORARY EROSION AND POLLUTION CONTROL

(135) C.10.10 KDOT DETAILS - ROADSIDE IMPROVEMENT PLANTING DETAILS

(136) C.11.1 KDOT - SUMMARY AND RECAPITULATION OF PVMT MARKING QUANTITIES

(137) C.12.1 KDOT - TRAFFIC CONTROL GENERAL NOTES (138) C.12.2 KDOT - TRAFFIC CONTROL CHANNELIZING DEVICES

(139) C.12.3 KDOT - TRAFFIC CONTROL ROAD CLOSURES (140) C.12.4 KDOT - TRAFFIC CONTROL SIGN INFORMATION

(141) C.12.5 KDOT - TRAFFIC CONTROL SIGN POSTS

(142) C.12.6 KDOT - DETAILS FOR "TWORKS" SIGNS (143) C.12.7 KDOT - SUMMARY OF DEVICES AND RECAPITULATION OF QUANTITIES

#### INDEX BY PROJECT TITLE

(1) TS - TITLE SHEET

(2) SI - SHEET INDEX

(3) 0.0 - EXISTING SITE

ACCESSIBILITY IMPROVEMENTS (BUILDING BASE BID 1)

(5) 1.A.0 - DEMOLITION PLAN - WEST PORTION

(6) 1.A.1 - DEMOLITION PLAN - EAST PORTION (7) 1.A.2 - DEMOLITION PLAN - BATHROOMS 7 & 8

(8) 1.A.3 - FLOOR PLAN OVERVIEW

(9) 1.A.4 - SITE WORK - WEST PORTION

(10) 1.A.5 - SITE WORK - EAST PORTION

(11) 1.A.6 - FLOOR PLAN - TICKET OFFICE, BATHROOMS (12) 1.A.7 - FLOOR PLAN - TICKET OFFICE, BATHROOMS

(13) 1.A.8 - FLOOR PLAN - VESTIBULES 2 & 3

(14) 1.A.9 - FLOOR PLAN - FREIGHT OFFICE & VESTIBULE 14

(23) 2.A.0 - ELEVATIONS & HANDRAIL DETAILS

(27) 3.A.0 - INTERIOR ELEVATIONS - BATHROOM 7 (28) 3.A.1 - INTERIOR ELEVATIONS - BATHROOM 8

(29) 3.A.2 - INTERIOR ELEVATIONS & FOUNTAIN DETAIL (30) 3.A.3 - INTERIOR ELEVATIONS & DOOR 12D DETAIL

(34) 4.A.0 - REFLECTED CEILING PLAN - BATHROOMS (37) 5.A.0 - STRUCTURAL CLAY TILE WALL SECTIONS

(38) 5.A.1 - WALL SECTION, JAMB, HEAD, CONCRETE DETAILS (39) 5.A.2 - JAMB, HEAD, WALL SUPPORT, PANIC DETAILS

(52) 7.A.0 - DOOR SCHEDULE

(55) M.A.1 - MECHANICAL SCHEDULES AND DEMOLITION PLAN (56) M.A.2 - MECHANICAL LAYOUT

(57) M.A.3 - MECHANICAL DETAILS

(70) P.A.1 - DEMOLITION PLAN & GENERAL NOTES

(71) P.A.2 - SANITARY PLUMBING PLAN (72) P.A.3 - DOMESTIC SUPPLY PLAN

(73) P.A.4 - PLUMBING FIXTURE LAYOUT & PLUMBING SCHEDULE

(74) P.A.5 - SECTIONS & DETAILS (75) P.A.6 - PLUMBING FIXTURE ELEVATION DETAIL

(76) P.A.7 - WATER CLOSET SECTION

(77) P.A.8 - URINAL SECTION

(78) E.A.1 - SCHEDULES & REFLECTED CEILING PLAN (79) E.A.2 - LIGHTING LAYOUT & POWER LAYOUT

EXTERIOR RESTORATION (BUILDING BASE BID 2)

(15) 1.E.0 - EXTERIOR PLAN - WEST PORTION

(16) 1.E.1 - EXTERIOR PLAN - EAST PORTION (24) 2.E.0 - EXISTING ELEVATIONS

(35) 4.E.O - REFLECTED CEILING PLAN - ROOF & CANOPY

(40) 5.E.O - BRICK, STONE & CONCRETE DETAILS (41) 5.E.1 - COLUMN DETAILS, SOFFIT SECTION

(47) 6.E.O - EXTERIOR PHOTO KEY

(48) 6.E.1 - EXTERIOR PHOTO KEY (49) 6.E.2 - EXTERIOR PHOTO KEY

INTERIOR RESTORATION (BUILDING ALTERNATE 1)

(17) 1.I.O - FINISH FLOOR PLAN (ALTERNATE #1) (31) 3.I.O - INTERIOR ELEVATIONS (ALTERNATE #1)

(36) 4.I.1 - REFLECTED CEILING PLAN (ALTERNATE #1)

(50) 6.I.0 - INTERIOR PHOTO KEY (ALTERNATE #1) (51) 6.I.1 - INTERIOR PHOTO KEY (ALTERNATE #1)

(53) 7.I.0 - FINISH SCHEDULE (ALTERNATE #1)

#### (54) 7.I.1 - FINISH SCHEDULE (ALTERNATE #1)

ROOF RESTORATION (BUILDING BASE BID 2)

(18) 1.R.0 - ROOF DEMOLITION PLAN

(19) 1.R.1 - ROOF PLAN (20) 1.R.2 - ROOF PLAN - OVERALL DIMENIONS

(21) 1.R.3 - ROOF DRAINAGE PLAN

(25) 2.R.0 - ELEVATIONS (42) 5 R 0 - ROOF SECTIONS

(43) 5.R.1 - FASCIA, WATER SPOUT, ROOF DRAIN DETAILS

(44) 5.R.2 - ROOF AND CHIMNEY SECTIONS

#### WEATHERIZATION (BUILDING BASE BID 2, EXCEPT 5.W.1)

(22) 1.W.0 - FLOOR PLAN & STOREFRONT DETAILS

(26) 2.W.0 - ELEVATIONS

(32) 3.W.0 - INTERIOR STORM WINDOW ELEVATIONS (33) 3.W.1 - INTERIOR STORM WINDOW ELEVATIONS

(45) 5.W.0 - STORM WINDOW SECTION (46) 5.W.1 - ROOF INSULATION DETAILS (ALTERNATE #2)

(58) M.1.0 - MECHANICAL DEMOLITION PLAN WEST

(62) M.5.0 - DIFFUSER & RETURN/ EXHAUST GRILLE LAYOUT EAST

(66) M.9.0 - SITE MAP/ GSHP WELL LOCATIONS

SHEET TOTAL STATE PROJECT NO. NO. SHEETS 143 KANSAS 23 TE-0373-01 2014 2

(69) M.12.0 - MECHANICAL DETAILS

#### **ELECTRICAL** (BUILDING BASE BID 2)

(81) E.2.0 - ELECTRICAL DEMOLITION PLAN EAST

(83) E.4.0 - ELECTRICAL RISER & CONDUIT SCHEDULE

(84) E.5.0 - LIGHTING SCHEDULE & BOILER ROOM SECTIONS

(87) E.8.0 - POWER LAYOUT WEST

(89) E.10.0 - PHOTOVOLTAIC PANEL LAYOUT

#### FIRE (BUILDING BASE BID 2)

(90) F.1.0 - GENERAL NOTES

(92) F.3.0 - FIRE SUPPRESSION LAYOUT EAST SITE IMPROVEMENTS

(94) C.1.2 EXISTING CONDITIONS

(95) C.2.1 SITE DEMOLITION NOTES

(97) C.2.3 SITE DEMOLITION PLAN (98) C.3.1 SITE LAYOUT NOTES

(101) C.3.4 SITE LAYOUT PLAN (102) C.3.5 SITE LAYOUT PLAN

(103) C.3.6 SITE LAYOUT PLAN

(106) C.4.3 GRADING PLAN

(109) C.5.2 EROSION CONTROL PLAN

(110) C.6.1 LANDSCAPE NOTES

(113) C.7.2 TRAFFIC CONTROL PLAN

(114) C.7.3 TRAFFIC CONTROL PLAN

(117) C.8.3 SITE DETAILS

(118) C.8.4 HANDRAIL ELEVATIONS AND DETAILS (119) C.8.5 CONCRETE STEP DETAILS

(122) C.9.3 CITY STANDARD DETAILS

(125) C.9.6 SITE QUANTITY RECAPITULATION

(126) C.10.1 KDOT DETAILS - TEMPORARY EROSION AND POLLUTION CONTROL

(127) C.10.2 KDOT DETAILS - TEMPORARY EROSION AND POLLUTION CONTROL

(130)C.10.5 KDOT DETAILS - TEMPORARY EROSION AND POLLUTION CONTROL (131) C.10.6 KDOT DETAILS - TEMPORARY EROSION AND POLLUTION CONTROL

(135) C.10.10 KDOT DETAILS - ROADSIDE IMPROVEMENT PLANTING DETAILS

(136) C.11.1 KDOT - SUMMARY AND RECAPITULATION OF PVMT MARKING QUANTITIES (137) C.12.1 KDOT - TRAFFIC CONTROL GENERAL NOTES

(141) C.12.5 KDOT - TRAFFIC CONTROL SIGN POSTS (142) C.12.6 KDOT - DETAILS FOR "TWORKS" SIGNS (143) C.12.7 KDOT - SUMMARY OF DEVICES AND RECAPITULATION OF QUANTITIES

### KANSAS DEPARTMENT OF TRANSPORTATION

TRACED DESIGNED DESIGNED QUANTITIES DESIGN CK. QUAN. CK TRACE CK DESIGN CK.

# (40) 5.E.O - BRICK, STONE & CONCRETE DETAILS (45) 5.W.0 - STORM WINDOW SECTION (48) 6.E.1 - EXTERIOR PHOTO KEY (49) 6.E.2 - EXTERIOR PHOTO KEY (51) 6.I.1 - INTERIOR PHOTO KEY (ALTERNATE #1) (52) 7.A.0 - DOOR SCHEDULE

(78) E.A.1 - SCHEDULES & REFLECTED CEILING PLAN

(79) E.A.2 - LIGHTING LAYOUT & POWER LAYOUT

(80) E.1.0 - ELECTRICAL DEMOLITION PLAN WEST

(82) E.3.0 - ELECTRICAL PANELBOARD SCHEDULE

(85) E.6.0 - LIGHTING LAYOUT WEST

(86) E.7.0 - LIGHTING LAYOUT EAST

(88) E.9.0 - POWER LAYOUT EAST

(90) F.1.0 - GENERAL NOTES

(91) F.2.0 - FIRE SUPPRESSION LAYOUT WEST

(94) C.1.2 EXISTING CONDITIONS

(97) C.2.3 SITE DEMOLITION PLAN

(101) C.3.4 SITE LAYOUT PLAN

(105) C.4.2 GRADING PLAN (106) C.4.3 GRADING PLAN

(109) C.5.2 EROSION CONTROL PLAN

(115) C.8.1 SITE DETAILS

(118) C.8.4 HANDRAIL ELEVATIONS AND DETAILS

(122) C.9.3 CITY STANDARD DETAILS

(125) C.9.6 SITE QUANTITY RECAPITULATION (126) C.10.1 KDOT DETAILS - TEMPORARY EROSION AND POLLUTION CONTROL

(130) C.10.5 KDOT DETAILS - TEMPORARY EROSION AND POLLUTION CONTROL (131) C.10.6 KDOT DETAILS - TEMPORARY EROSION AND POLLUTION CONTROL

(134) C.10.9 KDOT DTLS - PERMANENT SEEDING SUMMARY OF SEEDING QUANTITIES

#### MECHANICAL (BUILDING BASE BID 2)

(59) M.2.0 - MECHANICAL DEMOLITION PLAN FAST & GEN. NOTES (60) M.3.0 - MECHANICAL & VENTILATION SCHEDULES (61) M.4.0 - DIFFUSER & RETURN/ EXHAUST GRILLE LAYOUT WEST

(63) M.6.0 - MECHANICAL FLOOR PLAN WEST (64) M.7.0 - MECHANICAL FLOOR PLAN EAST (65) M.8.0 - MECHANICAL PIPING SCHEMATICS

(67) M.10.0 - BOILER ROOM ELEVATIONS & SECTIONS

(68) M.11.0 - AIR HANDLER CABINET DETAILS

(80) E.1.0 - ELECTRICAL DEMOLITION PLAN WEST

(82) E.3.0 - ELECTRICAL PANELBOARD SCHEDULE

(85) E.6.0 - LIGHTING LAYOUT WEST

(86) E.7.0 - LIGHTING LAYOUT EAST

(88) E.9.0 - POWER LAYOUT EAST

(91) F.2.0 - FIRE SUPPRESSION LAYOUT WEST

(93) C.1.1 EXISTING CONDITIONS

(96) C.2.2 SITE DEMOLITION PLAN

(99) C.3.2 SITE LAYOUT PLAN (100) C.3.3 SITE LAYOUT PLAN

(104) C.4.1 GRADING NOTES (105) C.4.2 GRADING PLAN

(107) C.4.4 GRADING PLAN (108) C.5.1 EROSION CONTROL NOTES

(111) C.6.2 LANDSCAPE PLAN (112) C.7.1 TRAFFIC CONTROL PLAN

(115) C.8.1 SITE DETAILS (116) C.8.2 SITE DETAILS

(120) C.9.1 CITY STANDARD DETAILS (121) C.9.2 CITY STANDARD DETAILS

(123) C.9.4 CITY STANDARD DETAILS (124) C.9.5 CITY STANDARD DETAILS

(128) C.10.3 KDOT DETAILS - TEMPORARY EROSION AND POLLUTION CONTROL (129) C.10.4 KDOT DETAILS - TEMPORARY EROSION AND POLLUTION CONTROL

(132) C.10.7 KDOT DETAILS - TEMPORARY EROSION AND POLLUTION CONTROL (133) C.10.8 KDOT DETAILS - TEMPORARY EROSION AND POLLUTION CONTROL (134) C.10.9 KDOT DTLS - PERMANENT SEEDING SUMMARY OF SEEDING QUANTITIES

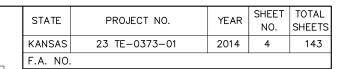
(138) C.12.2 KDOT - TRAFFIC CONTROL CHANNELIZING DEVICES (139) C.12.3 KDOT - TRAFFIC CONTROL ROAD CLOSURES (140) C.12.4 KDOT - TRAFFIC CONTROL SIGN INFORMATION

SHEET INDEX

FHWA APPROVAL XX-XX-XX APP'D XXX

F.A. NO.







#### Note:

This schematic Site Design drawing was prepared for and included in the Historic Structure Report dated December 15, 2009 for the Santa Fe Station. Its inclusion here is for reference only and is not intended to depict any specific Work included in this Preservation Project.

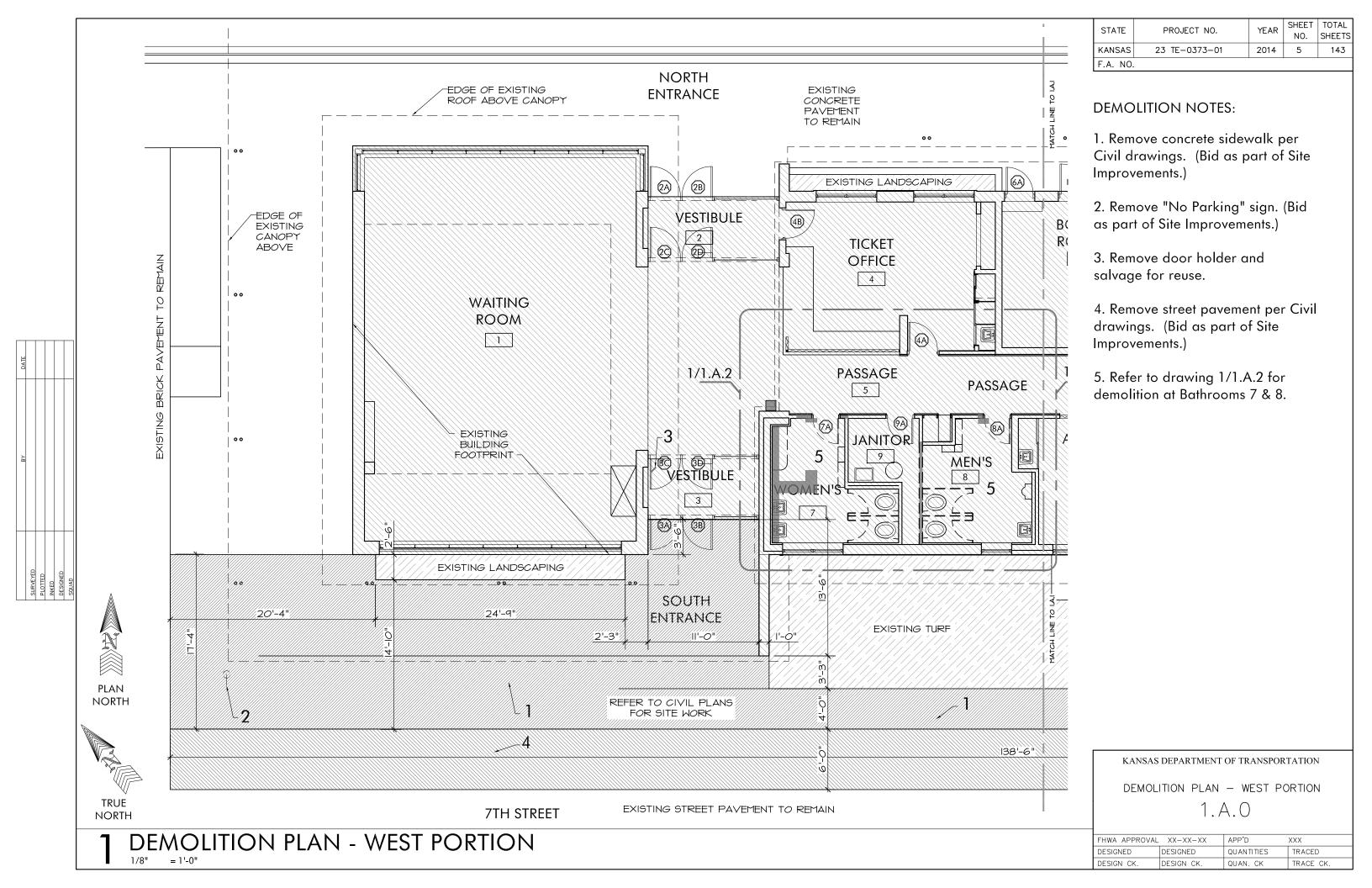
Construction Documents for site improvements are depicted elsewhere in these Construction Documents.

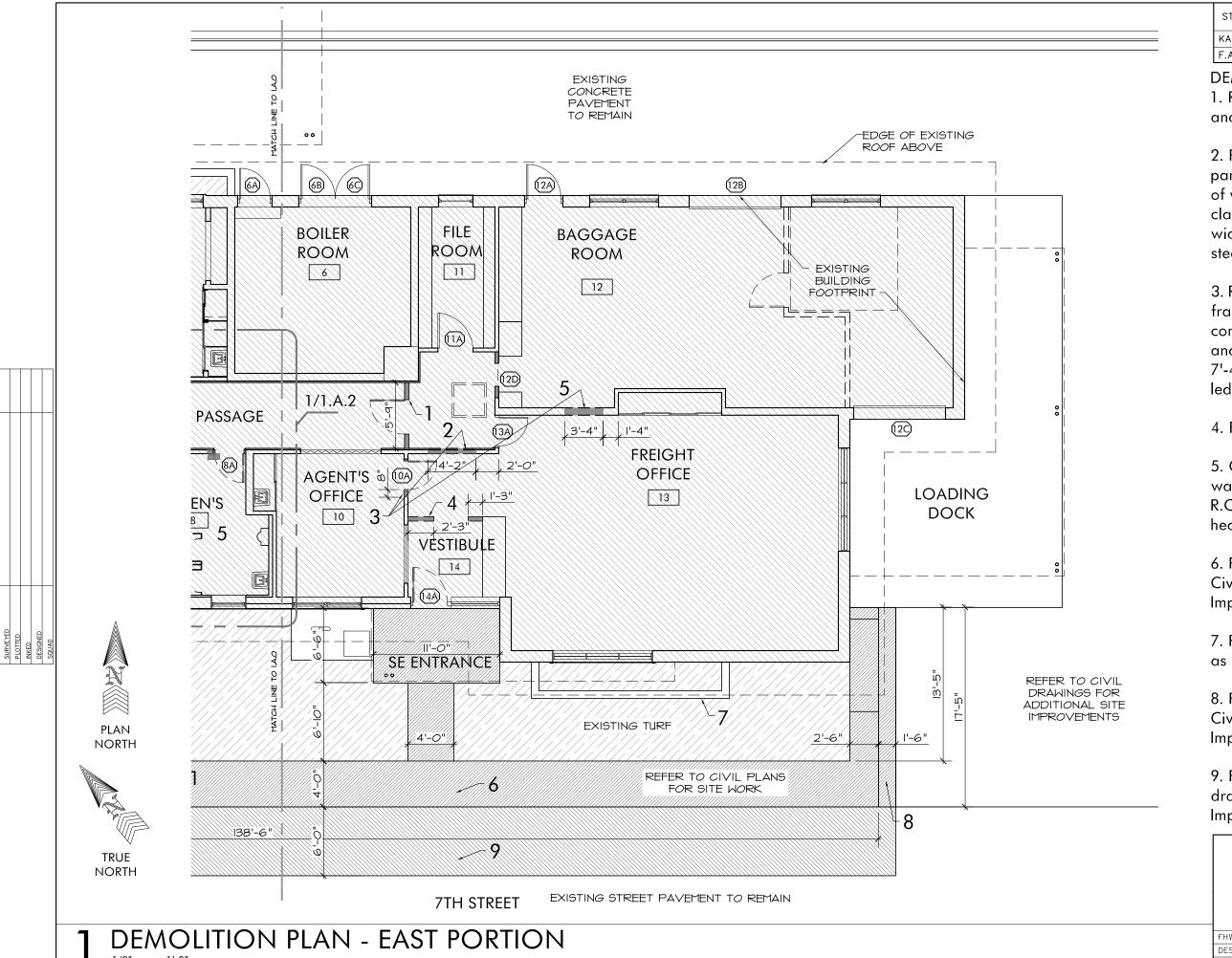
KANSAS DEPARTMENT OF TRANSPORTATION

SCHEMATIC SITE DESIGN

0.1

FHWA APPROVAL XX-XX-XX		APP'D XXX	
DESIGNED	DESIGNED	QUANTITIES	TRACED
DESIGN CK.	DESIGN CK.	QUAN. CK	TRACE CK.





STATE PROJECT NO.

YEAR SHEET TOTAL NO. SHEETS

KANSAS 23 TE-0373-01 2014 6 143

F.A. NO.

#### **DEMOLITION NOTES:**

- 1. Remove entire wood framed wall and door.
- 2. Remove and salvage wood paneling and trim on "Passage" side of wall. Cut and remove structural clay tile and plaster wall for 4'-2" wide x 6'-10" Tall R.O. Provide steel angle ledger per 2/5.A.1.
- 3. Remove wood door and metal frame; salvage all door hardware components. Cut and remove CMU and plaster wall for 3'-2" wide x 7'-4" tall R.O. Provide steel angle ledger at head per 1/5.A.2.
- 4. Remove partial height wall.
- 5. Cut and remove CMU and plaster wall for 3'-2" wide and 7'-4" tall R.O. Provide steel angle ledger at head per 2/5.A.2.
- 6. Remove concrete sidewalk per Civil drawings. (Bid as part of Site Improvements.)
- 7. Remove railroad tie planter. (Bid as part of Site Improvements.)
- 8. Remove concrete pavement per Civil drawings. (Bid as part of Site Improvements.)
- 9. Remove street pavement per Civil drawings. (Bid as part of Site Improvements.)

KANSAS DEPARTMENT OF TRANSPORTATION

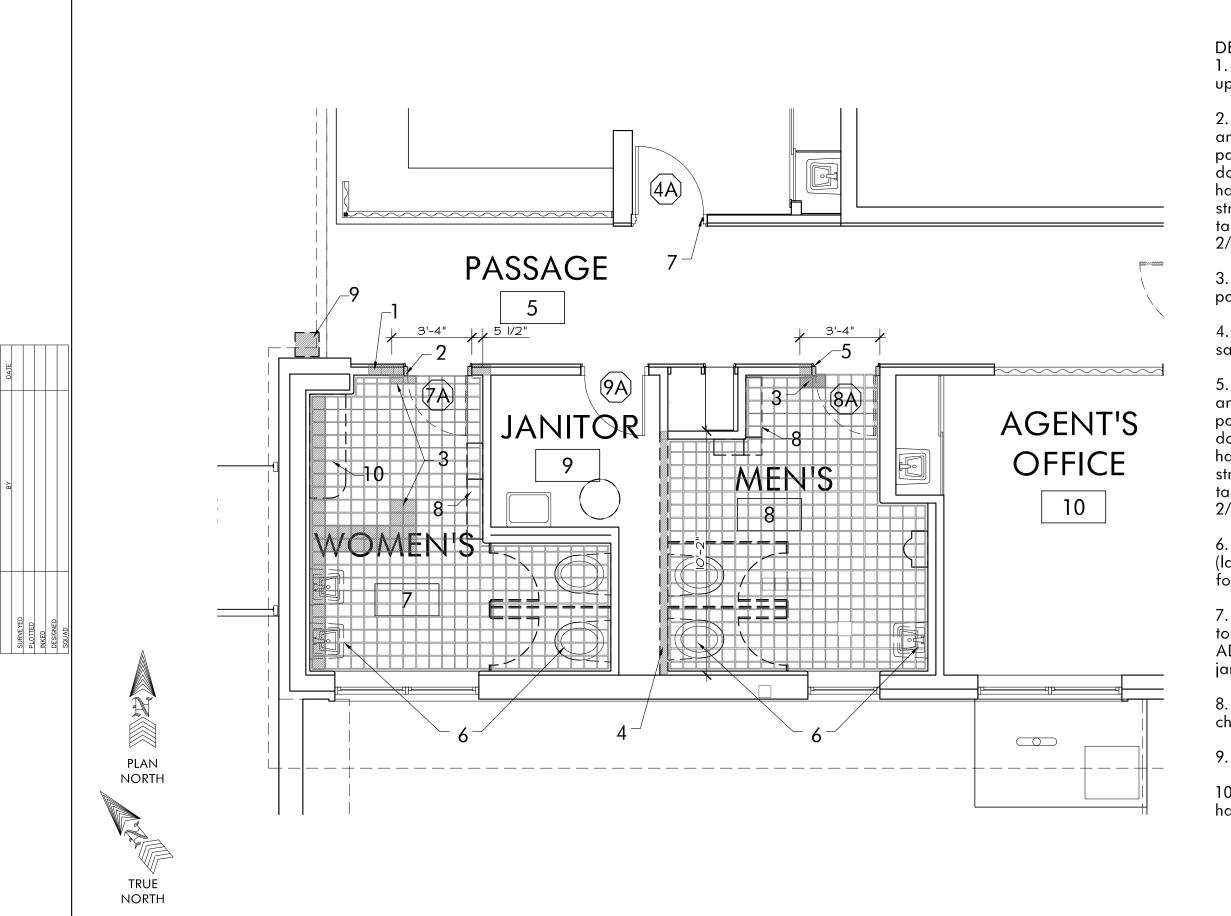
DEMOLITION PLAN - EAST PORTION

1, A, 1

FHWA APPROVAL XX-XX-XX APP'D XXX

DESIGNED DESIGNED QUANTITIES TRACED

DESIGN CK. DESIGN CK. QUAN. CK TRACE CK.



STATE PROJECT NO.

YEAR SHEET TOTAL NO. SHEETS

KANSAS 23 TE-0373-01 2014 7 143

F.A. NO.

#### **DEMOLITION NOTES:**

- 1. Remove 1-5/8" thick structural clay tile at upper portion of wall (re: 2/3.A.0.)
- 2. Remove and salvage wood paneling and trim around door on "Passage" side of wall (remove paneling to closest vertical joint). Remove wood door and metal frame; salvage all door hardware components. Cut and remove structural clay tile wall for 3'-2" wide x 6'-10" tall R.O. Provide steel angle ledger at head per 2/5.A.1.
- 3. Remove floor tiles as shown (43 full and partial tiles total).
- 4. Remove structural clay tile wall as shown; salvage structural clay tiles for reuse.
- 5. Remove and salvage wood paneling and trim around door on "Passage" side of wall (remove paneling to closest vertical joint). Remove wood door and metal frame; salvage all door hardware components. Cut and remove structural clay tile wall for 3'-2" wide x 6'-10" tall R.O. Provide steel angle ledger at head per 2/5.A.1.
- 6. Remove existing fixtures in both bathrooms (lavatories, toilets, urinals); salvage lavatories for reuse.
- 7. Cut and remove door stop on east jamb up to 34" above finish floor to make door width ADA accessible. Weld metal patch into cut jamb.
- 8. Remove existing fan coil unit, wood framed chase, and related piping.
- 9. Remove existing water fountain.
- 10. Remove and salvage existing shelf and hardware.

KANSAS DEPARTMENT OF TRANSPORTATION

DEMOLITION PLAN - BATHROOMS 7 & 8

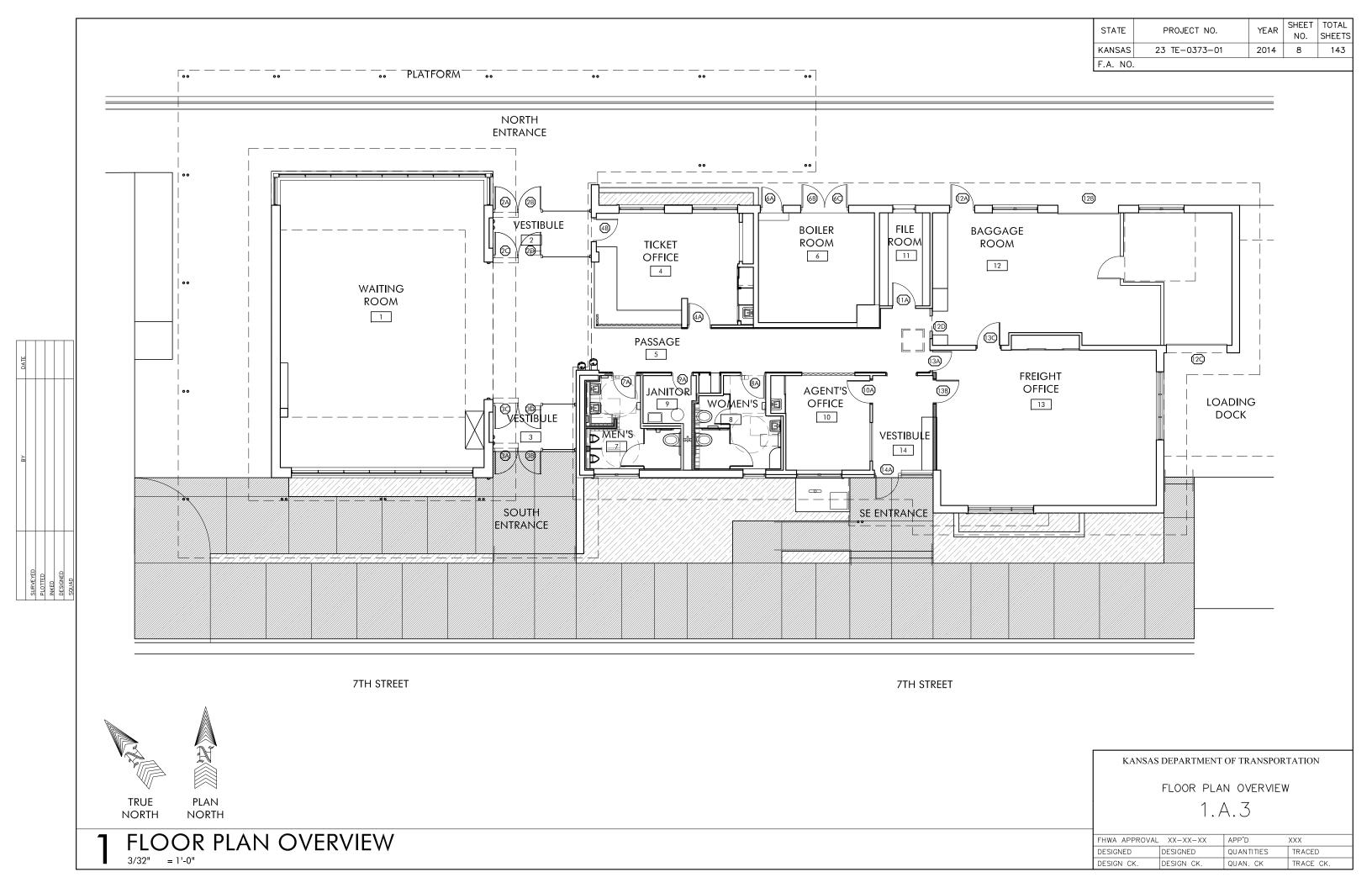
1.A.2

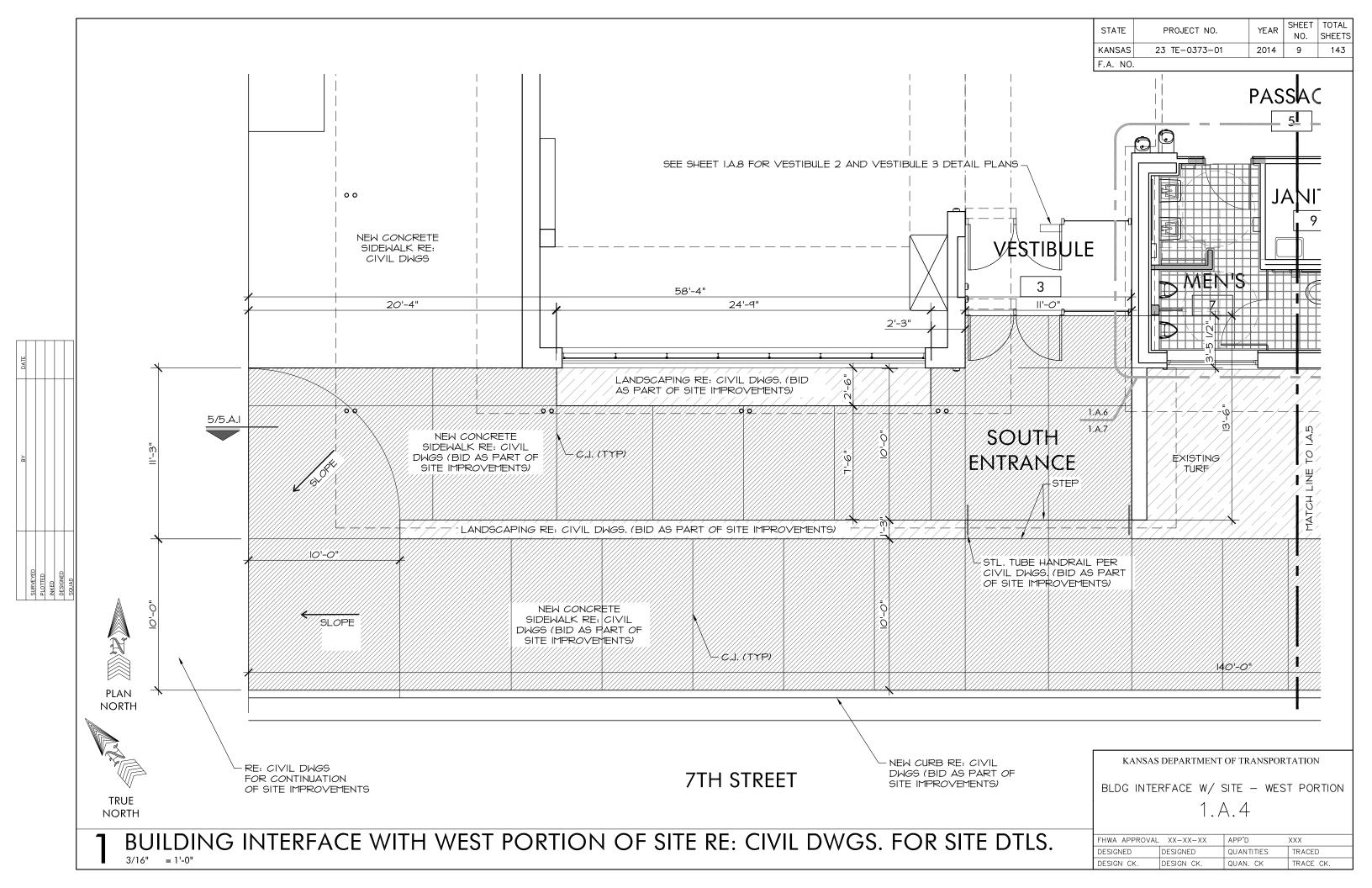
FHWA APPROVAL XX-XX-XX APP'D XXX

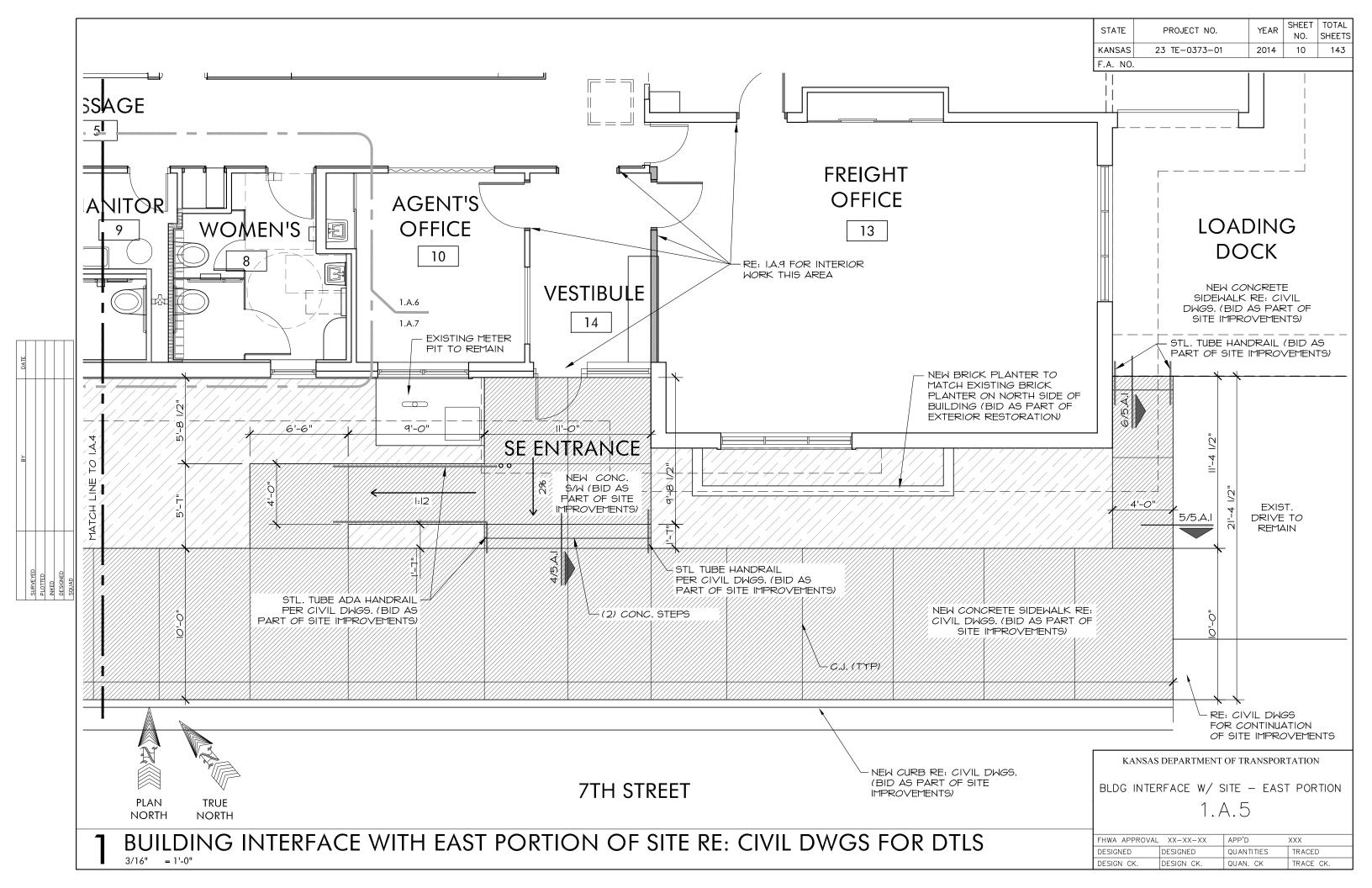
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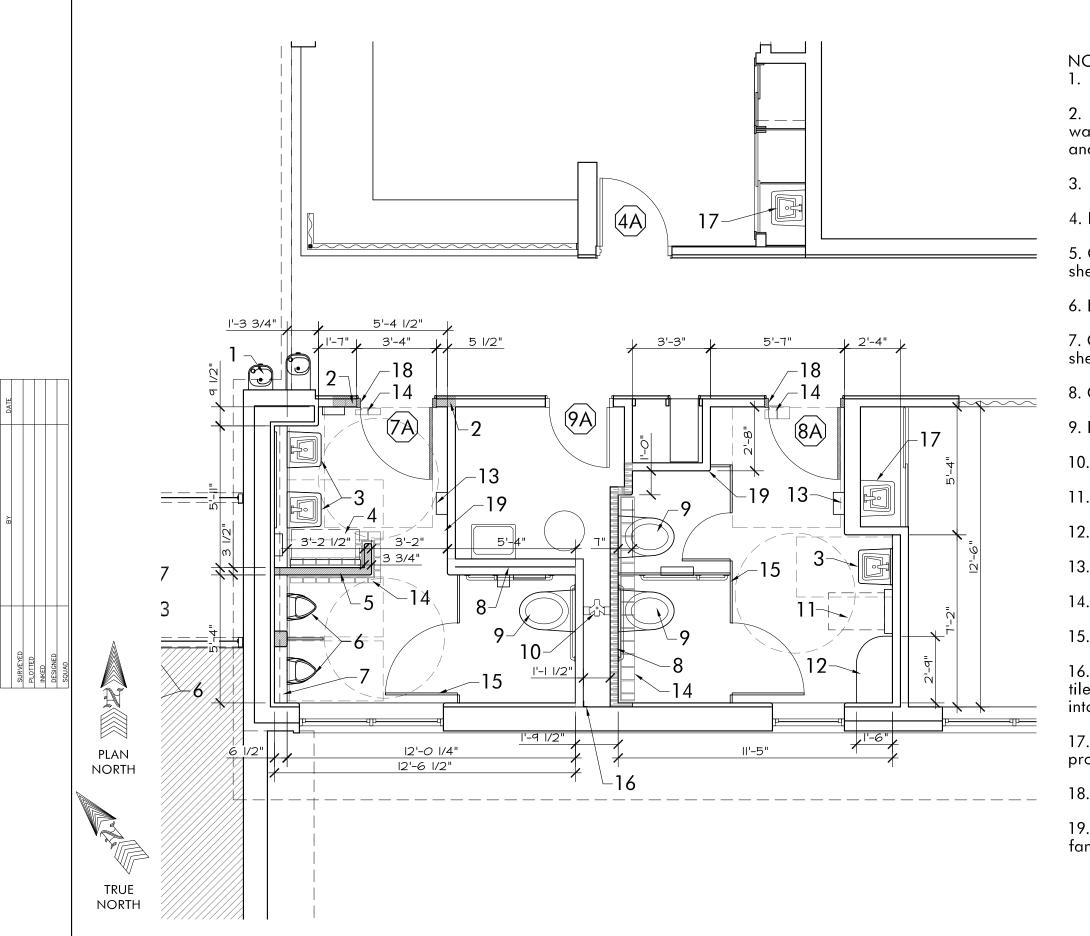
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DEMOLITION PLAN - BATHROOMS 7 & 8









STATE PROJECT NO.

YEAR SHEET TOTAL SHEETS

KANSAS 23 TE-0373-01 2014 11 143

F.A. NO.

#### NOTES:

- 1. Install ADA bi-level drinking fountain.
- 2. Replace exist. 1-5/8" thick structural clay tiles at upper portion of wall with salvaged 3-5/8" structural clay tiles; approximately 22 full and partial tiles (Re: 2/3.A.0).
- 3. Install salvaged lavatories.
- 4. Install wall-hung horizontal diapering station.
- 5. Construct structural clay tile wall, 6'-2 3/8" A.F.F. -- See details on sheet 5.A.0.
- 6. Install wall-hung urinal.
- 7. Construct structural clay tile wall, 3'-3 1/8" A.F.F. -- See details on sheet 5.A.0.
- 8. Construct structural clay tile wall, -- See sections on sheet 5.A.0.
- 9. Install wall-hung ADA toilet
- 10. Install back-to-back siphon jet
- 11. Install wall-hung certical diapering station
- 12. Install salvaged shelf with salvaged hardware; resize as shown
- 13. Install wall-hung automatic hand dryer.
- 14. Install ceramic floor tiles to match originals.
- 15. Install toilet partitions in accordance with ADA standards.
- 16. Provide steel angle brace at south end of existing structural clay tile wall; Attach #353 de-bonded shear anchors to ext. wall & embed into every third bed joint of exist. tile wall; See detail 3/5.A.2.
- 17. (2) Existing ceramic wall-hung lavatories; Clear drain lines for proper operation.
- 18. See head and jamb details 2/5.A.1 at structural clay tile walls.
- 19. Point mortar joints where anchoring devices are removed with fan coil unit, piping chase, and piping.

KANSAS DEPARTMENT OF TRANSPORTATION

FLOOR PLAN - TICKET OFFICE, BATHROOMS

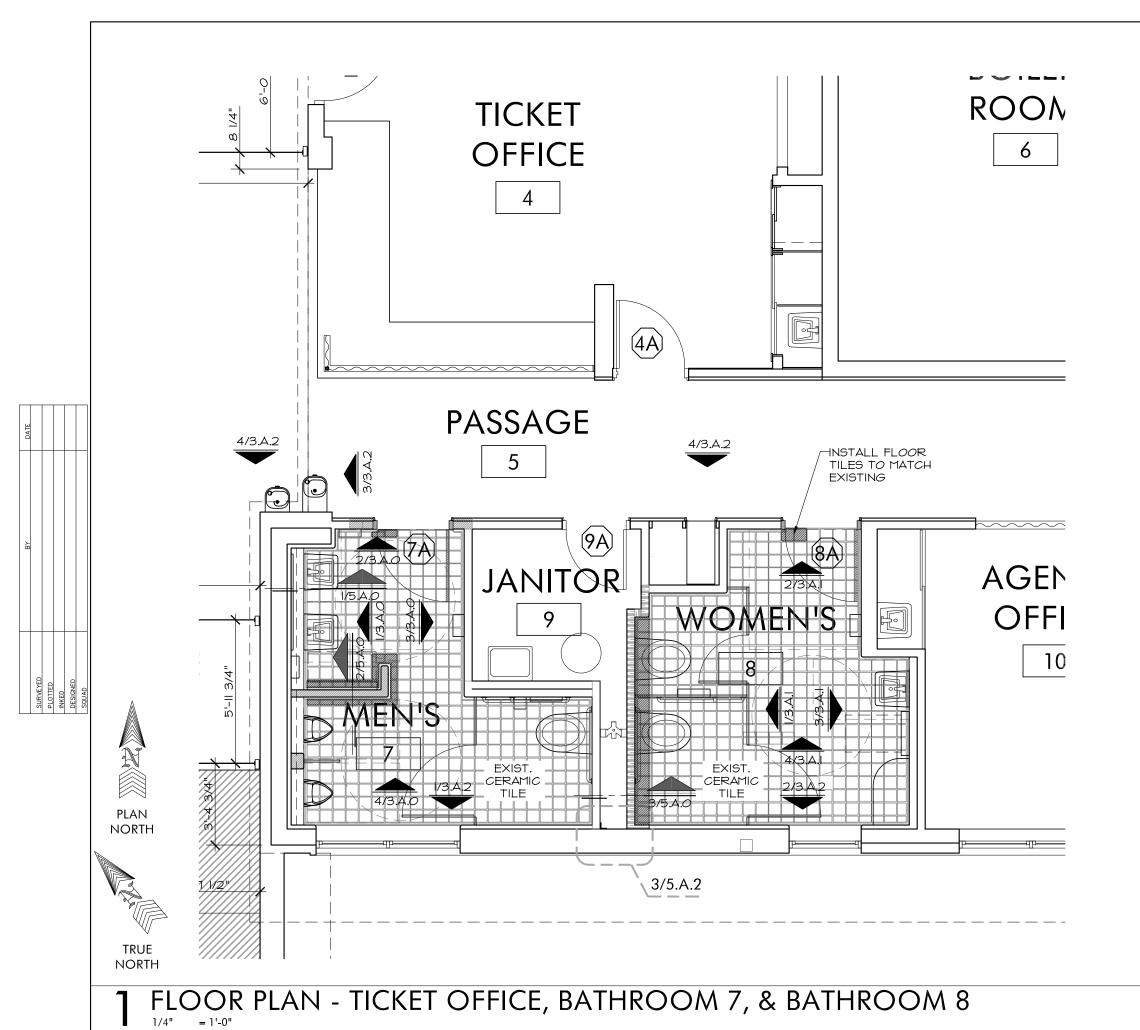
1.A.6

FLOOR PLAN - TICKET OFFICE, BATHROOM 7 & BATHROOM 8

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 STATE
 PROJECT NO.
 YEAR
 SHEET NO.
 NO.
 SHEET SHEET NO.

 KANSAS
 23 TE-0373-01
 2014
 12
 143

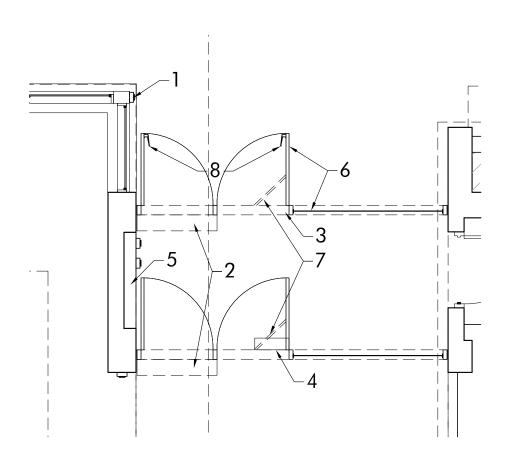
 F.A. NO.

KANSAS DEPARTMENT OF TRANSPORTATION

FLOOR PLAN - TICKET OFFICE, BATHROOMS

1.A.7

FHWA APPROVAL XX-XX-XX		APP'D	XXX
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2 FLOOR PLAN VESTIBULE 2

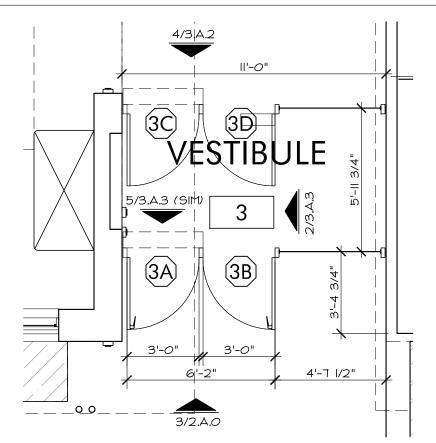
4/2 A.O

(2B)

5/3.A.3 VESTIBULE

3'-0"

(2A)



FLOOR PLAN VESTIBULE 3

PROJECT NO. 13 23 TE-0373-01 KANSAS 2014 F.A. NO.

#### **NOTES:**

- 1. Install wireless ADA door operator wall plates (4) @ each vestibule).
- 2. Install (4) low-energy overhead ADA door operators.
- 3. Install concealed overhead door closer.
- 4. Replace existing in-floor door closer with new in-floor door closer in existing enclosure; (1) at North Vestibule, (1) at South Vestibule); other existing in-floor door closer enclosures to remain
- 5. Existing radiator to remain; Remove piping.
- 6. Existing aluminum storefront and doors to remain. Replace hardware as indicated in schedule. Modify push bars for incorporation of new panic hardware. See elevations 3/2.A.0, 4/2.A.0, and 5/3.A.3.
- 7. Install (1) salvaged overhead door holder; Provide (3) overhead door holders to match salvaged holder.
- 8. Install deadlatch paddle device w/ salvaged push handles attached to paddle (Re: 5/3.A.3).

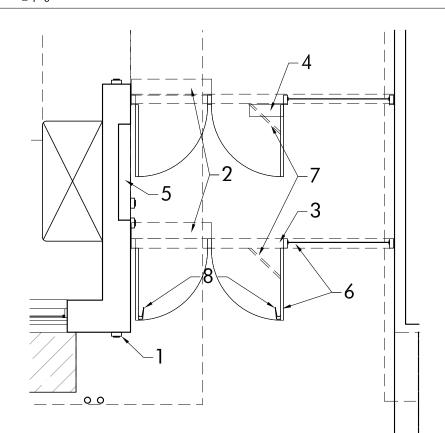
Other Notes - Replace remaining deadbolts with dummy cylinders; Remove existing overhead door closers. Cover screw holes in aluminum storefront framing members & doors with sheet aluminum to match existing finish.

KANSAS DEPARTMENT OF TRANSPORTATION

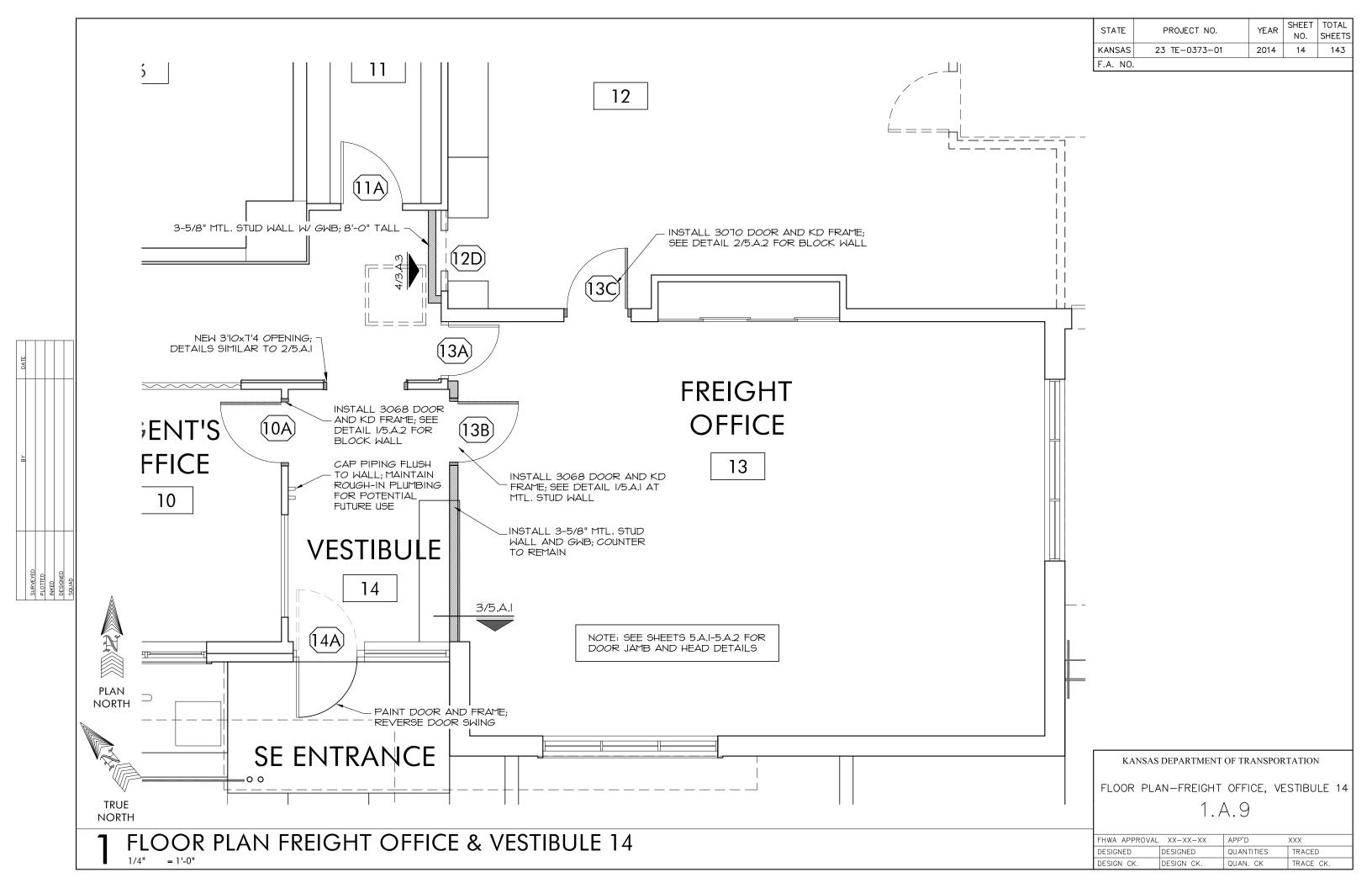
FLOOR PLAN - VESTIBULES 2 & 3 1.A.8

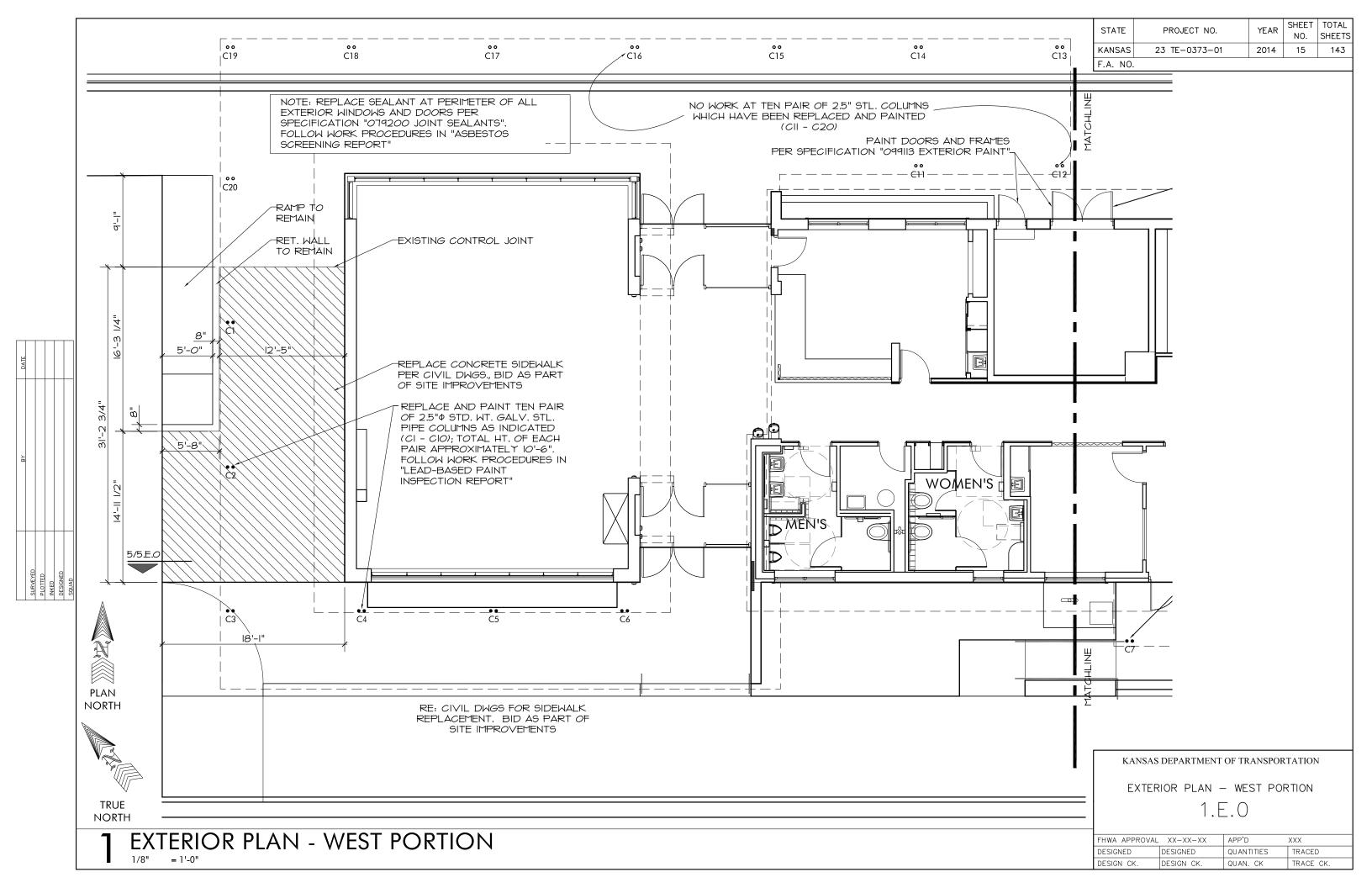
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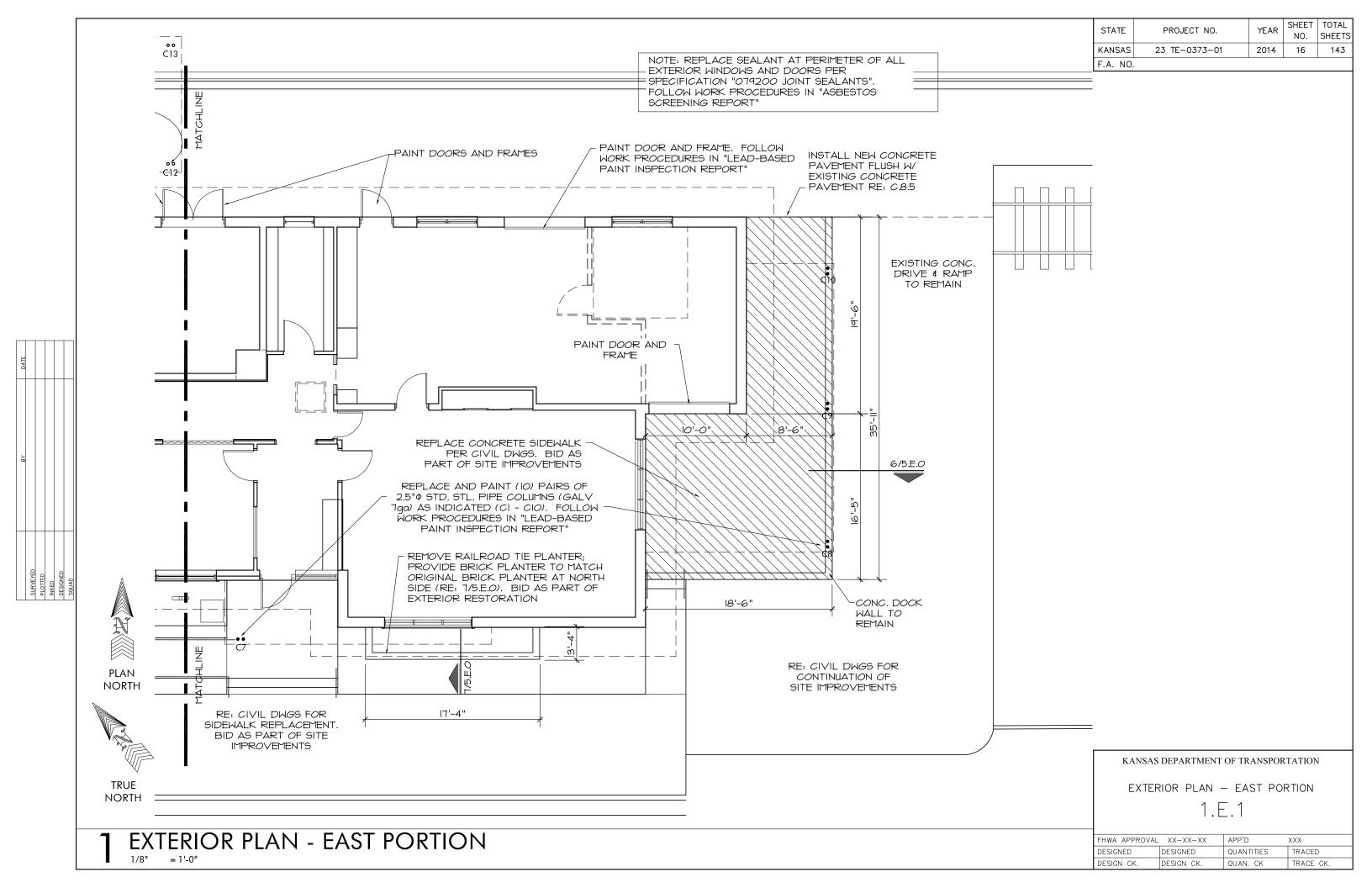
# FLOOR PLAN VESTIBULE 2

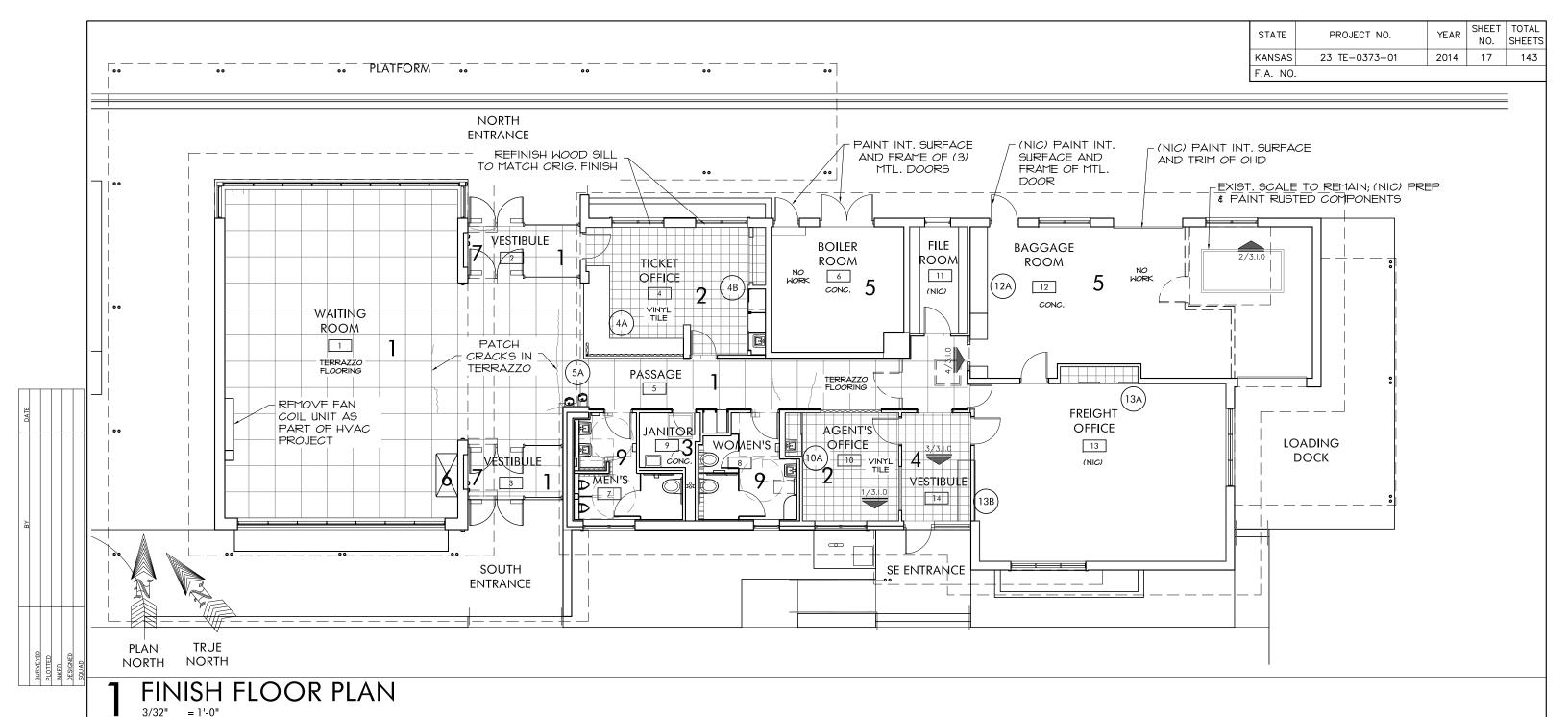


FLOOR PLAN VESTIBULE 3









### NOTES:

- 1. Terrazzo Flooring: Patch approximately 32 l.f. of cracks, re-grind, clean, and seal existing terrazzo per specification "096610 Terrazzo Flooring Restoration & Maintenance".
- 2. 12x12 vinyl tile is not original, 9x9 vinyl tile in closet is original. Replace existing 12x12 vinyl tile w/ new 12x12 vinyl tile to match original color. Mastic and 9x9 tiles are ACBM; follow work procedures in "Asbestos Screening Report".
- 3. Existing concrete floor to remain. Replace existing 30"x30" steel floor hatch and frame with new floor hatch and frame per specification "083113 Access Doors and Frames".
- 4. 12x12 vinyl tile is not original. Replace existing vinyl tile w/ new 12x12 vinyl tile to match original color. Mastic is ACBM; follow work procedures in "Asbestos Screening Report".
- 5. Existing concrete floor to remain.

- 6. Clean and paint metal shell of existing HVAC equipment; follow "Lead-Based Paint Inspection Report". Refer to Mechanical documents for new equipment.
- 7. Remove piping to non-functional radiator; replace missing skirt at bottom of radiator; clean and paint metal shell of radiator.
- 8. Refer to Finish Schedule on sheets 7.1.0 and 7.1.1 for additional work.

- 9. Bathroom finishes are included in "Accessibility Improvements".
- 10. Refer to 6.I.0 and 6.I.1 for casework and closet door work.

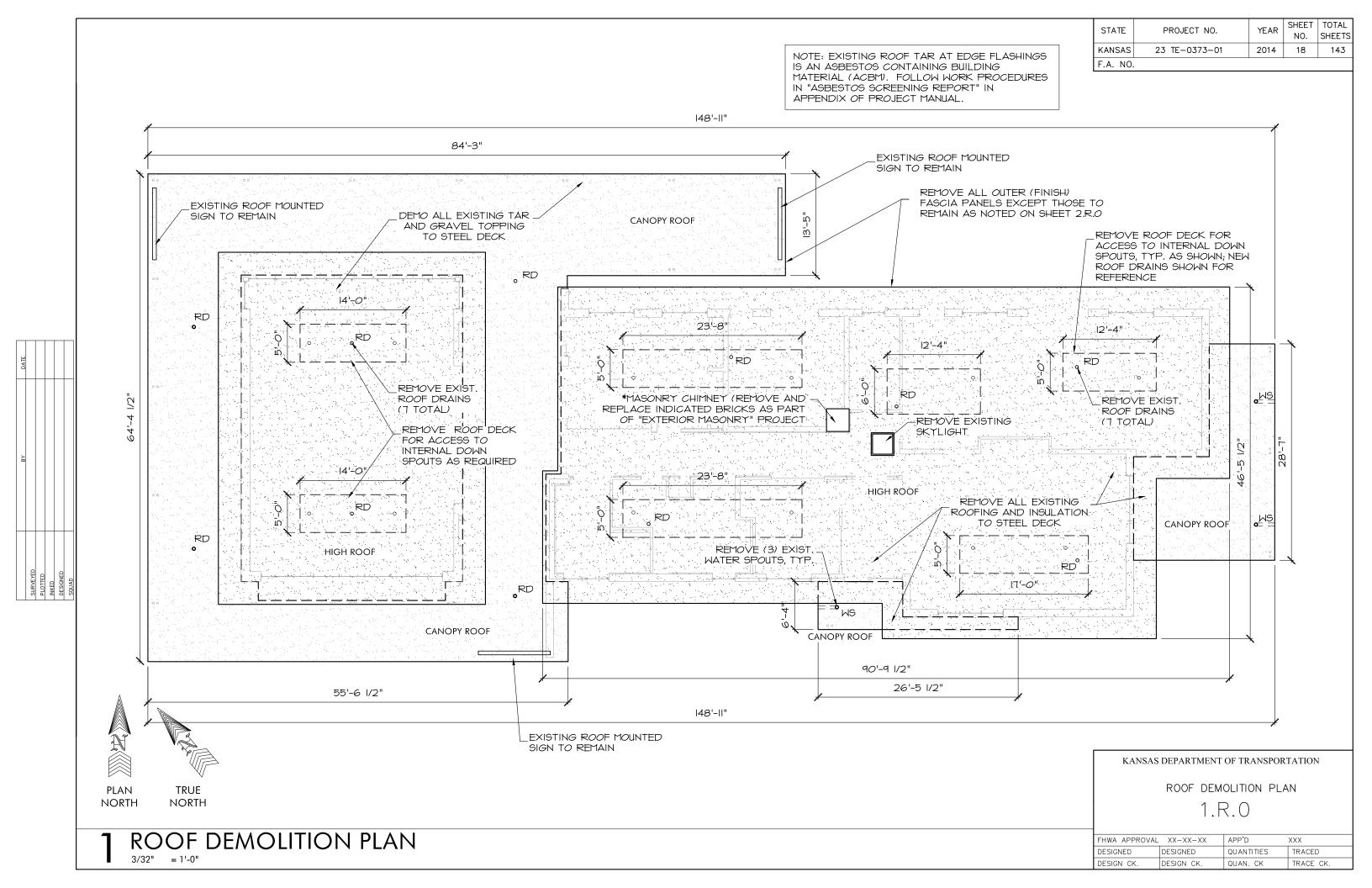
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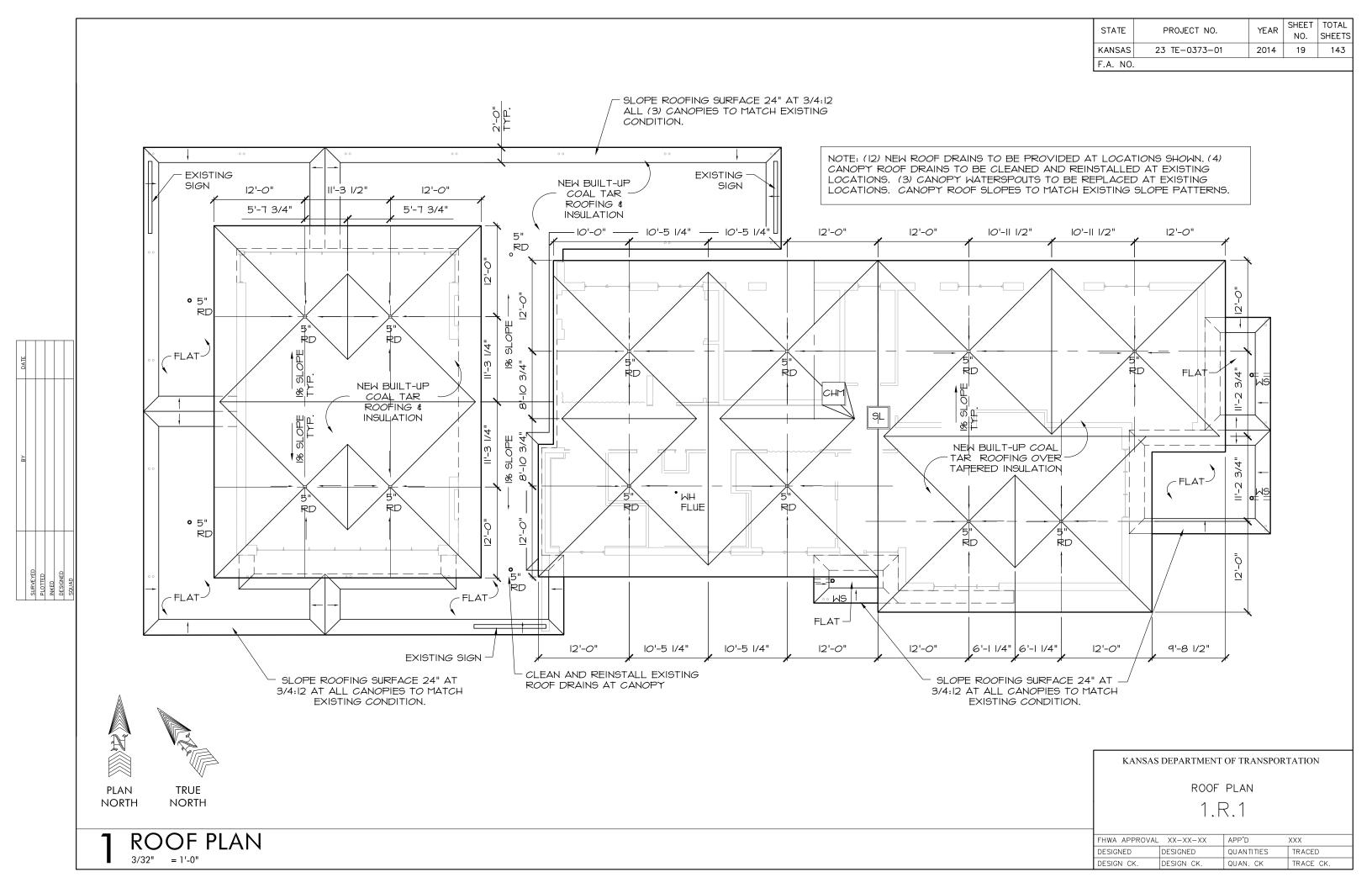
FINISH FLOOR PLAN (ALTERNATE #1)

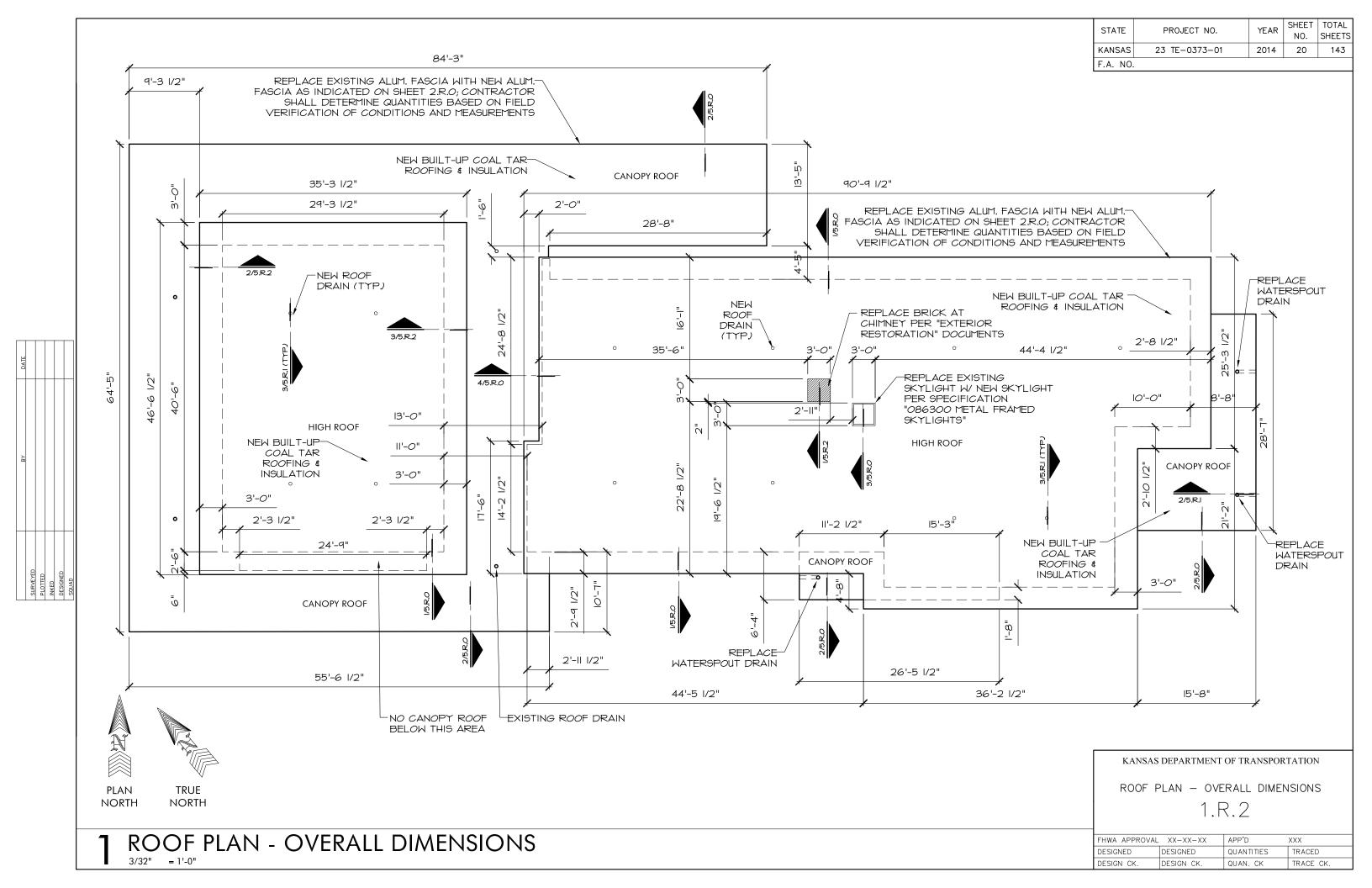
1.1.0

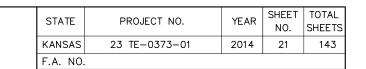
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**RESTORATION NOTES** 





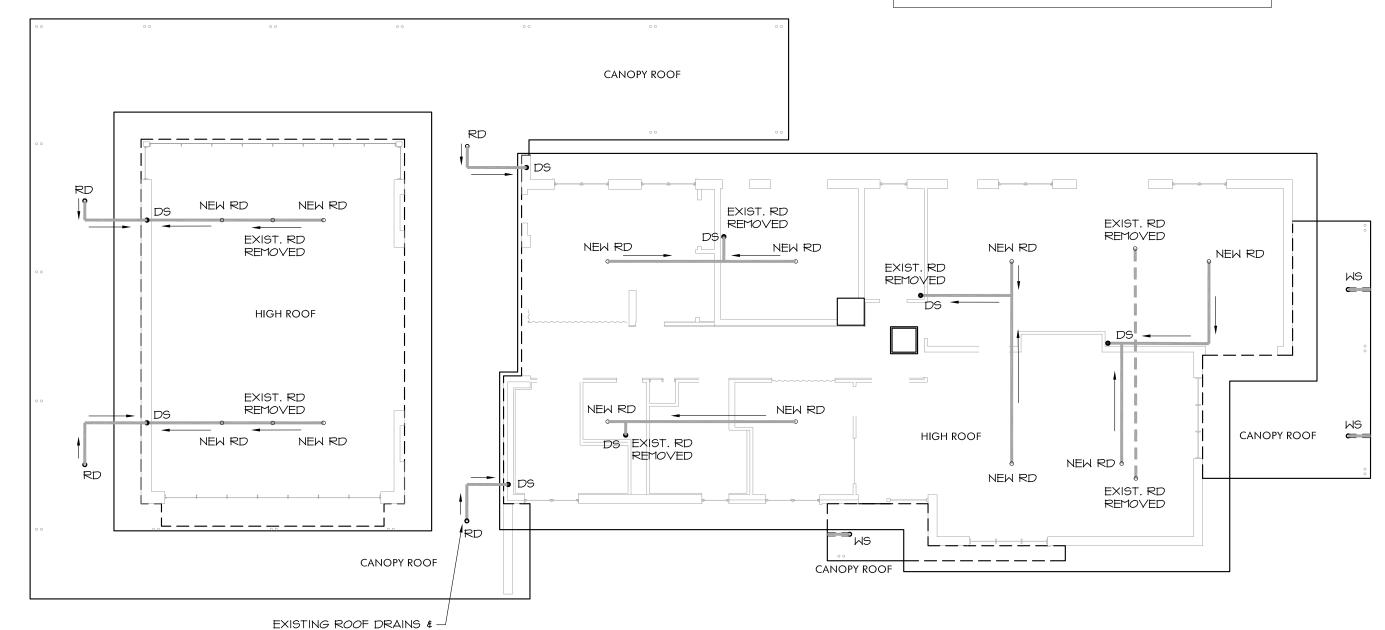


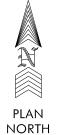


NOTE: ROOF DRAINS REPLACED AS SHOWN PER DETAIL 3/5.R.I; ALL EXISTING INTERNAL DOWNSPOUTS TO REMAIN, VERIFY CONDITION IS ACCEPTABLE; ALL CANOPY WATER SPOUTS TO BE REPLACED PER DETAIL 2/5.R.I

EXISTING BUILDING SERVICE PIPING TO REMAIN AT CANOPY

3" BUILDING SERVICE PIPING;
APPROXIMATELY 155 L.F. NEW;
APPROXIMETELY 27 L.F. EXISTING
REMOVE EXIST. DRAINAGE PIPE;
APPROXIMATELY 30 L.F.





