

***I*NSTITUTIONAL
*M*EAT
*P*URCHASE
*S*PECIFICATIONS**

***FRESH PORK
SERIES 400***

EFFECTIVE: November 2014



Institutional Meat Purchase Specifications

Fresh Pork - Series 400

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1.0 Introduction

1.1 IMPS Documents

The United States Department of Agriculture (USDA) through its Agricultural Marketing Service (AMS) develops and maintains the Institutional Meat Purchase Specifications (IMPS) for meat and meat products. The complete IMPS series includes the following 11 documents:

General Requirements	
Quality Assurance Provisions	
Fresh Beef	Series 100
Fresh Lamb	Series 200
Fresh Veal and Calf	Series 300
Fresh Pork	Series 400
Cured, Cured and Smoked, and Fully Cooked Pork Products	Series 500
Cured, Dried, and Smoked Beef Products	Series 600
Variety Meats and By-Products	Series 700
Sausage Products	Series 800
Fresh Goat	Series 11

1.2 Contact Information

These specifications are recommended for use by any meat product procuring activity. For assurance that procured items comply with these detailed requirements, AMS, through its Livestock, Poultry and Seed (LPS) Program's Quality Assessment Division (QAD) provides a voluntary meat certification service and a process verification program. For labeling purposes, only producers who have meat products certified according to the IMPS or operate under an approved IMPS process verified program may use the letters "IMPS" on the product label. Purchasers desiring these services should contact:

USDA, AMS, LPS Program, QAD
1400 Independence Ave, SW, Room 3932, Stop 0258
Washington, DC 20250
Phone: (202) 720-3271
<http://www.ams.usda.gov/AMSV1.0/QAD>

2.0 IMPS Ordering Checklist

2.1 Checklist Elements

The following checklist will assist the purchaser in providing contractual language necessary to describe the IMPS product and service desired. Each element within the checklist is further defined within **Section 3.0 – Ordering Data to be Specified by the Purchaser**.

Item Number

Special instructions
Purchaser Specified Options (PSO)
Added ingredients
Tenderization

State of Refrigeration (See IMPS GENERAL REQUIREMENTS (GR).)

Chilled
Frozen

Fat Limitations

Portion Cut Weight, Thickness, and Shape

Weight Range

Netting and Tying

Packaging and Packing (See IMPS GR.)

Quality Assurance (See IMPS QUALITY ASSURANCE PROVISIONS (QAP).)

Method of examination
Acceptable Quality Levels (AQL's)
Certification - (See IMPS GR and QAP.)

3.0 Ordering Data to be Specified by the Purchaser

3.1 Item Number, PSO's & Special Instructions

The purchaser shall specify: (1) IMPS item number and product name to be purchased, and if applicable, (2) PSO's, (3) added ingredients, applicable options, modifications, and special instructions to the requirements of the IMPS.

3.1.1 Abbreviations

In conjunction with other markings that may be required in the General Requirements and by Food Safety and Inspection Service (FSIS) Regulations, the IMPS item number, "Pork" and the product name shall be used for marking of shipping containers. Abbreviation of the product name is recommended. Abbreviations, when used, shall be as follows:

Bone in – Bn-in	Fresh - Fr	Regular – Reg
Boneless - Bnls	Frozen - Frz	Roast Ready – Rst-Rdy
Boned, Rolled & Tied - BRT	Fatback - Ftbak	Roast - Rst
Blade - Bld	Ground - Grnd	Short Cut – Sh Cut
Bladeless - Bldls	Intermediate - Inter	Short Shank - Sh Shnk
Cellar Trimmed - CT	Individual Muscle - IM	Shoulder - Shld
Center-Cut - Cntr Cut	Not to exceed - NTE	Sirloin - Sirln
Chop - Chp	Partially - Part	Skinned - Sknd
Cover - Cov	Peeled - Pld	Special - Sp
Defatted - Dfatd	Picnic - Pix	Tenderloin - Tender
Denuded - Dnd	Porterhouse - Prthse	Trimmed - Trmd
Extra - Ex	Portion - Portn	Untrimmed - Untrmd

The product names and abbreviations listed in this series have been reviewed and approved by USDA; FSIS; Office of Policy and Program Development (OPPD); Labeling and Program Delivery Staff, Washington D.C.

3.1.2 Added Ingredients

To enhance product performance (e.g. tenderness, juiciness), the purchaser may specify ingredients to be added to any IMPS fresh pork item. Ingredients may be added by immersion or injection. Unless otherwise specified, ingredients shall be limited to water, salt, sodium phosphate, and antimicrobials. The purchaser may specify any one of the following levels of added ingredients within a purchase order:

Option No.	Maximum Percentage of Added Ingredients
1	7%
2	10%
3	12%
4	15%

5	Other
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The use of ingredients, method of addition, and product labeling shall need to comply with FSIS Regulations and Policies.

3.1.3 Mechanical Tenderization

To enhance the tenderness of pork products, the purchaser may specify roasts or raw materials to be made into portion cuts to be mechanically tenderized. When specified, the roast or raw materials to be portioned shall be mechanically tenderized by using the multiple probe method (pinning) not more than one time. Cubing is also recognized as an alternative form of tenderization.

3.2 State of Refrigeration

Purchaser shall specify the state of refrigeration (chilled or frozen) for delivery of product. (See IMPS GENERAL REQUIREMENTS.)

3.3 Fat Limitations

Purchaser shall specify IMPS item number, product name, and fat content or thickness to be purchased. The fat thickness requirements are intended as guidelines.

3.3.1 Carcasses & Sides

The purchaser shall specify maximum fat thickness as described below.

3.3.2 Cuts, Roasts & Diced Items

The purchaser shall specify maximum surface fat thickness requirements unless fat limitations for surface and/or seam fat are indicated in the item descriptions. Maximum fat thickness requirements may be specified in terms of “average” or “at any one point”. Alternative “average” and/or “at any one point” fat limitations may be specified.

Option No.	Maximum Average Thickness	Maximum At Any One Point
1	¾-inch (19 mm) "Commodity trim"	1.0 inch (25 mm)
2	¼-inch (6 mm)	½-inch (13 mm)
3	⅛-inch (3 mm)	¼-inch (6 mm)
4	Practically Free (75% lean/seam surface exposed)	⅛-inch (3 mm)

5	Peeled/Denuded* (remaining fat shall not exceed 1.0 inch (25 mm) in the longest dimension and/or 1/8-inch (3 mm) in thickness)	1/8-inch (3 mm)
6	Peeled/Denuded, Surface Membrane Removed* (90% lean exposed)	1/8-inch (3 mm)

*See Section 6.4.

Note: When average fat thicknesses are specified by the purchaser or in item descriptions, the appropriate "Maximum at Any One Point" limitation shall apply.

3.3.3 Portion-Cuts

The purchaser shall specify the maximum (at any one point) thickness of surface fat on the edges of the portion cut unless fat limitations for surface and/or seam fat are indicated in the detailed item descriptions. Alternative fat limitations may be specified. If not specified, surface fat thickness shall not exceed 1/4-inch (6 mm) at any one point.

Option No.	Maximum At Any One Point
1	1/4-inch (6 mm)
2	1/8-inch (3 mm)
3	Practically free (75% lean/seam surface exposed and remaining fat shall not exceed 1/8-inch (3 mm))
4	Peeled/Denuded* (remaining fat shall not exceed 1.0 inch (25 mm) in the longest dimension and/or 1/8-inch (3 mm) in thickness))
5	Peeled/Denuded, Surface Membrane Removed* (90% lean exposed and remaining fat shall not exceed 1/8-inch (3 mm))

*See Sections 6.4

3.3.4 Comminuted Products & Trimmings

When specified, fat limitations for these items shall be expressed in terms of a fat content percentage. Fat content describes the percentage of fat present in the product. Unless otherwise specified, the fat content of ground and flaked and formed shall not exceed 22 percent. However, the purchaser may specify any fat content provided it does not exceed 30 percent and may specify discount ranges.

The purchaser shall specify the fat content analysis to be determined on a (1) composite analysis, or (2) average analysis method. (See IMPS QUALITY ASSURANCE PROVISIONS.) If the purchaser does not specify either method, the procedures for average fat content analysis method shall be used.

3.3.5 Fat Content Verification

The fat content shall be specified by the purchaser and verified by one or any combination of the following PSO. If not specified, the fat content shall be verified with PSO #2 requirements.

Option No.	Fat Content
1	Fat content shall be declared on the product label along with a nutrition facts panel in accordance with FSIS regulations
2	Contractor shall submit documentation of fat analysis to purchaser
3	Fat content certified by AMS (See QUALITY ASSURANCE PROVISIONS.)
4	Samples selected by AMS and sent to purchaser designated laboratory

3.4 Portion Cut Weight, Thickness & Shape

3.4.1 Weight & Thickness

The purchaser shall specify the portion weight and/or thickness desired. For assistance in specifying weight, see weight range tables. Unless other portion weight and/or thickness tolerances are specified by the purchaser, the following tables shall be used. When both weight and thickness are specified, it is recommended that those requirements be limited to items that are mechanically pressed and/or sliced.

Portion Thickness Tolerances*		
Specified Thickness	Thickness Tolerance	Thickness Uniformity
1 inch (25 mm) or less	+/- $\frac{3}{16}$ -inch (5 mm)	$\frac{3}{16}$ -inch (5 mm)
More than 1 inch (25 mm)	+/- $\frac{1}{4}$ -inch (6 mm)	$\frac{1}{4}$ -inch (6 mm)

* Thickness measurements are not applicable within $\frac{1}{4}$ -inch (6 mm) of the edge. Also, value listed under thickness uniformity is the maximum allowable difference between the thinnest and thickest measurement of an individual chop.

Portion Weight Tolerances		
Specified Weight	Weight Tolerance	Thickness Uniformity*
Less than 6.0 ounces (170 g)	+/- ¼ oz. (7 g)	³ / ₁₆ -inch (5 mm)
6.0 (170 g) to 12.0 ounces (340 g)	+/- ½ oz. (14 g)	¼-inch (6 mm)
12.01 (341 g) to 24.0 ounces (680 g)	+/- ¾ oz. (21 g)	⅜-inch (9 mm)
24.01 ounces (681 g) or more	+/- 1 oz. (28 g)	½-inch (13 mm)

3.4.2 Shape

Unless otherwise specified, the shape of whole muscle portions cuts shall resemble the approximate shape relative to the cut of origin. Cubed and braising cuts which are mechanically pressed and sliced shall be uniform in shape. Unless otherwise specified, patties shall be round.

3.5 Weight Range

Purchaser shall specify IMPS item number, product name, and weight range to be purchased. The following weight ranges are intended as guidelines. **Carcass weights are not necessarily related to the weight of cuts within their respective weight range.** Other weights or ranges may be specified.

