

TEXAS PARKS AND WILDLIFE DEPARTMENT

DESIGN STANDARDS FOR ROADS AND PARKING



Infrastructure Division
Last Revised
September, 2008

**TEXAS PARKS AND WILDLIFE DEPARTMENT
DESIGN STANDARDS**

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PART 1 - GENERAL

1.1 SCOPE

Standards outlined herein are to be applied in locating and designing all Texas Parks and Wildlife Department roads and parking areas. Various features including vertical and horizontal alignment, roadway width, shoulders, surfacing, bridges, culverts, permissible slopes, loading criteria and required clearances are covered.

1.2 ENVIRONMENTAL QUALITY PROTECTION

The preservation and protection of natural and cultural resources combined with construction economy, public safety and sound engineering practice shall be major considerations in the layout, survey, design and construction of roads, parking areas, drainage and erosion control. Compliance with all applicable laws and regulations concerning environmental pollution control and abatement will be required. Areas, which are historically or archaeologically significant, will be avoided and those areas, which have delicately balanced wildlife or unique natural features, will not be impacted. Every effort will be made to preserve and protect the natural and cultural resources from injury, defacement or destruction. The impact to the site during the construction will be minimized in every respect possible. Archaeological monitoring may be required during construction. This applies to both temporary and permanent construction activities. Additionally, the surrounding areas and population shall be considered in the abatement of noise, control of dust, burning of wastes and cleanup. A **"Certification of Environmental Procedures for Construction of Roads and Parking within and Adjacent to the Facilities of the Texas Parks and Wildlife"** Form will be obtained by the appropriate Division and given to the Department TxDOT Coordinator for Certification of the project to the Texas Department of Transportation. This Form is included at the end of these Standards.

1.3 MINIMUM STANDARDS

These standards generally represent minimum values and should be considered by the Engineer as the lowest acceptable limits in design. It is expected that designs will embody the highest values possible, commensurate with conditions. Higher designs are not considered an exception.

1.4 DEPARTURES FROM STANDARDS

These design policies are intended to serve as a basic Departmental guide in design work; however, they are not to be considered as inflexible. They are not intended as a substitute for engineering knowledge, experience or judgment. When it is deemed necessary or desirable to deviate from them, approval will be secured from the Infrastructure Division, TxDOT Coordinator.

PART 2 - ROADS

2.1 CLASSIFICATION

For design purposes, Departmental roads have been classified into seven categories. Descriptions of these classifications are given below:

- A. Types I, I-A and II - These classifications apply to paved, two-way Departmental roads. Their numerical designations correspond respectively to known or anticipated heavy, moderate and low traffic volume.
- B. Type II-A - This classification designates a paved or unpaved two-way road to be used where a combination of terrain, planning concept, esthetics and low traffic volume requires and/or allows its application.
- C. Type III-H - This classification designates a paved or unpaved two-way road to be used where a combination of historical application, planning concepts and esthetics requires and or allows its use.
- D. Type III-W - This classification designates a paved or unpaved one-way or two-way road to be used where existing roadbeds, environmental considerations, right-of-way constraints, esthetics and low or seasonal traffic volume requires its application. This designation may occur typically is a Wildlife Management Area.
- E. Type IV - This classification designates a paved, one-way road to be used where a combination of terrain, planning concept, and low traffic volume requires and/or allows its application.

2.2 DESIGN VEHICLE

The heaviest and largest travel units utilizing Departmental roads are school buses, motor homes, construction-oriented vehicles such as dump trucks and garbage trucks. A single unit truck (SU), as described by the American Association of State Highway and Transportation Officials, best fits this category. It is a single axle vehicle with an overall length of (9.1M) 30 feet, width of (2.6M) 8.5 feet, a wheel base of (6.1M) 20 feet, front overhang of (1.2M) 4 feet, rear overhang of (1.8M) 6 feet, and a total height of (4.1M) 13.5 feet.

2.3 DESIGN VOLUME

The design criteria for Departmental roads may be the annual Average Daily Traffic (ADT) as derived from current attendance records, five-year projections, traffic counts, etc., if available. See Table 2-1.

2.4 SURFACING

Unless otherwise specified, Type I, I-A and II Departmental roads will be surfaced with a 2-course penetration treatment or Hot Mix Asphaltic Concrete. Pull-offs and some parking areas may be concrete. Grade of aggregate, type of asphalt, type of Hot Mix and thickness of application shall be as determined by the Texas Department of Transportation Design Engineer.

2.5 SUBBASE AND BASE THICKNESS

Thickness will be designed to withstand (8.2metric tons) 18,000-pound equivalent single axle loadings at the traffic volumes established in Table 2-1. Texas Department of Transportation specification for flexible base used in the Area of the Project is preferred. Sub-base may be treated as necessary to provide an adequate foundation for the base material.

2.6 OBSTRUCTION CLEARANCES

- A. Horizontal - Minimal distance from outer pavement edge which must be cleared of all visual or physical obstructions to protect the public safety and provide for the esthetic quality of the facility.
- B. Vertical - Height above paved roadway surface which should be clear of all overhanging limbs, power lines, or other features that might interfere with vehicle passage. See Table 2-1, Figure 2-1 and Figure 2-2.

2.7 CONSTRUCTION WIDTH

This dimension will be the narrowest possible clearing width for roadway construction, including surface width, obstruction clearance and drainage structure, where applicable. Significant trees or other desirable aesthetic features within its limits will be preserved where the public safety is not endangered. See Figure 2-1 and Table 2-1.

2.8 MINIMUM CLEARANCE BETWEEN CULVERT ENDS - SEE TABLE 2-1

- A. With Headwall - Face to face of headwall curbs
- B. Without Headwall - Distance between the intersection of side slope and top of pipe on each side.

2.9 BRIDGES

- A. Roadway widths - See Table 2-1. New Bridges - Dimension measured face to face of railing.
- B. Loadings - See Table 2-1
- C. Retention of Existing Bridges - Use Texas Department of Transportation Criteria

2.10 LOW WATER STRUCTURES

Practical and economical use of concrete low water crossings or overflow sections is encouraged for Road Types II, II-A, III-H, III-W and IV. Such installations will be considered on an individual basis for Road Type I and I-A.

2.11 DRAINAGE AND HYDRAULIC FREQUENCY

Table 2-1 reflects the minimum flood user frequencies recommended for Departmental drainage structure design. Design rainfall intensities will correspond to those used by the Texas Department of Transportation for each of its respective Districts. Special considerations such as access to Park visitors may require higher design frequencies.

2.12 CURVES AND GRADES

Maximum limits are indicated in Table 2-1. **Steeper grades and sharper curves may be justified by economics of construction and anticipated traffic volume, subject to the approval of the Infrastructure Division, TxDOT Coordinator.**

2.13 PAVEMENT CROSS-SLOPES - SEE FIGURE 2-1

2.14 DRAINAGE

Sheet flow drainage across all road systems is encouraged where control of storm drainage is not needed. The Non-point Source Pollution Abatement Plan requires maintaining sheet flow where possible and minimizing any concentration of storm water flows. Where existing cross slopes are 5% or greater and drainage areas are less than (2.0 hectares) 5 acres, the design illustrated in Figure 2-2 is recommended. On slopes of less than 5% and situations where water would otherwise collect adjacent to the road base, the design illustrated in Figure 2-1 is recommended. On camping loops and other low volume roads, minimal grading/fill should be designed to drain away from the road base. Where culverts under parking pullouts are required, the smallest possible size may be used to minimize depth of ditches.

Temporary erosion control measures (e.g. silt fences) shall be in place prior to construction and be maintained until vegetative cover is established and/or permanent structural controls are constructed.

2.15 TERRAIN CLASSIFICATION AND GRADE STANDARDS

- A. Flat terrain occurs where both horizontally and vertically restricted sight distances are generally long or can be made so without difficulty or major expense. Maximum grades can range from 6-7%.
- B. Rolling terrain consists of natural slopes which consistently rise above and fall below the roadway grade line, combined with occasional steep slopes offering some restriction to normal vertical and horizontal alignment. Maximum grades can range from 7-12%.
- C. Mountainous terrain presents abrupt longitudinal and transverse changes in ground elevation as related to the roadway centerline. Maximum grades range from 13-18%.