TOUT

TRUE NORTH KANSAS DEPARTMENT OF TRANSPORTATION

ROOF DRAINAGE PLAN

1.R.3

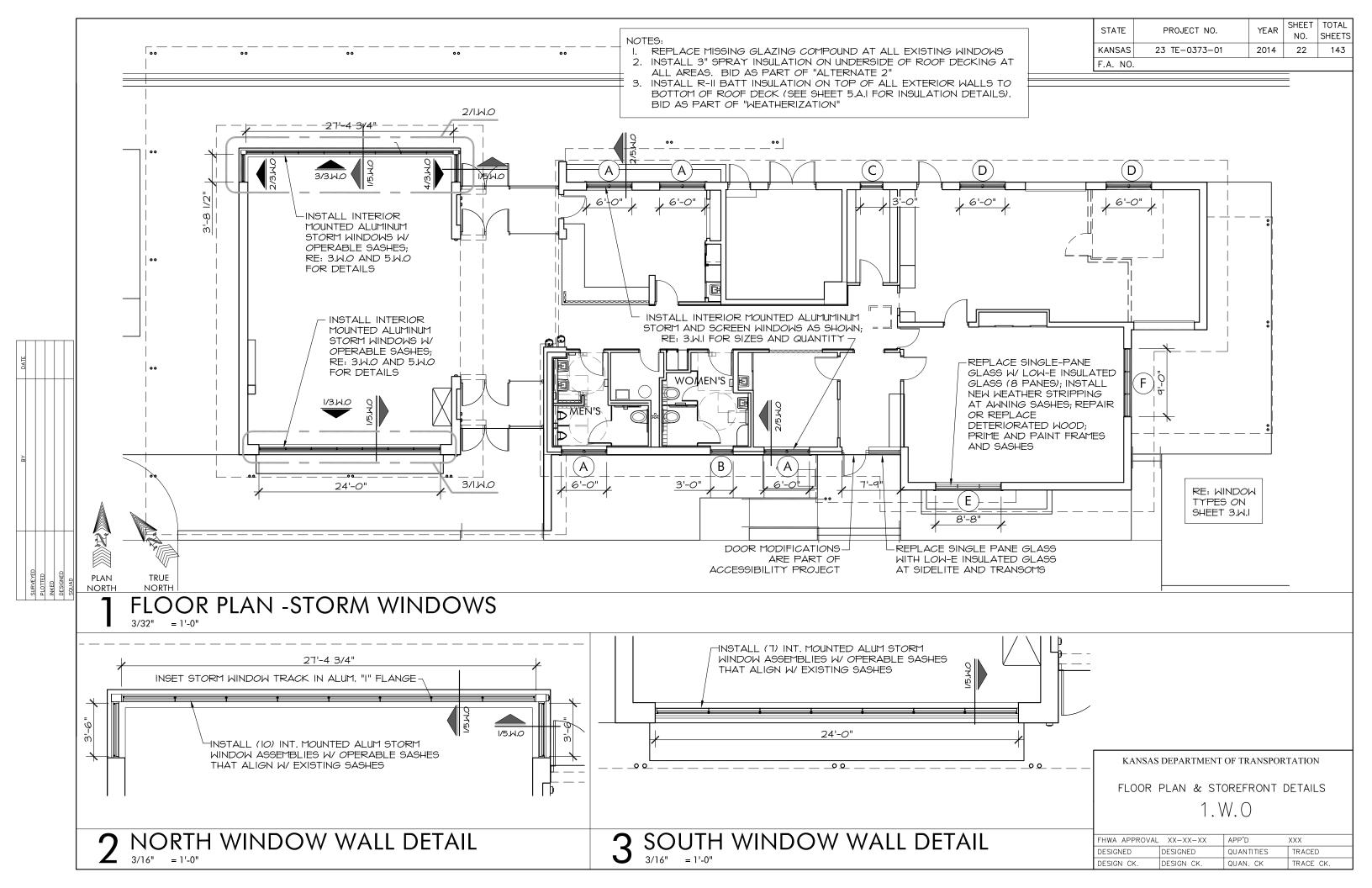
ROOF DRAINAGE PLAN

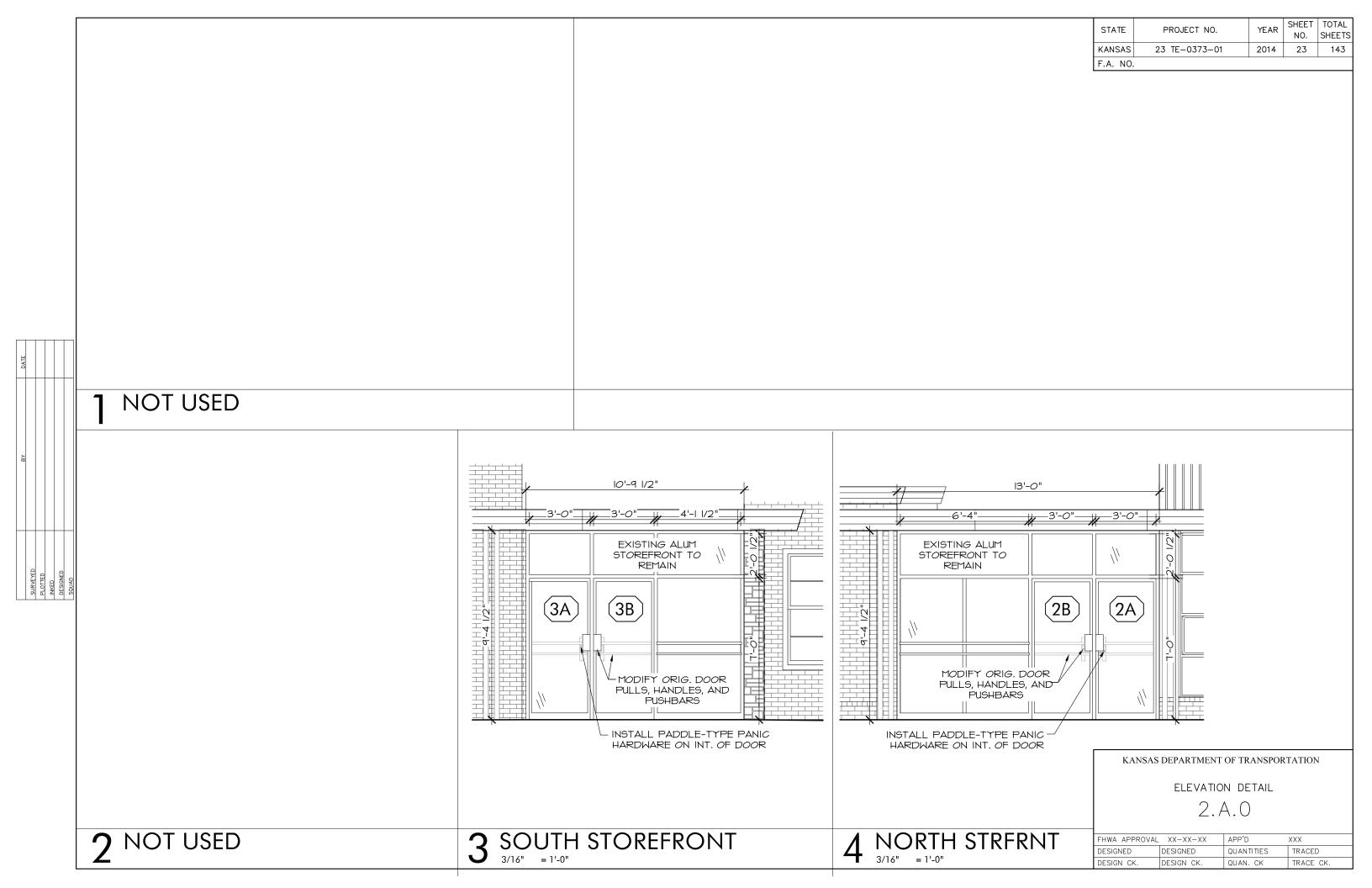
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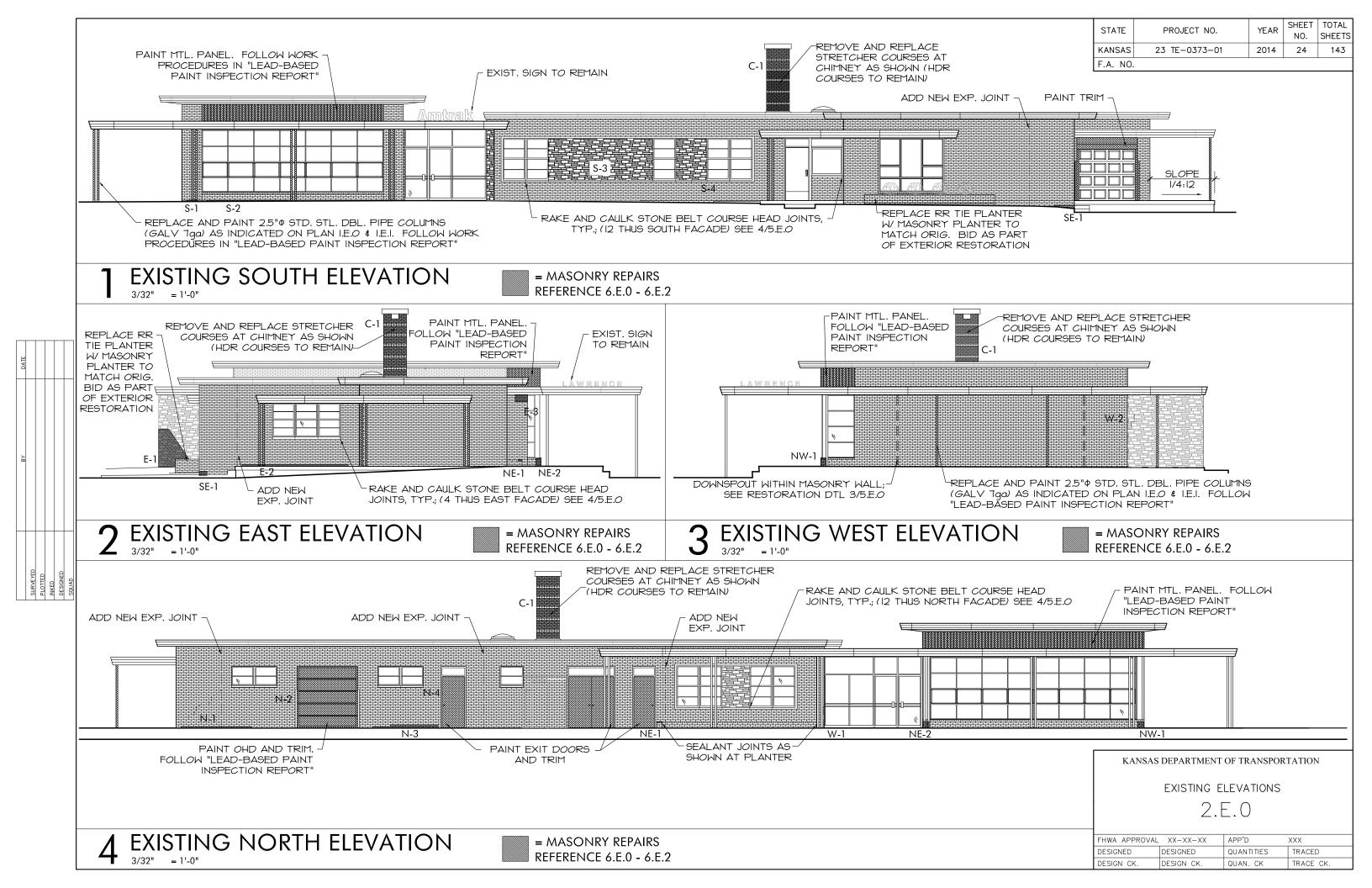
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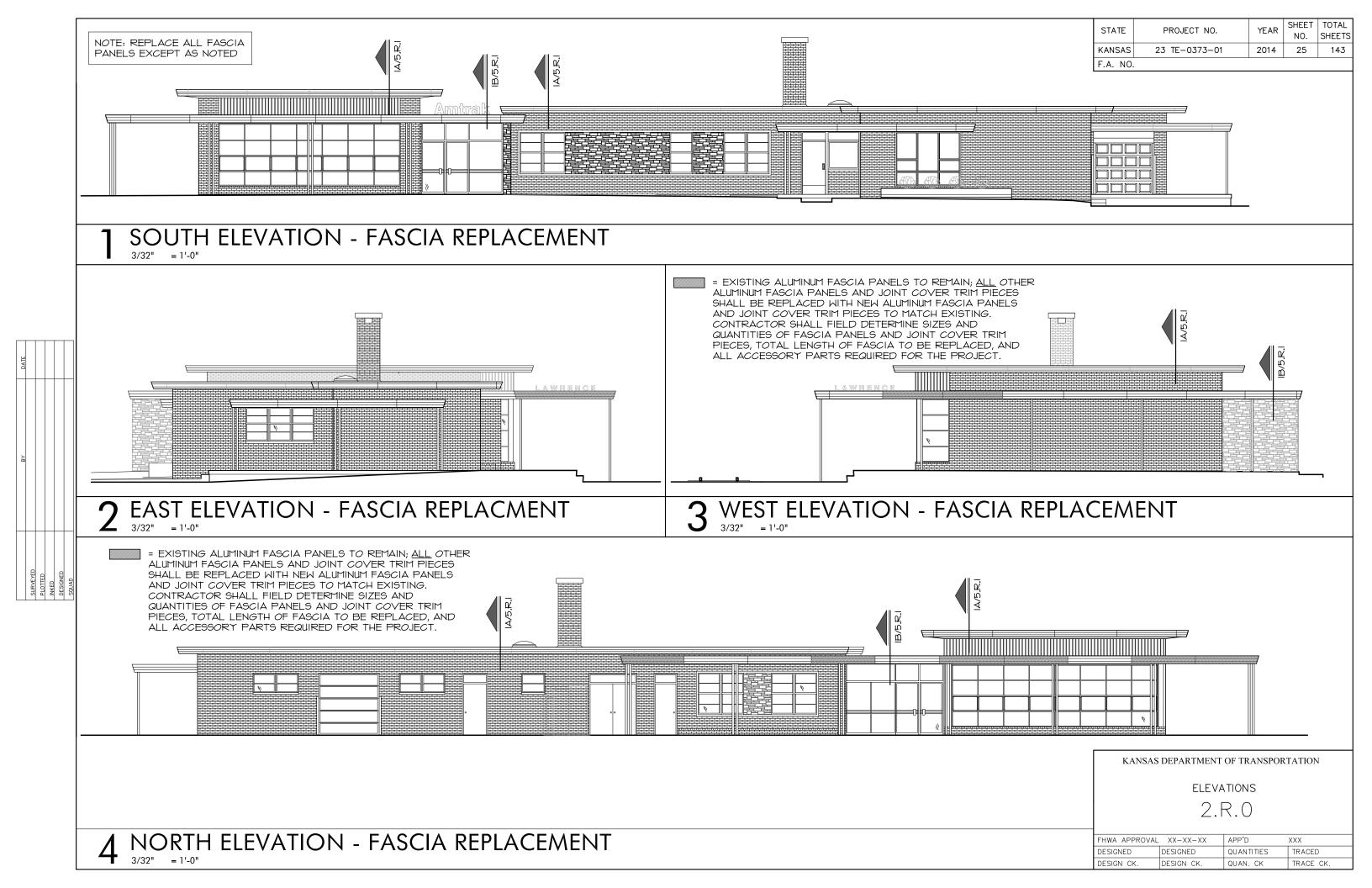
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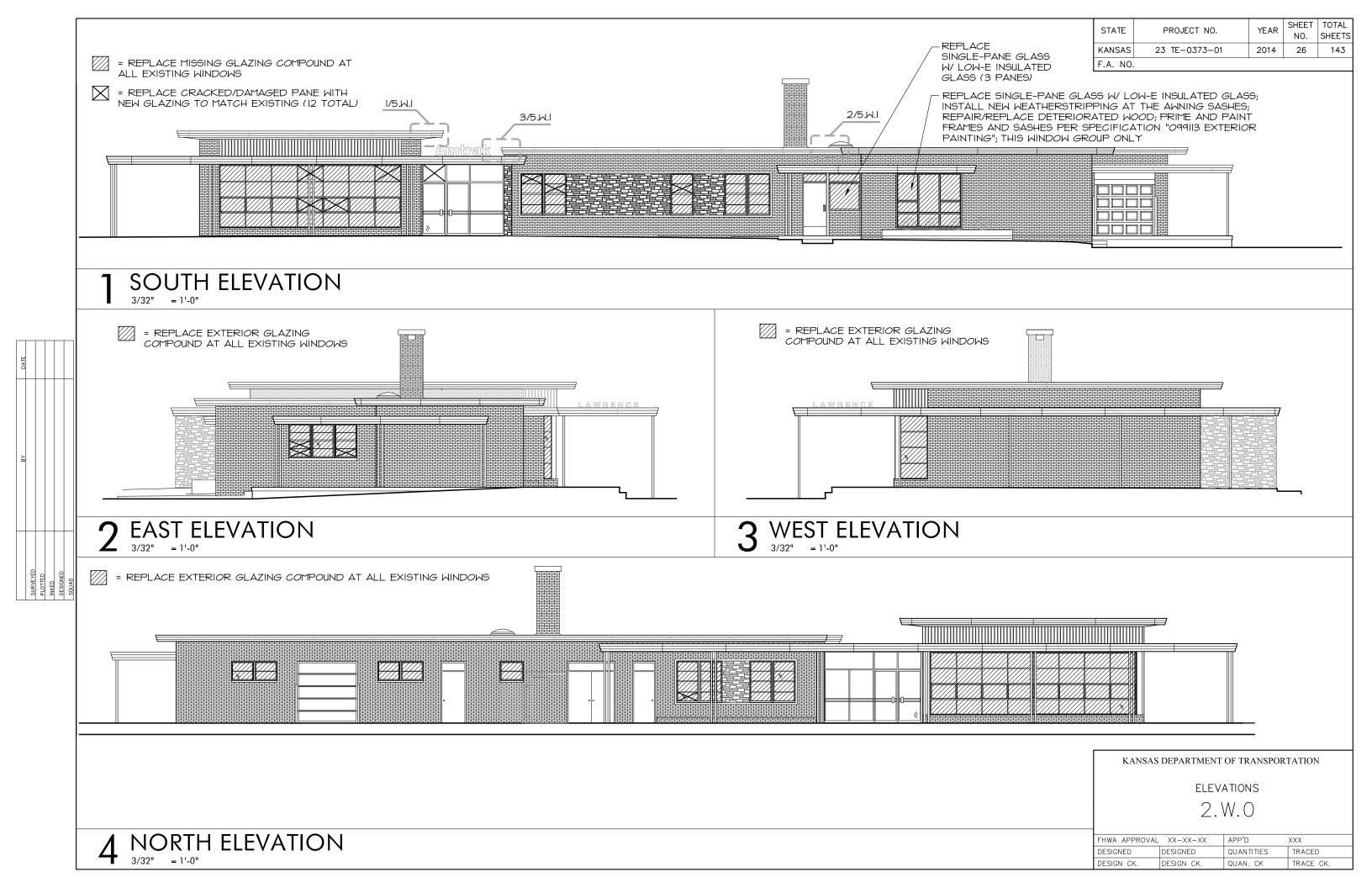
3/32" - 1'-0

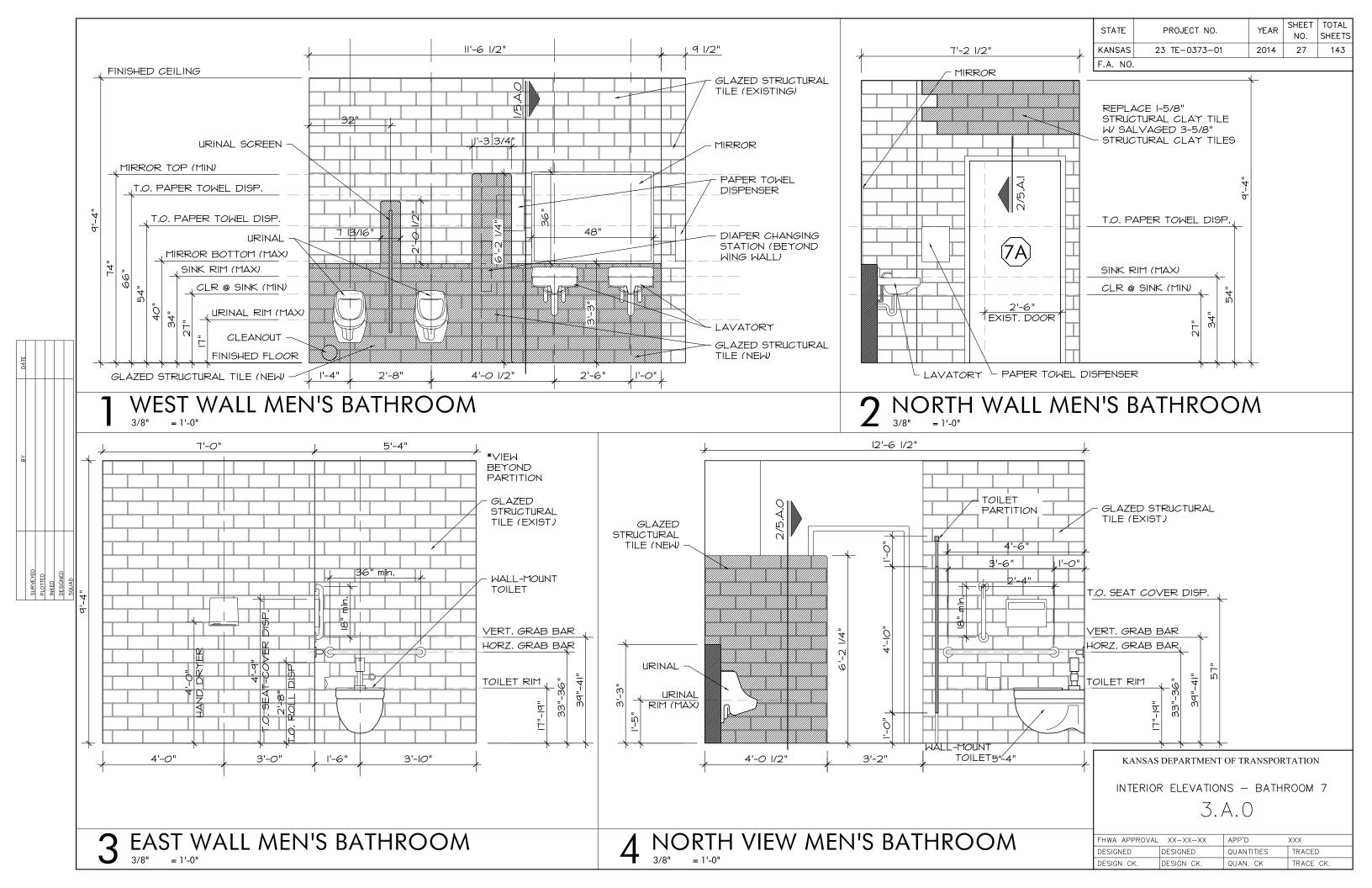


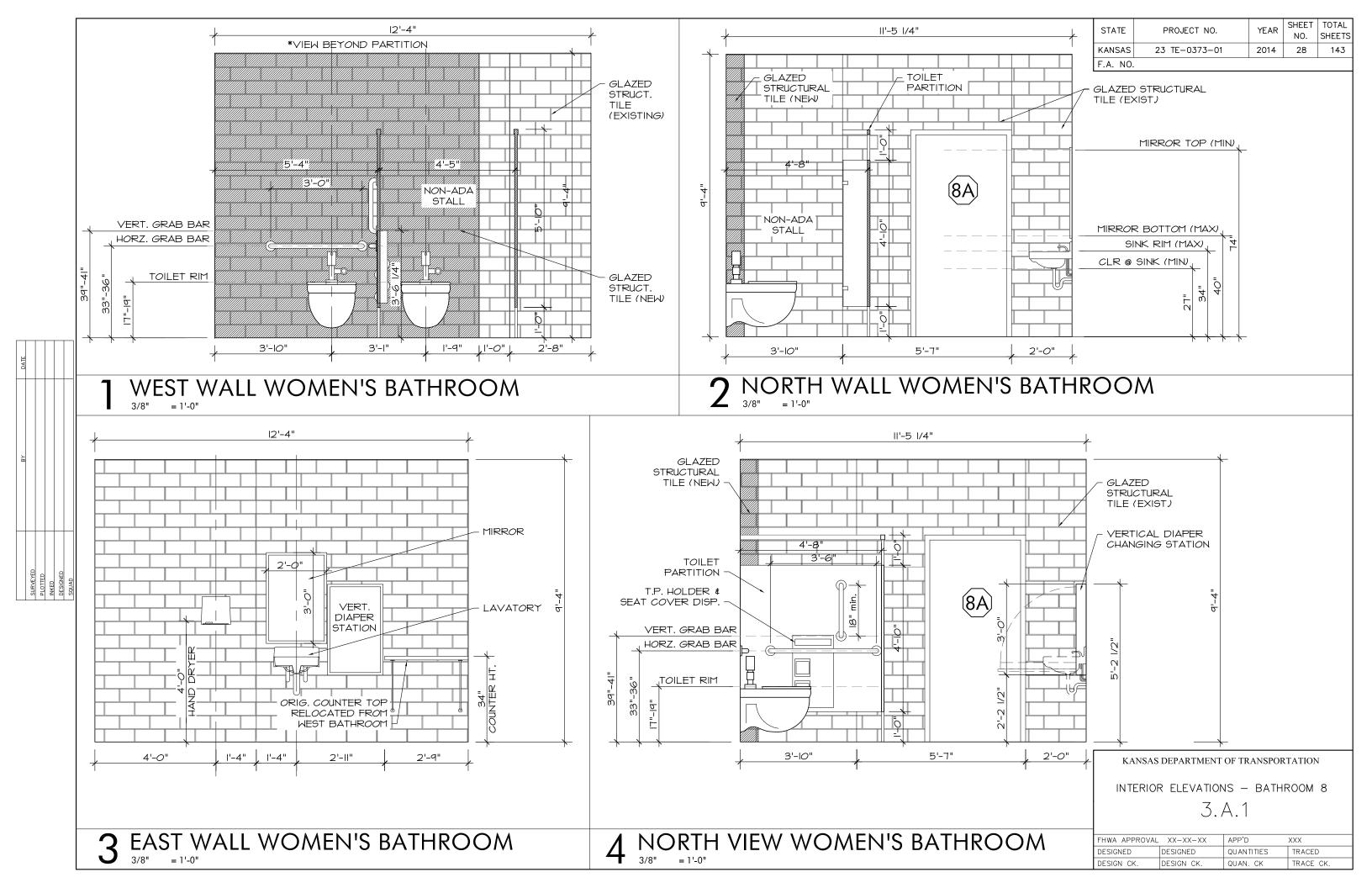


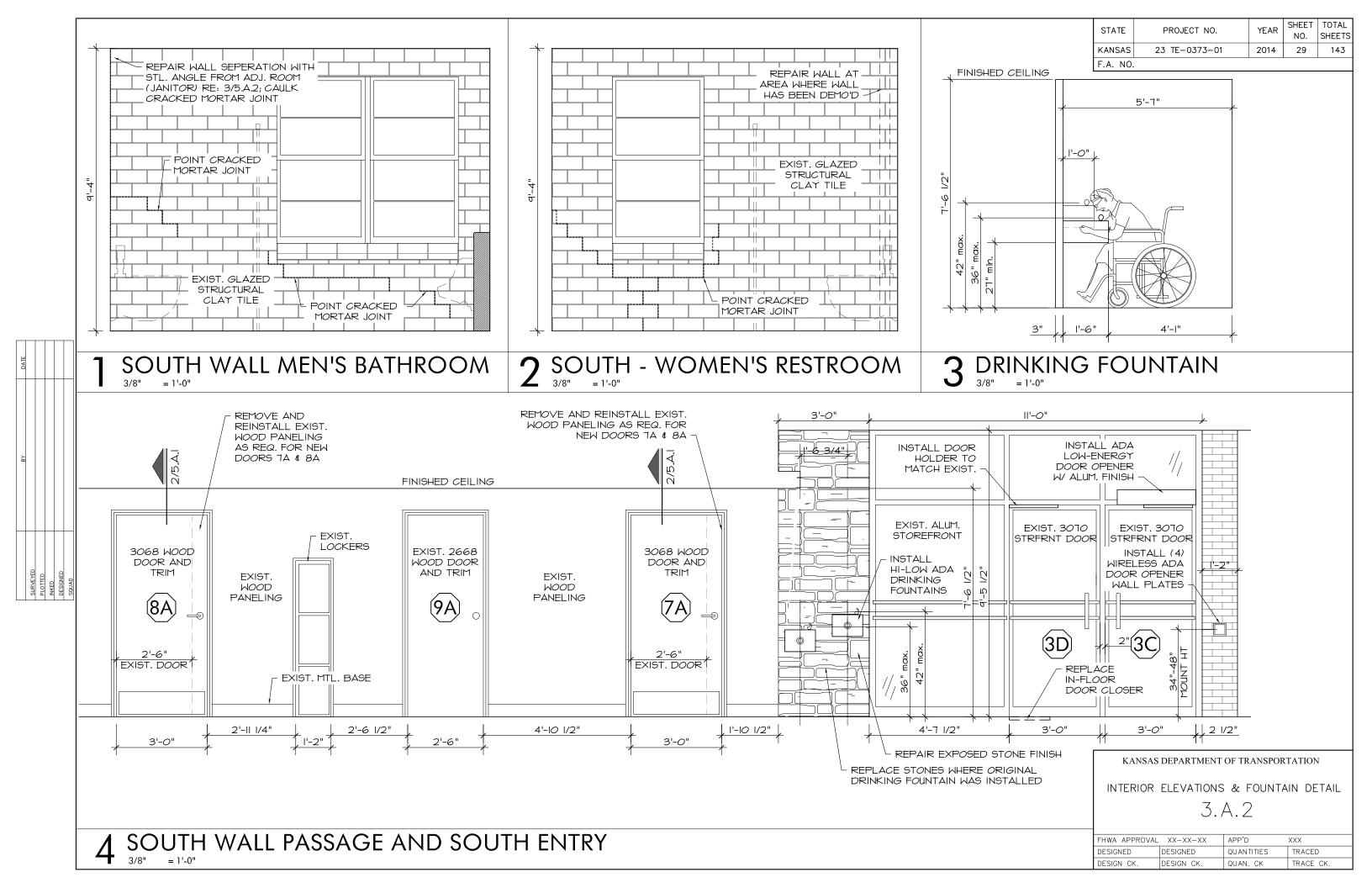


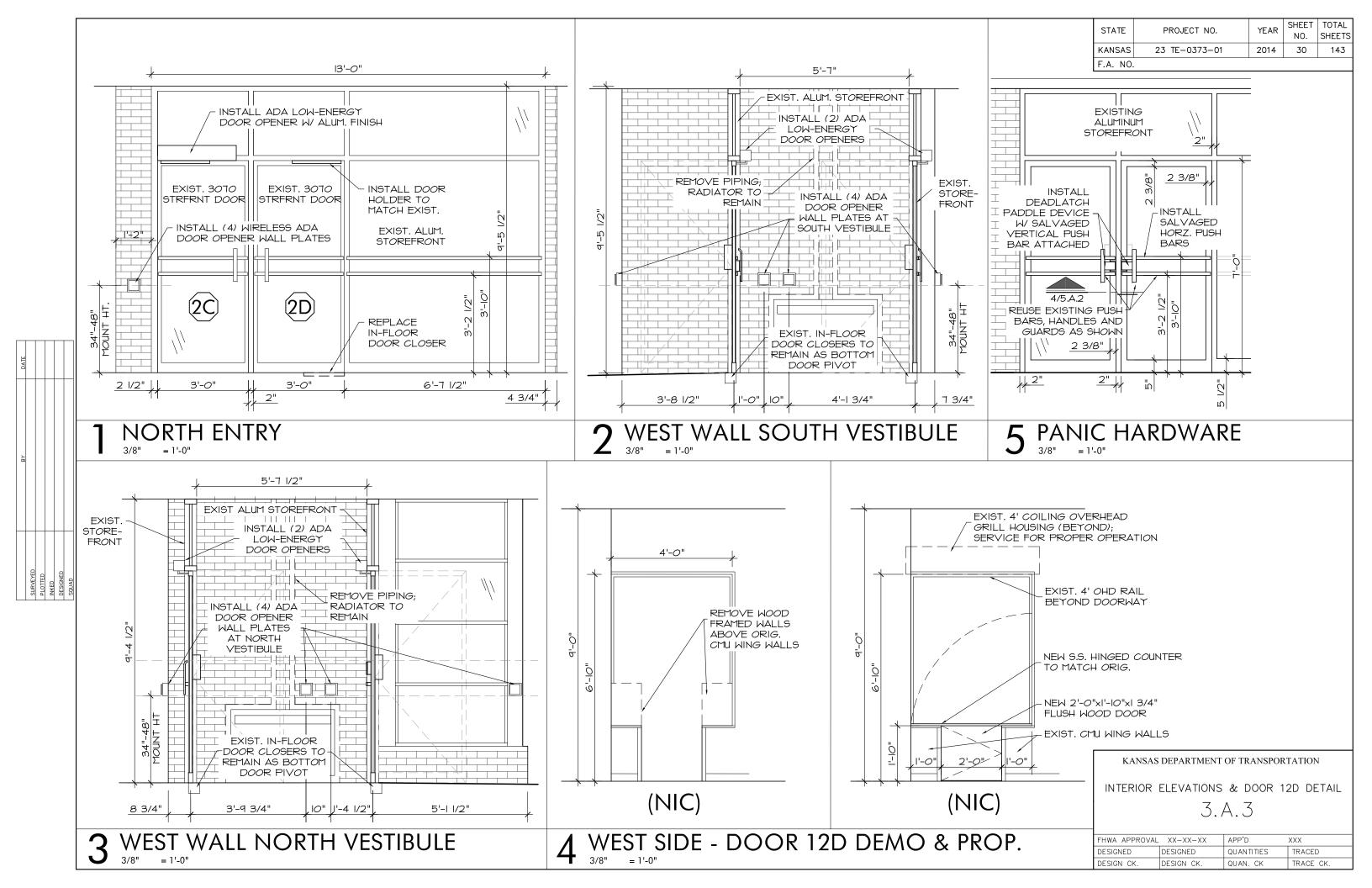


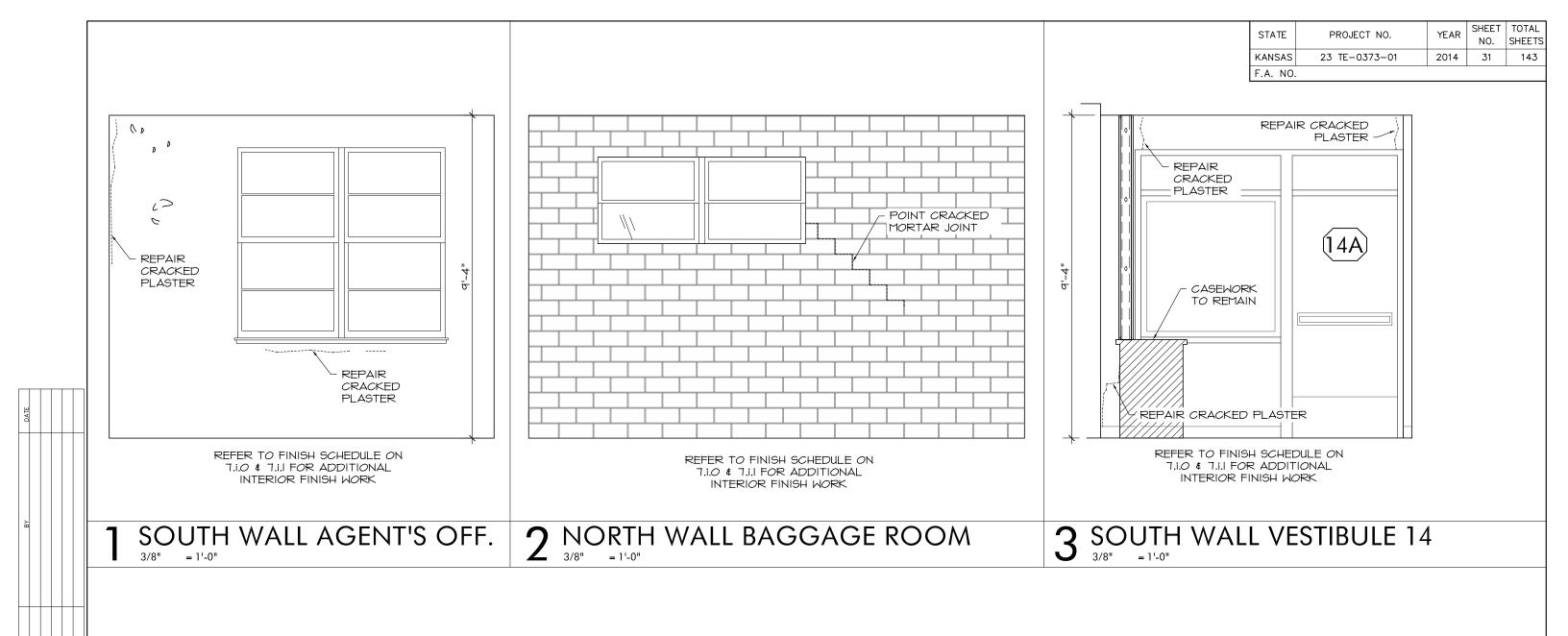










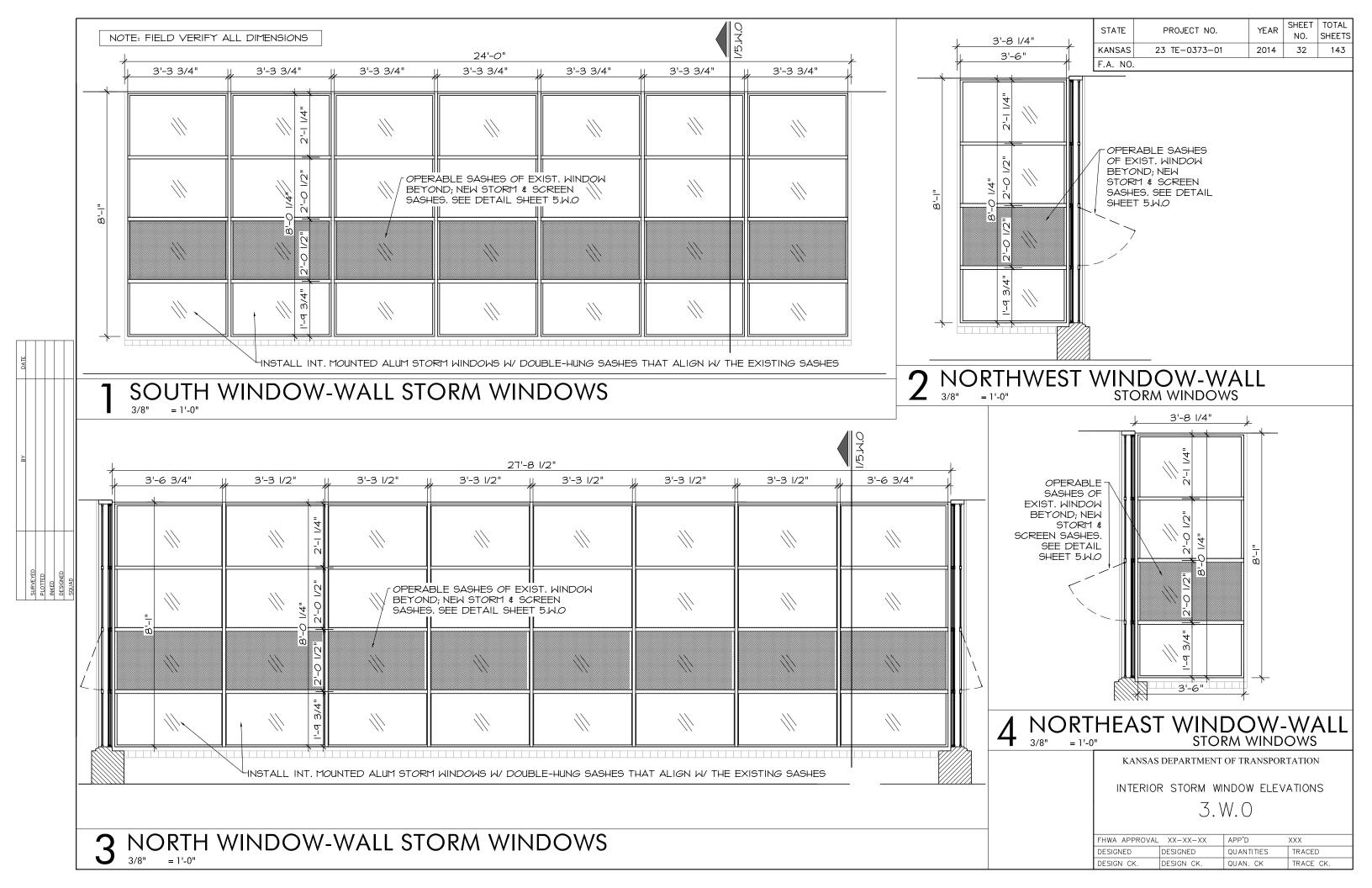


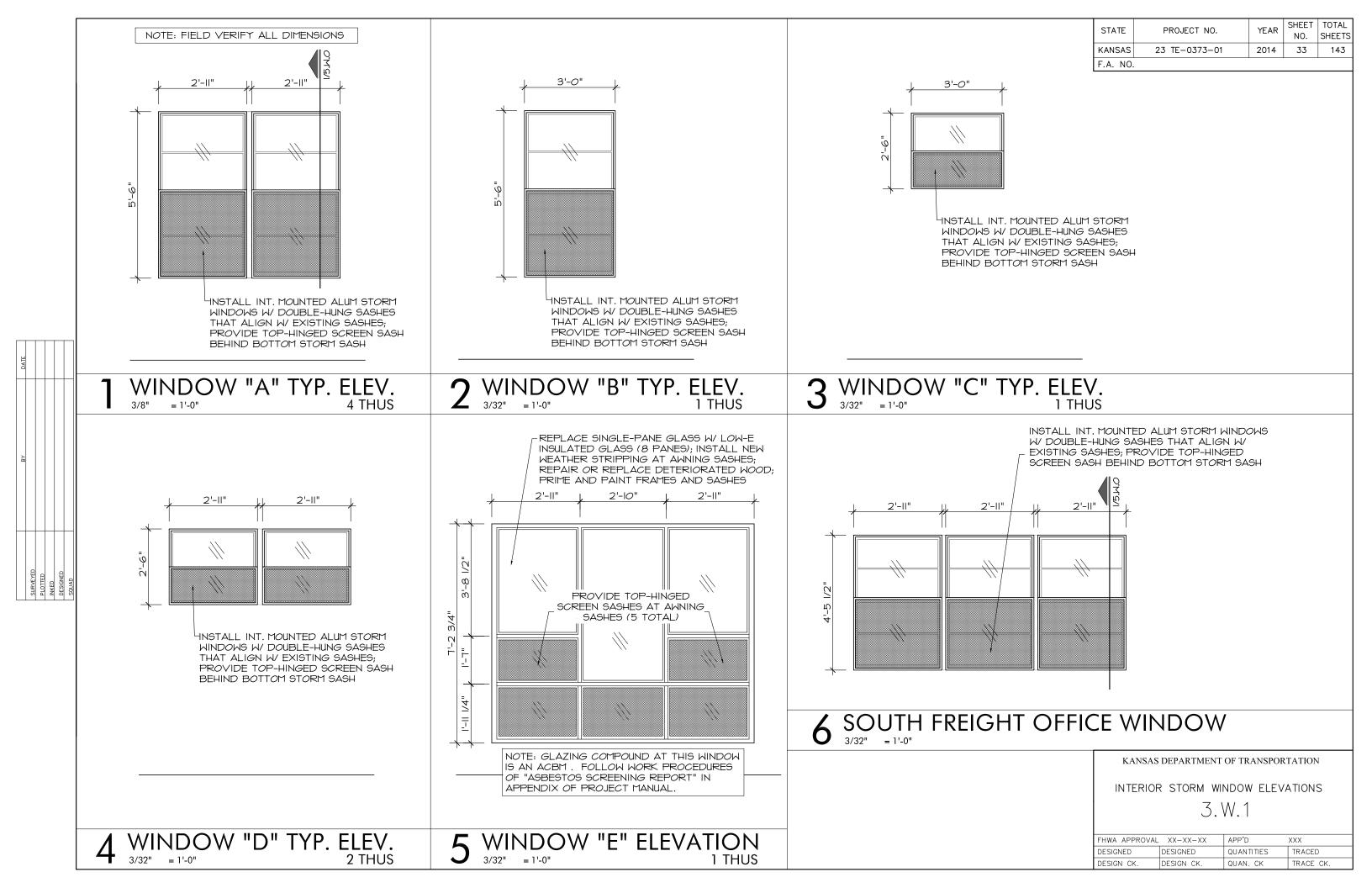
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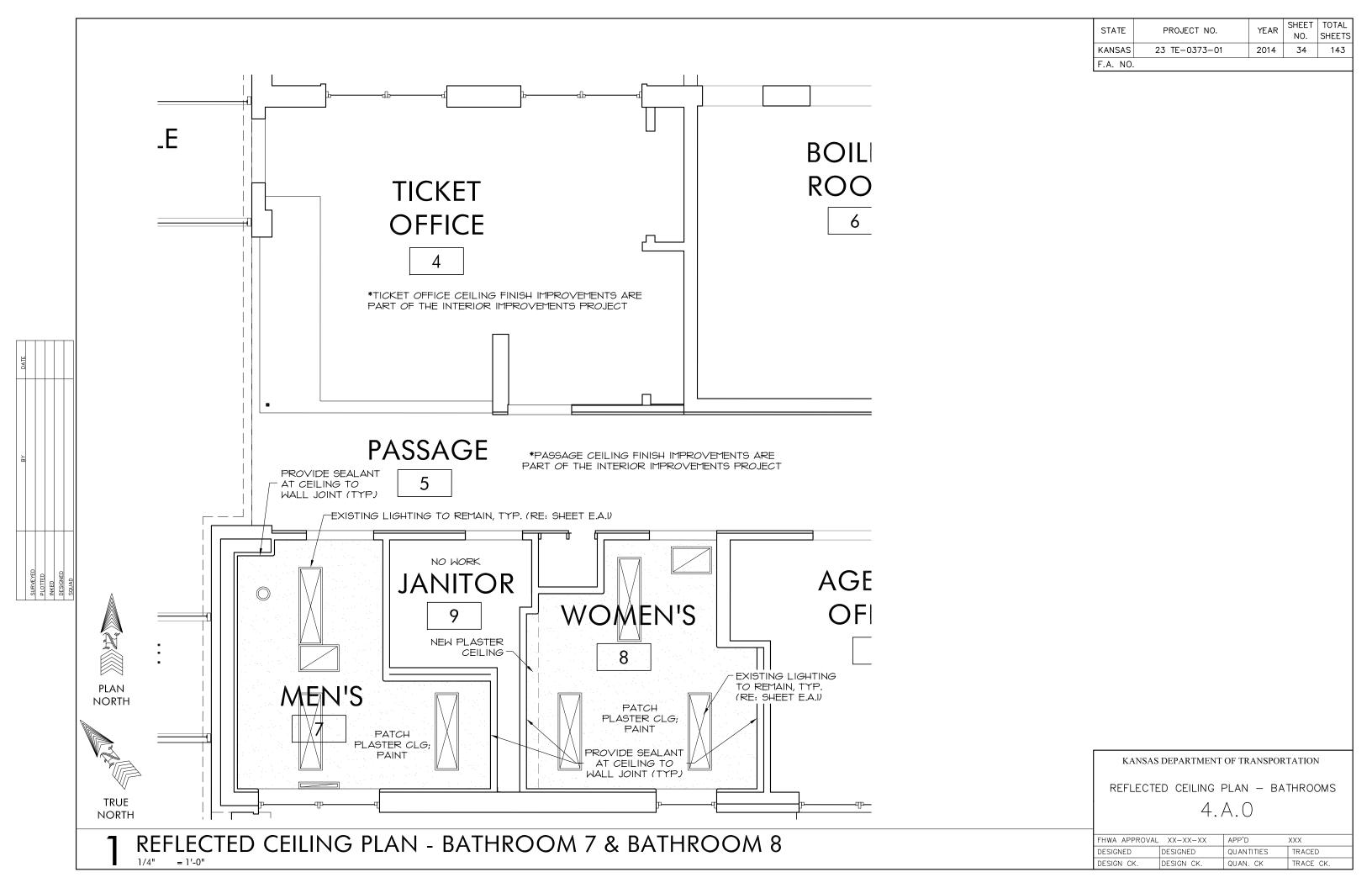
INTERIOR ELEVATIONS (ALTERNATE #1)

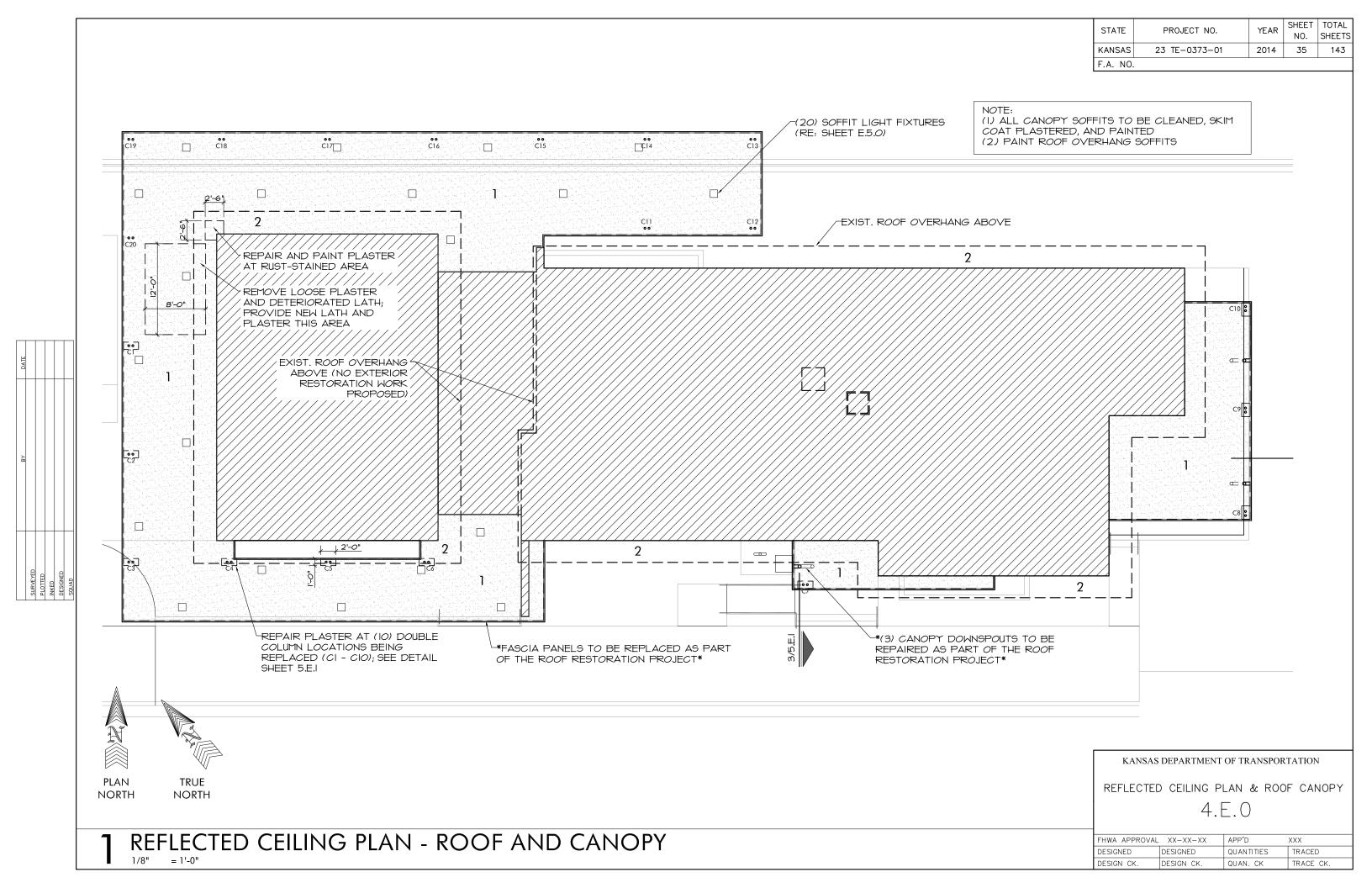
3.1.0

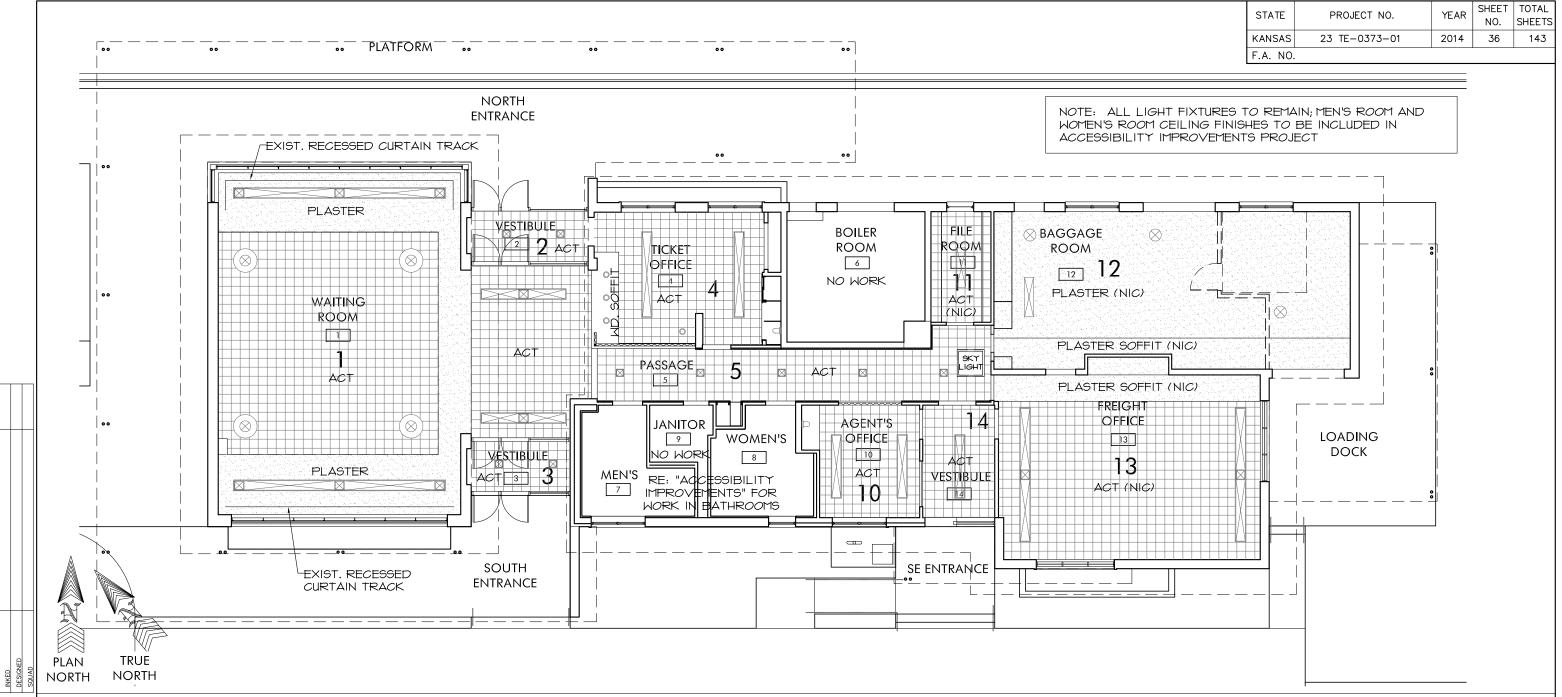
FHWA APPROVAL XX-XX-XX		APP'D XXX	
DESIGNED	DESIGNED	QUANTITIES	TRACED
DESIGN CK.	DESIGN CK.	QUAN. CK	TRACE CK.











# REFLECTED CEILING PLAN

#### **NOTES:**

- 1. 12x12 fissured ACT, some original, (1) missing tile; Ptd. plaster w/ some damage -- Replace tile w/ new tile to match original. Patch and paint plaster to match original.
- 2. 24x48 fissured ACT, not original -- Replace w/ new 12x12 fissured tile to match original.
- 3. 24x48 fissured ACT, not original--

Replace w/ new 12x12 fissured tile to match original.

- 4. 12x12 fissured ACT w/ some staining and damage -- Replace damaged tiles to match existing, prime and paint entire ceiling.
- 5. 24x48 fissured ACT, not original -- Replace w/ new 12x12 fissured tile to match original.
- 10. 24x48 fissured ACT, not original --

Replace w/ new 12x12 fissured tile to match original.

- 11. (NIC) 12x12 fissured ACT w/ some staining and damage -- Replace damaged tiles to match existing, prime and paint entire ceiling.
- 12. (NIC) Ptd. plaster on metal lath, w/ some water damage -- Repair damaged area and paint entire ceiling.
- 13. 24x48 fissured ACT, not original --

(NIC) Replace w/ new 12x12 fissured tile to match original; Patch and paint plaster fur-down.

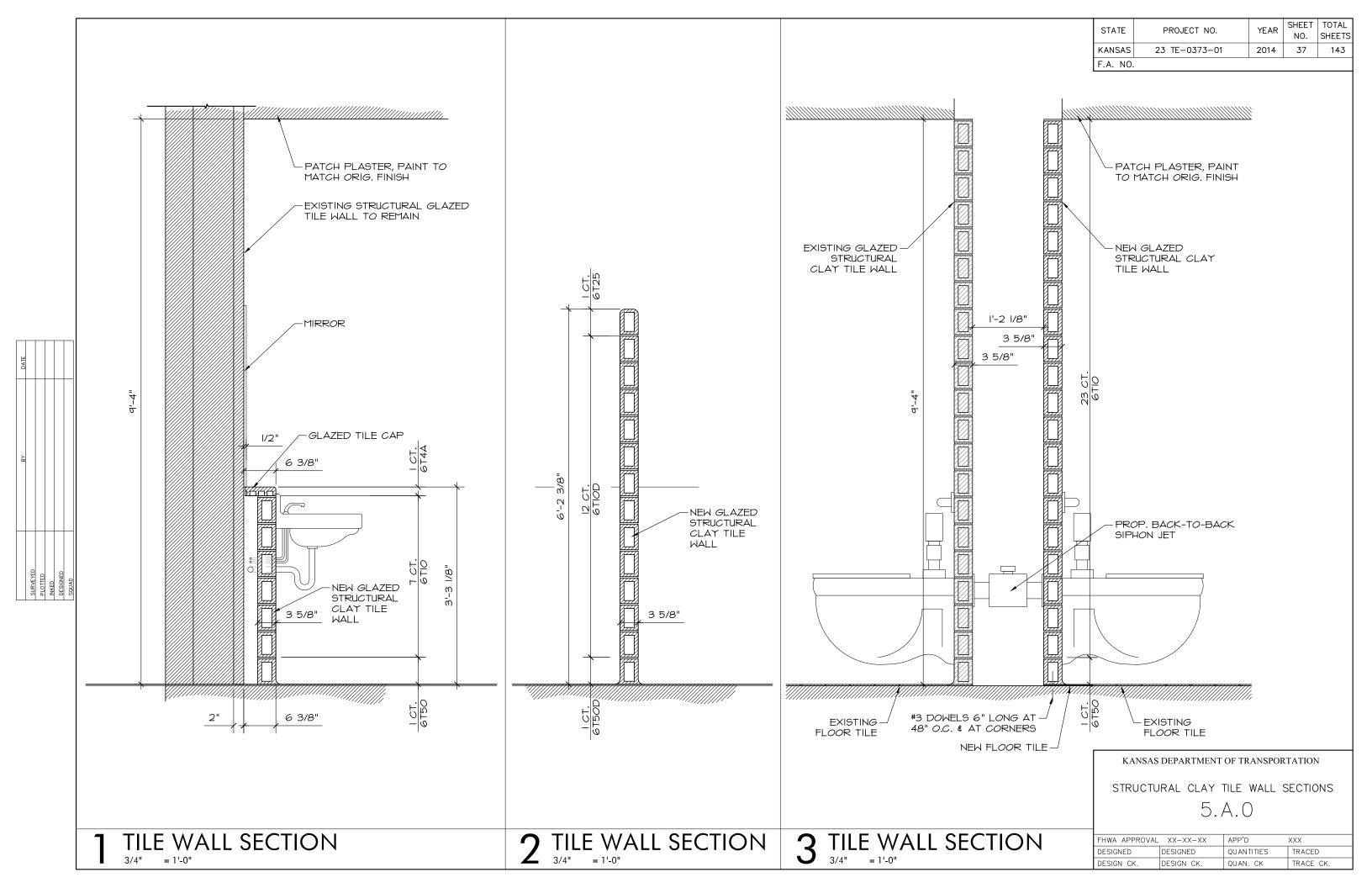
14. 24x48 fissured ACT, not original -- Replace w/ new 12x12 fissured tile to match original.