Foodservice Cuts					
Item No.	Product Name	Weight Ranges (Pounds)			Page#
		A	B	C	
400	Carcass	150-190	190-230	230-up	21
400A	Whole Roasting Pig	30-50	50-70	70-up	21
401	Leg	17-20	20-28	28-up	21
401A	Leg, Short Shank	17-20	20-28	28-up	22
401B	Leg, Sirloin On	22-25	25-34	34-up	22
401C	Leg, Skinned, Pelvic Bone Removed	16-18	18-20	20-up	22
401D	Leg, Hind Shank	1.5-dn	1.5-2	2-up	22
401E	Leg, Semi-Boneless, Handle-On	14-16	16-19	19-up	22
402	Leg, Skinned	17-20	20-28	28-up	22
402A	Leg, Skinned, Short Shank	17-20	20-28	28-up	23
402B	Leg, Boneless	8-10	10-14	14-up	23
402C	Leg,, Short Shank, Trimmed, Boneless	8-10	10-14	14-up	23
402D	Leg, Outside	4-5	5-7	7-up	23
402E	Leg, Outside, Flat Cut	3-4	4-6	6-up	23
402F	Leg, Inside	3-4	4-6	6-up	24
402G	Leg,3-Way, Boneless	14-16	16-20	20-up	24

402H	Leg, Tip	2-2.5	2.5-3	3-up	24
402J	Leg, Inside Cap (IM)	As Specified			24
402K	Leg, Outside, Eye of Round (IM)	.75-1	1-1.5	1.5-up	24
403	Shoulder	12-16	16-22	22-up	24
403A	Shoulder, Long Cut	14-18	18-24	24-up	24
403B	Shoulder, Outside	12-16	16-22	22-up	25
403D	Shoulder, Riblet	.5-1	1-up		25
404	Shoulder, Skinned	12-16	16-22	22-up	25
405	Shoulder, Picnic	6-8	8-11	11-up	25
405A	Shoulder, Picnic, Boneless	4-6	6-9	9-up	26
405B	Shoulder, Picnic, Cushion, Boneless	As Specified			26
405C	Shoulder, Pectoral Meat (IM)	1.5-dn	1.5-2	2-up	26
405D	Shoulder, Shoulder Tender	As Specified			26
406	Shoulder, Butt, Bone-In	6-8	8-11	11-up	26
406A	Shoulder, Butt, Boneless	4-7	7-10	10-up	26
406B	Shoulder, Butt, Boneless, Special	4-6	6-10	10-up	27
407	Shoulder Butt, Cellar Trimmed, Boneless	3-5	5-9	9-up	27
407A	Shoulder, Collar Butt	4-down	4-up		27
408	Belly	12-16	16-20	20-up	27
408B	Belly, Bone-In	14-16	16-18	18-up	27
409	Belly, Skinless	9-12	12-15	15-up	28
409A	Belly, Single Ribbed, Skinless	12-16	16-20	20-up	28
410	Loin, Bone-In	14-18	18-24	24-up	28

Foodservice Cuts (continued)

Item No.	Product Name	Weight Ranges (Pounds)			Page#
		A	B	C	
410A	Loin, Sirloin End, Bone-In	4-6	6-8	8-up	29
410B	Loin, Rib End, Bone-In	4.5-5.5	5.5-6.5	6.5-up	29
410C	Fat Back	Not Applicable			29
411	Loin, Bladeless, Bone-In	14-18	18-24	24-up	29
412	Loin, Center Cut, 8 Ribs, bone-In	6-8	8-11	11-up	30
412A	Loin, , 8 Ribs, Chine Bone Off	5-7	7-10	10-up	30
412B	Loin, , 8 Ribs, Boneless	4-5	5-7	7-up	30
412C	Loin, , 11 Ribs, Bone-In	7-9	9-12	12-up	30
412D	Loin, , 11 Ribs, Chine Bone Off, Bone-In	6-8	8-11	11-up	30
412F	Loin, , Rib End, Boneless	2-dn	2-2.5	2.5-up	31
412G	Loin, , Rib End (Rack)	7.5-dn	7.5-10	10-up	31
412H	Loin, , Lumbar Half	7.5-dn	7.5-10	10-up	31
413	Loin, Boneless	8-10	10-13	13-up	31
413A	Loin, Roast, Boneless	8-10	10-13	13-up	31
413B	Loin, Boneless, Special	8-10	10-13	13-up	32
413C	Loin, Loin Eye	5-8.5	8.5-11	11-up	32
413D	Sirloin, Boneless	2-down	2-up		32
414	Loin, Center-Cut, 11 Ribs, Boneless	4-5	5-7	7-up	32
415	Tenderloin	1-1.5	1.5-2	2-up	32
415B	Tenderloin, Butt Tender	.5-down	.5-up		32
416	Spareribs	2-4	4-6	6-up	33
416A	Spareribs, St. Louis Style	2-3	3-4	4-up	33
416B	Spareribs, Brisket Bones	0.33-0.5	0.5-1	1-up	33
416C	Spareribs, Breast Bone (Sternum Off)	2-4	4-6	6-up	33
416D	Breast Bones (Sternum)	1-1.5	1.5-2	2-up	33
417	Hocks	0.75-1.25	1.25-2	2-up	33
417A	Shoulder Hocks	0.75-1.25	1.25-2	2-up	33
417B	Leg Hocks	Not Applicable			33
418	Trimmings	Not Applicable			33

419	Jowl	Not Applicable	34
420	Front Feet	Not Applicable	34
420A	Hind Feet	Not Applicable	34
421	Neck Bones	As Specified	34
422	Loin, Back Ribs	1.5-1.75 1.75-2.25 2.25-up	34
424	Loin, Riblet	Not Applicable	34
435	Diced Pork	As Specified	34
435A	Pork for Stewing	As Specified	35
435B	Pork for Kabobs	As Specified	35
496	Ground Pork	As Specified	35
496A	Ground Pork and Soy Protein Product	As Specified	36
496B	Pork Patty Mix	As Specified	37
496C	Pork Patty Mix, NTE 10% Fat	As Specified	37

Portion-Cuts			
Item No.	Product Name	Suggested Portion Weight Range (Ounces)	Page#
1400	Steak Cubed	3 - 6	38
1401	Steaks Cubed, Special	3 - 6	38
1401D	Osso Bucco, Hind Shank	8 - 16	38
1402	Cutlets	3 - 6	38
1402G	Leg Cutlets	3 - 6	38
1406	Butt Steaks	4 - 8	38
1407	Shoulder Butt Steaks, Boneless	4 - 8	38
1408	Shoulder, Short Ribs	8-16	38
1408B	Short Ribs	8-10	39
	Pockets	Not Applicable	39
1410	Loin Chops	4 - 14	39
1412E	Loin Chops, Center-Cut, One Muscle, Boneless	6 - 8	
1413	Loin Chops, Boneless	3 – 8	41
1423	Loin, Country-Style Ribs	8-16	42
1423A	Shoulder, Country-Style Ribs	8-16	42
1438	Steaks, Flaked and Formed, Frozen	(As Specified)	43
1438A	Sandwich Steaks, Flaked, Chopped, Formed and Wafer Sliced, Frozen	(As Specified)	43
1438B	Steaks, Sliced and Formed, Frozen	(As Specified)	43
1495	Coarse Chopped Pork	(As Specified)	43
1496	Ground Pork Patties	(As Specified)	44
1496A	Ground Pork and Soy Protein Product Patties	(As Specified)	44
1496B	Pork Patties	(As Specified)	44
1496C	Pork Patties, NTE 10% Fat	(As Specified)	44

3.6 Netting & Tying

Many of the item descriptions require roasts to be netted or tied to facilitate institutional style cookery methods. The purchaser may specify the netting and tying requirements for such items as needed.

When tying is required, stretchable netting (or any other equivalent material) shall be used to make roasts firm and compact. Unless otherwise specified, roasts shall be netted so that all portions are held intact, without any portions protruding through the ends of the netting. Conversely, excess netting at the portion ends shall be no more than 2.0 inches (5.0 cm) in length. Alternatively, roasts may be string tied by loops of twine uniformly spaced at no more than approximately 2.0 inches (5.0 cm) intervals (along the items length). When tying does not make roasts firm and compact, lengthwise tying may be used. For net weight verification, netting and tying material shall be included along with packaging materials when determining tare weight.

3.7 Packaging & Packing

Purchaser shall specify packaging and packing for delivery of product. (See IMPS GENERAL REQUIREMENTS.)

3.8 Quality Assurance

The purchaser may consult the IMPS Quality Assurance Provisions for options regarding production examination and lot acceptance criteria in terms of acceptable AQLs.

4.0 USDA Certification and Verification

4.1 Contact Information

When requested, the purchaser shall specify within a contract or purchase order that product shall be certified or that the producer is operating under an approved IMPS Process Verified Program by the USDA, AMS, LPS Program, QAD. The IMPS Quality Assurance Provisions (QAP), <http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELDEV3003293>, will be used to determine compliance. Purchasers desiring these services should contact:

USDA, AMS, LPS Program, QAD
1400 Independence Ave, SW, Room 3932, Stop 0258
Washington, DC 20250
Phone: (202) 720-3271

5.0 Material Requirements

All products offered shall comply with the following material requirements and the individual item descriptions. For certification, product shall be evaluated in accordance with the IMPS QUALITY ASSURANCE PROVISIONS.

6.0 Quality

6.1 Excellent Condition

All product offered as meeting the specification requirements must be in excellent condition. For certification, product shall be in the fresh-chilled state (not previously frozen) when examined for excellent condition; i.e., exposed lean and fat surfaces shall be of a color and bloom normally associated with the class, grade, and cut of meat, and typical of meat which has been properly stored and handled. Cut surfaces and naturally exposed lean surfaces shall show no more than slight darkening or discoloration due to dehydration, aging, and/or microbial activity. The fat shall show no more than very slight discoloration due to oxidation or microbial activity. No odors foreign to fresh meat shall be present. Changes in color and odors characteristically associated with vacuum packaged meat in excellent condition shall be acceptable. Also, product shall show no evidence of freezing, defrosting, or mishandling. Pork must be maintained in excellent condition through processing, storage, and transit.

Portion cut and ground items to be delivered frozen may be produced from frozen meat cuts which have been previously certified in the fresh chilled state, provided such cuts show no evidence of deterioration. Unless otherwise specified, portion cut items shall maintain their approximate original shape. Products thus produced shall be packaged, packed, and returned promptly to the freezer.

6.2 Lean Quality

All pork shall be practically free from bruises, blood clots, bloody tissue, blood discoloration, exposed spinal cord portions, or any other conditions which would negatively affect the use of the product.

The lean must: (1) be at least slightly firm; (2) possess a bright, reasonably uniform color (slight two-toned color is permissible), ranging from light pink to light red; (3) have a fine, smooth texture; and (4) exhibit no evidence of the pale, soft, and exudative (PSE) condition. The skin must be thin, smooth, and pliable. Dark, coarse textured lean, oily and soft fat shall not be acceptable.

6.3 Workmanship

The cutting, trimming, and boning of cuts shall be accomplished with sufficient care to allow each cut to retain its identity and to avoid objectionable scores in the lean. Ragged edges shall be removed close to the lean surfaces. Except for cuts that are separated through natural seams, all cut surfaces shall form approximate right angles with the skin surface. With the exception of specifically defined cut separations, no more than a slight amount of lean, fat, or bone shall be removed or included from an adjacent cut.

Except for chops which are cubed or unless otherwise specified in the individual item description, chops shall be cut in full slices in a straight line reasonably perpendicular to the outer surface and at an approximate right angle to the length of the cut being sliced or portioned. The entire cut shall be sliced from end to end, and all suitable portions shall be included. Portion cut items shall be practically free of: (1) fractures, (2) tag ends, and (3) knife scores. Individual chops shall remain intact when suspended ½-inch (13 mm) from the outer edge.

6.4 Fat Trimming

Trimming to remove fat on the exterior surface of a cut shall be accomplished by smoothly removing the fat following the contour of the underlying muscle surface. Beveling of the edges only is not acceptable. Two terms used for describing fat trim limitations are: (1) maximum fat thickness at any one point and (2) average fat thickness. Fat thickness requirements may apply to surface fat (external and/or exterior fat in relationship to the item) and seam fat (fat between adjacent muscles within an item) as specified by the purchaser or within the detailed item description.

6.4.1 Peeled/Denuded

The term "peeled" implies surface fat and muscle separation through natural seams so that the resulting cut's seamed surface ("silver" or "blue" tissue) is exposed with remaining "flake" fat not to exceed 1.0 inch (25 mm) in the longest dimension and/or ⅛-inch (3 mm) in depth at any point. The term "denuded" implies all surface fat is removed so that the resulting cut's seamed surface ("silver" or "blue tissue") is exposed with remaining "flake" fat not to exceed (NTE) 1.0 inch (25 mm) in any dimension and/or ⅛-inch (3 mm) in depth at any point.