Roadway Classification Types	I	I-A	11	II-A	III-H	III-W	IV
Type	Circulation	Circulation	Area Road	Area Road	Area Road	Area Road	Area Road
	(Two Way)	(Two Way) Minimum Desirable	(Two Way) Minimum Desirable	(Two Way) Minimum Desirable	Historical Site-Limited	Wildlife Management Area	One Way or Two Way
Design Volume (Average Daily Traffic, No. Vehicles)	Over 250	Over 250	Less than 250	Less than 250	Not Used	Not Used	Not Used
Surface Width, Meters/Feet	6.0M/20' Paved	6.0M/20' Paved	5.5M/18' Paved	5.5M/18' Paved or Unpaved	Existing or 18' Paved or Unpaved	Minimum Existing Paved or Unpaved	3.7M/12' Paved or Unpaved
Shoulder Width, Meters/Feet (Each side)	0.6M/2' Paved	0.3M/1' Unpaved or Paved	0.6M/2' Unpaved	0.6M/1' Unpaved	Existing or Limited by Archeology	Existing or Limited by Resources	No Shoulder or 0.3M/1'
Obstruction Clearance, Horiz. Meters/Feet	1.2M/4'	1.2M/4'	1.2M/4*	0.6M/2'	Not Used	Not Used	Not Used
Obstruction Clearance, Vert. Meters/Feet	4.3M/14"	4.3M/14'	4.3M/14'	4.3M/14'	4.3M/14'	4.3M/14'	4.3M/14"
Usable Roadway Width, Meters/Feet	7.2M/24*	6.0 to 6.7M 20 to 22'	5.5M/18'	5.5M/18'	Existing or limited	Existing or limited	3.7M/12'
Construction Width	Varies with Site (Minimum	Varies with Site (Minimum	Varies with Site (Minimum	Varies with Site (Minimum	Varies with Site (Minimum	Varies with Site (Minimum Possible)	Varies with Site (Minimum
Minimum Clearance Between Culvert Ends, Pipes or Boxes	7.9M/26'	7.9M/26'	7.9M/26'	7.9M/26'	NA	NA	NA
New Bridges Roadway Width, Meters/Feet	7.2M/24'	6.7M/22'	6.1M/20'	6.1M/20'	Existing	Existing	3.7M/12'
Design loading, Tons	18.2 Metric tons/20	18.2 Metric tons/20	18.2 Metric tons/20	18.2 Metric tons/20	Traffic Dependent	Traffic Dependent	Traffic Dependent
Drainage, Hydraulic Design Frequency, Years (Minimum)							
Culverts	5	5	2	2	2	2	2
Minor Bridges	5	5	2	2	2	2	2
Major Bridges	10	10	5 (Min)	5 (Min)	5 (Min)	5 (Min)	5 (Min)
Low Water Crossings	5	5	2	2	2	2	
Minimum Preferred Radius of Horizontal Curve	60M/197'	60M/197'	19M/62'	19M/62'	19M/62'	19M/62'	

TABLE 2-1

ROADS AND BRIDGES

TABLE 2-2**DRAINAGE CHANNEL SIDE SLOPES**

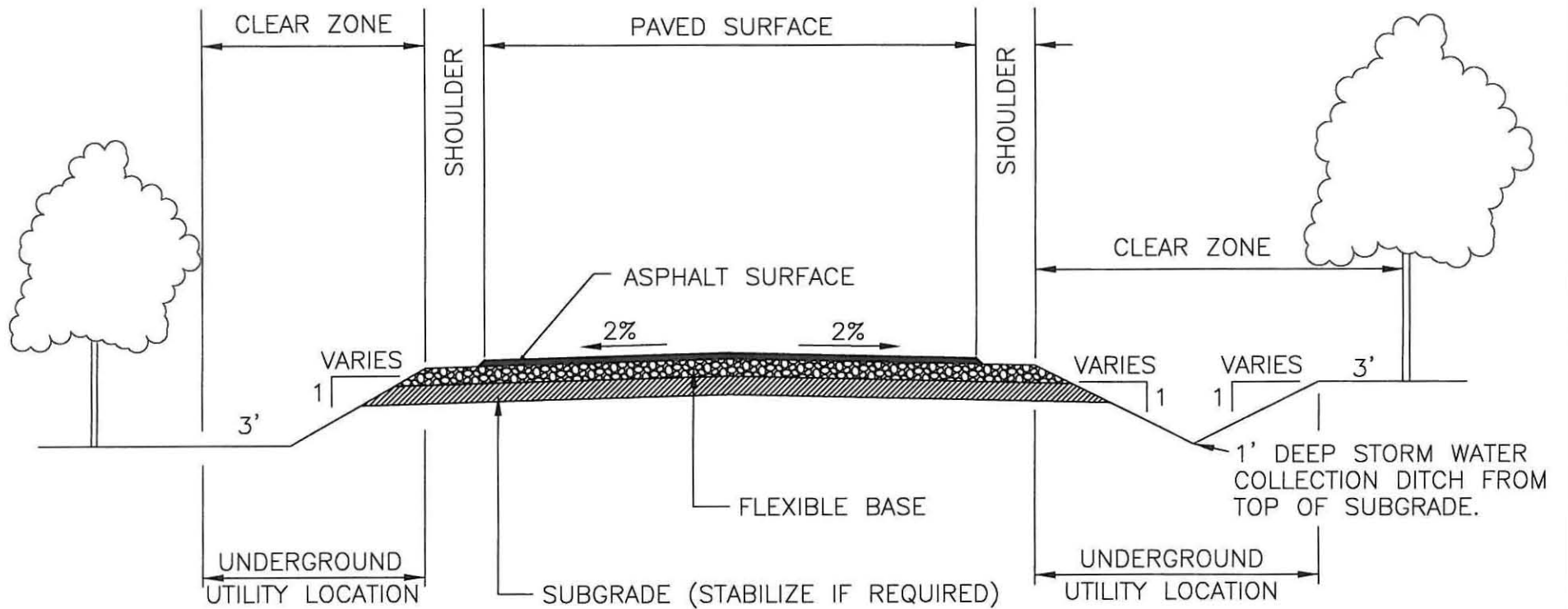
EARTH SLOPE, HORIZONTAL TO VERTICAL FOR TYPES OF TERRAIN

* In clay or silty soils subject to erosion, steeper than 2:1 should be avoided.

HEIGHT OF CUT OR FILL	Flat or Rolling	Moderately Steep	Steep
(0 - 1.2M) 0-4	4:1	4:1	2:1
(1.2 - 3.0M) 4-10	4:1	3:1	2:1
(3.0 - 4.6M) 10-15	3:1	2-1/2:1	1-3/4:1
(4.6 - 6.1M) 15-20	2:1	2:1	1-1/2:1*
(Over 6.1M) Over 20	2:1	1-1/2:1*	1-1/2:1*

Notes:

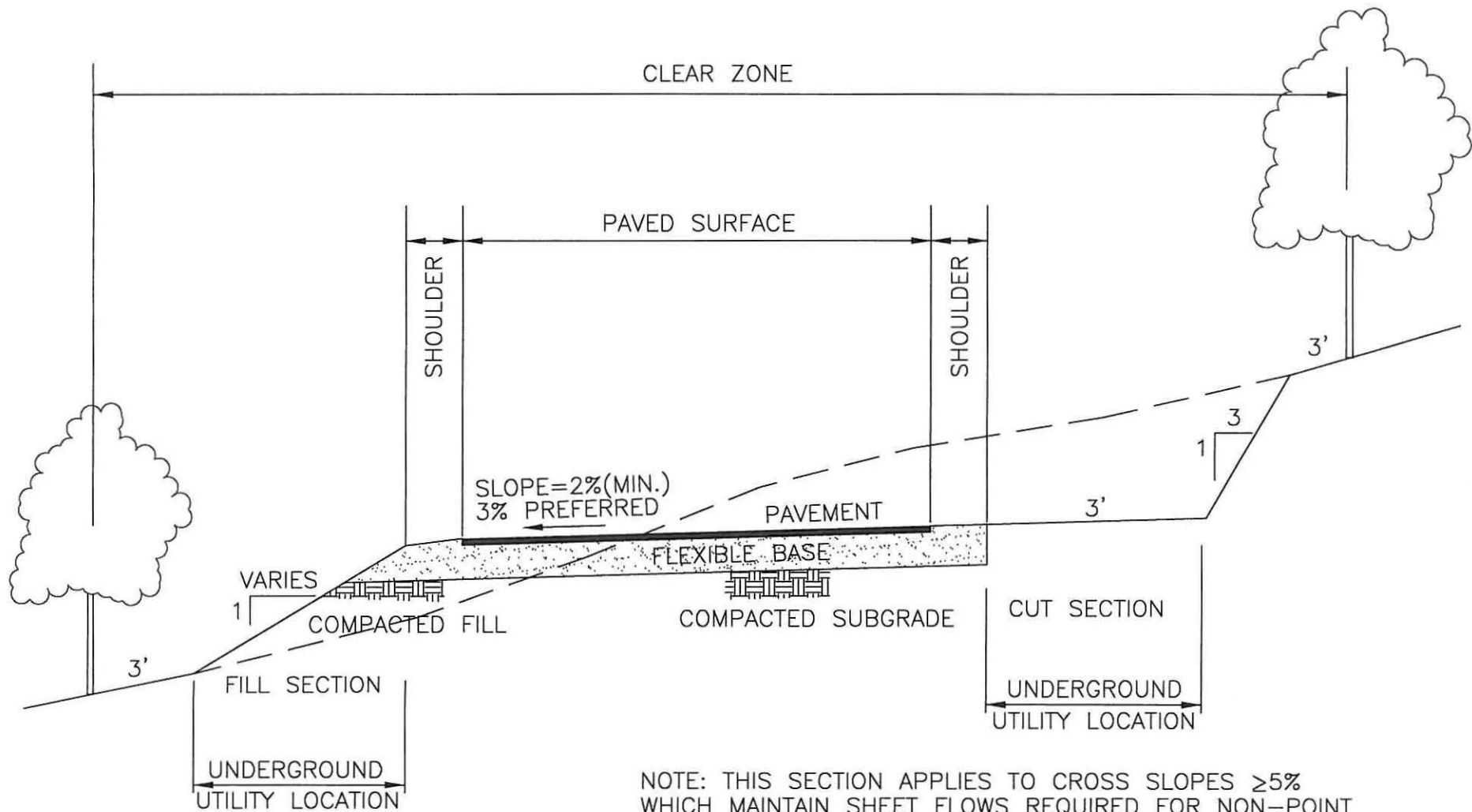
1. 4:1 slopes are the desired maximum for convenient vehicular mowing.
2. 2:1 is absolute maximum allowable without erosion control measures.
3. Sheet flow is always preferred to channel drainage.