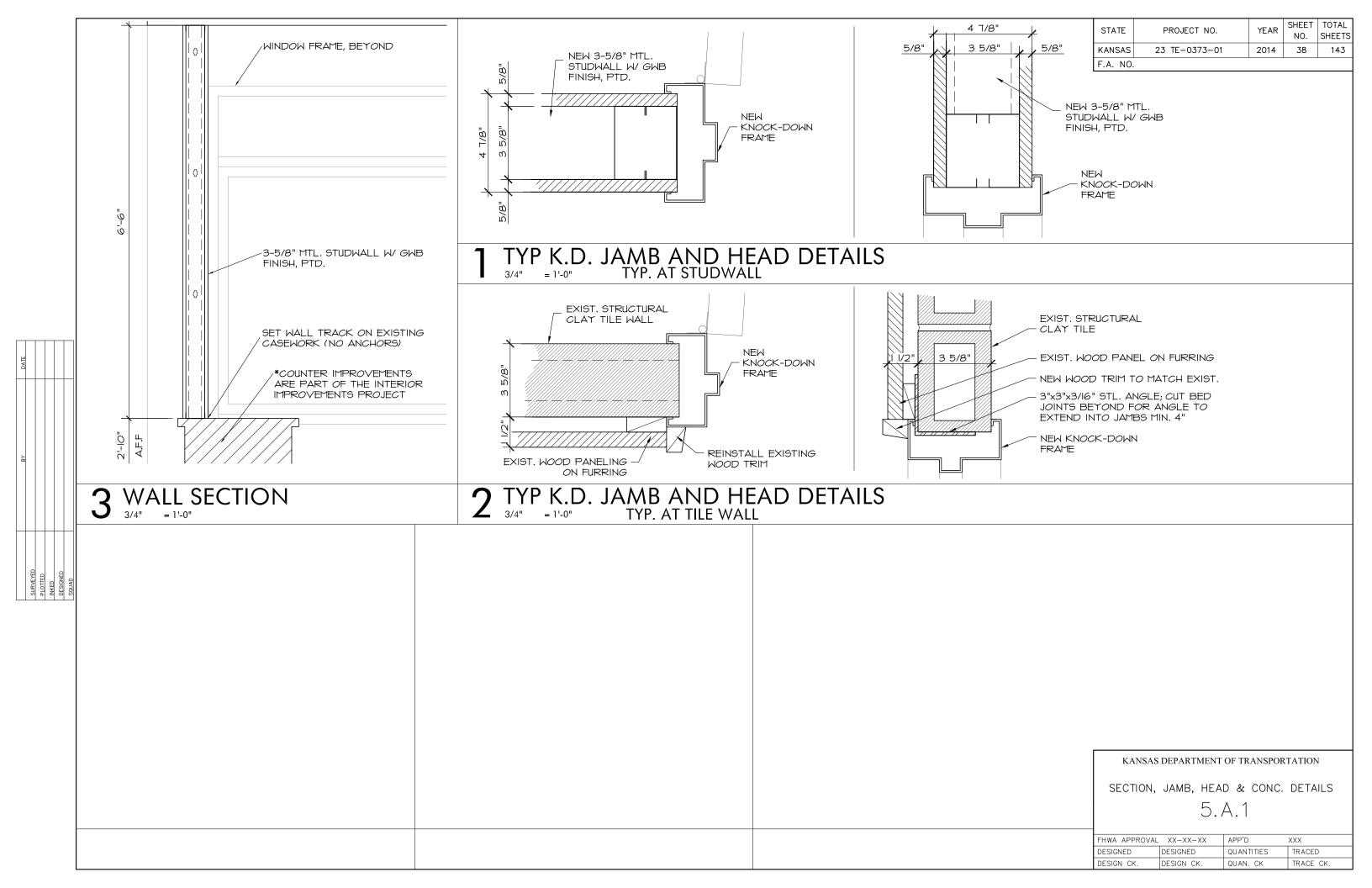
FHWA APPROVAL XX-XX-XX APP'D XXX

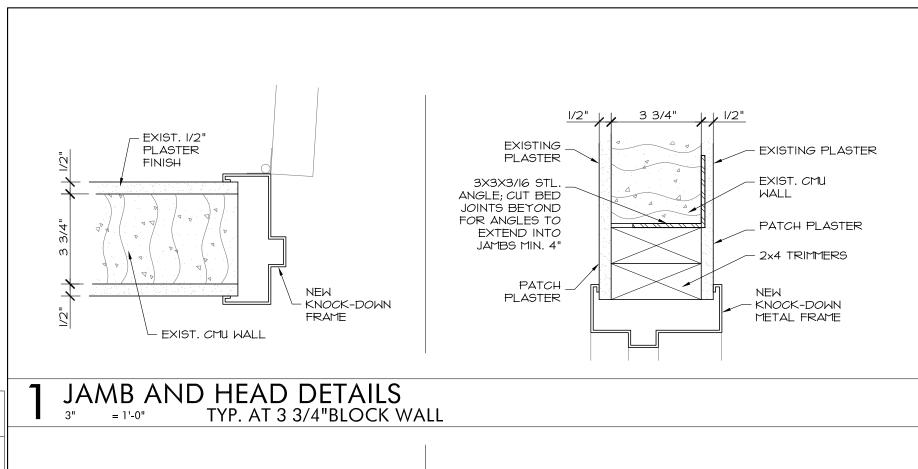
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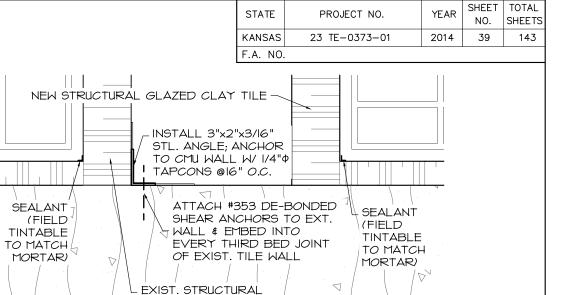
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**CEILING RESTORATION NOTES** 









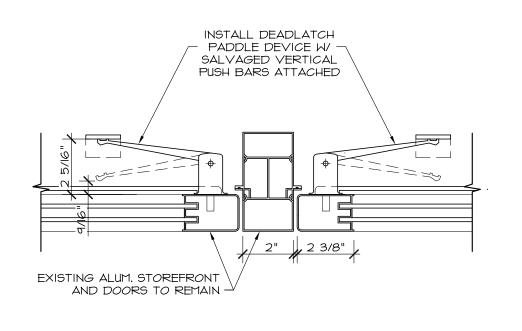
V

#### 7 1/2" EXIST. CMU WALL EXISTING PLASTER (2) 3-1/2×3-1/2×1/4 STL. ANGLES; CUT BED JOINTS BEYOND FOR ANGLES TO EXTEND INTO JAMBS MIN. 8"; EPOXY PRIME PATCH -PAINT **PLASTER** METAL DOOR CORNER FRAME W/ 4" HEAD BEAD SEALANT

# 3 WALL SUPPORT DETAIL

GLAZED TILE WALL

4/



# **2** TYP. K.D. JAMB AND HEAD DETAILS TYP. AT 7 1/2" BLOCK WALL

EXIST. CMU WALL

EXIST. PLASTER

- SEALANT

METAL

FRAME

DOOR

SEALANT

PLASTER

CORNER

BEAD

# 4 PANIC HARDWARE DETAIL

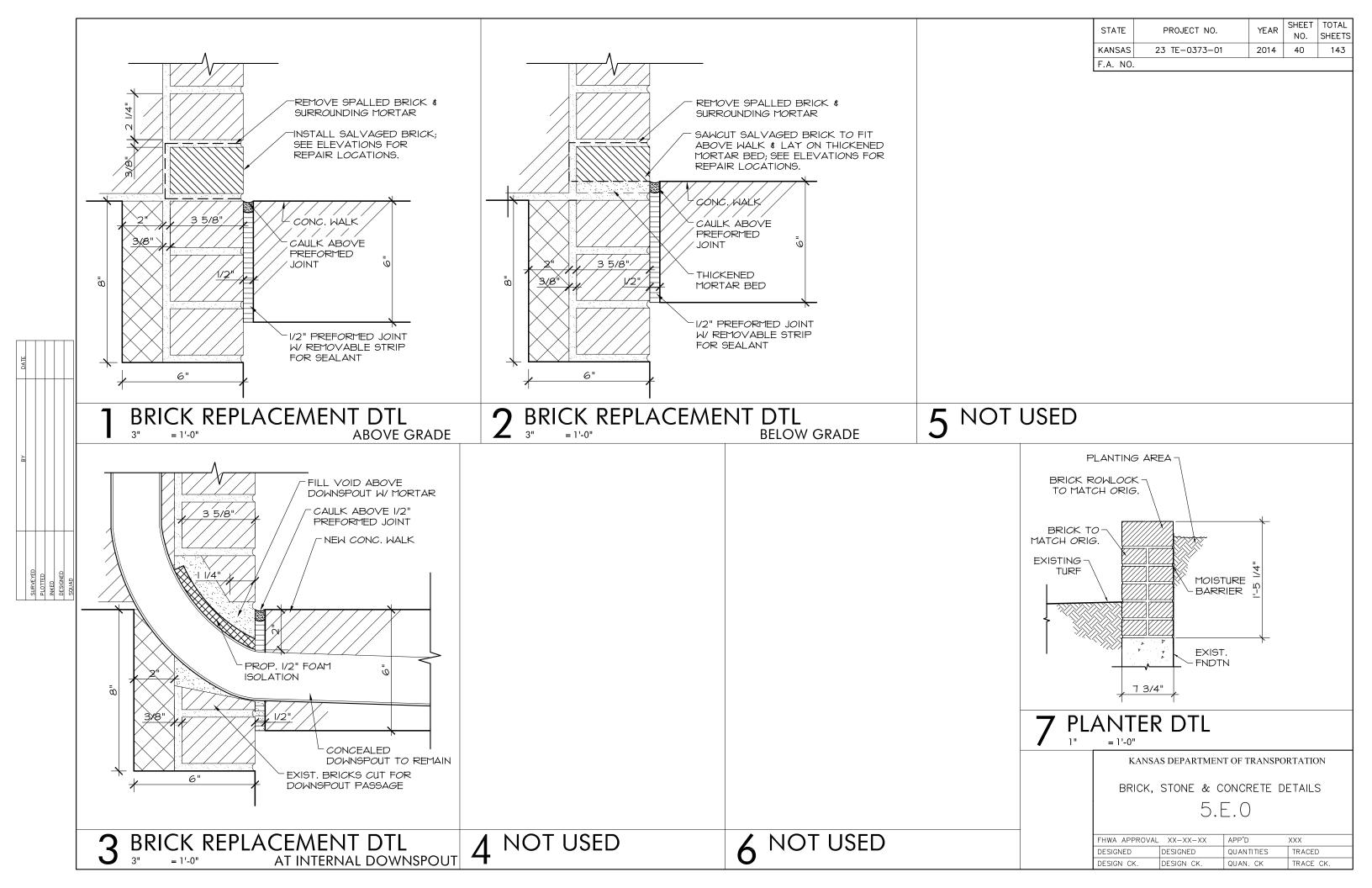
kansas department of transportation

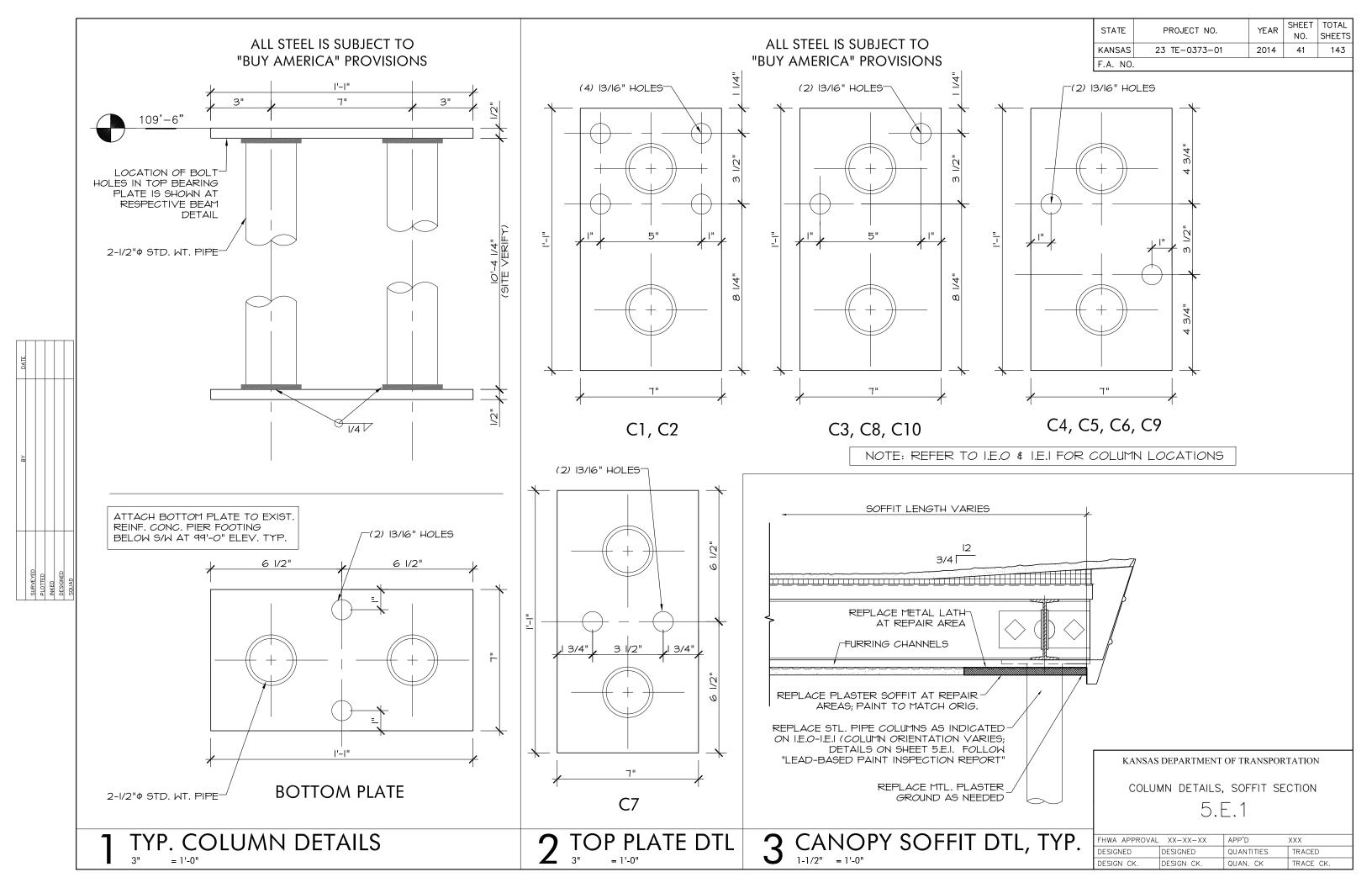
JAMB, HEAD, WALL SUPPORT, PANIC DETAILS 5.A.2

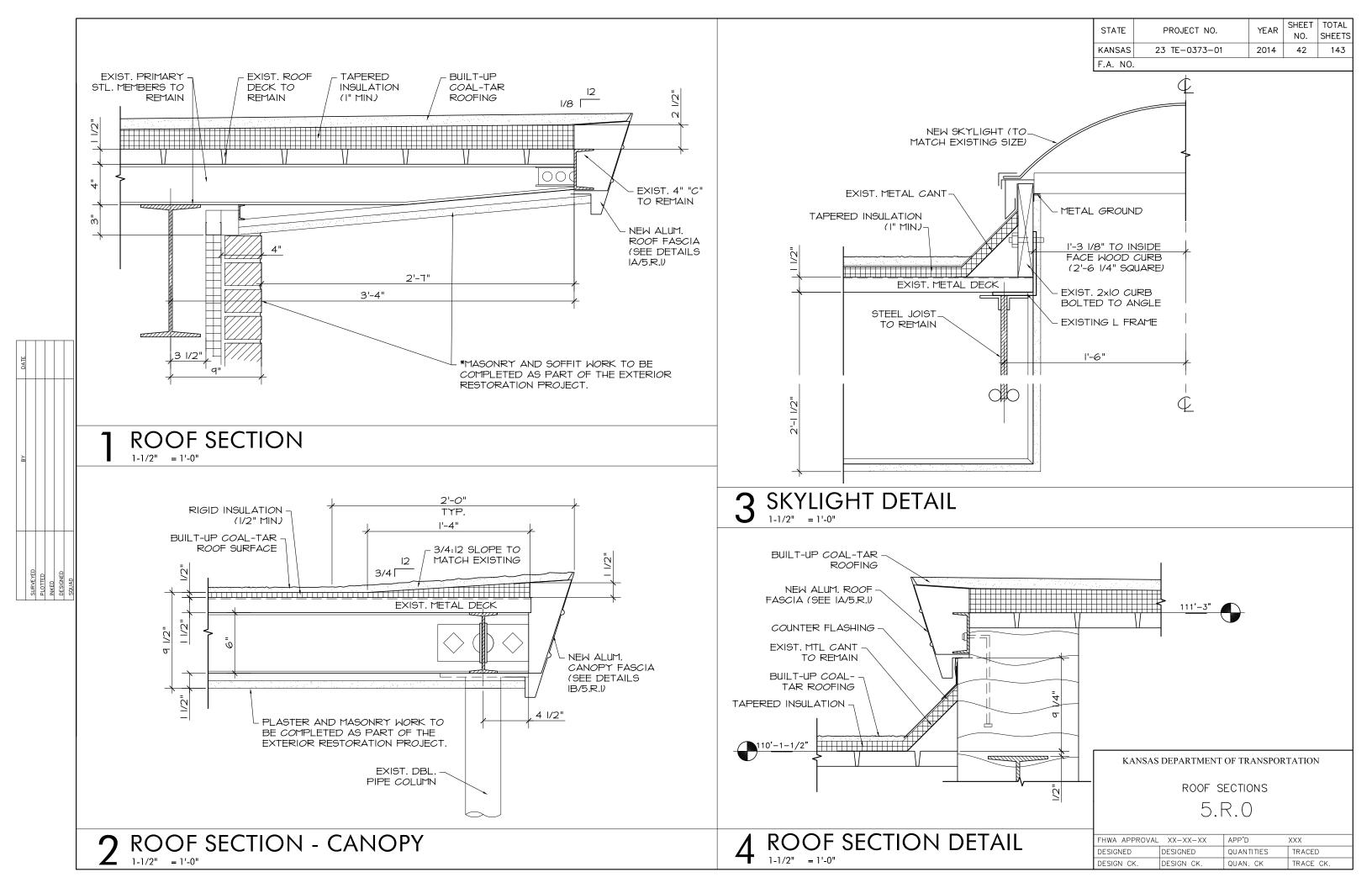
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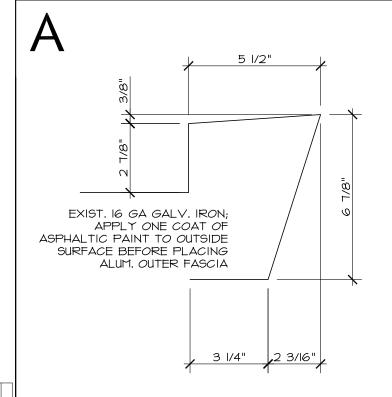
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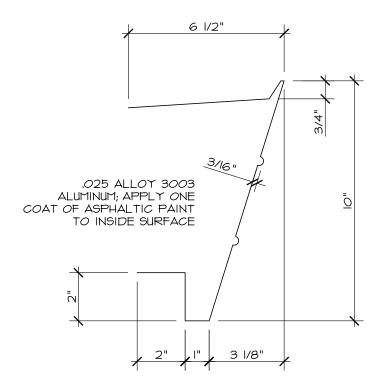






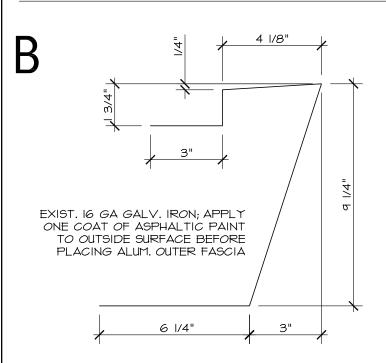
## EXIST. ROUGH (INNER) FASCIA

TYPICAL AT ALL ROOF OVERHANGS REPAIR AS NECESSARY



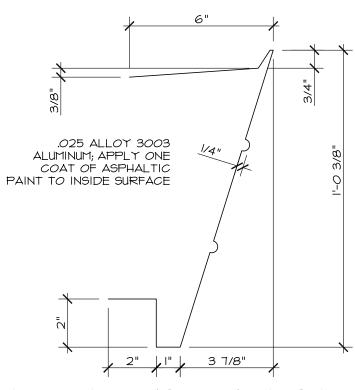
## NEW FINISH (OUTER) FASCIA

TYPICAL AT ALL ROOF OVERHANGS DETAIL MATCHES EXISTING FASCIA



EXIST. ROUGH (INNER) FASCIA

TYPICAL AT ALL CANOPIES
REPAIR AS NECESSARY



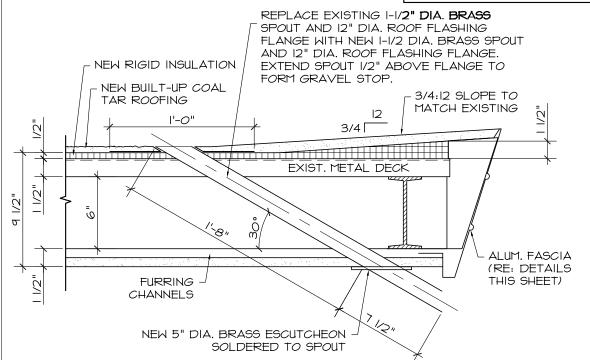
# NEW FINISH (OUTER) FASCIA

TYPICAL AT ALL CANOPIES
DETAIL MATCHES EXISTING FASCIA

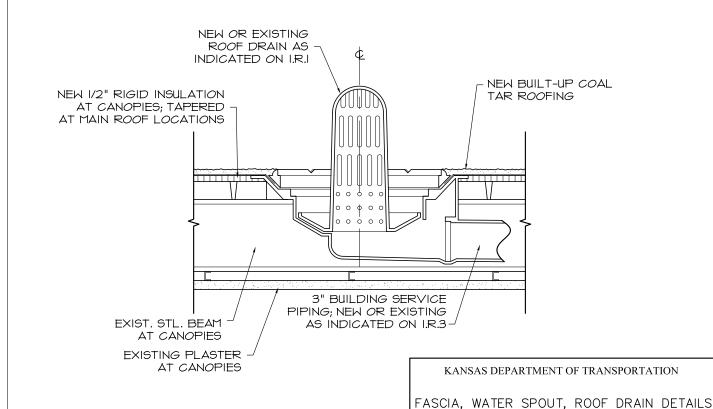
 STATE
 PROJECT NO.
 YEAR
 SHEET NO.
 SHEETS

 KANSAS
 23 TE-0373-01
 2014
 43
 143

 F.A. NO.



# 2 WATER SPOUT DETAIL - CANOPY



PROPOSED FASCIA DETAILS

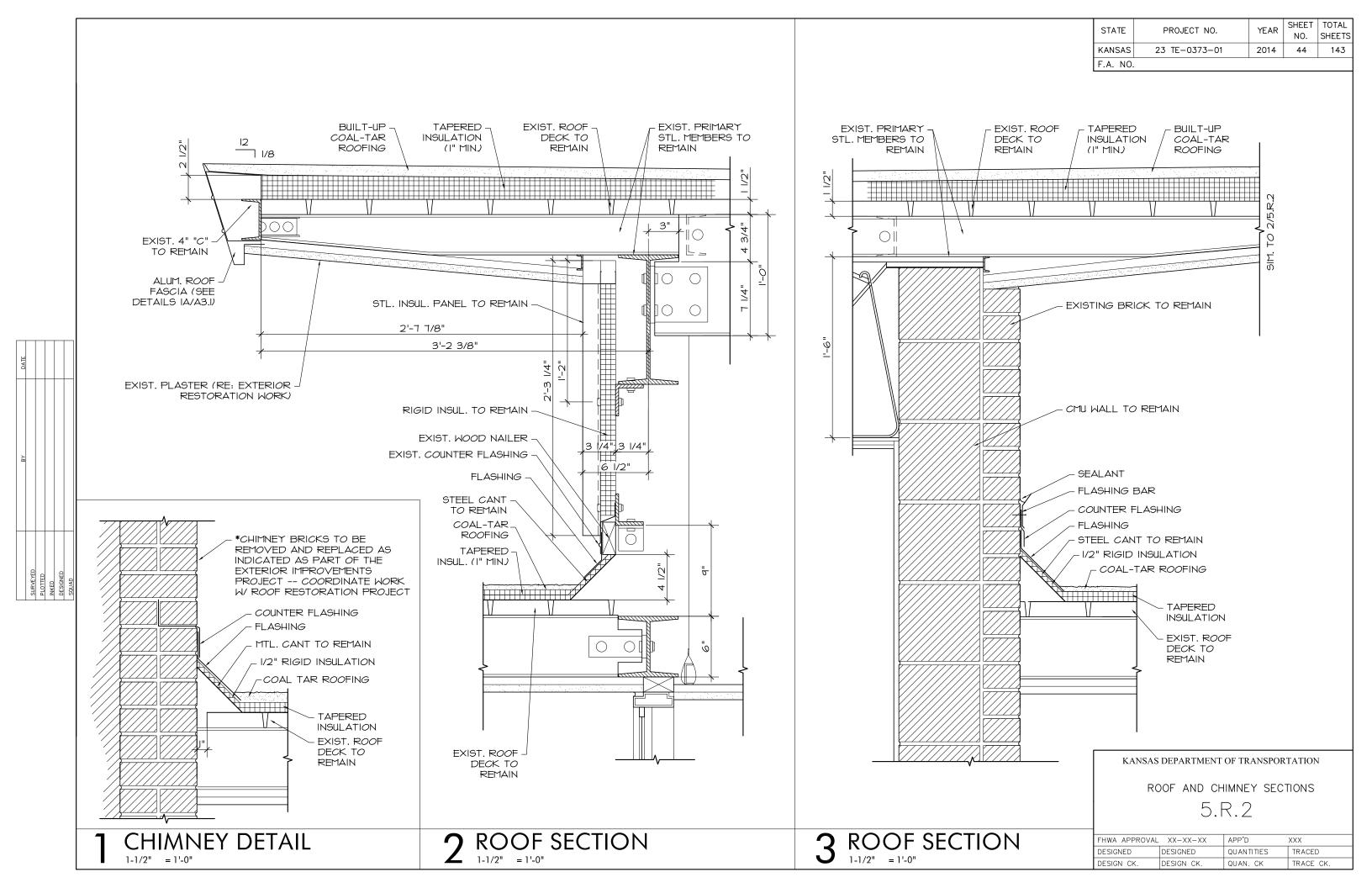
3 ROOF DRAIN DETAIL

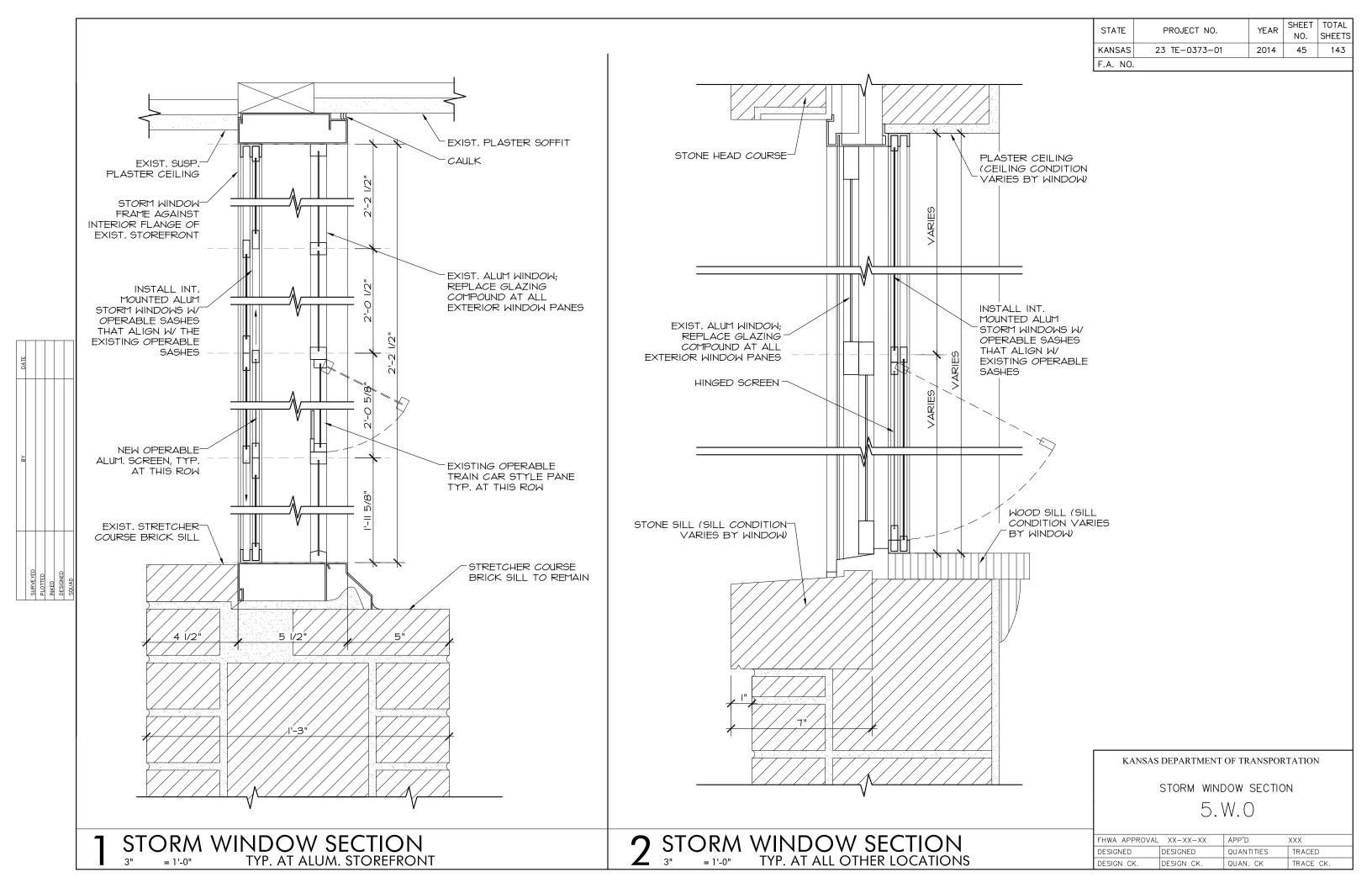
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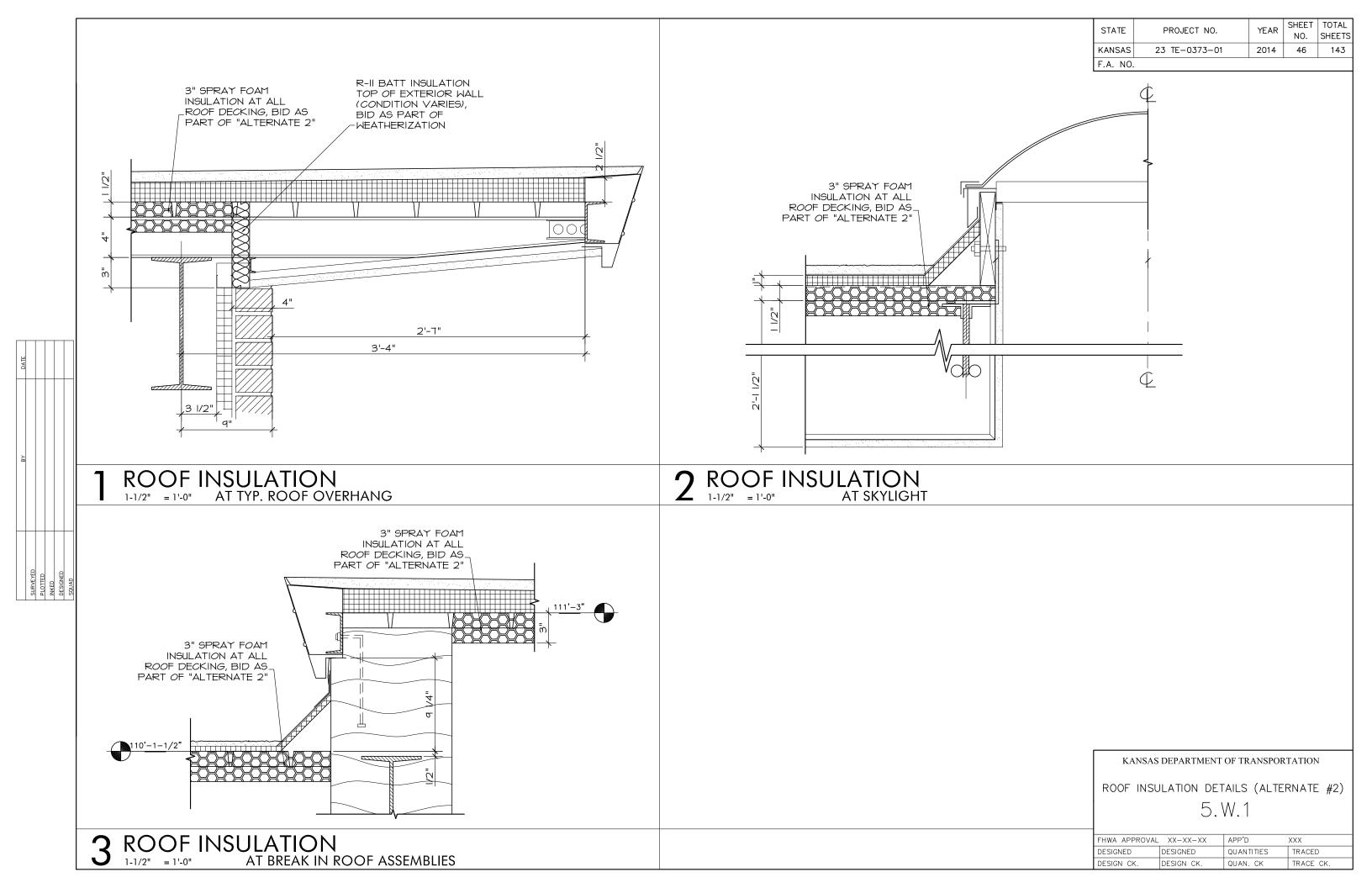
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5.R.1







STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	23 TE-0373-01	2014	47	143
F.A. NO	,			







S-1

S-2

S-3







S-4

SE-1

E-1

KANSAS DEPARTMENT OF TRANSPORTATION

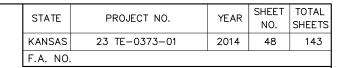
EXTERIOR PHOTO KEY

6.E.O

FHWA APPROVAL	XX-XX-XX	APP'D	XXX
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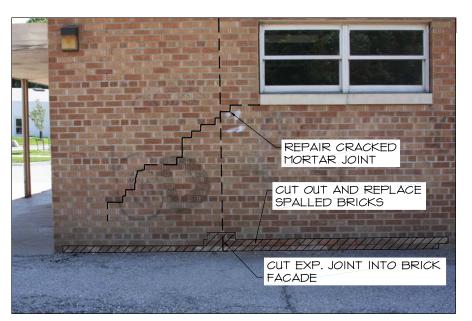




E-2

E-3





REPAIR CRACKED MORTAR JOINTS

CAULK & SEAL TOPS OF CORNER BRACKETS, TYP.

NE-1

NE-2

N-1

<u>|-2</u>

KANSAS DEPARTMENT OF TRANSPORTATION

EXTERIOR PHOTO KEY

6.E.1

FHWA APPROVAL	XX-XX-XX	APP'D	XXX
DESIGNED	DESIGNED	QUANTITIES	TRACED
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 STATE
 PROJECT NO.
 YEAR
 SHEET NO.
 TOTAL SHEETS

 KANSAS
 23 TE-0373-01
 2014
 49
 143

 F.A. NO.

CUT OUT SPALLED AND FRACTURED BRICKS;
CLEAN AND PRIME BASE OF STEEL COLUMN WITH
EPOXY PRIMER INTENDED FOR "RUSTY METAL HAND TOOLED CLEAN"; INSERT I/2" PREFORMED
JOINT BARRIER BETWEEN BRICK AND COLUMN;
REPLACE BRICK AND REPAIR CRACKED JOINTS

N-3 N-4 NW-1







CUT OUT AND REPLACE ALL STRETCHER COURSES; HEADER COURSES TO REMAIN. SALVAGE BRICKS FOR REUSE AT REPAIR LOCATIONS (BELOW ROOF) AT EXTERIOR WALLS AS INDICATED. LAY NEW BRICKS TO MATCH COURSING AND EXISTING UNITS BETWEEN HEADER COURSES. CHIMNEY IS A DOUBLE WYTHE BRICK WALL AND REMAINING MASONRY NEEDS TO BE BRACED UNTIL CHIMNEY WALL IS FULLY RESTORED



W-1 W-2 C-1

KANSAS DEPARTMENT OF TRANSPORTATION

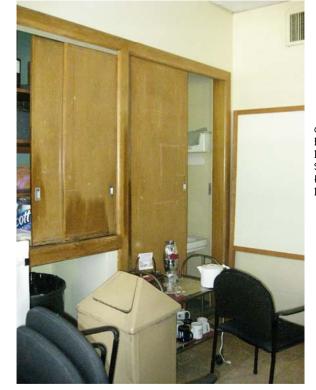
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6.E.2

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DESIGNED		DESIGNED	QUANTITIES	TRACED		
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ORIGINAL WOOD BY-PASS SLIDING DOORS; REPLACE
SLIDING DOOR
HARDWARE; REFINISH
DOORS AND TRIM.

PROJECT NO.

23 TE-0373-01

STATE

KANSAS

F.A. NO.

4B

SHEET TOTAL

SHEETS

143

NO.

2014

50

REPLACE SLIDING CABINET DOOR HARDWARE; REFINISH CABINET DOORS, DRAWER FACES, AND CASES; SERVICE DRAWER HARDWARE FOR PROPER OPERATION.







ORIG. TICKET COUNTER CASEWORK; REFINISH WOOD COUNTERTOP
EDGING; REFINISH
MARRED SPOTS OF
"PICKLED" FINISH
OF WOOD PANEL BELOW COUNTERTOP.



ORIG. WOOD BY-PASS SLIDING DOORS; REPLACE TRACK HARDWARE AND REFINISH DOORS AND TRIM

KANSAS DEPARTMENT OF TRANSPORTATION

INTERIOR PHOTO KEY (ALTERNATE #1)

6.1.0

10A FHWA APPROVAL XX-XX-XX APP'D XXX TRACED DESIGNED DESIGNED QUANTITIES DESIGN CK. DESIGN CK. QUAN. CK TRACE CK.



WOOD SHELVING; PREP AND PAINT SHELVING.

(NIC)



ORIG. WOOD BY-PASS SLIDING DOORS; REPLACE TRACK HARDWARE AND REFINISH DOORS AND TRIM.

(NIC)

 STATE
 PROJECT NO.
 YEAR
 SHEET NO.
 NO.
 SHEETS

 KANSAS
 23 TE-0373-01
 2014
 51
 143

 F.A. NO.



REFINISH THE DOORS AND CABINET CASE; SERVICE DRAWER AND DOOR HARDWARE FOR PROPER OPERATION.

(NIC)

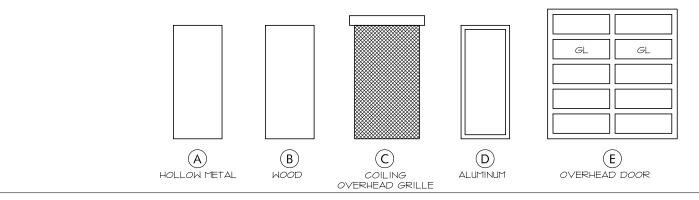
12A 13A 13B

KANSAS DEPARTMENT OF TRANSPORTATION

INTERIOR PHOTO KEY (ALTERNATE #1)

6.1.1

HWA APPROVAL	XX-XX-XX	APP'D	XXX
ESIGNED	DESIGNED	QUANTITIES	TRACED
ESIGN CK.	DESIGN CK.	QUAN. CK	TRACE CK.



WIDTH PER SCHEDULE	WIDTH PER SCHEDULE	WIDTH PER SCHEDULE	WIDTH PER SCHEDULE
1	2	3	4
HOLLOW METAL	KNOCK DOWN FRAME	WOOD FRAME	ALUMINUM

 STATE
 PROJECT NO.
 YEAR
 SHEET NO.
 NO.
 SHEETS

 KANSAS
 23 TE-0373-01
 2014
 52
 143

F.A. NO.

### DOOR & FRAME TYPES - ACCESSIBILITY PROJECT

DOOR							FRAME				HZ	\RD	MA	RE									
											HINGES	L <i>oc</i> kset	BOLTS	PUSH	PULL	CLOSER	OFITKALOK DOOD 10 DTD	DOOR HOLDER	KIOKPLATE Tijppojiojio		MEATHERSTRIP	SIGNAGE	
DR #	NOTE	SIZE (W×H)		TYPE	MAT.	FINISH		TYPE	MAT.	FINISH	Ī	$\frac{2}{\Gamma}$	<u> </u>	ឮ	_₫	<u></u> 7	5 6	<u> </u>	Ž į	±	岁 7	<u>מ</u> ਨੋ	Ź
2A		3'-0" x 7'-0" (PAIR)	EXIST	D	AL	CLR	EXIST	4	AL	CLR	E			PI	P2	(	OI E	2I	ŧ	≣│	N		
2B		3'-0" x 7'-0" (PAIR)	EXIST	D	AL	CLR	EXIST	4	AL	CLR	E			PI	P2	SI			ŧ	≣	N		
20		3'-0" x 7'-0" (PAIR)	EXIST	D	AL	CLR	EXIST	4	AL	CLR	H2			P3	P4	(		2	1	П	N		
2D		3'-0" x 7'-0" (PAIR)	EXIST	D	AL	CLR	EXIST	4	AL	CLR	H2			P3	P4 (	22			1	П	N		
ЗА		3'-0" x 7'-0" (PAIR)	EXIST	D	AL	CLR	EXIST	4	AL	CLR	H2			PΙ	P2	C		2	1	П	N		
3B		3'-0" x 7'-0" (PAIR)	EXIST	D	AL	CLR	EXIST	4	AL	CLR	H2			PI	P2	SI			1	П	N		
30		3'-0" x 7'-0" (PAIR)	EXIST	D	AL	CLR	EXIST	4	AL	CLR	H2			P3	P4	C		2	7	П	N		
3D		3'-0" x 7'-0" (PAIR)	EXIST	D	AL	CLR	EXIST	4	AL	CLR	H2			P3	P4 (	22			٦	П	N		
4A		2'-10" × 6'-8"	EXIST	В	MD	REFINISH	EXIST	3	MD	PAINT	E	L										F	રા
4B		2'-10" × 6'-8"	EXIST	В	MD	REFINISH	EXIST	3	MD	PAINT	H5	L											
6A	- 1	2'-8" × 6'-8"	EXIST	А	HM	PAINT	EXIST	I	HM	PAINT	E	Ħ							ŧ	≣│	N	R	.2
6B	ı	3'-0" x 6'-8" (PAIR)	EXIST	А	HM	PAINT	EXIST	1	HM	PAINT	E	E							Ð	≣	N	R	2
6C	1	3'-0" x 6'-8" (PAIR)	EXIST	А	ΗМ	PAINT	EXIST	- 1	HM	PAINT	E	E	Ш						ŧ	≣	N		
٦A		3'-0" × 6'-8"	NEM	В	MD	CLR	NEM	2	KD	PAINT	H4	L2		P5	P6	23		k	<1		5	31	
8A		3'-0" × 6'-8"	NEM	В	MD	CLR	NEW	2	KD	PAINT	H4	L2		P5	P6 (	23		k	<1		Ę	31	
9A	2	2'-6" x 6'-8"	EXIST	В	WD	REFINISH	EXIST	3	MD	PAINT	E	LЗ						1	ΕT				
IOA		3'-0" × 6'-8"	NEM	В	MD	CLR	NEW	2	KD	PAINT	H4	LI				24	E	3					
IIA	2	2'-6" x 6'-8"	EXIST	В	WD	REFINISH	EXIST	1	HM	PAINT	E	LЗ						1	ΕT			R	:3
I2A	1	2'-8" × 6'-8"	EXIST	А	ΗМ	PAINT	EXIST	ı	HM	PAINT	E	I				E			ŧ	≣	N	R	2
I2B	1, 3	8-0" x 8'-0" (OHD)	EXIST	E	MD	PAINT	EXIST	-	MTL	PAINT		E											
120	1	8-0" x 6'-10" (OHD)	EXIST	-	ΗМ	-	EXIST	-	MTL	PAINT		E											
12D		4'-0" × 6'-8" (OHD)	EXIST	C	MTL	-	EXIST	-	MTL	PAINT													
12D		2'-0" x l'-l0"	NEM	В	MD	PAINT	NEW	3	MD	PAINT	нз		ВΙ										
I3A	2	2'-6" × 6'-8"	EXIST	В	MD	REFINISH	EXIST	3	WD	PAINT	E	E										R	.4
I3B		3'-0" × 6'-8"	NEM	В	MD	CLR	NEW	2	KD	PAINT	НЗ	LI										R	.5
130		3'-0" × 7'-0"	NEM	В	MD	CLR	NEW	2	HM	PAINT	НЗ	LI										R	.5
14A		3'-0" × 6'-8"	EXIST	В	MD	PAINT	EXIST	3	MD	PAINT	H4			PT	P8 (	23		K	(2 H		N	R	6

- I. BID AS PART OF "EXTERIOR RESTORATION" WORK.
- 2. BID AS PART OF "INTERIOR RESTORATION" WORK.
- 3. FOLLOW WORK PROCEDURES OF "LEAD-BASED PAINT INSPECTION REPORT" IN APPENDIX OF PROJECT MANUAL

## DOOR SCHEDULE - ACCESSIBILITY PROJECT

#### HARDWARE KEY

- E EXISTING
- J NEM
- HI NEW STANDARD WEIGHT BALL-BEARING HINGES
- H2 SERVICE EXISTING PIVOT HINGES FOR PROPER OPERATION
- H3 NEW STANDARD WEIGHT PLAIN BEARING HINGES
- H4 INSTALL SALVAGED HINGES
- H5 STANDARD WEIGHT OFF-SET BALL-BEARING HINGES
- LI NEW LEVER HANDLE ENTRANCE/OFFICE LOCKSET KEY LOCK EXTERIOR, BUTTON LOCK INTERIOR, ROTATE INTERIOR LEVER TO RELEASE
- L2 INSTALL SALVAGED DEADBOLT LOCK
- L3 NEW LVR HANDLE STORAGE LOCKSET EXT. LEVER LOCK/UNLOCK BY KEY, INT. ALWAYS UNLOCKED
- BI NEW SURFACE MOUNT MANUAL HORIZONTAL SLIDE BOLT
- PI NEW DEADLATCH PADDLE W/ EXT. KEYED DEADBOLT CYLINDER; MOUNT SALVAGED ALUM. VERT. PUSH BAR TO PUSH BARS TO FACE OF DOOR
- P2 INSTALL SALVAGED PULL HANDLES
- P3 EXIST. ALUM. VERTICAL AND HORIZONTAL PUSH BARS TO REMAIN
- P4 EXIST. PULL HANDLES TO REMAIN
- P5 INSTALL SALVAGED PUSH PLATE
- P6 INSTALL SALVAGED PULL HANDLE
- PT NEW PANIC DEVICE W/ EXTERIOR KEYED DEADBOLT CYLINDER
- P8 INSTALL SALVAGED PULL HANDLE; THUMB RELEASE TO BE NON-FUNCTIONAL
- CI OVERHEAD CONCEALED CLOSER
- C2 NEW IN-FLOOR CLOSER; MOUNT IN EXIST. CLOSER CASE
- C3 NEW OVERHEAD SURFACE CLOSER
- C4 INSTALL SALVAGED CLOSER
- OI NEW OVERHEAD SURFACE DOOR OPERATOR W/ 2 BATTERY OPERATED REMOTE PUSH-PLATE ACTIVATORS
- DI INSTALL SALVAGED OVERHEAD DOOR HOLDER
- D2 NEW OVERHEAD DOOR HOLDER, MATCH SALVAGED DOOR HOLDER
- D3 INSTALL SALVAGED DOOR KICK HOLDER
- KI NEW KICKPLATE SIZED FOR NEW DOOR; FINISH TO MATCH EXIST. KICKPLATE
- K2 INSTALL SALVAGED KICKPLATE ON OPPOSITE SIDE OF DOOR
- TI EXISTING THRESHOLD, INCLUDING IN-FLOOR DOOR CLOSER CASE AND COVER, TO REMAIN
- SI INSTALL SALVAGED DOOR MOUNTED SIGN
- RI AT LATCH SIDE, CUT AND REMOVE MTL. STOP ON DOOR FRAME BELOW 34"; WELD SHEET MTL. PATCH OVER REMOVED STOP, GRIND SMOOTH
- R2 AT BOTTOM OF DOOR FRAME, REPLACE DETERIORATED PORTION OF FRAME WITH NEW SECTION OF FRAME, WELD AND GRIND SMOOTH
- R3 REMOVE SLIDE BOLT LATCH, PADLOCK CHAIN HANGER, AND
  FOOT BOLT; PATCH HOLES IN DOOR W/ WOOD FILLER; PATCH
  HOLES IN KICKPLATE W/ SEALANT (MATCH KICKPLATE COLOR)
- R4 HANG ORIG. EXIST. DOOR LEAF AT THIS LOCATION (CURRENTLY STORED IN BAGGAGE ROOM)
- R5 PROVIDE DOOR SILENCERS
- R6 REINSTALL EXIST. DOOR AT THIS LOCATION SO IT OPENS
  IN THE DIRECTION OF EXIT TRAVEL

KANSAS DEPARTMENT OF TRANSPORTATION

DOOR SCHEDULE

7.A.O

FHWA APPROVAL XX-XX-XX APP'D XXX

DESIGNED DESIGNED QUANTITIES TRACED

DESIGN CK. DESIGN CK. QUAN. CK TRACE CK.

STATE	PROJECT NO.	YEAR 2014	SHEET NO.	TOTAL SHEETS
KANSAS	23 TE-0373-01	2014	53	143
F.A. NO.			•	

ROOM #	ROOM NAME	FLOOR	BASE	WALLS	CEILING	WINDOW TREATMENTS	WOOD WORK AND TRIM
		TERRAZZO: PATCH CRACKS (APPROX 24 L.F.),	PTD. MTL. BASE, SOME PCS LOOSE OR	FACE BRICK: CLEAN W/ WATER	12x12 FISSURED ACT, SOME ORIG.;	EXISTING CURTAIN TRACKS TO	REFINISH WOOD TELEPHONE SHELF, WOOD TRIM A
	WAITING	RE-GRIND, CLEAN, AND SEAL PER SPECIFICATION	MISSING. REATTACH LOOSE PCS ON	AND MILD DETERGENT PER	PTD. PLASTER W/ SOME DAMAGE.	REMAIN. NEW CURTAINS ARE NOT	BULKHEAD OVER TICKET COUNTER, AND WOOD E
1	WAITING	SECTION 096610	NORTH WALL W/ MASONRY ANCHORS	SPECIFICATIONS SECTION 040120	REPLACE ALL TILE W/ NEW TILE	INCLUDED IN THIS PROJECT.	AT TICKET COUNTER. CLEAN WOOD PANELING U
			(APPROX. 27 L.F.), REPLACE MISSING		TO MATCH ORIG.; PATCH		TICKET COUNTER AND WOOD FRAME AROUND PH
			SEGMENTS (APPROX. 4 L.F.), PAINT		(APPROX. 20 L.F.) AND PAINT ALL		ON WEST WALL. REFINISH & CLEAN PER SPECIFIC
			ALL BASE TO MATCH ORIG. COLOR		PLASTER		SECTION 064005.
		TERRAZZO: RE-GRIND, CLEAN, AND SEAL PER	PTD. MTL. BASE, SOME PCS LOOSE.	FACE BRICK: CLEAN W/ WATER	24×48 FISSURED ACT, NOT ORIG.		
	VESTIBULE 2	SPECIFICATION SECTION 096610	REATTACH LOOSE PCS W/ MASONRY	AND MILD DETERGENT PER	REPLACE W/ NEW 12x12 FISSURED		
2	VESTIBULE 2		ANCHORS (APPROX. 6 L.F.), PAINT ALL	SPECIFICATIONS SECTION 040120	ACT TO MATCH ORIG.		
			BASE TO MATCH ORIGINAL COLOR				
		TERRAZZO: RE-GRIND, CLEAN, AND SEAL PER	PTD. MTL. BASE, SOME PCS LOOSE.	FACE BRICK AND STONE: CLEAN	24×48 FISSURED ACT, NOT ORIG.		
	VESTIBULE 3	SPECIFICATION SECTION 096610	REATTACH LOOSE PCS W/ MASONRY	W/ WATER AND MILD DETERGENT	REPLACE W/ NEW 12x12 FISSURED		
3	VESTIBOLE 3		ANCHORS (APPROX. 6 L.F.), PAINT ALL	PER SPECIFICATIONS SECTION	ACT TO MATCH ORIG.		
			BASE TO MATCH ORIGINAL COLOR	040120			
		12x12 VINYL TILE IS NOT ORIG., MASTIC CONTAINS	PTD. MTL. BASE, SOME PCS LOOSE.	PLASTER ON CMU: PATCH	12x12 FISSURED ACT W/ SOME	REFINISH EXISTING OAK SILL PER	REFINISH WOOD CASEWORK, CLOSET DOORS, AN
	TICKET OFFICE	ASBESTOS. 9x9 VINYL ASBESTOS TILE IN CLOSET IS	REATTACH LOOSE PCS W/ MASONRY	CRACKS (APPROX. 8 L.F.) AND	STAINING AND DAMAGE. REPLACE	SPECIFICATION SECTION 064005.	PER SPECIFICATION SECTION 064005
4	HERET OTTICE	ORIGINAL. REPLACE EXISTING 12X12 VINYL TILE W/	ANCHORS (APPROX. 12 L.F.), PAINT ALL	PAINT ALL WALLS	TEN DAMAGED TILES TO MATCH	CLEAN HORIZONTAL LOUVER	
		NEW 12X12 TILE TO MATCH ORIGINAL COLOR. CLEAN	BASE TO MATCH ORIGINAL COLOR		EXISTING, PRIME AND PAINT	BLINDS AND SERVICE FOR	
		AND POLISH NEW 12X12 TILE AND EXISTING 9X9 TILE.			ENTIRE CEILING	PROPER OPERATION	
		FOLLOW WORK PROCEDURES IN "ASBESTOS					
		SCREENING REPORT" IN PROJECT MANUAL.					
		TERRAZZO: PATCH CRACKS (APPROX. 8 L.F.),	PTD. MTL. BASE, SOME PCS LOOSE.	WOOD PANELING: REFINISH PER	24×48 FISSURED ACT, NOT ORIG.		REFINISH WOOD TRIM PER SPECIFICATION SECTION
	PASSAGE	RE-GRIND, CLEAN, AND SEAL PER SPECIFICATION	REATTACH LOOSE PCS (APPROX. 6 L.F.),	SPECIFICATION SECTION 064005.	REPLACE W/ NEW I2xI2 FISSURED		064005
5	TASSAGE	SECTION 096610	PAINT ALL BASE TO MATCH ORIGINAL		ACT TO MATCH ORIG.		
			COLOR				
		REFER TO "MECHANICAL" AND	REFER TO "MECHANICAL" AND	REFER TO "MECHANICAL" AND	REFER TO "MECHANICAL" AND		
,	BOILER ROOM	"ELECTRICAL" DRAWINGS FOR	"ELECTRICAL" DRAWINGS FOR	"ELECTRICAL" DRAWINGS FOR	"ELECTRICAL" DRAWINGS FOR		
6		WORK IN THIS AREA	WORK IN THIS AREA	WORK IN THIS AREA	WORK IN THIS AREA		
		REFER TO "ACCESSIBILITY	REFER TO "ACCESSIBILITY	REFER TO "ACCESSIBILITY	REFER TO "ACCESSIBILITY		
7	MEN'S RESTROOM	IMPROVEMENTS" DRAWINGS FOR	IMPROVEMENTS" DRAWINGS FOR	IMPROVEMENTS" DRAWINGS FOR	IMPROVEMENTS" DRAWINGS FOR		
/		WORK IN THIS AREA	WORK IN THIS AREA	WORK IN THIS AREA	WORK IN THIS AREA		
		REFER TO "ACCESSIBILITY	REFER TO "ACCESSIBILITY	REFER TO "ACCESSIBILITY	REFER TO "ACCESSIBILITY		
	WOMEN'S RESTROOM	IMPROVEMENTS" DRAWINGS FOR	IMPROVEMENTS" DRAWINGS FOR	IMPROVEMENTS" DRAWINGS FOR	IMPROVEMENTS" DRAWINGS FOR		
8	WOMEN'S RESTROOM	WORK IN THIS AREA	WORK IN THIS AREA	WORK IN THIS AREA	WORK IN THIS AREA		
		EXIST. CONC. FLOOR TO REMAIN. REPLACE					
	JANITOR'S CLOSET	EXISTING 30"x30" STEEL FLOOR HATCH AND	NO WORK AS PART OF INTERIOR	NO WORK AS PART OF INTERIOR	NO WORK AS PART OF INTERIOR		
9		FRAME W/ NEW STEEL FLOOR HATCH AND FRAME	IMPROVEMENTS PROJECT	IMPROVEMENTS PROJECT	IMPROVEMENTS PROJECT		
		12x12 VINYL TILE IS NOT ORIG., MASTIC CONTAINS	PTD. MTL. BASE, SOME PCS LOOSE.	PLASTER ON CMU. PATCH	24x48 FISSURED ACT, NOT ORIG.	CLEAN HORIZONTAL LOUVER	REFINISH WOOD CLOSET DOORS AND TRIM PER
10	AGENT'S OFFICE	ASBESTOS. 9x9 VINYL ASBESTOS TILE IN CLOSET IS	REATTACH LOOSE PCS W/ MASONRY	CRACKS (APPROX. 12 L.F.) AND	REPLACE W/ NEW 12x12 FISSURED	BLINDS AND SERVICE FOR	SPECIFICATION SECTION 064005
		ORIGINAL. REPLACE EXISTING 12X12 VINYL TILE W/	ANCHORS (APPROX. 12 L.F.), PAINT ALL	PAINT ALL WALLS	ACT TO MATCH ORIG.	PROPER OPERATION	
		NEW 12X12 TILE TO MATCH ORIGINAL COLOR. CLEAN	BASE TO MATCH ORIGINAL COLOR				
			1	1	Ī	I	
		AND POLISH NEW 12X12 TILE AND EXISTING 9X9 TILE.					
		AND POLISH NEW 12X12 TILE AND EXISTING 9X9 TILE. FOLLOW WORK PROCEDURES IN "ASBESTOS					

KANSAS DEPARTMENT OF TRANSPORTATION

FINISH SCHEDULE (ALTERNATE #1)

7.1.0

FINISH SCHEDULE

FHWA APPROVAL	XX-XX-XX	APP'D	XXX
DESIGNED	DESIGNED	QUANTITIES	TRACED
DESIGN CK.	DESIGN CK.	QUAN. CK	TRACE CK.

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	23 TE-0373-01	2014	54	143
F.A. NO.				

	FLOOR	BASE	WALLS	CEILING	WINDOW TREATMENTS	WOOD WORK AND TRIM
	12×12 VINYL TILE NOT ORIG., MASTIC	PTD. MTL. BASE, SOME PCS LOOSE	PLASTER ON CMU PATCH	12x12 FISSURED ACT W/ SOME		WOOD SHELVING CLEAN AND PAINT
(NIIC) EILE BOOM	CONTAINS ASBESTOS REPLACE EXISTING	REATTAGH LOOSE PCS W/ MAS. ANCHORS,	CRACKS AND PAINT TO MATCH	STAINING AND DAMAGE		
(MC) THE ROOM	12X12 VINYL TILE W/ NEW 12X12 THE TO	REPLACE MISSING SEGMENTS, PAINT TO	ORIG. COLOR AND TEXTURE	REPLACE DAMAGED TILES TO		
	MATCH ORIG. COLOR. FOLLOW WORK	MATCH ORIG. COLOR		MATCH EXISTING, PRIME AND		
	PROCEDURES IN "ASBESTOS SCREENING			PAINT ENTIRE CEILING		
	REPORT" IN PROJECT MANUAL.					
	EXIST. CONC. FLOOR TO REMAIN		PTD. CMU, NON-ORIG. STUD WALL	PTD. PLASTER ON METAL LATH, W/		ORIG. FREIGHT SCALE, OPERATIONAL CONDITION
(NIC) BAGGAGE ROOM			PARTITION IN EAST PORTION	SOME WATER DAMAGE REPLACE		UNKNOWN PREP AND PAINT RUSTED COMPONENTS
(Me) Brooker Room		NONE NO WORK PROPOSED	PAINT WALLS TO MATCH ORIG.,	DAMAGED AREA AND PAINT		
			PATCH CRACK, & COORDINATE	ENTIRE CEILING		
			REMOVAL OF STUD WALL			
			PARTITION WITH BNSF			
	12x12_VINYL TILE IN POOR CONDITION, NOT	PTD, MTL. BASE, SOME PCS LOOSE	PLASTER ON CMU PATCH	24x48 FISSURED ACT, NOT ORIG.	ORIG. LOUVRE BLINDS CLEAN	REFINISH WOOD CASEWORK, CLOSET DOORS, AND TRIM
(NIC) EREIGHT OFFICE	ORIG., MASTIC CONTAINS ASBESTOS / 9x9 VINYL	REATTACH LOOSE PCS W/ MAS. ANCHORS,	CRACKS AND PAINT TO MATCH	REPLACE W/ NEW 12x12	BLINDS AND SERVICE FOR	PER SPECIFICATION SECTIONS 062023 \$ 064600
(NIC) TREIGHT OTTICE	ASBESTOS TILE IN CLO, ORIG., REPLACE	REPLACE MISSING SEGMENTS, PAINT TO	ORIG. COLOR AND TEXTURE	FISSURED AST TO MATCH ORIG.,	PROPER OPERATION	
	EXISTING VINYL TILE WATEN 12X12 TILE TO	MATCH ORIG. COLOR	$\times$	PATCH AND PAINT PLASTER	$\times$	
	MATCH ORIG. COLOR. FOLLOW WORK			FUR-DOWN		
	PROCEDURES IN "ASBESTOS SCREENING					
	REPORT" IN PROJECT MANUAL.					
	12x12 VINYL TILE IN POOR CONDITION, NOT	PTD. MTL. BASE, SOME PCS LOOSE	PLASTER ON CMU, IN POOR	24×48 FISSURED ACT, NOT ORIG.		REFINISH WOOD CASEWORK AND TRIM PER
VESTIBLUE 14	ORIG REPLACE EXISTING VINYL TILE W/	REATTACH LOOSE PCS W/ MAS. ANCHORS,	CONDITION PATCH CRACKS	REPLACE W/ NEW 12x12		SPECIFICATION SECTIONS 062023 \$ 064600
VESTIBOLE 14	NEW 12X12 TILE TO MATCH ORIG. COLOR.	REPLACE MISSING SEGMENTS, PAINT TO	AND PAINT TO MATCH ORIG.	FISSURED ACT TO MATCH ORIG. IF		
	FOLLOW WORK PROCEDURES IN "ASBESTOS	MATCH ORIG. COLOR	COLOR AND TEXTURE	AVAILABLE		
	SCREENING REPORT" IN PROJECT MANUAL.					
	(NIC) FILE ROOM  (NIC) BAGGAGE ROOM  (NIC) FREIGHT OFFICE  VESTIBULE 14	(NIC) FILE ROOM  CONTAINS ASBESTOS REPLACE EXISPING  12X12 VINYL TILE W NEW 12X12 THE TO  MATCH ORIG. COLOR. FOLLOW WORK  PROCEDURES IN "ASBESTOS SCREENING  REPORT" IN PROJECT MANUAL.  EXIST. CONC. FLOOR TO REMAIN  (NIC) BAGGAGE ROOM  (NIC) FREIGHT OFFICE  CONTAINS ASBESTOS SCREENING  REPORT" IN PROJECT MANUAL.  EXIST. CONC. FLOOR TO REMAIN  ORIG., MASTIC CONTAINS ASBESTOS / PXT VINYL  ASBESTOS TILE IN CLO, ORIG REPLACE  EXISTING VINYL TILE IN PAUL 12X12 TILE TO  MATCH ORIG. COLOR. FOLLOW WORK  PROCEDURES IN "ASBESTOS SCREENING  REPORT" IN PROJECT MANUAL.  12X12 VINYL TILE IN POOR CONDITION, NOT  ORIG REPLACE EXISTING VINYL TILE W  NEW 12X12 TILE TO MATCH ORIG. COLOR.  FOLLOW WORK PROCEDURES IN "ASBESTOS	(NIC) FREIGHT OFFICE    CONTAINS ASBESTOS REPLACE EXISTING   REATTACH LOOSE PCS W MAS, ANCHORS, 12X12 VINYL TILE W NEW 12X12 THE TO   REPLACE MISSING SEGMENTS, PAINT TO   MATCH ORIG. COLOR. PROCEDURES IN "ASSESTOS SCREENING   REPORT" IN PROJECT MANUAL.    EXIST. CONC. FLOOR TO REMAIN	CONTAINS ASBESTOS REPLACE EXISTING IZXI2 VINTL TITLE, W NEW IZXI2 THE TO REPLACE MISSING SEGRENTS, PAINT TO ORIG, COLOR AND TEXTURE  MATCH ORIG. COLOR FOLLOW WORK PROCEDURES IN "ASBESTOS SCREENING REPORT" IN PROJECT MANUAL.  EXIST, CONC. FLOOR TO REMAIN  NONE NO MORK PROPOSED  PARTITION IN EAST PORTION PATCH CROCK, 1 CORDINATE REPOXAL OF STUD WALL PARTITION WITH BNSF  IZXI2 VINTL TILE IN POOR CONDITION, NOT ORIG, MASTLO CONTAINS ASBESTOS JAKT VINTL ASBESTOS TILE IN-CLO, ORIG, REPLACE EXISTING VINTL TILE IN POOR CONDITION, NOT PTD, MTL. BASE, SOME PCS W MAS. ANGHORS, CRACKS, AND PAINT TO MATCH ASTLE MATCH ORIG. COLOR  VESTIBULE 14  VESTIBULE 14  VESTIBULE 14  CONTAINS ASBESTOS REPLACE EXISTING IZXI2 VINTL TILE IN POOR CONDITION, NOT PTD, MTL. BASE, SOME PCS W MAS. ANGHORS, REPOXT" IN PROJECT MANUAL.  IZXI2 VINTL TILE IN POOR CONDITION, NOT PTD, MTL. BASE, SOME PCS W MAS. ANGHORS, REPOXT" IN PROJECT MANUAL.  IZXI2 VINTL TILE IN POOR CONDITION, NOT PTD, MTL. BASE, SOME PCS W MAS. ANGHORS, REPOXT" IN PROJECT MANUAL.  IZXI2 VINTL TILE IN POOR CONDITION, NOT REPLACE MISSING SEGMENTS, PAINT TO AND PAINT TO MATCH CRACKS NEW IZXI2 TILE TO MATCH ORIG. COLOR  PETATACH LOOSE PCS W MAS. ANCHORS, REPLACE MISSING SEGMENTS, PAINT TO AND PAINT TO MATCH CRACKS NEW IZXI2 TILE TO MATCH ORIG. COLOR  PLASTER ON CMU, IN POOR CONDITION PATCH CRACKS NEW IZXI2 TILE TO MATCH ORIG. COLOR  REPLACE MISSING SEGMENTS, PAINT TO AND PAINT TO MATCH ORIG. COLOR AND TEXTURE	CONTAÎNS ASBESTOS REPLACE EXISTING  REATTAGU LOOSE PCS W MAS, ANCHORS,  IZXIZ VINTL TÎLE LIV NEH IZXIZ PLIÉ TO  REPLACE MISSING SEGRENTS, PAÍNT TO  REPLACE MISSING SEGRENTS, PAÍNT TO  REPLACE MISSING SEGRENTS, PAÍNT TO  REPLACE DAMAGED TILES TO  MATCH ORIG, COLOR. PEDELOH WARM  PROCEDURES IN "ASBESTOS SCREENING  REPORT" IN PROJECT MANUAL.  DISTILLOR TO REMAIN  PARTITION, IN EAST PORTION  PARTITION, IN EAST PORTION  PARTITION IN EAST PORTION  PARTITION IN EAST PORTION  PARTITION IN EAST PORTION  PARTITION IN THE INSECTION  PARTITION WITH BAISE  REPOXAC OF STUD WALL  PARTITION WITH BAISE  REPLACE MISSING SEGRENTS  PROJECT WITH AS ASSESTED AND PAINT TO MATCH  REPLACE MISSING SEGRENTS  PROJECT WITH THE INFORMATION NOT PITCH MATCH ORIG. COLOR  PARTITION WITH BAISE  REPLACE MISSING SEGRENTS  PARTITION WITH SAME PROJECT WAS ANCHORS,  PROJECTION NOT TO MATCH ORIG. COLOR  PART	CONTAÎNS ASBESTOS REPLACE BUSTING  EXIZU VINTL TILE MY NEW IZXIZ TILE TO  REPLACE DUSTING SECRETARY, AND PAINT TO MATCH  HATCH ORIG, COLOR SECRETARY  HATCH ORIG, COLOR  PROCEDURES IN "ASBESTOS SCREENING  REPORT IN PROJECT HANIAL.  EXIST. CONC. FLOOR TO REHAIN  INIC) BAGGAGE ROOM  INIC) BAGGAGE ROOM  INIC) BAGGAGE ROOM  INIC) FREIGHT OFFICE  INIC) FREIGHT OFFICE  INIC) FREIGHT OFFICE  INIC) FREIGHT OFFICE  INIC) REPLACE DUSTING  INIC) REPLACE DUSTING SECRETARY, FAINT TO  INIC) REPLACE DUSTING VINTL TILE DUSTING  INIC) REPLACE DUSTING VINTL TILE WE REPLACE DUSTING SECRETARY, FAINT TO  INIC) REPLACE DUSTING VINTL TILE WE REPLACE DUSTING SECRETARY, FAINT TO  INIC) REPLACE DUSTING VINTL TILE WE REPLACE DUSTING SECRETARY, FAINT TO  INIC) REPLACE DUSTING VINTL TILE WE REPLACE DUSTING SECRETARY, FAINT TO  INIC) REPLACE DUSTING VINTL TILE WE REPLACE DUSTING SECRETARY, FAINT TO  INIC) REPLACE DUSTING SECRETARY, FAINT TO  INIC) REPLACE DUSTING VINTL TILE WE REPLACE DUSTING SECRETARY, FAINT TO  INIC) REPLACE DUSTING

KANSAS DEPARTMENT OF TRANSPORTATION

FINISH SCHEDULE (ALTERNATE #1)

7.1.1

FINISH SCHEDULE

FHWA APPROVAL	XX-XX-XX	APP'D	XXX
DESIGNED	DESIGNED	QUANTITIES	TRACED
DESIGN CK.	DESIGN CK.	QUAN. CK	TRACE CK.

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	23 TE-0373-01	2014	55	143
F.A. NO.				

AIR DEV	AIR DEVICE SCHEDULE												
MARK				TYPE			MOUN	DUTY		,			
	NECK SIZE	DIFFUSER FACE OR CEILING GRID SIZE	DIFFUSER	REGISTER	GRILLE	CFM RANGE	LAY-IN	SURFACE	SUPPLY	RETURN		MANUFACTURER	REMARKS
S-1	24" x 3"	24" x 3"	Х			300		Х	Х				INSTALL AS CLOSE AS POSSIBLE TO EXTERIOR WALL.
R-1	24" x 16"	25 3/4" x 17 3/4"			х	300		Х		Х		REFER TO SPECIFICATIONS	TO EXTERIOR WALL.
E-1	6" x 6"	7 3/4" x 7 3/4"			Х	75		Х			Х	REFER TO SPECIFICATIONS	
E-1	8" x 6"	9 3/4" x 7 3/4"			Х	150		Х			Х	REFER TO SPECIFICATIONS	
E-1	10" x 6"	11 3/4" x 7 3/4"			Х	225		Х			Х	REFER TO SPECIFICATIONS	

HVAC E	HVAC EXHAUST FAN SCHEDULE											
MARK					ELE	CTRI	CAL					
	MANUFACTURER AND MODEL NO.	CFM	ESP	RPM	BLOWER HP	VOLTS	PHASE	OPER WT (LBS)	REMARKS			
EF-1	REFER TO SPECIFICATIONS	450	.25	628	1/6	120	1	53	INSTALL BACKDRAFT DAMPER			

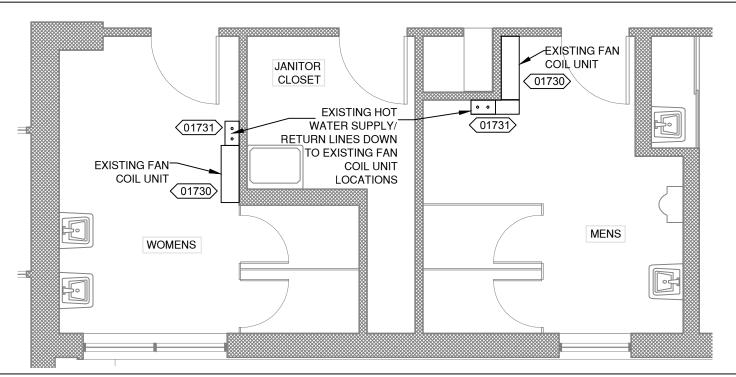
HVAC U	NIT HEATER SO	CHE	DULE								
MARK	MARK HEATING CAPACITY (BTUH)					ELECTRICAL					
	MANUFACTURER	CFM	ESP	RPM	` 1		모			  -	REMARKS
	AND MODEL NO.			INPUT OUTPUT		BLOWER	VOLTS				
UH-1	TRANE UNT-IM-1	300	.286	1140	23,700	14,700	1/60	115	1	40	EXISTING FAN COIL. USE AIRGUARD DP40-STD FILTER 16" x 20" x 1"

EXISTING FAN COIL MAY BE REPLACED WITH NEW EQUIVALENT FAN AND COIL. CONTRACTOR SHALL PROVIDE SUBMITTAL FOR APPROVAL.

TEMPER	TEMPERATURE CONTROLS SCHEDULE												
FIXTURE	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	HEIGHT	REMARKS								
T	REFER TO SPECIFICATIONS		REMOTE TEMPERATURE SENSOR	4' - 0"	SENSOR CONNECTED TO CONTROL IN JANITOR CLOSET.								
С	REFER TO SPECIFICATIONS		NON-PROGRAMMABLE THERMOSTAT	4' - 0"	LOCATED IN THE JANITOR CLOSET. ONE THERMOSTAT FOR EACH RESTROOM.								

ALL CONTROLS SHALL BE APPROVED BY THE OWNER OR OWNERS REPRESENTATIVE PRIOR TO ORDERING OR INSTALLATION

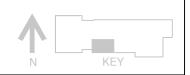
# SCHEDULES SCALE: NONE



#### DEMOLITION NOTES: (THIS SHEET ONLY)

01730 REMOVE EXISTING FAN COIL UNITS
(HEATING ONLY). CUT UNIT CASE DOWN
TO COIL AND FAN ONLY, REMOVE VALVE
BOX ENCLOSURES ON SIDE. SEE DETAILS
FOR LOCATING UNIT ABOVE CEILING.
CLEAN UNIT PRIOR TO PLACEMENT IN
CEILING.

01731 FIELD VERIFY/ IDENTIFY EXISTING HOT WATER SUPPLY AND RETURN LINES AND REMOVE EXISTING ENCLOSURE AND PIPING TO ABOVE CEILING. CLEAN AND PATCH WALL BEHIND EQUIPMENT AND CHASE THAT HAS BEEN REMOVED.



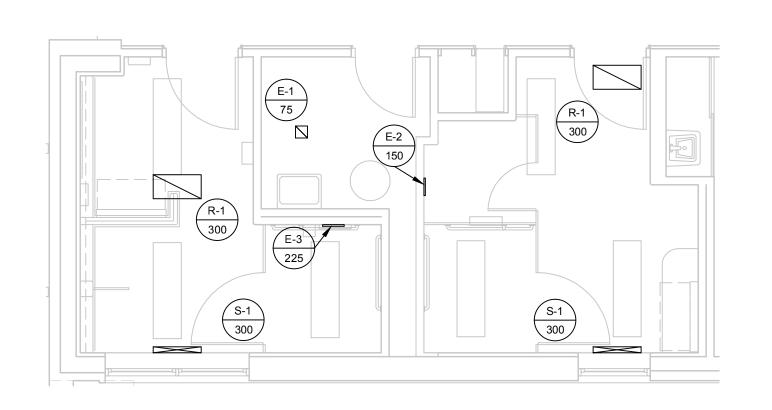
KANSAS DEPARTMENT OF TRANSPORTATION

MECHANICAL SCHEDULES AND DEMO PLAN

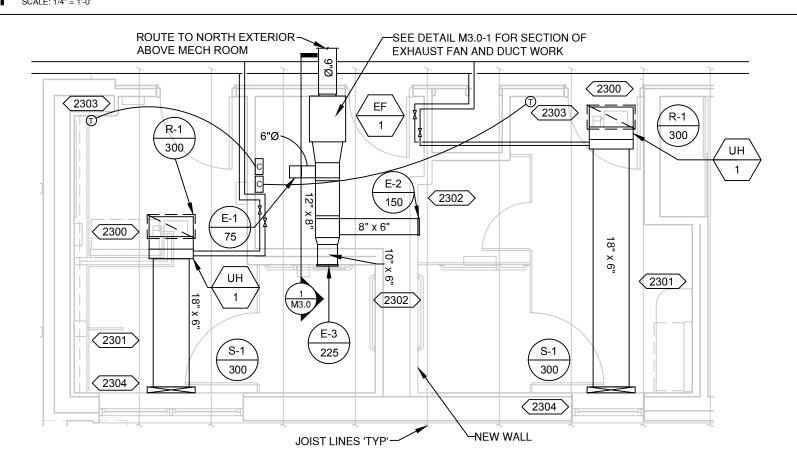
M.A.1

DEMOLITION PLAN
SCALE: 1/4" = 1'-0'

FHWA APPROVA	AL XX-XX-XX	APP'D	XXX
DESIGNED	DESIGNED	QUANTITIES	TRACED
DESIGN CK.	DESIGN CK.	QUAN. CK	TRACE CK.



## DIFFUSER AND RETURN/ EXHAUST GRILLE LAYOUT



#### **GENERAL NOTES:**

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	23 TE-0373-01	2014	56	143
FA NO				

- 1. ALL WORK SHALL CONFORM TO THE LATEST ADOPTED VERSION OF THE INTERNATIONAL MECHANICAL CODE (IMC).
- 2. ALL DUCT CONSTRUCTION, GAUGES, METHODS OF HANGING AND SUPPORTING SHALL CONFORM TO THE LATEST SMACNA STANDARDS AND CHAPTER 6 OF THE IMC.
- 3. ALL EXHAUST, RETURN, AND SUPPLY DUCTS SHALL BE CONSTRUCTED OF GALVANIZED SHEET METAL TO SMACNA 2" PRESSURE CLASS. ALL JOINTS AND SEAMS SHALL BE SEALED AIRTIGHT.
- 4. ALL ROUND EXHAUST AND SUPPLY DUCTS SHALL BE STANDARD GALVANIZED "SNAP LOCK" PIPE WITH ALL CHANGES IN DIRECTION MADE VIA ADJUSTABLE ELBOWS. ALL JOINTS AND SEAMS SHALL BE SEALED AIRTIGHT.
- 5. PROVIDE MANUAL DAMPERS WITH LOCKING QUADRANTS IN ALL LOCATIONS INDICATED OR REQUIRED TO BALANCE THE AIR SYSTEM.
- 6. COORDINATE THE LOCATION OF DUCTWORK WITH THE PLACEMENT OF THE EXISTING LIGHT FIXTURES AND THE EXISTING STRUCTURAL MEMBERS.
- 7. LINE ALL DUCTS WITH 1/2" INSULATION. (EXCLUDE EXHAUST AND DUCTS UNDER 10" IN DIAMETER OR 10" x 10" IN SIZE.) ALL DUCT DIMENSIONS GIVEN ON DRAWINGS ARE CLEAR INSIDE DIMENSIONS (W x D).
- 8. THE CONTRACTOR SHALL VERIFY ALL STRUCTURAL CONDITIONS FOR THE CEILING SPACE AND EXACT DUCT ROUTE PRIOR TO FABRICATION. VERIFY IN THE FIELD EXACT ROUTING OF DUCTWORK TO ALLOW PROPER LOCATION OF LIGHTS AS SHOWN.
- 9. ANY FRAMING REQUIRED FOR DIFFUSER INSTALLATION IN HARD CEILINGS SHALL BE BY THE GENERAL CONTRACTOR.
- 10. ANY EQUIPMENT THAT IS SUBSTITUTED SHALL FIT IN THE SPACE PROVIDED, WITH ADEQUATE ROOM FOR SERVICING.
- 11. HVAC UNITS SHALL BE MOUNTED LEVEL.
- 12. SUPPLY SPECIFIED EQUIPMENT OR APPROVED EQUAL
- 13. CONTRACTOR SHALL REVIEW ALL EQUIPMENT NAME PLATES AND INSTALLATION REQUIREMENTS PRIOR TO DOING WORK. EQUIPMENT IS TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
- 14. CONTRACTOR SHALL REMOVE THE EXISTING LIGHT FIXTURES IN THE RESTROOMS FOR ACCESS INTO THE CEILING CAVITY FOR INSTALLATION OF THE DUCTWORK AND REINSTALL THE EXISTING LIGHT FIXTURES WHEN COMPLETED.

#### INSTALLATION NOTES: (THIS SHEET ONLY)

- 2300 EXISTING MODIFIED FAN COIL UNIT PLACED ABOVE CEILING THOUGH RETURN AIR GRILLE OPENING.
- 2301 REMOVE JOIST CROSS BRACING TO INSTALL DUCT. INSTALL BLOCKING IN PLACE OF CROSS BRACING.
  LIGHT FIXTURES MAY BE REMOVED AND RE-INSTALLED FOR ACCESS TO AREAS ABOVE THE HARD CEILING.
- FIELD VERIFY LOCATIONS OF WHOLE BLOCKS FOR REMOVAL TO INSTALL NEW WALL EXHAUST GRILLE.
  INSTALL EXHAUST GRILLE AT TOP OF WALL.

  FIELD VERIFY LOCATIONS OF WHOLE BLOCKS FOR REMOVAL TO INSTALL NEW WALL EXHAUST GRILLE.

  FIELD VERIFY LOCATIONS OF WHOLE BLOCKS FOR REMOVAL TO INSTALL NEW WALL EXHAUST GRILLE.

  FIELD VERIFY LOCATIONS OF WHOLE BLOCKS FOR REMOVAL TO INSTALL NEW WALL EXHAUST GRILLE.

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  FIELD VERIFY LOCATIONS OF WHOLE BLOCKS FOR REMOVAL TO INSTALL NEW WALL EXHAUST GRILLE.

  FIELD VERIFY LOCATIONS OF WALL.

  F
- 2303 REMOTE THERMOSTATS FOR THE FAN COIL UNITS ARE LOCATED IN THE RESTROOMS. MOUNT IN THE LOCATION OF THE EXISTING LIGHT SWITCHES TO BE REMOVED. THE SETTINGS & CONTROLS FOR FAN COIL UNITS ARE LOCATED IN AN EASY-TO-ACCES LOCATION WITHIN THE JANITOR CLOSET. CONSULT WITH ELECTRICAL CONTRACTOR FOR WIRING AND LOCATIONS.
- 2304 NEW SLOT DIFFUSERS AT WALL. DIRECT AIR DOWN ACROSS WINDOW.



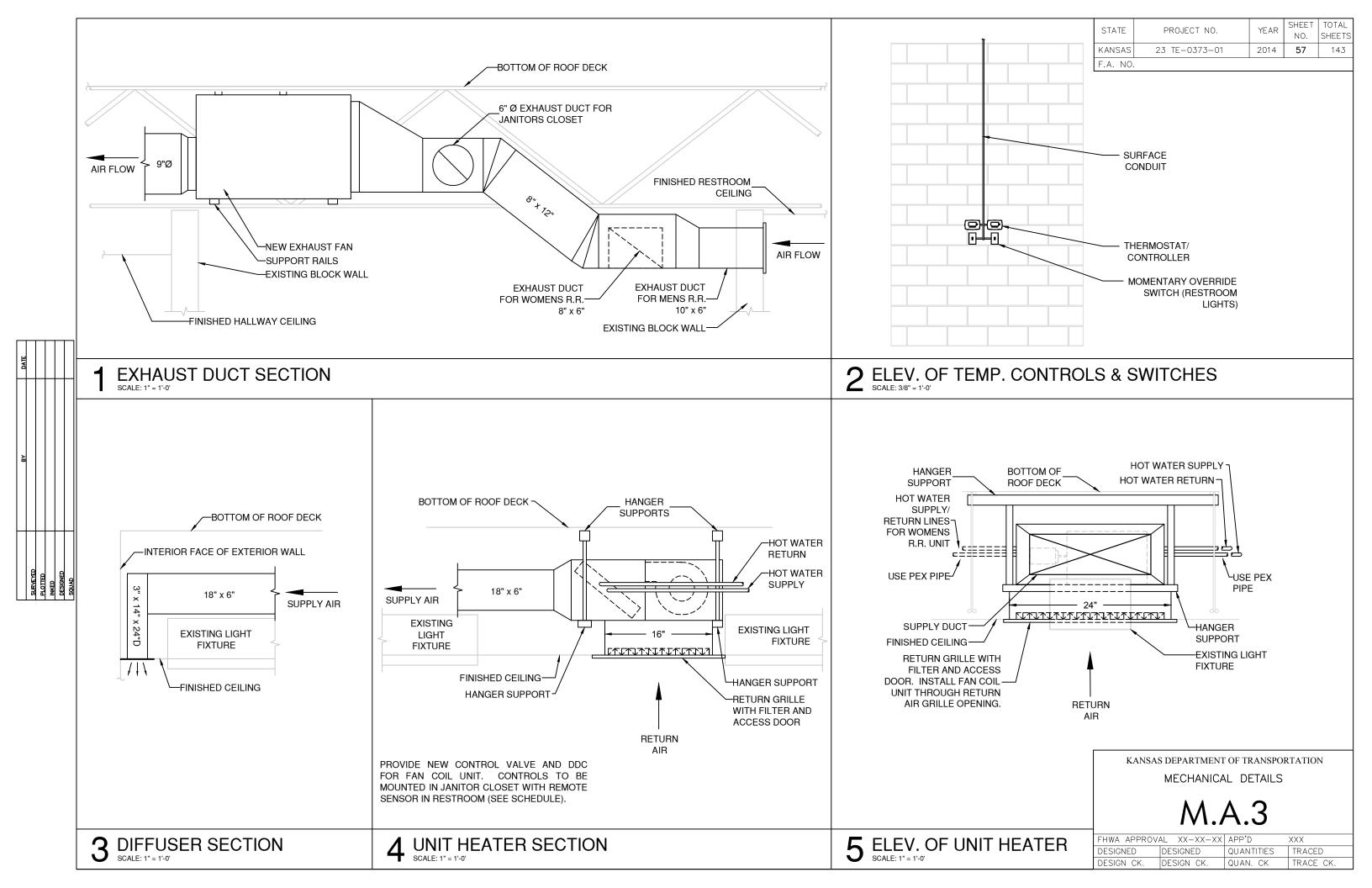
KANSAS DEPARTMENT OF TRANSPORTATION

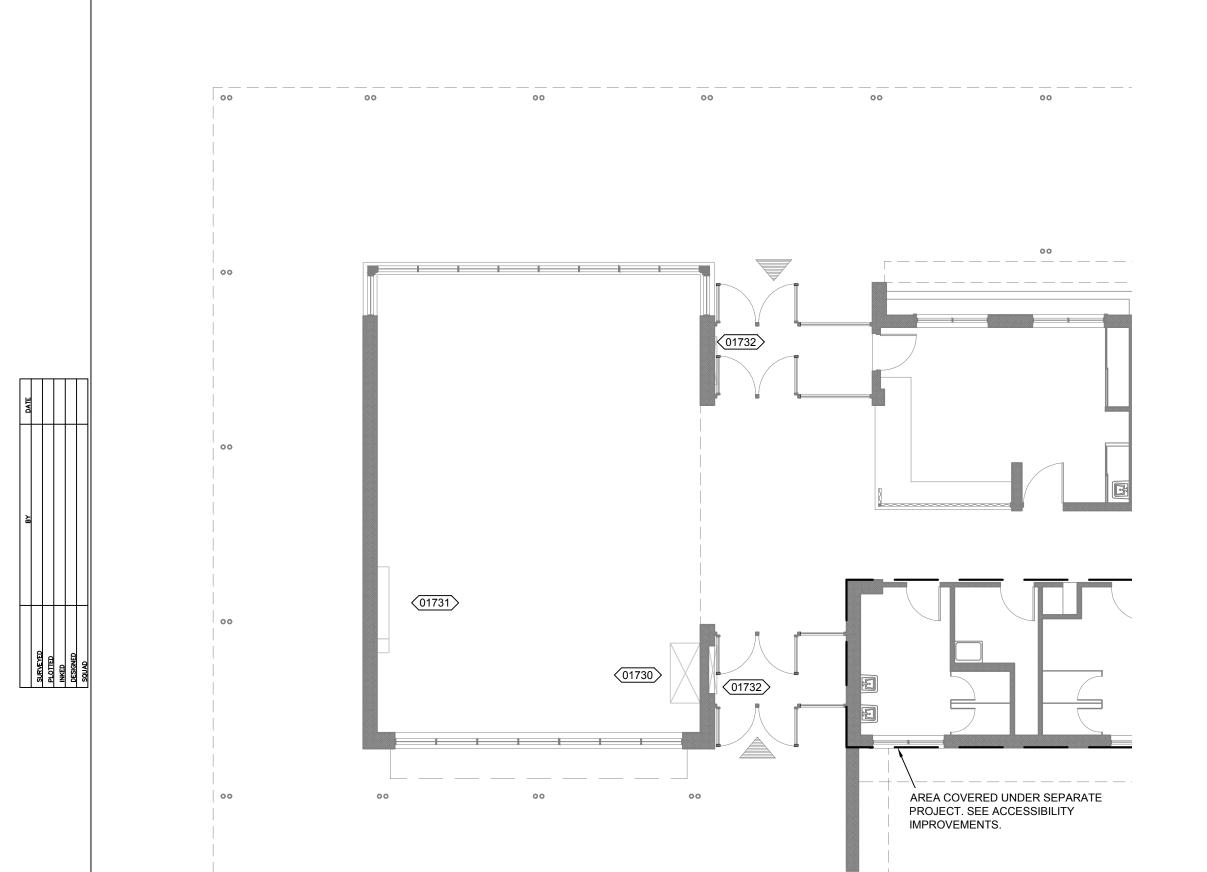
MECHANICAL LAYOUT

M.A.2

FHWA APPROVA	AL XX-XX-XX	APP'D	XXX
DESIGNED	DESIGNED	QUANTITIES	TRACED
DESIGN CK.	DESIGN CK.	QUAN. CK	TRACE CK.

