

SITE DEMOLITION SPECIFICATION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
1. Demolition of structures, paving, and utilities.
2. Patching and filling voids created as a result of removals or demolition.

1.2 REGULATORY REQUIREMENTS

- A. Compliance with all laws, including Safety Laws, Environmental Laws, Stormwater Laws and Worker Verification Laws as well as requirements found within the Contract Documents and these Specifications, that pertain to Safety Compliance, Environmental Compliance, Stormwater Compliance and Worker Verification Compliance. Obtain required permits and licenses from appropriate authorities. Pay associated fees including disposal charges.
B. Notify affected utility companies before starting work and comply with their requirements.
C. Do not close or obstruct public or private roadways, sidewalks, or fire hydrants without appropriate permits or written authorization.
D. If hazardous, contaminated materials or other environmental related conditions are discovered, stop work immediately and notify the Wal-Mart Construction Manager for action to be taken. Do not resume work until specifically authorized by the Construction Manager.

1.3 PROJECT CONDITIONS

- A. Conditions existing at time of inspection for bidding purposes will be maintained by Owner as reasonably practical.
B. Unless otherwise indicated in Contract Documents or specified by the Owner, items of salvageable value to Contractor shall be removed from site and structures. Storage or sale of removed items on site will not be permitted and shall not interfere with other work specified.

PART 2 - PRODUCTS

2.1 FILL MATERIALS

- A. Fill material shall be aggregate fill materials consisting of stone, gravel, or sand free from debris, trash, frozen materials, roots, and other organic matter.

2.2 CONCRETE

- A. Mix concrete and deliver in accordance with ASTM C 94.
B. Design mix to produce normal weight concrete consisting of Portland cement, aggregate, water reducing admixture, air entraining admixture, and water to produce following:
1. Compressive Strength: 3,500 psi, minimum at 28 days, unless otherwise indicated on the Drawings.
2. Slump Range: 1 to 3-inches at time of placement
3. Air Entrainment: 5 to 8 percent

PART 3 - EXECUTION

3.1 PREPARATION

- A. Provide, erect, and maintain erosion control devices, temporary barriers, and security devices at locations indicated on Construction Drawings. Provide a comprehensive construction phasing plan for this work to the store manager 7 days prior to starting any work. It is to provide for dates, times and duration of lane closures, temporary vehicle and pedestrian traffic control.
B. Protect existing landscaping materials, appurtenances, and structures, which are not to be demolished. Repair damage to existing items to remain caused by demolition operations.
C. Prevent movement or settlement of adjacent structures. Provide bracing and shoring as necessary.
D. Mark location of utilities. Protect and maintain in safe and operable condition utilities that are to remain. Prevent interruption of existing utility service to occupied or used facilities, except when authorized in writing by authorities having jurisdiction. Provide temporary services during interruptions to existing utilities as acceptable to governing authorities and Owner.
E. For work on operating Walmart sites, prior to any underground excavation, contractor is expected to obtain current and representative underground utility plans for Walmart for private utilities that are not located by others. This is specifically intended to provide approximate locations for Walmart private utilities including water, sewer, electrical, telephone and data services.
F. Notify adjacent property owners of work that may affect their property, potential noise, utility outages, or other disruptions. Obtain written permission from adjacent property owners when demolition equipment will traverse, infringe upon, or limit access to their property. Coordinate notice with Owner.

3.2 GENERAL DEMOLITION REQUIREMENTS

- A. Conduct demolition to minimize interference with adjacent structures or pavements to remain.
B. Cease operations immediately if adjacent structures appear to be in danger. Notify authority having jurisdiction. Do not resume operations until directed by authority.
C. Conduct operations with minimum of interference to public or private access. Maintain ingress and egress at all times other than in specific areas where work is in progress.
D. Sprinkle work with water to minimize dust. Provide hoses and water connections for this purpose.
E. Comply with governing regulations pertaining to environmental protection.
F. Clean adjacent structures and improvements of dust, dirt, and debris caused by demolition operations. Return adjacent areas to condition existing prior to start of work.