6.4.2 Peeled/Denuded, Surface Membrane Removed

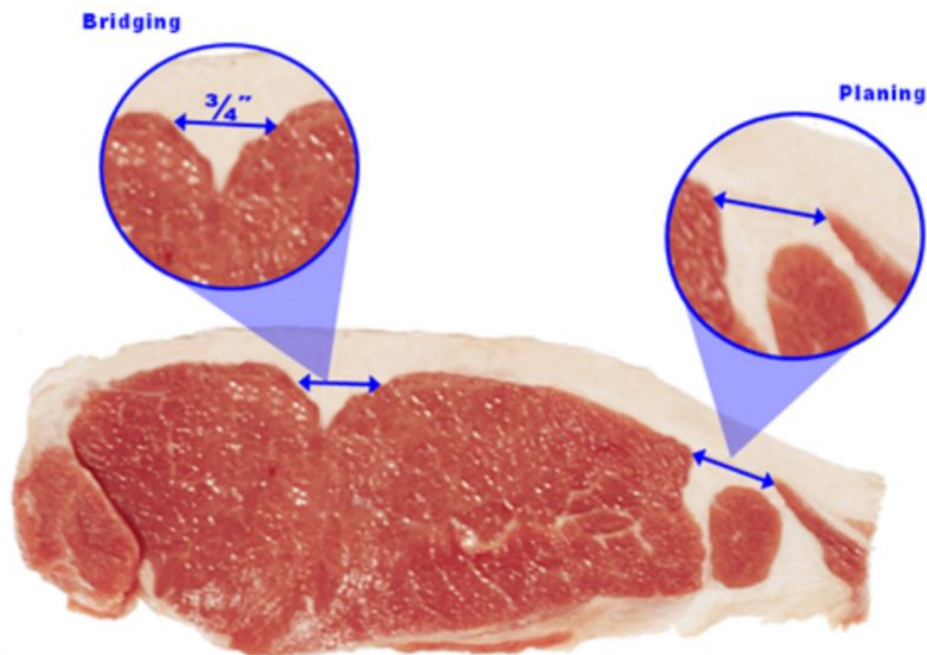
Peeled/denuded, surface membrane removed requires the surface membrane ("silver" or "blue" tissue) to be removed (skinned); the resulting cut surface shall expose at least 90% lean with remaining "flake" fat NTE ⅛-inch (3 mm) in depth.

6.4.3 Cuts & Roast Items

For cuts and roast items, the maximum fat thickness at any one point is evaluated by visually determining the area of a cut which has the most fat thickness and measure the thickness (depth) at this point. The average fat thickness is evaluated by visually determining the areas of surface fat and taking multiple measurements in these areas only. The average shall be determined by evaluating the amount of surface area that each thickness represents (e.g., if one third of the fat surface was 0.2 inch in depth, one third was 0.3 inch in depth and one third was 0.4 inch in depth, then the average would be 0.3 inch).

6.4.4 Bridging & Planing

When a natural depression occurs in a muscle, only the fat above the portion of the depression which is more than $\frac{3}{4}$ -inch (19 mm) in width is considered (this method is known as "bridging"). When a seam of fat occurs between adjacent muscles only the fat above the level of the involved muscles is measured (this method is known as "planing"). However, when fat limitations for Peeled/Denuded or Peeled/Denuded, Surface Membrane Removed are specified, the bridging method shall be used for evaluating fat above a natural depression in a muscle and fat occurring between adjacent muscles.



6.4.5 Diced & Portion-Cut Items

For diced and portion-cut items, the maximum fat thickness at any one point is evaluated by determining the areas on the edges of either side of the dice or portion-cut which has the thickest amount of fat, and measuring the thickness (depth) of fat in these areas. The average fat thickness is evaluated by visually determining the various areas of surface fat and taking multiple measurements in these areas. The average shall be determined by evaluating the amount of surface area that each thickness represents.

The actual measurements of fat are made on the edges of the cut and by probing or scoring the fat surface as necessary in a manner that reveals the actual fat thickness. For portion-cut items, the bridging and/or the planing methods shall be applied to take into account any natural depression occurring in a muscle and/or when a seam of fat occurs between adjacent muscles. However, when fat limitations for Peeled/Denuded or Peeled/Denuded, Surface Membrane Removed are specified, the bridging method shall be used for evaluating fat above a natural depression in a muscle and fat occurring between adjacent muscles.

6.4.6 Seam Fat

For the purpose of measuring seam fat, when specified, the maximum fat thickness at any one point is evaluated by visually determining the areas of fat between layers of lean (muscles) on any side of the cut which have the thickest (widest) deposits of fat and measuring the width in these areas. The average fat thickness is evaluated by visually determining the various areas of seam fat and taking multiple measurements in these areas. The average shall be determined by evaluating the areas that each thickness (width) represents.

For chop items, the bridging and/or planing methods shall be applied to take into account the irregular widths of the seam fat within a muscle depression or between adjacent muscles in order to reveal the actual fat thickness (width) of fat within a seam. Seam fat shall be evaluated no closer than $\frac{3}{4}$ -inch (19 mm) from the contour (projected perimeter when symmetrically formed or unformed) of the outer edge of the chop.

6.5 Lean-to-Fat Ratio

Fresh Legs, shoulders, shoulder picnics, shoulder butts, and loins must have at least a moderate degree of meatiness, based on a composite evaluation of thickness of muscling and quantity of intermuscular and external fat.

Bellies must indicate at least a slightly high ratio of lean to fat and have uniform distribution of fat and lean layers. They may vary in thickness from slightly thick to moderately thick and must be moderately uniform in thickness and moderately long in relation to their width.

6.6 Skeletal Structure

When present, bones must not be ossified to a degree that cartilage is not evident in the pelvic, spinal, and scapular sections. The split chine bones, spinous processes, and cross-cut sections of bones must be porous. The color of the bones must range from red to deep pink. The exterior surfaces of the rib bones must show at least some redness.

Pork cuts shall be free of dislocated or enlarged joints or other malformations of the skeletal structure. However, cuts with bones broken during processing are acceptable if the bones are not splintered to the extent that the lean around the fracture is affected.

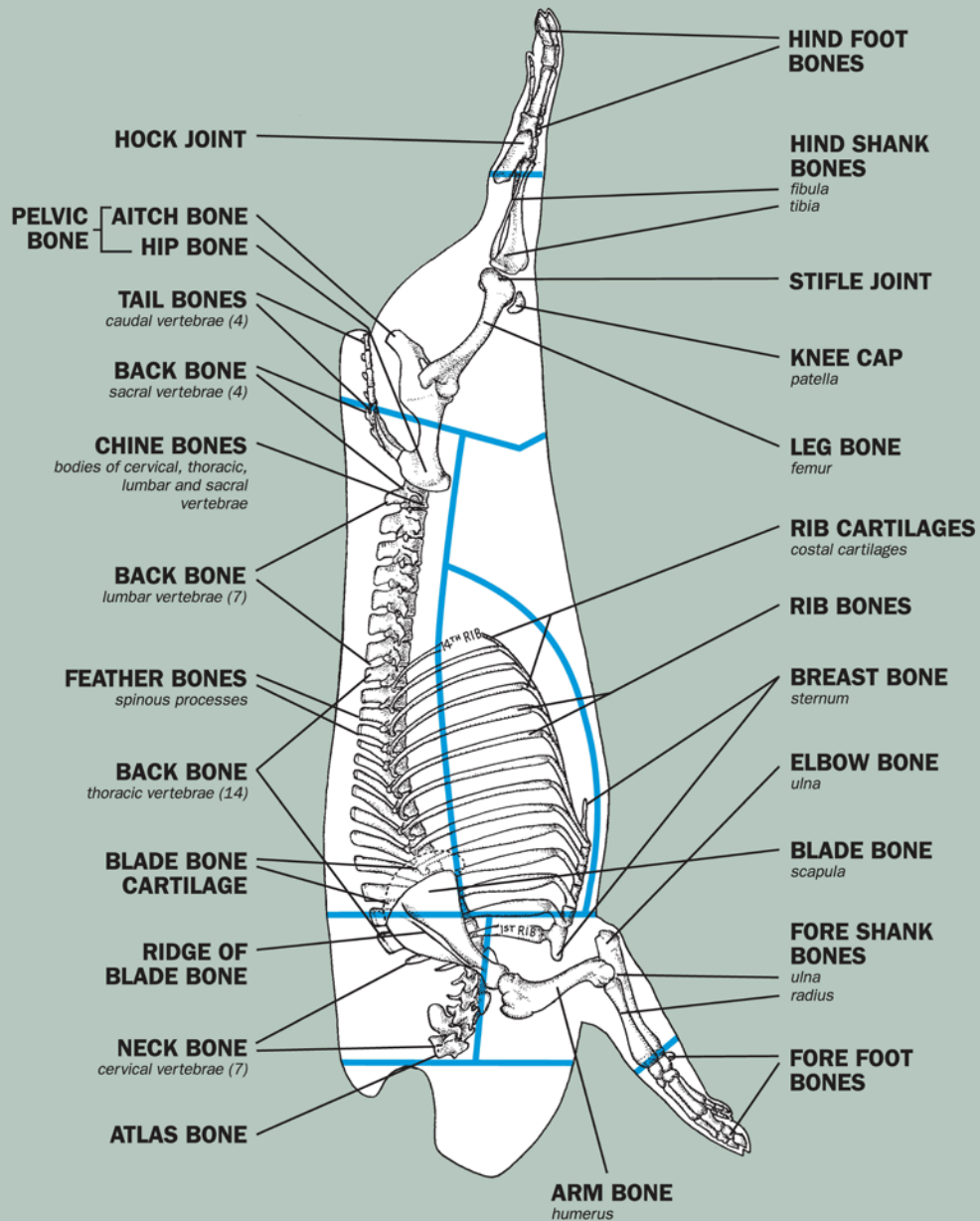
7.0 Diagrams

7.1 Pork Side Skeletal Diagram

Pork

Pork Skeletal Chart

Location, Structure, and Names of Bones



Courtesy of the American Meat Science Association

7.2 Pork Side Primal Diagram – New diagram coming soon!

7.3 Primal Separations Diagram – **New diagram coming soon!**

8.0 Cut Descriptions

8.1 Myology

A reference for identification of muscles is the University of Nebraska's "Porcine Myology & Muscle Profiling" Web site (<http://porcine.unl.edu>) produced by the National Pork Board (<http://pork.org>) on behalf of the Pork Checkoff Program.

8.2 Foodservice Cut Descriptions

Item No. 400 - Pork Carcass - The carcass shall be dressed "packer style"; i.e., without the head and kidneys and practically free of internal fat. There shall not be any objectionable scores on the outside of the carcass and, unless otherwise specified, the carcass shall be skin on. Mutilated feet must be removed at the hock or upper knee joint (as applicable). Carcasses with a "stuck" shoulder are not acceptable. The membranous portion of the diaphragm must be removed close to the lean, although the lean portion (and the membrane surrounding the lean portion) may remain, if firmly attached to the carcass. The jowl may remain intact with each carcass side, except that minor trimming is acceptable for removal of bloody portions and ragged edges. However, excessively trimmed or mutilated jowls shall be removed by a reasonably straight cut perpendicular to the length of the carcass and is not more than 1.0 inch (25 mm) anterior to the ear dip. The carcasses shall be split into reasonably uniform sides by cutting lengthwise through the backbone so that the major muscles of the loin and shoulder are not scored and such that the spinal cord groove is evident on at least 75 percent of both sides of the back bone.

Item No. 400A - Whole Roasting Pig - This item is as described in Item No. 400 except that the carcass shall not be split, the head shall remain, internal fat and membranous portion of the diaphragm may remain.