**2** MECHANICAL FLOOR PLAN





STATE PROJECT NO.

YEAR SHEET TOTAL NO. SHEETS

KANSAS 23 TE-0373-01 2014 58 143

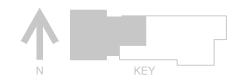
F.A. NO.

#### DEMOLITION NOTES: (THIS SHEET ONLY)

01730 EXISTING WAITING ROOM COOLING ONLY UNIT TO BE REMOVED AND DISPOSED OF PROPERLY. UNIT ENCLOSURE TO REMAIN. ENCLOSURE SHALL BE REMOVED STRIPPED AND REPAINTED TO MATCH EXISTING COLOR AND MOUNTED ON NEW UNIT.

O1731 EXISTING HOT WATER FAN COIL UNIT TO BE REMOVED ALONG WITH ASSOCIATED PIPING AND WOOD PANEL ENCLOSURE FOR PIPING. NEWLY EXPOSED WALL TO BE PATCHED AND CLEANED TO MATCH EXISTING WALLS. CONSULT ARCHITECT PRIOR TO CLEANING AND PATCHING WITH PROCEDURES TO BE USED FOR CLEANING AND PATCHING. PROPERLY DISPOSE OF FAN COIL UNIT AND PIPING.

O1732 EXISTING HOT WATER RADIATORS IN VESTIBULES TO REMAIN IN NONFUNCTIONAL MANNER. WALL MOUNTED HOT WATER SUPPLY AND RETURN PIPING TO BE REMOVED. CAP PIPING.



KANSAS DEPARTMENT OF TRANSPORTATION
MECHANICAL DEMO PLAN WEST

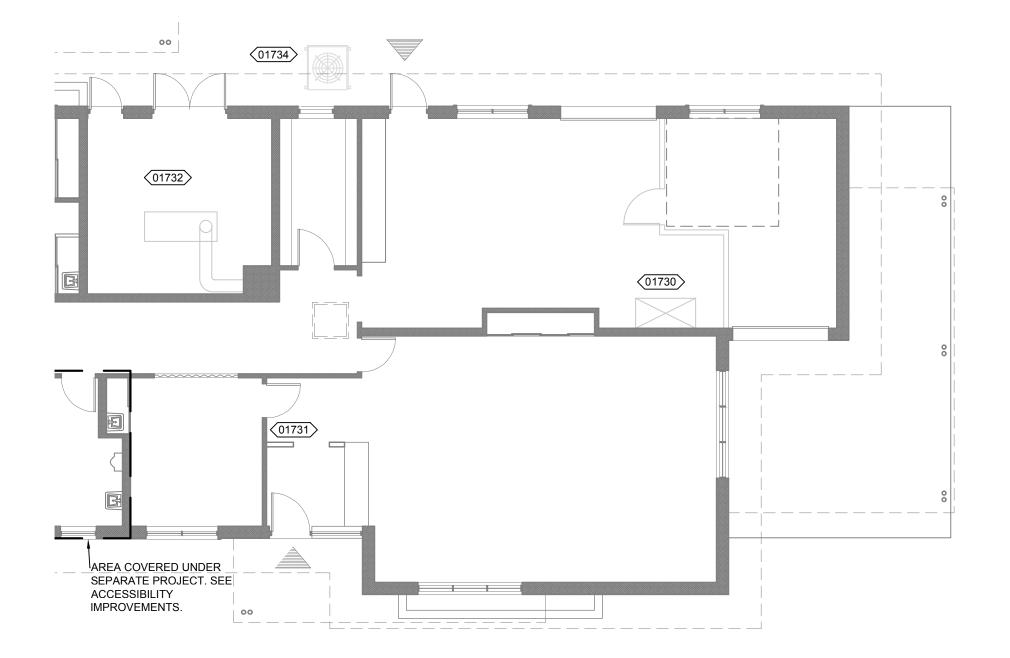
M.1.0

FHWA APPROVAL XX-XX-XX APP'D XXX

DESIGNED DESIGNED QUANTITIES TRACED

DESIGN CK. DESIGN CK. QUAN. CK TRACE CK.

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	23 TE-0373-01	2014	59	143
F.A. NO.				



#### DEMOLITION NOTES: (THIS SHEET ONLY)

©1730 EXISTING BAGGAGE ROOM UNIT ENCLOSURE TO REMAIN. ENCLOSURE SHALL BE REMOVED STRIPPED AND REPAINTED TO MATCH EXISTING COLOR. EQUIPMENT WITHIN CABINET TO BE REMOVED AND REPLACED. EXISTING AIR DISTRIBUTION DUCTWORK TO REMAIN.

01731 REMOVE EXISTING DOMESTIC WATER SUPPLY AND SANITARY PIPING FLUSH WITH WALL AND CAP

O1732 EXISTING BOILER AND ASSOCIATED PUMPS, EXPANSION TANK, AND PIPING TO BE REMOVED. REMOVE ANY OTHER ABANDON EQUIPMENT IN THE BOILER ROOM. THE PIPING SERVING THE UNDER FLOOR HEATING PANELS SHALL BE CUT IN A MATTER THAT DOES NOT CAUSE VIBRATIONS IN THE PANEL PIPING. FIELD VERIFY LAYOUT.

01733 EXISTING COOLING TOWER AND ASSOCIATED PUMP AND PIPING TO BE REMOVED. REMOVE PIPING TO THE COOLING ONLY UNITS.



KANSAS DEPARTMENT OF TRANSPORTATION

MECHANICAL DEMO PLAN EAST

M.2.0

HVAC L	HVAC UNIT SCHEDULE														
MARK	COOLIN	G						HEATING	HEATING						
	TOTAL COOLING CAPACITY	SENSIBLE COOLING	MIN. EER (BTUH/	EI ST.	ECT			MANUFACTURE & MODEL NO.	CFM	ESP	RPM	HEA <sup>-</sup> CAPACIT	Y (BTUH)	ER (LBS)	REMARKS
	(BTUH)		WATTS)	VOL	PHA	МОР	MCA	& WODEL NO.				INPUT	OUTPUT	OPEI WT (	
AC-1	83,000	38,200	19.7	230	3	35	40	REFER TO SPECIFICATIONS	2600	3/4	825	N/A	55,000	644	WAITING ROOM UNIT 200 CFM OUTSIDE AIR
AC-2	95,000	31,400	19.6	230	3	35	40	REFER TO SPECIFICATIONS	2800	3/4	845	N/A	65,000	762	BAGGAGE ROOM UNIT 250 CFM OUTSIDE AIR

PROVIDE RETURN AIR SMOKE DETECTOR FOR EACH UNIT THAT SHALL SHUT DOWN THE UNIT UPON DETECTION OF SMOKE IN THE RETURN AIR.

AIR DEV	ICE SCH	IEDULE												
MARK			-	TYPE			MOUN	NTING	I	OUTY				
	NECK SIZE	DIFFUSER FACE OR CEILING GRID SIZE	DIFFUSER	REGISTER	GRILLE	CFM RANGE	LAY-IN	SURFACE	SUPPLY	RETURN	EXHAUST	MANUFACTURER	MODEL NO.	REMARKS
S-1		12" x 16"	Х			450		Х	х			EXISTING	EXISTING	EXISTING DIFFUSERS TO REMAIN.
S-2		8" x 24"	Х			450		Х	х			EXISTING	EXISTING	EXISTING DIFFUSERS TO REMAIN.
S-3		14" x 40"	Х			300		Х	Х			EXISTING	EXISTING	EXISTING DIFFUSERS TO REMAIN.
S-4		1' x 1'	Х			200		Х	Х			EXISTING	EXISTING	EXISTING DIFFUSERS TO REMAIN.
S-5		10" x 20"	Х			300		х	х			EXISTING	EXISTING	EXISTING DIFFUSERS TO REMAIN.
S-6		12" x 18"	Х			300		х	Х			EXISTING	EXISTING	EXISTING DIFFUSERS TO REMAIN.
S-7	12" X 18"	13 3/4" x 19 3/4"	Х			50-100		х	Х			REFER TO SPECIFICATIONS	300	
S-8	6" X 6"	7 3/4" x 7 3/4"			Х	50		х	Х			REFER TO SPECIFICATIONS	300	
R-1		16" x 32"			Х	1500		х		Х		EXISTING	EXISTING	EXISTING GRILLE TO REMAIN.

REQUIRED MINIMUM OUTDOOR VENTILATION						
2009 IMC - TABLE 403.3						
AREA DESCRIPTION	PERSONS	OUTDOOR AIR PER PERSON (CFM)	BUILDING SQUARE FEET	OUTDOOR AIR PER SQUARE FOOT (CFM)	CFM REQUIRED	
WAITING ROOM	25	5	1,028	0.06	187	
OFFICES	7	5	3,296	0.06	233	
BUILDING TOTAL					420	

HOT WATER BOOSTER COILS SCHEDULE							
MARK	MANUFACTURER AND MODEL NO.	HEATING CAPACITY (BTUH)	OPER WT (LBS)	REMARKS			
HW-1	PRECISION COILS W1021224 N	74.3 MBH	24	26" x 14" MOUNT ON DISCHARGE OF AC-1 AND AC-2			

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	23 TE-0373-01	2014	60	143
F.A. NO.				

HVAC E	HVAC EQUIPMENT SCHEDULE							
MARK		HEATING CAPACITY (BTUH)			REMARKS			
-	MANUFACTURER AND MODEL NO.	INPUT	OUTPUT	OPER WI (LBS)	KLIVIAINO			
BO-1	REFER TO SPECIFICATIONS	299,000	270,000	350	PROVIDE OUTDOOR RESET			

					<u> </u>	
PUMP SCHEDULE						
MARK	MANUFACTURER AND MODEL NO.	GPM	HEAD (FT)	HP	REMARKS	
P-1	REFER TO SPECIFICATIONS	30	20	3/4	PUMPS FOR GROUND LOOP	
P-2	REFER TO SPECIFICATIONS	7.5	25	3/4	PUMP FOR BOOSTER HEATING COILS ON AC-1 AND AC-2	
P-3	REFER TO SPECIFICATIONS	5	15	1/8	PUMP FOR EXISTING FAN COILS	
P-4	REFER TO SPECIFICATIONS	40	15	1/2	PUMP FOR RADIANT FLOOR. MATCH WITH EXISTING PUMP.	
P-5	REFER TO SPECIFICATIONS	15	15	1/6	PUMP FOR NEW BOILER	

AIR BALANCE SCHEDULE						
ALL QUANTITIES ARE IN CFM						
ITEM	OUTSIDE AIR	RETURN AIR	SUPPLY AIR	EXHAUST/ RELIEF AIR	PRESSURE	
EF				400	-400	
AC-1	200	2400	2600	0	+200	
AC-2	250	2550	2800	0	+250	
BUILDING TOTAL	450	4950	5400	400	+50	

KANSAS DEPARTMENT OF TRANSPORTATION MECHANICAL AND VENTILATION SCHEDULES M.3.0

FHWA APPROVA	AL XX-XX-XX	APP'D	XXX
DESIGNED	DESIGNED	QUANTITIES	TRACED
DESIGN CK.	DESIGN CK.	QUAN. CK	TRACE CK.

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	23 TE-0373-01	2014	61	143
F.A. NO.				

#### **GENERAL NOTES:**

- 1. ALL WORK SHALL CONFORM TO THE LATEST ADOPTED VERSION OF THE INTERNATIONAL MECHANICAL CODE (IMC).
- 2. ALL NEW DUCT CONSTRUCTION, GAUGES, METHODS OF HANGING AND SUPPORTING SHALL CONFORM TO THE LATEST SMACNA STANDARDS AND CHAPTER 6 OF THE IMC.
- 3. ALL NEW EXHAUST, RETURN, AND SUPPLY DUCTS SHALL BE CONSTRUCTED OF GALVANIZED SHEET METAL TO SMACNA 2" PRESSURE CLASS. ALL JOINTS AND SEAMS SHALL BE SEALED AIRTIGHT.
- 4. ALL NEW ROUND EXHAUST AND SUPPLY DUCTS SHALL BE STANDARD GALVANIZED "SNAP LOCK" PIPE WITH ALL CHANGES IN DIRECTION MADE VIA ADJUSTABLE ELBOWS. ALL JOINTS AND SEAMS SHALL BE SEALED AIRTIGHT.
- 5. COORDINATE THE LOCATION OF DUCTWORK WITH THE PLACEMENT OF THE EXISTING LIGHT FIXTURES AND THE EXISTING STRUCTURAL MEMBERS.
- 6. LINE ALL NEW DUCTS WITH 1/2" INSULATION. (EXCLUDE EXHAUST AND DUCTS UNDER 10" IN DIAMETER OR 10" x 10" IN SIZE.) ALL DUCT DIMENSIONS GIVEN ON DRAWINGS ARE CLEAR INSIDE DIMENSIONS (W x D).
- 7. THE CONTRACTOR SHALL VERIFY ALL STRUCTURAL CONDITIONS FOR THE CEILING SPACE AND EXACT DUCT ROUTE PRIOR TO FABRICATION. VERIFY IN THE FIELD EXACT ROUTING OF DUCTWORK TO ALLOW PROPER LOCATION OF LIGHTS AS SHOWN.
- 8. ANY FRAMING REQUIRED FOR DIFFUSER INSTALLATION IN HARD CEILINGS SHALL BE BY THE GENERAL CONTRACTOR.
- 9. ANY EQUIPMENT THAT IS SUBSTITUTED SHALL FIT IN THE SPACE PROVIDED, WITH ADEQUATE ROOM FOR SERVICING.
- 10. HVAC UNITS SHALL BE MOUNTED LEVEL.
- 11. SUPPLY SPECIFIED EQUIPMENT OR APPROVED EQUAL.
- 12. CONTRACTOR SHALL REVIEW ALL EQUIPMENT NAME PLATES AND INSTALLATION REQUIREMENTS PRIOR TO DOING WORK. EQUIPMENT IS TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.

#### INSTALLATION NOTES: (THIS SHEET ONLY)

2300 EXISTING DUCTWORK TO REMAIN AND REUSED UNLESS OTHERWISE NOTED. DUCTWORK TO BE CLEANED. DUCTWORK JOINTS SHALL BE SEALED WHERE POSSIBLE.

PROVIDE MINIMUM OF 200 CFM OUTDOOR AIR FROM ROOF INTAKE IN SIDE OF TRANSITION/ STEP WALL. INSTALL 12" x12" INTAKE LOUVRE WITH 10"Ø DUCT WITH BALANCING DAMPER TO RETURN AIR ON AC-1.

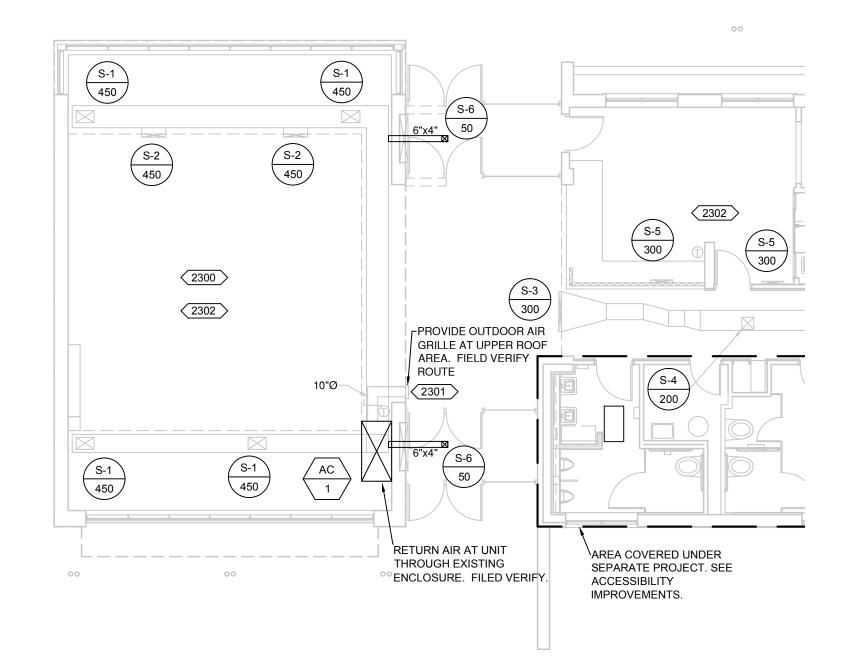
2302 CLEAN AND REPAINT DIFFUSERS TO MATCH EXISTING.

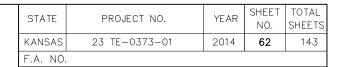


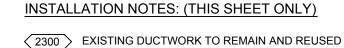
KANSAS DEPARTMENT OF TRANSPORTATION
MECHANICAL AIR SIDE WEST AND
GENERAL NOTES

M.4.0

FHWA APPROVA	AL XX-XX-XX	APP'D	XXX
DESIGNED	DESIGNED	QUANTITIES	TRACED
DESIGN CK.	DESIGN CK.	QUAN. CK	TRACE CK.







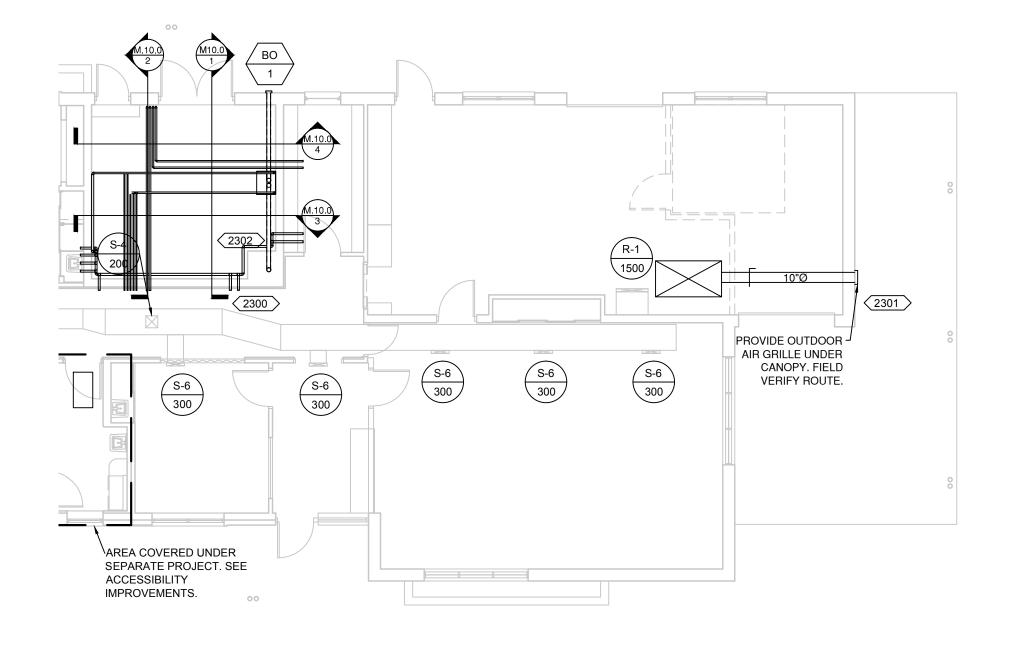
WHERE POSSIBLE

2301 PROVIDE 250 CFM OF OUTDOOR AIR FROM UNDER CANOPY. INSTALL 14" x 14" INTAKE LOUVRE WITH 10"Ø DUCT WITH BALANCING

DAMPER TO RETURN AIR ON AC-2.

2302 ROUTE FLUE FOR NEW BOILER THROUGH EXISTING CHIMNEY AND COMBUSTION AIR INTAKE TO EXTERIOR WALL ON THE NORTH.

UNLESS OTHERWISE NOTED. DUCTWORK TO BE CLEANED. DUCTWORK JOINTS SHALL BE SEALED





KANSAS DEPARTMENT OF TRANSPORTATION

MECHANICAL AIR SIDE EAST

M.5.0

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS	
KANSAS	23 TE-0373-01	2014	63	143	
F.A. NO.					

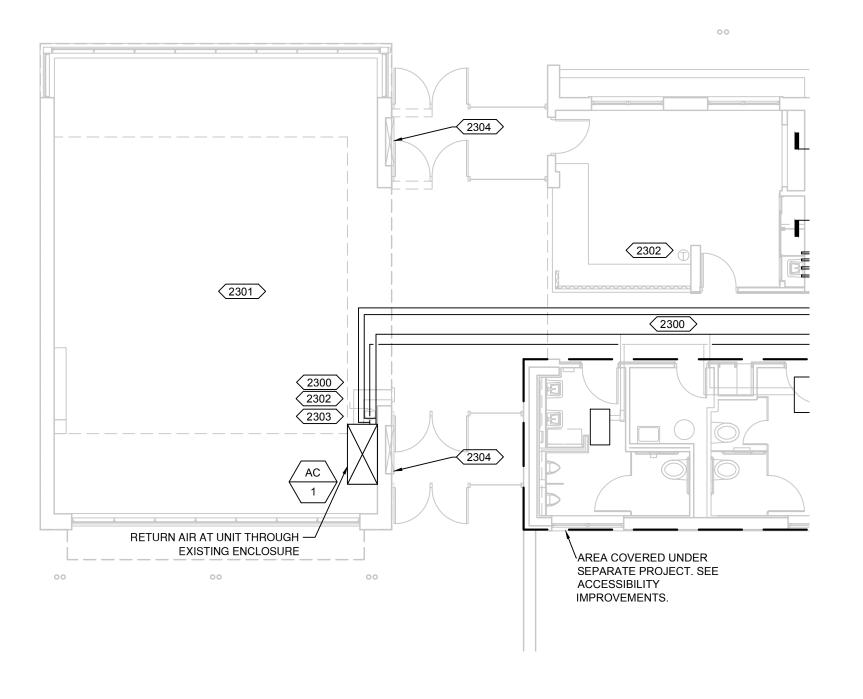
2300 INSTALL NEW GROUND-SOURCE HEAT PUMP IN EXISTING 4'11" W X 2'4" D X 9'4" H AIR-HANDELER CABINET. ROUTE NEW GROUND LOOP PIPING AND HOT WATER PIPING FROM BOILER ROOM ALONG ROUTE OF OLD CONDENSER WATER PIPING FROM COOLING TOWER AND BOILER ROOM. USE EXISTING PIPE HANGERS WHERE POSSIBLE.

2301 CONNECT EXISTING RADIANT FLOORING LOCATED IN THE WAITING ROOM AND OTHER ROOMS TO NEW BOILER, THERMOSTATIC VALVE, AND PUMP. SEE DETAILS DRAWING M10.0-1.

2302 EXISTING HISTORICAL THERMOSTAT TO REMAIN.

2303 INSTALL CO2 SENSOR TO CONTROL FRESH AIR DAMPER IN RETURN AIR DUCT FOR AIR HANDLER UNITS LOCATED IN THE WAITING ROOM AND BAGGAGE ROOM.

VESTIBULE RADIATORS TO REMAIN IN PLACE IN NON-FUNCTIONAL CONDITION.





KANSAS DEPARTMENT OF TRANSPORTATION

MECHANICAL HYDRONIC FLOOR PLAN

WEST

M.6.0

FHWA APPROVA	AL XX-XX-XX	APP'D	XXX	
DESIGNED	DESIGNED	QUANTITIES	TRACED	
DESIGN CK.	DESIGN CK.	QUAN. CK	TRACE CK.	

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	23 TE-0373-01	2014	64	143
F.A. NO.				

2300 INSTALL NEW GROUND-SOURCE HEAT PUMP IN EXISTING 5'6" W X 3' D X 5'2" H AIR-HANDELER CABINET. SEE DRAWING M.11.0

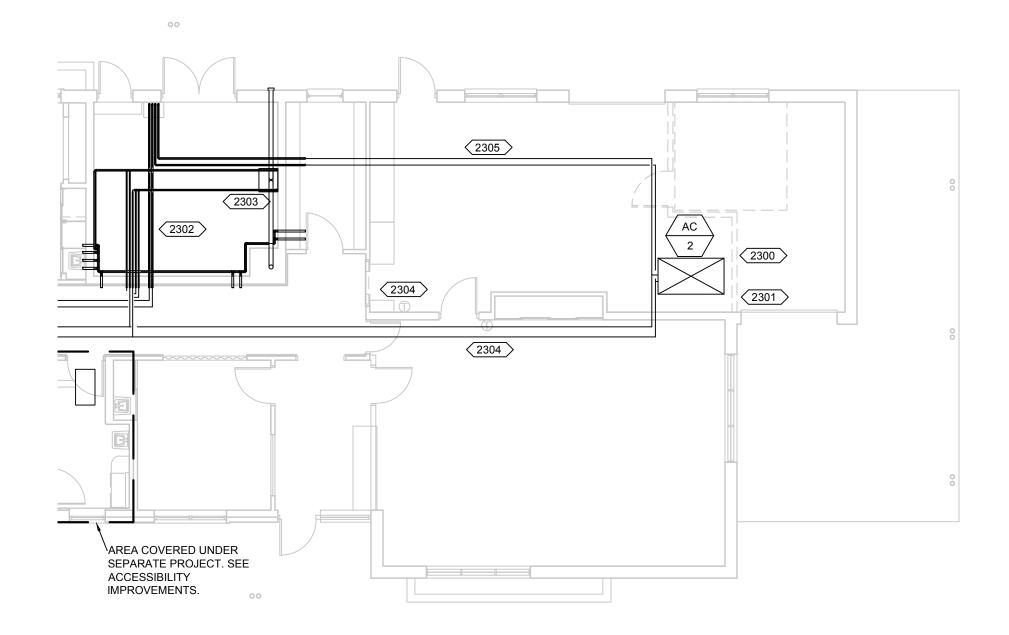
2301 INSTALL CO2 SENSOR TO CONTROL FRESH AIR DAMPER IN RETURN AIR DUCT FOR AIR HANDLER UNITS LOCATED IN THE WAITING ROOM AND BAGGAGE ROOM.

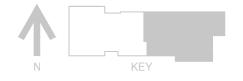
2302 SEE DRAWINGS M10.0 AND M12.0 FOR DETAILS OF BOILER ROOM LAYOUT.

2303 CONNECT NEW BOILER INTO EXISTING HOT WATER SUPPLY AND RETURN LINES.

2304 EXISTING HISTORICAL THERMOSTAT TO REMAIN.

2305 NEW PIPING TO AC-2 SHALL FOLLOW THE PATH TAKEN BY THE OLD CONDENSER WATER PIPE. REUSE PIPE HANGERS WHERE POSSIBLE FOR NEW GROUND LOOP PIPING AND HOT WATER PIPING.





KANSAS DEPARTMENT OF TRANSPORTATION 

MECHANICAL HYDRONIC FLOOR PLAN EAST

FHWA APPROVAL		AL XX-XX-XX	APP'D	XXX
	DESIGNED	DESIGNED	QUANTITIES	TRACED
	DESIGN CK.	DESIGN CK.	QUAN. CK	TRACE CK.

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	23 TE-0373-01	2014	64	143
F.A. NO.				

2300 INSTALL NEW GROUND-SOURCE HEAT PUMP IN EXISTING 5'6" W X 3' D X 5'2" H AIR-HANDELER CABINET. SEE DRAWING M.11.0

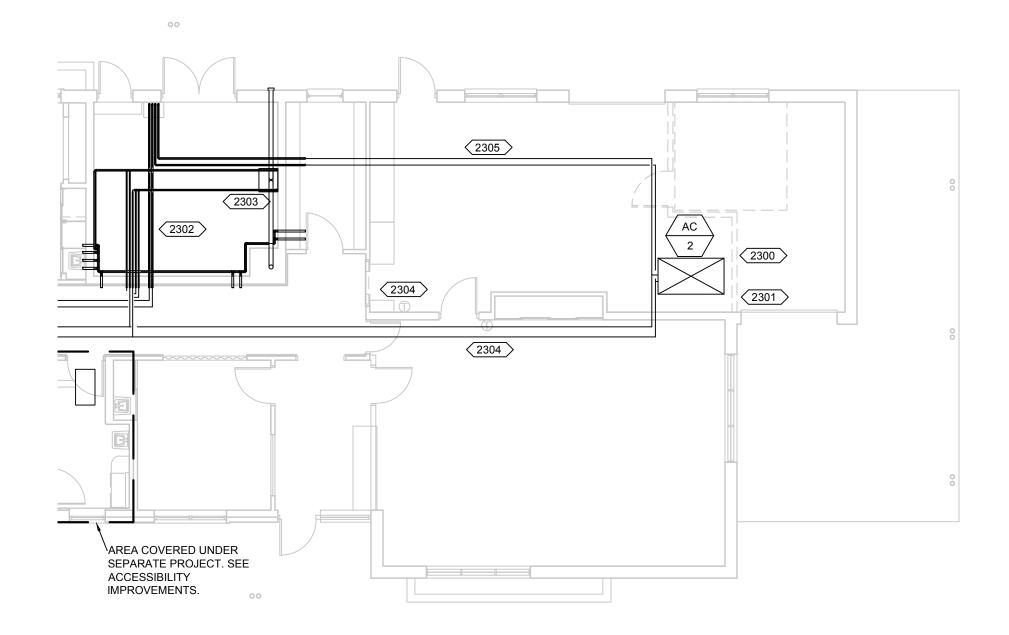
2301 INSTALL CO2 SENSOR TO CONTROL FRESH AIR DAMPER IN RETURN AIR DUCT FOR AIR HANDLER UNITS LOCATED IN THE WAITING ROOM AND BAGGAGE ROOM.

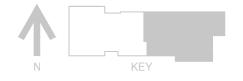
2302 SEE DRAWINGS M10.0 AND M12.0 FOR DETAILS OF BOILER ROOM LAYOUT.

2303 CONNECT NEW BOILER INTO EXISTING HOT WATER SUPPLY AND RETURN LINES.

2304 EXISTING HISTORICAL THERMOSTAT TO REMAIN.

2305 NEW PIPING TO AC-2 SHALL FOLLOW THE PATH TAKEN BY THE OLD CONDENSER WATER PIPE. REUSE PIPE HANGERS WHERE POSSIBLE FOR NEW GROUND LOOP PIPING AND HOT WATER PIPING.

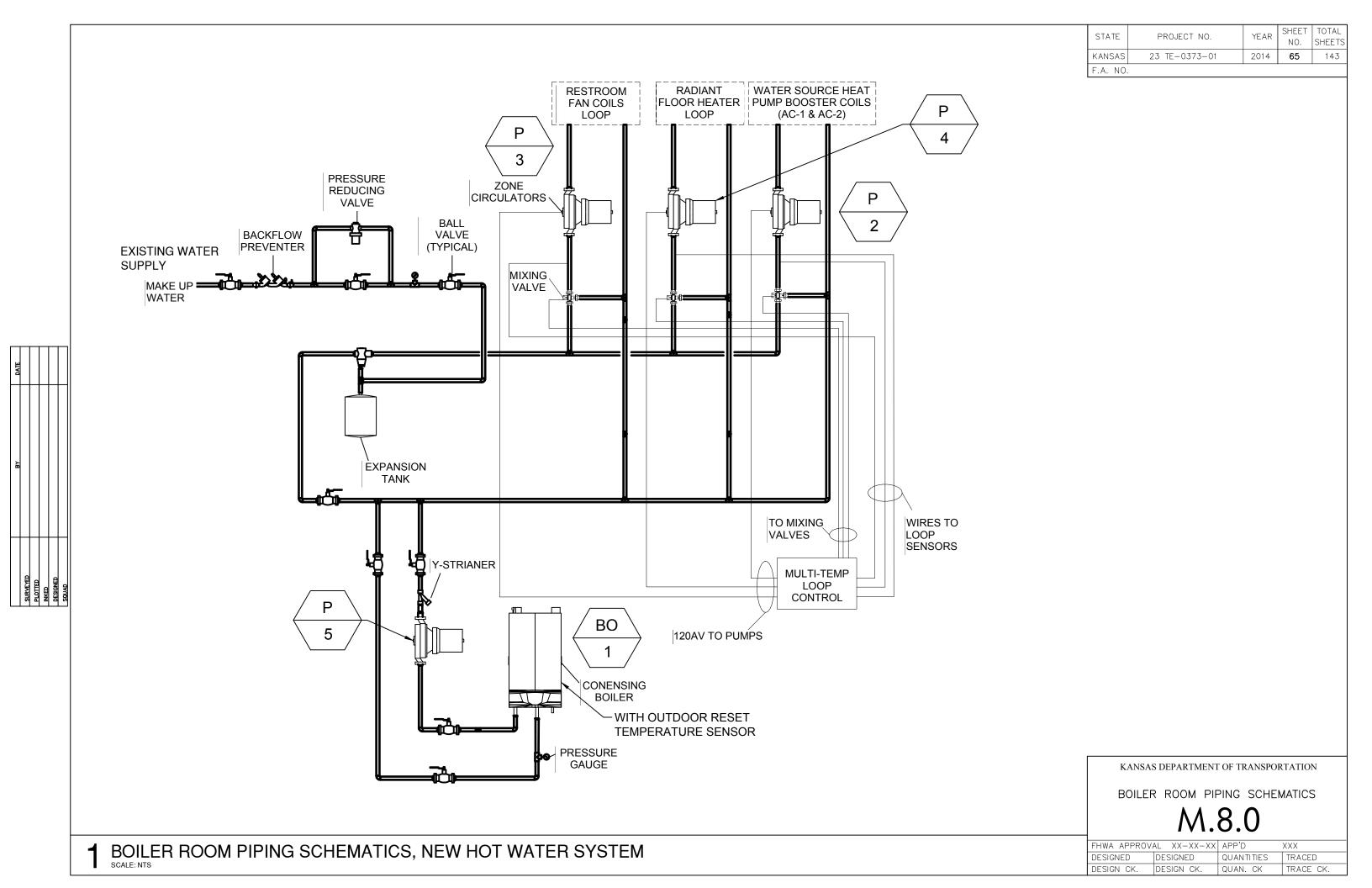


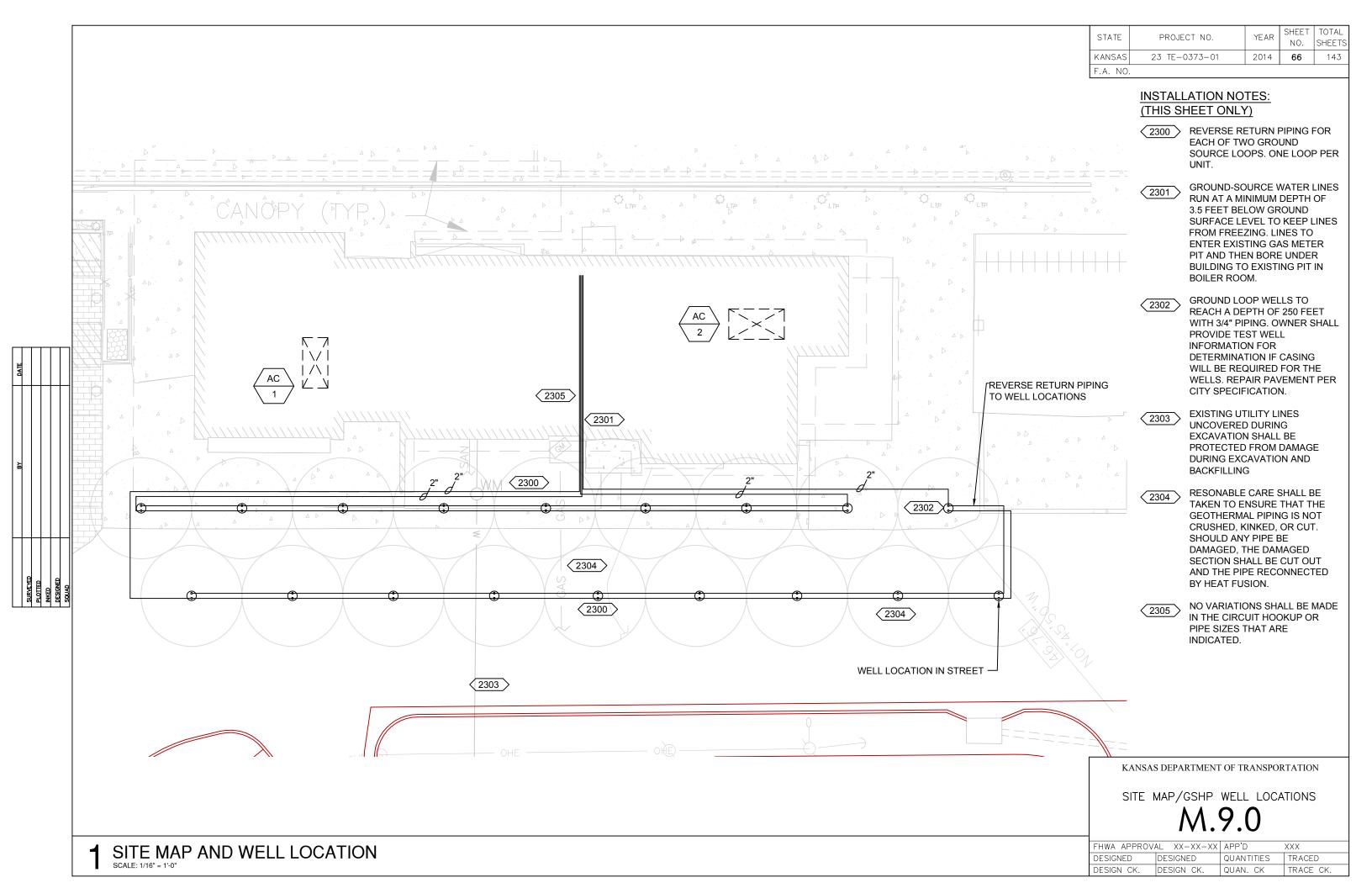


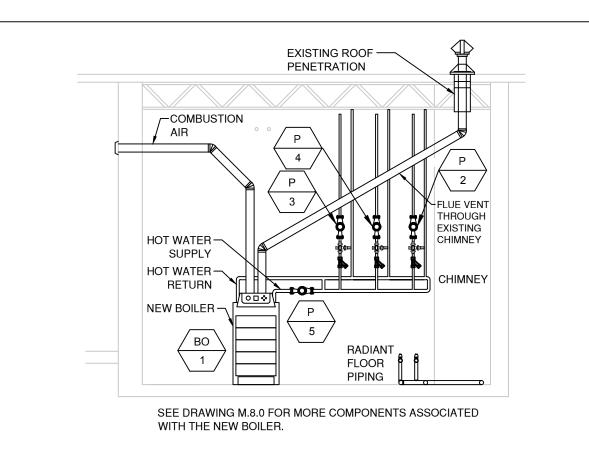
KANSAS DEPARTMENT OF TRANSPORTATION 

MECHANICAL HYDRONIC FLOOR PLAN EAST

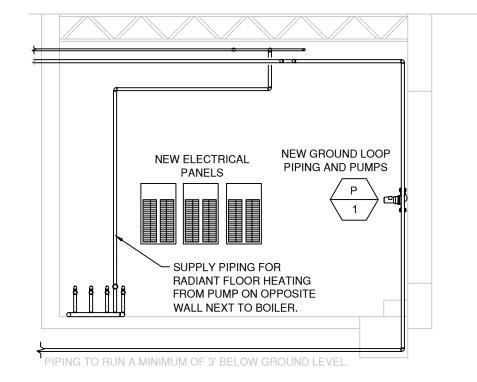
FHWA APPROVAL		AL XX-XX-XX	APP'D	XXX
	DESIGNED	DESIGNED	QUANTITIES	TRACED
	DESIGN CK.	DESIGN CK.	QUAN. CK	TRACE CK.







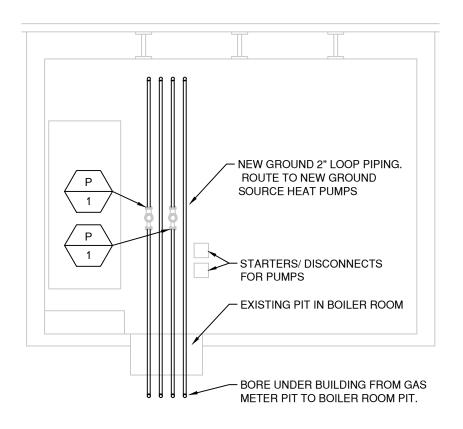
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	23 TE-0373-01	2014	67	143
F.A. NO.				



## **1** BOILER ROOM ELEVATION EAST

# RADIANT FLOOR PIPING

# 2 BOILER ROOM SECTION WEST



KANSAS DEPARTMENT OF TRANSPORTATION

BOILER ROOM ELEVATIONS & SECTIONS

M.10.0

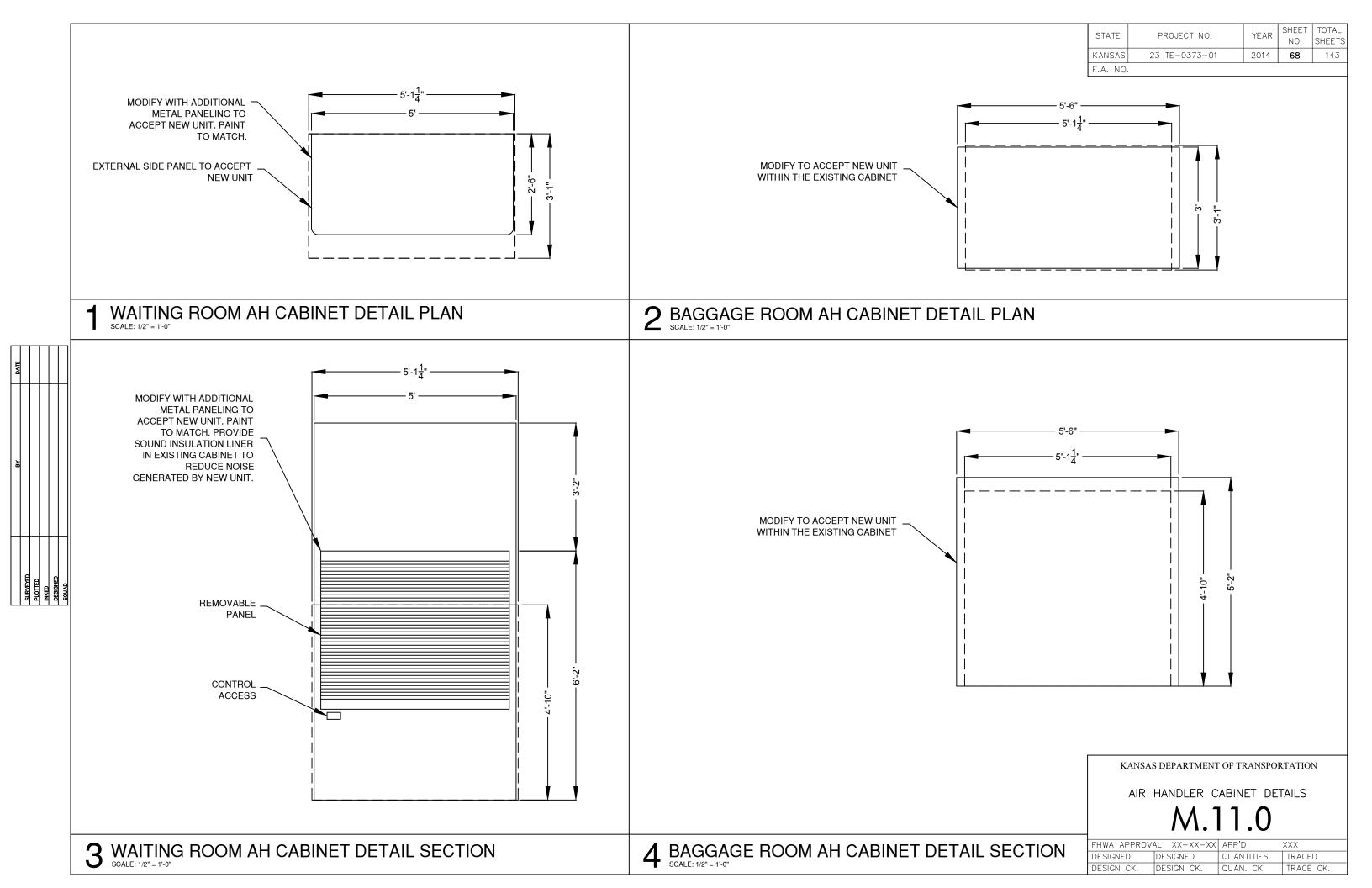
3 BOILER ROOM SECTION SOUTH

4 BOILER ROOM SECTION NORTH

FHWA APPROVAL XX-XX-XX APP'D XXX

DESIGNED DESIGNED QUANTITIES TRACED

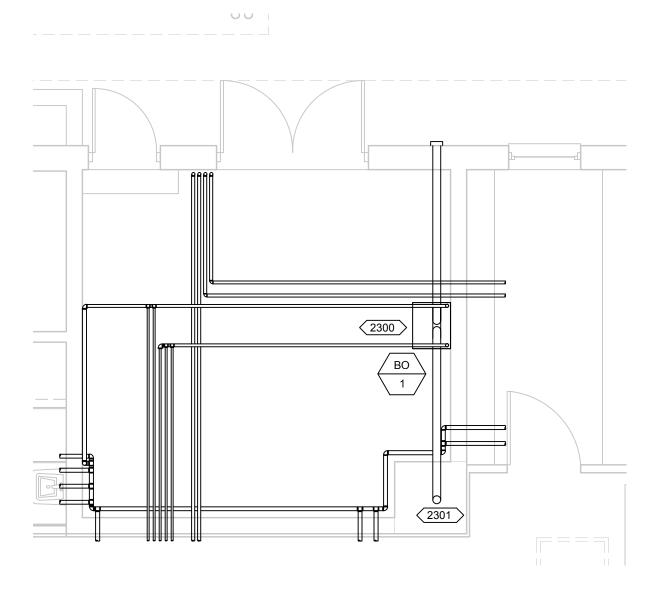
DESIGN CK. DESIGN CK. QUAN. CK TRACE CK.



STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	23 TE-0373-01	2014	69	143
F.A. NO.				

2300 CONNECT NEW BOILER INTO EXISTING HOT WATER SUPPLY AND RETURN LINES FOR HEATING EQUIPMENT. SEE DRAWINGS M.8.0 AND M.10.0 FOR ADDITIONAL INFORMATION.

ROUTE COMBUSTION AIR AND FLUE VENTS LINES THROUGH EXISTING WALL PARTITION. USE EXISTING ROOF PENETRATION FOR NEW FLUE.



KANSAS DEPARTMENT OF TRANSPORTATION

ENLARGED BOILER ROOM PLAN

M.12.0

FHWA APPROVAL XX—XX—XX APP'D XXX

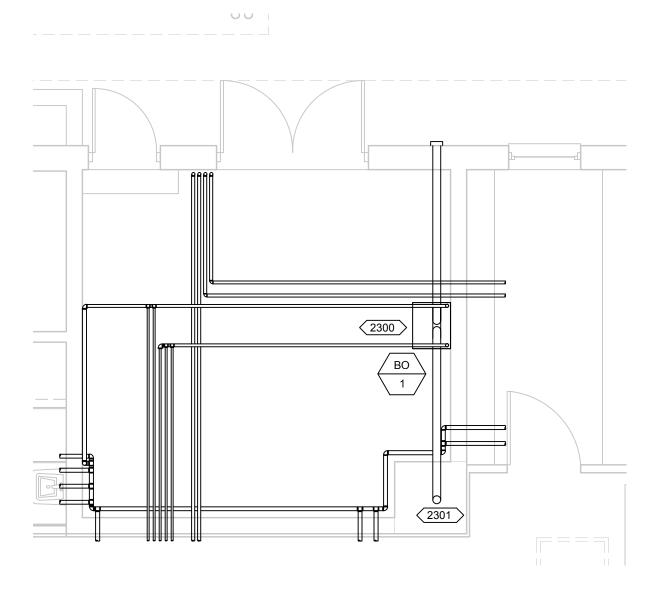
DESIGNED DESIGNED QUANTITIES TRACED

DESIGN CK. DESIGN CK. QUAN. CK TRACE CK.

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	23 TE-0373-01	2014	69	143
F.A. NO.				

2300 CONNECT NEW BOILER INTO EXISTING HOT WATER SUPPLY AND RETURN LINES FOR HEATING EQUIPMENT. SEE DRAWINGS M.8.0 AND M.10.0 FOR ADDITIONAL INFORMATION.

ROUTE COMBUSTION AIR AND FLUE VENTS LINES THROUGH EXISTING WALL PARTITION. USE EXISTING ROOF PENETRATION FOR NEW FLUE.



KANSAS DEPARTMENT OF TRANSPORTATION

ENLARGED BOILER ROOM PLAN

M.12.0

FHWA APPROVAL XX—XX—XX APP'D XXX

DESIGNED DESIGNED QUANTITIES TRACED

DESIGN CK. DESIGN CK. QUAN. CK TRACE CK.

# STATE PROJECT NO. YEAR SHEET NO. TOTAL SHEETS KANSAS 23 TE-0373-01 2014 70 143 F.A. NO.

#### DEMOLITION NOTES: (THIS SHEET ONLY)

0220 EXISTING WATER CLOSET TO BE REMOVED, DISPOSED OF PROPERLY, AND REPLACED WITH NEW WALL HUNG FIXTURE AND CARRIERS PER PLUMBING FIXTURE SCHEDULE. REMOVE AND DISPOSE OF PROPERLY ALL ASSOCIATED SANITARY PIPING AND OLD WATER CLOSET HANGERS. PREPARE DOMESTIC WATER PIPING AND SANITARY DRAIN AND VENT PIPING FOR CONNECTION TO NEW PIPING.

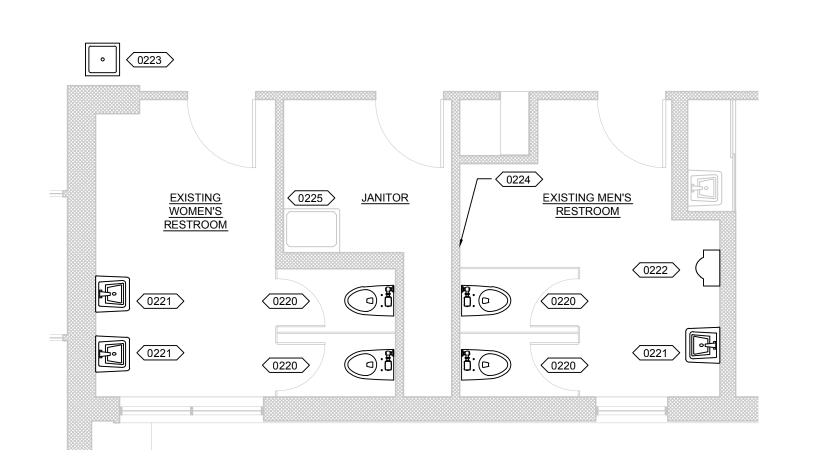
0221 EXISTING LAVATORIES TO BE REUSED WITH NEW CARRIERS, DISPOSE OF

(0222) REMOVE EXISTING URINAL AND PROPERLY DISPOSE.

0223 REMOVE EXISTING DRINKING FOUNTAIN AND PROPERLY DISPOSE OF THE UNIT. EXISTING OPENING IN STONE TO BE WIDENED AS NEEDED TO GAIN ACCESS TO PLUMBING AND INSTALL NEW 2-LEVEL ADA COMPLIANT DRINKING FOUNTAIN. REFERENCE SHEET P5.0 FOR DETAILS.

(0224) EXISTING WALL TO BE REMOVED PER ARCHITECTURAL PLANS.

(0225) EXISTING MOP SINK IN JANITOR CLOSET TO REMAIN.



#### **GENERAL NOTES:**

- 1. ALL NEW WORK SHALL CONFORM TO THE LATEST ADOPTED VERSION OF THE INTERNATIONAL PLUMBING CODE.
- 2. TYPE L HARD COPPER WITH 95/90 SOLDERED FITTINGS SHALL BE USED FOR ALL DOMESTIC WATER PIPING. PEX DOMESTIC WATER PIPING MAY BE USED WHERE ALLOWED BY CODE AND WHERE CONTRACTOR PROVIDES EVIDENCE OF TRAINING ON PEX PIPING INSTALLATION.
- 3. STANDARD WEIGHT CENTRIFUGALLY CAST, CAST IRON DWV PIPE WITH "NO-HUB" FITTINGS AND JOINTS SHALL BE USED FOR SOIL, WASTE, AND VENT PIPING. STANDARD WEIGHT CENTRIFUGALLY CAST, CAST IRON DWV PIPE WITH "TY-SEAL" FITTINGS AND JOINTS SHALL BE USED FOR SOIL, WASTE, AND VENT PIPING BELOW GRADE. PVC DWV MAY BE USED WHERE ALLOWED BY CODE.
- 4. PIPE HANGERS SHALL BE DESIGNED FOR FERROUS, PLASTIC, AND COPPER PIPE WITH HANGER RODS IN DIAMETERS AS REQUIRED BY HANGERS. HANGER SPACING SHALL BE IN ACCORDANCE WITH THE INTERNATIONAL PLUMBING CODE.
- 5. DOMESTIC HOT AND COLD WATER LINES SHALL BE INSULATED WITH 1/2" THICK FIBERGLASS PREFORMED INSULATION WITH SELF-SEALING JOINTS. THE COLD WATER PIPING SYSTEM SHALL BE PROVIDED WITH A VAPOR BARRIER. PEX PIPING MAY BE INSTALLED WITHOUT INSULATION.
- 6. EXPOSED HANDICAPPED LAVATORY P-TRAPS AND SUPPLY FITTINGS SHALL BE INSULATED WITH PREFORMED FLEXIBLE CELLULAR INSULATION.
- 7. ALL PIPING SYSTEMS SHALL BE TESTED BEFORE COVERING AND CONCEALING IN THE PRESENCE OF THE OWNER OR THE OWNER'S REPRESENTATIVE. ALL LEAKS SHALL BE REPAIRED IN A SATISFACTORY MANNER.
- 8. TEST DOMESTIC WATER PIPING AT 100 PSI.
- 9. SOIL AND WASTE PIPE SHALL SLOPE 2% MINIMUM, UNLESS OTHERWISE NOTED OR REQUIRED BY CODE.
- 10. CONTRACTOR SHALL VERIFY THE LOCATION OF THE SANITARY SEWER AND SHALL REVISE THE SEWER SYSTEM AS REQUIRED.
- 11. ALL CLEANOUTS SHALL BE INSTALLED WHERE READILY ACCESSIBLE. THE CONTRACTOR SHALL COORDINATE ALL CLEANOUT LOCATIONS WITH EQUIPMENT, CABINETS, ETC. AND THE OWNER'S REPRESENTATIVE PRIOR TO ANY INSTALLATION.
- 12. INSTALL SHUT-OFF VALVES ON ALL HOT & COLD WATER LINES TO FIXTURE OR APPLIANCE. ALL EXPOSED WATER AND WASTE LINES TO BE CHROMED PLATED.
- 13. ALL VALVES, UNIONS, ETC. TO BE THE SAME SIZE AS THE PIPE UNLESS OTHERWISE INDICATED ON DRAWINGS.
- 14. PROVIDE EITHER WATER HAMMER ARRESTOR OR AIR CHAMBERS FOR WATER LINES AS REQUIRED BY CODE. THIS SHALL INCLUDE ALL FLUSH VALVE PLUMBING EQUIPMENT.
- 15. CONTRACTOR SHALL COORDINATE INSTALLATION OF PLUMBING WORK WITH ALL OTHER TRADES SO AS TO AVOID UNNECESSARY DELAY OF INTERFERENCES. CONTRACTOR TO REVIEW ARCHITECTURAL AND EQUIPMENT SHEETS.



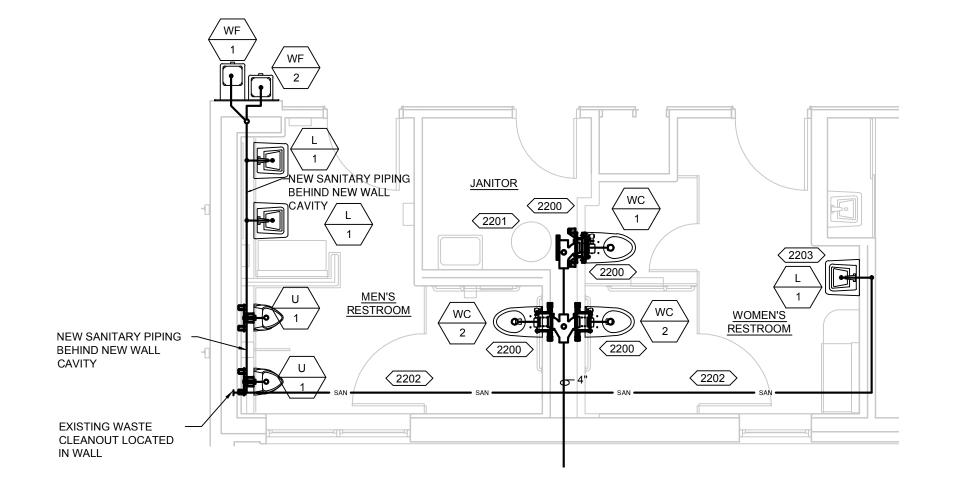
KANSAS DEPARTMENT OF TRANSPORTATION

DEMO PLAN & GENERAL NOTES

P.A.1

FHWA APPROVA	AL XX-XX-XX	APP'D	XXX		
DESIGNED	DESIGNED	QUANTITIES	TRACED		
DESIGN CK.	DESIGN CK.	QUAN. CK	TRACE CK.		

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	23 TE-0373-01	2014	71	143
F.A. NO.				

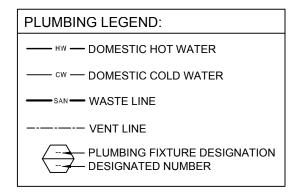


WATER CLOSET CARRIERS SHALL BE ANCHORED TO NEW 6" CONCRETE SLAB. FORM AND POUR WITH WALL REMOVED (SEE DEMOLITION PLAN)

2201 MOVE WATER HEATER AS NECESSARY TO ACCESS SANITARY PIPING FOR NEW CARRIERS. WATER HEATER SHALL BE RE-INSTALLED ONCE ALL WORK IS COMPLETED.

2202 EXISTING SANITARY LINE. FIELD VERIFY.

2203 CONNECT LAVATORY INTO SANITARY LINE THAT WAS USED FOR URINAL.





KANSAS DEPARTMENT OF TRANSPORTATION

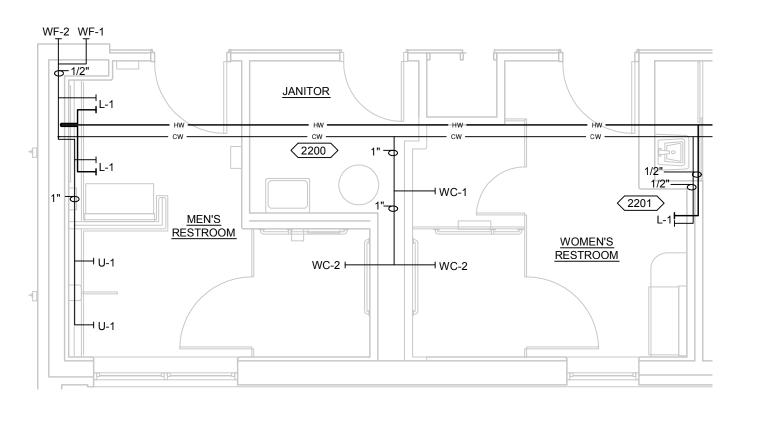
SANITARY PLUMBING PLAN

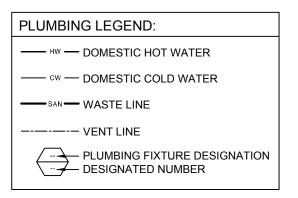
P.A.2

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	23 TE-0373-01	2014	72	143
F.A. NO.				

2200 FIELD VERIFY WATER SUPPLY LINES IN JANITOR CLOSET.

2200 ROUTE NEW HOT WATER LINE DOWN IN WALL FOR NEW LAVATORY.







KANSAS DEPARTMENT OF TRANSPORTATION

DOMESTIC SUPPLY PLAN

P.A.3

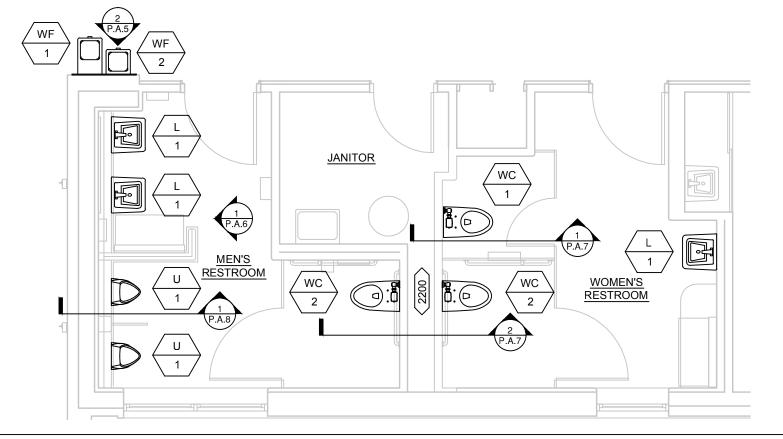
FHWA APPROV	AL XX-XX-XX	APP'D	XXX
DESIGNED	DESIGNED	QUANTITIES	TRACED
DESIGN CK.	DESIGN CK.	QUAN. CK	TRACE CK.

PROJEC	T PLUMBI	NG FIXTL	JRE SCH	EDULE				
ITEM	FIXTURE	SOIL OR WASTE	VENT	COLD WATER	HOT WATER	WASTE FU	WATER FU	DESCRIPTION
WC 1	WATER CLOSET	4"	2"	1"		4	5	TOTO CT708E WALL-MOUNTED FLUSHOMETER TOILET MOUNTED AT 14.5" A.F.F., 1.28GPF, USE ZURN CARRIER Z1203-N-XB, FLUSH VALVE: TOTO TET1LN32, OR AMERICAN STANDARD AFWALL 2257.00, 1.1 GPF, USE JOSAM 12704, FLUSH VALVE: 6067.11.002, OR EQUIVALENT.
WC 2	WATER CLOSET	4"	2"	1"		4	5	TOTO CT708E WALL-MOUNTED FLUSHOMETER TOILET MOUNTED AT 17" A.F.F., 1.28GPF, USE ZURN CARRIER Z1203-ND4 (BACK-TO-BACK), FLUSH VALVE: TOTO TET1LN32, OR AMERICAN STANDARD AFWALL 2257.00, 1.1 GPF, USE JOSAM 12704-35, FLUSH VALVE: 6067.11.002, OR EQUIVALENT.
U 1	URINAL	2"	2"	1"		2	5	TOTO CONCEALED INTEGRAL TRAP LOW CONSUMPTION WASHOUT URINAL MODEL UT104EV W/ ¾" BACK SPUD. TOTO TEU2LN11 FLUSH VALVE, ZURN Z-1221 FLOOR SUPPORTED CARRIER. MOUNT RIM AT 17" A.F.F. INSTALL TO MEET ADA REQUIREMENTS, OR AMERICAN STANDARD ALLBROOK 6550.00, 1.0 GPF, USE JOSAM 17550-UR, FLUSH VALVE: 6062.101, OR EQUIVALENT.
L 2	LAVATORY	2"	2"	1/2"	1/2"	1	2	EXISTING LAVATORY TO BE RE-USED, INSTALL WITH ZURN CARRIER Z1224 (FIELD VERIFY CARRIER CONFIGURATION FOR EXISTING LAVATORY PRIOR TO ORDERING), CHICAGO FAUCETS 2200-4ABCP ADA SINGLE LEVER FAUCET OR AMERICAN STANDARD INNSBROOK SELECTRONIC 6055.205 (OR EQUIVALENT). FIELD VERIFY EXISTING SINK CONFIGURATION FOR FAUCET COMPATIBILITY PRIOR TO ORDERING.
WF 1	WATER FOUNTAIN	2"	2"	1/2"		1	1	ELKAY NO-LEAD DRINKING FOUNTAIN WITH SOFT SIDES, WALL MOUNT-FULLY EXPOSED WITH WALL PLATE, BARRIER-FREE ACCESS MODEL EDFP217C, OR HAWS 1011, "HI-LO" BARRIER FREE, WALL MOUNT-FULLY EXPOSED WITH WALL PLATE, OR EQUIVALENT.
WF 2	WATER FOUNTAIN	2"	2"	1/2"		1	1	ELKAY NO-LEAD DRINKING FOUNTAIN WITH SOFT SIDES, WALL MOUNT-FULLY EXPOSED WITH WALL PLATE, MODEL EDFP210C, OR HAWS 1001, BARRIER FREE, WALL MOUNT-FULLY EXPOSED WITH WALL PLATE, OR EQUIVALENT.

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	23 TE-0373-01	2014	73	143
F.A. NO.				

PLUMBING CONTRACTOR SHALL SUBMIT PLUMBING FIXTURE INFORMATION PRIOR TO CONSTRUCTION AND ONCE APPROVED INFORMATION SHALL BE DISTRIBUTED TO ALL SUBCONTRACTORS.

# PLUMBING FIXTURE SCHEDULE



# INSTALLATION NOTES: (THIS SHEET ONLY)

2200 WATER CLOSET CARRIERS SHALL BE MOUNTED TO NEW CONCRETE SLAB IN PLUMBING CHASE. EXCAVATE AND POUR CONCRETE AFTER PLUMBING PIPING AND WALL REMOVAL.

#### PLUMBING LEGEND:

── HW ── DOMESTIC HOT WATER

---- cw --- DOMESTIC COLD WATER

——san— WASTE LINE

----- VENT LINE

PLUMBING FIXTURE DESIGNATION
DESIGNATED NUMBER



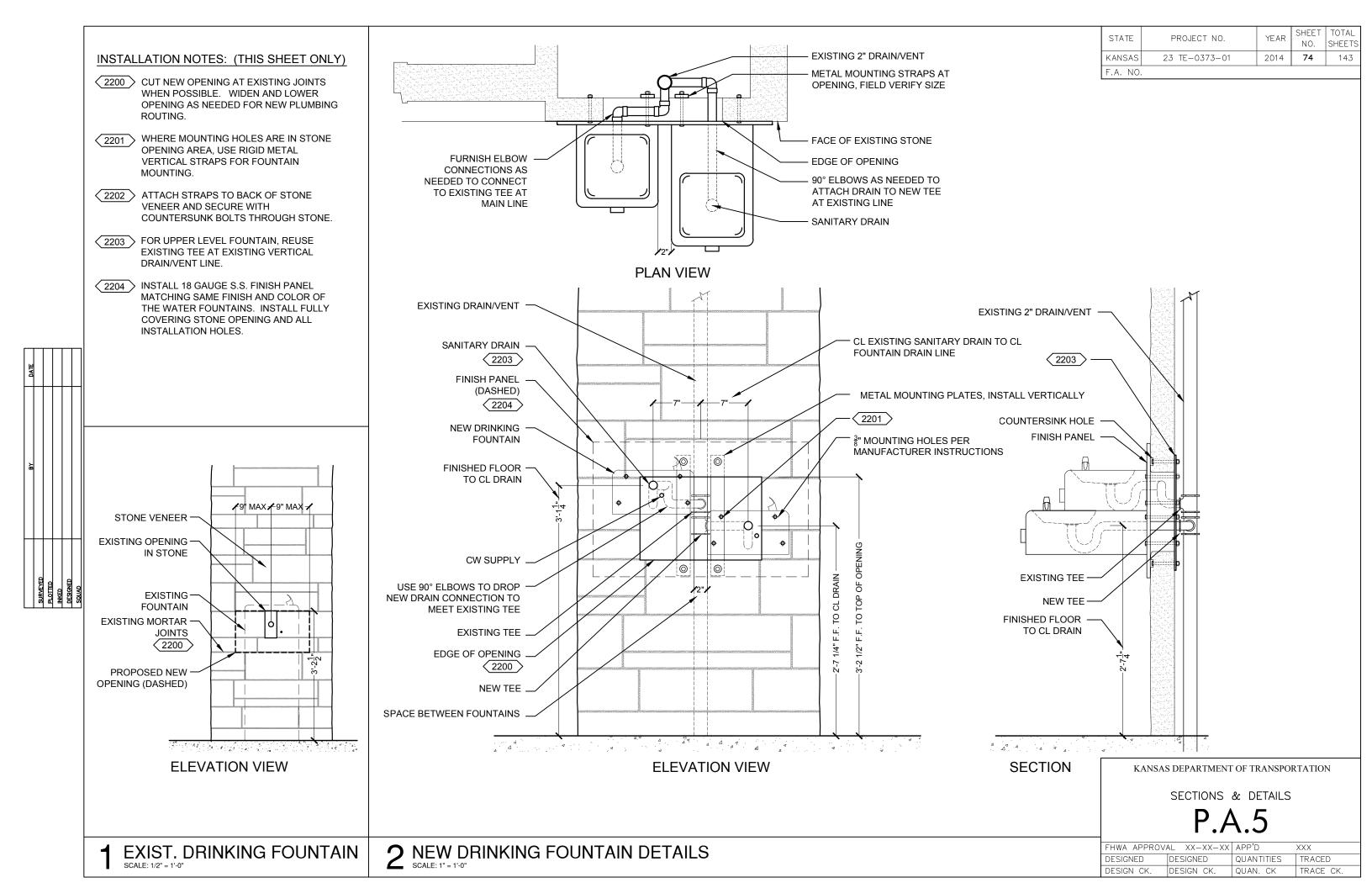
KANSAS DEPARTMENT OF TRANSPORTATION

PLUMBING FIXTURE LAYOUT & PLUMBING SCHEDULE

P.A.4

FHWA APPROVA	AL XX-XX-XX	APP'D	XXX
DESIGNED	DESIGNED	QUANTITIES	TRACED
DESIGN CK.	DESIGN CK.	QUAN. CK	TRACE CK.

PLUMBING FIXTURES SCALE: 1/4" = 1'-0"

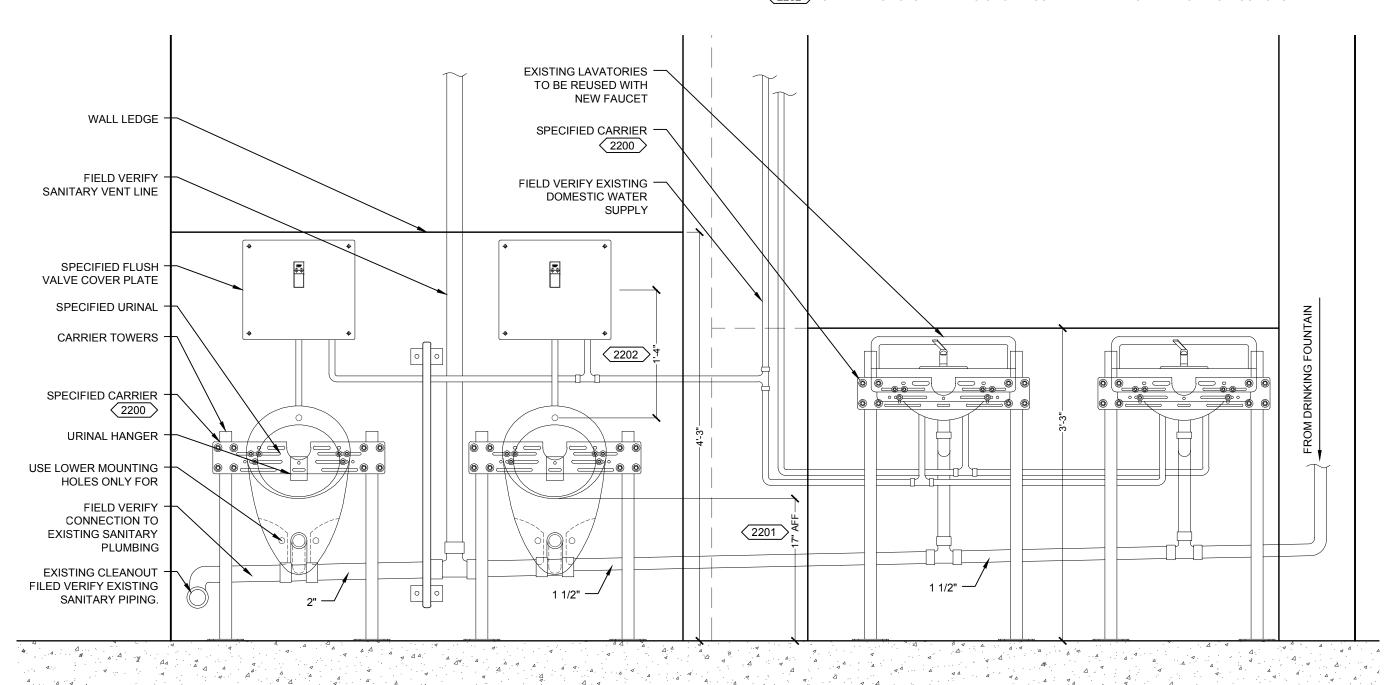


STATE	PROJECT NO.	YEAR	SHEET	TOTAL
STATE	PROJECT NO.	TEAR NO.		SHEETS
KANSAS	23 TE-0373-01	2014	75	143

2200 HEAVY-DUTY CARRIER INSTALLER PER MANUFACTURER SPECIFICATIONS, ANCHOR TO EXISTING CONCRETE SLAB WITH  $\frac{1}{2}$ " ANCHORS.

2201 URINAL RIM TO BE 17" ABOVE FINISHED FLOOR PER ACCESSIBILITY REQUIREMENTS SEE MANUFACTURER SPECIFICATIONS FOR INSTALLATION DETAILS.

2202 URINAL BACK SPUD INLET TO CL OF FLUSH VALVE PER INSTALLATION INSTRUCTIONS



KANSAS DEPARTMENT OF TRANSPORTATION

PLUMBING FIXTURE ELEVATION DETAIL

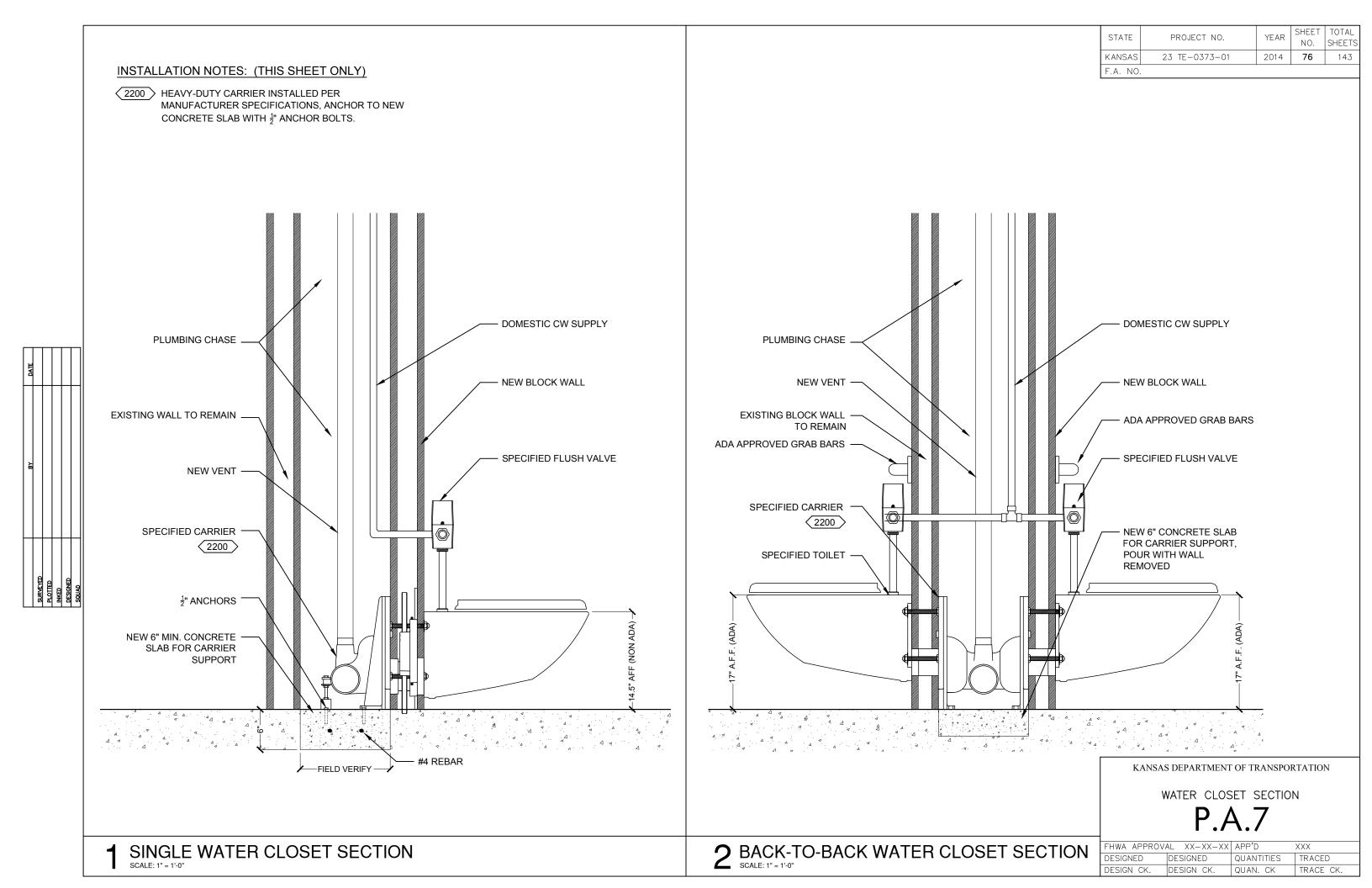
P A 6

1 URINAL/LAVATORY WALL ELEVATION

FHWA APPROVAL XX-XX-XX APP'D XXX

DESIGNED DESIGNED QUANTITIES TRACED

DESIGN CK. DESIGN CK. QUAN. CK TRACE CK.