NOTE: THIS IS A GENERAL SECTION, THE INTENT IS TO MINIMIZE GRADING, PROVIDE FOR LIMITED CLEARING OF VEGETATION AND TO MAINTAIN A NATURAL SETTING. SIDE SLOPES MAY BE REDUCED IN SPECIFIC AREAS TO 3:1 OR BY USE OF RETAINING WALLS WITH METAL BEAM GUARD RAILS TO REDUCE THE CLEAR ZONE REQUIRED. SEE FIGURE 1-2

TYPICAL PAVING SECTION

NO SCALE
FIGURE 2-1



NOTE: THIS SECTION APPLIES TO CROSS SLOPES $\geq 5\%$ WHICH MAINTAIN SHEET FLOWS REQUIRED FOR NON-POINT SOURCE POLLUTION ABATEMENT. (NOT APPLICABLE FOR DRAINAGE AREA > 5 ACRES.)

TYPICAL PAVING SECTION

NO SCALE
 FIGURE 2-2

PART 3 - SPECIAL CONDITIONS

3.1 ELEVATED ROAD SECTIONS

On high fills where riprap or other slope protection is required in conjunction with metal beam guard fence such that future widening of the embankment will be impractical, a minimum of two (3.6M) 12 foot traffic lanes and a minimum shoulder width of (1.2M) 4 feet between the surface edge and face of the metal beam guard fence should be provided.

3.2 METAL BEAM GUARD FENCE

A. Across Culverts - The use of guard fence will be restricted to only those locations where terrain presents an unusually hazardous condition.

B. Bridge Ends - Except for unusual conditions or safety issues, no guard fence will be provided at bridge ends.

3.3 TURN-AROUNDS

Generally, any dead-end Departmental road designed for public use will be provided with a turn-around having a minimum inside edge radius of (15.3M) 50 feet for the paved surface.

3.4 INTERSECTIONS AND MINIMUM TURNING RADII

All road intersections and inner loop roads will be designed to permit a minimum inside turning radius of (10.7M) 35 feet and outside turning radius of (15.3M) 50 feet without any wheel of the design vehicle leaving paved surface. Entrances to and exits from main loop roads shall be designed so that no wheel shall leave the driving lane.

PART 4 - PARKING

4.1 SURFACES

Parking lot and campsite parking pad surfaces will be designed in accordance with foregoing road standards.

4.2 DIMENSIONS AND GRADES

The following Table 4-1 and Figures 4-1 through 4-6 establish design values for parking areas.

TABLE 4-1

PARKING

LAST 30 FEET OF PAD AREA

<u>Design Elements</u>	<u>Parking Lots</u>	<u>Trailer or Multi-Use Parking Pads</u>	<u>Cabin or Shelter Parking Pads</u>	<u>Double Wide Trailer or Multi-Use Parking Pads</u>
1. Grades, %				
a. Front to Back	(-) 1.5 to (+) 3.0	(±) 1.0 min. to (±) 2.0 max.	(±) 1.0 min. to (±) 2.0 max.	2.0 max.
b. Side to Side	0.5 to 8.0	(±) 2	(±) 2	2.0 max
c. Mountainous or hilly terrain may require grades of 5% to 10% or more to reduce site impact for parking other than trailer or RV.				
d. ADA maximum grade is 2% in all directions for parking or camping pad spaces.				

2. Parking spaces,
Paved surfaces, ft.

Parking Lot (3.0M) (Minimum Width 10)	Lengths	Trailer or Multi-Use Parking Pads (3.6M) (12' Minimum Width)	Cabin or Screen Shelter (6.0M) (20' Minimum Width)	Double-Wide Trailer or Multi-Use Pads (6.0M) 20' Minimum Width)
Interior Space	(6.7M) 22'	(18.3M) 60' from edge of road along short side	(9.2M) 30' from edge of road along short side of pad*	Double-Wide Trailer or Multi-Use Pads (6.0M) 20' Minimum Width)
Exterior Spaces	(6.0M) 20'	Trailer or Multi-Use Parking Pads (3.6M) (12' Minimum Width)	Cabin or Screen Shelter (6.0M) (20' Minimum Width)	Double-Wide Trailer or Multi-Use Pads (6.0M) 20' Minimum Width)
Adjacent to Roadway	(9.8M) 32'	Trailer or Multi-Use Parking Pads (3.6M) (12' Minimum Width)	Cabin or Screen Shelter (6.0M) (20' Minimum Width)	Double-Wide Trailer or Multi-Use Pads (6.0M) 20' Minimum Width)
*At end of pad, provide (3.0M) 10 foot back-up rear overhang space for trailers and motor homes, cleared of all woody vegetation. Also, a pull through design may be used. (See Figure 4-4 and 4-4a)				
Width (3.0M) 10' regular, (4.9M) 16' ADA (Van 8' space with 8' isle)		(6.0M) 20' ADA Minimum	(6.0M) (20' Minimum Width)	(6.0M) 20' Minimum Width)

Table 4-1

Page 2

<u>Total Parking</u>	<u>Required Minimum Number of ADA Accessible Spaces</u>
1 to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5
150 to 200	6
201 to 300	7
301 to 400	8
401 to 500	9
501 to 1000	2% of Total spaces
1001 – Over	20 plus 1 for each 100 over 1000 spaces

Note: Camping ADA spaces vary by location and number of site types, 20' width minimum.

Example: 1 site requires 1 ADA site for Multi-Use, cabin, or primitive sites, etc.

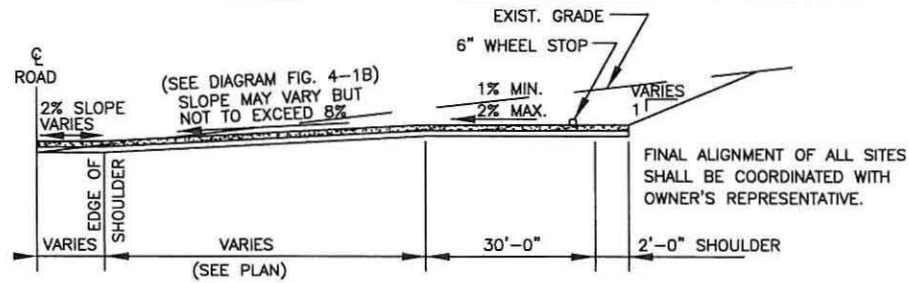
2 to 25 sites require 2 ADA site for Multi-Use, cabin, or primitive sites, etc.

26 to 50 sites require 3 ADA site for Multi-Use, cabin, or primitive sites, etc.

51 to 75 sites require 4 ADA site for Multi-Use, cabin, or primitive sites, etc.

76 TO 100 sites require 5 ADA site for Multi-Use, cabin, or primitive sites, etc.

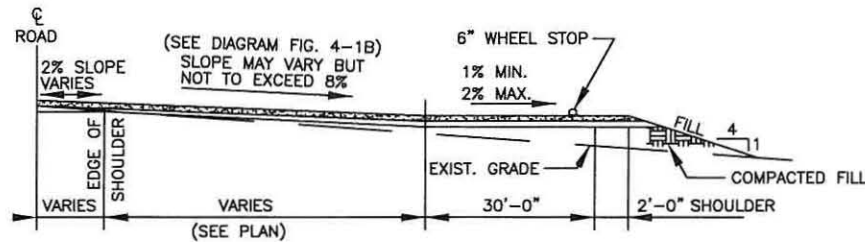
And so on!!



TYPICAL PROFILE SECTION OF CAMPSITE IN CUT

NO SCALE

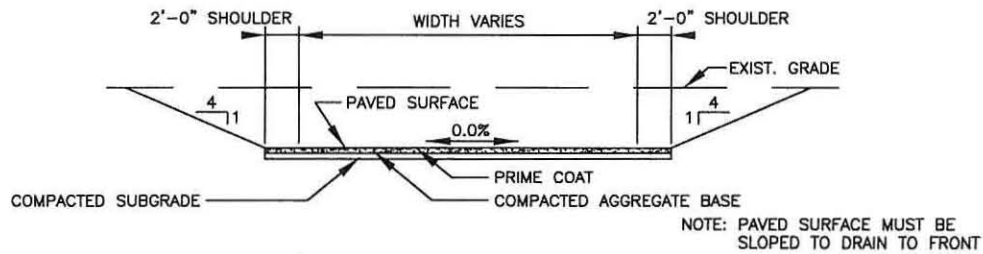
SEE TABLE 2-2 FOR MAX. SIDE SLOPES.



TYPICAL PROFILE SECTION OF CAMPSITE IN FILL

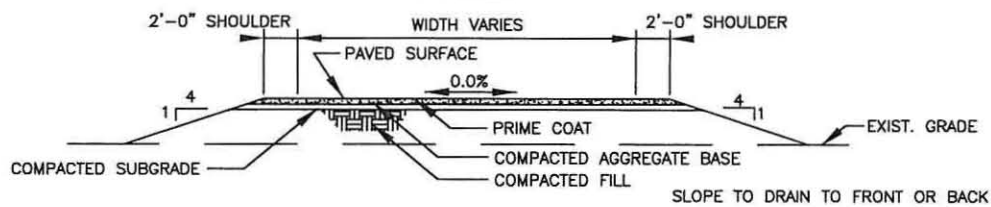
NO SCALE

SEE TABLE 2-2 FOR MAX. SIDE SLOPES.