Item No. 401 - Pork Leg - The leg is separated from the side by a straight cut approximately perpendicular to a line parallel to the shank bones. The cut passes through a point which is not less than 1.5 inches (3.8 cm) from the anterior edge of the aitch bone. The foot shall be removed at or slightly above the hock joint. The tail, vertebrae, flank muscle (*M. rectus abdominis*), *M. cutaneous trunci*, prefemoral lymph gland, and any other exposed lymph glands shall be removed. The skin and collar fat over the inside muscle (*M. semimembranosus*) shall be smooth and well rounded such that the innermost curvature of the skin is trimmed back at least half the distance from the stifle joint to the posterior edge of the aitch bone. The skin overlying the medial side of the quadriceps group shall be removed and fat overlying the quadriceps group and pelvic area shall be removed close to the lean. The fat thickness beneath the leg face measured at the skin edge and directly under the bone shall not exceed that indicated in the following schedule:

Weight Range	Maximum Fat Thickness
A 17-20 lbs. (7.7-9.1 kg)	1-½ in. (3.8 cm)
B 20-28 lbs. (9.1-12.7 kg)	1-¾ in. (4.3 cm)
C 28 lbs. (12.7 kg) - up	2.0 in. (5.0 cm)

Item No. 401A - Pork Leg, Short Shank - This item is as described in Item No. 401 except the shank shall be removed by a straight cut made at an approximate right angle to the shank bones exposing a cross section of the *M. gastrocnemius*.

Item No. 401B - Pork Leg, Sirloin On - This item is as described in Item No. 401, except that the loin is removed by a straight cut immediately anterior to the hip bone and related cartilage leaving no less than 1-½ lumbar vertebrae on the leg. When specified, the shank shall be removed as described in Item No. 401A and may be labeled accordingly.

Item No. 401C - Pork Leg, Skinned, Pelvic Bone Removed - This item is as described in Item No. 401A, except that the pelvic bone (aitch or hip), fat and lean above the pelvic bone (oyster), vertebrae, flank and *M. ilio psoas* are removed. Unless otherwise specified, all skin shall be removed. The purchaser may request this item be made from Item No. 401B, which will include the sirloin.

Item No. 401D – Pork Leg, Hind Shank – The item will consist of the skinless hind shank of the pork leg. It is separated from the leg by a straight cut passing through the stifle joint. The foot will be removed at or slightly above the hock joint.

Option No.	Description
1	The shank shall be frenched by trimming it to be practically free of lean and fat from the posterior end (hock joint) so that the shank bone is exposed for a distance of 1.0 inch (25 mm).

Item No. 401E – Pork Leg, Handle On, Semi-Boneless – This item is as described in Item No. 401, except that the pelvic bone (aitch or hip), fat and lean above the pelvic bone (oyster), vertebrae, flank (*M. rectus abdominis*), *M. ilio psoas* are excluded. The leg shall be “faced” by a straight cut that exposes the *M. semitendinosus*, and a cross section of the ball of the femur. This cut may sever the quadriceps group. Further, the shank and heel meat shall be excluded from the tibia (shank bone) by a straight cut perpendicular to the ventral edge of the leg leaving no less than 3.5 inches (8.8 cm) of the shank bone exposed. The fibula shall be completely removed, minimizing scoring to adjacent lean. The exposed shank bone shall be trimmed practically free of lean. Unless otherwise specified, all skin shall be removed. This item may also be referred to as a “Steamship Leg of Pork”.

Item No. 401F – Pork Leg, Hind Shank portion, Frenched – This item is derived from Item No. 401D. It consists of the Fibula bone and shank meat. The Fibula bone is separated at both extremities and part of the shank muscle, *M. flexor digitorum superficialis*, remains attached to the bone. This item may also be referred to as a “Pork Drumstick”.

Item No. 402 – Pork Leg, Skinned - This item is as described in Item No. 401 except the skin and fat on the outside of the leg shall be trimmed. The skin shall be removed anterior to a straight line parallel to the leg face, which starts at a point that does not exceed 25 percent of the distance from the stifle joint to the leg face. The fat exposed by the removal of the skin shall be trimmed to not exceed ½-inch (13 mm) in depth at any point which is 1.5 inches (3.8 cm) or more

from the skin edge. However, fat thickness at the tail end of the pelvic area shall not exceed 1.0 inch (25 mm).

Item No. 402A - Pork Leg, Skinned, Short Shank - This item is as described in Item No. 402 except the shank shall be removed as described in Item No. 401A.

Item No. 402B - Pork Leg, Boneless - This item is prepared from Item No. 401. All bones, cartilages, skin, flank muscle (*M. rectus abdominis*), *M. cutaneous trunci*, fat and lean above the aitch bone, shank meat and exposed lymph glands shall be removed. The loin end shall be exposed by a straight cut anterior to the quadriceps group. The cut shall not be less than 1.0 inch (25 mm) and not more than 3.0 inches (7.5 cm) from the anterior end of the femur pocket. Purchaser may request this item be netted or tied.

Option No.	Description
1	Shank meat which is firmly attached may remain and shall be folded into the femur cavity. The tendinous ends shall be excluded.

Item No. 402C - Pork Leg, Short Shank, Trimmed, Boneless - This item is as described in Item No. 402B except the popliteal lymph gland and surrounding (star) fat in excess of ¼-inch (6 mm) shall be removed. Additionally, the shank shall be removed by a straight cut made at an approximate right angle to the length of the shank exposing the *M. gastrocnemius*.

Item No. 402D - Pork Leg, Outside - This boneless item shall consist of the outside muscles (*M. biceps femoris*, *M. gluteus superficialis*, and *M. semitendinosus*) from the leg. The inner shank (*M. gastrocnemius*) may remain; however, the "mouse" (*M. flexor digitorum superficialis*) shall be removed. The popliteal lymph gland and surrounding fat in excess of ¼-inch (6 mm) in depth shall be removed. The purchaser may specify outsides from two legs to be reversed, and the boned surfaces placed together to produce a uniformly thick roast (when this option is specified, the purchaser may also specify the item to be divided into approximately equal portions by a straight cut(s) at a right angle to the length of the cut). Purchaser may specify additional trim specifications.

Option No.	Description
1	The inner shank (<i>M. gastrocnemius</i> and <i>M. flexor digitorum superficialis</i>) shall be removed by a cut through the natural seam.

Item No. 402E – Pork Leg, Outside, Flat Cut – The item shall consist of the *M. biceps femoris* and *M. gluteal superficialis*. The flat cut is separated from the eye (*M. semitendinosus*) and inner shank (*M. gastrocnemius*) by cutting through the natural seams.

Item No. 402F - Pork Leg, Inside - This boneless item shall consist of the *M. semimembranosus* and related muscles of the inside portion of the leg which are removed from the outside and tip portions of the leg along the natural seam. All bones, cartilage, exposed heavy (opaque) connective tissue, lean and fat overlying the aitch bone (oyster), and the *M. gracilis* membrane (opaque portion) shall be removed. The purchaser may specify insides from two hams to be packaged together by placing the seamed surfaces together to produce a uniformly thick roast.

Item No. 402G - Pork Leg, 3-Way, Boneless - This item shall consist of inside (top), outside (bottom), and leg tip (knuckle) portions of the leg individually packaged and placed into the same container. The inside shall be as described in Item No. 402F. The outside shall be as described in Item No. 402D. The leg tip (knuckle) portion shall be as described in Item No. 402H. All bones and cartilage shall be removed. The purchaser may specify the packaging of individual roasts consisting of two insides, two outsides, two leg tips (knuckle) be placed into the same container.

Item No. 402H - Pork Leg, Tip, - This item shall consist of the leg tip portion of the leg (*M. tensor fasciae latae* and quadriceps group). This item may also be referred to as a “Knuckle”.

Option No.	Description
1	The purchaser may specify the removal of the <i>M. tensor fasciae latae</i> from the quadriceps group through the natural seam. This item may also be referred to as a “Pocket Roast”.

Item No. 402J – Pork Leg, Inside Cap (IM) – This item shall consist of the *M. gracilis* that is separated from the inside leg by cutting through the natural seams.

Item No. 402K – Pork Leg, Outside, Eye of Round (IM) - This item shall consist of the *M. semitendinosus* and shall be removed from the outside leg by cutting through the natural seams. This item may also be referred to as the “finger or thumb muscle”

Item No. 403 - Pork Shoulder - The shoulder is separated from the side by a straight cut, approximately perpendicular to the length of the side, posterior to, but not more than 1.0 inch (25 mm) from, the tip of the elbow and shall not expose the elbow. The outer tip of the *M. subscapularis* shall not extend past the dorsal edge of the base of the medial ridge of the blade bone. The foot shall be removed at or slightly above to the upper knee joint by a straight cut approximately perpendicular to the shank bones. The jowl shall be removed by a straight cut approximately parallel with the loin side which is anterior to, but not more than 1.0 inch (25 mm) from the innermost curvature of the ear dip. The neck bones, ribs, breast bones, and associated cartilage, and breast flap (through the major crease) shall be removed. The fat and skin shall be beveled to meet the lean on the dorsal edge. The exterior fat thickness at the dorsal skin edge, measured at the center of the cut, shall not exceed 1.5 inches (3.8 cm)

Item No. 403A - Pork Shoulder, Long Cut - This item is as described in Item No. 403, except that the shoulder shall be separated from the carcass by a straight cut approximately perpendicular to the length of the carcass between the 4th and 6th ribs.

Item No. 403B - Pork Shoulder, Outside - This item shall consist of the shank, humerus, and blade bone and associated outside muscles of the shoulder (Item No's. 403 or 403A). It may be prepared from the carcass prior to separation of the loin and belly by cutting through the breast flap and *M. pectorales superficialis* and following the natural seam to a point immediately medial to the blade cartilage. The shank shall be removed at or above the knee joint. The thick end (arm end) shall include the shank and humerus bones and overlying lean (*M. latissimus dorsi*, *M. triceps brachii* group (cushion), and minor muscles associated with the humerus). The thin end (blade end) shall consist of the blade bone and muscles overlying the blade bone (*M. supraspinatus*, *M. infraspinatus*, *M. latissimus dorsi* and may contain the *M. subscapularis* and *M. teres major*). All sides shall be trimmed following the natural curvature of the major muscles and the scapula. The purchaser may specify all skin to be removed.

Item No. 403D - Pork Shoulder, Riblet - This item consists of the rib and breast bone (sternum) that are removed during the fabrication of Item 403, Pork Shoulder. The back bone (vertebrae and feather bones) shall be removed. This item shall have no less than 2 ribs.

Option No.	Description
1	The purchaser may specify that the shoulder riblets be removed during the fabrication of a long cut shoulder, Item 403A. This item shall have no less than 4 ribs.
2	The purchaser may specify that the breast bone (sternum) be removed.

Item No. 404 - Pork Shoulder, Skinned -The shoulder is as described in Item No. 403 except the skin and fat on the outside of the shoulder shall be trimmed. The skin shall be removed dorsal to a straight line parallel to the dorsal side which starts at a point that does not exceed 25 percent of the distance from the elbow joint to the dorsal side. The fat exposed by the removal of the skin shall be trimmed to not exceed ½-inch (13 mm) in depth at any point 1.5 inches (3.8 cm) or more from the edge of the skin collar. At least traces of the false lean shall be exposed.

Item No. 405 - Pork Shoulder, Picnic - This item is prepared from Item No. 403. The butt shall be removed by a straight cut, dorsal to the shoulder joint, at an approximate right angle with the belly side. The jowl shall be removed by a straight cut approximately parallel with the belly side which is not more than 1.0 inch (25 mm) anterior from the half-moon muscle (*M. pectorales profundus*), measured on the butt side. The fat and skin shall be beveled to meet the lean on the dorsal edge. The fat thickness, measured at the center of the butt side, shall not exceed 1.0 inch (2.5 cm).

Option No.	Description
1	All skin is removed.