BESTROCKMAL  SPACE AND LODGE TO SUPPLY TO SUPP		INSTALLATION NOTES: (THIS SHEET ONLY)  (2200) HEAVY-DUTY CARRIER INSTALLED PER MANUFACTURER SPECIFICATIONS, ANCHOR TO EXISTING CONCRETE SLAB WITH ½" ANCHORS.  (2201) URINAL RIM TO BE 17" ABOVE FINISHED FLOOR PER ACCESSIBILITY REQUIREMENTS SEE MANUFACTURER SPECIFICATIONS FOR INSTALLATION DETAILS.	STATE PROJECT NO. YEAR KANSAS 23 TE-0373-01 2014 F.A. NO.		OTAL HEETS 143
	SALRVE KED         BY         DATE           PLOTIED         INKED         INKED	EXISTING WALL  SPECIFIED CABRIER, TRIM UNUSED LENGTH OF TOWER  2° OUTLET PIPE I.P. REMOVED PRITONUS OF WALL TO FIELD VERBY EXISTING CONNECTIONS TO SANITARY WASTE UNE  2' ANCHORS INTO EXISTING SLAB	DOMESTIC SUPPLY LOCATION, REROUTE AS NEEDED  SPECIFIED FLUSH VALVE  NEW FINISHED WALL  SPECIFIED URINAL  URINAL HANGER FURNISHED WITH FIXTURE  CL OUTLET TO CL URINAL HANGER  URINAL OUTLET  OUTLET TO CL URINAL OUTLET  OUTLET TO CL URINAL SECTION  P.A.8  FHWA APPROVAL XX-XX-XX APP'D	XXX	K.

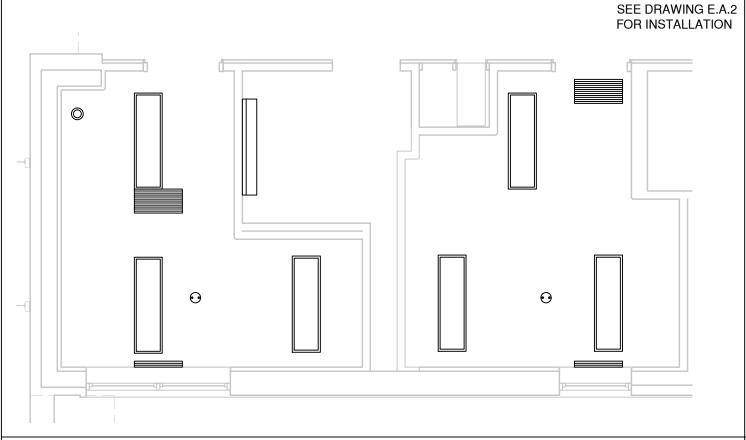
LIGHTING CONTROL SCHEDULE:							
				MOUN	NTING		
FIXTURE	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	WALL	SURFACE	HEIGHT	REMARKS
M	REFER TO SPECIFICATIONS		ULTRASONIC MOTION DETECTOR		Х	9' - 0"	360 DEGREE COVERAGE. MOUNT ON CEILING SURFACE.

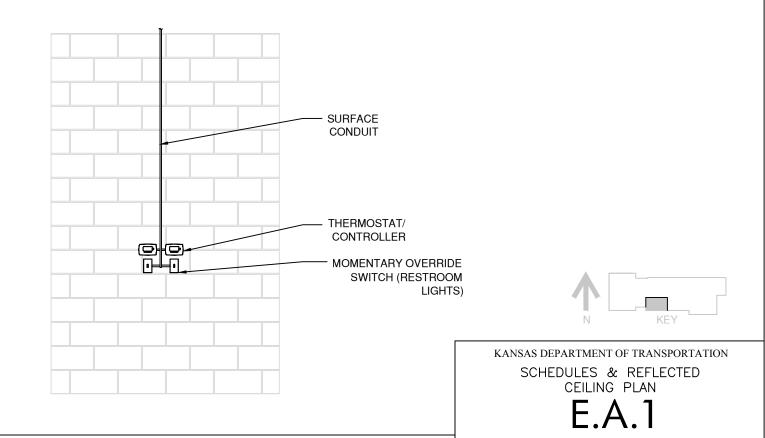
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	23 TE-0373-01	2014	78	143
F.A. NO.				

ALL CONTROLS SHALL BE APPROVED BY THE OWNER OR OWNERS REPRESENTATIVE PRIOR TO ORDERING OR INSTALLATION

LIGHTIN	LIGHTING SCHEDULE:									
						MOUN	NTING	}		
FIXTURE	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	LAMP TYPE	WALL	RECESSED	SURFACE	PENDANT	HEIGHT	REMARKS
A	EXISTING	EXISTING	1' x 4' RECESSED	32W T-8: 2900 LUMENS		Х			9' - 0"	RETROFIT EXISTING FIXTURES WITH NEW T8 LAMPS, TOMBSTONES AND ELECTRONIC BALLASTS.
<b>Д</b> Н	EXISTING	EXISTING	LED DOWN LIGHT	GE 10W LED A-19: 800 LUMENS		Х			9' - 0"	REPLACE THE EXISTING BULB WITH AN ENERGY EFFICIENT LED LIGHT BULB.
J	REFER TO SPECIFICATIONS		48" WALL MOUNT FLUORESCENT	32W T-8: 2900 LUMENS	X				8' - 0"	

# 1 SCHEDULES SCALE: NONE

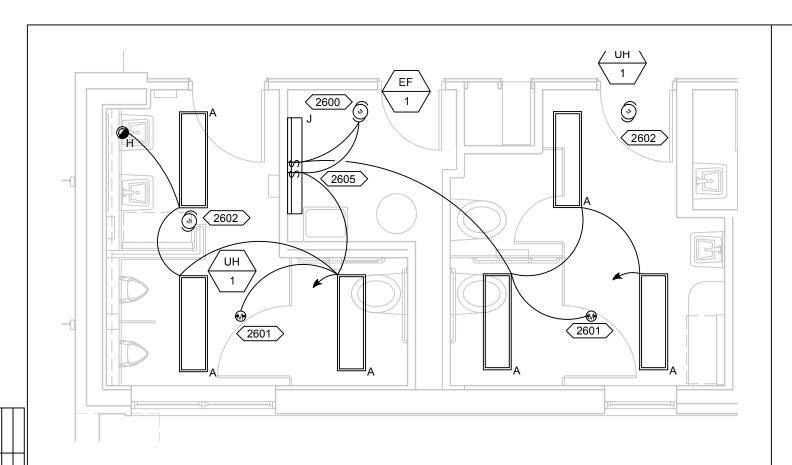




2 REFLECTED CEILING PLAN
SCALE: 1/4" = 1'-0'

3 ELEV. OF TEMP. CONTROLS & SWITCHES

FHWA APPROVA	AL XX-XX-XX	APP'D	XXX	
DESIGNED	DESIGNED	QUANTITIES	TRACED	
DESIGN CK.	DESIGN CK.	QUAN. CK	TRACE CK.	



- 2600 SWITCH THE CENTRAL EXHAUST FAN WITH THE LIGHTS. CONNECT EXHAUST FAN TO LIGHTING CIRCUIT.
- 2601 THE MOTION SENSOR LOCATED IN EACH RESTROOM SHALL CONTROL THE EXHAUST FAN AND THE RESTROOM'S LIGHTS.
- 2602 CONNECT FAN COILS INTO THEIR EXISTING CIRCUIT.
- 2603 REMOVE EXISTING RECEPTACLE LOCATED NEXT TO THE DRINKING FOUNTAIN. REMOVE ALL ASSOCIATED WIRING AND CONDUIT BACK TO ITS EXISTING JUNCTION BOX.
- 2604 MOUNT NEW RECEPTACLES AT COUNTER HIEGHT. CONNECT TO EXISTING RECEPTACLE CIRCUIT.
- 2605 CONSULT WITH MECHANICAL CONTRACTOR ABOUT EXACT PLACEMENT OF EQUIPMENT (SWITCHES AND THERMOSTATS) IN JANITOR CLOSET.

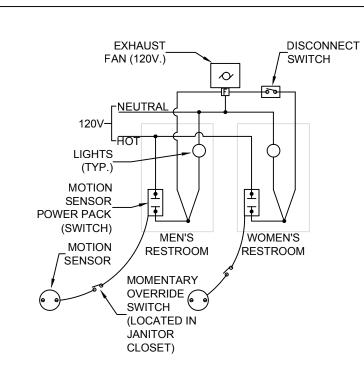
#### POWER LEGEND:

STANDARD RECEPTACLE (18" A.F.F.)

GFI RECEPTACLE (WITHIN 6' OF A SINK)

EQUIPMENT MOTOR

MECH. EQUIPMENT DESIGNATION DESIGNATED NUMBER



# GENERAL NOTES:

STATE

KANSAS

F.A. NO.

1. ALL WORK SHALL CONFORM TO THE LATEST ADOPTED VERSION OF THE NATIONAL ELECTRICAL CODE (NEC).

SHEET

NO.

79

YEAR

2014

TOTAL

SHEETS

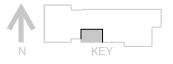
143

2. ALL WIRING SHALL BE IN CONDUIT.

PROJECT NO.

23 TE-0373-01

- 3. CONDUIT SHALL BE EMT WITH COMPRESSION TYPE OR SCREW FITTINGS.
- 4. ALL FLEXIBLE METALLIC AND PVC CONDUIT WHERE ALLOWED BY LOCAL CODE IS TO BE PROVIDED WITH SEPARATE GROUND WIRE.
- 5. ALL POWER WIRES AND CABLES SHALL BE COPPER #12 AWG, UNLESS NOTED OTHERWISE OR REQUIRED BY THE MANUFACTURER OF THE CONNECTED DEVICE. WIRE SHALL BE CODE TYPE THWN/THHN, UNLESS OTHERWISE STATED.
- 6. ALL CIRCUITS SHALL HAVE SEPARATE NEUTRALS, THROUGHOUT THE ENTIRE CIRCUIT.
- 7. ALL NEW SWITCHES SHALL BE RATED AT 20 AMPS.
- 8. ALL OUTLETS SHALL BE RATED 15 AMPS. GROUND-FAULT CIRCUIT INTERRUPTER TYPE OUTLETS SHALL BE INSTALLED IN THOSE LOCATIONS AS REQUIRED BY THE NEC OR AS DESIGNATED ON THE DRAWINGS.
- 9. PROVIDE ALL OUTLET, LIGHTING FIXTURES, AND J-BOXES THROUGHOUT THE AREA IN ACCESSIBLE LOCATIONS. BOXES SHALL BE OF GALVANIZED KNOCK OUT TYPE WITH SCREW COVERS.
- 10. CONTRACTOR IS TO FURNISH AND INSTALL CONDUIT FOR LOW VOLTAGE WIRING. INSTALL AND CONNECT LINE VOLTAGE WIRING. LOW VOLTAGE-WIRING CONNECTIONS ON HVAC SYSTEM AND CONTROL SYSTEMS BY CONTRACTOR.
- 11. CONTRACTOR SHALL VERIFY ALL EQUIPMENT NAME PLATES AND INSTALLATION REQUIREMENTS PRIOR TO DOING WORK. EQUIPMENT IS TO BE INSTALLED PER MANUFACTURERS SPECIFICATIONS.



KANSAS DEPARTMENT OF TRANSPORTATION

LIGHTING & POWER LAYOUTS

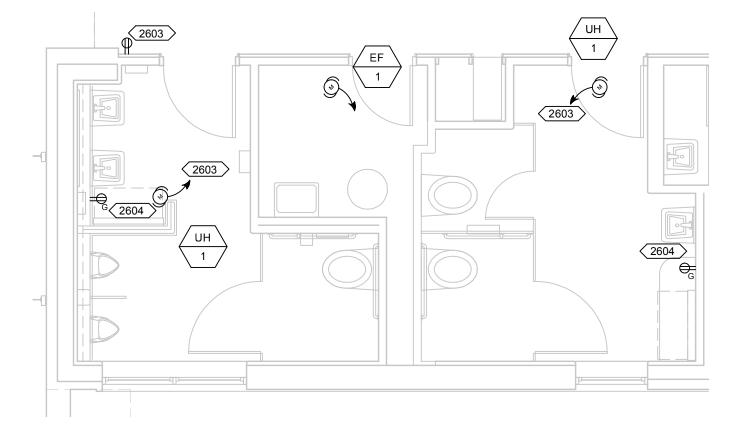
F A 2

FHWA APPROVAL XX-XX-XX APP'D XXX

DESIGNED DESIGNED QUANTITIES TRACED

DESIGN CK. DESIGN CK. QUAN. CK TRACE CK.

# 1 LIGHTING LAYOUT SCALE: 1/4" = 1'-0'



POWER LAYOUT

3 EXH. FAN WIRING DIAGRAM

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	23 TE-0373-01	2014	82	143
FA NO				

VOLTAGE: 208/120 V									MAIN	: 400	A							F	FEED:"C, # Cu, # GI
PHASE: 3Ø WIR								ı	OCA	TION:	-								MOUNTING: SURFAC
DESCRIPTION	REC	ပြ		VA		BRK	R	CKT	В	US	СКТ	В	RKR		VA		REC	ပြ	DESCRIPTION
DESCRIPTION	2		Α	В	С	AMP	Р	NO.	CC	NNC	NO.	Р	AMP	Α	В	O	R	느	BESONII IION
FQ DEPOT	-	-				40	1	1	•		2	1	-	0			-	-	PANEL D BOILER ROOM
T & DET OT	-	-		0			1	3		<b>†</b>	4	1	20		0		-	-	1 MILE D BOILER ROOM
	<u> -</u>	-			0	20	1	5		1 t	6	1	20			0	-	-	
AC WAITING ROOM	<u> </u> -	-	0			20	1	7	] <b>†</b>		8	1	20	0			-	-	AC BAGGAGE
	-	-		0		20	1	9		<b>†</b>	10	1	20		0		-	-	
	<u> -</u>	-			0	20	1	11	ļ	1 t	12	1	20			0	-	Ŀ	
CIRCULATING PUMP	-	-	0			20	1	13	] <b>†</b>		14	1	20	0			-	-	SPARE
	-	-		0		20	1	15		<b>†</b>	16	1	20		0		-	-	
	-	-			0	20	1	17		1 t	18	1	20			0	-	-	-
	<u>_</u>	-	0			20	1	19	🛉		20	1	20	0			<u> -</u>	-	
PANEL B	-	-		0		20	1	21		<b>†</b>	22	1	20		0		-	-	PANEL C
	<u> -</u>	-			0	20	1	23		1 1	24	1	20			0	-	-	
	<u> -</u>	-	0			20	1	25	ļ <b>†</b>		26	1	20	0			-	-	
	-	-		0		20	1	27		<b>†</b>	28	1	20		0		-	-	
SPARE	-	-			0	20	1	29		1 1	30	1	20			0	-	_	SPARE
SPARE	-	-	0			20	1	31	ļ <b>†</b>		32	1	20	0			-	—	SPARE
SPARE	-	-		0		20	1	33		<b>†</b>	34	1	20		0		-	_	SPARE
SPARE	-	-			0	20	1	35		1 t	36	1	20			0	-	_	SPARE
SPARE	-	-	0			20	1	37	🛉		38	1	20	0			<u> -</u>	_	SPARE
SPARE	-	-		0		20	1	39	]	<b>†</b>	40	1	20		0		-	_	SPARE
SPARE	-	-			0	20	1	41		+	42	1	20			0	-	<u> -</u>	SPARE
WATTS: BUS A: BUS B: BUS C:	0 0	L	0	0	0	J							l	0	0	0	J		

VOLTAGE: 120/240 V						M	IAIN:	:200	Α							FEED: EXISTING
Phase: 1Ø				L	.00	IOITA:	N: TI	CKE	TOF	FIC	E					MOUNTING: SURFACE
DESCRIPTION	REC LTG	1	/A	BRK	R	СКТ	ВІ	JS	CKT	В	RKR	V	A	ပ္ပ	Ö	DESCRIPTION
DESCRIPTION		Α	В	AMP	Р	NO.	co	NN	NO.	Р	AMP	Α	В	屋	Ĕ	DESCRIPTION
NORTH CANOPY	T-I-	0		15	1	1	•		2	1	15	0		-	-	SW CANOPY
NORTH CANOPY	T-T-		0	15	1	3	11	+	4	1	15		0	-	-	LOBBY VESTIBULE
SW CANOPY	T-1-	-		15	1	5	-		6	1	15	-		-	-	WAITING ROOM LIGHTS
BLANK	T-I-		-	15	1	7	11	+	8	1	20		-	-	-	COUNTER
BLANK	T-1-	-		15	1	9	<b>│                                    </b>		10	1	20	-		-	-	COUNTER
WAITING ROOM	T-I-		-	15	1	11	11	•	12	1	15		-	-	-	OFFICE
RESTROOM	T- -	-		15	1	13	-		14	1	15	-		-	-	NIGHT
HALL LIGHTS	T-I-		-	15	1	15	11	į.	16	1	15		-	-	-	OUTLETS
CLOCK/OUTLETS	T-I-	-		20	1	17	1 ∤		18	1	20	-		-	-	BLANK
OUTLETS/TOILETS	T- -		-	20	1	19	11	į.	20	1	20		-	-	-	SF SIGN
STATION SIGN		-		20	1	21	1 ∤	-	22	1	20	-		-	-	SIGNAL LINE
SPARE	T-1-		-	15	1	23	11	+	24	1	15		-	-	-	JANITOR LIGHTS
E WAITING ROOM DROP	T- I-	-		20	1	25	1 🖡		26	1	20	-		-	-	EAST POLE
W WAITING ROOM DROP	T- -		-	20	1	27	11	+	28	1	15		-	-	-	WEST POLE
E WIREMOLD	T-1-	-		20	1	29			30	2	15	-		-	-	SPARE
		0	0				•	•				0	0			
WATTS: BUS A:	)			-							_			•		
BUS B:	5	FIELD	<b>VERIF</b>	Y ALL	EΧ	<b>ISTIN</b>	G CI	RCI	JITS A	ND	BREA	KER S	IZES			

					ELI	ΞC	TRI	С	AL	. 1	PAN	ΙΕΙ	L: C					
							(22	2,0	00 A	٨.١.	C.)							
VOLTAGE: 120/240 V							N	ΙA	IN:20	00	Α							FEED: EXISTING
Phase: 1Ø					LC	)C/	NOITA	l: F	FRE	IG	HT OF	FIG	CE					MOUNTING: SURFACE
DESCRIPTION	REC	ာ		VA	BRK		СКТ	ı	BUS		CKT		RKR	V	A	REC	ပြ	DESCRIPTION
DEGGINI NOI	22	_	Α	В	AMP	Р	NO.	(	CON	N	NO.	Ρ	AMP	Α	В	2	ᅼ	DECORN HOW
EXISTING	-	-	-		-	1	1	١,	•		2	1	-	-		-	-	EXISTING
EXISTING	-	-		-	-	1	3		1	ŀ	4	1	-		-	-	-	EXISTING
EXISTING	-	-	-		-	-	5	١,	•		6	1	20	1380		-	-	AUTOMATIC DOORS
EXISTING	-	-		-	-	-	7		1	ŀ	8	1	20		1380	-	-	AUTOMATIC DOORS
EXISTING	-	-	-		-	-	9	] •	<b>•</b> '		10	ı	-	ı		-	-	EXTERIOR SOUTH SIDE
EXISTING	-	-		-	-	-	11		٠ ا	ŀ	12	ı	-		-	-	-	EXTERIOR EAST SIDE
ROOF SERVICE RECEP	1	-	180		20	1	13	١,	•	l	14	-	-	-		-	-	EXISTING
EXISTING	-	-		-	-	-	15		٠ ا	ŀ	16	-	-		-	-	-	EXISTING
EXISTING	-	-	-		-	-	17	۱,	•		18	-	-	-		-	-	EXISTING
EXISTING	T-I	-		-	-	-	19	1	١ ،	ŀ	20	-	-		-	-	-	EXISTING
ICE MACHINE	T-I	-	-		-	-	21	١,	•		22	-	-	-		-	-	EXISTING
EXISTING	1-1	-		-	-	-	23	1	٠ (	ŀ	24	-	-		-	-	-	ICEBOX
SPARE	1-1	-	-		-	-	25	۱,		П	26	-	-	-		-	-	SPARE
			180	0				•						1380	1380	Г		
WATTS: BUS A:156	0	٠		•	-											•		
BUS B: 138	0		BOLD	DITEMS	ARE	ΝE	w to	Ρ	ANE	ELI	BOAF	D						
			FIELD	VERIF	Y ALL	ΕX	ISTIN	G	CIR	CL	JITS A	ND	BREA	KER S	SIZES			
TOTAL WATTAGE 294	0																	

VOLTAGE: 120/240 V							М	AIN	:100	) A				FE	FEED: SEE CONDUIT SCHEDULE E.4.0			
Phase: 1Ø					L	.00	ATIO	N: B	OIL	ER RO	OO	Л				MOUNTING: SURFACE		
DESCRIPTION	) L	19	A	VA I B	BRK AMP	_	CKT NO.	_	US DNN	CKT NO.	_	RKR AMP	A I	В		DESCRIPTION		
BOILER	-	+	1800	_	20	1	1	1	I	2	1	20	0	ь	+	- SPARE		
PUMP 1	+-	+	1000	700	20	1	3	[	Ţ	4	1	20		0	+	- SPARE		
PUMP 2	+-	+	700	1	20	1	5		Ī	6	1	20	0		+	- SPARE		
PUMP 3	Ť-	†-	1	120	20	1	7		1	8	1	20	-	0	1-1	- SPARE		
PUMP 4	Τ.	١.	120		20	1	9	↓		10	-	-	- 1		1-1	- BLANK		
PUMP 5	1-	1-		120	20	1	11		•	12	-	-		-	1-1	- BLANK		
BOILER RECEP	1	†-	180		20	1	13	↓		14	-	-	-		1-1	- BLANK		
BLANK	-	-		-	-	-	15		+	16	-	-		-	1-1	- BLANK		
BLANK	-	-	-		-	-	17	•		18	-	-	-		-	- BLANK		
BLANK	Τ-	T-		-	-	-	19		+	20	-	-		-	1-1	- BLANK		
BLANK	-	T-	-		-	-	21	•		22	-	-	-		1-1	- BLANK		
BLANK	-	T-		-	-	-	23		•	24	-	-		-	-	- BLANK		
			2800	940									0	0				
WATTS: BUS A:28	_																	
BUS B:9	10		FIELD	VERIF	Y ALL	EX	ISTIN	ЭC	IRC	JITS A	ND	BREA	KER SI	ZES				

#### **GENERAL NOTES:**

- 1. ALL WORK SHALL CONFORM TO THE LATEST ADOPTED VERSION OF THE NATIONAL ELECTRICAL CODE (NEC).
- 2. ALL WIRING SHALL BE IN CONDUIT.
- 3. CONDUIT SHALL BE EMT WITH COMPRESSION TYPE OR SCREW
- 4. ALL FLEXIBLE METALLIC AND PVC CONDUIT WHERE ALLOWED BY LOCAL CODE IS TO BE PROVIDED WITH SEPARATE GROUND WIRE.
- 5. ALL POWER WIRES AND CABLES SHALL BE COPPER #12 AWG. UNLESS NOTED OTHERWISE OR REQUIRED BY THE MANUFACTURER OF THE CONNECTED DEVICE. WIRE SHALL BE CODE TYPE THWN/THHN, UNLESS OTHERWISE STATED.
- 6. ALL CIRCUITS SHALL HAVE SEPARATE NEUTRALS, THROUGHOUT THE ENTIRE CIRCUIT.
- 7. ALL NEW SWITCHES SHALL BE RATED AT 20 AMPS.
- 8. ALL OUTLETS SHALL BE RATED 15 AMPS. GROUND-FAULT CIRCUIT INTERRUPTER TYPE OUTLETS SHALL BE INSTALLED IN THOSE LOCATIONS AS REQUIRED BY THE NEC OR AS DESIGNATED ON THE DRAWINGS.
- 9. PROVIDE ALL OUTLET, LIGHTING FIXTURES, AND J-BOXES THROUGHOUT THE AREA IN ACCESSIBLE LOCATIONS. BOXES SHALL BE OF GALVANIZED KNOCK OUT TYPE WITH SCREW COVERS.
- 10. REFER TO MECHANICAL DRAWINGS FOR THE LOCATION OF EXHAUST FANS AND HVAC EQUIPMENT. CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF ALL CONDUITS, J-BOXES, WIRING, DISCONNECT SWITCHES, AND THERMOSTAT J-BOXES.
- 11. CONTRACTOR IS TO FURNISH AND INSTALL CONDUIT FOR LIFE SAFETY AND LOW VOLTAGE WIRING. INSTALL AND CONNECT LINE VOLTAGE WIRING. LOW VOLTAGE-WIRING CONNECTIONS ON HVAC SYSTEM BY CONTRACTOR.
- 12. USE ELECTRONIC BALLAST ON ALL FLUORESCENT LIGHTING. WIRE CONNECTION FROM LIGHT FIXTURES MAY BE ENCASED IN FLEXIBLE CONDUIT 6'-0" MAXIMUM.
- 13. ALL TYPE BATTERY EMERGENCY LIGHT FIXTURES AND BATTERY EXIT SIGNS SHALL BE CIRCUITED VIA A SEPARATE SET OF CONDUIT AND JUNCTION BOXES. DESIGNATED ONLY FOR (BATTERY EMERGENCY) LIGHT FIXTURES AND / OR BATTERY EXIT SIGNS.
- 14. CONTRACTOR SHALL VERIFY ALL EQUIPMENT NAME PLATES AND INSTALLATION REQUIREMENTS PRIOR TO DOING WORK. EQUIPMENT IS TO BE INSTALLED PER MANUFACTURERS SPECIFICATIONS.

KANSAS DEPARTMENT OF TRANSPORTATION

ELECTRICAL PANELBOARD SCHEDULES

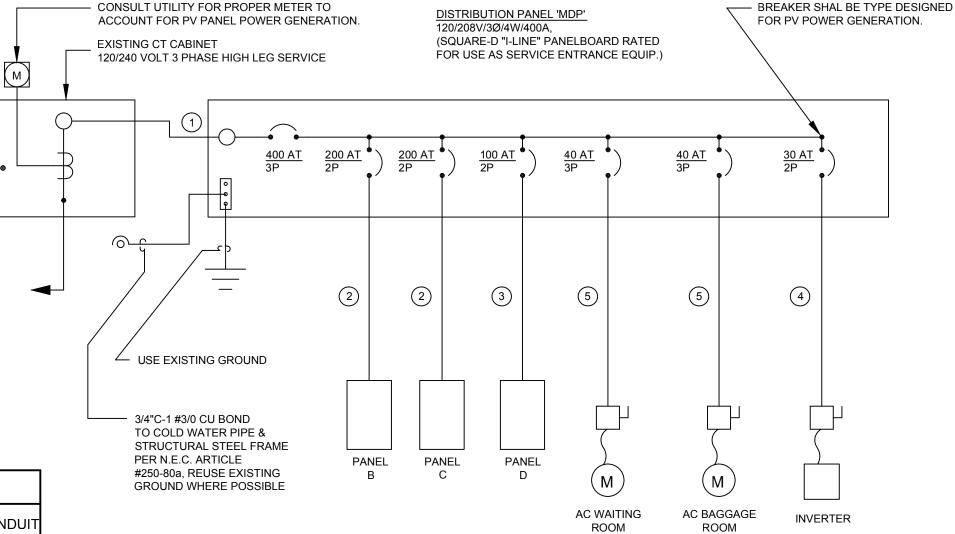
FHWA APPROVAL XX-XX-XX APP'D DESIGNED TRACED QUANTITIES DESIGNED DESIGN CK. TRACE CK. DESIGN CK. QUAN. CK

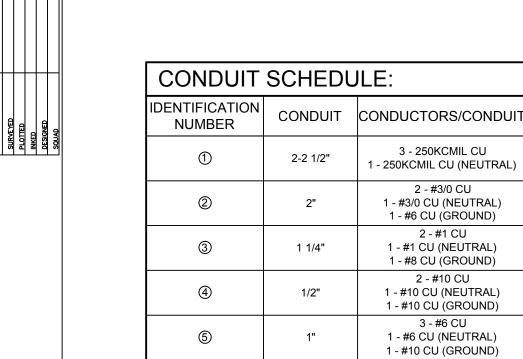
PANELBOARD SCHEDULES

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	23 TE-0373-01	2014	83	143
F.A. NO.				

SHORT CIRCUIT PROTECTION NOTE: SYSTEM SHALL BE U.L. LISTED/ TESTED FOR SERIES RATING BETWEEN CKT. BREAKERS AT THE DISTRIBUTION PANEL & ALL THE DOWNSTREAM 10k A.I.C. RATED PANELS & CIRCUIT BREAKERS TO WITHSTAND A MIN. OF 22,000 AMPS FAULT CURRENT

NOTED HERE TO NEW MDP.





KANSAS DEPARTMENT OF TRANSPORTATION

ELECTRICAL RISER & CONDUIT SCHEDULE

FHWA APPROVAL XX-XX-XX APP'D XXX TRACED DESIGNED DESIGNED QUANTITIES DESIGN CK. QUAN. CK TRACE CK. DESIGN CK.

**ELECTRICAL RISER** 

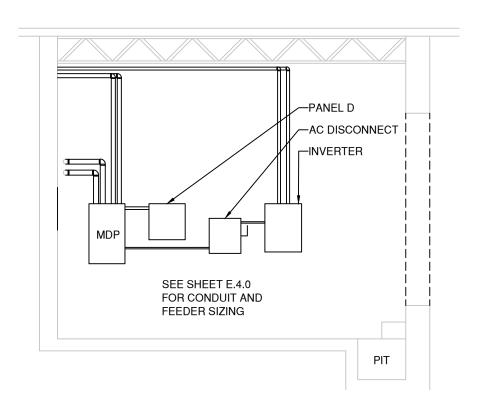
FIELD VERIFY CIRCUITS IN OLD

PANEL. MOVE ANY CIRCUITS NOT

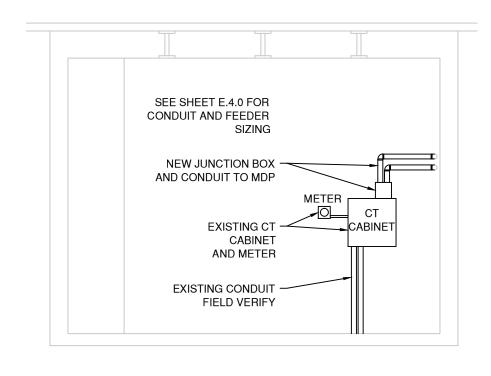
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	23 TE-0373-01	2014	84	143
F.A. NO.		•		•

LIGHTIN	NG SCHEDUL	E:								
						MOUN	NTING	ì		
FIXTURE	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	LAMP TYPE	WALL	RECESSED	SURFACE	PENDANT	HEIGHT	REMARKS
A	EXISTING	EXISTING	1' x 4' RECESSED	32W T-8: 2900 LUMENS		Х			9' - 0"	RETROFIT EXISTING FIXTURES WITH NEW T8 LAMPS, TOMBSTONES AND ELECTRONIC BALLASTS.
В	EXISTING	EXISTING	CAN LIGHT	23 W COMPACT FLUORESCENT		Х			9' - 0"	REPLACE THE EXISTING BULB WITH AN ENERGY EFFICIENT COMPACT FLUORESCENT LIGHT BULB.
С	EXISTING	EXISTING	1' X 1' RECESSED	23 W COMPACT FLUORESCENT		X			9' - 0"	REPLACE THE EXISTING BULB WITH AN ENERGY EFFICIENT FLUORESCENT LIGHT BULB.
D	EXISTING	EXISTING	1' X 1' RECESSED EXTERIOR	23 W T-3 CFL: 1700 LUMENS		X			9' - 0"	REPLACE THE EXISTING BULB WITH AN ENERGY EFFICIENT FLUORESCENT LIGHT BULB.
E	EXISTING	EXISTING	PENDANT FIXTURE	40 W COMPACT FLUORESCENT				Χ	8' - 0"	REPLACE THE EXISTING BULB WITH AN ENERGY EFFICIENT FLUORESCENT LIGHT BULB.
□ F	HOLOPHANE	30803WS	WALL LIGHT 9.5 " WIDE X 10" DEEP X 10" HIGH	200 W EQUIVALENT LED	Х				8' - 0"	REPLACE WITH LIKE UNIT WITH LIGHT CUT OFF.
⊢⊖ G	REFER TO SPECIFICATIONS	EXISTING	WALL MOUNT	200 W HOLOPHANE	Χ				8' - 0"	REPLACE SIX OF THE SEVEN EXISTING FIXTURES WITH THE HOLOPHANE 420 FIXTURE. REPAIR ONE.

LIGHTING SCHEDULE SCALE: NTS



CONTRACTOR SHALL PROVIDE ALTERNATES TO EACH FIXTURE REFURBISHED USING LED TYPE LAMPS.



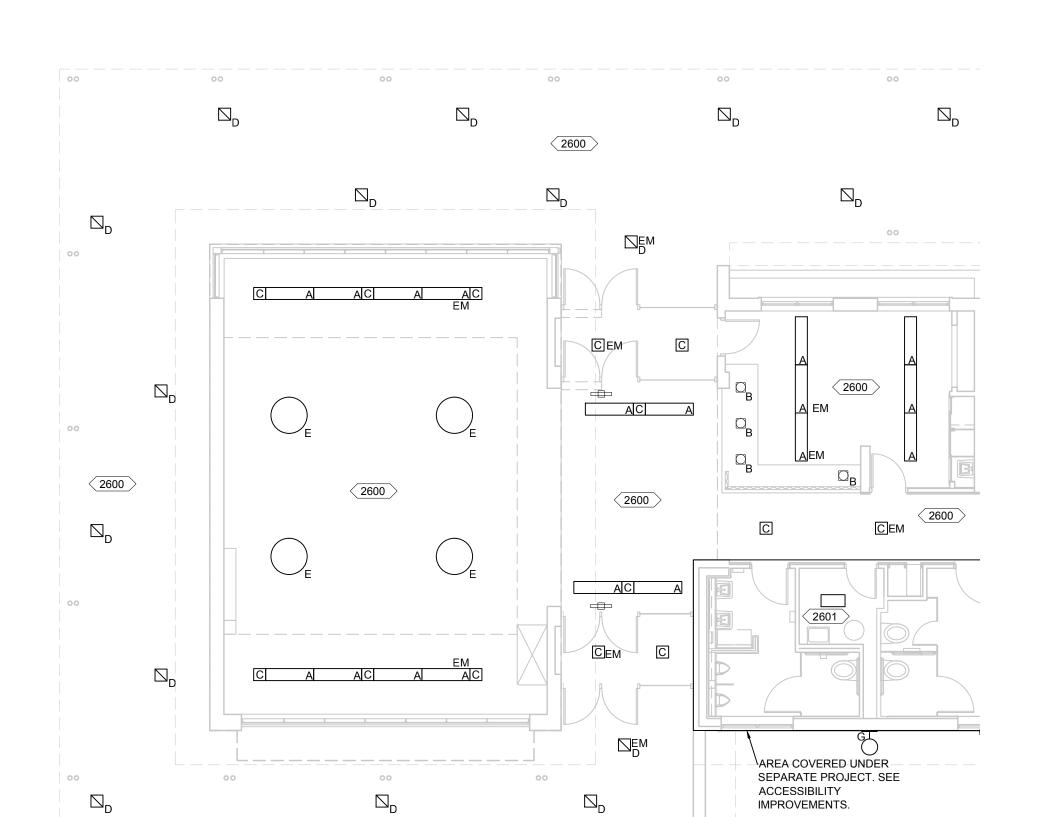
KANSAS DEPARTMENT OF TRANSPORTATION LIGHTING SCHEDULE & BOILER ROOM SECTIONS

E.5.0

**3** BOILER ROOM SOUTH SECTION SCALE: 1/4" = 1'-0"

HWA APPROVA	AL XX-XX-XX	APP'D	XXX
ESIGNED	DESIGNED	QUANTITIES	TRACED
ESIGN CK.	DESIGN CK.	QUAN. CK	TRACE CK.

**2** BOILER ROOM WEST SECTION SCALE: 1/4" = 1' - 0"



 $\square_{\mathsf{D}}$ 

 $\square^{\mathsf{D}}$ 

(2600)

 $\square^{\mathsf{D}}$ 

STATE PROJECT NO.

YEAR SHEET TOTAL NO. SHEETS

KANSAS 23 TE-0373-01 2014 85 143

F.A. NO.

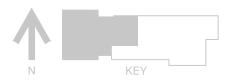
#### **INSTALLATION NOTES:**

2600 RETROFIT EXISTING LIGHT FIXTURES WITH NEW T8 FLUORESCENT OR EQUIVALENT LUMEN COMPACT FLUORESCENT LIGHT BULBS.

2601 PROVIDE CENTRAL BACKUP BATTERY PACK FOR LIGHT FIXTURES DESIGNATED AS EM (EMEREGNCY EGRESS) LIGHT FIXTURES. SEE LIGTING LAYOUT. BATTERY SHALL ALOS LIGHT THE EXIT SIGNS. LOCATED BATTERY PACK IN JANITORS CLOSET.

#### LIGHTING LEGEND:

- STANDARD SWITCH (48" A.F.F.)
- 3 WAY SWITCH (48" A.F.F.)
- \$<sub>P.L.</sub> PILOT LIGHT SWITCH (48" A.F.F.)
- \$<sub>M</sub> SYNERGY LIRW NIGHT OCCUPANCY SENSOR
- 2' X 4' FLUORESCENT FIXTURE
  FIXTURE TYPE
- RECESSED CAN FIXTURE FIXTURE TYPE
- EXIT SIGN CONNECTED TO EM CIRCUIT
- ELECTRICAL PANEL

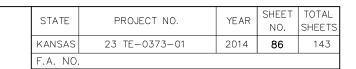


KANSAS DEPARTMENT OF TRANSPORTATION

LIGHTING LAYOUT WEST

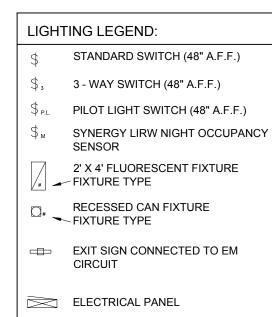
E.6.0

FHWA APPROVA	AL XX-XX-XX	APP'D	XXX
DESIGNED	DESIGNED	QUANTITIES	TRACED
DESIGN CK.	DESIGN CK.	QUAN. CK	TRACE CK.



2600 RETROFIT EXISTING LIGHT FIXTURES
WITH NEW T8 FLUORESCENT OR
EQUIVALENT LUMEN COMPACT
FLUORESCENT LIGHT BULBS.

PROVIDE CENTRAL BACKUP BATTERY PACK FOR LIGHT FIXTURES DESIGNATED AS EM (EMEREGNCY EGRESS) LIGHT FIXTURES. SEE LIGTING LAYOUT. BATTERY SHALL ALOS LIGHT THE EXIT SIGNS. LOCATED BATTERY PACK IN JANITORS CLOSET.



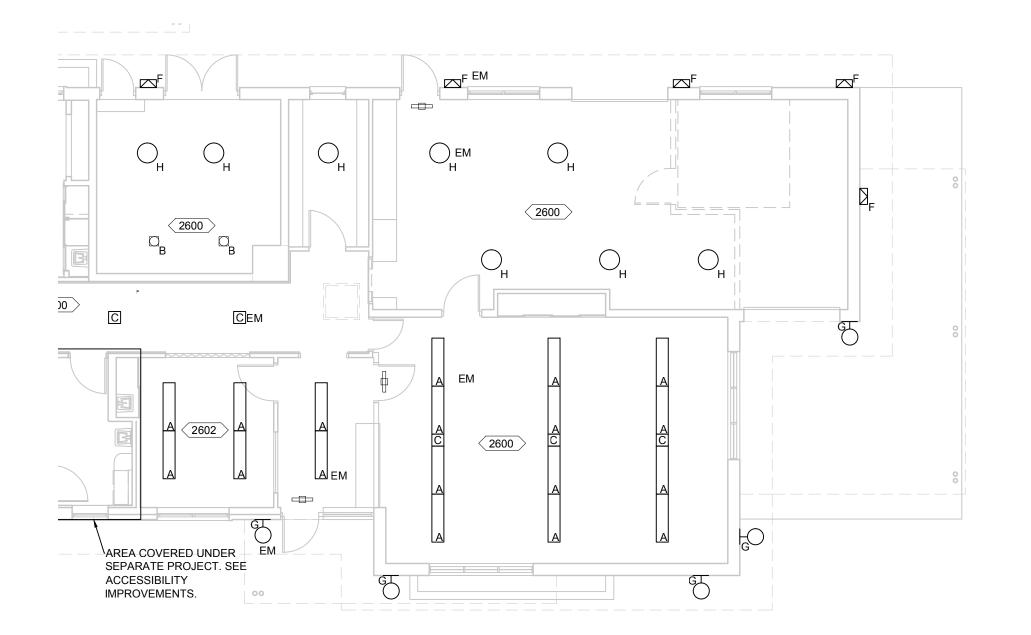


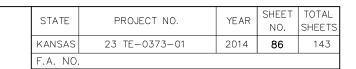
KANSAS DEPARTMENT OF TRANSPORTATION

LIGHTING LAYOUT EAST

E.7.0

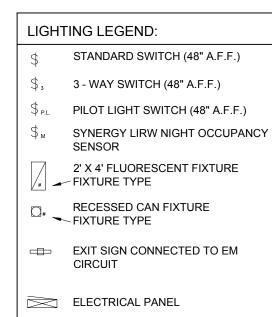
FHWA APPROV	AL XX-XX-XX	APP'D	XXX
DESIGNED	DESIGNED	QUANTITIES	TRACED
DESIGN CK.	DESIGN CK.	QUAN. CK	TRACE CK.





2600 RETROFIT EXISTING LIGHT FIXTURES
WITH NEW T8 FLUORESCENT OR
EQUIVALENT LUMEN COMPACT
FLUORESCENT LIGHT BULBS.

PROVIDE CENTRAL BACKUP BATTERY PACK FOR LIGHT FIXTURES DESIGNATED AS EM (EMEREGNCY EGRESS) LIGHT FIXTURES. SEE LIGTING LAYOUT. BATTERY SHALL ALOS LIGHT THE EXIT SIGNS. LOCATED BATTERY PACK IN JANITORS CLOSET.



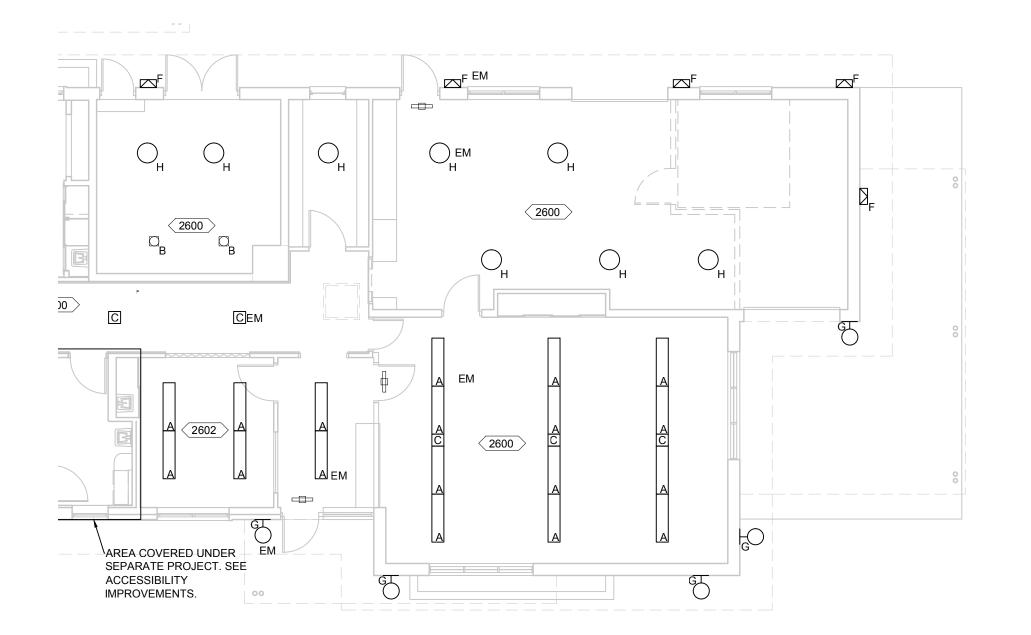


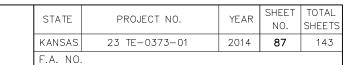
KANSAS DEPARTMENT OF TRANSPORTATION

LIGHTING LAYOUT EAST

E.7.0

FHWA APPROV	AL XX-XX-XX	APP'D	XXX
DESIGNED	DESIGNED	QUANTITIES	TRACED
DESIGN CK.	DESIGN CK.	QUAN. CK	TRACE CK.





2600 PANEL B TO BE REMOVED AND REPLACED. EXISTING WIRING AND CIRCUITS TO REMAIN.

2601 > PROVIDE POWER ABOVE THE CEILING NEAR THE MAIN ENTRY DOORS FOR NEW AUTOMATIC DOORS. PROVIDE DISCONNECT ABOVE THE LAY-IN TILE CEILING FOR THE AUTOMATIC DOORS.

#### POWER LEGEND:

STANDARD RECEPTACLE (18" A.F.F.)

EXISTING RECEPTACLE

WATER PROOF TYPE RECEPTACLE

GFI RECEPTACLE (WITHIN 6' OF A SINK)

**EQUIPMENT MOTOR** 

DISCONNECT SWITCH

MECH. EQUIPMENT DESIGNATION DESIGNATED NUMBER



KANSAS DEPARTMENT OF TRANSPORTATION

POWER LAYOUT WEST

FRO

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2.WFB	FHWA APPROV	/AL XX-XX-XX	APP'D	XXX
	DESIGNED	DESIGNED	QUANTITIES	TRACED
OALL, I/O = 1-0	DESIGN CK.	DESIGN CK.	QUAN. CK	TRACE CK.

SURFACE WIRE MOLD

2600

**PANEL** В

AREA COVERED UNDER SEPARATE PROJECT. SEE

ACCESSIBILITY IMPROVEMENTS.

2601

2601

MDP 🤻

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	23 TE-0373-01	2014	88	143
F.A. NO.				

2600 CONNECT CIRCUITS FROM EXISTING PANEL A LOCATED IN THE HALLWAY TO NEW MDP PANEL LOCATED IN THE BOILER ROOM, REFERENCE ELECTRICAL RISER AND PANEL SCHEDULES FOR MORE INFORMATION.

2601 MDP AND PANEL D TO BE LOCATED ON WEST WALL OF BOILER ROOM.

2602 PANEL C TO BE REMOVED AND REPLACED. EXISTING WIRING AND CIRCUITS TO REMAIN. ADD CIRCUITS AS NEEDED. SEE E.3.0 FOR MORE INFORMATION.

# POWER LEGEND:

STANDARD RECEPTACLE (18" A.F.F.)

EXISTING RECEPTACLE

WATER PROOF TYPE RECEPTACLE

GFI RECEPTACLE (WITHIN 6' OF A SINK)

EQUIPMENT MOTOR

→ DISCONNECT SWITCH

→ DI

MECH. EQUIPMENT DESIGNATION
DESIGNATED NUMBER



KANSAS DEPARTMENT OF TRANSPORTATION

POWER LAYOUT EAST

E.9.0

1	POWER LAYOUT EAST SCALE: 1/8" = 1'-0'

∏ INVERTER

2601

PANEL 2602

METER 1/E

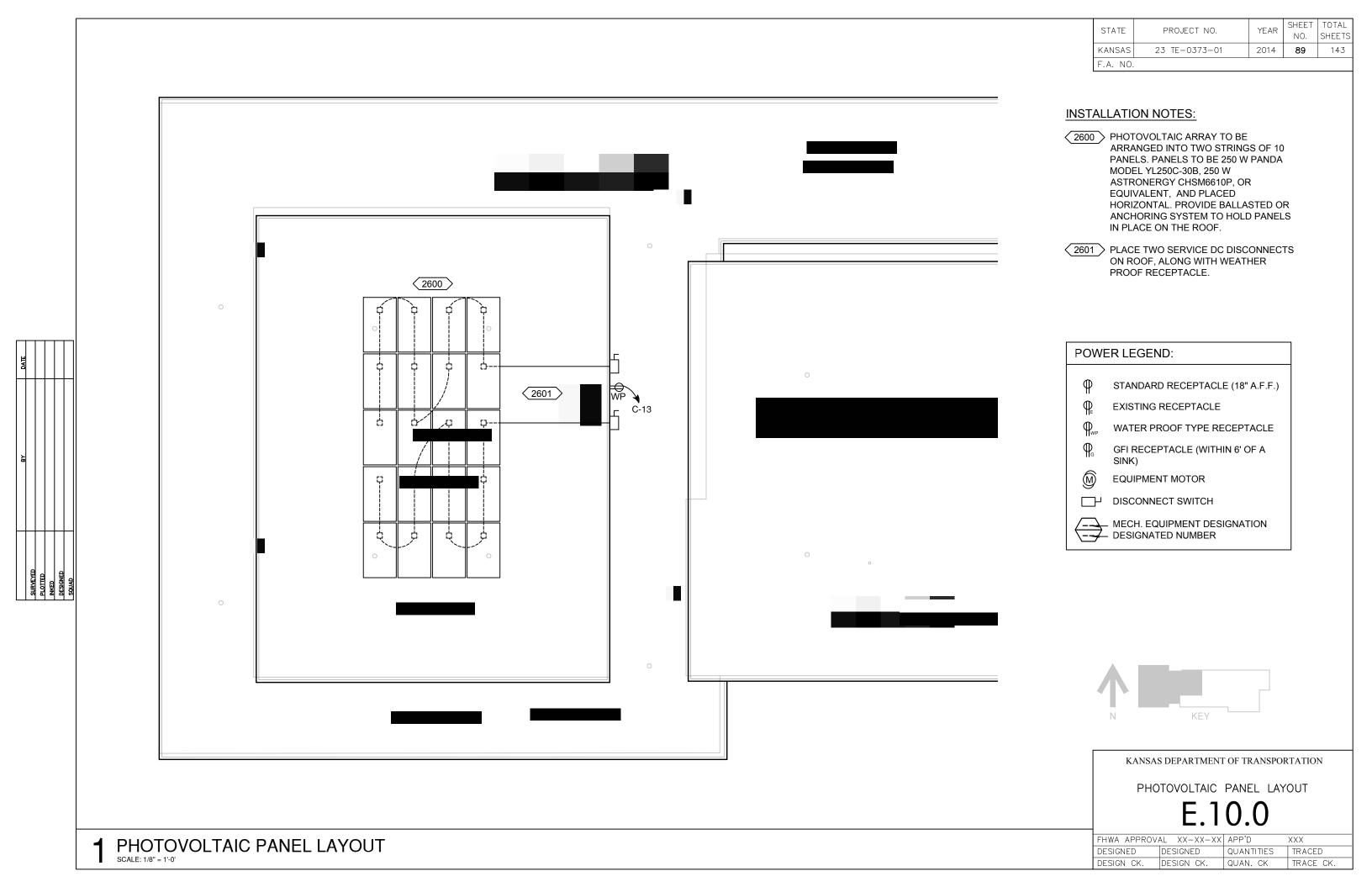
<sup>\</sup>AREA COVERED UNDER SEPARATE PROJECT. SEE

ACCESSIBILITY IMPROVEMENTS.

PANEL D

MDP CT

FHWA APPROVAL XX-XX-XX		APP'D	XXX
DESIGNED	DESIGNED	QUANTITIES	TRACED
DESIGN CK.	DESIGN CK.	QUAN. CK	TRACE CK.



#### GENERAL NOTES: (WET-PIPE FIRE SUPPRESSION SPRINKLERS)

- 1. INCLUDE ALL PLANT FACILITIES, LABOR, MATERIAL, EQUIPMENT AND SERVICE NECESSARY FOR THE DESIGN, FABRICATION AND INSTALLATION OF THE AUTOMATIC SPRINKLER SYSTEM AND PIPING.
- 2. SYSTEM INSTALLATION SHALL BE DESIGNED AND COMPLY WITH THE LATEST VERSION OF THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA), NFPA 13 INSTALLATION OF SPRINKLER SYSTEMS, AND NFPA 70 NATIONAL ELECTRICAL CODE.
- 3. SUBMIT DRAWINGS SIGNED BY A REGISTERED FIRE PROTECTION ENGINEER OR SIGNED BY A NICET IP CERTIFIED FIRE SUPPRESSION DESIGNER IF ALLOWED BY LOCAL FIRE CODE OFFICIAL. SUBMIT HYDRAULIC CALCULATIONS TO SUBSTANTIATE COMPLIANCE WITH HYDRAULIC DESIGN REQUIREMENTS. SUBMIT NAME OF SOFTWARE PROGRAM IF USED AND CERTIFICATES.
- 4. DESIGN SHALL BE IN ACCORDANCE WITH HYDRAULIC CALCULATIONS FOR UNIFORM DISTRIBUTION OF WATER OVER THE DESIGN AREA. LOCATE SPRINKLER HEADS IN A CONSISTENT PATTERN. FIELD VERIFY ROUTING IN THE EXISTING BUILDING.
- 5. DEVICES AND EQUIPMENT FOR FIRE PROTECTION SERVICE SHALL BE UL FPED LISTED.
- 6. IN GENERAL, WORK SHALL INCLUDE BUT NOT BE LIMITED TO:
  A. COMPLETE OVERHEAD AUTOMATIC SPRINKLER SYSTEM.
  B. INSTALLATION OF SYSTEM CONTROL VALVES, POST
  INDICATOR VALVES (IF REQUIRED), CONTROL VALVE, DRAIN
  VALVES, INSPECTOR'S TEST VALVES, PLUS INSTALLATION OF
  GAUGES AT MAIN RISER, AND SIGNS TO IDENTIFY SAID VALVES.
- C. INSTALLATION OF WATER FLOW INDICATORS, PRESSURE-OPERATED ALARM SWITCHES AND VALVE SUPERVISORY SWITCHES.
- D. INSTALLATION OF OS&Y AND BUTTERFLY VALVES.
  E. INSTALLATION OF 2-1/2 INCH x 2-1/2 INCH x 4 INCH FIRE
  DEPARTMENT PUMPER CONNECTION (CONSULT LOCAL FIRE
  DEPARTMENT FOR PUMPER CONNECTION REQUIREMENTS AND
  ADJUST AS NECESSARY).
- 7. PROVIDE FITTINGS FOR CHANGES IN DIRECTION OF PIPING AND FOR CONNECTIONS. MAKE CHANGES IN PIPING SIZES THROUGH TAPERED REDUCING PIPE FITTINGS; BUSHINGS WILL NOT BE PERMITTED.
- 8. STEEL PIPING SHALL BE SCHEDULE 40. FITTINGS INTO WHICH SPRINKLER HEADS, SPRINKLER HEAD RISER NIPPLES, OR DROP NIPPLES ARE THREADED SHALL BE THREADED TYPE. FITTINGS SHALL BE UL FPED LISTED. CPVC FIRE SERVICE PIPING MAY BE USED WHERE ALLOWED BY LOCAL CODE OFFICIALS AND WHERE PIPING IS HIDDEN AND WILL NOT BE EXPOSED TO ANY POTENTIAL CONTACT DAMAGE.
- 9. PROVIDE NOMINAL 0.50 INCH ORIFICE SPRINKLER HEADS.
  O-RINGS WILL NOT BE PERMITTED IN SPRINKLER HEADS.
  RELEASE ELEMENT OF EACH HEAD SHALL BE OF THE STANDARD
  TEMPERATURE RATING OR HIGHER AS SUITABLE FOR THE
  SPECIFIC APPLICATION.
- 10. PROVIDE PIPE HANGERS AND SUPPORTS IN ACCORDANCE WITH NFPA 13.
- 11. INSTALL PIPING STRAIGHT AND TRUE TO BEAR EVENLY ON HANGERS AND SUPPORTS. ALL PIPING SHALL BE REAMED TO REMOVE ALL BURRS, AND PIPE SECTIONS SHALL BE CLEANED INSIDE TO REMOVE ALL CHIPS AND FOREIGN MATERIALS PRIOR TO MAKING JOINTS.

- 12. KEEP THE INTERIOR AND ENDS OF NEW PIPING AND EXISTING PIPING AFFECTED BY CONTRACTOR'S OPERATIONS THOROUGHLY CLEANED OF WATER AND FOREIGN MATTER. KEEP PIPING SYSTEMS CLEAN DURING INSTALLATION BY MEANS OF PLUGS OR OTHER APPROVED METHODS. WHEN WORK IS NOT IN PROGRESS, SECURELY CLOSE OPEN ENDS OF PIPING TO PREVENT ENTRY OF WATER AND FOREIGN MATTER. INSPECT PIPING BEFORE PLACING INTO POSITION.
- 13. PROVIDE TEFLON PIPE THREAD PASTE ON MALE THREADS.
- 14. A DOUBLE CHECK BACK FLOW PREVENTER SHALL BE PROVIDED ON ALL FIRE MAINS AND SHALL BE ZURN MODEL 350, WATTS MODEL LF709, OR APPROVED EQUAL. THE DOUBLE CHECK BACK FLOW PREVENTER SHALL BE INSTALLED WITHIN BUILDING FOR FREEZE PROTECTION WITH A MINIMUM OF TWELVE (12) INCHES OF CLEAR SPACE BELOW OR AROUND THE DEVICE. THE DOUBLE CHECK BACK FLOW PREVENTER SHALL BE PROVIDED WITH TWO (2) MUELLER # A-2360-6 OUTSIDE SCREW AND YOKE (OS&Y) VALVES HAVING RESILIENT SEATS, WATTS SERIES 403RT-RW, OR APPROVED EQUAL. ONE SHALL BE LOCATED ON THE SUPPLY SIDE OF THE DOUBLE CHECK BACK FLOW PREVENTER. THE OS&Y VALVES SHALL BE PROVIDED WITH VALVE SUPERVISORY SWITCHES AND SHALL BE CONNECTED TO THE BUILDING'S FIRE ALARM SYSTEM.
- 15. THE FIRE DEPARTMENT PUMPER CONNECTION AND ITS REQUIRED SWING CHECK VALVE SHALL BE CONNECTED TO THE FIRE MAIN AND SHALL BE LOCATED ON THE SYSTEM SIDE AND DIRECTLY BELOW THE SECOND OS&Y VALVE.
- 16. THE FIRE DEPARTMENT PUMPER CONNECTION SHOULD BE LOCATED ADJACENT TO THE STREET FOR FIRE DEPARTMENT ACCESS.
- 17. OUTSIDE VALVES, IF REQUIRED, MUST BE POST INDICATING VALVES (PIV'S) AND SHOULD BE LOCATED FORTY (40) FEET FROM THE EXTERIOR WALL OF THE BUILDING, MINIMUM, UNLESS FACES BY A BLANK WALL WHERE A LESSER DISTANCE MAY BE ACCEPTABLE.
- 18. ALL DRAIN VALVES AND TEST VALVES SHALL BE REPLACEABLE RUBBER OR COMPOSITION DISCS.
- 19. ALL PENDANT SPRINKLERS LOCATED WITHIN SEVEN (7) FEET OF THE FLOOR SHALL BE PROVIDED WITH SPRINKLER GUARDS.
- 20. EXTRA SPRINKLERS IN QUANTITIES REQUIRED BY NFPA 13 (1989) SHALL BE PROVIDED AND SHALL BE PLACED WITHIN AN APPROVED CABINET WHICH SHALL BE LOCATED ADJACENT TO THE MAIN RISER. THE CABINET SHALL BE PROVIDED WITH A SPRINKLER WRENCH, OR SPECIAL WRENCH WHERE APPLICABLE.
- 21. EXTERIOR ELECTRIC HORN SHALL BE 120 VAC-POWERED, SYSTEM SENSOR SPECTRALERT #P2RHK-120, FEDERAL 350 WEATHERPROOF, OR APPROVED EQUAL.
- 22. VANE TYPE WATER FLOW INDICATORS SHALL BE POTTER VSR SERIES, SYSTEM SENSOR WFD SERIES, OR APPROVED EQUAL, AND SHALL INCLUDE TWO (2) SINGLE POLE DOUBLE THROW (SPDT) CONTACTS, AND PNEUMATIC ADJUSTABLE RETARD.

- STATE PROJECT NO.

  YEAR SHEET TOTAL NO. SHEETS

  KANSAS 23 TE-0373-01 2014 90 143

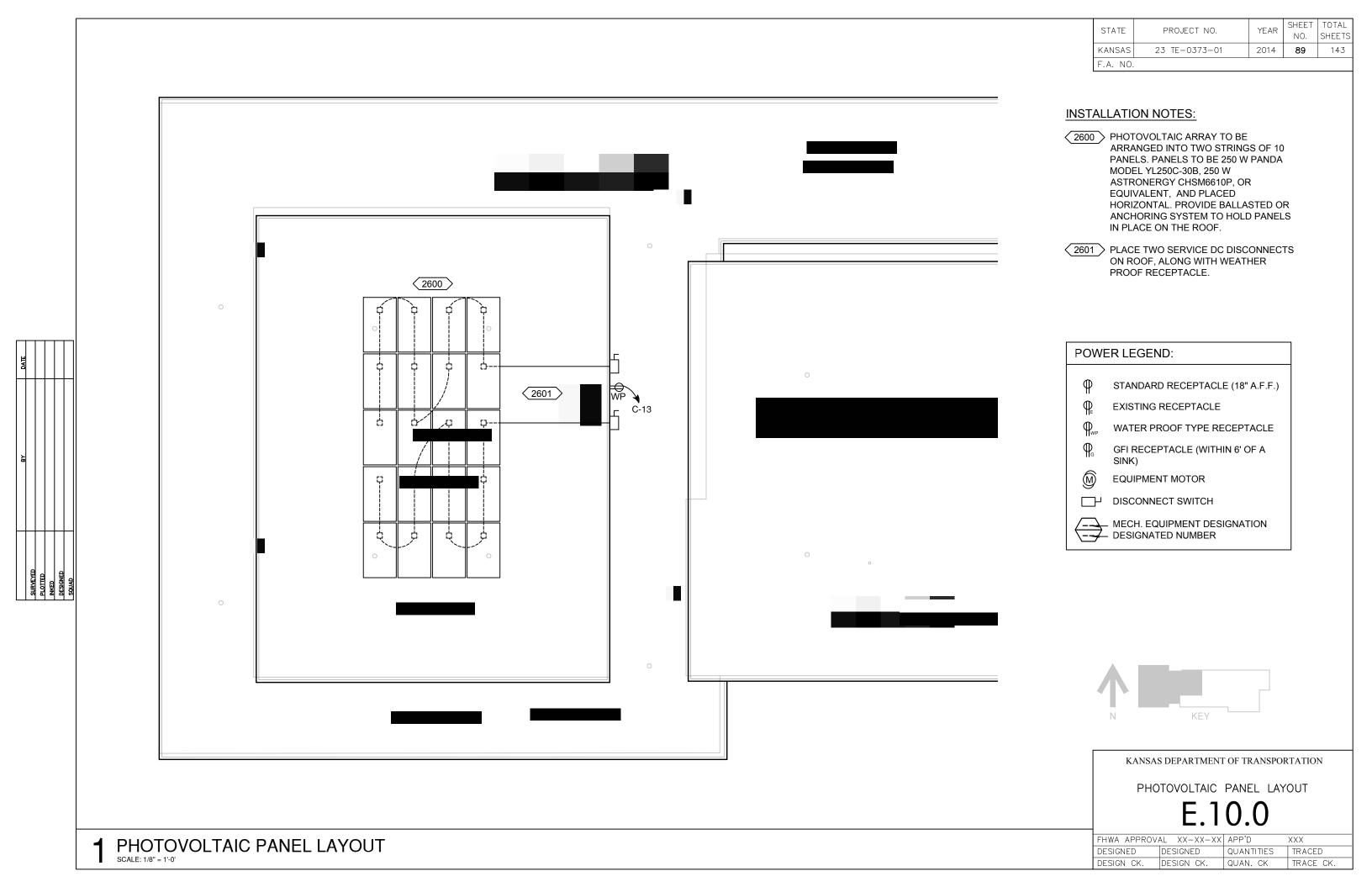
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- 23. VALVE SUPERVISORY SWITCHES SHALL INCLUDE SPDT CONTACTS. BUTTERFLY VALVES WITH INTERNAL SUPERVISORY SWITCHES ARE ACCEPTABLE. EXTERNAL MOUNTED SUPERVISORY SWITCHES SHALL BE POTTER DEVICES. VALVE SUPERVISORY SWITCHES SHALL BE INSTALLED AND ADJUSTED.
- 24. INSPECTOR'S TEST VALVES SHALL BE INSTALLED DOWNSTREAM OF WATER-FLOW DEVICE. INSPECTOR'S TEST OUTLETS SHALL BE PIPED TO DRAIN OUTSIDE OF THE BUILDING OR INTO THE SEWER DRAIN. VALVES SHALL BE WITHIN SIX (6) FEET OF THE FLOOR OR FINISHED GRADE. WHEN THE DISCHARGE OUTLET CANNOT BE SEEN FROM THE VALVE OR WHEN INSPECTOR'S TEST CONNECTIONS ARE PIPED INTO THE SEWER SYSTEM, A SIGHT GLASS SHALL BE PROVIDED. DIRECT INTERCONNECTIONS SHALL NOT BE MADE BETWEEN SEWERS AND SPRINKLER DRAINS.
- 25. INSTALL CONTROL VALVES, SUPPLY VALVES, AND WATER FLOW SWITCHES IN CLEARLY ACCESSIBLE LOCATIONS WITHIN FIVE (5) FEET OF THE FLOOR.
- 26. INSTALL FIRE DEPARTMENT PUMPER CONNECTION EIGHTEEN (18) INCHES TO TWENTY-FOUR (24) INCHES ABOVE PAVING OR GRADE WITH TWELVE (12) INCH CLEARANCE AROUND ALL SIDES.
- 27. INSTALL CHECK VALVES AND WATER FLOW INDICATORS WITH EIGHTEEN (18) INCH CLEARANCE FROM OBSTRUCTIONS SO THAT THEY CAN BE REMOVED AND SERVICED.
- 28. PRESSURE GAUGES SHALL BE PROVIDED AT EACH SIDE OF THE MAIN CHECK VALVE AND AT THE CONTROL VALVE.
- 29. PROVIDE PIPE MARKERS ON EXPOSED PIPING WITH THE WORDS "AUTO SPRINKLER" OR "FIRE SPRINKLER" IN A MINIMUM 2 INCH HIGH LETTERING SO AS TO BE EASILY READ FROM THE GROUND OR FLOOR LEVEL. MARKERS SHALL BE SPACED AT A MAXIMUM OF 25 FEET BETWEEN MARKERS.
- 30. UNDERGROUND MAIN PIPING SHALL BE FLUSHED PRIOR TO CONNECTION TO SPRINKLER RISER. FLUSHING SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF NFPA 13 AND NFPA 24, PRIVATE FIRE SERVICE MAINS. FLUSHING SHALL BE CONTINUED AT LEAST UNTIL A CLEAR FLOW IS OBTAINED.
- 31. ALL COMPONENTS OF THE SYSTEM, FROM THE TAPPING VALVE TO BRANCH LINES, MUST BE HYDROSTATICALLY TESTED AT 200 PSI FOR A MINIMUM OF TWO (2) HOURS. ALL PIPING MUST BE EXPOSED FOR THE HYDROSTATIC TEST. PORTIONS OF THE SYSTEMS MAY BE TESTED SEPARATELY, BUT CARE MUST BE TAKEN TO INSURE THAT ALL PIPING, CONNECTIONS THERETO, AND DEVICES ARE TESTED.
- 32. THE CONTRACTOR SHALL CERTIFY THAT THE WORK IS INSTALLED IN ACCORDANCE WITH THE PROJECT REQUIREMENTS AND THE REQUIREMENTS OF NFPA 13 AND NFPA 24.

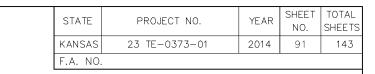
KANSAS DEPARTMENT OF TRANSPORTATION

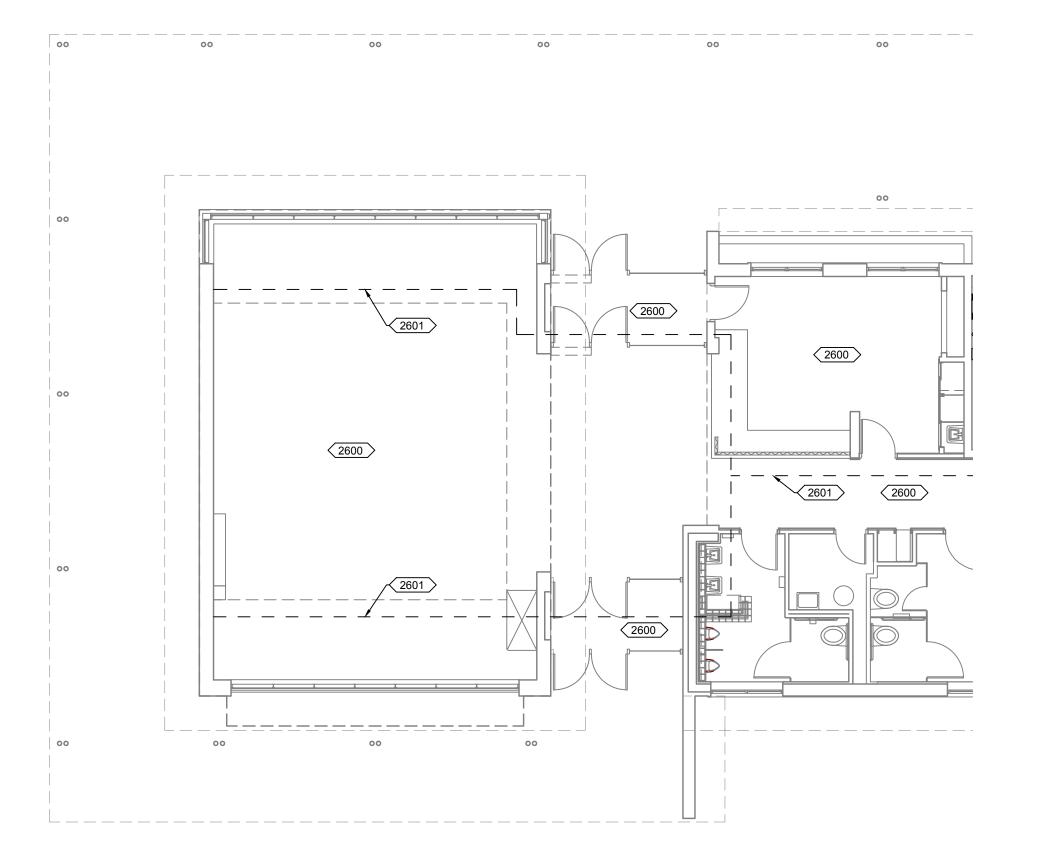
GENERAL NOTES

F.1.0

FHWA APPROVAL XX-XX-X		APP'D	XXX
DESIGNED	DESIGNED	QUANTITIES	TRACED
DESIGN CK.	DESIGN CK.	QUAN. CK	TRACE CK.







2600 SPRINKLER HEADS TO BE PLACED APPROPRIATELY ON CEILING AND WALLS TO COVER ALL AREAS.

2601 PROPOSED ROUTE FOR FIRE SPRINKLER PIPING WITHIN SOFFIT AND BELOW LAY-IN TILE CEILING. FIELD VERIFY ROUTING.

### LEGEND:

MAIN FIRE ALARM CONTROL PANEL

AUDIO/VISUAL FIRE ALARM DEVICE WITH, FOR EXAMPLE, 50dB AND 15 CD OUTPUT, MOUNT AT 6'-8" A.F.F.

S) PHOTOELECTRIC TYPE SMOKE DETECTOR

MANUAL FIRE ALARM PULL STATION, MOUNT AT 48" A.F.F.

AV SPRINKLER SYSTEM ALARM SWITCH

SPRINKLER SYSTEM FLOW SWITCH

SPRINKLER VALVE TAMPER SWITCH



KANSAS DEPARTMENT OF TRANSPORTATION

FIRE SUPPRESSION LAYOUT WEST

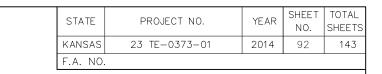
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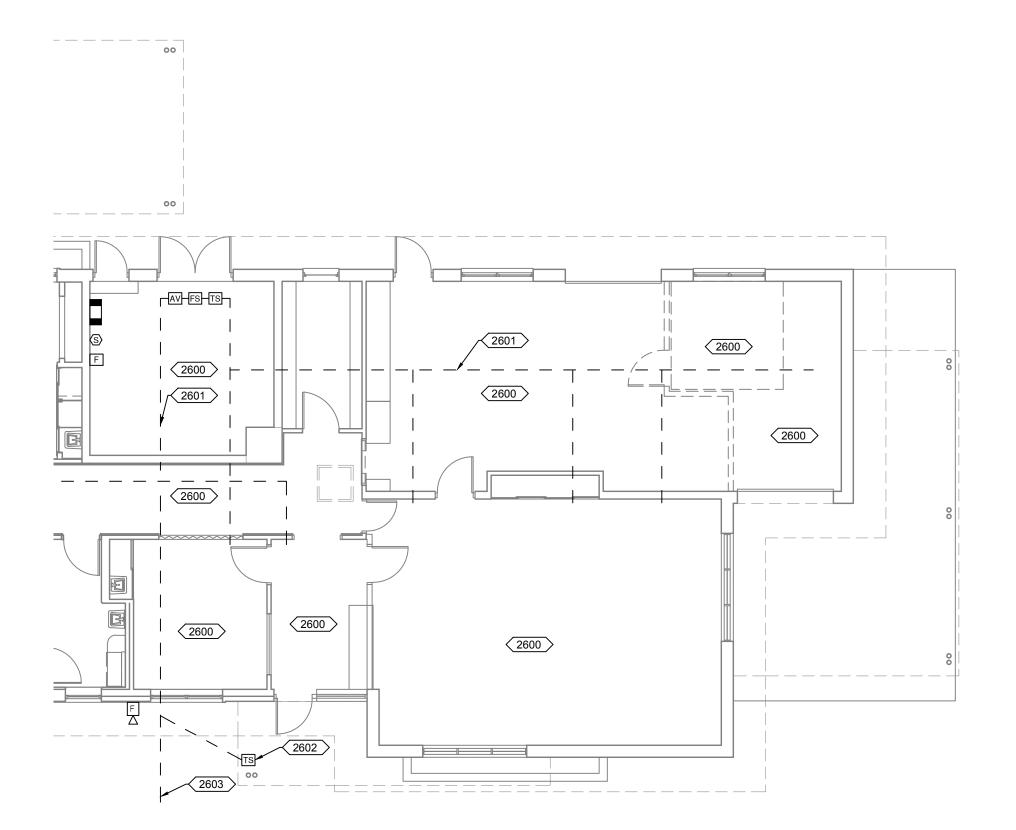
1 FIRE SUPPRESSION LAYOUT WEST

FHWA APPROVAL XX-XX-XX APP'D XXX

DESIGNED DESIGNED QUANTITIES TRACED

DESIGN CK. DESIGN CK. QUAN. CK TRACE CK.





- 2600 SPRINKLER HEADS TO BE PLACED APPROPRIATELY ON CEILING AND WALLS TO COVER ALL AREAS.
- 2601 PROPOSED ROUTE FOR FIRE SPRINKLER PIPING WITHIN SOFFIT AND BELOW LAY-IN TILE CEILING. FIELD VERIFY ROUTING.
- 2602 LOCATE FIRE DEPARTMENT CONNECTION AND PIV ABOVE NATURAL GAS METER VAULT.
- 2603 BORE UNDER BUILDING TO BOILER ROOM FOR NEW 4" FIRE SERVICE LINE.

#### LEGEND:

MAIN FIRE ALARM CONTROL PANEL

50dB AUDIO/VISUAL FIRE ALARM DEVICE WITH, FOR EXAMPLE, 50dB AND 15 CD OUTPUT, MOUNT AT 6'-8" A.F.F.