TYPICAL HMAC/2 COURSE SECTION CAMPSITE IN CUT

NO SCALE



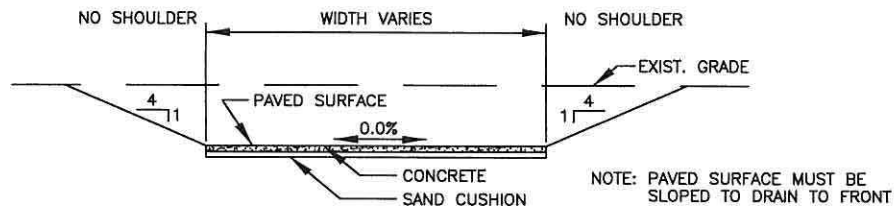
TYPICAL SECTION CAMPSITE ON FILL

NO SCALE

NOTE:

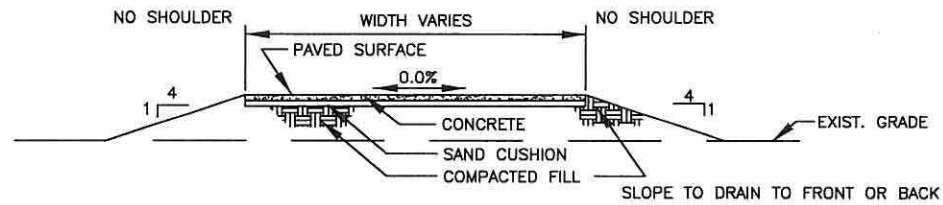
ADA SITES SHALL HAVE A 2% MAXIMUM SLOPE IN ALL DIRECTIONS.

FIGURE 4-1



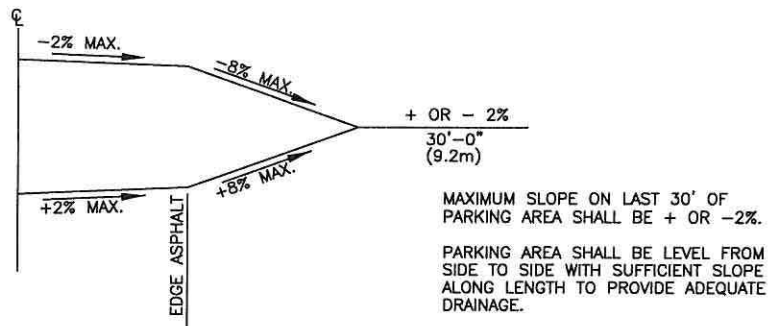
TYPICAL CONCRETE SECTION CAMPSITE IN CUT

NO SCALE



TYPICAL CONCRETE SECTION CAMPSITE ON FILL

NO SCALE



MAXIMUM SLOPE ON LAST 30' OF PARKING AREA SHALL BE + OR - 2%.

PARKING AREA SHALL BE LEVEL FROM SIDE TO SIDE WITH SUFFICIENT SLOPE ALONG LENGTH TO PROVIDE ADEQUATE DRAINAGE.

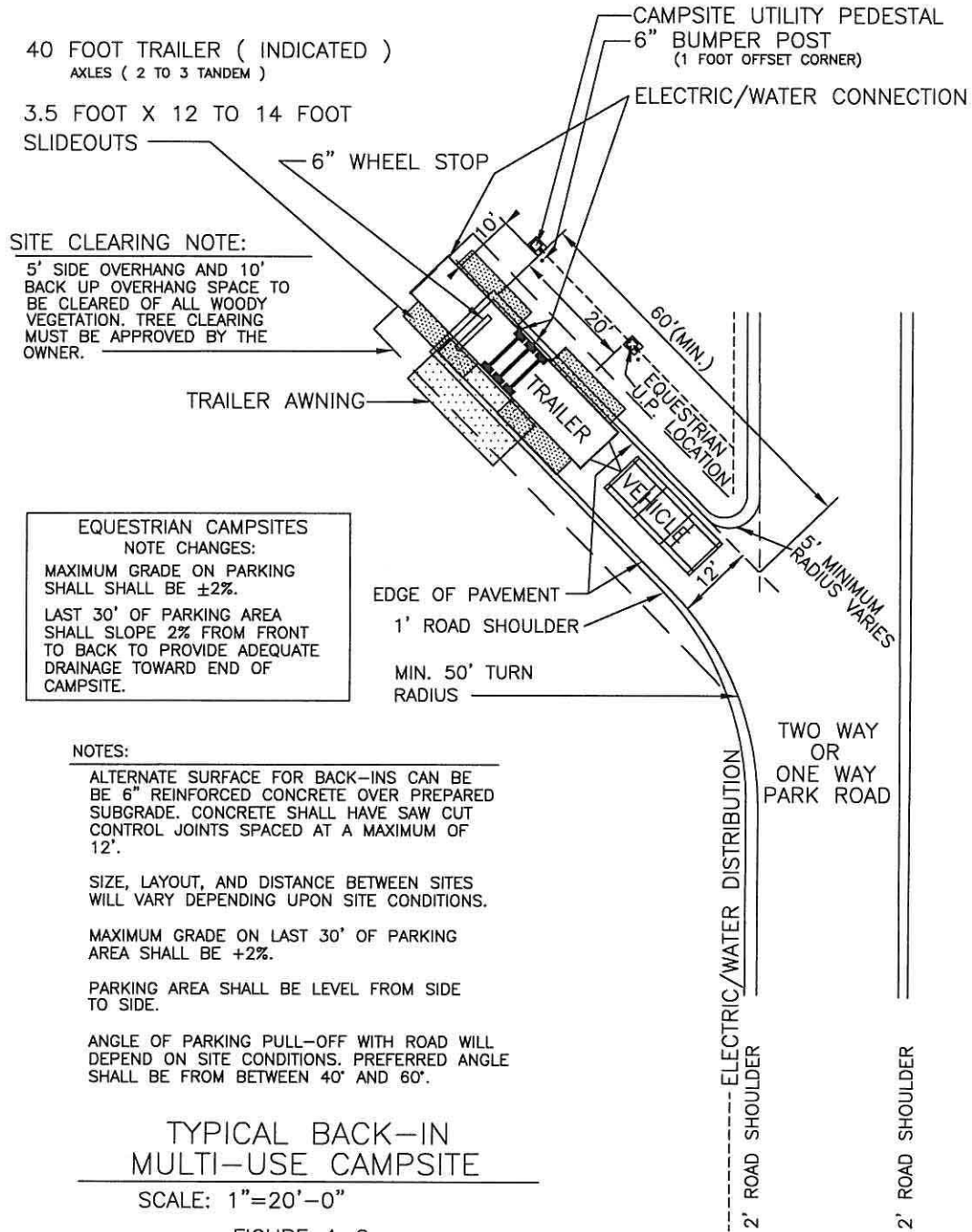
DIAGRAM

NO SCALE

NOTE:

ADA SITES SHALL HAVE A 2% MAXIMUM SLOPE IN ALL DIRECTIONS.

FIGURE 4-1a



TYPICAL BACK-IN
MULTI-USE CAMPSITE

SCALE: 1"=20'-0"