3.3 DEMOLITION

- A. Demolish site improvements designated to be removed as shown on the drawings. Site improvements shall include but not be limited to structures, foundations, pavements, curbs and gutters, drainage structures, utilities, signage or landscaping.
B. Disconnect and cap or remove utilities to be abandoned as shown on the drawings.
C. Fill or remove piping and appurtenances as shown.
D. Demolish concrete and masonry in small sections. Break up concrete slabs on grade that are 2-feet or more below proposed subgrade to permit moisture drainage. Remove slabs-on-grade and below grade construction within 2-feet of proposed subgrade.

3.4 PATCHING

- A. Where improvements are removed from paved areas, pavements shall be sawcut in straight lines at the perimeter and patched. Damaged pavement adjacent to removed improvements shall also be removed and patched.
B. Pavement patches shall be paved with minimum 6" concrete, broom finished and flush with adjacent grades.

3.5 FILLING VOIDS

- A. Completely fill below grade areas and voids resulting from demolition removal of structures, using aggregate fill materials consisting of stone, gravel, or sand free from debris, trash, frozen materials, roots, and other organic matter.
B. Areas to be filled shall be free of standing water, frost, frozen or un-frozen materials, trash, and debris prior to fill placement.
C. Place fill materials in lifts not to exceed 6 inches loose measure and compacted to a density of maximum laboratory density per ASTM D698 with moisture content of not less than 1 percent below and not more than 3 percent above optimum moisture content.
D. Grade surface to match adjacent grades, provide 2% of surface drainage over fill placement and compaction.

3.6 DISPOSAL OF DEMOLISHED MATERIALS

- A. Remove from site debris, rubble, and other materials resulting from demolition operations. Leave areas of work in clean condition.
B. No burning of any material, debris, or trash on site or off site will be allowed.
C. Transport materials removed from demolished structures with appropriate vehicles and dispose off-site to areas that are approved for disposal by governing authorities and appropriate property owners.

END OF SECTION

PAVEMENT MARKINGS SPECIFICATION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
1. Painting and marking of pavements, curbs, and guard posts (bollards).

1.2 REFERENCES

- A. The publications listed below form a part of this specification to the extent referenced. Publications are referenced within the text by the basic designation only.
B. American Association of State Highway and Transportation (AASHTO):
1. AASHTO M247 - Glass Beads Used in Traffic Paints
2. AASHTO M248 - Ready-Mixed White and Yellow Traffic Paints
C. Master Painter's Institute (MPI):
1. MPI 32 - Traffic Marking Paint, Solvent Based.
2. MPI 97 - Traffic Marking Paint, Latex.
D. ASTM International (ASTM):
1. ASTM D4414 - Standard Practice for Measurement of Wet Film Thickness by Notched Gages.
E. Federal Specifications (FS):
1. FS A-A-2886 - Paint, Traffic, Solvent Based (supersedes FS TT-P-85 and FS TT-P-115, Type I)
2. FS TT-B-1325 - Beads (Glass Spheres) Retro-Reflective
3. FS TT-P-1952 - Paint, Traffic And Airfield Marking, Waterborne

1.3 PROJECT CONDITIONS

- A. Maintain access for vehicular and pedestrian traffic as required for other construction activities. Utilize flagmen, barricades, warning signs, and warning lights as required.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Paint shall be waterborne or solvent borne, colors as shown or specified herein. Pavement marking paints shall comply with applicable state and local laws enacted to ensure compliance with Federal Clean Air Standards. Paint materials shall conform to the restrictions of the local Air Pollution Control District.
B. Waterborne Paint: Paints shall conform to FS TT-P-1952 and have MPI 32 approval. Paint shall be non bleeding, quick drying, and alkyl petroleum base paint suitable for traffic bearing surface and be mixed in accordance with manufacturer's instructions before application for colors White, Yellow, Blue, and Red.
C. Solvent Borne Paint: Paint shall conform to FS A-A-2886 or AASHTO M248 and have MPI 32 approval. Paint shall be non bleeding, quick drying, and alkyl petroleum base paint suitable for traffic bearing surface and be mixed in accordance with manufacturer's instructions before application for colors White, Yellow, Blue, and Red.
D. Glass Beads: AASHTO M 247, Type I or FS TT-B-1325, Type I, Gradation A.
E. Pickup Area Pavement Marking Paint: Paint shall conform to the requirements specified herein for solvent borne or waterborne paints, with exception of the relevant difference due to the material being supplied in a color other than white or yellow.
1. Color: Orange, according to the following mix rate:

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- 2. Contractor's Option: In lieu of field mixing, limited quantities of pre-mixed orange marking paint conforming to the requirements specified herein are available for purchase from select national coatings suppliers.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine the work area and correct conditions detrimental to timely and proper completion of work. Do not proceed until unsatisfactory conditions are corrected.

3.2 PREPARATION

- A. Sweep and clean surface to eliminate loose material and dust.
B. Where existing pavement markings are indicated on Construction Drawings to be removed or would interfere with adhesion of new paint, a motorized abrasive device or soda blasting shall be used to remove the markings. Equipment employed shall not damage existing paving or create surfaces hazardous to vehicle or pedestrian traffic.

3.3 CLEANING EXISTING PAVEMENT MARKINGS

- A. Remove existing pavement markings which are in good condition but interfere or conflict with the newly applied marking patterns and as noted on plans. Deteriorated or obscured markings that are misleading or confusing or do not interfere with the adhesion of the new marking material do not require removal. Conduct grinding/soda blasting operations in such a manner that the finished pavement surface is not damaged or left in a pattern that is misleading or confusing. Use dust extraction system when removing existing pavement markings. Comply with the requirements of Section 01351 Regulatory Compliance Supplement for management and disposal of hazardous wastes.

3.4 APPLICATION

- A. Apply two coats of same color of paint as specified below, at manufacturer's recommended rate, without addition of thinner, with maximum of 100 square feet per person on one coat, to provide a minimum wet film thickness of 15 mils and dry film thickness of 7 1/2 mils per coat. Paint shall be applied for a total dry film thickness of 15 mils. Apply with mechanical equipment to produce uniform straight edges. At sidewalk curbs and crosswalks, use straightedge to ensure uniformity, and straight stripe.
B. All pavement markings according to manufacturer's recommended procedures for the specified material.
C. Following items shall be painted with colors noted below:
1. Pedestrian Crosswalks: White
2. Exterior Sidewalk Curbs and Guard posts: Yellow
3. Exterior Light Pole Bases: Yellow (unless otherwise noted on Construction Details).
4. Fire Lanes: Red or per local code.
5. Lane Striping where separating traffic moving in opposite directions: Yellow.
6. Lane Striping where separating traffic moving in the same direction: White.
7. ADA Symbols: Blue or per local code.
8. ADA parking space markings as shown on the drawings.
9. Parking Stall Striping: Yellow, unless otherwise noted on Construction Drawings.
10. Associate Parking Area: White, unless otherwise noted on Construction Drawings.
11. "Pickup" area striping and other areas as shown on site plan and in associated details - Orange, as specified herein.
D. Apply glass beads at pedestrian crosswalk striping and at lane striping and arrows at driveways connecting to public streets. Broadcast glass beads uniformly into wet markings at a rate of 6 lb/gal.

3.5 FIELD QUALITY CONTROL

- A. Field quality control shall be the responsibility of the Contractor. Field quality control testing and inspection shall be at the discretion of the Contractor as necessary to assure compliance with Contract requirements.

3.6 CLEANING

- A. Waste materials shall be removed at the end of each workday. Upon completion of the work, all containers and debris shall be removed from the site. Paint spots upon adjacent surfaces shall be carefully removed by approved procedures that will not damage the surfaces and the entire job left clean and acceptable.