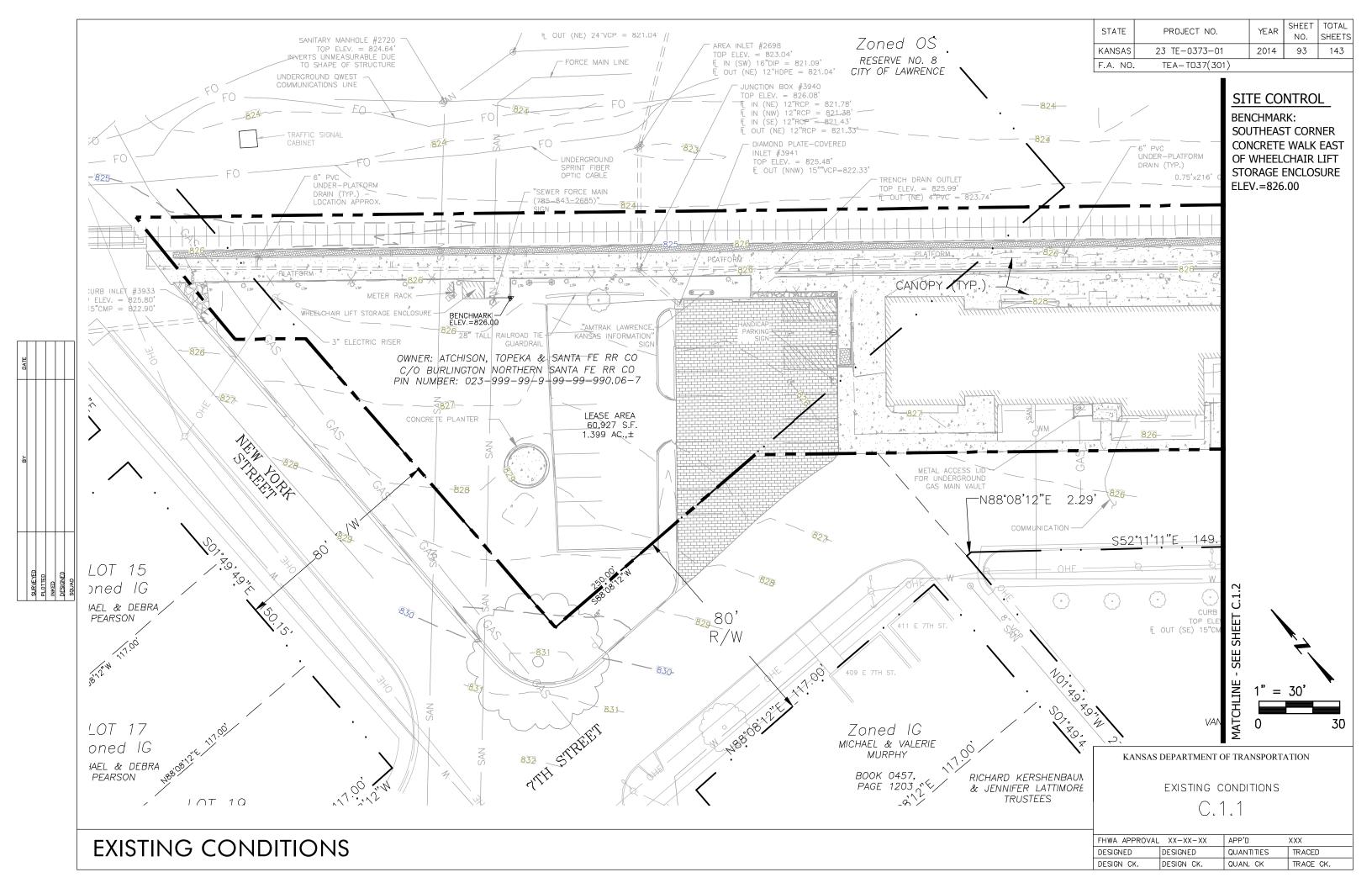
- PHOTOELECTRIC TYPE SMOKE DETECTOR
- MANUAL FIRE ALARM PULL STATION, MOUNT AT 48" A.F.F.
- AV SPRINKLER SYSTEM ALARM SWITCH
- S SPRINKLER SYSTEM FLOW SWITCH
- **TS** SPRINKLER VALVE TAMPER SWITCH

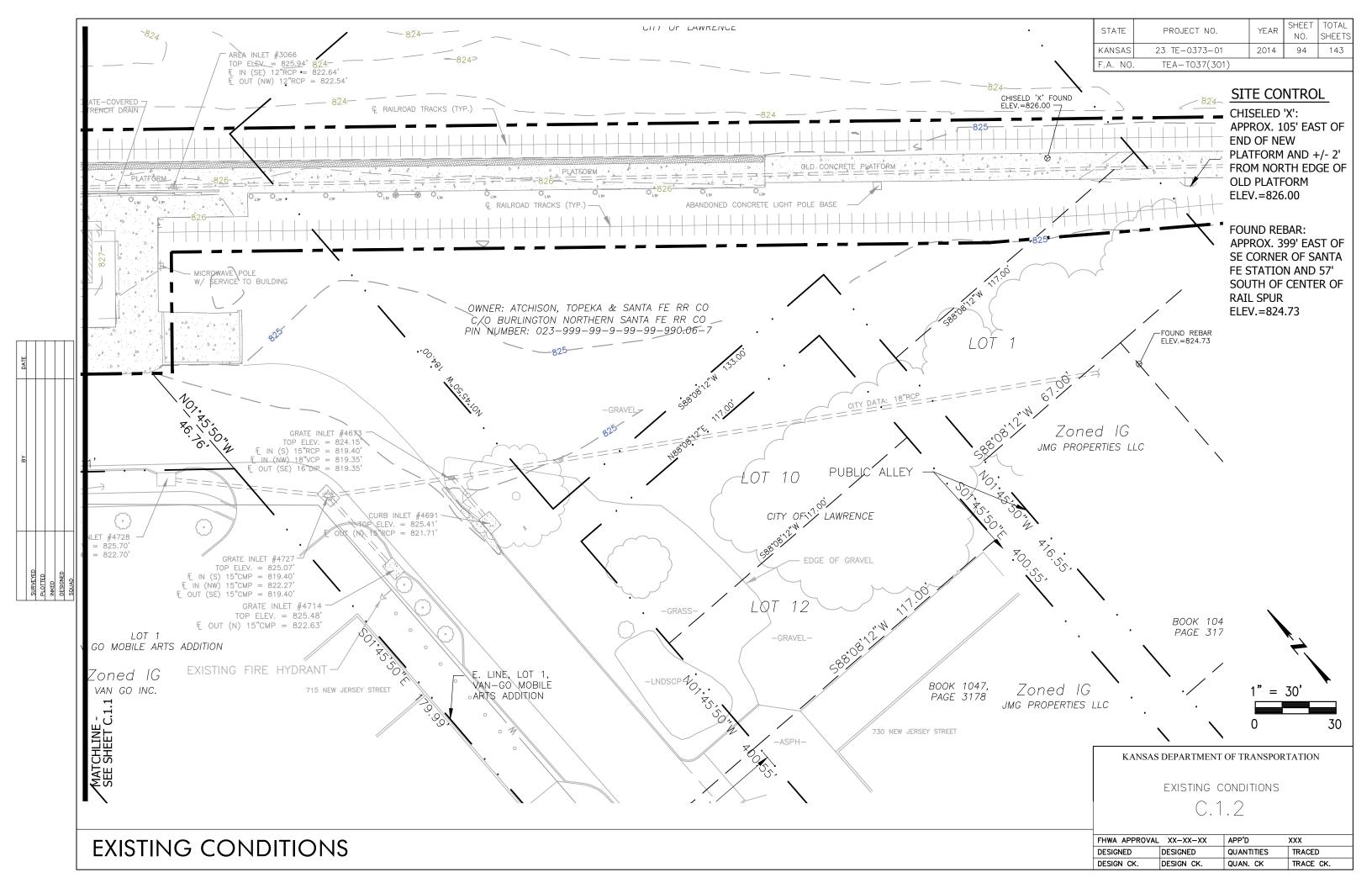


KANSAS DEPARTMENT OF TRANSPORTATION

FIRE SUPPRESSION LAYOUT EAST

F.3.0





#### DEMOLITION NOTES:

- 1. ALL UTILITY INFORMATION SHOWN HEREIN IS BASED ON THE INFORMATION AVAILABLE TO THE DESIGN PROFESSIONAL AT THE TIME OF DESIGN. THE CONTRACTOR SHALL VERIFY ALL UTILITY DEPTHS AND LOCATIONS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES TO FIELD LOCATE AND/OR ADJUST THEIR UTILITY AS REQUIRED FOR CONSTRUCTION. ALL UTILITY LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND THE DESIGN PROFESSIONAL ASSUMES NO LIABILITY FOR SAME. ADDITIONAL EXISTING UTILITIES MAY ALSO BE ENCOUNTERED. PRIOR TO ANY EXCAVATION WORK THE CONTRACTOR MUST NOTIFY ALL UTILITIES 48 HOURS PRIOR.
- 2. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING AND COORDINATING REMOVAL AND REPLACEMENT OF ALL UTILITIES ON THIS SITE WITH THE OWNER, AND THE APPROPRIATE UTILITY PROVIDER, ALL UTILITIES INCLUDE, BUT ARE NOT LIMITED TO STORM, SANITARY, GAS, ELECTRIC, WATER, TELEPHONE, AND CABLE.
- 3. CONTACT AFFECTED OWNER(S) A MINIMUM OF 24 HOURS PRIOR TO HALTING OF UTILITY SERVICES. UNDER NO CIRCUMSTANCE SHALL ANY UTILITY SERVICE BE DISCONTINUED FOR MORE THAN ONE (1) 12-HOUR PERIOD.
- 4. CLEARING AND GRUBBING WITHIN 50 FEET OF A DEFINED DRAINAGE COURSE SHOULD BE AVOIDED UNLESS NOTED OTHERWISE.
- 5. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE DURING DEMOLITION AND IS RESPONSIBLE FOR ALL DEWATERING NECESSARY FOR CONSTRUCTION.
- 6. CARE SHALL BE EXERCISED BY THE CONTRACTOR TO PRESERVE AND/OR PROTECT ANY EXISTING VEGETATION OUTSIDE OF AREAS TO BE GRADED. IT IS REQUIRED THE CONTRACTOR INSTALL CONSTRUCTION FENCING AROUND TREES AND SHRUBS WITHIN PROJECT LIMITS INTENDED TO STAY. THE PERSON(S) WHO DAMAGES ANY OF THESE AREAS SHALL BE HELD RESPONSIBLE FOR ALL COSTS OF REPLACEMENT MATERIALS AND LABOR. TREES AND SHRUBS NOT SHOWN TO BE REMOVED SHALL BE SPARED UNLESS DIRECTED BY THE ENGINEER OR LANDSCAPE ARCHITECT TO BE REMOVED. ADDITIONAL CARE TO SPARE ALL TREES AS POSSIBLE SHALL BE GIVEN WHEN WORKING AROUND TREES ADJACENT TO THE CONSTRUCTION LIMITS. ALL TREES AND SHRUBS SHOWN WITH AN "X" SHALL BE REMOVED.
- ALL WASTE EXCAVATION, CONSTRUCTION MATERIALS, DEMOLISHED STRUCTURES AND DEBRIS
   SHALL BE REMOVED FROM THE SITE PER KDOT STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
- 8. ALL EXCAVATED OR OTHERWISE DISTURBED AREAS SHALL BE RETURNED TO THEIR ORIGINAL CONDITION AS NEARLY AS IS PRACTICAL. THE REPLACEMENT MATERIALS SHALL BE COMPACTED SO AS TO PREVENT SETTLEMENT. ANY PARKING OR DRIVE SURFACING, SIDEWALK OR ESTABLISHED LAWN AREAS SHALL BE REPLACED IN KIND OR AS SHOWN HEREIN.
- 9. PAVEMENT TO BE REMOVED AS INDICATED SHALL BE SAWCUT TO NEAT LINES OR TO EXISTING JOINTS AND HAULED FROM SITE BY THE CONTRACTOR, AT HIS EXPENSE. ANY PAVEMENT OR SIDEWALKS DAMAGED BEYOND THE ORIGINAL SAWCUT LIMITS (AS SHOWN ON THE PLAN OR DETERMINED IN THE FIELD) SHALL BE RE-SAWED TO PROVIDE AN EVEN JOINT AND REPLACED AT THE CONTRACTOR'S EXPENSE.
- 10. THE MAILBOX WITHIN THE CONSTRUCTION LIMITS SHALL BE REMOVED AND TEMPORARILY PLACED AT A LOCATION COORDINATED WITH THE LOCAL POST OFFICE. UPON COMPLETION OF CONSTRUCTION, THE MAILBOX SHALL BE RESET ON A PERMANENT MAILBOX SUPPORT ERECTED BY THE CONTRACTOR. MAILBOX SUPPORT SHALL CONSIST OF A SINGLE 4-INCH BY 4-INCH OR 4 1/2 INCH DIAMETER WOODEN POST. MAILBOX SUPPORTS SHALL NOT BE SET IN CONCRETE. WHEN POSSIBLE THE NEW MAILBOX SHALL BE PLACED SUCH THAT THE MAILBOX FACE WILL BE 6-INCHES FROM THE FACE OF CURB AND THE BOTTOM OF THE BOX SHALL BE 3'-6" ABOVE THE ROADWAY SURFACE. DUE TO THE LOCATION OF THE SIDEWALK BETWEEN THE BUILDING AND STREET A NEW LOCATION MAY BE NEEDED. THE LOCATION SHALL BE COORDINATED WITH THE CITY AND POST OFFICE. PAID FOR AS MAILBOX INSTALLATION.
- 11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR AN NPDES PERMIT AND ALL OTHER PERMITTING, FOLLOWING APPLICABLE STATE AND LOCAL EROSION AND SEDIMENTATION CONTROL REQUIREMENTS AS NECESSARY.
- 12. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ASSURE THAT ACCESS TO THE PROPERTY AND SANTA FE STATION BE PROVIDED DURING CONSTRUCTION OF THE PROJECT.

- 13. THE CONTRACTOR IS RESPONSIBLE FOR ALL BARRICADES REQUIRED FOR SAFETY IN AND AROUND THE CONSTRUCTION SITE. CONTINUOUS MAINTENANCE OF TRAFFIC CONTROL DEVICES DURING THE TERM OF THIS PROJECT IS THE CONTRACTOR'S RESPONSIBILITY. ALL TRAFFIC CONTROL DEVICES SHALL MEET THE REQUIREMENTS OF THE LATEST VERSION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS."
- 14. ALL EXISTING STRUCTURES WITHIN THE CONSTRUCTION LIMITS SHALL BE PROTECTED BY MEANS OF FENCING AND OTHER DEVICES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT THESE STRUCTURES AND CLEAN UP ALL DEBRIS NEAR, ON, OR AROUND THESE STRUCTURES AT COMPLETION OF WORK.
- 15. THE CONTRACTOR SHALL VERIFY ALL DEMOLITION DIMENSIONS SHOWN PRIOR TO COMMENCING DEMOLITION
- 16. THE CONTRACTOR SHALL ESTABLISH STAGING, STORAGE AND PARKING AREAS PER APPROVAL OF THE OWNER AND ARCHITECT. THE AREAS SHALL BE FENCED WITH TEMPOARY FENCING AS APPROVED BY THE OWNER.
- 17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING AND PROTECTING ALL SURVEY STAKES (CONTROL POINTS, REFERENCE POINTS, BENCH MARKS, PROPERTY AND OFFSET CORNERS, AND ALL OTHER ESSENTIAL HORIZONTAL AND VERTICAL SURVEY CONTROL POINTS) UNTIL CONSTRUCTION ACTIVITY IS COMPLETED. THE CONTRACTOR SHALL PAY FOR RE-STAKING ANY SURVEY STAKES THAT ARE DESTROYED.

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	23 TE-0373-01	2014	95	143
F.A. NO.	TEA-T037(301)			

KDOT STANDARDS AND SPECIFICATIONS SHALL GOVERN ALL WORK TO BE PERFORMED. OTHER STANDARDS AND SPECIFICATIONS, AS NEEDED, SHALL BE PER THE CITY OF LAWRENCE, KANSAS

## LIST OF UTILITIES:

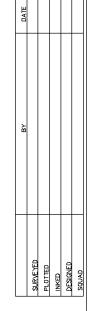
1-800-344-7233	DIG SAFE (ONE CALL)		
1-785-832-3130	CITY OF LAWRENCE PUBLIC WORKS ENGINEERING	DAVID CRONIN	dcronin@lawrenceks.org
1-785-832-3034	CITY OF LAWRENCE TRAFFIC ENGINEERING	DAVID WOOSLEY	dwoosley@lawrenceks.org
1-785-832-7812	CITY OF LAWRENCE WATER & WASTEWATER	ANDY ENSZ	aensz@lawrenceks.org
1-785-832-3142	CITY OF LAWRENCE STORMWATER ENGINEER	MATT BOND	mbond@lawrenceks.org
1-785-832-3190	CITY OF LAWRENCE RIGHT-OF-WAY MANAGER	JACOB BARNES	jbarnes@lawrenceks.org
1-785-832-3944	BLACK HILLS ENERGY (GAS)	CHUCK HOAG	chuck.hoag@blackhillscorp.com
1-785-865-4850	WESTAR ENERGY (ELECTRIC)	MIKE SOLIDA	mike.solida@westarenergy.com
1-785-276-5377	AT&T (TELEPHONE)	KEITH GATZEMEYER	kg4306@att.com
1-785-312-6960	WOW (CABLE TV)	HARV WAYMIRE	james.waymire@knology.com

KANSAS DEPARTMENT OF TRANSPORTATION

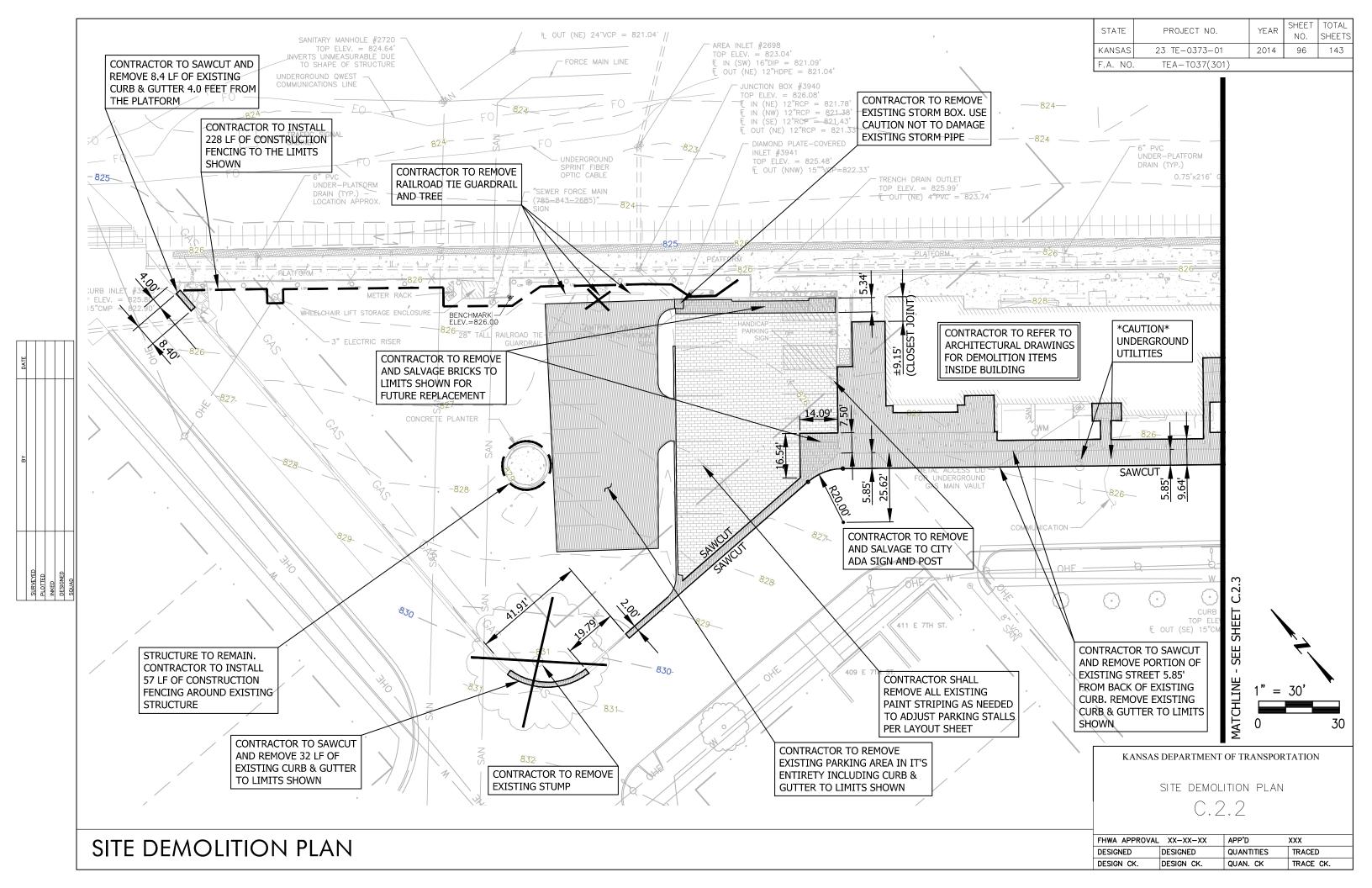
SITE DEMOLITION NOTES

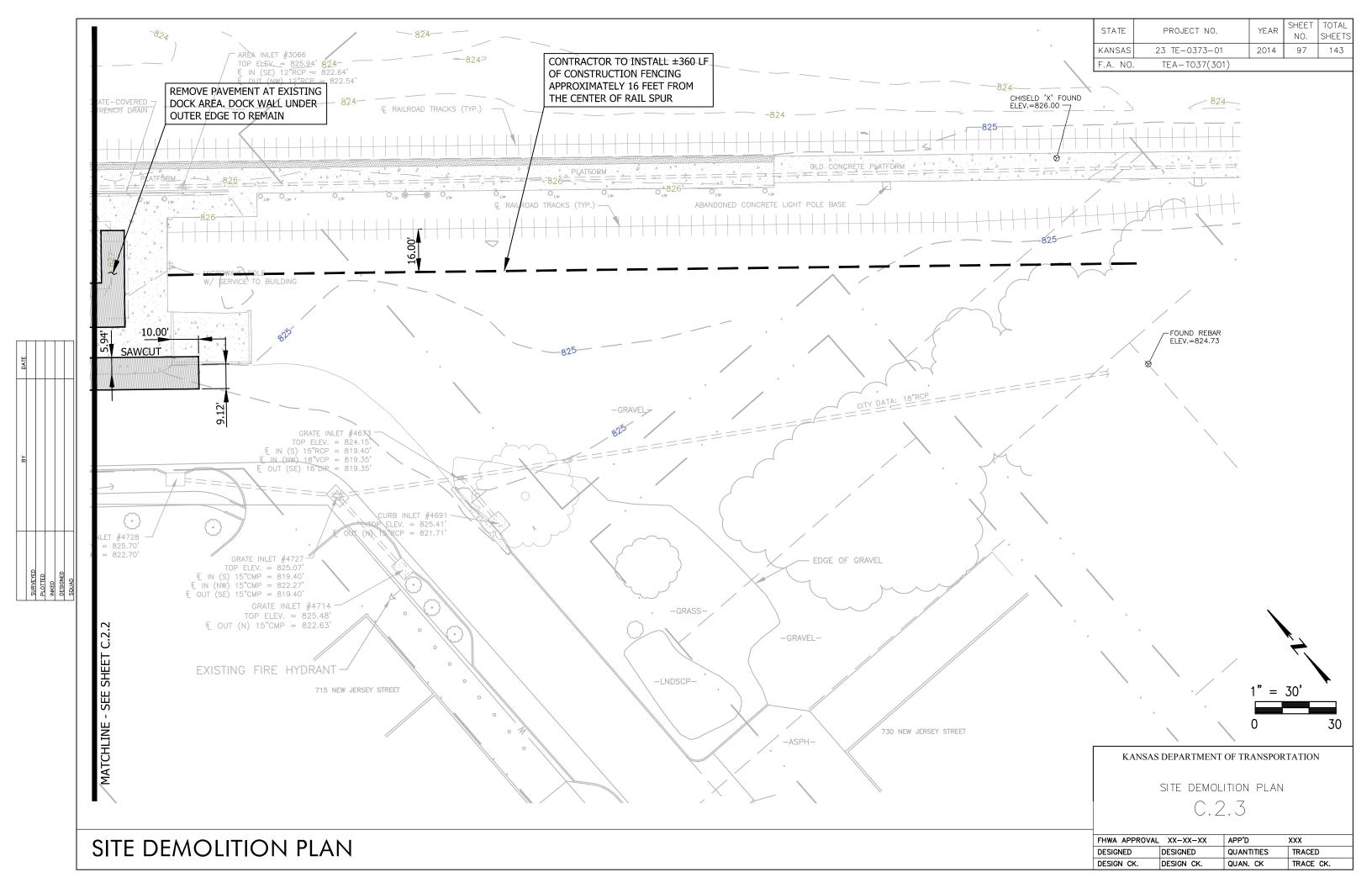
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FHWA APPROVAL XX-XX-XX		APP'D	XXX	
	DESIGNED	DESIGNED	QUANTITIES	TRACED
	DESIGN CK.	DESIGN CK.	QUAN, CK	TRACE CK.



SITE DEMOLITION NOTES





# LAYOUT NOTES:

- EXISTING UTILITY INFORMATION SHOWN HEREIN IS BASED ON THE INFORMATION AVAILABLE TO THE DESIGN PROFESSIONAL AT THE TIME OF DESIGN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL UTILITY DEPTHS AND LOCATIONS PRIOR TO CONSTRUCTION. ANY DAMAGE TO UTILITIES AND INCIDENTAL DAMAGE CAUSED BY THE CONTRACTOR'S CONSTRUCTION OPERATIONS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND QUANTITIES AND SHALL RECORD "AS-BUILT" DIMENSIONS OR LOCATIONS OF ANY APPURTENANCES IF THEY DIFFER FROM THE
- ALL HANDICAPPED SITE FEATURES SHALL BE CONSTRUCTED TO MEET ALL STATE, LOCAL, AND ADA SPECIFICATIONS AS CURRENTLY IN EFFECT.
- CONTACT AFFECTED OWNER(S) A MINIMUM OF 48 HOURS PRIOR TO HALTING OF UTILITY SERVICES. UNDER NO CIRCUMSTANCE SHALL ANY UTILITY SERVICE BE DISCONTINUED FOR MORE THAN ONE (1) 12-HOUR PERIOD.
- ALL DISTURBED OFFSITE CONDITIONS SHALL BE REPLACED TO THEIR PREVIOUS CONDITION(S). ANY DAMAGE TO OR REMOVAL OF EXISTING CONDITIONS OCCURRING UPON ADJACENT PROPERTY DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THEIR PREVIOUS CONDITION(S).
- CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE DURING CONSTRUCTION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR DIVERTING STORM SEWER RUNOFF INTO THE PROPOSED STORM SEWER SYSTEM DURING CONSTRUCTION. TEMPORARY CONNECTIONS SHALL BE MADE TO ELIMINATE FLOODING AND PONDING PRIOR TO COMPLETION OF THE PROPOSED STORM SEWER.
- ALL METHODS AND MEANS OF CONSTRUCTION PERFORMED ON THIS PROJECT SHALL CONFORM TO THE DESIGN CRITERIA FOR KDOT AS DEPICTED IN THESE PLANS AND SPECIFICATION, IF APPLICABLE.
- THE CONTRACTOR IS RESPONSIBLE FOR THE PROVISION OF ALL MATERIALS, TOOLS, EQUIPMENT AND LABOR NECESSARY TO CONTROL EROSION, SILTATION AND DISCHARGES OF FILL MATERIAL (SEDIMENT) INTO DOWNSTREAM SYSTEMS OR RECEIVING CHANNELS. THIS SHALL BE REQUIRED DURING ALL PHASES OF CONSTRUCTION AND UNTIL SUITABLE GROUND COVER IS ESTABLISHED FOR ALL DISTURBED AREAS. IF ANY METHOD OF CONTROL FAILS, THE CONTRACTOR SHALL NOTIFY THE CITY IMMEDIATELY, SO THAT THE CITY CAN REVIEW THE CONTRACTOR'S PROPOSED METHOD OF REPAIR.
- ALL SAWED AND EXPANSION JOINTS IN CONCRETE PAVEMENT AND VALLEY GUTTERS SHALL BE SEALED AS PER THE CITY OF LAWRENCE STANDARD SPECIFICATIONS LOCATED ON CITY'S WEB SITE (HTTP://WWW.LAWRENCEKS.ORG/PUBLIC\_WORKS/SPECIFICATIONS).
- 11. REFER TO ELECTRICAL ENGINEER'S PLANS FOR ALL LOCATIONS, TYPE, DESIGN AND DETAILS OF GEOTHERMAL DESIGN, SITE LIGHTING AND ALL ELECTRICAL ROUTING USED THROUGHOUT THE PROJECT.
- 12. REFER TO ARCHITECTURAL PLANS FOR ALL BUILDING RELATED INFORMATION.

GOVERN ALL WORK TO BE PERFORMED. OTHER STANDARDS AND SPECIFICATIONS, AS NEEDED, SHALL BE PER THE CITY OF LAWRENCE, KANSAS

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	23 TE-0373-01	2014	98	143
F A NO	TF A = TO 3 7 ( 3 O 1 )			

# KDOT STANDARDS AND SPECIFICATIONS SHALL

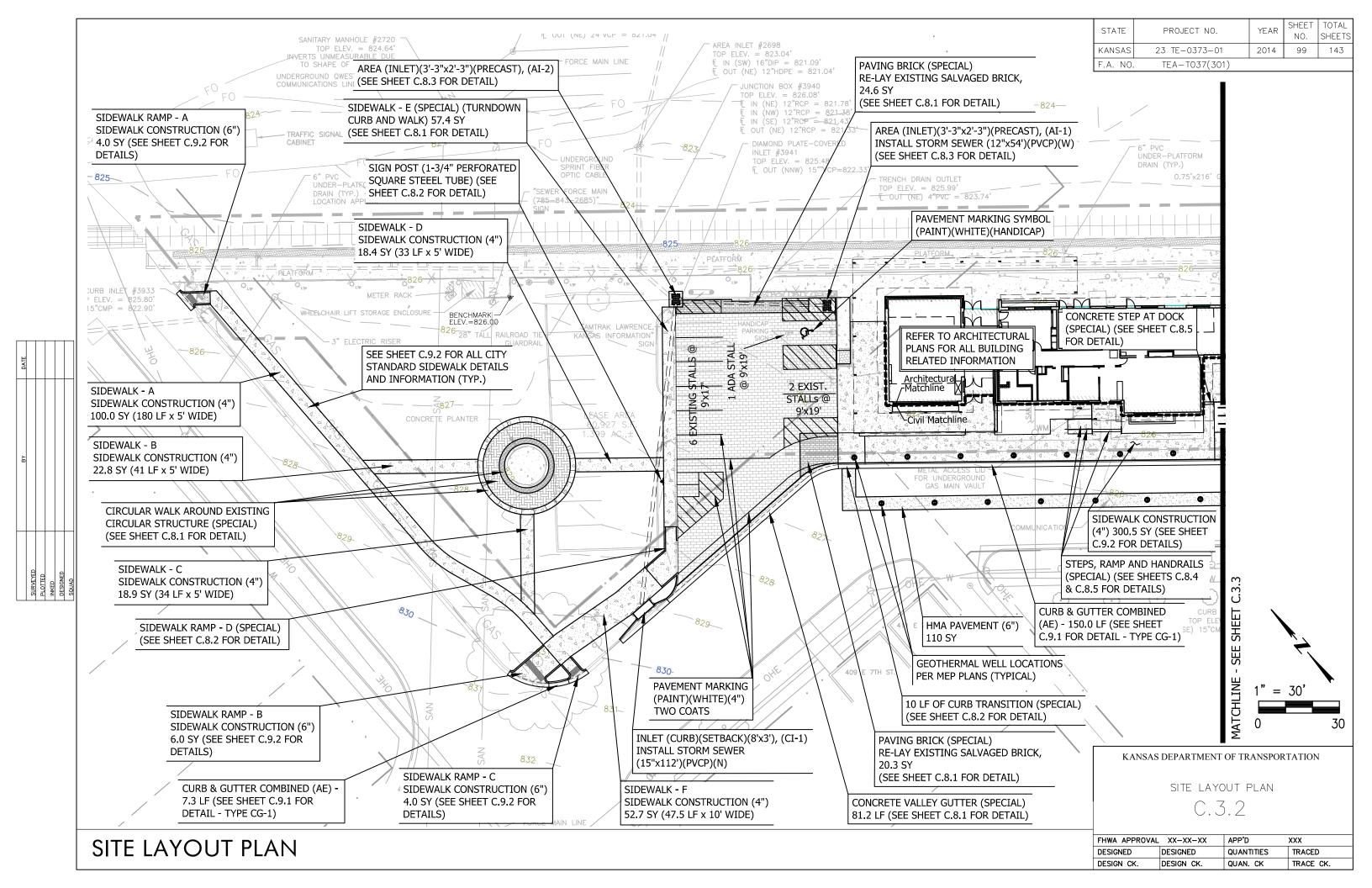
SITE LAYOUT NOTES

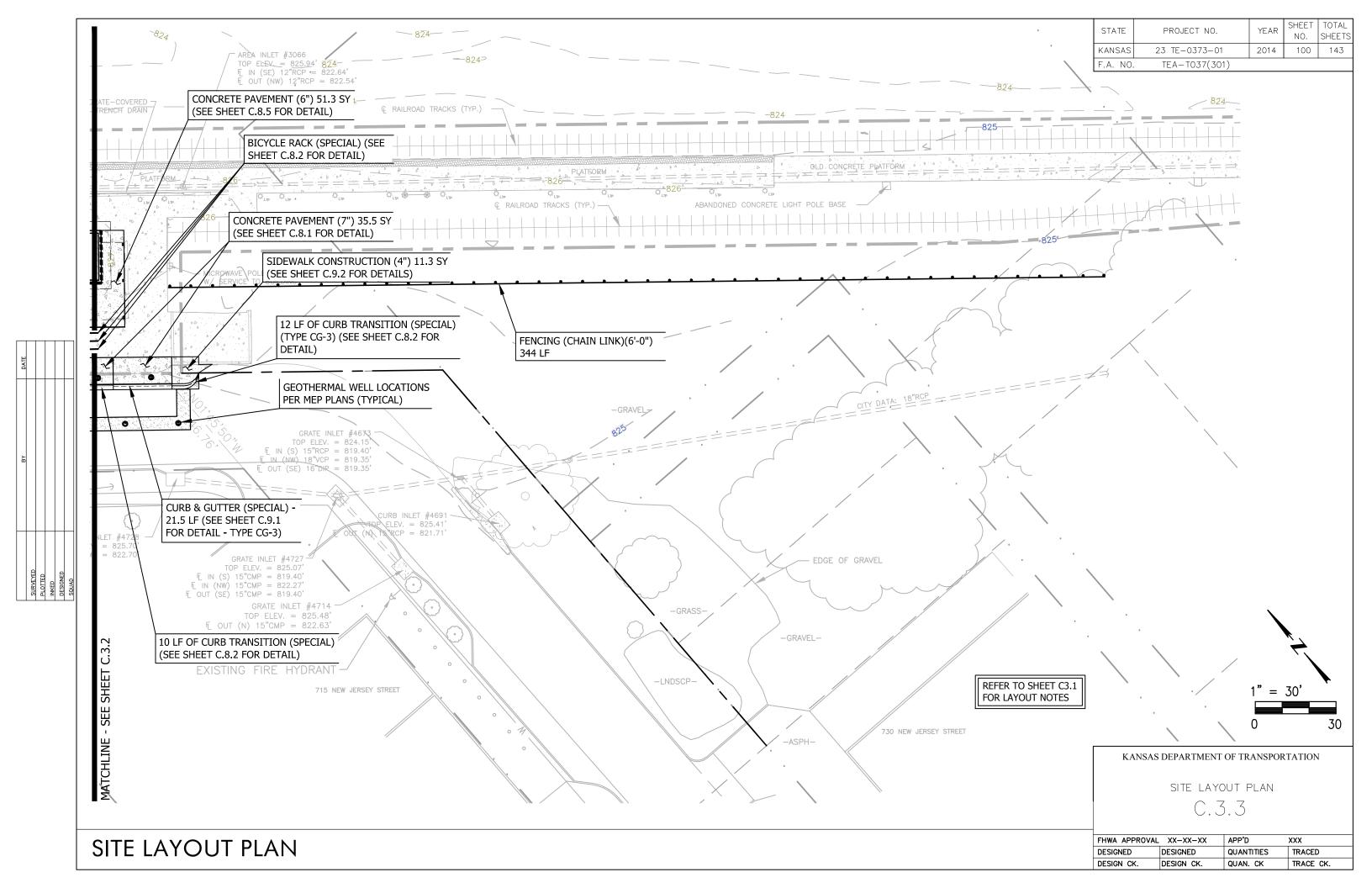
KANSAS DEPARTMENT OF TRANSPORTATION

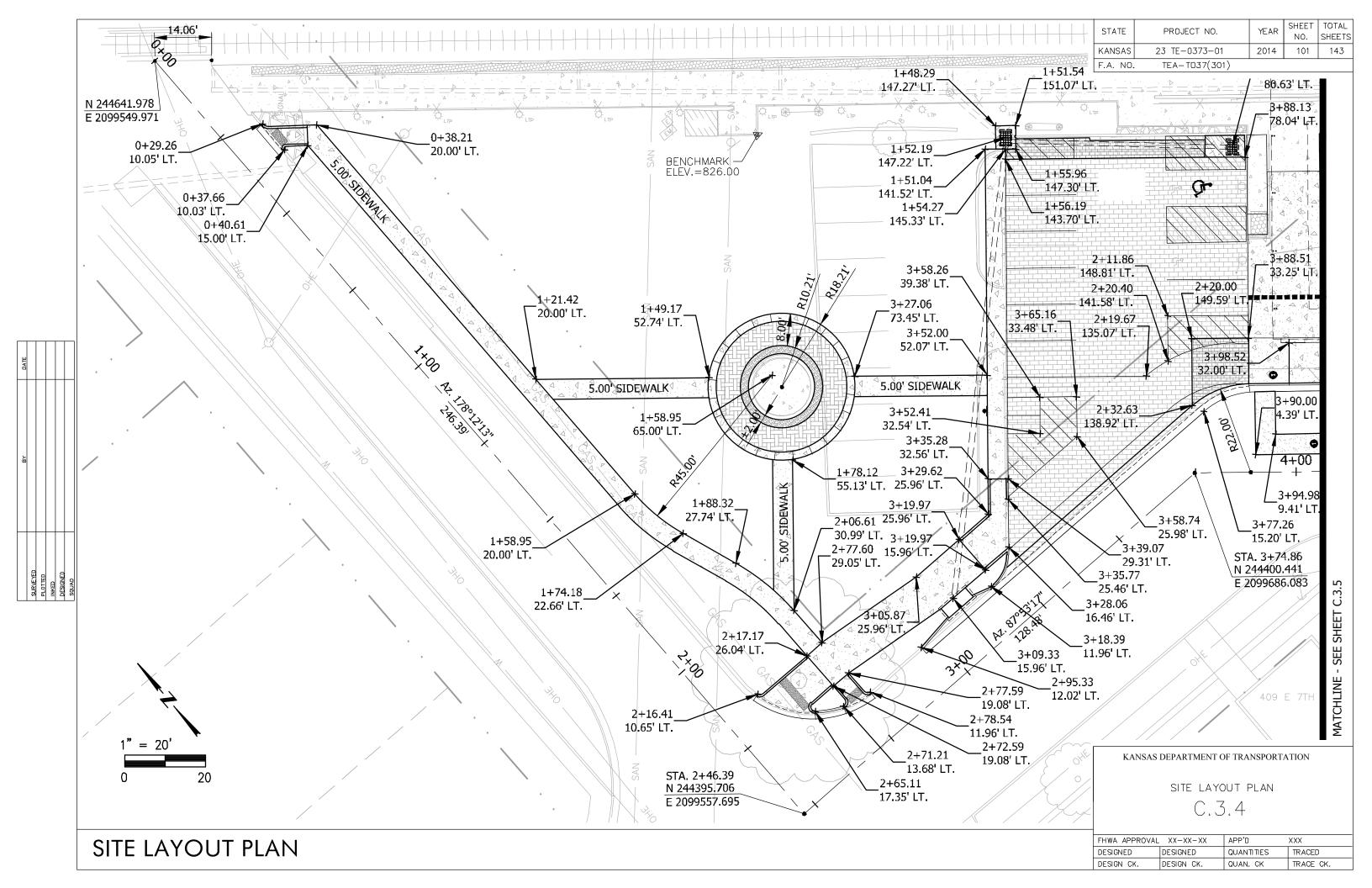
SITE LAYOUT NOTES

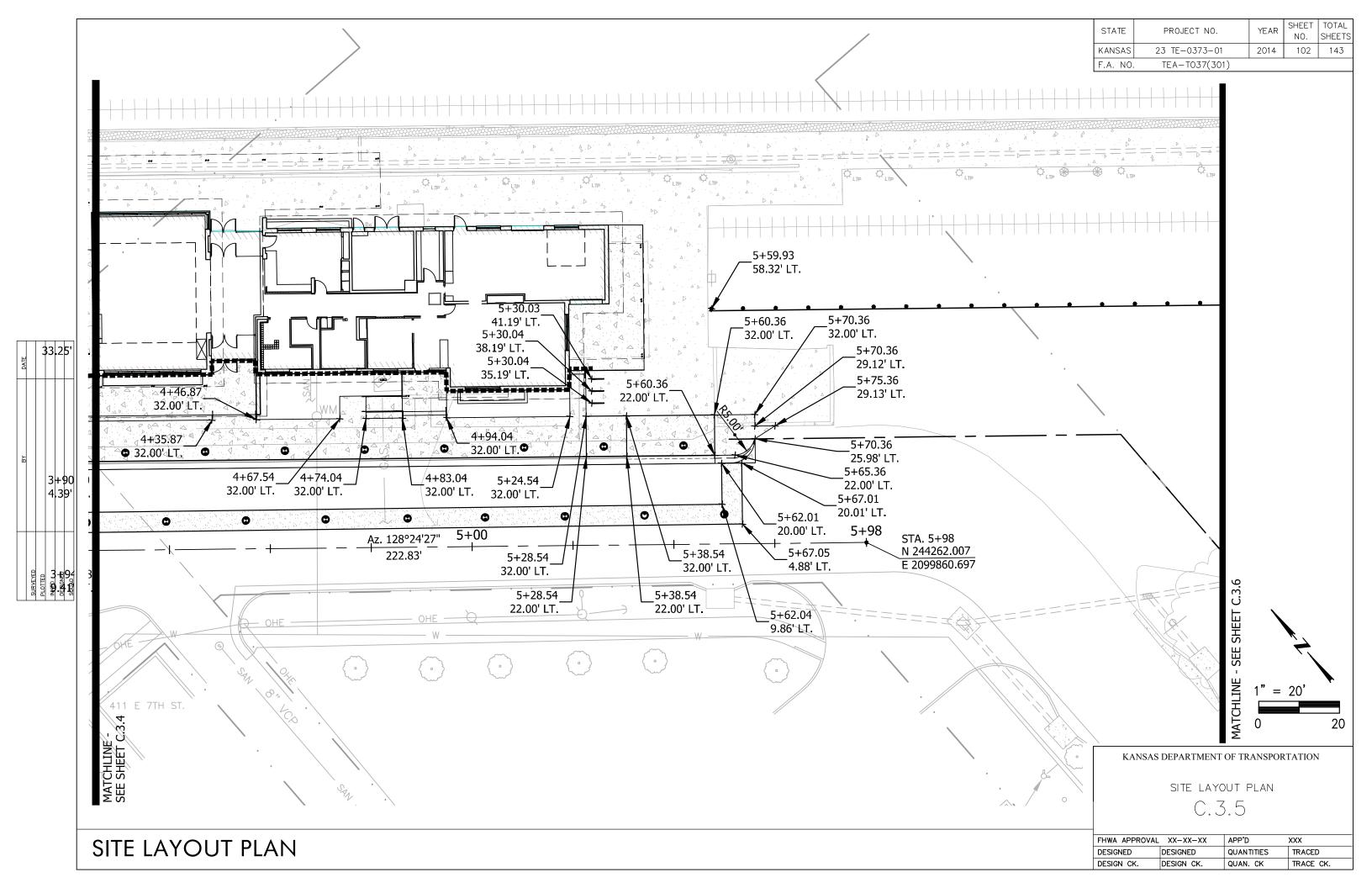
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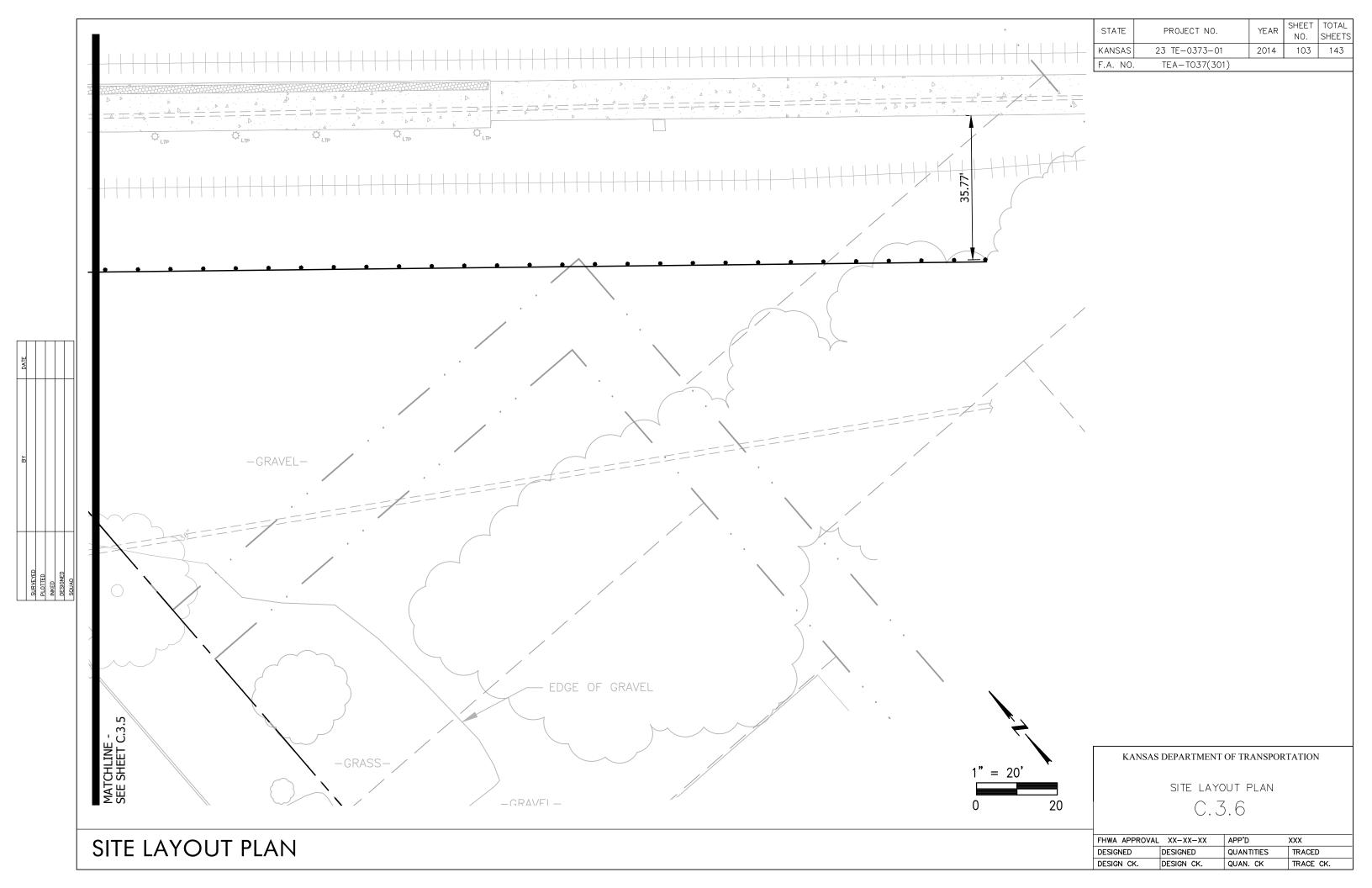
FHWA APPROVAL	OVAL XX-XX-XX APP'D XXX		XXX
DESIGNED	DESIGNED	QUANTITIES	TRACED
DESIGN CK.	DESIGN CK.	QUAN. CK	TRACE CK.











# GRADING NOTES:

- 1. ALL QUANTITIES SHALL BE DOUBLE CHECKED BY THE CONTRACTOR PRIOR TO ORDERING MATERIALS.
- THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS REQUIRED FOR THE SITE GRADING.
- ALL AREAS DISTURBED DURING THE PROGRESS OF THIS PROJECT SHALL BE FINISHED WITH 6" (MIN.) OF 3. TOPSOIL AND GRADED/RESTORED TO EXISTING CONDITIONS PRIOR TO DISTURBANCE.
- ALL AREAS SHALL SLOPE AWAY FROM BUILDING(S).
- ALL GROUND SURFACES SHALL VARY UNIFORMLY BETWEEN INDICATED ELEVATIONS.
- GRADING PLAN REFLECTS TOP OF TURF OR PAVEMENT ELEVATION UNLESS OTHERWISE NOTED.
- 7. CONTRACTOR SHALL PROVIDE AND MAINTAIN POSITIVE DRAINAGE DURING ALL PHASES OF
- EXISTING UTILITIES AS SHOWN ARE APPROXIMATE LOCATIONS ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO THE START OF CONSTRUCTION WORK. ANY DAMAGE TO EXISTING STRUCTURES, UTILITIES, FENCES, AND/OR INCIDENTALS NOT DESIGNATED FOR REMOVAL SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR IS RESPONSIBLE FOR THE PROVISION OF ALL MATERIALS, TOOLS, EQUIPMENT AND LABOR NECESSARY TO CONTROL EROSION, SILTATION AND DISCHARGES OF FILL MATERIAL (SEDIMENT) INTO DOWNSTREAM SYSTEMS OR RECEIVING CHANNELS. THIS SHALL BE REQUIRED DURING ALL PHASES OF CONSTRUCTION AND UNTIL SUITABLE GROUND COVER IS ESTABLISHED FOR ALL DISTURBED AREAS. IF ANY METHOD OF CONTROL FAILS, THE CONTRACTOR SHALL NOTIFY THE OWNER IMMEDIATELY, SO THAT THE OWNER OR HIS AGENT CAN REVIEW THE CONTRACTOR'S PROPOSED METHOD OF REPAIR. REFER TO EROSION CONTROL SHEET FOR MORE NOTES AND INFORMATION.
- SILT FENCES REQUIRE MAINTENANCE TO PRESERVE THEIR EFFECTIVENESS. ALL SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH HEAVY RAINSTORM AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY. WHEN SEDIMENT DEPOSITS REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE SILT FENCE, THE SEDIMENT SHALL BE REMOVED OR A SECOND SILT FENCE SHALL BE INSTALLED.
- 11. THE CONTRACTOR SHALL NOT PERFORM FINAL GRADING UNTIL ALL UTILITY INSTALLATIONS ARE COMPLETE.
- 12. ALL STORM SEWER STRUCTURES ARE TO BE INSTALLED PER KDOT STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING AND PROTECTING ALL SURVEY STAKES (CONSTRUCTION STAKES, CONTROL POINTS, REFERENCE POINTS, BENCH MARKS, PROPERTY AND OFFSET CORNERS, AND ALL OTHER ESSENTIAL HORIZONTAL AND VERTICAL SURVEY CONTROL POINTS) UNTIL CONSTRUCTION ACTIVITY IS COMPLETED. THE CONTRACTOR SHALL PAY FOR RE-STAKING ANY SURVEY STAKES THAT ARE DESTROYED.

**GRADING NOTES** 

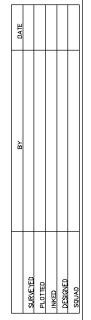
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
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F.A. NO.	TFA-T037(301)			

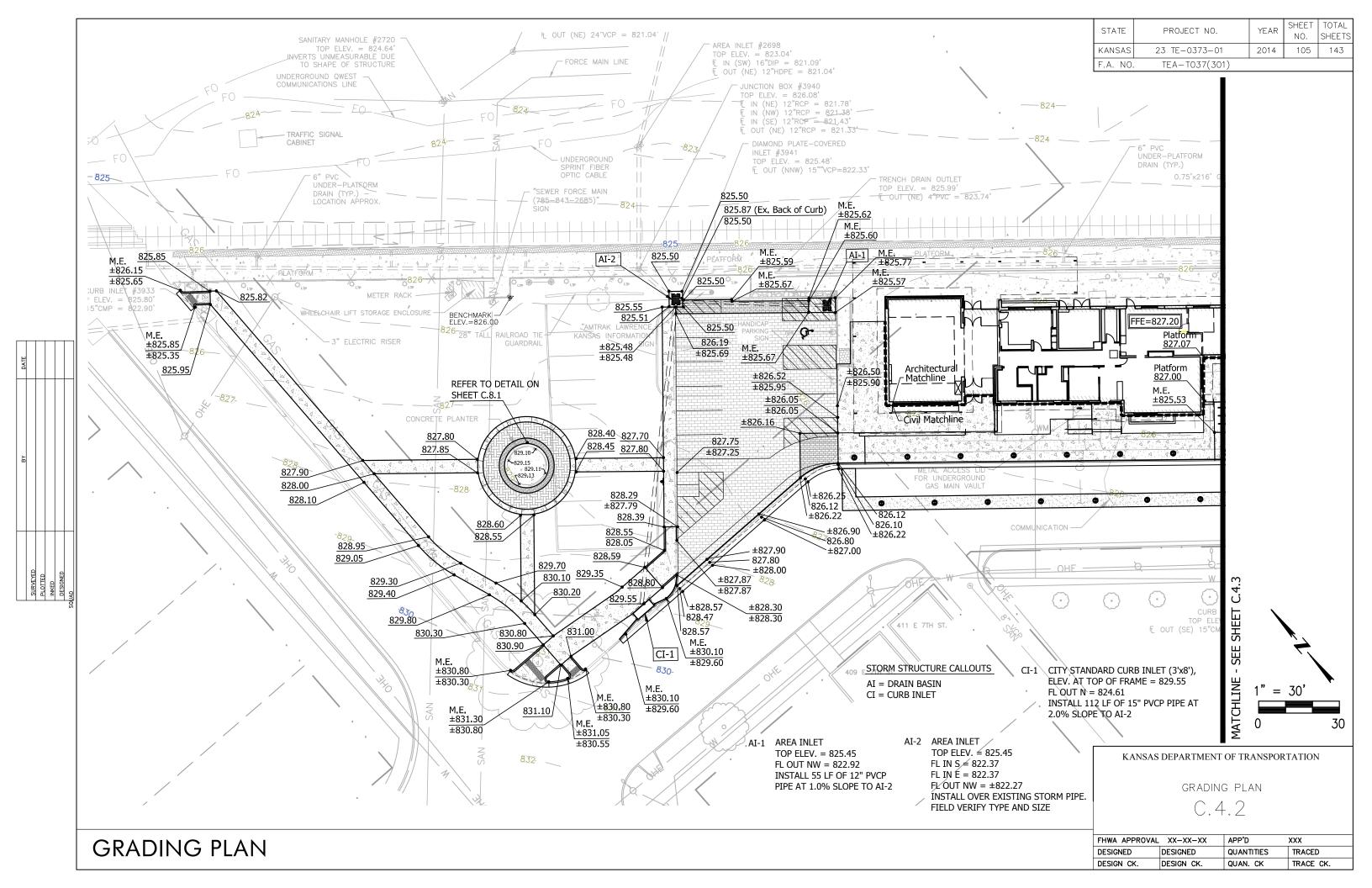
KDOT STANDARDS AND SPECIFICATIONS SHALL
GOVERN ALL WORK TO BE PERFORMED. OTHER
STANDARDS AND SPECIFICATIONS, AS NEEDED,
SHALL BE PER THE CITY OF LAWRENCE, KANSAS

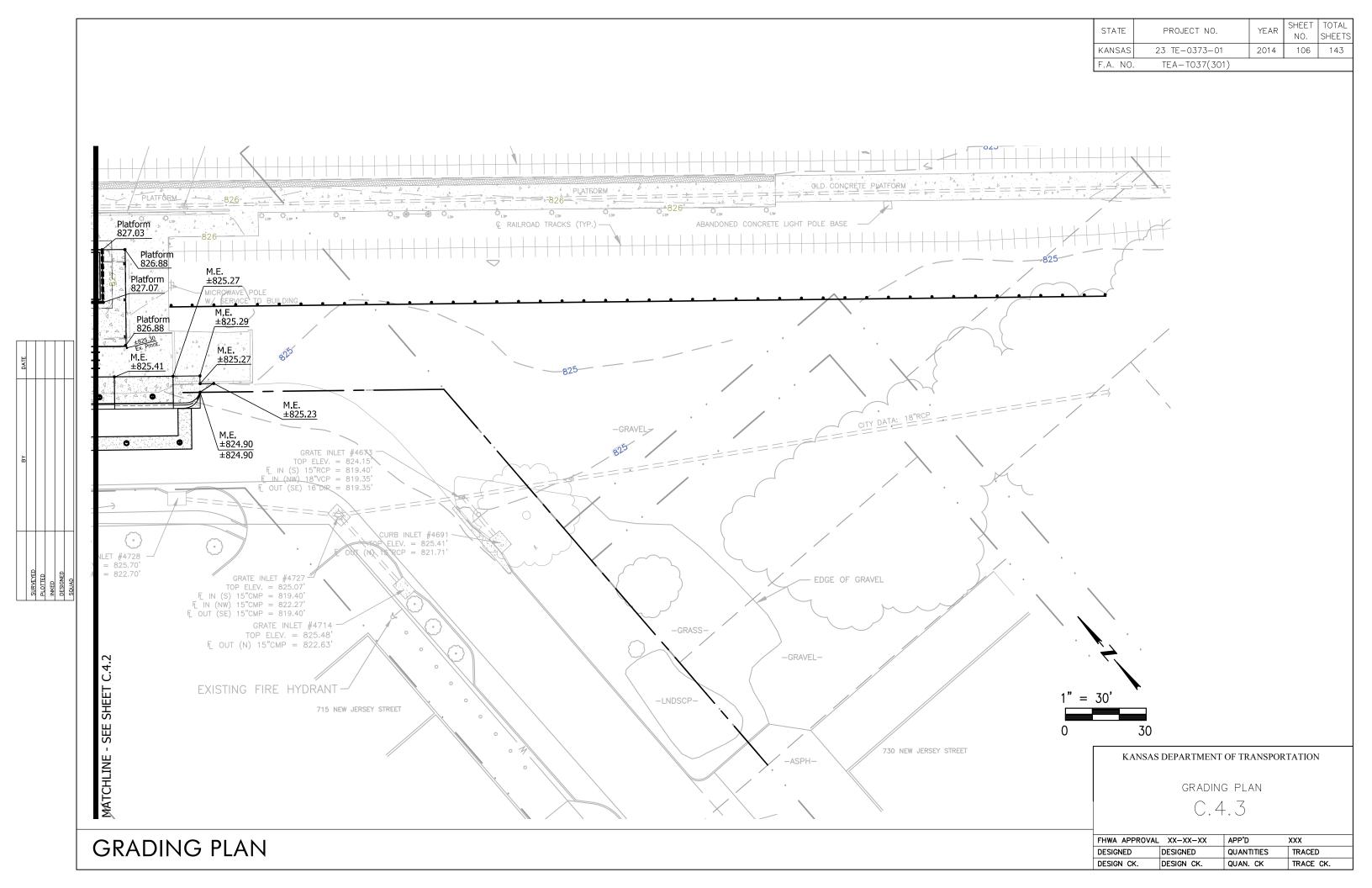
KANSAS DEPARTMENT OF TRANSPORTATION

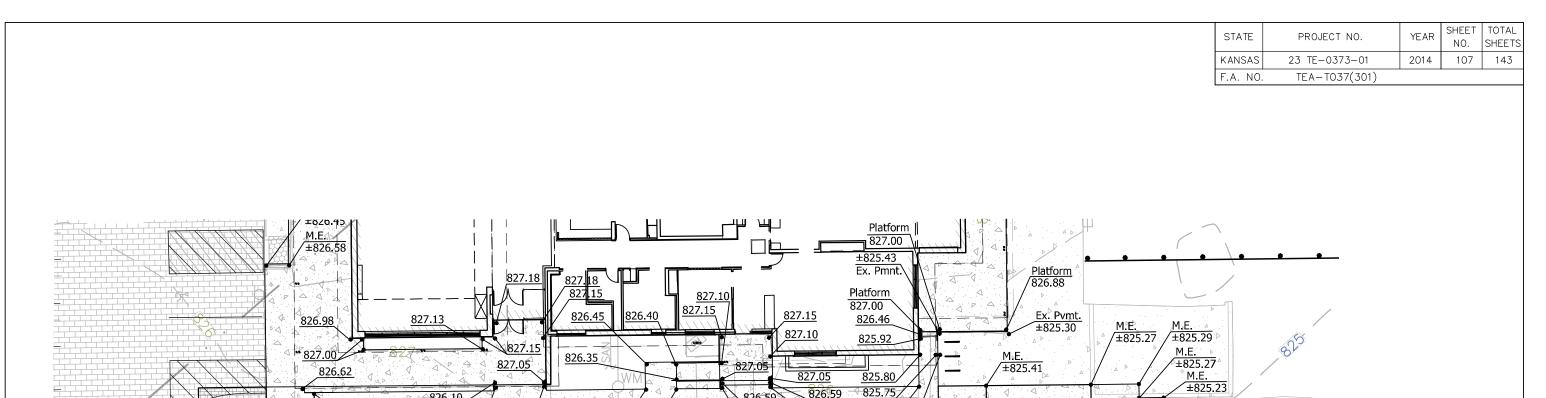
GRADING NOTES

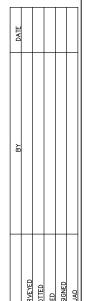
FHWA APPROVAL XX-XX-XX		APP'D	XXX
DESIGNED	DESIGNED	QUANTITIES	TRACED
DESIGN CK.	DESIGN CK.	QUAN. CK	TRACE CK.

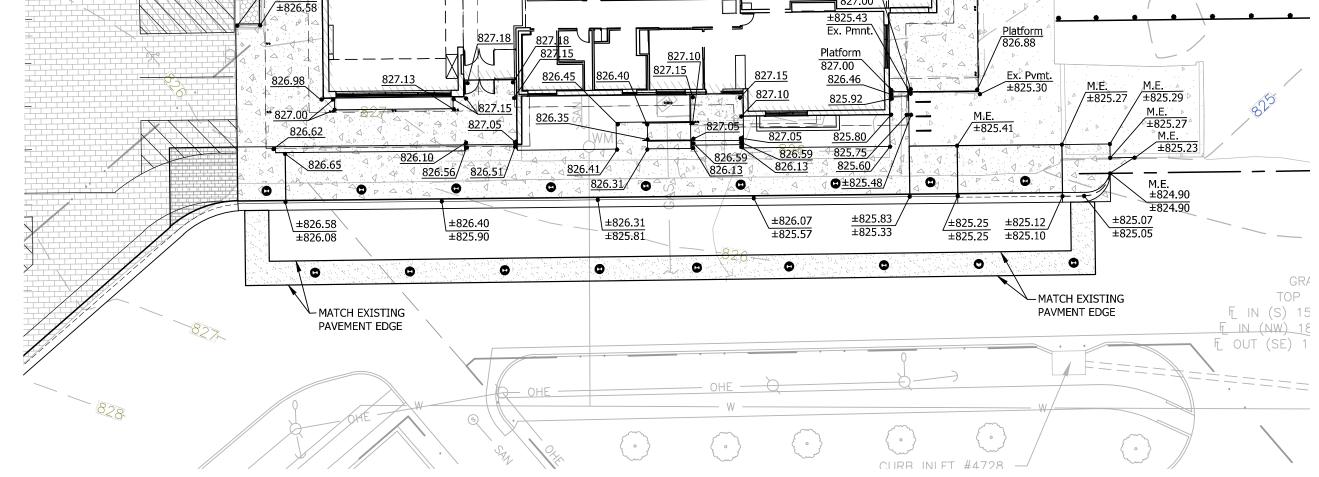




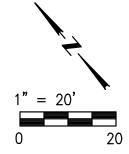








ENLARGED AREA - SOUTH SIDE OF BUILDING



#### KANSAS DEPARTMENT OF TRANSPORTATION

GRADING PLAN

C.4.4

**GRADING PLAN** 

FHWA APPROVAL	XX-XX-XX	APP'D	XXX
DESIGNED	DESIGNED	QUANTITIES	TRACED
DESIGN CK.	DESIGN CK.	QUAN. CK	TRACE CK.

#### EROSION CONTROL NOTES:

- 1. THE CONTRACTOR SHALL BE REQUIRED TO SUBMIT A NOTICE OF INTENT (NOI) FOR THIS PROJECT PRIOR TO THE COMMENCEMENT OF PROJECT ACTIVITIES. THE CONTRACTOR SHALL KEEP A WRITTEN LOG OF WHEN CONSTRUCTION ACTIVITIES BEGIN, EROSION AND SEDIMENT CONTROLS ARE INSTALLED, INSPECTED AND REPAIRED. COPIES OF LOG SHALL BE FURNISHED TO THE ENGINEER. IF PERMIT REQUIRES BARTLETT & WEST'S NAME ANYWHERE ON THE DOCUMENT IT MUST BE SUBMITTED TO THE STAMPING ENGINEER OF RECORD FOR REVIEW PRIOR TO SUBMITTAL TO THE REGULATING AUTHORITY.
- THE CONTRACTOR SHALL MONITOR EROSION AND SEDIMENT CONTROL MEASURES THROUGHOUT
  THE PROJECT. THIS PLAN MAY BE UPDATED AS CONSTRUCTION PROGRESSES WITH APPROVAL OF
  FNGINEFR.
- TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES INSTALLED AS PART OF THIS PLAN SHALL NOT BE REMOVED FOLLOWING CONSTRUCTION UNTIL SLOPES ARE STABILIZED TO A NON-EROSIVE STATE WITH ESTABLISHED GRASS OR AS DIRECTED BY THE ENGINEER.
- 4. IMMEDIATELY AFTER MOBILIZATION AND PRIOR TO STARTING ANY SOIL DISTURBING ACTIVITIES, THE CONTRACTOR SHALL INSTALL ANY PERIMETER EROSION AND SEDIMENT CONTROL MEASURES, GRAVEL CONSTRUCTION ENTRANCE(S) AND TEMPORARY SEDIMENT BASIN(S). IT IS RECOGNIZED THAT SOME SITE CLEARING AND PREPARATION MAY BY REQUIRED TO PROPERLY INSTALL SUCH MEASURES.
- 5. THE RECOMMENDED SEQUENCE OF CONSTRUCTION ACTIVITIES AND OF THE INSTALLATION AND REMOVAL OF EROSION AND SEDIMENT CONTROL MEASURES IS AS FOLLOWS: ANY PERIMETER CONTROL MEASURES (SILT FENCE, TEMPORARY SEDIMENT BASIN) INCLUDING AREAS DRAINING TO A DRAINAGE WAY SUCH AS A STREAM, GRAVEL CONSTRUCTION ENTRANCE(S), CONSTRUCTION OF SANITARY SEWERS, STORM SEWERS, INLET PROTECTION, DITCH CHECKS, STREETS, FINAL GRADING, SEEDING, FERTILIZING AND MULCHING ON ALL SLOPES AND DISTURBED AREAS, INDIVIDUAL SITE CONTROL MEASURES, REMOVAL OF TEMPORARY PRACTICES, REMOVAL OF PERIMETER CONTROLS AND SITE CLEANUP.
- 6. PERIMETER SILT FENCE, CONSTRUCTION ENTRANCE(S) AND TEMPORARY SEDIMENT BASIN(S) SHALL BE CONSTRUCTED IN ACCORDANCE WITH DETAILS SHOWN HEREON. INSTALL SILT FENCE OR BALES WHERE REPRESENTED ON PLAN AS DITCH CHECKS AND SLOPE CONTROL, AROUND INLETS, ALONG ROADWAYS, AREAS DRAINING TO DRAINAGE WAYS SUCH AS A STREAM AND OTHER LOCATIONS AS NEEDED TO PREVENT SEDIMENT FROM LEAVING THE SITE. MEASURES WILL BE KEPT IN PLACE UNTIL GRASS IS ESTABLISHED.
- 7. REINFORCED SILT FENCE INLET PROTECTION AT EACH INLET SHALL BE INSTALLED AFTER COMPLETION OF INLETS AND DITCHES. PROTECTION SHALL REMAIN IN PLACE AT INLETS UNTIL PAVEMENT IS CONSTRUCTED AND IN DITCHES UNTIL PERMANENT GRASS STAND IS ESTABLISHED. ROCK BAGS SHALL BE INSTALLED AFTER CURB AND GUTTER IS INSTALLED. IN ADDITION, SILT FENCE WILL BE PLACED ALONG STREETS AS NEEDED TO REDUCE SEDIMENT IN THE STREET.
- 8. ALL EROSION CONTROL MEASURES SHALL BE INSPECTED AND MAINTAINED BY THE GENERAL CONTRACTOR NOT LESS THAN WEEKLY OR WITHIN 24 HOURS AFTER A RAINFALL EVENT OF 0.5 INCHES OR MORE. MAINTENANCE SHALL INCLUDE BUT NOT LIMITED TO SEDIMENT REMOVAL, SILT FENCE REPAIR AND/OR REPLACEMENT.
- ONSTRUCTION ENTRANCES SHALL BE MAINTAINED BY THE GENERAL CONTRACTOR IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS, PRIVATE DRIVE AND PAVED STREETS. THIS MAY INCLUDE PERIODIC TOP DRESSING WITH ADDITIONAL CRUSHED STONE AS CONDITIONS WARRANT. REPAIR OF ENTRANCES, CLEANING ON A DAILY BASIS OF RIGHT-OF-WAYS AND PAVED STREETS THAT HAVE BEEN SOILED BY CONSTRUCTION ACTIVITIES SHALL BE THE GENERAL CONTRACTOR'S RESPONSIBILITY.
- 10. THE CONTRACTOR SHALL NOTIFY EACH SUB-CONTRACTOR OR ENTITY (INCLUDING UTILITY CREWS AND CITY EMPLOYEES OR THEIR AGENTS) THAT WILL BE PERFORMING WORK AT THE SITE OF THE EROSION CONTROL PLAN AND WHAT ACTIONS OR PRECAUTIONS SHALL BE TAKEN TO MINIMIZE THE POTENTIAL FOR SOIL EROSION.
- 11. DURING ALL SOIL DISTURBING ACTIVITIES, THE GENERAL CONTRACTOR WILL TAKE APPROPRIATE STEPS USING ACCEPTED CONSTRUCTION METHODS TO MINIMIZE THE TIME OF EXPOSURE OF UNPROTECTED SOIL AND OTHER CONSTRUCTION MATERIALS TO RAINFALL.
- 12. NO GROUND SHALL BE LEFT OPEN FOR MORE THAN 7 DAYS OF NON-ACTIVITY WITHOUT BEING MULCHED AND/OR SEEDED.
- 13. SOIL STOCKPILED FOR MORE THAN 7 DAYS SHALL HAVE SILT FENCE PLACED ON THE DOWNHILL SLOPES TO TRAP SEDIMENT.
- 14. WHENEVER SOIL, ROCK, VEGETATION OR OTHER MATERIALS ARE EXPORTED FOR PLACEMENT IN AREAS OFF OF THE CONSTRUCTION SITE COVERED IN THIS PLAN, THE GENERAL CONTRACTOR IS RESPONSIBLE FOR DETERMINING THAT EPA STORM WATER PERMITTING REQUIREMENTS ARE MET. PRIOR TO THE REMOVAL OF ANY MATERIALS FROM THE SITE THE GENERAL CONTRACTOR WILL FURNISH THE ENGINEER WITH WRITTEN AGREEMENT, SIGNED BY EACH LANDOWNER WHO WILL RECEIVE EXPORTED MATERIALS, STATING THAT THEY ACCEPT THE MATERIAL AND THAT RECEIVING SITE IS PROPERLY PERMITTED, WHEN REQUIRED.

#### STORM WATER MANAGEMENT - Sediment Control

- 1. THIS PLAN OUTLINES STORM WATER MANAGEMENT AND SEDIMENT AND EROSION CONTROL PRACTICES TO BE FOLLOWED BY THE CONTRACTOR DURING ALL PHASES OF CONSTRUCTION OF THE PROJECT. THE CONTRACTOR WILL BE RESPONSIBLE TO PREVENT SOIL OR SEDIMENT LOSS FROM THE CONSTRUCTION SITE AND CANNOT LEAVE THE SITE UNTIL ALL PERMANENT EROSION CONTROL, SEDIMENT CONTROL AND STORM WATER MANAGEMENT PRACTICES ARE IN PLACE, INSPECTED AND HAVE BEEN FOUND TO BE SATISFACTORY, AND UNTIL ALL TEMPORARY PRACTICES HAVE BEEN PROPERLY REMOVED.
- 2. THIS PROJECT HAS BEEN DESIGNED TO PROVIDE POSITIVE POST-CONSTRUCTION CONTROL OF EXCESS STORM WATER GENERATED ON THE SITE THROUGH THE USE OF CURBS, GUTTERS, PIPING, STORM WATER BASINS (WHEN DESIGNED) AND STORM WATER OUTLES. DURING THE COURSE OF CONSTRUCTION, THE CONTRACTOR SHALL INSTALL AND MAINTAIN STORM WATER MANAGEMENT STRUCTURES IN A MANNER TO MAXIMIZE STORM WATER CONTROL.
- 3. THIS PROJECT IS DESIGNED TO MINIMIZE OFF-SITE EFFECT OF SOIL EROSION AND RESULTING SEDIMENT LOSS THROUGH THE USE OF PROPER CONSTRUCTION TECHNIQUES, INCLUDING INSTALLING BOTH TEMPORARY AND PERMANENT MANAGEMENT PRACTICES. ALL SOIL DISTURBING ACTIVITIES PERFORMED BY THE CONTRACTOR SHALL BE ACCOMPLISHED IN SUCH A MANNER AS TO PREVENT THE LOSS OF SEDIMENT IN STORM WATER AND TRACKING OF SOIL FROM VEHICLE TRAFFIC FROM THE CONSTRUCTION SITE.

KDOT STANDARDS AND SPECIFICATIONS SHALL GOVERN ALL WORK TO BE PERFORMED. OTHER STANDARDS AND SPECIFICATIONS, AS NEEDED, SHALL BE PER THE CITY OF LAWRENCE, KANSAS

STATE	PROJECT NO.	YEAR		TOTAL SHEETS
KANSAS	23 TE-0373-01	2014	108	143
F.A. NO.	TEA-T037(301)			

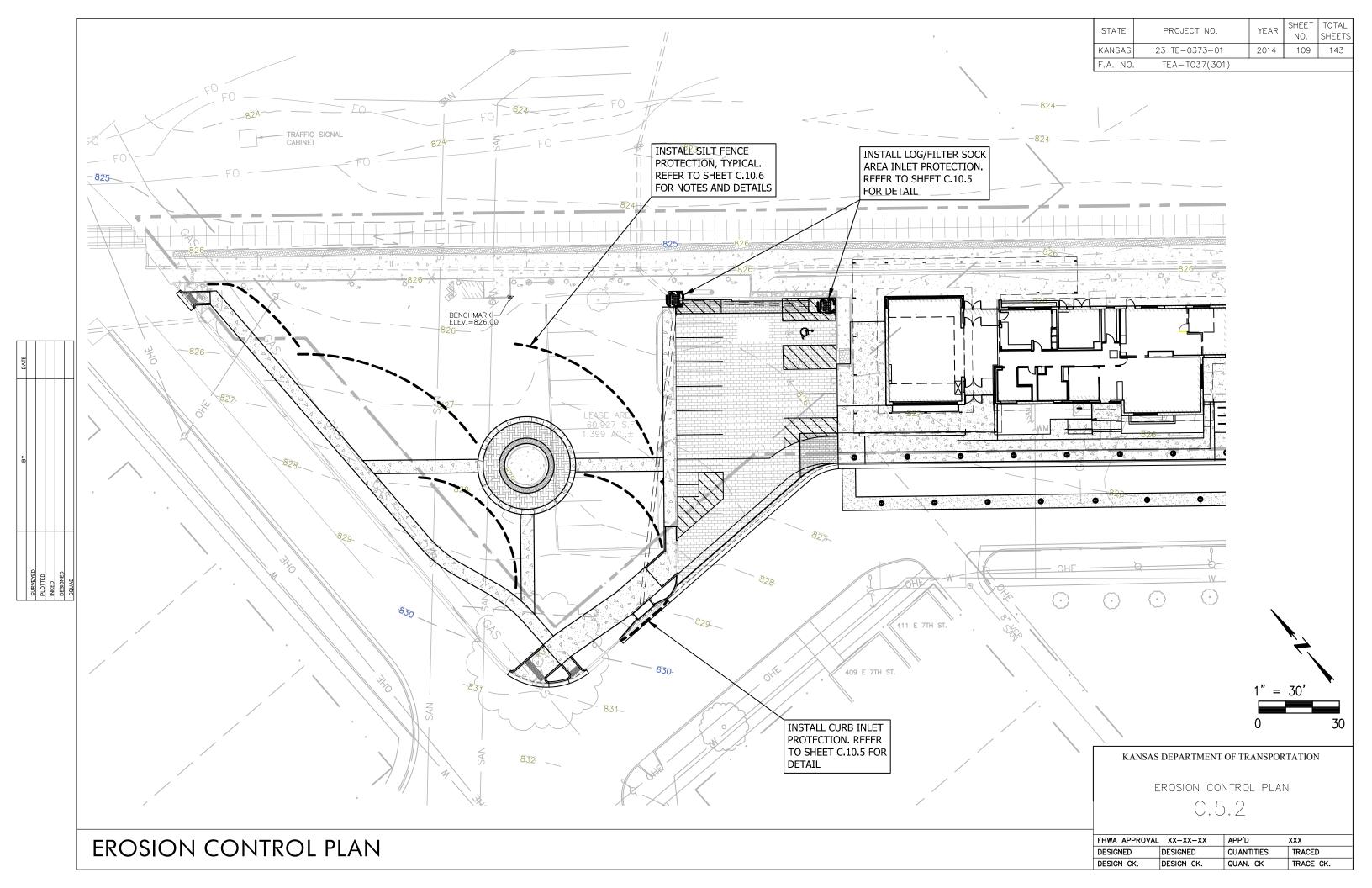
KANSAS DEPARTMENT OF TRANSPORTATION

EROSION CONTROL NOTES

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FHWA APPROVAL XX-XX-XX		APP'D	XXX
DESIGNED	DESIGNED	QUANTITIES	TRACED
DESIGN CK.	DESIGN CK.	QUAN. CK	TRACE CK.