FIGURE 4-2

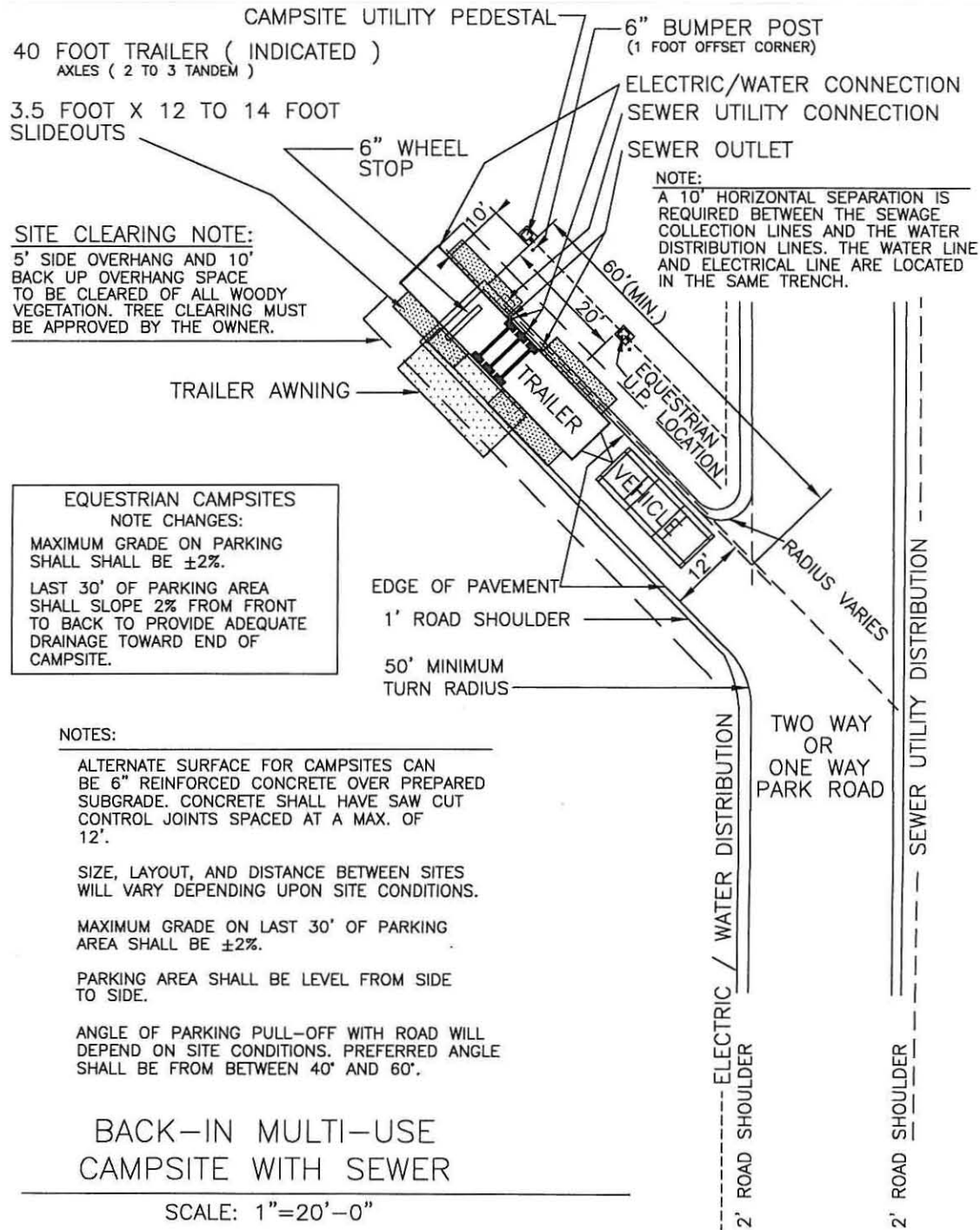
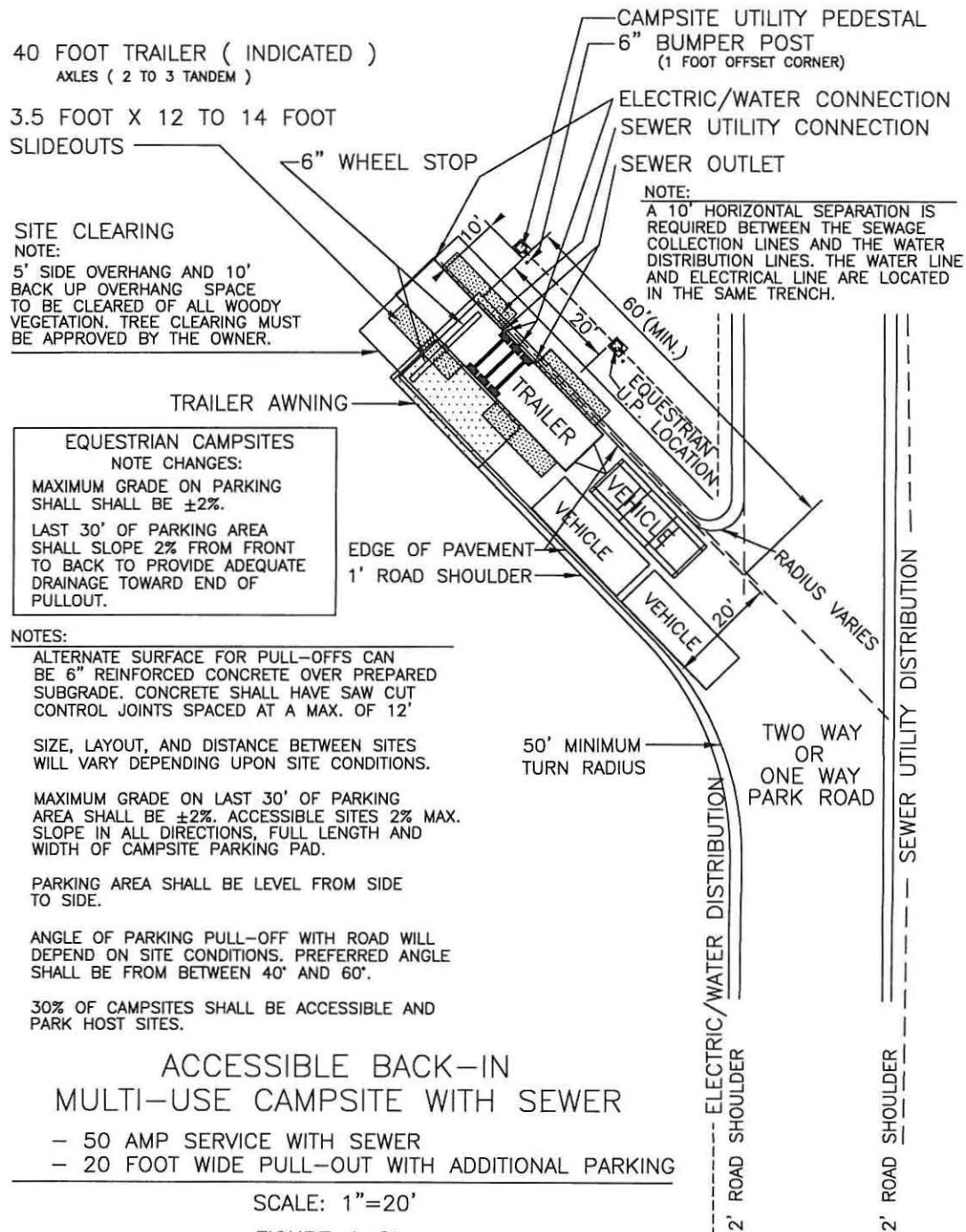
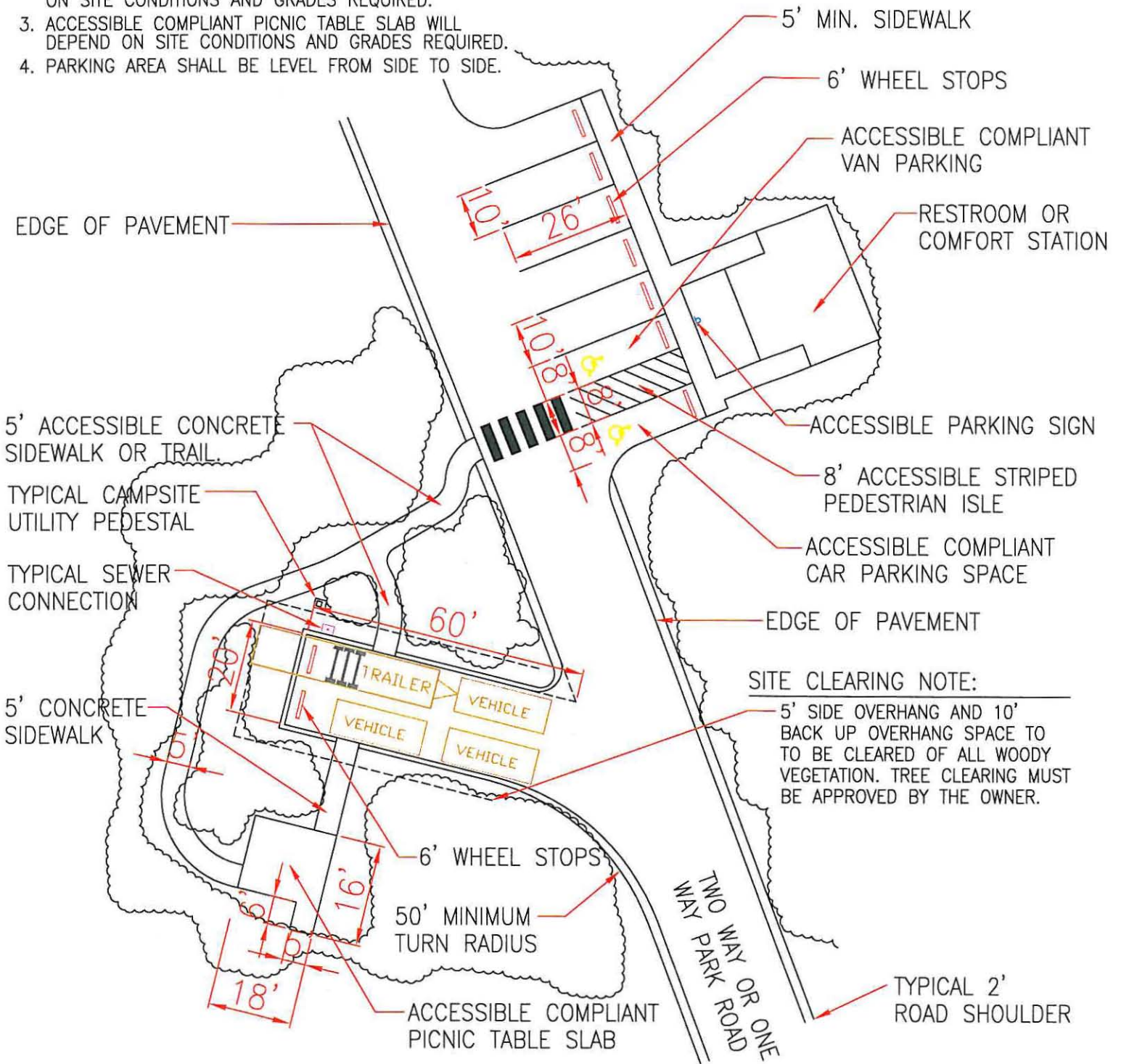


FIGURE 4-2a



NOTES:

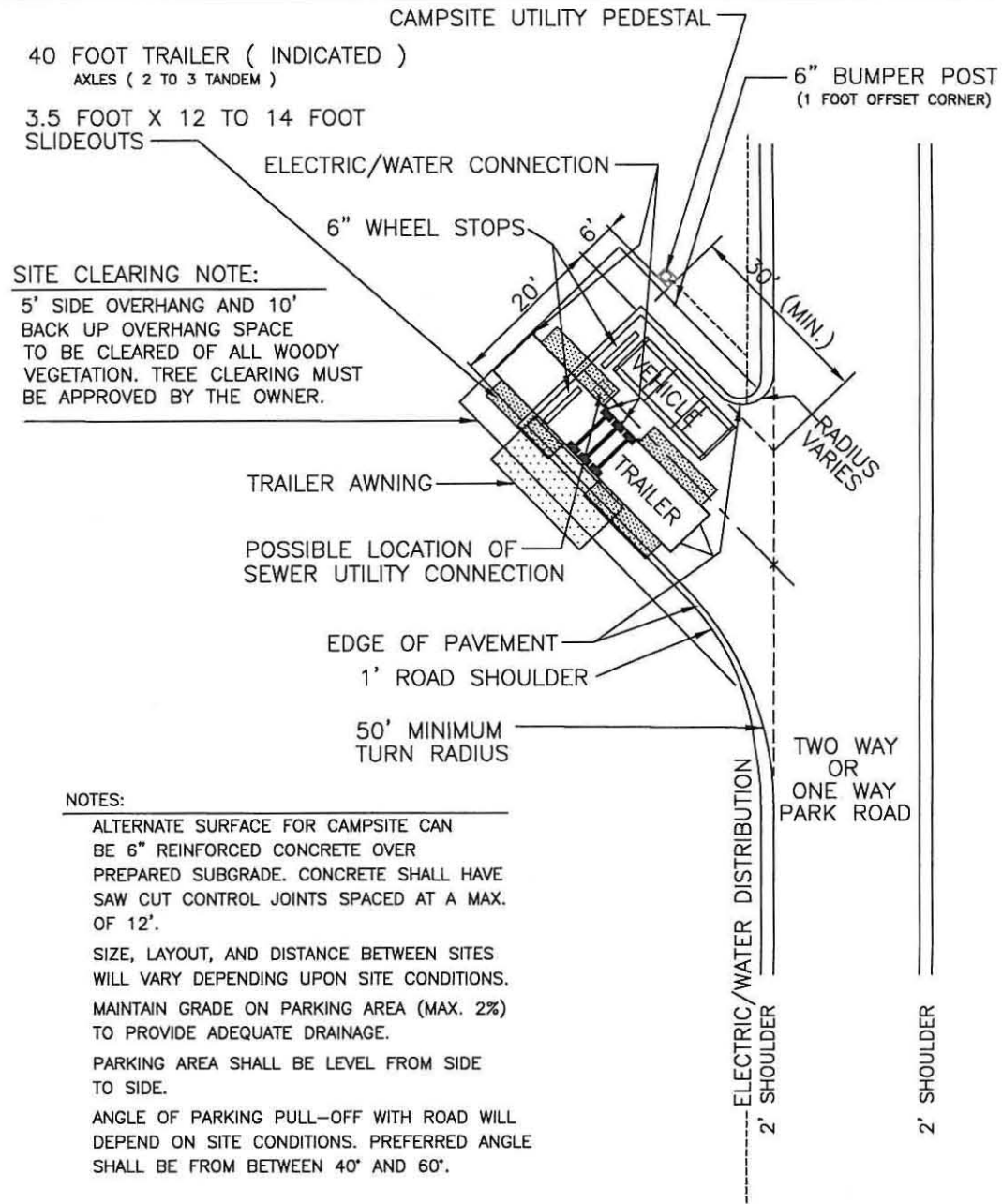
1. REFER TO FIGURE 4-2 FOR TYPICAL BACK-IN MULTI-USE CAMPSITE STANDARDS AND NOTES.
2. CONCRETE SIDEWALK LOCATIONS WILL DEPEND ON SITE CONDITIONS AND GRADES REQUIRED.
3. ACCESSIBLE COMPLIANT PICNIC TABLE SLAB WILL DEPEND ON SITE CONDITIONS AND GRADES REQUIRED.
4. PARKING AREA SHALL BE LEVEL FROM SIDE TO SIDE.



TYPICAL ACCESSIBLE AND HOST MULTI-USE CAMPSITE

SCALE: 1' = 30'

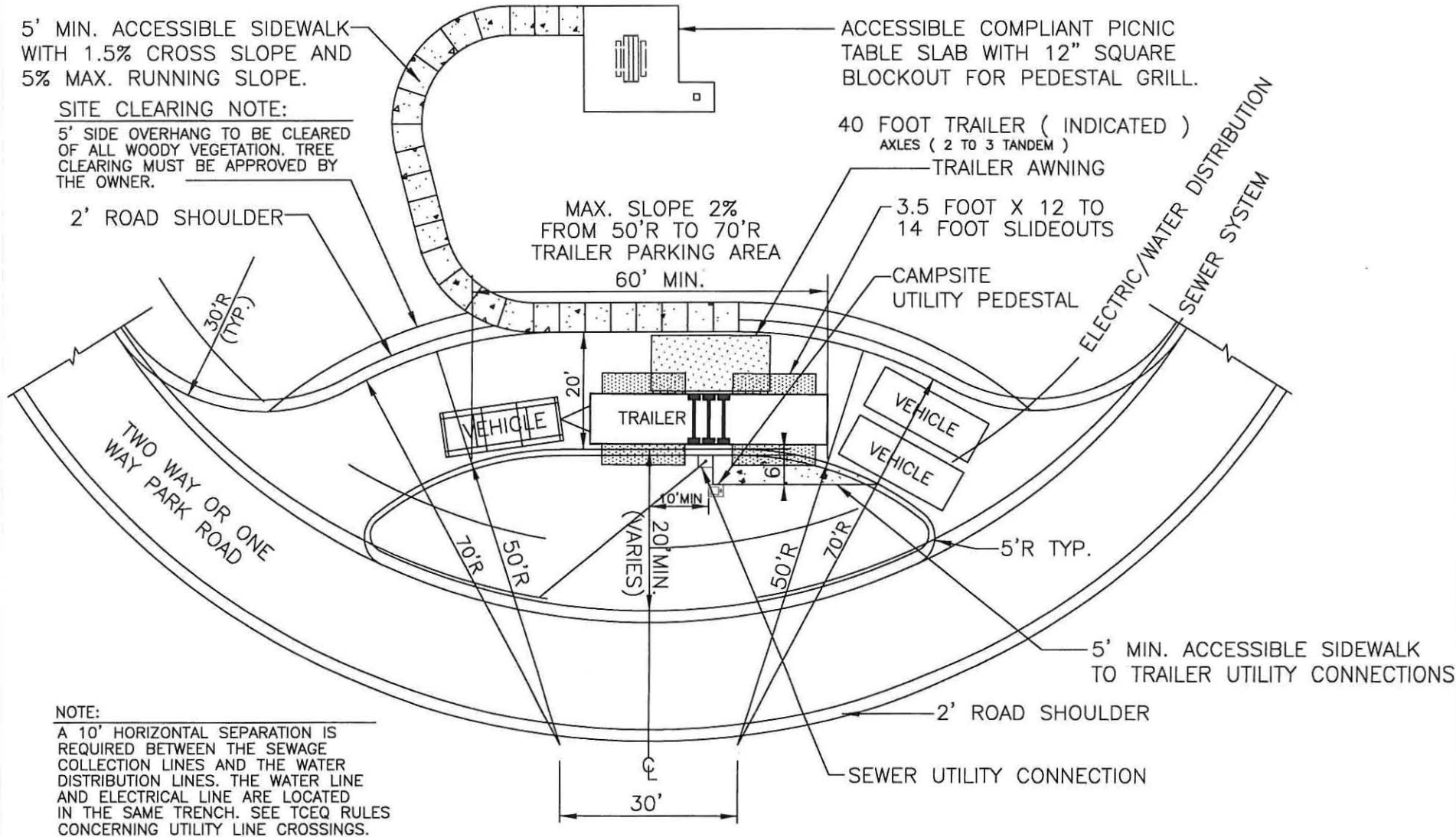
FIGURE 4-2c



BACK-IN DOUBLE MULTI-USE CAMPSITE

SCALE: 1"=20'-0"

FIGURE 4-3



ACCESSIBLE PULL-THROUGH MULTI-USE CAMPSITE
SCALE: 1"=20'-0"

FIGURE 4-4

SITE CLEARING NOTE:

5' SIDE OVERHANG TO BE CLEARED OF ALL WOODY VEGETATION. TREE CLEARING MUST BE APPROVED BY THE OWNER.