2	The shank shall be removed by a cut passing through a point at or above the elbow joint.
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Item No. 405A - Pork Shoulder, Picnic, Boneless - This item is prepared from Item No. 405. All bones, cartilage, and skin shall be removed. The belly side of the picnic shall expose a cross-section of the cushion (*M. triceps brachii group*). The butt side shall expose a full cross-section of the *M. supraspinatus* with no more than a slight enlargement of tendons. The jowl shall be removed by a cut which is not more than 1.0 inch (25 mm) anterior from the half-moon muscle (*M. pectorales profundus*), measured on the butt side. The tendinous ends of the shank shall be removed to a point where a cross-sectional cut exposes at least 75 percent lean.

Option No.	Description
1	The skin shall remain.
2	The shank meat shall be removed.

Item No. 405B - Pork Shoulder, Picnic, Cushion, Boneless - This item shall consist of the *M. triceps brachii group* from Item No. 405A and shall be practically free of fat. Tendons shall be trimmed flush with the lean.

Item No. 405C – Pork Shoulder, Pectoral Meat (IM) – This item will consist of the *M. pectorales profundus* that is removed from the shoulder by cutting through the natural seams.

Item No 405D – Pork Shoulder, Shoulder Tender – This item will consist of the *M. teres major* that is removed from the medial side of the outside shoulder. It is located immediately ventral to the blade bone and is removed by cutting along the natural seams from the adjacent muscles.

Item No. 406 - Pork Shoulder, Butt, Bone-In - This item is as described in Item No. 403 except that the picnic is removed as described in Item No. 405. Skin, neck bones and related cartilage shall be removed. At least traces of false lean (*M. trapezius*) shall be exposed. When specified, the neck shall be removed by a straight cut approximately parallel to the loin side, immediately anterior to the half-moon muscle (*M. pectorales profundus*). This item may also be referred to as the “Boston Butt” or “Blade”.

Item No. 406A - Pork Shoulder, Butt, Boneless - This item is prepared from Item No. 406. All bones, cartilages, and skin shall be removed. The loin side of the butt shall expose the *M. longissimus* equal to or larger than the combined areas of the *M. splenius* and *M. semispinalis*

capitis. The picnic side shall expose a cross-section of the *M. supraspinatus* with no more than a slight enlargement of tendons. The jowl shall be removed by a straight cut, approximately parallel with the loin side, which is not more than 1.0 inch (25 mm) anterior to the half-moon muscle (*M. pectorales profundus*), measured on the picnic side. At least traces of false lean (*M. trapezius*) shall be exposed. The lean and fat overlying the blade shall remain firmly attached. When specified, the neck shall be removed by a straight cut approximately parallel to the loin side, immediately anterior to the half-moon muscle (*M. pectorales profundus*). Purchaser may specify that the boneless butt be netted or tied. This item may also be referred to as "Boston Butt, Boneless" or "Blade, Boneless".

Item No. 406B - Pork Shoulder, Butt, Boneless, Special - This item is as described in Item No. 406A except the false lean (*M. trapezius*) shall be removed and the remaining roast shall be trimmed practically free of surface fat.

Item No. 407 - Pork Shoulder, Butt, Cellar Trimmed, Boneless - The butt is as described in Item No. 406A except the lean and fat immediately overlying the blade shall be removed.

Item No. 407A – Pork Shoulder, Collar Butt – This item is as described within Item No. 407, except a 'collar' (consisting of skin and back fat above the most dorsal point of where the blade bone and over lying lean had been removed) extends from the anterior end to the loin end. The collar shall be no less than 1.0 inches (26 mm) and no more than 2.0 inches (5 cm) in width.

Option No.	Description
1	The purchaser may specify that the collar butt be made from Item 403A – Pork Shoulder, Long Cut.

Item No. 408 - Pork Belly - The belly is prepared from the side after removal of the leg, shoulder, loin, fat back, and spareribs. All bones and cartilages shall be removed. Practically all leaf fat shall be removed. The fat back shall be removed by a straight cut not more than 1.5 inches (3.8 cm) from the outermost dorsal curvature of scribe line. The anterior (shoulder) and posterior (leg) ends of the belly shall be reasonably straight and parallel. No side of the belly shall be more than 2.0 inches (5.0 cm) longer than its opposing side. The width of the flank muscle (*M. rectus abdominis*) shall be at least 25 percent of the width of the belly on the leg (sirloin) end. The fat on the ventral side of the belly and adjacent to the flank shall be trimmed to within 3/4-inch (19 mm) from the lean. The area ventral to the scribe line shall be free of scores and "snowballs" (exposed areas of fat) which measure 3.0 in² (19.4 cm²) or more. The belly shall be free of enlarged, soft, porous, dark, or seedy mammary tissue. The scribe line is not considered a score but shall be not more than 1/4-inch (6 mm) in depth at any point.

Item No. 408B Pork Belly, Bone - In - This item contains the belly and spareribs left intact and is prepared as described in Item No. 408. There shall be no less than 11 intact ribs, costal cartilages, and sternum.

Option No.	Description
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1	The purchaser may request this item to have no less than 9 intact ribs.
2	The skin is removed as described in Item No. 409.

Item No. 409 - Pork Belly, Skinless - The skinless belly is as described in Item No. 408 except the skin is removed leaving a smooth skinned surface which is practically free of hair roots and scores.

Option No.	Description
1	Purchaser may specify that the fat back be excluded by a straight cut no more than 0.5 inch (13 mm) dorsal to the outermost curvature of the scribe line. The fat and teat line on the ventral edge shall be eliminated by a straight cut immediately ventral to the lean edge.

Item No. 409A - Pork Belly, Single Ribbed, Skinless - This item is as described in Item No. 408B except that the rib bones are removed individually leaving the *M. intercostal* (rib fingers), costal cartilages, sternum, and *M. transversus abdominis* intact.

Option No.	Description
1	Purchaser may specify that skin may remain and that the costal cartilages and/or sternum be removed.

Item No. 410 - Pork Loin - The loin is that portion of the side remaining after removal of the shoulder, leg, belly, and fat back leaving a portion of the blade bone, its overlying lean and fat, not less than two (2) sacral, but no caudal vertebrae on the loin. The shoulder and leg shall be separated from the loin by straight cuts which are reasonably perpendicular to the split surface of the backbone. The outer tip of the *M. subscapularis* shall not extend past the center of the base of the medial ridge of the blade bone. The belly side shall be removed by a straight cut (a slight dorsal curvature is acceptable) which extends from a point which is ventral to but not more than 3.0 inches (7.5 cm) from the *M. longissimus* on the shoulder end, to a point on the leg end ventral to but not more than ½-inch (13 mm) from the tenderloin. Surface fat shall be trimmed to an average of ¼-inch (6 mm) in depth or less except in the hip bone area. The hip bone area is defined as the area contained within two (2) parallel lines, 2.0 inches (5.0 cm) on either side of the anterior end of the hip bone and associated cartilage. Fat in the hip bone area shall be trimmed to the same contour as the rest of the trimmed fat surface of the loin. At least 2.0 inches (5.0 cm) of the false lean (*M. trapezius*) shall be exposed. Lumbar and pelvic fat shall be

trimmed to ½-inch (13 mm) or less in depth. The tenderloin shall remain intact. The diaphragm and hanging tender shall be removed. The spinal cord groove shall be evident on at least 75 percent of the vertebrae.

Item No. 410A - Pork Loin, Sirloin End, Bone-In- This item is prepared from Item No. 410 and as described in Item No. 412 for the preparation of a bone-in, center-cut pork loin wherein the sirloin end, bone-in is removed by a straight cut anterior to the hip bone and related cartilage exposing the *M. gluteus medius*. Unless otherwise specified, a portion of the tenderloin may remain.

Item No. 410B – Pork Loin, Rib End, Bone-In – This item is prepared from Item No. 410 and as described in Item No. 412 for the preparation of a bone-in, center-cut pork loin wherein the rib end, bone-in is removed by a straight cut from the pork loin so that the rib end shall have no less than two rib bones and no more than six rib bones.

Item No. 410C – PorkFat Back – This item shall be produced as described in Item No. 410 and shall be an average of 0.5 inch (13 mm) thick.

Option No.	Description
1	Purchaser may request this item with the skin removed.
2	Purchaser may request specific fat thickness.

Item No. 411 - Pork Loin, Bladeless, Bone-In - The loin is as described in Item No. 410 except the blade bone, associated cartilage, and associated overlying lean and fat shall be removed. On the shoulder end, the *M. longissimus* shall be equal to or larger than the combined areas of the *M. splenius* and *M. semispinalis capitis*. When specified by the purchaser, all false lean (*M. trapezius* and *M. latissimus dorsi*) shall be removed in their entirety.

The purchaser may specify the following options for all applicable pork loins in the 412, 413, and 414 series. Option No's. 1-4 are belly strap removal options (ventral to the *M. longissimus*; blade end x sirloin end), Option no. 5 is for trim, and Option No's. 6-11 are muscle and/or rib count designations. More than one of these options may be specified for a single item number.

Option No.	Description
1	2.0 in. (5.0 cm) x 1.0 in. (25 mm)
2	1.0 in. (25 mm) x 1.0 in. (25 mm)
3	0.0 in. (0.0 mm) x 0.0 in. (0.0 mm)
4	Other belly removal dimensions as specified by the purchaser
5	All false lean removed (<i>M. trapezius</i> and <i>M. latissimus dorsi</i>)
6	<i>M. Multifidus dorsi</i> (tiger) shall be removed
7	Tenderloin, as described in Item No. 415, shall be removed
8	Eight (8) Rib End (Rack), Center-Cut
9	Nine (9) Rib End (Rack), Center-Cut
10	Ten (10) Rib End (Rack), Center-Cut

Item No. 412 - Pork Loin, Center-Cut, 8 Ribs, Bone-In - This item is prepared from Item No. 410. The blade and the sirloin portions are removed by straight cuts made approximately perpendicular to the split surface of the backbone and the length of the loin. The sirloin is removed anterior to the hip bone and associated cartilage exposing the *M. gluteus medius*. The blade portion shall be removed to leave not more than eight (8) ribs present. Floating rib(s) which do not show a cross-section at the belly side are exempt. The belly shall be removed by a straight cut (a slight dorsal curvature is acceptable) from a point that is ventral to, but not more than 4.0 inches (10.0 cm) from, the *M. longissimus* at the blade end to a point on the sirloin end which is ventral to, but not more than 3.0 inches (7.5 cm) from the *M. longissimus*. Surface fat shall be trimmed to an average of ¼-inch (6 mm) in depth. Lumbar fat shall be trimmed to not exceed ½-inch (13 mm) in depth. The tenderloin shall remain intact. The spinal cord groove shall be evident on at least 75 percent of the vertebrae.

Item No. 412A - Pork Loin, Center-Cut, 8 Ribs, Chine Bone Off, Bone-in - This item is as described in Item No. 412. The tenderloin is removed. The protruding edge of the chine bone shall be removed such that the ventral edge of the spinal groove is not evident on the length of the loin. The *M. longissimus* shall not be scored.

Item No. 412B - Pork Loin, Center-Cut, 8 Ribs, Boneless - This item is prepared from Item No. 412. The tenderloin, all bones and cartilages shall be removed. On the blade end, the *M. longissimus* shall be at least twice as large as the *M. spinalis dorsi*. The sirloin is removed anterior to the hip bone cartilage and shall expose the *M. gluteus medius*. The belly shall be removed by a cut ventral to, but not more than 4.0 inches (10.0 cm) from, the *M. longissimus* at the blade end to a point on the sirloin end ventral to, but not more than 3.0 inches (7.5 cm) from, the *M. longissimus*. To facilitate packaging, this item may be “butterflied” perpendicular to the length of the loin.