#### **EROSION CONTROL NOTES**



#### LANDSCAPE NOTES:

- GENERAL CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE (1) YEAR FROM DATE OF PROJECT SUBSTANTIAL COMPLETION.
- ALL PLANT MATERIALS SHALL MEET MINIMUM REQUIREMENTS SHOWN IN THE "AMERICAN STANDARDS FOR NURSERY STOCK" (ANSI Z60.1-1990).
- 3. EACH TREE AND SHRUB SHALL BE SECURELY LABELED WITH A WATERPROOF TAG INDICATING BOTANICAL NAME AND COMMON NAME FOR DELIVERY TO SITE.
- 4. NO PLANT MATERIAL SHALL BE SUBSTITUTED WITH OUT THE APPROVAL OF THE OWNER. ALL PLANTING LOCATIONS FOR TREES AND SHRUBS SHALL BE FLAGGED BY THE CONTRACTOR AND APPROVED BY THE OWNER, PRIOR TO INSTALLATION.
- 5. ALL DISCREPANCIES AND/OR FIELD CHANGES SHALL BE REPORTED TO THE OWNER FOR APPROVAL PRIOR TO IMPLEMENTATION. WHEN CONDITIONS DETRIMENTAL TO PLANT GROWTH ARE ENCOUNTERED, SUCH AS RUBBLE FILL, ADVERSE DRAINAGE CONDITIONS OR OBSTRUCTIONS, LANDSCAPE CONTRACTOR SHALL NOTIFY THE OWNER BEFORE PLANTING.
- 6. THE GENERAL CONTRACTOR SHALL VERIFY LOCATION OF AND PROTECT ALL UTILITIES AND STRUCTURES. DAMAGE TO UTILITIES AND STRUCTURES SHALL BE REPAIRED BY THE CONTRACTOR.
- THE LANDSCAPE CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER CONTRACTORS ON SITE THROUGHOUT THE CONSTRUCTION PROCESS.
- 8. ALL SHRUB AND TREE PLANTING AREAS SHALL BE EXCAVATED AND BACK-FILLED WITH PLANT MIX. PROVIDE FERTILIZER WITH NOT LESS THAN 5% TOTAL NITROGEN, 10% AVAILABLE PHOSPHORIC ACID AND 5% SOLUBLE POTASH. DISCARD SUBSOIL REMOVED FROM PLANTING AREA EXCAVATION; DO NOT MIX WITH PLANT MIX OR USE AS BACK-FILL. PREPARE PLANTING AREAS AND INSTALL PLANTS COMPLETELY, PRIOR TO SEEDING.
- 9. PLANT MIX SHALL CONSIST OF TOPSOIL COMPLETELY FREE OF DEBRIS, ROCK IN EXCESS OF 1" IN DIAMETER, STICKS AND CLAY. MIX ONE PART COMPOSTED STABLE MANURE AND THREE PARTS TOPSOIL WITH FERTILIZER AS SPECIFIED ABOVE.
- 10. ALL SHRUBS SHALL BE INSTALLED IN PROPOSED PLANTING BEDS AND COVERED WITH SHREDDED BARK MULCH OR ACCEPTABLE MATERIAL APPROVED BY THE OWNER.
- 11. ALL PLANTED SURFACES SHALL RECEIVE EMULSION TYPE, FILM FORMING, ANTI-DESSICANT AGENT DESIGNED TO PERMIT TRANSPIRATION, BUT RETARD EXCESSIVE LOSS OF MOISTURE FROM PLANTS. ANTI-DESSICANT TO BE DELIVERED IN MANUFACTURER'S FULLY IDENTIFIED CONTAINERS AND MIXED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. APPLY PRIOR TO APPLICATION OF MULCH.
- 12. ALL DISTURBED AREAS NOT DESIGNATED AS PAVEMENT OR PLANTING BEDS SHALL BE SODDED WITH TURF TYPE TALL FESCUE BLEND OR APPROVED EQUAL AT THE DIRECTION OF THE OWNER. ALL TURF AREAS SHALL CONSIST OF A MINIMUM 6" THICKNESS TOPSOIL FREE OF CLAY, DEBRIS, STICKS OR ROCKS IN EXCESS OF 1" IN DIAMETER. ALL TOPSOIL AREAS SHALL BE FINE GRADED AND RAKED, REMOVING RIDGES AND FILLING DEPRESSIONS AS REQUIRED TO MEET FINISHED GRADES. PRIOR TO SODDING, MOISTEN PREPARED TOPSOIL IF GROUND IS DRY. AFTER ONE MONTH FOLLOWING SODDING, APPLY FERTILIZER AT THE MANUFACTURER'S RECOMMENDED RATE FOR NEWLY ESTABLISHED LAWNS. AFTER TWO MONTHS FOLLOWING SODDING, APPLY GYPSUM AT THE RATE OF 100 LBS. PER 1000 SQ. FEET. THE GENERAL CONTRACTOR SHALL MAINTAIN ALL PLANTED OR TURF AREAS THROUGHOUT THE WARRANTY PERIOD AND SHALL PERFORM OPERATIONS SUCH AS ROLLING, REGRADING, RESODDING, AND/OR REPLANTING AS REQUIRED TO ESTABLISH A SMOOTH TURF SURFACE, FREE OF ERODED OR BARE AREAS.
- 13. ALL UTILITY INFORMATION SHOWN HEREIN IS BASED ON THE INFORMATION AVAILABLE TO THE DESIGN PROFESSIONAL AT THE TIME OF DESIGN. THE CONTRACTOR SHALL VERIFY ALL UTILITY DEPTHS AND LOCATIONS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES TO FIELD LOCATE AND/OR ADJUST THEIR UTILITY AS REQUIRED FOR CONSTRUCTION. ALL UTILITY LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND THE DESIGN PROFESSIONAL ASSUMES NO LIABILITY FOR SAME.
- 14. REMOVE ANY EXCESS SOIL AND DEBRIS FROM AREA AND DISPOSE OF IN AN APPROVED MANNER.
- 15. SPACING SHOWN FOR PLANTS IS FOR INFORMATION ONLY AND SHALL BE ADJUSTED AS REQUIRED TO PROVIDE UNIFORM SPACING WITHIN PLANTING BEDS.

KDOT STANDARDS AND SPECIFICATIONS SHALL GOVERN ALL WORK TO BE PERFORMED. OTHER STANDARDS AND SPECIFICATIONS, AS NEEDED, SHALL BE PER THE CITY OF LAWRENCE, KANSAS

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
ANSAS	23 TE-0373-01	2014	110	143
.A. NO.	TEA-T037(301)			

NOTE: ALL TREES AND SHRUBS TO BE PURCHASED, SUPPLIED AND INSTALLED BY CITY OF LAWRENCE STAFF IN COORDINATION WITH THE GENERAL CONTRACTOR

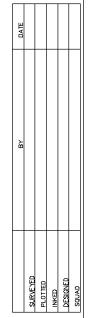
PLANT SCHEDULE						
TREES	QTY	BOTANICAL NAME / COMMON NAME	CONT	CAL		
ACE DEB	5	Acer platanoides `Deborah` / Deborah Maple	B & B	2.5"Cal		
ULM FRO	3	Ulmus x `Frontier` / Frontier Elm	B & B	2.5"Cal		
	•					
SHRUBS	QTY	BOTANICAL NAME / COMMON NAME	SIZE			
SPI TOR	31	Spiraea betulifolia `Tor` / Birchleaf Spirea	5 gal			
GROUND COVERS	QTY	BOTANICAL NAME / COMMON NAME	CONT			
	50	Perennials Per City	1 qt			
	$\{$					

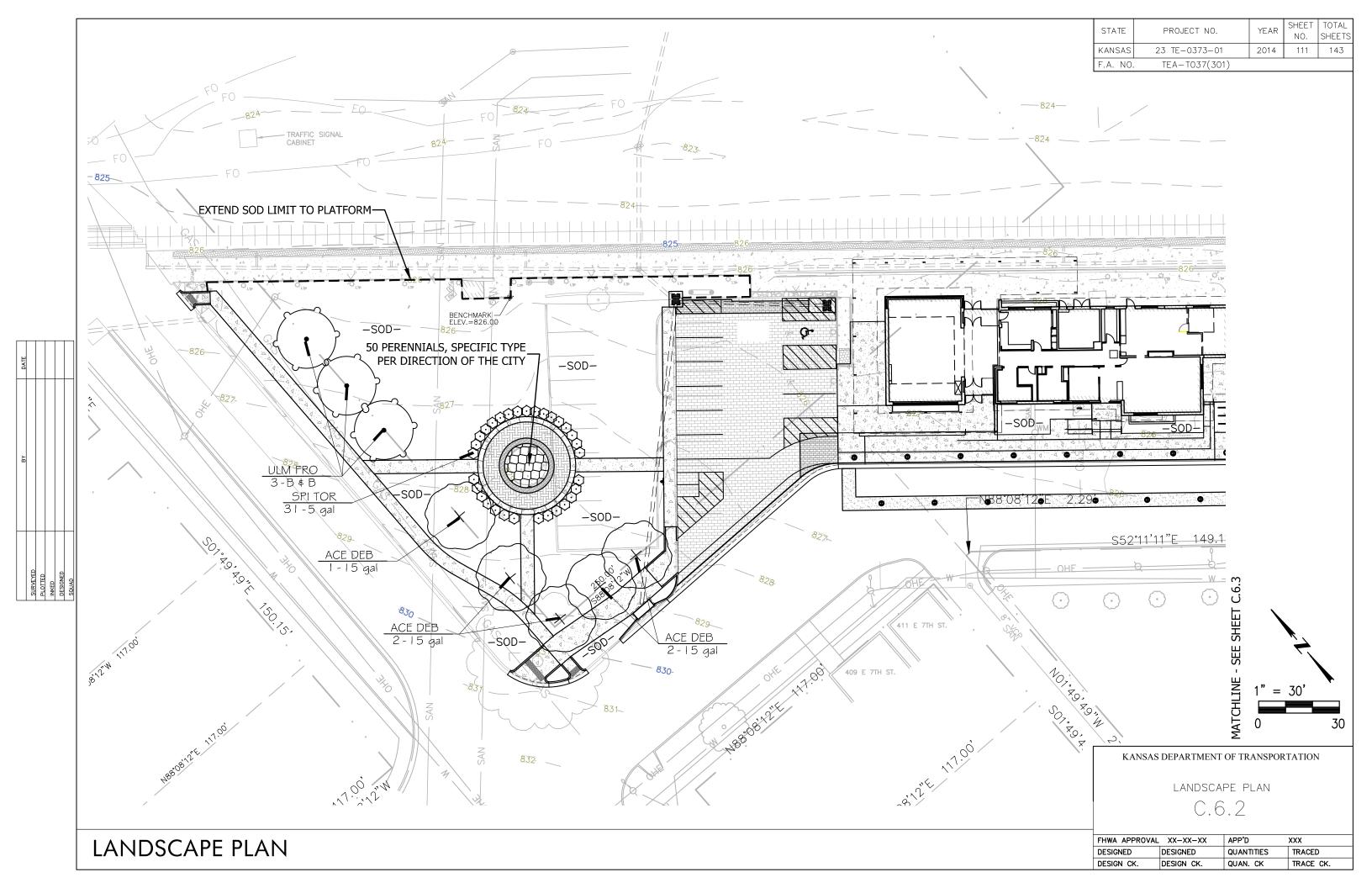
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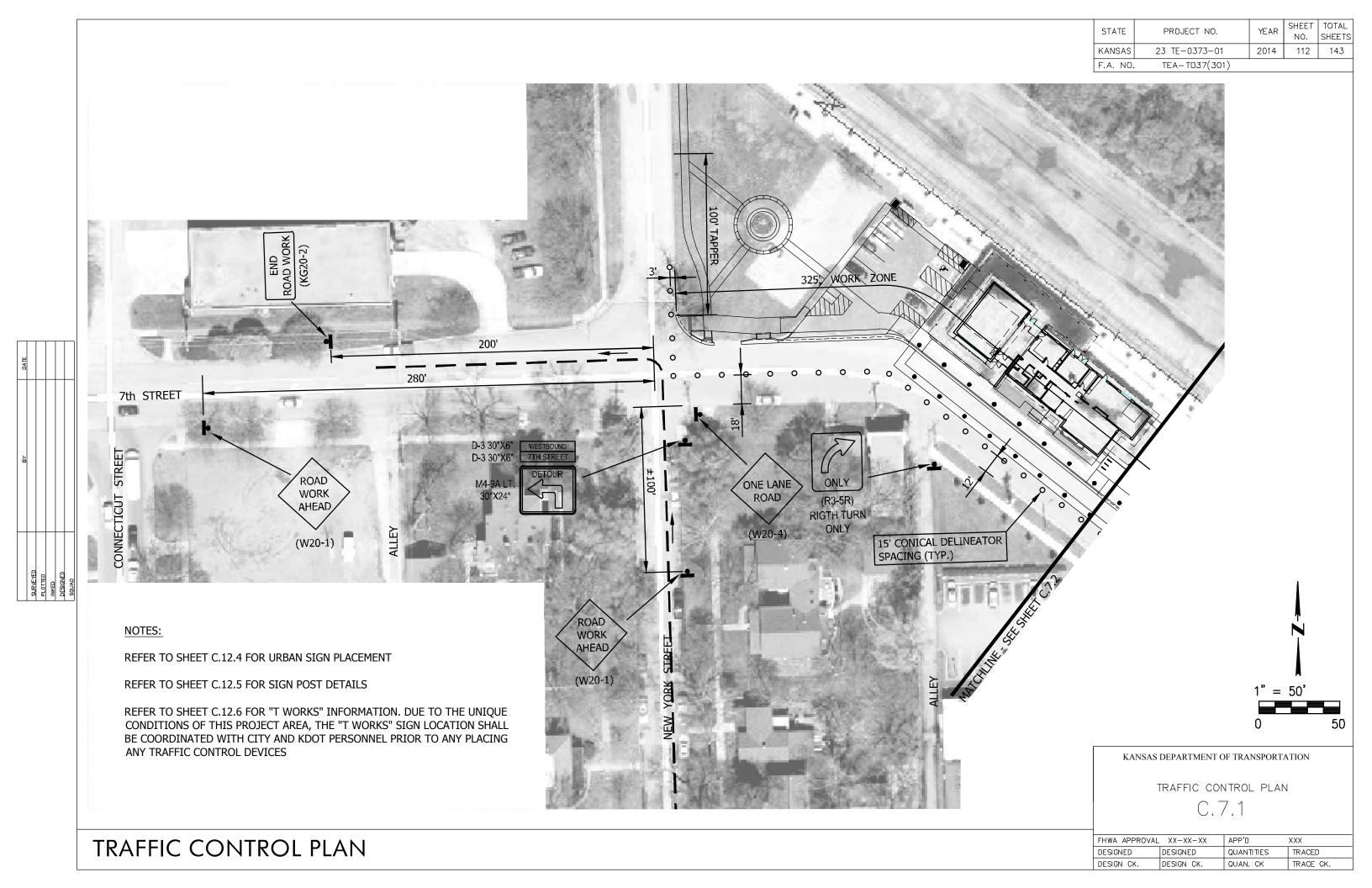
LANDSCAPE NOTES

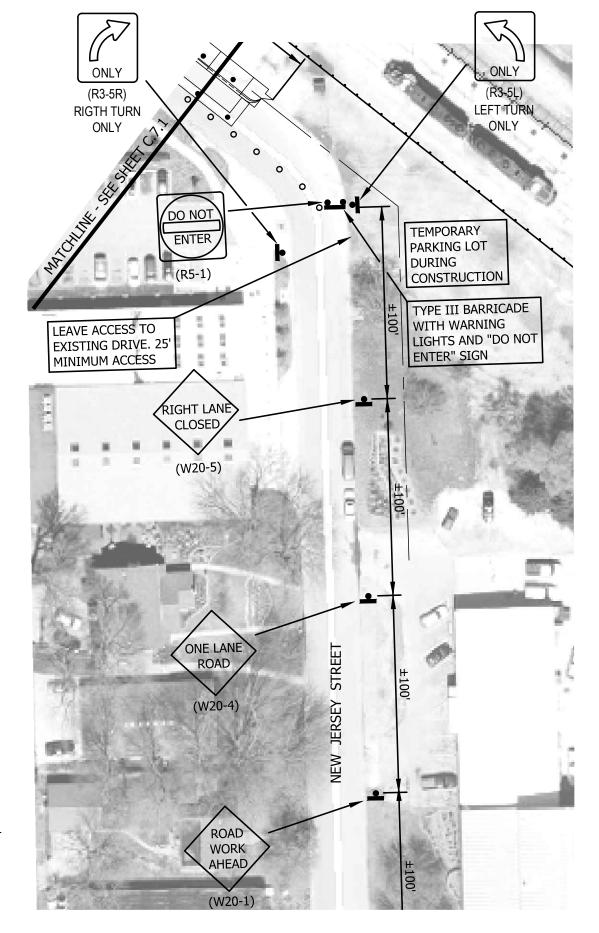
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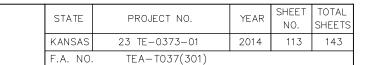
FHWA APPROVAL XX-XX-XX		APP'D	XXX
DESIGNED	DESIGNED	QUANTITIES	TRACED
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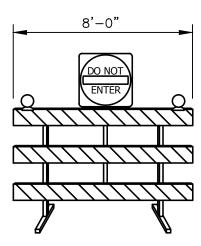






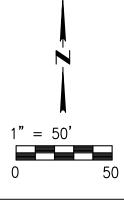






TYPE III BARRICADE WITH WARNING LIGHTS AND 'DO NOT ENTER" SIGN

TYPE III BARRICADE

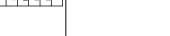


#### KANSAS DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLAN

C.7.2

FHWA APPROVAL XX-XX-XX		APP'D	XXX
DESIGNED	DESIGNED	QUANTITIES	TRACED
DESIGN CK.	DESIGN CK.	QUAN. CK	TRACE CK.



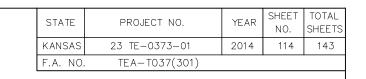
NOTES:

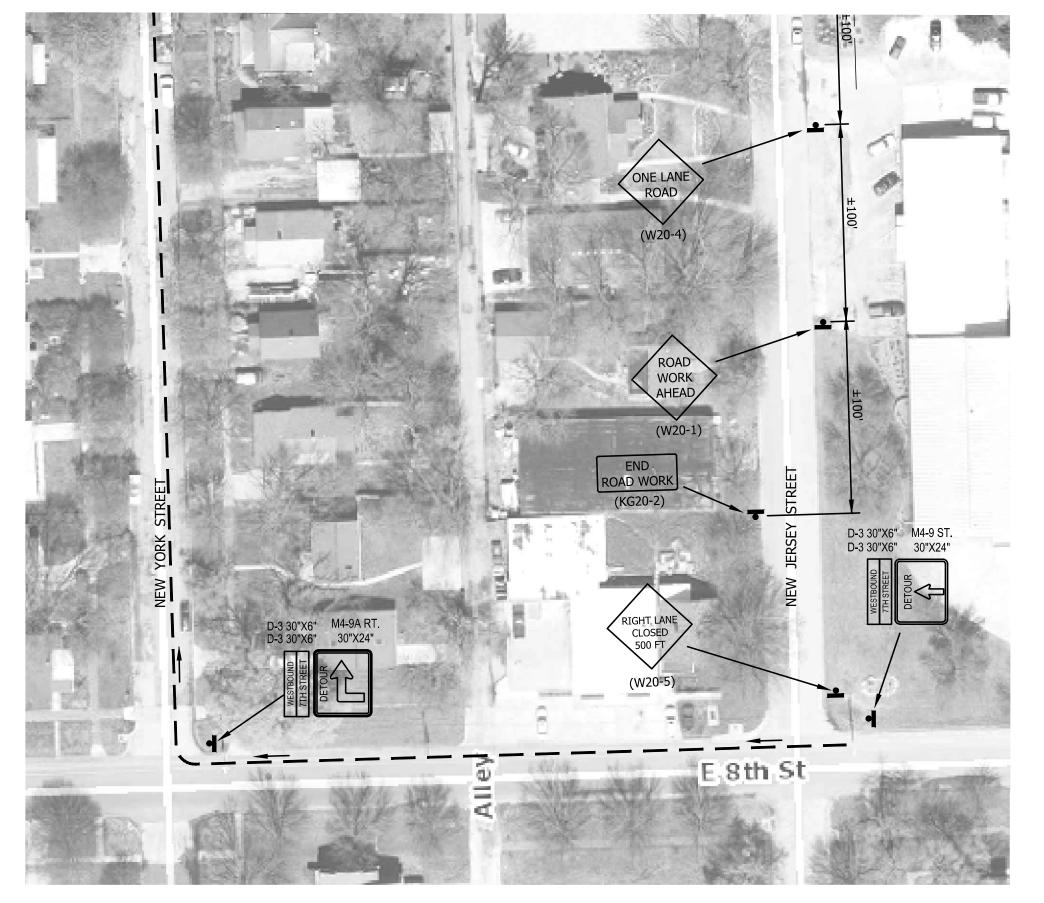
REFER TO SHEET C.12.4 FOR URBAN SIGN PLACEMENT

REFER TO SHEET C.12.5 FOR SIGN POST DETAILS

REFER TO SHEET C.12.6 FOR "T WORKS" INFORMATION. DUE TO THE UNIQUE CONDITIONS OF THIS PROJECT AREA, THE "T WORKS" SIGN LOCATION SHALL BE COORDINATED WITH CITY AND KDOT PERSONNEL PRIOR TO ANY PLACING ANY TRAFFIC CONTROL DEVICES

TRAFFIC CONTROL PLAN



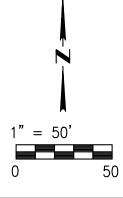


#### NOTES:

REFER TO SHEET C.12.4 FOR URBAN SIGN PLACEMENT

REFER TO SHEET C.12.5 FOR SIGN POST DETAILS

REFER TO SHEET C.12.6 FOR "T WORKS"
INFORMATION. DUE TO THE UNIQUE CONDITIONS OF
THIS PROJECT AREA, THE "T WORKS" SIGN LOCATION
SHALL BE COORDINATED WITH CITY AND KDOT
PERSONNEL PRIOR TO ANY PLACING ANY TRAFFIC
CONTROL DEVICES



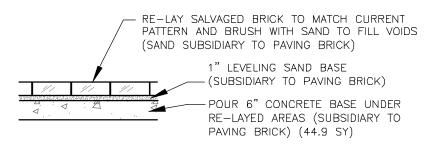
#### KANSAS DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLAN

C.7.3

FHWA APPROVAL	XX-XX-XX	APP'D	XXX	
DESIGNED	DESIGNED	QUANTITIES	TRACED	
DESIGN CK.	DESIGN CK.	QUAN. CK	TRACE CK.	

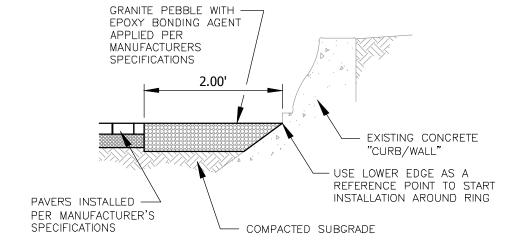
TRAFFIC CONTROL PLAN



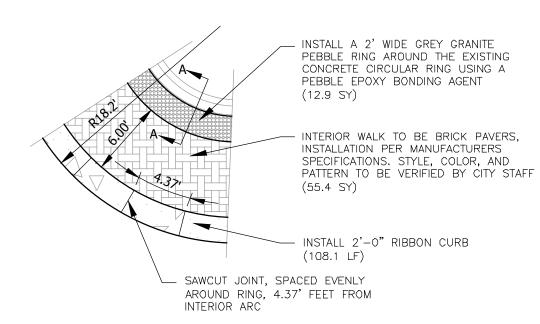
FOR EXISTING BRICK PARKING LOT AREAS

#### PAVING BRICK (SPECIAL)

NTS



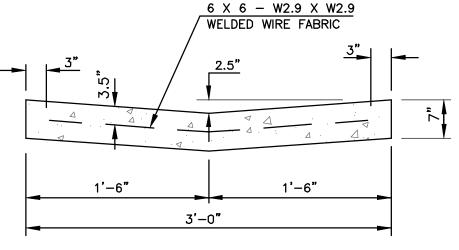
#### SECTION A-A



CIRCULAR WALK AROUND EXISTING CIRCULAR STRUCTURE

NTS

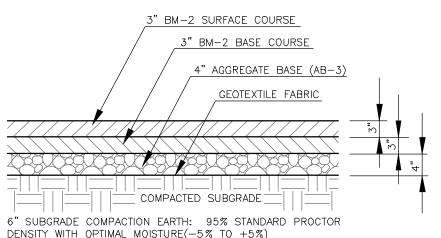
SITE DETAILS



NOTE: REFER TO GRADING PLAN FOR SPOT GRADES

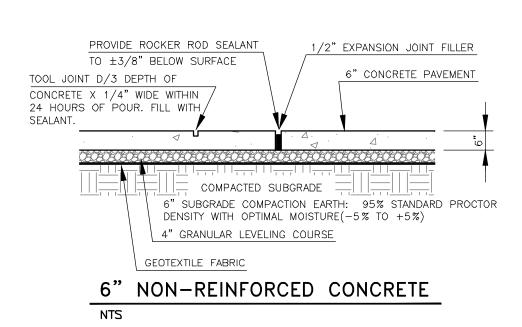
#### CONCRETE VALLEY GUTTER

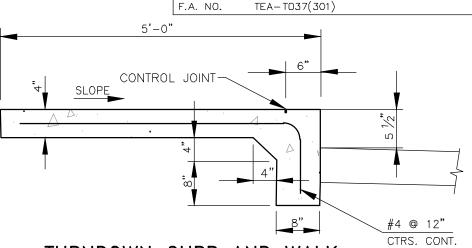
NTS



#### 6" ASPHALT PAVING DETAIL

NTS





PROJECT NO.

23 TE-0373-01

SHEET | TOTAL

115

2014

NO. SHEETS

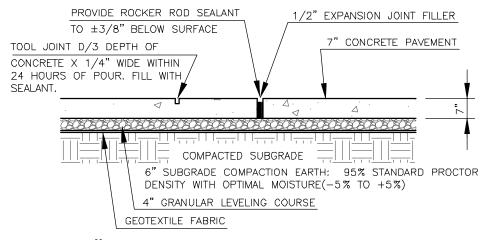
143

TURNDOWN CURB AND WALK

STATE

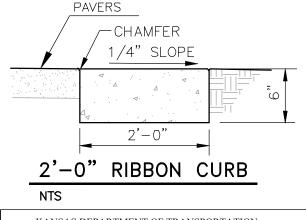
KANSAS

NTS



#### 7" NON-REINFORCED CONCRETE

NTS

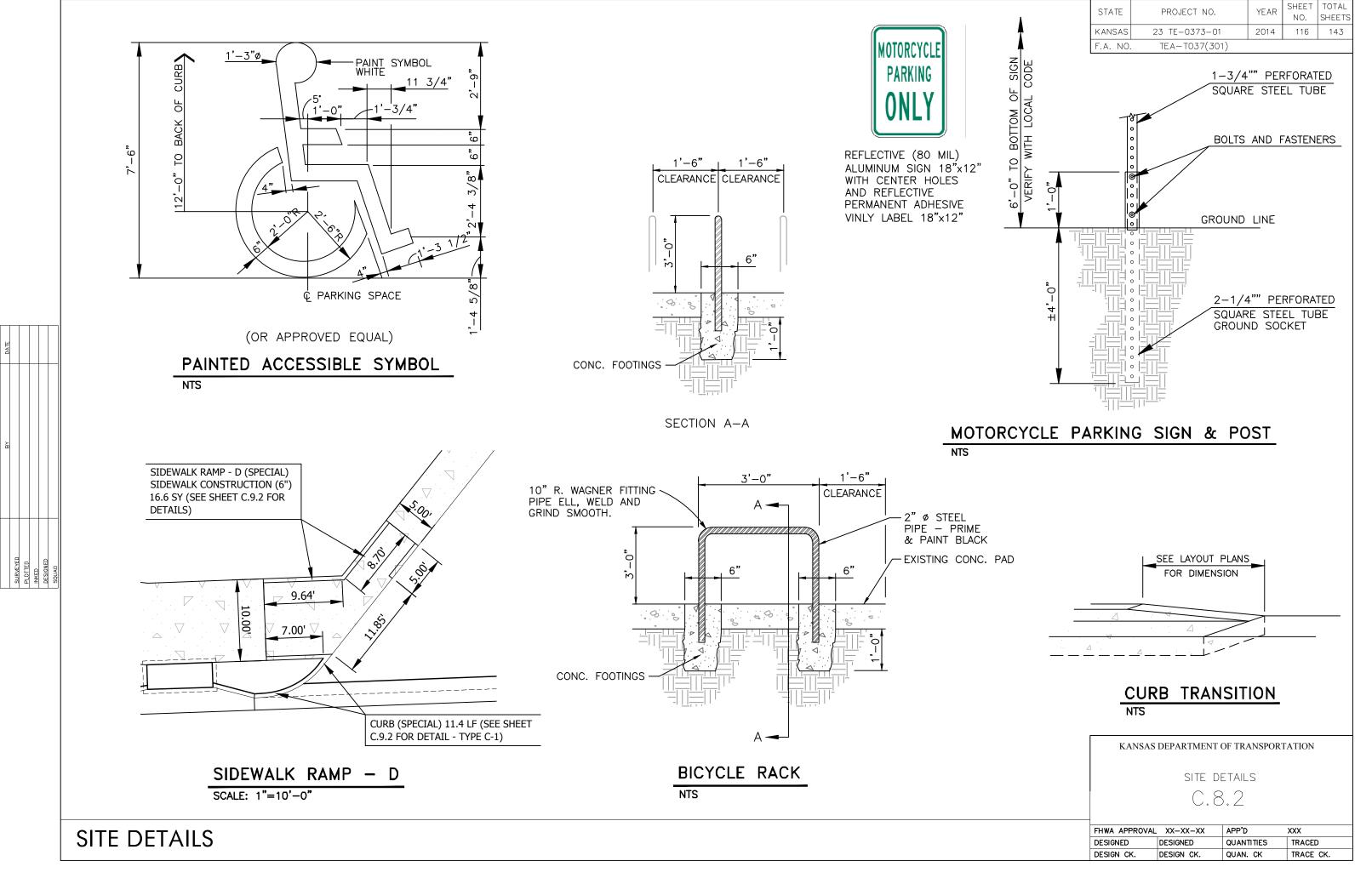


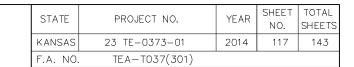
# KANSAS DEPARTMENT OF TRANSPORTATION SITE DETAILS C.8.1

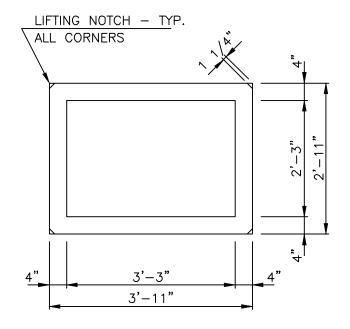
FHWA APPROVAL XX-XX-XX APP'D XXX

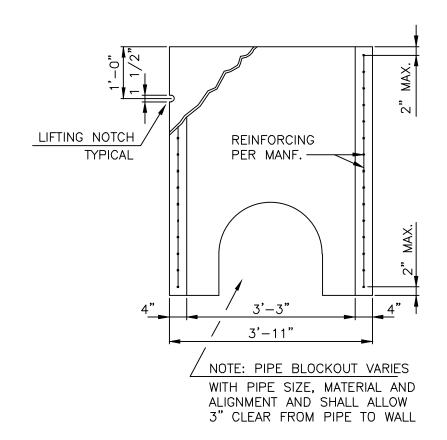
DESIGNED DESIGNED QUANTITIES TRACED

DESIGN CK. DESIGN CK. QUAN. CK TRACE CK.





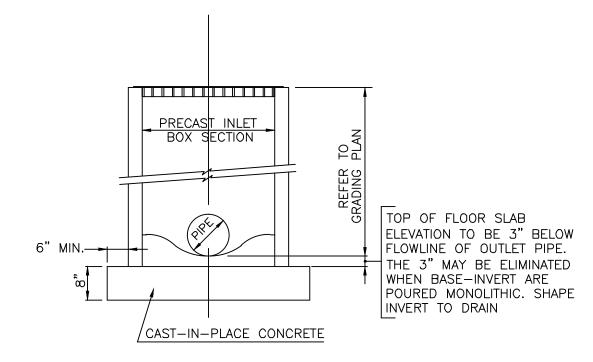




PRECAST AREA INLET BOX

#### GENERAL NOTES

- 1. GROUT ALL PIPES IN PLACE.
- 2. GRATES & FRAMES SHALL BE
  ASTM A36 STEEL
  COATED WITH BITUMASTIC BLACK SOLUTION
  (COAL TAR BASE) AS MANUFACTURED BY
  KOPPERS OR APPROVED EQUAL



## SECTION - AREA INLET

250 LB. TRAFFIC GRATE

A 2 EA. 

B 4 EA. 

C 12 EA. 

C 12 EA. 

C 12 EA. 

D 2 EA. 

C 14 EA. 

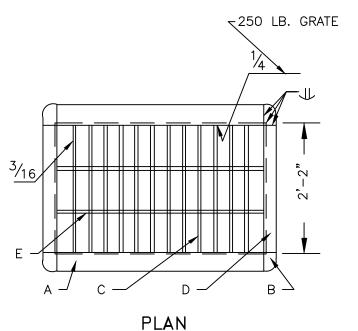
C 16 EA. 

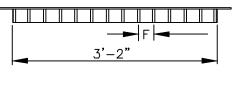
C 16 EA. 

C 17 E 26 EA. 

C 18 E 3/80x0'-2 3/8"

E 2-7/8" O.C.





<u>SECTION</u>

AREA INLET GRATE

KANSAS DEPARTMENT OF TRANSPORTATION

SITE DETAILS

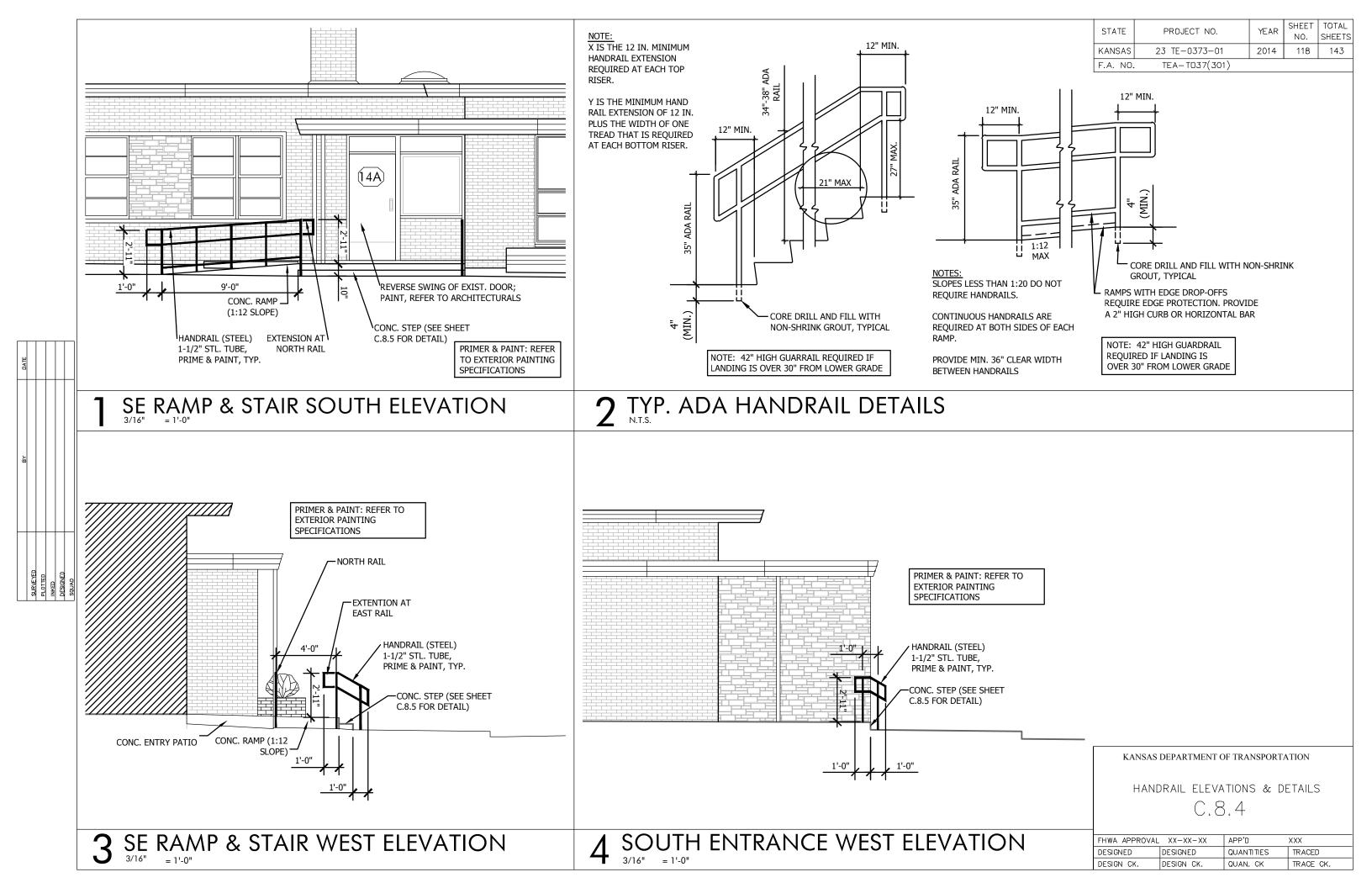
FHWA APPROVAL XX—XX—XX APP'D XXX

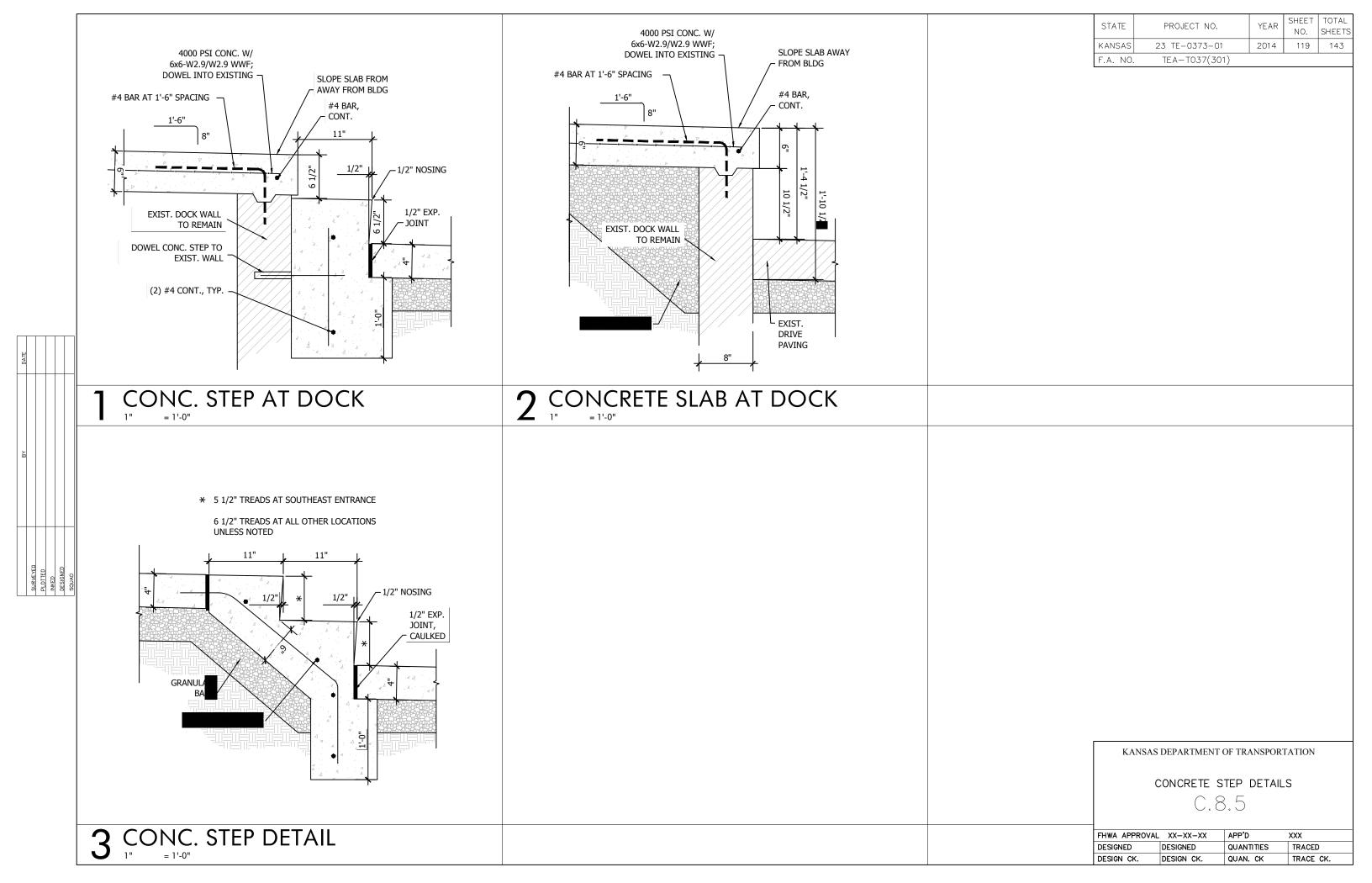
DESIGNED DESIGNED QUANTITIES TRACED

DESIGN CK. DESIGN CK. QUAN. CK TRACE CK.

NTS

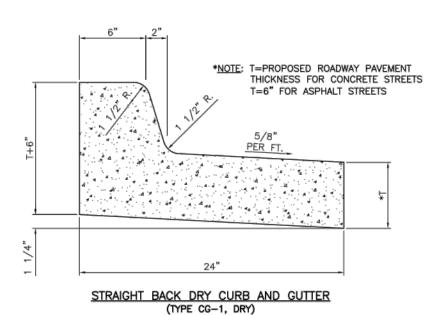
SITE DETAILS



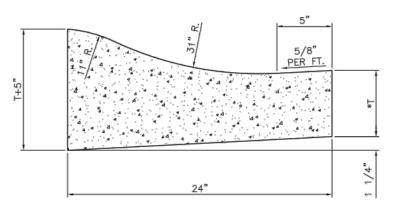


# PAVEMENT SURFACE STRAIGHT CURB (TYPE C-1) \*NOTE: T=PROPOSED ROADWAY PAVEMENT THICKNESS FOR CONCRETE STREETS T=6" FOR ASPHALT STREETS PER FT. 24" STRAIGHT BACK CURB AND GUTTER

(TYPE CG-1)

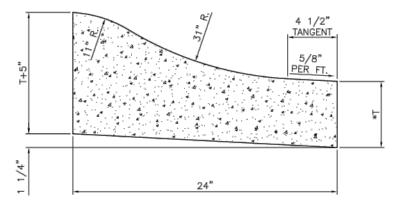


#### \*NOTE: T=PROPOSED ROADWAY PAVEMENT THICKNESS FOR CONCRETE STREETS T=6" FOR ASPHALT STREETS

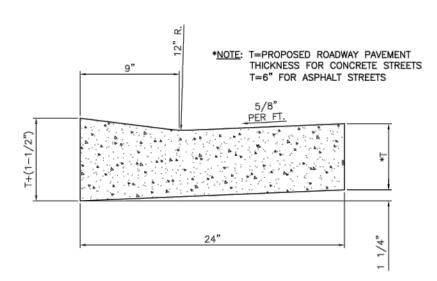


ROLL BACK CURB AND GUTTER (TYPE CG-2)

#### \*NOTE: T=PROPOSED ROADWAY PAVEMENT THICKNESS FOR CONCRETE STREETS T=6" FOR ASPHALT STREETS



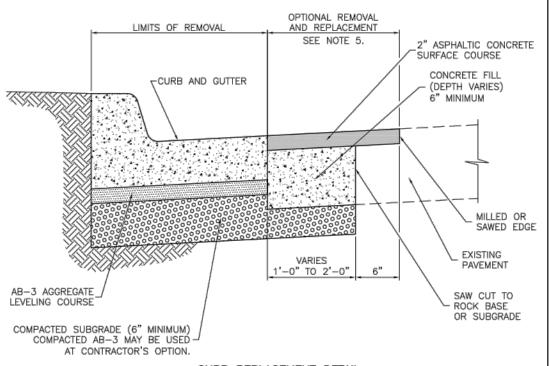
ROLL BACK CURB AND GUTTER (TYPE CG-2, DRY)



CURB AND GUTTER THROUGH DRIVEWAYS AND ACCESS RAMPS (TYPE CG-3)

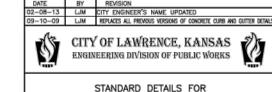
#### CURB AND GUTTER GENERAL NOTES

- TYPE CG-2 OR CG-2 DRY ROLL BACK CURB AND GUTTER MAY BE USED ONLY ON RESIDENTIAL STREETS. CURB CUTS FOR DRIVEWAYS ARE NOT REQUIRED WITH ROLL BACK CURB AND GUTTER.
- 2. INSTALL JOINTS IN ACCORDANCE WITH STANDARD SPECIFICATIONS.
- 3. CONCRETE SHALL CONFORM TO STANDARD SPECIFICATIONS, SECTION 2000.
- ASPHALTIC CONCRETE SURFACE COURSE SHALL CONFORM TO STANDARD SPECIFICATIONS, SECTION 1300.
- PAVEMENT REMOVAL AND REPLACEMENT BEYOND THE LIMITS OF CURB AND GUTTER REMOVAL IS AT THE CONTRACTOR'S OPTION AND COST.



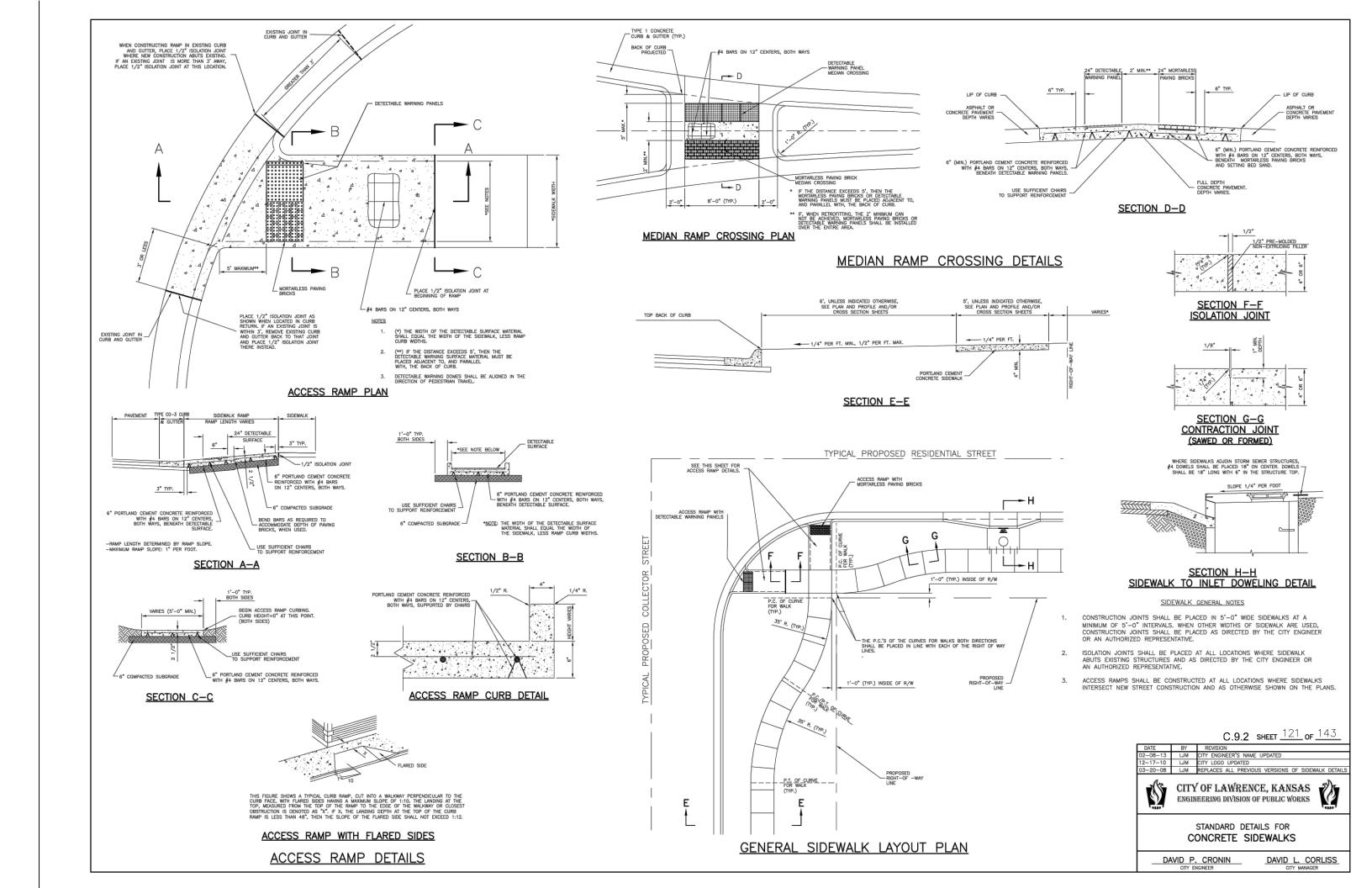
CURB REPLACEMENT DETAIL (NOTE: TO BE USED ONLY WHEN EXISTING CURB AND GUTTER IS REMOVED AND REPLACED, BUT STREET PAVEMENT REMAINS IN PLACE)

C.9.1 SHEET 120 of 143



CONCRETE CURB AND GUTTER

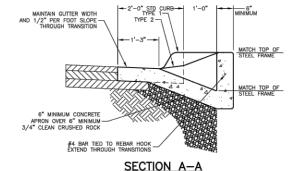
DAVID P. CRONIN
CITY ENGINEER DAVID L. CORLISS

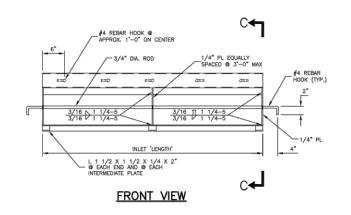


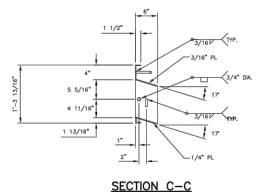
### NOTES THE MINIMUM WIDTH OF ALL STRUCTURES SHALL BE 4 FEET OR AS REQUIRED FOR PIPE CLEARANCE STEPS ARE REQUIRED IN ALL STRUCTURES WITH WALL HEIGHT GREATER THAN 4 FEET. CURB INLET DIMENSIONS SHALL BE STATED AS 'LENGTH' x 'WIDTH' ON ALL CONSTRUCTION NOTES. THE MINIMUM LENGTH OF CURB INLET OPENING SHALL BE 5 FEET. CURB INLET FRAME TOP CHANNEL SHALL BE FABRICATED FROM 0.15 Max. CARBON, FORMING QUALITY, OR A36 HOT ROLLED STEEL PLATE.

CURB INLET FRAMES SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION PER ASTM A123.

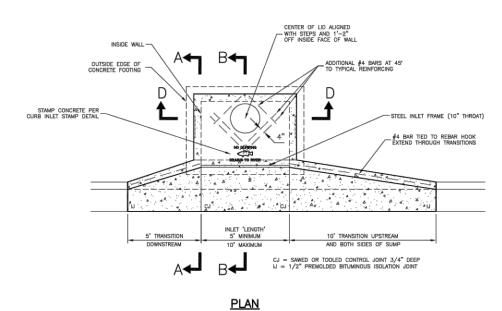
**PAVING** 



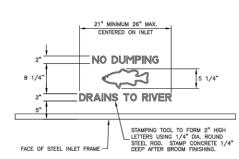




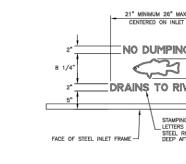
STEEL INLET FRAME



STANDARD CURB INLET



<u>PLAN</u> **CURB INLET STAMP** 



#### C.9.3 SHEET 122 of 143

02-08-13 LJM CITY ENGINEER'S NAME UPDATED 01-24-13 LJM TYPICAL TRENCH SECTIONS REVISED AND NOTES ADDED 12-16-10 LJM TYPICAL TRENCH SECTIONS REVISED AND NOTES ADDED 09-10-09 LJM SEPILADES ALL DREVIOUS CUERDIANS OF STORM SEMED PETAIL	DATE	BY	REVISION
12-16-10 LJM TYPICAL TRENCH SECTIONS REVISED AND NOTES ADDED	02-08-13	LJM	CITY ENGINEER'S NAME UPDATED
THE RESERVE THE PROPERTY OF TH	01-24-13	LJM	TYPICAL TRENCH SECTIONS REVISED AND NOTES ADDED
09-10-09 LIM REPLACES ALL PREVIOUS VERSIONS OF STORM SEWER DETAIL	12-16-10	LJM	TYPICAL TRENCH SECTIONS REVISED AND NOTES ADDED
se is se man pur man real relations to stote dentity being	09-10-09	LJM	REPLACES ALL PREVIOUS VERSIONS OF STORM SEWER DETAIL

**SECTION** 

SUBSURFACE DRAIN

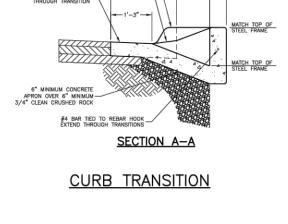


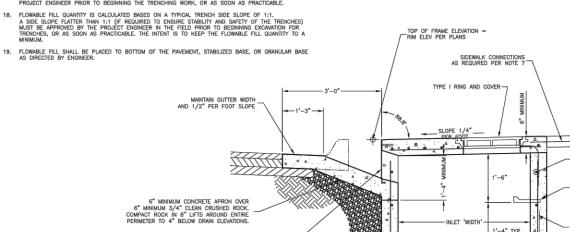
CITY OF LAWRENCE, KANSAS ENGINEERING DIVISION OF PUBLIC WORKS

STANDARD DETAILS FOR STORM SEWER CURB INLETS

DAVID L. CORLISS

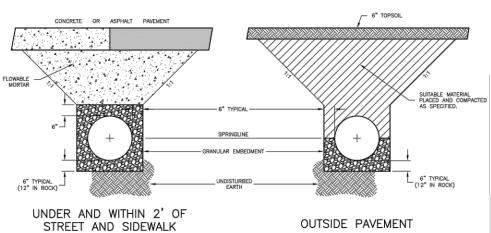
CITY MANAGER DAVID P. CRONIN



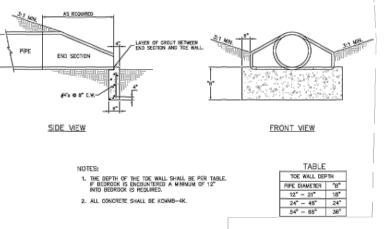


1'-4" TYP. 10" STEEL INLET FRAME MANUFACTURED BY SHAWNEE STEEL AND WELDING, INC. OR PRE—APPROVED EQUAL, SEE STEEL INLET FRAME DETAIL 6" MINIMUM ALL WALLS 6" MINIMUM

\* NOTE:
THE END OF THE PIPE SHOULD EXTEND
A MINIMUM OF 4", UP TO A MAXIMUM OF
6", BEYOND THE INTERIOR WALL FACE. SECTION B-B



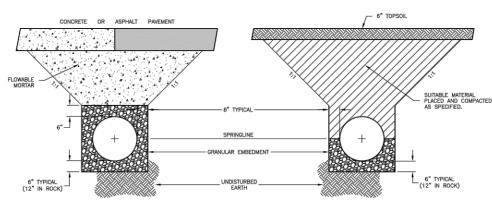
OUTSIDE PAVEMENT TYPICAL TRENCH SECTIONS



STANDARD END SECTION

#### NOTES

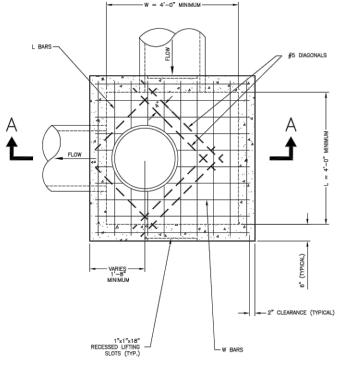
- STANDARD DRAWINGS SHALL APPLY ONLY TO STRUCTURES WITHIN THE FOLLOWING LIMITS:
   A. INSIDE PLAN DIMENSIONS SHALL NOT EXCEED 40 SQUARE FEET.
   B. WALL HEIGHT SHALL NOT EXCEED 10 VERTICAL FEET.
- THE MINIMUM WIDTH OF ALL STRUCTURES SHALL BE 4 FEET OR AS REQUIRED FOR PIPE CLEARANCE.
- 3. STEPS ARE REQUIRED IN ALL STRUCTURES WITH WALL HEIGHT GREATER THAN 4 FEET.
- FRAMES, LIDS, CASTINGS, STEPS, INVERT, SUBSURFACE DRAINS, PIPE CONNECTIONS AND OT ITEMS SHOWN SHALL BE CONSIDERED SUBSURIARY TO EACH STANDARD STRUCTURE
- SUBSURFACE DRAINS ARE REQUIRED IN ALL STRUCTURES IN THE PUBLIC RIGHT—OF—WAY WITH WALL HEIGHT GREATER THAN 3 FEET, ONE DRAIN PER WALL SHALL BE INSTALLED ONLY IN WALL WHICH ARE PERPENDICULAR TO THE STREET CENTERLINE.
- JUNCTION BOXES WITH INSIDE PLAN DIMENSIONS EXCEEDING 25 SQUARE FEET SHALL HAVE TYPE II RING AND COVER. JUNCTION BOXES IN PAVED AREAS SHALL HAVE TYPE II RING AND COVER.
- NO JUNCTION BOX TO BE LOCATED IN PAVEMENT WITHOUT APPROVAL OF THE CITY ENGINEER.
- 8. ALL FLAT PLATE AND RODS SHALL BE M1020 MERCHANT QUALITY OR A36 HOT ROLLED STEEL.
- 9. ALL WELDING SHALL CONFORM TO THE PROVISIONS OF THE AWS "STRUCTURAL WELDING CODE
- STAMPING TOOLS SHALL BE APPROVED PRIOR TO USE. A FULL SIZE FABRICATION
  PATTERN MAY BE OBTAINED FROM THE PUBLIC WORKS DEPARTMENT. FOR CAST—IN-PLACE INLETS,
  A STAMPING TOOL MAY BE ROPROWED FROM THE DEPARTMENT PER AN APPROVED SCHEDULE.
- ALL DIMENSIONS AND SIDE SLOPES SHOWN WITHIN THE "TYPICAL TRENCH SECTION DETAILS" ARE TYPICAL ANY DEVIATION FROM THESE DIMENSIONS MUST BE APPROVED BY THE
- 12. FLOWABLE FILL QUANTITY IS CALCULATED BASED ON A TYPICAL TRENCH SIDE SLOPE OF 1:1. A SIDE SLOPE FLATER THAN 1:1 (IF REQUIRED TO ENSURE STABILITY AND SAFETY OF THE TRENCHES) MUST BE APPROVED BY THE PROJECT ENGINEER IN THE FIELD PRIOR TO BEDINNING EXCANATION FOR TRENCHES, OR AS SOON AS PRACTICABLE. THE INTENT IS TO KEEP THE FLOWABLE FILL QUANTITY TO A MANUAL.
- FLOWABLE FILL SHALL BE PLACED TO BOTTOM OF THE PAVEMENT, STABILIZED BASE, OR GRANULAR BASE AS DIRECTED BY ENGINEER.



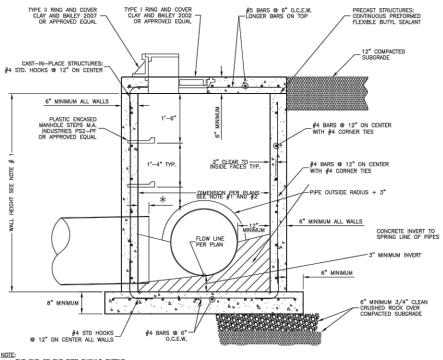
UNDER AND WITHIN 2' OF STREET AND SIDEWALK PAVING

OUTSIDE PAVEMENT

TYPICAL TRENCH SECTIONS





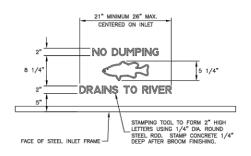


\* NOTE:

THE END OF THE PIPE SHOULD EXTEND
A MINIMUM OF 4", UP TO A MAXIMUM OF
6", BEYOND THE INTERIOR WALL FACE.

TYPICAL SECTION A-A

STANDARD JUNCTION BOX



PLAN
JUNCTION BOX STAMP

C.9.4 SHEET 123 OF 143

DATE	BY	REVISION
02-08-13	LJM	CITY ENGINEER'S NAME UPDATED
01-24-13	LJM	TYPICAL TRENCH SECTIONS REVISED AND NOTES ADDED
12-16-10	LJM	TYPICAL TRENCH SECTIONS REVISED AND NOTES ADDED
00-10-00	1.1M	DEDIAGES ALL DECIONE VEDELONIS OF STORM SERVED DETAILS



CITY OF LAWRENCE, KANSAS ENGINEERING DIVISION OF PUBLIC WORKS

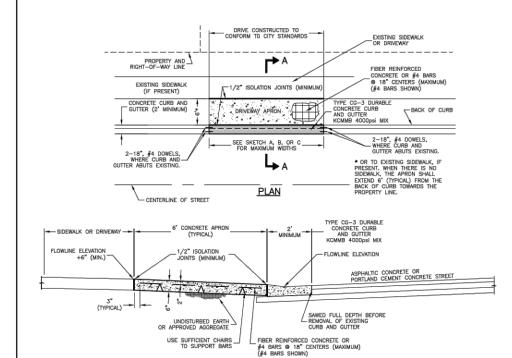
STANDARD DETAILS FOR STORM SEWER JUNCTION BOXES

DAVID P. CRONIN

CITY ENGINEER

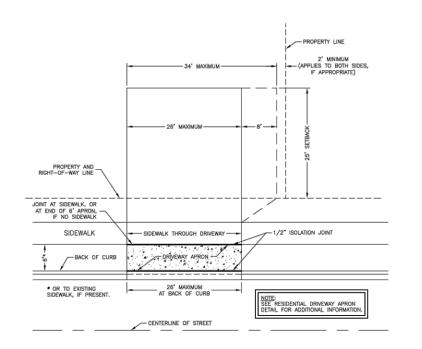
DAVID L. CORLISS

CITY MANAGER



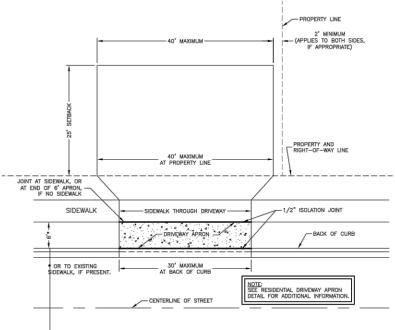
#### SECTION A-A

#### RESIDENTIAL DRIVEWAY APRON



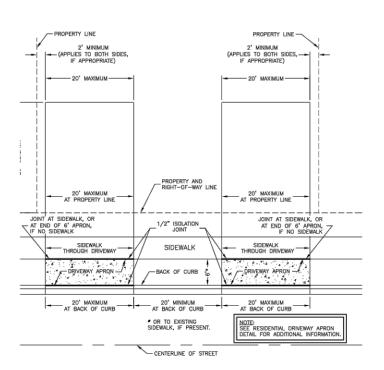
#### DRIVEWAY DETAIL FOR A SINGLE FAMILY HOME

SCALE : 1"=10'
(SKETCH A)
NOTE: DRIVEWAY APRON MAY BE FLARED, IF DESIRED;
HOWEVER, THE MAXIMUM WIDTH AT THE CURB REMAINS AT



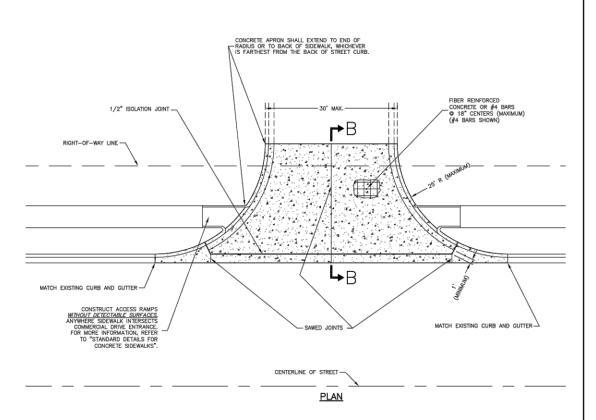
#### DRIVEWAY DETAIL FOR A DUPLEX WHERE 2-CAR GARAGES ARE SIDE BY SIDE

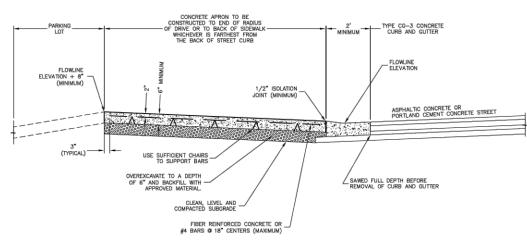
SCALE : 1"=10'
(SKETCH B)
NOTE: DRIVEWAY APRON MAY BE FLARED, IF DESIRED;
HOWEVER, THE MAXIMUM WIDTH AT THE CURB REMAINS AT



#### DRIVEWAY DETAIL FOR A DUPLEX WHERE 2-CAR GARAGES ARE SEPARATED

SCALE : 1"=10'
(SKETCH C)
NOTE: DRIVEWAY APRON MAY BE FLARED, IF DESIRED;
HOWEVER, THE MAXIMUM WIDTH AT THE CURB REMAINS AT 20 FEET.





NOTE: ON DOWN ENTRANCE GRADES,THE DRIVEWAY APRON SHALL ATTAIN AN ELEVATION 8" HIGHER THAN THE FLOWLINE OF THE CURB AND GUTTER BEFORE SLOPING DOWNWARD.
APRON SHALL BE CONSTRUCTED OF CONCRETE CONTAINING "DURABLE" AGGREGATE PER CITY STANDARD SPECIFICATIONS.

#### SECTION B-B

#### COMMERCIAL DRIVEWAY APRON

#### COMMERCIAL DRIVEWAY DETAILS

C.9.5 SHEET  $\frac{124}{124}$  of  $\frac{143}{143}$ 

10-21-08 04-03-08	LJM	RESIDENTIAL DRIVEWAY APRON DETAILS REVISED REPLACES ALL PREVIOUS VERSIONS OF DRIVEWAY	DETAIL
(2)		EERING DIVISION OF PUBLIC WORKS	(4

STANDARD DETAILS FOR CONCRETE DRIVEWAYS

DAVID P. CRONIN

CITY ENGINEER

DAVID L. CORLISS

CITY MANAGER

RESIDENTIAL DRIVEWAY DETAILS

		1	I
2	REMOVAL OF EXISTING STRUCTURES	LS	1
3	TRAFFIC CONTROL	LS	1
4	CLEARING & GRUBBING	LS	1
5	COMMON EXCAVATION	CY	41
6	CONTRACTOR CONSTRUCTION STAKING	LS	1
7	COMPACTION OF EARTHWORK (TYPE AA)(MR-5-5)	LS	1
8	CURB & GUTTER, COMBINED	LF	178.8
9	GUTTER (CONCRETE VALLEY)	LF	81.2
10	SIDEWALK CONSTRUCTION (4")	SY	570.7
11	SIDEWALK RAMP	EA	4
12	HMA COMMERCIAL GRADE (CLASS A)	TON	36.6
13	CONCRETE PAVEMENT (6") (GRADE 4.0)(AE)	SY	51.3
14	CONCRETE PAVEMENT (7") (GRADE 4.0)(AE)	SY	35.5
15	PAVING BRICK (SPECIAL)	SY	44.9
16	REINFORCING STEEL	LBS	370
17	GRANULAR BASE (AB-3)	SY	145.5
18	STORM SEWER (12")(PVCP)	LF	55
19	STORM SEWER (15")(PVCP)	LF	112
20	INLET (CURB)(SETBACK)	EA	1
21	PRECAST AREA INLET	EA	2
22	FENCE (CHAIN LINK)(6'-0")	LF	344
23	FENCE (CONSTRUCTION)(TEMPORARY)	LF	1,000
24	SIGN POST (1-3/4" PERFORATED SQUARE STEEL TUBE)	LF	6
25	SIGN POST (2-1/4" PERFORATED SQUARE STEEL TUBE)	LF	5
26	SIGN "MOTORCYCLE PARKING ONLY"	EA	1
27	CURB. EDGE (VARIABLE)(AE)(SPECIAL) "TRANSITION"	LF	32
28	CURB. EDGE (VARIABLE)(AE)(SPECIAL) "RIBBON CURB"	LF	108.1
29	2' WIDE GREY GRANITE PEBBLE RING (SPECIAL)	SY	12.9
30	BRICK PAVERS (CIRCULAR WALK)	SY	55.4
31	BICYCLE RACK	EA	3
32	HANDRAIL (STEEL)	LF	126
33	PAVEMENT MARKING (PAINT)(WHITE)(4")	LF	725
34	PAVEMENT MARKING SYMBOL (PAINT)(WHITE)(HANDICAP)	EA	2
35	GEOTEXTILE FABRIC	SF	1,307
36	FURNISHING AND PLANTING MATERIALS	LS	1
37	ROCK EXCAVATION	CY	79
38	MAILBOX INSTALLATION (SET PRICE)	EA	1

BUILDING BASE BID 1 - ACCESSIBILITY IMPROVEMENTS (REFER TO "SHEET INDEX SI" FOR WORK RELATED TO THIS ITEM)

BUILDING ALTERNATE 1 - INTERIOR RESTORATION (REFER TO "SHEET INDEX SI" FOR WORK RELATED TO THIS ITEM)

BUILDING ALTERNATE 2 - ROOF INSULATION (REFER TO "5.W.1" FOR WORK RELATED TO THIS ITEM)

BUILDING BASE BID 2 - EXTERIOR RESTORATION, ROOF RESTORATION, WEATHERIZATION (REFER TO "SHEET INDEX SI" FOR WORK RELATED TO THIS ITEM)

**RECAPITULATION OF SITE QUANTITIES** 

GENERAL DESCRIPTION

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	23 TE-0373-01	2014	125	143
F.A. NO.	TEA-T037(301)			

REMOVAL OF EXISTING STRUCTURES				
ITEM NO.	GENERAL DESCRIPTION	UNIT	QUANTITY	
1	RAILROAD TIE GUARD	LF	16	
2	STORM BOX	EA	1	
3	ADA SIGN AND POST (SALVAGE TO CITY)	EA	1	
4	CURB & GUTTER, COMBINED	LF	151	
5	CONCRETE PARKING AREA (INCLUDES ASSOCIATED CURB & GUTTER)	SY	424.6	
6	ASPHALTIC CONCRETE PAVEMENT	SY	141.5	
7	CONCRETE SIDEWALK	SY	213.7	
8	CONCRETE LOADING DOCK (ASSOCIATED WITH BUILDING)	SY	52.6	
9	CONCRETE DRIVEWAY (ASSOCIATED WITH LOADING DOCK)	SY	22.0	
10	PAVEMENT MARKING (PAINT)(WHITE)(4")	LF	659	
11	PAVEMENT MARKING SYMBOL (PAINT)(WHITE)(HANDICAP)	EA	2	

UNIT

LS

LS

LS

LS

1

QUANTITY

FOR LANDSCAPE QUANTITIES SEE SHEET C.6.1
FOR SUMMARY OF SEEDING QUANTITIES SEE SHEET C.10.9
FOR SUMMARY OF PAVEMENT MARKING QUANTITIES SEE SHEET C.11.1

FOR TRAFFIC CONTROL QUANTITIES SEE SHEET C.12.4 FOR EROSION CONTROL QUANTITIES SEE SHEET C.10.3

#### KANSAS DEPARTMENT OF TRANSPORTATION

SITE QUANTITIES RECAPITULATION

C.9.6

SITE QUANTITIES

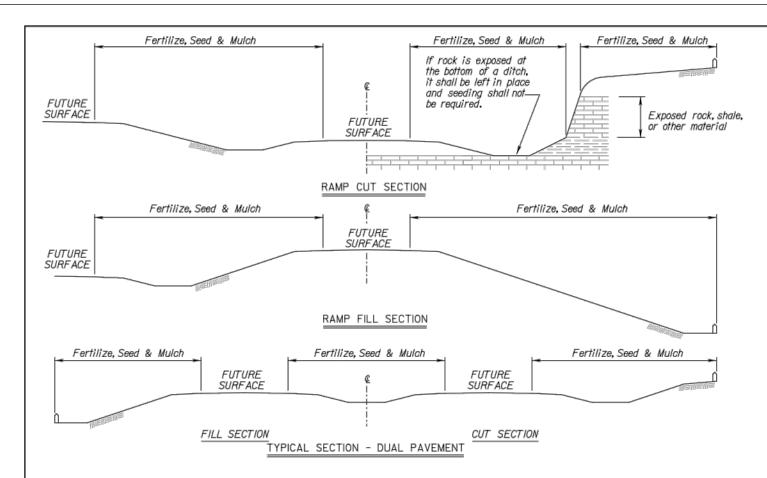
39

41

ITEM NO.

MOBILIZATION

FHWA APPROVAL	XX-XX-XX	APP'D	XXX
DESIGNED	DESIGNED	QUANTITIES	TRACED
DESIGN CK.	DESIGN CK.	QUAN. CK	TRACE CK.



FERTILIZER: A ratio and application rate that equals or exceeds the required minimum rate per acre of N, P<sub>2</sub> O<sub>5</sub>, K<sub>2</sub>O listed in Summary of Quantities will be acceptable.

- \* N = Nitrogen Rate of Application
- \*\* P<sub>2</sub> 0<sub>5</sub> = Phosphorous Rate of Application
- \*\*\*  $\overline{K}_{9}\overline{O}$  = Potassium Rate of Application

The Contractor will be required to finish areas of excavation, borrow and embankment in accordance with the specifications. Areas that require installation or construction of temporary water pollution control items will be finished in reasonable close conformity to the alignment, grade and cross section shown on the plans or as established by the Engineer.

CLT = Construction Limit Tract. This area is defined by the entire disturbed area of the project that requires seeding and erosion control measures to be placed. Any impervious areas (i.e. pavement, gravel, riprap, etc.) shall not be included in this measurement.

Slope = Defined by the area of the project that requires Class I erosion control material to be placed. This area shall be seeded using the Soil Erosion Mix prior to placement of the material. Drilling seed is preferred, however, broadcasting is acceptable if drilling is not possible.

Channel - Defined by the area of the project that requires Class 2 erosion control material to be placed. This area shall be seeded using the Soil Erosion Mix prior to placement of the material. Drilling seed is preferred, however, broadcasting is acceptable if drilling is not possible.

#### GENERAL NOTES

The entire disturbed area, excepting the paved or surfaced areas, steep rocky slopes and areas of undisturbed native sod or other desirable vegetation shall be fertilized (limed when required), seeded, and mulched. Soil preparation shall conform to the Standard Specifications.

Temporary seeding shall be done during any time of the year that the soil can be cultivated. After the temporary seeding has been completed on the entire project, a permanent seeding shall be done by another project during the normal seeding season.

MULCHING: Mulch shall be spread uniformly over all disturbed areas and punched in the soil, unless otherwise noted on the plans. The rate of application per acre, thickness in place, for the mulching materials is as follows:

 $1\frac{3}{4}$  -  $2\frac{1}{4}$  Tons per Acre =  $1\frac{1}{2}$ " loose depth spread uniformly over acre.

Agricultural products, such as native prairie hay, used for mulching and erosion control practices, excluding wood based mulch, shall meet the North American Weed Free Forage Standards.

Other vegetative mulches are acceptable only with the Engineer's concurrence.

The above rate is a guide. It will be at the discretion of the Engineer to determine what rate is sufficient for adequate protection of newly seeded areas.

The amount of mulch and mulch tacking slurry in the bid quantities is estimated. The total mulch and mulch tacking slurry required shall be determined in the field. The bid item for mulching and mulch tacking slurry shall be paid for according to Standard Specification Section 904.

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	23 TE-0373-01	2014	126	143
F.A. NO.	TEA-T037(301)			

			SUMI	MARY OF SEEDING QUANTITIES		
P.L.S. RA	TE/ ACRE	ACF	RES	DID ITEM	OLIANITITY	1,,,,,,
CLT	CLT   SL/CH   CLT   SL/CH		BID ITEM	QUANTITY	UNIT	
				Temporary Fertilizer (* - ** - ***)		LB
				Temporary Seed (Canada Wildrye)		LB
				Temporary Seed (Grain Oats)		LB
				Temporary Seed (Sterile Wheatgrass)		LB
				Soil Erosion Mix		LB
				Agricultural Limestone		TON
				Temporary Berm (Set Price)	1	LF
				Temporary Slope Drain		LF
				Temporary Stream Crossing		EACH
				Temporary Inlet Sediment Barrier		EACH
				Silt Fence	260	LF
				Biodegradable Log (****) 9"	80	LF
				Synthetic Sediment Barrier		LF
				Filter Sock (****)		LF
				Temporary Ditch Check (Rock)		CU Y
				Temporary Sediment Basin		CU Y
				Sediment Removal (Set Price)	ı	CU Y
				SWPPP Design *	-Lump Sum	LS
				SWPPP Inspection t		EACH
				Water Pollution Control Manager *		EACH
				Erosion Control(Class I, Type Y)		SQ Y
				Erosion Control(Class 2, Type Y)		SQ Y
	/ acre			Mulch Tacking Slurry		LB
2 tons	/ acre			Mulching (Temporary)		TON
				Water (Erosion Control) (Set Price) †	#	MGAL

NOTE: Projects less than I acre shall be bid as "Seeding" by the lump sum. All disturbed areas shall be seeded, fertilized and mulched at the listed rate per acre. The acres are estimated.