40 FOOT TRAILER (INDICATED)
AXLES (2 TO 3 TANDEM)

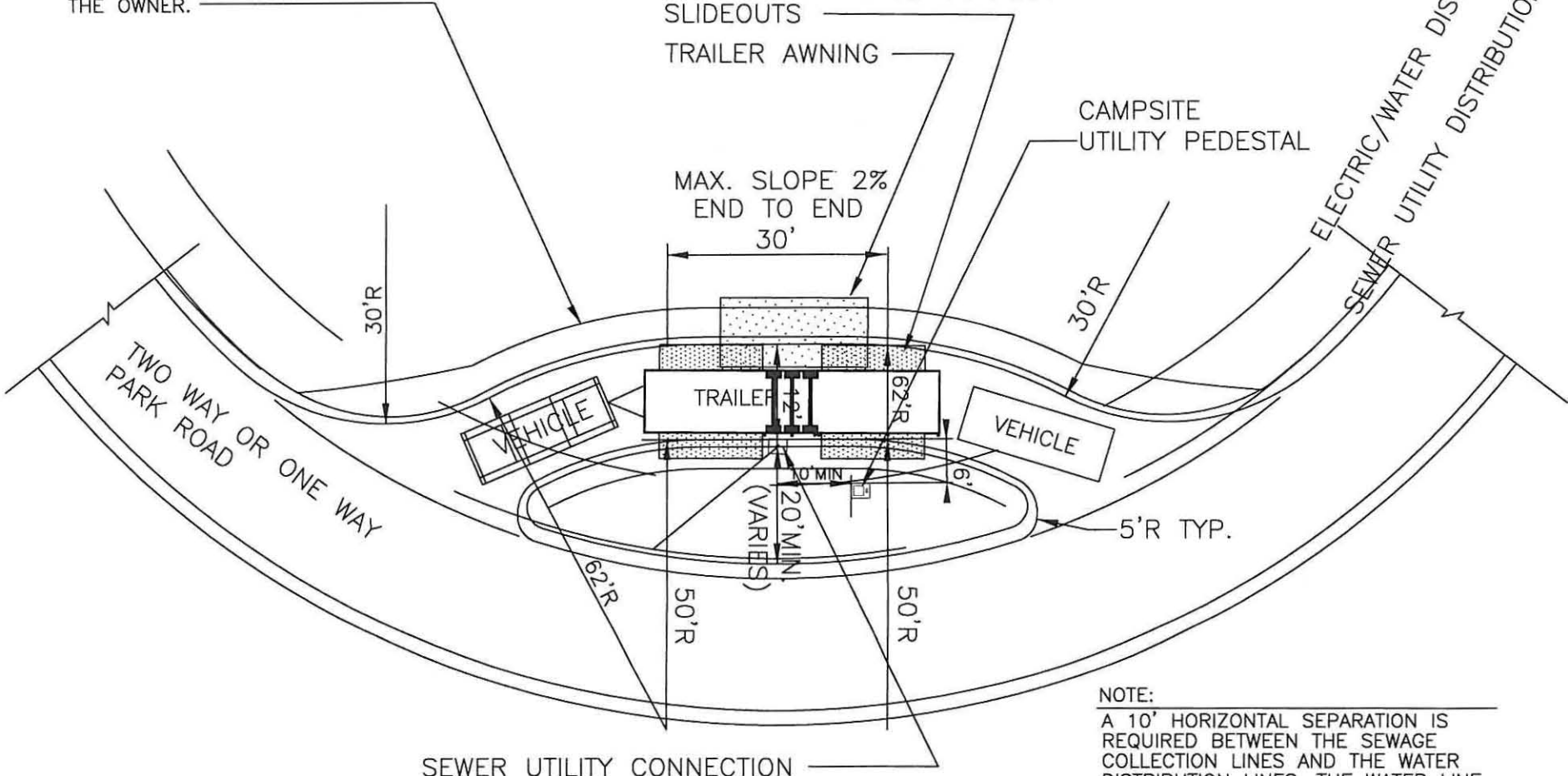
3.5 FOOT X 12 TO 14 FOOT
SLIDEOUTS

TRAILER AWNING

CAMPSITE
UTILITY PEDESTAL

MAX. SLOPE 2%
END TO END
30'

ELECTRIC/WATER DISTRIBUTION
SEWER UTILITY DISTRIBUTION



NOTE:

A 10' HORIZONTAL SEPARATION IS REQUIRED BETWEEN THE SEWAGE COLLECTION LINES AND THE WATER DISTRIBUTION LINES. THE WATER LINE AND ELECTRICAL LINE ARE LOCATED IN THE SAME TRENCH. SEE TCEQ RULES CONCERNING UTILITY LINE CROSSINGS.

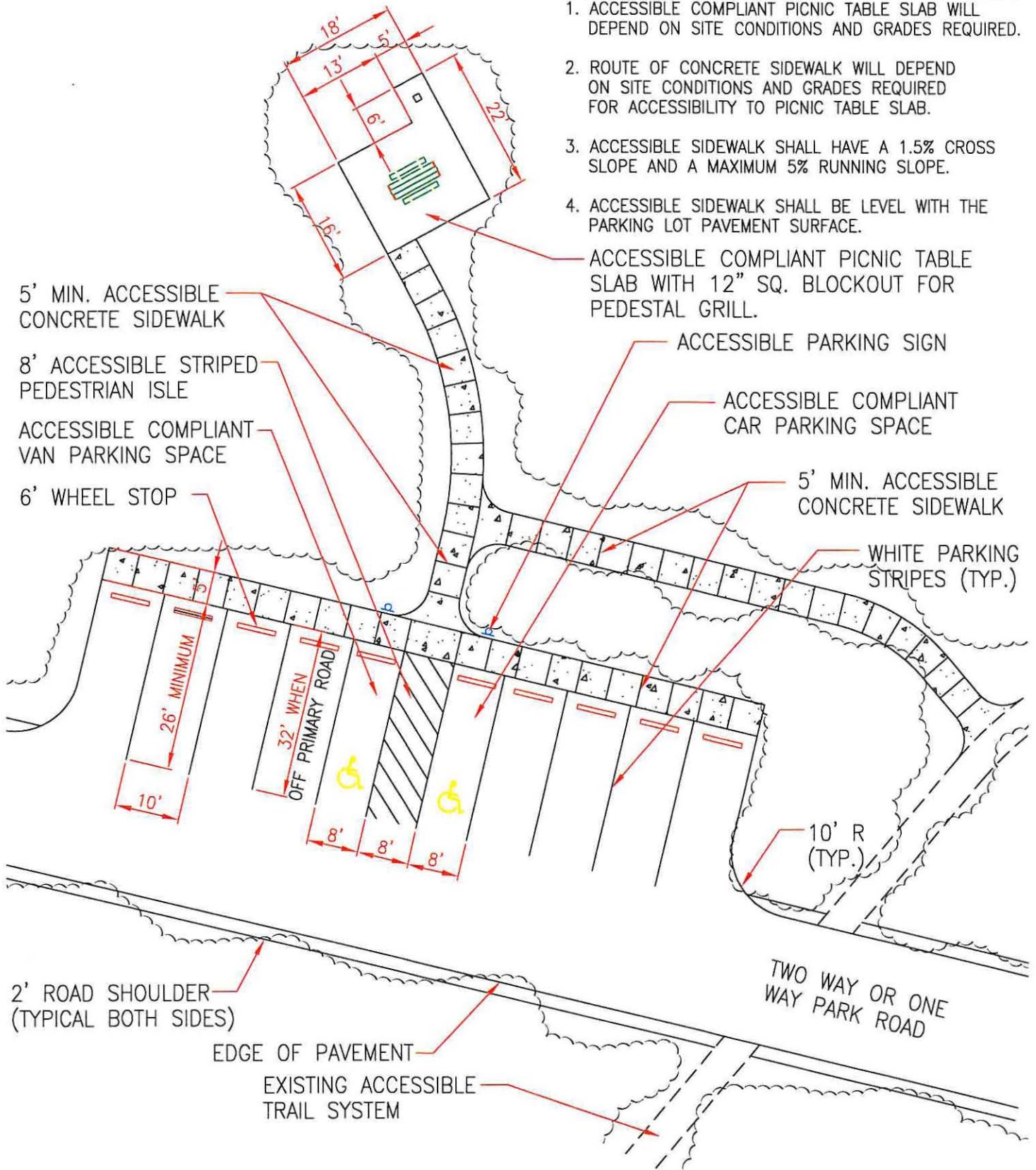
STANDARD PULL-THROUGH MULTI-USE CAMPSITE

SCALE: 1"=20'-0"

FIGURE 4-4a

NOTES:

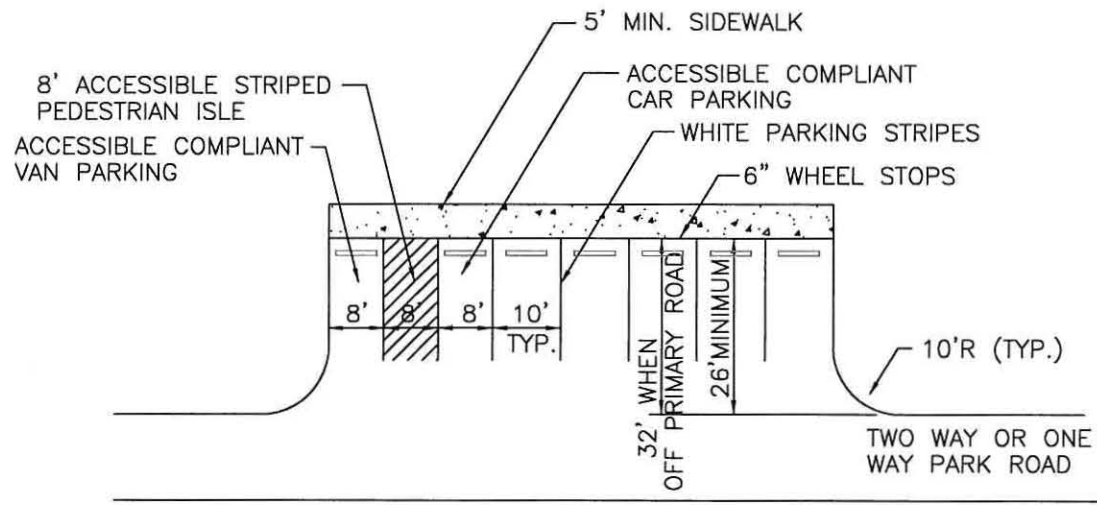
1. ACCESSIBLE COMPLIANT PICNIC TABLE SLAB WILL DEPEND ON SITE CONDITIONS AND GRADES REQUIRED.
2. ROUTE OF CONCRETE SIDEWALK WILL DEPEND ON SITE CONDITIONS AND GRADES REQUIRED FOR ACCESSIBILITY TO PICNIC TABLE SLAB.
3. ACCESSIBLE SIDEWALK SHALL HAVE A 1.5% CROSS SLOPE AND A MAXIMUM 5% RUNNING SLOPE.
4. ACCESSIBLE SIDEWALK SHALL BE LEVEL WITH THE PARKING LOT PAVEMENT SURFACE.



