



## PLAN REVIEW SHEET

**Date:** 10/18/2011

**Staff Contact:** Tina Votaw

**Telephone:** 704-432-3013

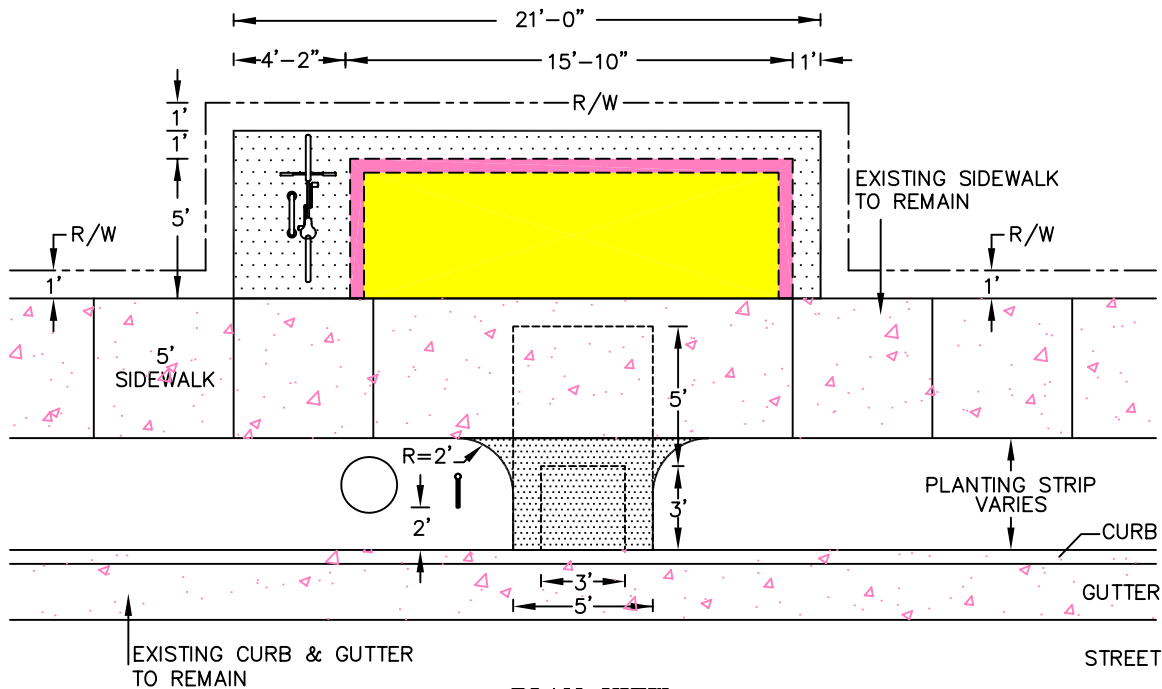
**Petition:** 2011-072

**Email:** tvotaw@charlottenc.gov

**Attachments:** 60.04A and 60.07B

### I. SUMMARY REMARKS:

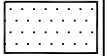
CATS requests that Petitioner install a concrete passenger shelter pad as depicted on the attached. If Petitioner has any questions regarding this request, please contact Ramond Robinson at CATS Service Development, 704.353-0018. Thank you.



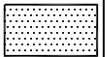
**PLAN VIEW**  
NTS

**LEGEND**

NEW CONCRETE WAITING  
PAD 6" THICK



NEW CONCRETE WAITING  
PAD 4" THICK



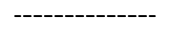
TRASH RECEPTACLE



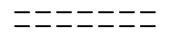
SIGN



ADA SPACE



5X15 STRUCTURE



BICYCLE RIB RACK  
IF REQUIRED



**NOTES:**

1. DIMENSIONS REPRESENT MINIMUM STANDARDS; VARIATIONS MUST BE APPROVED THROUGH CATS AND CDOT PROJECT MANAGER.
2. SEE SHEETS NO. 07A AND 07B FOR ADDITIONAL DETAILS AND NOTES.
3. 2' MINIMUM PLANTING STRIP. 4' PLANTING STRIP IS TYPICAL.