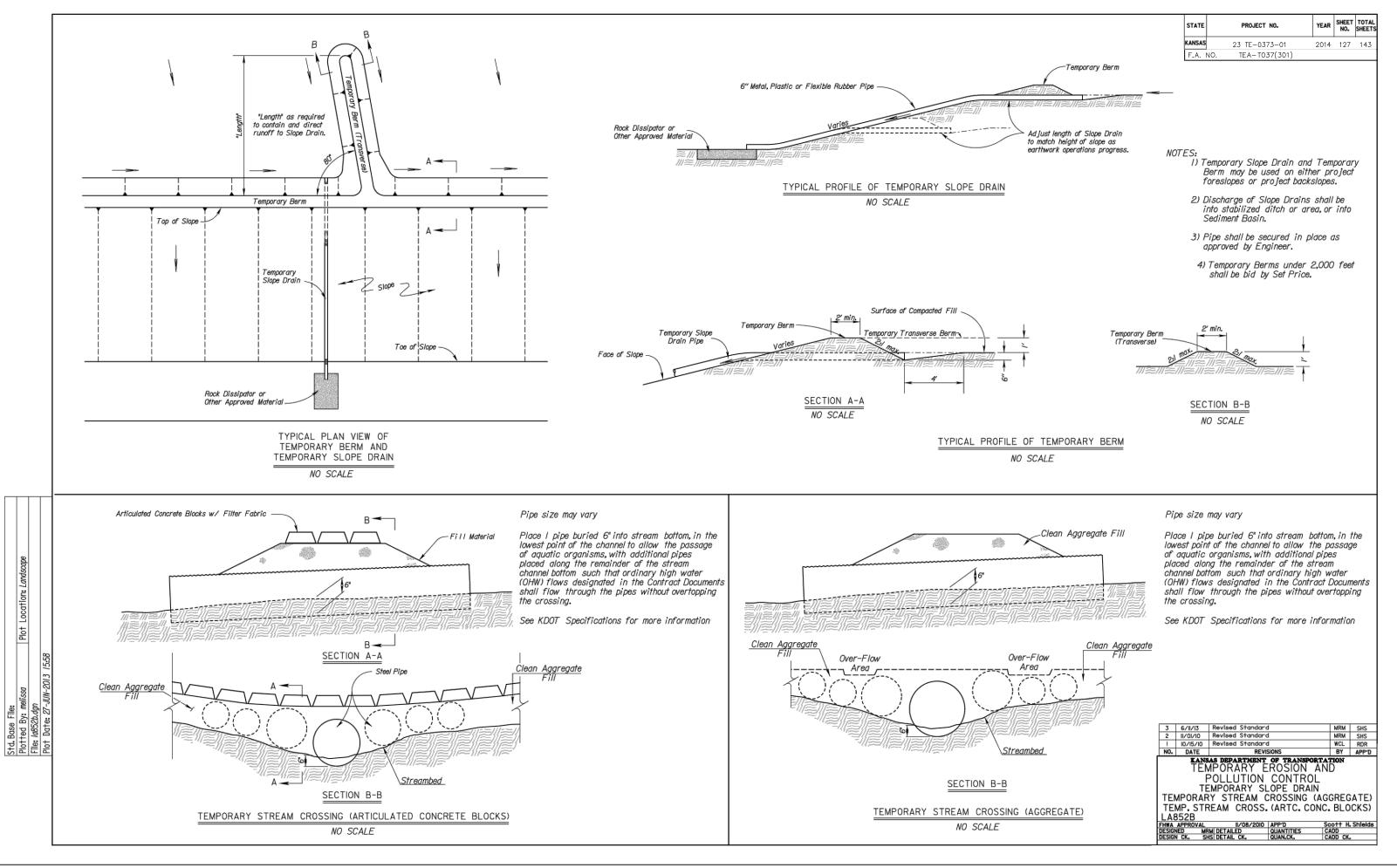
Regreen and Quick Guard are the approved sterile wheatgrass products.

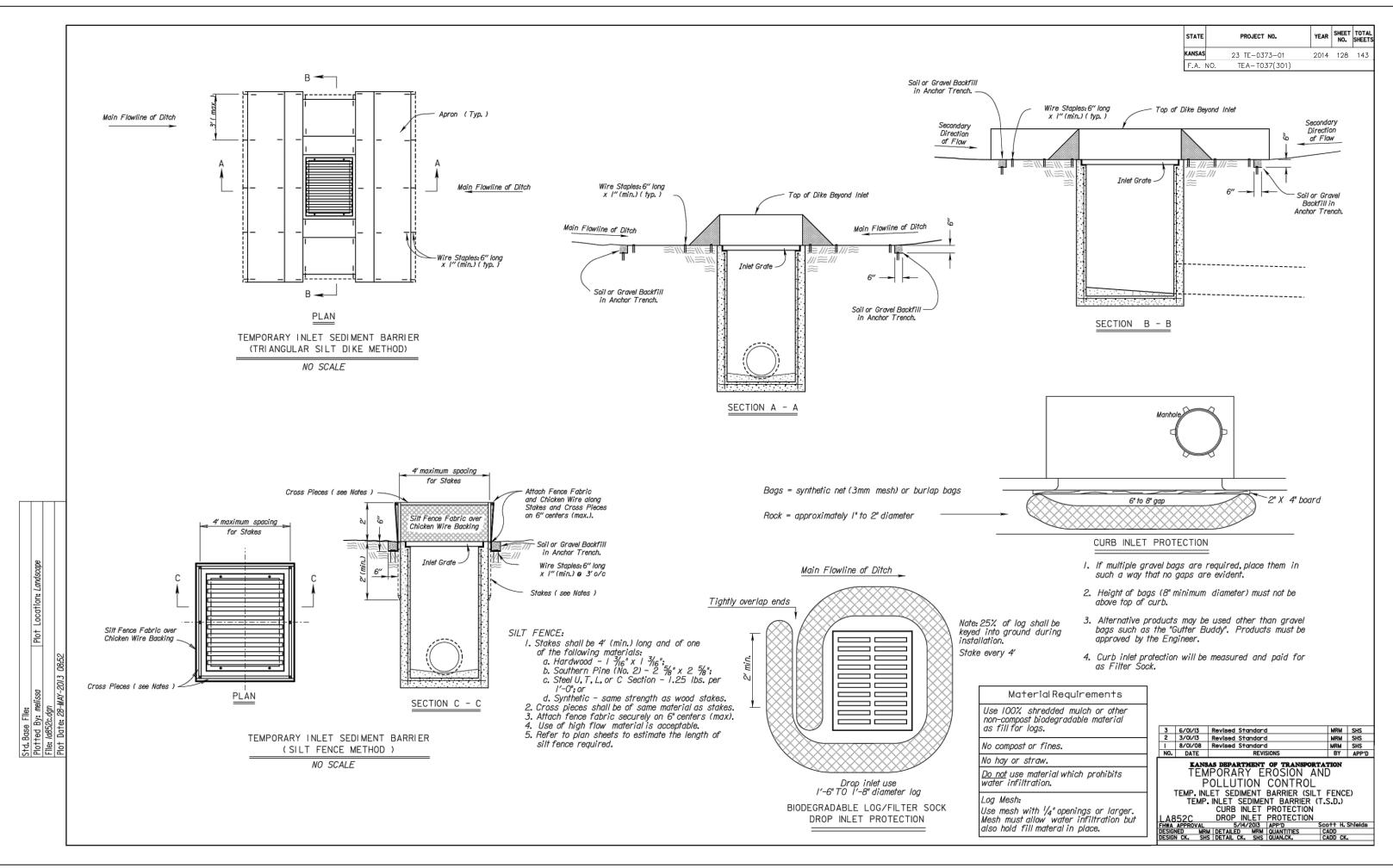
† These Bid Items will not be included when the project is less than I acre.
\*\*\*\*\* List size of material.

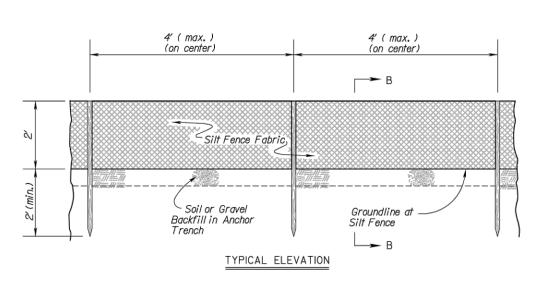
SC	IL EROSION MIX		
PLS RATE	NAME	QTY (lb)	)
			_
			_
			_
			_
	Total (lb)		

The Soil Erosion Mix is to be placed under the Class I and Class 2 (if used) erosion control material.

3	6/11/13	Revised Standard	MRM	SHS	
2	6/01/13	Revised Standard	MRM	SHS	
- 1	3/01/13	Revised Standard	MRM	SHS	
NO.	DATE	REVISIONS	BY	APP'D	
TEMPORARY EROSION AND POLLUTION CONTROL					
	52A	POLLUTION CONTROL	•		
FHWA	APPROVA	POLLUTION CONTROL  5/14/2013   APP'D	Scott H	. Shleids	
	APPROVA NED	POLLUTION CONTROL	•	MRI	





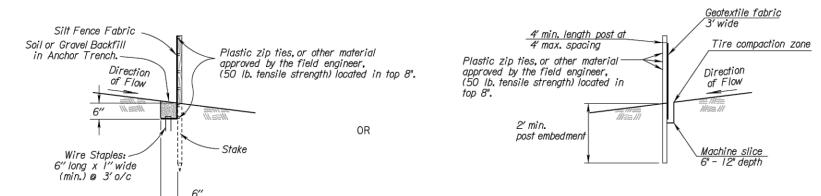


SECTION B-B

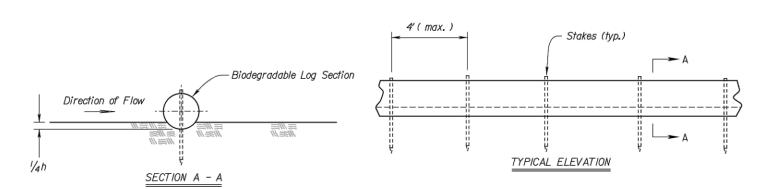
Plot Location: Landscape

#### SILT FENCE SLOPE BARRIER

NO SCALE



SECTION B-B



#### BIODEGRADABLE LOG SLOPE BARRIER

NO SCALE

#### INSTALLATION NOTES

# STATE PROJECT NO. YEAR SHEET NO. SHEETS KANSAS 23 TE-0373-01 2014 129 143 F.A. NO. TEA-T037(301)

#### SILT FENCE:

- I. Stakes shall be 4' (min.) long and of one of the following materials:
  - a. Hardwood 1 3/16" x 1 3/16";
  - b. Southern Pine (No. 2) 2 1/8" x 2 1/8";
  - c. Steel U, T, L, or C Section 1.25 lbs. per I'-0"; or
  - d. Synthetic same strength as wood stakes.
- 2. Cross pieces shall be of same material as stakes.
- 3. Attach fence fabric securely on 6" centers (max.).
- 4. Use of high flow material is acceptable.
- 5. Refer to plan sheets to estimate the length of silt fence required.

#### BIODEGRADABLE LOG BARRIERS

- I. Place biodegradable logs tightly together.
- 2. Wood stakes shall be 2" x 2" (nom.).
- 3. Wire staples shall be 6" long x 1" wide (min.) and placed on 4' (max.) centers.
- 4. Refer to plan sheets to estimate length of biodegradable log barriers required.
- 5. Logs should be keyed into the ground at a minimum of 25% of its height.
- 6. Length of stakes should be 2 times the height of the log at a minimum.

#### Biodegradable Logs, Straw Wattles & Sediment Logs

	•					
	PRODUCT					
		9* Sediment Log	12" Sediment Log	20" Sediment Log		
		& 9" Straw Wattle (ft)	& 12" Straw Wattle (ft)	& 20" Straw Wattle (ft)		
tu	≤4H:IV	40	60	80		
Gradient	3H:IV	30	45	60		
Slope G	2H:IV	20	30	40		
S	IH:IV	10	15	20		

	LOW FLOW	HIGH FLOW
9"	Straw/Compost	Excelsior / Wood Chips / Coconut Fiber
12"	Straw/Compost	Excelsior / Wood Chips / Coconut Fiber
18"-20	Straw/Compost	Excelsior / Wood Chips / Coconut Fiber
	•	•

BIODEGRADABLE LOG MATERIAL

9" and 12" material should only be used in areas which have been seeded and mulched. 20" material should be used in all other areas. Deviations should be approved by the Field Engineer.

#### GENERAL NOTES

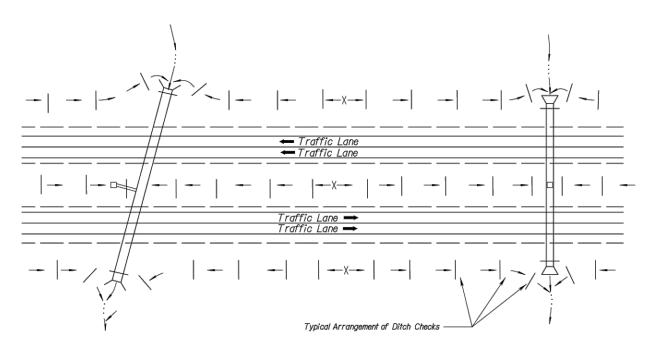
- I) The slope barriers shall be placed along contour lines, with a short section turned upgrade at each end of the barrier. The maximum length of the slope barrier shall not exceed 250 feet, and the barrier ends need to be staggered.
- At culverts, the Silt Fence shall be placed over the culvert, not through the streambed flowline.
- Barriers damaged by Contractor's negligence, including improper maintenance or lack of maintenance, shall be repaired immediately by Contractor at no additional cost to KDOT.
- 4) Agricultural products, such as native prairie hay, used for mulching and erosion control practices, excluding wood based mulch, shall meet the North American Weed Free Forage Standards.

1	6/01/13	Revised Standard	MRM	SHS
2	3/01/13	Revised Standard	MRM	SHS
1	9/01/10	Revised Standard	MRM	SHS
NO.	DATE	REVISIONS	BY	APP'D

EANSAS DEPARTMENT OF TRANSPORTATION
TEMPORARY EROSION AND
POLLUTION CONTROL
SILT FENCE SLOPE BARRIERS
BIODEGRADABLE LOG SLOPE BARRIERS

LA852D
FHWA APPROVAL 5/14/2013 APP'D Scott H. Shleids
DESIGNED MRM DETAILED MRM QUANTITIES CADD
DESIGN CK. SHS | DETAIL CK. QUAN.CK. CADD CK.

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	23 TE-0373-01	2014	130	143
F.A.	NO. TEA-T037(301)			



TYPICAL	DITCH	CHECK	LAYOUT	PLAN
	NO	) SCALE		

#### GENERAL NOTES

- I) The choice of ditch check methods is at the option of the Contractor.
- Use only rock checks i exceeds 6 percent.

Plot Location: Landscape

Ditch checks damaged by Contractor's negligence, including improper maintenance or lack of maintenance, shall be repaired by Contractor at no extra cost to KDOT.

TEMPORA	BA DITCH
CHECK	
DITCH @ SLOPE (%)	SPACING INTERVAL (FEET)
1.0	200
2.0	100
3.0	65
4.0	50
5.0	40
6.0	33
NOTE: Use this space except Rock Ditch Ci	

3 6/01/13 Revised Standard
2 9/10/07 Revised Standard
1 6/16/05 Revised Standard
No. DATE REVISIO MRM SHS
MRM SHS
WCL RDR
BY APP'D REVISIONS

TEMPORARY EROSION AND POLLUTION CONTROL

DITCH CHECKS

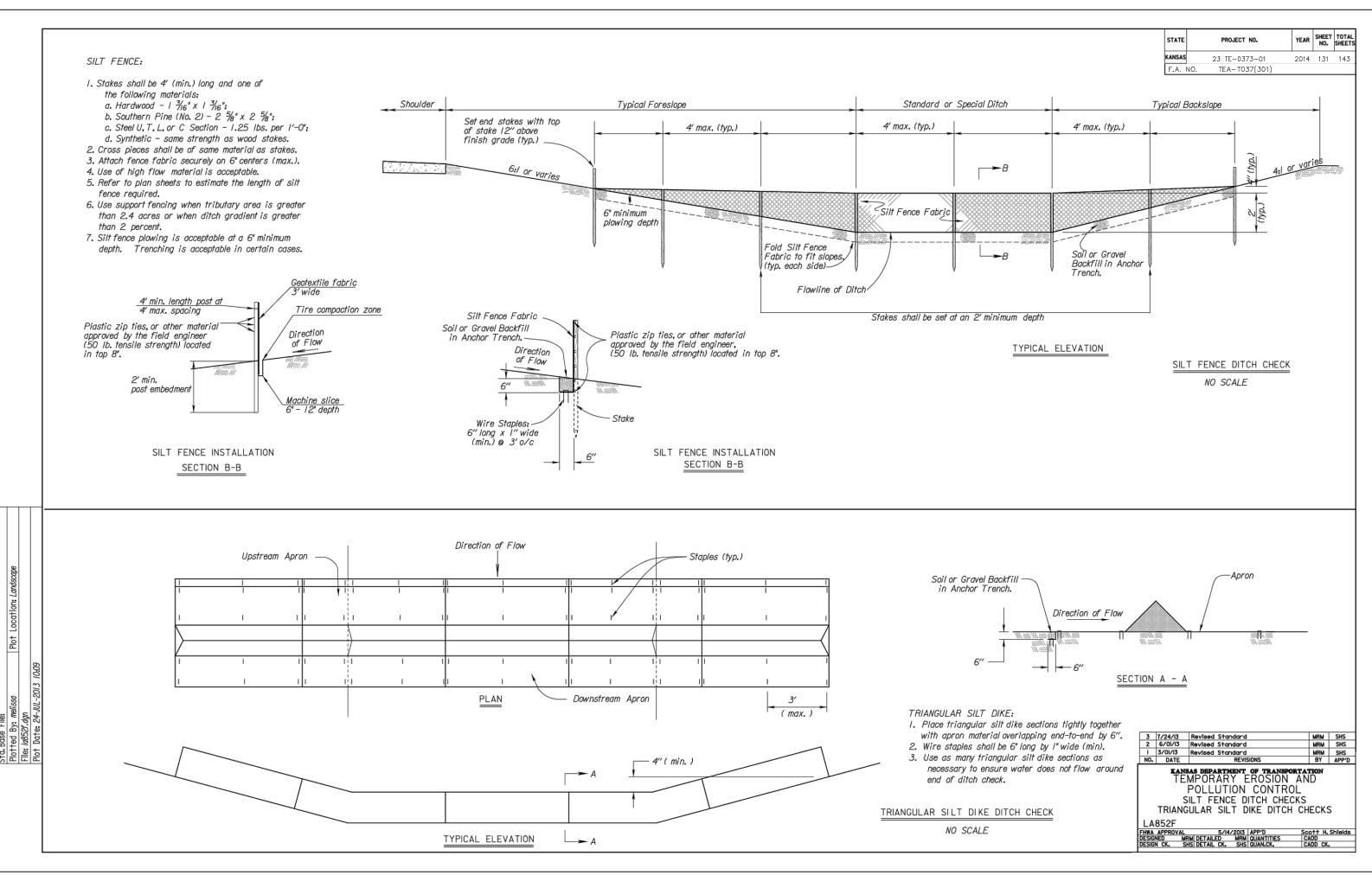
LA852E

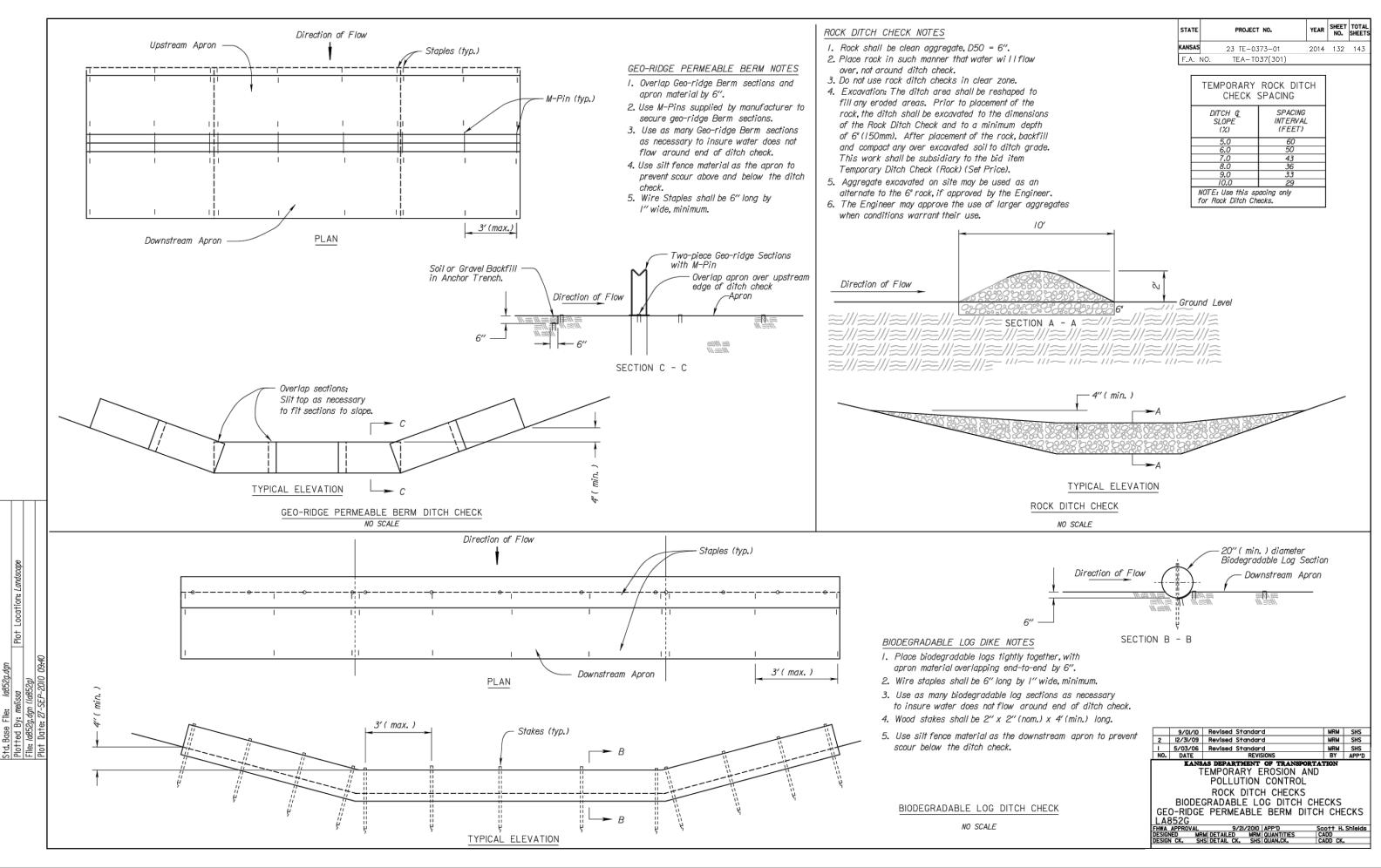
FHWA APPROVAL 5/14/2013 APP'D

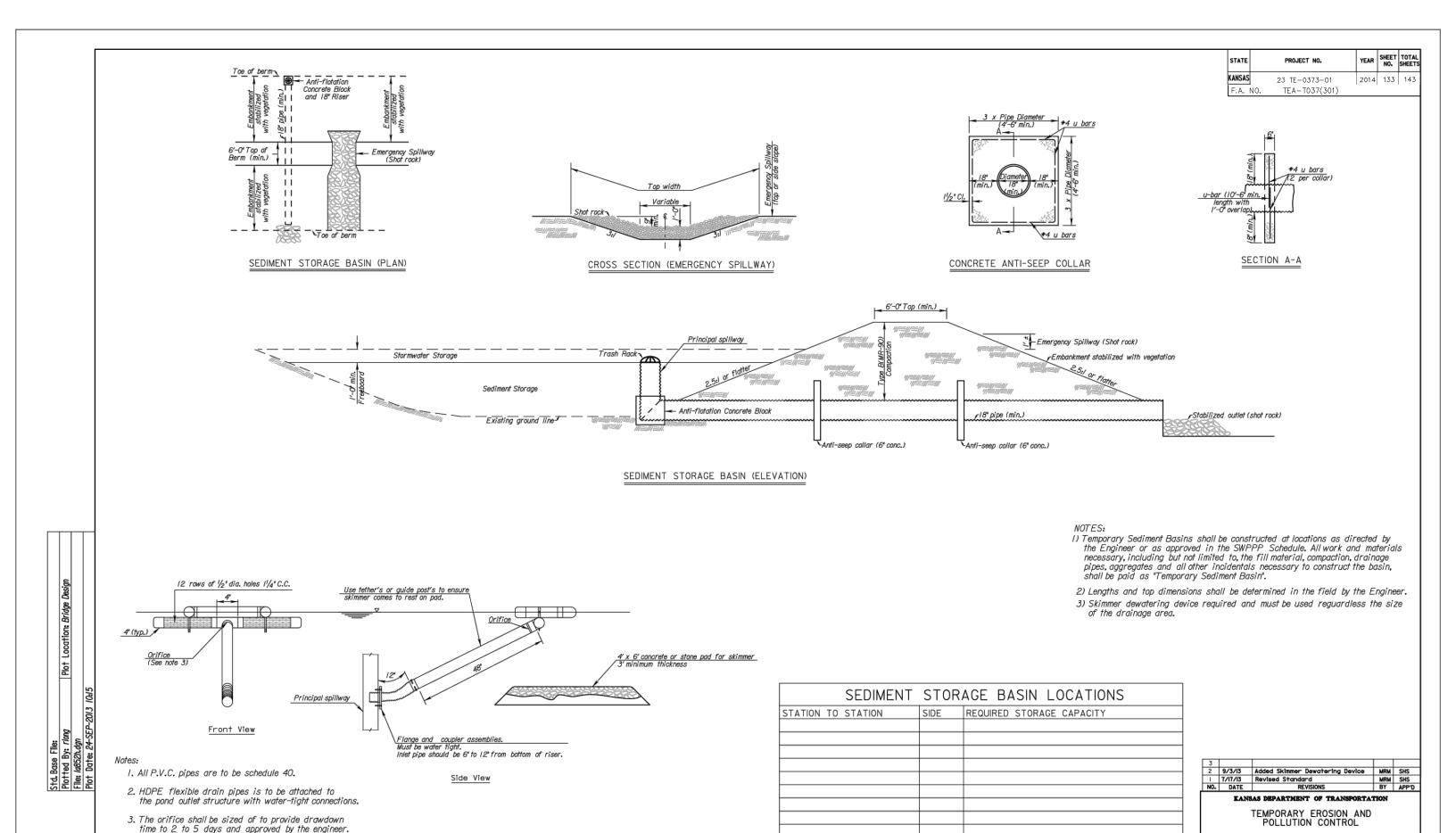
DESIGNED MRM DETAILED MRM QUANTITIES

DESIGN CK. SHS DETAIL CK. SHS QUAN.CK. Scott H. Shields CADD MRM CADD CK. SHS

in	situations	where	the	ditch	slope	



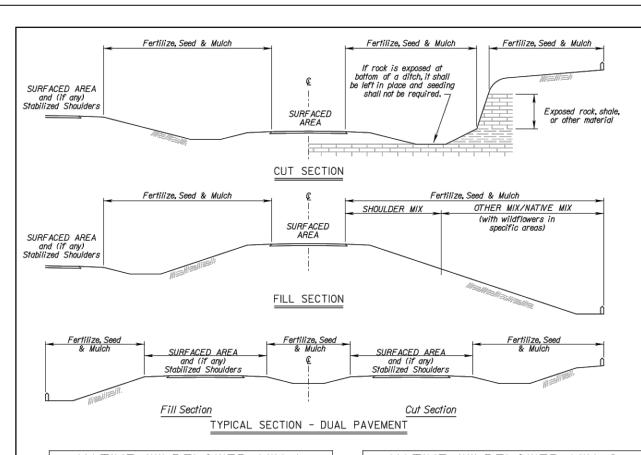




4. Other skimmer designs maybe used that dewaters

from the surface at a controlled rate. The design must be approved by the engineer. SKIMMER DEWATERING DEVICE

SEDIMENT STORAGE BASIN



NATIVE	: WILDFLOWER M	X I	
PLS RATE	NAME	QTY (lb	)
0.1	Black Eyed Susan		
1.8	Illinois Bundleflower		
0.15	Maximilian Sunflower		
0.4	Purple Prairie Clover		
2.9	Showy Partridge Pea		
0.1	Upright Prairie Coneflower		
0.3	Butterfly Milkweed		
0.1	Stiff Goldenrod		
0.05	Pinnate Prairie Coneflower		
0.1	Lance-leaf Coreopsis		
0.05	New England Aster		
0.2	Pale Purple Coneflower		
0.05	Plains Coreopsis		
0.05	Hoary Verbena		
0.3	Roundhead Lespedeza		
0.4	Thickspike Gayfeather		
0.05	Wild Bergamot		
0.2	Smooth Oxeye		
0.05	Lemon Mint		
7.35	Total (lb)		

Plot Location: Landscape

NATIVE	WILDFLOWER M	IX 3
PLS RATE	NAME	QTY (lb)
0.15	Black Eyed Susan	
1.9	Illinois Bundleflower	
0.15	Maximilian Sunflower	
0.05	Western Yarrow	
0.5	Black Sampson Echinacea	
0.05	Upright Prairie Coneflower	
0.3	Butterfly Milkweed	
0.4	Dotted Blazing Star	
0.75	Annual Gaillardia	
0.05	Stiff Goldenrod	
0.05	New England Aster	
0.4	Pitcher Sage	
0.01	Plains Coreopsis	
0.15	White Prairie Clover	
0.2	Purple Prairie Clover	
0.4	Leadplan†	
0.02	White Heath Aster	
1	Blue Wild Indigo	
0.05	Lemon Mint	
6.58	Total (lb)	

PLS RATE	NAME	QTY (Ib)
0.1	Black Eyed Susan	
1.8	Illinois Bundleflower	
0.15	Maximilian Sunflower	
0.4	Purple Prairie Clover	
2.9	Showy Partridge Pea	
0.1	Upright Prairie Coneflower	
0.3	Butterfly Milkweed	
0.4	Dotted Blazing Star	
0.4	Annual Gaillardia	
0.05	Stiff Goldenrod	
0.05	New England Aster	
0.3	Missouri Evening Primrose	
0.05	Plains Coreopsis	
0.15	White Prairie Clover	
0.3	Roundhead Lespedeza	
0.05	Lemon Mint	
0.15	Pitcher Sage	
7.65	Total (lb)	

NA	TIVE WILDFLOWER MIX	X 4
PLS RATE	NAME	QTY (II
I <b>.</b> 9	Illinois Bundleflower	
0.4	Maximilian Sunflower	
0.05	Western Yarrow	
1	Black Sampson Echinacea	
0.1	Upright Prairie Coneflower	
0.1	Scarlet Globemallow	
0.4	Dotted Blazing Star	
l <sub>a</sub> l	Annual Gaillardia (Firewheel)	
0.1	Hoary Vervain	
0.3	White Prairie Clover	
0.4	Purple Prairie Clover	
0.4	Perennial Gaillardia (Blanket Flower)	
0.02	White Heath Aster	
0.05	Lemon Mint	
6.32	Total (lb)	

Package and deliver the wildflower seed separately from the grass seed mix. Package and deliver the Tall Drop Seed separately from the grass seed and the wildflower mix. Place the grass seed (except Tall Drop Seed) in the large seed box and drill (cover) seed  $\frac{1}{6}$ " -  $\frac{1}{4}$ ". Place the wildflower seed in a separate seed box and drill (cover) seed  $\frac{1}{6}$ " maximum. Place the Tall Drop Seed in a separate (third) seed box and place the seed (using the seed drill) on the soil surface. OPTION: Broadcast Tall Drop Seed on the soil surface.

PERIODS
WARM SEASON
November 15 to June I
SPECIES
Big Bluestem
Blue Grama
Buffalograss
Eastern Gamagrass
Indiangrass
Little Bluestem
Sand Bluestem
Sand Dropseed
Sand Lovegrass
Side Oats Grama
Switchgrass
Wildflower Mixes

When "CoolSeason" species are mixed with "Warm Season" species, in areas of lacre or more, the mixture shall be seeded during the "Warm Season". In areas of less than I acre, the mixture of "CoolSeason" and
"Warm Season" species may be seeded during the "Warm or Cool Seasons".

SODDING	G PERIODS
March /	to April 15
September I	to November 1 5

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	23 TE-0373-01	2014	134	143
F.A. I	NO. TEA-T037(301)			

GENERAL NOTES

The entire disturbed area, excepting the paved or surfaced areas, steep rocky slopes and areas of undisturbed native sod or other desirable vegetation shall be fertilized (limed when required), seeded, and mulched. Soil preparation shall conform to the Standard Specifications except as noted below.

All borrow areas shown on the plans are to be fertilized, seeded, and mulched. However, operation in borrow areas where crops are growing may be omitted when requested by the owner.

It shall not be required to till the area to bare ground prior to permanent seeding. If temporary cover has provided stable slopes with no erosion seed the permanent grasses into the existing cover. If there has been erosion that requires repair prior to seeding, then it may be necessary to regrade the area, resulting in bare ground.

FERTILIZER: A ratio and application rate that equals or exceeds the required minimum rate per acre of N,  $P_2$   $O_{E_1}$ ,  $K_2O$ listed in Summary of Seeding Quantities will be acceptable.

MULCHING: Mulch shall be spread uniformly over all disturbed areas and punched in the soil, unless otherwise noted on the plans. The rate of application per acre, thickness in place, for the mulching material is as follows:

 $1\frac{3}{4}$  -  $2\frac{1}{4}$  Tons per Acre =  $1\frac{1}{2}$ " loose depth spread uniformly over acre.

Agricultural products, such as native prairie hay, used for mulching and erosion control practices, excluding wood based mulch, shall meet the North American Weed Free Forage Standards.

Other vegetative mulches are acceptable only with the Engineer's concurrence.

The above rate is a guide. It will be at the discretion of the Engineer to determine what rate is sufficient for adequate protection of newly seeded areas.

The amount of mulch in the quantities is estimated. The total mulch required shall be determined in the field. The bid item for mulching shall be paid for according to Standard Specification Section 904.

				SU	MMAR	Y OF	SEEDING QUANTITIES		
	P.L.S. RATE/ACRE  HLDR OTHER SHLDR OTHER		BID ITEM	QUANTITY	UNIT				
SHLDR	OTHER		SHLDR	OTHER					
							SOD	13,073	SF
		<u> </u>	<u> </u>				Mulching (Permanent)(Set Price)	l	TON

SHLDR = Shoulder Turf Mix: Includes a 30 foot wide strip along the stabilized shoulder on each side of each traveled way, plus all median areas less than 60 feet wide.

OTHER = All other turf areas except Shoulder, Guardrail, and Native areas usually include the Native Wildflower Mix.

NOTE: Projects of less than I acre shall be bid as "Seeding" by the lump sum. All disturbed areas shall be seeded, fertilized and mulched at the listed rate per acre. The acres are estimated.

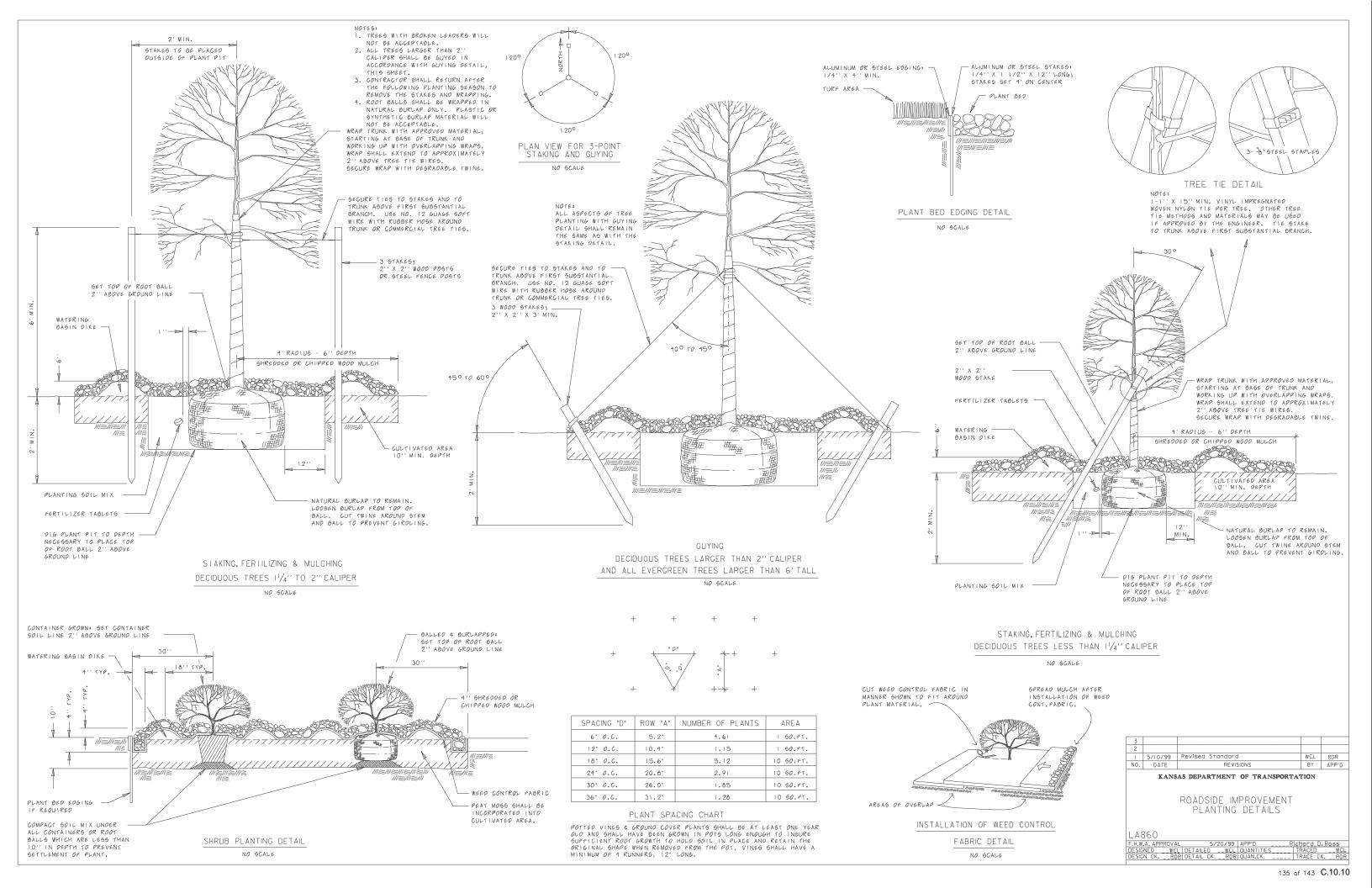
NO.	DATE	REVISIONS	BY	APP'D
1	6/01/10	Revised Standard	MRM	SHS
2	2/24/12	Revised Standard	MRM	SHS
3	3/01/13	Revised Standard	MRM	SHS
4	6/01/13	Revised Standard	MRM	SHS

KANSAS DEPARTMENT OF TRANSPORTATION

PERMANENT SEEDING SUMMARY OF SEEDING QUANTITIES

LA850

CADD CK.



	4"	6"	6"	6" Broken	6" Dotted	5" Broken	6"	Broken	8"	B" Dotted	12" Solid	12" Solid	12" Salid	24" Selid WHITE	24"	4"	4" Solid	4"	4 <sup>n</sup>	<b>6</b> "
LOCATION	Solid WHITE Edge Line	Solid WHITE Edge Line	Broken WHITE Lane Line	WHITE Lane Line (PCP)	WHITE Extension Line	Broken WHITE Lane Drop Line	Solid WHITE Lane Line	Broken WHITE Lane Drop Line	Solid WHITE Gore Line	WHITE Extension Line	WHITE	WHITE Cheyron Line	Type I Crosswalk Line	WHITE Type II Crosswalk Line	Solid WHITE Stop Line	Solid YELLOW Edge Line	YELLOW Double Line	Solid YELLOW Line	Broken YELLOW Line	Soll YELLO Edge L
	_							-		-										
		-	-					1		-		-		-		-	-	-		-
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ITEMS	TOTAL	UNIT
PAVEMENT MARKUNG (MULTI-COMPONENT)(WHITE)(4")		FT
PAVEMENT MARKING (MULTI-COMPONENT)(WHITE)(6")		FT
PAVEMENT MARKING (MULTI-COMPONENT)(WHITE)(8")		FT
PAVEMENT MARKING (MULTI-COMPONENT)(WHITE)(12")		FT
PAVEMENT MARKING (MULTI-COMPONENT)(YELLOW)(4")		FT
PAVEMENT MARKING (MULTI-COMPONENT)(YELLOW)(6")		FT
PAVEMENT MARKING (MULTI-COMPONENT) (YELLOW) (12")		FT
PAVEMENT MARKCING (THERMOPLASTIC)(WHITE)(4")		FT
PAVEMENT MARKING (THERMOPLASTIC)(WHITE)(6")		FT
PAVEMENT MARKING (THERMOPLASTIC)(WHITE)(8")		FT
PAVEMENT MARKING (THERMOPLASTIC)(WHITE)(12*)		FI
FAVEMENT MARKING (THERNOPLASTIC)(YELLOW)(4")		FI
PAVEMENT MARKING (THERMOPLASTIC)(YELLOW)(6")		FT
PAVEMENT MARKING (THERMOPLASTIC)(YELLOW)(12")		FT
haveniment has herebook emporable districtions (in	1.020	
PAVENIENT MARKING (EPOXY)(WHITE)(4")	1,020	FT
PAVEMENT MARKING (EPCXY)(WHITE)(8")		FT
PAVEMENT MARKING (EPOXY)(WHITE)(8")		FT
PAVEMENT MARKING (EPOXY)(WHITE)(12')		FT
PAVEMENT MARKING (EPOXY)(YELLOW)(4")		FT
PAVEMENT MARKING (EPDXY)(YELLOW)(6")		FT
PAVEMENT MARKING (EPOXY)(YELLOW)(12")		FT
PAVEMENT MARKING (INTERSECTION GRADE)(WHITE)(12")		FT
PAVEMENT MARKING (INTERSECTION GRADE)(WHITE)(24")		FT
PAVEMENT MARKING (INTERSECTION GRADE)(YELLOW)(12")		FT
PAVEMENT MARKING SYMBOL (INTERSECTION GRADE)(WHITE)(RIGHT ARROW)		EACI
PAVEMENT MARKING SYMBOL (INTERSECTION GRADE)(WHITE)(LEFT ARROW)		EACI
PAVEMENT MARKING SYMBOL (INTERSECTION GRADE)(WHITE)(ONLY)		EAC
PAVEMENT MARKING SYMBOL (INTERSECTION GRADE)(WHITE)( )		EACI
BAVEMENT MARKING SYMBOL (INTERSECTION GRADE)(WHITE)( )		EACI
BAVEMENT MARKING SYMBOL (INTERSECTION GRADE)(US-SHIELD)( )		EACI
PAVEMENT MARKING SYMBOL (INTERSECTION GRADE)(K-SHIELD)( )		EACI
BAVEMENT MARKING SYMBOL (INTERSECTION GRADE)(I-SHIELD)( )		EAC
PAVEMENT MARKING (PATTERNED COLD PLASTIC)(WHITE)(4")		FT
PAVEMENT MARKING (PATTERNED COLD PLÁSTIC)(WHITE)(8")		FT
PAVEMENT MARKING (PATTERNED COLD PLASTIC)(WHITE)(12")		FT

	SUMMARY OF WORD & SYMBOL MARKINGS																		
LOCATION																			
WEST PARKING LOT						1													
TOTALS						1													

NOTE: FOR SPECIFIC PAVEMENT MARKING DETAILS AND DIMENSIONS SEE PLAN SHEETS

NOTE: ALL TOTALS REFLECT ACTUAL QUANTITY OF PAVEMENT MARKING MATERIALS REQUIRED.

#### NOTE:

WORDS & SYMBOLS SHALL CONFORM TO THE LATEST EDITION OF "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS" PRINTED BY THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION.

PRIOR TO COMMENCEMENT OF PAVEMENT MARKING WORK THE ENGINEER WILL ESTABLISH THE LIMITS FOR "NO PASSING" ZONES. THESE LIMITS SHALL BE USED FOR THE LOCATION OF "NO PASSING" LINES AND FOR THE COMPUTATION OF ACTUAL MARKING QUANTITIES FOR THIS LINE TYPE.

ſ					
	2	5/25/12	Added Line Types, Symbols, and Shields	В.А.Н.	B.D.G.
	- 1	7/26/05	New FHWA ApprovalDate	J.F.F.	B.D.G.
	NO.	DATE	REVISIONS	BY	APP'D

KANSAS DEPARTMENT OF TRANSPORTATION
SUMMARY AND RECAPITULATION
OF PAVEMENT MARKING
QUANTITIES

TE3II

FHWA APPROVAL		5/25/2012	APP'D	Brian D. Gower	Ξ
DESIGNED	J.F.F. DETAILED	J.F.F.	QUANTITIES	TRACED	
DESIGN CK.	B.D.G. DETAIL CK	B.D.C.	QUAN. CK.	TRACE CK.	

- 2) Minimum lane width: Lane widths shall be a minimum of 11' (measured between centerlines of pavement markings) or as shown on the plans, or as directed by the engineer. A lane width less than 11' may require restricted roadway width signing.
- 3) Consideration should be made to seperate pedestrian and, if needed, bicycle movements from both work site activity and vehicular traffic. Unless a reasonable safe route that does not involve crossing the roadway can be provided, pedestrians should be appropriately directed with advance signing that encourages them to cross to the opposite side of the roadway. In urban and suburban areas with high vehicular traffic volumes, these signs should be placed at intersections (rather than midblock locations) so that pedestrians are not confronted with midblock work sites that will induce them to attempt skirting the work site or making a midblock crossing.
- 4) When existing pedestrian facilities are disrupted, closed, or relocated, the temporary facilities shall be detectable and include accessibility features consistent with the features present in the existing pedestrian facility.
- 5) When the driving surface open to traffic is milled, is a temporary surface made of loose material, or when directed by the engineer use the W8-15 (Grooved Pavement) or W8-7(Loose Gravel) a "C" distance after the W20-1 (Road Work Ahead) on mainline approaches. Signs may be used with the W8-15p motorcycle plaque as directed by the engineer. Display signs in advance of the condition as long as the condition is present.
- 6) Alternative temporary rumble strip options may be available. Please contact the Temporary Traffic Control Unit for more information at 785-296-0355 or 785-296-1183.

KANSAS 23 TE-0373-01 2014 137 F.A. NO. TEA-T037(301) Channelizing Inertial barrier system (sloped concrete treatment is Pavement marking optional if posted speed limit Concrete safety \* (temporary) is 40 mph or less) barrier system display Distance Distance Taper "L" Work space Taper Shoulder taper Advanced warning area Transition Activity area Termination area

#### TYPICAL WORK ZONE COMPONENTS

\*When concrete barrier system is used, portable channelizing devices are not needed along the tangent barrier section.

#### Minimum advance warning sign spacing (in feet):

SPEED (MPH) *	А	В	С
URBAN (40 MPH OR LOWER)	100	100	100
URBAN (45 MPH OR HIGHER)	350	350	350
RURAL (55 MPH OR LOWER)	500	500	500
RURAL (60 MPH OR HIGHER)	750	750	750
EXPRESSWAY/FREEWAY	1000	1500	2640

\* Posted speed prior to work starting

The minimum spacing between signs shall be no less than 100', unless directed by the engineer.

The spacing between any signs may be increased beyond the minimum values in the table above as approved by the engineer in order to maximize visibility.

#### Taper Formulas:

L = WS for speeds of 45 MPH or more

 $L = WS^2/60$  for speeds of 40 MPH or less

Where: L =Minimum length of taper in feet
S =Numericial value of posted speed
prior to work starting in MPH
W =Width in offset feet

STATE

PROJECT NO.

SHEET NO.

Shifting taper=1/2 L Shoulder taper=1/3 L

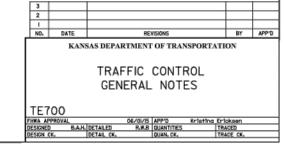
#### **Buffer Space**

SPEED (MPH) *	20	25	30	35	40	45	50	55	60	65	70	75
LENGTH (ft)	115	155	200	250	305	360	425	495	570	645	730	820

\* Posted speed prior to work starting

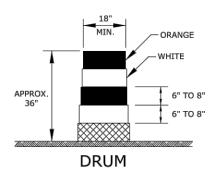
Neither work activity nor storage of equipment, vehicles, or material should occur in the buffer space. When a protection vehicle is placed in advance of the work space, only the space upstream of the vehicle constitutes the buffer space.

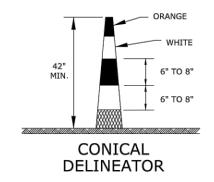
If temporary concrete safety barrier system is used to seperate approaching traffic from the work space, the barrier system shall be considered part of the activity area. A full lane width should be available throughout the length of the buffer space. See typical work zone components above.

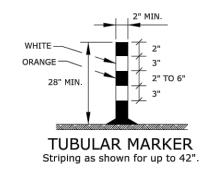


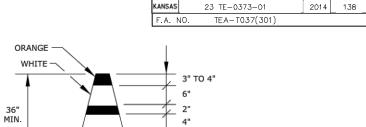
ed: 01-JUN-2015 13:54

Drawn By : musnock









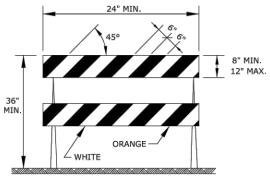
STATE

KANSAS

PROJECT NO.

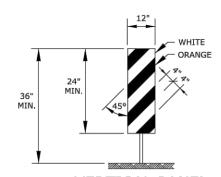
YEAR SHEET NO. TOTAL SHEETS

TRAFFIC CONE

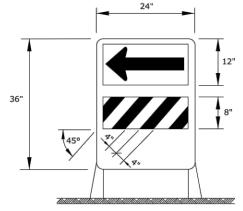


TYPE 2 BARRICADE

For rails less than 36" long, 4" wide stripes may be used. All stripes shall slope downward to the traffic side for channelization.

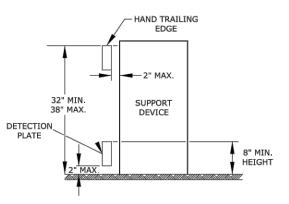


**VERTICAL PANEL** The stripes shall slope downward to the traffic side for channelization.



#### DIRECTION INDICATOR BARRICADE

The stripes shall slope downward in the direction traffic is to pass. The direction indicator barricade shall be used in series to direct the motorist into the intended lane of travel.

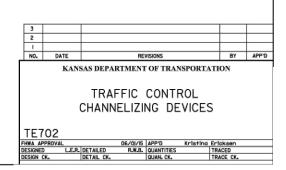


#### PEDESTRIAN CHANNELIZER

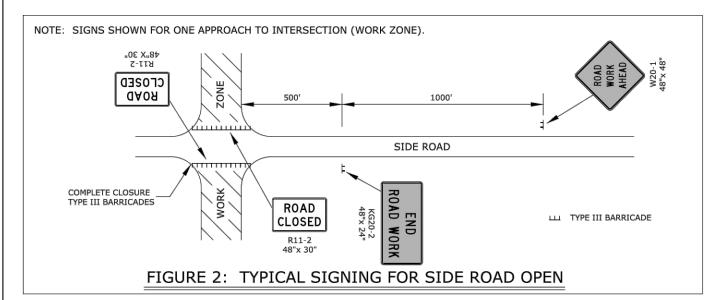
- 1. Support device shall not project beyond the detection plate into the pathway.
- 2. Hand trailing edges and detection plates are optional for continuous walls.
- Interconnect pedestrian channelizers to prevent displacement and to provide continuous guidance through or around work.
- 4. Alternate pathways shall be firm, stable, and slip resistant.
- 5. Treat height differentials > 1/2" in the surfaces of alternate paths with a firm, stable, and slip resistant temporary ramp having a slope of 12:1 or flatter and having a width equal to
- the alternate path. 6. Use alternating orange/white on interconnected devices.

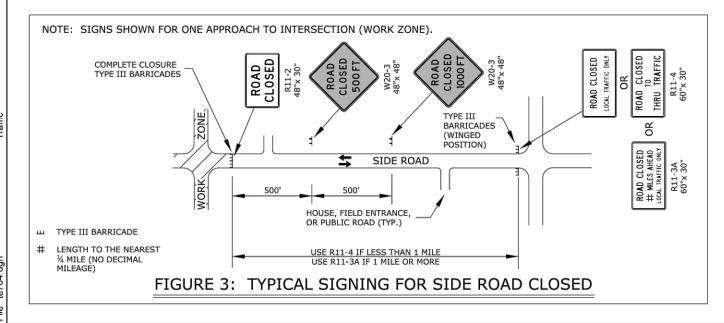
ITEM	LOCATION	Ś	\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	The selection of the se	"gents	Reg	Squi A	00 Pearl	1 20 / 20 / 20 / 20 / 20 / 20 / 20 / 20		1 8 /
PORTABLE											ı
	Drums	Yes	Yes	Yes	Yes	Yes	(1)	Yes	Yes	Yes	ı
	Conical Delineators	Yes	Yes	Yes	Yes	Yes	(1)	Yes	Yes	Yes	ı
	Vertical Panels	(2)	(2)	(2)	(2)	(2)	(1,2)	YES	(2)	(2)	ı
	Direction Indicator Barricade	NO	NO	NO	Yes	NO	NO	NO	NO	NO	ı
	Type 2 Barricade	(2)	(2)	(2)	(2)	NO	NO	Yes	NO	NO	ı
	Traffic Cones	NO	NO	(4)	(4)	(4)	NO	(4)	(4)	(4)	ı
FIXED											ı
	Tubular Markers	(3)	(3)	(3)	NO	(3)	Yes	NO	Yes	Yes	ı
	Vertical Panels	(3)	(3)	(3)	(3)	(3)	(3)	Yes	(2,3)	(2)	ı

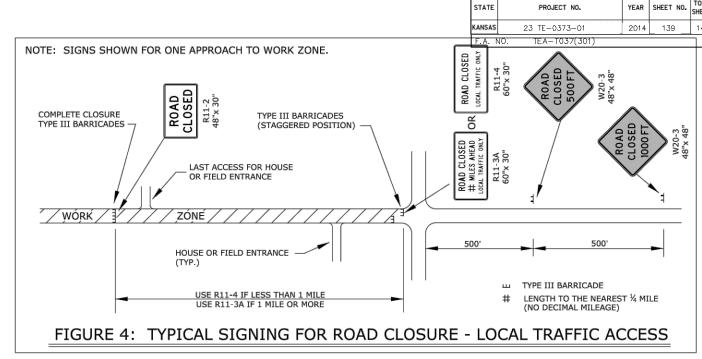
- (1) Not allowed on centerline delineation along freeways or expressways.
- (2) The stripes shall slope downward to the traffic side for channelization.(3) May be used upon the approval of the engineer.
- (4) Daytime operations only.



Plotted: 01-JUN-2015 13:54 Traffic







#### NOTES:

#### 1 SIGNS:

THE R11-4 (ROAD CLOSED TO THRU TRAFFIC OR ROAD CLOSED LOCAL TRAFFIC ONLY) SIGN SHALL BE USED WHEN THE DISTANCE TO THE POINT OF COMPLETE CLOSURE OF THE ROADWAY IS LESS THAN 1 MILE.

THE R11-3A (ROAD CLOSED # MILES AHEAD LOCAL TRAFFIC ONLY) SIGN SHALL BE USED WHEN THE DISTANCE TO THE POINT OF COMPLETE CLOSURE OF THE ROADWAY IS 1 MILE OR GREATER.

THE WORDS "BRIDGE OUT" (OR BRIDGE CLOSED) MAY BE SUBSTITUTED FOR THE WORDS "ROAD CLOSED" ON THE R11-3A OR R11-4 SIGN WHERE APPLICABLE.

#### 2. BARRICADE PLACEMENT:

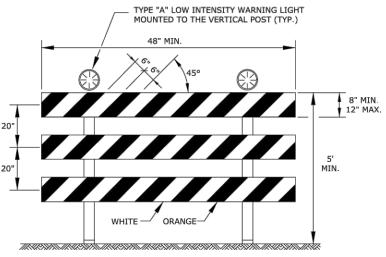
#### A) COMPLETE ROAD CLOSURE

WHEN A ROADWAY IS CLOSED, TYPE III BARRICADES SHALL BE PLACED END-TO-END TO COMPLETELY COVER THE ROADWAY AND SHOULDERS. WHEN ACCESS MUST BE ALLOWED FOR CONSTRUCTION OR OTHER OFFICIAL/GOVERNMENT VEHICLES, TYPE III BARRICADES SHALL BE LONGITUDINALLY STAGGERED FAR ENOUGH APART FROM ONE ANOTHER TO ALLOW SAFE PASSAGE OF VEHICLES AND MAINTAIN THE APPEARANCE OF A CLOSED ROADWAY. TYPE III BARRICADES SHALL BE REALIGNED AND PLACED END-TO-END TO DENY ANY ACCESS WHEN THE CONSTRUCTION ACTIVITY HAS CEASED FOR THE DAY.

#### B) ROAD CLOSED - LOCAL TRAFFIC

AS SHOWN IN FIGURE 4, WHEN LOCAL TRAFFIC MUST BE ALLOWED ACCESS INTO THE WORK ZONE, TYPE III BARRICADES SHALL BE LONGITUDINALLY STAGGERED TO MAINTAIN THE APPEARANCE OF A CLOSED ROADWAY. A SECOND LINE OF END-TO-END TYPE III BARRICADES SHALL BE PLACED JUST BEYOND THE LAST ACCESS POINT IN THE WORK ZONE, TO COMPLETELY CLOSE THE ROADWAY AS DESCRIBED IN NOTE 2-A.

AS SHOWN IN FIGURE 1 AND FIGURE 3, AT THE POINT WHERE THRU TRAFFIC MUST DETOUR AND LOCAL TRAFFIC CAN PROCEED TO THE LOCATION WHERE THE ROADWAY IS COMPLETELY CLOSED, THE R11-3A (ROAD CLOSED # MILES AHEAD LOCAL TRAFFIC ONLY) OR R11-4 (ROAD CLOSED LOCAL TRAFFIC ONLY OR ROAD CLOSED TO THRU TRAFFIC) SIGN SHALL BE USED WITH TYPE III BARRICADES (WINGED POSITION), PLACED ON THE SHOULDERS OF ROADWAY.



TYPE III BARRICADE WITH LIGHTS

THE ENTIRE AREA OF BARRICADE RAILS, BOTH FRONT AND BACK, SHALL HAVE ASTM TYPE III SHEETING.

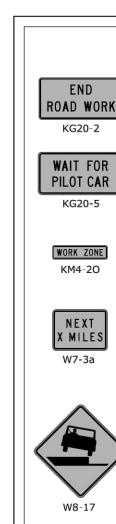
THE STRIPES SHALL SLOPE DOWNWARD TO THE SIDE TRAFFIC IS TO PROCEED OR TOWARD THE CENTER OF THE ROADWAY AT ROAD CLOSURES. APPROVED SIGNS MOUNTED ON TYPE III BARRICADES SHOULD NOT COVER MORE THAN 50% OF THE TOP TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

WHEN BARRICADES ARE PLACED END-TO-END OR STAGGERED, A TYPE "A" LOW INTENSITY WARNING LIGHT SHALL BE MOUNTED TO THE VERTICAL POST NEAR EACH OUTSIDE CORNER OF THE END BARRICADES.

3	10/16/12	Modified Type	III Barricade Note	J.A.M.	K.P.						
2	8/8/07	Added Position T	o Type III Barricade	M.B.	A.A.A.						
_	12/29/05	Note •	Modified	M.B.	A.A.A.						
NO.	DATE	RE	VISIONS	BY	APP'D						
KANSAS DEPARTMENT OF TRANSPORTATION  TYPICAL TRAFFIC CONTROL  ROAD CLOSURES											
TE7	'04										
HWA AF	PPROVAL	10/16/12	APP'D Kristin	a Pyle							
ESIGNET				TRACED							
ESIGN (	CK.	DETAIL CK.	QUAN. CK.	TRACE CK.							

ed: 24-OCT-2012 07:5

wn By : jmadrid



STD. SIZE SHOULDER EXPWY/FREEWAY DROP-OFF 30"x 24"

W8-17P (OPTIONAL)

NB US-75 CLOSED FOLLOW DETOUR

US-75 CLOSED NORTH OF Topeka FOLLOW DETOUR

UPPERCASE: 6" C LOWERCASE: 4.5" C

UPPERCASE: 10" D LOWERCASE: 8" D

(SPECIAL SIGN)

ALL CITY NAMES AND STREET NAMES ON SPECIAL SIGNS AND DESTINATION SIGNS



6" C

48"x 24" STD. SIZE

EXPWY/FREEWAY 6" C

Mileage to be determined

by the engineer.

48"x 24"

STD. SIZE EXPWY/FREEWAY 3" C 6" C 48"x 12" 24"x 6"



STD. SIZE EXPWY/FREEWAY 30"x 24"

8" D

48"x 48"

STD. SIZE

EXPWY/FREEWAY

48"x 48"

STD. SIZE

EXPWY/FREEWAY

48"x 48"

W8-15p

PAVEMENT

W8-15

**LOOSE** 

**GRAVEL** 

W8-7



STD. SIZE EXPWY/FREEWAY



STD. SIZE EXPWY/FREEWAY

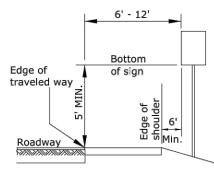
SP-01 (SPECIAL SIGN)

STD. SIZE

EXPWY/FREEWAY

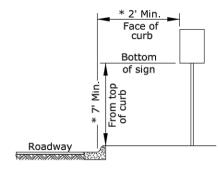
SP-02

MUST HAVE UPPER AND LOWER CASE LETTERS.



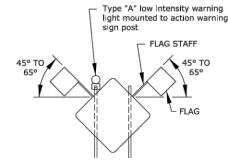
#### Rural

- 1) Ground-mounted signs shall be mounted at a minimum height of 5' measured from the bottom of sign to the near edge of the pavement.
- 2) Large signs having an area exceeding 50 square feet installed on multiple breakaway posts shall be mounted a minimum of 7' above the ground.
- 3) The height of the secondary sign mounted below another sign may be 4' measured from the bottom of the sign to the near edge of the pavement. Signs shall not overlap each other



#### Urban

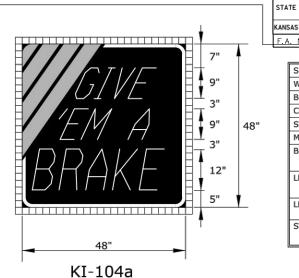
- 1) Signs shall be mounted at a minimum height of 7' measured from the bottom of sign to the near edge of the pavement.
- 2) Neither portable nor permanent sign supports should be located on sidewalks or areas designated for pedestrian or bicycle traffic.
- 3) Signs mounted lower than 7' should not project more than 4" into pedestrian facilities.
- 4) The height from of the secondary sign mounted below another sign may be 6' measured from the bottom of sign to the near edge of the pavement. Signs shall not overlap each other.
- 5) Large signs having an area exceeding 50 square feet installed on multiple breakaway posts shall be mounted a minimum of 7' above the ground.
- \* 6) Pedestrian detour signing shall be a minimum of 2' measured from the top of the pedestrian pathway to the bottom of the sign and shall not protrude into the walkway nor shall it project beyond the back of curb.



When the sign width is equal to or greater than 9', three or more wood posts may be used with a minimum of 4' between the centerline of each post. All signs less than 9' in width shall use a maximum of two wood posts

In the case of hitting rock when driving posts

- 1. Shift the sign location. Do not violate minimum sign spacing.
- With the engineer's approval, use acceptable alternative sign stands.



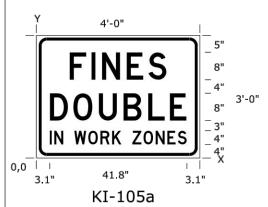
23 TE-0373-01 140 SIGN NUMBER GIVE EM A BRAKE

YEAR

SHEET NO.

WIDTH x HEIGHT 4'-0" x 4'-0" BORDER WIDTH 1.0" CORNER RADIUS 4.0" STRIPE WIDTH 3.0" MOUNTING GROUND BACKGROUND TYPE: NON-REFLECTIVE COLOR: BLACK LEGEND/BORDER TYPE: REFLECTIVE COLOR: WHITE LEGEND FONT DUTCH 801 ROMAN SWO 25 DEGREE SLANT STRIPES TYPE: REFLECTIVE COLOR: ORANGE

PROJECT NO.



SIGN NUMBER	FINES DOUBLE
WIDTH x HEIGHT	4'-0" x 3'-0"
BORDER WIDTH	0.9"
CORNER RADIUS	3.0"
MOUNTING	GROUND
BACKGROUND	TYPE: REFLECTIVE
	COLOR: WHITE
LEGEND/BORDER	TYPE: NON-REFLECTIVE
	COLOR: BLACK

#### DIMENSIONS IN INCHES

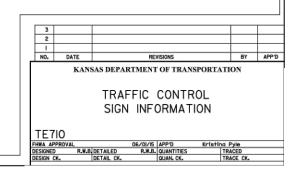
SPACINGS ARE TO START OF NEXT LETTER

Y FONT	Г								L	EΠ	ΓER	SP	ACI	NG	S	HT LEN
23.0	X	F	I	N	Е	S	$\boxtimes$									8.0
D	9.7	6.4	3.2	7.3	6.4	5.4	9.7									28.6
11.0	$\times$	D	0	U	В	L	E	$\supset$								8.0
D	3.9	6.9	7.5	7.3	7.3	6.4	4.9	3.9								40.3
4.0	$\times$	I	N	$\times$	W	0	R	K	$\times$	Z	0	N	Е	S	$\boxtimes$	4.0
D	3.1	1.6	2.7	3.2	4.3	3.8	3.6	2.8	3.2	3.4	3.8	3.6	3.2	2.7	3.1	41.8

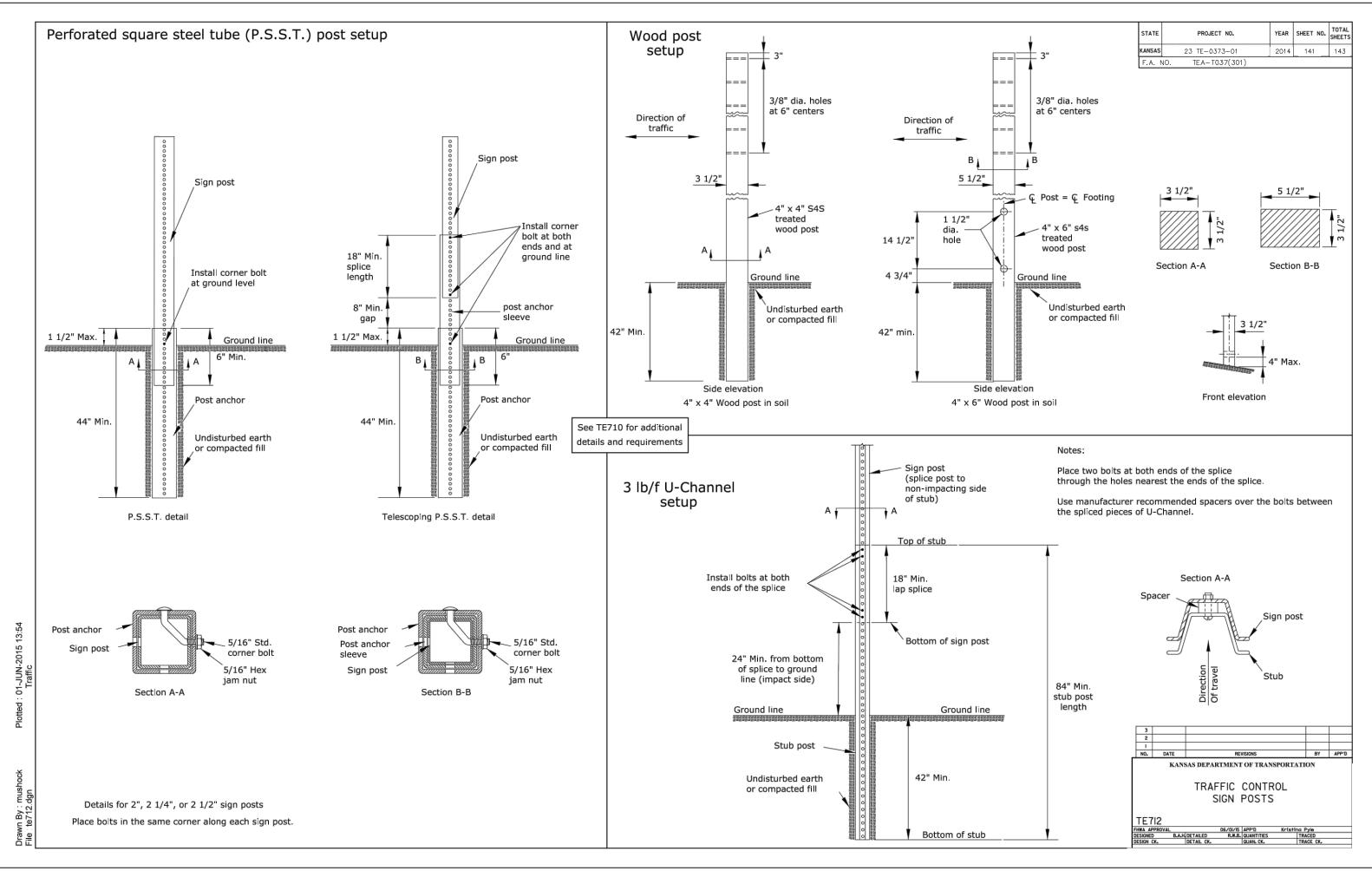
Typically, there are two sets of informational signs installed per project: one for each direction of traffic.

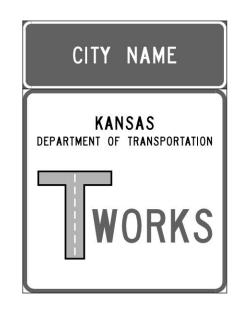
Install signs a minimum of 500' in advance of the road work ahead sign. The engineer may designate a more appropriate location if conditions dictate.

The informational signs are not to interfere with the traffic control signs for the project.



01-JUN-2015 13:54 Traffic



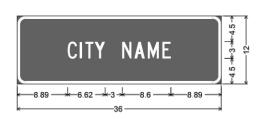


TYPICAL SIGN ASSEMBLY

# KANSAS DEPARTMENT OF TRANSPORTATION WORKS 2.6 13.2 20.2 -7.4 3.6 1.25 21.23 2.52 TWORKS SIGN 8 2.00" RADIUS, 0.75" BORDER, BLUE ON WHITE; [KANSAS] BLACK C;

TWORKS SIGN 8
2.00" RADIUS, 0.75" BORDER, BLUE ON WHITE;
[KANSAS] BLACK C;
[DEPARTMENT OF TRANSPORTATION] BLACK C 90% SPACING;
[T] ORANGE; 0.3" BLACK BORDER
LANE LINES: .3"X1.4" WHITE; 0.75" SPACING FROM BOTTOM
[WORKS] C 75% SPACING;
TABLE OF DISTANCES BETWEEN LETTER AND OBJECT LEFTS.

	K	A	N	S	A	S		7						
12.88	1.58	1.91	1.82	1.71	1.91	1.31	12.88							
	D	Ε	Р	A	R	T	М	E	N	T	0	F		
2.59	1.18	1.04	1.12	1.24	1.12	1.05	1.34	1.04	1.12	2.24	1.23	2.24		
T	R	A	N	S	Р	0	R	T	A	T	1	0	N	
1.04	1.12	1.24	1.18	1.18	1.11	1.23	1.12	0.88	1.08	1.05	0.53	1.22	0.88	2.59
	T													
2.6	13.2	20.2												
	W	0	R	K	S									
12.25	5.26	4.42	4.22	4.05	5 3.2	8 2.5	52							



TWORKS SIGN 7 1.50" RADIUS, 0.50" BORDER, WHITE ON BLUE; [CITY NAME] C; TABLE OF DISTANCES BETWEEN LETTER AND OBJECT LEFTS.

	C	1	T	Υ	N	A	М	F	
1	١~	١.	ı •		l	/*	177	-	
8 89	2 14	0.93	1 67	4 88	2 14	2 39	2 57	1 50	8 89

#### GENERAL NOTES

THE "TWORKS" SIGN BLANK MATERIAL SHALL BE ALUMINUM, WOOD, OR FIBERGLASS REINFORCED PLASTIC.

THE "TWORKS" SIGN FACES SHALL BE COVERED WITH TYPE IV HIGH INTENSITY RETROREFLECTIVE SHEETING.

THE "TWORKS" SIGNS SHOULD BE MOUNTED ON APPROVED POSTS, AS SHOWN ON TE712 WITHOUT THE USE OF BRACING, GUY WIRES, OR TIE-DOWNS. THE "TWORKS" SIGNS MAY ALSO BE MOUNTED ON SKIDS. THE MOUNTING HEIGHTS AND LATERAL OFFSETS ARE TO BE SHOWN ON TE714.

THE "TWORKS" SIGNS SHOULD BE INSTALLED IN ADVANCE OF THE FIRST TRAFFIC CONTROL SIGN A DISTANCE OF 500' FOR A TWO-WAY ROADWAY IN A RURAL LOCATION AND 100' TO 350' IN AN URBAN AREA DEPENDING UPON THE SPEED. THE FIRST TRAFFIC CONTROL SIGN IS EITHER THE "ROAD WORK AHEAD" OR THE "GIVE 'EM A BRAKE" SIGN. THE ENGINEER MAY DESIGNATE A MORE APPROPRIATE LOCATION IF CONDITIONS DICTATE.

THE "TWORKS" SIGNS SHALL NOT INTERFERE WITH THE TRAFFIC CONTROL SIGNS FOR THE PROJECT OR WITH ANY OTHER REGULATORY, WARNING, OR GUIDE SIGN THAT IS TO REMAIN IN PLACE DURING CONSTRUCTION.

THE TWORKS SIGN ASSEMBLY CONSISTS OF A TWORKS SIGN 7 AND AND TWORKS SIGN 8. THE BID ITEM FOR THIS ASSEMBLY IS "TWORKS SIGN ASSEMBLY" WITH A BID UNIT OF "EACH".

THE TWORKS SIGN ASSEMBLY SHOULD REMAIN IN PLACE FOR SIX (6) MONTHS FOLLOWING THE COMPLETION OF THE PROJECT AND BECOME THE PROPERTY OF KDOT OR THE LOCAL JURISDICTION.

3	10/16/12	Modified General Note	J.A.M.	K.P.
2	10/4/11	Removed Swoosh From TWork Sign	J.A.M.	K.P.
- 1	9/1/10	Modified Bid Item	J.A.M.	K.P.
NO.	DATE	REVISIONS	BY	APP'D

KANSAS DEPARTMENT OF TRANSPORTATION
DETAILS FOR THE
TRANSPORTATION WORKS
FOR THE KANSAS (TWORKS) SIGNS
LOCAL PROJECTS

TE7I5C

WA APPROVAL				10/16/12	APP'D	Kristina	Pyle	
SIGNED	D.G.	DETAILE	D	D.G.	QUANTITIES	T	RACED	_
SIGN CK.	J.A.M.	DETAIL	CK.	J.A.M.	QUAN. CK.	T	RACE CK.	

Plotted 24-OCT-2012 07:54

Drawn By jmadrid

# Summary Of Traffic Control Devices (Each)

Work Zone Sign (Special)					
Sign No.	16.25 Sq.Ft. & Less	16.26 Sq.Ft. & Over			
	I	l			

# Summary Of Traffic Control Devices (Each Per Day)

\* Quantity Most Used On The Project At Any One Time

	Work Zon	e Signs *	<del>(</del>		
Sign No.	Size - Sa.Ft.				
-W20-7	0-9.25	9.26-16.25 <del>2</del>	16.26 & Over		
		<del></del>			
W20-1	3				
W20-4	2				
W20-5					
R3-5R	3 2 2 2 2				
R3-5L					
R5-1	1				
D-3	1				
KG20-2	2				
M4-5A RT	1				
M4-5A LT	1				
M4-9 ST	1				

Barrio	cades *	Channelizing Devices *				
Type 3 (4' To 12')	Pedestrian	Fixed	Portable	Pedestrian		
1			31			

Lighted Devices *	
Work Zone Warning Light (Type "A" Low Intensity)	2
Work Zone Warning Light (Red Type "B" High Intensity)	
Arrow Display	
Portable Changeable Message Sign	

STATE	PROJECT NO.		SHEET NO.	TOTAL SHEETS
KANSAS	23 TE-0373-01	2014	143	143
F.A. 1	NO. TEA-T037(301)			

Recapitulation Of Quantities		
Item	Quantity	Unit
Work Zone Signs (O To 9.25 Sq.Ft.)	15	Each Per Day
Work Zone Signs (9.26 To 16.25 Sq.Ft.)		Each Per Day
Work Zone Signs (16.26 Sq.Ft. & Over)		Each Per Day
Work Zone Barricades (Type 3 - 4' To 12')	1	Each Per Day
Work Zone Barricades (Pedestrian)	-	Each Per Day
Channelizer (Fixed)		Each Per Day
Channelizer (Portable)	31	Each Per Day
Channelizer (Pedestrian)	, , , , , , , , , , , , , , , , , , ,	Each Per Day
Work Zone Warning Light (Type "A" Low Intensity)	2	Each Per Day
Work Zone Warning Light (Red Type "B" High Intensity)		Each Per Day
Arrow Display		Each Per Day
Portable Changeable Message Sign		Each Per Day
Pavement Marking (Temporary)		
4" Solid (Type I)		Sta./Line
4" Solid (Type II)		Sta./Line
4" Broken (8.0') (Type I)		Sta./Line
4" Broken (8.0') (Type II)		Sta./Line
4" Broken (3.0') (Type I)		Sta./Line
4" Broken (3.0') (Type II)		Sta./Line
4" Dotted Extension (Type I)		Sta./Line
4" Dotted Extension (Type II)		Sta./Line
Solid (Line Masking Tape)		Sta./Line
Broken (Line Masking Tape)		Sta./Line
Symbol (Type I)		Each
Symbol (Type II)		Each
Flexible Raised Pavement Marker (4" Broken (8.0'))		Sta./Line
Flexible Raised Pavement Marker (4" Broken (3.0'))		Sta./Line
Pavement Marking Removal		Lin. Ft.
Work Zone Sign (Special) (16.25 Sq. Ft. & Less)		Each
Work Zone Sign (Special) (16.25 Sq. Ft. & Less)  Work Zone Sign (Special) (16.26 Sq. Ft. & More)		Each
Temporary Raised Pavement Marker (Type I)		Each
		Each
Temporary Raised Pavement Marker (Type I)		
Traffic Signal Installation (Temporary)	Luman Cum	Lump Sum
Traffic Control (Initial Set Up)	Lump Sum	Lump Sum
Traffic Control		Lump Sum
Flagger (Set Price)	+	Hour
TWORKS Sign Assembly	1	Each

REVISIONS

TRAFFIC CONTROL
SUMMARY OF DEVICES
RECAPITULATION OF QUANTITIES
TE795
FINA APPROVAL 06/01/15 | APPROVAL NETALED R.W.B. | IOHANDE KETALED R.W.B. | IOHANDE R.W.B. | IO