Item No. 412C - Pork Loin, Center-Cut, 11 Ribs, Bone-In - This item is prepared from Item No. 410. The blade and the sirloin portions are removed by straight cuts made approximately perpendicular to the split surface of the backbone and the length of the loin. The sirloin is removed anterior to the hip bone and associated cartilage exposing the *M. gluteus medius*. The blade portion shall be removed to leave no more than 11 ribs present. Floating rib(s) which do not show a cross-section at the belly side are exempt. The belly shall be removed by a straight cut from a point that is ventral to, but not more than 3.0 inches (7.5 cm) from, the *M. longissimus* at the blade end to a point on the sirloin end ventral to, but not more than 3.0 inches (7.5 cm) from, the *M. longissimus* (a slight dorsal curvature is acceptable). The blade bone, related cartilage, and overlying lean and fat shall be removed. Lumbar fat shall be trimmed to not exceed ½-inch (13 mm) in depth. The tenderloin shall remain intact. The spinal groove shall be evident on at least 75 percent of the vertebrae.

Item No. 412D - Pork Loin, Center-Cut, 11 Ribs, Chine Bone Off, Bone-In - This item is as described Item No. 412C. The tenderloin is removed. The protruding edge of the chine bone shall be removed such that the ventral edge of the spinal groove is not evident on the length of the loin. The *M. longissimus* shall not be scored.

Item No. 412F - Pork Loin, Center-Cut, Rib End, Boneless - This item is as described in Item No. 412B or 414, except that the sirloin end shall be removed posterior to the *M. spinalis dorsi*.

Item No. 412G - Pork Loin, Center-Cut, Rib End (Rack) - This item- often referred to as a “center-cut”, is as described in Item No. 412A or 412D, except the lumbar half shall be removed posterior to the last rib. To make the item roast ready, the purchaser may specify removal of the feather bones. Also, the purchaser may request that the rib bones be frenched by the exclusion of the *M. intercostal* between and over the ribs leaving not more than 1.5 inches (3.8 cm) of the rib bones exposed. The remaining *M. intercostal* between and over ribs shall not exceed 2.5 inches (6.3 cm) from the outer edge of the *M. longissimus*. A roast-ready, frenched, center-cut is often used to produce pork loin crown roast. This item may also be referred to as a “Center-Cut Rack”.

Item No. 412H - Pork Loin, Center-Cut, Lumbar Half - This item is as described in Item No. 412A or 412D, except the rib half shall be removed posterior to the last rib. The remaining portion shall contain no less than four transverse processes (“paddle” or “finger” bones).

Item No. 413 - Pork Loin, Whole, Boneless - This item is prepared from Item No. 410. All skin, bones, cartilages, the tenderloin, and lean and fat overlying the blade bone shall be removed. The leg end of the loin shall be exposed by a straight cut which shows no evidence of the quadriceps group or the *M. longissimus*. The sirloin may be removed immediately anterior to the hip bone pocket. In such cases, both the *M. longissimus* and *M. gluteus medius* shall be exposed on the leg end. On the shoulder end, the *M. longissimus* shall be equal to or larger than the combined areas of the *M. splenius* and *M. semispinalis capitis*. The belly shall be removed by a cut from a point ventral to but not more than 2.0 inches (5.0 cm) from the *M. longissimus* at the shoulder end to a point on the leg end, no more than 1.0 inch (25 mm), ventral to the *M. longissimus* and/or *M. gluteus medius* (a slight dorsal curvature is acceptable). Surface fat shall not exceed ¼-inch (6 mm) in depth, except in the hip pocket which has no measurable fat requirement but shall be trimmed to the same contour as the rest of the trimmed fat surface. The hip bone area is defined as the area contained within two (2) parallel lines, 1.0 inch (25 mm) on either side of the hip pocket area. To facilitate packaging, this item may be “butterflied” perpendicular to the length of the loin. This item may also be referred to as the “Loin, Long Cut”.

Option No.	Description
12	The sirloin is removed by a straight cut immediately anterior to the hip cartilage. When prepared this way, and PSO 3 (belly strap off), the item may also be referred to as “Loin, Short-Cut Back, Main Muscle” or “Loin, Canadian Back”.

Item No. 413A - Pork Loin, Roast, Boneless - The loin is prepared as described in Item No. 413 except that the boneless loin shall be cut into two (2) pieces of approximately equal length. The pieces shall be positioned with the boned surfaces together, such that the blade and sirloin ends are not on the same end. The pieces shall be trimmed so that one piece of the boneless loin will not extend more than 1.0 inch (25 mm) in total length past its opposing piece. The boneless loin shall be netted or tied.

Item No. 413B - Pork Loin, Special, Boneless - This item is prepared as described in Item No. 413A except that the entire *M. infraspinalis*, *M. supraspinalis*, *M. latissimus dorsi*, and *M. trapezius* shall be removed. The belly shall be removed immediately ventral to the *M.*

longissimus and *M. gluteus medius*. The *M. iliocostalis* and the *M. obliquus internus abdominis* shall be removed. Binding agents shall be used to bind the boned surface of each half of the loin together. Binding agents and their application shall be in accordance with FSIS regulations and the product name shall be changed accordingly.

Item No. 413C – Pork Loin, Loin Eye – This item will consist of the *M. longissimus* and *M. multifidus dorsi*. This item may also be referred to as “Loin, Short Cut, Main Muscle”

Item No. 413D - Pork Sirloin, Boneless - This item is prepared as described in Item No. 413. The sirloin is the portion of the full loin that remains after the center cut loin is removed by a straight cut anterior to the hip bone and related cartilage.

Item No. 414 - Pork Loin, Center-Cut, 11 Ribs, Boneless - This item is prepared from Item No. 412C. The tenderloin, all bones and cartilages shall be removed. On the blade end, the *M. longissimus* shall be approximately equal to or larger than the *M. spinalis dorsi* and the *M. rhomboideus* shall not be present. The sirloin is removed anterior to the hip bone cartilage exposing the *M. gluteus medius*. The belly shall be removed by a cut from a point ventral to, but not more than 3.0 inches (7.5 cm) from, the *M. longissimus* at the blade end to a point on the sirloin end ventral to, but not more than 3.0 inches (7.5 cm) from the *M. longissimus*. To facilitate packaging, this item may be “butterflied” perpendicular to the length of the loin. This item can also be referred to as a “Loin, Short-Cut”.

Item No. 415 - Pork Tenderloin - This item is prepared from Item No. 410. The tenderloin shall be removed intact. The side muscle (*M. psoas minor*) shall be removed. The anterior portion (tail end) shall be trimmed so that the tail is not split more than 1.0 inch (25 mm). The tenderloin shall be practically free of fat.

Option No.	Description
1	The side muscle (<i>M. psoas minor</i>) shall remain attached.
2	The thick (posterior) end is removed anterior to the <i>M. iliacus</i> . The side muscle is removed so that only the <i>M. psoas major</i> remains.

Item No. 415B – Pork Tenderloin, Butt Tender - The butt tenderloin is derived from Item No. 410A. It is removed from the pelvic bone and shall consist of the *M. psoas major*, *M. psoas minor* and *M. iliacus*.

Item No. 416 - Pork Spareribs - Spareribs shall contain at least 11 ribs and associated costal cartilages and may include portions of the sternum and diaphragm. The membranous portion of the diaphragm must be removed close to the lean. Any portion of the diaphragm not firmly attached shall be removed close to the inside surface of the ribs. The lean shall not extend more than 2.0 inches (5.0 cm) past the curvature of the last rib and costal cartilage. Heart fat on the inside surface of the ribs shall not exceed ¼-inch (6 mm) average depth. Leaf fat shall be trimmed practically free from the diaphragm and *M. transverse abdominis*. This item may also

be referred to as "Side Ribs". Purchaser may specify number of ribs.

Item No. 416A - Pork Spareribs, St. Louis Style - The spareribs shall be as described in Item No. 416 except the sternum and the ventral portion of the costal cartilages shall be removed along with the flank portion. The breast shall be removed at a point which is dorsal to the curvature of the costal cartilages. When specified, the diaphragm shall be removed, and the spareribs shall be separated into two approximate equal portions by a lengthwise cut. This item may also be referred to as "Side Ribs, Center-Cut"

Item No. 416B - Pork Spareribs, Brisket Bones - This item consists of the sternum, costal cartilages and attached lean which have been removed from Item No. 416A. This item may also be referred to as "Rib Tips".

Item No. 416C - Pork Spareribs, Breast Bone (Sternum) Off - This item is as described in Item No. 416 except that the sternum is removed. This item may also be referred to as "Side Ribs, Breast Bone (Sternum) Off"

Item No. 416D - Pork Breast Bone (Sternum) - This item shall consist of the breast bone (sternum) and associated lean and fat.

Item No. 417 - Pork Hocks - Hocks may come from either the front feet or the hind feet and shall be separated from the front feet at or above the upper knee joint of the knee or separated from the hind feet at or above the hock joint.. Hocks shall be at least 2.0 inches (5.0 cm) in length.

Item No. 417A - Pork Shoulder Hock – Shoulder hocks shall be separated from the front feet at or above the upper knee joint of the knee. Shoulder hocks shall be at least 2.0 inches (5.0 cm) in length.

Item No. 417B - Pork Leg Hock - Leg hocks shall be separated from the hind feet at or above the hock joint. Leg hocks shall be at least 2.0 inches (5.0 cm) in length.

Item No. 418 - Pork Trimmings - Trimmings shall be prepared from any portion of the carcass (Item No. 400) which yields product which will meet the end item requirements. Trimmings shall be free of bones, cartilages, skin, seedy mammary tissue, exposed heavy tendons and lymph glands (including the prefemoral, popliteal, prescapular, and other exposed lymph glands). The tendinous ends of shanks shall be removed to a point where a cross-sectional cut exposes at least 75 percent lean. Ground product is not permitted. Unless otherwise specified, trimmings derived from automatic deboning machines and/or advance lean retrieval systems shall be excluded. The purchaser may further specify fat limitation in terms of fat content percentage (refer to **Section 3.3 Fat Limitations**).

Item No. 419 - Pork Jowl - The jowl is removed from the shoulder as described in Item No. 403. Jowls shall be reasonably rectangular in shape and trimmed of loose tissue, bloody discoloration and other significant objectionable materials. Unless otherwise specified, the jowls shall have all skin removed, and will be slashed

Option No.	Description
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1	The jowl shall be trimmed to be practically free of surface fat over the <i>M. pectoralis superficialis</i> .
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Item No. 420 - Pork Front Feet - The feet shall be removed at or above the upper knee joint of the front legs. The feet shall be trimmed practically free of hair and hair roots.

Item No. 420A - Pork Hind Feet - The feet shall be removed at or above the hock joint of the hind legs. The feet shall be trimmed practically free of hair and hair roots.

Option No.	Description
1	Purchaser may request that items No 420 and 420A be split lengthwise (2 pieces) or quartered (4 pieces).

Item No. 421 - Pork Neck Bones - The neck bones shall contain at least two (2) cervical vertebrae and at least one (1), but not more than four (4) thoracic vertebrae, adjoining ribs and *M. intercostal* lean.

Item No. 422 - Pork Loin, Back Ribs - The back ribs shall consist of at least eight (8) ribs and related *M. intercostal* from a loin. The back rib sections shall be intact, and the bodies of the thoracic vertebrae shall be removed except that small portions of the vertebrae may remain between the rib ends. When specified, the "skin" (*peritoneum*) shall be removed from the inside surface of the ribs and *M. intercostal*. This item may also be referred to as "Baby Back Ribs". Purchaser may specify number of ribs.

Item No. 424 - Pork Loin, Riblet - This item is derived from the transverse processes and associated lean from the lumbar vertebrae of any IMPS bone in pork loin after removal of the tenderloin and the loineye. Riblets shall; contain no less than 4 transverse processes (sometimes referred to as "paddle" or "finger" bones); be held intact by associated lean; and include no more than two rib bones. This item shall be trimmed practically free of surface fat. Purchaser may specify number of bones.