**REVISIONS**

NO.	DATE	DESCRIPTION

APPROVED DATE \_\_\_\_\_

**CHARLOTTE-MECKLENBURG  
LAND DEVELOPMENT  
STANDARDS**



**WAITING PAD WITH 5'X15' BOX SHELTER  
WITH PLANTING STRIP**

STD. NO.	REV.
60.04A	

**ACCESSIBLE PROVISIONS:** THE ALLOWANCES AND SPECIAL PROVISIONS OF INDIVIDUALS IN WHEELCHAIRS, AS WELL AS OTHERS WITH DISABILITIES, REQUIRE CERTAIN PHYSICAL IMPROVEMENTS WHICH ARE STANDARD TO ALL BUS STOPS. ALL BUS STOPS WILL REQUIRE AN ACCESS PAD LOCATED AT THE FRONT DOOR OF THE BUS. THE ACCESS PAD, AN AREA 3' BY 3', IS INTENDED TO ACCOMMODATE THE LIFT AS IT MEETS WITH THE BUS PAD PAVEMENT. THE ACCESS PAD NEED NOT BE DEFINED OR MARKED ON THE PAVEMENT, HOWEVER, CLEAR SPACE IS NECESSARY. IT IS CRUCIAL FOR THE SUCCESSFUL LIFT OPERATION THAT THE ACCESS PAD RUN PARALLEL TO THE ADJACENT BUS PAD ROAD GRADE. TYPICALLY, LIFTS MOVE VERTICALLY TO MEET THE ADJACENT GRADE WITHIN ONE TO THREE FEET OF THE BUS. THE LIFTS CANNOT ACCOMMODATE HORIZONTAL TORQUE. IN ADDITION TO THE ACCESS PAD, A CLEAR ZONE MUST BE PROVIDED SO THAT THE INDIVIDUAL IN THE WHEELCHAIR CAN MANEUVER OUT OF THE LIFT AND INTO THE STREAM OF PEDESTRIAN MOVEMENTS. THE CLEAR ZONE REQUIRES A MINIMUM OF A 5' BY 8' AREA AS MEASURED FROM THE BACK OF CURB. THE ACCESS PAD CAN BE PART OF THE CLEAR ZONE. THE CLEAR ZONE IS NOT REQUIRED TO BE MARKED OR DELINEATED. OTHER PEDESTRIAN USES MAY OVERLAP BOTH THE ACCESS PAD AND THE CLEAR ZONE, HOWEVER, TO BE ADA COMPLIANT ALL OBSTRUCTIONS MUST BE LOCATED OUTSIDE THE 40 SQUARE FOOT AREA.

**BENCH PROVISIONS:** ALL BENCHES SHALL BE A MIN. OF 4' LONG. BENCH BACKS AND END ARM RESTS ARE OPTIONAL. ALL BENCHES SHALL BE VANDAL PROOF, ROT, IMPACT, SCRATCH, WEATHER, FADE, INSECT, AND FUNGUS RESISTANT AND SELF EXTINGUISHING. ALL SURFACES SHALL BE A SMOOTH FINISH. ALL EDGES SHALL BE SMOOTH, EASED, AND

ROUNDED OR CHAMFERED. THE BENCHES SHALL BE MADE OF A MINIMUM OF 60 % POST CONSUMER RECYCLED MATERIAL. WOOD POLYMER COMPOSITE MATERIAL, POST CONSUMER PLASTIC, RECYCLED ALUMINUM, GALVANIZED STEEL, OR RECYCLED CAST IRON ARE RECOMMENDED. COLOR SHALL BE INTEGRAL TO MATERIAL COMPONENT, BAKED ON POWDER, POLYURETHANE ENAMEL AFTER WELDING. ALL FASTENERS SHALL BE STAINLESS STEEL OR PLATED AND SELF LOCKING OR HIDDEN TO DETER UNWANTED REMOVAL.

ALL BENCHES SHALL BE PERMANENTLY AFFIXED TO THE CONCRETE SLAB ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS. NO PORTION OF THE BENCH OR SUPPORT SYSTEMS SHALL EXTEND INTO OR ONTO LAWN, PLANTED, OR SOIL SURFACES. ALL BENCHES SHALL BE PLACED PARALLEL TO THE ROAD AND SHALL BE SETBACK A MINIMUM OF 7'-6" FROM THE BACK OF CURB AND 3'-0" ON THREE SIDES OF THE CONCRETE PAD. THE FOURTH SIDE, FARTHEST FROM THE ROAD, SHALL HAVE A MINIMUM CLEARANCE OF 1'.

**BIKE RIB:** THE BIKE RIBS ARE TO BE INSTALLED PER THE MANUFACTURER'S SPECIFICATIONS. A CONCRETE PAD WITH A DIMENSION OF 4'-00" BY 6'-00" IS REQUIRED TO ACCOMMODATE ONE BIKE RIB. ADDITIONAL BIKE RIBS CAN BE ADDED BY EXTENDING THE CONCRETE PAD 2'-00" BY 6'-00" PER BIKE RIB.