ACCESSIBLE PARKING LOT WITH
SIDEWALK AND PICNIC TABLE SLAB

SCALE: 1" = 20'

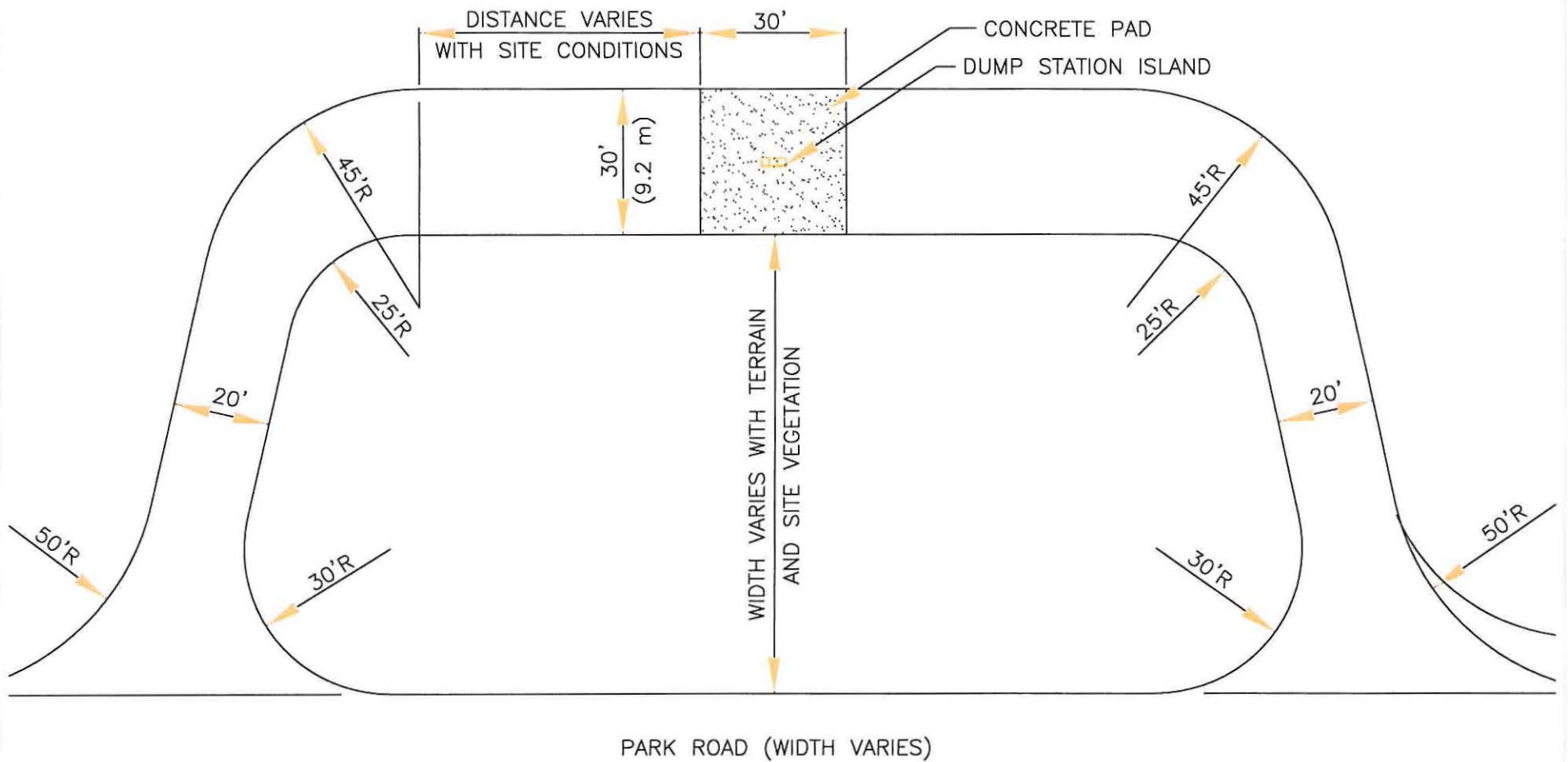
FIGURE 4-5



STANDARD ACCESSIBLE PARKING LOT

SCALE: 1"=20'

FIGURE 4-5a



NOTE: DRIVEWAY APPROACHES MAY BE SUBSTANTIALLY EXTENDED TO ALLOW FOR MULTIPLE CAR/TRAILER UNITS TO BE IN LINE WAITING TO USE DUMP STATION WITHOUT OBSTRUCTING ROADWAY. A TURN OFF LANE MAY BE DESIRABLE.

TRAILER DUMP STATION

SCALE: 1"=30'

FIGURE 4-6

PART 5 – MISCELLANEOUS

5.1 CONCRETE PAD FOR TRASH FACILITIES

Pads for trash dumpsters shall be 6" reinforced concrete triangles (15'x15'x20') with the 20' side located alongside the pavement. Pads will be located by the Texas Parks and Wildlife Department.

PART 6 – DESIGN AND CONSTRUCTION COORDINATION

6.1 PRELIMINARY

- A.** The TxDOT Coordinator, Facility Manager and TxDOT representatives will meet in a preliminary design meeting. The needs specific to the particular project can be defined at this meeting as well schedules, cost and methods of implementation.
- B.** TxDOT will provide the Facility Manager with one set of preliminary review documents and will provide the TxDOT Coordinator with two sets of review documents.
- C.** Prior to submittal to the District for review, TxDOT will provide review documents as noted in Item **B**.

6.2 LETTING AND CONSTRUCTION

- A.** The TxDOT representative will notify the TxDOT Coordinator when the proposed letting date is scheduled, the results of the letting within a reasonable time and the date of the pre construction conference.
- B.** The TxDOT representative will notify the TxDOT Coordinator of all construction changes and provide adequate notice for the TxDOT Coordinator to attend the final inspection.

CERTIFICATION OF ENVIRONMENTAL PROCEDURES
for TxDOT CONSTRUCTION of ROADS and PARKING
on PROPERTY OWNED or LEASED by
THE TEXAS PARKS AND WILDLIFE DEPARTMENT
PARKS DIVISION and ALL GENERAL AREAS

Project Description: _____

Facility name and Number: _____

County (ies): _____

Facility Manager: _____

Texas Parks and Wildlife Department (TPWD) certifies that all necessary environmental studies have been conducted for the proposed construction impacts described above, including those for any borrow sources, haul roads and staging areas; and, that all coordination, consultation and permits have been conducted/obtained pursuant to all federal and state laws, rules, and regulations: and, that all necessary public involvement has been completed prior to commencement of any construction activity pursuant to the Memorandum of Agreement between TPWD and Texas Department of Transportation (TxDOT) for the Design, Construction and maintenance of Roads and Parking, within and adjacent to the facilities of the TPWD, signed September 14, 2007.

Additional comments /requirements /conditions:
(attach additional information or data as needed) _____

CERTIFIED by RESOURCE COORDINATOR(S):

NAME: _____ NAME: _____

TITLE: _____ TITLE: _____

SIGNATURE: _____ DATE: _____ SIGNATURE: _____ DATE: _____

APPROVED for CULTURAL RESOURCE COMPLIANCE
by DIRECTOR of CULTURAL RESOURCES PROGRAM;

NAME: _____

TITLE: _____

SIGNATURE: _____ DATE: _____

APPROVED for NATURAL RESOURCES COMPLIANCE
by DIRECTOR of NATURAL RESOURCES PROGRAM:

NAME: _____

TITLE: _____

SIGNATURE: _____ DATE: _____

CERTIFICATION OF ENVIRONMENTAL PROCEDURES
for TxDOT CONSTRUCTION of ROADS and PARKING
on PROPERTY OWNED or LEASED by
THE TEXAS PARKS AND WILDLIFE DEPARTMENT
WILDLIFE DIVISION

Project Description: _____

Facility name and Number: _____

County (ies): _____

Facility Manager: _____

Texas Parks and Wildlife Department (TPWD) certifies that all necessary environmental studies have been conducted for the proposed construction impacts described above, including those for any borrow sources, haul roads and staging areas; and, that all coordination, consultation and permits have been conducted/obtained pursuant to all federal and state laws, rules, and regulations; and, that all necessary public involvement has been completed prior to commencement of any construction activity pursuant to the Memorandum of Agreement between TPWD and Texas Department of Transportation (TxDOT) for the Design, Construction and maintenance of Roads and Parking, within and adjacent to the facilities of the TPWD, signed September 14, 2007.

Additional comments /requirements /conditions:
(attach additional information or data as needed) _____

CERTIFIED by RESOURCE COORDINATOR:

NAME: _____

TITLE: _____

SIGNATURE: _____ DATE: _____

APPROVED for CULTURAL and NATURAL RESOURCE COMPLIANCE
by WILDLIFE FACILITIES and PUBLIC ACCESS COORDINATOR:

NAME: _____

TITLE: _____

SIGNATURE: _____ DATE: _____