Item No. 435 - Diced Pork - Diced pork shall be prepared from any portion of the carcass (Item No. 400) which yields product that meets the end item requirements. Unless otherwise specified, inner shank (heel portion of the leg), shank meat and jowls shall be excluded. Dices shall be free of bones, cartilages, skin, heavy connective tissue, seedy mammary tissue, and lymph glands. When inner shank is allowed by the purchaser, the *M. flexor digitorum superficialis* ("mouse" muscle) shall be removed from the *M. gastrocnemius* through the natural seams. To facilitate dicing, meat may be frozen and/or tempered, one time only. The meat shall be either hand diced or mechanically diced (grinding is not permitted). Unless otherwise specified, at least 75 percent, by weight, of the resulting dices shall be of a size equivalent to not less than a ¾-inch (19 mm) cube or not more than a 1.5 inches (3.8 cm) cube, and no individual surface shall be more than 2.5 inches (6.3 cm) in length. The surface and/or seam fat shall not exceed ¼-inch (6 mm) thickness at any point. The purchaser may further specify fat limitation in terms of fat content percentage (refer to **Section 3.3 Fat Limitations**).

Item No. 435A - Pork for Stewing - This item is as described in Item No. 435 except (unless otherwise specified) at least 85 percent, by weight, of the resulting dices shall be of a size equivalent to not less than a ¾-inch (19 mm) cube or not more than a 1.5 inches (3.8 cm) cube and no individual surface shall be more than 2.5 inches (6.3 cm) in length. The fat thickness of the surface and/or seam fat shall not exceed ¼-inch (6 mm) at any point. The purchaser may further specify fat limitation in terms of fat content percentage (refer to **Section 3.3 Fat Limitations**).

Item No. 435B - Pork for Kabobs - This item is as described in Item No. 435 except (unless otherwise specified) at least 90 percent, by weight, of the resulting dices shall be of a size equivalent to not less than a 1.0 inch (25 mm) cube or not more than a 1.5 inches (3.8 cm) cube, and no individual surface shall be more than 3.0 inches (7.5 cm) in length. The fat thickness of the surface and/or seam fat shall not exceed ⅛-inch (3 mm) at any point.

Item No. 496 - Ground Pork - Unless otherwise specified, ground pork may be prepared from any portion of the carcass (Item No. 400). The meat shall be free of bones, cartilages, skin, seedy mammary tissue, heavy exposed tendons, exposed heavy (opaque) connective tissue, prefemoral, popliteal, prescapular lymph glands specifically and other exposed lymph glands shall be removed. The tendinous ends of shanks shall be removed so that a cross-sectional cut exposes at least 75 percent lean. Meat from automatic deboning machines is acceptable provided it is ground on the same day as deboning.

Ground pork may be derived from boneless meat which has been previously frozen and stockpiled. The purchaser may specify the maximum amount of previously frozen boneless meat that can be mixed with fresh chilled meat prior to final grinding.

When specified by the purchaser, “lean finely textured pork” may be combined with boneless pork meeting the above material requirements provided it does not exceed 20 percent by weight of the combined finished product. “Lean finely textured pork” shall be produced and labeled in accordance with FSIS regulations. Grinding equipment shall have sharp knives and plates. Unless otherwise specified, the boneless meat shall be ground at least once through a plate having holes not larger than 1.0 inch (25 mm) in diameter. Alternatively, boneless pork may be chopped or machine cut by any method provided the texture and appearance of the product after final grinding is typical of ground pork prepared by grinding only. Unless otherwise specified, final grinding shall be through a plate having holes 3/16-inch (5 mm) in diameter. Pork may be thoroughly blended at least once prior to final grinding. However, the ground pork shall not be mixed after final grinding. Initial reduction in size, blending, final grinding and packaging shall be a continuous sequence.

The purchaser may specify the use of a bone collector/extruder system on the final grind (3/16-inch (5 mm) or smaller plate) to remove objectionable materials (bone, cartilage, connective tissue, etc.). Objectionable material removed during final grinding may not be reintroduced into the finished product. For certification purposes, the purchaser may waive examination for trimming defects provided (1) the use of a bone collector/extruder system is specified and (2) the producer assures that the other objectionable materials listed in the material requirements are removed.

When coarse ground pork is specified, boneless meat shall be ground once through a plate having holes no larger than 1.0 inch (25 mm) and no smaller than 5/8-inch (16 mm) in diameter.

Alternatively, the boneless meat may be ground twice, with the smallest plate having holes no larger than 1.0 inch (25 mm) and no smaller than ¾-inch (19 mm) in diameter. Coarse ground meat may be blended after grinding or between grinds to assure uniformity of fat content. The term “coarse ground” shall appear on the product label.

Unless otherwise specified, fat content shall not exceed 22 percent. Purchaser, however, may specify any fat content provided it does not exceed 30 percent.

Item No. 496A - Ground Pork and Soy Protein Product - This item as described in Item No. 496 except that soy protein product (SPP) shall be added. Source (i.e., soy), Type^{1/} (flour, concentrate, or isolate), and Texture (granular or flaked) of SPP shall be specified by the purchaser. The SPP may be used dry, partially hydrated, or fully hydrated. If not specified, the dry SPP shall be fully hydrated to yield a minimum of 18 percent protein. To determine the maximum amount of water to be mixed with the dry SPP to yield 18 percent protein in the mixture, the following equation shall be used:

Equation
$[(\text{Percent Protein of SPP on "As-Is" Basis} / 18) - 1] = x$
x = maximum pounds of water to be added to each pound of dry SPP.

^{1/}Any one or combination of the following types of SPP may be used. When a combination of these are produced by the SPP manufacturer, the amount of each type and minimum protein content (as is basis) of the mixture shall be declared on the manufacturer's label.

Type	Protein (%) As-Is Basis
Flour	50.0
Concentrate	65.0
Isolate	85.0

The SPP shall be hydrated for the length of time listed on the product label. If this information is not available, the product shall be hydrated until all water is absorbed. The purchaser shall specify any level of substitution of hydrated SPP in the combined finished product up to 30 percent. If not specified, the maximum percent of hydrated protein product in the combined finished product shall not exceed 20 percent. The hydrated SPP shall be used in the same working day in which it was hydrated. The hydrated SPP shall be blended with the raw meat (in the specified ratio) following the initial reduction in size.

SPP hydrated and frozen by the SPP manufacturer may be used provided that: (1) the protein content of the hydrated product (as specifically stated on the manufacturer's label) is not less than 18 percent; (2) the product may be tempered, but not thawed, prior to use; and (3) no additional water may be added.

Item No. 496B - Pork Patty Mix - This item is as described in Item No. 496A except that SPP does not need to comply with FNS Regulations.

Item No. 496C - Pork Patty Mix, NTE 10% Fat - This item is as described in Item No. 496, except that the fat content shall not exceed 10 percent. Additional ingredients may be added to enhance product acceptability. Such ingredients shall not exceed 10 percent of the combined finished product. The purchaser may specify the ingredients that will be allowed.

8.3 Portion-Cut Descriptions

Item No. 1400 - Pork Steak Cubed - Cubed steaks shall be prepared from any portion of the carcass which yields product that meets the end item requirements. However, shank and inner shank meat shall be excluded. Unless otherwise specified, the steaks shall be cubed (while in the fresh chilled state) twice at approximate right angles. Knitting of two or more pieces and folding the meat when cubing is permissible. After cubing, surface and seam fat shall not exceed 15 percent of the total area on either side of the steak. Individual steaks shall remain intact when suspended ½-inch (13 mm) from the outer edge. The steaks shall be free of heavy connective tissue, bones, cartilages, and lymph glands.

Item No. 1401 - Pork Steaks Cubed, Special - This item is as described in Item No. 1400 except the steaks shall be prepared from any combination of lean from the leg, sirloin, loin, and shoulder sections (excluding shank and inner shank meat) of the carcass. Knitting of two or more pieces and folding the meat when cubing is not permissible.

Item No. 1401D – Pork Osso Buco, Hind Shank – This item shall be prepared from Item No. 401D. The hind shank portions shall be cut to a thickness as specified by the purchaser and approximately perpendicular to the bone length. The resulting cross section surfaces (both sides) shall display at least 75 percent exposed lean.

Item No. 1402 - Pork Cutlets - Cutlets shall be prepared from any combination of lean from the leg, loin, sirloin, or shoulder sections (excluding shank and inner shank meat) of the carcass which yields product that meets the end item requirements. The cutlets shall be free of heavy (opaque) connective tissue, bones, cartilages, and lymph glands. When specified, the raw materials shall be mechanically tenderized by using the multiple probe method (pinning) not more than one time. Pressing, knitting, or folding two pieces of meat together is not permissible. Surface and seam fat shall not exceed an average of ⅛-inch (3 mm) in thickness and the thickness at any one point shall not exceed ¼-inch (6 mm). Surface fat, measuring 0.1 inch (2 mm) or more in thickness, shall not exceed 50 percent of the circumference of the cutlet. Individual cutlets shall remain intact when suspended ½-inch (13 mm) from the outer edge. Alternatively, the purchaser may specify surface and seam fat limitations in terms of maximum surface area percentage. Both surface and seam fat of the total cut surface on either side of the cutlet shall not exceed the percentage specified by the purchaser.

Item No. 1402G - Pork Leg Cutlets - This item is as described in Item No. 1402 except that boneless pork shall be derived from any item meeting the end item requirements for Item No. 402G.

Item No. 1406 - Pork Butt Steaks - The steaks are prepared from Item No. 406. The slicing of steaks shall start on the loin side of the butt. This item is also referred to a “Boston Butt Steaks” or “Blade Steaks”.

Item No. 1407 - Pork Shoulder Butt Steaks, Boneless - The steaks are prepared from Item No. 407. The slicing of steaks shall start on the loin side of the butt. This item is also referred to a “Boston Butt Steaks, Boneless” or “Blade Steaks, Boneless”.

Item No. 1408 - Pork Shoulder, Short Ribs - This item is made from Item No. 403A - Pork Shoulder Long Cut. Prior to removal of the neck bones and ribs from a shoulder that contains 4 - 6 ribs, the short ribs are removed by making a scribe cut through the ribs immediately ventral to the ventral curvature of the neck bones (cervical vertebrae) and detaching the ribs, sternum and the *M. serratus ventralis* intact by cutting through the natural seams. *The M. serratus ventralis* shall be continuous for at least two ribs on the dorsal side.

Option No.	Description
1	The sternum shall be removed by cutting through the costal cartilages.

Item No. 1408B - Pork Short Ribs - This item is made from Item No. 408B - Pork Belly, Bone In. This item shall be derived from the anterior portion of the belly and shall consist of the intact rib bones, and the *M. latissimus dorsi* and *M. serratus ventralis*. *The M. serratus ventralis* shall be continuous for at least two ribs on both the dorsal and ventral sides. The skin, lean and fat dorsal to the rib bones, sternum and ventral portions of the costal cartilages shall be removed. Unless otherwise specified, this item shall be portioned to contain no more than 3 ribs.

Option No.	Description
1	The purchaser may specify removal of the <i>M. latissimus dorsi</i> and seam fat.

Item No. 1410 – Pork Loin Chops – The chops are prepared from all suitable lean from Item No. 410 and will include blade, rib, t-bone, porter house, and sirloin chops. Misshapen chops associated with the hip bone pocket shall be excluded. Unless otherwise specified, the tail length (distance from the *M. longissimus dorsi*) shall not exceed 1.0 inch (2.5 cm). Other tail length options: are 3 inches (7.5 cm) (recommended for frenched chops, see PSO – 5), 2 inches (5.0 cm) and No tail (trimmed to meet specified fat trim).

Pockets - When specified by the purchaser for applicable pork loin chops in the 1410 and 1413 series, the pocket shall be made by a cut into the *M. longissimus* leaving no less than ¼-inch (6 mm) and not more than ½-inch (13 mm) of intact lean from the edge to the innermost point of the pocket. The cut shall not puncture either surface containing the cross-section of the *M. longissimus*.