**BUS SHELTER:** ALL BUS SHELTERS SHALL BE DESIGNED TO MEET THE CURRENT BUILDING REQUIREMENTS ASSOCIATED WITH LOCAL BUILDING CODES INCLUDING THE ABILITY TO WITHSTAND SUSTAINED WINDS IN ACCORDANCE WITH LOCAL AND STATE BUILDING CODES. ALL SHELTERS SHALL BE CORROSION, RUST, AND WEATHER RESISTANT, AND SELF EXTINGUISHING. SHELTERS SHALL BE VANDAL PROOF, IMPACT AND SCRATCH RESISTANT. ALL WALL PANELS MUST BE REPLACEABLE AND OF STANDARD SIZE. ALL OPENINGS MUST BE ACCESSIBLE FROM AND ADJACENT TO THE SIDEWALK AND THE PASSENGER LOADING PAD. A MINIMUM OF 3'-0" WIDE PAVING SHALL CONNECT ALL OPEN SIDES OF THE SHELTER TO THE PASSENGER LOADING PAD. ALL FASTENERS USED ANCHORING DEVICES TO THE CONCRETE PAD SHALL BE MADE OF HOT

DIPPED GALVANIZED STEEL OR OF APPROVED EQUAL. FASTENERS SHALL BE SELF LOCKING AND MUST BE OF A TYPE WHICH CANNOT BE LOOSENED WITH READILY AVAILABLE TOOLS. FASTENERS SHALL BE HIDDEN WHENEVER POSSIBLE AND SHALL BE FLUSH WITH THE SURFACE CONNECTED. ALL SURFACES SHALL BE SMOOTH, FINISHED, AND FREE FROM BURRS, SHARP EDGES, SLIVERS, PROJECTIONS, NICKS, DENTS, AND OTHER IMPERFECTIONS.

ALL SHELTERS SHALL BE SUITABLE FOR MOUNTING ON A CONCRETE PAD BY SURFACE ANCHORS PER THE MANUFACTURER'S SPECIFICATIONS. THE CONCRETE PAD SHALL BE OF A STABLE, NONSKID SURFACE SLOPED TO DRAIN BUT NOT EXCEEDING 2% CROSS SLOPE OR 3% LONGITUDINAL SLOPE.

SIGN STANDARDS: THE EXTERIOR SIGNAGE SHALL MEET THE SPECIFICATIONS OUTLINED IN THE REPORT; BUS STOP SIGNAGE SPECIFICATIONS-LOW AND MEDIUM VOLUME STOPS, PROVIDED BY THE CHARLOTTE AREA TRANSIT SYSTEM (CATS).

LANDSCAPING FOR THE DEVELOPER: WHEN LANDSCAPING IS PROVIDED, LOW MAINTENANCE, WINTER HARDY, INDIGENOUS PLANT MATERIAL SHALL BE UTILIZED. SHRUBS SHALL NOT EXCEED 2'-6" IN HEIGHT. SHRUBS WHICH REQUIRE PRUNING TO MAINTAIN MAXIMUM HEIGHT ARE NOT RECOMMENDED. PLANTINGS SHALL BE PLACED TO DEFINE THE EDGE OF THE PASSENGER LOADING PAD AND TO ADD VISUAL INTEREST. SHRUBS SHALL NOT BE PLANTED ADJACENT TO THE BACK OF THE SHELTER.

ORNAMENTAL TREES OR SMALL SHADE TREES ARE RECOMMENDED TO PROVIDE SHADE FOR PASSENGERS. TREES SHOULD BE PLANTED ON THE SOUTH OR WEST SIDES OF THE PASSENGER LOADING PAD WHENEVER POSSIBLE. TREE CANOPIES WHICH OVERHANG THE SHELTERS ARE DISCOURAGED. TREES SHOULD BE UPRIGHT IN HABIT AND SHOULD NOT PRODUCE FRUIT. BRITTLE HARDWOOD SPECIES ARE DISCOURAGED. TREES SHOULD BE PLANTED OUTSIDE THE PAVED AREA OF THE PASSENGER LOADING ZONE AND SIDEWALKS.

APPROVED DATE \_\_\_\_\_

#### REVISIONS

NO.	DATE	DESCRIPTION

## CHARLOTTE-MECKLENBURG LAND DEVELOPMENT STANDARDS



## ACCESSIBILITY PROVISIONS AND OTHER NOTES

STD. NO.	REV.
60.07B	