END OF SECTION

TRAFFIC SIGNS AND SIGNALS SPECIFICATION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
1. Traffic control signs.
B. Related Requirements:
1. Section 09900 - Painting, Painting for painted posts where shown on the Drawings.

1.2 REFERENCES

- A. The publications listed below form a part of this specification to the extent referenced. Publications are referenced within the text by the basic designation only.
B. ASTM International (ASTM):
1. ASTM A53 - Pipe, Steel, Black and Hot Dipped, Zinc Coated Welded and Seamless.
2. ASTM C94 - Ready Mix Concrete
3. ASTM D4956 - Retroreflective Sheeting for Traffic Control.
C. US Department of Transportation, Federal Highway Administration:
1. Manual on Uniform Traffic Control Devices (MUTCD).

PART 2 - PRODUCTS

2.1 SIGNS

- A. Conform to US Department of Transportation MUTCD, Sign classification, type, size, and color shall be as shown on the drawings
B. Retroreflectivity: Microprismatic type, diamond grade reflective sheeting conforming to ASTM D4956, Type XI.

2.2 POSTS

- A. Square Post: Square tubular steel sign post, galvanized 1 1/2" diameter, all lengths with 7/16 inch holes on four sides. Post size shall be as shown on the Drawings.
B. Steel Pipe: ASTM A 53, Type E (electric-resistance welded) or Type X (seamless), Grade B, Schedule 40, size as shown on the Drawings.

2.3 CONCRETE

- A. Mix concrete and deliver in accordance with ASTM C 94.
B. Design mix to produce normal weight concrete consisting of Portland cement, aggregate, water reducing admixture, air entraining admixture, and water to produce following:
1. Compressive strength: 3,500 psi, minimum at 28 days, unless otherwise indicated on the Drawings.
2. Slump Range: 1 to 3-inches at time of placement
3. Air Entrainment: 5 to 8 percent

PART 3 - EXECUTION

3.1 PREPARATION

- A. Field verify underground utilities prior to sign installation. Primary utilities of concern of shallow depths are lawn sprinkler systems, electric, telephone, fiber optic, cable and gas.

3.2 INSTALLATION

- A. Install signs as shown on the Drawings and in accordance with MUTCD and manufacturer's instructions.
B. Install signs of the type and at locations shown on the Drawings.
C. Install posts of the type as shown on the drawing.
D. Where shown as painted, field paint steel pipe posts in accordance with Section 09900.

END OF SECTION

SEAL COAT SHALL BE APPLIED WHERE EXISTING MARKINGS ARE REMOVED.

SMALL PROJECT SEAL COAT SPECIFICATION:

IN GENERAL:

- CRACK FILLING AND OIL SPOT TREATMENTS ARE NOT REQUIRED PRIOR TO SEAL COAT. OTHER THAN THESE EXCEPTIONS, PREPARE AND CLEAN AREA TO BE SEAL COATED CONSISTENT WITH MANUFACTURER'S INSTRUCTIONS AND SPECIFICATION.

APPROVED MATERIALS:

- 1) STAR PRODUCTS
- MICRO-PAVE PRO-BLEND WITH ADDED SAND
- SINGLE COAT
2) SEAL MASTER
- POLYMER MODIFIED MASTERSEAL WITH ADDED SAND
- SINGLE COAT
3) GEM SEAL BLACK DIAMOND XI
- WITH ADDED SAND
- SINGLE COAT

MATERIALS IDENTIFIED IN SPECIFICATION SECTION 02787 CAN BE USED. COAL TAR BASED SEAL COAT MATERIALS IN ANY FORM ARE PROHIBITED.

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Bowman CONSULTING logo and address: 960 NORTH POINT PKWY, SUITE 200, ALPHARETTA, GA 30005. Phone: 678-374-6687. Website: KBRKBOWMANCONSULTING.COM



SUPERCENTER, #634, CAMDEN, KERSHAW, SOUTH CAROLINA. WAL-MART STORES, INC., 2240 WEST DEKALB STREET, CAMDEN, SOUTH CAROLINA, 29020



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