The purchaser may specify chops that are derived from specific portions of the pork loin by using the Purchaser Specified Options for Pork Loin Chops listed below:

Option No.	Description
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1	Center-Cut Chops – Chops shall be derived from any pork loin item after the removal of the blade and sirloin portions of the loin and will include both Ribeye and T-bone chops as described within PSO's 3 and 4 below.
2	Porter House Chops – These chops are derived from the portion of the pork loin that is anterior to the hip bone/cartilage and shall have the <i>M. psoas major</i> exposed on both sides of the chop. When measured parallel to the back bone, the width of the <i>M. psoas major</i> shall be at least 0.5 inch on both sides of the chop.
3	T-Bone Chops – These Chops are the same as the Porter House Chops except that the any portion of the tenderloin (<i>M. psoas minor</i> and/or <i>M. psoas major</i>) shall be expose on at least one side of the chop.
4	Ribeye Chops – These chops are derived from item number 412G or the rib portion of any bone-in 8, 9, 10, or 11 rib Center-Cut Pork Loin. Each chop shall consist of at least one rib.
5	Ribeye Chops, Frenched - The purchaser may specify that the rib chops be frenched by removing the the intercostal meat and lean and fat over and around the rib bones ventral to the <i>M. longissimus dorsi</i> . Unless otherwise specified, the chops shall be made from Ribeye Chops with a tail length of 3.0 inches (7.5 cm). The exposed portion of the ribs shall not exceed one half the distance between the end of the rib bone and the <i>M. longissimus dorsi</i> .
6	NY Chops – These chops are derived the lumbar region of any center-cut pork loin. The tenderloin and protruding edge of the chine bone shall be removed.
7	Blade Chops – These chops are derived from the blade end of the pork loin and shall include the blade bone/cartilage.
8	Sirloin Chops – These chops are derived from the sirloin and shall include the suitable lean associated with the hip (pelvic) bone.
9	End Chops – These chops are derived from the blade and/or the sirloin portions of any bone in pork loin.

Item No. 1414 - Pork Loin Chops, Center-Cut, One Muscle, Boneless - This item may be prepared from Item No's. 412B or 414 except that the sirloin shall be removed approximately 1.5

(3.8 cm) inches anterior to the hip cartilage so that the *M. longissimus* appears as one muscle. All muscles other than the *M. longissimus* and the *M. multifidus dorsi* shall be excluded. This item shall be practically free of fat and sliced at the thickness and/or portion weight specified by the purchaser. This item may also be referred to as the “America’s Cut” when sliced to a thickness of not less than 1-¼ inches (3.2 cm) or not more than 1-½ inches (3.8 cm).

Option No.	Description
1	The chops shall consist of the <i>M. longissimus dorsi</i> only.

Item No. 1413 – Pork Loin Chops, Boneless – The boneless loin chops are prepared from all suitable lean from Item No. 413 and will include blade, center-cut, and sirloin chops. Misshapen chops associated with the hip bone pocket shall be excluded. Unless otherwise specified, the tail length (distance from the *M. longissimus dorsi*) shall not exceed 1.0 inch (2.5 cm). Other tail length options: are 3 inches (7.5 cm) (recommended for frenched chops, see PSO – 5), 2 inches (5.0 cm) and No tail (trimmed to meet specified fat trim).

The purchaser may specify chops that are derived from specific portions of the boneless pork loin by using the Purchaser Specified Options for Pork Loin Chops, Boneless listed below:

Option No.	Description
1	Center-Cut Chops, Boneless – Chops shall be derived from the center portion (blade and sirloin removed) of item No. 413. The center cut chops include both the Rib eye chops and New York chops, as described in PSO’s 2 and 3 below.
2	Ribeye Chops, Boneless – The boneless ribeye chops shall be derived from the rib portion of the Item No. 414 and shall consist of the <i>M. longissimus dorsi</i> and <i>M. spinalis dorsi</i> . The longissimus shall appear equal or larger than the <i>M. spinalis dorsi</i> .
3	New York Chops, Boneless – The boneless New York Chops shall be derived from the lumbar region of the Item No. 414. The <i>M. spinalis dorsi</i> shall not be present.
4	Blade Chops, Boneless – This item shall be derived from the boneless blade portion of Item No. 413.
5	Sirloin Chops, Boneless - This item shall be derived from the boneless sirloin. The boneless chops shall include the <i>M. gluteus medius</i> .

6	Loin End Chops, Boneless – This item shall include all suitable lean from the boneless blade and sirloin portions of Item No. 413.
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Item No. 1423 - Pork Loin, Country-Style Ribs - This item shall be prepared from the blade end of a pork loin and shall include not less than three (3) or more than six (6) ribs. The chine bones shall be removed by a cut which exposes lean meat between the feather bones and ribs. Country-Style ribs shall be divided into approximately equal portions by cutting through the flesh from the rib end (ventral) side to the feather bone side without severing the *M. trapezius*, leaving both portions attached. This cut leaves the blade bone and overlying lean and fat in one portion and the ribs and feather bones in the other.

Option No.	Description
1	The purchaser may specify the blade bone, related cartilage, and overlying lean and fat shall be removed. The chine bone shall be removed as described above. The country style ribs shall be separated into approximately equal portions by cutting through the flesh where the chine bones were removed. This cut leaves the ribs in one portion and the feather bones in the other. Both portions shall be packed into the same container.
2	Pork Loin, Country-Style Ribs, Boneless – This item shall be prepared from the boneless blade end of the pork loin. The lean and fat overlying the blade may remain is firmly attached. This item shall be divided into approximately equal portions by cutting through the flesh from the rib end (ventral side) to the dorsal side (where the feather bones were) without severing the <i>M. trapezius</i> , leaving both portions attached. This cut usually splits the <i>M. longissimus dorsi</i> so that a portion will remain on both sides of the portion.

Item 1423A Pork Shoulder, Country-Style Ribs - The purchaser may specify that this item be derived from Item No. 406 - Pork Shoulder, Butt, Bone-In. The Shoulder, Country-Style ribs shall be divided into approximately equal portions by cutting through the flesh from the rib end (ventral) side to the side where the feather bones were without severing the *M. trapezius*, leaving both portions attached. This cut leaves the blade bone and overlying lean and fat in one portion and a boneless portion in the other.

Option No.	Description
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1	Pork Shoulder, Country-Style Ribs, Boneless - This item is prepared from Item No. 406A – Pork Shoulder, Butt, Boneless. This item shall be divided into approximately equal portions by cutting through the flesh from the rib end (ventral) side to the side where the feather bones were without severing the <i>M. trapezius</i> , leaving both portions attached. The lean and fat overlying the blade may remain is firmly attached.
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Item No. 1438 - Pork Steaks, Flaked and Formed, Frozen - This item shall be prepared from boneless pork that complies with the material requirements of Item No. 496 and shall be flaked (grinding is not permitted) and formed. The flaking and forming process shall be in compliance with FSIS Regulations. Product shall comply with fat content requirements of Item No. 496. The purchaser shall specify shape and weight of steaks. When specified, the flaked and formed steaks may be cubed (the term “cubed” may be included in the product label). When specified the steaks shall be breaded and labeled appropriately. The breading and its application shall be in accordance with FSIS Regulations.

Item No. 1438A - Pork Sandwich Steaks, Flaked, Chopped, Formed and Wafer Sliced, Frozen - The steaks shall be prepared from boneless pork that complies with the material requirements of Item No. 496. The flaking, chopping, forming, and slicing process shall be in compliance with FSIS Regulations and shall produce steaks which are moderately fine textured. Product shall comply with fat content requirements of Item No. 496. Each steak shall consist of two or more thin slices weighing approximately 1.0 ounce (28 g) each. No more than a minor amount of green/brown/gray rings shall be present. Steaks shall be packaged with paper separators between each steak. Unless otherwise specified, slices shall be approximately 4-¾ x 7-½ inches (11.9 x 18.8 cm). The purchaser shall specify weight and/or number of slices per pound.

Item No. 1438B - Pork Steaks, Sliced and Formed, Frozen - The steak shall be prepared from boneless pork that complies with Item No. 418. The slicing and forming process shall be in accordance with FSIS Regulations. Ingredients may be added for the purpose of tenderizing and binding and shall appear on product label. The purchaser shall specify weight, shape, and/or thickness of steaks.

Item No. 1495 - Coarse Chopped Pork - This item shall be prepared from any portion of the carcass (Item No. 400) which yields product meeting the end item requirements. However, shank meat and jowls shall be excluded. All skin, bones, cartilages, heavy connective tissue, and *prefemoral, popliteal, prescapular* lymph glands and any other exposed lymph glands and all surface and seam fat in excess of ¼-inch (3 mm) shall be removed. The boneless meat shall be ground once through a plate with holes measuring ¾-inch (19 mm). Alternatively, the boneless meat may be chopped or machine cut by any method which yields equivalent results. However, if specified by the purchaser, the meat shall be hand diced to the size desired.

The purchaser may specify the following options for any item in the 1496 series.

Option No.	Description
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1	Perforations (to facilitate heat transfer during cooking)
2	Shape (oval, round, square, etc.)
3	Style (plate fill method)

Item No. 1496 - Ground Pork Patties- This item shall be prepared from Item No. 496.

Item No. 1496A - Ground Pork and Soy Protein Product Patties - The patties shall be prepared from Item No. 496A.

Item No. 1496B - Pork Patties - This item is prepared from Item No. 496B.

Item No. 1496C - Pork Patties, NTE 10% Fat- The patties shall be prepared from Item No. 496C

9.0 Glossary

Anterior – Toward the front of the carcass, or forward of.

Blast Frozen – Products are frozen rapidly at extremely low temperatures ($\leq -10^{\circ}\text{F}$) in conjunction with high-velocity air movement around the product.

Block Ready – A cut that is marketed ready for further processing or portioning.

BRT – Boned, rolled and tied (or netted).

Butterfly – To split chops, cutlets and roasts in half, leaving the halves hinged on one edge.

Carcass – The dressed, harvested animal containing two “sides”.

Center-Cut – Term used to indicate the interior portion of a cut after removal of outer edges or ends to create a more desirable, uniform portion.

Chain – The side muscle of the tenderloin.

Chilled – A temperature related term generally used to describe “fresh” product.

Chine Bone – A part of the backbone that remains after the carcass is split.

Comminuted – Reduction of meat particle size, using such methods as grinding, dicing and chopping.

Dorsal to – Toward the upper or top line of the carcass away from the belly.

End Cuts – Cuts made from the ends of primal or sub-primal cuts. Ends often lack the uniformity of the adjacent cuts.

Evisceration – The process of removing the internal organs from the carcass during harvest.

False Lean – The *cutaneous* muscle imbedded in the fat overlying the shoulder area of a side of pork.

Frenched – The process by which the bone is exposed after removing the intercostal meat and/or the lean and fat surrounding it to provide a decorative appearance.

Fresh – Refers to meats that have not been canned, cured, smoked, or cooked. In addition to the above, the product must never have been frozen.

Frozen – Refers to meats that have been reduced in temperature to below the freezing temperature of meat (<28°F).

IM – Acronym for Individual Muscle designating that a cut is composed of one muscle only.

IQF – Acronym for Individually Quick Frozen. Refers to cuts that have been individually quick frozen at extremely low temperatures immediately after processing.

Lateral – Away from the median plane that divides the carcass vertically into right and left sides.

Leaf Fat – The fat lining from the abdominal wall in pork.

Medial – Towards the median plane that divides the carcass vertically into right and left sides.

Net Weight – Weight of the contents of a container after the weight of the packaging and packing materials has been deducted.

Posterior to – Towards the rear of the carcass, or backward of.

Primal Cuts – Basic major cuts into which carcasses and sides are separated.

PSE – Acronym for Pale, Soft and Exudative pork.

Side – One matched half of a pork carcass.

Sub-Primal Cuts – Smaller cuts derived from primal cuts.

Ventral – Toward the belly of the carcass away from the upper or top line.